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**GLENBEIGH DEVELOPMENTS LIMITED AND DACORAR SOUTHERN LIMITED  
LAND NORTH OF THE A2300, GODDARDS GREEN, BURGESS HILL, WEST  
SUSSEX**

**PRE-APPLICATION HIGHWAYS & TRANSPORT OVERVIEW**

**14<sup>TH</sup> MAY 2019**

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**1.0 Introduction**

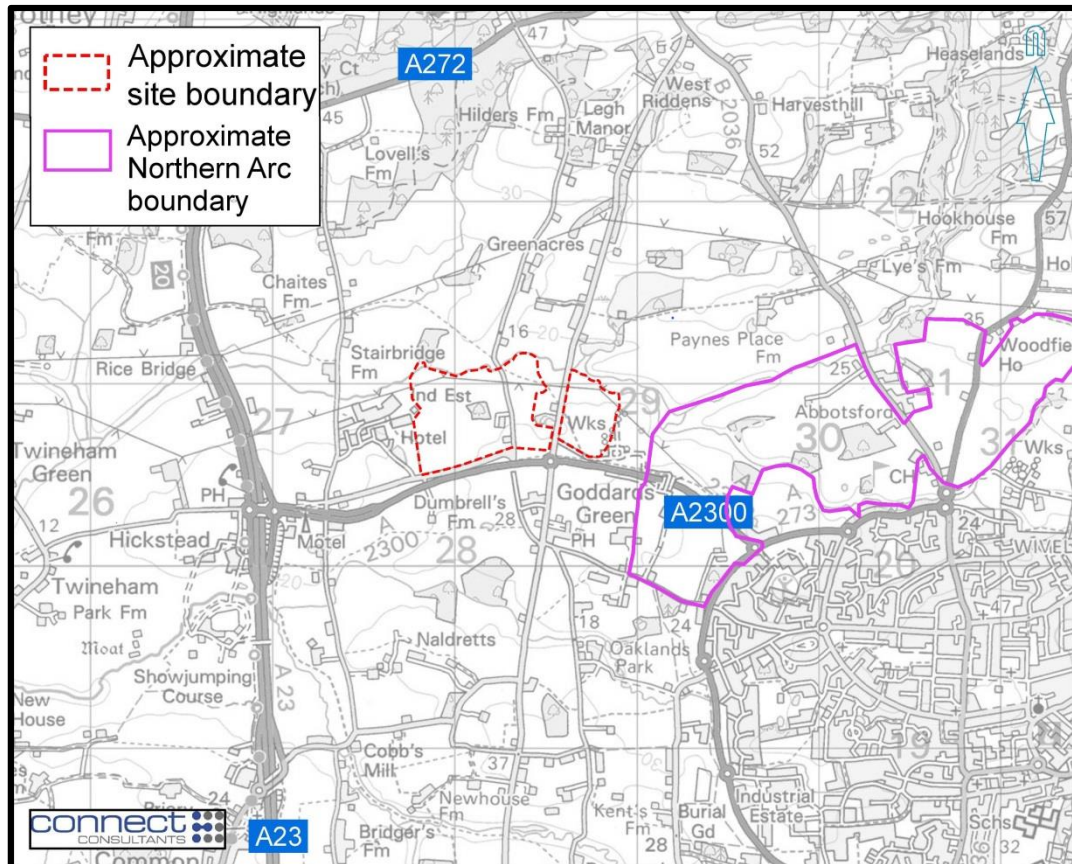
- 1.1 Connect Consultants Limited is a firm of transport planning and highway design consultants that have been instructed by Glenbeigh Developments Limited and Dacorar Southern Limited in relation to the promotion of their land to the north of the A2300 at Goddards Green, West Sussex, for a future Science & Technology Park.
- 1.2 This is in the context of the Mid Sussex District Plan (Policy DP1) and the proposed site allocations Development Plan Document (DPD), in which Mid Sussex District Council (MSDC) has identified the intention of realising a Science & Technology Park in a location described broadly as being to the west of Burgess Hill.
- 1.3 MSDC are currently undertaking a site selection exercise for the Science & Technology Park, and have identified specific areas of interest that reflect some of the criteria they will use in their site selection methodology. MSDC has included the following transport-specific criteria:
  - *"Accessibility strategy including the role of sustainable transport modes.*
  - *Access arrangements to the site.*
  - *Wider highway improvements proposed or needed and mitigation required.*
  - *Details of joint work to date with the Highway Authority and future intentions."*
- 1.4 This Technical Note (TN) addresses each of the highways-specific areas of interest listed above, in the context of the proposed Science & Technology Park location to the north of the A2300.
- 1.5 This TN will also be submitted to West Sussex County Council Highways as part of a pre-application consultation with the Local Highway Authority.

**2.0 Site Context**

- 2.1 The proposal site is located to the north of Goddards Green, bounded by the A2300 on its southern side and Cuckfield Road on its eastern side. The site is currently used for agricultural purposes. The A2300 provides a key road link to Burgess Hill to the east and A23 to the west. Cuckfield Road connects to neighbouring settlements to the north and south of the site.

- 2.2 The location of the proposal site, in the context of the urban area, is presented at Figure 2.1.

