From: [redacted]
To: Gatwick Airport
Subject: Gatwick Airport Northern Runway (Application Ref: TR020005) - GTC Response
Date: 30 November 2023 12:31:38
Attachments: [redacted]

Dear Sir/Madam,

I have read the plans and documents you sent BUUK recently in regard to the application to install a Northern Runway at Gatwick Airport.

Processing your plans and details I have deduced that GTC has one gas network that falls within the vicinity of the Gatwick Airport Boundary. Please study the attached the images showing your works locations and our corresponding network drawings for the relevant areas and decide if our assets are within the order limits of your proposed works.

If you believe that the proposed works will have an impact on our network, please submit your C2/C3 diversion request along with a copy of this letter/email to Network_Variations@gtc-uk.co.uk or electricity.diversions@gtc-uk.co.uk. The following must be submitted in order for us to escalate this to our design team.

- An outline of your proposed works.
- Highlighted GTC drawing with the area in question.

Our designer can then quote for costs for diversion works and respond back to you directly with the necessary information.

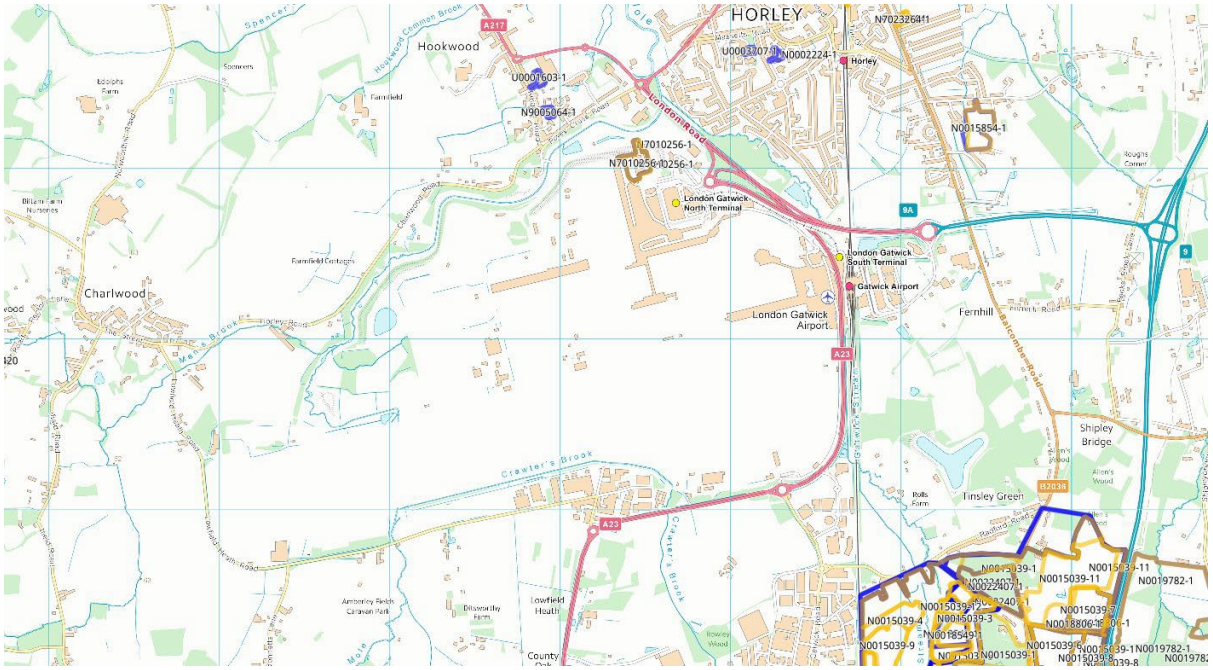
We look forward to hearing from you.

