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Onshore Cable Route

Code of Construction Practice Requirement 22 (1) and (2)(c) Appendix 2 - Flood Plan

Applicable to Work Numbers 5B to 20, 25 to 38, 41 to 49 and 52 to 61

Prepared by:	Checked by:	Approved by EATL:	Approved by NKT:

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	Revision Summary						
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1	28/10/2021	Dan Watson	Felicity Cole	Gareth Mills	-		
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	Description of Revisions						
Rev	Page	Section	Description				
1	ALL	ALL	New Document				
2	ALL	ALL	Updated throughout in accordance with cable route design				
3	10-12	5.3	Updated in accordance with Consultee comments: ESC (14/08/23) and				
	18	6.8	Environment Agency (25/08/23) and also revisions to site layout				
	23	6.10					
	25, 27	6.11					
4	17	6.8	Addition of reference to "Flood Alerts" in first line of paragraph 36				

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1. INTRODUCTION AND SCOPE

1.1. Project Overview

East Anglia Three Limited (EATL) was awarded a Development Consent Order (DCO) by the Secretary of State, Department of Business, Energy and Industrial Strategy (DBEIS) on 7 August 2017 for the East Anglia THREE Offshore Windfarm (EA THREE). The DCO granted consent for the development of a 1200MW offshore windfarm and associated infrastructure and is live until 28 August 2022. The DCO has now been subject to three non-material variations:

- In March 2019 EATL submitted a non-material change application to DBEIS to amend the consent to increase the maximum generating capacity from 1,200MW to 1,400MW and to limit the maximum number of gravity base foundations to 100. In June 2019 DBEIS authorised the proposed change application and issued an Amendments Order.
- In July 2020 EATL submitted a second non-material change application to DBEIS to amend the parameters of its offshore substations (reducing the number of these to one) and wind turbines (a decrease in the number of turbines and an increase in their hub height and rotor radius). On 15 April 2021 DBEIS authorised this proposed change application and issued an Amendments Order.
- In August 2021 EATL submitted a third non-material change application to DBEIS to amend the consent to remove the maximum generating capacity of 1,400MW and to amend the parameters of its wind turbines (a decrease in the number of turbines and an increase in their hub height and rotor radius). In September 2022 DBEIS authorised the proposed change application and issued an Amendments Order.
- The onshore construction works associated with EA THREE will have a capacity of 1,400MW and transmission connection of 1,320MW. The construction works will be spread across a 37km corridor between the Suffolk coast at Bawdsey and the Converter Station at Bramford, passing the northern side of Ipswich. As a result of the strategic approach taken, the cables will be pulled through pre-installed ducts laid during the onshore works for East Anglia ONE Offshore Windfarm (EA ONE), thereby substantially reducing the impacts of connecting to the National Grid (NG) at the same location. The infrastructure to be installed for EA THREE, therefore, comprises:
 - The landfall site with one associated transition bay location with two transition bays containing the connection between the offshore and onshore cables;
 - Two onshore electrical cables (single core);
 - Up to 62 jointing bay locations each with up to two jointing bays;
 - One onshore Converter Station, adjacent to the EA ONE Substation;
 - Three cables to link the Converter Station to the National Grid Bramford Substation;
 - Up to three onshore fibre optic cables; and
 - Landscaping and tree planting around the onshore Converter Station location.
- Since the granting of the DCO, the decision has been made that the electrical connection for EA THREE will comprise a high voltage direct current (HVDC) cable rather than a high voltage alternating current cable and, therefore, the type of substation that will be required is a HVDC Converter Station. The substation will, therefore, be referred to here as a 'converter station' and this amended terminology has been agreed with the relevant authorities on 15 October 2020. It has also been determined that only one converter station will be constructed rather than two and that the Converter Station will be installed in a single construction phase.
- 4. The EA THREE onshore works commenced development in July 2022, with works at the Converter Station, Paper Mill Lane, Playford Corner and Clappits.

1.2. Scope and Purpose

- 5. This Flood Plan identifies the flood risk areas and sets outs the procedures to be followed in the unlikely event of a flood emergency during the construction of the EA THREE onshore cable route. This document forms an appendix to the Code of Construction Practice (CoCP) and fulfils DCO Requirement 20 (2) (c) which states:
 - **22**.—(1) No stage of the connection works may commence until for that stage a code of construction practice (which must accord with the outline code of construction practice) has been submitted to and approved by the relevant local planning authority, in consultation with the relevant highway authority (...)
 - (2) The code of construction practice must include—
 - (c) a flood plan

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The scope of this document is the Flood Plan associated with the construction of the EA THREE onshore cable route running from the landfall location at Bawdsey to the Converter Station works located near Bramford, Suffolk converter station works, comprising Work No.s 5B to 61 (excluding 21 to 24, 39, 40, 50 and 51), (Figure 1 Site Context Plan) as defined in the EA THREE DCO. The Requirement Discharge Documents (RDDs) relating to the construction and installation of cable route infrastructure within the Clappits Works Stage (Work No.s 21 to 24), Playford Corner Works Stage (Work No.s 39 and 40), Paper Mill Lane Works Stage (Work No.s 50 and 51) and Converter Station Stage (Work No.s 62 to 69) have previously been discharged. For the sake of completeness and to provide a suite of comprehensive RDDs for use by the Principal Contractor for the cable route (NKT), the infrastructure and activities that fall within these areas and the associated management measures for these will also be addressed in this document. Nevertheless, this document seeks only to discharge this Requirement with respect to Works No.s 5B to 20, 25-38, 41-49 and 52 -61.

- With respect to the onshore cable route, it is Mid Suffolk District Council (MSDC) and East Suffolk District Council (ESC) who are the relevant planning authorities for the sections within their jurisdiction. However, EATL has acknowledged from an early stage that Suffolk County Council (SCC) (as the Lead Local Flood Authority), the East Suffolk Internal Drainage Board, and the Environment Agency (EA) are important consultees in the process for the Flood Plan.
- 7. This Flood Plan contains information on flood emergency response actions across the EA THREE cable route, portions of which are located in Flood Zone 2 and 3. This Plan has been informed by: a Flood Risk Assessment (FRA) (Royal HaskoningDHV, 2015), which demonstrates that the development meets the requirements of the National Planning Policy Framework (NPPF). Ordnance Survey LiDAR data and EA flood maps have also been accessed online and used as evidence within this Flood Plan.
- 8. The Flood Warning and Evacuation Procedure (FWEP) detailed in this plan will continue to be updated and reviewed during the onshore cable construction works. As such, it has been necessary to include areas within the document where additional information will continue to be added as the document remains live throughout the works.
- 9. The measures contained herein shall be adhered to by the Principal Contractor and the implementation and compliance will be monitored by the Construction Management Team. These measures will only be revised with the agreement of MSDC and ESC.

2. ABBREVIATIONS

AEP	Annual Exceedance Probability		
ccs	Construction Consolidation Site		
СоСР	Code of Construction Practice		
DBEIS	Department of Business, Energy and Industrial Strategy		
DC	Direct Current		
DCO	Development Consent Order		
EA	Environment Agency		
EA ONE	East Anglia ONE		
ESC	East Suffolk Council		
EA THREE	East Anglia THREE Offshore Windfarm		
EATL	East Anglia THREE Limited		
EnvCoW	Environmental Clerk of Works		
FRA	Flood Risk Assessment		
FWEP	Flood Warning Evacuation Plan		
HVDC	High Voltage Direct Current		
M aOD	Metres above Ordinance Datum		
MSDC	Mid Suffolk District Council		
MW	Megawatt		
NPPF	National Planning Policy Framework		

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NG	National Grid Plc
scc	Suffolk County Council
SFRA Strategic Flood Risk Assessment	

3. STRUCTURE

- 10. This FWEP is broken down into the following sections:
 - Section 4 discusses responsibility for the implementation of the Flood Plan.
 - Section 5 identifies sites at risk of flooding along the EA THREE Cable Corridor and provides a technical assessment of flood risk using LiDAR and Environment Agency (EA) data.
 - Section 6 outlines the key 'pre-occupation' actions that the Principal Contractor shall complete to implement the
 procedure. As well as providing details of key contacts and information, the FWEP outlines the triggers for action and
 recommended evacuation procedures. This section presents details and tables which will be used by the Principal
 Contractor to document key actions. Each sub-contractor will be required to complete and duplicate these sections in their
 FWEP.
 - Section 7 outlines the monitoring and review process for the procedure.

4. FLOOD PLAN GOVERNANCE

Prior to the commencement of construction, a Flood Coordinator will be appointed by the Principal Contractor to manage the implementation of the Flood Plan. Contact details for the Flood Coordinator will be submitted to stakeholders ((MSDC, ESC, SCC, the Environment Agency and East Suffolk Internal Drainage Board)) for their records prior to commencement of construction.

5. FLOOD RISK IDENTIFICATION

5.1. Aim and Objectives

- 12. This Flood Plan has been developed in order to manage flood risk during onshore cable works and thereby ensure the preparedness of construction site personnel, in the event of a flood emergency.
- The key aim of this Flood Plan is to provide the Principal Contractor clear indicators confirming when a construction works area should be evacuated in the unlikely event of a flood emergency. The Flood Plan also provides key information for planning and responding to an evacuation.

5.2. Background

- The majority of the onshore cable route, illustrated in Figure 1, is currently used as agricultural, greenfield land previously used for the EA ONE cable installation works. The cable route crosses seven main rivers as designated by the EA, which are shown in Appendix 1). These main rivers are: the River Deben, Mill River, Martlesham Creek, River Lark, River Fynn, River Gipping and Somersham watercourse.
- Based on the EA Flood Zone map the majority of the cable route is located in Flood Zone 1 (land defined as having less than 1 in 1000 annual probability of flooding from rivers or the sea). However, there are 10 sections of the cable route that encroach into Flood Zone 2 (land having between 1 in 1000 and 1 in 100 annual probability of flooding from rivers or the sea) and Flood Zone 3 (greater than 1 in 100 annual probability of flooding). These areas are shown in Appendix 2 and detailed in Table 5-1 (Cable Sections located within Flood Zone 2 and 3).

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Table 5-1: Cable Sections located within Flood Zone 2 and 3, and within Surface Water Flow Pathways

Area Number	Location	Land Use Nearby	Relevant Infrastructure	Hydrological Setting	Flood Source	Upstream Catchment Area	Flood Zone
Area 1	NGR 611381, 247969	Industrial Wasteland/Arable Land	JB 2/3; Western end of HDD 21; HDD 1; North and Southern end of HDD2	Somersham Watercourse in the vicinity Surface Water Pond 200m north Drainage channels 400m north and east	Somersham Watercourse near Sycamore farm (Fluvial)	25.41km²	Flood Zone 2 & 3a
Area 2	NGR 612501, 248936	Grassland	JB 3/4; Western end of HDD 19; Paper Mill Lane CCS, eastern end of HDD 4 and western end of HDD 5;	River Gipping and drainage channel in the vicinity Ponds and lakes extending 1.3km south Adjacent drainage channels extending 500m north	River Gipping west of the Paper Mill Lane Commencement Works (Fluvial)	264.45km²	Flood Zone 2 & 3b
Area 3	NGR 613283, 248983	Grassland/Woodland	JB 4/5	Drainage channel in the vicinity River Gipping 600m west	Drainage Channel adjacent to Paper Mill Lane Commencement Works (Fluvial)	16.45km²	Flood Zone 2 & 3a
Area 4	NGR 615593, 248986	Arable Land	JB 5/6	Small watercourse in the vicinity Ponds 250m north Small connecting watercourse 800m south	Small watercourse south of Fairview Farm (Fluvial)	5.5km²	Flood Zone 2 & 3a

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Area Number	Location	Land Use Nearby	Relevant Infrastructure	Hydrological Setting	Flood Source	Upstream Catchment Area	Flood Zone
Area 5	618905, 249211	Grassland	JB 8/9; JB 9/10; JB 10/11; Southern end of HDD 20; Both ends of HDD 6;	River Fynn in the vicinity Drainage channels located 2m north and 30m south	River Fynn east of Fynn Valley Golf Club (Fluvial)	17.1km²	Flood Zone 2 & 3a
Area 6	623439, 248221	Arable Land	JB 11/12; JB 12/13; HDD 7; Playford Corner CCS;	River Lark in the vicinity River Fynn located 500m south	River Lark south of Great Bealings (Fluvial)	39.1km²	Flood Zone 2 & 3a
Area 7	624975, 247855	Grassland/Scrub land	JB 13/14; JB 14/15; Both ends of HDD 8; Eastern end of HDD 9	River Fynn and Drainage Channels in the vicinity Connecting drainage channels extend 200m east	River Fynn south of Rosary Farm (Fluvial)	71.47km²	Flood Zone 2 & 3a
Area 8	626351, 247240	Mud Flats/Grassland	Both ends of HDD 10; JB 15/16; JB 16/17; Southern end of HDD 11; JB 17/18; Both ends of HDD 12	Martlesham Creek and Drainage channels in the vicinity Drainage channels 300m south and 700m north Deben Estuary 800m east	River Fynn near Martlesham Creek (Tidal)	No data (estimated 80km²)	Flood Zone 2 & 3b

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Area Number	Location	Land Use Nearby	Relevant Infrastructure	Hydrological Setting	Flood Source	Upstream Catchment Area	Flood Zone
Area 9	628090, 241525	Grassland	Both ends of HDD 14; Both ends of HDD 15; JB 21/22; JB 22/23; JB 23/24	Mill River and Drainage Channels are in the vicinity Drainage Channel 330m south Kirton Brook 600m west Small watercourse 825m northwest Deben Estuary 1.3km east	Mill River south of Hemley, near Sluice Farm (Tidal)	45.63km²	Flood Zone 2 & 3b
Area 10	635182, 239228	Salt Marsh/Mud Flats	Eastern and Western end of HDD 17; Both ends of HDD 16; JB 24/25; JB 25/26; JB 26/27; JB 27/28; TJB-1 28/29 and TJB2-28/29	Deben Estuary and Drainage channels in vicinity Kings Fleet 1.7km south	Deben Estuary near Falkenham (Tidal)	No data (estimated >100km²)	Flood Zone 2 & 3b
N/A	N/A	N/A	JB 1/2; HDD 21; JB 6/7; JB 18/19; JB 19/20; Clappits CCS and JB 20/21	No	Flood Risk relevant		Flood Zone 1

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16. Based on the EA Flood Zone map the construction consolidation sites are located fully within Flood Zone 1 (land having less than a 1 in 1000-year annual probability of flooding from rivers or the sea). Only the following jointing bays are located directly within Flood Zone 2 or 3: 24/25, 25/26, 26/27, 27/28. These are all in the tidal floodplain close to the coast and there is no reasonable potential for these to be moved to lower risk areas. All of the other jointing bays and all Construction Consolidation Sites (CCSs) are in Flood Zone 1. Land within Flood Zone 1 is regarded by the Environment Agency to have a 'low' risk of flooding, meaning that this area has less than 1 in 1000 annual probability chance of occurring.

In order to manage flood risk during the onshore cable construction works, this Flood Plan has been developed to ensure the preparedness of construction site personnel, in the event of a flood emergency.

5.3. Flood Risk

- An FRA was undertaken (Royal HaskoningDHV, 2015) in November 2015 as part of the Environmental Statement for the EA THREE onshore works, however, this focused on flood risk at the onshore converter station, which was deemed negligible (under 1 in 1000 probability of flood event). The 2015 assessment did not assess flood risk to the entire cable route. The EA Flood Map for Planning (Environment Agency, 2021) and the Mid Suffolk & Babergh Level 1 Strategic Flood Risk Assessment (SFRA) (JBA Consulting, 2020) confirm that the majority of the onshore works is not at risk of flooding from any source and is wholly in Flood Zone 1.
- The EA Flood Map for Planning has established that there are 10 areas along the cable route at risk from flooding (Table 5-1)). Nine of these areas are where the cable route crosses a watercourse, the remaining site is located where the cable route borders the Ipswich coastline. Two of the four sites within Mid Suffolk District are also considered to be within the fluvial functional floodplain (Flood Zone 3b) by the Babergh & Mid Suffolk Level 1 Strategic Flood Risk Assessment (SFRA) (JBA Consulting, 2020) as a result of detailed hydraulic modelling. The Coastal Suffolk and Waveney District SFRA confirms that three of the remaining six locations, within East Suffolk District land, are within the functional floodplain, affected by estuarine sources (Table 5-1) (East Suffolk Councils, 2018)
- LiDAR data has been extracted (Department for Environment, Food & Rural Affairs, 2020), to ascertain minimum channel / riverbank levels within or adjacent to the areas at risk of flooding. This information is summarized for the relevant flood risk areas in Table 5-2.
- 21. Relevant flood models for along the route have been obtained from the Environment Agency. Where available these outputs are provided alongside elevations for the relevant areas in Table 5-2. This information can be used to assess the risk posed and inform decisions about when actions detailed in this flood plan need to be implemented.

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Table 5-2 Site Elevations and Flood Levels

Site ID	Infrastructure	Location	Channel / Bank Level (m AOD)	Flood Level 20% AEP (m AOD)	Flood Level 5% AEP (m AOD)	Flood Level 1% AEP (m AOD)	Flood Level 0.1% AEP (m AOD)
Area 1¹	JB 1/2; JB 2/3; Western end of HDD 21; HDD1; North and Southern end of HDD2	611381, 247969	10.1	11.07	11.26	-	-
Area 2¹	Western end of HDD 19; Paper Mill Lane CCS, eastern end of HDD 4 and western end of HDD 5; JB 3/4	612501, 248936	8.6	9.04	9.27 (US)	9.41 (US)	9.89 (US)
Area 3¹	JB 4/5	613283, 248983	11.5	-	-	12.80	13.6
Area 4	JB 5/6	615593, 248986	25	-	-	-	-
Area 5²	Southern end of HDD 20; Both ends of HDD 6; JB 8/9; JB 9/10; JB 10/11	618905, 249211	17.0	18.10	18.19 (4% AEP)	18.26	18.41
Area 6³	Playford Corner CCS; JB 11/12; JB 12/13; HDD 7	623439, 248221	4.8	5.66	5.80 (4%)	5.91	6.23
Area 7³	Both ends of HDD 8; JB 13/14; JB 14/15; Eastern end of HDD 9;	624975, 247855	1.85 (before culvert) 1.5 (after culvert)	2.71 No flooding	2.93 (4%) No flooding	3.28 3.62 (0.5%)	4.32 3.93
Area 8³	Both ends of HDD 10; Southern end of HDD 11; Both ends of HDD 12; JB 15/16; JB 16/17; JB 17/18	626351, 247240	-0.7 – Martlesham Creek 0.5 – Drainage Channel	3.27 (10%)	3.42	3.77 (0.5%)	3.98
Area 9³	Both ends of HDD 14; Both ends of HDD 15; JB 21/22; JB 22/23; JB 23/24	28090, 241525	-0.2	-0.13 (10%)	0.37	2.18 (0.5%)	3.77

¹ Gipping 2020 Model

² Fynn and Lark 2018 Model

³ Deben Estuary 2018 Model

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Site ID	Infrastructure	Location	Channel / Bank Level (m AOD)	Flood Level 20% AEP (m AOD)	Flood Level 5% AEP (m AOD)	Flood Level 1% AEP (m AOD)	Flood Level 0.1% AEP (m AOD)
Area 10³	Both ends of HDD 16; Eastern and Western end of HDD 17; JB 24/25; JB 25/26; JB 26/27; JB 27/28; TJB-1 28/29 and TJB 2-28/29	635182, 239228	-1.0	-	-0.58	1.24 (0.5%)	3.70
N/A	JB1/2; HDD 21; JB 6/7; JB 18/19; JB 19/20; Clappits CCS and JB 20/21	No Flood Risk relevant					

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6. FLOOD WARNING AND EVACUATION PROCEDURE

6.1. Evacuation Triggers

- EA flood alerts and warnings, Met Office severe weather warnings and observation of local conditions will all be used to initiate the flood procedures set out in this Flood Plan and have, therefore, been used to set evacuation triggers. Across three trigger levels, two stages have been identified: either to place staff on a green alert (state of readiness) and implement a review of the Emergency Plan procedures; or to issue a red alert (triggering site evacuation). Further detail on these stages is given in Section 6.9.
- During construction all construction workers, as part of their Site Induction, will be made aware of the works sites located in areas of elevated flood risk (Appendix 2) and of the evacuation process from those locations in the event of a Flood Alert or Warning, as set out in Table 6-7.
- The Principal Contractor's Site Manager and deputy/responsible person will be required to sign up to both the EA's flood warning service and the Met Office severe weather warning service so that automated warning messages are received by the Flood Coordinator. Signing up for these EA and Met Office services must be conducted and updated in line with the progression of operations along the cable route to ensure that the correct warnings (see Table 6-8) are available at each stage of the development. During some periods it may be necessary for the Principal Contractor's Site Manager and deputy/ responsible person to sign up for multiple EA's flood warning areas surrounding the work location to ensure full coverage of the site.

6.2. Pre-Occupation Actions

25. Prior to the commencement of the onshore cable construction works, it will be the responsibility of the Principal Contractor's Site Manager, monitored by EATL and working with the Flood Coordinator, to ensure that all actions outlined in Table 6-1 are completed.

Table 6-1 Pre-Occupation Actions

No	Action	Further Information	Completion Date and Signature
1	Undertake a review of the Flood Warning and Evacuation Procedure and make updates to take into account new or additional information.	Flood Warning and Evacuation Procedure to be incorporated into contractor Emergency Response Plan.	
2	Register with the Met Office Weather Warning service. Register with the EA Floodline Warnings Direct service.	Details on how to access weather warnings can be obtained at the following website: https://www.metoffice.gov.uk/weather/guides/warnings Floodline Warnings Direct can be signed up to using the following link https://www.gov.uk/sign-up-for-floodwarnings or by calling either the Floodline on 0345 988 1188 or the National Customer Contact Centre (03708 506 506) to receive flood warnings for more than one site.	
3	Ensure all construction personnel are aware of the Flood Warning and Evacuation Procedure and are trained sufficiently to implement the procedures set out in the Plan.	Include as part of the Site Induction training.	
4	Principal Contractor to implement appropriate designated evacuation route	The evacuation points and emergency evacuation routes are included in Appendix 3.	

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6.3. Key Contacts and Information

Table 6-2 lists contact numbers for personnel and Agencies that have key roles during a flooding emergency. This table will be completed by the Principal Contractor. This table will be periodically reviewed, and if necessary updated, by the Principal Contractor, with this review process monitored by EATL.

Table 6-2 Contact Numbers

Position	Name	Role	Contact Number
Flood Coordinator	TBC	Once flood or weather warning alerts have been received, it is the Flood Co-ordinator's responsibility to disseminate the alerts to all members of staff. The Flood Co-ordinator should lead in directing the evacuation of the site and help other members of staff to move to the designated evacuation point(s) located in Flood Zone 1. The Flood Coordinator should also take a register to ensure all staff are accounted for and provide an update to any on-site emergency services confirming that the site has been evacuated.	ТВС
Project Manager	TBC	Ensure that the Flood Warning and Evacuation Procedure has been put in place and monitor to ensure that periodic updates are made to the procedure as necessary. Ensure sufficient resources (people, time and money) are provided to implement the procedure.	ТВС
Construction Manager	ТВС	The Construction Manager's role is to ensure all the Pre-Occupation Actions (Table 6-1) have been completed as well as to ensure that the FWEP is reviewed and updated when deemed appropriate.	
Site Manager	ТВС	It is the Site Manager's responsibility to operate emergency electrical shut off switches that terminate electricity supply to the works sites. The Site Manager should assist the Flood Coordinator in directing the evacuation of the works sites and help other members of staff to move to the designated evacuation point(s) located in Flood Zone 1. The Site Manager should also take a register to ensure all staff are accounted for and provide an update to any on-site emergency services confirming that the site has been evacuated. When severe flood or weather warnings have been issued it is the Site Manager's responsibility to contact the Emergency Services and EA to confirm that the site is being closed due to potential flooding.	
EA Floodline Contact	ТВС	The EA will issue a flood warning to nominated construction management personnel.	0345 9881188

Note: TBC fields to be completed prior to the start of construction

6.4. Emergency Contacts

- Table 6-3 provides contact numbers for the relevant Emergency Services.
- 28. In an emergency where there is a real and immediate threat to life or property always dial 999.

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Table 6-3 Contact Numbers for Relevant Emergency Services

Body	Contact Number
Suffolk Fire & Rescue Service	01473 260588
Suffolk Police (Ipswich Police Station)	01473 613500
Environment Agency National Contact	03708 506 506
Suffolk County Council (reporting a flood, even in an emergency)	0345 606 6171
Environment Agency Incident Hotline	0800 80 70 60

- 29. If medical attention is required within the workplace, First Aiders should be in attendance and a record of the individual affected and the circumstances relating to the incident should be kept.
- The closest hospital to the onshore construction works with an Accident and Emergency Department is the Ipswich Hospital. **The Hospital can be contacted on 01473 712233 The address is: Heath Road, Ipswich, Suffolk, IP4 5PD.**

6.5. Other Useful Numbers

Table 6-4 provides a list of other useful numbers. This table will be completed by the Principal Contractor. This table will be periodically reviewed, and if necessary updated, during the onshore construction works.

Table 6-4 Other Useful Numbers

Body	Name	Contact Number
Electricity Provider	UK Power Networks	0800 029 4285
		Emergency number- 105
Gas Provider	Cadent	0800 389 8000
		Emergency number- 0800 111 999
Water Company	Anglian Water	0345 791 9155
		Emergency number - 0800771881
Telephone Provider	ТВС	ТВС
Local Authority	East Suffolk Council	01394 444453 / 0800 440 2516
	Mid Suffolk District Council	0300 1234000
Local Radio Station	BBC Radio Suffolk	01473 250000
Local TV Stations	BBC – Suffolk	01473 250000

Note: TBC fields to be completed prior to the start of construction

6.6. Insurance Details

32. Table 6-5 provides Insurance details for the onshore cable construction works. This table will be completed by the Principal Contractor.

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Table 6-5 Insurance details

Insurance Company	Policy Number	Contact Number
ТВС		

Note: TBC fields to be completed prior to construction start

6.7. Location of Services

Table 6-6 provides details of the locations of cut offs and valves for key services. This table will be completed by the Principal Contractor. This table should be periodically reviewed, and if necessary updated, during the onshore cable construction works.

Table 6-6 Location of Services

Service	Location of Cut Off and Values
Electricity	TBC
Gas	TBC
Water	TBC

Note: TBC fields to be completed prior to the start of construction

6.8. Environment Agency Flood Warning Service

- The Environment Agency issues three tiers of flood warning depending upon prevailing conditions. These are detailed in Table 6-7.
- There is no single standard or trigger that will result in a Flood Warning or Flood Alert being issued by the Environment Agency. Instead, each river, section of river, estuary and section of coastline is considered independently based on the local specifics and the prevailing conditions.

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Table 6-7 The EA Flood Warnings as Outlined in Diagram 1

Symbol	Risk	Status	When it is used
SEVERE FLOOD WARNING	High Risk	Severe Flood Warning Severe flooding. Danger to life.	When flooding poses a significant threat to life. Dangerous weather is expected and action should be taken to keep personnel and workforce safe from the impact of the severe weather. It is very likely that there will be a substantial widespread disruption to travel, energy supplies. Avoid travelling, where possible, and follow the advice of the emergency services and local authorities.
FLOOD WARNING	Medium Risk	Flood Warning Flooding is expected. Immediate action required.	Half an hour to one day in advance of flooding. There is an increased likelihood of impacts from severe weather, which could potentially disrupt works plans. This means there is the possibility of travel delays, road and rail closures, power cuts and the potential risk to life and property.
FLOOD ALERT	Low Risk	Flood Alert Flooding is possible. Be prepared	Two hours to two days in advance of flooding. Weather may cause some low level impacts, including some disruption to travel in a few places. Weather could bring much more severe impacts to many people but the certainty of those impacts occurring is much lower. It is important to read the content of yellow warnings to determine which weather situation is being covered by the yellow warning.
None	Very Low Risk	Warnings no longer in force No further flooding is currently expected in your area.	When river conditions begin to return to normal.

Flood risk areas 1, 3, 4 and 5, as identified in Table 5-1, do not benefit from Flood Alerts or Flood Warnings; however, the high level alerts for the wider catchment will still be of use in identifying periods of elevated risk. The specific Flood Alert and Flood Warning areas of relevance to the different flood risk areas identified and the work sites are summarised in Table 6.8.

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Table 6-8 Flood Alert and Warning Areas

Area	Site access, Jointing Bays and HDD locations	Flood Alert Area	Flood Warning Area
Area 1	AP-01, AP-02; AP-03; AP-04; AP-05; JB1/2; JB 2-3 Western end of HDD 21; HDD1; North and Southern end of HDD2;	East Anglia: The River Gipping from downstream of Needham Market to upstream of London Road Bridge, Ipswich, including riverside areas at Great Blakenham, Bramford and Sproughton.	N/A
Area 2	AP-06-AP-09; JB 3/4; Western end of HDD 19; Paper Mill Lane CCS, eastern end of HDD 4 and western end of HDD 5;	East Anglia: The River Gipping from downstream of Needham Market to upstream of London Road Bridge, Ipswich, including riverside areas at Great Blakenham, Bramford and Sproughton.	East Anglia: The River Gipping from Needham Market to London Road Bridge, Ipswich, including Bramford and Sproughton.
Area 3	AP-10; JB 4/5	East Anglia: The River Gipping from downstream of Needham Market to upstream of London Road Bridge, Ipswich, including riverside areas at Great Blakenham, Bramford and Sproughton.	N/A
Area 4	AP11-AP-12; JB 5/6; JB 6/7; JB 9/10	East Anglia: The River Gipping from downstream of Needham Market to upstream of London Road Bridge, Ipswich, including riverside areas at Great Blakenham, Bramford and Sproughton.	N/A
Area 5	AP-14; AP-16; JB 8/9; JB 10/11; JB 11/12; Both ends of HDD 6; Southern end of HDD 20;	East Anglia: The River Deben from Debenham, to and including Bromeswell, and the River Lark from Clopton to Martlesham.	N/A
Area 6	AP-17; AP-18; JB 12/13; HDD 7; JB 13/14; Playford Corner CCS;	East Anglia: The River Deben from Debenham, to and including Bromeswell, and the River Lark from Clopton to Martlesham.	East Anglia: The River Lark from Clopton to Martlesham, including Grundisburgh and the Bealing
Area 7	AP-19, AP-20; AP-21; JB 14/15 A&B JB 15/16; Both ends of HDD 8; Eastern end of HDD 9	East Anglia: The River Deben from Debenham, to and including Bromeswell, and the River Lark from Clopton to Martlesham.	East Anglia: The River Lark from Clopton to Martlesham, including Grundisburgh and the Bealing.
Area 8	AP-22; AP-23; AP-24; AP- 25; AP-26; JB 16/17; AP17/18 ; JB 19/20; JB 21/22;	East Anglia: The tidal Deben estuary, from Felixstowe Ferry and Bawdsey to Ufford.	East Anglia: The tidal River Deben estuary, from Felixstowe Ferry Hamlet to Ufford, including the Deben Marshes.

