

## **Saltfleetby-Theddlethorpe NNR Site Hazard Map**

The following site hazards are for consideration when forming a risk assessment and undertaking work:

- Salt marsh tidal creeks and deep mud
- Unexploded ordnance (See separate map)
- Ticks
- Brown moth caterpillars – nests can cause irritation when in contact with skin
- Naturists present on sections of the reserve
- Rabbit warrens
- Protected species – badgers, natterjack toads, water voles etc.
- Drains and ditches
- Public access throughout

## **Emergency Access Points**

### **Crook Bank car park – (TF 48853 88241)**

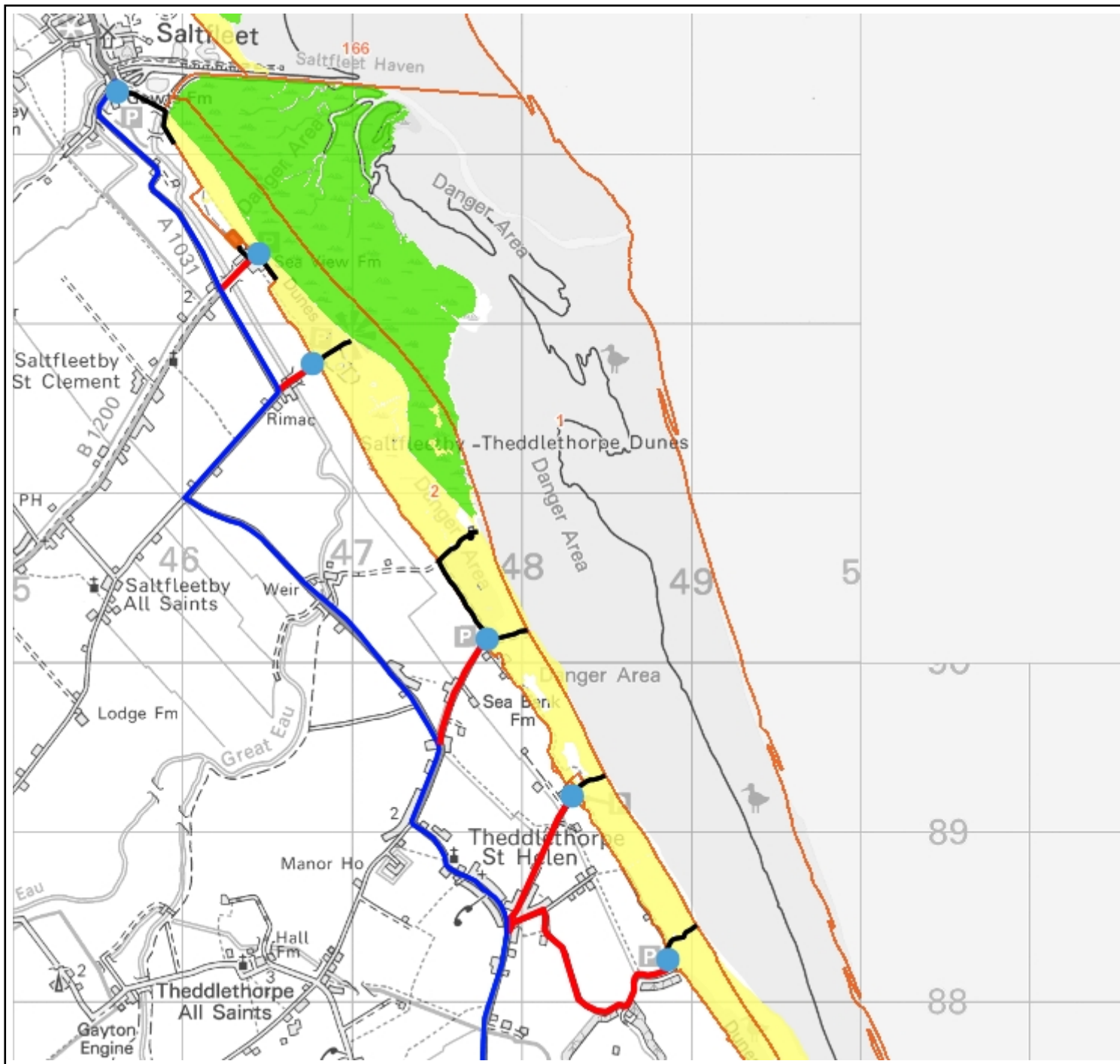
Follow track north past car park entrance. For beach access follow fork to right through metal gate where padlock opens with the key. Concrete path continues for c200m before narrowing to a chalk/sand path 300m before the beach which is approximately 1m wide at the thinnest point.



