



**Shire**  
Group of IDBs

## **Black Drain toe piling Black Drain opposite The Dutchman**

**Environmental Appraisal**

**September 2017**

**Black Drain DB  
Epsom House  
Malton Way  
Adwick le Street  
Doncaster DN6 7FE**





## Contents

<b>Executive Summary</b> .....	<b>1</b>
<b>1. Introduction</b> .....	<b>2</b>
1.1 Background.....	2
1.2 Location .....	2
1.3 Site Description.....	2
1.4 Proposed Works .....	3
1.5 Legislative Context .....	3
<b>2. Existing Baseline</b> .....	<b>4</b>
2.1 Human Beings .....	4
2.2 Nature Conservation Sites.....	4
2.3 Flora and Fauna .....	4
2.4 Landscape .....	5
2.5 Cultural Heritage and Archaeology.....	5
<b>3. Environmental Assessment and Mitigation</b> .....	<b>6</b>
3.1 Human Beings .....	6
3.2 Nature Conservation Sites.....	6
3.3 Flora and Fauna .....	6
3.4 Landscape .....	6
3.5 Cultural Heritage and Archaeology.....	6
<b>4. Conclusion</b> .....	<b>7</b>
4.1 Conclusion .....	7
<b>References</b> .....	<b>8</b>

## List of Figures

<b>Figure 1: Location Map .....</b>	<b>2</b>
<b>Figure 2: slip facing north east .....</b>	<b>3</b>
<b>Figure 3: Thorne Moors SSSI .....</b>	<b>4</b>

## Abbreviations

SAM	Scheduled Ancient Monument
LWS	Local Wildlife Site
SSSI	Site of Special Scientific Interest
WLMP	Water Level Management Plan

## Executive Summary

Board maintained strategic watercourse Black Drain has suffered bank slips on the highway side of the watercourse. The slip is a recent occurrence and has occurred immediately adjacent to a burst water main incident earlier in 2017 on Moorends Road.

Proximity of the highway Moorends Road to the edge of the drain raises Health & Safety concerns to pedestrians and vehicle users. Utility services also run within the upper section of the bank side. The slip is likely to fall further as winter and wet weather approaches and could impact on the road surface and damage service utilities. Any further slip is likely to obstruct the watercourse thus reducing effective water level management within the Board District

The Board will undertake these works in compliance with the Environmental Impact Assessment (Land Drainage Improvement Works) Regulations 1999 (as amended).

## 1. Introduction

### 1.1 Background

The Board is the Risk Management Authority within its district under the Flood & Water Management Act 2010, its function defined by the Land Drainage Act 1991 (as amended).

Black Drain watercourse is the main watercourse within Board district, delivering water to the Board Inlet pump station. A recent slip has occurred on Black Drain within the vicinity of The Dutchman, Moorends Road, Moorends. The slip has the potential to affect pedestrians and road users creating a Health & Safety issue, affect utility services within the top section of the bank and further slips can affect the main flow of water through its District. The Board will undertake works to the Black Drain in accordance with Section 14a Land Drainage Act 1991 (as amended).

### 1.2 Location

The slip is located on the west side of the highway Moorends Road, opposite The Dutchman, Moorends Road, Moorends 360m north of the railway crossing at Moorends (see Figure 1).

