

East Anglia ONE North Offshore Windfarm

Outline Access Management Plan

Applicant: East Anglia ONE North Limited

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Table of Contents

1	Introduction	1
1.1	Background	1
1.2	OAMP Scope	2
2	Access Design	3
2.1	Access Strategy	3
2.2	Access Design	8
2.3	Crossing Design	11
2.4	Road Safety	11
2.5	Technical Approval	12
3	Traffic Management	13
3.1	References	17
Annex 1: Proposed Preliminary Access Concepts		18
Annex 2: Stage 1 Road Safety Audit and Designers Response		43

The Outline Access Management Plan is supported by one figure, listed in the table below.

Figure number	Title
Figure 1	Access Locations and Associated Onshore Infrastructure

Glossary of Acronyms

CCS	Construction Consolidation Site
DCO	Development Consent Order
DMRB	Design Manual for Roads and Bridges
ES	Environmental Statement
HDD	Horizontal Directional Drill
HGV	Heavy Goods Vehicle
OAMP	Outline Access Management Plan
OTP	Outline Travel Plan
OCTMP	Outline Construction Traffic Management Plan

Glossary of Terminology

Applicant	East Anglia ONE North Limited.
Cable sealing end compound	A compound which allows the safe transition of cables between the overhead lines and underground cables which connect to the National Grid substation.
Cable sealing end (with circuit breaker) compound	A compound (which includes a circuit breaker) which allows the safe transition of cables between the overhead lines and underground cables which connect to the National Grid substation.
Construction consolidation sites	Compounds associated with the onshore works which may include elements such as hard standings, lay down and storage areas for construction materials and equipment, areas for vehicular parking, welfare facilities, wheel washing facilities, workshop facilities and temporary fencing or other means of enclosure.
Contractor	An individual or business in charge of carrying out construction work.
Development area	The area comprising the onshore development area and the offshore development area (described as the 'order limits' within the Development Consent Order).
East Anglia ONE North project	The proposed project consisting of up to 67 wind turbines, up to four offshore electrical platforms, up to one construction, operation and maintenance platform, inter-array cables, platform link cables, up to one operational meteorological mast, up to two offshore export cables, fibre optic cables, landfall infrastructure, onshore cables and ducts, onshore substation, and National Grid infrastructure.
East Anglia ONE North windfarm site	The offshore area within which wind turbines and offshore platforms will be located.
European site	Sites designated for nature conservation under the Habitats Directive and Birds Directive, as defined in regulation 8 of the Conservation of Habitats and Species Regulations 2017 and regulation 18 of the Conservation of Offshore Marine Habitats and Species Regulations 2017. These include candidate Special Areas of Conservation, Sites of Community Importance, Special Areas of Conservation and Special Protection Areas.
Horizontal directional drilling (HDD)	A method of cable installation where the cable is drilled beneath a feature without the need for trenching.
HDD temporary working area	Temporary compounds which will contain laydown, storage and work areas for HDD drilling works.
Jointing bay	Underground structures constructed at intervals along the onshore cable route to join sections of cable and facilitate installation of the cables into the buried ducts.
Landfall	The area (from Mean Low Water Springs) where the offshore export cables would make contact with land, and connect to the onshore cables.
Link boxes	Underground chambers within the onshore cable route housing electrical earthing links.

Mitigation areas	Areas captured within the onshore Development Area specifically for mitigating expected or anticipated impacts.
National electricity grid	The high voltage electricity transmission network in England and Wales owned and maintained by National Grid Electricity Transmission
National Grid infrastructure	A National Grid substation, cable sealing end compounds, cable sealing end (with circuit breaker) compound, underground cabling and National Grid overhead line realignment works to facilitate connection to the national electricity grid, all of which will be consented as part of the proposed East Anglia ONE North project Development Consent Order but will be National Grid owned assets.
National Grid overhead line realignment works	Works required to upgrade the existing electricity pylons and overhead lines (including cable sealing end compounds and cable sealing end (with circuit breaker) compound) to transport electricity from the National Grid substation to the national electricity grid.
National Grid overhead line realignment works area	The proposed area for National Grid overhead line realignment works.
National Grid substation	The substation (including all of the electrical equipment within it) necessary to connect the electricity generated by the proposed East Anglia ONE North project to the national electricity grid which will be owned by National Grid but is being consented as part of the proposed East Anglia ONE North project Development Consent Order.
National Grid substation location	The proposed location of the National Grid substation.
Natura 2000 site	A site forming part of the network of sites made up of Special Areas of Conservation and Special Protection Areas designated respectively under the Habitats Directive and Birds Directive.
Onshore cable corridor	The corridor within which the onshore cable route will be located.
Onshore cable route	This is the construction swathe within the onshore cable corridor which would contain onshore cables as well as temporary ground required for construction which includes cable trenches, haul road and spoil storage areas.
Onshore cables	The cables which would bring electricity from landfall to the onshore substation. The onshore cable is comprised of up to six power cables (which may be laid directly within a trench, or laid in cable ducts or protective covers), up to two fibre optic cables and up to two distributed temperature sensing cables.
Onshore development area	The area in which the landfall, onshore cable corridor, onshore substation, landscaping and ecological mitigation areas, temporary construction facilities (such as access roads and construction consolidation sites), and the National Grid Infrastructure will be located.
Onshore infrastructure	The combined name for all of the onshore infrastructure associated with the proposed East Anglia ONE North project from landfall to the connection to the national electricity grid.

Onshore preparation works	Activities to be undertaken prior to formal commencement of onshore construction such as pre-planting of landscaping works, archaeological investigations, environmental and engineering surveys, diversion and laying of services, and highway alterations.
Onshore substation	The East Anglia ONE North substation and all of the electrical equipment within the onshore substation and connecting to the National Grid infrastructure.
Onshore substation location	The proposed location of the onshore substation for the proposed East Anglia ONE North project.
Transition bay	Underground structures at the landfall that house the joints between the offshore export cables and the onshore cables.
Two-way movement	A movement is the process of transporting goods from a source location to a predefined destination. A two-way movement represents the inbound (laden trip from source) and the outbound unladen trip (back to source). For example, 20 two-way movements comprise 10 laden trips from source and 10 outbound unladen trips back to source.

Outline Access Management Plan

1 Introduction

1.1 Background

1. This Outline Access Management Plan (OAMP) relates to the onshore infrastructure of the proposed East Anglia ONE North project.
2. The OAMP forms part of a set of documents that supports the Environmental Statement (ES) (document reference 6.1) submitted by the Applicant as part of the Development Consent Order (DCO) application.
3. A final detailed Access Management Plan (AMP) will be produced post-consent, prior to onshore construction of the proposed East Anglia ONE North project, and will be in line with this OAMP . Once contractors¹ have been appointed, the final AMP measures would be further developed in consultation with Suffolk County Council and agreed with East Suffolk County Council, prior to the commencement of works.
4. The final AMP will provide a key mechanism, enforceable through the DCO, through which the location, frontage, general layout, visibility and embedded mitigation measures for points of access to the onshore infrastructure would be agreed with the relevant regulators.
5. This OAMP reinforces commitments made in the ES (document reference 6.1) and presents the requirements and standards that will be incorporated into the final access designs.
6. In respect to traffic and transport, the two certified plans referred to in the DCO, which support the AMP, are outlined below:
 - Outline Construction Traffic Management Plan (OCTMP): The OCTMP sets out the standards and procedures for managing the impact of Heavy Goods Vehicles (HGV) traffic during the construction period, including localised road improvements necessary to facilitate the safe use of the existing road network; and

¹ The term contractor is used throughout this document. The term 'contractor' in relation to contractor responsibilities relates to either a Principal Contractor(s) or sub-contractors(s) and will be defined within the final OAMP.

- Outline Travel Plan (OTP): The OTP sets out how construction personnel traffic would be managed and controlled.

1.2 OAMP Scope

7. Activities within the scope of this OAMP relate to works undertaken from the point of commencement of construction of the proposed East Anglia ONE North project onshore infrastructure as defined within the DCO or as permitted as onshore preparation works in line with the provisions set out within the DCO. Works include:
 - Export cable installation from the landfall location to the transition bays, including Horizontal Directional Drilling (HDD);
 - Temporary works associated with landfall HDD and transition bay excavation;
 - Onshore cable installation along the onshore cable route including jointing bays and potential HDD;
 - Temporary works associated with the onshore cable route and onshore substation including establishment of a haul road for the entire cable route, Construction Consolidation Sites (CCSs) and temporary working areas;
 - Onshore substation, and access;
 - National Grid infrastructure;
 - Reinstatement and mitigation works enacted during the construction phase; and
 - Highways enabling works include the construction of seven public highway accesses, three haul road crossings and off-site highway improvements.
8. The scope of this OAMP does not extend to the base port to be utilised for offshore construction and maintenance, as no decision has yet been made regarding a preferred base port for the offshore construction and operation of the proposed East Anglia ONE North project. Such facilities would be provided or brought into operation by means of one or more planning applications or as port operations with permitted development rights.
9. The East Anglia TWO offshore windfarm project (the proposed East Anglia TWO project) is also in the application phase. The proposed East Anglia TWO project has a separate DCO which has been submitted at the same time as the proposed East Anglia ONE North project. The two projects share the same landfall location and onshore cable route and the two onshore substations are co-located, and connect into the same National Grid substation.

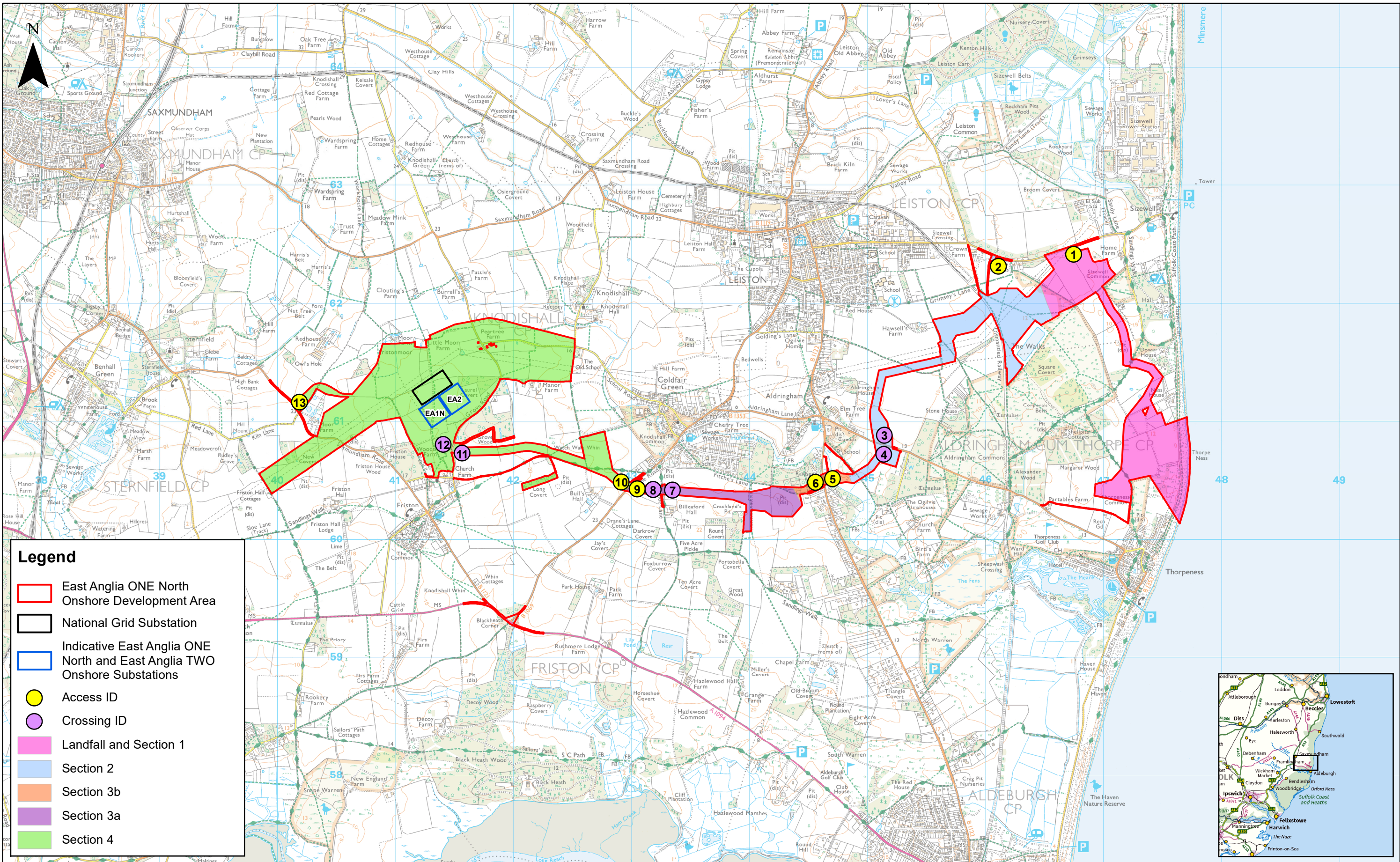
10. The traffic and transport impact assessment presented in the ES considers the proposed East Anglia ONE North project and the proposed East Anglia TWO North project under two construction scenarios:
- Scenario 1 - the proposed East Anglia ONE North project and proposed East Anglia TWO project are built simultaneously; and
 - Scenario 2 - the proposed East Anglia ONE North project and the proposed East Anglia TWO project are built sequentially with a construction gap.
11. This OAMP applies to both scenario 1 and scenario 2.

2 Access Design

2.1 Access Strategy

12. The onshore infrastructure includes works at the following seven discrete sites (which are shown on **Figure 1**):
- Landfall location;
 - Onshore cable route section 1;
 - Onshore cable route section 2;
 - Onshore cable route section 3;
 - Onshore cable route section 4;
 - Onshore substation; and
 - National Grid Infrastructure.
13. In order to access these seven discrete sites an access strategy has been developed. The 'basis of design' for the access strategy has been informed by engagement with Suffolk County Council and refined following feedback from public consultation (full details are set out in ES **Chapter 26 Traffic and Transport** (document reference 6.1.26)
14. The access strategy applies a hierarchical approach (informed by the Suffolk Country Council HGV route hierarchy) to selecting routes and where possible, seeks to reduce the impact of HGV traffic upon the most sensitive communities.
15. To allow construction vehicles to be routed away from the most sensitive communities, the Applicant has committed to the implementation of a temporary haul road for the length of onshore cable route. The use of the haul road allows:

- All construction traffic wishing to access the landfall location to do so via Sizewell Gap rather than travelling via the B1122 from Aldeburgh and B1353 towards Thorpeness;
 - All construction traffic to the onshore substation and National Grid Substation to avoid travelling via Friston or Sternfield by accessing from the B1069 (south of Knodishall/ Coldfair Green) and travelling along the temporary haul road and crossing over Grove Road; and
 - All construction traffic wishing to access all onshore cable route section 2 to the south of the B1353 to do so via Sizewell Gap rather than travelling via the B1122 from Aldeburgh and B1353 towards Thorpeness.
16. The use of the haul route has allowed the Applicant to commit the following access strategy:
- All HGV traffic would be required to travel via the A1094 or B1122 from the A12, no HGV traffic would be permitted to travel via alternative routes, such as the B1121 or B1119;
 - No HGV traffic would be permitted to travel through Leiston or Coldfair Green / Knodishall;
 - No HGV traffic would be permitted to travel via the B1121 through Friston, Sternfield or Benhall-Green; and
 - No HGV traffic would be permitted to travel via the B1353 towards Thorpeness.
17. The access strategy includes both accesses and crossings. The accesses provide for access and egress to and from the existing public highway, whilst crossings would only permit construction traffic to cross from one side of the existing public highway to the other. No construction access or egress would be permitted from the crossing points.



2	04/09/2019	FC	Second Issue.
1	20/06/2019	FC	First Issue.
Rev	Date	By	Comment

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Scale @ A3		Km	
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East Anglia ONE North

Access Locations and Associated Onshore Infrastructure

Drg No	EA1N-DEV-DRG-IBR-001014		
Rev	2	Coordinate System: BNG Datum: OSGB36	
Date	04/09/19		
Figure	1		

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18. The following **Table 2.1** describes the proposed access strategy, the location of the proposed accesses and crossings and associated onshore infrastructure which the access serves. This information is also depicted graphically within **Figure 1**.

Table 2.1 Proposed East Anglia ONE North Accesses and Associated Infrastructure Components

Infrastructure component	Access	Route
Landfall	1 (Sizewell Gap)	Vehicles to travel from the A12 via the B1122 and Lover's Lane / Sizewell Gap.
Onshore cable route section 1	1 (Sizewell Gap)	Vehicles to travel from the A12 via the B1122 and Lover's Lane / Sizewell Gap.
Onshore cable route section 2	2 (Sizewell Gap)	Vehicles to travel from the A12 via the B1122 and Lover's Lane / Sizewell Gap. Vehicles wishing to access south of B1353 would cross the B1353 at access 3 and 4.
Onshore cable route section 3	10 (B1069 Snape Road)	Vehicles to travel from the A12 via the A1094 before heading north on the B1069 to the CCS via access 10. From the CCS vehicles would then cross over the B1069 from access 10 to 9 to access section 3 of the onshore cable route. Works to the east of Sloe Lane would cross Sloe Lane at access 7 and 8.
Onshore cable route section 4	10 (B1069 Snape Road)	Vehicles to travel from the A12 via the A1094 before heading north to access 10 on the B1069. Works to the west of Grove Road would cross Grove Road at access 11 and 12.
East Anglia ONE North Substation	10 (B1069 Snape Road)	Vehicles to travel from the A12 via the A1094 before heading north to access 10 on the B1069, vehicles would then travel via the haul road and crossing Grove Road at access 11 and 12.
National Grid Substation and Infrastructure		
East Anglia ONE North Substation	13 (B1121 Saxmundham Road)	Access 13 would provide a permanent access to the East Anglia ONE North and National Grid substations following completion of construction. During construction the access would only be used for Abnormal Indivisible Load (AIL) deliveries.
National Grid Substation and Infrastructure		

19. There is a small part of section 3 of the onshore cable route (section 3A) that is located either side of the B1122 to the south of Aldringham (**Figure 1**). At this stage, three options are being investigated for serving section 3A. These include serving section 3A directly from access 2 or 9 or providing two new accesses from the B1122 (accesses 5 and 6). If access 2 or 9 were used to serve section 3A, accesses 5 and 6 would be converted from accesses to a crossing.

