Yorkshire Green Energy Enablemen (GREEN) Project

Volume 8

Document 8.23.4 Applicant's Response to ISH2 Hearing Action Points Final Issue A June 2023

Planning Inspectorate Reference: EN020024

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Version History				
Document	Version	Status	Description / Changes	
06/06/2023	А	Final	First Issue	

1. About this document

1. Introduction

- 1.1.1. This document provides National Grid Electricity Transmission Plc's (National Grid) (the Applicant) response to Action Points addressed to the Applicant arising from Issue Specific Hearing (ISH) 2 held on Wednesday 24 and Thursday 25 May on Green Belt, Environmental Effects and Construction Matters in respect of the Yorkshire Green Energy Enablement Project (Yorkshire GREEN) (the Project).
- 1.1.2. Responses to actions addressed to the Applicant and required for Deadline 4 are provided in **Section 2** below.

2. The Applicant's Response to ISH2 Action Points

Table 2.1 – Response to ISH2 Action Points

Action No.	ExA description	Party	Deadline	Response
1	Updated SoCG with Environment Agency to be submitted at D5.	The Applicant and Environment Agency	D5	An updated Statement of Common Ground between National Grid and the Environment Agen
2	Signed and dated version of SoCG with Historic England to be submitted.	The Applicant and Historic England	D5	National Grid will continue to endeavour to obtain a signed and dated Statement of Common submitted at Deadline 5.
3	Applicant to consider whether ES addenda (parts 1, 2 and any future parts) can be consolidated into a single document for ease of use in discharging requirements.	The Applicant	D4	National Grid can confirm that the ES Addendum Parts 1 and 2 (and any subsequent ES Add into one consolidated ES Addendum Document, for submission at Deadline 5. Please also re Action Point 6.
4	ES consolidated errata [REP3-008] – Applicant to consider additional minor inconsistencies set out in Annex A to this action point list.	The Applicant	D4	 National Grid can confirm it will address these errata in an update to the Environmental States (Document 5.2.19(C)) to be submitted at Deadline 5. National Grid considers it appropriate to update the Environmental Statement Consolidated 5.2.19(C)) at Deadline 5 in case any further errata arise through the Second Round of Question and be captured at the same time.
5	Submit written update on the implications of the Powering Up Britain policy paper and draft NPSs EN-1 and EN-5 for the Proposed Development, including on the question of whether or not the proposed development would fall into the definition of Critical National Priority.	The Applicant	D4	 Implications of changes set out in the Revised Draft NPSs National Grid has undertaken a detailed review of the proposed changes to National Policy St EN-1 (Overarching National Policy for Energy) and Revised Draft EN-5 (National Policy State Infrastructure. National Grid is content that the changes proposed would not alter the position Statement. It is acknowledged that some variances occur, for example, in relation to the sequ Government continues its review of the NPSs, the current suite of energy NPSs remain releva therefore, continue to have effect for the purposes of the Planning Act 2008 and for determini Consent Order application. Accordingly, the submitted documents including the NPS complia B of the Planning Statement (Document 7.1), [APP-202] are not required to be updated as NPSs only and do not include the draft consultation NPS's. Implications of the Powering Up Britain policy for the Proposed Development Powering Up Britain is the Government's blueprint for the future of energy in the Country, and and paves the way for emerging policies, strategies and plans.

ency will be submitted at Deadline 5.

on Ground with Historic England, to be

ddendums if required) will be consolidated refer to National Grid's response to ISH3

tement Consolidated Errata Document

ted Errata Document (Document

stions from the Examining Authority which

Statements set out in Revised Draft NPS atement for Electricity Networks on set out in the submitted Planning quential test for flooding. Whilst the evant and extant Government policy and, ining the Yorkshire Green Development pliance schedules set out in Appendix A and as they relate to the relevant and extant

nd brings together numerous existing plans,

Action No.	ExA description	Party	Deadline	Response
				In summary, Powering Up Britain recognises energy networks as being an 'enabler' of the trastrategy, and seeks to accelerate the delivery of strategic transmission upgrades, and cut del Overall, Yorkshire GREEN is in accordance with the ethos of the policy, seeking to deliver a I contracted customers (including offshore wind and interconnectors); ensure future connection connected without incurring significant constraint costs; facilitate net zero ambitions; and mee obligations. This is clearly set out in the Updated Needs Case (Document 7.4) [APP-205]. Whether or not the proposed development would fall into the definition of Critical Natic As part of the NPS consultation process, National Grid has requested that the definition of Chebetween the definition within the NPS glossary, and the reference to infrastructure identified i 2.12.7 of EN-5), which does not feature in the glossary definition. Within the revised draft National Policy Statements (NPSs), critical national priority (CNP) is of significant new offshore wind development <u>and supporting onshore and offshore network infrareinforcements</u> .' (emphasis added) In terms of Yorkshire GREEN, the Updated Needs Case (Document 7.4) [APP-205] specific support a nationally significant new offshore wind developments. As such, it is National Grid's view that the Project does fall within the CNP definition, as curree In addition, draft EN-5 states that, when considering what comprises CNP, ' <i>This includes infra Network Design and its follow-on exercises</i> '. The Yorkshire GREEN project is identified as a ' <i>HND essential optionessential to deliver th</i> Network Options Assessment 2021/22 Refresh. This document identifies the projects needed delivering National Grid's 2030 offshore wind ambitions and the UK's broader net zero targets Project within the definition of CNP.
7	Submit a plan showing the extent of the Leeds and York Green Belts with the Order limits overlaid.	The Applicant	D4	Figure 8.23.4-1 provided in Appendix A shows the York and Leeds Green Belt areas, the loc Project Order Limits.
8	Submit any case law or precedent for treating substations and/or CSECs as 'engineering operations' for the purposes of para 150 NPPF regarding Green Belt.	The Applicant	D4	In respect of substations, National Grid has always accepted that the substation works at Over from the exception at paragraph 150 of the NPPF because they would not preserve the open special circumstances are required to justify the development. National Grid also recognises respect of the substation works at those two particular locations, some aspects of built develop is accepted that the development at those locations has to be treated as inappropriate in any In respect of CSECs, the Examining Authority in its Report on the Hinkley Point C Connection that "the construction of an overhead line would be classified as an engineering operation" (para Secretary of State in the decision (para 63). Consistent with that position, National Grid's vie engineering operations because they do not involve any built enclosure or any other building

ransition towards the future energy elivery times.

a Project to enable connection of three ons of renewable generation can be eet National Grid's transmission licence

tional Priority.

CNP be clarified, given the discrepancy I in the Holistic Network Design (para

defined within the glossary as '...nationally frastructure and related network

ically identifies that the Project is needed to P4 (see section 3.21, bullet point 3). Section s of supporting the transfer of energy

rently set out.

frastructure identified in the Holistic

the Pathway to 2030' within table 3.4 of the ed to ensure the power system is capable of ets. The inclusion of the Yorkshire GREEN of further demonstrates the inclusion of the

ocal planning authority boundaries and the

verton and Monk Fryston would not benefit enness of the Green Belt. As such, very s that, in respect of this Project and in elopment will be provided and so therefore it by event.

on Project accepted National Grid's position (para 7.5.13). This was adopted by the iew is that CSECs fall into the same class of g within the normal meaning of the word.

