

Volume 3

NJUG GUIDELINES ON THE MANAGEMENT OF THIRD PARTY CABLE DUCTING

PLEASE ENSURE THAT YOU READ THE LEGAL NOTICE AND DISCLAIMER WHICH APPEARS IN APPENDIX B OF THIS PUBLICATION

Issue 1: 1st August 2007

NJUG has a vision for street works, this vision is simply:

- Safety is the number one priority
- Damage to underground assets is avoided
- Utilities work together and in partnership with local authorities to minimise disruption
- Utilities deliver consistent high quality
- Utilities maximise the use of sustainable methods and materials
- Street Works in the U.K. are regarded as world class

This document forms part of that vision.

Mark Ostheimer Director, Safety and Policy



The following volumes constitute the NJUG Publications. They are living documents and may be amended from time to time. There is no attempt to describe any specific industry process as each utility has its own specifications and procedures. Not all the publications will necessarily be available at one time as individual volumes will be published when available.

NJUG PUBLICATIONS				
Current	Previous			
VOLUME 1				
NJUG Guidelines on the Positioning and Colour Coding of Underground Utilities' Apparatus	NJUG 4 & 7			
VOLUME 2				
NJUG Guidelines on the Positioning of Underground Utilities Apparatus for New Development Sites	NJUG 2, 5 & 6			
VOLUME 3				
NJUG Guidelines on the Management of Third Party Cable Ducting	New			
VOLUME 4				
NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees	NJUG 10			
VOLUME 5				
NJUG Guidelines on Environmental Good Practice	New			
VOLUME 6				
Legislation & Bibliography	NJUG 1			

The following NJUG publications have not been reviewed and have been completely withdrawn:

- NJUG 3 Cable Locating Devices
- NJUG 8 Performance Guide for the Assessment of Metallic Pipe and Cable Locators
- NJUG 9 Recommendations for the Exchange of Records of Apparatus between Utilities
- NJUG 11 Proposed Data Exchange Format for Utility Map Data
- NJUG 12 NJUG Specification for the Digitisation of Large Scale OS Maps
- NJUG 13 Quality Control Procedure for Large Scale OS Maps Digitised to OS 1988
- NJUG 15 NJUG/Ordnance Survey Service Level Agreement (Technical) for Digital Map Products and Services



CONTENTS

	Background 4 Scope 4		
1.	RISK ASSESSMENT	5	
2.	NOTIFICATION AND RECORDS	5	
3.	PROCEDURE FOR REMOVAL AND REPLACEMENT BY A THIRD PARTY	6	
	3.1 Cable Ducts 3.2 Specific Precautions for Duct Removal 3.3 Removal of PVC Cable Duct – Suggested Method 3.4 Replacement of PVC Duct – Suggested Method 3.5 Removal of Plastic Corrugated Duct – Suggested Method 3.6 Replacement of Plastic Corrugated Duct – Suggested Method 3.7 Removal of Steel Duct – Suggested Method 3.8 Replacement of Steel Duct – Suggested Method 3.9 Removal of Earthenware Duct – Suggested Method 3.10 Replacement of Earthenware Ducts – Suggested Method 3.11 Clusters of Ducts – Suggested Methods	6 7 7 11 12 15 16 17 18 21	
4.	SUPPLY OF DUCT REPAIR KITS	21	
5.	COMPETENCE	22	
6.	RECOMMENDED TIMESCALES FOR ASSET OWNER WHEN REMOVING AND REPLACING OWN CABLE DUCTING	22	
GL	GLOSSARY 23		
Su	PPENDIX A ummary of the court of appeal's recommended process orkshire Electricity Distribution plc v Telewest Ltd (2006)	24	
	PPENDIX B sportant Legal Notice and Disclaimer	26	



NJUG Guidelines on the Management of Third Party Cable Ducting

Background

The Court of Appeal ruling in Yorkshire Electricity Distribution Plc. v Telewest Ltd (2006) stated that interference with an asset owner's ducting amounts to damage within the meaning of section 82 New Roads and Street Works Act 1991 (NRSWA), but that the interferer is likely to have a defence to a damage claim where industry guidelines have not been followed, without good reason, by the asset owner. Failure to follow industry guidelines does not however exempt a party from complying with section 69 NRSWA to take reasonably practical steps to give the asset owner an opportunity to impose requirements for the protection of its asset. (See Appendix A)

As a result of this ruling, NJUG has produced the following guidelines in order to reduce the risk of unnecessary litigation and costs.

