London Gateway Logistics Park Local Development Order 2

Appendix 2: Code of Construction Practice

December 2024

thurrock.gov.uk

London Gateway Park Local Development Order 2

Code of Construction Practice

Contents

Appendices

Introduction

1. The London Gateway Logistics Park Code of Construction Practice (CoCP) forms part of the London Gateway Local Development Order 2 (LDO2) and must be read in conjunction with it.

2. This document provides a framework for compliance for all site preparation and construction works and applies to all parties involved in the construction of development permitted under LDO2. It establishes site-wide codes of practice and protocols, detailed work methodologies and provides a framework for the management of environmental impacts including specific control measures for managing noise, and impacts upon air quality, water resources, ecology and archaeology. All site works shall be undertaken in accordance with the EA's published guidance or relevant CIRIA construction guidance. The CoCP does not avoid the need to obtain the necessary environmental permits, licences and regulatory notifications.

3. **Development must comply with all aspects of this CoCP in order to benefit from the permitted development rights conferred by LDO2.**

4. Where there is a specific requirement for monitoring set out in this CoCP, records shall be made available for inspection by the Environmental Advisory Group (EAG) at any time.

5. The monitoring regime proposed by the developer to meet these requirements is to be made available in the form of a scheme Construction Environmental Management Plan (CEMP) to the EAG for information and subsequent records are to be reported to the EAG at intervals to be agreed.

6. The EAG will advise the developer if it considers that action needs to be taken in relation to the monitoring results to comply with the CoCP. Appropriate remedial action shall be taken by the developer in a reasonable and timely manner in response to this advice.

7. A DP World London Gateway Logistics Park Incident Management Plan is included as Appendix 1 to this document and will be updated as necessary throughout the duration of the LDO2. The protocols established in the Emergency Plan must be complied with by all parties.

8. Where herein reference is made to adopted guidance, standards or codes, any such updates to that guidance, standard or code shall apply.

Content of this Document

9. The CoCP comprises two parts.

10. **Part One** sets out specific **site preparation and construction standards** that shall be followed at all times during the construction period. Matters for control are set out in the following sections.

Section A: Traffic management (on site and off-site)
Section B: Construction Compounds
Section C: Site Remediation Works
Section D: Groundworks
Section E: Waste Material Management.

11. **Part Two** sets out the **environmental control measures and procedures** that shall be followed to minimise the environmental impact of construction works.

12. All construction works shall follow best practice as set by the relevant CIRIA construction guidance. The environmental issues for control are set out in the following sections.

Section F:	Habitats and Protected Species
Section G:	Water Quality
Section H:	Dust
Section I:	Noise and Vibration
Section J:	Archaeology
Section K:	Landscape and Visual Characteristics

Phasing

13. The rate of development of the logistics park shall be subject to market demand but shall proceed in a controlled and co-ordinated manner. Suitable plots to meet commercial requirements shall be released in a way that does not compromise the delivery of the overall development and enables the necessary supporting infrastructure to be bought forward in a timely manner.

14. Once a plot has been identified for development, the following general sequence of preparatory ground works shall be undertaken:

a) The plot shall be cleared of vegetation and levelled. If protected species are detected during works, all works shall stop and the procedures set out in Section F of the CoCP shall be followed. Procedures set out in Section J shall also be followed to protect archaeological resources.
b) A geophysical survey shall be undertaken to identify obstructions requiring removal.
c) The plot shall be accurately set out and underground services shall be identified.
d) Temporary ditches shall be cut to drain the plot area and the ground shall be graded to fall towards the ditches.
e) Trial pits shall be dug across the plot area and samples taken and tested for contaminants in line with the requirements set out in Section C of the CoCP.
f) Trail pit logs shall be analysed and areas of contamination delineated with all materials deemed to be contaminated sent to the on-site remediation compound for treatment.
g) Major obstructions and pipelines shall be removed. All steel shall be recycled and concrete obstructions crushed to provide road base materials, capping and Type 1 Sub-base.
h) Suitable material shall either be imported or sourced from the dredged granular material for the plot fill. All source material shall be tested and approved in line with the Environmental Permit held for the site prior to its use.
i) Each plot shall be shaped and contoured to allow water to drain from the area and to drain to the temporary ditches.
j) Existing internal access roads shall be used to provide access to all plots on the Park. If required, temporary haul roads shall be constructed of crushed concrete, with a minimum width of 7.0 metres.

15. Once preparatory ground works are completed, works shall commence on the construction of the individual units, internal access roads, parking and service areas.

Part 1: Site Preparation and Construction Standards

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A. Traffic Management

A1 Site Access

A1.1 Site access for construction vehicles shall be from the Manorway (A1014) via the existing Port/Park Access Road.

A1.2 Emergency vehicles shall continue to be permitted to use Gates 1, 2 and 3 in perpetuity.

A2 Routing of Construction Traffic and Lorries

A2.1 If travelling from outside the immediate Stanford-Le-Hope or Corringham area, lorries and construction traffic shall use the major road network to access the site via the A13 and A1014. The use of Southend Road, Lampits Hill, Corringham Road, Fobbing Road or other local residential roads, shall be avoided.

A2.2 Where construction traffic originates from the local area, contractors and suppliers shall be advised of the requirement to access the preferred routes indicated on Figure 1 in the most direct manner possible, having regard to the suitability of the local road network.

A2.3 The Borough of Thurrock, Corringham and Stanford le Hope (Weight Restriction) Order 2003 prohibits vehicles over 7.5 tonnes (gross weight) from driving in the following areas:

Stanford le Hope

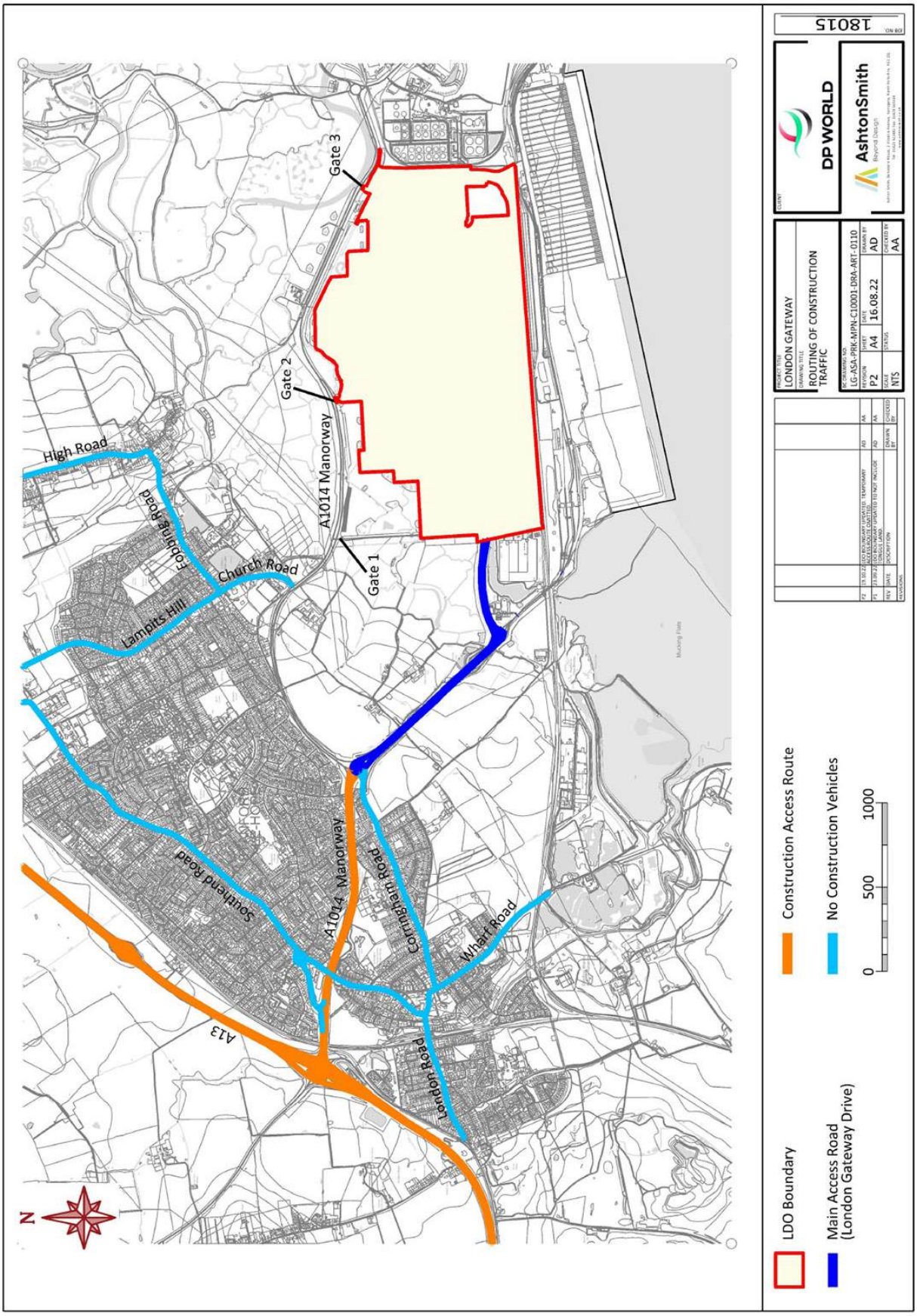
- Bounded by London Road at its junction with the A13 north eastwards on the southeast side of A1013 to its junction with the Manorway, eastwards on the southern side of the Manorway to its junction with Springhouse Lane, southwards down the eastern side of Springhouse Lane to Corringham Oil Refineries railway then in a westerly direction to its junction with London Road/A1013.

Corringham

- Bounded by the Manorway at its junction with the A13 north eastwards on the southeast side of the A13 to its junction with the High Road, southwards on the eastern side of the High Road to the Manorway, westwards on the northern side of the Manorway to its junction with the A13.

A2.4 Directional traffic signs notifying drivers of preferred construction routes shall be placed in clear view at all site exits and in construction compounds and shall be highlighted within site inductions.

Figure 1: Routing of Construction Traffic



A3 Emergency Access Strategy

A3.1 In the event that a traffic incident prevents access to the site via the A13 or A1014, contractors shall notify the supplier and request that any trips planned by vehicles in excess of 7.5 tonnes be rescheduled where possible.

A3.2 Traffic management procedures for the stacking or diversion of vehicles during emergency incidents have been agreed in principle with emergency service operators and shall be implemented accordingly. In the event of a diversion the B1420 is likely to be signed as the most appropriate alternative route of access to/from the A13 for HGVs exiting the site with HGVs approaching the Park being diverted back onto the A13 via the Five Bells junction.

A3.3 Gates 1, 2 or 3 shall remain available in perpetuity to provide access routes for emergency vehicles as appropriate dependent upon the location of the emergency incident within the Park.

A4 Abnormal Loads

A4.1 Where abnormal loads have to be delivered to the site by road, the protocols set out in the Highways Agency's "Aide memoire for notification requirements for the movement of Abnormal Indivisible Loads or vehicles when not complying with The Road Vehicles (Construction and Use) Regulations 1986" (as amended) shall be adhered to, as shown in Table 1.

A5 Sustainable Transportation

A5.1 Wherever possible the transportation of construction material by road shall be minimised and the methods of transportation shall be considered in accordance with the following hierarchy:

- Potential to utilise materials recycled from within the development site boundary (existing hard-standings, roads, drainage, stockpiles, structures or use of dredged material);
- Consideration of potential to develop materials on site (concrete batching, etc.);
- Transportation via sea or rail;
- Transportation by road.

A5.2 Where transportation of materials by road is necessary the following measures shall be considered:

- Proximity of suppliers to the development site;
- Use of vehicles with low emissions;
- Arrangement of deliveries outside the am and pm peak hours;
- Optimisation of vehicle loading;
- Implementation of appropriate route management;
- Adoption of efficient delivery management protocols.

Table 1 Notification Requirements for the Movement of Abnormal Loads

Weight

Gross weight of vehicle carrying the load exceeding C & U limits up to 80,000kgs (78.74 tons)	2 clear days notice* with indemnity to Highway and Bridge Authorities.
Gross weight of vehicles carrying the load exceeding 80,000kgs up to 150,000kgs (147.63 tons)	2 clear days notice* and 5 clear days with indemnity to Highways and Bridge Authorities.
Gross weight of vehicle carrying the load exceeding 80,000kgs up to 150,000kgs (147.63 tons)	HA Special Order** plus 5 clear days notice* to Police and 5 clear days notice with indemnity to Highways and Bridge Authorities.

Width

Width exceeding 2.9m (for C & U loads) 3.0m (9ft 10ins) up to 5.0m (16ft 5ins) for other loads	2 clear days notice* to Police.
Width exceeding 5.0m (16ft 5ins) up to 6.1m (20ft)	HA form VR1** plus 2 clear days notice* to Police.
Width exceeding 6.1m (20ft)	HA Special Order** plus 5 clear days notice* to Police and 5 clear days notice with indemnity to Highway and Bridge Authorities.

Length

Length exceeding 18.65m (61ft 2in) up to 30.0m (98ft 5ins) rigid.	2 clear days notice* to Police.
Vehicle combination exceeding 25.9m (85ft)	2 clear days notice* to Police.
Length exceeding 30.0m (98ft 5ins) rigid, NB For some very light loads, such as yacht masts, that are moved on conventional motor vehicles not exceeding 12 tonnes gross weight or trailers not exceeding 10 tonnes gross weight, an HA Special Order will be required if the rigid length exceeds 27.4m (89'11")	HA Special Order** plus 5 clear days notice* to Police and 5 clear days notice* with indemnity to Highway and Bridge Authorities.

** 'Clear days Notice' excludes Saturdays, Sundays or a public holiday in any part of Great Britain in relation to movements authorised by the Special Types General Order only, there being no such exclusion in Special Orders unless specifically stated.*

*** There is no statutory limit governing the overall height of a load, however, when applying for a Special Order or VR1 it should, wherever possible not exceed 4.95m (16ft 3ins) in order that the maximum use can be made of the motorway and trunk road network.*

B. Construction Compounds

B1 Construction Compounds

B1.1 Each contract for the construction of infrastructure or plot related works may be served by a separate segregated construction compound. The construction compound layout and position shall be dictated by the nature, scale, and location of individual development plots.

B1.2 Construction compounds shall make provision for the parking and manoeuvring of contractor's vehicles and if required, temporary hard-standings for the safe and secure storage of construction materials and plant, temporary office and welfare facilities and the control of pollution. Construction compound management shall include measures to prevent and respond to the escape of spilled materials from the compound to surface waters or groundwater in accordance with the procedures set out in Section G of the CoCP.

B1.3 Portacabin type accommodation shall be a maximum of three storeys in height. Perimeter security fencing panels, where required by individual contractors, shall be installed to a maximum height of 3.0m.

B1.4 Secure tool lockers and shower facilities shall be provided within construction compounds. A phone line for public enquiries shall be made available and publicised on London Gateway's website.

B1.5 Barriers which provide visual screening shall be installed around construction compounds situated within 250m of the site boundary adjacent to the grazing marshes.

B2 Access

B2.1 Internal access shall principally be achieved using either the existing site access roads, or temporary haul roads constructed of crushed concrete with a minimum width of 7.0 metres. A 20mph vehicle speed limited shall be in force across the site.

B3 Delivery and Storage of Materials

B3.1 An area of impermeable hard-standing shall be provided, if required, within each construction compound for the delivery and storage of materials. Existing areas of hard-standing within the site shall be used wherever suitable, however if additional areas of hard-standing are required, they shall meet the following standards.

B3.2 Where existing areas of hardstanding are not available or suitable for the storage of materials, impermeable areas shall be created comprising either (a) an impermeable hardstanding or (b) crushed concrete underlain by an impermeable membrane. Drainage shall be provided via the temporary ditches and any material that may cause contamination shall be bunded in accordance with best practice guidance to contain possible spillages and prevent pollution.

B4 Parking of Construction Related Vehicles

B4.1 Parking for construction workers shall be provided either within each construction compound serving separate elements of construction or within a communal parking area serving more than one works.

B4.2 Parking shall be provided as follows:

Contractor Parking - 0.75 spaces per full time operative employed on-site.
Site Visitors - 0.25 spaces per full time operative employed on-site.

B4.3 The following parking management measures shall be adhered to:

- Parking shall be prohibited on all internal access roads or any areas outside of construction compounds unless specifically required as part of the construction or inspection process.
- Cycle, motorcar, LGV and HGV parking areas shall be segregated.
- Signage denoting parking areas and access routes for vehicles and pedestrians shall be provided.
- Sufficient manoeuvring areas shall be provided in accordance with the Design Code.
- Preferential parking shall be provided for operatives engaged in car sharing.
- Promotional information shall be posted on communal notice boards relating to the benefits of car-sharing and other sustainable travel initiatives.
- Information relating to local public transport services shall be provided.
- Minibuses shall be made available for construction operatives where practical.
- When not in use, all vehicles shall be securely parked within construction compounds.

B5 Wheel Cleaning and Wash Facilities

B5.1 The main site access road and internal logistics park infrastructure roads have now been completed such that construction compounds and work sites are remote from the public highway network. Egress from construction sites and compounds shall be monitored by a banksman. Where the banksman considers potential exists for mud or debris to be tracked onto the public highway he shall direct the vehicle to be subject to wheel cleaning before leaving the site.

B5.2 At all times that construction activities are taking place a road sweeper shall be made available to carry out cleaning of the logistics park internal highway network and main site access road.

B5.3 If implemented, wheel wash facilities shall be self-contained units. Systems shall be portable, require no ground excavation (save for an appropriately sized sump e.g. 0.75m x 0.75m) and not impact upon ground-water quality. The wheel wash facility shall be subject to regular inspection and maintenance.

B5.4 Disposal of debris/water shall be in accordance with Section E of this CoCP.

B6 Hours of Working

B6.1 Core working hours are defined as follows:

- Weekdays (excluding bank holidays): 07:30 to 19:00.
- Saturdays: 08:00 to 13:00.

B6.2 Best practical means of noise control shall be employed in accordance with BS 5228-1:2009+A1:2014 to ensure that the construction noise level, at 1 metre from the façade of the nearest residential receptor, is not in excess of 65 dB LAeq,1hour during core working hours.

B6.3 If any construction activities have to be planned to take place outside core working hours and/or have the potential to result in a construction noise level exceeding the levels set out in Table 2, these works shall only take place in accordance with a licence provided by the

Environmental Health Authority pursuant to Section 61 of the Control of Pollution Act 1974. As part of the application, the Contractor shall demonstrate that the proposed works incorporate best practical means of noise control with the aim of not exceeding the limits within Table 2.

B8.4 Refer to F8.2 regarding mitigation of noise for the protection of ecological receptors.

Table 2: Construction noise limits at the nearest residential receptors

Time of Day	**Construction noise limit, dB $L_{Aeq,1hour}$**
Core working hours: Weekdays (excluding bank holidays): 07:30 to 19:00 Saturdays: 08:00 to 13:00.	65
Evenings, weekends and bank holidays: Weekdays (excluding bank holidays): 19:00 to 23:00 Saturdays: 13:00 to 23:00 Sundays and bank holidays: 08:00 to 23:00	55
Night-time: each day 23:00 to 07:00	45
Note 1: Construction noise limit applies at a position 1m from a residential building, in façade conditions.	
Note 2: If the ambient noise level, in the absence of noise from the works, exceeds the construction noise limit above, the total noise level, dB $L_{Aeq,T}$, during the works shall not exceed the ambient noise level by more than 3 dB $L_{Aeq,T}$.	

C. Site Remediation Works

C0.1 Historical land uses have led to soil and groundwater contamination in some parts of the site. Works to remediate the site have already commenced and a substantial part of the site has now been remediated. Remediation of the remainder of the site shall proceed in a manner and to a programme that supports the development of plots, responding flexibly to commercial needs.

C0.2 The development of an individual plot shall only commence when that plot has been remediated in accordance with the procedures and methods specified below.

C0.3 The investigation, risk assessment and remediation of soil and groundwater shall be undertaken in accordance with the Environment Agency's Land Contamination Risk Management (LCRM).

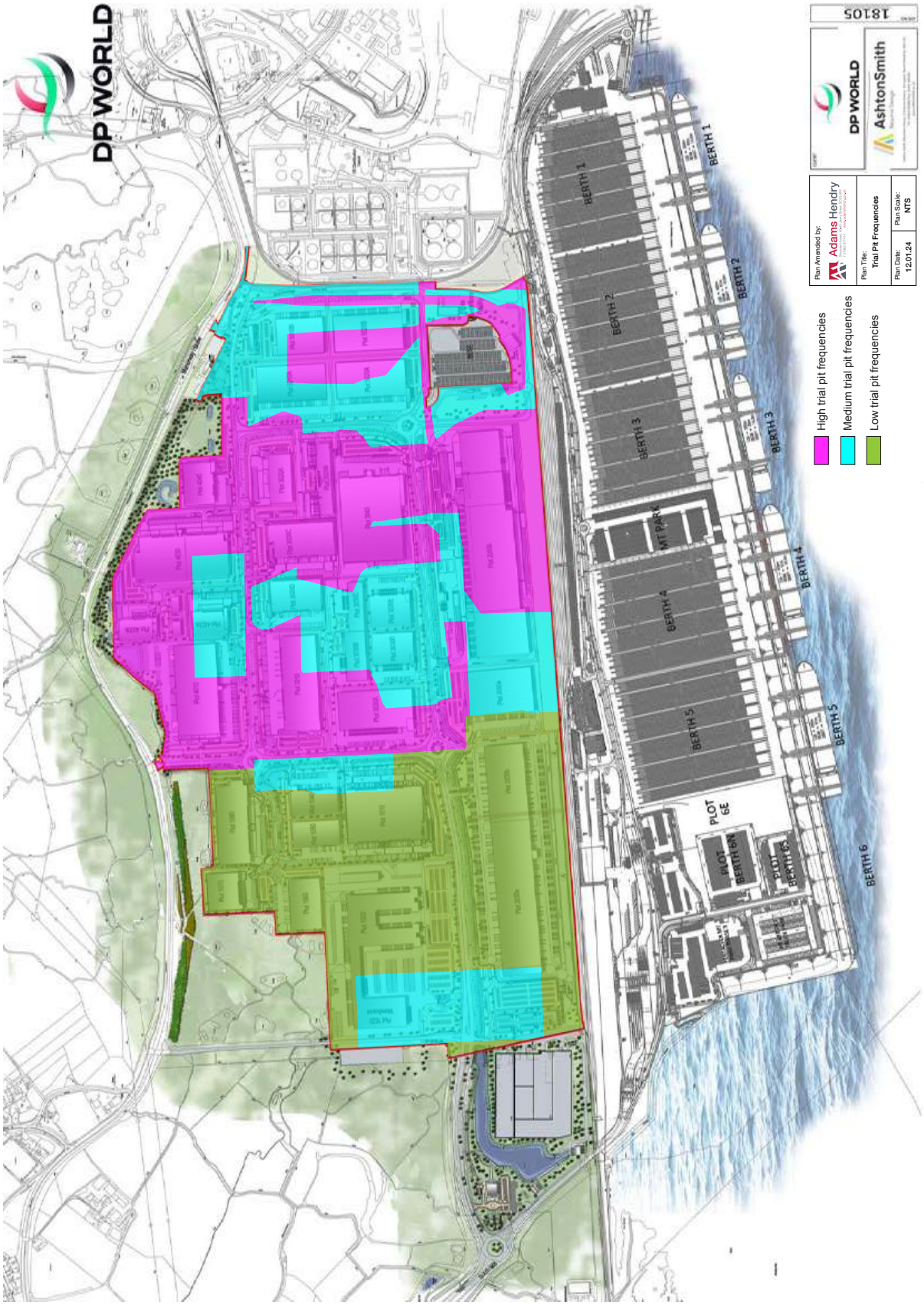
C0.4 Where appropriate, contaminated soil and groundwater shall be treated for reuse on site, or where not appropriate for reuse, categorised and segregated for off-site disposal.

C1 Site investigation, contaminated soil excavation and backfilling works

C1.1 Site investigations have been undertaken and areas of the site have been categorised as having a low, medium or high risk. Following an appraisal of site conditions (based on the former use, frequency of investigations, previous remediation works and TPH concentrations) trial pits shall be excavated to an appropriate depth to meet the requirements of the contaminated land risk assessment strategy in the areas shown on Figure 2 as follows:

(i) Low Risk – 2 trial pits per hectares
(ii) Medium Risk – 3 trial pits per hectare

Figure 2: Contamination Risk Plan



(iii) High Risk – 7 trial pits per hectare
(iv) Along the route of drainage swales, for balancing ponds and where utilities are to be buried, at a frequency of 30m.

C1.2 Soil samples shall be collected and visually inspected by an appropriately qualified and experienced person for the level of risk in that area for both field screening and laboratory analysis for comparison against Site Specific Target Levels (SSTLs) as set out in Table 3 and Table 4. The laboratory must be UKAS accredited and hold MCERTS accreditation for the soil tests and ISO accreditation for water. The SSTLs establish the maximum permissible concentration of each appropriate contaminant which can be present in soils on site without posing a risk to human health.

C1.3 Additional intrusive investigation techniques may be utilised to allow characterisation of site conditions. Such techniques may include advancing boreholes, multi-interface probes and drainage investigation surveys.

C1.4 A Relic Drainage Assessment shall be undertaken of the historic drainage channels, which are predominately located in the southern, northern and eastern areas of the site. The construction of the channels shall be assessed and sediment/sludge samples collected and analysed.

