

## 1. SCOPE

This Construction Environmental Management Plan (CEMP) has been developed for the diversion of the existing 275kV XX Route Overhead Line (OHL) to the new Monklands Hospital at Wester Moffat and is based on data gathered through pre-tender ecological and environmental surveys and stakeholder consultations.

The CEMP has been developed to ensure that the construction phase must be planned, managed and monitored in a way which enables works to be carried out with full awareness of the associated environmental risks. The benefit of effective forward planning should vastly reduce or where possible eliminate risk to the environment.

The CEMP aims to ensure that good construction practices are adopted and maintained throughout the construction of the project and provides assurance to third parties that agreed environmental performance criteria are met. It shall establish procedures for ensuring compliance with environmental legislation and statutory consents and detail the process for monitoring and auditing environmental performance.

For usability, a table containing the environmental Planning Conditions and where this information can be found within the document is included in Appendix 1.

This CEMP must be read in conjunction with the Contractors Environmental Performance Requirements (CEPR). The CEPR establishes the environmental requirements to be followed by SP Transmission Plc.'s (SPT) contractors for the tender, planning and execution of their works. The CEPR is in Appendix 2 of this document.

This CEMP details the results, recommendations and mitigations of the surveys and investigations and includes:

- □ Environmental Statement [if EIA process completed]
- □ Ecology Reports;
- □ Hydrology Reports;
- □ Archaeology Reports;
- Geotechnical Reports [summary]; and
- □ SPT Environmental Constraints Matrix.

These can be seen at Appendices 3 and 4 of this document.

This document will remain **a live document** for the duration of the project and will be revised and updated as and when required, revisions may be required if there is a change of scope/Conditions/ contractor or change to a supporting document. Where SPT are obliged to update or revise the document this will be communicated to all contractors working on the project via the SPT Quality and or Environmental Advisor representative on the site to all stake holders.

This document compliments the Construction Phase Plan (CPP), Traffic Management (TMP), **Quality Plan (EP) & contractual documentation for this project.** 



### 2. ISSUE RECORD

This is a Controlled document. The current version is held on Project Wise. It is your responsibility to ensure you work to the current version.

Issue Date DD/MM/YYYY	Issue No.	Author	Amendment Details
07/11/2022	0		Document created

## 3. ISSUE AUTHORITY

Prepared	Reviewed	Approved
Name:	Name:	Name:
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### 5. DESCRIPTION OF PROJECT

The diversion involves the installation of three new L8© D60 towers, the removal of existing towers XX033, XX034 and XX035 and assessment of the new foundation loads for the existing towers XX032 and XX035. These new towers would be strung with 'twin' bundle AAAC 425mm<sup>2</sup> 'Totara' phase conductor at 90°C with a 160mm<sup>2</sup> 'Keziah' equivalent AACSR OPGW. The new towers and conductor system shall be designed and constructed to satisfy the requirements of the DWNO / DWUP projects (i.e. constructed for 400kV operation with 'twin' 'Totara' phase conductor at 90°C) to avoid the need to rework this section of overhead line again in the immediate future.

The construction and civil works associated with the Wester Moffat – XX Route OHL Route Diversion shall include (but are not limited to):

- □ All works associated with the XX Overhead Line Route Diversion works inclusive of all essential ancillary equipment.
- All civil works installations associated with the Diversion of the overhead lines including compound, puller /tensioner areas, working and laydown areas.
- All temporary works associated with the Diversion of the overhead lines.
- □ All telecommunication works associated with the Diversion of the overhead lines.
- □ Removal of all temporary compounds, laydown / working areas and access tracks to tower locations following completion of the diversion works.
- All works associated with dismantling and removal of overhead lines.
- □ All necessary design and construction works associated with the temporary site compound and working / laydown areas including drainage requirements
- □ Repairs to private / public roads shall be carried out where necessary during the construction works with a consideration to construct any lay-bys to facilitate the movement of construction traffic.

The OHL works associated with the Wester Moffat – XX Route OHL Route Diversion shall include (but are not limited to):

- Decommission, Dismantle, and remove from site existing towers ('XX'033, 'XX'034 and 'XX'035) including all existing phase, earthwire conductors and associated fixtures / fittings and foundations taken down to minimum 1.5 metre below ground level. (ensure existing conductor / earthwire can be modified on site to enable connection to proposed towers etc)
- Existing L2 D E36 tower ('XX'032) & L2 D E28 tower ('XX'036) to be reviewed and upgraded if required prior to removal and install of new towers at XX033A, XX034A & XX035A location.
- Install new L8c D60 E7.3 tower ('XX'033A), L8c D60 E7.3 tower ('XX'034A) and L8c D60 E7.3 tower ('XX'035A) including all associated fixtures / fittings, insulators, furniture, anticlimb devices, signage, and foundations.
- Install of new twin 425mm2 'Totara' AAAC (EHC) phase conductors at 90°C, from towers ('XX'033A to' XX'035A).
- Install of new 160mm2 'Keziah' AACSR (36 fibres) optical earthwire (OPGW) equivalent and sagged to match the new 'Totara' AAAC (EHC) phase conductors, including required OPGW joint canisters on new tower ('XX'033A) and ('XX'035A).
- Replacement and/or upgrade of damaged / corroded tower steelwork where required. Steelwork corrosion degradation of members with NGC designated above grade 4 shall be replaced. (Note: replacement of any damaged steelwork at tower cross arms shall be carried out during the outage period; tower body replacement steelwork can be carried out at another stage; works to include painting of all tower replacement steelwork)
- Construction, installation and removal of all temporary working / laydown areas and access tracks for all required towers.
- Identification and replacement of any outstanding works related to Transmission Design Memorandums (TDM) and/or Transmission Design Circulars (TDC).
- Co-ordination with T-OPS / CBRM planned circuit work projects to produce the most efficient delivery programme



## 5.1 Project Location

The project is located adjacent to the new Monklands Hospital Development (NGR X278570 Y665890).



Figure 1: Proposed Development Location Plan

## 5.2 Key Dates and Programme

**5.2.1** Table 1: Key Dates and Programme Highlights

Stage	Planned Dates
Site Investigation Works	27/07/2023 - 06/02/2024
Site establishment	27/05/2024 - 13/12/2024
Main Civils	N/A
Balance of Plant	N/A
Commissioning	20/12/2024
Foundation Upgrades	TBC
Tower Painting	TBC
Re-Conductoring	26/08/2024 - 13/12/2024



#### 6. KEY STAKEHOLDERS

#### 6.1 **Pre-Tender Consultations**

As part of the development of the project SPT have carried out a range of consultations with key stakeholders.

#### 6.1.1 Table 2: Relevant regulatory agencies and interested parties

Regulator/ Interested Party	Responsibility
SEPA 6 Parklands Avenue Motherwell ML1 4WQ Tel: 01786 457700	Environmental Regulator. Issue Waste Management Licenses and Exemptions from Waste Management Licensing, CAR Authorisations. Will use enforcement tools to ensure compliance with authorisation conditions issued by them and all other relevan environmental regulation.
SEPA's Pollution Hotline – 0800 80 70 60 (24 hour service)	Report pollution incidents to Pollution Hotline. Issuing Construction Site Licenses for surface water management. Reviewing any methods statements and documents when required under a licence.
NatureScot Cadzow Court 3 Wellhall Road Hamilton ML3 9BG	Issuing any protected species or protected area (e.g. SSSI / SPA /SAC) licences required for the project. To be contacted where protected species are encountered during works and where the project ECoW/Environmental Advisor cannot be reached.
Tel: 01738 457037	
Email: licensing@nature.scot	
North Lanarkshire Council 7 Scott Street Motherwell ML1 1PN	Planning Authorities and responsible regarding highways, road closures and Archaeology.
Tel:	

### 7. **RESPONSIBILTIES**

The environmental detailed responsibilities for SP Transmission are:

SP Transmission are responsible for the transmission and distribution networks within defined licence areas across the UK. Under such licences they are required under The Electricity Act 1989 (The Act) to "develop and maintain an efficient, co-ordinated and economical supply of electricity transmission".

