



SPECIFICATION
for
REPLACEMENT RETAINING WALLS
at
SWANAGE BOAT PARK

for
SWANAGE TOWN COUNCIL

Project Ref: 006020

prepared by
Dorset Property

DORSET COUNTY COUNCIL

PROJECT: REPLACEMENT RETAINING WALLS

LOCATION: SWANAGE BOAT PARK, PEVERIL POINT ROAD, SWANAGE BH19 2AY

SPECIFICATION

INDEX

SECTION	PAGES
1	Preliminaries
2	Preambles
3	Schedule of Works
4	Drawings
5	Bar Schedule
6	Tender Summary Sheet

APPENDICES

Appendix A

Utility Plans

- Scottish & Southern HV & LV
- Scottish Gas Networks
- Wessex Water
- Openreach

Appendix B

RNLI Swanage Bore Hole Report

Appendix C

Smith Foster Schedule of Significant Risks

Appendix D

Pre-construction Information

Appendix E

Quality Assessment Questionnaire

PROJECT: REPLACEMENT RETAINING WALLS

LOCATION: SWANAGE BOAT PARK, PEVERIL POINT ROAD, SWANAGE BH19 2AY

SECTION

- 1 Preliminaries

Table of Contents

Title		Page
A10	PROJECT PARTICULARS	2
A11	TENDER AND CONTRACT DOCUMENTS	3
A12	THE SITE/ EXISTING BUILDINGS	4
A13	DESCRIPTION OF THE WORK	5
A20	JCT MINOR WORK BUILDING CONTRACT (MW)	6
A30	TENDERING/ SUBLETTING/ SUPPLY	9
A31	PROVISION, CONTENT AND USE OF DOCUMENTS	12
A32	MANAGEMENT OF THE WORKS	16
A33	QUALITY STANDARDS/ CONTROL	19
A34	SECURITY/ SAFETY/ PROTECTION	24
A35	SPECIFIC LIMITATIONS ON METHOD/ SEQUENCE/ TIMING	28
A36	FACILITIES/ TEMPORARY WORK/ SERVICES	29
A37	OPERATION/ MAINTENANCE OF THE FINISHED WORKS	31
A40	CONTRACTOR'S GENERAL COST ITEMS: MANAGEMENT AND STAFF	32
A41	CONTRACTOR'S GENERAL COST ITEMS: SITE ACCOMMODATION	33
A43	CONTRACTOR'S GENERAL COST ITEMS: MECHANICAL PLANT	34
A44	CONTRACTOR'S GENERAL COST ITEMS: TEMPORARY WORKS	35
A54	PROVISIONAL WORK/ ITEMS	36

A10 PROJECT PARTICULARS

110 THE PROJECT

- Name: Swanage Boat Park .
- Nature: Replacement of Retaining Walls .
- Location: Peveril Point Road, Swanage BH19 2AY .
- Length of contract: 8 Weeks .

120 EMPLOYER (CLIENT)

- Name: Swanage Town Council.
- Address: Town Hall, High Street, Swanage, BH19 2NZ.
- Contact: Mr G Brookes, Operations Manager.
- Telephone: 01929 423636.
- E-mail: g.brookes@swanage.gov.uk.

130 PRINCIPAL CONTRACTOR (CDM)

- Name: The contractor.
- Address: To be confirmed.
- Contact: To be confirmed.
- Telephone: To be confirmed.
- E-mail: To be confirmed.

140 ARCHITECT/ CONTRACT ADMINISTRATOR

- Name: Vivienne Berry.
- Address: Dorset Property, Environment Directorate, Dorset County Council, County Hall, Colliton Park, Dorchester, DT1 1XJ.
- Contact: Vivienne Berry.
- Telephone: 01305 221920.
- E-mail: v.a.berry@dorsetcc.gov.uk.

150 PRINCIPAL DESIGNER

- Name: Vivienne Berry.
- Address: Dorset Property, Environment Directorate, Dorset County Council, County Hall, Colliton Park, Dorchester, DT1 1XJ.
- Contact: Vivienne Berry.
- Telephone: 01305 221920.
- E-mail: v.a.berry@dorsetcc.gov.uk.

200 CONSULTANTS

- Description: Structural Engineer.
- Name: Ian Foster.
- Address: Smith Foster, Suite 8, Branksome Park House, Branksome Business Park, Bourne Valley Road, Poole, BH12 1ED.
- Telephone: 01202 540888.

A11 TENDER AND CONTRACT DOCUMENTS

110 TENDER DRAWINGS

- The tender drawings are: As drawing schedule, see section 4.

120 CONTRACT DRAWINGS

- The Contract Drawings: The same as the tender drawings.

160A PRECONSTRUCTION INFORMATION

- Format: The Preconstruction information is described in the Appendices.

A12 THE SITE/ EXISTING BUILDINGS

110 THE SITE

- Description: The site provides parking for boats and associated vehicles and access to the slipway.

120 EXISTING BUILDINGS ON/ ADJACENT TO THE SITE

- Description: there are no buildings on the site. The site is in a residential area and close to the RNLI Lifeboat Station.

140 EXISTING UTILITIES AND SERVICES

- Drawings: (Information shown is indicative only): please refer to appendix A.
- Other information: the generic safety information associated with each utility supplier is available on request.

160 SOILS AND GROUND WATER

- Information: Included in the tender documents.

200 ACCESS TO THE SITE

- Description: Access to the site is via Peveril Point Road.
- Limitations: Peveril Point Road is the single point of access to properties beyond the boat park and must be kept clear at all times.

210 PARKING

- Restrictions on parking of the Contractor's and employees' vehicles: Keep inside site area.

220 USE OF THE SITE

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

230 SURROUNDING LAND/ BUILDING USES

- General: Adjacent or nearby uses or activities are as follows:
 - The site is in a residential area and provides access to active fishermen's huts and adjacent RNLI Lifeboat Station. It is essential that access is maintained to the slipway at all times..

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:
 - Refer to Appendix C, Smith Foster Schedule of Significant Risks.
- Information: The accuracy and sufficiency of this information is not guaranteed by the Employer or the Employer's representative. 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.

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 has existing open access.

A13 DESCRIPTION OF THE WORK

110 PREPARATORY WORK BY OTHERS

- Works: Carried out under a separate contract and completed before the start of work on site for this Contract.
- Description: None.

120 THE WORKS

- Description: Removal of existing blockwork retaining walls, formation of new insitu concrete retaining walls, drainage, macadam surfacing and associated minor works.

130 WORK BY OTHERS CONCURRENT WITH THE CONTRACT

- Description: None.

140 COMPLETION WORK BY OTHERS

- Description: None.

A20 JCT MINOR WORK BUILDING CONTRACT (MW)

JCT MINOR WORKS BUILDING CONTRACT

- The Contract: JCT Minor Works Building Contract 2016 Edition.
- Requirement: Allow for the obligations, liabilities and services described.

THE RECITALS

First - THE WORKS AND THE CONTRACT ADMINISTRATOR

- The work comprises: Replacement of Existing Retaining Walls to Swanage Boat Park.
- Architect/ Contract Administrator: See clause A10/140.

Second - CONTRACT DOCUMENTS

- Contract drawings: As listed in clause A11/120.
Contract documents: The following have been prepared which show and describe the work to be done a specification and a schedule of works.

Third - PRICED DOCUMENTS

- Documents to be priced or provided by the Contractor: Preliminaries and Schedule of Works.

THE ARTICLES

3 - ARCHITECT/ CONTRACT ADMINISTRATOR

- Architect/ Contract Administrator: See clause A10/140.

4 and 5 - PRINCIPAL DESIGNER/ PRINCIPAL CONTRACTOR

- Principal Designer: See clause A10/150.
- Principal Contractor: See clause A10/130.

CONTRACT PARTICULARS

Fourth Recital and Schedule 2 - BASE DATE

- Base date: 10 days before date of tender.

Fourth Recital and clause 4.2 - CONSTRUCTION INDUSTRY SCHEME (CIS)

- Employer at the Base Date is a 'contractor' for the purposes of the CIS.

Fifth Recital - CDM REGULATIONS

- The project is not notifiable.

Sixth Recital - FRAMEWORK AGREEMENT

- Framework agreement: Does not apply.
- Details:
 - Date: Not applicable.
 - Title: Not applicable.
 - Parties: Not applicable.

Seventh Recital and Schedule 3 - SUPPLEMENTAL PROVISIONS

- Collaborative working: Supplemental Provision 1 applies.
- Health and safety: Supplemental Provision 2 applies.
- Cost savings and value improvements: Supplemental Provision 3 applies.
- Sustainable development and environmental considerations: Supplemental Provision 4 applies.
- Performance indicators and monitoring: Supplemental Provision 5 does not apply.
- Notification and negotiation of disputes: Supplemental Provision 6 applies. Where Supplemental Provision 6 applies, the respective nominees of the parties are:
 - Employer's nominee: Viivienne Berry.
 - Contractor's nominee: _____.Or such replacement as each party may notify to the other from time to time.

Article 7 - ARBITRATION

- Article 7 and Schedule 1 apply.

Clause 2.3 - COMMENCEMENT AND COMPLETION

- Works Commencement date: 8 January 2018.
- Date for Completion: 2 March 2018.

Clause 2.8 - LIQUIDATED DAMAGES

- At the rate of £317 per calendar day.

Clause 2.10 - RECTIFICATION PERIOD

- Period: 12 months from the date of practical completion.

Clause 4.3 - INTERIM PAYMENTS

- Interim Valuation Dates:
 - The first Interim Valuation Date is: 5 February 2018.
 - Thereafter at intervals of: 4 weeks.
- Payments due prior to practical completion:
 - Percentage of total value of the work etc.: 95%.
- Payments becoming due on or after practical completion:
 - Percentage of the total amount to be paid: 97½ per cent.

Clause 4.3 and 4.8 - FLUCTUATIONS PROVISION

- The following fluctuations provision applies: No fluctuations provision applies.
- Where Schedule 2 applies, the percentage addition (paragraph 13) is not applicable.

Clause 4.8.1 - SUPPLY OF DOCUMENTATION FOR COMPUTATION OF AMOUNT TO BE FINALLY CERTIFIED

- Period: Three months from the date of practical completion.

Clause 5.3 - CONTRACTOR'S PUBLIC LIABILITY INSURANCE - INJURY TO PERSONS OR PROPERTY

- The required level of cover for any one occurrence or series of occurrences arising out of one event:
 - Not less than: £5,000,000.

Clauses 5.4A, 5.4B and 5.4C - INSURANCE OF THE WORKS, ETC. - ALTERNATIVE PROVISIONS

- Clause 5.4B applies.
- Where clause 5.4.A or 5.4B applies. percentage to cover professional fees: 15 per cent.
- Where clause 5.4.C applies:
 - insurance arrangements - details of the required policy or policies: not applicable.

Clause 7.2 - ADJUDICATION

- The Adjudicator is: President or vice President of the Royal Institute of British Architects.
- Nominating body: Royal Institute of British Architects.

Schedule 1 paragraph 2.1 - ARBITRATION

- Appointor of Arbitrator (and of any replacement): President or a Vice president of the: Royal Institute of British Architects.

THE CONDITIONS

SECTION 1: DEFINITIONS AND INTERPRETATION

1.4 - RECKONING PERIODS OF DAYS

- Amendments: None.

1.8 - APPLICABLE LAW

- Amendments: None.

SECTION 2: CARRYING OUT THE WORKS

SECTION 3: CONTROL OF THE WORKS

SECTION 4: PAYMENT

SECTION 5: INJURY, DAMAGE AND INSURANCE

SECTION 6: TERMINATION

SECTION 7: SETTLEMENT OF DISPUTES

EXECUTION

- The Contract: Will be executed as a deed.

CONTRACT GUARANTEE BOND

- Contract Guarantee Bond: Not applicable.

A30 TENDERING/ SUBLETTING/ SUPPLY

MAIN CONTRACT TENDERING

- 110 SCOPE
- General: These conditions are supplementary to those stated in the Invitation to Tender and on the form of tender.
- 145 TENDERING PROCEDURE
- General: In accordance with NBS Guide to Tendering for Construction Projects.
 - Errors: Alternative 1 is to apply.
- 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.
- 170 ACCEPTANCE OF TENDER
- Acceptance: No guarantee is offered that any tender will be recommended for acceptance or be accepted, or that reasons for non acceptance will be given.
 - Costs: No liability is accepted for any cost incurred in the preparation of any tender.
- 190 PERIOD OF VALIDITY
- Period: After submission or lodgement, keep tender open for consideration (unless previously withdrawn) for not less than 90 days.
 - Date for possession/ commencement: See section A20.

PRICING/ SUBMISSION OF DOCUMENTS

- 210 PRELIMINARIES IN THE SPECIFICATION
- The Preliminaries/ General conditions sections (A10-A56 inclusive) must not be relied on as complying with SMM7/ NRM2.
- 250 PRICED DOCUMENTS
- Alterations: Do not alter or qualify the priced documents without written consent. Tenders containing unauthorised alterations or qualifications may be rejected.
 - Measurements: Where not stated, ascertain from the drawings.
 - Deemed included: Costs relating to items, which are not priced, will be deemed to have been included elsewhere in the tender.
 - Submit: Within one week of request.
- 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.

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: Within one week of request.

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.