20. After construction, temporary accesses (access 1 to 12) will be reinstated, unless otherwise agreed with the Local Highway Authority and relevant land owner.
21. Access 13 would provide a permanent access to the onshore substation and National Grid substation and would therefore remain for the operational life of the proposed East Anglia ONE North project. It is anticipated that the proposed East Anglia TWO project would use access 13 as permanent access to the East Anglia TWO onshore substation.

2.2 Access Design

22. All seven accesses have been designed as simple priority junctions, with geometry in accordance with the requirements of the Design Manual for Roads and Bridges (DMRB) standards for major/ minor priority junctions.
23. General Arrangement drawings (with details of visibility splays, signage and road markings), of all accesses are provided in **Annex 1**.
24. In order to ensure that HGVs can enter and exit each access in forward gear, swept path analysis has been undertaken for each access. This swept path analysis (presented within **Annex 1**) has been undertaken using a maximum legal articulated vehicle and a rigid body tipper. These vehicle types are considered to provide a representation of the largest standard vehicles that would use the accesses.
25. A summary of the drawings provided within **Annex 1** and content are provided in **Table 2.2**.

Table 2.2 Access Design Drawing Summary

Access ID	General Arrangement drawing	Swept path analysis drawings
1	TP-PB4842-DR001 Rev D0.6	TP-PB4842-DR002 Rev D0.3
2	TP-PB4842-DR003 Rev D0.4	TP-PB4842-DR004 Rev D0.3
5	TP-PB4842-DR008 Rev D0.5	TP-PB4842-DR009 Rev D0.3
6	TP-PB4842-DR008 Rev D0.5	TP-PB4842-DR010 Rev D0.3
9	TP-PB4842-DR011 Rev D0.4	TP-PB4842-DR012 Rev D0.3
10	TP-PB4842-DR011 Rev D0.4	TP-PB4842-DR013 Rev D0.3
13 (construction phase for AILs and employees only)	TP-PB4842-DR020 Rev D0.3	TP-PB4842-DR022 Rev D0.3
13 (operational phase)	TP-PB4842-DR021 Rev D0.3	TP-PB4842-DR022 Rev D0.3

26. The general guiding principle for the access design is to keep engineering works to a minimum to reduce the environmental impact of the proposed East Anglia ONE North project and ensure timely reinstatement of baseline conditions. This has entailed minimising vegetation that needs to be removed to provide forward visibility.
27. **Table 2.3** provides a summary of the required visibility splay for each access in accordance with the measured 85th percentile speeds (the speed at which 85 percent of all vehicles are observed to travel) and the achievable splays. It has been agreed with SCC that 85th percentile speeds should be used rather than average speeds as this would provide a worst case for determining visibility splays as higher speeds result in a requirement for longer visibility splays.
28. Where the visibility splays cannot be achieved, measures are proposed to temporality reduce the speed limit and consequently the required visibility splay.

Table 2.3 Access Visibility Requirements

Access ID *	Measured 85th percentile speeds (mph)	Required visibility for 85th percetile speed	Achievable visibility		Visibility achievable	Further traffic control measures	Notes
1	57.1	215m	380m	295m	Yes	Temporary reduction in the speed limit from 60 to 40mph	Whilst visibility is acheiveable, a reduction in speed limit is proposed as best practice.
2	57.1	215m	195m	215m	No	Temporary reduction in the speed limit from 60 to 40mph	The visibility to the east is 20m shorter than required for a design speed of 100kph (62.5mph). It is therefore proposed to temporarily reduce the speed limit to 40mph.
5	44.7	120m	97m	90m	No	Speed limit reduced from 40 to 30mph	The visibility north and south is 23 and 30m shorter than required for a design speed of 70kph (43.8mph). It is therefore proposed to temporarily reduce the speed limit to 30mph.

Access ID *	Measured 85th percentile speeds (mph)	Required visibility for 85th percentile speed	Achievable visibility		Visibility achievable	Further traffic control measures	Notes
6	44.7	120m	90m	99m	No	Speed limit reduced from 40 to 30mph	The visibility north and south is 30 and 21m shorter than required for a design speed of 70kph (43.8mph). It is therefore proposed to temporarily reduce the speed limit to 30mph.
9	39.4	120m	50m	95m	No	Extension of the existing 40mph speed limit south along the B1069.	It is proposed to extend the existing 40mph speed limit further south along to reduce the speed of vehicles on the approach to access 9. In addition, existing vegetation will be removed/ cut back to ensure a visibility splay of 120m can be achieved in both directions.
10	39.4	120m	145m	268m	Yes	Extension of the existing 40mph speed limit south along the B1069.	Whilst visibility is achievable, an extension of the the 40mph speed limit is required for access 9 located opposite access 10 on the B1069.
13	43.8	160m	247m	161m	Yes	Temporary reduction in the speed limit from 60 to 40mph	Speed limit reduction to be applied for construction only. Upon completion of the construction the temporary speed limit would be removed.

Notes:

* Accesses 3, 4, 7, 8, 11 and 12 are considered separately in Section 2.3 because at these locations construction traffic would only be able cross the public highway.

2.3 Crossing Design

29. Where the haul road crosses the public highway at the B1353 (access 3 and 4), Sloe Lane (access 7 and 8) and Grove Road (access 11 and 12), formalised crossings are proposed.
30. The crossing points at Grove Road and Sloe Lane are located at sections of the highway where existing traffic flows and speeds are low. It is proposed therefore that construction vehicles would give-way to traffic on the public highway and cross in gaps in traffic when safe to do so.
31. The crossing point at the B1353 is located at a section of the highway where traffic speeds are higher, it is therefore proposed that construction vehicles cross the public highway under traffic signal control. Under traffic signal control, the traffic signals would rest on red on the haul road and would only change to green when demanded by vehicles on the construction haul road.
32. Each of the crossings have been designed to ensure that vehicles cannot turn off or on to the public highway from the haul road. To prevent dirt being tracked across the public highway 20m of carriageway construction (concrete or asphalt) are provided either side of the entry point. Further measures to prevent dirt being tracked across the public highway are detailed within the OCoCP submitted with this DCO application.
33. General Arrangement drawings (with details of signs, road markings and visibility drawings are provided in **Annex 1** and a summary of the drawings and content are provided in **Table 2.4**.

Table 2.4 Crossing Design Drawing Summary

Access ID	General Arrangement drawing
3 and 4	TP-PB4842-DR007 Rev D0.4
7 and 8	TP-PB4842-DR027 Rev D0.1
11 and 12	TP-PB4842-DR014 Rev D0.3

2.4 Road Safety

34. The following mitigation measures have been developed to reduce the risk to the travelling public and construction personnel and are applied to each access and crossing (where applicable):
 - Temporary direction and warning signs to advise of turning vehicles would be provided for all accesses. This signage would highlight the proposed

- accesses to construction personnel traffic to avoid late breaking manoeuvres and highlight to the travelling public the potential for turning vehicles;
- Temporary warning signs to advise of crossing vehicles would be provided for all crossings. This signage would highlight to the travelling public the potential for crossing vehicles;
 - All accesses constructed to facilitate two-way HGV movements to prevent vehicles having to give way on the highway;
 - All crossings constructed to prevent access from the highway, ensuring vehicles do not attempt to access or egress at these locations;
 - All accesses and crossings provided with appropriate visibility splays to allow vehicles to safely access and exit from the junctions. These splays will be maintained by the Contractor for the duration of use of the access;
 - All accesses and crossings to incorporate a bound (concrete or asphalt) surface to prevent dust and dirt being tracked on to the highway and
 - Temporary reduction in the existing speed limit in the vicinity of all accesses and crossings to reduce the speed of vehicles in the vicinity of these locations.
35. In addition to the applied road safety measures, each access and crossing have been subject to an independent Stage 1 Road Safety Audit (preliminary design). A copy of the independent Stage 1 Road Safety Audit is provided within **Annex 2**.
36. The Stage 1 Road Safety Audit has identified a total of 10 problems² with the access designs as presented and provides recommendations for how to address these problems as the designs are developed. A Designers response is also provided within **Annex 2** this includes confirmation of the acceptance of each of the problems and also the auditor's recommendations for how to address these problems.

2.5 Technical Approval

37. Once a Contractor has been appointed, the technical approvals for the access, crossing designs and speed limit modifications will be submitted to and agreed with Suffolk County Council (SCC) as required under the DCO (or under Section 278 of the Highways Act (1980) where required).

² The term 'problem' is a formal road safety audit term that identifies an issue with the design as present that need to be addressed.

- 38. The technical approval process will include submission of finalised drawings, showing full details of access and crossing improvements, including drainage, lighting, signing, and standard construction details.
- 39. Apart from Access 13, all project accesses and crossing points are temporary and following completion of construction would be reinstated to their former state unless otherwise agreed with SCC and the relevant land owner.
- 40. The technical approval documentation would also include a Stage 2 Road Safety Audit (detailed design) and designer's response.
- 41. In addition to the powers set out in the draft DCO, relevant powers under the Road Traffic Regulation Act (1984) will also be relied upon to implement the temporary speed limit changes associated with the access and crossing strategy.

3 Traffic Management

- 42. In order to construct each of the accesses and crossings temporary traffic management will be implemented to maintain highway safety and to ensure minimal delays to existing road users.
- 43. The form of traffic management to be employed at each access and crossing location depends on the characteristics at the site (traffic volume, speed, visibility etc). In locations where traffic flows are very low and forward visibility is good, shuttle working could be controlled manually with the use of STOP/GO signs. In most cases however, it is expected that alternate one-way traffic (shuttle working) would be traffic signal controlled. Indicative working arrangements extracted from Safety at Street Works and Road Works: a code of practice 2013, as shown in **Plate 3.1 - Plate 3.3**.

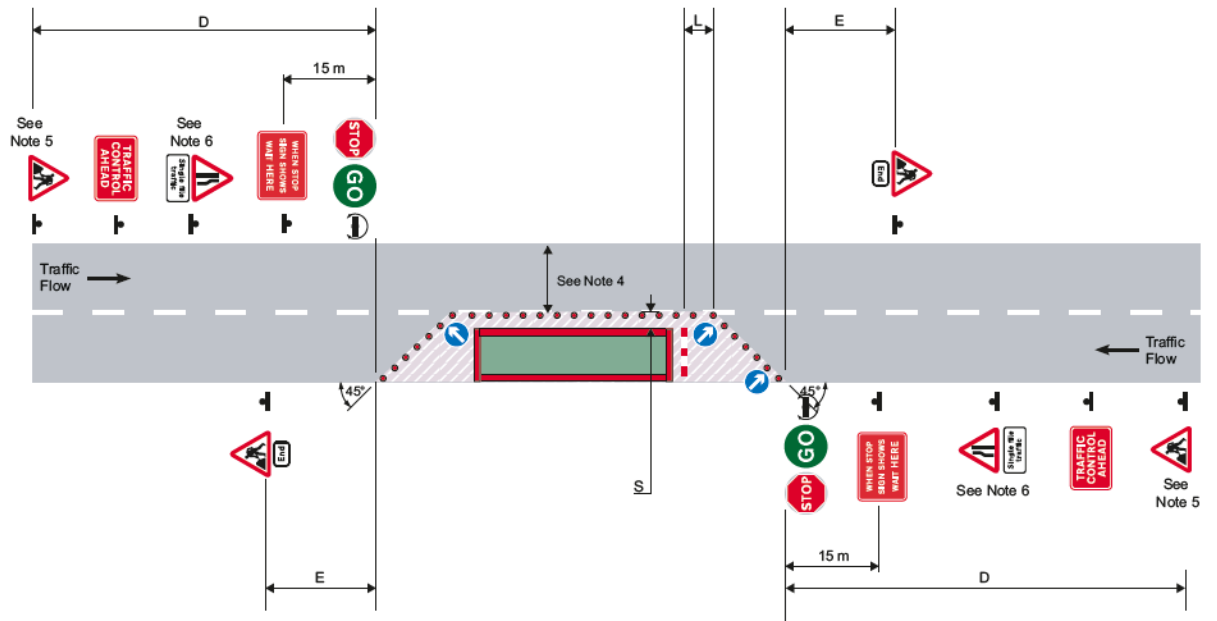


Plate 3.1 Indicative Temporary Traffic Management Arrangements (Stop/Go)

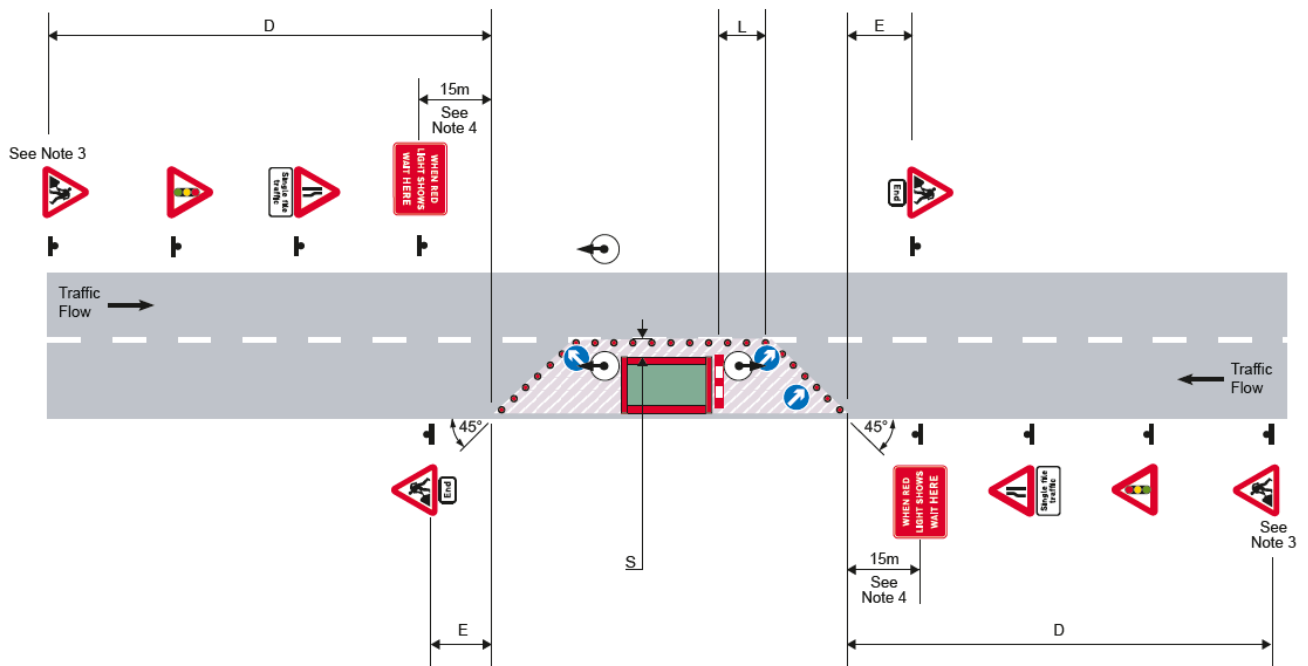


Plate 3.2 Indicative Temporary Traffic Management Arrangements (Traffic Signals)

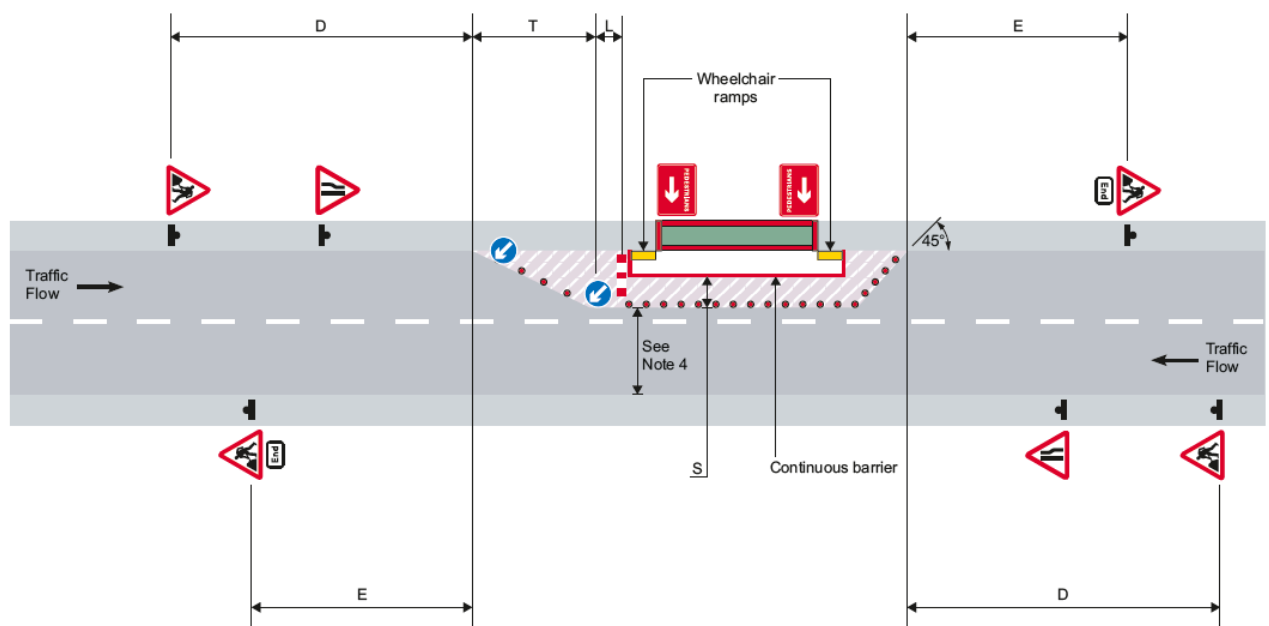


Plate 3.3 Indicative Temporary Traffic Management Arrangements (footway diversion into the carriageway)

44. Where the construction of the accesses and crossings would impact upon an existing footpath, the traffic management would incorporate a segregated area where pedestrians can safely walk through the works area. However, should the

existing road width not safely permit such an arrangement then the road would be temporarily, widened into the adjacent verge.

