

# DEFENCE AREA 33

## GREATHAM CREEK

### 1. Area details:

Greatham Creek is 2½ miles from Teesmouth, 5½ miles NE of Stockton-on-Tees, and 5 miles S of Hartlepool.

Unitary Authority: Stockton-on-Tees.

Parish: Billingham.

NGR: centre of area, NZ 507253.

### 1.1 Area Description: [see Map 1].

The defence area lies on, and to the south of, Greatham Creek, which is a tributary of the River Tees flowing into the North Sea some three miles to the east. In 1940, this was a largely undeveloped area of salt marsh and sand. The area is bisected by the A178 road to Seaton Carew, which crosses Greatham Creek by a bridge. A railway line, now dismantled, runs on an embankment to a point south of the Creek where it terminates abruptly. This railway appears to relate to the later industrialisation of the area, but, as some of the defence works are built on its embankment, it must have been constructed before the war or at its beginning.

A series of sea banks forming a rectangular shape crossed the marshes, and are still present. They ran on the south edge of Greatham Creek, and south of it, fronting were then the open Seal Sands and, further west, Rough Marsh and Cowpen Marsh. The majority of the defence works were built on these banks.

From the 1960s, the area to the east of the A178 road was intensively developed for brine fields and for the storage of petrochemicals, and much of the land is still owned and managed by Huntsman Petrochemicals (UK) Ltd. However, the land immediately south of Greatham Creek bordering the eastern sea bank has been largely cleared and now forms part of the Teesmouth National Nature Reserve.



*Fig. 1 - Greatham Creek looking towards the road bridge.*



Various viewsheds looking over the flat expanses of the former marshland are formed by the sea banks and the embankment of the disused railway, with oil refineries in the distance.



*Fig. 2 - The defence area in a 1946 air photograph. The sea banks running south from Greatham Creek, and the disused railway embankment, can be seen clearly, as can the positions of various defence works.*

## 2. **Assessment.**

### 2.1 **Defences:** [see Map 2]

*Defence overview -*

Greatham Creek was a defended locality within Hartlepool Sub Sector of No.1 Sector defended in 1940 by 176th Infantry Brigade, and, later, by 217th Infantry



Brigade.<sup>1</sup> The defended locality formed part of the rear defences of Hartlepool and the coastal front-line between that port and Seaton Carew. Its main purpose appears to have been to prevent enemy troops landing on the sands and salt marshes to make a flanking attack to capture the docks at Hartlepool.<sup>2</sup> A further defended locality was at Greatham village itself, one and a half miles to the north-west. Here an additional responsibility was the protection of Greatham Airfield.<sup>3</sup>

On 9th June 1940, work commenced on a coast defence scheme from North Gare, at the mouth of the River Tees, to West Hartlepool, and it seems likely that the defence works at Greatham Creek were built as part of this programme of work, undertaken by 510th Field Company Royal Engineers. The construction of 'rifle section posts' are recorded, and almost certainly it is this type of defence structure that was erected at Greatham Creek.<sup>4</sup> An Operation Instruction from 176th Infantry Brigade refers to the provision of concrete rifle posts in place of open trenches, each to have ten loopholes.<sup>5</sup> The defended locality was also protected by roadblocks and surrounded by a barbed wire perimeter. Greatham Creek Bridge was mined for demolition in the event of an invasion.<sup>6</sup>

The Royal Engineers unit which constructed the defences - 510th Field Company - was also responsible at first for manning them. In 1941, however, the defence was being undertaken by the 19th Bn. Durham Home Guard.<sup>7</sup>