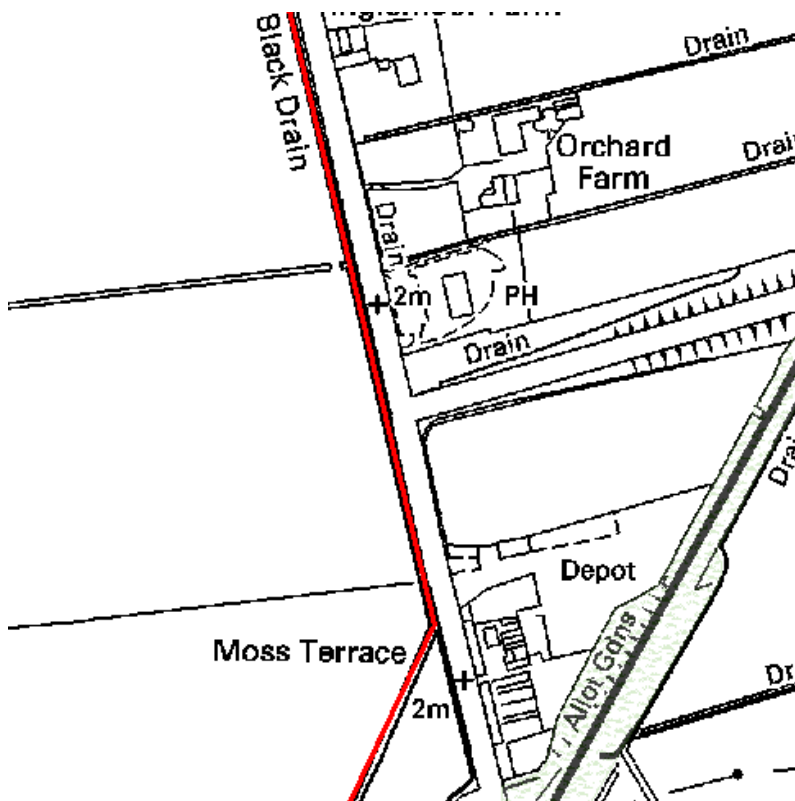


Figure 1: Location Map

### 1.3 Site Description

The section of watercourse slip is 20m in length immediately adjacent to the highway. The depth of the drain from bank top is approximately 3m, depth of water at the time of survey less than 30cm.

## 1.4 Proposed Works

Timber toe piling of approximately 20m length at the base of the slip on the Highway side of the watercourse. (see Figure 2)



Figure 2: slip facing north east

## 1.5 Legislative Context

The Land Drainage Act 1991 (as amended) places obligations on an Internal Drainage Board regarding SSSI. The proposed works fall within the category of Class A Permitted Development under the Town and Country Planning (General Permitted Development) Order 1995, provided the works are carried out on behalf of DDC.

Under the Environmental Impact Assessment (Land Drainage Improvement Works) Regulations 1999 (as amended), DDC has an obligation to consider whether any proposals to carry out these works are likely to have a “significant” environmental effect. This process will determine whether there is a requirement for the preparation of a formal Environmental Statement. In every case when it is considered that an Environmental Statement is not required, it is the Policy of Black Drain to prepare an Environmental Appraisal.

## 2. Existing Baseline

### 2.1 Human Beings

The site was surveyed 17th September 2017.

The nearest property is The Dutchman on the opposite side of Moorends Road approximately 55m east of the slip. Other properties of Orchard Farm and Inglemoor Farm are its neighbours. The next closest properties are 200m to the south on the opposite side of Moorends Road.

There is no public right of way to or through the site however the slip is immediately adjacent to the highway.

### 2.2 Nature Conservation Sites

Thorne, Crowle & Goole Moors SSSI is approximately 1km to the east of the site of proposed works. No other nature conservation or local wildlife site falls within 1km radius of the proposed work (see figure 3) and will not be affected by the works.

