



The Sizewell C Project

6.5 Volume 4 Southern Park and Ride Chapter 3 Alternatives and Design Evolution

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Figures

None provided.

Appendices

None provided.

3. Alternatives and Design Evolution

3.1 Introduction

3.1.1 In accordance with Schedule 4 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (hereafter referred to as the “EIA Regulations”) (Ref. 3.1), this chapter of the **Environmental Statement (ES)** presents a description of the main alternatives considered in relation to the proposed southern park and ride facility at Wickham Market (herein referred to as the ‘proposed development’).

3.1.2 The site selection and design evolution process for the proposed development has been iterative and informed by consultation with statutory consultees and the public.

3.1.3 This chapter provides details of the supporting studies and assessments that have informed the final design choices for the proposed development, taking into account potential environmental, transport and socio-economic impacts, where relevant. In summary this includes the following:

- alternative sites considered for the proposed development; and
- alternative layouts, including sizing, land uses, access and landscaping.

3.1.4 This includes details of how the choice of site and layout have been influenced by environmental, transport and socio-economic considerations.

3.1.5 This chapter should be read in conjunction with **Volume 1, Chapter 5** of the **ES**, the **Transport Assessment** (Doc Ref. 8.5), and the **Planning Statement** (Doc Ref. 8.4), which provide further details on the strategic site selection process for the park and ride facilities. Further details on the formal Stage 1 Consultation, Stage 2 Consultation, Stage 3 Consultation and Stage 4 Consultation are described in the **Consultation Report** (Doc Ref. 5.1).

3.2 Alternative sites

a) Background

3.2.1 To reduce the amount of additional traffic generated by the construction workforce on local roads, and through local villages, park and ride facilities were proposed. By having a park and ride facility located adjacent to the A12, a significant number of Sizewell C Project construction worker vehicle

movements would be taken off the wider highway network close to the main development site.

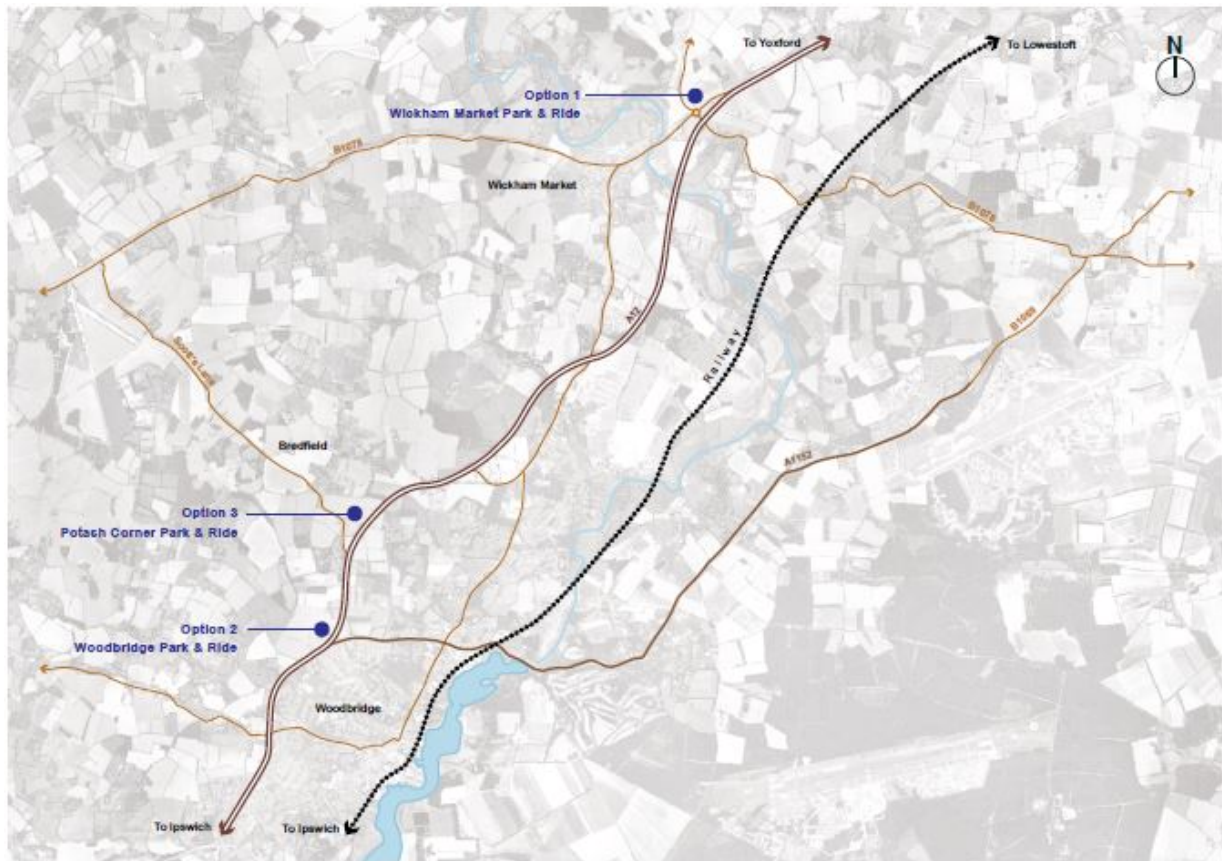
- 3.2.2 In considering appropriate locations for the park and ride sites, the Sizewell C Project Transport Strategy and Supporting Information that accompanied the Stage 1 Consultation anticipated that the majority of the construction workforce would use the A12. Therefore, two sites (one north of Yoxford and the other south of Saxmundham) were sought along this road to cater for those travelling from both directions. Both park and ride sites would also intercept traffic movements from locations west of the A12.
- 3.2.3 Further detail on the rationale for proposing two park and ride facilities, one to the north and one to the south of the Sizewell C Project main development site, is detailed in **Volume 1, Chapter 4** of the **ES**.
- 3.2.4 The principal consideration in the location of the southern park and ride site was to reduce the volume of traffic passing through smaller settlements and to reduce traffic volumes on the A12 and local road network east of the A12.
- 3.2.5 Having identified the benefits of intercepting construction worker vehicle movements in these general locations, SZC Co. commenced a site selection exercise to identify potentially suitable locations. This is summarised in the **Site Selection Report** appended to the **Planning Statement** (Doc Ref. 8.4).
- 3.2.6 SZC Co.'s Sizewell C Gravity Model, which estimated the residential location of the peak construction workforce, provided in **Volume 2, Chapter 9** of the **ES**, informed the required number of car parking spaces at each of the park and ride facilities. At Stage 1 Consultation, for the southern park and ride facility, it was determined that over 1,000 car parking spaces would be required, together with other infrastructure and on-site storage areas (this number changed in later stages of consultation as described later in this chapter).
- 3.2.7 The southern park and ride site would also include facilities to serve two other purposes:
- a traffic incident management area (TIMA) would enable heavy goods vehicles (HGVs) to pull off the A12 in the event of traffic disruption and road closures to the main development site, in order to avoid contributing to further delays. This would not be a lorry park, and would only be used during periods of traffic disruption. The vehicles