Action No.	ExA description	Party	Deadline	Response
				However, National Grid has always accepted that the CSECs at Shipton and Tadcaster would Belt and that, as such, they do not benefit from the exemption at paragraph 150 of the NPPF development such that very special circumstances need to be demonstrated.
				National Grid therefore does not consider that the Examining Authority or the Secretary of Sta description of these parts of this project as engineering operations or otherwise and can take that these aspects of the development are inappropriate in the Green Belt.
10	Submit a full copy of the Horlock Rules and Holford Rules.	The Applicant	D4	A copy of the Holford Rules and Horlock Rules including supplementary notes are provided in
12	Agree and submit a statement (agreed with NYC if possible) to be added to the LVIA methodology, which sets out a brief explanation of the level of detail and its appropriateness which has been included in the visualisations.	The Applicant and North Yorkshire Council	D4	National Grid propose to add the following statement to section 1.3 'Visual Receptor Assessin Visual Impact Assessment Methodology, Document 5.3.6C, [APP-110]). This update will Council (NYC) and included in an ES Errata Document to be submitted at Deadline 5. The purpose of the photomontages produced for the visual assessment is to illustrate a reaso infrastructure. This is in line with Technical Guidance Note (TGN) 06/19 (Landscape Institute, Development Proposals). Paragraph 1.2.12 of TGN 06/19 states that with regards to visualis <i>typically be relative to the design and/or planning stage that has been reached</i> '. At the time of full three-dimensional models of every infrastructure component were not designed in detail a Project at this stage of development prior to consent and detailed design. Therefore some of and steel cross arms are not included in the photomontages. Paragraph 1.2.13 of TGN 06/19 <i>visualisations, however detailed and sophisticated, can never fully substitute what people wo</i> <i>be considered an approximation of the three-dimensional visual experiences that an observe</i> photomontages have been produced for the Project which as stated in paragraph 4.4.3 of TG <i>design, form and context to a reasonable degree of objectivity and accuracy, one which can k</i> <i>authorities and others</i> ". Therefore taking into account the guidance set out in TGN 06/19 the I photomontages is considered sufficient to inform the landscape and visual assessment at this
14	The Applicant to submit a note that summarises the purpose and use of the Type 3 photomontages.	The Applicant	D4	The purpose of the photomontages is to illustrate a reasonable approximation of the Project in Section 8 of Table 2.3 of the Applicant's comments on the Local Impact Reports (Document responded to North Yorkshire Council's (NYC) queries on the level of detail in the Type 3 phot the missing details on the photomontages including insulators and steel cross arms. National stage of a project where full three-dimensional models of every infrastructure component are provided in Appendix A of the Applicant's comments on the Local Impact Reports (Document stated: "National Grid consider that none of the omissions noted by NYC could have a bearing on the Visual Impact Assessment (LVIA). Attention is drawn to paragraph 1.2.12 of Technical Guidat Landscape Institute states, <i>"the degree of detail shown will typically be relative to the design a reached"</i> and at 1.2.13 <i>"Two-dimensional visualisations, however detailed and sophisticated, would see in reality"</i> . They should, therefore, be considered an approximation of the three-dim observer might receive in the field." In terms of Type 3 photomontages and photowires TGNC visualisations are intended to represent design, form and context to a reasonable degree of our understood and relied on by competent authorities and others"."
15	Provide a diagram which shows the soil/ material movements from existing bunds to	The Applicant	D4	A plan that illustrates the soil/material movements from existing bunds to temporary bunds to Substation is appended to this document at Appendix C .

Ild not preserve the openness of the Green and have to be treated as inappropriate

State needs to reach any view on the te it as the accepted and agreed position

in Appendix B.

sment' of **ES Appendix 6C Landscape and** ill be agreed if possible with North Yorkshire

sonable approximation of the Project e, 2019, Visual Representation of disations "the degree of detail shown will of completing the photomontages in 2022 as would be typical for an infrastructure of the detail of the pylons such as insulators 19 states that "Two-dimensional rould see in reality. They should, therefore, ver might receive in the field." Type 3 GN 06/19 "are intended to represent to be understood and relied on by competent e level of detail shown in the Project his stage of the Project.

t infrastructure, not a precise replication. In **ht 8.10) [REP2-040]** National Grid hotomontages. National Grid acknowledged al Grid confirm this is not unusual at this re not designed in detail. Further detail is **ent 8.10) [REP2-040]** response where it is

he judgements made in the Landscape and lance Note TGN 06/19 where the *n and/or planning stage that has been d, can never fully substitute what people* dimensional visual experiences that an N06/19 states at 4.4.3 that: *"Type 3 Tobjectivity and accuracy, one which can be*

to permanent bunds at Monk Fryston

Action No.	ExA description	Party	Deadline	Response
	temporary bunds to permanent bunds at Monk Fryston Substation.			
17	Respond to the additional planting/ bunding suggested for part of the southern boundary of the Overton substation site by Mr Stephenson on behalf of Ms Husband, Ms Eves and Mr Bulmer.	The Applicant	D4	National Grid's land agents are seeking a meeting with the owners of the land on either side of planting where there are gaps in the current screening. Planting would be subject to a volur bunding to the south of the substation outside of the areas prone to flooding would reduce the likely to adversely impact the efficiency of farming the remaining land. In addition, bunding or Overton substation and Hurns Gutter would be less effective in mitigating visual effects experient Cottages than the suggested planting infilling gaps along Hurns Gutter, that would be closer to be constructed by the substation of the substation of the set
19	Applicant to submit a note summarising its discussions with landowners about ongoing management and maintenance of reinstatement planting.	The Applicant	D4	National Grid discusses with landowners the matter of reinstatement planting and the 5 year r engagement if requested. The voluntary terms provided to landowners identifies a scheme of planting removed, and the need for replacement of planting which dies or becomes seriously of maintenance period undertaken by National Grid. The scheme for mitigation planting (reinstatement planting) would be submitted to and approvincludes the requirement for details of the five year maintenance regime including monitoring that period. Discussions would be held with the relevant landowner (and where appropriate, te proposed planting where possible. Where vegetation including hedgerows and trees have been planted as part of the reinstatem maintenance regime including monitoring and management. Article 39 of the draft DCO (Doc use of land for maintaining the authorised development, provides that where the authorised de maintenance periods" means the period of five years beginning with the date on which that pa During the maintenance period periodic checks will be undertaken by a suitably experienced p to replace species that die or are seriously damaged or diseased. These checks will identify w undertaken so that vegetation re-establishes in these areas. This could include additional plar Prior to the end of the five-year maintenance period, a final inspection would take place and a communicated to the landowner prior to handover. After the five year maintenance period Nat further maintenance obligation in respect of reinstatement planting.
20	The Applicant to provide an explanation of the vibration mitigation techniques that are detailed in paragraph 2.2.21 of the NVMP [APP-101].	The Applicant	D4	 Although it should be recognised that the vibration reduction mitigation mechanisms for piling BS5228 part 2, and that predicted vibration impact from piling is negligible, such that the mitig to be employed to mitigate vibration, further information on the measures outlined in paragrap Management Plan (Document 5.3.3H [APP-101]) is provided as follows: Use of alternative methods: If significant vibration is a risk, where ground conditions allow, of non-vibratory piling techniques such as Continuous Flight Auger (CFA) piling.