590 SITE WASTE MANAGEMENT PLAN

- Person responsible for developing the Plan: The Contractor.
- Content: Include details of:
 - Principal Contractor for the purposes of the plan
 - Location of the site.
 - Description of the project.
 - Estimated project cost.
 - Types and quantities of waste that will be generated.
 - Resource management options for these wastes including proposals for minimization/ reuse/ recycling.
 - The use of appropriate and licensed waste management contractors.
 - Record keeping procedures.
 - Waste auditing protocols.
- Additional requirements: None.
- Submit with tender.

599 FREEDOM OF INFORMATION

- Records: Retain, make available for inspection and supply on request information reasonably required to allow response to requests made under the provisions of the Freedom of Information Act.
- Determination: Submit requests received. Do not supply information to anyone other than the project participants without express written permission.
- Confidentiality: Maintain at all times.

SUBLETTING/ SUPPLY

A31 PROVISION, CONTENT AND USE OF DOCUMENTS

DEFINITIONS AND INTERPRETATIONS

- 110 **DEFINITIONS**
- Meaning: Terms, derived terms and synonyms used in the preliminaries/ general conditions and specification are as stated therein or in the appropriate British Standard or British Standard glossary.
- 120 **COMMUNICATION**
- Definition: Includes advise, inform, submit, give notice, instruct, agree, confirm, seek or obtain information, consent or instructions, or make arrangements.
 - Format: In writing to the person named in clause A10/140 unless specified otherwise.
 - Response: Do not proceed until response has been received.
- 130 **PRODUCTS**
- Definition: Materials, both manufactured and naturally occurring, and goods, including components, equipment and accessories, intended for the permanent incorporation in the Works.
 - Includes: Goods, plant, materials, site materials and things for incorporation into the Works.
- 135 **SITE EQUIPMENT**
- Definition: All appliances or things of whatsoever nature required in or about the construction for completion of the Works but not materials or other things intended to form or forming part of the Permanent Works.
 - Includes: Construction appliances, vehicles, consumables, tools, temporary works, scaffolding, cabins and other site facilities.
- 140 **DRAWINGS**
- Definitions: To BSRIA BG 6 A design framework for building services. Design activities and drawing definitions.
 - CAD data: In accordance with BS 1192.
- 145 **CONTRACTOR'S CHOICE**
- Meaning: Selection delegated to the Contractor, but liability to remain with the specifier.
- 155 **SUBMIT PROPOSALS**
- Meaning: Submit information in response to specified requirements.

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: Receive, unload, handle, store, protect, place and fasten in position and disposal of waste and surplus packaging including all labour, materials and site equipment for that purpose.
- Supply and fix: As above, but including supply of products to be fixed. All products to be supplied and fixed unless stated otherwise.
- Keep for reuse: Do not damage designated products or work. Clean off bedding and jointing materials. Stack neatly, adequately protect and store until required by the Employer/ Purchaser or for use in the Works as instructed.
- Make good: Execute local remedial work to designated work. Make secure, sound and neat. Excludes redecoration and/ or replacement.
- Replace: Supply and fix new products matching those removed. Execute work to match original new state of that removed.
- Repair: Execute remedial work to designated products. Make secure, sound and neat. Excludes redecoration and/ or replacement.
- Refix: Fix removed products.
- Ease: Adjust moving parts of designated products or work to achieve free movement and good fit in open and closed positions.
- Match existing: Provide products and work of the same appearance and features as the original, excluding ageing and weathering. Make joints between existing and new work as inconspicuous as possible.
- System: Equipment, accessories, controls, supports and ancillary items, including installation, necessary for that section of the work to function.

170 MANUFACTURER AND PRODUCT REFERENCE

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

200 SUBSTITUTION OF PRODUCTS

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

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.

220 REFERENCED DOCUMENTS

- Conflicts: Specification prevails over referenced documents.

230 EQUIVALENT PRODUCTS

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

240 SUBSTITUTION OF STANDARDS

- Specification to British Standard or European Standard: Substitution may be proposed complying with a grade or category within a national standard of another Member State of the European Community or an international standard recognised in the UK.
- Before ordering: Submit notification of all such substitutions.
- Documentary evidence: Submit for verification when requested as detailed in clause A31/200. Any submitted foreign language documents must be accompanied by certified translations into English.

250 CURRENCY OF DOCUMENTS AND INFORMATION

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

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.

DOCUMENTS PROVIDED ON BEHALF OF THE EMPLOYER

410 ADDITIONAL COPIES OF DRAWINGS/ DOCUMENTS

- Additional copies: Issued free of charge.

440 DIMENSIONS

- Scaled dimensions: Do not rely on.

450 MEASURED QUANTITIES

- Ordering products and constructing the Works: The accuracy and sufficiency of the measured quantities is not guaranteed.
- Precedence: The specification and drawings shall override the measured quantities.

460 THE SPECIFICATION

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

DOCUMENTS PROVIDED BY CONTRACTOR/ SUBCONTRACTORS/ SUPPLIERS

630 TECHNICAL LITERATURE

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

640 MAINTENANCE INSTRUCTIONS AND GUARANTEES

- Components and equipment: Obtain or retain copies, register with manufacturer and hand over on or before completion of the Works.
- Information location: In Building Manual.
- Emergency call out services: Provide telephone numbers for use after completion. Extent of cover: twenty four hours seven days a week.

A32 MANAGEMENT OF THE WORKS

GENERALLY

110 SUPERVISION

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

120 INSURANCE

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

130 INSURANCE CLAIMS

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

140 CLIMATIC CONDITIONS

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

150 OWNERSHIP

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

PROGRAMME/ PROGRESS

210 PROGRAMME

- Master programme: 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.

245 START OF WORK ON SITE

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

250 **MONITORING**

- Progress: Record on a copy of the programme kept on site.
- Avoiding delays: If any circumstances arise which may affect the progress of the Works submit proposals or take other action as appropriate to minimize any delay and to recover any lost time.
- Key Performance Indicators:
 - Details: Time, cost and quality.
 - Record progress against each of the KPIs. If performance against KPI falls short of target, submit proposals for remediation.

260 **SITE MEETINGS**

- General: Site meetings will be held to review progress and other matters arising from administration of the Contract.
- Frequency: Every two weeks.
- Location: At site.
- Accommodation: Ensure availability at the time of such meetings.
- Attendees: Attend meetings and inform subcontractors and suppliers when their presence is required.
- Chairperson (who will also take and distribute minutes): Contract Administrator.

280 **PHOTOGRAPHS**

- Number of locations: 12.
- Frequency of intervals: Monthly.
- Image format: digital.
- Number of images from each location: two.
- Other requirements: None

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): Two weeks.

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

420 **REMOVAL/ REPLACEMENT OF EXISTING WORK**

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

430 **PROPOSED INSTRUCTIONS**

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

440 MEASUREMENT

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

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.

A33 QUALITY STANDARDS/ CONTROL

STANDARDS OF PRODUCTS AND EXECUTIONS

110 INCOMPLETE DOCUMENTATION

- General: Where and to the extent that products or work are not fully documented, they are to be:
 - Of a kind and standard appropriate to the nature and character of that part of the Works where they will be used.
 - Suitable for the purposes stated or reasonably to be inferred from the project documents. Contract 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.

120 WORKMANSHIP SKILLS

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

130 QUALITY OF PRODUCTS

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

135 QUALITY OF EXECUTION

- Generally: Fix, apply, install or lay products securely, accurately, plumb, neatly and in alignment.
- Colour batching: Do not use different colour batches where they can be seen together.
- Dimensions: Check on-site dimensions.
- Finished work: 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.

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.

150 **INSPECTIONS**

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

160 **RELATED WORK**

- Details: Provide all trades with necessary details of related types of work. Before starting each new type or section of work ensure previous related work is:
 - Appropriately complete.
 - In accordance with the project documents.
 - To a suitable standard.
 - In a suitable condition to receive the new work.
- Preparatory work: Ensure all necessary preparatory work has been carried out.

170 **MANUFACTURER'S RECOMMENDATIONS/ INSTRUCTIONS**

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

180 **WATER FOR THE WORKS**

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

SAMPLES/ APPROVALS

210 **SAMPLES**

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

220 **APPROVAL OF PRODUCTS**

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

230 APPROVAL OF EXECUTION

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

ACCURACY/ SETTING OUT GENERALLY

320 SETTING OUT

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

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.

360 RECORD DRAWINGS

- Site setting out drawing: Record details of all grid lines, setting-out stations, benchmarks and profiles. Retain on site throughout the contract and hand over on completion.

SERVICES GENERALLY

410 SERVICES REGULATIONS

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

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.

430 WATER REGULATIONS/ BYELAWS CONTRACTOR'S CERTIFICATE

- On completion of the work: Submit (copy where also required to the Water Undertaker) a certificate including:
 - The address of the premises.
 - A brief description of the new installation and/ or work carried out to an existing installation.
 - The Contractor's name and address.
 - A statement that the installation complies with the relevant Water Regulations or Byelaws.
 - The name and signature of the individual responsible for checking compliance.
 - The date on which the installation was checked.

435 ELECTRICAL INSTALLATION CERTIFICATE

- Submit: When relevant electrical work is completed.
- Original certificate: To be lodged in the Building Manual.

445 SERVICE RUNS

- General: Provide adequate space and support for services, including unobstructed routes and fixings.
- Ducts, chases and holes: Form during construction rather than cut.
- Coordination with other works: Submit details of locations, types/ methods of fixing of services to fabric and identification of runs and fittings.

450 MECHANICAL AND ELECTRICAL SERVICES

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

SUPERVISION/ INSPECTION/ DEFECTIVE WORK

525 ACCESS

- Extent: Provide at all reasonable times access to the Works and to other places of the Contractor or subcontractors where work is being prepared for the Contract.
- Designate: Contract Administrator.

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: One 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.

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.

560 TESTS AND INSPECTIONS

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

610 DEFECTIVE PRODUCTS/ EXECUTIONS

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

WORK AT OR AFTER COMPLETION

710 WORK BEFORE COMPLETION

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

720 SECURITY AT COMPLETION

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

730 MAKING GOOD DEFECTS

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

A34 SECURITY/ SAFETY/ PROTECTION

SECURITY, HEALTH AND SAFETY

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: Refer to Appendix C Schedule of Significant Risks.
 - Precautions assumed: Refer to Appendix C Schedule of Significant Risks.
 - Specification reference: NA.
 - Drawing reference: NA.

130 PRODUCT HAZARDS

- Hazardous substances: Site personnel levels must not exceed occupational exposure standards and maximum exposure limits stated in the current version of HSE document EH40: Workplace Exposure Limits.
- Common hazards: Not listed. Control by good management and site practice.
- Significant hazards: Specified construction materials include the following:
 - Hazard: none.
 - Material: none.
 - Specification reference: NA.

140 CONSTRUCTION PHASE HEALTH AND SAFETY PLAN

- Submission: Present to the Employer/ Client no later than two weeks before commencement of the works.
- 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 the CDM Regulations.
- Content: Develop the plan from and draw on the Outline Construction Phase Health and Safety Plan, clause A30/570, and the Pre-tender Health and Safety Plan/ Preconstruction information.

150 SECURITY

- Protection: Safeguard the site, the Works, products, materials, and any existing buildings affected by the Works from damage and theft.
- Access: Take all reasonable precautions to prevent unauthorized access to the site, the Works and adjoining property.
- Special requirements: The contractor is to provide block and mesh fencing to secure the site during the works to prevent public access. The existing security fencing is the property of Swanage Town Council and will be removed at commencement of the works.

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.

PROTECT AGAINST THE FOLLOWING

330 NOISE AND VIBRATION

- Standard: Comply with the recommendations of BS 5228-1, in particular clause 7.3, to minimize noise levels during the execution of the Works.
- Noise levels from the Works: Maximum level: exposure from the Works shall not exceed a daily or weekly personal noise exposure of: 80 dB(A) when measured from the site boundary.
- Equipment: Fit compressors, percussion tools and vehicles with effective silencers of a type recommended by manufacturers of the compressors, tools or vehicles.
- Restrictions: Do not use:
 - Percussion tools and other noisy appliances without consent during the hours of operation of the site.
 - Radios or other audio equipment or permit employees to use in ways or at times that may cause nuisance.

340 POLLUTION

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

350 PESTICIDES

- Use: Not permitted.

360 NUISANCE

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

370 ASBESTOS CONTAINING MATERIALS

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

371 DANGEROUS OR HAZARDOUS SUBSTANCES

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

375 ANTIQUITIES

- Duty: Report immediately any fossils, antiquities and other objects of interest or value discovered during execution of the Works.
- Preservation: Keep objects in the exact position and condition in which they were found.
- Special requirements: none.

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 Construction Industry Publications and The Fire Protection Association (The 'Joint Fire Code').

- 390 SMOKING ON SITE
- Smoking on site: Not permitted.
- 400 BURNING ON SITE
- Burning on site: Not permitted.
- 430 WASTE
- Includes: Rubbish, debris, spoil, surplus material, containers and packaging.
 - General: Minimize production. Prevent accumulations. Keep the site and Works clean and tidy.
 - Handling: Collect and store in suitable containers. 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.
 - Recyclable material: Sort and dispose at a Materials Recycling Facility approved by the Waste Regulation Authority.
 - Voids and cavities in the construction: Remove rubbish, dirt and residues before closing in.
 - Waste transfer documentation: Retain on site.
- 470 INVASIVE SPECIES
- General: Prevent the spread of species (e.g. plants or animals) that may adversely affect the site or Works economically, environmentally or ecologically.
 - Special precautions: none.
 - Duty: Report immediately any suspected invasive species discovered during execution of the Works.
 - Do not disturb.
 - Agree methods for safe eradication or removal.

