

Carrying out an Excavation? Is a 'Permit to Excavate' needed? The short answer is Yes!

What is an 'Excavation'?

On Teesside Works, excavation work covers ANY disturbance of the ground, surface removal, compaction, indentation or penetration by:

- Boring
- Channelling
- Clawing
- Rolling
- Digging
- Pile-driving
- Dozing
- Disc cutting



- Grading
- Rotovating
- Drilling
- Levelling
- Post-driving
- Pulling out tree roots
- Scraping
- Shovelling, etc.

It applies to work using: hand tools, power tools, mobile tools, mobile machinery & equipment.

What are the 'Dangers'?

There are various services buried beneath the ground at depths ranging from a few centimetres to many metres, these include:



- Electrical cables (up to 66,000 Volts)
- Data & Communication cables
- Gas mains
- Oil lines

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- Water mains
- Water courses
- Sewers
- Drains



Are there any exemptions?

Yes but only :

- **PLANING OF EXISTING TARMAC AND CONCRETE ROADWAYS** for surface overlay and pothole repairs to a maximum depth of 200 mm. (This does not include road verges).

Note - Scraping or shovelling on an engineered surface such as tarmac or concrete does not disturb the ground surface so therefore **DOES NOT** require a Permit to Excavate.

What is needed?

The control measures for ensuring excavations are carried out safely on the STSC site are described in procedure **MS 6.20.1 'MANAGEMENT OF EXCAVATIONS'**. If the task you are planning or being asked to carry out requires any of the above, a 'Permit to Excavate' will need to be in force. These permits are issued by the **SITE EXCAVATION CONTROLLERS** who will organise and carry out a ground search and ground scans of the area to ensure that it is safe to proceed.

SSI UK		PERMIT TO EXCAVATE		PERMIT No: A1B2C3	M10																																																								
IF IN DOUBT ABOUT SAFETY - STOP WORK AND REFER TO EXCAVATION CONTROLLER																																																													
1. PERMIT ISSUE																																																													
1.1 Issuing Authority (Name) Position																																																													
1.2 Issue Date Time																																																													
1.3 Issued To (Working Party Leader)																																																													
1.4 COMPANY or DEPT.																																																													
1.5 Permit Valid Until Time																																																													
1.6 EXTENSION OF PERMIT: SIGNED																																																													
2. WORK DETAILS																																																													
2.1 Precise Location (use drawing) Sketch/Drawing/Plan Ref No. BOX A																																																													
2.2 Description of Work																																																													
2.3 Access Route to Work Area (use drawing)																																																													
2.4 Are Power Tools to be used? YES NO IF YES detail																																																													
2.5 Is a Mechanical Excavator or Similar Mobile Tool to be used? YES NO IF YES detail																																																													
2.6 Are any Safe Working Procedures to be employed? YES NO IF YES detail																																																													
3. MANDATORY CHECK SIGNATURES (DECLARATION) As an AUTHORISED PERSON in sect.3.1 (below) I have:																																																													
(a) Checked drawings for the designated work location for services in sect. 3.1 (below)																																																													
(b) Checked SCAN results and detailed services listed in my discipline or dept. in sect. 3.1 (below)																																																													
(c) Marked up a document of services listed in BOX A (below)																																																													
(d) Agree work can commence in accordance with safety procedures specified in this permit																																																													
3.1 SERVICE DISCIPLINES (N.B. Electric scan sweeps are MANDATORY)																																																													
Scan Completed by: Signature Date																																																													
<table border="1"> <thead> <tr> <th>Services</th> <th>Present and Marked on Drawing</th> <th>YES</th> <th>NON KNOWN</th> </tr> </thead> <tbody> <tr> <td>(a) HV Electrical Cables</td> <td></td> <td></td> <td></td> </tr> <tr> <td>(b) All Other Electrical Cables</td> <td></td> <td></td> <td></td> </tr> <tr> <td>(c) Rail Signal Cables</td> <td></td> <td></td> <td></td> </tr> <tr> <td>(d) Telephone / Data Cables</td> <td></td> <td></td> <td></td> </tr> <tr> <td>(e) Gas Mains / Pipes</td> <td></td> <td></td> <td></td> </tr> <tr> <td>(f) Compressed Air Lines / Pipes</td> <td></td> <td></td> <td></td> </tr> <tr> <td>(g) Steam Lines / Pipes</td> <td></td> <td></td> <td></td> </tr> <tr> <td>(h) Oil Lines / Pipes</td> <td></td> <td></td> <td></td> </tr> <tr> <td>(i) Water Mains / Pipes</td> <td></td> <td></td> <td></td> </tr> <tr> <td>(j) Drains - Surface & Foul</td> <td></td> <td></td> <td></td> </tr> <tr> <td>(k) Water Courses</td> <td></td> <td></td> <td></td> </tr> <tr> <td>(l) Tunnels / Cellars / Basements / Foundations etc.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>(m) Messenger Tubes</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>						Services	Present and Marked on Drawing	YES	NON KNOWN	(a) HV Electrical Cables				(b) All Other Electrical Cables				(c) Rail Signal Cables				(d) Telephone / Data Cables				(e) Gas Mains / Pipes				(f) Compressed Air Lines / Pipes				(g) Steam Lines / Pipes				(h) Oil Lines / Pipes				(i) Water Mains / Pipes				(j) Drains - Surface & Foul				(k) Water Courses				(l) Tunnels / Cellars / Basements / Foundations etc.				(m) Messenger Tubes			
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4. PRE-WORK CONSIDERATIONS																																																													
4.1 Is a Safety Method Statement Attached to this Permit? YES NO																																																													
4.2 Define and Specify:																																																													
(a) The method of marking the excavation boundary/route?																																																													
(b) The method of marking underground services?																																																													
4.3 Is a Full or Partial Road Closure necessary? FULL PART NONE SECURITY INFORMED YES NO																																																													
4.4 Traffic Control Method - Traffic Lights YES NO STOPGO Boards YES NO																																																													
4.5 Is a Rail Track Closure necessary? YES NO RAILWAY OCCUPATION PERMIT REQUIRED YES NO																																																													
4.6 If YES will flags or locked points be employed?																																																													
4.6 Isolations Required: Gas Electrical Water Oxygen Oil/Hyd etc. YES NO																																																													
4.7 Are trial digs to be made? YES NO IF YES what distances? 10m 25m 50m 75m 100m Other																																																													
4.8 Is an ATMOSPHERE Clearance Test necessary? YES NO																																																													
5. EXCAVATION DETAILS																																																													
5.1 Detail ground surface removal, excavation or disturbance methods																																																													
5.2 Excavation inspection frequency																																																													
5.3 Excavation Fall Safety Precautions required: Solid Barrier/Fence Plastic Fencing Bunting & Signs Cover Plates																																																													
5.4 Are flashing lights to be employed after dark? YES NO																																																													
5.5 What type of shuttering is to be used? (if required)																																																													
5.6 What will the excavation batter angle be? (if required)																																																													
5.7 Will the excavation be left uncovered after dark? YES NO YES NO																																																													
5.8 Will mobile plant be able to work safely on and into excavation edge? YES NO YES NO																																																													
5.9 Can gas build up and/or reduced oxygen be a safety problem? YES NO YES NO																																																													
5.10 Is any special personal protective equipment necessary? YES NO IF YES detail																																																													
5.11 Are Safety Lookout men to be employed? YES NO Signal Men? YES NO Safety Barriers? YES NO Flag Men? YES NO																																																													
5.12 Detail ground conditions: Clay Ballast Rock Clay Soil Gravel Sand Made Ground																																																													
Civil Engineers Concurrence Signature (if required) Date																																																													
6. EMERGENCY PROCEDURE (BSI UK to supply details)																																																													
7. ADDITIONAL SIGNATURES (as required)																																																													
7.1 Production Services																																																													
7.2 Accident Prevention																																																													
7.3 Plant																																																													
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8. WORKING PARTY LEADER DECLARATION																																																													
I am authorised and trained in excavation work																																																													
(a) I have read and understood the Safety Method Statement, Permit and precautions overlaid and																																																													
(b) have safety briefed the workforce (including sub-contractors)																																																													
Signature Date																																																													
9. EXCAVATION CONTROLLER																																																													
As a competent Excavation Controller I have:																																																													
(a) Checked sections 1 to 7 and																																																													
(b) Obtained the necessary Concurrences																																																													
I AUTHORISE THE WPL TO COMMENCE WORK																																																													
AT (time) ON (date)																																																													
Signature																																																													
10. CANCELLATION																																																													
Excavation Controller Signature																																																													
Signature Date																																																													
Time Date																																																													



