

Ref: 2230/18

Surveyor: Philip Wiltshire MRICS MaPS

Issued: March 2019

Rev: Tender Issue

## **SPECIFICATION FOR**

# 5<sup>th</sup> FLOOR INCIDENT ROOM ALTERATIONS and 3<sup>rd</sup> FLOOR ARCHIVE ROOM

AT

## EA GUILDBOURNE HOUSE, CHATSWORTH ROAD, WORTHING BN11 1LD



On behalf of

**Environment Agency** 

Guildbourne Centre

Chatsworth road

Worthing BN11 1LD

PHILIPS SURVEYORS LLP
THE OLD COACH HOUSE
78 LOWER STREET
PULBOROUGH
WEST SUSSEX RH20 2AA

EMAIL info@philips-surveyors.co.uk

01798 873222









## **INTRODUCTION**

Project: 5<sup>th</sup> Floor – Alterations to incident room

3<sup>rd</sup> Floor – New archive room

Location: EA Guildbourne House, Chatsworth road, Worthing, BN11 1LD

Access: Strictly To be arranged in advance via the client David Bonner (Crises and Disaster

management) with 48hrs notice.

07702 666765

David.bonner @environment-agency.gov.uk

All tender queries to be referred to the lead consultant

Lead Consultant: Philips Surveyors LLP c/o Philip Wiltshire MRICS MaPS

The Old Coach House, 78 Lower Street, Pulborough, West Sussex RH20 2AZ

Telephone: (01798) 873222

Mobile: (07889 922862)

Contract: JCT Minor Works with Contractor Design 2016

Contract Dates: Tender Return TBC

Pre-Contract Meeting TBC

Commencement on Site TBC

Completion of Works TBC

Contract Period 4 weeks

## Note:

- 1. A competent, qualified working full-time site foreman must be employed on site to oversee each sub-contractor.
- 2. The Contractor must employ the necessary labour, specialists, materials, plant and equipment to carry out the work to complete the work on time and be fully clear from site by the prescribed completion date.
- 3. All works to be undertaken out of normal hours, i.e. Monday-Friday 5.00pm to 7.00am or at weekends.

## **CONTENTS**

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2230/19/P-TF1 – Philips Surveyors LLP – Proposed builders works 3<sup>rd</sup> Floor

Appendix B MCA Engineers – Electrical & Mechanical Drawings & Specification

Appendix C EA SHEW COP 677 15 May 2018

EA 549 13.9.2016 Timber purchasing requirements

EA 14.13 COPES part 2 23.6.16n

## **SECTION A**

**General Preliminaries** 



#### A10 PROJECT PARTICULARS

#### 110 THE PROJECT

- Name: 5<sup>th</sup> floor incident room and 3<sup>rd</sup> floor archive room

Nature: Internal alterations

- Location: EA Guildbourne House, Chatsworth road, Worthing, BN11 1LD

Contract Dates: Tender Return TBC

Pre Contract Meeting
Commencement on Site
Completion of Works
Contract Period
TBA
TBA
TBA
TBA
TBA
TBA
TBA

#### 120 EMPLOYER (CLIENT)

Name: Environment agency

- Address: Guildbourne House, Chatsworth Road, Worthing BN11 1LD

- Contact: - Jeanette Woolgate - 07880 052435, Jeanette.woolgar@envirnonment-agency.gov.uk

## 130 PRINCIPAL CONTRACTOR

- Name: TBC - Address: - Tel:

#### 140 DESIGNER/CONTRACT ADMINISTRATOR

Title: Philips Surveyors LLP

- Name: Philip Wiltshire MRICS, IMaPS

- Address: The Old Coach House, 78 Lower Street, Pulborough, West Sussex, RH20 2AZ.

- Tel: 01798 873222

- Email: philw@philips-surveyors.co.uk

#### 150 PRINCIPAL DESIGNER

Title: Black & Vetch
Name: Michael Nimmo

- Address: 60 High Street, Redhill, RH1 1SH

- Tel: 01737 856474 - Email: nimmom@bv.com

#### 200 MECHANICAL & ELECTRICAL ENGINEER

Title: MCA Consulting Engineers

Name: Graham Andrews

- Address: Old Crawley Rd, Faygate, Horsham RH12 4RU

- Telephone: 01293 851490

- Email: grahamandrews@mcaltd.co.uk

#### A11 TENDER AND CONTRACT DOCUMENTS

## 110 TENDER DRAWINGS

The tender drawings are as listed within the appendices on the introduction page.

## 120 CONTRACT DRAWINGS

Format: Developed tender drawings enhanced with Contractor Design Proposals and further design details.

## 160 PRECONSTRUCTION INFORMATION

- Format: Preconstruction information is described in these preliminaries in Section A34. It refers to information given elsewhere in the preliminaries and other tender documents.

#### A12 THE SITE/ EXISTING BUILDINGS

#### 110 THE SITE

- Description: The site is on the 5<sup>th</sup> and 3<sup>rd</sup> floors of a six storey office block occupied by the EA. The block forms part of the main Guildbourne centre which also has residential flats and mixed use retail units.

#### 140 EXISTING MAINS AND SERVICES

- As existing on site. The Contractor must ascertain the presence and location of existing site services prior to undertaking any works that may disrupt hidden or enclosed services.

#### 170 SITE INVESTIGATION

Report: Based on previous works undertaken in the area, we are aware there is no asbestos within the areas to be worked upon. A copy of the asbestos register is included.

#### 200 ACCESS TO THE SITE

- Description: Via Chatsworth road

#### 210 PARKING

- Restrictions on parking of the Contractor's: To be agreed at the pre-contract meeting however for the purpose of tendering assume space is provided on site within the main car park area.

#### 220 USE OF THE SITE

- General: Do not use the site for any purpose other than carrying out the Works.

#### 230 SURROUNDING LAND/ BUILDING USES

- General: Residential

## 240 HEALTH AND SAFETY HAZARDS

- General: Build up of dust and debris, removal of walls and maintaining unsupported edges of plasterboard ceilings. Movement of waste material out of the building. Delivery of new folding partition. Disconnect and working with live services. See also PCIP for details

#### 250 SITE VISIT

- Before tendering: Ascertain the nature of the site, access thereto and all local conditions and restrictions likely to affect the execution of the Works.

#### A13 DESCRIPTION OF THE WORKS

#### 110 PREPARATORY WORK BY OTHERS

- Works: Asbestos survey

#### 120 THE WORKS

- Description: Minor alterations to create an enlarged incident room on the 5<sup>th</sup> Floor; formation of two meeting rooms and new archive room to the 3<sup>rd</sup> Floor

## 130 WORK BY OTHERS CONCURRENT WITH THE CONTRACT

- Scope: See section A50.

## A20 JCT AGREEMENT FOR MINOR BUILDING WORKS

#### 360 JCT MINOR WORKS BUILDING CONTRACT

The Contract: JCT Minor Work with Contractors Design 2016; allow for all obligations, liabilities and services described therein against the headings below:

## THE RECITALS

First

the Employer wishes to have the following work carried out (see A13/120) at (see A10/110) under the direction of the Architect/Contract Administrator referred to in Article 3;

#### Second

#### CONTRACTOR DESIGN PORTION

the Works include the design and management of the electrical and mechanical works and new folding screen with support (the Contractor's Design Portion')

#### Third

the Employer has had the following documents prepared which show and describe the works to be done:

the drawings numbered/listed in (see A11/110) ('the contract Drawings')

a specification ('the Contract Specification')

#### **Works Schedules**

other documents showing or describing or otherwise stating his requirements for the design and construction of the Contractors Design Portion ('the Employer's Requirements)

which for identification have been signed or initialled by or on behalf of each Party; those documents together with this agreement, the Conditions and, if applicable, a Schedule of Rates as referred to in the Forth Recital (collectively 'the Contract Document') as annexed to this Agreement;

#### Fourth

the Contractor has supplied the Employer with a copy of the priced Contract Specification or Work Schedules or with a Schedule of Rates,

#### Fifth

for the purposes of the Construction Industry under the Finance Act 2004, the status of the Employer is, as at the Base Date, the stated in the Contract Particulars;

## Sixth

for the purposes of the Construction (design and Management) Regulations 2015 (the 'CDM Regulations') the status of the project that comprises or includes the Works is stated in the Contract Particulars;

#### Seventh

where so stated in the Contract Particulars, this Contract is supplemented by Framework Agreement identified in those particulars;

## Eighth

whether any of Supplemental Provisions 1 to 6 apply as stated in the Contract Particulars;

#### THE ARTICLES

#### 1

#### **CONTRACTORS OBLIGATIONS**

The Contractor shall carry out and complete the Works in accordance with the Contract Documents.

#### 2

#### **CONTRACT SUM**

The Employer will pay the Contractor at the times and in the manner specified in the Conditions the VAT-exclusive sum of TBA ('the contract Sum')

