



**Contaminated Land  
Strategic Inspection Report**

**Chalkpit Road,  
Titchwell, King's Lynn**

**022083**

**March 2024**

Environment and Planning  
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# Executive Summary

The Borough Council of King's Lynn and West Norfolk has published a contaminated land inspection strategy which sets out how it proposes to fulfil its legal responsibilities for inspection under the contaminated land regime. The legal definition of Contaminated Land in Part 2A of the Environmental Protection Act 1990 (Part 2A) relates to unacceptable risks to human health and/or the wider environment. The contaminated land strategy details how sites are prioritised and the arrangements for strategic inspection. Strategic inspections identify where we may need to find out more about the land or where we don't need to take any more action.

A landfill situated on Chalkpit Road, Titchwell, has been identified for inspection. Given the former use of the land and the sensitivity of the surrounding area, an initial assessment of the site has been undertaken to assess the potential for harm to human health, property, the environment, groundwater and surface waters under Part 2A.

From the evidence gathered during the assessment of the site history and a site walkover, the following can be stated:

- The site is a former Chalk pit, reported anecdotally to have been in use since roman times, but seen from the beginning of our records.
- The site has previously been used as a landfill operated by Docking Rural District Council which records a first input date of 31st December 1950
- The area underwent restoration attempts with larger waste items being removed and the pit fenced off and planted with trees and shrubs. This is indicated to have occurred in the 1970s.
- The site is currently heavily vegetated and described as a mini-reserve which is maintained by local effort, accessible from a fence off Chalkpit road

The Potential Hazard and the Risk associated with the site has been assessed. This assessment indicates a potential Low hazard a risk rating of Very Low to Low. The site is not considered to represent a potential risk to human health and the environment under Part 2A of the Environmental Protection Act 1990 based on the information gathered and will not be prioritised for further detailed inspection. If additional information is discovered, or changes are proposed to the site, then the site should be reassessed.

## Strategic Assessment

The Borough Council of King's Lynn and West Norfolk has published a contaminated land inspection strategy which sets out how it proposes to fulfil its legal responsibilities for inspection under the contaminated land regime. The legal definition of Contaminated Land in Part 2A of the Environmental Protection Act 1990 (Part 2A) relates to unacceptable risks to human health and/or the wider environment. The contaminated land strategy details how sites are prioritised and the arrangements for strategic inspection.

Strategic inspections identify where we may need to find out more about the land or where we don't need to take any more action. This report is a summary report of the strategic inspection carried out following prioritisation of sites in 2013 and is updated based on current information about the site.

Location	The site's location is Chalkpit Road, Titchwell Kings Lynn NGR 576223 343289. The closest postcode is PE31 8BE. The site is shown in Figure 1 in the appendices.
Previous site use	The site is a former Chalk quarry. After quarrying ceased the site was then reportedly used as a landfill.
Present Site Use	The site is now a wooded area 'mini-reserve' as shown in Figure 2.
Prioritisation Score	In the map based screening for priority sites, the site was identified due to the historical/potential use as a landfill, in a location where humans and property could be present as well as being located on a principal aquifer. Initial screening showed that the risks from the site were Low to Very Low, so further detailed inspection was not carried out.
Ownership	The site's owners are understood to be Titchwell Parish. A representative for the Parish Council has been consulted and had no comments to make on the finished report. This report will be made available for information.
Previous Investigation	No previous reports are known for the site.
Geology	The OS Terrain 50 digital height dataset indicates that the site is at 20-30m above ordnance datum (maOD). Till, Devensian Superficial geology is recorded at the site. The bedrock is classified as Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk Formation And Culver Chalk Formation (Undifferentiated). (BGS digital geology).
Hydrogeology	The site is on land classified as a principal aquifer, up to 450 m thick. The water is described as hard to very hard, good quality water. (BGS Geo-index). It is not within a Source Protection Zone for drinking water. There is 1 private water supply recorded 750m to the east of the site.
Hydrology	The nearest major water features are Titchwell marshes with the nearest part of the marsh approximately 820m north of the site. There is a drain 580m north of the site which is connected with the marsh but not within its borders.
BGS borehole records	No borehole records have been found for the site.
Local Authority Pollution Control	No LAPPC process is recorded within 500m of the site.
Environment Agency data	The Environment Agency records the site as 'Land West of Chalkpit Road' (EAHLD03384) The historic landfill data records a first Input