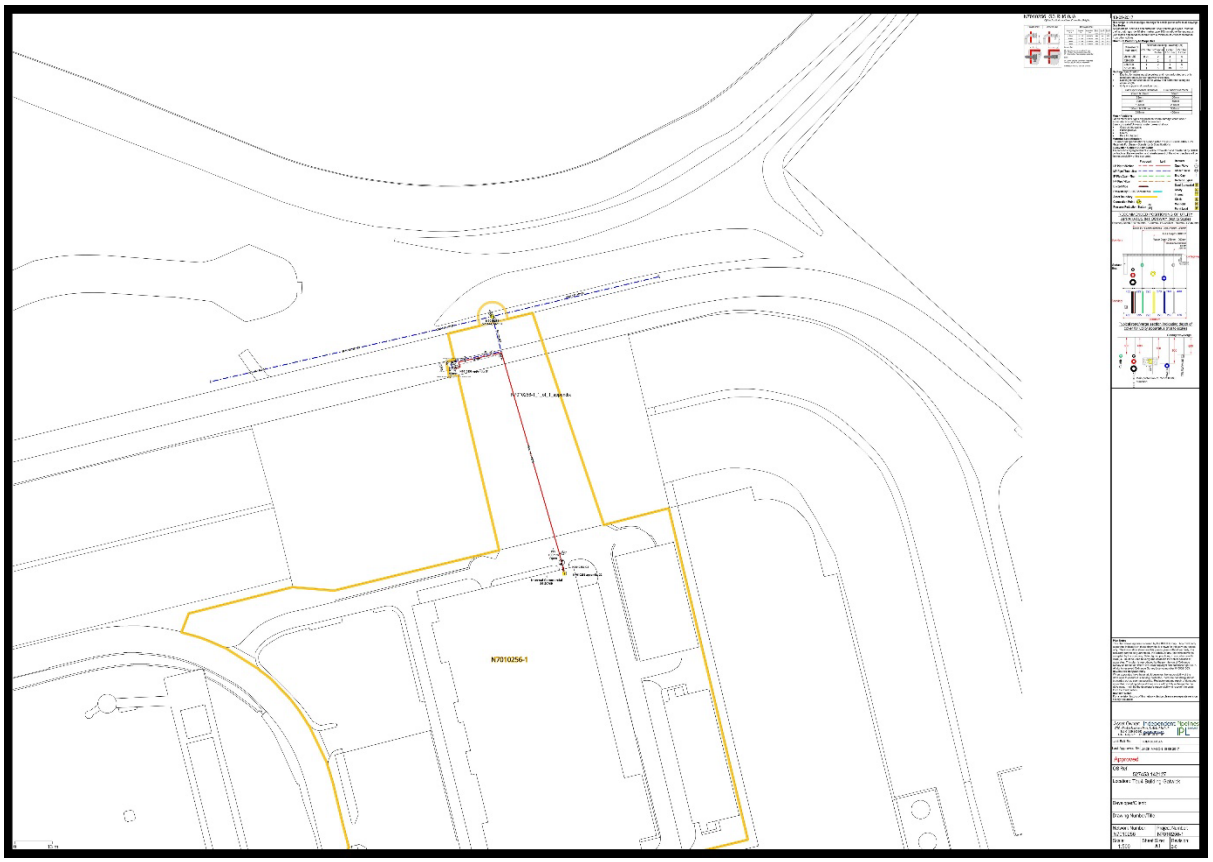
If you require any other information or assistance, please do not hesitate to contact us further.

