




**Rowley Lane, Lepton  
Proposed Internal Layout and Off-Site Highway Works  
Response Report to Road Safety Audit Stage 1**

April 2023 (Initial Issue)

Prepared on behalf of  
**KCS Developments Ltd.**

# Quality Management

| Rowley Lane, Lepton - Response Report to Road Safety Audit Stage 1<br>Project No: 13015 |   |                   |                   |                   |                   |
|---|---|-------------------|-------------------|-------------------|-------------------|
| <b>File reference</b>   | O:\Rowley Lane, Lepton\TEXT\REPORTS\KCS\230403 Rowley Lane, Lepton - Stage 1 RSA Designers Response Report.docx |                   |                   |                   |                   |
| <b>Issue/revision</b>   | <b>Initial Issue</b>  | <b>Revision 1</b> | <b>Revision 2</b> | <b>Revision 3</b> | <b>Revision 4</b> |
| <b>Remarks</b>  | Draft   |                   |                   |                   |                   |
| <b>Date</b>   | 3 <sup>rd</sup> April 2023  |                   |                   |                   |                   |
| <b>Prepared by</b>  | J Stackhouse  |                   |                   |                   |                   |
| <b>Signature</b>  |                                |                   |                   |                   |                   |
| <b>Checked by</b>   | M Whittaker   |                   |                   |                   |                   |
| <b>Signature</b>  |                                |                   |                   |                   |                   |
| <b>Authorised by</b>  | M Whittaker   |                   |                   |                   |                   |
| <b>Signature</b>  |                                |                   |                   |                   |                   |

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# 1. Introduction

## 1.1 PROJECT DETAILS

**Table 1.1 Project Details**

|                                 |  |
|---------------------------------|--|
| Report title                    | Rowley Lane, Lepton<br>Proposed Internal Layout and Off-Site Highway Works<br>Response Report to Road Safety Audit Stage 1 |
| Date                            | 3 <sup>rd</sup> April 2023   |
| Document reference and revision | Proposed Internal Layout and Off-Site Highway Works  |
| Prepared by                     | Optima Highways and Transportation Ltd   |
| On behalf of                    | Kirklees Council   |

**Table 1.2 Authorisation Sheet**

|                      |  |
|----------------------|--|
| <b>Project:</b>      | Rowley Lane, Lepton  |
| <b>Report Title:</b> | Response Report to Road Safety Audit Stage 1   |
| <b>Prepared by:</b>  |  |
| Name:                | James Stackhouse BA (Hons) MCIHT   |
| Position:            | Engineer   |
| Signed:              |  |
| Organisation:        | Optima Highways & Transportation.  |
| Date:                | 3 <sup>rd</sup> April 2023   |
| <b>Approved by:</b>  |  |
| Name:                | Ryan Kinder  |
| Position:            | Ryan Kinder – Principal Engineer<br>Highway Development Management                   |
| Signed:              |  |
| Organisation:        | Kirklees Council   |
| Date:                | 3 <sup>rd</sup> April 2023   |



## 1.2 OVERVIEW

1.2.1 This report provides a response to the items raised within a Stage 1 Road Safety Audits dated 3<sup>rd</sup> April 2023, prepared by Road Safety Initiatives, which considers the proposed internal layout and off-site highway works associated with the residential development of land off Hermitage Park, Lepton.

1.2.2 The development proposals are illustrated on the Niemen Architects Proposed Site Layout drawing 3284-0-002 rev HH – Proposed Site Plan, and includes the erection of 80 residential dwellings, with access taken via Hermitage Park.

1.2.3 The Stage 1 Road Safety Audit has been undertaken at the request of Ryan Kinder, Kirklees Council (Overseeing organisation).

1.2.4 The Audit team was provided with the following drawings:

- **Niemen Architects Proposed Site Layout drawing 3284-0-002 rev HH – Proposed Site Plan;**
- **Drawing 13015/GA/01/REV/C - Penistone Rd / Rowley Lane Junction Proposed Junction Improvements; and**
- **Drawing 13105/GA/08/REV/B - Rowley Lane/Hermitage Park Proposed Junction Improvements.**

1.2.5 A copy of the Stage 1 RSA is contained within Appendix A.

1.2.6 This RSA Response Report has been prepared by James Stackhouse BA (Hons) MCIHT who represents the Design Organisation, Optima Highways & Transportation.

## 1.3 KEY PERSONNEL

1.3.1 Table 1.3 below contains the details of the key personnel involved in this Stage 1 RSA representing the Overseeing Organisation, the RSA Team and the Design Organisation.

**Table 1.3 Key Personnel**

|                         |   |
|-------------------------|---|
| Overseeing organisation | Kirklees Council  |
| RSA Team                | Lead Auditor: Mark Hedley, IEng, MCIHT, MSoRSA, FIHE, RegRSA(IHE), Road Safety Initiatives LLP<br>Team Member: Alan Bawn, BSc (Hons), CEng, MICE, Road Safety Initiatives LLP |
| Design Organisation     | James Stackhouse BA (Hons) MCIHT<br>Engineer<br>Optima Highways and Transportation  |

1.3.2 The RSA decision logs which references each road safety issue/problem, design organisation response, overseeing organisation response and the agreed RSA action are contained within Chapter 2.



