

SWANAGE TOWN COUNCIL

A specification for proposed construction of an extension to Godlingston Cemetery, Washpond Lane, Swanage BH19 3DH.

19 FEBRUARY 2021

TGMS1215.2

STATUS: TENDER

REVISION RECORD					
Rev	Date	Description	Prepared	Checked	Approved
0	19-02-21	Document Creation.	RE	MY	MY
1	26-02-21	Macadam surfacing added to area in front of two storage containers.	RE	MY	MY
2	23-03-21	New timber post and rail fencing added near the northern car park.	RE	MY	MY

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1. PART I: JCT 2016 MINOR WORKS BUILDING CONTRACT - PRELIMINARIES SUMMARY

1.1 PROJECT PARTICULARS

1.1.1 The Project

- Name: Godlingston Cemetery.
- Nature: Construction of a cemetery extension.
- Location: Godlingston Cemetery, Washpond Lane, Swanage BH19 3DH.
- Length of contract: 12 Weeks.

1.1.2 Employer (Client)

- Name: Swanage Town Council.
- Address: C/o Gail Percival (Operations Manager), Swanage Town Council, Unit 5 Anvil Centre, Prospect Business Park, Victoria Avenue, Swanage, Dorset, BH19 1EJ.
- Contact: Gail Percival
- Telephone: 01929 766034
- Email: g.percival@swanage.gov.uk

1.1.3 Principal Contractor (CDM)

- Name: TBC
- Address:
- Contact:
- Telephone:
- E-mail:

1.1.4 Architect / Contract Administrator

- Name: TGMS.
- Address: 4 Doolittle Mill, Froghall Road, Ampthill, Bedfordshire, MK45 2ND.
- Contact: Dr Richard Earl
- Telephone: 01525 307060
- Email: richard.earl@tgms.co.uk

1.1.5 CDM Administrator

- Name: N/A
- Address:
- Contact:
- Telephone:
- Email:

1.2 FORM OF CONTRACT

The form of contract will be the Joint Contracts Tribunal Ltd Minor Works Building Contract 2016 Edition incorporating all current published amendments.

The Clauses are scheduled within this document but the Contractor must inspect the draft form for the full details of these Clauses and is to allow such sum/s as may deem necessary for carrying out the obligations and services required by the Contract.

Payment terms are amended to 30 days.

All information contained within this document is subject to the conditions of the above stated contract.

1.3 THE RECITALS

1.3.1 First Recital

The work comprises the construction of a cemetery extension.

1.3.2 Second Recital

All construction information is found in the specification section (**REF: TGMS1215.2**) and on the drawings scheduled in Table 1 below.

1.3.3 Third Recital

The Contractor is to supply the Employer with a copy of the priced Work Schedules.

1.3.4 Forth Recital

Is the Employer a 'contractor' for the purposes of CIS? **No.**

1.3.5 Sixth Recital

The Contract is not supplemented by a Framework Agreement.

1.4 THE ARTICLES

Article 2: Contract Sum: **TBC**

Article 3: ~~Architect~~/Contract Administrator: **TGMS.**

Article 4 The Principal Designer for the purposes of the CDM Regulations is the ~~Architect~~/Contract Administrator

Article 5 The Principal Contractor for the purposes of the CDM Regulations is the Contractor.

Article 7: Is dispute resolution to be by arbitration? **Yes**

1.5 CONTRACT PARTICULARS

Fourth Recital & Schedule 2

Base Date: **10 days before tender return date**

Fifth Recital

CDM Regulations **The project is not notifiable.**

Section 2.2

Works commencement date **TBC.**

Date for completion: **TBC.**

Section 2.8

Liquidated damages: **£50 per day or part thereof.**

Section 2.10

Rectification period: **12 months from the date of practical completion.**

Section 4.3 Date of first interim payments

30 days from start date.

Section 4.3 Interim payments

95% of total work value up to practical completion.

Percentage of the total amount to be paid to the contractor on or after practical completion: **97.5%.**

Section 4.8.1 Final certificate and final payment

Supply of documentation for computation of amount to be finally certified: **3 months.**

Section 4.3 and 4.8 Fluctuations provision

Schedule 2 (Fluctuations Option): **Does not apply.**

Section 5.3

Contractor's Public Liability insurance: injury to persons or property – the required level of cover is not less than **£1 million.**

Section 5.4A, 5.4B and 5.4C Insurance of the Works.

