

National Grid | SCOTLAND TO ENGLAND GREEN LINK 1 PROJECT

Wording for Construction Best Practice

1. **Soil:** Prior to the commencement of work, the Grantee will prepare a soil management plan with the objective of returning the Grantor's Property to a condition as recorded in the Pre-Construction Soil Survey and Pre-Entry Schedule of Condition (see 2 below).

The Grantee will appoint (at the Grantee's sole cost and expense) a soil specialist, who will have experience of working in the Yorkshire region, to manage soil handling ("**Soil Expert**") and to act for both the Grantor and Grantee. The Soil Expert will be jointly agreed between the Grantor and the Grantee or failing agreement to be appointed on the application by either party to the President of the Royal of Institution of Chartered Surveyors.

The Soil Expert will, together with an Agricultural Liaison Officer (ALO) to be appointed on the Project (see *Agricultural Liaison Officer* - 6 below), liaise with the Grantee's Soil Expert where necessary, monitor and agree soil handling throughout the works and have input into the reinstatement works.

The Grantee will consult with the Soil Expert as to whether to continue with or commence the work in circumstances where long term and/or adverse weather conditions have led to cumulative wetting of the Grantor's Property so as to make it unsuitable for the works to be carried out.

Works which have been suspended or not commenced as above may be carried out only with consultation having taken place with the Soil Expert and the ALO. The Soil Expert and the ALO may suggest soil management conditions for commencing or re-commencing work.

Any topsoil stripped from agricultural land will be stored in a bund. The subsoil will be stored in a separate bund to the topsoil if:

- a. required in accordance with Environment Agency Guidelines, the Grantee will, if requested by the Grantor, install around each relevant bund entrenched vertical entrapment fences (also known as silt fences);
- b. not required in accordance with Environment Agency Guidelines and not requested by the Grantor pursuant to (a) above, the Grantee may still choose (but shall not be obliged) to install around each relevant bund entrenched vertical entrapment fences (also known as silt fences).

If requested by the Grantor and/or Occupier, each topsoil bund which has been in situ for more than 6 months will be seeded with a rapid-growing grass mix to minimise erosion.

The Soil Expert will carry out an assessment to consider where water could pond on subsoil in the stripped working area and, where appropriate, determine means to drain this water away through the bund.

Dewatering (if required at the discretion of the Grantee and subject to obtaining all necessary statutory consents) will be carried out along the *Construction Swathe* or, subject to the consent of the Grantor and/or Occupier (such consent not to be

unreasonably withheld or delayed), by being piped or pumped over the Grantor's Property to the nearest drainage ditch. The Grantee reserves the right to undertake dewatering by means of discharge to new or existing drainage systems (subject to the adequacy of existing drainage systems which will be discussed on an individual case by case basis). Water from dewatering activities will pass through a silt interceptor (or equivalent) prior to discharging to drainage ditches or watercourses.

The Grantee will undertake control of weed growth on the topsoil and subsoil bunds (and in the *Construction Swathe*) before the weeds flower. Where necessary, hand roguing of wild oats, weedy beet and black grass will be undertaken. The Grantee will take precautions not to allow weed spray to drift onto crops adjacent to the *Construction Swathe*. If the Grantee fails to take adequate steps to control weed growth, the Grantee shall not unreasonably withhold consent, subject to compliance with the Construction (Design and Management) Regulations 2015 (CDM), to the Grantor or the Occupier carrying out weed control at the reasonable cost of the Grantee.

The above will be carried out to assist in informing the soil reinstatement works to be carried out to bring agricultural soils back to their former use and condition as recorded in the Pre-Entry Schedule of Condition.

The Grantee will reinstate sub soil and topsoil to the same condition as evidenced by the Pre-Entry Schedule of Condition. If requested by the Grantor and/or the Occupier, the area to be reinstated will be seeded by the Grantee as soon as reasonably practicable following reinstatement of topsoil (taking into account the time of year) with a cover crop of a species mix to be agreed by the Grantor and/or Occupier (acting reasonably) with reference to soil type and land use.

The Soil Expert will consult with the Grantor at the relevant time, on completion of cable laying works, regarding any deficit of organic matter or any organic matter to be imported.

Soil testing will be undertaken by the Grantee until the earlier of either such time as the soil has been restored in line with the Pre-Entry Schedule of Condition or a maximum period of 5 years after completion of the work.

If soil testing shows that after a period of 5 years following the reinstatement the condition of the soil is worse following completion of reinstatement work, the Grantee will at its option either replace any affected soil or carry out other works recommended by the Soil Expert to restore productivity or at its discretion pay the Grantor and/or the Occupier (as applicable) reasonable compensation.

The Grantee will ensure that all construction debris and litter is removed from site as soon as reasonably practicable.

