

Site Conditions Report for Northington Depot

Date: March 22	Author: Nick Mace, Milestone	Reviewed By: V Hilton, FM Conway.
Document Review	Number	Purpose
Revision	01	First draft for permit application
	02	Final issue for permit submission
	03	Amendment to Section 1.4 Site Plans. Amendment to Section 4 Permitted Activities. Appendix A Added.

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1.0 Site Details

1.1 Applicant

FM Conway
Conway House
Vestry Road
Sevenoaks
TN14 5EL

1.2 Address of Site Operations

Northington Depot
Main Road
Northington
Winchester
Hampshire
S024 9TZ

1.3 Grid Reference

SU 53906 36444

1.4 Site Plans

See Appendix A for Site Plan.

2.0 Conditions of the land at Permit Issue

A desktop study and site visit (7th March 2022) of the land adjacent to the site was undertaken. The desktop study used a range of information including:

- MAGIC maps, accessed 7th March 2022;
- Groundsure report, GS-8567771 7th March 2022
- Ground Investigation Report Proposed Commercial Development Land off Lunways Road, Northington, April 2020
- Site inspection and walkover survey

This was performed with a search radius of up to 1,000m of the center of the site. The key findings are reported below.

2.1 Environmental setting

The proposed site is located in a rural and agricultural setting, with rolling countryside of arable crop. The site is located 2km west of the Northington village in the Northington civil parish. It is situated 1.3km east of the M3 motorway, off Main Road and is approximately 2.3 km east of Basingstoke Road (A33).

The site is accessed through a gateway from Main Road straight into a gravel bellmouth via security palisade fence into the main site. The site is currently as a depot for gully waste management vehicles to park and associated welfare cabins.

The site is generally flat throughout; however, there is a slight fall approximately south west. The site is immediately surrounded by agricultural land to the north, east and south. An ancient and semi natural broadleaved woodland, Hassock Copse abuts the site perimeter fence line. Further to the north east is Micheldever Woods Car Park with ancient and semi natural woodland status. A car park for public access to the woodland is about 1km to the west of the site along Main Road. The woodland is also designated as a schedule ancient monument which was listed in 1963.

The nearest property (bungalow) is located approximately 480m north-east of the site (off Main Road) in the village of Roseacre, and a further 600m to the east of the site (off Main Road) is a small hamlet of seven (7) properties. Surrounding these properties are large industrial barns and small businesses.

Nearby properties that have been recorded on historical and current Ordnance Survey mapping of the area are indicated in Table 1 below.

Table 1 Nearby properties

Distance from site (m)	Direction	Property Locations
480	NE	The Bungalow
600	NEE	Row of semidetached houses x7 off the Main Road

Distance from site (m)	Direction	Property Locations
810	NE	Haddock Cottage and small Hamlet of 3 other houses (off the Main Road)
880	NE	Cricket Close House
1km	NEE	Newhouse Farm

The site is indicated as being undeveloped land on the historical maps between 1847 – 1957. From 1957 a small area of hard standing appears to be developed which has been maintained to the present date. Between 1942 to 1975, MOD used the land for a pumping station for a government oil pipeline. Since 1976 permission has been granted for the site to be used for the storage, processing and recycling of asphalt road chippings. Planning history for 1998 details an application for a waste facility to Winchester City Council. The site continues to operate to this date for a waste depot for gully waste vehicles.

2.1.1 Features within 1Km of the Site

- The site activity has included several low-risk waste exemptions to use, store and treat waste.
- A planning application as submitted for a waste transfer facility, 1998, Installation and management of a waste transfer facility for the drainage of gully waste before its disposal at landfill. The proposed area would consist of 2 hard standings for lorries, bunds to control the water run-off and direct to required position positions for lorries to wash-off with water, capacity to allow one week's waste to be contained, drainage and replacement gates.
- Within 500m of the site boundary there are a six unspecified pits and gravel pits dating between 1910 and 1990. However, there are no records of landfill activities within 500m.
- The nearest abstraction borehole is over 1.1km from the site for general farming and domestic purposes.
- There have been no recorded environmental incidents within 500m of the site.
- Due to the agricultural setting the area surrounding the site is at risk from agricultural nitrate pollution designated under the EC Nitrate Directive

2.1.2 Coal and Mining Activities

The Groundsure report states that the site is not located within a known coal mining affected area but 330m north of the site, which is considered closed, gravel pit was operated historically.