**Figure 2.1 – Site Location Plan**

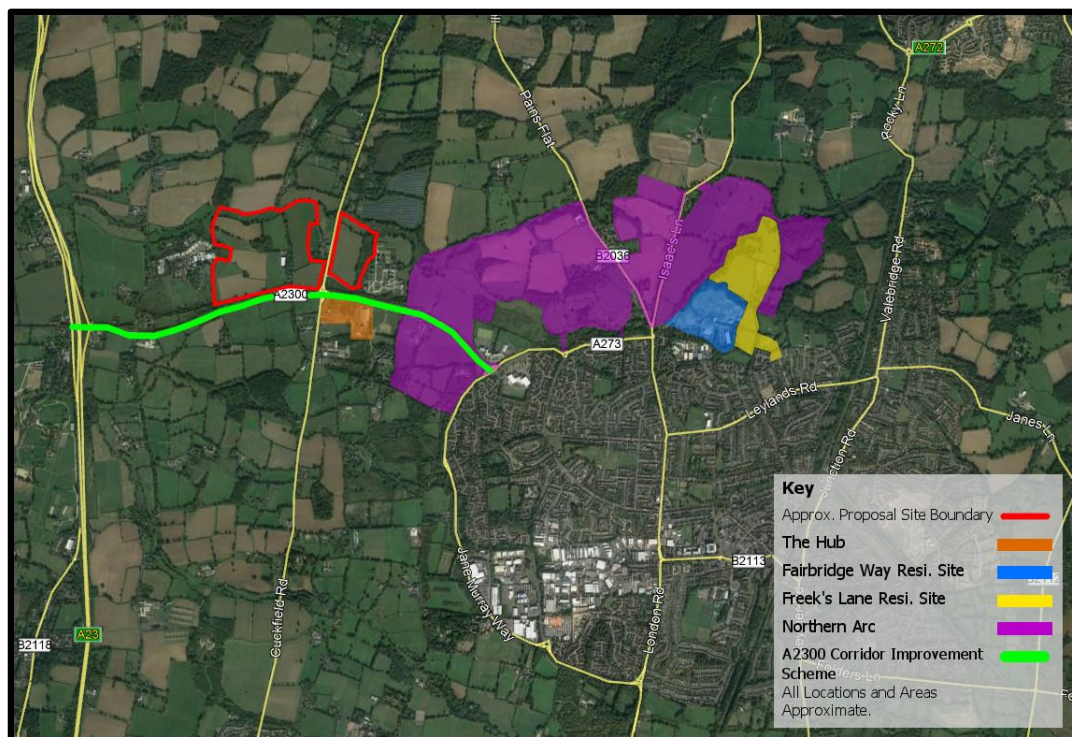


Source: Promap

- 2.3 The Burgess Hill area has been the subject of a number of major development proposals in recent years, with further growth in the area planned through the MSDC Local Plan.
- 2.4 The local committed/planned developments are as follows:
- DM/18/5114 Northern Arc Development – Mixed use development comprising approximately 3,040 dwellings and other facilities, including extensive infrastructure works. The planning application has not been determined at the time of writing.
  - DM/18/0509 Freek's Lane Residential Development – 460 dwellings located on land west of Freek's Lane, including associated infrastructure works. The planning application has not been determined at the time of writing.
  - 08/01644/OUT Fairbridge Way Residential Development – Outline planning permission was granted on 24<sup>th</sup> June 2014 for the redevelopment of the Former Sewerage Treatment Works at Fairbridge Way into 325 residential dwellings with associated infrastructure works.

- 13/01618/OUT The Hub Development – Employment development comprising up to 50,000 sq.m. with associated infrastructure works. The site is currently under construction.
- 2.5 The Local Highway Authority, West Sussex County Council (WSCC), has a planned major improvement scheme known as the *A2300 Corridor Improvement Scheme*, which includes widening of the existing single carriageway to a dual carriageway and implementing associated improvement works on the A23 / A2300 Interchange Roundabouts, the A2300 / Cuckfield Road Roundabout and the A273 / A2300 Roundabout. The scheme is currently in its design and consultation stages.
- 2.6 Figure 2.2 shows a plan of the area north and west of Burgess Hill, showing the approximate areas of the major planned/committed developments, along with the A2300 Corridor Improvement Scheme.

**Figure 2.2 – Proposal Site Context**



Source: Google

### 3.0 Sustainable Access Strategy

- 3.1 This section of the TN details the accessibility of the proposed development in relation to pedestrian, cycle and non-car modes of transport and outlines potential measures to improve sustainable accessibility to the proposal site.



