

# HATFIELD AERODROME

## Town and Country Planning Act 1990, Section 78

Application for the establishment of a new quarry on land at the former Hatfield Aerodrome, including a new access onto the A1057, aggregate processing plant, concrete batching plant and other ancillary facilities, together with the importation of inert fill materials for the restoration of the minerals working

Application Ref. 5/0394-16

Section 78 Appeal against refusal of planning permission by Hertfordshire County Council.

Appeal Ref. APP/M1900/W/21/3278097

Note on Highways

1. This note has been prepared in relation to a request made by the Inspector regarding the site access design and how traffic growth has been taken into account within the Transport Assessment(s).

## Access Design

### Design Evolution

#### 2016 Application

2. The design of the site entrance, and subsequent changes made following discussions with HCC Highways and a Stage 1 Road Safety Audit (RSA), are documented in the Transport Chapter Addendum dated August 2016 [CD 1.3]. The following provides a summary.
  - i. The design for the access submitted with the planning application (see Drawing HQ 3/2, dated November 2015 was a simple ‘bell mouth’ design with 4.5m by 120m visibility spays. [see Section 4.2, CD1.3]
  - ii. At a meeting with HCC highways (10 March 2016) comments were provided on the submitted design indicating that changes would be required. The main change suggested was for the provision of a right turning lane (often referred to as a ‘ghost island’) within the A1057. It was also suggested that the double 90° bends were not ideal. Finally, a Stage 1 RSA should be undertaken. [see Section 4.1, CD1.3]
  - iii. The design was updated to include a the right hand turning lane (ghost island) in the A1057, but retained the two 90° bends. This design was passed to AECOM to undertake a Stage 1 RSA. A copy of the RSA is included at Appendix A to CD1.3, with a summary provided at Section 4.3.1 of CD1.3.
  - iv. Following the Stage 1 RSA the access design was further updated to reflect the recommendations. This included the removal of the two 90° bends in favour of a straighter section of road. Additionally, in order to promote sustainable modes of travel, a pick up point layby is proposed at the site access junction. The layby is served by footway and will operate as a hail a ride service whereby colleagues would undertake pick-ups as they pass. Alternatively management could arrange a lift. This would also discourage any pedestrians from walking up the access road conflicting with HGVs.
  - v. The updated access design is shown on Drawing 402.01009.00064.14H002 (R4) and is referred to in the conditions appended to the committee reports (and at Appendix 1 to the SoCG [CD 8.1]. This Drawing is shown at Figure 2 in CD1.3, and included as Drawing 1 at the end of CD1.3. For ease it is included in this note.
  - vi. A further drawing was provided to show the swept path analysis for HGVs using the junction (Drawing 2 at the end of CD1.3), also included at the end of this note.