#### 3

# ARCHITECT / CONTRACT ADMINISTRATOR Contract Administrator: See A10/140

#### 4

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PRINCIPAL DESIGNER
PRINCIPAL DESIGNER: See A10/150
PRINCIPAL CONTRACTOR
Principal Contractor: See A10/130
ADJUDICATION
This clause does apply
ARBITRATION
This clause does not apply
LEGAL PROCEEDINGS
Subject to Article 6 and (where it applies) to Article 7, the English courts shall have jurisdiction over any
dispute or difference between the Parties which arises out of or in connection with this contract
CONTRACT PARTICULARS
Fifth Recital & Schedule 2 (paragraphs 1.1, 1.2, 1.5, 1.6, 2.1 and 2.2)
Base date: 1st April 2019
Fifth Recital & clause 4.2
CIS: The Employer IS a Contractor under the CIS.
Sixth Recital
CDM Regulations: The CDM regulations WILL apply.
Seventh Recital
Supplemental Framework Agreement: Does not apply
Eighth Recital & Schedule 3
Supplemental Provisions:
   Collaborative Working
                                                            Applies
   Health & Safety
                                                            Applies
   Cost Savings & Improvements
                                                            Applies
   Sustainable & Environmental Provisions
                                                            Applies
                                                            Applies
   Performance Indicators & Monitoring
   Notification of Negotiations & Disputes
                                                            Applies
         Contractor Nominee
                                                                    TBC
         Employer
                                                                    TBC
Article 7 & Schedule 1
Arbitration
                                                                    DOES NOT apply
Clause 1.1
CDM PLANNING PERIOD
2 weeks
Clause 2.3
DATE FOR COMMENCEMENT OF THE WORKS
TBA
Clause 2.3
```

4 TO SUMMARY

DATE FOR COMPLETION – TBA 4 weeks after commencement date

Clause 2.9

LIQUIDATED DAMAGES

At a rate of £1,000.00 per week

Clause 2.11

**RECTIFICATION PERIOD** 

Period: 6 months from the date of Practical Completion

Clause 4.3

INTERIM PAYMENTS

Monthly

Clause 4.3

PAYMENTS DUE PRIOR TO PRACTICAL COMPLETION

97.5 %

Clause 4.3

PAYMENTS BECOMING DUE ON OR AFTER PRACTICAL COMPLETION

2.5 %

Clause 4.3 and 4.8

**FLUCTUATIONS PROVISION** 

Not Applicable

Clause 4.3 and 4.8

PERCENTAGE ADDITION FOR SCHEDULE 2

N/A

Clause 4.5

PERCENTAGE OF THE TOTAL AMOUNT TO BE PAID TO THE CONTRACTOR

97.5 per cent

Clause 4.8.1

SUPPLY OF DOCUMENTATION

3 months from the date of Practical Completion

Clause 5.3

CONTRACTORS PUBLIC LIABILITY INSURANCE

Insurance cover (for any one occurrence or series of occurrences arising out of one event)

£5 million

Clauses 5.4A, 5.4B & 5.4C

INSURANCE OF THE WORKS - ALTERNATIVE PROVISIONS

5.4A – Works insurance by Contractor in Joint Names

5.4B – Works and existing structures insurance by Employer in Joint Names

5.4C - Existing structures insurance by Employer in own name

Clauses 5.4A & 5.4B

PERCENTAGE TO COVER PROFESSIONAL FEES

Addition: 15 per cent

Clause 5.4C

INSURANCE ARRANGEMENTS

Alternative provisions

Clause 7.2

ADJUDICATION

The Adjudicator is: Royal Institution of Chartered Surveyors

Nominator of Adjudicator: President / Vice president or Chairman or Vice Chairman of the RICS

Schedule 1 (Paragraph 2.1) ARBITRATION Not applicable

#### **ATTESTATION**

Note on Execution

Execution under hand

## A30 TENDERING/ SUBLETTING/ SUPPLY

#### MAIN CONTRACT TENDERING

#### 170 ACCEPTANCE OF TENDER

- Acceptance: No guarantee is offered that any tender will be recommended for acceptance or be accepted, or that reasons for non acceptance will be given.
- Costs: No liability is accepted for any cost incurred in the preparation of any tender.

#### 190 PERIOD OF VALIDITY

- Period: After submission or lodgement, keep tender open for consideration (unless previously withdrawn) for not less than 6 Weeks
- Date for possession/ commencement: See section A20.

#### PRICING/ SUBMISSION OF DOCUMENTS

#### 220 PRICING OF PRELIMINARIES

- Charges: If the Contractor requires interim payments to include fixed and time related charges for specific items in the Preliminaries, those charges must be clearly shown against the items.

#### 251 PRICED DOCUMENTS

- Alterations: Do not alter or qualify the priced documents without written consent. Tenders containing unauthorised alterations or qualifications may be rejected.
- Measurements: Where not stated ascertain from the drawings and/or site dimensions.
- Deemed included: Costs relating to items, which are not priced, will be deemed to have been included elsewhere in the tender.

## 310 TENDER

- General: Tenders must include for all work shown or described in the tender documents or implied thereon as a whole or clearly apparent as being necessary for the complete and proper execution of the Works.

## 350 PC AND PROVISIONAL SUMS

- Contractor's profit on PC Sums: Included in Preliminaries sections A51 and A52, not in the pricing document.
- Submit: A copy of sections A51-A55 (as applicable), priced to include profit, attendance and percentage adjustments

#### 480 PROGRAMME

- Programme of work: 16 weeks or alternative as per form of tender. Prepare a summary showing the sequence and timing of the principal parts of the Works and periods for planning and design. Itemize any work which is excluded.
- Submit: The Contractor shall provide with his tender submission a programme based on the contract dates and it shall be the responsibility of the Contractor to perform against the programme. The Contractors programme submitted at tender stage shall indicate in detail key processes i.e. steelwork installation, ground floor alterations etc. and indicate which areas of the building he (the Contractor) requires to be cleared and/or surrendered, and for how long, in order to execute the works in that specific area.

#### 490 INFORMATION RELEASE SCHEDULE

- Compatibility with programme: At the same time as submitting the proposed programme or summary, confirm that it is compatible with the Information Release Schedule.
- Alternative proposals: If any part of the programme is not compatible with the Schedule submit alternative proposals and reasons for varying the times for release of information.

#### 521 DESIGN DOCUMENTS FOR WORK PACKAGES

- Design drawings and technical information
- Submit: Prepare and submit by Main Contractor for Sub-Contractor Packages as the works proceed.

#### 530 SUBSTITUTE PRODUCTS

- Details: If products of different manufacture to those specified are proposed, submit details with the tender giving reasons for each proposed substitution. Substitutions, which have not been notified at tender stage, may not be considered.
- Compliance: Substitutions accepted will be subject to the verification requirements of clause A31/200.

#### 540 QUALITY CONTROL RESOURCES

- Statement: Describe the organisation and resources to control the quality of the Works, including the work of subcontractors.

#### 550 HEALTH AND SAFETY INFORMATION

- Content: Describe the organisation and resources to safeguard the health and safety of operatives, including those of subcontractors, and of any person whom the Works may affect.
- Include:
  - A copy of the Contractor's health and safety policy document, including risk assessment procedures.
  - Accident and sickness records for the past five years.
  - Records of previous Health and Safety Executive enforcement action.
  - Records of training and training policy.
  - The number and type of staff responsible for health and safety on this project with details of their qualifications and duties.

## 570 OUTLINE CONSTRUCTION PHASE HEALTH AND SAFETY PLAN

- Content: Submit the following information within one week of request:
  - Method statements on how risks from hazards identified in the pre-construction information and other hazards identified by the Contractor will be addressed.
  - Details of the management structure and responsibilities.
  - Arrangements for issuing health and safety directions.
  - Procedures for informing other Contractors and employees of health and safety hazards.
  - Selection procedures for ensuring competency of other Contractors, the self-employed and designers.
  - Procedures for communications between the project team, other Contractors and site operatives.
  - Arrangements for cooperation and coordination between Contractors.
  - Procedures for carrying out risk assessment and for managing and controlling the risk.
  - Emergency procedures including those for fire prevention and escape.
  - Arrangements for ensuring that all accidents, illness and dangerous occurrences are recorded.
  - Arrangements for welfare facilities.
  - Procedures for ensuring that all persons on site have received relevant health and safety information and training.
  - Arrangements for consulting with and taking the views of people on site.
  - Arrangements for preparing site rules and drawing them to the attention of those affected and ensuring their compliance.
  - Monitoring procedures to ensure compliance with site rules, selection and management procedures, health and safety standards and statutory requirements.
  - Review procedures to obtain feedback.

#### SUBLETTING/ SUPPLY

#### 630 DOMESTIC SUBCONTRACTS

- General: Comply with the Construction Industry Board 'Code of Practice for the selection of subcontractors'.
- List: Provide details of all subcontractors and the work for which they will be responsible.
- Submit: with tender

## A31 PROVISION, CONTENT AND USE OF DOCUMENTS

#### **DEFINITIONS AND INTERPRETATIONS**

#### 110 DEFINITIONS

- Meaning: Terms, derived terms and synonyms used in the preliminaries/ general conditions and specification are as stated therein or in the appropriate British Standard or British Standard glossary.

#### 120 COMMUNICATION

- Definition: Includes advise, inform, submit, give notice, instruct, agree, confirm, seek or obtain information, consent or instructions, or make arrangements.
- Format: In writing to the person named in clause A10/140 unless specified otherwise.
- Response: Do not proceed until response has been received.

#### 130 PRODUCTS

- Definition: Materials, both manufactured and naturally occurring, and goods, including components, equipment and accessories, intended for the permanent incorporation in the Works.
- Includes: Goods, plant, materials, site materials and things for incorporation into the Works.

#### 135 SITE EQUIPMENT

- Definition: All appliances or things of whatsoever nature required in or about the construction for completion of the Works but not materials or other things intended to form or forming part of the Permanent Works.
- Includes: Construction appliances, vehicles, consumables, tools, temporary works, scaffolding, cabins and other site facilities.

#### 140 DRAWINGS

- Definitions: To BSRIA BG 6/2009 A design framework for building services. Design activities and drawing definitions.
- CAD data: In accordance with BS 1192.

#### 160 TERMS USED IN SPECIFICATION

- Remove: Disconnect, dismantle as necessary and take out the designated products or work and associated accessories, fixings, supports, linings and bedding materials. Dispose of unwanted materials. Excludes taking out and disposing of associated pipework, wiring, ductwork or other services.
- Fix: Unload, handle, store, place and fasten in position including all labours and use of site equipment.
- Supply and fix: Includes all labour and site equipment for unloading, handling, storing and execution. All products to be supplied and fixed unless stated otherwise.
- Keep for reuse: Do not damage designated products or work. Clean off bedding and jointing materials. Stack neatly, adequately protect and store until required by the Employer/ Purchaser or for use in the Works as instructed.
- Make good: Execute local remedial work to designated work. Make secure, sound and neat. Excludes redecoration and/or replacement.
- Replace: Supply and fix new products matching those removed. Execute work to match original new state of that removed.
- Repair: Execute remedial work to designated products. Make secure, sound and neat. Excludes redecoration and/ or replacement.
- Refix: Fix removed products.
- Ease: Adjust moving parts of designated products or work to achieve free movement and good fit in open and closed positions.
- Match existing: Provide products and work of the same appearance and features as the original, excluding ageing and weathering. Make joints between existing and new work as inconspicuous as possible.
- System: Equipment, accessories, controls, supports and ancillary items, including installation, necessary for that section of the work to function.

#### 170 MANUFACTURER AND PRODUCT REFERENCE

- Definition: When used in this combination:
  - Manufacturer: The firm under whose name the particular product is marketed.
  - Product reference: The proprietary brand name and/ or reference by which the particular product is identified
- Currency: References are to the particular product as specified in the manufacturer's technical literature current on the date of the invitation to tender.

#### 200 SUBSTITUTION OF PRODUCTS

- Products: If an alternative product to that specified is proposed, obtain approval before ordering the product.
- Reasons: Submit reasons for the proposed substitution.
- Documentation: Submit relevant information, including:
  - manufacturer and product reference;
  - cost:
  - availability;
  - relevant standards;
  - performance;
  - function;
  - compatibility of accessories;
  - proposed revisions to drawings and specification;
  - compatibility with adjacent work;
  - appearance;
  - copy of warranty/ guarantee.
- Alterations to adjacent work: If needed, advise scope, nature and cost.
- Manufacturer's guarantees: If substitution is accepted, submit before ordering products.

#### 220 REFERENCED DOCUMENTS

- Conflicts: Specification prevails over referenced documents.

#### 230 EQUIVALENT PRODUCTS

- Inadvertent omission: Wherever products are specified by proprietary name the phrase 'or equivalent' is to be deemed included.

## DOCUMENTS PROVIDED ON BEHALF OF EMPLOYER

#### 410 ADDITIONAL COPIES OF THE DRAWINGS/ DOCUMENTS

- Additional copies: will be issued via email for Contractor to Print

#### 440 DIMENSIONS

Scaled dimensions: Do not rely on.

## DOCUMENTS PROVIDED BY CONTRACTOR/ SUBCONTRACTORS/ SUPPLIERS

## 510 CHANGES/ AMENDMENTS TO EMPLOYER'S REQUIREMENTS

- Contractor's changes to Employer's Requirements: Support request for substitution or variation with all relevant information.
- Employer's amendments to Employer's Requirements: If considered to involve a variation, which has not already been acknowledged as a variation, notify without delay (maximum period 7 days), and do not proceed until instructed. Claims for extra cost, if made after the variation has been carried out, may not be allowed.
- Submit: in a timely manner

#### 610 PRODUCTION INFORMATION

- Contractor/ Domestic subcontractor provide: All required design information to complete the works
- Submit:
  - For comment and make any necessary amendments.
  - Sufficient copies of final version for distribution to all affected parties.

#### 620 AS BUILT DRAWINGS AND INFORMATION

- Contractor's designed work: Provide drawings/information:
- Submit: At least two weeks before date for completion.

#### 630 TECHNICAL LITERATURE

- Information: Keep on site for reference by all supervisory personnel:
  - Manufacturers' current literature relating to all products to be used in the Works.
  - Relevant British Standards.

#### 640 MAINTENANCE INSTRUCTIONS AND GUARANTEES

- Components and equipment: Obtain or retain copies, register with manufacturer and hand over on or before completion of the Works.
- Emergency call out services: Provide telephone numbers for use after completion. Extent of cover: for all Services (plumbing, mechanical and electrical) installations

#### A32 MANAGEMENT OF THE WORKS

#### **GENERALLY**

#### 110 SUPERVISION

- General: Accept responsibility for coordination, supervision and administration of the Works, including subcontracts.
- Coordination: Arrange and monitor a programme with each subcontractor, supplier, local authority and statutory undertaker, and obtain and supply information as necessary for coordination of the work.

#### 120 INSURANCE

- Documentary evidence: Before starting work on site submit details, and/ or policies and receipts for the insurances required by the Conditions of Contract.

## 130 INSURANCE CLAIMS

- Notice: If any event occurs which may give rise to any claim or proceeding in respect of loss or damage to the Works or injury or damage to persons or property arising out of the Works, immediately give notice to the Employer, the person named in clause A10/140 and the Insurers.
- Failure to notify: Indemnify the Employer against any loss, which may be caused by failure to give such notice.

#### 140 CLIMATIC CONDITIONS

- Information: Record accurately and retain:
  - Daily maximum and minimum air temperatures (including overnight).
  - Delays due to adverse weather, including description of the weather, types of work affected and number of hours lost.

#### 150 OWNERSHIP

- Alteration/ clearance work: Materials arising become the property of the Contractor except where otherwise stated. Remove from site as work proceeds.

## PROGRAMME/ PROGRESS

#### 210 PROGRAMME

- Master programme: With the tender and revised as required before starting work on site, submit in an approved form a master programme for the Works, which must include details of:
  - Design, production information and proposals provided by the Contractor/ Subcontractors/ Suppliers, including inspection and checking (see section A31).
  - Planning and mobilization by the Contractor.
  - Earliest and latest start and finish dates for each activity and identification of all critical activities.
  - Running in, adjustment, commissioning and testing of all engineering services and installations
  - Work resulting from instructions issued in regard to the expenditure of provisional sums (see section A54)
  - Work by or on behalf of the Employer and concurrent with the Contract (see section A50). The nature and scope of which, the relationship with preceding and following work and any relevant limitations are suitably defined in the Contract Documents.

- Exclusions: Where and to the extent that the programme implications for work which is not so defined are impossible to assess, the Contractor should exclude it and confirm this when submitting the programme.
- Submit: with Tender and as amended with accurate references

#### 215 REVISED PROGRAMME

- Format and content: Compatible with master programme.
- Revised programme interval: Described in the contract data part one.

#### 230 SUBMISSION OF PROGRAMME

- Further information: Submission of the programme will not relieve the Contractor of the responsibility to advise of the need for further drawings or details or instructions in accordance with the Contract.

#### 240 COMMENCEMENT OF WORK

Notice: Before the proposed date for commencement of work on site give minimum notice of one week

#### 250 MONITORING

- Progress: Record on a copy of the programme kept on site.
- Avoiding delays: If any circumstances arise which may affect the progress of the Works submit proposals or take other action as appropriate to minimize any delay and to recover any lost time.

#### 255 NOTIFICATION OF COMPENSATION EVENT

- Content: Notwithstanding the Contractor's obligations under the Contract written notice must also be given of all other causes which apply concurrently.

#### 261 SITE MEETINGS

- General: Site meetings will be held to review progress and other matters arising from administration of the Contract.
- Frequency: Weekly
- Location: On Site (Contractor provided facilities)
- Accommodation: Ensure availability at the time of such meetings.
- Attendees: Attend meetings. The Main Contractor is to take notes/ minutes and inform subcontractors and suppliers when their presence is required.

#### 265 CONTRACTOR'S PROGRESS REPORT

- General: Submit a progress report at least 2 days before the site meeting.
- Content: Notwithstanding the Contractor's obligations under the Contract the report must include:
  - A progress statement by reference to the master programme for the Works.
  - Details of any matters materially affecting the regular progress of the Works.
  - Subcontractors' and suppliers' progress reports.
  - Any requirements for further drawings or details or instructions.

#### 270 CONTRACTOR'S SITE MEETINGS

- General: Hold meetings with appropriate subcontractors and suppliers shortly before main site meetings to facilitate accurate reporting of progress.

## 280 PHOTOGRAPHS

- Number of locations: 10no
- Frequency of intervals: weekly
- Image format: electronic
- Number of images from each location: 1no

#### 290 NOTICE OF COMPLETION

- Requirement: Give notice of the anticipated dates of completion of the whole or parts of the Works.
- Associated works: Ensure necessary access, services and facilities are complete.

#### 310 EXTENSIONS OF TIME

- Notice: When a notice of the cause of any delay or likely delay in the progress of the Works is given under the conditions of contract, written notice must also be given of all other causes which apply concurrently.
- Details: As soon as possible submit:
  - Relevant particulars of the expected effects, if appropriate, related to the concurrent causes.
  - An estimate of the extent, if any, of the expected delay in the completion of the Works beyond the date for completion.
  - All other relevant information required.

#### **CONTROL OF COST**

#### 410 CASH FLOW FORECAST

- Submission: Before starting work on site, submit a forecast showing the gross valuation of the Works at the date of each Interim Certificate throughout the Contract period. Base on the programme for the Works.

#### 420 REMOVAL/ REPLACEMENT OF EXISTING WORK

- Extent and location: Agree before commencement.
- Execution: Carry out in ways that minimize the extent of work.

#### 430 PROPOSED INSTRUCTIONS

- Estimates: If a proposed instruction requests an estimate of cost, submit without delay and in any case within seven days.
- Include:
  - A detailed breakdown of the cost, including any allowance for direct loss and expense.
  - Details of any additional resources required.
  - Details of any adjustments to be made to the programme for the Works.
  - Any other information as is reasonably necessary to fully assess the implications of issuing such an instruction.
- Inability to comply: Inform immediately if it is not possible to comply with any of the above requirements.

#### 440 MEASUREMENT

- Covered work: Give notice before covering work required to be measured.

#### 460 INTERIM VALUATIONS

- Applications: Include details of amounts requested under the Contract together with all necessary supporting information.
- Submission: At least seven days before established dates.

#### 470 PRODUCTS NOT INCORPORATED INTO THE WORKS

- Ownership: At the time of each valuation, supply details of those products not incorporated into the Works which are subject to any reservation of title inconsistent with passing of property as required by the Conditions of Contract, together with their respective values.
- Evidence: When requested, provide evidence of freedom of reservation of title.

#### 475 LISTED PRODUCTS STORED OFF SITE

- Evidence of Title: Submit reasonable proof that the property in items stored off site to be included in valuations is vested in the Contractor.
- Include for products purchased from a supplier:
  - a copy of the contract of sale;
  - a written statement from the supplier that any conditions of the sale relating to the passing of property have been fulfilled and the products are not subject to any encumbrance or charge.
- Include for products purchased from a supplier by a subcontractor or manufactured or assembled by any subcontractor:
  - Copies of the subcontract with the subcontractor and a written statement from the subcontractor that any conditions relating to the passing of property have been fulfilled.

#### 480 LABOUR AND EQUIPMENT RETURNS

- Records: Provide for verification at the beginning of each week in respect of each of the previous seven days.

- Records must show:
  - The number and description of craftsmen, labourers and other persons directly or indirectly employed on or in connection with the Works or Services, including those employed by subcontractors.
  - The number, type and capacity of all mechanical, electrical and power-operated equipment employed in connection with the Works or Services

#### A33 QUALITY STANDARDS/ CONTROL

#### STANDARDS OF PRODUCTS AND EXECUTIONS

#### 110 INCOMPLETE DOCUMENTATION

- General: Where and to the extent that products or work are not fully documented, they are to be:
  - Of a kind and standard appropriate to the nature and character of that part of the Works where they will be used.
  - Suitable for the purposes stated or reasonably to be inferred from the project documents.
  - Contract / Tender documents: Omissions or errors in description and/ or quantity shall not vitiate the Contract nor release the Contractor from any obligations or liabilities under the Contract. The Contractor must supplement the Tender/ Contract Documents to enable work package/ subcontract packages to be sought.

#### 120 WORKMANSHIP SKILLS

- Operatives: Appropriately skilled and experienced for the type and quality of work.
- Registration: With Construction Skills Certification Scheme.
- Evidence: Operatives must produce evidence of skills/ qualifications when requested.

#### 130 QUALITY OF PRODUCTS

- Generally: New (Proposals for recycled products may be considered).
- Supply of each product: From the same source or manufacturer.
- Whole quantity of each product required to complete the Works: Consistent in kind, size, quality and overall appearance.
- Tolerances: Where critical, measure a sufficient quantity to determine compliance.
- Deterioration: Prevent. Order in suitable quantities to a programme and use in appropriate sequence.

#### 135 QUALITY OF EXECUTION

- Generally: Fix, apply, install or lay products securely, accurately, plumb, neatly and in alignment.
- Colour batching: Do not use different colour batches where they can be seen together.
- Dimensions: Check on-site dimensions.
- Finished work: Not defective, e.g. not damaged, disfigured, dirty, faulty, or out of tolerance.
- Location and fixing of products: Adjust joints open to view so they are even and regular.

#### 140 COMPLIANCE

- Compliance with proprietary specifications: Retain on site evidence that the proprietary product specified has been supplied.

#### 150 INSPECTIONS

- Products and executions: Inspection or any other action must not be taken as approval unless confirmed in writing referring to:
  - Date of inspection.
  - Part of the work inspected.
  - Respects or characteristics which are approved.
  - Extent and purpose of the approval.
  - Any associated conditions.

## 160 RELATED WORK

- Details: Provide all trades with necessary details of related types of work. Before starting each new type or section of work ensure previous related work is:
  - Appropriately complete.
  - In accordance with the project documents.

- To a suitable standard.
- In a suitable condition to receive the new work.
- Preparatory work: Ensure all necessary preparatory work has been carried out.

#### 170 MANUFACTURER'S RECOMMENDATIONS/ INSTRUCTIONS

- General: Comply with manufacturer's printed recommendations and instructions current on the date of the Invitation to tender.
- Changes to recommendations or instructions: Submit details.
- Ancillary products and accessories: Use those supplied or recommended by main product manufacturer.
- Agrément certified products: Comply with limitations, recommendations and requirements of relevant valid certificates.

#### 180 WATER FOR THE WORKS

- Mains supply: Clean and uncontaminated.
- Other: Do not use until:
  - Evidence of suitability is provided.
  - Tested to BS EN 1008 if instructed.

#### SAMPLES/ APPROVALS

#### 210 SAMPLES

- Products or executions: Comply with all other specification requirements and in respect of the stated or implied characteristics either:
  - To an express approval.
  - To match a sample expressly approved as a standard for the purpose.
  - Submit: samples joinery, fixtures and fittings

#### 220 APPROVAL OF PRODUCTS

- Submissions, samples, inspections and tests: Undertake or arrange to suit the Works programme.
- Approval: Relates to a sample of the product and not to the product as used in the Works. Do not confirm orders or use the product until approval of the sample has been obtained.
- Complying sample: Retain in good, clean condition on site. Remove when no longer required.

#### 230 APPROVAL OF EXECUTION

- Submissions, samples, inspections and tests: Undertake or arrange to suit the Works programme.
- Approval: Relates to the stated characteristics of the sample. (If approval of the finished work as a whole is required this is specified separately). Do not conceal, or proceed with affected work until compliance with requirements is confirmed.
- Complying sample: Retain in good, clean condition on site. Remove when no longer required.

#### **ACCURACY/ SETTING OUT GENERALLY**

## 320 SETTING OUT

- General: Submit details of methods and equipment to be used in setting out the Works.
- Levels and dimensions: Check and record the results on a copy of drawings. Notify discrepancies and obtain instructions before proceeding.
- Inform: When complete and before commencing construction.

#### 340 CRITICAL DIMENSIONS

- Critical dimensions: Set out and construct the Works to ensure compliance with the tolerances stated.

#### 350 LEVELS OF STRUCTURAL FLOORS

- Maximum tolerances for designed levels to be:
  - Floors to be self-finished, and floors to receive sheet or tile finishes directly bedded in adhesive: +/- 5 mm.
  - Floors to receive dry board/ panel construction with little or no tolerance on thickness: +/- 5 mm.
  - Floors to receive mastic asphalt flooring/ underlays directly: +/- 10 mm.
  - Floors to receive mastic asphalt flooring/ underlays laid on mastic asphalt levelling coat(s): +/- 15 mm.
  - Floors to receive fully bonded screeds/ toppings/ beds: +/- 5 mm.
  - Floors to receive unbonded or floating screeds/ beds: +/- 5 mm.

#### **SERVICES GENERALLY**

#### 410 SERVICES REGULATIONS

New or existing services: Comply with the Byelaws or Regulations of the relevant Statutory Authority.

#### 435 ELECTRICAL INSTALLATION CERTIFICATE

- Issue: When work is completed.
- Original certificate: To be lodged in the Home Information Pack.

## 440 GAS, OIL AND SOLID FUEL APPLIANCE INSTALLATION CERTIFICATE

- Before the completion date stated in the contract: Submit a certificate stating:
  - The address of the premises.
  - A brief description of the new installation and/ or work carried out to an existing installation.
  - Any special recommendations or instructions for the safe use and operation of appliances and flues.
  - The Contractor's name and address.
  - A statement that the installation complies with the appropriate safety, installation and use regulations.
  - The name, qualification and signature of the competent person responsible for checking compliance.
  - The date on which the installation was checked.
- Certificate location: H&S File

#### 450 MECHANICAL AND ELECTRICAL SERVICES

- Final tests and commissioning: Carry out so that services are in full working order at completion of the Works.
- Building Regulations notice: Copy to be lodged in H&S File

#### SUPERVISION/ INSPECTION/ DEFECTIVE WORK

#### 510 SUPERVISION

- General: In addition to the constant management and supervision of the Works provided by the Contractor's person in charge, all significant types of work must be under the close control of competent trade supervisors to ensure maintenance of satisfactory quality and progress.
- Replacement: Give maximum possible notice before changing person in charge or site agent.

#### 520 COORDINATION OF ENGINEERING SERVICES

- Suitability: Site organisation staff must include one or more persons with appropriate knowledge and experience of mechanical and electrical engineering services to ensure compatibility between engineering and the Works generally.
- Evidence: Submit when requested CVs or other documentary evidence relating to the staff concerned.

#### 560 TESTS AND INSPECTIONS

- Timing: Agree and record dates and times of tests and inspections to enable all affected parties to be represented.
- Confirmation: One working day prior to each such test or inspection. If sample or test is not ready, agree a new date and time.
- Records: Submit a copy of test certificates and retain copies on site.

#### 610 PROPOSALS FOR RECTIFICATION OF DEFECTIVE PRODUCTS/ EXECUTIONS

- Proposals: Immediately any execution or product is known, or appears, to be not in accordance with the Contract, submit proposals for opening up, inspection, testing, making good, adjustment of the Contract Sum, or removal and re-execution.
- Acceptability: Such proposals may be unacceptable and contrary instructions may be issued.

## WORK AT OR AFTER COMPLETION

#### 710 WORK BEFORE COMPLETION

- General: Make good all damage consequent upon the Works.
  - Temporary markings, coverings and protective wrappings: Remove unless otherwise instructed.

- Cleaning: Clean the Works thoroughly inside and out, including all accessible ducts and voids. Remove all splashes, deposits, efflorescence, rubbish and surplus materials.
- Cleaning materials and methods: As recommended by manufacturers of products being cleaned, and must not damage or disfigure other materials or construction.
- COSHH dated data sheets: Obtain for all materials used for cleaning and ensure they are used only as recommended by their manufacturers.
- Minor faults: Touch up in newly painted work, carefully matching colour and brushing out edges. Repaint badly marked areas back to suitable breaks or junctions.
- Moving parts of new work: Adjust, ease and lubricate as necessary to ensure easy and efficient operation, including doors, windows, drawers, ironmongery, appliances, valves and controls.

#### 720 SECURITY AT COMPLETION

- General: Leave the Works secure with, where appropriate, all accesses closed and locked.
- Keys: Account for and adequately label all keys and hand over to Employer with itemized schedule, retaining duplicate schedule signed by Employer as a receipt.

#### 730 MAKING GOOD DEFECTS

- Remedial work: Arrange access with Philip Wiltshire
- Rectification: Give reasonable notice for access to the various parts of the Works.
- Completion: Notify when remedial works have been completed.

#### A34 SECURITY/ SAFETY/ PROTECTION

#### SECURITY, HEALTH AND SAFETY

## PRECONSTRUCTION INFORMATION

- Location: Integral with the project Preliminaries, including but not restricted to the following sections:
  - Description of project: Sections A10 and A11.
  - Client's consideration and management requirements: Sections A12, A13 and A36.
  - Environmental restrictions and on-site risks: Section A12, A35 and A34.
  - Significant design and construction hazards: Section A34.
  - The Health and Safety File: Section A37.

#### 130 PRODUCT HAZARDS

110

- Hazardous substances: Site personnel levels must not exceed occupational exposure standards and maximum exposure limits stated in the current version of HSE document EH40: Occupational Exposure Limits.
- Common hazards: Not listed. Control by good management and site practice.
- Significant hazards: Specified construction materials include the following:

## 140 CONSTRUCTION PHASE HEALTH AND SAFETY PLAN

- Submission: Present to the Employer/ Client no later than One Week Prior to commencement of the works
- Confirmation: Do not start construction work until this has been prepared; includes the procedures and arrangements required by CDM Regulations.
- Content: Develop the plan from and draw on the Outline Construction Phase Health and Safety Plan, clause A30/570, and the Pre-tender Health and Safety Plan/ Preconstruction information.

#### 150 SECURITY

- Protection: Safeguard the site, the Works, products, materials, and any existing buildings affected by the Works from damage and theft.
- The site and compound will need full heras fencing and gates and works are protected as well as screened to prevent site access