Table 3 Human Health Site Specific Target Levels (SSTL) – Soils

Contaminant	Sand, pH 7, SOM 1% Import Material / Topsoil (ENVIRON GAC Commercial) mg/kg	Sand silt loam, pH 7, SOM 1% Landscaped Areas 0.3 - 1.0m bgl mg/kg	Sand silt loam, pH 7, SOM 1% Landscaped Areas 1.0-3.0m bgl mg/kg
Inorganics/Metals			
Arsenic	635.06	647.39	NR
Aluminium	387,574.40	1,820,018.95	NR
Antinomy	7,546.24	13,190.92	NR
Barium	22,075.86	22,215.95	NR
Beryllium	417.10	3,967.39	NR
Boron	192,495.48	237,661.35	NR
Cadmium	230.29	398.39	NR
Chromium III	30,356.33	310,351.37	NR
Chromium VI	34.76	2,009.09	NR
Copper	71,742.09	176,643.16	NR
Lead	750.00	750.00	NR
Mercury (Inorganic)	3,641.42	4,405.40	NR
Molybdenum	17,673.04	17,937.12	NR
Nickel	1,787.58	22,423.36	NR
Selenium	13,023.11	13,105.79	NR
Vanadium	3,164.09	5,911.15	NR
Zinc	665,453.08	666,510.60	NR
Asbestos[1]	0.001% w/w	0.001% w/w	NR
BTEX and TMB			
Benzene	15.83	570.92	Saturation
Ethylbenzene	Saturation	196,318.19	Saturation
Toluene	Saturation	444,633.92	Saturation

Xylene, o-	Saturation	311,910.77	Saturation
Xylene, m-	Saturation	310,293.45	Saturation
Xylene, p-	Saturation	309,402.92	Saturation
1,2,3-Trimehtylbenzene	18.88	46,055.48	Saturation
1,2,4-Trimethylbenzene	22.88	1,966.40	Saturation
1,3,5-Trimethylbenzene	12.71	38,850.17	Saturation
Methyl tert-butyl ether (MTBE)	4,017.14	592,486.44	Saturation
Tributyl Tin (oxide)	134.01	243.70	Saturation
TPH			
TPH Aliphatic C5-C6	Saturation	Saturation	Saturation
TPH Aliphatic C6-C8	Saturation	Saturation	Saturation
TPH Aliphatic C8-C10	Saturation	99,621.39	Saturation
TPH Aliphatic C10-C12	Saturation	100,462.36	Saturation
TPH Aliphatic C12-C16	Saturation	100,897.34	Saturation
TPH Aliphatic C16-C35	Saturation	2,009,736.76	NR
TPH Aliphatic C35-C44	Saturation	2,009,736.76	NR
TPH Aromatic C5-C7 (Benzene)	15.83	570.92	Saturation
TPH Aromatic C7-C8 (Toluene)	Saturation	444,633.92	Saturation
TPH Aromatic C8-C10	Saturation	40,067.13	Saturation
TPH Aromatic C10-C12	Saturation	40,294.05	Saturation
TPH Aromatic C12-C16	Saturation	40,409.96	Saturation
TPH Aromatic C16-C21	28,134.67	30,258.05	NR
TPH Aromatic C21-C35	28,435.70	30,304.73	NR
TPH Aromatic C35-C44	28,435.70	30,304.73	NR
TPH Aliphatic & Aromatic C44-C70	28,408.02	30,312.21	NR
PAHs			
Acenaphthene	Saturation	117,690.21	Saturation
Acenaphthylene	Saturation	117,665.44	Saturation
Anthracene	522,477.94	589,566.25	Saturation
Benz(a)anthracene	91.02	233.95	Saturation
Benzo(a)pyrene	14.30	35.03	Saturation
Benzo(b)fluoranthene	101.55	246.35	Saturation
Benzo(k)fluoranthene	143.21	352.89	Saturation
Benzo(ghi)perylene	658.49	1,668.86	Saturation
Chrysene	140.17	331.80	Saturation
Dibenzo(ah)anthracene	12.87	32.17	Saturation
Fluoranthene	22,606.84	24,580.34	Saturation
Fluorene	Saturation	78,510.18	Saturation
Indeno(123-cd)pyrene	61.00	147.73	Saturation
Naphthalene	Saturation	29,890.28	Saturation
Phenanthrene	21,898.80	24,522.23	Saturation
Pyrene	54,263.16	59,002.39	Saturation
Chlorinated Solvents			
1,2-Dichloroethane (1,2- DCA)	0.36	224.95	1,852.53
1,1,1-Trichloroethance	391.51	Saturation	Saturation
1,1,2,2-Tetrachloroethane	156.09	11,349.33	Saturation
1,1,1,2-Tetrachloroethane	62.72	11,200.91	Saturation
Tetrachloroethene (PCE)	72.19	27,261.37	Saturation
Tetrachloromethane (carbon tetrachloride)	1.74	Saturation	Saturation

Trichloroethene (TCE)	6.61	Saturation	Saturation
Trichloromethane (chloroform)	57.25	21,250.90	Saturation
Chloroethene (vinyl chloride)	0.04	27.73	143.09
1,1,2-Trichloroethane	51.13	7,799.64	Saturation
1,1-Dichloroethane	148.25	Saturation	NR
1,1-Dichloroethene	15.36	Saturation	Saturation
Chlorobenzene	32.75	91,337.62	Saturation
1,2-Dicholorbenzene	Saturation	680,645.87	Saturation
1,3-Dichlorobenzene	17.66	3,315.10	Saturation
1,4-Dichlorobenzene	Saturation	138,480.32	Saturation
1,2,3-Trichlorobenzene	58.56	14,024.89	Saturation
1,2,4-Trichlorobenzene	123.25	76,071.19	Saturation
1,3,5-Trichlorobenzene	12.83	12,351.71	Saturation
1,2,3,4-Tetrachlorobenzene	Saturation	6,759.42	Saturation
1,2,3,5-Tetrachlorobenzene	27.98	744.71	Saturation
1,2,4,5-Tetrachlorobenzene	Saturation	124.94	Saturation
Pentachlorobenzene	Saturation	942.27	Saturation
Hexachlorobenzene	Saturation	60.85	Saturation
Phenol			
Phenol	30,790.39	64,024.72	Saturation
2-Chlorophenol	3,587.29	5,055.25	Saturation
2,4-Dichlorophenol	3,532.39	5,039.91	Saturation
2,4,6-Trichlorophenol	Saturation	5,055.14	Saturation
2,3,4,6-Tetrachlorophenol	Saturation	5,050.95	Saturation
Pentachlorophenol	1,233.73	1,571.45	Saturation
Hexachloro-1,2-butadiene	17.58	306.14	Saturation
Chloroethane	566.89	Saturation	Saturation
Chloromethane	0.59	Saturation	Saturation

NR – Not required . – This has been assessed qualitatively based on the non-volatile properties of the contaminant.

Saturation – the concentration above which the contaminant might be considered to represent a significant risk via modelled pathways exceeds the contaminant saturation value (for the soil type modelled). This is interpreted as a requirement to be present as free phase product before it was considered to represent a potential risk. Mobile free phase product will be treated in accordance with the strategies set out in this document.

[1] Asbestos concentrations in soils must not exceed 0.001% w/w in material that will be handled/disturbed in landscaped areas.

Table 4 Leachate Criteria

Contaminant	Leachate Criteria µg/l	Source of Value
Hydrocarbons		
Total Hydrocarbons	10	UK DWS
Benzene	8	WFD EU EQS
Ethylbenzene	20	Non-Statutory DSD
Toluene	40	EU EQS - UKTAG
Xylene	30	UK EQS (from DSD)
Polycyclic Aromatic Hydrocarbons (PAHs)		
Naphthalene	1.2	WFD EU EQS
Benzo(a)pyrene	0.05	WFD EU EQS
Benzo(b)flouranthene	10.03	WFD EU EQS
Benzo(k)flouranthene		
Benzo(ghi)perylene	10.002	WFD EU EQS
Indeno(123cd)pyrene		
Fluoranthene	0.1	WFD EU EQS
Inorganics		
Arsenic	25	EU EQS- UKTAG
Cadmium	0.2	WFD EQ EQS
Chromium (Trivalent)	4.7	EU EQS - UKTAG
Chromium (Hexavalent)	0.6	EU EQS- UKTAG
Copper	5	EU EQS- UKTAG
Cyanide	1	EU EQS- UKTAG
Lead	7.2	WFD EU EQS
Mercury	0.05	WFD EU EQS
Nickel	20	WFD EQS
Total Phenols	7.7	EU EQS- UKTAG
Selenium	10	UK DWS
Zinc	40	EU EQS- UKTAG
Miscellaneous		
Tributyl Tin	0.0002	WFD EU EQS
Chloride	250,000	Non-Statutory DSD
Pentachlorophenol	0.4	WFD EU EQS

WFD EQ EQS– 2008/105/EC Directive on Environmental Quality Standards in the field of Water Policy
EU EQS UKTAG – refer to item 2 below.
Non-statutory DSD – refer to item 4 below.
Assessment of other contaminants may be required, dependent on source material and assessment criteria will be based on the following in order of priority:

1. *EU EQS for Priority Substances, obtained from Part 5 of the 2009 Ministerial Directions (based on 'other surface waters' (i.e. coastal and saline waters) annual average EQS)*
2. *UK derived EQS for Specific Pollutants, obtained from Part 4 of the 2009 Ministerial Directions (EU EQS UKTAG)*
3. *For substances which are not contained within Part 5 or Part 4 of the Ministerial Directions, refer to the UK DSD EQS*
4. *Former Non-Statutory UK DSD EQS (draft EQS for the DSD not formally implemented, but were used by the EA in the absence of other criteria).*

UK DWS – UK Drinking Water Standards

Leachability testing will be required to be undertaken in accordance with BSEN12457-2 (single stage leach test at L/S 10 (water:soil 10:1) for 24hours) Note - as consistent test results have been obtained from plot specific testing to date in future a frequency of 1 per 10,000m3 with a minimum of 3 samples per plot is acceptable unless agreed otherwise with the regulatory authorities.

C1.5 There is potential for unexploded ordnance to be present on the site and this risk shall be taken into account prior to all intrusive investigations.

Delineation

C1.6 Where soil samples exceed the screening criteria in laboratory analysis, further targeted trial pit investigation at a more intensive frequency shall be undertaken to identify the nature and extent of the identified contamination.

Excavation and Tracking

C1.7 Delineated soils which exceed the screening criteria shall be excavated and transported directly to the on site Remediation Compound. All significant movements of soil, whether considered to be contaminated or not, shall be tracked.

Validation and Backfilling

C1.8 Further soil samples shall be collected from the base and sidewalls of remaining excavations on a 25m grid with a minimum sample of 1 per base and 1 per wall and these shall be compared with the screening criteria. Where soils are suitable for use, the excavation shall then be backfilled with suitable materials.

C1.9 All relevant documentation shall be filed for inspection for a minimum of 2 years and shall be reported in a Validation/Verification Report.

C1.10 Evidence that the soil falls within the SSTLs criteria shall be submitted to Thurrock Council's Environmental Health Department.

C2 Operation of Remediation Compound

C2.1 The compound shall be used temporarily for the stockpiling, sorting and treatment of excavated materials during the remediation process. Treatment bays shall be impermeable, be routinely maintained and designed and built to prevent any horizontal or lateral migration of contaminants.

C2.2 The compound shall include segregated areas for stockpiling site won contaminated and non-contaminated soils.

C2.3 Uncontaminated standing water outside of the treatment bed area shall be pumped away to nearby surface water drainage as needed.

C2.4 Spill kits shall be made available on site in the event of accidental leakage from site traffic or delivery of fuel to bowsers outside of the treatment bays. Staff shall be trained in the use of spill kits and made aware of their locations. All fuel bowsers shall be double bunded and located within the site compound area. Refuelling areas shall be located away from surface watercourses and drains to prevent pollution.

C2.5 Stockpiles shall be stored in such a way as to minimise dust emissions. For example, they shall be sealed when material is not being processed and in dry conditions dampening techniques shall be deployed to minimise dust generation during loading/unloading and mechanical processing of soil if required.

C2.6 All remediation compounds will obtain and comply with any Environmental dss as required under the prevailing Environmental Permitting Regulations. Any monitoring and mitigation measures identified in the Permit will be implemented to ensure any impacts are appropriately managed.

C2.7 To manage water run-off, rain and leachate within the treatment area, a water treatment plant shall be set-up consisting of a settlement tank, oil water separator, sand and carbon filtration (a Granular Activated Carbon System (GAC)). Water produced shall be piped into the adjacent site drainage in compliance with the relevant discharge consent.

C2.8 Oil collected shall be stored in double skinned containers and disposed of off-site promptly.

C2.9 The level of odours shall be recorded daily during active treatment works e.g. turning of stockpiles. If odour nuisance arises, an odour suppression unit shall be utilised on the compound. Where any odours or emissions are likely to be transported beyond the site boundary at levels that would represent a significant nuisance or affect health of off-site receptors, immediate action shall be taken to stop operations giving rise to the emissions.

C2.10 The remediation compound shall be decommissioned upon completion of the remediation process and the compound shall be made good.

C3 Remediation Processes

C3.1 Contaminated soils shall be remediated in accordance with the Environmental Permit held for the site. Acceptable technologies are likely to include:

- Blending, mixing, bulking, particle size reduction and/or particle separation to facilitate remediation;
- Bioremediation;
- Chemical Oxidation;
- Stabilisation/Solidification;
- Pumping and treatment of perched water in excavations.

C3.2 Remediation Criteria targets required for treated soils are as follows unless otherwise agreed with the appropriate regulatory authority:

i) <5,000 mg/kg Total Petroleum Hydrocarbons (TPH);
ii) <1 mg/kg Benzene, Toluene, Ethylbenze & Toluene (BTEX) Compounds;
iii) <150mg/kg Polyaromatic Hydrocarbons (PAH);
iv) <5ppm Volatile Organic Compounds (VOC) (headspace screening).

C3.3 Free-phase oil product in groundwater or soils which are heavily impacted by hydrocarbons shall be removed and treated in-situ or in the treatment plant.

C3.4 Works shall be undertaken in accordance with the London Gateway Asbestos Management Plan (WSP, 2018) which has been approved by the Local Authority, or any subsequently approved updated plan. If potential asbestos containing materials (ACM) as visually identifiable material is encountered in the ground, isolation measures shall be undertaken prior to the impacted soils being assessed for potential re-use or disposal off-site. It may be possible to handpick visible asbestos and re-use the residual soils on-site if the residual soil asbestos concentrations meet the proposed criteria. This is subject to evaluation on a case-by-

case basis and the following criteria apply for site-won soils:

i) Soils from 0.0 – 0.3m below final ground level of proposed landscaped areas and within 10m of a swale – <0.001% by weight (w/w);
ii) Soils from 0.3 – 1.0m below final ground level of proposed landscaped areas – <0.001% w/w;
iii) Soils at any depth below building footprint and hardstanding - <0.1% w/w;
iv) Soils at 1 – 3m below final ground level – <0.1% w/w;
v) Disturbed soils >0.1% w/w should be disposed of off-site.

C3.5 Any works involving asbestos in soils need to be assessed in terms of their nature and whether these are licensed or non-licensed works. For works to take place there needs to be appropriate health and safety documentation and mitigation in place to meet the requirements of the Control of Asbestos Regulations (2012) and associated guidance including, but not limited to, Approved Code of Practice (ACOP) L143 Managing and working with asbestos, and CL:AIRE's Control of Asbestos Regulations 2012 Interpretation for Managing and working with Asbestos in Soil and Construction and Demolition Materials (CAR SOIL).

C3.6 Remediation measures (e.g. hand picking of identifiable material from soil) shall be undertaken by suitably qualified personnel and in accordance with the licence requirements of the Control of Asbestos Regulation (2012) or any subsequent amendments to it.

C3.7 Where for logistical reasons it is not practical or prudent to transport contaminated soils to the Remediation Compound for treatment, in-situ remediation works may be undertaken, such as screening, grading and bio-remediation.

C3.8 If a batch of impacted soils is unsuitable for remediation either at a remediation compound or in-situ, then such material shall be quarantined and stored on an impermeable, bunded and controlled location. Following further testing, such material shall be removed from the site within three months for further treatment or disposal at a licensed facility unless an alternative date is agreed with the Environment Agency.

D Groundworks

D1 Bulk Upfilling

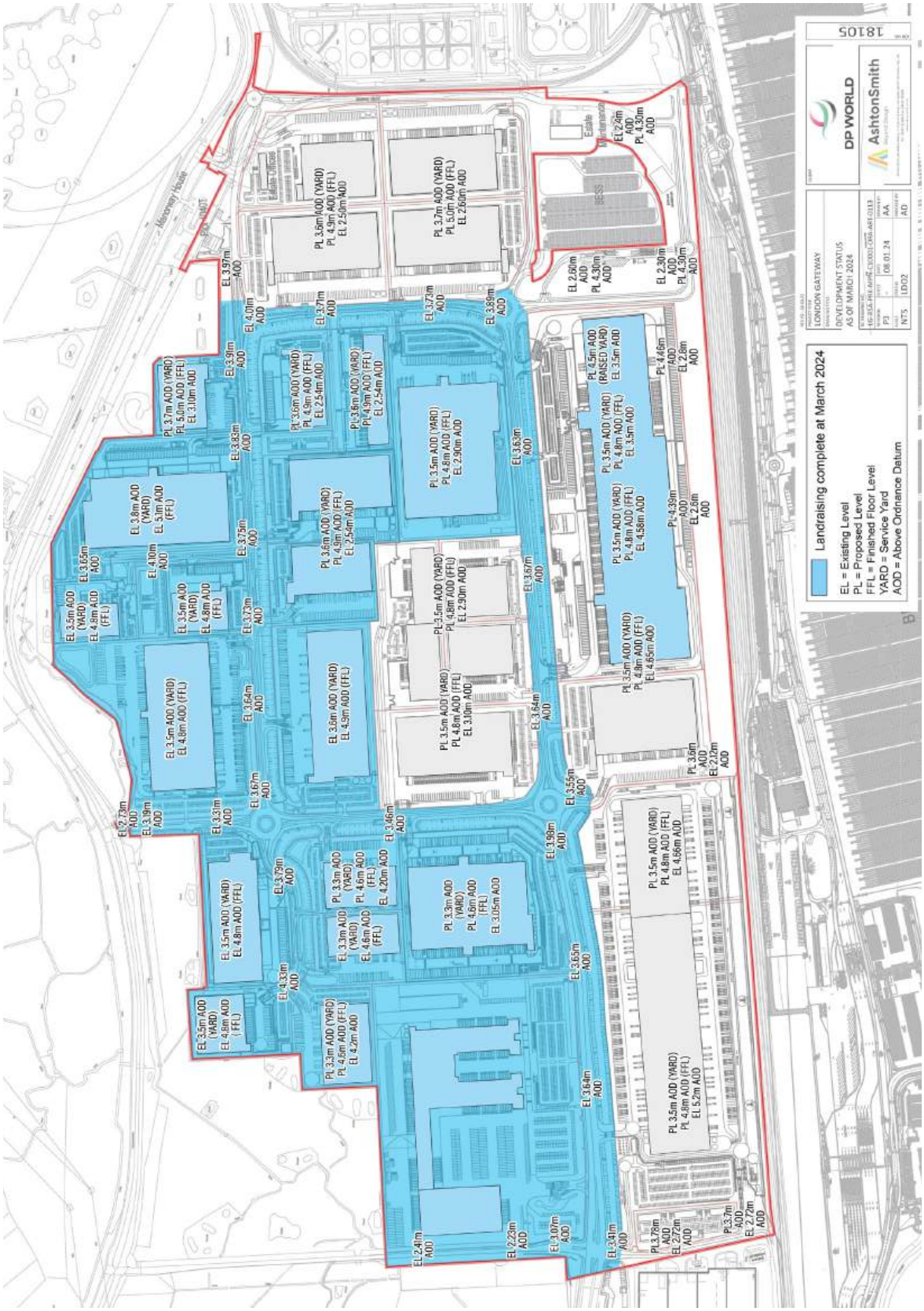
D1.1 The existing ground levels shall generally be raised across the Site to the levels shown on Figure 3, with localised additional raising up to finished floor level. Bulk upfilling works shall not commence until the underlying land has been remediated and validation completed.

D1.2 Where infilling proceeds on a plot by plot basis, the final ground level of each plot shall be contiguous with the finished ground level of the completed infrastructure service corridor and any other completed neighbouring plots. Plot boundaries abutting land that has still to be raised shall be shaped and contoured to allow surface water to drain to temporary ditches.

D1.3 The material required for raising levels may be obtained from either dredged material from the Thames Estuary, site won material (e.g. crushed concrete) or be imported.

D1.4 All potential fill material, wherever sourced, shall be screened and assessed for contamination and shall only be used where it meets the SSTLs or Import Criteria and as set out at Table 3 in Section C. Based on the outcome of assessment and screening process, suitable fill material shall only be used for those purposes specified in Table 5.

Figure 3: Existing and Proposed Site Levels Plan



D2 Imported Material

D2.1 Materials shall continue to be imported under the terms specified in Environmental Permit (Reference EPRIYP3691 EK/A001) which allows the re¬use and recovery of waste materials for construction purposes. The import of material has strict controls over the type and condition of material that can be imported. The material must:

- conform with the types of material allowed for import in the Permit as classified by Waste Codes (e.g. soil and stones or crushed concrete);
- be of solid form with no liquid or saturated waste allowed;
- meet engineering specifications. Soil analytical test certificates must be provided prior to import and there must be conformance against the import criteria depending on the location of final use on-site (the import criteria are the SSTLs generated within the CLRAS as outlined in Table 3).

D2.2 Where material is imported for use in soft landscaping areas and where infiltration may lead to leachate generation, soil leachate testing (as per Table 4) shall be undertaken to confirm the suitability of material for re-use. On receipt at the site the imported material shall be subject to further visual inspection to verify that it conforms to the characterisation provided prior to import.

Table 5 Materials Management Strategy

Material		Assessment		Fate		
Mobile Free Phase Oil Product		Excavation for Ex-situ remediation at on-site remediation compound by third party				
Asbestos Impacted Soil in Areas of Future Ground Disturbance/ Material Re-use		Refer to the DP World Asbestos Management Plan and criteria set out in Table 3-1 of that document to select the appropriate asbestos in soil limits based on the proposed end use of the material.				
Source	Passes Import Criteria	Passes SSTL for proposed end placement depth (Refer to Scenario SSTLS Table C1)	For soils between surface and 1m depth and within 10m of swale Passes Leachate Criteria (Table C2)	Suitable for Use in all areas	Suitable for Use in all areas, except within 10m of swale	Suitable for Use under buildings /hard surfacing only
Site Won Excavated Materials		✓	✓	✓	–	–
		✗	✗	✗		✓
		✓	✗	✗	✓	✓
Remediation Site Won Materials		✓	✓	✓		–
		✓	✗	✗	✓	✓
		✗	✗	✗		✓
Imported Materials (Dredged)		✓	✓	✓		–
		✗	✗	✗	✗	✓
		✓	✗	✗	✓	✓
Imported Material (other)	✓	✓	✓	✓	–	–
		✓	✗	✗	✓	✓
	✗	✗	✗	✗	✗	✗

Note that any site won material not intended for use in soft landscaped areas and intended for placement beneath buildings or hard standing on-site should be subject to an assessment of the materials suitability for use including whether this placement would comply with the DP World Materials Management Strategy (2023) or any subsequently approved updated strategy.

D2.3 Sample analysis shall be carried out on all imported fill material. The analysis shall include an assessment of all chemicals identified as having potential to be present within soil following a review of the historical use of the land from which the imported material has been sourced. The limits set out in Table 3 and Table 4 define the maximum permitted concentrations of these identified chemicals in soils also taking into account any Environmental Permit requirements.

D2.4 In instances where the imported soils are placed (and thus effectively encapsulated) beneath a building footprint it may not be necessary to analyse these soils for their leachate quality.

D2.5 Potential fill material not meeting the import criteria (at the 95th percentile mean) will not be acceptable.

D2.6 A visual assessment for evidence of asbestos containing material, supplemented with confirmatory laboratory based screening shall be carried out by a suitably qualified person against a limiting value of 0.001% weight/weight.

D2.7 Primary aggregate used for concrete and road base shall not require any additional analysis to that provided within the material supply certificate. For recycled aggregates the absence of asbestos must be confirmed.

D2.8 Dredged material from the Thames estuary shall be reviewed against the SSTLs criteria set out previously in Table 3 in Section C to confirm its suitability for use.

D2.9 Soil for use in soft landscaped areas shall also be assessed against the criteria set out in Table 3 and Table 4 in Section C above. Soil leaching limits shall be applied to material intended for use in landscaped areas at the surface or to a depth of 1m and within 10m lateral distance of swales.

D3 Suitable End Uses for Material

D3.1 The suitable end use of site won, remediated or imported material is summarised in Table 5 based on the results of the assessment and screening process.

D4 Undiscovered Contaminated Soil and Groundwater Watching Brief

D4.1 During the course of any ground preparation works that penetrate existing site levels, a watching brief shall be undertaken by a suitably qualified person to identify undiscovered contaminated soil and groundwater.

D4.2 Work shall stop immediately should any material be encountered that appears to be visually impacted by mobile oil product and/or asbestos and LGPDL shall be notified and the material remediated in accordance with Section C of this document.

D5 Earthworks Procedure

D5.1 All movements of soil, whether considered to be contaminated or not, whether imported or site won, shall be tracked. An Earthworks and Materials Tracking Spreadsheet shall document each movement of soil around the Site, including site of origin and location of deposition, quantities and all quality control checks.

D6 Geophysical Survey and Removal of Obstructions

D6.1 Prior to plot development, a geophysical survey shall be undertaken.

D6.2 Where obstructions are encountered these shall be cut back as required to facilitate the construction of the new building otherwise obstructions shall be left in situ to avoid the risk of creating new pathways between shallow near-surface contaminated soils and the underlying Minor Aquifer. Building sub-structures shall be designed to overcome and bridge any existing piles. All material recovered shall be recycled and re-used on site wherever possible. Any underground services to be retained shall be checked and recorded.

D7 Piling Procedure

D7.1 Whilst all plots will have been subjected to detailed site investigation and where necessary remediation prior to construction work, there remains a possibility for hot spots of hydrocarbons or suspected asbestos contamination to be identified during site works. A risk assessment shall be undertaken prior to work commencing and the appropriate piling methodology (either driven or bored piles) adopted taking into account site conditions, previous site investigations etc. in line with the Environment Agency's National Groundwater and Contaminated Land Centre report NC/99/73 (May 2001): Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination or any subsequent updates to it. The floor slab design of buildings shall be constructed in accordance with CIRIA Report C665 and BS8485 and shall incorporate a gas and damp proof membrane with the necessary Quality Assurance and Quality Control as standard, beneath which the piling mat shall also provide a permeable venting layer to prevent the potential for volatilisation of contaminants and ground gases to enter indoor air spaces in the buildings. Service ingress points shall be sealed.

D7.2 A groundwater monitoring programme for the River Terrace Deposits (RTD) shall be maintained through the construction works to ensure that piling activities do not increase the risk of contamination to the underlying secondary aquifer, unless otherwise agreed with the Environment Agency.

D7.3 Visual and olfactory inspections shall be undertaken by suitably qualified persons during excavation activities. Should contamination be suspected work shall stop immediately and appropriate action taken.

D7.4 Trial piles may be utilised to inform foundation design. For any piling operations which are required to be undertaken within 25 metres of a vibration sensitive building a vibration impact assessment based on BS 5228-2:2009+A1:2014 'Code of practice for noise and vibration control on construction and open sites: vibration' shall be undertaken and depending on the outcome of the assessment, vibration monitoring conducted. Occupiers of buildings within 50 metres should also be taken into consideration when selecting a piling solution.

D7.5 When a site is partially built and piling works are required adjacent to an occupied plot potentially resulting in separation distances below 25 metres, measures to control vibration set out in BS5228 could include:

- The use of a low vibration alternative plant and/or methods of work e.g. using bored rather than driven piles.
- Measures to reduce the levels of vibration at source such as the reduction of energy per blow or pre-boring for driven piles and the removal of obstructions.
- Cut-off trenches.

D7.6 Between October-March all impact piling in the restricted area as shown on Figure 4 shall cease during periods of severe winter weather based on relevant measurements recorded at the Shoeburyness Meteorological Station, by reference to the Joint Nature Conservation Committee guidelines, "Statutory Suspension of waterfowl shooting in severe winter weather" (JNCC Report No. 45). This measure becomes active if the minimum recorded temperature at Shoeburyness is below 0°C for 14 consecutive days. Periods of up to 2 days of greater than 0°C (minimum) will not count towards the consecutive days and not restart the day count. Periods of greater than 3 days of greater than 0°C (minimum) will restart the day count and lift the restriction.

D7.7 Construction noise from piling works in the restricted area identified on Figure 4 shall be monitored by the Contractor at a position representing the closest part of the designated ecological sites listed below and the results made available to the Environmental Advisory Group on request. Noise monitoring shall include observations as to whether the source of short-term high noise levels is associated with the LDO development works. Where piling works result in construction noise levels exceeding the following thresholds, all piling activities shall cease:

Vange & Fobbing Marshes SSSI

- Maximum sound pressure levels of 63 dB LAFmax,1min more than five times in any hour.

Mucking Flats & Marshes SSSI

- Maximum sound pressure levels of 66 dB LAFmax,1min more than five times in any hour.

D8 Stripping and Storage of Topsoil and Sub Soil

D8.1 Most of the topsoil required shall be imported 'Multi-Purpose' grade in accordance with BS 3882-2015.

D8.2 Topsoil that exists on the site is of very thin depth and shall not generally be removed.

D8.3 Topsoil materials containing concentrations of toxins, pathogens or other extraneous substances harmful to plant life shall not be used. Peat or products containing peat shall not be used.