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Area	Site access, Jointing Bays and HDD locations	Flood Alert Area	Flood Warning Area
	Both ends of HDD 10; Southern ends of HDD 11; Both ends of HDD 12		
Area 9	AP-27; JB 21/22; JB 22/23; JB 23/24; Both ends of HDD 14; Both ends of HDD 15;	East Anglia: The tidal Deben estuary, from Felixstowe Ferry and Bawdsey to Ufford.	East Anglia: The tidal River Deben estuary, from Felixstowe Ferry Hamlet to Ufford, including the Deben Marshes.
Area 10	AP-28; AP-29; AP-30; AP-31; JB 24/25; JB 25/26; JB 26/27; JB 27/28; TJB-1 28/29; TJB-2 28/29; Both ends of HDD 16; Eastern and Western end of HDD 17;	East Anglia: The tidal Deben estuary from Felixstowe Ferry and Bawdsey to Ufford.	East Anglia: The tidal River Deben estuary, from Felixstowe Ferry Hamlet to Ufford, including the Deben Marshes

6.9. Met Office Severe Weather Warnings

- The Met Office is responsible for issuing weather warnings, which warn of impacts caused by severe weather. The warnings are designed to let people, businesses, emergency responders and governments know what weather is in store and what the impacts of that weather may be. Warnings are provided up to seven days ahead for rain, thunderstorms, wind, snow, lightning, ice and fog, although in relation to this plan the warnings for rain and thunderstorms are the ones of direct relevance.
- Surface water runoff from the works in periods of heavy rainfall may lead to pollution of nearby watercourses and therefore Met Office warnings for adverse rainfall should be utilised at the site to adapt, limit and cease work in response to projected weather condition. This has therefore been included in the Flood Warning and Evacuation Procedures.
- 39. Severe weather warnings are provided at four different levels that relate to the potential level of impact that the forecast weather is expected to bring and the likelihood of those impacts occurring. The levels used are detailed below, alongside the definitions stated on the Met Office website:
 - Very low (green)

"On many days of the year, the weather has the potential to impact our lives. Most of the time these impacts are quite small so we do not notice them. These are the days we often describe as 'typical weather' in the UK. These types of weather days are often assessed as having a 'very low' impact. The Met Office does not send out warnings for these days but there could still be some impacts caused by the weather. However, these impacts would be expected to be short-lived or fairly localised."

Low (yellow)

"Issued when it is likely that the weather will cause some low level impacts, including some disruption to travel in a few places. Many people may be able to continue with their daily routine, but there will be some that will be directly impacted and so it is important to assess if you could be affected. Other yellow warnings are issued when the weather could bring much more severe impacts to the majority of people but the certainty of those impacts occurring is much lower. It is important to read the content of yellow warnings to determine which weather situation is being covered by the yellow warning."

Medium (amber)

"There is an increased likelihood of impacts from severe weather, which could potentially disrupt your plans. This means there is the possibility of travel delays, road and rail closures, power cuts and the potential risk to life and property. You

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should think about changing your plans and taking action to protect yourself and your property. You may want to consider the impact of the weather on your family and your community and whether there is anything you need to do ahead of the severe weather to minimise the impact."

High (red)

"Dangerous weather is expected and, if you haven't already done so, you should take action now to keep yourself and others safe from the impact of the severe weather. It is very likely that there will be a risk to life, with substantial disruption to travel, energy supplies and possibly widespread damage to property and infrastructure. You should avoid travelling, where possible, and follow the advice of the emergency services and local authorities."

The precise impacts of a warning issued will depend on the nature of the predicted weather systems and, as the ratings are derived based on both probability and level of impact, may be notably different in nature on different occasions (i.e. an amber warning for rainfall may be issued in response to very different types of events). As a result, care should be taken to read the details of the warnings issued.

6.10. Flood Warning and Evacuation Procedures

An overview of the Flood Warning and Evacuation Procedures is illustrated in Diagram 1. This diagram shows the three trigger levels and the corresponding actions that will need to be implemented.

TRIGGER LEVEL 1 **Green Alert** This represents a state of **Local EA Flood Alert** readiness ahead of a potential flood situation. See Table 5-7 for Met Office Yellow Warning for rainfall, snow actions. or thunderstorms TRIGGER LEVEL 2 Red Alert – Evacuate Site This represents as action state **Local EA Flood Warning** ahead of a near-imminent flood situation. See Table 5-7 for Met Office Amber Warning for rainfall, actions. snow or thunderstorms TRIGGER LEVEL 3 Red Alert – Evacuate Site This represents as action state **Local EA Severe Flood Warning** ahead of an imminent flood situation that poses a significant Met Office Red Warning for rainfall, snow or threat to life. thunderstorms

Diagram 1 Trigger Levels and Actions

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The primary reasons of the Trigger Levels to be implemented are set out in the diagram above and will typically apply to all work areas. In addition, any observation of flooding, significant overland flow or very intense rainfall will constitute additional reasons for implementing Trigger Levels at the discretion of the Site Manager or Flood Coordinator.

- In areas where no flood warnings are available, if a flood alert has been issued by the Environment Agency but the Met Office have not issued Amber or Red Severe weather warnings, the Flood Coordinator will be responsible for determining if Trigger Level 2 or 3 (i.e. requirement for site evacuation) are applicable. This will involve a documented review of condition in the work area and along the channels in proximity to the work area. This should occur every two hours while work is in progress and prior to the start of works on any given day.
- 44. Guidance on the site-specific trigger levels for each location is detailed in Table 6-9.

Table 6-9 Site Trigger Levels

Site Location	Respective Jointing Bay/ Infrastructure	Met Office Weather Warnings	Site Conditions / Observations	Environment Agency Flood Alerts	Environment Agency Flood Warning
Area 1	Western end of HDD 21; HDD1; North and Southern end of HDD2; AP-6; JB 2/3	✓	✓	√	Х
Area 2	Western end of HDD 19; Paper Mill Lane CCS, eastern end of HDD 4 and western end of HDD 5; JB 3/4	✓	✓	1	1
Area 3	JB 4/5	✓	✓	√	Х
Area 4	JB 5/6	✓	✓	✓	Х
Area 5	JB8/9; Southern end of HDD 20; Both ends of HDD 6; JB 9/10; JB 10/11	√	√	√	Х
Area 6	Playford Corner CCS; JB 11/12; JB 12/13; HDD 7	√	✓	√	1
Area 7	JB 13/14;Both ends of HDD 8; Eastern end of HDD 9; JB 14/15	√	√	√	1
Area 8	Both ends of HDD 10; Southern end of HDD 11; Both ends of HDD 12; JB 15/16; JB 16/17; JB 17/18	√	✓	√	1
Area 9	Both ends of HDD 14; Both ends of HDD 15; JB 21/22; JB 22/23; JB 23/24	✓	√	√	✓
Area 10	JB 24/25; JB 25/26; Both ends of HDD 16; Eastern and Western end of HDD 17; JB 26/27; JB 27/28; TJB-1 28/29 and TJB2-28/29	✓	✓	✓	✓

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Site Location	Respective Jointing Bay/ Infrastructure	Met Office Weather Warnings	Site Conditions / Observations	Environment Agency Flood Alerts	Environment Agency Flood Warning
N/A	JB 1/2; HDD 21; JB 6/7; JB 18/19; JB 19/20; Clappits CCS and JB 20/21	No Flood Risk Relevant			

- The role of the Flood Coordinator is therefore crucial to smooth-running of flood procedure to ensure there is a regional, integrated approach for all sites with clear communication channels between Flood Coordinator, Principal Contractor and Site Managers.
- Once a threshold for a Trigger Level has been reached at a given site flood response procedures will be implemented to control and manage risks. These are outlined in Table 6-10.

Table 6-10 Flood Response Procedures

Warning Triggers	General Procedures	Specific Actions
Trigger Level 1	Communicate risk to all staff Make sure you know who is on site Take basic measures to prepare for flooding Stay in a safe place with a means of escape. Be ready should you need to evacuate.	 Place Staff on Green Alert Check access and availability to, and condition of equipment: closed road signs, torches (check battery life/spares), high visibility jackets for all staff Allow for handover should shift change occur before the warning is lowered Check staff registers are complete and available to ensure all staff are accounted for post- evacuation Where trigger relates to rainfall, in addition to the actions above, the Principal Contractor will: Speak to construction teams and request implementation of active measures to reduce the mobilisation of sediment and other pollutants in storm water runoff. This is likley to take the form of bringing forward basic house keeping measures such a road sweeping and clearance of intercept ditches. Reschedule (if reasonably possible and will not make situation worse) all engineering works which are liable to generate turbid runoff. This should include all earthworks. Review active work programme and associated temporary drainage arrangements and confirm that these are all in place and functional. Undertake survey of all active storm water drainage arranagments to check for damage, blockages or other problems which could impair their correct function and, in the event that definciencies are identified, action urgent remedial works.

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Warning Triggers	General Procedures	Specific Actions
Trigger Level 2	 Stay away from high risk areas Turn off gas, electricity and water supplies if safe to do so. Put flood protection equipment in place if safe to do so. Cooperate with the emergency services. Call 999 if you are in immediate danger. Evacuate site in an orderly and controlled way. 	 Stop active work on the site and communicate change in flood status to all staff. If reasonably possible within a short timeframe (1hr) remove plant and equipment and relocate to elevated area that is away from potential flooding. Place staff on Red Alert and begin evacuation of jointing bay compound/CCS (Trigger Fire Alarm) Operate the emergency electrical shut off switches terminating the electricity supply and all power supplies to construction works sites/compounds, but only if safe to do so. Use allocated evacuation route to facilitate / direct the safe evacuation of all personnel to the agreed refuge location. Take register to ensure all staff are accounted for. Contact the Emergency Services and EA to confirm that the work sites are being closed due to the risk of flooding
Trigger Level 3	 Evacuate site as quickly as can be safely achieved. Account for all personnel Leave the area 	 Immediately start evacuation of jointing bay compound and CCS if not actioned on receipt of the Flood Warning or Met Office Weather Warning (Trigger Fire Alarm at compounds) Use allocated evacuation route to facilitate / direct the safe evacuation of all personnel. Take register to ensure all staff are accounted for Contact EATL to confirm that the jointing bay compound and/or CCS is being closed due to the risk of flooding within 30 minutes.
All Clear	 Be careful. Flood water may still be around for several days. If you've been flooded, ring your insurance company as soon as possible. 	Where the preceeding event related to rainfall or resulted in flood water entering or passing through the site storm water management systems, the Principal Contractor will: • Undertake a survey of all active storm water drainage arranagments to check for damage, blockages or other problems resulting from the storm / flood. • Remedial works should be urgently undertaken on deficient drainage equipment. • Signficiant pollution of any surface waterbody should be reported to the Environment Agency.

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Flooding is very complex and is controlled by a number of highly variable physical factors such as the volume and intensity of rainfall and subsequent upstream flow. Ground level data has been analysed to estimate likely flood conditions at each construction site within Flood Zone 2 or 3 and this information has been built into this FWEP. However, it is also recommended that the Flood Coordinator consults with the EA to gain understanding how much time is likely to be available between receiving a flood alert and flood waters first affecting the construction works at each location.

6.11. Evacuation Route and Designed Evacuation Point

There will be separate evacuation routes from each area of the onshore construction works area located in Flood Zone 2 or 3 or where access to the works area could be impeded by flooding via surface water flow pathways and affect the safety of staff (See Appendix 3 Emergency Evacuation Routes). These routes are documented below. All construction site personnel will be informed of these evacuation routes during their Induction training.

Table 6-11 Evacuation Routes and Evacuation Points

Jointing Bay Location/Work Site	Evacuation Point	Access/Egress Route from Evacuation Point via vehicle
Western end of HDD 21	The site access point AP 1. NGR: TM 09882 46236	South to Bullen Lane, then east along Bullen Lane to Lorraine Way (B113) heading north to the A14 *Surface water flood depths along Bullen Lane are only expected to be <0.15m and this would be spread out across the land
JB 1/2, Bullen Lane CCS, eastern end of HDD 21 and both ends of HDD 1	The site access point AP-2. NGR: TM 09882 46236	East along Bullen Lane to Lorraine Way (B113) heading north to the A14 *Surface water flood depths along Bullen Lane are only expected to be <0.15m and this would be spread out across the land
JB 2/3	The site access point AP-3. NGR: TM 11317 47812	Southwards down Somersham Road, to Loraine Way (B1113) northwards.
Southern end of HDD 2	The site access point AP-4. NGR: TM 29388 39000	Southwards down Somersham Road, to Loraine Way (B1113) and then northwards.
Northern end of HDD 2	The site access point AP-5. NGR: TM 11087 47997	Southwards down Somersham Road, to Loraine Way (B1113) and then northwards.
Western end of HDD 19	The site access point AP-7 NGR: TM 12075 48969	Northwards along Loraine Way (B1113)
JB 3/4, eastern end of HDD 19 and western end of HDD 4	The site access point AP-8. NGR: TM 12188 49074	Northwards along Loraine Way (B1113)
Paper Mill Lane CCS, eastern end of HDD 4 and western end of HDD 5	The site access point AP-9 NGR: TM 12815 48969	Northwards along Paper Mill Lane; to the A14. *Mapping indicates Flood Zone 3 crosses Paper Mill Lane however the road is embanked

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Jointing Bay Location/Work Site	Evacuation Point	Access/Egress Route from Evacuation Point via vehicle		
JB 4/5 and eastern end of HDD 5	The site access point AP-10 NGR: TM 13311 49093	Northwards along Old Ipswich Road, west onto Ipswich Road and onto Claydon Roundabout heading north.		
JB 5/6	The site access point AP-11. NGR: TM 16131 49058	Northwards along Henley Road, then west on Brent Cross, south on Bull's Road, east on Church Lane, then north on Norwich Road onto the A14. *Mapping indicates there is a high risk of surface water flow pathway at the side of the Henley Road, however detailed LiDAR mapping indicates that the road level is higher than the adjacent land and even at the expected depths of the surface water (0.6-0.9m), this is still below the road level. This is route is deemed suitable for the evacuation route.		
JB 6/7	Given low flood risk, no evacuation route is required. In the event of site evacuation, muster at site access point and then disperse after all clear is given.			
JB 7/8	Walk westwards along the construction track to Westerfield Road (B1077)	Southwards on Westerfield Road (B1077) towards Ipswich.		
JB 8/9 and western end of HDD 6W	Walk northwards using the public rights of way to the evacuation point on Struggler's Lane (TM 18424 49741). *Surface water flood depths on a section of the public right of way are only expected to be <0.15m and this would be spread out across the land.	Southwards on Rose Hill (B1077) towards Ipswich.		
HDD 6E	Walk eastwards uphill to the boundary of Witnesham Lane and Clopton Road. *High Risk (3.3%AEP) surface water flood depths at the middle and southern section of the cable boundary in this area are up to 0.15m mostly with patches of 0.3-0.6m. Medium Risk (1%AEP) surface water flood depths along the middle section of the cable boundary is up to 0.15m, with localised pools of 0.15-0.30m and 0.6-0.9m. *Vehicle pick-up is limited on this road and only available at the entrance gate (NGR: TM 19268 49326).	Westwards onto Tuddenham Lane (Sandy Lane) to the B1077 (northwards)		
JB 9/10 and northern end of HDD 20	Walk north along the construction track and then east still following the construction track to Access Point AP-14 (NGR: TM 19925 48753)	East along Grundisburgh Road, then east along Bealings Road, then south along Butt's Road, east		

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Jointing Bay Location/Work Site	Evacuation Point	Access/Egress Route from Evacuation Point via vehicle	
		along Playford Road, south along Hall Road to the Main Road (A1214) leading to the A12. *The high risk of surface water flooding on the eastern side of Butt's Lane is expected to be shallow (<0.15m) *The low risk of surface water flooding along Playford Road is expected to be shallow	
Southern end of HDD 20	The access point AP 15 NGR: TM 19991 48744	East along Grundisburgh Road, east along Bealing Road, then south along Butt's Road, east along Playford Road, south along Hall Road to the Main Road (A1214) leading to the A12. *The high risk of surface water flooding on the eastern side of Butt's Lane is expected to be shallow (<0.15m) *The low risk of surface water flooding along Playford Road is expected to be shallow	
JB 10/11	Walk eastwards along the construction track to Butt's Road then south to the evacuation point (NGR: TM 21347 48508).	South along Butt's Road, east along Playford Road south along Hall Road to the Main Road (A1214) leading to the A12. *The high risk of surface water flooding on the eastern side of Butt's Lane is expected to be shallow (<0.15m) *The low risk of surface water flooding along Playford Road is expected to be shallow	
Playford Corner CCS	The site access AP 16 NGR: TM 21519 48683	West along Bealings Road to Butt's Road, east along Playford Road, south along Hall Road to the Main Road (A1214) leading to the A12. *The high risk of surface water flooding on the eastern side of Butt's Lane is expected to be shallow (<0.15m) *The low risk of surface water flooding along Playford Road is expected to be shallow	
JB 11/12	Walk southwards from site along the footpath to Sandy Lane then north onto 'The Street' where the evacuation point is located at All Saints Church (NGR 622914, 247996).	Heading to the south towards the A1214 (Main Road) via 'The Street' and then 'Hall Road'.	
JB 12/13 and both ends of HDD 7	Lodge Road (NGR: TM 23208 48253).	Heading South along Lodge Road, 'The Street', Hall Road, east onto the A12.	

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ointing Bay Evacuation Point Location/Work Site		Access/Egress Route from Evacuation Point via vehicle		
JB1 13/14	Near the top of the site access 18 (NGR: TM 24539 48502), just before Seckford Hall Road.	Head east along Seckford Hall Road to the A12 going north.		
HDD 8W	Walk southwards along the track beath the A12 and continue eastwards along the construction track to site access AP 19 (NGR: TM 25345 47797).	Continue north on Top Street to Ipswich Road (B1438), then west on Ipswich Road to the A12 going north.		
HDD 8E	Walk eastwards along the construction track within the cable route to site access AP 19 (NGR: TM 25345 47797).	Continue north on Top Street to Ipswich Road (B1438), then west on Ipswich Road to the A12 going north.		
Top Street CCS and JB 14/15 A&B	The site access AP-19. (NGR: TM 25345 47797).	Continue north on Top Street to Ipswich Road, then west on Ipswich Road to the A12 going north.		
Eastern end of HDD 9; Both ends of HDD 10	Follow the cable track to the site access AP 21 NGR: TM 34710 39307	South on Sandy Lane to Top Street, then north on Top Street to Ipswich Road, east on Ipswich Road to the A12. *Surface water flow path along the south of Sandy Lane is expected to be <0.15m (shallow)		
JB 15/16	Just south of the site access at Sandy Lane (NGR: TM 26128 47903).	North along Sandy Lane, east onto California Road east onto Ipswich Road and onto the A12. *The high risk of surface water flooding across parts of the route is expected to be <0.15m (shallow).		
JB 16/17 and southern end of HDD 11	Walk southwards along the construction track towards the site access (AP-22) The evacuation point is just to the north of the access point (NGR: TM 26312 46368).	South on Waldringfield Road, west on Ipswich Road to Newbourne Road onto the A12.		
JB 17/18, both ends of HDD 12 and HDD 13	The site access AP-23 (NGR: TM 26725 45985).	South on Waldringfield Road, west on Ipswich Road to Newbourne Road and on to the A12.		
JB 18/19	Given low flood risk, no evacuation route is required. In the event of site evacuation, muster at site access point and then disperse after all clear is given			
JB 19/20	Given low flood risk, no evacuation route is required. In the event of site evacuation, muster at site access point and then disperse after all clear is given.			
Clappits CCS and JB 20/21	Given low flood risk, no evacuation route is required. In the event of site evacuation, muster at site access point and then disperse after all clear is given.			

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Jointing Bay Location/Work Site	Evacuation Point	Access/Egress Route from Evacuation Point via vehicle		
JB 21/22 and northern end of HDD 14	Walk to north along the construction track to TM 28063 42357, then along the public rights of way to the evacuation point (NGR: TM 28318 42390).	Head north following Mill Road, west on Cliff Road, north on School Road, west on Ipswich Road and Newbourne Road to the A12.		
Southern end of HDD 14	Walk southwards along the construction tracks to the site access AP 27 (NGR TM 28236 40393).	Head westwards along Park Lane, southwards along Bucklesham Road, Trimley Road, Kirton Road onto the A14.		
JB 22/23	Walk southwards along the construction track to the site access AP 27 (NGR TM 28236 40393).	Head westwards along Park Lane, southwards along Bucklesham Road, Trimley Road, Kirton Road onto the A14.		
JB 23/24 and northern end of HDD 15	Walk northwards along the construction track to the site access AP-27 (NGR TM 28236 40393).	Head westwards along Park Lane, southwards along Bucklesham Road, Trimley Road, Kirton Road onto the A14.		
Southern end of HDD 15	Walk southwards within the cable corridor to the construction track leading to the site access AP-28 (NGR: TM 29388 39000).	West along Lower Falkenham Road to Back Road, then Innocence Lane to Croft Lane to the A14.		
JB 24/25 and western end of HDD 16	Walk west along the public rights of way to the evacuation point just before the site access AP 28 (NGR: TM 29279 39354).	Southwards to the site access, then west along Lower Falkenham Road to Back Road, then Innocence Lane to Croft Lane to the A14.		
JB 25/26	Walk northwards along the construction track to the evacuation point AP 29 (NGR: TM 32056 41324).	Northwards past the site access to Woodbridge Road (B1083) and continue north on Ford Hill (B1083)		
JB 26/27	Walk along access/construction track to the access point AP 29 (NGR: TM 32056 41324)	Eastwards to Woodbridge Road (B1083) then continue northwards along this road towards Melton		
Western end of HDD 17	Walk along construction track to the access point AP 29 (NGR: TM 32056 41324)	Eastwards to Woodbridge Road (B1083) then continue northwards along this road towards Melton		
Eastern end of HDD 17	Walk eastwards along the construction track to the site access on Ferry Road AP 30 (NGR: TM 34505 39038).	North along Ferry Road onto The Street towards Alderton then north along Woodbridge Road (B1083) towards Sutton.		
JB 27/28	Walk eastwards along the construction track to the site access on Ferry Road AP 30 (NGR: TM 34505 39038).			

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Jointing Bay Location/Work Site	Evacuation Point	Access/Egress Route from Evacuation Point via vehicle	
TJB-1 28/29 and TJB2- 28/29	Walk north along the construction track to the site access point AP-31 (NGR: TM 34710 39307).	North along Ferry Road onto The Street towards Alderton then north along Woodbridge Road (B1083) towards Sutton.	

54. The Principal Contractor shall carry out and record Flood Emergency Response drills every 6 months.

6.12. Water Level Falling

- As detailed, the EA Flood Warnings and Met Office Weather warnings identify a 'potential' rather than 'actual' threat. It should be noted that not all events would result in an automatic progression from one warning to another with the end result being flooding and evacuation of any construction works site. It is possible for smaller events to trigger initial warnings with water levels subsequently falling before flooding occurs.
- Should water levels within the watercourse/s thought to be at risk of flooding or tide levels exhibit a sustained fall at any point during the event, this will be identified by the EA Flood Warning Service and an automatic notification sent to the Principal Contractor's Site Manager via phone and email.
- 57. On receipt of such a notification the Principal Contractor's Site Manager can downgrade the trigger level response as appropriate.

7. MONITORING AND REVIEW

- During construction, a Flood Coordinator will be appointed by the Principal Contractor. The Flood Coordinator will ensure that all construction personnel are aware of the potential flood risk and of how to respond in the event of a flooding emergency. The training for construction personnel as a minimum, will cover:
 - Requirements of the FWEP (detailed in Section 6).
 - Confirmation of Key Roles, clearly identifying positions held, responsibilities, communication and chain of command.
 - Staff duties.
 - Evacuation Routes.
 - Staff safety during a flood event.
 - Electrical systems emergency shut off procedures.
 - Operation of communications systems, signage and traffic management systems.
 - All construction staff will be trained as part of the site induction process.
- All training completed will be documented and recorded. Staff will also be made aware of any updates to the FWEP through appropriate internal staff briefings or toolbox talks.
- 60. The FWEP will be subject to update / review:
 - Whenever there are changes to any of the contact numbers, names or roles held within the FWEP.
 - All updates / reviews shall be documented and recorded.
 - The Principal Contractor's Site Manager will ensure an up-to-date version of the Procedure is available at all times during the construction phase.
- 61. When the FWEP is updated a document control record, as presented in Table 7-1, will be completed for document control and to understand why changes were needed.

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Table 7-1 Flood Plan Evacuation Procedures Document Control