Scope

This document is intended to encourage cooperation and communication to avoid causing damage to cables and ducting and sets out a process for the removal and replacement of third party cable ducting when attempting to access plant.

It should be used in conjunction with a site risk assessment and discussions with the asset owner where restricted access is identified.

Non-compliance with these guidelines could result in the following:

- Personal injury, death and other health and safety issues
- Substantial cost implications and/or legal proceedings, e.g. bending or twisting can easily damage fibre optic cables. If broken the cost of replacement can be very expensive.
- Extended duration of works resulting in increased costs, penalty charges and congestion
- Disruption to emergency services
- Interruption to customer supplies
- Erosion of inter-utility and local authority relations
- Security risks as a result of loss of communications



1. RISK ASSESSMENT

Before undertaking excavation work the Health and Safety Executive guidance note HSG47 – 'Avoiding Danger from Underground Services' should be followed and every effort must be made to obtain asset owner records in order to identify plant.

Before commencing work, an on site risk assessment must be carried out to verify that all the standard control measures are in place and that any additional hazards that may be present on site are identified, e.g. natural gas leak, surface water, contaminated land etc, are controlled.

Having exposed the plant, a further risk assessment should be carried out to determine whether plant can be accessed without interference with third party ducting.

2. NOTIFICATION AND RECORDS

Once plant has been identified as preventing access every effort must be made to contact the asset owner in order to agree the method of removal and replacement and to discuss the urgency of the works. The asset owners' permission, agreed method of removal and replacement and any other protocol should be logged by both parties. In circumstances where the asset owner elects to undertake the necessary works, the recommended timescales detailed in sub-section 6 – 'Recommended Timescales for Asset Owner when Removing and Replacing own Cable Ducting' should be followed.

Asset owner contact details may be obtained from plant enquiry drawings, the local and regional HAUC websites or by contacting the highway authority.

In the unlikely event that the asset owner cannot be identified, the procedure outlined in sub-section 3 – 'Procedure for Removal and Replacement by a Third Party' should be followed. It is advised that a record of all attempts to identify the asset owner is retained.

It is recommended that a photographic record is taken before, during and on completion of the works.

All records should be retained in order to reduce the risk of unnecessary litigation and costs.



3. PROCEDURE FOR REMOVAL AND REPLACEMENT BY A THIRD PARTY

This procedure is to enable a third party, by agreement and when deemed necessary, to remove and replace cable ducting. Any damage discovered or caused to the asset owner's plant at any stage of the works must be reported to the asset owner immediately.

Introduction

Ducting is usually, but not exclusively, used to carry communication cables or electricity cables. The first step prior to removal and replacement must be to identify the contents of the duct using asset records having contacted the asset owner. This document details the approved methods of removing and replacing the types of duct detailed below:

3.1 Cable Ducts

3.1.1 Communication Cable Ducts.

Communication cable ducts range from plastic 50mm-110mm diameter ducts carrying fibre optic cables (some within sub ducts) to steel or earthenware ducts carrying sub ducts or cables. This process details the approved method for the removal and replacement of cable ducts by a third party.

Types of Duct

- PVC duct
- Plastic corrugated duct
- PE duct
- Earthenware duct
- Metallic duct (e.g. steel, cast iron or ductile iron) it is absolutely necessary that prior to removal these are identified as cable ducts and not mains following consultation with the asset owner. This is essential as gas, water or oil mains are often of metallic composition and any compromise of these types of mains can result in serious injury or death.

3.1.2 Electricity Cable Ducts.

Electricity cable ducts range from plastic 48mm - 150mm diameter ducts, carrying electricity and internal communications cables, to earthenware ducts. This process details the approved method for the removal and replacement of cable ducts by a third party.

Types of Duct

- PVC duct (Polyvinyl Chloride)
- Plastic corrugated duct
- Earthenware duct



• Steel duct - it is absolutely necessary that prior to removal these are identified as cable ducts and not mains following consultation with the asset owner. This is essential as gas, water or oil mains are often of metallic composition and any compromise of these types of mains can result in serious injury or death.

Note: H.V (high voltage) and E.H.V (extra high voltage) cables may not be ducted and may be protected by a cable tile.