*Crook Bank – right fork leads to the beach/foreshore down a concrete track which becomes a thin chalk/sand path.*

### **Brickyard Lane car park – (TF 48316 89214)**

For beach/foreshore access follow the concrete track eastwards. The padlock on the metal gate opens with the key and the 300m long chalk/sand path (c1m wide) leads to the beach.



## Saltfleetby-Theddlethorpe NNR Site Safety Map

### Key

- SSSI England Site Units © Natural England
- PHI Coastal Saltmarsh © Natural England
- PHI Coastal Sand Dunes © Natural England
- Ordnance Survey (Greyscale) © Ordnance Survey
- Car park
- Main road (A1031)
- Road access to car park
- Main access route onto reserve
- Natural England work base

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Map Produced from WebMap2 on 20/11/20

Map Projection: British National Grid

Map Scale at A4: 1:33,561





*Continue up the concrete path past the car park. Thin path (c1m wide) out to the beach/foreshore.*

### **Churchill Lane car park – (TF 47798 90144)**

Beach/foreshore accessed through the metal gate in the south-east corner of the car park. The padlock is opened with the code xxxx. Following the straight concrete track towards the beach leads on to a thin (c1m wide) sand path for the final 200m before the foreshore.



*Concrete track through the metal gate leading out to the beach/foreshore.*

Use the metal gate on the left just before the car park to access the beach/foreshore further north near the Rimac MOD base. This opens with the five digit code xxxxx. Follow the track north and turn right at the fork. This has good vehicular access and a turning point at the end.



*The metal gate which leads to the beach/foreshore north of Churchill Lane out from Rimac MOD base by taking the right fork in the track.*

### **Rimac car park - (TF 46755 91762)**



Follow the road past the car park entrance and exit to the access gate onto the reserve. The padlock opens with the code xxxx. The chalk track east leads down towards the saltmarsh, however vehicular access may not be possible.



*Wooden gate at the end of the track leads out towards the saltmarsh.*

After going through the first gate there is another wooden gate on the left which allows access into the dunes to the north (between Rimac and Sea View). Vehicular access would be difficult over uneven dune terrain.



*Gate allowing access to the dunes between Rimac and Sea View.*

### **Sea View car park – (TF 46458 92412)**

In the south-west corner of the car park there is a metal barrier with no lock which can be opened to allow access to a short (c200m) wide path towards the north end of the dunes between Rimac and Sea View.





*Metal barrier leading to the north end of Rimac-Sea View dunes.*

The metal barrier in the north-east corner of the car park opens with the key however there is limited access to both the saltmarsh and the dunes via this route.

### **Sea View Farm - (TF 463 924)**

Just before the car park there is a track on the left. Going down the track to the left of the wooden gate leads to a metal barrier which opens with the code 2175 to access Sea View Farm.