This document (together with one or more drawings and/or maps) is designed to highlight any known services within the area. They give detail as to what the boundaries of the excavation area are, may state what depth you can go down to and stipulates what control measures need to be put in place BEFORE WORK CAN START.

The permit will also give details of the ground conditions, list any isolations that will be required before work can start, specify any Safety Lookout personnel required and detail any fall protection required.

The permit will specify the SAFE WORKING PROCEDURE or SAFETY METHOD STATEMENTS that cover the task and list all emergency procedures that may need to be followed.

The Site Excavation Controller will go through the contents of the permit with the WORKING PARTY LEADER, who is responsible for briefing the workforce (including any sub-contractors) prior to work commencing. The Site Excavation Controller will also make periodic visits to the excavation area while the task is being carried out and check that all personnel, materials and equipment have been removed and the area is safe before cancelling it.



Always:

- ✓ Contact the Site Excavation Controllers prior to carrying out an excavation.
- ✓ Work within the limits and boundaries as set out in the Excavation Permit.
- ✓ STOP work if you locate any cable, pipe or duct you were not expecting to find and contact the Site Excavation Controller.
- ✓ Consider any exposed service to be LIVE and DANGEROUS until proven otherwise:
 - ⚠ Any unknown cable should always be considered to be Live and at high voltage.
 - ⚠ Any pipes should be presumed to contain pressurised flammable gas or liquids.
- ✓ Ensure that the site is left in a safe condition at the end of each working shift.

Do Not:



- ☒ Use any tools, plant or machinery not authorised on the permit.
- ☒ Remove or modify any fence or safety barrier to gain access to the work area unless it is stipulated in the Excavation Permit. All fences or other safety barriers MUST be re-instated before the permit is cleared and cancelled.
- ☒ Use mechanical excavators, digging machines and cutting machines with power tools within 2-metres of a known high voltage cable location, such as a cable reservation, without the approval of the Power Distribution Department.
- ☒ Make any assumptions about the location of any service; get the Site Excavation Controller to locate it as accurately as possible.
- ☒ Continue working if the conditions change dramatically - an increase in ground water can affect the stability of the excavation.



REMEMBER – IF YOU HAVE ANY DOUBT AS TO WHETHER THE WORK REQUIRES AN EXCAVATION PERMIT, DO NOT START UNTIL YOU HAVE HAD CLARIFICATION FROM A SITE EXCAVATION CONTROLLER!

Site Excavation Controller's Contact Details -