2.1.3 Groundwater

The site is negligible to low risk of groundwater flooding. The site is located above superficial geological Diamicton deposits, a siliciclastic sediment and sedimentary rock above the Newhaven Chalk Formation, classified as a Principal bedrock Aquifer which is highly vulnerable to pollution with well-connected fractures. The British Geological Society describes the Newhaven Chalk Formation as soft to medium hard, smooth white chalks with numerous marl seams and flint bands, including abundant Zoophycos flints.

A site survey conducted in April 2020 provided the following information:

A top layer of Structural Material for Reinstatement (SMR) was encountered within all boreholes to depths of between 0.10m and 0.27m. The Made Ground was underlain by Superficial Deposits comprising soft to firm or medium dense orangish brown to brown clay or sand with variable quantities of clay, silt, sand and gravel to depths of between 0.10m and 1.20m. The Newhaven Chalk Formation was encountered below the Superficial Deposits and was composed of off white to beige becoming whiter silt or gravel with variable quantities of silt, sand and gravel. (Grades Dm and Dc) to the maximum investigated depth of 5.00m.

The site investigation revealed no perched or deep groundwater was encountered during the investigation.

There is no Groundwater Source Protection Zones (GSPZ) within 1km of the site.

There are no potable or non potable groundwater abstraction licences within 1km of the site.

2.1.4 Surface Water

The site is not located in a flood risk zone and the nearest surface water receptor, a small pond is over 500m from the site. A small surface pond is located to the northwest of the site and is not hydraulically linked to the site. There is no main river within the 1km search area.

2.1.5 Air Quality

The local area to the site is dominated by agricultural land uses (mainly crop fields) with small rural villages and farmsteads.

Predominant wind direction is from a westerly direction with periods for wind from other directions. Therefore, the most likely sensitive receptors for emission to air are the agricultural fields adjacent, and the farmsteads to the west of the site location over 500m from the site.

The nearest reference air quality monitoring station to the site is located approximately 200m SE from the outskirts of Chilbolton Village, approx. 14km due west of the site, in arable farmland and operated as part of the Defra UK Air Quality Monitoring Network. Table 2 outlines the available data from the station obtained during 2021.

Table 2: Chilbolton observatory data 2021 compared to air quality screening criteria.

Air Pollutant	Annual Average ($\mu\text{g}/\text{m}^3$)	Maximum Value ($\mu\text{g}/\text{m}^3$)	Air Quality Screening Criteria ($\mu\text{g}/\text{m}^3$)	Exceeds Screening Criteria
Nitrogen Dioxide	6	48	200 (1hr mean)	No
			40 (annual mean)	No
Nitrogen oxides as nitrogen dioxide	8	132	30 (annual mean)	No
PM 10 (hourly measured)	11	193	Air Quality Strategy Objective (PM10) Annual mean > 40 $\mu\text{g}/\text{m}^3$	No
			Air Quality Strategy Standard (PM10) daily mean > 50 $\mu\text{g}/\text{m}^3$	2
PM 2.5 particulate matter (Hourly measured)	7	58	Air Quality Strategy Objective for 2020 (PM2.5) Annual mean > 25 $\mu\text{g}/\text{m}^3$	No

*Sourced from <https://uk-air.defra.gov.uk/data/>

The site is not located within any designated Air Quality Management Areas

2.1.6 Sensitive Land Use Sites

Searches from the MAGIC (Multi Agency Geographic Information) records identify the site lies within a SSSI impact zone, but the SSSI unit is not located within 1km of the site.