*The track on the left leads to the metal barrier to access Sea View Farm.*

### **Paradise Lagoon - (TF 456 933)**

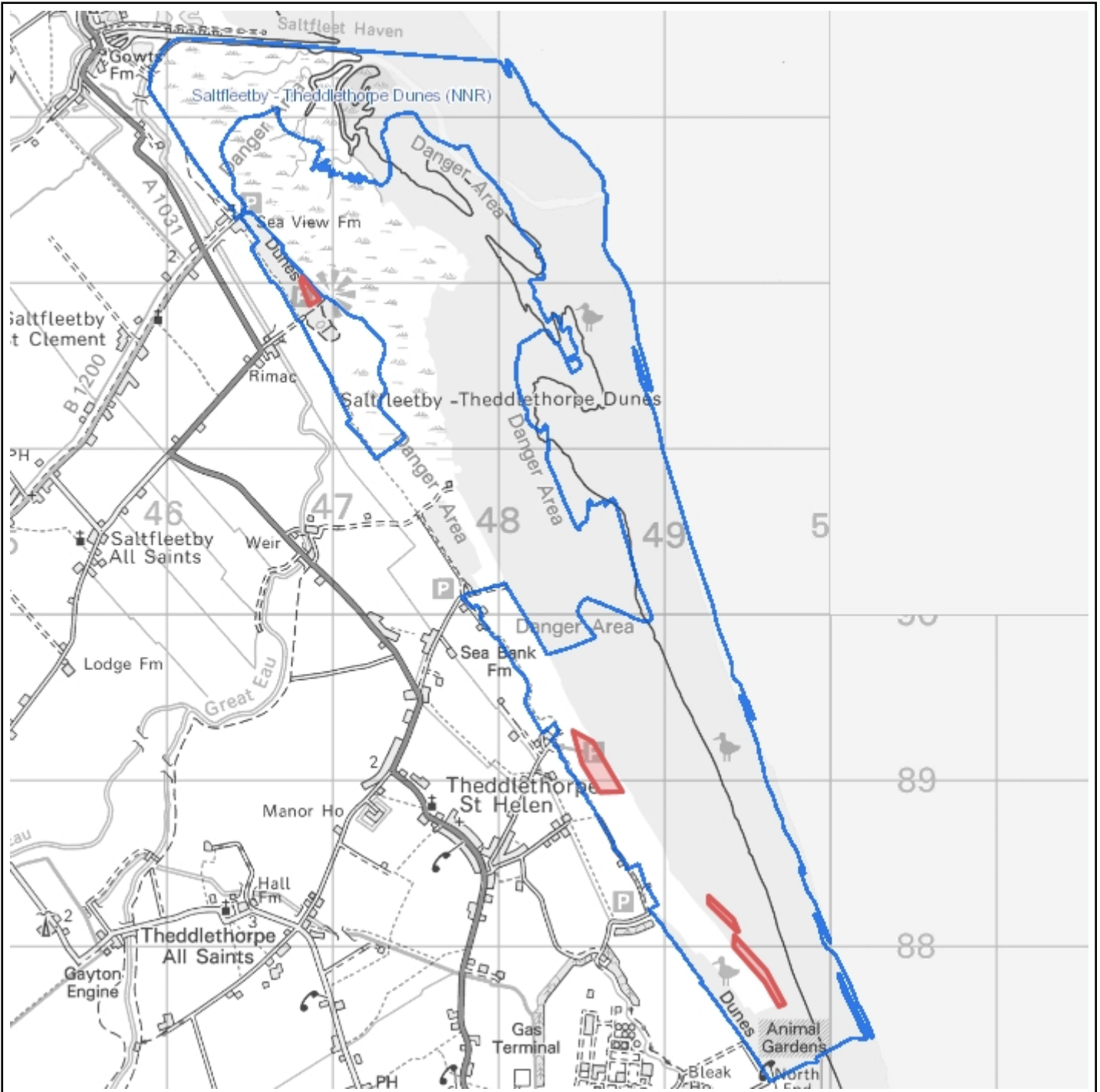
Turning off the A1031 at the southern end of Saltfleet, drive past the car park until the metal gate. There are three locks but the code for the combination lock is 2175. Follow the track past Paradise Lagoon and take the gate on the right to access round the back of the plantation woodland and onto the reserve.



*Going through the gate and following the track leads to the northern reserve boundary.*



## Location of antisocial behaviour



### Key

- National Nature Reserves © Natural England
- Ordnance Survey (Greyscale) © Ordnance Survey

■ area of antisocial behaviour



Map Produced from WebMap2 on 06/02/19

Map Projection: British National Grid

Map Scale at A4: 1:35,000

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## **DIO UXO Estate Intelligence – Theddlethorpe Bombing Range**

### **Foreword**

This document is not a risk assessment, it is a summary of UXO Estate Intelligence (UXO-EI) relating to potential UXO contamination at the former RAF Theddlethorpe Bombing Range. The purpose of the document is to provide information on the UXO hazard to duty holders and those conducting risk assessments for works or other activities conducted on or in the vicinity of the former range.

### **UXO**

Unexploded Ordnance (UXO) is defined as explosive ordnance that has been primed, fused, armed, or otherwise prepared for use and used in an armed conflict or during training. It may have been fired, dropped, launched or projected and should have exploded but failed to do so. It also includes unexploded ordnance that may have been dumped, buried or otherwise discarded.