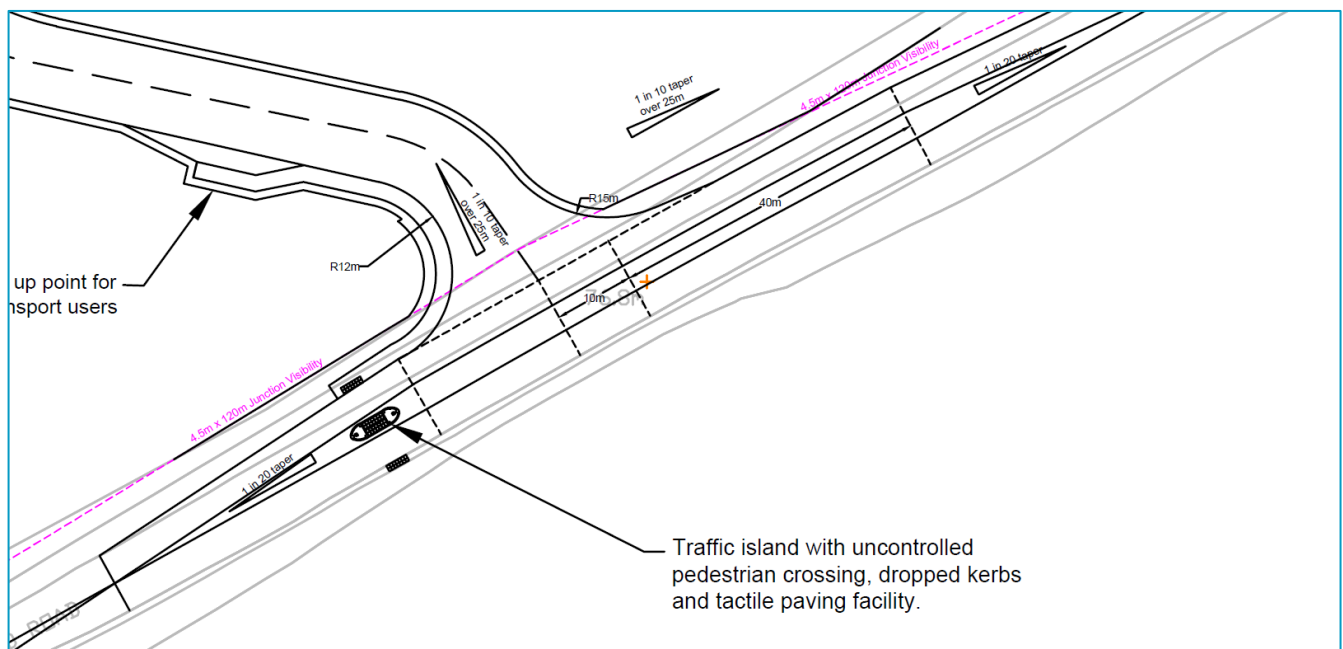
#### 2021 Application

3. The updated access design for the 2016 planning application has been incorporated into the 2021 planning application. In this respect Drawing HQ 7/1 shows the detailed design of the site access (incorporating the right hand turn). Drawing HQ 7/2 replicates the swept path analysis on Drawing 2 referred to above. Drawings HQ7/1 and HQ 7/2 are attached at the end of this note.
4. Whilst the access road which runs along the western edge of the site has been moved by 5m into the site (away from the boundary), the position of the site entrance remains the same as the 2016 design.

## Access Design and Operation

5. The access design includes a dedicated right turning lane for HGVs approaching the site travelling along the westbound carriageway of the A1057.
6. Under the original submitted scheme, HGVs would have to stop on the westbound carriageway and wait for a gap in the opposing flow of traffic. This could potentially cause traffic to back up behind the waiting HGV.
7. The updated design allows for localised widening of the A1057 (within the highway boundary) to create a third (middle) lane between the eastbound and westbound carriageways. HGVs would be able to pull into the central lane in the highway and wait for a gap in the opposing flow of traffic before turning into the site. Other westbound traffic following the HGV would be able to pass the waiting HGV and so there would be no interruption to the flow of traffic.
8. Figure 1 below provides an extract of Drawing 402.01009.00064.14H002 / HQ7/1 focussing on the design of the highway carriageway at the site entrance.

**Figure 1**  
**Access Design**



9. The total length of the right turning lane in the junction design is 50m. The lane widths of the eastbound and westbound carriageways on either side of the right turning lane at the junction are 3.65m.

## Further detailed design

10. Whilst the site entrance has been designed by Highway Engineers of SLR Consulting Limited, a detailed design would be required under a S.278 Agreement. Draft Condition 12 referred to above provides that prior to the commencement of mineral extraction, the site access onto the A1057, as indicated on drawing 402.01009.00064.14.H002 R4, shall be provided in accordance with the technical approval of

the Highway Authority. In addition, Section 278 Agreement (Highways Act) and the informatives at the end of the draft conditions provided that any works within the highway boundary (including the proposed site access and removal of existing vegetation on highway land) will need to be secured and approved via a s278 Agreement with the HCC.

