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**NEW PAVEMENT 3 AND WORKSHOP DEVELOPMENT
to
PORTHMELLON WASTE MANAGEMENT SITE, ST MARYS, ISLES OF SCILLY, TR21 OJY
for
COUNCIL OF THE ISLES OF SCILLY
CONTRACT DOCUMENTS**

The following documents are enclosed:

**Contract Preliminaries including Pre-Construction Information
The Schedule of Work
Specification Worksections**

The Drawings

PROJECT NO. JLA/5505-02

JULY 2019

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DOCUMENT RECORD SHEET

Document Number	JLA/5505-02
Document Title	New Pavement 3 and Workshop Development Contract Documents: Preliminaries including PCI Schedule of Work Drawings

Rev	Date	Issue/Revision/Description
0	19/03/2019	Draft
1	01/04/2019	For Client Review
2	27/06/2019	Pavement 3 & Workshop Only
3	02/08/2019	Tender Issue
4	12/09/2019	Updated drawing revision references

Prepared by:	Mike Nye BA (Hons)
Signature:	

Checked by:	J W Lockyer BSc CEng FICE
Signature:	

SCHEDULE OF WORK

Project: Porthmellon Waste Management Site, St Marys, Isles of Scilly, TR21 OJY
 Reference: JLA/5505-02

**SECTION A
PRELIMINARIES****£ p****A10 PROJECT PARTICULARS****A10/110 THE PROJECT**

Name **Moorwell Depot**
 Nature **New Pavement 3 and Workshop Development**
 Location **Porthmellon Waste Management Site, St Marys, Isles of Scilly, TR21 OJY**
 Length of contract: **15 Weeks Anticipated**
As proposed and agreed at tender stage

A10/120 EMPLOYER (CLIENT)

Name **Council of the Isles of Scilly**
 Address **Town Hall, St Mary's, Isles of Scilly TR21 0LW**

A10/130 PRINCIPAL CONTRACTOR (CDM)

Name **The Contractor**

**A10/140 PERSON EMPOWERED BY THE CONTRACT TO ACT ON BEHALF OF THE EMPLOYER
[EMPLOYERS REPRESENTATIVE - ER]**

Name James W Lockyer BSc CEng FICE
 Address James Lockyer Associates Ltd, Oakland Mews, Liskeard PL14 3UX
 Telephone 01579 344771

A10/150 PRINCIPAL DESIGNER

Name James W Lockyer BSc CEng FICE
 Address James Lockyer Associates Ltd, Oakland Mews, Liskeard PL14 3UX
 Telephone 01579 344771

A11 TENDER AND CONTRACT DOCUMENTS**A11/110 TENDER DRAWINGS**

The tender drawings are:

Drawing number	Revision	Title
5505/CB/100	D	Existing Site Plan
5505/CB/101	D	Pavement Layout Existing Plan
5505/CB/201	D	Pavement Proposals
5505/CB/202	€	Pavement Area 1 OMITTED
5505/CB/203	€	Pavement Area 2 OMITTED
5505/CB/204	D	Pavement Area 3
5505/CB/205	A	Pavement Area 3 Detail
5505/CD/210	D	Pavement Construction Details
5505/XB/101	D	Workshop Floor Plan & Block plan
5505/XB/102	D	Workshop Development Proposals

A11/120 CONTRACT DRAWINGS

The Contract Drawings: The same as the tender drawings.

A11/160 PRECONSTRUCTION INFORMATION

Format: **The Pre-Construction information is described in these Preliminaries in Section A34.** It refers to information given elsewhere in the Preliminaries and other tender documents.

Note that CDM Regulations will apply to this contract.

Health & Safety Plans and method statements will be required as described in these Preliminaries.

JAMES LOCKYER ASSOCIATES

File reference:5505-02-Preliminaries
 Rev4.docx

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SCHEDULE OF WORK

Project: Porthmellon Waste Management Site, St Marys, Isles of Scilly, TR21 OJY
 Reference: JLA/5505-02

**SECTION A
PRELIMINARIES****£ p****A12 THE SITE/EXISTING BUILDINGS****A12/110 THE SITE**

Description: The Works are centred around the Moorwell Depot to the north of the Porthmellon Waste Management Site. The Waste Management Site will remain open throughout the contract period.

A12/140 EXISTING UTILITIES AND SERVICES

Description: Locations of services are to be established prior to commencing works.

A12/180 HEALTH AND SAFETY FILE

Availability for inspection: The Health and Safety File for the site/building is not available.

A12/200 ACCESS TO THE SITE

Description: The property is accessed from Moor Well Lane, a single track road off Telegraph Road.

At its narrowest point, Moor Well Lane is approximately 3.7m wide.

A12/210 PARKING

Restrictions on parking of the Contractor's and employees' vehicles:

Limited parking will be available on the site. Parking and the contractor's compound will need to be agreed with the employer.

A12/220 USE OF THE SITE

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

A12/230 SURROUNDING LAND/BUILDING USES

General Adjacent or nearby uses or activities are as follows:

- **Residential properties**
- **Garages**
- **Porthmellon Industrial Estate**

A12/240 HEALTH AND SAFETY HAZARDS

General: The nature and condition of the site/building cannot be fully and certainly ascertained before it is opened up. However the following hazards are or may be present:

- **Restricted access**
- **Working adjacent to busy site, and interaction with the public and site operatives**
- **Maintaining access to Workshop and minimising disruption during works**

Information: The accuracy and sufficiency of this information is not guaranteed by the Employer or the Employer's Agent. Ascertain if any additional information is required to ensure the safety of all persons and the Works.

Site staff: Draw to the attention of all personnel working on the site the nature of any possible contamination and the need to take appropriate precautionary measures.

A12/250 SITE VISIT

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

Arrangements for visit: The site can be seen from the road.

SCHEDULE OF WORK

Project: Porthmellon Waste Management Site, St Marys, Isles of Scilly, TR21 OJY
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**SECTION A
PRELIMINARIES****£ p****A13 DESCRIPTION OF THE WORKS**

A13/120 THE WORKS

Description: The works involve:

- **Construction of Pavement 3 Workshop Hardstanding**
- **Alterations to Workshop**

A20 NEC3 ENGINEERING & CONSTRUCTION SHORT CONTRACT

A20/575 NEC3 ENGINEERING & CONSTRUCTION SHORT CONTRACT (ECSC)

The Conditions of Contract: The core clauses, conditions and secondary Options indicated for the NEC3 Engineering & Construction Short Contract (April 2013).

Requirement: Allow for the obligations, liabilities and services described, including the particular requirements identified in the accompanying ECSC

- **Contract Data**
- **Contractors Offer**
- **Employers Acceptance**
- **Price List**
- **Works Information**
- **Site Information**

SCHEDULE OF WORK

Project: Porthmellon Waste Management Site, St Marys, Isles of Scilly, TR21 OJY
Reference: JLA/5505-02

**SECTION A
PRELIMINARIES****£ p****A30 TENDERING/ SUBLETTING/ SUPPLY****MAIN CONTRACT TENDERING****A30/110 SCOPE**

General: These conditions are supplementary to those stated in the invitation to tender and on the form of tender.

A30/145 TENDERING PROCEDURE

General: In accordance with the principles of the "Code of Procedure for Single Stage Selective Tendering.

Arithmetical errors: Overall price is dominant.

A30/160 EXCLUSIONS

Inability to tender: Immediately inform if any parts of the work as defined in the tender documents cannot be tendered.

Relevant parts of the work: Define those parts, stating reasons for the inability to tender.

A30/170 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.

A30/250 PRICED DOCUMENTS

Alterations: Do not alter or qualify the priced documents without written consent. Tenders containing unauthorised alterations may be rejected.

Measurements: Where not stated, ascertain from the drawings.

Deemed included: Costs relating to items, which are not priced, will be deemed to have been included elsewhere in the tender.

A30/310 TENDER

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

A30/320 THE PRICED SCHEDULE OF WORKS

Content: Alterations and qualifications to the schedule of works or specification must not be made without the written consent of the Employers Agent. Tenders containing unauthorised alterations or qualifications may be rejected. Costs relating to items in the schedule of work which are not priced will be deemed to have been included elsewhere in the tender.

Submit: **With tender.**

A30/500 TENDER STAGE METHOD STATEMENTS

Method statements: Prepare, describing how and when the following is to be carried out:

- **Restricted access - Proposals for providing access and delivery of materials to site, to include both transporting materials to site and off-loading of materials in the working area.**
- **Working within the Waste Management Site – Proposals for ensuring the safety of contractor's operatives, site personnel and the public, both pedestrians and vehicles, including traffic management arrangements. Note that access to all areas of the Waste Management Site, including the Moorwell Depot, must be maintained at all times.**
- **Construction materials proposals with regard to working on island environment – method of batching concrete, etc.**

Submit: **Within one week of request.**

JAMES LOCKYER ASSOCIATES

File reference:5505-02-Preliminaries
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SCHEDULE OF WORK

Project: Porthmellon Waste Management Site, St Marys, Isles of Scilly, TR21 OJY
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**SECTION A
PRELIMINARIES****£ p****A30/530 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.

A30/550 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.

Submit: **The successful tenderer will be required to submit a detailed Construction Phase Health & Safety Plan prior to construction.**

A30/570 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.

SCHEDULE OF WORK

Project: Porthmellon Waste Management Site, St Marys, Isles of Scilly, TR21 OJY
Reference: JLA/5505-02

**SECTION A
PRELIMINARIES****£ p****A31 PROVISION, CONTENT AND USE OF DOCUMENTS****DEFINITIONS AND INTERPRETATIONS****A31/110 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.

A31/120 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.

A31/130 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.

A31/135 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.

A31/160 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 & execution. All products to be supplied & 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.

SCHEDULE OF WORK

Project: Porthmellon Waste Management Site, St Marys, Isles of Scilly, TR21 OJY
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**SECTION A
PRELIMINARIES****£ p****A31/170 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 manufacture's technical literature current on the date of the invitation to tender.

A31/200 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.

Manufacturers' guarantees: If substitution is accepted, submit before ordering products.

A31/210 CROSS REFERENCES

Accuracy: Check remainder of the annotation or item description against the terminology used in the section or clause referred to.

Related terminology: Where a numerical cross-reference is not given the relevant sections and clauses of the specification will apply.

Relevant clauses: Clauses in the referred to specification section dealing with general matters, ancillary products and execution also apply.

Discrepancy or ambiguity: Before proceeding, obtain clarification or instructions.

A31/220 REFERENCED DOCUMENTS

Conflicts: Specification prevails over referenced documents.

A31/230 EQUIVALENT PRODUCTS

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

A31/250 CURRENCY OF DOCUMENTS

Currency: References to published documents are to the editions, including amendments and revisions, current on the date of the Invitation to Tender.

A31/260 SIZES

General dimensions: Products are specified by their co-ordinating sizes.

Timber: Cross section dimensions shown on drawings are:

- Target sizes as defined in BS EN 336 for structural softwood and hardwood sections.
- Finished sizes for non-structural softwood or hardwood sawn and further processed sections.

SCHEDULE OF WORK

Project: Porthmellon Waste Management Site, St Marys, Isles of Scilly, TR21 OJY
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**SECTION A
PRELIMINARIES****£ p****DOCUMENTS PROVIDED ON BEHALF OF EMPLOYER****A31/410 ADDITIONAL COPIES OF DRAWINGS/ DOCUMENTS**

Copies: Two of each contract drawing and contract document will be issued free of charge (not counting any certified copies).

Additional copies: Issued on request and charged to the Contractor.

A31/440 DIMENSIONS

Scaled dimensions: Do not rely on.

A31/460 THE SPECIFICATION

Coordination: All sections must be read in conjunction with Main Contract Preliminaries/ General conditions.

A31/470 DIVERGENCE FROM THE STATUTORY REQUIREMENTS

Divergence: Between the drawings or specification and the requirements of the Building Regulations, other Statutes, statutory undertakers and other regulatory authorities.

Action: Inform immediately.

SCHEDULE OF WORK

Project: Porthmellon Waste Management Site, St Marys, Isles of Scilly, TR21 OJY
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**SECTION A
PRELIMINARIES****£ p****A32 MANAGEMENT OF THE WORKS****GENERALLY****A32/120 INSURANCE**

Documentary evidence: Submit details before starting work on site and/ or policies and receipts for the insurances required by the Conditions of Contract.

A32/130 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.

A32/140 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.

A32/150 OWNERSHIP

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

PROGRAMME/ PROGRESS**A32/210 PROGRAMME**

Master programme: Immediately when requested and before starting work on site submit in an approved form a master programme for the Works, which must include details of:

- Planning and mobilisation by the Contractor.
- Subcontractor's work.
- 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.
- Work by others concurrent with the Contract.

Submit: **Two copies to the Employers Representative.**

A32/250 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.

A32/255 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.

A32/290 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.

Period of notice (minimum): 2 weeks.

SCHEDULE OF WORK

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**SECTION A
PRELIMINARIES****£ p****A32/310 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 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**A32/420 REMOVAL/ REPLACEMENT OF EXISTING WORK**

Extent and location: Agree before commencement.

Execution: Carry out in ways that minimize the extent of work.

A32/430 PROPOSED INSTRUCTIONS

Estimates: If a proposed instruction requests an estimate of cost, submit without delay and in any case within seven days.

A32/440 MEASUREMENT

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

A32/450 DAYWORK VOUCHERS

Before commencing work: Give reasonable notice to person countersigning daywork vouchers.

Content: Before delivery, each voucher must be:

- Referenced to the instruction under which the work is authorized.
- Signed by the Contractor's person in charge as evidence that the operatives' names, the time daily spent by each and the equipment and products employed are correct.

Submit: By the end of the week in which the work has been executed.

A32/460 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.

A32/470 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.

A32/475 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 sub-contractor 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.

JAMES LOCKYER ASSOCIATES

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SCHEDULE OF WORK

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**SECTION A
PRELIMINARIES****£ p****A33 QUALITY STANDARDS/ CONTROL****STANDARDS OF PRODUCTS AND EXECUTIONS****A33/110 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 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.

A33/120 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.

A33/130 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.

A33/135 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: Without defects, 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.

A33/140 COMPLIANCE

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

Compliance with performance specifications: Submit evidence of compliance, including test reports indicating:

- Properties tested.
- Pass/ fail criteria.
- Test methods and procedures.
- Test results.
- Identity of testing agency.
- Test dates and times.
- Identities of witnesses.
- Analysis of results.

SCHEDULE OF WORK

Project: Porthmellon Waste Management Site, St Marys, Isles of Scilly, TR21 OJY
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**SECTION A
PRELIMINARIES****£ p****A33/150 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.

A33/160 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.

A33/170 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.

Agreement certified products: Comply with limitations, recommendations and requirements of relevant valid certificates.

A33/180 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**A33/210 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.

A33/220 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.

A33/230 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.

JAMES LOCKYER ASSOCIATES

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SCHEDULE OF WORK

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**SECTION A
PRELIMINARIES****£ p****ACCURACY/ SETTING OUT GENERALLY****A33/320 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.

A33/330 APPEARANCE AND FIT

Tolerances and dimensions: If likely to be critical to execution or difficult to achieve, as early as possible either:

- Submit proposals; or
- Arrange for inspection of appearance of relevant aspects of partially finished work.

General tolerances (maximum): To BS 5606, tables 1 and 2.

SERVICES GENERALLY**A33/410 SERVICES REGULATIONS**

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

A33/420 WATER REGULATIONS/ BYELAWS NOTIFICATION

Requirements: Notify Water Undertaker of any work carried out to or which affects new or existing services and submit any required plans, diagrams and details.

Consent: Allow adequate time to receive Undertaker's consent before starting work. Inform immediately if consent is withheld or is granted subject to significant conditions.

A33/435 ELECTRICAL INSTALLATION CERTIFICATE

Submit: When relevant electrical work is completed.

Original certificate: To be given to Employers Representative.

SUPERVISION/ INSPECTION/ DEFECTIVE WORK**A33/530 OVERTIME WORKING**

Notice: Prior to overtime being worked, submit details of times, types and locations of work to be done.

- Minimum period of notice: 1 week.

Concealed work: If executed during overtime for which notice has not been given, it may be required to be opened up for inspection and reinstated at the Contractor's expense.

A33/540 DEFECTS IN EXISTING WORK

Undocumented defects: When discovered, immediately give notice. Do not proceed with affected related work until response has been received.

Documented remedial work: Do not execute work which may:

- Hinder access to defective products or work; or
- Be rendered abortive by remedial work.

A33/610 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.

SCHEDULE OF WORK

Project: Porthmellon Waste Management Site, St Marys, Isles of Scilly, TR21 OJY
Reference: JLA/5505-02

**SECTION A
PRELIMINARIES****£ p****WORK AT OR AFTER COMPLETION****A33/710 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.

A33/720 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 itemised schedule, retaining duplicate schedule signed by Employer as a receipt.

A33/730 MAKING GOOD DEFECTS

Remedial work: Arrange access with the Employer .

Rectification: Give reasonable notice for access to the various parts of the Works.

Completion: Notify when remedial works have been completed.

SCHEDULE OF WORK

Project: Porthmellon Waste Management Site, St Marys, Isles of Scilly, TR21 OJY
Reference: JLA/5505-02

**SECTION A
PRELIMINARIES****£ p****A34 SECURITY/ SAFETY/ PROTECTION****SECURITY, HEALTH AND SAFETY****A34/110 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.

A34/120 EXECUTION HAZARDS

Common hazards: Not listed. Control by good management and site practice.

Significant hazards: The design of the project includes the following:

Hazard:	Restricted Access:
	Deliveries to/from site, Nuisance
Precautions assumed:	Deliveries or collection of materials will be carried out by vehicles of a suitable size for the existing access. Site rules and procedures will be established, contractors compound and parking areas will be identified and possibly relocated as the works progress.
Requirement:	Provide RAMS to clarify arrangements and precautions to be taken, and sequence of proposed activities. Provide Method Statements to clarify arrangements and precautions to be taken for managing delivery and collection vehicles on site and guarding and protecting working areas.
References:	A12/200, A12/210, A12/230 A12/240, A30/500, A34/520 B10/020, B10/030

Hazard:	Interface with site users and the public:
	Personal injury, Nuisance
Precautions assumed:	The site to be demarcated and guarded by suitable barriers/fencing/signage. Site rules and procedures will be established, access routes will be identified and maintained, storage and compound areas will be identified, guarding of the site from adjacent features will need to be considered and will need to be assessed in the Risk Assessments and Method Statements (RAMS)
	Phase works and install suitable traffic management systems to ensure vehicular access is maintained at all times.
Requirement:	Client access to be coordinated with & controlled by PC Provide RAMS to clarify arrangements and precautions to be taken, and sequence of proposed activities. Provide Method Statements to clarify arrangements and precautions to be taken for managing delivery and collection vehicles on site and guarding and protecting working areas.
References:	A12/200, A12/210, A12/240, A30/500, A34/150, A34/170 B10/020, B20/010, B30/020

SCHEDULE OF WORK

Project: Porthmellon Waste Management Site, St Marys, Isles of Scilly, TR21 OJY
Reference: JLA/5505-02

**SECTION A
PRELIMINARIES****£ p**

<u>Hazard:</u>	Excavations & cutting/breaking out concrete & masonry:
	Personal injury, excavations, ground movement
Precautions assumed:	Cutting out and any associated excavations to be guarded by suitable barriers/fencing/signage Breaking/cutting out substantially achieved with mechanical plant; Dust control for concrete cutting generally IAW HSE Construction Information Sheet No 54 (Revision 1) CPP to address HAV issues associated with breaking/cutting out Noise control IAW A34/330 Where required earthworks support for excavations to be generally in accordance with the guidance contained in CIRIA Report 97 'Trenching Practice'. Dewatering will be completed in accordance with RAMS where required Reference(s): CIRIA, Report 97 "Trenching Practice" 2nd Edition, 2001.
Requirement:	Provide RAMS to clarify arrangements and precautions to be taken, and sequence of proposed activities.
<u>Hazard:</u>	Existing services:
	Electrocution, Explosion, Flooding, Scalding, Disruption to Essential Services, Injury
Precautions assumed:	Location of existing services to be established & marked before excavations by combination of local tracing, scanning, and hand excavations Protect and shroud any adjacent overhead services, and ensure these are clearly visible and apparent to operatives; Measures will be taken to ensure safe isolation of any services located in vicinity of or likely to be affected by the construction works; If any "live" services need to be maintained in the works area, suitable protection will be required to avoid damage and injury, and operatives must be forewarned; New services will be installed in accordance with current legislation; Client/Utility Company access for works to electrical installations and any other works to be coordinated with and controlled by PC.
Requirement:	Provide RAMS to clarify arrangements and precautions to be taken, and sequence of proposed activities.
<u>Hazard:</u>	Drainage works, ground and surface water:
	Leptospirosis / Drowning
Precautions assumed:	PPE provided as required and welfare facilities to be provided to ensure hand washing is available. Material arising from the works is to be removed and not allowed to fall into existing sewers or watercourses. Watercourses to be protected IAW EA PPG5
Requirement:	Provide RAMS to clarify arrangements and precautions to be taken, and sequence of proposed activities.

