



The Sizewell C Project

6.14 Ch Sizewell Link Road Description of Development - Tracked Changes Version

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CONTENTS

2	DESCRIPTION OF DEVELOPMENT.....	4
2.1	Introduction	4
2.2	Proposed development description.....	5
2.3	Parameters.....	20
2.4	Description of construction.....	21
2.5	Description of operation	34
2.6	Post-construction of Sizewell C.....	36
	REFERENCES.....	37

TABLES

Table 2.1:	Anticipated plant and equipment for construction.....	28
Table 2.2:	Anticipated material quantities.....	30

PLATES

Plate 2.1:	Anticipated construction sequence.....	23
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FIGURES

First Environmental Statement Addendum Volume 2 (Doc Ref. 6.14)

Figure 6.2.1: Revised Sizewell link road site boundary *-(superseded by Second Environmental Statement Addendum, Volume 2, Figure 4.1.1)*

Figure 6.2.2: Illustrative masterplan for the Sizewell link road – key plan *(superseded by Second Environmental Statement Addendum, Volume 2, Figure 4.2.2)*

Figure 6.2.3: Illustrative masterplan of the Sizewell link road Area 1- *(superseded by Second Environmental Statement Addendum, Volume 2, Figure 4.2.3)*

Figure 6.2.4: Illustrative masterplan of the Sizewell link road Area 2 *(superseded by Second Environmental Statement Addendum, Volume 2, Figure 4.2.4)*

Figure 6.2.5: Illustrative masterplan of the Sizewell link road Area 3 *(superseded by Second Environmental Statement Addendum, Volume 2, Figure 4.2.5)*

Figure 6.2.6: Illustrative masterplan of the Sizewell link road Area 4 *(superseded by Second Environmental Statement Addendum, Volume 2, Figure 4.2.6)*

Figure 6.2.7: Illustrative masterplan of the Sizewell link road Area 5 (*superseded by Second Environmental Statement Addendum, Volume 2, Figure 4.2.7*)

Figure 6.2.8: Illustrative masterplan of the Sizewell link road Area 6 (*superseded by Second Environmental Statement Addendum, Volume 2, Figure 4.2.8*)

Figure 6.2.9: Site clearance plan – sheet 1 (*superseded by Second Environmental Statement Addendum, Volume 2, Figure 4.2.9*)

Figure 6.2.10: Site clearance plan – sheet 2 (*superseded by Second Environmental Statement Addendum, Volume 2, Figure 4.2.10*)

Figure 6.2.11: Site clearance plan – sheet 3 (*superseded by Second Environmental Statement Addendum, Volume 2, Figure 4.2.11*)

Figure 6.2.12: Site clearance plan – sheet 4 (*superseded by Second Environmental Statement Addendum, Volume 2, Figure 4.2.12*)

Second Environmental Statement Addendum, Volume 2 Figures (Doc Ref. 6.16 Ch)

Figure 4.1.1 Revised Sizewell link road site boundary

Figure 4.2.1 Proposed Change 18 Design Changes

Figure 4.2.2: Illustrative masterplan for the Sizewell link road – key plan

Figure 4.2.3: Illustrative masterplan of the Sizewell link road Area 1

Figure 4.2.4: Illustrative masterplan of the Sizewell link road Area 2

Figure 4.2.5: Illustrative masterplan of the Sizewell link road Area 3

Figure 4.2.6: Illustrative masterplan of the Sizewell link road Area 4

Figure 4.2.7: Illustrative masterplan of the Sizewell link road Area 5

Figure 4.2.8: Illustrative masterplan of the Sizewell link road Area 6

Figure 4.2.9: Site clearance plan – sheet 1

Figure 4.2.10: Site clearance plan – sheet 2

Figure 4.2.11: Site clearance plan – sheet 3

Figure 4.2.12: Site clearance plan – sheet 4

APPENDICES

Environmental Statement Volume 6 Chapter 2 (Doc Ref. 6.7)

Appendix 2A – Proposed development drawings

Note: Appendix 2A has not been updated with the proposed changes for the purpose of this ES Addendum. The updated proposed development drawings are provided in Book 2 of Part 2 of this [Change Request Submission](#)~~submission~~

Unless specifically stated, where a document reference is provided, it refers to the document series. Refer to the Navigation Document (Doc Ref. 1.3) for the latest revision number.

2 DESCRIPTION— OF DEVELOPMENT

2.1 Introduction

- 2.1.1 This chapter has been prepared in respect of the proposed Sizewell link road (referred to hereafter as the ‘proposed development’) ~~shown in Figure 6.2.1 in Volume 2 of this Second ES Addendum~~. The proposed development also includes a roundabout connecting the A12 to the Sizewell link road, a single span railway bridge, a road from the Sizewell link road to Yoxford Road including a roundabout (called the ‘Middleton Moor Link’), a road from the Sizewell link road to Leiston Road (called the ‘B1125 Link’), the Pretty Road overbridge, side roads, landscaping features, drainage, crossings, and public rights of way (PRoWs) diversions. The ‘route’ or ‘route of the proposed Sizewell link road’ refers to the proposed road alignment. This proposed development would be retained following completion of the Sizewell C main development site as a lasting legacy of the Sizewell C Project.
- 2.1.2 The Sizewell link road would comprise a new, permanent, 6.8 kilometre (km) single carriageway road, with a design speed of 60 miles per hour (mph), which begins at the A12 south of Yoxford, and bypasses Middleton Moor and Theberton before joining the B1122.
- 2.1.3 The Sizewell link road site (herein referred to as the ‘site’), forms part of the Sizewell C Project to which this application for Development Consent Order (DCO) relates. The proposed development would help to reduce the amount of traffic on the B1122 through Middleton Moor and Theberton during the peak construction phase of the Sizewell C Project, and beyond. Further detail on the Sizewell link road, in the context of the wider construction transport strategy, is provided in the Consolidated Transport Assessment ~~Transport Assessment~~ (Doc Ref. 8.5(A)) and ~~the Transport Assessment Addendum~~ (Doc Ref. 8.5Ad).
- 2.1.4 The Sizewell link road would be constructed in the early years of the construction phase of the Sizewell C Project, as shown in the Indicative Phasing Schedule in the **Implementation Plan** provided at **Appendix I** of the **Planning Statement** (Doc Ref. 8.4). Once operational, it would also be open to the public and would be used by SZC Co. during the construction phase of the Sizewell C main development site to transport construction workers arriving by car, buses from both the northern and the southern park and ride sites, and goods vehicles (both light and heavy) delivering freight to the Sizewell C main development site.
- 2.1.5 This chapter presents a description of the proposed development, including:

- the general site layout, routing of the proposed road, landscaping, utilities and drainage, security and lighting;
- the parameters which identify defined envelopes within which future development would be undertaken;
- the sequence and methods for construction, including material quantities and number of construction personnel and vehicles; and
- operation of the proposed development.

2.2 Proposed development description

a) The proposed route of the Sizewell link road

2.2.1 The site is approximately 109.5 ha and comprises of predominately agricultural land (which accounts for approximately 100.71.01 ha of the site) as well as highway land and hardstanding. Approximately 85.24.8 ha of the agricultural land would be required permanently for the proposed development and approximately 15.916 ha would be required temporarily to facilitate construction.

2.2.2 The route of the Sizewell link road would bypass a section of the B1122 with a new 6.8km long single carriageway road to the south-west. The proposed road would be 7.3 metres (m) wide, with additional 1m hardstrips and 2.5m wide verges. Along the route of the Sizewell link road, there would be swales approximately 3.5m wide for highway drainage.

2.2.3 The road starts at the A12 south of Yoxford, bypasses Middleton Moor and Theberton before joining the B1122 to the west of the Sizewell C main development site. Further detail on the site and the environmental baseline is provided in **Chapters 4 to 12 of Volume 6** of the **ES** (Doc Ref. 6.7), as updated by the First and Second ES Addendums and the other environmental information outlined in the ES Signposting Document (Doc Ref. PDB-2).

2.2.4 Within this volume, the description of the proposed development has been split into six main areas as follows:

- Area 1 – from the A12 to Footpath E-344/013/0 and E584/016/A (land west of the East Suffolk line).
- Area 2 – from land west of the East Suffolk line to Littlemoor Road.
- Area 3 – from Littlemore Road to east of Garden House Farm (including the link to B1122 west of Middleton Moor).