45. The detailed design of traffic management at accesses and crossings will be undertaken prior to construction and agreed with SSC in accordance with the requirements set out within the draft DCO.

3.1 References

Department for Transport (2013). Safety at street works and road works: a code of practice 2013

Department for Transport (2009). Traffic Signs Manual - Chapter 8 - Traffic Safety measures and Signs for Road Works and Temporary Situations, London: TSO

Department for Transport (2007). Manual for Streets, London: Thomas Telford Publishing

Highways Agency (now Highways England) (1995). Design Manual for Roads and Bridges (DMRB) Volume 6 Section 2 Part 6 TD 42/95 - Geometric Design of Major/Minor Priority Junctions

Annex 1: Proposed Preliminary Access Concepts

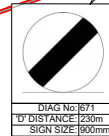
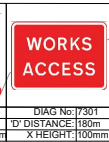
DRAWING No.
TP-PB4842-DR001



VISIBILITY DETAILS
SCALE - 1:2000



ACCESS DETAILS
SCALE - 1:500



ACCESS 1

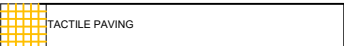
ACCESS 1

NOTES

- Do not scale from this drawing. all dimensions are in metres unless noted otherwise.
- This drawing has been based upon Ordnance Survey Maps and Royal HaskoningDHV can not guarantee the accuracy of data.
- All road markings and signage to conform with the Traffic Signs Regulation and General Directions 2016 and Chapter 6.
- D' distance is the siting distance of temporary road signs from the closest haul road crossing point/access location.
- Visibility
- X-distance - the set back from the nearest edge of the carriageway from which the access will be taken
- Y-Distance - the SSD measured along the nearest edge of the carriageway to its intersection with the centreline of the access.
- SSD - Stopping Sight Distance for design speed of the road.
- All vegetation to be cleared/trimmed within identified visibility envelope.

KEY

- ORDER LIMITS
- PROPOSED EXTENDED CYCLEWAY
- PROPOSED ACCESS BOUNDARY/ROAD MARKINGS
- VISIBILITY SPLAY (SEE VISIBILITY TABLE)
- PROPOSED TEMPORARY ROAD SIGN



ACCESS 1 - SIZEWELL GAP		VISIBILITY	
Posted Speed Limit (PSL) (mph)		EAST	WEST
Required Y-distance SSD for PSL (m)		60	215
Required Y-distance SSD achievable?		Yes	Yes
85 th percentile speed (mph)		57.1	

D0.6	24.07.19	PAGE SIZE CHANGED FROM A3 TO A1	JL	SKT	SKT
D0.5	07.06.19	ORDER LIMITS, ACCESS LOCATION UPDATED	JL	SKT	SKT
D0.4	11.04.19	ACCESS LOCATION AMENDED	JL	SKT	SKT
D0.3	11.04.19	ACCESS LOCATION AMENDED	JL	SKT	SKT
D0.2	16.11.18	ORDER LIMITS UPDATED	JL	SKT	ADR
D.01		FIRST ISSUE			
REV	DATE	DESCRIPTION	BY	CHK	APP

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PROJECT

EAST ANGLIA ONE North

TITLE

ACCESS 1
SIZEWELL GAP



DRAWN	JL	CHECKED	ST	APPROVED	ADR
DATE	09.10.18	SCALE AT A3	VARIES	AUTOCAD REF.	
DRAWING No	TP-PB4842-DR001				REVISION
CLIENT DWG No.					D0.6



SIZEWELL GAP - ACCESS 1
SCALE - 1:200

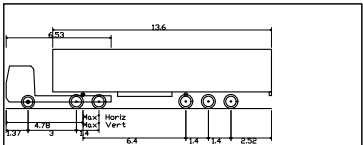
- NOTES**
1. Do not scale from this drawing, all dimensions are in metres unless noted otherwise.
 2. This drawing has been based upon Ordnance Survey Maps and Royal HaskoningDHV can not guarantee the accuracy of data.

- KEY**
- ORDER LIMITS
 - PROPOSED EXTENDED CYCLEWAY
 - PROPOSED ACCESS BOUNDARY/ROAD MARKINGS

FULL DEPTH CARRIAGEWAY CONSTRUCTION WITH BOUND SURFACE

TACTILE PAVING

VEHICLE TRACKING



Max Legal Length (UK) Articulated Vehicle (16.5m)
Overall Length 16.500m
Overall Width 2.550m
Overall Body Height 3.681m
Min Body Ground Clearance 0.411m
Max Track Width 2.500m
Lock to lock time 6.00s
Kerb to Kerb Turning Radius 6.530m

- VEHICLE BODY SWEEP PATH (FORWARD GEAR)
- VEHICLE CHASSIS SWEEP PATH

D0.3	24.07.19	DRAWING TITLE AMENDED	JL	SKT	SKT
D0.2	10.06.19	ORDER LIMITS, ACCESS LOCATION UPDATED	JL	SKT	SKT
D.01		FIRST ISSUE			
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

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PROJECT

EAST Anglia ONE North

TITLE

ACCESS 1
SIZEWELL GAP
MAX ARTICULATED HGV
SWEEP PATH ANALYSIS
(RIGHT TURN IN / LEFT TURN OUT)



DRAWN	JL	CHECKED	SKT	APPROVED	ADR
DATE	09.10.18	SCALE AT A3	1:200	AUTOCAD REF.	

DRAWING No. TP-PB4842-DR002

REVISION

CLIENT DWG No.

DRAWING No
TP-PB4842-DR003



VISIBILITY DETAILS
SCALE - 1:2000



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tages

ACCESS DETAILS
SCALE - 1:500

NOTES

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- Road markings and signs
- All road markings and signage to conform with the 'Traffic Signs Regulation and General Directions 2016 and Chapter 8.
- 'D' distance is the siting distance of temporary road signs from the closest haul road crossing point/access location.
- Visibility
- X-distance - the set back from the nearest edge of the carriageway from which the access will be taken
- Y-Distance - the SSD measured along the nearest edge of the carriageway to its intersection with the centreline of the access.
- SSD - Stopping Sight Distance for design speed of the road.
- All vegetation to be cleared/trimmed within identified visibility envelope.

KEY

- ORDER LIMITS
- PROPOSED EXTENDED CYCLEWAY
- PROPOSED ACCESS BOUNDARY/ROAD MARKINGS
- VISIBILITY SPLAY (SEE VISIBILITY TABLE)
- PROPOSED TEMPORARY ROAD SIGN



ACCESS 2 - SIZEWELL GAP	VISIBILITY	
	EAST	WEST
Posted Speed Limit (PSL) (mph)	60	60
Required Y-distance SSD for PSL (m)	215	215
Existing achievable Y-distance SSD 1 (m)	195	215
Required Y-distance SSD achievable?	No	Yes
85 th percentile speed (mph)	57.1	57.1
Required Y-distance SSD for 85 th percentile speed (m)	215	215
Existing Y-distance SSD suitable for 85 th percentile speeds	No	Yes
Proposed Reduced Speed Limit (RSL) (mph)	40	40
Assumed design speed (mph)	40	40
Required Y-distance SSD for design speed (m)	120	120
Required Y-distance SSD achievable?	Yes	Yes
Traffic control measures required	Yes	Yes

* Distances measured on site.

D0.4	24.07.19	PAGE SIZE CHANGED FROM A3 TO A1	JL	SKT	SKT
D0.3	10.06.19	ORDER LIMITS UPDATED	JL	SKT	SKT
D0.2	16.11.18	ORDER LIMITS UPDATED	JL	SKT	ADR
D.01		FIRST ISSUE			

REV	DATE	DESCRIPTION	BY	CHK	APP
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REVISIONS

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PROJECT

EAST Anglia ONE North

TITLE

ACCESS 2
SIZEWELL GAP



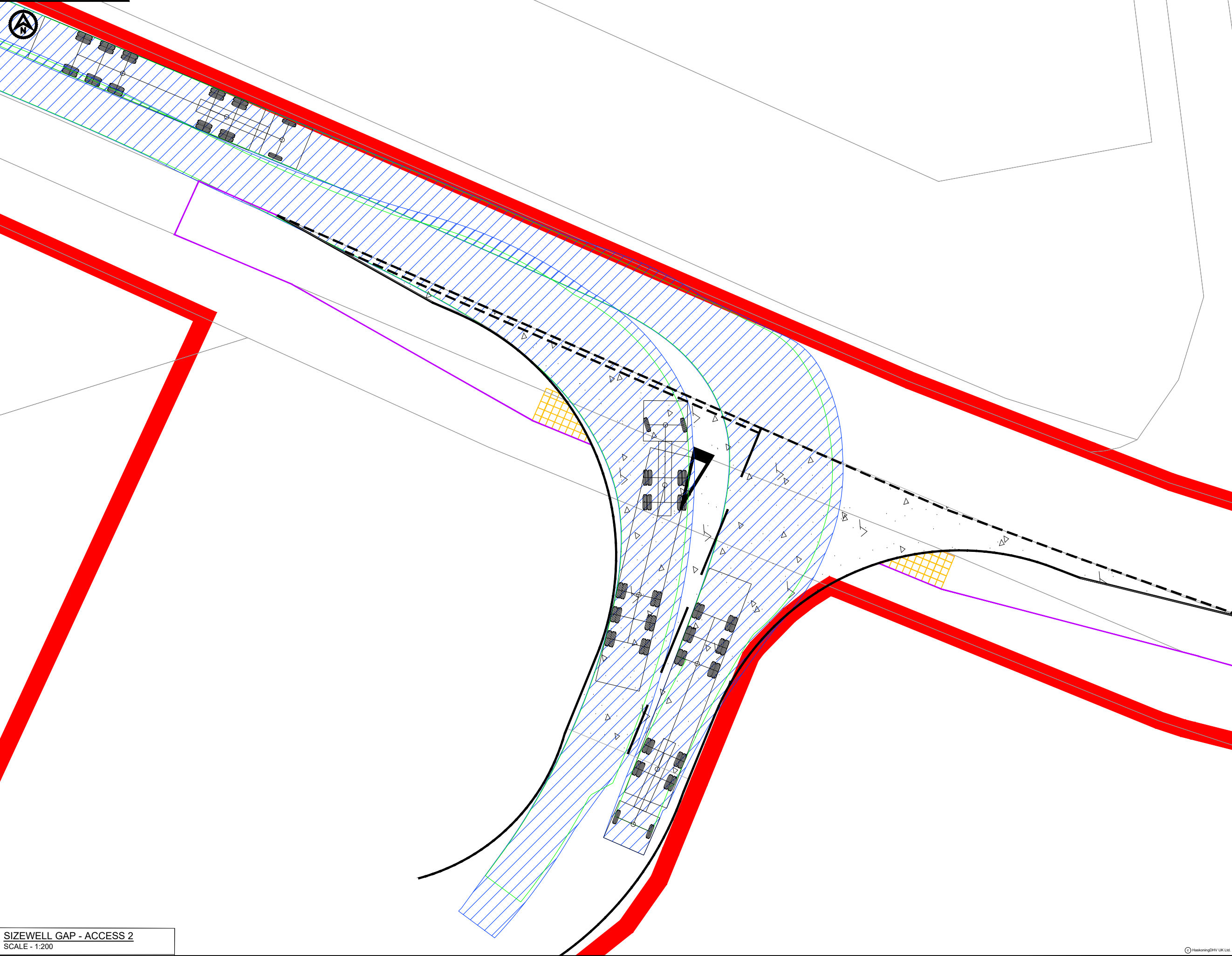
DRAWN	JL	CHECKED	ST	APPROVED	ADR
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DATE	09.10.18	SCALE AT A3	VARIABLES	AUTOCAD REF.	
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DRAWING No	TP-PB4842-DR003	REVISION	
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CLIENT DWG No.			
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DRAWING No.
TP-PB4842-DR004



SIZEWELL GAP - ACCESS 2
SCALE - 1:200

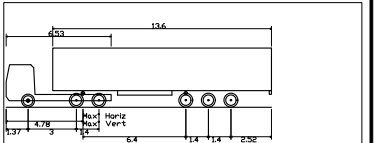
NOTES
1. Do not scale from this drawing, all dimensions are in metres unless noted otherwise.
2. This drawing has been based upon Ordnance Survey Maps and Royal HaskoningDHV can not guarantee the accuracy of data.

KEY
ORDER LIMITS
PROPOSED EXTENDED CYCLEWAY
PROPOSED ACCESS BOUNDARY/ROAD MARKINGS

FULL DEPTH CARRIAGEWAY CONSTRUCTION WITH BOUND SURFACE

TACTILE PAVING

VEHICLE TRACKING



Max Legal Length (UK) Articulated Vehicle (16.5m)
Overall Length 16.500m
Overall Width 2.550m
Overall Body Height 3.281m
Min Body Ground Clearance 0.41m
Max Truck Width 2.550m
Lock to lock time 6.00s
Kerb to Kerb Turning Radius 6.530m

VEHICLE BODY SWEEP PATH (FORWARD GEAR)
VEHICLE CHASSIS SWEEP PATH



D0.3	24.07.19	DRAWING TITLE AMENDED	JL	SKT	SKT
D0.2	10.06.19	ORDER LIMITS, UPDATED	JL	SKT	SKT
D.01		FIRST ISSUE			
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

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PROJECT

EAST Anglia ONE North

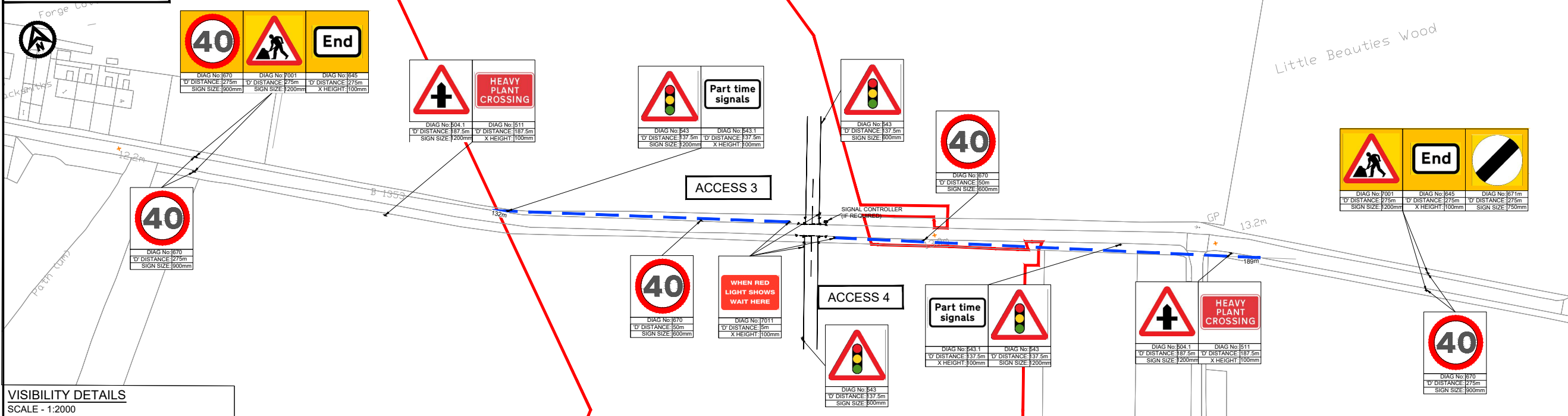
TITLE

ACCESS 2
SIZEWELL GAP
MAX ARTICULATED HGV
SWEEP PATH ANALYSIS
(RIGHT TURN IN / LEFT TURN OUT)

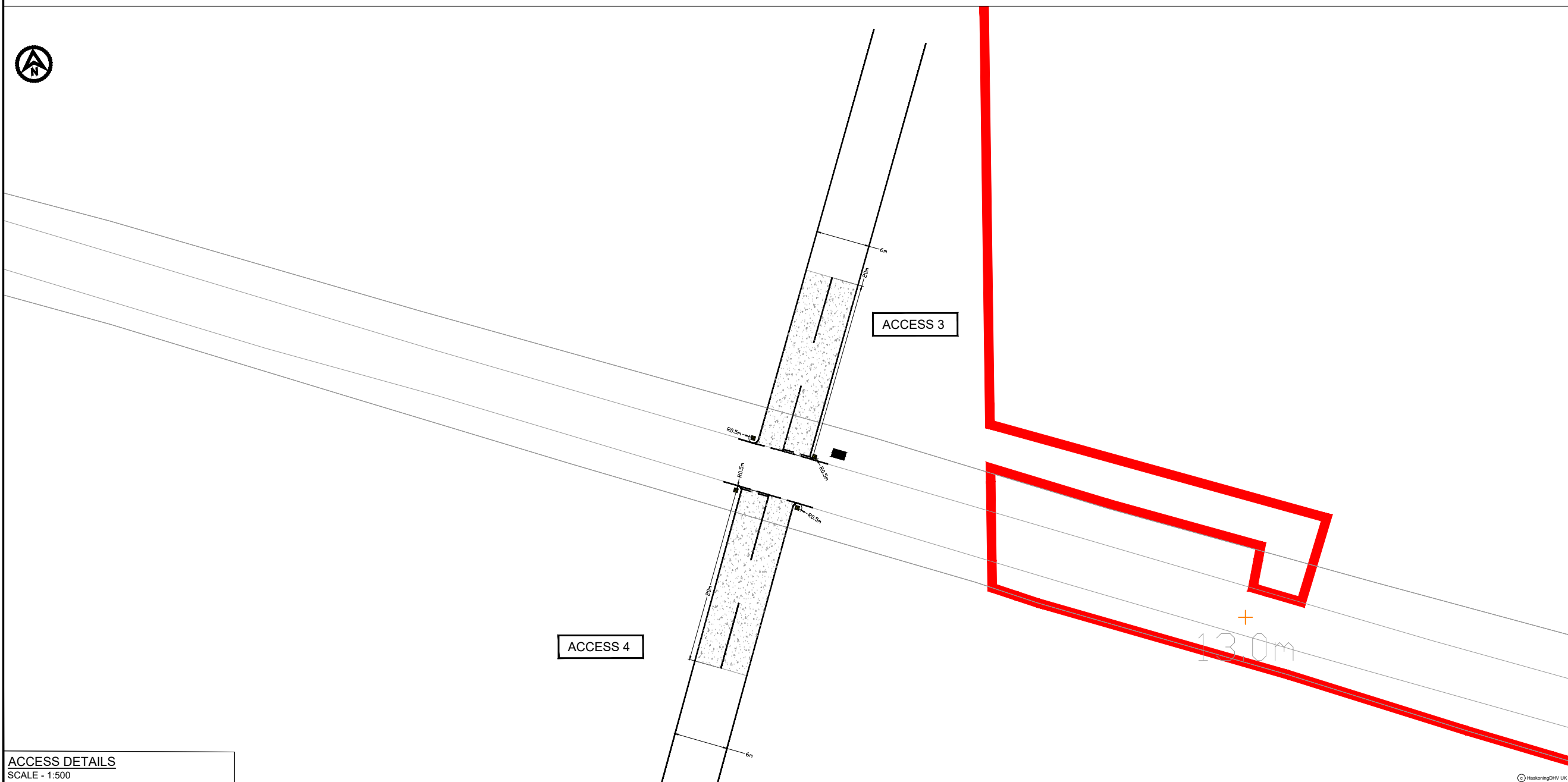


DRAWN	JL	CHECKED	SKT	APPROVED	ADR
DATE	09.10.18	SCALE AT A3	1:200	AUTOCAD REF.	