## Traffic Growth

11. Recent traffic levels have been impacted by the restrictions and changes in behaviour influenced by the COVID-19 pandemic, therefore new traffic counts would not be considered representative. As a result, the 2021 ES Chapter is based on the Department for Transport (DfT) data obtained online and previously recorded traffic count data from 2015.
12. Within the 2021 ES Chapter a link impact assessment was undertaken based on DfT traffic flow data recorded in 2018. This has been growthed to a 2023 opening year to reflect the cumulative increase of traffic generated by new and forthcoming development.
13. Traffic growth factors were extracted from the software TEMPro which is used in the development of future transport schemes, particularly factoring base year trip matrices to reflect the expected condition of the future. The version of TEMPro is based on 2011 Census MSOA (Middle Layer Super Output Area) zones which allows for adjustment to reflect localised growth. The study area is made up of principal roads. It is considered that this is the appropriate methodology to analyse the traffic growth of these strategic links.
14. The operational capacity of the proposed access junction has been modelled whereby baseline traffic flows have also been analysed reflecting strategic traffic growth using this industry standard methodology. Furthermore, a sensitivity test has been completed based on a hypothetical scenario whereby all development traffic volumes have been multiplied by a factor of ten. The analysis is therefore considered to be robust, demonstrating that access junction operates within acceptable parameters during all of the proposed scenarios considered.