PROTECT THE FOLLOWING

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

- 520 ROADS AND FOOTPATHS
- Duty: Maintain roads and footpaths within and adjacent to the site and keep clear of mud and debris.
 - Damage caused by site traffic or otherwise consequent upon the Works: Make good to the satisfaction of the Employer, Local Authority or other owner.
- 560 EXISTING FEATURES
- Protection: Prevent damage to existing buildings, fences, gates, walls, roads, paved areas and other site features, which are to remain in position during execution of the Works.
 - Special requirements: None.
- 570 EXISTING WORK
- Protection: Prevent damage to existing work, structures or other property during the course of the work.
 - Removal: Minimum amount necessary.
 - Replacement work: To match existing.
- 630 EXISTING STRUCTURES
- Duty: Check proposed methods of work for effects on adjacent structures inside and outside the site boundary.
 - Supports: During execution of the Works:
 - Provide and maintain all incidental shoring, strutting, needling and other supports as may be necessary to preserve stability of existing structures on the site or adjoining, that may be endangered or affected by the Works.
 - Do not remove until new work is strong enough to support existing structure.
 - Prevent overstressing of completed work when removing supports.
 - Adjacent structures: Monitor and immediately report excessive movement.
 - Standard: Comply with BS 5975 and BS EN 12812.

A35 SPECIFIC LIMITATIONS ON METHOD/ SEQUENCE/ TIMING

130 METHOD/ SEQUENCE OF WORK

- Specific Limitations: Include the following in the programme:
- none.

160 USE OR DISPOSAL OF MATERIALS

- Specific limitations: comply with a all current legal requirements.

170 WORKING HOURS

- Specific limitations: no weekend or vening working without permission.

A36 FACILITIES/ TEMPORARY WORK/ SERVICES

GENERALLY

110 SPOIL HEAPS, TEMPORARY WORKS AND SERVICES

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

ACCOMMODATION

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.

TEMPORARY WORKS

340 NAME BOARDS/ ADVERTISEMENTS

- General: Obtain approval, including statutory consents, and provide a temporary name board displaying:
 - Title of project: Swanage Boat Park Replacement of Retaining Walls.
 - Name of Employer: Swanage Town Council.
 - Names of Consultants: Dorset County Council.
 - Names of Contractor and Subcontractors: To be confirmed.
 - Special requirements: A brief description of the works being carried out.

SERVICES AND FACILITIES

420 LIGHTING AND POWER

- Supply: Electricity from the Employer's mains may be used for the Works as follows:
 - Metering: To be agreed.
 - Point of supply: lighting control box.
 - Available capacity: unknown.
 - Frequency: 50 Hz.
 - Phase: unknown.
 - Current: Alternating.
- Continuity: The Employer will not be responsible for the consequences of failure or restriction in supply.

430 WATER

- Supply: The Employer's mains may be used for the Works as follows:
 - Metering: To be agreed.
 - Source: To be agreed.
 - Location of supply point: To be agreed.
 - Conditions/ Restrictions: To be agreed.
- Continuity: The Employer will not be responsible for the consequences of failure or restriction in supply.

440 TELEPHONES

- Direct communication: As soon as practicable after the Date of Possession provide the Contractor's person in charge with a mobile telephone.

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.

A37 OPERATION/ MAINTENANCE OF THE FINISHED WORKS

GENERALLY

115 THE HEALTH AND SAFETY FILE

- Responsibility: the contractor.
- Content: Obtain and provide the following information: as built drawings.
- Format: one hard copy & one pdf format
- Delivery to: Contract Administrator By (date): One week prior to practical completion.

A40 CONTRACTOR'S GENERAL COST ITEMS: MANAGEMENT AND STAFF

- 110 MANAGEMENT AND STAFF
 - Cost significant items: Site supervision.

A41 CONTRACTOR'S GENERAL COST ITEMS: SITE ACCOMMODATION

110 SITE ACCOMMODATION

- Details: Site accommodation required or made/ not made available by the Employer: See section A36.
- Cost significant items: Provision of storage and welfare facilities..

A43 CONTRACTOR'S GENERAL COST ITEMS: MECHANICAL PLANT

110 MECHANICAL PLANT

- Cost significant items: Contractors choice.

A44 CONTRACTOR'S GENERAL COST ITEMS: TEMPORARY WORKS

110 TEMPORARY WORKS

- Details: Temporary works required or made/ not made available by the Employer: See section A36.
- Cost significant items: site security temporary fencing.

A54 PROVISIONAL WORK/ ITEMS

110A PROVISIONAL SUMS FOR DEFINED WORK

- All provisional sums are highlighted in the schedule of works

210A PROVISIONAL SUMS FOR UNDEFINED WORK

- All provisional sums are highlighted in the schedule of works

590 CONTINGENCIES

- Provisional sum: Include: £10,000.

PROJECT: REPLACEMENT RETAINING WALLS

LOCATION: SWANAGE BOAT PARK, PEVERIL POINT ROAD, SWANAGE BH19 2AY

SECTION

2 Preambles

Table of Contents

Title		Page
C20	Demolition	2
C41	Repairing/ Renovating/ Conserving masonry	5
D20	Excavating and filling	7
E05	In situ concrete construction generally	11
E10	Mixing/casting/curing in situ concrete	12
E20	Formwork for in situ concrete	15
E30	Reinforcement for in situ concrete	17
E40	Designed joints in in situ concrete	18
Q10	Kerbs/ edgings/ channels/ paving accessories	19
Q20	Granular sub-bases to roads/ pavings	21
Q22	Asphalt roads/ pavings	23
Q40	Fencing	25
R12	Below ground drainage systems	26
R16	Groundwater pressure relief drainage	31
V91	Electrical systems - landscape	32
Z21	Mortars	37

C20 Demolition

To be read with Preliminaries/ General conditions

GENERAL REQUIREMENTS

110A SURVEY

- Scope: Before starting deconstruction/ demolition work, examine available information, and carry out a survey of:
 - the structure or structures to be deconstructed/ demolished,
 - the site on which the structure or structures stand, and
 - the surrounding area.
- Report and method statements: Submit, describing:
 - Identity and location of services above and below ground, including those required for the Contractor's use, and arrangements for their disconnection and removal.
 - Proposed programme of work, including sequence and methods of deconstruction/ demolition.
 - Arrangements for protection of personnel and the general public, including exclusion of unauthorized persons.
 - Arrangements for control of site transport and traffic.Format of report: method statement.

120 EXTENT OF DECONSTRUCTION/ DEMOLITION

- General: Subject to retention requirements specified elsewhere, deconstruct/ demolish structures down to foundation level: Break up and dig out foundations.

130 GROUNDWORKS

- Old foundations, slabs and the like: Break out in locations and to the extents stated.
- Contaminated material: Remove, and carry out remediation required by the Enforcing Authority.

140 BENCH MARKS

- Unrecorded bench marks and other survey information: Give notice when found. Do not remove marks or destroy the fabric on which they are found.

150 FEATURES TO BE RETAINED

- General: Keep in place and protect the following: stone retaining walls as marked on the drawings Nos. 69010/10 & 69010/12.

SERVICES AFFECTED BY DECONSTRUCTION/ DEMOLITION

210 SERVICES REGULATIONS

- Work carried out to or affecting new and/ or existing services: Carry out in accordance with the byelaws and/ or regulations of the relevant Statutory Authority.

220 LOCATION OF SERVICES

- Services affected by deconstruction/ demolition work: Locate and mark positions.
- Mains services marking: Arrange with the appropriate authorities for services to be located and marked.
 - Marking standard: In accordance with National Joint Utilities Group 'Guidelines on the positioning and colour coding of underground utilities' apparatus'.

Swanage Town Council

Swanage Boat Park

250 LIVE FOUL AND SURFACE WATER DRAINS

- Drains and associated manholes, inspection chambers, gullies, vent pipes and fittings:
 - Protect; maintain normal flow during deconstruction/ demolition.
 - Make good any damage arising from deconstruction/ demolition work.
 - Leave clean and in working order at completion of deconstruction/ demolition work.
- Other requirements: none.

260 SERVICE BYPASS CONNECTIONS

- General: Provide as necessary to maintain continuity of services to occupied areas of the site on which the deconstruction/ demolition is taking place and to adjoining sites/ properties.
- Minimum notice to adjoining owners and all affected occupiers: 72 hours, if shutdown is necessary during changeover.

270 SERVICES TO BE RETAINED

- Damage to services: Give notice, and notify relevant service authorities and/ or owner/ occupier regarding damage arising from deconstruction/ demolition.
- Repairs to services: Complete as directed, and to the satisfaction of the service authority or owner.

DECONSTRUCTION/ DEMOLITION WORK

310 WORKMANSHIP

- Standard: Demolish structures in accordance with BS 6187.
- Operatives:
 - Appropriately skilled and experienced for the type of work.
 - Holding, or in training to obtain, relevant CITB Certificates of Competence.
- Site staff responsible for supervision and control of work: Experienced in the assessment of risks involved and methods of deconstruction/ demolition to be used.

330 DUST CONTROL

- General: Reduce airborne dust by periodically spraying deconstruction/ demolition works with an appropriate wetting agent. Keep public roadways and footpaths clear of mud and debris.
- Lead dust: Submit method statement for control, containment and clean-up regimes.

340 HEALTH HAZARDS

- Precautions: Protect site operatives and general public from hazards associated with vibration, dangerous fumes and dust arising during the course of the Works.

350 ADJOINING PROPERTY

- Temporary support and protection: Provide. Maintain and alter, as necessary, as work proceeds. Do not leave unnecessary or unstable projections.
- Defects: Report immediately on discovery.
- Damage: Minimize. Repair promptly to ensure safety, stability, weather protection and security.
- Support to foundations: Do not disturb.

360 STRUCTURES TO BE RETAINED

- Extent: Stone retaining walls marked on drawings 69010/10 & 69010/12 .
- Parts which are to be kept in place: Protect.
- Interface between retained structures and deconstruction/ demolition: Cut away and strip out with care to minimize making good.

Swanage Town Council

Swanage Boat Park

370 PARTLY DEMOLISHED STRUCTURES

- General: Leave in a stable condition, with adequate temporary support at each stage to prevent risk of uncontrolled collapse. Make secure outside working hours.
- Temporary works: Prevent overloading due to debris.
- Access: Prevent access by unauthorized persons.

380 DANGEROUS OPENINGS

- General: Provide guarding at all times, including outside of working hours. Illuminate during hours of darkness.
- Access: Prevent access by unauthorized persons.

391 ASBESTOS-CONTAINING MATERIALS – UNKNOWN OCCURRENCES

- Discovery: Give notice immediately of suspected asbestos-containing materials when discovered during deconstruction/ demolition work. Avoid disturbing such materials.
- Removal: Submit statutory risk assessments and details of proposed methods for safe removal.

410 UNFORESEEN HAZARDS

- Discovery: Give notice immediately when hazards such as unrecorded voids, tanks, chemicals, are discovered during deconstruction/ demolition.
- Removal: Submit details of proposed methods for filling, removal, etc.

MATERIALS ARISING

510 CONTRACTOR'S PROPERTY

- Components and materials arising from the deconstruction/ demolition work: Property of the Contractor except where otherwise provided.
- Action: Remove from site as work proceeds where not to be reused or recycled for site use.

C41 Repairing/ Renovating/ Conserving masonry

To be read with Preliminaries/ General conditions

GENERALLY/ PREPARATION

110 SCOPE OF WORK

- Schedule: see drawing 69010/12.
- Records of masonry to be repaired: Before starting work, use measurements and photographs as appropriate to record bonding patterns, joint widths, special features, etc.
- Identification of masonry units to be removed, replaced or repaired: Mark clearly, but not indelibly, on face of masonry units or parts of units to be cut out and replaced. Transcribe markings to drawings/ photographs.

WORKMANSHIP GENERALLY

165 STRUCTURAL STABILITY

- General: Maintain stability of masonry. Report defects, including signs of movement that are exposed or become apparent during the removal of masonry units.

170 DISTURBANCE TO RETAINED MASONRY

- Retained masonry in the vicinity of repair works: Disturb as little as possible.
- Existing retained masonry: Do not cut or adjust to accommodate new or reused units.
- Retained loose masonry units and those vulnerable to movement during repair works: Prop or wedge so as to be firmly and correctly positioned.

180 WORKMANSHIP

- Skill and experience of site operatives: Appropriate for types of work on which they are employed.
 - Documentary evidence: Submit on request.

185 ADVERSE WEATHER

- General: Do not use frozen materials or lay masonry units on frozen surfaces.
- Air temperature: Do not bed masonry units or repoint:
 - In cement gauged mortars when ambient air temperature is at or below 3°C and falling or unless it is at least 1°C and rising, unless mortar has a minimum temperature of 4°C when laid and the masonry is adequately protected.
 - In hydraulic lime:sand mortars when ambient air temperature is at or below 5°C and falling or unless it is at least 3°C and rising.
 - In nonhydraulic lime:sand mortars in cold weather, unless approval is given.
- Temperature of the work: Maintain above freezing until mortar has fully set.
- Rain, snow and dew: Protect masonry by covering during precipitation, and at all times when work is not proceeding.
- Hot conditions and drying winds: Prevent masonry from drying out rapidly.
- New mortar damaged by frost: Rake out and replace.