Insurance of the works: **Option A Applies.**

Percentage to cover professional fees: **15%**

Section 7.2 Settlement of Disputes – Adjudication

The Adjudicator is: **Chartered Institute of Arbitrators**

Nominating body: **Chartered Institute of Arbitrators**

Appointor of Arbitrator (and of any replacement): **President or a Vice-President of the Chartered Institute of Arbitrators.**

Attestation

Method of execution: **By Deed.**

1.6 FORM OF TENDER

PROJECT TITLE: Construction of an extension to Godlingston Cemetery.

We (Tenderer's name to be entered) hereby tender and undertake to perform the whole of the works/services required in and associated with the Project for **Swanage Town Council** according to the Specification, Work Schedules, Preliminaries and Drawings examined by us for the firm price sum of:

.....(pounds)

.....(pence)

(£ : p) excluding VAT.

Further we are prepared, when called upon to do so, to enter into and sign a contract, the full terms of which we have read, for the due and proper completion of the works/services.

We understand that we are tendering at our own expense and that the Client is not bound to accept the lowest or any tender and that the client reserves the right to award the contract phase by phase.

We declare that we are not party to any scheme or agreement under which:

- we inform any other person the amount of our tender; and/or
- we have fixed the amount of any tender in accordance with a price fixing arrangement.

We accept that the Client is entitled to cancel the contract and to recover from us the amount of any loss resulting from such cancellation if it is discovered that there has been any corrupt or fraudulent act or omission by us which in any way induced the Client to enter into the contract.

We declare that all goods materials and workmanship will meet the appropriate British Standard Specification or British Standard Code of Practice issued by the British Standards Institution or equivalent European standard current at the date of the contract.

We undertake in respect of all persons employed by us or with whom we sub-contract to comply with the Disability Discrimination Act 1995 and the Commission for Racial Equality's Code of Practice issued under the Race Relations Act 1976 aimed at eliminating discrimination and promoting equality of opportunity.

We undertake not to transfer, assign, or sub-let any portion of the contract nor create any lien or charge on premises, goods or equipment connected with or forming part of the contract, without the written consent of the Client or its duly authorised officer.

We agree that if, before acceptance of this tender, an error in computation of the tender is detected in the priced document submitted by us we will be given details of the error and the opportunity of confirming the total tender sum or withdrawing the tender.

We agree that the insertion by us of any qualifications to this tender or any unauthorised alterations to any of the tender documents will not affect the original text but will cause the tender to be liable to rejection.

We agree that this tender will remain open for acceptance by the Client and will not be withdrawn by us for a period of 90 days from the last date fixed for the receipt of tenders or any notified extension thereof.

We certify that this is a bona fide tender.

Tenderer's Name

.....

Address

.....

.....

.....

Telephone

.....

Facsimile

.....

Signature*

.....

Name

.....

Date

.....

Witness

.....

Name

.....

Date

.....

* Where the Tenderer is an incorporated association the Company Secretary or a duly authorised Director should sign. In the case of a partnership a Partner should sign. In the case of an individual the Proprietor should sign.

2. PART II: DESIGN SPECIFICATION

2.1 INTRODUCTION AND SITE INFORMATION

The 0.8 ha development site is located immediately to the north-west of the existing cemetery.

The development area comprises grazing land and the site is bounded by further grazing land to the west, Washpond Lane to the north and the existing cemetery to the south and east.

2.1.1 Site location and access

The site can be accessed via the existing cemetery entrance off Washpond Lane. The grid reference for the development area is approximately: OSGB 401821, 80155. The nearest postcode is BH19 3DH.

