

Appendix B2 – Proposed Haul Road Junctions

Figure B-2-01: Proposed Junction Swept Path - Braddup Junction (MNA_B-2-01)

Figure B-2-02: Proposed Marl Hill Section – Braddup Compound Access Design - B27070CQ-JAC-XX-DR-C-TR4_VS-1008 (MNA_B-2-02_ B27070CQ-JAC-XX-DR-C-TR4_VS-1008)

Figure B-2-03: Proposed Braddup Junction Daily Movements (MNA_B-2-03)

Figure B-2-05: Proposed Marl Hill Section – Bonstone Compound Access Junction with B6478 Access Design - B27070CQ-JAC-XX-DR-C-TR4_VS-1007 (MNA_B-2-05_ B27070CQ-JAC-XX-DR-C-TR4_VS-1007)

Figure B-2-06: Proposed Bonstone Junction Daily Movements (MNA_B-2-06)

Figure B-2-07: Proposed Bowland Section – Temporary Haul Road Hallgate Hill Junction – Vehicle Tracking – Three Axle Loader (FH16 Assumption) - B27070CQ-JAC-XX-DR-C-TR3_VT-1124 (MNA_B-2-07_ B27070CQ-JAC-XX-DR-C-TR3_VT-1124)

Figure B-2-08: Proposed Bowland Section – Temporary Haul Road – Hallgate Hill Access Design - B27070CQ-JAC-XX-DR-C-TR3_VS-1006 (MNA_B-2-08_ B27070CQ-JAC-XX-DR-C-TR3_VS-1006)

Figure B-2-09: Proposed Junction Access Design - Hallgate Hill Junction - Proximity to Tree (MNA_B-2-09)

Figure B-2-10: Proposed Hallgate Hill Junction Daily Movements (MNA_B-2-10)

Figure B-2-11: Proposed Bowland Section – Newton-in-Bowland Compound – Vehicle Across Junction (staggered) – Standard Vehicle Tracking - B27070CQ-JAC-XX-DR-C-TR3_VT-1108 (MNA_B-2-11_ B27070CQ-JAC-XX-DR-C-TR3_VT-1108)

Figure B-2-12: Proposed Bowland Section – Newton-Bowland Compound – Access Design - B27070CQ-JAC-XX-DR-C-TR3_VS-1002 (MNA_B-2-12_ B27070CQ-JAC-XX-DR-C-TR3_VS-1002)

Figure B-2-13: Proposed Bowland Section – Newton-in-Bowland Compound South – Access Design - B27070CQ-JAC-XX-DR-C-TR3_VS-1003 (MNA_B-2-13_ B27070CQ-JAC-XX-DR-C-TR3_VS-1003)

Figure B-2-14: Proposed Newton Road Junction Daily Movements (MNA_B-2-14)

Figure B-2-15: Proposed Bowland Section Braddup, Bonstone and Newton Compounds – Mitigation Measures – Waddington - West Bradford Rd to Slaidburn Rd – B27070CQ-JAC-XX-DR-C-TR4_MIT-0001 (MNA_B-2-15_ B27070CQ-JAC-XX-DR-C-TR4_MIT-0001)

Figure B-2-16: Proposed Speed Limits (MNA_B-2-16)

Figure B-2-17: River Ribble Haul Road – Access Design – Before River Ribble (A59, Pimlico Link Rd, West Bradford Rd) – Vehicle Tracking – Three axle low loader B27070CQ-JAC-XX-DR-C-TR4_VT-1130 (MNA_B-2-17_ B27070CQ-JAC-XX-DR-C-TR4_VT-1130)

Figure B-2-18: River Ribble Haul Rd – Access Design – After River Ribble (West Bradford Rd, Waddington Village, Slaidburn Rd) – Vehicle Tracking – Three axle low loader B27070CQ-JAC-XX-DR-C-TR4_VT-1132 (MNA_B-2-18_ B27070CQ-JAC-XX-DR-C-TR4_VT-1132)

Figure B-2-19: River Ribble Haul Rd – Access Design – Before River Ribble A59, Pimlico Link Road, West Bradford B27070CQ-JAC-XX-DR-C-TR4_VS-1010 (MNA_B-2-19_ B27070CQ-JAC-XX-DR-C-TR4_VS-1010)

Figure B-2-20: River Ribble Haul Road – Access Design – After River Ribble West Bradford Rd, Waddington Village, Slaidburn Rd B27070CQ-JAC-XX-DR-C-TR4_VS-1011 (MNA_B-2-20_ B27070CQ-JAC-XX-DR-C-TR4_VS-1011)

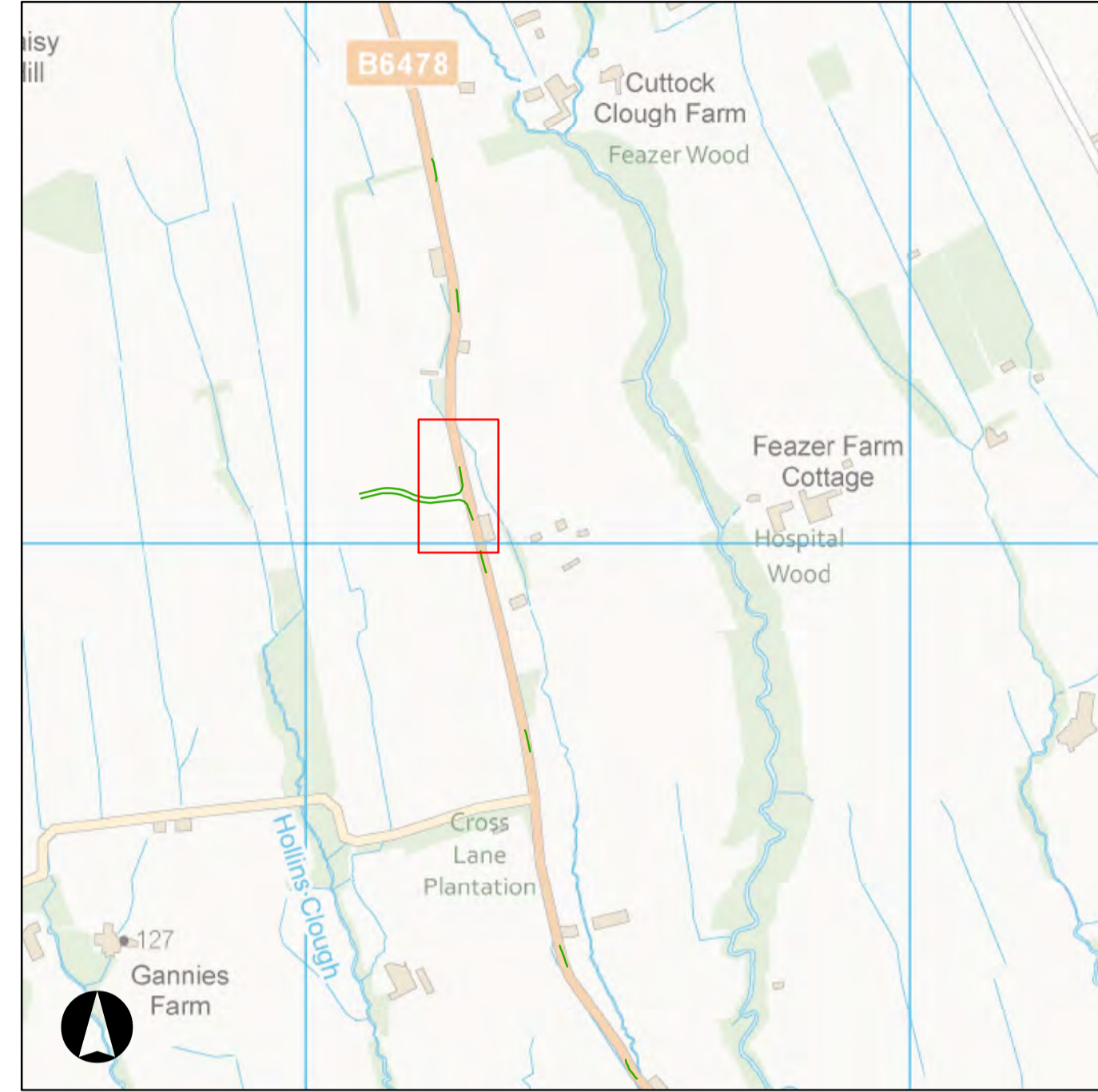
Haweswater Aqueduct Resilience Programme

Figure B-2-21: River Ribble Haul Road – West Bradford Rd before River Ribble – General Arrangement B27070CQ-JAC-XX-DR-C-TR4_GA-1212 (MNA_B-2-21_ B27070CQ-JAC-XX-DR-C-TR4_GA-1212)

Figure B-2-22: River Ribble Haul Road – West Bradford Rd Going towards Waddington – General Arrangement B27070CQ-JAC-XX-DR-C-TR4_GA-1213 (MNA_B-2-22_ B27070CQ-JAC-XX-DR-C-TR4_GA-1213)

**APPENDIX B2 - PROPOSED JUNCTION SWEEP PATHS
JUNCTIONS FIGURE B - 2 - 01**

BRADDUP COMPOUND - B6478 SLAIDBURN ROAD JUNCTION



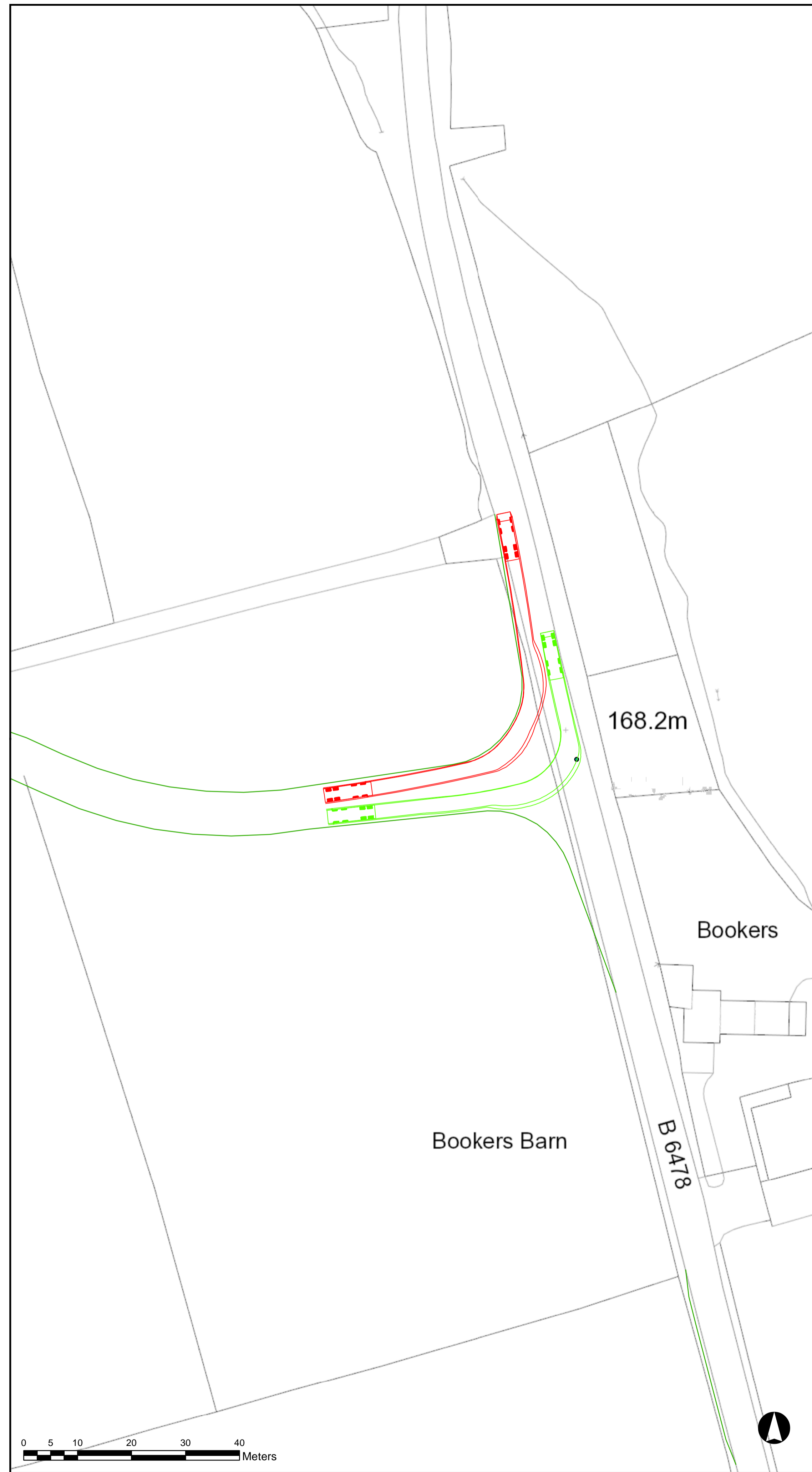
WIDER AREA 0 0.1 0.2 0.4 Kilometers



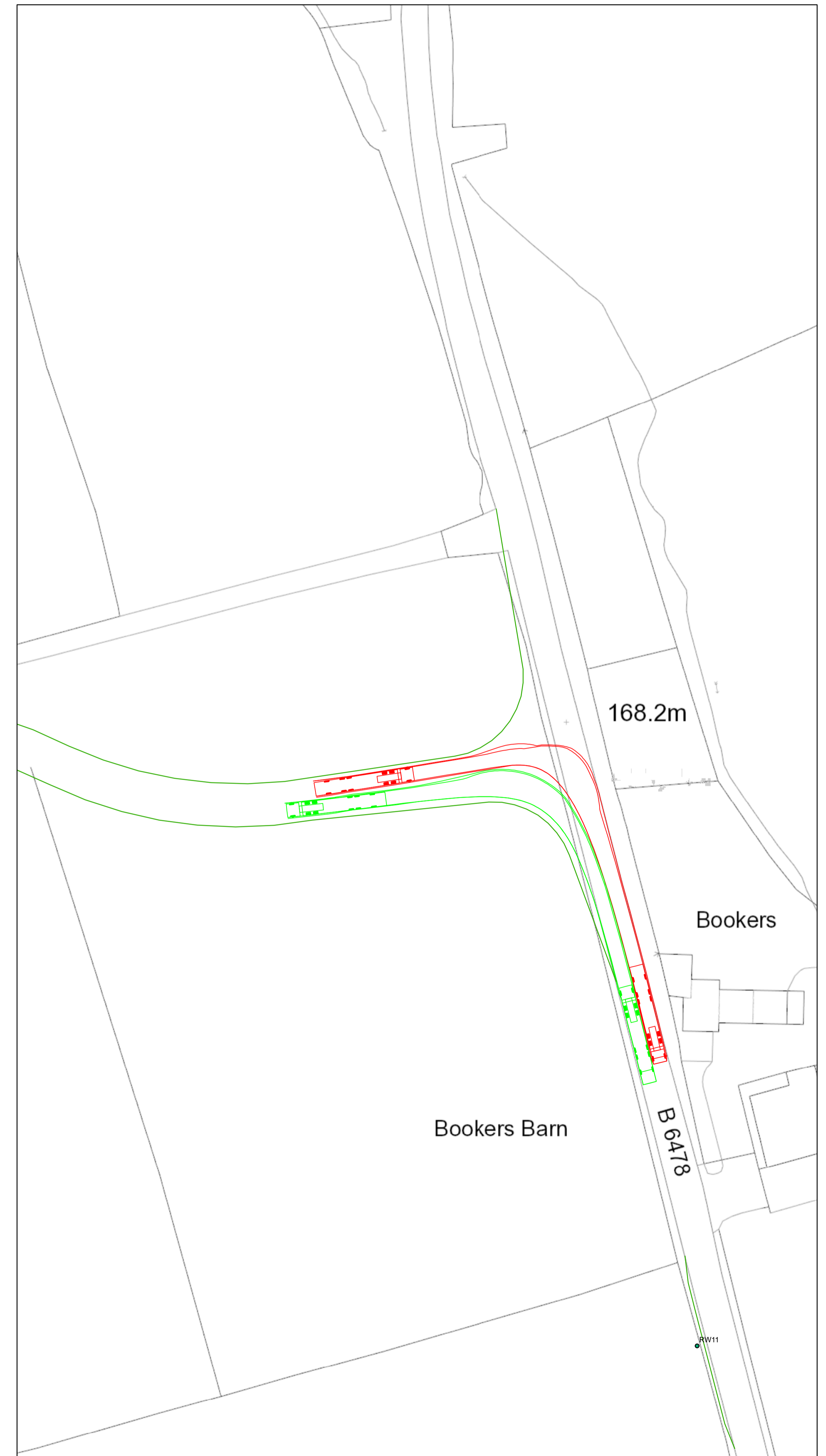
**HGV TRIAL 11th NOVEMBER 2020
4 AXLE RIGID TIPPER FRONT VIEW**



**HGV TRIAL 11th NOVEMBER 2020
4 AXLE RIGID TIPPER REAR VIEW**

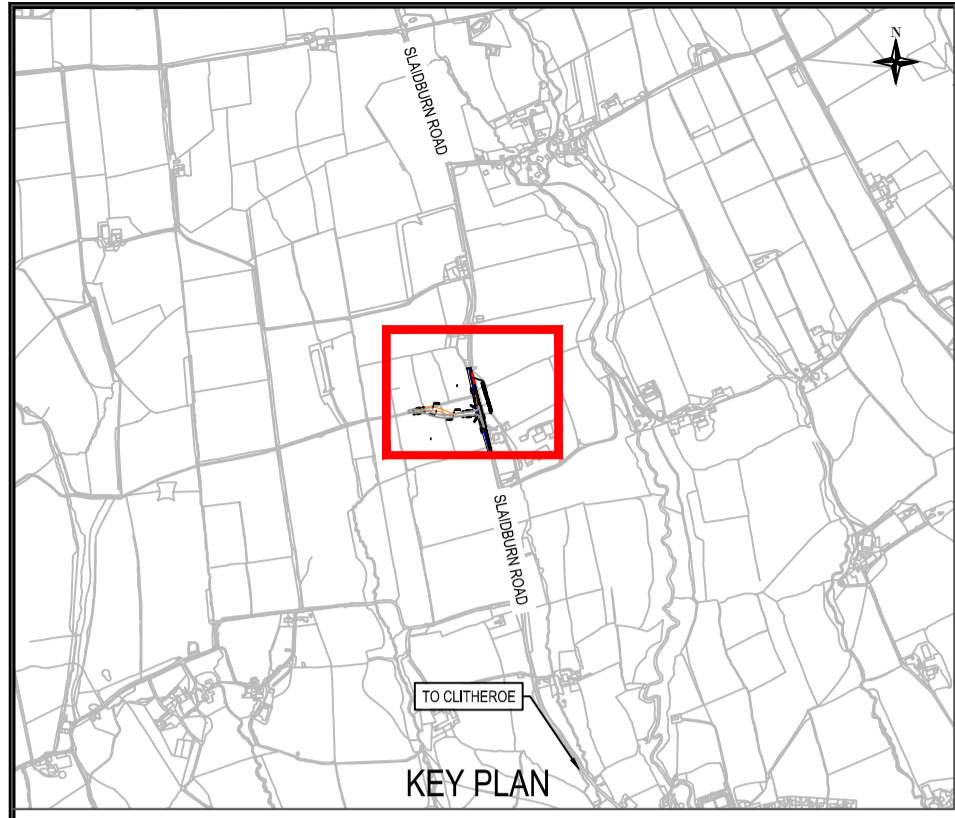


**HGV - 4 axle rigid (rigid/tipper) from site to Quarry (Northbound)
HGV - 4 axle rigid (rigid/tipper) to site from Quarry (Southbound)**



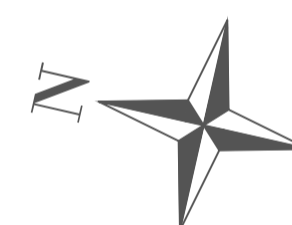
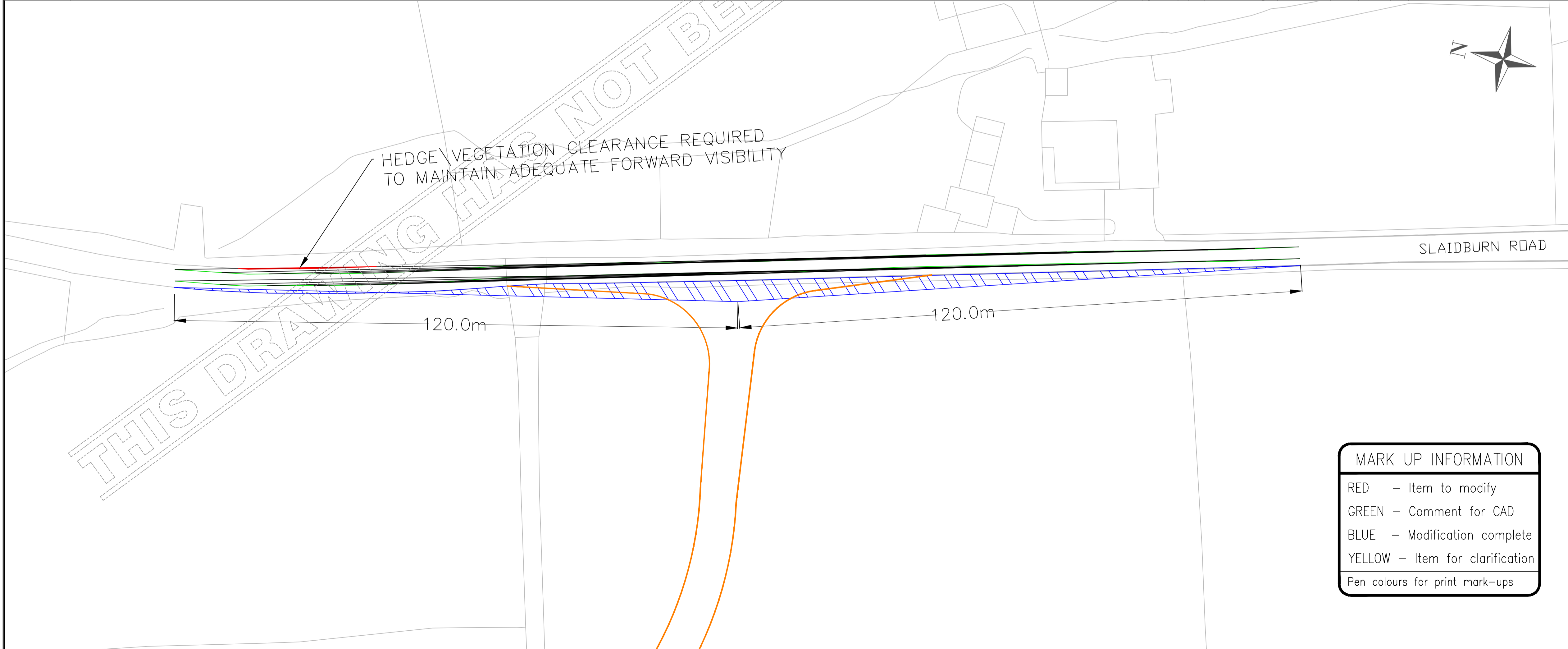
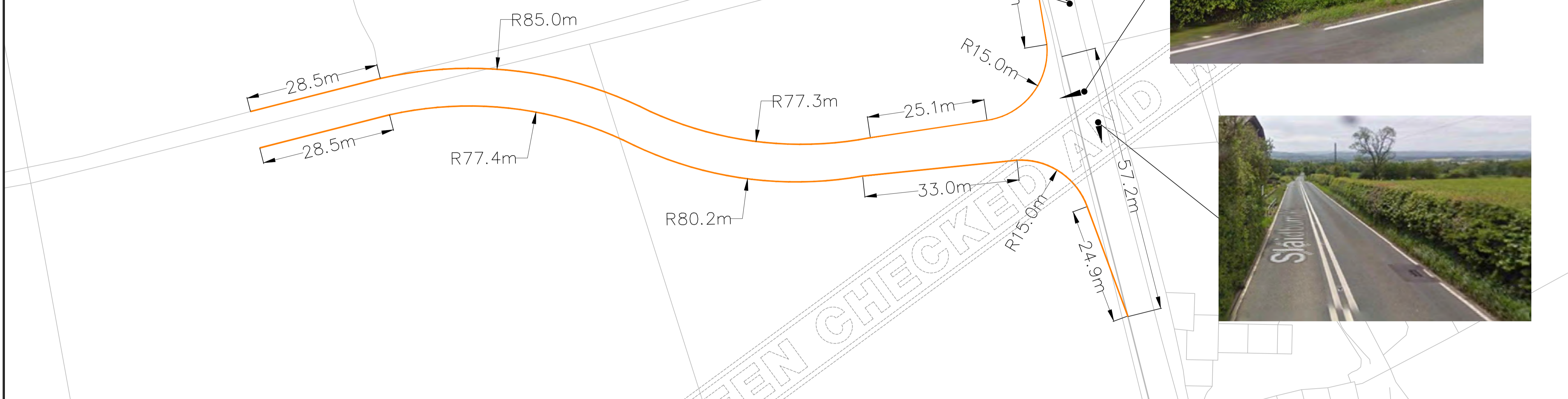
**HGV - 6 axle articulated flat bed to site (Northbound)
HGV - 6 axle articulated flat bed to site from site (Southbound)**

The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. United Utilities Water will not accept liability for any loss or damage caused by the actual position being different from those shown. Crown copyright and database rights 2017 Ordnance Survey 100022432.