3.1.3 Significant risks and hazards associated with electricity cable ducts

- Danger of death
- Electric shock
- Burns
- Cuts/abrasions
- Damage to other underground services
- Cable damage
- Loss of supply
- Substantial cost implications

3.2 Specific Precautions for Duct Removal

- NEVER assume that a duct is empty.
- Appropriate tests for the presence of gas must be taken before undertaking works on communication cable ducts.
- It is absolutely necessary that prior to removal steel ducts are identified as cable ducts and not mains following consultation with the asset owner. This is essential as gas, water or oil mains are often of metallic composition and any compromise of these types of mains can result in serious injury or death.
- If the duct is empty any draw rope found must be left intact.
- Do not smoke or use a naked flame near the duct.
- When using saws on PVC ducting attention must be paid to the depth of cut to avoid damage to underlying cables.

3.3 Removal of PVC Cable Duct – Suggested Method

3.3.1 **Tools**

NJUG Publication: Volume 3: Issue 1: 01/08//2007

Cable ducts may be cut using hand tools provided the precautions and procedures in this document are followed.

Typical hand tools currently used for cutting PVC ducts are:



- a) Floorboard saw
- b) Tension saw
- c) Cheese cutter saw

Note: These tools may be replaced by innovative alternatives, which may be used in agreement with the asset owner.

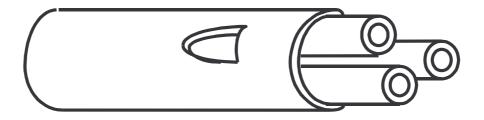
3.3.2 **Method**

- Once the duct is exposed, clear as much space as possible around the duct to allow access.
- When dealing with multiway ducts, insert wedges between the ducts to create space.

Stage 1

Remove a triangular window to allow the contents of the duct to be inspected:

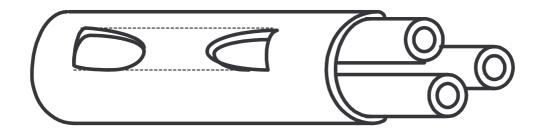
(i) Using the floorboard saw cut around the circumference of the duct for approximately 100mm. Do not cut deeper than the thickness of the duct.



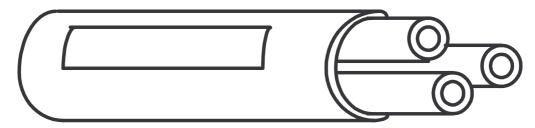
- (ii) Cut at an acute angle, starting about 35mm from the first cut to produce a triangular window in the duct. Do not cut deeper than necessary. When cutting at less than 90°, care should be taken to avoid the blade slipping along the surface of the duct.
- (iii) If no cables have been installed and/or there is no sub-duct go to stage 5.
- (iv) If cables are installed or a sub-duct is found repeat steps (i) and (ii) at the other end of the section of duct to be removed.



Stage 2

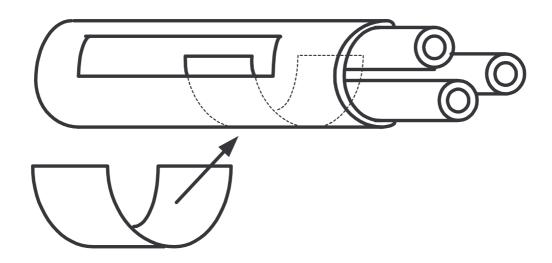


- (i) Using the floorboard saw make two cuts along the duct between the two exposed windows. Limit the depth of the cut to the thickness of the duct wall.
- (ii) Once cut you may remove this section of the duct wall.



Stage 3

Cut a section of split duct to a suitable size as shown below for insertion into the duct.



NJUG Publication: Volume 3: Issue 1: 01/08//2007

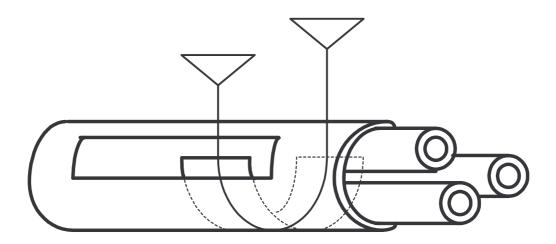


Stage 4

- (i) Using the window, insert the section of split duct between the cables and the inside of the duct wall. This will protect the contents of the duct while you are cutting.
- (ii) Cut around the outside of the duct wall with the tension saw. The inserted section of duct will also give an indication of depth if it is free to move with the blade of the tension saw. Stop cutting when the inserted section stops moving freely.

