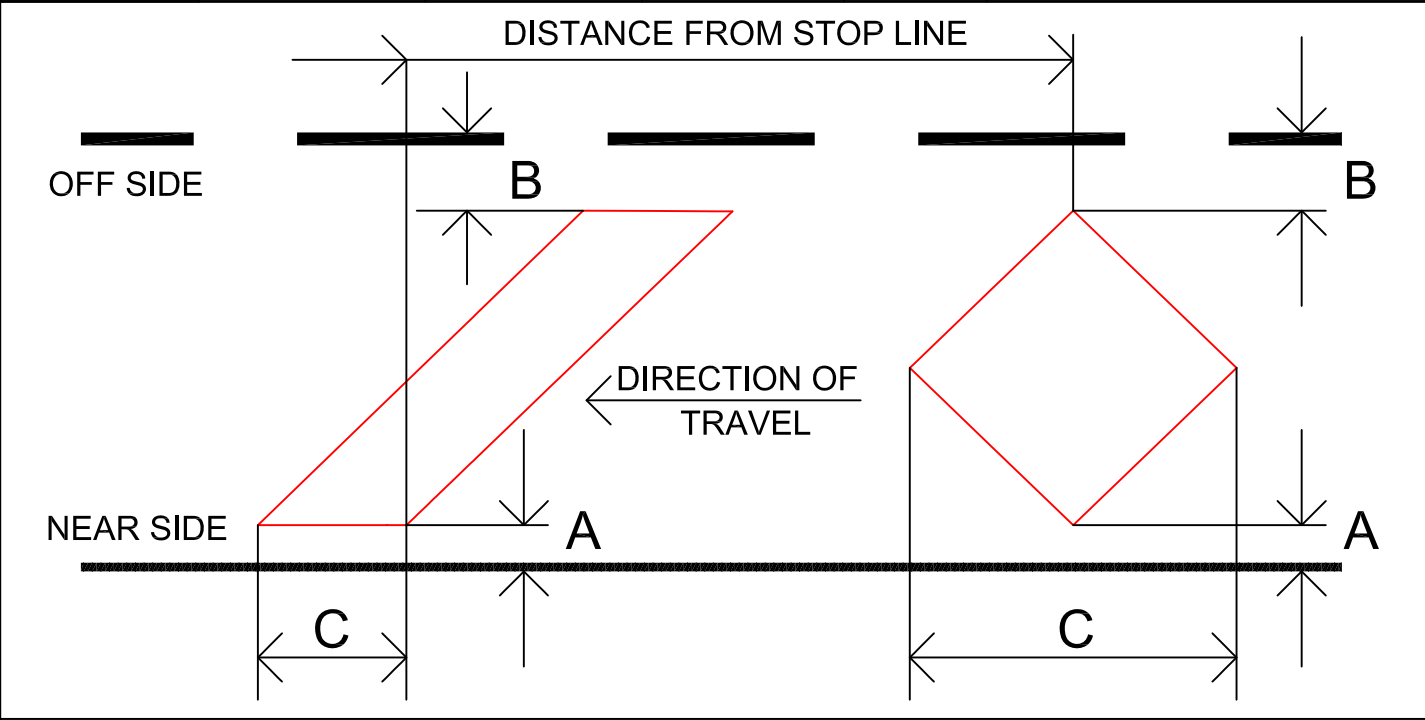


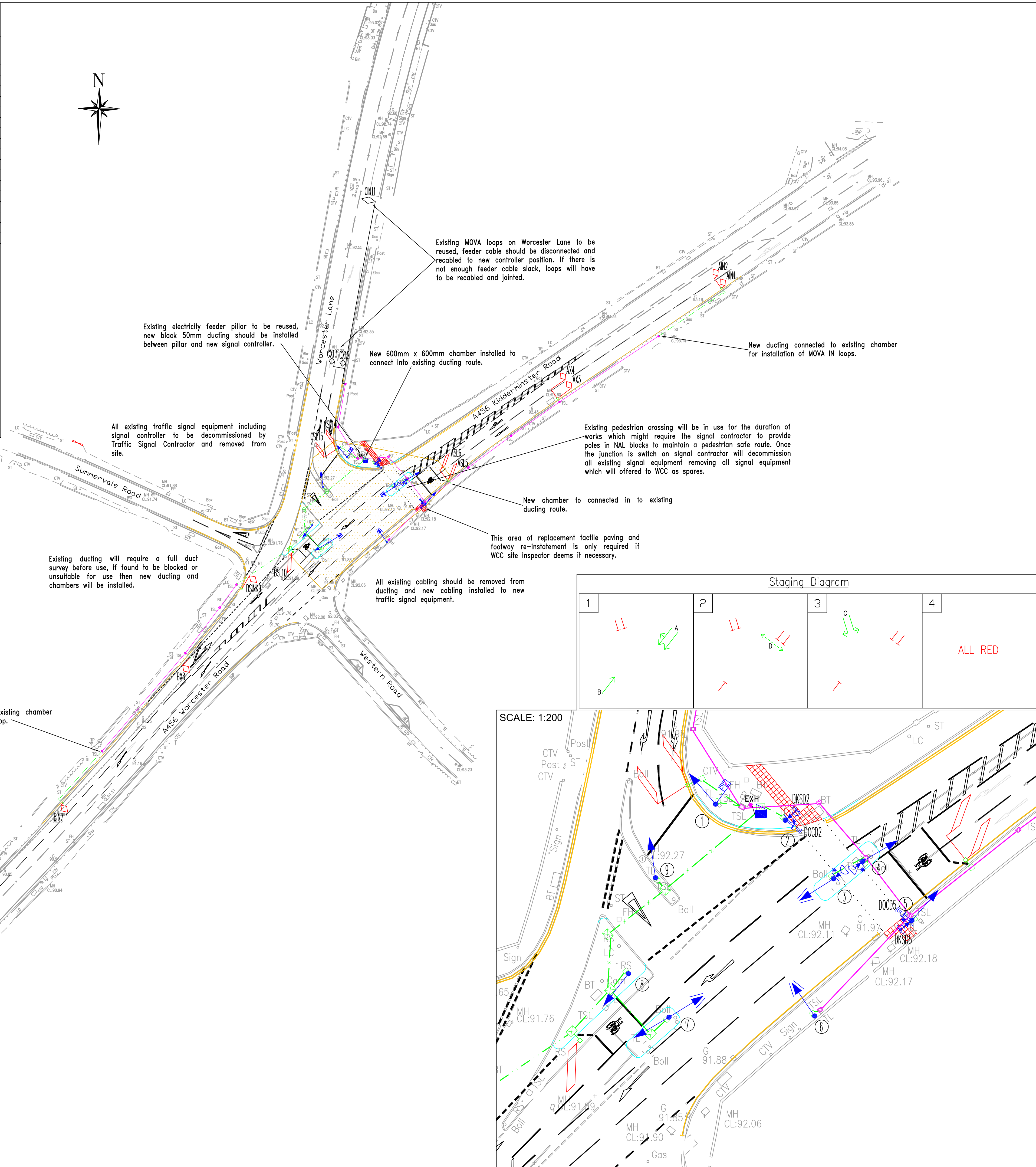
| MOVA LOOP DIMENSIONS A456 KIDDERMINSTER ROAD / WORCESTER LANE, HAGLEY, WORCESTERSHIRE | | | | | |
|---|-----------------------------|-----------------------------|----------------------------|----------------|---------|
| LOOP NAME | DISTANCE FROM STOP LINE (M) | DISTANCE FROM NEAR SIDE (M) | DISTANCE FROM OFF SIDE (M) | LOOP WIDTH (M) | NOTES |
| | | A | B | C | |
| AIN1 | 84 | 0.4 | 0.8 | 1.7 | Diamond |
| AIN2 | 84 | 0.8 | 0.6 | 1.7 | Diamond |
| AX3 | 39 | 0.4 | 0.8 | 1.7 | Diamond |
| AX4 | 39 | 0.8 | 0.6 | 1.7 | Diamond |
| ASL5 | 3 | 0.4 | 0.8 | 1.0 | Chevron |
| ASL6 | 3 | 0.8 | 0.4 | 1.0 | Chevron |
| BIN7 | 85 | 0.4 | 0.6 | 1.7 | Diamond |
| BX8 | 40 | 0.4 | 0.4 | 1.7 | Diamond |
| BSINK9 | 14 | 0.4 | 0.8 | 1.7 | Chevron |
| BSL10 | 3 | 0.4 | 0.4 | 1.0 | Chevron |
| CIN11 | 62 | Existing | Existing | Existing | Diamond |
| CX12 | 23 | Existing | Existing | Existing | Diamond |
| CX13 | 23 | Existing | Existing | Existing | Diamond |
| CSL14 | 3 | 0.4 | 0.8 | 1.0 | Chevron |
| CSL15 | 3 | 0.8 | 0.4 | 1.0 | Chevron |



