

Response to Local Highway Authority Comments
Application No. P17/V2490/LDO
Didcot Technology Park, OX14 4PJ

1.0 Introduction and Background

- 1.1 This Highways Response has been prepared by Glanville Consultants on behalf of Reef Estates ('Reef') in relation to a consultation response made by Oxfordshire County Council (OCC), acting in their role as Local Highway Authority (LHA). The comments are provided in full at Appendix A.
- 1.2 The LHAs consultation response was made in relation to a proposed Local Development Order (LDO) (Application No. P17/V2490/LDO) at Hill Farm, Didcot ('D-Tech').
- 1.3 The Highway Authority's consultation response can be summarised as follows:
 1. Section 106 Contributions;
 2. Access Arrangements;
 3. Traffic Generation & Impact;
 4. HIF / strategic contribution;
 5. Pedestrian and cyclist connections;
 6. Parking Provisions;
 7. Public Transport;
 8. Travel Plan; and
 9. Construction Traffic Management Plan (CTMP).
- 1.4 Each point of the LHAs consultation response is addressed in the sections below.

2.0 S106 Contributions

- 2.1 The LHAs consultation response contained a number of S106 contributions which it is expected that D-Tech will contribute to.
- 2.2 It is understood that Reef Estates are dealing with the S106 requests directly with District and County officers and as such no further reference is made in this Highways Response.

3.0 Access Arrangements

- 3.1 In their consultation response, the LHA outlined that given D-Techs dependence on the HIF infrastructure to facilitate access to the development, the programme of delivery of the LDO (agreed between the District and County Councils and Reef) will commence after HIF has been delivered (currently expected November 2026).
- 3.2 However, if Reef wishes to bring forward D-Tech prior to the delivery of HIF, it is proposed that Reef construct the southernmost portion of the Didcot-Culham River Crossing, between sections A and B on LDO Plan 5 (shown at Appendix B), tying into the Collett Roundabout.

3.3 The above approach is agreed and should the proposals set out in paragraph 3.2 above arise, the road will be constructed in line with the proposals set out in the 'Access and Wayleaves' section of the submitted Transport Assessment (TA), with appropriate drawings demonstrating their deliverability provided as part of the S106 agreement and the road offered to the LHA for adoption, up to Hill Farm.

4.0 Traffic Generation and Impact

4.1 In their consultation response, the LHA noted that whilst the collection methodology to predict the trip rates for the B2 General Industrial usage and B8 Data Centre usage is acceptable, further justification is required for the first principles approach undertaken to determine the potential traffic generation of the proposed battery storage centre.

4.2 In addition, the LHA requested that the traffic generation potential is calculated of the existing uses on site (two residential dwellings and a wood pallet recycler).

4.3 The section below outlines the existing traffic generated by the site and justification for the proposed Battery Storage traffic generation.

Existing

Residential

4.4 To determine the existing traffic generation potential of the two dwellings, the TRICS database has been interrogated for privately owned houses in suburban and edge of town locations. The full selection parameters are outlined in the TRICS database output at Appendix C.

4.5 The trip rates and resultant traffic generation of the two dwellings are outlined in Tables 1 and 2 below.

Table 1: Trip Rate – Houses Privately Owned

| Period | Trip Rate (per dwelling) | | |
|-----------------------|--------------------------|----------|---------|
| | Inbound | Outbound | Two-Way |
| AM Peak (08:00-09:00) | 0.190 | 0.348 | 0.538 |
| PM Peak (17:00-18:00) | 0.274 | 0.197 | 0.471 |

Table 2: Traffic Generation – 2 Dwellings

| Period | Traffic Generation (vehicles) | | |
|-----------------------|-------------------------------|----------|---------|
| | Inbound | Outbound | Two-Way |
| AM Peak (08:00-09:00) | 0 | 1 | 1 |
| PM Peak (17:00-18:00) | 1 | 0 | 1 |

Wood Pallet Recycler

4.6 It is understood that the wood pallet recycler (J James Ltd) no longer occupies the site. Due to the unique nature of the site (the only wood pallet recycler in Oxfordshire), it is no longer possible to accurately calculate the traffic generated by the site.

4.7 It is worth noting that the wood pallet recycler would have generated some number of vehicle movements, including HGVs transporting pallets to and from the site. However, restrictions were in place such that the site could only operate between the hours of 09:00 to 17:00 and therefore the traffic impact in the peak hours would have been negligible in any case.

Farming Activities

4.8 Farming activities are understood to be ongoing at the site. However the number of vehicle movements associated with farming are likely to be minimal and primarily outside of peak hours. Therefore, it is not considered necessary to account for any traffic associated with farming activities.

Battery Storage

4.9 In the submitted TA, an upper limit of 15 vehicle movements per day (including 5 inbound in the AM peak and 5 outbound in the PM peak) was considered for the Battery Storage usage, based on discussions held between Reef and existing battery storage companies.

4.10 Due to the relatively novel nature of Battery Storage facilities, limited information is available with regard to the exact number of vehicle movements that could be expected of such facilities, but it is understood that once up and running, the Battery Storage requires minimal intervention, other than occasional maintenance checks or repairs.

4.11 However, in line with the LHAs request, applications for Battery Storage developments from around the country have been assessed, with the relevant application number and number of predicted vehicle movements set out below:

- Land Off Newburn Bridge Road, Between Flogas and Blaydon Caravan Blaydon NE21 4NT (Gateshead Planning Ref. DC/21/00922/FUL) – 2 vehicle movements per month;
- The installation of a Battery Storage Facility at Land to the north of the Royle Farm Business Park, Caldwell Road, Burton-on-Trent (South Derbyshire Planning Ref. DMPA/2021/1221) – 2 vehicle movements per month;
- Installation of battery energy storage system, Indian Queens Sub-Station B3279, From Gaverigan to Carne Hill St Dennis PL26 8BY (Cornwall Planning Ref. PA21/10827) – 4 vehicle movements per month; and
- Planning permission to erect a 95MW battery energy storage site and associated external works, Land north of Gala Bingo, Winterton Road, Scunthorpe (North Lincs Planning Ref. PA/2021/1291) – 4 vehicle movements per month.

4.12 Based on the above applications, it is reasonable to assume the battery storage facility would generate an upper limit of 4 two-way vehicle movements per month (assumed the workers would arrive in the AM peak and leave in the PM peak for robustness).

Summary

4.13 Whilst the site would have historically seen additional vehicle movements associated with the wood pallet recycler and farming activities, the number of vehicle movements associated with these uses is either negligible or no longer possible to calculate.

4.14 The TA assumed 5 vehicle movements associated with the Battery Storage in each peak hour. Evidently, this was an overestimation, based on newly available information. It is therefore considered that 2 vehicle movements in each peak hour would be sufficient to capture the traffic associated with the Battery Storage facility.

4.15 Tables 3 and 4 assesses the traffic generation of the 'worst-case' and 'anticipated' development scenarios set out in the TA¹, accounting for the 1 existing peak hour movement of the residential dwellings and a reduction of 3 vehicle movements compared to that previously considered for the Battery Storage (an overall reduction of 4 vehicle movements in each peak hour when compared to the submitted TA).

Table 3: Net Traffic Generation – Worst-Case Scenario

| Period | Traffic Generation (vehicles) | | |
|-----------------------|-------------------------------|----------|---------|
| | Inbound | Outbound | Two-Way |
| AM Peak (08:00-09:00) | 32 | 4 | 36 |
| PM Peak (17:00-18:00) | 2 | 34 | 36 |

Table 4: Net Traffic Generation – Anticipated Scenario

| Period | Traffic Generation (vehicles) | | |
|-----------------------|-------------------------------|----------|---------|
| | Inbound | Outbound | Two-Way |
| AM Peak (08:00-09:00) | 25 | 3 | 28 |
| PM Peak (17:00-18:00) | 2 | 28 | 30 |

4.16 The LHA accepted in their consultation response that “*In regard to the overall new traffic movements to be generated by the proposed LDO, Table 8 [of the TA] provides this estimation, 32 two-way vehicle movements in the AM peak hour and 34 two-way vehicle movements in the PM peak hour. Such movements are considered acceptable on the highway network in comparison to the larger LDO proposal initially promoted which would have had more significant impacts on the highway network of Didcot*”.

4.17 Therefore, the same should be true of the traffic generation set out in Tables 3 and 4 above, given they represent a reduction in vehicle movements compared to the submitted TA and far less than the previous LDO proposal. Notwithstanding, Reef remains content to restrict the overall floorspace delivered at the site until the Didcot-Culham River Crossing has been constructed and is open for public use.

5.0 HIF / Strategic Contributions

5.1 The LHA welcomed the safeguarding of land to ensure delivery of the Didcot-Culham River Crossing, however an additional request was made for safeguarding of land “*for the future delivery of pedestrian / cycle bridge over the railway line to the east of the site during the ‘LDO period’ (1st January 2042)*”.