### **Background**

RAF Theddlethorpe was a bombing and gunnery range believed to date back to 1935, it was mainly used by aircraft operating out of nearby RAF Manby. Targets were either on the beach, floating on the sea or towed behind aircraft. The range has been used for a wide variety of munitions, typically small arms, cannon rounds, rockets, practice bombs and large bombs. Since its closure in 1976 the site has been retained by RAF as an explosive demolition training area.

### **Range decommissioning**

After range closure an RAF detachment commenced UXO clearance of the range. This proved to be a difficult task that was not fully achieved despite spending over 10 years on the task. UXO clearance certificates were issued for some areas of the range however, these need to be treated with a degree of caution, as air to ground ordnance can penetrate the ground to a considerable depth.

For UXO clearance purposes the site was split into smaller search areas A to F based on proposed sale/transfer of parcels of land, see Appendix A. Areas A, B, D & F were certified by RAF to have been cleared of UXO to the parameters of the Foerster 4015 locator. A later certificate was issued for Area C which was cleared to the parameters of the Foerster 4021 locator.

DIO have no evidence of any UXO clearance activity in Area E. The geophysical survey indicates that this is close to a former target/impact area, as such it must be assumed to be contaminated with UXO.

### **Geophysical Survey**

DIO conducted a geophysical survey using a towed array of magnetometers over an area to the north of Area C. This was done to inform a site sampling exercise to assess the level of UXO contamination remaining in the area. A total of 19 anomalies were selected for investigation, none of these were found to be UXO, depth of anomalies varied from a few centimetres to in excess of 3 metres. The survey indicates that some UXO clearance was conducted up to 200 m to the north of Area C, thereafter it is apparent that no clearance activity has been undertaken, see Appendix B.

### **Potential UXO Hazard**

As the range was used over a considerable period of time it is not possible to identify all types of ordnance that may have impacted the range. Some examples UXO known to have been recovered at Theddlethorpe are:



Projectiles 0.5", 20mm & 30mm  
Depth Charge MK17 (325lb)  
Fragmentation Bomb 20lb  
Fuzes Various  
Small Arms Ammunition  
Practice Bombs 25lb 11.5lb 10lb 8lb 28lb 14kg  
Incendiary 4lb, 30lb, 50kg (German WWII)  
Bombs 40lb GP, 250lb GP, 250lb TI (Target Indicator)  
20-30mm projectiles  
2" Mortars  
Rockets Various  
Rocket Motors 3"  
Rocket Head 60lb  
Smoke Float

It should be assumed that any of the above may be present and possibly other types. Most will be inert training variants or will have functioned as intended however, some will remain as UXO.

### **Accessibility**

The level of UXO clearance was 'to the limits of the locator', either the Foerster 4015 or 4021, both of which are deep search instruments. This can give a false sense of security as on a beach site it is often difficult and sometimes impossible to extract deeper anomalies. It is reasonable to assume that where UXO clearance activity has taken place any remaining UXO is likely to be sub-surface and therefore not readily accessible. However, the action of the tide and costal erosion may lead to UXO appearing in some areas.

### **Sensitivity of UXO**

The vast majority of ordnance impacted on this range will have been inert training variants. Where live ordnance was used most will have function as intended however, it is reasonable to assume a small percentage will have failed to function and become UXO. It is important to note that contact with UXO during normal site activity is very unlikely to lead to an energetic event. However, striking, hitting, attempted dismantling or similar activity will increase the likelihood of such an event.

### **Conclusions**

UXO clearance certificates have been issued for areas A, B, C, D & F. Due to possible tidal action and difficulties in digging it should be assumed to be clear to 1.5 m.

As there is no evidence of search for areas E it must be assumed to be contaminated with UXO.

Geophysical evidence indicates the remaining areas to the north of areas E and C have not been subjected to UXO clearance and must be assumed to be contaminated with UXO.

### **Recommendations**

1. Intrusive works conducted in areas A, B, C, D & F consider UXO as a potential hazard when conducting deep excavations.
2. All other areas of the former range should be assumed to have the potential for UXO to be present, possibly on or close to the surface.