NOTES CONTINUED

- SIGNAL POLE POSITION AND ORIENTATION TO BE AGREED ON SITE BY WORCESTERSHIRE COUNTY COUNCIL ENGINEER OR THEIR REPRESENTATIVE.
- TACTILE DEVICES SHALL BE MOUNTED WITH IN THE RIGHT HAND SIDE PEDESTRIAN DEMAND UNIT AND SHALL PROTRUDE FROM THE UNDERSIDE OF THE UNIT. AUDIO DEVICES SHALL ARE ALSO REQUIRE AND WILL BE TIME TABLED NOT TO SOUND BETWEEN THE HOURS OF 22:30 AND 06:30.
- SIGNAL HEADS AND AGD'S SHALL BE ALIGNED TO THE SATISFACTION OF THE ENGINEER ON THE DAY OF COMMISSIONING.
- ALL TRAFFIC SIGNAL EQUIPMENT WILL HAVE AT LEAST 450MM CLEARANCE FROM CARRIAGEWAY.
- ALL TRAFFIC SIGNAL POLES WILL BE POSITIONED AT 750MM FROM KERB FACE, 450MM FROM TACTILE EDGE.
- ALL TRAFFIC SIGNAL EQUIPMENT WILL BE BLACK IN COLOUR.
- PLEASE NOTE THAT THE ABOVE GROUND DETECTORS WILL ALSO REQUIRE CORRECT MOUNTING BRACKETS SO THAT THEY ALSO ACHIEVE 450MM FROM THE KERB FACE.
- TRAFFIC SIGNAL HEADS WILL BE INSTALLED AT MINIMUM CLEARANCE OF 2.1M FROM GROUND LEVEL TO THE BOTTOM EDGE OF THE SIGNAL HEAD.
- ALL TRAFFIC SIGNAL EQUIPMENT INCLUDING SIGNAL CONTROLLER WILL BE OF ELV TYPE.
- NAL CONTROLLER CABINET BASE TO BE INSTALLED, CORRECT CONTROLLER CABINET BASE WILL NEED TO BE ORDERED BASED ON THE CONTROLLER TYPE INSTALLED. COLOUR OF BASE WILL MATCH SIGNAL CONTROLLER. SEE INSTALLATION INSTRUCTIONS ON STANDARD DETAIL DRAWING C/1181/101.
- THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH STANDARD DETAIL DRAWING C/1181/101 AND SAFETY CASE.