5.2 Reef are content to safeguard the above land and have provided a drawing of this as identified at Appendix D, along with securing of land to facilitate the delivery of HIF.

¹ Worst-case = 5,000m² B2 Light Industrial, 105,000m² B8 Data Centre & 5,000m² Battery Storage. Anticipated = 3,000m² B2 Light Industrial, 97,000m² B8 Data Centre & 15,000m² Battery Storage.

6.0 Pedestrian and Cycle Connections

- 6.1 The LHA requested "On-site pedestrian and cycle connections (and improvements) to the existing public highway (including connection to Sustrans Route 5) are to be provided prior to the first occupation of the LDO site. All such infrastructure is to be designed in accordance with LTN 1/20 design standards as shown on LDO Plan 5. A detailed master plan of the LDO site will be required showing all such routes ensuring they are both direct and safe to use".
- 6.2 A masterplan will be secured by way of a Condition and will provide the necessary information requested above.

7.0 Parking Provision

- 7.1 The LHA stated in their consultation response "The LDO proposal will be required to promote sustainable and active travel behaviour by encouraging employees to travel to their work destination by non-car modes and reduce the number of car trips on the highway network.....the parking provisions to be provided on site must be provided to a level that supports OCC's objective to reduce 25% of car trips by 2030, and 33% by 2040."
- 7.2 The LHA requested that the following methodology be followed to determine the appropriate number of car parking spaces at the site:
 - The development's land use;
 - Trip rate associated with the development (including base and forecast mode share);
 - Oxfordshire County Council car trip and local cycling targets; and
 - The user group of employees / visitors of the site (including shift patterns).

Car Parking

Land Use

- 7.3 As set out in the submitted TA, the proposed land uses are as follows:

'Worst Case Scenario'

| | |
|---------------------------------|---|
| • B2 Light Industrial | 5,000m ² (of which 500m ² waste management) |
| • B8 Data Centre | 105,000m ² |
| • Sui Generis (battery storage) | 5,000m ² |

Total 115,000m²

'Anticipated Scenario'

| | |
|---------------------------------|---|
| • B2 Light Industrial | 3,000m ² (of which 500m ² waste management) |
| • B8 Data Centre | 97,000m ² |
| • Sui Generis (battery storage) | 15,000m ² |

Total 115,000m²

7.4 It is noted that OCC have recently adopted new car parking standards (October 2022), for which the parking standards are 1 space per 45m² for light industrial (Class E). For the Data Centre, given the low number of employees expected (see trip rates at Table 8 below) it is considered appropriate to calculate the Data Centre based on the lowest land use contained in the standards (1 space per 300m² B8 Storage).

7.5 For the Battery Storage, it is reasonable to assume that only operational parking would be provided, thus in the region of 2 spaces would be appropriate, given the limited number of trips expected (see paragraph 4.12).

Trip Rates

7.6 The trip rates (to which the LHA have raised no objection) are copied below from the TA, along with the predicted traffic generation:

Table 5: Trip Rates – B2 Light Industrial

| Period | Trip Rates (per 100m ²) | | |
|-----------------------|-------------------------------------|----------|---------|
| | Inbound | Outbound | Two-Way |
| AM Peak (08:00-09:00) | 0.240 | 0.062 | 0.302 |
| PM Peak (17:00-18:00) | 0.027 | 0.183 | 0.210 |

Table 6: Traffic Generation – B2 Light Industrial (5,000m² – Worst-Case)

| Period | Traffic Generation (Vehicles) | | |
|-----------------------|-------------------------------|----------|---------|
| | Inbound | Outbound | Two-Way |
| AM Peak (08:00-09:00) | 12 | 3 | 15 |
| PM Peak (17:00-18:00) | 1 | 9 | 10 |

Table 7: Traffic Generation – B2 Light Industrial (3,000m² – Anticipated)

| Period | Traffic Generation (Vehicles) | | |
|-----------------------|-------------------------------|----------|---------|
| | Inbound | Outbound | Two-Way |
| AM Peak (08:00-09:00) | 7 | 2 | 9 |
| PM Peak (17:00-18:00) | 1 | 5 | 6 |

Table 8: Trip Rates – B8 Data Centre

| Period | Trip Rates (per 100m ²) | | |
|-----------------------|-------------------------------------|----------|---------|
| | Inbound | Outbound | Two-Way |
| AM Peak (08:00-09:00) | 0.017 | 0.002 | 0.019 |
| PM Peak (17:00-18:00) | 0.002 | 0.022 | 0.024 |

Table 9: Traffic Generation – B8 Data Centre (105,000m² – Worst-Case)

| Period | Traffic Generation (Vehicles) | | |
|-----------------------|-------------------------------|----------|---------|
| | Inbound | Outbound | Two-Way |
| AM Peak (08:00-09:00) | 18 | 2 | 20 |
| PM Peak (17:00-18:00) | 2 | 23 | 25 |

Table 10: Traffic Generation – B8 Data Centre (97,000m² – Anticipated)

| Period | Traffic Generation (Vehicles) | | |
|-----------------------|-------------------------------|----------|---------|
| | Inbound | Outbound | Two-Way |
| AM Peak (08:00-09:00) | 16 | 2 | 18 |
| PM Peak (17:00-18:00) | 2 | 21 | 23 |

7.7 As noted in paragraph 4.12, the Battery Storage would generate 2 inbound movements in the AM peak and 2 outbound movements in the PM peak.

7.8 Given the industrial nature of the proposals, it is considered unlikely that significant numbers of visitors will travel to the site.

Mode Share

7.9 Modal share has been calculated for the site, based on 2011 Census data for Mid-Super Output Area South Oxfordshire 009 (E02005966), which covers the area just to the south of the site, including Southmead Industrial Estate and is therefore considered a robust representation of the potential baseline modal share of D-Tech.

- Single Occupancy Vehicle – 68.9%
- Car Passenger – 7.4%
- Cycling – 6.9%
- Walking – 11.8%
- Train – 1.1%
- Bus – 1.8%
- Other – 2.1%

7.10 In respect of forecast modal share of travel to the site, given its location on the edge of Didcot, proximity to residential areas (including the under-construction Land North East of Didcot) and proposed bus service (which will be delivered with or without HIF), it is reasonable to assume that D-Tech should aim for a similar trip profile to that of Milton Park.

7.11 A Travel Plan² has been submitted as part of an application for a “Proposed Revised Draft Local Development Order for Milton Park (Application Ref. P22/V1917/LDO)”. The Travel Plan outlines the following mode share in 2019:

- Single Occupancy Vehicle – 56%
- Car Share – 8%
- Car Passenger (Drop-Off) – 11%
- Walking and cycling – 11%
- Bus and Train – 5%
- Bus Only – 7%
- Other – 2%

7.12 Based on the above, it is realistic to propose a 13% (69%-56%) reduction to the car parking standards based on the forecast reduction in single occupancy vehicle travel outlined above. Thus, it is proposed that the revised standards are capped at:

² Milton Park Travel Plan 2022 (July 2022)

- 1 space per 51m² for light industrial; and
- 1 space per 339m² for Data Centre.

7.13 Given the end users of the site are not yet known, it is not possible to determine shift patterns for the proposed land uses, therefore no further reduction has been applied to account for shift patterns.

7.14 However, the above standards should be considered a maximum, and once future occupiers are known, the parking standards may be further reduced based on operator-specific requirements, thus allowing flexibility for future occupiers.

7.15 As parking for the Battery Storage would be operational only, no change is proposed to the parking provision of this land use.

Electric Vehicle Charging

7.16 It is proposed that a minimum of 25% of all parking spaces on-site will be provided with active electric vehicle charging points, in line with OCC guidance to ensure D-Tech is futureproofed.

Disabled Parking

7.17 Disabled parking spaces will be provided at a minimum of 6% per land use and will be located within 50m of a building's entrance, in compliance with OCC standards.

7.18 The parking provision and allocation will be detailed in a masterplan submitted as part of the S106.

8.0 Public Transport

8.1 In their consultation response, the LHA stated that “A pair of bus stops and associated infrastructure (shelters, hard standings, poles, flags, RTI etc) are to be provided within the site as part the HIF works. If HIF doesn’t come forward, then the site still requires public transport infrastructure to be provided. Further discussions with council officers are required regarding an alternative location and type of stops e.g. layby, half layby, on carriageway etc in case this option is required in the future.”.

8.2 It is understood that the HIF 1 application is going to committee in June 2023 and therefore there is a reasonable degree of certainty that HIF will come forward. However, in the unlikely event that HIF does not come forward, Reef will engage with the LHA to agree a strategy for the delivery of the bus stops.