Yours faithfully,

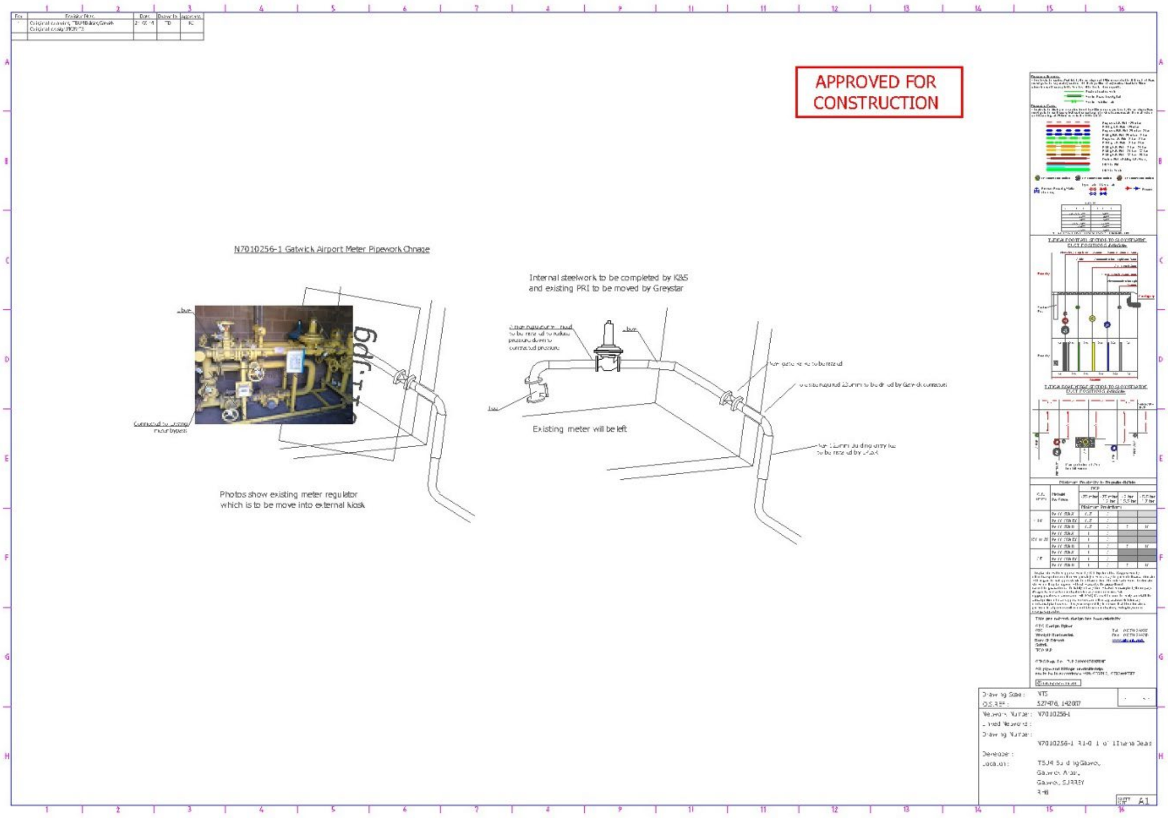
William Price
Project Officer
[redacted]

NOTE:
This E-Mail originates from BUUK Infrastructure, Synergy House, Woolpit Business Park, Woolpit, Bury St Edmunds, Suffolk, IP30 9UP
VAT Number: GB688 8971 40. Registered No: 08246423.
DISCLAIMER
The information in this E-Mail and in any attachments is confidential and may be privileged. If you are not the intended recipient, please destroy this message, delete any copies held on your system and notify the sender immediately. You should not retain, copy or use this E-Mail for any purpose, nor disclose all or any part of its content to any other person. Whilst we run antivirus software on Internet E-Mails, we are not liable for any loss or damage. The recipient is advised to run their own up to date