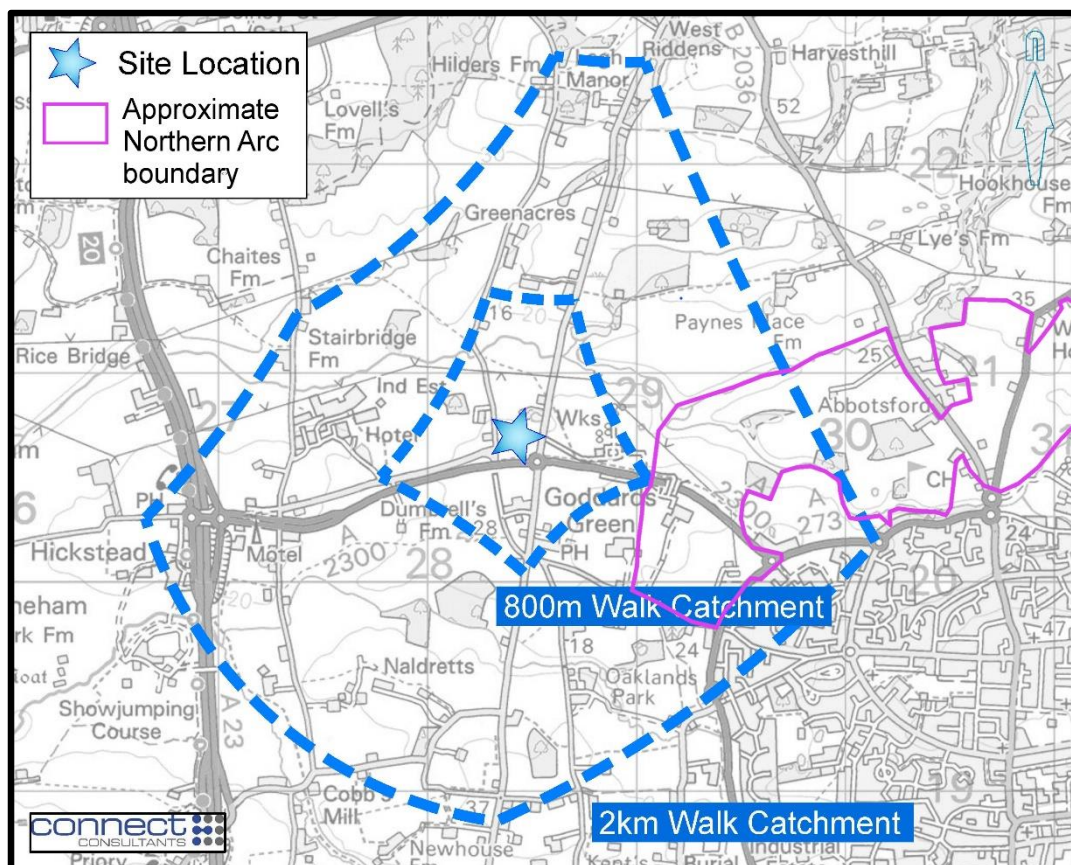
### Pedestrian Access

- 3.2 The Department for Transport's (DfT) document titled 'Manual for Streets' dated 2007 provides guidance in relation to walk distances. Section 4.4 gives the following advice:-

*"Walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes' (up to about 800 m) walking distance of residential areas which residents may access comfortably on foot".*

- 3.3 Table 3.2 of The Institute of Highways and Transportation (IHT) guidance document titled 'Providing for Journeys on Foot' identifies a maximum walk distance of 2.0km for commuter, school and sightseeing walk trips, 800m for town centre walk trips and 1.2km for trips elsewhere.
- 3.4 The actual distance that people will be prepared to walk will vary depending on the trip purpose and other factors such as the presence of road crossings and terrain.
- 3.5 Based on the maximum walk distance of 800m and 2km, the approximate walk catchments are shown at Figure 3.1 below.

**Figure 3.1 – 800m and 2km Walk Catchment**



Source: Promap

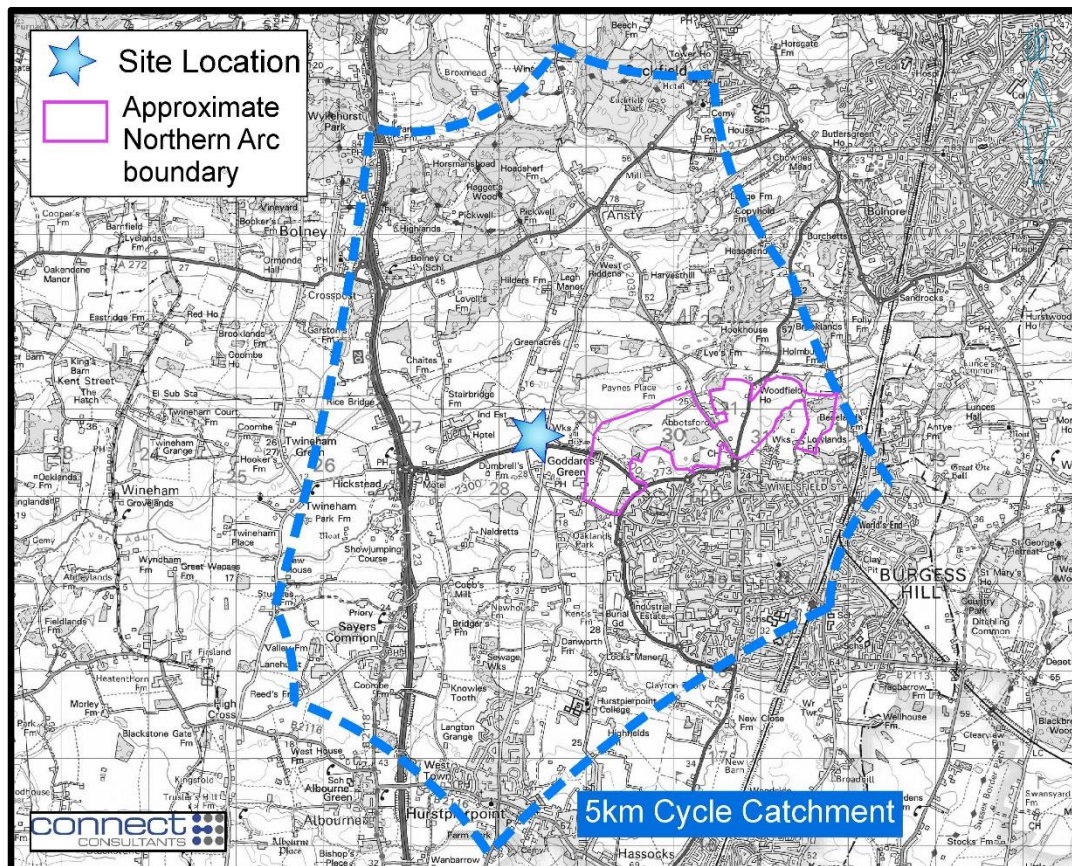
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- 3.6 The walk catchments above indicate that there are a number of residences within the 800m walk catchment area, including Goddards Green south of the proposal site. The 2km walk catchments cover a section of west Burgess Hill and surrounding villages.
  - 3.7 The western parts of the Northern Arc development site are within walking distance, which means that a significant area of residential land will be within walking distance of this proposed employment site.
  - 3.8 As part of the A2300 Corridor Improvement Scheme, a footway / cycleway will be provided along the route's northern side between the A2300 / A23 interchange and Burgess Hill. The route passes the site's southern boundary.
  - 3.9 The proposal site is located within walking distance of the nearby Hub employment development and its associated sustainable transport links, including a pedestrian and cycle route via Gatehouse Lane. These links will provide a safe, low-trafficked connection between the proposed Science & Technology Park and Burgess Hill.