- NOTES**
- DO NOT SCALE FROM THIS DRAWING.
 - TAKEN FROM CD 109 (TABLES 2.5 AND 2.10)
- | DESIRED VISIBILITY SPY | ACHIEVED VISIBILITY SPY |
|------------------------|-------------------------|
| 4.5m x 215m | 4.5m x 120m |
- | EXISTING SPEED LIMIT | PROPOSED SPEED LIMIT |
|----------------------|----------------------|
| 60 mph | 40 mph |
- 120 METER VISIBILITY SPY IS APPLICABLE FROM TABLE 2.10 OF CD 109 DUE TO RESTRICTING FACTORS OF ROAD CURVATURE AND EXISTING VEGETATION. A REDUCED 40 MPH SECTION OF ROAD CAN ACHIEVE ADEQUATE VISIBILITY.
 - VISIBILITY SPY (VALUE X) SET BACK 4.5m FROM EDGE OF CARRIAGEWAY

- LEGEND**
- EXISTING KERB
 - PROPOSED KERB
 - VISIBILITY SPY
 - SSD ENVELOPE (120m)
 - SSD CLEARANCE



CURRENT ISSUE INFORMATION

P01.4	HS	SP	--	--	--
VERSION	AUTH	CHKD	REVD	REASON FOR ISSUE	DATE
SO	WORK IN PROGRESS (WIP)				
SUITABILITY CODE	SUITABILITY DESCRIPTION				



HAWESWATER AQUEDUCT RESILIENCE PROGRAMME

PROPOSED MARL HILL SECTION - BRADDUP COMPOUND

ACCESS DESIGN

SCALE	1:250 / 1:500	SHEET SIZE	A1
DRAWING NUMBER	B27070CQ-JAC-XX-DR-C-TR4_VS-1008	REVISION	P01.4

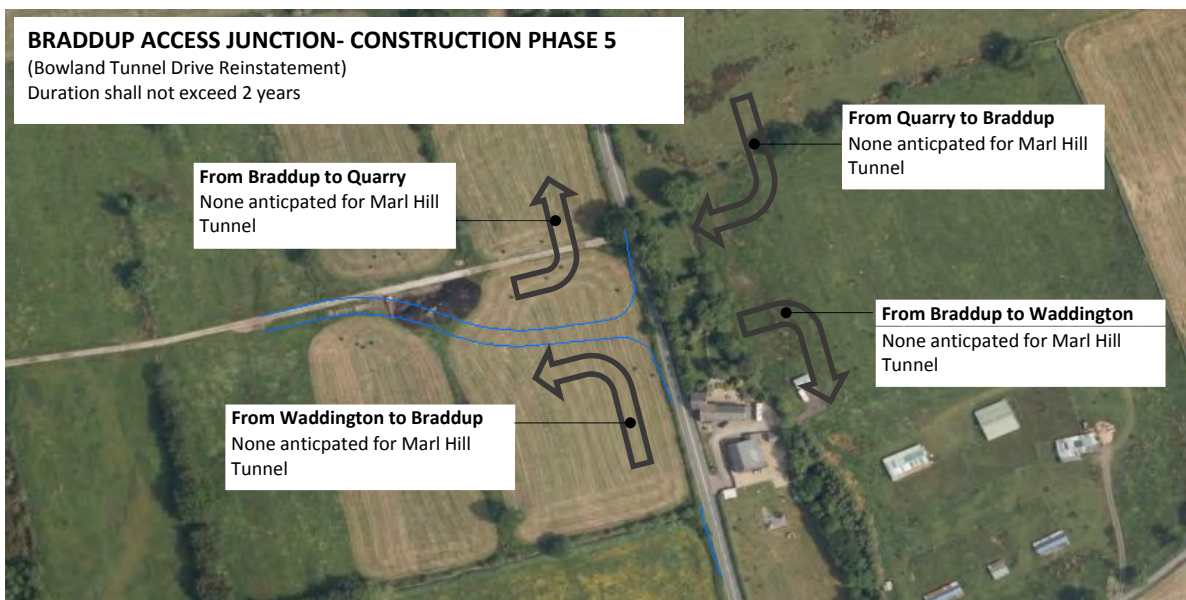
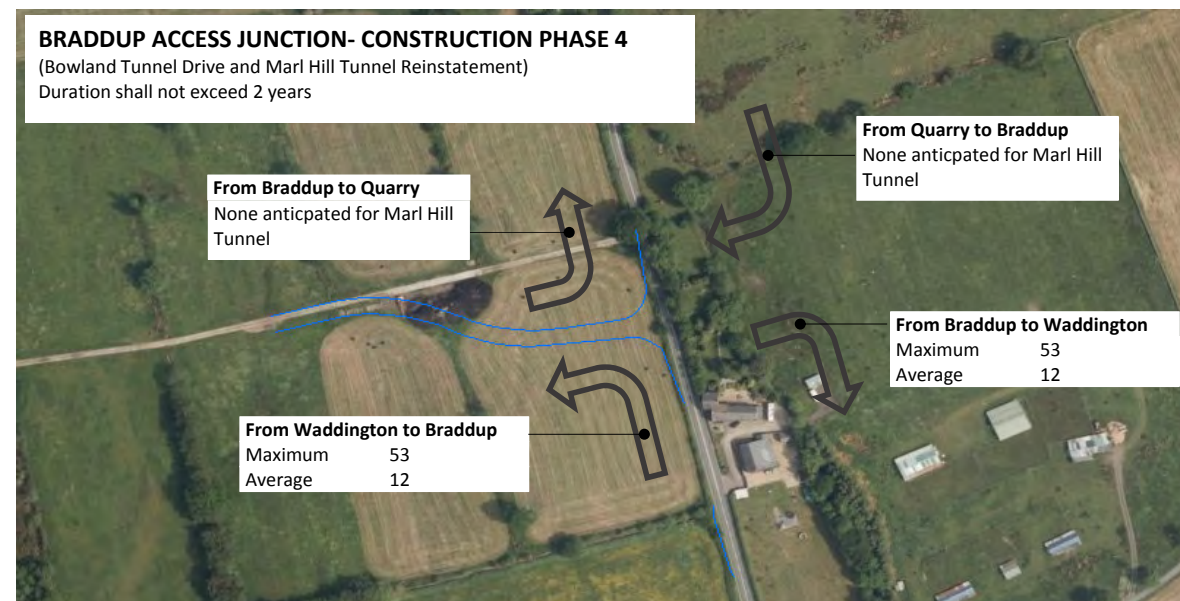
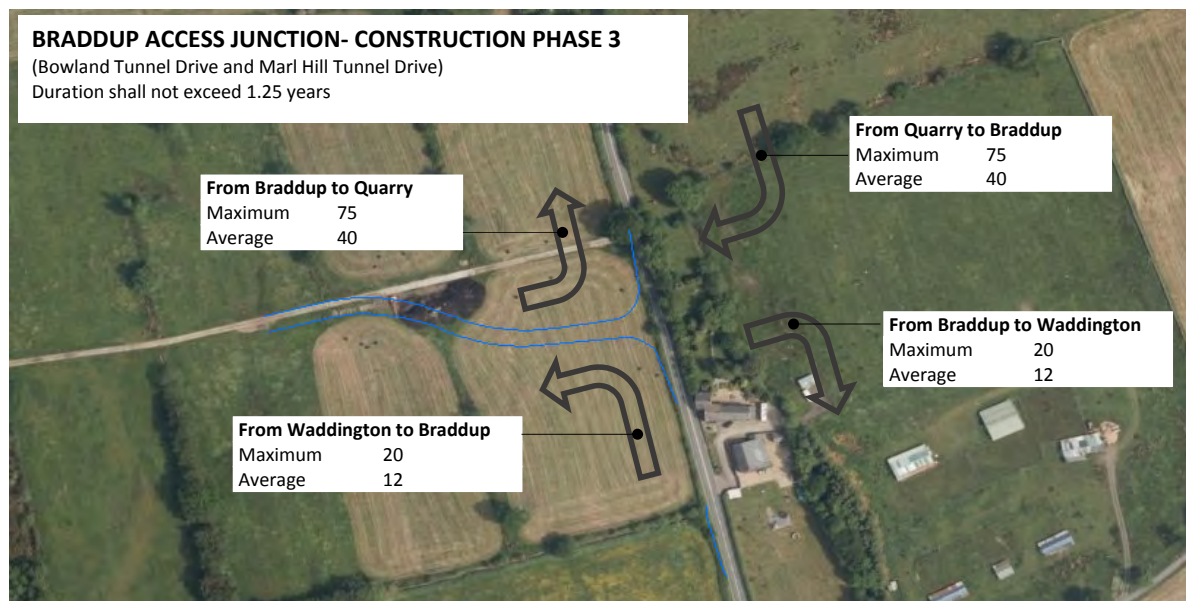
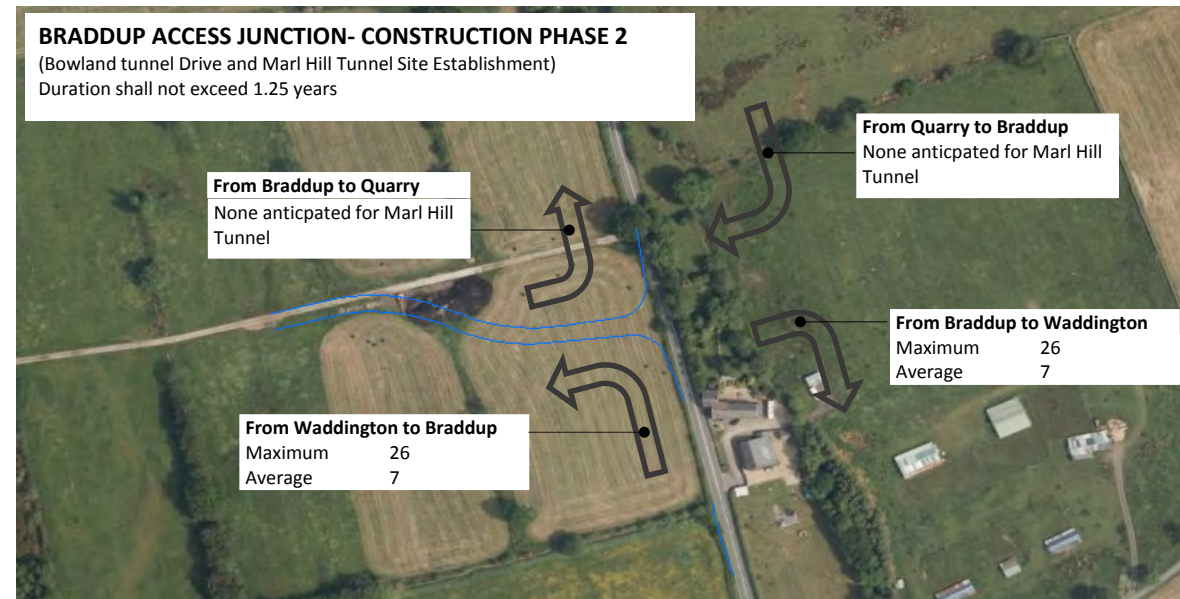
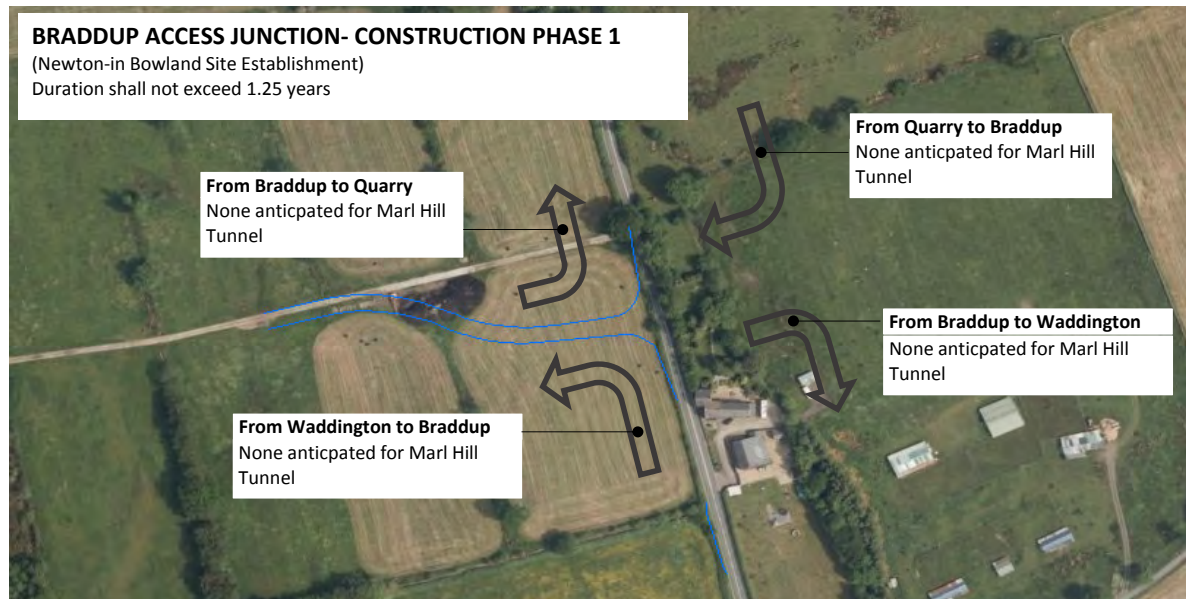
MARK UP INFORMATION

- RED - Item to modify
- GREEN - Comment for CAD
- BLUE - Modification complete
- YELLOW - Item for clarification

Pen colours for print mark-ups

APPENDIX B2 - FIGURE B-2-03

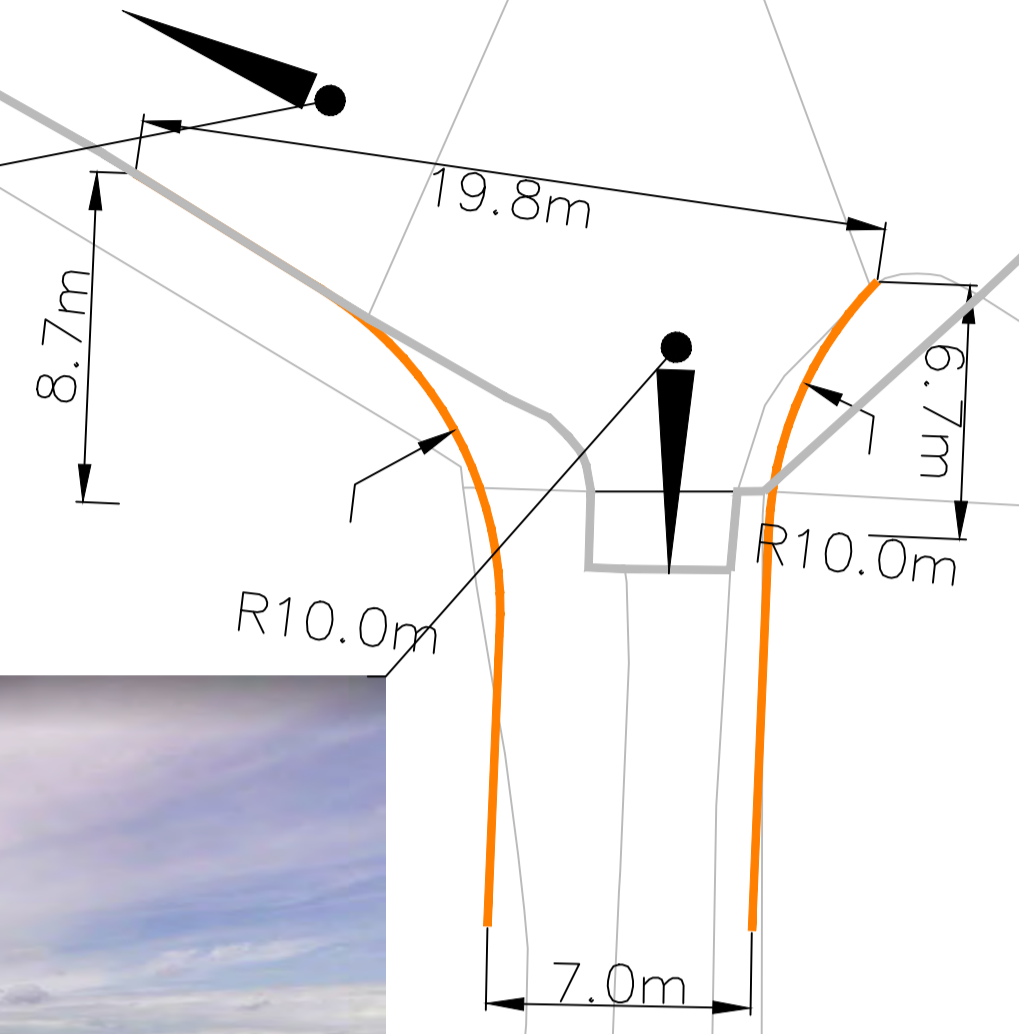
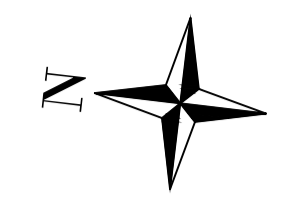
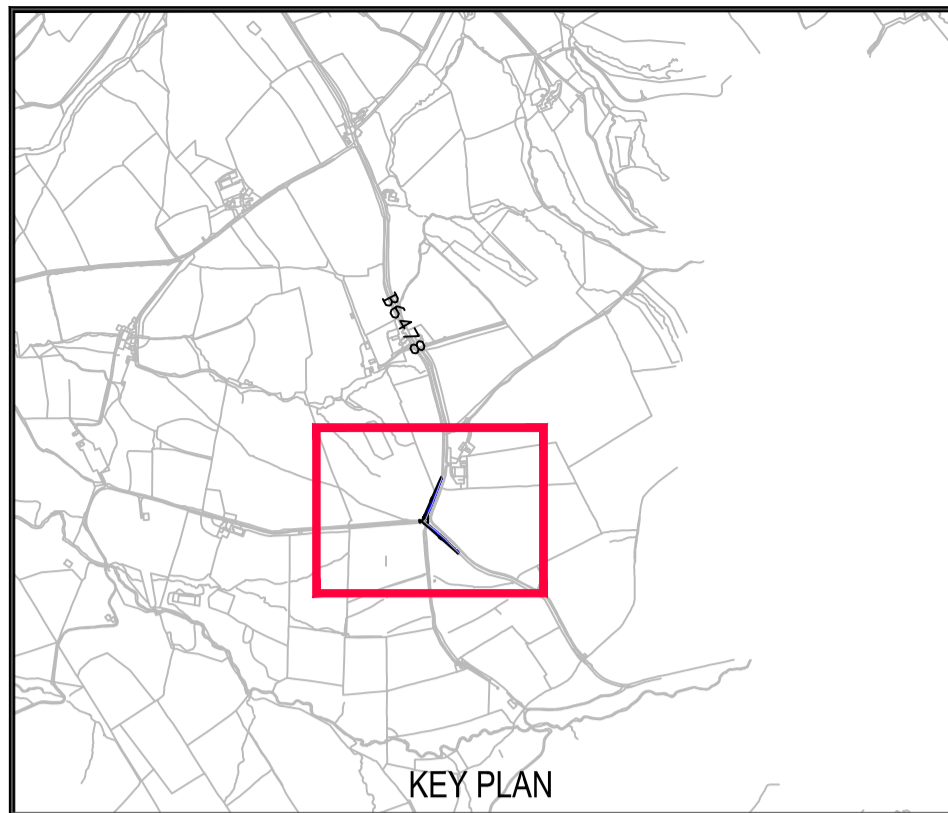
PROPOSED BRADDUP JUNCTION DAILY MOVEMENTS