- Area 4 – from east of Garden House Farm to land to the west of Theberton.
- Area 5 – from land to the west of Theberton to the south of Theberton.
- Area 6 – from the south of Theberton to the B1122 adjacent to Brown's Plantation.

2.2.5 Please refer to **Figure 64.2.2** of **Volume 2** of ~~this the~~ **Second ES Addendum** for the location of each of the above areas, with further detail shown on **Figures 64.2.3 to 64.2.12** of **Volume 2** of ~~this the~~ **Second ES Addendum**.

2.2.6 Sections i. to vi. of this chapter provide an overview of the proposed development in these six areas. All dimensions in these sections are approximate. The heights of embankments or depths of cuttings are based on the proposed vertical alignment profiles of the proposed development shown in ~~Appendix 2A of this volume on the~~ **Sizewell Link Road Plans For Approval (Doc Ref. 2.10)**, however, there is some flexibility during detailed design to alter the vertical alignment shown by up to 1m. Further detail of this flexibility is provided in **Section 2.3** of this chapter.

2.2.7 Indicative planting locations and drainage (including attenuation basins) are also shown on **Figures 64.2.2 to 64.2.12** of **Volume 2** of ~~the~~ **Second ES Addendum**, with further detail provided in **Sections 2.2 b) and c)** of this chapter respectively.

- i. Area 1 – from the A12 to land to Footpath E-344/013/0 and E584/016/A (land west of the East Suffolk line)

2.2.8 An illustrative masterplan for Area 1 is provided in **Figure 64.2.3** of **Volume 2** of ~~this the~~ **Second ES Addendum**.

2.2.9 The route of the proposed Sizewell link road would connect to the A12, via a new roundabout located approximately 180m north of The Red House Farm, south of Yoxford. The proposed road would continue in a north-easterly direction rising from ground level towards the East Suffolk line to an embankment (for approximately 700m to the end of the area) of up to 4m before decreasing in height to 2m. This section of the proposed road would be approximately 1km in length.

2.2.10 Key features of the proposed development in Area 1 include:

- a new three arm roundabout on the A12, located approximately 180m north of The Red House Farm. The A12 to the north and south of the new roundabout would be realigned for approximately 200m on both

sides to join the north and south arms of the roundabout respectively, with the eastern arm providing the junction for the proposed route of the Sizewell link road;

- a new accommodation access from the A12 on the south side of the proposed Sizewell link road to maintain access to land associated with Rookery Farm (Yoxford); Footpath E-344/014/0 would be realigned to cross the proposed route of the Sizewell link road approximately 37m east of its existing location; and
- Footpaths E-344/013/0 and E584/016/A (which connect together where they cross the site to form one route) would be realigned to cross the proposed route of the Sizewell link road approximately 8070m west of their existing location.

2.2.11 Signage and road markings would also be provided, as required.

ii. Area 2 – from land west of the East Suffolk line to Littlemoor Road

2.2.12 An illustrative masterplan for Area 2 is provided in **Figure 46.2.4** of **Volume 2** of the Second **is ES Addendum**.

2.2.13 The route of the proposed Sizewell link road would continue in an easterly direction for approximately 1.1 km, crossing over the existing East Suffolk line, intersecting Littlemore Road, and then continuing towards Middleton Moor and Fordley Road. With the exception of the East Suffolk line crossing, the route for the proposed Sizewell link road would be at grade level until it meets the new road link north-west of Yankee Lodge as described in Area 3.

2.2.14 Key features of the proposed development in Area 2 include:

- a single span railway bridge, approximately 50m in length, to enable the route of the proposed Sizewell link road to cross over the East Suffolk line. At the point of the proposed crossing location, the East Suffolk line is in an approximate 6m deep existing cutting. The proposed Sizewell link road would rise up on a 2.5m embankment, and cross the railway via the bridge, to provide sufficient headroom as required by Network Rail (with 5.2m needed from rail level to soffit (underside) of bridge deck); and
- ~~the diversion of Footpath E-584/016/0 would be permanently diverted E-396/014/0 east along the proposed route of the Sizewell link road; the footpath would cross the proposed road approximately 26470m east of its existing location before re-joining with E-396/014/0.~~

2.2.15 Signage and road markings would also be provided, as required.

- iii. Area 3 – from Littlemore Road to east of Garden House Farm (including the link to B1122 west of Middleton Moor)

2.2.16 The illustrative masterplan for Area 3 is shown in **Figure 46.2.5** of **Volume 2** of this **Second ES Addendum**.

2.2.17 The route of the proposed Sizewell link road in this section is approximately 1km and would continue in an easterly direction from the existing Littlemore Road towards Fordley Road. A new road link from the route of the proposed Sizewell link road to the B1122 (Yoxford Road) would be provided, north-west of Yankee Lodge, referred to as the 'Middleton Moor link'. The route of the proposed Sizewell link road would be at grade level until it meets the Middleton Moor link, after which it would rise on to an embankment up to approximately 3.5m high for approximately 200m until it meets the junction with Fordley Road.

2.2.18 From Fordley Road, the route of the proposed Sizewell link road turns south easterly to run broadly parallel to the B1122 passing Garden House Farm. Due to the gentle undulating topography, the proposed road would alternate between being in cutting, up to 3.5m deep for approximately 150m, and on an embankment, up to a 4m high for approximately 200m to the end of Area 3.

2.2.19 Key features of the proposed development in Area 3 include:

- a ghost island junction and provision of the Middleton Moor link, from the proposed route of the Sizewell link road to the B1122, to the north-west of Yankee Lodge. Littlemore Road would be stopped up where it is intersected by the route of the Sizewell link road and the Middleton Moor link;
- a new three arm-roundabout and realignment of the B1122 over a length of approximately 300m to meet the new Middleton Moor link road. The junction layout between the Middleton Moor link road and the existing B1122 would be designed to accommodate Abnormal Indivisible Load vehicles (AILs);
- a new walking and cycling route would utilise the existing Littlemore Road where the road is stopped up, with a new route provided in two locations: an approximately 100m section will be provided to cross the proposed Middleton Moor link, and an approximately 80m section to allow a crossing point over the route of the proposed Sizewell link road west of the junction with the Middleton Moor link, from the existing Littlemore Road, which would continue along the proposed Middleton Moor link, to allow a crossing point over the route of the proposed Sizewell link road east of the junction with the Middleton Moor link, before re-joining Littlemore Road on the south side of the route;

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- realignment of Fordley Road on the south side of the proposed route of the Sizewell link road so northbound traffic could join the new road. On the north side, Fordley Road would be stopped up where it meets the proposed route of the Sizewell link road. A new footpath and private means of access would be created on the north side of the proposed route to provide access for Old Abbey Farm, with the new footpath connecting to the diverted Footpath E396/017/0;
- diversion of Footpath E-396/017/0 west along the proposed road alignment, to cross the route of the proposed Sizewell link road approximately 60m west of its existing location. A new walking and cycling route would be provided to connect Footpath E-396/017/0 to Fordley Road on the south side of the proposed route of the Sizewell link road;
- diversion of the existing watercourse along Fordley Road (referred to as the 'Middleton Watercourse') 15m to the west. A portal culvert, 5.4m wide and 1.2m above bank level, would be provided where the watercourse is diverted beneath the route of the proposed Sizewell link road. A flood relief culvert 2.4m wide and 1.0m high would be provided alongside the culvert to ensure there is no increase in flood risk in the area upstream of the crossing; and
- crossing of an unnamed watercourse located approximately 500m west of Trust Farm, located in Area 4. A portal culvert, 5.4m wide and 1.2m above bank level would be provided to allow the route of the proposed Sizewell link road to cross the watercourse.

2.2.20 Signage and road markings would also be provided, as required.

iv. [Area 4 – from east of Garden House Farm to land to the west of Theberton](#)

2.2.21 The illustrative masterplan for Area 4 is shown in **Figure 64.2.6 of Volume 2 of the [Second ES Addendum](#).**

2.2.22 The route of the Sizewell link road would continue in an easterly direction in this area for approximately 1km. The route of the proposed Sizewell link road would run along an embankment up to 5m high where it extends from Area 3 until it passes Trust Farm, before continuing in south-east direction in a cutting 2-3m to pass Hawthorne Road where it then rises on an embankment up to 2m high.