e of Hurns Gutter to discuss the possibility luntary agreement with landowners. Earth he area of BMV agricultural land and is or planting in the open field between the erienced by residents of New Farm r to the residents of New Farm Cottages.

r maintenance period as part of its on-going of mitigation planting for the replacement of ly damaged or diseased during the 5 year

oved by the relevant planning authority and g and management by National Grid during , tenant) in relation to the suitability of the

ement, these will have a five-year ocument 3.1(C)) [REP3-004] temporary development is mitigation planting, "the part of the mitigation planting is completed.

d professional to ensure establishment and whether additional measures need to be anting.

any remedial measures undertaken and lational Grid would cease to have any

ng are transposed from the code of practice tigation measures are very unlikely to need aph 2.2.21 of the **Noise and Vibration**

w, this would comprise for example the use

Action No.	ExA description	Party	Deadline	Response
				Removal of obstructions; Excavation of a pilot hole and removal of obstruction, such as lar reduce energy required for each impact.
				 Provision of cut-off trenches: A mechanism that isolates the piling site from the receptor by a trench) in the horizontal travel of vibration waves.
				Reduction of energy input per blow: Reduced energy results in reduced noise and vibration counterproductive as it prolongs the exposure to noise and vibration.
				• Reduction of resistance to penetration, including pre-boring for driven piles: This comprise adding water to the bore hole for impact bored piles. This is also a method of reducing the the hammer.
				• Excavation under support fluid: This involves providing lubrication to the pile, reducing the
				Avoidance of shear leg contact with sensitive structures: This is unlikely to be appropriate Yorkshire GREEN Project, as it relates to piling undertaken from barges but is a method or
				• Removal of the plug when using casing vibrators: This requires the augering out of the soi the pile is fully driven into the ground., thus reducing the friction needed to be overcome to
				Bottom-driving: This is an alternative method of piling that generates lower noise and vibra mode employs a hammer driving the solid steel bottom of an otherwise hollow steel tube p
				Use of variable moment vibrators: An alternative method of piling that significantly reduces moments to balance the driving mechanism and reduce noise accordingly.
21	Submit details of the approximate distance between the Shipton North CSEC and the farm house and new dairy buildings at Newlands Farm.	The Applicant	D4	 The approximate distances between the Shipton North Cable Sealing End Compound fence libuildings and residential property are detailed below as follows: Fence line of Shipton North Cable Sealing End Compound in current location to dairy building account the limits of deviation, the shortest distance would be 56m. Fence line of Shipton North Cable Sealing End Compound in current location to residential buildings
				account the limits of deviation, the shortest distance would be 221m.
22	The Applicant and Mr Stephenson (on behalf of Mr Rab) to provide an update on concerns raised about potential health effects arising at Newlands Farm due to the proximity of the proposed works.	The Applicant and Mr Stephenson	D5	National Grid has emailed the landowners' agent on 26 May 2023 proposing three dates throu Magnetic Field specialist can attend the site and discuss any health concerns directly with the response to the dates provided.
24	Applicant and North Yorkshire Council to undertake site visits to review some of the access points, where issues have been	The Applicant, North Yorkshire Council	D5	National Grid will undertake a workshop with North Yorkshire Council on 7 June 2023, and w will require a site visit at this workshop. An update on this will be provided at Deadline 5.

large rocks, before driving the pile to

by introducing a disconnect (in the form of

ion. However, this can be

ses the mudding in of rotary bored piles and ne energy required at the point of impact of

ne energy requirement.

te for the types of piling required for the lof reducing vibration.

oil plug from inside of the pile casing before to vibrate the casing into place.

ration than top-driving piling. The piling pile into a pre-bored hole.

es vibration through the use of counter

line, to the new, constructed dairy

ngs is approximately 73m. Taking into

building is approximately 234m. Taking into

rough June that National Grid's Electric and he landowners. National Grid is awaiting a

will seek to identify any access points that

Action No.	ExA description	Party	Deadline	Response
	raised, including road safety and potential for fly-tipping.			
25	Full considered response as to why additional access track for SP004 to SP005 would not be feasible.	The Applicant	D4	National Grid have considered the possibility of an alternative access track between SP004 are of the access track from SP004 and a temporary bridge across Hurns Gutter would have, com construction works associated with SP005 as currently proposed. Whilst the proposed alternat bridge infrastructure over Hurns Gutter, the current powers and land rights sought in the draft would allow for the temporary construction of an access road along this route, and bridges are development' detailed within Schedule 1 of the draft DCO. The alternative construction access 11kV diversion in this location, and the need to widen the existing access track and bellmouth On that basis, National Grid consider this alternative could be taken forward in this location be construction works only. The current proposed access past New Farm Cottages would need to construction of the bridge across Hurns Gutter and for operational access, potentially with son limits, including removing the 11kV diversion, and reducing the bellmouth to reduce the land ta access in this location could be confirmed in the Construction Traffic Management Plan (CTM the access route for future maintenance. It is not proposed to change the access for future maintenance, and a permanent bridge is not prop
26	Applicant to provide sketch plan of passing places and extent of related hedgerow removal for access track to proposed pylon SP005, under worst case scenario as exemplar of what reinstatement mitigation might be required.	The Applicant	D4	An illustrative plan showing a potential access road and passing places for the track to pylon S D.
29	Applicant to consider how to incorporate into the Construction Traffic Management Plan a commitment to involve local landowners and residents in designing the details of construction access arrangements such as passing places in access 'hotspots' including Newlands Farm and the	The Applicant	D4	 National Grid can confirm that an updated version of the Construction Traffic Management 1 099]) will be submitted at Deadline 5. Where measures, such as passing places, are required to the adopted highway for construction would take place with the relevant highway authorities but not with landowners. Such measures relevant highway authorities, as set out under Requirement 14 of the Development Consent O Furthermore, the CTMP sets out a number of measures to minimise effects on users of the put which form part of the Project's embedded environmental measures. All matters relating to the Leeds City Council (Statement of Common Ground Document 8.5.4 (B) [REP3-022]) and City Ground Document 8.5.3 (B) [REP3-020]). Engagement with North Yorkshire Council (NYC) is design of access points and visibility splays as well as the requirement to widen Overton Road at meetings held in 2022 (Table 12.5, ES Chapter 12 Traffic and Transport, Document 5.2. CTMP set out the HGV and LV routing strategy which ensure that where possible traffic has b (Table 4.1). Routes with the least constraints have been selected where possible (paragraph 4 number of traffic management measures which would be implemented where required and ag (paragraph 7.2.4). Detailed plans for site specific temporary traffic management arrangements

and SP005, and any impacts the extension ompared to not using the access track for native would require additional temporary ft DCO (Document 3.1(C)) [REP3-004] are included in the list of associated ess route would remove the need for the th.

between SP004 and SP005 for I to remain in the Order limits to allow for ome amendments to reduce the Order I take. The restrictions on construction MP). As set out above, this would remain naintenance as this would be very low roposed over Hurns Gutter.

