Document

5.26.5C

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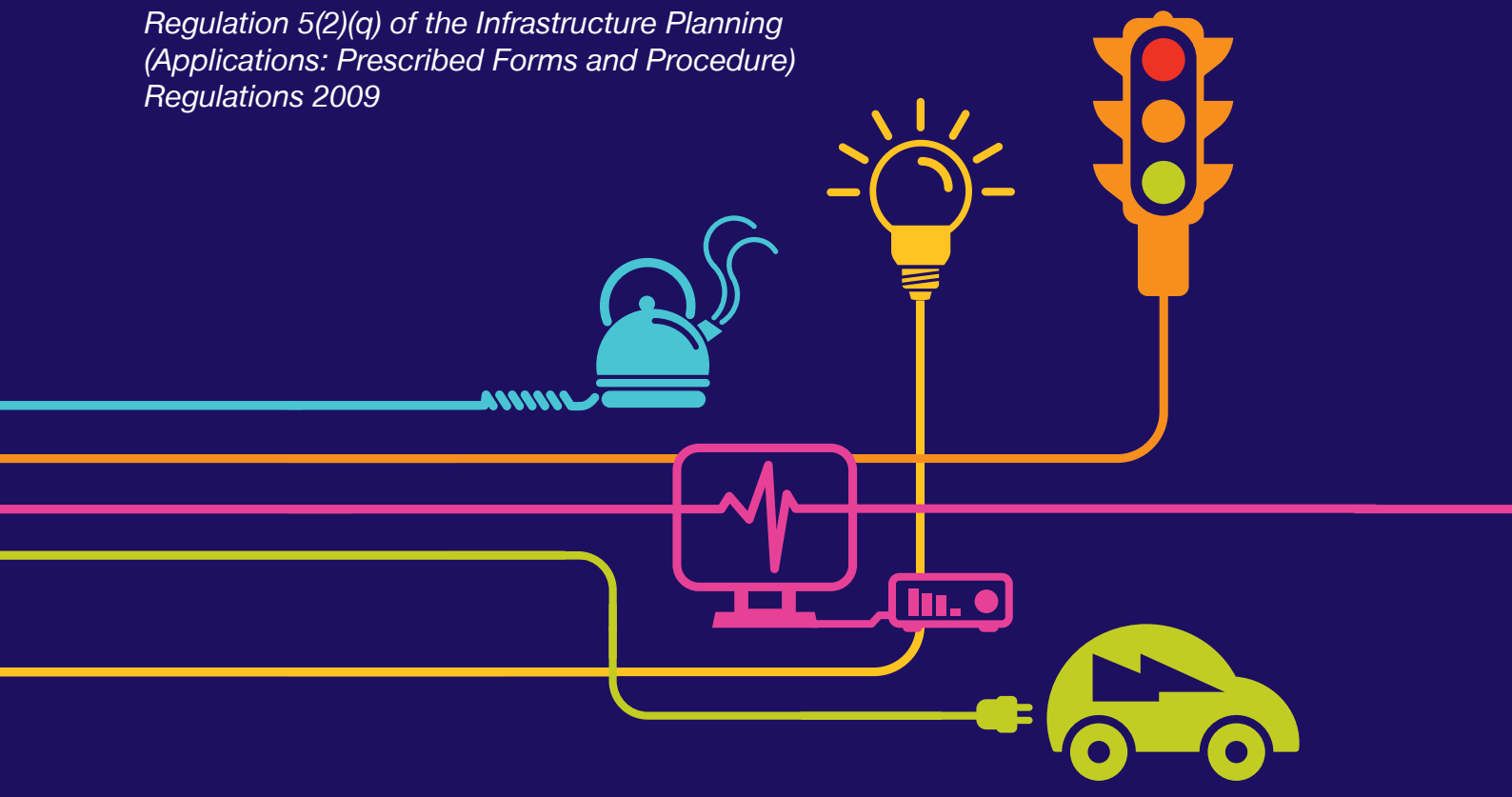
Environmental Statement Construction Environmental Management Plan Appendix 4 Construction Traffic Management Plan

Hinkley Point C Connection Project

Regulation 5(2)(q) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009



Application Reference EN020001

July 2015

nationalgrid

Hinkley Point C Connection Project

JULY 2015

VOLUME 5.26.5C, CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

APPENDIX 4 – CONSTRUCTION TRAFFIC MANAGEMENT PLAN

Document Control	
Document Properties	
Organisation	**National Grid**
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Title	**Construction Environmental Management Plan, Appendix 4 - Construction Traffic Management Plan**
Document Reference	**Volume 5.26.5C**

Date	**Version**	**Status**	**Description/Changes**
09/05/14	A	Superseded	Final version for DCO submission
19/01/15	B	Superseded	Updated version for submission to PINS
08/05/15	C	Superseded	Updated version for submission to consultees
01/06/15	D	Superseded	Updated version for submission to PINS
13/07/15	E	Live	Updated version for submission to PINS

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ANNEXES (VOLUME 5.26.5C)

ES1 EXECUTIVE SUMMARY

ES1.1 Introduction

Background

ES1.1.1 This Construction Traffic Management Plan (CTMP) (**Volume 5.26.5C**) accompanies an application by National Grid to seek powers to construct, operate and maintain a new 400,000 volt (400kV) connection between Bridgwater Substation in Somerset and Seabank Substation, north of Avonmouth (the Proposed Development).

ES1.1.2 During its construction, the Proposed Development requires the transportation of various people, plant and materials to and from the development. During the construction period, Western Power Distribution (WPD) will work to the same standards and protocols as National Grid and any reference to National Grid includes reference to WPD.

ES1.1.3 National Grid consulted with the relevant Local Highway Authorities (LHA) and Highways England (HE) to update the CTMP during the examination of the Development Consent Order (DCO). The CTMP has been certified by the Secretary of State in accordance with Article 45 of the DCO; compliance with the CTMP is secured via **Schedule 3, Requirement 5** of the DCO.

ES1.1.4 A Transport Assessment (TA) (**Volume 5.22**) and TA Sensitivity Test (**Volume 5.29.2**) which identify the potential effects associated with the traffic has been prepared and details the potential effects that would be generated by the Proposed Development.

ES1.1.5 National Grid proposes to undertake the construction of the Proposed Development with as little impact on the surrounding communities, environment and businesses as possible. The analysis conducted in the TA identifies sensitive junctions within the construction route network where mitigation is potentially required. The CTMP secures mitigation, management and monitoring measures in regard to traffic and transportation during the construction of the Proposed Development. The CTMP should be read alongside the TA and the TA Sensitivity Test.

ES1.1.6 The TA, TA Sensitivity Test and CTMP are supported by, and should be read alongside, Chapter 12 of the accompanying Environmental Statement (ES) (**Volume 5.12.1**). The ES assesses the likely environmental effects of the traffic associated with the Proposed Development. The ES also includes the identification of sensitive receptors and an assessment of the magnitude of potential environmental effects.

ES1.1.7 A Travel Plan has also been produced for the Proposed Development which is included at **Annex A** of this document.

ES1.2 Objectives

ES1.2.1 National Grid is committed to working with the LHAs and HE to limit the impacts of the Proposed Development in line with current national, regional and local transportation policy. The primary objectives of the CTMP are to:

- ensure that movement of people and materials are achieved in a safe, efficient, timely and sustainable manner;
- keep freight and construction traffic to a minimum during network peaks to reduce the impact on the highway network during the busy periods;
- ensure that the impact and disruption to the local communities and tourists is minimised;
- minimise construction trips where possible;
- ensure the continued monitoring, review and subsequent improvement of the CTMP and mitigation measures;
- limit the impacts on the Strategic Road Network (SRN) and the Local Road Network (LRN); and
- limit the impacts on the natural and built environment.

ES1.3 Scoping and Consultation

ES1.3.1 As part of the scoping exercise for the Proposed Development, a Scoping Report was produced setting out the proposed method for assessing the traffic and transport elements in the TA and the CTMP. This was submitted to the Planning Inspectorate and the LHAs potentially affected by the scheme. This included the following organisations:

- Somerset County Council (SCC) (incorporating Sedgemoor District Council (SDC) and West Somerset Council (WSC));
- North Somerset Council (NSC);
- Bristol City Council (BCC);
- South Gloucestershire Council (SGC); and
- Highways England (HE).

ES1.3.2 The comments which were raised have been incorporated, where appropriate, into the overall assessment of the Proposed Development.

ES1.3.3 As appropriate, National Grid will continue to consult and seek agreement with the LHAs on outstanding operational requirements related to the Proposed Development.

ES1.4 Development Phases

ES1.4.1 The CTMP considers the construction phase of the Proposed Development only. During operation the Proposed Development will generate very few vehicle movements and therefore its operational traffic and transport effects will be negligible.

ES1.5 Construction Timescales

ES1.5.1 The preliminary construction programme which forms the basis of the ES assessment is detailed at **Table 2.2** (see also **Volume 5.29.1.1**).

ES1.6 Access

ES1.6.1 The CTMP identifies three levels of access to the Proposed Development as follows:

- Strategic Road Network (SRN) – motorway network with a wide catchment to the local road network;
- Local Road Network (LRN) - local road which provide access from the SRN to the Proposed Development; and
- haul road – comprises a road network linking the LRN to areas of the Proposed Development which are currently inaccessible.

ES1.6.2 The CTMP identifies all the roads which compromise the SRN and LRN and the connections between the two networks.

Issues and Constraints

ES1.6.3 Common issues and constraints have been identified for the whole study area, i.e. the construction route network between the M5 and the Proposed Development. The common issues have been identified and mitigated at the strategic planning stage. The six common issues and constraints identified are:

- sensitive built up areas – avoidance by temporary construction traffic due to congestion, reduction in safety and air and noise pollution;
- avoidance of built up areas to remove conflicts with parking areas and local roads and streetscapes;
- avoidance or rural roads;
- limited visibility at bellmouths;
- impacts on pedestrian (PRoW) cyclists (National Cycle Network, Sustrans and local routes) equestrians (local routes); and
- construction traffic impacts on capacity of junctions and links on the construction routes (SRN and LRN).

ES1.6.4 The common issues and constraints identified have been mitigated within the construction route planning stage, bellmouth design stage, TA capacity analysis assessment stage and through the CTMP.

ES1.7 Routeing Strategy

ES1.7.1 The routeing strategy has been agreed with the LHAs and HE and is detailed at **Annex C** of this document. The proposed construction routes form eight distinct traffic networks which link the haul roads to the SRN via the LRN. The primary considerations for each routeing strategy are:

- to use the shortest route from the location of bellmouths to the primary distributive network;
- to avoid settlement and any other sensitive receptors to reduce congestion and minimise effects in cities, towns and villages; and
- to minimise travel on the LRN and use haul roads where possible.

ES1.8 Working Hours

ES1.8.1 Construction work will take place in accordance with the 'Construction Hours' set out in **Schedule 3, Requirement 7** of the DCO.

ES1.9 Mitigation Measures

ES1.9.1 The CTMP proposes the following mitigation measures to reduce the impacts of the Proposed Development on the SRN, LRN and communities and environment:

- HGV construction vehicle identification;

- preferred transport construction routes for HGV, LGV and staff;
- HGV traffic movement restrictions;
- permitted hours for on-site vehicle movements – permitted hours;
- control of HGV emissions (use of Euro standard IV vehicles to limit pollution);
- presence of banksman at accesses;
- capping of HGV movements;
- timings of HGV movements;
- set transport shift patterns;
- Delivery Management System (DMS);
- minimising staff trips through use of welfare-van services for staff transport;
- routeing staff to monitor construction routes;
- cleansing of vehicles;
- no provision for private vehicle parking at construction compound and laydown areas;
- PRoW Implementation Plan;
- highway condition surveys;
- Temporary Traffic Management (TTM);
- promotional material and communications;
- Transport Management Group (TMG) and Transport Co-ordination Officer (TCO) to be employed to implement and monitor the CTMP;
- Traffic Incident Management Plan (TIMP); and
- Travel planning measures promoted and implemented via a Travel Plan.

1 INTRODUCTION

1.1 Background and Scope

1.1.1 This Construction Traffic Management Plan (CTMP) accompanies an application by National Grid to seek powers to construct, operate and maintain a new 400,000 volt (400kV) connection between Bridgwater Substation in Somerset and Seabank Substation, north of Avonmouth (the Proposed Development).

1.1.2 The part of the Proposed Development that comprises an electric line above ground within section 16 of the Planning Act 2008 is a Nationally Significant Infrastructure Project (NSIP) for the purposes of that Act. Under Section 31 of the Planning Act 2008, development consent is required for development to the extent that it is or forms part of an NSIP. Development consent is granted by the making of a Development Consent Order (DCO) for which application may be made under section 37 of the Planning Act 2008.

1.1.3 The Proposed Development (described in more detail at **Volume 5.3.1** (Project Description)) comprises the following principal elements:

- construction of a 57km 400kV electricity transmission connection between Bridgwater in Somerset and Seabank, near Avonmouth, comprising:
  - installation of a 400kV overhead line; and
  - installation of 400kV underground cables.
- modifications to existing overhead lines at Hinkley Point, Somerset;
- construction of three 400kV cable sealing end (CSE) compounds along the route of the connection;
- construction of a 400/132kV substation at Sandford, North Somerset;
- extension of the existing 400kV substation at Seabank;
- the removal of existing 132kV overhead lines and the construction of replacement 132kV overhead lines and 132kV underground cables;
- extensions/modifications to existing 132kV substations at Churchill, Portishead, Avonmouth and Seabank; and
- associated works, for example, temporary access roads, highway works, temporary construction compounds, scaffolding, work sites and ancillary works.

1.2 Objectives

1.2.1 This CTMP details the measures to be implemented to provide mitigation for the traffic generated during the construction of the Proposed Development. The CTMP has been prepared to ensure that the management and mitigation measures contained within this document minimise the impact on existing users of the public highway network.

1.2.2 National Grid consulted with the relevant Local Highway Authorities (LHAs) and Highways England (HE) to update the CTMP during the examination of the Development Consent Order (DCO). The CTMP was certified by the Secretary of

State in accordance with Article 45 of the DCO; compliance with the CTMP will be secured via **Schedule 3, Requirement 5** of the DCO.

1.2.3 During the construction period, Western Power Distribution (WPD) will work to the same standards and protocols as National Grid and any reference to National Grid includes reference to WPD.

1.2.4 This CTMP should be read alongside the Environmental Statement (ES) (**Volume 5.1 – 5.19**), Transport Assessment (TA) (**Volume 5.22**) and TA Sensitivity Test (**Volume 5.29.2**) which also support the DCO. The objectives of this CTMP are outlined in **Table 1.1** below:

Table 1.1 Objectives of the CTMP

Objective	Description
A	Ensure that movements of people and materials are achieved in a safe, efficient, timely and sustainable manner.
B	Keep freight and construction traffic to a minimum during network peaks to reduce the impact on the highway network during busy periods.
C	Ensure that the impact and disruption to the local communities and tourists is minimised.
D	Minimise construction trips where possible.
E	Ensure the continued monitoring, review and subsequent improvement of the CTMP and mitigation measures contained herein.
F	Limit the impacts on the Strategic Road Network (SRN) and Local Road Network (LRN).
G	Limit the impacts on the natural and built environment.

1.3 Scoping and Consultation

1.3.1 As part of the scoping exercise for the Proposed Development, a Scoping Report was produced setting out the proposed method for assessing the traffic and transport elements in the TA and the CTMP. This was submitted to the Planning Inspectorate and the LHAs potentially affected by the scheme. This included the following organisations:

- Somerset County Council (SCC) (incorporating Sedgemoor District Council (SDC) and West Somerset Council (WSC));
- North Somerset Council (NSC);
- Bristol City Council (BCC);
- South Gloucestershire Council (SGC); and
- Highways England (HE).

1.3.2 The comments which were raised have been incorporated, where appropriate, into the overall assessment of the Proposed Development.

1.3.3 As appropriate, National Grid will continue to consult and seek agreement with the LHAs on outstanding operational requirements related to the Proposed Development.

2 THE PROPOSED DEVELOPMENT

2.1 Overview

2.1.1 The Proposed Development is in the south west of England in the administrative boundaries of the following Local Authorities:

- Somerset County Council;
- West Somerset District Council – Somerset County Council as Highway Authority;
- Sedgemoor District Council – Somerset County Council as Highway Authority;
- North Somerset Council;
- Bristol City Council; and
- South Gloucestershire Council.

2.1.2 The Proposed Development may also have an impact on the SRN (specifically the M5). Therefore, HE is also a stakeholder in the planning and development process.

2.1.3 The Proposed Development has been split into eight Sections (Sections A - H) as follows:

- Section A: Puriton Ridge;
- Section B: Somerset Levels and Moors South;
- Section C: Mendip Hills AONB;
- Section D: Somerset Levels and Moors North
- Section E: Tickenham Ridge;
- Section F: Portishead;
- Section G: Avonmouth; and
- Section H: Hinkley Line Entries.

Development Phases

2.1.4 The CTMP considers the construction phase of the Proposed Development only. During operation the Proposed Development will generate very few vehicle movements and therefore its operational traffic and transport effects will be negligible.

2.1.5 The traffic generation during decommissioning would be similar to that during construction; however, given that decommissioning would occur so far into the future (60 years plus), its impacts cannot be accurately assessed at this time and a separate study and decommissioning plan would be required prior to the decommissioning taking place (see **Schedule 3, Requirement 34** of the DCO).

Vehicle Classification

2.1.6 A number of vehicle types will be used for the construction traffic. **Table 2.1** below details each vehicle with a brief vehicle specification.

Table 2.1 Typical Construction Vehicle Classification

Light (LGVs)	Medium (MGVs)	Heavy (HGVs)
Car	Excavator	40 tonne truck
Van	Winch Tractor	Low Loader
4x4 pick-up	Tractor and Trailer	Flat Bed
4x4 transit	7 tonne truck	Truck
Welfare Van		Crane

2.1.7 The vehicles and specifications provided above have been identified based on similar projects by scale and type.

2.1.8 Construction machinery and on-site plant, vehicles and generator fuel tanks will be re-fuelled on site.

LGV and HGV Movements

2.1.9 LGV and HGV traffic movements have been assessed as part of the TA (**Volume 5.22**) and the TA Sensitivity Test (**Volume 5.29.2**).

AIL Movements

2.1.10 The Proposed Development will require the movement of abnormal indivisible loads (AILs) to transport plant to each relevant site.

2.1.11 The Road Vehicles (Authorisation of Special Types) General Order 2003 sets out the categories of AILs with regard to weight, width and length. Depending on the size of the plant to be transported different arrangements may be required in terms of temporary traffic management and the management and timing of these movements. These movements will be required to meet the standards and guidelines as set out in the Road Vehicles (Authorisation of Special Types) General Order 2003.

Project Timescale

2.1.12 The preliminary construction programme which forms the basis of the ES assessment is detailed at **Table 2.2** below (see also **Volume 5.29.1.1**).

Table 2.2 Preliminary Construction Programme

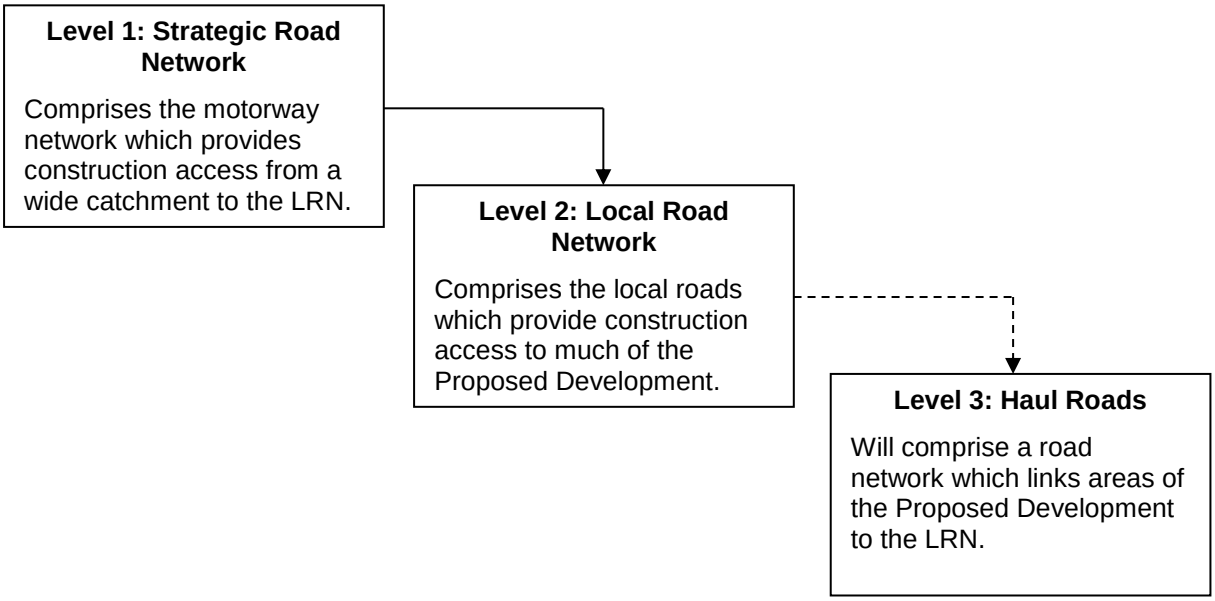
Proposed Development Component	Start Date	Finish Date
400kV Overhead Line 400kV Route (South)	Q2 2018	Q2 2020
400kV Overhead Line 400kv Route (North)	Q3 2018	Q3 2021
400kV Overhead Line 400kV Route (Huntspill to Bridgwater Tee)	Q3 2019	Q2 2020
400kV Cable Mendip Hills Route - works between A38 Bristol Road to Tower head Road (including South of Mendip Hills CSE Compound, A38 Bristol Road (UGC) Compound and haul Road	Q1 2016	Q2 2020
400kV Cable Mendip Hills Route – works between Towerhead Road and Sandford Substation	Q1 2018	Q2 2020
400kV Cable – works between Towerhead Road and Sandford Substation (haul road and compound only)	Q1 2017	Q3 2021
Bridgwater Tee 400kV Cable Route	Q3 2019	Q3 2020
AT Route Underground and Overhead Line	Q4 2019	Q3 2020
W Route	Q2 2017	Q2 2019
BW Route Avonmouth Option A	Q4 2018	Q2 2019
BW Route Portishead Option B	Q4 2018	Q4 2019
G Route	Q3 2019	Q3 2020
Seabank Line Entries BW Route	December 2015	Q2 2016
Seabank Line Entries G Route	Q1 2016	Q3 2016
Seabank Line Entries DA Route	Q1 2018	Q3 2018
N Route Overhead Line (including disconnection and removal)	Q3 2019	Q2 2020
Hinkley Line Entries	Q3 2018	Q3 2022
Y Route Churchill	Q1 2018	Q4 2018
W Route Churchill	Q3 2018	Q3 2018
Sandford 400/132kV Substation	Q1 2018	Q3 2020
Seabank 400/132kV Substation	Q4 2019	Q4 2021
Churchill 132/33kV WPD Substation	December 2015	Q4 2018
Portishead 132/33kV WPD Substation	Q3 2018	Q2 2019
Avonmouth132/33kV WPD Substation	Q3 2019	Q2 2020
Removal of Southern Half F Route	Q3 2019	Q4 2019
Removal of Northern Half F Route	Q2 2020	Q2 2021
Removal of 132kV G Route	Q3 2019	Q3 2020

3 ACCESS

3.1 Introduction

3.1.1 To provide access to the Proposed Development, there are three levels of access roads outlined in **Inset 3.1** below:

Inset 3.1: Construction Access Hierarchy



3.2 Strategic and Local Road Network

3.2.1 The SRN comprises the M5 corridor which runs roughly parallel to the majority of the Proposed Development. From south to north, the access points to the SRN are as follows (these are shown at **Volume 5.26.5C, Annex C**).

- M5 Junction 23;
- M5 Junction 22;
- M5 Junction 21;
- M5 Junction 20;
- M5 Junction 19;
- M5 Junction 18A/18;
- St Andrew's Road/King Road Avenue/Crowley Way;
- M5/A4/Avonmouth Way; and
- M5/A4/Bristol Broadway/Avonmouth Road/Portway.

3.3.1 To provide construction access to the SRN, the LRN has been prescribed for construction traffic. Each road on the designated LRN has been provided in **Table 3.1** below in relation to its section and nearest access to the SRN.

Table 3.1 Breakdown of the LRN

Section	LRN Road		Nearest SRN Junction onto M5
	Number	Name	
A	A38	Bristol Road	Junction 23, M5
	A39	(unnamed section)	
		Puriton Hill	
		Bath Road (south)	
		Bath Road (east)	
	B3141	Woolavington Hill	
B	B3139	Lockswell	
		Causeway	
		Church Road	Junction 22, M5
		Mark Road	
	-	Bennet Road	
	A38	Bristol Road	
		(unnamed section)	
		Turnpike Road	
C	A38	Bridgwater Road	
		Bristol Road	Junction 21, M5
		New Road	
D	A38	Bristol Road	
	A368	Dinghurst Road	
		Greenhill Road	
		Station Road	
	B3133	(unnamed section)	
		Stock Lane	
		Brinsea Road	
		High Street	
	A370	Station Road	
		Weston Road	
		Somerset Avenue	
		(unnamed section)	
	-	May's Green Lane	
		Puxton Road	

Section	LRN Road		Nearest SRN Junction onto M5
	Number	**Name**	
	A370	(unnamed section)	Junction 20, M5
	-	Brockley Lane	
		Chelvey Road	
		Netherton Wood Lane	
		Engine Lane	
		North Street	
		Hanham Way	
		Causeway	
		Union Street	
		Silver Street	
		Stock Way North	
		Nailsea Wall Lane	
		Nailsea Wall	
		Davis Lane	
		Kenmoor Road	
		Manmoor Lane	
	B3133	Kenn Road	
		(unnamed section)	
		Ettlingen Way	
	-	Central Way	
		Northern Way	
	B3130	Tickenham Road	
	B3128	Clevedon Road	
E	B3128	Tickenham Hill	Junction 19, M5
	-	Cuckoo Lane	
		Whitehouse Lane	
		Caswell Hill	
		Caswell Lane	
F	A369	The Portbury Hundred	
	-	Caswell Lane	
		Sheepway	
		Station Road	

Section	LRN Road		Nearest SRN Junction onto M5
	Number	Name	
		Royal Portbury Dock road	
		The Drove	
		Portbury Way	
G	A4	Portway	Junctions 18A/18, M5
		Bristow Broadway	
		Crowley Way	
	-	Avonmouth Way	
		West Town Road	
		Victoria Road	
		King Road	
	A403	St. Andrew's Road	
		Smoke Lane	
		Chittening Road	
		Severn Road	
	-	Kings Weston Way	
		Poplar Way West	
		Poplar Way East	
		Packgate Road	
		Ableton Lane	
		Minors Lane	
H	A38	Bristol Road	Junction 23, M5
	A39	The Drove	
		Western Way	
		Homberg Way	
		Quantock Road	
		New Road	
		Main Road	
		(unnamed section)	
	-	High Street	
		Rodway	
		Wick Moor Drove	

3.3.2 To meet the objectives set out in section 1.2 of this CTMP, the roads which make up the LRN included in **Table 3.1** above will be subject to appropriate mitigation measures. These measures are detailed in section 6 of this document.

3.3.3 The respective sensitivity of these roads has been explored in the Traffic and Transport chapter (**Volume 5.12.1**) of the accompanying ES.

3.3.4 All construction traffic must adhere to the prescribed routeing strategy which is set by this CTMP. As part of the CTMP control and monitoring measures, deviation from the approved routes will result in enforcement procedures and penalties. The mitigation, monitoring and enforcement are discussed in detail in section 7 of this CTMP.

3.3.5 No Proposed Development construction traffic will travel through Banwell to access the working areas.

Access Points

3.3.6 The proposed alignment of the overhead and underground line has been divided into eight Sections (A – H). Each Section of the overhead line and underground cables will require access from the LRN. Construction routes have been identified and agreed in principle with the LHAs. These construction routes are set out within **Annex C** of this document.

3.3.7 A total of 117 bellmouths are proposed on the LRN.

3.3.8 Each bellmouth is identified at **Volume 5.26.5C, Annex C**. As part of the proposals and as agreed through consultation with the LHAs, all bellmouths have been designed to a permanent standard.

Haul Roads

3.3.9 In cases where the Proposed Development cannot be accessed solely by the existing LRN road network and construction vehicles have to achieve access, temporary haul roads will be constructed.

3.3.10 A construction method for haul roads has been produced by National Grid at **Volume 5.3.2, Appendix 3G (9)** - 'Hazard Identification, Risk Assessment and Method Statement for the Installation and Removal of Haul Roads'.

Local Highway Issues and Constraints

Types of Constraints/Issues

3.3.11 Site visits along the proposed construction access routes were conducted with the LHAs throughout the consultation process. The issues and constraints have been identified through on-site inspection of these routes and include:

- height restrictions;
- weight restrictions;

- road classification;
- road layout;
- existing crossing facilities;
- existing traffic calming features;
- sensitive receptors adjacent to the public highway;
- visibility constraints;
- restricted access;
- speed limits and traffic speeds;
- congestion;
- large gradient changes;
- Public Rights of Way (PRoW); and
- other road users (pedestrians, cyclists and equestrians).

Issues/Constraints Identified

3.3.12 The study area encompasses all vehicular routes to be used to and from the proposed sites and the M5 corridor, and the Proposed Development. A number of common issues and constraints have been identified in regard to the study area. These are set out in **Table 3.2** below and many have been mitigated at the strategic planning stage.

Table 3.2 Common Issues and Constraints

No.	Issue/Constraint	Mitigated at Stage	Mitigation
1	Sensitive, built up areas (villages, towns) to be avoided by temporary construction traffic due to congestion, reduction of safety and air and noise pollution	Construction route planning stage	Final construction routeing and highway signage agreed with LHAs
2	Avoidance, if possible of built up areas to remove conflicts with parking areas and local roads and streetscapes	Construction route planning stage	Final construction routeing and highway signage agreed with LHAs
3	Avoidance of narrow rural roads	Construction route planning stage	Final construction routeing agreed with LHAs
4	Limited visibility at bellmouths	Bellmouth design stage	Bellmouth designs to be agreed with LHAs
5	Impacts on pedestrian (PRoW), cyclist (National Cycle Network, Sustrans and local routes) and equestrians (local routes)	Construction route planning and bellmouth design stages	Where pedestrian, cyclist and equestrian networks are likely to be impacted by bellmouth locations, re-provision through alternate alignment has been proposed and agreed with LHAs

No.	Issue/Constraint	Mitigated at Stage	Mitigation
6	Construction traffic impacts on capacity of junctions and links on the construction routes (SRN and local highway network)	Transport and Construction route planning stage, TA capacity analysis, CTMP, TIMP and mitigation	Capacity assessments undertaken and results included within the TA (**Volume 5.22**). Mitigation proposed including vehicle movement restrictions.
7	Environmental interests in the local area, i.e. conservation areas, monuments, listed buildings and Sites of Specific Scientific Interest (SSSI)	Mitigation identified in the ES and ES supporting documents (**Volume 5**) and implemented via DCO Requirements and legal agreement.	

Junction Capacities along the Construction Vehicle Routes

3.3.13 In addition to the above issues and constraints, the LHAs identified junctions on the proposed and agreed construction vehicle routes where capacity assessments are required. This has been undertaken and detailed within the TA (**Volume 5.22**) and the TA Sensitivity Test (**Volume 5.29.2**).

4 ROUTEING STRATEGY

4.1 Introduction

4.1.1 The study area has been broken into smaller areas to allow for a more transparent and practical assessment. Eight smaller Sections (see **Volume 5.1.1. and 5.3.1** for a description of the Sections) have been identified as referenced in **Table 4.1** below.

4.1.2 To provide safe and responsible construction vehicle access to various locations (bellmouth, compound or substation) of the Proposed Development and to help achieve the objectives outlined in **Table 1.1**, proposed construction traffic routes have been derived and agreed with the LHAs. This will be followed by both Light Goods Vehicles (LGVs) and Heavy Goods Vehicles (HGVs) during the construction phase of the Proposed Development. The primary considerations for each routeing strategy are as follows:

- to use the shortest route from the location of bellmouths to the primary distributive network;
- to avoid settlement and any other sensitive receptors to reduce congestion and minimise effects in cities, towns and villages; and
- to minimise travel on the LRN and use haul roads where possible.