2.2.23 Key features of the proposed development in Area 4 include:

- provision of a staggered crossroads, with ghost island junctions, as well as the realignment of Trust Farm access road, for approximately

400m from the property to the B1122. The proposed junctions would be staggered, approximately 50m apart. On the north side of the route of the proposed Sizewell link road, this access road would become highway and open to the public, whilst on the south side of the route of the Sizewell link road, the access road would remain a private means of access to Trust Farm;

- users of footpath E-396/023/0 would be diverted to the east of its existing alignment. On the south side of the route of the proposed Sizewell link road, the footpath would run alongside the route of the proposed Sizewell link road. E-396/023/0 would be diverted to the east by approximately 200m to cross the road, approximately 150m to the east of the ghost island junction. On the north side of the proposed Sizewell link road, the footpath would then be diverted west towards the ghost island junction and then directed north-east along the proposed access road to join the B1122. run alongside the realigned access road, and cross the route between the northern and southern junctions of the proposed staggered crossroads;
- realignment of Hawthorn Road on the south side of the proposed route of the Sizewell link road for approximately 170m, with a new junction to provide access to the route. On the north side of the route of the proposed Sizewell link road, Hawthorn Road would be stopped up where it is intersected by proposed route;
- crossing of an unnamed watercourse adjacent to Hawthorn Road where the route of the proposed Sizewell link road would cross the watercourse via a portal culvert (5.4m wide and 1.2m above bank level); and
- an extension of Footpath E-396/020/0 from the existing Hawthorn Road. The footpath would extend along the proposed route Sizewell link road, approximately 160m to the west, to cross the proposed route before heading east along the north side of the route to re-join Hawthorn Road.

2.2.24 Signage and road markings would also be provided, as required.

v. **Area 5 – from land to the west of Theberton to the south of Theberton**

2.2.25 The illustrative masterplan for Area 5, is shown in **Figure 46.2.7 of Volume 2 of this Second ES Addendum.**

2.2.26 South of Hawthorn Road, the route of the proposed Sizewell link road continues for 2.64-3km in a south-east direction, passing into a cutting up

to 5m deep and intersecting Plumtreehills Covert. From here the route of the proposed Sizewell link road would rise on to a short embankment approximately 4m high for 200m before passing into another cutting, approximately 5m deep, on the approach undertowards Pretty Road. From Pretty Road the route would continue in an easterly direction, decreasing in cutting depth as it passes to return to embankment to tie-in to the existing B1122 -towards the end of Area 5.

2.2.27 Key features of the proposed development in Area 5 include:

- a new ghost island junction would be formed with an extension of the B1125 and a new junction would be formed with a reconfiguration of the existing B1122 (Leiston Road). This includes a provision of a new link road between the route of the proposed Sizewell link road and Leiston Road (the 'B1125 link');
- at the northern end of the B1125 link, Footpath E-396/015/0 would be realigned to meet the new junction between the Sizewell link road and the B1122;
- users of Footpath E-396/015/0 would be diverted for approximately 55m, approximately 25m to the west of its existing alignment along the B1125 link;
- a portal culvert, 5.4m wide and 1.2m above bank level, would be provided where the route of the proposed Sizewell link road crosses an unnamed watercourse, approximately 200m north west of the existing Pretty Road;
- ~~a new priority junction on the west side of the Sizewell link road at Pretty Road would be provided where the road would be located in a cutting up to 2m deep;~~
- a new overbridge, multi-span single span, up to 6044m long would be provided which would carry vehicles and non-motorised users ~~only~~ (pedestrians, cyclists, equestrians) over the Sizewell link road and connect to Pretty Road on either side. The bridge would be 4m above existing ground level and the Sizewell link road would be in a 5m cutting. The height of the bridge from Sizewell link road level to the top of parapet would be approximately 9.9m;
- a diversion of Footpath E-396/015/0 where it would be intersected by the Sizewell link road. On the north side of the Sizewell link road, the footpath would be diverted south for approximately 75m to join Footpath E-515/005/0, which would direct users to Pretty Road. Users would then be able to cross the Sizewell link road via the proposed

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Pretty Road overbridge. On the south side of the Sizewell link road, users would be diverted south, around the new priority junction and be able to cross the Sizewell link road via the proposed Pretty Road overbridge;

- diversion of Footpaths E-515/003/0 and E-515/004/0. Users of Footpath E-515/003/0 heading north would be directed north-west to cross the Sizewell link road via the proposed Pretty Road overbridge. Users heading south from Pretty Road would be directed east to join Footpath E-515/004/0. Footpath E-515/004/0 would be diverted east, to cross the proposed road at grade, approximately 50m east of its existing location; and
- a portal culvert, 5.4m wide and 1.2m above bank level, would be provided where the route of the proposed Sizewell link road crosses the Theberton Watercourse, approximately 450m east of the existing Pretty Road.

2.2.28 Signage and road markings would also be provided, as required.

- vi. [Area 6 - from south of Theberton to re-joining the B1122 adjacent to Brown's Plantation.](#)

2.2.29 The illustrative masterplan for Area 6 is shown in **Figure 64.2.8** of **Volume 2** of the [Secondis ES Addendum](#).

2.2.30 The route of the proposed Sizewell link road would continue on from Pretty Road for approximately 1.3km, curving east and intersecting Moat Road before joining the B1122 south of Browns Plantation. The route would alternate from being on an embankment, up to 2.5m high and passing within a cutting up to 2.5m deep. The route would continue at ground level with a new junction to provide access to Theberton.

2.2.31 Key features of the proposed development in Area 6 include:

- a new junction to Moat Road would be provided which would maintain access to the existing properties including Theberton Grange and Moat House. The road to Theberton Grange would be realigned for approximately 300m to join George Road;
- a new road and junction would be provided connecting the Sizewell link road to the B1122 to provide access to Theberton. The existing B1122 would be realigned to the south-east of the new junction to tie in to the route of the Sizewell link road. Approximately 360m of the existing B1122 would be permanently converted to footpath;

- a diversion of Footpath E-515/007/0 approximately 425m east of its existing alignment.; Users would then be directed west to meet the existing Moat Road alignment, where it has been converted to Non-Motorised User route.;
- ~~new footpaths from the existing George Road to follow the route of the Sizewell link road to the east and north along the new road to the B1122;~~
- ~~The existing Footpath E-515/013/0 will be retained. a diversion of Footpath E-515/013/0 would be provided to cross the route of the proposed Sizewell link road approximately 45m south-east of its existing position, at grade;~~
- an extension of the existing 600mm culvert crossing of the B1122 would be provided beneath the Sizewell link road; and
- a flood relief culvert would be provided to maintain an existing surface water overland flow path, envisaged to be approximately 2.4m wide by 1m high, crossed by the route of the Sizewell link road on the south side of Brown's Plantation.

2.2.32 Signage and road markings would also be provided, as required.

b) Landscaping

2.2.33 The proposed landscaping for the site has been designed specifically to minimise potential effects on ecological, heritage, and landscape and visual receptors and will follow the design principles set out in the **Associated Development Design Principles** (Doc Ref. 8.3). The illustrative masterplan shows the indicative location of proposed landscaping, as provided in **Figures 64.2.2 to 64.2.12** of **Volume 2** of the is **Second ES Addendum**.

2.2.34 Existing vegetation would be retained where possible, except where the route of the proposed Sizewell link road crosses field boundaries. Hedgerow planting is proposed along the route to integrate with the surrounding landscape, compensating for the loss of hedgerow severed by the route. This new hedgerow planting would connect into the existing hedgerow network where possible.

2.2.35 All proposed tree and shrub planting would use native species.

2.2.36 Where the proposed route of the Sizewell link road is in a cutting, if bat flight lines are severed, bat hop-over features, such as planting installed as close the carriageway edge as possible, would be provided to

encourage an inter-linking canopy to keep bats at height and away from the path of vehicles using the road.