DRAWING No.	TP-PB4842-DR004	REVISION	D0.3
CLIENT DWG No.			



VISIBILITY DETAILS
SCALE - 1:2000



ACCESS DETAILS
SCALE - 1:500

- ## NOTES
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 2. This drawing has been based upon Ordnance Survey Maps and Royal HaskoningDHV can not guarantee the accuracy of data.
- ### Road markings and signs
3. All road markings and signs to conform with the 'Traffic Signs Regulation and General Directions 2016 and Chapter 8.
 4. 'Z' distance is the sitting distance of temporary road signs from the closest haul road crossing point/access location.
- ### Visibility
5. ASD - Stopping Sight Distance to traffic signals for design speed of road.
 6. All vegetation to be cleared/trimmed within identified visibility envelope.

KEY	
	FULL DEPTH CARRIAGEWAY CONSTRUCTION WITH BOUND SURFACE
	ORDER LIMITS
	PROPOSED ACCESS SHOULDER/ROAD MARKINGS
	SSD TO TRAFFIC LIGHTS (SEE VISIBILITY TABLE)
	PROPOSED TEMPORARY ROAD SIGN
	PROPOSED TRAFFIC SIGNAL
	PROPOSED YELLOW DEMARCATION BOLLARD

ACCESS 3 - NORTH SIDE OF B1353 (EAST OF ALDRINHAM)		VISIBILITY	
		EAST	WEST
Posted Speed Limit (PSL) (mph)		215	
Required SSD for PSL (m)		215	
Existing achievable SSD (m)		N/A	132
Required SSD achievable?		N/A	No
85 th percentile speed (mph)		54	14
Required SSD for 85 th percentile speed (m)		215	
Existing SSD suitable for 85 th percentile speeds		N/A	No
Proposed Reduced Speed Limit (RSL) (mph)		40	
Assumed design speed (mph)		40	
Required SSD for design speed (m)		120	
Required SSD achievable?		N/A	Yes
Traffic control measures required		Yes	
Distances measured on site.			

ACCESS 4 - SOUTH SIDE OF B1353 (EAST OF ALDRINHAM)		VISIBILITY	
		EAST	WEST
Posted Speed Limit (PSL) (mph)		40	
Required SSD for PSL (m)		215	
Existing achievable SSD (m)		189	N/A
Required SSD achievable?		No	N/A
85 th percentile speed (mph)		54	14
Required SSD for 85 th percentile speed (m)		215	
Existing SSD suitable for 85 th percentile speeds		No	N/A
Proposed Reduced Speed Limit (RSL) (mph)		40	
Assumed design speed (mph)		40	
Required SSD for design speed (m)		120	
Required SSD achievable?		Yes	N/A
Traffic control measures required		Yes	

D0.5	24.07.19	PAGE SIZE CHANGED FROM A3 TO A1	J1	SKT	SKT
D0.4	10.06.19	ORDER LIMITS, ACCESS LOCATION UPDATED	J1	SKT	SKT
D.03	16.11.18	ORDER LIMIT UPDATED	J1	SKT	ADR
D.02	14.11.18	EXTENSION OF TEMPORARY SPEED LIMIT	J1	SKT	ADR
D.01		FIRST ISSUE			
REV	DATE	DESCRIPTION	BY	CHK	APP

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PROJECT	

EAST Anglia ONE North

TITLE



DRAWN JI		CHECKED ST		APPROVED ADR	
DATE 09.10.18		SCALE AT A3 VARIES		AUTOCAD REF.	
DRAWING No. TP-PB4842-DR007					REVISION
CLIENT DWG No.					D0.5

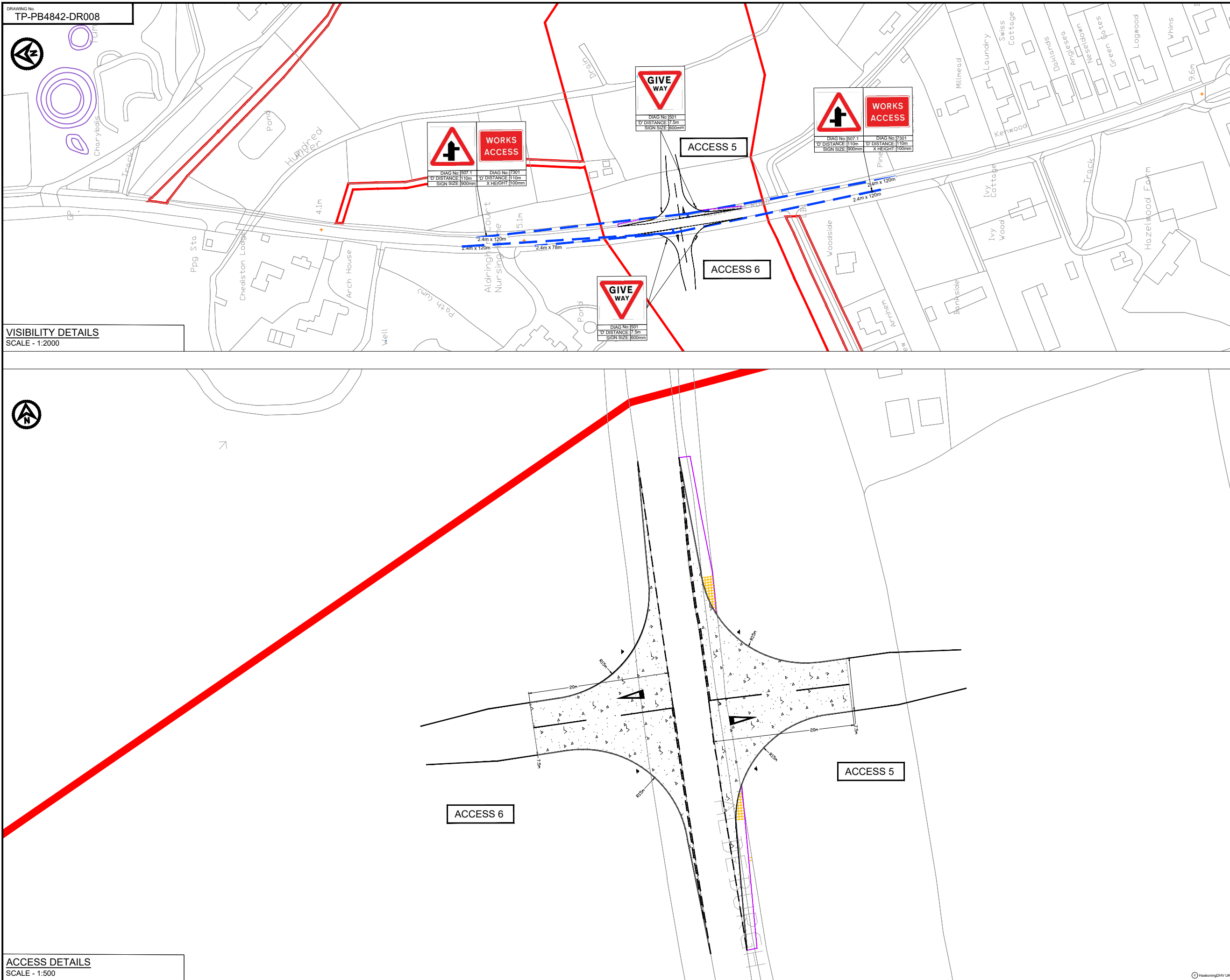
DRAWING No.
TP-PB4842-DR008



VISIBILITY DETAILS
SCALE - 1:2000

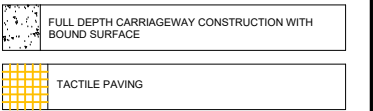


ACCESS DETAILS
SCALE - 1:500



- NOTES**
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- Road markings and signs**
3. All road markings and signage to conform with the 'Traffic Signs Regulation and General Directions 2016 and Chapter 8.
 4. 'D' distance is the stiling distance of temporary road signs from the closest haul road crossing point/access location.
- Visibility**
5. X-distance - the set back from the nearest edge of the carriageway from which the access will be taken
 6. Y-Distance - the SSD measured along the nearest edge of the carriageway to its intersection with the centreline of the access.
 7. SSD- Stopping Sight Distance for design speed of the road.
 8. All vegetation to be cleared/trimmed within identified visibility envelope.

- KEY**
- ORDER LIMITS
 - PROPOSED EXTENDED CYCLEWAY
 - PROPOSED ACCESS BOUNDARY/ROAD MARKINGS
 - VISIBILITY SPLAY (SEE VISIBILITY TABLE)
 - PROPOSED TEMPORARY ROAD SIGN



ACCESS 5 - EAST SIDE OF B1122 (SOUTH OF ALDRINGHAM)		VISIBILITY	
		NORTH	SOUTH
Posted Speed Limit (PSL) (mph)		40	
Required Y-distance SSD for PSL (m)		120	
Existing achievable Y-distance SSD (m)		120	120
Required Y-distance SSD achievable?		Yes	Yes
85 th percentile speed (mph)		44.7	
Required Y-distance SSD for 85 th percentile speed (m)		120	
Existing Y-distance SSD suitable for 85 th percentile speeds		Yes	Yes

ACCESS 6 - WEST SIDE OF B1122 (SOUTH OF ALDRINGHAM)		VISIBILITY	
		NORTH	SOUTH
Posted Speed Limit (PSL) (mph)		40	
Required Y-distance SSD for PSL (m)		120	
Existing achievable Y-distance SSD (m)		120	120
Required Y-distance SSD achievable?		Yes	Yes
85 th percentile speed (mph)		44.7	
Required Y-distance SSD for 85 th percentile speed (m)		120	
Existing Y-distance SSD suitable for 85 th percentile speeds		Yes	Yes

D0.3	24.07.19	PAGE SIZE CHANGED FROM A3 TO A1	JL	SKT	SKT
D0.4	11.06.19	ORDER LIMITS, ACCESS LOCATION UPDATED	JL	SKT	SKT
D0.3	11.04.19	HIGHWAY BOUNDARY ADDED	JL	SKT	SKT
D0.2	16.11.18	ORDER LIMITS UPDATED	JL	SKT	ADR
D.01		FIRST ISSUE			
REV	DATE	DESCRIPTION	BY	CHK	APP

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PROJECT
EAST Anglia ONE North

TITLE
ACCESS 5 & 6
B1122 ALDEBURGH ROAD



DRAWN	JL	CHECKED	ST	APPROVED	ADR
DATE	09.10.18	SCALE AT A3	VARIES	AUTOCAD REF.	
DRAWING No.	TP-PB4842-DR008				REVISION
CLIENT DWG No.					D0.5

DRAWING No.
TP-PB4842-DR009



ACCESS 5

B122 ALDEBURGH ROAD - ACCESS 5
SCALE - 1:200

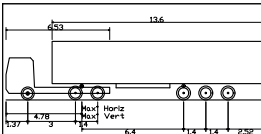
NOTES
1. Do not scale from this drawing, all dimensions are in metres unless noted otherwise.
2. This drawing has been based upon Ordnance Survey Maps and Royal HaskoningDHV can not guarantee the accuracy of data.

KEY
ORDER LIMITS
PROPOSED EXTENDED CYCLEWAY
PROPOSED ACCESS BOUNDARY/ROAD MARKINGS

FULL DEPTH CARRIAGEWAY CONSTRUCTION WITH BOUND SURFACE

TACTILE PAVING

VEHICLE TRACKING



Max Legal Length (UK) Articulated Vehicle (16.5m)
Overall Length 16.50m
Overall Width 2.55m
Overall Body Height 4.11m
Min Bdy Ground Clearance 0.41m
Max Track Width 2.50m
Lock to lock time 6.00s
Kerb to Kerb Turning Radius 6.530m

VEHICLE BODY SWEEP PATH (FORWARD GEAR)
VEHICLE CHASSIS SWEEP PATH

D0.3	24.07.19	DRAWING TITLE AMENDED	JL	SKT	SKT
D0.2	11.06.19	ORDER LIMITS, ACCESS LOCATION UPDATED	JL	SKT	SKT
D.01		FIRST ISSUE			
REV	DATE	DESCRIPTION	BY	CHK	APP

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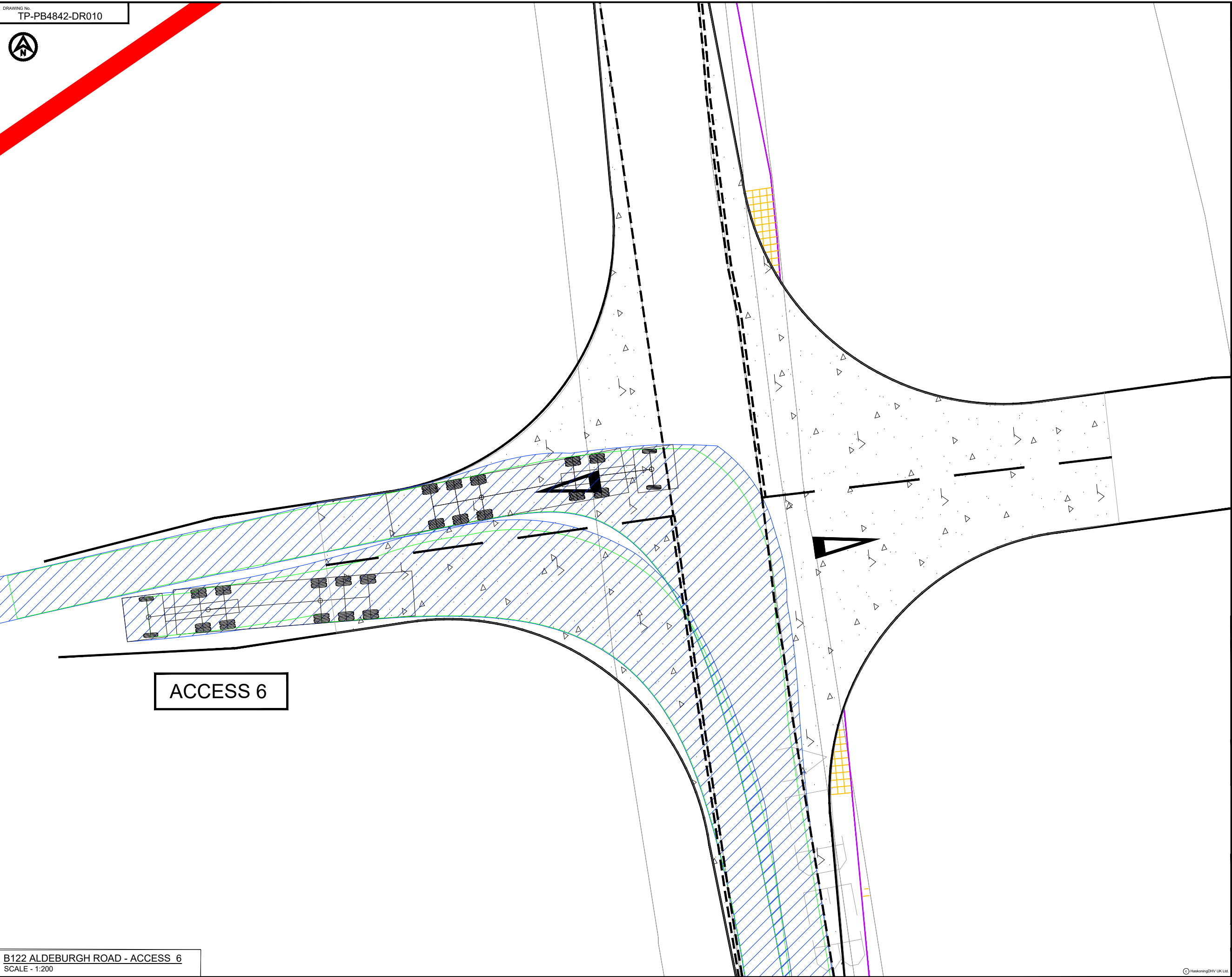
EAST Anglia ONE North

TITLE

ACCESS 5
B1122 ALDEBURGH ROAD
MAX ARTICULATED HGV
SWEEP PATH ANALYSIS



DRAWN	JL	CHECKED	SKT	APPROVED	ADR
DATE	09.10.18	SCALE AT A3	1:200	AUTOCAD REF.	
DRAWING No.	TP-PB4842-DR009	REVISION	D0.3		
CLIENT DWG No.					