#### Cycle Access

- 3.10 The 2017 National Travel Survey specified average journey lengths by cycle in England of c.5.5km. This suggests that cycling can offer a realistic alternative to car travel, particularly for trips of less than 5km.
- 3.11 Cycling has the potential to play an important part in sustainable travel to and from the proposed Science & Technology Park, for visitors and staff.
- 3.12 As part of the A2300 Corridor Improvement Scheme, a footway / cycleway will be provided along the route's northern side between the A2300 / A23 interchange to Burgess Hill, with connections to the National Cycle Network. This route passes along the site's southern boundary, thereby providing the site with a good quality, attractive local and longer distance cycle route.
- 3.13 Using 5km as an indicator of the average cycling distance, the approximate cycle catchment is shown at Figure 3.2 below.
- 3.14 The 5km cycle catchment includes most of Burgess Hill and settlements to the west of the town, including Hurstpierpoint, Sayers Common, Ansty, and Goddards Green. It also includes the entire Northern Arc site.
- 3.15 This provides a significant local population within cycle distance of the site.
- 3.16 As with the pedestrian access strategy, cyclists will also have the opportunity to use the sustainable transport links associated with The Hub development southeast of the proposal site, with links to Burgess Hill. This includes the provision of a signal-controlled pedestrian and cycle crossing over Jane Murray Way, where it intersects with Gate House Lane.
- 3.17 This will provide a quiet and low-trafficked route via Gatehouse Lane to the proposed Science & Technology Park for pedestrians and cyclists travelling to and from Burgess Hill.



**Figure 3.2 – Cycle Catchment Area**



Source: Promap

### Bus Access

- 3.18 The publication 'Planning for Public Transport in Developments' produced by the Institution of Highways and Transportation (IHT) specifies that new developments should be located within 400m of the nearest bus stop.
- 3.19 As part of the permitted Hub development two bus stops will be provided on the A2300 adjacent to the Hub site. The bus stops will be situated approximately 200m and 250m east of the proposed Science & Technology Park site, serving westbound and eastbound routes respectively.
- 3.20 The stops will serve the existing 100 Route, which provides hourly services between Burgess Hill and Horsham, both of which have train stations, thereby providing the proposed Science & Technology Park with convenient and regular bus access.
- 3.21 As the proposed Science & Technology Park development programme progresses, the opportunity will be explored to divert, extend or introduce new bus routes into the site, so as further promote bus travel to/from the development.
- 3.22 With the close proximity of the Northern Arc development, the future Northern Arc bus services could be easily adapted to serve the Science & Technology Park, either by small-scale route diversion, or by users walking between the sites to the nearest bus stops.

#### Highway Access

- 3.23 The site lies immediately adjacent to the north side of the A2300, to the northwest of the A2300 / Cuckfield Road roundabout.
- 3.24 The A2300 connects Burgess Hill to the A23 strategic route, under the authority of Highways England. The A23 links the south coast with the M23, Gatwick Airport, the M25 and London.
- 3.25 Cuckfield Road provides a local route north and south to the surrounding villages.

#### **4.0 Proposed Access Arrangements**

- 4.1 The site benefits from close proximity to the existing roundabout junction of the A2300 and Cuckfield Road, as well as the priority-controlled junction of Jobs Lane with the A2300.
- 4.2 The Cuckfield Road roundabout will provide an 'all-movements' access junction both before and after the A2300 dualling as part of the A2300 Corridor Improvement Scheme.
- 4.3 At this early stage, three preliminary design options have been prepared for the access arrangements of the proposal site, provided in Appendix 1.

