

This manual relates to the following pipeline systems only:-

- **BPA**
- **Centrica Energy**
- **ConocoPhillips**
- **E-ON**
- **Esso Petroleum Company Ltd**
- **Ineos**
- **Government Pipelines & Storage System. (GPSS)**
- **Mainline Pipelines Ltd.**
- **Manchester Jetline Limited**
- **Marchwood Power**
- **Sabic**
- **Shell**
- **Total**
- **WINGAS**

It is emphasised that not all pipelines in the UK are represented and that owners of pipelines, which do not appear in this booklet, should be consulted regarding procedures to be followed when working close to their pipelines.

General Information

- All the pipelines mentioned are high pressure, steel pipelines containing petroleum products or gas.
- Sizes vary from 100mm, (4") to 915mm (36") diameter.
- Nominal depth of cover is 0.9m, (3ft) although in some locations this cover may be less. e.g. Canal towpaths.
- The employing authority (or their contractor) shall be responsible for all or any liability under the Health and Safety at Work Act, 1974, etc.

The following pages indicate the routes and provide details of the pipelines, which make up these systems.

Special requirements for safe working in close proximity to high pressure pipelines

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Special Requirements for Safe Working in Close Proximity to pipeline systems owned or operated by BPA, Centrica Energy, ConocoPhillips, E-On, Esso, GPSS, Ineos, Mainline, Manchester Jetline Limited, Marchwood Power, Sabic, Shell, Total and WINGAS.

The purpose of this booklet is to provide guidance on the basic requirements for safe working in close proximity to buried pipelines owned and/or operated by BPA, ConocoPhillips, E-On, Esso Petroleum Co. Ltd, Ineos, The Government Pipelines and Storage System (GPSS), Mainline Pipelines Ltd, Manchester Jetline Limited, Marchwood Power, Sabic, Shell, Total and WINGAS. They are not exhaustive and a safe system of work, including any specific requirements of the operator, should be agreed prior to work commencing.

To fulfil their duty to specify safe systems of work near the pipelines, the operators require notification of the intention to carry out underground works (as more fully defined in pp 23 - 27) when within 50metres of the pipe and in the same parcel of land, i.e. not separated by a fence or other identifiable division. The operator is then responsible for clearly marking the detailed route of the pipe (a free service) and the specification of any constraints on the proposed method of working.

All works require prior approval except routine agricultural operations; however, drainage operations and mole ploughing must be approved.

When planning works which could involve crossing or working close to a high-pressure pipeline then the land owner, occupier, utility company or contractor should supply details of the proposed works to the Pipeline Operator or their Agent. These should include:

- 1** A brief description of the proposed works.
- 2** A plan with a National Grid reference.
- 3** A proposed time scale for the works.

No works shall take place within 3m (10ft) on either side of a pipeline without prior approval of the pipeline operator in accordance with the provisions of the Deeds of Grant and the following Acts of Parliament: -

- Requisitioned Land and War Works Act 1948.
- The Land Powers (Defence) Act 1958.
- Shell-Mex and BP (London Airport Pipeline) Act 1959.
- Esso Petroleum Company Act 1961.
- Pipelines Act 1962.
- Pipeline Safety Regulations 1996.
- The Stanlow Carrington Partington Pipeline Act 1958.

Section 16 of The Land Powers (Defence) Act 1958 prohibits most works within the easement without the prior consent of the Secretary of State. (See guidance note 15).

For the purposes of this document the term "easement", as used, includes property rights arising under Deeds of Grant, Wayleaves and other rights in land granted under the above Acts.

Details of the relevant operators or their agents are listed in this booklet.

What to do in an emergency

Signs of a possible pipeline leak may include: pools of fuel, dirt or dust blowing in the air, hissing sounds, gas or petroleum odours, bubbles in standing water, dead or discoloured vegetation and ice on the ground. If you notice any of these in the vicinity of a pipeline, treat as an emergency.

In the event of an emergency

Remove all personnel from the vicinity of the incident

Extinguish any naked flames and shut down all working plant from the immediate area (remember, vapours will travel downwind).

Inform the emergency services.

If known, call the pipeline operator. There will be a pipeline marker nearby with emergency contact information.

Exclude all vehicles and personnel from the vicinity.

Do not attempt to seal any leaks.

Do not attempt to extinguish the flame if the leak has ignited.

If damage to the pipeline does not cause a leak do not try and hide it. Dents and gouges in a pipe may cause it to fail at a later time with, potentially, catastrophic consequences. Report all damage, however seemingly insignificant, to the pipeline operator.

Basic Guidelines for any work near Pipelines

- 1** All work shall be in accordance with the Guidance Notes. (Contained in this booklet). **Prior to commencement of all works a written task risk assessment and method statement will be required. In general a legal consent will be required prior to any works within the easement. Adequate time should be allowed for the completion of these consents.**
- 2** No raising or lowering of ground level throughout the easement without written consent from the pipeline operator.
- 3** Concrete slab protection will be required over the pipeline at permanent road crossings and parking areas, including temporary construction areas, typically, as per example (Appendix I). Prior to installation the promoter shall expose the pipeline under the supervision of a representative of the Pipeline Operator and arrange for the existing protective pipe wrapping to be inspected, repaired and then double wrapped at the Promoter's expense by a contractor approved by the Pipeline Operator or his Agent.
- 4** The easement shall be pegged out and fenced off prior to works commencing. Agreed crossing points across the easement for construction machines shall be protected by tied timber mat, "Bog Mat" or a temporary concrete slab or hardcore, as per example (Appendix II).
- 5** To prevent indiscriminate crossings along the pipeline, service crossings (i.e. drains, cables, pipes, etc.), should be grouped together at a common point. These should be ducted if possible.
- 6** Pipeline marker posts shall be installed at the Promoter's expense each side of all road crossings and elsewhere as necessary, to mark the pipeline route.
- 7** No buildings, structures or caravans to be sited within the pipeline easement.
- 8** The pipeline easement should always be in an open area, as access to the easement and/or the pipeline is required at all times.
- 9** Attention is drawn to the fact that the pipeline is cathodically protected. This can corrode metal structures in the vicinity and it is the Promoter's responsibility to protect their constructions against this.
- 10** Tree planting is restricted in the easement.
- 11** No explosives to be used within 400 metres (1300 ft) of the pipeline without prior agreement with the Pipeline Operator or his Agent.
- 12** No pile driving or bore holes within 30 metres (100 ft) of the pipelines without prior agreement with the Pipeline Operator or his Agent.
- 13** No 3D seismic survey using the Vibrosis method within 30 metres (100ft) of the pipeline without prior agreement.
- 14** Directional drilling, thrust boring or other trenchless techniques will be considered as an alternative method of crossing the pipelines subject to certain conditions being fully adhered to.
- 15** High voltage electric cable crossing may require special consideration.

Guidance Notes for works in close proximity to Pipeline Systems owned or operated by BPA, Centrica Energy, ConocoPhillips, E-ON, Esso, GPSS, Ineos, Mainline, Manchester Jetline Limited, Marchwood Power, Sabic, Shell, Total and WINGAS

1 Pursuant to the provision of the applicable Acts, a Consent is required before commencing any work within 3m (10 ft) of a point on the surface of the land vertically above the position of the pipeline. Such works shall include, but not be limited to:-

(a) the erection or construction of a building, structure, road or path

(b) excavation or the deposit of earth, refuse, spoil or other material on the ground.

or,

(c) the crossing by a utility or other service.

Full details of the proposed work should be submitted to the appropriate Pipeline Operator or their Agent.

Applicants are normally requested to enter into a form of indemnity before Consent is given. The Promoter should note that any one incident involving damage to the pipelines could result in claims in excess of £5,000,000 and they should ensure that they have adequate insurance cover. The Pipeline Operator or their Agent shall have the right to inspect all relevant policies and premium receipts.

2 The conditions mentioned herein are common to most works but are not exhaustive. Other conditions may be imposed depending on the nature of the work.

3 Prior to any work commencing the following applies:

(a) The location of the pipe must be verified and pegged on site by the Pipeline Operator's representative and witnessed by a representative of the Promoter or contractor.