SCHEDULE OF WORK

Project: Porthmellon Waste Management Site, St Marys, Isles of Scilly, TR21 OJY
 Reference: JLA/5505-02

**SECTION A
PRELIMINARIES****£ p**

Hazard: Working at height. Erection of steelwork and handling construction materials

Precautions assumed: Suitable access scaffold to provide access and protection from falling objects

Appropriate PPE and lifting aids provided

Requirement: **Provide RAMS to clarify arrangements and precautions to be taken, and sequence of proposed activities.**

A34/130 PRODUCT HAZARDS**Hazardous Substances:
Poisoning/Chemical Burns/Injury**

Hazardous substances: Site personnel levels must not exceed occupational exposure standards and maximum exposure limits stated in the current version of HSE document EH40: Workplace Exposure Limits.

Common hazards:

Not listed. Control by good management and site practice.

Significant hazards:

Specified construction materials include the following:

A34/140 CONSTRUCTION PHASE HEALTH AND SAFETY PLAN

Submission: Present to the Employers Agent no later than 1 week before commencement.

Confirmation: Do not start construction work until the Employer has confirmed in writing that the Construction Phase Health and Safety Plan 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.

A34/150 SECURITY

Protection: Safeguard the site, the Works, products, materials, and any existing buildings affected by the Works from damage and theft.

Access: Take all reasonable precautions to prevent unauthorized access to the site, the Works and adjoining property.

A34/160 STABILITY

Responsibility: Maintain the stability and structural integrity of the Works and adjacent structures during the Contract.

Design loads: Obtain details, support as necessary and prevent overloading.

A34/170 OCCUPIED PREMISES

Extent: Existing buildings will be occupied and used during the Contract.

Works: Carry out without undue inconvenience & nuisance & without danger to occupants & users. **Maintain insofar as practical access to neighbouring property driveway, & coordinate works to minimise inconvenience.**

Overtime: If compliance with this clause requires certain operations to be carried out during overtime, and such overtime is not required for any other reason, the extra cost will be paid to the Contractor, provided that such overtime is authorized in advance.

SCHEDULE OF WORK

Project: Porthmellon Waste Management Site, St Marys, Isles of Scilly, TR21 OJY
 Reference: JLA/5505-02

**SECTION A
PRELIMINARIES****£ p****PROTECT AGAINST THE FOLLOWING****A34/330 NOISE CONTROL**

Standard: Comply with the recommendations of BS 5228-1, in particular clause 7.3, to minimize noise levels during the execution of the Works.

Equipment: Fit compressors, percussion tools and vehicles with effective silencers 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.

A34/340 POLLUTION

Prevention: Protect the site, the Works and the general environment including the atmosphere, land, streams and waterways against pollution.

Contamination: If pollution occurs inform immediately, including to the appropriate Authorities and provide relevant information.

A34/360 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.

A34/370 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.

A34/380 FIRE PREVENTION

Duty: Prevent personal injury or death, and damage to the Works or other property from fire.

Standard: Comply with Joint Code of Practice 'Fire Prevention on Construction Sites', published by the Construction Confederation and The Fire Protection Association (The 'Joint Fire Code').

A34/390 SMOKING ON SITE

Smoking on site: Not permitted.

A34/400 BURNING ON SITE

Burning on site: Not permitted.

A34430 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/cavities in construction: Remove rubbish, dirt & residues before closing in.

Waste transfer documentation: Retain on site.

SCHEDULE OF WORK

Project: Porthmellon Waste Management Site, St Marys, Isles of Scilly, TR21 OJY
 Reference: JLA/5505-02

**SECTION A
PRELIMINARIES****£ p****PROTECT THE FOLLOWING****A34/510 EXISTING SERVICES**

Confirmation: Notify service authorities, statutory undertakers and adjacent owners of proposed works not less than one week before commencing Works.

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 damage to be made good without delay to the satisfaction of service authority/statutory undertaker or other owner.
- 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 undertakers recommendations.

A34/520 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.

A34/530 EXISTING TOPSOIL/ SUBSOIL

Duty: Prevent over compaction of existing topsoil and subsoil in those areas which may be damaged by construction traffic, parking of vehicles, temporary site accommodation or storage of materials and which will require reinstatement prior to completion of the Works.

Protection: Before starting work submit proposals for protective measures.

A34/540 RETAINED TREES/ SHRUBS/ GRASSED AREAS

Protection: Preserve and prevent damage, except those not required.

Replacement: Mature trees and shrubs if uprooted, destroyed, or damaged beyond reasonable chance of survival in their original shape, as a consequence of the Contractor's negligence, must be replaced with those of a similar type and age at the Contractor's expense.

A34/560 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.

A34/570 EXISTING WORK

Protection: Prevent damage to existing work, structure or other property during the course of the work.

Removal: Minimum amount necessary.

Replacement work: To match existing.

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SCHEDULE OF WORK

Project: Porthmellon Waste Management Site, St Marys, Isles of Scilly, TR21 OJY
Reference: JLA/5505-02

**SECTION A
PRELIMINARIES****£ p****A34/580 BUILDING INTERIORS**

Protection: Prevent damage from exposure to the environment, including weather, flora, fauna, and other causes of material degradation during the course of the work.

A34/600 EXISTING FURNITURE, FITTINGS AND EQUIPMENT

Protection: Prevent damage or move as necessary to enable the Works to be executed. Reinstall in original positions.

Extent:

A34/630 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.

A34/640 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.

SCHEDULE OF WORK

Project: Porthmellon Waste Management Site, St Marys, Isles of Scilly, TR21 OJY
Reference: JLA/5505-02

**SECTION A
PRELIMINARIES****£ p****A35 SPECIFIC LIMITATIONS ON METHOD/ SEQUENCE/ TIMING****A35/130 METHOD/ SEQUENCE OF WORK**

Specific Limitations: Generally to suit the programme and method of working proposed, taking account of the need to co-ordinate the works of subcontractors and others employed direct.

Method statements, developed from the tender stage method statements where requested, must be submitted within one week of request describing how and when the Contractor proposes and undertakes to carry out the works. These method statements will then be included in the Construction Phase Health And Safety Plan (A34/140).

A35/170 WORKING HOURS

Specific limitations: Obtain prior permission from Employers Agent to any desired working outside normal working hours of 0800-1730 Monday to Friday.

A36 FACILITIES/ TEMPORARY WORKS/ SERVICES**GENERALLY****A36/110 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**A36/230 TEMPORARY ACCOMMODATION**

Proposals for temporary accommodation and storage for the Works: Submit two weeks prior to starting on site.

Details to be included: Type of accommodation and storage, its siting and the programme for site installation and removal.

SERVICES AND FACILITIES**A36/420 LIGHTING AND POWER**

Supply: Electricity from the Property Owner's mains should not be assumed.

Allow for temporary supply/generation

Make arrangements for distribution around site

A36/430 WATER

Supply: The Employer's mains may be used for the Works as follows:

Metering: A charge will be made for this supply based on meter readings taken at the start and finish of the Works

Source: External tap. Make arrangements for distribution around site

Continuity: The Employer will not be responsible for the consequences of failure or restriction in supply.

A36/440 TELEPHONES

Direct communication: As soon as practicable after the Date of Possession provide the Contractor's person in charge with a mobile telephone, and if reception is poor or inadequate ensure that alternative arrangements are effected to ensure any necessary contact with emergency services is facilitated.

A36/540 METER READINGS

Charges for service supplies: Where to be apportioned ensure that:

- Meter readings are taken by relevant authority at possession and/ or completion as appropriate.
- Copies of readings are supplied to interested parties.

JAMES LOCKYER ASSOCIATES

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SCHEDULE OF WORK

Project: Porthmellon Waste Management Site, St Marys, Isles of Scilly, TR21 OJY
Reference: JLA/5505-02

**SECTION A
PRELIMINARIES****£ p****A36/550 THERMOMETERS**

General: Provide on site and maintain in accurate condition a maximum and minimum thermometer for measuring atmospheric shade temperature, in an approved location.

A36/570 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.
- High visibility waistcoats to BS EN 471 Class 2.
- Safety boots with steel insole and toecap to BS EN ISO 20345.
- 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****A37/110 THE FACILITY MANUAL (INCLUDING HEALTH & SAFETY FILE)**

Responsibility: **Principal Contractor**

Content: **As A37/155**

Obtain and Provide comprehensive information for owners and users of the completed Works. Include an overview of the main design principles and describe key components and systems within the finishing Works, so affording a complete understanding of the Works, including all buildings and their systems to enable efficient and safe operation and maintenance.

Number of copies: **1**

Delivery to: **Employers Representative/Principal Designer within two weeks of practical completion**

A37/155 CONTENT OF THE FACILITY MANUAL

General:

Details of the facility, the parties, operational requirements and constraints of a general nature.

Building fabric:

Design criteria, maintenance details, product details, and environmental and trafficking conditions.

Building services:

Description and operation of systems, diagrammatic drawings, record drawings, identification of services, product details, equipment settings, maintenance schedules, consumable items, spares and emergency procedures

Documentation:

- As Built Drawings
- Guarantees, warranties, maintenance agreements, test certificates and reports.

A37/160 PRESENTATION OF FACILITY MANUAL

Format: Provide in two formats:

- Hard Copy: 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.
- **Complete electronic copy in PDF format**

SCHEDULE OF WORK

Project: Porthmellon Waste Management Site, St Marys, Isles of Scilly, TR21 OJY
 Reference: JLA/5505-02

**SECTION A
PRELIMINARIES****£ p****A40 CONTRACTOR'S GENERAL COST ITEMS: MANAGEMENT AND STAFF**

A40/110 MANAGEMENT AND STAFF

A41 CONTRACTOR'S GENERAL COST ITEMS: SITE ACCOMMODATION

A41/110 SITE ACCOMMODATION SEE SECTION A36

A42 CONTRACTOR'S GENERAL COST ITEMS: SERVICES AND FACILITIES

A42/110 SERVICES AND FACILITIES SEE SECTION A36

A43 CONTRACTOR'S GENERAL COST ITEMS: MECHANICAL PLANT

A43/110 MECHANICAL PLANT

A44 CONTRACTOR'S GENERAL COST ITEMS: TEMPORARY WORKS

A44/110 TEMPORARY WORKS SEE SECTION A36

A54 PROVISIONAL WORK/ ITEMS

A54/590 CONTINGENCIES

Provisional sum: Include: Include a Contingency Sum to be expended only by instructions from the Employers Agent.

Contingencies**£5,000.00**

SCHEDULE OF WORK**Project:** New Pavement 3 and Workshop Development**Reference:** JLA/5505-02**SECTION B
SCHEDULE OF WORKS**

£ p

B10 GENERALLY**B10/010 THE WORKS:**

The works involve:

- **Construction of Pavement 3 Workshop Hardstanding**
- **Alterations to Workshop**

Prior to commencement:

- **Take full record details and photographs of all associated walls, buildings and other adjacent features to assist in determining any defect reinstatement requirements.**

THE FOLLOWING ITEMS DESCRIBE THE MAIN ITEMS OF WORK TO BE CARRIED OUT. ALLOW FOR ALL WORKS NECESSARY TO SATISFACTORILY COMPLETE THE WORKS.

B10/020 DESCRIPTION:

The site is a busy Waste Management Site (WMS) off Moor Well Lane, operated by the Council of the Isles of Scilly. The site includes a Householder Waste Recycling Centre, and the Moorwell Depot, where council vehicles are maintained. Several areas of the site require new hardstandings. Additionally, a new workshop area and access are required.

The WMS and Workshop will remain open to the site operatives and the public throughout the works. Opening times can be found here:

<http://www.scilly.gov.uk/environment-transport/waste/porthmellon-waste-managment-site#Opening%20Times>

B10/030 ACCESS TO SITE:

The property is accessed via Moor Well Lane, a narrow single lane public highway off Telegraph Road. At its narrowest point, Moor Well Lane is approximately 3.75m wide. Contractor and delivery vehicles will need to be of a suitable size to access the site.

Submit a tender stage method statement confirming proposals for access, following a tender stage inspection to ascertain site conditions.

B10/40 DISPOSAL OF ARISING:

The proposed works will result in a reasonably substantial volume of debris **which cannot be disposed of at the WMS free of charge.**

Where practical allow for recycling and reusing suitable materials from excavations, etc. in the project.

Allow for the hire and location of skips and remove of all waste and debris from site.

Dispose of all timber, steel, plastics and other recyclable material at an appropriate facility.

Dispose of all other arisings off site at licensed tip.

Allow for paying all charges.

B10/50 BUILDING REGULATIONS:

Payment of the Inspection Fee will be made by the Employer.

Allow for providing notification of commencement, contacting Building Control to arrange all necessary inspections for Building Regulations compliance and obtaining completion certificate.

COMPLETION CERTIFICATE

A certificate of compliance with the Building Regulations will be required at the handover of the Project.

SCHEDULE OF WORK**Project:** New Pavement 3 and Workshop Development**Reference:** JLA/5505-02**SECTION B
SCHEDULE OF WORKS**

£ p

B10/60 COMPLIANCE WITH CDM

Allow for complying with the CDM Regulations, including the preparation of Construction Phase Plan, the Health & Safety File & providing on site Welfare.

B10/70 HANDOVER PROCESS & BUILDING MANUAL:

Prepare and issue the Building Manual in full accordance with Preliminaries A37, presenting the data in the prescribed format, including the provision of all necessary certification.

Ensure that adequate resources are devoted to this critical activity, allow for all costs associated with this aspect of the Works, for giving timely notice to the ER to ensure attendance at commissioning and testing, and for training, explaining, demonstrating to Client the purpose, function and operation of the installations. THE WORKS WILL NOT BE DEEMED PRACTICALLY COMPLETED UNTIL THE BUILDING MANUAL HAS BEEN APPROVED AND ISSUED, WHICH MAY DELAY PAYMENT AND REDUCTION OF RETENTION FROM 5% TO 2.5%.

B10/80 DEFECTS LIABILITY PERIOD:

Ensure due allowance is made for attending in a timely manner to any defects that occur during the **6 month Defects Liability Period**, in accordance with the conditions of contract.

B20 PROTECTION AND PREPARATORY WORKS**B20/010 SITE SET UP:**

The working areas and contractor's compound within the WMS are to be demarcated & guarded to protect all site users, and to ensure the WMS remains open and operative throughout the Works. Provide & maintain an appropriate site boundary and temporary signage warning of construction works in progress.

Accept responsibility for any damage or disruption to WMS activities caused by lack of protection during the Works.

Put forward proposals for a Contractor's compound.

Allow for the provision of site facilities and for the safe storage of materials.

Submit a tender stage method statement confirming proposals for site security and interaction with other site users, following a tender stage inspection to ascertain site conditions.

B20/020 TEMPORARY SUPPORT:

Provide, maintain, alter and adapt temporary supports and scaffolding of adequate strength for access to, and to ensure the stability and safety of, the building, retaining structures and of any nearby services during the works.

B20/030 SITE CLEARANCE AND PROTECTION:

Provide screens and sheeting to protect the existing structures and pavings/grassed surfaces during the Works.

Allow for removal, temporary storage and replacement following construction of new hardstandings of material currently located in the M&R Hardstanding area.

B20/040 EXISTING SERVICES:

A check for services should be made prior to carrying out any excavation works. Scan and trace the routes of any services. Inform the ER where existing services will need to be diverted or protected.

In addition, include the following provisional sum for works to any existing services:

Provisional sum for works to divert and/or protect the existing services on the site subject to instruction by ER.

Service diversions are to be carefully planned and undertaken to minimise disruption to the Client, and to ensure that essential services are maintained by temporary means if necessary.

£5,000.00**Carry forward to Tender total**

SCHEDULE OF WORK**Project:** New Pavement 3 and Workshop Development**Reference:** JLA/5505-02**SECTION B
SCHEDULE OF WORKS**

£ p

B30 PAVEMENT 3: WORKSHOP HARDSTANDING**B30/10 GENERALLY:**

Carry out the works in accordance with the accompanying Specification.

Co-ordinate with the workshop improvements detailed in Section B60.**B30/20 SETTING OUT**

Check dimensions and levels shown on drawings for compatibility with each other and with the site. Inform ER of any discrepancy and seek instructions.

B30/30 PHASING OF WORKS:

The working area for this section requires access through the entrance to the Moorwell Depot. The depot must remain open **throughout** the works. Phase the works and put in place suitable site protection to maintain access to the existing end workshop bay insofar as possible and practical.

Submit a tender stage method statement confirming proposals for site security, phasing of works and interaction with workshop staff, following a tender stage inspection to ascertain site conditions.

B30/40 ENABLING WORKS:

Cut back to full depth and grub up edge of existing concrete pavements to neat edge for new pavements to abut against.

Cut back edge of existing concrete pavement to full depth along edge of existing Workshop slab/pad footing projection c.650mm from roller shutter door line.

Break up the existing concrete/hard surfaces providing access to Workshop in area of new pavements, taking care to prevent damage to service chamber.

Dispose of all arisings off site.

B30/50 EXCAVATION:

Complete reduced level excavations to design formations, in conjunction with new service runs. For tendering purposes, assume a general level of 325mm below existing ground for new pavement construction. Dispose of all arisings off site.

Note that formations are to be suitably protected as described in the Specifications, and additional payments will not be entertained if the formation deteriorates due to early exposure or lack of protection.

Arrange for ER to inspect and approve the formations.

SCHEDULE OF WORK**Project:** New Pavement 3 and Workshop Development**Reference:** JLA/5505-02**SECTION B
SCHEDULE OF WORKS**

£ p

B30/60 SWD INSTALLATIONLinear Drain 1

Construct linear drain along existing pavements as detailed on concrete bed and surround with movement joints each side, finished flush with existing pavements which have slight fall to north.

Linear drain to be ACO S100 constant fall units (0.6%) to provide sufficient gradient.

Provide and install ACO S100 sump unit at end of run with silt bucket

Overall length of linear drain including c.500mm long sump unit, c.20m.

Linear Drain 2

Construct linear drain along existing pavements against Workshop edge from service chamber as detailed on concrete bed and surround with movement joints each side, finished flush with existing pavements which have slight fall to north.

Linear drain to be ACO S100 constant fall units (0.6%) to provide sufficient gradient.

Provide and install ACO S100 sump unit at end of run with silt bucket

Overall length of linear drain including c.500mm long sump unit, c.17m.

MH S103 & Collection Pipework

Expose and confirm route, depth and position of spur 300mm dia. Rigidrain running to existing manhole. Advise ER and seek instruction to confirm new MH location drainage works if this differs from anticipated details shown on existing plan.

Construct new Type 2 MH S103 IAW SFA7 as detailed with D400 cover & frame.

Provide surface water installation as described and specified:

- 300mm dia. twin-wall PVC Rigidrain spur with sealed end projection from MH toward future MH S102 (Pavement 2)
- 100mm dia. carrier drains from linear drain sumps

Cover and protect all drains to prevent filling with debris during the works.

Test all drains, manholes and fittings prior to backfill and construction of new hardstandings, and on completion of the Works.

B30/70 SERVICES INSTALLATION – EXISTING COMMS CHAMBER:

Adjust existing service chamber cover and frame to suit finished levels.

B30/80 NEW CONCRETE PAVINGS:

Trim and prepare formations. Allow for importing suitable fill to make up to formation where required

Set out and construct new pavements in accordance with contract drawings and specification in indicated bay layout which assumes substantially "hit and miss" construction in bays due to lack of long runs. Agree any amendments to bay layout with ER.