MATERIAL/ PRODUCTION/ ACCESSORIES

245 REPLACEMENT STONE UNITS

- Sizes and profiles: To match existing masonry. Maintain existing joint widths.
- Sinkings for fixings, joggles and lifting devices: Accurately aligned and positioned in relation to existing masonry.
- Marking: Mark each block/ dressing clearly and indelibly on a concealed face to indicate the natural bed and position in the finished work.

250 STONE ORIENTATION

- Orientation of natural bed:
 - In plain walling: Horizontal.
 - In projecting stones and copings: Vertical and perpendicular to wall face.
 - In arches: Perpendicular to line of thrust.

DISMANTLING/ REBUILDING

310 DISMANTLING MASONRY FOR REUSE

- Masonry units to be reused: Remove carefully and in one piece.
 - Treatment: Clean off old mortar, organic growths and dirt, and leave units in a suitable condition for rebuilding.
 - Identification: Mark each unit clearly and indelibly on a concealed face, indicating its original position in the construction. Transcribe makings to drawings/ photographs.

POINTING/ REPOINTING

810 PREPARATION FOR REPOINTING

- Existing mortar: Working from top of wall downwards, remove mortar carefully, without damaging adjacent masonry or widening joints, to a minimum depth of 30 mm.
 - Loose or friable mortar: Seek instructions when mortar beyond specified recess depth is loose or friable and/ or if cavities are found.
- Raked joints: Remove dust and debris.

820 POINTING STONE RETAINING WALLS

- Preparation of joints: Carefully brush away loose mortar.
- Mortar: As section Z21.
 - Mix: cement/lime mortar with aggregate mix to match existing.
 - Sand source/ type: sample to be approved.
- Joints profile/ finish: to match adjacent finishes.
- Other requirements: none.

840 POINTING WITH TOOLS/ IRONS

- General: Press mortar well into joints using pointing tools/ irons that fit into the joints, so that they are fully filled.
- Face of masonry: Keep clear of mortar. Use suitable temporary adhesive tape on each side of joints where necessary. Finish joints neatly.

D20 Excavating and filling

To be read with Preliminaries/General conditions

GENERALLY/THE SITE

110 SITE INVESTIGATION

- Report: on borehole sampling and testing prepared for adjacent RNLI station is included in the tender documents.

150 EXISTING SERVICES, FEATURES AND STRUCTURES

- Services: See section A12 for locations.
- Site features to be retained: See section A12 for details.
- Structures: See section A34 for details of protection.

CLEARANCE/EXCAVATING

250 PERMISSIBLE DEVIATIONS FROM FORMATION LEVELS

- Beneath mass concrete foundations: ± 25 mm.
- Beneath ground bearing slabs and r.c. foundations: ± 15 mm.
- Embankments and cuttings: ± 50 mm.
- Ground abutting external walls: ± 50 mm, but such as to ensure that finished level is not less than 150 mm below dpc.

260 INSPECTING FORMATIONS

- Give notice: Make advance arrangements for inspection of formations for foundations and filling formations.
 - Notice (minimum): 3 days.
- Preparation: Just before inspection remove the last 150 mm of excavation. Trim to required profiles and levels, and remove.
 - Loose material: Remove.
- Seal: Within 4 hours of inspection, seal formations with concrete.

270 FOUNDATIONS GENERALLY

- Give notice if:
 - A natural bearing formation of undisturbed subsoil is not obtained at the depth shown on the drawings.
 - The formation contains soft or hard spots or highly variable material.

285 STEPS IN FOUNDATION FORMATIONS

- Depth of formation below ground level (minimum):
 - Existing ground level: refer to structural engineers drawings .
 - Finished ground level: refer to structural engineers drawings.
- Step dimensions:
 - Distance between steps (minimum): refer to structural engineers drawings.
 - Height of step (maximum): refer to structural engineers drawings.
 - Length of overlap (minimum): refer to structural engineers drawings.

290 FOUNDATIONS IN MADE UP GROUND

- Depth: Excavate down to a natural formation of undisturbed subsoil.
- Discrepancy: Give notice if this is greater or lesser than depth given.

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310 UNSTABLE GROUND

- Generally: Ensure that the excavation remains stable at all times.
- Give notice: Without delay if any newly excavated faces are too unstable to allow earthwork support to be inserted.
- Take action: If instability is likely to affect adjacent structures or roadways, take appropriate emergency action.

310A UNSTABLE GROUND

- Generally: Ensure that the excavation remains stable at all times. Investigate stability of material behind the retaining walls and agree in advance with Contract Administrator method for taking down the walls to avoid landslippage that might result by taking walls down in a single phase of demolition. Give notice: Without delay if any newly excavated faces are too unstable to allow earthwork support to be inserted.
- Take action: If instability is likely to affect adjacent structures or roadways, take appropriate emergency action.

320 RECORDED FEATURES

- Recorded foundations, beds, drains, manholes, etc: to be agreed on site.
- Contaminated earth: Remove and disinfect as required by local authority.

330 UNRECORDED FEATURES

- Give notice: If unrecorded foundations, beds, voids, basements, filling, tanks, pipes, cables, drains, manholes, watercourses, ditches, etc. not shown on the drawings are encountered.

360 EXCESS EXCAVATION

- Excavation taken wider than required:
 - Backfill: As clause 700.
- Excavation taken deeper than required:
 - Backfill: With lean mix concrete.

DISPOSAL OF MATERIALS

450 WATER

- Generally: Keep all excavations free from water until:
 - Formations are covered.
 - Below ground constructions are completed.
 - Basement structures and retaining walls are able to resist leakage, water pressure and flotation.
- Drainage: Form surfaces of excavations and fill to provide adequate falls.
- Removal of water: Provide temporary drains, sumps and pumping as necessary. Do not pollute watercourses with silt laden water.

454 GROUND WATER LEVEL, SPRINGS OR RUNNING WATER

- Give notice: If it is considered that the excavations are below the water table.
- Springs/ Running water: Give notice immediately if encountered.

457 PUMPING

- General: Do not disturb excavated faces or stability of adjacent ground or structures.
- Pumped water: Discharge without flooding the site or adjoining property.
- Sumps: Construct clear of excavations. Fill on completion.
 - Locations: Submit proposals.

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FILLING

500 PROPOSED FILL MATERIALS

- Details: Submit full details of proposed fill materials to demonstrate compliance with specification, including:
 - Type and source of imported fill.
 - Proposals for processing and reuse of material excavated on site.
 - Test reports as required elsewhere.
- Timing: At least 21 days before starting filling.

510 HAZARDOUS, AGGRESSIVE OR UNSTABLE MATERIALS

- General: Do not use fill materials which would, either in themselves or in combination with other materials or ground water, give rise to a health hazard, damage to building structures or instability in the filling, including material that is:
 - Frozen or containing ice.
 - Organic.
 - Contaminated or noxious.
 - Susceptible to spontaneous combustion.
 - Likely to erode or decay and cause voids.
 - With excessive moisture content, slurry, mud or from marshes or bogs.
 - Clay of liquid limit exceeding 80 and/or plasticity index exceeding 55.
 - Unacceptable, class U2 as defined in the Highways Agency 'Specification for highway works', clause 601.

520 FROST SUSCEPTIBILITY

- General: Except as allowed below, fill must be non frost-susceptible as defined in Highways Agency 'Specification for highway works', clause 801.8.
- Test reports: If the following fill materials are proposed, submit a laboratory report confirming they are non frost-susceptible:
 - Fine grained soil with a plasticity index less than 20%.
 - Coarse grained soil or crushed granite with more than 10% retained on a 0.063 mm sieve.
 - Crushed chalk.
 - Crushed limestone fill with average saturation moisture content in excess of 3%.
 - Burnt colliery shale.
- Frost-susceptible fill: May only be used:
 - At depths below the finished ground surface greater than 1000 mm.
 - Within the external walls of buildings below spaces that will be heated. Protect from frost during construction.
 - Where frost heave will not affect structural elements.

530 PLACING FILL

- Surfaces of excavations and areas to be filled: Free from loose soil, topsoil, organic material, rubbish and standing water.
- Freezing conditions: Do not place fill on frozen surfaces. Remove material affected by frost. Replace and recompact if not damaged after thawing.
- Adjacent structures, membranes and buried services:
 - Do not overload, destabilise or damage.
 - Submit proposals for temporary support necessary to ensure stability during filling.
 - Allow 14 days (minimum) before backfilling against in situ concrete structures.
- Layers: Place so that only one type of material occurs in each layer.
- Earthmoving equipment: Vary route to avoid rutting.

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550 GEOTEXTILE SHEET

- Manufacturer: Submit proposals.
 - Product reference: Submit proposals.
- Type: Contractor's choice.
- Polymer type: Contractor's choice.
- Recycled content: Submit proposals.
- Jointing: 300 mm overlap.
- Preparation of subgrade: Before laying sheet, remove humps and sharp projections. Fill hollows.
- Protect from:
 - Exposure to light.
 - Contaminants.
 - Materials listed as potentially deleterious by geotextile manufacturer.
 - Wind uplift.

617 HIGHWAYS AGENCY TYPE 1 UNBOUND MIXTURE

- Fill: To Highways Agency 'Specification for highway works', clauses 801 and 803:
 - Crushed rock (other than argillaceous rock).
 - Crushed concrete.
 - Recycled aggregates.
 - Crushed non-expansive slag to clause 801.2.
 - Well-burned non-plastic colliery shale.
- Amendments to requirements in Highways Agency 'Specification for highway works': None.
- Filling: To Highways Agency 'Specification for highway works', clause 802.

700A BACKFILLING AROUND FOUNDATIONS

- Infront of retaining wall base: Concrete Grade ST2 Mix/C10

730 BLINDING

- 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 fill interstices. Moisten as necessary before final rolling to provide a flat, closed, smooth surface.
- Sand for blinding: To BS EN 12620, grade 0/4 or 0/2 (MP).
- Permissible deviations on surface level: +0 -25 mm.

850 COMPACTED GENERAL FILLING/ EARTHWORKS

- Specification: Highways Agency 'Specification for highway works', Earthworks section, clauses series 600.
 - Appendices (see clauses 900-970 in this section): 6/1.
 - Amendments to requirements in Highways Agency 'Specification for highway works': None.
- Definition: References to the 'Overseeing Organisation' are deemed to be to the issuer of this specification.
- Fill material:
 - Permitted classes/ source: N.
 - Assessment of acceptability: Tests as table 6/1 carried out by Contractor.
 - Preliminary tests: Not required.
- Compaction: As table 6/4.

E05 In situ concrete construction generally

To be read with Preliminaries/General conditions.

290 ACCURACY OF CONSTRUCTION

- Setting out: To BS 5964-1.
- Geometrical tolerances: To BS 5606.
 - Conflicts: Notwithstanding tolerances specified elsewhere, do not exceed requirements for compliance with the designated code of practice.
 - Substitution of alternative requirements: None.

E10 Mixing/casting/curing in situ concrete

To be read with Preliminaries/General conditions.

CONCRETE MIXES

- 101 SPECIFICATION
- Concrete generally: To BS 8500-2.
 - Exchange of information: Provide concrete producer with information required by BS 8500-1, clauses 4 and 5.
- 105 DESIGNATED CONCRETE RETAINING WALLS
- Designation: RC28/35.
 - Fibres: Not required.
 - Aggregates:
 - Size (maximum): 20 mm.
 - Coarse recycled aggregates: Contractor's choice.
 - Additional aggregate requirements: None.
 - Special requirements for cement/ combinations: Designation Cem I, IIA, IIB or III.
 - Consistence class: S3.
 - Chloride class: Cl 0.40.
 - Admixtures: None.
 - Additional mix requirements: None.
- 160 STANDARDIZED PRESCRIBED CONCRETE SURROUND TO GULLY POTS AND BASE TO MANHOLE
- Grade: ST2 mix/C10 grade.
 - Aggregates:
 - Size (maximum): 20 mm.
 - Additional aggregate requirements: none.
 - Special requirements for cement/ combinations: none.
 - Consistence class: S2.
 - Site mixing: permitted.

MATERIALS, BATCHING AND MIXING

- 215 READY-MIXED CONCRETE
- Production plant: Currently certified by a body accredited by UKAS to BS EN ISO/IEC 17065 for product conformity certification of ready-mixed concrete.
 - 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.
- 225 CHANGES TO SPECIFICATION
- Changes to specification of fresh concrete (outside concrete producer's responsibility): Prohibited .

PLACING/ COMPACTION/ CURING AND PROTECTION

630 PREMATURE WATER LOSS

- Requirement: Prevent water loss from concrete laid on absorbent substrates.
 - Underlay: Select from:
 - Polyethylene sheet: 250 micrometres thick.
 - Building paper: To BS 1521, grade B1F.
 - Installation: Lap edges 150 mm.

640 CONSTRUCTION JOINTS

- Location of joints: Horizontal joints in water resistant construction to be in detailed positions, otherwise pours to be continuous between movement joints.
- Preparation of joint surfaces: As section E40.

650 SURFACES TO RECEIVE CONCRETE

- Cleanliness of surfaces immediately before placing concrete: Clean with no debris, tying wire clippings, fastenings or free water.