(b) On receipt of written approval of the proposed works, and subject to the approval, if required, of the Secretary of State and the landowner, the Promoter or contractor shall give not less than 3 working days notice to the respective Pipeline Operator or his Agent of intention to commence the works and access for them will be afforded at all times.

(c) Work includes any structure, erection, plant or equipment being placed on or within the easement. The pipeline owners consent to the variation of property rights, necessary for the purpose, must be obtained and completed.

4 Any plant crossing the easement can be hazardous to the pipeline especially if the ground is soft or wet. The Pipeline Operator or their Agent will require the contractors to mark out the easement with a paling fence or similar if this is considered to be in the best interest of a safe operation. Where access over the easement is required, a tied timber mat, "bog mat" or temporary concrete slab may be necessary to prevent a reduction in earth cover. This protection will be required unless authority in writing to the contrary is given by the Pipeline Operator or their Agent. (See Appendix II).

5 Where road construction schemes or similar are to encroach over the pipeline, the Promoter or their contractor will be required to place a protective concrete pad over the pipeline unless written permission to the contrary is given by the Pipeline Operator or their Agent.

The protective pad should be similar to the example in Appendix I.

6 All excavations above, below or within 3m (10 feet) on either side of the pipeline must always be supervised by a representative of the Pipeline Operator. Manual digging will be employed unless another method is specifically authorised by the representative.

7 Where a new service passes under or over the existing pipeline, there should be ideally a 600mm (24") clearance between them and cross at an angle of not less than 60°. A lesser clearance or angle of crossing will not be permitted without authority in writing from the Pipeline Operator or their Agent. A concrete separation slab, marker tiles or warning tape may be required. If the new service or works includes a high pressure gas pipe or other pipe containing material whose escape might endanger the pipeline(s), sleeving and/or construction in pre-tested pipe across the width of the easement may be required.

8 If it is proposed to use explosives within 400m (1300 ft) or drive piles within 30m (100 ft) of a pipeline then agreement must be reached with the Pipeline Operator or their Agent. The maximum allowable PPV at the Pipeline is 25mm per second.

9 Suitable fire extinguishers must be provided if contractor's plant or equipment is working near the exposed pipeline.

Any work involving a naked flame or likely

to cause a spark within 3m (10 ft) of an exposed section of a pipeline will only be permitted subject to approval of the methods by, and presence of, the representative of the Pipeline Operator. The Pipeline Operator reserves the right of his representative to check the availability of fire extinguishers on site to reduce the risk to the pipeline should the plant or equipment catch fire, and to prohibit any work until they are reasonably satisfied.

10 Backfilling shall be in layers of maximum depth of 300mm (12") and consolidated before any further backfilling takes place. Backfill must be free of flints or any other material, which may damage the anti-corrosion wrapping. If the backfill material is not suitable in the opinion of the representative of the Pipeline Operator, imported sand, stone dust or other approved fine material shall be provided to give a minimum 150mm (6") surround to the pipeline.

11 The pipeline is wrapped to prevent corrosion and any damage to the pipe or its wrapping must be notified immediately to the Pipeline Operator or their Agent who will arrange for repairs to be carried out. The Pipeline Operator reserves the right to recover the cost of repairs.

12 Cathodic protection of the pipelines is provided by an impressed current system and sacrificial anodes which could adversely affect any ferrous structure or service that crosses or runs parallel to the pipeline for any distance. It is recommended that test leads be installed at the point of intersection of the two to facilitate interference testing, according to British Standard BS 7361 Part 1 1991, BS EN 13636:2004, BS EN 12954 2001 and BS EN 13509 2003

The fitting of the test lead to the pipeline will be carried out by a representative of the Pipeline Operator and the two leads taken to a Cathodic Protection Test Post supplied by them and installed at the nearest convenient point. Any work required will be at the expense of the Promoter. The Pipeline Operator does not accept responsibility for any damage to the new service by virtue of electric corrosion protection systems applied to the pipeline(s). It would be in the Promoter's interest for him to make provision for precautionary measures during planning and construction stages of the new service or works.

13 Ideally no trees or shrubs should be planted within the easement and before any shrub or tree planting is carried out within the easement area, written approval must be obtained from the Pipeline Operator or their Agent. Any approval granted will be subject to the Pipeline Operator retaining the right to remove, at any time in the future, all trees and shrubs which, in his opinion, might become a danger to the pipeline and, in consequence, a potential hazard to personal safety, or prevent access for maintenance purposes.

Where permission is granted for planting within the easement only species, such as hazel, oak, ash, sweet chestnut and many others which are tolerant to coppicing, will be acceptable (i.e. they will sprout from the stump if it is necessary to cut them down to ground level in order to provide access). Many garden shrubs are acceptable, but conifers are not acceptable.

14 Where permission is granted for a new pipe, cable, etc., to cross a pipeline, that permission will only be granted subject to the following condition:

"If at any time during the course of the new construction it is discovered that the Pipeline Operator requires to carry out emergency works on their pipeline then work on the new construction must cease until the pipeline repair work has been completed. This repair work will be carried out with the shortest possible delay. In these circumstances the Pipeline Operator will not be responsible for any delay or associated costs on the new construction."

15 Supervision of Works

The Pipeline Operators require strict controls to be applied on all third party works that could affect the pipeline, which are administered by the Pipeline Operator or Agent. The minimum controls are:

- A minimum of three working days prior notice shall be given by the third party to the Pipeline Operator or Agent before commencement of any works within 3m (10ft) ft of the pipeline.
- All works within the pipeline easement shall be supervised by the Pipeline Operator or Agent and shall not commence without the written authority of the Pipeline Operator or Agent.
- There will be no charge for such supervision for the first three working days, (of 8 hours), but, thereafter, the costs will be recovered by the Pipeline Operator from the third party. Current contract rates for supervision charges will be provided by the Pipeline Operator to the third party on request.

16 Trenchless techniques

Directional drilling, thrust boring or other trenchless techniques will be considered as an alternative method of crossing pipelines subject to the following conditions being fully adhered to.

Method statement complete with drawings for the completion of pipeline crossings using trenchless methods shall be approved by the pipeline operator. Approval shall be requested at least thirteen weeks prior to commencement of the works. Approval by the pipeline operator shall in no way reduce the responsibilities and liabilities of the third party for the safe and successful completion of the crossing works. Clearance between the pipeline and the drilling auger (or similar) should be maximised. The minimum clearance shall be 1.5 metres.

17 Special requirements specific to GPSS and Finaline pipelines:

Any works within a GPSS wayleave (easement) are subject to the provisions of The Land Powers (Defence) Act 1958.

Section 16 of this act prohibits most works within the pipeline wayleave without the consent of the Secretary of State, i.e. within 3m (10ft) either side of the pipeline. Any works within the Fina-Line Demised Strip will require a legal wayleave agreement to be completed with Total (Original plus 4 copies of documents required) before any works can commence.

● Planning of Works

When planning any works which could involve crossing or working within the wayleave of an oil pipeline, the Pipeline

Operator or their Agent must be contacted who will then

- locate and mark the pipeline and
- obtain a Section 16 Consent (GPSS)
- Instruct solicitors (Fina-Line).

This can be achieved by providing the Pipeline Operator or his Agent with the following: -

- A detailed description of the proposed works including a method statement.
- Six copies of an OS 1:2500 scale plan showing the proposed works and with an eight figure OS Map Reference.
- A proposed time scale for the works.

It should be noted that a Section 16 Consent can take up to four weeks to process from the date the required information is received by the Pipeline Operator or their Agent. The Fina-Line Legal Agreement is dependant on both party's solicitors. Normally it takes between two and four months.

In addition, works outside the easement but which may jeopardise the integrity of an oil pipeline, such as blasting or piling, must be discussed with, and agreed by, the Pipeline Operator.