Version	Date	Prepared by	Checked by	Approved by	Reasons for Revision

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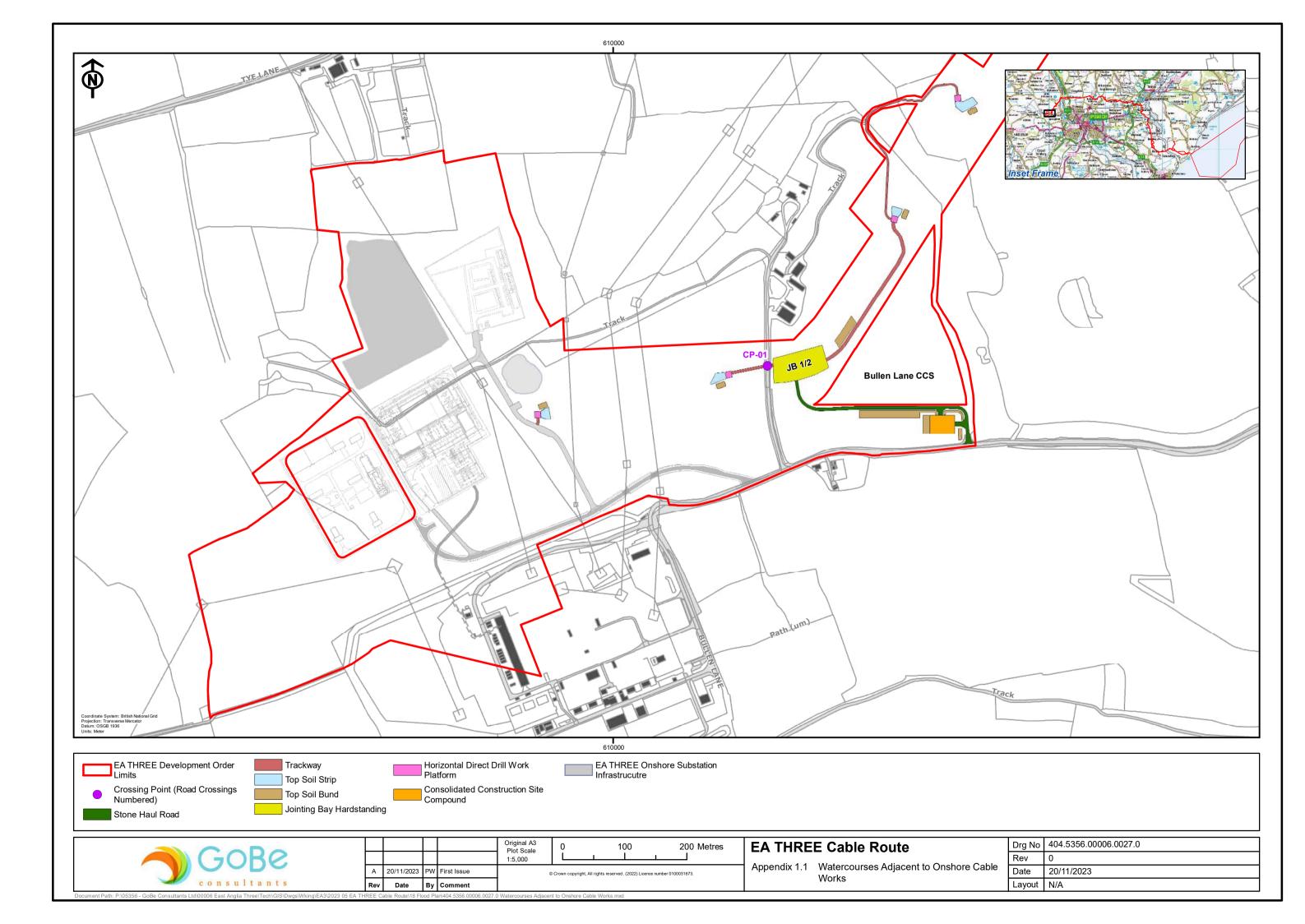
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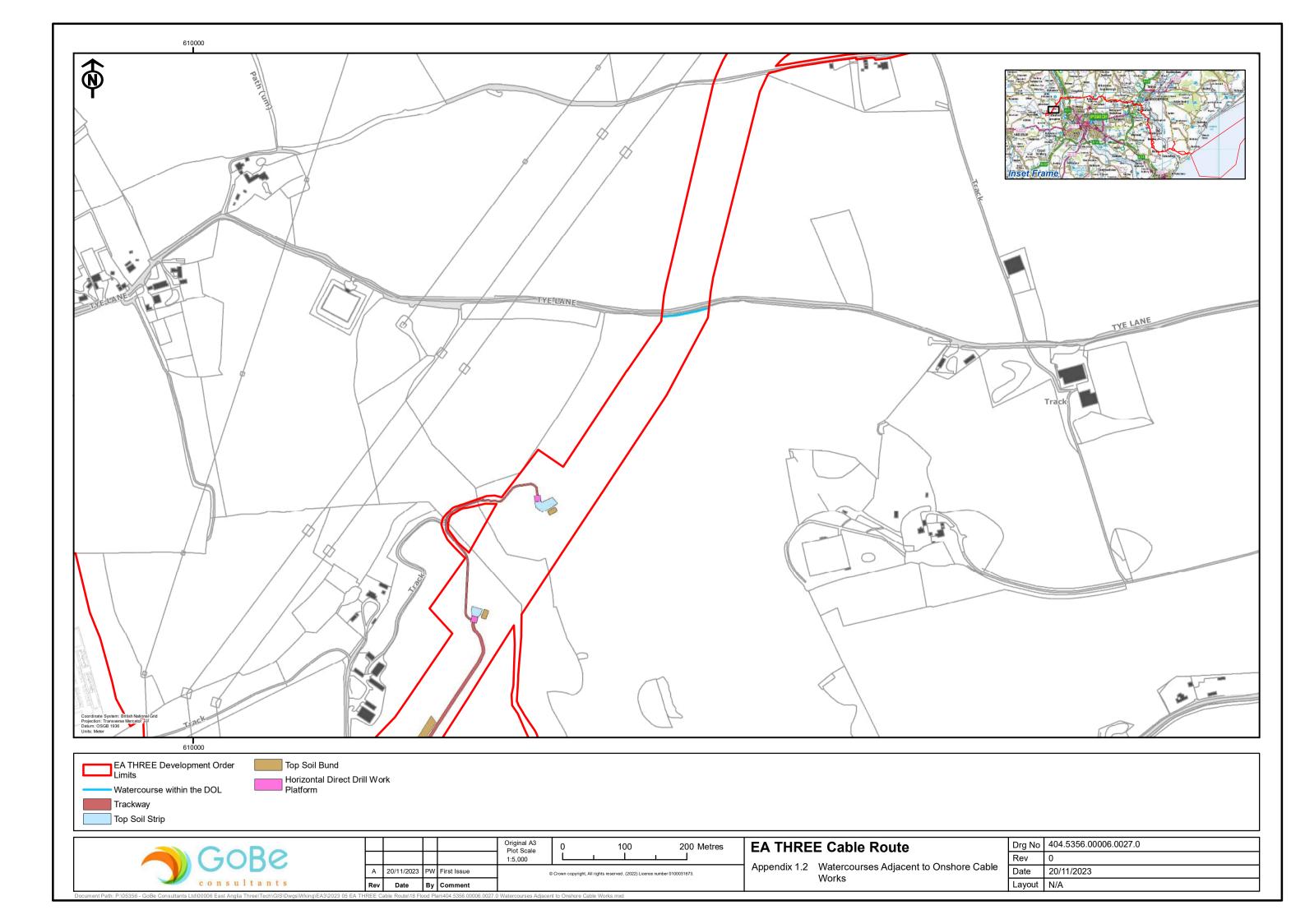
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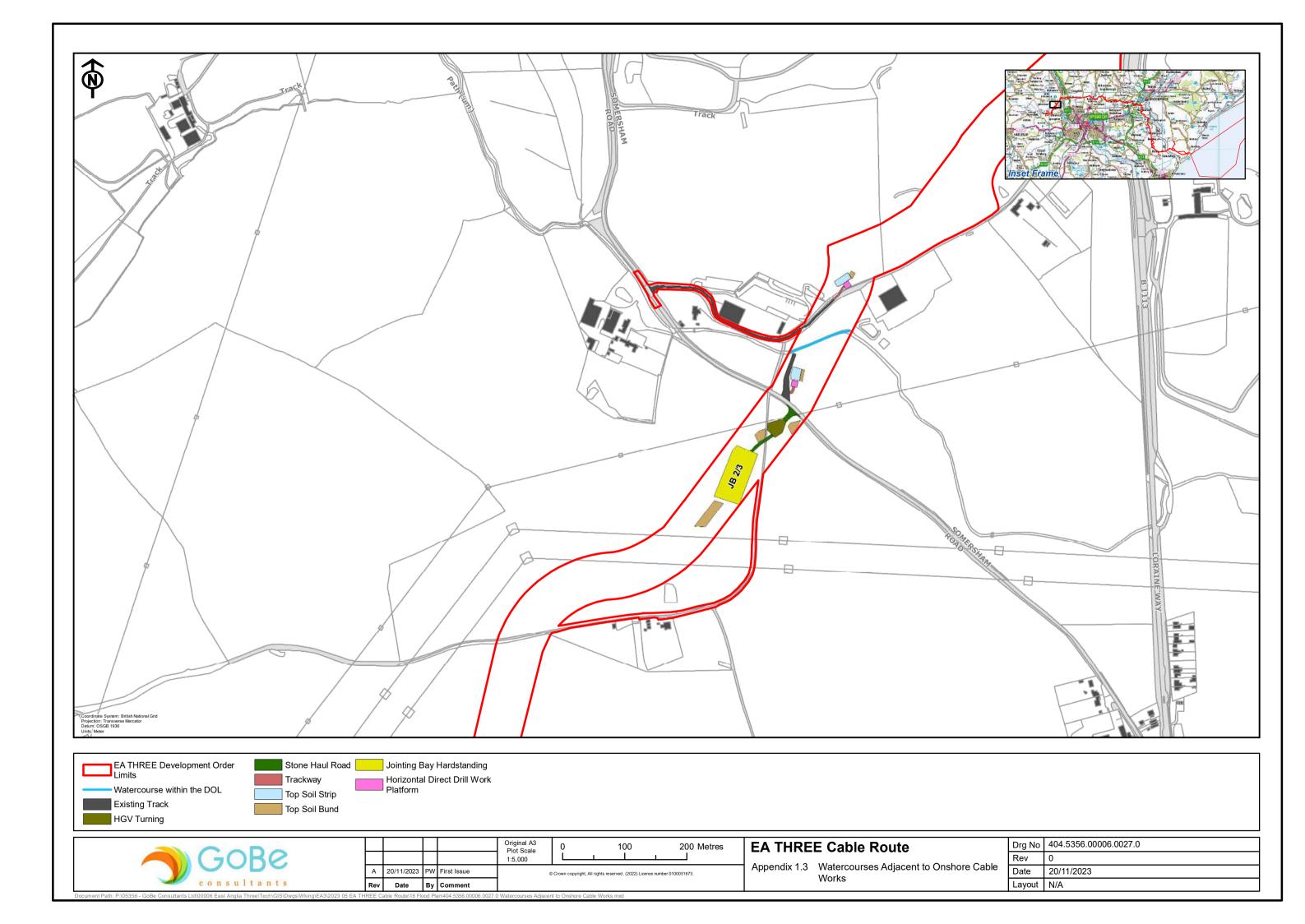
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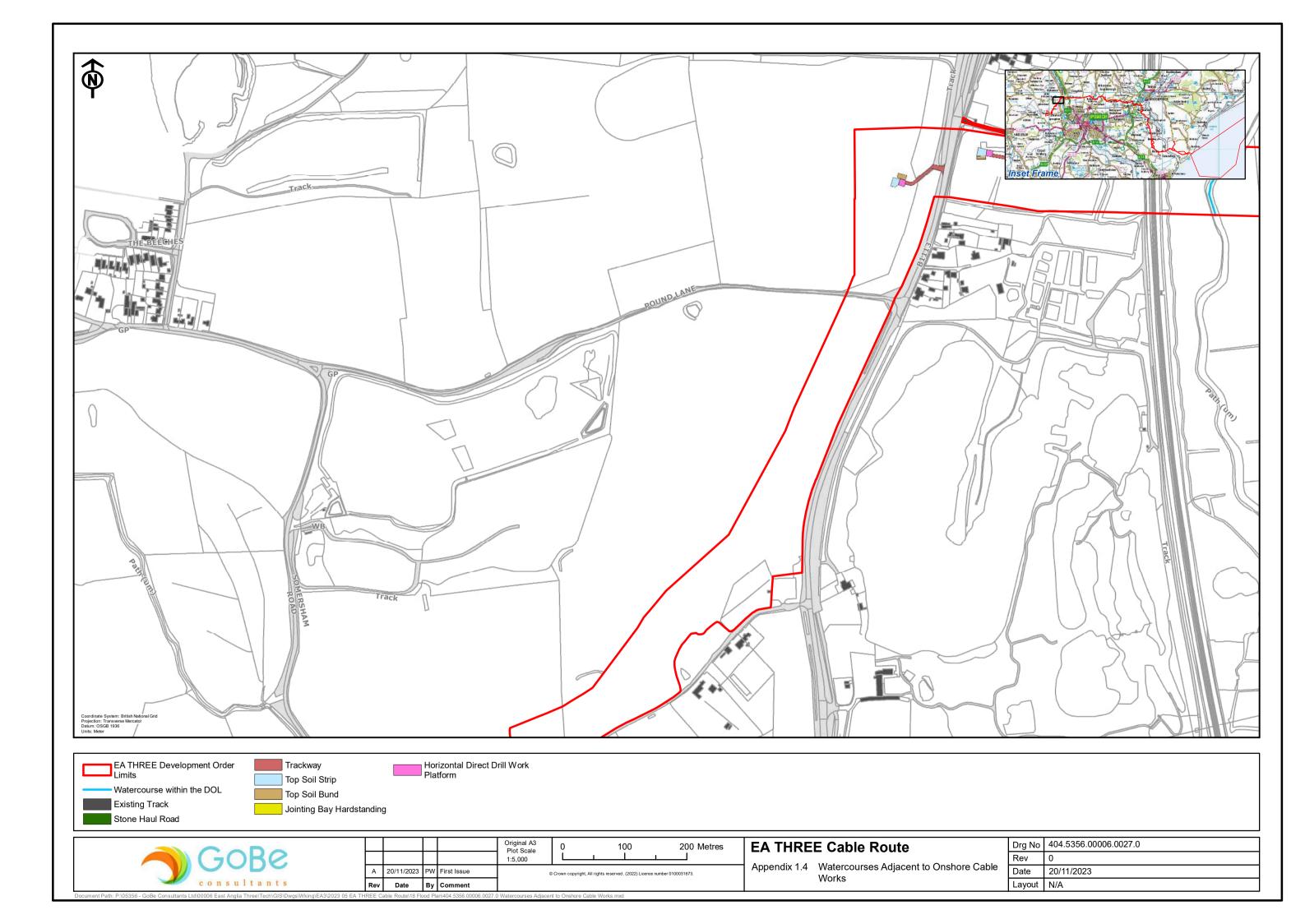