In doing so it is the responsibility of SPT to obtain consent, in accordance with relevant legislation, from local or national government for the development of infrastructure. Under 'The Act' it is SPT's duty to consider the possible environmental impacts of the proposals and state what can 'reasonably' be done to mitigate any identified adverse environmental impacts.

SPT will ensure that all projects are delivered in accordance with requirements of 'The Act' together with the relevant consent, conditions of that consent; and committed mitigation relevant to the proposals.

The environmental detailed responsibilities for SPT Projects are:F-ENV-006 Issue 1Page 6 of 46



Name/ Tile	Responsibility
SPT Project Manager Construction Manager/ Site Manager	<ul> <li>i. Regular liaisons between all parties on site to ensure adequate precautions are taken to minimise the impact on the environment.</li> <li>ii. Ensure the CEMP is implemented and monitored by the Contractors.</li> <li>iii. Ensuring that all environmental incidents are reported and investigated where appropriate.</li> <li>iv. Ensuring site environmental inspections are performed and all issues raised are addressed promptly.</li> <li>v. Conducts regular site meetings and discusses any Environmental issues appropriate.</li> <li>vi. Ensure all the following factors are considered and appropriately actioned;</li> <li>a. The most appropriate order and method of working</li> <li>b. Allocation of responsibilities between personnel, and other organisations on site.</li> <li>c. The CEMP is prepared and issued in a controlled way to all sites</li> <li>d. The protection of the environment, waste generation is minimised, and all waste is disposed of in a safe and responsible manner, and is detailed in the Site Waste Management Plan (SWMP)</li> </ul>
Environmental Advisor	<ul> <li>i. Inputs into the preparation of the CEMP assisted by the Construction Manager and Project Manager.</li> <li>ii. Reviews site inductions and provides information regarding site specific Environmental Aspects</li> <li>iii. Reviews Contractors' Environmental documentation with particular emphasis on environmental regulations and requirements.</li> <li>iv. Carries out regular inspections of the construction site.</li> <li>v. Advise the Construction Management Team on compliance with the statutory Environmental requirements.</li> <li>vi. Attends progress and coordination meetings.</li> </ul>

Note that the environmental responsibilities for the contractor(s) on this project are described in the Contractor's Environmental Performance Requirements (CEPR) document. See below.



#### 8. CONTRACTORS ENVIRONMENTAL PERFORMANCE REQUIREMENTS (CEPR)

The Contractors Environmental Performance Requirements (CEPR) is a document which details all the environmental performance requirements of contractors on SPT projects. The CEPR covers all EU and UK Environmental Legal Requirements and SPT compliance such as:

- □ ISO 14001 certificated for the scope of work tendered; and
- □ SPT Sustainability Commitments for all projects.
  - Divert 95% of waste from landfill by 2023, re-use and recycle 100% of waste by 2030 and achieve zero waste by 2050;
  - Reduce water use by 10% by 2023, 25% by 2030 and 50% by 2050;
  - 15% reduction in our carbon footprint by 2023, 80% reduction by 2030 and be carbon neutral by 2050; and
  - Improvement in Biodiversity with no net loss.

The CEPR can be found in Appendix 1 of the CEMP.



### 9. COMMUNICATIONS

Regular communication between all parties will be essential for environmental management to be successful. There are a variety of communication channels and methods. In the first instance any communication at a site level should be done through the SPT Site/ Construction Manager or SPT Environmental Advisor. The SPT Site/ Construction Manager or SPT Environmental Advisor will then distribute the information to the relevant parties. All communications with regulators such as SEPA/NatureScot must also be communicated to SPT and records saved on SPT's document management system ProjectWise. General communication shall take place on site daily to ensure the project is managed effectively.

Communication Tool	Details
	All contractors attending site shall receive a site-specific induction that addresses
Site Induction	the site environmental risks, contact details and any site-specific processes or
	procedures. Site Induction suitability will be inspected by SPT environmental
	advisor.
	The site construction team will attend a weekly site meeting with all contractors.
Weekly Meetings	The minutes shall be recorded and distributed to all the contractors involved in
	the works. Environmental actions will be captured, discussed and closed out.
	Safety Observation Reports shall include observations related to both good and
SOBa (Environmental)	bad environmental practice witnessed on site, a copy will be provided to the
SORS (Environmental)	contractor and a copy will be held by SPT. SORs will be discussed at the weekly
	meetings.
	SPT must be included in all communications with stakeholders and regulators
Email	bodies, all communication must be uploaded to ProjectWise.
	All emails that have a contractual implication shall be saved on ProjectWise.
	Allocated space on a site noticeboard should be given to relevant environmental
	aspects. The notice board should include SPT's environmental policy, any
Site Noticeboard	environmental alerts and a site plan detailing environmental controls. Besides
	that, the notice board shall include an organigram and emergency response
	team contacts.
Environmental Folders on	Up to date electronic copy or hard copy shall be available to reference by site
ProjectWise	staff and for inspection purposes.

Direct actions taken by SPT to communicate with the contractors:

## 10. SITE ENVIRONMENTAL BASELINE CONDITIONS

SPT have provided information on the baseline conditions which indicates the site environmental risks and likely impacts (without mitigation) associated with the project. The baseline conditions for the various aspects are detailed in Table 3 below. In addition to this an Environmental Constraints Matrix is appended to this plan [OHL/cable projects only] (Appendix 4). The baseline reports cover:

- Designated Sites;
- □ Habitats and Species;
- □ Biodiversity;
- □ Historic and Cultural Environment;
- Geotechnical (SI works);
- Hydrological Context; and
- □ The Water Environment (watercourses etc).

This is a **baseline** which shall be monitored and re-evaluated throughout the project. There must be an allowance for unexpected finds which materially affect this baseline. This would be particularly relevant where projects are active



over more than 1 survey season (> 12 months) or where limitations applied to the amount of pre-tender investigation work which was undertaken due to lack of access or due to changes in scope of the project post tender.

Therefore, this aspect of the CEMP must be considered as **live** for the duration of the project. Any new finds or changes in site sensitivity will be communicated to all contractors. This would require contractors to revise risk assessments and method statements etc as a minimum.

10.1.1	Table 3: The key	v environmental a	aspects and the	e baseline conditions	identified are	detailed below
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Environmental Aspect	Baseline Conditions		
	<ul> <li>Four statutory sites (SACs) have been identified within 10km of the site:</li> <li>Black Loch Moss 6.6km east</li> <li>West Fannyside Moss 6.8km north</li> <li>North Shotts Moss 8.4km south-east</li> <li>Blawhorn Moss 9.8km east</li> <li>One SSSI has been identified within 2km of the site:</li> <li>Lady Bell's Moss 1.2km east</li> <li>One Special Protection Area (SPA) has been identified within 7km of the</li> </ul>		
Statutory and Non-	<ul> <li>site:</li> <li>Slamannan Plateau 6.2km North</li> <li>No constraints are identified to the proposed development with the above sites.</li> </ul>		
Statutory Designated Sites	Seven non-statutory designated sites, Sites of Interest for Nature Conservation (SINCs) have been identified within 1km of the site:		
	<ul> <li>North Calder Water – includes three separate sites, NCW Moffat Mills (Plains), NCW Moffat Mills (Dunrobin) and NCW Monkland Bridge</li> <li>Cameron Glen SINC 14m north</li> <li>Springbank Quarry 500m east</li> <li>Knowehead Marsh 750m south</li> <li>Easter Moffat Golf Course 800m east</li> <li>Due to the requirement to avoid habitat loss wherever possible, there is moderate constraints identified to the proposed development.</li> <li>For further details refer to Appendix 3 of this CEMP.</li> </ul>		
Archaeology	The proposed diversion is located sufficiently far enough away from archaeological and cultural heritage receptors that it will not result in any significant effects on them. Should it be required to prevent impacts on unrecorded archaeological remains a watching brief will be maintained during pre-construction ground investigations.		
Cultural Heritage	As above		
Biodiversity	Ancient Woodland There are three AWI woodlands within the area of the proposed development, located 20m south, 585m northeast and 757m southeast. Phase 1 Habitats		