Stage 5

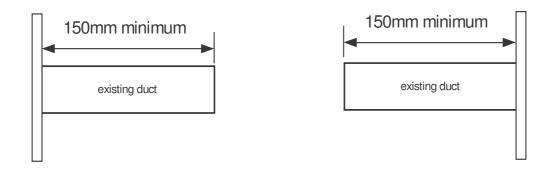
- (i) Cut completely around the duct with the tension saw at each end of the window.
- (ii) Remove the section of duct to expose the contents.



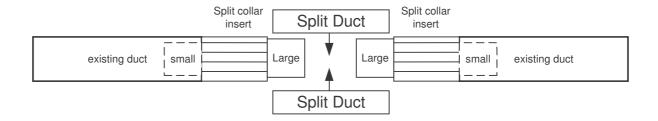
Stage 6

After both sides of the duct have been cut and the section of duct removed to allow access to cables or sub-ducts, make sure that there is a minimum of 150mm of clean duct at each end to allow a replacement to be made.





3.4 Replacement of PVC Duct – Suggested Method



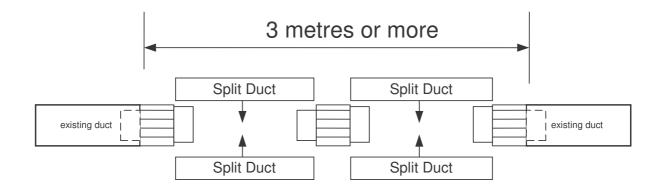
Once the work is complete use split duct to replace the removed section as shown above. Place the split collar insert around the contents of the duct and insert the end marked 'small' into one end of the existing duct. This should be a snug fit. If the fit is loose then try the end marked 'large'. If neither end provides a good fit, add duct liners until a snug fit is achieved.

Repeat this procedure at the other end of the duct.

Measure the distance between the two flanges of the split collar inserts and cut a length of split duct to fit between the split collars. Place this over the spigot ends of the split collar inserts. Clamp the split ducts in place using strap cable fixings provided, placed at intervals of approximately 150mm.

If the length of the damaged section exceeds 3 metres the split duct will not be long enough. For lengths longer than 3 metres join lengths of split duct together with split collars.





3.5 Removal of Plastic Corrugated Duct – Suggested Method

3.5.1 **Tools**

Corrugated ducts may be cut using hand tools provided that the precautions and procedures in this document are followed.

Typical hand tools currently used for cutting corrugated ducts are:

- a) Floorboard saw
- b) Depth guarded armour saw;
- c) Universal Shears

Note: These tools may be replaced by innovative alternatives, which may be used in agreement with the asset owner.

3.5.2 **Method**

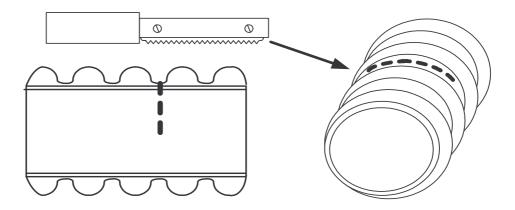
- Once the duct is exposed clear as much space as possible around the duct to allow access.
- When dealing with multiway ducts, insert wedges between the ducts to create space.

Stage 1

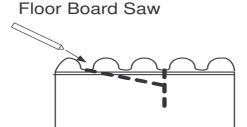
Remove a triangular window as shown below to allow the contents of the duct to be inspected:



a) Using the depth guarded armour saw cut around the duct for approximately 100mm.



b) Cut at an acute angle starting about 70mm from the first cut. Do not cut deeper than necessary. When cutting corrugated duct at less than 90 degrees safeguard against the blade slipping along the surface of the duct.

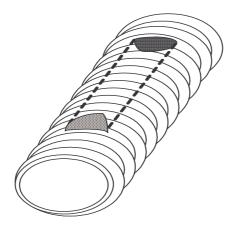


- c) If no cables have been installed go to stage 3
- d) If there are cables installed repeat steps a) and b) at the other end of the section of duct to be removed.

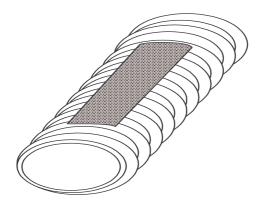


Stage 2

a) Cut along the duct with the universal shears between the two windows.