LEGEND

Average: averaged over 1 year and rounded to the nearest whole number the number of movements per day turning in shown direction

Maximum: the anticipated maximum number of movements on any single day turning in shown direction



- NOTES**
- DO NOT SCALE FROM THIS DRAWING.
 - TAKEN FROM CD 109 (TABLES 2.5 AND 2.10)
- | | |
|--------------------------|---------------------------|
| DESIRED VISIBILITY SPLAY | ACHIEVED VISIBILITY SPLAY |
| 4.5m x 215m | 4.5m x 120m |
| EXISTING SPEED LIMIT | PROPOSED SPEED LIMIT |
| 60 mph | 40 mph |
- 120 METER VISIBILITY SPLAY IS THE DESIRED MINIMUM VISIBILITY SPLAY OF 40 MPH AS SPECIFIED IN TABLE 2.10 OF CD 109. VISIBILITY IS GENEROUS BOTH WAYS DUE TO LACK OF OBSTACLES.
 - VISIBILITY SPLAY (VALUE X) SET BACK 4.5m FROM EDGE OF CARRIAGEWAY

LEGEND

	EXISTING KERB
	PROPOSED KERB
	VISIBILITY SPLAY

CURRENT ISSUE INFORMATION

P01.1	MB	SP	--	--	
VERSION	AUTH	CHKD	REVD	REASON FOR ISSUE	DATE
SO	WORK IN PROGRESS (WIP)				
SUITABILITY CODE	SUITABILITY DESCRIPTION				



HAWESWATER AQUEDUCT RESILIENCE PROGRAMME
 PROPOSED MARL HILL SECTION
 BONSTONE COMPOUND ACCESS JUNCTION WITH B6478
 ACCESS DESIGN

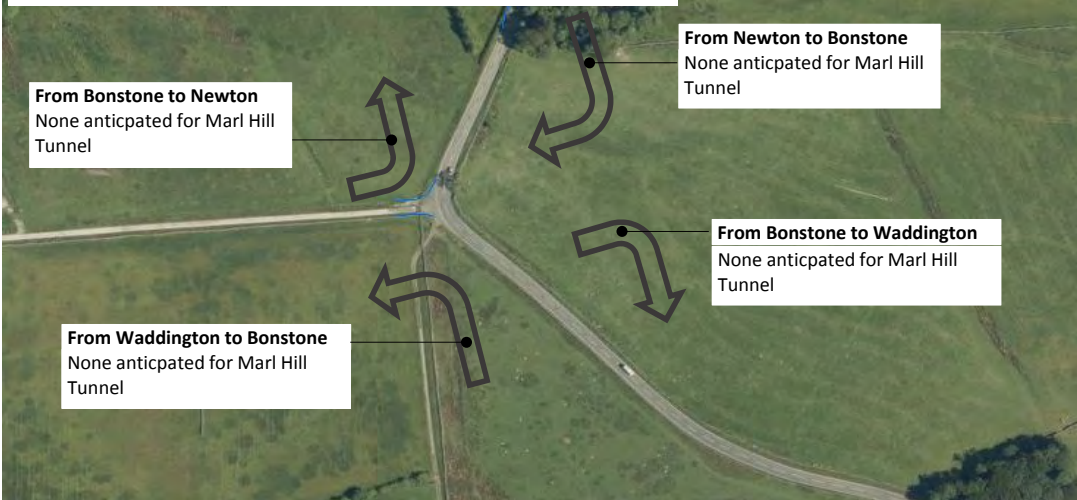
MARK UP INFORMATION

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GREEN	- Comment for CAD
BLUE	- Modification complete
YELLOW	- Item for clarification
Pen colours for print mark-ups	

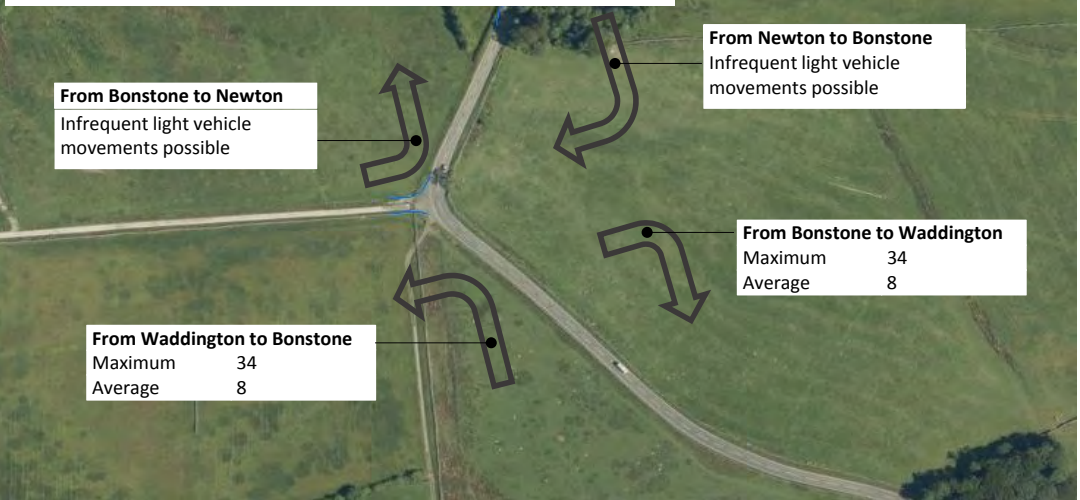
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PROPOSED BONSTONE JUNCTION DAILY MOVEMENTS

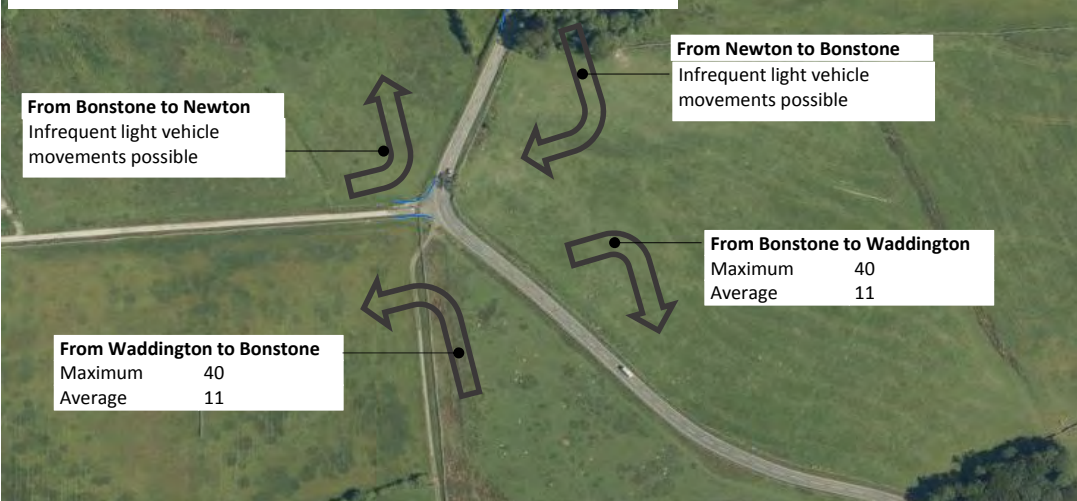
BONSTONE ACCESS JUNCTION- CONSTRUCTION PHASE 1
(Newton-in Bowland Site Establishment)
Duration shall not exceed 1.25 years



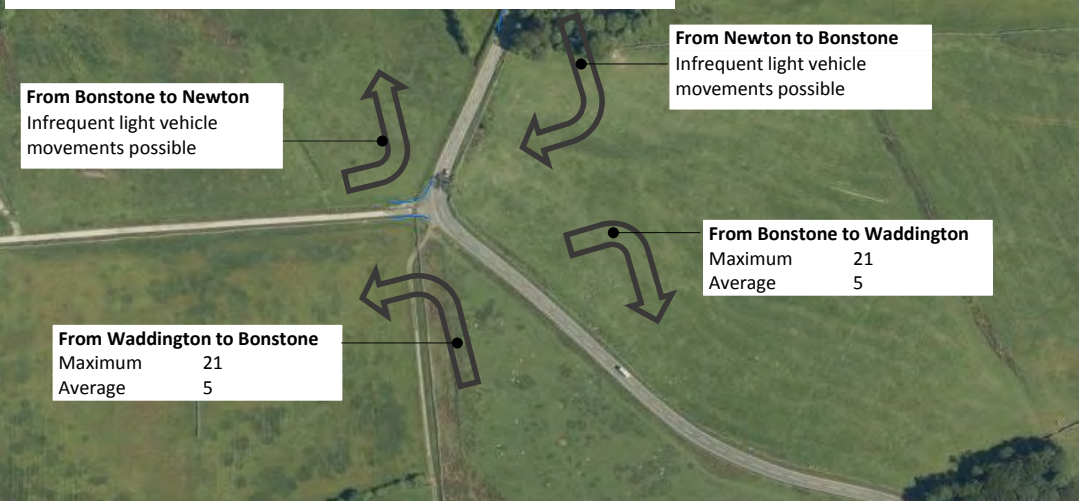
BONSTONE ACCESS JUNCTION- CONSTRUCTION PHASE 2
(Bowland tunnel Drive and Marl Hill Tunnel Site Establishment)
Duration shall not exceed 1.25 years



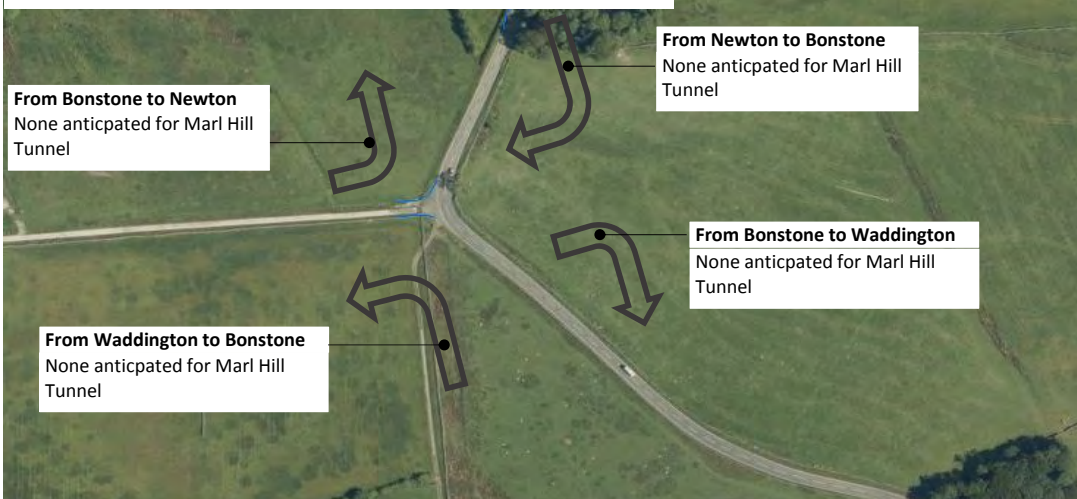
BONSTONE ACCESS JUNCTION- CONSTRUCTION PHASE 3
(Bowland Tunnel Drive and Marl Hill Tunnel Drive)
Duration shall not exceed 1.25 years



BONSTONE ACCESS JUNCTION- CONSTRUCTION PHASE 4
(Bowland Tunnel Drive and Marl Hill Tunnel Reinstatement)
Duration shall not exceed 2 years



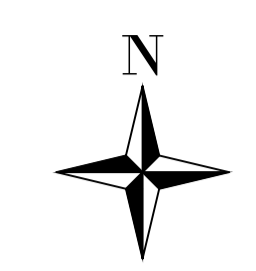
BONSTONE ACCESS JUNCTION- CONSTRUCTION PHASE 5
(Bowland Tunnel Drive Reinstatement)
Duration shall not exceed 2 years



LEGEND

Average: averaged over 1 year and rounded to the nearest whole number the number of movements per day turning in shown direction

Maximum: the anticipated maximum number of movements on any single day turning in shown direction



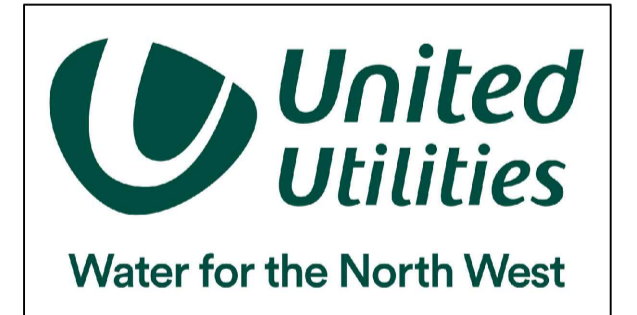
NOTES
1. DO NOT SCALE FROM THIS DRAWING

LEGEND

	PROPOSED KERB
	EXISTING KERB

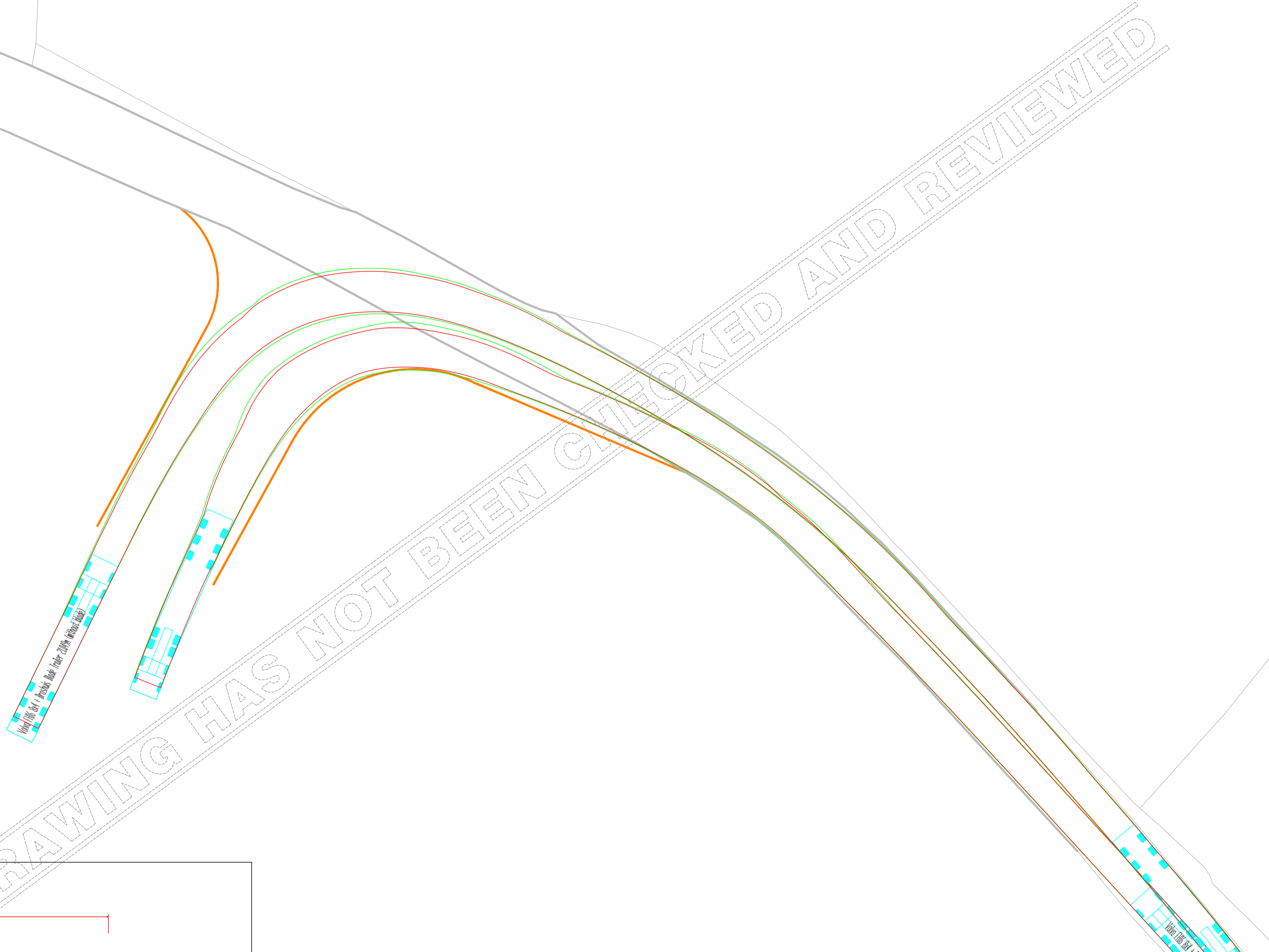
CURRENT ISSUE INFORMATION

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SUITABILITY CODE	SUITABILITY DESCRIPTION				

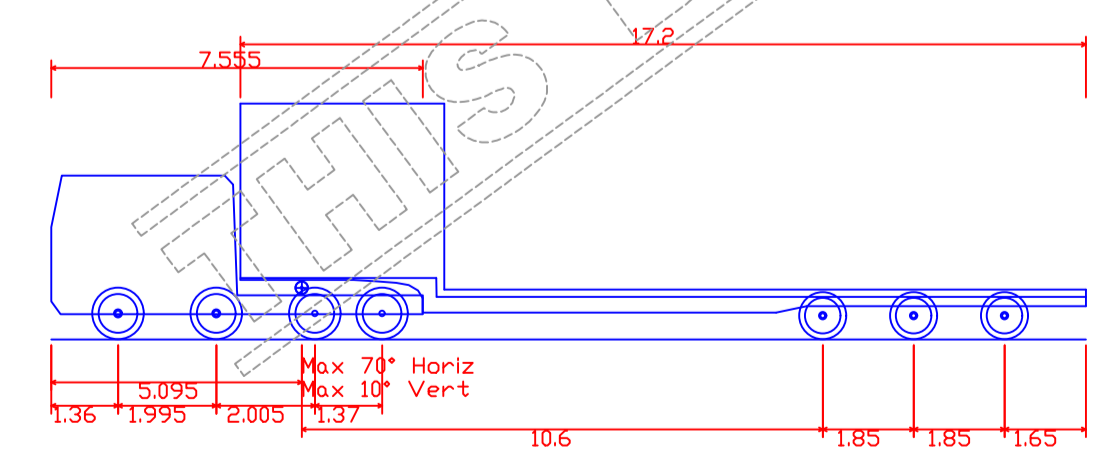


HAWESWATER AQUEDUCT RESILIENCE PROGRAMME
PROPOSED BOWLAND SECTION - TEMPORARY HAUL ROAD
HALLGATE HILL JUNCTION
VEHICLE TRACKING - THREE AXLE LOADER
(FH16 ASSUMPTION)

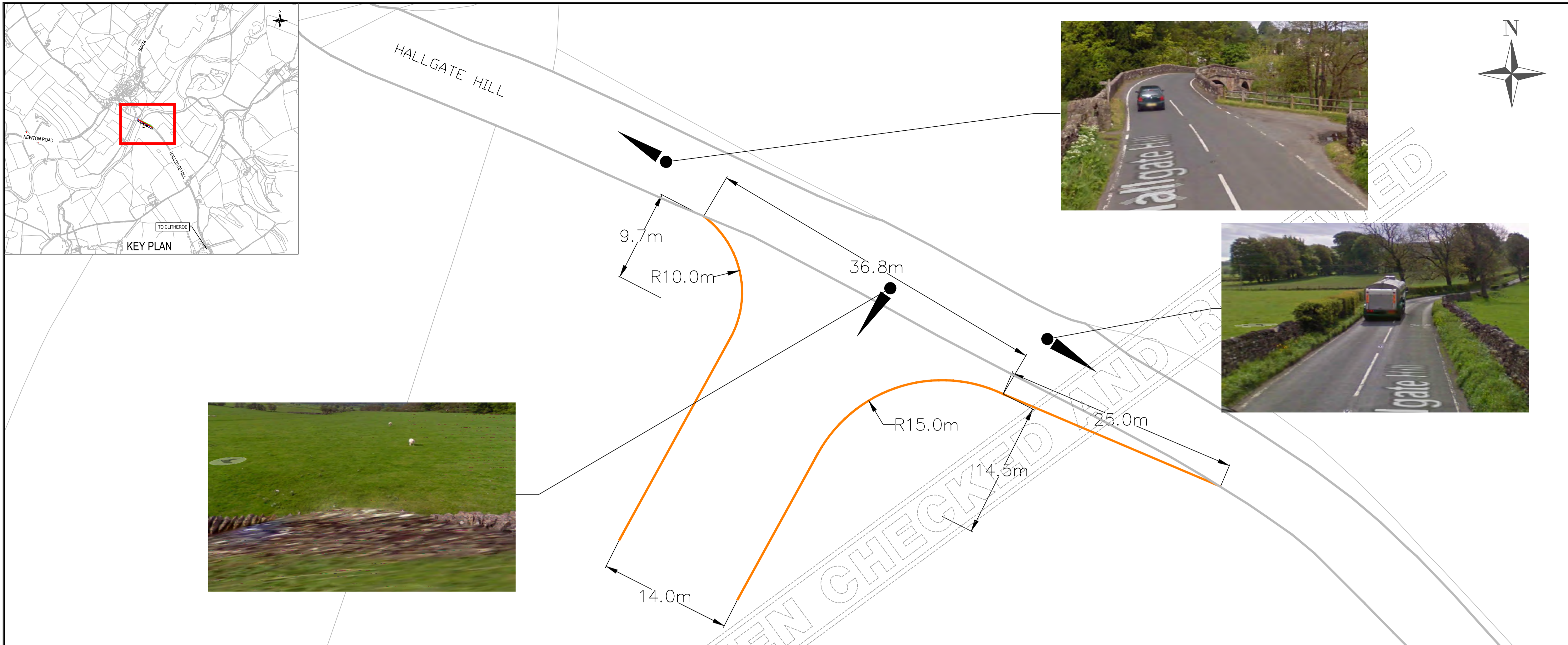
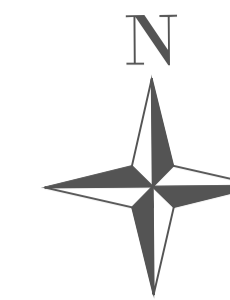
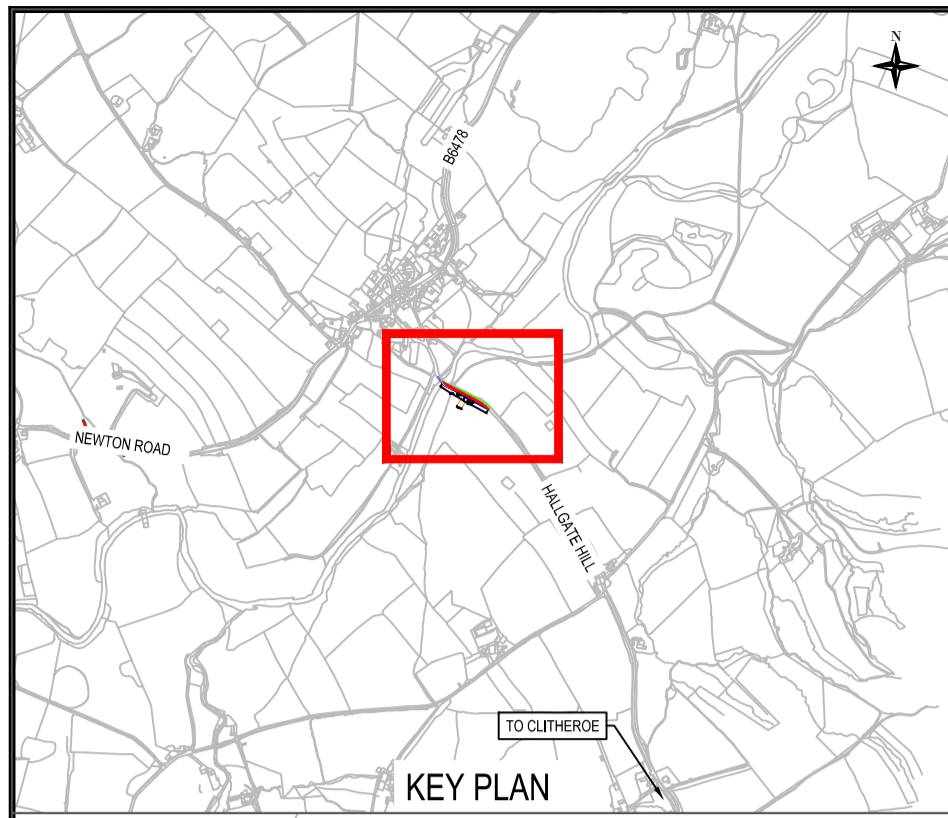
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DRAWING NUMBER B27070CQ-JAC-XX-DR-C-TR3_VT-1124	REVISION P01.1