2.1.2 Arrangements to visit the site

To arrange a site visit, please contact

- Contact: Gail Percival (Operations Manager)
- Telephone: 01929 766034
- Email: g.percival@swanage.gov.uk

2.2 GENERAL SCOPE

The work proposed in this specification shall be as follows:

- Removal of the existing concrete post and wire fence along the southern boundary of the development area to disposal off-site.
- Removal of a section of post and rail fencing near the proposed new northern car park to disposal off-site.
- Removal of a small section of hedge along the eastern boundary of the development area.
- Removal of vegetation using a total herbicide.
- Installation of water standpipes.
- Installation of a car park, roads, paths and access track.
- Installation of land drainage infrastructure.
- Installation of grassed paths.
- Targeted topsoil strip, placement of subsoil arisings from construction of the macadam car park, roads and paths, and trenching arisings from land drainage installation.
- Placement and spreading of topsoil arisings from construction of the macadam car park, roads and paths.
- Cultivations and levelling of the site to create an even surface.
- Grass establishment (fertilising, seeding and mowing).
- Line marking of car park bays.
- Tree and hedgerow planting.
- Erection of a timer post and rail fence.
- Erection of deer proof fencing.
- Reinstatement after completion of works.

Please refer to the Schedule of Drawings (Table 1) for earthworks, pipe sizes and layout. Please consult the Drawing Register to ensure that the latest revision versions of the drawings are used.

Table 1 Schedule of Drawings

Drawing No.	Title
TGMS1215.1-1	Godlingston Cemetery Extension - Existing Levels
TGMS1215.2-1	Godlingston Cemetery Extension - Proposed Layout REV3
TGMS1215.2-2	Godlingston Cemetery Extension – Drainage Design
TGMS1215.2-3	Godlingston Cemetery Extension – Access Track
Mark Hinsley	Planting Plan

General Notes

- All drainage and earthworks to be carried out using equipment fully equipped with laser grade control.
- All ancillary equipment to be fitted with low ground pressure tyres.
- Diesel or any other deleterious matter shall be prevented from contaminating the site etc. Any such matter allowed to pollute the site shall be removed together with all affected soil and/or plant material and carted to tip at the Contractor's own expense. Any material necessary to make good the soil formation or plant material will be provided by the Contractor and will be of the type and quality of the original material prior to damage, and must be approved by the Contract Administrator.
- It is the Contractor's responsibility to conduct searches to determine the presence of any services and utilities running through, over and/or around the working area. Contractors should conduct site investigations to determine the location of any service or utilities as per good health and safety practice prior to commencement of any work on site.
- Prior to start on site, the Contractor shall prepare a photographic Schedule of Condition and agree same with the Contract Administrator.

- The works listed below are not necessarily to be conducted in chronological order. It is the responsibility of the contractor to implement all items specified to the desired standards irrespective of the order that they are presented in this document.
- Please note, the drainage of grave plot areas is not included as the grave plots in the existing cemetery are also undrained. During periods of wet weather, grave plots will become wet however this will be mitigated to some degree by drained paths.

2.3 DETAILED SPECIFICATION

ITEM OPERATION

Transport and preliminaries

- P1 The Contractor shall allow for all necessary fencing and signage in order to secure the working and site compound areas and haulage routes in order to protect members of the public from the works. It is anticipated that Heras fencing shall be used to demarcate the working areas and site compound. Footpath crossing points shall be marked appropriately. The location for deep excavations (e.g., inspection chamber construction) shall be protected with Heras (or similar) fencing.
- P2 The Contractor shall allow for compliance with all relevant Health and Safety regulations including the Construction Design and Management regulations (CDM) 2015.
- P3 The Contractor shall allow for the provision of all welfare facilities for staff.
- P4 The Contractor shall allow for the mobilisation and demobilisation of all necessary plant to complete the project.
- P5 The contractor shall allow for compliance with all Conditions of Contract.

1 Setting out and enabling works

- 1.1 The development area shall be set-out according to the details provided on **Drawing TGMS12151.2.1**.
- 1.2 Arrange for the short section of hedge located where the existing path halfway down the eastern perimeter is to join a new path to be removed, and for the stumps and roots to be grubbed out. Dispose of arisings off-site.
- 1.3 Remove the existing concrete and wire fencing along the southern boundary. Dispose of arisings off site.
- 1.4 Remove a section of the timber post and rail fencing along the western boundary of the natural burial area. Dispose of arisings off site.

2 Site clearance

- 2.1 Spray off the existing vegetation in the working area with an approved, systemic, non-residual total herbicide in accordance with the manufacturer's instructions and an appropriate COSHH assessment by qualified personnel. A period of 14 days shall elapse between spraying and undertaking cultivations to allow sufficient time for the vegetation to senesce. A second application of total herbicide may be required just prior to cultivation to ensure complete vegetation control. Extreme care should be taken to avoid spraying trees/hedges on site.
- 2.2 Any remaining vegetation and stubble on the site shall be flail-mowed and the clippings removed to disposal off-site. Due care and attention should be taken around tree trunks.