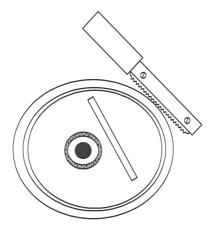
b) After cutting the duct remove this section of the duct wall.



Stage 3

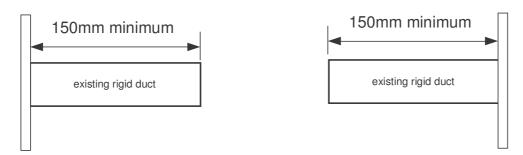
Cut around the duct using the universal shears or depth guarded armour saw. Protect any cable inside the duct from damage by moving them away from the cutting blade, or provide adequate protection between the saw blade and the cable, e.g. insert a section of split duct between the cable(s) and the inside of the duct wall.





Stage 4

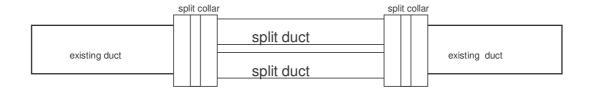
After the duct has been cut and the section of duct removed to allow access, make sure that there is a minimum of 150mm of clean duct at each end to allow a replacement to be made.



3.6 Replacement of Plastic Corrugated Duct – Suggested Method

Once the work is complete use split duct to replace the removed section as shown below. Place the split collar around the existing duct; repeat this at the other cut end.

Measure the distance between the two collars and cut a length of split rigid duct to fit between them. Clamp the split duct in place using provided strap cable fixings placed at intervals of approximately 150mm.





3.7 Removal of Steel Ducts – Suggested Method

3.7.1 **Tools**

Steel ducts may be cut using hand tools and hand held power tools provided that the precautions and procedures in this document are followed.

Typical hand tools and hand held power tools currently used for opening steel ducts

- a) Disc cutter, fitted with depth gauge
- b) Pipe cutters
- c) Hacksaw
- d) Depth guarded saw
- e) Chain wrench

Note: These tools may be replaced by innovative alternatives, which may be used in agreement with the asset owner.

3.7.2 **Method**

- Once the duct is exposed clear as much space as possible around the duct to allow access.
- When dealing with multiway ducts, insert wedges between the ducts to create space.

Stage 1

- a) Identify the duct to be opened
- b) A small diameter hand operated drill should be used to ensure that the main is not pressurised before adopting pipe cutters to break into the main.
- c) If the main is pressurised the asset owner must be contacted immediately for advice.
- d) If the main is not pressurised make the first cut using a pipe cutter
- e) Repeat this cut at the other end of the duct
- f) Once the duct has been cut at both ends use a chain wrench to break away the cut section of steel duct.

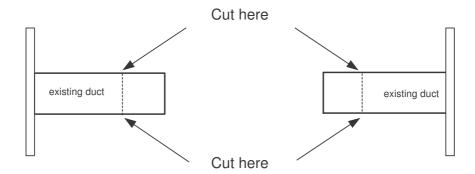
Stage 2

Using a depth guarded disc cutter and wooden wedges, cut along the top of the duct using the wooden wedges to lift the duct away from any cable contained inside.

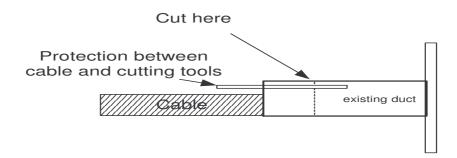


Stage 3

a) Once the centre section of duct has been removed cut the duct back.

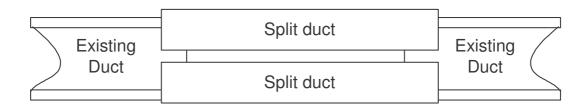


- b) Before cutting the duct insert a method of protection (e.g. a section of split duct) between the cable and the duct wall. If a cable is installed in the duct use the disc cutter and wedges again as shown in stage 2.
- c) Once cut insert suitable packing in each of the ducts to protect the cable from any sharp edges left by the cutting process



3.8 Replacement of Steel Ducts - Suggested Method

Once the work is complete use split rigid duct to replace the removed section as shown below and secure using heavy duty cable ties.





3.9 Removal of Earthenware Duct – Suggested Method

3.9.1 **Tools**

Earthenware cable ducts may be removed using hand tools provided that the precautions and procedures in this document are followed.