MARK UP INFORMATION
RED - Item to modify
GREEN - Comment for CAD
BLUE - Modification complete
YELLOW - Item for clarification
Pen colours for print mark-ups



Volvo FH16 8x4 + Broshuis Blade Trailer 21.049m (without blade)
Overall Length 21.045m
Overall Width 3.050m
Overall Body Height 4.800m
Min Body Ground Clearance 0.515m
Track Width 3.000m
Lock to lock time 6.00s
Wall to Wall Turning Radius 9.800m



NOTES

- DO NOT SCALE FROM THIS DRAWING.
- TAKEN FROM CD 109 (TABLES 2.5 AND 2.10)

DESIRED VISIBILITY SPLAY	ACHIEVED VISIBILITY SPLAY
4.5m x 215m	4.5m x 70m

EXISTING SPEED LIMIT	PROPOSED SPEED LIMIT
60 mph	30 mph
- 70 METER VISIBILITY SPLAY IS ONE STEP BELOW IN TABLE 2.10 OF CD 109 DUE TO RESTRICTING FACTORS OF ROAD CURVATURE, EXISTING VEGETATION AND EXISTING OVERBRIDGE TO THE NORTH.
- VISIBILITY SPLAY (VALUE X) SET BACK 4.5m FROM EDGE OF CARRIAGEWAY

LEGEND

- EXISTING KERB
- PROPOSED KERB
- VISIBILITY SPLAY
- SSD ENVELOPE NORTHBOUND
- SSD ENVELOPE SOUTHBOUND

CURRENT ISSUE INFORMATION

P01.3	HS	SP	--	--	--
VERSION	AUTH	CHKD	REVD	REASON FOR ISSUE	DATE
S0		WORK IN PROGRESS (WIP)			
SUITABILITY CODE	SUITABILITY DESCRIPTION				



HAWESWATER AQUEDUCT RESILIENCE PROGRAMME
 PROPOSED BOWLAND SECTION
 TEMPORARY HAUL ROAD - HALLGATE HILL
 ACCESS DESIGN

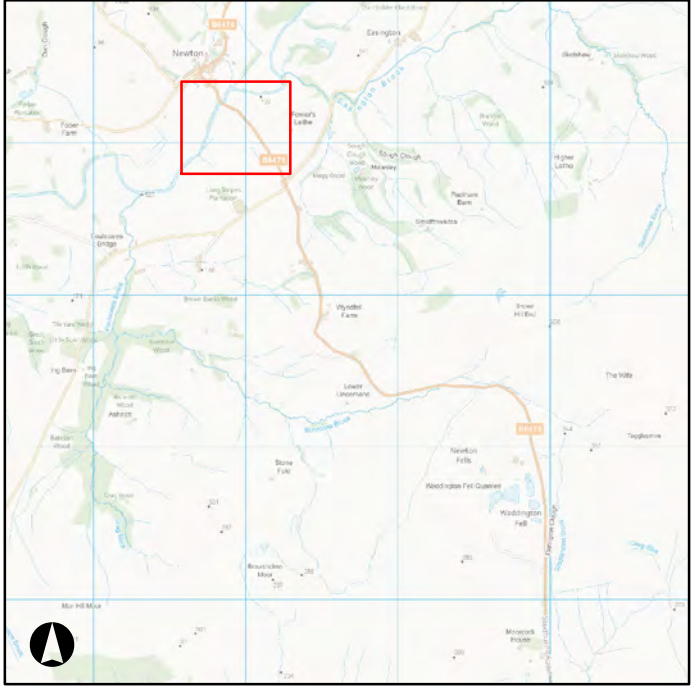
MARK UP INFORMATION
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 GREEN - Comment for CAD
 BLUE - Modification complete
 YELLOW - Item for clarification
 Pen colours for print mark-ups

SCALE 1:250 / 1:500	SHEET SIZE A1
DRAWING NUMBER B27070CQ-JAC-XX-DR-C-TR3_VS-1006	REVISION P01.3



APPENDIX B2 - PROPOSED JUNCTION

FIGURE B - 2 - 09

B6478 Hallgate Hill



WIDER AREA 0 0.275 0.55 1.1 Kilometers

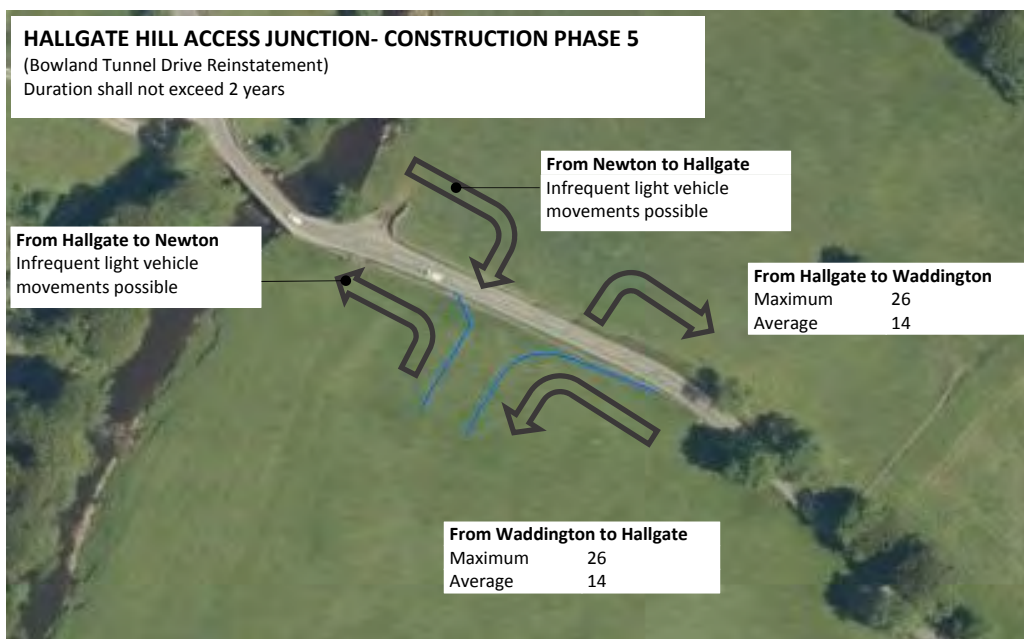
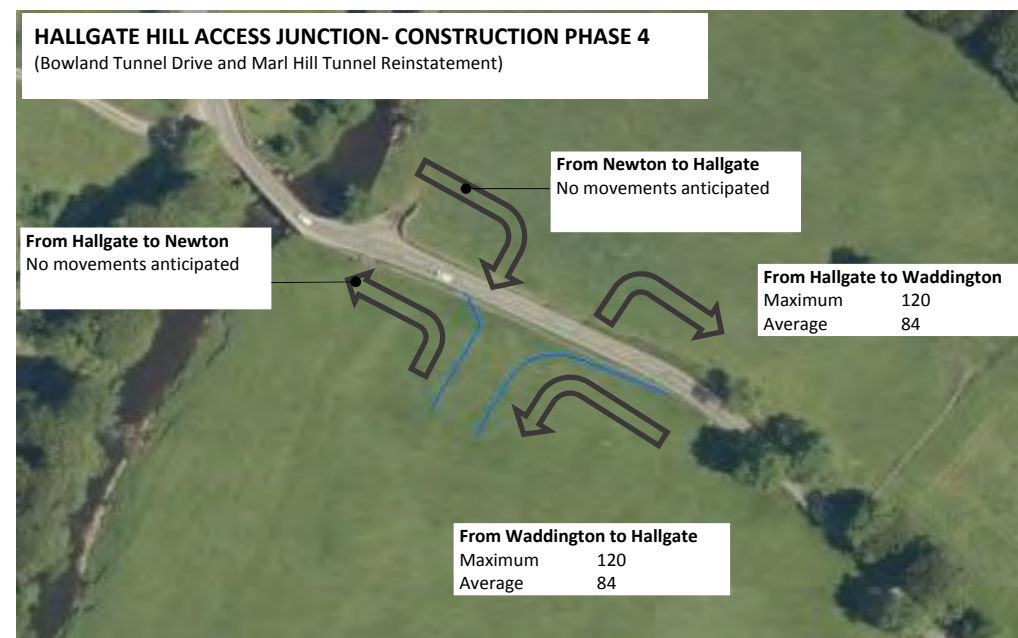
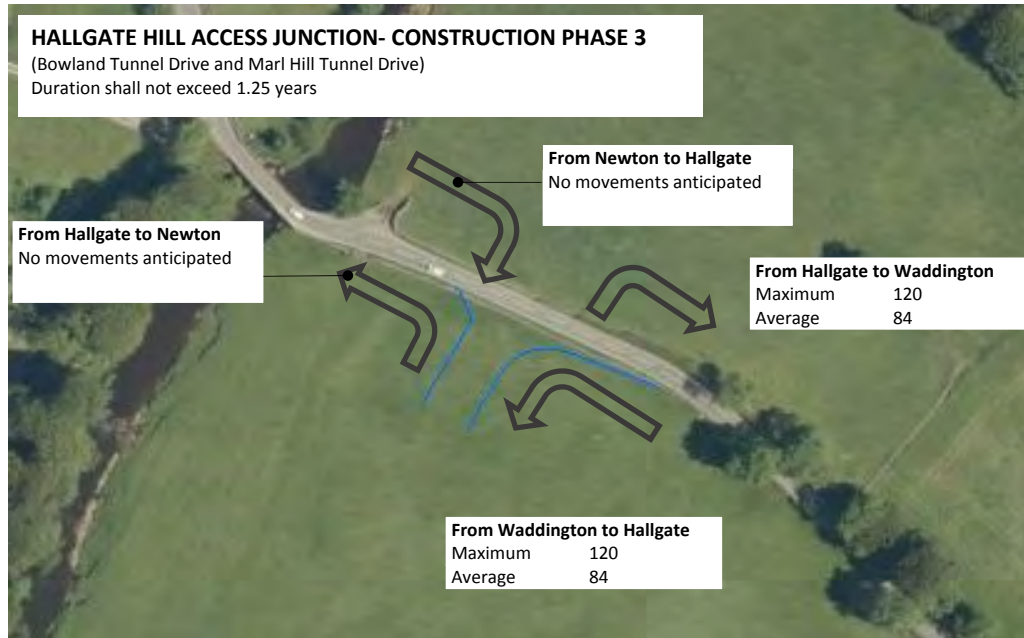
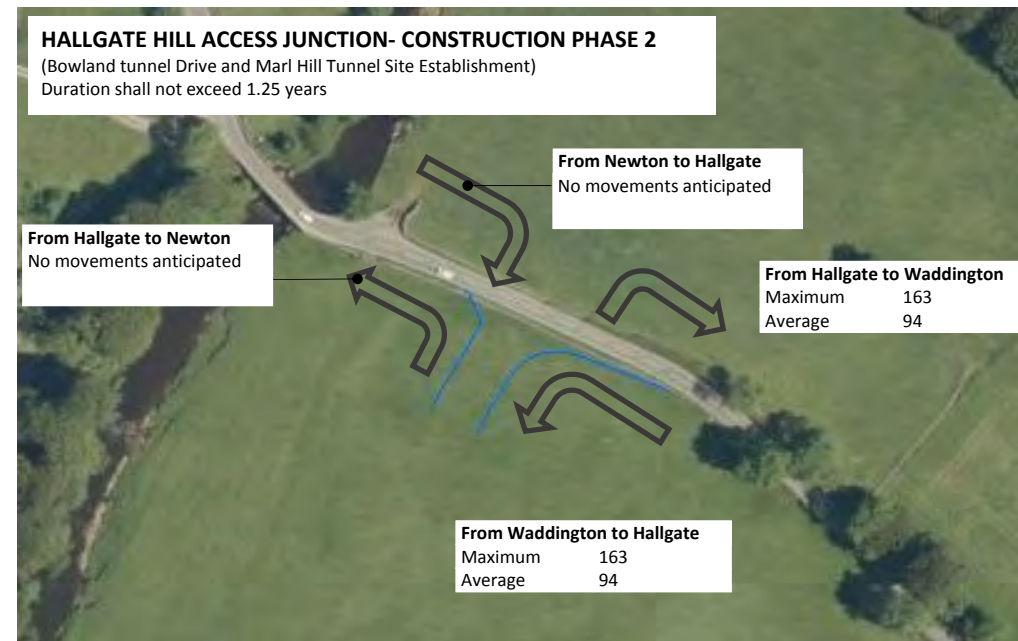
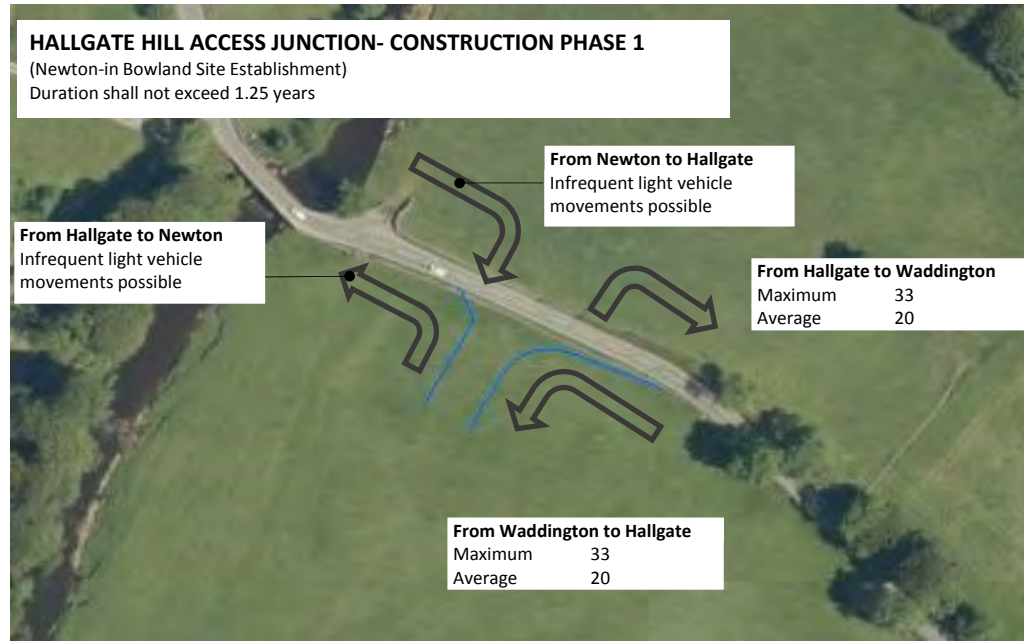
- Legend**
-  4.5m x 70m Visibility splay
 -  Proposed Junction



The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. United Utilities Water will not accept liability for any loss or damage caused by the actual position being different from those shown. Crown copyright and database rights 2017 Ordnance Survey 100022432.

APPENDIX B2 - FIGURE B-2-10

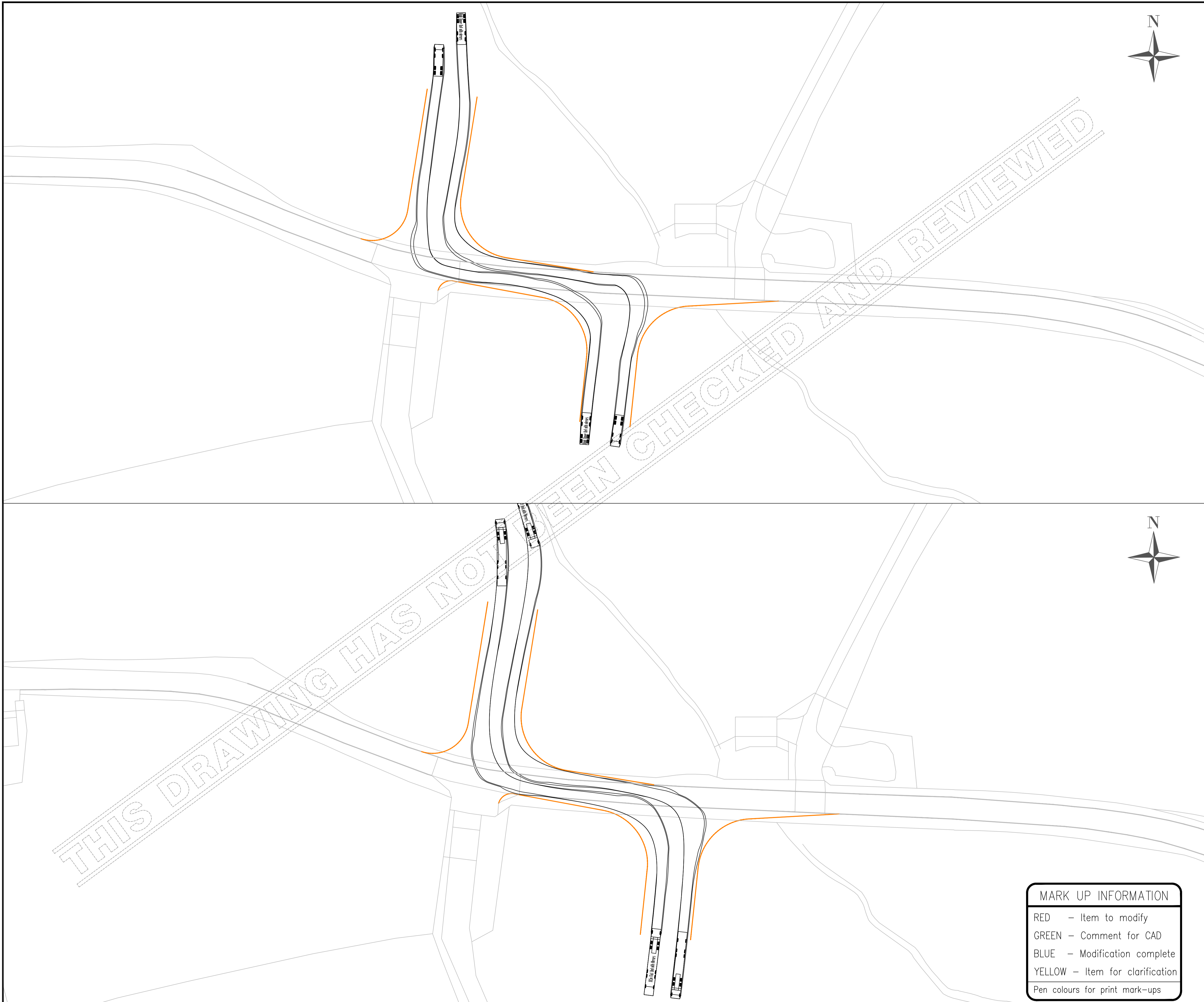
PROPOSED HALLGATE HILL JUNCTION DAILY MOVEMENTS



LEGEND


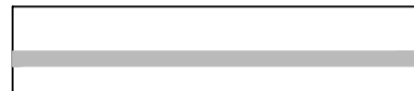
Average: averaged over 1 year and rounded to the nearest whole number the number of movements per day turning in shown direction

Maximum: the anticipated maximum number of movements on any single day turning in shown direction



- NOTES**
- DO NOT SCALE FROM THIS DRAWING
 - VEHICLE MEASUREMENTS

LEGEND

	PROPOSED KERB
	EXISTING KERB

CURRENT ISSUE INFORMATION

P01.1	HS	SP	--	--	-
VERSION	AUTH	CHKD	REVD	REASON FOR ISSUE	DATE
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SUITABILITY CODE		SUITABILITY DESCRIPTION			