## Relationship with CEMEX Hatfield Quarry

15. As an operational quarry, HGV traffic associated with CEMEX Hatfield Quarry would be captured within the baseline traffic flows that have been recorded. Whilst subsequent planning permissions have been issued (or about to be issued pending the completion of a s.106 Agreement), they do not propose increases in HGV traffic; they are for extensions to existing operations with the existing traffic movements prevailing for longer.
16. In the 2016 application, consideration was given to potential cumulative effects within CD1.3 [refer to Section 5.4]. This considered the proposals to import inert waste to the 'Cut Field' area, which is accessed off Oaklands Lane. The assessment stated that :

*"The above assessment indicates that the cumulative impact of the two sites would increase the daily traffic flow on the A1057 by approximately 3.5%. In terms of peak traffic impact, there would be an impact of up to 5.7%. This impact assumes that all traffic routes to/from the east and is a worst case scenario. Once traffic reaches the A1(M) junction traffic will disperse throughout the network minimising the impacts further.*

*Again, this level of impact is considered to be well within the normal fluctuation in daily traffic, which is typically 10%."*

## DRAWINGS

**Drawing 1**

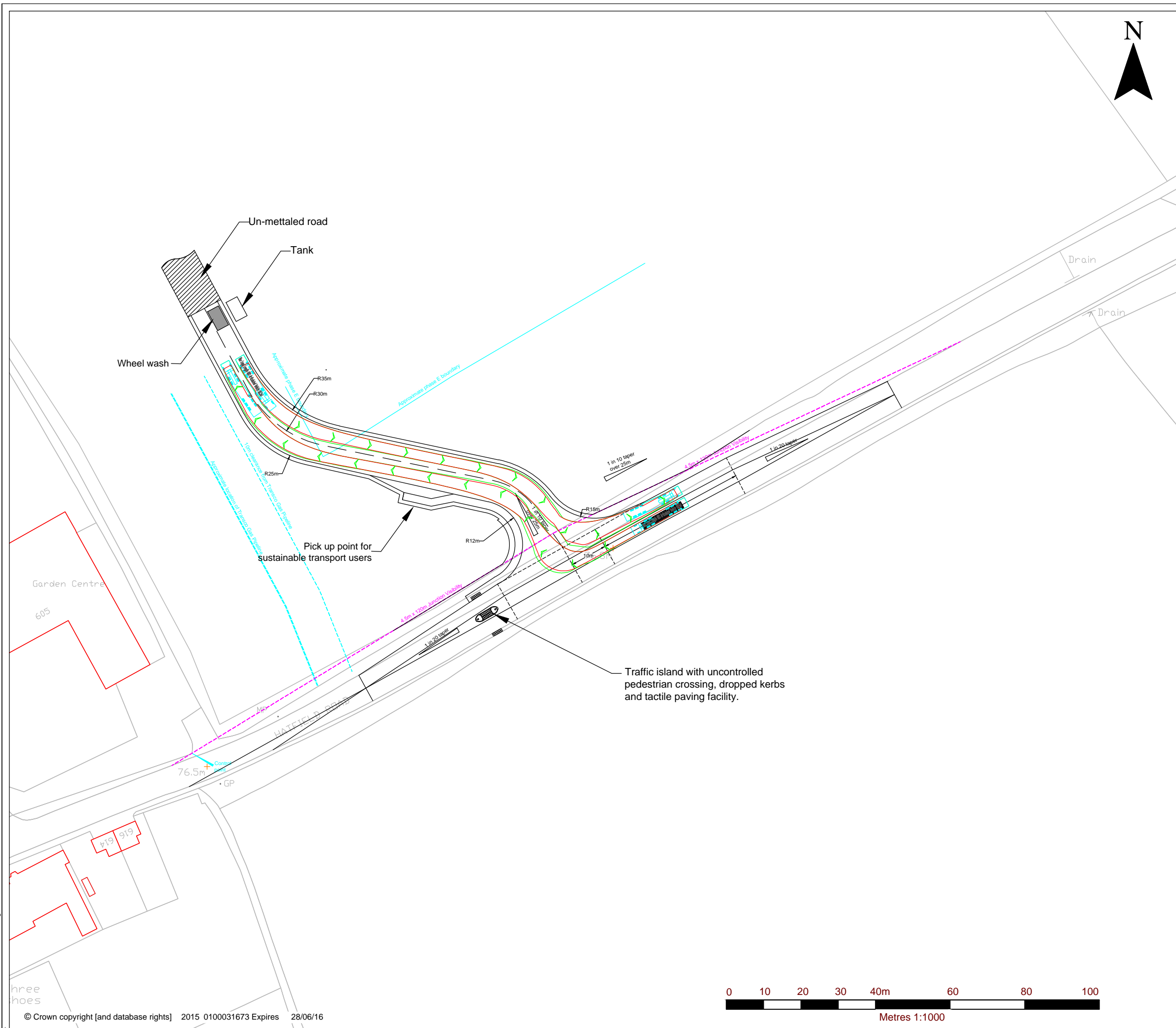
**Proposed Site Access Junction Layout**