Environmental Aspect	Baseline Conditions		
	Woodland		
	The riparian woodland along the North Calder Water in the north and west of the Survey Area is categorised as semi-natural broadleaved woodland.		
	In the far south of the Survey Area, along the small burn, woodland is present comprising self-sown, semi-mature birch and alder with frequent hawthorn. The trees here are covered by a black fungus. This woodland is included on the AWI as long-established woodland of plantation origin. However, whilst the field survey recorded it as semi-natural, it is not of maturity or diversity, and does not appear to exhibit the flora etc. associated with semi-natural ancient woodland.		
	In the centre of the Survey Area is a large area of steeply sloping broadleaved plantation woodland overwhelmingly dominated by mature birch with occasional horse chestnut Aesculus hippocastanum and sycamore, and rarely birch. The ground is largely bare and covered in leaf litter, with occasional neutral grasses, elder Sambucus nigra saplings, herb- Robert and wood sorrel. Rarely there is broad-leaved helleborine Epipactis helleborine. A very narrow strip of similar composition is present in the south-east of the Survey Area. Another area of broadleaved plantation woodland in the north-west of the Survey Area comprises young hazel Corylus avellana and birch. The ground flora is again sparse with abundant bare ground. Within a large area of semi-improved neutral grassland to the south of the Survey Area (see below) there are localised patches of immature alders, which are a mix of self-seeded and planted specimens.		
	Scattered Trees and Scrub		
	There are scattered trees along fence lines, the vast majority mature beech Fagus sylvatica with localised patches of immature alder. Scattered scrub comprises hawthorn and willow Salix sp.		
	Hedges		
	A species-poor intact beech hedge runs parallel to the North Calder Water.		
	Grassland		
	The majority of grassland within the Survey Area is agriculturally improved and dominated by perennial rye-grass Lolium perenne with occasional white clover Trifolium repens and creeping buttercup Ranunculus repens. This appears to be used for rotational grazing of livestock. Marshy grassland occurs in a small area towards the south of the Survey Area.		
	Tall ruderal vegetation is represented by a large patch of dense nettles surrounding a dung pile in the middle of the Survey Area.		
	For further details refer to Appendix 3 of this CEMP.		
Protected Species	<b>Bats:</b> The high-level assessment conducted during the Phase 1 habitat survey found the Survey Area to be highly suitable for bats. This is based on the diversity of habitats present (river, woodland and grassland) which may be used by bats for commuting, foraging and/or roosting. In particular, the riparian woodland along the North Calder Water was noted to include several trees with roosting suitability. The Site is also well connected to further suitable habitats in the wider area. Further details are available in Appendix 3 of this CEMP		
	<b>Otter:</b> The North Calder Water and adjacent woodland habitat is highly suitable for otter, and otter is known from other work carried out by the consultants to occur on the North Calder Water. However, presence of a		



Environmental Aspect	Baseline Conditions		
	breeding holt is considered unlikely as the North Calder Water at this location is fairly large and fast flowing, so is less suitable for vulnerable, newly born cubs.		
	Further details are available in Appendix 3 of this CEMP		
	Badger: Extensive badger activity was recorded in the Survey Area.		
	Further details are available in Appendix 3 of this CEMP		
	<b>Water vole:</b> Habitats in the Survey Area are sub-optimal for water vole. Water vole favours open, unshaded steep banks with appropriate vegetation, whereas the North Calder Water in the Survey Area is fairly wide and fast flowing with sloping, densely wooded banks, and often rather shallow water.		
	Further details are available in Appendix 3 of this CEMP		
	<b>Red Squirrels</b> : No squirrels or squirrel dreys were observed during field survey (although full survey for squirrels was not carried out).		
	Further details are available in Appendix 3 of this CEMP		
	<b>Great Crested Newts:</b> There is no suitable habitat for great crested newts on Site and a review of OS mapping indicates that there are no ponds or other waterbodies which may be suitable for great crested newt within 250m of the Site.		
	Further details are available in Appendix 3 of this CEMP		
Birds	<b>Nesting birds</b> : Four species were identified:		
	<ul> <li>Curlew</li> <li>Swift</li> <li>Tree Sparrow</li> <li>Bean Goose</li> </ul>		
	It is unlikely that breeding Curlew would occur in the site or wider survey area. There is also no habitat Nesting Swift. There is reasonable likelihood of tree sparrow occurring on site.		
	Further details are included in Appendix 3 of this CEMP.		
Tree root protection	Tree protection fencing is to be placed where woodland is to be retained. Further details can be found in appendix 3 of this CEMP.		
Invasive Non-native Plant Species	No INNS were recorded during the field survey.		
Hydrology	<ul> <li>Records of ten notable invertebrates were found:</li> <li>large red damselfly and emerald damesfly</li> <li>six species of flies: Hydropsyche pellucidula (Scottish Environment Protection Agency (SEPA), 2007), Sericostoma personatum (UK Trichoptera (Caddisfly) Recording Scheme and SEPA, 2004 and</li> </ul>		



Environmental Aspect	Baseline Conditions
	<ul> <li>2007), Polycentropus flavomaculatus (SEPA, 2007), blue-winged olive Serratella ignita (SEPA, 2007), Hydropsyche siltalai (SEPA, 2007), Rhyacophila dorsalis (SEPA, 2007)</li> <li>two molluscs Potamopyrgus antipodarum (SEPA, 2007) and Ancylus fluviatilis (SEPA, 2007).</li> </ul>
	The above records are of species associated with freshwater. Depending on water quality (which according to the SEPA Water Environment Hub is 'Moderate'), the North Calder Water may support these or other notable invertebrates. They are less likely to occur at the small tributary owing to its small size. The bulk of the Survey Area is terrestrial and would not therefore support them. Further details are included in Appendix 3 of this CEMP
Water courses	The North Calder Water runs under the Proposed Diversion, between the first and second of the proposed new overhead towers. A small burn is also present in the south-east of the Survey Area, which discharges into the North Calder Water. Further details can be found in Appendix 3 of this CEMP.
Contaminated Land	TBC

## 10.2 Further Survey and Pre-Construction Checks

The baseline conditions indicate that there will be a requirement for further surveys including pre-construction surveys for:

- □ Nesting birds (pre-construction)
- □ Badgers (pre-construction)
- Otters (pre-construction)
- □ Water vole (pre-construction)
- □ Bats (pre-construction)
- □ Habitats (further survey)
- □ Invasive Species (pre-construction)

### 11. CONSTRUCTION ASPECTS AND IMPACTS

#### 11.1 Risk Assessment

The construction of the diversion of XX Route OHL presents potential risks to the environment unless control measures and mitigation are put in place. Any risk assessment must be based on:

**a.** The sensitivity of the baseline conditions described in Table 3 above e.g. presence of designated sites, protected species, proximity to the water environment; and

**b**. The stage of works including duration.

Contractors on SPT projects must consider the risks their works present and provide an appropriate risk assessment as part of their tender submission.



## **Construction Environmental Management Plan** BT003651-1-EP-SPTM-0001 Wester Moffat XX Route OHL

# **11.1.1** Table 4: Project Stage Risk Level

TYPICAL RISK LEVEL	LOW				HIGH	MODERATE	LOW
Project Stage	Site establishment (compound and welfare set up)	Installation of Access Tracks	Major Civils (large excavations for new buildings, platforms, cables, tower foundations etc)	Any project working in or near the water environment	Any project which requires a Construction Site Licence from SEPA	Maintenance and repair works (e.g. tower painting)	Balance of Plant (which may include some minor civils works) and commission phase

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### 11.2 Site Specific Environmental Aspects and Impacts

All contractors must respond to the site-specific environmental aspects as per Table 5 and potential impacts within their tender submission indicating their proposed mitigation and management controls for each. Contractors should also refer to the performance requirements detailed in the CEPR.

Should there be any modifications or changes made to the scope of any aspect of the construction then any risk assessments made should be revisited to ensure that the control measures and mitigations remain sufficient to manage any new or increased risk.