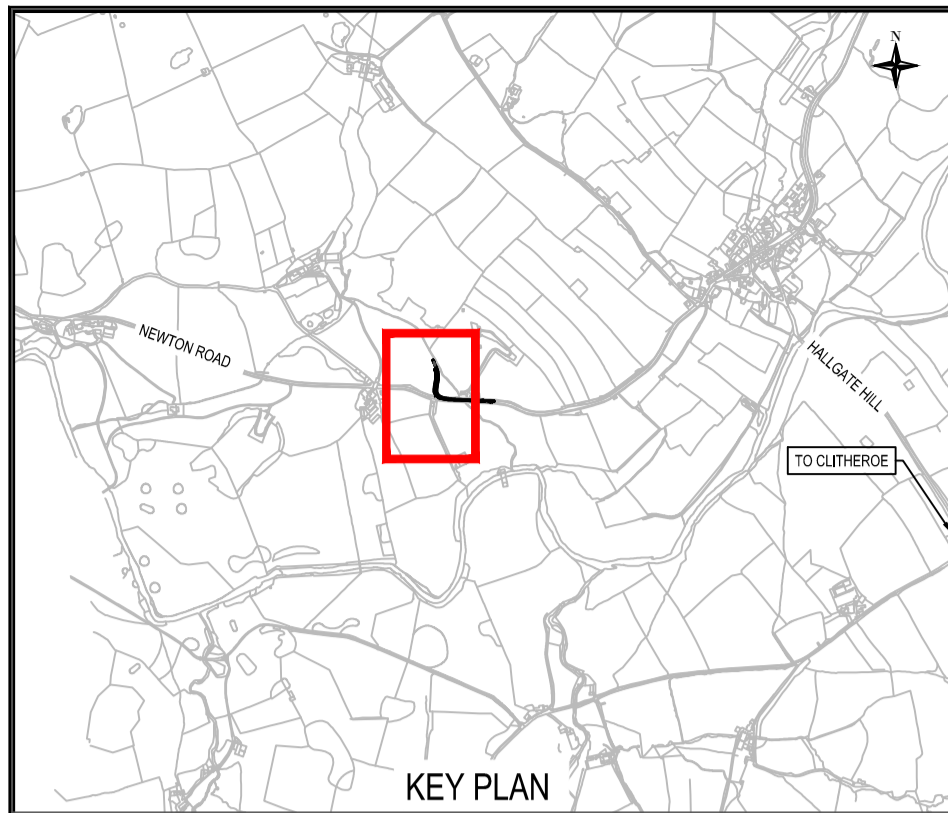
HAWESWATER AQUEDUCT RESILIENCE PROGRAMME

PROPOSED BOWLAND SECTION
 NEWTON-IN-BOWLAND COMPOUND
 VEHICLE ACROSS JUNCTION (STAGGERED)
 STANDARD VEHICLE TRACKING

MARK UP INFORMATION

RED – Item to modify
 GREEN – Comment for CAD
 BLUE – Modification complete
 YELLOW – Item for clarification
 Pen colours for print mark-ups

SCALE 1:500	SHEET SIZE A1
DRAWING NUMBER B27070CQ-JAC-XX-DR-C-TR3_VT-1108	REVISION P01.1



NOTES

- DO NOT SCALE FROM THIS DRAWING.
- TAKEN FROM CD 109 (TABLES 2.5 AND 2.10)

DESIRED VISIBILITY SPLAY	ACHIEVED VISIBILITY SPLAY
4.5m x 215m	4.5m x 120m
EXISTING SPEED LIMIT	PROPOSED SPEED LIMIT
60 mph	40 mph
- 120 METER VISIBILITY SPLAY IS ACHIEVABLE TO TABLE 2.10 OF CD 109 REQUIRING REMOVAL OF EXISTING VEGETATION. A REDUCED 40 MPH SECTION OF ROAD CAN ACHIEVE ADEQUATE VISIBILITY.
- VISIBILITY SPLAY (VALUE X) SET BACK 4.5m FROM EDGE OF CARRIAGEWAY

LEGEND

	EXISTING KERB
	PROPOSED KERB
	VISIBILITY SPLAY

CURRENT ISSUE INFORMATION

P01.2	HS	SP	--	--	--
VERSION	AUTH	CHKD	REVD	REASON FOR ISSUE	DATE
S0	WORK IN PROGRESS (WIP)				
SUITABILITY CODE	SUITABILITY DESCRIPTION				

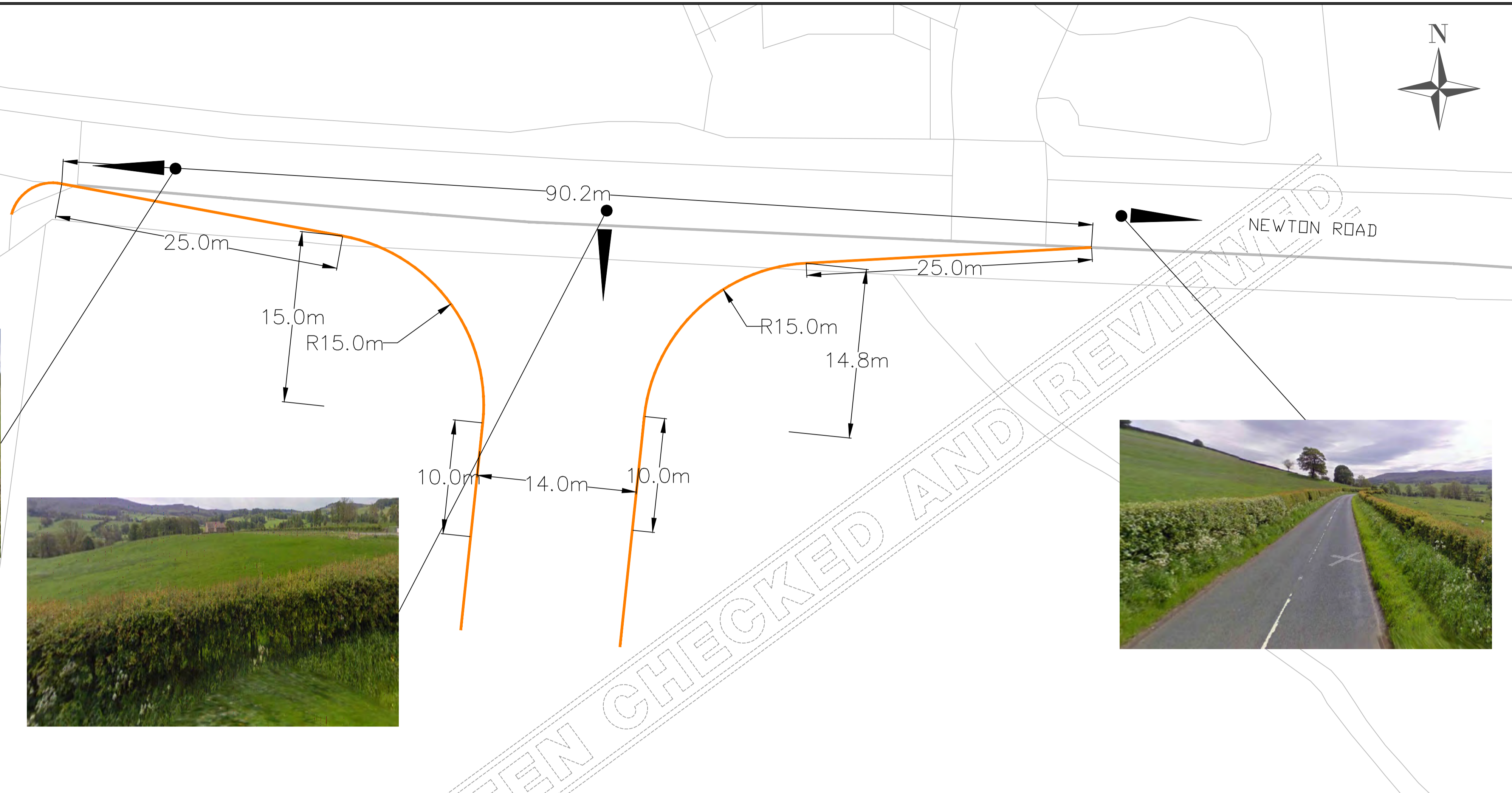
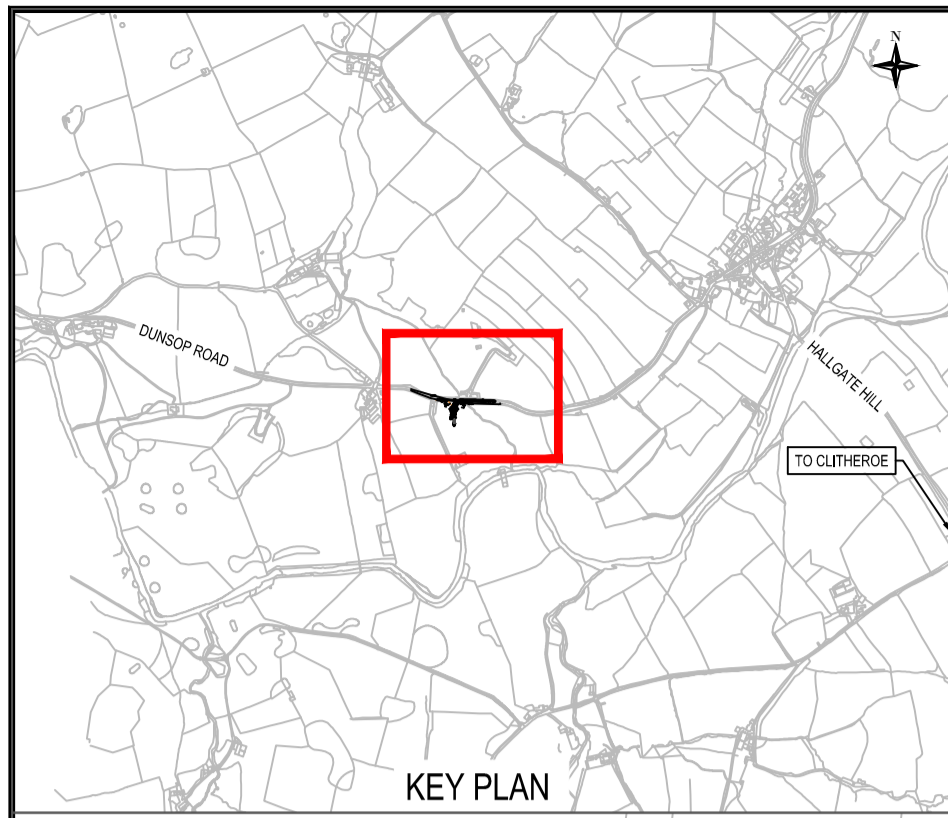


HAWESWATER AQUEDUCT RESILIENCE PROGRAMME
 PROPOSED BOWLAND SECTION
 NEWTON-IN-BOWLAND COMPOUND
 ACCESS DESIGN

MARK UP INFORMATION

- RED - Item to modify
- GREEN - Comment for CAD
- BLUE - Modification complete
- YELLOW - Item for clarification
- Pen colours for print mark-ups

SCALE 1:250 / 1:500	SHEET SIZE A1
DRAWING NUMBER B27070CQ-JAC-XX-DR-C-TR3_VS-1002	REVISION P01.2



NOTES

- DO NOT SCALE FROM THIS DRAWING.
 - TAKEN FROM CD 109 (TABLES 2.5 AND 2.10)
- | | |
|--------------------------|---------------------------|
| DESIRED VISIBILITY SPLAY | ACHIEVED VISIBILITY SPLAY |
| 4.5m x 215m | 4.5m x 120m |
| EXISTING SPEED LIMIT | PROPOSED SPEED LIMIT |
| 60 mph | 40 mph |
- 120 METER VISIBILITY SPLAY IS ACHIEVABLE TO TABLE 2.10 OF CD 109 REQUIRING REMOVAL OF EXISTING VEGETATION. A REDUCED 40 MPH SECTION OF ROAD CAN ACHIEVE ADEQUATE VISIBILITY.
 - VISIBILITY SPLAY (VALUE X) SET BACK 4.5m FROM EDGE OF CARRIAGEWAY

LEGEND

	EXISTING KERB
	PROPOSED KERB
	VISIBILITY SPLAY

CURRENT ISSUE INFORMATION

P01.2	HS	SP	--	--	--
VERSION	AUTH	CHKD	REVD	REASON FOR ISSUE	DATE
SO	WORK IN PROGRESS (WIP)				
SUITABILITY CODE	SUITABILITY DESCRIPTION				



HAWESWATER AQUEDUCT RESILIENCE PROGRAMME
 PROPOSED BOWLAND SECTION
 NEWTON-IN-BOWLAND COMPOUND SOUTH
 ACCESS DESIGN

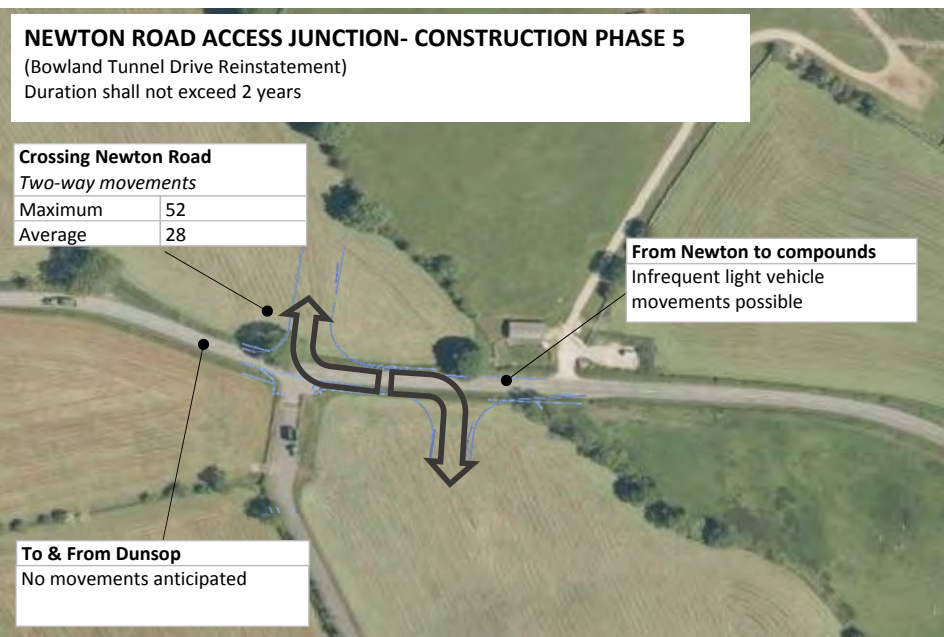
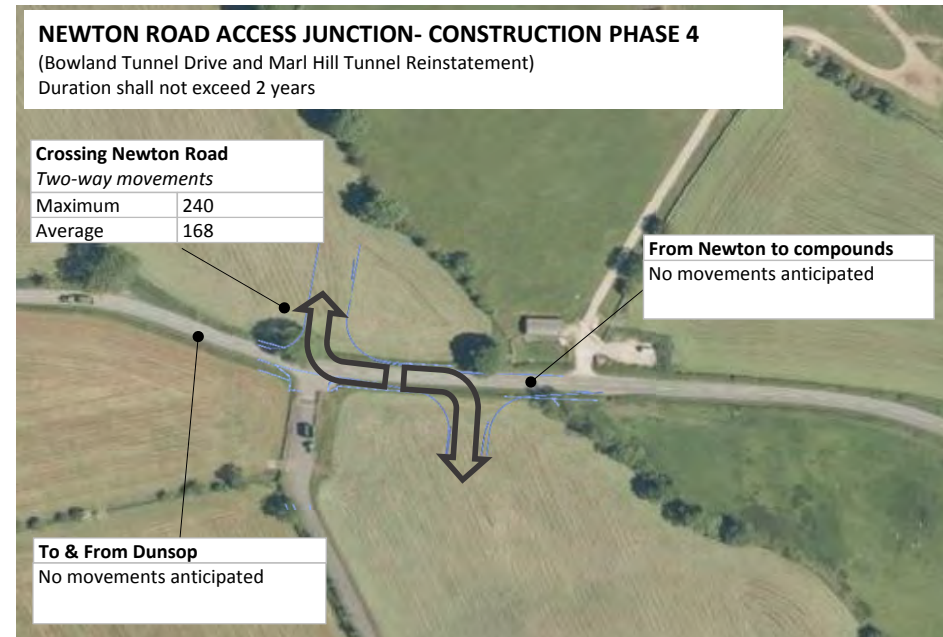
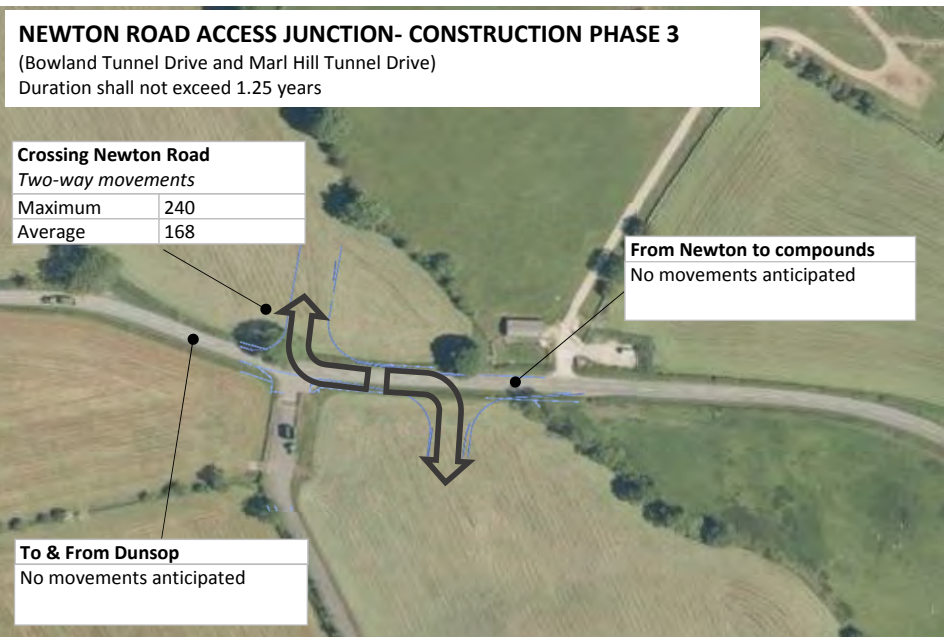
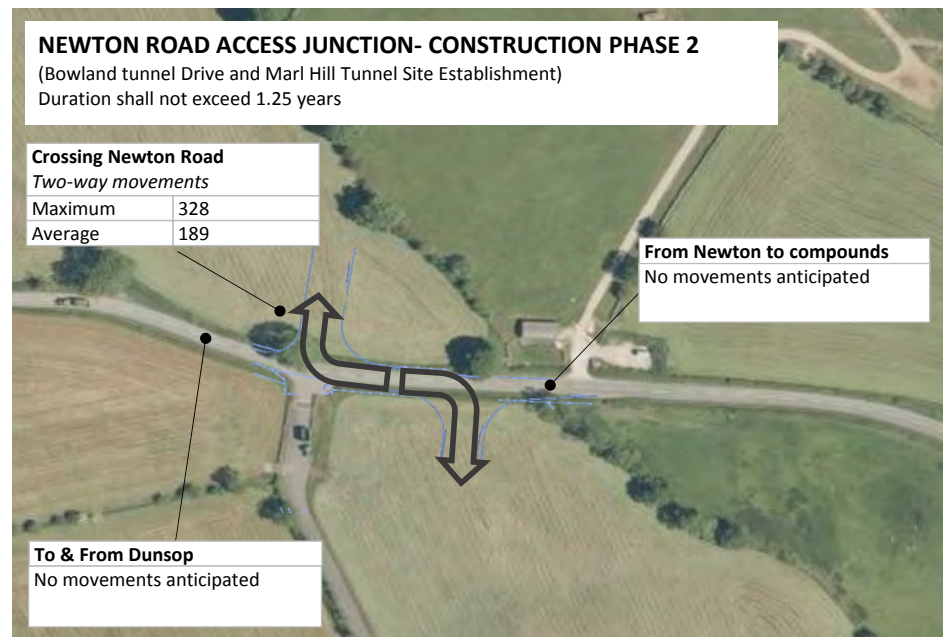
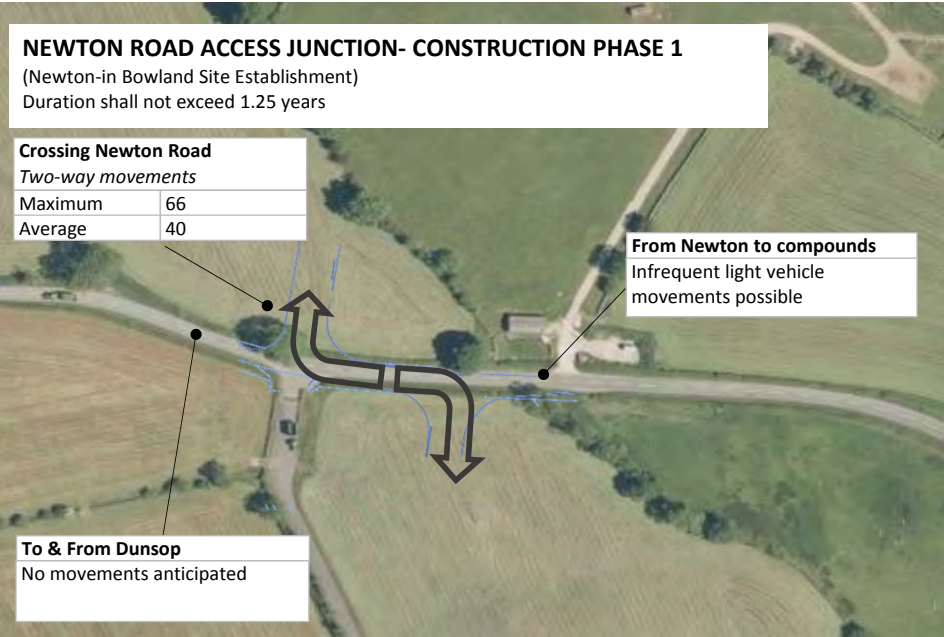
MARK UP INFORMATION

- RED - Item to modify
 - GREEN - Comment for CAD
 - BLUE - Modification complete
 - YELLOW - Item for clarification
- Pen colours for print mark-ups