8.3 The LHA also requested financial contributions of £163,348.68 index linked, to be provided to improve the bus services serving the LDO site. Public transport contributions will form part of the LDO S106 terms and take into account the contributions for on-site bus stops and sustainable transport infrastructure.

9.0 Travel Plan

9.1 It is agreed that a Travel Plan will be secured by way of a Condition.

10.0 Construction Traffic Management Plan (CTMP)

- 10.1 The LHA requested a CTMP to mitigate the impact of construction traffic on the local and strategic highway network.
- 10.2 It is proposed that the necessary CTMP is secured through a Condition.

Appendix A

Highways Consultation Response

Application no: P17/V2490/LDO
Location: Land at Hill Farm, Didcot

Transport Development Control

Key issues:

- Provision of safe and suitable vehicle access arrangements.
- Traffic Generation & Impact.
- HIF / strategic contribution, including land to deliver future schemes and for construction purposes.
- Local Plan 2031 Part 1 Core Policies 17 and 18.
- The Local Development Order (LDO) proposal should only be granted if it does not delay, impede, or interfere with the construction and delivery of the Didcot to Culham River Crossing works.
- Pedestrian and cyclist connections.
- Parking Provisions.
- Public Transport
- Construction Traffic Management Plan (CTMP).
- Travel Plan for development proposal.

Legal agreement required to secure:

S106 financial contributions

| Contribution | Amount £ | Price base | Index | Towards (details) |
|--|-------------|------------|--------|---|
| Strategic Highway Contribution | TBC | | Baxter | Towards the delivery of the Didcot to Culham River Crossing works through the LDO site. |
| Public Transport Contribution | £163,348.68 | Dec 2021 | RPIX | Towards the provision of a bus service to serve the LDO site and local area. |
| Public transport infrastructure Contribution (bus shelters on LDO site). Or works to be delivered via direct delivery (S278 works)). | TBC | | Baxter | Towards the installation of Real Time Information displays for the required bus stops to serve the LDO site & future maintenance. |

| | | | | |
|------------------------|--|---------------|------|-------------------------------------|
| Travel Plan Monitoring | £2,563.00 | December 2021 | RPIX | Monitoring of the site Travel Plan. |
| Total | £TBC | | | |
| Other requirements | As part of the Section 106 agreement for this proposal the applicant is to permanently transfer / dedicate land to OCC to enable the delivery of the Didcot to Culham River Crossing works through the LDO site. This land agreement will also require appropriate easements to be agreed for future maintenance purposes. Licenced land will also be required on a temporary basis to assist with the construction this section of the Didcot Garden Town Housing Infrastructure Fund (HIF) scheme. | | | |
| | Land is required to be safeguarded for the future delivery of a pedestrian / cycle bridge over the railway line during the 'LDO period' (1 st January 2042). OCC will call upon this land during the LDO period to be permanently dedicated / transferred over to enable the delivery of a future bridge scheme. Licenced land from the LDO site will also be required on a temporary basis to assist with the construction of such a scheme at that time. | | | |
| | On-site pedestrian and cycle connections (and improvements) to the existing public highway (including connection to Sustrans Route 5) are to be provided prior to first occupation of the LDO site. All such works are to be provided in accordance with LTN 1/20 design standards as shown on LDO Plan 5. | | | |

S278 Agreement (Off-site highway works).

| Highway works | Drawing | Trigger Date |
|---|-----------------|--|
| Amendments to the existing vehicle access / arm onto A4130 / Collet roundabout to provide suitable access to the LDO site. Works are to include appropriate pedestrian and cyclist crossing infrastructure with connections to the existing public highway network and bus stop provisions. | To be provided. | If the LDO site comes forward ahead of the delivery of HIF. These highway works are to be provided by the site prior to its first occupation / use to ensure suitable access for all travel modes to the LDO site is provided. |

Informatics:

Prior to the commencement of a development, a separate agreement(s) must be obtained from OCC Road Agreements Team for the proposed highway works (vehicular access, new footway links, bus infrastructure, pedestrian refuge island, carriageway widening and new right-turn lane) under S278 of the Highways Act 1980.

For guidance and information please contact the county's Road Agreements Team via <https://www.oxfordshire.gov.uk/cms/content/contact-road-agreements-team>.

It is an offence under S151 of the Highways Act 1980 for vehicles leaving the development site to carry mud onto the public highway. Facilities should therefore be provided and used on the development site for cleaning the wheels of vehicles before they leave the site.

No vehicles associated with the building operations on the development site shall be parked on the public highway, so as to cause an obstruction. Any such obstruction is an offence under S137 of the Highways Act 1980.

Comments:

1. The principle of the proposed LDO at the Hill Farm site in Didcot is recognised within the Vale of White Horse Local Plan 2031: Part 1 and Part 2 as part of the Science Vale UK area, and has been allocated as an area of economic growth for the district. Within this growth area is an Enterprise Zone, that includes Harwell, Milton Park and the Didcot Growth Accelerator – where this LDO proposal is located (known as 'EZ2').
2. The development proposal subject to this LDO application specifically proposes: up to 5,000m² of B2 General Light industrial processes (including 500m² for a waste management facility), up to 110,000m² for a Data Centre only use (B8 use class) and up to 20,000m² for Battery Storage (B8 use class).
3. A Transport Statement (TS) report (ref 060_8130727_AD_Transport_Statement, issue 5) has been prepared by Glanville dated 22nd February 2022 to support the LDO proposal following pre-application discussions with council officers and has been assessed on its merits.

Access Arrangements

4. The LDO proposal proposes to utilise the current vehicle access to the site via an existing arm off the A4130 / Collett roundabout junction. This access arrangement is to lead to a pair of priority junctions within the site providing access to secondary roads serving the build zones of the LDO.
5. The design of the main access to serve the LDO site will be dependant on the site's delivery programme and the delivery of the Didcot Garden Town Housing Infrastructure Fund (HIF) scheme(s). From initial discussions between council officers and the LDO site promoter, it is currently programmed that the LDO proposal will commence, once permitted, after the delivery of HIF and the access works described within the submitted TS will not be required.
6. However, if the LDO proposal was to come forward ahead of the delivery of HIF, the details of the access works described within the 'Access and Wayleaves section of the TS must be provided (and approved) on a scaled drawing and this is to be secured by a S106 agreement accompanying the LDO. Providing and agreeing this design detail now will ensure all potential access options are

covered, ensuring there is no delay in delivering an acceptable access to the site ahead of HIF. It is requested that a scaled drawing of these highway works is provided for assessment with an accompanying Road Safety Audit.

7. The pre-HIF access works, if triggered, would be delivered via a S278 Agreement with OCC as the Local Highway Authority through a S106 obligation from the LDO proposal. While it is expected HIF will be delivered prior to the LDO site coming forward it is recommended this approach is taken by the district council to ensure that the LDO site is provided with an acceptable access arrangement in the short term (prior to HIF being delivered) as a fall-back position.
8. While the main access will be taken via the A4130 / Collet roundabout junction, it is important to note that the proposed internal access arrangements will provide a link to the Appleford Railway Crossing to the north. While such a link is necessary to enable access to the site, the submitted TS confirms (paragraph 3.8) that it is not intended that the crossing will be used as a means of access to the LDO site. In recognition of this, it is requested the district council considers imposing a condition (or an obligation within the S106 Agreement is provided) on the LDO site to ensure this remains the case. It is recognised that in the long term this access arrangement will only be in place until the delivery of the Didcot to Culham River Crossing works once it has been constructed as part of the overall Didcot Garden Town Housing Infrastructure Fund (HIF) scheme(s).
9. A significant section of the Didcot to Culham River Crossing is to be delivered through the LDO site and the land to deliver this scheme (on a permanent and temporary basis) must be secured via a legal agreement if this LDO proposal is to be approved by the district council. Such a requirement is supported and considered to be in accordance with Core Policies 17 and 18 of the adopted Vale of White Horse Local Plan 2031: Part 1. It is essential that the LDO proposal, if approved, does not delay, impede, or interfere with the construction and delivery of Didcot to Culham River Crossing works. Such an obligation from the site promoter will be required in the S106 Agreement for this proposal.
10. Notwithstanding the above, if the LDO site comes forward ahead of the delivery of HIF, the submitted TS, confirms the section of road between the A4130 / Collett roundabout junction and Hill Farm would be constructed and offered to the Local Highway Authority for adoption via an appropriate legal agreement. However, beyond Hill Farm, only existing rights would remain i.e. as a bridleway and any other private rights wayleaves which exist. This means there would be no public right of vehicular access beyond Hill Farm as there are no current rights that would allow for an increase in vehicular traffic. This position would change once the HIF infrastructure is constructed and available for use to the public.