	<p>date of 31<sup>st</sup> December 1950 with the site operated by Docking Rural District Council. The site was known to accept Household and Liquid/sludge wastes. The record does not have a date listed for the 'last input' or for the issue and surrender of any licence. Waste Regulation Authority Reference: WD 691</p>
Environment Agency Consultation	Not consulted as not within a source protection zone.
Parish council consultation	<p>Consultation with the parish council confirmed that Titchwell Parish Meeting owns two acres of land around the Chalk Pit. The area is shown on the Enclosure award map. The Parish Meeting pays an annual insurance premium to cover the property.</p> <p>Historically, the Chalk Pit provided the village with chalk for both building and agricultural use. It has been considered as 'worked out' for many years. The diggings were subsequently used by the village for local rubbish disposal but this was cleared in the 1970s. Subsequently the Chalk Pit restoration was awarded an Environmental prize by Shell in 1992.</p>
Planning History	No planning permissions exist onsite in the borough or county councils' records, the nearest permission is approximately 180m northwest and unrelated to the site.
Historical Maps (E-map Explorer)	<p>Enclosure Map 1800 - 1850 – Not Available</p> <p>Tithe map circa 1840 – Any feature showing the pit is not seen, but the plot is sectioned off as its own parcel of land. (This could be down to the lesser level of detail in this map set.)</p> <p>Ordnance Survey 1st Ed. 1879-1886 – Seen labelled as 'Old Chalk Pit'</p>
Historical Maps (BCKLWN)	<p>1843 – 1893: Site shows the depression and labelled as 'Old Chalk Pit' with a path leading from north to south. The pit is seen with a few trees on the northwestern edge and grass cover is signified to be present in the pit.</p> <p>1891 – 1912: Site is largely unchanged but now only referred to as 'chalk pit'. Trees no longer seen on northern edge, grass cover is still signified to be present in the pit.</p> <p>1904 – 1939: Remains largely the same although trees are now indicated to be present within the pit.</p> <p>1919 – 1943: No Data</p> <p>1945 – 1970: Chalkpit no longer labelled and no features showing the pit are seen. Scattered trees are indicated on the site.</p> <p>1970 – 1996: No Data</p>
Aerial Photographs	1945 – 1946 MOD Aerial Photograph – some vegetative cover. Bare sections seen as bright white potentially showing the underlying chalk Bedrock at the base of the pit. No signs of impact to density or changes in colour of plants in the surrounding crop fields.

	<p>1988 Aerial Photograph – Vegetative cover across site. No landfilling activity evident. No signs of impact to density or changes in colour of plants in the surrounding crop fields.</p> <p>1999 Aerial Photograph – The site appears vegetated, a clearing on the centre-east of the site less vegetated. No signs of impact to density or changes in colour of plants in the surrounding crop fields.</p> <p>2006-2009 Aerial Photograph densely vegetated with a clearing east of centre of the site. No signs of impact to density or changes in colour of plants in the surrounding crop fields.</p> <p>2023 Aerial Photograph – Dense vegetative cover. No signs of impact to density or changes in colour of plants in the surrounding crop fields.</p>
Site Walkover	<p>A site visit was carried out by one of BCKLWN Contaminated Land Officers on 19/2/2013 and the following was noted.</p> <p>The site was accessed through a gate from Chalkpit Road. A notice on the gate stated ‘It is sometimes said that the chalk pit goes back to Roman times and before, but it has known a more modern use. After chalk was last removed it became a rubbish dump which was eventually closed following local outcry and then lay dormant for some years. With help of the local farmers and Norfolk county Council (prompted by Mr R.C. Gould, the then chairman of Titchwell Parish Meeting) the larger pieces of rubbish were subsequently removed, the pit tidied, the boundary wired and trees and shrubs planted.’</p> <p>The site received a Shell Environment Award in 1993. There was a pathway through the site which appeared well used and seating.</p> <p>The site was colonised by a variety of plants and mature trees, which did not display any signs of vegetative stress.</p> <p>Along the eastern flank of the pit was an area of material which jutted out into the pit. This area was fenced off from the rest of the pit, although it had been broken down in various places. This area contained a variety of waste items including glass and plastic bottles, jars, brick and concrete. The waste material was mostly covered in soil and snowdrops and other flora were growing on the flanks.</p> <p>The visit on 12<sup>th</sup> February 2024 confirmed that no significant changes had occurred on site. The Plaque (picture 1) still remains in good condition. The site was vegetated with the trees forming a canopy over the pit. Due to the time of year sunlight was able to permeate the canopy, and ground in the pit was largely vegetated with short foliage. The site appears to be managed with the path cleared and steps constructed (photograph 7) leading up to the edge of the pit as well as some barriers around the edge. The raised area on the eastern flank is seen with litter present (Photograph 5&amp;8). This is soil covered with soil the southwestern face has numerous snowdrop present. The raised area looks to be where a clearance is seen in</p>