B122 ALDEBURGH ROAD - ACCESS 6
SCALE - 1:200

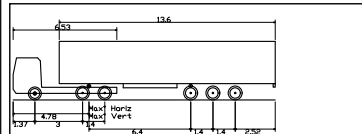
NOTES
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- KEY**
- ORDER LIMITS
 - PROPOSED EXTENDED CYCLEWAY
 - PROPOSED ACCESS BOUNDARY/ROAD MARKINGS

FULL DEPTH CARRIAGEWAY CONSTRUCTION WITH BOUND SURFACE

TACTILE PAVING

VEHICLE TRACKING



Max Legal Length (UK) Articulated Vehicle (16.5m)
Overall Length 16.50m
Overall Width 2.55m
Overall Body Height 4.1m
Min Body Ground Clearance 0.41m
Max Track Width 2.55m
Lock to lock time 6.0s
Kerb to Kerb Turning Radius 6.530m

- VEHICLE BODY SWEEP PATH (FORWARD GEAR)
- VEHICLE CHASSIS SWEEP PATH

D0.3	24.07.19	DRAWING TITLE AMENDED	JL	SKT	SKT
D0.2	11.06.19	ORDER LIMITS, ACCESS LOCATION UPDATED	JL	SKT	SKT
D.01		FIRST ISSUE			
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS
CLIENT



PROJECT
EAST Anglia ONE North

TITLE
ACCESS 6
B1122 ALDEBURGH ROAD
MAX ARTICULATED HGV
SWEEP PATH ANALYSIS



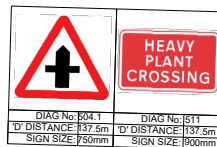
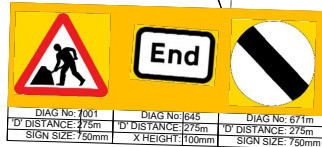
DRAWN	JL	CHECKED	SKT	APPROVED	ADR
DATE	09.10.18	SCALE AT A3	1:200	AUTOCAD REF.	

DRAWING No.	TP-PB4842-DR010	REVISION	D0.3
CLIENT DWG No.			

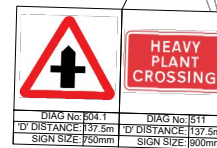
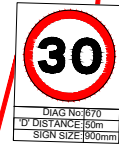
DRAWING No.
TP-PB4842-DR027



Covert



ACCESS 8



EXISTING SPEED LIMIT SIGNS TO BE REMOVED FOR THE DURATION OF THE CONSTRUCTION PERIOD

VISIBILITY DETAILS
SCALE - 1:2000



ACCESS 7

ACCESS 8

ACCESS DETAILS
SCALE - 1:500

NOTES

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- Visibility
- X-distance - the set back from the nearest edge of the carriageway from which the access will be taken
 - Y-distance - the SSD measured along the nearest edge of the carriageway to its intersection with the centreline of the access.
 - SSD - Stopping Sight Distance for design speed of the road.
 - All vegetation to be cleared/trimmed within identified visibility envelope.

KEY

FULL DEPTH CARRIAGEWAY CONSTRUCTION WITH BOUND SURFACE

HEDGEROW REMOVAL REQUIRED TO ACCOMMODATE VISIBILITY

- ORDER LIMITS
- PROPOSED ACCESS BOUNDARY/ROAD MARKINGS
- VISIBILITY SPLAY (SEE VISIBILITY TABLE)
- PROPOSED TEMPORARY ROAD SIGN

ACCESS 7 - EAST SIDE OF SLOE LANE (NORTH OF KNORDISHALL COMMON)		VISIBILITY	
		EAST	WEST
Posted Speed Limit (PSL) (mph)		30	30
Required Y-distance SSD for PSL (m)		215	215
Existing achievable Y-distance SSD (m)		12	101
Required Y-distance SSD achievable?		No	No
Proposed Reduced Speed Limit (RSL) (mph)		30	30
Assumed design speed (mph)		30	30
Required Y-distance SSD for design speed (m)		59(M15)	59(M15)
Required Y-distance SSD achievable?		Yes	Yes
Traffic control measures required		Yes	Yes

ACCESS 8 - WEST SIDE OF SLOE LANE (NORTH OF KNORDISHALL COMMON)		VISIBILITY	
		EAST	WEST
Posted Speed Limit (PSL) (mph)		30	30
Required Y-distance SSD for PSL (m)		215	215
Existing achievable Y-distance SSD (m)		91	19
Required Y-distance SSD achievable?		No	No
Proposed Reduced Speed Limit (RSL) (mph)		30	30
Assumed design speed (mph)		30	30
Required Y-distance SSD for design speed (m)		59(M15)	59(M15)
Required Y-distance SSD achievable?		Yes	Yes
Traffic control measures required		Yes	Yes

DO 2	24.07.19	HEDGEROW REMOVAL AND PAGE SIZE AMENDED	JL	SKT	SKT
D.01		FIRST ISSUE			
REV	DATE	DESCRIPTION	BY	CHK	APP

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PROJECT

EAST Anglia ONE North

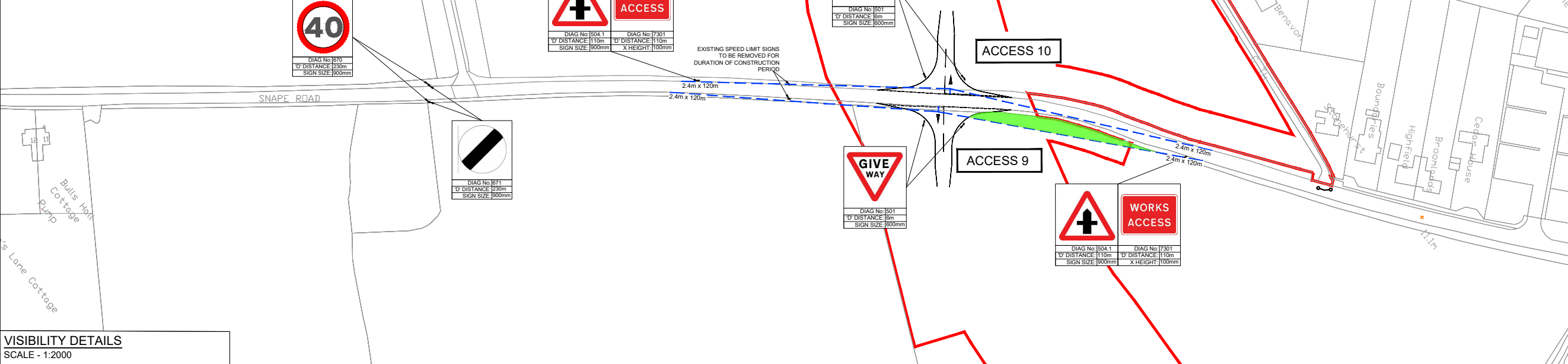
TITLE

ACCESS 7 & 8
SLOE LANE

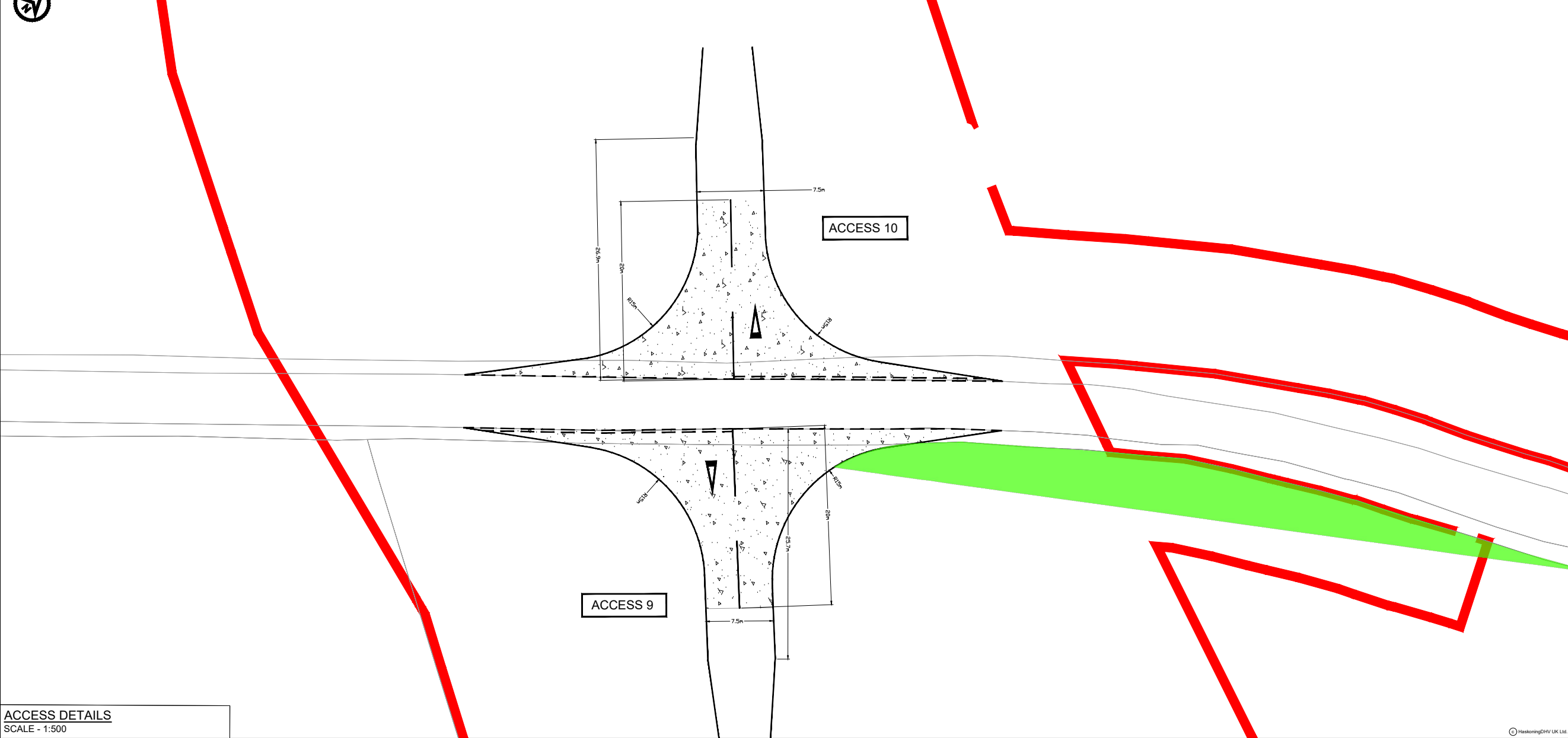


DRAWN	JL	CHECKED	ST	APPROVED	ADR
DATE	12.06.19	SCALE AT A3	VARIABLE	AUTOCAD REF.	
DRAWING No. TP-PB4842-DR027					REVISION
CLIENT DWG No.					D0.2

DRAWING No.
TP-PB4842-DR011



VISIBILITY DETAILS
SCALE - 1:2000



ACCESS DETAILS
SCALE - 1:500

- NOTES**
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- Road markings and signs**
- All road markings and signage to conform with the 'Traffic Signs Regulation and General Directions 2016 and Chapter 8.
 - 'Y' distance is the sighting distance of temporary road signs from the closest haul road crossing point/access location.

- Visibility**
- X-distance - the set back from the nearest edge of the carriageway from which the access will be taken
 - Y-Distance - the SSD measured along the nearest edge of the carriageway to its intersection with the centreline of the access.
 - SSD - Stopping Sight Distance for design speed of the road.
 - All vegetation to be cleared/trimmed within identified visibility envelope.

- KEY**
- FULL DEPTH CARRIAGEWAY CONSTRUCTION WITH BOUND SURFACE
 - HEDGEROW REMOVAL REQUIRED TO ACCOMMODATE VISIBILITY
 - ORDER LIMITS
 - PROPOSED ACCESS BOUNDARY/ROAD MARKINGS
 - VISIBILITY SPLAY (SEE VISIBILITY TABLE)
 - PROPOSED TEMPORARY ROAD SIGN

ACCESS 9 - EAST SIDE OF B1069 (SOUTH OF COLDFAIR GREEN)		VISIBILITY NORTH SOUTH	
Posted Speed Limit (PSL) (mph)	40		
Required Y-distance SSD for PSL (m)	120		
Existing achievable Y-distance SSD (m)	50	95	
Required Y-distance SSD achievable?	No	No	
85 th percentile speed (mph)	39.4		
Required Y-distance SSD for 85 th percentile speed (m)	120		
Existing Y-distance SSD suitable for 85 th percentile speeds	No	No	
Proposed Reduced Speed Limit (RSL) (mph)	40		
Assumed design speed (mph)	40		
Required Y-distance SSD for design speed (m)	120		
Required Y-distance SSD achievable?	Yes	Yes	
Traffic control measures required	Yes		

ACCESS 10 - WEST SIDE OF B1069 (SOUTH OF COLDFAIR GREEN)		VISIBILITY NORTH SOUTH	
Posted Speed Limit (PSL) (mph)	40		
Required Y-distance SSD for PSL (m)	120		
Existing achievable Y-distance SSD (m)	145	268	
Required Y-distance SSD achievable?	Yes	Yes	
85 th percentile speed (mph)	39.4		
Required Y-distance SSD for 85 th percentile speed (m)	120		
Existing Y-distance SSD suitable for 85 th percentile speeds	Yes	Yes	
Proposed Reduced Speed Limit (RSL) (mph)	40		
Assumed design speed (mph)	40		
Required Y-distance SSD for design speed (m)	120		
Required Y-distance SSD achievable?	Yes	Yes	
Traffic control measures required	Yes		

D0.4	24.07.19	PAGE SIZE CHANGED FROM A3 TO A1	JL	SKT	SKT
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D0.2	16.11.18	ORDER LIMITS UPDATED	JL	SKT	ADR
D.01		FIRST ISSUE			

REV	DATE	DESCRIPTION	BY	CHK	APP
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REVISIONS

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PROJECT

EAST Anglia ONE North

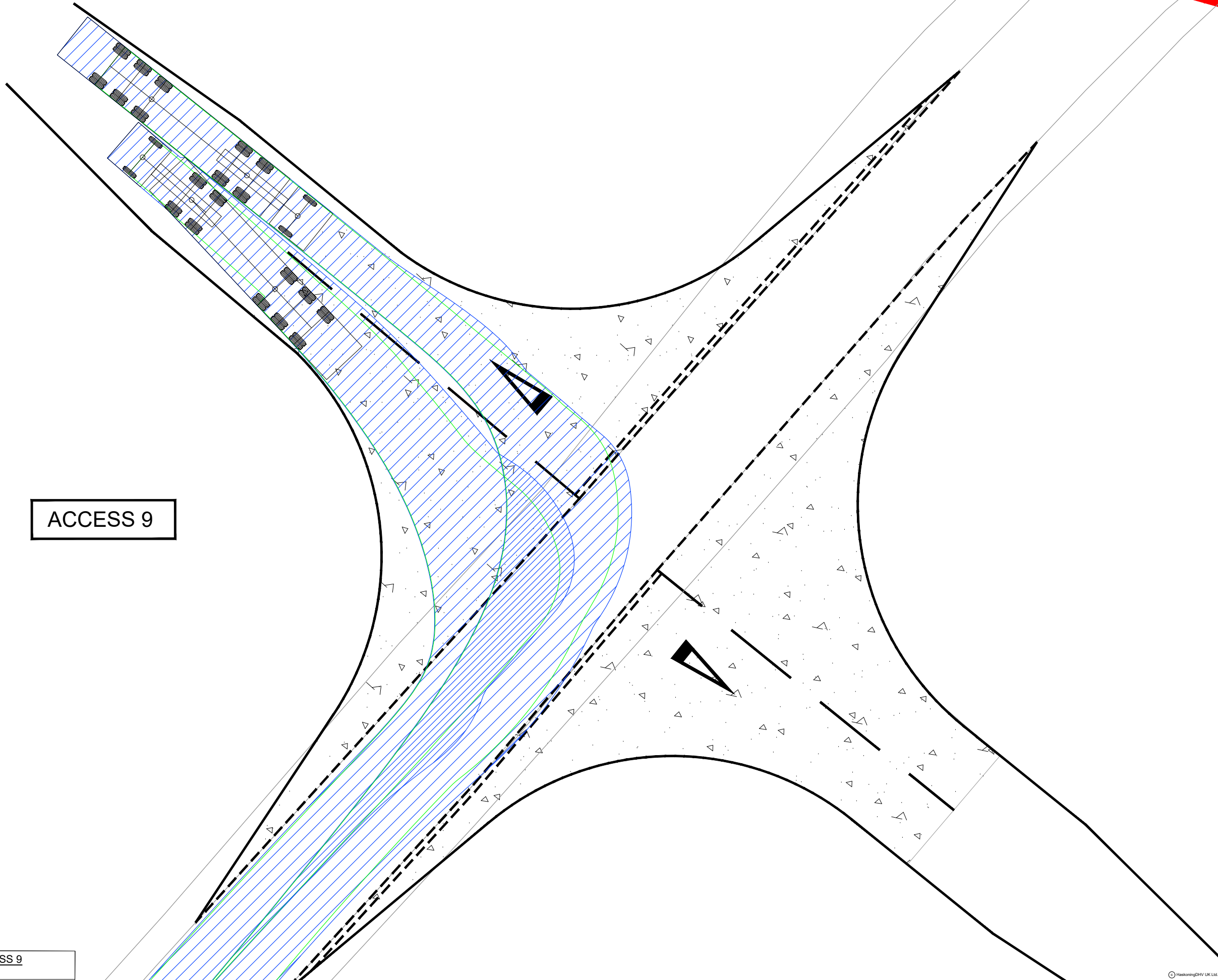
TITLE

ACCESS 9 & 10
SNAPE ROAD



Enterprise House,
Delta Way, Egham,
Surrey, TW20 8RX
Tel +44(0)1832 589596
www.royalhaskoningdhv.com

DRAWN	JL	CHECKED	ST	APPROVED	ADR
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DRAWING No.	TP-PB4842-DR011				REVISION
CLIENT DWG No.					D0.4



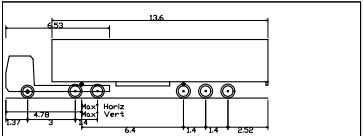
SNAPE ROAD - ACCESS 9
SCALE - 1:200

- NOTES**
1. Do not scale from this drawing, all dimensions are in metres unless noted otherwise.
 2. This drawing has been based upon Ordnance Survey Maps and Royal HaskoningDHV can not guarantee the accuracy of data.