## 2. Stage 1 Road Safety Audit Decision Log

| RSA Problem  | RSA Recommendation   | Design Organisation Response  | Overseeing Organisation Response   | Agreed RSA Action   |
|--|--|---|--|---|
| <p><b>Problem 3.1.1: Junctions</b></p> <p><b>Location</b> – A629 Penistone Road / Rowley Lane Junction.</p> <p><b>Summary</b> – Vehicles may encroach into the adjacent lane, leading to subsequent vehicle-to-vehicle collisions.</p> <p><b>Detail</b> – In order to provide a two-lane approach to Penistone Road, the junction approach is to be realigned with changes to the verge alignment and the relocation of the pedestrian refuge island and hatching. It would appear that it may not be possible for vehicles (particularly large vehicles) to approach the junction side-by-side without encroachment into adjacent lane. Furthermore, the presence of roadside features i.e., trees, raised verge, road lighting and traffic signs may result in nearside ‘verge shyness’, which may exacerbate the situation.</p> <p>This could lead to vehicle-to-vehicle collisions, for example side impact and head-on collisions.</p> <p>In a similar theme, the warning line bounding the hatched road markings may lead drivers into the traffic island kerbs and result in subsequent loss of control collisions.</p> | <p><i>It is recommended that a swept path analysis demonstrates that vehicles can successfully and comfortably approach the junction without encroachment into adjacent lane.</i></p> <p><i>It is also recommended that the warning line should be offset from the traffic island kerb line.</i></p> | <p>RSA recommendation is Accepted.</p> <p>Analysis of the Penistone Road/Rowley Lane manually classified count (MCC) conducted on Thursday 19<sup>th</sup> September 2019 (contained within the TA) shows that no heavy goods vehicles were recorded making the right turn from Rowley Lane to Penistone Road during the hours of 07:00 – 10:00am and 14:00 – 19:00pm.</p> <p>Notwithstanding the above, drawing 13015/GA/01/REV/C contained within Appendix B demonstrates that the Kirklees refuse collection vehicle can approach the junction whilst vehicles are queuing within the adjacent approach lane and make both the left and right turns out.</p> <p>The proposed warning line has also been amended as per the recommendation and is now shown offset from the traffic island kerb line.</p> | <p>The amendments to proposed lining and swept path analysis are acceptable.</p> | <p>Proposed warning lines to be offset from traffic island kerb line.</p> |



| RSA Problem  | RSA Recommendation   | Design Organisation Response  | Overseeing Organisation Response     | Agreed RSA Action   |
|--|--|---|--------------------------------------|---|
| <p><b>Problem 3.1.2: Junctions</b></p> <p><b>Location</b> – Rowley Lane / Hermitage Park Junction</p> <p><b>Summary</b> – Potential for conflicts resulting from obscured visibility.</p> <p><b>Detail</b> – Inter-visibility between drivers entering Rowley Lane from Hermitage Park and approaching drivers may be restricted by existing vegetation and parked vehicles.</p> <p><i>It is acknowledged that vegetation clearance is proposed to provide pedestrian deterrent paving, but the drawing indicates that this is vegetation in the verge and not the overhanging adjacent foliage. In addition, the survey in the Transport Assessment confirms parking occurs momentarily during school ‘drop-off’ times around the junction. Nevertheless, these may lead to an incident of ‘looked but failed to see’ and, potentially, a pull-out collision.</i></p> | <p><i>It is recommended that that vegetation and branches are trimmed back to such an extent that regular maintenance will not be required to ensure adequate inter-visibility is provided. In addition, provide ‘no waiting’ restrictions to protect the visibility splays at the junction.</i></p> | <p>RSA Recommendation accepted.</p> <p>For the avoidance of doubt, drawing no. 13015/GA/08/REV/C has been revised to include an additional note stating that “Existing landscaping and trees to be cut back so far as possible within the extent of the maximum visibility splay”.</p> <p>A further note has been added to the drawing stating that “Parking restrictions to be provided in the vicinity of Rowley Lane/Hermitage Park junction - details to be agreed with the LHA”.</p> <p>The proposals also now include the installation of tactile paving at the Rowley Lane/Hermitage Park junction existing dropped crossing.</p> <p>A copy of the revised drawing no. 13105/GA/08/REV/C is contained within Appendix C.</p> | <p>Designers’ response accepted.</p> | <p>Vegetation to be cut back so far as possible within the maximum visibility splay, parking restrictions to be funded at the Rowley Lane/Hermitage Park junction (details to be agreed) and tactile paving to be installed at Rowley Lane/Hermitage Park junction existing dropped crossing.</p> |



| RSA Problem   | RSA Recommendation  | Design Organisation Response  | Overseeing Organisation Response     | Agreed RSA Action   |
|---|---|---|--------------------------------------|---|
| <p><b>Problem 3.2.1: Walking, Cycling and Horse Riding</b></p> <p><b>Location</b> – Rowley Lane / Hermitage Park Junction – Pedestrian crossing</p> <p><b>Summary</b> – Inadequate visibility of pedestrians may lead to collisions.</p> <p><b>Detail</b> – Existing vegetation may result in inadequate inter-visibility between drivers and pedestrians using the proposed crossing.</p> <p><i>It is acknowledged that vegetation clearance is proposed to provide pedestrian deterrent paving, but the drawing indicates that this is vegetation in the verge and not the overhanging adjacent foliage. In addition, the survey in the Transport Assessment confirms parking occurs momentarily during school ‘drop-off’ times around the junction. Nevertheless, a pedestrian crossing the road must be able to see and be seen by approaching traffic. If inadequate visibility is achieved, then there is a risk of pedestrian collisions with approaching traffic.</i></p> | <p><i>It is recommended that that vegetation and branches are trimmed back to such an extent that regular maintenance will not be required to ensure adequate inter-visibility is provided. In addition, provide ‘no waiting’ restrictions to protect the pedestrian visibility splays.</i></p> | <p>RSA Recommendation accepted.</p> <p>For the avoidance of doubt, drawing no. 13015/GA/08/REV/C has been revised to include an additional note stating that “Existing landscaping and trees to be cut back so far as possible within the extent of the maximum visibility splay”.</p> <p>A further note has been added to the drawing stating that “Parking restrictions to be provided in the vicinity of Rowley Lane/Hermitage Park junction - details to be agreed with the LHA”.</p> <p>The proposals also now include the installation of tactile paving at the Rowley Lane/Hermitage Park junction existing dropped crossing.</p> <p>A copy of the revised drawing no. 13105/GA/08/REV/C is contained within Appendix C.</p> | <p>Designers’ response accepted.</p> | <p>Vegetation to be cut back so far as possible within the maximum visibility splay, parking restrictions to be funded at the Rowley Lane/Hermitage Park junction (details to be agreed) and tactile paving to be installed at Rowley Lane/Hermitage Park junction existing dropped crossing.</p> |



### 3. Design Organisation and Overseeing Organisation Statements

#### 3.1 DESIGN ORGANISATION STATEMENT

3.1.1 On Behalf of the design organisation, I certify that:

- 1) *the RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the overseeing organisation.*

Name: James Stackhouse BA (Hons) MCIHT

Position: Engineer

Organisation: Optima Highways & Transportation

Date: 3<sup>rd</sup> April 2023

Signed: 

#### 3.2 OVERSEEING ORGANISATION STATEMENT

3.2.1 On Behalf of the overseeing organisation, I certify that:

- 1) *the RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the design organisation; and*
- 2) *the agreed RSA actions will be progressed.*

Name: Ryan Kinder

Position: Principal Engineer – Highway Development Management

Organisation: Kirklees Council

Date: 3<sup>rd</sup> April 2023.