##### Option 1 – Left-in / Left-out Access via Jobs Lane (Drawing No. 18108 – SK190515.1)

- 4.4 The A2300 / Jobs Lane junction is currently an all-movements T-Junction, however, following the proposed dualling of the A2300, it will become a left-in / left-out junction.
- 4.5 The Science & Technology Park access could be constructed from Jobs Lane, with vehicles travelling from the A2300 via the left-in / left-out junction.
- 4.6 This access option would be suitable for a scenario with relatively low volumes of development traffic, as this traffic will need to make U-turns at the A23 / A2300 junction and at the A2300 / Cuckfield Road roundabout.
- 4.7 This left-in / left-out option has been discounted as it would not provide sufficient capacity for a development of the scale and prestige of the proposed Science & Technology Park, and it would add unnecessary pressure from U-turning traffic at adjoining junctions on the A2300.

##### Option 2 – All Movements Roundabout Access (Drawing No. 18108 – SK190515.2)

- 4.8 This option involves locally modifying the alignment of Cuckfield Road immediately north of its roundabout junction with the A2300, along with the provision of a secondary roundabout junction, providing direct access into the Science & Technology Park site.
- 4.9 The benefit of this option is that all movements are accommodated within the site access, avoiding the need for traffic to U-turn at neighbouring junctions, and consequently improving their capacity and operation.

- 4.10 This scale and form of junction would be more akin to the standard expected to serve a high-profile development.
- 4.11 A further benefit of this access option is that it could accommodate the local diversion of both eastbound and westbound bus services from the A2300 and would allow them to efficiently re-join with minimal delay, thus offering the opportunity for much improved bus connectivity within the Science & Technology Park.

Option 3 – High Capacity Access (Drawing No. 18108 – SK190515.3)

- 4.12 This option offers the same benefits as Option 2, but the A2300 junction is upgraded to a signalised 'hamburger junction' to accommodate higher volumes of traffic. This offers significantly higher capacity than a conventional roundabout and would accommodate a larger scale of development than that which could be accommodated with either access options 1 or 2.
- 4.13 The provision of A2300 through-lanes will minimise disruption and delay to through-traffic using the A2300.
- 4.14 This arrangement utilises land both within the proposed site and also the adjoining Hub development, all of which is within the control of Dacorar Southern Limited.

## **5.0 Wider Highway Improvements**

- 5.1 This section considers the potential need or opportunities for wider highway improvements if required to mitigate the traffic effect of the proposed Science & Technology Park.
- 5.2 The Transport Assessment (TA) for the Northern Arc planning application (AECOM on behalf of Homes England, December 2018) incorporates traffic data from the Burgess Hill Traffic Model (BHTM), using the SATURN traffic modelling software.
- 5.3 As well as informing the traffic assessment of the allocated Northern Arc site, the BHTM has been used for the business case for the c.£20m A2300 dualling scheme.
- 5.4 The BHTM includes in its future traffic forecasts all permitted and allocated developments in Mid Sussex District, and therefore represents the future traffic scenario as envisaged by MSDC.
- 5.5 The Northern Arc TA includes assessments of a number of the junctions local to the proposed Science & Technology Park site.
- 5.6 This section reviews the assessments of those local junctions so as to understand the likely future traffic scenario and the potential need for mitigation of the proposed Science & Technology Park.
- 5.7 The specific junctions that have been reviewed for the purposes of this report are as follows:
- A2300 / Cuckfield Road Roundabout.
  - A273 / A2300 / Triangle Way Roundabout.
  - A23 / A2300 Junction Interchange Eastern / Western Roundabouts.



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A2300 / Cuckfield Road Roundabout

- 5.8 The Northern Arc TA includes the proposed A2300 dualling scheme within the future baseline scenario, which includes the associated capacity improvement at the Cuckfield Road roundabout. The TA shows that the roundabout will be close to capacity in the 2037 scenario with the full Northern Arc plus committed developments.
- 5.9 As set out in the previous section, Dacorar Southern Limited controls land on both sides of this roundabout and therefore the ability exists to provide further capacity improvements if required to accommodate the proposed Science & Technology Park traffic.

A273 / A2300 / Triangle Way Roundabout

- 5.10 The Northern Arc TA also shows that the capacity of the A273 / A2300 / Triangle Way Roundabout would operate at or close to capacity in the 2037 Base + Development scenario.
- 5.11 The TA of the proposed Northern Arc development does not include any additional mitigation or capacity improvement beyond the improvements forming part of the A2300 Corridor Improvement Scheme.
- 5.12 It should be noted that the provision of a signal-controlled pedestrian and cycle crossing over Jane Murray Way, where it intersects with Gate House Lane, was agreed as part of The Hub development. This will improve the accessibility of the proposed Science & Technology Park for pedestrians and cyclists travelling to and from Burgess Hill, and may therefore help to reduce the traffic effect at the Triangle Way Roundabout.
- 5.13 Additional capacity improvements or mitigation measures will be explored and provided, if they are identified as being required through any future planning application or traffic assessment work in support of the Science & Technology Park.