- KEY**
- ORDER LIMITS
 - PROPOSED ACCESS BOUNDARY/ROAD MARKINGS

FULL DEPTH CARRIAGEWAY CONSTRUCTION WITH BOUND SURFACE

VEHICLE TRACKING



Max Legal Length (UK) Articulated Vehicle (16.5m)
Overall Length 16.50m
Overall Width 2.55m
Overall Body Height 3.68m
Min Body Ground Clearance 0.41m
Max Track Width 2.50m
Lock to lock time 6.0s
Kerb to Kerb Turning Radius 6.53m

- VEHICLE BODY SWEEP PATH (FORWARD GEAR)
- VEHICLE CHASSIS SWEEP PATH



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D0.2	27.06.19	ORDER LIMITS, ACCESS LOCATION UPDATED	JL	SKT	SKT
D.01		FIRST ISSUE			
REV	DATE	DESCRIPTION	BY	CHK	APP

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PROJECT

EAST Anglia ONE North

TITLE

ACCESS 9
SNAPE ROAD
MAX ARTICULATED HGV
SWEEP PATH ANALYSIS
(RIGHT TURN IN / LEFT TURN OUT)



DRAWN	JL	CHECKED	SKT	APPROVED	ADR
DATE	09.10.18	SCALE AT A3	1:200	AUTOCAD REF.	
DRAWING No.	TP-PB4842-DR012	REVISION			
CLIENT DWG No.					D0.3



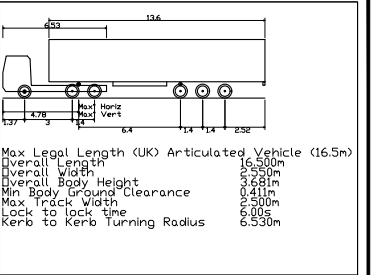
ACCESS 10

NOTES
1. Do not scale from this drawing, all dimensions are in metres unless noted otherwise.
2. This drawing has been based upon Ordnance Survey Maps and Royal HaskoningDHV can not guarantee the accuracy of data.

KEY
— ORDER LIMITS
— PROPOSED ACCESS BOUNDARY/ROAD MARKINGS

 FULL DEPTH CARRIAGEWAY CONSTRUCTION WITH BOUND SURFACE

VEHICLE TRACKING



 VEHICLE BODY SWEEP PATH (FORWARD GEAR)
 VEHICLE CHASSIS SWEEP PATH

D0.3	24.07.19	DRAWING TITLE AMENDED	JL	SKT	SKT
D0.2	27.06.19	ORDER LIMITS, ACCESS LOCATION UPDATED	JL	SKT	SKT
D.01		FIRST ISSUE			
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CLIENT



PROJECT

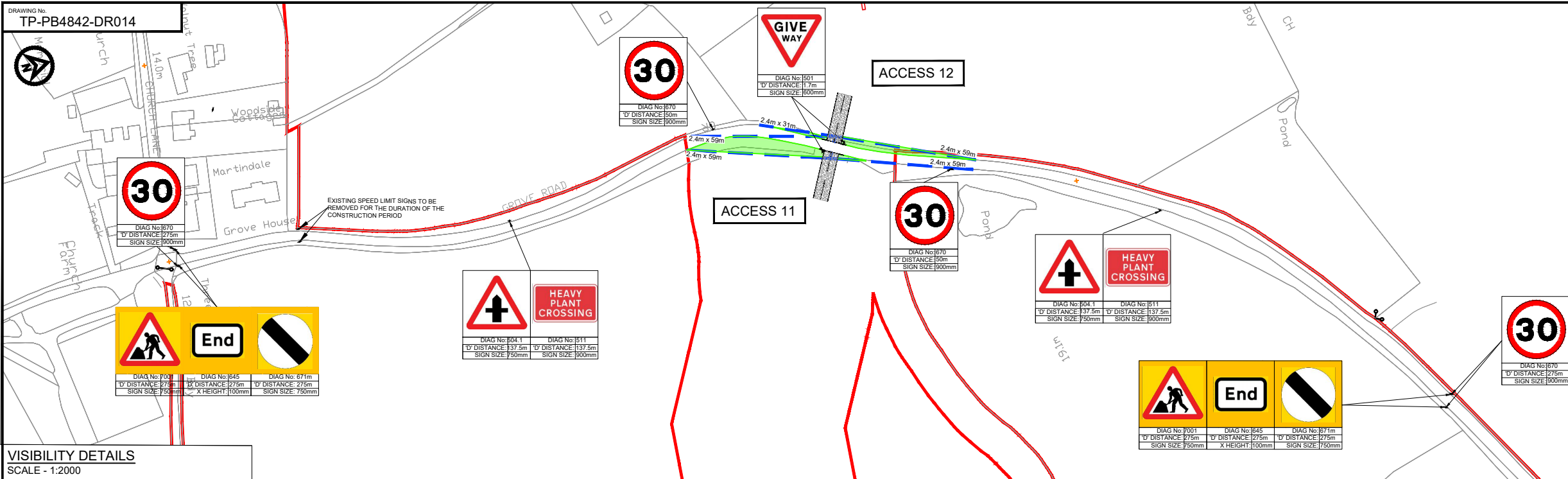
EAST Anglia ONE North

TITLE

ACCESS 10
SNAPE ROAD
MAX ARTICULATED HGV
SWEEP PATH ANALYSIS
(LEFT TURN OUT)



DRAWN	JL	CHECKED	SKT	APPROVED	ADR
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DRAWING No.	TP-PB4842-DR013	REVISION			
CLIENT DWG No.					D0.3



VISIBILITY DETAILS

SCALE - 1:2000



ACCESS DETAILS

SCALE - 1:500

NOTES

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 2. This drawing has been based upon Ordnance Survey Maps and Royal HaskoningDHV can not guarantee the accuracy of data.
- Visibility
3. X-distance - the set back from the nearest edge of the carriageway from which the access will be taken
 4. Y-distance - the SSD measured along the nearest edge of the carriageway to its intersection with the centreline of the access.
 5. SSD - Stopping Sight Distance for design speed of the road.
 6. All vegetation to be cleared/trimmed within identified visibility envelope.

KEY

- | | |
|---|--|
|  | FULL DEPTH CARRIAGEWAY CONSTRUCTION WITH BOUND SURFACE |
|  | HEDGEROW REMOVAL REQUIRED TO ACCOMMODATE VISIBILITY |
|  | ORDER LIMITS |
|  | PROPOSED ACCESS BOUNDARY/ROAD MARKINGS |
|  | VISIBILITY PLAY (SEE VISIBILITY TABLE) |
|  | PROPOSED SPEED VISIBILITY PLAY |
|  | PROPOSED TEMPORARY ROAD SIGN |

ACCESS 11 - EAST SIDE OF GROVE ROAD (NORTH OF FRISTON)	VISIBILITY	
	EAST	WEST
Proposed Speed Limit (PSL) (mph)		
Required Y-distance SSD for PSL (m)	215	
Existing achievable Y-distance SSD (m)	35	45
Required Y-distance SSD achievable?	No	No
85 th percentile speed (mph)	31.9	
Required Y-distance SSD for 85 th percentile speed (m)	59 (MS)	
Proposed Reduced Speed Limit (RSL) (mph)	30	
Required Y-distance SSD for design speed (m)	39	
Required Y-distance SSD achievable?	Yes	Yes
Traffic control measures required	Yes	
Distances measured on site		

ACCESS 12 - WEST SIDE OF GROVE ROAD (NORTH OF FRISTON)		VISIBILITY	
		EAST	WEST
Posted Speed Limit (PSL) (mph)		60	
Required Y-distance SSD for PSL (m)		215	
Existing achievable Y-distance SSD ¹ (m)		0	0
Required Y-distance SSD achievable?		No	No
85 th percentile speed (mph)		31.9	
Required Y-distance SSD for 85 th percentile speed (m)		59 (MIS)	
Proposed Reduced Speed Limit (RSL) (mph)		30	
Required Y-distance SSD for design speed (m)		59	
Required Y-distance SSD achievable?		Yes	Yes
Traffic control measures required		Yes	
Distances measured on site.			

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D.0.3	12.06.19	ORDER LIMITS UPDATED	J1	SKT	SKT
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REV	DATE	DESCRIPTION	BY	CHK	APP

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PROJECT

EAST Anglia ONE North

TITLE

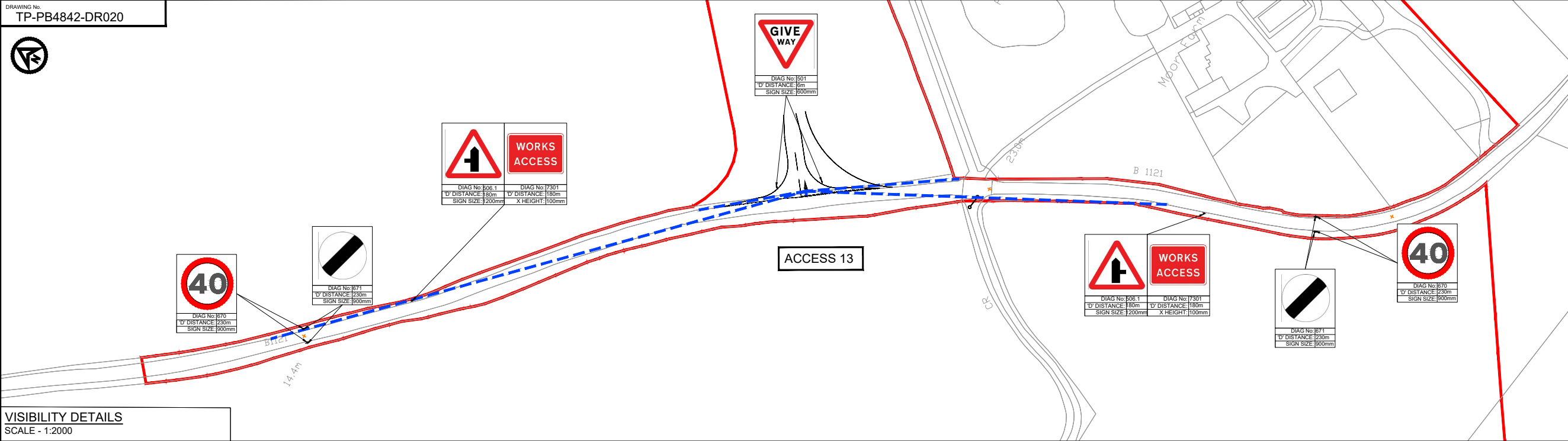
ACCESS 11 & 12
GROVE ROAD



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Delta Way, Egham,
Surrey, TW20 8RX
Tel +44(0)1932 569566
www.royalhaskoningindhiv.com

DRAWN JI		CHECKED ST		APPROVED ADR	
DATE 09.10.18		SCALE AT A3 VARIES		AUTOCAD REF.	
DRAWING No. TP-PB4842-DR014					REVISION
CLIENT DWG No.					D0.4

DRAWING No.
TP-PB4842-DR020



VISIBILITY DETAILS
SCALE - 1:2000



ACCESS DETAILS
SCALE - 1:200

- NOTES**
- Do not scale from this drawing, all dimensions are in metres unless noted otherwise.
 - This drawing has been based upon Ordnance Survey Maps and Royal HaskoningDHV can not guarantee the accuracy of data.
- Road markings and signs**
- All road markings and signage to conform with the 'Traffic Signs Regulation and General Directions 2016 and Chapter 8.
 - 'D' distance is the sighting distance of temporary road signs from the closest haul road crossing point/access location.
- Visibility**
- X-distance - the set back from the nearest edge of the carriageway from which the access will be taken
 - Y-distance - the SSD measured along the nearest edge of the carriageway to its intersection with the centreline of the access.
 - SSD - Stopping Sight Distance for design speed of the road.
 - All vegetation to be cleared/trimmed within identified visibility envelope.

KEY

	PROPOSED ACCESS BOUNDARY/ROAD MARKINGS
	VISIBILITY SPY (SEE VISIBILITY TABLE)
	PROPOSED TEMPORARY ROAD SIGN
	FULL DEPTH CARRIAGEWAY CONSTRUCTION WITH BOUND SURFACE
	INDICATIVE ABNORMAL LOAD VEHICLE OVERRUN AREA

ACCESS 13 - B1121		VISIBILITY	
		NORTH	SOUTH
Posted Speed Limit (PSL) (mph)		60	
Required Y-distance SSD for PSL (m)		215	
Existing achievable Y-distance SSD (m)		247	161
Required Y-distance SSD achievable?	Yes	No	
85 th percentile speed (mph)		43.8	
Required Y-distance SSD for 85 th percentile speed (m)		160	
Existing Y-distance SSD suitable for 85 th percentile speeds	Yes	Yes	
Proposed Reduced Speed Limit (RSL) (mph)		40	

Distances measured on site.



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PROJECT

EAST Anglia ONE North

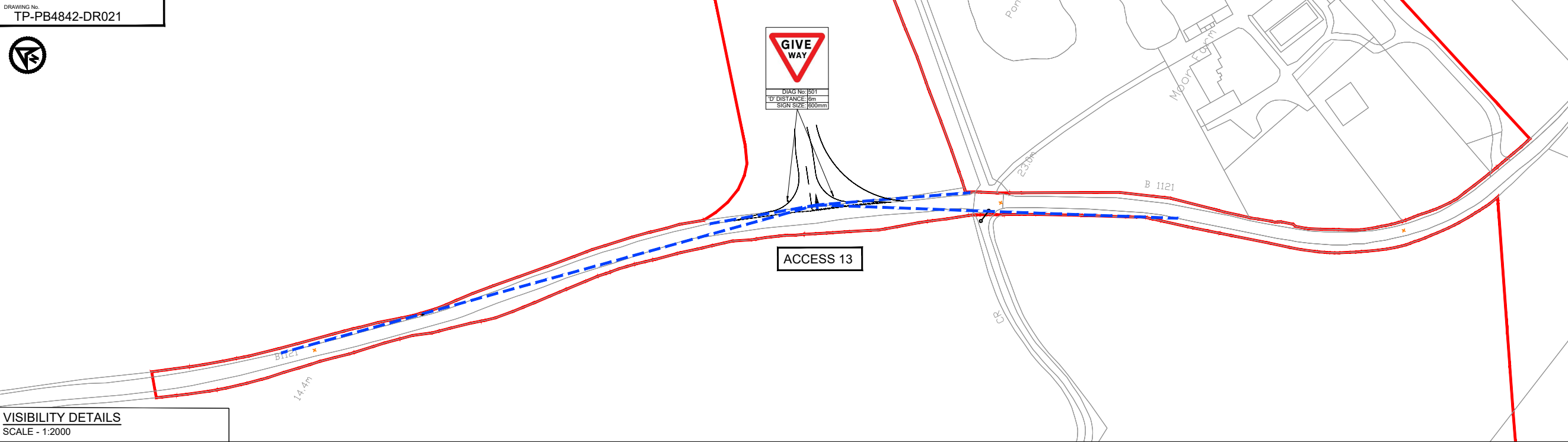
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ACCESS 13
B1121
CONSTRUCTION PHASE

