



Invitation to quote for Vegetation Removal and Improvement Works Bastion No. 1

Fortifications South of Trinity Green, Gosport

For Gosport Borough Council 9<sup>th</sup> August 2019



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#### 1.0 Introduction and background

#### 1.1 Introduction

Bastion No.1 is part of the defences to the southern section of fortifications known as the Gosport Lines, first begun in 1605 under the reign of Charles II as a series of earthworks by his Chief Engineer de Gomme. Located just to the south of Trinity Green, the ramparts were originally constructed in 1677 – 78 as earthwork ramparts forming a demi-bastion facing Haslar Creek. They were re-built and completed in their present form in 1802-03.

It consisted of 14 no. gun emplacements with those at the angles being the largest. Nearly all had gun pivots and semi-circular retaining walls in front. The Bastion is served by two ramps and has two expense magazines and four shell recesses at ground level set in the inner slope of the rampart facing the parade ground to the rear. The basic brickwork is said to have been constructed by French prisoners of war, but it is unclear as to how much of these works date from the Napoleonic period due to the extensive works carried out in the 1840s. The gun emplacements were renewed in 1848, with 38 guns in position. The brick shell recesses were added around 1855 and in 1856 parts of the ramparts were raised. After this time the Gosport Lines effectively became redundant with the construction of the Palmerston Forts to the west.

Bastion No.1 is a Scheduled Ancient Monument (National Monument No. 460) and must be considered in its importance and the overall context of the Gosport fortifications. As one of the older Scheduled Ancient Monuments, there is no description on the National Heritage List Description Entry, although the Parade Ground on the north side is not included within the actual Scheduling. The site is owned and maintained by Gosport Borough Council as a public open space.

Some repair works have taken place in recent years, in particular remedial engineering works to return the front slope and berm position of the rampart and stabilise the moat edge in 2003; and in 2012 brickwork repairs to the gun emplacements. A proposed Management Plan for the site was drafted in 2013. Bastion No.1 is both a heritage asset as a vital part of the original Gosport Lines and potentially a visitor attraction, which is yet to be fully realised.

### 1.2 Site description and context

The construction form of Bastion No1 represents a similar form to other such rampart constructions consisting in section of a moat, an escarp, berm, scarp and parapet. Behind the parapet is a 'terre plein', a banquette firing step and gun positions. A caponier is positioned on the east end of the berm. The rear inner slope drops down to a parade ground with an entry from the north side in Trinity Green, which is bounded with a high brick wall. This wall consists of at least two builds being heighted during the 19th Century. The Holy Trinity Vicarage forms the remainder of this boundary adjacent to the Parade Ground. The waterfront Promenade, with the adjacent high rise residential blocks forms the east boundary of the monument. The north eastern corner of the rampart beyond the last gun emplacement is fenced off and heavily overgrown. Outside the rampart and its wide berm, the moat has a brick wall with a sluice (which were built between 1848 –1858) separating it from the Harbour.

On the bastion as existing, nearly half the length of the rampart is occupied by the 14 gun positions, with the two at the angles being larger than the 12 intermediate ones. The emplacements are fairly typical of their type and period, with semi-circular retaining brick walls at 1.4 metres high built into the back of the parapet (three bricks deep) with low side 250 mm wings tapering down. Constructed in Flemish bond with headers on the curved centre, the header course has a coping stone at either end. Each position has a central cast iron gun pivot (some still set in a stone base) and stone racer tracks forming a semicircle against the Terre Plein. The ground in the gun positions are all now covered with grass, but presumably the surface was originally gravel or some other hard finish. Between the gun positions are the firing steps, many of which have lost their original profile. The other structures of note are the two brick expense magazines, with vaulted ceilings, which are built into the inner slope of the rampart. Four mid- 19th Century brick shell recesses with stone door frames complete the composition.

The ramparts are open to visitors as a public open space and being close to the town centre it is a local landmark when approaching from the south across Haslar Creek. The site is bounded by iron railings on the Haslar Road side and has a pedestrian gate. However, access to the monument is fairly restricted to those more able and although on a main road and close to the town centre its relative enclosure and overgrown nature makes it vulnerable to misuse by some. Nevertheless, overall the ramparts are in reasonable condition considering their age and position.