680 PLACING

- Records: Maintain for time, date and location of all pours.
- Timing: Place as soon as practicable after mixing and while sufficiently plastic for full compaction.
- Temperature limitations for concrete: 30°C (maximum) and 5°C (minimum), unless otherwise specified. Do not place against frozen or frost covered surfaces.
- Continuity of pours: Place in final position in one continuous operation up to construction joints. Avoid formation of cold joints.
- Discharging concrete: Prevent uneven dispersal, segregation or loss of ingredients or any adverse effect on the formwork or formed finishes.
- Thickness of layers: To suit methods of compaction and achieve efficient amalgamation during compaction.
- Poker vibrators: Do not use to make concrete flow horizontally into position, except where necessary to achieve full compaction under void formers and cast-in accessories and at vertical joints.

690 COMPACTING

- General: Fully compact concrete to full depth to remove entrapped air. Continue until air bubbles cease to appear on the top surface.
 - Areas for particular attention: Around reinforcement, under void formers, cast-in accessories, into corners of formwork and at joints.
- Consecutive batches of concrete: Amalgamate without damaging adjacent partly hardened concrete.
- Methods of compaction: To suit consistence class and use of concrete.

810 CURING GENERALLY

- Evaporation from surfaces of concrete: Prevent, including from perimeters and abutments, 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: Cover immediately after placing and compacting. If covering is removed for finishing operations, replace it immediately afterwards.
- Surface temperature: Maintain above 5°C throughout the specified curing period or four days, whichever is longer.
- Records: Maintain details of location and timing of casting of individual batches, removal of formwork and removal of coverings. Keep records on site, available for inspection.

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811 COVERINGS FOR CURING

- Sheet coverings: Suitable impervious material.
- Curing compounds: Selection criteria:
 - Curing efficiency: Not less than 75% or for surfaces exposed to abrasion 90%.
 - Colouring: Fugitive dye.
 - Application to concrete exposed in the finished work: Readily removable without disfiguring the surface.
 - Application to concrete to receive bonded construction/ finish: No impediment to subsequent bonding.
- Interim covering to top surfaces of concrete: Until surfaces are in a suitable state to receive coverings in direct contact, cover with impervious sheeting held clear of the surface and sealed against draughts at perimeters and junctions.

840 PROTECTION

- Prevent damage to concrete, including:
 - Surfaces generally: From rain, indentation and other physical damage.
 - Surfaces to exposed visual concrete: From dirt, staining, rust marks and other disfiguration.
 - Immature concrete: From thermal shock, physical shock, overloading, movement and vibration
 - In cold weather: From entrapment and freezing expansion of water in pockets, etc.

E20 Formwork for in situ concrete

To be read with Preliminaries/ General conditions.

GENERALLY/ PREPARATION

110 LOADINGS

- Requirement: Design and construct formwork to withstand the worst combination of the following:
 - Total weight of formwork, reinforcement and concrete.
 - Construction loads including dynamic effects of placing, compacting and construction traffic.
 - Wind and snow loads.

CONSTRUCTION

310 ACCURACY

- General requirement for formwork: Accurately and robustly constructed to produce finished concrete in the required positions and to the required dimensions.
- Formed surfaces: Free from twist and bow (other than any required cambers).
- Intersections, lines and angles: Square, plumb and true.

STRIKING

510 STRIKING FORMWORK

- Timing: Prevent any disturbance, damage or overloading of the permanent structure.

521 MINIMUM PERIOD FOR RETAINING FORMWORK/ TEMPORARY SUPPORTS IN POSITION

- Concrete strength at time of formwork removal (minimum):
Backfilling behind retaining walls - delayed until concrete reaches a cube strength of 20 N/mm².
- Assumptions: Imposed load will not exceed 0.75kN/m² until concrete reaches full maturity.
 - Before removing formwork: Submit proposals if assumptions will not be realised.
- Method to be used in assessing early age strength of concrete: Submit proposals.

FORMED FINISHES

610 BASIC FINISH

- Location: Faces below ground level.
- Finish: Faces fully compacted and cover to reinforcement provided.

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620 PLAIN FINISH

- Location: Exposed faces.
- Finish: Even and dense. Arrange formwork panels in a regular pattern as a feature of the surface.
- Permissible deviation of surfaces:
 - Sudden irregularities (maximum): 3 mm.
 - Gradual irregularities (maximum): 3 mm, when measured from the underside of a 1 m straightedge, placed anywhere on surface.
- Variations in colour:
 - Permitted: Those caused by impermeable formwork linings.
 - Not permitted: Those caused by contamination or grout leakage.
- Surface blemishes:
 - Permitted: Blowholes less than 10 mm in diameter and at an agreed frequency.
 - Not permitted: Voids, honeycombing, segregation and other large defects.
- Formwork tie holes: In a regular pattern and filled with matching mortar.

E30 Reinforcement for in situ concrete

To be read with Preliminaries/ General conditions.

110 QUALITY ASSURANCE OF REINFORCEMENT

- Standards:
 - Reinforcement: To BS 4449, BS 4482, BS 4483 or BS 6744.
 - Cutting and bending: To BS 8666.
- Source of reinforcement: Companies holding valid certificates of approval for product conformity issued by the UK Certification Authority for Reinforcing Steels (CARES).

150 RIBBED BAR REINFORCEMENT

- Standard: To BS 4449.
 - Strength grade: B500B or B500C to BS 4449.

210 STANDARD FABRIC REINFORCEMENT

- Standard: To BS 4483.
- Strength grade: B500B or B500C.

310 CUTTING AND BENDING REINFORCEMENT

- General: To schedules and to BS 8666.
- Bending on site, including minor adjustments: Obtain instructions.

320 PROTECTION OF REINFORCEMENT

- Dropping from height, mechanical damage and shock loading: Prevent.
- Cleanliness of reinforcement at time of pouring concrete: Free from corrosive pitting, loose mill scale, loose rust and contaminants which may adversely affect the reinforcement, concrete, or bond between the two.

451 FIXING REINFORCEMENT

- Standard: To BS 7973-1 and -2.
- Installation: In addition to any spacers and chairs shown on drawings or schedules, provide adequate support, tie securely and maintain the specified cover.
- Tying:
 - Wire type: 16 gauge black annealed. Use stainless steel wire for stainless steel reinforcement.
 - Ends of tying wire: Prevent intrusion into the concrete cover. Remove loose ends.
- Compatibility of metals: Prevent contact between ordinary carbon steel and stainless or galvanized reinforcement.

480 NOMINAL COVER TO REINFORCEMENT

- Top face: Generally 40 mm unless otherwise stated.
- Formed faces: Generally 40mm unless otherwise stated.

E40 Designed joints in in situ concrete

To be read with Preliminaries/General conditions.

- 120A CONSTRUCTION/MOVEMENT JOINTS GENERALLY
- Accuracy: Position and form joints accurately, straight, well-aligned and truly vertical or horizontal or parallel with setting out lines.
 - Modifications to joint design or location: Submit proposals.
 - Placing concrete to form movement joints:
 - Maintain effectiveness of joints. Prevent concrete entering joints or penetrating or impregnating compressible joint fillers.
 - Do not place concrete simultaneously on both sides of movement joints.
- 210 FORMED JOINTS
- Forms/ stop ends generally: Rigid and grout-tight.
 - Forms/ stop ends for projecting continuity reinforcement: To accommodate bars or fabric without temporary bending or displacement.
- 230 PREPARATION OF CONSTRUCTION JOINTS
- Roughening of joint surfaces: Select from:
 - Brushing and spraying: Remove surface laitance and expose aggregate finish while concrete is still green.
 - Other methods: Submit proposals.
 - Condition of joint surfaces immediately before placing fresh concrete: Clean and damp.
- 530 SEALANT FOR JOINTS IN RETAINING WALLS.
- Manufacturer: Sika.
 - Product reference: Polysulphide GG.
 - Colour of surfaces exposed to view: Grey.
 - Preparation and application: As section Z22.
 - Guarantee: Not required.
 - Period: Not applicable.
 - Requirements: None.

Q10 Kerbs/ edgings/ channels/ paving accessories

TO BE READ WITH PRELIMINARIES/ GENERAL CONDITIONS.

TYPES OF KERBS/ EDGINGS/ CHANNELS

110 PROPRIETARY PRECAST CONCRETE KERBS

- Standard: To BS EN 1340.
- Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
- Recycled content: Contractor's choice.
- Designations: To match existing.
- Size (width x height x length): To match existing.
- Special shapes: none.
- Finish: As cast.
- Colour: Grey.
- Bedding: TBA.
- Joints generally: Tooled mortar.
- Sealant movement joints: Not required.
- Accessories: None.

395 ROAD MARKING (THERMOPLASTIC)

- Standard: Road Safety Markings Association standard specification document for road marking and road studs (StanSpec).
- Manufacturer: to match existing.
 - Product reference: to match existing.
- Colour: White.
- Retroreflectivity to BS EN 1436: Class R2.

LAYING

510 LAYING KERBS, EDGINGS AND CHANNELS

- Cutting: Neat, accurate and without spalling. Form neat junctions.
 - Long units (450 mm and over) minimum length after cutting: 300 mm.
 - Short units minimum length after cutting: The lower of one third of their original length or 50 mm.
- Bedding of units: Positioned true to line and levelled along top and front faces, in a mortar bed on accurately cast foundations or on a race of fresh concrete.
- Securing of units: After bedding has set, secured with a continuous haunching of concrete or on a race of fresh concrete with backing concrete cast monolithically.

530 CONCRETE FOR FOUNDATIONS, RACES AND HAUNCHING

- Standard: To BS 8500-2.
- Designated mix: Not less than GEN0 or Standard mix ST1.
- Workability: Very low.

540 CEMENT MORTAR BEDDING

- General: To section Z21.
- Mix: (Portland cement:sand): 1:3.
 - Portland cement: Class CEM I 42.5 to BS EN 197-1.
 - Sand: to BS EN 12620, grade 0/4 or 0/2 (MP).
- Bed thickness: 12-40 mm.

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640 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.

Q20 Granular sub-bases to roads/ pavings

To be read with Preliminaries/ General conditions.

- 110 THICKNESSES OF SUB-BASE/ SUBGRADE IMPROVEMENT LAYERS
- Thicknesses: See sections:
 - Q22 Coated macadam/ asphalt roads/ pavings.
- 145 PREPARATION AND COMPACTION OF SUBGRADES
- Timing: Immediately before placing sub-base.
 - Soft or damaged areas: Obtain instructions.
 - 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.
- 150 SUBGRADES FOR VEHICULAR AREAS
- Preparation and treatment: To Highways Agency 'Specification for highway works', clauses 616 and 617.
- 170 GEOTEXTILE FILTER/ SEPARATOR MEMBRANE TO LAND DRAIN
- Manufacturer: Contractor's choice.
 - Product reference: Submit proposals.
 - Jointing: 300 mm overlap.
 - Protect from:
 - Exposure to light, except during laying (maximum five hours).
 - Contaminants.
 - Materials listed as potentially deleterious by geotextile manufacturer.
 - Damage, until fully covered by fill.
 - Wind uplift, by laying not more than 15 m before covering with fill.
 - Preparation: Remove humps and sharp projections and fill hollows before laying.
- 180 NOTICE
- Give notice: After preparation and compaction of subgrades.
 - Period of notice: 2 working days.
- 210 HIGHWAYS AGENCY TYPE 1 UNBOUND MIXTURE FOR SUB-BASE
- Material: Type 1 unbound mixture to Highways Agency 'Specification for highway works', clauses 801 and 803.
 - Recycled aggregate: Permitted.
- 230 PLACING GRANULAR MATERIAL GENERALLY
- Preparation: Loose soil, rubbish and standing water removed.
 - Structures, membranes and buried services: Ensure stability and avoid damage.
- 240 LAYING GRANULAR SUB-BASES FOR VEHICULAR AREAS
- General: Spread and levelled in layers. As soon as possible thereafter compact each layer.
 - Standard: To Highways Agency 'Specification for highway works' clause 802.
 - At drainage fittings, inspection covers, perimeters and where local excavation and backfilling has taken place: Take particular care to compact fully.

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Swanage Boat Park

310 ACCURACY

- Permissible deviation from required levels, falls and cambers (maximum):
 - Subgrades:
Roads and parking areas: +20 -30 mm.
Footways and recreation areas: ± 20 mm.
 - Sub-bases:
Roads and parking areas: ± 20 mm.
 - Footways and recreation areas: none.

330 COLD WEATHER WORKING

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

340 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.

Q22 Asphalt roads/ pavings

To be read with Preliminaries/ General conditions.

TYPES OF PAVING

- 110 ASPHALT CONCRETE PAVING TO CAR PARK
- Standard: To Highways Agency (HA) 'Specification for highway works'.
 - Subgrade improvement layer: Not required.
 - Compacted thickness: Not applicable.
 - Granular sub-base: As section Q20.
 - Compacted thickness: As drawing 69010-11.
 - Geotextile: Not required.
 - Manufacturer: Not applicable.
 - Product reference: Not required.
 - Base: Not required.
 - Paving grade: Not applicable.
 - Compacted thickness: Not applicable.
 - Binder course: AC 20 dense bin.
 - Paving grade: 100/150.
 - Compacted thickness: 60 mm, nominal .
 - Surface course: AC 6 dense surf.
 - Paving grade: 100/150.
 - Slip/ Skid resistance: No requirement.
 - Compacted thickness: 25 mm, nominal.
 - Reclaimed content:
 - Standard: To BS EN 13108-8.
 - Value (maximum): Contractor's choice.
 - Surface treatment: Not required.
 - Other requirements: None.