SCALE 1:250 / 1:500	SHEET SIZE A1
DRAWING NUMBER B27070CQ-JAC-XX-DR-C-TR3_VS-1003	REVISION P01.2

APPENDIX B2 - FIGURE B-2-14

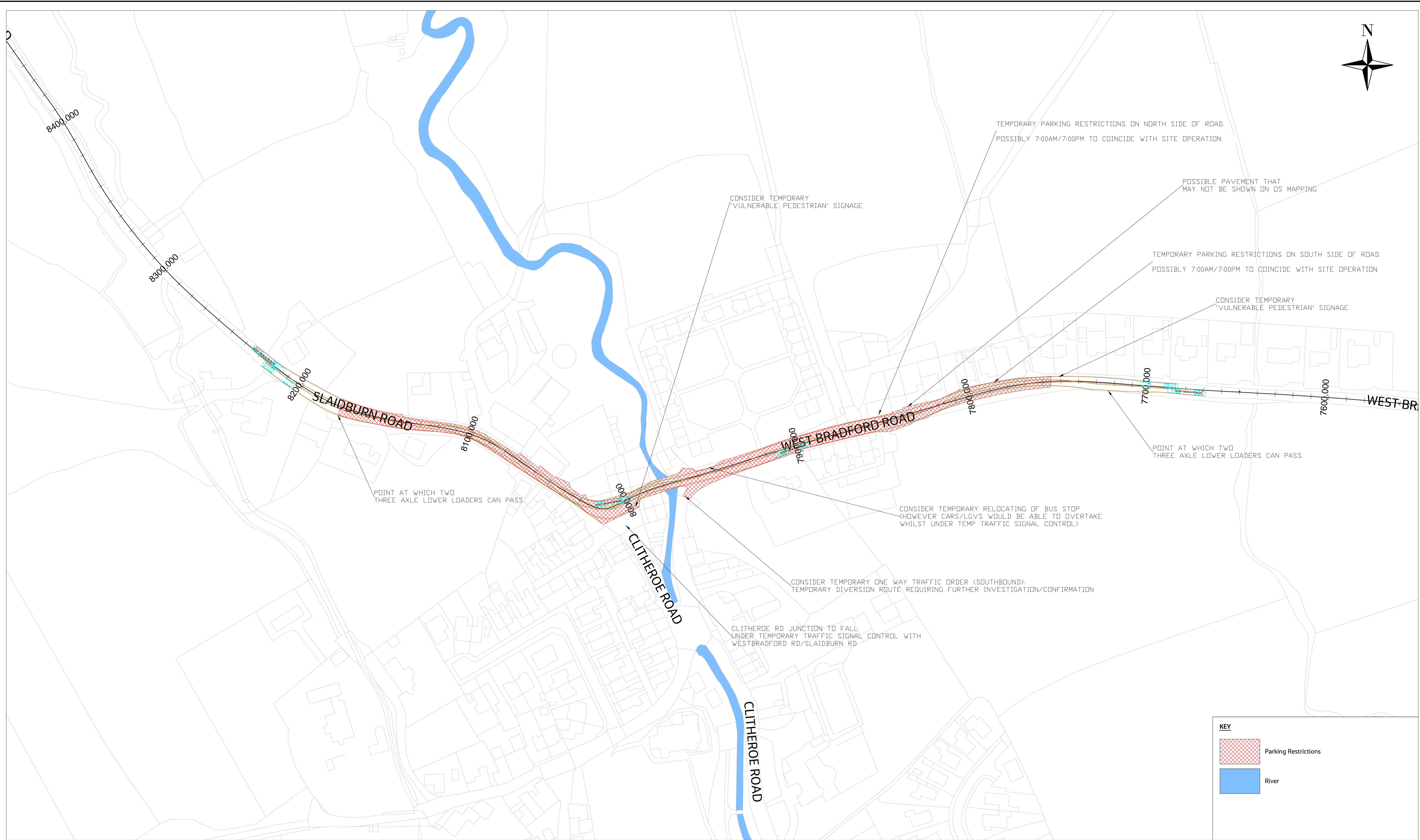
PROPOSED NEWTON ROAD JUNCTION DAILY MOVEMENTS



LEGEND

Average: averaged over 1 year and rounded to the nearest whole number the number of movements per day turning in shown direction

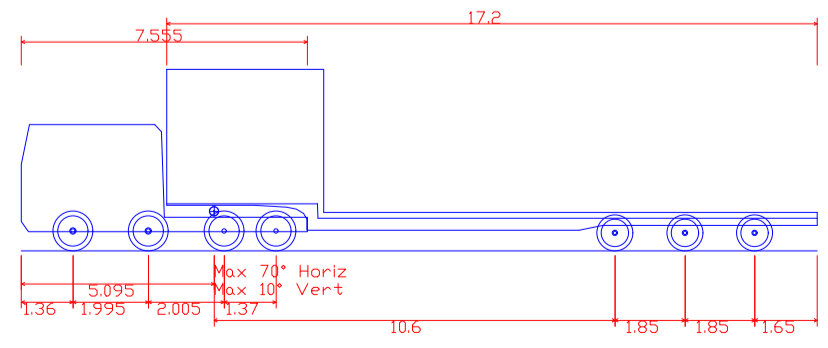
Maximum: the anticipated maximum number of movements on any single day turning in shown direction



KEY

	Parking Restrictions
	River

M:\Projects\Transport\Projects\B27070BW - Haweswater Aqueduct Renewal\5. Project Work\5. Drawings & OS Tiles\1 - Swept path Analysis\5. Working



Volvo FH16 8x4 + Broshuis Blade Trailer 21.049m (without blade)

Overall Length	21.045m
Overall Width	3.050m
Overall Body Height	4.800m
Min Body Ground Clearance	0.510m
Track Width	3.000m
Lock to lock time	6.00s
Wall to wall Turning Radius	9.800m

Rev	Rev. Date	Purpose of revision	Orig	Check'd	Rev'd	Apprv'd
P01	2021-02-09		HS	SP	SP	

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Client: **United Utilities**

Project: **Haweswater Aqueduct Resilience Programme**

Drawing title:
PROPOSED BOWLAND SECTION
BRADDUP, BONSTONE & NEWTON COMPOUNDS
MITIGATION MEASURES - WADDINGTON
WEST BRADFORD RD TO SLAIDBURN RD

Drawing status: **DRAFT** Suitability: **SO**

Scale: 1:1000 @ A1 DO NOT SCALE

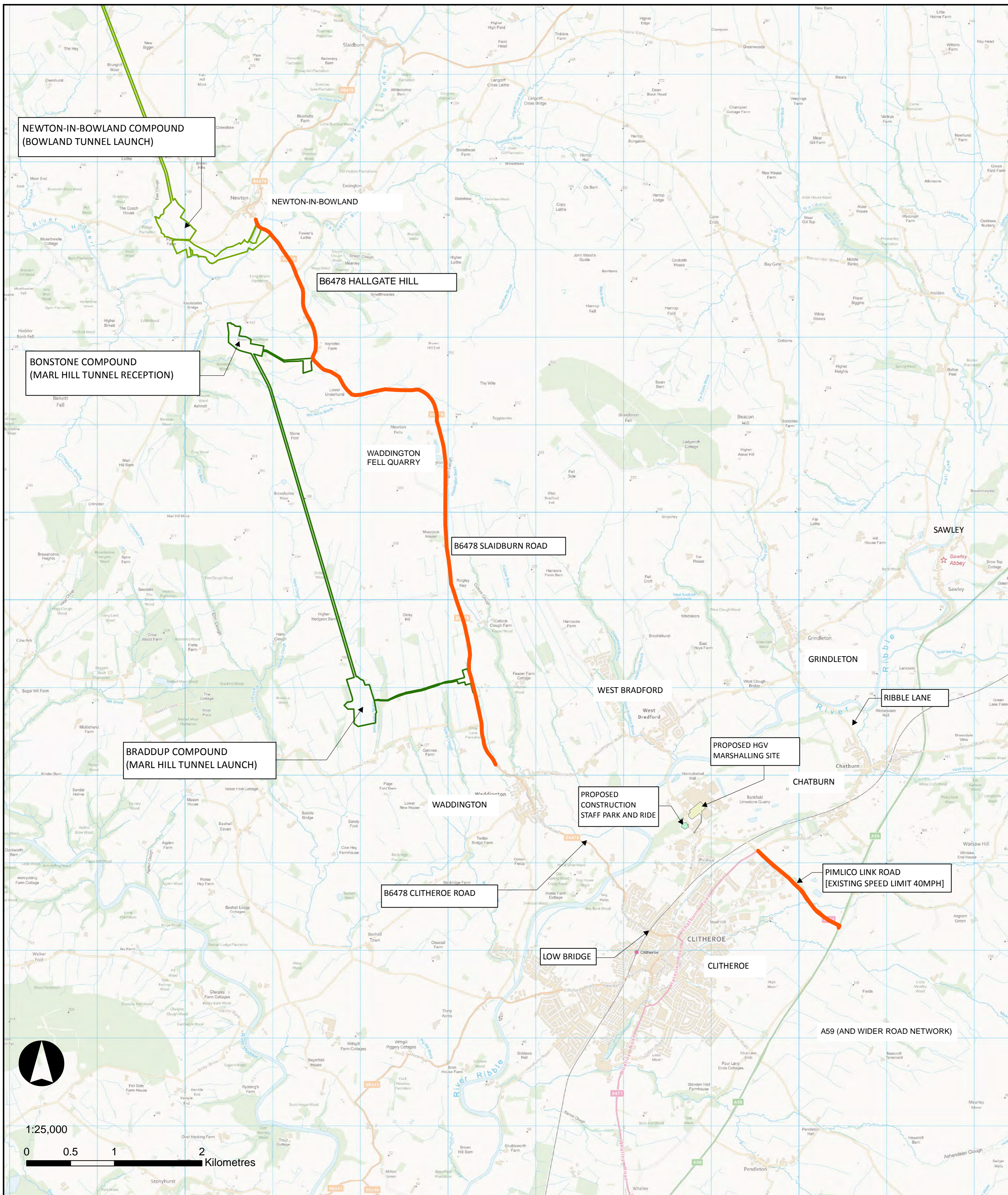
Jacobs No. B27070CQ Rev

Client No. **P01**

Drawing number:
B27070CQ-JAC-XX-DR-C-TR4_MIT-0001

APPENDIX B2

FIGURE B-2-16: PROPOSED SPEED LIMITS

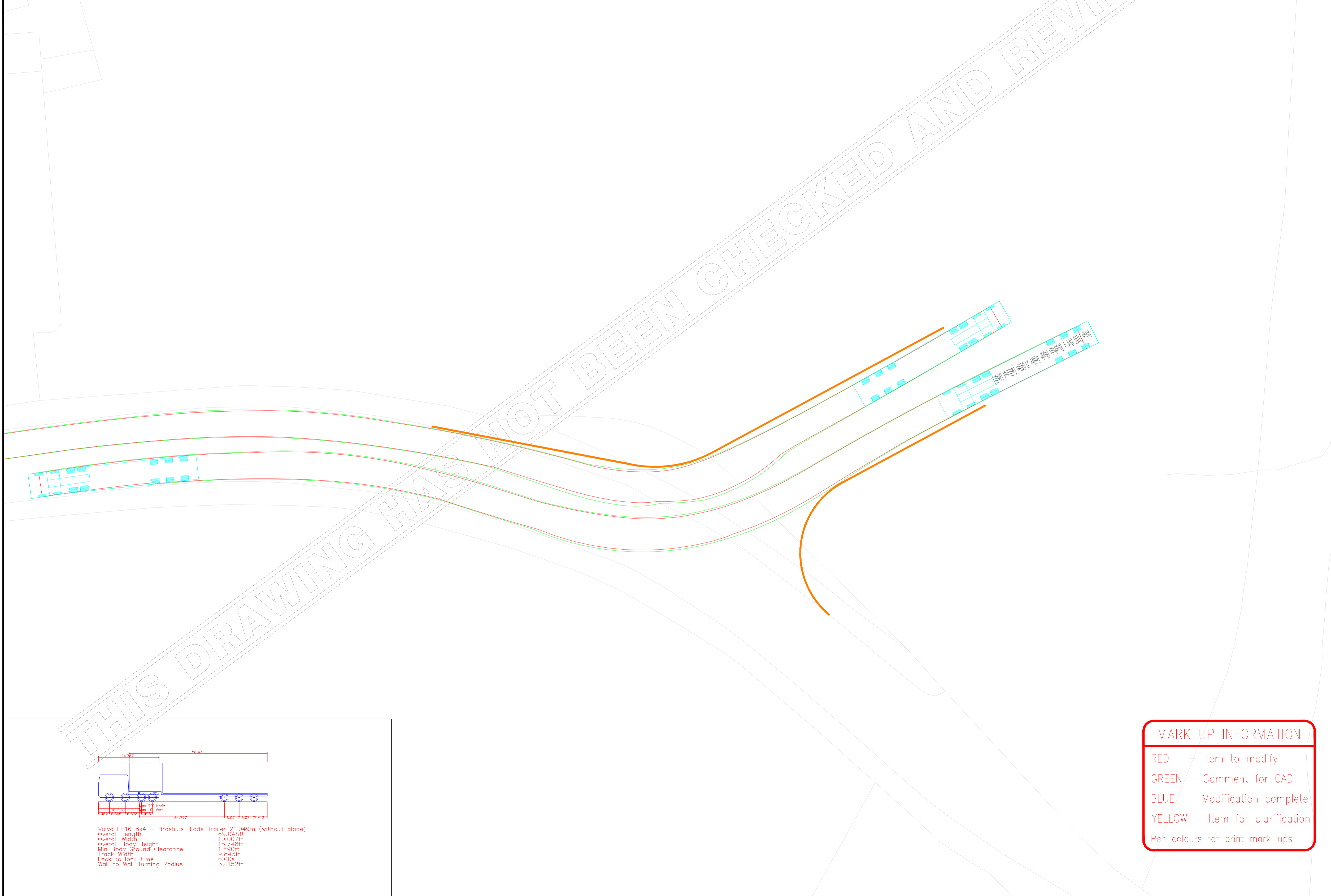
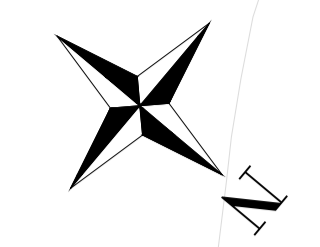
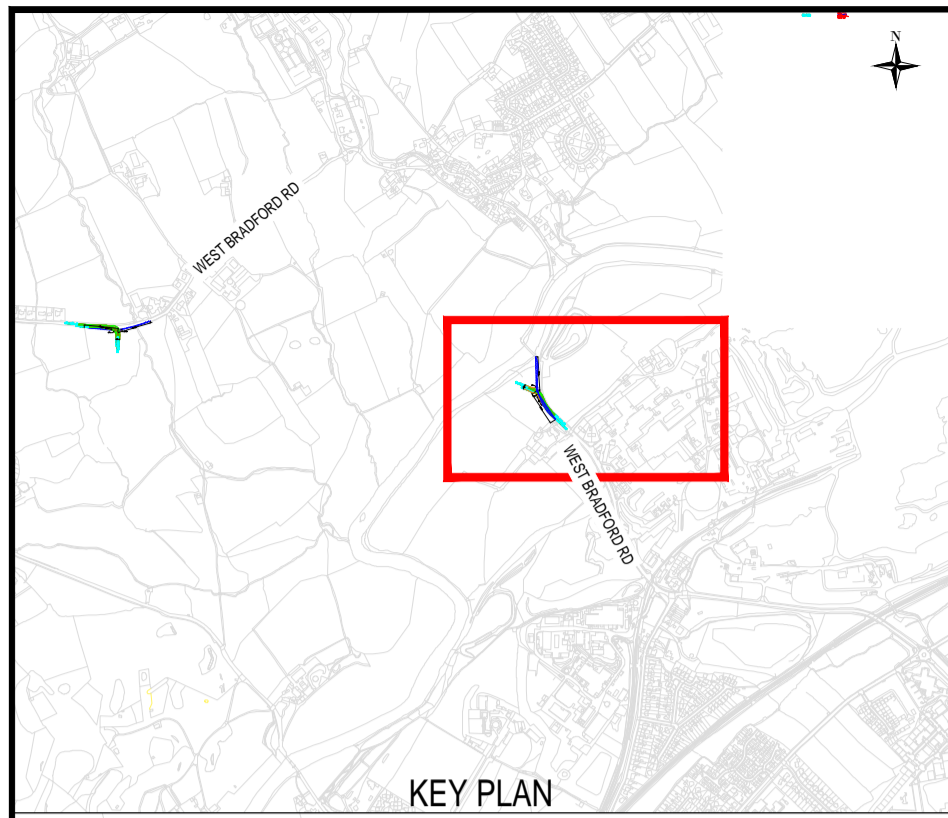


The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. United Utilities Water will not accept liability for any loss or damage caused by the actual position being different from those shown. Crown copyright and database rights 2017 Ordnance Survey 100022432.

Legend	
	PROPOSED 30MPH SPEED LIMIT
	PROPOSED CONSTRUCTION STAFF AND VISITOR PARK AND RIDE SITE
	PROPOSED HGV MARSHALLING AND HOLDING AREA
	PROPOSED BOWLAND TUNNEL DEVELOPMENT AREA
	PROPOSED MARL HILL TUNNEL DEVELOPMENT AREA

NOTES:

EXISTING SPEED LIMIT WHERE CHANGES ARE PROPOSED IS NATIONAL SPEED LIMIT UNLESS OTHERWISE STATED



NOTES
1. DO NOT SCALE FROM THIS DRAWING.

LEGEND

	EXISTING KERB
	PROPOSED KERB

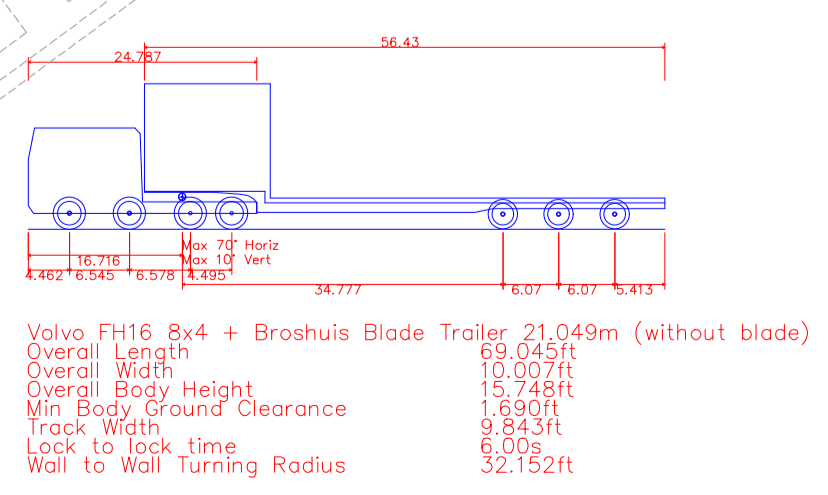
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SUITABILITY CODE	SUITABILITY DESCRIPTION				

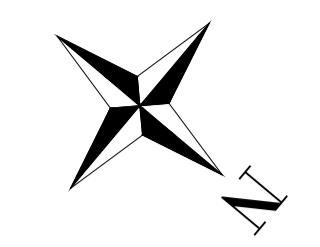
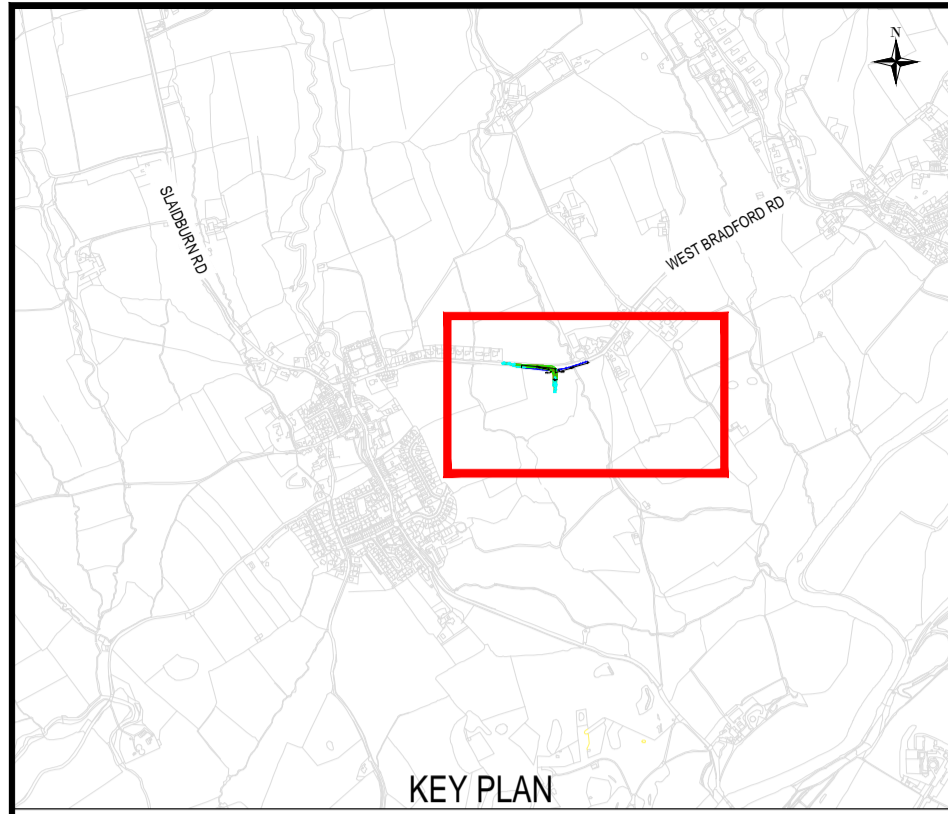


HAVESWATER AQUEDUCT RESILIENCE PROGRAMME
 PROPOSED CLITHEROE SECTION
 RIVER RIBBLE HAUL RD
 ACCESS DESIGN - BEFORE RIVER RIBBLE (A59, PIMLICO LINK RD, WEST BRADFORD RD)
 VEHICLE TRACKING - THREE AXLE LOW LOADER

MARK UP INFORMATION
 RED - Item to modify
 GREEN - Comment for CAD
 BLUE - Modification complete
 YELLOW - Item for clarification
 Pen colours for print mark-ups



SCALE 1:500	SHEET SIZE A1
DRAWING NUMBER B27070CQ-JAC-XX-DR-C-TR4_VT-1130	REVISION P01.2



NOTES
1. DO NOT SCALE FROM THIS DRAWING.

