

# Preliminary Environmental Information Report

Volume 3 Part B Section Specific Assessments

Section 4 New Lincolnshire Connection Substation B to Refined  
Weston Marsh Substation Siting Zone

Chapter 7 Geology and Hydrogeology

Appendix 7A Initial Contamination Risk Classification

June 2025



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# Grimsby to Walpole

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# **7A. Initial Contamination Risk Classification**

# 7A. Initial Contamination Risk Classification

## 7A.1 Introduction

- 7A.1.1 The assessment methodology for the Geology and Hydrogeology Chapter follows the approach as outlined within the Environmental Impact Assessment (EIA) Scoping Report (Ref 1) and within **PEI Report Volume 3 Part A Appendix 4B Environmental Impact Assessment Methodologies and Scope**.
- 7A.1.2 Given the size and length of the Study Area for the Grimsby to Walpole Project (the Project) and in order to provide a comprehensive but proportionate assessment, when considering the potential effects relating to the risk of encountering and mobilising pre-existing ground or groundwater contamination, it was proposed in the EIA Scoping Report (Ref 1) to first undertake a preliminary screening assessment to determine locations where the previous land use necessitated further assessment of the risks from pre-existing contamination. The criteria used in this assessment have been developed using guidance within Land Contamination Risk Management (LCRM) (Ref 2).
- 7A.1.3 The assessment is based on the classification system in **Table 7A.1** below. The results of applying this system to the potential contamination source areas in the New Lincolnshire Connection Substation B to Refined Weston Marsh Substation Siting Zone Section (Section 4) are provided in **Table 7A.2**. The sources with a moderate, high or very high potential risk of notable contamination being present have then been taken forward for assessment as detailed within **PEI Report Volume 2 Part B Section 5 Chapter 7 Geology and Hydrogeology**. Where a low, very low or negligible risk of notable contamination being present is identified, these sites/areas have not been taken further for assessment on the basis that significant results are unlikely.

Table 7A.1 Initial contamination screening assessment criteria

Risk Classification	Potential for Generating Contamination
Very Low	Contamination that could be of note in the context of an electricity infrastructure construction project is very unlikely – e.g. residential, retail or offices, agriculture.
Low	Some potential for contamination, but previous and current uses are of low risk and unlikely to be of note in the context of an electricity infrastructure construction project e.g. low risk commercial uses, such as depots or warehouses.
Moderate	Some potential for contamination, with previous and current processes that are considered a risk of generating widespread slightly elevated contamination levels and/or more localised areas of more severe

Risk Classification	Potential for Generating Contamination
	contamination – e.g. railways, railway yards, collieries, scrap yards, inert landfills.
High	Previous and current uses that are commonly associated with widespread elevated contamination potential – e.g. major industry, non-hazardous landfills.
Very High	Previous and current uses that are associated with the highest risk of elevated contamination – e.g. hazardous landfills, gas works, chemical works.

Table 7A.2 Initial contamination screening assessment for Section 4

Feature <sup>1</sup>	Location	Distance from draft Order Limits (m)	Risk Classification
Grantham and Skegness Railway (current)	North west of Thorpe Culvert, between pylons LW61 and LW62 perpendicular to the draft Order Limits	0 m (within)	Moderate
Grantham and Skegness Railway (current)	East of Thorpe Fen, crossing the draft Order Limits between pylons LW76 and LW77	0 m (within)	Moderate
Grantham and Skegness Railway (current)	East of Hubberts Bridge, crossing the draft Order Limits between pylons LW152 and LW153	0 m (within)	Moderate
Disturbed ground (linear feature)	Between B1195 and Fendike Bank (from pylon LW43 to LW67), east, south and south west of Burgh le Marsh, crossing the draft Order Limits between pylons LW58 and LW59	0 m (within the draft Order Limits and Study Area throughout its length)	Low
Disturbed ground (linear feature)	At Midville, between Fodder Dike Bank and Hobhole Bank, north of pylon LW95	0 m (within)	Low
Disturbed ground (linear feature) and compound area	South of Stickney, either side of A16 (between pylons LW108 and LW142), adjacent to pylons LW108 and LW109	0 m (within the draft Order Limits and Study Area throughout its length)	Low

<sup>1</sup> For brevity, historical pollution incidents to land or water are only included in this table that have an impact classification of Category 2 (major) or greater within the Study Area.