Provide all necessary formwork and allow for c.80m² of new concrete pavements to the following construction:

- Lotrack 25R geotextile or equivalent on prepared formation
- 150mm minimum Type 1 granular sub-base
- 1200g polythene slip membrane
- 175mm PAV2 concrete finishes

Lay new pavings to falls to drainage channels and gulleys, and tie finished levels into existing pavements.

Forming dowelled expansion joints between the concrete bays as detailed on Drawing **5505/CD/210**.

New pavements will abut with the existing building floor slab/new linear drain 2 at Workshop openings and extend around existing pad and perimeter foundations.

SCHEDULE OF WORK**Project:** New Pavement 3 and Workshop Development**Reference:** JLA/5505-02**SECTION B
SCHEDULE OF WORKS**

£ p

B30/090 ABUTMENT WITH EXISTING BUILDING:

Construction details where new pavements abut the existing building and floor slabs will need to be reviewed after the existing pavements are grubbed up. Provisional proposals for regulating and preparing the external projecting pavements/pad footings out to the proposed Linear Drain 2 are described in B30/100 below and are to be fully costed.

Include the following Provisional Sum for alterations to construction details.

Provisional sum for alterations to the construction details for the abutment of new pavements and the existing workshop building fabric.
--

£5,000.00**Carry forward to Tender total****B30/0100 WORKSHOP EXTERNAL SLAB AND THRESHOLD (PROVISIONAL)**

The projecting concrete floor slab and pad footings are variable in condition and regularity. These are to be cut back to a neat vertical edge to allow new Linear Drain 2 to be constructed along the building entrances as far as an existing service pit as described above.

The existing concrete surfaces between the roller shutter door thresholds and the edge of the linear drains surround are to be prepared and finished with a heavy duty two-pack epoxy resin anti-slip traffic paint

Prepare the existing concrete by pressure washing and degreasing in strict accordance with the repair system manufacturer's instructions.

Refurbish the existing floor slab by regularising and grinding down existing surfaces to uniform level, with slight fall to linear drain, and repairing holes and minor cracks in cementitious epoxy mortars

Install new heavy duty two-pack epoxy resin anti-slip traffic paint coating in strict accordance with the manufacturer's instructions:

- Holes and areas of spalling: **Watco Concrex Epoxy Repair Mortar**
- Minor cracks (2-3mm wide): **Watco Fine Crack Filler**
- Finish coating: **Watco Heavy Duty two-pack epoxy resin anti-Slip Traffic Paint**

Allow for Yellow colour.

Confirm colour of finish coat with ER prior to procurement.

B30/0110 GROUND & SITE CLEARANCE:

On completion clear all debris from the site and remove arisings to tip.
Remove all traffic management signage, barriers, etc.
Leave site clean and tidy

SCHEDULE OF WORK**Project:** New Pavement 3 and Workshop Development**Reference:** JLA/5505-02**SECTION B
SCHEDULE OF WORKS**

£ p

B40 WORKSHOP IMPROVEMENTS**B40/10 GENERALLY:**

Carry out the works in accordance with the accompanying Specification.

Co-ordinate with the access hardstanding detailed in Section B50.**B40/20 INVESTIGATIVE WORKS:**

Arrange for ER to attend site and core drill 3No. 100mm trial holes through slab.

Core locations TBC on site in conjunction with ER. **The results of the cores will inform which of the two options below will be used.****B40/30 NEW OPENING TO EXISTING WORKSHOP:**

Form opening in existing block wall between the new and existing workshops. Set out the opening to suit a single 762mm (30") door leaf plus linings.

Needle over the opening location and install new 140x140mm Naylor S5 Hi-Spec PCC lintel or equivalent with min. 150mm bearings.

Carefully saw-cut the existing blockwork (assumed 150mm thick) and dispose of arisings off site.

B40/40 NEW PARTITION WALL – METAL STUDWORK:

Supply and construct full height metal framed studwork wall along Grid Line 3 as detailed.

Framing arrangement and final design details to be confirmed by supplier, detailed for door opening and around roller shutter door operator at high level.

Provide details for review and agreement by ER before confirming order.

Tender details assume Metsec SFS framing or equivalent

Studs: 150M18-75 @ 600mm c/c

With base rail, slotted head track and intermediate rails/door lintel IAW with suppliers details and to suit boarding.

Temporarily remove and support door operator cables and switches fixed to face of portal column.

Clean and prepare existing concrete base slab along line of new partition.

Set out, level, shim and fix base rail off existing slab on DPC with M12 resin anchors @ 800mm c/c. Dry pack mortar under rail to ensure full and continuous support to base rail each side.

Drill and bolt fix slotted head track to soffit of portal rafters and haunches.

Erect studwork framing IAW with suppliers details.

B40/50 INSULATION AND CLADDING TO NEW PARTITION WALL:

Infill between studs with mineral wool insulation.

Line metal studwork each side with 15mm Spruce Structural Plywood sheathing.

Overboard each face with 12mm non-combustible cement particle boarding RCM Multiboard or equivalent, staggering joints.

Ensure sheathing is taken past portal rafters and neatly trimmed/cut around purlins to underside of roof cladding.

Box out around columns above dado blockwork with sheathing, cutting and fitting around sheeting rails and eaves beams.

Apply intumescent sealant around gaps and joints to ensure adequate fire stopping.

Apply alkaline resistant primer to cement board and leave ready for decorative finishes.

SCHEDULE OF WORK**Project:** New Pavement 3 and Workshop Development**Reference:** JLA/5505-02**SECTION B
SCHEDULE OF WORKS**

£ p

B40/60 RENOVATE EXISTING SLAB - OPTION ONE:

Prepare the existing concrete by pressure washing and degreasing in strict accordance with the repair system manufacturer's instructions.

Refurbish the existing floor slab by repairing holes and minor cracks in cementitious epoxy mortars, and install new epoxy resin floor coating in strict accordance with the manufacturer's instructions:

- Holes and areas of spalling: **Watco Concrex Epoxy Repair Mortar**
- Minor cracks (2-3mm wide): **Watco Fine Crack Filler**
- Finish coating: **2 ct. Watco Epoxicote High Build 4L epoxy resin coating**

Allow for Light Grey RAL 7035 colour.

Confirm colour of finish coat with ER prior to procurement.

B40/70 REPLACEMENT SLAB - OPTION TWO:

Make neat and true saw-cuts in existing 150mm mesh-reinforced concrete slab where shown on the contract drawings. Carefully break up the slab and dispose of off site.

Inspect hardcore layer. Allow for digging out soft spots, ensuring minimum 150mm depth Type 1 subbase and compacting.

Place new 1200 gauge DPM over subbase, lapped up face of existing slab at abutments. Install new 18mm filler boards at abutments of new slab with existing concrete and internal walls as detailed.

Place new 150mm PAV2 concrete slab, with A393 mesh as detailed with power-floated finish to new concrete.

Finish edges of new slab with c. 20mm deep polysulphide joint sealant.

Cost for Option 2

DO NOT CARRY FORWARD TO TENDER TOTAL.

If Option 2 is selected the contract sum will be adjusted by OMITTING Option 1 B60/60 and ADDING this item B60/70

£

**Not to be included
in tender total**

B40/80 NEW DOORS:

Supply and hang new FD30 fire doors with glazed apertures in opening formed in the new partition wall and existing blockwork wall:

- Linings: Softwood FD30 rated
- Door leafs: **Howden Flush plywood glazed door Ref:DXF1360 or equivalent**
- Ironmongery: 1.5pr Grade 8 hinges to BS EN 1395
Panic latch to New Workshop sides
Opening handles to opposite sides
Fire-rated door closers

All ironmongery to be Certifire accredited.

For tender purposes allow the following:

- **£150 PC for supply of ironmongery to single door**
- **£250 PC for supply of ironmongery to double doors**

Include for all costs, including supply and installation of the new door leaves and linings.

SCHEDULE OF WORK

Project: New Pavement 3 and Workshop Development

Reference: JLA/5505-02

SECTION B SCHEDULE OF WORKS

£ p

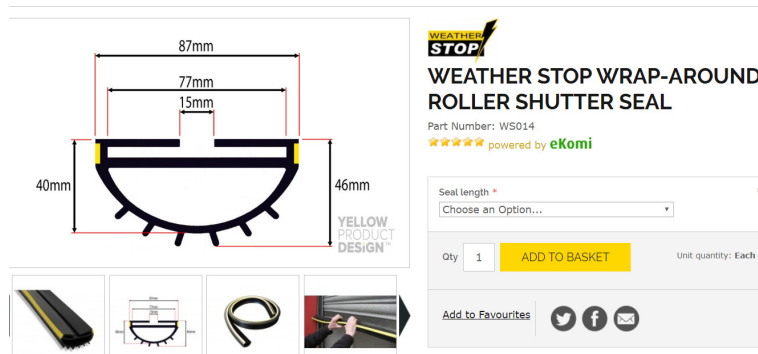
B40/90 ROLLER SHUTTER DOOR SEALS & THRESHOLD KITS

Door seals

Supply and fit "D" type door seals to base rail of all existing roller shutter doors (4Nr.) Obtain kits of required length for the shutters and trim to size where required.

Weather Stop Wrap Around Kit or equivalent suitable for standard 75mm T-bar bottom rails

https://www.weatherstop.co.uk/weather-seals-roller-shutter-seal.html?gclid=CjwKCAjw1f_pBRAEEiwApp0JKFlme5VIVEpgdJ2otjg7H-SIGij9cwOjqUtKMB9mrd0Wz6XjTRtXoxoCX6MQAvD_BwE

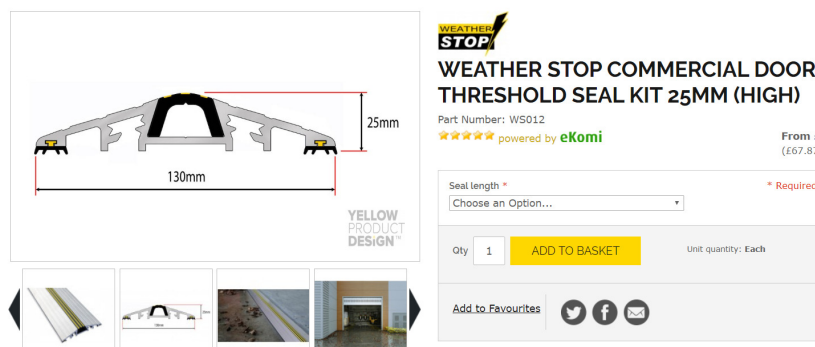


Threshold Kits

Supply and fit IAW suppliers instructions door threshold kits under all existing roller shutter doors (4Nr.) Obtain kits of required length for the shutters.

Weather Stop 25mm high Commercial Threshold Kit or equivalent

<https://www.weatherstop.co.uk/commercial-door-seals/weather-seals-commercial-threshold-25mm.html>



SCHEDULE OF WORK**Project:** New Pavement 3 and Workshop Development**Reference:** JLA/5505-02**SECTION B
SCHEDULE OF WORKS**

£ p

B40/100 ASSOCIATED M&E WORKS:

Arrange for an **NIC EIC Approved Contractor** to complete the following electrical works, including installation, testing and commissioning of new electrical services fixtures, fittings and outlets.

Review and confirm the required layout of the fixtures and fittings with Client prior to carrying out the work.

New cable runs and outlets are to be surface mounted.

Electrical works are to comply with BS 7671 / current IEE Regulations.

Install and commission the new service in accordance with the Non-Domestic Building Services Compliance Guide.

Allow for all costs involved, including profit and attendance of subcontractor.

- **Isolation and temporarily removal of cabling and door operator controls fixed to portal column on Grid 3**
- **4No. new wall mounted IP65-rated 58w T8 luminaires**
- **2-way switching for new lighting circuit**
- **6No. new double electrical sockets**
- **Reinstate door operator controls against new partition wall**

For tender purposes, assume new circuits can be run from spareways on the existing distribution board

Provide electrical test certificate on completion.

B40/110 ASSOCIATED DECORATIVE WORKS:

Provide paint colour samples and agree colour with ER.

Allow for all necessary preparatory work to ensure surfaces are suitable to receive finishes

Obtain coats of each painting system from the same supplier and use in accordance with their instructions.

PREPARATION GENERALLY:

Substrates: Sufficiently dry in depth to suit coating.

Efflorescence salts, dirt, grease and oil: Remove.

Surface irregularities: Abrade to a smooth finish.

Dust, particles and residues from abrasion: Remove.

COATING GENERALLY:

Application: To BS 6150, Section 5.

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.

WOOD PREPARATION:

General: Abrade to a smooth, even finish with lightly rounded arrises.

Degraded or weathered surface timber: Abrade to remove.

Degraded substrate timber: Repair with sound timber of same species.

Heads of fasteners: Countersink sufficient to hold stoppers/fillers.

Resinous areas and knots: Apply two coats of knotting.

Defective primer: Abrade back to bare wood and re-prime.

Location	Walls	Ceilings	Joinery & Metalwork
INTERNALLY			
New Workshop	1 mist +2cts Trade Matt emulsion or equivalent	N/A	Prime 1 u/ct, 1 top/ct gloss

B40/120 GROUND & SITE CLEARANCE:

On completion clear all debris from the site and remove arisings to tip.

Remove all traffic management signage, barriers, etc.

Leave site clean and tidy.

SCHEDULE OF WORK**Project:** New Pavement 3 and Workshop Development**Reference:** JLA/5505-02**SECTION C
SUMMARY OF TENDER**

£ p

A-PRELIMINARIES		AMOUNT (£ p)
Page A1 – A21	Preliminaries Generally	
Page A23	General Cost Items Provisional Sums & Contingencies	
B-THE WORKS		
Page B1		
Page B2		
Page B3		
Page B4		
Page B5		
Page B6		
Page B7		
Page B8		
Page B9		
TOTAL FOR TENDER		£

PRICES ARE TO INCLUDE ALL PROFIT AND OVERHEADS AND ARE NOT TO INCLUDE VAT.

NAME OF TENDERER	
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SCHEDULE OF DAYWORKS RATES

The following rates will apply to those hours worked when dayworks are directed. Any necessary standing time, travelling time, etc. is to be included in rates together with all overheads and profit and supervision.

LABOUR		
Tradesman	Gross rate/hour	£
Labourer	Gross rate/hour	£
MATERIALS		
	Percentage to be added to invoiced amounts	%
PLANT		
	Percentage to be added to invoiced amounts	%

PROJECT: NEW PAVEMENT 3 AND WORKSHOP DEVELOPMENT REFERENCE: JLA/5505-02
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Specification Worksections:.

Worksection	Title
D20	Excavation & Filling
E10	Insitu Concrete [See Q21 for external pavements]
E20-E41	Formwork, Reinforcement & Finishes
Q10	Kerbs & Channels
Q20	Granular Sub Base
Q21	Insitu Concrete Pavements
R12	Below Ground Drainage

SPECIFICATION

Project: Moorwell Depot Hardstandings and Workshop Alterations
Reference: JLA/5505

D20**D20 EXCAVATING AND FILLING****D20/006 GROUND WATER LEVEL**

Ground water level on the site is not known. Make all necessary enquiries concerning ground water level and allow for variations from that level. Take precautions to manage and control ground and surface water runoff from the site.

D20/10 PREPARATORY WORK

Trees, shrubs and hedges to be removed: Cut down, grub up main roots and fill voids.
Clear site of rubbish and vegetation. Grub up large roots.
Arisings: Remove from site.

D20/20 STRIPPING TOPSOIL

General: Excavate from areas where there will be re-grading or construction work.

- Remove to an average depth of: 150mm

D20/23 EXCAVATIONS AND BACKFILLING

Prior to commencing excavation: Excavate trial pits adjacent to existing foundations to determine extent and formation levels.

- Allow for inspection of trial pits.
- Allow time for amendment of details if required.

Requirement: Where excavations are close; complete all work including backfilling to the lower excavation before the higher excavation is made.

D20/25 INSPECTING FORMATIONS

Notice: Make advance arrangements for inspection of formations for:

- New concrete pavings
- New footing to workshop wall
- New slab to workshop

D20/30 OBSTRUCTIONS

Recorded foundations, beds, drains, etc: Break out and seal off drain ends. Remove contaminated earth.

Unrecorded foundations, beds, basements, filling, tanks, service pipes, drains, etc: Give notice.

D2035 EXCESS EXCAVATIONS

Excavation taken wider than required: Backfill with material from the excavations.

Excavation taken deeper than required: Backfill with Type 1 Subbase.

D20/036 EXCAVATION BELOW REQUIRED LEVEL – ROADS AND PAVINGS:

Where excavation is made below the required formation level, or when an excavated surface is damaged, softened or otherwise made unsuitable by Contractor's operations, re-excavate to an approved level and backfill with sub-base materials to formation level, laid and compacted as specified

D20/038 PREPARATION AND SURFACE TREATMENT:

prepare and surface treat formation after completion of any required sub-grade drainage and immediately prior to laying sub-base or roadbase where no sub-base is required as follows, unless otherwise agreed by the PM:

- clean mud and slurry from all surfaces after reinstatement of any soft areas.
- compact surface without using water by 4 passes of smooth wheeled roller of suitable load per unit width of roll for type of subsoil being compacted.
- regulate and trim formation surface smooth and to levels and cross section as shown within a tolerance of +0 to -50 mm.
- roll retrimmed formation by 1 pass of smooth-wheeled roller of suitable load per unit width of roll for type of subsoil being compacted or by vibratory compactor having base plate static load of not less than 1.4 tonnes per sq metre.
- where completed formation is not immediately covered by sub-base/roadbase material, seal by surface dressing in accordance with TRRL Road Note No 39, clause 8.6 or protect with polythene sheeting 0.125 mm thick.

SPECIFICATION

Project: Moorwell Depot Hardstandings and Workshop Alterations
Reference: JLA/5505

D20**D20/039 SERVICES UNDER ROADS & PAVEMENTS:**

Complete all services laid in trenches across roads and pavements prior to construction of sub-base.

D20/40 SURPLUS EXCAVATED MATERIAL

Topsoil: Dispose of off site
Remaining material: Dispose of off site.

D2050 HAZARDOUS, AGGRESSIVE OR UNSTABLE MATERIALS

Generally: Do not import or use fill materials which would, either in themselves or in combination with other material or ground water, give rise to a health hazard, damage to building structures or instability in the filling.

D20/53 WATER

General: Keep excavations free from water until formations are covered, foundations and below ground constructions are completed, and structures (including basements and retaining walls) are able to resist leakage, water pressure and flotation.

D20/55 PLACING FILL GENERALLY

Excavations and areas to be filled: Free from loose soil, rubbish and standing water.

Freezing conditions: Do not use frozen materials or materials containing ice. Do not place fill on frozen surfaces. Remove material affected by frost. Replace and recompact if not damaged after thawing.

Fill against structures, membranes or buried services: Place and compact in a sequence and manner which will ensure stability and avoid damage.

D20/60 BACKFILLING AROUND FOUNDATIONS

Under oversite concrete and pavings: Hardcore.

Under grassed or landscaped areas: Material excavated from the trench, laid and compacted in 300 mm layers.

D20/62 FROST SUSCEPTIBILITY

General: Except as allowed below, fill must be non frost-susceptible as defined in the 'Specification for highway works', clause 801.8.

Frost-susceptible fill: Use only within the external walls of buildings below spaces that will be heated. Protect from frost during construction.

D20/65 HARDCORE

Fill: Granular material, free from harmful matter and excessive dust or clay, well graded, all pieces less than 75 mm in any direction, and in any one layer only one of the following:

- Crushed hard rock (other than argillaceous rock) or quarry waste.
- Crushed concrete, brick or tile, free from plaster.
- Gravel or hoggin.

Filling: Spread and level both backfilling and general filling in layers not exceeding 150 mm. Thoroughly compact each layer.

D20/75 BLINDING TO HARDCORE

Surfaces to receive sheet overlays or concrete: Blind with:

- Concrete where shown on drawings; or
- Sand, fine gravel, or other approved fine material applied to provide a closed smooth surface.

Permissible deviation on surface level: +0 -25mm.

