BT-NG-020621-545-0171

Bramford to Twinstead Reinforcement

Volume 6: Environmental Information

Document 6.3.4.2: ES Appendix 4.2 – Construction Schedule

Final Issue A
April 2023

Planning Inspectorate Reference: EN020002

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 Regulation 5(2)(a)

nationalgrid

Page intentionally blank

Contents

1. Introduction

1.1 Overview

1.1.1 National Grid Electricity Transmission plc (here on referred to as National Grid) is making an application for development consent to reinforce the transmission network between Bramford Substation in Suffolk, and Twinstead Tee in Essex. The Bramford to Twinstead Reinforcement ('the project') would be achieved by the construction and operation of a new electricity transmission line over a distance of approximately 29km (18 miles), the majority of which would follow the general alignment of the existing overhead line network.

1.1.2 This appendix has been produced to support the application for development consent and the accompanying Environmental Statement (ES) under the Planning Act 2008. It sets out the durations and phasing for the construction stage that have been assumed when undertaking the environmental impact assessment (EIA).

1.2 Construction Schedule

1.2.1 Construction of the project is expected to take up to five and a half years. Construction activities are likely to be sequenced and of a transient nature given the linear construction site. In any single location, perceptible construction activities are likely to be considerably shorter in duration than this. The target date for commencement of operation of the project is late 2028.

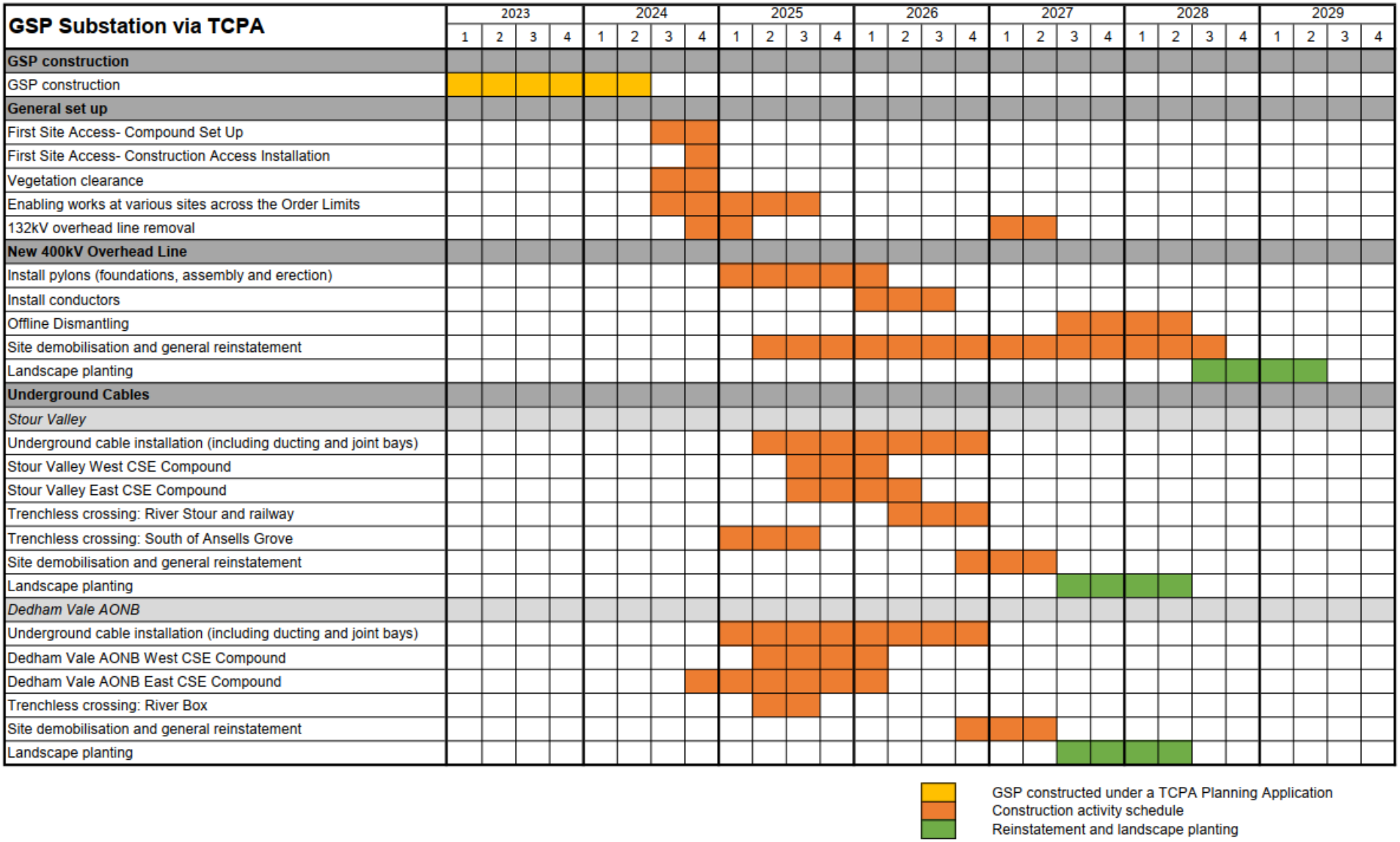
1.2.2 The construction schedules provide indicative durations and phasing for the purpose of preparing the EIA. In common with other Nationally Significant Infrastructure Projects, the eventual detailed construction programme would be subject to change from factors such as secondary consents, procurement, system access requirements (outages), resource and material availability, weather and ground conditions and in the case of this project, whether the (GSP) substation is constructed pursuant to the separate Town and Country Planning Act (TCPA) application and associated works pursuant to the Electricity Act 1989. The final proposed construction schedule would be included within the Stage Plan submitted to the relevant planning authorities in accordance with Requirement 3 of the draft Development Consent Order (**application document 3.1**) prior to commencement.