3 Water supply and stand pipes

- 3.1 Supply and lay 63 mm diameter MDPE water pipe (12 bar pressure rated) including all necessary trenching and connect to the supply in the existing cemetery (connection point to be confirmed).
- 3.2 With reference to **Drawing TGMS1215.2-2**, supply and install Edwards Standpipe Model ED2012 with bib tap (or similar) including connection to the water supply via a ½" BSP brass female socket. Include a 600 x 300 mm concrete slab, set into the ground beneath the taps to dissipate water spillage energy.

4 Porous macadam roads, paths and car park

- 4.1 Porous macadam roads, paths and car park shall be constructed as indicated on **Drawing TGMS1215.2-2** and **Drawing TGMS1215.2-3**. Excavate and dispose (on-site) material to achieve a uniform sub-grade of 0.390 mm below finished levels. Ensure that topsoil is separated from subsoil. Excess subsoil shall be disposed of by temporarily scraping off topsoil from proposed grave plot areas, placing and grading the surplus subsoil before returning the topsoil. Excess topsoil shall be placed and graded over proposed grave plot areas.
- 4.2 Cut and fill and re-grading operations shall be carried out when subsoil is below its plastic limit water content.
- 4.3 The formation shall be free from tree roots, mud or slurry and will have no areas of freestanding water. Any loose, fragmented or soft materials shall be excavated and re-packed with crushed rock, free from detritus material, in accordance with the Department of Transport Specification for Highway Works (Class 6F2).
- 4.4 The formation shall be compacted using smooth drum rollers to ensure full compaction to ensure no future settlement or subsidence; to achieve a CBR of >5%.
- 4.5 The formation surface shall be treated with a residual herbicide to minimise the risk of future weed growth. This to be applied by competent personnel in strict accordance with the Manufacturer's instructions and relevant legislation/regulations.
- 4.6 Carry out California Bearing Ratio (CBR) plate testing to six (6 no.) different areas of the prepared formation and provide published results upon completion for approval by TGMS prior to installation of the stone sub-base.
- 4.7 Kerbs around the car park, road, paths and access track to the containers shall be precast concrete pin kerbs (e.g. 50 mm x 150 mm x 900 mm) to BS 7263:2001, well haunched in concrete on mass concrete foundations. Movement joints shall be installed at appropriate spacings. Kerbs shall be laid to a true line and level with the proposed finished tarmac surface. For layout and cross sections see **Drawing TGMS1215.2-2** and **Drawing TGMS1215.2-3**.
- 4.8 Supply and lay a permeable geotextile membrane over the formation surface. The geotextile membrane shall be a non-woven type and have a minimum tensile strength of 20 kN m⁻¹ when tested in accordance with BS EN ISO 10319 and a static puncture strength of at least 2.0 kN when tested in accordance with BS EN ISO 12236. Joints shall overlap by at least 300 mm.
- 4.9 Supply and place 300 mm compacted depth of Aggregate Industries 'Suds Aggregate' 20/4 product. All aggregates shall be porous and frost resistant; test certificates to be provided by the aggregate supplier.
- 4.10 The sub-base shall be compacted using smooth drum rollers to ensure full compaction and consolidation to ensure no future settlement or subsidence. The installed sub-base shall have a compacted density of 95% of the maximum dry density when tested in accordance with BS5835 (there shall be no detectable movement under the roller used to compact the surface) and have a target stiffness of 60 MPa (min 40 MPa) when tested with a lightweight deflectometer.
- 4.11 The sub-base shall have a permeability of >500 mm/hour when compact (as per BS EN 12626).
- 4.12 The surface level tolerance shall be <10 mm when checked using a 3 m straight edge.