## 11.3 Environmental Permits and Licences

### 11.3.1 Existing

As part of the development process for the project SPT have secured no licences at present. The contractor must monitor compliance with these which may require additional resource and therefore cost. Copies of the licences and their conditions can be seen at Appendix 3.

### **11.3.2** Further licence requirements

The baseline conditions indicate that there may be a further requirement for consultation with regulators such as SEPA and NatureScot.

The contractor is responsible for arranging any relevant licences (e.g. ecological, archaeological, or SEPA authorisations) and mitigation measures for the works.

### 12. TRAINING

The Environmental Training requirements of contractors working on SPT projects is detailed in the CEPR (Appendix 2). It states that the contractor shall provide the following:

- Environmental induction/ awareness training for all site personnel in line with identified project specific environmental risks. Environmental Emergency Preparedness and Response specific training for key identified roles shall include any training that will be required to comply with specific commitments/ mitigations and environmental good practice;
- Environmental tool box talk sessions to cover specific relevant environmental issues appropriate to the construction activities being undertaken at the time. The provision of evidence of training for all staff associated with onsite activities shall be maintained and retained by all Contractors;
- □ A training plan identifying all environmental training provided (including toolbox talk topics covered);
- □ The Contractor shall test their environmental emergency response plan by carrying out a spill response drill at the beginning of the project and annually thereafter.

### 13. MONITORING AND MEASURING

#### 13.1 Site Inspections

The SPT Projects Environmental Advisor for the project will carry out regular inspections against the procedures and specifications used during the works. The frequency of the Environmental Inspection



will vary depending on the number of contractors present at the site and the risks involved in the activities. The Contractor's Environmental Advisor will provide the SPT Projects Environmental Advisor with a two week look ahead of working activities. Joint inspections of the site will be agreed to by SPT Projects and the contractors Environmental Advisor during the site start up meeting.

The findings of site inspections will be communicated at the site and then via ProjectWise on return to the office.

Contractors will be responsible for carrying out their own Environmental inspections during the works and uploading the findings to ProjectWise.

## 13.2 Audits

SPT Projects have the right to audit the contractor at any time during the works. All contractors will be given at least 10 workings days' notice when a formal audit will be carried out. All contractors are expected to provide suitable resources to assist with the audit. Contractors are expected to carry out audits in line with the level of environmental risk of project work activities and management system commitments. Contractors will inform SPT Projects of their audit schedule upon contract award.

ISO 14001 Accreditation audits/certificates to be communicated to SPT Projects.



## Table 5: Project Aspects and Impacts Register

Activity	Environmental aspect is an element of the project's activities that interacts or can interact with the environment	Environmental Impacts and risks Change to the environment, whether adverse or beneficial, wholly or partially resulting from the project's environmental aspects	Mitigation & Management Controls Efforts to reduce or eliminate impacts	Relevant Legislation (Non-exhaustive)
Site establishment/ Installation of Access Tracks, Site/Ground Investigation works/ Civils	Working in Designated Sites	Destruction/ Habitat loss	Ensure all appropriate consultation and consents are agreed with NaturalScot prior to works commencing in the relevant areas.	National Parks (Scotland) Act 2000 Nature Conservation (Scotland) Act 2004 Environmental Liability (Scotland) Regulations
Site establishment/ Installation of Access Tracks, Site/Ground Investigation works/ Civils	Vegetation Clearance	Destruction/loss of habitat Impact on protected species or harm to resident animals which are not protected.	Vegetation clearance should be carried out with the nesting season. Any clearance undertaken during the nesting season (March to August inclusive) must be done under the supervision of an Ecological Clerk of Works/ecologist, this may result in programme delays if protected species are found. Contractor to arrange relevant preconstruction surveys and licences / consents and to implement mitigation measures for works. Relevant TBT to be issued to all on site	Nature Conservation (Scotland) Act 2004 Conservation (Natural Habitats etc.) Regulations 1994 SI 2716 and amendments Wildlife & Countryside Act 1981 and amendments

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Activity	Environmental Aspect	Environmental Impacts and risks	Mitigation & Management Controls	Relevant Legislation (Non-exhaustive)
Plant/Vehicle operations	Biosecurity	Biosecurity when not adhered to can lead to the spread of invasive species in a new habitat which may not be able to cope with the new species Loss of native plants and animals, reducing biodiversity Loss of habitat can cause issues to landowners, animals using the habitat and the hydrology	Contractors must ensure there is no cross contamination by ensuring all plant and vehicles are washed thoroughly before entering/leaving different habitat areas or catchments depending on the risk (i.e. if there is a specific area of risk in a small area like a field within a wider catchment this must be treated as a different catchment). The contractor is responsible for establishing and documenting within their EMP the procedures and processes to maintain an acceptable level of biosecurity for the project. This must be agreed with the landowners before access is taken.	Wildlife and Natural Environment (Scotland) Act 2011) Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) Wildlife and Natural Environment (Scotland) Act 2011
Installation of Access Tracks, Site/Ground Investigation works/ Civils	Peat	Improper handling/ storage of peat can cause major issues to the natural structure of peat and affect carbon balance, local hydrology and cause flooding. This can lead to long-term changes to habitats resulting in permanent habitat loss. Overall reduction in biodiversity due to species loss.	Peat must be excavated, stored and reinstated correctly. Ensuring segregations, storages areas no higher than 1.5m and 30m away from watercourses. Turves should be stored vegetation side up and be watered to ensure they do not dry out A Peat Management Plan shall be in place and implemented.	Environmental Liability (Scotland) Regulations 2009 Wildlife & Countryside Act 1981 and amendments Conservation (Natural Habitats etc.) Regulations 1994 SI 2716 and amendments

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Activity	Environmental Aspect	Environmental Impacts and risks	Mitigation & Management Controls	Relevant Legislation (Non-exhaustive)
Installation of Access Tracks, Site/Ground Investigation works/ Civils	Nesting birds	Destruction of habitat Disturbance to/ death of/ injury to breeding birds or their chicks	All wild birds are protected. It is an offence to intentionally or recklessly disturb any wild bird while it is nest building, at a nest containing eggs or young, or to disturb the dependent young of such a bird. Suitable nesting habitats and programme works shall be identified to avoid impacting on these during nesting season (March – August inclusive). Mitigation measures shall be implemented to prevent birds nesting in work areas. Scrub, Hedgerows & Trees should be removed out with the nesting season. If it is required to remove them within the nesting season, then this can only be done following a survey to confirm the absence of nesting birds. Consultation and acquisition of licences from NatureScot to disturb or relocate protected species may be required. Relevant pre-works checks shall be arranged by qualified ecologist/ECoW on all suitable habitats where work within nesting seasons is unavoidable. Contractor shall minimise the impact to nesting birds, including arranging necessary licenses or consents and stopping work. Site teams shall be trained on Nesting Birds.	Environmental Liability (Scotland) Regulations 2009 Wildlife & Countryside Act 1981 and amendments Conservation (Natural Habitats etc.) Regulations 1994 SI 2716 and amendments Nature Conservation (Scotland) Act 2004

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Activity	Environmental Aspect	Environmental Impacts and risks	Mitigation & Management Controls	Relevant Legislation (Non-exhaustive)
Installation of Access Tracks, Site/Ground Investigation works/ Civils	Reptile habitat	Destruction/loss of habitat Potential disturbance / death / injury to reptile species	The contractor is responsible for any furthe pre-construction surveys and arranging any relevant licences or mitigation measures fo the works in consultation with NS and/o suitably qualified Ecologists. Vegetation within suitable reptile habitat shal be progressively cut, typically a two-stage cut strimmed and chipped to remove cover. Clea areas are to be left for at least 24 hours prior to soil stripping. Any area of rocks, brick rubble or other debris that have been present for over six months within suitable reptile habitat are to be destructively searched by hand before the start of construction in that area by a qualified person.	Environmental Liability (Scotland) Regulations 2009 Wildlife & Countryside Act 1981 and amendments Conservation (Natural Habitats etc.) Regulations 1994 SI 2716 and amendments Nature Conservation (Scotland) Act 2004