SPECIFICATION

Project: Moorwell Depot Hardstandings and Workshop Alterations
 Reference: JLA/5505

E10**E10 MIXING/ CASTING/ CURING IN SITU CONCRETE****E10/15 SPECIFICATION**

Concrete generally: To BS 8500-2

Exchange of information: Provide concrete producer with information required by BS 8500-1, clauses 4 and 5.

E10/20 DESIGNATED CONCRETE

Generally in accordance with BS 5328 and as follows:

Concrete for the Works will be described on the drawings and documents by Designated Mix Reference and where appropriate by Strength Class ie. GEN3 (C16/20)

Mixes may be either Designed, or Designated provided the Specification and BS requirements are met.

Designated Mix	Strength Class / Consistence Class	Specified Use in Works
GEN1 / ST2	C8/10 S1	Backfill, kerb bedding and backing Drainage works
GEN3	C16/20 S2/3	Trench fill foundations to workshop
PAV2	C28/35 S2/S3	Concrete pavements Floor slabs to workshop

E10/35 SUBSTITUTION OF STANDARDIZED PRESCRIBED FOR DESIGNATED CONCRETE

General: Conform to BS 8500-2, clause 9.

Substitution: In accordance with BS 8500-1, Table A.14.

- Proposals: Submit for each substitution, stating reasons.

Site mixing: Conform to BS 8000-2.1, subsections 2, 3 and 4.

E10/45 PROPERTIES OF FRESH CONCRETE

Adjustments to suit construction process: Determine with concrete producer. Maintain conformity to the specification.

E10/50 PREMATURE WATER LOSS

Requirement: Prevent water loss from concrete laid on absorbent substrates.

- Underlay: Polyethylene sheet 250 micrometres thick.
- Installation: Lap edges 150 mm.

E10/60 PLACING AND COMPACTING

Surfaces to receive concrete: Clean, no debris, tying wire clippings, fastenings or free water.

Timing: Place as soon as practicable after mixing while sufficiently plastic for full compaction.

Temperature limitations for concrete: 30°C (maximum) and 5°C (minimum). Do not place against frozen or frost covered surfaces.

Compaction: Fully compact to full depth to remove entrapped air especially around reinforcement, cast-in accessories, into corners of formwork and at joints. Continue until air bubbles cease to appear on the top surface.

- Methods of compaction: To suit consistence class and use of concrete.

SPECIFICATION

Project: Moorwell Depot Hardstandings and Workshop Alterations
Reference: JLA/5505

E10**E10/70 CURING AND PROTECTING**

Evaporation from surfaces of concrete: Prevent throughout curing period.

- Surfaces covered by formwork: Retain formwork in position and, where necessary to satisfy curing period, cover surfaces immediately after striking.
- Top surfaces:
Pavements – apply curing compound IAW suppliers recommendations Sika Antisol or equivalent
Other surfaces – cover immediately after placing and compacting. Replace cover immediately after any finishing operations.

Curing periods:

- Surfaces which in the finished building will be exposed to the elements, and wearing surfaces of floors and pavements: **10 days (minimum)**.
- Other structural concrete surfaces: 5 days (minimum).

Protection: Protect concrete from shock, indentation and physical damage.

WORKMANSHIP**E10/110 HANDLING AND STORAGE:**

Obtain cement in sealed bags or containers.

E10/120 FROZEN MATERIALS:

Do not use frozen or frost covered materials.

E10/130 READY MIXED CONCRETE:

Provide ready mixed concrete supplier with the information appropriate to each mix specified for the Works

Production plant: Currently certified by a body with UKAS accreditation to BS EN ISO/IEC 17065

Source of ready mix concrete: Obtain from one source if possible. Otherwise submit proposals

Name & address of Depot: Submit before concrete is delivered

Delivery Notes: Retain for inspection delivery tickets for each batch of concrete. The use of the concrete specified by the Contractor shall be written on the ticket immediately after the mix designation. eg. **PAV2(R)** U-Unreinforced, R-Reinforced

E10/150 APPROVAL TO POUR:

Obtain approval before starting each pour of concrete.

E10/180 FROST DAMAGE:

Remove and replace concrete damaged by frost.

SPECIFICATION

Project: Moorwell Depot Hardstandings and Workshop Alterations
Reference: JLA/5505

E20-41**E20 FORMWORK FOR IN SITU CONCRETE****E20/010 WORK BELOW GROUND:**

Vertical faces of strip footings, bases and slabs may be cast against faces of excavation, provided the faces are sufficiently accurate and stable and adequate measures are taken to prevent contamination of concrete.

E20/70 FORMWORK

General: Accurately and robustly constructed to produce finished concrete to the required dimensions.

Formed surfaces: Free from twist and bow with intersections, lines and angles square, plumb and true.

Joints between forms and completed work: Prevent loss of grout and formation of steps.

Holes and chases: Form with inserts or box out as required.

E30 REINFORCEMENT FOR IN SITU CONCRETE**E30/30 FABRIC REINFORCEMENT TO CONCRETE PAVEMENTS AND WORKSHOP SLAB**

Designation: A393

Standard: To BS 4483.

Strength grade: B500B.

E30/40 CONDITION OF REINFORCEMENT

At time of placing concrete: Free from corrosive pitting, loose millscale, loose rust and contaminants which may adversely affect the reinforcement, concrete, or bond between the two.

E30/55 LAPS IN REINFORCEMENT

Laps in fabric reinforcement (minimum): 40 x diameter of bars

E30/70 FIXING REINFORCEMENT

Standard: To BS 7973-1 and -2.

Installation: Provide adequate support, tie securely and maintain the specified cover.

- Tying wire: 16 gauge black annealed. Prevent intrusion into the concrete cover.

E41 WORKED FINISHES TO IN SITU CONCRETE**E41/10 FINISHING**

Timing: Carry out at optimum times in relation to setting and hardening of concrete.

Prohibited treatments to surfaces:

- Wetting to assist surface working.
- Sprinkling cement.

E41/20 SMOOTH POWER FLOATED FINISH – WORKSHOP SLAB (ASSUMING NEW SLAB)

Surface on completion: Even, with no ridges or steps.

E41/40 BRUSHED FINISH FOR WEARING SURFACES – CONCRETE PAVEMENTS (SEE Q21)

Surface on completion: Light, even texture.

SPECIFICATION

Project: Moorwell Depot Hardstandings and Workshop Alterations
 Reference: JLA/5505

Q10**Q10 KERBS/ EDGINGS/ CHANNELS/ PAVING ACCESSORIES****Q10/10 PRECAST CONCRETE KERBS**

To BS EN 1340.

Method of manufacture: Wet press process.

Manufacturer and reference: Marshalls Concrete Products or equivalent

Type/size: 125x255 half-battered (Ref: 125x255 HB2)

Finish/colour: Plain

Joints: Butted

Q10/015 PRECAST CONCRETE CHANNELS

To BS EN 1340.

Method of manufacture: Wet press process.

Manufacturer and reference: Marshalls Concrete Products or equivalent

Type/size: 255x125 (Ref: 255x125 CD)

Finish/colour: Plain

Joints: Butted

Q10/40 LAYING KERBS, EDGINGS AND CHANNELS

Cutting: Neat and accurate and without spalling. Form neat junctions.

Bedding and backing of units: Either of the following: Bedded on mortar laid on hardened concrete base. Bedding mortar allowed to set and units secured with a continuous haunching of concrete.

- Bedded on fresh concrete races to BS 7533-6, secured with backing concrete cast monolithically with concrete race.

Concrete for foundations and haunching:

- Standard: To BS 8500-2.
- Designated mix: Not less than GEN0 or Standard mix ST1 or better, low workability.

Mortar bedding: 1:3 cement:sand as section Z21.

- Bed thickness: 12-40 mm.

Q10/45 ACCURACY

Deviations (maximum):

- Level: ± 6 mm.
- Horizontal and vertical alignment: 3 mm in 3 m.

Q10/50 TOOLED MORTAR JOINTS

Jointing: Ends of units buttered with bedding mortar as laying proceeds. Joints completely filled and tooled to a neat flush profile.

- Joint width: 6 mm.

Q10/80 REGULARITY OF PAVED SURFACES

Maximum undulation of (non-tactile) paving surface: 3 mm.

- Method of measurement: Under a 1 m straight edge placed anywhere on the surface (where appropriate in relation to the geometry of the surface).

Difference in level between adjacent units (maximum):

- Joints flush with the surface: Twice the joint width (with 5 mm max difference in level).
- Recessed, filled joints: 2 mm.
- Recess depth (maximum): 5 mm.
- Unfilled joints: 2 mm.

Sudden irregularities: Not permitted.

SPECIFICATION

Project: Moorwell Depot Hardstandings and Workshop Alterations
 Reference: JLA/5505

Q20**Q20 GRANULAR SUB-BASES TO ROADS/ PAVINGS****Q20/10 THICKNESSES OF SUB-BASES**

Thicknesses: As specified in the relevant paving section.

Q20/30 EXCAVATION AND COMPACTION OF SUBGRADES

Final excavation to formation level: Carry out immediately before compaction of subgrade.

Soft spots and voids: Give notice.

Wet conditions: Do not excavate or compact when the subgrade may be damaged or destabilized.

Compaction: Thoroughly, by roller or other suitable means, adequate to resist subsidence or deformation of the subgrade during construction and of the completed roads/ pavings when in use. Take particular care to compact fully at intrusions, perimeters and where local excavation and backfilling has taken place.

Q20/040 TYPE 1 GRANULAR SUB-BASE:

Crushed rock, crushed slag, crushed concrete or well-burnt non-plastic shale and:

- within the following grading limits:

BS Sieve	Percentage passing (by weight)
75.0 mm	100
37.5 mm	85 - 100
10.0 mm	40 - 70
5.0 mm	25 - 45
600 micron	8 - 22
75 micron	0 - 10

- material passing 425 micron sieve to be non-plastic when tested to BS 1377;
- particle size distribution to BS 812: Part 103.1.

Q20/45 LAYING AND COMPACTING SUB-BASES

Subgrade: Not frozen and free from loose soil, rubbish and standing water.

Structures, membranes and buried services: Ensure stability and avoid damage.

General: Spread and level in layers.

Compaction:

- Timing: As soon as possible after laying.
- Method: By roller or other suitable means, adequate to resist subsidence or deformation of the sub-base during construction and of the completed paving when in use. Take particular care to compact fully at intrusions, perimeters and where local excavation and backfilling has taken place.

Q20/50 ACCURACY

Permissible deviation from required levels, falls and cambers (maximum):

- Subgrade: ± 20 mm.
- Sub-base: ± 12 mm.

Q20/60 SURFACES TO RECEIVE SAND BEDDING FOR PAVING

Blind surface: As necessary before compaction to ensure that surface is tight and dense enough to prevent laying course sand being lost into it during construction or use.

Material: Sand or PFA.

Q20/70 PROTECTION

Sub-bases: As soon as practicable, cover with subsequent layers, specified elsewhere.

Subgrades and sub-bases: Prevent degradation by construction traffic, construction operations and inclement weather.

Q20/90 TRAFFIC:

Do not allow traffic on sub-base unless authorised by EA.

SPECIFICATION

Project: Moorwell Depot Hardstandings and Workshop Alterations
Reference: JLA/5505

Q20**COMPACTION TABLE**

Q20/100 TYPE 1, TYPE 2 AND HARDCORE SUB-BASES
CEMENT BOUND MATERIAL 1 & 2 (CBM1 & CBM2) SUB-BASES

Type of Compaction plant	Category	Minimum No. of passes for layers of compacted thickness not greater than:		
		110 mm	150	225
Smooth wheeled roller	Load per metre width of roll: tonnes:			
	Over 2.7 up to 5.4	16	-	-
	Over 5.4	8	16	-
Pneumatic- tyred roller	Load per wheel: tonnes			
	Over 4 up to 8	12	-	-
	Over 8 up to 12	10	16	-
	Over 12	8	12	-
Vibrating roller	Static load per metre width of roll: tonnes:	16	-	-
	Over 0.7 up to 1.3	6	16	-
	Over 1.3 up to 1.8	4	6	10
	Over 1.8 up to 2.3	3	5	8
	Over 2.3 up to 3.6	2	4	6
	Over 3.6			
Vibrating- plate compactor	Static load per sq metre of baseplate: tonnes:	8	-	-
	Over 1.4 up to 1.8	5	8	-
	Over 1.8 up to 2.1	3	6	10
	Over 2.1			
Vibro tamper	Static load: kg			
	Over 50 up to 65	4	8	-
	Over 65 up to 75	3	6	10
	Over 75	2	4	8
Power Rammer	Load: kg			
	Over 100	5	8	-
	Over 500	5	8	12

SPECIFICATION

Project: Moorwell Depot Hardstandings and Workshop Alterations
 Reference: JLA/5505

Q22**Q21 IN SITU CONCRETE ROADS/PAVINGS/BASES****TYPES OF PAVING****Q21/115 PAVING WITH EMBEDDED METAL (DESIGNATED CONCRETE)**

Subgrade improvement layer: Not required

Compacted thickness: N/A

Geotextile filter: Lotrack 25R

Granular sub-base: HA Type 1 unbound mixture

Compacted thickness: 150mm

Separation membrane: Polyethylene sheet 125 micrometres thick, edges lapped 300 mm.

Embedded metal: Mesh reinforcement to BS 4483 Type A393, free from oil, dirt, loose rust and scale

Concrete: To BS 8500-2.

Designation: **PAV2 (R)**

Fibres: Not required

Aggregate: 20mm nominal size

Size (maximum):

Coarse recycled concrete aggregate: Not permitted

Additional aggregate requirements:

Consistence class **S2/S3**

Slab thickness (minimum): **175mm**

Finish: Brush textured as HA SHW Clause 1026

GENERAL/PREPARATION**Q21/140 READY-MIXED CONCRETE**

Production plant: Currently certified by a body accredited by UKAS to BS EN ISO/IEC 17065 for product conformity certification.

Source of ready-mixed concrete: Obtain from one source if possible. Otherwise, submit proposals.

Name and address of depot: Submit before any concrete is delivered.

Delivery notes: Retain for inspection.

Declarations of nonconformity from concrete producer: Notify immediately.

Q21/240 SUB-BASE PREPARATION

Surface: Sound free of debris, mud and soft spots and suitably close textured.

Levels and falls: Within specified tolerances:

Vehicular areas: ± 20 mm.

Pedestrian areas: ± 12 mm

Drainage outlets: $-+0 -10$ mm of required finished level.

Kerbs and edgings: Complete, adequately bedded and haunched, and to required levels.

Q21/250 LAYING FABRIC REINFORCEMENT

Flatness: Lay in flat sheets, straight and out of winding.

Main reinforcement: Parallel to long axis of slab.

Temporary support: Securely fix and support fabric during construction of slab.

Lapping at joints (minimum):

- Longitudinal bars: 450mm

- Transverse bars: 450mm

Extent of fabric: Fully within slab.

Stopping short of slab edges by: 60mm +/- 20mm

Stopping short of centre line of transverse joints by: 100mm +/-20mm

Stopping short of centre line of longitudinal joints: 100mm +/-20mm

SPECIFICATION

Project: Moorwell Depot Hardstandings and Workshop Alterations
Reference: JLA/5505

Q20**Q21/260 STEEL FORMWORK**

Side forms: Steel drilled for dowel bars, free from warping and kinks.

Fixing:

To required line, ± 10 mm.

To required level, ± 3 mm.

Locking plates: Use where necessary to ensure rigidity and prevent movement during laying and compaction of concrete.

Removal of forms: Six hours (minimum) after completing compaction. Treat exposed edges with waterproof compound.

Q21/265 TIMBER PERMANENT FORMWORK

Side forms: Softwood board.

Location: For small areas only, steel forms preferred

Fixing: Galvanized nails to 50 x 50 x 450 mm long softwood pegs driven into the ground at 1200 mm centres.

LAYING CONCRETE**Q21/310 TRANSPORTING CONCRETE**

General: Avoid contamination, segregation, loss of ingredients, excessive evaporation and loss of workability. Protect from heavy rain.

Entrained air: Anticipate effects of transport and placing methods in order to achieve specified air content.

Placing: Use suitable walkways and barrow runs for traffic over reinforcement and freshly placed concrete.

Q21/320 LAYING CONCRETE GENERALLY

Timing: Place as soon as practicable after mixing and while sufficiently plastic for full compaction. After discharge from the mixer do not add water or retemper.

Temperature of concrete at point of delivery:

In hot weather (maximum): 30°C.

In cold weather (minimum): 5°C.

Cold weather

Do not use frozen materials.

Do not place concrete against frozen or frost covered surfaces.

Do not place concrete when air temperature is below 3°C on a falling thermometer. Do not resume placing until rising air temperature has reached 3°C.

Surfaces on which concrete is to be placed: Free from debris and standing water.

Placing in final position: Place in one continuous operation up to construction joints.

Do not place concrete simultaneously on both sides of movement joints.

Spreading: Spread and strike off with surcharge sufficient to obtain required compacted thickness.

Adjacent work: Form neat junctions and prevent damage.

Keep clean all channels, kerbs, inspection covers, etc.

Q21/330 COMPACTING

General: Fully compact concrete to full depth (until air bubbles cease to appear on the surface) especially around reinforcement, cast-in accessories, into corners and at joints.

Poker vibrators: Do not use to make concrete flow into position. Do not allow to come into contact with fabric reinforcement.

Wet formed joint grooves: Rectify any irregularities by means of a vibrating float.

Finish: A dense, even textured surface free from laitance or excessive water.

Excess concrete: Remove from top of groove formers.

Q21/340 MANHOLE COVER AND GULLY GRATING FRAMES

General: Set frames in independent concrete slabs placed over, but slightly larger than, exterior of manhole shaft or gully pot and any concrete surround.

Positioning of joints in main slab: Set out so that manhole/gully slabs area adjacent to a main transverse joint, wherever possible.

Joints: Separate the independent slabs from main slabs with 25 mm thick joint filler board. Set board 20 mm below top of slab to form a sealing groove.

SPECIFICATION

Project: Moorwell Depot Hardstandings and Workshop Alterations
Reference: JLA/5505

Q20**Q21/350 LEVELS**

Lines and levels of finished surface: Smooth and even, with regular falls to prevent ponding.
Finished surfaces: Within ± 6 mm of required levels (+6 or -0 mm adjacent to gullies and manholes).

Q21/360 SURFACE REGULARITY

General: Where appropriate in relation to the geometry of the surface, the variation in gap under a 3 m straightedge (with feet) placed anywhere on the surface to be not more than 5 mm.
Sudden irregularities: Not permitted.

JOINTS**Q21/410 JOINTS GENERALLY**

Layout: All joints to be accurately located, straight and well aligned.
Construction joints made at end of working day: Form as contraction joints.
Modifications to joint design or location: Submit proposals.
Temporary support: Prior to concreting, set formwork, dowel bars, tie bars, joint filler boards, sealing groove fillets and the like rigidly in position and support to prevent displacement.
Maintain support until concrete has set.
Keep clean:
Do not allow concrete to enter any gaps or voids in formwork or to render movement joints ineffective.
Do not allow concrete to impregnate or penetrate materials used as compressible joint fillers.

Q21/430 DOWEL BARS

Standard:
Material/ Designation: S/steel to BS6744
Strength: 500MPa
Profile: Plain, round.
Condition: Free from oil, dirt, loose rust and scale.
Bar dimensions: 20mm diameter, 400mm long
Location: Place dowel bars in movement joints at mid depth of the slab ± 20 mm, centred at joint and at 300 mm centres.
Bars to be parallel to longitudinal axis and top surface of the slab.
Misalignment tolerance per 300 mm length of dowel bar:
Debonding of bars: Plastic sleeve covering not less than 0.6mm thick, or flexible polymeric coating as HA SHW Clause 1011(7)
Bars in expansion joints: Provide 100 mm long plastics caps for free bar movement. Before placing concrete, ensure there is a space between the end of the cap and the end of the dowel bar 10 mm greater than the thickness of the joint filler board.

Q21/440 LONGITUDINAL CONSTRUCTION JOINTS

Definition: Longitudinal joints are those parallel to the main axis of the paving.
Standard: To Concrete Society Technical Report 28.
Completion; Round upper edges of slabs at joints to 5 mm radius. Do not overwork concrete.