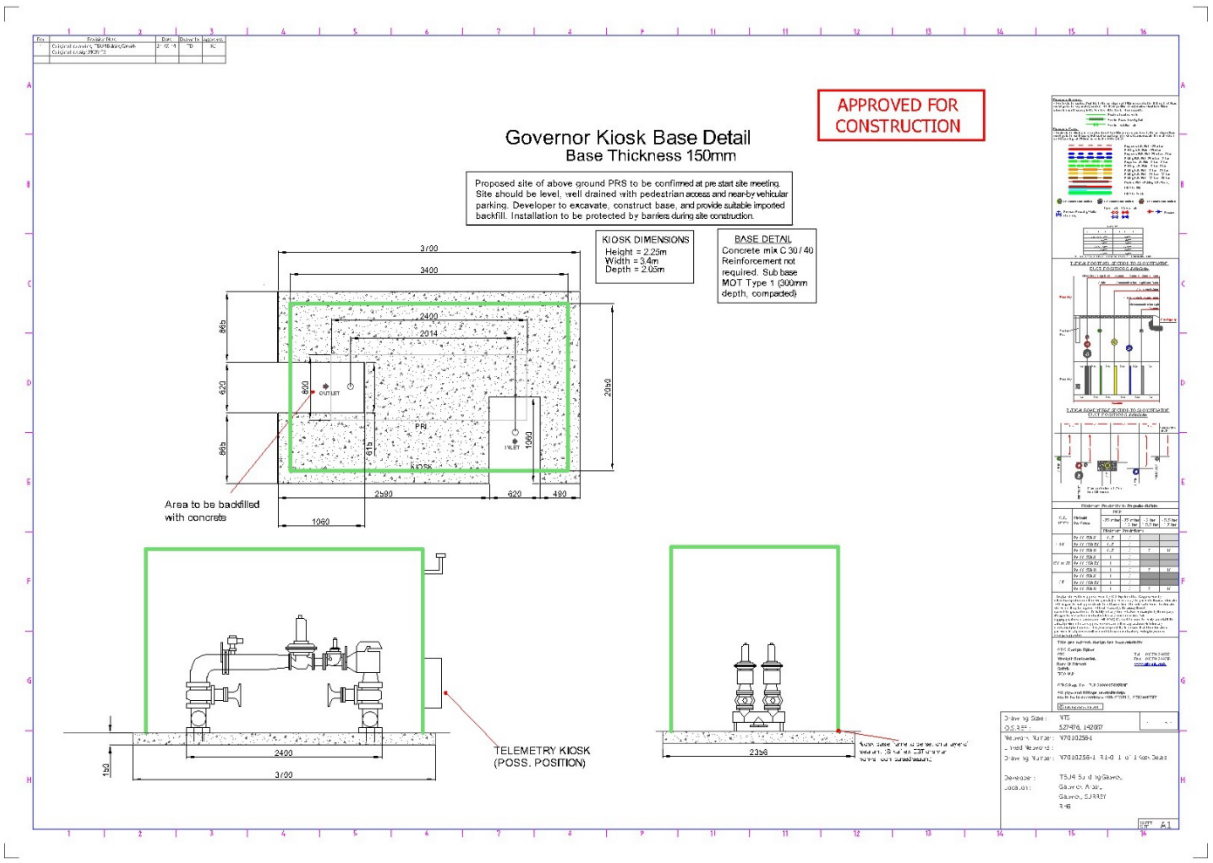

HORLEY
Hookwood
Charlwood
Horley
London Gatwick North Terminal
London Gatwick South Terminal
Gatwick Airport
London Gatwick Airport
Fernhill
Shipley Bridge
Tinsley Green
Lowfield Heath
A217
A23
A22
B2036
9A
London Road
Balcombe Road
Crawter's Brook
N0002224-1
N0015854-1
N7010256-1
N9005064-1
U0001603-1
N7023264-1


N7010256-1

appendix_1_of_2
Authorised by JACK MASON 18-09-2017



appendix_2_of_2
Authorised by JACK MASON 18-09-2017



SAFE WORKING IN THE VICINITY OF UTILITY NETWORKS

(Refer to the HSE Guidance Document HSG47)

Introduction

This document should be issued to anyone intending on working in the vicinity of GTC and associated entities' utility networks and should be used in conjunction with HSG47, NJUG guidance and industry recognised practices.

Confirmation should be sought from the asset owner in any instance of ambiguity or if there is confusion.

Any querries regarding diversions, alterations, and disconnections for Gas, Water, Distributed Heat and Fibre please contact: Network_Variations@gtc-uk.co.uk

Any querries regarding diversions, alterations, and disconnections for Electric, please contact: Electricity.diversion@gtc-uk.co.uk

For more information please see the GTC website: https://www.gtc-uk.co.uk/ or alternatively contact plant.enquiries@bu-uk.co.uk

The Dangers

Damage to services can cause significant disruption and project delays and therefore incur considerable costs as well as the potential for severe or fatal injury to not only to those directly involved but also the general public.

Damages often have instantaneous reactions like explosive arcing with cables or leaks for gas and water mains however latent reactions due to damages that are ignored, consealed, or unnoticed can have much greater consequences.

General

1. It is imperative that all works are carried out in accordance with the guidance provided by the HSE (Health and Safety Executive) in their document HSG47 "Avoiding Danger from Underground Services", ISBN 978 0 7176 6584 6, 3rd Edition 2014. No party shall carry out any excavation works or other intrusive works such as piling, blasting or demolition without following the guidance in HSG47.

2. We own gas, electricity, water, waste water, fibre, and district heating apparatus located in the highway, private property and through the countryside. Some plant may be located in land for which a wayleave or easement has been granted and there may be no surface evidence of the presence of apparatus.

3. Ensure that you have obtained detailed plans of existing and proposed gas, electricity, water, waste water, fibre, and district heating networks before any works commence.

4. The position of the networks shall be pinpointed as accurately as possible by visually surveying the area for indications of apparatus, by means of a locating device, and reference the information gathered to the plans. Locating equipment must be tested and calibrated within the manufacturer's calibration date.

Excavation work should be carried out where applicable, carefully following recognised safe digging practices. Once a locating device has been used to determine position and route, excavation may proceed; trial holes should be dug using suitable hand tools to confirm the position of buried networks. During excavation the locating device should be reused to check position and route of buried apparatus.

Once the apparatus has been located, appropriate marking be made on the covering hard surface confirming location and any errors in plans identified, GTC should be advised to allow plans to be updated.