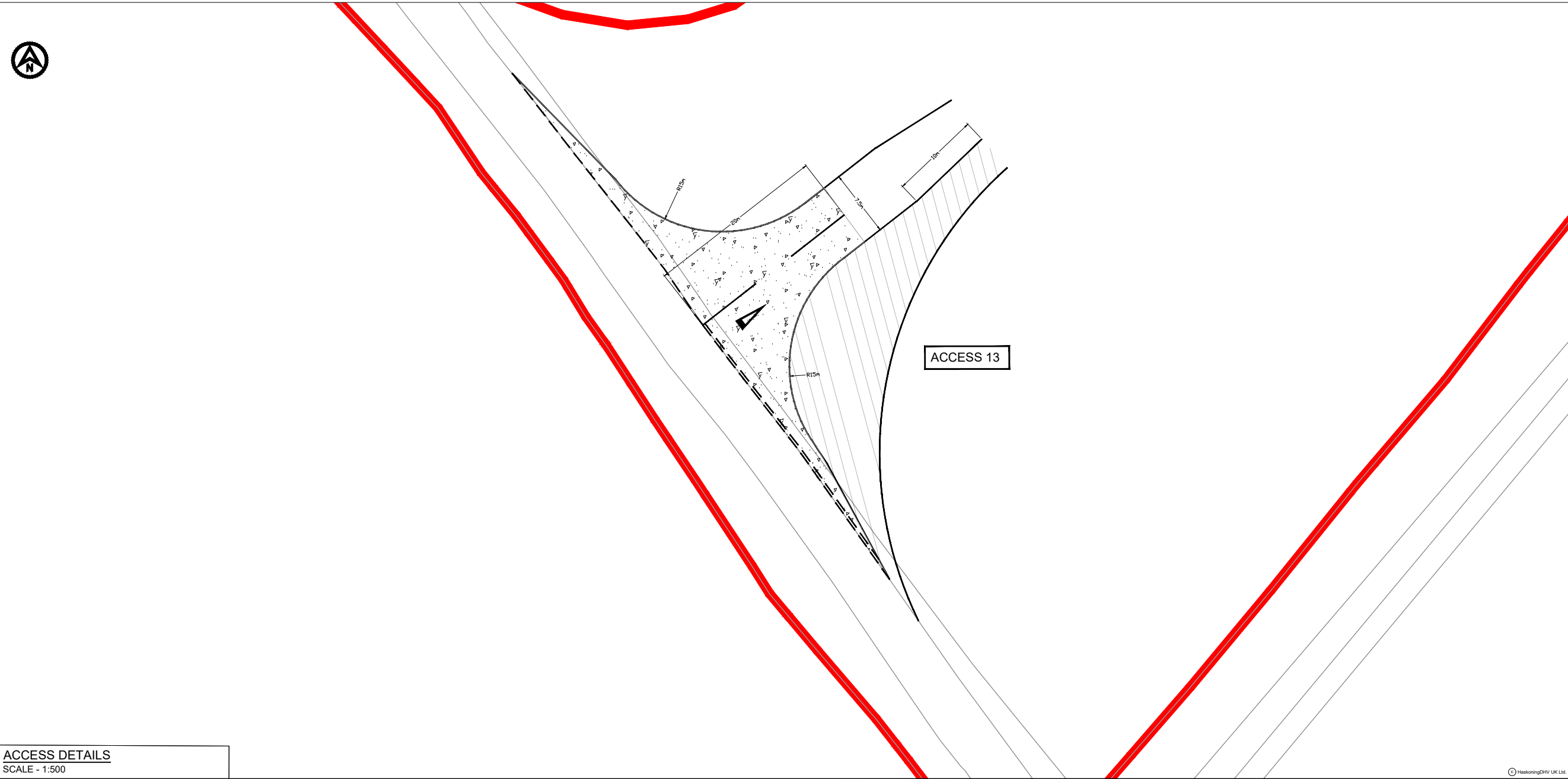


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DATE	13.11.18	SCALE AT A3	VARIES	AUTOCAD REF.	
DRAWING No.	TP-PB4842-DR020				REVISION
CLIENT DWG No.					D0.3

DRAWING No.
TP-PB4842-DR021



VISIBILITY DETAILS
SCALE - 1:2000



ACCESS DETAILS
SCALE - 1:500

- NOTES**
1. Do not scale from this drawing, all dimensions are in metres unless noted otherwise.
 2. This drawing has been based upon Ordnance Survey Maps and Royal HaskoningDHV can not guarantee the accuracy of data.
 3. All road markings and signage to conform with the 'Traffic Signs Regulation and General Directions 2016 and Chapter 8.
 4. 'D' distance is the sighting distance of temporary road signs from the closest haul road crossing point/access location.
- Visibility**
5. X-distance - the set back from the nearest edge of the carriageway from which the access will be taken
 6. Y-distance - the SSD measured along the nearest edge of the carriageway to its intersection with the centreline of the access.
 7. SSD - Stopping Sight Distance for design speed of the road.
 8. All vegetation to be cleared/trimmed within identified visibility envelope.

KEY

	PROPOSED ACCESS BOUNDARY/ROAD MARKINGS
	VISIBILITY SPY (SEE VISIBILITY TABLE)
	PROPOSED ROAD SIGN
	FULL DEPTH CARRIAGEWAY CONSTRUCTION WITH BOUND SURFACE
	INDICATIVE ABNORMAL LOAD VEHICLE OVERRUN AREA

ACCESS 13 - B1121		VISIBILITY	
		NORTH	SOUTH
Posted Speed Limit (PSL) (mph)		60	
Required Y-distance SSD for PSL (m)		215	
Existing achievable Y-distance SSD (m)		247	161
Required Y-distance SSD achievable?		Yes	No
85 th percentile speed (mph)		43.8	
Required Y-distance SSD for 85 th percentile speed (m)		160	
Existing Y-distance SSD suitable for 85 th percentile speeds		Yes	Yes

* Distances measured on site.



D0.3	24.07.19	PAGE SIZE CHANGED FROM A3 TO A1	JL	SKT	SKT
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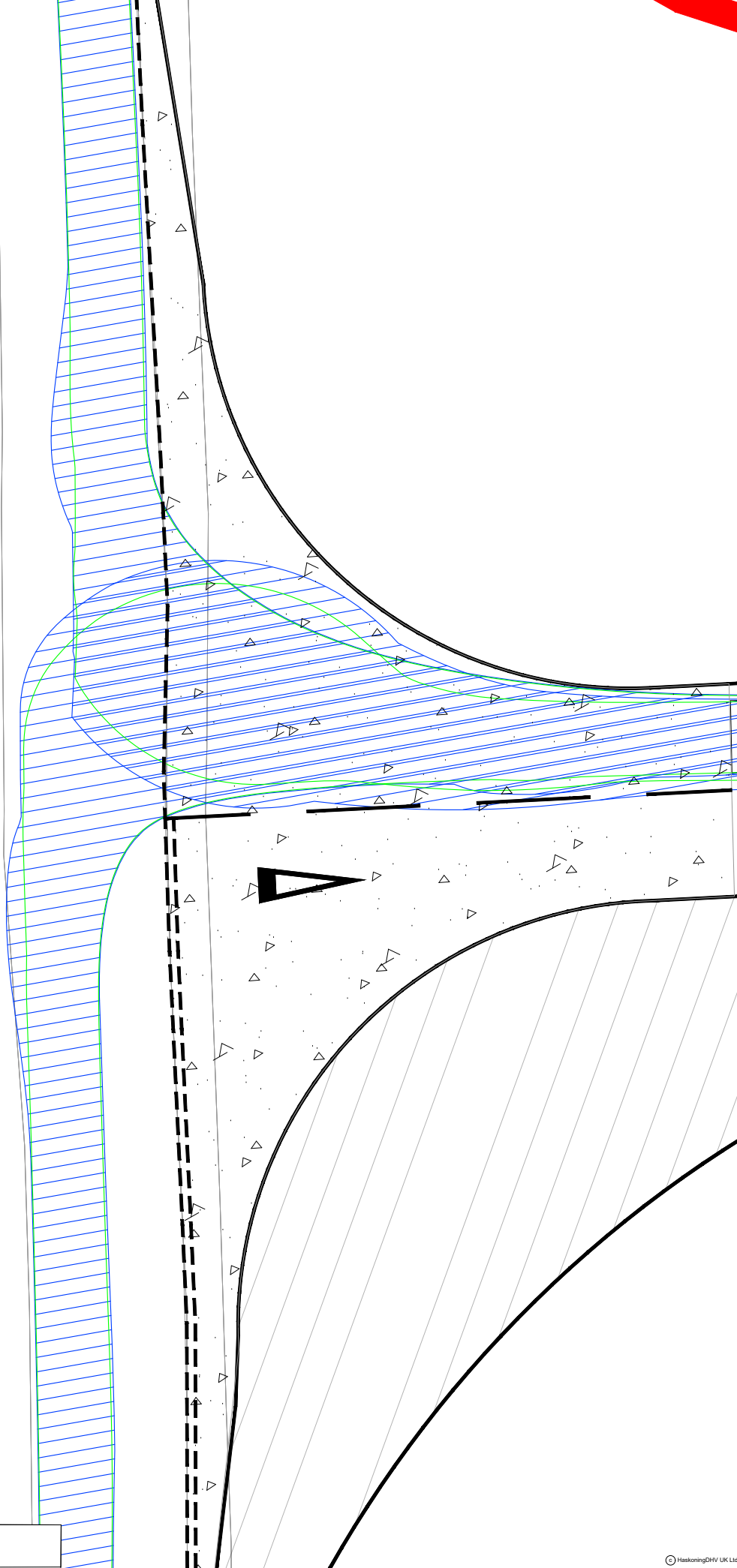
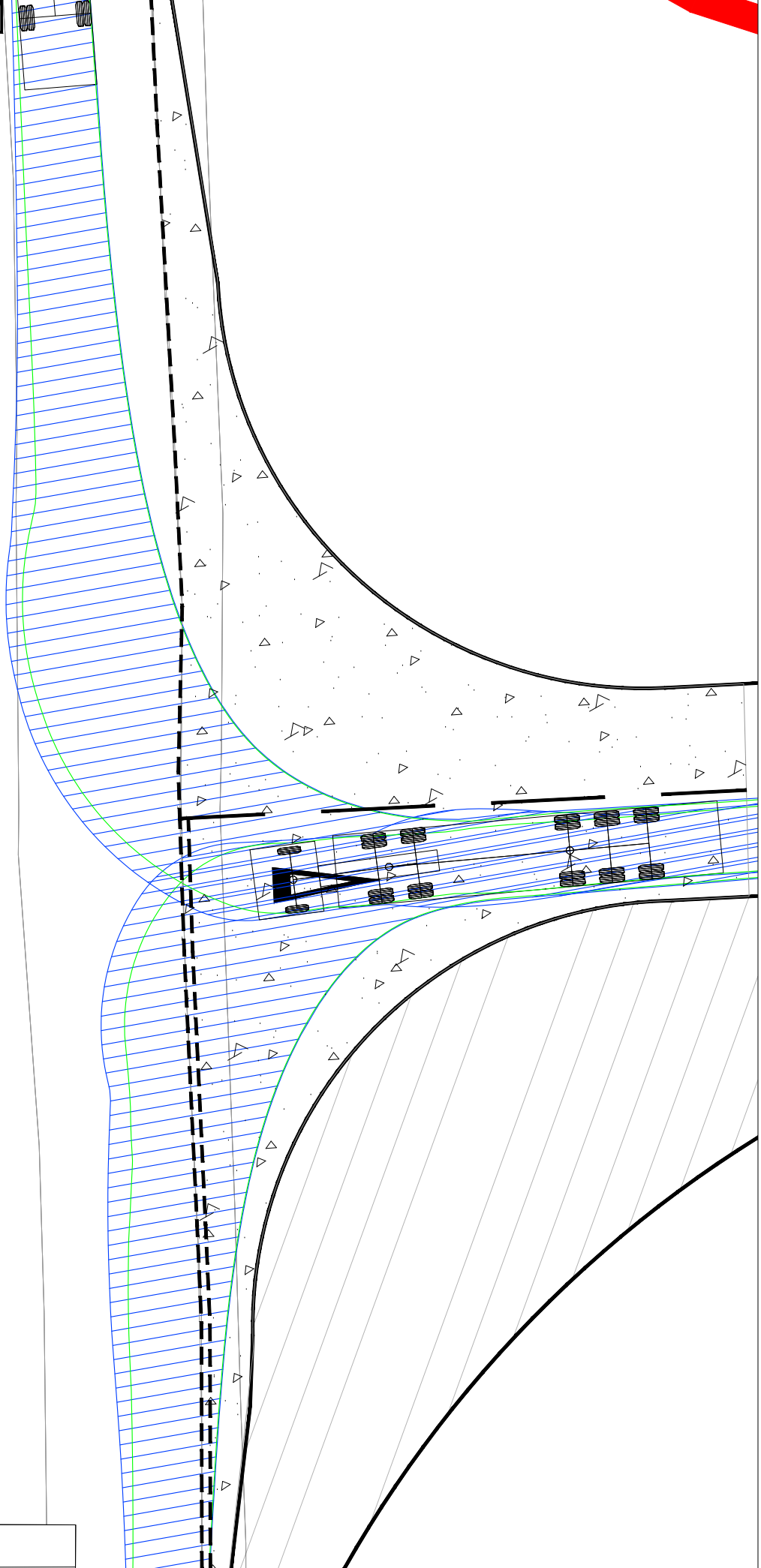
EAST Anglia ONE North

TITLE

ACCESS 13
B1121
OPERATIONAL PHASE



DRAWN	JL	CHECKED	ST	APPROVED	ADR
DATE	13.11.18	SCALE AT A3	VARIABLE	AUTOCAD REF.	
DRAWING No	TP-PB4842-DR021				REVISION
CLIENT DWG No.					D0.3



NOTES
1. Do not scale from this drawing, all dimensions are in metres unless noted otherwise.
2. This drawing has been based upon Ordnance Survey Maps and Royal HaskoningDHV can not guarantee the accuracy of data.

KEY

- ORDER LIMITS
- PROPOSED ACCESS BOUNDARY/ROAD MARKINGS

FULL DEPTH CARRIAGEWAY CONSTRUCTION WITH BOUND SURFACE

VEHICLE TRACKING

Max Legal Length (UK) Articulated Vehicle (16.5m)
Overall Length 16.500m
Overall Width 2.550m
Overall Body Height 3.581m
Min Body Ground Clearance 0.411m
Max Track Width 2.500m
Lock to lock time 6.005s
Kerb to Kerb Turning Radius 6.550m

VEHICLE BODY SWEEP PATH (FORWARD GEAR)
VEHICLE CHASSIS SWEEP PATH



D0.3	24.07.19	DRAWING TITLE AMENDED	JL	SKT	SKT
D0.2	12.06.19	ORDER LIMITS UPDATED	JL	SKT	SKT
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PROJECT

EAST Anglia ONE North

TITLE

ACCESS 13
B1121
MAX ARTICULATED HGV
SWEPT PATH ANALYSIS

Royal HaskoningDHV
Enhancing Society Together

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DATE	13.11.18	SCALE AT A3	1:200	AUTOCAD REF.	
DRAWING No.	TP-PB4842-DR022	REVISION			D0.3
CLIENT DWG No.					

Annex 2: Stage 1 Road Safety Audit and Designers Response

ROAD SAFETY AUDIT – DESIGNER’S RESPONSE

Project	East Anglia ONE North Offshore Windfarm
Audit Reference	T&P PB4842 RSA1
Date of Audit	17.07.2019
Audit Team Members	Vicky Seaton and Bryn Buck

Paragraph No. / Problem No.	Problem Accepted (Yes / No)	Recommended Measure Accepted (Yes / No)	Notes, alternative Measure (describe)
B1.1.1 / Problem 1	Yes	Yes	Details of a relocated bus stop will be provided for the Stage 2 Road Safety Audit (RSA)
B1.2.1 / Problem 2	Yes	Yes	Detail of surfacing materials will be provided for the Stage 2 RSA.
B2.2.1 / Problem 3	Yes	Yes	The Access Management Plan includes a requirement for the Contractor to maintain visibility splays for the duration of use of the access.
B2.3.1 / Problem 4	Yes	Yes	Details of the location of utilities’ and any required diversions will be provided for the Stage 2 RSA.
B5.1.1 / Problem 5	Yes	Yes	Details of relocated signing will be provided for the Stage 2 RSA.
B5.1.2 / Problem 6	Yes	Yes	Details of signing sizes and carriageway offsets will be provided for the Stage 2 RSA.
B5.1.3 / Problem 7	Yes	Yes	Details of signing sizes and carriageway offsets will be provided for the Stage 2 RSA.
B5.1.4 / Problem 8	Yes	Yes	Details of relocated signing will be provided for the Stage 2 RSA.
B5.1.5 / Problem 9	Yes	Yes	Details of signing sizes and carriageway offsets will be provided for the Stage 2 RSA.
B5.2.1 / Problem 10	Yes	Yes	Details of amendments of the center line markings will be provided for the Stage 2 RSA

Signed: SIGNATURE REDACTED

Date: 30.07.2019

Name: Sam Taylor

Please submit this completed Designer’s Response to the Local Highway Authority, in conjunction with the associated Road Safety Audit.

East Anglia ONE North Offshore Windfarm

Stage 1 Road Safety Audit

Client: Scottish PowerRenewables

Reference: T&P PB4842 RSA1

Status: 01/Final

Date: 30 July 2019

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Document title: East Anglia ONE North Offshore Windfarm

Document short title: East Anglia ONE North - RSA1

Reference: T&P PB4842 RSA1

Status: 01/Final

Date: 30 July 2019

Project name: East Anglia ONE North Offshore
Windfarm Project number: PB4842

Author(s): Vicky Seaton

Drafted by: Vicky Seaton

Checked by: Bryn Buck

Date / initials: 05.07.2019 / BB

Approved by: Vicky Seaton

Date / initials: 17.07.2019

Classification

Project related



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Table of Contents

1	Introduction	1
2	Matters Arising from this Stage 1 Road Safety Audit	3
B1	Local Alignment	3
B2	General	4
B3	Junctions	5
B4	Walking, Cycling and Horse Riding	5
B5	Traffic Signs, Carriageway Markings and Lighting	6
3	Audit Team Statement	8

Table of Figures

Figure 1 – Audit Locations Plan

Figure 2 – Problem Location Plan

Appendices

Appendix A – Documents forming the Audit Brief

1 Introduction

1.1.1 Royal HaskoningDHV has been appointed by Scottish PowerRenewables to undertake a Stage 1 Road Safety Audit. This Audit refers to the construction access points and haul road crossings of the existing highway network for the proposed East Anglia ONE North project. The locations of the 13 accesses audited are shown on **Figure 1** of this report.

1.1.2 The Audit Team for this Stage 1 Road Safety Audit was as follows:

Audit Team Leader

Vicky Seaton, BSc (Hons), MSoRSA, MCIHT, HE CoC
HaskoningDHV UK Limited

Audit Team Member

Bryn Buck, MIHE
HaskoningDHV UK Limited

1.1.3 The Road Safety Audit took place at the Birmingham office of Royal HaskoningDHV on Thursday 4th July, in accordance with information provided by Sam Taylor of Royal HaskoningDHV's Peterborough office. The Road Safety Audit comprised an examination of the documents listed in **Appendix A** of this report.

1.1.4 A site visit by the above Audit Team was undertaken on Wednesday 3rd July between 14:00 and 16:30. Weather conditions during the site visit were fine and surface conditions were dry.