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DRAWING N°
C/1221/100


ISSUE
3

KEY:-

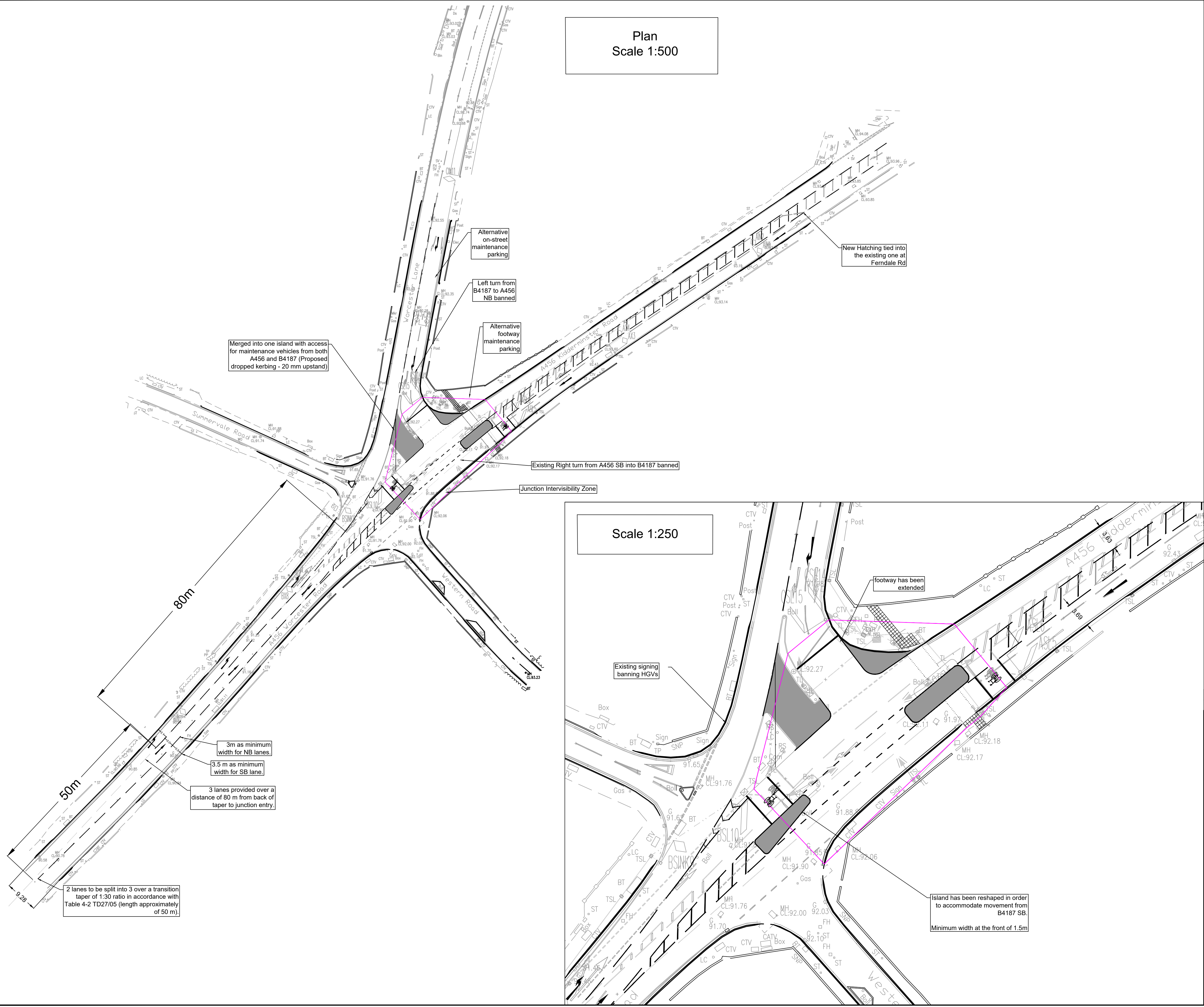
- 4.0m Signal pole
- VEHICLE SIGNAL HEADS
 - Fitted with primary hoods
 - Fitted with secondary hoods
- PEDESTRIAN SIGNAL HEADS
 - Combined Puffin near sided indicator with push button indicator
 - Puffin push button wait indicator
 - Tactile device
- ELV Traffic signal controller
- EXH Existing Electricity Supply Pillar ("Halda")
- Photo cell
- Existing MOVA detection
- MOVA detection
- Stop line detection
- Kerb side detector
- On crossing detector
- 1 No. Polyethelene 100mm duct
- 2 No. Polyethelene 100mm duct
- 4 No. Polyethelene 100mm duct
- Signal pole and RS115 NAL retention socket
- NAL STAKKAbox 600mm x 600mm, Twin walled access chambers, composite covers to BS125
- NAL STAKKAbox 600mm x 450mm, Twin walled access chambers, composite covers to BS125
- NAL STAKKAbox 450mm x 450mm, Twin walled access chambers, composite covers to BS125
- NAL carriageway loop chamber, ductile iron D400 to BS2789
- Existing ducting chamber
- Assumed existing ducting route
- Black 50mm electricity duct
- Intervisibility Zone
- Red tactile paving at signal controlled crossing.
- buff tactile paving at uncontrolled crossings