For all GPSS enquiries and general information contact the Pipeline Operator:

GPSS
PO Box 7273
Ashby de la Zouch
LE65 2BY
Tel: 0845 070 1245
Fax: 0845 070 1250
Email: gpss@gpss.info

18 Emergencies:

BPA	01827 63708
ConocoPhillips	01507 475546
Centrica Energy	0800 371726
Esso	023 8089 1541
Mainline	023 8089 1541
E-ON Pipelines	0800 389 4795
Finnart / Inoes (including TSEP)	0800 374185
GPSS Aldermaston (including Falmouth - St Mawgan and Inverness - Lossiemouth)	0118 9712021
GPSS Rawcliffe (including Linkswood - Leuchars)	01405 839212
Sabic TPEP (West)	01928 572580
Sabic TPEP (East) and WGEP	01642 452461
Manchester Jetline Limited	01244 665989
Marchwood Power	0800 328 6030
Shell	0800 220959
Total	0800 592246
Colwick Total	01159 615785
WINGAS	01507 338360

Action to be taken by the Owners of the new service or works in the event of a leak in the pipeline:

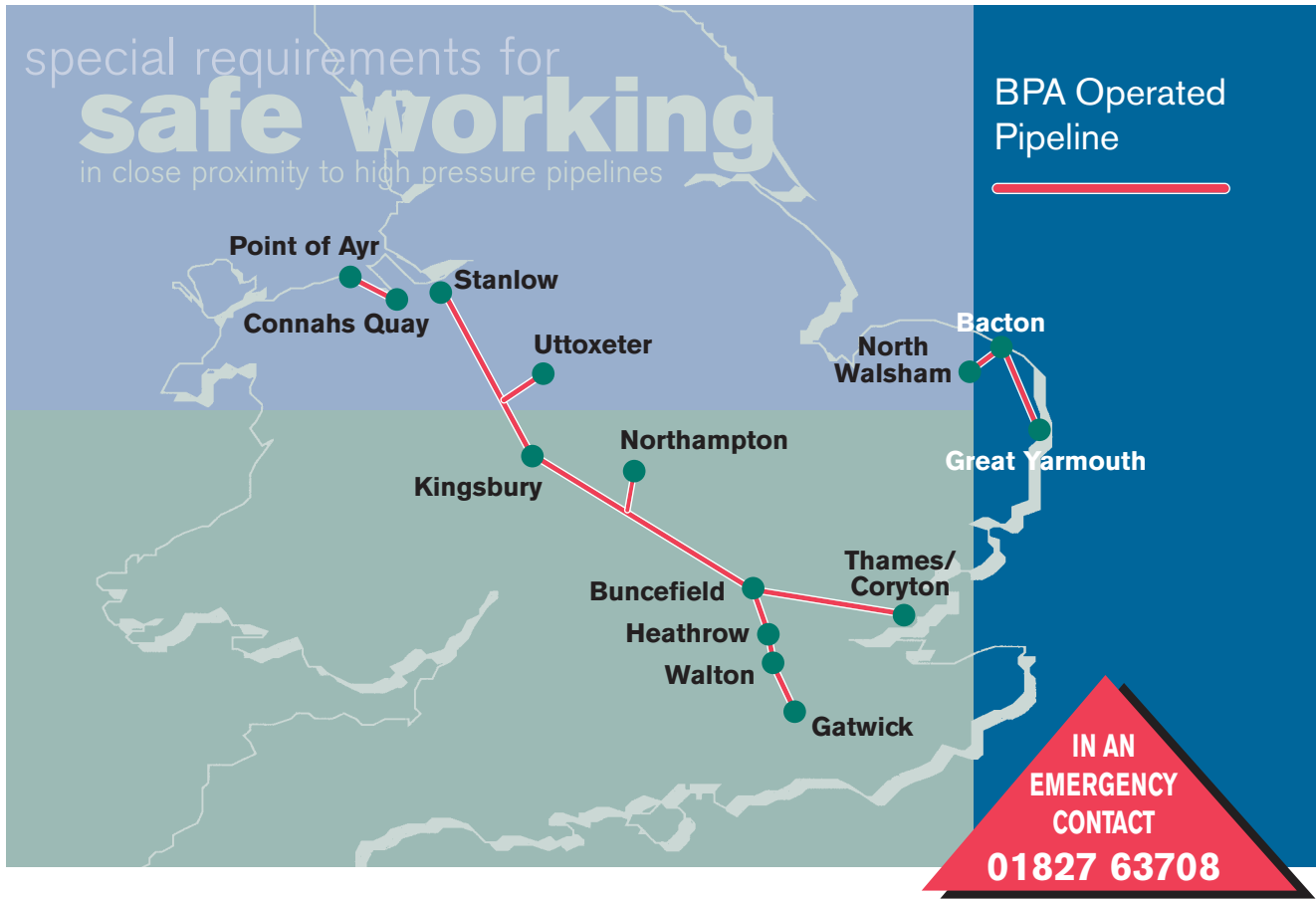
- a) Dial 999 and call the Fire Brigade and Police.
- b) Contact the Pipeline Operations Control Rooms (24 hours)
- c) Remove all personnel from immediate vicinity.
- d) Remove all sources of ignition for at least 200 metres upwind and 500 metres downwind from the area of leak, e.g. stop engines, stop smoking, extinguish all naked flames, and do not use any electrical apparatus.
- e) Prevent approach of traffic and general public.
- f) Assist in safeguarding persons and property as necessary or as requested by the Police, Fire Service or Pipeline Operator.
- g) Do not attempt to seal any leak of gas or oil at source, but if oil is leaking from pipeline(s) construct [with regard to limits applied by c) or d) above] dams or bunds with earth or boards to prevent it flowing into ditches, streams, drains, manholes or other such water courses or ducts.

19 Action to be taken if damage has not caused leakage:

- a) Contact the Pipeline Operator or his Agent.
- b) Do not backfill and await the representative of the Pipeline Operator to inspect the damage and decide on the action required.