would wait temporarily in the traffic incident management area until the disruption had cleared before proceeding on their journey; and

- a postal consolidation facility would enable mail and courier deliveries to be consolidated into a smaller number of vehicle trips to the main development site, in order to reduce the number of individual vehicle movements to and from the main development site.

3.2.8 Three sites were considered to be potentially suitable as a park and ride facility south of the Sizewell C Project main development site (see **Plate 3.1**).

Plate 3.1: Stage 1 Consultation: Southern Park and Ride options.



3.2.9 Three sites were considered to be potentially suitable as a park and ride facility south of the Sizewell C Project main development site. These sites were presented as options at the Stage 1 Consultation.

Table 3.1: Description of the three southern park and ride options at the Stage 1 Consultation.

Option 1 (Wickham Market).
<ul style="list-style-type: none"> • Located at the junction between the A12 and the B1078/B1116 to the north-east of Wickham Market. The site was approximately 26 hectares (ha) in area and in agricultural use. • The site boundary for the park and ride, postal and TIMA would largely follow the existing field boundaries, except the south-eastern perimeter where it aligns with the northern edge of the A12 embankment and northbound slip road. Four wooded copses would lie along the outer edges of the site along the eastern, northern and western boundaries, including Wonder Grove and Whin Belt. • An existing pond would be present within the site with a further two ponds located immediately adjacent to the west of the site. • The closest residential properties would include Ash View, located at the eastern end of Main Road (B1078) (approximately 270 metres (m) west of the site), Bottle and Glass Cottages (approximately 200m south) on the opposite side of the A12 and other properties in Lower Hacheston and Hacheston to the south and north respectively. • The site would be relatively open with views across the site from the A12, B1116, and surrounding public rights of way (PRoW). However, views of the site from within the wider landscape would be relatively contained by local variations in landform, boundary hedgerows and woodland. • Local landscape designations consist of the River Deben Special Landscape Area (SLA) (adjacent to the site, to the west) and the Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB) (approximately 4.5 kilometres (km) south-east of the site). • There would be no statutory designated ecological sites within 1km of the site but seven non-statutory designated County Wildlife Sites (CWS) would be within 2km of the site. • Built heritage features in the vicinity would include two Grade II listed buildings known as Ash Cottage and 36 Ash Road (both approximately 500m south) and another Grade II listed building, Rookery Farm (approximately 650m north-west). • No PRoWs would cross the site but there would be a number in the vicinity of the site.
Option 2 (Woodbridge)
<ul style="list-style-type: none"> • Located to the west of the A12 at the A12/A1152 Woods Lane Junction, north-west of Woodbridge. The site would have been approximately 35ha of arable fields. • There would have been long-distance views from the PRoWs crossing the land to the west on the other side of the valley, which would have been difficult to mitigate given the local topography. Development would therefore have focussed on the flatter, higher ground on the eastern half of the site, as far as practicable, with the western land used primarily for appropriate landscape mitigation including land shaping and woodland planting. The site would have been approximately 100m to the east of the Valleys and tributaries of the River Deben SLA, including the grounds of Hasketon Manor. • A small number of properties would have been in the vicinity of the site on the western side of the A12. • Two PRoWs would have crossed the site. • There would have been no ecologically designated sites within 1km of the site. The site consisted of arable land with hedgerows with occasional mature trees around the boundary and grassland to the north-west. • An existing pond would have been present on-site. • No designated heritage assets were located within the site boundary or within 250m of the site.