Q21/470 EXPANSION JOINTS

Joint filler board.
Type; Bitumen impregnated fibre board
Standard: To Highways Agency Specification for Highway Works', clause 1015.
Thickness: 18 mm.
Depth; Joint filler boards must expand from underside of sealing groove fillet to full depth of slab to provide complete separation of adjacent slabs.
Holes for dowel bars: Accurately bored or punched holes to form a sliding fit for dowel bars.
Completion; Round upper edges of slabs at joints to 5 mm radius. Do not overwork concrete.

SPECIFICATION

Project: Moorwell Depot Hardstandings and Workshop Alterations
Reference: JLA/5505

Q20**SURFACE FINISH****Q21/530 BRUSHED FINISH**

Direction: To align with existing adjacent bays unless otherwise instructed

Texture depth: Approximately 1 mm with finished surface having an overall even texture.

CURING/ PROTECTION/ FINISHING**Q21/610 CURING**

General: Immediately after completion of surface treatment prevent evaporation from surface and exposed edges or slabs for a minimum period of **seven days**.

Early curing;

Cover with waterproof sheeting held clear of surface. Seal against draughts at edges and junctions. Do not apply sprayed compounds or sheets in direct contact until surface is in a suitable state and will not be marked.

Covering for curing; Contractor's choice of:

Impervious sheet material.

Resin based aluminized curing compound containing a fugitive dye and with an efficiency index of 90% when tested to BS 7542.

Sprayed plastics film.

Q21/650 COLD JOINT SEALING

Sealant:

Either; To BS 5212-1, type N

Or; To BS EN 14188-2, class A

Provide a manufacturer's certificate of compliance.

Application; Prepare joints and apply sealant in accordance with BS 5212-2.

Q21/660 PROTECTION

Prevent damage to concrete;

From rain, indentation, physical damage, dirt, staining, rust marks and other disfiguration.

From thermal shock.

In cold weather, from freezing expansion of water trapped in pockets, etc.

By use as a building platform or for storing, mixing or preparing materials.

SPECIFICATION

Project: Moorwell Depot Hardstandings and Workshop Alterations
 Reference: JLA/5505

R12**R12 BELOW GROUND DRAINAGE SYSTEMS****R12/02 EXISTING DRAINS**

Setting out: Before starting work, check levels and positions of existing drains, inspection chambers and manholes against drawings. Report discrepancies.

R12/04 IN SITU CONCRETE FOR USE IN DRAINAGE BELOW GROUND

Standard: To BS 8500-2. Concrete: As **E10/20**.

R12/14 PLASTICS PIPELINES

Pipes, bends and junctions: PVC-U to BS EN 1401-1.

Sizes: 150mm, 300mm .

Bedding class:

- **Class S** Generally, and under roads and pavings with min 750 over
- **Class Z** Under roads and pavings (less than 750 cover)

Warning marker tape: **150mm wide red polyethylene with stainless steel trace wire**

R12/19 EXCAVATING PIPE TRENCHES

Trench from bottom up to 300 mm above crown of pipe: With vertical sides.

- Width: As small as practicable but not less than external diameter of pipe plus 300 mm.

Type of subsoil: Where the type of subsoil at the level of the crown of the pipe differs from that stated for the type of pipeline, give notice.

Timing: Excavate to formation immediately before laying beds or pipes.

Mud, rock projections, boulders & hard spots: Remove. Replace with bedding material.

Local soft spots: Harden by tamping in bedding material.

R12/21 BEDDING AND JOINTING

Laying pipes: To true line and regular gradient on even bed for full length of barrel with sockets (if any) facing up the gradient.

Jointing: Lubricate. Leave gaps at ends of spigots to allow for movement.

R12/58 INSTALLATION OF FITTINGS

Appearance: Square with and tightly jointed to adjacent construction as appropriate.

Bedding and surround of fittings, traps, etc: Concrete, 150 mm thick.

Permissible deviation in level of gullies: +0 to -10mm.

R12/84 TESTING AND INSPECTION GENERALLY

Obstructions and debris: Remove. Check that the installation is clear before testing.

R12/88 FINAL TESTING OF DRAINS

Method: Block open ends of pipelines to be tested and pressurise. Air test short lengths to BS EN 1610.

R12/89 WATER TESTING OF MANHOLES AND INSPECTION CHAMBERS

Timing: Before backfilling.

Standard:

- Exfiltration: To BS EN 1610, water testing (method W).
- Infiltration: No identifiable flow of water penetrating the chamber.

R12/91 BACKFILLING TO PIPELINES GENERALLY

Backfill from top of surround or protective cushion: Material excavated from trench, compacted in 300 mm layers. Do not use heavy compactors before there is 600 mm of material over pipes.

R12/94 BACKFILLING UNDER ROADS AND PAVINGS

Backfill from top of specified surround or protective cushion up to formation level: Well graded gravel or hardcore passing a 75 mm sieve, well compacted in 150 mm layers.

R12/97 CLEANING

General: Flush out the whole installation and remove silt & debris immediately before handing over.

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 Liskeard Business Park
 LISKEARD
 Cornwall PL14 3UX
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 Facsimile: 01579 344882

The Drawings:.

Drawing No	Revision	Title
5505/CB/100	D	Existing Site Plan
5505/CB/101	D	Pavement Layout Existing Plan
5505/CB/201	D	Pavement Proposals
5505/CB/202	€	Pavement Area 1 OMITTED
5505/CB/203	€	Pavement Area 2 OMITTED
5505/CB/204	D	Pavement Area 3
5505/CB/205	A	Pavement Area 3 - Detail
5505/CD/210	D	Pavement Construction Details
5505/XB/101	D	Workshop Floor Plan & Block plan
5505/XB/102	D	Workshop Development Proposals



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NOTES:

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2. IF IN DOUBT ASK.
3. This drawing is to be read in conjunction with all other relevant Contract Documents.

Topographical survey by
Cornish Engineering Surveys.

Additional data added from
Drawing JKK8520-06(J)
NOTE
Some discrepancies exist
between this and as-built
construction and works not
completed in full

HEALTH, SAFETY & ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the nature and scope of the proposed Works, note the following:

Construction Hazards:

1. Restricted access/interface with site users and public. Access to site and adjacent properties to be maintained. Erect site fencing around working areas and compound.
2. Excavations, concrete cutting and breaking out, drilling and installing dowel rebars – IAW RAMS with dust control and regard to HAV
3. Existing services – drainage, comms & power.
4. Working adjacent to watercourse, high ground water level/potential flood risk in bad weather.
5. Pollution.
Watercourse to be protected IAW PPG5
6. Drainage works/ground & surface water.
Leptospirosis/Drowning risk in bad weather.

Maintenance, Cleaning and Removal:

No significant additional requirements identified for future works not already identified above

Maintain drainage infrastructure by routine clearance of gullies, surmps and gratings

It is assumed that all works will be carried out by a competent contractor working in accordance with an accepted Construction Phase Plan and, where appropriate, to approved method statements

D	TENDER DRAWING	31.07.19
C	WD	27.06.19
B	WD FOR CLIENT REVIEW	29.03.19
A	PRELIMINARY	25.02.19
Amat:		Date

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Project

**MOORWELL DEPOT
ST. MARYS
ISLES of SCILLY
TR21 OLV**

Title

EXISTING SITE PLAN

Client

COUNCIL OF ISLES OF SCILLY

Date	Scale @ A1	Cad Ref.
05.02.2019	AS SHOWN	5505CB100
Designed	Drawn	Checked
JWL	AJR	JWL

Drawing Number	Rev
5505/CB/100	31/07/2019 16:53 PM D

NOTES:

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2. Excavations, concrete cutting and breaking out, drilling and installing dowel rebars – IAW RAMS with dust control and regard to HAV
3. Existing services – drainage, comms & power.
4. Working adjacent to watercourse, high ground water level/potential flood risk in bad weather.
5. Pollution. Watercourse to be protected IAW PPG5
6. Drainage works/ground & surface water. Leptospirosis/Drowning risk in bad weather.

Maintenance, Cleaning and Removal:

No significant additional requirements identified for future works not already identified above

Maintain drainage infrastructure by routine clearance of gullies, sumps and gratings

It is assumed that all works will be carried out by a competent contractor working in accordance with an accepted Construction Phase Plan and, where appropriate, to approved method statements



EXISTING SITE PLAN
1:100

D	TENDER DRAWING	31.07.19
C	WD	27.06.19
B	WD FOR CLIENT REVIEW	29.03.19
A	PRELIMINARY	19.02.19
Amat:		Date



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Project
MOORWELL HARDSTANDINGS
ST. MARYS
ISLES of SCILLY
TR21 OLW

PAVEMENT LAYOUT
EXISTING PLAN

Client
COUNCIL OF ISLES OF SCILLY

Date
05.02.2019

Scale @ A1
AS SHOWN

Cod Ref.
5505CB101

Designed
JWL

Drawn
AJR

Checked
JWL

Drawing Number
5505/CB/101

Rev
31/07/2019 16:53 PM
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HEALTH, SAFETY & ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the nature and scope of the proposed Works, note the following:

Construction Hazards:



1. Restricted access/interface with site users and public. Access to site and adjacent properties to be maintained. Erect site fencing around working areas and compound.
2. Excavations, concrete cutting and breaking out, drilling and installing dowel rebars – IAW RAMS with dust control and regard to HAV
3. Existing services – drainage, comms & power.
4. Working adjacent to watercourse, high ground water level/potential flood risk in bad weather.
5. Pollution. Watercourse to be protected IAW PPG5
6. Drainage works/ground & surface water. Leptospirosis/Drowning risk in bad weather.

Maintenance, Cleaning and Removal:

No significant additional requirements identified for future works not already identified above

Maintain drainage infrastructure by routine clearance of gullies, sumps and gratings

It is assumed that all works will be carried out by a competent contractor working in accordance with an accepted Construction Phase Plan and, where appropriate, to approved method statements

E1 Sub Sta

Pavement Joints
Assume all joints are dowelled Movement or Isolation Joints with filler board and joint sealant
Amendments to bay and joint layout and joint type subject to agreement with Employers Representative

Pavement 1
HWRC Hardstanding
175mm PAV2 mesh reinforced concrete on;
1200g slip membrane on;
150mm minimum Type 1 granular sub-base (803) on;
Lotrak 25R geotextile on prepared formation
NOT INCLUDED IN THIS CONTRACT

Pavement 2
M&R Hardstanding
175mm PAV2 mesh reinforced Concrete on;
1200g slip membrane on;
150mm minimum Type 1 granular sub-base (803) on;
Lotrak 25R geotextile on prepared formation
NOT INCLUDED IN THIS CONTRACT

Pavement 3
Workshop Concrete Hardstanding
175mm PAV2 mesh reinforced concrete on;
1200g slip membrane on;
150mm minimum Type 1 granular sub-base (803) on;
Lotrak 25R geotextile on prepared formation
SEE DRAWING 5505/CB/300 FOR DETAILS

— SWD — As built
— SWD — Assumed, TBC
— SWD — New

— SWD — As built
— SWD — Assumed, TBC
— SWD — New

PROPOSED SITE PLAN
1:100

D	TENDER DRAWING	31.07.19
C	WD	27.06.19
B	WD FOR CLIENT REVIEW	29.03.19
A	PRELIMINARY	18.03.19



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Project
MOORWELL HARDSTANDINGS
ST. MARYS
ISLES of SCILLY
TR21 OLW

Title
PAVEMENT PROPSALS
MOORWELL HWRC

Client
COUNCIL OF ISLES OF SCILLY

Date	Scale @ A1	Cad Ref.
05.02.2019	AS SHOWN	5505CB201
Designed	Drawn	Checked
JWL	AJR	JWL
Drawing Number	Rev	
5505/CB/201	31/07/2019 16:53 PM	
	D	

NOTES:

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HEALTH, SAFETY & ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the nature and scope of the proposed Works, note the following:

Construction Hazards:



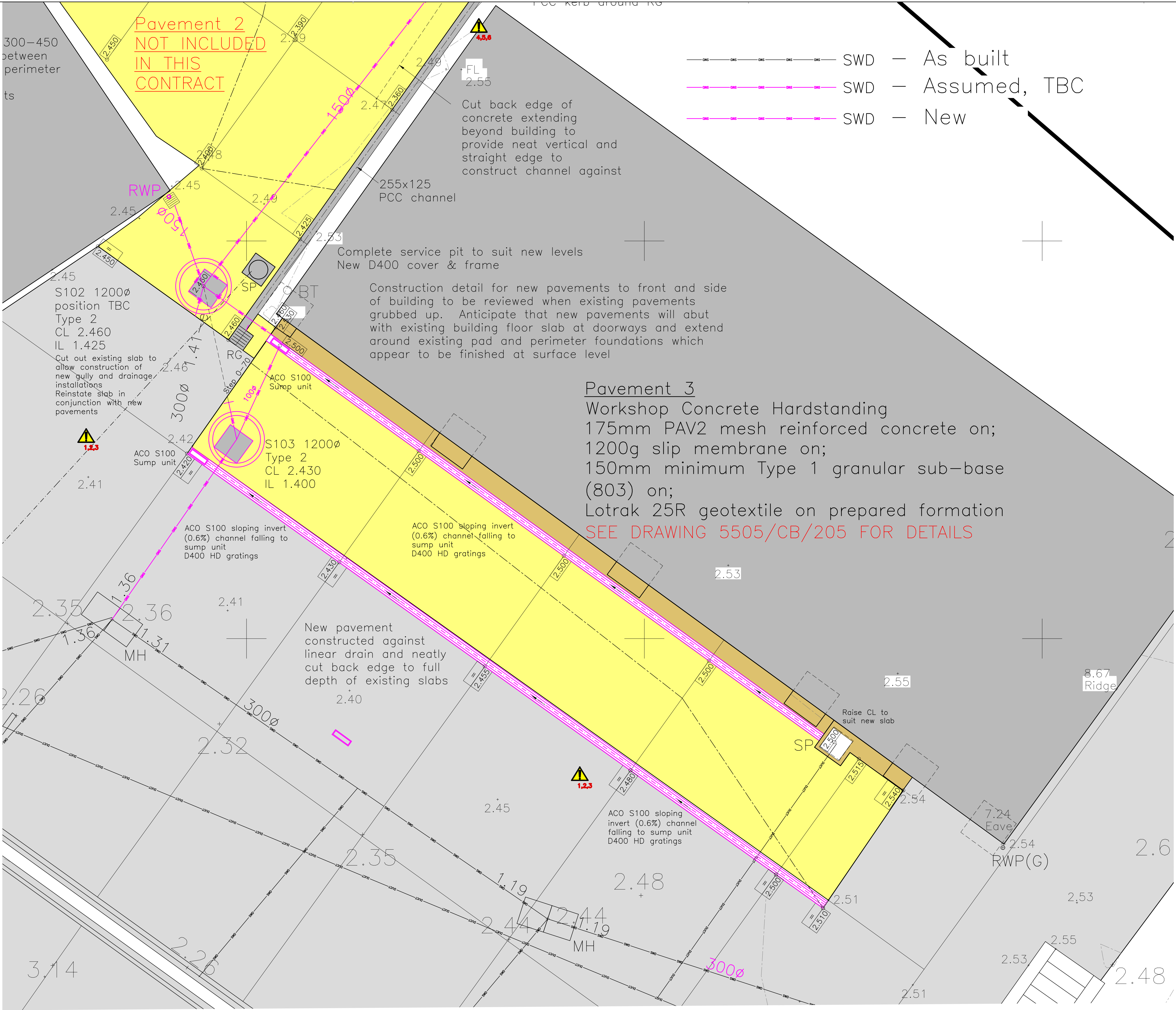
1. Restricted access/Interface with site users and public. Access to site and adjacent properties to be maintained. Erect site fencing around working areas and compound.
2. Excavations, concrete cutting and breaking out, drilling and installing dowel rebars – IAW RAMS with dust control and regard to HAV
3. Existing services – drainage, comms & power.
4. Working adjacent to watercourse, high ground water level/potential flood risk in bad weather.
5. Pollution.
Watercourse to be protected IAW PP65
6. Drainage works/ground & surface water.
Leptospirosis/Drowning risk in bad weather.

Maintenance, Cleaning and Removal:

No significant additional requirements identified for future works not already identified above

Maintain drainage infrastructure by routine clearance of gullies, sumps and gratings

It is assumed that all works will be carried out by a competent contractor working in accordance with an accepted Construction Phase Plan and, where appropriate, to approved method statements



PROPOSED SITE PLAN
1:50

D	TENDER DRAWING	31.07.19
C	WD	27.06.19
B	WD FOR CLIENT REVIEW	29.03.19
A	PRELIMINARY	18.03.19
Amat:		Date



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Project
**MOORWELL HARDSTANDINGS
ST. MARYS
ISLES of SCILLY
TR21 OLV**

Title
**PAVEMENT AREA 3
WORKSHOP HARDSTANDING**

Client
COUNCIL OF ISLES OF SCILLY

Date 05.02.2019	Scale @ A1 AS SHOWN	Cad Ref 5505CB204
Designed JWL	Drawn AJR	Checked JWL

Drawing Number 5505/CB/204	Rev 02/08/2019 10:32 AM D
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NOTES:

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HEALTH, SAFETY & ENVIRONMENTAL INFORMATION

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Construction Hazards:



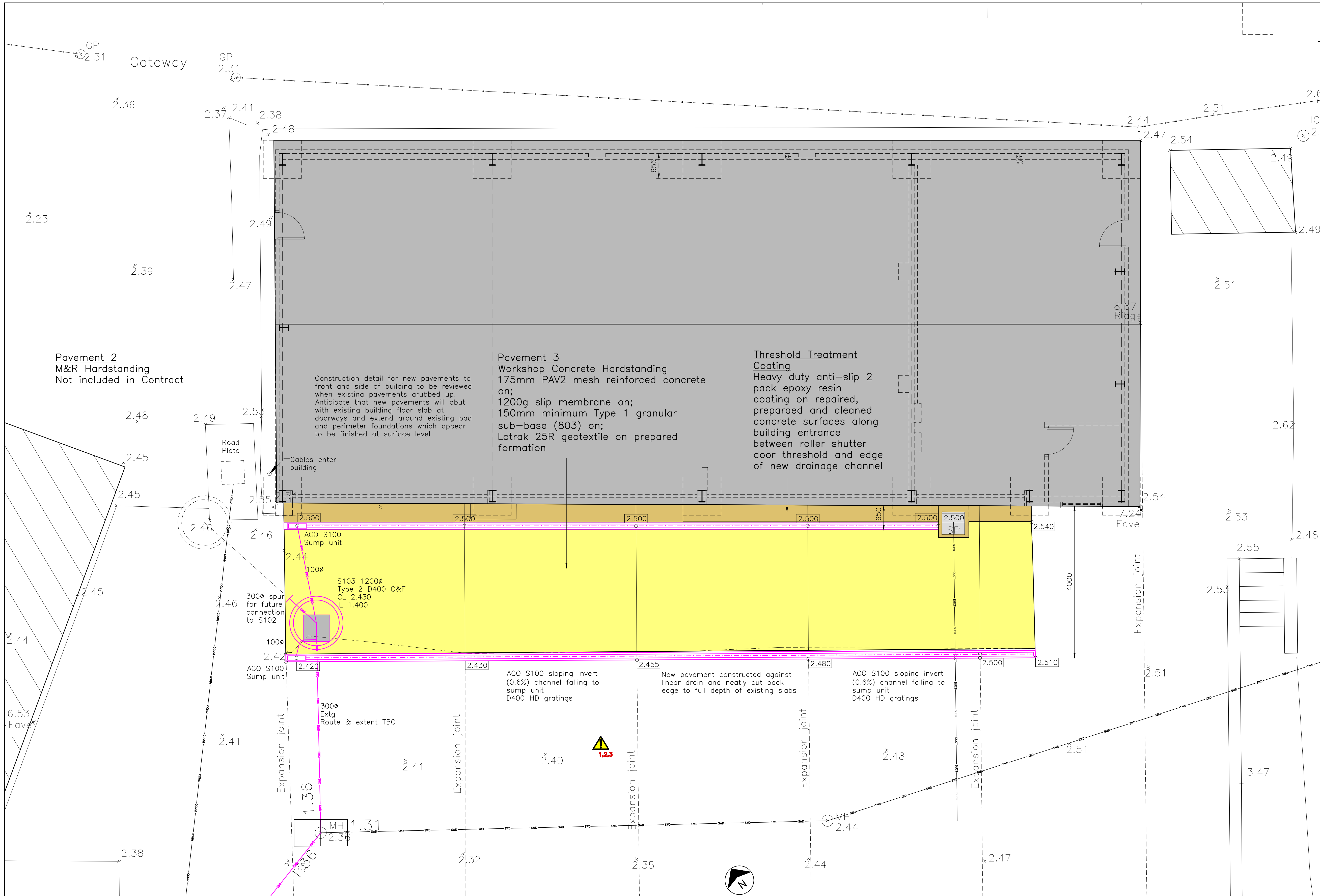
1. Restricted access/Interface with site users and public. Access to site and adjacent properties to be maintained. Erect site fencing around working areas and compound.
2. Excavations, concrete cutting and breaking out, drilling and installing dowel rebars – IAW RAMS with dust control and regard to HAV
3. Existing services – drainge, comms & power.
4. Working adjacent to watercourse, high ground water level/potential flood risk in bad weather.
5. Pollution.
Watercourse to be protected IAW PPG5
6. Drainage works/ground & surface water.
Leptospirosis/Drowning risk in bad weather.