A23 / A2300 Junction Interchange Eastern / Western Roundabouts

- 5.14 The A2300 corridor scheme includes capacity improvements to this interchange. This was included in the Northern Arc TA, which predicts that the roundabouts will operate at or close to capacity in the 2037 Base + Development scenario.
- 5.15 On behalf of Dacorar Southern Limited, Connect Consultants is in dialogue with Highways England seeking to understand whether any aspirations exist for future large-scale improvements to this interchange. As the proposals for the Science & Technology Park progress, dialogue with HE and WSCC will continue in order to identify whether any additional improvements or mitigation will be required in this location.

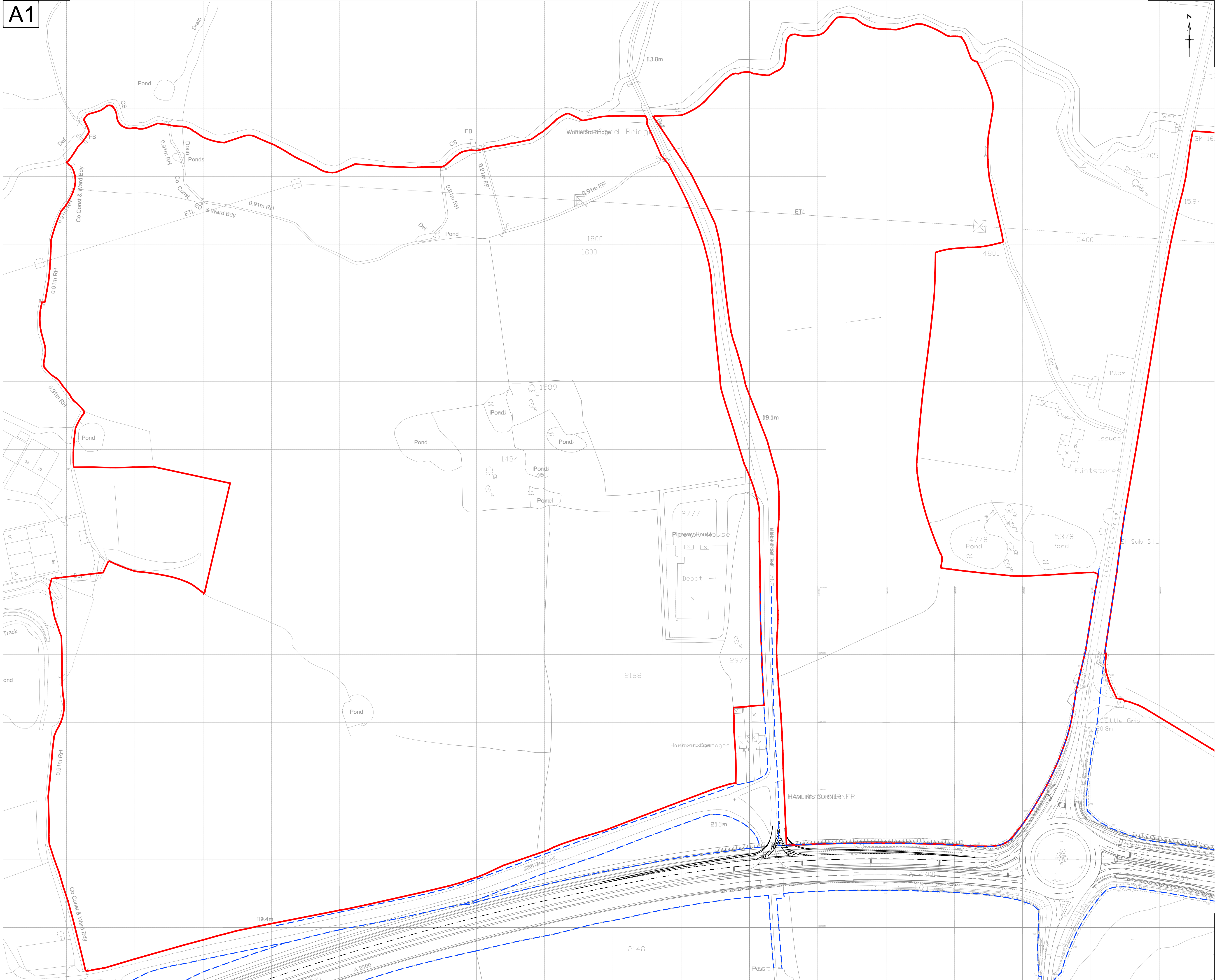
## **6.0 Conclusions**

- 6.1 This TN has been prepared to support the promotion land to the north of the A2300 at Goddards Green, West Sussex, for a future Science & Technology Park, as identified in the Mid Sussex District Plan.

- 6.2 Sustainable Access: The proposed site has good non-car accessibility with pedestrian and cycle links to Burgess Hill and the local area, as well as nearby frequent bus services between Burgess Hill and Horsham, both of which have train stations. The site is within walking distance of the Northern Arc development. Opportunities exist for bus services to enter the site.
- 6.3 Access Options: The site benefits from close proximity to the existing roundabout junction of the A2300 and Cuckfield Road, as well as the priority-controlled junction of Jobs Lane with the A2300. Three preliminary access design options have been prepared; the left-in / left-out junction option has been discounted as unsuitable for a development of this scale, with two forms of all-movements junctions remaining as options, demonstrating that the site can be readily accessed from the highway network.
- 6.4 Wider Highway Improvements: The predicted future operation of key local junctions has been considered in the context of the expected quantum of committed and planned development in the Burgess Hill area. Additional capacity improvements or mitigation measures will be explored and provided, if they are identified as being required through any future planning application or traffic assessment work in support of the Science & Technology Park.
- 6.5 Joint Working: Connect Consultants has been in initial dialogue with both WSCC Highways and Highways England. This TN has been prepared to inform pre-application consultation with WSCC Highways, with whom a meeting will be arranged as soon as possible after its submission.
- 6.6 In light of all of the above, the site is deliverable from a highways and transport perspective.