D8.4 All topsoil shall be tested to ensure that it is not contaminated with any hazardous material or substances including controlled wastes (as defined in the Environmental Protection Act 1990 Part IIA or any subsequent amendments to it) or hazardous wastes (as defined in the Hazardous Waste (England and Wales) Regulations 2005 or any subsequent amendments to it) and radioactive wastes (as defined in the Radioactive Substances Act 1993 or any subsequent amendments to it).

D8.5 The (maximum) limiting values for contamination of materials (including topsoil) are set out in Table 3 and 4 in Section C.

D8.6 Topsoil shall be deposited over new earthworks in bulk, in layers of 150mm vertical depth in grassed areas, 300mm for woodland and buffer planting, 350mm for ornamental shrub planting and 450mm depth for hedge trenches.

D8.7 Appropriate plant shall be used to minimise disturbance, trafficking and compaction during excavation and placement of topsoil.

D8.8 Contamination of topsoil by subsoil, stone, hard core, rubbish or material from demolition or construction works shall be screened out on site.

D8.9 Different grades of topsoil shall be kept separate from each other when stock piling and handling. Topsoil handling shall be kept to a minimum and in accordance with DEFRA Construction Code of Practice for the Sustainable Use of Soils on Construction Sites.

D8.10 Stockpiling of topsoil shall be carried out in accordance with the DEFRA Construction Code of Practice for the Sustainable Use of Soils on Construction Sites.

D8.11 Topsoil shall not be compacted. A friable texture of visible crumbs shall be preserved.

D9 Final Ground Levels and Conditions

D9.1 Landscaping fill material to be used for shaping and contouring shall be sourced from within the site wherever possible. Prior to use, site won material shall have been tested and remediated to the appropriate standard as specified in Table 3 and 4 in Section C.

D9.2 All imported materials for use as a growing medium or for any other purpose, including fill, shall also be tested for compliance to the standard specified in Table 3 and 4.

D9.3 Deposition of landscape fill material shall be carried out as soon as practicable after excavation.

D9.4 The degree of compaction shall be sufficient to remove large voids and to produce a coherent mass whilst preventing over-compaction.

D10 Services Infrastructure

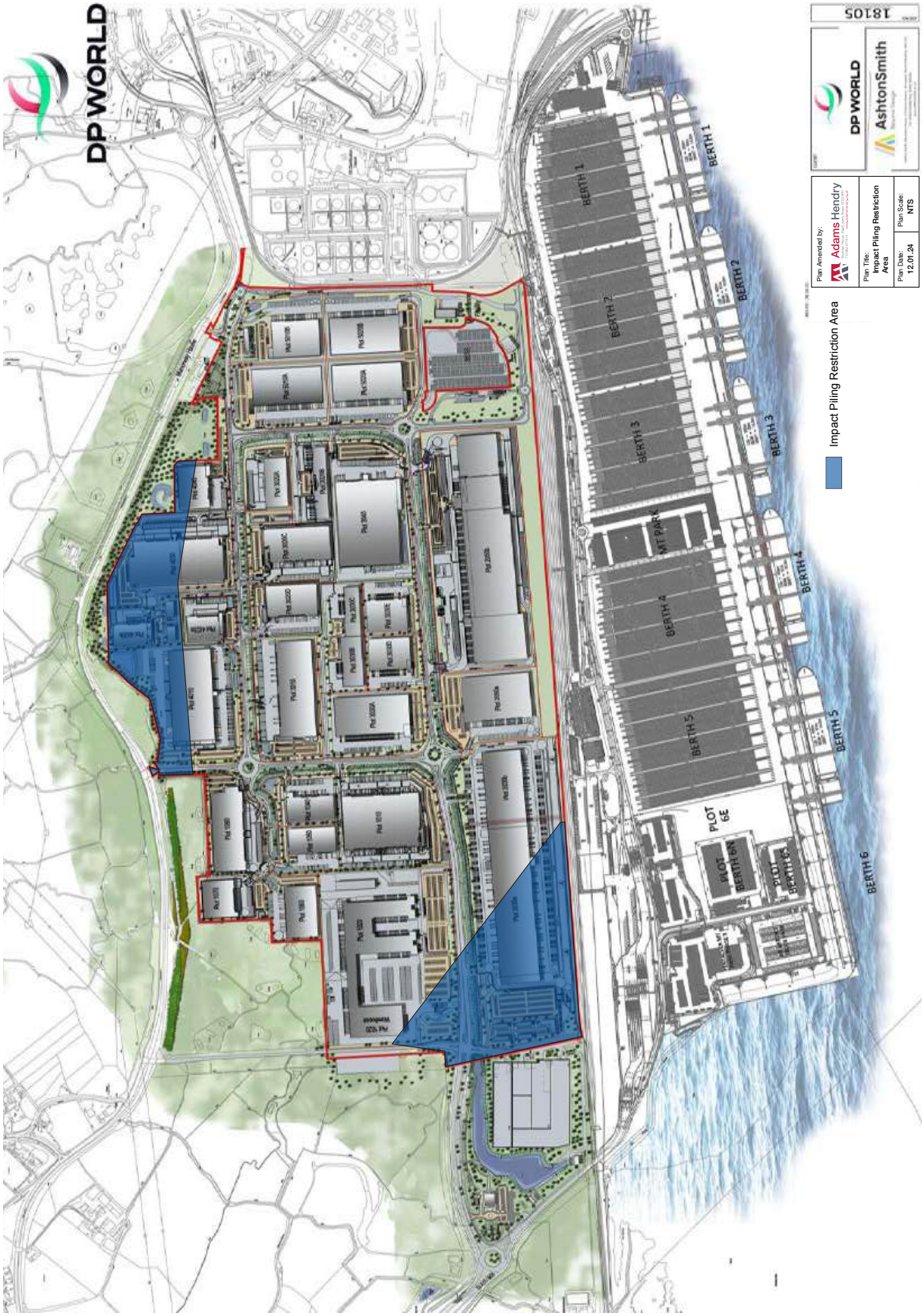
D10.1 Where the installation of water pipe, ducts or any other excavation occurs, a watching brief shall be maintained and any mobile oil product encountered will be excavated for ex-situ bioremediation at the remediation compound. Supply pipe materials shall be appropriate for use in contaminated ground. Supply pipes installed at shallower depths, within material used to raise ground levels, will not require any special mitigation measures other than the provision of a gravel/pea shingle filled trench.

E Waste Material Management

E0.1 All waste material generated on-site during the construction process shall be handled and disposed of in accordance with waste management legislation and the waste hierarchy as follows:

- Waste Prevention
- Material Reuse
- Material Recycling
- Disposal

Figure 4: Impact Piling Restriction (October-March)



E0.2 The management of construction waste shall be phased in line with the construction works phasing.

E0.3 During the construction phase, waste management shall be reviewed for each of the waste hierarchy stages and the suitability of the materials to each stage will be assessed. For material reuse, recycling and disposal off site, a review of waste management companies shall be undertaken to assess the capacity for certain materials to be recovered.

E0.4 The following measures shall be considered to ensure that waste is minimised:

- avoidance of waste at the design stage;
- use of materials with recycled content;
- provision of construction material cut to size to reduce waste generated in site;
- just-in-time deliveries;
- safe and secure storage of materials;
- minimisation of packaging;
- reuse or recycling of unwanted packaging e.g. pallets; and
- reuse of waste on site.

E0.5 The following targets have been set for waste management:

- 100% of remediated soil to be reused on-site;
- 80% of contractor's waste to be recycled (tracked through quarterly reporting system).

E0.6 Materials available within the development site (existing hard standing, roads, drainage, stockpiles, structures or use of dredged material) shall be re-used on site wherever possible.

E0.7 All construction works shall be carried out in accordance with a waste management plan to be prepared in relation to those works and which shall be made available to the EAG on request.

E1 Waste Streams and Segregation

E1.1 Waste shall be segregated into the following waste streams:

- Mixed construction/demolition waste – excluding:
- Timber
- Metal
- Cardboard
- Recyclable Office Waste
- Non-Recyclable Office Waste
- Insulation – glass fibre, mineral wool, purlboard, breather paper;
- 'Green waste'
- Plasterboard – all plasterboard waste must be sent to a licensed facility for recycling
- Concrete washout
- Road sweeper arisings (insert waste)
- Hazardous waste.

E1.2 Under no circumstances shall mixed demolition and construction waste go straight to landfill.

E2 Preventing Escape of Waste

E2.1 All waste produced on-site shall be appropriately stored to prevent escape or leakage whilst stored on-site or in transit. Waste storage facilities shall be suitable to contain waste and labelled with a description of the waste. Vehicles used for transporting waste shall be suitable to prevent escape during transit.

E2.2 Containment bunds with rain shelters and sealed containers shall be used if there is any likelihood of stored waste contaminating the surrounding area. Liquid waste shall be stored away from drains, boreholes and watercourses.

E2.3 No wastes shall be burnt or disposed on site.

E3 Transfer to an Authorised Person

E3.1 Waste shall only be transferred to an appropriately licensed waste consignee. A copy of the Waste Carriers Licence or registration shall be retained by the waste consignor.

E4 Off Site Waste Disposal or Treatment

E4.1 The final waste disposal or treatment facility must be authorised to accept specified wastes and hold an appropriate waste management license, environmental permit or waste management license exemption.

E5 Record Keeping

E5.1 Appropriate records for all waste material transported off-site shall be retained. The waste transfer notes and the consignment notes shall be retained for a minimum period required by the Waste (England and Wales) Regulations 2011 (as amended) or as per updated UK waste legislation of two years, and hazardous waste consignment notes shall be retained for a minimum period of three years.

E6 Managing Hazardous Waste

E6.1 The following measures shall be adopted for the management of hazardous waste.

- Hazardous wastes shall be segregated and stored in labelled facilities, or areas.
- Non-hazardous waste shall not be contaminated with hazardous waste.
- The Environment Agency shall be notified of the movement of hazardous waste, through the hazardous waste consignment process.
- All hazardous waste shall be clearly and appropriately identified and labelled prior to transit from site.

Part 2: Environmental Control Measures / Procedures

Part 2 Environmental Control Measures / Procedures

F Habitats and Protected Species

F0.1 Protected species have already been translocated to receptor sites within the vicinity of the development area as shown on Figure 5. Activities and works shall not disturb or damage the ecological mitigation and management measures that have already been implemented (e.g. fencing, ponds etc.). In the event that damage occurs it shall be repaired at the earliest practical opportunity. Further detail on the monitoring and management requirements for the ecological receptor sites is set out in the London Gateway Ecological Mitigation and Management Plan (EMMP).

F0.2 As part of an induction process, the contractor shall be made aware of the potential for protected species to be found on site. In the event that protected species are encountered during construction works, all works shall cease in that area until the procedures set out below have been satisfactorily completed.

F0.3 In the event a contractor encounters a protected species, to continue works a qualified ecologist shall be appointed to oversee the high-risk construction activities.

F1 Adder, Common Lizard, Slow Worm, Grass Snake

F1.1 Long-term reptile exclusion perimeter fencing has been erected between the logistics park and receptor sites to prevent reptiles entering the construction areas. The fencing shall be maintained until Natural England deem it is no longer necessary and through the relevant licences.

F1.2 Once every three months throughout the construction period, the integrity of the reptile exclusion fence shall be checked and, if damaged, shall be repaired immediately. If necessary, sections of damaged reptile exclusion fence shall be replaced, or if possible, repaired with a waterproof cloth tape.

F1.3 If encountered, reptile habitat shall not be disturbed between November and March whilst the animals are hibernating. If necessary, survey and translocation to an identified receptor site shall be carried out between April and September (occasionally early October). Any areas of reptile habitat identified shall be protected by post and wire fences to prevent accidental damage until the reptiles can be moved.

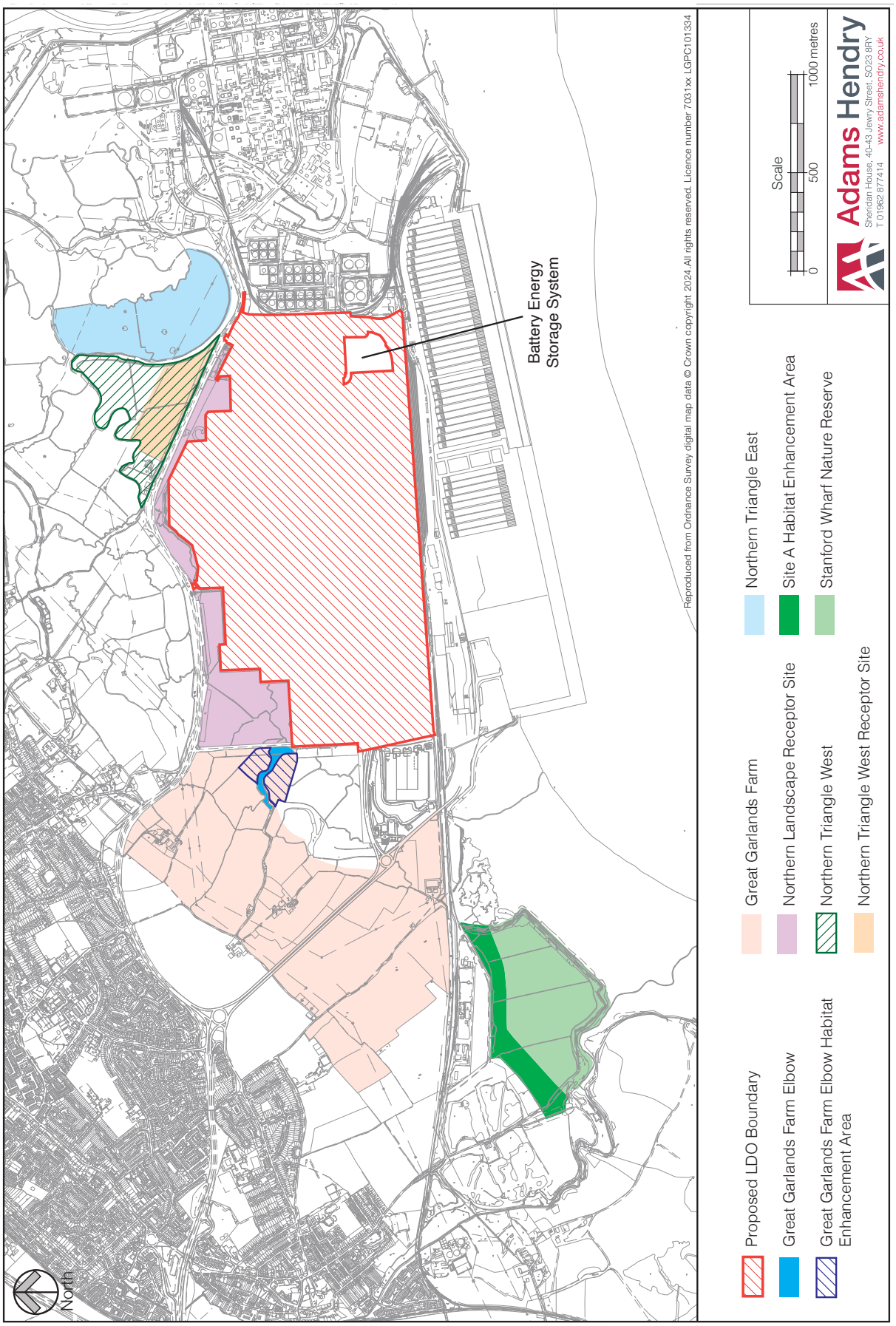
F1.4 Removal of the exclusion fencing post construction shall be done under the supervision of an ecologist and outside the reptile hibernation period, i.e. between the months of April to September inclusive.

F2 Great Crested Newt

F2.1 Amphibian fences and a secure fence shall be maintained around refuge areas for the duration of construction. A secure fence shall be maintained outside the amphibian fences to prevent accidental entry by construction traffic or plant. Warning signs shall be displayed to ensure contractor awareness.

F2.2 A watching brief for amphibians shall be maintained throughout all site clearance operations with amphibian potential and any animals found shall be removed to the refuge

Figure 5: Ecological Receptor Sites / Habitat Enhancement Areas



areas. The fences surrounding the newt refuges shall be walked at least once every three months throughout the construction period to check for and if necessary close up or repair any gaps or cracks through which newts could escape.

F2.3 An annual survey shall be carried out of suitable water bodies on remaining undeveloped plots and any animals found shall be translocated to suitable refuges. Handling and transfer of great crested news shall be by a licensed ecologist.

F3 Bats

F3.1 Any buildings to be demolished shall be surveyed for the presence of bats and if any bats or bat roosts are present then work that will impact on bats and their roost shall not proceed until the appropriate European Protected Species License has been obtained from Natural England.

F3.2 No work shall be carried out on known or suspected hibernation roosts between December and February, or on a known or suspected maternity roost between May and August. Work is possible (under licences) on male bachelor roosts during the latter period.

F3.3 All site workers associated with the development of the site shall be informed of the presence of bat roosts and briefed to undertake actions to protect bat roosts within buildings.

F4 Badgers

[redacted]

F5 Water Vole

F5.1 Water voles on site have been translocated to a number of the receptor sites, which include, the in-site swale ditch network on the Park and the River Colne near Colchester.

F5.2 Any water bodies within the construction areas shall be surveyed by a qualified ecologist in advance of works and if water voles are present, steps shall be taken to exclude them and prevent recolonisation. Any remaining water bodies shall be fenced to prevent accidental damage by plant or vehicles and shall be protected from pollution or silt run-off from the works.

F6 Brown Hares

F6.1 Areas of grazing marsh and arable land in the vicinity of the works have been fenced off, preventing accidental incursion into the areas by construction traffic. In the event of construction works taking place at night, appropriate lighting (see paragraph K1.4) shall be erected along temporary construction traffic routes to help avoid collisions to brown hare as well as other species.

F7 Breeding Birds

F7.1 Prior to and during the construction period on undeveloped plots, breeding bird surveys shall take place annually between March and June inclusive, to encompass the breeding season for various species of birds. The results shall be used to identify any potential nesting

bird constraints. More frequent specific surveys shall be carried out as required around working areas to locate nest sites of Schedule 1 and ground nesting birds. A Natural England Schedule 1 bird disturbance licence may be required for this activity.

F7.2 Ecologists shall provide a watching brief in all areas thought to be occupied by breeding birds. If breeding birds are present, measures shall be taken to avoid disturbance. These shall include the creation of an exclusion zone to avoid the area, or the delay of construction activities until the end of the breeding bird season (or fledging of juveniles in the event that individual nest sites are identified). A marker fence shall be erected at a suitable distance from the nest-sites of any bird species. Marker fencing shall also be erected in un-cleared grassland close to working areas if ground-nesting birds are present, to prevent contractors accessing these areas.

F7.3 All potential breeding habitat shall be cleared between September and February prior to and after breeding season has ceased. Outside this period, clearance work shall immediately follow a thorough checking survey to identify active nests which, if found, shall be left undisturbed.

F7.4 Once the vegetation is cleared and the ponds or ditches have been infilled , construction works shall either commence immediately or the cleared ground shall be managed to minimise its attraction to the majority of breeding birds by regular blading away of any vegetation growth by mechanical means outside of the breeding bird season. The construction area to be developed shall also be marked out/fenced and a series of posts and highly coloured, reflective mirrors and/or tape with trailing markers/streamers used to criss-cross the construction sites. Physical exclusion may also be provided by the installation of netting to exclude birds from the development site as long as the netting is of a coarse gauge to ensure birds do not get tangled.

F7.5 An experienced ornithologist shall check the cleared areas for ground nesting birds if works are to occur in the breeding season.

F7.6 Appropriate measures shall be taken to deter birds from breeding in any areas of suitable bird breeding habitat where construction is likely to start during the breeding bird season. This will specifically include habitat management to minimize the risk of suitable habitat being present for breeding. The situation shall be monitored closely, and further action shall be taken if required such as audio and visual bird deterrents and the use of agricultural bird scarers or kites, balloons, scarecrows and raptor decoys.

F8 Wintering Birds

F8.1 Work directly affecting wintering waterfowl habitat shall be avoided between October and March.

F8.2 In order to avoid disturbance of wintering birds, noise arising from construction works during the months of October to March inclusive, as observed within the closest part of the designated ecological sites, shall not exceed the construction noise thresholds set out within Section D7.7.

F8.3 Construction vehicle speeds across the Site shall be limited to 20 mph.

F8.4 Construction workers shall be made aware of the sensitivity of wintering birds and how to minimise disturbance during their induction process.

F9 Plant Species

F9.1 All scarce plant species discovered during the clearance of the Park have been translocated to a nursery on Northern Triangle East and Site A Habitat Enhancement Area.

F9.2 A survey by a qualified ecologist shall be undertaken on undeveloped plots with the potential for scarce plants prior to construction. Any remaining nationally scarce plant species discovered shall be marked out, and protected. Where in the opinion of the qualified ecologist, it considered feasible, best efforts shall be made for successful translocation to a suitable location.

F9.3 Construction workers shall be made aware of the purpose of the fencing during their induction process.

F9.4 When working in or near waterbodies, measures will be implemented to prevent the spread of the invasive water fern (Azolla filiculoides) during construction. Machinery, equipment, and clothing will be checked for plant fragments before and after works take place.

G. Water Quality

G0.1 All works shall be undertaken in accordance with standard regulatory practice to prevent pollution.

G0.2 The potential for impacts to occur as a result of on-site storage of materials and contamination of water by oil or other liquids shall be minimised by the following measures:

- Storage compounds for fuels, oils or other liquid chemicals shall be located away from surface water drains wherever possible. They shall have an impermeable base and impermeable bunds and shall not drain directly into the surface water drains. Fuel and oil storage compounds bunds shall have a capacity of at least 110%. Where practical, drainage from storage compounds shall be passed through oil interceptors prior to discharge.
- Spill kits shall be located near to watercourses and within the works compound.
- Drums and barrels shall be stored in designated, bunded safe areas within the compound.
- All drums and barrels shall be fitted with flow control taps.
- All drums and barrels shall be properly labelled.
- Small plant such as pumps shall be fitted with drip trays.

G0.3 The potential for impacts to occur as a result of disturbance of silt on land shall be minimised by implementing the following measures:

- All pumped drainage from the construction works, including areas used for temporary storage of construction materials or excavated soils, shall be passed through silt settlement treatment prior to discharge to surface watercourses or drains. Silt settlement treatments may, for example, include straw bales, grassland soakaways and silt settlement lagoons. Balancing ponds shall be at least partially excavated during the early phases of the construction programme to allow them to act as temporary settlement lagoons.
- Any pumping operations shall be carried out on a ‘permit to pump’ basis.

- Where appropriate, access to watercourses shall be bunded to prevent contamination from surface water run-off.
- All roads and hard-standing shall be kept clean and tidy to prevent the build-up of oil and dirt that may be washed into a watercourse or drain during heavy rainfall
- The use of water spray to reduce dust or wash down construction areas shall be carefully regulated to avoid washing substantial quantities of silt etc. into the watercourses of surface water drains. Where large quantities of gravel, mud or other such material require cleaning, the area shall be swept clean prior to any subsequent hosing down.

G0.4 Foul water from welfare facilities shall be sumped and pumped out for offsite disposal at an appropriate facility.

G1 General Construction Control Measures

Silt and Suspended Solids

G1.1 The following control measures shall be put in place to manage silt generation.

- Excavations: Where possible water shall be prevented from entering excavations using cut off ditches to prevent entry of surface water and groundwater.
- Exposed ground and stockpiles: The amount of exposed ground and soil stockpiles shall be minimised. Silt fences shall be constructed from a suitable geotextile to reduce silt levels in run-off water. The height of stockpiles of material for reuse shall be minimised to avoid damage to the soil structure. Spoil and temporary stockpiles shall be positioned away from watercourses and drainage systems. Surface water shall be directed away from the stockpiles to prevent erosion at the base.
- Pumping: Pumped discharges shall be made using a pump of suitable size and at a rate which shall not cause erosion or disturbance to the bed of the watercourse (see disposal of waste water section below).

Concrete & Cement

G1.2 The following control measures will be put in place:

- Concrete & Cement Operations: Operations shall be carefully controlled and supervised at all times to minimise the risk of any materials entering watercourses.
- Concrete & Cement Washout: Washing out and cleaning of concrete batching plant or ready mix lorries shall be carried out in a contained area as far from watercourses as practicable. The area shall be appropriately bunded and segregated to prevent the escape of contaminated water into a watercourse.
- On-site concrete production: Careful initial siting of concrete mixing/batching facilities is vital. A settlement and recirculation system for water reuse shall be provided to minimise the risk of pollution and reduce water usage.

Oil & Chemical Storage & Use

G1.3 All oils and chemicals shall be stored and handled in an appropriate manner to prevent leaks or spills to surface water or groundwater.

G1.4 All storage tanks, buildings, ancillary handling facilities, filling, drawing and overflow pipes shall be enclosed within an impervious bunded area of at least 110% of the tank capacity.

G1.5 The measures in the EA's Pollution Prevention Guidelines for Above Ground Oil Storage Tanks (PPG2) or latest equivalent guidance shall apply. Whilst the PPG previously maintained by the EA has been withdrawn, it remains available on the Government's national archives and is still considered a relevant source of good practice guidance alongside resources under GOV.UK including Oil storage regulations for businesses and Pollution prevention for businesses.

G2 Disposing of wastewater from site

G2.1 The most appropriate method of discharging wastewater from site without adverse environmental impact shall be used. The option that is most appropriate to a specific operation will be dependent upon the following factors:

- The quantities of water involved;
- Whether areas are available for storage and treatment;
- The level of suspended sediment in the water;
- The characteristics of the sediment; and
- Whether the wastewater is likely to be contaminated.

Site dewatering

G2.2 Dewatering activities shall comply with Environment Agency and other regulatory requirements related to dewatering. Under certain circumstances an Environmental Permit may be required from the Environment Agency and treatment of water prior to discharge may be required.

G2.3 Pumping to soakaways or grasslands is not permitted.

Pump to tanker for off-site disposal

G2.4 If there is no alternative option, contaminated wastewater shall be tankered off-site by an appropriate contractor for disposal as a hazardous waste. Temporary welfare facilities shall include appropriate foul sewage storage for subsequent removal and disposal off-site.

G3 Water Quality Monitoring

G3.1 Watercourses shall be visually inspected daily to identify whether there have been any changes in water quality during construction operations. The aspects to be inspected are:

- Colour;
- Odour;
- Suspended solids; and
- Presence of oily films and discolouration.

G3.2 Where problems are identified it may be necessary to carry out more detailed scientific tests to determine the extent of the problem and treat as necessary.

G3.3 Visual monitoring of all wastewater discharged shall be undertaken as best practice. Chemical analysis shall be required when discharging water in line with an environmental permit.

G4 Drainage Pollution Control Measures

G4.1 Contractors shall ensure the ready availability of equipment to contain spillages, including oil booms, drain blockers and dams to contain soluble pollutants.

G4.2 The measures in the EA's Pollution Prevention Guidelines for the Use and Design of Oil Separators (PPG3) or latest equivalent guidance shall be adopted on-site. Whilst the PPG previously maintained by the EA has been withdrawn, it remains available on the Government's national archives and is still considered a relevant source of good practice guidance.

G4.3 All re-fuelling and maintenance works during the construction phase must be undertaken off-site where possible. If this is not possible then an appropriate area of hardstanding, in line with the recommendations for construction compounds and storage must be provided.

G5 Water Demand Management Measures

G5.1 In order to help minimise water demand during the construction phase, an analysis of the key sources of demand for mains water shall be undertaken and an estimate of their associated costs for the duration of the project using mains supplies calculated.

G5.2 Processes to be considered would include:

- Concrete-batching.
- Bentonite-batching.
- Pressure cleaning.
- Grit blasting.
- Damping down.
- Wheel-washing.
- Block toilets and basins.
- Block showers and changing facilities.
- Canteen facilities.