Maintenance, Cleaning and Removal:

No significant additional requirements identified for future works not already identified above

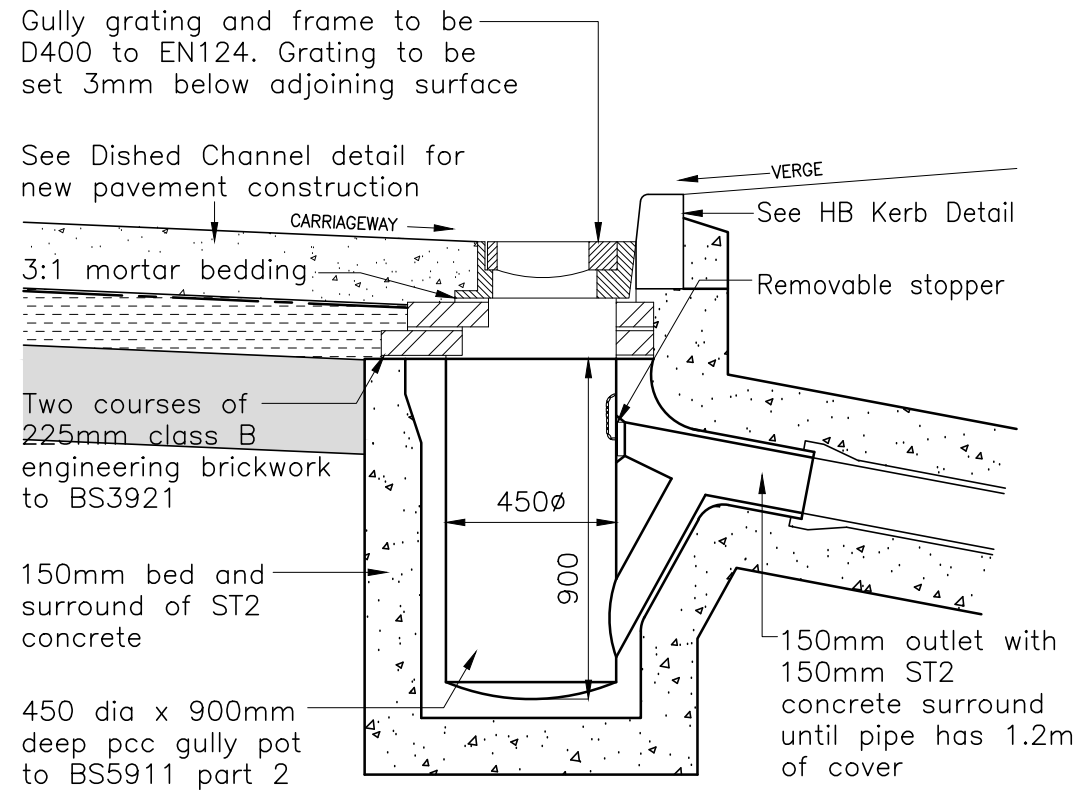
Maintain drainage infrastructure by routine clearance of gullies, sumps and gratings

It is assumed that all works will be carried out by a competent contractor working in accordance with an accepted Construction Phase Plan and, where appropriate, to approved method statements

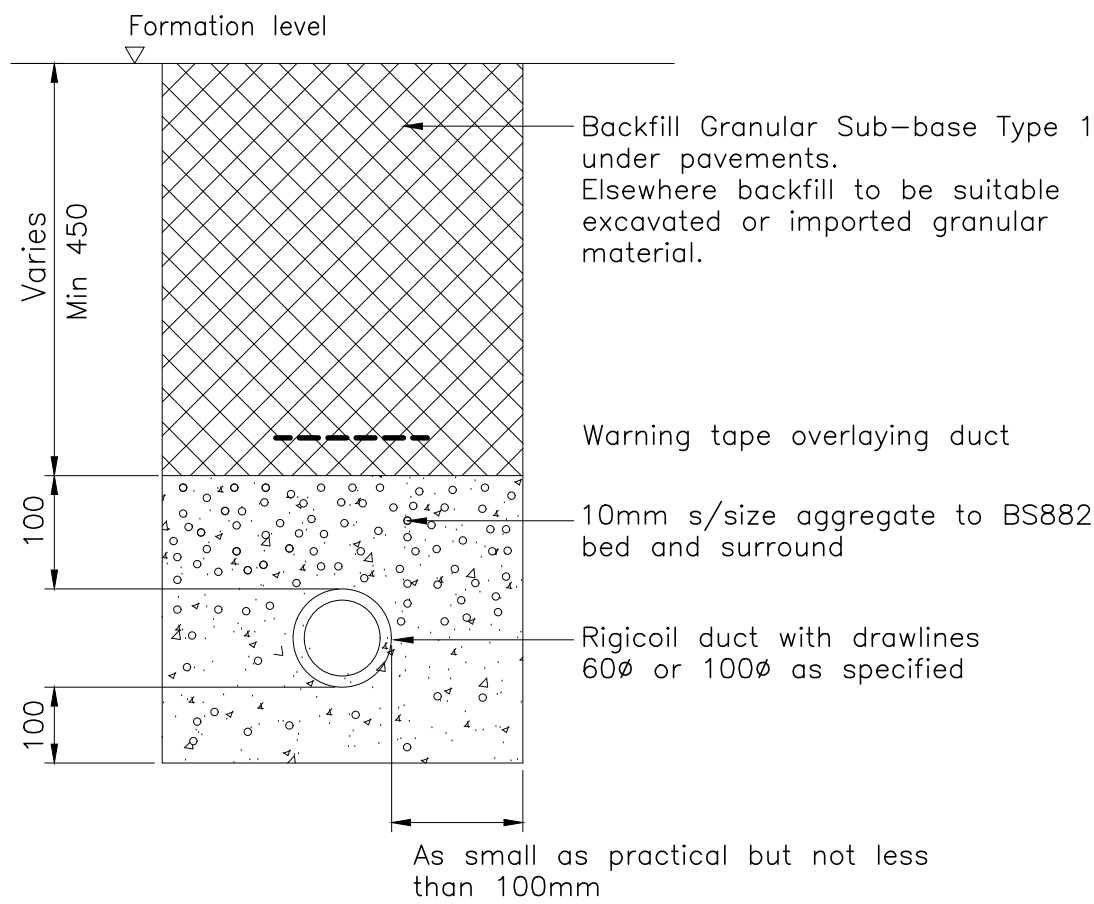


PROPOSED BLOCK PLAN
1:50

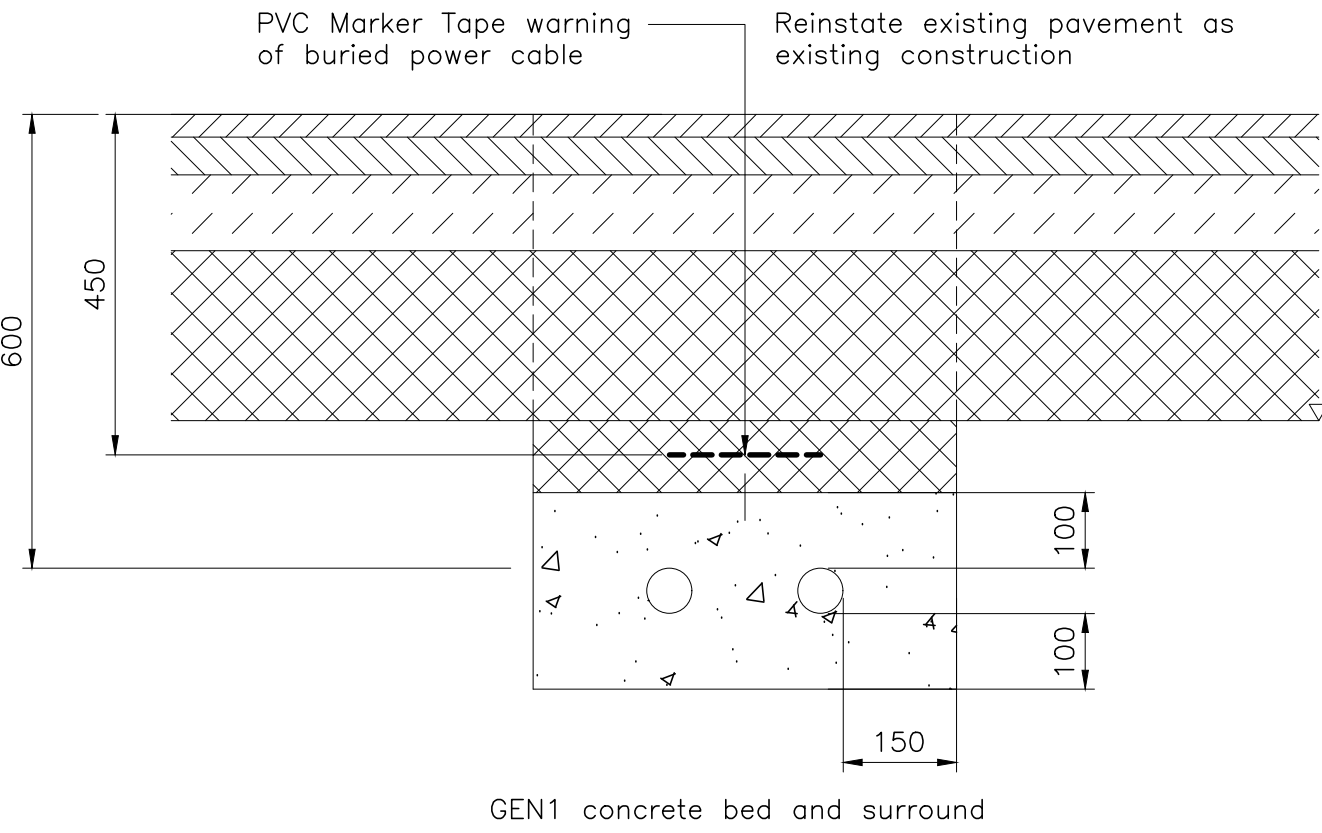
A	TENDER DRAWING	31.07.19
Amat.		Date
J L A		
JAMES LOCKYER ASSOCIATES		
CONSULTING ENGINEERS		
CONSTRUCTIVE ADVICE, CONSIDERED SOLUTIONS		
Oakland Mews T: 01579 344771 Liskeard Business Park F: 01579 344882 Liskeard, Cornwall, PL14 3UX E: post@jameslockyer.co.uk		
Project		
MOORWELL WORKSHOP ST. MARYS ISLES of SCILLY TR21 OLV		
Title		
PAVEMENT 3 PROPOSALS		
Client		
COUNCIL OF ISLES OF SCILLY		
Date	Scale @ A1	Cad. Ref.
30.07.19	AS SHOWN	5505CB205
Designed	Drawn	Checked
JWL	AJR	JWL
Drawing Number		Rev
5505/CB/205		02/08/2019 10:32 AM
		A