SP005 has been provided in Appendix

t Plan (CTMP) (Document 5.3.3F, [APP-

tion access arrangements, consultation ires would be agreed in advance with the Order **(Document 3.1(C)), [REP3-004]**.

bublic highway, including minor roads, he CTMP and access are agreed with ty of York Council (Statement of Common is ongoing regarding the CTMP. The ad were discussed and agreed with NYC **2.12, [APP-084]**). Sections 4 and 5 of the been routed to avoid narrow rural roads in 4.5.2). Section 7 of the CTMP sets out a agreed with the relevant authorities ints will be developed at the detailed design

Action No.	ExA description	Party	Deadline	Response
	proposed access to SP005.			phase of the Project and agreed with the relevant highway authority (paragraph 7.2.5). Traffic signage, use of banksmen at key locations, temporary traffic signals and road widening.
	Also to set out how embedded measures would ensure disruption to other users is minimised.			With regards to construction access on private land, paragraph 8.1.3 of the CTMP, which sets overarching Transport Co-ordination Officer (TCO) to be appointed by National Grid, will be u TCO to liaise with National Grid's Lands Officers and the contractor's Agricultural Liaison Officer may have regarding access routes and develop measures (e.g. appropriate passing places if possible.
				National Grid are aware of a number of locations where landowners have concerns regarding accessing properties, farm machinery and construction vehicles using access tracks on privat areas. In these instances, National Grid is continuing to liaise with the relevant landowners/ acconcern. It is the intention that the updated CTMP will provide further clarity on this issue not the construction phase of the Project and therefore it would not be appropriate to set out deta CTMP.
31	Provide a Schedule of Deliveries for Monk Fryston Substation.	The Applicant	D5	A schedule of deliveries for Monk Fryston will only become known once a principal contractor would also change due to availability and scheduling of deliveries. However, the requirement Management System (DMS) is identified in Paragraph 7.3.12 of the Construction Traffic Ma 5.3.3F) [APP-099]. The DMS will be agreed with National Grid and can be used to ensure con equipment in line with the construction programme and limit traffic movements to manageable site. The DMS does not commit to scheduling all deliveries outside of peak hours, for example detrimental impact on the construction programme and on time sensitive deliveries. However package of measures outlined in Section 7 of the CTMP (Document 5.3.3F) [APP-099] and r CTMP will minimise any potential traffic and transport impacts during the construction phase of the DMS would be enforced by the Transport Coordination Officer (TCO), appointed by Natio contractor(s) through the provisions set out in Section 8 of the CTMP (Document 5.3.3F) [APF monitoring of compliance with the CTMP measures, including the DMS, and corrective and di breach occur, as set out in paragraphs 8.2.3 and 8.2.4 of the CTMP (Document 5.3.3F) [APF
				The DMS will operate in conjunction with the other mitigation measures set out in Section 7 of 099] to minimise the impact of the Project's construction traffic on the local highways network 7.3.7 of the CTMP (Document 5.3.3F) [APP-099] , qualified personnel are to be placed at key accesses, to ensure impacts of traffic are minimised and adherence to measures such as the
32	Provide details of the location and planning status of the solar farm that was referred to as being close to the Leeds City Council boundary within the former Selby area.	Leeds City Council or North Yorkshire Council	D4	National Grid can confirm that Hayton House Solar Farm (2021/1502/SCN), which is the appli in the cumulative effects assessment (ES Chapter 18: Cumulative Effects, Document 5.2.1 cumulative effects long list (ES Appendix 18A: Cumulative Effects Assessment: Long List 5.3.18(B), [REP3-011]) and short list (Table 18.9, Document 5.2.18, [APP-090]) as proposed identified no significant cumulative effects (Section 18.6, Document 5.2.18, [APP-090]). It is development was recently submitted to North Yorkshire Council which has adopted a scoping (2022/1306/SCP). The information provided in the scoping report indicates no change to the or assessment that significant effects are not likely.
33	Ensure that the East Yorkshire solar farm NSIP that is currently listed as being at the	The Applicant	D4	The East Yorkshire Solar Farm (Planning Inspectorate Case Reference: EN010143) is located Fryston Substation. It therefore falls outside the maximum 6km zone of influence identified in 18.4.17, ES Chapter 18: Cumulative Effects, (Document 5.2.18, [APP-090]) and has not be assessment as significant cumulative effects are not likely and is not required to be added to the

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ic management measures could include

ets out the responsibilities of the updated to reflect the requirement for the fficers to discuss any concerns land owners if required) to resolve these where

ng potential conflicts between residents ate land to access construction working agents to seek to address areas of ting that such locations may vary through tailed measures for specific locations in the

or is in place to deliver the Project and the for the contractor to use a Delivery **Management Plan (CTMP) (Document** control of the delivery of material and ble numbers that can be accommodated on ple, as this may have an unacceptably er National Grid are satisfied that the d routing strategy set out in Section 4 of the e of development.

tional Grid, and the TCO(s) of the **\PP-099]**. These provisions include disciplinary measures taken should a **PP-099]**.

of the **CTMP (Document 5.3.3F) [APP**rk. For example, as stated in paragraph ey locations, likely to include construction ne DMS is monitored.