Option 3 (Potash Corner).

- Located at Potash Corner on Scott’s Lane, to the west of the A12 and in close proximity to the village of Bredfield, which lies to the north. The site would have been approximately 24ha of arable farmland.
- Hedgerows and woodland would have marked some of the field boundaries and provided some screening. There would have been a few residential properties near the site, including a number at Potash Corner and others to the north and west, overlooking the northern fields beyond boundary vegetation. Suffolk Wildlife Trust’s Foxburrow Farm – an education centre and working farm managed for wildlife – would have been situated nearby, located on the opposite side of the A12.
- Two PRowS would have crossed the site.
- There would have been no statutory ecological designations within 1km of the site.
- There would have been no designated heritage assets within the site, but a number of listed buildings would have been in the area. In addition to Blue Barn Farmhouse, four further listed properties would have been within 500m, including the Grade II* Listed Building Bredfield House Stables.

3.2.10 The analysis of environmental, transport and socio-economic impacts associated with the three options is set out in the following section.

i. Environmental considerations

3.2.11 Option 1 (Wickham Market), as presented at the Stage 1 Consultation, had high archaeological potential, as well as longer distance landscape sensitivity (notably views from Wickham Market and from the River Deben SLA).

3.2.12 Option 2 (Woodbridge) would have been located on the west side of the A12 beyond the built-up area of Woodbridge, and would have had similar long-distance landscape and visual considerations to the Option 1 (Wickham Market); although the long-distance views from the PRowS crossing Option 2 would have been difficult to mitigate given the local topography. It was also considered to have some potential for unrecorded archaeology.

3.2.13 Option 3 (Potash Corner) would have had a number of residential dwellings overlooking the site in a village setting. Both Options 2 (Woodbridge) and 3 (Potash Corner) would have been crossed by PRowS and Option 3 would have also had a woodland/ditch habitat along its eastern and northern boundaries.

3.2.14 Whilst all options would have given rise to potential environmental impacts, the greater number of, and closer proximity to, sensitive receptors of Option 3 (Potash Corner) made it the least favourable in environmental terms.

3.2.15 The Stage 1 Consultation feedback resulted in more respondents raising concerns regarding Option 2 (Woodbridge) than the preferred Option 1

(Wickham Market). It was considered that Option 2's greater distance from the Sizewell C Project main development site may result in fewer car journeys being intercepted. Respondents also expressed concern that Option 2's closer proximity to residential areas and schools would result in greater potential for adverse effects.

3.2.16 Whilst Option 1 (Wickham Market) was preferred to Option 2 (Woodbridge), Option 2 was held in reserve. However, it would only have been taken forward if Option 1 proved unsuitable in light of feedback from consultation or further environmental and technical studies at the following stages of consultation.

3.2.17 Following the Stage 1 Consultation, an archaeological geophysical survey of the Option 1 (Wickham Market) site was undertaken. The results suggested that extensive archaeological remains associated with the Roman 'small town' of Hacheston extended across the site. The area of investigation was broadened to include land immediately to the east of the Option 1 site (refer to **Plate 3.2**). This additional geophysical survey suggested that the potential for archaeology was lower in the revised location to the east of the Option 1 site, and was largely confined to the southern part of the field where the original Option 1 site was proposed. Therefore, this revised location (revised Wickham Market site) was a preferable alternative to the original Option 1 site.

Plate 3.2: Stage 1 Consultation: park and ride Option 1: Wickham Market.