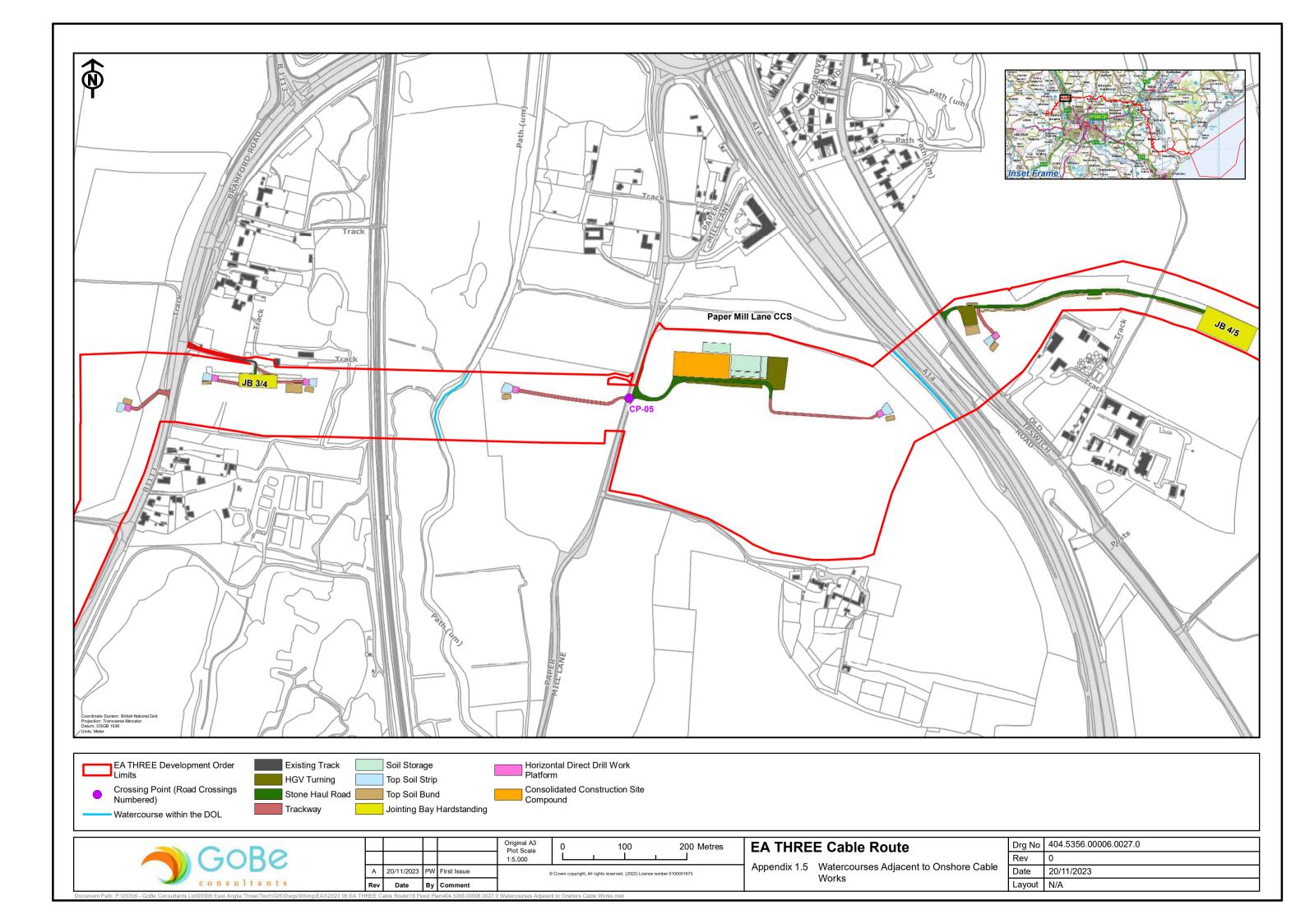
APPENDIX 1 - WATERCOURSES ADJACENT TO ONSHORE CABLE WORKS

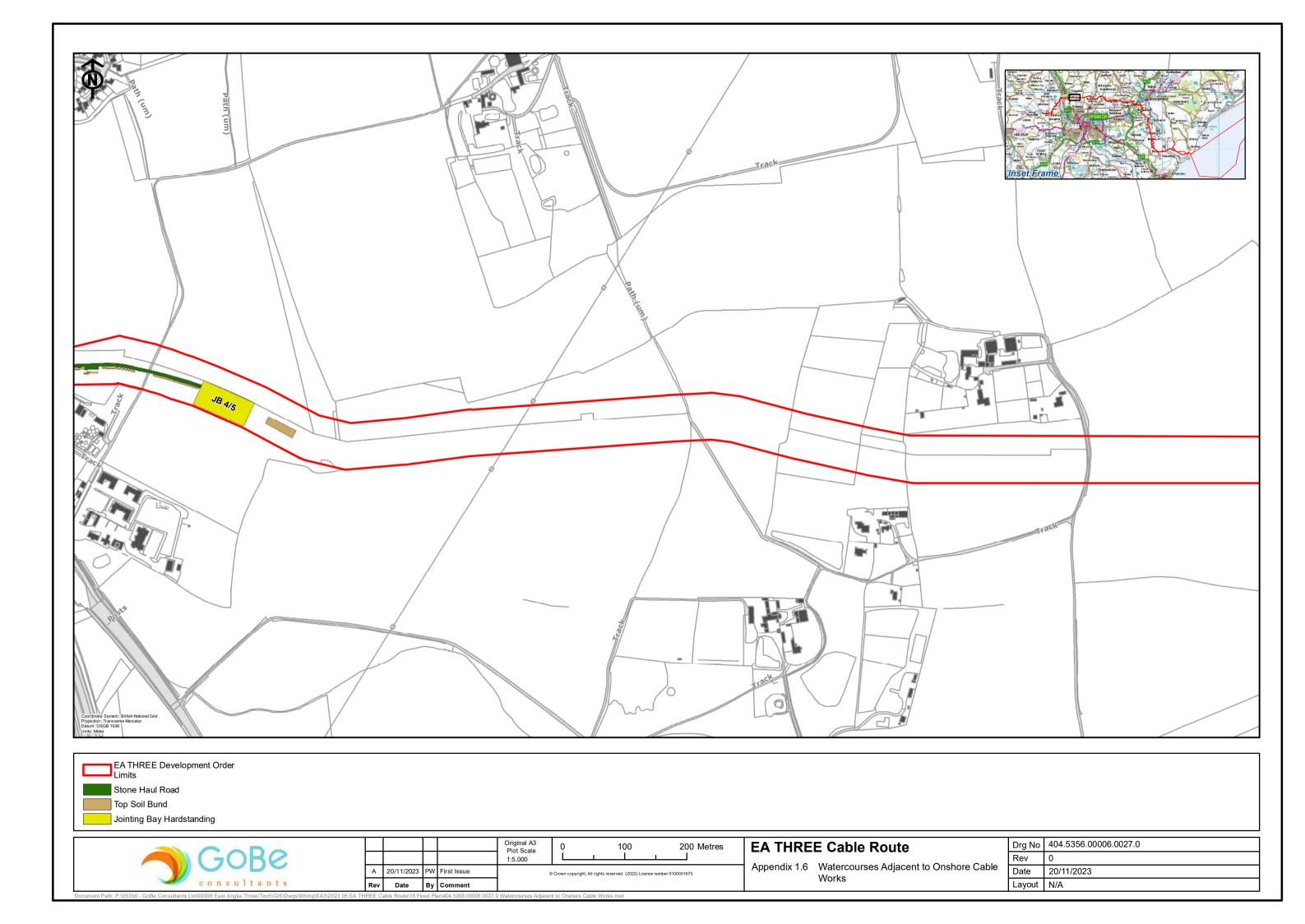


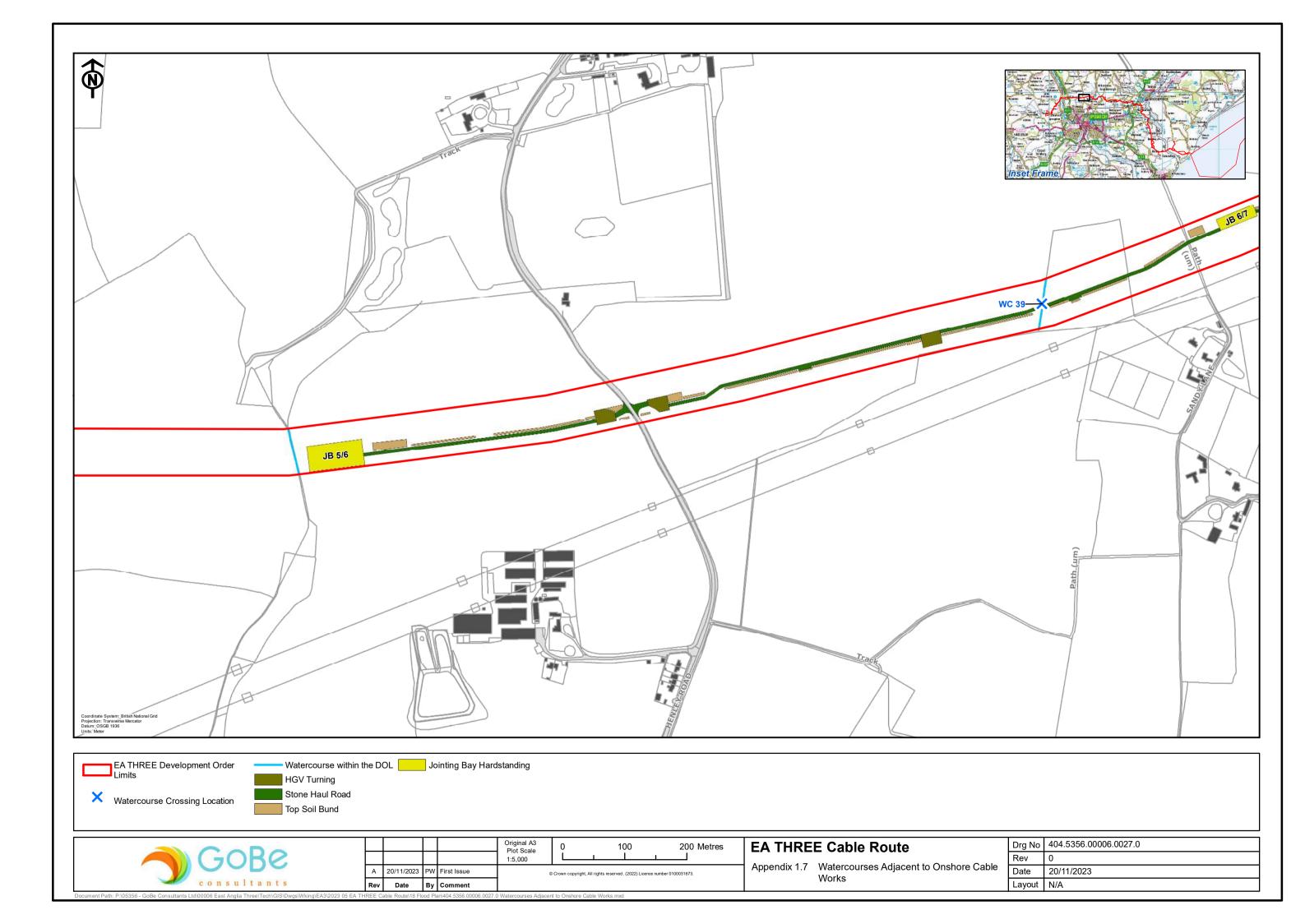


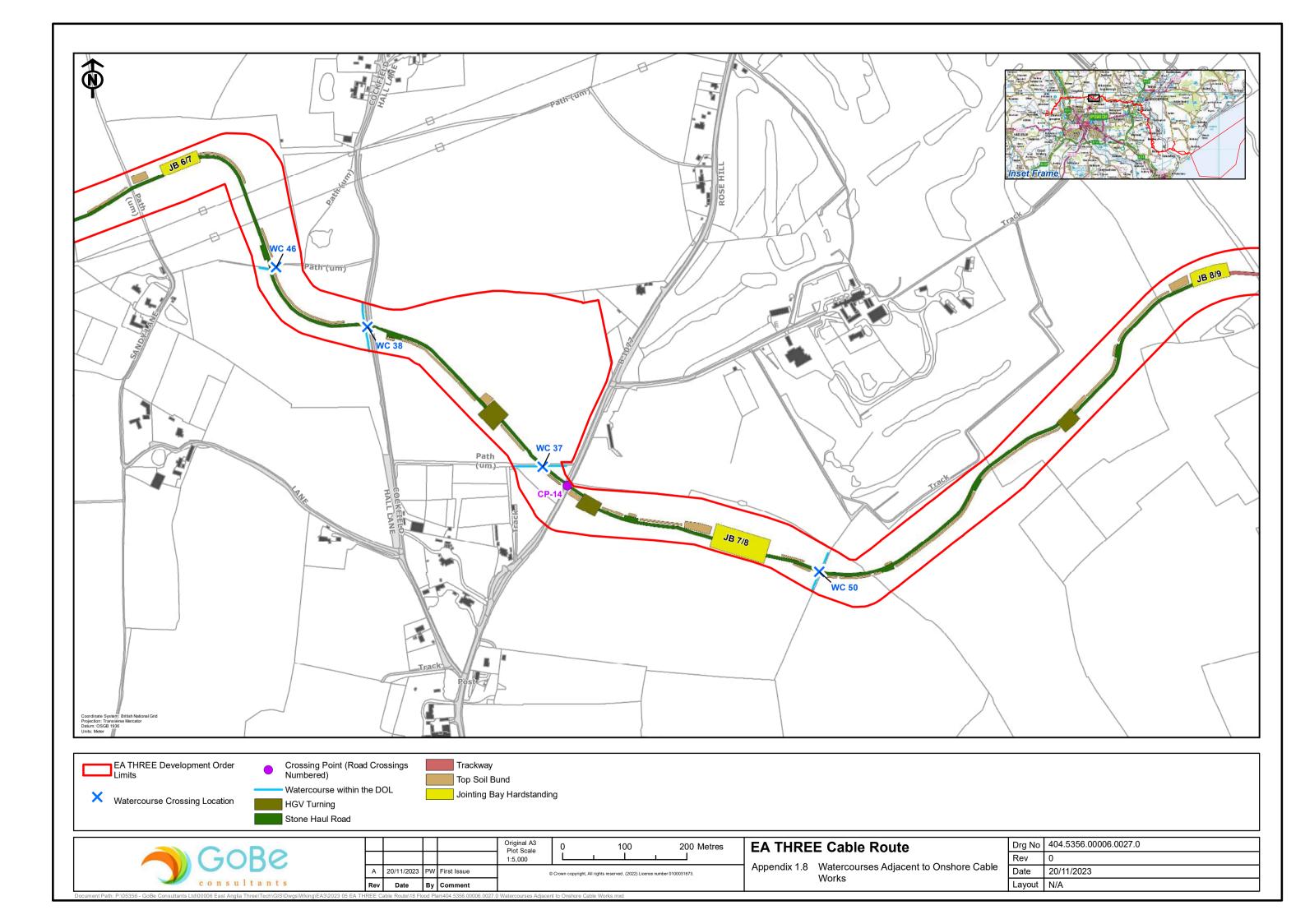


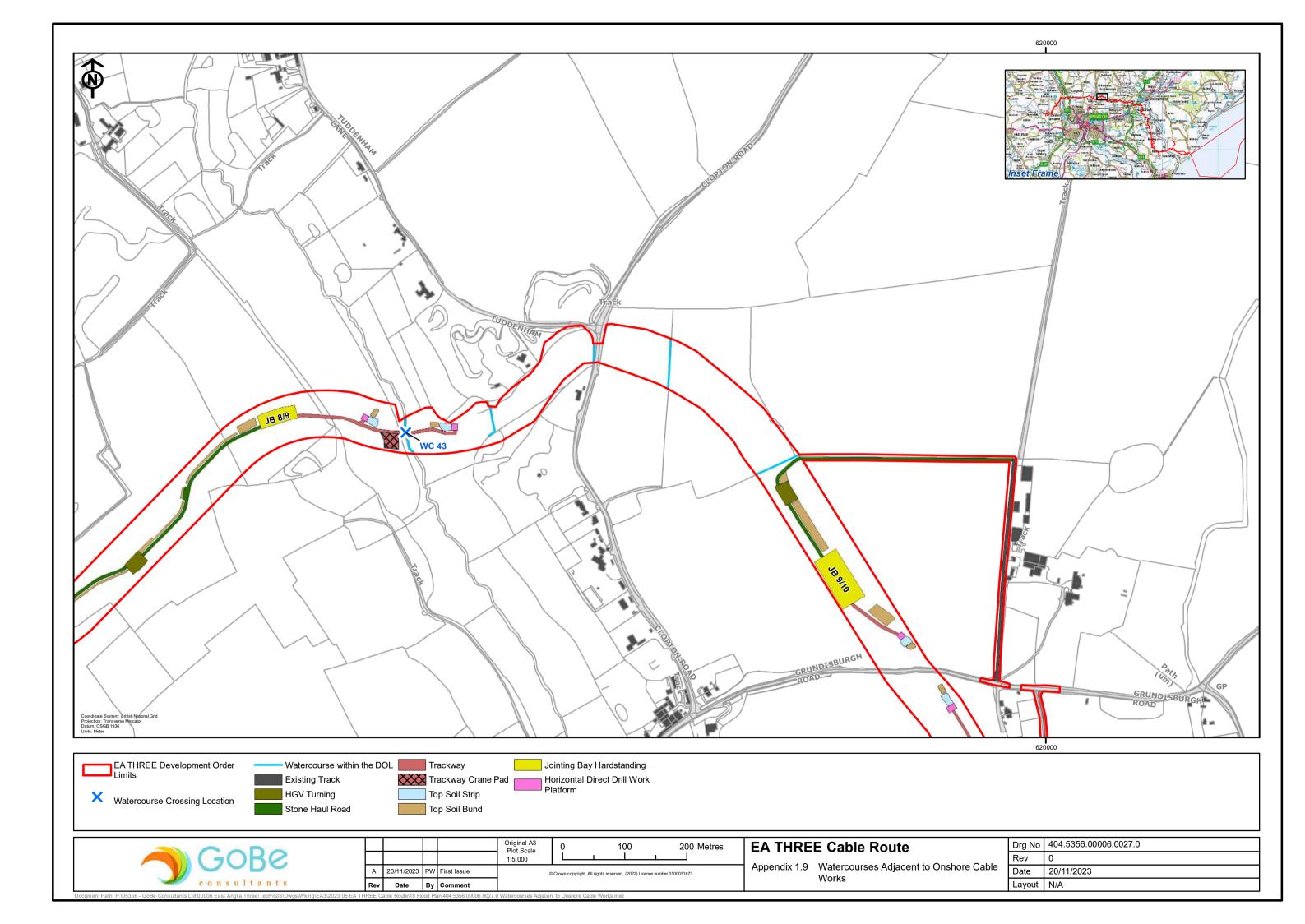


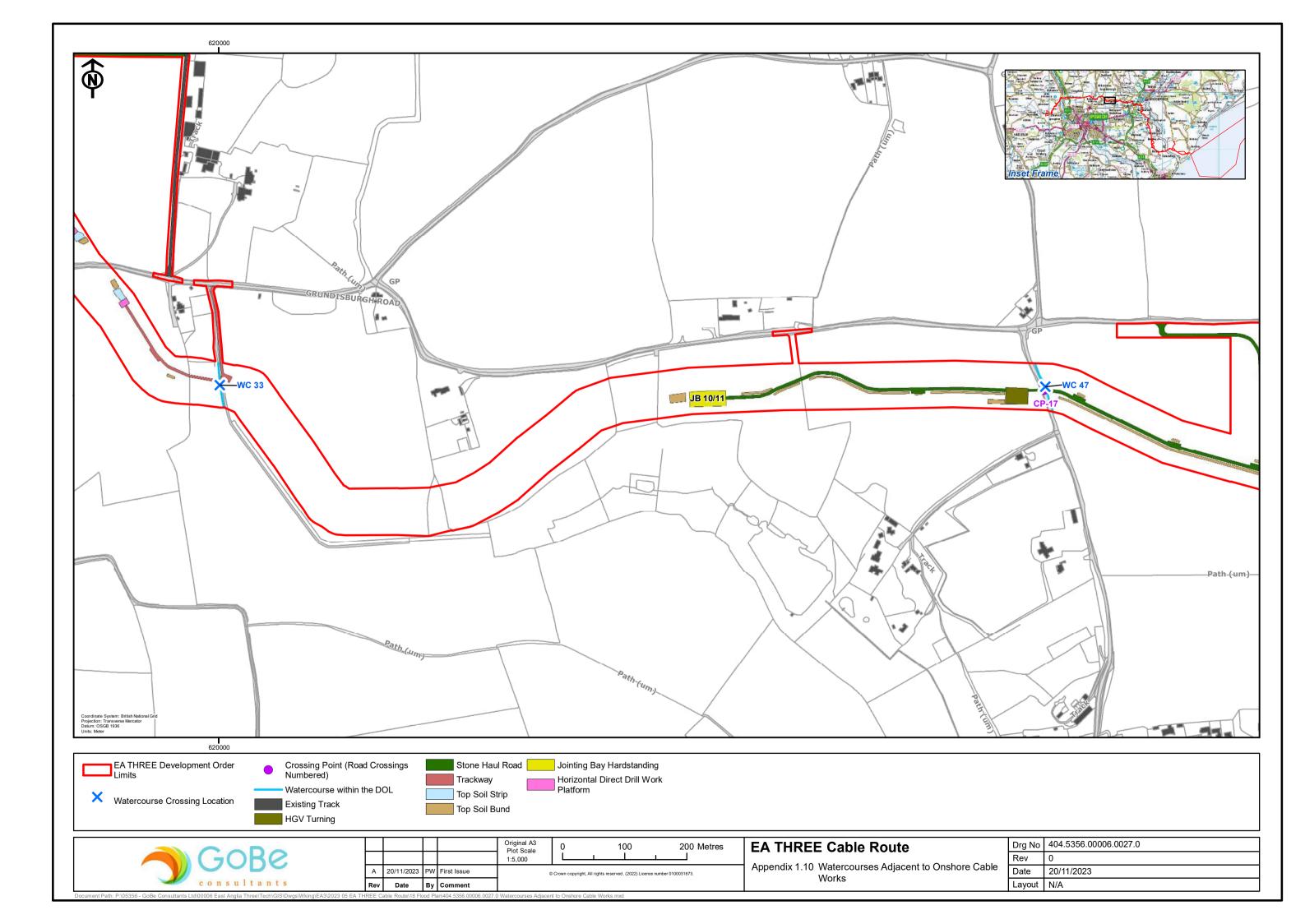


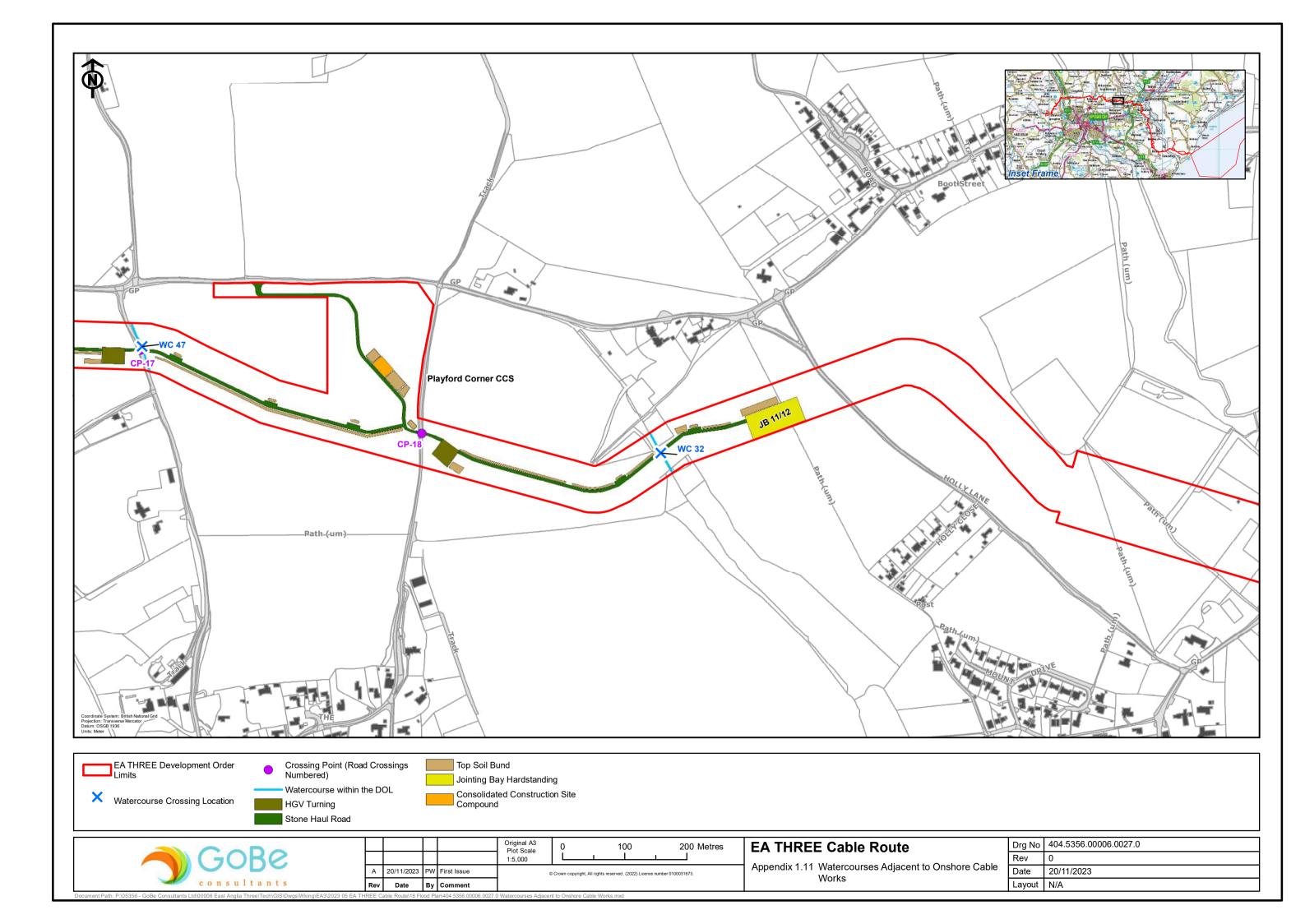


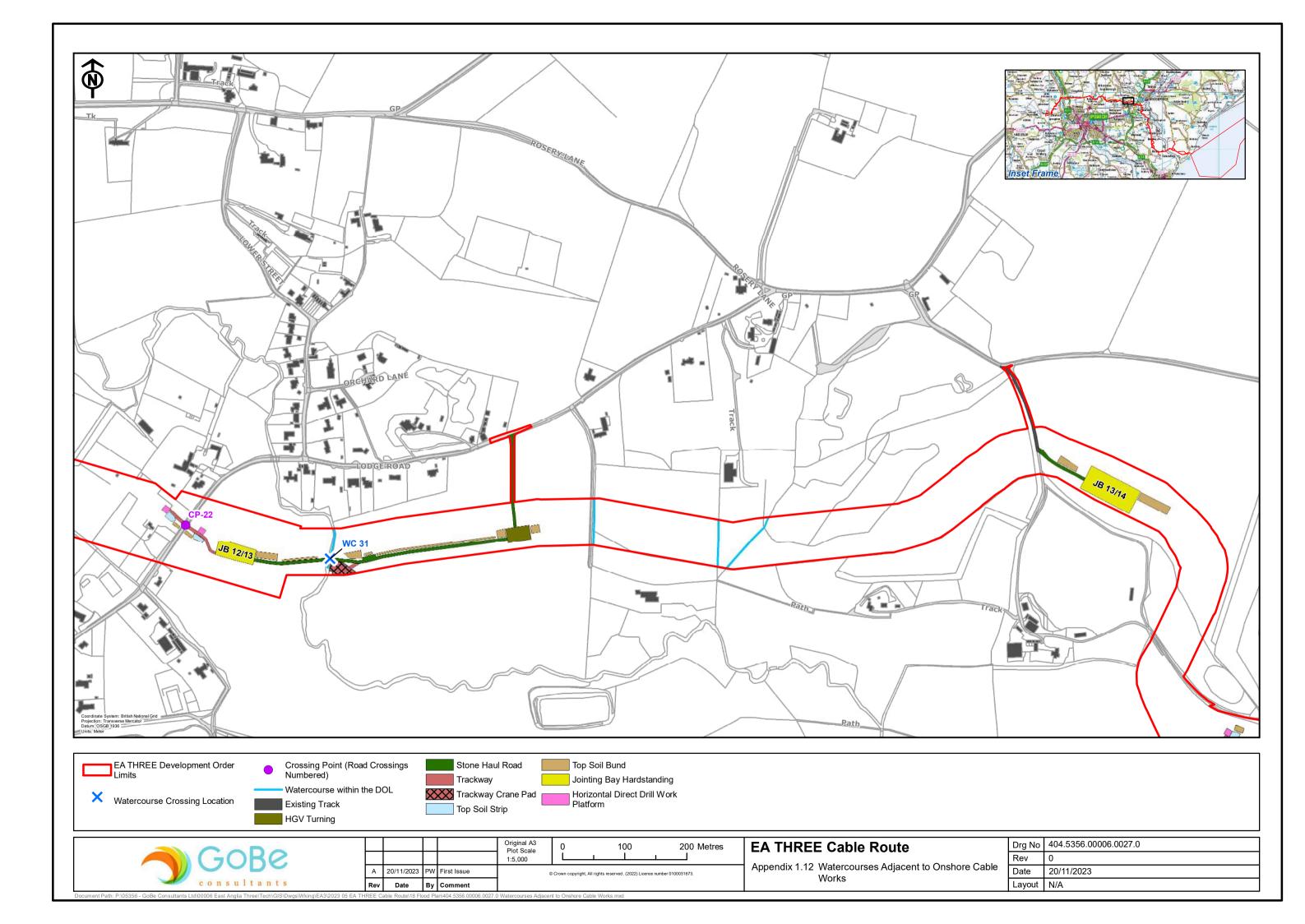


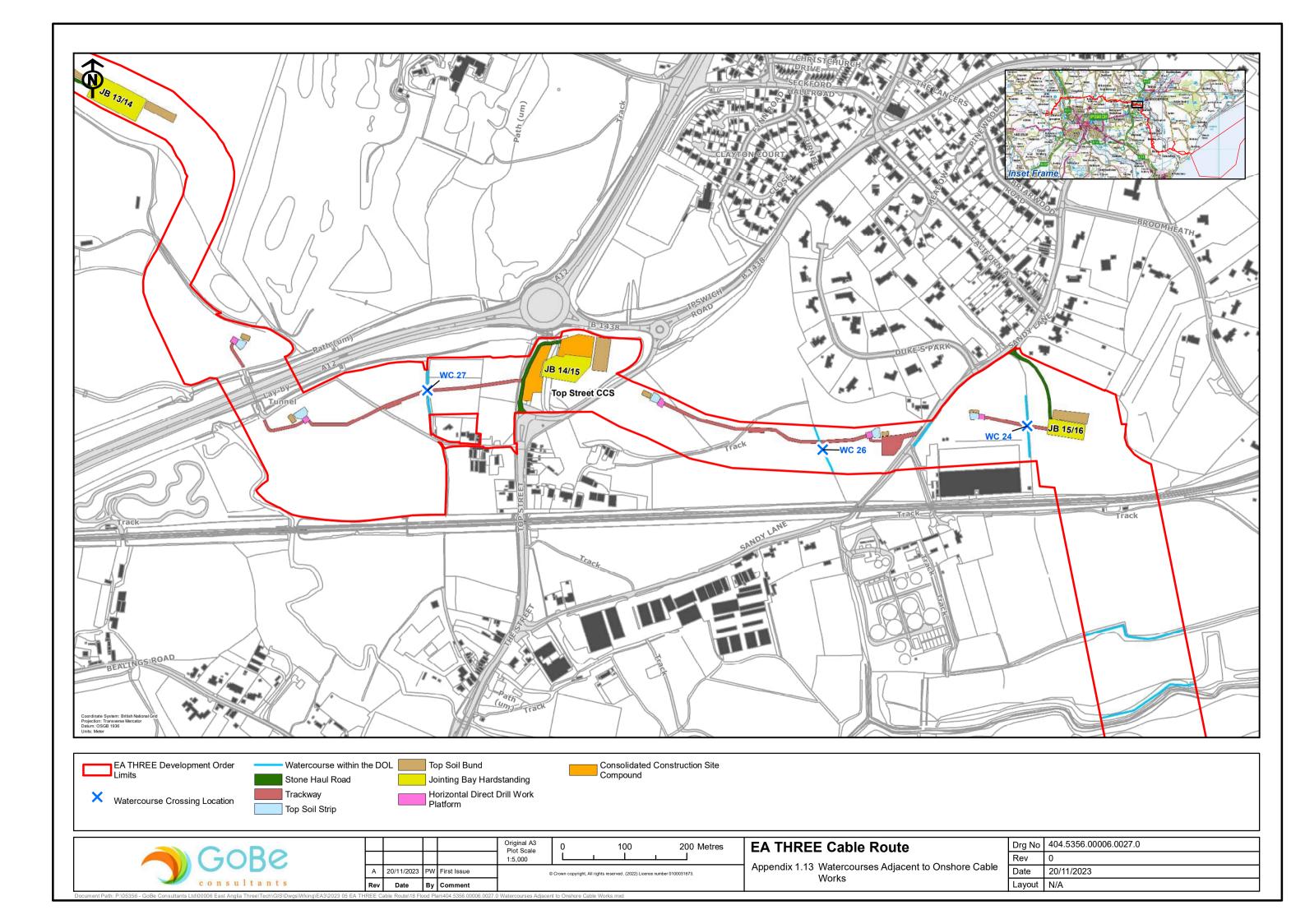