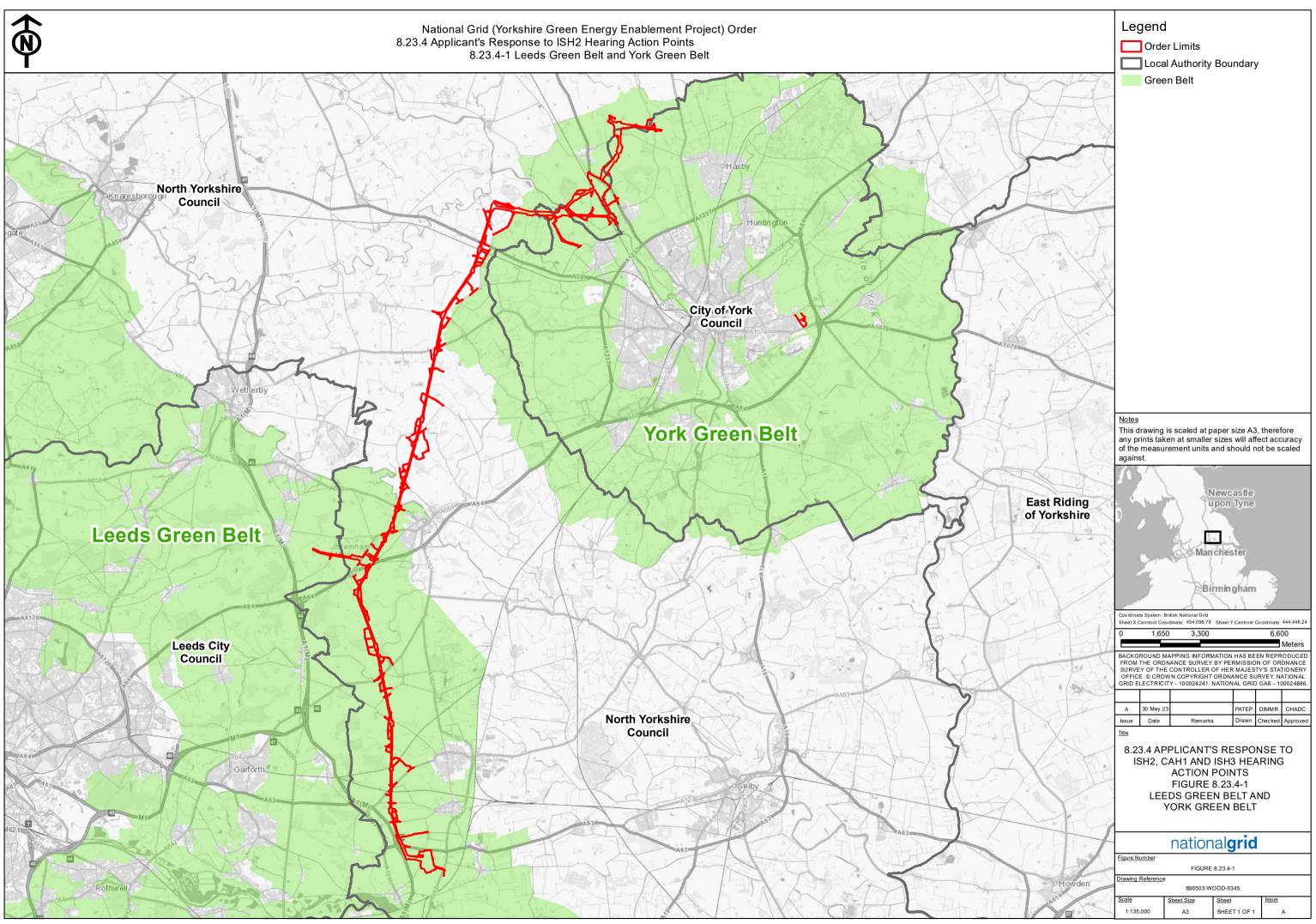
plication referred to, has been considered **2.18, [APP-090]**) and is included on both the **ist of Other Developments, Document** sed development ID102. The assessment is noted that a scoping report for this ng opinion for the proposed development e conclusions of the cumulative effects

ted approximately 17km east of Monk n **Table 18.7 and paragraphs 18.4.8 to** been considered in the cumulative effects o the cumulative effects long-list.

Action No.	ExA description	Party	Deadline	Response
	pre-application stage on the National Infrastructure website has been given appropriate consideration within the assessment of cumulative effects.			
34	Provide update on how co-operation will be achieved between Undertaker's contractor and contractor for Lumby Quarry with update on minimising vegetation removal.	The Applicant	D5	National Grid is in contact with the agent representing Lumby Quarry and information is being Grid are currently awaiting an update from the developer. An update will be provided at Dead

ng shared between the parties. National adline 5 as per Action Point 34.

Appendix A Leeds Green Belt and York Green Belt Plan



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Appendix B The Holford Rules and The Horlock Rules

The Holford Rules

Guidelines on overhead line routeing were first formulated in 1959 by Sir William later Lord, Holford, who was a part-time member of the CEGB. National Grid has reviewed these guidelines, known as the 'Holford Rules', and concluded that they have stood the test of time. National Grid therefore intends to continue to employ them as a basis of the company's approach to overhead line routeing.

Since the formulation of the original Rules, formal requirements for environmental assessment have been introduced. Whilst environmental assessment for overhead lines addresses wider topics than the visual amenity issue on which the Rules concentrate, they remain a valuable tool in the selecting and assessing potential route options as part of the environmental assessment process. The original Rules and their added notes of clarification are set out below.

GUIDELINES FOR THE ROUTEING OF NEW HIGH VOLTAGE OVERHEAD TRANSMISSION LINES

Rule 1:

Avoid altogether, if possible, the major areas of highest amenity value, by so planning the general route of the first line in the first place, even if the total mileage is somewhat increased in consequence.

Note on Rule 1

Investigate the possibility of alternative routes, avoiding if possible the areas of the highest amenity value. The consideration of alternative routes must be an integral feature of environmental statements.

Areas of highest amenity value are:

Areas of Outstanding Natural Beauty National Parks Heritage Coasts World Heritage Sites

Rule 2:

Avoid smaller areas of high amenity value, or scientific interests by deviation; provided that this can be done without using too many angle towers, ie the more massive structures which are used when lines change direction.

Note on Rule 2

Some areas (e.g. Site of Special Scientific Interest) may require special consideration for potential effects on ecology (e.g. to their flora and fauna).

Where possible choose routes which minimise the effects on the setting of areas of architectural, historic and archaeological interest including Conservation Areas, Listed Buildings, Listed Parks and Gardens and Ancient Monuments.

Rule 3:

Other things being equal, choose the most direct line, with no sharp changes of direction and thus with fewer angle towers.

Note of Rule 3

Where possible choose inconspicuous locations for angle towers, terminal towers and sealing end compounds.

Rule 4:

Choose tree and hill backgrounds in preference to sky backgrounds wherever possible; and when the line has to cross a ridge, secure this opaque background as long as possible and cross obliquely when a dip in the ridge provides an opportunity. Where it does not, cross directly, preferably between belts of trees.

Rule 5:

Prefer moderately open valleys with woods where the apparent height of towers will be reduced, and views of the line will be broken by trees.

Note on Rules 4 & 5

Utilise background and foreground features to reduce the apparent height and domination of towers from pan viewpoints.

Minimise the exposure of numbers of towers on prominent ridges and skylines.

Where possible avoiding cutting extensive swathes through woodland blocks and consider opportunities for skirting edges of copses and woods.

Protecting existing vegetation, including woodland and hedgerows, and safeguard visual and ecological links with the surrounding landscape.

Rule 6:

In country which is flat and sparsely planted, keep the high voltage lines as far as possible independent of smaller lines, converging routes, distribution poles and other masts, wires and cables, so as to avoid a concentration or 'wirescape'.

Note on Rule 6:

In all locations minimise confusing appearance.