Typical hand and hand-held power tools currently used for opening earthenware ducts are:

- a) Chipping Hammer
- b) Ball Pein Hammer
- c) Steel Duct Shield (Locally Fabricated, Longitudinal Split Steel Duct)

NB: These tools may be replaced by innovative alternatives which may be used in agreement with the asset owner.

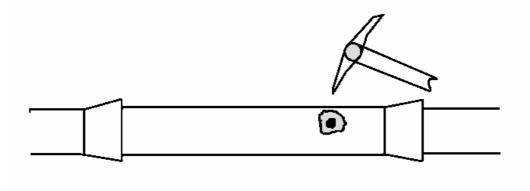
3.9.2 **Method**

- Once the duct is exposed, clear as much space as possible around the duct to allow access.
- When dealing with multi-way ducts, insert wedges between the ducts to create space being careful to not dislodge the collars.
- Some earthenware cable ducts are one piece multi-way ducts up to 9 way.

Stage 1

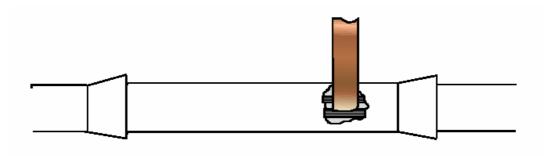
Open a circular window to allow the contents of the duct to be inspected:

a) Using a chipping hammer, lightly chip the outer surface of the duct to create a hole of sufficient size to enable view of the duct interior to establish the presence of any in-bore cables or sub-ducts.





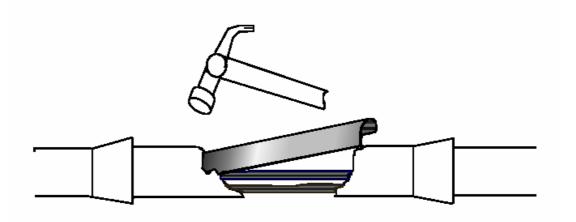
- b) If there are no cables or sub-duct present go to stage 3.
- c) If cables are installed or a sub-duct is found, enlarge the hole to enable a blunt wooden implement to be inserted into the hole. Gently push this down on the cables, creating space between the cables and the upper inner wall of the duct.



d) Before inserting wooden wedge, make sure there are no sharp glazed splinters that could compromise the cable sheathing.

Stage 2

- a) Using a ball pein hammer, gently tap the duct to breakout the glazed duct wall either side of the broken duct. Care must be taken **not** to hammer sharp pieces of glazing into the cable sheathing.
- b) When sufficient space prevails, use a shield to protect duct during breakout operations. Shield could consist of longitudinal cut steel ducting passed over the cables.



c) Using the chipping hammer, carefully remove any cement remnants from the connecting duct joints.



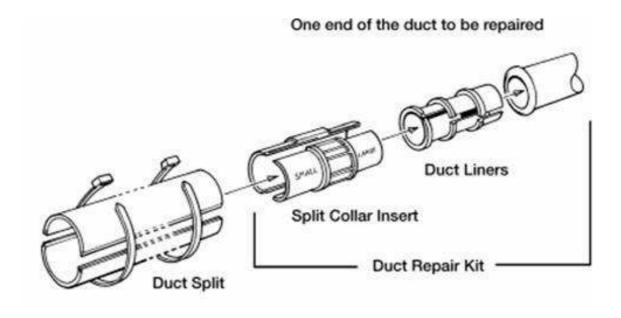
Stage 3

With no in-bore cables present, carefully breakout the glazed duct to both connecting duct joints. When doing so, care must be taken not to damage either of the adjacent ducts.



Stage 4

- a) Once the work is complete use split duct to replace the removed section as shown below. Placing the Split Collar insert around the duct contents, place one end into one end of the existing duct, using the duct liners to obtain the required diameter. This should be a snug fit. If the fit is loose, add further duct liners until a snug fit is achieved.
- b) Repeat this same procedure at the other end of the duct.



NJUG Publication: Volume 3: Issue 1: 01/08//2007

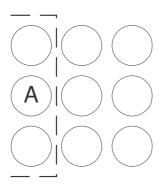


3.10 Replacement of Earthenware Ducts – Suggested Method

- a) Correct split duct must be used throughout the damaged length
- b) Measure the distance between the two flanges of the split collar inserts, and cut a length of split duct to fit between the split collars. Place this over the spigot ends of the split collar inserts. Clamp the split ducts in place using the strap cable fixings provided placed at intervals of approximately 150mm.
- c) If the length of the damaged section exceeds 3 metres the split duct will not be long enough. For lengths longer than 3 metres join lengths of split duct together with split collars.