Perhaps the main threat to the site, beside some vandalism is the advancing self-seeding trees and shrubbery which has created the now overgrown nature of the site and is impinging on the brick structures.

### 2.0 The Commission

### 2.1 Summary of project

The objective of the Borough Council now is to repair the main features of the historic structure and where possible to make the ramparts more accessible and safe for visitors. There are three main features of the bastion which require attention: - these are the gun emplacements, the fire steps, the expense magazines and shell recesses. The focus of this invitation is the first phase of works to clear the self seeded trees and scrub, plant new wildflower areas, re-turf areas and to replace a damaged fence.

#### 2.2 Conservation approach to works

The Ramparts are a Scheduled Ancient Monument (SAM) and significant for the reasons set out in the introduction. It is therefore important that the nature and implications of any remedial or repairs works are to be carefully considered if the character and preservation of the structure is to be retained.

The SAM refers to the legal system for protecting nationally important monuments and archaeological remains in England, as set out under the provisions of the Ancient Monuments and Archaeological Areas act 1979 (Amended). Its aim is to preserve the best examples of these for the

benefit of current and future generations. In making decisions on scheduling and any works the Secretary of State is advised by Historic England, who must be consulted and approval sought for any proposed works. Consent for works is granted by the Secretary of State and must be given in writing before works are started.

### 2.3 Description of works

Vegetation is required to be cleared on site in order to protect the historic earth works within the Scheduled Monument, to enhance visibility of the earthworks and increase public understanding of these.

Parts of the site are heavily overgrown with bramble and self seeded small trees. Removal of this invasive vegetation growth and the reinstatement of amenity grass and wildflower areas will increase the aesthetic value and ability to observe the historic earth workings present on site.

### 3.0 Particulars of appointment

#### 3.1 Services

Landscape Contractor services to clear the existing invasive vegetation and trees, to replace the existing fence line and to lay new amenity grass and create wildflower areas.

### 3.2 The Employer and Employer's Representatives

"The Employer" under the terms of appointment is: Gosport Borough Council The Contract Administrator for the Project will be: Gosport Borough Council

### 3.3 Payment Terms

Unless stated otherwise, payment terms will be 28 days from receipt of invoice. Invoices are to be submitted direct to the Client.

### 3.4 Insurances (Public & Employer's Liability etc)

Your quote should include details of the level of cover carried for relevant insurances (Public Liability, Employer's Liability and any other relevant insurances). Minimum insurance requirements are as follow:

Public Liability Insurance: £10mEmployers Liability Insurance: £10m

### 3.5 Timing of Works

Works are due to commence on 23rd September 2019 and be completed five weeks later

### 4.0 Programme

The programme for the project is as follow:

Milestone	Date
Quote Period Starts	14 <sup>th</sup> August 2019
Latest date for queries to be raised	23 <sup>rd</sup> August 2019
Submission of quotes	30 <sup>th</sup> August 2019 – 4pm
Confirmation of Appointment	4 <sup>th</sup> September 2019
Lead in Period	4 <sup>th</sup> to 23 <sup>rd</sup> September
Pre-commencement meeting	10 <sup>th</sup> September 2019 – 2.30pm
Commencement of Works on Site	23 <sup>rd</sup> September 2019
Completion of Works on Site	25 <sup>th</sup> October 2019

Note that the period of works on site is fixed due to the ecological constraints of the site and cannot be moved.

### 4.0 Site visits and quotation queries

It is highly recommended that a site visit be undertaken prior to submitting a quote. The site is publicly accessed so no arrangements need to be made to visit site.