- Access: Take all reasonable precautions to prevent unauthorized access to the site, the Works and adjoining property.

#### 180 PASSES

- Controlled areas: No Access to areas outside the site and compound

- Authorised persons: Submit a list of the names of all persons requiring passes together with any other related information reasonably required.
- Return of passes: When requested or on completion of the work to which the pass relates.

#### 190 OCCUPIER'S RULES AND REGULATIONS

- Compliance: includes access limitations, site control of waste and noisy works – to be confirmed at prestart meeting

#### 210 EMPLOYER'S REPRESENTATIVES SITE VISITS

- Safety: Submit details in advance, to the Employer or the person identified in clause A10/140, of safety provisions and procedures (including those relating to materials, which may be deleterious), which will require their compliance when visiting the site.
- Protective clothing and/ or equipment: Provide and maintain on site for the Employer and the person stated in clause A10/140 and other visitors to the site.

#### PROTECT AGAINST THE FOLLOWING

#### 330 NOISE CONTROL

- Standard: Comply generally with the recommendations of BS 5228-1, clause 9.3 to minimize noise levels during the execution of the Works.
- Equipment: Fit compressors, percussion tools and vehicles with effective silencers of a type recommended by manufacturers of the compressors, tools or vehicles.
- Restrictions: Do not use:
  - Pneumatic drills and other noisy appliances without consent
  - Radios or other audio equipment or permit employees to use in ways or at times that may cause nuisance.

#### 340 POLLUTION

- Prevention: Protect the site, the Works and the general environment including the atmosphere, lands, streams and waterways against pollution.
- Contamination: If pollution occurs inform immediately, including to the appropriate Authorities and provide relevant information.

## 350 PESTICIDES

- Use: Not permitted.

#### 360 NUISANCE

- Duty: Prevent nuisance from smoke, dust, rubbish, vermin and other causes.
- Surface water: Prevent hazardous build-up on site, in excavations and to surrounding areas and roads.

## 370 ASBESTOS CONTAINING MATERIALS

- Duty: Report immediately any suspected materials discovered during execution of the Works.
  - Do not disturb.
  - Agree methods for safe removal or encapsulation.

#### 390 SMOKING ON SITE

- Smoking on site: Not permitted.

#### 400 BURNING ON SITE

- Burning on site: Not permitted.

#### 410 MOISTURE

- Wetness or dampness: Prevent, where this may cause damage to the Works.
- Drying out: Control humidity and the application of heat to prevent:
  - Blistering and failure of adhesion.
  - Damage due to trapped moisture.
  - Excessive movement.

#### 420 INFECTED TIMBER

- Removal: Where instructed to remove timber affected by fungal/ insect attack from the building, minimize the risk of infecting other parts of the building.

#### 430 WASTE

- Includes: Rubbish, debris, spoil, containers and surplus material.
- Minimize: Keep the site and Works clean and tidy.
- Remove: Frequently and dispose off site in a safe and competent manner:
  - Non-hazardous material: In a manner approved by the Waste Regulation Authority.
  - Hazardous material: As directed by the Waste Regulation Authority and in accordance with relevant regulations.
- Voids and cavities in the construction: Remove rubbish, dirt and residues before closing in.
- Waste transfer documentation: Retain on site.

#### PROTECT THE FOLLOWING

#### 510 EXISTING SERVICES

- Confirmation: Notify all service authorities, statutory undertakers and/ or adjacent owners of proposed works not less than one week before commencing site operations.
- Identification: Before starting work, check and mark positions of mains/ services. Where positions are not shown on drawings obtain relevant details from service authorities, statutory undertakers or other owners.
- Work adjacent to services:
  - Comply with service authority's/ statutory undertaker's recommendations.
  - Adequately protect and prevent damage to services: Do not interfere with their operation without consent of service authorities/ statutory undertakers or other owners.
- Identifying services:
  - Below ground: Use signboards, giving type and depth;
  - Overhead: Use headroom markers.
- Damage to services: If any results from execution of the Works:
  - Immediately give notice and notify appropriate service authority/ statutory undertaker.
  - Make arrangements for the work to be made good without delay to the satisfaction of service authority/ statutory undertaker or other owner as appropriate.
  - Any measures taken to deal with an emergency will not affect the extent of the Contractor's liability.
- Marker tapes or protective covers: Replace, if disturbed during site operations, to service authority's/ statutory undertaker's recommendations.

#### 520 ROADS AND FOOTPATHS

- Duty: Maintain roads and footpaths within and adjacent to the site and keep clear of mud and debris.
- Damage caused by site traffic or otherwise consequent upon the Works: Make good to the satisfaction of the Employer, Local Authority or other owner.

#### 560 EXISTING FEATURES

- Protection: Prevent damage to existing buildings, fences, gates, walls, roads, paved areas and other site features, which are to remain in position during execution of the Works.

#### 570 EXISTING WORK

- Protection: Prevent damage to existing property undergoing alteration or extension.
- Removal: Minimum amount necessary.
- Replacement work: To match existing.

## 630 EXISTING STRUCTURES

- Duty: Check proposed methods of work for effects on adjacent structures inside and outside the site boundary.
- Supports: During execution of the Works:
  - Provide and maintain all incidental shoring, strutting, needling and other supports as may be necessary to
    preserve stability of existing structures on the site or adjoining that may be endangered or affected by the
    Works.
  - Do not remove until new work is strong enough to support existing structure.
  - Prevent overstressing of completed work when removing supports.

- Adjacent structures: Monitor and immediately report excessive movement.
- Standard: Comply with BS 5975 and BS EN 12812.

#### 640 MATERIALS FOR RECYCLING/ REUSE

- Duty: Sort and prevent damage to stated products or materials, clean off bedding and jointing materials and other contaminants.
- Storage: Stack neatly and protect until required by the Employer or for use in the Works as instructed.

#### A35 SPECIFIC LIMITATIONS ON METHOD/ SEQUENCE/ TIMING

#### 110 SCOPE

- General: The limitations described in this section are supplementary to limitations described or implicit in information given in other sections or on the drawings.

#### 120 DESIGN CONSTRAINTS

 Details: The contract makes provision for the design of all or part of the work by the Main Contractor, and expects the Contractor to facilitate and manage design which is included in subcontract packages and thus become CDP managed by the Main Contractor.

#### 130 METHOD/ SEQUENCE OF WORK

- Specific Limitations: Include on the submitted Contractors programme all methods and sequence of works

#### 140 SCAFFOLDING

- Standing scaffolding: Make available to subcontractors at all times.

#### 170 WORKING HOURS

- See particular specification

## A36 FACILITIES/ TEMPORARY WORK/ SERVICES

#### **GENERALLY**

#### 110 SPOIL HEAPS, TEMPORARY WORKS AND SERVICES

- Location: Give notice of intended siting.
- Maintenance: Alter, adapt and move as necessary. Remove when no longer required and make good.

#### **ACCOMMODATION**

## 210 ROOM FOR MEETINGS

- Facilities: The Client will provide accommodation.

## 220 SITE BUILDINGS

Use accommodation on site

#### 260 SANITARY ACCOMMODATION

- Facilities: Use toilets to be agreed on site and 6<sup>th</sup> floor canteen.

#### **SERVICES AND FACILITIES**

## 410 LIGHTING

- Finishing work and inspection: Provide temporary lighting, the intensity and direction of which closely resembles that delivered by the permanent installation.

#### 420 LIGHTING AND POWER

- Supply: Electricity from the Employer's mains may be used for the Works
- Continuity: The Employer will not be responsible for the consequences of failure or restriction in supply.

#### 430 WATER

- Supply: The Employer's mains may be used for the Works
- Continuity: The Employer will not be responsible for the consequences of failure or restriction in supply.

#### 440 MOBILE TELEPHONES

- Direct communication: As soon as practicable after the start on site:
  - provide the Contractor's person in charge with a mobile telephone.
  - pay all charges reasonably incurred.

#### 470 E-MAIL AND INTERNET FACILITY

- General: Mobile Phone

#### 480 PHOTOCOPIER

- General: No site access permitted.

#### 550 THERMOMETERS

- General: Provide on site and maintain in accurate condition a maximum and minimum thermometer for measuring atmospheric shade temperature, in an approved location – not applicable.

#### 570 PERSONAL PROTECTIVE EQUIPMENT

- General: Provide for the sole use of those acting on behalf of the Employer, in sizes to be specified:
  - Safety helmets to BS EN 397, neither damaged nor time expired. Number required: 5no
  - High visibility waistcoats to BS EN 471 Class 2. Number required: 5no
  - Disposable respirators to BS EN 149.FFP1S.
  - Eye protection to BS EN 166.
  - Ear protection muffs to BS EN 352-1, plugs to BS EN 352-2.
  - Hand protection to BS EN 388, 407, 420 or 511 as appropriate.

#### A37 OPERATION/ MAINTENANCE OF THE FINISHED WORKS

## **GENERALLY**

#### 110 THE BUILDING MANUAL

- Purpose: The Manual is to be a comprehensive information source and guide for owners and users of the completed Works. It should provide an overview of the main design principles and describe key components and systems to enable proper understanding, efficient and safe operation and maintenance.
- Scope:
  - Part 1: General: [Content as clause 120].
  - Part 2: Fabric: [Content as clause 130].
  - Part 3: Services: [Content as clause 140].
  - Part 4: The Health and Safety File: [prepared and supplied by the CDM Coordinator]. [Content as clause 150].
- Responsibility: The Building Manual is to be produced by the Main Contractor and must be complete no later than 2 months
- Compilation:
  - Prepare all information for Contractor designed or performance specified work including as-built drawings.
  - Obtain or prepare all other information to be included in the Manual.
- Reviewing the Manual: Submit a complete draft. Amend in the light of any comments and resubmit. Do not proceed with production of the final copies until authorized.
- Final copies of the Manual:
  - Number of copies: 2no
  - Format: hard copy and electronic in matching file format
- As-built drawings and schedules:
  - Number of copies: Within the H&S Files and electronic copies

#### 120 CONTENT OF THE BUILDING MANUAL PART 1: GENERAL

- Content: Obtain and provide the following, including all relevant details not included in other parts of the manual:
- Index: list the constituent parts of the manual, together with their location in the document.
- The Works:
  - Description of the buildings and facilities.
  - Ownership and tenancy, where relevant.
  - Health and Safety information other than that specifically required by the Construction (Design and Management) Regulations.
- The Contract:
  - Names and addresses and contact details of all significant consultants, Contractors, subcontractors, suppliers and manufacturers.
  - Overall design criteria.
  - Environmental performance requirements.
  - Relevant authorities, consents and approvals.
  - Third party certification, such as those made by "competent" persons in accordance with the Building Regulations.
- Operational requirements and constraints of a general nature:
  - Maintenance contracts and Contractors.
  - Fire safety strategy for the buildings and the site. Include drawings showing emergency escape and fire appliance routes, fire resisting doors, location of emergency alarm and fire fighting systems, services, shut off valves switches, etc.
  - Emergency procedures and contact details in case of emergency.
- Description and location of other key documents.

#### 130 CONTENT OF THE BUILDING MANUAL PART 2: BUILDING FABRIC

- Content: Obtain and provide the following, including all relevant details not included in other parts of the manual:
- Detailed design criteria, including:
  - Floor and roof loadings.
  - Durability of individual components and elements.
  - Loading restrictions.
  - Insulation values.
  - Fire ratings.
  - Other relevant performance requirements.
  - Construction of the building:
  - A detailed description of methods and materials used.
  - As-built drawings recording the construction, together with an index.
  - Information and guidance concerning repair, renovation or demolition/ deconstruction.
- Periodic building maintenance guide chart.
- Inspection reports.
- Manufacturer's instructions index, including relevant COSHH data sheets and recommendations for cleaning, repair and maintenance of components.
- Fixtures, fittings and components schedule and index.
- Guarantees, warranties and maintenance agreements obtain from manufacturers, suppliers and subcontractors.
- Test certificates and reports required in the specification or in accordance with legislation, including:
  - Air permeability.
  - Resistance to passage of sound.
  - Continuity of insulation.
  - Electricity and Gas safety.

#### 140 CONTENT OF THE BUILDING MANUAL PART 3: BUILDING SERVICES

- Content: Obtain and provide the following, including all relevant details not included in other parts of the
- Detailed design criteria and description of the systems, including:
  - Services capacity, loadings and restrictions.
  - Services instructions.

- Services log sheets.
- Manufacturers' instruction manuals and leaflets index.
- Fixtures, fittings and component schedule index.
- Detailed description of methods and materials used.
- As-built drawings for each system recording the construction, together with an index, including:
  - Diagrammatic drawings indicating principal items of plant, equipment and fittings.
  - Record drawings showing overall installation.
  - Schedules of plant, equipment, valves, etc. describing location, design performance and unique identification cross referenced to the record drawings.
  - Identification of services a legend for colour coded services.
- Product details, including for each item of plant and equipment:
  - Name, address and contact details of the manufacturer.
  - Catalogue number or reference.
  - Manufacturer's technical literature, including detailed operating and maintenance instructions.
  - Information and guidance concerning dismantling, repair, renovation or decommissioning.
- Operation: A description of the operation of each system, including:
  - Starting up, operation and shutting down.
  - Control sequences.
  - Procedures for seasonal changeover.
  - Procedures for diagnostics, troubleshooting and faultfinding.
- Guarantees, warranties and maintenance agreements obtain from manufacturers, suppliers and subcontractors.
- Commissioning records and test certificates list for each item of plant, equipment, valves, etc. used in the installations including:
  - Electrical circuit tests.
  - Corrosion tests.
  - Type tests.
  - Work tests.
  - Start and commissioning tests.
- Equipment settings: Schedules of fixed and variable equipment settings established during commissioning.
- Preventative maintenance: Recommendations for frequency and procedures to be adopted to ensure efficient operation of the systems.
- Lubrication: Schedules of all lubricated items.
- Consumables: A list of all consumable items and their source.
- Spares: A list of recommended spares to be kept in stock, being those items subject to wear and tear or deterioration and which may involve an extended delivery time when replacements are required.
- Emergency procedures for all systems, significant items of plant and equipment.
- Annual maintenance summary chart.

## 150 CONTENT OF THE BUILDING MANUAL PART 4: THE HEALTH AND SAFETY FILE

- Content: Obtain and provide the following, including all relevant details not included in other parts of the manual, including:
  - residual hazards and how they have been dealt with.
  - hazardous materials used.
  - information regarding the removal or dismantling of installed plant and equipment.
  - health and safety information about equipment provided for cleaning or maintaining the structure.
  - the nature, location and markings of significant services.
  - information and as-built drawings of the structure, its plant and equipment.

#### 160 PRESENTATION OF BUILDING MANUAL

- Format: A4 size, plastics covered, loose leaf, four ring binders with hard covers, each indexed, divided and appropriately cover titled.
- Selected drawings needed to illustrate or locate items mentioned in the Manual: Where larger than A4, to be folded and accommodated in the binders so that they may be unfolded without being detached from the rings.
- As-built drawings: The main sets may form annexes to the Manual.

#### 190 MAINTENANCE SERVICE

## 2230 19 – EA Guildbourne house – 5<sup>th</sup> floor incident room and 3<sup>rd</sup> Floor Archive room

- Scope; provide a comprehensive maintenance service for the following items of plant and equipment: Include all planned preventative maintenance, as set out within the maintenance schedule and replacement of all consumable items

#### 210 INFORMATION FOR COMMISSIONING OF SERVICES

- General: Submit relevant drawings and preliminary performance data to enable the building user's staff to familiarise themselves with the installation.
- Time of submission: At commencement of commissioning.

#### 220 TRAINING

- Objective: Before Completion, explain and demonstrate to the Employer's maintenance staff the purpose, function and operation of the installations including items and procedures listed in the Building Manual.
- Operating time: Include a minimum of 2 days.

#### 230 SPARE PARTS

- General: Before Completion submit a priced schedule of spare parts that the Contractor recommends should be obtained and kept in stock for maintenance of the services installations.
- Content: Include in the priced schedule for:
  - Manufacturers' current prices, including packaging and delivery to site.
  - Checking receipts, marking and numbering in accordance with the schedule of spare parts.
  - Referencing to the plant and equipment list in Part 3 of the Building Manual.
  - Painting, greasing, etc. and packing to prevent deterioration during storage.

#### 250 TOOLS

- General: Provide tools and portable indicating instruments for the operation and maintenance of all services.
   plant and equipment (except any installed under Named Subcontracts) together with suitable means of identifying, storing and securing.
- Quantity: Two complete sets.
- Time of submission: At completion.

#### A40 CONTRACTOR'S GENERAL COST ITEMS: MANAGEMENT AND STAFF

## 110 MANAGEMENT AND STAFF

- Contractor to include for all Cost Significant Items

#### A41 CONTRACTOR'S GENERAL COST ITEMS: SITE ACCOMMODATION

#### 110 SITE ACCOMMODATION

- Details: Site accommodation required or made/ not made available by the Employer: See section A36.
- Contractor to include for all Cost Significant Items

## A42 CONTRACTOR'S GENERAL COST ITEMS: SERVICES AND FACILITIES

#### 100 GENERALLY

For all items below 110 to 310 inclusive. Contractor to include for all Cost Significant Items.

- 110 POWER
- 120 LIGHTING
- 140 WATER DISTRIBUTION
- 150 TELEPHONE AND ADMINISTRATION

## 160 SAFETY, HEALTH AND WELFARE

- See clause A34/210.

170	STORAGE OF MATERIALS
180	RUBBISH DISPOSAL See clause A34/430.
190 -	CLEANING See clause A33/710.
200	DRYING OUT See clause A34/410.
210	PROTECTION OF WORK IN SECTIONS
220 -	SECURITY See clause A34/150.
230	MAINTAIN PUBLIC AND PRIVATE ROADS See clause A34/520.
240	SMALL PLANT AND TOOLS
250	OTHERS
301 -	GENERAL ATTENDANCE ON SUBCONTRACTORS See section A51.
310	ADDITIONAL SERVICES AND FACILITIES ITEMS
A43	CONTRACTOR'S GENERAL COST ITEMS: MECHANICAL PLANT
100	<b>GENERALLY</b> For all items below 110 to 310 inclusive. Contractor to include for all Cost Significant Items.
130	PERSONNEL TRANSPORT
140	TRANSPORT
200	ADDITIONAL MECHANICAL PLANT
A44	CONTRACTOR'S GENERAL COST ITEMS: TEMPORARY WORKS
100	<b>GENERALLY</b> For all items below 110 to 200 inclusive. Contractor to include for all Cost Significant Items.
110	TEMPORARY WORKS  Details: Temporary works required or made/ not made available by the Employer
A50	WORK/ PRODUCTS BY/ ON BEHALF OF THE EMPLOYER
110 -	WORK BY/ ON BEHALF OF EMPLOYER  Description of work: Installations of Specialist fixtures and fittings, equipment and the like which does not form part of the contract works  Carried out by: The Employers directly employed operatives/ workforce  Attendance: Allow for those reasonably required by the conditions of contract

24 TO SUMMARY

PRODUCTS PROVIDED BY/ ON BEHALF OF EMPLOYER

120

## 

	eneral: Details of such products are given in the work sections, for fixing by the Contractor. Use for no other
Há	andling: Accept delivery, check against receipts and take into appropriate storage.
Su	urplus products: Keep safe and obtain instructions.

## **SECTION B**

Health & Safety
See PCIP by Black & Veatch



# PRE-CONSTRUCTION INFORMATION (SIMPLE PROJECTS) FACILITIES

## **DOCUMENT REF**:

## Guildbourne House – 5<sup>th</sup> Floor Incident Room

	Guildbourne House, 5 <sup>th</sup> Floor Incident Room & 3 <sup>rd</sup> Floor Archive Room
Project Name:	
	Guildbourne House, Chatsworth Road, Worthing BN11 1LD
Project Location:	
Description of Work	ζ:

## The works consist of:

- Alterations to the existing incident room on the 5<sup>th</sup> Floor of Guildbourne House
- Construction of a new archive room on the 3<sup>rd</sup> Floor of Guildbourne House.

Key Personnel (if applicable)	Name	Contact Details
Client:	Jeanette Woolgar	Environment Agency Guildbourne House, Chatsworth Road, Worthing BN11 1LD
		07880 052435  Jeanette.woolgar@environment- agency.gov.uk
Designer:	Phillip Wiltshire	Phillips Surveyors The Old Coach House Lower Street Pullborough West Sussex RH20 2AA 01798 873 222
M & E Designer	Graham Andrews	07889 922 862 philw@philips-surveyors.co.uk  MCA Consulting Engineers Ltd 8 Newhouse Business Centre

		Old Crawley Road,		
		Horsham		
		West Sussex		
		RH12 4RU		
		01293 851490		
		GrahamAndrews@mcaltd.co.uk		
Contractor:	TBC	TBC		
Contractors	150	150		
Principal Designer:	Michael Nimmo	CH2M		
Trincipal Designer.	Wilchael Willing	2nd Floor Cottons Centre,		
		•		
		Cottons Lane,		
		London		
		SE1 2QG		
		01737 856474		
		07789 004086		
		nimmom@bv.com		
Principal Contractor:	TBC	TBC		
Other Stakeholders:	David Bannar	Facility and Assessed		
Other Stakeholders:	David Bonner	Environment Agency		
		Guildbourne House,		
		Chatsworth Road,		
		Worthing		
		BN11 1LD		
		07702 666765		
		David.bonner@environment-agency.gov.uk		
Client Requirements:	*All contractors and visitors to si			
		e induction before entering work area and		
	work commencing	a madelion before entering work area and		
	*Hi-visibility vests/jackets must be worn at all times			
	*Eye protection must be worn, if specified by contractors RAMS for the task			
		•		
	*Appropriate safety footwear mu			
		ified in the contractors RAMS for the task		
	1	equipment may be used on-site unless		
	authorized by the Facilities Team			
	*No smoking or alcohol consump	tion on site at any time, this is to include in		
	vehicles			
	*Only approved contractors are a	allowed to enter the work area		
	, , , ,	pe reported to the Facilities Team immediately		
	The Principal Contractor or Contr	actor must plan, manage and co-ordinate		
	ase taking account of the information			
	work during the construction pric	ase taking account of the illiornation		

contained in the PCI provided by the Principal Designer or client CDM Advisor on behalf of the client, and any other information provided by contractors. The CPP must also comply with the specific requirements detailed in Constructing a Better Environment SHEW CoP.

The Health and Safety Timeline in Appendix F 1 Constructing a Better Environment SHEW CoP diagrammatically shows the CDM process to be followed and details who needs to be involved at what stage. It is mandatory that the Principal Designer is informed of the following:

- Appointment of any designers by anyone (temporary works, specialists, etc.).
- Design changes where safety considerations are required for all permanent and temporary works.
- Proof that safety is considered for all design changes and variations

The Client has very specific competence and training requirements as detailed in section 4.2 Constructing a Better Environment SHEW CoP. The PC must ensure that these are adhered to.

Start Date: TBC

End Date: TBC

#### Site Hazards including those resulting from activities on site:

- Pedestrians/Staff and Visitors
- Staff trying to access the immediate vicinity of the work area
- Stair/lift access
- The designer has produced a design hazard inventory identifying residual risks and assumed control measures based upon the design.

## Restrictions:

- Restrictions on movement in and around the working area
- The client's representative will be resident on site and will be responsible, in conjunction with
  the designer for co-ordination. A communication/liaison process will be agreed with the
  contractor to comply with the mutual QA procedures.
- Work is to be carried out after hours (between 5.00pm and 7.00am) and weekends only

It is essential that the Principal Designer is informed of the following:

- Appointment of any designers (piling, temporary works, etc.)
- Any design work still to be carried out
- Design changes where safety considerations are required for all permanent and temporary works.
- Proof that safety is considered for all design variations (however minor).

#### **Control Measures:**

- No entry will be allowed to this area whilst works are taking place.
- The Principal Contractor or Contractor shall prepare a suitable Construction Phase Plan (CPP)
  which is to be submitted to the Principal Designer or client CDM Advisor as early as practical
  but at least a minimum of 10 working days prior to the planned start of any construction phase.

#### Fire/Emergency Rules:

• As per the site regulations. Contractors will be briefed on these during site induction.

The Principal Contractor should ensure that the Accident / Incident reporting procedure detailed in Appendix A of Constructing a Better Environment SHEW CoP is followed.

#### **Welfare Arrangements:**

- Toilets with hand basins, hot and cold running water, are available on-site
- Showers are available on-site
- Hot water and cold water and drinks making facilities can be found in the kitchenettes on all floors. This kitchenette also has a fridge and a microwave.

#### **Details of relevant information given to Contractor:**

- 19 02 26 Guildbourne House Fifth Floor Project Directory
- 2112-17-P-FF-1\_Proposed 5<sup>th</sup> Floor Guildbourne House
- 2112-17-P-TF-1\_Proposed 3<sup>rd</sup> Floor Guildbourne House
- 203019 Guildbourne House Fifth Floor Full Specification 22 03 2019
- Environment Agency SHEW CoP
- 3.6 LBC Guildbourne House Fifth Floo DM2015 Designer Risj Register 19.03.2019
- 2680-E51 5<sup>th</sup> Floor Incident Room & 3<sup>rd</sup> Floor Archives Room M&E Drawings
- Guildbourne House (asbestos) Reinspection Survey 2018

Up to date Service Drawings
Post project information required from Contractor:
The principal contractor, contractors, designers and client, shall, where applicable, provide the Principal Designer with all relevant information for inclusion in the Health and Safety File.
(O & H Manuals), final drawings / schematics.
Hardah and Cafata Ella
Health and Safety File

**Commented [NM1]:** Please provide the emergency/fire plans.

Commented [NM2]: Service information to be provided

Project Manager Signature	Date	
Principal Contractor/Contractor Signature		Date

## **Emergency Procedures**



Supporting document 149\_05\_SD02

Issued 03/06/2016

## **GUILDBOURNE HOUSE**

## **APRIL 2018**

# WHAT IS THIS DOCUMENT ABOUT?

## **Emergency Procedures for:**

- Fire
- Bomb
- Biological and chemical threats
- Hostile visitors/protesters
- Gas
- Flood

# WHO DOES THIS APPLY TO?

Anyone managing an occupied buildings or structures.

## CONTACT FOR QUERIES AND FEEDBACK

- Sue Cooper Facilities Technical Team
- Please give <u>anonymous feedback</u> for this document.

## EMERGENCY PLANS

Below are the best practice templates for the six hazards listed above. Each template has sections for adding local information; these need completion with local details and tables for completion with relevant details.

The template for any other hazards identified see 149 05 SD01



Supporting document 149\_05\_SD02

Issued 03/06/2016

#### EMERGENCY PROCEDURES MANUAL

#### **CONTENTS**

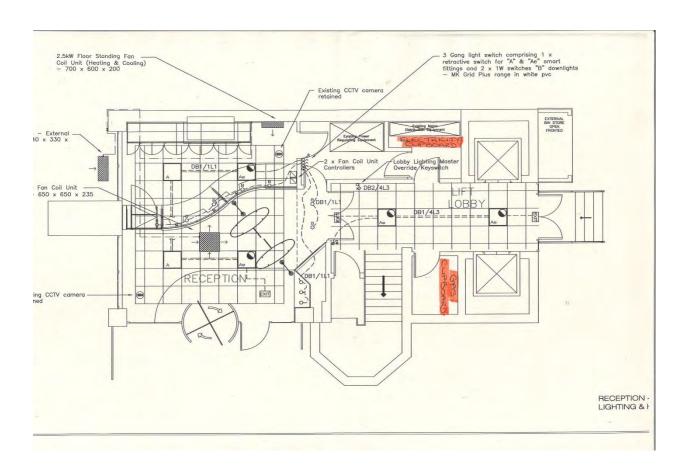
Emergency Procedures Manual	2
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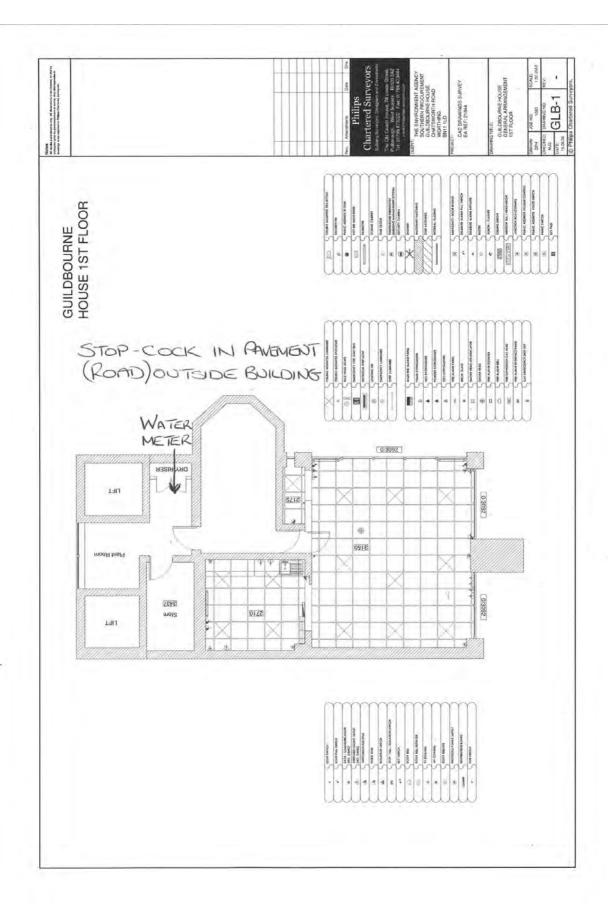
SITE LOCATION
SITE PLAN

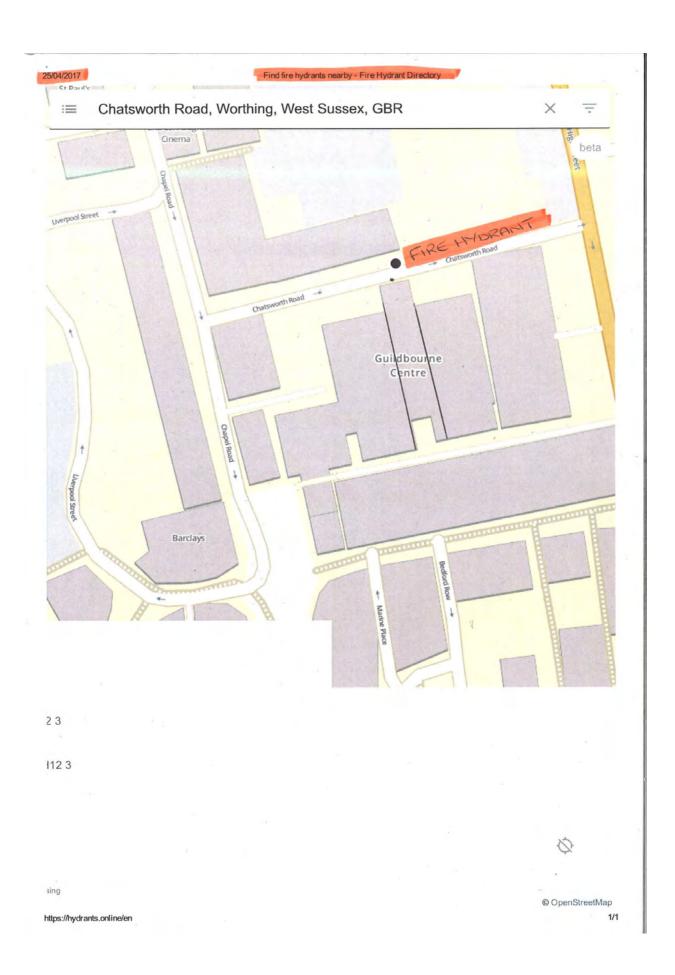
Guildbourne House, Chatsworth Road, Worthing, West Sussex BN11 1LD See plans below of isolation points plus location of nearest fire hydrant.

SITE OCCUPANCY

Office hours are 7am to 7pm. Approximately 300 staff work on site including up to 30 staff from Natural England. There is an Incident Room located on floor 5 which is sometimes open 24 hours.







# RESPONSE COORDINATOR

- Take the lead on practical aspects of an incident and coordinates the
  response to that incident. For example, contacting the emergency
  services, communicating information to the occupants of the building,
  evacuating the building where appropriate, informing the Duty Manager of
  the situation, collating information and disseminating this to the other
  responders and roles below.
- Wear an orange high visibility waistcoat for ease of identity.
- Liaise with and train Receptionist, Security Guard, Evacuation wardens.
- Check the status of designated areas with Emergency Evacuation Wardens. (CLEAR or UNCONFIRMED).
- In the case of an automatic alarm activation, the fire service generally will
  not attend unless informed that there is evidence of a fire (e.g.
  fire/smoke/heat). Follow the flowchart in appendix B and if there is
  evidence of a fire dial 999 and contact the Fire Service.
- Liaise with the Fire Service and/or Duty Manager about staff returning to the building. In the event of a substantial delay, inform the Duty Manager to allow them to make ongoing arrangements for staff welfare and work arrangements.
- If contaminated firewater or other contamination is likely to enter surface water drains, contact the Environment Agency Incident Control Centre (0800) 163 300 or their local Environment Management Duty Officer, to request emergency assistance.
- Provide a verbal situations report to the Duty Manager on site in line with BCM protocols.

# AREA OR SITE DUTY MANAGER

- Make contact with the Response Coordinator and discuss any further response or checks of the building.
- Blue high visibility waistcoat, held in site grab bag.
- Take a lead on decisions about the staff e.g., how long they should wait outside, where they should go to wait, how they will be kept in touch with etc. Clearly communicate the arrangements to all staff.
- Raise helpdesk reports where necessary.

# EVACUATION WARDENS

- Assist and support the Response Coordinator during any emergency event at site.
- Wear a yellow high visibility waistcoat for ease of identity
- Attend training sessions.
- Familiarise yourself with all the procedures in this pack and the assembly areas given.
- Ensure that everyone in the area you are responsible for is aware of the procedures and knows how to act in an emergency.
- Maintain communications between the Response Coordinator/Duty Manager and the people evacuated from your area.

# RECEPTIONIST, SECURITY GUARD OR NOMINATED PERSON

- Take grab bag from cupboard to place of assembly.
- Ensure reception area clear and secured.
- Liaise with the Response Coordinator.

### FIRST AIDERS

- Have a first aid kit easily available and first aid lanyards to be worn.
- Liaise with Response Coordinator and Evacuation Wardens to identify casualties.
- Remember the role of the first aider is to preserve life, protect and prevent further injury or harm – ensure the victim is in a safe place, administer first aid as necessary and hand over the casualty to the paramedics as soon as they arrive.

#### ALL STAFF

- Respond to alarms or follow instructions given by the Evacuation Wardens, Response Coordinator, or any member of the Emergency Services.
- Never return to a building until the Duty Manager, Response Coordinator or Evacuation Warden tells you that it is safe to do so.
- Read and understand the local arrangement.
- Participate in all fire evacuations, drills and tests.
- Understand where the assembly points and reporting places are.

# VISITORS & CONTRACTORS

- The safety of visitors is the responsibility of their Environment
   Agency/Defra host. The host must ensure the visitor has received a safety
   briefing on the procedures to follow in the case of an emergency.
- Contractors are the responsibility of the person organising the work.
   Emergency procedures and practical methods of contacting them in event of an emergency must be part of the site induction.



Supporting document 149\_05\_SD02

Issued 03/06/2016

#### **EMERGENCY CONTACT DETAILS**

### **RESPONSE COORDINATOR**

(ORANGE high visibility waistcoat)

NAME	Phone No
Vicky Evans (Facilities Operations Team Leader)	57265
Caroline Budd (Facilities Operations Officer 2)	57039
Ian Waters (Facilities Operations Officer 2)	57102

### **EMERGENCY EVACUATION WARDENS**

(YELLOW high visibility waistcoat)

AREA	WARDEN	Phone No
Floor 2	Greg Smith	57086
Floor 2	Gareth Williams	57074
Floor 2	John Hutchinson	57132
Floor 3	Rob Boutle	57236
Floor 3	Kevin Bellevue de Sylva	57153
Floor 3	Steve White	57256
Floor 4	Raquel Landauer	57224
Floor 4	Pauline Morrow	57210
Floor 4	Jonathan Smeed	57136
Floor 4	Lee Spicer-Howard	57158
Floor 5	Jon Denman	57133
Floor 5	Jo Matthews	57124
Floor 5	Doug Lisle	49104
Floor 6	Helen Parrish	57094
Floor 6	James Barker	57106
Fire Officer	Vicky Evans	57265
Fire Officer Support	Andrew Barnes	57017

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### **FIRST AIDERS**

# (GREEN high visibility waistcoat)

NAME	LOCATION	Phone No
Mark Emsley	Floor 2	57174
Steve White	Floor 3	57256
Anna Field	Floor 4	57025
Paul Reynolds	Floor 5	47501
Gavin Johnson	Floor 4 but mainly home based.	57075

### **OTHER USEFUL CONTACTS**

Role/Company	Contact Name	TELEPHONE NUMBER
Facilities Officer/	Caroline Budd/lan Waters	0203 02 58606 (Reception)
Responsible Officer		
H&S Advisor	Paul Taylor	07770 852761
Area Duty Manager (Blue high visibility waistcoat)	Rota	0800 171 2237
Facilities Duty Manager	Rota	0800 085 8835
ICS	Incident Communication Service	0800 163 300 (EA staff only)
CIS Duty Manager	Rota – in hours	0800 389 9873
Gas	Emergency Gas	0800 111 999
Electricity	UK Power Networks	0800 316 3105
Water	Business Stream	0330 123 2000
Interserve	Helpdesk (Building code SN01001)	0333 207 4148

# **OUT OF HOURS CONTACTS**

Role	Phone No
ICS	0800 163 300
FM National Duty Manager	0800 756 7783
FM Duty Manager	0800 085 8835
Area Duty Manager	0800 171 2237
CIS Duty Manager	0800 917 9651



Supporting document 149\_05\_SD02

Issued 03/06/2016

# **FIRE**

Date of issue	11 April 2017
Version No	4
Location	Guildbourne House, Chatsworth Road, Worthing, West Sussex BN11 1LD
Responsible Person	David Howarth (Facilities Manager)
Competent Person	Vicky Evans/Caroline Budd/Ian Waters

#### Introduction

A significant factor in multiple fatality fires in non-domestic premises is the incorrect response of building occupants. Therefore, there is a need for well-planned and rehearsed fire procedures. A properly considered procedure should be formulated for each site.

Under the Regulatory Reform (Fire Safety) Order 2005, owner/occupiers/premises managers are required to carry out/arrange for a fire risk assessment to be made of the premises. The risk assessment will generate information, which will guide the provision of firefighting equipment, fire detectors, alarm systems, emergency escape routes and suitable fire assembly points.

Management are required to inform all staff of these evacuation procedures and to ensure that these are followed.

Staff are required to follow them in the event of a fire.