4.1.3 The prescribed route from each bellmouth to junctions 18-23 of the M5 is detailed in **Table 4.1** below.

Table 4.1 Bellmouth Locations

Section	Bellmouth	LRN	SRN	Route
H	ZZ7-BM01	A39	23	M5 Junction 23, A39, A38 Bristol Road, A39 The Drove/Western Way/Homberg Way/Quantock Rd/New Rd/Main Rd, A39, High St, Rodway, Withycombe Hill
H	ZG7-BM01	A39	23	M5 Junction 23, A39, A38 Bristol Road, A39 The Drove/Western Way/Homberg Way/Quantock Rd/New Rd/Main Rd, A39, High St, Rodway, Withycombe Hill
H	VQ3C-BM01	A39	23	M5 Junction 23, A39, A38 Bristol Road, A39 The Drove/Western Way/Homberg Way/Quantock Rd/New Rd/Main Rd, A39, High St, Rodway, Withycombe Hill, Wick Moor Drove
H	JP3-BM01	A39	23	M5 Junction 23, A39, A38 Bristol Road, A39 The Drove/Western Way/Homberg Way/Quantock Rd/New Rd/Main Rd, A39, High St, Rodway, Withycombe Hill, Wick Moor Drove
H	JP1-BM01	A39	23	M5 Junction 23, A39, A38 Bristol Road, A39 The Drove/Western Way/Homberg Way/Quantock Rd/New Rd/Main Rd, A39, High St, Rodway, Withycombe Hill, Wick Moor Drove
A	VQ043R-BM01	A39 Puriton Hill	23	M5 Junction 23, A39 Puriton Hill, A39 Bath Road (South)

Section	Bellmouth	LRN	SRN	Route
A	C-ZGA3-BM01	-	23	M5 Junction 23, A39 Puriton Hill
A/B	C-ZGA4-BM01	A39 Bath Road (East)	23	M5 Junction 23, A39 Puriton Hill, A39 Bath (East), B3141, B3139
A/B	C-ZGA12-BM01	A39 Bath Road (East)	23	M5 Junction 23, A39 Puriton Hill, A39 Bath (East), B3141, B3139
A/B	C-ZGA13-BM01	A39 Bath Road (East)	23	M5 Junction 23, A39 Puriton Hill, A39 Bath (East), B3141, B3139, Middle Moor Drove
A/B	C-LD3-BM01	A39 Bath Road (East)	23	M5 Junction 23, A39 Puriton Hill, A39 Bath (East), B3141, B3139
B	C-LD9-BM01	A38 Bristol Road	22	M5 Junction 22, A38 Bristol Road, Bennett Road, B3139 Mark road, B3141 Church Road/Causeway
B	Junction 01*	A38 Bristol Road	22	M5 Junction 22, A38 Bristol Road, Bennett Road, B3139 Mark road, B3141 Church Road, Factory Lane
B	C-LD10-BM01	A38 Bristol Road	22	M5 Junction 22, A38 Bristol Road
B	400-UG-BM01	A38 Bristol Road	22	M5 Junction 22, A38 Bristol Road
B/C	400-UG-BM10	A38 Bristol Road	22	M5 Junction 22, A38 Bristol Road/Turnpike Road/Bridgwater Road/Bristol Road/New Road, A368 Dinghurst Road/Greenhill Rd/Station Rd/Towerhead Road
B/C/D	400-UG-BM11	A38 Bristol Road	22	M5 Junction 22, A38 Bristol Road/Turnpike Road/Bridgwater Road/Bristol Road/New Road, A368 Dinghurst Road/Greenhill Rd/Station Rd/Towerhead Road
D	C-LD39-BM01	A370	21	M5 Junction 21, A370
D	AT29-BM01	A370	21	M5 Junction 21, A370, May's Green Lane, Puxton Road
B/C/D	Y-Route-BM01	A38 Bristol Road	22	M5 Junction 22, A38 Bristol Road/Turnpike Road/Bridgwater Road/Bristol Road/New Road/Bristol Rd, B3133, B3133 Stock Lane, Wood Lane
B/C/D	Y-Route-BM02	A38 Bristol Road	22	M5 Junction 22, A38 Bristol Road/Turnpike Road/Bridgwater Road/Bristol Road/New Road/Bristol Rd, B3133, B3133 Stock Lane, Wood Lane
D	C-LD53-BM01	A370	21	M5 Junction 21, A370
D	C-LD54-BM01A	B3133	20	M5 Junction 20, B3133 Ettlingen Way, Central Way, B3133, B3133 Kenn Road
D	C-LD62-BM01	B3133	20	M5 Junction 20, B3133 Ettlingen Way, Central Way, B3133, Davis Ln, Kennmoor Road
D	C-LD70-BM01	B3133	20	M5 Junction 20, B3133 Ettlingen Way, Central Way, B3133, Davis Ln, Kennmoor Road

Section	Bellmouth	LRN	SRN	Route
D	C-LD74-BM01	B3133	20	M5 Junction 20, B3133 Ettlingen Way, Central Way, B3133, Davis Ln, Nailsea Wall
D	C-LD76-BM01	B3130	20	M5 Junction 20, B3133 Ettlingen Way, Northern Way, B3130 Tickenham Rd/Clevedon Rd, Stock Way North, Stock Way South, Mizzymead Rd, Queens Rd, Hanham Way
D	W-Route-BM01.1 & W-Route-BM02	B3130	20	M5 Junction 20, B3133 Ettlingen Way, Northern Way, B3130 Tickenham Rd/Clevedon Rd, Stock Way North, Stock Way South, Mizzymead Rd, Queens Rd, Hanham Way
D	W-Route-BM00.1	B3130 (A370) (Contingency)	20 (21)	In: M5 Junction 20, B3133 Ettlingen Way, Northern Way, B3130 Tickenham Rd/Clevedon Rd, Stock Way North, Stock Way South, Mizzymead Rd, Queens Rd, Hannah More Rd, Blackfriars Rd, Engine Lane Out: Engine Lane, St. Mary's Grove, Hannah More Rd, Queens Rd, Mizzymead Rd, Stock Way South, Stock Way North, B3130 Clevedon Rd/Tickenham, Northern Way, B3133 Ettlingen Way, M5 Junction 20
D	W-Route-BM01	B3130 (A370) (Contingency)	20 (21)	In: M5 Junction 20, B3133 Ettlingen Way, Northern Way, B3130 Tickenham Rd/Clevedon Rd, Stock Way North, Stock Way South, Mizzymead Rd, Queens Rd, Hannah More Rd, Blackfriars Rd, Engine Lane Out (Primary): Engine Lane, St. Mary's Grove, Hannah More Rd, Queens Rd, Mizzymead Rd, Stock Way South, Stock Way North, B3130 Clevedon Rd/Tickenham, Northern Way, B3133 Ettlingen Way, M5 Junction 20 Out (Secondary): Engine Lane, North Street, Queens Rd, Mizzymead Rd, Stock Way South, Stock Way North, B3130 Clevedon Rd/Tickenham, Northern Way, B3133 Ettlingen Way, M5 Junction 20
D	W-Route-BM04.1	B3130	20	M5 Junction 20, B3133 Ettlingen Way, Northern Way, B3130 Tickenham Rd/Clevedon Rd
D	W-Route-BM05	B3130	20	M5 Junction 20, B3133 Ettlingen Way, Northern Way, B3130 Tickenham Rd/Clevedon Rd
E	W-Route-BM06	B3130	20	M5 Junction 20, B3133 Ettlingen Way, Northern Way, B3130 Tickenham Rd/Clevedon Rd
D	C-LD79-BM01	B3130	20	M5 Junction 20, B3133 Ettlingen Way, Northern Way, B3130 Tickenham Rd/Clevedon Rd
E/F	W-Route-BM07	A369	19	In: M5 Junction 19, A369 The Portbury Hundred, [Haul Road], Caswell Lane, Caswell Hill, Whitehouse Lane.

Section	Bellmouth	LRN	SRN	Route
				Out: Whitehouse Lane, [Haul Road], Caswell Lane, [Haul Road], (Left Turn out) A369 The Portbury Hundred, (Around Roundabout) A369 The Portbury Hundred, M5 Junction 19.
E/F	W-Route-BM08	A369	19	In: M5 Junction 19, A369 The Portbury Hundred, [Haul Road], Caswell Lane, (Caswell Hill, Whitehouse Lane)*. *Could use W-Route-BM09 for these 5 pylons Out: Caswell Lane, [Haul Road], (Left Turn out) A369 The Portbury Hundred, (Around Roundabout) A369 The Portbury Hundred, M5 Junction 19.
E/F	W-Route-BM09	A369	19	In: (circular route via W-Route-BM08): M5 Junction 19, A369 The Portbury Hundred, [Haul Road], Caswell Lane, (Caswell Hill, Whitehouse Lane)*. *Could use W-Route-BM09 direct for these 5 pylons Out: Caswell Lane, [Haul Road], (Left Turn out) A369 The Portbury Hundred, (Around Roundabout) A369 The Portbury Hundred, M5 Junction 19.
F	C-LD92-BM01	A369	19	In: M5 Junction 19, A369 The Portbury Hundred, [Haul Road], Caswell Lane Out: Caswell Lane, [Haul Road], (Left Turn out) A369 The Portbury Hundred, (Around Roundabout) A369 The Portbury Hundred, M5 Junction 19.
F	W-Route-BM10	A369 The Portbury Hundred	19	In: M5 Junction 19, A369 The Portbury Hundred, [Haul Road], to Caswell Lane Out: From Caswell Lane, [Haul Road], (Left Turn out) A369 The Portbury Hundred, (Around Roundabout) A369 The Portbury Hundred, M5 Junction 19.
F	W-Route-BM11 & W-Route-BM11.1	A369 The Portbury Hundred	19	M5 Junction 19, A369 The Portbury Hundred, Sheepway
F	W-Route-BM12	A369 The Portbury Hundred	19	M5 Junction 19, A369 The Portbury Hundred, Sheepway
F	BW-P-BM01	Royal Portbury Dock Rd	19	M5 Junction 19, Royal Portbury Dock Road, Portbury Way
F	C-LD95A-BM02	A369 The Portbury Hundred	19	In: M5 Junction 19, A369 The Portbury Hundred. Out: (Left Turn out) A369 The Portbury Hundred, (Around Roundabout) A369 The Portbury Hundred, M5 Junction 19.
F	C-LD96-BM01	A369 The Portbury Hundred	19	M5 Junction 19, A369 The Portbury Hundred

Section	Bellmouth	LRN	SRN	Route
G	P-LD101-BM01	Royal Portbury Dock Rd	19	M5 Junction 19, Royal Portbury Dock Road, Private Road(s)
G	C-LD107-BM01	A4 Portway	18/18A	M5 Junction 18/18A, A4 Portway, West Town Road, Victoria Road
G	G-Route-BM01	-	18/18A	M5 Junction 18/18A, Avonmouth Way
G	G-Route-BM02	-	18/18A	M5 Junction 18/18A, Avonmouth Way
G	C-LD119-BM01	A403	18/18A	M5 Junction 18/18A, A4 Crowley Way, A403 St. Andrew's Road/Smoke Lane, Poplar Way West, Poplar Way East, Packgate Road
G	C-LD121-BM01	A403	18/18A	M5 Junction 18/18A, A4 Crowley Way, A403 St. Andrew's Road/Smoke Lane/Chittening Rd, Severn Road
G	C-LD124-BM01	A403	18/18A	M5 Junction 18/18A, A4 Crowley Way, A403 St. Andrew's Road/Smoke Lane/Chittening Rd, Severn Road, Ableton Road

5 SIGNING STRATEGY AND CORE WORKING HOURS FOR TRAFFIC MANAGEMENT

5.1 Access Route and Point Signing

5.1.1 Temporary signage will be erected along construction traffic routes on the LRN to provide access (directional) routeing information. These will be placed to ensure that construction vehicles and staff are able to travel directly to site from the SRN. Locations of the temporary signage will be drafted in plan format and approved by the relevant LHA ahead of installation in accordance with **Schedule 3, Requirement 25** of the DCO.

5.1.2 This temporary signage will also be provided in the vicinity of each bellmouth and also will provide warning to other road users of the likely presence of construction vehicles. Temporary signage will be produced and agreed with the LHAs in accordance with **Schedule 3, Requirement 25** of the DCO.

5.1.3 The method of sign installation is described in the bellmouth and haul road construction method statements at **Volume 5.3.2, Appendix 3G (10)** – 'Hazard Identification, Risk Assessment and Method Statement for Ducted Road Crossings and Access Bellmouth Installations'.

5.2 Haul Road Signing

5.2.1 Similar to the above access route, temporary signage will be erected along proposed construction haul roads where necessary. The signage will provide drivers with information on distances to destination, and warning (hazard) information relating to potential vehicle conflict areas (cross over points).

5.2.2 Locations of the temporary signage will be drafted in plan format and approved by the relevant LHA ahead of installation.

5.3 Temporary Diversion Signing

5.3.1 In the event that any diversions of traffic along the construction traffic routes are required, temporary signage will be installed by National Grid or the relevant LHA or both in accordance with relevant signage design guidance as is standard.

5.4 Working Hours

5.4.1 Construction work will take place in accordance with the 'Construction Hours' set out in **Schedule 3, Requirement 7** of the DCO.

6 MITIGATION MEASURES

6.1 Introduction

6.1.1 National Grid will implement a number of mitigation measures as set out below via DCO Requirements.

6.1.2 Each mitigation measure relating to the construction phase of the Proposed Development has been detailed in the following paragraphs.

6.2 HGV and LGV Construction Vehicle Identification

6.2.1 All HGV and LGV construction vehicles associated with the Proposed Development will be clearly identifiable through the use of a vehicle marking scheme; this is secured via **Schedule 3, Requirement 24** of the DCO. The purpose of this is to assist with the monitoring process of the construction vehicles over the SRN and LRN.

6.2.2 It is envisaged that this will by a sign attached to the side of all HGVs and LGVs entering and exiting the working areas onto the LRN. This signage would be passed to appointed contractors prior to the start of construction.

6.2.3 The exact form of identification is still to be determined; however, wording stating "Working on behalf of National Grid" or similar will be used. It is anticipated that the signs will be a minimum 21cm x 30cm for LGVs and 30cm x 42cm for HGVs.

6.2.4 The attachment method may differ from one supplier or contractor to another. Where a vehicle is based full time on the project it will be secured by adhesive bond. However, for others (for example stone haulage vehicles that may have other clients from one day to the next) detachable magnetic signs will be used.

6.3 Prescribed HGV and LGV Construction Routes

6.3.1 Only the construction traffic routes and haul roads which have been agreed with the LHAs and HE will be used. The construction traffic routes and haul roads are shown at **Annex C** of this document. The proposed construction routes form eight distinct traffic networks which link the haul roads to the SRN via the LRN. The primary considerations for each routeing strategy are:

- to use the shortest route from the location of bellmouths to the primary distributive network;
- to avoid settlement and any other sensitive receptors to reduce congestion and minimise effects in cities, towns and villages; and
- to minimise travel on the LRN and use haul roads where possible.

6.3.2 The construction traffic routes and haul roads shown at **Annex C** supersede those previously provided in the TA at **Volume 5.22.3, Figure 22.1** in the DCO application made in May 2014.

6.4 HGV Traffic Movement Restrictions

6.4.1 Following the assessment of junctions along the proposed construction routes (the method and results of which are set out in the accompanying TA (**Volume 5.22)** and the TA Sensitivity Test (**Volume 5.29.2**) some were found to be operating at or close to capacity in the future assessment scenarios (without the addition of the Proposed Development construction traffic). It is important to the mitigation strategy that National Grid restricts heavy goods vehicle movements during the identified peak periods at those junctions on the LRN that are predicted to operate at over their practical capacity (i.e. over 0.85 RFC or 90% DoS) during future design year scenario. The peak periods are 08.00-09.00 and 17.00-18.00.

6.4.2 All junctions that are predicted to be operating over capacity in the future baseline scenario (with the exception of the strategic road network (SRN)) will have the restrictions in place for the duration of the construction of the Proposed Development.

6.4.3 The LRN junctions where these restrictions will take place are set out below. The junction restrictions form **Schedule 3, Requirement 23** of the DCO.

- (2) A39/Puriton Hill;
- (4) A39 Puriton Hill/Bath Road;
- (6) A39 Bath Road/Woolavington Hill;
- (10) A38 Bristol Road/Harp Road;
- (13) Dunball Roundabout;
- (14) A38 Bristol Road/The Drove;
- (15) A38 Bristol Road/Wylds Road;
- (16) Wylds Road/The Drove;
- (28) Central Way/Southern Way;
- (31) Northern Way/B3133 Tickenham Road;
- (32) Clevedon Road/B3128 Tickenham Hill; and
- (41) A403 St Andrew's Way/Kings Weston Way.

6.4.4 HGV restrictions at the above LRN junctions will reduce the HGV traffic on the adjoining SRN junctions.

6.4.5 The proposed mitigation does not include restrictions on the SRN, however, limiting traffic at junctions close to the SRN will reduce traffic on the SRN during peak periods.

6.4.6 Except in exceptional circumstances or if HGVs are required in association with out of hours working specifically requested by the relevant highway authority (e.g. for

road crossings; scaffold erection), HGV movements associated with the Proposed Development will not be permitted on the LRN at the following times:

- between the movement hours of 19:00 and 07:00 (Monday to Saturday); and
- at the LRN junctions identified above between 08:00 and 09:00 and between 17:00 and 18:00.

6.4.7 The above restrictions do not apply to the movements of HGVs on the SRN or in relation to AILs.

6.4.8 'Exceptional circumstances' are defined in **Schedule 3** of the DCO and discussed in section 6.9.8 of this document.

6.4.9 Physical junction mitigation measures are proposed only at Factory Lane where TTM procedures are proposed. These are detailed in section 6.13 below.

6.5 HGV Emissions

6.5.1 All vehicles used in the construction of the Proposed Development will be to Euro standard IV class.

6.6 Banksman or Presence of Qualified Personnel at Access

6.6.1 Qualified personnel (Banksmen) will be in place at key locations during the construction of the Proposed Development. Qualified personnel can be provided at other locations as required.

6.7 Timings of HGV Movements

6.7.1 A booking system (Delivery Management System) will be used to ensure deliveries to the sites will be spread across the whole day where possible. This will minimise the impact of HGV traffic during the network peak periods. This booking schedule will also form part of and inform the monitoring process of the CTMP.

6.8 Routeing Staff

6.8.1 Staff will be employed to travel on the construction routes and monitor LGV and HGV traffic using the routes where all construction vehicles associated with the Proposed Development will be clearly identifiable.

6.8.2 Staff will be trained to conduct this monitoring process, collect and collate data and present the data for the Transport Co-ordinator (TCO) and Traffic Management Group (TMG).

6.9 Traffic Incident Management Plan

6.9.1 An initial Traffic Incident Management Plan (TIMP) has been drafted to accompany the DCO application. The TIMP outlines the arrangements for the control of Proposed Development construction traffic movements to minimise potential impacts on the road network in the event of an incident. The TIMP sets out the relationships between National Grid, the Emergency Services and Highways Authorities and details the communication, management and response procedures

which will be undertaken to ensure the operational safety of the employees and the general public should an incident occur. The TIMP identifies National Grid's ongoing roles and responsibilities including their responsibilities in the event of an incident which will need to be adhered to throughout the duration of the Proposed Development construction programme.

6.9.2 The further development of the TIMP will be undertaken in accordance with **Schedule 3, Requirement 26** of the DCO.

6.9.3 The strategies contained within the TIMP will be based on the existing procedures undertaken by the LHA, Emergency Services and HE. The key elements of the TIMP will be the provision of planning, strategy and contingencies for the following key elements of incident management:

- Incident Management Area (IMA).
- HGV/Construction vehicle routeing.
- Incident Detection.
- Incident Verification.
- Incident Response.
- Traveller Information.
- Site Management.
- Traffic Management.
- Site Clearance.
- Monitoring.

6.9.4 The TIMP will set out the strategies and contingencies that National Grid will put in place to control the movement of construction vehicles to the various sites over the construction route network in the event of an accident within the IMA.

6.9.5 The information provided herein sets out the key principles of the TIMP.

Construction Traffic Routes

6.9.6 Construction traffic routes detailed in the TIMP are those agreed with the LHAs and contained within **Annex C** of this document.

HGV Movements

6.9.7 National Grid will control the number of construction vehicle movements, as stated in section 6.4 above. National Grid will observe, manage and restrict construction vehicle movements at the key locations (junctions). Adherence to these restrictions will be verified through the agreed monitoring process.

Exceptional Circumstances

6.9.8 There may be exceptional circumstances when traffic movements on the SRN or LRN are compromised which will impact on construction vehicles being able to use the agreed construction traffic routes and access the necessary bellmouth. These exceptional circumstances are defined at **Schedule 3** of the DCO.

6.9.9 In the event of these exceptional circumstances resulting in construction vehicles, particularly HGVs not, being able to arrive at or depart from a site, the following impacts need to be considered with regard to highways and construction of the Proposed Development:

- incidents on the highway network of vehicles not being able to access the site resulting in stoppage (at agreed locations) or rescheduling of delivery;
- incidents on the highway network causing delays, resulting in construction vehicles travelling through restricted junctions in the peak period; and
- impacts of delivery not being made with specific regard to construction works on site, specifically health and safety issue due to lack of equipment of material or stop to construction works and delays to construction programme.

Incident Management Area

6.9.10 The IMA has been determined by the extents of the prescribed route from each bellmouth to the SRN used by the construction vehicles as detailed in **Table 4.1** above. Therefore, on the SRN, the IMA extends between Junction 18 to 23 only. With regard the LRN roads within the IMA; these are only those LRN roads listed at **Table 4.1** up to the furthest bellmouth from the SRN.

6.9.11 Given the scale of the used road network and the ownership of the road networks over this area, the IMA would be broken down to three areas as defined by the Local Highway Authority boundary lines. The IMA would be made up of three distinct areas which represent Somerset, North Somerset and Bristol.

6.9.12 This approach of defining the extents of the IMA will need to discussed and agreed with the LHAs.

Abnormal Indivisible Loads

6.9.13 HE's Electronic Service Delivery for Abnormal Loads (ESDAL) system will be used to notify HE, LHAs and the Police of AIL movement details, times, types and route. The ESDAL system will be used to notify the aforementioned authorities prior to departure.

6.9.14 A full road condition survey of any proposed AIL delivery route will be undertaken both before and after delivery. The method of the surveys will be discussed and agreed with the relevant Local Authorities prior to being undertaken.

6.9.15 The movement of abnormal vehicles is controlled by The Motor Vehicles (Authorisation of Special Types) General Order 2003 and subject to management and prior agreement with the Police and Highways England.

6.9.16 Leaflet drops will be undertaken at key sections along the AIL delivery routes to inform local residents.

Incident Detection

6.9.17 National Grid's role with regard to incident detection is set out at **Schedule 3, Requirement 26** of the DCO to establish and implement an agreed TIMP. The CTMP sets out the monitoring system which will be in place for the duration of the construction programme and the management of the construction vehicles accessing the site of the Proposed Development. Therefore, on notification of an incident on the road network, National Grid's responsibility is to implement the TIMP as appropriate (depending on location and severity).

Incident Verification

6.9.18 National Grid will have no direct role in the verification process of an incident unless it directly involves its operations, i.e. at a construction site or involving a construction vehicle.

Response to Incident

6.9.19 National Grid will have the responsibility of notifying all suppliers (those listed on the Delivery Management System (DMS) for that day) of the occurrence of an incident after it has been notified by the Emergency Services, the Local Authority or HE. National Grid will reduce or stop any additional HGVs (construction vehicles) entering the incident area within the IMA where necessary. Given the scale of the IMA it is anticipated that some vehicles within the IMA may not be travelling in the vicinity of the incident site or in an area impacted by the incident. Subject to location and impacts on the road network further afield, advice would be sought by National Grid from the Police and Highway Authorities.

Response to Incident - Communications

6.9.20 The following means of communication will be utilised to notify appropriate parties of an incident:

- National Grid will be notified of an incident by the LHA or HE.
- National Grid will notify suppliers by telephone.
- Suppliers will notify their drivers by appropriate means, i.e. pagers, radio (subject to H&S best practice).
- Suppliers will notify National Grid of the action taken by supplier's drivers (this will be relative to their location on the road network. This action may be to hold up at pre-designated and agreed positions on/off the road network (including common laybys, haul roads, compounds), diversion routes as directed by the Emergency Services and using diversion routes or diversion routes as included within the construction routes and agreed by the LHA).

6.9.21 National Grid will ensure that suitable training is provided to ensure that all drivers are made aware of any fixed diversion routes set out in the construction routes.

6.9.22 Subject to the location of an incident within the IMA and the expected deliveries, National Grid and the suppliers will notify their drivers and notify them if the incident requires hold up or recall. Given the scale of the IMA it is possible that an incident within IMA may have no impact on the movement of traffic on the road network further afield and therefore deliveries can continue to be made.

Traffic Management - Diversion Routes

6.9.23 In the event of an incident on the road network, the Police may implement diversion routes for all traffic. Under these circumstances, Proposed Development construction vehicles will utilise the diversion as directed by the Police.

6.9.24 As part of the agreed construction routes, a secondary construction route links Hewish and Nailsea via the A370. This route is to be used only where the primary route is not accessible.

6.9.25 HE has a number of existing diversion routes east of Bridgwater that could be utilised should an incident occur on the SRN.

6.9.26 National Grid will ensure that suitable training is provided to ensure that all drivers will be made aware of the secondary construction route and the existing HE diversion routes.

Incident Clearance

6.9.27 National Grid will not have a direct role in incident clearance with the exception of a National Grid (or supplier) vehicle associated with their operation breaking down on the road network. National Grid will then be responsible for implementing measures to recover the vehicle. Once cleared, normal procedures relating to construction vehicle movements will continue. Once cleared, National Grid will advise the suppliers/driver that the incident is cleared.

Scenario Testing

6.9.28 It is considered that there is potential for four varied scenarios which may arise and affect the operation of the road network, the construction of the Proposed Development and the movement of the construction vehicles. These are:

- traffic incident involving National Grid vehicle;
- traffic congestion as a result of an incident on the road network;
- protest incident (at HPC and which may potentially affect Section H of the Proposed Development); and
- a nuclear emergency (at HPC and which may potentially affect Section H of the Proposed Development).

6.9.29 Subject to the location of construction vehicles, the following recommended measures are considered applicable in the event of the above incidents occurring:

- National Grid to implement measures set out in the TIMP;
- all construction vehicles stopped from entering the IMA/incident area;
- construction vehicles inside the area would be moved to a safe location or, subject to geographical location, this may include continuing with the designated journey (if beyond incident); and
- suppliers contacted to cancel/postpone deliveries (as appropriate).

6.9.30 National Grid will ensure that suitable training is provided to ensure that all drivers are made aware of the control measures which will need to be implemented in the event of any of the above incidents occurring.

6.10 PRoW Management Plan

6.10.1 A PRoW Management Plan has been produced (**Volume 5.26.6C**) setting out how PRoW will be managed during the construction of the Proposed Development.

6.10.2 The PRoW Management Plan highlights where potential PRoW closures and diversions are required and the extent of any reinstatement works required.

6.11 Cleansing of Vehicles

6.11.1 All vehicles exiting from a bellmouth will pass over a wheel cleaning facility prior to using the public highway. The cleansing of vehicles will ensure the removal of debris from all vehicles ahead of joining the road network. If required, National Grid will use a road sweeper to further ensure that the LRN remains clear of debris.

6.12 Bellmouth Highway Maintenance and Repair

6.12.1 As set out at **Volume 8.4B, Schedule 2, Section 3** (Agreement between National Grid and the Joint Councils pursuant to section 106 of the Town and Country Planning Act), National Grid shall:

- Inspect and maintain each bellmouth adjacent to a bellmouth highway during the construction period.
- Carry out the inspections pursuant to paragraph 3.1 weekly to ensure that the surface of the bellmouth remains in good repair and safe for the public traffic using the highway.
- Carry out such repairs as are required to maintain the bellmouths throughout the construction period.

6.12.2 National Grid shall not commence the construction of a bellmouth until it has carried out a baseline deflectograph conditions survey of the bellmouth highway and submitted the survey results to the Highway Authority.

6.13 Temporary Traffic Management Procedures

6.13.1 TTM will be used where required to enhance safety conditions on the LRN and mitigate potential impacts of the construction of the bellmouths and haul roads. Consideration has been given to each bellmouth design and liaison with the LHAs has ensured that the design reflects the predicted traffic volumes and also the conditions and operation of the LRN within the vicinity of each bellmouth.

6.13.2 TTMs will be employed during the construction of the bellmouths where each bellmouth meets the LRN. Once the bellmouth works are completed, the TTM will be removed until the access is returned back to its original condition.

6.13.3 TTMs will either employ temporary traffic signals or manned stop and go boards or road narrowing.

6.13.4 All TTM measures and implementation plans will need to be agreed with the LHAs.

6.13.5 Details of the TTM arrangement have been included at **Annex B** of this document and are indicative. Detailed, site specific plans will be produced at the detailed design stage for bellmouths as required. These detailed plans will be agreed with the relevant LHA. The TTM arrangement will be in accordance with **Schedule 13, Article 41** of the DCO (Temporary Prohibition of Vehicular Access and No Waiting and Speed Restriction).

6.14 Delivery Management Systems

6.14.1 Records will be kept of project deliveries being made to site. Qualified personnel will be located at key bellmouth locations. This will ensure the management of deliveries and allow the number of vehicles accessing/egressing to be recorded.

6.14.2 This information will be collated by the TCO and reported to the LHAs at the TMG meetings. The role of the TCO and TMG are discussed in Section 7 of this document.

6.14.3 The objectives of the DMS are:

- to control the delivery of materials and equipment in line with the construction programme;
- to minimise the number of construction vehicles on the road network (will be scheduled to meet/adhere to any agreed restrictions); and
- ensure construction vehicles do not exceed any agreed restrictions, i.e. peak period travel through certain junctions.

6.15 Information Packs and Communications

6.15.1 Information packs will be provided to all contractors which will form part of the contractual agreement between the contractors and National Grid. The information pack will contain the details of the following CTMP requirements:

- HGV restrictions;
- construction routes;
- non-compliance guidance;
- complaints procedure;
- CTMP protocols and indications required for all contractors including a Code of Good Practice;
- guidance on standard communication procedures between contractors and site; and
- CTMP contacts (emergency and non-emergency).

6.15.2 Information packs and communications details will be shared with the LHAs ahead of any construction works.

6.16 Abnormal Indivisible Loads

6.16.1 The movement of abnormal vehicles is controlled by The Motor Vehicles (Authorisation of Special Types) General Order 2003 and subject to management and prior agreement with the Police and HE.

6.16.2 All vehicles will be escorted by a pilot car and Police escort and be scheduled to travel during off-peak hours where possible. This will ensure the safety of other road users and result in minimal disruption.

6.16.3 The local communities affected by the delivery of the AILs will be contacted prior to any movements. It is envisaged that this will include leaflet drops and publication in the local press advising of the AIL movements.

6.17 Temporary Repositioning of Bus Stops

6.17.1 Once the detailed temporary traffic management designs are finalised, works which may affect bus stops will be confirmed and National Grid will liaise with the relevant bus companies about any necessary temporary repositioning of bus stops.

6.17.2 National Grid will ensure that the least possible inconvenience is caused to all parties. Any temporary bus stop relocation(s) will be kept to the minimum distance possible from the existing stop to ensure safety for all users of the highway.

6.18 Travel Plan

6.18.1 A Travel Plan will be implemented for the Proposed Development which sets out a number of travel planning initiatives including:

- travel planning awareness;
- welfare van provision for staff from external locations to site;
- public transport;
- car sharing;
- construction traffic management;
- modal shift monitoring; and
- travel plan co-ordinator (TPC).

6.18.2 The Travel Plan can be found at **Annex A** of this document.

7 MANAGEMENT STRUCTURE

7.1 Introduction

7.1.1 This section reviews the management structure that will oversee the CTMP. It is important that a strong management structure is in place to ensure the CTMP objectives are met, and that the continued monitoring and reviewing of the CTMP is maintained.

7.1.2 A Traffic Management Group (TMG) and a Transport Co-ordination Officer (TCO) will be appointed to achieve this.

7.1.3 The TCO will be employed prior to commencement of works and will have the following transport-related responsibilities:

- monitor the CTMP;
- report to the Transport management Group about mitigation and any remedial measures if required;
- update the CTMP as required; and
- resolve issues and problems through the liaison with relevant stakeholders.