3.11 Clusters of Ducts – Suggested Method

Ducts are often grouped together in clusters. When access to one duct is required it will often be necessary to open a number of other ducts to allow access.



Clusters of ducts may contain services from a number of utilities such as Communications, Gas, Water, as well as High Voltage or Low Voltage cables.

If the presence of Gas or Water services are suspected the asset owner(s) should be contacted immediately for advice on how to proceed.

To gain access to duct 'A' it may be necessary to remove the ducts above and below it. Use wooden wedges to separate the duct to allow access for tools.

If access to any duct other than those on the outside of the cluster is required, the asset owner should be informed as they may wish to attend the site to agree working methods and safety precautions.

4. SUPPLY OF DUCT REPAIR KITS

It is recommended that, subject to agreement, the asset owner provides duct repair kits free of charge. This may depend on the required length of replacement duct.



5. COMPETENCE

It is essential that operatives and supervisors are fully conversant with the procedures laid out in this document.

It is incumbent upon organisations and their service providers to ensure that their work force has the necessary competence to carry out the procedures detailed in this document.

6. RECOMMENDED TIMESCALES FOR ASSET OWNER WHEN REMOVING AND REPLACING OWN CABLE DUCTING

- a) Emergency works normally within three hours
- b) Other works within reasonably agreed timescales

NJUG Publication: Volume 3: Issue 1: 01/08//2007



GLOSSARY

Apporatus	Equipment queb se volves etaposeks abambara	
Apparatus	Equipment such as valves, stopcocks, chambers,	
	cabinets, transformer chambers etc and includes any	
	structure for the lodging of apparatus.	
Carriageway	A way constituting or comprised in a highway, being a	
	way (other than a cycle track) over which the public	
	have a right of way for the passage of vehicles.	
Cycle track	A way constituting or comprised in a highway over which	
	the public have a right of way on pedal cycles with or	
	without a right of way on foot.	
Duct / ducting	Structure (usually cylindrical) used to convey and	
3	protect apparatus	
Fibre optic	The use of very thin glass or plastic fibres through which	
'	light can be transmitted to carry information from a	
	source to a receiver, especially for telecommunication,	
	television and information technology systems.	
Footpath	A highway over which the public have a right of way on	
Ισοιραιίι	foot only, not being a footway.	
Footway	A way comprised in a highway which also comprises a	
lootway	carriageway, being a way over which the public have a	
	right of way on foot only.	
Main	Structure (usually cylindrical) used to convey water or	
IVIAIII	· · · · · · · · · · · · · · · · · · ·	
NJUG	gas or oil generally greater than 50mm diameter.	
	National Joint Utilities Group Limited.	
Pipe	Longitudinal structure (usually cylindrical) used to	
	convey water, gas or oil.	
Service strip	A strip of designated land alongside a carriageway or	
	footway used to convey services.	
Sub-duct	Longitudinal structure (usually cylindrical) laid inside	
	ducts used to carry smaller diameter cables such as	
	fibre optic.	
Utility	An undertaker by statute that has a legal right to provide	
	customer services (e.g. communications, electricity, gas,	
	water)	
Verge	A strip of land alongside a carriageway or footway which	
	may contain services.	



APPENDIX A

Summary of the Court of Appeal's Recommended Process: Yorkshire Electricity Distribution plc v Telewest Ltd (2006)

The following is the process lifted verbatim, as recommended by the court of appeal, where undertaker A is the undertaker requiring the ducting or other apparatus to be removed, and undertaker B is the undertaker that owns that ducting or apparatus.