5. Hand-held power tools can damage buried apparatus and shall be used with care until the exact position of a utility has been determined. They may only be used to break a paved or concrete surface above the network, unless there are any indications that the network is particularly shallow; in such circumstances, accuracy of plant location is determined and excavation initiated adjacent to the apparatus.

6. No manhole, chamber or other structure shall be built over, around or under the network. Such structures, other pipes, ducts and cables should be laid to provide a minimum clearance from the existing network of 300mm or 1.5 times the diameter of the asset, whichever is the greater. No work should be carried out if this minimum clearance cannot be met or which results in a reduction of cover or protection over the network, without first consulting GTC, please seek advice from GTC.

7. Where an excavation uncovers any network apparatus the backfill shall be adequately compacted, particularly beneath the network, to prevent any settlement, which would subsequently damage the network. Backfill material adjacent to the network shall be selected fine material or sand, containing no stones, bricks or lumps of concrete etc. and shall be suitably compacted to give comparable support and protection to that provided before excavation. No power compaction shall take place until at least 200mm cover of selected fine fill has been suitably compacted by hand tools.

8. If the road construction is close to the top of the network, GTC shall be asked to identify whether any additional precautions are necessary. The road construction depth should not be reduced without permission from the local Highway Authority.

9. Costs incurred by GTC through direct or consequential damage shall be recharged.

10. Where utilities are within a duct the duct should be treated in the same manner as live utility cable/pipe/fibre and any work in the vicinity of the apparatus shall be carried out with caution.

Any damage caused no matter how insignificant or minor in appearance SHALL BE REPORTED to GTC as soon as possible.

Precautions for Gas Networks

11. Plans do not always show the presence of gas service pipes (from the gas main to premises) but their existence should be assumed with consideration given to the increased height of the service off-take fitting on the main.

12. The depth of cover for gas mains is typically 750mm in carriageways and grass verges, 600mm in footways and 1.1m in open field. The depth of cover for gas services is typically between 375mm and 600mm . Reference should always be made to the network drawing. Remember these covers are to finished level, you may be working in an area, which will be made up or lowered at a later date.

13. Gas pipes should be located by hand digging before mechanical excavation begins. When the positions and depth of the pipes have been determined, work can proceed.

14. If a gas leak is suspected, the following action should be taken immediately:

- Remove all people from the immediate vicinity of the escape. If the service connection to a building or the adjacent main has been damaged, warn the occupants to leave the building, and any adjoining building, until it is safe for them to return. It is important to note that a mechanical excavator may not only cause damage/leakage at the point of impact. For example, damage to a service connection outside the building may result in further, unseen damage to the connection inside the building. Gas leaking from the damage inside or gas travelling along the line of the service connection pipe from outside the building may cause a build-up of gas within the building.
- Prohibit smoking, and extinguish all naked flames and other sources of ignition i.e. stop excavator and compressor engines within at least 5.0m of the leak.
- Inform the National Gas Emergency Service immediately by dialling:

  0800 111 999

- Remain on site.
- Assist the Gas Emergency Service Provider staff, Police, Fire Services or other Statutory Authorities as requested.

15. Where gas pipes cross or are parallel and close to excavations, changes in backfill etc. may cause differential ground settlement and increased stress in the pipe. For pipes parallel and close to excavations, the degree of risk depends upon the depth of the excavation, the distance of the pipe from the excavation, the type of soil and any excessive loading from heavy construction plant and materials. Wherever excavation works may affect the support of the gas pipe or cause excessive loading over the gas pipe then GTC shall be consulted.

16. No concrete or other hard material should be placed or left under or adjacent to any gas pipe as this can cause pipe fracture at a later date. Concrete backfill should not be used within 300mm of a gas pipe.

17. Where an excavation uncovers a gas pipe with a damaged wrapping, GTC shall be informed, so that repairs can be made to prevent future corrosion and leakage.

18. Pipe restraints or thrust blocks close to gas mains shall not be removed or interfered with as they are a safety feature of the live gas network.

19. Anyone who carries out work near underground gas plant should observe any specific requirements made by the site manager, and ensure that access to the plant by the asset owners staff is available at all times. No unauthorised repairs to gas pipes should be made.

20. Where excavation is within 5m proximity to above or below ground pressure control equipment, ground workers must be aware of the possibility of encountering small auxilary pipework that is more susceptible to damage.