Traffic Generation & Impact

11. The traffic data that has been utilised within the transport submission for the LDO proposal has been sourced from the TRICS database for B2 General Industry land use and a permitted B8 Data Centre land use (ref P18/V2277/FUL) that used first principles traffic data collection. The proposed battery storage (sui generis use) has also used a first principles approach to estimate its traffic generation due to

the unusual nature of this land use. The use of such traffic data is considered appropriate to use to support the LDO proposal and assess its potential impact on the highway network.

12. Paragraphs 4.1 to 4.3 provides evidence of the potential traffic movements that could be generated for a B2 General Light Industrial proposal for up to 5,000m² of floor area. Table 2 of the TS confirms that in the AM peak hour (08:00 to 09:00) there is a total of 15 two-way vehicle movements and a total of 10 two-way movements in the PM peak (17:00 to 18:00).
13. Paragraphs 4.4 to 4.6 provides evidence of the potential traffic movements that could be generated by the proposed B8 Data Centre (110,000m² of floor area). Table 6 of the TS confirms that in the AM peak hour (08:00 to 09:00) there is a total of 18 two-way vehicle movements for this land use and a total of 23 two-way movements in the PM peak (17:00 to 18:00).
14. The TRICS data base doesn't currently hold data specifically for battery storage facility land uses. On this basis a first principles approach has been used by the site promoter from contacting operators of similar operations. Due to the nature of the operation of such facilities, it is expected that a minimal level on site personnel will be on site at any one time. Thus, only generating a modest number of traffic movements throughout the day. As such an assumption has made (paragraph 4.7 of TS), that 15 two-way traffic movements are estimated to take place per day; with 5 two-way movements accounted for in the AM and PM peak hours. Such a first principles approach to estimating the traffic generation movements associated with this land use is considered appropriate. For completeness, it is requested that the similar sites of operation with battery storage facilities that were reviewed by the applicant are provided to ensure the information referenced to is available for review.
15. In addition to the battery storage information requested above, there appears to be no traffic data provided confirming what the existing traffic movements are to / from the development site. It is requested this outstanding information is provided for as an addendum to the TS for assessment.
16. In regard to the overall new traffic movements to be generated by the proposed LDO, Table 8 provides this estimation, 32 two-way vehicle movements in the AM peak hour and 34 two-way vehicle movements in the PM peak hour. Such movements are considered acceptable on the highway network in comparison to the larger LDO proposal initially promoted which would have had more significant impacts on the highway network of Didcot. While such new traffic movements are considered acceptable, a commitment by the site promoter has been given that they will accept a condition on the LDO restricting the volume of traffic movements that can be generated by the site during the commuter peak hours in Didcot, until the Didcot to Culham River Crossing has been fully constructed and is open for use by the public (TS paragraph 4.18).
17. Such an obligation from the applicant has been accepted in principle by OCC officers to ensure the highway network will operate at a satisfactory level until the delivery of the Didcot Garden Town Housing Infrastructure Fund (HIF) scheme.

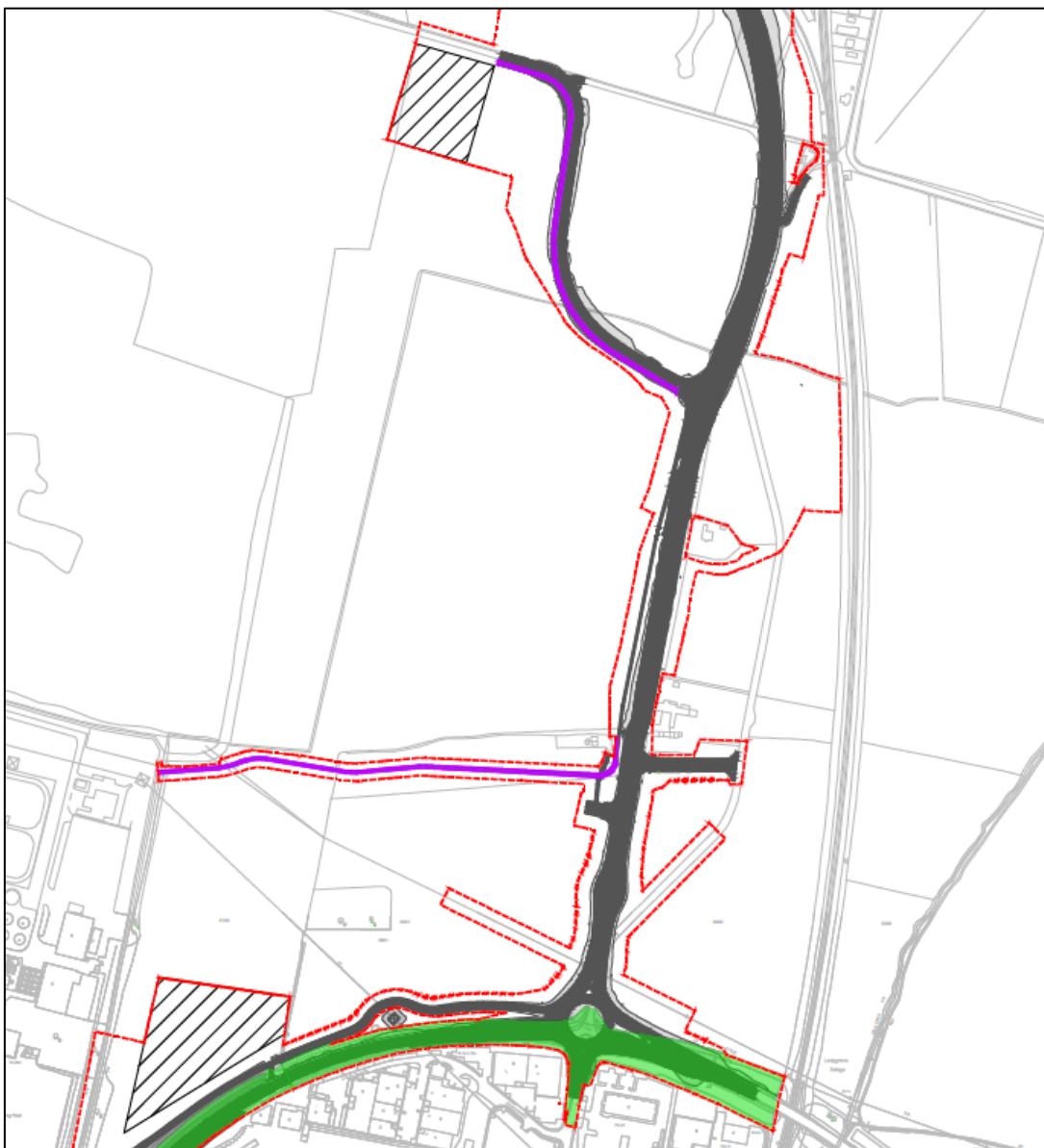
Any such condition (or an obligation within the S106 Agreement) to restrict the level of traffic movements generated by the site will need to be imposed on the new land use types proposed at the LDO site and associated gross floor areas of those land uses rather than the number of traffic movements generated. If the LDO wishes to increase its gross floor area (with appropriate mitigation measures) in the future an updated transport submission in accordance with the County Council's Local Transport Connectivity Plan will be required for assessment.

18. No junction assessments have been submitted as part of the transport submission for the LDO to specifically assess the impact of the LDO on the A4130 / Collett roundabout junction or any nearby local junctions. It is however accepted that the number of vehicles movements expected to be generated by the land uses proposed at the LDO site will be low. Meaning a junction assessment for this proposal is not considered fundamental to this application.
19. This position has been formulated by considering two key factors. One, a junction assessment for the A4130 / Collet junction roundabout has been undertaken by the County Council to support the HIF planning application (Appendix D of TS). This assessment shows that the roundabout junction will have capacity to accommodate the LDO proposal once HIF has been delivered. Two, the LDO, if permitted will be subject to a restriction on the number of traffic movements associated with the land uses proposed and gross floor area of the LDO site; until the Didcot to Culham River Crossing has been fully constructed and is open for use.
20. If the restriction on the amount of floor area for the LDO and associated traffic numbers are not accepted as pre-HIF condition, then OCC will review this position and require further transport assessment work by the site promoter to be undertaken.

HIF / strategic contributions

21. Land has been safeguarded through the LDO site in the Vale of White Horse Local Plan 2031: Part 2 (Appendix B: Land for Safeguarding for Future Transport Scheme) to ensure the delivery of the Thames river crossing. The illustrative LDO site layout provided confirms the provision of such a southern road corridor through the site, which is welcomed and required.
22. The corridor width of the Didcot to Culham River Crossing works that is shown (which consists of a two-lane road, cycle and footways and retention of the bridleway) on LDO Plan 5 (dated 09/07/2021) with a width up to 54m. Such a width is considered acceptable in principle by OCC but will also require a temporary (10m) working area corridor around it, as per the HIF planning application boundary plan.