7.2 Traffic Management Group

7.2.1 A TMG will be established prior to construction to implement and monitor the CTMP.

7.2.2 The TMG will meet to discuss and review the traffic and transportation elements of the construction phase of the Proposed Development.

7.2.3 The primary role of the TMG meetings will be to review the following information:

- implementation and effectiveness of mitigation measures;
- contractor obligations with regard to the CTMP; and
- suitable changes to the CTMP based on the success of the mitigation measures seeking to enhance the efficiency and effectiveness of the CTMP.

7.2.4 It is suggested that TMG meetings will be held on commencement of the project and every three months thereafter for the duration of the construction of the Proposed Development. That is unless specific issues which need to be addressed are brought to the attention of the TCO. In such cases, additional meetings or discussions will be co-ordinated by the TCO as and when required. In the event that a particular junction is identified by the LHA for assessment, this junction will be added to the monitoring list and surveys will be undertaken accordingly.

7.2.5 Discussion in the scheduled meetings will be aided by a monitoring report produced by the TCO. Discussions will also relate to the CTMP objectives outlined in **Table 1.1** of this CTMP.

7.2.6 The TMG will include representatives from National Grid, the TCO and the following organisations will also be asked to provide representatives:

- National Grid;
- Somerset County Council;
- West Somerset District Council;
- Sedgemoor District Council;
- North Somerset Council;
- Bristol City Council;
- South Gloucestershire Council; and
- Highways England.

7.3 Monitoring and Review

Monitoring Strategy

7.3.1 The TMG will be established and a TCO will be appointed prior to construction as part of the CTMP to oversee the implementation and monitoring of the CTMP in line with the agreed Requirement.

7.3.2 The contractor will undertake monitoring as necessary to ensure compliance with the requirements of the CTMP and this will include the maintenance of records and traffic management measures.

7.3.3 National Grid will ensure that a full time, qualified member of staff is employed to conduct surveys and monitor construction vehicle activity at specific locations on the construction route network to ensure contractors' obligations are met as well as adherence to the CTMP. This will include the monitoring of construction vehicles on the LRN, the monitoring of three randomly selected peak hours at junctions with HGV restrictions per week and speed enforcement monitoring.

7.3.4 The road network through Bridgwater has a number of automatic number plate recognition (ANPR) cameras at positions leading to the Hinkley Point C Power Station. National Grid will discuss the potential use of the cameras along proposed construction traffic routes with Somerset County Council to assist the monitoring strategy.

Review

7.3.5 The TMG will monitor and review the CTMP. These reviews are required to ensure that the CTMP delivers on the commitments and achieves the goals agreed as set out in the document.

7.4 Compliance

7.4.1 As part of the CTMP a series of mechanisms will be established to provide all parties with a clear understanding of the enforcement procedures that will be applied if the requirements contained within this CTMP are not achieved. It is anticipated that these mechanisms will be determined at a later stage and will include:

- RAMS procedures – National Grid will implement the CTMP, adhere to the requirements and meet the goals through management practices. This will include site inductions for contractors, briefing on the obligations of National Grid standards, induction and adherence to RAMS procedures, DMS briefing, driver inductions and compliance guidance;

- contractual conditions – to be employed as part of this CTMP compliance methodology and will be built into the contractors contract, this will be subject to performance review by National Grid/TMG; and
- actions – to be employed if the commitments of this CTMP are breached.

7.4.2 National Grid has agreed with the Local Authorities that a complaints management procedure will be in place prior to the start of construction and implemented via a **Schedule 3, Requirement 31** of the DCO.

7.5 Enforcement and Corrective Measures

7.5.1 National Grid will ensure that appropriate measures are taken to ensure that contractor behaviour and performance is monitored and where appropriate corrective measures are taken to resolve, redress and enhance service performance which is in breach of the standards within the CTMP.

7.5.2 National Grid will require that the relevant contractor's disciplinary procedures incorporating the project commitments, including this CTMP, are reflected in the contract between National Grid and the relevant contractors. National Grid will have the power to remove person(s) from the project should it be required and deemed appropriate.

Annex A – Travel Plan

nationalgrid

Hinkley Point C Connection Project

ANNEX A: TRAVEL PLAN

Table of Contents

1 INTRODUCTION

1.1 Introduction

1.1.1 This Travel Plan (TP) accompanies an application by National Grid to seek powers to construct, operate and maintain a new 400,000 volt (400kV) connection between Bridgwater Substation in Somerset and Seabank Substation, north of Avonmouth (the Proposed Development). The Proposed Development is in the administrative boundaries of Somerset and West Somerset, Sedgemoor, North Somerset, the City of Bristol, and South Gloucestershire in the southwest of England.

1.1.2 That part of the Proposed Development that comprises an electric line above ground within section 16 of the Planning Act 2008 is a Nationally Significant Infrastructure Project (NSIP) for the purposes of that Act. Under Section 31 of the Planning Act 2008, development consent is required for development to the extent that it is or forms part of an NSIP. Development consent is granted by the making of a Development Consent Order (DCO) for which application may be made under Section 37 of the Planning Act 2008.

1.2 Purpose of this Report

1.2.1 This reported is intended to demonstrate the commitment to sustainable transport by National Grid and to indicate the necessary measures that should be undertaken to meet these sustainable transport ambitions.

1.2.2 Due to the nature of the Proposed Development, it would be impractical to provide TPs for each specific area of development. Also it should be noted that due to health and safety practices, staff (both National Grid and construction staff), will not be permitted to enter the construction site on-foot or by bicycle.

1.3 Development Proposals

1.3.1 The Proposed Development is located across the south west of England, crossing the administrative boundaries of the following authorities:

- Somerset County Council (SCC);
- West Somerset Council (WCC);
- Sedgemore District Council (SDC);
- North Somerset Council (NSC);
- Bristol City Council (BCC); and

- South Gloucestershire Council (SCG).

1.3.2 The proposed Hinkley Point C Connection project includes the following principal elements, each of which is considered in more detail below:

- construction of a 57km 400kV electricity transmission connection between Bridgwater in Somerset and Seabank, near Avonmouth, comprising:
  - installation of a 400kV overhead line; and
  - installation of 400kV underground cables.
- modifications to existing overhead lines at Hinkley Point, Somerset;
- construction of three 400kV cable sealing end (CSE) compounds along the route of the connection;
- construction of a 400/132kV substation at Sandford, North Somerset;
- extension of the existing 400kV substation at Seabank;
- the removal of existing 132kV overhead lines and the construction of replacement 132kV overhead lines and 132kV underground cables;
- extensions/modifications to existing 132kV substations at Churchill, Portishead, Avonmouth and Seabank; and
- associated works, for example, temporary access roads, highway works, temporary construction compounds, scaffolding, work sites and ancillary works.

1.4 Background to Travel Plans

1.4.1 A TP is intended to encourage people to choose alternative transport modes over single occupancy car use and where possible, reduce the need to travel at all. Such a plan should include a range of measures designed to achieve this goal.

1.4.2 The National Planning Policy Framework (NPPF) was adopted in March 2012 and outlines the potential benefits and requirements for the production of TPs. It states that TPs are “key tools” to facilitate development.

1.5 The Aims and Objectives of the Travel Plan

1.5.1 National Grid has prepared this TP to:

- show their commitment to addressing the access needs of employees, contributors and visitors alike;
- respond to congestion issues on the road network which may affect operational and local traffic and thereby reduce business performance;
- support the Government's environmental and sustainable development initiatives;
- demonstrate its environmental responsibilities amongst its peers and neighbouring communities;
- ensure that a formal monitoring process is in place to maintain construction traffic; and
- maximise the efficiency of the organisation's transport.

1.6 Benefits of a Travel Plan

1.6.1 The most easily identifiable benefits are those that are directly related to reductions in vehicle use; namely significantly less congestion, noise, air pollution and accidents. However, there is also a broader range of more intangible benefits that can occur from the implementation of TP initiatives. These benefits include:

- improved health (i.e. increased fitness and reduced stress and obesity);
- a reduction in travel costs;
- a cleaner local environment;
- improved accessibility to local services;
- increased road safety;
- reduced travel times;
- improved travel choice; and
- reduced congestion and demand for parking spaces.

2 STAFF AND TRANSPORTATION CHARACTERISTICS

2.1 Introduction

2.1.1 The section below details the projected employment required for the duration of the Proposed Development and how the particular employment patterns for the Proposed Development will generate transportation needs.

2.2 Construction Employment

2.2.1 The employment profile of the Proposed Development has been extracted from the ES Sensitivity Test, Socio-economics and Land Use Chapter (**Volume 5.29.1.1, Chapter 15**)**.**

2.2.2 The employment data identifies that the demand for labour is expected to be concentrated in 2018 and 2019. The employment peak is shown as 385 staff in August 2018.

2.2.3 The peak staff demand for the overhead line construction and removal would be 230 in September 2018 to January 2019. The average staff demand would be 135 (Full Time Equivalent (FTE)) per month during the 49 month construction duration for this Development Component.

2.2.4 The peak staff demand for the underground cable and CSE construction would be 280 in December 2016. The average staff demand would be 130 FTE during the 54 month construction duration for this Development Component.

2.2.5 The peak staff demand for the substation construction would be 55 during October 2019. The average monthly staff would be 35 over the 49 month construction duration for this Development Component.

2.3 Staff – Local and Non Local

2.3.1 The workforce for the Proposed Development would be made up of local and non-local personnel.

2.3.2 Based on the information contained in the ES Sensitivity Test, Socio-economics and Land Use Chapter (**Volume 5.29.1.1, Chapter 15**), the breakdown of the workforce on-site coming from the local labour marked is expected to be between 10 and 24% (averaging at 17%). This share of employment is expected to be equivalent to an estimated 210 person years of work.

2.3.3 The average monthly local job demand is expected to be 35 over the six years of the construction programme. It is forecast that the overall effect on employment across the combines local authorities would equate to less than 1% of people out of work.

2.4 Non-local Staff Accommodation

2.4.1 From experience, National Grid anticipates that of the non-local staff required during construction of the works, the following percentage breakdown of demand on different accommodation types is likely:

- 50% stay in caravan and camping accommodation (sourced) independently of National Grid
- 20% stay in short term let properties;
- 20% stay in serviced accommodation (B&Bs, hotels); and
- 10% travel to the area from home.

2.5 Staff – Transportation

2.5.1 As part of the Proposed Development and in line with other National Grid projects, staff will be transported to the various construction sites using a welfare van services. The welfare van services will pick up staff from varying locations, either at or close to their accommodation and transport them to the appropriate area.

2.5.2 There will be no car parking provided on-site for private vehicles. Parking will be provided at specified locations (such as construction compounds) for a limited number of business vehicles/company cars associated with the Proposed Development. This could include specialist construction personnel or those people undertaking a specific role or function that requires a vehicle to be present on-site i.e. cleaner or security guard.

2.5.3 These welfare van services will accommodate the workforce movements across the development study area and will facilitate movement of all staff from pre-organised external pick up/drop off points (close to respective residences), to site and at the end of the working day back to the external locations.

2.5.4 The pickup/drop off point locations will be at accessible locations for all staff. It is anticipated that these will be at local accommodation sites that will be close to key local locations, town centres, or public transport interchanges.

2.5.5 The pickup/drop off points will also be local to constructions sites and would not necessitate the multiple occupant vehicles to travel on the SRN. All movements of welfare vanes will be within each network, i.e. movements will be contained on the Local Road Network (LRN) within each of the networks identified.

2.5.6 The provision of staff travel in the form of welfare vans ensures that there will be no impact from staff parking on the LRN.

2.5.7 The use of these services to transport staff will also form a key travel planning measure for the development.

2.5.8 The parking strategy will be communicated through the contractor's information packs and will be monitored by the Traffic Co-ordination Officer.

2.5.9 For those staff movements by car to local accommodation sites, all parking will be within parking facilities associated with the operational permissions of the accommodation.

3 TRAVEL PLAN MEASURES AND INITIATIVES

3.1 Introduction

3.1.1 It is envisaged that any contractor working on-site will work sustainably and encourage sustainable travel initiatives.

3.1.2 As such a number of travel planning initiatives have been identified below which fall under the following headings:

- travel planning awareness;
- welfare van provision for staff from external locations to site;
- public transport;
- car sharing;
- construction traffic management;
- modal shift monitoring;
- travel plan co-ordinator (TPC); and
- transport management group (TMG).

3.2 Travel Planning Awareness

3.2.1 A key initiative of a TP will be the distribution of travel planning material. All employees will receive an introductory pack before starting work and such packs can be critical in influencing travel patterns. The contents of the packs will include, but not necessarily be limited to:

- introduction to TPs;
- website produced with up to date information on Proposed Development transport services, locations and timings;
- literature on the health benefits of walking, cycling and environmental benefits of sustainable modes of transport;
- maps showing local pick up and drop off points for welfare van services;
- details of public transport services, including timetables and routes; and
- details of the TPC.

3.3 Staff Welfare Van Transport Service

3.3.1 Welfare van services will be provided to allow staff to gain access to and from external locations to and from the site.

3.3.2 These services will be arranged and co-ordinated according to designated shift patterns and staff accommodation and will allow staff to be picked up and dropped off at key locations, i.e. central town locations/residential locations.

3.3.3 Typically construction gangs will stay in local accommodation together and travel in welfare vans together. This will ensure vans operate at their full capacity. Pick up points will typically be off the highway network at the site of accommodation. If a pick up occurs from the highway it would be from a safe existing pick up position such as a layby or car park.

3.3.4 Local staff may choose to use public transport to access pick up locations; however, this will be arranged on a case by case basis.

3.3.5 The provision of these services will ensure that the staff travel profile will be sustainable.

3.3.6 Staff traffic movements (including welfare van traffic movements) have been accounted for IN the supporting Transport Assessment (see **Volume 5.22**). All vehicles have been assessed as travelling to and from the M5 to the Proposed Development.

3.4 Modal Shift Monitoring

3.4.1 Information on the methods of construction staffs travel to site will be collected by the Travel Plan Co-ordinator and reported to the TMG.

3.5 Public Transport

3.5.1 It is anticipated that there may be some locally employed members of staff who may choose to use public transport to access a welfare van pick up location as such public transport information including timetables would be provided in Introductory Packs, and on staff notice boards.

3.6 Car Sharing

3.6.1 There will be no on-site parking provision for staff who wish to travel to site by private car, however, a car sharing data base will be created to identify those members of staff that live in the same area so that they could travel to the local accommodation together.

3.7 Construction Traffic Management

3.7.1 Sustainable movement of plant and materials will be adopted. This will include ensuring vehicles arrive and exit the site loaded where practical.

3.7.2 In addition, plant and materials will be sourced locally where possible.

3.8 Travel Plan Co-ordinator

3.8.1 The primary support and leadership for implementing a TP will come from an individual with a specific remit for delivering the measures proposed within the TP. This person is appointed as the TPC.

3.8.2 The TPC will assume overall responsibility of the TP once adopted. This role will be managed by the appointed contractor(s) and will be separate to the Transport Co-ordination Officer's role as described in the CTMP. The roles and responsibilities of the TPC are as follows:

- co-ordinate and attend and TMG meetings;
- prepare monitoring report to present to TRG. This will be shared with the Joint Councils at the quarterly TMG meetings;
- be the first point of contact in case of any problems or information relating to the CTMP; and
- ensure that the CTMP is meeting the objectives set out above.

Annex B – Indicative Temporary Traffic Management Plans

KEY

01A

ADVANCED WARNING
THIS ROAD WILL BE CLOSED
FROM —/—/— TO —/—/—
FOR —— DAY/S

P7105

750mm

01

ROAD CLOSED

ROAD AHEAD CLOSED FOLLOW DIVERSION 02

Diversion ENDS 03

Diverted traffic 04

Diverted traffic 05

Diverted traffic 06

Diversion 07

Diversion 08

Diversion 09

ROAD AHEAD CLOSED 10

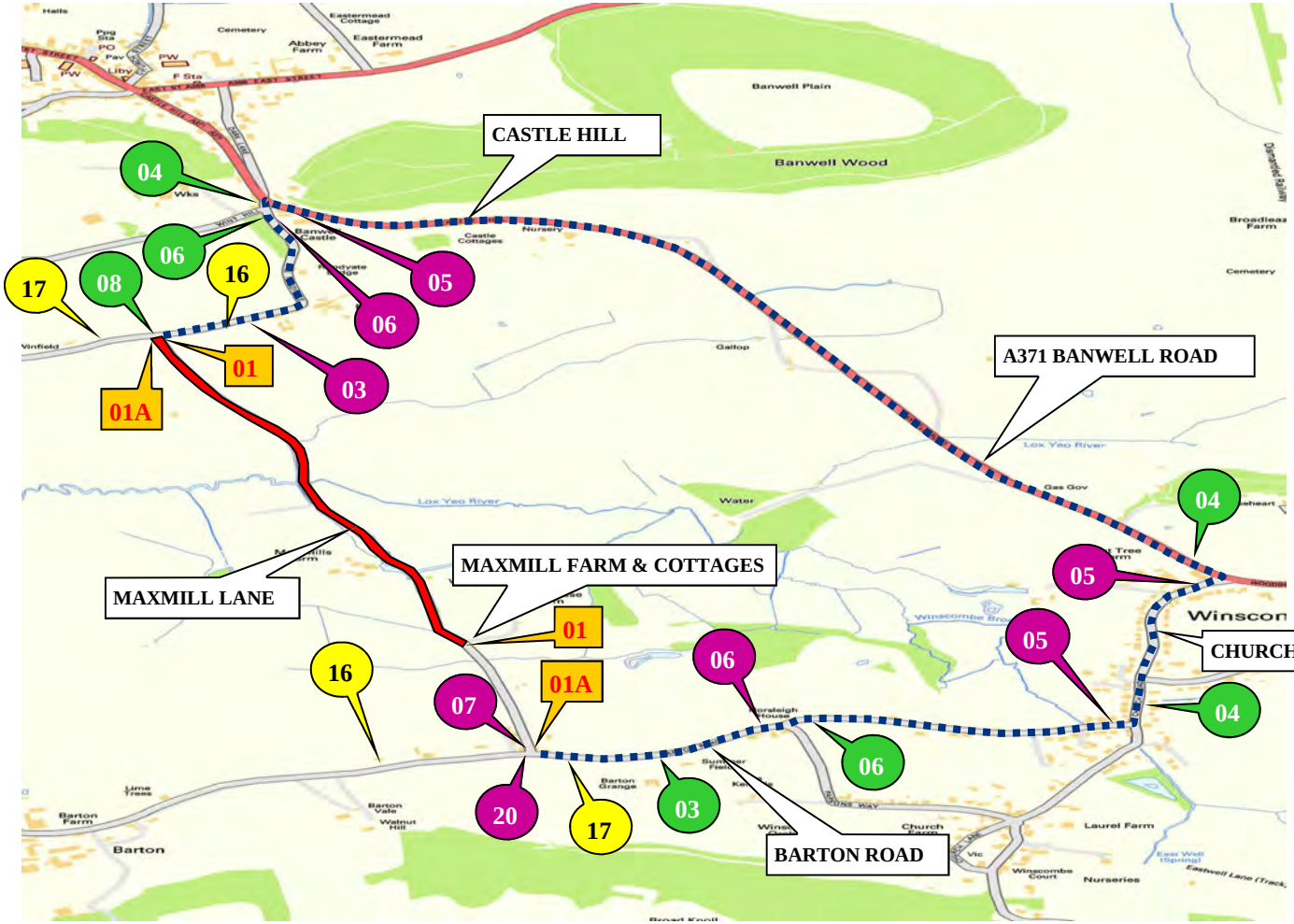
Diverted traffic 11

Diverted traffic 12

Diverted traffic 13

Diverted traffic 14

Diverted traffic 15



FOR XXXX FOLLOW DIVERSION

21

MAXMILL LANE CLOSED

16

ACCESS TO XXXXXX XXX ONLY

22

MAXMILL LANE CLOSED

17

18 Diverted traffic

BARRIERS,CONES AND FLASHING LAMPS REQUIRED EACH END OF ROAD CLOSURE

19 Diverted traffic

20 Access To Residents Only

A-Plant Lux Traffic Control & Management
Kemble Airfield Enterprise Park
Cirencester Road
Kemble
GL7 6BQ
Telephone: 0870 050 0792
Fax: 0845 0047105

NOTES

1 ALL EQUIPMENT SHALL BE APPROVED AND SHALL COMPLY WITH THE DEPARTMENT OF TRANSPORT SPECIFICATION MCE0111
THIS DRAWING DOES NOT SHOW THE NORMAL ROADWORKS SIGNING THAT WILL BE REQUIRED (chapter 8)
2. ALL SIGNS TO BE IN ACCORDANCE WITH TSGRD 2002 AND TO MINIMUM
CLASS 2 RETROFLECTIVE
3. MINIMUM x HEIGHT OF LETTERING TO BE 60MM AND SIGN BOARDS TO BE MIN
1000MM*750MM WHERE APPROPRIATE

CLIENT DETAILS	REP/DEPOT	DRAWN BY	ADDRESS
NATIONAL GRID	RW/926	RW	MAXMILL LANE WINSCOMBE BS25 1DS
AMMEND NO 00	SHEET NO. 1 OF 1	DATE 13/02/14	

SUITABLE TIME TO UNDERTAKE THE WORKS				
OFFPEAK 0930-1530	NIGHT 2100-0600	WEEKEND	WEEKDAY 0800-1700	24 HOUR WORKS
				✓

BUS ROUTE AFFECTED: NO

KEY

ROAD CLOSURE

DIVERSION ROUTE

ANTI-CLOCKWISE DIVERSION

CLOCKWISE DIVERSION

ROAD CLOSURE SIGN

ROAD CLOSURE LENGTH APPROX 0.8Miles
ROAD CLOSURE WIDTHAPPROX 3.0 M

HIRE ADVICE 242-S0001057/15

NOTES

60MPH
2 WAY WITH ADDITONAL SIGNS
SITE LENGH 120M APPROX
SPEED REDUCTION TO 30MPH REQUIRED
LAYBY CLOSURE REQUIRED

MMD DRAWING No. MMD-322069-C-DR-GEN-XX-0306

ISSUE	DATE	COMMENTS	DRAWN	CHK'D	APP'D

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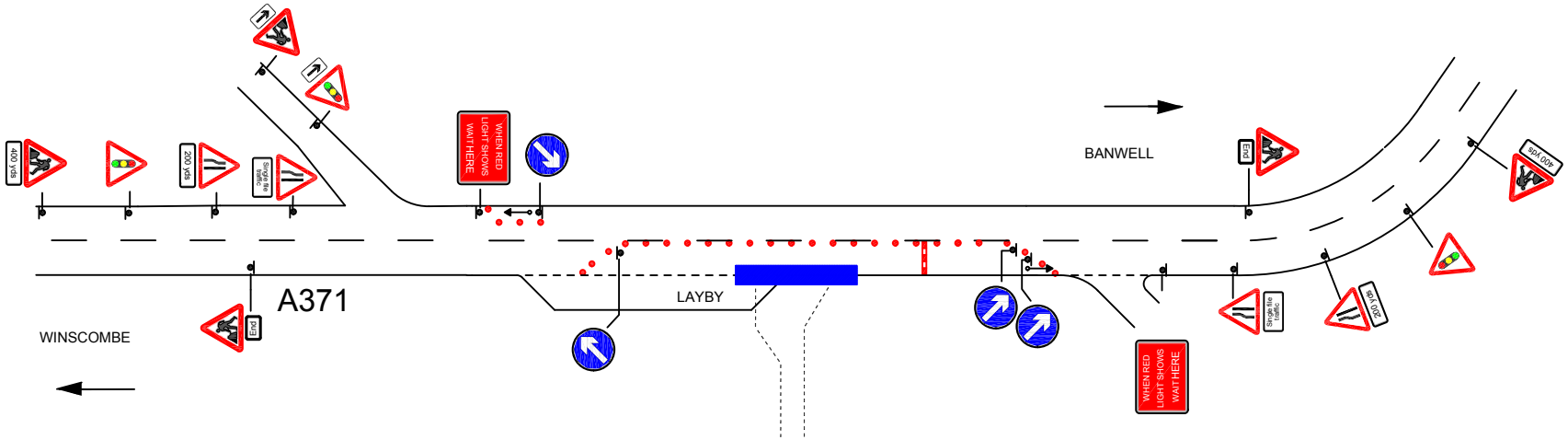
nationalgrid



A-Plant Lux Traffic Control & Management
Kemble Airfield Enterprise Park
Cirencester Road
Kemble
GL7 6BQ
Telephone : 0870 050 0792
Fax: 0845 004 7105

SPEED OF ROAD		60 MPH
DISTANCE FROM FIRST SIGN TO START OF SITE(D)	MIN	275m
	MAX	450m
SIDEWAYS SAFETY ZONE (S)		1.2 M
LONGWAYS CLEARANCE (L)		60 M
TAPER		45°

KEY:
- Cone
- Temporary Road Signs
- Traffic Barrier
- Working Area

Running lanes

3.5m maximum
3.25m desirable minimum
3.0m absolute minimum

All signs will be 750mm and will be held in place with sand bags

All marked with 750mm cone where required

DRAWING DESCRIPTION

2 WAY LIGHTS WITH ADDITONAL SIGNAGE

CLIENT DETAILS
National Grid

DO WORK AT	PEAK TIMES		WEEKEND		OFF PEAK		24HR	✓	DATE 13/02/14
PURPOSE OF WORKS	DRAWN BY								AMMEND No / Drawing information / SHEET NO
EXCAVATION	R W								00 / ADDRESS CASTLE HILL BANWELL BS29 6NX / 1 of 2
PERMANENT LIGHTS AFFECT SITE?								N/A	
PEDESTRIAN CROSSING AFFECTED?								N/A	
BUS ROUTES / STOPS AFFECTED?								N/A	

HIRE ADVICE 242-S001057/16

NOTES

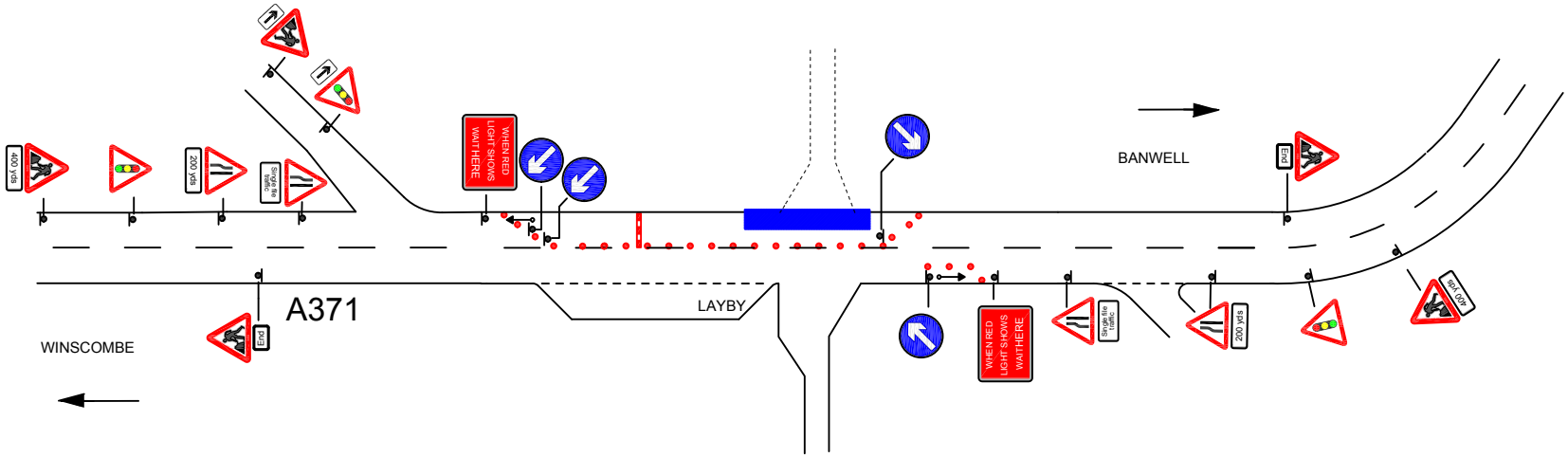
60MPH
2 WAY WITH ADDITONAL SIGNS
SITE LENGH 80M APPROX
SPEED REDUCTION TO 30MPH REQUIRED
LAYBY CLOSURE REQUIRED

MMD DRAWING No.
MMD-322069-C-DR-GEN-XX-0306

ISSUE	DATE	COMMENTS	DRAWN	CHK'D	APP'D

TITLE:

nationalgrid



A-Plant Lux Traffic Control & Management
Kemble Airfield Enterprise Park
Cirencester Road
Kemble
GL7 6BQ
Telephone : 0870 050 0792
Fax: 0845 004 7105

SPEED OF ROAD		60 MPH
DISTANCE FROM FIRST SIGN TO START OF SITE(D)	MIN	275m
	MAX	450m
SIDEWAYS SAFETY ZONE (S)		1.2 M
LONGWAYS CLEARANCE (L)		60 M
TAPER		45°

KEY:
- Cone
- Temporary Road Signs
- Traffic Barrier
- Working Area

Running lanes

3.5m maximum
3.25m desirable minimum
3.0m absolute minimum

All signs will be 750mm and will be held in place with sand bags

All marked with 750mm cone where required

DRAWING DESCRIPTION

2 WAY LIGHTS WITH ADDITONAL SIGNAGE

CLIENT DETAILS
National Grid

DO WORK AT | PEAK TIMES | WEEKEND | OFF PEAK | 24HR ✓ | DATE 13/02/14

PURPOSE OF WORKS: EXCAVATION
DRAWN BY: R W

PERMANENT LIGHTS AFFECT SITE? N/A
PEDESTRIAN CROSSING AFFECTED? N/A
BUS ROUTES / STOPS AFFECTED? N/A

AMMEND No: 00

Drawing information

ADDRESS CASTLE HILL
BANWELL
BS29 6NX

SHEET NO
2 of 2

HIRE ADVICE 242-S001057/16

NOTES

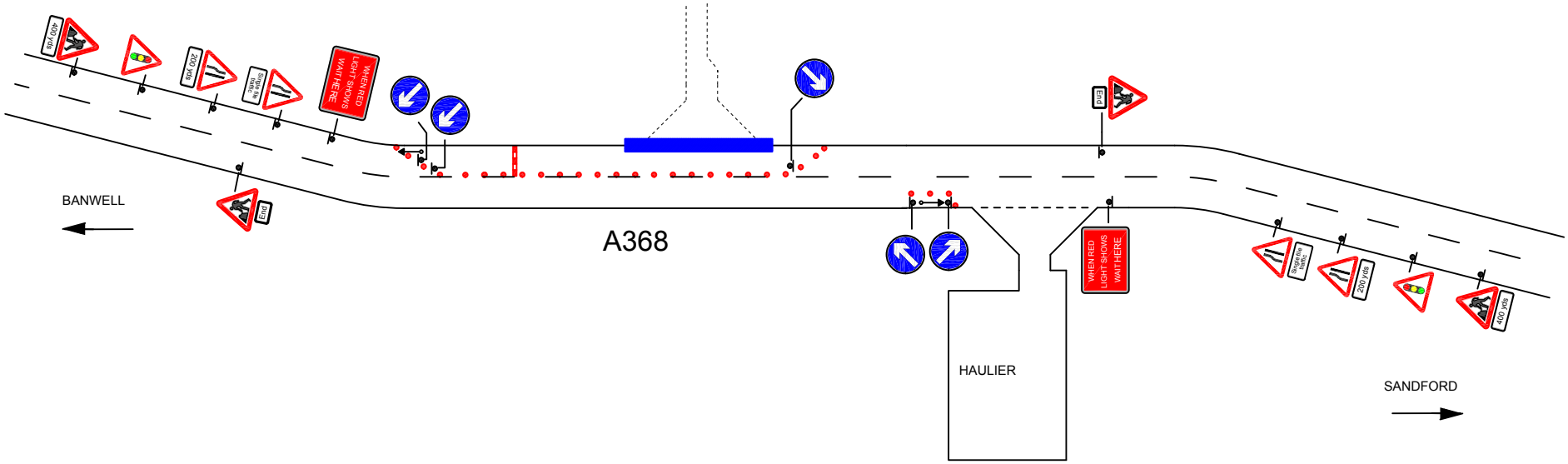
60MPH
2 WAY LIGHTS
SITE LENGH 120M APPROX
SPEED REDUCTION TO 30MPH REQUIRED

MMD DRAWING No.
MMD-322069-C-DR-GEN-XX-0306

ISSUE	DATE	COMMENTS	DRAWN	CHK'D	APP'D

TITLE:

nationalgrid



A-Plant Lux Traffic Control & Management
Kemble Airfield Enterprise Park
Cirencester Road
Kemble
GL7 6BQ
Telephone : 0870 050 0792
Fax: 0845 004 7105

