5G Getting Around

Evidence

- 5.82 The SDNPA commissioned a Transport Assessment³⁰ from ADL Traffic & Highways Engineering to assess the effects and viability of each development scenario from a transport perspective. This assessment shows growth in traffic in the surrounding area generally and growth in traffic from site development in all scenarios. The study also assesses changes in the kind of traffic generated.
- 5.83 The study showed that there would be more private motor vehicles rather than the existing HGV and commercial vehicle levels for most scenarios, with Scenario I generating the greatest number of two-way trips in the peak hours (1,102 trips p/day). Scenario 4 would generate the least amount of traffic (735 peak hours two way trips p/day), in line with its smaller residential allotment, though balanced out with additional office space. The more leisure-based Scenario 3 would generate slightly more traffic than Scenario 4 (742 peak hours two-way trips p/day), but the makeup of this traffic shows greater volumes of bus/coach traffic, estimated to be at least 3 p/day along with 190 of the two way trips p/day being for leisure access.
- 5.84 Shoreham Cement Works is bisected by the A283 Steyning Road and there is an



Routes across the surrounding landscape, such as the Downs Link and South Downs Way, and also encouraging cycling for recreation and commuting. (Credit: LUC)

underpass linking the two parts of the site. Detailed examination of the underpass was not within the scope of works for the traffic consultants. Many variants of access were tested, including All Movements Junctions, and a pair of three armed roundabouts at the existing access points. However, the best option in regards to queues and delays for traffic both using the site, and traffic on the A283, is a four armed roundabout located near to the existing access point to the Cement Works area; full details can be found in section 11.0 of the ADL report.

5.85 This roundabout could also facilitate the segregation of vehicular traffic that would use the roundabout from pedestrians/cyclists who use the existing underpass; emergency vehicles could also use the underpass. Alternatively, a new and improved underpass could be provided that could accommodate flows of traffic in both directions along with segregated cycling/walking routes. This would allow for a pair of Left-in-Left-out junctions at the existing access points with traffic routing through the site and through an underpass. Either access arrangement should take on board

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³⁰ Shoreham Cement Works Transport Assessment, ADL Traffic & Highways Engineering, 2022

- the recommendations in the SDNPA guidance document Roads in the South Downs to ensure they are in keeping with the purposses of the National Park.
- 5.86 Traffic tensions on surrounding network can be mitigated. In the tested worst-case scenario, Scenario I without sustainable transport options, approximately £2.5million worth of works would be required to surrounding junctions/roundabouts. This can be reduced with agreement from West Sussex County Council as two locations show negligible effects from development traffic. Sustainable transport options are available, but it is uncertain how much relief they will provide.
- 5.87 There is scope for improvements in sustainable access to the site, connecting up with both the South Downs Way and the Downs Link, improving bus connectivity

and making use of car club spaces. With investment in digital infrastructure, and a mixed use site, reducing the need to travel and increased home working could also reduce dependence on private motor vehicles.

5.88 Overall, the conclusion of this study is that delivery of the proposed development scenarios is feasible from a transport perspective. However, all the development scenarios would require significant highway improvement measures coupled with reduction in private car usage, through sustainable transport measures.



Milton Keynes: Make a home for nature through the use of bus stops with green roofs. (Credit: Bridgman & Bridgman / Greenscape Magazine)

5.89 It should be noted that the traffic counts for the study were carried out in summer

2021 and so there is uncertainty over the commuting and trip patterns. Further, traffic counts will be carried out, if necessary, before the submission of the AAP for examination.

Issues

- 5.90 There are a number of transport issues relating to Shoreham Cement Works explored by the ADL study relating to traffic generation, different access solutions and sustainable means of travel.
- 5.91 In terms of motorised transport the redevelopment would cause a general increase in traffic on the surrounding network. Due to its relatively remote location, the site is predisposed towards motor vehicles which of course contributes to climate change. Scenario I would generate the most traffic (1102 peak time two-way movements p/day) whereas Scenario 4 generates the least (735 peak time two-way movements p/day). The leisure based Scenario 3 changes the composition of traffic,

- drawing more coaches and tourist traffic to the site (3 coach and 190 car based peak time two-way movements p/day).
- 5.92 In terms of the access solutions there are landscape effects generated by the different options, for example, the provision of a roundabout would require the clearance of much of the **Cement Works**. The duel use of the new roundabout and the underpass could facilitate segregating motorised and non-motorised traffic. There may also be the possibility of shared surfaces rather than segregated traffic. Some scenarios and access options could result in mixed heavy traffic in residential areas.
- 5.93 The site is close to both the South Downs Way and the Downs Link, which offers great opportunities to access the site by foot or cycle if well marked links are provided.

How the Issues Affect the Five Areas

- 5.94 The issues for the **Riverside** are primarily access related. The roundabout would involve major infrastructure changes and regrading of terrain. The provision of a new and improved underpass would create higher traffic flows through residential areas. As primary residential area, internal routes would need to be informed by Roads in the South Downs and the Manual for Streets.
- 5.95 Again, the issues for the **Cement Works** are primarily access related. The roundabout option would involve major infrastructure changes and regrading of terrain. Some of the development scenarios would skew traffic, for example, the leisure scenario has a higher amount of coaches and busses accessing the site. As a potential residential area, internal routes would need to be informed by Roads in the South Downs and the Manual for Streets.
- 5.96 There are few transport effects on the **Bowl** and the **Moonscape** outside of internal routing. In regards to the **Clifflands**, roads and access need to be located away from cliffs due to safety concerns.
- 5.97 In all areas walking/cycling access routes would need to be connected up to and through the site, primarily accessing the residential areas and any tourist focused attractions.

Options

- 5.98 There are a number of options arising from the transport evidence:
 - A four arm roundabout located near the existing access to the Cement Works
 area is suggested as the best option by the transport consultants. The existing
 underpasses would be retained for walking/cycling and emergency vehicle access.

 There is potential for a left-in-leftout access using existing access points instead of a roundabout. This would require replacing the existing underpass with a larger one that could accommodate two way traffic and walking/cycling access. Full investigation of this option was beyond the scope of the Transport Study.



Four-arm roundabout to improve access entering and exiting the site on the A283. (Credit: Nigel Cox)

5.99 Two further options were considered but dismissed by the consultants due to unacceptable impacts on traffic flows.

We would, however, be interested in

your views too. The first further option was the retention of the two all movements junctions on both sides of the road plus the existing underpass. The other further option was the provision of two three-armed roundabouts plus the existing underpass.

Question 15: What is your view on a new roundabout or any other solutions to access the site?

Question 16: Do you support shared surfaces or segregated routes for vehicular traffic and pedestrians/cyclists for parts of the redeveloped site?