Signed: *Ryan Kinder*



# Appendices



# Appendix A Road Safety Initiatives Stage 1 Road Safety Audit





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# LAND OFF HERMITAGE PARK, LEPTON

Stage 1 Road Safety Audit  
Client: KCS Developments Ltd

03/04/2023

# Quality Management

## Issue Record

| ISSUE  | REVISION | DESCRIPTION | DATE          | PREPARED BY     | CHECKED       |
|--|----------|-------------|---------------|-----------------|---------------|
| 1  | -        | Final       | 03 April 2023 | <i>M Hedley</i> | <i>A Bawn</i> |
|  |          |             |               |                 |               |
|  |          |             |               |                 |               |
|  |          |             |               |                 |               |
|  |          |             |               |                 |               |
|  |          |             |               |                 |               |
|  |          |             |               |                 |               |
|  |          |             |               |                 |               |
| <b>Document number - RSI-MH-0323-011 Issue 1.0</b> |          |             |               |                 |               |

# Land off Hermitage Park, Lepton

## Stage 1 Road Safety Audit

03/04/2023

### Overseeing Organisation

Kirklees Council

### Client

KCS Developments Ltd

### Design Organisation

Optima Highways and Transportation Consultancy Ltd

### Road Safety Audit Team Organisation

Road Safety Initiatives LLP

[www.roadsafetyinitiatives.co.uk](http://www.roadsafetyinitiatives.co.uk)

### Registered Address

Road Safety Initiatives LLP  
OC380991  
c/o One Two One Accounts Limited  
44 Astley Road  
Seaton Delaval  
Northumberland  
NE25 0DG

### Enquiries regarding this audit should be made to

**M Hedley**

Partner  
Road Safety Initiatives LLP

Tel: +44 (0)7960 798075  
[mailto: mark@roadsafetyinitiatives.co.uk](mailto:mark@roadsafetyinitiatives.co.uk)

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**APPENDIX A – Scheme Documents Issued for Road Safety Audit**

**APPENDIX B – Location Plans**

# 1 Introduction


- 1.1.1 This report results from a Stage 1 Road Safety Audit carried out on the highway improvement works for the proposed development on the land off Hermitage Park, Lepton scheme. This is at the request of Ryan Kinder, Kirklees Council (Overseeing Organisation).
- 1.1.2 The terms of reference of the Road Safety Audit are as described in DMRB GG 119. The Road Safety Audit Team has examined and reported only on the road safety implications in the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.
- 1.1.3 The Road Safety Audit Team membership, approved by Ryan Kinder, Kirklees Council (Overseeing Organisation), consisted of:
- Team Leader**                      **Mark Hedley, IEng, MCIHT, MSoRSA, FIHE, RegRSA(IHE)**  
Certificate of Competency in Road Safety Audit gained in Nov 2013  
Partner, Road Safety Initiatives LLP
- Team Member**                      **Alan Bawn, BSc (Hons), CEng, MICE**  
Consultant, Road Safety Initiatives LLP
- 1.1.4 The Road Safety Audit was undertaken in accordance with the Road Safety Audit Brief provided by Martin Whittaker, Director (Design Organisation) and approved by Ryan Kinder, Kirklees Council (Overseeing Organisation). The Road Safety Audit comprised an examination of the documents provided and listed in **Appendix A**.
- 1.1.5 The Road Safety Audit Team visited the site together on Friday 31 March 2023 between 10:50 and 11:25 hours. It was overcast with drizzly rain and the road surfaces were wet at the time of the site visit. During the site visit, traffic flows were moderate, and several pedestrians and no cyclists were observed.
- 1.1.6 All Road Safety problems are referenced to the design drawings and the locations have been indicated on the plans supplied with the Road Safety Audit Brief in **Appendix B**.
- 1.1.7 This Road Safety Audit will review the road safety aspects of the highway improvement works for the proposed development on the land off Hermitage Park, Lepton. These included:
- Proposed access arrangements and internal residential development (80 dwellings) on land off Hermitage Park, Lepton.
  - Visibility improvements to Rowley Lane/Hermitage Park junction.
  - Capacity improvements to A629 Penistone Road/Rowley Lane junction.
- 1.1.8 The Road Safety Audit Team was not informed of any strategic decision made and agreed by the Overseeing Organisation.
- 1.1.9 The Road Safety Audit Team was not informed of any Departures from Standard.


## 2 Items Raised at previous Road Safety Audits

2.1.1 No previous Road Safety Audit has been undertaken on this scheme.


## 3 Items Raised at this Stage 1 Road Safety Audit

### 3.1 JUNCTIONS

|   |  |
|---|--|
| <b>PROBLEM 3.1.1</b>  |  |
| <b>Location</b>   | A629 Penistone Road / Rowley Lane Junction.  |
| <b>Summary</b>  | Vehicles may encroach into the adjacent lane, leading to subsequent vehicle-to-vehicle collisions. |
| <p>In order to provide a two-lane approach to Penistone Road, the junction approach is to be realigned with changes to the verge alignment and the relocation of the pedestrian refuge island and hatching. It would appear that it may not be possible for vehicles (particularly large vehicles) to approach the junction side-by-side without encroachment into adjacent lane. Furthermore, the presence of roadside features i.e., trees, raised verge, road lighting and traffic signs may result in nearside 'verge shyness', which may exacerbate the situation.</p> <p>This could lead to vehicle-to-vehicle collisions, for-example side impact and head-on collisions.</p> <p>In a similar theme, the warning line bounding the hatched road markings may lead drivers into the traffic island kerbs and result in subsequent loss of control collisions.</p> |                 |
| <b>RECOMMENDATION</b>   |  |
| <p>It is recommended that a swept path analysis demonstrates that vehicles can successfully and comfortably approach the junction without encroachment into adjacent lane.</p> <p>It is also recommended that the warning line should be offset from the traffic island kerb line.</p>  |  |