	Aerial Photography from 1999 & 2006-2009. No signs of vegetative stress were noted to the crops surrounding the site.
Potential Hazard	<p>The site is a former chalkpit that has been previously partially backfilled with waste and operated as a landfill by Docking Rural District Council around 1950. The plaque on site indicates that some works have occurred on site to remove some of the deposited waste and establish the site with its current use as a nature reserve. Correspondence with the local parish council indicates that the works to clear the rubbish on site occurred in the 1970s.</p> <p>The site is listed as a principal aquifer, but is not in a source protection zone for drinking water. The closest private water supply is 750m east of the site.</p> <p>From the evidence from site walkover it can be seen that there could be some waste remaining on site from previous landfilling activities however it is largely covered with soil and vegetated. It is assumed that any remaining waste has been in situ for approximately 70 years over which time it is considered that the majority of the contaminants which would be able to affect human health and ecology could have volatilised or have leached out of the soils and migrated away from the source. If any remaining contaminants had leached out of the landfilled material it would have been diluted and dispersed to such an extent when it did reach an abstraction point that it would be unlikely pose a significant risk.</p> <p>Due to the age of the waste activity and lack of evidence of harm, the hazard is assumed to be LOW.</p>
Summary Conceptual Site Model and Assessment of Risk	<p><b>Human health</b> The site is accessible by a gate and contains clearly defined paths creating a loop around the western and northern edge of the site back to the eastern entrance gate. The site has a few items of litter visible, the mound that was suspected to contain waste material is fenced off and off the main path through the site. Therefore the opportunity for direct contact with waste material is restricted and the likelihood of the hazards affecting human health is considered to be LOW. The associated risk for human health would be LOW</p> <p><b>Property</b> There are no properties on site. The closest residential dwelling is approximately 180m northwest. The site is surrounded by crops, these show no signs of vegetative stress on recent aerial photography or during the site walkover. Therefore, the likelihood of the hazards affecting property is UNLIKELY, and that the associated risk for property would be VERY LOW</p> <p><b>Environment</b> The site is within an Area of Outstanding Natural Beauty (AONB). The chalkpit itself is described as a mini-reserve. It does not at this time have a formal designation. An AONB site is land protected by the Countryside and Rights of Way Act 2000 which is not an area designated environmental receptor as set out in Table 1 of the Defra Contaminated land statutory guidance (2012). The likelihood of</p>

	<p>hazards affecting the environment is UNLIKELY and that the associated risk for environment would be VERY LOW.</p> <p><b>Ground/surface water</b></p> <p>The site is on land classified as Principal aquifer. It is not within a Source Protection Zone for drinking water. 1 private water supply is recorded 750m east of the site. Therefore the likelihood of hazards affecting ground/surface water is considered to be LOW, and that the associated risk for water would be LOW.</p> <p>Therefore the overall risk is VERY LOW to LOW</p>
<p>Conclusions &amp; Recommendations</p>	<p>The Borough Council considers that based on information available at the time of this strategic inspection, no significant source of contamination was indicated, and no relevant contaminant linkage has been established. Based on this assessment the land is unlikely to be considered Contaminated Land as defined in Part 2A EPA 1990 and the site will not be prioritised for detailed inspection.</p> <p>This assessment is based on the site's current use and is valid providing no changes are made to the soil or vegetation cover material, to surface water conditions or to the site's use.</p> <p>No further assessment of the site is considered necessary under Part 2A unless additional information is discovered or if changes are made to the site.</p> <p>If the land use changes or it is redeveloped, this land may require further investigation. The National Planning Policy Framework (NPPF) states that responsibility for securing a safe development rests with the developer and/or landowner. The Borough Council will require that adequate site investigation information, prepared by a competent person is presented to ensure that the site is suitable for any proposed new use.</p>



## Appendices 12/02/2024 Photographs



Photograph 1. Plaque by the main entrance.





Photograph 2. Gate at the entrance of the site.



Photograph 3: Path top the edge of the pit around the north of site.



Photograph 4: Bare ground path on site, no obvious signs of infill material.





Photograph 5. Raised area, fenced off east of centre of the site. Some litter seen.



Photograph 6: Vegetation on site, Wooden steps installed to the left of this picture leading to the path around the outside of the pit.





