# High Angle Battery HLS Historic & Archaeological Features Management Plan

Reference: AG00567711

Produced on behalf of Weymouth & Portland Borough Council by Dorset Wildlife Trust

### **HIGH ANGLE BATTERY MANAGEMENT PLAN 2015-2020**

### 1. Introduction

**Location:** Fortuneswell. Portland

SY 694 732

Area: 4ha

Main Habitats: Grassland & mixed scrub

**Status:** The site is covered by a range of designations including Site of Special

Scientific Interest (SSSI), Regionally Important Geological Site (RIGS) and a Special Area of Conservation (SAC). The Redoubt and Verne

Citadel are registered Scheduled Ancient Monuments (SAMs).

**Tenure:** Ownership of Weymouth & Portland Borough Council

### **Historic Interest:**

The Battery was constructed in c. 1892 forming one element of the defences of Portland. The design of the battery was unique in that the high angle of the guns allowed shell fire at ships out into the English Channel. Due to the Battery's location in the middle of the island, there was limited no visibility with those targets and technological advances rendered the guns defunct in a relatively short space of time. The Battery remains one of the best examples of its type in the country and as such is of significant historical importance.

High Angle Battery forms part of a wider group of other 19<sup>th</sup> century military features close by including the Verne Citadel, East Weare batteries and Portland Harbour.

### Context of agreement

High Angle Battery which is covered under this HLS agreement (outlined below) is of high importance for its SAMs status and for the areas of unimproved and semi-improved limestone grassland present, which fall into the HLS target areas for Portland and Dorset.

The wider HLS agreement which includes High Angle Battery incorporates the following compartments: Cowslip field (Area 1, parcel 9366), Verne Hill (Area 2, parcel 0345), Tillycombe (Area 3, parcel 9641), High Angle Battery (Area 4, parcel 3927), Dog Leg field (Area 5, parcel 2931), Old Hill Upper (Area 6, parcel 0620), Old Hill Lower (Area 7, parcel 9520) and Priory Corner (Area 8, parcel 7202) (See Compartment Map).

High Angle Battery for many years has suffered from vandalism, graffiti and erosion issues. The works planned under this agreement and outlined in this management plan will aim to repair some of this damage and establish preventative measures to alleviate future issues.

The SSSI designation which covers the site is focused around the locally, nationally and internationally important limestone grassland that are present. Species of particular interest are populations of: Early Gentian (*Gentianella angilica*), Dwarf Mouse-ear (*Cerastium* pumilum) Adonis Blue (*Lysandra bellargus*) and Silver-studded Blue (*Plebejus argus*).

Areas of the site have suffered from scrub encroachment which is threatening the existing species-rich grassland and many species of high importance. Under option HK7 and HR7 the agreement aims to restore these areas back to species-rich grassland with occasional patches of diverse scrub (see Scrub Management Plan and attached scrub map). In order to aid this work capital works options have also been included within the agreement to enable scrub removal in selected areas. This management plan provides detailed guidance on location and priorities for scrub control.

## Aims of management

The aim of management for High Angle Battery is to maintain and enhance, where possible, the historical and nature conservation interest of the site.

These interests include:

- The registered Scheduled Ancient Monument
- Nationally important populations of limestone specialist flora
- Nationally and internationally important populations of fauna

## **Objectives of restoration**

To meet the aims of maintaining and enhancing the SAM's site and important populations of flora and fauna, the following actions are required:

- Repair and maintenance of Battery walls, slopes, tunnels and steps
- Removal of vegetation from retaining walls
- Prevention of scrub onto grassland
- Management of the grassland through grazing appropriate livestock

### **2. Management Action Plan** (See Annual Works Programme)

# Timing of works:

Scrub management related works must be carried out between 1<sup>st</sup> October and 28<sup>th</sup> February, outside of the bird-nesting season (see HLS Scrub Management Plan – Verne Local Nature Reserve). Works related to historical feature protection and restoration should be undertaken in the allocated capital works years as approved at the start of the agreement.

### **Scrub Management:**

Agreed scrub management works are outlined in the HLS Scrub Management Plan – Verne Local Nature Reserve. A map of planned scrub management works is attached to give an overview of the extent of clearance planned (See Scrub Management Plan – Area 4 – Map).

Future opportunities to graze High Angle Battery with temporary fencing would significantly reduce recurrence of encroaching scrub. Introduction of grazing would also significantly improve the sward structure and be of great benefit for butterflies and floristic communities present.

### **Feature Protection:**

Restoration works outlined under this plan and approved in the agreement will require further consent from Historic England. The Annual Works Programme below indicates for which areas of work, additional advice should be sought in developing specifications for restoration.

There are a number of areas across the site which are suffering from erosion, mainly due to visitors either not aware of, or not using the appropriate access steps which are in place. Interpretation and signage should be provided to make clear where the nearest designated path/safe access is. Access works outlined below in work area 9. Should also help to reduce erosion.