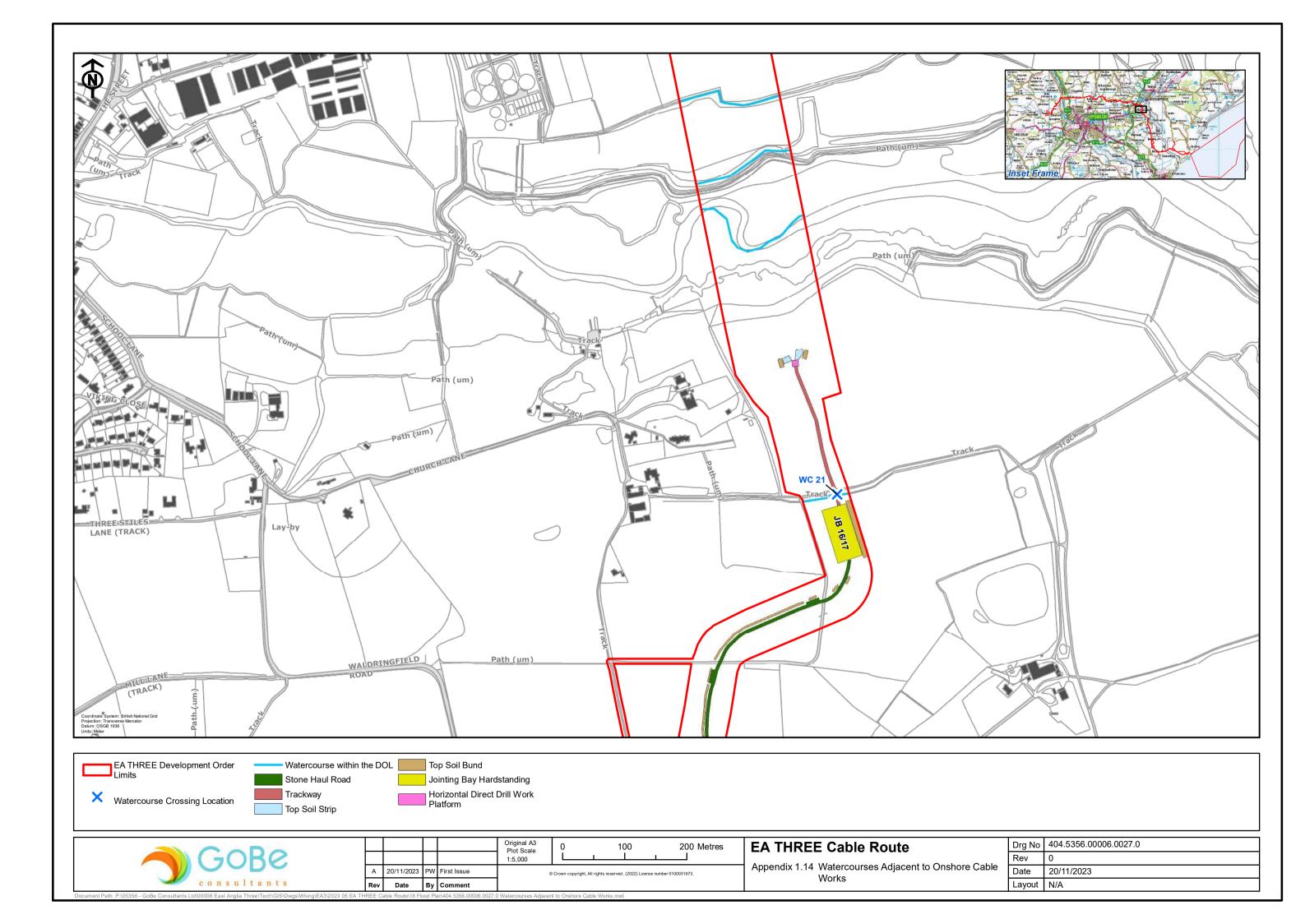


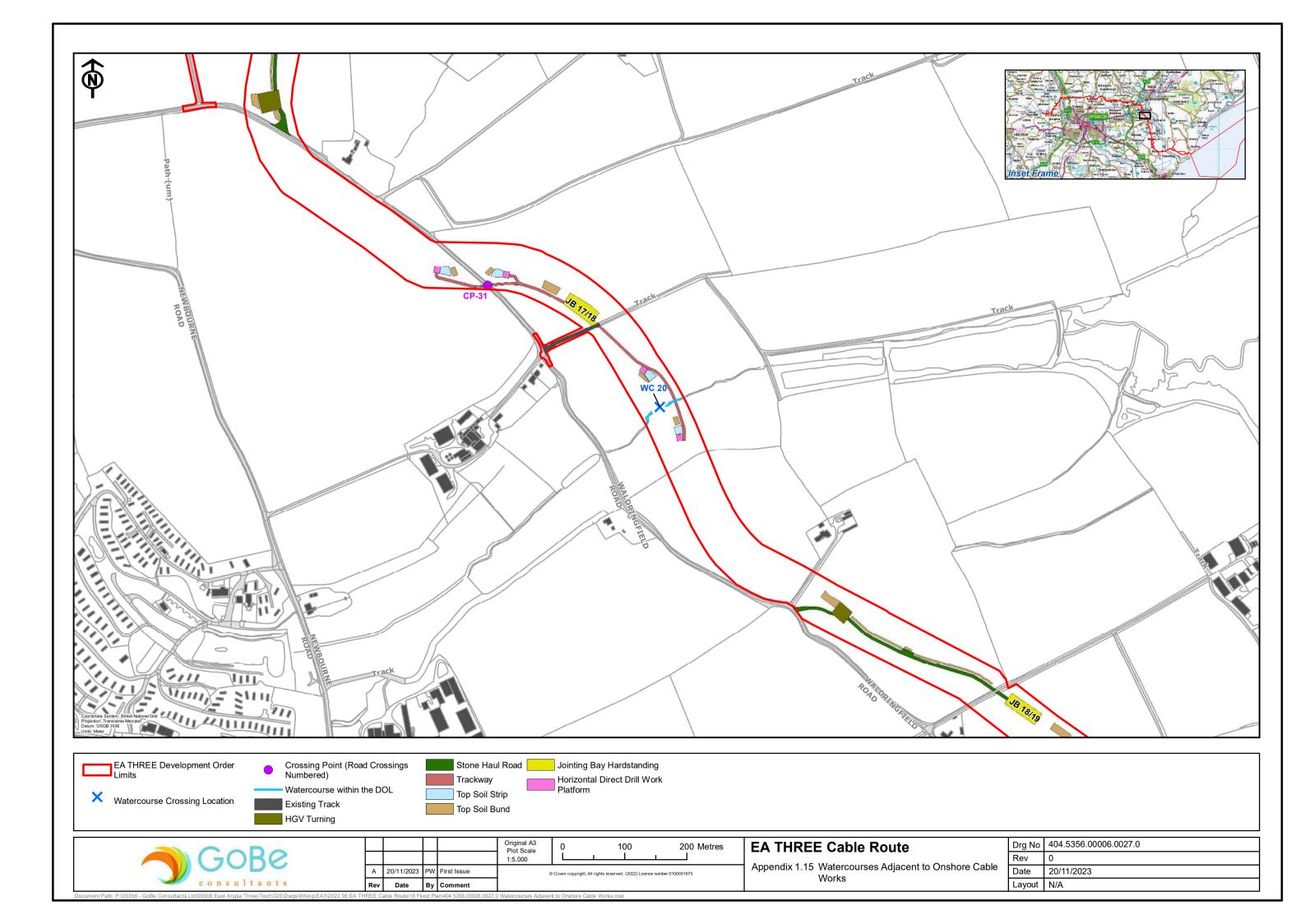


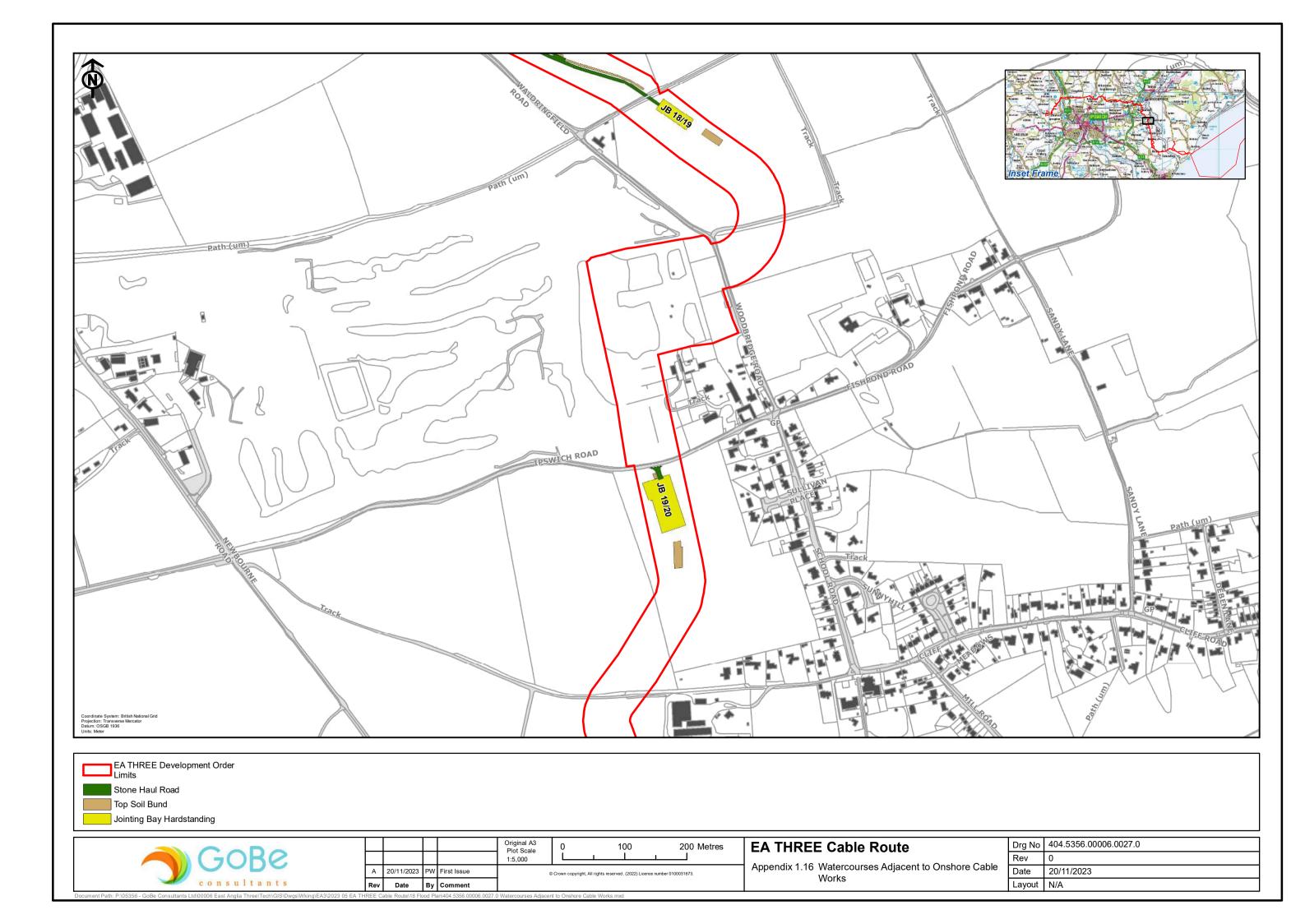


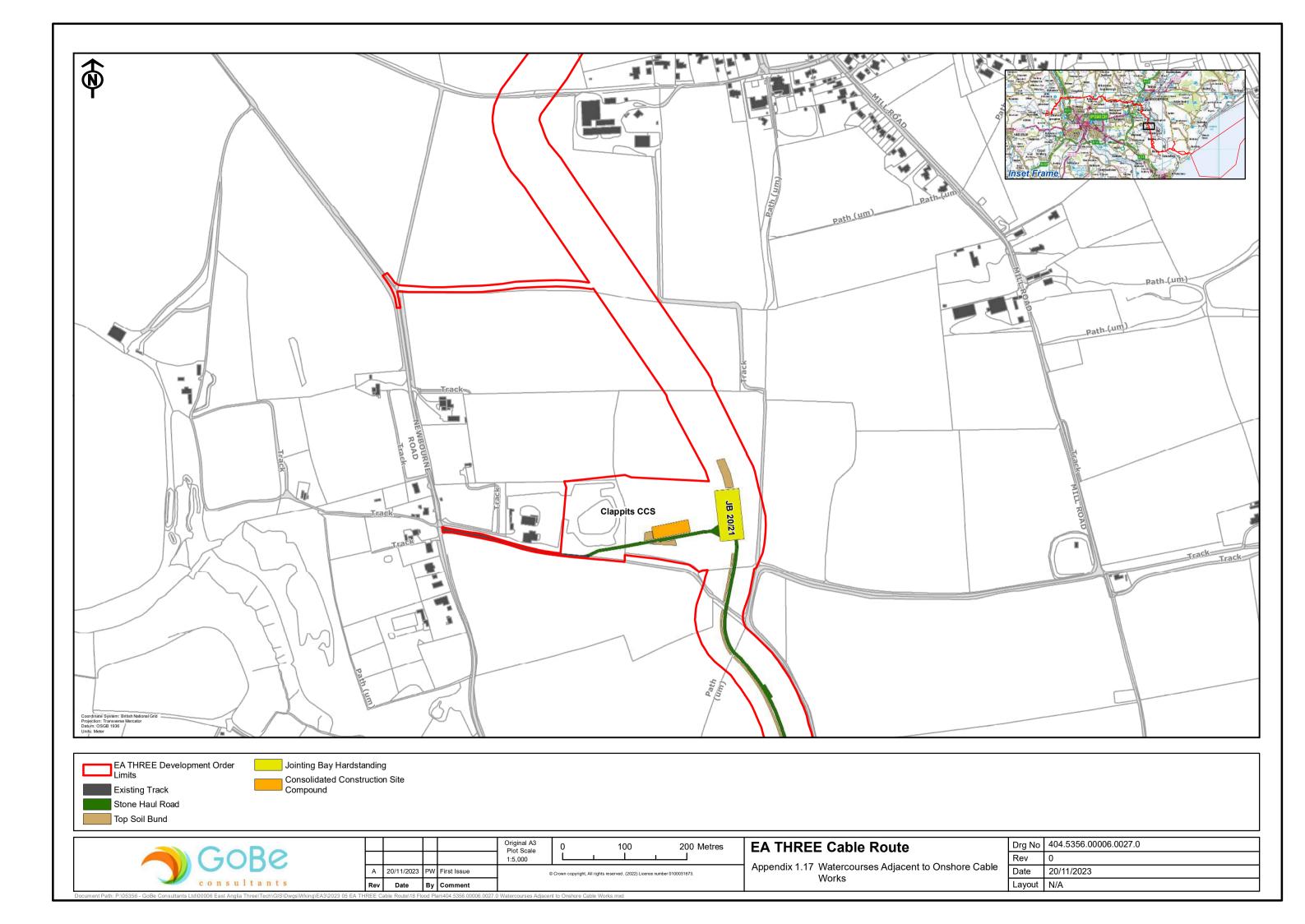


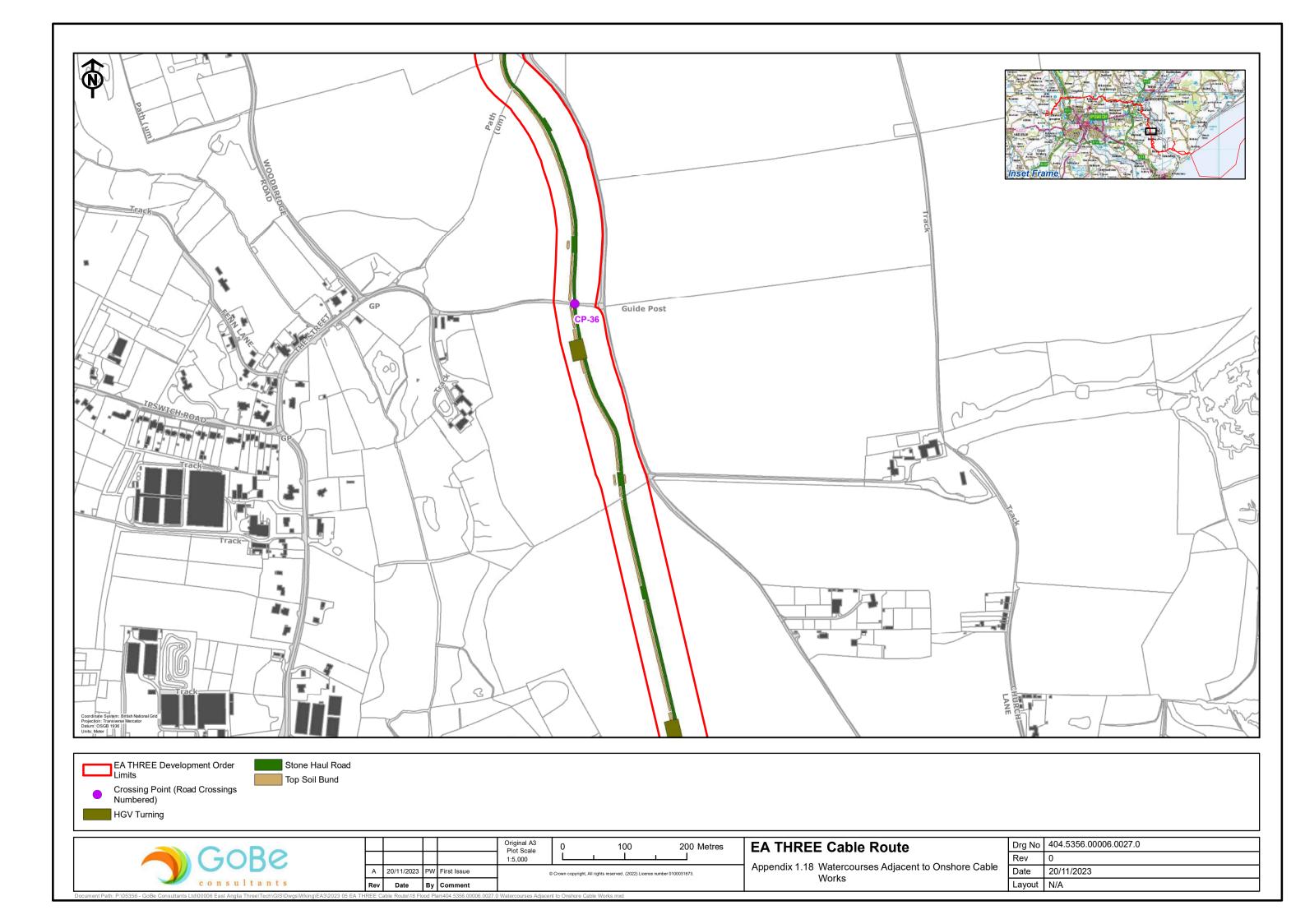


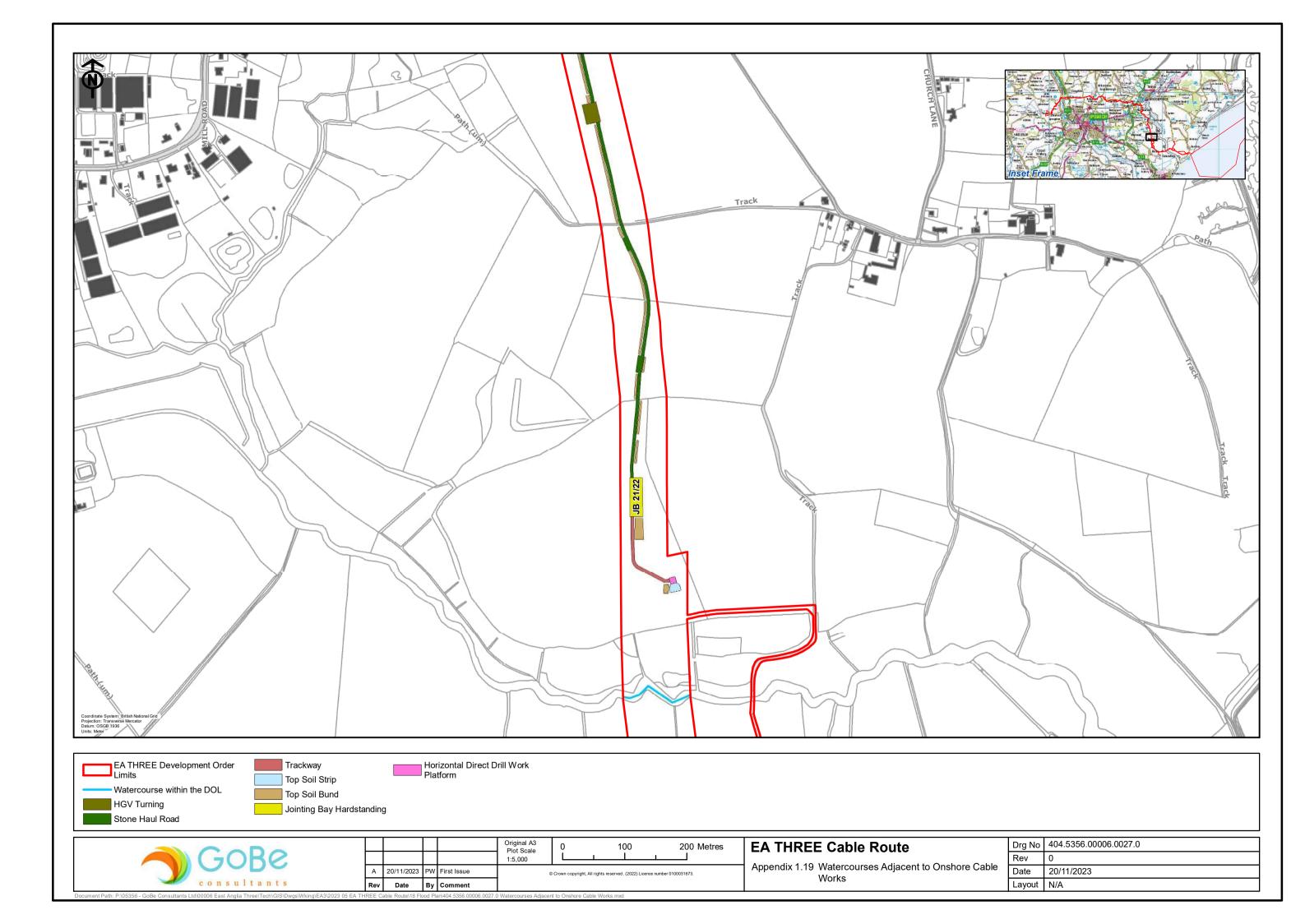


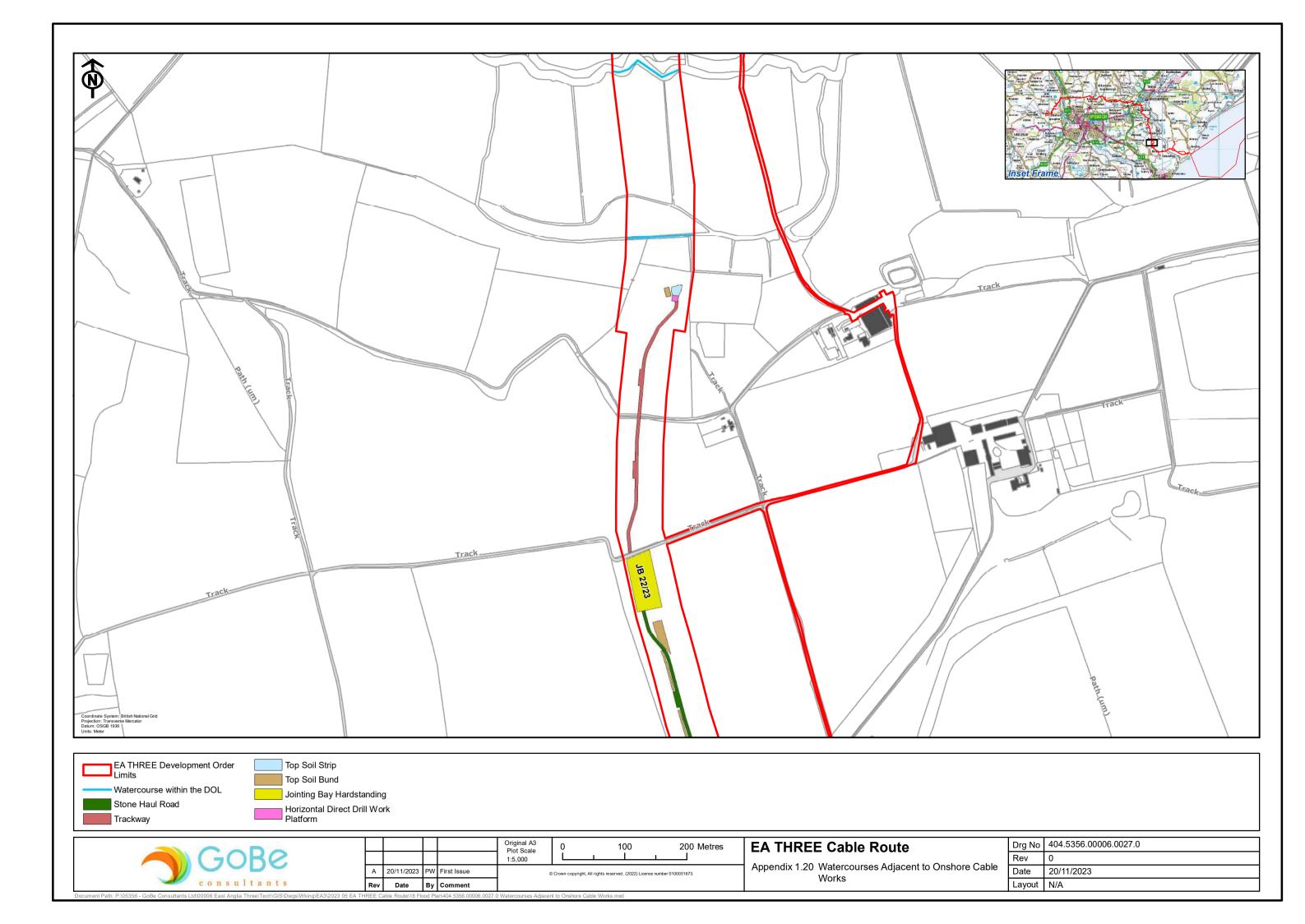


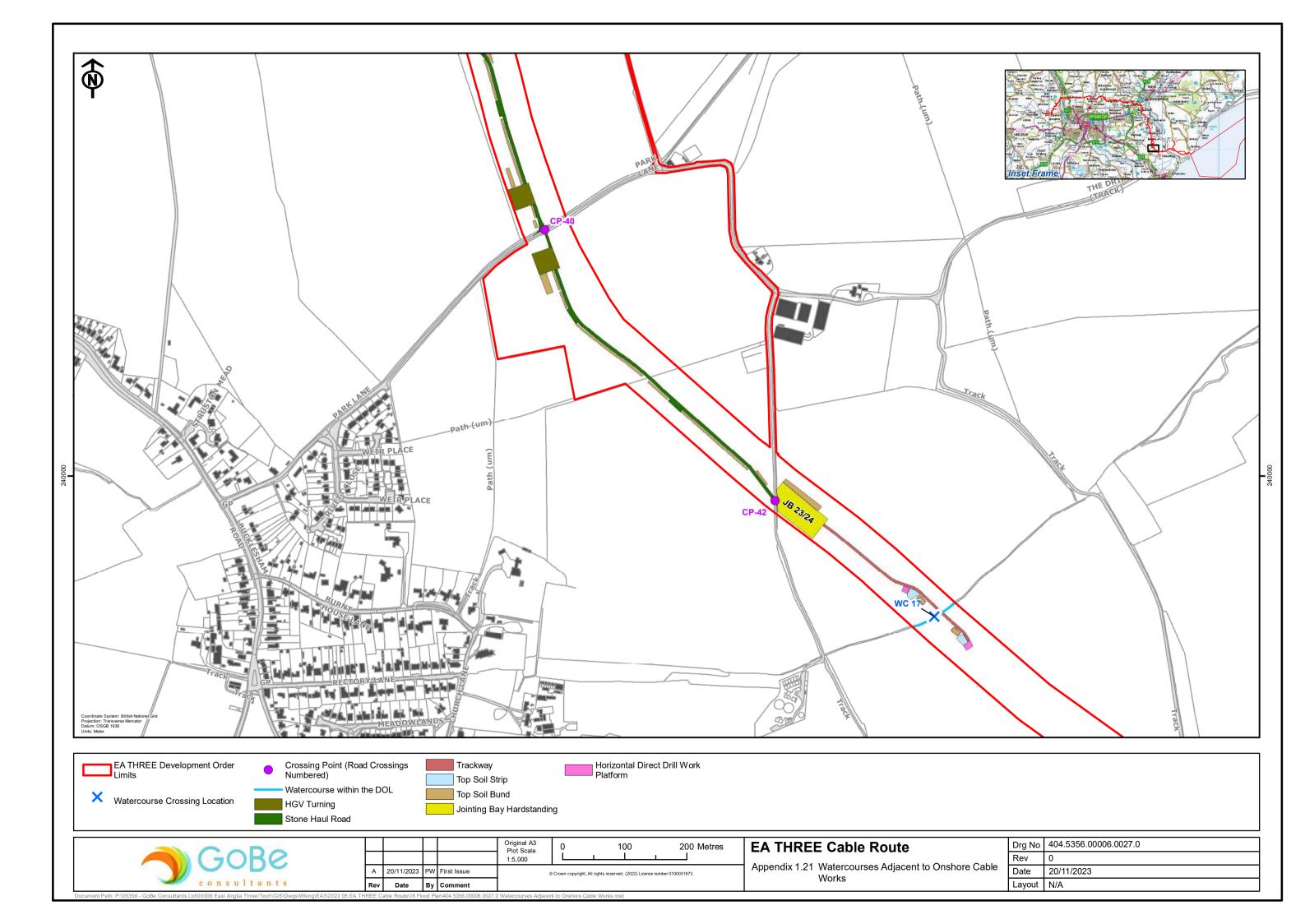


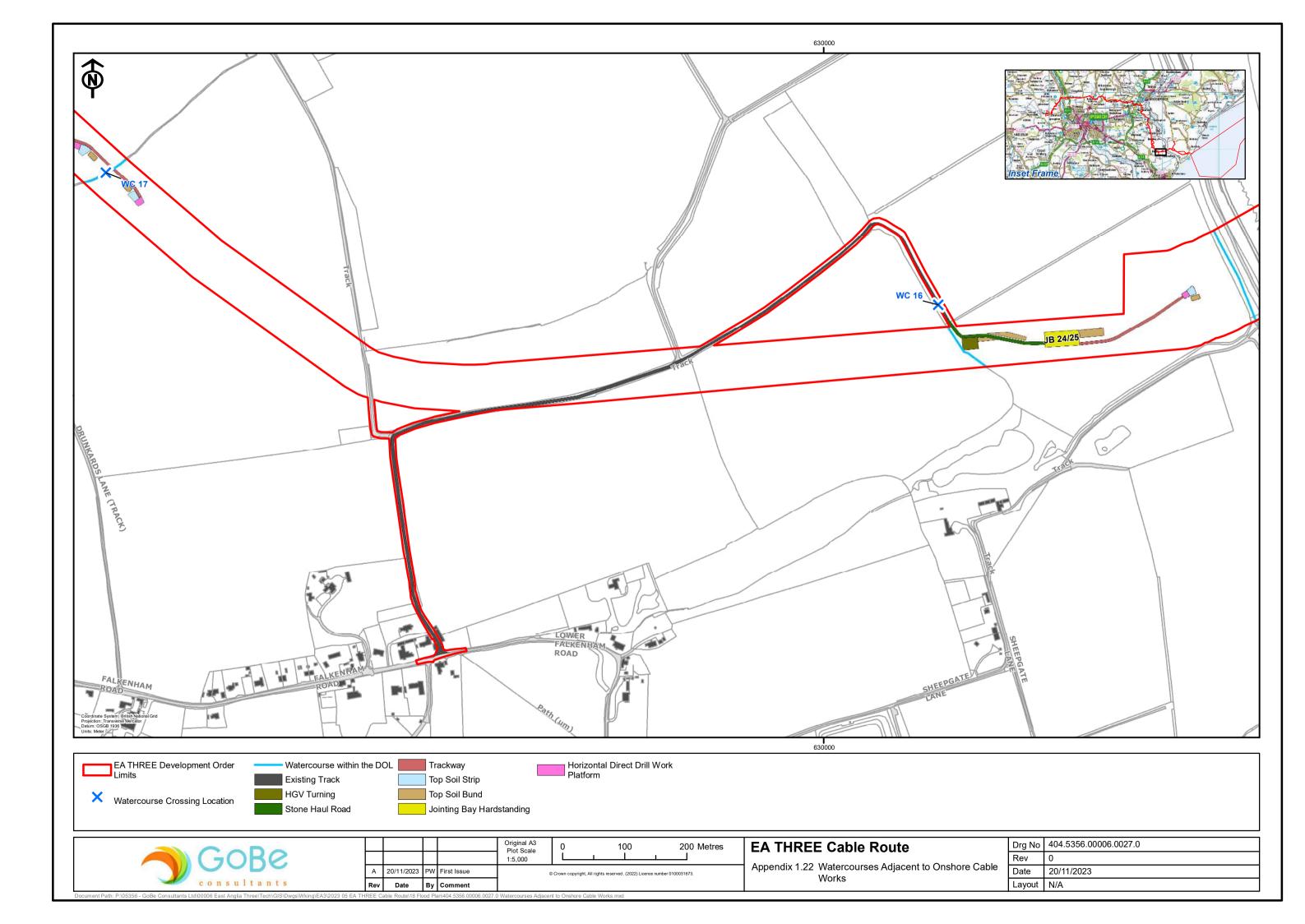


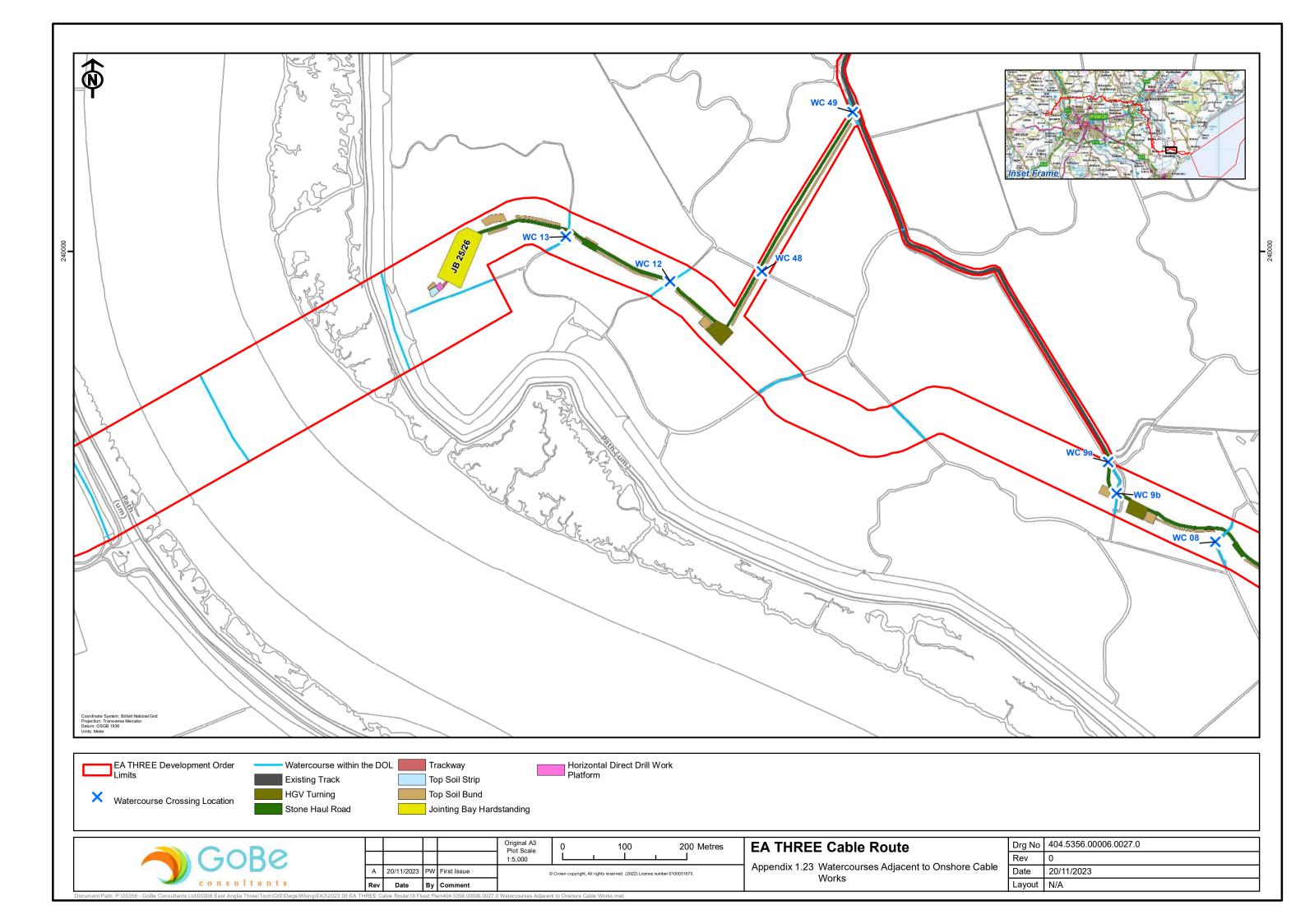