|   |  |
|---|--|
| <b>PROBLEM 3.1.2</b>  |  |
| <b>Location</b>   | Rowley Lane / Hermitage Park Junction.   |
| <b>Summary</b>  | Potential for conflicts resulting from obscured visibility.                        |
| <p>Inter-visibility between drivers entering Rowley Lane from Hermitage Park and approaching drivers may be restricted by existing vegetation and parked vehicles.</p> <p>It is acknowledged that vegetation clearance is proposed to provide pedestrian deterrent paving, but the drawing indicates that this is vegetation in the verge and not the overhanging adjacent foliage. In addition, the survey in the Transport Assessment confirms parking occurs momentarily during school 'drop-off' times around the junction. Nevertheless, these may lead to an incident of 'looked but failed to see' and, potentially, a pull-out collision.</p> |  |
| <b>RECOMMENDATION</b>   |  |
| <p>It is recommended that that vegetation and branches are trimmed back to such an extent that regular maintenance will not be required to ensure adequate inter-visibility is provided. In addition, provide 'no waiting' restrictions to protect the visibility splays at the junction.</p>   |  |

## 3.2 WALKING, CYCLING AND HORSE RIDING

|   |  |
|---|--|
| <b>PROBLEM 3.2.1</b>  |  |
| <b>Location</b>   | Rowley Lane / Hermitage Park Junction – Pedestrian crossing.                       |
| <b>Summary</b>  | Inadequate visibility of pedestrians may lead to collisions.                       |
| <p>Existing vegetation may result in inadequate inter-visibility between drivers and pedestrians using the proposed crossing.</p> <p>It is acknowledged that vegetation clearance is proposed to provide pedestrian deterrent paving, but the drawing indicates that this is vegetation in the verge and not the overhanging adjacent foliage. In addition, the survey in the Transport Assessment confirms parking occurs momentarily during school ‘drop-off’ times around the junction. Nevertheless, a pedestrian crossing the road must be able to see and be seen by approaching traffic. If inadequate visibility is achieved, then there is a risk of pedestrian collisions with approaching traffic.</p> |  |
| <b>RECOMMENDATION</b>   |  |
| <p>It is recommended that that vegetation and branches are trimmed back to such an extent that regular maintenance will not be required to ensure adequate inter-visibility is provided. In addition, provide ‘no waiting’ restrictions to protect the pedestrian visibility splays.</p>  |  |

\*\*\*\* END OF IDENTIFIED PROBLEMS AND RECOMMENDATIONS MADE AT THIS  
STAGE 1 ROAD SAFETY AUDIT \*\*\*\*

## 4 Audit Team Statement

We certify that this Road Safety Audit has been carried out in accordance with GG 119.

| ROAD SAFETY AUDIT TEAM LEADER |   |
|-------------------------------|---|
| <b>Name:</b>                  | Mark Hedley   |
| <b>Signed:</b>                |    |
| <b>Position:</b>              | Partner   |
| <b>Organisation:</b>          | Road Safety Initiatives LLP   |
| <b>Date:</b>                  | 03 April 2023   |
| ROAD SAFETY AUDIT TEAM MEMBER |   |
| <b>Name:</b>                  | Alan Bawn   |
| <b>Signed:</b>                |  |
| <b>Position:</b>              | Consultant  |
| <b>Organisation:</b>          | Road Safety Initiatives LLP   |
| <b>Date:</b>                  | 03 April 2023   |

## Appendices, Figures and Tables

## Appendix A: Scheme Documents Issued for Road Safety Audit

| DRAWING NUMBER                            | REV      | TITLE   |
|---|----------|---|
| 3284-0-002 HH                             | HH       | Proposed Site Layout  |
| 13015/GA/08                               | B        | Rowley Lane/Hermitage Park<br>Proposed Junction Improvements          |
| 13015/GA/01                               | C        | Penistone Road/Rowley Lane Junction<br>Proposed Junction Improvements |
| 13015/IN/09                               | E        | Intervisibility Analysis  |
| 13015/ATR/06                              | F        | Swept Path Analysis   |
| 230327 Stage 1 Road Safety<br>Audit Brief | 27/03/23 | Stage 1 RSA Brief   |

## Appendix B: Location Plans

Numbers refer to problems identified in the text.