G5.3 Where temporary accommodation and facilities are to be used during construction, suppliers shall calculate the costs and benefits of supplying more water-efficient fixtures, fittings and systems as standard. Contractors are:

- Encouraged to fit in-line water purifiers in preference to bottled water. Other recommended practices are as follows:
- Make sure that taps are not left running or dripping.
- Fit controls to existing systems including self-closing taps, flow regulator/ restrictors and trigger-operated spray guns & hoses.
- Investigate opportunities for re-using process water, e.g. from wheel wash area.
- Check equipment and systems periodically for leaks and insulate pipes to prevent against frost damage.

H. Dust

H0.1 During periods of dry and windy conditions, surfaces shall be damped down to minimise the volume of dust being generated and transported.

H0.2 The dust control methods shown in Table 6 shall be employed as appropriate.

H1 Haulage Routes

- Haulage routes shall be sited away from any sensitive sites.
- Heavily used areas shall be paved where possible, and swept regularly.
- There shall be a length of paved road prior to the exit from site.
- The width of haul roads shall be kept to a minimum width of 7m to reduce the surface area from which dust can be produced.
- Paved access roads and public highways shall be regularly swept using a road sweeper as required.
- Speed limits for site traffic shall be kept to a minimum (20mph) and enforced to minimise dust production.

Table 6 Dust Control Methods

Activity	Possible Dust Control Methods
Soil handling & excavation	Restrict the duration of the activity where possible. Seal and seed storage mound surfaces where possible. Where possible protect surfaces from winds until disturbed areas are sealed and stable.
Laying granular materials	Use water sprays
Material storage	Dampen material. Protect from wind and store under cover where possible.
Transport by vehicle within and off-site	Restrict vehicle speed. Water un-surfaced roads and paved roads Wheel or body wash at an appropriate distance from the site entrance. Load and unload in areas protected from the wind wherever possible. Minimise drop heights. Sheet or cover loaded vehicles wherever possible, Use water sprays/spray curtains to moisten material wherever possible. Sweep/wash paved roads. Use paved roads where practicable. Demolition and construction vehicles conform to at least Euro III standards.

H2 Demolition

- Enclosed and dampened chutes shall be used for dropping demolition waste to ground level.
- Buildings shall be screened with suitable screens and sheets to minimise airborne material.
- Asbestos shall be removed by a registered specialist prior to demolition.
- Bird droppings and other biological matter shall be removed prior to demolition.
- Crushing plant shall be sited away from sensitive areas.

H3 Plant

- Site egress shall be monitored by a banksman and vehicles will not be permitted to exit the site where there is potential for mud and debris to be tracked onto the public highway network.
- Exhausts shall not discharge directly to the ground.
- Plant and equipment shall, where at all possible, be operated away from sensitive receptors near to the site.
- Any mobile plant that is used on site shall be appropriately licensed and operated within its design capacity.
- Any mobile crushing plant being used on site needs to have the appropriate environmental permit.

H4 Earthworks & Excavations

- Temporary or complete earthworks shall be sealed or re-vegetated as soon as possible.
- Earthworks shall be kept damp during dry periods of working.

H5 Materials Handling & Storage

- Account shall be taken of prevailing wind/sensitive receptors when locating stockpiles to minimise dust generation and impact.
- Stockpiles shall be kept to a practical height with gentle slopes.
- Stockpile surfaces shall be compacted and bound.
- The amount of time materials are stored on site shall be kept to a minimum.
- Waste or excess material shall be removed from the site as soon as practical.
- Long-term stockpiles shall be protected from wind erosion by screens, wind barriers, capping, vegetation or other effective methods.
- Loose stockpiles can be stabilised with binding agents to reduce wind erosion, however consultation with the Environment Agency is necessary in advance of binders being used.
- Dry or fine materials shall be stored in an appropriate location, such as inside a building or covered/sheeted bay.
- Material handling operations shall be kept to a minimum.
- All dust generating materials shall be delivered under tarpaulin covers.
- Spillages shall be cleared away as soon as possible if they occur using wet handling methods.
- Methods and equipment for cleaning up spillages shall be in place at all times.
- Vehicles carrying loose materials shall be adequately sheeted or contained during travel along site roads and upon leaving the site. Un-sheeting shall only be permitted in designated areas.

H6 Concrete Batching & Pouring

- Large quantities of concrete or bentonite slurries shall be mixed in enclosed areas.
- Dirt in formwork shall be vacuumed rather than blown out prior to concrete pours.
- Concrete pours shall be kept clean once they have gone off.
- Cement or other powder materials shall be delivered by bulk tanker and transferred to silos fitted with particle filtration systems.

- Silos shall be equipped with filters to remove dust from venting air and fitted with alarm systems to warn of overfilling or the failure of dust arrestment systems.

H7 Cutting/Grinding/Grouting/Packing

- Cutting and grinding on-site shall be kept to a minimum.
- Dust extractors or wet cutting shall be used when using concrete/stone cutters and saws.
- Standard angle grinders and disk cutters with no dust control shall not be used on site.

H8 Hot Bitumen Processes

H8.1 If hot bitumen processes are to be used during construction, best-practice measures shall be employed to minimise the production of fugitive black smoke emissions during operations. Such measures should include:

- Avoiding the overheating of bitumen;
- Covering pots and tanks when practical to do so;
- Extinguishing small fires immediately;
- Minimising and clearing up spillages; and
- Care to be taken during 'torching'.

H9 Damping Techniques

H9.1 A fine spray of water shall be used and applied regularly, especially during warm and sunny weather. The following shall be sprayed:

- Unpaved work areas subject to traffic or wind.
- Structures and building during demolition.
- Sand, spoil and aggregated stockpiles.
- During the loading and unloading of dust generating materials.

H10 Preventing Emissions and Odours

Vehicles & Plant

- Low emission plant and vehicles shall be used.
- Vehicles and plant used on site shall be well maintained and regularly serviced.
- All vehicles shall comply with MOT emissions standards at all times.
- Deliveries to site shall be controlled to minimise queuing.
- All engines shall be switched off when not in use.
- Refuelling areas shall be located away from sensitive receptors.

Additional measures

- Waste materials shall not be burnt on site.
- Waste shall be enclosed in a covered container and removed frequently.
- Organic waste shall be removed before it begins to decompose.

Chemicals on site

- Weather conditions shall be accounted for when planning activities that produce any aerosols, fumes, odours and smoke.

I Noise and Vibration

I0.1 Best practical means of controlling noise and vibration shall be employed for all works in accordance with BS 5228:2009+A1:2014: 'Code of practice for noise and vibration control on construction and open sites – Part 1: Noise' and 'Part 2: Vibration'.

I0.2 If any construction activities have to be planned to take place outside core working hours (see Para B6.1) and/or have the potential to result in a construction noise level exceeding the levels set out in Table 2 (Section B6), these works shall only take place in accordance with a licence provided by the Environmental Health Authority pursuant to Section 61 of the Control of Pollution Act 1974. As part of the application, the Contractor shall demonstrate that the proposed works incorporate best practical means of noise control with the aim of not exceeding the limits within Table 2.

I0.3 Contractors and employees shall be made aware of the requirements to restrict construction noise from the Site. This shall include the following:

- Where practicable, ensuring the use of quiet working methods, the use of the most suitable plant, reasonable hours of working for the most noisy operations, and economy and speed of operations.
- Controlling noise and vibration at source and limiting the spread of noise.

I0.4 If noisy processes cannot be avoided the following measures shall be employed wherever practicable:

- Increasing separation distance between source and receiver if possible.
- Screening through barriers or other structures (such as site buildings).
- Management of timing of site operations.

I0.5 Whilst the volumes of construction traffic may not able to be reduced, careful attention shall be paid to the routing and timing of construction traffic.

I0.6 Measures to maintain good community relations shall include informing local residents on progress and the measures employed to minimise the potential for adverse effects due to construction noise.

I1 Noise Control Measures

I1.1 The following control measures shall be implemented:

Plant

I1.2 Plant shall be selected to minimise noise and vibration where feasible. The following should be considered:

- All plant shall conform to relevant standards and directives for noise emissions as stated above.

- Noise control equipment, such as enclosures, shrouds and silencers, on plant shall be fitted and used properly when in use.
- The fuel source for the plant shall be considered; electrically powered plant is often quieter than diesel or petrol driven plant.
- All plant shall be operated correctly.
- All plant shall be turned off when not in use.
- All plant shall be regularly inspected and maintained.
- Rotation, impacting or percussive machinery shall be fixed on anti-vibration mountings.
- Wherever practicable, noisy plant or processes shall be substituted with less noisy alternatives and shall be carefully sited to minimise noise propagation to the nearest noise-sensitive receptors.

Screening

I1.3 Temporary screens shall be used, where feasible and appropriate, to reduce noise propagation to the nearest noise-sensitive receptors such that the noise limits within Table 2 are not exceeded. Temporary screen shall be a solid hoarding (minimum mass per unit area of 7 kg/m2) of minimum height 2 m and shall be positioned along the nearest plot boundary to the noise-sensitive receptor.

I2 Monitoring

I2.1 Construction noise levels shall be monitored regularly by a suitably qualified person appointed specifically for the purpose, and in particular during the critical phases of construction, such as piling, or when significant changes in construction method or plant are introduced such that the potential for adverse effects due to noise is increased. The required locations and intensity of noise monitoring shall vary depending on the construction phase and location of the works. As a minimum, when there is a potential for adverse effects, noise monitoring shall be undertaken on a weekly basis at positions representing the nearest sensitive receptors to the site. Noise measurements shall be taken to verify that noise arising from construction works does not exceed the limits within this Code of Construction Practice. If limits are exceeded, or complaints received, then these shall be investigated by the relevant works Contractor and actioned appropriately.

I2.2 Best Practicable Means (for example appropriate mitigation and sensible use of site equipment) shall be employed so the effects of construction noise on ecological receptors are not significant. The results of the weekly noise monitoring shall be submitted to the EAG on request. As noted in paragraph F8.2, construction noise levels shall not exceed the thresholds set out within Section D7.7. If noise monitoring demonstrates that these thresholds are exceeded, then work shall stop immediately and the timing or method of working amended such that the potential for adverse effects on ecological receptors is effectively reduced.

J. Archaeology

J1.1 No protected archaeological sites or historic landscapes are present within the LDO2 area. The site nevertheless has potential for archaeological remains, deeply buried within floodplain deposits, as detailed in baseline studies including a geological ‘Deposit Model’ (Oxford Archaeology, February 2012, A Multi-Disciplinary Investigation of the Sediments at the London Gateway Site, Essex: Geophysics, Palaeoenvironment and Dating, Final Deposit Model Update). Areas of high archaeological potential, based on the ‘Deposit Model’, are shown on Figure 6.

J1.2 In the majority of cases it is expected that construction activities undertaken within the parameters established by the LDO2 Design Code will not have a significant impact on archaeological sites due to the planned thickness of artificially raised ground covering the site. The latter comprises existing made ground laid during development of the former Shell oil refinery and ground-raising permitted under the LDO1 and LDO1.5.

J1.3 Wherever possible, any archaeological remains shall be preserved in situ through sensitive design and where this cannot be achieved any remains shall be investigated and recorded.

J1.4 Before construction takes place, groundwork designs of all types shall be assessed and a professional opinion provided by a suitably qualified and experienced archaeologist (a full Member of the Institute for Archaeologists) to determine whether formal assessment is required.

J1.5 Construction and drainage features that penetrate below the base of artificially raised ground into alluvial deposits shall in all cases be subject to formal assessment based on a comparison of finalised design drawings with the archaeological 'Deposit Model'. Features requiring assessment include (but are not limited to) drainage installations and other buried services, piled foundations, strip foundations, ponds and swales, and areas of deep ground mixing.

J1.6 Features that do not penetrate below the base of artificially raised ground shall not require archaeological investigation.

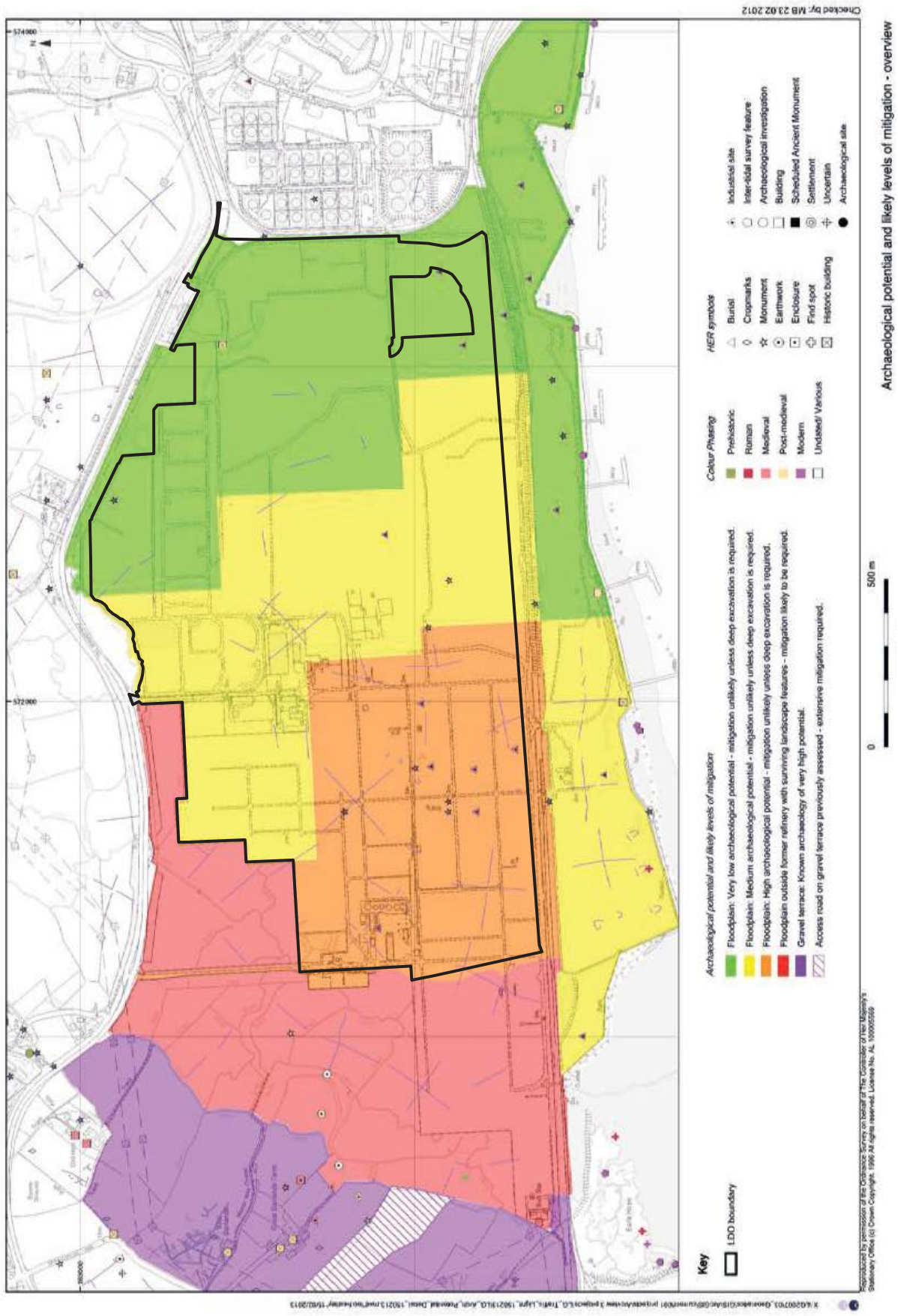
J1.7 Piling will not normally require archaeological investigation, although unusually dense piling schemes in archaeologically sensitive areas may trigger a requirement for investigation.

J1.8 Where preservation in situ is not feasible, investigation shall be required to identify any significant archaeological remains within the affected area and preserve them by record. Preservation by record may comprise monitoring during construction, trench investigation or other appropriate methods agreed with the relevant local authority archaeological advisor.

J1.9 The professional opinion, archaeological assessments and any investigation proposals arising shall be submitted for approval by the local authority archaeological advisor in advance of the LDO prior notification process in the form of an Archaeological Project Design (APD). The local authority archaeological advisor shall have no more than 15 working days to consider the APD. If no response is received by 5pm on day 15, the APD shall be deemed to be acceptable. A short format APD is suitable for documenting the assessment process where no investigation is deemed necessary. Where investigation is required a full APD shall be produced, including a greater level of site specific information commensurate with the scale and archaeological significance of the investigation. As a minimum the following information shall be included in APDs:

- Principal contractor/ client name
- Plot name
- Contract reference
- OS grid reference
- Planned period of construction work
- Summary description of works
- Planning background: Standardised text for LDO2 area
- Archaeological baseline summary: Standardised text for the LDO2 area can be used in the short format APD
- Heritage baseline data drawing: (not required for short format APDs)

Figure 6: Areas of High Archaeological Potential



- Heritage baseline data reports: List of relevant baseline report references
- Archaeological Assessment: Identification of the importance of the archaeological resource at the specific location
- Impact Assessment: Description of the anticipated impact of the proposed groundworks on the archaeological resource
- Construction design drawings consulted: List of design drawings consulted in making the assessment
- Archaeological requirements: Identification of specific measures proposed to either preserve archaeology in situ or preserve it by record.
- QA sheet: To be signed by the archaeological specialist, local authority archaeological advisor and client/ principal contractor representative at the following stages: a) acceptance of the APD; b) completion of any archaeological requirements; c) completion of interim report where relevant; d) completion of final report and archive deposition requirements where relevant (short format APDs require signature at stage a) only).

K Landscape and Visual Characteristics

K1.1 Control of waste and good housekeeping shall reduce any visual impacts from windblown material.

K1.2 Existing mature trees and hedgerows shall be protected in accordance with BS 5837:2012 Trees in relation to Design, Demolition and Construction-Recommendations.

K1.3 The artificial grass pitch (AGP)/multi use games areas (MUGA) should be no closer to trees than a distance equivalent to at least the potential height of the tree and its potential canopy width. Where this is not possible, construction can take place above the tree roots by using 'cellular web' sheeting, which is placed onto the soil, pinned in place and filled with stone ('non-dig' construction).

Lighting

K1.4 The type and level of lighting provided will be dependent on the particular construction activities in progress. Lighting shall be in general accordance with BS EN 12464-2:2014 Lighting of Work Places (Part 2 – Outdoor Work Places). In particular Table 5.3 of that standard relates to building sites and recommends minimum lighting levels for construction areas to have an average illuminance of 50 lux with 40% uniformity.

K1.5 As a minimum, lighting will be likely to be required during the winter months and may also be required during the night depending on construction activities, programme and permitted working hours. When construction operations are undertaken at night, temporary lighting shall be provided in accordance with the HSE requirements. Typically the contractor will employ mobile tower floodlights powered by a diesel generator. These units can typically extend the mast to a height of between 5m-9m and are equipped with 4 or 6 1000W metal halide floodlights. The general lighting shall be supplemented where necessary with local task lighting.

K1.6 Monitoring of the temporary lighting installations shall be undertaken to ensure correct aiming angles are being achieved, and appropriate modifications made where necessary, should undue light spill or glare on human or ecological receptors be identified.

K1.7 Possible sources of obtrusive light are:

- Light trespass – light spilling beyond the boundary of the site on which a light is located.
- Glare – the uncomfortable brightness of a light source when viewed against a darker background.
- Sky glow or upward light produced from poorly controlled or aimed lighting.

K1.8 Consideration shall be given to the location and angle of site lighting to minimise the potential for obtrusive light to impact upon sensitive receptors.

K1.9 The following best practice measures shall be implemented:

- Lights shall where practicable, be positioned facing away from sensitive receptors. Where this is not possible lighting units will be placed in such a way that obtrusive light is minimised. Unless health and safety requirements dictate otherwise, no lighting shall be directed to face towards any sensitive receptor.
- All luminaires used around the perimeter of the site shall be mounted within the site, so that the main photometric distribution of the luminaire will be towards site works, keeping all light within the boundary of the development and preventing artificial light spilling outside of this.
- All artificial lighting used during the construction phase shall be directed below the horizontal to prevent unwanted upward light.
- Where necessary glare shields, baffles and cowls shall be used to control and minimise light distribution.
- Modern, high efficiency lamps and luminaires shall be employed throughout the site to be as energy efficient as possible.
- Illuminance levels shall be designed in accordance with BS EN 12464-2:2014 Lighting of Work Places and the areas shall not be overlit.
- When not in use all artificial lighting used for demolition or construction shall be extinguished; this shall include periods outside of normal site working hours.
- Any security lighting shall be kept to a minimum at all times.
- Checks shall be made each evening to ensure no lights are left on in error.
- Any complaints relating to obtrusive light shall be fully investigated by the site management company.

Appendix 1:
DP World London Gateway Logistics Park Incident Management Plan

DP WORLD
London Gateway

Emergency Management System

DP World London Gateway Logistics Park Incident Management Plan

Document Reference: HSMS-ERP-0004

Document Owner: Head of Estates

Revision History:

Version	Date	Reason for change	Author
FINAL	05 May 2019	Updates by LG	Nick Orbell
Update	02 June 2020	Post exercise review updates	Nick Orbell
v.2	March 2022	Updates following IMT exercise 16/11/21 and development of LGLC Incident Management Plan.	Sonia Peirson
v.2 FINAL	6 September 2023	Final version	Sonia Peirson

Approvals:

This document requires the following approvals.

Name	[redacted]	Title	Date	Version
Oliver Treneman		Head of Park Development	6.9.2023	2

Location/Distribution:

This document is issued to the following people:

- LGLP Incident Management Team (see paragraph 4.3.2)
- Incident Commanders of the LG Site Incident Management Team
- The plan, and associated documentation, is also stored securely in the following locations:
- LGLP Emergency Control Centre locations listed at paragraph 4.3.3 and;
- LG Park folder at O:\Park\11.0 Park SHES\Emergency Plans.

This document is a Regulation at the London Gateway Logistics Park.

1. Purpose

The purpose of this plan is to improve the capacity of DPWLG to manage disruptions to operations, thereby reducing both the impact on customers and other stakeholders, and unnecessary costs. Specifically, this plan deals with the response at a local level for London Gateway Logistics Park (a map of the park is at Annex A): Ref A details the DPWLG corporate Emergency Management System.

2. Scope

The scope of this plan is to establish local incident management arrangements for the LGLP during a disruptive incident, within the overall DP World Emergency Management System (Ref A), in order to minimise the impact on Tenants, staff, operational partners and other stakeholders. Effective incident management improves the long-term prospects of the organisation by giving shareholders and customers the confidence that DPWLG is a corporate group that they can rely upon.

No1 London Gateway is outside the LGLP, so the physical recovery of this facility is outside the scope of this plan and falls under the Port Emergency Response Plan.

Definitions

Annex - an attachment to this document which is reviewed and updated as part of the maintenance cycle at paragraph 7 of this plan.

DP World London Gateway (DPWLG) – a group of companies comprising London Gateway Port Limited, London Gateway Logistics Park Development Limited; LG Park Freehold Limited and LG Park Leasehold Limited.

DP World London Gateway Logistics Centre (LGLC) – a multi-occupancy office and warehousing facility located at the junction of Atlantic Avenue and North Sea Crossing.

EMS - DP World London Gateway Port Emergency Management System.

First or Initial Responder - the responsible person who receives first notification of an incident or becomes aware of an incident (in most situations likely to be Mitie Security Limited).

Incident Controller – the responsible person who initially takes charge of the incident on site.

Incident Commander – the person who leads the **LG Site Incident Management Team.**

LG Port – the operational area of DP World London Gateway Port.

LG Site - LG Port and No1 London Gateway building.

LGLP Security Staff - employees of the third-party security contractor (Mitie Security Limited) employed by LGLP.

LGLP Incident Management Team (LGLP IMT) – as described in paragraph 4.3.1.

LG Site Incident Management Team (LG Site IMT) – IMT responsible for the LG Site

London Gateway Logistics Park (LGLP) - the area of land and built estate and infrastructure as shown at Annex A.

Principal Contractor – a contractor directly employed by DPWLG working on **LGLP**.

Ref - a relevant DP World document referred to in this plan (see list in paragraph 0).

Tenant - a commercial occupier of property at **LGLP**.

3. Incident Response

4.1. Invocation of the LGLP Incident Management Plan

The requirement to invoke this plan may arise from a wide range of disruptions, including the following (see flowchart at Annex B):

Incident Type	IMP Doc	Date
Fire in Tenant area, LGLP managed area, or construction site	Annex E	Aug 2022
Road traffic incident	Annex E	Aug 2022
Casualty in LGLP controlled area	Annex E	Aug 2022
Spillage and escape of substance on road network (excluding Tenant sites)	Annex E & I	Aug 2022
Flooding	Ref C	July 2022
Criminal activity, including unwanted persons on site	Annex E	Aug 2022
Major utility failure - power	Annex E	Aug 2022
Extreme weather	Annex F	Aug 2022
Major incident on neighbouring site (LG Port, Shell)	Annex E	Aug 2022
Incident affecting No1 London Gateway (including Control Room)	Annex E	Aug 2022
Uncontrolled social media	Annex E	Aug 2022

Any of the above, or other instances of serious disruption, should be reported immediately to the **No 1 Security Control Room (0800 121 6830).** In particular, tenants/contractors must inform the Control Room if they have called for any Emergency Services, so as LGLP Security staff can ensure that gates are unlocked and that they are escorted to the scene. The Control Room will inform one of the designated Incident Controllers who can then activate the relevant call-out procedures if necessary.

A checklist for immediate actions in the event of an incident is contained at Annex C. In **the case of an actual or suspected "4" of "5" incident; a Serious Incident Notification must be made as per EMP Ref B.**

All information received and actions taken from this point should be logged: a template for logging information received and actions taken is at Annex D.

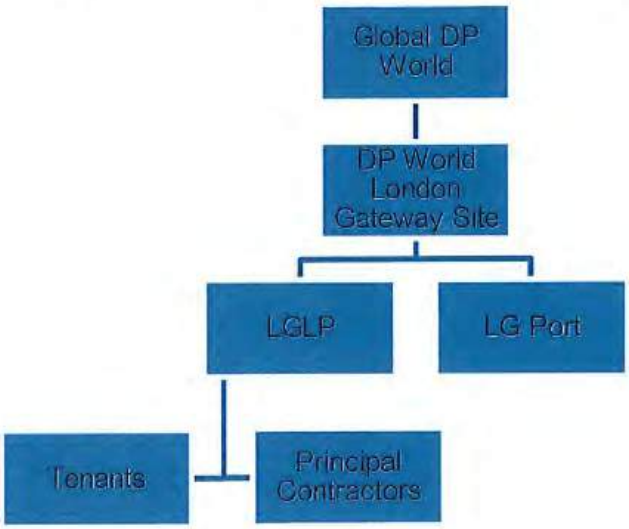
4.2. Methods of invocation

Specific incident responses may be invoked as follows prior to the formal establishment of the LGLP IMT:

Requirement	Method	Authority to Invoke	Comments
Unrestricted public notification of incident required	DPWLG website, local media (including BBC Radio Essex)	Senior Exec (in accordance with EMP)	Must be invoked via LG Port Communications Manager
LGLP Tenant / occupier communication	SMS (also email and phone)	Incident Controller	
DPWLG Staff only communication	Email	Incident Controller via LG Port H&S Manager or Harbourmaster	Manage via DPWLG Communications Manager if possible
Blue Light Services	Phone / verbal	Incident Controller or Initial Responder	Additional actions required in EMP

4.3. Incident Response Structure

The DP World Emergency Management System (EMP Ref A) comprises three planning levels; contractors and Tenants of LGLP constitute a fourth level. This is shown in the diagram below.