Circulate the evacuation procedures to all staff on a regular basis. Display the General Instructions prominent locations across the site, such as adjacent to fire alarm call points, fire alarm panels, meeting rooms and Health and Safety notice boards.

Records of emergency evacuation drills, fire safety training, and inspections of means of escape, maintenance and testing records of firefighting equipment, emergency lighting and fire warning systems must be kept in the site fire logbook.

# **GENERAL INSTRUCTIONS**

### **FIRE**

ON DISCOVERING A FIRE	<ul> <li>Raise the alarm immediately by activating nearest 'break glass' call point</li> <li>Leave the building via the nearest or safest fire exit and go to assembly point on grass verge at front of multi-storey car park in High Street.</li> <li>Do not delay evacuation by trying to fight the fire.</li> </ul>
WHEN YOU HEAR THE FIRE ALARM (CONTINUOUS RINGING)	<ul> <li>DURING OFFICE HOURS</li> <li>Evacuate the building immediately by the nearest fire exit or as directed by an Emergency Evacuation Warden who will be wearing a yellow high visibility jacket. If it is safe to do so, close windows and doors before leaving.</li> <li>DO NOT EVACUATE VIA THE LIFTS</li> <li>Do not stop to collect personal belongings or to lock away documents. Keep important personal belongings (e.g. car keys, wallet, purse, medication) with you at all times.</li> <li>Visitors – If you are responsible for visitors accompany them to the appropriate assembly point.</li> <li>Disabled persons should go to, or be escorted to, the assembly point in accordance with their PEEP.</li> <li>Staff must follow instructions given by Response Coordinator or Evacuation Warden.</li> <li>Remain at assembly point until Duty Manager or Response Coordinator gives further instruction.</li> </ul>
ON DISCOVERING A FIRE	<ul> <li>OUT OF HOURS/WEEKEND WORKING</li> <li>If you discover a fire activate the nearest alarm and evacuate building, ensuring your immediate area is clear. Ring the emergency services.</li> </ul>
ON HEARING THE FIRE ALARM (CONTINUOUS RINGING)	<ul> <li>Evacuate the building immediately and go to the normal assembly point.</li> <li>The Fire Service generally will not attend automatic alarm activations. If there is clear evidence of a fire, ring 999 and inform them. If there is not clear evidence of a fire and the Response Coordinator or an Evacuation Warden are not present contact Facilities Management standby officer via the Incident Control Centre on 0800 163 300 for details of what to do.</li> </ul>
REMEMBER	<ul> <li>Do NOT return to your desk to collect personal belongings.</li> <li>Do NOT re-enter the building until told to do so.</li> <li>Do NOT use the lifts.</li> <li>Be prepared to evacuate the building by having keys, tickets, money etc. with you in case there is no further access to the building.</li> </ul> The fire alarm is tested at 10.00am on Fridays.

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There is no need to evacuate unless the alarm rings for more than a few
seconds.
Assembly point is the front of the multi-storey car park in High Street.

# Roles and Responsibilities

### **Response Coordinator**

- Collect orange high visibility waistcoat and leave by the nearest exit.
- Check the status of designated areas with Emergency Evacuation Wardens. (CLEAR or UNCONFIRMED).
- The fire service generally will not attend unless there is evidence of a fire (e.g. fire/smoke/heat).
   Follow the flowchart in appendix B and if there is evidence of a fire dial 999 and contact the Fire Service.
- Liaise with the Fire Service and/or Duty Manager about staff returning to the building.
- In the event of a substantial delay, the Response Coordinator must liaise with the senior managers on site to allow them to make ongoing arrangements for staff welfare and work arrangements. It is important that the Duty manager clearly communicates the arrangements to all staff.
- If contaminated firewater is likely to enter surface water drains, the Response Coordinator should contact the Environment Agency Incident Control Centre 0800 163 300 or their local Environment Management Duty Officer, to request emergency assistance.
- Provide a verbal situations report to the Duty Manager on site in line with BCM protocols.

### **Area or Site Duty Manager**

- Make contact with the Response Coordinator and discuss any further response or checks of the building.
- Take a lead on decisions about the staff e.g., how long they should wait outside, where they should go to wait, how they will be kept in touch with etc.

# **Emergency Evacuation Wardens**

- Put on your yellow high visibility jacket.
- DO NOT PUT YOURSELF AT RISK. Do not tackle any fire however small. Your role is to assist evacuation and you cannot do this if you are fighting fires.
- Check your designated area and adjacent toilets, storage areas and lifts to ensure that staff have left your area of responsibility.
- Assist anybody experiencing difficulty leaving the building.
- After checking your designated area, report to the Response Coordinator in charge outside the building, who will be wearing an Orange high visibility jacket. You will need to tell him/her whether your area is:-
  - CLEAR (there is nobody left in your designated area)
     Or
  - UNCONFIRMED (there is, or possibly is, someone left in your designated area).
- When you have reported to the Response Coordinator, await further instruction from them regarding crowd control, security, possible checks of the building, liaison with emergency services, and provision of information to evacuated persons. Emergency Evacuation Wardens are not responsible for actions normally undertaken by the emergency services (e.g. directing traffic).
- Do not leave the assembly point unless instructed to by the Response Coordinator.

### **Reception/Security**

- Collect grab bag.
- Check reception area and any other allocated area is clear.
- Go to assembly point and liaise with the Response Coordinator.

#### **First Aiders**

- On hearing the fire alarm, collect your nearest first aid kit and first aid lanyard.
- Leave by the nearest fire exit proceeding to your assembly point.
- Report to Response Coordinator to await instructions on casualties.
- Remember the role of the first aider is to preserve life, protect and prevent further injury or harm –
  ensure the victim is in a safe place, administer first aid as necessary and hand over the casualty to
  the paramedics as soon as they arrive.

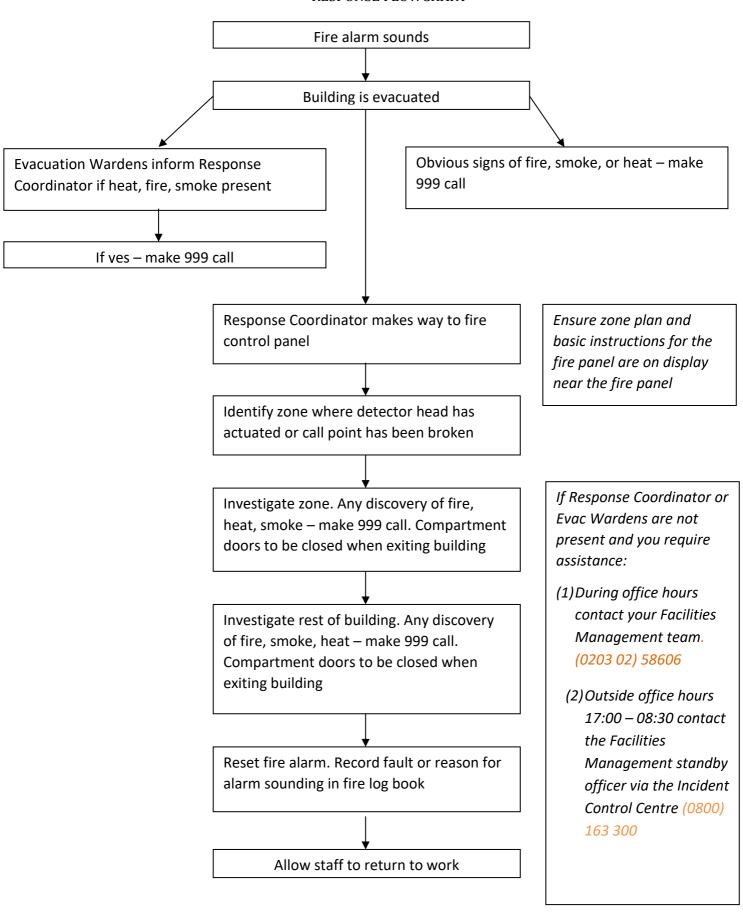
#### **All Staff**

- On hearing the fire alarm leave by the nearest available fire exit.
- Follow instructions as directed by the Evacuation Wardens, Response Coordinator, or any member of the Emergency Services.
- Never return to a building until the Duty Manager or Response Coordinator or Evacuation Warden tells you that it is safe to do so.
- Read and understand this local arrangement.
- Participate in all fire evacuations, drills and tests.
- Be aware of the fire assembly point and reporting point for each floor if specified.

#### **Visitors and Contractors**

• The safety of visitors is the responsibility of their Environment Agency host. The host must ensure the visitor has received a safety briefing of the procedures to follow in the case of an emergency. The advice will be to leave by the nearest exit identified by the Emergency Evacuation Wardens.

#### RESPONSE FLOWCHART



# **BOMB THREAT**

Date of issue	11 April 2017
Version No	2
Location	Guildbourne House, Chatsworth Road, Worthing, West Sussex BN11 1LD
Response Co-ordinator	Vicky Evans/Caroline Budd/Ian Waters
Deputy Response Co-ordinator	ABC Rota 0800 066 5625

#### INTRODUCTION

Most security threats are hoaxes or false alarms. However, there is a legal requirement that organisations have arrangements in place for evacuation in the event of a bomb threat.

Terrorist or criminal incidents of this nature are extremely rare and the specific risk posed to the Environment Agency is very low. However, if there is a concern that there is a danger of an explosion sensible steps can be taken to minimise the possibility of harm. It is important to remain calm and be very clear about any information received and given.

To prepare for an event of this nature some actions can be taken now:

- Staff who may receive a call from someone making a threat need training. They need to
  understand the type of questions to ask and information to note. There is a government
  form for collecting useful facts and information and this is in SD03 anyone manning
  reception, press office desks, call centres should be familiar with this form and a copy
  should be easily available for them to use.
- Identify assembly points, these will probably be different from those used for fire
  evacuations, as they should not be in car parks and should be at least 500 meters from the
  building and possible suspected bomb. Having more than one easily identified assembly
  point will save time during an event and help with a speedy safe evacuation if required.
  Ensure that staff are aware of these and have a clear way of informing staff which assembly
  point they should use.
- Identify suitable places to move staff to within the building should it be necessary for people to remain inside in order to be away from any possible explosion and the danger of flying glass etc. The areas chosen must also have a means of escape in case that is necessary.
- Have a means of raising the alarm. It is not suitable to use the same alarm as for fire as
  using this will mean that people automatically evacuate the building in a direction that may
  place them in danger. These alarms may also trigger some explosive devises. In buildings
  that have Tannoy systems it may be possible to use these. At most, sites hand bells are
  used and this method should be adopted, where possible, to give consistency across the
  organisation.
- Ensure that Evacuation Wardens are aware of their role during an event of this nature. Train them by carrying out exercises either desktop or practice scenarios.

Circulate the emergency procedures to all staff on a regular basis. Display the General Instructions in prominent locations across the site, such as meeting rooms and Health and Safety notice boards.

THE FOLLOWING EMERGENCY PLAN IS FOR ACTIONS TO TAKE: -

- On receipt of a bomb threat that refers to Environment Agency Premises
- On receipt of a call about a bomb elsewhere but close to Environment Agency premises.
- On receiving instruction from the police or other response authority

# **GENERAL INSTRUCTIONS**

### **BOMB ALERT**

	Receive the call calmly.
	Try to make sure you get the details exactly.
ON RECEIPT OF A	<ul> <li>If the caller is making a threat you should attempt to obtain as much information as possible about the 'bomb' (use SD03 to help)</li> </ul>
	Ring the police.
	<ul> <li>Inform Facilities Team Leader &amp; Duty Manager/Area Manager, as soon as possible.</li> </ul>
	On receipt of the alert, confirm location and type of threat
	Contact Emergency Services and take their advice instructions.
	<ul> <li>Consult Duty Manager/Area Manager on appropriate action to take following the advice. Start evacuation or in building moves as appropriate.</li> </ul>
RESPONSE	Or
CO-ORDINATION	<ul> <li>If, the authority in charge order an evacuation inform the Duty Manager/Area Manager of the situation.</li> </ul>
	Inform other building tenants
	If appropriate, call Evacuation wardens together and brief them.
	Use hand bells or Tannoy system to signal an alert.
	Evacuation Wardens sent to relay instructions to staff in their zones.
	Put on your yellow high visibility jacket
	Follow instructions given by the Response Co-ordinator
	<ul> <li>Ensure that everyone in the area you are responsible for follows these instructions.</li> </ul>
EMERGENCY EVACUATION WARDENS	<ul> <li>Report to the Response Co-ordinator in charge who will be wearing a Orange high visibility jacket, You will need to tell him or her the status of your area: -</li> </ul>
	CLEAR (there is nobody left in the work area)
	• or
	UNCONFIRMED (there is or maybe someone left in the work area).
	Await further instructions from the Response Co-ordinator.
	DO NOT PANIC.
ALL STAFF ON HEARING HAND BELLS	Follow instructions given by your Evacuation Wardens or Tannoy system promptly.
	Unless instructed to do so, do not return to your desk to collect your personal belongings or to lock away confidential documents.
OR THE TANNOY	If instructed evacuate the building immediately by the nearest fire exit or as directed by an Emergency Evacuation Warden.
	Or

	Assemble at a place of safety, as directed by an Emergency Evacuation     Warden.
	• The bomb evacuation assembly points could change due to the location of the threat – First possible meeting site could be the front of the multistorey car park in High Street.
	Always remain at your place of safety until either the Emergency Evacuation Warden or the Response Co-ordinator gives further instructions Or you are instructed by the Police to move to another location.
	DO NOT wait to conclude meetings, telephone calls, etc
	DO NOT re-enter the building until told to do so by the Response Co- ordinator or Manager in charge.
	DO NOT use the lifts
REMEMBER	DO NOT leave site by car
	Switch off all mobile phones
	Remember where your assembly points are
	Be prepared to evacuate the building by having keys, tickets, money etc.     with you in case you cannot return to the building.



Supporting document 149\_05\_SD02

Issued 03/06/2016

### The information you need to collect if you receive a bomb threat.

The checklist is from the guidance published by National Counter Terrorism Security Office

#### Checklist

- Switch on the tape recorder (if available).
- Tell the caller which town/district you are answering from.
- Record the exact wording of the threat.

# Advise on handling the call

Anyone receiving a bomb threat call must remember that their function is to convey as far as they are able, the exact message to the response co-ordinator, so that he/she may then decide what course of action to take. It is very important that if you receive such a call, you react in the following manner:

- Do not hang up, no matter how foul-mouthed or abusive the caller may be.
- Be calm and courteous do not let the caller know he/she is alarming you.
- Do not interrupt the caller once he/she has started to relay a message or he/she may hang up.
- Write down the time and exactly what is said all of it and whether something is said more than once.
- Do not try to transfer the call to another extension, you may get cut off.
- Do not talk to anyone else whilst talking to the caller.
- Keep the caller talking for as long as possible in an effort to elicit as much information as possible. If necessary, pretend that the line is bad and ask for some of the information to be repeated.
- Whilst he/she is talking, listen carefully to the caller to get as many details about him/her as possible, for example, age, accent, whether nervous etc.
   Also, listen for background noises which may give a clue as to the location of the caller and whether the call is being made from an internal or external phone, mobile or a call box.

# If you have the caller's confidence

- Attempt to get him/her to answer some questions, which may give you more details, see '<u>Ask these questions'</u>
- Tell him/her the building is occupied and lives may be at risk most callers only want to cause disruption, they do not want to harm people.

- If possible, have your checklist to hand whilst talking to the caller so that you can tick off details as he/she speaks. If this is not possible, fill in the details from memory as soon as the caller has rung off.
- Normally, advance warning of a bomb detonation will be given, so there is time to decide what action to take. If this is the case, as soon as the caller has rung off, contact the response co-ordinator.
- If the caller tells you that the bomb is in the building and due to go off
  imminently, you have no time to inform anyone else. The lives of people in
  the building are at risk. Activate the fire alarm and evacuate the building
  immediately.

# Ask these questions

- Where is the bomb right now?
- When is it going to explode?
- What does it look like?
- What will cause it to explode?
- Did you place the bomb?
- Why?
- What is your name?
- What is your address?
- What is your telephone number?

#### Record

- The time the call was completed
- Where automatic number reveal equipment is available, record number

#### Inform

- The response co-ordinator
- Phone the Police using the emergency number.
- Record the time these were done.

# Complete this part when the caller has hung up and the police/response co-OI

rdinator have been informed.		

<ul> <li>Time and</li> </ul>	date of	f call
------------------------------	---------	--------

- The length of the call.
- Number of the phone, at which call was received.

#### Information about the caller

Sex of caller	Male	Female		
Nationality.			Age.	
Threat language				
Well spoken Message read by t	Irrational hreat maker	Taped	Foul	Incoherent
Caller's voice				
Calm Slurred Lisp Laughter If the voice sounde	Crying Excited Accent* Hoarse ed familiar, whose d	Clearing throat Stutter Rapid id it sound like?	Angry Disguised Deep	Nasal Slow Familiar
*Which accent?				
Background sound	ds			
Street noises Crockery Music Other (specify) Remarks:	House noises Voices Factory machinery	Animal noises Static	Clear Booth Motor	Office machinery PA System

A printable version of the form <u>Actions to take on Receipt of a bomb threat</u>



Supporting document 149\_05\_SD02

Issued 03/06/2016

# POSTAL THREAT/SUSPECT PACKAGES OR BAGS

(Biological, Chemical or Explosive)

Date of issue	11 April 2017
Version No	2
Location	Guildbourne House, Chatsworth Road, Worthing, West Sussex BN11 1LD
Response Co-ordinator	Vicky Evans/Caroline Budd/Ian Waters
Deputy Response Co-ordinator	ABC Rota 0800 066 5625

#### INTRODUCTION

Terrorist or criminal incidents of this nature are extremely rare and the specific risk posed to The Environment Agency is low. However, if there is a concern that a suspect package has been received or a bag or package left in or near the building then sensible steps can be taken to minimise the possibility of harm.

Suspect packages could contain explosives, biological agents or chemicals and sharp objects in all cases treat with extreme care.

When opening post or on finding a bag or package follow these guidelines:

If you discover a suspect package or bag, do not touch or move it and report it immediately.

If you have any suspicions about an envelope, package or bag do not open it and follow the instructions below.

Look for anything unusual about the envelope or package (see general information 'what to look for')

Always open envelopes & packages in a way that is least likely to disturb the contents.

If you think, you have opened a package containing suspicious materials or explosives follow the instructions below and see 'if you are exposed'.

#### The following are actions to take: -

On receipt of or opening a suspicious package.

On discovery of a suspect package, bag etc, that might be left on or near the premises.

### **POST HANDLING INSTRUCTIONS**

# POSTAL THREATS/SUSPECT PACKAGES OR BAGS

	<ul> <li>Look out for suspicious envelopes or packages (see below for some things that should trigger suspicion).</li> </ul>
PRECAUTIONS WHEN OPENING	Open all mail with a letter opener or other method that is least likely to disturb contents.
	Open packages/envelopes with a minimum amount of movement.
MAIL	Do not blow into envelopes.
	Do not shake or pour out contents.
	Keep hands away from nose and mouth while opening mail.
	Wash hands after handling mail.
	Some indicators of suspect mail:
	<ul> <li>Unusual size or weight in proportion to size</li> </ul>
	Lopsided or oddly shaped envelope
	Excessive tape or string
	Envelope with powder or powder-like residue
	Discolouration, crystals on surface or oily stains
	Strange odours, some explosive have smells like almonds, sometimes fragrance
	may be used to mask other odours.
WHAT TO LOOK FOR	No return address
	Postmark that does not match return address
	Excessive postage
	Handwritten, block-printed or poorly-typed address
	Misspellings of common words
	Incorrect titles
	Title but no name
	Addressed to individual no longer within organisation
	Restrictive endorsements such as "Personal" or "Confidential" in combination
	with other indicators
	<b>DO NOT</b> investigate, move or interfere with the package or bag in any way.
	Tell everyone in the immediate vicinity to leave.
	Ring the police and inform your local response co-ordinator and Duty
ACTIONS TO TAKE ON DISCOVERING A SUSPICIOUS	Manager/Area Manager.
	leave the area/room
	DO NOT – take the package outside
PACKAGE OR BAG	DO NOT – take it to another person
	DO NOT – place it in a bucket of water or cover it with anything
	<b>DO NOT</b> – cut, remove or undo string or wire on a suspect package as this may release the trigger mechanism and cause detonation.
	<b>DO NOT</b> – lift the cover of a box believed to contain an explosive or incendiary
	device.

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### IF YOU HAVE PARTIALLY OR COMPLETELY OPENED SUSPECT MAIL.

### DO NOT OPEN IT FURTHER

- If holding the package place it carefully on the nearest flat surface, keeping your face turned away all the time.
- Follow the actions above.

	EXPLOSIVE OR INCENDIARY
	Leave package where it is or place on a flat surface if holding it.
	Clear the immediate area
	Do not use mobile phones or handheld radios within 15 metres
	• Ring 999
IF THE HAZARD	Inform Response Coordinator
COULD BE:	Prevent others from entering the room/area by displaying warning signs.
	Where possible open windows.
	Where possible leave a clear route to the device e.g. open doors etc to allow access for emergency services.
	Report to response coordinator and remain available to provide information to emergency services.

#### CHEMICAL/BIOLOGICAL OR RADIOLOGICAL

#### Remain calm

- Leave package where it is or place on a flat surface if holding it.
- **DO NOT touch, sniff or tamper** with it in any way.
- Ring 999
- Inform the Response Coordinator
- Switch off any room air conditioning and/or fans.
- Close windows and doors and if possible lock these on leaving.
- Prevent others from entering by displaying a warning sign.
- Move yourself and any others who might have been exposed to a clean room close to but not in the contaminated area.
- Keep yourself and anyone who may have been exposed separate from others and await medical examination from the specialist emergency team attending. DO NOT go to hospital they will not be able to help you.

**DO NOT** rub your eyes mouth or face or any other part of your body.

- Wash your hands but not your face, unless you think it has been exposed to the suspect substance, in ordinary soap if facilities are provided. However, avoid moving outside the contained location as much as possible.
- If you have washed your hands, make the building manager aware of this.
- Blow your nose on a clean tissue.

#### **SHARPS**

- Leave package where it is or place on a flat surface if holding it.
   DO NOT tamper with it anyway.
- Ring 999
- Inform the Response Coordinator
- Seek first aid if needed.

### **GENERAL INSTRUCTIONS**

	Notify the police immediately if this has not already been done.
	Inform your Facilities Operations Manager.
	Inform other tenants where appropriate.
RESPONSE COORDINATOR	<ul> <li>Liaise with the Duty Manager/Area Manager to decide whether an evacuation is appropriate.</li> </ul>
	If appropriate, call Evacuation wardens together and brief them.
	Use hand bells or Tannoy system to signal an alert.
	Evacuation Wardens sent to relay instructions to staff in their zones.
	<ul> <li>For suspected biological contamination:</li> <li>Ensure people outside the contaminated area are evacuated as soon as possible.</li> <li>Ensure that the people in the contaminated room are evacuated to an adjacent unoccupied uncontaminated room away from the hazard to</li> </ul>
	wait medical assessment.
	Switch off building air conditioning
ACTIONS FOR	Close all windows in the building
SEPECIFIC HAZARDS	<ul> <li>For a suspected chemical incident:</li> <li>Ensure people evacuate the room as soon as possible.</li> <li>Look for signs that people of exposure, streaming eyes, coughs and irritated skin. Seek medical advice and wait for instructions from the emergency services.</li> </ul>
	For suspected Sharps:  • Ensure first aid treatment is sought and if necessary hospital treatment.
	DO NOT PANIC.
	<ul> <li>Follow instructions given by your Evacuation Wardens or Tannoy system promptly.</li> </ul>
ON HEARING HAND BELLS OR THE TANNOY	Do not return to your desk to collect your personal belongings or to lock away confidential documents.
	If instructed evacuate the building immediately by the nearest fire exit or as directed by an Emergency Evacuation Warden.
	<ul> <li>Assemble at a place of safety, as directed by an Emergency Evacuation Warden.</li> </ul>
	Always make sure you remain at your place of safety until either the Emergency Evacuation Warden or the Response Co-Ordinator gives further instructions. In the event of an evacuation, the Police may move us to another location.
REMEMBER	<ul> <li>DO NOT wait to conclude meetings, telephone calls, etc.</li> <li>DO NOT re-enter the building until told to do so by the Response Coordinator or Manager in charge.</li> <li>DO NOT use the lifts</li> </ul>

- **DO NOT** leave site by car
- Switch off all mobile phones
- Remember where your assembly points are.
- Be prepared to evacuate the building by having keys, tickets, money etc. with you in case you cannot to return to the building.



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Issued 03/06/2016

# HOSTILE SITUATIONS AT ENVIRONMENT AGENCY PREMISES

Date of issue	11 April 2017
Version No	2
Location	Guildbourne House, Chatsworth Road, Worthing, West Sussex BN11 1LD
Response Co-ordinator	Vicky Evans/Caroline Budd/Ian Waters
Deputy Response Co-ordinator	ABC Rota 0800 066 5625

#### INTRODUCTION

Protests or individuals acting in a threatening way are extremely rare and the specific risk posed to The Environment Agency is low. However, if there is a concern that there is a danger that a protest or individual may turn hostile then there are sensible steps that can be taken to minimise the possibility of harm. It is important to remain calm and be very clear about any information you have and alert people to a developing situation as early as possible.

A certain amount of preparation is needed to prepare for an event of this nature:

- Staff who may be faced with a situation where someone may become threatening should receive Hostile Situations training. For example, anyone manning reception, carrying out security duties, or interviewing while gathering evidence.
- Have a means of raising the alarm and ensure that people know how to use them.
- Ensure that people know what the alarm means and know how to react to it.
- Have CCTV in any indoor area where such a situation might occur. For example Reception/entrance areas, interview rooms.
- Have an easily accessible means of escape for any member of staff caught up in such a situation. That means of escape should not allow immediate access for the hostile person or group to the rest of the building.
- Identify suitable places to move staff to within the building should it be necessary for people to move in order to be away from any incident.
- Ensure that Evacuation Wardens are aware of their role during an event of this nature. Train them by carrying out exercises either desktop or evacuations.

# **GENERAL INSTRUCTIONS**

# **HOSTILE SITUATIONS**

SUSPICIOUS PERSON(S) ON SITE	<ul> <li>If you have any reason to doubt identity of the person(s) contact the Response Co-ordinator.</li> <li>Give a good clear description of the person or group and their</li> </ul>
	<ul><li>location.</li><li>Try to keep track of the person(s) movements.</li></ul>
	Remain calm.
	Sound the alarm.
HOSTILE PERSON(S)	Attract the attention of another member of staff.
IN RECEPTION OR	Withdraw immediately, if you have any doubts about your own safety.
INTERVIEW ROOM	Call the Police.
	Contact Facilities or Duty Manager.
	Remain calm
HOSTILE DEDCOM/S	Withdraw immediately, if you have any doubts about your own safety.
HOSTILE PERSON/S ON PREMISES	Inform Facilities.
• · · · · · · · · · · · · · · · · · · ·	Contact Response Co-ordinator or Duty Manager.
	Await assistance of other staff or the police.
	Respond immediately to the alarm (raised verbally or by telephone call)
RESPONSE	<ul> <li>Assess the situation, use CCTV if available, applying dynamic risk assessment and decide on appropriate action.</li> </ul>
COORDINATOR	Contact Police, and appropriate Duty Manager.
	Notify First Aider(s) and put on standby, if appropriate.
	<ul> <li>Position Emergency Evacuation Wardens, if appropriate, in order to marshall staff away from the incident.</li> </ul>
	<u></u>
DETAILS OF LOCAL ARRANGEMENTS	There is a panic button on reception which alerts Facilities staff on floor 6. Receptionist has access to a place of safety through the adjacent room which can be locked and then out through the far end. The interview room (Stour) on floor 2 has a panic alarm which sounds on the floor and a safe means of escape is through a separate door into the next door storeroom which can be locked.
	floor 6. Receptionist has access to a place of safety through the adjacent room which can be locked and then out through the far end.  The interview room (Stour) on floor 2 has a panic alarm which sounds on the floor and a safe means of escape is through a separate door
	<ul> <li>floor 6. Receptionist has access to a place of safety through the adjacent room which can be locked and then out through the far end. The interview room (Stour) on floor 2 has a panic alarm which sounds on the floor and a safe means of escape is through a separate door into the next door storeroom which can be locked.</li> <li>Avoid direct confrontation.</li> <li>Physically protect yourself.</li> </ul>
	floor 6. Receptionist has access to a place of safety through the adjacent room which can be locked and then out through the far end. The interview room (Stour) on floor 2 has a panic alarm which sounds on the floor and a safe means of escape is through a separate door into the next door storeroom which can be locked.  • Avoid direct confrontation.



Supporting document 149\_05\_SD02

Issued 03/06/2016

# **GAS LEAK**

Date of issue	11 April 2017
Version No	2
Location	Guildbourne House, Chatsworth Road, Worthing, West Sussex BN11 1LD
Response Co-ordinator	Vicky Evans/Caroline Budd/Ian Waters
Deputy Response Co-ordinator	ABC Rota 0800 066 5625

# **GENERAL INSTRUCTIONS**

# **GAS LEAK**

·	
	Receive the call calmly.
ON RECEIPT OF A	<ul> <li>Try to make sure you get the details exactly.</li> </ul>
PHONE CALL	<ul> <li>Inform Facilities Team Leader, Response Coordinator &amp; Duty Manager/Area Manager, as soon as possible.</li> </ul>
ON SMELLING GAS	<ul> <li>Inform Facilities Team Leader, Response Coordinator &amp; Duty Manager/Area Manager, as soon as possible.</li> </ul>
	Respond immediately to the alarm.
	<ul> <li>Where possible isolate gas supply (in locked room off the ground floor lobby area. First door on the rhs after staircase. Use the master key kept in reception to gain access).</li> </ul>
	<ul> <li>Contact gas supplier and liaise with them (0800 111 999).</li> </ul>
FACILITIES TEAM	Move everyone from the immediate vicinity of the leak.
LEADER	Secure the area.
RESPONSE	Inform other tenants or close by buildings of the situation.
CO-ORDINATION	<ul> <li>If the authority in charge has ordered evacuation or you decide to evacuate the building,</li> </ul>
	<ul> <li>Inform the Duty Manager of the situation.</li> </ul>
	<ul> <li>Call Evacuation wardens together and brief them.</li> </ul>
	<ul> <li>Use hand bells or Tannoy system to signal an alert.</li> </ul>
	<ul> <li>Send Evacuation Wardens to relay instructions to staff in their zones.</li> </ul>
	DO NOT PANIC.
	• Follow instructions given by your Evacuation Wardens or Tannoy system promptly.
	Do not switch on or off electrical items such as mobile phones.
ON HEADING HAND	• Do not return to your desk to collect your personal belongings or to lock away confidential documents.
ON HEARING HAND BELLS OR	<ul> <li>If instructed evacuate the building immediately by the nearest fire exit or as directed by an Emergency Evacuation Warden.</li> </ul>
THE TANNOY	Or
	<ul> <li>Assemble at a place of safety, as directed by an Emergency Evacuation Warden.</li> </ul>
	Always make sure you remain at your place of safety until either the Emergency Evacuation Warden or the Response Coordinator gives further instructions. In the event of an evacuation, the Police may move us to another location.
	DO NOT wait to conclude meetings, telephone calls, etc
REMEMBER	DO NOT re-enter the building until told to do so by the Response Co-
KEIVIEIVIBEK	ordinator or Manager in charge.

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DO NOT leave site by car
Remember where your assembly points are
Be prepared to evacuate the building by having keys, tickets, money etc. with you.



Supporting document 149\_05\_SD02

Issued 03/06/2016

# **FLOOD EVENT**

Date of issue	11 April 2017
Version No	1
Location	Guildbourne House, Chatsworth Road, Worthing, West Sussex BN11 1LD
Response Co-ordinator	Vicky Evans/Caroline Budd/lan Waters
Deputy Response Co-ordinator	ABC Rota 0800 066 5625

# Introduction

As we operate the flood warning system for the whole country, we should prepare for possible flooding at our sites. Steps to take in advance to prepare for such an event.

- Find out if, your site is in a flood plain. If it is what is the likelihood of flooding occurring.
- For buildings with a reasonable likelihood of flooding, make plans for a flooding event.
- Sign up to receive flood warnings
- Speak to your MEICA contact about a shutdown plan for the site.
- Wherever possible do not store important documents on the ground floor or have a plan to move these if necessary.
- Contact your services suppliers and find out what to do in the event of a flood.
- Take advice on what flood damage prevention measures you need to consider.

#### **GENERAL INSTRUCTIONS**

### **FLOOD EVENT**

	Receive the call calmly.
ON RECEIPT OF A	Try to make sure you get the details exactly.
PHONE CALL	Inform Facilities Team Leader, Response Coordinator & Duty
	Manager/Area Manager, as soon as possible.
ON SEEING RISING	<ul> <li>Inform Facilities Team Leader, Response Coordinator &amp; Duty</li> </ul>
WATER	Manager/Area Manager, as soon as possible.
	Where safe to do so implement your site shut down procedure.
	<ul> <li>Speak to local flood warning team for more details</li> </ul>
	<ul> <li>Move any important documents to a higher level.</li> </ul>
FACILITIES TEAM	Deploy sandbags or flood barriers.
LEADER	<ul> <li>Inform other tenants or close by buildings of the situation.</li> </ul>
RESPONSE	Inform the Duty Manager/Area Manager of the situation and make a
CO-ORDINATION	joint decision about evacuation.
	<ul> <li>Call Evacuation wardens together and brief them.</li> </ul>
	<ul> <li>Use hand bells or Tannoy system to signal an alert.</li> </ul>
	<ul> <li>Send Evacuation Wardens to relay instructions to staff in their zones.</li> </ul>
LOCAL DETAILS	Utilities Isolation Points: Gas - (in locked room off the ground floor lobby area. First door on the rhs after staircase. Use the master key kept in reception to gain access). Electricity – (in electricity room opposite staircase in the ground floor lobby area). Water – (shut off valve is under drain cover in pavement to the rhs of the building).
ON HEARING HAND	DO NOT PANIC.
BELLS	Follow instructions given by your Evacuation Wardens or Tannoy system
OR	promptly.
THE TANNOY	<ul> <li>If instructed evacuate the building as directed by an Emergency Evacuation Warden.</li> </ul>

# **Meica Electrical Shutdown Procedure**

The points below require action BEFORE any electrical isolation of the building takes place.

- The Responsible Officer shall inform the Business Service Manager that Guildbourne House will be without electrical power.
- Whomever manages the site IT server (CIS) shall be contacted informing them that an 'uncontrolled' server shutdown is imminent at Guildbourne House.
- The person who operates the main incoming electrical switch to isolate and re-instate power to the building shall be approved by the South East MEICA Regional Advisor.