SPEED OF ROAD		60 MPH
DISTANCE FROM FIRST SIGN TO START OF SITE(D)	MIN	275m
	MAX	450m
SIDEWAYS SAFETY ZONE (S)		1.2 M
LONGWAYS CLEARANCE (L)		60 M
TAPER		45°

KEY:
- Cone
- Temporary Road Signs
- Traffic Barrier
- Working Area

Running lanes

3.5m maximum
3.25m desirable minimum
3.0m absolute minimum

All signs will be 750mm and will be held in place with sand bags

All marked with 750mm cone where required

DRAWING DESCRIPTION
2 WAY LIGHTS

CLIENT DETAILS
National Grid

DO WORK AT	PEAK TIMES		WEEKEND	OFF PEAK	24HR ✓
PURPOSE OF WORKS	DRAWN BY				
EXCAVATION	R W				
PERMANENT LIGHTS AFFECT SITE?		N/A			
PEDESTRIAN CROSSING AFFECTED?		N/A			
BUS ROUTES / STOPS AFFECTED?		N/A			

DATE 14/02/14

AMMEND No: 00

Drawing information

ADDRESS A368 STATION ROAD
SANDFORD
BS25 5RQ

SHEET NO
1 of 2

HIRE ADVICE 242-S001057/17

NOTES

60MPH
2 WAY LIGHTS
SITE LENGH 120M APPROX

60M SAFTEY ZONE NOT POSSIBLE SO

SPEED REDUCTION TO 30MPH REQUIRED

MMD DRAWING No. MMD-322069-C-DR-GEN-XX-0306

ISSUE	DATE	COMMENTS	DRAWN	CHK'D	APP'D

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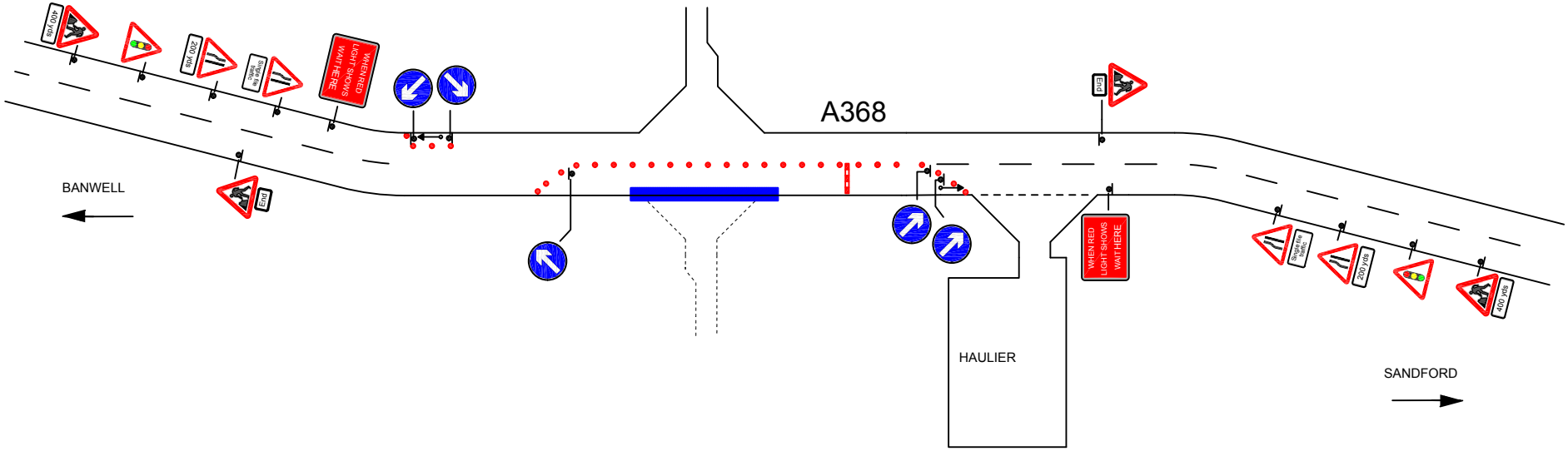

A-Plant Lux Traffic Control & Management
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GL7 6BQ
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SPEED OF ROAD		60 MPH
DISTANCE FROM FIRST SIGN TO START OF SITE(D)	MIN	275m
	MAX	450m
SIDEWAYS SAFETY ZONE (S)		1.2 M
LONGWAYS CLEARANCE (L)		60 M
TAPER		45°

KEY:

	Cone
	Temporary Road Signs
	Traffic Barrier
	Working Area

Running lanes

3.5m maximum
3.25m desirable minimum
3.0m absolute minimum

All signs will be 750mm and will be held in place with sand bags

All marked with 750mm cone where required

DRAWING DESCRIPTION

2 WAY LIGHTS

CLIENT DETAILS

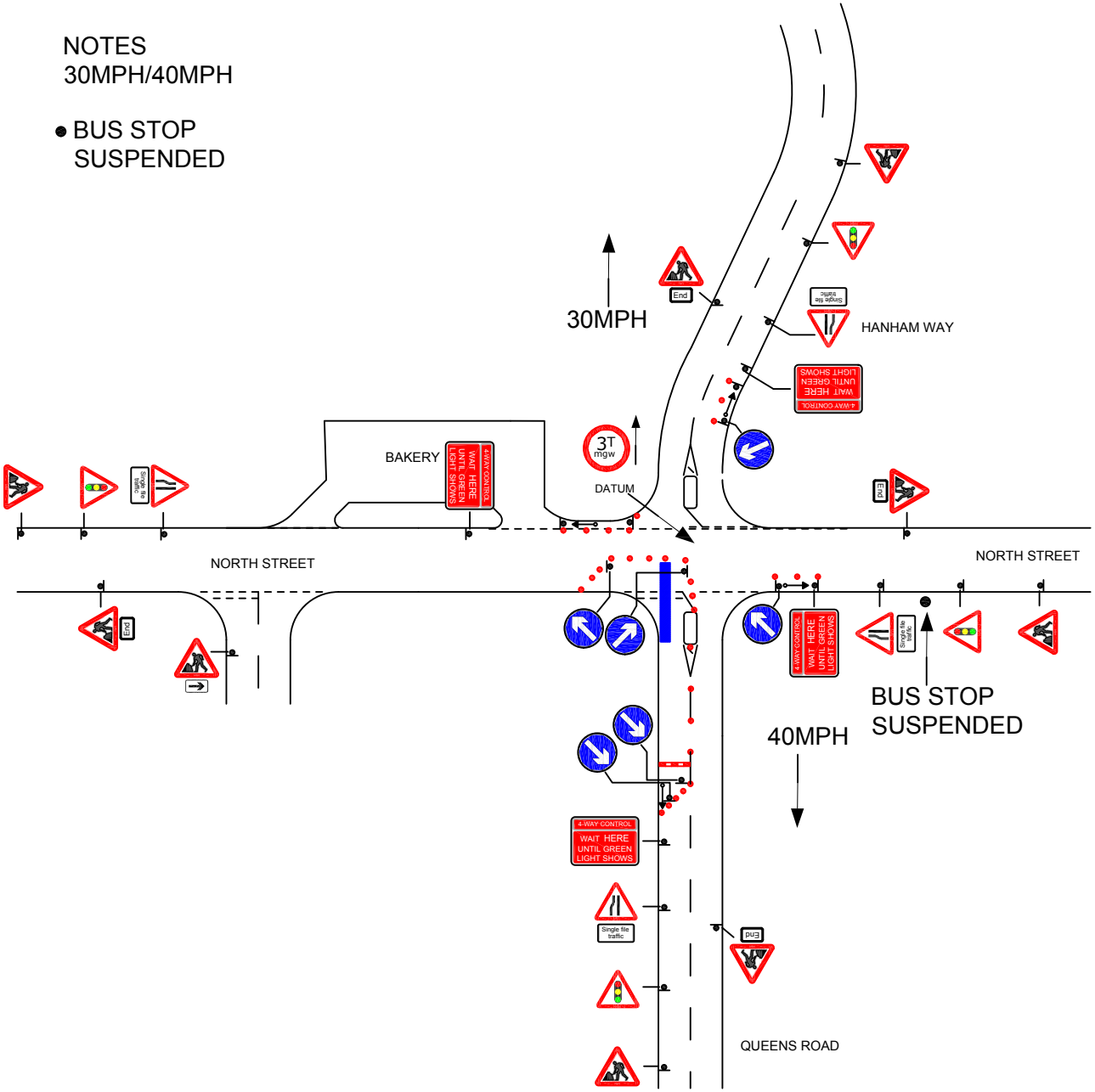
National Grid

DO WORK AT	PEAK TIMES		WEEKEND		OFF PEAK		24HR	✓	DATE	14/02/14
PURPOSE OF WORKS	DRAWN BY								AMMEND No	Drawing information	SHEET NO
EXCAVATION	R W								00	ADDRESS A368 STATION ROAD SANDFORD BS25 5RQ	2 of 2
PERMANENT LIGHTS AFFECT SITE?		N/A									
PEDESTRIAN CROSSING AFFECTED?		N/A									
BUS ROUTES / STOPS AFFECTED?		N/A									

HIRE ADVICE 242-S001057/17

NOTES
30MPH/40MPH

- BUS STOP SUSPENDED

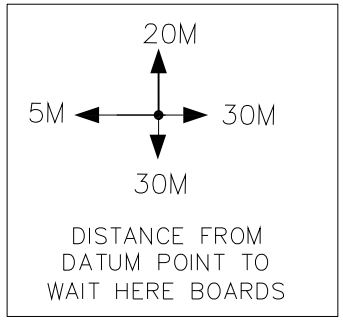


MMD DRAWING No.					
MMD-322069-C-DR-GEN-XX-0308					
ISSUE	DATE	COMMENTS	DRAWN	CHK'D	APP'D

TITLE:

nationalgrid

PHASE DIAGRAM	PHASE 1	PHASE 2	PHASE 3	PHASE 4
	GO	GO	GO	GO
RED SETTINGS	3	3	2	1
GREEN SETTINGS (SECONDS)	45	45	45	45



A-Plant Lux Traffic Control & Management
Kemble Airfield Enterprise Park
Cirencester Road
Kemble
GL7 6BQ
Telephone : 0870 050 0792
Fax: 0845 004 7105

		KEY:	
SPEED OF ROAD	30 MPH	●	Cone
DISTANCE FROM FIRST SIGN TO START OF SITE(D) MIN	20m		Temporary Road Signs
DISTANCE FROM FIRST SIGN TO START OF SITE(D) MAX	45m		Traffic Barrier
SIDEWAYS SAFETY ZONE (S)	0.5 M		Working Area
LONGWAYS CLEARANCE (L)	0.5 M		
TAPER	45°		

Running lanes

3.5m maximum
3.25m desirable minimum
3.0m absolute minimum

All signs will be 750mm and will be held in place with sand bags

All marked with 750mm cone where required

DRAWING DESCRIPTION

4 WAY LIGHTS

CLIENT DETAILS

E.A.W.

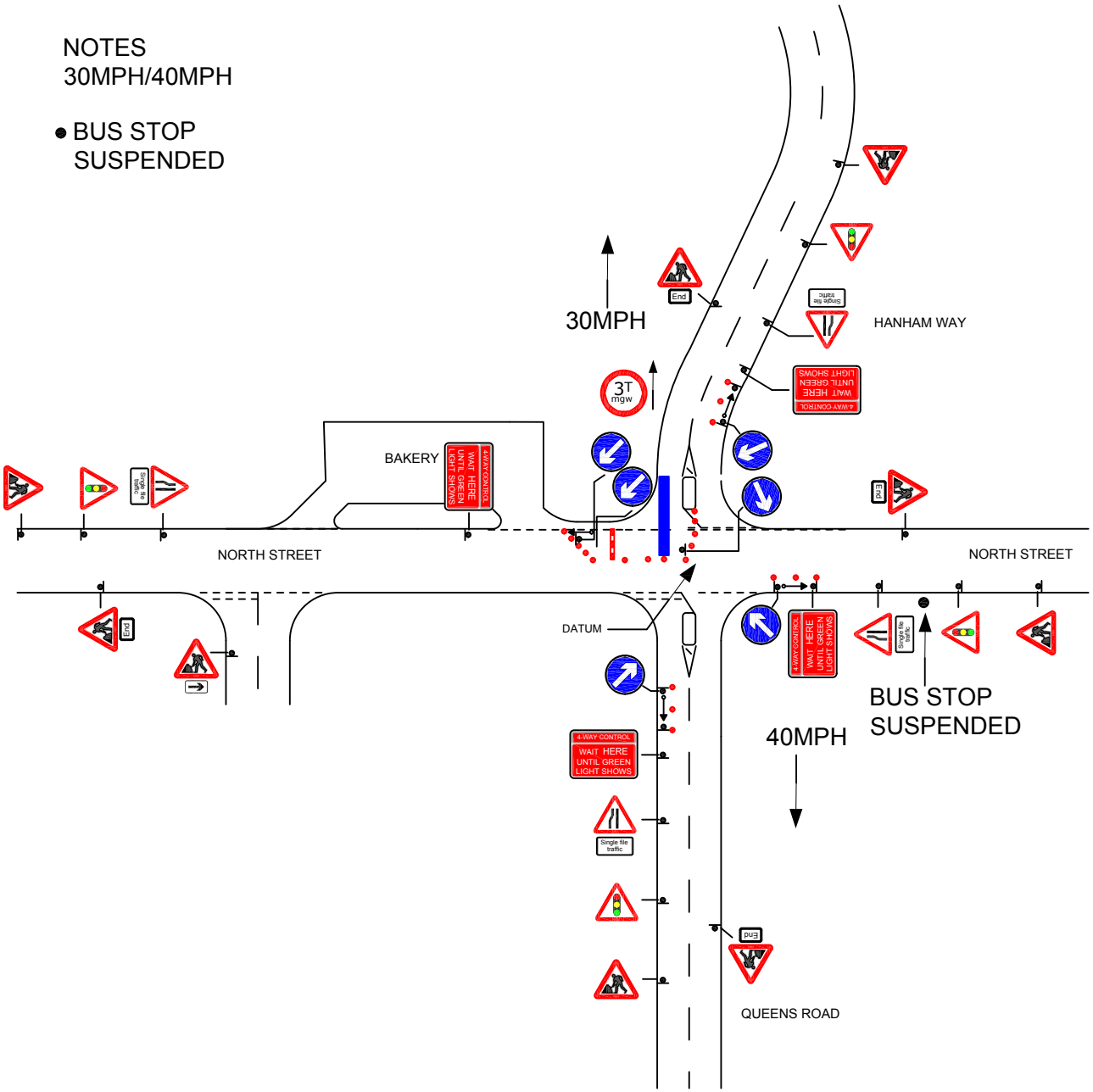
DO WORK AT	PEAK TIMES	WEEKEND	OFF PEAK	24HR ✓	DATE	10/02/14
PURPOSE OF WORKS	DRAWN BY				AMMEND No	Drawing information
EXCAVATION	R W				00	ADDRESS NORTH ROAD QUEENS ROAD
PERMANENT LIGHTS AFFECT SITE?	N/A					
PEDESTRIAN CROSSING AFFECTED?	N/A					
BUS ROUTES / STOPS AFFECTED?	YES					

SHEET NO
1 of 2

HIRE ADVICE 242-S001057/12

NOTES
30MPH/40MPH

- BUS STOP SUSPENDED



MMD DRAWING No.					
MMD-322069-C-DR-GEN-XX-0308					
ISSUE	DATE	COMMENTS	DRAWN	CHK'D	APP'D
TITLE:					

nationalgrid

PHASE DIAGRAM

	PHASE 1	PHASE 2	PHASE 3	PHASE 4
	GO	GO	GO	GO
RED SETTINGS	2	3	3	1
GREEN SETTINGS (SECONDS)	45	45	45	45

30M
5M 30M
20M
DISTANCE FROM DATUM POINT TO WAIT HERE BOARDS

A-Plant Lux Traffic Control & Management
Kemble Airfield Enterprise Park
Cirencester Road
Kemble
GL7 6BQ
Telephone : 0870 050 0792
Fax: 0845 004 7105

SPEED OF ROAD		30 MPH
DISTANCE FROM FIRST SIGN TO START OF SITE(D)	MIN	20m
	MAX	45m
SIDEWAYS SAFETY ZONE (S)		0.5 M
LONGWAYS CLEARANCE (L)		0.5 M
TAPER		45°

KEY:
- Cone
- Temporary Road Signs
- Traffic Barrier
- Working Area

Running lanes

3.5m maximum
3.25m desirable minimum
3.0m absolute minimum

All signs will be 750mm and will be held in place with sand bags

All marked with 750mm cone where required

DRAWING DESCRIPTION

4 WAY LIGHTS

CLIENT DETAILS
E.A.W.

DO WORK AT	PEAK TIMES	WEEKEND	OFF PEAK	24HR ✓	DATE 10/02/14
PURPOSE OF WORKS	DRAWN BY	AMMEND No	Drawing information		SHEET NO
EXCAVATION	R W	00	ADDRESS NORTH ROAD HANHAM WAY		2 of 2
PERMANENT LIGHTS AFFECT SITE?	N/A				
PEDESTRIAN CROSSING AFFECTED?	N/A				
BUS ROUTES / STOPS AFFECTED?	YES				

HIRE ADVICE 242-S001057/12

KEY

01A

ADVANCED WARNING
THIS ROAD WILL BE CLOSED
FROM —/—/— TO —/—/—
FOR —— DAY/S

P7105

750mm

ROAD CLOSED

01

ROAD AHEAD CLOSED FOLLOW DIVERSION 02

Diversion ENDS 03

Diverted traffic 04

Diverted traffic 05

Diverted traffic 06

Diversion 07

Diversion 08

Diversion 09

ROAD AHEAD CLOSED 10

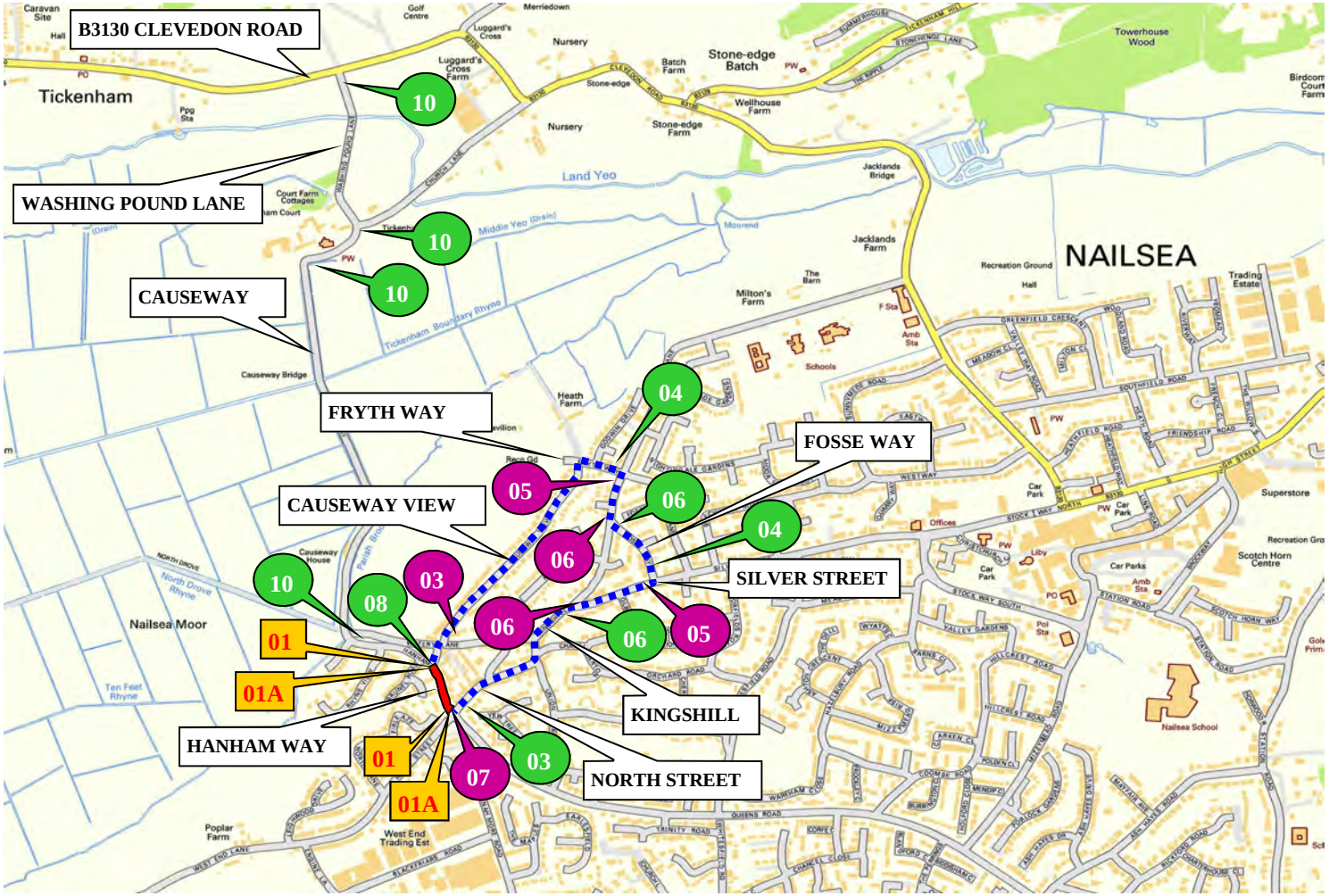
Diverted traffic 11

Diverted traffic 12

Diverted traffic 13

Diverted traffic 14

Diverted traffic 15



FOR QUEENS ROAD & HANNAHMORE ROAD FOLLOW DIVERSION 21

QUEENS ROAD CLOSED 16

QUEENS ROAD & HANNAHMORE ROAD 22

QUEENS ROAD CLOSED 17

18 Diverted traffic

BARRIERS,CONES AND FLASHING LAMPS REQUIRED EACH END OF ROAD CLOSURE 19

19 Diverted traffic

20 Access To Residents Only

A-Plant Lux Traffic Control & Management
Kemble Airfield Enterprise Park
Cirencester Road
Kemble
GL7 6BQ
Telephone: 0870 050 0792
Fax: 0845 0047105

NOTES

1 ALL EQUIPMENT SHALL BE APPROVED AND SHALL COMPLY WITH THE DEPARTMENT OF TRANSPORT SPECIFICATION MCE0111 THIS DRAWING DOES NOT SHOW THE NORMAL ROADWORKS SIGNING THAT WILL BE REQUIRED (chapter 8)
2. ALL SIGNS TO BE IN ACCORDANCE WITH TSGRD 2002 AND TO MINIMUM CLASS 2 RETROFLECTIVE
3. MINIMUM x HEIGHT OF LETTERING TO BE 60MM AND SIGN BOARDS TO BE MIN 1000MM*750MM WHERE APPROPRIATE

CLIENT DETAILS	REP/DEPOT	DRAWN BY	ADDRESS
NATIONAL GRID	RW/926	RW	HANHAM WAY NAILSEA BS48 2FD
AMMEND NO	SHEET NO.	DATE	
00	1 OF 5	13/02/14	

SUITABLE TIME TO UNDERTAKE THE WORKS				
OFFPEAK 0930-1530	NIGHT 2100-0600	WEEKEND	WEEKDAY 0800-1700	24 HOUR WORKS
				✓

BUS ROUTE AFFECTED: NO

KEY

ROAD CLOSURE

DIVERSION ROUTE

ANTI-CLOCKWISE DIVERSION

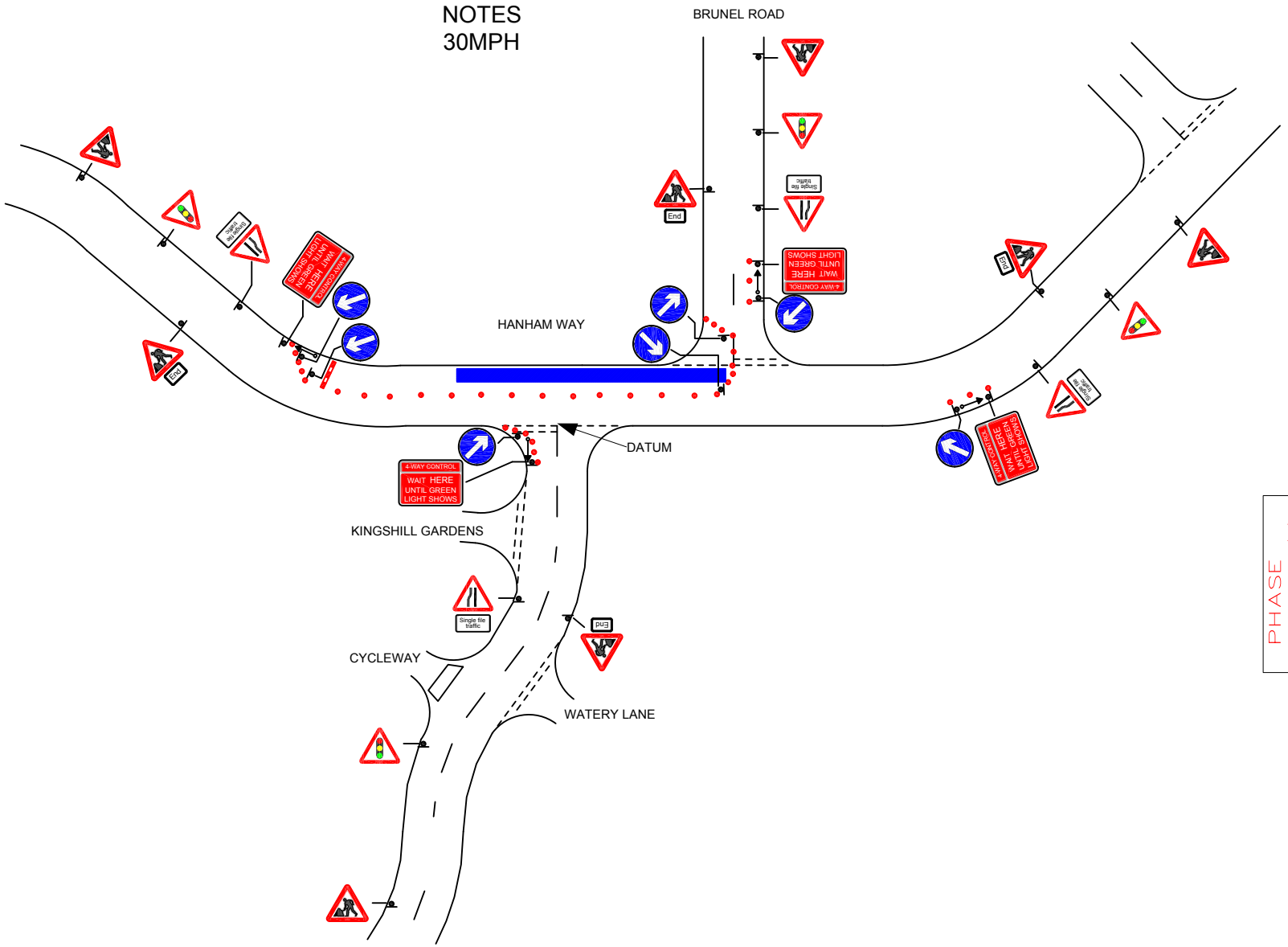
CLOCKWISE DIVERSION

ROAD CLOSURE SIGN

ROAD CLOSURE LENGTH APPROX 100M
ROAD CLOSURE WIDTHAPPROX 6.0 M

HIRE ADVICE 242-S0001057/13

NOTES
30MPH



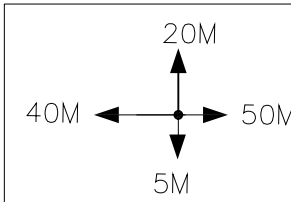
MMD DRAWING No.	MMD-322069-C-DR-GEN-XX-0308				
ISSUE	DATE	COMMENTS	DRAWN	CHK'D	APP'D

TITLE:

nationalgrid

PHASE DIAGRAM

	PHASE 1	PHASE 2	PHASE 3	PHASE 4
	GO	GO	GO	GO
RED SETTINGS	4	5	1	2
GREEN SETTINGS (SECONDS)	45	45	45	45



DISTANCE FROM DATUM POINT TO WAIT HERE BOARDS

A-Plant Lux Traffic Control & Management
Kemble Airfield Enterprise Park
Cirencester Road
Kemble
GL7 6BQ
Telephone : 0870 050 0792
Fax: 0845 004 7105

SPEED OF ROAD		30 MPH
DISTANCE FROM FIRST SIGN TO START OF SITE(D)	MIN	20m
	MAX	45m
SIDEWAYS SAFETY ZONE (S)		0.5 M
LONGWAYS CLEARANCE (L)		0.5 M
TAPER		45°

KEY:

●	Cone
	Temporary Road Signs
	Traffic Barrier
	Working Area

Running lanes

3.5m maximum
3.25m desirable minimum
3.0m absolute minimum

All signs will be 750mm and will be held in place with sand bags

All marked with 750mm cone where required

DRAWING DESCRIPTION

4 WAY LIGHTS

CLIENT DETAILS
NATIONAL GRID

DO WORK AT | PEAK TIMES | | WEEKEND | | OFF PEAK | | 24HR ✓ | DATE 11/02/14

PURPOSE OF WORKS: EXCAVATION | DRAWN BY: R W

PERMANENT LIGHTS AFFECT SITE? N/A
PEDESTRIAN CROSSING AFFECTED? N/A
BUS ROUTES / STOPS AFFECTED? N/A

AMMEND No: 00

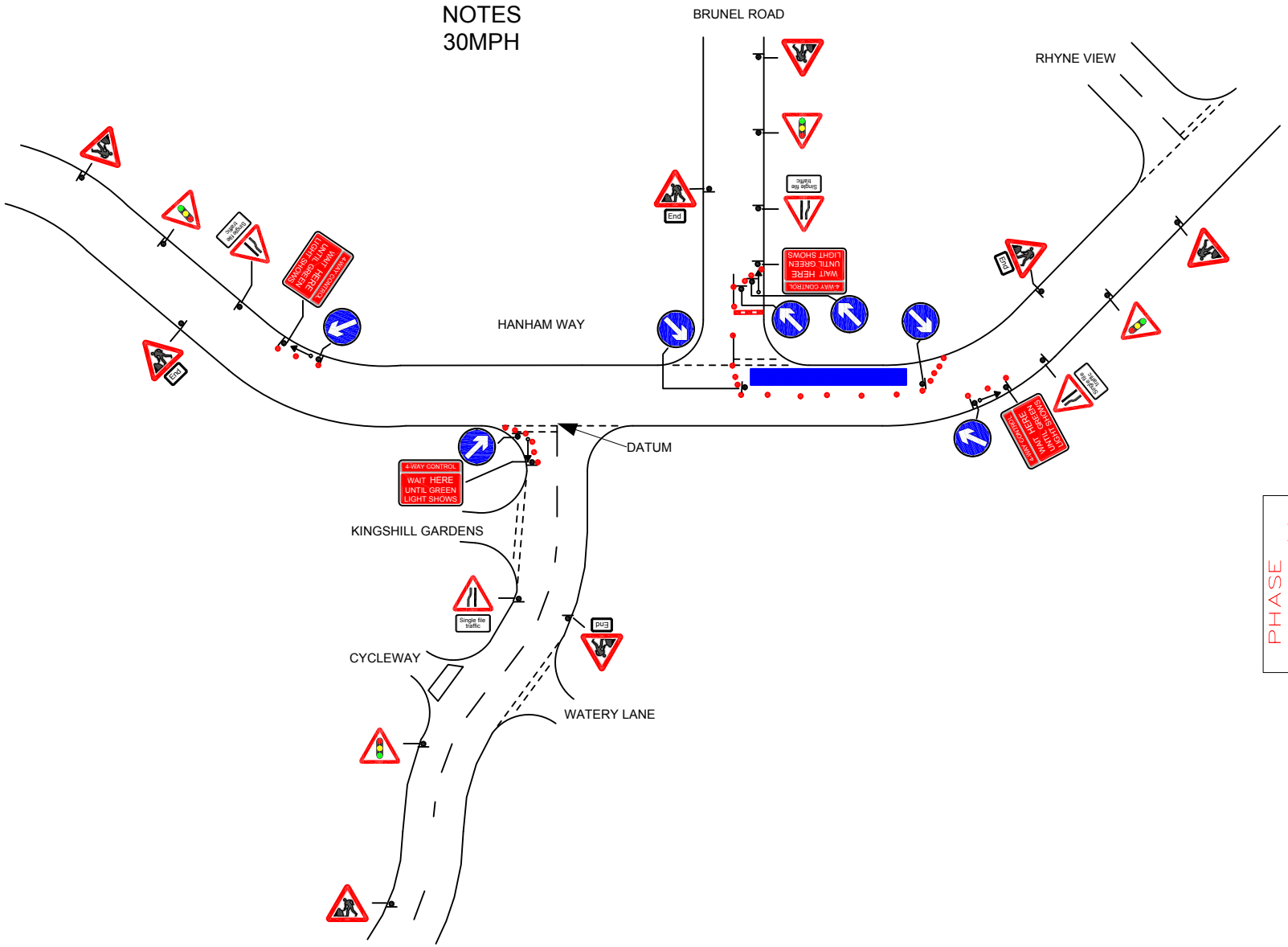
Drawing information

ADDRESS: HANHAM WAY BRUNEL ROAD

SHEET NO: 2 of 5

HIRE ADVICE 242-S001057/13

NOTES
30MPH

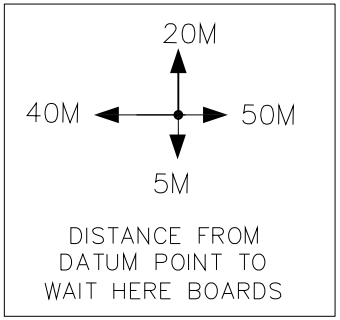


MMD DRAWING No.					
MMD-322069-C-DR-GEN-XX-0308					
ISSUE	DATE	COMMENTS	DRAWN	CHK'D	APP'D

TITLE:

nationalgrid

PHASE DIAGRAM	PHASE 1	PHASE 2	PHASE 3	PHASE 4
	GO	GO	GO	GO
RED SETTINGS	4	5	1	2
GREEN SETTINGS (SECONDS)	45	45	45	45



A-Plant Lux Traffic Control & Management
Kemble Airfield Enterprise Park
Cirencester Road
Kemble
GL7 6BQ
Telephone : 0870 050 0792
Fax: 0845 004 7105

