

## Risk Assessment / Method Statement – Jointing.

### Project Scope:

**Location issues:** *Heavy public presence, weather conditions, transport.*

### Detail:

- Installed before work commences;
  - Infrastructure including chambers & ducting.
  - Joint box (footway or carriageway) containing network equipment e.g. Aggregation node (AGG node).
- Exchange – Splicing activities of internal & external fibre cable joint. Internal fibre cable exiting Optical Distribution Frame (ODF) spliced to external fibre cable located within cable chamber.
- Splicing activities of joints at Aggregation node (AGG node) & intermediate joint (splitter).
- Assembly of structure within joint box (Mowbra mounting kit).
- Presentation of fibre cable(s) within joint box to Openreach specification.
- Splicing activities as per Fibre Node Configuration (FNC) - included within job pack.

### Hazard Identification and Risk Controls

Provided in the attached Risk Assessment.

### Environmental Protection Measure:

Waste and spoil disposed of in the designated area or receptacle provided for waste.

### Quality Control:

The installation will be checked on completion by inspection.

### Welfare:

Local knowledge of public welfare facilities beneficial. Local business welfare facilities must only be utilised if / when purchasing products or if permitted by owner/manager.

### Emergency Procedures:

Reference to instruction detailed within Map group (uk) vehicle pack.

### Method

1. Effectively segregate working area to prevent unauthorised access.
2. Provide clear safe, alternative pedestrian routes if work area obstructs existing footway.
3. Break seal & partially raise chamber cover. Complete initial atmosphere test prior to removing chamber cover (three bleeps/20 seconds per bleep).
4. Safely & correctly remove chamber cover in accordance with required standard. Contain open chamber, chamber cover & equipment within segregated area.
5. Complete thorough atmosphere tests & continuously monitor (SA002).
6. If water is present within chamber, perform water test to determine category e.g. pure water, sewage etc. If volume is  $<5m^3$  & is not deemed as polluted then pump from chamber into carriageway drain/gutter or onto grass verge - continuously monitor. If volume is  $>5m^3$  & is deemed as polluted, stop work & contact supervisor for tank disposal (Gully emptier). Reference 'test card' within water test kit.
7. Exchange – Conduct splicing activities internal & external fibre cable. Internal fibre cable exiting data cabinet (ODF) spliced to external fibre cable located within cable chamber.
8. Conduct splicing activities at Aggregation node (AGG node).
9. Conduct splicing activities at intermediate joint (splitter).
10. Install/assemble Mowbra mounting kit within joint box.
11. Present (dress) fibre cable(s) within joint box to Openreach specification.
12. Splicing activities as per Fibre Node Configuration (FNC) - included within job pack.
13. Test integrity of connections.
14. Replace chamber cover (SA002).
15. Disassemble SLG e.g. remove barriers.

	Name	Title	Date
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<b>Reviewer</b>	Lee Meek	H & S Manager	06/12/2018
<b>Authorised by</b>	Matty Carlin	Director	14/12/2018

Likelihood		Consequence	
1	Very unlikely 1 in a million of hazardous event	1	Insignificant No injury
2	Unlikely 1 in 100,000 of hazardous event	2	Minor Minor injuries requiring first aid
3	Fairly likely 1 in 10,000 of hazardous event	3	Moderate Up to 7 days absence
4	Likely 1 in 1,000 of hazardous event	4	Major More than 7 days absence
5	Very likely 1 in 100 of hazardous event	5	Catastrophic Death

LIKELIHOOD	CONSEQUENCES				
	1	2	3	4	5
5	5	10	15	20	25
4	4	8	12	16	20
3	3	6	9	12	15
2	2	4	6	8	10
1	1	2	3	4	5

□ Location / Activity ○ Hazard	➤ Who might be harmed, ❖ The Hazardous Event The Consequences	Controls	Risk Rating		
			L	C	R
□ Carriageway / removing equipment from vehicle. ○ Traffic	➤ Technician(s). ❖ Impact from passing vehicle. Catastrophic.	1. Vehicle to be parked with side door (access to cargo hold) adjacent to the footway. 2. Mandatory high-visibility clothing to be worn at all times.	1	5	5
□ Lifting operations e.g. carrying equipment / tooling. ○ Manual handling	➤ Technician(s). ❖ Inappropriate manual handling. Major musculoskeletal injury.	1. Manual handling training provided (induction). 2. TBT on manual handling provided at 1-year intervals. 3. Regular refresher training at 3 yearly intervals.	2	4	8
□ Exchange. ○ Optical systems / Lasers.	➤ Technician(s). ❖ Invisible laser radiation. Major Injury.	1. Training provided on fibre splicing activities/awareness (technician assessments). 2. Laser rated equipment provided e.g. eye shields. 3. Regular refresher training at 3 yearly intervals.	2	4	8
□ Spicing activities. ○ Fibre optic shards (glass).	➤ Technician(s). ❖ Contact with shards (eyes/skin) Major injury.	1. Training provided on fibre splicing activities/awareness (technician assessments). 2. PPE provided e.g. eye protection, hand protection (gloves). 3. Sharps receptacle provided. 4. Regular refresher training at 3 yearly intervals.	1	4	4
□ Accessing / working on underground services. ○ Electricity.	➤ Technician(s). ❖ Contact with live conductors. Catastrophic.	1. Approved / Insulated tooling. 2. Voltage detection equipment (pen) provided.	1	5	5
□ Accessing / working on underground services. ○ Gas.	➤ Technician(s). ❖ Explosive atmosphere. ❖ Oxygen deficient atmosphere. Catastrophic.	1. Calibrated Gas Detection Unit (GDU) provided. 2. Gas testing / monitoring - GDU usage / training provided on induction & at regular intervals – A9 assessment. 3. Utility provider contact number available within vehicle pack.	2	5	10
□ Accessing / working on underground services. ○ Sharps.	➤ Technician(s). ❖ Infection. Major illness.	1. Technician training on surveying area / needle stick injuries / discarded sharps / disease & infection - provided on induction & technician assessments (SA002). 2. Sharps hotline number provided to technician on induction & at regular intervals via TBT. 3. Regular refresher training on removal of chamber cover / surveying (sweep) work area via TBT / practical assessments (SA002).	2	4	8
□ Accessing / working on underground services. ○ Venomous insects.	➤ Technician(s). ❖ Stung / bitten by venomous insect. Minor injury.	1. Training / instruction involving: Leaving undisturbed / gathering photographic evidence (insect) / seeking medical advice. 2. Refresher training.	1	2	2