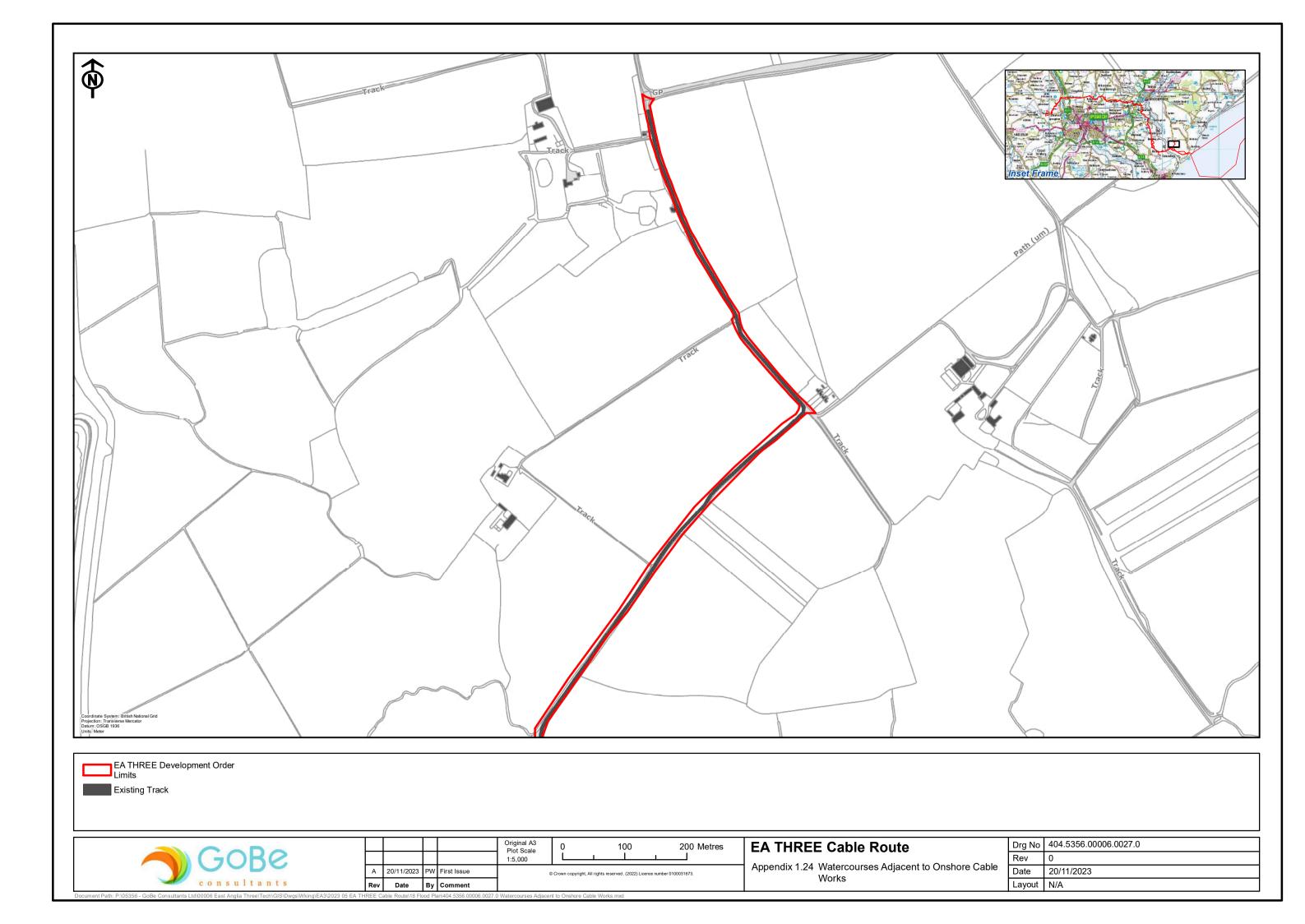


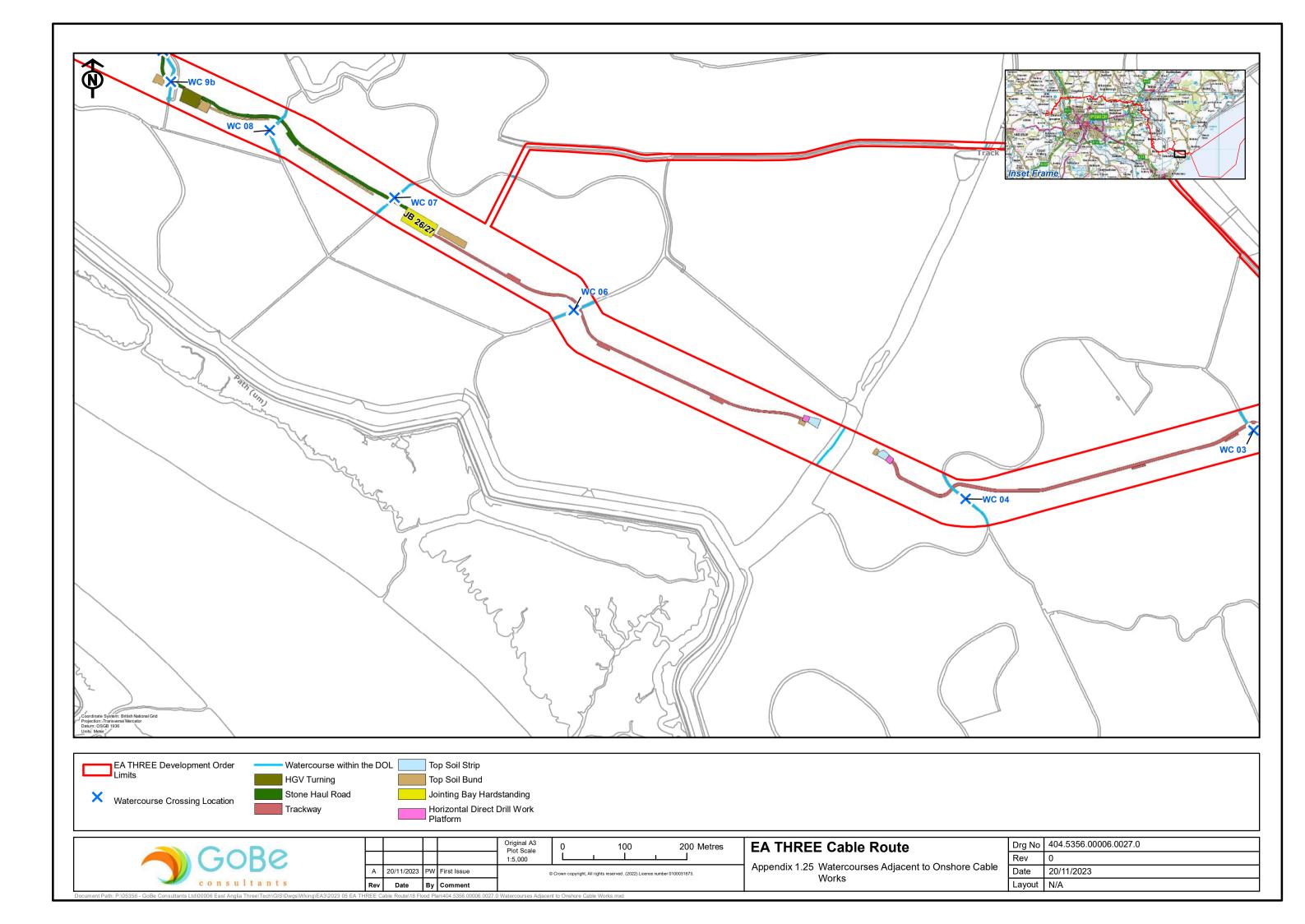


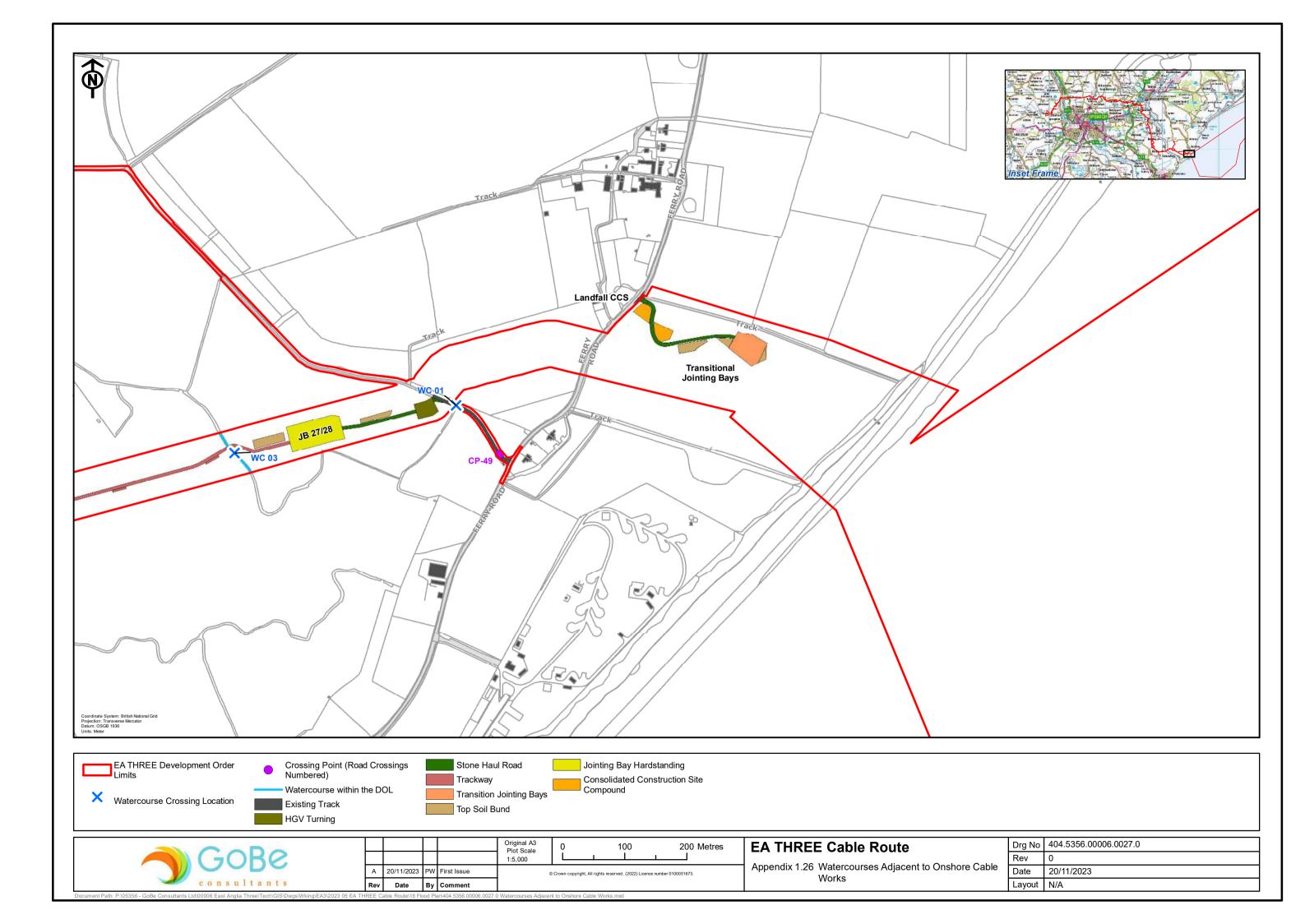












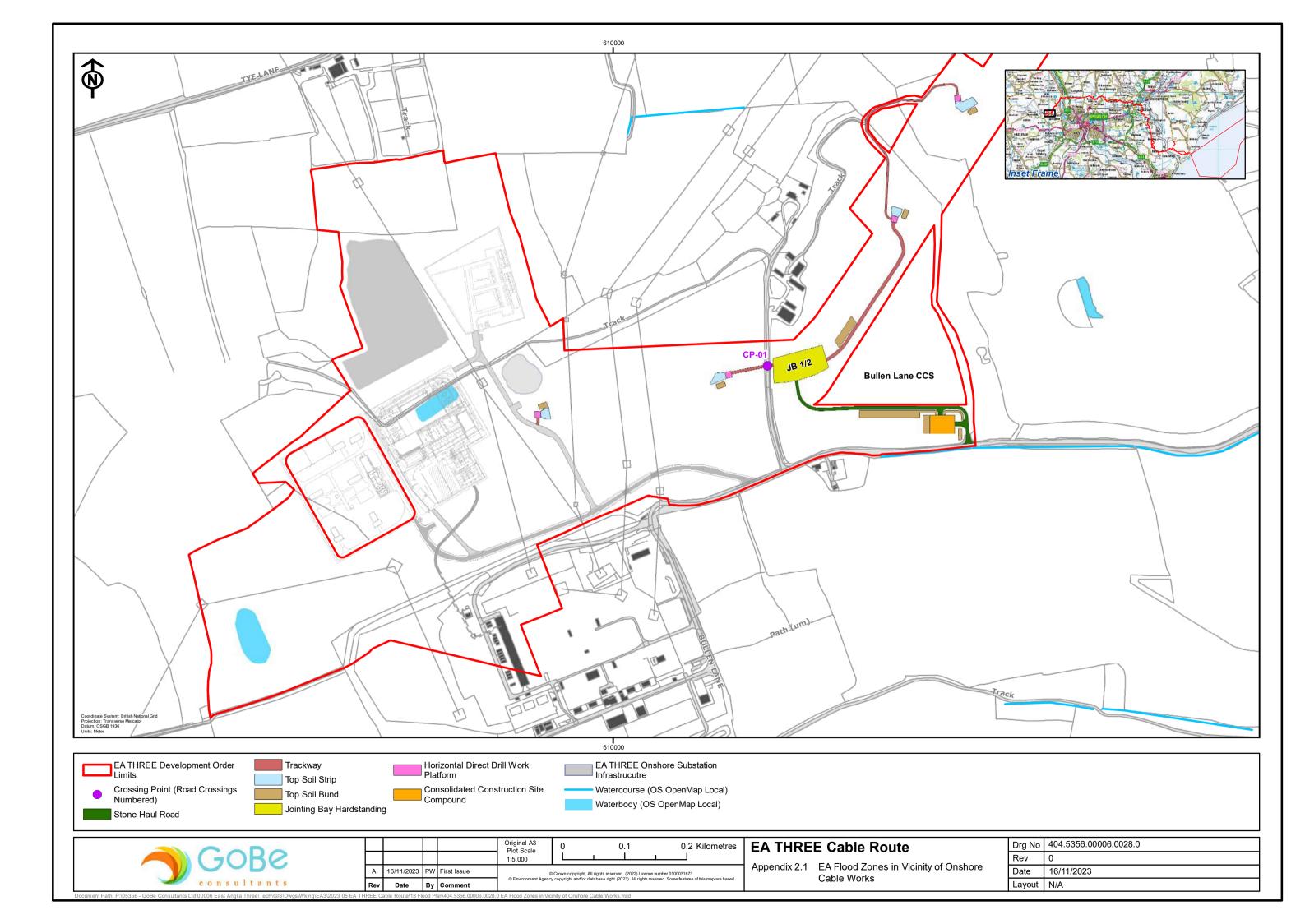
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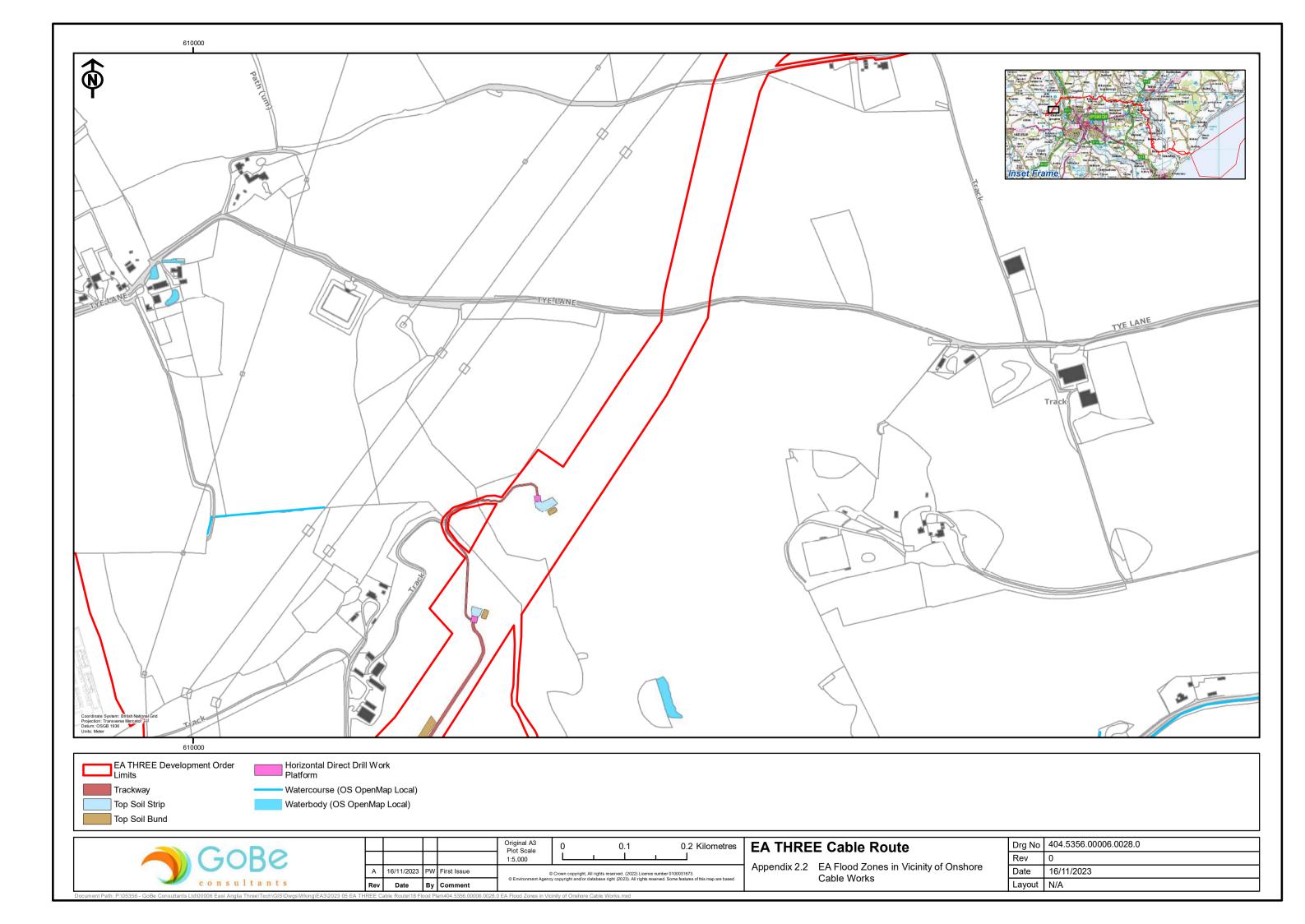
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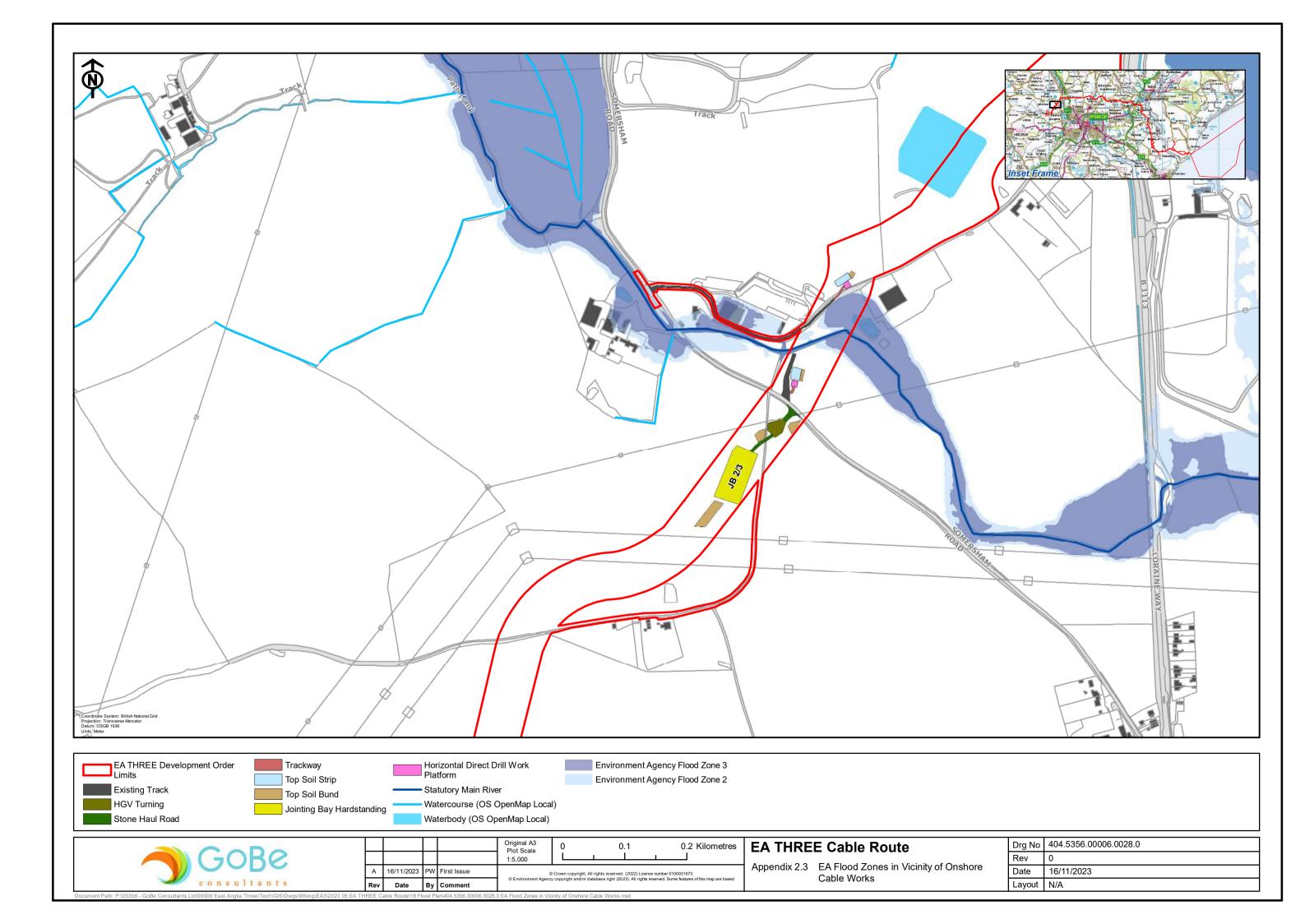
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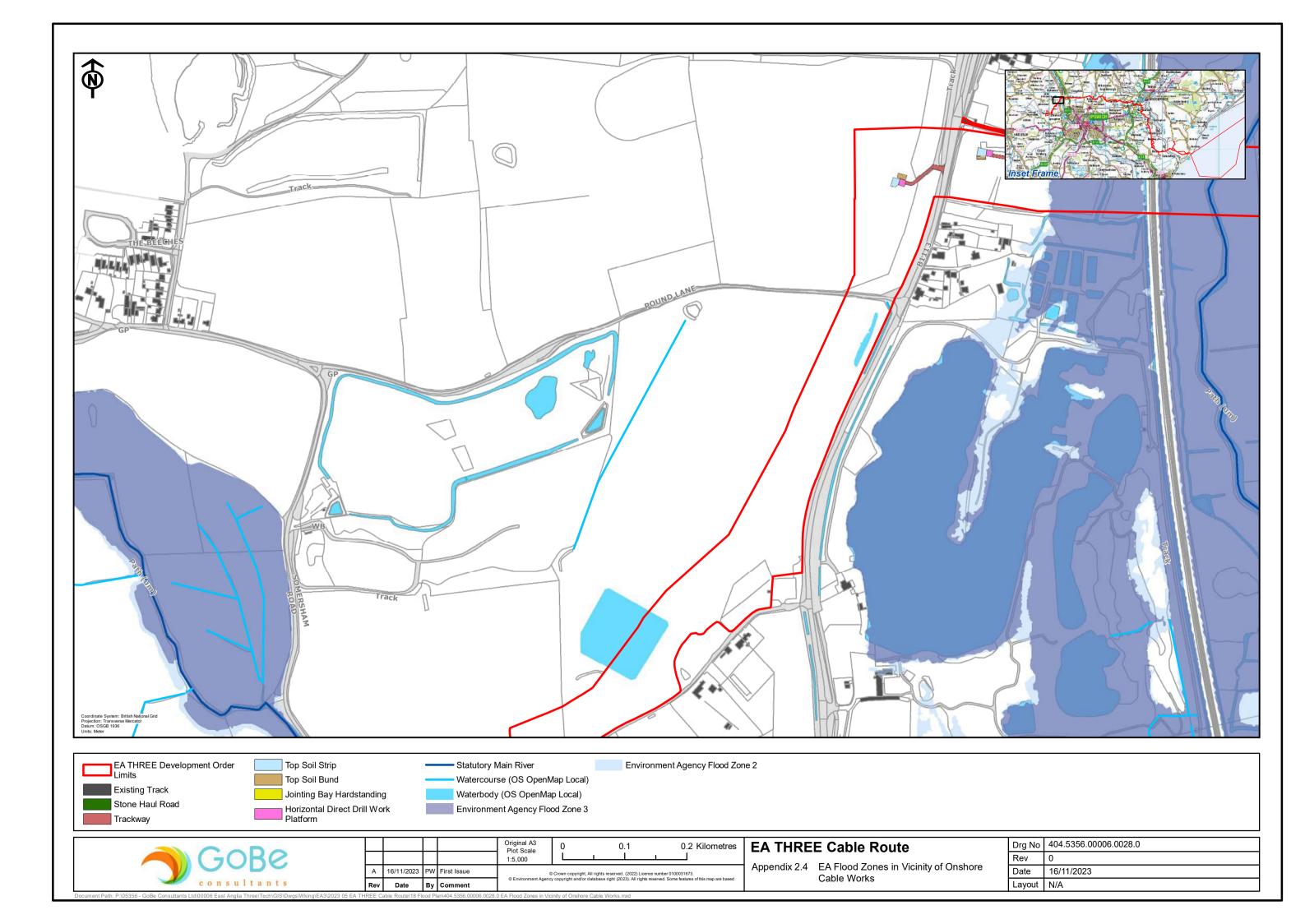