2.2.37 It is envisaged that eight ponds and surrounding terrestrial habitat would be provided as part of the proposed development in order to reduce impacts on great crested newts. Additionally, it is anticipated that six further ponds would also be provided along the route, to provide additional pond habitat in the area and contribute to bio-diversity net gain. Indicative locations for these ponds are shown on **Figures 46.2.2 to 64.2.12 of Volume 2 of the Second ES Addendum.**

2.2.38 Further details of the indicative planting in each area are provided in the following sections.

i. Area 1 - from the A12 to land to land west of the East Suffolk line

2.2.39 Tree and shrub planting is proposed around the roundabout at the junction with the A12, as well as around any attenuation basins which may be provided south of the route in this area, to help integrate these features into the surrounding landscape. Where field corners are severed from the rest of a field by the proposed route, these corners would be planted with trees and shrubs to replicate the pattern of small woodland blocks in the surrounding landscape and replace woodland lost during construction of the proposed development.

ii. Area 2– from land west of the East Suffolk line to Littlemoor Road

2.2.40 Tree and shrub planting is proposed on the south side of the route of the proposed Sizewell link road, east of the East Suffolk link, and around any attenuation basins which may be provided south of the route in this area, to help integrate these features into the surrounding landscape.

iii. Area 3 - from Littlemore Road to east of Garden House Farm (including link to B1122 west of Middleton Moor)

2.2.41 Tree and shrub planting is proposed at the junction with the proposed Middleton Moor link and around any attenuation basin which may be located west of this link and any attenuation and flood relief basins on the south side of the route of the proposed Sizewell link road, to help integrate these features into the surrounding landscape.

2.2.42 Tree planting is also proposed south of the route to compensate for woodland lost in the vicinity of Fordley Road and to minimise visibility of the route from nearby residential properties.

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iv. Area 4 - from east of Garden House Farm to land to the west of Theberton

2.2.43 Tree and shrub planting is proposed around any attenuation and flood relief basins which may be provided in this area to further integrate these features into the surrounding landscape.

2.2.44 Tree and shrub planting is also proposed south of the route in the vicinity of Trust Farm to Hawthorn Road to minimise visibility of the route from nearby residential properties.

v. Area 5 - from land to the west of Theberton to the south of Theberton

2.2.45 Tree and shrub planting is proposed around any attenuation and flood relief basins which may be provided in this area to integrate these features into the surrounding landscape.

2.2.46 Tree planting is also proposed west of the route in the vicinity of Dovehouse Farm, to compensate for the loss of woodland in the belt west of Theberton Hall and to infill field corners severed by the proposed route. Further planting is proposed east of the route in this vicinity to minimise visibility from the Theberton Hall estate and to help integrate the proposed Pretty Road overbridge into the surrounding landscape.

vi. Area 6 - from south of Theberton to re-joining the B1122 adjacent to Brown's Plantation

2.2.47 Tree planting is proposed north and south of the route between Theberton and Theberton Grange, to minimise visibility of the route from residential properties and to infill field corners severed by the proposed route. Existing woodland at Browns Plantation, west of Theberton House, would remain unaffected by the proposals.

2.2.48 Tree and shrub planting is proposed around any attenuation basins which may be provided in this area to integrate these features into the surrounding landscape.

c) Utilities and drainage

2.2.49 Sustainable drainage system (SuDS) would be implemented to attenuate surface water run-off, minimise sediment generation and provide water treatment. **Figures 46.2.7 to 64.2.13 of Volume 2 of this [Second ES Addendum](#) illustrate the indicative drainage plan for the site.**

2.2.50 In Area 1 from the A12 Roundabout to the East Suffolk Railway line, swales and attenuation basins are proposed. The purpose of the attenuation basins is to receive highway runoff collected by roundabout underground drains and swales. They will store the water over a longer

period of time until it is gradually removed by natural processes, including take up by vegetation, evaporation and limited infiltration.

- 2.2.51 This arrangement has been discussed with Suffolk County Council in their dual roles as Highway Authority and Lead Local Flood Authority. SCC have indicated that this arrangement could be considered provided sufficient storage volume can be achieved but they may wish to see additional back up drainage measures.
- 2.2.52 ~~Three~~ potential drainage outfall routes are proposed to discharge surface water flows to a local watercourse at a controlled flow rate (these are located in Area 1 and Area 2). Each route would comprise a ditch and pipework with headwalls. The piped section is proposed to maintain field access. The need for these routes will be determined as part of the detailed design work.
- 2.2.53 The possibility of providing a surface water pumping station next to a attenuation basin serving the roundabout in Area 1 is being considered. This pumping station would remove highway runoff from the basin and pump it along the line of the road and over the railway bridge to Area 2 where the runoff would discharge into a swale and ultimately to the Middleton watercourse.
- 2.2.54 If the pumping station is provided it will occupy a hard-paved area of approximately 10 m x 15 m. With the exception of a control kiosk typically 1.2 m high x 1.2 m long x 0.4 m deep, all parts of the pumping station will be underground and not visible. It is likely that the pumping station compound will be fenced for health and safety/security reasons.
- 2.2.55 Given its location away from habitable property the pumping station will not create perceptible noise or odour nuisance for receptors.
- 2.2.56 For the remaining Areas 2 – 6 located between the East Suffolk railway and the B1122 road east of Theberton, it is possible to remove highway runoff by discharge to one of six local watercourses.
- 2.2.57 In Areas 2-6 swales are proposed to collect the highway runoff and convey the flow to the watercourse. They will be supplemented by attenuation basins which will provide temporary storage and help to reduce the peak flow rate on the approach to the watercourses. The swales on the upstream side of the road will terminate short of the watercourse and pass under the road in a pipe to discharge into a final attenuation basin. Swales on the downstream side of the road will also discharge to an attenuation basin.
- 2.2.58 The attenuation basin will have an outfall connection allowing discharge to the watercourse. The flow rate will be attenuated down to a low value in accordance with the SCC stated requirements. This will ensure that there

is no unacceptable increase in flood risk from the watercourse. There will be a further attenuation basin located on either side of the watercourse at the road crossing.

2.2.59 Swales and attenuation basins will also be provided within Area 5 to effectively drain the extended B1125 and realigned B1122.

2.2.60 It is envisaged that 37 attenuation basins would be located along the length of the site. The exact location, footprint and depth of these basins is to be confirmed at the detailed design stage, at which stage it is anticipated that the final number of basins may reduce. The attenuation basins would be designed to cater for a 100 years flood event plus a 40% allowance for climate change. The indicative locations, as shown on **Figures 46.2.2 to 64.2.12-8** of **Volume 2** of this **Second ES Addendum**, are as follows:

- an attenuation basin adjacent to the A12, north of the roundabout with the Sizewell link road;
- an attenuation basin south of the Sizewell link road, adjacent to the roundabout with the A12;
- an attenuation basin on the south side of proposed Sizewell link road located approximately 200m east of the proposed roundabout with the A12;
- an attenuation basin on the north side of the proposed Sizewell link road, located approximately 300m east of the proposed roundabout with the A12;
- an attenuation basin south of the located to the west of the East Suffolk line, approximately 150m south-west of Bobbett's Wood;
- an attenuation basin on the south side of the proposed road approximately 350m east of the East Suffolk line;
- an attenuation basin on the north side of the proposed road approximately 350m east of the East Suffolk line;
- an attenuation basin on the south side of the proposed road, opposite the Middleton Moor link;
- an attenuation basin on the north side of the proposed road, to the west side of the Middleton Moor link;
- two attenuation basins on the west side of the Middleton Moor link approximately 50m south-west of the new roundabout;

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- two attenuation basins on the south side of the proposed route of the Sizewell link road, one on the east side of Fordley Road and one to the west side of Fordley Road;
- two attenuation basins on the north side of the proposed road, one to the east side of Fordley Road and one to the west side of Fordley Road;
- two attenuation basins, one to the north and one to the south of the proposed road, approximately 150m east of Fordley Road;
- an attenuation basin located to the south side of the proposed route of the Sizewell link road, to the west side of Trust Farm;
- four attenuation basins adjacent to the proposed route of the Sizewell link road, two on the east side of Hawthorne Road and two on the west side;
- two attenuation basin on the west side of the B1125 link road, one to the south of the B1122 and one to the north;
- an attenuation basin on the south side of the B1122/B1125 west junction;
- an attenuation basin to the east side of the B1122 link road, to the south of the B1122/B1125 east junction;
- four attenuation basins west (approximately 450m east of the proposed Pretty Road overfoot bridge), two on the north side of the proposed route of the Sizewell link road and two on the south side;
- four attenuation basins located approximately 300-550m east of Pretty Road, two on the north side of the proposed route of the Sizewell link road and two on the south side; and
- three attenuation basins located west of Brown's Plantation, two to the east of the proposed route of the Sizewell link road and one on the west side.