BPA Operated

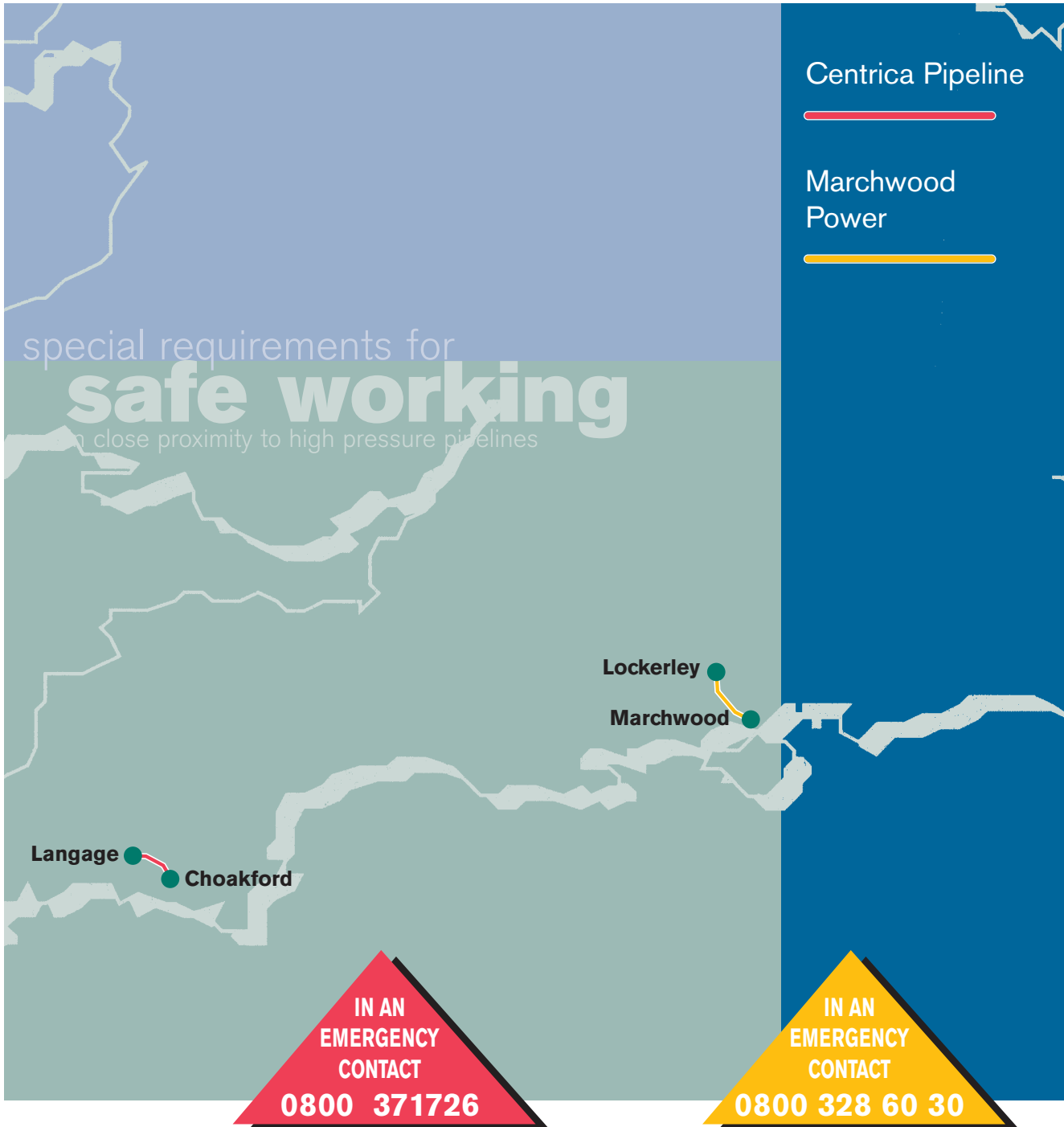
pipelines



Route	Approx. Operating Pressure	Pipeline (NB = Nominal Bore)
1 Stanlow - Kingsbury	1200psi	Multiproducts 10" NB (250mm)
2 Kingsbury - Buncefield	1200psi	Multiproducts 12" NB (300mm)
Kingsbury - Buncefield	1200psi	Multiproducts 10" NB (250mm)
3 Buncefield - Thames	1200psi	Multiproducts 14" NB (350mm)
4 Buncefield - Heathrow	1200psi	Multiproducts 8" NB (200mm)
Buncefield - Heathrow	1200psi	Multiproducts 6" NB (150mm)
5 Heathrow - Walton	1300psi	Multiproducts 10" NB (250mm)
6 Walton - Gatwick	1300psi	Multiproducts 10" NB (250mm)
7 Walton - Heathrow	720psi	Multiproducts 6" NB (150mm)
Walton - Heathrow	720psi	Multiproducts 6" NB (150mm)
8 Bacton - North Walsham	720psi	Gas Condensates 6" NB (150mm)
9 Bacton - Great Yarmouth	1100psi	Natural Gas 12" NB (300mm) *
10 Point of Ayr - Connahs Quay	640psi	Natural Gas 24"NB (600mm) *

*Additional safety precautions apply to these high pressure gas pipelines. Please consult BPA.

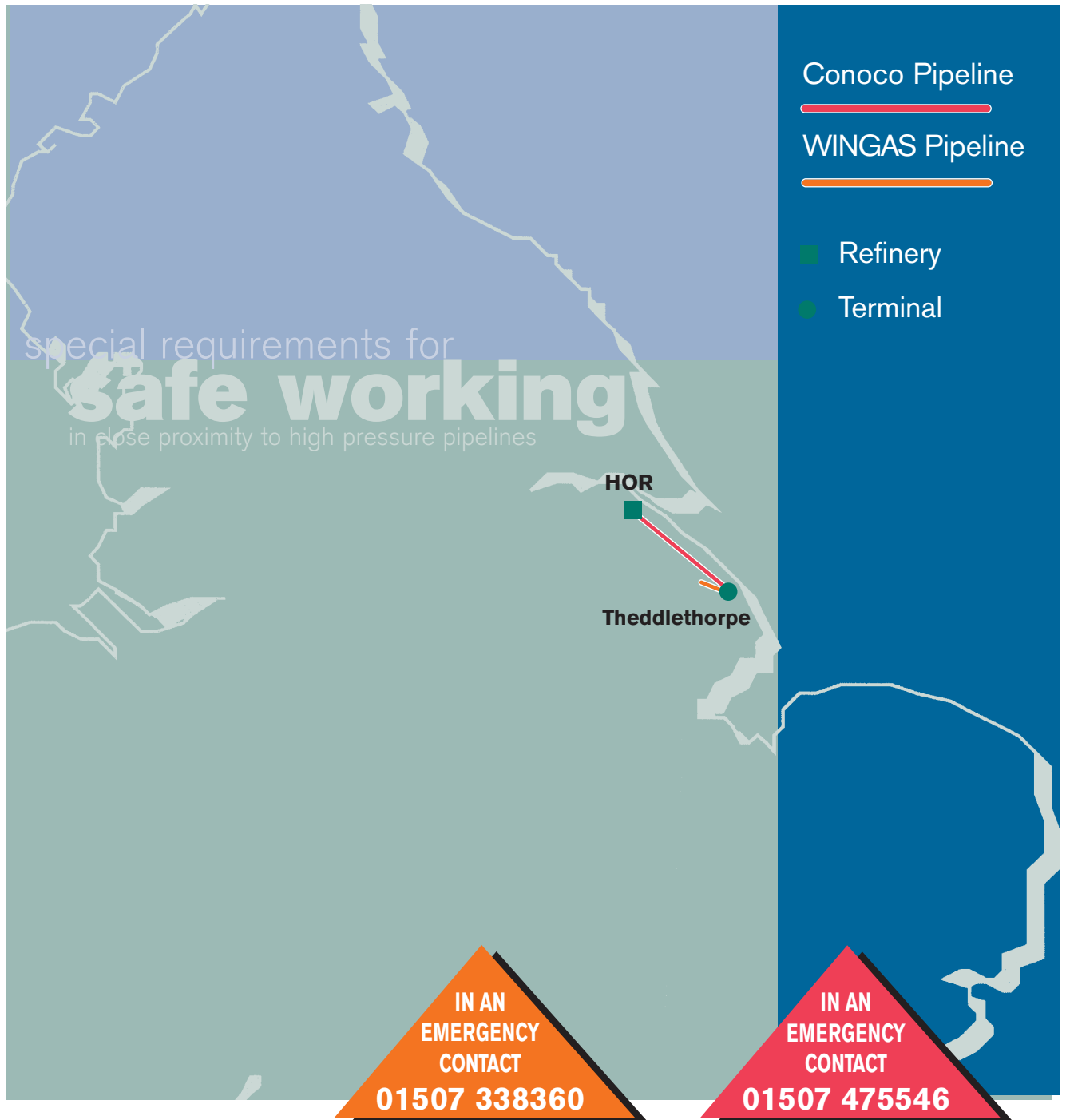
Centrica Energy & Marchwood Power pipelines



Route	Approx. Operating Pressure	Pipeline (NB = Nominal Bore)
1 Choakford - Langage	1150psi	Natural Gas 36" NB (915mm)
2 Lockerley - Marchwood	1100psi	Natural Gas 24" NB (600mm)