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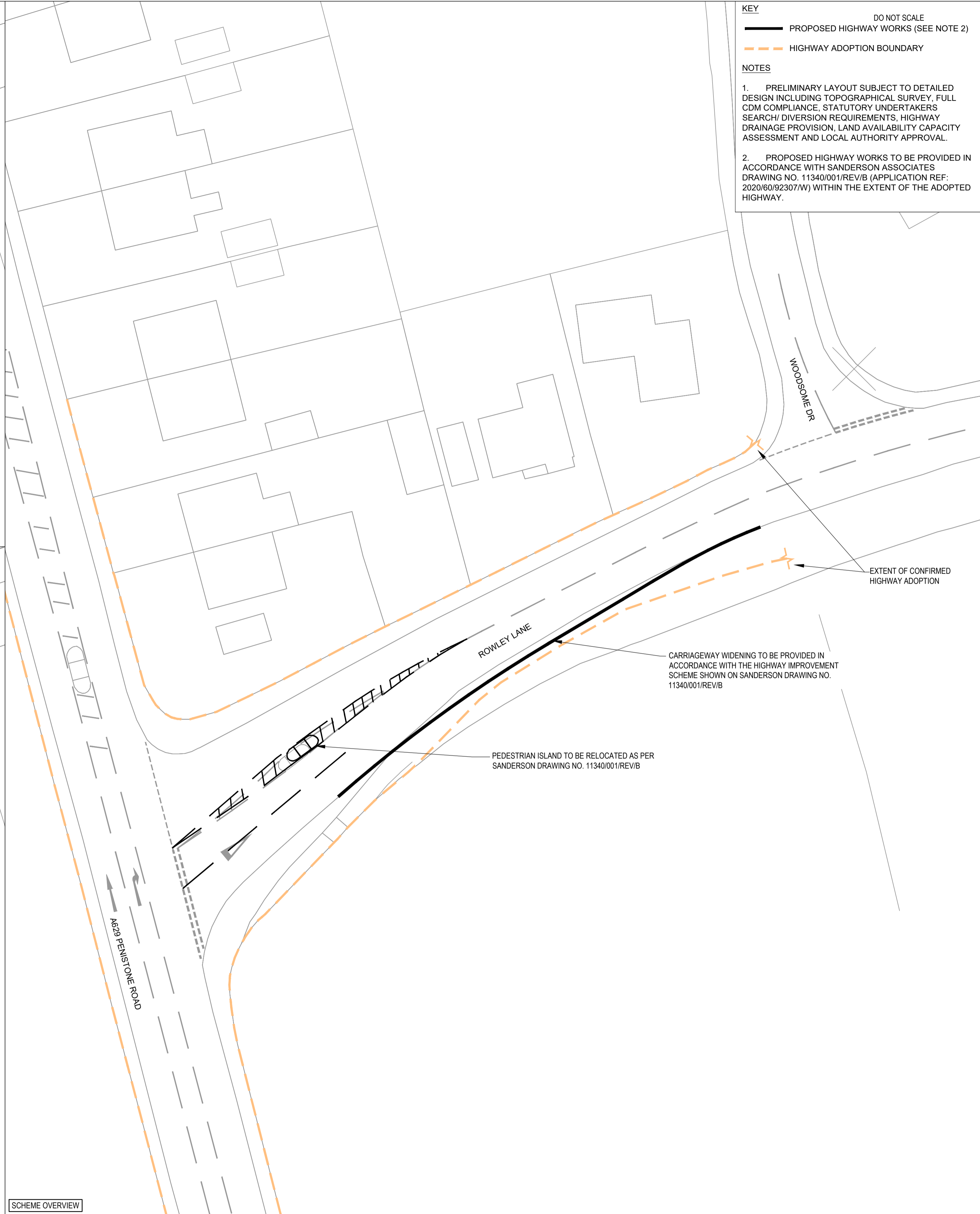
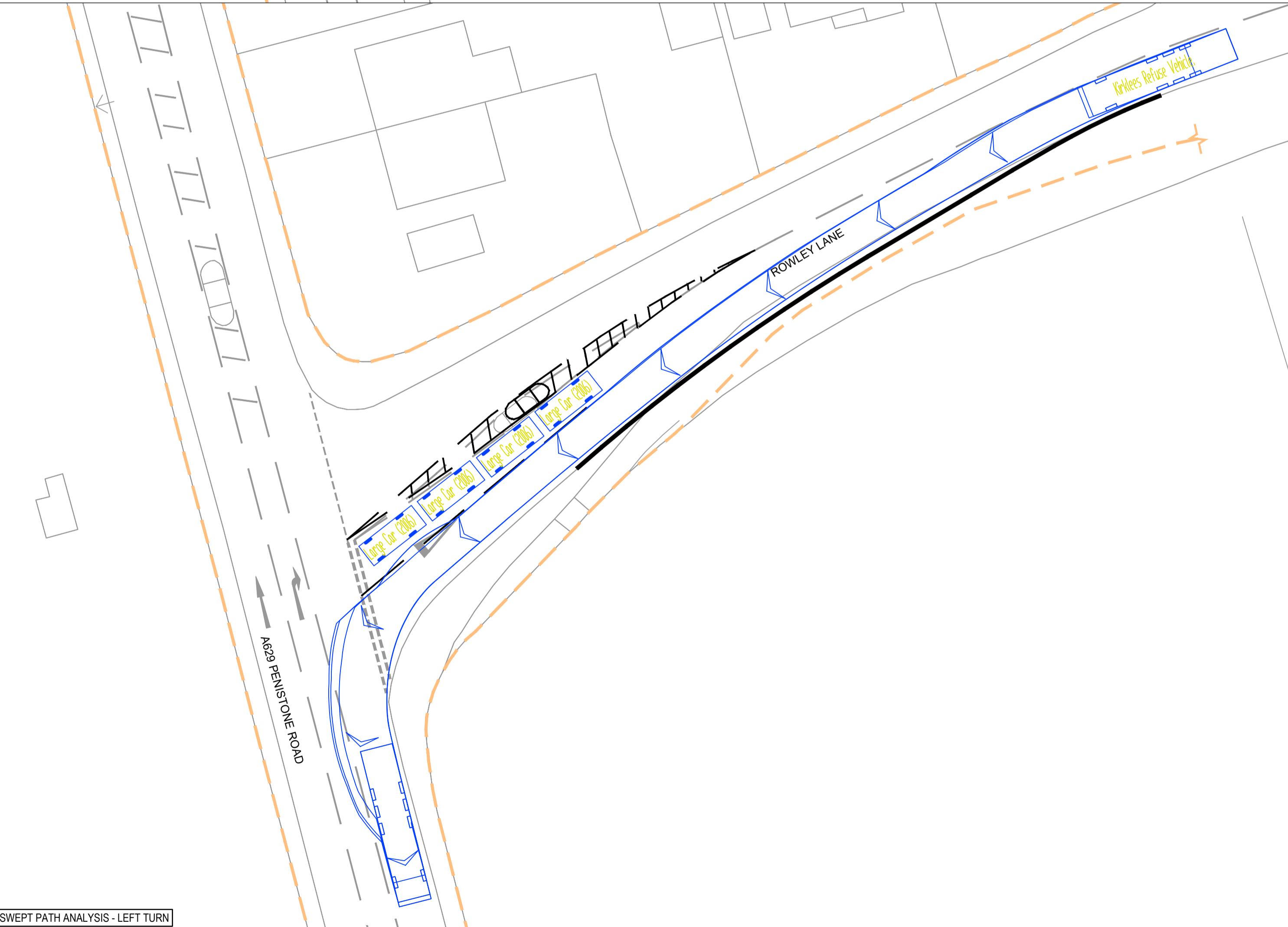
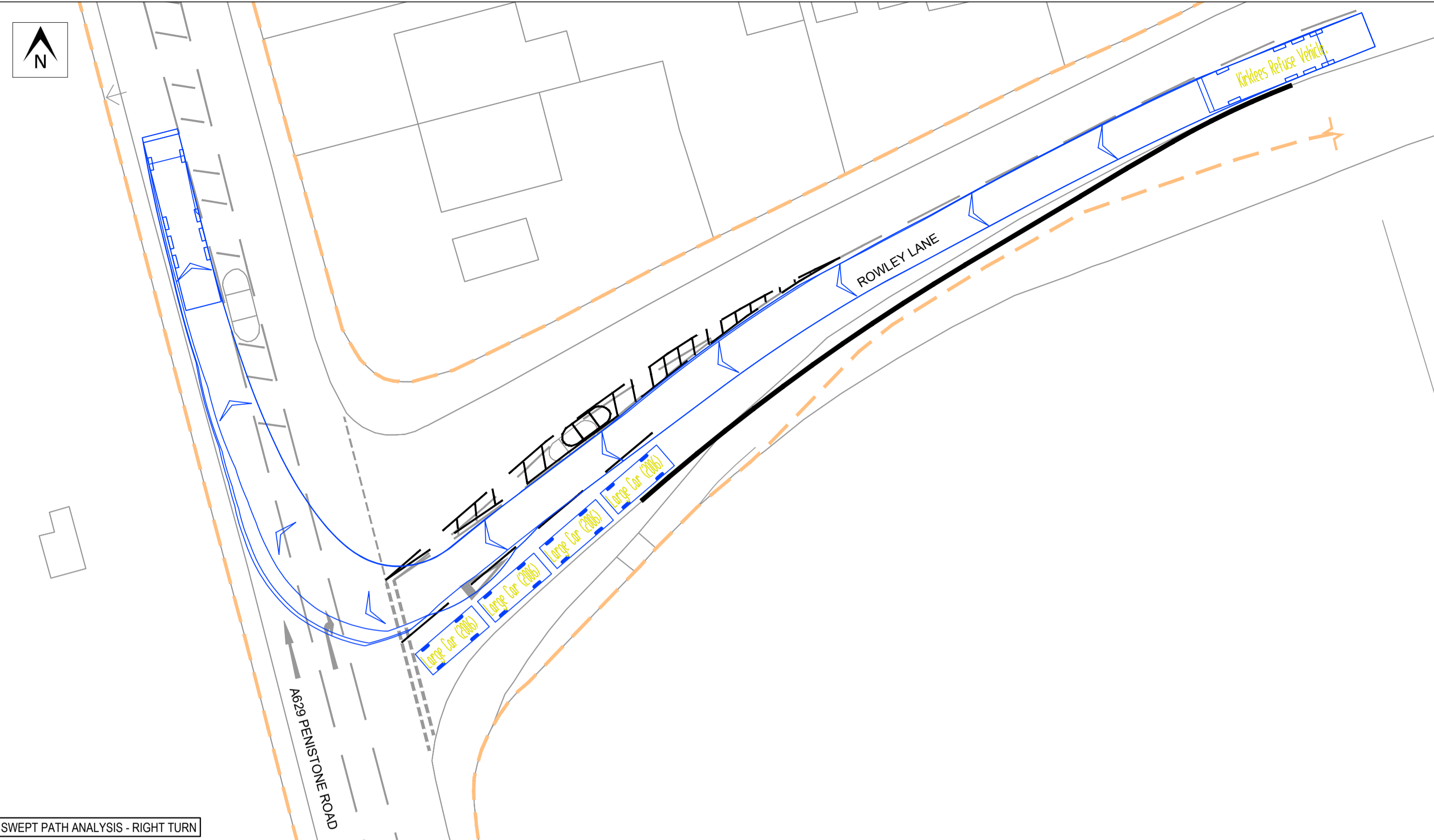
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Road Safety Initiatives LLP  
c/o One Two One Accounts Limited  
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Northumberland  
NE25 0DG