LAYING

- 310 LAYING GENERALLY
- Preparation: Remove all loose material, rubbish and standing water.
 - Adjacent work: Form neat junctions. Do not damage.
 - Channels, kerbs, inspection covers etc: Keep clean.
 - New paving:
 - Keep traffic free until it has cooled to prevailing atmospheric temperature.
 - Do not allow rollers to stand at any time.
 - Prevent damage.
 - Lines and levels: With regular falls to prevent ponding.
 - Overall texture: Smooth, even and free from dragging, tearing or segregation.
 - State on completion: Clean.
- 330 LEVELS
- Permissible deviation from the required levels, falls and cambers (maximum): In accordance with BS 594987, clause 5.2.

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COMPLETION

390 DOCUMENTATION

- Standard: BS EN 13108-1.
 - Declaration of conformity: Submit.
- Number of copies: 1.

Submission: Two weeks prior to date when Contractor expects work to be complete.

Q40 Fencing

FENCING

- 30 PROPRIETARY FENCING GALVANISED BARRIER RAILING
- Manufacturer: Submit proposals.
 - Product reference: Submit proposals.
 - Height: 1100.
 - Components: Posts, top and midrails.
 - Post setting: Base socket bolted to top of retaining walls.
 - Accessories: None.
- 60 INSTALLATION GENERALLY
- Expertise: By an experienced fencing contractor.
 - Alignment: Straight lines or smoothly flowing curves.
 - Tops of posts: Following profile of the ground.
 - Setting posts: Rigid, plumb and to specified depth, or greater where necessary to ensure adequate support.
 - Fixings: All components securely fixed.
- 90 MAKING GOOD GALVANIZED SURFACES
- Treatment of minor damage (including on fasteners and fittings): Low melting point zinc alloy repair rods or powders made for this purpose, or at least two coats of zinc-rich paint to BS 4652.
 - Thickness: Apply sufficient material to provide a zinc coating at least equal in thickness to the original layer.

R12 Below ground drainage systems

To be read with Preliminaries/ General conditions.

GENERAL

- 110 BELOW GROUND DRAINAGE SYSTEM CAR PARK
- Surface water and rainwater drainage sources: One piece gullies .
 - Foul drainage sources: as existing.
 - Land drainage sources: see drawings.
 - Pressure relief drainage sources: Not applicable.
 - Pipes, bends and junctions: PVC-U - solid wall .
 - Accessories: Submit proposals .
 - Manholes, inspection chambers, traps, and separators: Manholes and inspection chambers - concrete or brickworks as drawing 69010-11 .
 - Accessories: Manhole channels and branches - conventional and steps .
 - Disposal: To sewers.
 - Accessories - general: Access covers and frames .
- 116 GROUNDWATER PRESSURE RELIEF DRAINAGE SYSTEM - FILTER DRAINS BACK OF RETAINING WALLS
- Pipes, bends and junctions: PVC-U - solid wall perforated, as section R16.
 - Pipe beddings and surrounds: as drawing 69010-11.
 - Capping: Polyethylene, as section R16.
 - Disposal: To below ground drainage system.
 - Accessories: None.

PRODUCTS

- 313 ONE PIECE GULLIES ROAD
- Standards: To BS EN 1253-1, -2, -3, -4 and -5; or
 - Cast iron: To BS 437 and Kitemark certified, or Agrément certified.
 - Clay: To BS EN 295-1 and Kitemark certified, or Agrément certified.
 - Concrete: To BS 5911-6 and Kitemark certified, or Agrément certified.
 - Plastics: To BS 4660 and Kitemark certified, or Agrément certified.
 - Polypropylene: To BS EN 1852-1.
 - Material: Cast iron.
 - Manufacturer: Contractor's choice.
 - Product reference: GA2-450sq.
 - Sizes: 450x450mm.
 - Outlet sizes: DN 150.
 - Silt buckets: None.
 - Product reference: N/A.
- 329 PIPES, BENDS AND JUNCTIONS - SUPPLY
- Pipes and fittings: From same manufacturer for each pipeline.

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- 344 PIPES, BENDS AND JUNCTIONS - PLASTICS -STRUCTURED WALL SURFACE WATER DRAINAGE
- Standard: Agrément certified.
 - Supplementary requirements: Puncture resistance, jetting resistance and longitudinal bending to requirements of WIS 4-35-01, issue 2.
 - Material: PVC-U.
 - Manufacturer: Submit proposals.
 - Product reference: Submit proposals.
 - Recycled content: Submit proposals.
 - Sizes: 150 & 225mm.
 - Jointing type: Spigot and socket.
- 407 MANHOLES AND INSPECTION CHAMBERS - CONCRETE SURFACE WATER
- Standards:
 - To BS 5911-3 and BS EN 1917 and Kitemark certified; or
 - To BS 5911-4 and BS EN 1917.
 - Manufacturer: Contractor's choice.
 - Shape: Rectangular or circular.
 - Sizes: 1200 x 675 mm.
 - Cement type and content: To BS 5911-3 and BS EN 1917 and Kitemark certified; or to BS 5911-4 and BS EN 1917.
 - Chamber sections:
 - Product reference: Contractor's choice.
 - Jointing type: Mortar.
 - Cover slabs:
 - Product reference: None.
 - Thickness: Not applicable.
 - Loading grades to BS EN 124: B125 and C250.
 - Openings: To suit access covers.
 - Steps: Required in chambers over 900 mm deep.
 - Vortex flow control units: Not required.
- 448 SEALING FOR CONCRETE MANHOLES - SEALANT SURFACE WATER
- Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
- 471 ACCESS COVERS AND FRAMES SURFACE WATER
- Standard: To BS EN 124.
 - Types: Class D.
 - Manufacturer: Contractor's choice.
 - Product reference: Submit proposals.
 - Material: Ductile cast iron.
 - Finishes: Self finish.
 - Sizes: 1200x675 mm.
 - Loading grades to BS EN 124: D400.
 - Edging trims: Not required.
 - Accessories: None.
- 473 ACCESS COVERS AND FRAMES - PRECAST CONCRETE SEATINGS SURFACE WATER
- Standards: To BS 5911-3 and BS EN 1917 and Kitemark certified.
 - Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
 - Opening sizes: To suit access covers.

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Swanage Boat Park

483 CONCRETE GENERALLY

- Standard: To BS 8500-2.
- Concrete: ST2, as section E10.

492 GEOTEXTILE MEMBRANES - FILTER WRAP TO LAND DRAIN

- Manufacturer: Contractor's choice.
- Product reference: Contractor's choice.

496A GRANULAR MATERIAL– NATURAL LAND DRAIN PIPE BEDDING

- - Size: Min. 14mm nominal size.

EXECUTION

611 EXISTING DRAINS

- Setting out: Before starting work, check invert levels and positions of existing drains, sewers, inspection chambers and manholes against drawings. Report discrepancies.
- Protection: Protect existing drains to be retained and maintain normal operation if in use.

631 TYPE OF SUBSOIL

- General: Where type of subsoil at level of crown of pipe differs from that stated for the type of bedding, surround or support, give notice.

635 FORMATION FOR BEDDINGS

- Timing: Excavate to formation immediately before laying beddings or pipes.
- Mud, rock projections, boulders and hard spots: Remove. Replace with consolidated bedding material.
- Local soft spots: Harden by tamping in bedding material.
- Inspection of excavated formations: Give notice.

683 LAYING PIPELINES

- Laying pipes: To true line and regular gradient on even bed for full length of barrel with sockets (if any) facing up the gradient.
- Ingress of debris: Seal exposed ends during construction.
- Timing: Minimize time between laying and testing.

685 JOINTING PIPELINES

- Connections: Durable, effective and free from leakage.
- Junctions, including to differing pipework systems: With adaptors intended for the purpose.
- Cut ends of pipes: Clean and square. Remove burrs and swarf. Chamfer pipe ends before inserting into ring seal sockets.
- Jointing or mating surfaces: Clean and, where necessary, lubricate immediately before assembly.
- Allowance for movement: Provide and maintain appropriate clearance at ends of spigots as fixing and jointing proceeds.
- Jointing material: Do not allow to project into bore of pipes and fittings.

697 INSTALLING FLEXIBLE COUPLINGS

- Ends of pipes to be joined: Cut cleanly and square.
- Outer surfaces of pipes to be joined: Clean and smooth. Where necessary, e.g. on concrete or iron pipes, smooth out mould lines and/ or apply a cement grout over the sealing area.
- Clamping bands: Tighten carefully to make gastight and watertight seals.

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705 INITIAL TESTING OF PIPELINES

- Before testing:
 - Cement mortar jointing: Leave 24 h.
 - Solvent welded pipelines: Leave 1 h.
- Method: Block open ends of pipelines to be tested and pressurise. Air test short lengths to BS EN 1610.

720 BACKFILLING UNDER ROADS AND PAVINGS

- Backfilling from top of surround or protective cushion up to formation level: Granular sub-base material, laid and compacted in 150 mm layers.

734 INSTALLING ACCESS POINTS AND GULLIES

- Bedding:
 - Material: Concrete.
 - Thickness (minimum): 150 mm.
- Surround:
 - Material: Concrete.
 - Thickness (minimum): 150 mm.
 - Height: Full height.
- Backfilling:
 - Material: as retaining wall backfill.
 - Compaction: By hand in 100 mm layers.
- Setting out relative to adjacent construction features: Square and tightly jointed.
- Permissible deviation in level of external covers and gratings: +0 to -6 mm.
- Raising pieces (clay and concrete units): Joint with 1:3 cement:sand mortar.
- Exposed openings: Fit purpose made temporary caps. Protect from site traffic.

743 INSTALLING CONCRETE MANHOLES

- Bases:
 - Material: Concrete.
 - Thickness (minimum): 150mm.
- Surround:
 - Material: Not required.
 - Thickness (minimum): Not required.
 - Height: Not required.
- Backfilling:
 - Material: as retaining wall backfill.
 - Compaction: By hand in 100 mm layers.

753 FIXING MANHOLE STEPS

- Fixing: Secure to chamber wall.
- Positioning: 300 mm vertical centres staggered 300 mm horizontally, with lowest step 300 mm (maximum) above benching and top step 450 mm (maximum) below top of cover.

755 JOINTING CONCRETE MANHOLE CHAMBER SECTIONS

- Jointing and sealing: sealant.
- Inner joint surface: Trim surplus jointing material extruded into chamber and point neatly.

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Swanage Boat Park

757 LAYING CONVENTIONAL CHANNELS, BRANCHES AND BENCHING

- Main channel: Bed solid in 1:3 cement:sand mortar.
 - Branches: Connect to main channel at or slightly above invert level, but not higher than half channel level, so that discharge flows smoothly in direction of main flow.
 - Branches greater than nominal size 150 mm: Connect the branch soffit level with the main drain soffit.
 - Connecting angles more than 45° to direction of flow: Use three-quarter section channel bends.
- Benching:
 - Material: Concrete.
 - Profile: Rise vertically from top of main channel to a level not lower than soffit of outlet pipe, then slope upwards at 10% to walls.
 - Topping:
 - Material: high strength concrete, min. 20mm thick.
 - Application: Before benching concrete has set, and with dense smooth uniform finish.

773 INSTALLING ACCESS COVERS AND FRAMES

- Seating: Class B engineering brickwork .
- Bedding and haunching of frames: Continuously.
 - Material: 1:3 cement:sand mortar.
 - Top of haunching: 30 mm below surrounding surfaces.
- Horizontal positioning of frames:
 - Centred over openings.
 - Square with joints in surrounding paving.
- Vertical positioning of frames:
 - Level; or
 - Marry in with levels of surrounding paving.
- Permissible deviation in level of external covers and frames: +0 to -6 mm.

776 EXPOSED OPENINGS IN INSPECTION CHAMBERS, ACCESS POINTS, FITTINGS AND EQUIPMENT

- General: Fit purpose made temporary caps. Protect from site traffic.

COMPLETION

901 REMOVAL OF DEBRIS AND CLEANING

- Preparation: Lift covers to manholes, inspection chambers and access points. Remove mortar droppings, debris and loose wrappings.
 - Timing: Before cleaning, final testing, CCTV inspection if specified, and immediately before handover.
- Cleaning: Thoroughly flush pipelines with water to remove silt and check for blockages. Rod pipelines between access points if there is any indication that they may be obstructed.
- Washings and detritus: Do not discharge into sewers or watercourses.
- Covers: Securely replace after cleaning and testing.

911 TESTING AND INSPECTION

- Dates for testing and inspection: Give notice.
 - Period of notice: 2 days.

941 WATER TESTING OF MANHOLES AND INSPECTION CHAMBERS

- Timing: Before backfilling.
- Standard:
 - Exfiltration: To BS EN 1610.
 - Method: Testing with water (method W).
 - Infiltration: No identifiable flow of water penetrating the chamber.

R16 Groundwater pressure relief drainage

To be read with Preliminaries/General conditions

PRODUCTS

- 305 BELOW GROUND DRAINAGE SYSTEMS - PRODUCTS
- Products generally: As section R12.
- 345 PIPES, BENDS AND JUNCTIONS - PVC-U - SOLID WALL PERFORATED LAND DRAIN TO REAR OF RETAINING WALLS
- Standard: To BS EN 1401-1 with flexible joints.
 - Class: Submit proposals.
 - Manufacturer: Submit proposals.
 - Product reference: Submit proposals.
 - Recycled content: Submit proposals.
 - Application area code: UD.
 - Sizes: As drawing 69010-11.
- 360 POLYETHYLENE SHEET FOR FILTER DRAIN CAPPING
- Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
 - Thickness: 300 µm (1200 gauge).