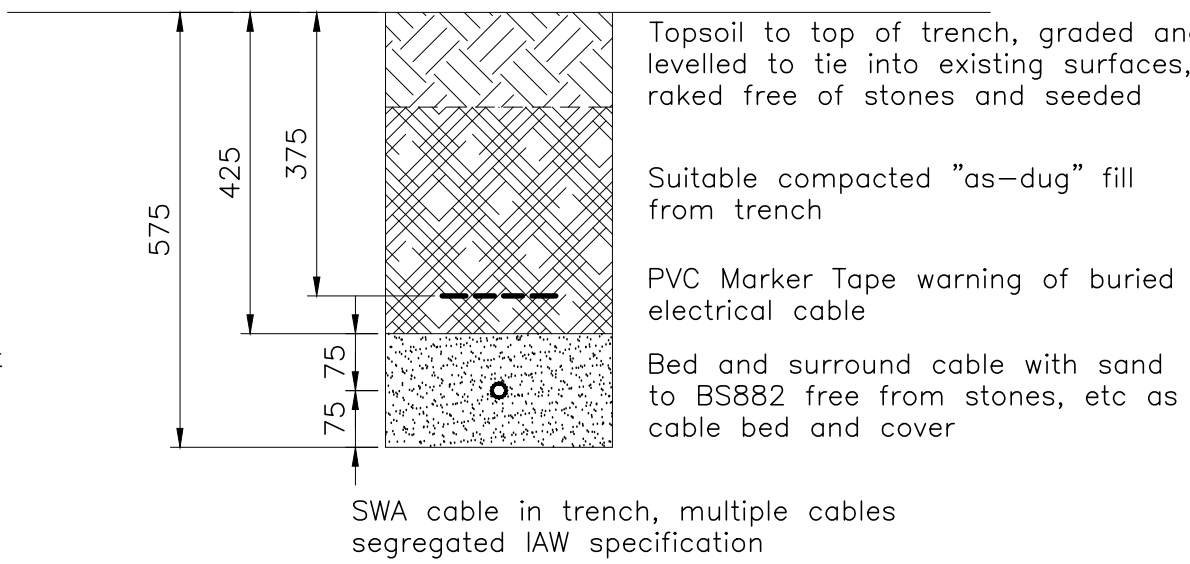
TYPICAL GULLY DETAIL
1:20



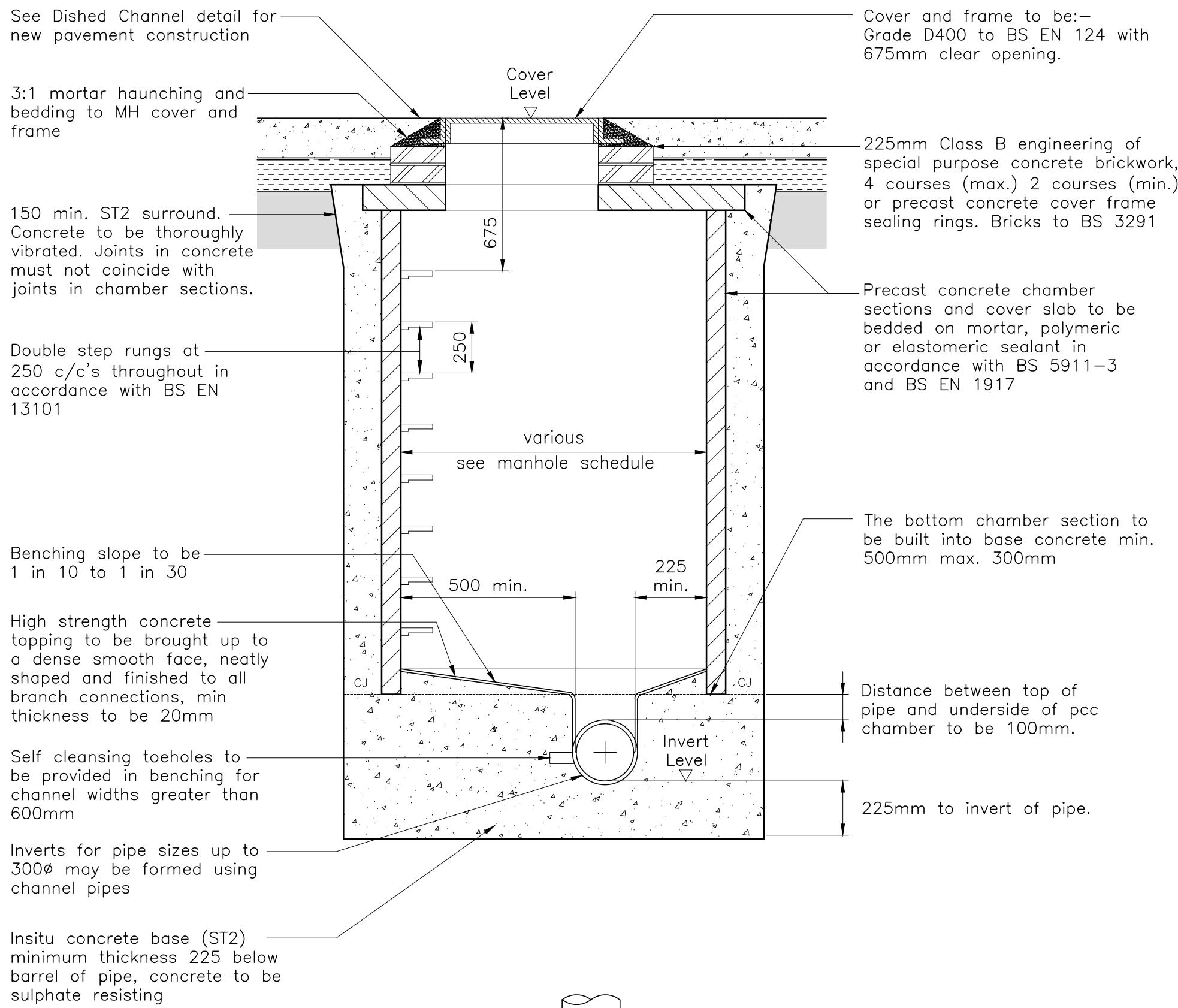
TYPICAL DUCT DETAIL UNDER PAVINGS
1:10



TYPICAL DUCT DETAIL CROSSING ROADS & PAVEMENTS
1:10

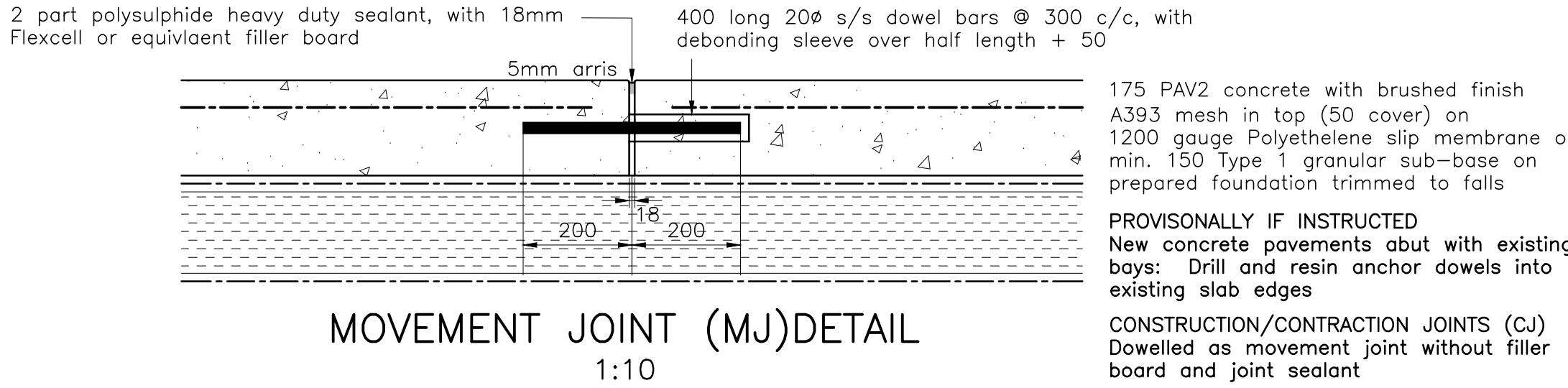


TYPICAL SOFT DIG CABLE TRENCH
1:10

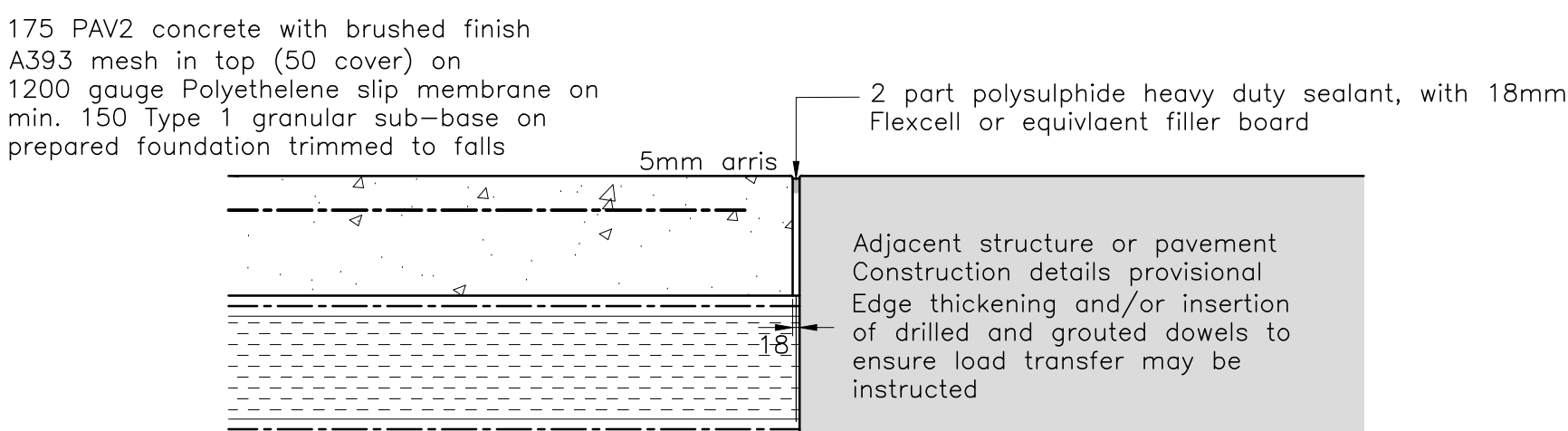


CONSTRUCTION DETAIL AT DISHED CHANNEL
1:10

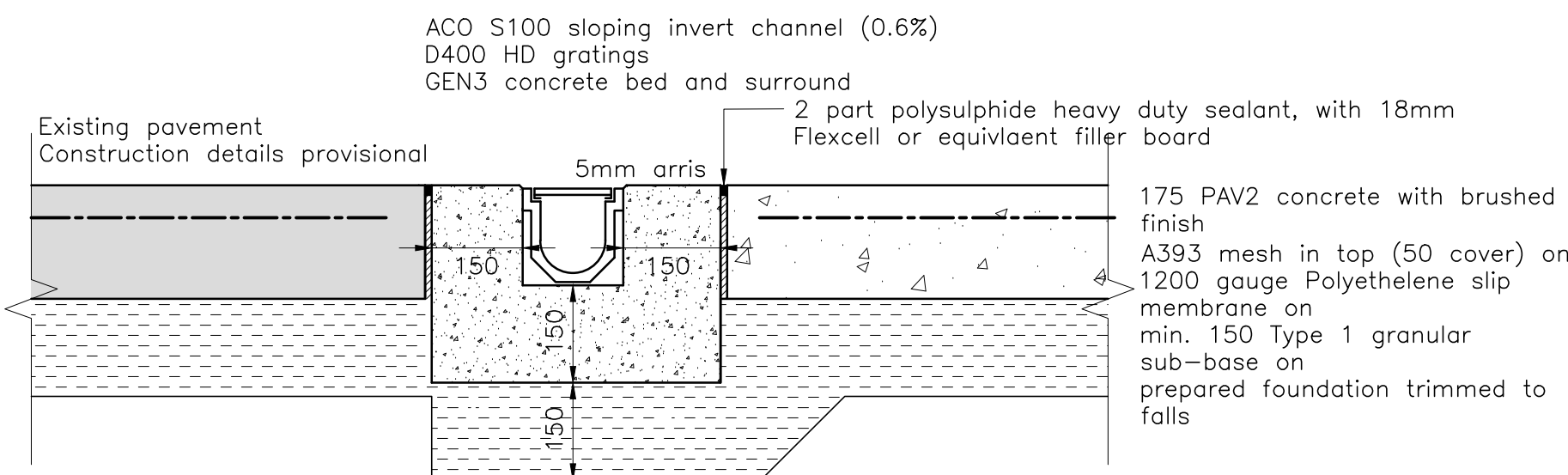
Where channels are required at edges of new pavements, provide haunching to rear faces as HB2 kerbs



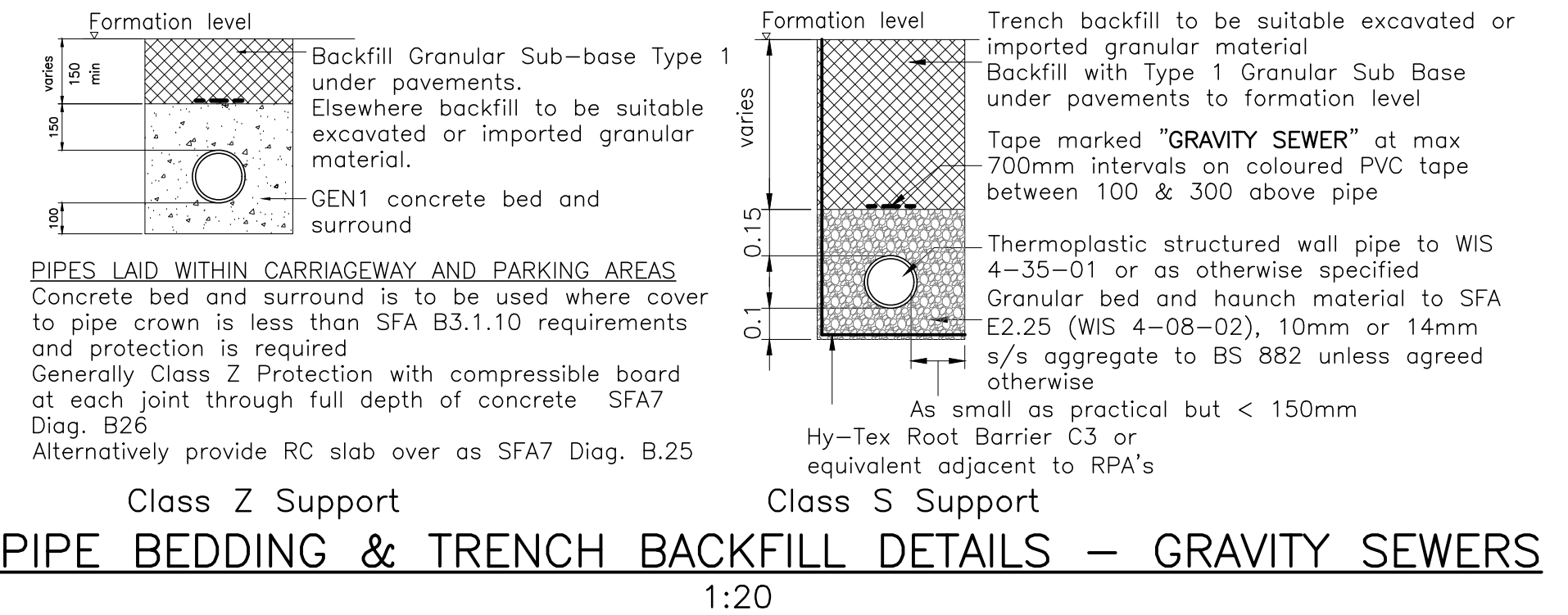
MOVEMENT JOINT (MJ)DETAIL
1:10



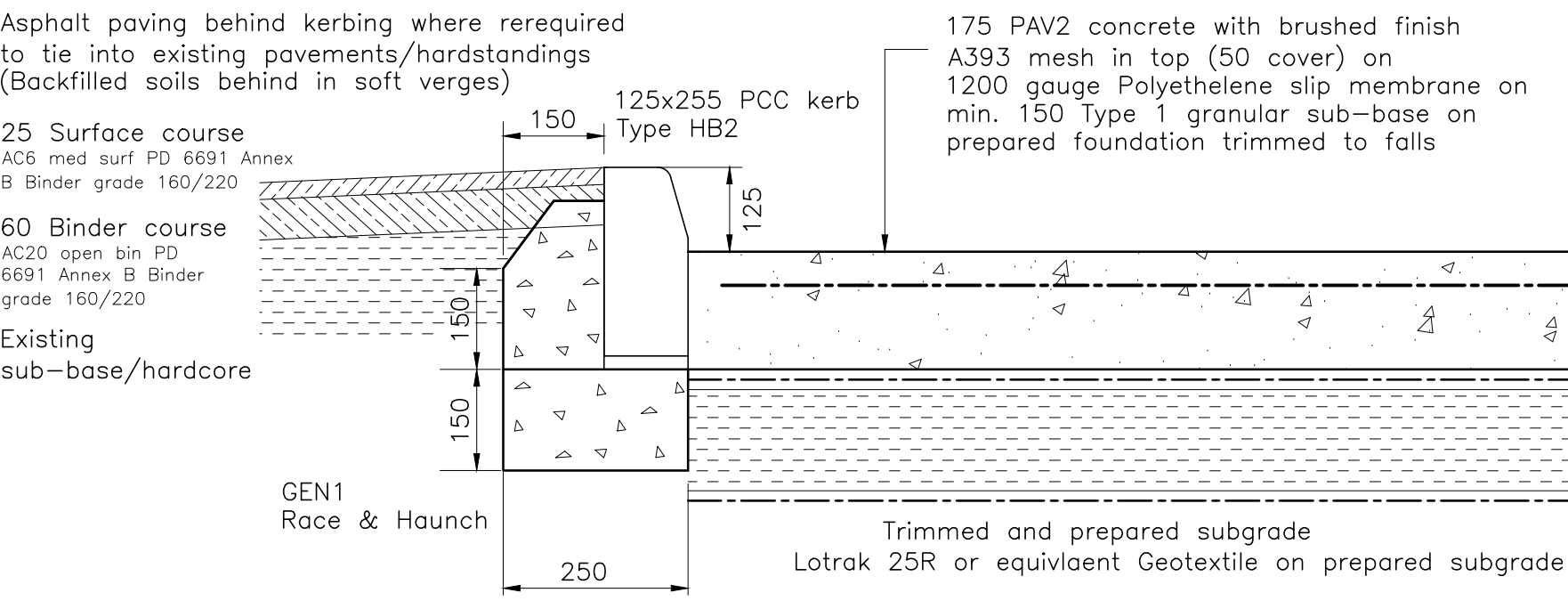
ISOLATION JOINT DETAIL
AGAINST EXISTING STRUCTURE/PAVEMENT
1:10



LINEAR DRAIN DETAIL ADJACENT EXTG PAVEMENT
1:10



CONCRETE PAVEMENT CONSTRUCTION & KERB DETAIL
1:10



Pipe Diameter (mm)	Effective Length (mm)
150–600	600
675–750	1000
825 & over	1250

GENERAL NOTES:

- Outgoing pipes greater than 600mm diameter are to be fitted with safety chains.
- Sulphate resisting portland cement shall be used for all concretes and mortars having equivalent compressive strength of 20N/mm² or greater (including precast concrete products).
- Refer to manhole schedules for details of covers, pipe sizes, invert levels, manhole diameters etc.

MANHOLE — TYPE 2
DEPTH TO SOFFIT — 3.0m Max.
1:20

NOTES:

- Do not scale, check all dimensions and details before commencement.
- IF IN DOUBT ASK.
- This drawing is to be read in conjunction with all other relevant Contract Documents.

D	TENDER DRAWING—renumbered	31.07.19
C	WD	27.06.19
B	WD FOR CLIENT REVIEW	29.03.19
A	PRELIMINARY	18.03.19

Amat. **JLA** Date

JAMES LOCKYER ASSOCIATES
CONSULTING ENGINEERS

CONSTRUCTIVE ADVICE, CONSIDERED SOLUTIONS

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Project **MOORWELL HARDSTANDINGS**
ST. MARYS
ISLES of SCILLY
TR21 OLV

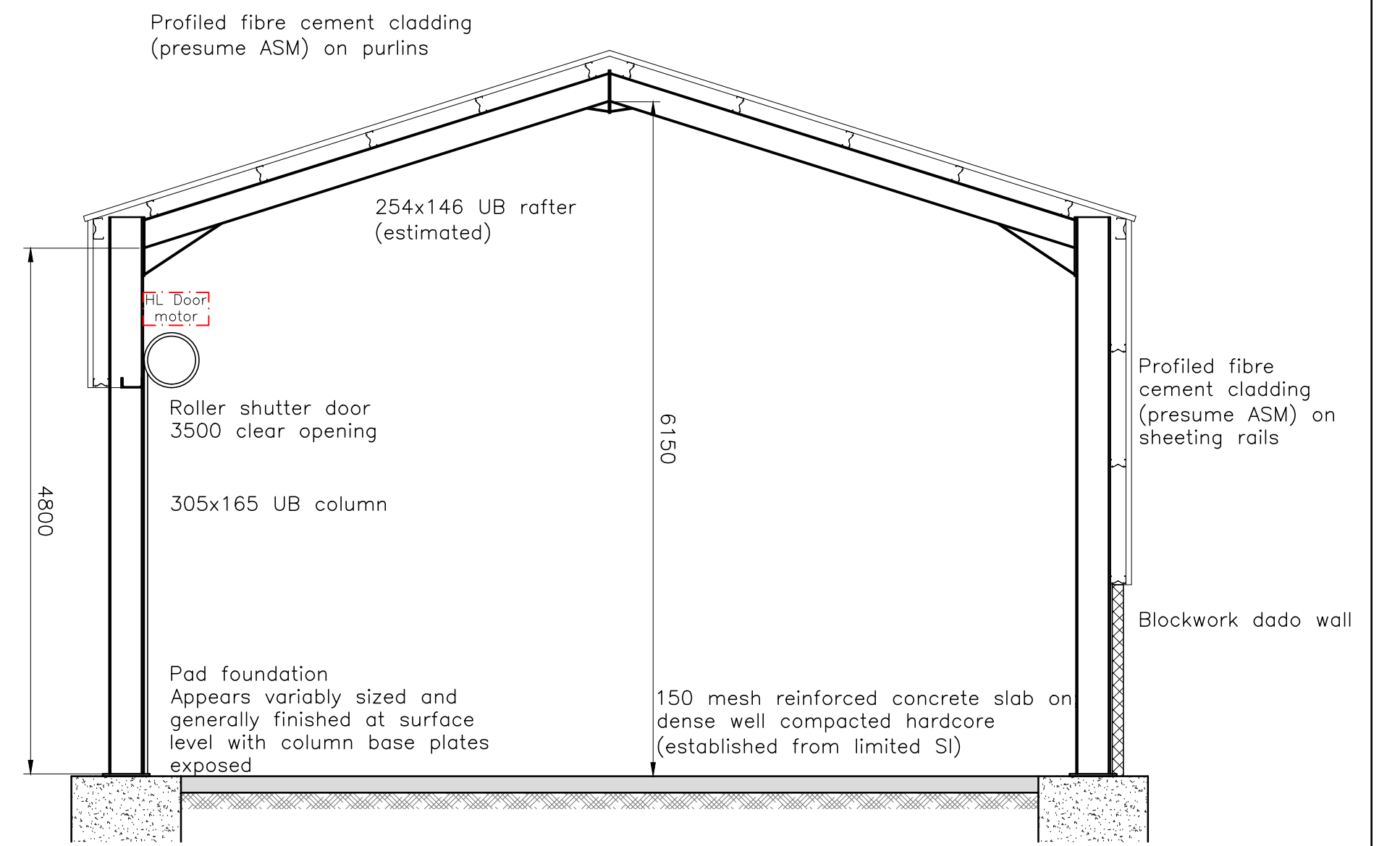
Title **PAVEMENT CONSTRUCTION**
DETAILS

Client **COUNCIL OF ISLES OF SCILLY**

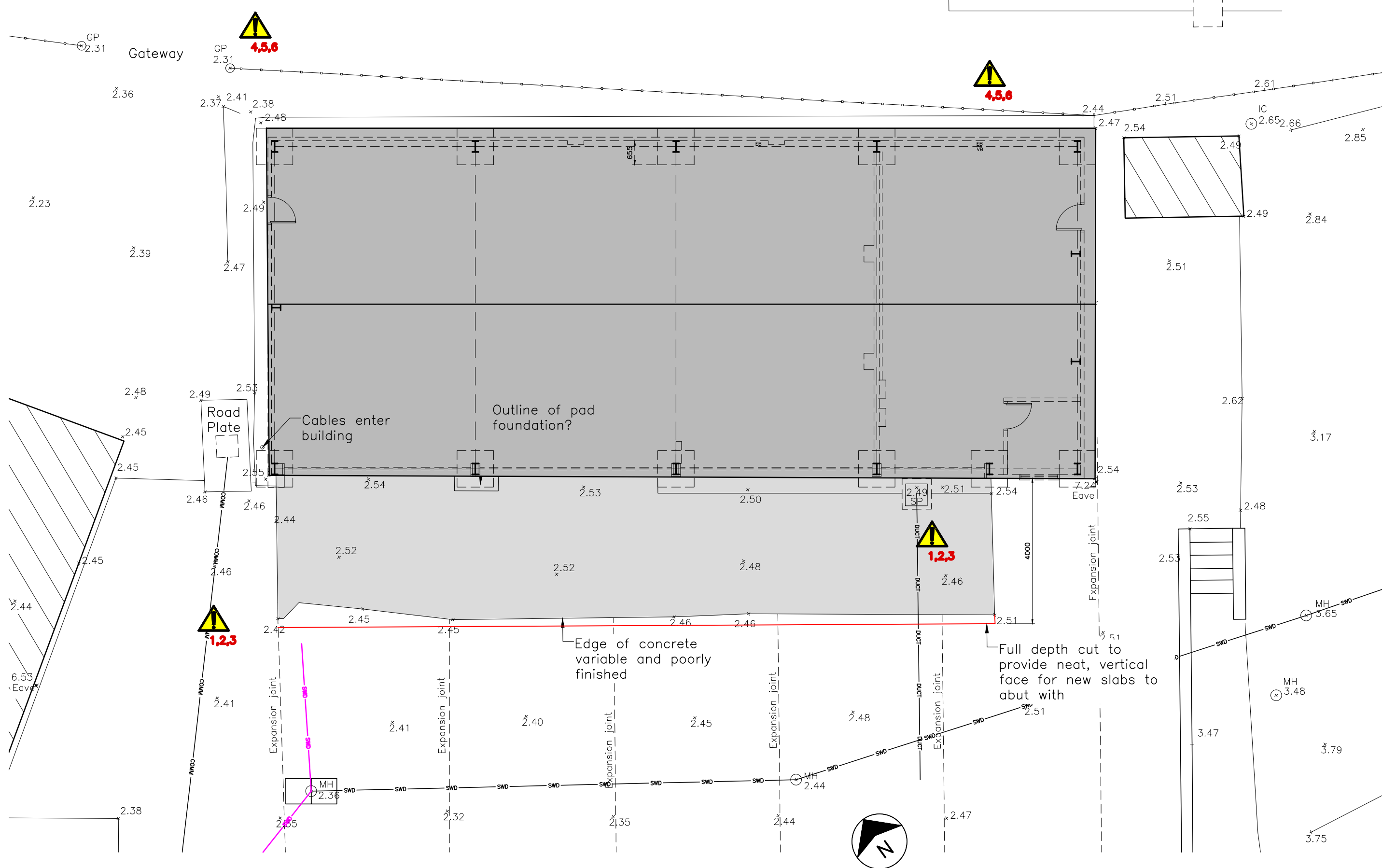
Date 05.02.2019	Scale @ A1 AS SHOWN	Cad Ref. 5505CD210
Designed JWL	Drawn MDN	Checked JWL