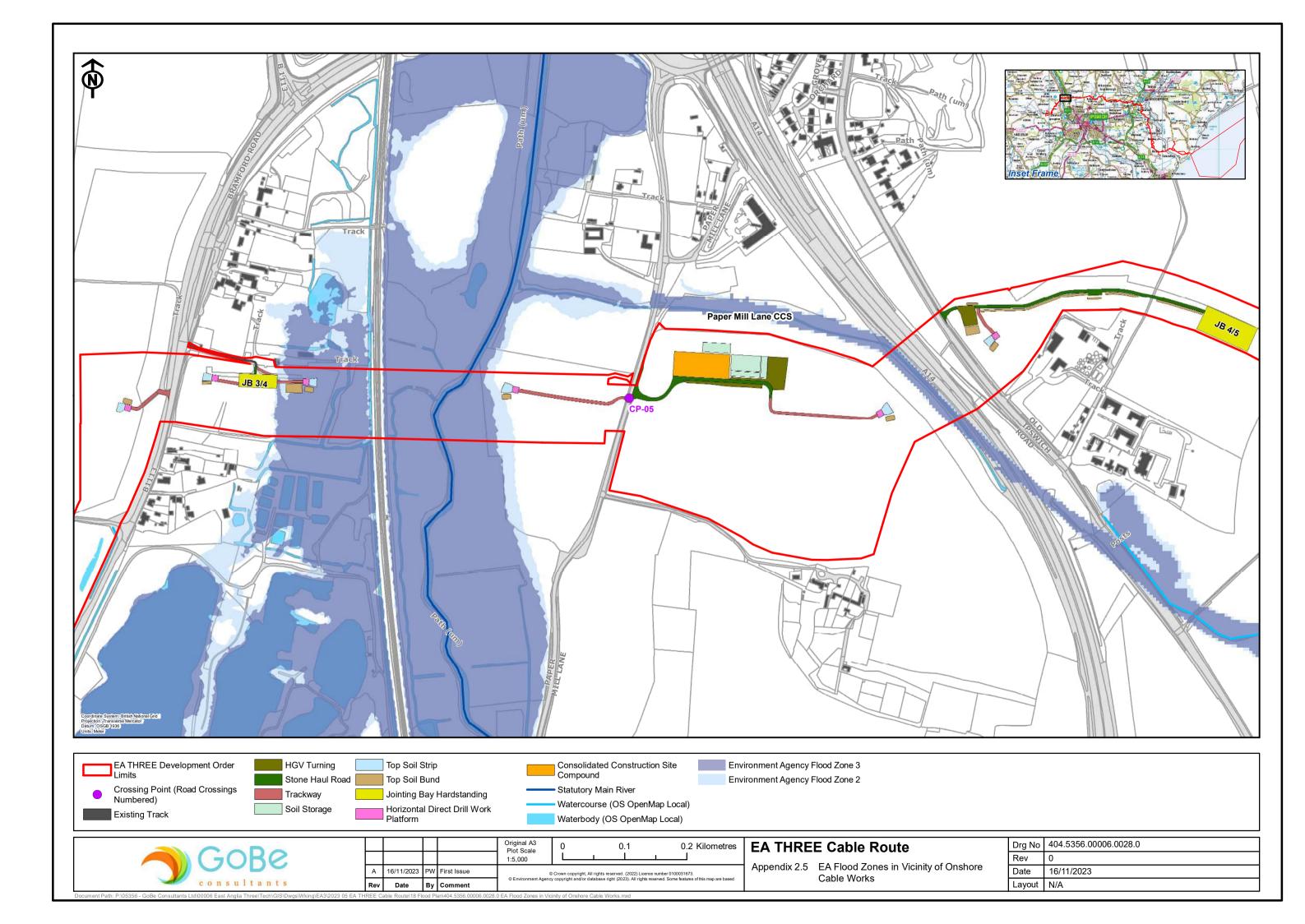
APPENDIX 2 - EA FLOOD ZONES IN VICINITY OF ONSHORE CABLE WORKS

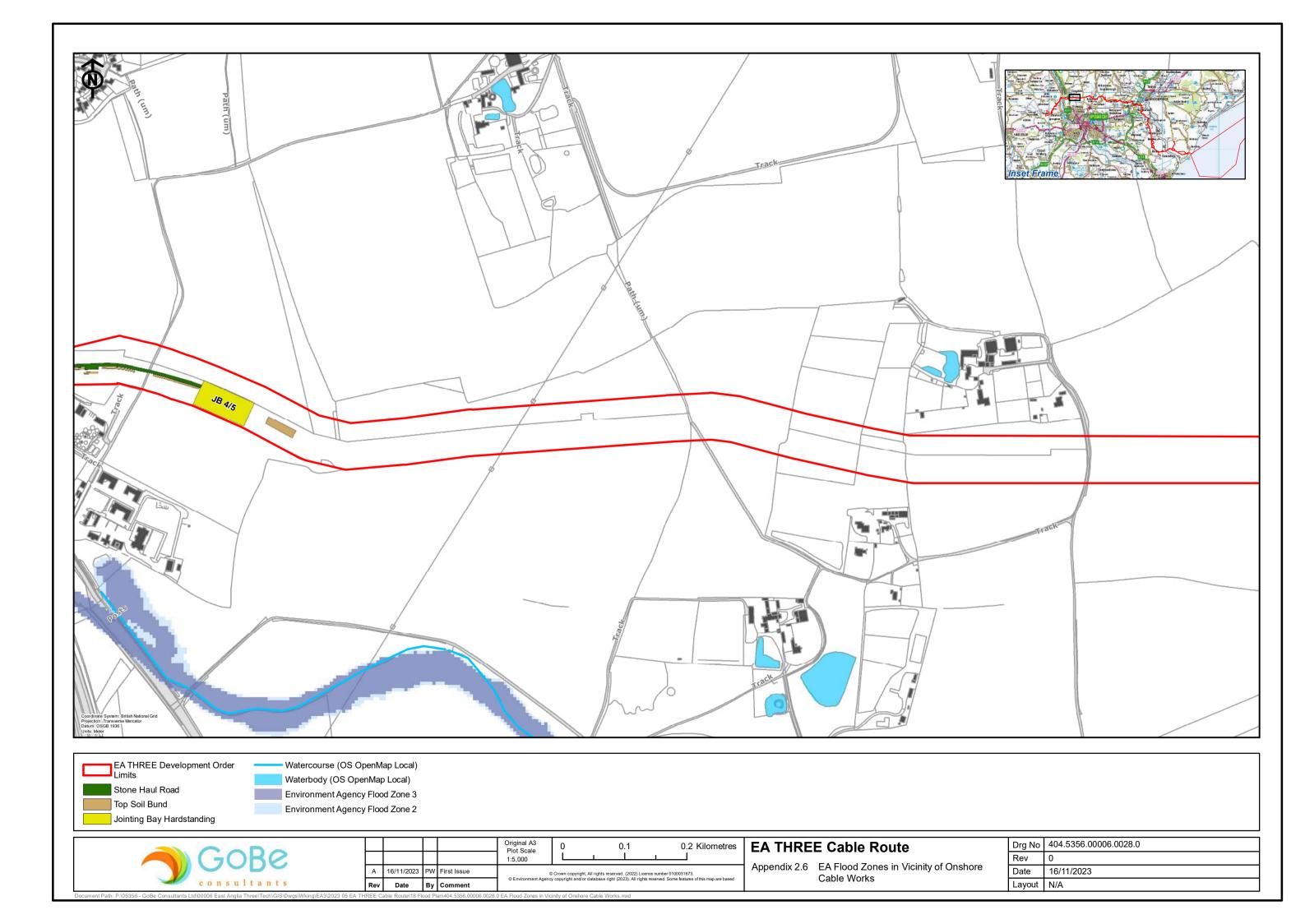


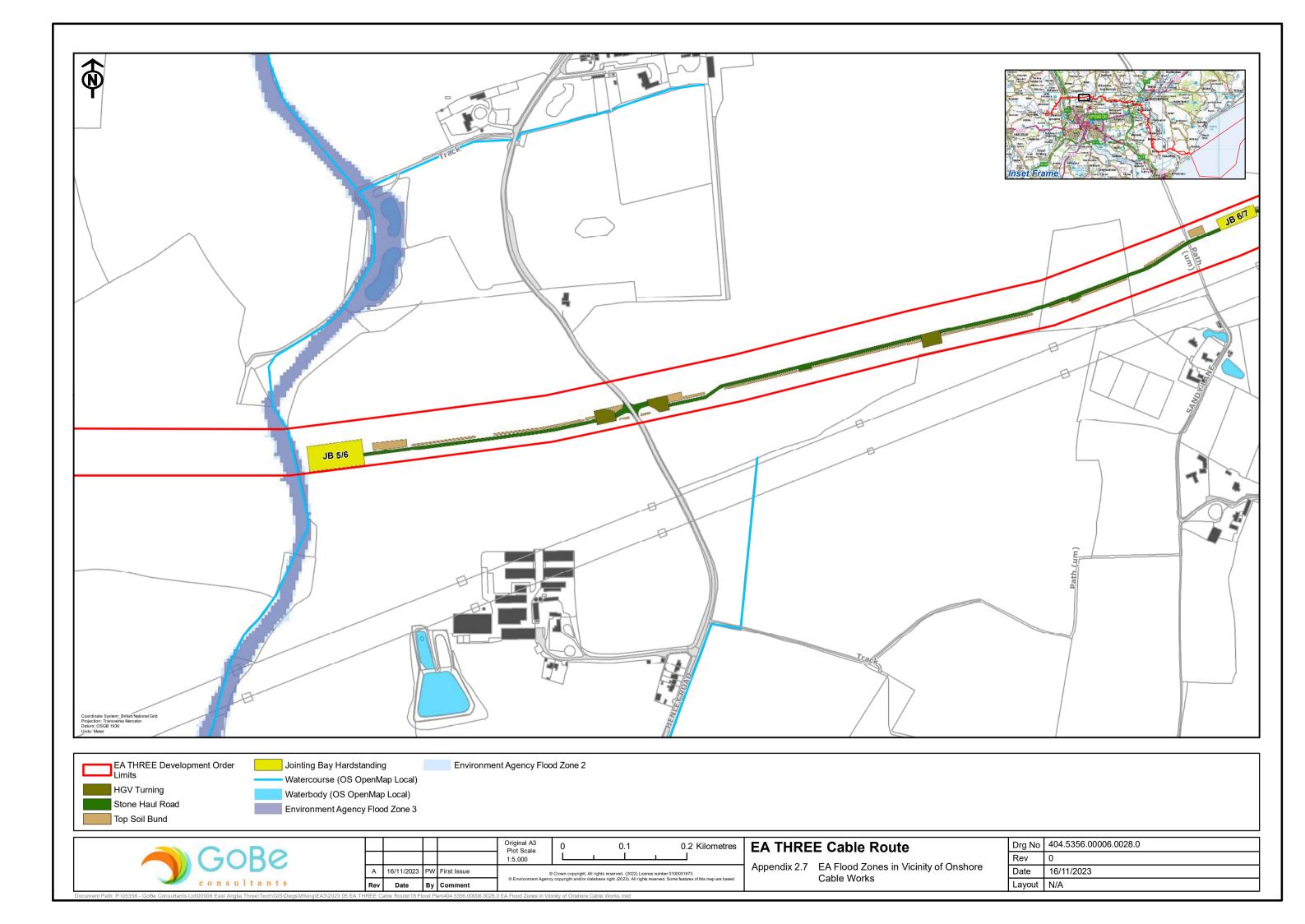


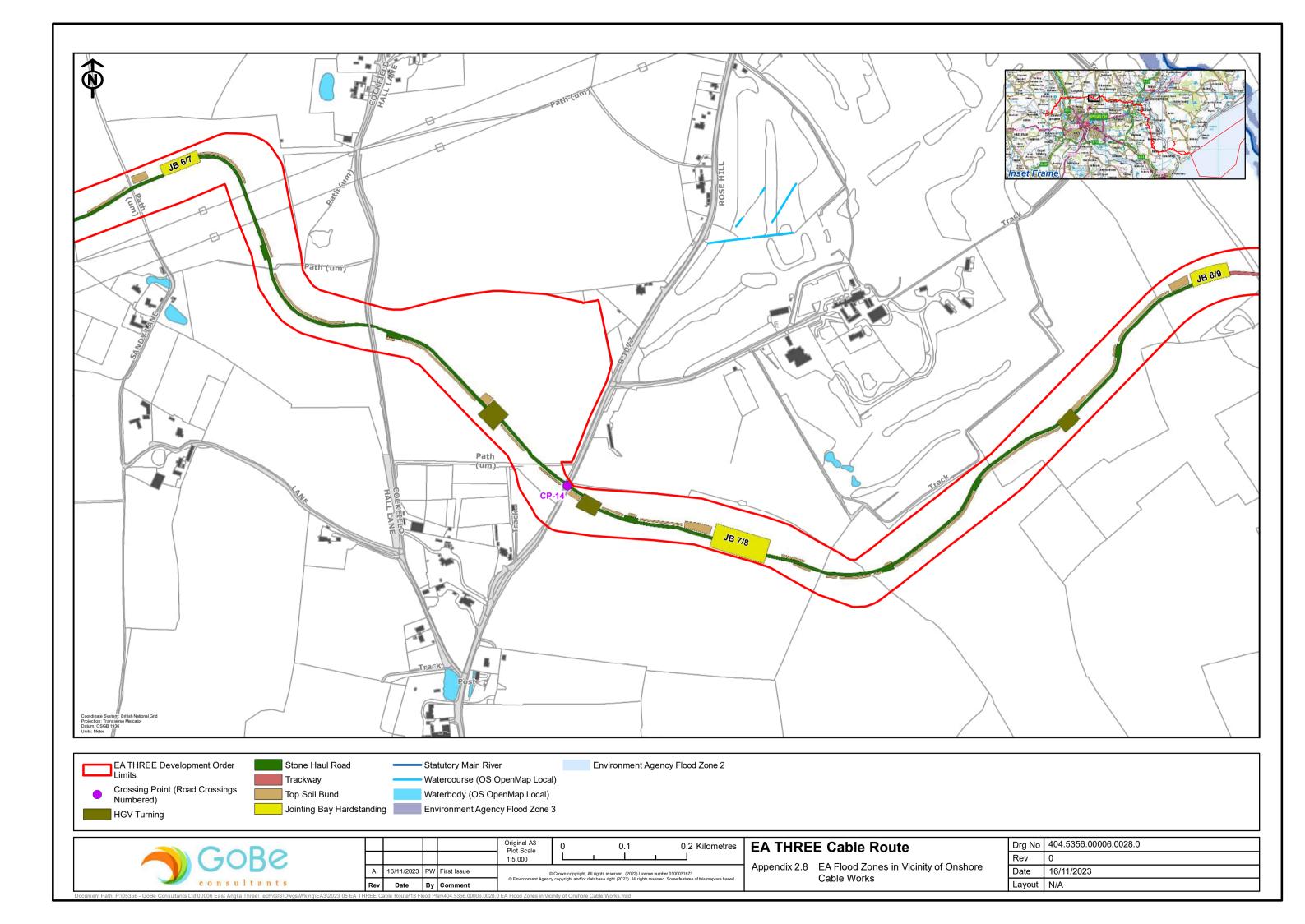


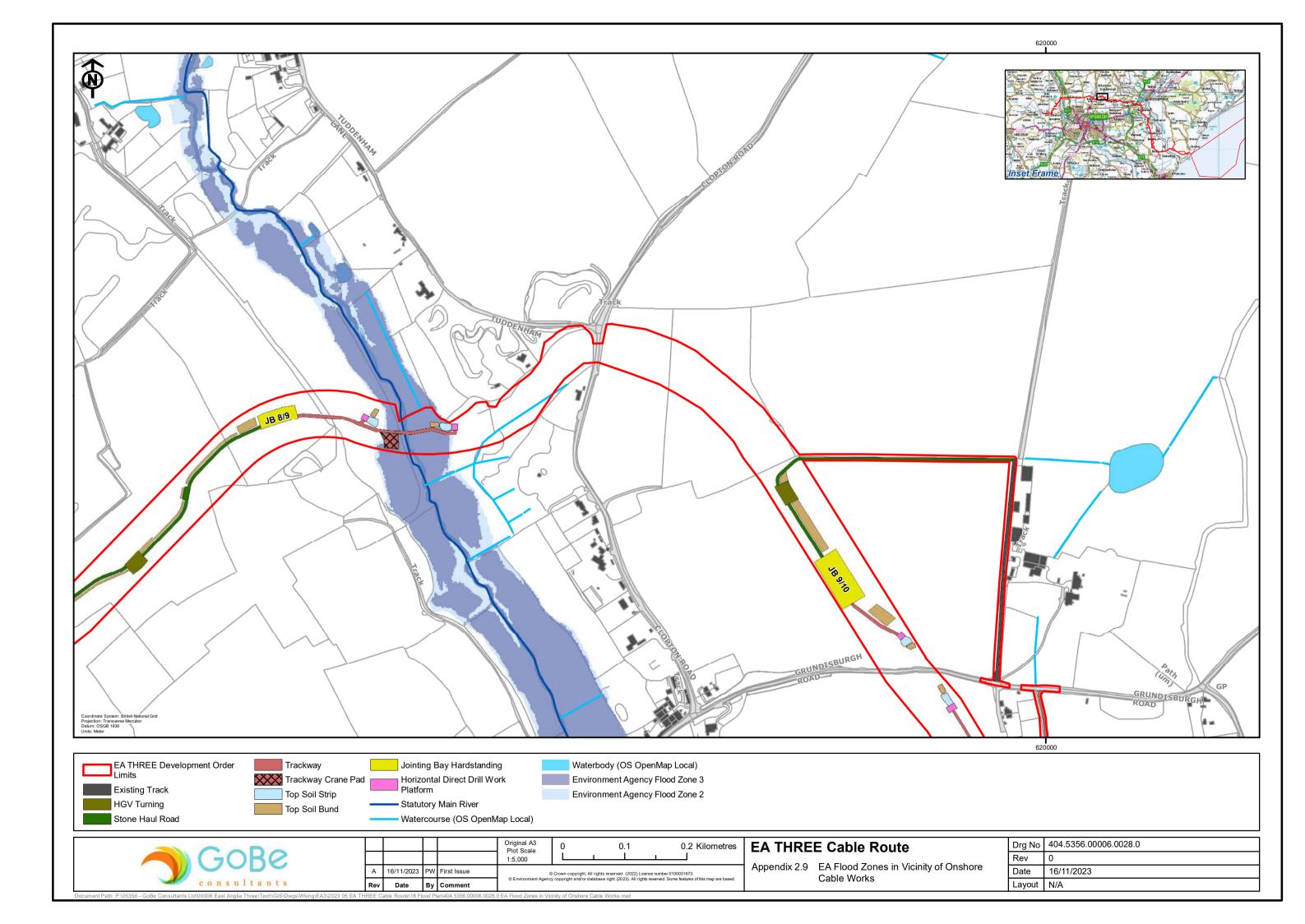


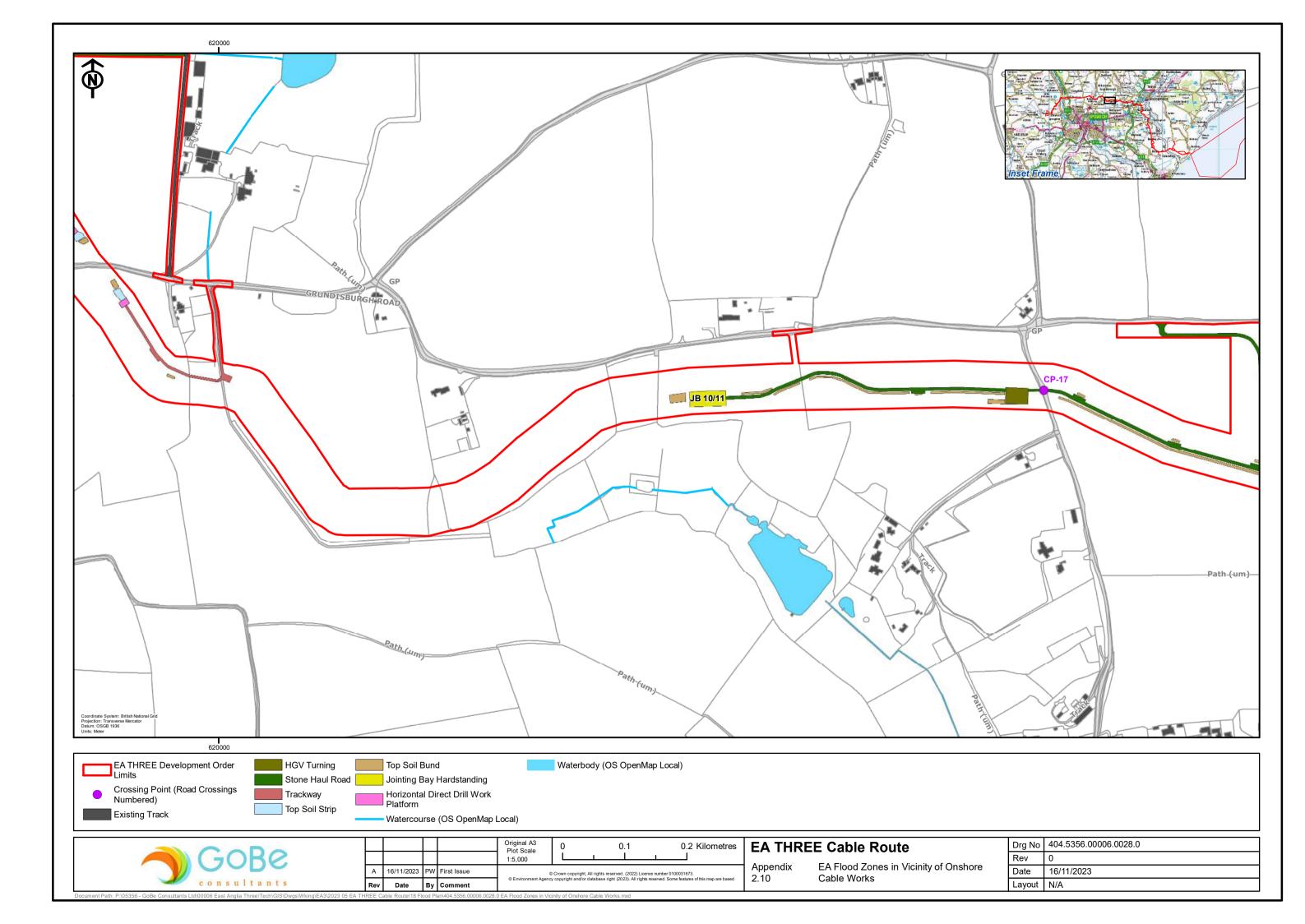


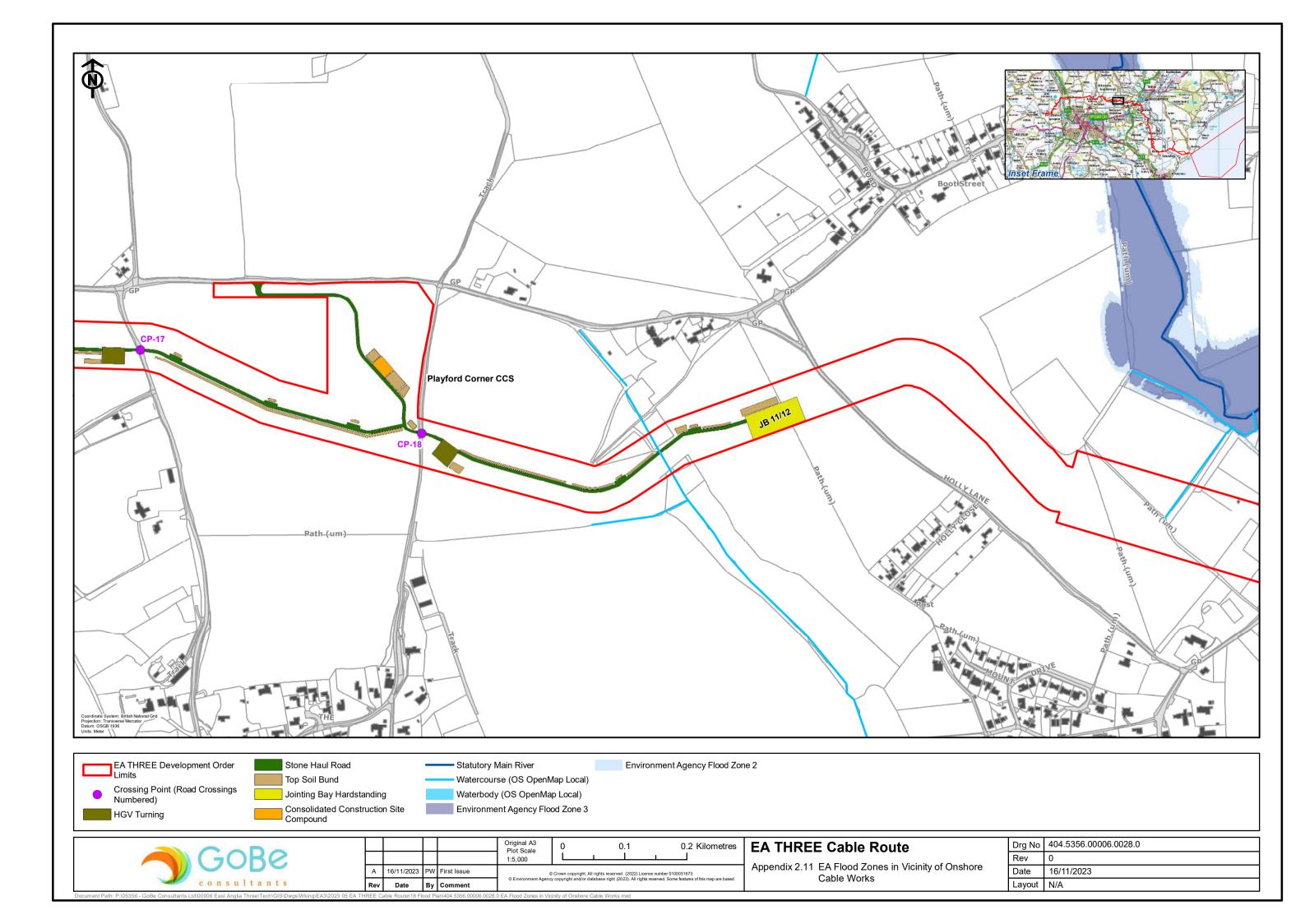


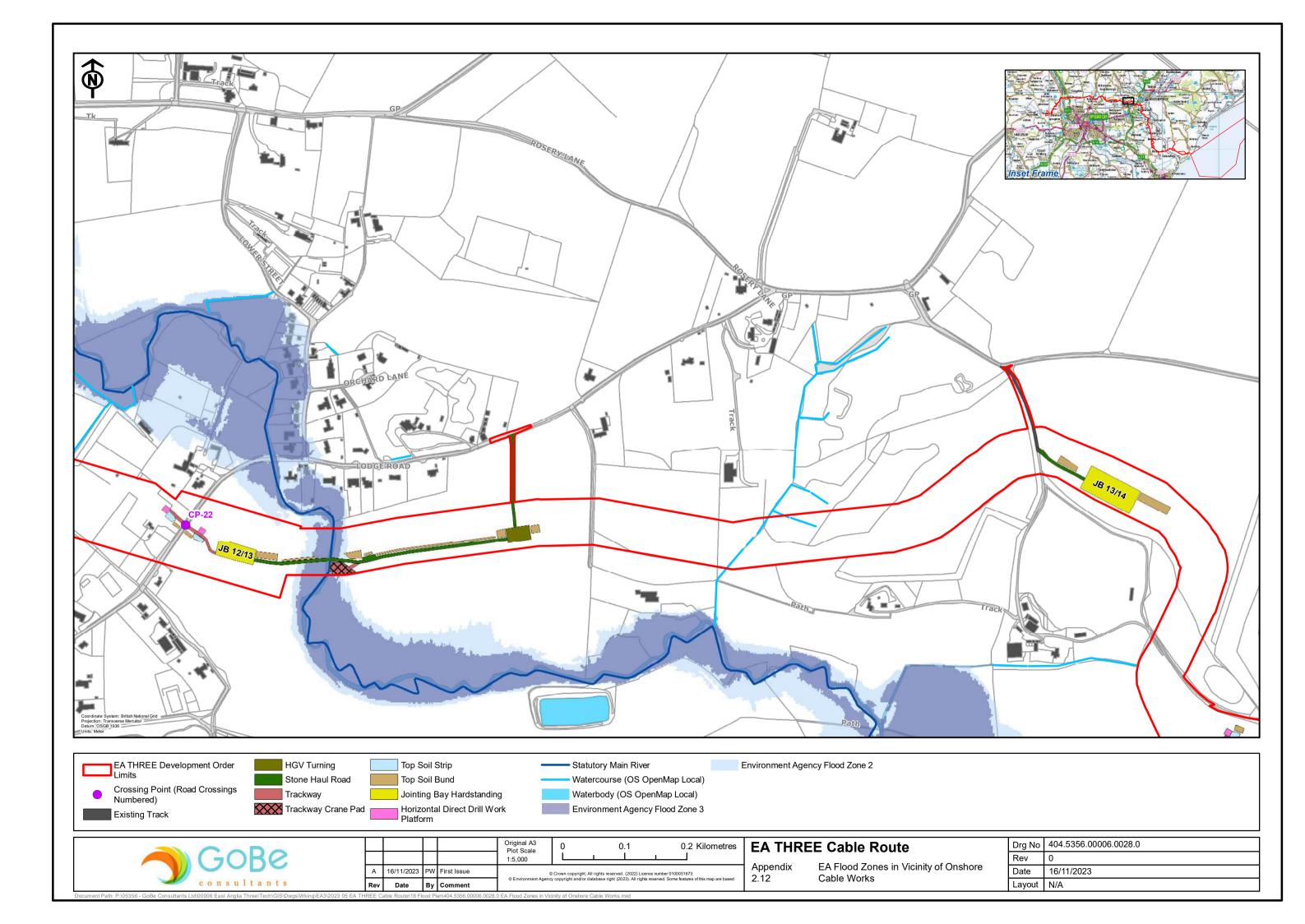


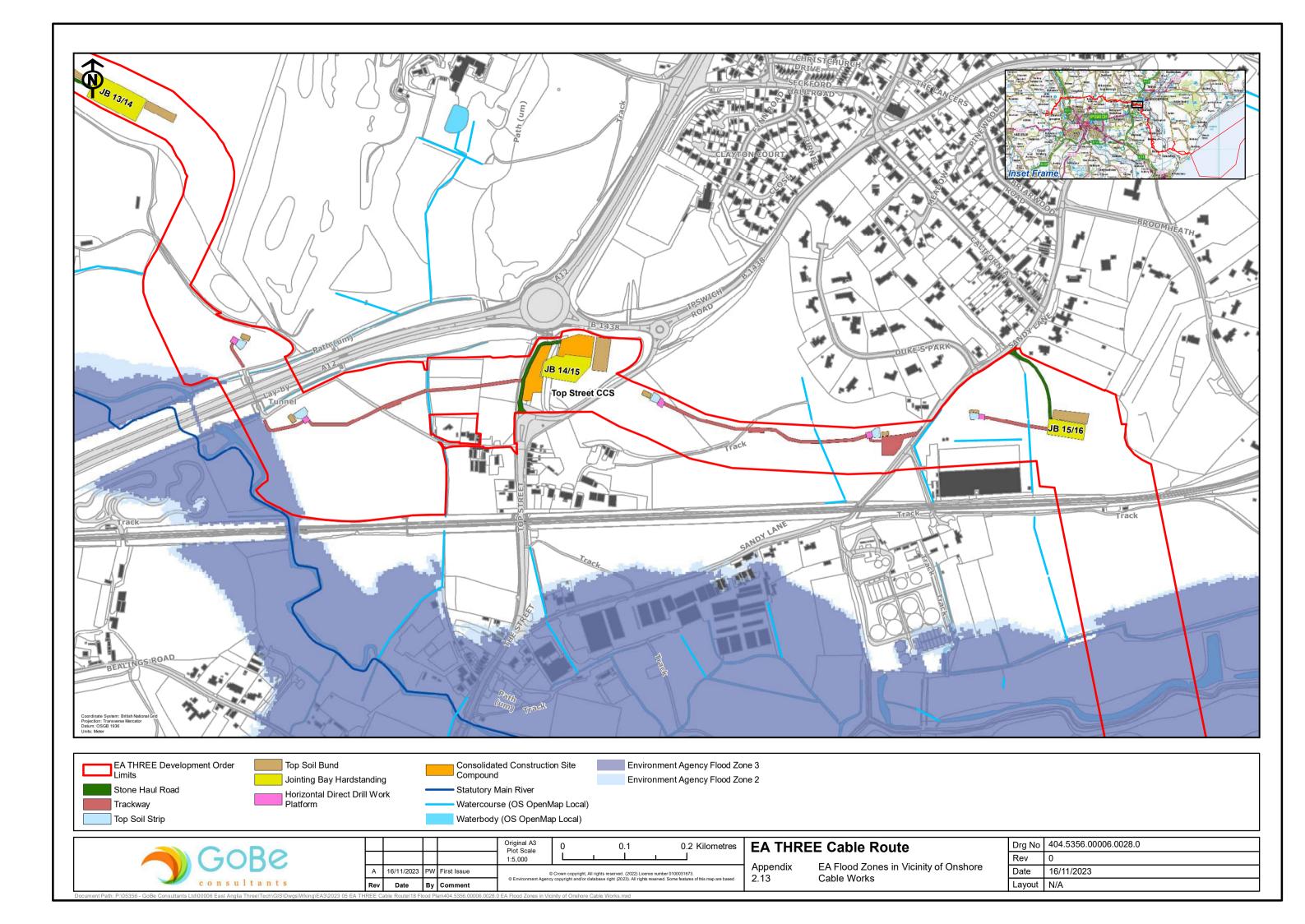


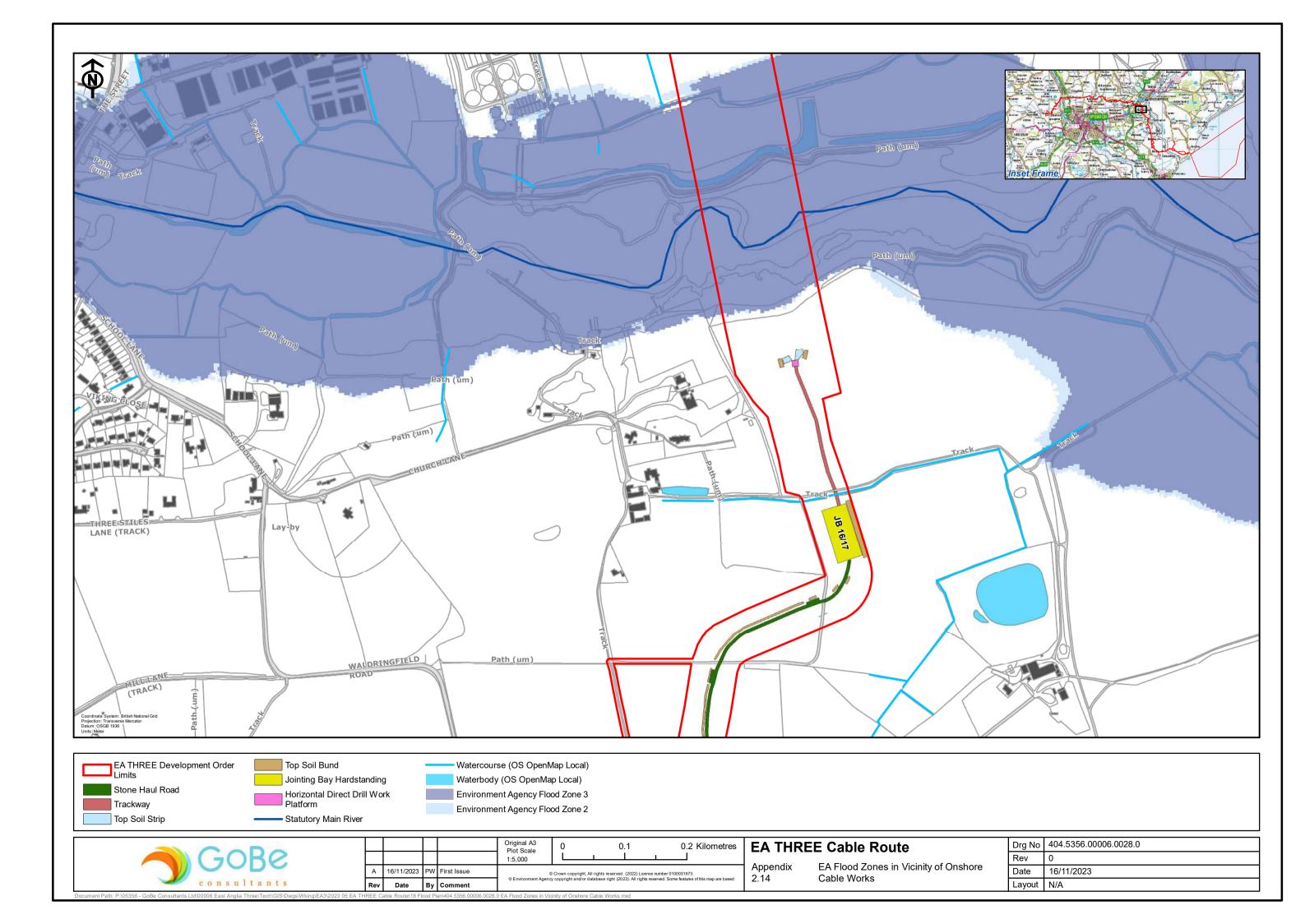


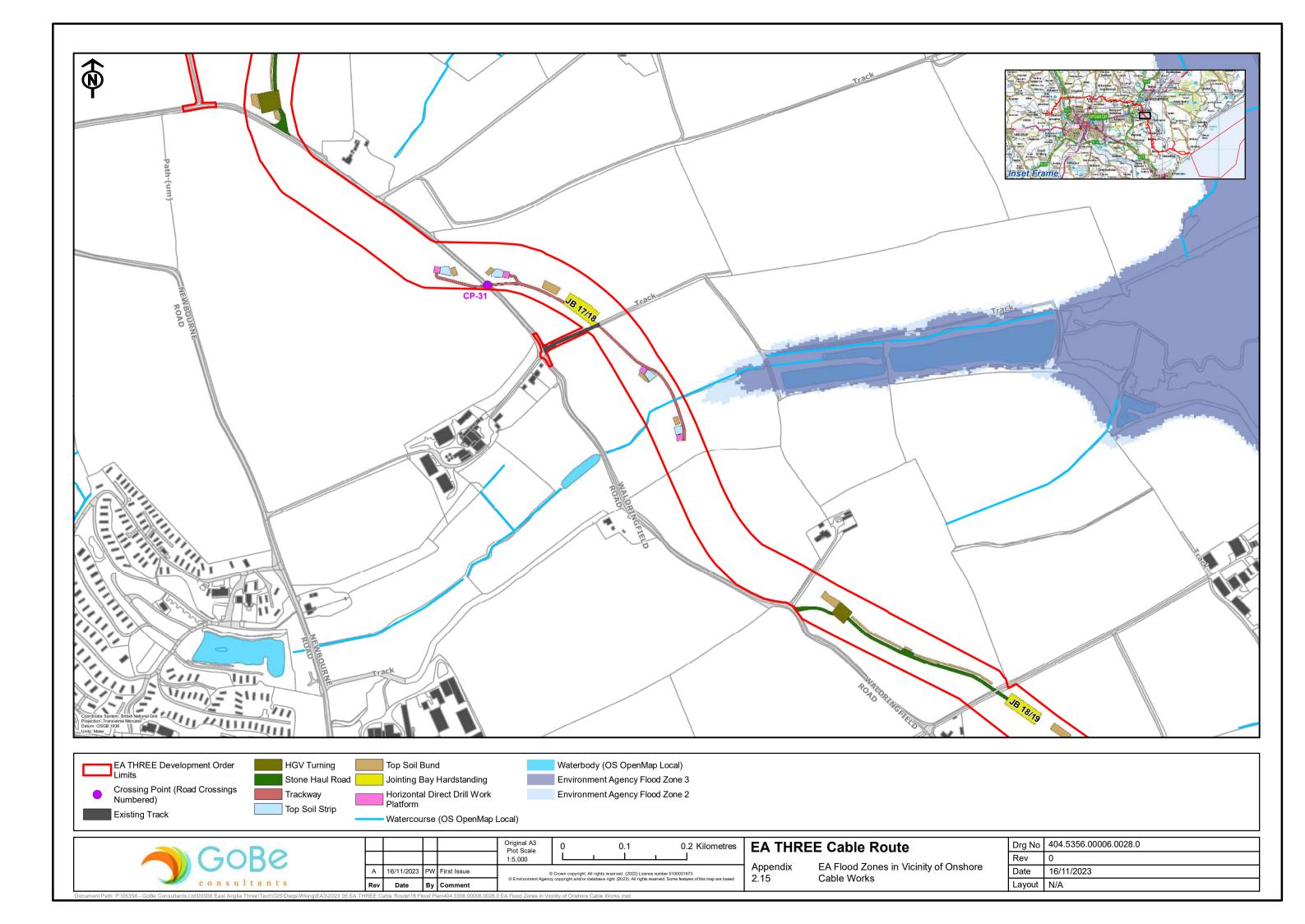