<b>Feature<sup>1</sup></b>	<b>Location</b>	<b>Distance from draft Order Limits (m)</b>	<b>Risk Classification</b>
Historical railway (London Northeastern Railway) with cuttings	From Willoughby through Farlesthorne, between pylons LW10 and LW11	0 m (within), cuttings located 100 m west	Moderate
Historical railway (London Northeastern Railway)	Midville, directly south of pylon LW94	0 m (within)	Moderate
Historical railway (Lincolnshire Loop – Great Northern Railway)	North of Surfleet Seas End, directly east of pylon LW195 (the current location of the A16)	0 m (within)	Moderate
Historical railway (Lincolnshire Loop – Great Northern Railway)	At Langrick Bridge, directly north of the River Welland, approximately 230 m south of pylon LW141	0 m (within)	Moderate
Use of waste in construction	South of Stickney, between pylons LW109 and LW110, approximately 170 m east of pylon LW110	0 m (within)	Low (process has registered waste exemption ref. WEX237643)
Storage of sludge	East of Gipsey Bridge, approximately 170 m south east of pylon LW132	0 m (within)	Low (process has registered waste exemptions ref. EPR/DE5944 VE/A001 and EPR/EE5449V V/A001)
Storage of sludge	Northeast of Hubberts Bridge, approximately 120 m north of pylon LW148	0 m (within)	Low (process has registered waste exemptions ref. WEX110662)
Recorded surface workings (pond)	East of Langrick Bridge, immediately adjacent to the draft Order Limits and approximately 60 m east of pylon LW141	0 m (just beyond the extent of the draft Order Limits)	Low

<b>Feature<sup>1</sup></b>	<b>Location</b>	<b>Distance from draft Order Limits (m)</b>	<b>Risk Classification</b>
Recorded surface workings (pond)	North east of Hubbert's Bridge, approximately 100 m north west of pylon LW151	0 m (just beyond the extent of the draft Order Limits)	Low
Solar Farm	North east of Asperton, approximately 260 m south east of pylon LW168	0 m (just beyond the extent of the draft Order Limits)	Very Low
Waste recycling and disposal site	Northlands Road, north west of Frithville, approximately 50 m north of pylons LW124 and LW125	0 m (just beyond the extent of the draft Order Limits)	Moderate
Historical railway (East Lincolnshire Line)	North of Irby in the Marsh, off Mill Lane, approximately 2.8 km north of pylon LW61	0 m (just beyond the extent of the draft Order Limits for an area of indicative temporary highway improvements)	Moderate
Historical brickworks	North of Thorpe Culvert, off B1195, approximately 220 m north of pylon LW59	0 m (just beyond the extent of the draft Order Limits for an area of indicative temporary highway improvements)	High
Historical brickworks	South of Farlesthorpe, off Farlesthorpe Road, approximately 850 m south west of pylon LW12	0 m (just beyond the extent of the draft Order Limits)	High
Steel fabricator	North west of Frithville, off Westville Road, approximately 630 m east of pylon LW128	0 m (just beyond the extent of the draft Order Limits for an area of indicative temporary highway improvements)	Low
Compound area and above ground tanks	South west of Gipseys Bridge, off B1184, approximately 860 m north west of pylon LW138	0 m (just beyond the extent of the draft Order Limits for an area of indicative temporary highway improvements)	Low
Petrol Station	At Langrick Bridge, off B1192, approximately 1.2 km west of pylon LW142	0 m (just beyond the draft Order Limits)	Moderate
Plastic fabricator	North of Hubberts Bridge, off the B1192, approximately 730 m west of pylon LW150	0 m (just beyond the extent of the draft Order Limits for an	Low



Feature <sup>1</sup>	Location	Distance from draft Order Limits (m)	Risk Classification
		area of indicative temporary highway improvements)	
Agricultural manufacturer	North of Wigtoft, off Asperton Road, approximately 1.1 km south east of pylon LW171	0 m (just beyond the extent of the draft Order Limits for an area of indicative temporary highway improvements)	Low
Produce retailer (warehouses and compound)	East of Gosberton, off Cook's Road, approximately 120 m west of pylon LW191	0 m (just beyond the extent of the draft Order Limits for an area of indicative temporary highway improvements)	Low
Storage of sludge	North east of Hubberts Bridge, approximately 100 m north of pylon LW148	0 m (just beyond the extent of the draft Order Limits)	Low (process has registered waste exemptions ref. EPR/DE5348 EA/A001, EPR/KE5942 NH/A001 and WEX005712)
Department of Trucking vehicle depollution and Transfer Station (recorded Waste Site)	Northlands Road, north west of Frithville, approximately 50 m north of pylons LW124 and LW125	0 m (just beyond the extent of the draft Order Limits)	Moderate
Pollution Incident 2124515 (2023)	South east of Gipsey Bridge, off Castledyke Bank, approximately 300 m south east of pylon LW135	0 m (just beyond the extent of the draft Order Limits)	Moderate:  Category 2 (significant) – land Category 4 (no impact) – water  (unauthorised waste activities, including construction waste,