21. Where PE pipes and cables have been exposed and it is intended that hot work (e.g. welding, grinding, etc) be carried out, contact shall be made with GTC to confirm additional precautions and actions that may require to be undertaken.

22. GTC shall be consulted if it is intended to carry out any of the following activities:

- Using explosives within 30m of gas pipes or 400m of gas pressure reduction equipment.
- Piling or boring within 15m of gas plant.
- Excavating within 10m of pressure reduction equipment.
- Reducing the cover or protection of a gas pipe.
- Carrying out deep excavations nearby (minimum of 2m up to 15m).
- Working within 3m of GTC's intermediate pressure (IP) mains.

Precautions for Electricity Networks

23. Plans do not always show the presence of electric service cables (from the electricity main to premises) but their existence should be assumed.

24. In most cases there will be no permanent surface marker posts or other visible indication of the presence of a buried cable. Even if no cables are shown on plans or detected by a locator, there may still be cables present, which could be live and a close watch should be kept for any signs which could indicate their presence such as marker tape, tape tile, concrete tiles and wooden battens. Any marker which is disturbed by our excavations must be replaced once work is completed.

25. Typically underground cables are laid in trenches between 450mm and 1000mm deep, although some high voltage cables will be deeper, however, depths should never be assumed.

26. A cable is positively located only when it has been safely exposed. Even then, digging should still proceed with care as there may be other cables adjacent or lower down.

27. Occasionally, cables are terminated in the ground by means of a seal, sometimes with external mechanical protection. These "pot ended" or "bottle ended" cables should be treated as live and should not be assumed to be abandoned or disused. They can be difficult to detect with locators even when "live".

28. Where practicable, such power tools shall only be used 500mm or more away from the indicated line of a cable buried in or below a hard surface. Having done so, the cable shall then be positively located by careful hand digging under the hard surface. The hard surface should be gradually removed until the cable is exposed. If the cable is not exposed then it must be assumed to be embedded within the surface. Where possible a cable locator shall be used as a depth guide down the side of the excavation.

29. Because of the difficulty in confirming depth, hand held power tools shall never be used over the cable unless either:

- The cable has already been exposed by digging under the surface to be broken out and it is at a safe depth (at least 300mm) below the bottom of the hard surface material.

  or

- Physical precautions have been taken to prevent the tool striking the cable.

30. Excavating close to electricity cables buried in concrete is dangerous and shall not be undertaken unless the cable(s) have been isolated. For this reason alone electricity cables should not be buried in concrete.

31. Where mechanical excavators are used in the possible vicinity of underground cables, the work should be arranged so that damage to cables is avoided so far as is reasonably practicable. To minimise danger to operatives those onsite shall be outside of the reach of the excavator bucket and shall not enter the trench whilst digging is undertaken. Excavator operators shall be instructed to stay in the cab if a cable is struck. If excavator operators have to exit the cab they should jump clear. If excavator operators climb down from the cab the risk of electrocution is significantly increased. If a cable is struck, the machine involved shall be subject to continous observation and no one shall enter the excavation or approach the machine or the cable until GTC have been contacted and the damaged cable has been made safe.

32. Where cables have been exposed:

- Any damage shall be reported to GTC immediately on: **0800 032 6990**

  And work shall not be undertaken in the vicinity of a damaged cable until GTC has investigated its condition.

- For more than 1.0m and they cross a trench, support shall be provided. If the exposed cable length is shorter than 1.0m support shall still be considered if joints have been exposed or the cable appears otherwise vulnerable to damage. Where advice and help is needed contact GTC.

- Suitable precautions shall be taken to prevent damage from on-going work in the excavation. This may involve for example the use of physical means (e.g. timber boards, sandbags etc) to prevent mechanical damage. Materials or equipment which could damage or penetrate the outer sheath of the cable shall not be used. Cables lying in the bottom of an excavation are particularly vulnerable and shall be protected by nail free wooden planks, troughing or other suitable means.

- Cables shall not be moved aside unless the operation is supervised by GTC.

- Precautions shall be taken to prevent access by members of the public.

33. GTC shall be consulted if it is intended to carry out any of the following activities:

- Using explosives within 30m of plant or substations piling or boring within 15m of electric plant.

- Excavating within 10m of a substation.

- Carrying out deep excavations nearby (minimum of 2m up to 15m).

- Working near GTC's HV plant.