Note – Once electrical power is isolated, the main electrical switch shall be padlocked and a notice hung within the shank of the padlock stating who isolated the switch, the time and date.

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# Asbestos Survey Re-Inspection Report



Site Address:

Guildbourne House Chatsworth Road

Worthing BN11 1LD

Client Name:

**Environment Agency** 

Client Contact:

Caroline Budd

Our Ref:

30054

Version:

1.00

Re-Inspection Date:

28th June 2018

Surveyor/s:

Matt Cook

South East Office
Core Surveys Ltd
Rotherfield Woodyard
Mill Lane
Fletching Common
East Sussex
BN8 4JL

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# **Control Page**

This report has been prepared with all reasonable skill, care and diligence within the terms of the contract with the client taking into account the manpower and resources devoted to it by agreement with the client.

Core Surveys Ltd disclaims any responsibility to the client and others in respect of any matter outside the scope of the above.

Core Surveys Ltd is accredited by UKAS to ISO17020 & ISO17025. The accreditation awarded allows for asbestos inspections and reporting of Asbestos Re-Inspections, Management, Refurbishment & Demolition Surveys and Sampling of suspect asbestos materials as well as testing for asbestos within bulk samples.

Whilst undertaking the surveys and sampling, two types of assessment may be carried out – a Material Assessment and an Accessibility Assessment. Both Material Assessments and Accessibility Assessments will have been undertaken for each and every identified, referenced or presumed asbestos material as part of this survey.

It must be noted that the Accessibility Assessments & Total Risk Scores carried out by Core Surveys contained within this report may not be representative of the occupation levels, room use, activities or maintenance frequency specific to each location or room and the duty holder remains responsible for using their detailed knowledge of the property and the activities carried out within, to ensure that all scores are applicable. The duty holder must be aware that any change of use, occupation level or activity for a room/location will affect the initial assessment and will require review accordingly.

## More information on assessments can be found within Appendix 1.

Quality Assurance	Name	Signature	Date
Report Prepared by:	Luke Syred	Who Segu.	23 <sup>rd</sup> July 2018
Quality Assurance by:	Simon Evans		24 <sup>th</sup> July 2018
Report Sign Off by:	Simon Evans		24 <sup>th</sup> July 2018

leaving Office	South East Office	1	South West Office	
Issuing Office	South East Office		South West Office	

Re-Inspection commissioned for and on behalf of:

Environment Agency Guildbourne House Chatsworth Road Worthing BN11 1LD

## Document History

Date	Reference	Comments	
10/12/2007	070343	Management survey (Second to Sixth Floor)	
15/10/2009	090276A	Management survey (Ground to First Floor)	
17/01/2012	120007R	Re-inspection survey	
09/07/2013	130444R.1	Re-inspection survey	
04/04/2014	140221R	Re-inspection survey	
03/06/2015	17465	Re-inspection survey	
04/07/2016	21316	Re-inspection survey	
30/06/2017	25991	Re-inspection survey	

Ref: 30054 Re-Inspection Date: 28<sup>th</sup> June 2018 Page 2 of 41
Core Surveys Ltd – Asbestos Survey Re-Inspection Report: 1.16 – Last updated 03/05/2018

#### 1. Introduction

#### 1.1 Background Information

Asbestos is a naturally occurring silicate mineral that has been used commercially since the late 1800's. Due to its versatile nature approximately 3000 asbestos products were produced, the 1960's and 1970's saw the largest scale asbestos usage in the UK. Some asbestos products were in use up until the ban on the usage of Chrysotile in 1999.

There are three main types of asbestos found in buildings, these are;

Crocidolite

(Blue) asbestos

Amosite

(Brown) asbestos

Chrysotile

(White) asbestos

All are hazardous, but due to their composition, blue and brown fibres are more hazardous than their white counterpart.

Breathing in air containing asbestos fibres can lead to asbestos related disease such as asbestosis and Mesothelioma. Asbestos is only a risk when fibres are released and breathed in. Asbestos related diseases are currently responsible for 3000 deaths per year in the UK; this figure is expected to rise over the coming years.

Although it is now illegal to use asbestos in the construction of buildings, the large extent of the many thousands of tonnes used in the past is still in place.

As long as asbestos remains in good condition and is not disturbed, damaged or deteriorating through age, there is no risk to health. If asbestos is disturbed the risks are very much increased.

#### 1.2 Legislation

The Health & Safety at Work Act 1974 requires employers to provide a safe workplace for all their employees. Asbestos and work with asbestos is covered by specialist regulations, The Control of Asbestos Regulations 2012 (CAR 2012).

The duty to manage requires those in control of the premises to:

- Take reasonable steps to determine the location and condition of materials likely to contain asbestos.
- 2. Presume materials contain asbestos unless there is strong evidence that they do not.
- 3. Set up and maintain a record of the location and condition of the ACMs or presumed ACMs in premises.
- 4. Assess the risk of the likelihood of anyone being exposed to fibres from these materials.
- 5. Prepare a plan setting out how the risks from the materials are to be managed.
- 6. Take the necessary steps to put the plan into action.
- Review and monitor the plan periodically.
  - Provide information on the location and condition of the materials to anyone who is liable to work on or disturb them.

# 1.3 Executive Summary

Core Surveys Ltd carried out the requested Survey Re-Inspection to determine the most up to date material & accessibility assessments of the known asbestos containing materials (ACM's) within the building(s), and to update the associated recommendations. The Re-Inspection is based upon the Asbestos Survey carried out by Core Surveys Ltd Ref: 070343 and forms an addendum to the original survey.

The Survey Re-Inspection was carried out on 28th June 2018 by authorised surveyor, Matt Cook.

This report has been designed to enable the commissioning client to fulfil part of their legal duty of care under the 'Control of Asbestos Regulations 2012' (CAR 2012), by demonstrating that they have taken reasonable steps to manage known ACMs within their premises.

As the person responsible for managing asbestos, it is highly recommended that you familiarise yourself with the locations, and broadcast any relevant information to maintenance staff, contractors and any persons who may come into regular contact with any of the products. A short training session for all relevant staff may be required.

The report and accompanying drawings (where provided) should be consulted before any building or installation work is carried out in the building. All building users should be made aware of the contents of the report. It should not be used for the purposes of costing asbestos removal work. No responsibility will be accepted should the information contained herein be used in this way. Any person(s) using the report in this way MUST satisfy themselves as to the extent of the asbestos within the designated areas and thereby ensure that their tender is sufficient in every respect to remove ALL the asbestos within these areas.

# 1.4 Observations of Re-Inspection

Summary	Yes	No	Comments
Have all ACM's been inspected?		~	
Have any ACM's been removed since previous surveys?		~	
Have any ACM's assessments changed since previous surveys?	<b>V</b>		
Do any ACM's require remedial actions to take place?	1		

#### 2. Recommendation Explanations

The recommendations made in this report are guidelines for what you should do to manage any risk from any asbestos products found. It is advisable to meet with all those concerned to discuss the options and produce a viable management plan.

### REMOVE

Where an ACM is damaged, is likely to become damaged during future works or is vulnerable to day to day damage then a recommendation for removal has been made.

All work with Asbestos MUST be carried out in accordance with the 'Control of Asbestos Regulations 2012' (CAR 2012).

#### MANAGE

Where an ACM is in good condition and poses limited risk of damage then the material should be managed. This will require regular documented inspection (not more than every 12 months) to look for signs of damage or significant changes in the accessibility assessment to minimise any future disturbance. The material should ideally be labelled as containing asbestos; however the final decision will depend on the Duty Holders confidence of the asbestos management system and whether communication with internal workers and external contractors is effective.

#### **ENCAPSULATE & MANAGE**

Where an ACM is found to have un-sealed surfaces or edges then a recommendation of encapsulation has been recommended.

Encapsulation of Asbestos Insulating Board, Insulation or Coatings should be undertaken by a licensed asbestos contractor and is likely to be subject to a 14 day notification to the Health & Safety Executives as per the 'Control of Asbestos Regulations 2012' (CAR 2012).

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# 3. Survey Methodology & Limitations

# 3.1 Methodology

The ACM's identified within the original survey were visually re-inspected for signs of damage and to update the material & accessibility assessments in accordance with the Scope of Works issued to us.

The re-inspection considered any 'signs of disturbance, scratches, broken edges, cracked or peeling paint & debris' as per 'HSG-227 A Comprehensive Guide to the Managing of Asbestos in Premises – 2002'.

#### 3.2 Limitations

No attempt has been made to access any areas that were previously not accessed in the original survey, asbestos should be presumed to be present within these areas until an inspection has been made.

As part of the inspection it is not usually possible to visually re-inspect items of dust or individual isolated areas of debris/residue. If no removal records have been inspected by Core Surveys then these items will be presumed to still be in situ.

The following items of asbestos could not be re-inspected. Their assessment values have been presumed to have remained the same as in the original survey.

Item	Location	Comment
Brown floor tiles presumed under lino	0402 – DPA	No access was possible due to lino.
Bulkhead over double doors in ceiling void	0505 – Lift Lobby	Pipes blocked access so item was not visible.

The report and accompanying drawings (where provided) should be consulted before any building or installation work is carried out in the building. All building users should be made aware of the contents of the report. It should not be used for the purposes of costing asbestos removal work. No responsibility will be accepted should the information contained herein be used in this way. Any person(s) using the report in this way MUST satisfy themselves as to the extent of the asbestos within the designated areas and thereby ensure that their tender is sufficient in every respect to remove ALL the asbestos within these areas.

# 4. Re-Inspection Tables & Additional Comments & Recommendations

#### Floor:

Indicates which floor the asbestos containing materials is located.

#### Room No.:

The room column refers to the room or area concerned. The room area locator number is the unique reference given to that room or area during the initial survey.

#### Room Description:

The room description column refers to the nature of the room or area concerned e.g. Open Plan Office, Electrical Switch Room etc.

#### Item Description:

The item description column refers to the re-inspected asbestos containing material. Photographs can be found in the photographs section.

#### Sample Number:

The sample number column refers to the unique reference given to that sample or extrapolated sample during the initial survey.

#### Material, Accessibility & Total Risk Score:

Material & Accessibility Assessments have been made for each known material. The scores for these have then been combined to give an overall Total Risk Score.

Using the Total Risk Score, asbestos containing materials can be categorised. The top priority – Very High Risk - would be given to those materials that present an unacceptable risk and require immediate attention. It does not mean that this material must be removed; it means that steps must be taken to remove the risk from those affected by it. This could be as simple as locking a room or undertaking minor repair works or setting up a safe management procedure etc.

#### Recommendations & Additional Comments:

This column gives the recommendations for each sample e.g. REMOVE. This column is also used if removals have taken place with an appropriate comment i.e. **REMOVED**. If removal documentation is provided to Coré Surveys then this information will be inserted into the additional comments table.

#### Additional Comments Table:

Any removal details i.e. Certificate of Re-Occupation Reference Number & Date of works will be entered here. If no details are provided but the material has been removed then an appropriate comment will be made.

4.1 Re-Inspection Tables

core				Produ			Pap							Licensable Asbesto		
To Marini bendir				Asbes	tos T	ype:		Chrys 🖾	Amos  Cr	oc 🗆 An	th 🗆 A	ct 🗆 T	rem 🗆	Non-Licensable As	bestos Material	/
	Floor	Room No.	Room Descrip	otion		M		Risk Sco MRS')	ore	Acc		ity Risi ARS')	k Score	Extent (m, m², m³ or no.)	Recommendati	ons
	Ground	G05	Store		1 Type	Treatment 0-3	of Damage 0-3	bestos Type	'MRS' RATING	om Type / Activity 8-3	don of Rem in Room 0-3	supmeril lite 3	'ARS' RATING	<u>X7</u>	REMOVE (if applicable)	
	Sample No.	Item Descri	ption		Produc 1-	Surface T	Extent of	Asbe	RATING	Reem Acti	Location in R.	Access figs on Sit 0-3	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	
	V01	'Gaskets			2	2	0	1	LOW	2	3	3	HIGH	MEDIUM	LABEL & MANAGE	1
	Additional Co	omments:								×						

1

core			Produ Asbe:	_			lating Bo Chrys ⊠	ard Amos ⊠ Cr	ос	□ Anth	A	ct 🗆 T	rem 🗆	Licensable Asbesto Non-Licensable Asi		<ul><li>✓</li><li>□</li></ul>
MAT IS IN	Floor	Room No.	Room Description		М		Risk Sco	re		Acces		ty Risi	k Score	Extent (m, m², m³ or no.)	Recommendati	ons
	Second	0205	Lift Lobby	Type	atiment	Jamage	stos .	'MRS'	-5)	lyps /	of Hem	pulpment Its	'ARS'	<u>3m</u>	REMOVE (if applicable)	
	Sample No.	Item Descri	ption	Product 1.3	Surface The	Extent of Da	Asbestos	RATING		Rosen Typs Activity B-3	Lecation of in Rese	Access Equi on Site 6-3	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	1
	Ref 07	Bulkhead ov	ver double doors	2	2	1	2	MEDIUM		0	2	2	LOW	LOW	LABEL & MANAGE	1
A STATE OF THE PARTY OF THE PAR	Additional C	omments:	36													91
			Produ	ict Tv	pe:	Cen	nent							Licensable Asbesto	s Material	
core			Asbe					Amos 🗆 Cr	roc	☐ Anth	n 🗆 A	ct 🗆 T	rem 🗆	Non-Licensable As	bestos Material	1
	Floor	Room No.	Room Description		М		Risk Sco	ore		Acce		ty Ris	k Score	Extent (m, m², m³ or no.)	Recommendati	ons
	Second	0206	Electrical Riser	170.	adment	Samage	stos	'MRS'		ype /	of Bem	Equipment Site	'ARS'	<u>1m²</u>	REMOVE (if applicable)	
A STATE OF THE PARTY OF THE PAR	Sample No.	Item Descri	ption	Product 1.3	Barface Thea	Estent of Day	Asbestos Type	RATING		Room Typs Activity 6-3	Localien of I In Room	Access En	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	
	Ref 02	Ceiling pane	els	1	0	0	1	VERY LOW		0	2	2	LOW	VERY LOW	LABEL & MANAGE	1
N ASSESSED	Additional C	omments:														
			Produ	uct Tv	pe:	Ron	e, String	& Textile						Licensable Asbesto	os Material	
core			Asbe					Amos 🗆 Cı	roc	☐ Anti	ηDΑ	ct 🗆 T	rem □	Non-Licensable As	bestos Material	1
-	Floor	Room No.	Room Description		М		Risk Sc MRS')	ore		Acce		ity Ris	k Score	Extent (m, m², m³ or no.)	Recommendati	ons
	Second	0206	Electrical Riser	Fact Type	diment	aturada	tos	'MRS'		Abe (	of Bern.	alpmand	'ARS'	X1 fuse box	REMOVE (if applicable)	
	Sample No.	Item Descri	ption	Product	Burface Trea	Externt of Day	Asbestos Type	RATING		Rosm Type Activity 6-3	Lacation of in Roam 6-3	Access Equity on title	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	
-	V03	Flash guard	s	2	2	0	1	LOW		0	0	0	VERY LOW	VERY LOW	MANAGE	1
	Additional C	omments:				1										_

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core	The state of			Produ			Rein	nforced C	omposite					Licensable Asbeste	os Material	
To Advant Security				Asbes	tos T	ype:	-	Chrys 🛭	Amos  Cr	oc 🗆 Aı	th 🗆 A	Act 🗆 1	rem 🗆	Non-Licensable As	bestos Material	-
1=	Floor	Room No.	Room Descrip	otion		М		Risk Sco MRS')	ore	Ace		lity Ris ARS')	k Score	Extent (m, m², m³ or no.)	Recommendati	ons
	Second	0207	Dry Riser		tol Type	freatment -3	Damage	stos	'MRS'	team Type / Activity	of Rem	uipment He 3	'ARS'	<u>1m²</u>	REMOVE (if applicable)	
	Sample No.	Item Descri	ption		Product,	Burlace The	Extent of Da	Asbesto	RATING	Reem	Legation of Re-	Access Equip on 31s	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	C
	Ref 01	Brown floor	tiles		1	0	0	1	VERY LOW	2	3	3	<u>HIGH</u>	LOW	LABEL & MANAGE	
	Additional Co	omments:														
core	L.			Produ	ct Typ	oe:	Text	ured Coa	ting, Mastic	& Paint				Licensable Asbesto	os Material	
The Administrative				Asbes	tos T	ype:		Chrys 🖾	Amos 🗆 Cr	oc 🗆 Ar	th 🗆 A	Act 🗆 T	rem 🗆	Non-Licensable As	bestos Material	,
- 1	Floor	Bernett Comment of State Comment						Risk Sco MRS')	ore	Acc		lity Ris ARS')	k Score	Extent (m, m², m³ or no.)	Recommendati	ons
WINDS OF	Second	0232	Rear Stairwell		set Type 1-3	Treatment 8-3	of Damage 9-3	pe	'MRS'	Type /	atten of Rem in Room 8-3	guipment Dite	'ARS'	<u>10m²</u>	REMOVE (if applicable)	1
	Sample No.	Item Descri	ption		Product.	Surface 7	Edent of	Asbestos	RATING	Rosen Type Activity p.3	Lecalise	Access Equip on Bits 8-3	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	[
	Ref 05	Textured coa	ating to ceiling		1	0	0	1	VERY LOW	3	2	1	MEDIUM	LOW	LABEL & MANAGE	1
In the Land	Additional Co	omments:					1.5						1			
core				Produ	ct Typ	e:	Rope	e, String	& Textile		-			Licensable Asbesto	os Material	I
The Administration				Asbes	tos Ty	/pe:		Chrys 🖾	Amos 🗆 Cre	oc 🗆 Ar	th 🗆 A	ct 🗆 T	rem 🗆	Non-Licensable As	bestos Material	,
ALL ALL	Floor	Room No.	Room Descrip	tion	6	Ма		Risk Sco MRS')	ore	Acc		ity Ris	k Score	Extent (m, m², m³ or no.)	Recommendation	ons
	Second	0232	Rear Stairwell		uct Type 1-1	Tradment D-3	of Demage p-3	pe	'MRS'	- Page 1	and fram	Sulpment Site	'ARS'	60m²	REMOVE (if applicable)	1
	Sample No.	Item Descri	ption		Predu	Surface 1	Extent of	Asbestos Type	RATING	Resm Type Activity B-3	Location of B in Room 6-3	Access Equips on Site 9-3	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	1
N The state of the	30054 / Ref 02	Textile seal t	o Georgian wire	, -	2	2	0	. 1	LOW	3	3	3	HIGH	MEDIUM	LABEL & MANAGE	,

\*

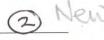
new

core			Prode Asbe					omposite Amos □ Cr	oc [	□ Anth	□ Ac	et 🗆 T	rem 🗆	Licensable Asbesto Non-Licensable As		□
1	Floor	Room No.	Room Description		М		Risk Sco	ore		Acces		ty Risi	k Score	Extent (m, m², m³ or no.)	Recommendati	ons
	Third	0302	DPA	Type	atment	ademet	stos	'MRS'		, add, and	of from	Equipment t the 6-3	'ARS'	1m²	REMOVE (if applicable)	
	Sample No.	Item Descri	ption	Product 1.3	Burtace Tree	Extent of Dam	Asbestos Type	RATING		Reom Type Activity 6-3	Lecation of in Reen 0-3	Access Be on B	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	
0	Ref 01	Brown floor	tiles under modern lino	1	0	0	1	VERY LOW		3	0	0	VERY LOW	VERY LOW	LABEL & MANAGE	-
	Additional Co	omments:										7				
			Prod	uct Ty	pe:		lating Bo					- 5		Licensable Asbesto		V
COLG.			Asbe	stos 7	ype:		Chrys 🖾	Amos 🖾 Cr	oc [	☐ Anth	ı 🗆 A	ct 🗆 T	rem 🗆	Non-Licensable As	bestos Material	
TO LONG BURN	Floor	Room No.	Room Description		М		l Risk Sco MRS')	ore		Acce		ty Risi	k Score	Extent (m, m², m³ or no.)	Recommendati	ons
7 TO A	Third	0305	Lift Lobby	Typ.	premise	Samage	stos	'MRS'		fype /	of Hem	pulpment its	'ARS'	<u>3m</u>	(if applicable)	
	Sample No.	Item Descri	ption	Product 1.2	Surface Thea	Extent of Dar	Asbestos	RATING		Reem Type Activity 6-3	Lecation of in Room 6-3	Access Equipments on little	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	
	07	Bulkhead ov	ver double door	2	2	1	2	MEDIUM .		0	2	2	LOW	LOW	LABEL & MANAGE	,
	Additional Co	omments:	•										(*)			
			Prod	uct Ty	pe:	Cen	nent							Licensable Asbest	os Material	I
core			Asbe	stos 1	уре:		Chrys 🖾	Amos 🗆 Cr	oc l	☐ Antl	n 🗆 A	ct 🗆 T	rem 🗆	Non-Licensable As	bestos Material	1
	Floor	Room No.	Room Description		М		Risk Sc MRS')	ore		Acce		ity Ris ARS')	k Score	Extent (m, m², m³ or no.)	Recommendati	ions
A STATE OF	Third	0306	Electrical Riser	bet Type	adment	adeuse	stos	'MRS'	7	1 44	of Bern orm	ulpmant lie	'ARS'	1m²	REMOVE (if applicable)	[
	Sample No.	Item Descri	ption	Preduct	Barface Tree	Extent of Day	Asbestos	RATING		Room Type Activity 6-1	Lacation of in Room	Access Equity on Site	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	[
1	Ref 02	Ceiling pane	els	1	0	0	1	VERY LOW		0	2	2	LOW	VERY LOW	LABEL & MANAGE	,
	Additional C		els	1	0	0	1	LOW		U	2	2	LOW	TENT LOW	MANAGE	

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core				uct Ty stos T		Rop	e, String Chrys ⊠	& Textile Amos □ Cı	roc [	☐ Anth	n 🗆 A	ct 🗆 T	rem 🗆	Licensable Asbesto Non-Licensable As		□ ✓
	Floor	Room No.	Room Description		N		Risk Sc MRS')	ore		Acce		ty Risi	k Score	Extent (m, m², m³ or no.)	Recommendati	ons
	Third	0306	Electrical Riser	Type	*adment	Osmage	stos	'MRS'		Type /	of Ben Som	unipment ille	'ARS'	X1 fuse box	REMOVE (if applicable)	
	Sample No.	Item Descri	ption	Product 12	Burlace Thea	Extent of Dam	Asbestos Type	RATING		Resen Type Activity 6-3	Location of 8 in Room 6-3	Access Equipment and Bits 6-3	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	
	V03	Flash guard	S	2	-2	0	1	LOW		0	0	0	VERY LOW	VERY LOW	MANAGE	1
	Additional C	omments:														
core				uct Ty stos T	_	Rei		omposite Amos  Cr	roc [	□ Anth	пПА	ct $\square$ T	rem []	Licensable Asbesto Non-Licensable As		
The Address Specials	Floor	Room No.	Room Description		-		Risk Sci				ssibili	_	k Score	Extent (m, m², m³ or no.)	Recommendation	ons
420	Third	0307	Dry Riser	18.	premise	- seemed	stos	'MRS'		i sek	of Bern	afgment ite	'ARS'	1m²	REMOVE (if applicable)	
	Sample No.	Item Descri	ption	Product 1.3	Surface Thea	Extent of Dam 9-3	Asbestos	RATING		Resm Type Activity 6-3	Location of B in Room 8-3	Access Equip on Site 6-3	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	
Service Services	Ref 01	Brown floor	tiles	1	0	0	1	VERY LOW		2	3	3	HIGH	Low	LABEL & MANAGE	-
	Additional Co	omments:					9						*			
core	fine in			uct Ty		Tex		ting, Mastic						Licensable Asbesto		
The Admonst Specialize	Floor	Room No.	Room Description	stos T			Chrys ⊠ I Risk Sc MRS')	Amos 🗆 Cr ore	rocL		ssibili		k Score	Extent (m, m², m³ or no.)	Recommendation	ions
	Third	0313	Rear Stairwell	-dut	afmant			'MRS'	T	i.		ment	'ARS'	10m²	REMOVE (if applicable)	
	Sample No.	Item Descri	ption	Preduct 12	Burface Trea	Extent of Day	Asbestos	RATING		Ream Type Activity B-3	Lecation of B in Room 6-3	Access Equity on Sits 0-3	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	
	Ref 05	Textured coa	ating to ceiling	1	0	0	1	VERY LOW		3	2	1	MEDIUM	Low	LABEL & MANAGE	1
	Additional Co	omments:							_							

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core				oduct Ty bestos T	_			& Textile Amos  Co	roc	☐ Antl	h 🗆 A	ct 🗆 T	rem 🗆	Licensable Asbesto Non-Licensable Asl		□ ✓
ALL	Floor	Room No.	Room Description	1	М	aterial Risk Score ('MRS')				Acce		ty Risk	Score	Extent (m, m², m³ or no.)	Recommendati	ons
	Third	Rear Stairwell	, del	atment	adeus	tos e	'MRS'		1 44	of Rem	ulpment 24	'ARS'	60m²	REMOVE (if applicable)		
	Sample No.	Item Descri	iption	Preduct	Burtace The	Extent of D	Asbesto	'MRS' RATING		Room Type Activity 8-3	Lecation of B in Room 6-3	Access Equip on Site	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	ĺ
	30054 / Ref 02	Textile seal glazing	to Georgian wire	. 2	2	0	1	LOW		3	3	3	HIGH	. MEDIUM	LABEL & MANAGE	1

core				uct Ty stos T				omposite Amos   Cr	roc	□ Anti	n 🗆 A	ct 🗆 T	rem 🗆	Non-Licensable As		-
	Floor	Room No.	Room Description		М		I Risk Sc MRS')	ore		Acce		ty Risi	Score	Extent (m, m², m³ or no.)	Recommendati	ions
	Fourth	0302	DPA	act Type	Teatiment	Damage	stos	'MRS'		Activity 6-3	ation of item in Room 6-3	s Equipment en titte p.3	'ARS'	<u>1m²</u>	REMOVE (if applicable)	
No photo available	Sample No.	Item Descri	ption	Produc	Burtace Trea	Extent of Dan	Asbestos Type	RATING		Resem Acti	Location In R	Access E en.	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	
	Ref 01	Brown floor lino	tiles presumed under	1	0	0.	1	VERY LOW		3	0	0	VERY LOW	VERY LOW	LABEL & MANAGE	,
	Additional Co	omments:	This item was inacce	ssible	durin	g the	re-inspec	tion. It was	pre	sumed	to be	in the	same cond	dition as the previous	inspection.	
core				uct Ty stos T			ulating Bo	ard Amos ⊠ Cr	rocl	☐ Anth	1 🗆 A	ct 🗆 T	rem 🗆	Licensable Asbesto Non-Licensable As	4.5554.445.775	
	Floor	Room No.	Room Description		М		I Risk Sc MRS')	ore		Acce		ty Risk	Score	Extent (m, m², m³ or no.)	Recommendati	ions
Vi Maria	Fourth	0405	Lift Lobby	170.	salment	Samage	stos	'MRS'		jacki,	of Bern	ulpmend	'ARS'	<u>3m</u>	REMOVE (if applicable)	
Carried Street	Sample No.	Item Descri	ption	Product 1-3	Burtess This	Extent of Dam	Asbestos	RATING		Reem Type Activity 8-3	Lecation of It in Room 6-3	Access Equip on Site 8-3	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	1
	Ref 07	Bulkhead ov	er double doors	2	2	1	2	MEDIUM		0	2	2	LOW	LOW	LABEL & MANAGE	
	Additional Co	omments:												-		
core			Prod				nent						_	Licensable Asbesto		
The Aglantic Sprinted			Asbe	stos T	-			Amos 🗆 Cr	oc I					Non-Licensable As	Destos Material	1
	Floor	Room No.	Room Description		М		I Risk Sc MRS')	ore		Acce		RS')	Score	Extent (m, m², m³ or no.)	, Recommendati	ions
	Fourth	0406	Electrical Riser	that Type	7 spletthard 3	Damage	stos	'MRS'		Activity B-3	of Bern com	s Equipment on Site 5-3	'ARS'	<u>1m²</u>	(if applicable)	1
	Sample No.	Item Descri	ption	Product	Burface Trapi	Extent of Darr	Asbesto	RATING		Reem Act	Lacation of I in Room 8-3	Access E	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	
	Ref 02	Ceiling pane	els	1	0	0	. 1	VERY LOW		o.	2	2	LOW	VERY LOW	LABEL & MANAGE	
	Additional Co	nmments:	( ) ( )	_	_	_							3			_

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core				roduct Ty			e, String Chrys ⊠	& Textile Amos   Cr	ос 🗆	Anth	D A	ct 🗆 T	rem 🗆	Licensable Asbesto Non-Licensable As		-
	Floor	Room No.	Room Description	on	M		I Risk Sco MRS')	ore	,	Acces		ty Risi	k Score	Extent (m, m², m³ or no.)	Recommendati	ons
	Fourth	0406	Electrical Riser	Type	adinent	Damage	stos	'MRS'		Sype /	of Item	palpment Its	'ARS'	X1 fuse box	REMOVE (if applicable)	
	Sample No.	Item Descri	ption	Product 4.3	Surface Theat	Extent of Da	Asbestos Type	RATING		Room Type Activity 8-3	Lecation of I in Roam	Access Eguip on litts 6-3	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	
YA	V03	Flash guard	S	2	2	0	1	LOW		0	0	0	VERY LOW	VERY LOW	MANAGE	1
	Additional C	omments:														
core				roduct Ty				omposite					1-1-1	Licensable Asbesto		
The Administration			A:	sbestos		_		Amos 🗆 Cr	_					Non-Licensable As	bestos Material	1
as	Floor	Room No.	Room Description	on	N		Risk Sco	ore	1	Acces		ty Ris	k Score	Extent (m, m², m³ or no.)	Recommendati	ons
	Fourth	0407	Dry Riser	***	safmant	Damage	stos	'MRS'		lyp.	of Hem Som	sulpment lite	'ARS'	<u>1m²</u>	REMOVE (if applicable)	
	Sample No.	Item Descri	ption	Product 5.3	Surface Treats	Extent of Dan	Asbesto	RATING		Roum Type Authory 6-3	Location of I	Access Equi on lite 8-3	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	0
	Ref 01	Brown floor	tiles	1	0	0	-1	VERY LOW		2	3	- 3	HIGH	LOW	LABEL & MANAGE	1
	Additional C	omments:												W		
•			P	roduct Ty	vpe:	Tex	tured Coa	ting, Mastic	& Pa	aint				Licensable Asbesto	os Material	
core				sbestos				Amos 🗆 Cr			1 🗆 'A	ct 🗆 T	rem 🗆	Non-Licensable As	bestos Material	1
	Floor	Room No.	Room Description	on	N		Risk Sc MRS')	ore		Acces		ty Ris	k Score	Extent (m, m², m³ or no.)	Recommendati	ions
	Fourth	0413	Rear Stairwell	***	adment	Samage	sots	'MRS'		ype.i	of Rem	Upmant	'ARS'	10m²	REMOVE (if applicable)	0
	Sample No.	Item Descri	ption	Product 52	Burface Tred	Extent of Dan	Asbestos Type	RATING		Rosen Type Activity B-3	Location of in Room	Access Equity on Site 6-3	'ARS' RATING	Total Risk Rating	ENCAPSULATE / REPAIR	. 🗆
AN	Ref 05	Textured co.	ating to ceiling	1	0	0	1	VERY LOW		3	2	1	MEDIUM	LOW	LABEL & MANAGE	1
	Additional C	omments:			-	_										

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core				duct Ty estos 1	_			& Textile	roo	□ Anti	ьПА	ot 🗆 T	rom 🗆	Licensable Asbesto Non-Licensable As		
The Advance Security	Floor	Room No.	Room Description	T		lateria	Risk Sco			_	ssibili		k Score	Extent (m, m², m³ or no.)	Recommendation	ons
	Fourth	0413	Rear Stairwell	1700	Treatment	of Damage 0-3	bestos	'MRS'		em Type / Activity 8-3	alisn of Item in Room 9-3	sulpenent lite	'ARS'	<u>60m²</u>	REMOVE (if applicable)	
WI I	Sample No.	Item Descri	iption	Produc	Burlace T	Extent of	Asbe	'MRS' RATING		Acth Fe	Location in Ri	Access Equip on Bits 8-3	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	С
	30054 / Ref 02	Textile seal glazing	to Georgian wire	2	2	0	1	LOW		3	3	3	HIGH	MEDIUM	LABEL & MANAGE	1

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core				oduct Ty bestos	_		ulating Bo Chrys ⊠	ard Amos ⊠ Cr	ос	☐ Anth	n 🗆 A	ct 🗆 T	rem 🗆	Licensable Asbesto Non-Licensable As		·
To About beauty	Floor	Room No.	Room Description	1	М		I Risk Sco MRS')	ore		Acce		ty Ris	k Score	Extent (m, m², m³ or no.)	Recommendati	ons
	Fifth	0505	Lift Lobby	1ybe	atment	Samage	stos	'MRS'		lype /	of Rem	adjument ite	'ARS'	<u>3m</u>	REMOVE (if applicable)	
	Sample No.	Item Descri	ption	Prosbert 1-2	Burtlece The	Extend of Da	Asbesto	RATING		Rearn Type Activity 8-3	Lecation of I in Room B-3	Access En	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	~
	Ref 07	Bulkhead ov ceiling void	er double doors in	2	1	1	2	LOW		0	2	2	LOW	LOW	LABEL & MANAGE	1
The state of the s	Additional C	omments:	This item was inac	cessible	durin	g the	re-inspec	tion. It was	pre	sumed	to be	in the	same con	dition as the previous	inspection.	
core	7			oduct Ty	_		nent	Amos □ Cr	.00	□ Anti	ьПА	ct 🗆 T	rem []	Licensable Asbesto		
The Authority Specialist	Floor	Room No.	Room Description		-	ateria	Risk Sco				ssibili		k Score	Extent (m, m², m³ or no.)	Recommendati	ions
/ We	Fifth	0506	Electrical Riser	, jan	dment	ageu		'MRS'		1.64	1	ment	'ARS'	<u>1m²</u>	REMOVE (if applicable)	
ACT	Sample No.	Item Descri	ption	Product 1.2	Burtace The	Edent of Da	Asbestos Type	RATING		Room Type Activity 8-3	Lecation of B in Room 8-3	Access Equip on lite	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	
	Ref 02	Ceiling pane	els	1	0	0	1	VERY LOW		0	2	2	LOW	VERY LOW	LABEL & MANAGE	1
	Additional C	omments:														
core				oduct Ty	_		e, String Chrvs ⊠	& Textile	roc	☐ Anti	h 🗆 A	ct 🗆 1	rem □	Licensable Asbeste Non-Licensable As		
A About Grant	Floor	Room No.	Room Description		-	lateria	I Risk Sc				ssibil	_	k Score	Extent (m, m², m³ or no.)	Recommendati	ions
	Fifth	0506	Electrical Riser	*44	- American	adeu		'MRS'		1.4	d lies	ipment .	'ARS'	X1 fuse box	REMOVE (if applicable)	
	Sample No.	Item Descri	ption	Product 1-2	Bartace The	Entered of Da	Asbestos	RATING		Room Typs Activity 8-3	Location of in Room	Access Equip on Site	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	0
	V03	Flash guard	s	2	. 2	0	1	LOW	1	0	0	0	VERY LOW	VERY LOW	MANAGE	1
	Additional C	omments:			-				726					•		

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core			P	Product T	ype:			omposite					Licensable Asbesto	os Material	
The Address Spranger			A	Asbestos	Type:		Chrys 🛭	Amos   Cr	oc 🗆 Ar	nth 🗆 A	Act 🗆 1	rem 🗆	Non-Licensable As	bestos Material	1
	Floor	Room No.	Room Description	ion	٨		Risk Sc MRS')	ore	Acc		lity Ris ARS')	k Score	Extent (m, m², m³ or no.)	Recommendat	ions
1	Fifth	0507	Dry Riser	had Type	Padiment	Darmage	stos	'MRS'	Activity	of liem	pulpment Ite	'ARS'	<u>1m²</u>	REMOVE (if applicable)	
	Sample No.	Item Descri	ption	Prosba	Surface Thad	Esteri of Dan	Asbesto Type	RATING	Reem	Location of in Room	Access Equit on 2016	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	
	Ref 01	Brown floor	tiles	1	0	0	1	VERY LOW	2	3	3	HIGH	Low	LABEL & MANAGE	,
	Additional Co	omments:													
			P	Product T	vpe:	Tex	tured Co	ating, Mastic	& Paint				Licensable Asbesto	os Material	I
core				Asbestos				Amos 🗆 Cr			ct 🗆 T	rem 🗆	Non-Licensable As	bestos Material	
	Floor	Room No.	Room Description	ion	٨		Risk Sc MRS')	ore	Acc		lity Ris ARS')	k Score	Extent (m, m², m³ or no.)	Recommendati	ions
	Fifth	0514	Rear Stairwell	*	Pediment	Damage	stos	'MRS'	teem Type / Activity 8-3	of liem som	Mile Me	'ARS'	<u>10m²</u>	REMOVE (if applicable)	1
	Sample No.	Item Descri	ption	Product	Burface Thea	Extent of Da	Asbesto	RATING	Reem	Location of B	Access Equip on Site 8-3	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	1
	Ref 05	Textured co.	ating to ceiling	1	0	0	1	VERY LOW	3	2	1	MEDIUM	LOW	LABEL & MANAGE	
	Additional Co	omments:													A
core			P	Product T	ype:	Rop	e, String	& Textile					Licensable Asbesto	os Material	[
The Address Specialist			A	Asbestos	Type:		Chrys 🛭	Amos 🗆 Cr	oc 🗆 Ar	nth 🗆 A	ct 🗆 T	rem 🗆 .	Non-Licensable As	bestos Material	1
Aller Aller	Floor	Room No.	Room Description	ion	N		l Risk Sc MRS')	ore	Acc		lity Ris ARS')	k Score	Extent (m, m², m³ or no.)	Recommendat	ions
	Fifth	0514	Rear Stairwell	170*	reatment	Damage	stos	'MRS'	Type /	of Rem	supment	'ARS'	<u>60m²</u>	REMOVE (if applicable)	1
	Sample No.	Item Descri	ption	Proshed	Burface Tre.	Extent of De	Asbesto	RATING	Activity P. E.J.	Location of B	Access Equipon on Site	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	1
N. I	30054 / Ref 02	Textile seal	to Georgian wire	2	2	0	1	LOW	3	3	3	HIGH	MEDIUM	LABEL & MANAGE	

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core				duct Ty estos 1			nent Chrys 🖾	Amos □ Cr	ос [	☐ Anth	□ Ac	t 🗆 T	rem 🗆	Licensable Asbesto Non-Licensable Asl		□ ✓
	Floor	Room No.	Room Description		M		Risk Sco MRS')	ore		Acces		ty Risk RS')	Score	Extent (m, m², m³ or no.)	Recommendati	ons
	Sixth	0606	Electrical Riser	-du	pression	Jamage	stos	'MRS'		) Abe /	of Item oom	palpment Ste	'ARS'	<u>1m²</u>	REMOVE (if applicable)	
	Sample No.	Item Descri	ption	Product 5.3	Burlace The	Extent of Da	Asbesto	RATING		Room Type Activity 6-3	Lecation of 9 in Reom 6-3	Access Equip on Site p-3	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	
MEN	02	Ceiling pane	els	1	0	0	1	VERY LOW		0	2	2	LOW	VERY LOW	LABEL & MANAGE	-
	Additional Co	omments:														4
com	12	12	Pro	duct Ty	pe:		e, String							Licensable Asbesto		
COCE The Address Specials'			Ast	estos 1		_		Amos 🗆 Cı	oc [					Non-Licensable As	bestos Material	
	Floor	Room No.	Room Description		N		Risk Sco	ore		Acce		ty Risi	Score	Extent (m, m², m³ or no.)	Recommendati	ons
2	Sixth	0606	Electrical Riser	Type	afrinant	Samage	stos	'MRS'		lyps / dry	of Hem	pulpment ite	'ARS'	X1 fuse box	REMOVE (if applicable)	1
	Sample No.	Item Descri	ption	Product 43.	Surface Tre	Extent of Dan	Asbestos	RATING		Activity 8-3	Lecation of in Room	Access Equipon Site on Site 6-3	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	1
	V03	Flash guard	s	2	2	0	. 1	LOW		0	0	0	VERY LOW	VERY LOW	MANAGE	
	Additional C	omments:	U.													
1			Pro	duct Ty	rpe:	Rei		omposite						Licensable Asbesto		
core			Ast	estos	Гуре:		Chrys ⊠	Amos 🗆 C	roc [	☐ Anth	n 🗆 A	ct 🗆 T	rem 🗆	Non-Licensable As	bestos Material	1
	Floor	Room No.	Room Description		N		Risk Sc MRS')	ore		Acce		ty Ris	k Score	Extent (m, m², m³ or no.)	Recommendati	ions
	Sixth	0607	Dry Riser	*dAL	afment	alleran	itos	'MRS'		ype i ny	of Item orn	Lépmand	'ARS'	<u>1m²</u>	REMOVE (if applicable)	[
	Sample No.	Item Descri	ption .	Product 1-2	Burtace Thea	Extent of Da	Asbestos	RATING		Room Type Activity E-3	Location of In Ruon S-3	Access Equip on Site p.3	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	1
A STATE OF	01	Brown floor	tiles	1	0	0	1	VERY LOW		2	3	3	HIGH	LOW	LABEL & MANAGE	
The state of the s	Additional C				_					-						-

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core				Produc	_	_			& Textile Amos  C	roc	□ Anti	n 🗆 A	ct 🗆 T	rem 🗆	Licensable Asbesto		
783	Floor	Room No.	Room Descrip		-		ateria	Risk Sco		T		ssibili		k Score	Extent (m, m², m³ or no.)	Recommendati	ons
	Sixth	0623	Rear Stairwell		Type	adment	Damage	stos	'MRS'		om Type / Activity 8-3	allen of Bem in Room 6-3	pulpment ite	'ARS'	60m²	REMOVE (if applicable)	
	Sample No.	Item Descri	ption		Product 1-2	Burlace Ti	Edeni of D	Asbesto	'MRS' RATING		Room Activ	Localism In Ro	Access Equip en Bite 6-3	'ARS' RATING	Total Risk Rating	ENCAPSULATE / REPAIR	