SPEED OF ROAD	30 MPH
DISTANCE FROM FIRST SIGN TO START OF SITE(D) MIN	20m
DISTANCE FROM FIRST SIGN TO START OF SITE(D) MAX	45m
SIDEWAYS SAFETY ZONE (S)	0.5 M
LONGWAYS CLEARANCE (L)	0.5 M
TAPER	45°

KEY:
- Cone
- Temporary Road Signs
- Traffic Barrier
- Working Area

Running lanes

3.5m maximum
3.25m desirable minimum
3.0m absolute minimum

All signs will be 750mm and will be held in place with sand bags

All marked with 750mm cone where required

DRAWING DESCRIPTION

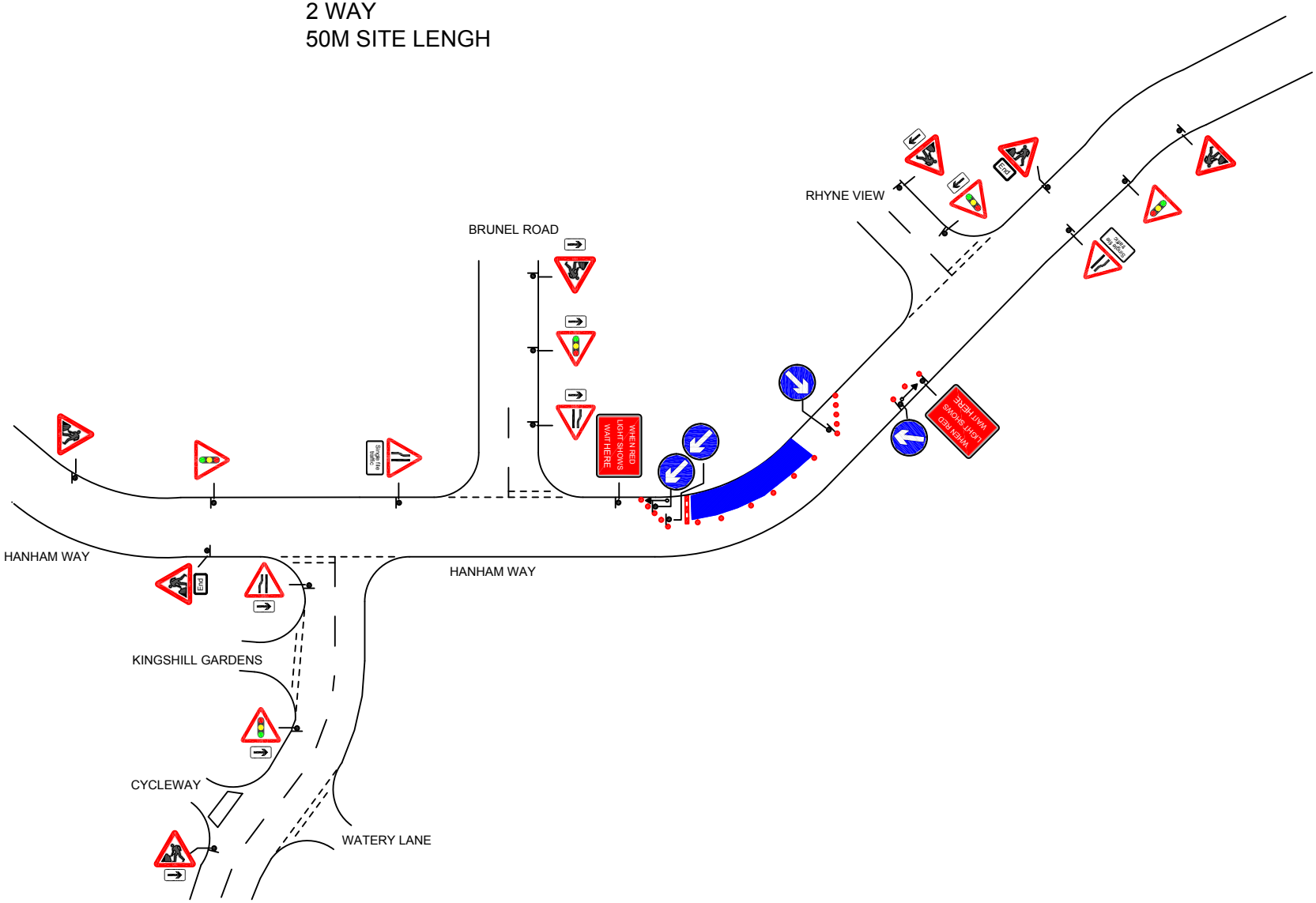
4 WAY LIGHTS

CLIENT DETAILS
NATIONAL GRID

DO WORK AT	PEAK TIMES		WEEKEND		OFF PEAK	24HR ✓	DATE 11/02/14
PURPOSE OF WORKS	DRAWN BY		AMMEND No	Drawing information			SHEET NO
EXCAVATION	R W		00	ADDRESS HANHAM WAY BRUNEL ROAD			3of 5
PERMANENT LIGHTS AFFECT SITE?		N/A					
PEDESTRIAN CROSSING AFFECTED?		N/A					
BUS ROUTES / STOPS AFFECTED?		N/A					

HIRE ADVICE 242-S001057/13

NOTES
30MPH
2 WAY
50M SITE LENGH



MMD DRAWING No. MMD-322069-C-DR-GEN-XX-0308

ISSUE	DATE	COMMENTS	DRAWN	CHK'D	APP'D

TITLE:

nationalgrid

A-Plant Lux Traffic Control & Management
Kemble Airfield Enterprise Park
Cirencester Road
Kemble
GL7 6BQ
Telephone : 0870 050 0792
Fax: 0845 004 7105

SPEED OF ROAD		30 MPH
DISTANCE FROM FIRST SIGN TO START OF SITE(D)	MIN	20m
	MAX	45m
SIDEWAYS SAFETY ZONE (S)		0.5 M
LONGWAYS CLEARANCE (L)		0.5 M
TAPER		45°

KEY:

	Cone
	Temporary Road Signs
	Traffic Barrier
	Working Area

Running lanes

3.5m maximum
3.25m desirable minimum
3.0m absolute minimum

All signs will be 750mm and will be held in place with sand bags

All marked with 750mm cone where required

DRAWING DESCRIPTION

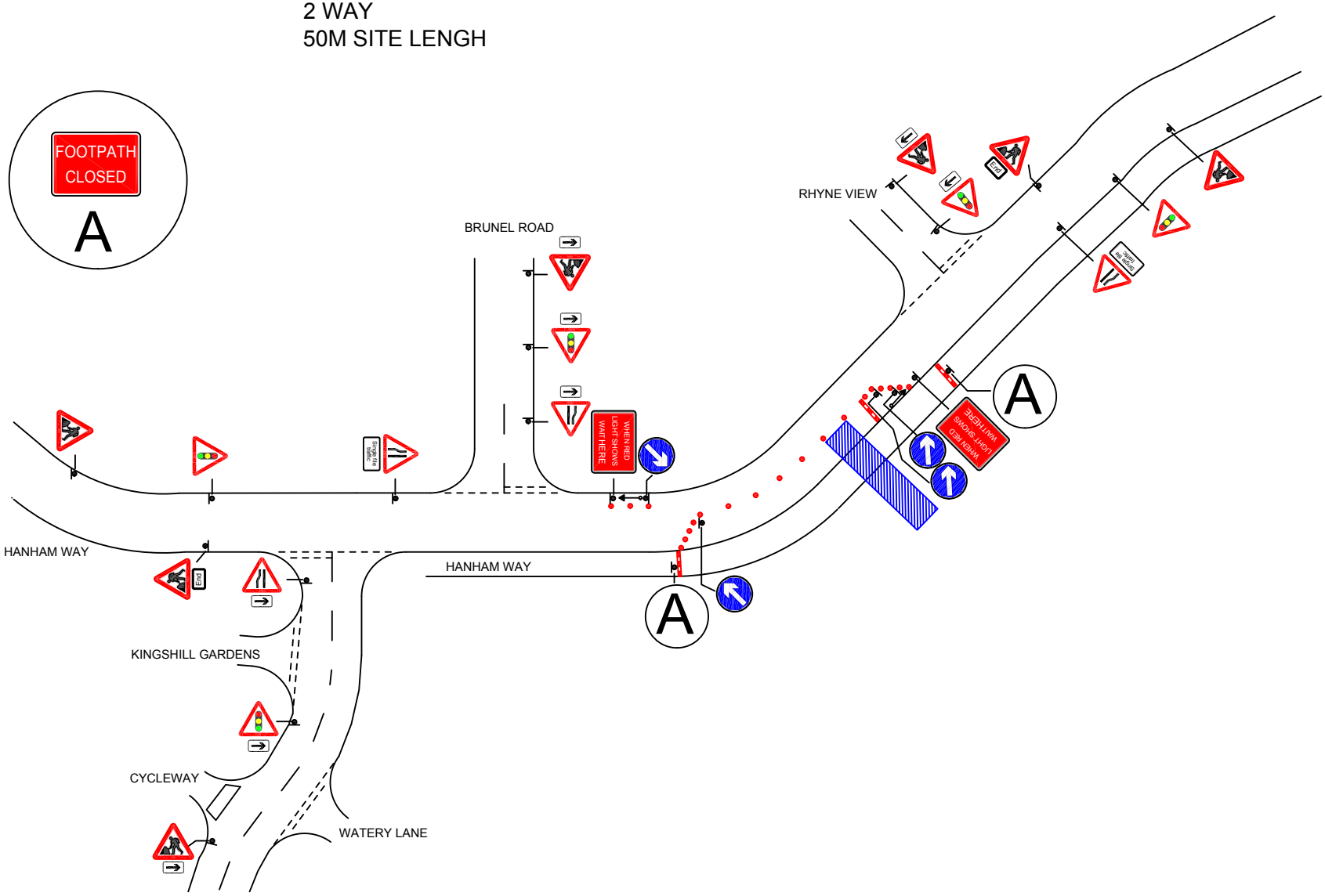
2 WAY LIGHTS

CLIENT DETAILS
NATIONAL GRID

DO WORK AT	PEAK TIMES		WEEKEND		OFF PEAK		24HR	✓	DATE	11/02/14
PURPOSE OF WORKS	DRAWN BY								AMMEND No	Drawing information	SHEET NO
EXCAVATION	R W								00	ADDRESS HANHAM WAY BRUNEL ROAD	4of 5
PERMANENT LIGHTS AFFECT SITE?								N/A			
PEDESTRIAN CROSSING AFFECTED?								N/A			
BUS ROUTES / STOPS AFFECTED?								N/A			

HIRE ADVICE 242-S001057/13

NOTES
30MPH
2 WAY
50M SITE LENGH



MMD DRAWING No. MMD-322069-C-DR-GEN-XX-0308

ISSUE	DATE	COMMENTS	DRAWN	CHK'D	APP'D

TITLE:

nationalgrid

A-Plant Lux Traffic Control & Management
Kemble Airfield Enterprise Park
Cirencester Road
Kemble
GL7 6BQ
Telephone : 0870 050 0792
Fax: 0845 004 7105

SPEED OF ROAD		30 MPH
DISTANCE FROM FIRST SIGN TO START OF SITE(D)	MIN	20m
	MAX	45m
SIDEWAYS SAFETY ZONE (S)		0.5 M
LONGWAYS CLEARANCE (L)		0.5 M
TAPER		45°

KEY:

	Cone
	Temporary Road Signs
	Traffic Barrier
	Working Area

Running lanes

3.5m maximum
3.25m desirable minimum
3.0m absolute minimum

All signs will be 750mm and will be held in place with sand bags

All marked with 750mm cone where required

DRAWING DESCRIPTION

2 WAY LIGHTS
&
FOOTWAY CLOSURE

CLIENT DETAILS
NATIONAL GRID

DO WORK AT	PEAK TIMES	WEEKEND	OFF PEAK / 24HR ✓
DATE	11/02/14		
PURPOSE OF WORKS	DRAWN BY	AMMEND No	Drawing information
EXCAVATION	R W	00	SHEET NO
		ADDRESS	HANHAM WAY BRUNEL ROAD
			5 of 5
PERMANENT LIGHTS AFFECT SITE?	N/A		
PEDESTRIAN CROSSING AFFECTED?	N/A		
BUS ROUTES / STOPS AFFECTED?	N/A		

HIRE ADVICE 242-S001057/13

KEY

01A

ADVANCED WARNING
THIS ROAD WILL BE CLOSED
FROM —/—/— TO —/—/—
FOR —— DAY/S

P7105

750mm

01

ROAD CLOSED

ROAD AHEAD CLOSED FOLLOW DIVERSION 02

Diverted traffic 04

Diverted traffic 06

Diversion 08

ROAD AHEAD CLOSED 10

Diverted traffic 12

Diversion ENDS 03

Diverted traffic 05

Diversion 07

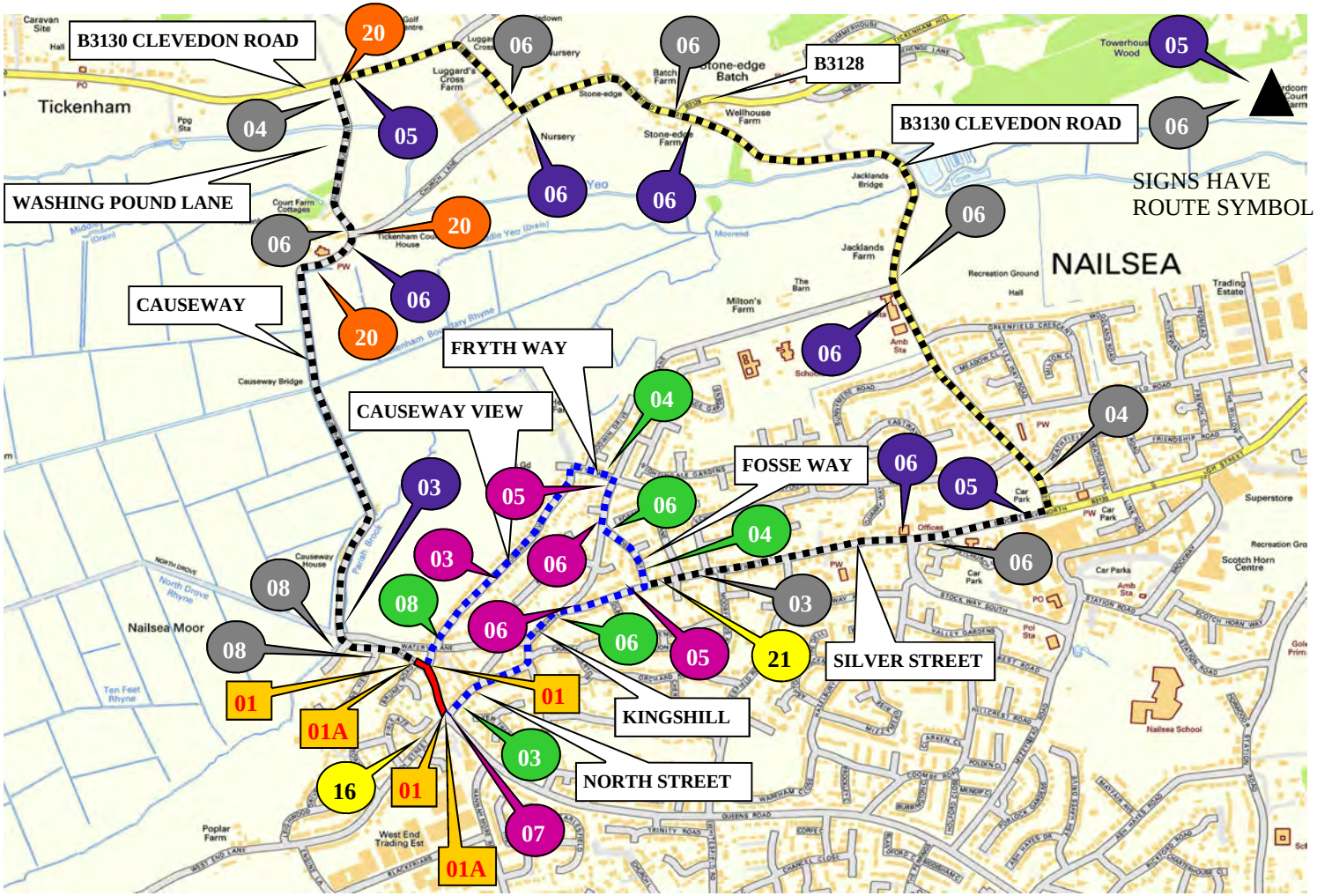
Diversion 09

Diverted traffic 11

Diverted traffic 13

Diverted traffic 14

Diverted traffic 15



FOR CAUSEWAY FOLLOW DIVERSION

21

HANHAM WAY CLOSED

16

XXXXXX & XXXXX XXXXX

22

HANHAM WAY CLOSED

17

18 Diverted traffic

BARRIERS,CONES AND FLASHING LAMPS REQUIRED EACH END OF ROAD CLOSURE

19 Diverted traffic

20 Access To Residents Only

A-Plant Lux Traffic Control & Management
Kemble Airfield Enterprise Park
Cirencester Road
Kemble
GL7 6BQ
Telephone: 0870 050 0792
Fax: 0845 0047105

NOTES

1 ALL EQUIPMENT SHALL BE APPROVED AND SHALL COMPLY WITH THE DEPARTMENT OF TRANSPORT SPECIFICATION MCE0111 THIS DRAWING DOES NOT SHOW THE NORMAL ROADWORKS SIGNING THAT WILL BE REQUIRED (chapter 8)
2. ALL SIGNS TO BE IN ACCORDANCE WITH TSGRD 2002 AND TO MINIMUM CLASS 2 RETROFLECTIVE
3. MINIMUM x HEIGHT OF LETTERING TO BE 60MM AND SIGN BOARDS TO BE MIN 1000MM*750MM WHERE APPROPRIATE

CLIENT DETAILS	REP/DEPOT	DRAWN BY	ADDRESS
NATIONAL GRID	RW/926	RW	HANHAM WAY NAILSEA BS48 2FD
AMMEND NO	SHEET NO.	DATE	
00	1 OF 5	13/02/14	

SUITABLE TIME TO UNDERTAKE THE WORKS

OFFPEAK 0930-1530	NIGHT 2100-0600	WEEKEND	WEEKDAY 0800-1700	24 HOUR WORKS
				✓

BUS ROUTE AFFECTED: NO

KEY

ROAD CLOSURE
DIVERSION ROUTE
DIVERSION ROUTE
ANTI-CLOCKWISE DIVERSION
CLOCKWISE DIVERSION
ROAD CLOSURE SIGN

ROAD CLOSURE LENGTH APPROX 140M
ROAD CLOSURE WIDTHAPPROX 6.0 M

HIRE ADVICE 242-S0001057/13 B

KEY

01A

ADVANCED WARNING
THIS ROAD WILL BE CLOSED
FROM —/—/— TO —/—/—
FOR —— DAY/S

P7105

750mm

ROAD CLOSED

01

ROAD AHEAD CLOSED FOLLOW DIVERSION 02

Diversion ENDS 03

Diverted traffic 04

Diverted traffic 05

Diverted traffic 06

Diversion 07

Diversion 08

Diversion 09

ROAD AHEAD CLOSED 10

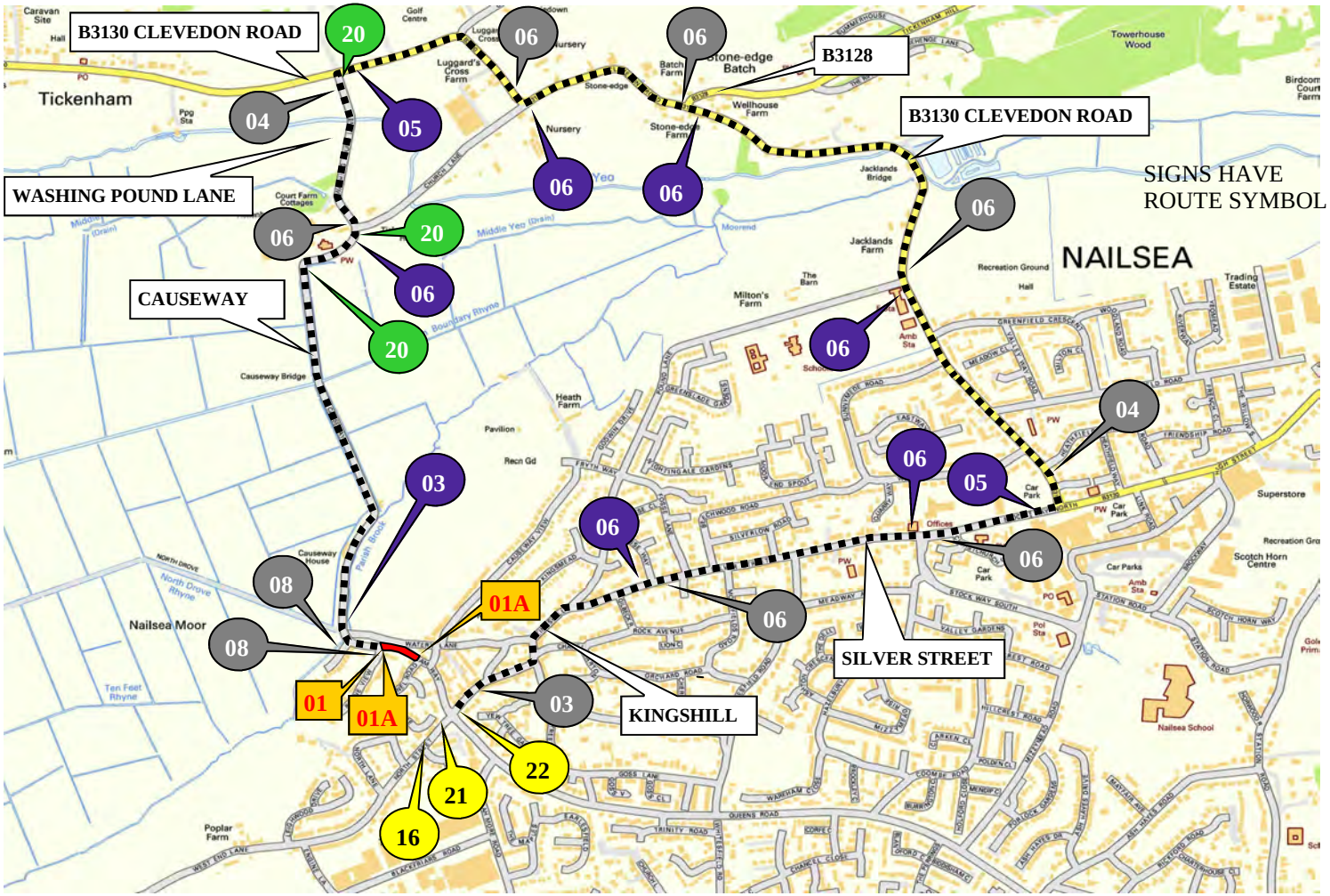
Diverted traffic 11

Diverted traffic 12

Diverted traffic 13

Diverted traffic 14

Diverted traffic 15



FOR CAUSEWAY FOLLOW DIVERSION

21

HANHAM WAY CLOSED

16

ACCESS TO CAUSEWAY VIEW & BRUNEL ROAD ONLY

22

HANHAM WAY CLOSED

17

18 Diverted traffic

BARRIERS,CONES AND FLASHING LAMPS REQUIRED EACH END OF ROAD CLOSURE

19

19 Diverted traffic

20 Access To Residents Only

A-Plant Lux Traffic Control & Management
Kemble Airfield Enterprise Park
Cirencester Road
Kemble
GL7 6BQ
Telephone: 0870 050 0792
Fax: 0845 0047105

NOTES

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2. ALL SIGNS TO BE IN ACCORDANCE WITH TSGRD 2002 AND TO MINIMUM CLASS 2 RETROFLECTIVE
3. MINIMUM x HEIGHT OF LETTERING TO BE 60MM AND SIGN BOARDS TO BE MIN 1000MM*750MM WHERE APPROPRIATE

CLIENT DETAILS	REP/DEPOT	DRAWN BY	ADDRESS
NATIONAL GRID	RW/926	RW	HANHAM WAY NAILSEA BS48 2FD
AMMEND NO	SHEET NO.	DATE	
00	1 OF 5	13/02/14	

SUITABLE TIME TO UNDERTAKE THE WORKS

OFFPEAK 0930-1530	NIGHT 2100-0600	WEEKEND	WEEKDAY 0800-1700	24 HOUR WORKS
				✓

BUS ROUTE AFFECTED: NO

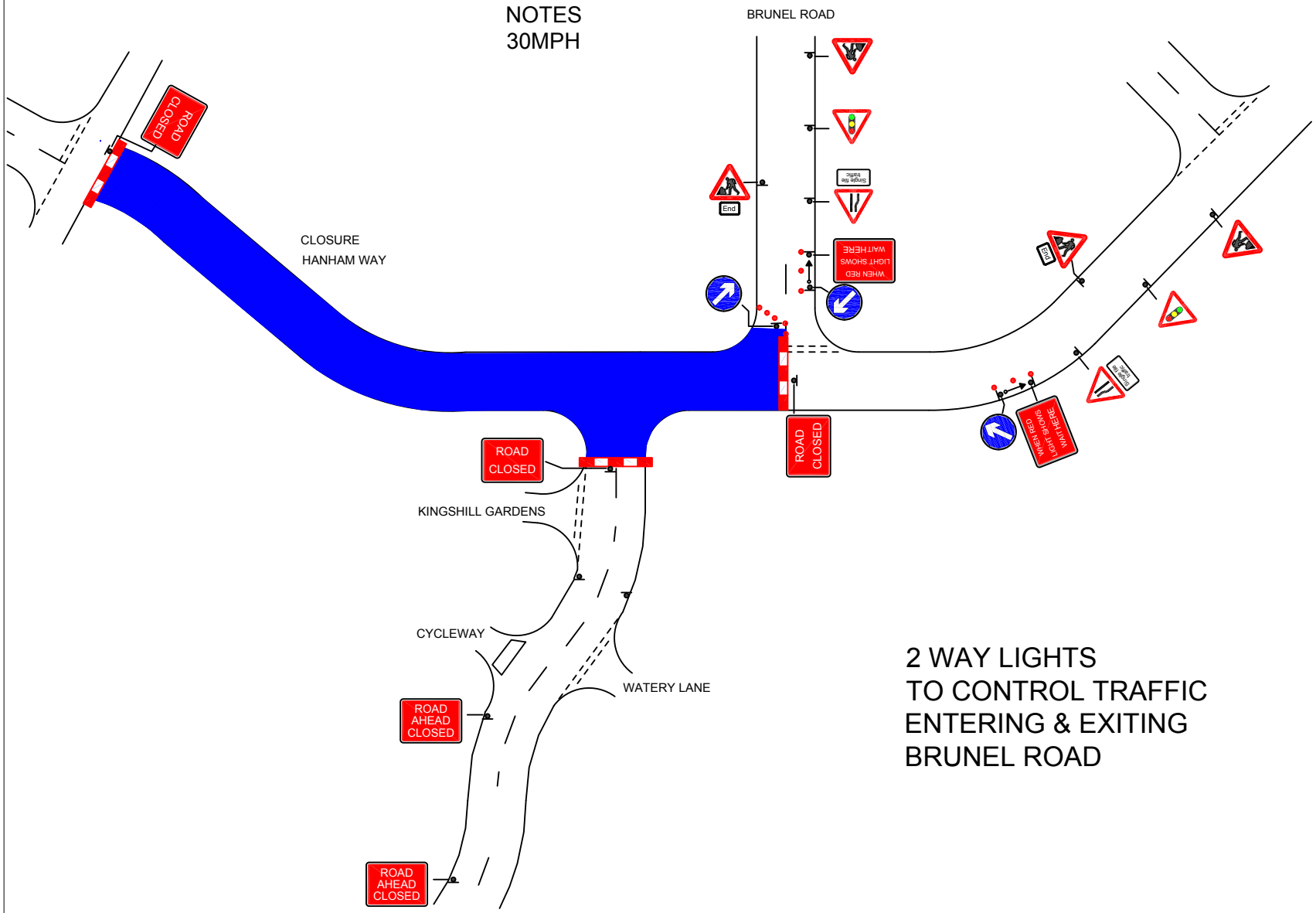
KEY

ROAD CLOSURE
DIVERSION ROUTE
DIVERSION ROUTE
ANTI-CLOCKWISE DIVERSION
CLOCKWISE DIVERSION
ROAD CLOSURE SIGN

ROAD CLOSURE LENGTH APPROX 70M
ROAD CLOSURE WIDTHAPPROX 6.0 M

HIRE ADVICE 242-S0001057/13 B

NOTES
30MPH



2 WAY LIGHTS
TO CONTROL TRAFFIC
ENTERING & EXITING
BRUNEL ROAD

20M
50M

DISTANCE FROM
DATUM POINT TO
WAIT HERE BOARDS

MMD DRAWING No.
MMD-322069-C-DR-GEN-XX-0308

ISSUE	DATE	COMMENTS	DRAWN	CHK'D	APP'D

TITLE:

nationalgrid

A-Plant Lux Traffic Control & Management
Kemble Airfield Enterprise Park
Cirencester Road
Kemble
GL7 6BQ
Telephone : 0870 050 0792
Fax: 0845 004 7105

SPEED OF ROAD		30 MPH
DISTANCE FROM FIRST SIGN TO START OF SITE(D)	MIN	20m
	MAX	45m
SIDEWAYS SAFETY ZONE (S)		0.5 M
LONGWAYS CLEARANCE (L)		0.5 M
TAPER		45°

KEY:
- Cone
- Temporary Road Signs
- Traffic Barrier
- Working Area

Running lanes

3.5m maximum
3.25m desirable minimum
3.0m absolute minimum

All signs will be 750mm and will be held in place with sand bags

All marked with 750mm cone where required

DRAWING DESCRIPTION

2 WAY LIGHTS
WITH
ROAD CLOSURE

CLIENT DETAILS
NATIONAL GRID

DO WORK AT	PEAK TIMES		WEEKEND	OFF PEAK	24HR ✓
PURPOSE OF WORKS	DRAWN BY				
EXCAVATION	R W				
PERMANENT LIGHTS AFFECT SITE?		N/A			
PEDESTRIAN CROSSING AFFECTED?		N/A			
BUS ROUTES / STOPS AFFECTED?		N/A			