Arrange wherever practicable that parallel or closely related routes are planned with tower types, spans and conductors forming a coherent appearance; where routes need to diverge, allow where practicable sufficient separation to limit the effects on properties and features between the lines.

Rule 7:

Approach urban area through industrial zones, where they exist; and when pleasant residential and recreational land intervenes between the approach line and the substation, go carefully into the comparative costs of the undergrounding, for lines other than those of the highest voltage.

Note on Rule 7

When a line needs to pass through a development area, route it so as to minimise as far as possible the effect on development.

Alignments should be chosen after consideration of effects on the amenity of existing development and on proposals for new development.

When siting substations take account of the effects of the terminal towers and line connections that will need to be made and take advantage of screening features such as ground form and vegetation.

SUPPLEMENTARY NOTES

Residential Areas

Avoid routeing close to residential areas as far as possible on grounds of general amenity.

Designations of County, District and Local Value

Where possible choose routes which minimise the effect on Special Landscape Areas, areas of Great Landscape Value and other similar designations of County, District or Local value.

Alternative Tower Designs

In additional to adopting appropriate routeing, evaluate where appropriate the use of alternative tower designs now available where these would be advantageous visually, and where the extra cost can be justified.

THE NATIONAL GRID COMPANY plc

NGC SUBSTATIONS AND THE ENVIRONMENT: GUIDELINES ON SITING AND DESIGN

Section 1 INTRODUCTION

- 1 The National Grid Company plc's (NGC's) policy statement on the environment recognises the importance of giving due regard to protecting and enhancing the environment and taking into account the environmental effects of the Company's actions. The Company has statutory duties in relation to preservation of amenity under Schedule 9 of the Electricity Act 1989, and has published a Schedule 9 Statement setting out the manner in which it proposes to meet these duties.
- 2 NGC has a statutory duty under the Act to develop and maintain an efficient, co-ordinated and economical transmission system of electricity for England and Wales. New transmission lines, new substations, sealing end compounds, line entries, additions and extensions to existing substations may be required to provide new connections for customers or reinforcement of the national grid system arising from changes in the demand for and generation of electricity.
- 3 This document explains the approach NGC takes towards such developments (Section II) and contains Guidelines (Section III) to assist those responsible for siting and designing substations to mitigate the environmental effects of such developments and so meet the Company's policy. The document complements the Company's Holford Rules guidelines on the routeing of high voltage transmission lines and when appropriate should be used in conjunction with them.
- 4 The guidelines are to be used by NGC staff, their consultants, and contractors in the siting and design of new substations and extensions to substations. They reflect the criteria the company requires its staff, consultants and contractors to satisfy.
- 5 As recognised in its Schedule 9 Statement NGC places importance on consultation with statutory planning and amenity bodies over its proposals for new developments. NGC believes that the availability of these guidelines will assist in such discussions by referring to the main considerations relevant to substation siting, and will thereby assist in achieving the most appropriate siting and design solutions.

Section II NGC'S APPROACH TO DESIGN AND SITING OF SUBSTATIONS

Approach to the Environment

- 6 NGC's environmental policy recognises the importance of giving due regard to protecting and enhancing the environment and taking into account the effect on the environment of all the Company's actions. Following the principle of integrating environmental considerations into all its activities, NGC seeks to keep known adverse effects on the environment to a reasonably practicable minimum and, in accordance with its duties under Schedule 9 of the Electricity Act, the Company gives due regard to the preservation of amenity and takes reasonable steps to mitigate the effects of its relevant proposals. To achieve these aims the Company therefore has to balance technical, economic and environmental considerations to reach reasonably practicable development proposals.
- 7 The guidelines (Section III) deal with the amenity issues associated with the siting and design of new substations and major extensions or major modifications to existing substations. They cover a range of key issues from the time options are initially considered to final design, including form, silhouette and colour of the entire development in relation to the surrounding area, and also related issues such as overhead line entries, since these are dominant features in any substation.

Environmental Report

8 In order to achieve these objectives, the environmental effects of new substations and extensions or modifications to existing substations will be assessed and where appropriate an environmental report prepared describing the effects and mitigative measures. Items to be considered are summarised in Appendix A.

Integrating Environmental Considerations into Power System Planning

- **9** The nature of transmission system planning is such that scheme proposals and options may go through various stages before it is finally decided to proceed with construction.
- **10** The purpose of each proposal for substation, sealing end compound or line entry development should be set out in a brief, and a range of system and siting options should be evaluated and documentated as part of the selection of the preferred solution. In each case the effects of the overall development on the environment should be assessed, prior to a commitment to a particular site or design.
- 11 When it is clear a project is likely to proceed, an assessment should be made of any additional skills required to deal effectively with the range of environmental, land use, planning and design issues. Consideration should also be given to consultation as soon as reasonably possible with appropriate statutory planning and amenity bodies.

Liaison with other Electricity Companies

12 NGC will encourage and recommend other parties such as power generators or regional electricity companies to adopt these guidelines when

working with NGC on proposals for substations, sealing end compounds or line entries.

Post Construction Review

13 Following completion of the project, a review should be undertaken to check that the necessary measures identified in the environmental report have been implemented.

Section III GUIDELINES

Overall System Options and Site Selection

1 In the development of system options including new substations, consideration must be given to environmental issues from the earliest stage to balance the technical benefits and capital cost requirements for new developments against the consequential environmental effects in order to keep adverse effects to a reasonably practicable minimum.

Amenity, Cultural or Scientific Value of Sites

- 2 The siting of new NGC substations, sealing end compounds and line entries should as far as reasonably practicable seek to avoid altogether internationally and nationally designated areas of the highest amenity, cultural or scientific value by the overall planning of the system connections.
 - Notes:
 - 1 Internationally and nationally designated areas of highest amenity, cultural or scientific value are:

National Parks; Areas of Outstanding Natural Beauty; Heritage Coasts; World Heritage Sites; Ramsar Sites; Sites of Special Scientific Interest; National Nature Reserves; Special Protection Areas; Special Areas of Conservation.

- 2 Care should be taken in relation to all historic sites with statutory protection eg Ancient Monuments, Battlefields and Listed Buildings.
- *3 Account should be taken of Government Planning Policy Guidance and established codes of practice.*
- 4 Account should be taken of any development plan policies relevant to the siting or design of substations.
- 3 Areas of local amenity value, important existing habitats and landscape features including ancient woodland, historic hedgerows, surface and ground water sources and nature conservation areas

should be protected as far as reasonably practicable.

Local Context, Land Use and Site Planning

4 The siting of substations, extensions and associated proposals should take advantage of the screening provided by land form and existing features and the potential use of site layout and levels to keep intrusion into surrounding areas to a reasonably practicable minimum.