	30054 / 02	Textile seal glazing	to Georgian wire		2	2	0	1	LOW	1	3	3	3	нідн	MEDIUM	LABEL & MANAGE	-
	Additional Co													-			_

core				duct Ty bestos 1	_	Pap		Amos 🗆 Cr	ос	□ Anti	h 🗆 Ad	ct 🗆 T	rem 🗆	Licensable Asbesto Non-Licensable As		□ ✓
PERSONAL PROPERTY.	Floor	Room No.	Room Description		М		Risk Sco	ore		Acce		ty Risk	Score	Extent (m, m², m³ or no.)	Recommendati	ons
1	Roof	R03	Plant Room	Type	programme	Damage	stos	'MRS'		Type /	of frem born 3	sulpenent lite	'ARS'	Approx. x10	REMOVE (if applicable)	
	Sample No.	Item Descri	ption	Product	Burlace Te	Extent of D	Asbestos Type	RATING		Room Type Authory 6-3	Lecation of Iff in Resm 6-3	Access Bouly on Site B3	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	0
	09	Gaskets to p	olant	2	2	0	1	LOW		2	3	3	HIGH	MEDIUM	LABEL 8 MANAGE	
	Additional Co	omments:											1-	3	1	
			Pro	duct Ty	pe:	Cen	nent							Licensable Asbesto	os Material	Ī
core			As	bestos 1	Гуре:		Chrys 🖾	Amos 🗆 Cı	roc	☐ Antl	h 🗆 A	ct 🗆 T	rem 🗆	Non-Licensable As	bestos Material	
100	Floor	Room No.	Room Description	1	M		Risk Sco	ore		Acce		ty Risi	k Score	Extent (m, m², m³ or no.)	Recommendati	ons
A STATE OF THE PARTY OF THE PAR	Roof	R03	Plant Room	Туре	afment	amage	itos	'MRS'		, add	of Ham om	alpment ite	'ARS'	1.5m³	REMOVE (if applicable)	
Visia III	Sample No.	Item Descri	ption	Product	Burface The	Extent of Da	Asbestos Type	RATING		Roem Type Activity 8-3	Location of I In Ream In Sa	Access Eq on S	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	T
	01	Panels to flo	oor	1	1.	3	1	LOW		2	3	3	HIGH	MEDIUM	LABEL & MANAGE	
	Additional Co	omments:														
			Pro	oduct Ty	pe:	Cen	nent							Licensable Asbesto		$\perp$
core			As	bestos	Гуре:		Chrys 🛛	Amos 🗆 Cı	roc	☐ Ant	h 🗆 A	ct 🗆 T	rem 🗆	Non-Licensable As	bestos Material	
18 may 1	Floor	Room No.	Room Description	1	N		l Risk Sc MRS')	ore		Acce		ity Ris	k Score	Extent (m, m², m³ or no.)	Recommendat	ions
	Roof	R03	Plant Room	- 170 ·	editheri	Damage	stos	'MRS'		lype (	of Bem	pulpmand ille	'ARS'	<u>0.5m²</u>	REMOVE (if applicable)	
0	Sample No.	Item Descri	ption	Product 5-2	Surface Tre	Extent of Dr	Asbesto	RATING		Room Typs Activity 6-3	Lacation of in Room	Access Br	RATING	Total Risk Rating	ENCAPSULATE / REPAIR	
100	Ref 01	Panel debris	s to floor	1	1	3	1	LOW		2	3	3	HIGH	MEDIUM	LABEL & MANAGE	
	Additional C				_	_										

\* NEW

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#### i) Material Assessment

The four main parameters used to determine the amount of fibre release from an asbestos-containing product when subject to standard disturbance, are:

- Asbestos Type
- Product Type
- Extent of Damage or Deterioration
- Surface Treatment

Each parameter is given a score; High, Medium, Low & Very Low. The value assigned is totalled to give a score between 2 and 12.

Variable	Score	Notes
	1	Plastics, Resins, Mastics, Roofing Felt, Bitumen Products Vinyl Floor Tiles, Textured Coatings, Asbestos Cement, Asbestos Reinforced Composites (ARC)
A. Product Type	2	Asbestos Insulating Board (A.I.B.), Mill Board, Textiles, Gaskets, Ropes, Paper, Felt
	3	Thermal Insulation, Sprayed Asbestos, Limpet, Loose Asbestos, Asbestos Mattresses and Packing
	0	None: No Visible Damage
	1	Low: A Few Scratches or Surface Marks, Broken Edges
B. Extent of Damage	2	Medium: Significant Breakage of Non-Friable Materials Revealing Loose Fibres
	3	High: Damage of Friable Materials, Visible Asbestos Debris
	0	Non-Friable Composite Materials
C. Surface Treatment	1	Enclosed Sprays and Lagging, A.I.B., Unsealed Asbestos Cement
o. Sanaso risamoni	2	Unsealed A.I.B., or Encapsulated Lagging or Sprays
	3	Unsealed Lagging or Sprays
	. 1	Chrysotile
D. Asbestos Type	2	Amosite
	3	Crocidolite
TOTAL		A + B + C + D = Material Risk Score

Materials that achieve scores of 10 or more are regarded as having a high potential to release fibres if disturbed. Scores of between 7 and 9 are regarded as having a medium potential and those between 5 and 6 are regarded as having a low potential. Materials with a score 4 or less have a very low potential of fibre release. Non-asbestos materials are not scored. The material assessment score has been calculated and recorded as part of the survey.

Risk	Material Score	Risk Value
High	10 or more	4
Medium	7-9	3
Low	5-6	2
Very Low	4 or less	1

It does not automatically follow that those materials assigned the highest score in the material assessment will be the materials that should be given priority for remedial action.

# ii) Accessibility Assessment

The Accessibility Assessment looks at the likelihood of someone disturbing the asbestos containing material by taking into account the type and usage of the room, where the item is located within the room and whether access equipment is available to use. The surveyor may have to assume certain factors at the time of the survey if no client representative is on site at the time of the survey.

A legal requirement to carry out a Risk Assessment for all work activities exists under the Management of Health and Safety at Work Regulations 1999. The requirement to assess the risk posed by asbestos is further enforced by the Control of Asbestos Regulations. These regulations require that asbestos present in the workplace must not present a hazard to health.

The risks from asbestos should be assessed and managed for all identified or presumed ACMs. The Risk Assessment or priority rating will establish the likelihood of people being exposed to the hazard and identify the measures to be taken that will either eliminate the hazard or adequately control it.

The Accessibility Assessment Score is calculated on the scores for each of the factors given by the table.

It is the responsibility of the Duty Holder to complete Priority Risk Assessments, and ensure it remains up to date and accurate, however the scores in this report have been completed by the surveyor.

Variable	Score	Notes	
	0	Rare	Location used rarely (e.g. confined spaces, lofts, risers, ceiling voids, inaccessible external areas / roofs etc.).
A Design Trans (Antholes	1	Occasional	Location used on monthly/occasional basis (e.g. comms room, electrical room etc.).
A. Room Type / Activity	2	Frequent	Location used on weekly/frequent basis (plant rooms, general stores etc.).
-10	3	Routinely	Location used on a daily basis (e.g. circulation areas, ablutions, offices, bedrooms, accessible external areas etc.).
TOTAL	TOTAL C	of A	
	0	Concealed	ACMs are in concealed areas.
B. Location of Item in Room	1	>3m in height	ACMs in areas where the use of a large ladder is required.
B. Eddalon of Rom III Noon	2	1 – 3m in height	ACMs in areas where standard ladders or chair can be used.
	3	<1m in height	ACMs in easily accessible areas.
TOTAL	TOTAL C	of B	
	0	None	No chairs, tables or small ladders on site or 'Concealed Item'.
C. Access Equipment on Site	1	Small Ladder / Chair / 'Hop Up'	Small ladder (1.5m), chairs or tables are available for use.
	2	Standard Ladder	Standard ladder (2.8m) available.
	3	High Reach ladder or if 'B' = 3	Large extendable ladder on site or 'cherry picker'
TOTAL	TOTAL C	of C	
TOTAL .	A+B+	C = Accessibility Risk	Score

Risk	Accessibility Score	Risk Value
High	8-9	4
Medium	6-7	3
Low	4-5	2
Very Low	3 or less	1



#### iii) Total Risk

The total material score value (where Very Low=1, Low=2, Medium=3 & High=4) is then added to the total accessibility score (where Very Low=1, Low=2, Medium=3 & High=4) giving a Total Risk Score. The Total Risk Score should form the basis of an Asbestos Management Plan. It is the duty holder's responsibility to carry out a Priority Risk Assessment, using the information given in the survey and their detailed knowledge of the activities carried out within the premises. A score will be produced for each material identified to be containing asbestos. The duty holder must ensure that the Assessment carried out by the surveyor is correct and make changes to the scores as and when required.

Total Risk	Risk Value	
High	7 - 8	
Medium	6	
Low	4-5	
Very Low	2-3	

# Appendix II - Certificates of Analysis

Original Survey Asbestos Sampling Certificate





#### **CERTIFICATE FOR IDENTIFICATION OF ASBESTOS FIBRES**

STANDARD PREMIUM EMERGENCY

Client:	CORE SURVEYS LTD					1
Address:	THE SUSSEX INNOVATION CENTRE SCIENCE PARK SQUARE FALMER, BRIGHTON BN1 9SB	Analysis Report No.	SCO	SCO/07/2699 13/12/07		
Attention:	SIMON EVANS	Report Date.	13/12/07			
Site Address:	GUILDBOURNE HOUSE WORTHING	Site Ref No.		070343		
Date sample taken:	10/12/07	Page No:	1	Of	1	
Date sample received:	13/12/07	No. of Samples:		9		
Date of Analysis:	13/12/07	Obtained:	DELIVERED			

Samples of material, referenced below, have been examined to determine the presence of asbestos fibres, using Scopes Asbestos Analysis "in house" method of transmitted/polarised light microscopy and centre stop dispersion staining, based on HSE's HSG248.

If samples have been DELIVERED the site address and actual sample location is as given by the client at the time of delivery. Scopes Asbestos Analysis Services Limited are not responsible for the accuracy or competence of the sampling by third parties. Under these circumstances Scopes Asbestos Analysis Services Limited cannot be held responsible for the interpretation of the results shown. Samples shown as COLLECTED have been sampled using Scopes Asbestos Analysis Services Limited documented "In-house" method for sampling

SCOPES SAMPLE	CLIENT SAMPLE	Sample Location	Fibre Type Detected	
1	1	SIXTH FLOOR CLEANERS CUPBOARD - BROWN FLOOR TILES	CHRYSOTILE	
2	2	SIXTH FLOOR ELECTRICAL RISER - CEILING PANELS	CHRYSOTILE	
3	3	SIXTH FLOOR OPEN PLAN AREA - UPSTANDS TO SUSPENDED CEILING	NADIS	
4	4	SIXTH FLOOR OPEN PLAN AREA - PANEL OVER DOUBLE DOORS	NADIS	
5	5	SIXTH FLOOR REAR STAIRWELL - TEXTURED COATING TO CEILING	CHRYSOTILE	
6	6	SIXTH FLOOR MAIN STAIRWELL - STAIR NOSING	NADIS	
7	7	THIRD FLOOR - BULKHEAD OVER DOUBLE DOORS	AMOSITE / CHRYSOTILE	
8	8	PLANT ROOM - DISUSED GASKET	NADIS	
9	9	PLANT ROOM - GASKET TO PLANT	CHRYSOTILE	
			)	
			*	

KEY: NADIS - No Asbestos Detected in Sample

Note: All samples will be retained for a minimum of six months.

Analysed by: B HOPSON Authorised signatory: Frint name: B.HOPSON - COMPANY MANAGER

BULK 001-VER 4 22-NOV-05-QCM

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# CERTIFICATE FOR IDENTIFICATION OF ASBESTOS FIBRES

PREMIUM **EMERGENCY** SCO/09/27932 19/11/09

STANDARD

CORE SURVEYS LTD THE SUSSEX INNOVATION CENTRE SCIENCE PARK SQUARE FALMER, BRIGHTON Analysis Report No Address: BN1 9SB Report Date. SIMON EVANS Attention: GUILDBOURNE HOUSE 090276A Site Address: Page No: 15/10/09 Of Date sample taken: No. of Samples: 18/11/09 Date sample received: DELIVERED Date of Analysis: 19/11/09 Obtained:

Samples of material, referenced below, have been examined to determine the presence of asbestos fibres, using Scopes Asbestos Analysis "in house" method of transmitted/polarised light microscopy and centre stop dispersion staining, based on HSE's HSG248.

If samples have been DELIVERED the site address and actual sample location is as given by the client at the time of delivery. Scopes Asbestos Analysis Services Limited are not responsible for the accuracy or competence of the sampling by third parties. Under these circumstances Scopes Asbestos Analysis Services Limited cannot be held responsible for the interpretation of the results shown.

SCOPES SAMPLE	CLIENT SAMPLE No.	Sample Location	Fibre Type Detected
1	1	GROUND FLOOR RECEPTION- CEILING	NADIS
2	2	GROUND FLOOR STORE- DEBRIS	NADIS
3	3	GROUND FLOOR ELECTRICS- FLOOR TILES	NADIS
4	. 4	GROUND FLOOR ELECTRICS- SWAB SAMPLE	CHRYSOTILE
5	5	GROUND FLOOR STAIRS- STEP NOSING	NADIS
6	6	1 <sup>ST</sup> FLOOR EVIDENCE ROOM- RISER	NADIS
7	7	1 <sup>ST</sup> FLOOR ELECTRICS- SHUTTERING	CHRYSOTILE
8	8	GROUND FLOOR STORE- DOOR PANEL	NADIS
		-	

NADIS - No Asbestos Detected in Sample Note: All samples will be retained for a minimum of six months.

Note: This Certificate for Identification of Asbestos Fibres shall not be reproduced except in full without the written approval of the Laboratory.

Tip Authorised signatory: Analysed by: B HOPSON B HOPSON- O.C.M BULK 001-VER 5 12-AUGUST-09-QCM

> 2 Nobel Square, Courtauld Road, Burnt Mills Industrial Estate, Basildon, Essex SS13 1LS Tel: 01268 724785 Fax: 01268 724796 Mob: 07765 685132 E-Mail: enquines@scopesaasl.co.u

Re-Inspection Date: 28th June 2018 Page 34 of 41 Ref: 30054 Core Surveys Ltd - Asbestos Survey Re-Inspection Report: 1.16 - Last updated 03/05/2018



# **Bulk Analysis Certificate**

Client:

**Environment Agency** 

Client Ref:

N/A

Address:

Guildbourne House Chatsworth Road Worthing

Our Ref::

30054

**BN11 1LD** 

No. of Samples:

2

Date(s) Samples Taken / Received: 28/06/2018

Taken by:

M Cook

Date(s) of Analysis:

28/06/2018

Analysed by:

A Smart

Site Location:

Guildbourne House, Worthing

Analysis No:         Sample No:           A52889         01           A52890         02		Location	Description	Analysis	
		R03 – Plant room Cement Panel to floor		Chrysotile	
		0623 - Stairwell	Textile seal to Georgian wire glazing	Chrysotile	

NADIS within the Analysis column = No Asbestos Detected in Sample

Analysis was carried out in accordance with Core Surveys documented in-house procedures and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Samples are retained for not less than 6 months from the date of analysis unless otherwise requested.

Where samples are taken by Core Surveys, sampling is carried out in accordance with our documented in-house methods and HSG 264 and is covered by our UKAS accreditation. Core Surveys are not responsible for the accuracy or competence of the sampling by third parties; including sample descriptions & locations.

Opinions and interpretations, including the description of the sample (i.e. referring to Insulating Board or Cement) are based on their asbestos content and visual appearance alone, these opinions are outside of Core Surveys scope of UKAS accreditation for Bulk Analysis. Water absorption tests (density determination) have not been carried out as these are outside of Core Surveys scope of UKAS accreditation for Bulk

This report should not be reproduced, except in full, without the written approval of the laboratory.

Signed on behalf of Core Surveys:

Name & Position:

Amy Smart (Lab Analyst)

Date of Issue:

28th June 2018

Core Surveys Ltd Issue 1.05 – 27.04.17

Registered Office:

Rotherfield Woodyard Mill Lane

Fletching Common

Company No: VAT No:

East Sussex BN8 4JL 5170789 844471223

**Bulk Analysis Certificate CS-BAC-01** Page: 1 of 1

# Appendix III - Marked Plans

#### **CORE SURVEYS KEY**

Ref = Reference to Sample Taken; V = Visual Inspection Only

#### **PREFIXES**

B = Basement; G = Ground Floor; 01 = First Floor; 02 = Second Floor etc.
M = Mezzanine; LG = Lower Ground Floor; L = Loft; R = Roof; EX = External

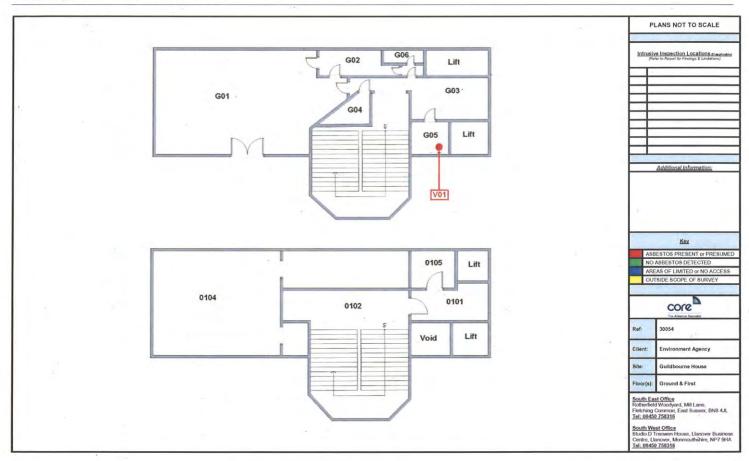
Sample locations indicated by unique sample numbers

Sample Points, Text or Areas shaded in red indicates where asbestos containing materials are located

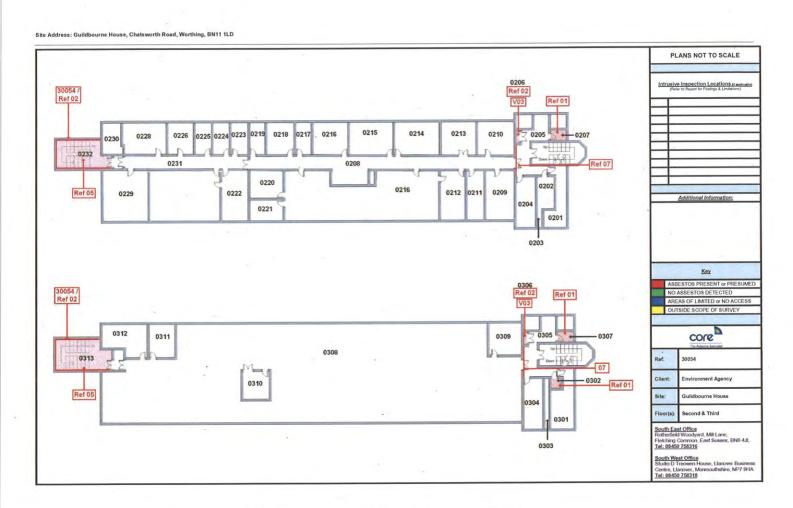
Sample Points shaded in green indicates no-asbestos containing materials were detected

Text or Areas shaded in blue indicate locations of No Access which must be presumed to contain asbestos until proven otherwise

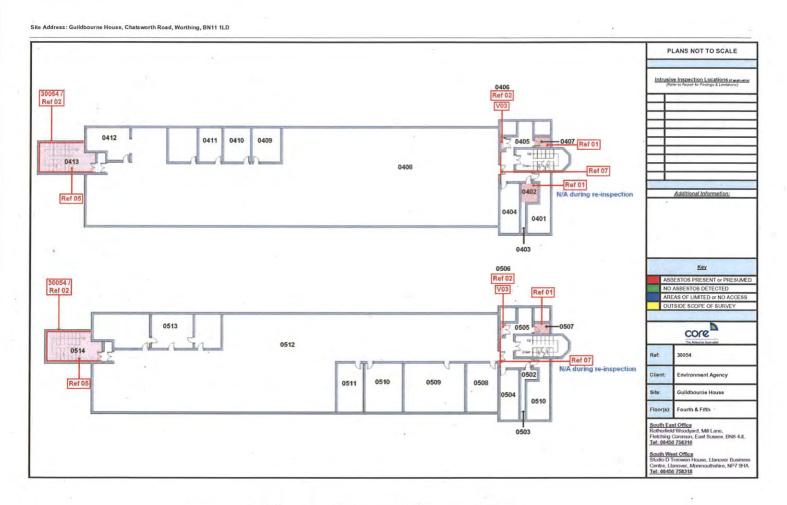
PLANS NOT TO SCALE



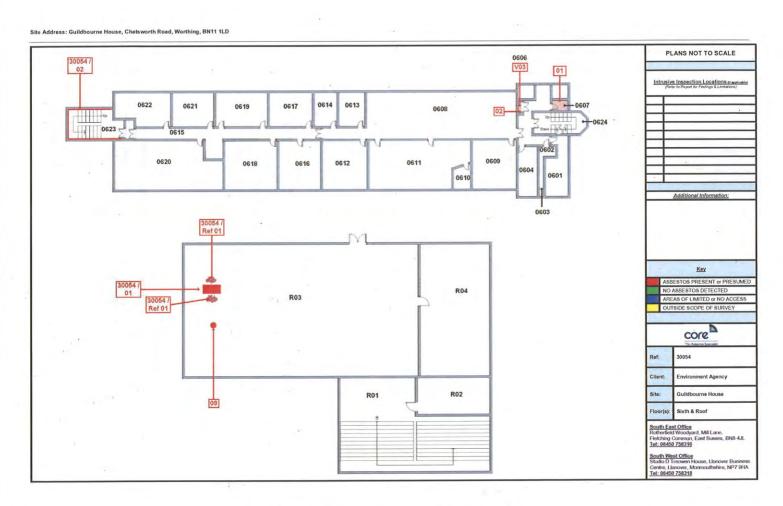
Ref. 30054 Re-Inspection Date: 28th June 2018 Page 37 of 41 Core Surveys Ltd – Asbestos Survey Re-Inspection Report: 1.16 – Last updated 03/05/2018



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# CDM2015 Designer Risk Register

Project:	Guildbourne House – Fifth Floor	Project Ref:	2230/19
Designer:	Philip Wiltshire MRICS IMaPS	Sheet No.:	1
Principal Designer:	Philip Wiltshire MRICS IMaPS	REV:	

Summary Of Design Element/s:

Designers have to consider all hazards and do what is reasonable to eliminate if feasible, or reduce risks where hazards remain. When it comes to passing on information, Designers do not need to mention every hazard or assumption, but they MUST point out significant risks. These are not necessarily those that result in greatest risk, but those that are:

- a) Not likely to be obvious to a competent Designer or Contractor;
- b) Unusual, or;
- c) Likely to be difficult to manage effectively.

Think about how the design is to be built, maintained and later removed.

Feature, element,	Hazards or hazardous	Efforts to eliminate by	Where hazards cannot be	Residual issues, hazards	How is the information going	Date closed-
structure, 'process' or	activity identified	design:	eliminated, measures	or risks: the information	to be provided?	out
activity.	From any or all of the	All design, which	designers can take to	to be supplied to others	Consider 'NOD' notes on	With initials
Number the boxes for	following:	includes: initial concepts,	reduce risk	and to whom or for	drawings or, if necessary,	of
identification purposes.	a) Accident and near-	layout, rules and	By reducing severity or	what?	information as a report, or	responsible
Date the box to record	miss records.	procedures, particular	population or reducing	Note the use of purpose	method statement or	person eg
when the issue was	b) Practical guidance.	working methods,	period of exposure (type	of the information if it	'suggested construction	when NOD
added to the register.	c) Plus any	specifications including	of risk, or no. of persons	helps management: is it	sequence' or precautions or	on drawings
	foreseeable	materials and	or amount of time). If	to other Designers or for	assumptions etc.	and if acting
	hazards identified	substances, bills of	appropriate note the	tenderers or for		as PD when
	by experienced	quantities, temporary	persons at risk.	construction or for the		added to
	team members	works.		H&S file?		PCIP
1. Delivery of	Injury to staff &	Segregate working areas.	Agree access / work	QS / Tenderers / Principal	Within PCIP and NoD	
Folding Screen	operatives during	Agree delivery times,	positions – use separate	Contractors / FM		
18.03.2019	movement of heavy	temporary banners,	access, signage	management		
	vehicles	signage				
2. Delivery vehicles,	Injury to pedestrians,	Segregate working areas.	Agree access / work	QS / Tenderers / Principal	Within PCIP and NoD	
lorries, skip lorries	traffic incidents	Agree delivery times,	positions – use separate	Contractors / adult		
18.03.2019		temporary banners,	access, signage	services management		
		signage				









3. Removal of Waste 18.03.2019	Injury to staff, pedestrians, traffic incidents	Segregate working areas. Agree delivery times, temporary banners, signage Agree removal times	Programme time for relocation of materials	QS / Tenderers / Principal Contractors / FM management	Within PCIP and NoD	
4. Electrical services 18.03.2019	Electrocution	Early identification of critical disconnection of circuits to be altered	Ensure matter is address within documents and plan	QS / Tenderers / Principal Contractors / FM management	Within PCIP and NoD	
5. Flooring 18.03.2019	Fumes from adhesive	Use of low odour products	Ensure adequate ventilation is noted	QS / Tenderers / Principal Contractors	Within PCIP and NoD	







# **SECTION C**

**Specific & Trade Preliminaries** 



# 2230 19 - EA Guildbourne House $-5^{th}$ incident room and $3^{rd}$ floor Archive room

# **Work Sections**

AA GENERALLY

C90 ALTERATIONS – SPOT ITEMS

K30 PANEL PARTITIONS

K45 SUSPENDED CEILING SYSTEM ALTERATIONS

L20DOORS / SHUTTERS / HATCHES

L40 GENERAL GLAZING

M50 RUBBERS / PLASTICS / CORK / LINO / CARPET TILING / SHEETING

M52 DECORATIVE PAPERS / FABRICS M60 PAINTING / CLEAR FINISHING

## AA GENERALLY

#### **GOOD PRACTICE:**

Where and to the extent that materials, products and workmanship are not fully detailed or specified they are to be:

- Of a standard appropriate to the Works and suitable for the functions stated in or reasonably to be inferred from the project documents, and
- In accordance with good building practice.

## QUALITY STANDARDS / CONTROL:

Notwithstanding the above, it should be clearly understood that the standard and quality of materials, products and workmanship required by the Employer and CA are the highest achievable.

The Principle Contractor and Works Contractors shall install in all persons employed for the works that they shall strive to reach the highest achievable standards in their work.

It should be instilled by the Principle Contractor and Works Contractors in all operatives engaged on the works, that the quality and standards are not the norm as would be expected for spec-housing, but more so those befitting a fine and bespoke property.

To achieve the standards required will necessitate the utmost diligence by the Principle Contractor and Works Contractors to ensure all operatives either employed directly or as works contractors, are fully aware of the high standards and quality required to be achieved.

The Principle Contractor and Works Contractors shall allow sufficient time and resources to select suitable personnel of the correct calibre and experience to carry out the works to achieve the required standards.

The Principle Contractor and Works Contractors shall allow sufficient time and resources to monitor and inspect the works to achieve the required standards.

All works and quality standards related thereto shall be to the satisfaction of the CA. Any works deemed to be unacceptable by the CA acting reasonably will be re-executed at no cost to the Employer.

The Principle Contractor and Works Contractors shall ensure that the quality and standard of each particular trade is the highest achievable and that all trades do not rely on subsequent trades to compensate for lack of quality and standard for example:

- 1. Joinery shall be finished to the highest achievable standards, with tight and well fitting joints to mitres etc, such that decorators do not have to fill and make good.
- 2. Blockwork shall be true, plumb and accurate to a high standard such that plasterers do not have to dub-out and make good to imperfect works.

Plastering shall be to the highest achievable standard such that decorators do not have to fill and make good and compensate for imperfect works.

The works are to be carried out in accordance with the appropriate Codes of Practice in a workmanlike manner in accordance with the specification requirements contained in this specification and to the complete satisfaction of the contract administrator.

All works shall be carried out to a high quality standard and all operatives/ contractors shall be advised of the high quality of standard and finish which will be required.

The quality of the works and, in particular, the finished works shall be to a high standard befitting the property.

Operatives and trades must not rely on subsequent trades to make good and/or correct their items of work.

All works which do not achieve the required standard shall be carried out again in the Contractors own time and at their own expense.

## C90 ALTERATIONS – SPOT ITEMS

To be read with Preliminaries/ General conditions.

## **GENERAL**

#### 110 DESCRIPTIONS

- Location of spot item descriptions: see schedule of works.

#### 120 EMPLOYER'S PROPERTY

- Components and materials arising from alterations that are to remain the property of the Employer: partitioning materials where re-usable.
  - Protection: Maintain until items listed above are removed by the Employer or reused in the Works, or until the end of the Contract.

#### 130 RECYCLED MATERIALS

- Materials arising from alterations: May be recycled or reused elsewhere in the project, subject to compliance with the appropriate specification and in accordance with any site waste management plan.
- Evidence of compliance: Submit full details and supporting documentation.
  - Verification: Allow adequate time in programme for verification of compliance.

# K30 PANEL PARTITIONS

## 10 RELOCATABLE PARTITION SYSTEM to 3<sup>rd</sup> Floor

- Manufacturer: Komfoot.
  - Product reference: Komfire 75.
- Framing/ Perimeters/ Trims: to match existing.
- Solid panels: plasterboard.
- Glazed panels: not applicable.
- Doorsets: as Schedule of Works

# 50 WORKMANSHIP GENERALLY

- Setting out: Plumb, true to line and level and free from bowing, undulations and other planar distortions.
- Stability: Fix securely, with additional supports where necessary at perimeters.

# 70 PERIMETER SEALS

- Sealant material: A type recommended by the partition/ panel manufacturer.
- Application: Continuously to clean, dry, dust free surfaces, leaving no gaps. In accordance with the sealant manufacturer's instructions.

#### 80 FINISHING

- Filling and taping: Fill joints, gaps and internal angles with jointing compound and cover with continuous lengths of tape.

  Apply more jointing compound and feather out to give a flush, seamless surface.
- Minor imperfections: Remove by lightly sanding.
- Finish with wallpaper to match existing.

# K45 SUSPENDED CEILING SYSTEM ALTERATIONS

- 12 EXISTING SUSPENDED CEILING SYSTEM to 5<sup>th</sup> floor and 3<sup>rd</sup> floor
  - Structure over: Concrete slab.
  - Ceiling type: suspended 24mm exposed grid.

- Manufacturer: Armstrong. Product reference: Dune.

# 13 SUSPENDED CEILING SYSTEM ALTERATIONS to 5<sup>th</sup> floor and 3<sup>rd</sup> floor

Manufacturer: Armstong.

- Product reference: Dune Supreme Square Edge lay in

Suspension type: wire.

- Grid: 600 x 600.

- Infill units: Dune Supreme square edge.

Access units: N/A.

- Accessories: To match grid and tile.

Integrated services fittings: N/A.

Void barriers: N/A.Insulation: N/A.

#### 62 EXECUTION GENERALLY

- Designated ceiling system components: Remove carefully without affecting surrounding areas.
- Disposal of removed components: all damaged units.
- Retained components: Do not distort or damage.
- Reuse of ceiling system components:
  - Condition: Undamaged, free from distortion, clean.
  - Units and boards: Match adjacent areas where appropriate.
- Cutting units, boards and components: Cut neatly and accurately. Maintain edge profiles.
  - Openings: Suit sizes and edge details of fittings.

## 65 SETTING OUT

- General: Maintain ceiling system accurately, continuous, even, and jointed at regular intervals. Provide level soffits free from undulations, lipping and distortions in grid members.
- Infill units, access units, integrated services: Fit and align correctly.
- Minimum size for edge and perimeter infill units: Half standard width or length where practicable.
- Grid: Position to suit infill unit sizes. Allow for permitted deviations from nominal sizes.
- Infill joints and exposed suspension members: Straight, aligned and parallel to walls or setting out lines.

#### 67 INSTALLING SUSPENSION

- Fixing:
  - Angle or strap hangers: Do not rivet for top fixing.
  - Wire hangers: Tie securely at top with tight bends to loops to prevent vertical movement.
- Installation:
  - Alignment: Vertical or near vertical without bends or kinks.
  - Maintain straight, with suitable tension and without bends or kinks.
  - Do not allow hangers to press against fittings, services and insulation covering ducts and pipes.
- Obstructions: Where obstructions prevent vertical installation, either:
  - brace diagonal hangers against lateral movement; or
  - hang ceiling system on an appropriate rigid sub-grid bridging across obstructions and supported to prevent lateral movement.
- Extra hangers: Provide as required to carry additional loads.

# 71 INTEGRATED SERVICES

- General: Position services accurately, support adequately. Align and level in relation to the ceiling. Alterations must not diminish performance of ceiling system.
- Surface spread of flame rating of additional supporting material: Match ceiling material.
- Services outlets:
  - Supported by ceiling system: Provide additional hangers.

- Independently supported: Provide flanges to support altered ceiling system.

#### 74 INSTALLING CAVITY FIRE BARRIERS

- Fixing:
  - General: Fix firmly to channels or angles at abutments to building structure.
  - At perimeters and joints: Secure. Provide permanent stability and continuity with no gaps. Provide a complete barrier to smoke and flame.
- Joints: Form to preserve integrity in fire.
- Service penetrations: Cut and pack to maintain barrier integrity. Sleeve flexible materials. Adequately support services passing through the barrier.
  - Ceiling systems intended for fire protection: Do not impair fire resisting performance of ceiling system.
  - Ceiling systems not intended for fire protection: Do not mechanically interlink barriers with ceiling system.

## L20DOORS/ SHUTTERS/ HATCHES

#### 70 FIRE RESISTANCE

- Requirement: Specified performance to be the minimum period attained when tested for integrity in accordance with BS 476-22, BS EN 1634-1 or BS EN 1634-3.

## 75 FIRE RESISTING/ SMOKE CONTROL DOORS/ DOORSETS

- Gaps between frames and supporting construction: Filled as necessary in accordance with door/ doorset manufacturer's instructions.

#### 80 SEALANT JOINTS

- Sealant:
  - Manufacturer: Contractor's choice.

#### 85 FIXING IRONMONGERY GENERALLY

- Fasteners: Supplied by ironmongery manufacturer.
  - Finish/ Corrosion resistance: To match ironmongery.
- Holes for components: No larger than required for satisfactory fit/operation.
- Adjacent surfaces: Undamaged.
- Moving parts: Adjusted, lubricated and functioning correctly at completion.

## L40GENERAL GLAZING

#### 10 WORKMANSHIP GENERALLY

- Glazing:
  - Generally: To BS 6262.
  - Integrity: Wind and watertight under all conditions. Make full allowance for deflections and other movements.
- Glass:
  - Standards: Generally to BS 952 and to the relevant parts of:
    - BS EN 572 for basic soda lime silicate glass.
    - BS EN 1096 for coated glass.
    - BS EN 12150 for thermally toughened soda lime silicate glass.
    - BS EN ISO 12543 for laminated glass.
  - Quality: Free from scratches, bubbles and other defects.
  - Dimensional tolerances: Panes/ sheets to be accurately sized.
- Material compatibility: Glass/ plastics, surround materials, sealers primers and paints/ clear finishes to be compatible. Comply with glazing/ sealant manufacturer's recommendations.

## M50 RUBBER/ PLASTICS/ CORK/ LINO/ CAPRET TILING/ SHEETING

- 15 CARPET TILING to 5<sup>th</sup> floor
  - Base: Existing concrete / screed.
    - Preparation: Remove existing carpet.

- Fabricated underlay: N/A.
- Carpet tiles: to 5<sup>th</sup> Floor.
  - Manufacturer: Forbo.
    - Product reference: Tesserra Mix.
  - Recycled content: as manufactured.
  - Size: 500 x 500.
  - Colour/ pattern: Random.
- Method of laying: Fully adhere with tack and ??.

# 40 LAYING COVERINGS ON NEW WET LAID BASES

- Base drying aids: Not used for at least four days prior to moisture content test.
- Base moisture content test: Carry out in accordance with BS 5325, Annexe A or BS 8203, Annexe A.
- Commencement of laying coverings: Not until all readings show 75% relative humidity or less.

#### 45 EXISTING FLOOR COVERING REMOVED

- Substrate: Clear of covering and as much adhesive as possible. Skim with smoothing compound to give smooth, even surface.

## 60 SETTING OUT TILES

- Method: Set out from centre of area/ room so that wherever possible:
  - Tiles along opposite edges are of equal size.
  - Edge tiles are more than 50% of full tile width.

#### 65 LAYING COVERINGS

- Base/ substrate condition: Rigid, dry, smooth, free from grease, dirt and other contaminants.
- Use a primer where recommended by adhesive manufacturer. Allow to dry thoroughly.
- Adhesive: As specified, as recommended by covering manufacturer or, as approved.
- Conditioning of materials prior to laying: As recommended by manufacturer.
- Environment: Before, during and after laying, provide adequate ventilation and maintain temperature and humidity approximately at levels which will prevail after building is occupied.
- Finished coverings: Accurately fitted, tightly jointed, securely bonded, smooth and free from air bubbles, rippling, adhesive marks, stains, trowel ridges and high spots.

# 70 EDGINGS AND COVER STRIPS

- Manufacturer: Gladus.
  - Product reference: DIM Strips.
- Material/ finish: PVC.
- Fixing: Secure (using matching fasteners where exposed to view) with edge of covering gripped.

#### 85 WASTE

- Spare covering material: Retain suitable material for patching. On completion submit pieces for selection. Hand over selected pieces to Employer.

# M52 DECORATIVE PAPERS/ FABRICS

- 10 COVERING FOR walls and plasterborad
  - Substrate: new and existing plasterboard.
    - Preparation: new only.
    - Treatment: primer.
  - Adhesive<mark>: prop</mark> ?? to suit.
  - Lining: not required.
  - Covering: to new walls.
    - Manufacturer: M?.
      - Product reference: to match existing.
    - Colour/ pattern: to match existing.
    - Other requirements:\_\_\_\_\_

## 21 PREPARATION OF SUBSTRATES GENERALLY

- Substrates: Sufficiently dry in depth to suit covering to be hung.
- Efflorescence salts, dirt, grease and oil: Remove.
- Organic growths and infected coatings/ decorations: Remove and dispose of. Apply treatment biocide to assist removal and residual effect biocide to inhibit regrowth.
- Substrate irregularities: Fill cracks, joints, holes and other depressions with stoppers/ fillers. Abrade to a smooth finish.
- Dust, particles and residues from abrasion: Remove.

## 41 PAPER/ FABRIC COVERED SUBSTRATES

- Existing coverings: Remove by wet or dry stripping.

#### 50 VINYL COVERED SUBSTRATES

- Existing covering: Remove peelable vinyl surface.
- Paper backings to vinyl: May be retained as a lining if in good condition and firmly adhering. Stick down lifting edges and corners.

#### 60 HANGING GENERALLY

- Completed covering: Securely adhered, smooth and free of air bubbles, wrinkles, gaps, tears, adhesive marks and stains. Joints truly vertical/horizontal and straight.

#### 70 LININGS

- Hang lengths: With neat butt joints.
- Drying period: Leave for 24 hours before hanging coverings.

#### 80 COVERINGS

- Colour consistency: Check before hanging each length and after hanging first three lengths.
- Hanging lengths:
  - Wall coverings: Vertical.
  - Ceiling coverings: Parallel to main window wall.
- Butt joints: Hang lengths with neat butt joints generally.
- Overlap joints: Permitted only where recommended by covering manufacturer. Cut through joints when stable to a true straight edge.
- Cross joints: Permitted only where single lengths are impractical.

# M60 PAINTING/ CLEAR FINISHING

# 30 PREPARATION GENERALLY

- Standard: In accordance with BS 6150.
- Risk assessment and method statement for hazardous materials: Prepare for operations, disposal of waste, containment and reoccupation, and obtain approval before commencing work.
- Preparation materials: Types recommended by their manufacturers and the coating manufacturer for the situation and surfaces being prepared.
- Substrates: Sufficiently dry in depth to suit coating.
- Efflorescence salts, dirt, grease and oil: Remove.
- Surface irregularities: Provide smooth finish.
- Organic growths and infected coatings:
  - Remove with assistance of biocidal solution.
  - Apply residual effect biocidal solution to inhibit regrowth.
- Joints, cracks, holes and other depressions: Fill with stoppers/ fillers. Provide smooth finish.
- Dust, particles and residues from preparation: Remove and dispose of safely.
- Doors, opening windows and other moving parts:
  - Ease, if necessary, before coating.
  - Prime resulting bare areas.

# 32 PREVIOUSLY COATED SURFACES GENERALLY

- Preparation: In accordance with BS 6150, clause 11.5.
- Contaminated or hazardous surfaces: Give notice of:
  - Coatings suspected of containing lead.

- Substrates suspected of containing asbestos or other hazardous materials.
- Significant rot, corrosion or other degradation of substrates.
- Risk assessment and method statement for hazardous materials: Prepare for operations, disposal of waste, containment and reoccupation, and obtain approval before commencing work.
- Removing coatings: Do not damage substrate and adjacent surfaces or adversely affect subsequent coatings.
- Loose, flaking or otherwise defective areas: Carefully remove to a firm edge.
- Alkali affected coatings: Completely remove.
- Retained coatings:
  - Thoroughly clean.
  - Gloss coated surfaces: Provide key.
- Partly removed coatings: Apply additional preparatory coats.
- Completely stripped surfaces: Prepare as for uncoated surfaces.

#### 35 FIXTURES AND FITTINGS

- Risk assessment and method statement for hazardous materials: Prepare for operations, disposal of waste, containment and reoccupation, and obtain approval before commencing work.