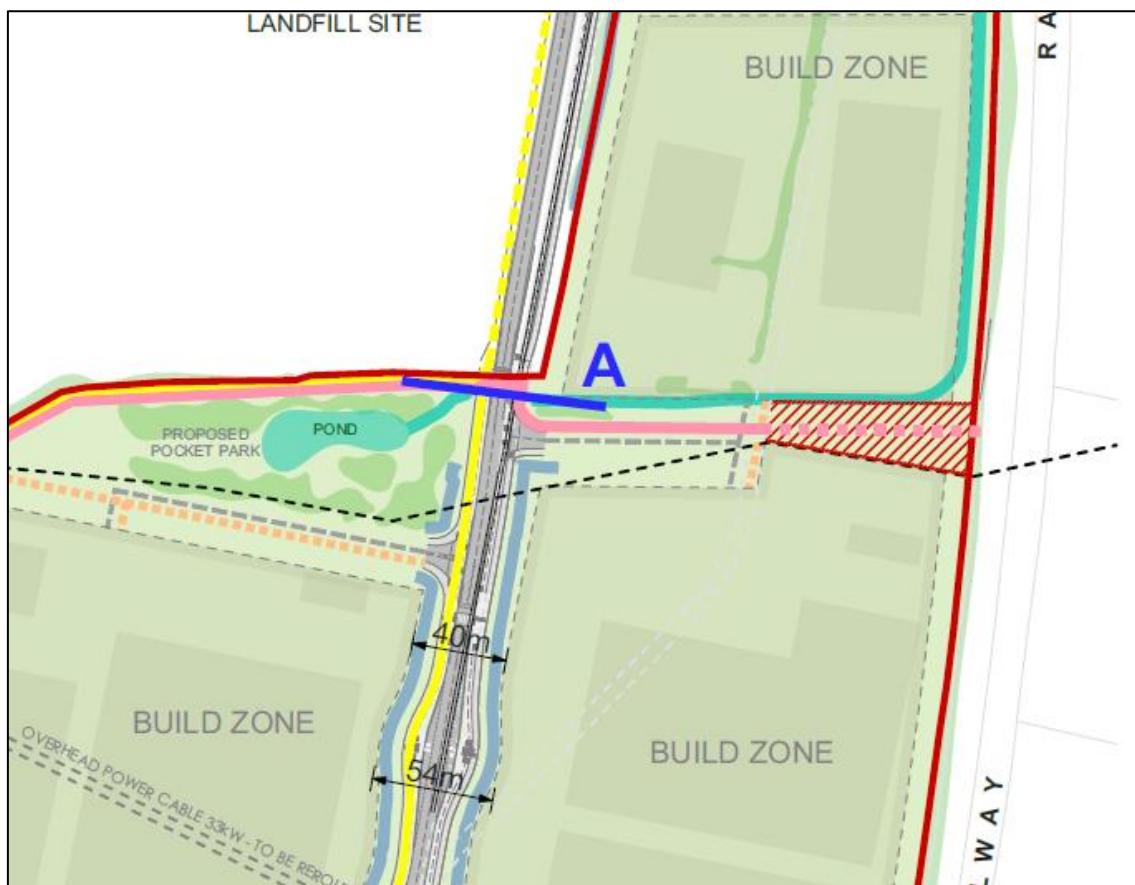
Extract of HIF Application Boundary Plan



23. The submitted draft LDO document (ref V7.01) confirms that the promoter of the site is to offer, at no cost to the council, the land required to allow the delivery of the southern section of the Thames crossing road through the site. Land is also to be provided to enhance the existing roundabout junction on A4130. The applicant has also confirmed that no Compulsory Purchase Order (CPO) in respect of this land will be required.
24. In addition to the land being provided to OCC to deliver the Didcot to Culham River Crossing, a financial contribution towards delivering this section of the HIF scheme is to be sought from the LDO proposal. Further discussions on this element of LDO mitigation package is required between officers and the site promoter.

25. Land is also required to be safeguard for the future delivery of pedestrian / cycle bridge over the railway line to the east of the site during the 'LDO period' (1st January 2042). When OCC is ready to progress a future scheme, OCC will call upon this land during the LDO period to be permanently dedicated / transferred over to the County Council to enable the delivery of such a scheme. Licensed land from the LDO site may also be required on a temporary basis to assist with the construction of such a scheme at that time.

26. Below is an extract from LDO Plan 5 showing the red hatched land to be safeguarded within the LDO site. A similar section of land is also to be safeguarded on the other side of the bridge. A scaled drawing showing a hatched area on both sides of the railway line is required to be included within the legal agreement to accompany the LDO proposal.



27. To ensure the above HIF package is secured, a legal agreement (S106) will be required between the applicant and OCC. For clarity, this agreement will be expected to secure the permanent and temporary land required to deliver the Didcot to Culham River Crossing works, land for a future bridge over the railway line, a financial contribution towards HIF and an obligation to enter into S278 and S38 for the identified road / access works with associated commuted sums if the LDO proposal comes forward ahead of the delivery of HIF. The requirement for the applicant to enter into this agreement is requested to be imposed by the Vale of White Horse District Council prior to the approval of the LDO.

Pedestrian and Cycle Connections

28. On-site pedestrian and cycle connections (and improvements) to the existing public highway (including connection to Sustrans Route 5) are to be provided prior to the first occupation of the LDO site. All such infrastructure is to be designed in accordance with LTN 1/20 design standards as shown on LDO Plan 5. A detailed master plan of the LDO site will be required showing all such routes ensuring they are both direct and safe to use.

Parking Provisions

29. The LDO proposal will be required to promote sustainable and active travel behaviour by encouraging employees to travel to their work destination by non-car modes and reduce the number of car trips on the highway network. Such an approach is emphasised within OCC's Local Transport and Connectivity Plan (LTCP) which supports sustainable travel measures and seeks to reduce the availability of car parking at employment sites. With this in mind, the parking provisions to be provided on site must be provided to a level that supports OCC's objective to reduce 25% of car trips by 2030, and 33% by 2040.
30. Therefore, LDO site must undertake a site-specific assessment and seek to balance its operational needs and space requirements to satisfactorily demonstrate that efforts to reduce car trips have been appropriately explored. Such considerations will include:
 - The development's land use.
 - Trip rate associated with the development (including base and forecast mode share).
 - Oxfordshire County Council car trip and local cycling targets; and
 - The user group of employees / visitors of the site (including shift patterns).
31. The number of spaces for Light Goods Vehicles (LGV) and Heavy Goods Vehicles (HGV) may also be calculated using a similar methodology or compared to vehicle operating licences for similar buildings / operations.
32. 'Active' charging points for all electric vehicles for the LDO site proposal are required to be provided at a minimum level of 25% for all parking spaces with ducting provided at all remaining spaces (where practical) to 'future proof' such spaces to be upgraded in the future. Such requirements ensure development proposals will accord with OCC's (LTCP) objective to deliver a transport network that contributes to a climate positive future by 2050 and Oxfordshire's Electrical Vehicle Infrastructure Strategy.
33. Consideration must be given to the future layout design of the LDO site for the provision and location of spaces for impaired mobility people (Blue Badge Holders). Generally, such spaces should be provided within 50m of a building's entrance (Blue Badge Holder range) and have level access to the main pedestrian access.

34. Cycle parking is to be provided to a high standard and provided to a minimum level. The emerging revised cycle parking standards of relevance for the LDO site are:

- B2 use 1 space per 200sqm for staff and 1 space per 400sqm for visitors: and
- B8 use 1 space per 400sqm for staff and 1 space per 1000 sqm for visitors.
- Battery storage facility is classed as *sui generis*, recommended the high standard of B2 use is used.

Note: Due to Didcot being classed as a Garden Town such parking provisions are expected to be exceeded where practically possible.

35. All cycling parking is to be provided in a convenient location close to building entrances and bus stop locations within the LDO site. Such parking provisions are to be covered and in the style of a Sheffield or similar type stand, which are individually installed permanently into the floor material. Double decked or vertical cycle parking should not be used unless agreed by OCC in specific circumstances. The spacing of stands should be provided in accordance with Local Transport Note (LTN) 1/20. If raised on a kerb, dropped kerbs must be provided in suitable locations. Cycle parking should cater for non-standard cycles e.g. cargo bikes. Charging infrastructure for E-bikes is also to be provided for.

36. The LDO site will be required to promote inclusive cycling, provision for cycles for disabled people and other needs (such as tricycles, cargo bikes, tandems, and adapted bicycles). Such parking facilities are required to be provided in accordance with LTN 1/20 standards.