3.2.18 The revised Wickham Market site was assessed against all of the site selection considerations. It was considered that, with the exception of clear differences in archaeological constraints, the conclusions of the assessment of the original Option 1 (Wickham Market) site presented at the Stage 1 Consultation generally applied to the revised site, given the similar locational and physical characteristics of the sites. The revised Wickham Market site would retain the same access arrangements as the original site, but would require an extended access road from the slip road junction into the site. In addition, the revised site access road would be bisected by a PRow. Both of these factors have engineering and operational implications, but these were outweighed by the suitability of the revised site in terms of archaeological considerations. Therefore, the revised site at Wickham Market was identified as the preferred southern park and ride site for the Stage 2 Consultation. It was also considered to be preferable over the other options (Option 2 – Woodbridge and Option 3 – Potash Corner) in terms of consultation feedback, operational considerations, transport and planning policy. See the **Consultation Report** (Doc Ref. 5.1) and the **Site**

Selection Report appended to the **Planning Statement** (Doc Ref. 8.4) for further details.

3.2.19 The revised site boundary for the Wickham Market site presented at the Stage 2 Consultation is shown in **Plate 3.3**.

ii. **Transport**

3.2.20 While all of the Stage 1 Consultation site options were in a good location for intercepting worker traffic from the south, Option 1 (Wickham Market) was considered to be in the optimal position. It would be located just before the single lane stretch of the A12 northbound through the villages of Marlesford, Little Glemham, Stratford St Andrew and Farnham, and would be closest to the Sizewell C Project main development site. The Wickham Market site was also considered to be the best placed to intercept any traffic travelling towards the site on the B1078 via Wickham Market and the B1116 through Hacheston.

3.2.21 Option 1 (Wickham Market) would have good access to and from the A12, with slip roads in each direction allowing all southbound and northbound car and bus traffic to access the site. Some local concerns were raised about the potential for delays at the junction of the B1078 and B1116. However, it was not anticipated that the scale of additional traffic is likely to give rise to any significant highway safety or congestion problems at this location, provided in **Volume 1, Chapter 4** of the **ES**.

3.2.22 Option 2 (Woodbridge) and Option 3 (Potash Corner) were both considered to be potentially suitable sites in transport terms, but would have been in less optimal locations. These would have had the potential to cause greater issues in terms of congestion, as well as access and highway safety when compared with Option 1 (Wickham Market).

iii. **Socio-economics**

3.2.23 At the Stage 1 Consultation it was thought that there may be some benefit for local businesses close to Option 1 (Wickham Market). However, greater benefits would have been expected from Option 2 (Woodbridge), where there would have been more nearby facilities likely to attract workers. Socio-economic benefits from Option 3 (Potash Corner) would have been limited, as there would be relatively few shops, services or facilities close by.

iv. Conclusion

- 3.2.24 Option 1 (Wickham Market) fulfilled the requirement of the park and ride facility to reduce the volume of traffic passing through smaller settlements and to reduce traffic volumes on the A12 and local road network east of the A12.
- 3.2.25 Whilst all options would give rise to potential environmental impacts, the proximity of sensitive receptions to Option 3 (Potash Corner) made it the least favourable. Option 2 (Woodbridge) would have been the best option from a socio-economic perspective but Option 1 (Wickham Market) also had socio-economic benefits and was considered to be in the optimal location from a transport perspective. Option 2 would also have had a greater landscape impact than Option 1, with long-distance views from the PRowS crossing the land to the west on the other side of the valley, which would have been difficult to mitigate given the local topography.
- 3.2.26 Option 1 (Wickham Market) would be located just before the single lane stretch of the A12 northbound through the villages of Marlesford, Little Glemham, Stratford St Andrew and Farnham, and would be closest to the Sizewell C Project main development site. This site was also considered to be the best placed to intercept any traffic travelling towards the site on the B1078 via Wickham Market and the B1116 through Hacheston. It would also have good access to and from the A12, with slip roads in each direction allowing all southbound and northbound car and bus traffic to access the site. Options 2 (Woodbridge) and 3 (Potash Corner) have the potential to cause greater issues in terms of congestion, as well as access and highway safety when compared to Option 1 (Wickham Market).
- 3.2.27 The transport benefits of Option 1 (Wickham Market) were considered to outweigh socio-economic benefits of Option 2 (Woodbridge). Option 1 was therefore considered to be the most appropriate site for the location of the southern park and ride and was selected as the preferred location for the proposed development.