Further details of the LGLP IMT are given below.

4.3.1. LGLP IMT

The LGLP IMT is established to coordinate the response across LGLP. Specifically, they:

- confirm appropriate strategies and convert into plans;
- coordinate communications with Tenants and LG Site;
- communicate decisions, actions and plans to Mitie security staff and other operational teams;
- establish measurable objectives and review progress against objectives;
- resolve conflicting requirements between functions for resources;
- liaise with the emergency services and/or local government at the Silver (tactical) level[1]; and
- liaise with key suppliers and operational partners.

It should be noted that Business Recovery measures are not within the scope of the LGLP IMT

[1] The LG Site IMT will take on this role if activated (see paragraph 5.6).

4.3.2. LGLP IMT - Roles

The following roles will generally be required in an incident:

Role	Primary	Alternate	Responsibilities
Incident Controller	Estates Manager	Estates Team	Liaison with LG Site and emergency services
Security	Security Superintendent	Operations Manager Mitie	Initial Responder Initial liaison with Tenants. Incident Marshalling Traffic Coordination First Aid
Environment	Senior Environmental Advisor	Environmental Team	Spillages Flooding
Facilities	FM Manager	Park Contracts Manager	Damage assessment, salvage and recovery
LG Port Liaison	LG Port Shift Manager	LG Port Harbourmaster	Liaison with port staff, contractors, vessel staff, neighbouring sites
Communications	LG Port Comms Team, led by Senior Manager – External Relations UK		Internal and external communication
Health & Safety	Senior H&S Advisor	H&S Advisor	Damage assessment, salvage and recovery
People	Head of People, UK	HR and L&D Manager	Liaison with LGLP staff and families
Insurance	Claims & Insurance Manager	Finance & Compliance Officer	Liaison with Insurers. Monitoring costs incurred.
IT	Head of IT	IT Infrastructure Manager	Damage assessment of IT. Liaison with Port VBS. Communication on Information Board.
Log-Keepers	Available persons; Estates Team, Reception Team, Others		Maintaining an accurate record of information received, decisions taken and actions completed.

4.3.3. Emergency Control Centres

The LGLP IMT will normally meet at one of the following locations:

- Vancouver Meeting Room, No 1 London Gateway; or

- RC Desk/Control Room, Third Floor, Terminal Building LG Port.

If an off-site meeting location is required, the following are possible venues (subject to availability):

- First Intervention Team, The Manorway, Stanford-le-Hope, SS17 9LQ;
- Orsett Hall, Prince Charles Avenue, Orsett, RM16 3HS;
- The Bell Inn, High Rd, Horndon on the Hill, Stanford-le-Hope, SS17 8LD; and
- Premier Inn, High Rd, Fobbing, Stanford-le-Hope SS17 9NR.

In circumstances where it is not practical for the LGLP IMT to meet face-to-face a "Virtual IMT" can be convened via Microsoft TEAMS. MS TEAMS call can be set up via Outlook calendar.

(Note. call leader needed, generally Incident Controller or person initiating TEAMS.)

An Emergency Pack is contained in an LGLP Emergency box located in the Vancouver Meeting Room (key held at LG reception).

4.3.4. Logging

It is essential that an effective log of information received and decisions taken is maintained throughout the incident; a log sheet format is attached at Annex D. The log must start from the moment the Initial Responder is involved.

4.4. Welfare

4.4.1. Accounting for Tenants in LGLC

In the event of an incident at LGLC, tenants are responsible for sweeping their area of the building and directing staff and visitors to the muster point (see Ref E). LGLP Estates Staff (during normal working hours) or LGLP Security Staff (outside of normal working hours) will coordinate with tenants at the muster point to account for all personnel and liaise with the Emergency Services. Further guidance for this Liaison Officer role is contained in Ref E.

4.4.2. Shelter

Following an evacuation of LGLC:

- If No 1 London Gateway is safe to enter, tenants will normally be guided to the canteen on the ground floor for shelter and refreshments; or
- If No 1 London Gateway is not safe to enter, consider the use of Orsett Hall or The Crooked Billett in Stanford-le-Hope.

4.4.3. Practical Assistance

In the event of an evacuation of No1 London Gateway, it is likely staff may be unable to access personal cars in the car park. The general expectation is that LGLP staff will make their own arrangements to get home after an evacuation; reasonable expenses (e.g. taxi, hotels) will be reimbursed on production of receipts in line with normal policies. If individual staff members have particular difficulties, then the LGLP IMT will assist.

4.5. Pre-Planned Responses

Pre-planned responses have been developed, supported by appropriate training and exercising, for the following forms of disruption. The detailed procedures are contained in Annexes or as References to this plan. Note also that combinations for all gates on LGLP are contained at Annex H.

4.5.1. Traffic Control (Annex E)

There are two separate procedures for dealing with road traffic accidents: (a) one for an incident in a Tenant-controlled area; and (b) one for an incident in a DPWLG-controlled area.

In any situations requiring traffic control, LGLP Security staff take the lead in directing traffic and liaising with the emergency services when their help is required. If additional resource is required:

- Staff from LG Port can assist with deploying signage;
- Landside Marshalls may be redeployed from LG Port (subject to Port requirements); and
- Requests can be made to Mitie Security or alternative security company for additional staff if required.

In the event of serious congestion, the IMT may instruct LGLP Security staff to open Gate 2 for the purposes of:

- Emergency Service access;
- Getting vehicles off the Park; and/or
- Improving access to LGLC.

In extreme cases, the IMT may instruct LGLP Security staff to open Gate 1 for Emergency Service access only.

4.5.2. Casualties (Annex E)

There are three separate procedures: (a) one for an incident in a Tenant-controlled area; (b) one for an incident in a principal contractor-controlled area; and (c) one for an incident in a DPWLG-controlled area. Tenants and principal contractors are responsible for providing first aid in the areas that they control and LGLP Security Staff provide first aid in DPWLG-controlled areas. If the Emergency Services are required, LGLP Security Staff will meet them and escort to the scene.

4.5.3. Spillages (Annex E and Annex I)

A number of measures are in place to prevent contamination from spillages entering the Thames. Principally these consist of:

- Stopping pumping;
- LGLP Security Staff turning off culverts (only available on certain roads); and
- LGLP Security Staff placing stop boards in the swales.

There is also a specific procedure for dealing with a spillage in the lorry park. If Security Staff are unavailable, the LG Port Environment Team can all carry out these tasks; in addition, some A to Z and UNIQUE staff have been trained to assist. In the event of a serious incident, specialist support is available from Adler and Allen.

4.5.4. Operation Stack

LG Port has plans in place (Ref D) for both:

- Minor Op Stack (vehicles still able to enter the port); and
- Major Op Stack (vehicles still able to enter port but under closer control).

Minor Op Stack involves vehicles queuing along Ocean Boulevard up to the junction with Atlantic Avenue. Major Op Stack involves vehicles queuing on Ocean Boulevard, Atlantic Avenue, North Sea Crossing and Baltic Avenue.

4.5.5. Severe Weather (Annex F)

The potential impacts of severe weather on LGLP include:

- loss of access to (parts of) LGLP;
- physical damage to parts of LGLP (or No 1 London Gateway);
- shortage of LGLP staff (or key contractors, e.g. Mitie Security Limited);
- loss of utilities to LGLP (or No1 London Gateway); and
- disruption to one or more Tenants.

Annex F provides guidance on useful sources of information about weather, flooding, transport disruption and school closures; and summarises DPWLG's absence policy in the context of severe weather.

4.5.6. Flooding (Ref C)

The DP World London Gateway Flood Action Plan details the preparations required to reduce flood risk on LGLP, actions on flooding and procedures for clean-up. The site itself is assessed at being at a low risk of flooding and, even if some areas were flooded, it should be possible to shelter on site (e.g. at No 1 London Gateway).

5. Incident Communications

5.1. Detecting an Incident and Alerting Response Personnel

LGLP receives alerts from the following sources:

Type of Incident	Source	Method
Criminal activity	Varied; observed and reported	CCTV to Control Room Phone call to Control Room from Tenant or third party
Riot, civil disturbance, public disorder	Police Port	CCTV to Control Room Phone call to Control Room from Police, Port, Tenant or third party Local media
Severe weather	Met Office Weather Quest	Email to Estates Team Alerts via LG Port to Estates Team
Flooding	Environment Agency	Email to Environment & Estates Team Local media
Disruption to transport	Highways Agency Essex County Council AA	Alerts via LG Port to Estates Team ECC/AA Websites
Incident at Shell storage depot	Shell	Email- ShellHavenSecurityGate1@shell.com Fay.Lashbrook@shell.com
Road traffic incident	Observed or reported	CCTV to Control Room Phone call to Control Room from Tenant or third party
Personal injury	Observed or reported	CCTV to Control Room Phone call to Control Room from Tenant or third party
Environmental incident	Observed or reported	CCTV to Control Room Phone call to Control Room from Tenant or third party
Op Stack	Port	Notification via Op Stack distribution list.

Response teams are alerted by landline or mobile phone.

5.2. Incident Monitoring

During an incident, individual functions/departments are responsible for assisting, supporting, monitoring and reporting the following information to the LGLP IMT (specific reporting deadlines will be established during the first LGLP IMT meeting).

Function/Department	Information	Comments
Estates	Tenant information records.	Limited remote access is available via OneDrive login by personnel
Security	Blue light co-ordination, LG Port coordination.	Via Control Room / (LG Port Harbourmaster if appropriate)
Facilities	Technical information, O&M manuals, specialist contractor support (e.g. drainage, tankering).	Limited remote access to files is available via OneDrive login. Certain systems have remote login capability.
Environment	Technical and regulatory records, regulator contacts.	Environment Agency must be informed under certain scenarios.
LG Port Harbourmaster	Potential impact on LG Port.	Security Contract Account Manager.
LG Port H&S Manager	EMP compliance and actions.	Escalation, Tier 4,5 liaison.
Communications	Monitoring external media, social media, direct inquiries.	Key monitoring role; see paragraph 5.4.2.

5.3. Internal Communications

5.3.1. Security Team

The Security Team communicate with each other via VHF radio. The IMT have a portable VHF base station and 02 Mobile in order to communicate with the Security Team. Radio Groups are available in Annex J.

5.3.2. Staff

The primary means of communicating with LGLP staff in an emergency will be by phone/SMS/WhatsApp. General information for staff may also be communicated via:

- the DP World Global email system (hosted in London); and
- London Gateway staff intranet website ("QUAY Net").

Contact details for next of kin are held by the DPWLG People Team. **Note. it is the responsibility of the emergency services to contact next of kin in the event of death or serious injury; LGLP staff should not get involved.**

5.4. External Communication

The DPWLG website (www.londongateway.com) will be updated regularly (the LG Port Communications Team can access the content management system remotely via their laptops).

5.4.1. Tenants

The primary method of communicating with Tenants in the early stages of an incident is via SMS. Contact details for all Tenants are also contained at Annex G; these include "Emergency" "HR" and "Communications" contacts (where available).

In the event of a major incident at LGLC, the LGLP IMT will also deploy a Liaison Officer (see above) to LGLC to communicate face-to-face with Tenants. Further guidance for this role is contained in Ref E.

5.4.2. Incoming Calls

The number 01375 648609 is reserved for use as an "Incident Line". Calls to this incident line will be routed to suitable LGLP staff. In the event of an incident:

- The recorded message on the main reception number (01375 648300) will be updated, advising that an incident is in progress and offering callers an option to be transferred to the "Incident Line"; and
- The "Incident Line" number will be published on the DPWLG website.

5.4.3. Media

All media communication will be coordinated by the LG Port Communications Team, who will escalate the details to our Dubai head office or Regional office in London, and will provide a Holding Statement to the IMT. The holding statement will be used for all internal and external communication purposes, and can additionally be recorded on the Park Emergency Phone. The holding statement will contain an outline of the incident that has occurred, any other relevant details at the time, and that further details will be issued on the DPW website.

The Communications Team are supported by New Century Media: contact numbers for key individuals are at Annex C. Staff should be reminded to direct all enquiries to the DPW website.

ONLY THE COMMUNICATIONS TEAM are authorised to make statements on behalf of LGLP. Staff are only authorised to use statements that have been issued by the Communications Team.

5.4.4. Operational Partners

A list of key partners' contact details is provided at Annex C.

5.5. Means of Communication

5.5.1. Phone Lines

Landline phones are dependent on No1 London Gateway being fully functional. If this building has been affected by an incident, then only mobile network access can be utilised.

5.5.2. Email

The DP World Global email system is hosted off-site (in London), so should not be affected by any local disruption at LGLP/LG Port. Most LGLP staff can access DP World email by phone.

5.5.3. Access to IT Systems

LGLP staff have remote access to data on OneDrive (and, in some cases, Norton Rose Fulbright LLP Data Room for contract documents).

5.6. Communication with Emergency Responders

The Bronze/Operational interface with the emergency services is via face-to-face communication with the Security Team Leaders. If liaison is required at the Tactical/Silver level, then the LGLP Incident Controller (or Incident Commander, if applicable) will communicate either face-to-face or by phone. In addition, the LG Port Communications Team will liaise directly with emergency services media teams as required.

In the event of an incident involving London Gateway Port, the Port's Incident Management procedure would be expected to take precedence over the LGLP IMT.

6. Stand-Down

6.1. Procedure for Stand-Down

The LGLP IMT will formally close the incident (in conjunction with the LG Site IMT, if applicable) when it judges that normal operations can be resumed. This will be communicated to all LGLP staff, Tenants and key stakeholders.

6.2. Post-Incident Review

Once normal operations have been resumed, or LGLP is close to this situation, it is important not to lose the opportunity for learning from the experience. A forum to discuss these matters with a brief to identify ways of improving incident management arrangements should be established. **Note that in the case of a "4" or "5" incident, there is a specific corporate investigation process detailed in Ref B.**

Task	Comments	Target Timescale
Appoint inquiry leader	Ideally a director who was not personally involved in managing the incident, or an external facilitator.	24 hours
Set terms of reference	Set out the exact remit and aim of the inquiry.	48 hours
Gather information from those involved	Set a specific date for the submission of feedback. Include external stakeholders.	5 working days
Assess impact on staff	May wish to use the UK HSE stress survey tool, or DPWLG internal welfare resources (Occupational Health nurse).	5 working days
Review data and produce post-incident report	Identify nature and cause of incident. Assess adequacy of management response to incident. Assess adequacy of incident management arrangements in preparing employees for incident. Identify improvements to be made to the LGLP Incident Management Plan. **Circulate key findings throughout DP World and share with operational partners as appropriate.**	No later than 10 working days [Note DPW requirements for post-incident response]
Update the LGLP Incident Management Plan as required	Inquiry Leader to track agreed actions through to completion.	20 working days post event

6.3. Plan Maintenance, Training and Exercising

Frequency	Task	Responsibility
Monthly	Update LGLP staff contact details	SHES team
Quarterly	Update contact details for tenants (Annex G)	Estates Team
	Update contact details for support partners (Annex C)	Heads of Departments
Annual	Exercise of Flood Action Plan	Environment Manager
	Exercise of plans contained in Annex E	Plan Owners
	Desktop exercises for LGLP IMT	Head of Estates
	Review of LGLP Incident Management Plan	Head of Estates
	Security exercise for LGLP IMT	Security Superintendent
Ongoing	Training of new staff Staff re-familiarisation	Estates team

7. Annexures

A. Plan of London Gateway Logistics Park

B. Invocation Flow Chart

C. LGLP IMT Checklist

D. LGLP Log Sheet

E. LGLP Emergency Incident Guidance

F. LGLP Severe Weather Plan

G. Tenants' Contacts List

H. Gate Combinations

I. Instructions for Closing Pump Station

J. Radio Groups

8. References

A. DP World London Gateway Tier 1 Site Umbrella Emergency Response, Management and Business Recovery Plan (June 2012)

B. DP World Serious Incident Protocol (April 2018)

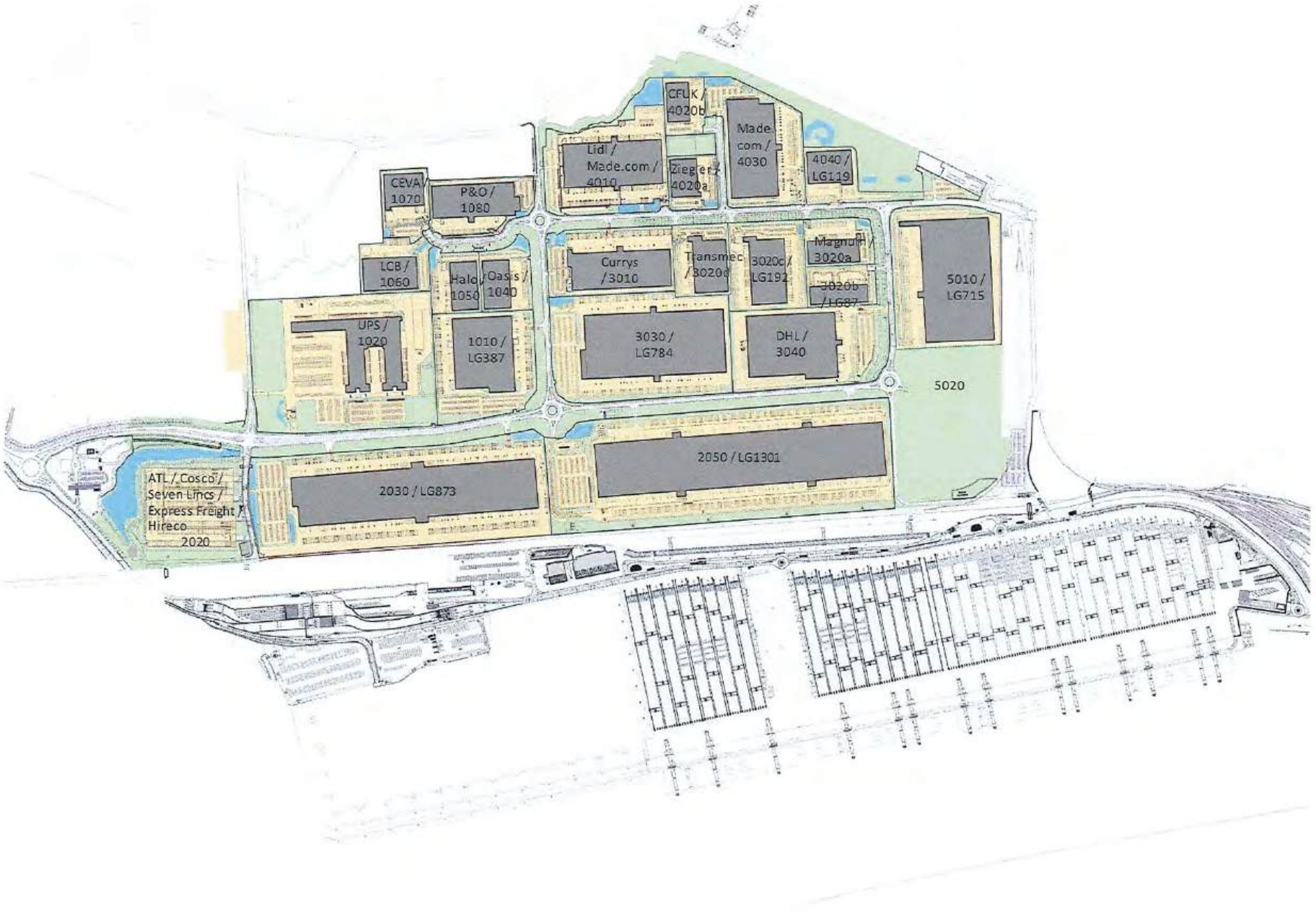
C. DP World London Gateway Flood Action Plan (March 2018)

D. DP World London Gateway Operation Stack (January 2022)

E. DP World London Gateway Logistics Centre Incident Management Plan (March 2022)

F. DP World London Gateway Logistics Park Flood Warning and Emergency Plan (July 2022)

Annex A - Plan of London Gateway Logistics Park


CFUK / 4020b
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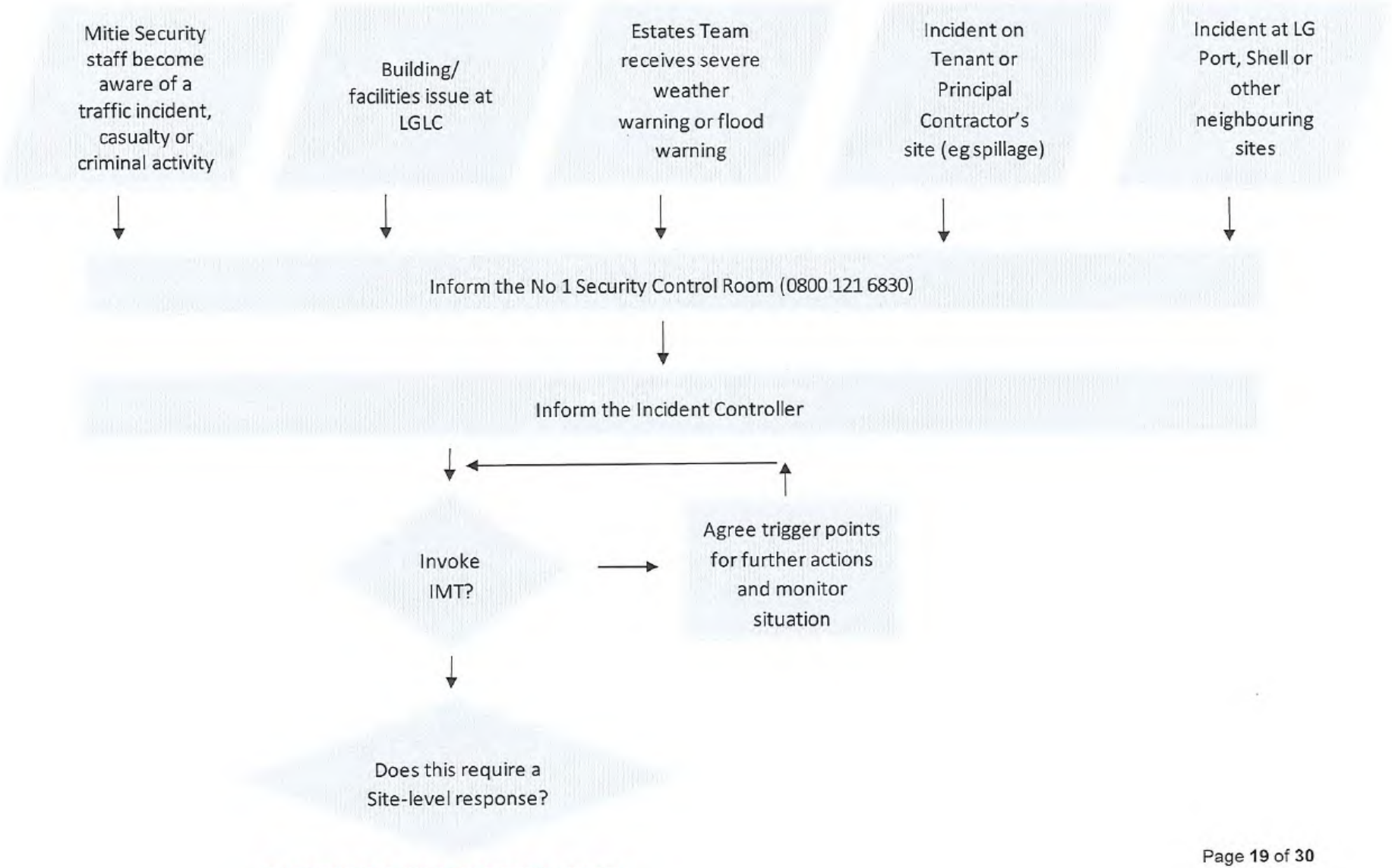
Zieger / 4020a
Made.com / 4030
4040 / LG119
CEVA 1070
P&O / 1080
LCB / 1060
Halo / 1050
Oasis / 1040
Currys / 3010
Transmec / 3020d
3020c / LG192
Magnum / 3020a
3020b / LG87
5010 / LG715
UPS / 1020
1010 / LG387
3030 / LG784
DHL / 3040
5020
ATL / Cosco / Seven Lincs / Express Freight / Hireco 2020
2030 / LG873
2050 / LG1301

Annex B – LGLP Invocation Flow Chart



Annex C – LGLP IMT Checklist

LGLP IMT Invocation

IMT Locations

- Santos Meeting Room, No1 London Gateway
- RC Desk/Control Room, Third Floor,Terminal Building LG Port
- First Intervention Team
- Orsett Hall
- Bell Inn, Horndon on the Hill
- Premier Inn, Fobbing

All IMT documentation is stored in the Santos Meeting Room

IMT Mobilisation

- Have all LGLP IMT members been notified? ☐
- Do we need anybody else (external or internal)? ☐
- Has the IMT room been established? ☐
- Have conference call lines been opened? ☐
- Has a log been commenced? ☐
- Agree time for handover and inform next IMT shift ☐

Immediate Actions

- Have LGLP staff and visitors been accounted for? ☐
- Are there any casualties? ☐
- Are there any urgent staff welfare issues? ☐
- Has there been an initial communication to staff? ☐
- Have we established communication with all Tenants? ☐
- Do Port/Site or any other stakeholders need to be informed at this stage? ☐
- Is a media statement required? ☐
- Invoke incident message on main phone line ☐

Invocation of Plans

- Procedures for dealing with RTAs ☐
- Procedures for dealing with casualties ☐
- Procedures for dealing with spillages ☐
- Evacuation/loss of utilities to LGLP-managed building ☐
- Severe weather plan ☐
- Flood action plan ☐

IMT Meetings

Assess the Incident

- How bad could this get?
- What do we know?
- What do we need to know?
- Who are our key stakeholders?
- What constraints are we under?