During the quotation period, should the contractor wish to present questions or seek clarification on any information contained within the quotation enquiry pack, requests will only be considered by email, at the following:

Email: studio@pritchardarchitecture.co.uk

### 5.0 Submission of Quotations

- 5.1 Quotations must be submitted by email no later than 4pm on 30<sup>th</sup> August 2019. To: robert.harper@gosport.gov.uk
- 5.2 Quotes must include the following information:
  - i) Form of Quote with price to undertake the works
  - ii) Completed priced Schedule of Works
  - iii) Insurance Certificates
  - iv) Confirmation that the contractor has the resources available to complete the works to the programme set out in this invitation

# **APPENDIX A**

# **Drawing list**

A1042-100	Location Plan	1:1000
A1042-200	Site Plan as Existing Showing Site Set-up	1:500
A1042-201	Site Plan – Constraints	1:500
A1042-202	Site Plan – Tree Removal Plan	1:500
A1042-203	Site Plan – Scrub Clearance	1:500
A1042-204	Site Plan - Proposed Landscape	1:500

#### **APPENDIX B**

#### Site set-up, access and constraints

Refer to drawings A1042-200 Site Plan as Existing Showing Site Set-up

A1042-201 Constraints

Access to the site is via a pair of timber gates from Trinity Green. GBC will provide keys to the gates and they are to be kept locked shut during the works. There is also a pedestrian gate in the railings on Haslar Road which is also to be kept locked. The contractor is to provide signage to both gates to inform the public that the site is temporarily closed and that there is no public access.

Adjacent properties will remain in residence during the Construction Phase as follows:

- Private Residence to the north of the Bastion off Trinity Green
- Private Residences to the east of the Bastion and associated parking area in the north east corner

The Contractor shall be responsible for checking that underground services will not be disturbed during shrub and tree removal operations. No plans showing existing services are available.

The contractor's attention is drawn to the area of suitable reptile habitat and access to these areas must be kept to a minimum. There is also one plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) which must be removed from site at the start of the contract to prevent it being spread.

An area has been shown at the entrance of the site for the contractors site set-up and welfare. Contractor is to erect 2m high heras type fencing around the trees which are to remain for tree protection.

General site rules shall be provided in the Contractors Risk Assessments and Method Statements and shall include requirements for:

- Head Protection
- Safety footwear
- High-visibility vests
- Accident Reporting
- No Smoking
- Unnecessary noise should be kept to a minimum. No Radios should be used.

Prior to the works starting on site, a pre-commencement meeting will take place with the contractor, representatives from GBC and the lead consultant. At this meeting, the extent and timings of the work will be agreed. Due to the sensitive nature of the works, the phasing of tree and scrub removal throughout the duration of the contract will need to be agreed and the full extent of reinstatement cannot be fully determined until the removal works have taken place.

Prior to any works commencing on site, the contactor is to provide full and relevant Risk Assessments and Method Statements.

#### **APPENDIX C**

### Tree and Vegetation Removal Methodology and Specification

### **Timing of Works**

All above ground vegetation clearance and tree felling is to be undertaken outside the bird nesting season (March to mid-September inclusive for most species in the UK). All occupied bird nests have legal protection from damage and destruction under the Wildlife and Countryside Act (1981).

### **Priority Works**

One plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) was recorded on the site. This is Allium triquetrum (Three-cornered Garlic). It is an offence under the Wildlife and Countryside Act 1981 to cause any species listed on Schedule 9 to spread in the wild. Therefore, to comply with the law, it should be removed to avoid spreading to the remainder of the site or off-site as a result of the proposed work, or being trampled on by members of the public.

#### **Vehicle restrictions**

All those involved in the implementation of the works are advised that the land is designated as a Scheduled Monument under the Ancient Monuments and Archaeological Areas Act 1979 (as amended); the extent of the Scheduled Monument is set out in both the scheduled monument description and the plans included with this quotation pack.

Equipment and machinery shall not be used or operated in the scheduled area in conditions or in a manner likely to result in damage to the monument or ground disturbance other than that which is expressly authorised by the client following consultation with Historic England.

Digging/excavating either by hand or using machinery within the Scheduled Monument is not permitted.

### Tool use

All vegetation clearance must be done using hand tools, such as chain saws and brush cutters and not by flail.

### **Potential Bat Roost Features**

The majority of the trees on site were identified as having negligible bat roost suitability. However, there are two mature trees on the site that have features that could be used by roosting bats, including broken limbs and crevices. These are as follows:

- a mature Laurus nobilis (Bay) tree with low bat roost suitability; and
- a mature Fraxinus excelsior (Ash) tree (Target Note 2) with low bat roost suitability.

No works are to be undertaken to either of these trees.