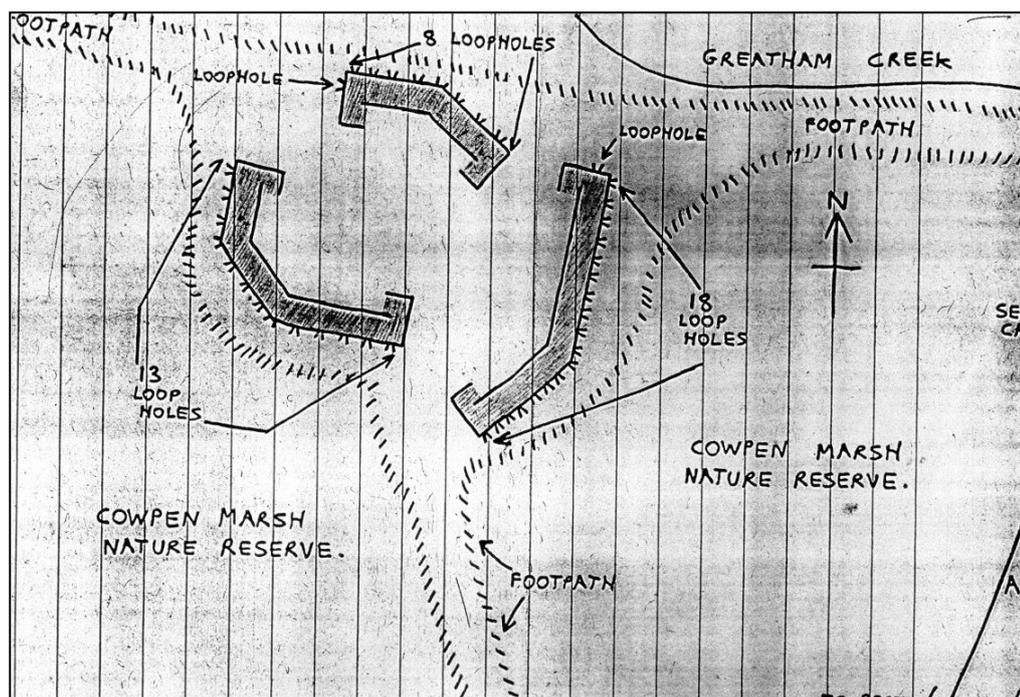


Fig. 3 - Rough sketch map showing the arrangement of one group of three rifle section posts at Greatham Creek [UORNs 6048, 16497, and 16498].<sup>8</sup>

<sup>1</sup> TNA: PRO WO 166/1070.

<sup>2</sup> TNA: PRO WO 166/4229.

<sup>3</sup> TNA: PRO WO 166/4688.

<sup>4</sup> TNA: PRO WO 166/3776.

<sup>5</sup> TNA: PRO WO 166/1045.

<sup>6</sup> TNA: PRO WO 166/4688.

<sup>7</sup> TNA: PRO WO 166/4688 and TNA: PRO WO 166/4229.

<sup>8</sup> Wills Collection, NMR.



*The defence works -*

The particular feature of the defence works at Greatham Creek are the remarkable section posts that survive there, either individually or in groups. As referred to above, these appear to have originated as a development of an infantry earthwork position, concreted and then roofed. The main body of the section post is angled, with small projections at each end containing the two entrances. The embrasures are all small, suitable for rifle, or possibly Bren gun fire, only, and they pierce the rear and end faces as well as those facing forward and to the rear. One section post in the group to the west of the defence area has eighteen forward-facing embrasures [UORN 16498].



*Fig 4 - Detail from a 1968 air photograph showing the western group of section posts - from the left, UORNs 6048, 16497, 16498.*



*Fig. 5 - UORN 6048: one of the western group of three section posts.*

A further group of section posts appears to be arranged in a square and is situated towards the north end of the disused railway embankment [UORN 6050]. There is no access to this site. It stands close to a small pillbox [UORN 6049], and the relationship between the two works, one with the enormous number of forty embrasures and the other only with three, is far from clear.





*Fig. 6 - UORN 6049 (left) and UORN 6050 (right) standing on the disused railway embankment. UORN 6050 is a section post that forms a square, and was able to provide firepower from some forty embrasures. Its purpose in relationship to UORN 6049 is unclear. Oil refineries form a backdrop to this intriguing defence landscape.*

On the eastern sea bank, three individual section posts have only recently become available for inspection with the clearance of the land here and the establishment of the Teesmouth Nature Reserve. A fallen sign still states 'Beware of Blockhouse', presumably a warning to the demolition gangs. The southerly of these section posts [UORN 16496] is in the best condition as its forward face is not buried like the others and it can be inspected internally. It has a total of nineteen embrasures, with eleven in the forward (east facing) face. A further section post [UORN 2924] on the south bank of Greatham Creek has been destroyed in recent years.



*Fig. 7 - UORN 16496: section post positioned to fire across the flats of Seal Sands.*



Fig. 8 - The interior of UORN 16496 with its firing shelf beneath the embrasures.