- 4.13 Conduct surface stiffness testing with a lightweight deflectometer (300 mm plate, contact stress of 100 kPa (7.1 kN impact force)) to six (6 no.) different areas across the sub-base. Results from the testing shall be provided to TGMS for approval prior to the application of the macadam course.
- 4.14 Supply and lay 60 mm consolidated thickness layer of 20 mm sized granite / hard limestone aggregate open textured porous macadam base course (aggregate Industries Drinasphalt 20, Lafarge Tarmac UltiDrive Porous Binder Course, or approved similar) conforming to BS EN 13108-7).
- 4.15 Supply and lay 30 mm consolidated thickness layer of 6 mm sized granite aggregate open textured macadam wearing course (Aggregate Industries Drinasphalt 6, Lafarge Tarmac UltiDrive Porous 6 mm, or approved alternative), conforming to BS EN 13108-7.
- 4.16 When checked using a 3 m straight edge, there should be no deviation >8 mm. No joint shall vary in level by more than 2 mm.
- 4.17 The finished surface shall have an in-situ infiltration rate exceeding 100 mm/hour (measurements to be normalised to a water temperature of 10°C to allow for temperature dependent changes in viscosity).
- 4.18 Work shall not progress to the next stage until the macadam levels have been inspected by TGMS (or other competent independent authority appointed by the Client).

5 Grassed paths

- 5.1 Grassed paths, 1.2 m wide, shall be constructed above lateral drain runs in accordance with **Drawing TGMS1215.2-2**.
- 5.2 Excavate path areas (as per **Drawings TGMS1215.1-2** and **TGMS1215.2-2**) to 200 mm depth plus a further 50 mm down the previously installed drain trench ensuring that the top of the drainage aggregate within the previously excavated trench remains uncontaminated with soil.
- 5.3 Supply and lay a permeable geotextile membrane over the formation surface. The geotextile membrane shall be a non-woven type and have a minimum tensile strength of 20 kN m⁻¹ when tested in accordance with BS EN ISO 10319 and a static puncture strength of at least 2.0 kN when tested in accordance with BS EN ISO 12236. Ensure that the fabric is cut above the drain run to facilitate water percolation.
- 5.4 Fill the excavation with 80:20 rootzone, consolidating in layers not exceeding 100 mm. The rootzone material shall:
 - 5.4.1 have a capillary rise of no more than 250 mm when compact to 1.6 Mg m⁻³,
 - 5.4.2 have at least 15 % air-filled porosity in the top 50 mm of the capillary rise, and
 - 5.4.3 have a saturated hydraulic conductivity of at least 300 mm hr⁻¹ at a tension of 15 cm and dry bulk density of 1.65 Mg m⁻³,
 - 5.4.4 be non-saline (electrical conductivity < 0.75 dS m⁻¹), and contain less than 0.5% (w/w) CaCO₃, and
 - 5.4.5 have a pH in the range of 5.5 – 7.0.
 - 5.4.6 The sand component shall comply with the following grading:

- V. coarse sand (2.0 – 1.0 mm)	<5%
- Coarse sand (1.0 – 0.5 mm)	10 – 20%
- Medium sand (0.5 – 0.25 mm)	55 – 70%
- Fine sand (0.25 – 0.15 mm)	10 – 20%
- V. fine sand (0.15 – 0.05 mm)	<5%
- 5.5 Ensure that topsoil arisings are separated from subsoil arisings. Excess subsoil shall be disposed of by temporarily scraping off topsoil from proposed grave plot areas, placing and

grading the surplus subsoil before returning the topsoil. Excess topsoil shall be placed and graded over proposed grave plot areas.

6 Installation of land drainage infrastructure

6.1 Trench excavation

- 6.1.1 Please refer to **Drawing TGMS1215.2-2** for layout and details of the drainage scheme. Drain cross sections are also presented on **Drawing TGMS1215.2-2**.
- 6.1.2 The trenches shall be clean cut, with a level base, to the dimensions given in **Item A6.2**.
- 6.1.3 All trenches shall be excavated with machinery fitted with laser grade control.
- 6.1.4 Excavation shall begin at the outfall, the profile to be established at the outfall, and carried upstream with adjustments for grade and depth as work proceeds.
- 6.1.5 Any under drains encountered are to be marked so they can be renovated and connected into the new system if considered viable.
- 6.1.6 All spoil from this operation shall be disposed of off-site.