Photograph 7. Wooden framed (top of those in Photograph 6) steps down to the pit



Photograph 8: photo from the outside of the pit across to the raised are on the centre of site.



# Figures



Borough Council of  
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Map  
**Aerial Photography  
Recent**

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Project / Details  
**Chalkpit Road,  
Titchwell**

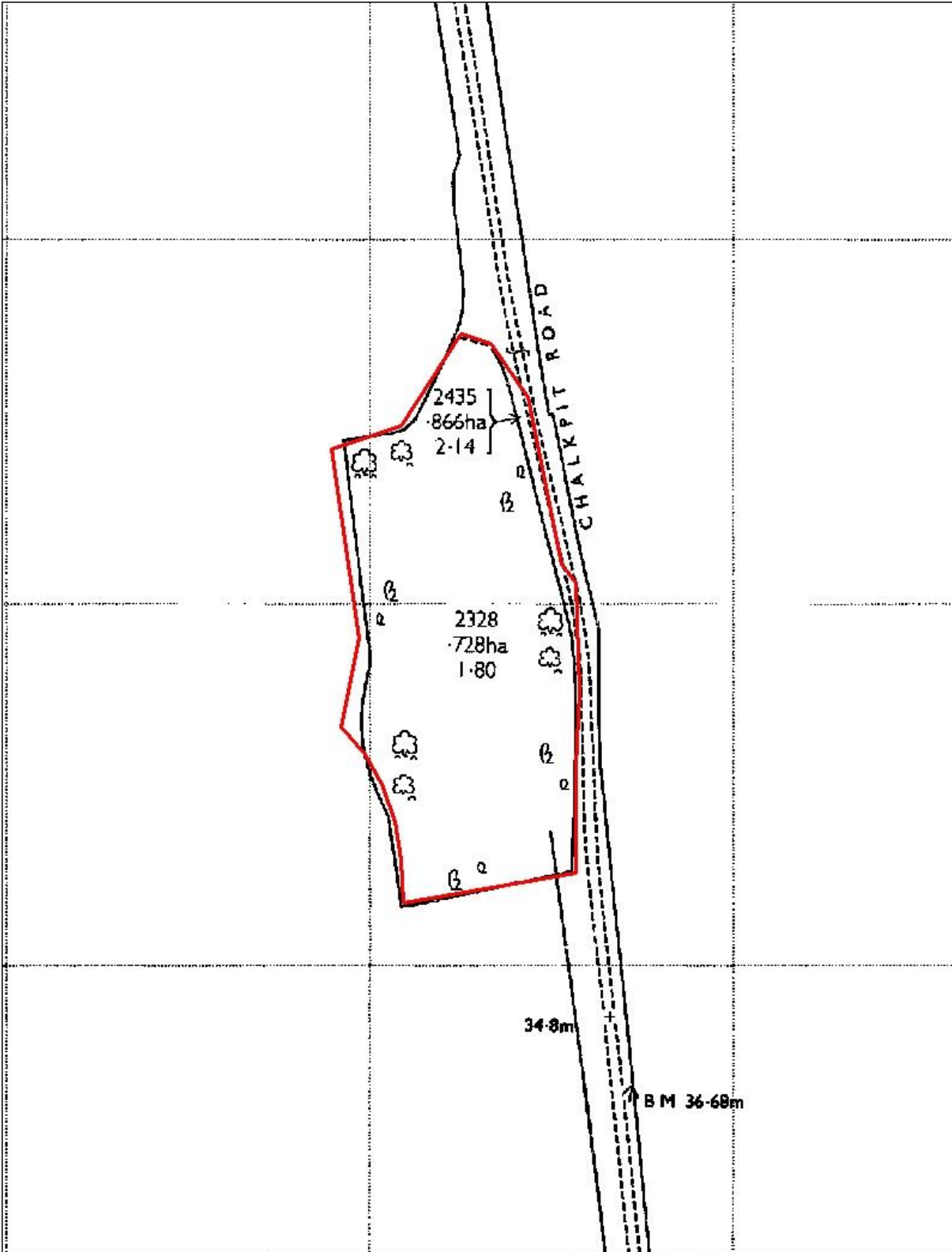
Drawn by  
**AMW**

Date  
**February 2024**

Scale  
**1:1,250**

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**022083/01**





Borough Council of  
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Map  
Historical Maps  
1945-1970

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Project / Details  
Chalkpit Road,  
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AMW

Date  
February 2024

Scale  
1:1,250

Drawing / Reference Number  
022083/09