DATE 13/02/14

AMMEND No: 00

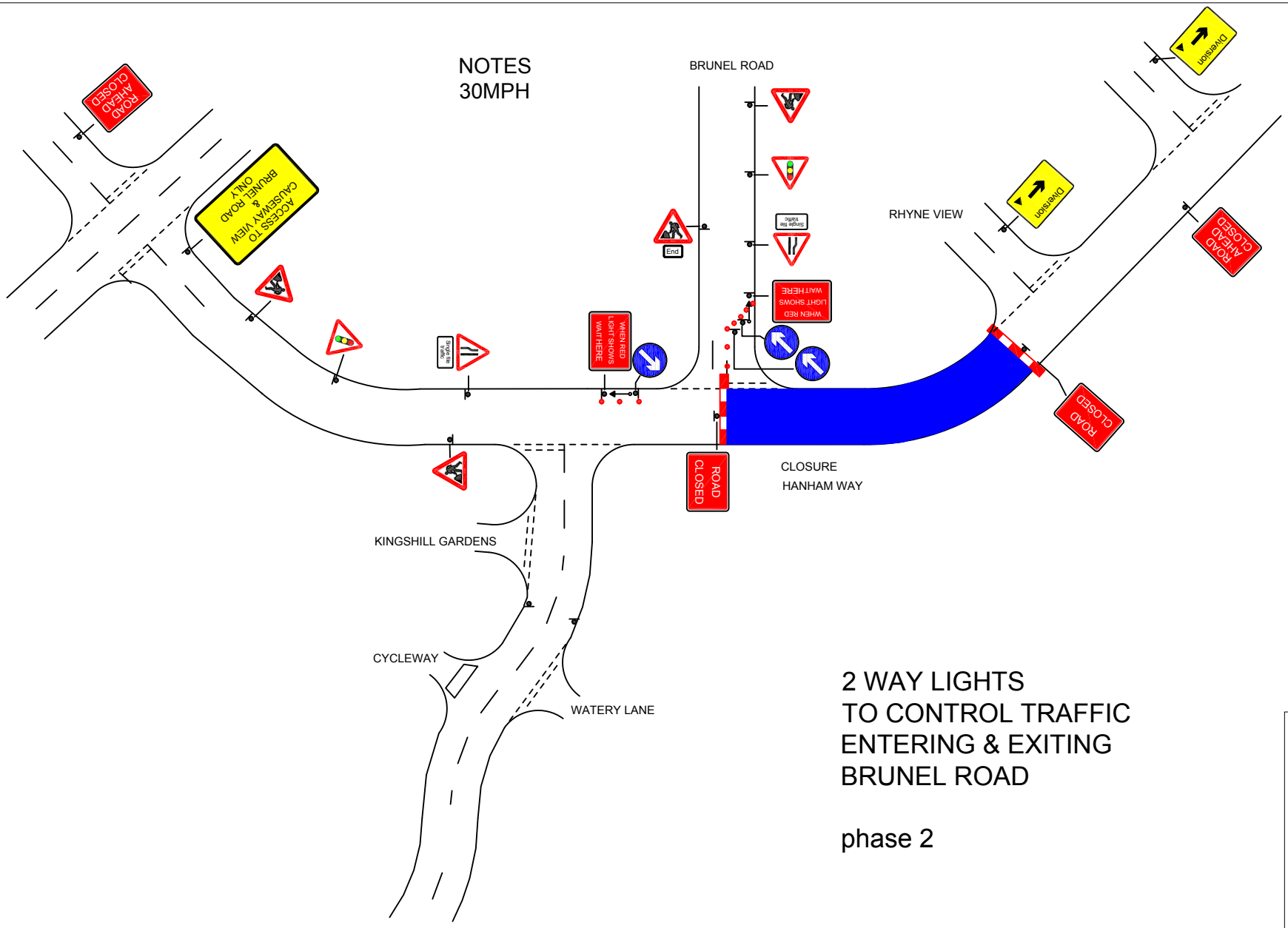
Drawing information

ADDRESS: HANHAM WAY
BRUNEL ROAD

SHEET NO: 3 of 4

HIRE ADVICE 242-S001057/13 B

NOTES
30MPH



2 WAY LIGHTS
TO CONTROL TRAFFIC
ENTERING & EXITING
BRUNEL ROAD

phase 2

20M
20M

DISTANCE FROM
DATUM POINT TO
WAIT HERE BOARDS

MMD DRAWING No.
MMD-322069-C-DR-GEN-XX-0308

ISSUE	DATE	COMMENTS	DRAWN	CHK'D	APP'D

TITLE:

nationalgrid

A-Plant Lux Traffic Control & Management
Kemble Airfield Enterprise Park
Cirencester Road
Kemble
GL7 6BQ
Telephone : 0870 050 0792
Fax: 0845 004 7105

SPEED OF ROAD		30 MPH
DISTANCE FROM FIRST SIGN TO START OF SITE(D)	MIN	20m
	MAX	45m
SIDEWAYS SAFETY ZONE (S)		0.5 M
LONGWAYS CLEARANCE (L)		0.5 M
TAPER		45°

KEY:
- Cone
- Temporary Road Signs
- Traffic Barrier
- Working Area

Running lanes

3.5m maximum
3.25m desirable minimum
3.0m absolute minimum

All signs will be 750mm and will be held in place with sand bags

All marked with 750mm cone where required

DRAWING DESCRIPTION

2 WAY LIGHTS
WITH
ROAD CLOSURE

CLIENT DETAILS
NATIONAL GRID

DO WORK AT	PEAK TIMES		WEEKEND	OFF PEAK	24HR ✓
PURPOSE OF WORKS	DRAWN BY				
EXCAVATION	R W				
PERMANENT LIGHTS AFFECT SITE?		N/A			
PEDESTRIAN CROSSING AFFECTED?		N/A			
BUS ROUTES / STOPS AFFECTED?		N/A			

DATE 13/02/14

AMMEND No	Drawing information	SHEET NO
00	ADDRESS HANHAM WAY BRUNEL ROAD	4 of 4

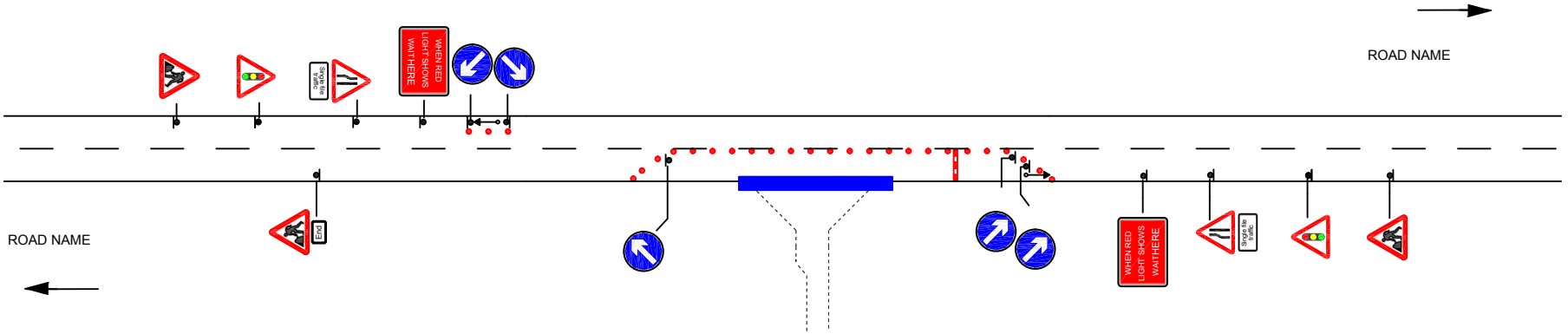
HIRE ADVICE 242-S001057/13 B

Hinkley Point C Connection Project

Generic Temporary Traffic Management Plans

NOTES

30MPH



MMD DRAWING No.		2 WAY 30MPH GENERIC			
ISSUE	DATE	COMMENTS	DRAWN	CHK'D	APP'D

TITLE:

nationalgrid

A-Plant Lux Traffic Control & Management
Kemble Airfield Enterprise Park
Cirencester Road
Kemble
GL7 6BQ
Telephone : 0870 050 0792
Fax: 0845 004 7105

SPEED OF ROAD		30 MPH
DISTANCE FROM FIRST SIGN TO START OF SITE(D)	MIN	20m
	MAX	45m
SIDEWAYS SAFETY ZONE (S)		0.5 M
LONGWAYS CLEARANCE (L)		0.5 M
TAPER		45°

KEY:

	Cone
	Temporary Road Signs
	Traffic Barrier
	Working Area
	Traffic Light Head

Running lanes

3.5m maximum
3.25m desirable minimum
3.0m absolute minimum

All signs will be 750mm and will be held in place with sand bags

All marked with 750mm cone where required

DRAWING DESCRIPTION

TEMPORARY CONSTRUCTION ACCESS BELLMOUTH

CLIENT DETAILS

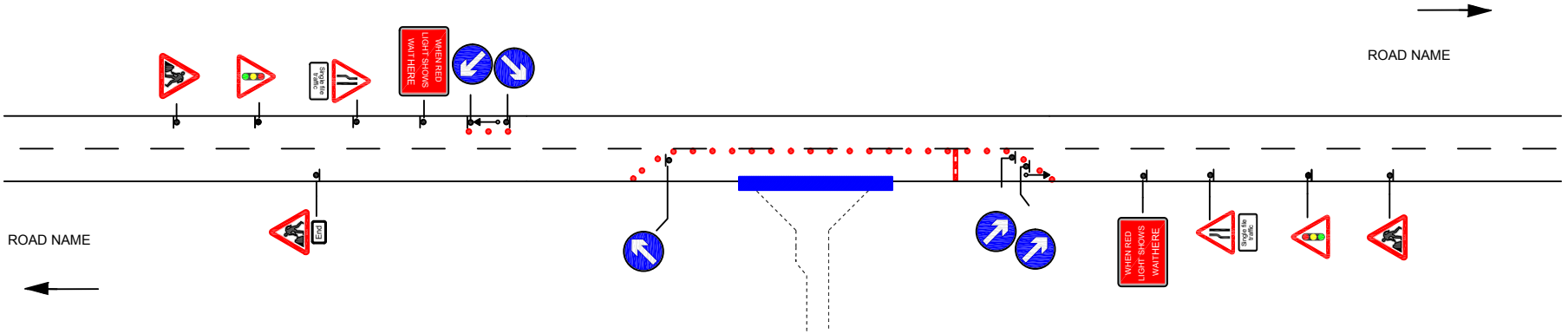
E.A.W.

DO WORK AT	PEAK TIMES	✓	WEEKEND		OFF PEAK		NIGHT	DATE 12/11/13
PURPOSE OF WORKS	DRAWN BY							AMMEND No / Drawing information / SHEET NO
EXCAVATION	R W							00 / ADDRESS / 1 of 1
PERMANENT LIGHTS AFFECT SITE?		N/A						
PEDESTRIAN CROSSING AFFECTED?		N/A						
BUS ROUTES / STOPS AFFECTED?		N/A						

HIRE ADVICE 242-S001057/1

NOTES

40MPH



MMD DRAWING No.	2 WAY 40MPH GENERIC

ISSUE	DATE	COMMENTS	DRAWN	CHK'D	APP'D

TITLE:

nationalgrid

A-Plant Lux Traffic Control & Management
Kemble Airfield Enterprise Park
Cirencester Road
Kemble
GL7 6BQ
Telephone : 0870 050 0792
Fax: 0845 004 7105

SPEED OF ROAD		40 MPH
DISTANCE FROM FIRST SIGN TO START OF SITE(D)	MIN	45m
	MAX	110m
SIDEWAYS SAFETY ZONE (S)		0.5 M
LONGWAYS CLEARANCE (L)		15 M
TAPER		45°

KEY:

	Cone
	Temporary Road Signs
	Traffic Barrier
	Working Area
	Traffic Light Head

Running lanes

3.5m maximum
3.25m desirable minimum
3.0m absolute minimum

All signs will be 750mm and will be held in place with sand bags

All marked with 750mm cone where required

DRAWING DESCRIPTION

TEMPORARY CONSTRUCTION ACCESS BELLMOUTH

CLIENT DETAILS

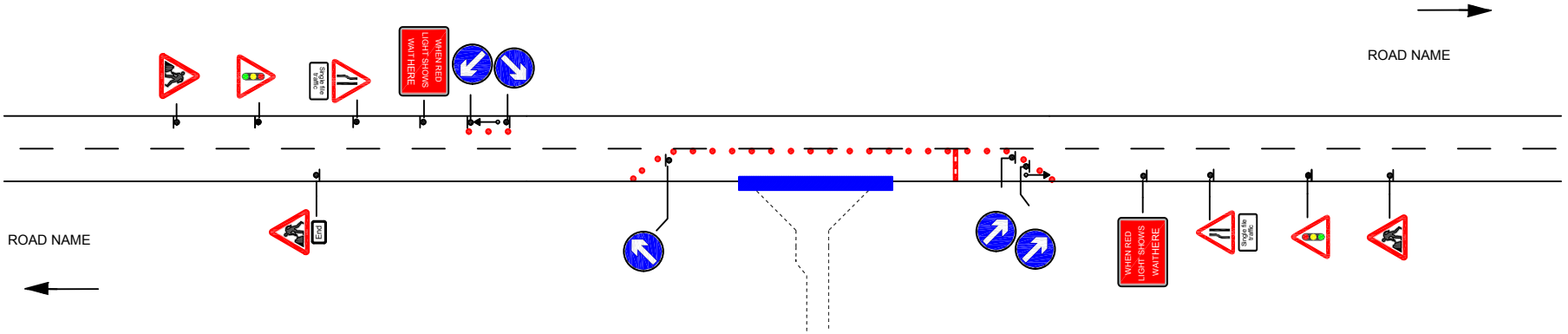
E.A.W.

DO WORK AT	PEAK TIMES	✓	WEEKEND		OFF PEAK		NIGHT	DATE 12/11/13
PURPOSE OF WORKS	DRAWN BY							AMMEND No / Drawing information / SHEET NO
EXCAVATION	R W							00 / ADDRESS / 1 of 1
PERMANENT LIGHTS AFFECT SITE?				N/A				
PEDESTRIAN CROSSING AFFECTED?				N/A				
BUS ROUTES / STOPS AFFECTED?				N/A				

HIRE ADVICE 242-S001057/2

NOTES

50MPH



MMD DRAWING No.	2 WAY 50MPH GENERIC				
ISSUE	DATE	COMMENTS	DRAWN	CHK'D	APP'D

TITLE:

nationalgrid

A-Plant Lux Traffic Control & Management
Kemble Airfield Enterprise Park
Cirencester Road
Kemble
GL7 6BQ
Telephone : 0870 050 0792
Fax: 0845 004 7105

SPEED OF ROAD		50 MPH
DISTANCE FROM FIRST SIGN TO START OF SITE(D)	MIN	275m
	MAX	450m
SIDEWAYS SAFETY ZONE (S)		1.2 M
LONGWAYS CLEARANCE (L)		30 M
TAPER		45°

KEY:

	Cone
	Temporary Road Signs
	Traffic Barrier
	Working Area
	Traffic Light Head

Running lanes

3.5m maximum
3.25m desirable minimum
3.0m absolute minimum

All signs will be 750mm and will be held in place with sand bags

All marked with 750mm cone where required

DRAWING DESCRIPTION

TEMPORARY CONSTRUCTION ACCESS BELLMOUTH

CLIENT DETAILS

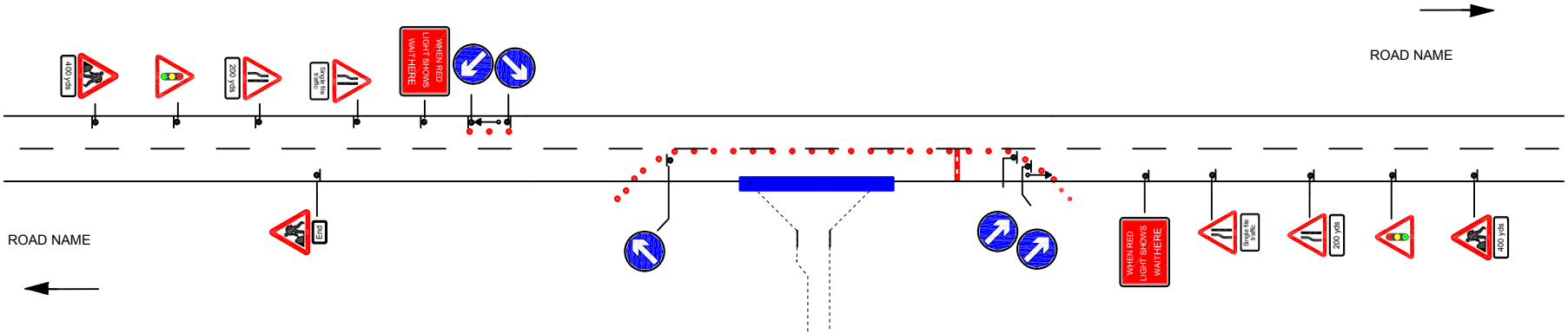
E.A.W.

DO WORK AT	PEAK TIMES	✓	WEEKEND		OFF PEAK		NIGHT	DATE 12/11/13
PURPOSE OF WORKS	DRAWN BY							AMMEND No / Drawing information / SHEET NO
EXCAVATION	R W							00 / ADDRESS / 1 of 1
PERMANENT LIGHTS AFFECT SITE?	N/A							
PEDESTRIAN CROSSING AFFECTED?	N/A							
BUS ROUTES / STOPS AFFECTED?	N/A							

HIRE ADVICE 242-S001057/3

NOTES

60MPH



MMD DRAWING No.					
2 WAY 60MPH GENERIC					
ISSUE	DATE	COMMENTS	DRAWN	CHK'D	APP'D

TITLE:

nationalgrid

A-Plant Lux Traffic Control & Management
Kemble Airfield Enterprise Park
Cirencester Road
Kemble
GL7 6BQ
Telephone : 0870 050 0792
Fax: 0845 004 7105

SPEED OF ROAD		60 MPH
DISTANCE FROM FIRST SIGN TO START OF SITE(D)	MIN	275m
	MAX	450m
SIDEWAYS SAFETY ZONE (S)		1.2 M
LONGWAYS CLEARANCE (L)		60 M
TAPER		45°

KEY:

	Cone
	Temporary Road Signs
	Traffic Barrier
	Working Area
	Traffic Light Head

Running lanes

3.5m maximum
3.25m desirable minimum
3.0m absolute minimum

All signs will be 750mm and will be held in place with sand bags

All marked with 750mm cone where required

DRAWING DESCRIPTION

TEMPORARY CONSTRUCTION ACCESS BELLMOUTH

CLIENT DETAILS

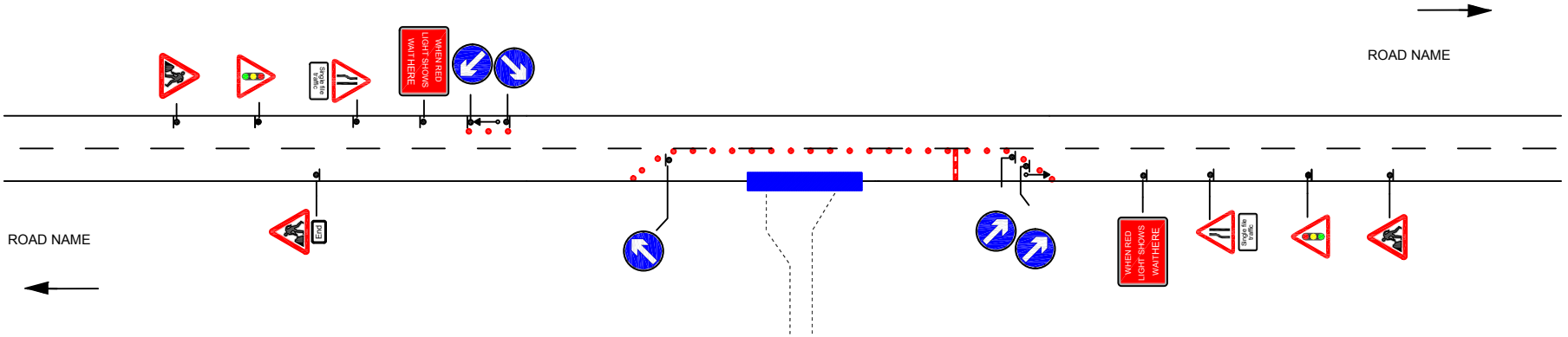
E.A.W.

DO WORK AT	PEAK TIMES	✓	WEEKEND		OFF PEAK		NIGHT	DATE	12/11/13
PURPOSE OF WORKS	DRAWN BY			AMMEND No	Drawing information			SHEET NO	
EXCAVATION	R W			00	ADDRESS			1 of 1	
PERMANENT LIGHTS AFFECT SITE?			N/A						
PEDESTRIAN CROSSING AFFECTED?			N/A						
BUS ROUTES / STOPS AFFECTED?			N/A						

HIRE ADVICE 242-S001057/4

NOTES

HAUL ROUTE PH1
50MPH



MMD DRAWING No.
HAUL ROUTE GENERIC 1/3

ISSUE	DATE	COMMENTS	DRAWN	CHK'D	APP'D

TITLE:

nationalgrid

A-Plant Lux Traffic Control & Management
Kemble Airfield Enterprise Park
Cirencester Road
Kemble
GL7 6BQ
Telephone : 0870 050 0792
Fax: 0845 004 7105

SPEED OF ROAD		50 MPH
DISTANCE FROM FIRST SIGN TO START OF SITE(D)	MIN	275m
	MAX	450m
SIDEWAYS SAFETY ZONE (S)		1.2 M
LONGWAYS CLEARANCE (L)		30 M
TAPER		45°

KEY:

	Cone
	Temporary Road Signs
	Traffic Barrier
	Working Area
	Traffic Light Head

Running lanes

3.5m maximum
3.25m desirable minimum
3.0m absolute minimum

All signs will be 750mm and will be held in place with sand bags

All marked with 750mm cone where required

DRAWING DESCRIPTION

TEMPORARY CONSTRUCTION ACCESS BELLMOUTH

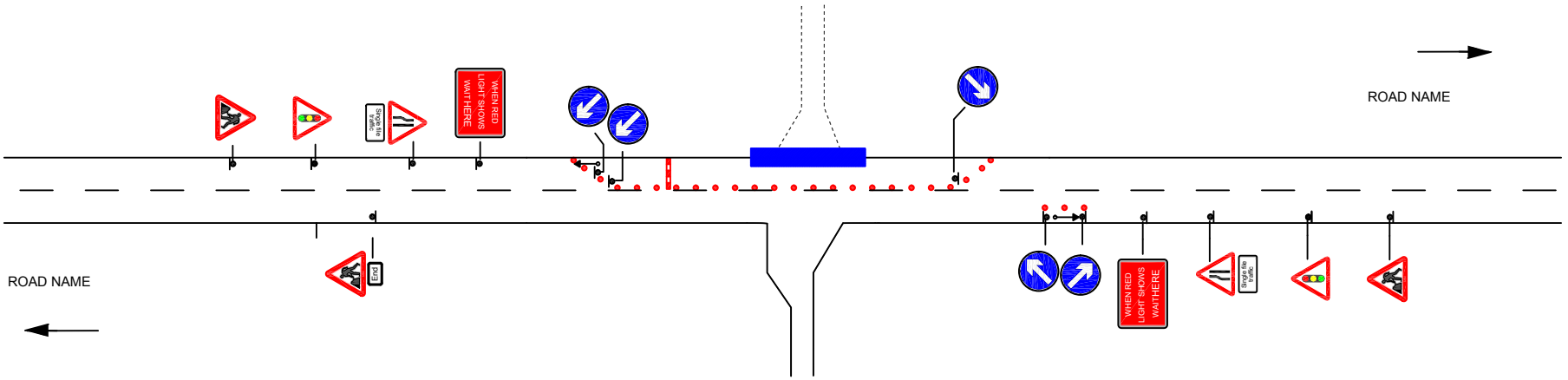
CLIENT DETAILS
E.A.W.

DO WORK AT	PEAK TIMES	✓	WEEKEND		OFF PEAK		NIGHT	DATE 12/11/13
PURPOSE OF WORKS	DRAWN BY							AMMEND No / Drawing information / SHEET NO
EXCAVATION	R W							00 / ADDRESS / 1 of 3
PERMANENT LIGHTS AFFECT SITE?				N/A				
PEDESTRIAN CROSSING AFFECTED?				N/A				
BUS ROUTES / STOPS AFFECTED?				N/A				

HIRE ADVICE 242-S001057/5

NOTES

HAUL ROUTE PH2
50MPH



MMD DRAWING No.	HAUL ROUTE GENERIC 2/3				
ISSUE	DATE	COMMENTS	DRAWN	CHK'D	APP'D

TITLE:

nationalgrid

A-Plant Lux Traffic Control & Management
Kemble Airfield Enterprise Park
Cirencester Road
Kemble
GL7 6BQ
Telephone : 0870 050 0792
Fax: 0845 004 7105

SPEED OF ROAD		50 MPH
DISTANCE FROM FIRST SIGN TO START OF SITE(D)	MIN	275m
	MAX	450m
SIDEWAYS SAFETY ZONE (S)		1.2 M
LONGWAYS CLEARANCE (L)		30 M
TAPER		45°

KEY:

	Cone
	Temporary Road Signs
	Traffic Barrier
	Working Area
	Traffic Light Head

Running lanes

3.5m maximum
3.25m desirable minimum
3.0m absolute minimum

All signs will be 750mm and will be held in place with sand bags

All marked with 750mm cone where required

DRAWING DESCRIPTION

TEMPORARY CONSTRUCTION ACCESS BELLMOUTH

CLIENT DETAILS

E.A.W.

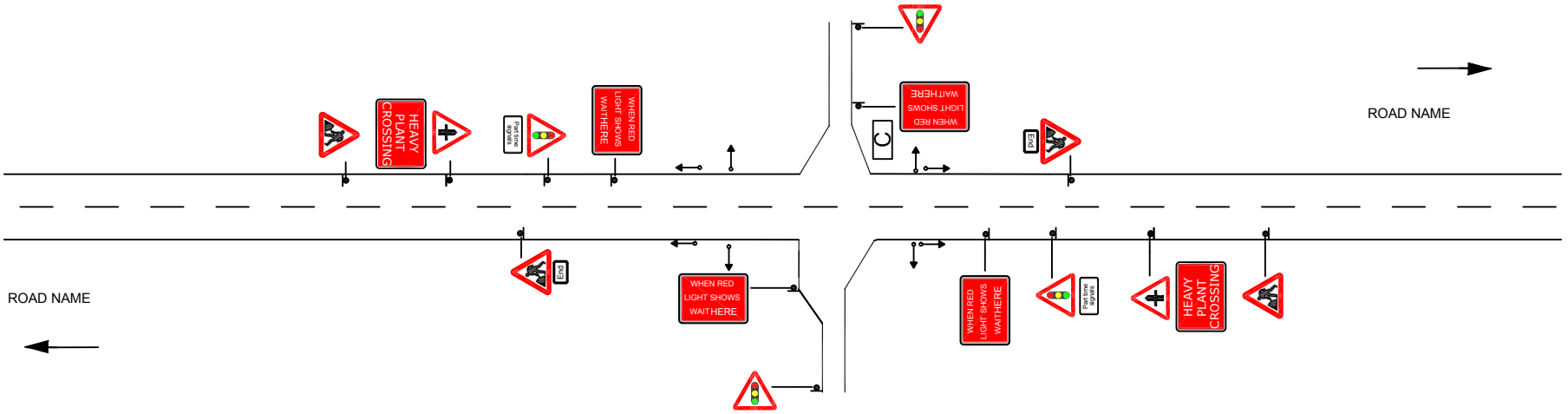
DO WORK AT	PEAK TIMES	✓	WEEKEND		OFF PEAK		NIGHT	DATE 12/11/13
PURPOSE OF WORKS	DRAWN BY			AMMEND No	Drawing information			SHEET NO
EXCAVATION	R W			00	**ADDRESS**			2 of 3
PERMANENT LIGHTS AFFECT SITE?			N/A					
PEDESTRIAN CROSSING AFFECTED?			N/A					
BUS ROUTES / STOPS AFFECTED?			N/A					

HIRE ADVICE 242-S001057/5

NOTES

HAUL ROUTE PH3
50MPH

SIGNS MOUNTED ON GREY
SEMI PERMANENT POLES



MMD DRAWING No.

HAUL ROUTE GENERIC 3/3

ISSUE	DATE	COMMENTS	DRAWN	CHK'D	APP'D

TITLE:

nationalgrid

A-Plant Lux Traffic Control & Management
Kemble Airfield Enterprise Park
Cirencester Road
Kemble
GL7 6BQ
Telephone : 0870 050 0792
Fax: 0845 004 7105

SPEED OF ROAD		50 MPH
DISTANCE FROM FIRST SIGN TO START OF SITE(D)	MIN	275m
	MAX	450m
SIDEWAYS SAFETY ZONE (S)		1.2 M
LONGWAYS CLEARANCE (L)		30 M
TAPER		45°

KEY:

C	Controller
	Temporary Road Signs
	Traffic Light Head

Running lanes

3.5m maximum
3.25m desirable minimum
3.0m absolute minimum

All signs will be 750mm and will be held in place with sand bags

All marked with 750mm cone where required

DRAWING DESCRIPTION

COMPLETED ACCESS BELLMOUTH

CLIENT DETAILS

E.A.W.

DO WORK AT	PEAK TIMES	✓	WEEKEND		OFF PEAK		NIGHT	DATE 12/11/13
PURPOSE OF WORKS	DRAWN BY							AMMEND No / Drawing information / SHEET NO
SITE ACCESS	R W							00 / ADDRESS / 3 of 3
PERMANENT LIGHTS AFFECT SITE?	N/A							
PEDESTRIAN CROSSING AFFECTED?	N/A							
BUS ROUTES / STOPS AFFECTED?	N/A							

HIRE ADVICE 242-S001057/5

KEY

01A

ADVANCED WARNING ACCESS TO ROAD AHEAD CLOSED ON ——TO —— FOR —— DAY/S FROM —/—/TO —/—

P7105

750mm

ROAD CLOSED

01

ROAD AHEAD CLOSED FOLLOW DIVERSION 02

Diversion ENDS 03

Diverted traffic 04

Diverted traffic 05

Diverted traffic 06

Diversion 07

Diversion 08

Diversion 09

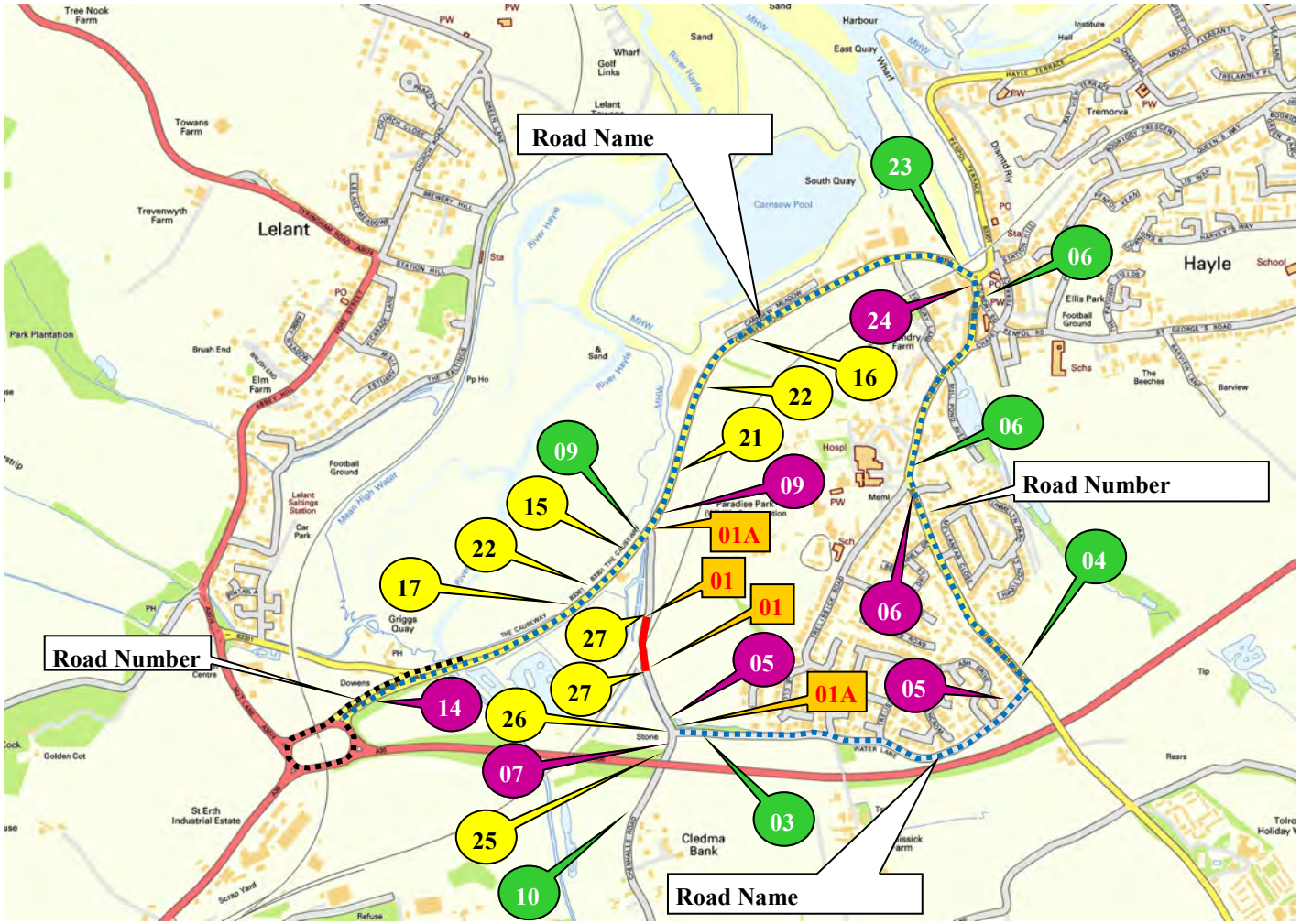
ROAD AHEAD CLOSED 10

Diverted traffic 11

Diverted traffic 12

Diverted traffic 13

Diverted traffic 14



ACCESS FOR BIRD SANCTUARY ONLY 15

Diverted traffic 23

XXXXX ROAD CLOSED 16

ACCESS FOR BIRD SANCTUARY ONLY 21

Diverted traffic 24

FOR ST ERTH & GO KART TRACK FOLLOW DIVERSION 22

FOR A30 & BIRD SANCTUARY FOLLOW DIVERSION 25

XXXXX ROAD CLOSED 17

ACCESS FOR GO KART TRACK ONLY 26

CYCLIST DISMOUNT 27

Diverted traffic 18

PEDESTRIAN WALKWAY THROUGH WORK SITE.
2 PEDESRIAN SIGNS
40 PIECES OF STACCA BARRIER REQUIRED
10x SPECIAL SIGNS.