6.2 Trench dimensions

- 6.2.1 Lateral drains (perforated corrugated 80 mm Ø) installed below grassed paths
 - Not less than 0.50 m deep
 - Spacing – central along grassed paths
 - Approximately 0.15 m wide
 - Grade to follow surface levels (but maintain 1:250 minimum)
- 6.2.2 Collector drains (perforated corrugated 160 mm Ø) installed below grassed paths
 - Not less than 0.55 m deep
 - Spacing – central along grassed paths
 - Approximately 0.20 m wide
 - Grade to follow surface levels (but maintain 1:250 minimum)
- 6.2.3 Collector drain (perforated corrugated 160 mm Ø) installed below porous macadam paths and access track to containers
 - Depth varies
 - Approximately 0.20 m wide
 - Grade to 1:500 minimum.
- 6.2.4 Main drain (twin wall 150 mm Ø) installed below porous macadam roads
 - Depth varies
 - Approximately 0.20 m wide
 - Grade to 1:500 minimum.
- 6.2.5 ACO RoadDrain 200.
 - 0.400 m below nominal ground level.
 - 0.260 m wide (0.200 m bore width).
 - Allow 0.200 either side for concrete haunch.
 - Grade at natural fall of the surface but not less than 0.5%.

6.3 Gravel backfill for lateral and collector drains

- 6.3.1 The material shall be clean, hard, gravel or chippings (e.g. quartz or quartzite) with dimensions not greater than 6 mm and not less than 2 mm. The calcium carbonate content shall not exceed 10%.
- 6.3.2 Aggregate shall be placed immediately and carefully over the pipe to within 250 mm when under a grassed path, or 340 mm when beneath macadam (see cross-sections on **Drawing TGMS1215.2-2**).
- 6.3.3 Provision shall be made to take account of natural settlement of material within the trenches such that a level surface is achieved. This will include consolidation of the material in the trenches and subsequent topping up. This should be taken into account when preparing cost estimates. Any settlement below stated levels prior to practical completion should be made good at the Contractor's expense.

- 6.4 Rootzone backfill material for lateral drains (grassed paths) see Item 5.4
- 6.5 Backfill for carrier pipes
- 6.5.1 The trench shall be first backfilled with site won subsoil and then topsoil. Care shall be taken not to mix subsoil and topsoil together.
- 6.6 *Pipe laying*
- 6.6.1 Pipes shall be laid to the correct depth stipulated above and to an even grade.
- 6.6.2 Drainage depth is to be measured from graded ground levels (unless indicated otherwise).
- 6.6.3 The pipe for lateral and collector drains shall be corrugated plastic corresponding to EN1401-1:2009. There should be no damage to the pipe. Upper ends of drain runs shall be plugged to prevent ingress of soil or animals.
- 6.6.4 The main drains shall be solid, smooth, twin-walled plastic pipe to BS EN1401-1:2019.
- 6.7 Junctions and connections
- 6.7.1 Connection of lateral drains to the collector drain shall be made with purpose made junctions (80/160 mm).
- 6.7.2 The collector and main drains shall be let into the inspection chambers and caulked with a sand/cement mix concrete to make good the pipe/wall seal. Alternative methods (for example using expanding foam) can be considered.
- 6.8 Inspection chambers
- 6.8.1 The inspection chambers are to be positioned as indicated on the accompanying plans and detailed in the work schedules.
- 6.8.2 Chambers can be constructed of brick, concrete or plastic (conforming to BS EN 13598-2:2020).
- 6.8.3 They shall be large enough to permit access for cleaning, jetting and rodding.
- 6.8.4 A sump of at least 150 mm below the lowest pipe shall be incorporated to act as a silt trap.
- 6.8.5 The top of the chambers shall be set level with the ground surface.
- 6.8.6 The cover loading (to BS EN 124:2015) for the inspection chambers shall be Class B125.
- 6.9 Oil separators
- 6.9.1 Supply and install bypass oil separators compliant with BS EN 858:2002 such as the ACO Q-Cepto (or similar).
- 6.10 Outfall
- 6.10.1 The main drains from the oil separators shall be connected to the existing inspection chambers as indicated on **Drawing TGMS1215.2-2**.
- 6.10.2 The connection operation shall include making good the macadam surfacing in the vicinity of the inspection chambers.
- 6.10.3 The collector drain under the access track to the containers shall outfall into the ditch on the eastern boundary.
- 6.10.4 Supply and install a proprietary headwall.
- 6.11 Disposal of arisings
- 6.11.1 Drain trenching arisings shall be disposed of by temporarily scraping off topsoil from proposed grave plot areas, placing and grading the surplus soil before returning the topsoil.
- 7 Line marking – northern car park**
- 7.1 The macadam shall be allowed to cure and the surface should be clear of grease and oil. This normally takes a minimum of three weeks in the British summer.
- 7.2 With reference to **Drawing TGMS1215.2-1**, line markings shall comprise white paint complying with BS 6044: Specification for Pavement Marking Paints.