[www.roadsafetyinitiatives.co.uk](http://www.roadsafetyinitiatives.co.uk)

## Appendix B Optima drawing 13105/GA/01/REV/D





**KEY**

- PROPOSED HIGHWAY WORKS (SEE NOTE 2)
- - - HIGHWAY ADOPTION BOUNDARY

**NOTES**

- PRELIMINARY LAYOUT SUBJECT TO DETAILED DESIGN INCLUDING TOPOGRAPHICAL SURVEY, FULL CDM COMPLIANCE, STATUTORY UNDERTAKERS SEARCH/ DIVERSION REQUIREMENTS, HIGHWAY DRAINAGE PROVISION, LAND AVAILABILITY CAPACITY ASSESSMENT AND LOCAL AUTHORITY APPROVAL.
- PROPOSED HIGHWAY WORKS TO BE PROVIDED IN ACCORDANCE WITH SANDERSON ASSOCIATES DRAWING NO. 11340/001/REV/B (APPLICATION REF: 2020/60/92307/W) WITHIN THE EXTENT OF THE ADOPTED HIGHWAY.

**DESIGN VEHICLE PROFILES:**

| Vehicle Type           | Overall Length | Overall Width | Overall Height | Min Body Ground Clearance | Track Width | Look to lock time | Wheel to Wheel Turning Radius |
|------------------------|----------------|---------------|----------------|---------------------------|-------------|-------------------|-------------------------------|
| Kikkees Refuse Vehicle | 11.800m        | 2.500m        | 3.140m         | 0.310m                    | 2.400m      | 6.00s             | 11.800m                       |
| Large Car (2006)       | 5.070m         | 1.870m        | 1.610m         | 0.310m                    | 1.610m      | 4.00s             | 5.00m                         |

**REVISIONS:**

| REV | DATE     | BY | DESCRIPTION            | CHK | APP |
|-----|----------|----|------------------------|-----|-----|
| D   | 03/04/23 | JS | STAGE 1 RSA AMENDMENTS | MEW | MEW |
| C   | 02/12/22 | JS | KC COMMENTS            | MEW | MEW |
| B   | 24/09/20 | JS | CLIENT NAME AMENDED    | MEW | MEW |
| A   | 18/09/19 | UK | MINOR AMENDMENTS       | MEW | MEW |
| -   | 19/09/16 | TP | INITIAL ISSUE          | MEW | MEW |

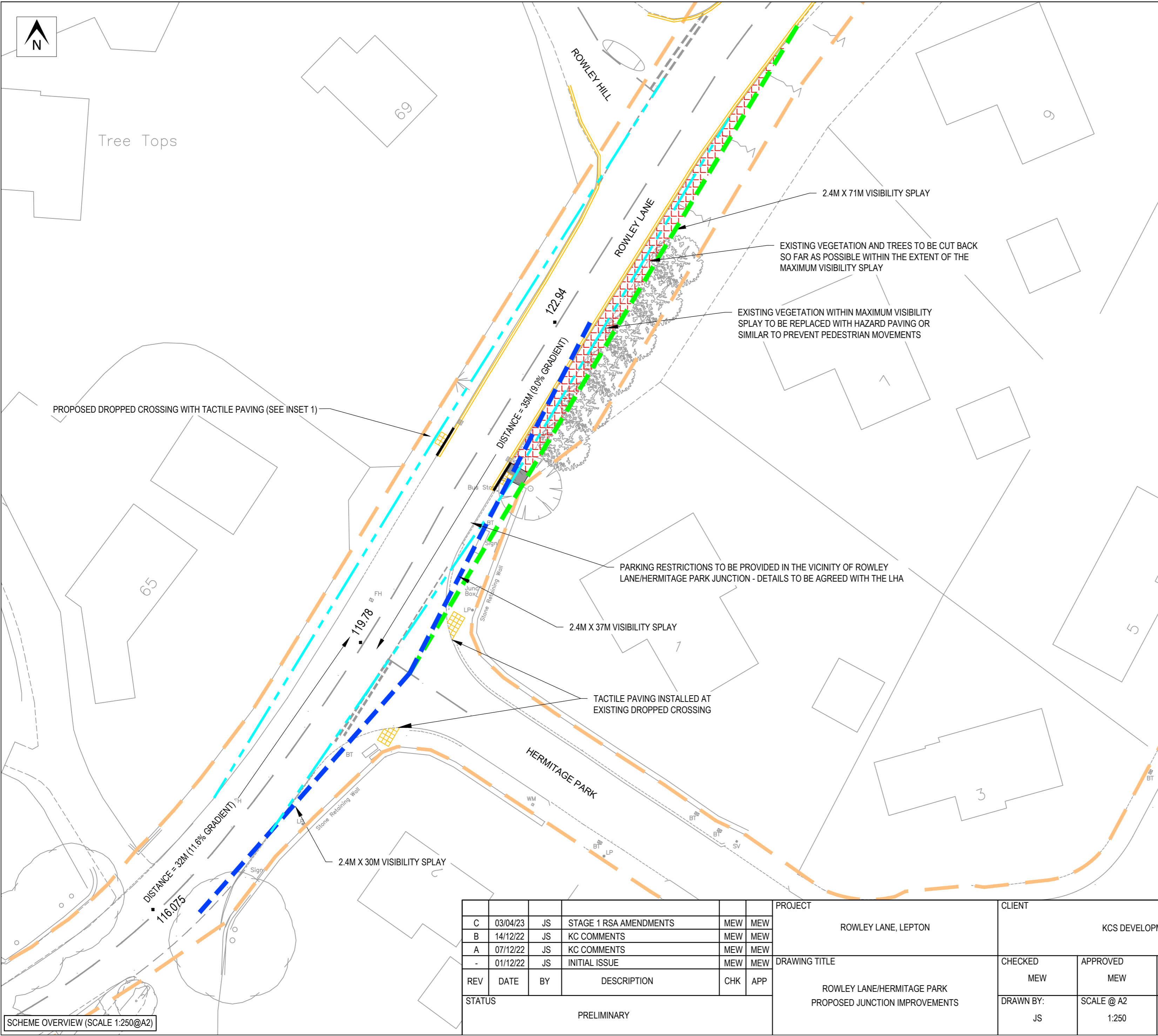
**STATUS:** PRELIMINARY

|   |                            |  |                           |
|---|----------------------------|--|---------------------------|
| <b>PROJECT</b><br>LAND OFF HERMITAGE PARK,<br>LEPTON  |                            | <b>CLIENT</b><br>KCS DEVELOPMENTS LTD. |                           |
| <b>DRAWING TITLE</b><br>PENISTONE RD / ROWLEY LANE JUNCTION<br>PROPOSED JUNCTION IMPROVEMENTS |                            | <b>CHECKED</b><br>MEW                  | <b>APPROVED</b><br>MEW    |
| <b>STATUS</b><br>PRELIMINARY  |                            | <b>DRG No.</b><br>13015/GA/01          | <b>DATE</b><br>03/04/2023 |
| <b>DRAWN BY:</b><br>JS  | <b>SCALE @ A1</b><br>1:250 | <b>REV.</b><br>D                       |                           |