3.3 Alternative design and design evolution

- 3.3.1 This section provides a summary of the evolution of the design of the proposed development, including the alternative designs considered and modifications made throughout the design process, including any environmental considerations and consultation feedback which led to those modifications.

a) Stage 1 Consultation

- 3.3.2 Each of the three options presented at Stage 1 Consultation had initial concepts for the layout of the sites, which included indications of where the hard surfacing and buildings would be located, with buffers between built development and the site boundaries.
- 3.3.3 For Option 1 (Wickham Market), the main aim of the design was to locate the buildings, parking and structures, away from the north and north-eastern parts of the site, as the land generally rises in this direction, and is less well screened by woodland.
- 3.3.4 Safe highway access was a key factor in determining the layout of the site. Preliminary studies in advance of the Stage 1 Consultation identified a proposed access point to/from the Wickham Market site off the slip road leading onto the A12.
- 3.3.5 Option 1 was located at the junction between the A12 and the B1078/B1116 to the north-east of Wickham Market. At the Stage 1 Consultation the site was made up of two areas – one to the north of the northbound A12 merge slip road and between the slip road and the A12. The combined area was 25ha (see **Plate 3.2**).
- 3.3.6 At the Stage 1 Consultation, the possibility of co-locating a lorry park, an induction centre for construction workers and a postal consolidation facility at the southern park and ride site was presented. By the Stage 2 Consultation, the lorry park was discounted from the southern park and ride site as this would be managed by alternative methods, for example, a freight management facility as provided in **Volume 8** of the **ES**. However, the preference was for the postal consolidation facility to be located at the southern park and ride site (with no comparable facility to be located at the northern park and ride site as the majority of post was expected to arrive from the south), and for the induction centre to be located at the Sizewell C Project main development site, provided in **Volume 2** of the **ES**. This was considered to offer the greatest efficiencies for the Sizewell C Project in relation to the management and integration of induction activities into the wider operation of the construction site and accommodation campus.

b) Stage 2 Consultation

- 3.3.7 Following the Stage 1 Consultation, Option 1 (Wickham Market) was generally supported by respondents and became the preferred location for the southern park and ride facility with Option 2 (Woodbridge) held in reserve. This formed the basis of the Stage 2 Consultation.

Plate 3.3: Stage 2 Consultation: park and ride Option 1 Wickham Market – masterplan.



3.3.8 The preferred site at Wickham Market was subject to further studies to increase understanding of the implications, and constraints of developing a park and ride facility in this location.

3.3.9 As the project developed following the Stage 1 Consultation, the broad requirements for the southern park and ride facility remained similar but various changes to the site requirements were made to meet project requirements.

3.3.10 The Sizewell C Gravity Model indicated that a slightly higher proportion of construction workers would travel from the north, therefore, the size of the

southern park and ride facility was slightly reduced in size to around 900 spaces.

- 3.3.11 Whilst the proposal to include a lorry park with space for between 50 to 100 HGVs at the southern park and ride site was discounted in favour of a freight management facility, a TIMA was included to enable HGVs to be held off of the local highway network in the event of an emergency.
- 3.3.12 The proposed landscaping scheme at the Stage 2 Consultation is illustrated in **Plate 3.3**. This was designed specifically to minimise potential effects on ecological and landscape and visual receptors. The layout was designed to maximise the benefit of the existing screening provided by Whin Belt and the other local blocks of woodland to the north, west (known as Wonder Grove, located approximately 250m west) and east. Supplementary hedgerow planting was proposed to screen views from Footpath E-387/008/0 and Bridleway E-288-008/0. In addition, the proposed site layout provided a reasonable separation between the built development, and the existing areas of woodland (and ponds) to protect existing habitat.
- 3.3.13 A temporary sustainable drainage system (SuDS) would be implemented to minimise surface water run-off and sediment generation. This design would include the incorporation of infiltration basins. The existing pond on the site would be retained within the layout to maintain its habitat value. It was also considered that it would have the potential to help attenuate storm water flows.
- 3.3.14 A lighting strategy was also developed which would provide perimeter lighting of the facility, and within the car parking areas for security and safety reasons. In developing the lighting strategy, regard was given to minimising potential effects on neighbouring residential occupiers and ecological receptors.
- 3.3.15 The facilities on-site would be bounded by perimeter security fences. This is necessary to mark the boundary of the site and ensure the security of the site throughout construction and operation and during the removal and reinstatement phase.
- 3.3.16 At the Stage 2 Consultation, some respondents were concerned about the potential noise, traffic and light pollution impacts of the Wickham Market site that could affect their homes and communities. Some respondents were concerned about the potential visual impact of the proposed site, and felt that the height and size of the proposed structures would dominate views from the village.