- 2. Pre-Construction Soil Survey and Pre-Entry Schedule of Condition (to be adopted for post construction works):** Any pre-construction detailed soil survey work will be undertaken by a competent person (e.g. a soil expert) in order to produce specific soil resource topsoil and subsoil unit plans and restoration specifications for areas of agricultural land within individual land holdings that will be occupied by the Grantee. These surveys will form the basis of the Pre-Construction Soil Survey of the land prior to construction works and soil stripping operations and will be used to monitor the progress of soil handling and restoration operations.

The Pre-Construction Soil Survey will include the identification of the physical characteristics of profiles at a standard density of 100 m intervals (with additional profiles examined where the 100 m grid sampling does not enable a suitable density of sampling in an agricultural enclosure that will otherwise be missed.). Soil pits will also be examined at appropriate locations to provide additional detail on soil structure and stoniness. The survey(s) will provide information on the following soil physical characteristics:

- i. Soil horizon depths for topsoil and subsoil horizons;
- ii. Soil textures of all horizons;
- iii. Soil colour;
- iv. Soil analysis to BS3882 identifying current soil nutrients and contaminants at a sampling standard density of 150m intervals
- v. Levels of compaction
- vi. Stone contents, estimated from augering, confirmed by soil pit excavation/and or sample analysis;
- vii. Presence and characteristics of mottling, a soil wetness indicator;
- viii. Presence of manganese concretions, a soil wetness indicator;
- ix. Identification of gleyed horizons;
- x. Identification of slowly permeable layers; and
- xi. Identification of impenetrable rock layers.

The Pre-Entry Schedule of Condition will be undertaken, provided in written and photographic form and will include the following:

- i. Existing crop regimes
- ii. Position and condition of existing field boundaries
- iii. Condition of existing access arrangements
- iv. Location and type of existing private water supplies
- v. Type of agricultural use taking place;
- vi. Yield of crops
- vii. Quality of grazing land
- viii. Existing weed burden
- ix. Soil/ ground condition
- x. Weather conditions
- xi. Date of survey
- xii. Grid reference
- xiii. Photographs and drone/video footage (where practicable)
- xiv. Section drawings/plans including irrigation and drainage plans

A copy of the Pre-Entry Schedule of Condition and the Pre-Construction Soil Survey will be provided to the Grantor who shall be entitled to make representations regarding the adequacy of the Pre-Entry Schedule of Condition and the Grantee shall give due and proper regard to any such representations and take reasonable steps to remedy any justifiable inadequacy identified, prior to entry to the landholding to commence cable installation works.

3. **Land Drains:** Prior to the commencement of construction works, the Grantee will employ or procure the services of a suitably qualified drainage consultant who, if reasonably possible and practicable, will have experience of working in the Yorkshire region (the "**Grantee's Drainage Consultant**").

The Grantee's Drainage Consultant will carry out a survey of the existing drainage system of the land that will be affected by the works. The survey will identify all ordinary

watercourses, agricultural ditches and land drains to be intercepted by the works and will inform a pre-construction drainage scheme which will allow drainage to be maintained during construction.

The ALO will coordinate any remaining drainage surveys which have not been undertaken pre application and will coordinate liaison between the Grantee's Drainage Consultant and the Grantor/Occupier.

Subject to the consultation with the Grantor and the Occupier, existing agricultural land drains, where encountered during construction, will be appropriately marked. The location of drains cut or disturbed by the construction works will be photographed, given a unique number and logged using GPS coordinates. The actual condition and characteristics (e.g. depth of installation, pipe type and diameter) of the existing drainage will also be recorded upon excavation.

Land drainage will be installed on one or either side of the cable trenches (typically on one side, rather than on both sides, dependent on existing field drainage), within the Option Area limits working width, to intercept existing field drains and ditches in order to maintain the integrity of the existing field-drainage system during construction. Such measures will also assist in reducing the potential for wet areas to form during the works, thereby reducing the impact on soil structure and fertility.

The Grantee's Drainage Consultant will prepare a draft design for the required drainage works on the land affected by the construction works and subsequent restoration so that where reasonably possible, the agricultural land drainage and natural drainage systems are not compromised during construction and in no worse a condition than before the date of entry for the construction works (the "**Drainage Scheme**").

The Grantee's Drainage Consultant will consult with and submit to the Occupier, the Grantor and the Grantor's drainage consultant (if appointed and notified in writing to the Grantee) the draft design of the Drainage Scheme for approval (such approval not to be unreasonably withheld or delayed) provided that the Grantor or the Grantor's drainage consultant will be required to provide feedback on the draft design of the Drainage Scheme within 28 days of receipt and if feedback is not provided within this timescale the Grantor will be deemed to have approved the draft design of the Drainage Scheme.

The Grantee will pay the reasonable and proper fees of the Grantor's drainage consultant in respect of the review, feedback and approval of the draft Drainage Scheme.

The Grantee will as soon as reasonably practicable, taking into account the programme for carrying out the construction works, implement the approved Drainage Scheme by a suitably qualified and experienced drainage contractor. The Grantee's Drainage Consultant will consult on the timing of any post construction land drainage works for the subsequent restoration of the land.