EXECUTION

- 605 BELOW GROUND DRAINAGE SYSTEMS - EXECUTION
- Execution generally: As section R12.
- 630 LAYING PERFORATED PIPES
- Pipe types laid with perforations up: Submit proposals.
 - Pipe types laid with perforations down: None.
- 650 LAYING FILTER DRAIN CAPPINGS
- Geotextile membrane or polyethylene sheet: Lay over completed surround before backfilling.
 - Jointing: Overlap 300 mm (minimum).

V91 Electrical systems - landscape

To be read with Preliminaries/ General conditions.

GENERAL

- 115 EXTERNAL LIGHTING SYSTEM EXISTING COLUMN LIGHTING
- Origin of supply: Cable distribution cabinets.
 - Type: check.
 - Final circuit cabling: check existing is suitable for reuse or submit proposal.
 - Containment: If required submit design and cost proposals.
 - Rewireable installation: Not required.
 - Concealed installation: Required.
 - Cable identification and protection: Submit design and cost proposals.
 - Luminaires: Road and street lighting.
 - Lighting columns: Reuse existing.
 - Lamps: Required.
 - Lamp controlgear: Required.
 - Individual control of luminaires: as existing.
 - Group control of luminaires: Not required.
 - Final connections: Required.
 - Accessories: None.
- 260 CABLES GENERALLY
- Cable sizes not stated: Submit proposals and calculations.

PRODUCTS

- 303 PRODUCTS STANDARDS AND APPROVALS GENERALLY
- Standard: In accordance with BS 7671.
 - CE Marking: Required.
 - Cables: BASEC approved.

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Swanage Boat Park

305 PARTICULAR PRODUCT STANDARDS

- Mineral insulated copper sheathed cables: To BS EN 60702-1.
 - Mineral insulated copper sheathed cable terminations: To BS EN 60702-2.
- Cable distribution cabinets: BS EN 61439-1 and BS EN 61439-5.
- Trunking and ducting: To BS EN 50085-1.
- Luminaires: To BS EN 60598-1 and BS EN 55015.
- Separated extra low voltage (SELV) transformers: To BS EN 61558-2-1.
- Lighting columns:
 - Aluminium: To BS EN 40-6.
 - Steel: To BS EN 40-5.
- Discharge lamp controlgear: To BS EN 60923 and BS EN 61347-2-9 or to BS EN 62386-101, -102, and -203.
- High frequency fluorescent lamp controlgear: To BS EN 60929 and BS EN 61347-2-3 or to BS EN 62386-101, -102, and -201.
- LED module controlgear: To BS EN 61347-2-13 or to BS EN 62386-101, -102, and -207.
- Low voltage halogen lamp dimmable digital addressable lighting interface (DALI) controlgear: To BS EN 62386-101, -102, and -204.
- Incandescent lamp digital addressable lighting interface (DALI) controlgear: To BS EN 62386-101, -102 and -205.
- Lamps:
 - Compact fluorescent lamps: To BS EN 60901 and BS EN 61199.
 - High pressure mercury lamps: To BS EN 60188 and BS EN 62035.
 - High pressure sodium lamps: To BS EN 62035.
 - Light emitting diode (LED) modules to BS EN 62031.
 - Metal halide lamps: To BS EN 62035.
 - Tubular fluorescent lamps: Single-capped: To BS EN 60901 and BS EN 61199.
 - Tubular fluorescent lamps: Double-capped: To BS EN 60081 and BS EN 61195.
 - Tungsten halogen lamps: To BS EN 60432-2 and BS EN 60357.
- Incandescent (tungsten filament) lamps: To BS EN 60432-1.
- Photoelectric control units: To BS 5972.
- Time switches: BS EN 60730-1 and BS EN 60730-2-7.
 - Approval: BEAB.
- Underground cable marker tape: To BS EN 12613.
- Underground concrete cable protection covers: To BS 2484.

335 LUMINAIRES GENERALLY

- Standards: To BS EN 60598-1 and BS EN 55015.

340 LUMINAIRES FOR ROAD AND STREET LIGHTING EXISTING COLUMN

- Standard: To Highways Agency Specification for highway works volume 1.
 - Approval: Kitemark certified.
- Photometric performance: To BS EN 13032-1.
- Manufacturer: Submit proposals.
 - Product reference: Submit proposals .
- Ingress protection to BS EN 60529: IP65.
- Material: Submit proposals .
 - Finish and colour: Submit proposals.
- Mounting: Submit proposals .
 - Type: Submit proposals .
- Lamp: Submit proposals.
 - Wattage: Submit proposals.
 - Colour temperature: Submit proposals.
- Controlgear: Submit proposals.
- Accessories: Submit proposals.

Swanage Town Council

Swanage Boat Park

385 LAMPS GENERALLY

- Standards:
 - Compact fluorescent lamps: To BS EN 60901 and BS EN 61199.
 - High pressure mercury lamps: To BS EN 60188 and BS EN 62035.
 - High pressure sodium lamps: To BS EN 62035.
 - Light emitting diodes (LEDs): To BS EN 62031.
 - Metal halide lamps: To BS EN 62035.
 - Tubular fluorescent lamps: Single-capped: To BS EN 60901 and BS EN 61199.
 - Tubular fluorescent lamps: Double-capped: To BS EN 60081 and BS EN 61195.
 - Tungsten halogen lamps: To BS EN 60432-2 and BS EN 60357.
- Manufacturer: Submit proposals.
 - Lamps of the same type and rating: Same manufacturer.

390 LAMP CONTROLGEAR

- High frequency fluorescent lamp controlgear: To BS EN 60929 and BS EN 61347-2-3 or to BS EN 62386-101, -102, and -201.
- Discharge lamp controlgear: To BS EN 61347-2-9 and BS EN 60923 or to BS EN 62386-101, -102, and -203.
- Light emitting diode (LED) module controlgear: To BS EN 61347-2-13 or to BS EN 62386-101, -102, and -207.
- Low voltage halogen lamp dimmable digital addressable lighting interface (DALI) controlgear: To BS EN 62386-101, -102, and -204.

425 UNDERGROUND CABLE MARKER TAPE

- Standard: To BS EN 12613.
- Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
- Material: Polyethylene.
- Size:
 - Width: 150 mm.
 - Thickness: 0.1 mm.
- Format:
 - Background colour: Yellow.
 - Text colour: Black.
- Labelling: 'CAUTION ELECTRIC CABLE BELOW' continuous along the tape length.

EXECUTION

605 ELECTRICAL INSTALLATION GENERALLY

- Standard: In accordance with BS 7671.

630 INSTALLING CABLES

- Temperature: Do not start installation if cable or ambient temperature is below 0°C, or has been below 0°C during the previous 24 hours.
- Cable routes: as existing.
- Joints: At luminaires and electrical accessories only.
- Fixings: Corrosion-resistant and compatible with the environment where they are installed.

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635 INSTALLING CABLES DIRECTLY IN THE GROUND

- Cables: Lay on newly prepared bedding.
- Cable bedding: 75 mm of sand.
- Cable pulling: Prevent kinks and twisting of the cable.
- Installation method: Submit proposals.
- Cable formation within trench: not applicable.
- Cables below roads and hard standings: Duct and derate if longer than 10 m. Extend ducts 1 m each side of hard standing.
- Cable marker tape: Lay at a distance of 250 mm above each underground cable and cable duct.
- Backfilling: 75 mm of sand over cables, then as-dug material.

640 INSTALLING UNDERGROUND CABLE MARKER TAPE

- Location: Directly over each underground cable and cable duct.
- Installation: During backfilling.
 - Depth: 250 mm above the cable.

650 SETTING COMPONENTS IN CONCRETE FOUNDATIONS AND BASES

- Foundation holes: Form neat holes with vertical sides. Cover bottom with a 50 mm layer of concrete.
- Locating components: Accurately position, plumb and provide secure temporary support.
- Cable ducts: Connect to column cable entry slot and protect against collapse during backfilling.
- Concrete surround: Fill holes to at least the specified depth. Fully compact as filling proceeds. Maintain temporary support and prevent disturbance for at least 48 h.
- Concrete foundations:
 - Concealed: Finish by bedding and haunching at a depth suitable to receive the overlying finish.
 - Exposed: Compact until air bubbles cease to appear on the surface. Weather to shed water, and trowel smooth.

655A SETTING COMPONENTS IN BACKFILL

- Locating components: Accurately position, plumb and provide secure temporary support.
- Cable ducts: Connect to column cable entry slot and protect against collapse during backfilling.
- Backfilling: Fully compact in 50 mm layers as filling proceeds.

660 HANDLING AND ERECTING LIGHTING COLUMNS

- Standard: To Highways Agency 'Specification for highway works Volume 1'.

670 LIGHTING COLUMN IDENTIFICATION

- Manufacturer's marking: To Highways Agency 'Specification for highway works Volume 1' clause 1304.
- Location marking for inspection and maintenance purposes: check for existing tags set aside safely to avoid loss whilst column is down.

675 INSTALLING LUMINAIRES AND LAMPS GENERALLY

- Location: As existing.
- Orientation: As existing.
- Supports: Adequate for weight of luminaire.

Swanage Town Council
Swanage Boat Park

COMPLETION

820 CLEANING

- Electrical equipment: Clean immediately before handover.

870 INSPECTION AND TESTING OF EXTERNAL LIGHTING

- Switching: Check correct operation of photoelectric control units, time switches and other switching devices over at least one switching cycle.
- Orientation: Adjust luminaires to achieve optimal performance.
- Additional requirements: none.

880 DOCUMENTATION

- Timing: Submit at completion.
- Contents:
 - Full technical description of each system installed.
 - Manufacturers' operating and maintenance instructions for fittings and apparatus including relamping instructions for luminaire types. Identify hazardous lamps that require specialist disposal.
 - Recommended frequency of testing and inspection, both for electrical safety, and for matters such as the corrosion and security of lighting columns and luminaire fixings.
 - Manufacturers' guarantees and warranties.
 - As-installed drawings showing circuits and their ratings and locations of fittings, apparatus and underground cable routes.
 - List of normal consumable items and their sources.

Z21 Mortars

To be read with Preliminaries/ General conditions.

CEMENT GAUGED MORTARS

- 110 CEMENT GAUGED MORTAR MIXES
- Specification: Proportions and additional requirements for mortar materials are specified elsewhere.
- 120 SAND FOR SITE MADE CEMENT GAUGED MASONRY MORTARS
- Standard: To BS EN 13139.
 - Grading: 0/2 (FP or MP).
 - Fines content where the proportion of sand in a mortar mix is specified as a range (e.g. 1:1: 5-6):
Lower proportion of sand: Use category 3 fines.
Higher proportion of sand: Use category 2 fines.
 - Sand for facework mortar: Maintain consistent colour and texture. Obtain from one source.
- 135 SITE MADE LIME:SAND FOR CEMENT GAUGED MASONRY MORTARS
- Permitted use: Where a special colour is not required and in lieu of factory made ready-mixed material.
 - Lime: Nonhydraulic to BS EN 459-1.
 - Type: CL 90S.
 - Mixing: Thoroughly mix lime with sand, in the dry state. Add water and mix again. Allow to stand, without drying out, for at least 16 hours before using.
- 160 CEMENTS FOR MORTARS
- Cement: To BS EN 197-1 and CE marked.
 - Types: Portland cement, CEM I.
Portland limestone cement, CEM II/A-L or CEM II/A-LL.
Portland slag cement, CEM II/B-S.
Portland fly ash cement, CEM II/B-V.
 - Strength class: 32.5, 42.5 or 52.5.
 - White cement: To BS EN 197-1 and CE marked.
 - Type: Portland cement, CEM I.
 - Strength class: 52.5.
 - Sulfate resisting Portland cement:
 - Types: To BS EN 197-1 Sulfate resisting Portland cement, CEM I/SR and CE marked.
To BS EN 197-1 fly ash cement, CEM II/B-V and CE marked.
 - Strength class: 32.5, 42.5 or 52.5.
 - Masonry cement: To BS EN 413-1 and CE marked.
 - Class: MC 12.5.
- 180 ADMIXTURES FOR SITE MADE CEMENT GAUGED MORTARS
- Air entraining (plasticizing) admixtures: To BS EN 934-3 and compatible with other mortar constituents.
 - Other admixtures: Submit proposals.
 - Prohibited admixtures: Calcium chloride, ethylene glycol and any admixture containing calcium chloride.

Swanage Town Council
Swanage Boat Park

210 MAKING CEMENT GAUGED MORTARS

- Batching: By volume. Use clean and accurate gauge boxes or buckets.
 - Mix proportions: Based on dry sand. Allow for bulking of damp sand.
- Mixing: Mix materials thoroughly to uniform consistency, free from lumps.
 - Mortars containing air entraining admixtures: Mix mechanically. Do not overmix.
- Working time (maximum): Two hours at normal temperatures.
- Contamination: Prevent intermixing with other materials.

LIME:SAND MORTARS

310 LIME:SAND MORTAR MIXES

- Specification: Proportions and additional requirements for mortar materials are specified elsewhere.

320 SAND FOR LIME:SAND MASONRY MORTARS

- Type: Sharp, well graded.
 - Quality, sampling and testing: To BS EN 13139.
 - Grading/ Source: As specified elsewhere in relevant mortar mix items.