NOTES

- CARRIAGEWAY MARKINGS TO BE LAID IN ACCORDANCE WITH "THE TRAFFIC SIGNS REGULATIONS AND GENERAL DIRECTIONS 2002"
- ALL NEARSIDED PEDESTRIAN INDICATORS ON POLES TO BE ANGLED 30 DEGREES AWAY FROM KERB FACE EXCEPT INDICATORS ON CENTRAL ISLAND WHICH SHOULD BE SQUARE TO CARRIAGEWAY.
- PHASE D (POLES 3 AND 4) PUSHBUTTONS TO HAVE A BLACK-OUT DURING THE EXTENDABLE PERIOD AND ONLY DISPLAY A RED MAN / GREEN MAN SHOULD THE PUSHBUTTONS BE PRESSED, CENTRAL PUSHBUTTONS TO GIVE A LATCHED CALL
- ALL NEW TRAFFIC SIGNAL DUCTING SHOULD BE ORANGE IN COLOUR, HIGH DENSITY POLYETHYLENE DUCTING OF 100MM DIAMETER WITH "TRAFFIC SIGNALS" MARKED ON IT EVERY 1M. DRAW ROPES SHOULD BE PROVIDED IN THE DUCT RUNS FOR THE USE OF PULLING CABLE, THE MAXIMUM BEND IN DUCTING RUNS SHOULD NOT EXCEED 45 DEGREE RADIUS.
- SIEMENS GSM OMU WITH CABINET MOUNT AERIAL WILL BE SUPPLIED AND INSTALLED, PLUS DOWNLOAD, CONFIGURATION AND TESTED BOTH WAYS BETWEEN THE INSTANTION AND OUTSTATION. TRAFFIC SIGNAL CONTRACTOR WILL ALSO PROVIDE LIVE UPDATE DRAWINGS.

| | | | |
|---|---|----------|------------------------|
| DO NOT SCALE | | | |
| | | | |
| 3 | Drawing amended to WCC comments of 02/09/14 | JPS | LC 04.09.14 |
| 2 | Drawing amended to WCC comments of 05/03/14 | JPS | LC 21.03.14 |
| ISSUE | DESCRIPTION | DRN | CHK DATE |
|  | | | |
| CLIENT IMTECH TRAFFIC AND INFRA | | | |
| SCHEME TITLE PROPOSED JUNCTION MODIFICATION SCN 4002, A456 KIDDERMINSTER ROAD / WORCESTER ROAD / WORCESTER LANE, HAGLEY, WORCESTERSHIRE | | | |
| DATE: 02/01/14 | DRN: JPS | CHKD: LC | SCALE: 1:500 @ A1 |
| <small>Canwell Ltd WCC Aston Science Park Jennens Road Birmingham B7 4EL</small> | | | STATUS: DETAIL DESIGN |
| <small>T 0121 314 3699 F 0121 314 5158 E enquiries@canwell.co.uk</small> | | | DRAWING N°: C/1221/100 |

U:\wpp01\Transportation\694944 - WMHA Term Contract\TA - Transport Planning\99 - 2019 Wyre Forest Modelling A45060 - Calculations\CAD\Hagley Layout changed 2.dwg - 06/11/2019 07:55:28 - GA - NegusD