- 3.3.17** Suffolk County Council (SCC) and Suffolk Coastal District Council (now part of East Suffolk Council) suggested that the design of the site and the positioning of bunds would be vital to preserving the landscape. They, along with many other respondents, felt these mitigation measures should be carefully considered. The screening of the site was also an issue for a small number of the respondents. They considered that the site should be screened with bunds and foliage, to preserve the River Deben SLA.
- 3.3.18** Hacheston Parish Council raised concerns at the Stage 2 Consultation over the potential impacts on listed buildings in Wickham Market. They considered that many of these village assets were listed due, in large part, to their rural location, and those assets were extremely sensitive to any design that would impact on the overall rural feel.
- 3.3.19** A primary concern raised about the Wickham Market site at the Stage 2 Consultation was the potential impact of increased traffic on local villages. Respondents were concerned that traffic would travel along local roads such as the B1078, B1079, A1152, C309, U3621 and the B1116, which were already regarded as congested and subject to incidences of speeding. Respondents, including Theberton and Eastbridge Parish Councils, were concerned that any incident on the A12 would drive traffic on to local roads, and believed the proposed diversionary routes to be inadequate to deal with the issue. They also believed that the A12 itself had many bottlenecks. It was noted, however, that the park and ride strategy minimises additional Sizewell C Project construction worker traffic on the A12 between the two sites at Darsham and Wickham Market.
- 3.3.20** Several respondents raised concerns that the local infrastructure around Wickham Market was not suitable to deal with the increased traffic brought about by the park and ride. Some respondents considered that the site was unsuitable due to Wickham Market's narrow streets and the existing local traffic, a problem exacerbated by residential parking which narrows the streets further in some places to single lane traffic. As explained in **section 3.4** of this chapter, two options for dealing with the traffic flows in and around Wickham Market were proposed at the Stage 3 Consultation.
- 3.3.21** Several respondents were concerned about the safety of local pedestrians in the Wickham Market area. They felt that the combination of speeding traffic and poor visibility would put pedestrians at risk.
- 3.3.22** Respondents believed that the current 30 miles per hour (mph) speed limit through Wickham Market was very rarely adhered to, and thought that the park and ride site would need to include methods for enforcing these restrictions.

3.3.23 Currently the speed limit on the B1078 through Campsea Ashe is 30mph, increasing to 60mph immediately west of the junction with the A12 slip road north-east of Wickham Market. It was proposed to request that SCC reduce the speed limit from 60mph to 30mph on the B1078, as it crosses the A12. This would have the effect of reducing traffic speeds, and make it easier for vehicles to exit from the A12 onto the B1078 in safety. However, SCC would remain the responsible body for enforcing restrictions in its capacity as the local highway authority.

3.3.24 Many respondents also expressed concerns about the junction north of Wickham Market where the northbound entry slip road joins the A12. They said that this was already a very dangerous junction for those entering and exiting the village, with poor visibility as the dual carriageway narrows to a single carriageway. They felt that the likelihood of accidents in this area would increase with such a heavy increase in traffic being proposed. However, the accident record over recent years does not support this view and the increased traffic volume in this area would be small because the park and ride site would intercept the majority of Sizewell C Project vehicle movements.

c) **Stage 3 Consultation**

3.3.25 At the Stage 3 Consultation the Wickham Market site continued to be the proposed site for the southern park and ride. The masterplan presented at Stage 3 Consultation is shown in **Plate 3.4**.

Plate 3.4: Stage 3 Consultation: Park and Ride Wickham Market – masterplan.



3.3.26 **Table 3.2** sets out the key project and design changes presented at Stage 3 in response to the Stage 2 Consultation feedback.

Table 3.2: Key project and design changes between the Stage 2 and Stage 3 consultation.

Change	Rationale
Changes to parking numbers (1,250 spaces as opposed to 900 in Stage 2 Consultation).	An increase in the number of car parking spaces to 1,250 was proposed at Stage 3 because the traffic modelling undertaken for the Stage 3 Consultation was based on the assumption that during the peak year a total of 7,900 construction workers would work on the main development site at any one time (whereas at Stage 2 the assumption was 5,600).

Change	Rationale
Included a deceleration lane on the entrance to the site to separate those vehicles slowing to enter the park & ride and others accelerating to join the A12 northbound.	The introduction of a deceleration lane for traffic turning left into the site would reduce the speed differential for traffic using the slip road to join the A12 northbound.
On the A12 north-east of Wickham Market, it was proposed to reduce the A12 from two lanes to one before the northbound slip road joins the A12 (to avoid the A12 reducing from three lanes of traffic to one). It was also proposed to request that SCC reduce the speed limit from 60mph to 30mph on the B1078 that crosses the A12 northeast of Wickham Market.	Many respondents expressed concerns about the safety of the A12/B1078 junction. However, publicly available accident data did not show a significant number of accidents. Nevertheless, to minimise this potential risk, a scheme of improved signage and road markings was proposed where the A12 reduces to a single carriageway north of the park and ride site. It was also proposed to liaise with SCC regarding extending the existing B1078 30mph speed limit to include the bridge over the A12. This would have the effect of reducing traffic speeds, making it easier for vehicles to exit from the A12 onto the B1078 in safety.
Options were proposed to mitigate traffic impacts through Wickham Market (temporary removal and replacement of on-street parking on the B1078 between Border Cot Lane and River Deben bridge, or improvements to Valley Road and Easton Road).	SZC Co. conducted further modelling which confirmed that the southern park and ride development could have led to congestion on the B1078 between Border Cot Lane and the River Deben bridge. Options to address this included temporarily removing on-street parking in this location to be provided elsewhere, or making improvements to Valley Road and Easton Road (as they would enable the diversion of Sizewell C Project traffic to the north of Wickham Market via Valley Road, Easton Road and the B1116).
An exit loop was provided at the site entrance barrier to allow errant vehicles to be turned away if necessary.	The layout was arranged to provide the most efficient layout for the movement of people and vehicles.