Drawing Number 5505/CD/210	Rev 02/08/2019 10:32 AM D
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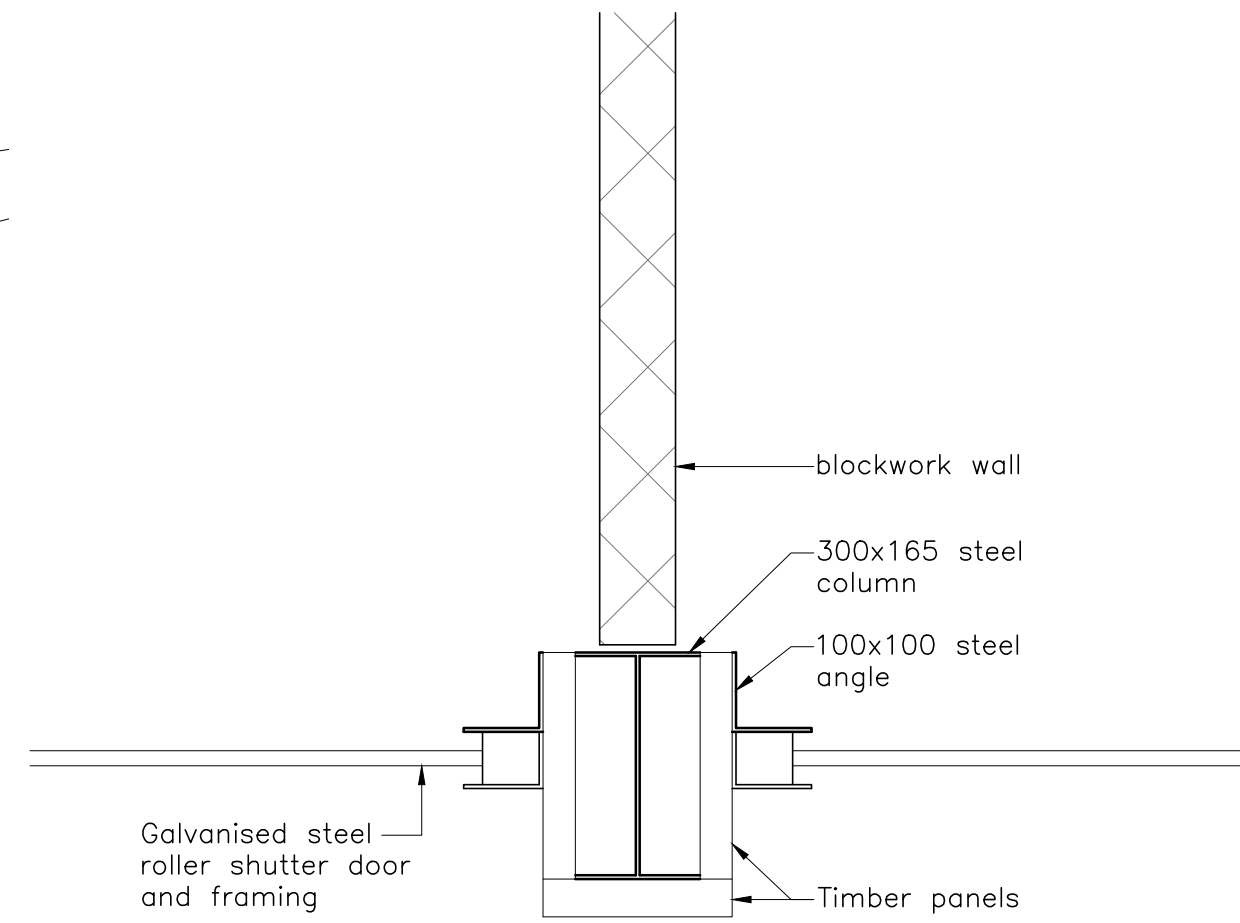
1. Do not scale, check all dimensions and details before commencement.
2. IF IN DOUBT ASK.
3. This drawing is to be read in conjunction with all other relevant Contract Documents.



EXISTING SECTION—GRID 3
1:50



EXISTING BLOCK PLAN
1:100



EXISTING COLUMN
CLADDING DETAIL
1:10



In addition to the hazards/risks normally associated with the nature and scope of the proposed Works, note the following:

1. Restricted access/Interface with site users and public. Access to site and adjacent properties to be maintained. Erect site fencing around working areas and compound.
2. Excavations, concrete cutting and breaking out, drilling and installing dowel rebars – IAW RAMS with dust control and regard to HAV
3. Existing services – drainage, comms & power.
4. Working adjacent to watercourse, high ground water level/potential flood risk in bad weather.
5. Pollution.
Watercourse to be protected IAW PPC5
6. Drainage works/ground & surface water.
Leptospirosis/Drowning risk in bad weather.
7. Working at height/erecting steelwork and lifting materials/blocks

No significant additional requirements identified for future works not already identified above

Maintain drainage infrastructure by routine clearance of gullies, sumps and gratings

It is assumed that all works will be carried out by a competent contractor working in accordance with an accepted Construction Phase Plan and, where appropriate, to approved method statements

D	TENDER DRAWING	23.07.19
C	WD	27.06.19
B	WD FOR CLIENT REVIEW	29.03.19
A	PRELIMINARY	18.03.19
Amdt.		Date



**JAMES LOCKYER ASSOCIATES
CONSULTING ENGINEERS**

CONSTRUCTIVE ADVICE, CONSIDERED SOLUTIONS

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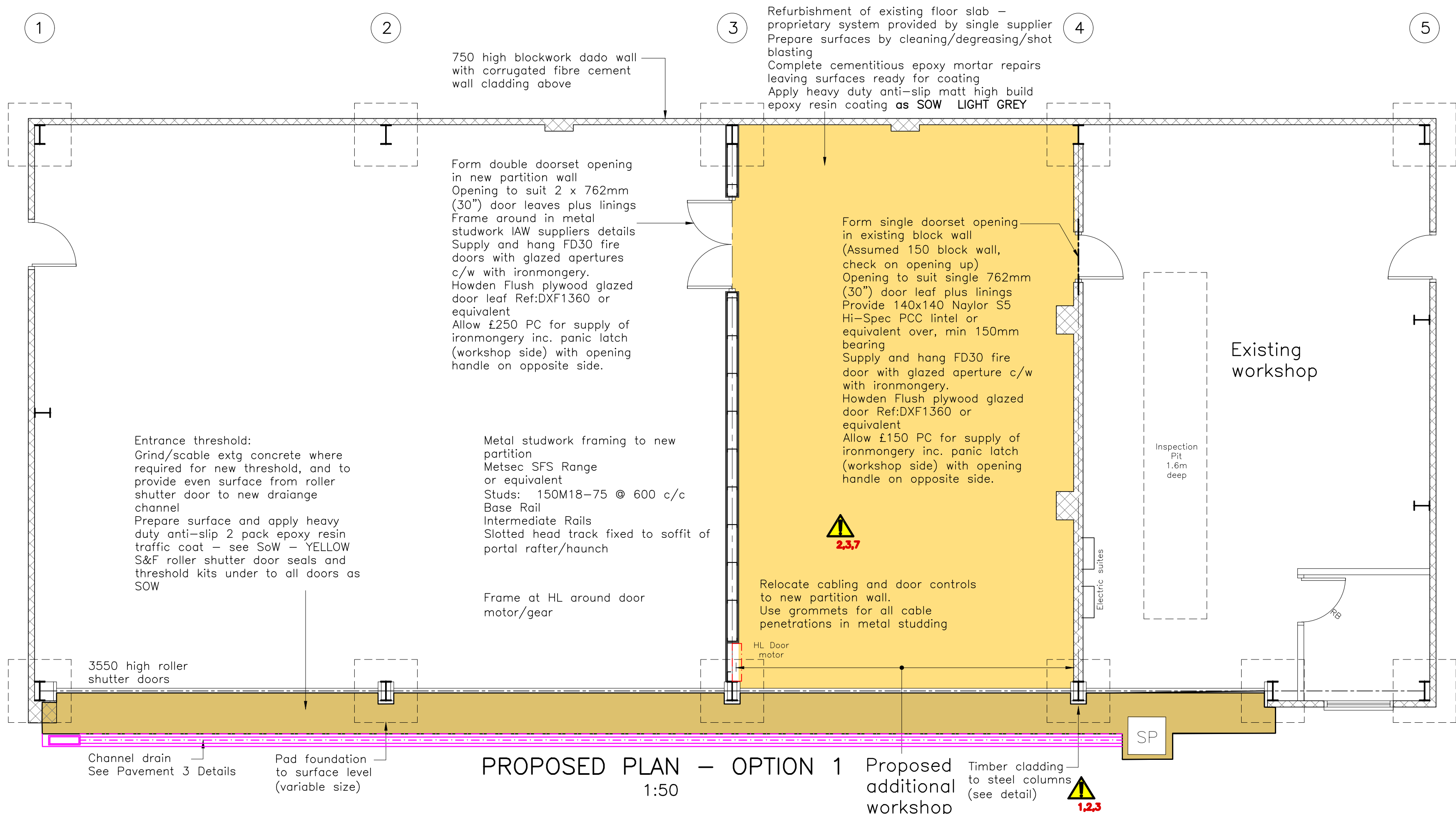
Project
MOORWELL WORKSHOP
ST. MARYS
ISLES of SCILLY
TR21 OLV

Title	WORKSHOP FLOOR PLAN AND BLOCK PLAN
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Client
COUNCIL OF ISLES OF SCILLY

Date 05.02.2019	Scale @ A1 AS SHOWN	Cod. Ref. 5505XB101
Designed JWL	Drawn AJR	Checked JWL

Drawing Number	Rev
5505/XB/101	31/07/2019 16:53 PM D



PROPOSED PLAN – OPTION 1
1:50

Proposed additional workshop

HEALTH, SAFETY & ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the nature and scope of the proposed Works, note the following:

Construction Hazards:

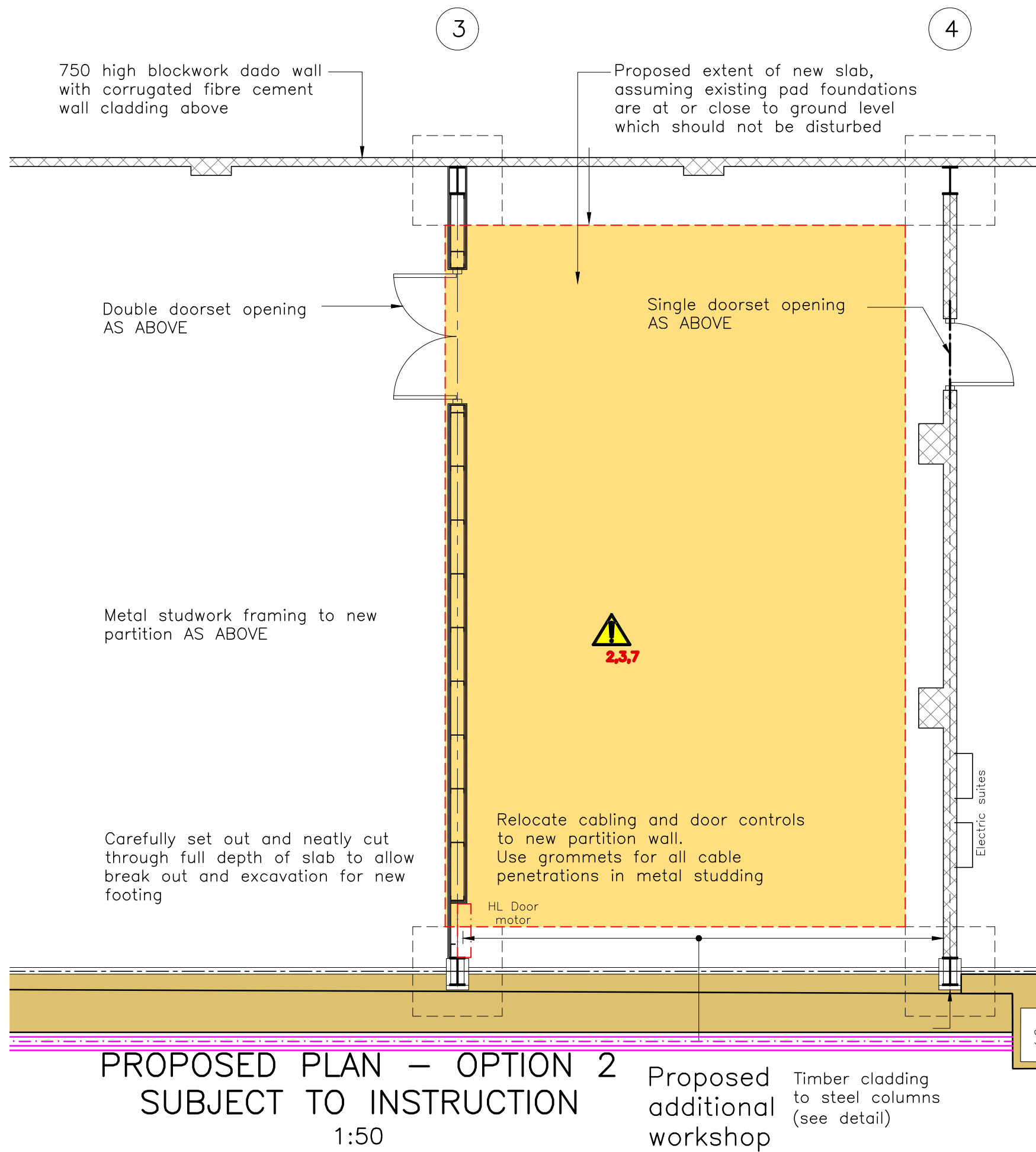
1. Restricted access/interface with site users and public. Access to site and adjacent properties to be maintained. Erect site fencing around working areas and compound.
2. Excavations, concrete cutting and breaking out, drilling and installing dowel rebars – IAW RAMS with dust control and regard to HAV
3. Existing services – drainage, comms & power.
4. Working adjacent to watercourse, high ground water level/potential flood risk in bad weather.
5. Pollution. Watercourse to be protected IAW PPG5
6. Drainage works/ground & surface water. Leptospirosis/Drowning risk in bad weather.
7. Working at height/erecting steelwork and lifting materials/blocks

Maintenance, Cleaning and Removal:

No significant additional requirements identified for future works not already identified above

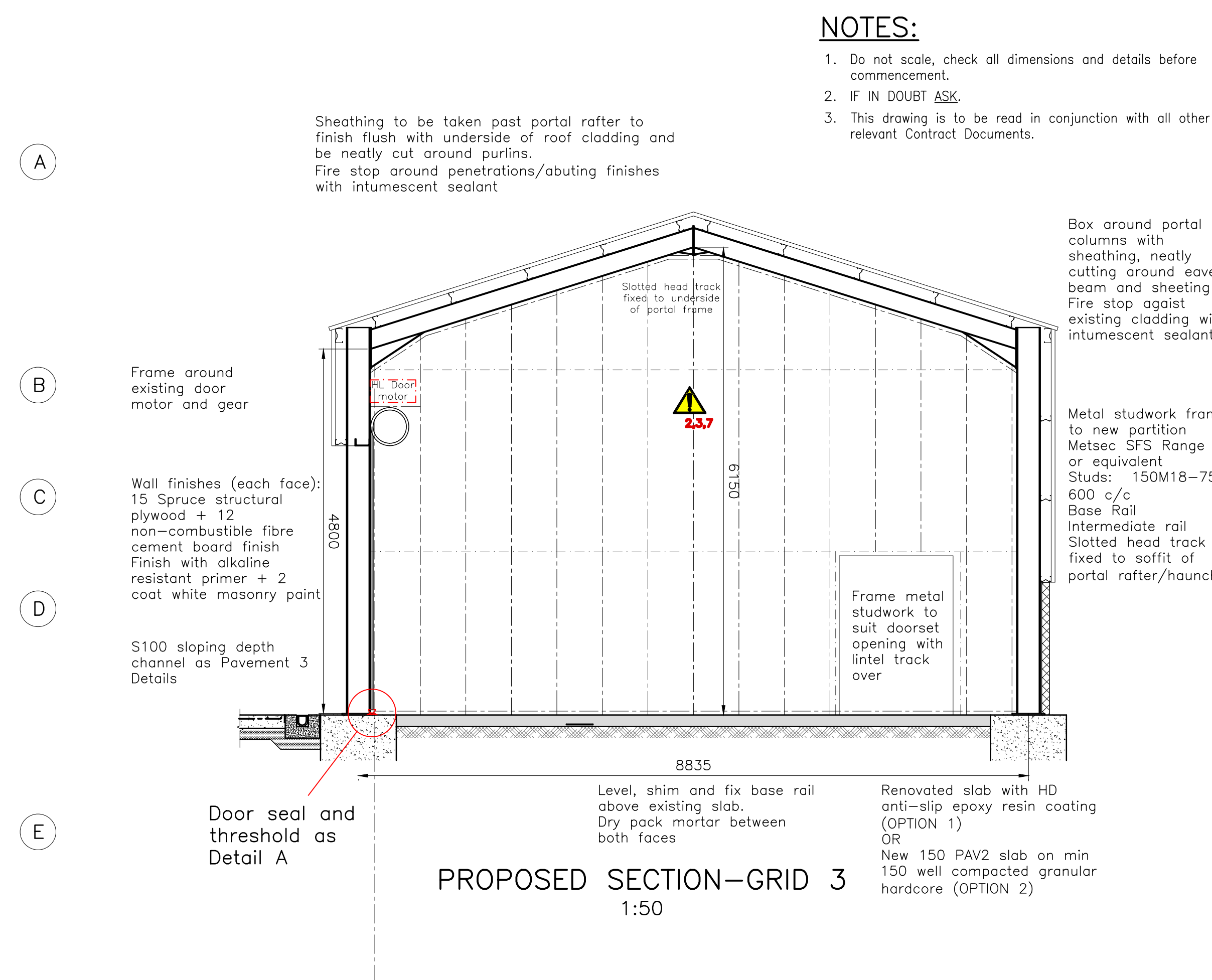
Maintain drainage infrastructure by routine clearance of gullies, sumps and gratings

It is assumed that all works will be carried out by a competent contractor working in accordance with an accepted Construction Phase Plan and, where appropriate, to approved method statements



PROPOSED PLAN – OPTION 2
1:50

Proposed additional workshop



PROPOSED SECTION – GRID 3
1:50

OPTION 1
SECTION THROUGH NEW WALL
WITH RENOVATED & HD COATING TO SLAB
1:20

SEE OPTION 1 FOR CONSTRUCTION DETAILS OF NEW PARTITION WALL

Carefully set out and neatly cut through extg slab to allow break out and excavation for new footing

Extg 150 mesh reinforced concrete floor slab on dense hardcore

IF OPTION 2 INSTRUCTED FLOOR REPLACEMENT TO BE COMPLETED BEFORE NEW PARTITION CONSTRUCTION

150 PAV2 concrete slab with A393 mesh reinforcement in top of slab, min 50 cover. Power floated finish on 1200g DPM on min 150 well compacted Type 1 granular subbase (803) on prepared suitable formation

Existing slab in new workshop bay to be broken out and grubbed up

Full depth 18mm filler board with polysulphide joint sealant

OPTION 2
REPLACEMENT FLOOR SLAB
1:20

NOTES:

1. Do not scale, check all dimensions and details before commencement.
2. IF IN DOUBT ASK.
3. This drawing is to be read in conjunction with all other relevant Contract Documents.

DETAIL "A"
1:10

D	TENDER DRAWING	23.07.19
C	WD	27.06.19
B	WD FOR CLIENT REVIEW	29.03.19
A	PRELIMINARY	18.03.19

Amat: **JLA** Date: **JAMES LOCKYER ASSOCIATES CONSULTING ENGINEERS**
CONSTRUCTIVE ADVICE, CONSIDERED SOLUTIONS
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Liskeard, Cornwall, PL14 3UX | E: post@jameslockyer.co.uk

Project: **MOORWELL WORKSHOP ST. MARYS ISLES of SCILLY TR21 OLW**

Title: **WORKSHOP DEVELOPMENT PROPOSALS**

Client: **COUNCIL OF ISLES OF SCILLY**

Date: **05.02.2019** Scale: **AS SHOWN** Cad Ref: **5505XB102**

Designed: **JWL** Drawn: **AJR** Checked: **JWL**

Drawing Number: **5505/XB/102** Rev: **31/07/2019 16:53 PM** D