- Removal: Before commencing work remove: all fixtures and fittings.
- Replacement: Refurbish as necessary, refit when coating is dry.

#### 37 WOOD PREPARATION

- General: Provide smooth, even finish with lightly rounded arrises.
- Degraded or weathered surface wood: Take back surface to provide suitable substrate.
- Degraded substrate wood: Repair with sound material of same species.
- Heads of fasteners: Countersink sufficient to hold stoppers/ fillers.
- Resinous areas and knots: Apply two coats of knotting.
- Defective primer: Take back to bare wood and reprime.

## 43 PLASTER PREPARATION

- Nibs, trowel marks and plaster splashes: Scrape off.
- Overtrowelled 'polished' areas: Provide suitable key.

## 61 COATING GENERALLY

- Application: In accordance with BS 6150, clause 9.
- Conditions: Maintain suitable temperature, humidity and air quality.
- Surfaces: Clean and dry at time of application.
- Thinning and intermixing: Not permitted unless recommended by manufacturer.
- Priming coats: Apply as soon as possible on same day as preparation is completed.
- Finish:
  - Even, smooth and of uniform colour.
  - Free from brush marks, sags, runs and other defects.
  - Cut in neatly.
- Doors, opening windows and other moving parts: Ease before coating and between coats.
- Preservative treated timber: Retreat cut surfaces with two flood coats of a suitable preservative before priming.
- End grain: Coat liberally, allow to soak in, and recoat.

# **SECTION D**

**Specification** 



ı		£	р
	<u>CONTENTS</u>		
D1.0 D2.0	GENERALLY SITE SET UP		
D3.0	CEILING ALTERATIONS		
D4.0 D5.0	PARTITIONS, DOORS & ALTERATIONS NEW FOLDING SCREEN		
D6.0 D7.0	DECORATION FLOORING		
D8.0	FIXTURES & FITTINGS		
D9.0 D10.0	ELECTRICAL SERVICES ATTENDANCE		
D11.0	DAYWORKS		
D1.0	GENERALLY		
D1.1	The works consist of the <b>OUT OF HOURS</b> alterations to the existing 5 <sup>th</sup> floor incident room and to the 3 <sup>rd</sup> floor to create a new archive room.		
D1.2	Tender Drawings		
	The following Schedule of Works is to be read in conjunction with the tender drawings within Appendix A and the MCA Specification and drawings within Appendix B.		
	Note also the specific compliance requirements for working on an EA site within		
	Appendix C.		
D1.4	Pricing		
	The Contractor will be expected to produce a priced Schedule of Works with <b>their tender submission</b> whereby each item of work should be individually costed for the Employer's review.		
D1.5	An e-mailed Schedule of Works can be issued on request should the Contractor wish to use the document to supply their breakdown of costs.		
D1.6	Programme		
	A detailed programme will need to be prepared and submitted prior to works commencing for approval by the CA.		
D1.7	Site Foreman		
	The Contractor must include for providing a full time experienced site foreman for the full duration of the project.		
	The site foreman must hold a minimum qualification of CSCS (Construction Skills Certificate Scheme) GOLD Card Supervisor standard for supervision and is to be		
	on site for all works. For out of hours working, a fully briefed GOLD card skilled worker or supervisor must be in charge on site.		
D1.8	Contract		
	See main Preliminaries. The Contractor should price for standard preamble provisions here.		
D1.9	Workmanship, Quality and Compliance with Regulations		
	The works are to be carried out in accordance with all appropriate and relevant Codes of Practice, in a workmanlike manner in accordance with the requirements contained in this specification and to the complete satisfaction of the CA.		
I			

D1.10	All products, materials and proprietary systems shall be used, handled and installed in accordance with the manufacturer's recommendations and their technical details shall be obtained and used for guidance.	£	р
D1.11	Should the Contractor wish to use alternative products to those specified they must obtain approval for their use from the CA. Such products must be at least equal to those specified.		
D1.12	Any works which do not achieve the required standard shall be carried out again in the Contractors own time and at their own expense.		
D1.13	Fire Alarm The existing fire alarm is linked to the adjoining shopping centre and is automatically linked to the fire brigade. ANY works which are likely to cause false activations that require isolation of the fire alarm MUST be arranged in accordance with EA FM to contact the Centre Manager to take the system off watch and to come bank on watch. The contractor must ensure they remain in attendance until this is safely put back on watch.		
D1.14	Power Disconnections A minimum of 20 days notice period is required for any power off situation with EA FM informing EA DDTS team. EA DDTS agree what power off procedures are required. If any power off of essential telemetry equipment is required this also requires advance approval.		
D1.15	IT Alterations The Contractor will be responsible for new and altering containment, including back boxes for new / revised data layouts. Ready for termination of cables by EA IT contractor and testing. The EA IT contractor will also relocate and provide any new cables.		
D2.0	SITE SET UP		
D2.1	Site Compound The Contractor can utilise two parking spaces at the side of the building using a 4 yard skip for non-hazardous waste only.		
D2.2	The Contractor shall ensure that all operatives contain themselves within the site compound works areas and do not enter onto neighbouring land unless for purposes required by the contract works. Operatives shall not explore the grounds and buildings and anyone found wandering from the site without contractual reason will be requested to leave immediately.		
D2.3	Health and Safety Signage Provide comprehensive and thorough health and safety signs to the site and, in particular, in and around the works areas. Provide "CONSTRUCTION SITE – KEEP OUT" notices to all building approaches.		
D2.4	The Contractor shall provide as part of their health and safety plan details of the proposed signs for agreement with the CA prior to starting on site.		
D2.5	Site Welfare Facilities Provide and maintain suitable welfare facilities in accordance with the requirements of Schedule 2 of the 2015 CDM Regulations as follows:  • Sanitary conveniences  • Washing facilities  • Drinking water  • Facilities for rest		

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D2.6	The Contractor shall assess their requirements for welfare facilities and shall provide full details of these facilities within their tender submission (See D2.7)	£	р	
D2.7	Site accommodation shall include, but not be limited to, the provision of the following:			
	Storage Cabin(s): Utilise the existing work areas of the building.			
	Welfare: - Utilise the café area on the 5 <sup>th</sup> floor.			
	WC facility: - Utilise the nearest existing internal toilet – to be identified by EA FM at the pre-start meeting.			
D2.8	If required, adjustments and alterations to the layout of the Contractor's compound shall be agreed at the pre-contract meeting.			
D2.9	Advertisement The Contractor shall not display any advertisement on the site other than the firm's name board and contact details; neither shall he permit any other advertisements to be displayed without the written authority of the CA.			
D2.10	Debris The Contractor is to allow for the removal from site of all debris and surplus materials that have arisen from the works. All items of stripping out, demolition and alterations are to include for removing all surplus materials and their disposal from site.			
D2.11	All debris is to be bagged up and removed from the building each day and placed in a 4 yard skip which is to be situated in two spaces at the front of the property and include for all necessary skip licences/applications and lighting as required.			
D2.13	All debris must be removed regularly and shall not be left to build-up.			
D2.14	All skips shall be provided with tarpaulins to avoid debris being blown around during windy weather.			
D2.15	Protection Generally Protection shall be given to all parts of the building and surrounding areas i.e. corridors, lifts, doorways etc. during deliveries and movement of materials. The Contractor is to reinstate all damage occurring during the course of the contract at his own time and expense.			
D2.16	Manning The Contractor will maintain adequate staffing levels and shall proceed diligently and expeditiously with the work.			
D2.17	The Contractor will be responsible for any delays arising out of their failure to inadequately resource the project.			
D2.18	Out of Hours Working All work is to be undertaken out of hours i.e.; weekends or after 5pm. EA FM will be in attendance during the works and will be responsible for security on site.			
D2.19	Electrical Appliances Only 110V rated and cordless power-pack tools are permitted. It is assumed that the Contractor will be able to use the local power supply during the works however this must be agreed at the pre-contract meeting.			

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D2.20	Meetings and Records The Contractor's representative and foreman will be required to attend site meetings when required by the CA and will be required to bring a progress report, records of sub-contractors and men employed. The Contractor is to submit to the CA weekly records of men employed for certification and signature.		·	
D2.21	Programme The Contractor is to submit within 5 days of being appointed as the successful Contractor, a programme to indicate duration of activities and levels of manning.			
D2.21	COSHH Regulations The Contractor is to comply with Control of Substances Hazardous to Health Regulations (COSHH) 2002. All relevant information relating to hazard assessment to be submitted on request			
D2.23	Extent of works & Contractor's Liaison The Contractor shall allow for liaison with all parties as required for the works which shall include the Employer and their representatives, all Contractors, whether specialist, domestic sub-contractors or those employed directly by the Employer, utilities companies and other suppliers involved in the works.			
D2.24	Samples & Materials Selection The Contractor shall be required to obtain samples of certain materials and items which will require selection by the Client. Colour cards and samples etc shall be used for the 'initial selection' process and once items have been 'short-listed' larger samples and/or pieces will be required for presentation to the Client for final selection.			
D3.0	SUSPENDED CEILING ALTERATIONS			
D3.1	Alter and adapt the existing 24mm exposed grid suspended ceiling system to the 5 <sup>th</sup> floor incident room to facilitate the removal of the existing partition, ready for new demountable partition track and pelmets to be installed (note ceilings are a different height).			
D3.2	Allow for replacement of 20 no damaged ceiling tiles to the 5 <sup>th</sup> floor incident room using replacement "lay in" Armstrong Dune Supreme ceiling tiles.			
D3.3	Provide pre-finished formica upstands / pelmets to both sides of new track to provide upstand.			
D3.4	To 3 <sup>rd</sup> floor proposed archive room which needs to achieve a 30 minutes fire resistance, alter and adopt existing ceiling to proposed foot print of the new rooms. Make good ceiling after fitment of new partitions.			
	Supply new Armstrong Dune Seupreme 600 x 600 suspended ceiling with 24mm exposed grid to abut new partitions within new archive room.			
D3.5	Alter and adapt existing ceiling partition to existing estates deeds room to make good and to facilitate new partition.			
D3.6	Provide additional hanging support for any new lights or services and adapt ceiling for any new framing cut outs, drops etc.			
D4.0	PARTITIONING DOORS AND ALTERATIONS			
D4.1	Carefully take down existing Komfort 75mm thick partition which currently subdivides incident room and salvage framing system for re-use. Dispose of excess material noting partition is partially glazed. Salvage door for re-use.			
		1	l	ł

D4.2	Using salvaged framing form new dividing partition to create incident breakout room no. 1 and incident breakout room no. 2 to extend up to the underside of existing ceiling.	£	р
	Provide new matching Komfort 75 partitioning to form free standing partition adjacent corridor and include for strengthening post to end of partition.		
D4.3	Provide acoustic barrier between head of new partitions to breakout room and shutter soffit above (ceiling void 200mm) and ensure full seal to partition head and soffit.		
D4.4	Form new doorway opening into incident room No. 1 using new matching powder coated grey framing into existing Komfort 100mm thick partition and rehang previous salvaged door. Provide new SSS can action door closer with slide track and arm and kickplates to match existing.		
D4.5	To both new incident breakout rooms allow for the insertion of new 1.2m wide x 1.0m high double glazed screens into existing partitions.		
	Allow to adapt, renew and alter partitions as required to facilitate this and make good on completion.		
D4.6	Remove existing veneered door into estates deeds room along with architrave and lining and make good with matching construction including all new finishes.		
D4.7	To create new archive room to 3 <sup>rd</sup> floor supply and install new full height solid Komfort 75mm partitioning to extend from existing floor to concrete soffit above. Colour of framing to match powder with grey finish.		
D4.8	To facilitate new partition, allow for removal of and disposal of the existing half glazed and partition to community room including removal of curved corner section. Provide fire barrier / sealing to secondary penetration within the ceiling void to achieve 30 minutes fire resistance.		
	Note: adjust position of new wall to convert into existing window mullion.		
D4.9	Supply and fit new FD30 intumescent and smoked striped veneered fire door to match existing within framing to be built into new partitioning. Door to be fitted with the following ironmongery		
	100 x 88 x3mm triple knuckle self lubricating butt hinges1.5 pairs with intumescent pads		
	SSS cam action overhead door closer with slide track and arm.		
	<ul><li>SSS 200mm kick plates to both sides of new doorway</li><li>Floor Stop</li></ul>		
	<ul> <li>SSS 26mm fire door keep locked sign</li> <li>Codelock 510 mechanical digilock</li> </ul>		
D5.0	NEW FOLDING SCREEN		
D5.1	Sliding Stacking Panel Partition Manufacturer: Becker (Sliding Partitions) Ltd Wemco House, 477, Whippendel Road, Watford, Herts, WD18 7QY. Tel: 01923 230149 Email. sales@becker.uk.com www.becker.com		

	Product Reference: Monoplan System Type System 100 System: Purpose made individually operated interlocking panels incorporating male and female aluminium edge profiles. The system includes rapid action retractable top and bottom seals. Single pass door Operation: manual Construction: High density particleboard panels with internal aluminium frame. Acoustic backing and infill material fitted to achieved required level of sound reduction. Heavy duty extruded aluminium head track (powder coated ro RAL9010), including ceiling perimeter trim. Acoustic Performance: Type 10046db Track system: Point suspension track Parking: Double roller, parking, stacked to consider side Finish: Drywhite finish (extra option cost) Fire rating: Size: 5500mm wide x 2540mm high (to be checked before manufacture) Installation: 1) survey, 2) preparation of drawings 3) installation of track (by Becker), supported from load bearing structure concrete structure, 4) baffles (as required) 5) installation of panels and wall abutments. Installation includes for all labour to offload and take to point of installation. Vision Panels; provide three number vision panels to alternate three doors.	£	p
D6.0	DECORATION		
D6.1	Unless otherwise specified, decoration materials shall be from the Dulux Trade range and Hammerite and shall be used in accordance with the manufacturer's recommendations. Where alternative materials are required the type and choice shall be agreed with the CA prior to the works. Decoration works shall include all necessary ancillary products such as fillers, thinners and cloths etc.		
D6.2	Preparation of all surfaces, both new and existing, is to be to a high standard so as to produce the correct finish to the final decorated surface. Note extent of exposed conduit and trunking and ensure adequate allowances for masking up of all services neatly and cleaning off of overpaint.		
D6.3	Prepare and decorate all new internal surfaces in colours to be selected by the Client as follows:		
D6.4	Walls: 1 no. mist coat 2 no. full coats of Dulux vinyl matt emulsion		
D6.5	Metalwork etc:  1 no. undercoat  2 no. gloss or satinwood finishing coats		
D6.7	All new joinery: knotting solution, 1 no spot primer / undercoat of Dulux quickdrying primer for new work, 2 no coats of Dulux Diamond eggshell,		
D6.8	Allow for the supply and fitment of new Muraspec Cheviot wallpaper to match existing (include the provisional sum of £250.00 for supply of paper) to be affixed using a property wall paper adhesive recommended by the manufacturer i.e. Muraband. Wallpaper to be provided to all new partitions and make good all disturbed areas.	250	00
D6.9	To existing end wall of incident room, allow for stripping out of existing orange finish and replace for full length and height of wall with new whiteboard flexible wall covering to be fixed using VOV adhesive.		

223	0 19 – EA Guildbourne 5 <sup>th</sup> floor incident room and 3 <sup>rd</sup> floor archive room	1	
D7.0	FLOORING	£	р
D7.1	Allow for the carful uplift and disposal of existing floor tiles to the 5 <sup>th</sup> floor incident room, incident breakout room no. 1 and incident breakout room no. 2.		
D7.2	Supply and lay new Forbo Tessera Mix Carpet tiles 500 x 500m, 6mm thick, to be laid in a random pattern using 542 Euroxfix tack plus adhesive.		
	Ensure all off-cuts are recycled via Forbo Back to the Floor.		
	Colour choice to be agreed with client.		
D7.3	To the 3 <sup>rd</sup> floor new archive room, allow for making good all flooring disturbed by the partition removal using existing salvaged tiling.		
D8.0	FIXTURES & FITTINGS		
D8.1	Include the provisional sum of £300.00 for altering, new and repositioned signage to be agreed with the client.	300	00
D8.2	Liaise with the electrical sub-contractor to enable relocation of the existing smart board from corridor wall to return wall.		
D9.0	ELECTRICAL SERVICES (ALL WORKS OUT OF NORMAL HOURS)		
D9.1	Include here for all electrical alterations as included within MCA drawing 2680-E51 in include:		
D9.2	Lighting and Power Installations Amend existing lighting and power systems as required to suit the revised layouts: install new as required or implied therein or reasonably inferred from the drawings to all areas.		
D9.3	Fire Alarms Amend existing fire alarm system as required to the requirements: install new as required or implied thereon or reasonably inferred from the drawings to all areas.		
D9.4	Access Control and CCTV Amend existing door entry system and CCTV as noted on the drawings.		
D9.5	Network  Amend existing data provision to suit the revised layout noting the specific requirements for attendance of Client IT provider to isolate and undertake final termination and testing. Cost of Client IT provider to be met by client.		
D9.6	All electrical shutdowns which includes lighting and small power final circuit isolations will require 20 working days notice to the on site FM team		
D9.7	Alterations to the fire detection and alarm system requiring zone isolation will require 7 working days notice.		

D10.0	ATTENDANCE	£	р	
D12.1	Allow for the full attendance and liaison on all service contractors in forming holes, chases and opening up etc and the subsequent making good on completion of the services i.e. extract fans, pipework, cabling etc.			
D12.2	The Main Contractor shall coordinate and integrate all works and in particular the services and specialist works undertaken by the sub-contractors			
D12.3	ENSURE ALL NEW CABLE, PIPEWORK, PENETRATIONS ARE FULLY FIRESTOPPED AND PHOTOGRAPHIC EVIDENCE WILL BE REQUIRED TO ENABLE A PRACTICAL COMPLETION CERTIFICATE TO BE ISSUED			
D13.0	DAYWORKS			
D13.1	Works instructed by the CA to be undertaken as 'Dayworks' (i.e. on a time and material basis) shall be charged at the following rates which shall be for the net time worked on site to carry out the operation/task.			
D13.2	The hourly labour rates shall include for all usual 'on-costs' such as overhead and profit, plant and tools, bonus, holiday pay, insurance, travelling and subsistence, supervision and administration costs etc.			
D13.3	The % on-cost applied to materials shall include for all usual 'on-cost' such as measuring and ordering, collection and/or delivering to site, unloading, storing, protection, handling and insurance etc.			
D13.4	The full details of works undertaken under 'dayworks' shall be accurately recorded which shall include the description of the task, operative's data, day, date, and details of hours spent on the task (scraps of paper with '2men, 3 days, will not be accepted!)			
D13.5	Include for the following additional labour within the tender sum:			
	Labour:         Labourer       1 hour @ £ per hr         Carpenter       1 hour @ £ per hr         Electrician       1 hour @ £ per hr         Mechanical Engineer 1 hour @ £ per hr			
	Materials: £ 500 (worth) plus% (OH&P)			
	Plant/tool hire £ 500 (worth) plus% (OH&P)			
	COLLECTION PAGE			
	Dage 1			
	Page 1 Page 2 Page 3 Page 4 Page 5 Page 6 Page 7 Page 8			
	TOTAL SECTION D £			

# **SECTION E**

**Contingency Sum** 



# **CONTINGENCY SUM**

Allow the following PROVISIONAL SUM as a general contingency to be expended or deducted as instructed by the Contract Administrator. **10%** of the total cost of section D per phase.

# **SECTION F**

Summary



# **TENDER SUMMARY**

The Contractor must complete this summary page to reflect the relevant work sections as set out below.

SEC	SECTION				
Α	General Preliminaries	£			
В	Health & Safety	£			
С	NBS Workmanship Clauses	£			
D	Particular schedule of works	£			
Ε	Contingency at 10%	£			
	SUB TOTAL	£			
	Total				
	VAT @ 20%				
	TOTAL INC VAT				
Sigr	ned:				
0.6.					
_					
Cor	npany:				
Dat	e:				

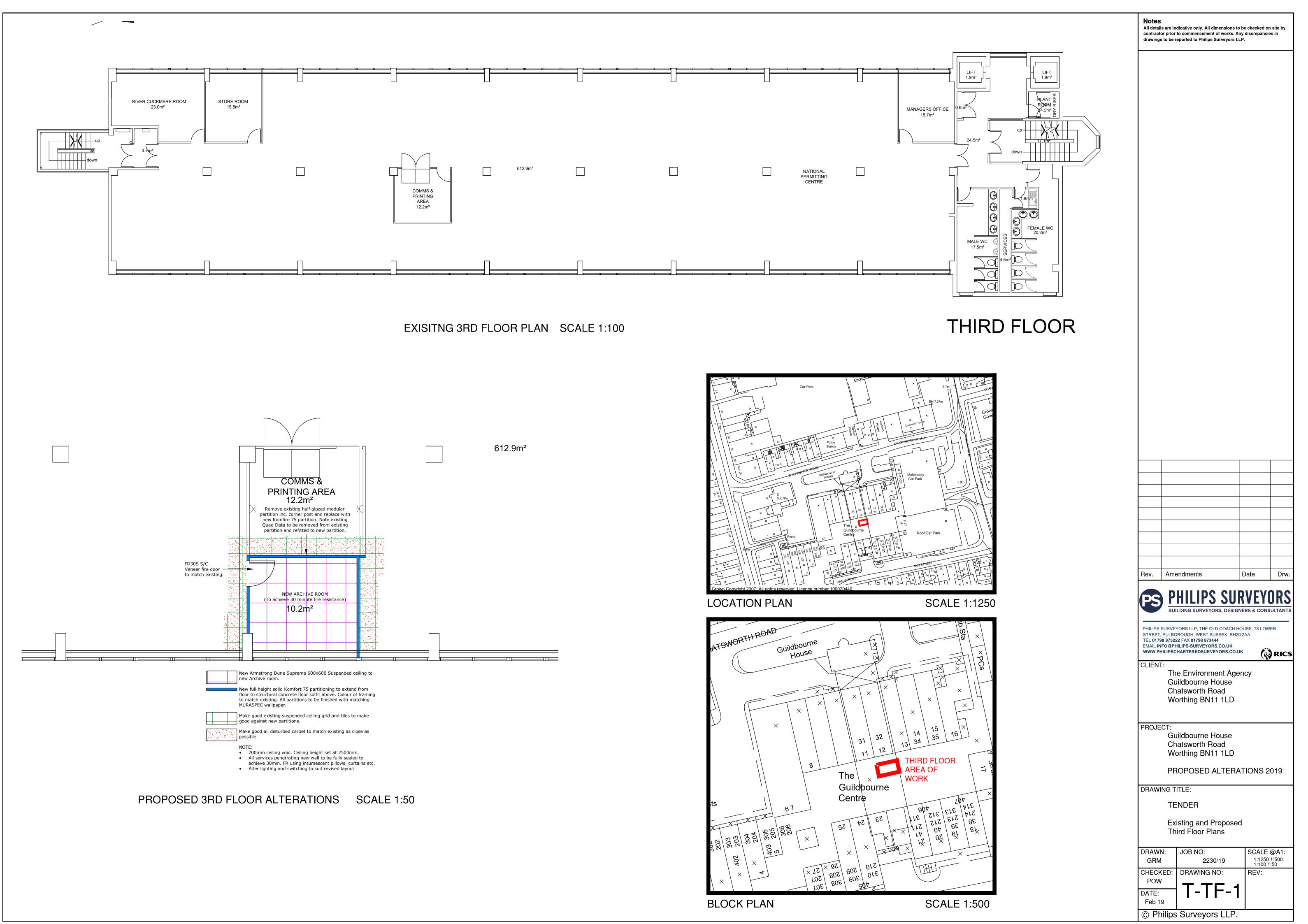
# **APPENDIX A**

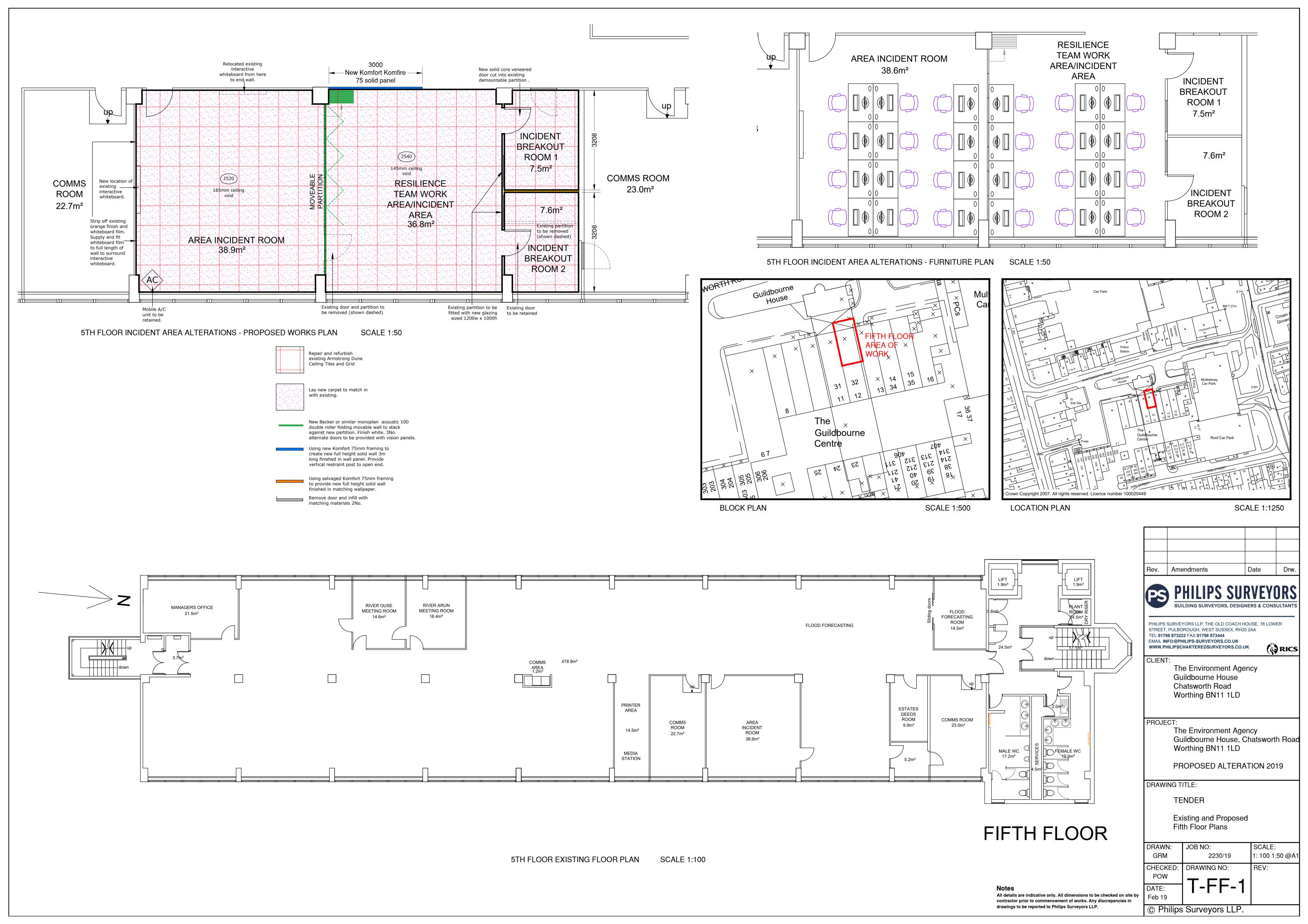
# **Drawings:-**

2230/19/P-FF1 – Philips Surveyors LLP – Proposed Builder's Works 5<sup>TH</sup> Floor

2230/19/P-TF1 – Philips Surveyors LLP – Proposed Builder's Works 3<sup>rd</sup> Floor



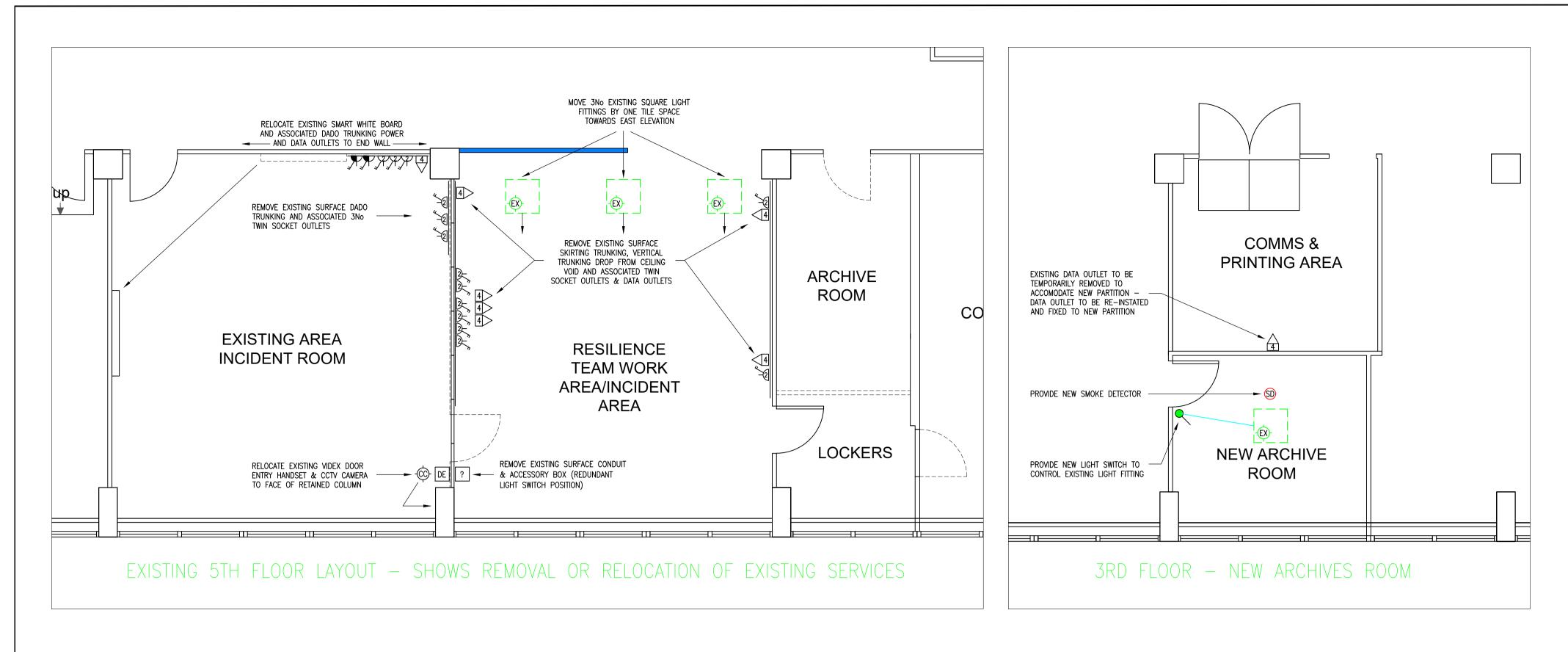


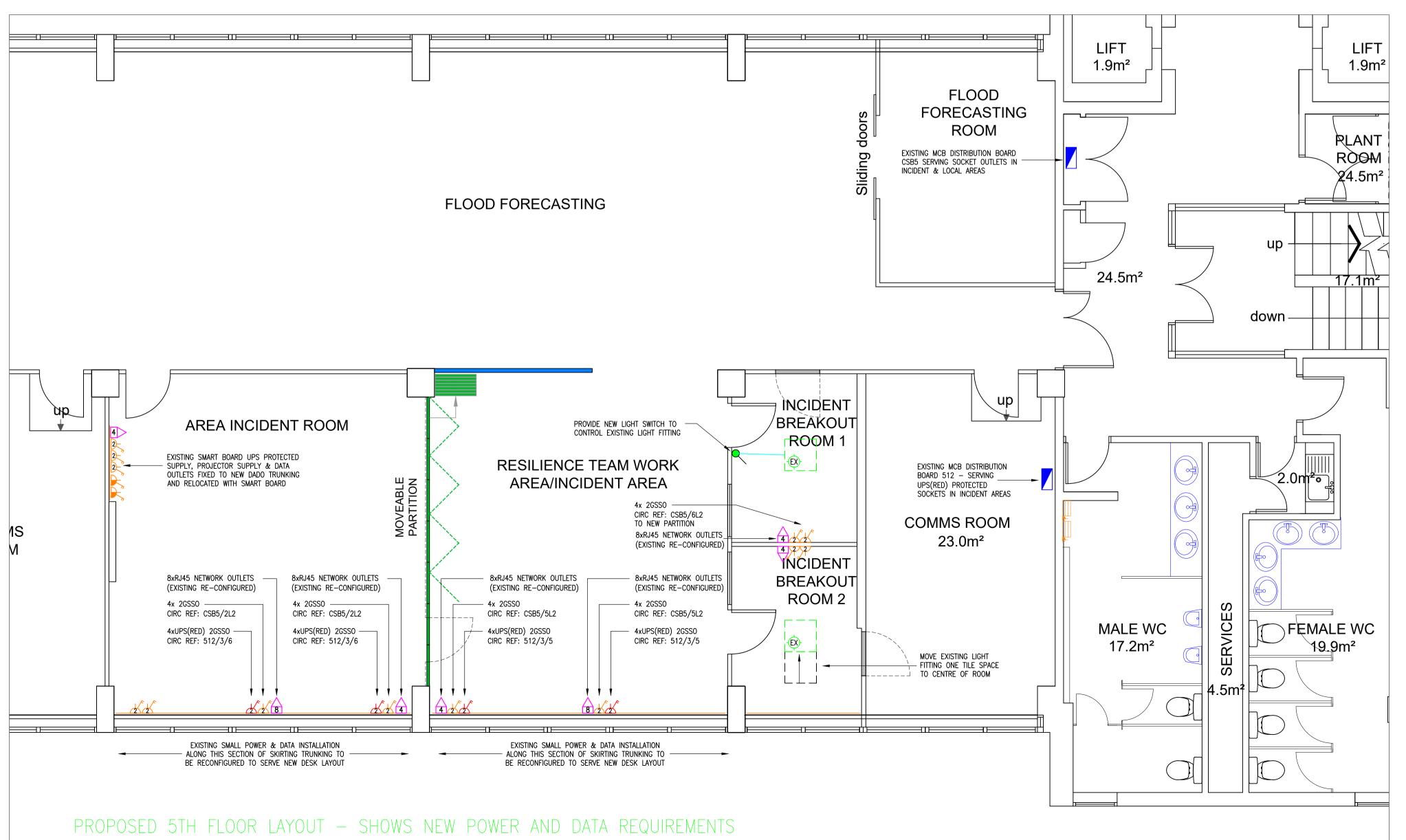


# **APPENDIX B**

# MCA Engineers – Electrical & Mechanical Drawings Specification







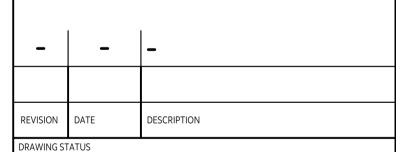
ELECTRICAL SERVICES SCHEDULE OF WORKS & SPECIFICATION NOTES

- 1. REMOVE EXISTING SMALL POWER, NETWORK OUTLETS AND ASSOCIATED DADO/SKIRTING TRUNKINGS TO ACCOMMODATE THE REMOVAL OR ALTERATION OF EXISTING FIXED PARTITIONS.
- 2. RELOCATE EXISTING RETAINED ELECTRICAL EQUIPMENT WHICH SHALL INCLUDE THE INTERACTIVE SMART WHITE BOARD & ASSOCIATED POWER/DATA/CONTROL EQUIPMENT, VIDEX DOOR ENTRY HANDSET AND CCTV CAMERA
- 3. RELOCATE EXISTING LIGHT FITTINGS IN RESILIENCE TEAM WORK AREA/INCIDENT AREA AS INDICATED
- 4. ADAPT/RECONFIGURE EXISTING LIGHTING CONTROL FOR INCIDENT BREAKOUT ROOM 1 & 3RD FLOOR NEW ARCHIVE ROOM
- 5. PROVIDE NEW SMOKE DETECTOR POSITION IN 3RD FLOOR NEW ARCHIVE ROOM
- 6. RECONFIGURE EXISTING SMALL POWER, UPS PROTECTED SMALL POWER AND NETWORK OUTLETS ALONG EXISTING PERIMETER SKIRTING TRUNKING TO SUIT NEW DESKING ARRANGEMENT WITHIN BOTH INCIDENT AREAS
- 7. PROVIDE SMALL POWER AND NETWORK OUTLETS ON NEW PARTITION TO BOTH INCIDENT BREAKOUT ROOMS 1 & 2 ADAPT EXISTING SMALL POWER AND NETWORK OUTLETS REMOVED FROM ADJECENT PARTITION WALL TO SUIT
- 8. DISTRIBUTION BOARD "CSB5" LOCATED IN 5TH FLOOR LIFT LOBBY SERVICES RISER CUPBOARD
- 9. DISTRIBUTION BOARD (UPS PROTECTED) "512" LOCATED IN COMMS ROOM ADJECENT TO 5TH FLOOR LIFT LOBBY
- 10. ALLOWANCE SHALL BE MADE TO ADAPT/EXTEND EXISTING SMALL POWER FIXED WIRING CIRCUITS TO SUIT NEW POSITIONS OF OUTLETS UTILISING SIMILAR PVC INSULATED WIRING SYSTEMS FULLY ENCLOSED IN EXISTING OR NEW PVC TRUNKING SYSTEMS TO SUIT THE APPLICATION
- 11. <u>ALL</u> ELECTRICAL SHUTDOWNS WHICH INCLUDES LIGHTING AND SMALL POWER FINAL CIRCUIT ISOLATIONS WILL REQUIRE 20 WORKING DAYS NOTICE TO THE ON—SITE FM TEAM— PERMISSION SHALL BE FORMALLY GRANTED THEREAFTER
- 12. ALTERATIONS TO THE FIRE DETECTION AND ALARM SYSTEM REQUIRING ZONE ISOLATION WILL REQUIRE 7 WORKING DAYS NOTICE TO THE ON SITE FM TEAM TO ORGANISE THE SYSTEM TO BE TAKEN OFF WATCH. ON COMPLETION OF REMEDIAL WORKS THE CONTRACTOR SHALL RE—COMMISSION THE FIRE ALARM SYSTEM AND PROVIDE A CERTIFICATE OF COMPLETION
- 13. ALTERATIONS TO THE EXISTING NETWORK STRUCTURED CABLING INSTALLATION SHALL BE CARRIED AS FOLLOWS:
- ISOLATION OF EXISTING NETWORK OUTLETS TO
   ACCOMMODATE REMOVAL OR RELOCATION OF WIRING AND
   OUTLETS TO BE CARRIED OUT BY CLIENT'S IT PROVIDER
- REMOVAL OR RELOCATION OF WIRING AND OUTLETS TO BE CARRIED OUT BY CONTRACTOR FOLLOWING ISOLATION
   WIRING AND CONTAINMENT OF NEW CAT6 STRUCTURED
- WIRING AND CONTAINMENT OF NEW CAT6 STRUCTURED CABLING TO BE CARRIED OUT BY CONTRACTOR LEAVING ADEQUATE CABLE LENGTH ENDS FOR TERMINATION BY CLIENT'S IT PROVIDER
- 14. GOOD WORKMANSHIP IS ESSENTIAL THROUGHOUT THE INSTALLATION AND THE CLIENT RESERVES THE RIGHT TO REJECT ANY PART OF THE WORKS, WHICH, IN HIS OPINION, DOES NOT CONFORM TO THE HIGHEST STANDARDS OF GOOD PRACTICE AND WORKMANSHIP. THE ELECTRICAL CONTRACTOR SHALL BE REGISTERED WITH THE NICEIC (NATIONAL INSPECTION COUNCIL ELECTRICAL INSTALLATION CONTRACTING).
- 15. ADAPTION/EXTENSION OF EXISTING FINAL CIRCUIT WIRING SHALL BE CARRIED OUT USING A COMBINATION OF BASEC APPROVED SOLID CORE LSZH INSULATED AND SHEATHED FLAT CABLES WITH PROTECTIVE CONDUCTOR COMPLYING WITH BS 7211 TOGETHER WITH BASEC APPROVED STRANDED CORE LSZH INSULATED AND SHEATHED CABLES WITH EARTHED METALLIC SCREEN, COMPLYING WITH BS 8436, WHERE THESE ARE TO BE INSTALLED IN WALLS LESS THAN 125MM IN DEPTH, SO AS TO MEET WITH THE REQUIREMENTS OF BS7671:2008+A3:2015.
- 16. ON COMPLETION OF THE WORK ALL ELECTRICAL FINAL CIRCUITS ADAPTED OR EXTENDED SHALL BE TESTED AND THE SUCCESSFUL RESULTS OF THOSE TESTS SHALL BE RECORDED ON TEST AND INSPECTION CERTIFICATES AND INCORPORATED INTO THE HEALTH & SAFETY FILE



NOTES

- 1. THE ELECTRICAL SERVICES INSTALLATION SHALL
  COMPLY WITH THE REQUIREMENTS OF BS 7671
  2018 BRITISH STANDARD REQUIREMENTS FOR
  ELECTRICAL INSTALLATIONS: IET WIRING
  REGULATIONS EIGHTEENTH EDITION
- 2. THE ELECTRICAL INSTALLATION WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH MEICA STANDARD SPECIFICATION 369-13, LATEST ISSUE FROM DATE OF THIS DRAWING AND SUPPLEMENTARY DOCUMENTS SD01 TO SD22 INCLUSIVE WHERE APPLICABLE
- 3. THE ELECTRICAL CONTRACTOR SHALL READ AND UNDERSTAND THE ENVIRONMENT AGENCY CODE OF PRACTICE FOR ELECTRICAL SAFETY (CopES): PART 2 PRIOR TO WORKING ON EXISTING ELECTRICAL SYSTEMS AT GUILDBOURNE HOUSE
- 4. THE ELECTRICAL CONTRACTOR WILL BE EMPLOYED AS DOMESTIC SUB-CONTRACTOR TO THE MAIN CONTRACTOR, WHO WILL BE PROVIDING GENERAL ATTENDANCE AND BE RESPONSIBLE FOR SITE HEALTH AND SAFETY. ALL OTHER NECESSARY SPECIALIST ATTENDANCE TO BOTH FIRE ALARM & IT SPECIALISTS WILL BE PROVIDED BY THE ELECTRICAL CONTRACTOR
- 5. THE WHOLE OF THE WORKS WILL BE UNDERTAKEN OUTSIDE NORMAL WORKING HOURS ELECTRICAL CONTRACTOR TO LIAISE WITH MAIN CONTRACTOR FOR FINAL WORKING TIMES AND ARRANGEMENTS FOR ACCESS
- 6. THE EXACT AND FINAL LOCATION OF ALL EQUIPMENT, ACCESSORIES AND WIRING WAYS SHALL BE SUBJECT TO DESIGN DETAIL AND AGREED WITH THE PROJECT MANAGER & CLIENT PRIOR TO INSTALLATION.
- 7. THIS DRAWING IS FOR THE PURPOSES OF DESIGN INTENT ONLY NOT FOR CONSTRUCTION



TENDER

THE ENVIRONMENT AGENCY

TECT

PHILIPS SURVEYORS LLP

GUILDBOURNE HOUSE WORTHING BN11 1LD

TITLE

5TH FLOOR INCIDENT ROOM & 3RD FLOOR ARCHIVES ROOM

MARCH 19 1:50@A1 GA - DRAWING NO. REVISION -



MCA CONSULTING ENGINEERS LTD
8 NEWHOUSE BUSINESS CENTRE
OLD CRAWLEY ROAD, HORSHAM
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# **APPENDIX C**

EA SHEW COP 677 15 May 2018

EA 549 13.9.2016 Timber purchasing requirements

EA 14.13 COPES part 2 23.6.16n







# Constructing a Better Environment

Safety, Health, Environment and Wellbeing (SHEW)

Code of Practice (CoP)

May 2018

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

# **Document status**

This is a controlled document.

# **Issue authority**

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

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

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- 1.6 Supplier Development Review
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Title	Safety, health env	Safety, health environment and wellbeing code of practice					
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Appendix A Accident/Incident Reporting

Appendix A.1 Health and Safety Incident and Near Miss Reporting Procedure
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# **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.

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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



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#### 1.3 Environment Agency Environmental Commitment



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#### 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.

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#### **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).

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- 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 <u>Supply Chain Sustainability School</u>
- 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, local public facilities or the facilities of local businesses. Clear documented agreement should be

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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.

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.

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#### 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

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

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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.
- 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.

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- 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
   <u>Waste Tool for Civils Projects</u>' and the <u>Construction Carbon Calculator</u> 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

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/

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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 <a href="Environment Agency's timber">Environment Agency's timber</a>
<a href="Power substance: purchasing requirements">purchasing requirements</a>. 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 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

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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 coordination 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:

- 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.

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- 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.

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.

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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/GetDocumentByld.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 <a href="C681">C681</a> and <a href="C754">C754</a>, 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 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.

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#### 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

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.

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 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 the enclosed link for information regarding TW design check categories: (http://www.hse.gov.uk/foi/internalops/sims/constrct/2 10 04.htm#design-checks)

#### 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 <u>Schedule 9</u>, <u>Wildlife & Countryside Act 1981</u>, such as Japanese knotweed and giant hogweed. Guidance on identification of these species is available from the <u>Non-Native Species Secretariat</u>.

#### 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.

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#### 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 <u>CL:AIRE register of materials</u> 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.

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#### **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

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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 <u>partner card scheme schemes.</u>). 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: <a href="https://www.britishdrillingassociation.co.uk">www.britishdrillingassociation.co.uk</a>

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.* 

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#### 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.

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#### 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.

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.

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

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#### 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/manufacturer'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 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:

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- -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 sitespecific 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

#### 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)

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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 <u>'How to use a diving contractor' 612 08</u> 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 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

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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.

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.

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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.
- 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.

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#### 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: <a href="Twf">Twf</a> 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, 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

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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 (<a href="https://www.cpa.uk.net">www.cpa.uk.net</a>) 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.

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.

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#### 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/peoplematters/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:

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

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#### 4.30 Resource Management

Contractors must:

- Take actions to reduce carbon through construction, including consideration of ecocabins, dual generators and efficient plant.
- Use the <u>CL:AIRE register of materials</u> 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 <u>Environment Agency's timber purchasing requirements</u>. 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.

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.

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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 <u>Biosecurity in the Field</u>. The non-native
  species secretariat <u>website</u> has a variety of resources including identification sheets that may
  assist you.
  - <u>Check</u> Check your plant, equipment and clothing for living organisms. Pay particular attention to areas that are damp or hard to inspect.
  - <u>Clean</u> 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.
  - <u>Dry</u> 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 <u>Treatment and disposal of invasive non-native plants</u>: 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.

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 <u>relevant bio-security advice</u> with site specific arrangements formally documented, briefed to staff and followed.