Implement Response

- Share information
- Identify issues
- Generate options
- Agree immediate actions
- Agree trigger points for further actions
- Communicate with stakeholders

LGLP

IMT AIDE-MEMOIRE

V.2 (Draft v.10)

IMT Contact Numbers				
Role	Name	Work Mobile	Pers Mobile	Home
Incident Controller	Sonia Peirson Estates Team	[redacted]		
Security	Clara Hurrell-Smith Wayne Callaghan			
Environment	Tom Coulter Environmental Team			
Facilities	Jordan Shea			
Port Liaison	Port Shift Manager Paul Brooks			
Communications	Dan Bridgett Alexander Walker Tony Lodge			
Health & Safety	Lee Haley Spencer McKenzie			
Insurance	Daw n Clee Jeff Bell			
IT	Nafi Yetkin			
Log-Keepers				

Key Stakeholder Contact Numbers				
Organisation	Name/Role	Office	Mobile	Comments
Shell	Terminal Supervisor Control Room	0207 934 4373 01375 644979	[redacted]	
PLA	General Duty Officer	01474 560311 01474 562215		
Thurrock Council		01375 391605		
Environment Agency		0800 807060		
Adler & Allen		0800 592827		Membership No: C000001430
First Intervention Team				
Orsett Hall		01375 891402		
Bell Inn		01375 642463		
Premier Inn		0333 777 3685		

Data Protection

Personal telephones numbers have been supplied in confidence, and are to be used for purposes of Incident Management only

LGLP

IMT AIDE MEMOIRE

V.2 (Draft v.10)

Annex D – LGLP Log Sheet

Name: **Contact No:** **Page:** **of**

Date / Time	From	Information Received	Action / Decision (Assigned to whom, by when)	Confirmation of Completion (When, by whom)

This log is to be used to record all messages received and sent during an incident. **Once completed, this form must not be destroyed, and should be forwarded to the Estates Manager.**

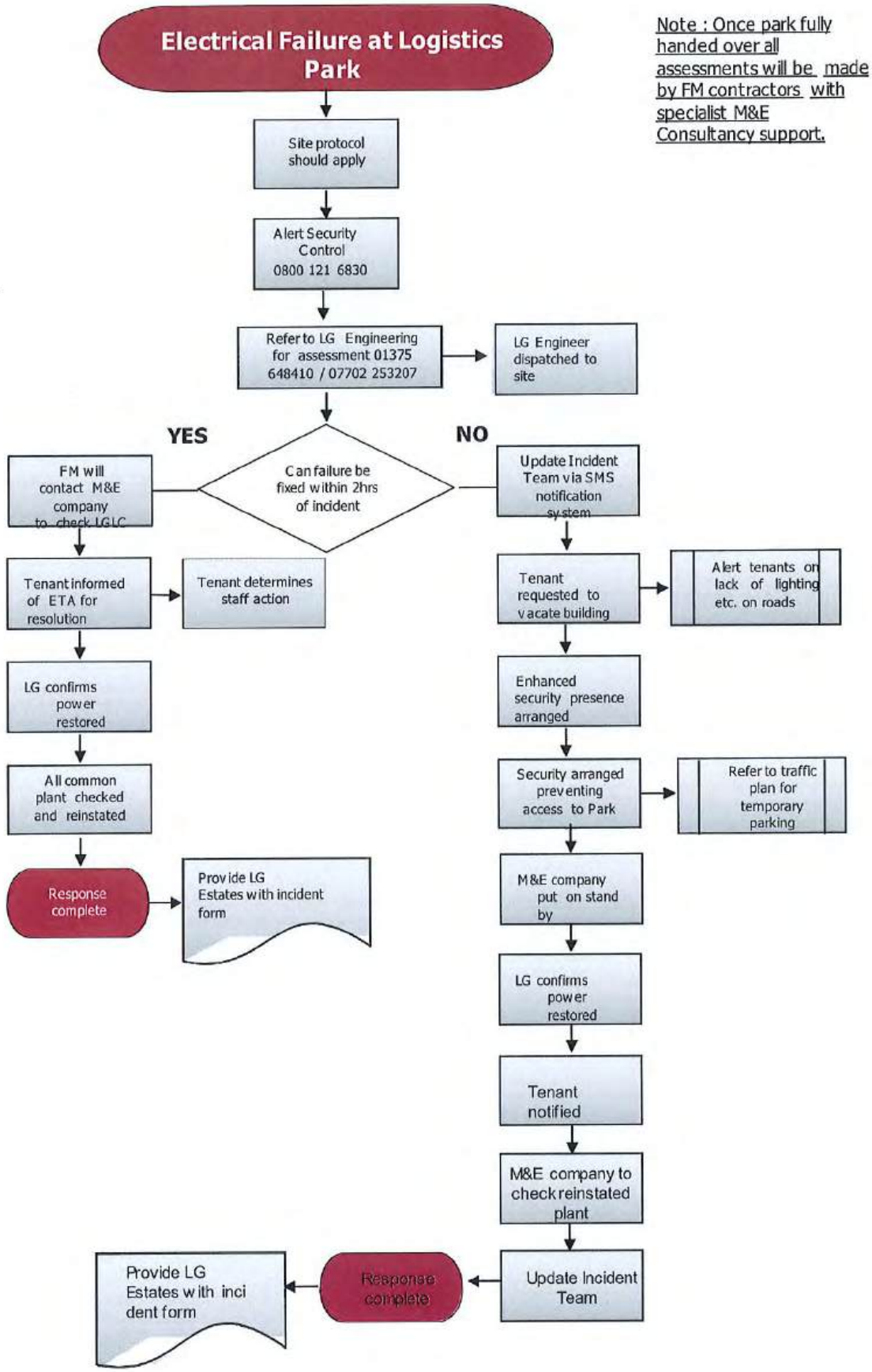
Annex E – LGLP Emergency Incident Guidance

DP WORLD
London Gateway

EMERGENCY INCIDENT GUIDANCE

London Gateway Logistics Park
Stanford-le-Hope
Essex
SS17 9DY

CONTENTS



Note : Once park fully handed over all assessments will be made by FM contractors with specialist M&E Consultancy support.

Spillage within the Park

Actions taken by:
- No1 Control Room
- LGLP Security staff
- Incident Controller/IMT
- Estates/FM team

Alert Security Control Room **0800 121 6830**

Security staff dispatched to site

Confirm nature of spillage and refer to hazchem guidance to establish risk. Do not tackle a spill until the material has been identified and do not expose yourself to danger in the vicinity of the spill.

Does the spillage pose a risk to life: fire, airborne contaminants, explosion? **If not known follow "Yes" arrow**

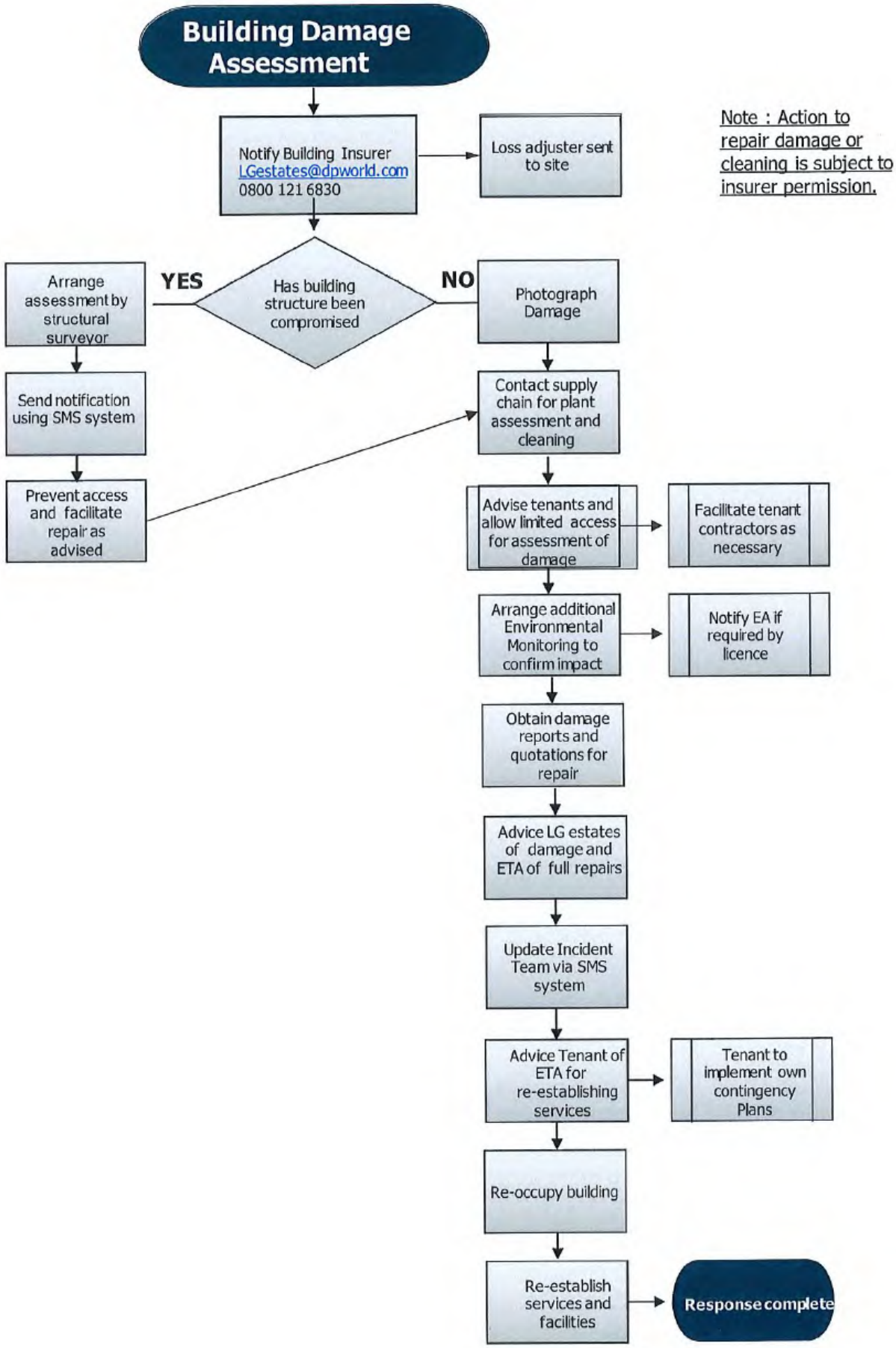
YES

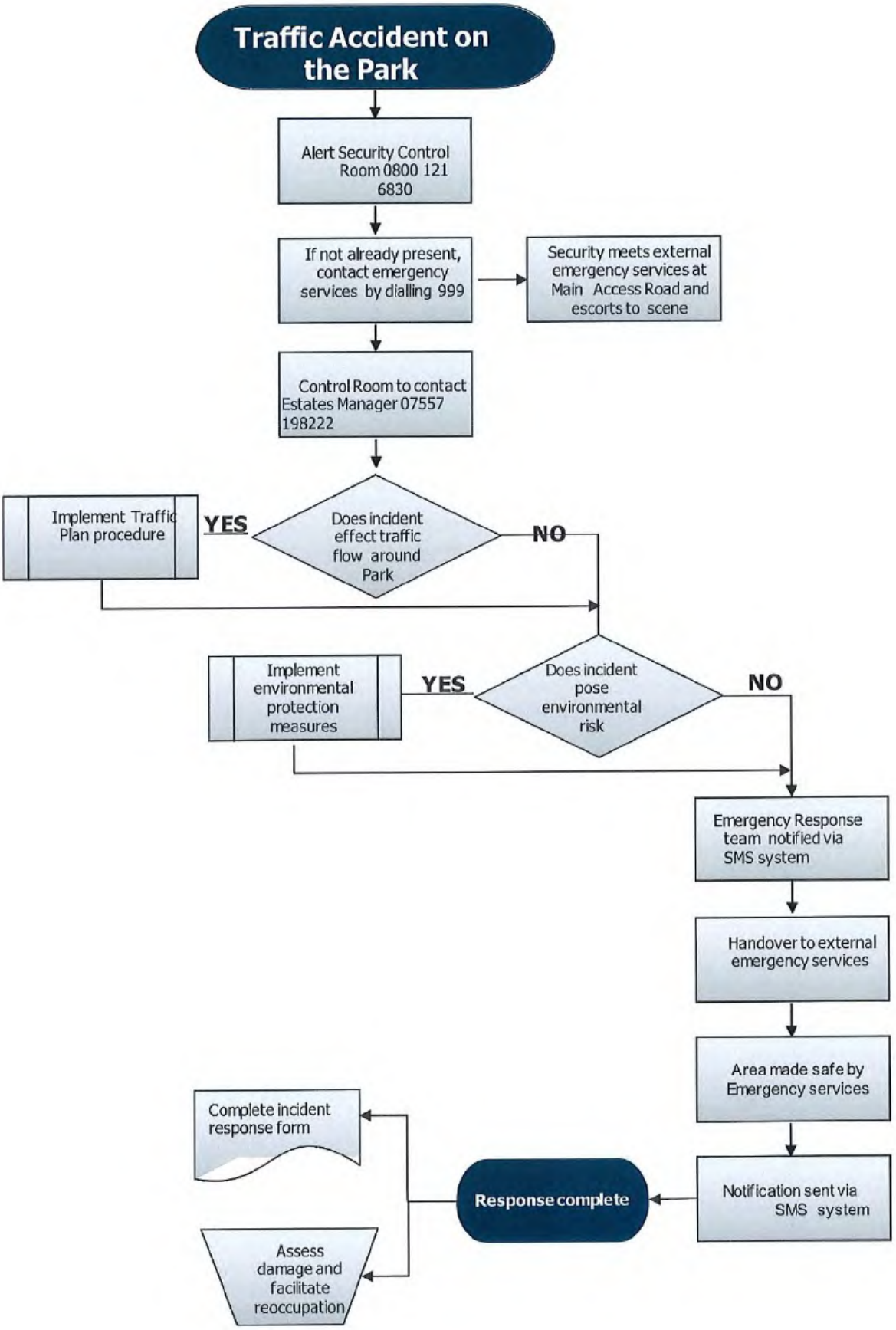
- Contact Emergency Services
  - Meet Emergency Services at the top of the Access Road
  - Establish size of exclusion zone and begin evacuation
  - Implement traffic management plan
  - Hand control to Emergency Services
  - Emergency Services clean up spill
  - Take over control from Emergency Services
- Alert member of Estates/FM team to prevent pollution
  - Contact Alder and Allen on **0800 592827** (response time 4 hours) Put on standby for clean up
  - Implement procedures to protect swales and drainage system (see Annex I) **if safe to do so**
- Alert Incident Controller who decides whether to invoke IMT
  - Incident Controller/IMT communicates instructions to LGLP occupants
  - Clean up spill

NO

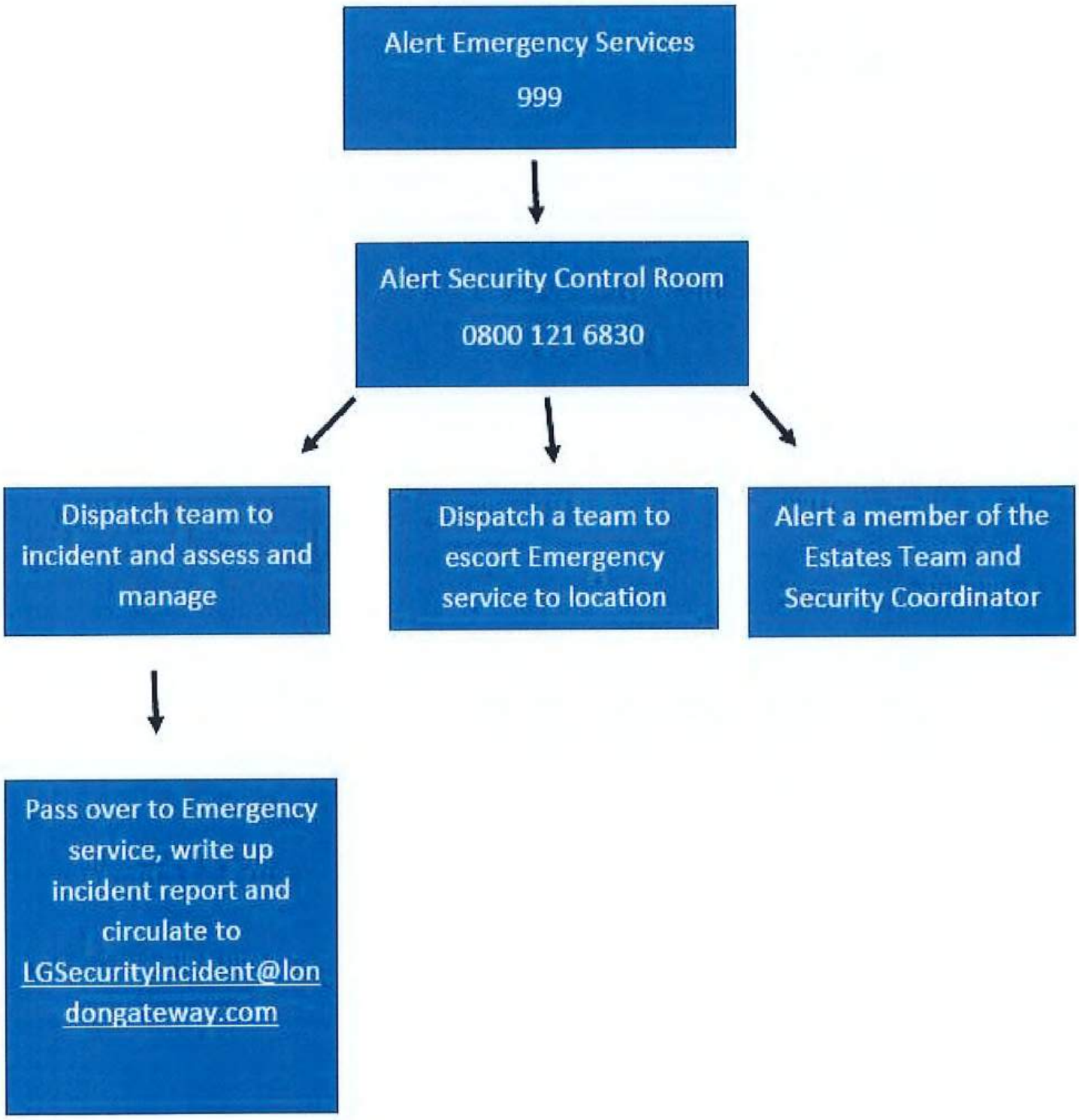
- Alert member of Estates/FM team to manage spill
  - Implement procedures to protect swales and drainage system (see Annex I)
  - Can the incident be managed by the on-site teams?
    - **YES** → Clean up spill
    - **NO**
      - Contain spill as much as possible
      - Contact Alder and Allen on **0800 592827** (response time 4 hours)
      - Adler and Allen clean up spill
- Implement traffic management plan

Write up incident report and circulate to **LGSecurityIncident@londongateway.com**

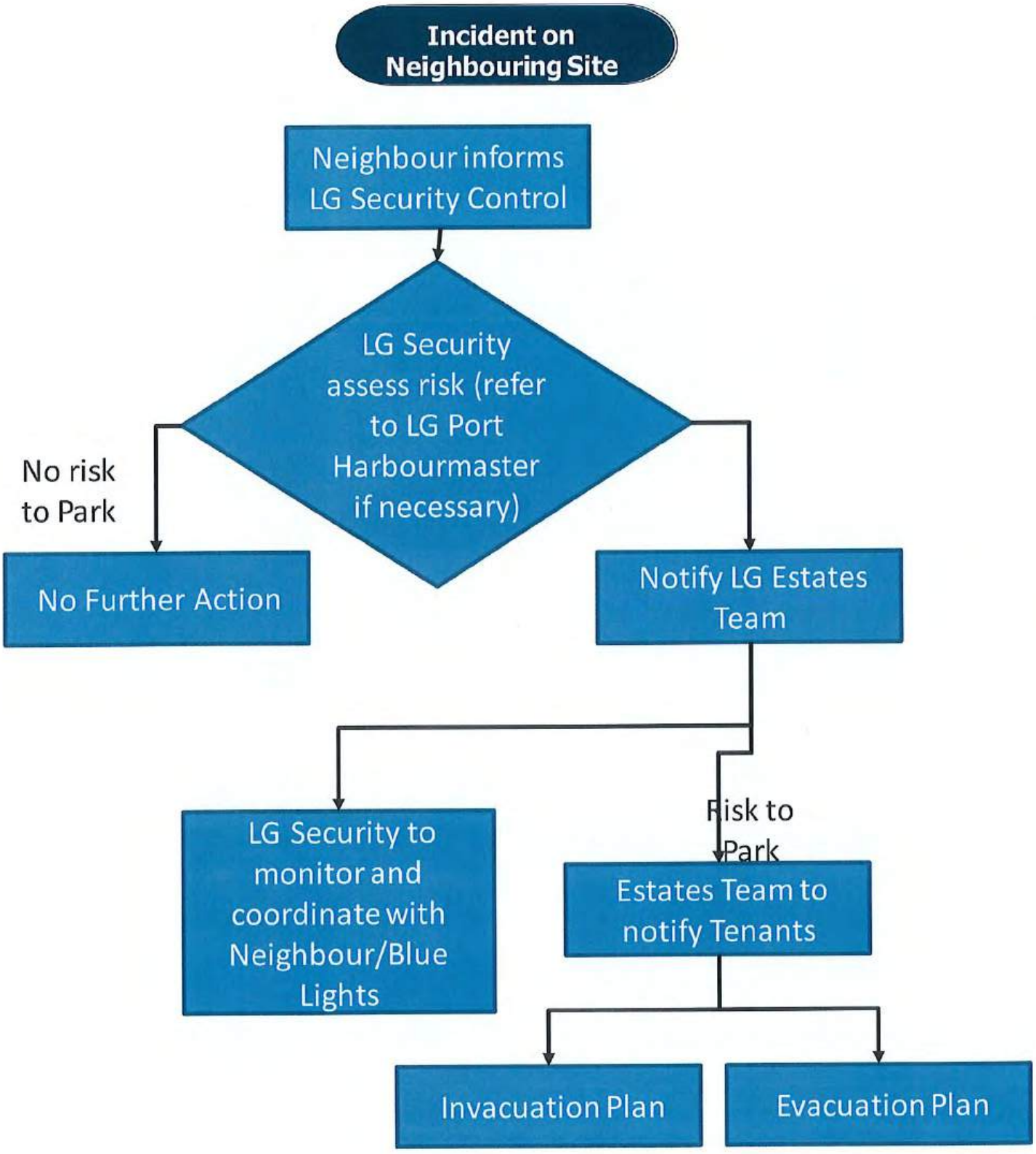

Building Damage Assessment
Notify Building Insurer
LGestates@dpworld.com
0800 121 6830
Loss adjuster sent to site
Note : Action to repair damage or cleaning is subject to insurer permission.
Has building structure been compromised
YES
NO
Arrange assessment by structural surveyor
Send notification using SMS system
Prevent access and facilitate repair as advised
Photograph Damage
Contact supply chain for plant assessment and cleaning
Advise tenants and allow limited access for assessment of damage
Facilitate tenant contractors as necessary
Arrange additional Environmental Monitoring to confirm impact
Notify EA if required by licence
Obtain damage reports and quotations for repair
Advice LG estates of damage and ETA of full repairs
Update Incident Team via SMS system
Advice Tenant of ETA for re-establishing services
Tenant to implement own contingency Plans
Re-occupy building
Re-establish services and facilities
Response complete

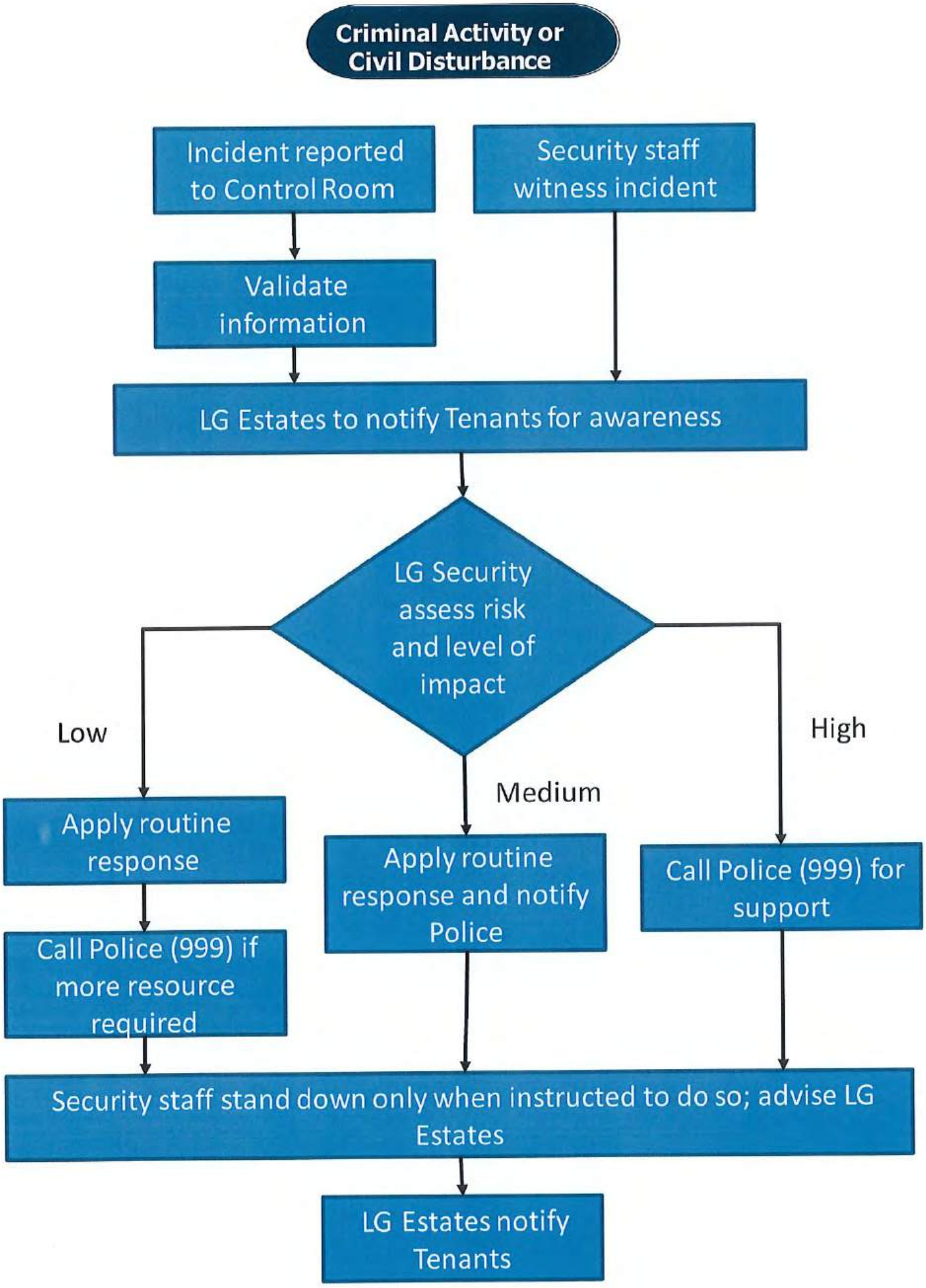

Traffic Accident on the Park
Alert Security Control Room 0800 121 6830
If not already present, contact emergency services by dialling 999
Security meets external emergency services at Main Access Road and escorts to scene
Control Room to contact Estates Manager 07557 198222
Does incident effect traffic flow around Park
YES
Implement Traffic Plan procedure
NO
Does incident pose environmental risk
YES
Implement environmental protection measures
NO
Emergency Response team notified via SMS system
Handover to external emergency services
Area made safe by Emergency services
Notification sent via SMS system
Response complete
Complete incident response form
Assess damage and facilitate reoccupation

Casualty on the Park



No external communications to be issued other than by LG Communications Manager


Incident on Neighbouring Site
Neighbour informs LG Security Control
LG Security assess risk (refer to LG Port Harbourmaster if necessary)
No risk to Park
No Further Action
Notify LG Estates Team
LG Security to monitor and coordinate with Neighbour/Blue Lights
Risk to Park
Estates Team to notify Tenants
Invacuation Plan
Evacuation Plan


Criminal Activity or Civil Disturbance
Incident reported to Control Room
Security staff witness incident
Validate information
LG Estates to notify Tenants for awareness
LG Security assess risk and level of impact
Low
Medium
High
Apply routine response
Call Police (999) if more resource required
Apply routine response and notify Police
Call Police (999) for support
Security staff stand down only when instructed to do so; advise LG Estates
LG Estates notify Tenants

Annex F – Severe Weather

Warning Trigger	Trigger Stage	Procedures
Environment Agency Flood Alert or Met Office Yellow Warning	Green Alert	Review Flood procedures
Environment Agency Flood Alert or Met Office Yellow Warning	Amber Alert	State of readiness. Move vehicles, important items, hazardous materials tohigher ground. Secure large loose items which may float and cause damage.
Environment Agency Flood Alert or Met Office Yellow Warning	Red Alert	Call 999 if in immediate danger and follow emergency services advice, evacuate if told to do so. Avoid driving or walking through flood water. IMT to decide if Park to be closed.

1. Impact of Severe Weather

The potential impacts of severe weather on LGLP include:

- loss of access to (parts of) LGLP;
- physical damage to parts of LGLP (or No 1 London Gateway);
- injury to LGLP staff, tenants or contractors from flying debris;
- Knock-on effects from closure of LG port;
- shortage of LGLP staff (or key contractors, e.g. Mitie);
- loss of utilities to LGLP (or No1 London Gateway); and
- disruption to one or more Tenants.