Key:

- Proposed New Layout
- Existing Layout

Background information taken from Canwell consultancy Services .
Drawing number C/1221/100 amended to Worcester City Council comments on 04/09/14

| SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION | | | | | |
|---|--|--|--|--|--|
| In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following : | | | | | |
| CONSTRUCTION Extra care on the footway to be extended with existing utilities such as the existing electricity feeder | | | | | |
| MAINTENANCE / CLEANING The island between A456 NB and the B4187 will be merged into one island with access for maintenance vehicles from both A456 and the B4187 | | | | | |
| DECOMMISSIONING / DEMOLITION It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement | | | | | |

| P01 | 05/11/19 | Indicative Layout | SC | DPN | PN | HT |
|-----|-----------|---------------------|-------|---------|-------|--------|
| Rev | Rev. Date | Purpose of revision | Drawn | Checked | Rev'd | Appr'd |

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www.jacobs.com

Client: **worcestershire county council**

Project: **A456 B4187 JUNCTION**

Drawing title: **FEASIBILITY OPTIONS**

Drawing status: **FOR COMMENTS**

| Scale | AS SHOWN @ A1 | Rev |
|----------------|--------------------------------|-----|
| Jacobs No. | 694944CH.TA.39.00 | P01 |
| Client no. | | |
| Drawing number | 694944CH-JAC-HGN-ZZ-DR-CH-0001 | |

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Vehicle tracking as per DMRB standards specifies using FTA Design articulated Vehicle 1998 (16.48 m Length)

Plan
Scale 1:500

Key:
Proposed New Layout
Existing Layout

Background information taken from Canwell consultancy Services .
Drawing number C/1221/100 amended to Worcester City Council comments on 04/09/14

Merged into one island with access for maintenance vehicles from both A456 and B4187 (Proposed splay kerbs)