• Notes:

- 1 A preliminary study should be undertaken to identify the extent of land required to meet both operational and environmental needs.
- 2 In some instances it may be possible to site a substation partially or fully enclosed by existing woodlands.
- 3 Topographical information should be obtained at an early stage. In some cases a geotechnical survey may be required.
- 5 The proposals should keep the visual, noise and other environmental effects to a reasonably practicable minimum.
 - Notes:
 - 1 Allow sufficient space for screening of views by mounding or planting.
 - 2 Consider appropriate noise attenuation measures where necessary.
 - 3 Use security measures which minimise visual intrusion from lighting.
 - 4 Consider appropriate on-site water pollution prevention measures.
 - 5 Consider adjoining uses and the amenity of local inhabitants.

6 The land use effects of the proposal should be considered when planning the siting of substations or extensions.

- Notes:
 - 1 Issues for consideration include potential sterilisation of nationally important land, eg Grade 1 agricultural land and sites of nationally scarce minerals.
 - 2 Effects on land drainage.

<u>Design</u>

- 7 In the design of new substations or line entries, early consideration should be given to the options available for terminal towers, equipment, buildings and ancillary development appropriate to individual locations, seeking to keep effects to a reasonably practicable minimum.
 - Notes:
 - 1 With outdoor equipment, a preference should be given normally to a low profile design with low height structures and silhouettes

appropriate to the background.

- 2 Use lightweight narrow section materials for taller structures especially for gantries over about 6 metres in height.
- 3 Commission exterior design and colours appropriate to the surroundings.
- 4 Materials and colours for buildings, equipment and fencing should be chosen to harmonise with local surroundings.
- 5 Where possible avoid the use of prominent insulators by consideration of available colours appropriate to the background.
- 6 Where possible site buildings to act as visual screens for switchgear.
- 7 Ensure that the design of high voltage and low voltage substations is co-ordinated by early consultation between NGC and its customers.
- 8 Where there are particular technical or environmental constraints, it may be appropriate to consider the use of Gas Insulated Switchgear (GIS) equipment which occupies less space and is usually enclosed within a building.
- 9 Early consideration should be given to the routeing of utility service connections.
- 8 Space should be used effectively to limit the area required for development consistent with appropriate mitigation measures and to minimise the adverse effects on existing land use and rights of way, whilst also having regard to future extension of the substation.
 - Notes:
 - 1 Assess the benefit of removing redundant substation equipment from existing sites where this would improve their appearance.
- 9 The design of access roads, perimeter fencing, earthshaping, planting and ancillary development should form an integral part of the site layout and design to fit in with the surroundings.

Line Entries

- 10 In open landscape especially, high voltage line entries should be kept, as far as possible, visually separate from low voltage lines and other overhead lines so as to avoid a confusing appearance.
- 11 The inter-relationship between towers and substation structures and background and foreground features should be studied to reduce the prominence of structures from main viewpoints. Where practicable the exposure of terminal towers on prominent ridges should be minimised by siting towers against a background of trees rather than open skylines.

NGC SUBSTATIONS – ENVIRONMENTAL REPORT

Introduction

All proposals for significant extensions of existing substations or for new substations and associated development should be the subject of an environmental appraisal and an environmental report should be produced. The project manager will be responsible for ensuring that an appropriate appraisal is undertaken and report prepared, with due regard to expert advice available to the team.

For a major development a scoping exercise should be undertaken with the contribution of appropriate skills to establish the range and depth of the appraisal. It will generally be appropriate at this stage to consider consultation with the local planning authority.

A clear distinction should be drawn between the preparation of an environmental report which will be undertaken in most cases and a full environmental statement (ES) which may on occasion be required under UK environmental assessment legislation, for example where the substation forms part of a major new power station for which an ES may be needed.

Recommended Content of Environmental Reports for Substations

Section 1

Information describing the project during construction, when operational and on decommissioning including:-

- 1.1 Purpose and physical characteristics of the project, including details of access and transport arrangements and employment.
- 1.2 Land use requirements and other physical features of the project.
- 1.3 Operational features of the project and relevant measurements of emissions such as noise, vibration, light, heat and electric and magnetic fields.
- 1.4 Main alternative sites considered and reasons for final choice.

Section 2

Information describing the site and its environment including:-

2.1 Physical features such as

-Flora and fauna -Soil: agricultural quality, geology -Water courses including land drainage generally -Climatic factors -Historic heritage and archaeological sites
-Landscape and topography
-Local recreational uses
-Proximity of population and any other relevant environmental features.

2.2 The policy framework

The policy framework including all relevant statutory designations such as national nature reserves, sites of special scientific interest, national parks, areas of outstanding natural beauty, heritage coasts, special protection areas, special areas of conservation, regional parks, country parks, national forest parks, local nature reserves, areas affected by tree preservation orders, water protection zones, minerals protection zones, nitrate sensitive areas, conservation areas, listed buildings, scheduled ancient monuments, and designated areas of archaeological importance. It should also include references to Structure, Unitary and Local plan policies applying to the site and the surrounding area which are relevant to the proposed development as well as to any international designations.

Section 3

Assessment of effects on the surrounding area and landscape including:-

- 3.1 Visual effects, emissions during normal operation, noise, light, impact on local roads and transport.
- 3.2 Effects of the development on buildings, the architectural and historic heritage and archaeological features.
- 3.3 Loss of, and damage to flora, fauna and geology.
- 3.4 Land use/resource effects such as
 quality and quantity of agricultural land to be taken
 sterilisation of mineral resources and alternative uses of the site.
- 3.5 Changes to hydrographic characteristics.
- 3.6 Air and Climate
- 3.7 Indirect matters such as
 - traffic (road, rail, air, water) related to the development,
 - development associated with the project, eg new roads, sewers, power lines, pipelines, telecommunications etc.