#### **Badgers**

Six badger setts are present on site; two disused and four active badger setts with a total of 21 entrance holes (including 14 active holes). The majority of the badger holes are located amongst the woodland and dense scrub. The following mitigation is proposed:

- the woodland and dense scrub surrounding the badger setts will be retained as much as
  possible to help prevent potential disturbance by people;
- trees near to the setts are to be soft-felled to prevent ground shocks and heavy impacts above tunnels and cavities; and
- felled trees are not to be left across badger holes, sett entrances, paths or latrines.

#### Arisings

Cut vegetation is to be taken to a designated chipping area and is to be chipped directly into the truck or trailer and removed from site. Do not leave piles of cut vegetation or logs stored on site as they will provide habitat potential for existing species.

Trunks and branches from cut trees are to be sectioned and removed from site. No wood chip is to be spread onto the ground.

Gorse and trees within the clearance areas are to be cut down to ground level to leave no protruding stumps or to be removed in order to facilitate future mowing and management of the area.

All litter and rubbish found on site during the works within the site boundary is to be collected by the contractor and placed in a skip in the site compound. Contractor is to allow for one 4 yard skip for this purpose. Skip to be removed on completion of the works.

### **Tree Removal outside of the SAM Boundary**

Prior to any works taking place a site visit is to be undertaken with the Tree Officer to agree the extent of removal within the area identified on the plan as Zone A.

Works to trees not on the scheduled ancient monument (SAM) require the removal of self-set sycamores (acer pseudoplatanus) and bramble along with what would be considered general maintenance to the following trees:

- one yew (taxus baccata)
- one evergreen oak (Quetcus ilex)

Note that no works are to be undertaken to the Bay or Ash trees due to the potential for bats. The trees shown on the site plan are indicative and the contractor is to determine the total number and allow for all to be removed in their quotation.

General maintenance to these remaining trees are to include;

- Crown lifting to min 3m
- Crown clean (the removal of all dead, dying, diseased, crossing and rubbing branches within the crown)

Both the Yew and the Evergreen oak are live, healthy and of good vigour with a safe and useful life expectancy (SULE) of 30 years plus

On the removal of the self-set sycamore trees and bramble the low level area can be maintained as an open area for public enjoyment. The removal of sycamores on the lower level can include the stumps being ground out by mechanical means as such works would not disturb the ancient monument. No works are to be undertaken in close proximity to the badger setts.

### **Tree Removal inside of the SAM Boundary**

The vast majority of the trees on the SAM are self-set sycamores with only a few self-set trees of different self-set species - Bay, Oak and Ash. All trees identified for removal from the SAM are required to reduce the risk of further disruption to the fabric of the SAM. The trees shown on the site plan are indicative and the contractor is to determine the total number and allow for all to be removed in their quotation.

Trees with a Diameter at Breast Height (DBH measured at L5m from ground level) of 400mm or more will require sectional felling & lowering to avoid damage to the SAM by falling debris. Trees with a DBH of less than 400mm may on the discretion of the local tree officer be directionally felled in a suitable manner so as not to damage the fabric of the SAM. All tree removal on the SAM will not include any disturbance to root systems by means uprooting or excavation.

Stump grinding of trees will not be possible without damaging the fabric of the monument, therefore each stump is to be chemically treated. Normally ammonium sulphamate is used in the form of white crystals which are useful for the control of tough woody weeds, tree stumps and brambles. The use of ammonium sulphamate in crystal form is not particularly practical for dealing with stumps upon the monument due to the degree upon which the stumps are set on the raised areas, the amount of crystal that would be required and open to rain, wind, slippage, removal etc and with Ammonium Sulphamate being slightly toxic to humans and animals its use in such a large and yet confined area of public land would be considered negligent.

The stumps from trees removed upon the monument are to be "plugged" using Ecoplug Max. This is a 100% effective method is dealing with eliminating the sprouting from broadleaved trees. It is a selective method that will reduce the use of chemicals by approx 90% compared to traditional methods such as ammonium sulphamate in crystal form. The active ingredient of Glyphosate is released inside the plant that is to be treated.