Public Transport

37. A pair of bus stops and associated infrastructure (shelters, hard standings, poles, flags, RTI etc) are to be provided within the site as part the HIF works. If HIF doesn't come forward, then the site still requires public transport infrastructure to be provided. Further discussions with council officers are required regarding an alternative location and type of stops e.g. layby, half layby, on carriageway etc in case this option is required in the future. Such works would be by direct delivery via a S278 Agreement with OCC.

38. To promote sustainable and active travel to / from the LDO site a financial contribution of £163,348.68 index linked will be required. This contribution would be used towards improvements to the bus services between the LDO site, including but not limited to improved services to Cowley, Berinsfield, Abingdon and Didcot.

Travel Plan

39. The drafted condition within the LDO submission, numbered as B4, is considered acceptable and will require a monitoring fee of £2,563.00 (index linked to December 2021 prices) to be secured as part of the S106 Agreement between OCC and the applicant.

Construction Traffic Management Plan (CTMP)

40. Construction traffic and its impact on both the local and strategic network is expected during the build out of the LDO. How this is managed with issues such as construction traffic management plans and routeing / delivery restrictions will require careful consideration and is to be included in a site wide CTMP. The contents of this document will need to be agreed and approved by OCC and secured by a pre-commencement condition.

Summary

41. The proposed LDO will result in additional trips onto the local highway network. However, it is acknowledged such trips are predicted to be low in number and will also be restricted by limiting the new floor space until the delivery of Didcot Garden Town Housing Infrastructure Fund (HIF) scheme. This has been accepted by the applicant is to be imposed within the S106 Agreement to accompany this proposal.
42. As part of the LDO mitigation package land is to be safeguarded, transferred / dedicated to OCC for the construction and delivery of the Didcot to Culham River Crossing works, and a future pedestrian and cycle bridge over the railway line at the eastern boundary of the site.
43. Financial contributions towards the delivery of the Didcot to Culham River Crossing works, public transport services (and infrastructure) improvements to existing pedestrian / cycle connections to the site, and a Travel Plan monitoring fee are to be secured by legal agreement.
44. For completeness, it is requested that the similar sites of operation with battery storage facilities that were reviewed by the applicant are provided to ensure the information referenced to is available for review. Clarification on the number of existing traffic movements the site currently generates is also required.

Officer's Name: Michael Deadman

Officer's Title: TDC Lead Officer

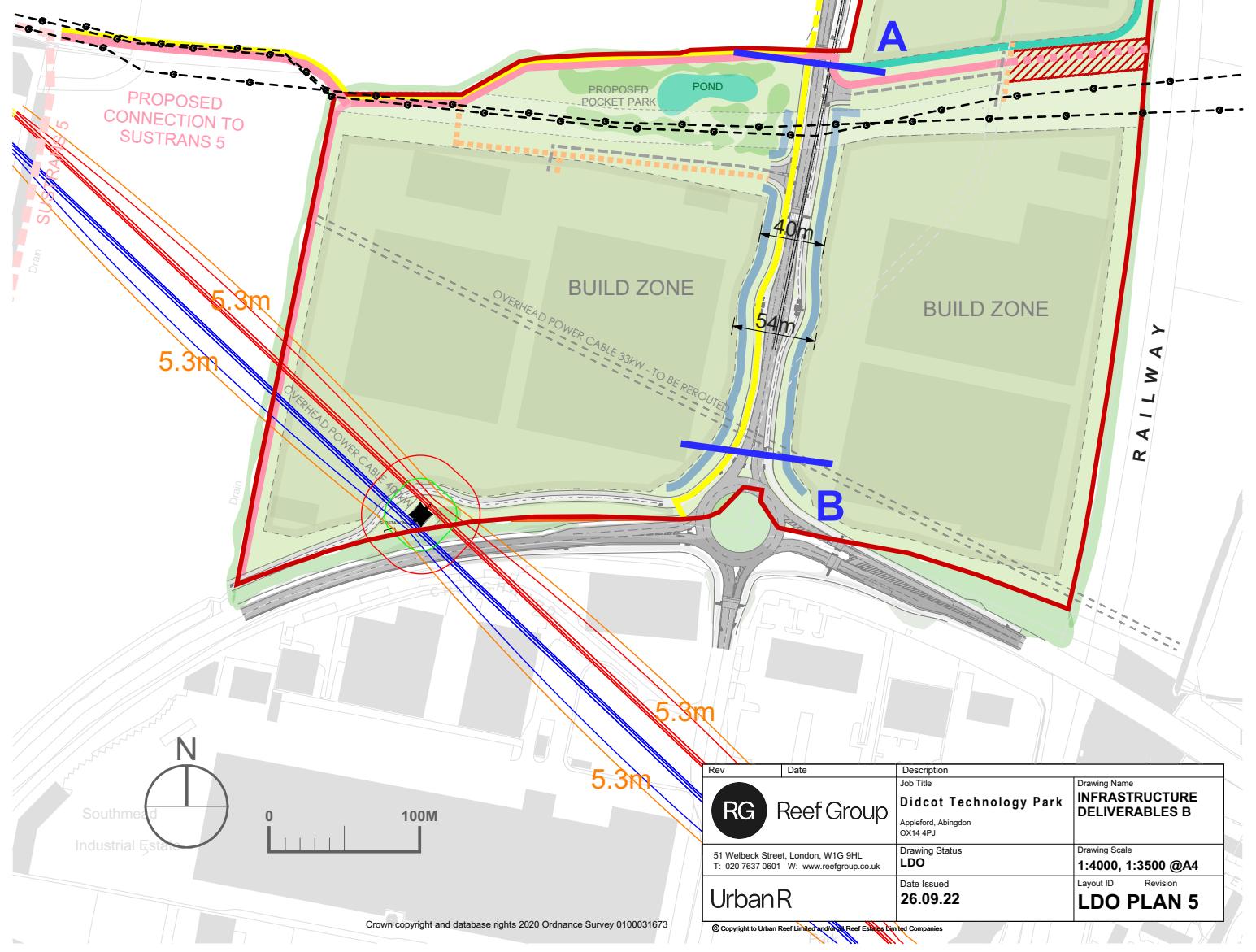
Date: 22 June 2022

Appendix B

Infrastructure Delivery Plan

LEGEND :

- LDO BOUNDARY
- PROPOSED STRATEGIC FOOTWAY AND CYCLEPATH (2M + 3M WIDE)
- BRIDLEWAY RETAINED THROUGH SITE AND NEW ROUTE WEST THROUGH POCKET PARK
- NEW BRIDLEWAY BY OTHERS
- INDICATIVE BUILD ZONE ACCESS INFRASTRUCTURE (TO REMAIN PRIVATE)
- INDICATIVE BUILD ZONE ACCESS FOOTWAY/CYCLEPATH INFRASTRUCTURE (2M + 3M WIDE) TO REMAIN PRIVATE
- LAND TO BE DEDICATED TO HIGHWAYS TO SAFEGUARD THE FUTURE OPPORTUNITY FOR THE DELIVERY OF A RAILWAY PEDESTRIAN/CYCLE BRIDGE
- BUILD ZONES WITH INDICATIVE BUILDINGS
- NEW HIF SCHEME DIDCOT-CULHAM RIVER CROSSING ROAD AND ASSOCIATED PEDESTRIAN AND CYCLE LANES
- HIF SCHEME DIDCOT-CULHAM RIVER CROSSING ROAD SWALES
- INDICATIVE LDO SWALES
- HIGH PRESSURE GAS MAINS WITH EASEMENT ZONE



| Rev | Date | Description | Drawing Name |
|-----|------------|---|--|
| RG | Reef Group | Job Title Didcot Technology Park Appleford, Abingdon OX14 4PJ | INFRASTRUCTURE DELIVERABLES B |
| | | 51 Welbeck Street, London, W1G 9HL T: 020 7637 0601 W: www.reefgroup.co.uk | Drawing Status LDO |
| | | Date Issued 26.09.22 | Drawing Scale 1:4000, 1:3500 @A4 |
| | | | Layout ID Revision LDO PLAN 5 |

Appendix C

TRICS Output

Calculation Reference: AUDIT-225601-221109-1138

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : A - HOUSES PRIVATELY OWNED
TOTAL VEHICLES

Selected regions and areas:

| | | | | |
|----|-------------------------------------|--|--------|--------|
| 02 | SOUTH EAST | | | |
| | MW MEDWAY | | | 1 days |
| 03 | SOUTH WEST | | | |
| | BC BOURNEMOUTH CHRISTCHURCH & POOLE | | 1 days | |
| | SD SWINDON | | 1 days | |
| 04 | EAST ANGLIA | | | |
| | NF NORFOLK | | 2 days | |
| | PB PETERBOROUGH | | 1 days | |
| | SF SUFFOLK | | 1 days | |
| 06 | WEST MIDLANDS | | | |
| | SH SHROPSHIRE | | 1 days | |
| | ST STAFFORDSHIRE | | 1 days | |
| | WK WARWICKSHIRE | | 1 days | |
| 07 | YORKSHIRE & NORTH LINCOLNSHIRE | | | |
| | NY NORTH YORKSHIRE | | 1 days | |
| 08 | NORTH WEST | | | |
| | AC CHESHIRE WEST & CHESTER | | 1 days | |
| | EC CHESHIRE EAST | | 1 days | |
| 10 | WALES | | | |
| | PS POWYS | | 1 days | |
| | VG VALE OF GLAMORGAN | | 1 days | |

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: No of Dwellings
 Actual Range: 10 to 28 (units:)
 Range Selected by User: 6 to 30 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 06/06/22

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

| | |
|-----------|--------|
| Monday | 6 days |
| Wednesday | 6 days |
| Thursday | 3 days |

This data displays the number of selected surveys by day of the week.