3.3.27 A Preliminary Environmental Information (PEI) report produced for Stage 3 found that the proposed park and ride at Wickham Market had the potential for effects on the landscape character of the site and its immediate surroundings during operation. There could also be short to medium-term impacts for users on short stretches of the PRoWs that cross or immediately abut the site.

3.3.28 Concern was also raised at the Stage 2 consultation about the potential impact on listed buildings in the area. However, the Stage 3 PEI found that that there were not expected to be any significant adverse effects on the setting of designated heritage assets or historic landscape character.

3.3.29 The site layout, use of buffer zones from site boundaries and existing woodland, retention of boundary hedgerows and the use of landscape bunding were incorporated into the design to mitigate potential impacts on both the visual landscape character and the historic landscape. Furthermore, the removal of the proposed development, the reinstatement of the site to agricultural use and the restoration of any hedgerows removed during construction would reverse any perceptual change in the landscape in the long-term.

d) Stage 4 Consultation

3.3.30 The Stage 3 Consultation feedback showed that there was continued support for a southern park and ride as an appropriate way to capture traffic from the south. Therefore, at the Stage 4 Consultation, the Wickham Market site continued to be the proposed site for the southern park and ride. The masterplan for the Wickham Market site presented at Stage 4 is shown in **Plate 3.5**. This was broadly the same as at the Stage 3 Consultation, except for the following updates:

- Minor amendments to the site boundary to better suit the land ownership boundaries.
- The site boundary was extended to include the B1078/B1116 roundabout (to facilitate the provision of walking/cycling improvements within highway land).
- Two options were presented at the Stage 3 Consultation to minimise delays through Wicket Market, namely a) the temporary removal of on-street parking on the B1078, or b) a diversion route (with associated highway improvements) via Valley Road and Easton Road. At the Stage 4 Consultation an alternative option was presented which included working with the Parish Council to bring forward a public realm improvement scheme within the public highway, which would represent the first phase of the implementation of the Wickham Market Neighbourhood Plan.
- Further refinement to the drainage design, including the incorporation and repositioning of infiltration basins.

Plate 3.5: Stage 4 Consultation: Park and Ride Wickham Market – masterplan.