# **Ecoplug Max**

- Can be used all year around
- Will exterminate all species found upon the SAM
- Will minimise the use of chemicals during the treatment of stumps
- The product will kill the entire root system

Ecoplug Max is used by the drilling of the stump at 25 to 75mm intervals using a 12mm dia drill bit to 35mm to 40mm depth; use a hammer to drive the plug into the hole, thus sealing the opening so that no substance can escape

Further details for Ecoplug Max can be found via the link:

http://www.ecoplug.com/

#### **APPENDIX D**

### **Turf and Wildflower Specification**

### **Extent of works**

The full extent of reinstatement and new planting works cannot be full determined until all the vegetation removal has taken place. A meeting will be required on site to agree this at the appropriate point in the contract. Allowances for areas have been included in the schedule of works so that rates can be applied against each.

### **Timing of all Operations**

Operations shall not be carried out during periods of inclement weather, i.e. rain, frost, or when ground is water-logged.

### **Ground Preparation and Soil for Wildflower Mix**

The area shall be scarified to open the soil surface without disturbance beyond 25mm depth, taking care to a to ensure that trees, shrubs and other plants being retained are not damaged

## **Materials**

All materials are to be supplied by the contractor, the contractor shall also be responsible for calculating required quantities and ensuring that materials conform to all relevant British Standards.

# **Seed sowing**

Prior to sowing apply 50mm peat free compost approved to and sow seed into the compost at the suppliers recommended rate, lightly rake seed into compost.

### **Cultivation for Turf**

Outside of the SAM, the full depth of top soil, but not exceeding 200mm, shall be thoroughly cultivated to a suitable tilth by plough, cultivator, disc harrow, rotary cultivator, drag harrow, chain harrow, or other means laid out in the contractors method statement for these works.

All areas not capable of being cultivated by mechanical means shall be prepared by hand and the full depth of top soil shall be broken up then raked down to a tilth.

All stones exceeding 30mm in any one dimension, weeds, roots and other deleterious material shall be collected and removed from site.

#### **Soil Preparation**

The surface shall be presented in an evenly firm and uniform condition to the prescribed levels and gradients with any settling or irregularities corrected or other means laid out in the contractors method statement for these works.

All areas prepared by hand tools shall be lightly trod followed by light raking to form a uniform and even surface.

All stones with any one dimension of 30mm or more shall be removed from site.

#### **Fertiliser**

An approved pre-seeding fertiliser shall be applied at the manufacturers recommended rate using an approved distributor or by hand. The fertiliser shall be lightly harrowed or raked into the surface.

### **Turfing**

All turf material shall be supplied by the Contractor and is to contain a typical seed composition of:

- 25% Abersprite / Escapade Dwarf Ryegrass
- 15% Limousine Smooth Stalked Meadow grass
- 20% Abercharm Slender Creeping Red Fescue
- 20% Luisa Chewings Fescue
- 20% Swing Strong Creeping Red Fescue

Contractor is to propose a turf containing a similar mix to the above which is appropriate to the coastal location.

Turves shall be laid on the prepared surface in accordance with recognised turf culture practice. Edges abutting areas of existing turf shall be tucked in to prevent edges drying out. Where turves are fixed to banks, they are to be pinned in place using 150mm timber pegs (https://www.britishhardwood.co.uk/fixing-accessories or similar).

### **Wildflower mix**

The seed mix is based on the coastal location and the type of soil. The proposed mix features species which are often found growing in a coastal environment. These species are typically quite hardy and tolerant of impoverished soils and a degree of salinity. Details for the proposed seed mix can be found via the following link:

https://www.barenbrug.co.uk/landscaping/wildflowers/wildflowers-coastal

The seed is to be obtained with an 80:20 Grass:Wildflowers mix. The mixture contains a rich blend of grasses, formulated to compliment the wildflower species. The grass blend contains slow growing species which will not compete against the slower growing wildflowers.

The mix is to be sown to the manufacturers recommendations and at a sowing rate of 5g/m<sup>2</sup>.

### **Germination and Establishment**

The Contractor shall allow for re-seeding/re-turfing any areas of poor germination or growth at his own expense in order to achieve 100% ground cover of the correct grass species within two months of sowing.