Selected survey types:

| | |
|-----------------------|---------|
| Manual count | 14 days |
| Directional ATC Count | 1 days |

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

| | |
|------------------------------------|---|
| Suburban Area (PPS6 Out of Centre) | 6 |
| Edge of Town | 9 |

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

| | |
|------------------|----|
| Residential Zone | 15 |
|------------------|----|

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

| | |
|----|---------|
| C3 | 15 days |
|----|---------|

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

| | |
|------------------|--------|
| 1,001 to 5,000 | 1 days |
| 5,001 to 10,000 | 3 days |
| 10,001 to 15,000 | 5 days |
| 15,001 to 20,000 | 2 days |
| 20,001 to 25,000 | 2 days |
| 25,001 to 50,000 | 2 days |

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

| | |
|--------------------|--------|
| 5,001 to 25,000 | 2 days |
| 25,001 to 50,000 | 1 days |
| 50,001 to 75,000 | 3 days |
| 75,001 to 100,000 | 3 days |
| 125,001 to 250,000 | 4 days |
| 250,001 to 500,000 | 2 days |

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

| | |
|------------|---------|
| 0.6 to 1.0 | 4 days |
| 1.1 to 1.5 | 11 days |

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

| | |
|-----|---------|
| Yes | 2 days |
| No | 13 days |

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

| | |
|-----------------|---------|
| No PTAL Present | 15 days |
|-----------------|---------|

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

| | | | |
|---|------------------------------------|----------------------|---|
| 1 | AC-03-A-04 | TOWN HOUSES | CHESHIRE WEST & CHESTER |
| | LONDON ROAD | | |
| | NORTHWICH | | |
| | LEFTWICH | | |
| | Suburban Area (PPS6 Out of Centre) | | |
| | Residential Zone | | |
| | Total No of Dwellings: | 24 | |
| | <i>Survey date: THURSDAY</i> | <i>06/06/19</i> | <i>Survey Type: MANUAL</i> |
| 2 | BC-03-A-02 | BUNGALOWS | BOURNEMOUTH CHRISTCHURCH & POOLE |
| | HURSTDENE ROAD | | |
| | BOURNEMOUTH | | |
| | CASTLE LANE WEST | | |
| | Edge of Town | | |
| | Residential Zone | | |
| | Total No of Dwellings: | 28 | |
| | <i>Survey date: MONDAY</i> | <i>24/03/14</i> | <i>Survey Type: MANUAL</i> |
| 3 | EC-03-A-06 | TERRACED HOUSES | CHESHIRE EAST |
| | GREYSTOKE ROAD | | |
| | MACCLESFIELD | | |
| | HURDSFIELD | | |
| | Edge of Town | | |
| | Residential Zone | | |
| | Total No of Dwellings: | 24 | |
| | <i>Survey date: MONDAY</i> | <i>24/11/14</i> | <i>Survey Type: MANUAL</i> |
| 4 | MW-03-A-02 | MIXED HOUSES | MEDWAY |
| | OTTERHAM QUAY LANE | | |
| | RAINHAM | | |
| | Edge of Town | | |
| | Residential Zone | | |
| | Total No of Dwellings: | 19 | |
| | <i>Survey date: MONDAY</i> | <i>06/06/22</i> | <i>Survey Type: MANUAL</i> |
| 5 | NF-03-A-03 | DETACHED HOUSES | NORFOLK |
| | HALING WAY | | |
| | THETFORD | | |
| | Edge of Town | | |
| | Residential Zone | | |
| | Total No of Dwellings: | 10 | |
| | <i>Survey date: WEDNESDAY</i> | <i>16/09/15</i> | <i>Survey Type: MANUAL</i> |
| 6 | NF-03-A-10 | MIXED HOUSES & FLATS | NORFOLK |
| | HUNSTANTON ROAD | | |
| | HUNSTANTON | | |
| | Edge of Town | | |
| | Residential Zone | | |
| | Total No of Dwellings: | 17 | |
| | <i>Survey date: WEDNESDAY</i> | <i>12/09/18</i> | <i>Survey Type: DIRECTIONAL ATC COUNT</i> |
| 7 | NY-03-A-13 | TERRACED HOUSES | NORTH YORKSHIRE |
| | CATTERICK ROAD | | |
| | CATTERICK GARRISON | | |
| | OLD HOSPITAL COMPOUND | | |
| | Suburban Area (PPS6 Out of Centre) | | |
| | Residential Zone | | |
| | Total No of Dwellings: | 10 | |
| | <i>Survey date: WEDNESDAY</i> | <i>10/05/17</i> | <i>Survey Type: MANUAL</i> |
| 8 | PB-03-A-04 | DETACHED HOUSES | PETERBOROUGH |
| | EASTFIELD ROAD | | |
| | PETERBOROUGH | | |
| | Suburban Area (PPS6 Out of Centre) | | |
| | Residential Zone | | |
| | Total No of Dwellings: | 28 | |
| | <i>Survey date: MONDAY</i> | <i>17/10/16</i> | <i>Survey Type: MANUAL</i> |

LIST OF SITES relevant to selection parameters (Cont.)

| | | | |
|----|------------------------------------|---------------------------|----------------------------|
| 9 | PS-03-A-02 | DETACHED/SEMI -DETACHED | POWYS |
| | GUNROG ROAD | | |
| | WELSHPOOL | | |
| | Suburban Area (PPS6 Out of Centre) | | |
| | Residential Zone | | |
| | Total No of Dwellings: | 28 | |
| | <i>Survey date: MONDAY</i> | 11/05/15 | <i>Survey Type: MANUAL</i> |
| 10 | SD-03-A-01 | SEMI DETACHED | SWINDON |
| | HEADLANDS GROVE | | |
| | SWINDON | | |
| | Suburban Area (PPS6 Out of Centre) | | |
| | Residential Zone | | |
| | Total No of Dwellings: | 27 | |
| | <i>Survey date: THURSDAY</i> | 22/09/16 | <i>Survey Type: MANUAL</i> |
| 11 | SF-03-A-05 | DETACHED HOUSES | SUFFOLK |
| | VALE LANE | | |
| | BURY ST EDMUND'S | | |
| | Edge of Town | | |
| | Residential Zone | | |
| | Total No of Dwellings: | 18 | |
| | <i>Survey date: WEDNESDAY</i> | 09/09/15 | <i>Survey Type: MANUAL</i> |
| 12 | SH-03-A-06 | BUNGALOWS | SHROPSHIRE |
| | ELLESMORE ROAD | | |
| | SHREWSBURY | | |
| | Edge of Town | | |
| | Residential Zone | | |
| | Total No of Dwellings: | 16 | |
| | <i>Survey date: THURSDAY</i> | 22/05/14 | <i>Survey Type: MANUAL</i> |
| 13 | ST-03-A-08 | DETACHED HOUSES | STAFFORDSHIRE |
| | SILKMORE CRESCENT | | |
| | STAFFORD | | |
| | MEADOWCROFT PARK | | |
| | Edge of Town | | |
| | Residential Zone | | |
| | Total No of Dwellings: | 26 | |
| | <i>Survey date: WEDNESDAY</i> | 22/11/17 | <i>Survey Type: MANUAL</i> |
| 14 | VG-03-A-01 | SEMI -DETACHED & TERRACED | VALE OF GLAMORGAN |
| | ARTHUR STREET | | |
| | BARRY | | |
| | Edge of Town | | |
| | Residential Zone | | |
| | Total No of Dwellings: | 12 | |
| | <i>Survey date: MONDAY</i> | 08/05/17 | <i>Survey Type: MANUAL</i> |
| 15 | WK-03-A-03 | DETACHED HOUSES | WORCESTERSHIRE |
| | BRESE AVENUE | | |
| | WARWICK | | |
| | GUYS CLIFFE | | |
| | Suburban Area (PPS6 Out of Centre) | | |
| | Residential Zone | | |
| | Total No of Dwellings: | 23 | |
| | <i>Survey date: WEDNESDAY</i> | 25/09/19 | <i>Survey Type: MANUAL</i> |