Left turn from B4187 to A456 NB banned

New Hatching tied into the existing one at Ferndale Rd

Right turn from A456 SB into B4187 banned



Scale 1:250

footway has been extended

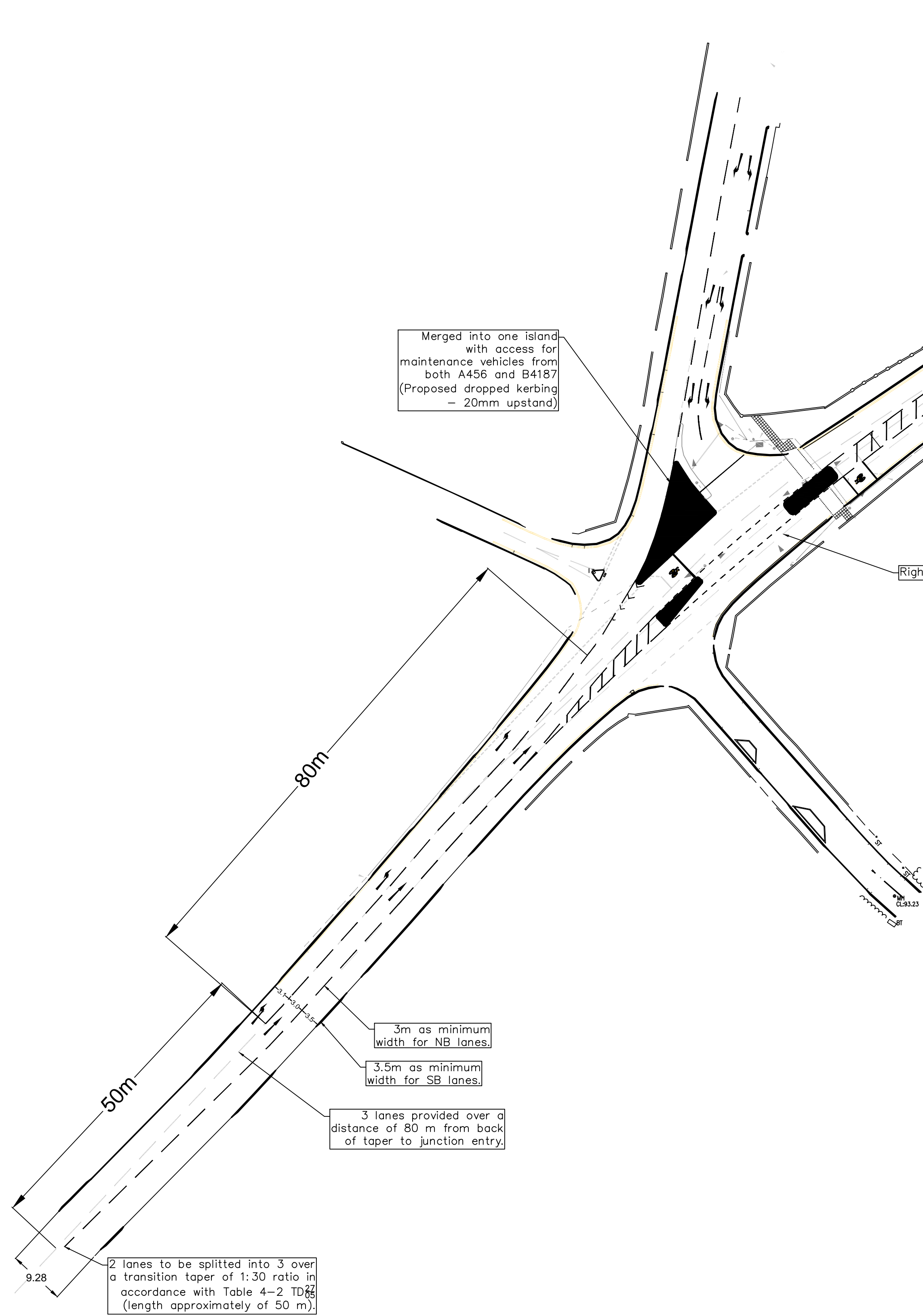
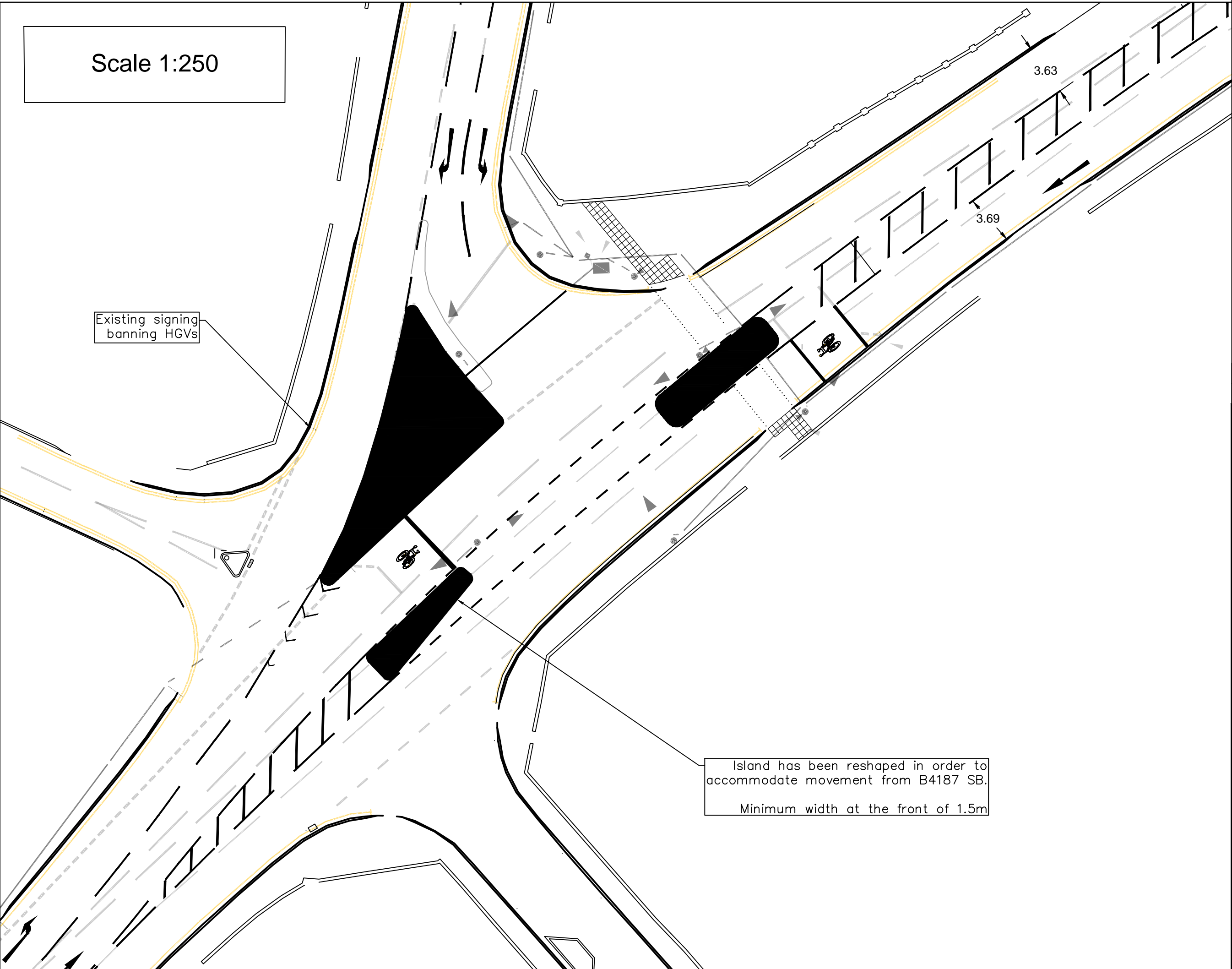
Existing signing banning HGVs