## **APPENDIX 1 – PRELIMINARY SITE ACCESS OPTIONS**





**LEGEND**

- PROPOSED SITE BOUNDARY
- EXISTING HIGHWAY BOUNDARY

rev.	amendment	by	date

**connect**  
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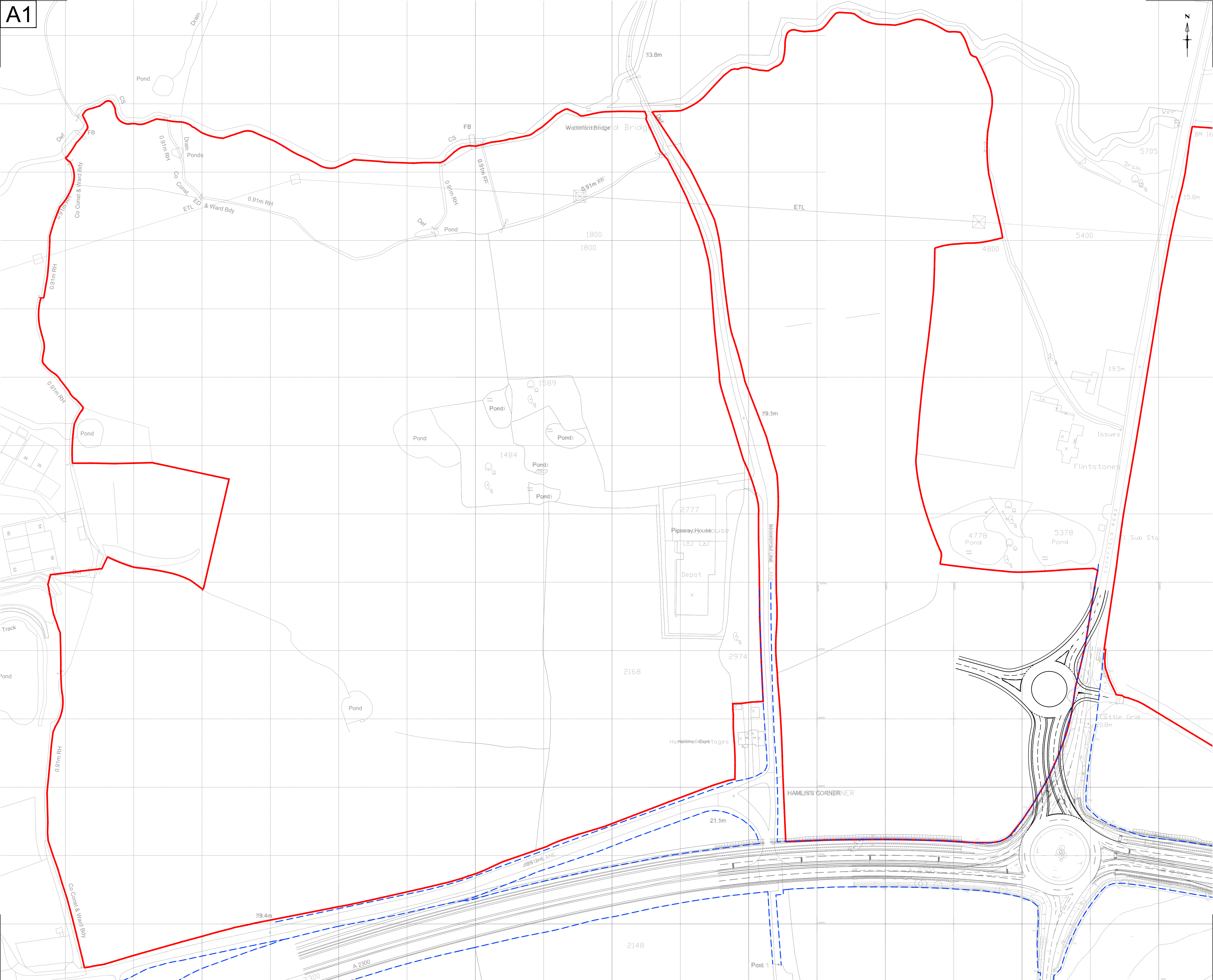
project  
**PROPOSED DEVELOPMENT  
GODDARDS GREEN SCIENCE PARK  
GODDARDS GREEN**

title  
**POSSIBLE A2300 LEFT IN / LEFT OUT  
SITE ACCESS WITH  
WSCC DUAL-CARRIAGEWAY SCHEME**

scale 1:1250	drawn by B.W.L	checked by S.J.J
date MAY 2019		status INFORMATION
drawing number 18108 - SK190515.1		rev.