2.2.61 Surface water from the two roundabouts would be collected via gullies and discharge via an outfall drain to the adjacent attenuation basins.

2.2.62 Swales would be provided along the length of the route of the Sizewell link road, up to 3.5m wide. The swales would attenuate and infiltrate to ground the surface water runoff.

- 2.2.63 The proposed development would cross two Main Rivers (referred to as Middleton Watercourse and Theberton Watercourse) as well as three unnamed watercourses; some watercourses are crossed by both the route of the Sizewell link road as well as side roads. The route of the proposed Sizewell link road crosses these watercourses at five locations where portal culverts 5.5m wide and 1.2m above bank level would be provided. These portal culverts would straddle the watercourse channel to reduce the disturbance of the bank.
- 2.2.64 At Fordley Road, the Middleton Watercourse would be diverted approximately 15m to the west of its existing course and would pass beneath the Sizewell link road via a portal culvert, as described above. A flood relief culvert 2.4m wide and 1.0m high would be provided alongside the culvert to ensure there is no increase in flood risk in the area upstream of the crossing.
- 2.2.65 A flood relief culvert is proposed south of Theberton and Brown's Planation to maintain a surface water overland route in this area. An existing 600mm culvert crossing of the B1122 would be extended to cross beneath the Sizewell link road.
- 2.2.66 Culverts proposed along the length of the proposed development are shown on **Figures 46.2.7-3 to 46.2.813** in **Volume 2** of the **Second ES Addendum**.
- 2.2.67 The swales and attenuation basins will provide a certain level of treatment for highway runoff. The adequacy of these facilities for removal of pollutants will be assessed as part of detailed design and approved by the Highways Authority. If necessary additional treatment measures such as Class 1 Bypass Separators would be provided. Existing utilities within the site may require diversion. Discussions with utility providers are underway to confirm whether utility infrastructure will need to be diverted or whether there will be sufficient clearance from the works that it will not be affected. An appropriate approach will be agreed with the relevant statutory undertaker (i.e. the utility company).
- 2.2.68 Connections would also be made to existing local utility services (such as electricity for lighting) in the public highway, where practicable. Engagement is ongoing with utility companies to confirm suitable points of connection within the highway.
- d) **Security and lighting**
- 2.2.69 The route of the proposed Sizewell link road would be mostly unlit, however, lighting would be provided at the A12 roundabout and the roundabout connecting the Middleton Moor link to the B1122 (Yoxford Road), see **Figures 46.2.2 to 64.2.8** in **Volume 2** of the **Second ES**

Addendum. The lighting columns would be 10m in height and would be designed to comply with technical standards (Ref. 2.1 and Ref. 2.2).

- 2.2.70 Lighting is required at the two proposed roundabouts to maximise road safety as it is a dark area.
- 2.2.71 The remaining proposed junctions with the proposed Sizewell link road would have low minor road flows and be similar to existing unlit rural junctions, and would therefore be unlit to minimise light spill.
- 2.2.72 Fencing is proposed along the route of the proposed Sizewell link road, and would generally be positioned approximately 5m back from the top of any cutting or the swales at the toe of an embankment, to provide forward visibility in accordance with standard technical requirements and to provide space for maintenance (Ref. 2.2). Breaks or gates in the fencing would be provided for PRow crossing points.

2.3 Parameters

- 2.3.1 SZC Co. has adopted a parameters approach which defines the envelope for the proposed development. A parameter approach has been adopted in order to ensure that the design process has adequate flexibility in order that the Sizewell C Project can be delivered. This approach has followed the Rochdale Envelope, as set out in PINS Advice Note Nine (Ref. 2.3). These parameters have informed the assessment presented in the **ES** and the flexibility being sought is consistent with the findings of the **ES**. The assessment has used a reasonable worst-case basis on which to assess and mitigate potential adverse impacts arising from the scheme.
- 2.3.2 The site location plan and illustrative masterplan are shown in **Figure 64.2.1** of **Volume 2** of the **Second ES Addendum** and **Figures 64.2.2** to **64.2.8** in **Volume 2** of the **Second ES Addendum** respectively. These details show one possible iteration of a scheme delivered within the defined parameters set out within the application. The parameters of the site assessed within the **ES**, within which the proposed development may be constructed, operated and maintained are shown on the **Work Plans** ([Doc Ref. 2.3](#)), provided in **Appendix 2A** of this volume.
- 2.3.3 **Schedule 1** of the **Draft Development Consent Order (Draft DCO)** (Doc Ref. 3.1(B)) describes the authorised development. The DCO states that the development will be: constructed, operated and maintained anywhere within the area as shown on the **Work Plans** (Doc Ref. 2.3) (showing lateral limits of deviation) and to a maximum of +/- 1 metre vertically; carried out in accordance with the relevant plans set out in Schedule 7 of the **Draft DCO**; and, carried out in general accordance with the design principles set out in the **Associated Development Design Principles**

(Doc Ref. 8.3), save to the extent that alternative plans or details relating to siting, scale or appearance are submitted by the undertaker and approved by the local planning authority.

2.4 Description of construction

2.4.1 This section presents key details of the proposed construction activities that are anticipated to be an overview of the construction process, including:

- construction sequence and durations;
- temporary contractor compounds;
- estimated construction vehicles;
- a description of road, rail and footpath realignments/ diversions/ closures;
- anticipated construction plant and equipment;
- anticipated construction workforce;
- indicative material quantities;
- an overview of construction waste; and
- an overview of construction environmental and traffic management arrangements.

2.4.2 The construction arrangements described in this section provide the basis for the assessment presented in ~~this the~~ [in the ES, as updated by the First and Second ES Addendums volume](#). Details of construction are necessarily broad and may be subject to modification during the detailed design stage and / or once a contractor has been appointed. The construction proposals are therefore indicative only but are sufficient to enable robust assessment of a realistic ‘worst case’ assessment of likely significant effects.

2.4.3 Construction work would take place during Monday to Saturday 07:00 to 19:00 hours, with no working on Sundays or bank holidays. However, some activities may require 24-hour working and these would be notified to East Suffolk Council (ESC) in advance.

a) Construction sequence and duration

2.4.4 It is expected that the proposed development would take approximately 24 months to construct, during the early years of construction of the Sizewell C Project, as shown in the Indicative Phasing Schedule in the **Implementation Plan** provided at **Appendix I** of the **Planning Statement** (Doc Ref. 8.4).

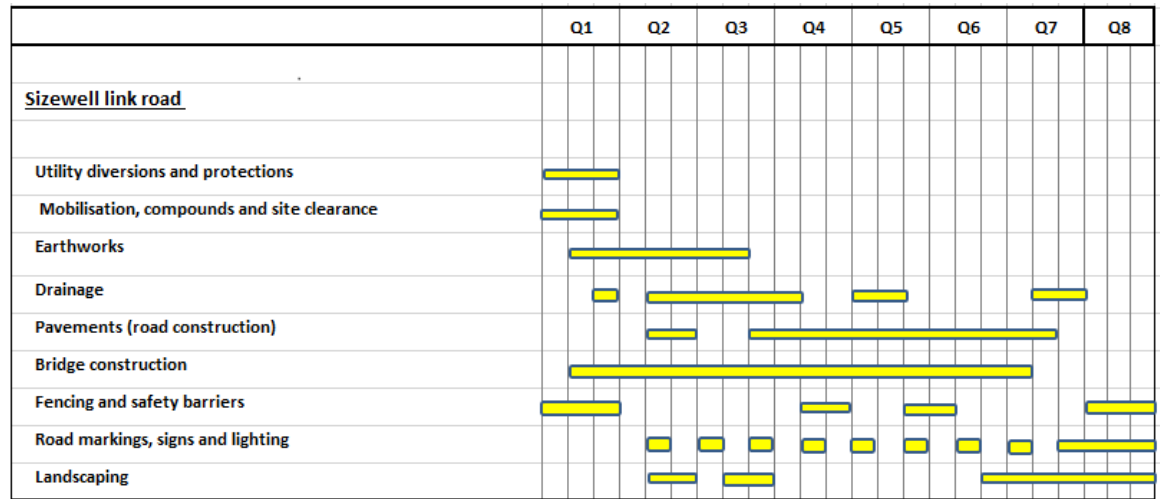
2.4.5 It is envisaged that the proposed development would be built in a west to east direction and off-line, with the exception of tie-ins which would be built on-line using temporary traffic management provided to minimise disruption to public traffic, utilising off-peak traffic management where possible. The road would be designed and constructed in accordance with Design Manual for Roads and Bridges technical standards (Ref. 2.1).