## **Drawing 2**

### **Swept-path Analysis**



## LEGEND

|           |     |          |       |   |
|-----------|-----|----------|-------|---|
| <b>R4</b> | CB  | AT       | 06/16 | Road alignment changed.                 |
| <b>R3</b> | CB  | AT       | 05/16 | Drawing amended based on notes from RSA |
| <b>R2</b> | DPP | AT       | 04/16 | LAY-BY-ADDED                            |
| <b>R1</b> | CB  | AT       | 04/16 |   |
| Revision  | By  | Chk'd By | Date  | Comments                                |

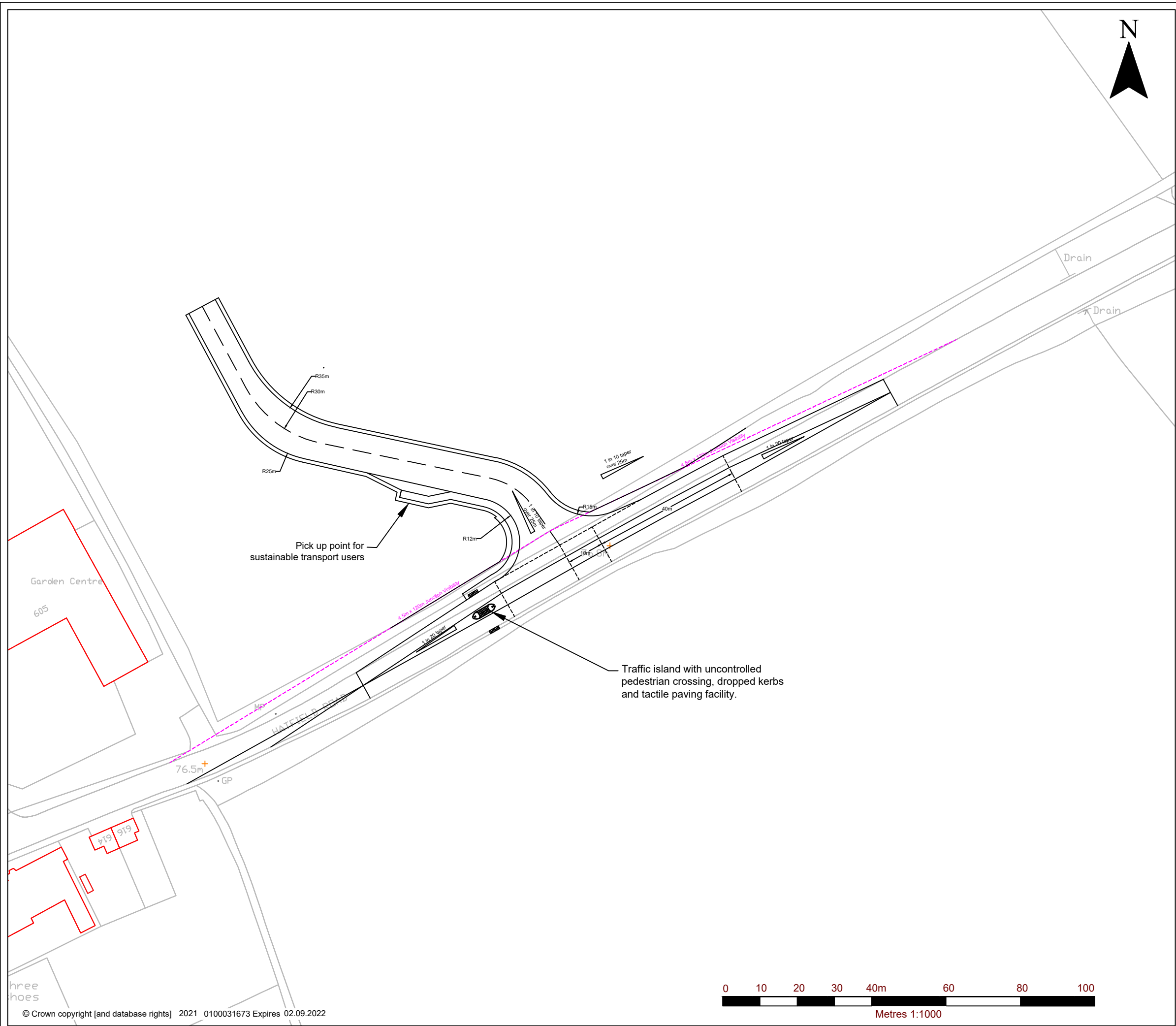
Site  
HATFIELD AERODROME

Drawing Title

**PROPOSED SITE ACCESS  
ARRANGEMENTS  
GHOST RIGHT TURN LANE**

|                               |           |
|-------------------------------|-----------|
| Drawing Number                | Revision  |
| <b>402.01009.00064.14H002</b> | <b>R4</b> |

402.0.1009.00064.14.HQ7-1.0\_Prop\_Site\_Access.dwg



NOTES

Hedges and vegetation will be cleared to achieve visibility requirement. The area within the visibility splays will be kept clear and maintained throughout the life of the development.

|          |    |          |       |          |
|----------|----|----------|-------|----------|
| 0        | KW | CL       | 09/21 |          |
| Revision | By | Chk'd By | Date  | Comments |