360 MAKING LIME:SAND MORTARS GENERALLY

- Batching: By volume. Use clean and accurate gauge boxes or buckets.
- Mixing: Mix materials thoroughly to uniform consistency, free from lumps.
- Contamination: Prevent intermixing with other materials, including cement.

PROJECT: REPLACEMENT RETAINING WALLS

LOCATION: SWANAGE BOAT PARK, PEVERIL POINT ROAD, SWANAGE BH19 2AY

SECTION

3 Schedule of Works

**Swanage Boat Park
Schedule of Works**

All works to be carried out in accordance with the Preambles and the structural engineers drawings 69010-11 to 69010-12; 69010-40 to 69010-45 and bar schedule.

Item	Description	Cost
1	Demolitions	
1.2	Isolate, disconnect and carefully take down existing lighting column and set aside for reuse	
1.3	Take down lower blockwork retaining wall and remove all arisings from site	
1.4	Take down upper blockwork retaining wall and remove all arisings from site	
1.5	Break out foundations to lower retaining wall and remove all arisings from site	
1.6	Break out foundations to upper retaining wall and remove all arisings from site	
2	Excavations	
2.1	Excavate for foundations to depths shown on drawings for lower retaining wall.	
2.2	Excavate for foundations to depths shown on drawings for upper retaining wall.	
3	In situ concrete retaining walls	
3.1	Form in situ concrete retaining wall and foundations to lower terrace in accordance with structural engineers drawings and schedule. Include for geotextile lining, land drain to back of wall and all backfilling.	
3.2	Form in situ concrete retaining wall and foundations to upper terrace in accordance with structural engineers drawings and schedule. Include for geotextile lining, land drain to back of wall and all backfilling.	
4	Drainage	
4.1	Form new surface water drainage run and connect to outfall onto beach, include for all connections, gullies, inspection chambers and covers in accordance with drawings 69010-10 & 11.	
4.2	Supply and lay land drain to back of wall, include for geotextile wrap, pipe bedding and connections into surface water drainage system.	
5	Barrier rail	
5.1	Supply and fit Kee Klamp type barrier rail to top of upper and lower walls, including returns.	
6	Car Park Reinstatement	
6.1	Supply and lay asphalt surfacing to reinstate all disturbed and incomplete surfacing to the boat park.	
7	Miscellaneous	

Swanage Boat Park
Schedule of Works

- | | |
|-----|---|
| 7.1 | Reinstate set aside lighting column with replacement LED equivalent head fitting, reconnect supply and test. |
| 7.2 | Allow for 100lm line marking to match existing type, plan to be agreed. |
| 7.3 | Carry out stonework repointing and rebedding repairs to stone retaining wall in accordance with drawing 69010-12. |

PROJECT: REPLACEMENT RETAINING WALLS

LOCATION: SWANAGE BOAT PARK, PEVERIL POINT ROAD, SWANAGE BH19 2AY

SECTION

4 Drawings

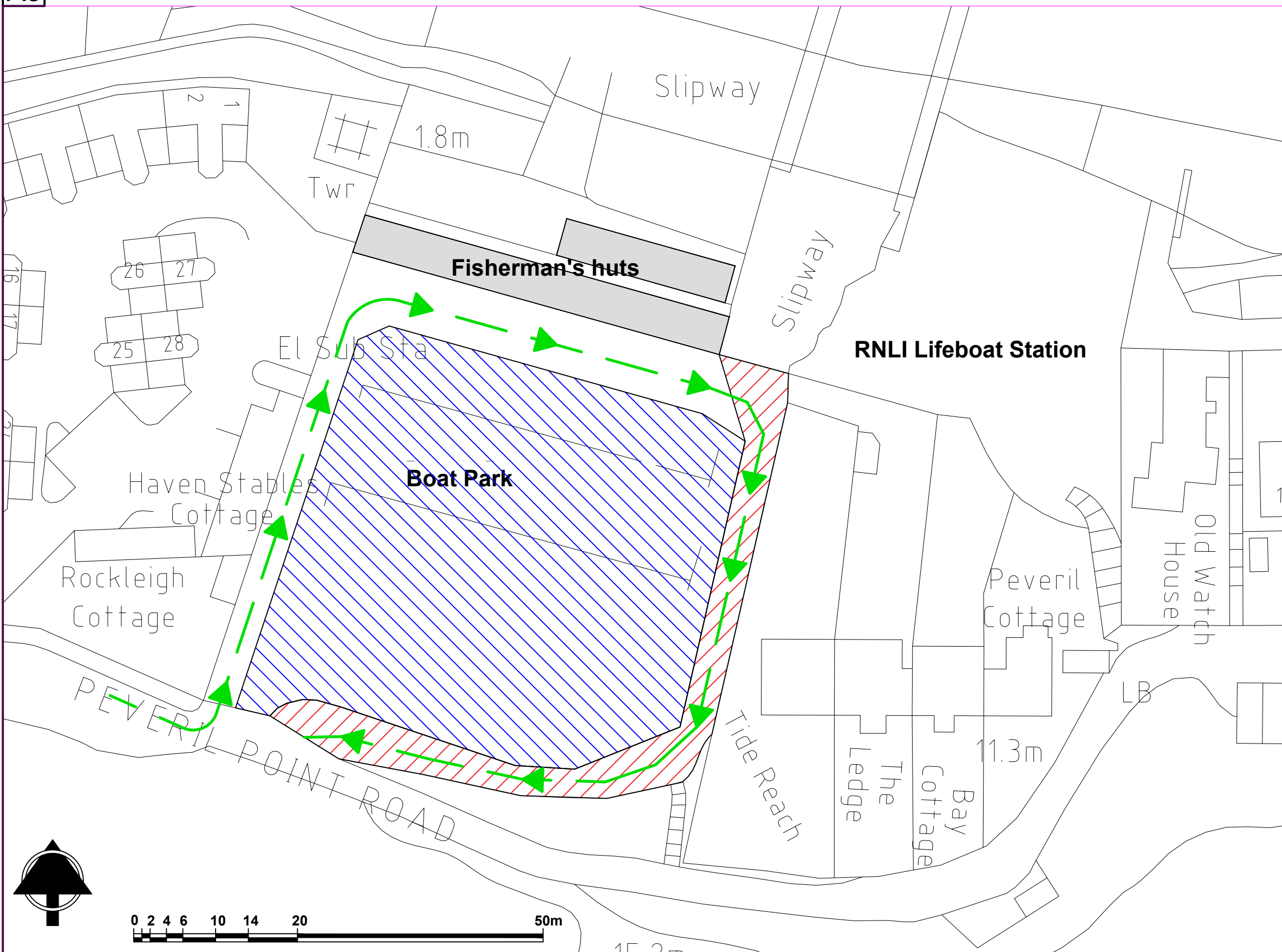
Dorset County Council - Dorset Property

Client: Swanage Town Council

Project: Replacement Retaining Walls

DRAWING SCHEDULE

Drawing No.	Description of Drawing
69010/10 T1	SITE PLAN-STRUCTURE AND DRAINAGE
69010/11 T2	SECTIONS AND DETAILS
69010/12 T1	REPAIRS TO UPPER WALL
69010/40 T2	REINFORCEMENT DETAILS KEY PLAN & TYPICAL SECTIONS
69010/41 T1	REINFORCEMENT DETAILS - SHEET 1
69010/42 T1	REINFORCEMENT DETAILS - SHEET 2
69010/43 T1	REINFORCEMENT DETAILS - SHEET 3
69010/44 T1	REINFORCEMENT DETAILS - SHEET 4
69010/45T1	REINFORCEMENT DETAILS - SHEET 5
006020/P101	SITE ARRANGEMENTS PLAN



KEY

-  Access route to be kept clear at all times
-  Site area
-  Existing oneway traffic route suggested to be maintained, alternative options can be agreed at Pre-contract meeting

Dorset Property

County Hall, Colliton Park, Dorchester, Dorset DT1 1XJ
Telephone: 01305 225200 Facsimile: 01305 224835

www.dorsetforyou.gov.uk/dorset-property

Client

SWANAGE TOWN COUNCIL

Job Title

SWANAGE BOAT PARK

PEVERIL POINT ROAD, SWANAGE, BH19 2AY

Drawing Title

REPLACEMENT RETAINING WALLS
SITE ARRANGEMENTS PLAN

Scale
1:500 @ A3

Date
OCT 2017

Drawn By
VAB

Filename

Property Ref.

Pims No.
006020

Drawing No.
P101

Revision

Dorset County Council



Working together for a strong and successful Dorset

PROJECT: REPLACEMENT RETAINING WALLS

LOCATION: SWANAGE BOAT PARK, PEVERIL POINT ROAD, SWANAGE BH19 2AY

SECTION

5 Bar Schedule

SMITH FOSTER LTD.

Bar schedule ref :

040

01

Site ref : SWANAGE BOAT PARK

Date prepared : 22.06.17

Job no : 69010

Prepared by : BH

Checked by : IF

[illegible]

This schedule conforms to BS 8666:2005

SPREADSHEET LICENSED TO SMITH FOSTER LIMITED

Bar Schedule 8666 v5.01

* Specified in multiples of 5mm.

† Specified in multiples of 25mm.

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SMITH FOSTER LTD.

Bar schedule ref :

040

02

Site ref : SWANAGE BOAT PARKDate prepared : 22.06.17Job no : 69010

Prepared by :

BH

Checked by : IF

Member	Bar mark	Type and size	No. of mbrs	No. of bars in each	Total no.	Length of each bar † mm	Shape code	A * mm	B * mm	C * mm	D * mm	E/R * mm	Rev letter
LOWER	16a	B 12	1	52	52	1350	00	1350					
WALL	16b	B 12	1	40	40	1475	00	1475					
STEM	16c	B 12	1	40	40	1575	00	1575					
(BAYS A-L)	16d	B 12	1	40	40	1650	00	1650					
	16e	B 12	1	40	40	1600	00	1600					
	16f	B 12	1	40	40	1550	00	1550					
	16g	B 12	1	40	40	1525	00	1525					
	16h	B 12	1	40	40	1500	00	1500					
	16j	B 12	1	40	40	1475	00	1475					
	16k	B 12	1	40	40	1450	00	1450					
	16l	B 12	1	64	64	1425	00	1425					
	17	B 10	1	36	36	1700	21	780	175				
	18	B 10	1	18	18	4075	00	4075					
	19	B 10	1	178	178	4450	00	4450					
	20	B 10	1	238	238	1275	21	560	195				
	21	B 10	1	18	18	2875	21	1360	175				
	22	B 10	1	18	18	3850	00	3850					

This schedule conforms to BS 8666:2005

SPREADSHEET LICENSED TO SMITH FOSTER LIMITED

Bar Schedule 8666 v5.01

* Specified in multiples of 5mm.

† Specified in multiples of 25mm.

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SMITH FOSTER LTD.

Bar schedule ref :

040

03

Site ref : SWANAGE BOAT PARK

Date prepared : 22.06.17

Job no : 69010

Prepared by : BH

Checked by : IF

[illegible]

This schedule conforms to BS 8666:2005

SPREADSHEET LICENSED TO SMITH FOSTER LIMITED

Bar Schedule 8666 v5.01

* Specified in multiples of 5mm.

† Specified in multiples of 25mm.

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SMITH FOSTER LTD.

Bar schedule ref :

040 04

Site ref : SWANAGE BOAT PARKDate prepared : 22.06.17Job no : 69010Prepared by : BH Checked by : IF

Member	Bar mark	Type and size	No. of mbrs	No. of bars in each	Total no.	Length of each bar † mm	Shape code	A * mm	B * mm	C * mm	D * mm	E/R * mm	Rev letter
UPPER	16m	B 12	1	60	60	1125	00	1125					
WALL	16n	B 12	1	40	40	1300	00	1300					
STEM	16p	B 12	1	40	40	1450	00	1450					
(BAYS M-Y)	16q	B 12	1	40	40	1575	00	1575					
	16r	B 12	1	40	40	1525	00	1525					
	16s	B 12	1	40	40	1475	00	1475					
	16t	B 12	1	40	40	1450	00	1450					
	16u	B 12	1	40	40	1400	00	1400					
	16v	B 12	1	40	40	1375	00	1375					
	16w	B 12	1	40	40	1325	00	1325					
	16x	B 12	1	40	40	1300	00	1300					
	16y	B 12	1	50	50	1300	00	1300					
	17	B 10	1	33	33	1700	21	780	175				
18 NOT USED	19	B 10	1	196	196	4450	00	4450					
	20	B 10	1	255	255	1275	21	560	195				
21-25 NOT USED	26	B 10	1	16	16	2975	00	2975					
	27	B 10	1	34	34	2500	00	2500					

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PROJECT: REPLACEMENT RETAINING WALLS

LOCATION: SWANAGE BOAT PARK, PEVERIL POINT ROAD, SWANAGE BH19 2AY

SECTION

6 Tender Summary Sheet

PROJECT: REPLACEMENT RETAINING WALLS

LOCATION: SWANAGE BOAT PARK, PEVERIL POINT ROAD, SWANAGE BH19 2AY

	TENDER SUMMARY SHEET	Costs
1	Preliminaries	£
2	Preambles	
3	Schedule of Works	£
	Contingency	£10,000.00
	Total Tender Amount (to be carried forward to form of tender) excl VAT	£

To be returned with Form of Tender