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#### 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

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#### **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.

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







## Health and safety incident and near miss reporting procedure

#### What should I report?

ALL accidents, incidents and near misses, no matter how minor.

#### Why should I report it?

To learn lessons and prevent others from getting hurt by something similar and to reduce risk.



Accident, incident or near miss happens on site.



Report ALL incidents on site to:

[Insert rep name here]

Follow your internal procedures and legal duties for reporting under RIDDOR.



## Investigate the incident

You must perform the correct level of investigation for the incident and share lessons learned with the project team.





**Call the Environment Agency project manager** as soon as the incident has been dealt with:



[Project manager name] [Contact number]

If the project manager is not available report it to another project manager or team leader.





Provide a written report for all incidents and significant near misses to:

- The Environment Agency project manager
- Jon Jones in the Health, Safety and Wellbeing Construction Team

You must provide a written report within 14 days of the incident, unless otherwise agreed with the project manager.

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#### Appendix A.2 – Environmental Incident and Near Miss Reporting





## **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.



**Environmental incident** occurs at or from the site.



Call the Incident Hotline immediately





- Name and telephone number
- State that it related to Environment Agency
- Principal contractor's name
- Name of site/project, including name of watercourse
- Description of incident
  - o Date/time first noticed
  - o Pollutant details
  - o How serious is it?
- Ask for a reference number
- For contractor incidents inform gary.haley@environmentagency.gov.uk



**Environmental near miss** occurs at or from the site.



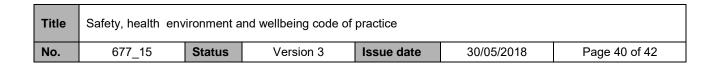
Inform the Environment
Agency project manager,
giving full details of what's
happened







Review the incident and provide a written report within 14 days to the Environment Agency project manager and Health, Safety and Wellbeing Construction Team. Include the hydraulic hose form if relevant.



### Appendix B – Accident/Incident Information Required



Project Title &	Address of	of site						
Name of main contractor or PC			Name(s) of injured					
Date of incident			Employer of the injured person(s)					
Time of incident					(contractor, blic, etc.)			
Reported to the EA PM by			Date a	nd	time			
Injury/Incident details								
		✓or n/s	а		Type/	Comment		
	HSE Rep	ortable						
Estimated Severity		Attention Required an first aid)						
(Check with EA PM for definitions)		Near Miss (serious or serious potential outcome)						
	Environm	ental Incident			NIRS Ref:			
Part and site of injured or Environment aff					Type of inju DO classific			
Immediate cause of injury								
		Inve	estigatio	n c	details			
Who is undertaking the investigation?  Name:  Title:  Contact No.:			in re pr	When will the investigation report be provided to the EA PM?		Incident facts confirmed: Interim report: (if applicable) Final report:		
						1		

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#### **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.

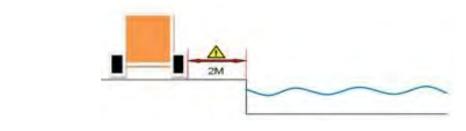
## What is the control zone?

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.

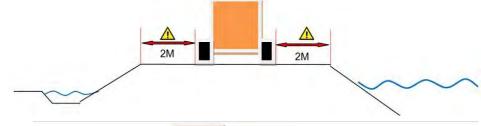
#### Additional controls include:

- 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

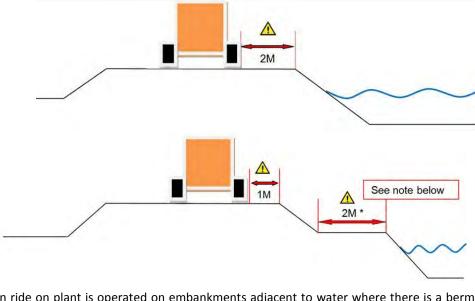


#### Example 2



#### Example 3





#### Example 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.

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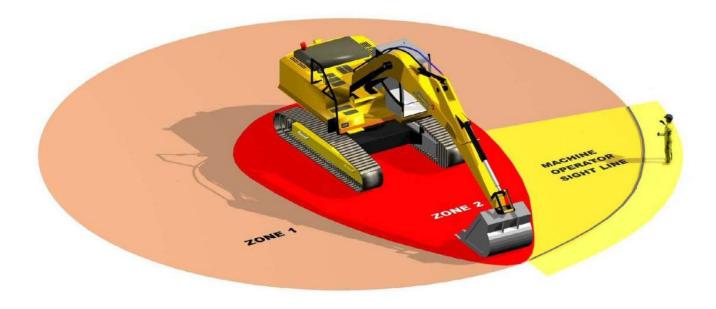
## **Appendix D – Plant Operation Safe Zone**

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



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## 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.

## **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)

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## **Summary of EA Timber Purchasing Requirements**

N.B. Please see the Timber Operational Instruction for full details

Timber Type	One-off purchase (EA staff or by a contractor)	Formal Contract	
Softwood e.g. Pine/Douglas Fir	FSC¹/PEFC² certified only with full chain of custody. Please use the <u>Category A checklist</u> .	For any requirement of timber that will be purchased directly by the	
Temperate Hardwood e.g. Oak/Beech	FSC/PEFC certified only with full chain of custody. Please use the Category A checklist.	Environment Agency or on our behalf by a contractor via a formal contract, please see Chapter 3 of the Timber	
Tropical Hardwood e.g. Ekki/Okan	Tropical hardwood will not be purchased unless it is an operational necessity.  A <u>business case</u> must be completed for all potential applications / uses of tropical hardwood and senior management approval will be needed before any purchases can be made.	Operational Instruction for detail of the mandatory questions, wording and clauses that must be included within contracts. If you are calling off from an existing contract please see Chapter 4.	
	FSC/PEFC certified only with full chain of custody.		
Recycled Timber	From a waste hierarchy and resource use perspective the purchase of recycled timber is preferable to the purchase of virgin timber.		
	Recycled timber is defined as timber which is being used for a different purpose than the purpose for which the tree was originally felled <sup>3</sup> .		
	For recycled timber, the previous use must be established and documented and the chain of custody from this point must be established and documented		
	Please see Chapter 6 of the <u>Timber Operational Instruction</u> for further information.		
Coppiced Material	Coppiced material is exempt from the requirements for softwood and temperate hardwood if documentary evidence which demonstrates the following is obtained:  The source of the coppiced material (full address/grid reference)  The coppicer has legal rights to coppice the wood (e.g. letter from the landowner)		
	Please see Chapter 6 of the <u>Timber Operational Instruction</u> for further information.		

http://ams.ea.gov/ams\_root/2013/501\_550/549\_13.doc

<sup>&</sup>lt;sup>1</sup> Forest Stewardship Council
<sup>2</sup> Programme for the Endorsement of Forest Certification Schemes
<sup>3</sup> E.g. If a beach groyne is removed and re-sawn to make fencing posts. If the beach groyne was removed and used again as a beach groyne somewhere else, this is re-use not recycling and you should refer to the full requirements for this timber type.



## Code of practice for electrical safety (CoPES): Part 2

Operational instruction 14\_13

Issued 23/06/2016

What's this document about?

This document is part 2 of the Environment Agency's code of practice for electrical safety. It outlines:

 responsibilities of the Environment Agency's Supra-Area Mechanical, Electrical, Instrumentation, Control and Automation (MEICA) team leaders;

responsibilities of those who work on or near Environment Agency electrical systems or equipment be they employees or contractors.

# Who does this apply to?

Anyone required to work on or near Environment Agency electrical systems or equipment must read and understand this part of the code of practice.

Anyone called on to procure, manage or accept any work on or near Environment Agency electrical systems or equipment must read and understand the code of practice.

# Contact for queries and feedback

- Neil Terry Head Office Senior FCRM Adviser
- Please give anonymous feedback for this document.

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## Introduction

# **Employer** duties

As an employer, the Environment Agency has a duty to comply with The Electricity at Work Regulations 1989 and other related legislation regarding the safety of its employees.

The Environment Agency has produced this code of practice for electrical safety with the aim of further minimising the risk to its employees and business from electrical systems and equipment.

## Special circumstances

As with all codes of practice, special circumstances can occur that fall outside the scope of the main document. This could include:

- working in hazardous environments;
- working with specialist equipment;
- working with third party electrical equipment.

If you are in any doubt or wish to seek further guidance, you must refer to your Supra-Area MEICA Team Leader before proceeding.

## Legislation

This document embodies the following legislation:

- Health and Safety at Work etc. Act 1974
- The Workplace (Health, Safety and Welfare) Regulations 1992
- The Provision and Use of Work Equipment Regulations (PUWER) 1998
- The Electricity at Work Regulations 1989
- The Management of Health and Safety at Work Regulations 1999
- The Regulatory Reform (Fire Safety) Order 2005
- The Construction (Design and Management) Regulations 2015

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## **MEICA** responsibilities

Supra-Area MEICA team leaders responsibilitie s and duties Each area of the Environment Agency has a Supra-Area MEICA team leader, appointed by the Area Manager, who is responsible for:

- ensuring compliance with this code of practice for of all electrical work undertaken by, or on behalf of, the Environment Agency within the area;
- ensuring legal compliance with all legislation that applies to the asset management of all national and area MEICA systems and equipment;
- assisting employees in ensuring compliance with this document.

It is the duty of the Supra-Area MEICA Team Leader to:

- assess the competence and authorise in writing all those who are to carry out work on Environment Agency electrical systems and equipment;
- give guidance on the competency levels required to become authorised to carry out electrical work.

Note: The Thames tidal defences manager holds these responsibilities for the Thames barrier and associated gates.

## **Electrical Authorisation**

Certification and training to undertake electrical work Before an Environment Agency employee carries out any work on electrical systems or equipment (or manages work being carried out by others), they must be authorised in writing by the Supra-Area MEICA Team Leader for any type of work they will be undertaking on Environment Agency sites.

It is the responsibility of line managers and team leaders to notify the Supra-Area MEICA Team Leader of:

- any member of their team who requires authorisation;
- the specific task for which they require authorisation.

Specific training is available to the holders of certain posts within the Environment Agency to allow them to undertake limited electrical work.

Employees with relevant electrical qualifications and/or experience may also be permitted to undertake electrical work, but this must be assessed by the Supra-Area MEICA team leader and if appropriate they can be authorised.

Further details including guidance for staff and the Supra-Area MEICA Team Leader can be found in <u>SD12 – Electrical authorisation</u>.

Outside the scope of this document

The following are not covered within the scope of this code of practice:

- authorisation for high voltage work;
- voltages exceeding 1,000 volts a.c. or 1,500 volts d.c. between conductors or, 600 volts a.c. or 900 volts d.c. between conductors and earth;
- authorisation for electric fishing.

Please refer to the Supra-Area MEICA Team Leader for advice.

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Duty of authorised persons

It is the duty of authorised persons to ensure they only undertake electrical work that falls within the limits set out in their certificate of authorisation. If there is any doubt as to whether work is covered by an electrical authorisation, advice must be sought from the Supra-Area MEICA Team Leader before proceeding.

Electrical work must be carried out in such a manner as to avoid danger.

## **Drawings and documentation**

# Record drawings

It is essential that the Environment Agency holds and maintains accurate record drawings and documentation for all its systems and equipment.

The Site Responsible Officer (SRO) must ensure that:

- documentation and drawings are available to those working on electrical systems or equipment;
- all documentation and drawings are current.

# Incorrect or missing drawings

It is the duty of the SRO to ensure they have a complete and accurate set of record drawings for all systems and equipment under their control.

If any system or equipment is found to have incorrect or missing drawings, they must be updated as soon as possible and before any further work is carried out. The Supra-Area MEICA Team Leader can provide further guidance.

Further detailed guidance for drawing and documentation requirements can be found in <u>SD09 – Drawings and documentation</u>.

## Contractors or consultants working on low voltage systems

### **Appointment**

The following operational instruction must be followed when appointing a contractor/consultant to carry out work:

44 07 The management of external contractors

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#### **Conditions**

The following conditions apply in addition to the mandatory operational instructions when contractors are required to carry out electrical work:

- Where contractors have their own electrical safety rules, these may be used where the contractor can demonstrate to the Supra-Area MEICA Team Leader that these rules are to an equal or better standard.
- A copy of this document must be made available to anyone required to undertake work on or near to electrical systems and equipment. This includes, but is not limited to, design, installation, commissioning, maintenance, inspection and testing.
- · All electrical works must comply with:
- The Electricity at Work Regulations 1989;
- BS 7671: 2008 (2011) Incorporating latest amendments.
   Requirements for electrical installations. IET Wiring Regulations.
- the requirements of this document;
- the engineering specification and any standards issued for the work.
  - All contractors' staff undertaking electrical works on any Environment Agency site must first be approved to undertake these works by the Supra-Area MEICA Team Leader. To gain approval contractors must demonstrate that they:
- are registered with the <u>Joint Industry Board</u> or equivalent;
- employ staff who possess sufficient experience, training and knowledge to carry out the electrical works in a safe and efficient manner;
- they are members of <u>NICEIC</u> (National Inspection Council for Electrical Installation Contracting), <u>ECA</u> (Electrical Contractors Association) or <u>NAPIT</u> (National Association of Professional Inspectors and Testers
- are registered under the appropriate category by the NICEIC or ECA for the works to be undertaken.
- Note: The Supra-Area MEICA Team Leader may require further information to assess the competence of a contractor before approval is given.
  - All contractors' or consultants staff undertaking electrical design work must be members of a relevant professional body or authorised by the Supra-Area MEICA Team Leader.
  - The Environment Agency reserves the right to audit (at regular intervals) the training and competency levels of contractor's staff and their sub-contractors working on its systems or equipment.

# Electrical safety agreements

Before commencing any electrical works on Environment Agency sites, an electrical safety agreement must be issued by an authorised person and completed by a competent person designated by the contractor. <a href="SD02">SD02</a> – <a href="Electrical safety agreement">Electrical safety agreement</a> contains a form that must be completed when work is required.

Electrical safety agreements will be required in order to carry out any electrical works.

## **Contractors** responsibilities

Contractors working on Environment Agency sites must sign the electrical safety agreement provided in <u>SD02 – Electrical safety agreement</u>.

The contractor is required to ensure that only suitably qualified and experienced personnel carry out work on Environment Agency equipment on the sites listed in the agreement.

Contractors are responsible for training their staff to undertake all necessary works to ensure compliance with this code of practice and all other legal regulations and standards in the execution of their duty.

# Supplementary procedures

Where deemed appropriate, the Supra-Area MEICA Team Leader may develop additional procedures to supplement this code of practice.

## Working procedure

# Safe working procedure for MEICA works

Anyone carrying out MEICA works on any Environment Agency site must produce detailed working procedures, in the form of risk assessments and method statements that will ensure safe working on any system or piece of equipment.

Procedures must follow guidelines as set out in HSG85 Electricity at Work - Safe working practices.

If you are in any doubt with respect to this, you must consult the Supra-Area MEICA Team Leader for advice.

## Low voltage permit to work

### Introduction

- A permit is required where control of a risk is provided by one party to ensure the safety of another party.
- Responsibility for the control of the risk remains with the person issuing the permit subject to the permit conditions.
- When a low voltage permit to work (PTW) is required, it must be issued by the party that is in control of the risk. If the risk is controlled by the Environment Agency only an Environment Agency <u>authorised person</u> may issue the PTW.

# Elements of a low voltage PTW

Permits are required for works:

- on electrical systems that have multiple points of supply or where remote operation can be implemented;
- on low voltage distribution systems, switchboards and busbar systems where the hazards and risks require additional control;
- on low voltage systems that have a point of isolation on a high voltage system for example transformers;
- where isolation for works is being done for a third party to carry out the works:
- where local MEICA procedures dictate.

The person issuing the PTW retains responsibility for the works and is responsible for the storage and retention of the PTW after completion of the works.

An example low voltage PTW work showing the elements it should contain is given in <u>SD03 – Low voltage permit to work</u>.

If you are in any doubt with respect to this, you must consult the Supra-Area MEICA Team Leader advice.

## Live working

### Introduction

There may be circumstances where it is unreasonable to make equipment dead because of the difficulties it would cause (refer to EAWR – reg 14).

**Important!:** When a situation is recognised that may require live working the Supra-Area MEICA Team Leader must be consulted immediately and their permission is required BEFORE work commences.

## Carrying out live works

Anyone carrying out live works on any Environment Agency systems or equipment must produce detailed working procedures, in the form of risk assessments and method statements that will ensure safe working on any system or piece of equipment.

Procedures for working live must follow guidelines as set out in <u>HSG85</u>, <u>Electricity at Work - Safe working practices</u> and <u>The Electricity at Work Regulations 1989</u>

The person carrying out the risk assessment must have extensive knowledge and experience of the factors to consider and of the competence of the people who will be carrying out the work and their ability to avoid danger whilst working live. On completion of this stage, the Supra-Area MEICA Team Leader must review its contents and decide whether it is reasonable in all circumstances to work live.

Further details can also be found in SD13 – Live working.

The Supra-Area MEICA Team Leader must provide further technical advice if you need to implement any live working.

# Functional isolation of machinery and equipment for mechanical maintenance

#### **Definition**

Functional isolation is the term used to describe the isolation of equipment such that the equipment is disabled from operation. It allows for work to take place near that equipment. It does not allow for:

- work on that equipment;
- work within the fixed guards of that equipment;
- work with other energy sources such as gravity, hydraulic, and so on
- Typical examples include:
- functional isolation of a pump in order to access the wet well;
- functional isolation of a sluice gate in order to work downstream of the sluice.

# Safe system of work

You must follow the detailed guidance and instruction given in <u>153\_10</u> Functional isolation of machinery and equipment.

If you are carrying out functional isolation you must have first been trained and authorised on the systems you are isolating.

The required detail of the safe system of work is defined by:

- the complexity of the task;
- the number of people involved.

If you are in any doubt with respect to this, you must consult the Supra-Area MEICA Team Leader for advice.

## **Electrical equipment inspection and testing**

### Scope

All electrical equipment in an installation whether permanently connected or connected by a plug and socket outlet is covered by this code of practice.

- The Institution of Engineering and Technology, Code of Practice for In-service inspection and testing of electrical equipment (4th Edition) contains detailed advice on in-service inspection and testing to determine whether electrical equipment is fit for continued service or maintenance or replacement is necessary.
- Details of the process requirements can be found in <u>SD11</u> <u>Electrical equipment testing.</u> Supra-Area MEICA Team Leader can provide further technical advice if required to support electrical equipment testing.

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## Fixed electrical installation inspection and testing

# Inspection and testing

All fixed electrical installations, for example building wiring, must be inspected and tested in accordance with Part 6 of BS 7671 (IEE Wiring Regulations) and IET Guidance Note 3 Inspection and testing (latest edition).

Details can also be found in <u>SD10 – Fixed electrical installations</u>. The Supra-Area MEICA Team Leader can provide further technical advice if required to support electrical installation testing.

## Electrical work in confined spaces and hazardous areas

# Confined spaces

The SRO must undertake a hazard identification and confined space assessment at each site. This assessment must be made available in the site health and safety file.

Electrical work undertaken in confined spaces will require a method statement and risk assessment. It must comply with:

983 14 Working in Confined Spaces

# **Explosive** atmospheres

Where electrical work is required on a site that has hazardous areas for explosive atmospheres, it is a legal requirement for the SRO to:

- carry out a hazardous area study;
- document the study's conclusions in the form of the zones into which each part of the site falls.

These zones are defined in the <u>Dangerous Substances and Explosive</u> <u>Atmospheres Regulations 2002</u> (DSEAR) and are referred to as Zones 1, 2 and 3.

This assessment must be undertaken by trained personnel or an external accredited body. The SRO should seek advice from the Supra-Area MEICA Team Leader.

In order to comply with current legislation, all electrical and electronic equipment located within the zone must:

- be suitable for operation within that zone;
- comply with the ATEX Directive (94/9/EC).

#### Guidance

Safety instrumentation is used within potentially explosive atmospheres to reduce the risk of a hazard causing harm. The risk mitigation is provided by installing safety-related instrumentation that has an appropriate safety integrity level (SIL).

Design, construction, installation, use of apparatus, inspection and testing must comply with BS EN 60079-17: 2007.

Advice on contractor competence and management of electrical risks in Hazardous areas must be sought from the Supra-Area MEICA Team Leader if there are any works required to mechanical or electrical equipment located within or adjacent to a hazardous area.

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## **Computer and communications rooms**

### Introduction

Computer rooms are controlled areas with a known environment containing corporate computers, servers, communications and other information technology equipment.

These areas are the joint responsibility of Corporate Information Services (CIS) and the SRO.

Entry into a computer room is restricted to specialist staff.

Annual visual inspections must be carried out by the Supra-Area MEICA Team Leader in accordance with <u>SD08 – Computer and communications rooms</u>.

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## **Generators**

### Introduction

Generators fall into three groups used in a variety of circumstances to provide electrical power supplies, these are:

- portable and transportable;
- mobile;
- fixed.

# General quidance

Staff installing and operating generator systems and equipment must be <u>authorised</u> in writing by the Supra-Area MEICA Team Leader.

Chapter 55 (Section 551) of BS 7671 (IET Wiring Regulations) defines requirements specifically related to generating sets.

- ! Important When connecting and using any type of generator, you
  must also follow the guidance given in HSE Information Document
  482/2 Electrical safety of independent low-voltage AC portable and
  mobile generators and connected systems.
- Details can also be found in <u>SD04 Generators</u>. The Supra-Area MEICA Team Leader can provide further technical advice if required to support generator installations.

## **Temporary electrical supplies**

#### Introduction

A temporary electrical supply is normally associated with the temporary electrical installation of a construction site. They have a specific testing and inspection regime that must be followed.

BS 7671 makes no distinction between temporary or permanent electrical installations in terms of safety. The fact that an electrical installation is of a temporary nature does not permit a lower standard of installation work – If anything, the requirements for temporary electrical installations are more stringent than those for permanent installations as the operating conditions are more onerous.

The definition and scope of temporary supplies can be found in <u>SD07 – Temporary electrical supplies</u>. The Supra-Area MEICA Team Leader can provide further technical advice to support the installation and maintenance of temporary electrical installations.

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## Testing of fire alarm and emergency lighting systems

## Environment Agency responsibility

Under The Regulatory Reform (Fire Safety) Order 2005, the Environment Agency is responsible for ensuring its building and structures are covered by an adequate fire safety procedure whose elements comply with BS 5839 and for testing, inspecting and maintaining emergency lighting systems to ensure the means of escape in the event of a fire is secured. The SRO has the responsibility for ensuring compliance with these statutory requirements.

# Responsible person

The site responsible officer must:

- carry out a fire risk assessment;
- keep up all fire precautions and maintenance routines;
- maintain fire alarm and emergency lighting systems in accordance with <u>282 10 Fire prevention</u>, <u>alert and escape for occupied</u> premises;
- ensure that testing and inspection of the emergency lighting systems are carried out.
- The Supra-Area MEICA Team Leader will provide further technical advice and support if required.

## **Overhead lines**

### Requirements

Overhead lines can be supported on a number of differing structures made of various materials such as concrete, timber or steel. The type of supporting structure is no indication of the voltage passing through the supported cables. The cables are often un-insulated and systems operating at high voltage are a particular hazard in that electrocution can occur without direct contact with the cable.

Treat all overhead lines as hazardous. Where work is to take place near overhead lines, follow the requirements set out in <u>728\_06 Travelling under and working near overhead lines</u> and <u>230\_10 Safe working and travelling under or near overhead cables</u>. These documents are based on HSE Guidance Note GS6 <u>Avoidance of danger from overhead electric power lines</u>.

The Supra-Area MEICA Team Leader will provide further technical advice and support if required.

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## **Underground cables**

### Requirements

Conduct all excavations on new or existing underground cable routes in accordance with 727 06 The dangers of underground services and how to avoid them. This document is based on HSE Guidance Note HSG47 Avoiding danger from underground services.

In all cases, follow the detailed Environment Agency procedures for ground penetration specified in 1137 08 Avoiding underground services.

#### Guidance

- Take particular care when excavating close to an earthing system. Should the earthing system be exposed, assess the risk to the electrical installation that it protects and, if necessary, put in place mitigating measures. Test the earthing installation when work is complete.
- Repair effectively earthing damaged during the excavation immediately and test the earth installation.
- Position cable markers at sufficiently frequent intervals and at changes of direction to ensure all routes are defined clearly.
- Mark underground cable routes clearly on the 'as built' drawings for submission into the health and safety file.
- The Supra-Area MEICA Team Leader will provide further technical advice and support if required.

## Office desk wiring

### **Background**

The use of information technology (IT) equipment can result in relatively high levels of protective conductor currents. A final circuit can accept many items of IT equipment and remain within its rating, but the resulting protective conductor currents can be high causing problems to connected devices.

 SD05 – office desk wiring provides technical details for desk electrical systems. The Supra-Area MEICA Team Leader will provide advice and technical support if any office desk wiring is required.

## **Lightning protection**

What is lightning protection?

Lightning protection is an electrically conductive system attached to the exterior of a building or structure that is bonded to the general mass of earth to allow any lightning strike to dissipate its energy safely.

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# Assessment of buildings

All buildings and structures owned or leased by the Environment Agency must be assessed against the requirements of BS EN 62305 by the SRO.

Where deemed necessary, a compliant lightning protection system must be designed, installed and tested at regular intervals.

<u>SD06 – lightning protection</u> provides technical details for lightning protection systems. The Supra-Area MEICA Team Leader will provide advice and technical support with respect to lightning protection of any building or structure if required.

## **Related documents**

### Legislation

- Health and Safety at Work etc. Act 1974
- The Electricity at Work Regulations 1989
- The Management of Health and Safety at Work Regulations 1999
- <u>Dangerous Substances and Explosive Atmospheres Regulations</u>
   2002 (DSEAR)
- The Regulatory Reform (Fire Safety) Order 2005
- The Construction (Design and Management) Regulations 2015
- <u>Directive 94/9/EC</u> (ATEX Directive)
- Directive 93/68/EEC CE Marking Directive

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### **British** standards

- BS EN 60079-17: 2007 Explosive atmospheres. Electrical installations inspection and maintenance.
- BS EN 60309 Plugs, socket-outlets and couplers for industrial purposes.
- BS EN 60309-2: 1999 Plugs, socket-outlets and couplers for industrial purposes. Dimensional interchangeability requirements for pin and contact-tube accessories.
- BS EN 60950 Information technology equipment. Safety.
- BS EN 61010 Safety requirements for electrical equipment for measurement, control and laboratory use.
- BS EN 61241-17: 2005 Electrical apparatus for use in the presence of combustible dust. Inspection and maintenance of electrical installations in hazardous areas (other than mines).
- BS EN 61508-2: 2002 Functional safety of electrical/ electronic/ programmable electronic safety-related systems. Requirements for electrical/electronic/programmable electronic safety-related systems.
- BS EN 61557-1: 2007 Electrical safety in low voltage distribution systems up to 1000 V a.c. and 1500 V d.c. Equipment for testing, measuring or monitoring of protective measures. General requirements.
- BS EN 61558 Safety of power transformers, power supply units and similar products.
- BS EN 62305-1: 2006 Protection against lightning. General principles
- BS EN 62305-2: 2006 Protection against lightning. Risk management
- BS EN 62305-3: 2006 Protection against lightning. Physical damage to structures and life hazard.
- BS EN 62305-4: 2006 Protection against lightning. Electrical and electronic systems within structures
- BS 1363: 1995 13 A plugs, socket-outlets, adaptors and connection units. Specification for rewirable and non-rewirable 13 A fused plugs.
- BS 5266 Emergency lighting.
- BS 5389 Fire detection and fire alarm systems for buildings.
- BS 5446 Fire detection and fire alarm devices for dwellings.
- BS 6396: 2008 Electrical systems in office furniture and educational furniture. Specification.
- BS 7671: 2008 (2011) Incorporating latest amendments. Requirements for electrical installations. IET Wiring Regulations.

#### Guidance

- ATEX guidelines (3rd edition), European Commission, June 2009.
- Guidance Note 1: Selection and erection of equipment (5th edition), Institution of Engineering and Technology, 2009.
- Guidance Note 3: Inspection and testing (latest edition), Institution of Engineering and Technology, 2008.
- Guidance Note 7: Special locations (latest edition), Institution of Engineering and Technology, 2009.
- Code of practice for in-service inspection and testing of electrical equipment (latest edition), Institution of Engineering and Technology, 2008.
- Avoidance of danger from overhead electric power lines, HSE Guidance Note GS6, HSE Books, 1997
- <u>Electrical test equipment for use by electricians</u>, HSE Guidance Note GS38, HSE Books, 1995.
- <u>Avoiding danger from underground services</u>, HSE Guidance Note HSG47, HSE Books, 2000.
- <u>Electricity at work: safe working practices</u>, HSE Guidance Note HSG85, HSE Books, 2003.
- 482/2 Electrical safety of independent low-voltage AC portable and mobile generators and connected systems. HSE Information Document 482/2, HSE, 2004.
- 983 14 Working in Confined Spaces
- 727 06 The dangers of underground services and how to avoid them
- 728 06 Travelling under and working near overhead lines
- 230 10 Safe working and travelling under or near overhead cables

## Operational instructions

- Code of practice for electrical safety (CoPES): Part 1
- 44 07 The management of external contractors
- 153 10 Functional isolation of machinery and equipment
- 300 10 SD06 SD11 Health and safety file
- 263 05 Electrical authorisation of environmental monitoring teams
- 282 10 Fire prevention, alert and escape for Occupied Premises
- 414 09 Providing and managing work equipment supporting information for office equipment
- 08 05 Providing and managing work equipment
- 1137 08 Safe working near underground services

## **Supporting** documents

- <u>13 13 SD01 Certificate of appointment as an authorised person</u>
- 13 13 SD02 Electrical safety agreement
- <u>13 13 SD03 Low voltage permit to work</u>
- <u>13 13 SD04 Generators</u>
- 13 13 SD05 Office desk wiring
- <u>13 13 SD06 Lightning protection</u>
- <u>13 13 SD07 Temporary electrical supplies</u>
- 13 13 SD08 Computer and communications rooms
- 13 13 SD09 Drawings and documentation
- 13 13 SD10 Fixed electrical installations
- 13 13 SD11 Electrical equipment testing
- 13 13 SD12 Electrical authorisation
- <u>13 13 SD13 Live working</u>
- 13 13 SD14 Electrical Safety in Offices and Laboratories