1.1.5 The terms of reference for the Road Safety Audit are described in GG 119¹. The Road Safety Audit has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the design to any other criteria.

1.1.6 The Audit is concerned with 13 proposed accesses and haul road crossings and their interface with the existing public highway network. The access strategy for the proposed East Anglia ONE North project includes both accesses and crossings. The accesses provide for access and egress to and from the existing public highway, whilst crossings would only permit ~~from outside of the existing~~ public highway to the other. No construction access or egress would be permitted from the crossing points.

1.1.7 Access 13 would also provide a permanent access to the onshore substation and National Grid substation and would therefore remain for the operational life of the proposed East Anglia ONE North project.

1.1.8 The locations of any problems observed by the Audit Team are shown on **Figure 2** of this report.

1.1.9 A summary of Personal Injury Collision (PIC) data has been provided to the Audit Team as part of the completed Audit Brief. The PIC data identified collisions within the study area for the period between 1st February 2013 and 1st February 2018 inclusive.

1.1.10 The collision data indicates that two 'slight' collisions were recorded on the B1069 within proximity of Accesses and 10. The first 'slight' collision was due to a loss of control on the bend and the

¹ GG 119 Road Safety Audit (Formerly HD 19/ 15), Revision 1, January 2019

second 'slight' collision was due to reduced visibility as a result of glare from the sun. No other collisions were recorded within proximity of the remaining 11 accesses/ crossings.

- 1.1.11 Any recommendations included within this report should not be regarded as being prescriptive design solutions to the problems identified. They are only to indicate a proportionate and viable means of eliminating or mitigating the identified problem, in accordance with GG 119, and in no way imply that a formal design process has been undertaken.
- 1.1.12 There may be alternative measures of addressing a problem which would be equally acceptable or superior in achieving the desired degree of mitigation and these should be considered when responding to this report.

2 Matters Arising from this Stage 1 Road Safety Audit

2.1.1 It is understood that the design is currently only at a planning stage, and as such there are a number of items the Audit Team would wish to see but which are not expected to be available for Audit at this stage. It is recognised that these details may not be available for Audit at this time. As such, the Design Team should submit a full Stage 2 Road Safety Audit alongside the detailed design package issued to the Local Highway Authority for approval.

2.1.2 Items to be considered by the detailed design may include:

- Drainage;
- Landscaping;
- Public utilities;
- Paving and kerbing;
- Carriageway markings;
- Road signs; and
- Lighting.

B1 Local Alignment

B1.1 Visibility

B1.1.1 Problem 1

Location: Access 5 from the B1122 Aldeburgh Road.

Summary: Stationary buses could restrict forward visibility of oncoming vehicles for drivers egressing from Access 5, leading to the potential for collisions.

Description: An existing bus stop is located to the south of the existing access to Aldringham Court. When a bus is stationary at the bus stop the forward visibility of vehicles from the north (travelling south) from Access 5 would be restricted by the stationary bus. Reduced visibility, due to the stationary bus could lead to vehicles pulling out of Access 5 into the path of an oncoming vehicle, potentially leading to side impact collisions.

RECOMMENDATION

Relocate the existing bus stop to ensure it is located outside of the proposed visibility splay.

B1.2 New/ Existing Road Interface

B1.2.1 Problem 2

Location: Access 1 from Sizewell Gap road.

Summary: Accelerated wear of the carriageway could result in premature highway failure leading to the potential for potholes to form which could destabilise cyclists and motorcyclist leading to personal injury.

Description: The Audit Team observed cracking of the existing highway in the vicinity of Access 1. The addition of turning HGV traffic at this location could lead to an acceleration of the wear of the carriageway surface and the potential for the carriageway to 'pick out' and potholes to form. If cyclists or motorcyclists were to collide with these potholes the rider could be destabilised, potentially leading to a fall and personal injury.



Looking west along Sizewell Gap road, an example of existing carriageway failure

RECOMMENDATION

Resurface/ repair the carriageway opposite Access 1 to prevent premature failure of the carriageway.

B2 General

B2.1 Departures from Standard

2.1.3 The Audit Team has not been made aware of any Departures from Standard at this Stage.

B2.2 Landscaping

B2.2.1 Problem 3

Location: Accesses 1, 7, 8, 9, 10, 11, 12 and 13.

Summary: Poor maintenance of existing vegetation alongside the highway could reduce the distance drivers can see an oncoming vehicle from new points of access, leading to the potential for side impact collisions.

Description: There are existing hedgerows and trees located alongside the road in the vicinity of Accesses 1, 3, 4, 7, 8, 9, 10, 11, 12 and 13. If these hedgerows are not regularly maintained, there is the potential for the vegetation to obscure visibility of oncoming vehicles. Reduced visibility, due to overgrown vegetation could lead to vehicles pulling out of the accesses in to the path of an oncoming vehicle, potentially leading to side impact collisions.

RECOMMENDATION

Ensure that visibility splays are maintained.

B2.3 Public Utilities/ Services Apparatus

B2.3.1 Problem 4

Location: Multiple locations as follows:

- Access 3 to the north of the B1353;
- Access 8 to the west of Sloe Lane; and
- Access 10 to the west of the B1069 Snape Road.

Summary: Insufficient offsets from existing telegraph poles to turning vehicles could lead to collisions.

Description: Telegraph poles are currently installed alongside the road in the proximity of Accesses 3, 8 and 10. It is not clear from the drawings provided to the Audit Team where the access would be located in relation to the telegraph poles. The Audit Team therefore considers that there is a risk that vehicles manoeuvring into or out of the proposed accesses could collide with the telegraph pole. Furthermore, it is not clear if larger vehicles could safely pass under the cables.

RECOMMENDATION

Ensure that the final access designs include for appropriate offsets between the new accesses and existing telegraph poles. In addition, ensure that all types of vehicles can pass safely under the cables.

B3 Junctions

2.1.4 The Audit Team did not identify any junction related safety problems at this stage.

B4 Walking, Cycling and Horse Riding

2.1.5 The Audit Team did not identify any walking, cycling and horse-riding related safety problems at this stage.

B5 Traffic Signs, Carriageway Markings and Lighting

B5.1 Traffic Signs

B5.1.1 Problem 5

Location: Access 1 from Sizewell Gap road.

Summary: Insufficient offsets between an existing sign and turning vehicles could lead to collisions.

Description: A shared use footway/ cycleway sign is currently installed alongside the road in the proximity of Access 1. It is not clear from the drawings provided to the Audit Team where the access would be located in relation to the sign. The Audit Team therefore considers that there is a risk that vehicles turning into or out of the proposed accesses could collide with the sign.

RECOMMENDATION

Ensure that the final access design includes for an appropriate offset between the new access and existing sign.

B5.1.2 Problem 6

Location: Accesses 1 and 2 from Sizewell Gap road.

Summary: Temporary signage located within the existing footway/ cycleway along Sizewell Gap Road could reduce the effective width leading to collisions.

Description: Temporary signing arrangements are proposed in the vicinity of Access 1 and Access 2. If positioned within the existing shared use footway/ cycleway the signs could reduce the effective width leading to the potential for conflict and collisions between pedestrians and cyclists.

RECOMMENDATION

Ensure that the final sign locations do not impact upon the effective width of the footway/ cycleway and that mounting heights allow cyclists to pass under the signs.

B5.1.3 Problem 7

Location: Access 5 from the B1122 Aldeburgh Road.

Summary: Temporary signage located within the existing footway along Aldeburgh Road could reduce the effective width leading to collisions.

Description: Temporary signing arrangements are proposed in the vicinity of Access 5. If positioned within the existing footway, the signs could reduce the effective width. A reduced footway width could potentially force users with pushchairs or in wheelchairs and mobility scooters to have to take to the road to navigate around the signs. Users travelling in the road could be struck by passing vehicles.

RECOMMENDATION

Ensure that the final sign locations do not impact upon the effective width of the footway.

B5.1.4 Problem 8

Location: Access 6 from the B1069 Snape Road.

Summary: An existing 'Elderly people' crossing sign could restrict visibility for drivers departing from Access 6, potentially leading to side impact collisions.

Description: An existing 'Elderly people' crossing sign is located to the south of Aldringham Court. The existing sign would be located within the visibility splay for Access 6, potentially reducing the forward visibility of oncoming vehicles. Reduced forward visibility from Access 6 could result in vehicles pulling out of the access across the path of an oncoming vehicle, leading to side impact collisions.

RECOMMENDATION

Relocate the existing 'Elderly people' crossing sign away from the visibility splay or raise the height of the sign assembly to allow drivers to see approaching vehicles under the sign face.

B5.1.5 Problem 9

Location: Multiple locations as follows:

- Accesses 7 and 8 from Sloe Lane;
- Accesses 11 and 12 from the B1069 Snape Road; and
- Access 13 from B1121 Saxmundham Road.

Summary: New signs placed close to the edge of the highway or within highway could be vulnerable to collisions with passing vehicles.

Description: Temporary signage is proposed on the approach to all new accesses. The existing highway and verges on the approach to Accesses 7, 8, 11, 12 and 13 are narrow, this could result in signs being placed within or close to the edge of the highway. Signs placed close to or within the highway could lead to collisions between vehicles and the sign or head on collisions between vehicles as drivers stray into the oncoming lane to avoid the signs.

RECOMMENDATION

Ensure that the final sign designs consider the available verge width maintaining a minimum 450mm clearance from the edge of the road to the edge of the sign face.

B5.2 Carriageway Markings

B5.2.1 Problem 10

Location: Access 13 from the B1121 Saxmundham Road.

Summary: The existing centre line markings along the B1121 Saxmundham Road finish short of Access 13. A centre line would reduce the potential for drivers departing from Access 13 to stray into the oncoming lane.

Description: An existing carriageway centre line is provided to the south of the proposed Access 13 in the vicinity of the junction with Kiln Lane. The centre line however terminates to the south of the proposed Access 13. The Audit Team were concerned that the presence of a centre line would assist drivers staying in lane when departing from Access 13. Without a centre line, drivers departing Access 13 may miss judge their position and stray in to the oncoming lane, potentially leading to head on collisions.

RECOMMENDATION

Extend the existing centre line to encompass Access 13.

3 Audit Team Statement

3.1.1 We certify that this Road Safety Audit has been carried out in accordance with GG 119.

Audit Team Leader

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Signed: REDACTED

Date: 17.07.2019

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Date: 04.07.2019

Appendix A

Documents Forming the Audit Brief

APPENDIX A

Documents Forming the Audit Brief

DRAWING NUMBER

TP-PB4842-DR001 Rev D0.5
TP-PB4842-DR002 Rev D0.2
TP-PB4842-DR003 Rev D0.3
TP-PB4842-DR004 Rev D0.2
TP-PB4842-DR007 Rev D0.4
TP-PB4842-DR008 Rev D0.4
TP-PB4842-DR009 Rev D0.2
TP-PB4842-DR010 Rev D0.2
TP-PB4842-DR027 Rev D0.1
TP-PB4842-DR011 Rev D0.3
TP-PB4842-DR012 Rev D0.2
TP-PB4842-DR013 Rev D0.2
TP-PB4842-DR014 Rev D0.3
TP-PB4842-DR020 Rev D0.2
TP-PB4842-DR021 Rev D0.2
TP-PB4842-DR022 Rev D0.2

DRAWING TITLE

Access 1
Access 1 SPA
Access 2
Access 2 SPA
Access 3 and 4 (Crossings)
Access 5 and 6
Access 5 SPA
Access 6 SPA
Access 7 and 8 (Crossings)
Access 9 and 10
Access 9 SPA
Access 10 SPA
Access 11 and 12 (Crossings)
Access 13 (construction phase access)
Access 13 (operational phase access)
Access 13 SPA

DOCUMENTS

- ☒ Safety Audit Brief
- ☒ Site Location Plan
- ☐ Traffic signal details
- ☐ Departures from standard
- ☐ Previous Road Safety Audits
- ☐ Previous Designer Responses
- ☒ Collision data
- ☐ Collision plot
- ☒ Traffic flow / modelling data
- ☐ Pedestrian flow / modelling data
- ☒ Speed survey data
- ☐ Other documents

DETAILS (where appropriate)

Included within the audit brief

Included within the audit brief

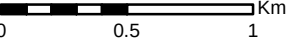
Included on drawings

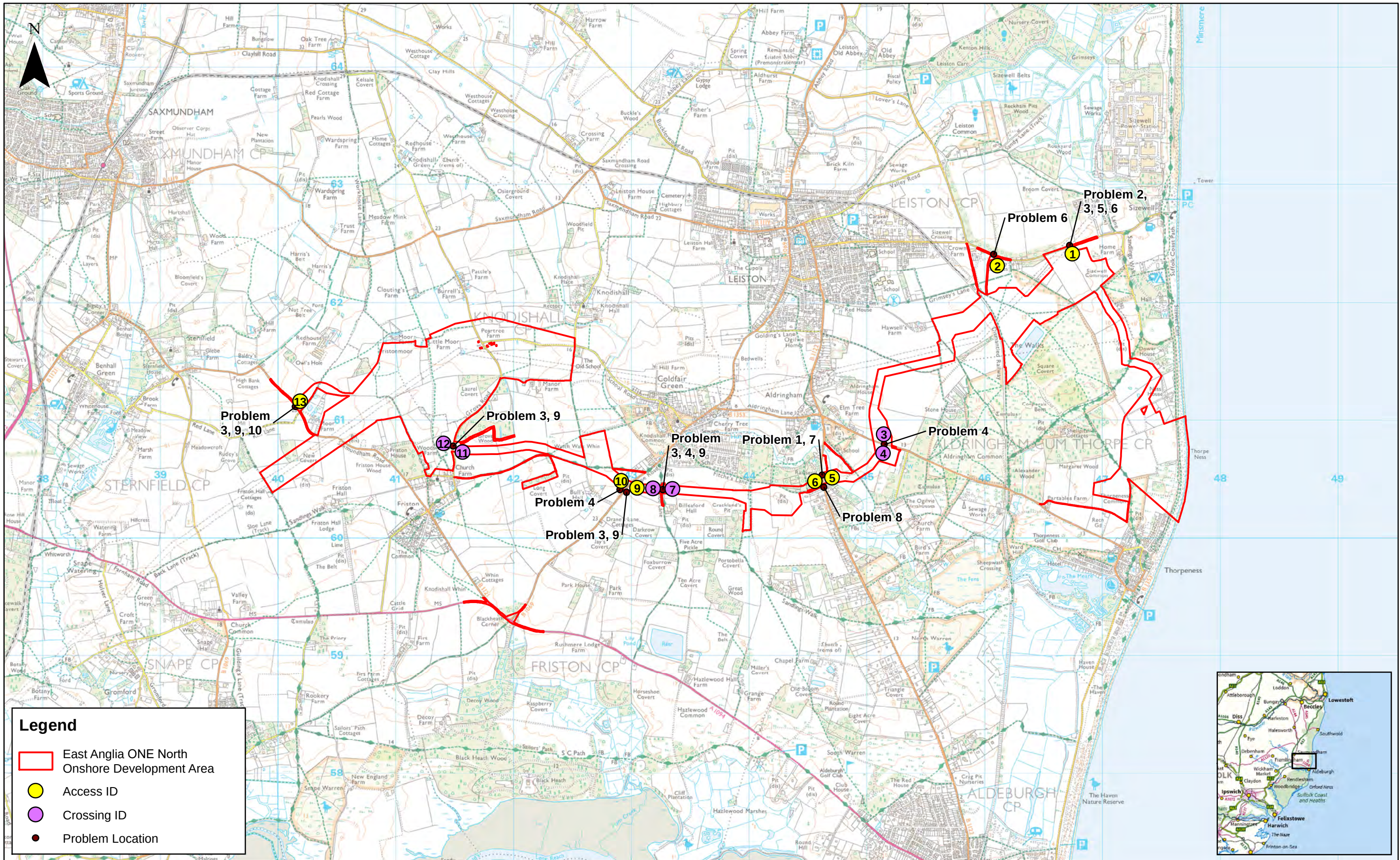
Figures

Figure 1 – Site Location Plan

Figure 2 – Problem Location Plan



				1:30,000 Scale @ A3				East Anglia ONE North Access Locations		Drg No	EA1N-DEV-DRG-IBR-000741	
				Prepared:	AB					Rev	1	Coordinate System: BNG Datum: OSGB36
1	11/07/2019	AB	First Issue.	Checked:	ST	Source: © Crown copyright and database rights 2018. Ordnance Survey 0100031673. This map has been produced to the latest known information at the time of issue, and has been produced for your information only. Please consult with the SPR Onshore GIS team to ensure the content is still current before using the information contained on this map. To the fullest extent permitted by law, we accept no responsibility or liability (whether in contract, tort (including negligence) or otherwise in respect of any errors or omissions in the information contained in the map and shall not be liable for any loss, damage or expense caused by such errors or omissions.					Date	11/07/19
Rev	Date	By	Comment	Approved:	AH						Figure	1



Legend

East Anglia ONE North Onshore Development Area

Access ID

Crossing ID

Problem Location

SCOTTISHPOWER RENEWABLES				Prepared: AB		1:30,000 Scale @ A3		0 0.5 1 Km		East Anglia ONE North Problem Location Plan		Drg No	EA1N-DEV-DRG-IBR-000869											
1 11/07/2019 AB First Issue.				Checked: ST		This map has been produced to the latest known information at the time of issue, and has been produced for your information only. Please consult with the SPR Onshore GIS team to ensure the content is still current before using the information contained on this map. To the fullest extent permitted by law, we accept no responsibility or liability (whether in contract, tort (including negligence) or otherwise in respect of any errors or omissions in the information contained in the map and shall not be liable for any loss, damage or expense caused by such errors or omissions.						Rev	1	Coordinate System: BNG Datum: OSGB36										
Rev Date By Comment				Approved: AH								Date	11/07/19											
												Figure	2											

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