2.4.6 The anticipated construction sequence would be:

- Preparatory works: site set up and clearance including trees and hedgerows, including erection of temporary fencing on land required for construction and creation of alternative access arrangements and rights of way, setting up of temporary construction of site security, welfare facilities, temporary contractor compounds and temporary utilities; and
- Construction works: earthworks, road construction and surfacing, breaking of hardstanding, construction of bridges and civil structures including any piling works, utility and drainage installation, construction of pavements, kerbs, footways and paved areas, installation of permanent fencing, road signs and marking, and road lighting, permanent connections to existing road networks, and landscaping.

2.4.7 **Plate 2.1** illustrates the above anticipated construction sequence.

Plate 2.1: Anticipated construction sequence



2.4.8 Working areas within the site would be secured with fencing. Early during construction, swales and attenuation basins would be used as appropriate to ensure that surface water run-off would be contained within the site.

2.4.9 The overbridge which crosses the East Suffolk line would be constructed through pre-fabricated steel bridge deck elements, which would be transported to site for assembly. As the Sizewell link road must cross the East Suffolk line, the overbridge construction would be constructed early in the programme to enable access to the full length of the site from the A12.

b) Temporary contractor compound

2.4.10 Temporary contractor compounds would be required in various locations along the route. It is envisaged that five temporary contractor compound areas would be established to manage construction of the proposed development. The proposed indicative locations for these temporary compounds are shown on **Figures 64.2.2 and 46.2.8** in **Volume 2** of **this Second ES Addendum**.

2.4.11 One temporary contractor compound is likely to be located in Area 1, adjacent to the A12, at the western end of the site, provided in **Figure 46.2.3** in **Volume 2** of **this Second ES Addendum**. It is envisaged that this compound would support 100 construction workers and contain up to 90 parking spaces. The compound would be approximately 270m by 170m and would comprise site welfare facilities, office space, and plant and materials store.

2.4.12 The second temporary contractor compound is likely to be located in Area 2, located on both sides of the East Suffolk Line where it would be

crossed by the proposed Sizewell link road, provided in **Figure 46.2.4** in **Volume 2** of **the Second this ES Addendum**. Access would be along a temporary haul road from the A12. It is envisaged that this compound would support 100 construction workers and contain up to 90 parking spaces. The compound would be approximately 240m by 140m on the west side of the East Suffolk line and 160m by 70m on the east side, and would comprise site welfare facilities, office space, and plant and materials store.

2.4.13 The third temporary contractor compound is also likely to be located in Area 2, to the west side of the proposed Middleton Moor link, as seen in **Figure 46.2.5** in **Volume 2** of **the Second this ES Addendum**. Access would be along a temporary haul road from the A12. It is envisaged that this compound would support 100 construction workers and contain up to 90 parking spaces. The compound would be approximately 420m by 120m and would comprise site welfare facilities, office space, and plant and materials store.

2.4.14 A fourth temporary contractor compound is likely to be located in Area 5, as seen in **Figure 64.2.7** in **Volume 2** of **the Second this ES Addendum**. This would be approximately 60 x 75m and would include site welfare facilities, office space, and plant, but primarily be used for materials storage for the construction of the bridge in this location.

2.4.15 A fifth temporary contractor compound is likely to be located in Area 6, on both sides of the proposed Sizewell link road and either side of the link to the B1122 (as seen in **Figure 46.2.8** in **Volume 2** of **the Second this ES Addendum**). The areas on either side of the B1122 link would later be used for attenuation basins once the temporary contractor compound in Area 6 is no longer required. These basins are not required until later in the construction programme of the link road and as such, there would be no conflict with siting a construction compound here initially.

2.4.16 The temporary contractor compounds would have wire mesh boundary fencing, approximately 2m high. Temporary site utilities comprising power, water, drainage, and telecommunications would be provided as required. Surface water runoff would be attenuated, treated and disposed by either: infiltration, or to a local watercourse at a controlled rate, or removed by tanker for disposal following treatment as required at a designated license facility. Foul water would be removed by tanker for treatment at designated licensed facility.

2.4.17 Where reasonably practicable, the movement of construction material, construction plant and/or construction workers from the temporary contractor compounds to the work sites would be along temporary roads within the area of land required for construction (known as haul routes).

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These haul routes would be located along the line of the route of the proposed Sizewell link road or running parallel to it.

- 2.4.18 Following completion of construction, the land required for the temporary construction compounds would be cleared and returned to agricultural use as far as practicable.

c) **Estimated construction vehicles**

- 2.4.19 It is assumed that all contractor vehicles would access the site from the A12 at the western end of the proposed development and travel along the route of the Sizewell link route via temporary haul routes to reach the remainder of the site. However, in an emergency, it is envisaged that vehicles could access the site from Leiston.

- 2.4.20 All HGV construction traffic would use the A12 and B1122 between Yoxford and the new roundabout west of Middleton Moor to access the temporary contractor compounds. The construction of the proposed development is expected to generate up to 100 HGV (each way) movements per day during the construction period (200 movements in total). LGV and cars would use A12 and B1122 between Yoxford and Leiston, depending on origin/home location.

d) **Road/rail/footpath closures or diversions during construction**

- 2.4.21 Three overnight closures would likely be required to construct three pairs of beams forming part of the overbridge over the East Suffolk line. Disruption would be minimised by pre-fabricating the steel bridge deck elements and transporting them to site for assembly.

- 2.4.22 There is likely to be short-term traffic management needed at the B1125 and B1122 west and east of Theberton respectively to allow construction of the junctions with the Sizewell link road. These would be phased to align with the programme for the construction of the route of the Sizewell link road and would seek to minimise disruption to public traffic, utilising off-peak traffic management where possible.

- 2.4.23 Access would be provided to Trust Farm whilst the plant crossing and new roads north and south of Sizewell link road are being constructed. Working closely with the land owner, farm access would be maintained throughout the construction period, which in this area could last up to six months.

- 2.4.24 The Pretty Road bridge would be brought to site as pre-fabricated steel elements (steel or precast concrete) and assembled on site. While the approach embankments and bridge foundations and abutments are being constructed, Pretty Road would be closed to all traffic for approximately

six months. During this time, existing road users would be diverted to use Moat Road or Hawthorn Road. Following completion of the new structure and approach embankments Pretty Road will be re-opened to traffic. Following completion of the Pretty Road bridge, Pretty Road would remain stopped up on the north side of the route of the proposed Sizewell link road.

2.4.25 Sixteen PRow are located within or partially within the site:

- Footpaths E-344/012/0, E-344/013/0, E-344/014/0, and E-584/016/A to the west of the East Suffolk line.
- Footpaths E-396/014/0, E-396/017/0, E-396/020/0, E-396/023/0 and E-584/016/0 towards the centre of the site, between the East Suffolk line and Hawthorn Road. Footpaths E-396/017/0 and E-396/020/0 form part of a circular walking route from Middleton promoted by SCC.
- Footpaths E-396/015/0, E-515/003/0, E-515/004/0, E-515/005/0, E-515/007/0, E-515/012/0, and E-515/013/0 in the east of the site, between Hawthorn Road and the B1122 (Leiston Road).