## Appendix C Optima drawing 13105/GA/08/REV/C



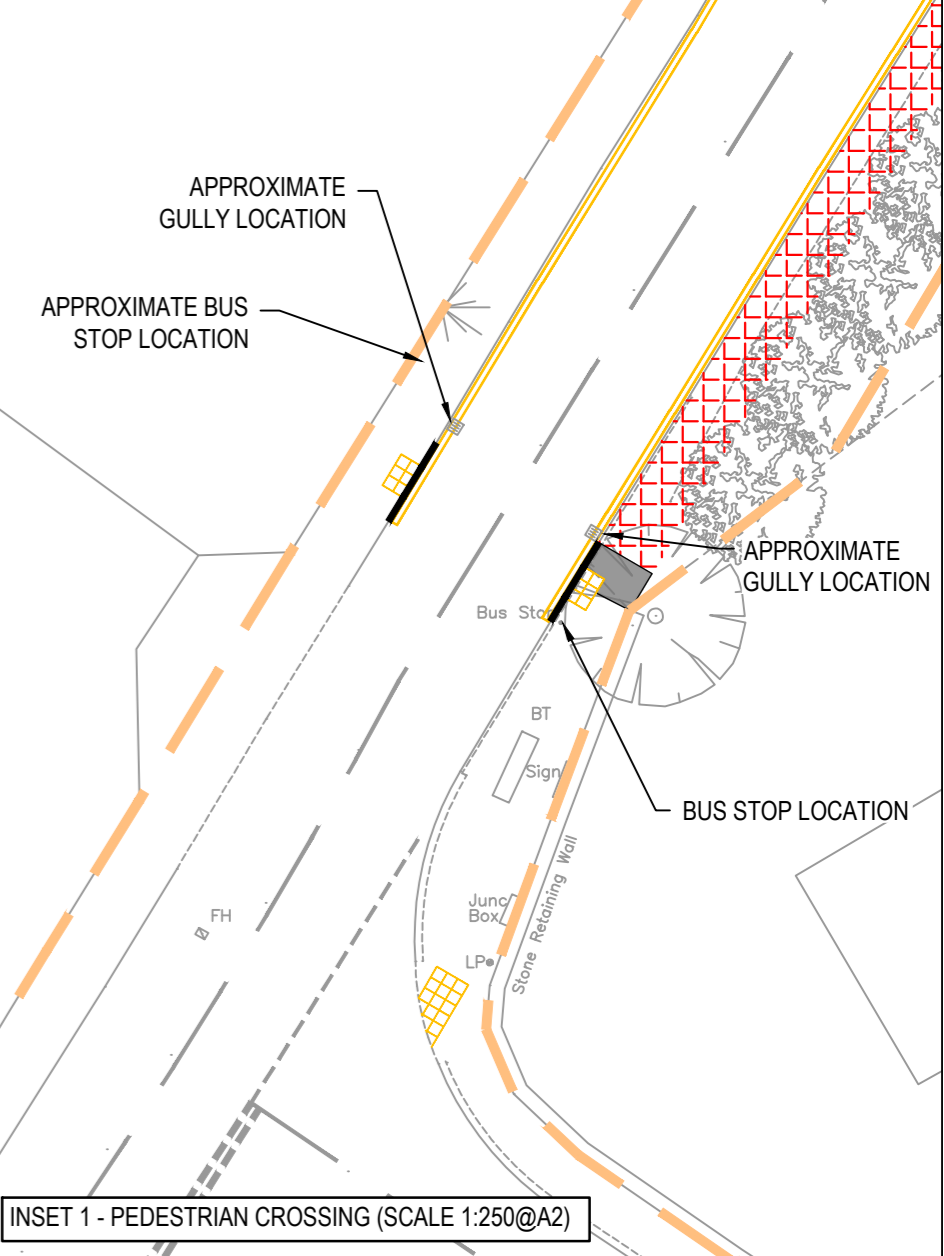


**KEY**

- PROPOSED HIGHWAY WORKS
- HIGHWAY ADOPTION BOUNDARY
- - - 2.4M x MFS 'Y' DISTANCE VISIBILITY SPLAY BASED ON SPEED SURVEY RESULTS
- - - 2.4m x MAXIMUM AVAILABLE VISIBILITY SPLAY
- - - 1.0M x 40M PEDESTRIAN VISIBILITY SPLAY (SEE NOTE 5)
- PROPOSED FOOTWAY SURFACING
- PROPOSED HAZARD PAVING OR SIMILAR

DO NOT SCALE

- NOTES**
1. PRELIMINARY LAYOUT SUBJECT TO DETAILED DESIGN INCLUDING TOPOGRAPHICAL SURVEY, FULL CDM COMPLIANCE, STATUTORY UNDERTAKERS SEARCH/ DIVERSION REQUIREMENTS, HIGHWAY DRAINAGE PROVISION, LAND AVAILABILITY CAPACITY ASSESSMENT AND LOCAL AUTHORITY APPROVAL.
  2. HIGHWAY ADOPTION BOUNDARY TRANSPOSED FROM KIRKLEES COUNCIL PLANS.
  3. DIMENSIONS SHOWN TAKEN FROM TOPOGRAPHICAL SURVEY.
  4. 85TH PERCENTILE WET WEATHER SPEEDS:  
NORTHBOUND 26 MPH  
SOUTHBOUND 28 MPH
- MANUAL FOR STREET STOPPING SITE DISTANCE  
26 MPH (42 KPH) - 30M\*  
28 MPH (45 KPH) - 37M
- \*ADJUSTED FOR GRADIENT
5. 40M PEDESTRIAN VISIBILITY PROVIDED IN ACCORDANCE WITH TRAFFIC SIGNS MANUAL CHAPTER 6, TABLE 2-1 BASED ON 30 MPH 85TH PERCENTILE SPEEDS.



SCHEME OVERVIEW (SCALE 1:250@A2)

| REV                 | DATE     | BY | DESCRIPTION            | CHK | APP |
|---------------------|----------|----|------------------------|-----|-----|
| C                   | 03/04/23 | JS | STAGE 1 RSA AMENDMENTS | MEW | MEW |
| B                   | 14/12/22 | JS | KC COMMENTS            | MEW | MEW |
| A                   | 07/12/22 | JS | KC COMMENTS            | MEW | MEW |
| -                   | 01/12/22 | JS | INITIAL ISSUE          | MEW | MEW |
| STATUS: PRELIMINARY |          |    |                        |     |     |

|               |   |
|---------------|---|
| PROJECT       | ROWLEY LANE, LEPTON                                       |
| DRAWING TITLE | ROWLEY LANE/HERMITAGE PARK PROPOSED JUNCTION IMPROVEMENTS |

|           |                       |             |      |
|-----------|-----------------------|-------------|------|
| CLIENT    | KCS DEVELOPMENTS LTD. |             |      |
| CHECKED   | APPROVED              | DRG No.     |      |
| MEW       | MEW                   | 13015/GA/08 |      |
| DRAWN BY: | SCALE @ A2            | DATE        | REV. |
| JS        | 1:250                 | 03/04/2023  | C    |