LEGEND

	EXISTING KERB
	PROPOSED KERB

CURRENT ISSUE INFORMATION

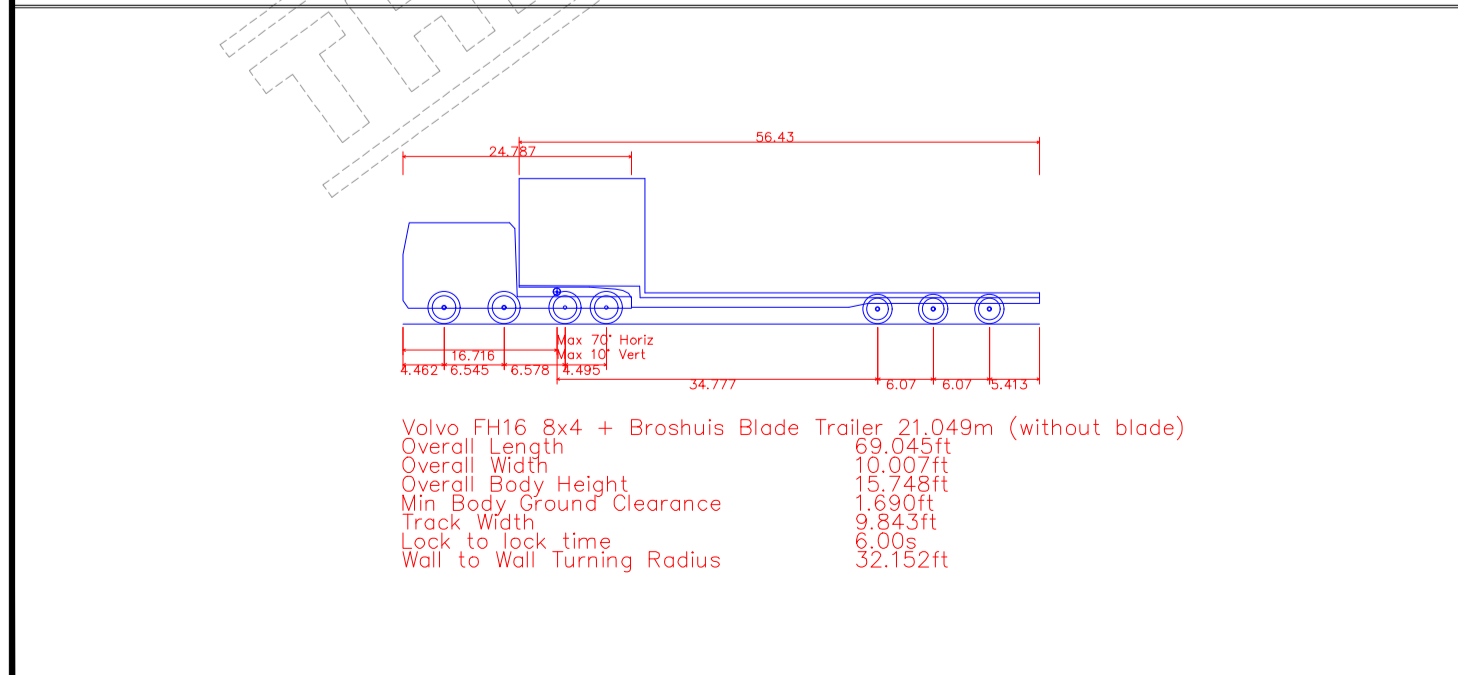
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SUITABILITY CODE	SUITABILITY DESCRIPTION				

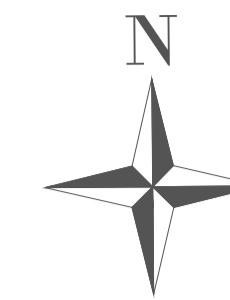
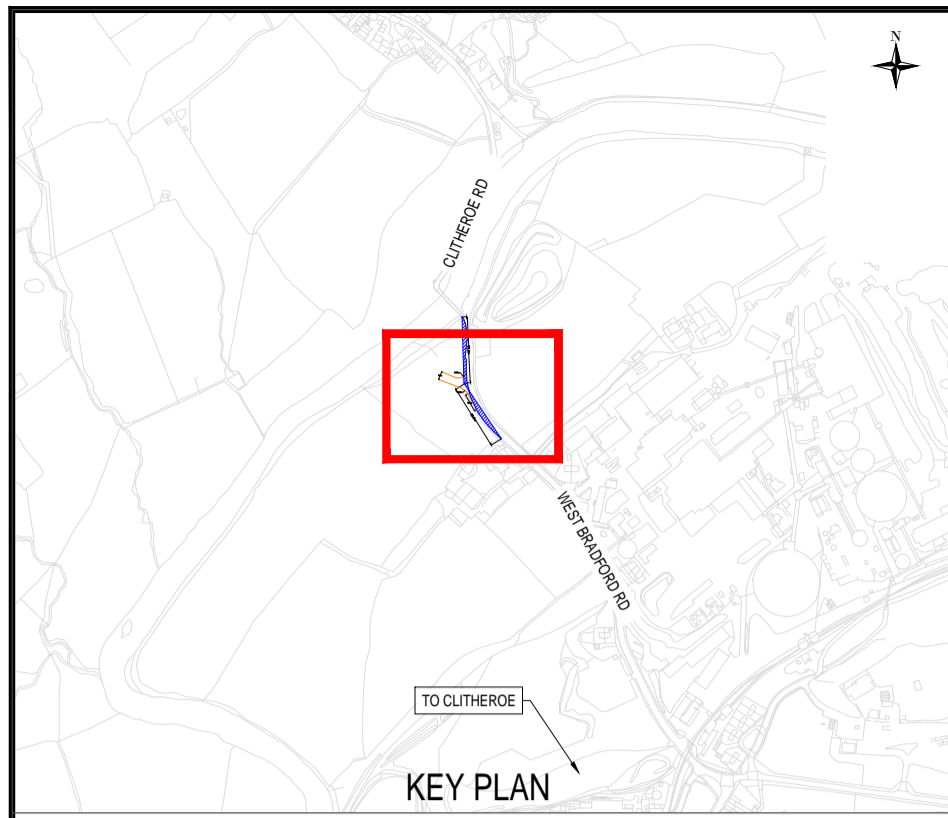


HAWESWATER AQUEDUCT RESILIENCE PROGRAMME
 PROPOSED CLITHEROE SECTION
 RIVER RIBBLE HAUL RD
 ACCESS DESIGN - AFTER RIVER RIBBLE (WEST BRADFORD RD, WADDINGTON VILLAGE, SLAIDBURN RD)
 VEHICLE TRACKING - THREE AXLE LOW LOADER

MARK UP INFORMATION
 RED - Item to modify
 GREEN - Comment for CAD
 BLUE - Modification complete
 YELLOW - Item for clarification
 Pen colours for print mark-ups

SCALE 1:500	SHEET SIZE A1
DRAWING NUMBER B27070CQ-JAC-XX-DR-C-TR4_VT-1132	REVISION P01.1





NOTES

- DO NOT SCALE FROM THIS DRAWING.
- TAKEN FROM CD 109 (TABLES 2.5 AND 2.10)

DESIRED VISIBILITY SPLAY	ACHIEVED VISIBILITY SPLAY
4.5m x 215m	4.5m x 120m
EXISTING SPEED LIMIT	PROPOSED SPEED LIMIT
60 mph	40 mph
- 120 METER VISIBILITY SPLAY IS APPLICABLE FROM TABLE 2.10 OF CD 109 DUE TO RESTRICTING FACTORS OF ROAD CURVATURE AND EXISTING VEGETATION. A REDUCED 40 MPH SECTION OF ROAD CAN ACHIEVE ADEQUATE VISIBILITY.
- VISIBILITY SPLAY (VALUE X) SET BACK 4.5m FROM EDGE OF CARRIAGEWAY

LEGEND

	EXISTING KERB
	PROPOSED KERB
	VISIBILITY SPLAY

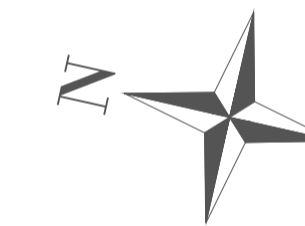
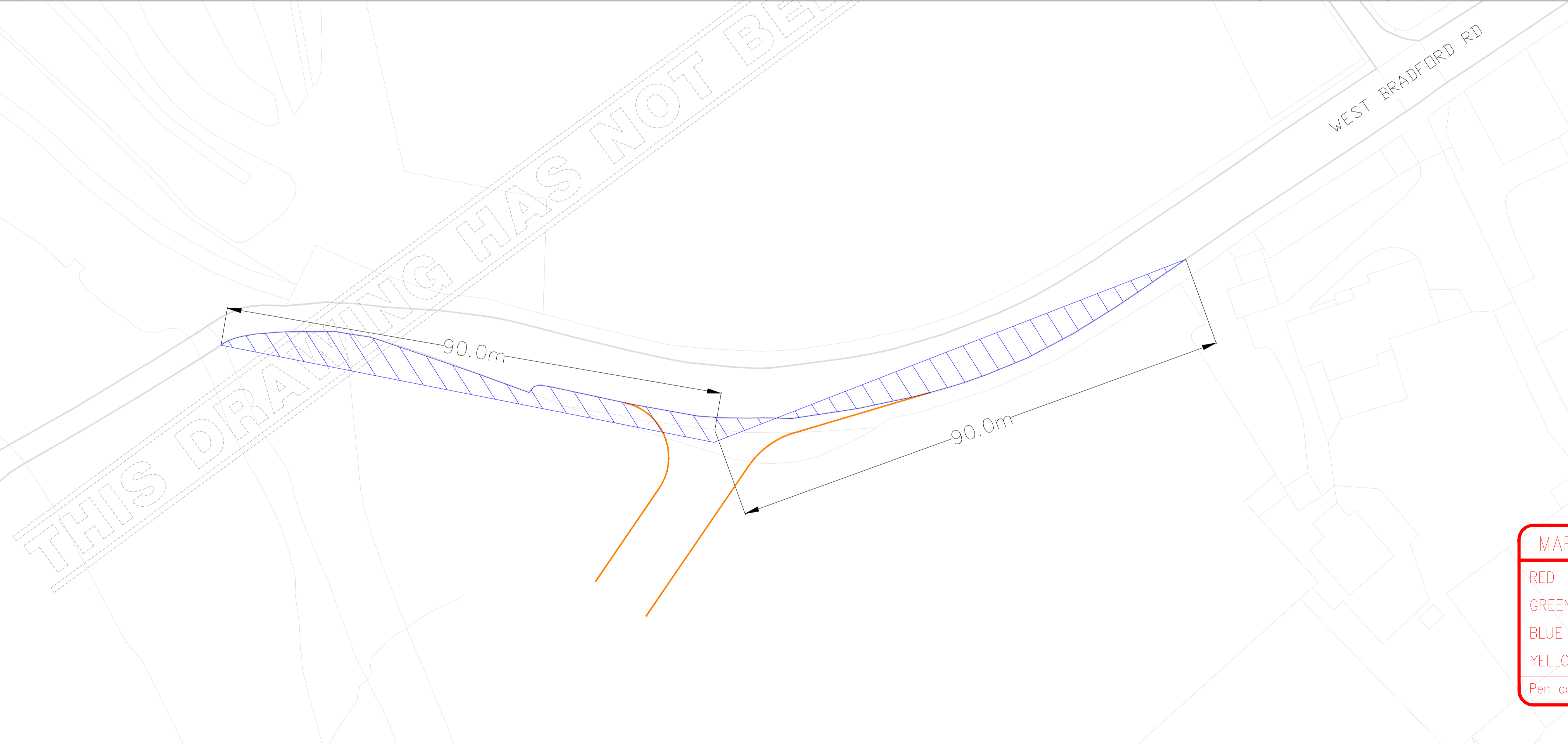
CURRENT ISSUE INFORMATION

P01.2	HS	SP	--	--	--
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SUITABILITY CODE		SUITABILITY DESCRIPTION			

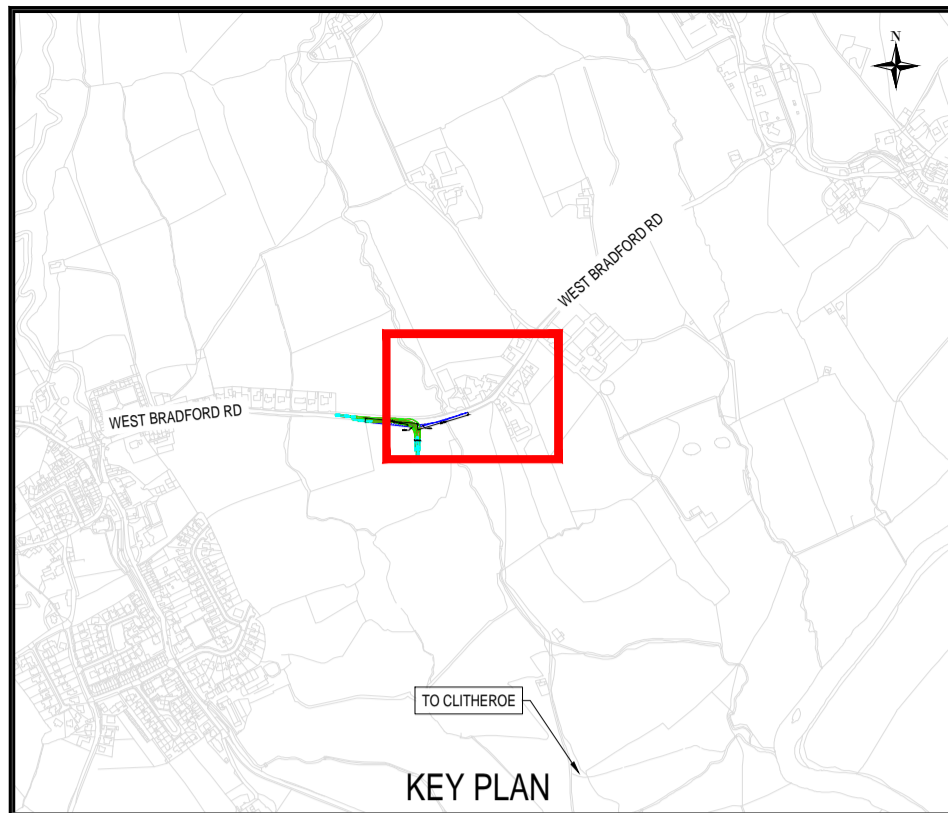


HAWESWATER AQUEDUCT RESILIENCE PROGRAMME
 PROPOSED CLITHEROE SECTION
 RIVER RIBBLE HAUL RD
 ACCESS DESIGN - BEFORE RIVER RIBBLE
 A59, PIMLICO LINK RD, WEST BRADFORD

MARK UP INFORMATION
 RED - Item to modify
 GREEN - Comment for CAD
 BLUE - Modification complete
 YELLOW - Item for clarification
 Pen colours for print mark-ups



SCALE 1:250 / 1:500	SHEET SIZE A1
DRAWING NUMBER B27070CQ-JAC-XX-DR-C-TR4_VS-1010	REVISION P01.2



NOTES

- DO NOT SCALE FROM THIS DRAWING.
- TAKEN FROM CD 109 (TABLES 2.5 AND 2.10)

DESIRED VISIBILITY SPLAY	ACHIEVED VISIBILITY SPLAY
4.5m x 215m	4.5m x 120m
EXISTING SPEED LIMIT	PROPOSED SPEED LIMIT
60 mph	40 mph

- 120 METER VISIBILITY SPLAY IS APPLICABLE FROM TABLE 2.10 OF CD 109 DUE TO RESTRICTING FACTORS OF ROAD CURVATURE AND EXISTING VEGETATION. A REDUCED 40 MPH SECTION OF ROAD CAN ACHIEVE ADEQUATE VISIBILITY.
- VISIBILITY SPLAY (VALUE X) SET BACK 4.5m FROM EDGE OF CARRIAGEWAY

LEGEND

	EXISTING KERB
	PROPOSED KERB
	VISIBILITY SPLAY

CURRENT ISSUE INFORMATION

P01.1	HS	SP	--	--	--
VERSION	AUTH	CHKD	REVD	REASON FOR ISSUE	DATE
S0	WORK IN PROGRESS (WIP)				
SUITABILITY CODE	SUITABILITY DESCRIPTION				



MARK UP INFORMATION

RED - Item to modify
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 BLUE - Modification complete
 YELLOW - Item for clarification
 Pen colours for print mark-ups

HAWESWATER AQUEDUCT RESILIENCE PROGRAMME

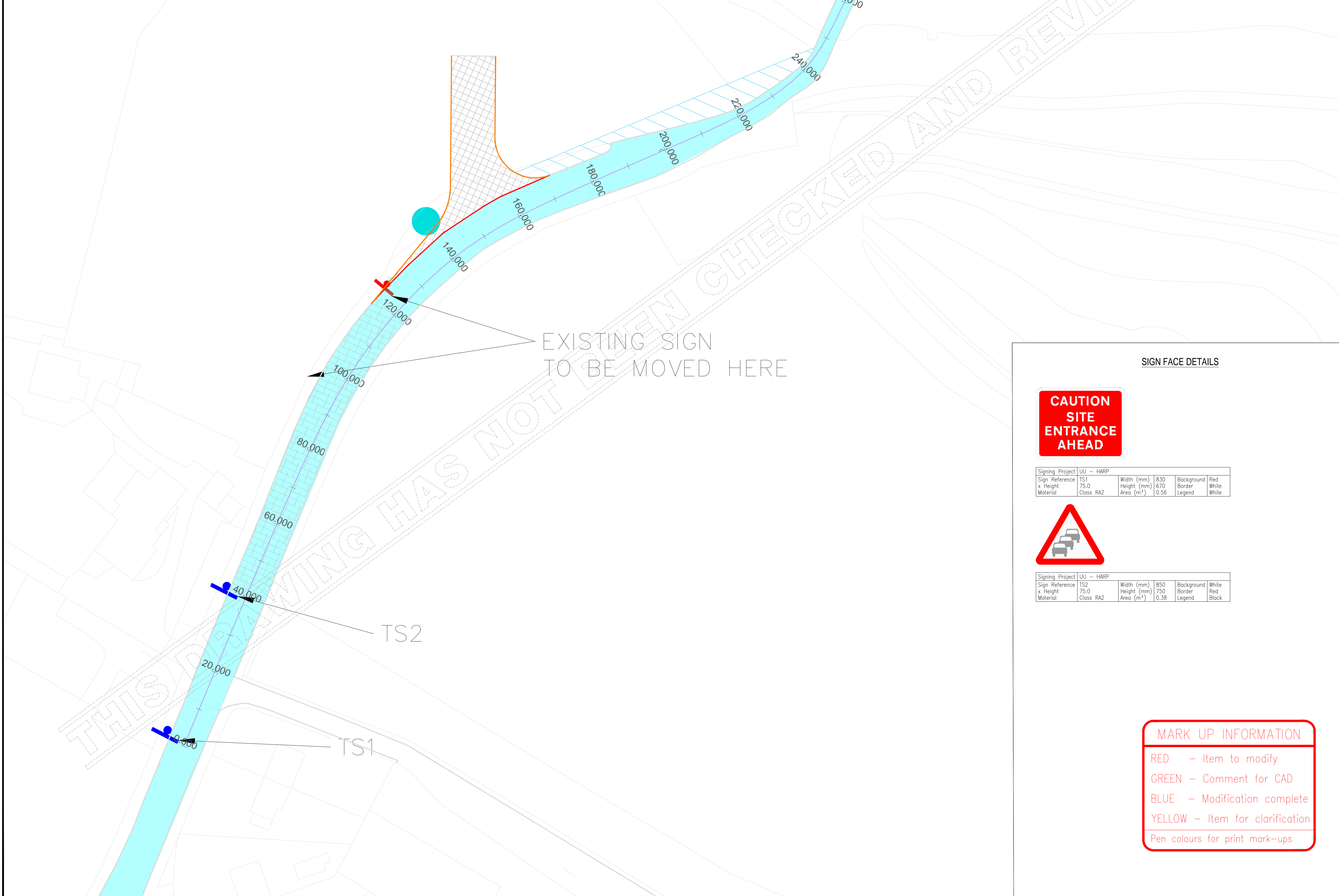
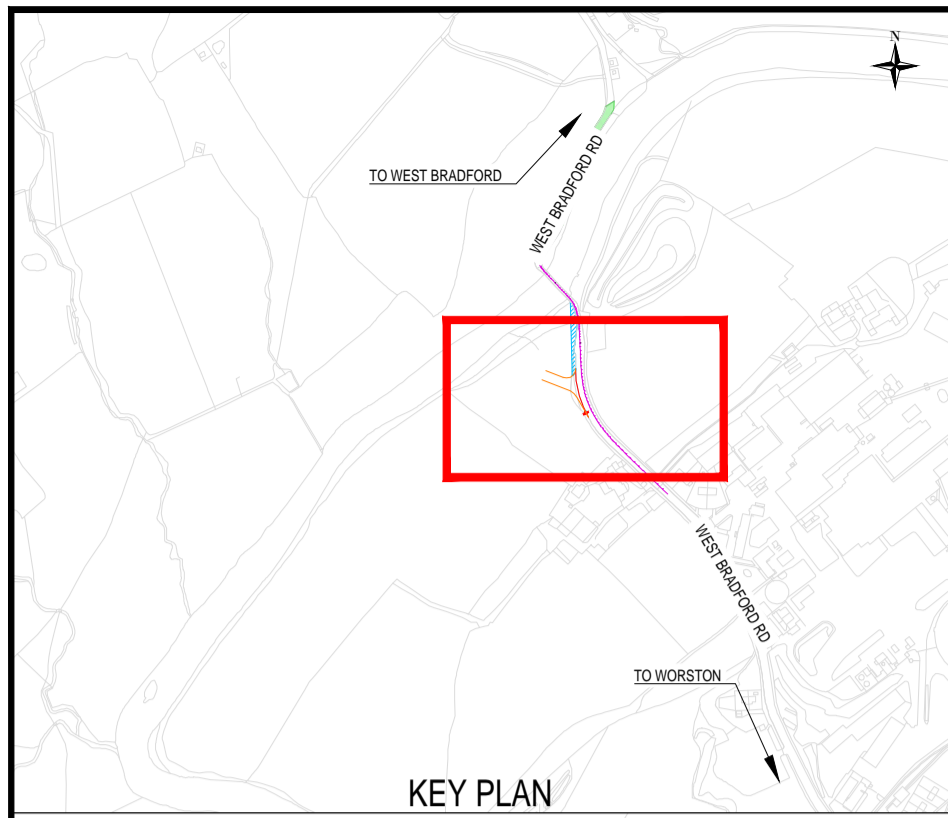
PROPOSED CLITHEROE SECTION