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

| Site Ref | Reason for Deselection |
|------------|--------------------------------------|
| BO-03-A-01 | Undertaken during Covid restrictions |
| HF-03-A-04 | Undertaken during Covid restrictions |
| KC-03-A-09 | Undertaken during Covid restrictions |

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

| Time Range | ARRIVALS | | | DEPARTURES | | | TOTALS | | |
|---------------|----------|-------------|-----------|------------|-------------|-----------|----------|-------------|-----------|
| | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | | | | | | | | | |
| 06:00 - 07:00 | | | | | | | | | |
| 07:00 - 08:00 | 15 | 21 | 0.097 | 15 | 21 | 0.239 | 15 | 21 | 0.336 |
| 08:00 - 09:00 | 15 | 21 | 0.190 | 15 | 21 | 0.348 | 15 | 21 | 0.538 |
| 09:00 - 10:00 | 15 | 21 | 0.126 | 15 | 21 | 0.197 | 15 | 21 | 0.323 |
| 10:00 - 11:00 | 15 | 21 | 0.187 | 15 | 21 | 0.194 | 15 | 21 | 0.381 |
| 11:00 - 12:00 | 15 | 21 | 0.194 | 15 | 21 | 0.200 | 15 | 21 | 0.394 |
| 12:00 - 13:00 | 15 | 21 | 0.229 | 15 | 21 | 0.235 | 15 | 21 | 0.464 |
| 13:00 - 14:00 | 15 | 21 | 0.206 | 15 | 21 | 0.194 | 15 | 21 | 0.400 |
| 14:00 - 15:00 | 15 | 21 | 0.213 | 15 | 21 | 0.213 | 15 | 21 | 0.426 |
| 15:00 - 16:00 | 15 | 21 | 0.300 | 15 | 21 | 0.265 | 15 | 21 | 0.565 |
| 16:00 - 17:00 | 15 | 21 | 0.316 | 15 | 21 | 0.206 | 15 | 21 | 0.522 |
| 17:00 - 18:00 | 15 | 21 | 0.274 | 15 | 21 | 0.197 | 15 | 21 | 0.471 |
| 18:00 - 19:00 | 15 | 21 | 0.235 | 15 | 21 | 0.148 | 15 | 21 | 0.383 |
| 19:00 - 20:00 | | | | | | | | | |
| 20:00 - 21:00 | | | | | | | | | |
| 21:00 - 22:00 | | | | | | | | | |
| 22:00 - 23:00 | | | | | | | | | |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | 2.567 | | | 2.636 | | | | 5.203 |

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

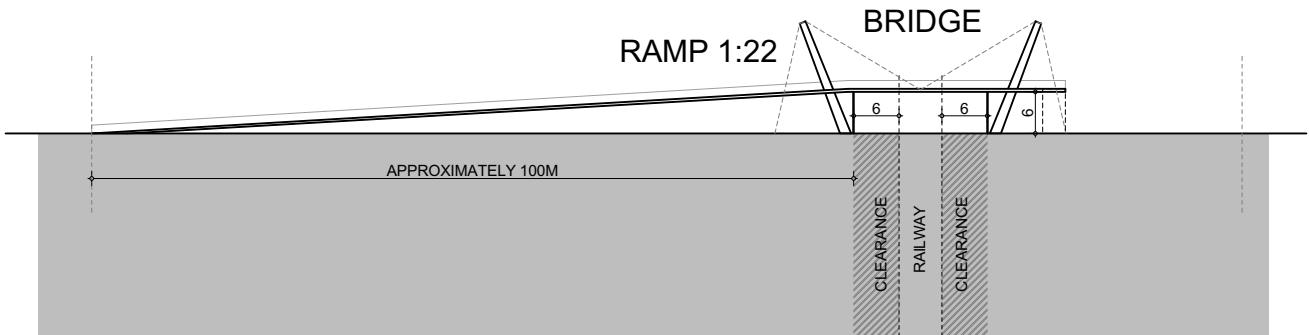
Parameter summary

| | |
|---|---------------------|
| Trip rate parameter range selected: | 10 - 28 (units:) |
| Survey date date range: | 01/01/14 - 06/06/22 |
| Number of weekdays (Monday-Friday): | 15 |
| Number of Saturdays: | 0 |
| Number of Sundays: | 0 |
| Surveys automatically removed from selection: | 0 |
| Surveys manually removed from selection: | 3 |

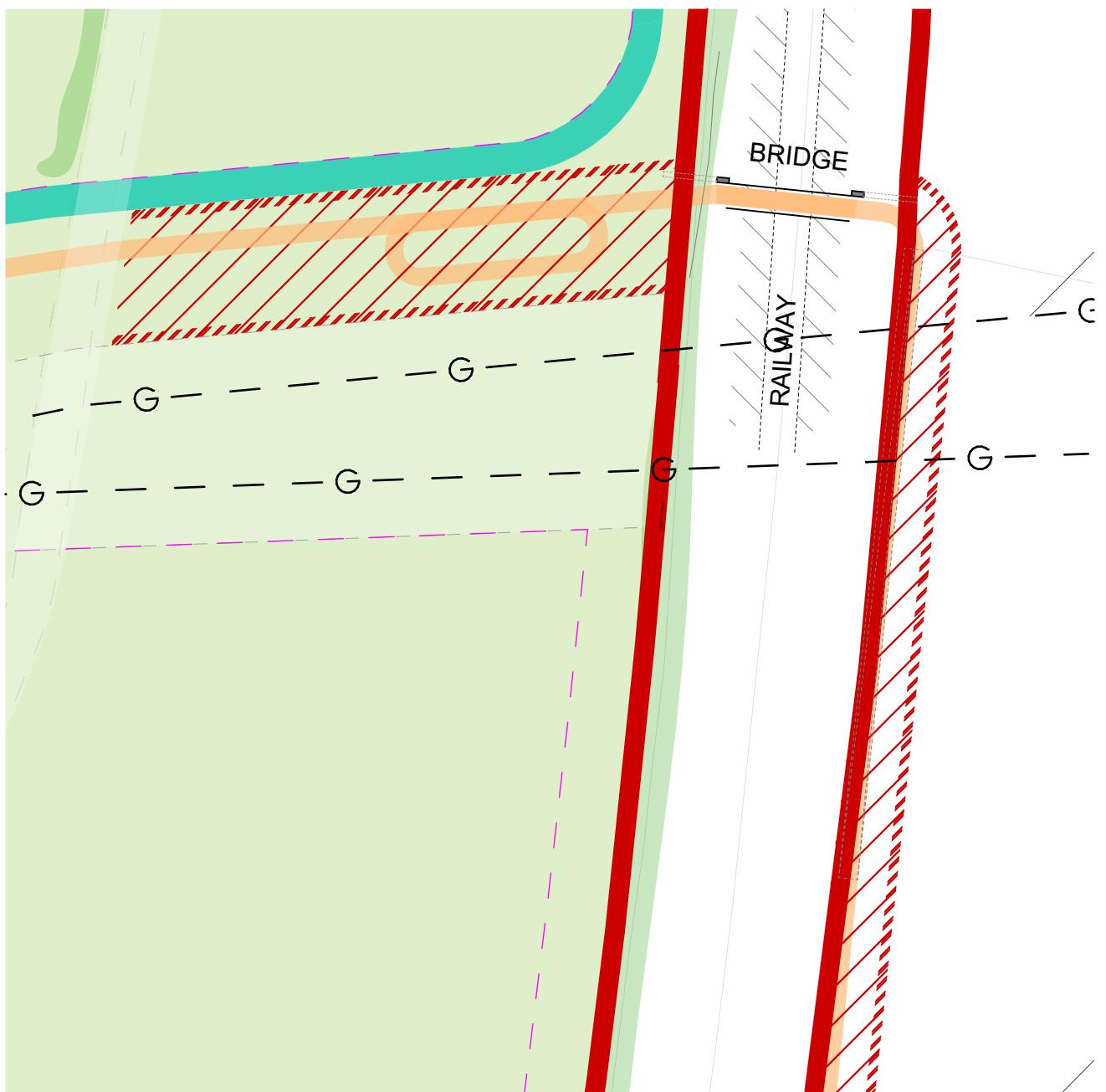
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Appendix D

Safeguarded Land for Foot/Cycle Bridge



CONCEPTUAL FOOTBRIDGE SECTION



| Rev | Date | Description | |
|--|--------------------------------|---|-------------------------------------|
|  Reef Group | | Job Title Didcot Technology Park Appleford, Abingdon OX14 4PJ | Drawing Name FOOTBRIDGE 2 |
| | | Drawing Status LDO | Drawing Scale @A4 |
| UrbanR | Date Issued 26.09.22 | Layout ID LDO | Revision |