Precautions for Water Networks

34. Plans do not always show the presence of water service pipes (from the water main to premises) but their existence should be assumed with consideration given to the increased height of the service off-take fitting on the main.

35. The depth of cover for water mains are typically 900mm. The depth of cover for water services are typically 750mm. Remember these covers are to finished level, you may be working in an area, which will be made up or lowered at a later date.

36. Water mains shall be located by hand digging before mechanical excavation begins. When the positions and depth of the pipes have been determined, work can proceed.

37. The danger created by damaging a water pipe with an excavator is much greater than if the damage is done with a hand-held power tool. Water pipes may have projections such as valve housings, which are not shown on the plans and to allow for this mechanical excavators shall not be used within 500mm of a water pipe.

38. If a water leak is suspected, the following action should be taken immediately:

- Remove all people from the immediate vicinity of the damage. It is important to note that a mechanical excavator may not only cause damage/leakage at the point of impact. For example, damage to a service connection outside the building may result in further, unseen damage to the connection inside the building.
- Shut down all working plant and machinery in the vicinity of the damage
- Inform IWNL by dialling: **02920 442 716**
- Remain on site.
- Do not attempt to make a repair.
- Assist Approved Contractors, Police, Fire Services or other Statutory Authorities as requested.

39. Where water pipes cross or are parallel and close to excavations, changes in backfill etc. may cause differential ground settlement and increased stress in the pipe. For pipes parallel and close to excavations, the degree of risk depends upon the depth of the excavation, the distance of the pipe from the excavation, the type of soil and any excessive loading from heavy construction plant and materials. Wherever excavation works may affect the support of the water pipe or cause excessive loading over the water pipe then GTC must be consulted.

40. No concrete or other hard material should be placed or left under or adjacent to any water pipe as this can cause pipe fracture at a later date. Concrete backfill should not be used within 300mm of a water pipe.

41. Where an excavation uncovers a water pipe with a damaged wrapping, GTC shall be told, so that repairs can be made to prevent future corrosion and leakage.

42. Pipe restraints or thrust blocks close to water mains should never be removed.

43. Anyone who carries out work near underground water plant shall observe any specific requirements made by the site manager, and ensure that access to the plant by GTC staff is available at all times. No unauthorised repairs to water pipes should be made.

44. Where PE pipes and cables have been exposed and it is intended hot work (e.g. welding, grinding, etc) be carried out, contact shall be made with GTC to confirm additional precautions and actions that may require to be undertaken.

45. GTC shall be consulted if it is intended to carry out any of the following activities:

- Using explosives within 30m of plant.

- Piling or boring within 15m of water plant.
- Excavating within 10m of water asset structures.
- Reducing the cover or protection of a water main or service.
- Carrying out deep excavations nearby (minimum of 2m up to 15m).

Precautions for Fibre Networks

46. Plans may not always show the presence of fibre ducts but their existence should be assumed if GTC advise they have fibre services deployed in the given area. Any planned excavation work should only proceed with due care and attention.

47. Chambers with IFNL or OFNL marked lids can be used as an onsite indictor that GTC have fibre plant deployed in a given area however an exclusion of their presence does not necessarily mean there is no plant present.

48. In most cases there will be no permanent surface marker posts or other visible indication of the presence of a buried fibre duct. Even if no ducts are shown on plans there may still be ducts present which could have live fibre service installed. A close watch shall be kept for any signs which could indicate duct presence such as marker tape. Any marker which is disturbed by our excavations must be replaced once work is completed.

49. The depth of cover for fibre duct is typically between 350mm and 600mm in footways and grass verges, 600mm in carriageways and 1m in agricultural deployments. Remember these covers are to finished level, you may be working in an area, which will be made up or lowered at a later date.

50. Fibre ducts should be located by hand digging before mechanical excavation begins. When the positions and depth of the ducts have been determined, work can proceed. Even then, digging should still proceed with care as there may be other ducts adjacent or lower down.

51. If fibre duct damage is suspected, the following action should be taken immediately:

- Remove all people from the immediate vicinity of the damage. It is important to note that a mechanical excavator may not only cause damage at the point of impact. For example, damage to a fibre connection outside the building may result in further, unseen damage to the connection inside the building.
- Shut down all working plant and machinery in the vicinity of the damage.
- Inform GTC Fibre immediately on: **02920 028 726**
- Remain on site.
- Do not attempt to make a repair.
- Assist Approved Contractors, Police, Fire Services or other Statutory Authorities as requested.