1.2.3 The EIA has considered two indicative construction schedules for the assumptions used within the ES; the 'baseline construction schedule' and the 'alternative scenario'. These are explained in more detail in Chapter 2 and 3 respectively.

2. Baseline Construction Schedule

2.1.1 The baseline construction schedule (Illustration 2.1) assessed in the EIA assumes that the GSP substation is constructed in advance of development consent, pursuant to the planning permission under the TCPA and associated works pursuant to the Electricity Act 1989. It assumes that the GSP substation and the associated works would take approximately 18 months to construct. The remaining works would then commence, subject to the successful granting of the Development Consent Order (DCO). Construction would continue for approximately four years. Land would be reinstated as soon as reasonably practicable and planting may continue beyond the construction phase, based on operational or seasonal constraints. The target date for the project to be operational is late 2028.

Illustration 2.1 – Baseline Construction Schedule (GSP Substation Constructed Via the TCPA Planning Application)



3. Alternative Scenario

3.1.1 National Grid is also considering a schedule that has the GSP substation construction included as part of the main works delivered pursuant to the DCO. This would mean that works at the GSP substation would commence subject to the successful granting of the DCO. There are some construction activities that could be undertaken concurrently to the GSP substation construction, for example works not dependent on the removal of the 132kV overhead line such as sections of underground cables and the Stour Valley West cable sealing end compound. The remaining construction activities, including removal of the 132kV overhead line and construction of the new 400kV overhead line would commence once the GSP substation is operational. Land would be reinstated as soon as reasonably practicable and mitigation planting may continue beyond the construction phase, based on operational and seasonal constraints. Under this scenario, it is assumed that the project would be operational by the end of 2028.

Illustration 3.1 – Alternative Scenario (GSP Substation Constructed Under the DCO)

GSP Substation via DCO	2023				2024				2025				2026				2027				2028				2029			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
GSP Construction																												
GSP construction																												
General set up																												
First Site Access- Compound Set Up																												
First Site Access- Construction Access Installation																												
Vegetation clearance																												
Enabling works at various sites across the Order Limits																												
132kV overhead line removal																												
New 400kV Overhead Line																												
Install pylons (foundations, assembly and erection)																												
Install conductors																												
Offline Dismantling - need for this option																												
Site demobilisation and general reinstatement																												
Landscape planting (at the end)																												
Underground Cables																												
Stour Valley																												
Underground cable installation (including ducting and joint bays)																												
Stour Valley West CSE Compound																												
Stour Valley East CSE Compound																												
Trenchless crossing: River Stour and railway																												
Trenchless crossing: South of Ansells Grove																												
Site demobilisation and general reinstatement																												
Landscape planting																												
Dedham Vale AONB																												
Underground cable installation (including ducting and joint bays)																												
Dedham Vale AONB West CSE Compound																												
Dedham Vale AONB East CSE Compound																												
Trenchless crossing: River Box																												
Site demobilisation and general reinstatement																												
Landscape planting																												

Construction activity schedule
Reinstatement and landscape planting

Page intentionally blank

National Grid plc
National Grid House,
Warwick Technology Park,
Gallows Hill, Warwick.
CV34 6DA United Kingdom

Registered in England and Wales
No. 4031152
nationalgrid.com