





























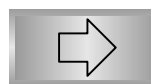
Responsibilities Process Map

Action	Client (as defined by CDM)	Designer / Planner (as defined by CDM)	Contractor (as defined by CDM)	References
Clearly scope works				<div data-bbox="1313 387 1568 544" style="border: 1px solid blue; padding: 5px; margin-bottom: 10px;">BPAUS 04 - Client, Designer and Contractor Opportunities, Responsibilities and Checklists</div> <div data-bbox="1361 745 1520 835" style="border: 1px solid gray; padding: 5px; margin-bottom: 10px; text-align: center;"></div> <div data-bbox="1313 835 1568 891" style="text-align: center;">http://www.hse.gov.uk/construction/cdm/acop.htm</div> <div data-bbox="1313 992 1568 1149" style="border: 1px solid blue; padding: 5px; margin-bottom: 10px;">BPAUS 04 - Client, Designer and Contractor Opportunities, Responsibilities and Checklists</div> <div data-bbox="1361 1193 1520 1283" style="border: 1px solid gray; padding: 5px; margin-bottom: 10px; text-align: center;"></div> <div data-bbox="1297 1261 1580 1317" style="text-align: center;">www.hse.gov.uk/construction/cdm/designers.htm</div> <div data-bbox="1313 1787 1568 1944" style="border: 1px solid blue; padding: 5px; margin-bottom: 10px;">BPAUS 05 – Training Framework for Designers & Planners</div> <div data-bbox="1361 1966 1520 2056" style="border: 1px solid gray; padding: 5px; margin-bottom: 10px; text-align: center;"></div> <div data-bbox="1297 2033 1580 2089" style="text-align: center;">www.hse.gov.uk/construction/cdm/designers.htm</div>
Ensure clarity of known areas of service interaction				
Define requirement for management of work near underground services				
Defined communication channels inc Designers and Supply Chain				
Ensure clear understanding of communication internally and with Clients, Designer, Planners and Contractors				
Defined change management process				
Understand responsibilities for coordination and management of underground services information.				
Follow change management process				
Location of services included in scope and price				
Tender submissions include management of underground services				
Encourage Supply Chain to sign up to USAG charter				
Designers demonstrably competent in underground services aspects				
Eliminate, substitute or reduce risk in design				

 Lead in action


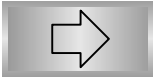

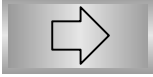











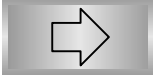




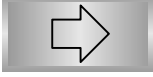
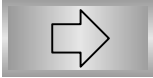
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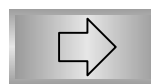
Responsibilities Process Map

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Establish clear communication with Asset Owners for contact, help and advice, inc. local knowledge				 www.energynetworks.org – Gas Distribution
Establish a clear understanding of communication process with Asset Owners				 www.energynetworks.org – Electricity Distribution
Define minimum acceptable standards for service information provision inc. colour and cross sections				
Do not accept services information more than 3 months old				
Allow sufficient time and resources for positive service location				
Obtain all relevant and available underground services information (in conjunction with Designers)				
Effective information communication process (inc BIM protocols) for right information to right people at right time.				 www.bimtaskgroup.org
Service Information Coordinator appointed to each project				
Designated Service Information Co-ordinator identified and included in design reviews				
HOLD POINT				
Contact Asset Owner at concept stage to identify the possibility of diversion or isolation or services				 www.ukpowernetworks.co.uk  www.nationalgrid.com

 Lead in action







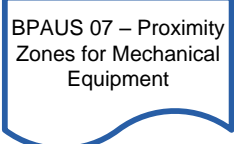


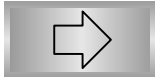







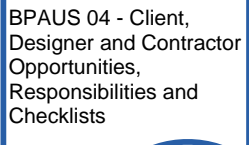

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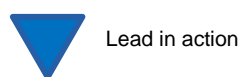
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Responsibilities Process Map

Action	Client <small>(as indicated in CDM)</small>	Designer / Planner <small>(as indicated in CDM)</small>	Contractor <small>(as indicated in CDM)</small>	References
Document and track all contacts with Asset Owners				
Review design to verify that all reasonable measures have been taken to avoid service locations				
Demonstrate that routings, diversions, pre-start removal, isolations and sequencing have been considered.				
Design takes into account "protection zones" for working in proximity of services which cannot be avoided				
BIM used to capture and share information, identify service clashes and potential diversions.				 www.bimtaskgroup.org
Clear communication processes in use to communicate appropriate and sufficient information to Contractors				
Handover of information with opportunity for review and explanation				
Ensure the provided information is complete				
HOLD POINT				
Clear and robust change management process is understood				
Clearly defined and communicated roles and responsibilities for management of underground services risks				
Clearly defined communication routes to Designers, Planners, Clients and Asset Owners for communication, information, advice and support.				



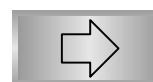
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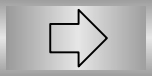

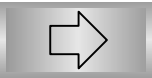









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Responsibilities Process Map

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<p>Adequate resources for management of risks associated with underground services is included in tender.</p>				
<p>Competence of supply chain in relation to management of risks associated with underground services including personal competence of workforce.</p>				 www.utilitystrikeavoidancegroup.org
<p>Encourage supply chain to sign up to USAG charter and the elements subjected to monitoring and audit.</p>				 www.utilitystrikeavoidancegroup.org
<p>Allow sufficient time and resources for positive service location throughout supply chain</p>				
<p>Communication and effective working relationship established with underground services coordinator</p>				
<p>Change management process understood and applied to changes in design, site conditions, sequencing etc.</p>				
<p>Integration with designers to assist in risk elimination.</p>				
<p>Challenge the design where expectations of elimination, substitution or reduction of risk by design fall short of contractors' expectation.</p>				

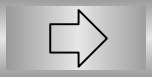

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HOLD POINT				
Confirmation that all services requiring diversion have been diverted and there are no residual risks (pot ends etc.)			▼	
Confirmation that any agreed isolations have been carried out			▼ ▼	
Comply with any other working restrictions identified by the Asset Owner			▼	
HOLD POINT				
Issue and brief Permit			▼	BPAUS 06- Permits Use & Content
COMMENCE WORK AROUND UNDERGROUND SERVICE				
Positive identification of all underground services which could potentially be disturbed.			▼	 www.national-one-call.co.uk  https://linsearch.org/
Workforce understand that if they are in any doubt that a service is live, or that safe working practices are not taking place they must STOP and obtain instruction.			▼	
Follow Safe Systems of Work			▼	HSG 47 – Avoiding Danger from Underground Services
Where any service is encased / surrounded in concrete work is to stop until a safe system of work is identified.			▼ ▼	BPAUS 08/09 – Services Encased / Surrounded in Concrete
Changes which may affect or could be mitigated by design to be referred to the Designer			▼	BPAUS 02 – Design & Planning Process to Avoid Underground Services



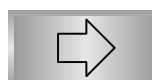
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