52. Where fibre ducts cross or are parallel and close to excavations, changes in backfill etc. may cause differential ground settlement and increased stress on the duct. For ducts parallel and close to excavations, the degree of risk depends upon the depth of the excavation, the distance of the duct from the excavation, the type of soil and any

excessive loading from heavy construction plant and materials. Wherever excavation works may affect the support of the fibre duct or cause excessive loading over the fibre duct then GTC must be consulted.

53. No concrete or other hard material shall be placed or left under or adjacent to any fibre duct as this can cause damage to the duct at a later date. Any backfill should comply with the requirements of NRSWA. Concrete backfill should not be used within 300mm of a fibre duct.

54. Anyone who carries out work near underground fibre plant should observe any specific requirements made by the site manager, and ensure that access to the plant by GTC staff is available at all times. No unauthorised repairs to fibre ducts should be made.

55. Where fibre ducts have been exposed and it is intended hot work (e.g. welding, grinding, etc) be carried out, contact must be made with GTC to confirm additional precautions and actions that may require to be undertaken.

56. GTC shall be consulted if it is intended to carry out any of the following activities:

- Using explosives within 30m of plant or fibre asset structures.
- Piling or boring within 15m of fibre plant.
- Excavating within 10m of fibre asset structures (including the OSCP).
- Reducing the cover or protection of a fibre asset.
- Carrying out deep excavations nearby (minimum of 2m up to 15m).

Precautions for District Heating Networks

For information with respect to Dstrict Heating Networks this could also include District Cooling.

57. Plans do not always show the presence of District Heating service pipes (from the District Hearing main to premises) but their existence should be assumed.

58. The depth of cover for District Heating mains is typically a minimum of 600mm under normal light carriageways and during construction activities, additional temporary protective bridging should be placed over DHN pipe runs. The depth of cover for District Heating services is typically 6000mm. Remember these covers are to finished level, you may be working in an area, which will be made up or lowered at a later date.

59. District Heating mains shall be located by hand digging before mechanical excavation begins. When the positions and depth of the pipes have been determined, work can proceed.

60. The danger created by damaging a District Heating with an excavator is much greater than if the damage is done with a hand-held power tool. District Heating pipes may have projections such as valve housings, which are not shown on the plans and to allow for this mechanical excavators should not be used within 600mm of a District Heating pipe.

61. If a water leak is suspected, the following action should be taken immediately:

- Remove all people from the immediate vicinity of the damage. It is important to note that a mechanical excavator may not only cause damage/leakage at the point of impact. For example, damage to a service connection outside the building may result in further, unseen damage to the connection inside the building.
- Shut down all working plant and machinery in the vicinity of the damage.
- Inform Metropolitan by dialling: **02920 100 346**
- Remain on site.
- Do not attempt to make a repair.
- Assist Approved Contractors, Police, Fire Services or other Statutory Authorities as requested.

62. Where District Heating cross or are parallel and close to excavations, changes in backfill etc. may cause differential ground settlement and increased stress in the pipe. For pipes parallel and close to excavations, the degree of risk depends upon the depth of the excavation, the distance of the pipe from the excavation, the type of soil and any excessive loading from heavy construction plant and materials. Wherever excavation works may affect the support of the District Heating or cause excessive loading over the water pipe then Metropolitan must be consulted.

63. No concrete or other hard material should be placed or left under or adjacent to any District Heating as this can cause pipe fracture at a later date. Concrete backfill should not be used within 300mm of a District Heating.

64. Where an excavation uncovers a District Heating pipe with a damaged insulation, Metropolitan should be told, so that repairs can be made to prevent future corrosions and leakage.

65. Pipe restraints , Anchor blocks or foam padding close to district heating mains shall never be removed.

66. Anyone who carries out work near underground district heating plant shall observe any specific requirements made by the site manager, and ensure that access to the plant by the asset owners staff is available at all times. No unauthorised repairs to district heating pipes shall be made.

67. Where District Heating pipes have been exposed and it is intended hot work (e.g. welding, grinding, etc) will be carried out, contact shall be made with Metropolitan to confirm additional precautions and actions that may require to be undertaken.

68. Metropolitan shall be consulted if it is intended to carry out any of the following activities:

- Using explosives within 30m of gas pipes or 400m of gas pressure reduction equipment.
- Piling or boring within 15m of District Heating pipe.
- Reducing the cover or protection of a District Heating pipe.
- Carrying out deep excavations nearby.