ConocoPhillips & WINGAS

pipelines



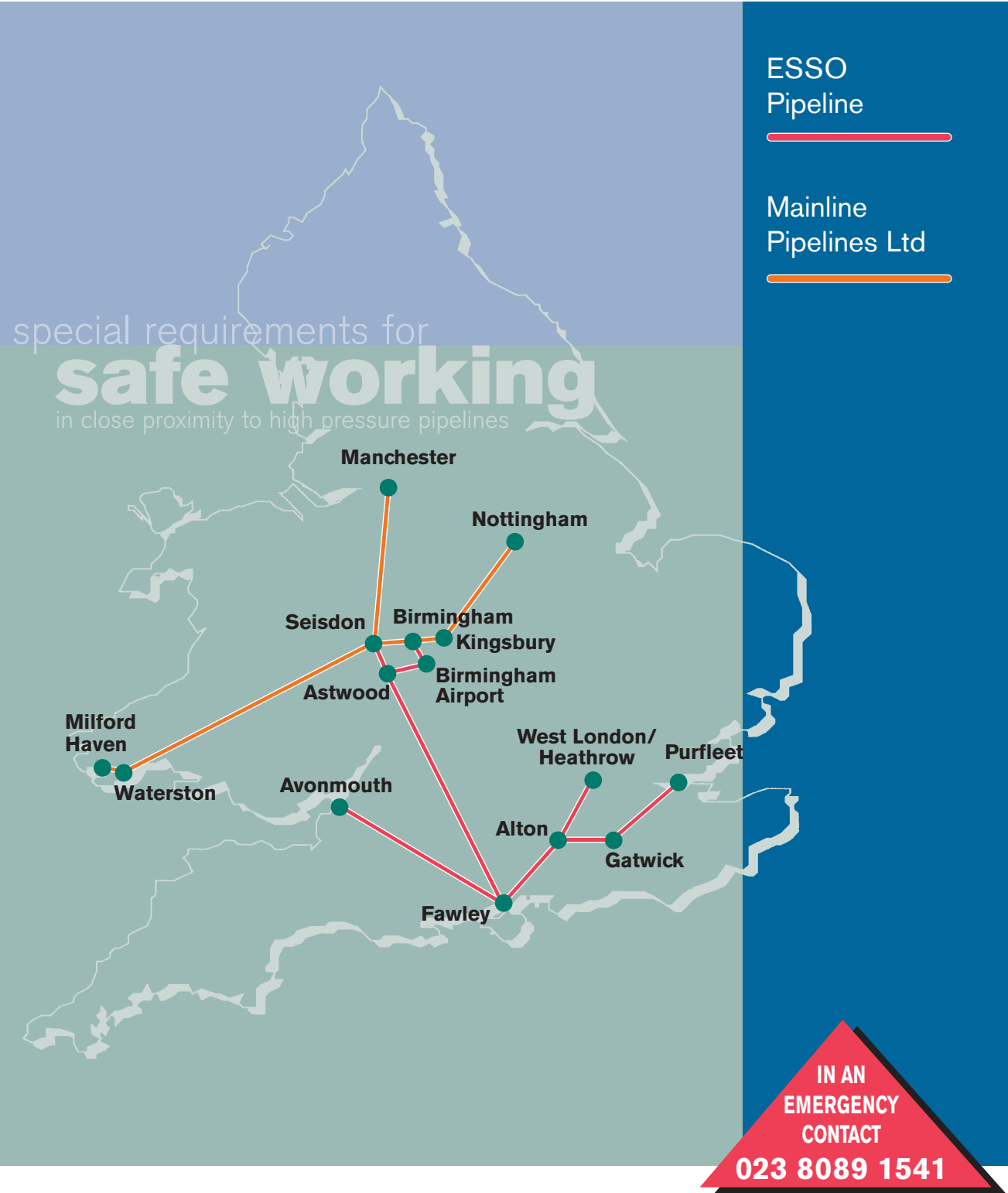
Route	Approx. Operating Pressure	Pipeline (NB = Nominal Bore)
1 Theddlethorpe - HOR (Killingholme)	900psi	Condensate 6" NB (150mm)
2 Theddlethorpe - Saltfleetby		



Route	Approx. Operating Pressure	Pipeline (NB = Nominal Bore)
1 Burton Point - Connah's Quay	1100psi	Gas 30" NB (750mm) 2.6km
2 Castleford CHP Pipeline	725psi	Gas 6" NB (152mm)
3 Cottam Pipeline	1015psi	Gas 24" NB (610mm) 24km
4 Enfield Pipeline	1088psi	Gas 24" NB (610mm) 12.8km
5 Holford Link	1100psi	Gas 700mm 4.7km
6 Holford Link	1470psi	Gas 700mm 2.75km
7 Isle of Grain Pipeline	1088psi	Gas 24" NB (610mm)
8 Killingholm - Theddlethorpe	1100psi	Gas 20" NB (508mm) 52km
9 Killingholm Refineries Pipeline	630psi	Gas 10" NB (254 mm) 10km
10 Winnington Pipeline	1100psi	Gas 12" NB (300mm) 11km

Esso and Mainline

pipelines



pipelines

<i>Route</i>	<i>Approx. Operating Pressure</i>	<i>Pipeline (NB = Nominal Bore)</i>
1 Fawley - West London	1000psi	Ex Fuel Oil (insulated) 10" NB (250mm)
Fawley - West London	1100psi	Multiproducts 12" NB (300mm)
*1 Gas Pipeline		8" NB (200mm)

*This pipeline is in the same trench as the 12" Esso pipeline, but is owned by Southern Gas Networks & National Grid and operated by their Local Distribution Zones (LDZ) as follows:

Hamble - Frimley (Colony Gate)	Southern Gas Networks, Horley, Surrey	
Frimley (Colony Gate) - West Bedfont	National Grid, Slough	
2 Alton - Purfleet (via Gatwick)	1100psi	Multiproducts 10" NB (250)
3 Fawley - Avonmouth	1440psi	Multiproducts 6" NB (150)
4 Fawley - Seisdon (Nr. Wolverhampton)	1100psi	Multiproducts 14" NB (350)
5 Astwood - Birmingham (Birmingham Airport Link)	1200psi	Multiproducts 12" NB (300)
6 Heathrow Feeder Lines (Perry Oaks)		

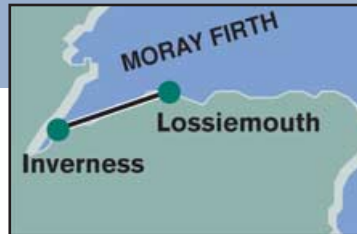
Mainline

pipelines

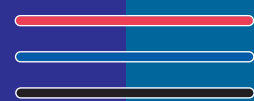
1 Waterston - Seisdon	1400psi	Multiproducts 16" NB (410mm)
2 Seisdon - Kingsbury	1400psi	Multiproducts 12" NB (300mm)
3 Kingsbury - Nottingham	1400psi	Multiproducts 10" NB (250mm)
4 Seisdon - Manchester	1400psi	Multiproducts 12" NB (300mm)
5 Texaco, Pembroke - Waterston		Multiproducts 16" NB (410mm)
6 Elf, Milford Haven - Waterston		Multiproducts 16" NB (410mm)
7 Carrington - Cadishead		Multiproducts 12" NB (300mm)