island has been reshaped in order to accommodate movement from B4187 SB.
Minimum width at the front of 1.5m

| SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION | |
|--|---|
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| | | | | | | | |
|--|-------------------|---------------------|--|-------|---------|-------|---------|
| P01 | 05/11/19 | Indicative Layout | | SC | DPN | PN | HT |
| Rev | Rev. Date | Purpose of revision | | Drawn | Checked | Rev'd | Apprv'd |
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| project | | | | | | | |
| A456 B4187 JUNCTION | | | | | | | |
| drawing title | | | | | | | |
| VEHICLE TRACKING FEASIBILITY OPTIONS | | | | | | | |
| drawing status | | | | | | | |
| FOR COMMENTS | | | | | | | |
| scale | AS SHOWN @ A1 | | | | | | |
| Jacobs No. | 694944CH.TA.39.00 | | | Rev | | P01 | |
| Client no. | | | | | | | |
| drawing number | | | | | | | |
| 694944CH-JAC-HGN-ZZ-DR-CH-0002 | | | | | | | |

Plan
Scale 1:500





Key:

Proposed New Layout

Existing Layout

| SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION | |
|--|---|
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| | | | | | | | |
|--|------------|---------------------|--|-------|-----------------------|-------|--------|
| P0x | 12/12/2019 | INDICATIVE LAYOUT | | SC | DPN | PN | HT |
| Rev | Rev. Date | Purpose of revision | | Drawn | Checked | Rev'd | Appr'd |
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| <div><div>Project</div><div>A456 B4187 JUNCTION</div></div> | | | | | | | |
| <div><div>Drawing title</div><div>FEASIBILITY OPTIONS</div></div> | | | | | | | |
| <div><div>Drawing status</div><div>FOR COMMENTS</div></div> | | | | | | | |
| Scale | | AS SHOWN @ A1 | | | Rev <div>P01</div> | | |
| Jacobs No. | | 694944CH.TA.39.00 | | | | | |
| Client no. | | | | | | | |
| <div><div>Drawing number</div><div>694944CH-JAC-HGN-ZZ-DR-0001</div></div> | | | | | | | |
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