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Activity	Environmental Aspect	Environmental Impacts and risks	Mitigation & Management Controls	Relevant Legislation (Non-exhaustive)
Installation of Access Tracks, Site/Ground Investigation works/ Civils	Invasive Non- Native Species	Increase in waste – increase in cost to remove. Pollution to ground Dead stems washed into and clogging up watercourses can cause an increased risk of flooding Loss of biodiversity	The contractor is responsible for any furthe pre-construction surveys and arranging any relevant licences or mitigation measures fo the works. If invasive non-native species are encountered during works, stop all work withir 7m of the invasive and contact your team leader/site manager for instructions. Fence ar area 7m from the nearest plant to preven access. Do not: Move soil that may contain seeds o other plant material without specific instructions; Store any removed plant materials within 30m of a watercourse. Educate workforce on common INNS and precautionary measures, for example do no touch Giant Hogweed.	<ul> <li>Wildlife and Natural Environment (Scotland) Act 2011)</li> <li>Conservation (Natural Habitats, &amp;c.) Regulations 1994 (as amended)</li> <li>Wildlife and Natural Environment (Scotland) Act 2011</li> <li>Environmental Liability (Scotland) Regulations 2009</li> </ul>

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Activity	Environmental Aspect	Environmental Impacts and risks	Mitigation & Management Controls	Relevant Legislation (Non-exhaustive)
Installation of Access Tracks, Site/Ground Investigation works/ Civils	Bat habitat	Destruction of habitat Potential disturbance/death/injury to bats	The contractor is responsible for any further pre-construction surveys and arranging any relevant licences or mitigation measures for the works in consultation with NS and/or suitably qualified Ecologists.	Conservation (Natural Habitats etc.) Regulations 1994 SI 2716 and amendments Nature Conservation (Scotland) Act 2004
			If any of the areas highlighted with bat roost potential are to be impacted by the works, then the environmental advisor and an ecologist should be notified. The trees should be inspected by an ecologist prior to removal. In the event that a bat or bat roost is found or suspected, the work must stop immediately and an ecologist contacted.	Protection of Badgers Act 1992 Wildlife & Countryside Act 1981 and amendments

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Activity	Environmental Aspect	Environmental Impacts and risks	Mitigation & Management Controls	Relevant Legislation (Non-exhaustive)
Installation of Access Tracks, Site/Ground Investigation works/ Civils	Badger Habitat	Destruction of habitat Potential disturbance/ death/injury to badger	The contractor is responsible for any furthe pre-construction surveys and arranging any relevant licences or mitigation measures fo the works in consultation with NS and/o suitably qualified Ecologists. Please consult ecology survey calendar for best survey/mitigation timescales If a badger sett is identified, then a licence from NS may be required to work within 30m o the identified badger sett if this area cannot be avoided. Note that the buffer zone may be extended for operations that produce ground vibrations e.g. pile-driving. Open excavations (including trenches, tria pits and manholes) will be covered at nigh where possible, to prevent animals falling in Where it is not possible to cover an oper excavation on a nightly basis a means o escape, such as a plank of wood, will be left ir the excavation.	Wildlife and Natural Environment (Scotland) Act 2011) Protection of Badgers Act 1992 Wildlife & Countryside Act 1981 and amendments

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Activity	Environmental Aspect	Environmental Impacts and risks	Mitigation & Management Controls	Relevant Legislation (Non-exhaustive)
Installation of Access Tracks, Site/Ground Investigation works/ Civils	Otter/ Water Vole habitat	Destruction of habitat Potential disturbance/death/injury to otter/water vole	The contractor is responsible for any furthe pre-construction surveys and arranging any relevant licences or mitigation measures fo the works in consultation with NS and/o suitably qualified Ecologists. All new watercourse crossings (or other works near watercourses) should be assessed beforehand for otter/ water vole by a suitably qualified ecologist. If otter shelters or wate vole habitat are found during surveys, a 30m buffer zone should be established (note tha this can increase to 200m for a breeding holt). I works are required within this buffer zone, NS will need to be consulted regarding a licence. Please consult ecology survey calendar for best survey/mitigation timescales	Conservation (Natural Habitats etc.) Regulations 1994 SI 2716 and amendments Nature Conservation (Scotland) Act 2004 Wildlife & Countryside Act 1981 and amendments

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Activity	Environmental Aspect	Environmental Impacts and risks	Mitigation & Management Controls	Relevant Legislation (Non-exhaustive)
Installation of Access Tracks, Site/Ground Investigation works/ Civils	Red squirrel/ pine marten	Destruction of habitat Potential disturbance/death/injury to red squirrel/ pine marten	The contractor is responsible for any furthe pre-construction surveys and arranging any relevant licences or mitigation measures fo the works in consultation with NS and/o suitably qualified Ecologists. All tree felling (and other works) in areas known to support red squirrel/ pine marter should be surveyed beforehand by a suitably qualified ecologist. If squirrel dreys or pine marten shelter/ dens are found during surveys, a buffer zone should be established (size dependent on breeding status of drey/den). If works are required within this buffer zone, NS will need to be consulted regarding a licence. Please consult ecology survey calendar for best survey/mitigation timescales	Conservation (Natural Habitats etc.) Regulations 1994 SI 2716 and amendments Nature Conservation (Scotland) Act 2004 Wildlife & Countryside Act 1981 and amendments
Installation of Access Tracks, Site/Ground Investigation works/ Civils	Great Crested Newt (GCN)	Destruction of habitat Potential disturbance/death/injury to GCN	Any ponds on site will have been assessed for GCN potential before construction phase o project commences. The contractor is responsible for any furthe pre-construction surveys and arranging any relevant licences or mitigation measures fo the works in consultation with NS and/o suitably qualified Ecologists. Please consult ecology survey calendar for best survey/mitigation timescales	Conservation (Natural Habitats etc.) Regulations 1994 SI 2716 and amendments Nature Conservation (Scotland) Act 2004 Wildlife & Countryside Act 1981 and amendments

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Activity	Environmental Aspect	Environmental Impacts and risks	Mitigation & Management Controls	Relevant Legislation (Non-exhaustive)
Installation of Access Tracks, Site/Ground Investigation works/ Civils	Trees, tree roots	Damage to trees and disturbance to the animals within them e.g. nesting birds and roosting bats. Permanent habitat loss and overall reduction in biodiversity due to species loss. Destabilisation of large trees is potential safety risk.	All working activity close to trees should follow BS 5837 (2012) and NJUG 4 guidelines – roo protection areas should be demarcated and any excavations close to a tree or under tree canopy should assess the methodology prior to construction. If disturbance of the root in the root protect area is required, the tree and root system should be assessed by an arboriculturist prior to works and their recommendation followed.	Nature Conservation (Scotland) Act 2004 The Town and Country Planning (Tree Preservation Order and Trees in Conservation Areas) (Scotland) Regulations 2010
		Loss of visual amenity	Ensure Tree Preservation Orders have beer checked with the Local Authority and consen granted if required.	
Installation of Access Tracks, Site/Ground Investigation works/ Civils	Biodiversity	Destruction, degradation and fragmentation of habitats Reduction of individual species and reproductive rates through exploitation, pollution and introduction of invasive species Loss of habitat or/and species	Loss of irreplaceable biodiversity must be avoided, and loss of other biodiversity has to be compensated (in terms of quality and quantity). Define possible measures to avoid, minimise or compensate for significant damage to, or loss of, biodiversity and/or ecosystems services; define possibilities to enhance biodiversity. Follow the biosecurity methods.	Environmental Liability (Scotland) Regulations 2009