- 1) To the extent not already done, both parties must give full disclosure to the other of the location of their various apparatus.
- 2) Although an initial failure by undertaker 'B' to give a Section 69 notice would not necessarily count as misconduct in the laying of the ducting, a failure by undertaker 'B' to cooperate with undertaker 'A's Section 69 notice will count as misconduct by undertaker 'B'.
- 3) When undertaker 'A' is contemplating pre-planned repair work it must give notice to undertaker 'B' to enable it to consider how and under what conditions its ducting was laid.
- 4) As soon as undertaker 'A' decides that ducting needs to be moved or otherwise interfered with, whether or not working in a location in respect of which undertaker 'B' has not given notice and whether or not in the course of pre-planned work, undertaker 'A' must give immediate notice to undertaker 'B'. That at least will always be practicable, even if the work has to start at once.
- 5) Undertaker 'B' must make arrangements to attend promptly on site to enable it to determine what directions it needs to give to undertaker 'A' or whether it should it undertake the work itself. It would be plainly be a good idea, if undertaker 'B' trained a number of undertaker 'A's operatives so that it could sub-contract the work to one of them. If undertaker 'B' does not take the opportunity to give directions or undertake the work itself then it would forfeit any right to complain of excessive or incompetent work.
- 6) Who pays to make good any damage depends on whether negligence or misconduct can be established on the part of undertaker 'B'.

NJUG Publication: Volume 3: Issue 1: 01/08//2007



- 7) Recourse to the courts must be avoided in the future.
- 8) The process between the parties should not be one of mediation but one of arbitration or rather determination by an expert. The parties should arrange to refer the matter to a single engineer agreed by them or in default appointed by the President of the Institute of Electrical Engineers who will determine any dispute on the basis of short written submissions with photographs of the site. He will apply the principles set out in this judgment so far as they are relevant to the case.
- 9) The court finished its judgment with the following paragraph:

"We cannot, of course, order or require any of this. However, should the parties re-appear in court and the more so in this court, in circumstances that have led them to litigation because of a failure to operate the system that we and, in essence, the judge has suggested, they are likely receive short shrift, and certainly to encounter an unsympathetic approach to costs."



APPENDIX B

Important Legal Notice and Disclaimer

- 1. This publication describes utility industry practice, technical guidelines and recommendations prepared and / or collated from third parties by NJUG for the management of third party cable ducting. NJUG has endeavoured to ensure that the information is correct and up-to-date at the date of first publication, but does not warrant its completeness and accuracy or that it will remain up-to-date. This publication is not intended to be exhaustive and may not be applicable in all situations.
- 2. You are permitted to print and download and make photocopies of this publication for your own use only on the following basis:
 - a) none of the information or related graphics in this publication are modified in any way;
 - b) no graphics in this publication are used separately from accompanying text; and
 - c) NJUG's copyright notices and this Legal Notice and Disclaimer are to appear in all copies
- 3. Unless otherwise stated, the copyright and other intellectual property rights in this publication are owned by NJUG Ltd or its licensors. For the purposes of this legal notice, any use of extracts from this publication other than expressly permitted by this legal notice, is prohibited. If you breach any of the terms in this legal notice, your permission to use this publication automatically terminates.
- 4. No part of this publication may be reproduced in any way (including via any website) or stored in any public or private electronic retrieval system or service without NJUG's prior written permission. Any rights not expressly granted in this legal notice are reserved.
- 5. This publication has no legal or statutory authority and is not intended to be a definitive or complete statement of the applicable law. Reference should always be made to any relevant legislation. This publication is not intended to be or to replace specific legal advice and all persons acting or placing reliance on this publication or any part of it are advised to consult with their own legal advisors to ensure that they understand and comply with the legal requirements which are applicable to their organisation and circumstances.



- 6. Persons who act or place reliance on this publication are solely responsible for undertaking all surveys, enquiries, tests and other investigations as may be appropriate in the circumstances. NJUG Ltd and its directors, advisors and other contributors to this publication (together collectively referred to as 'NJUG') do not accept any responsibility for the actions or conclusions drawn by persons acting or placing reliance on this publication.
- 7. This publication is free of charge and persons relying on this publication acknowledge that it would be unreasonable to hold NJUG liable in respect of this publication and the information contained in it. NJUG excludes all liability to the maximum extent permitted under applicable law. NJUG shall not be liable for any direct, indirect or consequential losses, damage, costs or expenses whatsoever or howsoever sustained by any person acting or placing reliance on this publication (or any person or entity claiming through such person) or otherwise arising therefrom whether arising in tort, contract or otherwise including, without limitation, any loss of profits, contracts, business, goodwill, data, income, revenue or anticipated savings.
- 8. Nothing in this disclaimer shall exclude or limit NJUG's liability for death or personal injury arising from its negligence, nor any other matter which cannot be excluded or limited under applicable law.