- 7.3 Line marking should only be undertaken in fine and dry weather (min temp 5°C).
- 7.4 Each coat should be allowed to cure before further paint application.
- 8 Tree planting**
- 8.1 Supply and plant 5 English Oak, 3 Ash and 2 Field Maple trees in accordance with the **Mark Hinsley planting plan 01 11 10**.
- 9 Hedgerow planting and fencing**
- 9.1 Supply and plant 200 Hawthorn, 200 Blackthorn, 50 Holly, 25 Sweet Briar and 25 Dog Rose hedge mix in accordance with the **Mark Hinsley planting plan 01 11 10**.
- 9.2 Supply and erect deer proof fencing in accordance with the **Mark Hinsley planting plan 01 11 10**.
- 9.3 Supply and erect timber post and rail fencing along the eastern boundary of the northern car park. The new fence shall match the existing fencing along the southern boundary of the natural burial area.
- 10 Topsoil cultivation (grave plot areas)**
- 10.1 Once vegetation has senesced, the development area shall be ploughed to a depth of 200 mm.
- 10.2 Following ploughing, the area shall be cultivated with a power harrow prior to re-grading.
- 11 Re-grading**
- 11.1 Once the topsoil is friable it should be carefully graded to provide a surface that is level to a tolerance of ± 20 mm under a 2 m straight edge.
- 11.2 The graded surface must form a smooth transition with the surrounding land. There shall be no slopes greater than 1:3.
- 12 Final grading, seedbed preparations, fertilisation & seeding**
- 12.1 Following re-grading, the development area shall undergo final surface grading to produce a finished surface to the tolerances stated in **Item 11.1**.
- 12.2 The development area shall then be fertilised with a pre-germination fertiliser of 10:15:10 formulation at a rate of 70 g/m² at least 5 days prior to seeding.
- 12.3 Any stones/debris greater than 20 mm in any dimension shall be removed from the top 50 mm of the topsoil by stone picking/stone burying.
- 12.4 The surface shall be lightly cultivated in order to incorporate the fertiliser and to produce a seedbed suitable for the cultivation of grass.
- 12.5 The following seed mix shall be drilled using multiple passes, to achieve an overall seedrate of @ 35 g m⁻²:
- 40% Perennial ryegrass
 - 40% Creeping red fescue
 - 20% Browntop Bent
- These particular grasses have been selected because they exhibit slow growth under a low maintenance regime.
- 12.6 The seed shall have a certified germination of not less than 80% and a certified purity of not less than 90%. Total weed seed content shall not be more than 0.5% and the total content of other crop seeds shall not exceed 1%.
- 12.7 Following seeding, the areas shall be lightly rolled with a set of Cambridge rolls in order to firm the seedbed and ensure good seed/soil contact.

12.8 The contractor shall undertake the first three grass cuts following establishment.

13 Reinstatement of damage

13.1 All damage caused by plant and vehicle movement is to be reinstated. Cultivate any damaged areas to below the depth of damage using a rotary cultivator or similar equipment. Care must be taken with the timing of this operation to avoid smearing on the base of the cultivation. Any weeds or rubbish over 20 mm gauge must be removed and disposed of on site as directed by the Contract Administrator. Grade the topsoil to provide a surface that is level to a tolerance of ± 20 mm under a 3 m straight edge.

13.2 Any stones greater than 20 mm in any dimension should be removed from the top 50 mm of the topsoil by stone burying.

13.3 Fertilise with an appropriate pre-germination fertiliser of 10:15:10 formulation at a rate of 70 g m^{-2} at least 5 days prior to seeding. This should be lightly worked into the seedbed.

