

**Every employee and contractor, working for Northern Powergrid, should go home at the end of each shift uninjured and in good health after a productive days work**

## Safety around Excavations

An accident occurred on 16 April 2016 involving a jointer's mate who suffered a knee injury when a flagstone at the side of the joint hole tipped under his weight, causing him to fall into the excavation. The mate was repositioning a battery lighting pack at the side of the joint hole for the jointer when the incident occurred. It was fortunate that the jointer, who was in the joint hole at the time, was able to react quickly and break his fall, otherwise the injuries could have been even more serious.

The incident is currently under investigation but at this early stage it is important to share with you what we already know.

As you can see from the pictures, the excavated joint hole is to the correct standard in that the sides of the hole are clear from spoil. There is a clear access and egress route to the side of the joint hole and signing and guarding is all present. To all intents and purposes, this would be a copybook example of a joint hole excavation, yet we have still incurred a serious injury accident. The mate suffered a knee ligament injury that required hospital treatment and he will require several weeks of convalescence before he is fit to return to work.

Excavations and street works are a daily feature of our work and the routine nature of the work can sometimes create over familiarity with the hazards associated with work sites and, as a result, create a false sense of safety in a hazardous environment.

To ensure we create a safe working environment it is important that we do not become blind / accepting of potential work site hazards and that we review and risk assess the work site, both at the start of the work and as the work progresses and conditions change.

The stability of the ground and structures around excavations is something to be aware of at all times (joint holes and trenches). In this particular instance the hazard was not obvious as the sides of the joint hole would appear to have been stable, especially as the excavation was in a flagged area. Tarmac excavations present an even greater risk of being undermined at the edges of the excavation.

It is prudent to take this opportunity to remind you of the general measures that you need to take into account when working in, accessing or egressing, trenches and joint holes.



Each route into and out of the joint hole has a different set of hazards that need to be mitigated to reduce the risk of a slip, trip and fall event. These should be risk assessed by all members of the team and the agreed safe route clearly communicated to all staff (including contractors) working on site.

**Some of the general hazards to look out for and take account of in your risk assessment are shown below.**

## General safety considerations when working in or near excavations

- 1. Access & Egress** - Always consider access and egress, into and out of joint holes / trenches and take account of any obstacles that may be unearthed and present a trip hazard. If there are obstacles within the trench which impede safe movement then, if not reasonably practicable to move the obstacle, create an alternative safer workaround.
- 2. Excavated materials** - Consider if excavated spoil presents an unacceptable hazard either from falling into the joint hole or blocking access and egress.  
  
Always keep spoil clear of the excavation edges and ensure that at least one side of the excavation is free of excavated material to facilitate access. Under no circumstances should the access route be across excavated spoil, materials or other potential trip hazards.
- 3. Housekeeping** - If site conditions are such that the risk of tripping is high, cease work and take corrective action. Tidy the site as far as is possible and move spoil that is presenting a hazard out of the way or off site if necessary. Keep your site risk assessment updated if site conditions change.  
  
Please remember to consider the members of the public who may need to negotiate around the excavation in the fenced off area.
- 4. Excavation sides** - When undertaking excavation work maintain awareness of the depth of the excavation and the requirement for shoring or sloping to prevent the sides falling in.  
  
Ensure the edges of the excavations are not undermined such that the top surface layer becomes load bearing to anyone working at the side of the excavation. Try to keep the same safe route into and out of the joint hole.
- 5. Adjacent structures** - Always maintain awareness that an excavation may affect structural stability of adjacent structures.
- 6. Signing & Guarding** - Make sure the signing and guarding for the site is in place at all times and that the general public are kept out of the excavation area. The signing and guarding is also an important aspect of traffic safety around the work site and the visibility of the works to motorists must be considered. As the reminder in the End of February 2016 brief stated always maintain an adequate safety zone between workers/pedestrians and traffic. [Link.](#)
- 7. Weather related impact** - Be aware of the impact that water can have on the stability of the excavation due to its ability to undermine or weaken ground structure.
- 8. Work at Height** – consider working at the edges of a joint hole as a work at height situation. If there are several obstacles uncovered in a joint hole, reassess the access point and construct a different one if the risk of an accident can be reduced. Stepping into a joint hole involves a controlled descent of your body weight. If a descent into the excavation becomes uncontrolled due to slip or trip the consequences are a complete unknown and down to reactions and luck.

**This newsflash must be given the widest possible circulation and personal copies issued to all appropriate staff.**