□ Location / Activity ○ Hazard	➤ Who might be harmed, ❖ The Hazardous Event The Consequences	Controls	Risk Rating		
			L	C	R
<input type="checkbox"/> Accessing / working on underground services. <input type="checkbox"/> Rodents / Vermin.	➤ Technician(s). ❖ Infection. Major Illness.	1. Leptospirosis awareness training included on induction & SA002 assessment. 2. Leptospirosis card issued on induction. Instructed that card must be carried at all times. 3. TBT on disease /awareness provided at 1-year intervals.	1	5	5
<input type="checkbox"/> Accessing / working on underground services. <input type="checkbox"/> Exposed chamber.	➤ Technician(s). ➤ General public. ❖ Falling into chamber. Major injury.	1. Training provided on safe removal of chamber cover / guarding exposed chamber. Technician assessments on safety underground (SA002). 2. Gate guards / barriers provided. 3. Sandbags issued for adverse weather conditions i.e. wind. 4. Refresher training provided at regular intervals.	2	5	10
<input type="checkbox"/> Accessing / working on underground services. <input type="checkbox"/> Silted / flooded chamber.	➤ Technician(s). ❖ Infection. Major illness.	1. Training / instruction provided on safety underground assessment (SA002) i.e. identification of pure & polluted water. 2. Instruction provided on removing excess water from chamber (SA002). 3. Water test kit provided. 4. If chamber is 'silted' then advised to inform supervisor & request civils cleanse . 5. If flooded & volume is >5m <sup>3</sup> & is deemed as polluted, stop work & contact supervisor for tank disposal (Gully emptier).	1	4	4
<input type="checkbox"/> Accessing / working on underground services. <input type="checkbox"/> Lifting / removal of chamber cover.	➤ Technician(s). ❖ Inappropriate manual handling. Major musculoskeletal injury. Major crush injury - foot / hand.	1. Manual handling training provided (induction). 2. Training provided on safe removal of chamber cover (induction). Technician assessments on safety underground (SA002). 3. Correct chamber cover removal keys / associated equipment provided. 4. PPE provided e.g. steel toe capped footwear. 5. On site manual handling training. 6. Regular refresher training at 3 yearly intervals.	2	4	8
<input type="checkbox"/> Accessing / working on underground services. <input type="checkbox"/> Cable.	➤ Technician(s). ➤ General public. ❖ Slip / trip / fall over cable. Major injury.	1. Retain cable within working area (K8). 2. SLG provided e.g. gate guards / barriers. 3. Regular refresher training at 3 yearly intervals.	2	4	8
<input type="checkbox"/> Underground Chamber / Confined Space working <input type="checkbox"/> Gas <input type="checkbox"/> Unsecured chamber ladders <input type="checkbox"/> Flooding	➤ Technician ❖ Explosive / oxygen deficient atmosphere ❖ Falls from height ❖ Drowning Catastrophic Catastrophic injury Catastrophic	1. NC2 City & Guilds Medium/high risk confined space training 2. Refresher confined space training every 2 years 3. Correct confined space equipment available (tripod, winch, harness, escape set, walkie talkies) 4. Calibrated GDU provided 5. Gas testing/GDU usage training provided in induction and at regular intervals. 6. Utility provider phone number supplied to technician. 7. Permit to Work completed before all confined space work	2	5	10
			3	5	15
			2	5	10

<input type="checkbox"/> Location / Activity <input type="radio"/> Hazard	➤ Who might be harmed, ❖ The Hazardous Event The Consequences	Controls	Risk Rating		
			L	C	R
<input type="checkbox"/> Working activities in vicinity of general public. <input type="radio"/> Threats & violence.	➤ Technician(s). ❖ Assault. Catastrophic.	1. Threats & violence awareness included on induction. 2. TBT on threats & violence provided at 1-year intervals. 3. Company mobile telephone provided.	1	5	5

Review date	Carried out by:	Major Changes
01/10/2019	Lee Meek/J. Alderson	None
09/10/2020	Lee Meek	Changed all A9 references to SA002
08/10/2021	James Alderson	None

Date of next review: 01/10/2022