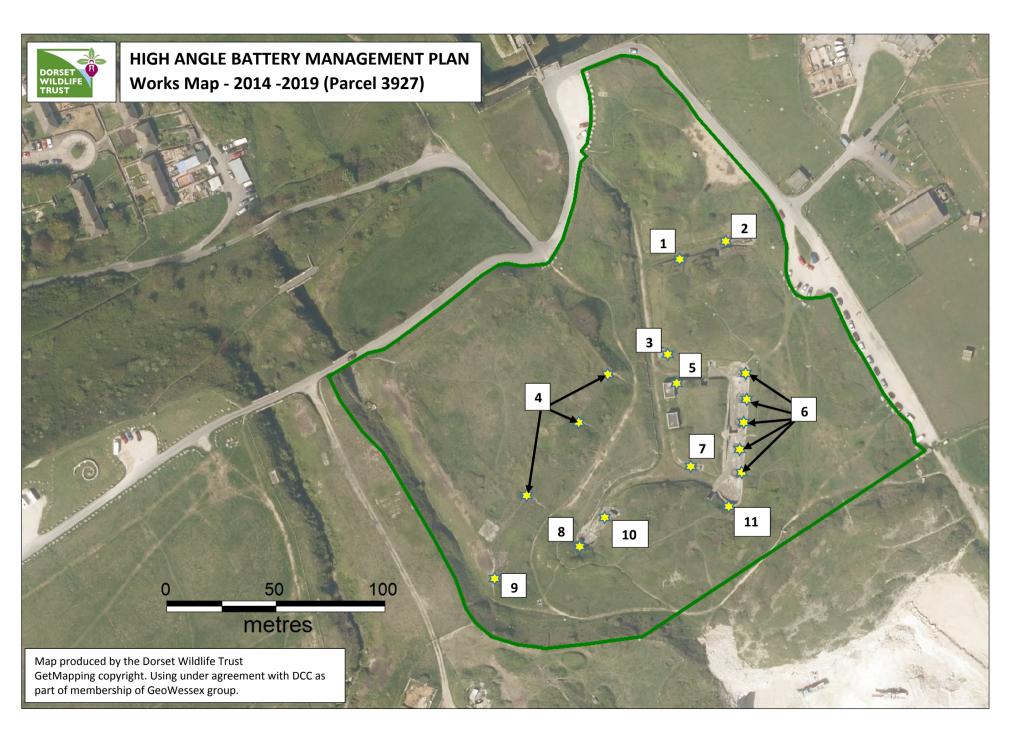
Existing grills on the tunnel entrances and the underground laboratory need to be reinforced to prevent further vandalism through repeated break-ins.

Many of the retaining walls around the main structure of the monument have become overgrown with vegetation both on the wall and at the base of the walls and this should be removed to prevent further damage.

Graffiti is an ongoing problem, particularly highly offence markings. Markings should be removed when they appear. Residential occupancy of Fancy's Farm may help in preventing future anti-social behaviour at High Angle Battery.

### **Site Safety**

The nature of the site includes hidden drops and features such as steps without supporting railings. Where possible these risks should be managed by more subtle interventions such as leaving small patches of scrub in strategic areas, as long as they are not causing integral harm to the listed structure. Signage should be placed at all site entrances which clearly outlines the hazards people should expect to encounter when they enter the site. In addition to this, it is important that where access is available i.e. steps, the structure is in a safe condition for use. Works outlined in the Works Programme below address some of these issues; but future maintenance will be required in order to maintain minimal risk.



# 3. Annual Work Programme 2014-19

Area 1. (see Works Map)



Location	Payment Code	Description	Outline of work	Date work	of	responsible work	for
1.	HAP	Brick wall repair	Some pointing required along brick retaining wall. Mortar sample will need to be analysed to determine specification. Seek further technical advice.	Spring 2018		WPBC	

Area 2. (See Works Map)



Location	Payment Code	Description	Outline of work	Date work	of	Organisation responsible work	for
2.	HAP	Concrete repair	<ul> <li>Steps require re-profiling to improve access, safety and protection of original material</li> <li>Several emergency repairs have been carried out on site to steps. It is acknowledged that these repairs are substandard but will only be undone on the flat areas marked G due to cost constraints. If the budget allows then further areas will be repaired in a more sympathetic manner.</li> <li>A sample of concrete was analysed by Sandberg Consulting Engineers. This identified that the sample was early concrete with graded aggregate. The analysis will be investigated and a specification will be provided from this. It may be necessary to carry out several trial areas in order to get a suitable match both in texture and finish.</li> <li>Seek further Technical/Historic England advice as required.</li> </ul>	TBC		WPBC	

Area 3. (See Works Map)



Location	Payment Code	Description	Outline of work	Date work	of	Organisation responsible work	for
3.	HAP	Concrete repair	<ul> <li>The corner of the bunker is eroding, although it has not completely caved in it needs work to restore the original corner and protect it from further damage.</li> <li>A sample of concrete was analysed by Sandberg Consulting Engineers. This identified that the sample was early concrete with graded aggregate. The analysis will be investigated and a specification will be provided from this. It may be necessary to carry out several trial areas in order to get a suitable match both in texture and finish.</li> <li>Seek further Technical/Historic England advice as required</li> </ul>	Spring 2018		WPBC	