Feature <sup>1</sup>	Location	Distance from draft Order Limits (m)	Risk Classification
			commercial waste, tarry waste, biodegradable waste and soils)
Disturbed ground/storage area off A158, Burgh le Marsh	East of Burgh le Marsh, directly north of A158, approximately 100 m west of LW42	Approximately 20 m west	Moderate
Warehouses	East of Orby, off Marsh Lane, approximately 270 m south east of pylon LW33	Approximately 20 m south	Low
Use of waste in construction	East of Burgh le Marsh, approximately 220 m west of pylon LW41	Approximately 40 m west	Low (process has registered waste exemption ref. WEX254020)
Pollution Incident 547983 (2007)	South east of Hubbert's Bridge, off Swineshead Road, approximately 350 m east of pylon LW155	Approximately 60 m east	Moderate:  Category 2 (significant) – water Category 4 (no impact) – land  (containment failure of silage liquors)
Unspecified ground workings	East of Hubbert's Bridge, approximately 150 m north east of pylon LW153	Approximately 80 m east	Moderate
Surfleet Bank Landfill	North of Surfleet Seas End, approximately 770 m south west of pylon LW197	Approximately 80 m south	Moderate
Pollution Incident 784049 (2010)	North west of Frithville, off Northlands Road, approximately 380 m north of pylon LW125	Approximately 110 m north	Moderate:  Category 2 (significant) – land Category 3 (minor – water

Feature <sup>1</sup>	Location	Distance from draft Order Limits (m)	Risk Classification
			(unauthorised activity for commercial waste)
Concrete plant	North east of Croft, off Middlemarsh Road, approximately 710 m east of pylon LW49	Approximately 140 m north (from an area of indicative temporary highway improvements)	Moderate
Electrical distribution substation	North east of Croft, off Middlemarsh Road, approximately 630 m east of pylon LW49	Approximately 160 m north (from an area of indicative temporary highway improvements)	Moderate
Frithville Sewage Treatment Works	At Frithville, off West Fen Drainside, approximately 2.6 km east of pylon LW131	Approximately 170 m south east (from an area of indicative temporary highway improvements)	Moderate
Historical filling station	At Eastville, off Station Road, approximately 2.2 km east of pylon LW96	Approximately 220 m east	Moderate
Storage area	At Sloothby, off Sloothby High Lane, approximately 650 m south west of pylon LW23	Approximately 230 m west (from an area of indicative temporary highway improvements)	Moderate
Works (unspecified)	At Eastville, off Spilsby Road, approximately 2.2 km east of pylon LW96	Approximately 240 m north east	Moderate
Solar Farm	North of Thorpe Culvert, off Burgh Lane, approximately 530 m north of pylon LW58	Approximately 260 m north	Very Low
Warehouses and Auto centre	North east of Burgh le Marsh, off Ingoldmells Road, approximately 1.1 km south west of pylon LW39	Approximately 270 m south west	Moderate
Boardsides Recycling (recorded Waste Site)	North of Surfleet Seas End, off Surfleet Bank, approximately 800 m south west of pylon LW197	Approximately 280 m south	Moderate

Feature <sup>1</sup>	Location	Distance from draft Order Limits (m)	Risk Classification
Petrol station and Auto centre	East of Croft, off A52 and Low Road South, approximately 3.2 km east of pylon LW50	Approximately 320 m east (from an area of indicative temporary highway improvements)	Moderate
Nursery	At Northlands, off the A16, approximately 1.3 km south of pylon LW109	Approximately 350 m south	Low
New Leake Sewage Treatment Works	North of Eastville, off Spilsby Road, approximately 2 km east of pylon LW95	Approximately 370 m north (from an area of indicative temporary highway improvements)	Moderate
Pollution Incident 135702 (2003)	South of Burgh le Marsh, off High Lane, approximately 510 m north of pylon LW51	Approximately 390 m north	Moderate:  Category 2 (significant) – water Category 4 (no impact) – land  (containment and drainage failure of vegetable cuttings)
Former airfield (Former RAF Spilsby)	South of Candlesby, off Gunby Lane and Mill Lane, approximately 3.4 km north of pylon LW62	Approximately 400 m west (from an area of indicative temporary highway improvements)	Moderate
Agricultural engineer and storage yard	At Frithville, off Main Road (B1183), approximately 2.9 km east of pylon LW132	Approximately 400 m east	Low
Disturbed ground at Tunnard Farms	South east of Kirton Holme, approximately 480 m east of pylon LW159	Approximately 430 m east	Low
Composting facility (recorded Waste Site)	South of Thorpe Fen, approximately 820 m south of pylon LW79	Approximately 500 m (on the Study Area boundary)	Low

# References

- Ref 1      National Grid Electricity Transmission (2024). Grimsby to Walpole Environmental Impact Assessment Scoping Report [online]. Available at: <https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN020036-000004-EN020036%20-%20Scoping%20Report%20Volume%201%20Main%20Report.pdf> [Accessed 14 March 2025]
- Ref 2      Environmental Agency (2023) Land contamination risk management (LRCM) [online]. Available at: <https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm> [Accessed 14 March 2025]



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