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Site

HATFIELD AERODROME

Project

PROPOSED NEW QUARRY

Drawing Title

PROPOSED SITE ACCESS  
ARRANGEMENTS  
GHOST RIGHT TURN LANE

Scale

1:1,000 @ A3

Date

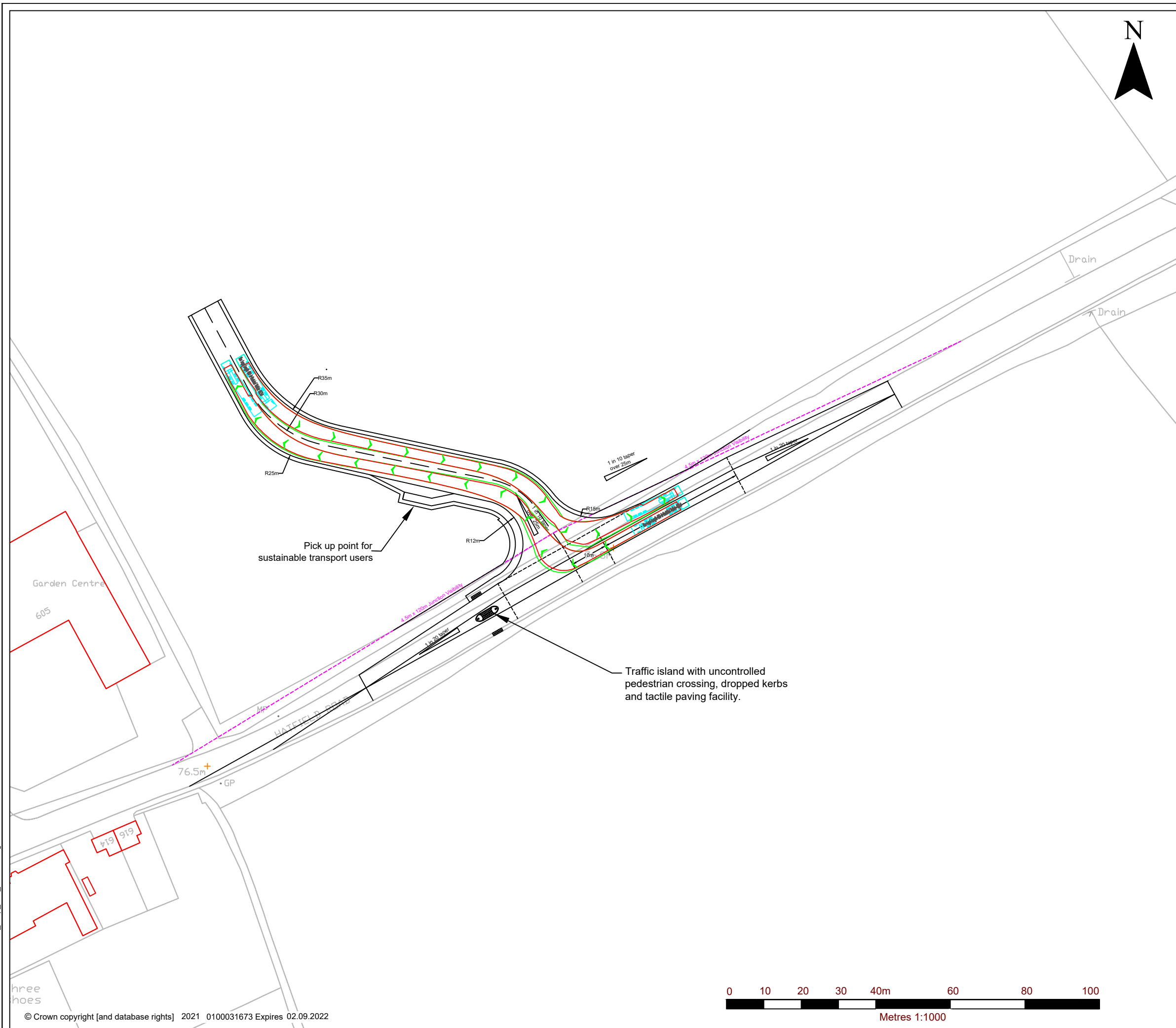
SEPTEMBER 2021

Drawing Number

HQ 7/1

Revision

0



NOTES

Hedges and vegetation will be cleared to achieve visibility requirement. The area within the visibility splays will be kept clear and maintained throughout the life of the development.

|          |    |          |       |          |
|----------|----|----------|-------|----------|
| <b>0</b> | KW | CL       | 09/21 |          |
| Revision | By | Chk'd By | Date  | Comments |

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|      |                    |
|------|--------------------|
| Site | HATFIELD AERODROME |
|------|--------------------|

|         |                     |
|---------|---------------------|
| Project | PROPOSED NEW QUARRY |
|---------|---------------------|

Drawing Title

**PROPOSED SITE ACCESS  
ARRANGEMENTS  
GHOST RIGHT TURN LANE**

|                       |                        |
|-----------------------|------------------------|
| Scale<br>1:1,000 @ A3 | Date<br>SEPTEMBER 2021 |
|-----------------------|------------------------|

|                |          |
|----------------|----------|
| Drawing Number | Revision |
| <b>HQ 7/2</b>  | <b>0</b> |

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