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Activity	Environmental Aspect	Environmental Impacts and risks	Mitigation & Management Controls	Relevant Legislation (Non-exhaustive)
Installation of Access Tracks, Site/Ground Investigation works/ Civils	Water crossings	Incorrectly installed culverts risk causing barriers to fish and other fauna, hydraulic steps or other features which alter the bed of the watercourse and encourage scouring and other erosive activity which would not otherwise occur. Regulatory enforcement action on incorrectly installed culverts is likely due to their high level of visibility. Erosion of riverbed (scour from change in hydraulic regime). Change in river alignment	All watercourse crossings will be considered against SEPA's CAR Practical Guide and level of authorisation justified. • Ensure that there is no hydraulic step at the inlet or outlet of the culvert as this can act as a barrier to fish movement and also cause scouring of bed and banks. • The culvert base should be sufficiently buried below the existing bed to allow a naturalised culvert bed to be maintained. • The culvert should be at least the same width as the natural active channel width, with consideration to low flows and channel migration No water bodies should be crossed unless they have been identified on the watercourse crossing schedule. Where required, temporary track mats and bog mats would be used to cross areas of soft ground. Should Crossing solutions be required, solutions would be used to cross minor watercourses without causing damage to bank integrity and would be specified within Contractor's RAMS.	The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended) The Water Act 2014 (Consequential Amendments etc.) Order 2017 Environmental Impact Assessment (Water Management) (Scotland) Regulations 2003 Environmental Liability (Scotland) Regulations 2009

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Activity	Environmental Aspect	Environmental Impacts and risks	Mitigation & Management Controls	Relevant Legislation (Non-exhaustive)
Installation of Access Tracks, Site/Ground Investigation works/ Civils	Private Water Supplies	Contamination of drinking water Disruption to volume and quality of water reaching PWS- fed properties Pollution of groundwaters within PWS catchment Pollutants can strain PWS filtration and treatment systems already in place within properties	It is the Contractors responsibility to assess the work being undertaken and consider the associated hydrological risks as required throughout the works. It is the Contractors responsibility to ensure appropriate mitigation is in place in advance of any works and that they are monitored and documented. Ensure that the relevant Water Quality Monitoring and testing of PWS's is carried out.	
Working in or near water	Fish/ Fresh Water Pearl Mussels (FWPM)/ American Signal Crayfish (ASC)	Water pollution Loss in water habitat	It is the contractor's responsibility to consult with the local fisheries trust/board for further detailed information and appropriate mitigation and management for fish, FWPM and ASC. Contractors must liaise and work with the Fisheries trusts as per the Technical Specification. The spawning season needs to be considered for any in-stream activity (such as culverts). The spawning season is October to April. It is the contractor's responsibility to consult with the local fisheries trust/ board for further/ detailed information and appropriate mitigation and management for Fish, FWPM and AS Crayfish. Pollution prevention techniques will be adopted at all interfaces with any water body.	

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Activity	Environmental Aspect	Environmental Impacts and risks	Mitigation & Management Controls	Relevant Legislation (Non-exhaustive)
Working in or near water	Groundwater Dependant Terrestrial Ecosystems (GWDTE)	Loss of habitat Pollution to water or ground environment	GWDTE - under the Water Framework Directive (WFD) the requirement for 'good groundwater status' is dependent upon there being no 'significant damage' to groundwater- dependent terrestrial ecosystems, i.e. groundwater-dependent wetlands. To ascertain if plant communities have the potential to be ground fed, an NVC survey will identify high/ medium risk habitats (as defined by SEPA) that will require consideration, avoidance, mitigation or further hydrological investigation.	

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Installation of Access Tracks, Site/Ground Investigation works/ Civils	Excavations and dewatering	Unprotected excavations which are open for long periods of time risk trapping numerous animals which are present or potentially present on site Unmitigated dewatering risks pollution of watercourses and ground water Fish kill/ habitat destruction	Strategies to deal with both Groundwater and Surface water due to heavy rain shall be in place. Sufficient equipment (e.g. pumps) and mitigation as detailed on permits to pump and pollution prevention plans must be on site before excavation work is undertaken Any strategy should also deal with where water will be pumped to. Water considered to be contaminated with silt/ oils etc. CANNOT be pumped straight into the environmen without primary and potentially secondary treatment. Abstraction/ de-watering of excavations should be in excess of 10m from a watercourse (if highly sensitive or prone to flooding this distance may need to increase) The de-watering exercise should be through a silt protection capture layer such as a siltsock siltbuster, sump/ silt fencing – grassy area with landowner permission to pump. It is the contractors' responsibility to assess the volume discharged is in line with SEPA guidance GBR 15 and Abstraction Licence parameters are adhered to. The 10 metres distance mentioned is the bare minimum, the expectation is this will increase based on risk assessment and site specific factors. It should be highlighted that buffer distances should take account of topography, vegetation cove	The Water Environment (Controlled Activities) (Scotland) Amendment Regulations 2013 and amendments Environmental Liability (Scotland) Regulations 2009 Environmental Impact Assessment (Water Management) (Scotland) Regulations 2003 Control of Pollution Act 1974 40 Part II
			and constantly of the receiving wateroourse	

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Activity	Environmental Aspect	Environmental Impacts and risks	Mitigation & Management Controls	Relevant Legislation (Non-exhaustive)
Installation of foundations	Concrete and Concrete Washout	High pH of washout water can cause serious negative ecological impact or pollution of private water supplies, ground and surface water Generation of washout waste or waste from over-supply. Offsite risk such as water courses and drainage installations (have the potential to transport effluent away from the source. Low flow during a pollution incident reduces the dilution potential and magnifies the resulting impacts.	Washing out of concrete trucks, crane skips and other equipment should be avoided wherever possible. Washing out of any concrete mixer & associated chute, tools or equipment should be carried out in a designated area away from drains and watercourses. Truck washout should be offsite as preference. If required on site this should be chute only (NOT including the drum) and limited to dry brushing where possible. Washing out only permitted into an impermeable container/area which should be covered when not in use. Uncured wash waters and cured material to be disposed of in line with WM3.	Control of Pollution Act 1974 40 Part II The Water Environment (Controlled Activities) (Scotland) Amendment Regulations 2013 The Water Environment (Controlled Activities) (Scotland)
Installation of underground ducts	Cement Bound Sand (CBS)	Water that is exposed to CBS for a couple of days can cause a higher pH and therefore the water can have a negative environmental impact	Test pH of water exposed to CBS. CBS storage must be in an impermeable surface and at least 20 m away from any watercourse/drainage system	The Water Environment (Controlled Activities) (Scotland) Amendment Regulations 2013 The Water Environment (Controlled Activities) (Scotland)

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		Silt pollution of drainage	A Surface Water Management Plan shall be	
Installation of Access	Surface Water	systems, watercourses and	in place.	Control of Pollution Act 1974 40 Part II
Tracks, Site/Ground	(Discharge of	groundwater	Surface water drains and the foul water	
Investigation works/	surface water		systems are to be clearly identified on the	The Water Environment (Controlled
Civile		Habitat destruction (fish	site prior to any works being carried out.	Activities) (Scotland) Amendment
Civils	runoff into the	spawning beds)		Regulations 2013
	water		Installation of cut of ditches, hydro dams,	
	environment/	Unmitigated drainage of	sumps, silt fencing to manage flow pathways	The Water Environment (Controlled
		surface water carries the	and control silt run off at all times during	Activities) (Scotland)
	drainage system)	potential to pollute sensitive	construction, this includes monitoring the	
		GWDTEs and cause serious	effectiveness of the prevention measures and	
		negative ecological impact	adapting to changes in flow rate and	
			disturbance.	
			Installation of SuDS (Sustainable Drainage	
			System).	
			Consult SEPA CAR Practical Guide at all	
			times when working near a watercourse as	
			authorisations may be required – it is the	
			contractors' responsibility to consult with	
			SEPA and apply for authorisation where	
			required. General Binding Rules (GBR 10,	
			16, 9) should be consulted as a minimum for	
			all sites hear a watercourse:	
			The contractor shall produce a pollution	
			prevention and/or surface water management	
			plan and identify likely sources of pollution	
			within the site particularly those considered	
			to be 'high risk' such as:	
			Areas of exposed soils during	
			construction.	
			Dewatering of excavation to SuDS	
			treatment area.	
			Temporary soil storage areas:	
			<ul> <li>Fuel storage and refuelling activities</li> </ul>	
			at site compound: and	
			at site compound, and	