2xWEEKLY MAINTENANCE CHECKS Friday & Monday

Diverted traffic 19

Access To Residents Only 20

A-Plant Lux Traffic Control & Management
Kemble Airfield Enterprise Park
Cirencester Road
Kemble
GL7 6BQ
Telephone: 0870 050 0792
Fax: 0845 0047105

NOTES

1 ALL EQUIPMENT SHALL BE APPROVED AND SHALL COMPLY WITH THE DEPARTMENT OF TRANSPORT SPECIFICATION MCE0111
THIS DRAWING DOES NOT SHOW THE NORMAL ROADWORKS SIGNING THAT WILL BE REQUIRED (chapter 8)
2. ALL SIGNS TO BE IN ACCORDANCE WITH TSGRD 2002 AND TO MINIMUM
CLASS 2 RETROFLECTIVE
3. MINIMUM x HEIGHT OF LETTERING TO BE 60MM AND SIGN BOARDS TO BE MIN
1000MM*750MM WHERE APPROPRIATE

CLIENT DETAILS	REP/DEPOT	DRAWN BY	ADDRESS
		RW	ROAD CLOSURE GENERIC
AMMEND NO	SHEET NO.	DATE	
00	1 OF 1		

SUITABLE TIME TO UNDERTAKE THE WORKS

OFFPEAK 0930-1530	NIGHT 2100-0600	WEEKEND	WEEKDAY 0800-1700	24 HOUR WORKS	BUS ROUTE AFFECTED
				✓	✓

KEY

ROAD CLOSURE

DIVERSION ROUTE

ANTI-CLOCKWISE DIVERSION

CLOCKWISE DIVERSION

ROAD CLOSURE SIGN

ROAD CLOSURE LENGTH APPROX 80M
ROAD CLOSURE WIDTH APPROX 3M

HIRE ADVICE 242-S0001057/6

KEY

01A

ADVANCED WARNING ACCESS TO ROAD AHEAD CLOSED ON ——TO —— FOR —— DAY/S FROM —/—TO —/—

P7105

750mm

ROAD CLOSED

01

ROAD AHEAD CLOSED FOLLOW DIVERSION 02

Diversion ENDS 03

Diverted traffic 04

Diverted traffic 05

Diverted traffic 06

Diversion 07

Diversion 08

Diversion 09

ROAD AHEAD CLOSED 10

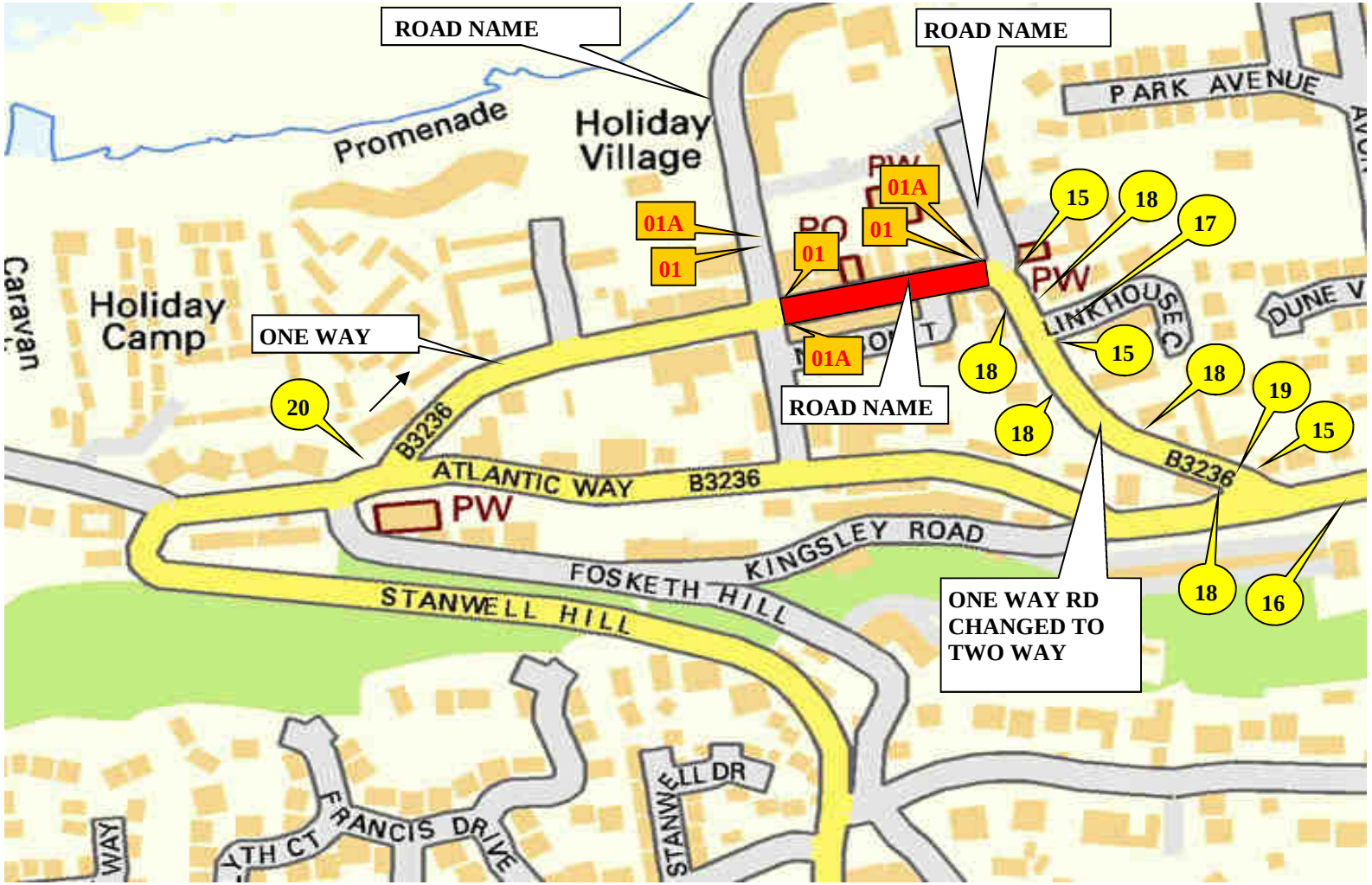
Diverted traffic 11

Diverted traffic 12

Diverted traffic 13

Diverted traffic 14

..... 15



ADVANCED WARNING THIS ROAD WILL BE CLOSED FROM 06/01/14 FOR 5 WEEKS

01A

KEEP RIGHT

18

Temporary Two Way Traffic

KEEP RIGHT

15

NO ENTRY

19

RESIDENTS ACCESS ONLY XXXXXX XX

16

NELSON ROAD CLOSED

RESIDENTS ACCESS VIA XXXXXXXX XXX

20

TWO WAY TRAFFIC

17

A-PLANT LUX TRAFFIC CONTROL & MANAGEMENT

A-Plant Lux Traffic Control & Management
Kemble Airfield Enterprise Park
Cirencester Road
Kemble
GL7 6BQ
Telephone: 0870 050 0792
Fax: 0845 0047105

NOTES

1 ALL EQUIPMENT SHALL BE APPROVED AND SHALL COMPLY WITH THE DEPARTMENT OF TRANSPORT SPECIFICATION MCE0111 THIS DRAWING DOES NOT SHOW THE NORMAL ROADWORKS SIGNING THAT WILL BE REQUIRED (chapter 8)
2. ALL SIGNS TO BE IN ACCORDANCE WITH TSGRD 2002 AND TO MINIMUM CLASS 2 RETROFLECTIVE
3. MINIMUM x HEIGHT OF LETTERING TO BE 60MM AND SIGN BOARDS TO BE MIN 1000MM*750MM WHERE APPROPRIATE

CLIENT DETAILS	REP/DEPOT	DRAWN BY
		RW
AMMEND NO	SHEET NO.	DATE
00	1 OF 1	

ADDRESS

ONE WAY CHANGED TO TWO WAY

GENERIC

SUITABLE TIME TO UNDERTAKE THE WORKS

OFFPEAK 0930-1530	NIGHT 2100-0600	WEEKEND	WEEKDAY 0800-1700	24 HOUR WORKS
				✓

BUS ROUTE AFFECTED

KEY

ROAD CLOSURE

DIVERSION ROUTE

ANTI-CLOCKWISE DIVERSION

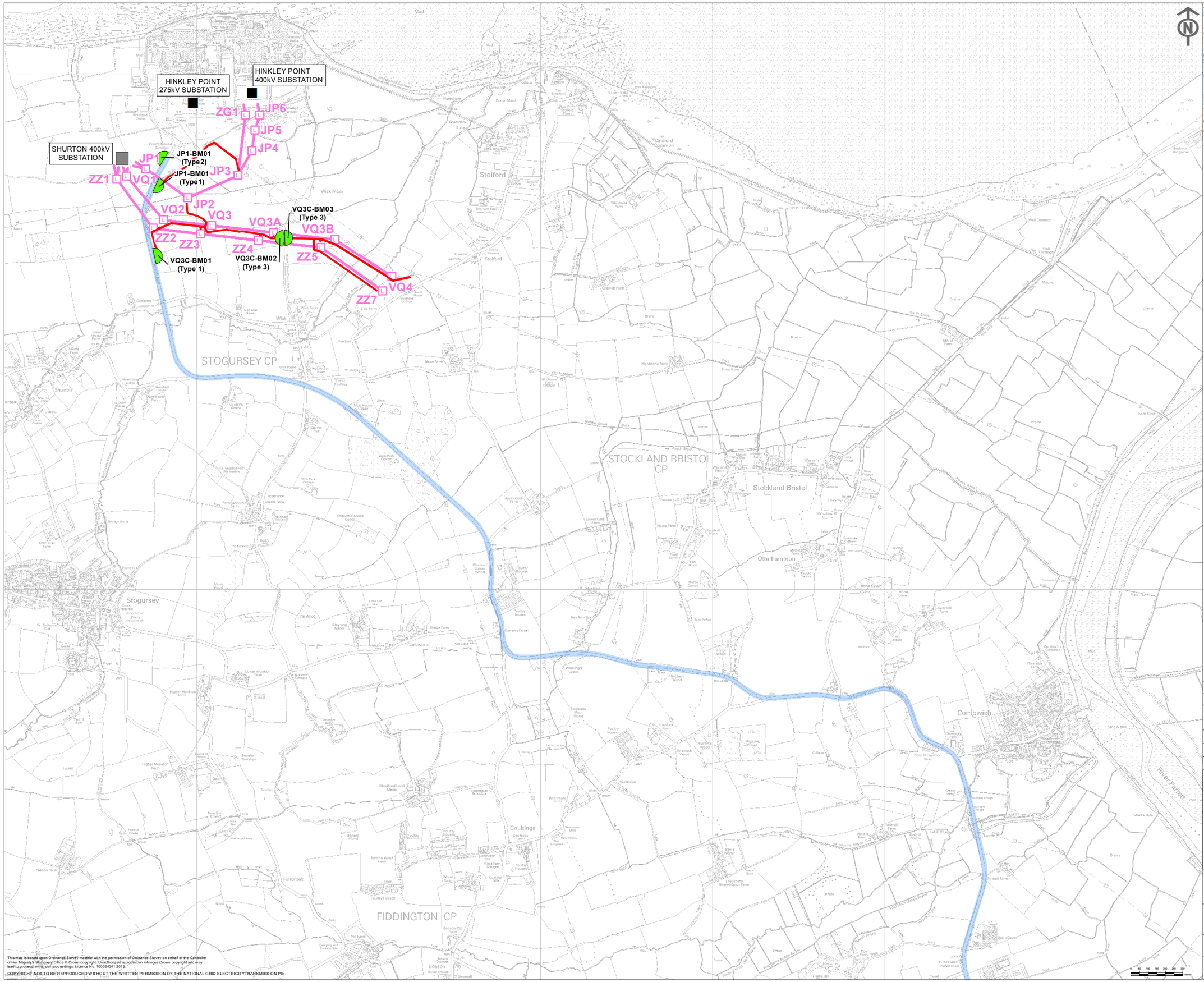
CLOCKWISE DIVERSION

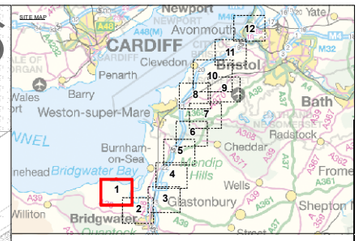
ROAD CLOSURE SIGN

ROAD CLOSURE LENGTH APPROX 110 M
ROAD CLOSURE WIDTHAPPROX 3M

HIRE ADVICE 242-S001057/7

Annex C – Construction Routes and Bellmouth Location Plans





Key

Proposed Construction Components and Access

- Haul Road
- Major Primary Construction Traffic Route
- Bellmouth and Reference

Proposed Development

- Proposed 400kV Standard Lattice Pylon Position
- Proposed Route for 400kV Overhead Line

Existing and Consented Infrastructure

- Existing Substation
- Consented Shurton 400kV Substation

Notes

This map includes data from the following sources:
- National Grid
- Ordnance Survey

ISSUE	DATE	COMMENTS	DRAW	CHK'D	APP'D
B	02/07/2015	UPDATED VERSION (FROM VOLUME 5.26.5) FOR DCO SUBMISSION	CB	BC	BC
A	19/01/2015	UPDATED VERSION (FROM VOLUME 5.22.3) FOR DCO SUBMISSION	CB	BC	BC

Title

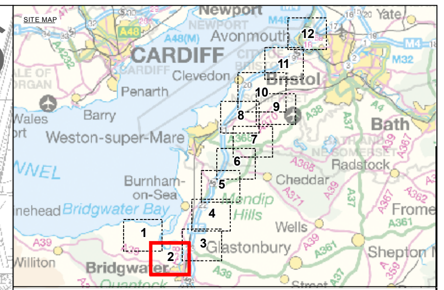
NATIONAL GRID (HINKLEY POINT C CONNECTION PROJECT)

CONSTRUCTION ROUTES AND BELLMOUTH LOCATION PLANS INSET 1

nationalgrid

National Grid plc, Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA

NG INVESTMENT No.	APPLICATION No.		GIS
20897	EN0200001		A3
FIGURE No.	DRAWING No.		SCALE
ANNEX C	G1979.2504.1B		1:20,000
SHEET 1 of 12			ISSUE B



Key

Proposed Construction Components and Access

Major Primary Construction Traffic Route

Proposed Development

Proposed Route for Temporary Overhead Line

Notes

This map includes data from the following sources:
- National Grid
- Ordnance Survey

B	02/07/2015	UPDATED VERSION (FROM VOLUME 5.26.5) FOR DCO SUBMISSION	CB	BC	BC
A	19/01/2015	UPDATED VERSION (FROM VOLUME 5.22.3) FOR DCO SUBMISSION	CB	BC	BC
ISSUE	DATE	COMMENTS	DRAW	CHK'D	APP'D

Title

NATIONAL GRID (HINKLEY POINT C CONNECTION PROJECT)

CONSTRUCTION ROUTES AND BELLMOUTH LOCATION PLANS INSET 2

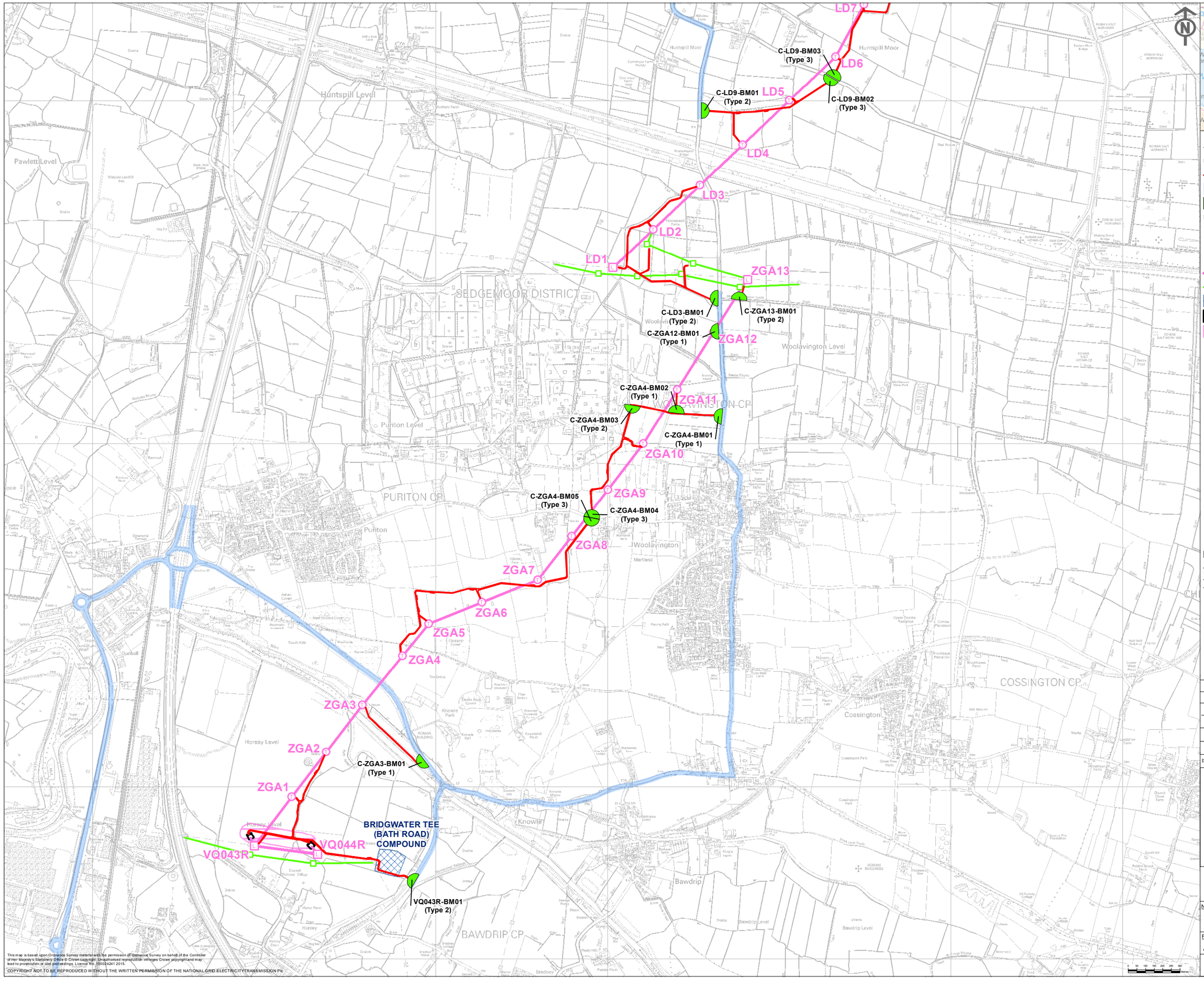
nationalgrid

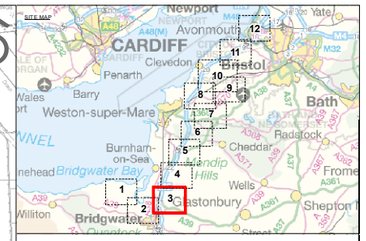
National Grid plc, Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA

NG INVESTMENT No.	APPLICATION No.	GIS
20897	EN0200001	A3
FIGURE No.	DRAWING No.	SCALE
ANNEX C	G1979.2504.2B	1:20,000

SHEET 2 of 12

ISSUE B





Key

Proposed Construction Components and Access

- Haul Road
- Major Primary Construction Traffic Route
- Bellmouth and Reference

Proposed Development

- Proposed 400kV Standard Lattice Pylon Position
- Proposed 400kV T-Pylon Position
- Proposed Temporary Pylon Position
- Proposed Route for 400kV Overhead Line
- Proposed Route for Temporary Overhead Line
- Proposed Compound / Laydown Area
- Proposed Bridgwater Tee 400kV Cable Sealing End Compound Work Area
- Proposed 400kV Underground Cable Route LoD

Notes

This map includes data from the following sources:
- National Grid
- Ordnance Survey

ISSUE	DATE	COMMENTS	DRAW	CHK'D	APP'D
B	02/07/2015	UPDATED VERSION (FROM VOLUME 5:26.5) FOR DCO SUBMISSION	CB	BC	BC
A	19/01/2015	UPDATED VERSION (FROM VOLUME 5:22.3) FOR DCO SUBMISSION	CB	BC	BC

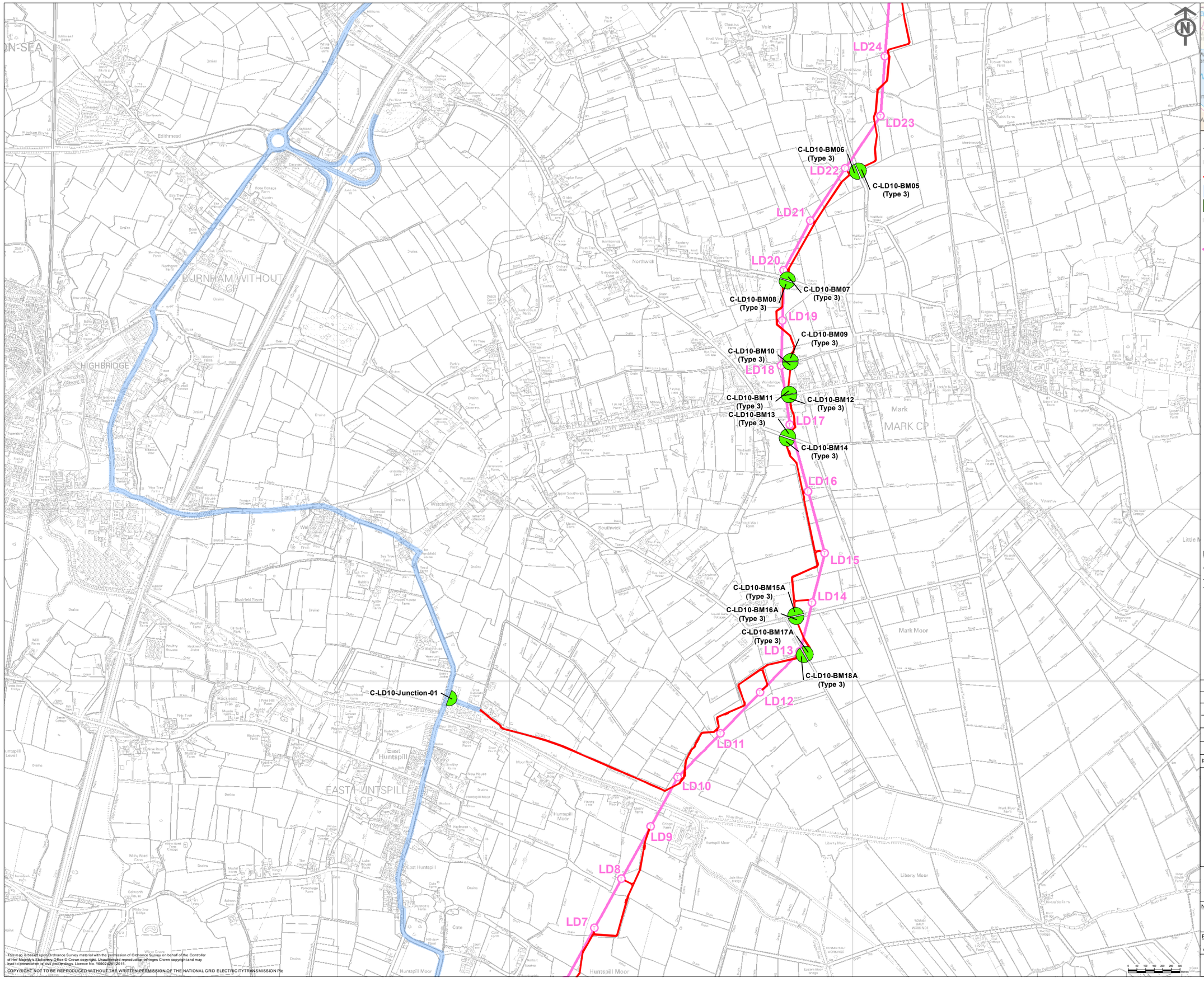
Title

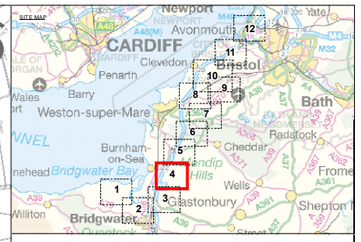
NATIONAL GRID (HINKLEY POINT C CONNECTION PROJECT)

CONSTRUCTION ROUTES AND BELLMOUTH LOCATION PLANS INSET 3

nationalgrid
National Grid plc, Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA

NG INVESTMENT No.	APPLICATION No.		GIS
20897	EN0200001		A3
FIGURE No.	DRAWING No.		SCALE
ANNEX C	G1979.2504.3B		1:20,000
SHEET 3 of 12			ISSUE B





Key

Proposed Construction Components and Access

- Haul Road
- Major Primary Construction Traffic Route
- Bellmouth and Reference

Proposed Development

- Proposed 400kV T-Pylon Position
- Proposed Route for 400kV Overhead Line

Notes

This map includes data from the following sources:
- National Grid
- Ordnance Survey

ISSUE	DATE	COMMENTS	DRAW	CHK'D	APP'D
B	02/07/2015	UPDATED VERSION (FROM VOLUME 5.26.5) FOR DCO SUBMISSION	CB	BC	BC
A	19/01/2015	UPDATED VERSION (FROM VOLUME 5.22.3) FOR DCO SUBMISSION	CB	BC	BC

Title

NATIONAL GRID (HINKLEY POINT C CONNECTION PROJECT)

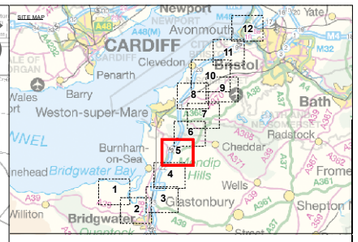
CONSTRUCTION ROUTES AND BELLMOUTH LOCATION PLANS INSET 4

nationalgrid

National Grid plc, Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA

NG INVESTMENT No.	APPLICATION No.		GIS
20897	EN0200001		A3
FIGURE No.	DRAWING No.		SCALE
ANNEX C	G1979.2504.4B		1:20,000
SHEET 4 of 12			ISSUE B

400-UG-BM03 (Type 3)
LD38B
LD38A
400-UG-BM02 (Type 3)
LD37
SOUTH OF THE MENDIP HILLS (HAMS LANE) COMPOUND
LD36
LD35
LD34
A38 BRISTOL ROAD (OHL) COMPOUND
400-UG-BM01B (Type 3)
400-UG-BM01A (Type 3)
LD33
A38 BRISTOL ROAD (UGC) COMPOUND
400-UG-BM01 (Type 1)
LD32
C-LD10-BM01 (Type 1)
LD31
LD30
LD29
LD28
C-LD10-BM02 (Type 3)
LD27
LD26
C-LD10-BM03 (Type 3)
C-LD10-BM04 (Type 3)
LD25
LD24
Eastertown
Edingworth
EAST BRENT CP
East Brent
Brent Knoll
Battleborough
Biddisham
Badgworth
BADGWORTH CP
Allerton Moor
CHAPEL ALLERTON CP
Stone Allerton
Vole



Key

Proposed Construction Components and Access

- Haul Road
- Bridge Structure
- Major Primary Construction Traffic Route
- Bellmouth and Reference

Proposed Development

- Proposed 400kV "Goalpost" T-Pylon Position
- Proposed 400kV T-Pylon Position
- Proposed Route for 400kV Overhead Line
- Proposed Compound / Laydown Area
- Proposed South of the Mendip Hills 400kV Cable Sealing End Compound Work Area
- Proposed 400kV Underground Cable Route LoD

Notes

This map includes data from the following sources:
- National Grid
- Ordnance Survey

ISSUE	DATE	COMMENTS	DRAW	CHK'D	APP'D
B	02/07/2015	UPDATED VERSION (FROM VOLUME 5.26.5) FOR DCO SUBMISSION	CB	BC	BC
A	19/01/2015	UPDATED VERSION (FROM VOLUME 5.22.3) FOR DCO SUBMISSION	CB	BC	BC