GPSS

pipelines



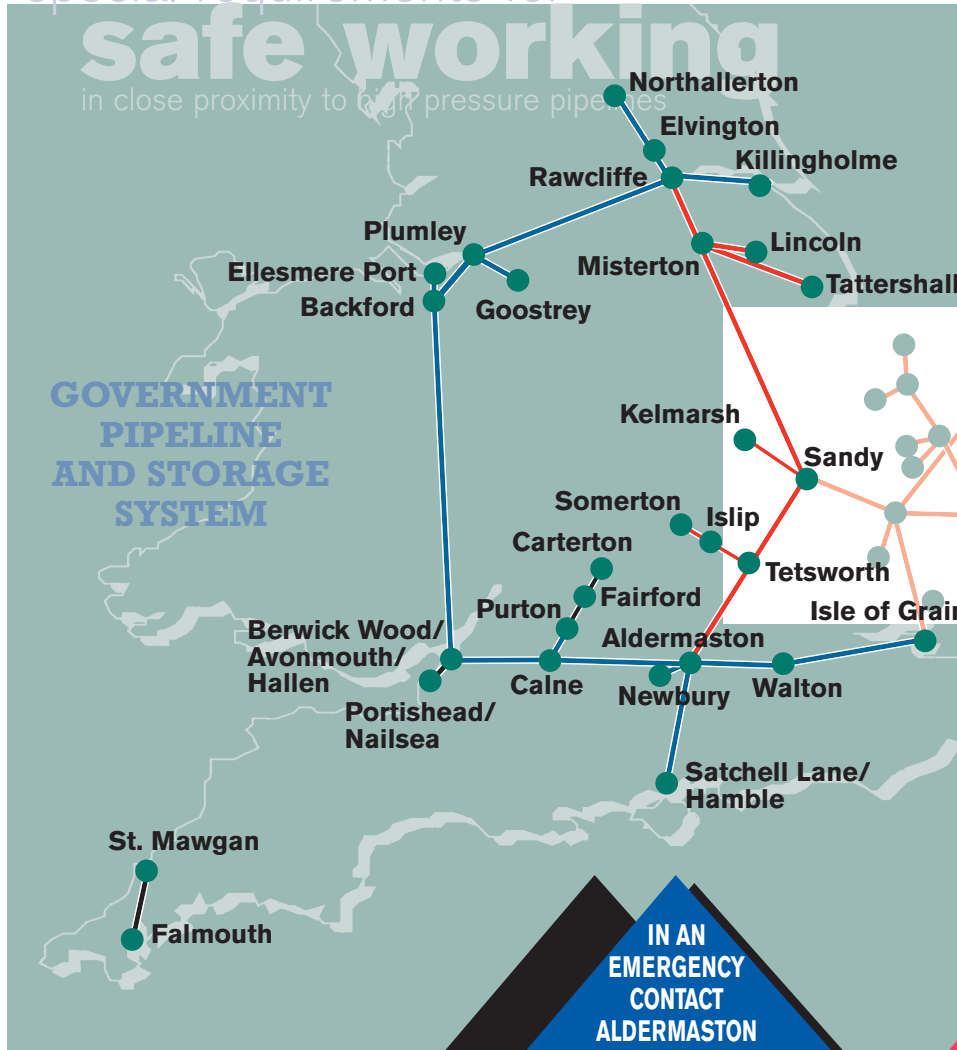
GPSS



special requirements for

safe working

in close proximity to high pressure pipelines



See Page 17

IN AN
EMERGENCY
CONTACT
ALDERMASTON
0118 971 2021

IN AN
EMERGENCY
CONTACT
RAWCLIFFE
01405 839212

GPSS

pipelines



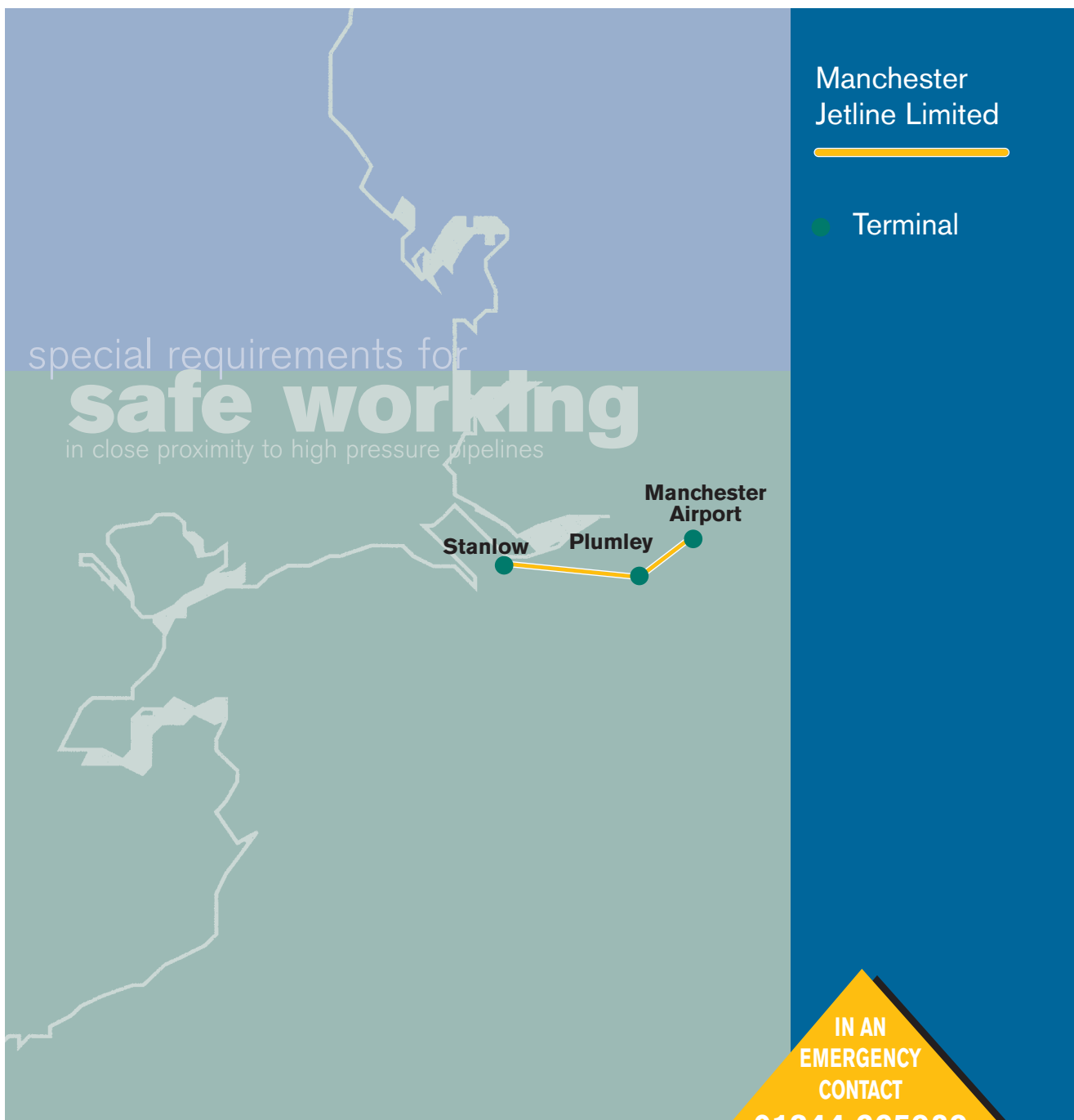
Principle GPSS

pipelines

<i>Route</i>	<i>Approx. Operating Pressure</i>	<i>Pipeline (NB = Nominal Bore)</i>
1 Backford - Rawcliffe	1100psi	Multiproducts 10"/12" NB (250/300mm)
2 Rawcliffe - Killingholme	1100psi	Multiproducts 12" NB (300mm)
3 Rawcliffe - Sandy	725psi	Multiproducts 6"/8" NB (150/200mm)
4 Sandy - Saffron Walden	725psi	Multiproducts 8" NB (200mm)
5 Saffron Walden - Hethersett	725psi	Multiproducts 8" NB (200mm)
6 Saffron Walden - Claydon	1200psi	Multiproducts 8" NB (200mm)
7 Saffron Walden - Thames	1200psi	Multiproducts 10" NB (250mm)
8 Sandy - Aldermaston	725psi	Multiproducts 8" NB (200mm)
9 Aldermaston - Satchell Lane	725psi	Multiproducts 8" NB (200mm)
10 Satchell Lane - Hamble	725psi	Multiproducts 8" NB (200mm)
11 Aldermaston - Walton	1200psi	Multiproducts 8"/10" NB (200/250mm)
12 Walton - Isle of Grain	725psi	Multiproducts 8" NB (200mm)
13 Aldermaston - Berwick Wood	725psi	Multiproducts 8"/10" NB (200/250mm)
14 Berwick Wood - Backford	725psi	Multiproducts 10" NB (250mm)
15 Falmouth - St Mawgan	1100psi	Multiproducts 8" NB (200mm)
16 Inverness - Lossiemouth	1100psi	Multiproducts 8" NB (200mm)
17 Calne - Fairford/Carterton	1100psi	Multiproducts 6" and 10" NB
18 Rawcliffe - Elvington/Northallerton	725psi	Multiproducts 8" NB (200mm)
19 Misterton - Lincoln/Tattershall	725psi	Multiproducts 8" NB (200mm)
20 Claydon - Thetford	1200psi	Multiproducts 8" NB (200mm)
21 Claydon - Woodbridge/Tunstall	725psi	6" NB (150mm)
22 Hethersett - Buxton	725psi	6" NB (150mm)
23 Thetford - Ingham/Barton Mills	725psi	6"/8" NB (150/200mm)
24 Tetsworth - Islip/Somerton	725psi	6"/8" NB (150/200mm)
25 Backford - Bromborough/Ellesmere Port	725psi	10" NB (250mm)
26 Berwick Wood - Portishead/Nailsea	725psi	16" NB (400mm)
27 Linkwood - Leuchars	232psi	6" NB (150mm)
28 Sandy - Kelmars	725psi	8" NB (200mm)
29 Thetford - Shouldham/Tattersett	725psi	8" NB (200mm)
30 Saffron Walden - Stansted	1100psi	6" NB (150mm)
31 Aldermaston - Newbury	725psi	6" NB (150mm)
32 Plumley - Goostrey	450psi	10" NB (250mm)