## 2.2 Landscape:

The changes to the landscape of the defence area since the Second World War have been immense, with the growth of the petrochemical works all around. However, with the clearance and reclamation of some land, and the establishment of the Teesmouth Nature Reserve, some of the character of the original salt marshes and the adjacent sand flats has returned. Certainly, seals can be observed again on Seal Sands, and a number of hides have been built for bird watching. The nature reserve also provides car parking on the west side of the road south of Greatham Creek Bridge. Access to the land east of the bridge is by a board walk by which it is possible as well to reach the sea bank overlooking Seal Sands.

The group of section posts to the west of Seaton Carew Road, however, should not be visited as the land here is contaminated and there is a warning notice to that effect. A convenient stile and a footbridge does, however, provide ready access, and, since this is an important group of defence works, the situation regarding entry to this land should be clarified



Fig. 9 - Warning notice at the Teesmouth Nature Reserve car park stating there is no access to the marshland where the western group of section posts stands owing to contamination of the ground.



There is no access, however, to the central square section post, and accompanying pillbox, as this land is fenced off and security patrolled.

The A178 road is very busy and care should be taken crossing it to walk on the footpath provided by the Nature Reserve on its east side as far as Greatham Creek Bridge. This bridge is a modern replacement of the original that lay just to its east.

### **2.3 Statement of Significance:**

The Greatham Creek defence area provides a most important group of defence works in a landscape different from any other examined for this study. Although the reason for placing a defended locality here can be understood, the intensity of the defence indicated by the groups of section posts may appear surprising. It has to be realised, however, that what has survived here is a unique transformation into concrete of the infantry earthworks that would usually have been dug at other defended localities, and which have long since been infilled. Provision was evidently made to defend the locality at company strength, with fields of fire criss-crossing the defended area. The unique nature of this defence area, and its importance, cannot be overstated.

The various structures should be fully surveyed. For this purpose, access to all the sites would need to be obtained, at which time there might be consultation as to the possibility of eventual public access.

## **3. Recommendations:**

1. That the surviving anti-invasion defence works in the Greatham Creek area be considered of national importance. They enable the defence of this section of the coastal hinterland of Durham to be interpreted, and provide evidence of the articulation of the defence and the inter-relationship of its functionally different components.
2. That the defence works be professionally surveyed and recorded, in particularly the two main groups of section posts.
3. That consultation with landowners take place concerning public access to sites where this is not currently possible.
4. That consideration be given, in a possible initiative with the local authority and with English Nature, to providing an information board on the Second World War history of Greatham Creek for the benefit of the many visitors who come to the Teesmouth Nature Reserve.



4. **Supporting material.**

4.1 **Photographs:**

Figs. 1 and 5-9 - taken (AWF) during field survey, 1.5.2003.

Fig. 2 - CPE/UK/1835 fr.3055 (13.11.1946) - NMR.

Fig. 4 - MAL/68018 fr.42 (6.4.1968) - NMR.

4.2 **Documentary Sources:**

510th Field Company, Royal Engineers War Diary, 1940 - TNA: PRO WO 166/3776.

2/6th Bn. South Staffordshire Regiment War Diary, 1940 - TNA: PRO WO 166/4688.

'Operation Instruction No.4', 13.7.1940 (from 176th Infantry Brigade War Diary) - TNA: PRO WO 166/1045.

'Operation Order No.2', 16.7.1940 (from 6th Bn. North Staffordshire Regiment War Diary) - TNA: PRO WO 166/4482.

'Hartlepool Dock Area Defence Scheme', 10.10.1940 (from 15th Bn. The Durham Light Infantry War Diary) - TNA: PRO WO 166/4229.

'No.1 Sector Operation Instruction No.1', 8.11.1940 (from 217th Infantry Brigade War Diary) - TNA: PRO WO 166/1070.

'Plan of Pillboxes at Cowpen Marsh', Wills Collection, NMR.

4.3 **Aerial Photographs:**

CPE/UK/1835 frs.3054-3055 (13.11.1946) - NMR.

543/396 frs.165-166 (25.9.1958) - NMR.

MAL/65090 fr.65 (16.10.1965) - NMR.

MAL/68018 fr.14 (6.4.1968) - NMR.

MAL/68018 fr.28 (6.4.1968) - NMR.

MAL/68018 fr.42 (6.4.1968) - NMR.

4.4 **Ordnance Survey 1: 2500 Plans:**

NZ 5024-5124 (1969) - BLML.

NZ 5025-5125 (1968) - BLML.

4.5 **Defence of Britain Project Database:**

[see 5. 'Annex'].