Area 4. (See Works Map)



Location	Payment Code	Description	Outline of work	Date of work	Organisation responsible work	for
4.		Feature protection	<ul> <li>Erosion from visitors descending down the banks rather than using the steps is causing damage to the slopes. Improvement of the condition of the steps should help manage this, but further signage may be required to prevent future damage.</li> <li>The contractor will employ a suitably qualified and experienced contractor to accurately locate, measure the existing erosion scar in plan, and who will clean back and record the exposed sections. A list of potential archaeological contractors is available upon request.</li> <li>Scars of sufficient depth to be filled using biodegradable hessian sandbags filled with archaeologically sterile and graded topsoil and any obvious recent up cast from the scar.</li> <li>The sandbag will be covered with archaeologically sterile and graded topsoil to a depth of no less than 100mm (4") to make flesh with the adjacent earthwork bank. In scars where the depth of erosion is not sufficient for sandbags, a biodegradable hessian mat will be laid over the exposed surface of the scar and filled as described to sufficient depth.</li> </ul>	Spring 18	WPBC/contactor	

		<ul> <li>The repair will be covered over with a seeded biodegradable hessian matt pegged (wooden pegs no more than 150mm (6")) into the adjacent extant rampart.</li> <li>Natural England propose that a pioneer or nurse mix is sown to allow natural recolonization from the surrounding grassland. The benefits of thinly sowing pioneer species include the stabilisation of substrates and the rapid creation of an attractive sward while leaving sufficient bare ground to allow natural recolonization to occur.</li> <li>Seed Mix for nurse mix. Sown at low rate of 12.5kg/ha. Common Bent (Agrostis capillaris) 10%. Sheep's Fescue (Festuca ovina) 40%. Red Fescue (Festuca rubra) 40%. Smooth Meadow grass (Poa pratensis) 10%</li> </ul>	
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Area 5. (See Works Map)



Location	Payment Code	Description	Outline of work	Date work	of	Organisation responsible work	for
5.	НАР	Building repair	<ul> <li>Replacement of stone block pediment to the Storage Building. The missing stone block is visible at the base of the wall.</li> <li>The stone to be re-laid as in adjacent areas. It is possible that there may be a deficit of stone. If this is the case then liaison with Historic England will be necessary in order to prioritise specific areas.</li> </ul>	Spring 2018		WPBC	

Area 6. (See Works Map)



Location	Payment Code	Description	Outline of work	Date of work	Organisation responsible work	for
6.	HAP	Feature protection	<ul> <li>The five circular gun placements have become overgrown with low level vegetation; these should be cleared to improve the visual interpretation of the features.</li> <li>Achieved by: Strimming path ways within HAB. Clearing vegetation off all stonework – walls, entrances and buildings and removal of arisings from site. Cutting back of woody shrubs that are growing into the paths and on top of stonework. Removal of all arisings.</li> <li>Use of herbicides as a method to control scrub must be authorised by Natural England HLS – May to September only.</li> </ul>	Spring – Autumn 2018 (if required)	WPBC	



Area 7. (See Works Map)



	Payment Code	Description	Outline of work	Date work	of	Organisation responsible work	for
7.	HAP	Concrete repair	<ul> <li>Concrete repair required to tunnel entrance brickwork which has been chipped. Gate also to be secured shut.</li> <li>A sample of concrete was analysed by Sandberg Consulting Engineers. This identified that the sample was early concrete with graded aggregate. The analysis will be investigated and a specification will be provided. It may be necessary to carry out several trial areas in order to get a suitable match both in texture and finish.</li> <li>Seek further technical advice required</li> </ul>	Spring 2018		WPBC	

Area 8. (See Works Map)





Location	Payment Code	Description	Outline of work	Date work	of	responsible work	for
8.	HAP	Concrete repair	Re-profiling work required on the steps and wall to prevent further damage and improve visitor safety in this area.	Spring 2018		WPBC	

Area 9. (See Works Map)



Location	Payment Code	Description	Outline of work	Date work	of	Organisation responsible work	for
9.	НАР	Access improvement	<ul> <li>Stone steps require repair. Some are overgrown and many are missing, or dislodged.</li> <li>An interpretation panel at the top of these steps may help persuade visitors from sliding down the embankments and causing erosion.</li> </ul>	Spring 2018		WPBC	

Area 10. (See Works Map)



Location	Payment Code	Description	Outline of work	Date work	of	Organisation responsible work	for
10.	HAP	Stone walling repair	Banks either side of the tunnel entrance require re-profiling and the stone retaining walls either side of the tunnel entrance require rebuilding.  The stone needs resetting without mortar.  Seek further technical/Historic England advice required  The stone needs resetting without mortar.	Spring 2018		WPBC	

Area 11. (See Works Map)



Location	Payment Code	Description	Outline of work	Date work	of	Organisation responsible work	for
11.	HAP	Concrete repair	Concrete repair to steps required. (Modern concrete acceptable here).	Spring 2018		WPBC	