Initial maintenance including irrigation, stone picking, rolling, and mowing, shall be carried out in accordance with recognised turf culture practice.

### **Maintenance Period**

Maintenance of newly-seeded and turfed areas shall continue under this Specification until the Supervising Office is satisfied that satisfactory standards have been achieved to enable maintenance to continue under the Landscape maintenance Specification. Maintenance period is to cover one full growing season after completion of the works.

#### **APPENDIX E**

### **Fence Repairs Specification**

Once the vegetation has been cleared, the existing chainlink fence is to be removed retaining the concrete fenceposts. These will be inspected to check their condition, but it is anticipated that they will be suitable for re-use. Note that the fence posts cannot be replaced as it would required disturbance of the SAM.

At the corner of the adjacent property an existing pair of steel and mesh gates exist. These are currently unlocked and open.

The contractor is to replace the chain link fencing with new galvanised chain link with 50mm mesh. Chain link to conform to BS 1722 part 1 and galvanising to conform to BS EN 10223. Wire size to be 3.0mm with a 10.5g gauge. Height to be 1.8m to suit existing fence posts. Provide 3no. line wires and tension chain link once fitted.

Provide and fix barbed wire brackets to each fence post for additional security. Brackets to be heavy Duty and Galvanised and either face or side fixed to the concrete posts. Brackets to be manufactured from 6mm thick steel with a cranked head. Pre-holed to take a 10mm diameter fixing for bolting to flat surfaces and where the straining wire is attached to the bracket. Provide and fix 3no rows of straining wire between the brackets. Contractor to select manufacturer similar to the following:

### https://www.lanleesupplies.co.uk/Products/004d0057

Ease and adjust existing gates so that they are fully operational. GBC to provide chain and padlock for securing gates.

# APPENDIX F

# **Schedule of Works**

Contractor to fully price the following schedule and return with quotation.

Item	Quantity	Rate	Cost
Site set-up, preliminaries and temporary signage			
Tree protection	5 areas		
Removal of Three-cornered Garlic and disposal off site			
Removal of all above ground vegetation (gorse, shurbs etc and trees with a diameter of <75mm at 1.5m above ground level) within Zone A and disposal off site			
Removal of trees >750mm diameter at 1.5m above ground level within Zone A and disposal off site			
Removal of all above ground vegetation (gorse, shurbs etc and trees with a diameter of <75mm at 1.5m above ground level) to remainder of site and disposal off site			
Removal of trees >750mm diameter at 1.5m above ground level to remainder of site and disposal off site			
Provision of a skip and removal of all site rubbish and litter	1no.		
Making good to area 1 and laying new turf	212m <sup>2</sup>		
Making good to area 2 and laying new turf	2440m²		
Making good to area 3 and laying new turf	477m <sup>2</sup>		
Making good to area 4 and sowing wildflower seeds	456m²		
Making good to area 5 and sowing wildflower seeds	158m²		
Removal of existing chain link fencing and replacement of new. Ease existing gates.	68 ln m		
Provide and fit new upper brackets to existing fence posts with straining wires between.	68 ln m		

Maintenance during defects period		
Contingency		£3,500
Allowance for any other items not specifically referred		
to above (details to be stated):		
1.		
2.		
3.		
TOTAL		

### **APPENDIX G**

Form of Quote

# FORM OF QUOTE

For: Vegetation Removal and Improvement Works, Bastion No. 1

Having inspected the site of the proposed works and examined the Quotation Documents and Drawings, we hereby undertake to carry out the proposed works in accordance with the Conditions of Contract as follows:-
For the sum of:
£ on the basis of a Fixed Price Contract
We agree that should obvious errors in pricing or errors in arithmetic be discovered before acceptance of this offer in the Pricing Document submitted by us these errors will be dealt with in accordance with NBS Guide to Tendering for Construction Projects.
We agree that this offer shall remain open for acceptance for a period of 12 weeks.
Signed
in the capacity of
duly authorised to sign quotations on behalf of
Address
Date
Telephone Number
QUOTATIONS to be sent electronically to: Robert.Harper@gosport.gov.uk
Subject header – Quotation Proposal: Bastion No. 1
to arrive not later than 4nm on Friday 30 <sup>th</sup> August