2. Information

2.1. Weather

LGLP receives weather warnings from the *National Severe Weather Warning Service* via email to the Estates Team. These warnings cover:

- rain;
- thunderstorms;
- wind;
- snow;

- lightning;
- ice; and
- fog.

Weather warnings are issued with an impact grading of "Very Low", "Low", "Medium" or "High"; details of the impact levels can be found at https://www.metoffice.gov.uk/guide/weather/severe-weather-advice.

LGLP also receives weather alerts from WeatherQuest via LG Port to the Estates Team.

2.2. Flooding

LGLP receives flood warnings from the Environment Agency via email to the Estates Team. Warnings are issued at three levels as follows:

- Severe Flood Warning: severe flooding - danger to life;
- Flood Warning: flooding is expected - immediate action required; and
- Flood Alert: flooding is possible - be prepared.

Information on current flood warnings is available from https://flood-warning-information.service.gov.uk/warnings.

Severe Flood Warning:

- When severe flood warning issued, IMT to ensure Park including construction work, are closed and no access to the Park.
- Operate any emergency electrical shut off switches that terminate electricity supply.
- All non-critical personnel should evacuate the Park or numbers reduced as much as possible.
- IMT will decide if Park to be closed.
- If Park closed, should not reopen until flood warning has been lifted or agreed with the emergency team.
- In no circumstances should a park user enter flood water in a vehicle or on foot.
- Evacuees should not enter floodwater unless Emergency Services are present as part of an assisted/supervised evacuation.
- Ensure all staff have evacuated the site and arrived at a safe place of refuge.

Safe Egress routes have been identified as the Port Access Road or Gate 1 or 2 to the Manorway.

2.3. Transport Disruption

The following websites should be monitored for details of transport disruption:

- The AA - www.theaa.com/traffic-news/;
- Essex County Council - www.essexhighways.org/interactive-maps-and-live-travel-information.aspx; and
- Heart Radio - www.heart.co.uk/essex/news/traffic-travel/.

2.4. School Closures

Information on local school closures is available at the following website: www.essex.gov.uk/Education-Schools/Schools/Dates/Pages/Emergency-School-Closures.aspx.

3. Incident Response

3.1 Pre-Incident

If LGLP receives advance warning of a weather incident (see para 2 above), the Estates Team will inform all tenants and contractors of the expected nature of the disruption. In particular, the Estates team will discuss with contractors if any work should be halted for a period. Tenants and contractors will also be advised to make appropriate preparations such as:

- Implementing local flood defences; and/or
- Securing bins, pallets and other loose items.

The LGLP IMT will make a judgement whether LGLP staff should come on site or work from home.

3.2 During Incident

The LGLP IMT will continue to monitor the situation and will advise tenants/contractors of any deterioration. Actions may include:

- Reducing the number of LGLP staff on site;
- Advising contractors to halt outdoors work;

Ref C details the specific steps to be taken in the event of flooding. Annex E details responses to the following specific issues:

- Electrical failure;
- Building damage;
- Traffic accident; and
- Casualty.

3.3 Post-Incident

Once it is safe to do so, the LGLP Estates Team, assisted by the Security Team, will check for:

- Damage to buildings (including sub-stations and bus shelters);
- Positioning of lifebuoys;
- Contents of spill bins; and
- Litter/debris.

4. Absence Policy

If severe weather conditions make it difficult or dangerous to attend work, staff should phone their line manager by 0730 to make alternative arrangements. In many cases, it may be possible for people to do some work at home but, in some cases, managers may ask staff members to take annual leave or to make the time up when the severe weather has passed.

REPORT

DP World London Gateway Park Estate

Flood Warning and Emergency Plan Park Estate: Non-Technical Summary

Client: London Gateway Port Ltd.

Reference: AEA667-RHD-ZZ-XX-RP-Z-2021

Status: S1/P03

Date: 21 July 2022

Royal HaskoningDHV
Enhancing Society Together

Royal HaskoningDHV

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Document title: DP World London Gateway Park Estate

Reference: AEA667-RHD-ZZ-XX-RP-Z-2021
Status: P03/S1
Date: 21 July 2022
Project name: DP World
Project number: AEA6671
Author(s): Oliver Harvey

Drafted by:	Oliver Harvey	
Checked by:	Debra Griffin	
Date:	18/07/2022	
Approved by:	Steven Brown	Christine D'Arcy
Date:	21/07/2022	21/10/2022

Classification
Open

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Table of Contents

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1 BACKGROUND

1.1 Purpose of this report

This Flood Warning and Emergency Plan (FWEP) Non-Technical Summary has been prepared on behalf of London Gateway Port Ltd. (herein referred to as the Client) to cover the park area of the DP World London Gateway Park site. The site is located on the north bank of the River Thames, Stanford-le-Hope, Essex, SS17 9DY (herein referred to as the Site; **Figure 1**) to inform potential future development and planning.

Figure 1: Global Mapper Aerial Mapping and Redline Boundary

This document is a more concise non-technical summary (NTS) to provide a summary of the key information to be shared with first time site users to inform their own FWEP and risk assessments for their projects at the Site. If any additional information is required, then it can be found in the FWEP main document (ref:AE6671-RHD-ZZ-XX-RP-Z-2011-FWEP) or in the previous Flood Risk Assessment (FRA) which was produced by Royal HaskoningDHV in 2021 (ref: PC2153-RHD-00-ZZ-RP-0002).

When the FWEP is updated, it should be recorded within a document control table setting out the changes that were made, when, and why these changes were needed, it should also clearly set out who has implemented and who has authorised the changes.

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2 SAFE ACCESS / EGRESS ROUTE

2.1 Evacuation Route

This FWEP assess two potential evacuation routes away from the site (**Figure 2 & 3**).

Evacuation route A would be the primary route of evacuation (most direct) by travelling west along Ocean Blvd then northwest along London Gateway Drive towards the existing roundabout to the northwest.

Evacuation Route B could be an alternative route by heading north along Atlantic Avenue or Pacific Avenue then west along The Manorway (A1014).

There are multiple different options to exist the site, for example, the layout of the internal roads means site users could either head north or south and use Evacuation Route A or B with relative ease.

If evacuation is required, then first time site users should be pragmatic about which route is taken depending on if flooding has already occurred.

Figure 2: Potential Evacuation Routes Assessed in this Document. Evacuation Route A is identified in Blue. Evacuation Route B is highlighted in Black.

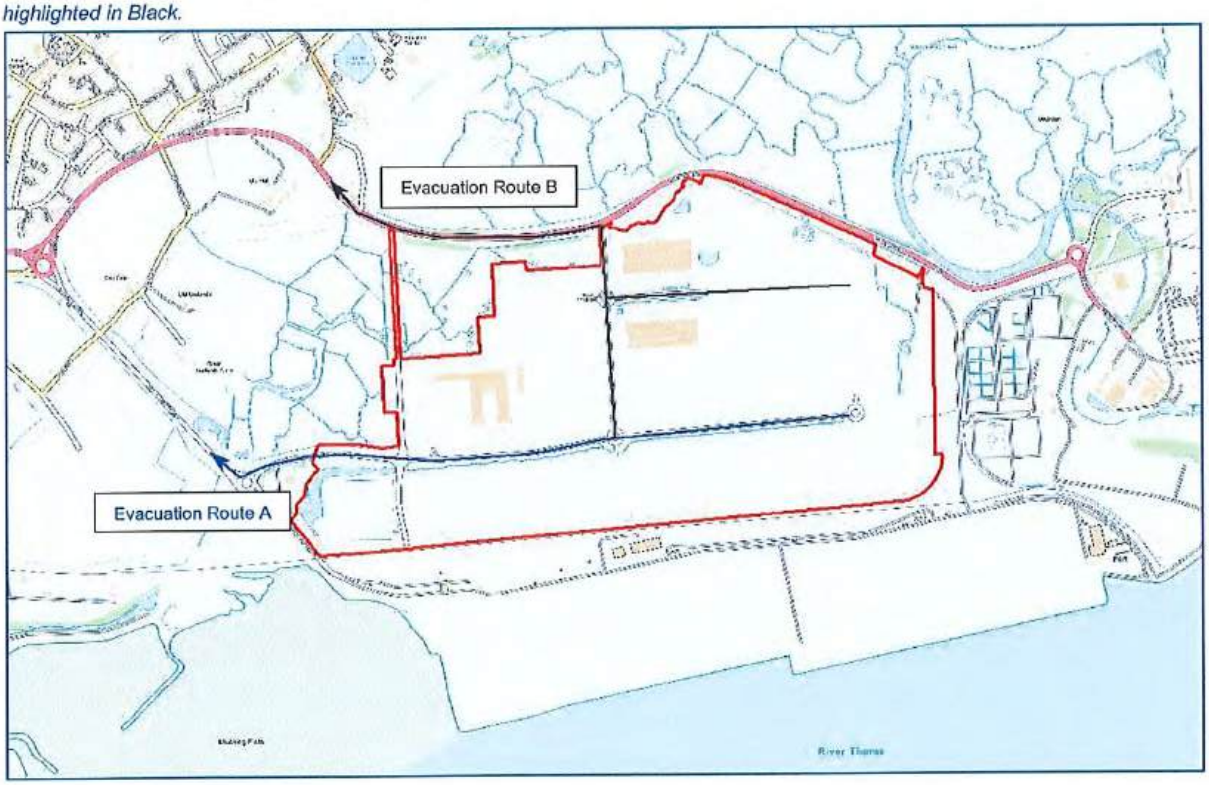

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Figure 3: Potential Evacuation Routes Assessed in this Document. Evacuation Route A is identified in Blue. Evacuation Route B is highlighted in Yellow (coloured yellow for visibility on the background image).

Flooding on the Western side of the Site - If a flood defence breach were to occur to the west of the site, it is likely that flooding of the primary access road would happen quickly. There are also some areas on the western side of the site that could flood relatively quickly, the time to inundation could be 1 to 4 hours. This may not give enough time to evacuate any personnel via this route. In this instance, it is highly recommended that the alternative evacuation route is utilised (Evacuation Route B). The time to inundation along Evacuation Route B is between 12-16 hours or 16-20 hours. This should give sufficient time to leave the site prior to flooding occurring.

Flooding on the Eastern side of the Site - If a breach event were to occur to the east of the site (Thames Haven, Coryton or Canvey Island) then flooding of the primary access road would not occur immediately. Analysis indicates that it may be 16-20 hours after the breach occurred that Evacuation Route A experiences flooding. Evacuation Route B on the other hand could experience inundation between 4-8 hours. As such, if a breach event were to occur at FOB002 or anywhere to the east of the site then evacuation from the either access route (Evacuation Route A or B) on the west or north of the site should be utilised.

Similarly, if a breach event were to occur at FOB003 or FOB004 then flooding of the primary access road may not occur until 20+ hours, giving sufficient time to immediately evacuate the site. Evacuation Route B also may not experience flooding for approximately 16-20 hours after a breach occurred. Therefore, if a breach occurred at FOB003/FOB004 or along the oil refinery area/Fobbing tidal reaches then evacuation from the main access road should be utilised.

It is appreciated that the location of a breach cannot be known until after it has occurred. Tidal flooding is a well understood mechanism of flooding where several hours warning would be given. This combined with the fact that a breach event would likely occur during a large storm event means a breach would be unlikely to occur without several hours of prior warning. For tidal floodplains, the EA aim to provide flood warnings at least 6-12 hours in advance.

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As flood hazard is a combination of the depth and velocity of floodwater, evacuees should not enter floodwater unless Emergency Services are present as part of an assisted / supervised evacuation. Obstacles below the water can present a significant hazard that may not be immediately obvious – collapsed manhole covers, debris, vegetation etc. can trap a person or cause serious injury when submerged. Additionally, shallow fast moving water can knock a physically fit adult over. Flood water may also be contaminated with sewage and/or hydrocarbons.

Surface Water
Overall, the risk of flooding from pluvial sources to most of the Site could be considered very low, although it is acknowledged that there are areas of high risk near the roundabout on the access road and some areas adjacent to the Stanford Boundary Drain (7C).

In summary, no safe access/egress would be achievable from the Park site if flooding has already occurred. However, depending on the location and severity of the breach it may be possible to utilise either Evacuation Route A or B immediately and exit the area before the access route is inundated.

However, it should be emphasised that prior evacuation upon receipt of EA Flood Warnings should be prioritised. In the event a severe flood warning is in place, all non-critical personnel should evacuate the site or numbers should be reduced as much as possible. It will be the responsibility of the Site emergency team to determine whether the Site should be closed. If the decision to close the site has been taken, the site should not reopen until flood warning has been lifted or agreed with the emergency team.

2.2 Evacuation by Vehicle

DEFRA/EA guidance 'Flood Risk to People' FD2321/TR1 states that there are, essentially, three reasons why vehicles cannot be used in floodwaters:

- The presence of water stops the engine functioning;
- The vehicle floats; and
- The vehicle becomes difficult to control.

Cars will stop and/or float in relatively shallow water (as low as 0.5m in depth) while emergency vehicles may survive in slightly deeper waters (up to 1m in depth). However, with suitable modifications (high level air intakes/exhausts), a fire engine remains controllable in depths of 0.5m at up to 5 m/s water flows.

Given the relatively large flood depths and 'Danger for All' hazard rating, it is unlikely that a 'safe' route could be provided. **It should be noted that under no circumstances should site users enter flood water (in a vehicle or on foot).**

Evacuees should not enter floodwater unless Emergency Services are present as part of an assisted / supervised evacuation. Obstacles below the water can present a significant hazard that may not be immediately obvious – collapsed manhole covers, debris, vegetation etc. can trap a person or cause serious injury when submerged. Additionally, shallow fast moving water can knock a physically fit adult over. Flood water may also be contaminated with sewage and/or hydrocarbons.

The danger of driving through floodwaters is not widely publicised in the UK. The Highway Code does not give advice on driving in flood conditions, and there is no easily accessible information on the Environment Agency website. FD2320 and FD2321 guidance documents do not provide any information relating to hazard ratings for cars/vehicles.

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In general, motorists should be aware of the dangers of driving in floodwater and should avoid driving in flooded areas.

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3 FLOOD WARNING AND EMERGENCY PLAN (FWEP)

This FWEP NTS has been developed to ensure that safe access / egress from the Site is possible in the event of a flood when evacuation is required, specifically during a tidal/breach flood event.

3.1 Ongoing actions

Prior to the commencement of any construction, it shall be the responsibility of the first time site users to ensure that all actions outlined in the FWEP are implemented. Currently the Site shall be the responsibility of the site owner / manager to ensure that all actions outlined in the FWEP are implemented.

These actions are summarised as follows:

- Undertake a review of the FWEP and make updates to take into account new or additional information.
- Register with the Environment Agency Floodline Warning Direct Scheme. Floodline Warning Direct can be signed up to by calling 0345 988 1188 or visit https://www.gov.uk/sign-up-for-flood-warnings.
- Ensure all management personnel are aware of the FWEP and are trained sufficiently to implement the procedures set out in the FWEP.
- Set up a single site wide system for all management staff to gather information regarding flood warnings, site closures etc. so they can disseminate information to their teams.
- Site manager to develop an emergency access and egress plan for the any new works in the floodplain. This plan should also consider how the contractor would recover any stranded plant and equipment, as well as personnel, In the event of flooding.
- During site inductions, all first time site users will need to be made aware of the emergency access and egress arrangements and to determine whether any extra PPE, life jackets and emergency buoyancy aids are needed.
- Site management to identify appropriate designated evacuation points for each phase of the construction works. The designated points should be located within Flood Zone 1. This should be reviewed regularly to ensure there are no changes in floodplain flood extents.

3.2 List of roles

3.2.1 Key personnel

Table 1 summarises the key personnel that have significant roles during a flooding event. It should be reviewed and updated periodically, where necessary, throughout the operational lifetime of the development. Each company/unit in the Park estate should have their own designated risk manager, whose responsibility it will be to monitor and disseminate warnings to members of staff.

Table 1: Key personnel / agencies and their role

Title	Role
Site Manager (during operation) / Site Emergency Team / Risk Manager	Once flood warnings / alerts have been received, it is their responsibility to disseminate flood alerts to all relevant members of staff. When severe flood warnings have been issued, it is their responsibility to ensure that the Site (and any visitors/contractors/construction work) are closed due to potential flooding and plant / materials moved, where appropriate. It is also their responsibility to operate any emergency electrical shut off switches that terminate electricity supply.

	During operation, they should direct the evacuation of the site and help others to move to the designated evacuation points away from the site, located in Flood Zone 1. If staff are unable to leave the Site then they should contact the emergency services for assistance immediately. They should take a register to ensure all staff / resident are accounted for and provide an update to any on-site (or remote) emergency services confirming that the site has either been fully evacuated. It is managements responsibility to ensure all staff have evacuated the site, and have arrived at a safe place of refuge. They are also responsible for all staff are regularly trained in the flood emergency approach for the site.
Site Operatives	All site operatives should be aware of the Flood Emergency Plan, and be familiar with the steps to be taken during the flood warning stage preceding the flood event.
Environment Agency Flood Information Service	The Environment Agency operate a 5 day county-wide forecast in relation to flood risk. It is recommended that this service is regularly checked to ensure staff are aware of any possible risks: https://flood-warning-information.service.gov.uk/5-day-flood-risk The Environment Agency also operate a Flood Information service which identifies whether any flood warnings or alerts have been issued for a specific postcode or place in England or Wales: https://flood-warning-information.service.gov.uk/. These can also be signed up to by contacting 0845 988 1188. The following flood alerts and flood warnings are available from the Environment Agency and are relevant to the Site: • The Thames estuary from Shellhaven to and including Tilbury (quick dial code: 313684)
Met Office	The Met Office issues weather warnings up to 5 days in advance, through the National Severe Weather Warning Service, when severe weather has the potential to bring impacts to the UK. It is also possible to stay up to date with weather warnings through the Met Office app (available on both android and apple), social media (twitter, Facebook) or email alerts. More information can be found at https://www.metoffice.gov.uk/weather/guides/warnings. Email notifications can be subscribed to via the following link: https://service.govdelivery.com/accounts/UKMETOFFICE/subscriber/new

3.2.2 Emergency services

It is important to leave the property upon receipt of a severe flood warning. This is to ensure that additoinal strain is not put on the emergency services. Blue light responders **(i.e. the emergency services)** will automatically become the 'first responder' during a flood event. Any instruction from the emergency services will supersede the information provided in this document. The instructions from the emergency services should be followed.

Table 2 provides contact numbers for relevant Emergency Services. In an emergency where there is a real and immediate threat to life or property always dial 999.

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Table 2: Key contact numbers for emergency services

Organisation	Contact Number
Essex County Fire & Rescue Service	HQ: 01376 576000 HQ: 0300 3035555 Emergencies: 999
Essex Police	Non-emergency: 101 Emergencies: 999
Environment Agency	Incident Hotline: 0800 80 70 60 Floodline (24 hour service): 0345 988 1188 (quick dial code: 313684) Main switchboard: 03708 506 506

3.3 Emergency plan

3.3.1 Evacuation triggers

The Environment Agency flood warnings and Met Office weather warnings should be used to set evacuation triggers.

Three trigger stages have been identified, namely, green alert (to implement a review of the FWEP procedures), place first time site users on amber alert (state of readiness) or issue a red alert (site evacuation):

1) Flood Alert - to implement a review of the FWEP procedures -
2) Flood Warning – first time site users on green alert (state of readiness)
3) Severe Flood Warning - issue a red alert (site evacuation).

All management staff should sign up to receive flood warnings from the Environment Agency. Management staff are responsible for monitoring the situation and ensuring relevant information is disseminated to all staff members on Site as well as ensuring first time site users follow the procedures if the situation worsens. Management staff are also responsible for ensuring that all first time site users have evacuated from the site.

Table 3: Flood evacuation procedures

Warning trigger	Trigger stage	Procedures
Environment Agency Flood Alert or Met Office Yellow Rain Warning *A flood alert means you need to prepare, flooding is possible*	Green Alert - Review FWEP	**Review FWEP and emergency access and egress plans.** • Check your flood risk - https://flood-warning-information.service.gov.uk/long-term-flood-risk • Keep up to date with the latest situation - call Floodline on 0345 988 1188 or follow @EnvAgency and #floodaware on Twitter for the latest flood updates • Ensure all management staff are aware of the situation and know their roles/responsibilities should the situation escalate
Environment Agency Flood Warning or Met Office Amber Rain Warning	Amber Alert	**Green Alert represents a state of readiness ahead of a potential flood situation.** • Move vehicles to higher ground if it's safe to do so

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Warning trigger	Trigger stage	Procedures
A flood warning means you need to act, flooding is expected		• Move any important items/hazardous materials to a higher level • Secure any materials or large loose items that may float and cause damage during a flood and relocate vulnerable plant/ machinery/ stores • Check staff registers are complete and available to ensure all staff are accounted for post-evacuation. • Site manager to make the final decision to close the site and management staff to disseminate key information to all members of staff
Environment Agency Severe Flood Warning or Met Office Red Weather Warning *A severe flood warning means there is danger to life, you must act now*	Red Alert	**Red Alert means that you must act.** • Call 999 if you're in immediate danger • Follow advice from the emergency services and evacuate if you're told to do so • Avoid driving or walking through flood water: just 30cm (1 foot) of fast flowing water could move your car and even shallow moving water can knock you off your feet. It may also contain heavy debris, sharp objects, open manhole covers, sewage and chemicals • Emergency team to determine whether the Site should be closed. If the decision to close the site has been taken, the site should not reopen until flood warning has been lifted or agreed with the park emergency team. • Any non-essential personnel still on site should leave immediately. • Contact the Emergency Services and Environment Agency to confirm that the Construction Compounds are being closed due to possible risk of flooding. • Use allocated evacuation route to facilitate / direct the safe evacuation of all personnel. A register should be taken to ensure all staff are safe. • Site manager should operate the emergency electrical shut off switches terminating the electricity supply and all power supplies.

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DP World London Gateway Park site Stanford-le-Hope, Essex, SS17 9DY

FLOOD ALERT	On receipt of a **FLOOD ALERT** management staff should Update themselves with the Flood Emergency Plan and ensure all procedures are understood
FLOOD WARNING	On receipt of a **FLOOD WARNING** the staff should be prepared to evacuate by vehicle.
SEVERE FLOOD WARNING	On receipt of a **SEVERE FLOOD WARNING**, the staff should evacuate the site unless directly instructed by the Emergency Services. The site should remain closed until the flood warning has been lifted
Environment Agency	Environment Agency Floodline Quick Dial Code: 0345 988 1188 (at prompt select 1) then, 313684 (The Thames estuary from Shellhaven to and including Tilbury)
	Thurrock Council Emergencies: 01375 372 468 (out of hours) Help with evacuation Police 101, or if an emergency 999. **Keep calls short!**
	Radio Stations with Flood Warnings BBC Radio Essex - FM: 95.3 MHz; FM: 103.5; DAB: 12D
Evacuation Route **1.0 mile,** **3 minute drive,** **10 minute walk** DESTINATION POSTCODE: **SS17 7DZ**	Leave site via the main access road to the north west of the site (London Gateway Drive). An alternative route (via Arctic Avenue) should only be utilised if flooding has already occurred along the main access route. **Under no circumstances should site users enter flood water unless being assisted by emergency services. The Site should not be reoccupied until the flood warnings have been lifted, or it has been deemed safe to do so, by the emergency services.**

THIS ADVICE SHOULD BE FOLLOWED UNLESS DIRECTED TO TAKE DIFFERENT ACTIONS BY EMERGENCY RESPONDERS (BLUE LIGHT RESPONDERS). OBEY ALL DIRECTIONS FROM EMERGENCY (BLUE LIGHT) RESPONDERS.

Firstly, stay calm. This guidance has been produced to help you make the right choices in the event of the flood. It has been produced using the best available predictions of flooding, with the intention of keeping you and everyone within the development at DP WORLD LONDON GATEWAY safe and away from harm.

If floodwaters are noticed around the site, the safest course of action would be to evacuate everyone on currently on Site.

Unless directed to do so by emergency personnel (blue light responders) no attempt to exit the Site should be made if flooding is evident on any of the access routes. The safest course of action is to remain on site (which is located in Flood Zone 1) and await assistance.

If such a flood occurs management staff will contact the emergency services to alert them to the presence of people requiring evacuation.

If temporary refuge within the building is required, this should be at first floor level and above.

Contact with floodwater should be avoided, as it can contain untreated sewage, or other contaminants. Flood waters can obscure hazards below the surface, sharp objects, open manholes, and therefore should be treated as a hazard.

Once temporary refuge has been achieved, a register of people present should be taken, and someone should be appointed as the Primary Flood Co-ordinator. This person should co-ordinate with the local emergency services, as appropriate. All mobile phone calls should be kept short in order to enable capacity on the network.

Local news outlets and radio stations should be monitored to receive up-to-date information of the flooding.

Use of individual mobile phones should be discouraged, this is to free-up service on the network for emergency calls and use by emergency service personnel. This can also preserve battery life, to provide additional back-ups should the need arise.

On receipt of a **FLOOD ALERT** all management staff should familiarise themselves with the flood evacuation plan, and make sure that process are in place to alert all staff to the situation.

Monitor the situation via local media. Make themselves aware of forecast local weather conditions. Alert both current visitors, and those scheduled to arrive, of the situation. Prepare to evacuate if necessary.

Check your flood risk - https://flood-warning-information.service.gov.uk/long-term-flood-risk

On receipt of a **FLOOD WARNING** management staff should alert all staff of the current situation. Measures should be taken to ensure that any important/hazardous materials are moved to a higher level and large loose items (that could float in a flood) are secured. The site manager should prepare to close the site if necessary. Alert scheduled visitors/contractors etc. that they should not enter the site. Be Prepared to follow instruction from the Emergency Services.

On receipt of a **SEVERE FLOOD WARNING** all non-critical personnel should evacuate the site or numbers should be reduced as much as possible. It will be the responsibility of the Site emergency team to determine whether the Site should be closed. If the decision to close the site has been taken, the site should not reopen until flood warning has been lifted or otherwise agreed with the emergency team.

The emergency services become the first responders during a flood event. The instructions they give should be followed at all times, even if it contradicts the details of this FWEP report.