2.4.26 During the construction stage of the proposed development, eleven PRow (E-344/013/0, E-344/014/0, E-396/015/0, E-396/017/0, E-396/023/0, E-515/003/0, E-515/004/0, E-515/005/0, ~~E-515/013/0~~, E-584/016/0 and E-584/016/A) would be subject to diversions, as seen in detailed **Rights of Way Plans** (Doc Ref. 2.4). These are intended to facilitate construction of the proposed development while ensuring that users continue to have access to a safe, well connected PRow network. In all cases, diversions would be kept as short as possible to minimise disruption. The proposed diversions would be as follows:

- users of footpath E-344/014/0 would be permanently diverted south by approximately 56m to allow the route to cross the proposed Sizewell link road. On the south side of the Sizewell link road users would be directed west for approximately 45m until the route rejoinsre-joins its original alignment;east by approximately 25m to allow the route to accommodate the proposed embankment slopes of the proposed Sizewell link road;
- users of footpaths E-344/013/0 and E-584/016/A would be diverted south-west along the proposed route of Sizewell link road and cross the proposed Sizewell link road approximately 250m south-west of the existing location;
- users of footpath E-584/016/0 would be diverted east along the proposed route of the Sizewell link road and cross the proposed road approximately ~~26470~~26470m east of the existing location;

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- users of footpath E-396/017/0~~2~~ would be diverted west along the proposed Sizewell link road, to cross the proposed road approximately 60m west of the existing location;
- users of footpath E-396/023/0 would be diverted west of its existing alignment to avoid the construction work area whilst the staggered junction north of Trust Farm is being constructed;
- users of footpath E-396/015/0 would be diverted in two separate locations. At the proposed junction of the B1122 and the B1125, there would be a short diversion to accommodate the new eastern junction towards Theberton. Where the alignment of footpath E-396/015/0 and E-515/005/0 meets the proposed Sizewell link road they would be temporarily diverted 100m to the south of their existing alignment whilst earthworks are being constructed, to cross the work area where the land is at grade. Once construction is completed, these footpaths would be diverted to cross the route of the proposed Sizewell link road via the Pretty Road overbridge;
- users of footpath E-515/003/0 would be diverted south-east along the route of the proposed Sizewell link road, to cross the proposed road approximately 120m from the existing location;
- users of footpath E-515/004/0 would be diverted south-east along the route of the proposed Sizewell link road, to cross the proposed road approximately 50m from the existing location;
- ~~• users of footpath E-515/013/0 would be diverted along the route of the proposed Sizewell link road, to cross the proposed road approximately 45m south of the existing location; and~~
- users of footpath E-515/007/0 would be temporarily diverted for 25m to the west of its existing alignment whilst earthworks are being constructed, to cross the work area where the land is at grade.

2.4.27 For further details see the **Access and Rights of Way plans (Doc Ref. 2.4)**.

~~2.4.27~~ Temporary and permanent diversions are shown on the **Rights of Way Plans**.

e) **Construction workforce**

2.4.28 The number of workers needed to construct the Sizewell link road would change during the course of the construction programme. It is estimated that the peak construction workforce would be approximately 300 persons on the construction site at any one time.

f) Anticipated construction plant and equipment

2.4.29 The anticipated plant and equipment required for construction is set out in **Table 2.1**.

Table 2.1: Anticipated plant and equipment for construction

Activity	Plant Equipment.
Site set up and Clearance.	<ul style="list-style-type: none"> • Lorry Loader Crane. • Diesel / Petrol Generators. • Bunded Fuel Tanks. • Mobile / Static Welfare Units. • Containers/Lock Ups. • Heras Fencing. • Low Loaders. • 360 Wheeled / Tracked Excavators. • Excavator Accessories and Attachments. • 180 Backhoe Loaders. • Dump Trucks. • Telehandlers. • Chainsaws and Brush-cutters. • Wood Chippers. • Road Sweeper / Gully Sucker. • 4x4 Site Vehicles. • Vibratory tamping rollers.
Earthworks	<ul style="list-style-type: none"> • Tracked Bulldozers. • Wheeled Loading Shovels. • 360 Tracked Excavators. • Excavator Accessories and Attachments. • Motor Graders / Scrapers. • Articulated Haulers/Dump Trucks. • Vibratory Tamping Rollers. • Dust Suppression Bowsers. • Road Tipper Waggon.
Drainage	<ul style="list-style-type: none"> • Lorry Loader Crane. • 360 Tracked Excavators. • Excavator Accessories and Attachments. • 180 Backhoe Loaders. • Trench Boxes. • Manhole Boxes. • Dump Trucks. • Wheeled Loading Shovels.

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Activity	Plant Equipment.
	<ul style="list-style-type: none"> • Concrete Mixer Trucks. • Compressors and Pneumatic Hand Tools. • Submersible Pumps. • Settlement Tanks. • Trench Rammers.
Pavements	<ul style="list-style-type: none"> • Cold Planer/Milling Machines. • Motor Graders / Dozers. • Wheeled Loading Shovels. • Dump Trucks. • 360 Tracked Excavators. • Excavator Accessories and Attachments. • 180 Backhoe Loaders. • Asphalt Pavers (and Tipper Lorries). • Concrete Mixer Trucks. • Compressors and Pneumatic Hand Tools. • Deadweight / Vibrating Rollers. • Vibrating Plate Compactors. • Road Sweeper.
Kerbs, Footways and Paved Areas.	<ul style="list-style-type: none"> • Lorry Loader Crane. • Telehandler • Cold Planer/Milling machines. • Concrete Mixer Trucks. • Compressors and Pneumatic Hand Tools. • Mini Asphalt Pavers (and Tipper Lorries). • Deadweight / Vibrating Rollers. • Vibrating Plate Compactors.
Bridges and Civil Structures.	<ul style="list-style-type: none"> • Lorry Loader Crane. • Telehandler • 360 Tracked Excavators. • Excavator Accessories and Attachments. • Concrete Mixer Trucks. • Concrete Pumps. • Concrete Compaction Plant. • Dump Trucks. • Deadweight / Vibrating Rollers. • Piling Rigs (including equipment for closed end driven cast in-situ piling, and continuous flight augering / bored piles and driven sheet piles where required). • Compressors and Pneumatic Hand Tools. • Mobile All Terrain Cranes.

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Activity	Plant Equipment.
	<ul style="list-style-type: none"> • Mobile Elevating Work Platforms (MEWP) - Vehicle Mounted or Self-propelled.
Road Restraints.	<ul style="list-style-type: none"> • Lorry Loader Crane. • Telehandler • Concrete Mixer Trucks. • Mini Excavator. • Excavator Accessories and Attachments. • 180 Backhoe Loaders.
Fencing	<ul style="list-style-type: none"> • Lorry Loader Crane. • Telehandler • 180 Backhoe Loaders. • Backhoe Accessories and Attachments. • Concrete Mixer Trucks.
Traffic Signs.	<ul style="list-style-type: none"> • Lorry Loader Crane. • 180 Backhoe Loaders. • Mini Excavator. • Excavator Accessories and Attachments. • Telehandler • Tower Scaffolds. • MEWP's - Vehicle Mounted or Self-propelled.
Road Lighting.	<ul style="list-style-type: none"> • Lorry Loader Crane. • Mini Excavator. • Excavator Accessories and Attachments. • Small Crane / Backhoe. • Telehandler • MEWP's - Vehicle Mounted or Self-propelled.

g) Indicative material quantities

2.4.30 The anticipated material quantities are set out in **Table 2.2**.

Table 2.2: Anticipated material quantities

Material	Mass of material required (tonnes).
Concrete	1,200
Granular sub-base.	80,000
Steel	600
Asphalt (including bitumen).	70,000
Other	100

2.4.31 Earthworks would be designed to maximise cut and fill balance across the Sizewell C Project. It is envisaged that the required fill material for the earthworks would be provided from material won across the Sizewell C Project, therefore negating the need to import fill materials to the site.

h) Waste

2.4.32 Waste generated from the construction and earthworks activities of the proposed development is likely to include:

- vegetation;
- packaging, including wood pallets, plastics, cardboard, tins;
- plasterboard;
- rubble (broken bricks, blocks, tiles etc.);
- timber (excluding pallets);
- cement;
- insulation;
- metal;
- dry concrete products (blocks, slabs etc.);
- plaster products (excluding packaging);
- ceramic materials; and
- hazardous waste (e.g. remedial wastes, paint cans, oil/lubricants etc.).

2.4.33 Earthworks would be designed to maximise cut and fill balance in order to prevent material being sent off-site. Furthermore, contractors would be required to investigate opportunities to minimise and reduce waste generation.