A1



### LEGEND

 PROPOSED SITE BOUNDARY  
 EXISTING HIGHWAY BOUNDARY

rev.	amendment	by	date
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client  
DACORAR (SOUTHERN) LIMITED

project  
PROPOSED DEVELOPMENT  
GODDARDS GREEN SCIENCE PARK  
GODDARDS GREEN

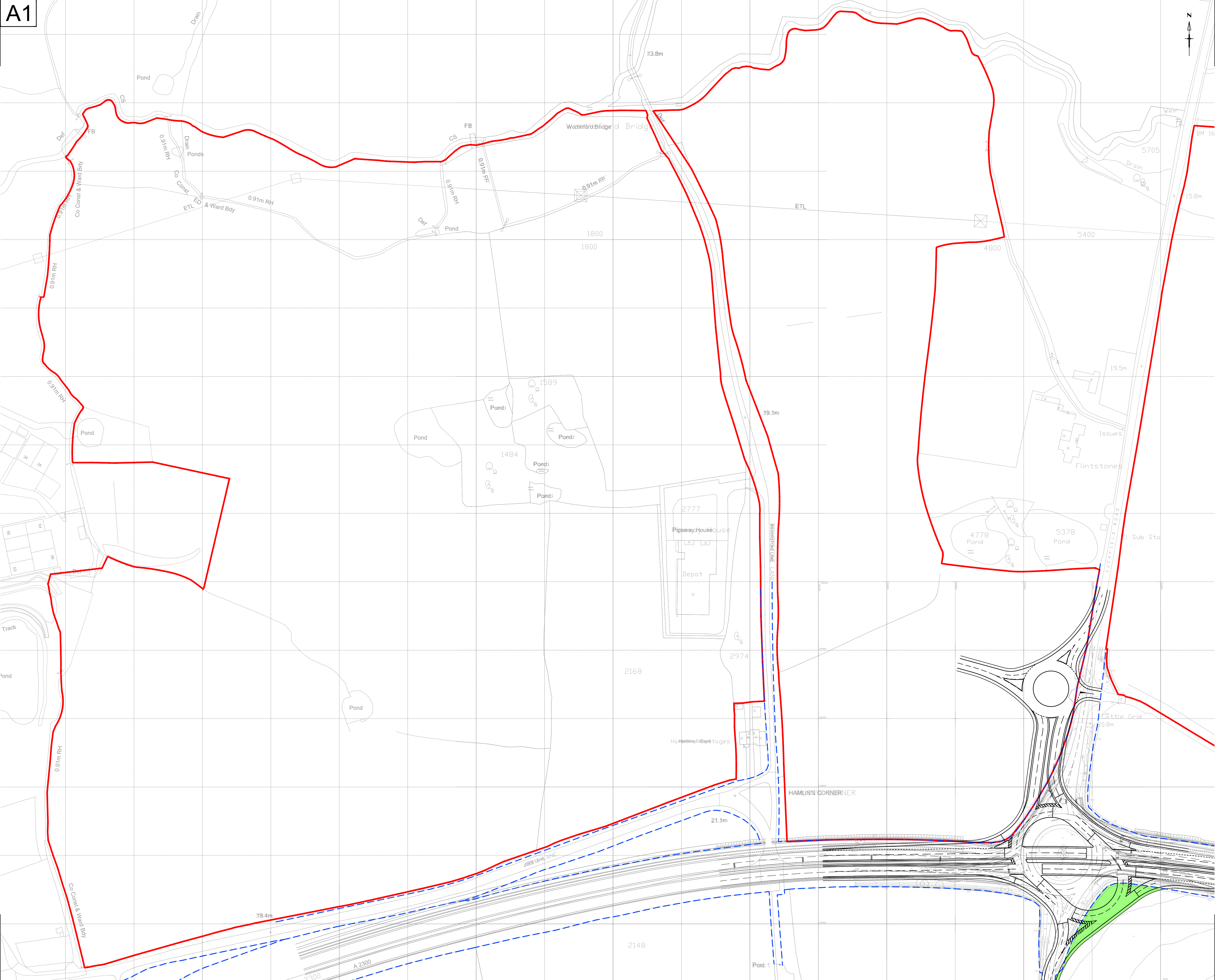
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POSSIBLE ALL MOVEMENTS ROUNDABOUT SITE ACCESS FROM A2300 WITH WSCC DUAL CARRIAGEWAY SCHEME

scale 1:1250	drawn by B.W.L	checked by S.J.J
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date	status
MAY 2019	INFORMATION

drawing number	rev.
18108 - SK190515.2	--





- LEGEND**
- PROPOSED SITE BOUNDARY
  - EXISTING HIGHWAY BOUNDARY
  - LAND BEYOND THE SITE IN CONTROL OF DACORAR SOUTHERN LIMITED

rev.	amendment	by	date

**connect**  
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client  
**DACORAR (SOUTHERN) LIMITED**

project  
**PROPOSED DEVELOPMENT  
GODDARDS GREEN SCIENCE PARK  
GODDARDS GREEN**

title  
**POSSIBLE ALL MOVEMENTS  
HIGH CAPACITY ROUNDABOUT ACCESS  
FROM A2300 WITH WSCC  
DUAL-CARRIAGEWAY SCHEME**

scale 1:1250	drawn by B.W.L	checked by S.J.J
date MAY 2019	status INFORMATION	
drawing number 18108 - SK190515.3	rev. ---	