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Activity	Environmental Aspect	Environmental Impacts and risks	Mitigation & Management Controls	Relevant Legislation (Non-exhaustive)
Horizontal Directional Drilling (HDD)	Water (Release of drilling muds such as bentonite fluid in watercourses)	HDD activity carries the risk of disturbing water environment in the channel and of pollution incidents such as bentonite	□ Concrete washout area Frack out plan shall be in place before HDD works start. This should sit within the Pollution Prevention Plan.	Control of Pollution Act 1974 40 Part II The Water Environment (Controlled Activities) (Scotland) Amendment Regulations 2013 The Water Environment (Controlled Activities) (Scotland)
Use of Plant, Machinery and Equipment	Spillage of fuel/oil and chemical into the ground, watercourses/drai nage systems	Pollution to ground water/drinking water through fuel and hydraulic oil spillages. Increased cost due to remediation, replenishment of spill controls and down time arising from clean up activity. Decrease in visual amenity of the area around the site. Noise, vibration and air quality implications also arise from plant use.	<ul> <li>Keep plant use on site to a minimum (both in terms of operating hours and number of machines present).</li> <li>Consider the use of low ground pressure plant where appropriate and minimise plant movements and journeys.</li> <li>Ensure daily checks are carried out including full inspection of fuel tanks and hydraulic lines. Ensure that lift ratings are observed to minimise the chance of blown hydraulic lines.</li> <li>Use plant nappies and spill kits.</li> <li>An Emergency Response Plan and Pollution Prevention Plan shall be in place to deal with spills and leaks</li> </ul>	The Water Environment (Miscellaneous) (Scotland) Regulations 2017 The Environmental Protection (Duty of Care) (Scotland) Regulations 2014 Environmental Protection Act 1990

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Activity	Environmental Aspect	Environmental Impacts and risks	Mitigation & Management Controls	Relevant Legislation (Non-exhaustive)
Use of Plant, Machinery and Equipment	Re-fuelling operations and COSHH Storage	Improper fuel storage, refuelling procedures or COSHH storage carries the potential to pollute ground / surface water and foul drainage. Spillage of fuel/oil and chemical into the ground, watercourses/drainage systems. Poor fuelling practices lead to localised ground contamination which will require time consuming testing for waste classification purposes, costly remediation efforts. Non-bunded or inappropriate COSHH storage promotes spillages, wasted materials and risks pollution incidents.	Refuelling off-site should be considered to prevent refuelling during works and possible spillage into nearby habitat and water courses. This should be detailed within the Pollution Prevention Plan. Standard practice: Machines will be refuelled minimum of 30 metres away from water courses. Ensure fuel and oil storage tanks are bunded, secured and on impermeable surfaces All funnels, buckets, containers, brushes and other associated equipment should also be kept in a bunded area when not in use. Fuel storage tanks should be locked when not in use to prevent unauthorised access and to reduce the risk of vandalism Place a plant nappy under all static plant and mobile plant during fuelling. Spill kits shall be present with the number on site relevant to the works and risks.	The Water Environment (Miscellaneous) (Scotland) Regulations 2017 The Environmental Protection (Duty of Care) (Scotland) Regulations 2014 Environmental Protection Act 1990 The Water Environment (Oil Storage) (Scotland) Regulations (as amended) The Control of Substances Hazardous to Health (COSHH) Regulations 2002

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Activity	Environmental Aspect	Environmental Impacts and risks	Mitigation & Management Controls	Relevant Legislation (Non-exhaustive)
Earthworks/ Excavations/ Civil works	Soil Storage/ Stockpiling	Soil degradation - the structure of topsoil can be changed which affects its drainage characteristics and can foster anaerobic activity which alters pH levels and impacts on the ability of plants to grow in it. This can in turn affect wildlife populations. •Soil Compaction •Soil Erosion •Loss of soil organic matter •Soil Poaching •Waterlogging Increase in waste generated if improper soil storage leads to its degraded condition. Loss of topsoil Increased erosion and risk of generating silted runoff from poor stockpiling practices.	All identified mitigation requirements for the location to be stripped shall be followed. Soil/substrate types to be segregated for localised storage and subsequent reinstatement 'as was'. Stockpiling to be minimised. Only open trenches / excavations as required by SPT and minimise the time these are left open. Complete offsite disposal of surplus material in a timely fashion to minimise the potential for run-off. Locate soil storage away from watercourses/ drainage systems (minimum 30m). Form bunds of no more than 1.5m tall, cover if necessary and design to shed water. It is the Contractors responsibility to assess the work being undertaken and consider the associated hydrological risks as required throughout the works. It is the Contractors responsibility to ensure appropriate mitigation is in place in advance of any works and are monitored and documented.	Environmental Liability (Scotland) Regulations 2009 The Environmental Protection (Duty of Care) (Scotland) Regulations 2014 Environmental Protection Act 1990 Environmental Liability (Scotland) Regulations SSI 2009/266 SPEN Land of Conduct

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#### XXX-X-PA-SPEN-0001 Project name

Activity	Environmental Aspect	Environmental Impacts and risks	Mitigation & Management Controls	Relevant Legislation (Non-exhaustive)
Earthworks/ Excavations/ Civil works	Contaminated land/ground	Nuisance Contamination of watercourses and groundwater. Increase of waste to landfill	Contaminated land/ground identified must be dealt with appropriately i.e. removed by a suitable waste removal company by contractor. Any material contaminated by a spill must also be appropriately dealt with. This should be treated as hazardous substance management and as such the contractor must handle the waste materia with appropriate waste management.	Environmental Protection Act (1990) Contaminated Land (Scotland) Regulations. Environmental Liability (Scotland) Regulations. The Environmental Protection (Disposal of Polychlorinated Biphenyls and other Dangerous Substances) (Scotland) Regulations 2000 Persistent Organic Pollutants (POPs) Regulation (EC No 850/2004)

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Activity	Environmental Aspect	Environmental Impacts and risks	Mitigation & Management Controls	Relevant Legislation (Non-exhaustive)
Earthworks/ Excavations/ Civil works	Archaeological features	Destruction and loss of cultural assets Impact on Scheduled Ancient Monuments and other designated features Extended programs to account for unexpected finds or Archaeological Clerk of Work checks during relevant works.	Refer to and follow guidance and advice within the Archaeological report produced by XXX to plan mitigation works (Appendix X). It is the contractor's responsibility to organise specialists (Archaeologists) and the mitigation required in line with programme and seasonal constraints. All required consents to be in place before works commence in, on or near archaeological features. Contractor to make suitable allowances for unexpected finds even where no archaeological features have been identified on site. Should archaeological remains be discovered unexpectedly during works it is the contractor's responsibility to arrange for archaeologists, licences and consultation with the local archaeological service and Council Archaeologist/ West of Scotland Archaeological Service (WoSAS).	<ul> <li>Historic Environment Scotland Act 2014</li> <li>Ancient Monuments and Archaeological Areas Act 1979</li> <li>Town and Country Planning (Scotland) Act 1997</li> <li>The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013</li> <li>Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997</li> <li>Planning (Listed Building Consent and Conservation Area Consent Procedure) (Scotland) Regulations 2015</li> </ul>

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Activity	Environmental Aspect	Environmental Impacts and risks	Mitigation & Management Controls	Relevant Legislation (Non-exhaustive)
Material transport/ Travel/ Waste transport/ Energy use/ Water usage	Air Emission	Air quality alteration Global warming and Climate change	The Contractor shall submit electricity, natural gas and fuel use data. This will help to identify the main sources of fuel use such as site equipment, cabins, vehicles and generators. Reports on carbon impacts and cost of energy use like CO2 footprint of project can be produced by SmartWaste	Road Vehicles (Construction and Use) (Amendment) Regulations 2010 SI 312 Air Quality (Scotland) Regulations 2000 SSI 97 Clean Air Act 1993 Climate Change (Scotland) Act 2009 Environmental Protection Act 1990
Working with or near SF6	Air Emission	Increase in greenhouse gasses Global warming and Climate change	The contractor must ensure that the management of SF6 is carried out taking into consideration all the legal requirements ir force. An activity that involves handling of SF6 shal only be carried out by Certified persons as defined in the SF6 regulations	The Fluorinated Greenhouse Gases Regulations 2015 (SI 310) and 2018 amendment