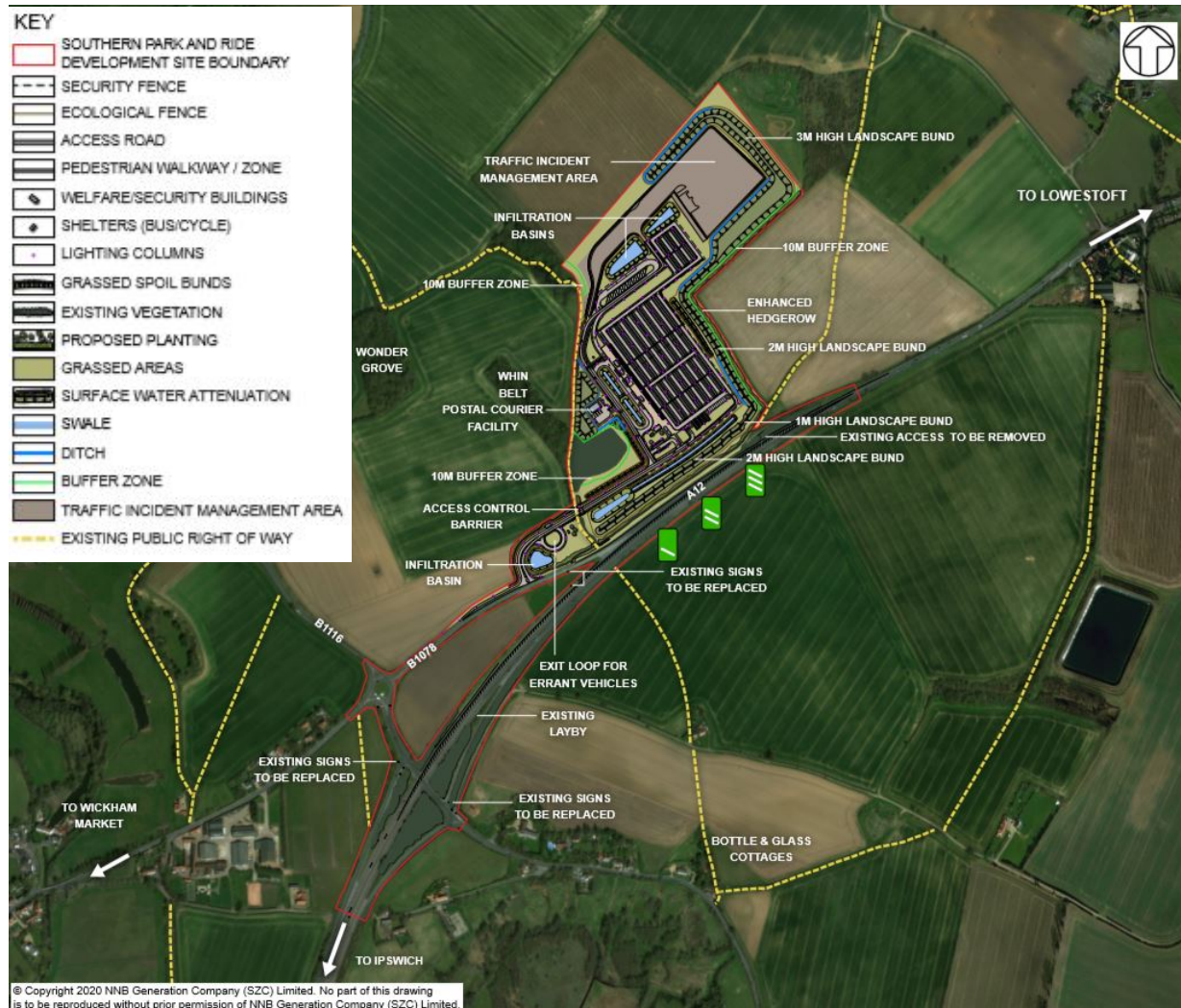
3.3.31 The Stage 3 PEI was reviewed in light of the proposed design changes to considered whether there would be any change to the Stage 3 baseline conditions in terms of terrestrial ecology and ornithology, amenity and recreation, and terrestrial historic environment. It was found that the changes would not substantially alter the baseline, mitigation proposals, the assessment of potential impacts or the residual effects for any of the environmental assessment topic areas as presented in the Stage 3 PEI.

3.3.32 The design changes at Stage 4 included improvements to the walking and cycling infrastructure on Fiveways (B1078) roundabout. The Stage 4 PEI found that these works would not result in new or different effects during the construction, operation or removal and reinstatement phases from those reported in the Stage 3 PEI.

e) The proposed development

- 3.3.33 A combination of public consultation feedback and options testing has determined that Wickham Market is the most appropriate location for the southern park and ride site. It would allow for the capturing of wider workforce traffic from the south and west of the Sizewell development, reducing the impact of workers commuting to site on the local road network.
- 3.3.34 The location of the site at Wickham Market was considered to have the least environmental impact and be the most optimal location in transport terms compared to the two alternative options. The design was developed over the four consultation stages, with measures proposed and refined to mitigate any potential environmental impacts.
- 3.3.35 The current design is based on the scheme presented in **Plate 3.6**. As described in this chapter, the design of the park and ride has developed as more information, and detail, on its precise operational requirements and environmental context has become available.

Plate 3.6: Illustrative masterplan for the southern park and ride at Wickham Market.



3.3.36 Respondents to the Stage 4 consultation generally supported the location of the southern park and ride at Wickham Market. However, a number of refinements to the design were made in response to the Stage 4 consultation comments received and as a result of further environmental and technical assessments, including:

- refinements to the drainage design – incorporating the inclusion of additional infiltration ponds to the north and south of the operational park and ride facility, and the removal of a large infiltration pond from within the ecological buffer zone and woodland area to the west of the site; and

- refinements to the lighting design including measures to reduce light spill and additional lighting columns from Fiveways (B1078) roundabout to the site along the slip road to the A12 for highway safety reasons.

3.3.37 Following Stage 4 Consultation, it was decided to proceed with the option of working with the Parish Council to bring forward a public realm improvement scheme within the public highway, which would represent the first phase of the implementation of the Wickham Market Neighbourhood Plan. Such improvements do not form part of the detailed proposals in relation to the Sizewell C Project, and will instead be secured through a section 106 agreement.

References

- 3.1 The Town and Country Planning (Environmental Impact Assessment) Regulations 2017.