Manchester Jetline Limited

pipelines

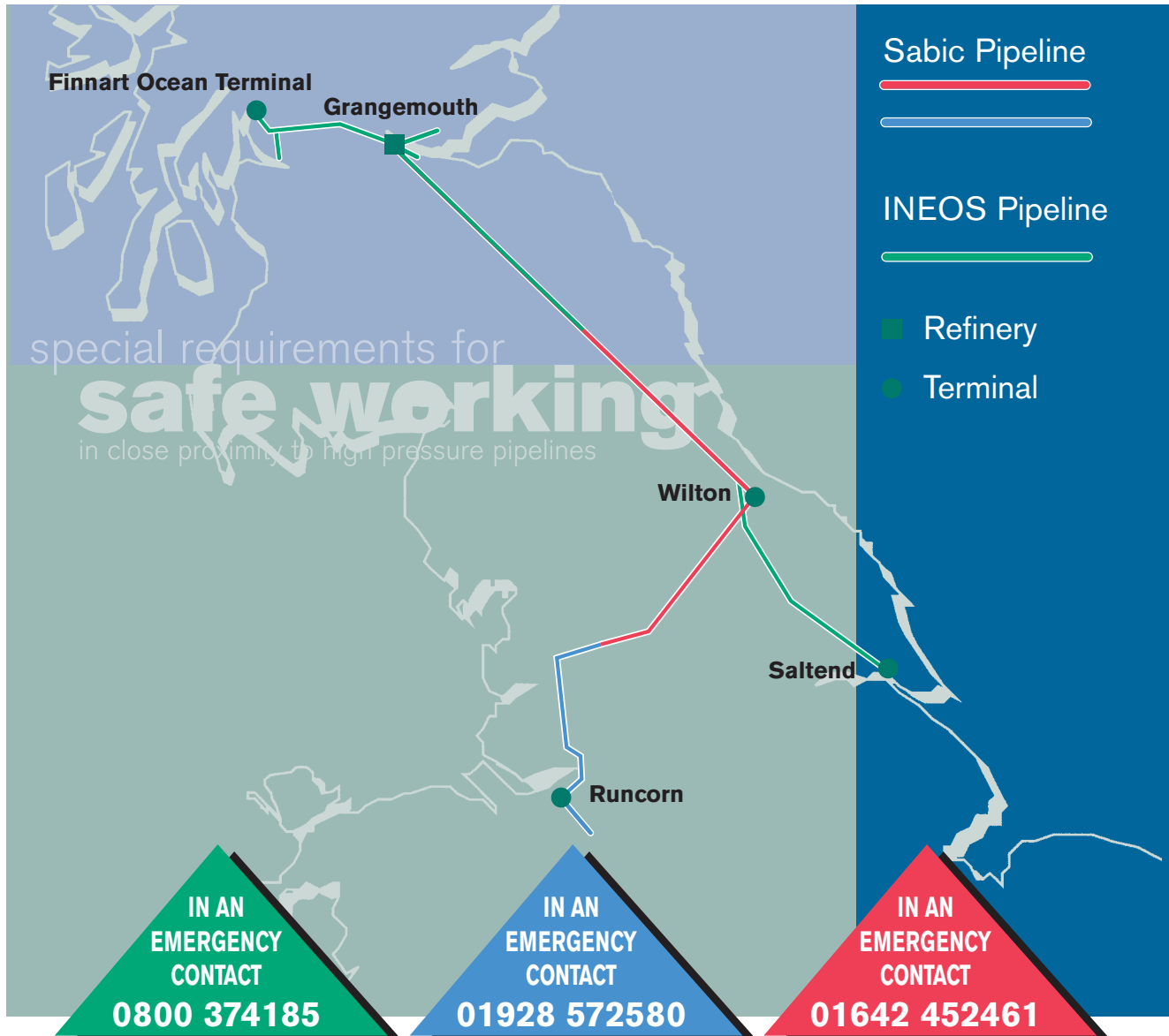


**IN AN
EMERGENCY
CONTACT
01244 665989**

<i>Route</i>	<i>Approx. Operating Pressure</i>	<i>Pipeline (NB = Nominal Bore)</i>
1 Stanlow to Manchester Airport	450psi	Jet Fuel 10" NB (250mm)

Ineos & Sabc

pipelines



Route	Approx. Operating Pressure	Pipeline (NB = Nominal Bore)
1 WGEP (North - INEOS/South - Sabc)	1390psi	Ethylene 10" NB (250mm)
2 TPEP (Sabic)	1410psi	Ethylene 8" NB (200mm)
3 Holford Link (Sabic)	1410psi	Ethylene 8" NB (200mm)
4 TSEP (Ineos)	1160psi	Ethylene 12" NB (200mm)
5 Finnart (Ineos)	710psi	Crude Oil 20" NB (500mm)
6 Finnart (Ineos)	940psi	Finished Hydrocarbon 12" NB (300mm)
7 NGPG (Ineos)	1160psi	Natural Gas 12" NB (300mm)
8 MGEP (Ineos)	1160psi	Ethylene 8" NB (200mm)
9 MGEP (Ineos)	400psi	Ethane 10" NB (250mm)



Route	Approx. Operating Pressure	Pipeline (NB = Nominal Bore)
1 Tranmere - Stanlow	650+psi	Crude Oil 24/28" NB (610mm)
2 Tranmere - Stanlow	650+psi	Fuel Oil 16" NB (400mm)
3 Tranmere - Eastham	650+psi	Crude Oil 12" NB (300mm)
4 Stanlow - Runcorn	1300+psi	HP Ethylene 8" NB (200mm)
5 Stanlow - Carrington	650+psi	Propylene 4" NB (100mm)
6 Stanlow - Carrington	650+psi	Ethylene 8" NB (200mm)
7 Stanlow - Grangemouth (NWEF)	1300+psi	HP Ethylene 10" NB (250mm)

Total

pipelines



Route	Approx. Operating Pressure	Pipeline (NB = Nominal Bore)
1 Killingholme - Buncefield (Finaline)	1500psi	Multiproducts 10" NB (250mm)
2 Colnbrook - Heathrow	200psi	Aviation fuel 12" NB (300mm)
3 Colwick	116psi	Multiproducts 2 x 12" NB (300mm)

List of Contacts relating to Pipelines in this booklet

BPA Operated

pipelines

Operators:

Agent:

- Land and Wayleaves Department
BPA
5-7 Alexandra Road
HEMEL HEMPSTEAD
Hertfordshire HP2 5BS

Tel: 01442 242200

Fax: 01442 214077

Email: reception@bpa.co.uk

**In an emergency contact:
01827 63708**

ConocoPhillips

pipelines

Contact for enquiries and
general information:

- ConocoPhillips
Theddlethorpe Gas Terminal
Theddlethorpe St. Helen
Mablethorpe
Lincolnshire LN12 1NQ

Tel: 01507 475665/475575

Fax: 01507 475431

**In an emergency contact:
01507 475546**

Centrica Energy

pipelines

Contact for enquiries and
general information:

- Centrica Energy
c/o FisherGerman LLP
The Grange
80 Tamworth Road
Ashby de la Zouch
Leics LE65 2BW

Tel: 01530 410857

Fax: 01530 563954

Email: centrica.energy@fishergerman.co.uk

**In an emergency contact:
0800 371726**

Esso

pipelines

Pipeline

Fawley - Avonmouth

Fawley - Seisdon

Fawley - London (including Perry Oaks)

Alton - Purfleet

Astwood - Birmingham

**In an emergency contact:
023 8089 1541**

Agent:

- FisherGerman Chartered Surveyors
Pipelines Office
New Road
Hardley, Hythe
Southampton
Hampshire
SO45 3NW

Tel: 023 8088 3150
Fax: 023 8088 3155
Email: pipelines@fishergerman.co.uk

Mainline

pipelines

Waterston - Seisdon

Elf Refinery - Waterston

Texaco Refinery - Waterston

Seisdon - Nottingham

Seisdon - Manchester

Carrington - Cadishead

**In an emergency contact:
023 8089 1541**

- FisherGerman Chartered Surveyors
Pipelines Office
New Road
Hardley, Hythe
Southampton
Hampshire
SO45 3NW

Tel: 023 8088 3150
Fax: 023 8088 3155
Email: pipelines@fishergerman.co.uk

GPSS

pipelines

Contact for enquiries and
general information:

**In an emergency contact:
(South) Aldermaston Control:
0118 971 2021
(North) Rawcliffe Control:
01405 839212**

- GPSS
PO Box 7273
Ashby de la Zouch
LE65 2BY

Tel: 0845 070 1245
Fax: 0845 070 1250
Email: gpss@gpss.info

E-ON

pipelines

All LINESEARCH enquiries should be emailed to: Sally.A.Brown@eon-uk.com

Contact for enquiries and general information:

- Killingholme And Cottam Pipelines
Engineering & Maintenance Dept. (Pipelines)
Chase Hill Road
North Killingholme
North Lincolnshire DN40 3LU
Tel: 01469 504080
Fax: 01469 541576
Email: pipelines@eon-uk.com

- Enfield Pipeline
E.ON UK
Enfield Power Station
111 Brancroft Way
Enfield
Middlesex EN3 7PL
Tel: 0208 443 9472
Email: Des.Gelly@eon-uk.com

- Connah's Quay Pipeline
Connah's Quay Power Station
Kelsterton Road
Connah's Quay
Clwyd CH5 4BP
Tel: 01244 894066
Email: Stuart.Armitage@eon-uk.com

- Winnington Pipeline
E.ON UK CHP Limited
Winnington
Northwich
Cheshire CW8 4GX
Tel: 01606 723738
Fax: 01606 783195
Email: Clive.Dutton@eon-uk.com

- Castleford CHP Pipeline
E.ON UK CoGeneration Ltd
Wheldon Road
Castleford
West Yorkshire WF10 2JT
Tel: 01977 555653
Email: Paul.Killelay@eon-uk.com

- Isle of Grain Pipeline
E.ON UK
Grain Power Station
Isle of Grain
Rochester
Kent ME3 0AF
Tel: 02476 424000

**In an emergency contact:
0800 389 4795**

Ineos

pipelines

Contact for enquiries and
general information:

Includes WGEP (North)

**In an emergency contact:
0800 374185**

- Pipeline Team
Ineos Manufacturing (Scotland) Ltd
PO Box 21
Bo'ness Road
Grangemouth
Stirlingshire
FK3 9XH

Tel: 0800 374185
www.innovene.com/pipelines
www.ineos.com

Manchester Jetline Limited

pipelines

Contact for enquiries and general information:

- GreyStar UK
2 Verity Court
Pochin Way
Middlewich
Cheshire CW10 0GW
Tel: 01606 833805
Fax: 01606 835557

**In an emergency contact:
01244 665989**

Marchwood Power

pipelines

Contact for enquiries and general information:

- Marchwood Power Limited
Oceanic Way
Marchwood Industrial Park
Marchwood
Hampshire SO40 4BD
Tel: 02380 527999
Fax: 02380 527998

**In an emergency contact:
0800 328 60 30**

Sabir

pipelines

Contact for enquiries and general information:

- SABIC UK Petrochemicals
Wilton Site
Redcar
TS10 4YA

In an emergency contact:

TPEP (West):

01928 572 580

TPEP (East) and WGEP:

01642 452461

TPEP (West)

Office Tel: 01928 512677

TPEP (East), TSEP and WGEP(South)

Office Tel: 01642 834531

The dividing point on TPEP is
ngr SD 769 452 NE of Clithroe

Shell

pipelines

Contact for enquiries and general information:

**In an emergency contact:
24hour freephone 0800 220959**

- Shell UK Limited
The Sidings Industrial Estate
Tebay, Cumbria CA10 3XR
Tel: 015396 24845
Fax: 015396 24195
Email: r.palmer@greystaruk.com

Total

pipelines

Contact for enquiries and general information:

**In an emergency contact:
Finaline & Colnbrook
0800 592 246**

**In an emergency contact:
Colwick 01159 615785**

- Finaline & Colnbrook Pipelines
- Serco-Total
Building 412, RAF Halton
Aylesbury
Buckinghamshire HP22 5PG
Tel: 01296 656790
Fax: 01296 656528
- Total Colwick
- Total UK Ltd, Nottingham Terminal
Private Road 3, Colwick Industrial Estate
Colwick
Nottingham NG4 2JS
Tel: 01159 615785
Fax: 01159 612334
Website: www.totalpipelines.co.uk

WINGAS

pipelines

Contact for enquiries and general information:

**In an emergency contact:
01507 338360**

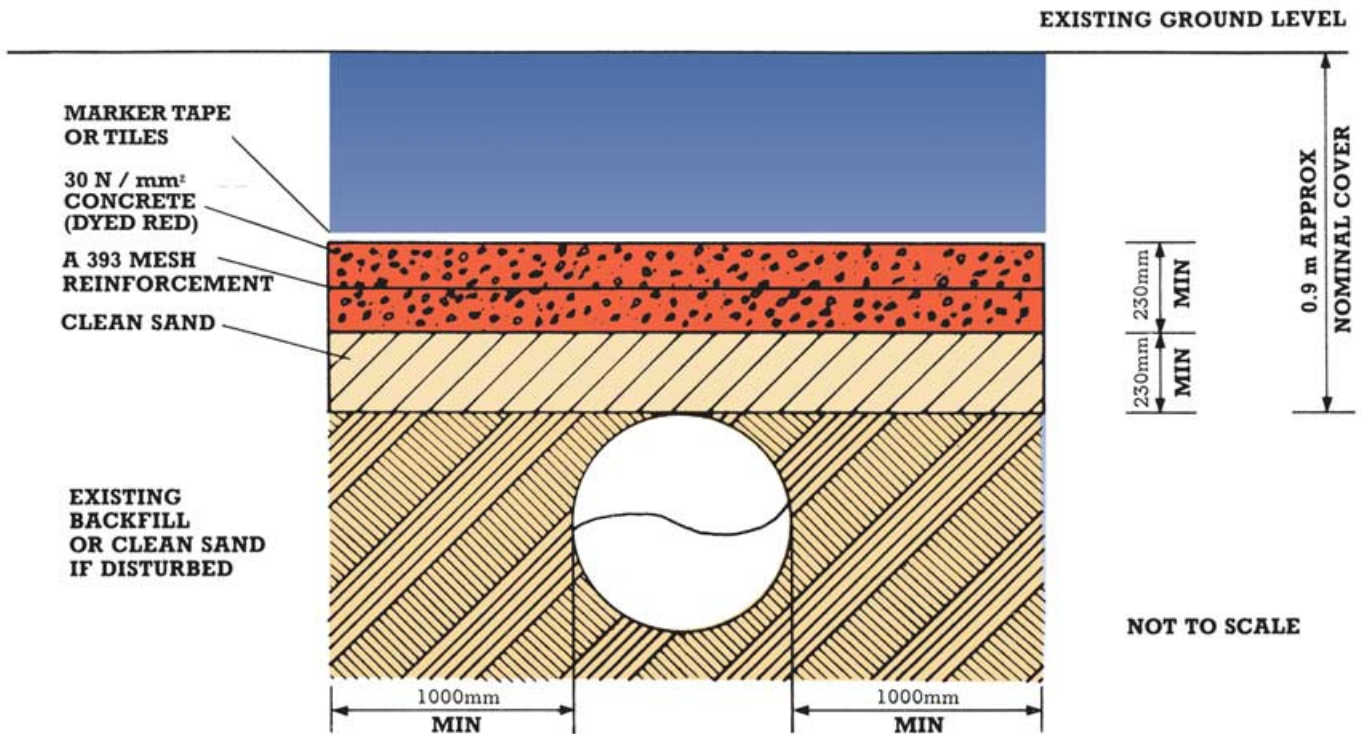
- WINGAS Storage UK Ltd
Saltfleetby Operations
Howdales
South Cockerington
Lough LN11 7DJ

Tel: 01507 338052
Fax: 01507 339022
Email: dutymanager@wingas-storage.com

Appendix I

Typical sectional drawing and specification for protection of Pipelines under carriage ways.

(Each case will be treated separately)



Notes:

1. Backfill between pipeline and concrete slab to be:
Either existing backfill (undisturbed)
Or sand clean of any inclusions.
2. The concrete slab is to extend a minimum of 1.0 metre (3' 3") beyond the proposed crossing area, i.e.