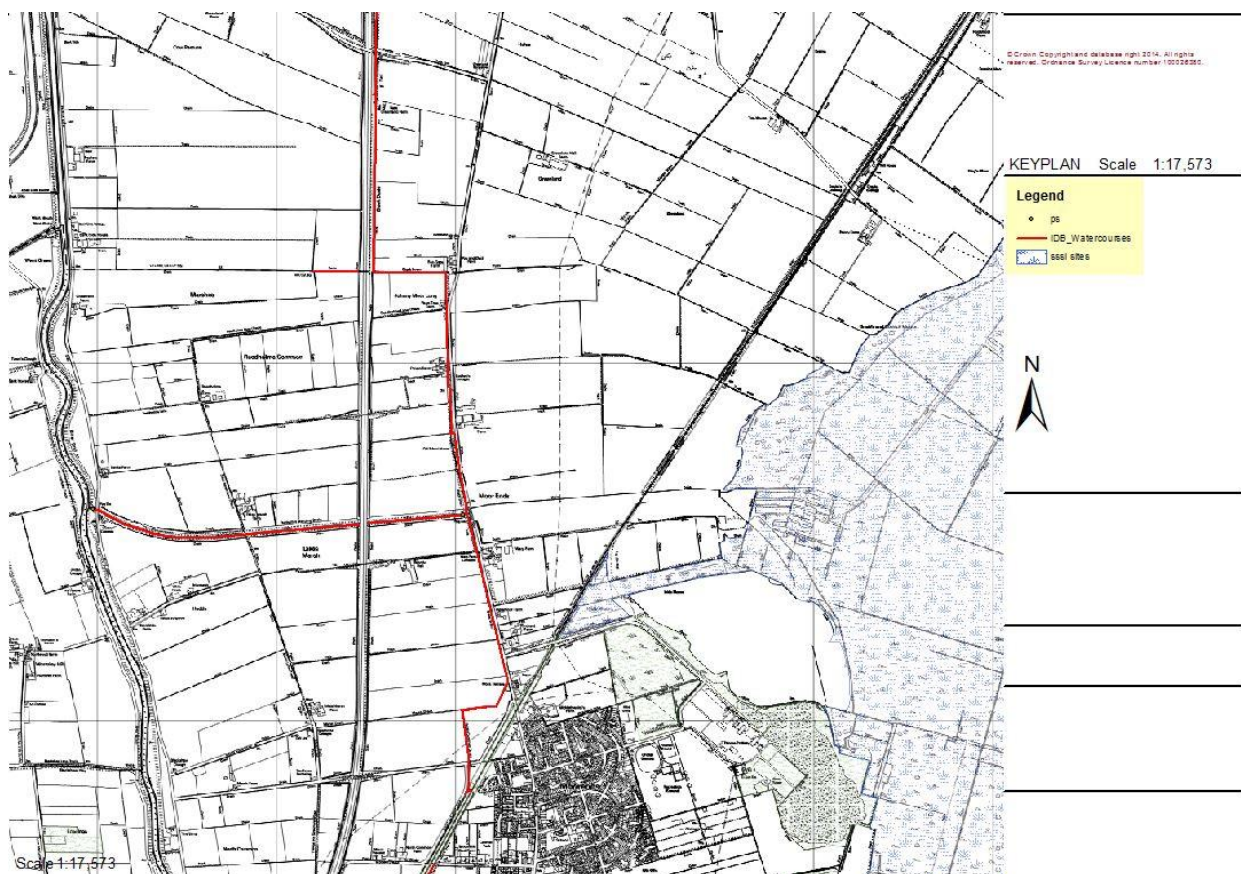


Figure 3: Thorne Moors SSSI

### 2.3 Flora and Fauna

The drain banks comprise rank grasses associated with intensive farmland. The Board has evidence of protected species water vole (*Arvicola amphibius*) population within Black Drain however that population is 2km to the north in the vicinity of Fox Gate Farm. The Board considers any water vole burrows that may have been within the area of slip to have been



destroyed as part of the slipping action of the soil. No evidence of re-burrowing is seen within that slipped material. No evidence of water vole (latrines, burrows, or grass grazing) is identified within 260 metres north and south of the slip.

## **2.4 Landscape**

The site of the proposed works is located within the Humberhead Levels Joint Character Area and Natural Area. The landscape is predominantly open low-lying arable land dissected by numerous drains and ditches.

## **2.5 Cultural Heritage and Archaeology**

There are no Scheduled Ancient Monuments within the vicinity of the site.

## **3. Environmental Assessment and Mitigation**

### **3.1 Human Beings**

#### **3.1.1 Environmental Impacts**

The proposed works are not likely to result in disturbance or disruption to local residents due to the distance from the site of the works and their minor nature with the exception of The Dutchman and its two adjacent farms which may be affected by noise however Moorends Road is a reasonably busy highway and noisy highway, frequently used by tractors and similar farm machinery as well as Heavy Goods Vehicles.

### **3.2 Nature Conservation Sites**

#### **3.2.1 Environmental Impacts**

The works will not impact on any Nature Conservation Sites

### **3.3 Flora and Fauna**

#### **3.3.1 Environmental Impacts**

No protected species have been observed within the immediate site, any previous inhabitation will have been destroyed by the slips. There will be short term detrimental environmental effect to the bankside vegetation when slipped material is regathered and returned to place. Where necessary should re-colonisation of grasses not occur growing season 2018, the area will be seeded with species rich meadow grass and native forbs.

### **3.4 Landscape**

#### **3.4.1 Environmental Impacts**

There will be no detrimental effect on the landscape caused by the proposed works.

### **3.5 Cultural Heritage and Archaeology**

#### **3.5.1 Environmental Impacts**

There will be no adverse impacts on the historic environment as a result of the works.

## **4. Conclusion**

### **4.1 Conclusion**

It is the considered opinion of the Board that the any environmental impacts that will arise during and after the proposed works are not likely to be significant.

The impacts on human beings and flora and fauna are likely to be minimal and the proposed works will have a positive and beneficial effect on human beings resulting from bank stability.

## References



# Shire

---

Group of IDBs