Immediately adjacent to the site is Hassock Copse Ancient and Semi Natural woodland.

2.1.7 Pollution history

The available historical records have been reviewed to identify possible contamination sources in the vicinity of the well site that could impact upon and affect the 'Baseline' conditions.

Historical mapping suggests that the site has previously been utilised for agricultural purposes (consistent field boundaries noted since 1847) up until 1957. No other significant land-use has been identified on the mapping in the wider context. Historically, the site comprised agricultural land that was bought by the MOD in the 1940's and turned into an oil pumping depot with a pump house, office and stores and a transformer building to ~1972. From 1942 to 1975, MOD used the land for a pumping station for a government oil pipeline. Since 1976 permission has been granted for the site to be used for the storage, processing and recycling of asphalt road chippings.

Post 1957 activity of a hard standing development which has developed into a waste transfer facility and depot for gully waste management.

Based upon the above the expected contamination status location has the potential for minor contamination from historical activities, however there are no reported pollution events within the red line boundary area. Surrounding the site agriculture is the sole historic land use for the site. As such there could potentially be elevated concentrations of fertilizers, pesticides and herbicides, associated with agricultural land use, within the shallow soils.

A site walkover revealed no obvious signs of contamination in the immediate vicinity of the site, with no evidence of stressed vegetation and no odorous deposits that would signal the presence of potentially contaminative materials in the ground.

2.2 Evidence of historic contamination

Landfill data has been provided within the Groundsure Report which contains data from Winchester City Council and the Environment Agency.

There are no records of active/operational or historic landfill sites within 1,000m of the site

A search from the Groundsure report did not reveal any evidence of historic contamination incidents linked to the site under Section 78R of the Environmental Protection Act 1990 or within 1000m of the study site.

The search also did not identify any environment agency recorded pollution incidents within 1000m of the site.

3.0 Baseline conditions

A site survey was conducted in April 2020 by Hampshire County Council, Phase 1 Contaminated Land Risk Assessment.

The site investigation encountered variable Made Ground comprising firm orangish brown silt or clay within HDP1-HDP4 (hand dug), and subbase material comprising loose black and dark grey sand or dense orangish brown gravel within BH1-BH6 (Boreholes).

The 2020 investigation has provisionally revealed low levels of contaminants with the investigated areas. Benzo(b)fluoranthene and Dibenzo(a,h)anthracene were above their respective guideline values from a single sample taken from BH2 at 0.40m within Made Ground. This slight elevation is likely attributed to asphalt fragments within the Made Ground material.

4.0 Permitted Activities

The permitted activities to be performed at the site will include and be detailed within:

- (1) Schedule 9 Waste Operations;
- (2) Environmental Management Plan NP-004-0322;
- (3) Environmental RAMS Northington High Tip Conway;

These will be conducted in a defined workspace as identified on Site Plan attached as Appendix A. All waste activities shall be confined to the area demarcated by the De-Watering Plant constructed walls and the red line.

The waste activities shall be restricted to 20 03 03 Street Cleansing Wastes and shall include the Depositing of waste into the defined receptacle as detailed within the Environmental Management Plan NP-004-0322.

Please also refer to NP-004-322 for treatment and disposal processes.

An Environmental Risk Assessment has been provided as part of the application process. Please refer to document Environmental RAMS Northington High Tip Conway.

5.0 Non-Permitted Activities

Non-permitted activities to be performed at the site will include (but are not limited to):

- Car parking for staff vehicles;
- Provision of welfare facilities for site staff;
- General site maintenance;
- Storage and disposal of non-hazardous and hazardous wastes not directly associated with the permitted activities;
- Discharge of uncontaminated rainwater run-off to a soakaway.

APPENDIX A



- Generator
- 1000Ltr Fuel Bowser