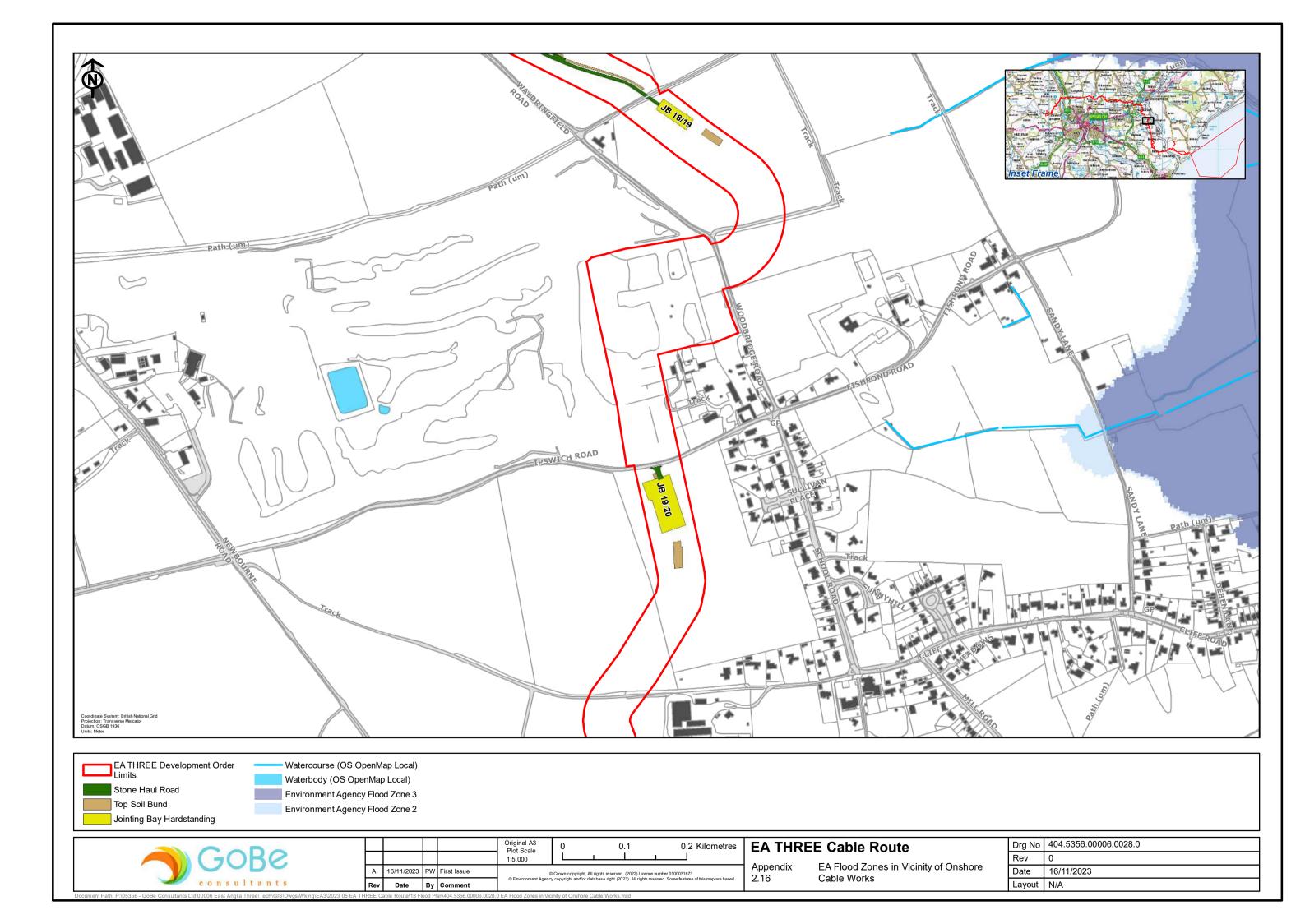


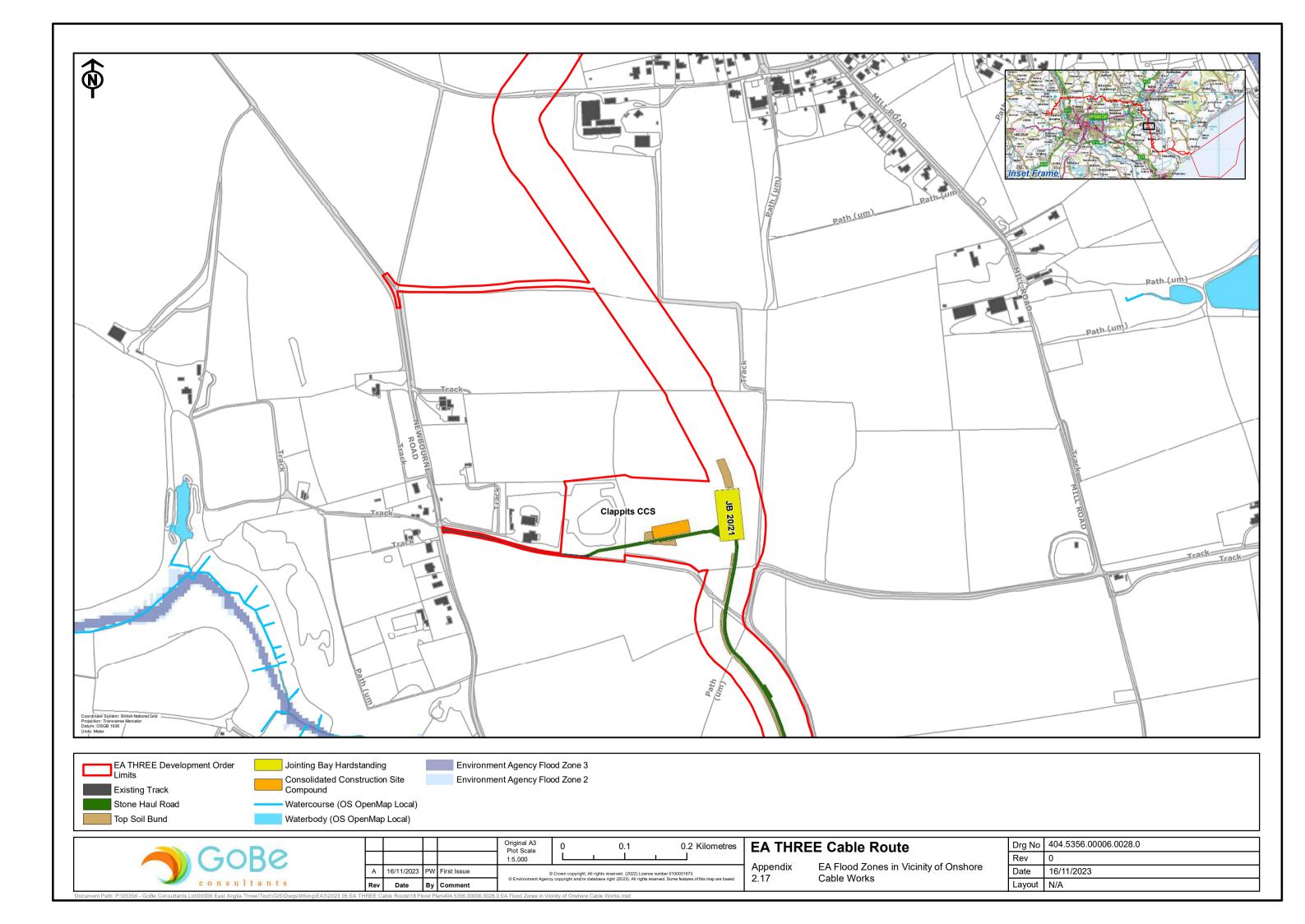


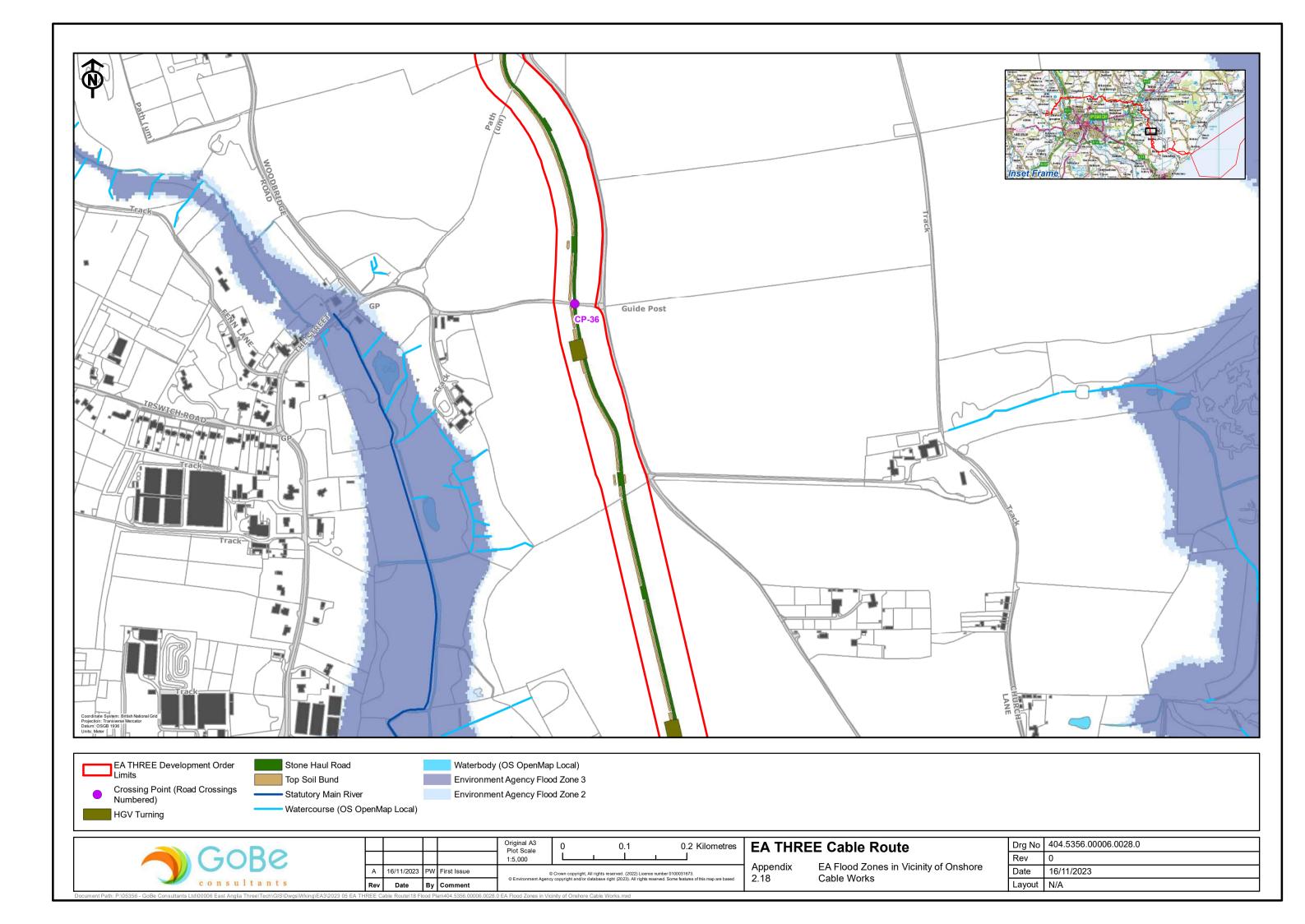


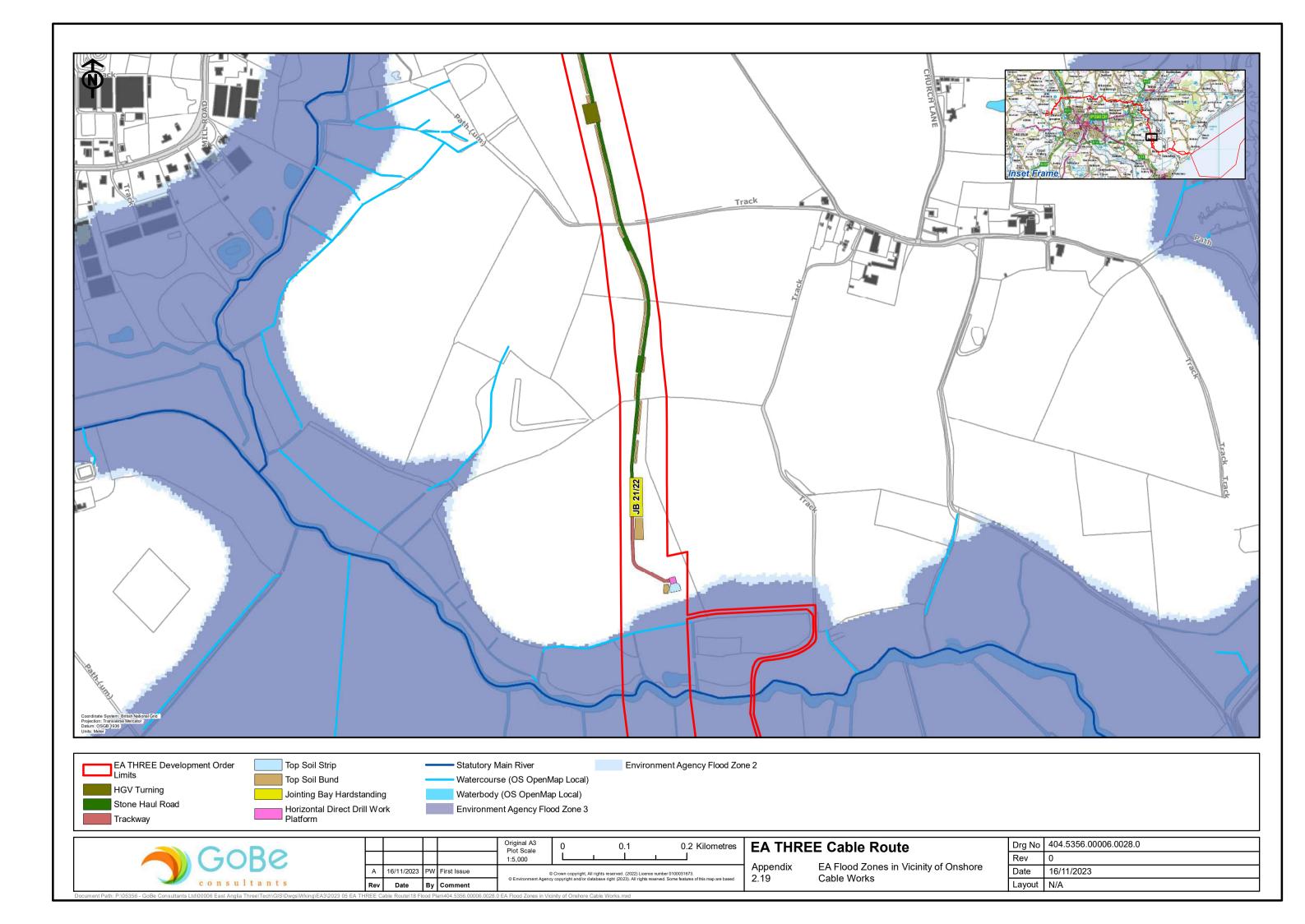


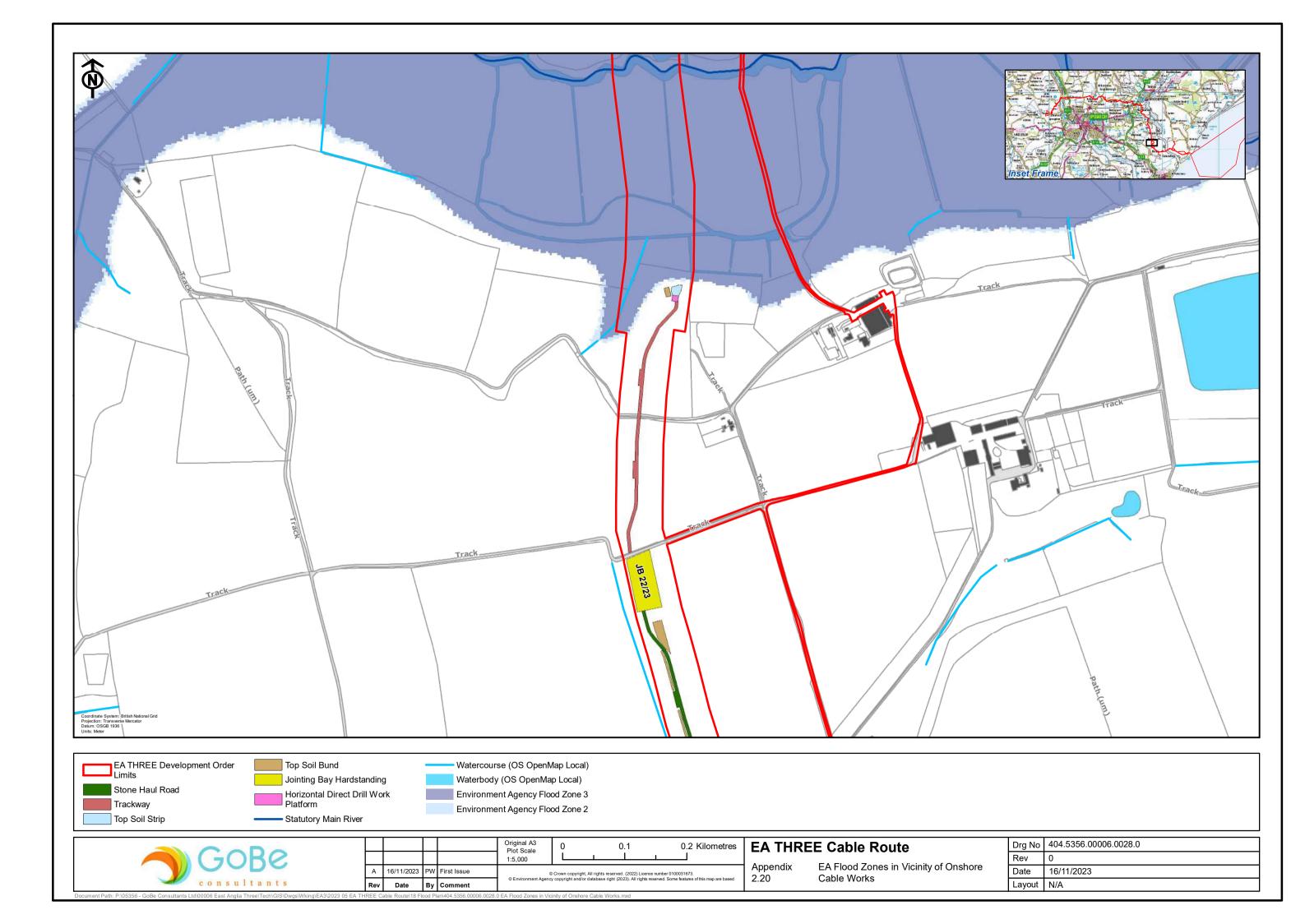


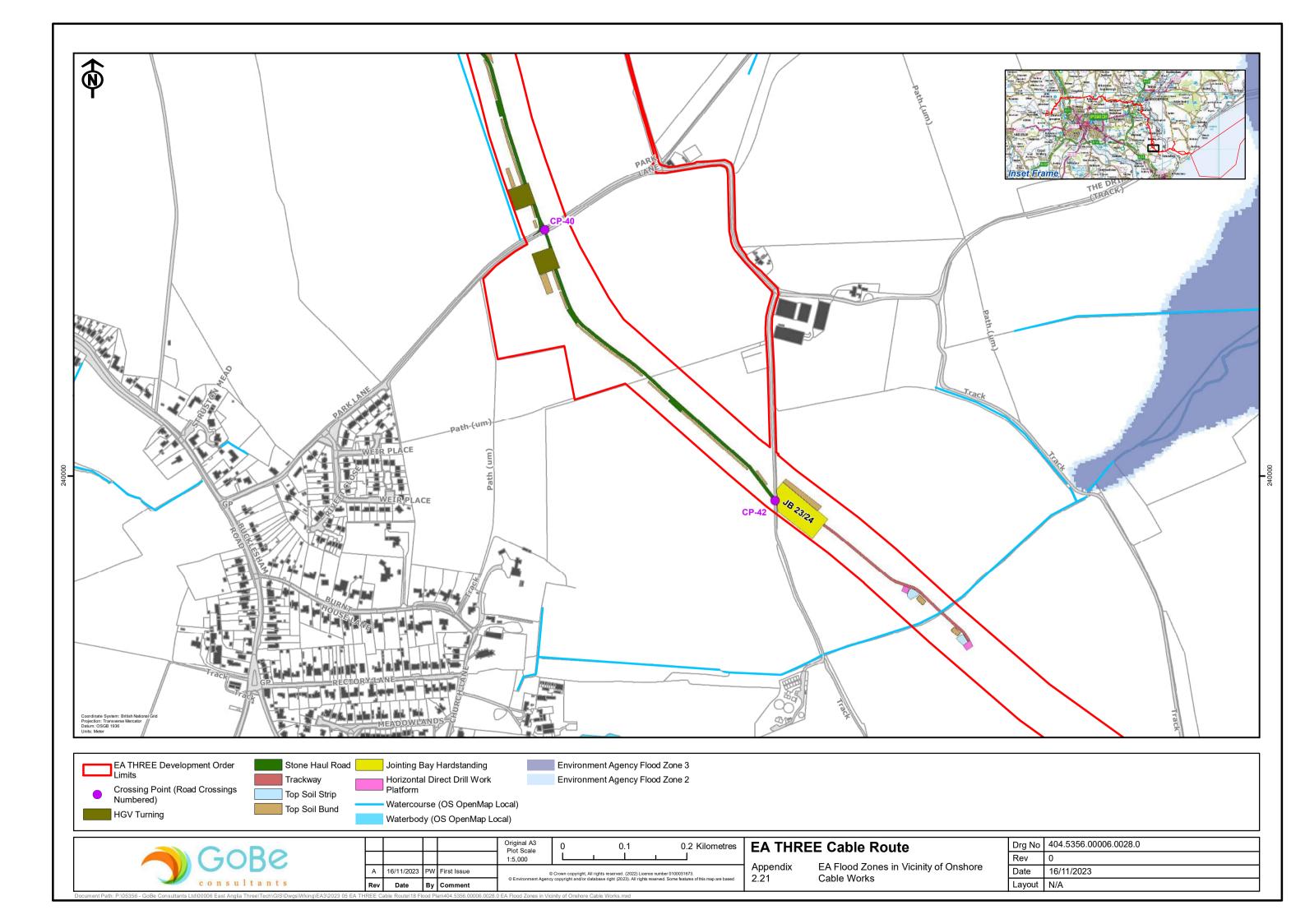


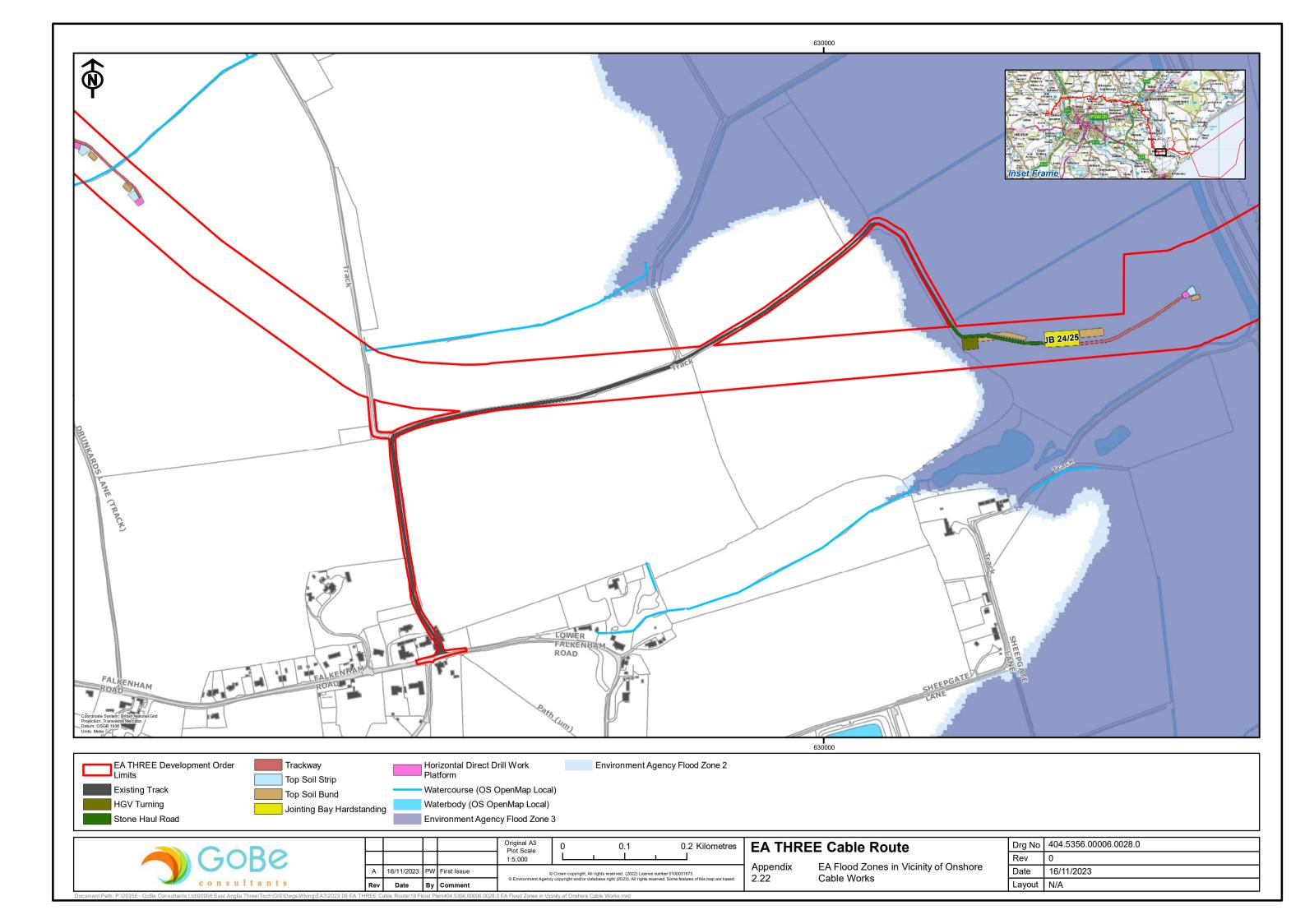


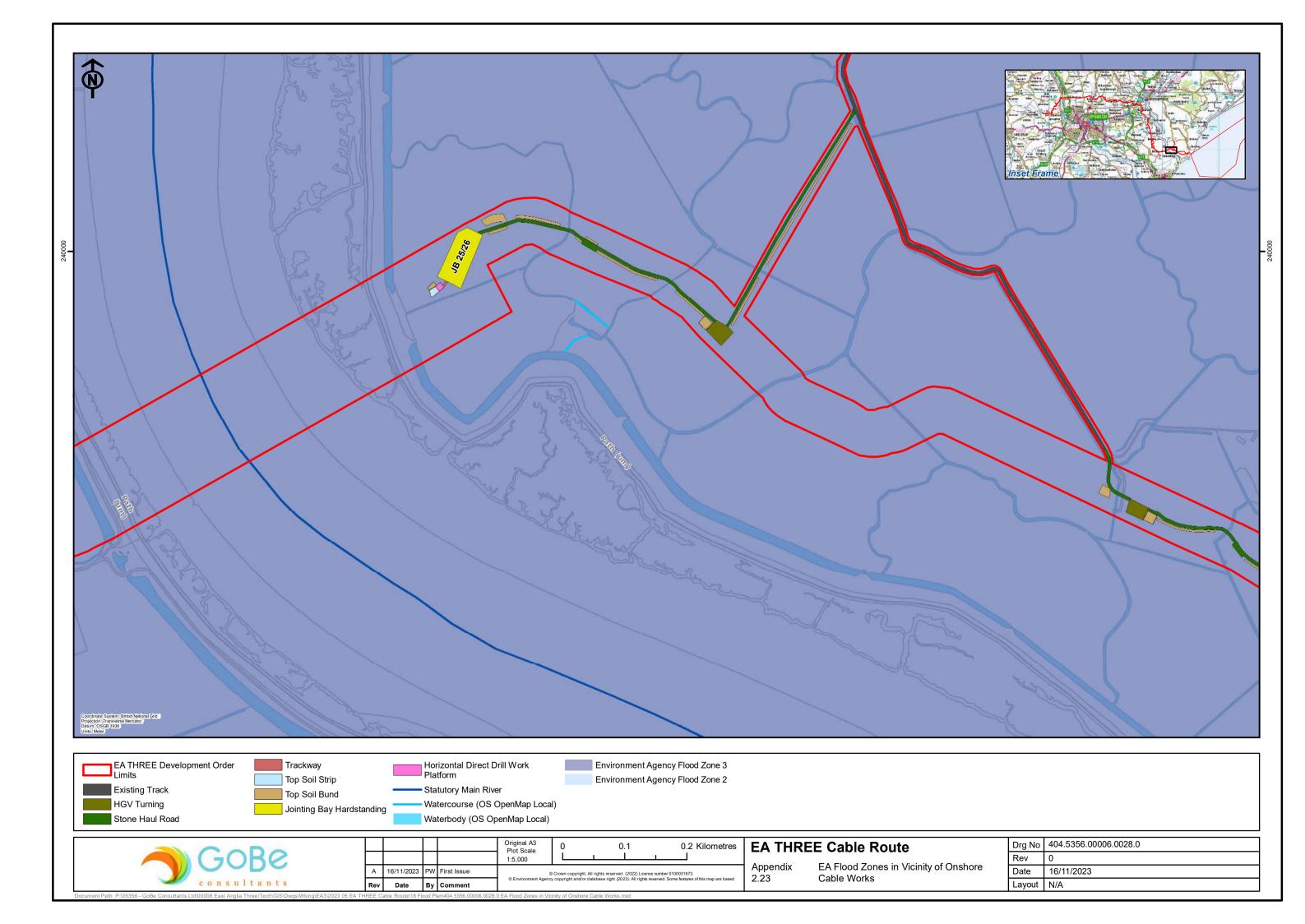


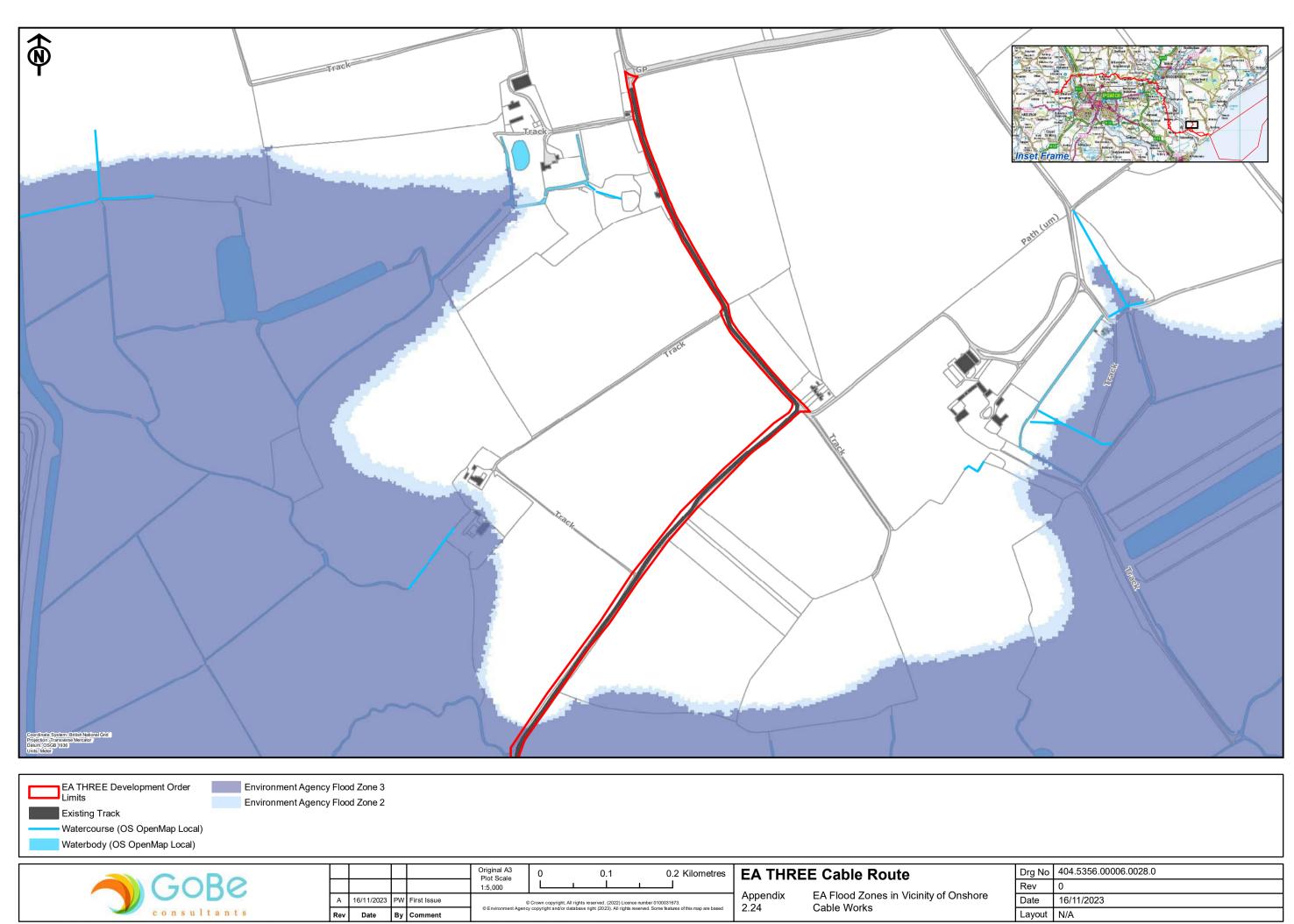




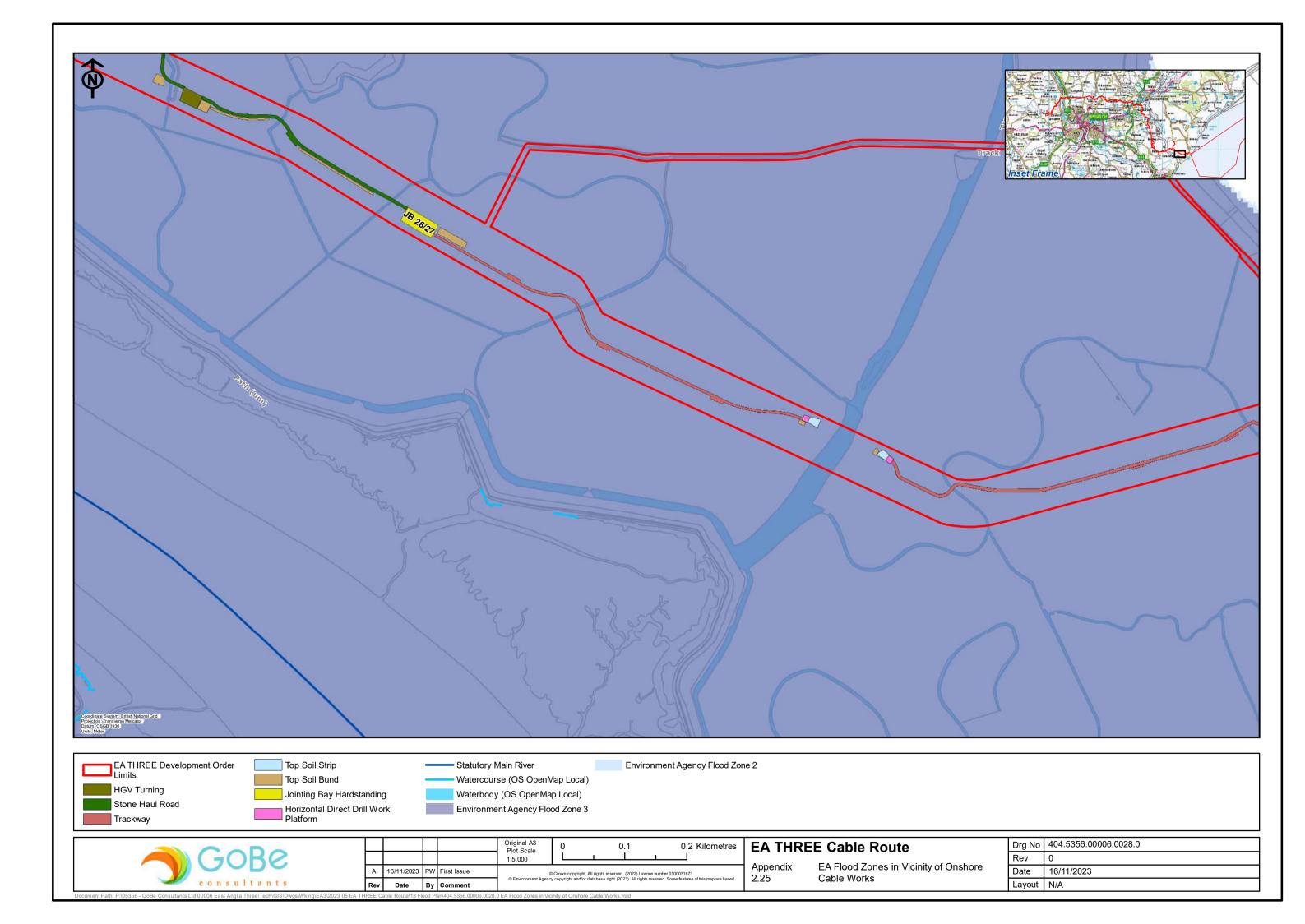


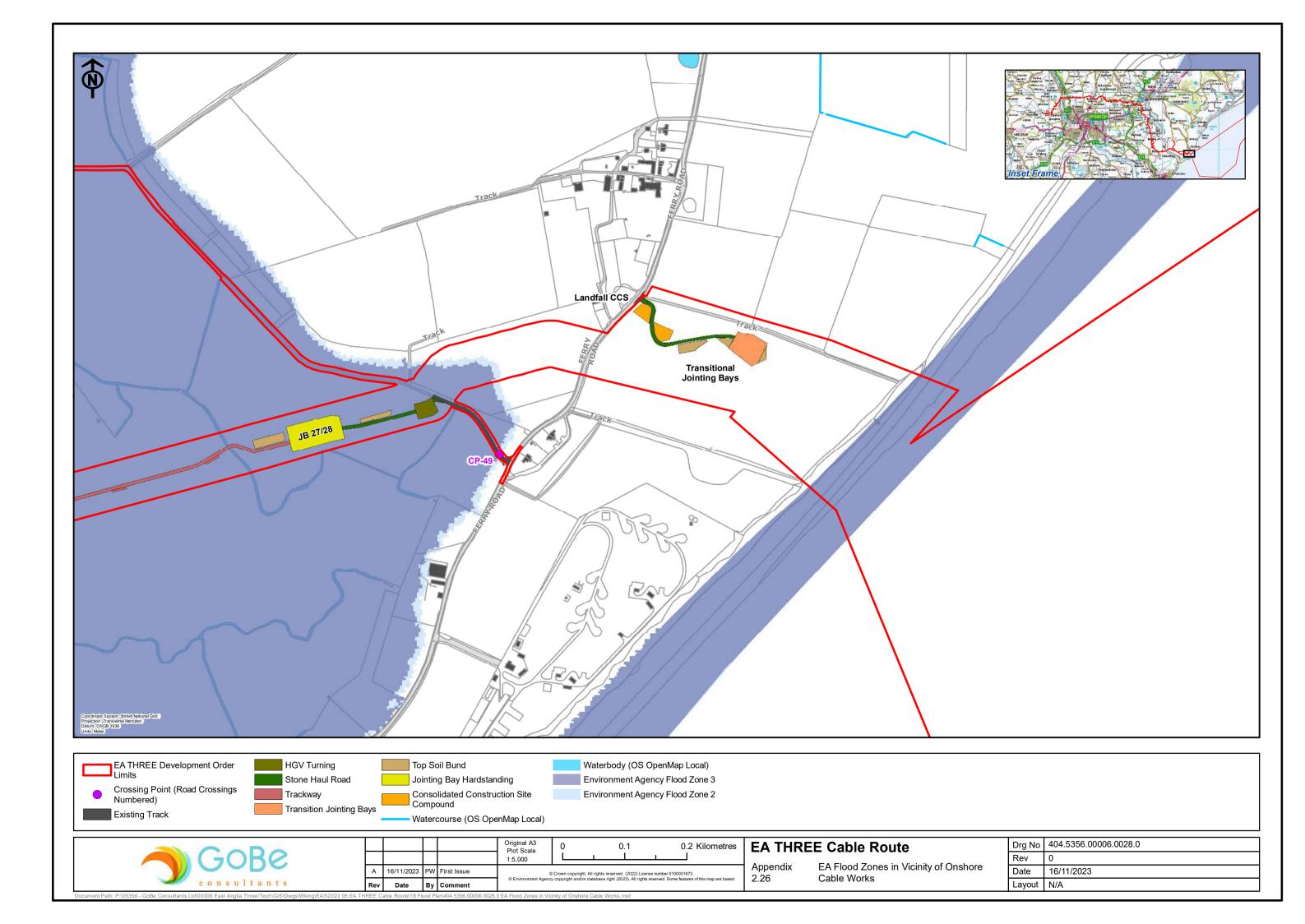






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APPENDIX 3 - EMERGENCY EVACUATION ROUTES