2.4.34 Any inert and non-hazardous waste material that cannot be reused on-site would be removed by licensed waste carriers and sent for reuse, recycling or recovery, or for disposal at appropriately licenced facilities (these are expected to be inert waste landfill sites) in accordance with the Waste Hierarchy, as defined in the EU Waste Framework Directive (2008/98/EC). However, works would be carried out in such a way that, as far as is reasonably practicable, the amount of waste to be disposed at landfill is minimised.

2.4.35 It is estimated that 987,90460 tonnes of construction waste would be created. Refer to Volume 1, Chapter 2 of this ES Addendum for further details.

i) Construction environmental and traffic management

2.4.36 A **Code of Construction Practice (CoCP)** (Doc Ref. 8.11(A)) is included in the Development Consent Order application for the Sizewell C Project, which sets out the measures and controls that SZC Co. will require its contractors to adopt during construction of the proposed development, where appropriate. This is secured by requirement included in Schedule 2 of the **Draft DCO** (Doc Ref. 3.1(B)). In summary, the **CoCP** (Doc Ref. 8.11(A)) sets out the following:

- general construction environmental management arrangements, including details of the environmental management system;
- how construction environmental management will be implemented, reviewed, and monitored;
- community and stakeholder engagement that will be implemented during the construction period;
- general measures relating to topics such as training and competence, construction consents, workforce code of conduct, working hours, and construction site layout;
- measures relating to waste management and resource use, land quality, ecology, landscape, cultural heritage, noise and vibration, air quality, water environment, traffic and transport, amenity and recreation, carbon emissions, and emergency arrangements; and
- any site-specific controls to be applied at any of the Sizewell C Project sites.

2.4.37 The management measures and controls included in the **CoCP** (Doc Ref. 8.11(A)) have been identified through the EIA process and will minimise impacts on the environment and human receptors, as far as reasonably practicable.

2.4.38 In addition to the **CoCP** (Doc Ref. 8.11(A)), the arrangements for the management of construction traffic and workforce travel are set out in the **Construction Traffic Management Plan (CTMP)** (Doc Ref. 8.7) and **Construction Worker Travel Plan (CWTP)** (Doc Ref. 8.8) respectively. These documents include a series of measures to reduce the impact of construction vehicle traffic upon the highway network and for the

sustainable travel of construction workforce to the Sizewell C Project sites.

2.4.39 The **CoCP** (Doc Ref. 8.11(**AC**)) is secured by a requirement in Schedule 2 of the **Draft DCO** (Doc Ref. 3.1(**BD**)_Ch) and the appointed contractors will be required to undertake the construction works in accordance with the arrangements set out within the **CoCP**. The **Section 106 Heads of Terms Draft Deed of Obligation** (Doc Ref. 8.17) ~~provided in the **Planning Statement**~~ (Doc Ref. 8.4) then secures the **CTMP** (Doc Ref. 8.7) and **CWTP** (Doc Ref. 8.8). Any work undertaken by a contractor would be reviewed and approved by relevant SZC Co. personnel prior to the work commencing.

2.4.40 In addition, there may be a need to apply for additional permits, consents, or licences prior to and during the construction works (such as Land Drainage Consents, Environmental Permits, or protected species licences, if required). As the programme of works and design are progressed, these permissions will be identified and scheduled in a timely manner to enable determination by the appropriate regulatory body. Any requirements of a granted permission will be provided to contractors undertaking the work.

j) Construction lighting

2.4.41 During construction of the proposed development, lighting would be required for certain periods to enable the safety and security of the site, construction staff and members of the public. Construction lighting would be designed to comply with relevant regulations and standards and would meet health and safety requirements. In accordance with the **CoCP** (Doc Ref. 8.11(A)), lighting would be positioned to minimise the potential impact upon the surrounding area as far as practicable.

2.4.42 Artificial lighting during construction of the proposed development would only be used during the hours of darkness, low levels of natural light, or specific construction methods or phases to ensure the health, safety and welfare of construction staff and members of the public.

2.4.43 It is envisaged that construction lighting would generally be required to provide illumination for:

- access/roads where required to meet safety requirements;
- safe movement of construction workers and pedestrians around the construction work site boundaries;
- specific construction tasks;

- site security; and
- temporary contractor compounds, materials storage facilities, and construction plant and equipment where required.

2.4.44 Where required, construction lighting would be provided at the minimum luminosity and would be designed, positioned and/or directed so as not to unnecessarily intrude on adjacent buildings, ecological receptors or habitat used by protected species, and other land uses to prevent unnecessary disturbance, interference with local residents and passing motorists. In addition, at construction sites where potentially significant effects related to lighting impacts are identified, the lead contractor will develop and implement lighting controls as part of their environmental management plan, which could include measures such as shielding of luminaires to reduce backward spill of light or use of sensors or timing devices to automatically switch off lighting where appropriate.

2.4.45 Close-boarded fencing would be erected during construction along the side of woodland blocks, where necessary where the site abuts these (such as along Plumtreehills Covert and at locations noted by Target Note 3, Target Note 8, Target Note 12 and Target Note 14, shown on **Figures 7.3 to 7.5 of Volume 6** of the **ES** (Doc Ref. 6.7)).

2.5 Description of operation

2.5.1 This section presents details of the operation of the proposed development. The route of the proposed Sizewell link road would be open for public use as well as use by construction traffic associated with the Sizewell C Project on a 24-hour basis and would have a 60mph speed limit.

a) Road usage

2.5.2 Once operational, during the peak construction period at the Sizewell C main development site, the daily number of vehicles using the Sizewell link road, on a typical day, is forecast to be:

- between A12 and Middleton Moor link – 2,300 vehicle movements (of which 1,150 would be Sizewell C vehicles);
- between Middleton Moor link and B1125 junction – 6,450 vehicle movements (of which 1,800 would be Sizewell C vehicles); and
- between B1125 junction and end of Sizewell link road – 8,500 vehicle movement (of which 2,200 would be Sizewell C vehicles).

- 2.5.3 During the peak construction period at the Sizewell C main development site there are anticipated to be 350 vehicle movements per day on the existing B1122 at Middleton Moor and 500 vehicle movements on the existing B1122 at Theberton.
- 2.5.4 Upon completion of the construction of the Sizewell C main development site, the daily number of vehicles using the Sizewell link road, on a typical day, is forecast to be:
- between A12 and Middleton Moor link – 1,400 vehicle movements (including 150 Sizewell C related vehicles);
 - between Middleton Moor link and B1125 junction – 5,200 vehicle movements (including 200 Sizewell C related vehicles); and
 - between B1125 junction and end of Sizewell link road – 7,200 vehicle movements (including 400 Sizewell C related vehicles);
- 2.5.5 Upon completion of the construction of the Sizewell C main development site, there are anticipated to be 400 vehicle movements per day on the existing B1122 at Middleton Moor and 400 vehicle movements on the existing B1122 at Theberton.
- b) **Site maintenance**
- 2.5.6 During operation, routine maintenance of the proposed development would be undertaken to maintain appropriate standards. Subject to the adoption of the highway by the highway authority, routine highway maintenance would be carried out by the highway authority. However, prior to the adoption, SZC Co. would be responsible for carrying out any required highway maintenance.
- 2.5.7 Periodic inspection and maintenance of the SuDS would be undertaken by the Highways Authority to ensure the continued efficiency of the drainage system.
- 2.5.8 Routine maintenance would also include vegetation clearance, maintenance of road signs and road markings, and litter collection. Periodically, maintenance activities such as resurfacing would be required.
- 2.5.9 Material use and waste generation from these maintenance activities are expected to be minimal during operation of the proposed development and would generally be the same (in both type and quantity) to that generated by the existing roads in the area. The wastes will be managed using the established procedures and facilities adopted by the local authority.

2.6 Post-construction of Sizewell C

- 2.6.1 The proposed development would be permanent and is expected to become part of the adopted highway network. Therefore, there would not be a 'removal and reinstatement' phase.

REFERENCES

- 2.1 British Standards Institute, Code of Practice for the Design of Road Lighting, Lighting of Roads and Public Amenity Areas BS 5489-1:2013 (2012)
- 2.2 Highways England, Design Manual for Roads and Bridges (last updated 2018) Available at:
<http://www.standardsforhighways.co.uk/ha/standards/dmrb/>
- 2.3 PINS Advice Note Nine: Rochdale Envelope, July 2018. Available at:
<https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2013/05/Advice-note-9.-Rochdale-envelope-web.pdf>