Where it is reasonable for the reinstatement of drainage to involve works outside of the order limits it will be done subject to the agreement of the Grantor and Occupier.

Subject to compliance with CDM Regulations, the Grantee will provide the Occupier, the Grantor and the Grantor's appointed drainage consultant the opportunity to inspect the land drainage works whilst in progress.

Records of existing and remedial drainage will be made available by the Grantee to the Grantor and any Occupier after completion of the drainage works.

Subject to obtaining the approval of the Grantor (such approval not to be unreasonably withheld or delayed), the Grantee will be permitted, in lieu of making good damage to or interference with the functioning of the drainage system, to pay fair and proper compensation instead to the Grantor and/or the Occupier (as applicable).

Any disagreement between the parties as to the design for the Drainage Scheme will be referred to a suitably qualified independent drainage expert, who will, if reasonably practicable, have at least 5 years' experience of dealing with land drainage issues within the Yorkshire region (the "**Drainage Expert**"). The Drainage Expert will be jointly agreed between the Grantor and the Grantee or failing agreement to be appointed on the application by either party to the President of the Royal Institution of Civil Engineers. The Drainage Expert shall act as an expert whose decision will be final and binding.

The reasonable and proper costs of the appointment and fees of the Drainage Expert will be paid by the Grantee.

4. **Irrigation:** Details of the irrigation system on each land holding will be gathered during the preconstruction stage and irrigation plans will be developed to inform the management of agricultural land drainage during construction. The ALO will be responsible for consulting with the Grantor and the Occupier to obtain the relevant information and to be a point of contact to report concerns regarding irrigation systems during construction. The plans will include the following information:
 - i. Location of boreholes and water supplies used by each farmer;
 - ii. Irrigation or impoundment licence granted by the Environment Agency; and
 - iii. System of irrigation applied and the location of irrigation network for each field.
5. **Water Supply:** If an existing piped private water supply that serves and is located upon the Grantor's Property is directly interrupted on a temporary basis by the construction works for the installation of the Cables, then the Grantee shall (subject to it being requested to do so by the Grantor or the Occupier (as applicable)) and where it is reasonable, proportionate and reasonably practicable to do so, provide or procure an alternative supply to the Grantor or the Occupier (as applicable). Where it is not reasonable, reasonably practicable or proportionate for the Grantee to provide or procure an alternative water the Grantee shall reimburse the fair, reasonable and proper costs incurred by the Grantor or Occupier in procuring their own alternative water supply during the period of such interruption in accordance with the Compensation provisions.

Where an existing piped private water supply that serves and is located upon the Grantor's Property is directly interrupted on permanent basis by the construction works for the installation of the Cables the Grantee shall either provide or procure an alternative permanent water supply or where it is not reasonable, proportionate and reasonably practicable to do so pay the Grantor or an Occupier's (as applicable) fair, reasonable and proper costs incurred in procuring a permanent means of an alternative supply of water in accordance with the Compensation provisions.

6. **Agricultural Liaison Officer (ALO):** The ALO will be appointed by the Grantee prior to the commencement of the cable installation works and will be the prime contact for ongoing engagement about practical matters with Grantors, Occupiers and their

agents before and during the construction process. There may be more than one ALO if required.

The ALO (or their company) will be contactable within the core working hours during the construction phase by Grantors, Occupiers and their agents and will provide 24-hour team or company contact details for use in the event of emergency.

Post-construction the ALO will remain appointed for at least one year in order to manage remediation issues.

The ALO will have responsibility for liaising with Grantors, Occupiers and their agents, including the following examples:

- i. Coordinating remaining drainage surveys and sharing pre and post construction drainage schemes with Grantors or Occupiers in advance for their consideration;
- ii. Coordinating the provision of a detailed pre-construction condition survey (where necessary pre-application, accounting for surveys undertaken pre-application) to include a soil survey as detailed in (ii) *Pre-Construction Soil Statement and Pre-Entry Schedule of Condition* above;
- iii. Advising on risks relating to the translocation of soil diseases, where necessary, and ensuring appropriate protective provisions are implemented;
- iv. Arranging quarterly meetings with Grantors, Occupier or their respective agent representatives, where considered necessary;
- v. Undertaking pre-construction liaison with affected parties to minimise disruption, where possible, to existing farming regimes and timings of activities (which will include endeavouring to keep the Grantor informed at least 3 months in advance (where practicable) of the Grantee's intention to take entry in order to commence the cable installation works);
- vi. Undertaking site inspections during construction to monitor working practices and ensure Grantors' and Occupiers' reasonable requirements are fulfilled;
- vii. Discussing and agreeing reinstatement measures following completion of the works;
- viii. Ensuring Grantors and Occupiers are consulted in respect of requirements to field entrances and accesses across the construction strip, in particular to severed land parcels.
- ix. Discussing the location, grouping, and marking of inspection chambers with the Grantor and Occupier.