Title

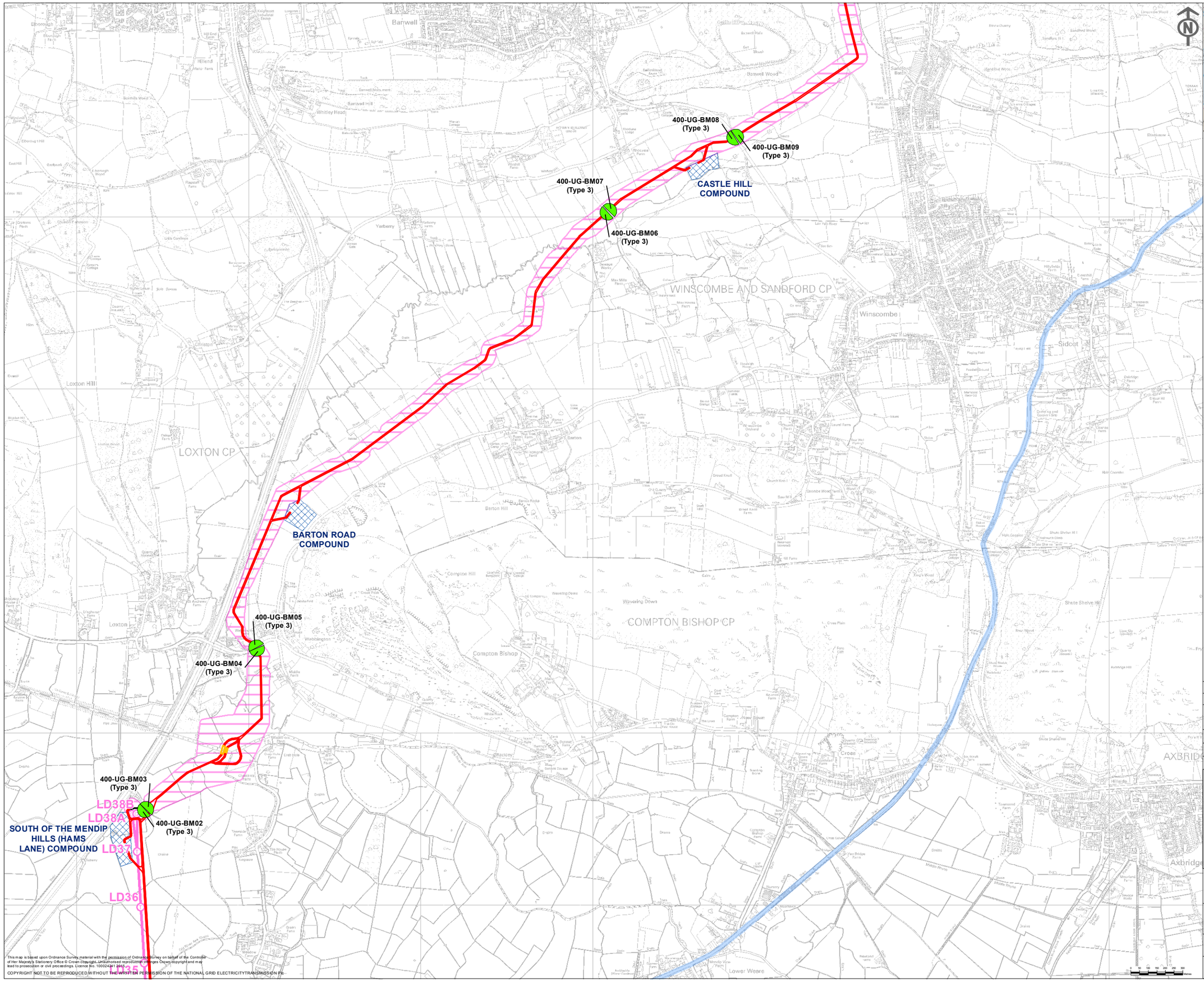
NATIONAL GRID (HINKLEY POINT C CONNECTION PROJECT)

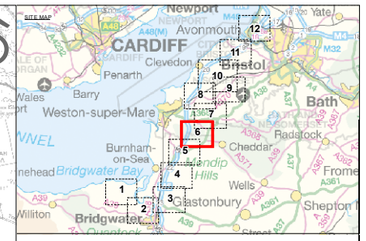
CONSTRUCTION ROUTES AND BELLMOUTH LOCATION PLANS INSET 5

nationalgrid

National Grid plc, Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA

NG INVESTMENT No.	APPLICATION No.		GIS
20897	EN0200001		A3
FIGURE No.	DRAWING No.		SCALE
ANNEX C	G1979.2504.5B		1:20,000
SHEET 5 of 12			ISSUE B





Key

Proposed Construction Components and Access

- Haul Road
- Bridge Structure
- Major Primary Construction Traffic Route
- Bellmouth and Reference

Proposed Development

- Proposed 400kV "Goalpost" T-Pylon Position
- Proposed 400kV T-Pylon Position
- Proposed Route for 400kV Overhead Line
- Proposed Compound / Laydown Area
- Proposed South of the Mendip Hills 400kV Cable Sealing End Compound Work Area
- Proposed 400kV Underground Cable Route LoD

Notes

This map includes data from the following sources:
- National Grid
- Ordnance Survey

ISSUE	DATE	COMMENTS	DRAW	CHK'D	APP'D
B	02/07/2015	UPDATED VERSION (FROM VOLUME 5.26.5) FOR DCO SUBMISSION	CB	BC	BC
A	19/01/2015	UPDATED VERSION (FROM VOLUME 5.22.3) FOR DCO SUBMISSION	CB	BC	BC

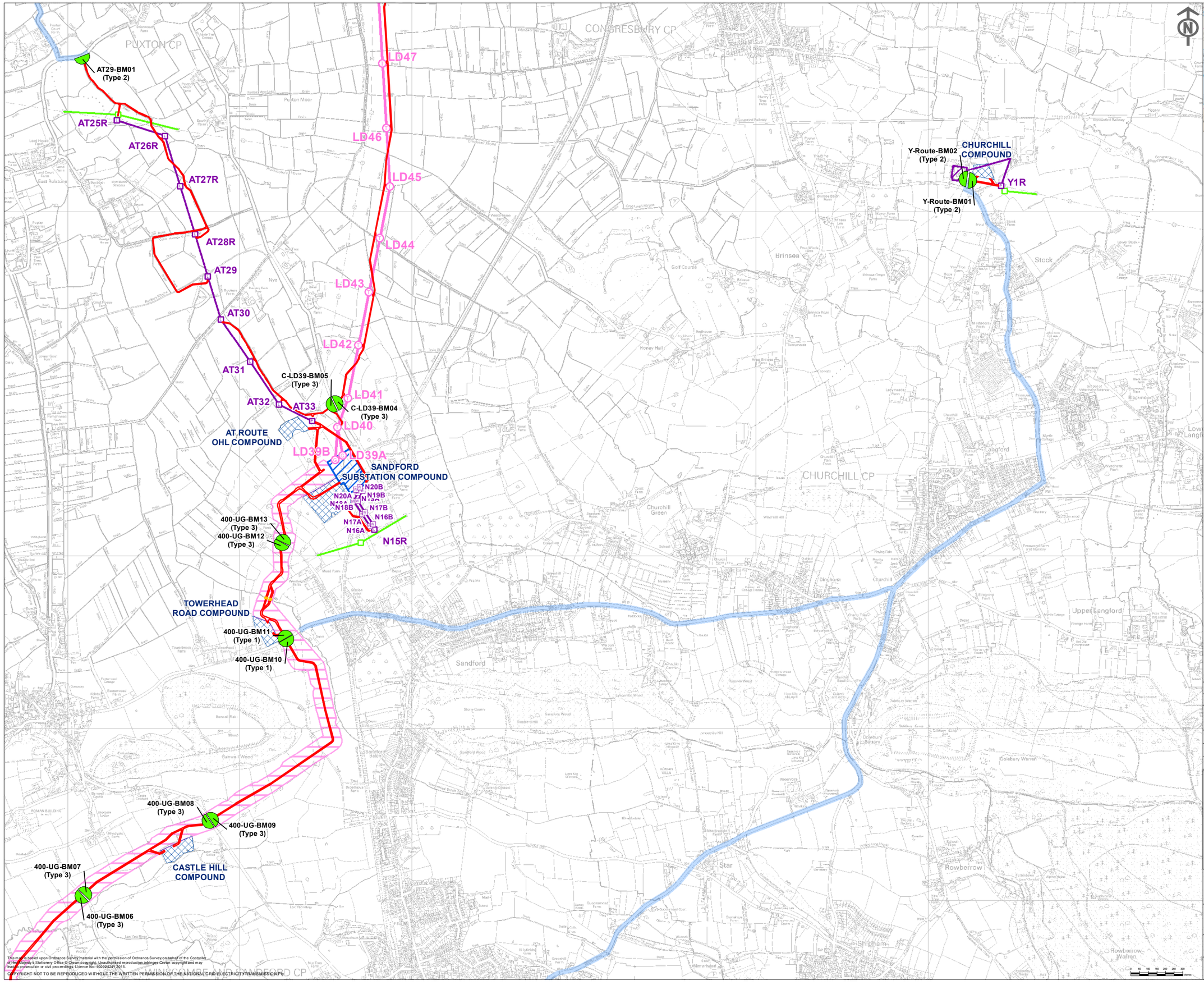
Title

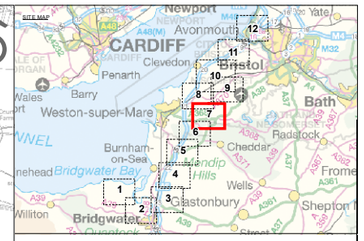
NATIONAL GRID (HINKLEY POINT C CONNECTION PROJECT)

CONSTRUCTION ROUTES AND BELLMOUTH LOCATION PLANS INSET 6

nationalgrid
National Grid plc, Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA

NG INVESTMENT No.	APPLICATION No.		GIS
20897	EN0200001		A3
FIGURE No.	DRAWING No.		SCALE
ANNEX C	G1979.2504.6B		1:20,000
SHEET 6 of 12			ISSUE B





Key

Proposed Construction Components and Access

- Haul Road
- Bridge Structure
- Major Primary Construction Traffic Route
- Bellmouth and Reference

Proposed Development

- Proposed 400kV "Goalpost" T-Pylon Position
- Proposed 400kV T-Pylon Position
- Proposed 132kV Lattice Platform Pylon Position
- Proposed 132kV Standard Lattice Pylon Position
- Proposed 132kV Wood Pole Pylon Position
- Proposed Temporary Pylon Position
- Proposed Route for 400kV Overhead Line
- Proposed Route for 132kV Overhead Line
- Proposed Route for Temporary Overhead Line
- Proposed Compound / Laydown Area
- Proposed Churchill 132kV Substation Work Area
- Proposed Sandford 400/132kV Substation Work Area
- Proposed 400kV Underground Cable Route LoD

Notes

This map includes data from the following sources:
- National Grid
- Ordnance Survey

ISSUE	DATE	COMMENTS	DRAW	CHK'D	APP'D
B	02/07/2015	UPDATED VERSION (FROM VOLUME 5.26.5) FOR DCO SUBMISSION	CB	BC	BC
A	19/01/2015	UPDATED VERSION (FROM VOLUME 5.22.3) FOR DCO SUBMISSION	CB	BC	BC

Title

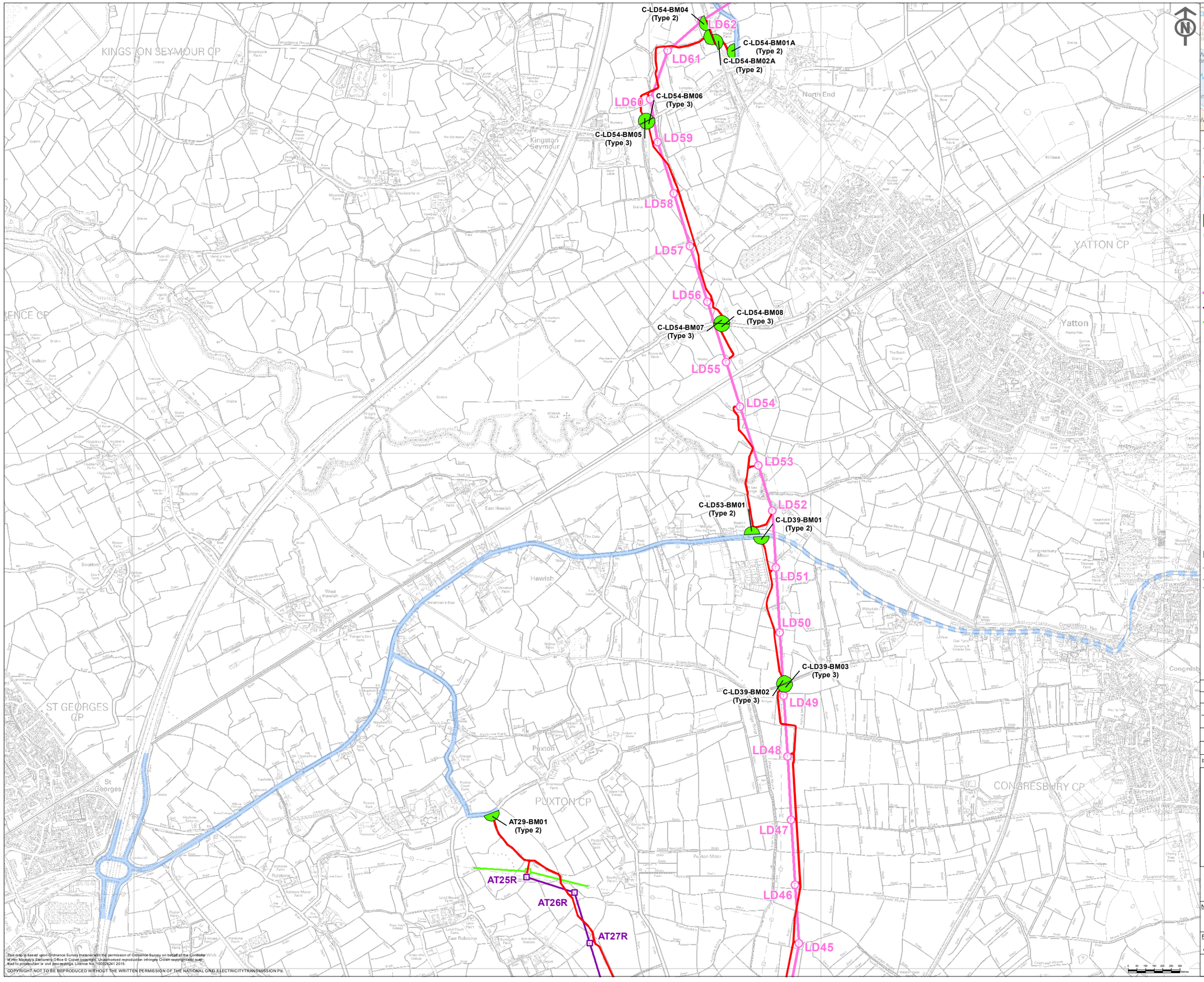
NATIONAL GRID (HINKLEY POINT C CONNECTION PROJECT)

CONSTRUCTION ROUTES AND BELLMOUTH LOCATION PLANS INSET 7

nationalgrid

National Grid plc, Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA

NG INVESTMENT No.	APPLICATION No.		GIS
20897	EN0200001		A3
FIGURE No.	DRAWING No.		SCALE
ANNEX C	G1979.2504.7B		1:20,000
SHEET 7 of 12			ISSUE B



Key

Proposed Construction Components and Access

- Haul Road
- Major Primary Construction Traffic Route
- Major Secondary Construction Traffic Route
- Bellmouth and Reference

Proposed Development

- Proposed 400kV T-Pylon Position
- Proposed 132kV Standard Lattice Pylon Position
- Proposed Temporary Pylon Position
- Proposed Route for 400kV Overhead Line
- Proposed Route for 132kV Overhead Line
- Proposed Route for Temporary Overhead Line

Notes

This map includes data from the following sources:
- National Grid
- Ordnance Survey

Secondary construction route only to be used should primary route become inaccessible

ISSUE	DATE	COMMENTS	DRAW	CHK'D	APP'D
B	02/07/2015	UPDATED VERSION (FROM VOLUME 5.26.5) FOR DCO SUBMISSION	CB	BC	BC
A	19/01/2015	UPDATED VERSION (FROM VOLUME 5.22.3) FOR DCO SUBMISSION	CB	BC	BC

Title

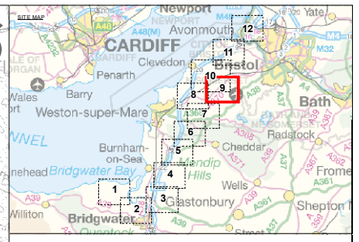
NATIONAL GRID (HINKLEY POINT C CONNECTION PROJECT)

CONSTRUCTION ROUTES AND BELLMOUTH LOCATION PLANS INSET 8

nationalgrid

National Grid plc, Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA

NG INVESTMENT No.	APPLICATION No.		GIS
20897	EN0200001		A3
FIGURE No.	DRAWING No.		SCALE
ANNEX C	G1979.2504.8B		1:20,000
SHEET 8 of 12			ISSUE B



Key

Proposed Construction Components and Access

Major Secondary Construction Traffic Route

Notes

This map includes data from the following sources:
- National Grid
- Ordnance Survey

Secondary construction route only to be used should primary route become inaccessible

ISSUE	DATE	COMMENTS	DRAW	CHK'D	APP'D
B	02/07/2015	UPDATED VERSION (FROM VOLUME 5.26.5) FOR DCO SUBMISSION	CB	BC	BC
A	19/01/2015	UPDATED VERSION (FROM VOLUME 5.22.3) FOR DCO SUBMISSION	CB	BC	BC

Title

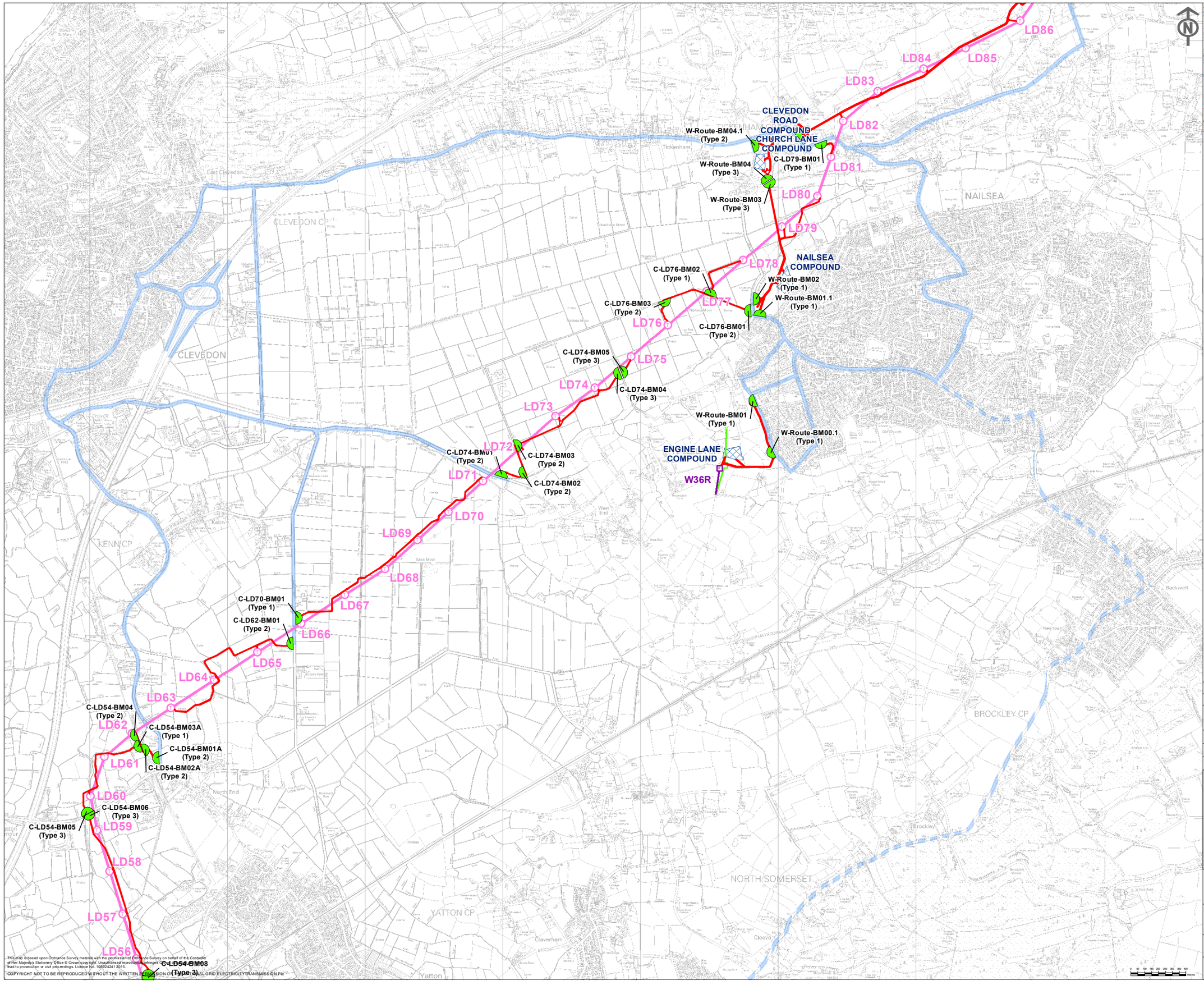
NATIONAL GRID (HINKLEY POINT C CONNECTION PROJECT)

CONSTRUCTION ROUTES AND BELLMOUTH LOCATION PLANS INSET 9

nationalgrid

National Grid plc, Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA

NG INVESTMENT No.	APPLICATION No.		GIS
20897	EN0200001		A3
FIGURE No.	DRAWING No.		SCALE
ANNEX C	G1979.2504.9B		1:20,000
SHEET 9 of 12			ISSUE B



Key

Proposed Construction Components and Access

- Haul Road
- Major Primary Construction Traffic Route
- Major Secondary Construction Traffic Route
- Bellmouth and Reference

Proposed Development

- Proposed 400kV T-Pylon Position
- Proposed 132kV Lattice Platform Pylon Position
- Proposed Temporary Pylon Position
- Proposed Route for 400kV Overhead Line
- Proposed Route for 132kV Overhead Line
- Proposed Route for Temporary Overhead Line
- Proposed Compound / Laydown Area

Notes

This map includes data from the following sources:
- National Grid
- Ordnance Survey

Secondary construction route only to be used should primary route become inaccessible

ISSUE	DATE	COMMENTS	DRAW	CHK'D	APP'D
B	02/07/2015	UPDATED VERSION (FROM VOLUME 5.26.5) FOR DCO SUBMISSION	CB	BC	BC
A	19/01/2015	UPDATED VERSION (FROM VOLUME 5.22.3) FOR DCO SUBMISSION	CB	BC	BC

Title

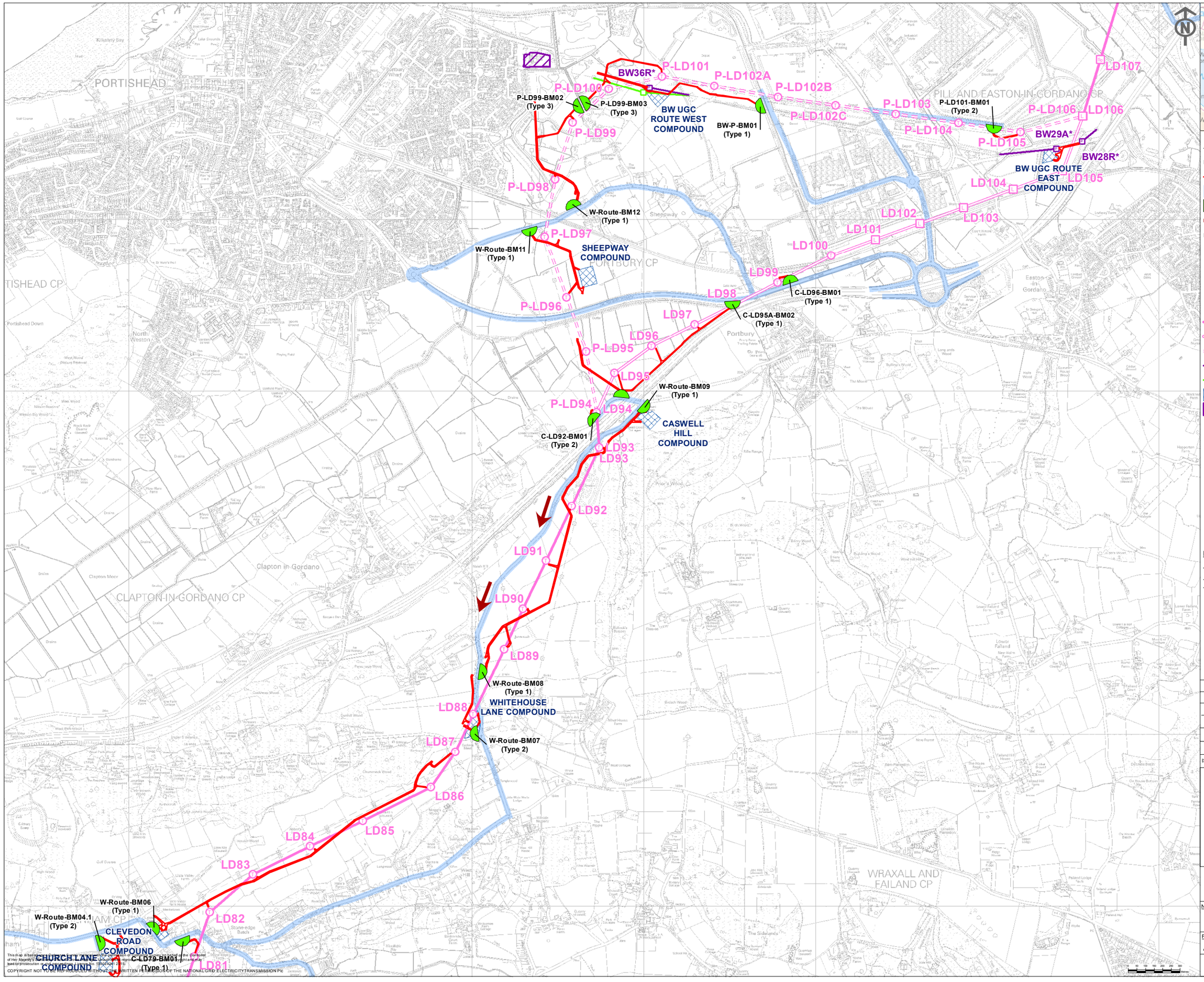
NATIONAL GRID (HINKLEY POINT C CONNECTION PROJECT)

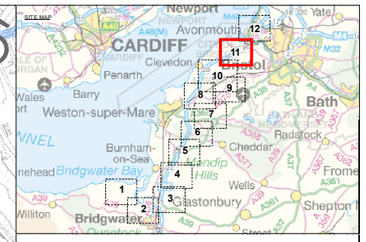
CONSTRUCTION ROUTES AND BELLMOUTH LOCATION PLANS INSET 10

nationalgrid

National Grid plc, Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA

NG INVESTMENT No.	APPLICATION No.		GIS
20897	EN0200001		A3
FIGURE No.	DRAWING No.		SCALE
ANNEX C	G1979.2504.10B		1:25,000
SHEET 10 of 12			ISSUE B





Key

Proposed Construction Components and Access

- Haul Road
- Major Primary Construction Traffic Route
- Bellmouth and Reference
- One Way Major Construction Traffic

Proposed Development

- Proposed 400kV (Special) Lattice Pylon Position
- Proposed 400kV Standard Lattice Pylon Position
- Proposed 400kV T-Pylon Position
- Proposed 132kV Lattice Platform Pylon Position
- Proposed Temporary Pylon Position
- Proposed Route for 400kV Overhead Line
- Preferred Route (Option A) for 400kV Overhead Line
- Alternative Route (Option B) for 400kV Overhead Line
- Proposed Route for 132kV Overhead Line
- Proposed Route for Temporary Overhead Line
- Proposed Compound / Laydown Area
- Proposed Portishead 132kV Substation Work Area

Notes

This map includes data from the following sources:
- National Grid
- Ordnance Survey

ISSUE	DATE	COMMENTS	DRAW	CHK'D	APP'D
B	02/07/2015	UPDATED VERSION (FROM VOLUME 5.26.5) FOR DCO SUBMISSION	CB	BC	BC
A	19/01/2015	UPDATED VERSION (FROM VOLUME 5.22.3) FOR DCO SUBMISSION	CB	BC	BC

Title

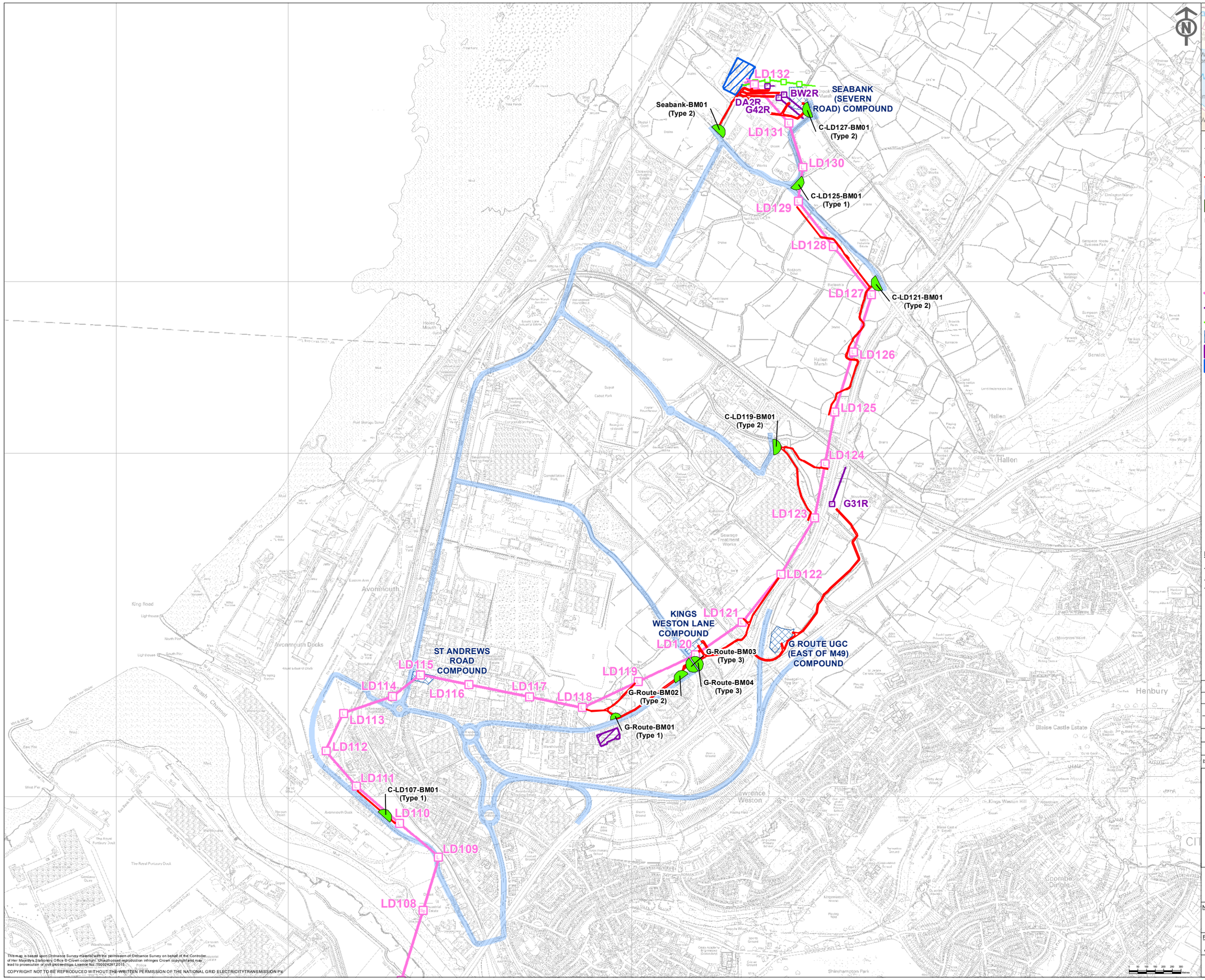
NATIONAL GRID (HINKLEY POINT C CONNECTION PROJECT)

CONSTRUCTION ROUTES AND BELLMOUTH LOCATION PLANS INSET 11

nationalgrid

National Grid plc, Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA

NG INVESTMENT No.	APPLICATION No.		GIS
20897	EN0200001		A3
FIGURE No.	DRAWING No.		SCALE
ANNEX C	G1979.2504.11B		1:20,000
SHEET 11 of 12			ISSUE B



Key

Proposed Construction Components and Access

- Haul Road
- Major Primary Construction Traffic Route
- Bellmouth and Reference

Proposed Development

- Proposed 400kV (Special) Lattice Pylon Position
- Proposed 400kV Standard Lattice Pylon Position
- Proposed 132kV Lattice Platform Pylon Position
- Proposed Temporary Pylon Position
- Proposed Route for 400kV Overhead Line
- Proposed Route for 132kV Overhead Line
- Proposed Route for Temporary Overhead Line
- Proposed Compound / Laydown Area
- Proposed Avonmouth 132kV Substation Work
- Proposed Seabank 400/132kV Substation Work Area

Notes

This map includes data from the following sources:
- National Grid
- Ordnance Survey

ISSUE	DATE	COMMENTS	DRAW	CHK'D	APP'D
B	02/07/2015	UPDATED VERSION (FROM VOLUME 5.26.5) FOR DCO SUBMISSION	CB	BC	BC
A	19/01/2015	UPDATED VERSION (FROM VOLUME 5.22.3) FOR DCO SUBMISSION	CB	BC	BC

Title

NATIONAL GRID (HINKLEY POINT C CONNECTION PROJECT)

CONSTRUCTION ROUTES AND BELLMOUTH LOCATION PLANS INSET 12

nationalgrid

National Grid plc, Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA

NG INVESTMENT No.	APPLICATION No.		GIS
20897	EN0200001		A3
FIGURE No.	DRAWING No.		SCALE
ANNEX C	G1979.2504.12B		1:20,000
SHEET 12 of 12			ISSUE B