Section 4

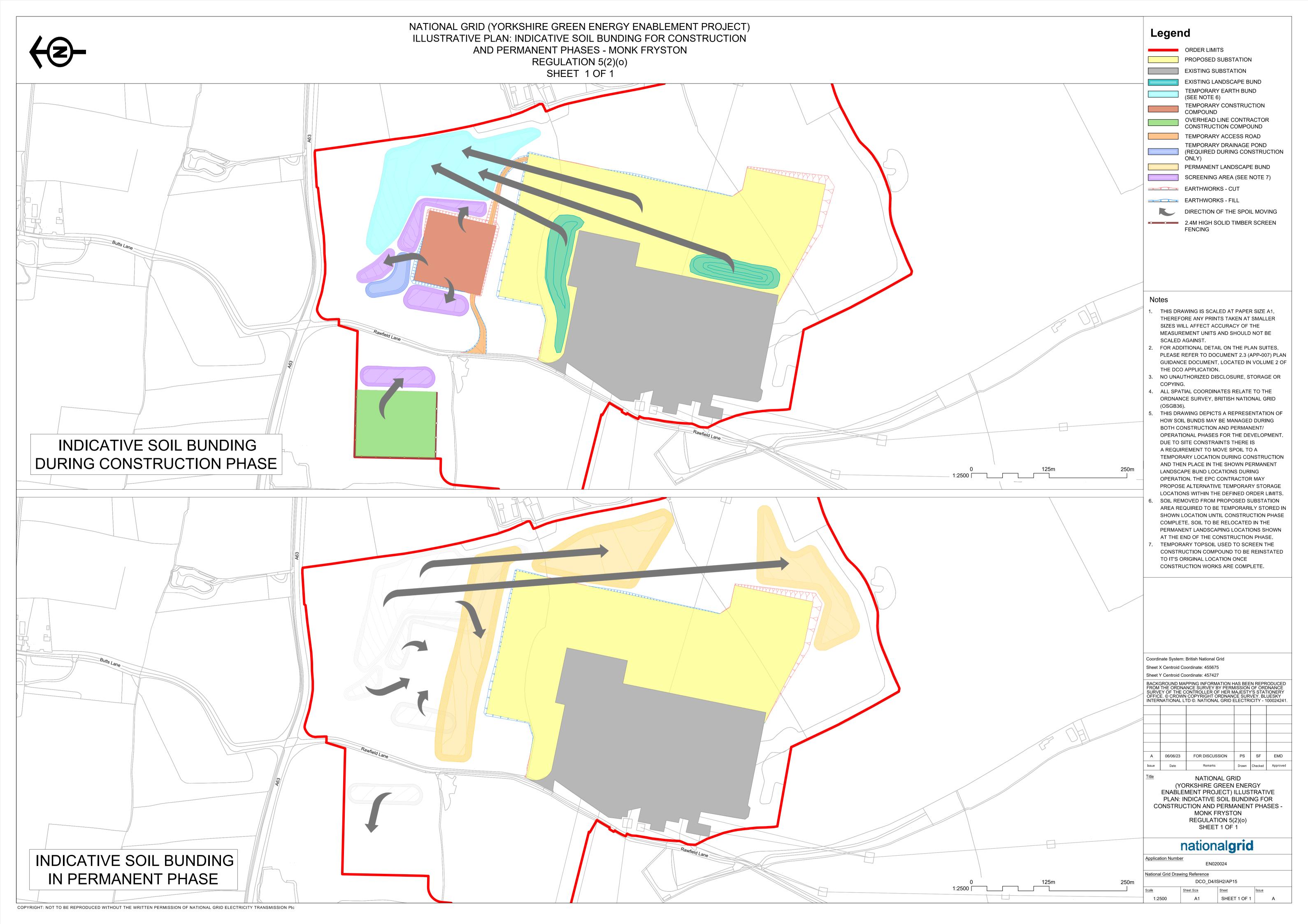
Mitigation measures

- 4.1 Where significant adverse effects are identified, a description of the measures to be taken to avoid, reduce or remedy those effects, eg
 - a) site planning;

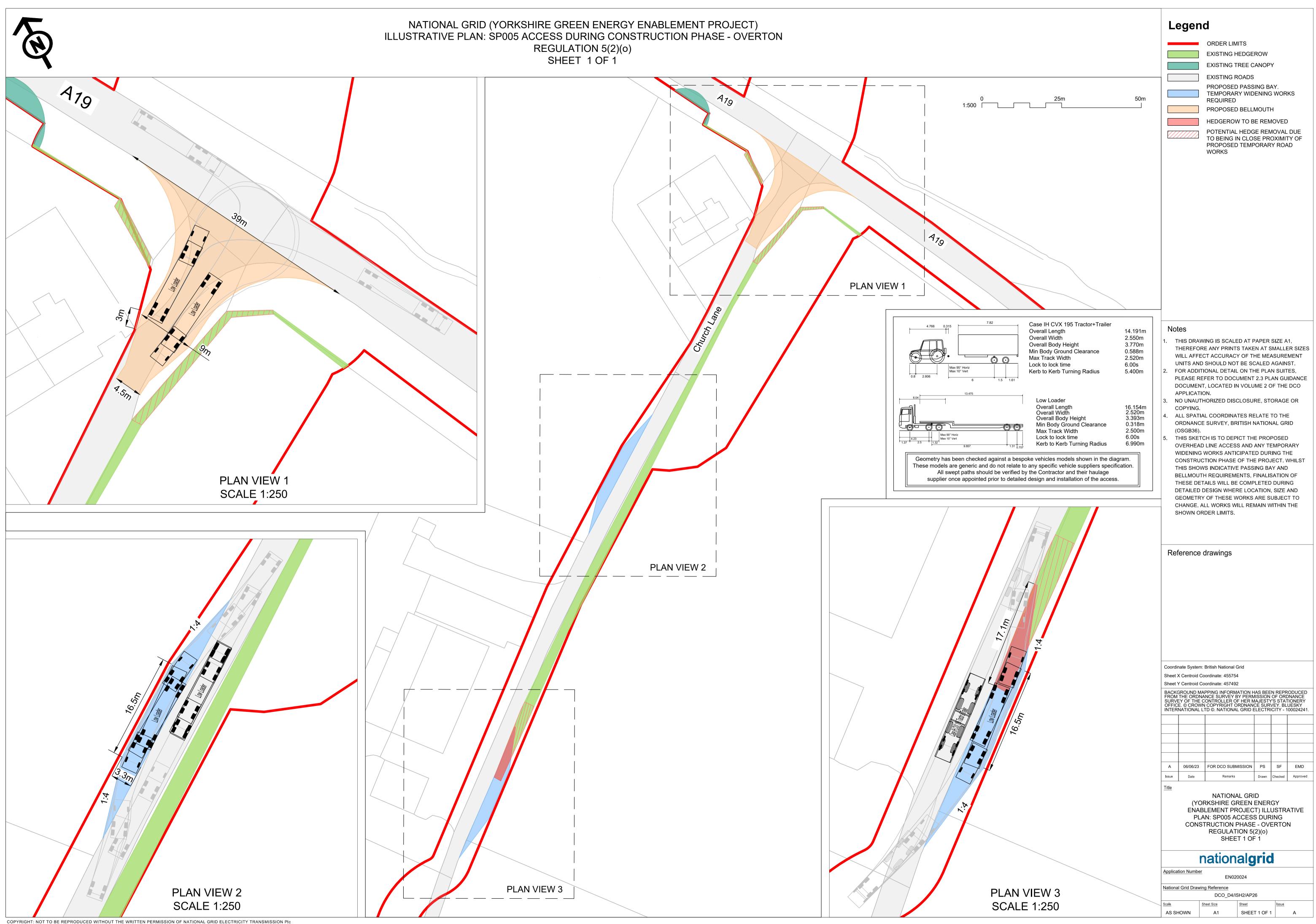
- b) technical measures eg equipment selection, recycling of waste or redundant parts, pollution control and treatment, containment (eg shielding of transformers and bunding)
- c) aesthetic and ecological measures eg
 - mounding, design, colour, landscaping, tree planting
 - measures to preserve particular habitats or create alternative habitats
 - recording of archaeological sites
 - measures to safeguard historic buildings or sites.

END

Appendix C Illustrative Plan: Indicative Soil Bunding for Construction and Permanent Phases



Appendix D Illustrative Plan: SP005 Access During Construction Phase



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