The management staff should be signed up to the Environment Agency's flood warning service: https://www.gov.uk/sign-up-for-flood-warnings

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Annex G – Tenants' Contact List

Plot	Tenant	Point of Contact	Job Title
Plot 1020	UPS		Accounts Email
		Dominik Martyniak	BaSE Automation Manager
		Jon Parson	Facilities Manager
Plot 3010	Dixons Carphone	Matthew Ritchie	
Plot 1050	S H Pratts	Wayne Milne	Commercial Director
		David Bateman	Managing Director
Plot 1060	London City Bond	Vaughan Bendall Alf Allington	
Plot 1070	Ceva Logistics	Rob Waterman	MD- CMA CGM UK
		Mick Blow	Managing Director
		Steve Bugg	Site Depot Manager
Plot 1080	P&O FM	Graham Brooks	Site Manager
Plot 4020a	Ziegler	Tracy Hampton	PA to Directors/Facilities Management
		Lee Marshall	Managing Director
		Darrell Noble	General Manager Logistics
Plot 4020b	CF	Eddie Carey	Operations Director
		Yanko Popov	Head of Depot Operations
Plot 4030	Cosco Shipping	Martin Beadle	Operations Manager
Plot 3040	DHL Supply Chain	Dean Woodroof	General Manager
		Dariene Wooton	Facilities Manager

[redacted]

LONDON GATEWAY LOGISTICS CENTRE

Tenant	Tenant	Point of Contact	Job Title	[redacted]
Ground floor right	London Port Health Authority	Tara Czogalik	Port Health Business Manager	
		Peter Markwell	Port Health Manager	
		Matthew Purkiss	Port Health Manager	
1st floor left	Warwick Estates	Beverley Squire	Regional Manager	
1st Floor	Boluda	Phil Dulson	Manager	
		David Slater	Commercial Manager	
1st Floor left	Thermotraffic	Neil Stokes	Head of Operations	
2nd floor left	Britannia Bureau Limited	Jamie Stuart		
		Mark Taylor		
2nd floor right	Good Shipping Ltd	Darren Spence	Director	
		Dave Churchyard	Key Account Manager	

Area	Tenant	Name	Job Title
Park 1	ATL Haulage Limited	Jamie Woodward	Director
		Amit Karia	Managing Director
Park 2a	Seven Lincs Limited		
		Tom Dunnett	
		Chris Woods	Fleet & Compliance Manager
		Angela Price	Insurance Advisor
Park 2 b	Cosco Shipping Logistics UK	Martin Beadle	Operations Manager
		Roman Plewa	General Manager/Director
Park 4	Hireco (TL) Limited	Paul jeffery	Truck Park Manager
		Gary White	Operations director

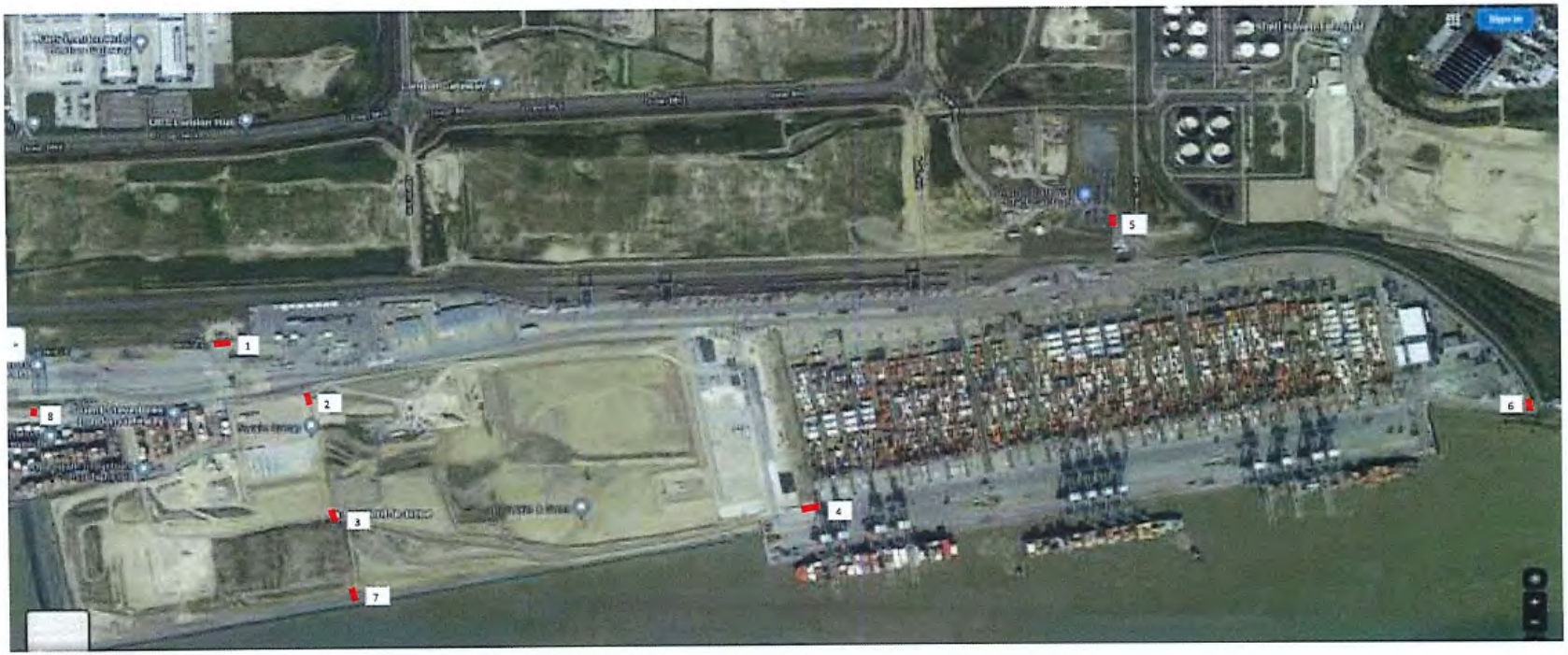
[redacted]

[redacted]

Annex H – Gate Combinations

No	Zone	Gate Description	Code
1		Gate 1	4311
2		Gate 2	4312
3		Gate 3	4313
4		Manorway House	4314
5		Cosco (Kit Kat)	4315
6		DPW Training Area	4316
1		Gate 45	9895
2		Berth 6	9896
3		Berth 6 Middle	9897
4		Berth 3	9898
5		DPW Staff Car Park	9899
6		S Jetty	9900
7		Berth 6 Top	9910
8		Pedestrian Gate MG	9911
1		Graffiti Gate	3415
2		Rainbow Lane	3416


London Gateway
Google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Google


2
The Crooked Billet
London Gateway
1

Annex I – Instructions for Closing Pump Station

DP WORLD
London Gateway

Logistics Park - Closing Pumping Station Penstocks – Spillage Procedure

DP World London Gateway Logistics Park does not benefit from being near a suitable connection point to the public sewerage system. Surface water from the Park Roads and most the Plots drains into the drainage corridors and is then ultimately discharged via the Pumping station into the River Thames. If there is a spillage on the Park that is at risk of entering the drainage corridors, it is very important that the pumping station is closed off so that polluted water doesn't get pumped into the River Thames. The Environment Agency can impose large fines or penalties on companies or individuals for spills entering the River Thames.

This procedure is produced to assist in the closing of the Penstock Gates to stop any such spills from entering the Pumping Station.

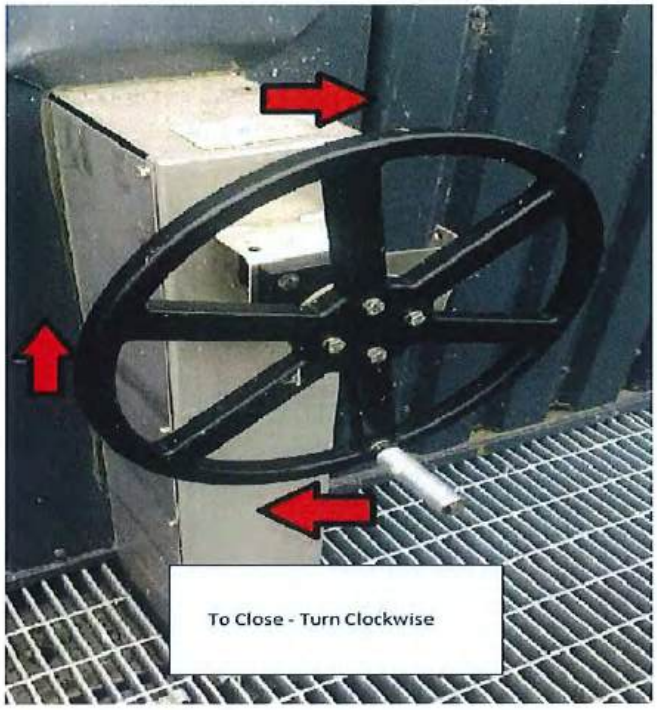
The diagram below shows where the Pumping Station in question is located and how to access.

There are 3 Penstock Wheels located at the back of the Pumping Station. The back of the Pumping Station is facing NO.1 LGW.

Each wheel opens/closes each section of the Penstock Gate and all 3 sections need to be closed if a spillage enters the lagoon.

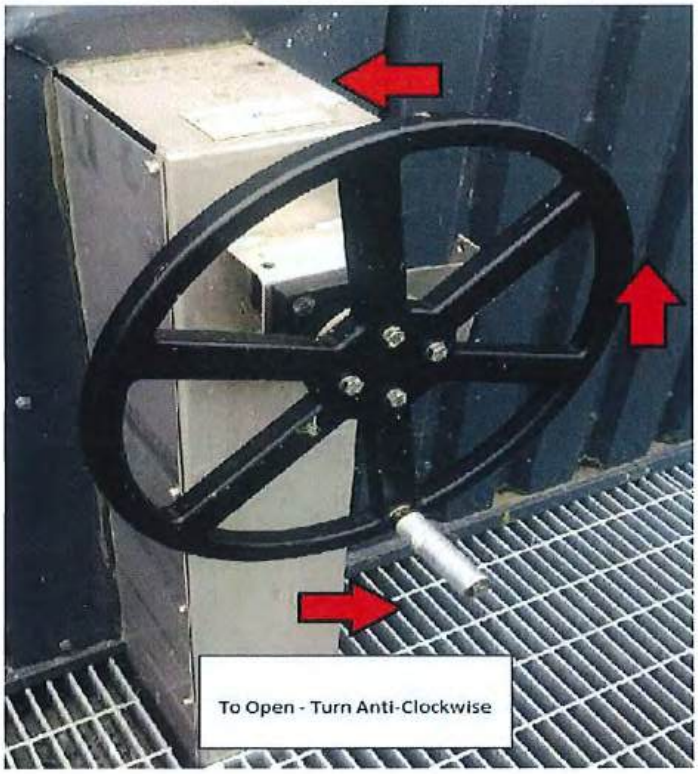
Closing the Penstock Gate

To close each section, each wheel must be turned fully **CLOCKWISE** by hand. **All 3 sections must be closed.**



Opening the Penstock Gate

When Instructed to each section can be opened, each wheel must be turned fully **ANTI-CLOCKWISE. All 3 sections must be re-opened.**

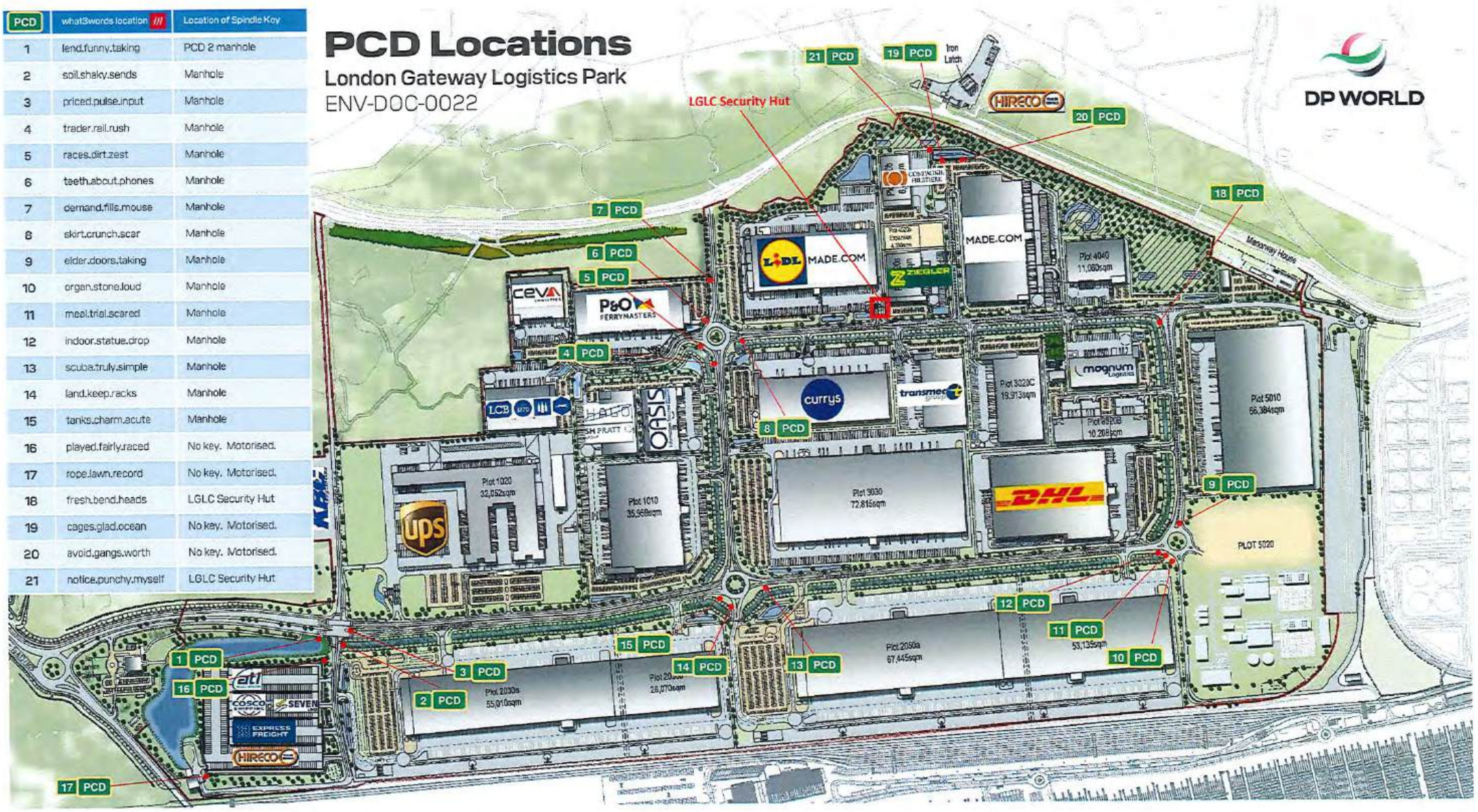


PCD Locations

London Gateway Logistics Park

ENV-DOC-0022

PCD	what3words location ///	Location of Spindle Key
1	lend.funny.taking	PCD 2 manhole
2	soil.shaky.sends	Manhole
3	priced.pulse.input	Manhole
4	trader.rail.rush	Manhole
5	races.dirt.zest	Manhole
6	teeth.about.phones	Manhole
7	demand.fills.mouse	Manhole
8	skirt.crunch.scar	Manhole
9	elder.doors.taking	Manhole
10	organ.stone.loud	Manhole
11	meal.trial.scared	Manhole
12	indoor.statue.drop	Manhole
13	scuba.truly.simple	Manhole
14	land.keep.racks	Manhole
15	tanks.charm.acute	Manhole
16	played.fairly.raced	No key. Motorised.
17	rope.lawn.record	No key. Motorised.
18	fresh.bend.heads	LGLC Security Hut
19	cages.glad.ocean	No key. Motorised.
20	avoid.gangs.worth	No key. Motorised.
21	notice.punchy.myself	LGLC Security Hut



Title:	London Gateway Logistic Park - PCD Spillage Procedure				
Site:	London Gateway Logistic Park				
Doc Reference:	ENV-DOC-0023	Date:	16.02.23	Version:	4

Please note: This procedure must be read with ENV-DOC-0022 PCD Locations

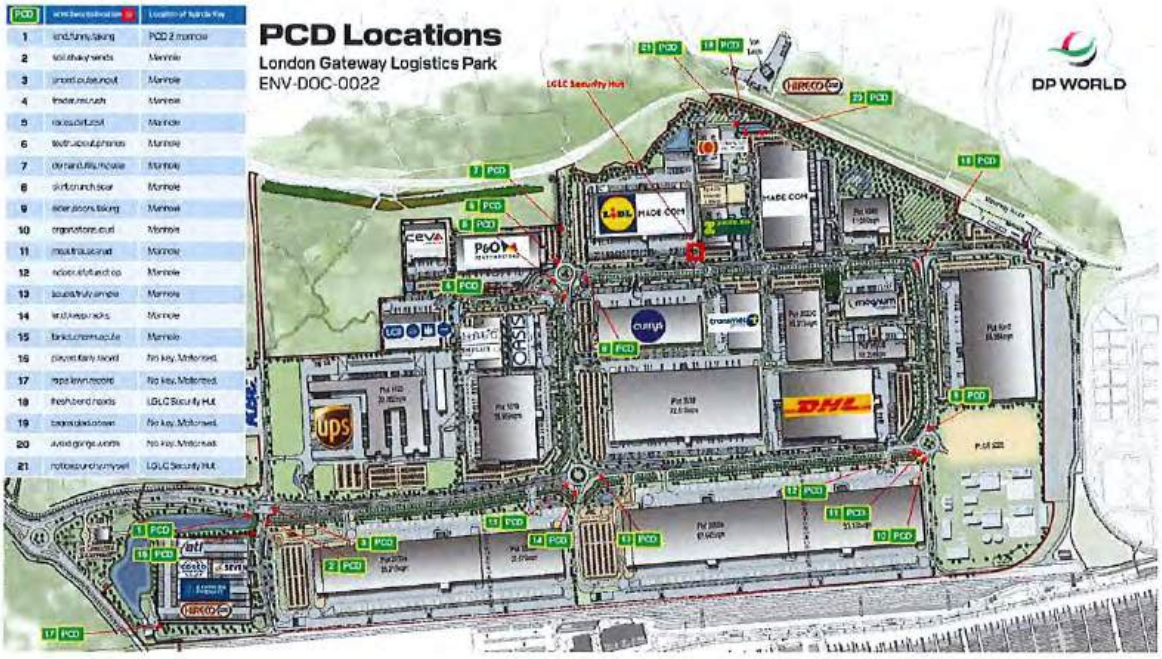


Figure 1 – Location of PCDs on the Logistics Park

Contents

1. Background

1.1. Surface water from the London Gateway Logistic Park road network drains into the drainage corridors and is then discharged into the River Thames. If there is a spillage on the Logistic Park, it is important that the drainage from the roads is closed off so that pollution does not enter the

drainage corridors. The Environment Agency can impose large fines or penalties on companies or individuals for spills which enter the natural environment.

1.2. The Pollution Control Devices (PCD's) are located at key risk areas along the Park internal road network. If there is a spillage on any of the roads, then adjacent PCD's should be closed to stop the spill entering the drainage corridor.

2. PCD Locations

2.1. The locations of all PCDs on the Logistic Park are shown in Document ENV-DOC-0022, which has been pasted into this document as Figure 1. There are 21 PCDs in total. PCD

2.2. At certain locations, you will find a PCD sign indicating the general area where the device is located. Not all locations have this PCD sign.

2.3. Most PCDs sit beneath a manhole cover with a corresponding yellow number painted on it. Certain PCDs, however, are open access and not located beneath a manhole cover.

2.4. Each PCD can be located by navigating to the corresponding what3words address as specified in Document ENV-DOC-0022 (Figure 1).

3. Using PCDs

3.1. To gain access to the device, lift off the manhole cover using a set of manhole keys and place to one side. Mounted on the inside of each manhole (with the exception of PCD 1, 16, 17, 18, 19, 20 & 21) is a key that is used to operate the device. The location of the key for each PCD is specified in Document ENV-DOC-0022 (Figure 1).

3.2. Remove the key from the bracket and connect it to the top of the PCD spindle. Turn the spindle counter-clockwise to close the device, and clockwise to open again. All PCDs are left open, only to be isolated and closed in the event of a spill.

4. Additional information PCD #1 & #2:

4.1. PCD #1 & #2 have a slightly different design than the others.

4.2. The devices still operate the same way except there is 1 key between them both. Due to #1 being open access (i.e. is not located in a manhole) the key for this has been installed inside the PCD #2 manhole for safe keeping. If PCD #1 needs to be closed, the key will need to be retrieved from #2 first.

PCD #1

PCD #2

5. Additional Information PCD #16 & #17

5.1. Please see separate procedure: *Security Spillage Procedure London Gateway HGV Lorry Park.*

5.2. Please also note that there is no key to operate these PCDs, rather the spindle is motorised. If the motor is not working, the spindle can be turned using the manual override. These PCDs are not located beneath manhole covers.

6. Additional information PCD #18 & #21

6.1. PCD #18 & #21 have a slightly different design than the others.

6.2. The devices still operate the same way except there is 1 key between them both. This key is kept at the LGLC Security Hut the location of which is shown in Document ENV-DOC-0022 (Figure 1).

6.3. Please also note that PCD #21 is located within the premises of Plot 4020B (Compagnie Fruitiere) and permission would need to be sought from this tenant to gain access to this PCD.

6.4. Please also note that, unlike other drainage PCD's which are all in drainage connected to the park internal drainage corridors, the drainage from PCD #21 connects to the farmers' fields to the north of Plot 4020B.

6.5. The manhole cover for PCD #21 does not have a corresponding yellow number painted on it and please also note that the spindle is located below a smaller manhole cover adjacent to the main manhole cover.

PCD #18

PCD #21

7. Additional information PCD #19 & #20

7.1. PCD #19 & #20 are located on the banks of a small dam in the premises of Plot 4030. Access can be gained by walking through the car park.

7.2. Please note that there is no key to operate these PCDs, rather the spindle is motorised. If the motor is not working, the spindle can be turned using the manual override. These PCDs are not located beneath manhole covers.

PCD #19 & #20

END

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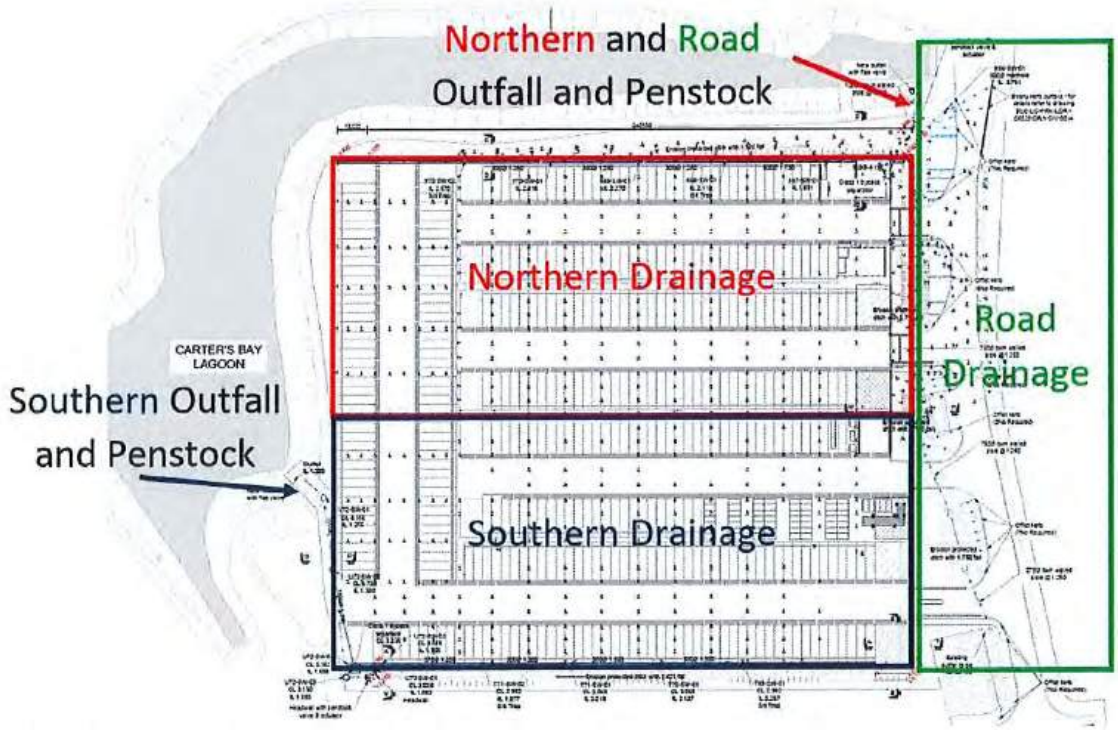
Security Spillage Procedure London Gateway HGV Lorry Park



The London Gateway HGV Lorry Park and Access Road surface water drains into the Carters Bay Lagoon and is then discharged into the River Thames. If there is a spillage on the Lorry Park that gets into the drainage, then it is important the drainage is closed off so that pollution doesn't get into the Lagoon or the River. The Environment Agency can impose large fines or penalties on companies or individuals for spills which enter the natural environment. Penstocks should also be closed if the adjacent interceptors are in alarm.

If a spillage occurs on the Lorry Park, then the tenant should inform you of the following details:

1) Location of spill (Access Road, Northern or Southern Drainage Area)
2) The nature of the spillage e.g. fuel, hydraulic oil, hazardous substance.
3) Amount spilt if known.
4) If spillage has entered the drainage or affected other tenanted areas on the Park.

The surface drainage on the Lorry Park is split between the Northern and the Southern Drainage. The Access Road drainage also feeds into the same penstock and outfall as the Northern Drainage.

Spillage Procedure

1) Isolate the area.
2) Close appropriate Penstocks (see Page 2-4)
3) If spillage has already been discharged into Carters Bay Lagoon or this is at risk then follow the Carters Bay Pumping Station emergency shut down.
4) Phone Reception on **01375 683300** during work hours and FM Helpdesk outside of work hours on **07860 704024** to inform them of the spillage and the details.
5) If spillage is on the Access Road clean up spillage if fuel or hydraulic oil. If a hazardous chemical or the fuel/oil spillage is too large to deal with onsite team, then phone Adler and Allen on **0800 592827** and request assistance for the clean-up.

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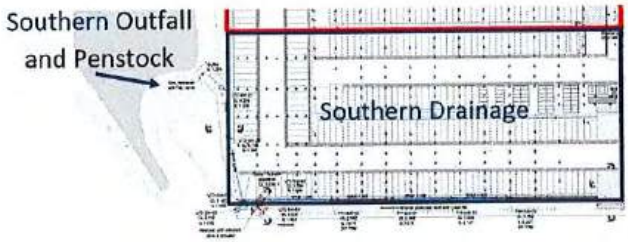
Closing Northern Drainage and Access Road Penstock

Area is accessed from the North via Ocean Boulevard

Closing Southern Drainage Penstock



1) Area is accessed from the South via the side of the Carters Bay Pumping station.

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Using Penstocks

1) Ensure Penstock is set to *'Local control'* as per below (note normally left locked in this position)

2) Close Penstock by pushing in the button on the bottom left.

3) If the electronic closure is not working, then the penstock should be closed manually by pushing in the blue button and turning the handle.

4) The Gate will be fully down when penstock is closed.

5) Don't open the penstock unless instructed to by LG Estates or Environment.

Annex J – Radio Groups

RADIO *UPDATE'S*

GO LIVE 22nd JUNE 2022 (06:00)

New Zones & Groups

General	Quayside	Landside	Engineering	Inspections
SS	QC 01	IMV ALL	Engineering All	Insp Supv
SM	QC 02	IMV 1	Stores	Insp Team
Security	QC 03	OOG *(Old LS)*	ASC Team	IMV ALL
Training	QC 04	LS Marshals *(Training 1)*	QC Team	SS
Health and Safety	QC 05	Marshals 45 *(Training 2)*	ME Team	General
Facilities	QC 06	MTY Stacker	Fabrication Team	Engineering All
First Aid	QC 07	Rail Checkers	PM 1	Freeze Requests
Mooring *(LM)*	QC 08	Rail Contractor	PM 2	
Freeze Requests	QC 09	Reach Stacker	Freeze Requests	
Incident	QC 10	RMG 1	Facilities	
General	QC 11	RMG 2	SS	
	QC 12	RMG 3		
	QC ALL	Yard Shunting *(IMV 5)*		
	SC ALL *(For Freeze Only)*	Gate		
	SC General *(old SC01)*	Reefer		
	Yard Shuttles *(old SC02)*			
	Lashing Pool *(Old Berth 1)*			
	Lashing Pool 2 *(Berth 2)*			
	Lashing Training *(Berth 3)*			
	Mooring *(LM)*			

Those in brackets are for the old channel set up

Emergency Button Standard

- Activate Emergency (2 Second Press On Orange Button)
- Short Press Orange Button To Cancel
- Press The Ok Button Twice To Clear Emergency After Receiving

All Radios should be on version
R02.10.10.0001

How to check
Press Ok
Scroll to Utilities (press ok)
Radio Info (press ok)
Version (press ok)

If you are unsure of anything, please contact Mark Tanner or visit him on the 2nd floor of the terminal building

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