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Activity	Environmental Aspect	Environmental Impacts and risks	Mitigation & Management Controls	Relevant Legislation (Non-exhaustive)
Earthworks,	Dust Emission	Air pollution	The following measures should be taken to	Control of Pollution Act 1974 40 Part III
Construction Traffic		Smothering of local vegetation	<ul> <li>Material discharge heights will be kept to a minimum;</li> </ul>	Environment Act 1995
		Impact on local residents	<ul> <li>Haul roads will be damped down during dry and windy conditions;</li> </ul>	Environmental Protection Act 1990 Noise and Statutory Nuisance Act 1993
			<ul> <li>Vehicle speeds will be restricted; and</li> <li>Keep stockpile levels less than 2 metres.</li> </ul>	Road Vehicles (Construction and Use) (Amendment) Regulations 2010 SI 312
Road and Construction Traffic	Noise Emission	Impact on local residents Impact in protected species	Respect working hours. All plant/machinery to use only routes for construction traffic.	Control of Noise (Codes of Practice for Construction and Open Sites) (Scotland) Order 2002 SSI 104
			Plant/equipment to be switch off when not in use Plant to be fitted with white noise reversing	Noise and Statutory Nuisance Act 1993
			alarm.	Noise Emission in the Environment by Equipment for Use Outdoors Regulations 2001 SI 1701

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Activity	Environmental Aspect	Environmental Impacts and risks	Mitigation & Management Controls	Relevant Legislation (Non-exhaustive)
All activities	Waste arising	Use of natural resources/ raw materials/ Potential contamination of land, air and water. Hazardous to human health Increases the burden on landfill site Contributes to land degradatior and depletion of natural resources Water and ground pollution Increase in pests on site	<ul> <li>Prepare the waste forecast for a project – identify all materials/ waste streams and volumes.</li> <li>Reduce, recycle and avoid producing waste in first place.</li> <li>Focus on material efficiently as this will reduce the amount of waste produced within any given project. Early implementation of a material efficiency-minded strategy also results in a lesser impact upon the environment and a reduction in natural resource depletion.</li> <li>Order what is needed. Use what was ordered.</li> <li>Adapt correct waste segregation process with storage and signage.</li> <li>Incorporate controls for correctly completing the waste transfer notes.</li> <li>Promote and implement waste hierarchy on site.</li> <li>Use SmartWaste, an online database for site waste management.</li> </ul>	The Environmental Protection (Duty of Care) (Scotland) Regulations 2014 Environment Act 1995 Environmental Protection Act 1990 Waste Management Licensing (Scotland) Regulations 2011 and amendments Waste (Scotland) Regulations 1996 and amendments

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Activity	Environmental Aspect	Environmental Impacts and risks	Mitigation & Management Controls	Relevant Legislation (Non-exhaustive)
Balance of Plant works	Hazardous/ Special waste arisings	Water and land pollution Increase in the burden on landfill site Contributes to land degradation and depletion of natural resources Water and ground pollution	The Contractor shall ensure that all chemicals including lubricating and hydraulic oils to be used onsite are environmentally friendly The Contractor shall comply with Fuels, Oils and Chemical storage regulations like GPP2 and 21 and GBR 22 and 28 The Contractor shall provide spill kits on all of the contractor's sites Where the Contractor undertakes Polychlorinated Biphenyls (PCBs) screening tests the result shall be recorded and returned to SP Transmission Plc. The Contractor shall ensure that PCBs contaminated wastes are segregated from other special/hazardous wastes and handled as per the CEPR.	Controlled Waste Regulations 1992 and amendments The Environmental Protection (Duty of Care) (Scotland) Regulations 2014 Environment Act 1995 Environmental Protection Act 1990 Special Waste Regulations 1996 and amendments Waste Management Licensing (Scotland) Regulations 2011 and amendments Waste (Scotland) Regulations 1996 and amendments

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#### 14. APPENDIX 1: PLANNING CONDITIONS AND THE LOCATION WITHIN DOCUMENT

Condition No.	Planning Condition Requirement	Location in Document
11	Ecological Clerk of Works	Table 3: Breakdown of Contractor Roles and Responsibilities -ECoW - page 9 of the
		Contractors Environmental Performance Requirements (CEPR)
12a.	site waste management plan	Section 11.12.2 (page 22 CEPR)
12b.	details of the formation of the construction compound	An Example Compound Layout drawing is included in Appendix 3.
12c.	dust management	Table 5. Projects Aspects and Impacts Register 'Dust Management' (page 13 CEMP)
12d.	site specific details for management and operation of any concrete batching plant (including disposal of pH rich waste water and substances)	Table 5. Projects Aspects and Impacts Register 'Use of Concrete and Concrete Washout' (page 13 CEMP)
12e.	details of measures to be taken to prevent loose or deleterious material being deposited on the local road network	Traffic Management Plan is included as part of the application
12f.	a pollution prevention plan	Section 11.7 Pollution Prevention Planning (page 14 CEPR)
12g.	soil storage and management	Table 5. Projects Aspects and Impacts Register 'Soil Storage/ Stockpiling' (page 13 CEMP)
12h.	a peat management plan	Section 10.2 (page 6 CEPR). A Peat Management Plan is a document the contractor is to provide on contract award
12i.	A drainage management strategy, demonstrating how all surface and waste water arising during and after development will be managed and prevented from polluting any watercourses or sources	Section 11.7 Pollution Prevention Planning (page 14 CEPR)
12j.	a surface water and groundwater management and treatment plan, including details of the separation of clean and dirty water drains, and location of settlement lagoons for silt laden water	Section 10.2 (page 6 CEPR). A Surface Water Management Plan is a document the contractor is to provide on contract award
12k.	sewage disposal and treatment	See Construction Phase Plan

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12I.	temporary site illumination;	See Construction Phase Plan
12m.	the construction of the access into the site	Table 5. Projects Aspects and Impacts Register 'Access Installation' (page 13 CEMP)
12n.	the method of construction of tower foundations and erection of steel lattices	See Construction Phase Plan
120.	details of watercourse crossings	Table 3. Baseline Conditions (page 11 CEMP) and Table 5. Projects Aspects and Impacts Register 'Water Crossings' (page 13 CEMP)
12p.	post-construction restoration/ reinstatement of the working areas not required during the operation of the Development, including construction access tracks, borrow pits, construction compound, storage areas, laydown areas, access tracks, passing places and other construction areas.	Section 11.11 Site Restoration (page 19 CEPR)
12q.	a wetland ecosystems survey and mitigation plan	Section 11.9.2 j (page 19 CEPR)
12r.	a felling and tree management plan	Section 11.9.2 i (page 19 CEPR)
13.	Pre-Construction Species Survey Work	Section 11.9.1 Pre-Construction Checks and Surveys (page 18 CEPR)
16.	Habitat Management Plan	Section 10.2 (page 6 CEPR). A Habitat Management Plan is a document the contractor is to provide on contract award
17.	Programme of Archaeological Works/ Archaeological Clerk of Works	Table 5. Projects Aspects and Impacts Register 'Work near Archaeological features' (page 13 CEMP)
18.	Private Water Supplies	Table 3. Baseline Conditions (page 11 CEMP) and Section 11.8a Hydrology (page 17 CEPR)

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#### 15. APPENDIX 2: CONTRACTORS ENVIRONMENTAL PERFORMANCE REQUIREMENTS (CEPR)

Attached separately as a PDF



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#### 16. APPENDIX 3: ENVIRONMENTAL REPORTS

AECOM – XX Route Overhead Line Diversion Preliminary Ecological Replacement (October 2022) AECOM – XX Route Overhead Line Diversion EIA Screening Assessment (October 2022)

Attached separately as a PDF



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#### 17. APPENDIX 4: SPT ENVIRONMENTAL CONSTRAINTS MATRIX

Attached separately as a PDF