13.4 Undertake final cultivations to produce a seedbed suitable for the establishment of grass.

13.5 The area shall be drilled using a Sisis Variseeder or similar, possibly with multiple passes, to achieve an overall seedrate of @ 35 g m^{-2} :

- 40% Perennial ryegrass
- 40% Creeping red fescue
- 20% Browntop Bent

These particular grasses have been selected because they exhibit slow growth under a low maintenance regime.

13.6 The seed shall have a certified germination of not less than 80% and a certified purity of not less than 90%. Total weed seed content shall not be more than 0.5% and the total content of other crop seeds shall not exceed 1%.

13.7 The seeded area shall be lightly rolled using a set of Cambridge rolls to settle and firm the surface.

14 As-built survey

14.1 Conduct as-built survey of constructed site including location of land drainage and water supply infrastructure.

2.4 WORK SCHEDULES

Please refer to the accompanying MS Excel spreadsheet:

TGMS1215.2 Godlingston Cemetery Extension Work Schedules 19 02 21.xlsx

2.5 DESIGNERS ASSESSMENT OF RESIDUAL RISK

2.5.1 The Project

- Name: Godlingston Cemetery.
- Nature: Construction of a cemetery extension.
- Location: Godlingston Cemetery, Washpond Lane, Swanage BH19 3DH.

2.5.2 Nature of work:

- Removal of the existing concrete post and wire fence along the southern boundary of the development area to disposal off-site.
- Removal of a small section of hedge along the eastern boundary of the development area.
- Removal of vegetation using a total herbicide.
- Installation of water standpipes.
- Installation of a car parks, roads, paths and access track.
- Installation of land drainage infrastructure.
- Installation of grassed paths.
- Targeted topsoil strip, placement of subsoil arisings from construction of the macadam car park, roads and paths, and trenching arisings from land drainage installation.
- Placement a spreading of topsoil arisings from construction of the macadam car park, roads and paths.
- Cultivations and levelling of the site to create an even surface.
- Grass establishment (fertilising, seeding and mowing).
- Line marking of car park bays.
- Tree and hedgerow planting.
- Erection of deer proof fencing.
- Reinstatement after completion of works.

2.5.3 Timescale for works:

12 weeks.

2.5.4 Existing drawings:

Table 2 Schedule of Drawings

Drawing No.	Title
TGMS1215.1-1	Godlingston Cemetery Extension - Existing Levels
TGMS1215.2-1	Godlingston Cemetery Extension - Proposed Layout REV2
TGMS1215.2-2	Godlingston Cemetery Extension – Drainage Design
TGMS1215.2-3	Godlingston Cemetery Extension – Access Track
Mark Hinsley	Planting Plan

2.5.5 Existing environment:

1. The site comprises agricultural grazing land.

2.5.6 Residual risk to construction workers:

1. Tetanus.
2. Injury from vehicle movements in and around site.
3. Potential fall hazard from exposed excavations prior to backfilling.
4. Fertiliser application.
5. Herbicide application.
6. Materials handling.

2.5.7 Construction materials that are hazardous to health:

1. Herbicide.
2. Fertiliser.

3. Soil.
4. Cement.
5. Macadam.

2.5.8 Site wide elements:

The working areas and haul routes shall be fenced with Heras fencing, or similar, to delineate these areas. This fencing shall be maintained until handover to the Client.

2.5.9 Method statements & risk assessments to be provided by contractor:

1. Earthworks.
2. Herbicide applications.
3. Land drainage installation.
4. Fertiliser applications.
5. Macadam surfacing.

2.6 METHOD STATEMENTS

ITEM	Brief method statement (Continue on additional sheets if required)	Type/ name of equipment you intend to use	Is equipment owned by the contractor?	Is equipment rented?	Will work be sub-contracted?	How many staff will be on site?
Earthworks						
Herbicide application						
Land drainage installation						
Fertiliser application						
Macadam surfacing						

2.7 SUBCONTRACTORS

Please specify the names and contact details for any subcontractors that you intend to use during the project (please continue on a separate sheet if necessary):

Name:	Contact Details:	Role:

2.8 REFERENCES

Please provide references from three recent (last 2 years) schemes where you have carried out work of a similar nature and value. Please give name, address and telephone number for the referees.

Name:	Contact Details:	Nature of work / project value (£):

2.9 CONFIDENTIALITY

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2.10 CONTACT DETAILS

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