RIVER RIBBLE HAUL ROAD

ACCESS DESIGN - AFTER RIVER RIBBLE

WEST BRADFORD RD, WADDINGTON VILLAGE, SLAIDBURN RD

SCALE	1:250 / 1:500	SHEET SIZE	A1
DRAWING NUMBER	B27070CQ-JAC-XX-DR-C-TR4_VS-1011	REVISION	P01.1



NOTES

1. DO NOT SCALE FROM THIS DRAWING.

LEGEND

GENERAL ARRANGEMENT

- EXISTING KERB/ EDGE OF CARRIAGEWAY
- PROPOSED KERB
- CARRIAGEWAY WIDENING

TRAFFIC MANAGEMENT

- EXISTING 30MPH SPEED LIMIT
- EXISTING NATIONAL SPEED LIMIT
- HIGH FRICTION ANTI-SKID SURFACE DRESSING
- PROPOSED TRAFFIC SIGN

SITE CLEARANCE

- EXISTING TRAFFIC SIGN TO BE RELOCATED
- STONE WALL TO BE REMOVED
- LIGHTING COLUMN TO BE REMOVED
- KERB TO BE REMOVED
- VEGETATION TO BE REMOVED
- EXISTING TREE TO BE REMOVED

CURRENT ISSUE INFORMATION

P01.2	HS	SP	--	--	--
VERSION	AUTH	CHKD	REVD	REASON FOR ISSUE	DATE
SO	WORK IN PROGRESS (WIP)				
SUITABILITY CODE	SUITABILITY DESCRIPTION				



HAWESWATER AQUEDUCT RESILIENCE PROGRAMME

PROPOSED CLITHEREO SECTION

RIVER RIBBLE HAUL ROAD

WEST BRADFORD RD BEFORE RIVER RIBBLE

GENERAL ARRANGEMENT

SIGN FACE DETAILS

CAUTION SITE ENTRANCE AHEAD

Signing Project	LUU - HARP	Width (mm)	850	Background	Red
Sign Reference	TS1	Height (mm)	670	Border	White
x Height	75.0	Area (m ²)	0.56	Legend	White
Material	Class RA2				

Signing Project	LUU - HARP	Width (mm)	850	Background	White
Sign Reference	TS2	Height (mm)	750	Border	Red
x Height	75.0	Area (m ²)	0.38	Legend	Red
Material	Class RA2				Black

MARK UP INFORMATION

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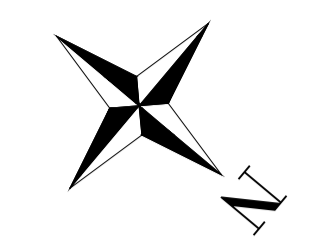
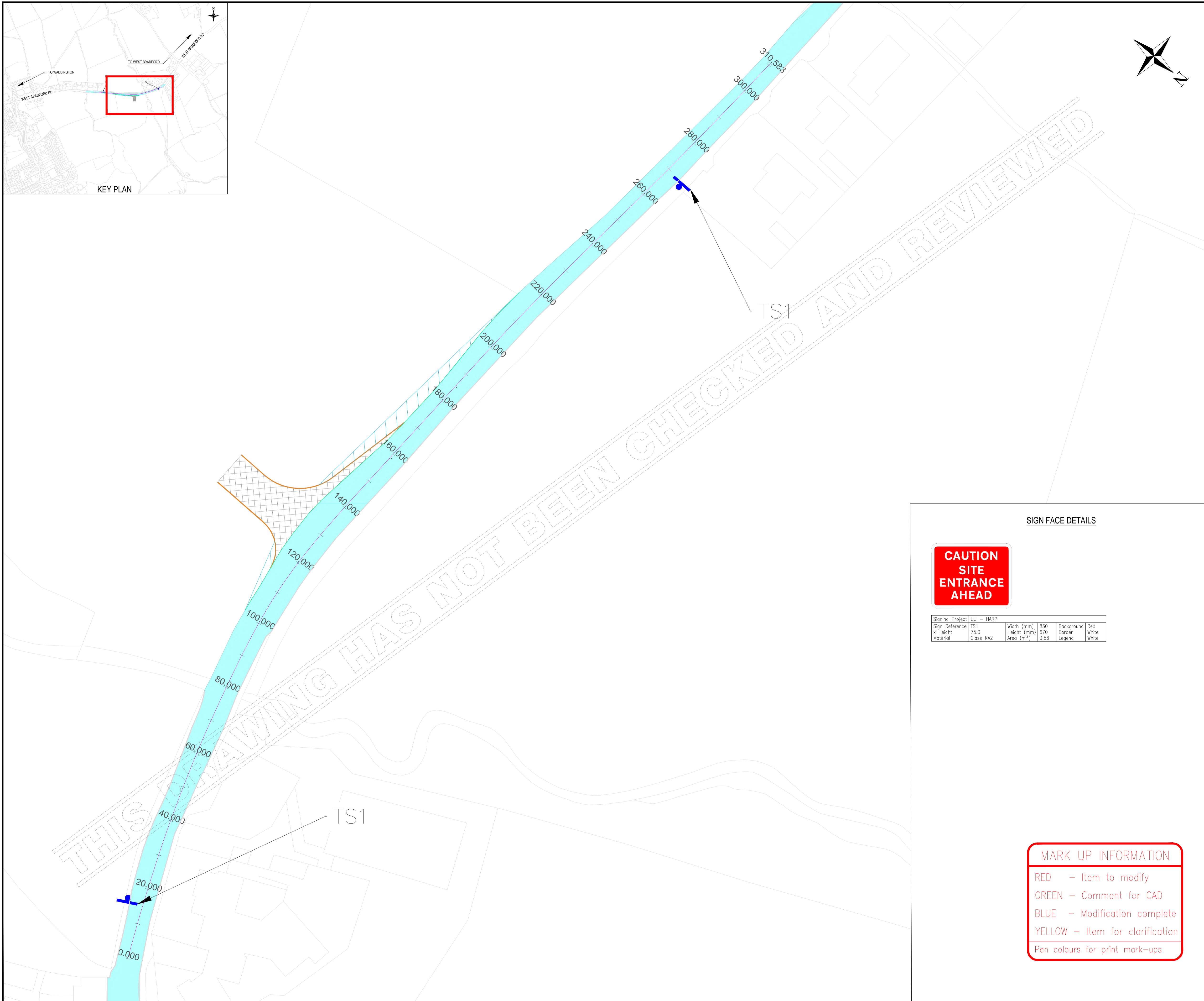
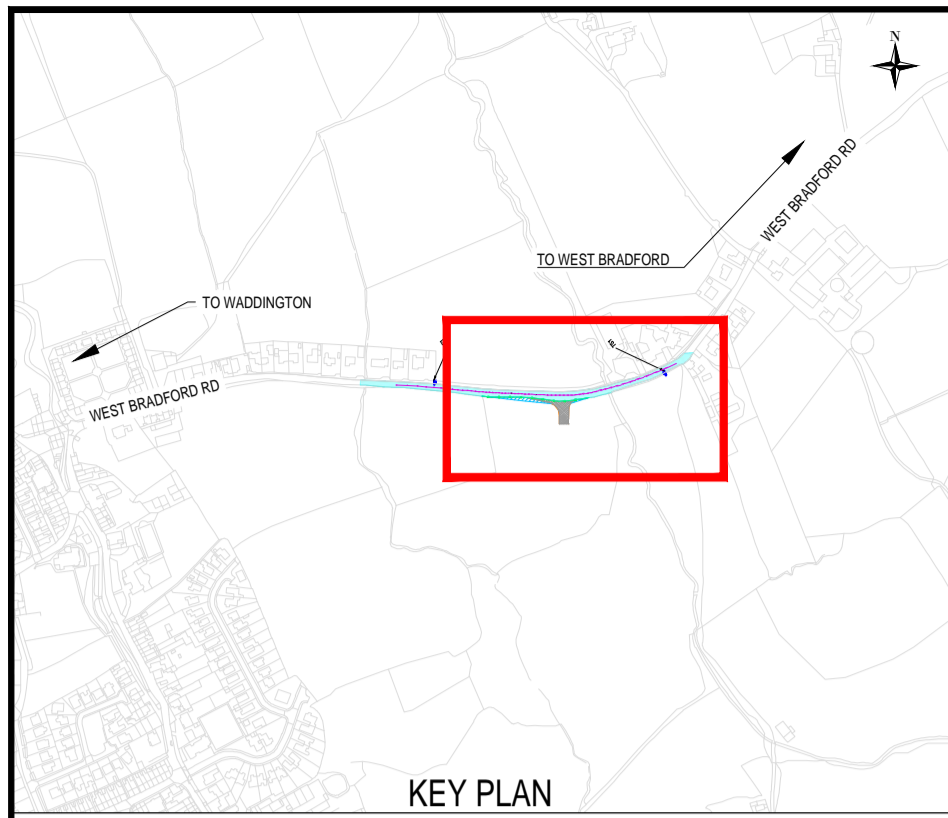
GREEN - Comment for CAD

BLUE - Modification complete

YELLOW - Item for clarification

Pen colours for print mark-ups

SCALE	1:200	SHEET SIZE	A1
DRAWING NUMBER	B27070CQ-JAC-XX-DR-C-TR4_GA-1212	REVISION	P01.2



NOTES

1. DO NOT SCALE FROM THIS DRAWING.

LEGEND

GENERAL ARRANGEMENT

- EXISTING KERB/EDGE OF CARRIAGEWAY
- PROPOSED KERB
- CARRIAGEWAY WIDENING

TRAFFIC MANAGEMENT

- EXISTING 30MPH SPEED LIMIT
- PROPOSED TRAFFIC SIGN

SITE CLEARANCE

- EXISTING TRAFFIC SIGN TO BE RELOCATED
- FENCE TO BE REMOVED
- VEGETATION TO BE REMOVED

SIGN FACE DETAILS



Signing Project	LUU - HARP	Width (mm)	850	Background	Red
Sign Reference	TS1	Height (mm)	670	Border	White
x Height	75.0	Area (m ²)	0.56	Legend	White
Material	Class RA2				

MARK UP INFORMATION

RED - Item to modify
 GREEN - Comment for CAD
 BLUE - Modification complete
 YELLOW - Item for clarification
 Pen colours for print mark-ups

CURRENT ISSUE INFORMATION

P01.1	HS	SP	--	--	--
VERSION	AUTH	CHKD	REVD	REASON FOR ISSUE	DATE
SO				WORK IN PROGRESS (WIP)	
SUITABILITY CODE	SUITABILITY DESCRIPTION				



HAWESWATER AQUEDUCT RESILIENCE PROGRAMME

PROPOSED CLITHEREO SECTION

RIVER RIBBLE HAUL ROAD

WEST BRADFORD RD GOING TOWARDS WADDINGTON

GENERAL ARRANGEMENT

SCALE	1:500	SHEET SIZE	A1
DRAWING NUMBER	B27070CQ-JAC-XX-DR-C-TR4_GA-1213	REVISION	P01.1

Appendix B3 – Abnormal Indivisible Load Review

Figure B-3-01: AIL Access Route Options (MNA_B-3-01)

Figure B-3-02: AIL Swept Path Sawley Bridge (Discounted Option) (MNA_B-3-02)

Figure B-3-03: AIL Swept Path Grindleton Bridge (MNA_B-3-03)

Figure B-3-04: Swept Paths Grindleton Road (MNA_B-3-04)

Figure B-3-05: Swept Paths Waddington (MNA_B-3-05)

Figure B-3-06: Proposed Marl Hill Section – Bonstone Compound Access Junction with B6478 – Abnormal Load Vehicle Tracking - B27070CQ-JAC-XX-DR-C-TR4_VT-1113 (MNA_B-3-06_B27070CQ-JAC-XX-DR-C-TR4_VT-1113)

Figure B-3-07: AIL Proposed Junction Swept Paths - Braddup Junction (MNA_B-3-07)

Figure B-3-08: Proposed Bowland Section – Temporary Haul Road – Hallgate Hill Junction Abnormal Load Vehicle Tracking – B27070CQ-JAC-XX-DR-C-TR3_VT-1112 (MNA_B-3-08_B27070CQ-JAC-XX-DR-C-TR3_VT-1112)

Figure B-3-09: Proposed Bowland Section – Newton-in-Bowland Compound – Vehicle Across Junction (Staggered) – Abnormal Load Vehicle Tracking (TBM) – B27070CQ-JAC-XX-DR-C-TR3_VT-1107 (MNA_B-3-09_B27070CQ-JAC-XX-DR-C-TR3_VT-1107)

Figure B-3-10: River Ribble Haul Rd – Access Design – Before River Ribble (A59, Pimlico Link Rd, West Bradford Rd) – Vehicle Tracking TBM B27070CQ-JAC-XX-DR-C-TR4_VT-1129 (MNA_B-3-10_B27070CQ-JAC-XX-DR-C-TR4_VT-1129)

Figure B-3-11: River Ribble Haul Road – Access Design – After River Ribble (West Bradford Rd, Waddington Village, Slaidburn Rd) – Vehicle Tracking TBM B27070CQ-JAC-XX-DR-C-TR4_VT-1131 (MNA_B-3-11_B27070CQ-JAC-XX-DR-C-TR4_VT-1131)

Abnormal Indivisible Load Movements

Introduction

Route 3 will be used for all AIL movements. The following sets out the rationale for this approach and some additional considerations that the Contractor will address as the CTMP is developed.

Abnormal Loads Services' Findings and Adopted Route

Abnormal Loads Services (ALS) were engaged on United Utilities behalf by Costain (Costain providing United Utilities with Early Contractor Involvement for the HARP). ALS's remit in relation to the MNA was the provision of route survey investigations to identify feasible access routes for the anticipated AILs focusing on the anticipated largest indivisible load (TBM Shield haulage). The review was completed in order to obtain advice on which route or routes are most suitable.

ALS provided a report (Route Survey Report, September 2020) that included a section that addresses the MNA (Section 3.2). The report also covers elements of HARP that relate to separate planning applications that are not applicable to the MNA so the report is not included in full here. The key findings relevant to the MNA are summarised below.

Figure B-3-01 in Appendix B3 shows the range of routes considered. ALS considered that the majority were not suitable. In particular the nature of many of the existing River Ribble crossings and the extent of road modification needed ruled these options out. The route ALS identified in their report as the most practical has been discounted. This was via Sawley (Option 3-E).

Along this discounted route ALS identified the following as being applicable to the whole route:

- It is advised that extensive tree surgery will be required on all roads on the route (this may attract objections from local residents)
- There are a number of structures along the route (culverts and bridges) for which the capacity is unknown. In the event there are structural limits it is anticipated that these structures can be "Overbridged" utilising temporary works (see Figure B-3-02)
- Temporary parking restrictions when AIL movements are proposed will be necessary to permit the sweep of the vehicle in a number of locations.

These considerations are also applicable to Route 3.

For Option 3-E the crossing of the River Ribble is the first area that is discussed in detail by ALS. They anticipate that the conventional TBM configuration considered will not be able to navigate the bridge without localised widening works (Figure B-3-02 illustrates this). They suggest that a suitable transshipment location should be sourced prior to the bridge and the TBM Section transferred to a shorter vehicle configuration. [Note: this may result in increasing the overall height of the vehicle to approx. 5.50m. At this increased height any overhead wires telecoms / electrical will have to be lifted or isolated. Swept path analysis will still be required to confirm this.]

Along Option 3-E, Sawley Road passes closely to the River Ribble wall. If Option 3-E is used ALS recommend the road should be assessed to check that it can withstand the pressure of the vehicle.

ALS concluded that Option 3-E (the route via Sawley) provides the best route to support the current vehicle configuration which is road going and legal, without the need for any bridge modifications. They highlight that this route does however include various pinch points between Sawley and Waddington which will need to be addressed. An alternative route via Chatburn (Option 3A) was discounted by ALS because of the limitations of Grindleton Bridge (East View).

There are two possible ways in which the Grindleton Bridge limitation might be overcome:

- One will be to widen the approaches to Grindleton Bridge
- ALS suggest that another will be similar to that proposed for the Sawley crossing. It will be to tranship the TBM section onto a configuration that could navigate the crossing. In this

instance it will necessitate the use of a configuration using a self-powered remote power pack unit which attaches to the rear of the trailer, this will permit the removal of the tractor unit but still powers the trailer configuration to travel legally on a public road (the example system cited is produced by Enerpac). By removing the tractor unit and reconfiguring the trailer, the weight and length of the means of navigation could be reduced and the existing bridge crossed. Once the bridge has been crossed the tractor unit could be re-attached and the load could progress onwards to Waddington.

Independently of the ALS exercise, Jacobs were engaged by United Utilities to complete swept path analysis and as necessary develop appropriate indicative mitigation.

Figure B-3-02 shows the swept path for the TBM along the discounted Option 3-E route at the Sawley Ribble crossing and shows, as highlighted in the ALS report, that the proposed TBM configuration cannot cross the bridge.

Figure B-3-03 shows the swept path for Option 3A at the Grindleton Bridge Ribble crossing and the need for widening.

The Jacobs swept path analysis also identified a need for significant road widening at the junction between East View and Grindleton Road (see Figure B-3-04).

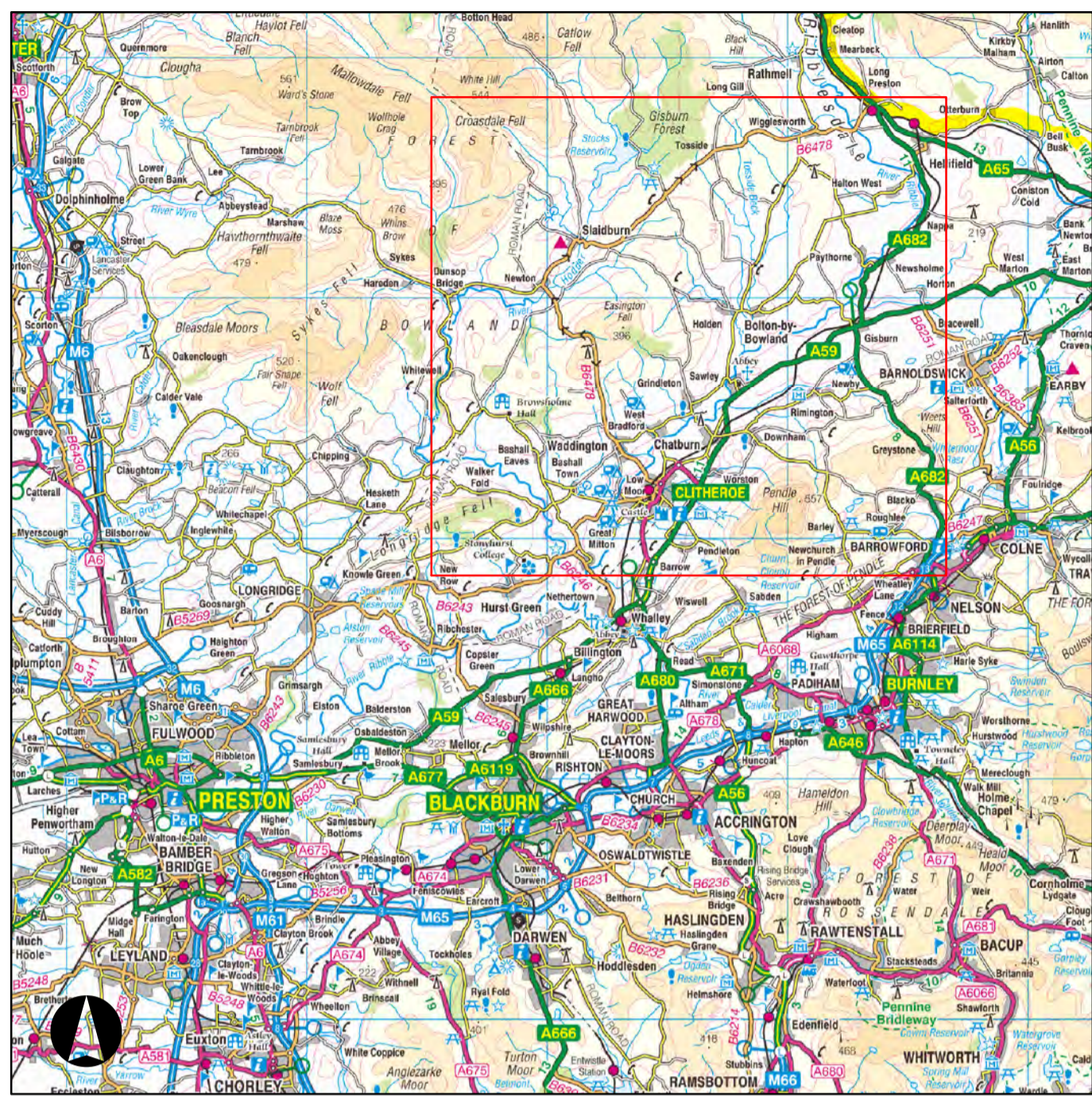
The proposed Route 3 whilst necessitating significant works across the Ribble valley avoids the need for these modifications and minimises the impact to the residential areas in Clitheroe, Sawley, Grindleton and Waddington.

Travelling towards the proposed construction compounds along Route 3 West Bradford Road in Waddington and turning right onto Slaidburn Rd / The Square / B6478, ALS suggested that the removal of bollards is required outside the Higher Buck Inn. The initial swept path analysis completed by Jacobs suggests this may not be required (see Figure B-3-05). (Note: As stated elsewhere the specification of the TBMs and vehicle / trailer configurations will be determined by the appointed contractor(s) and a specific more detailed assessment will be completed in due course).

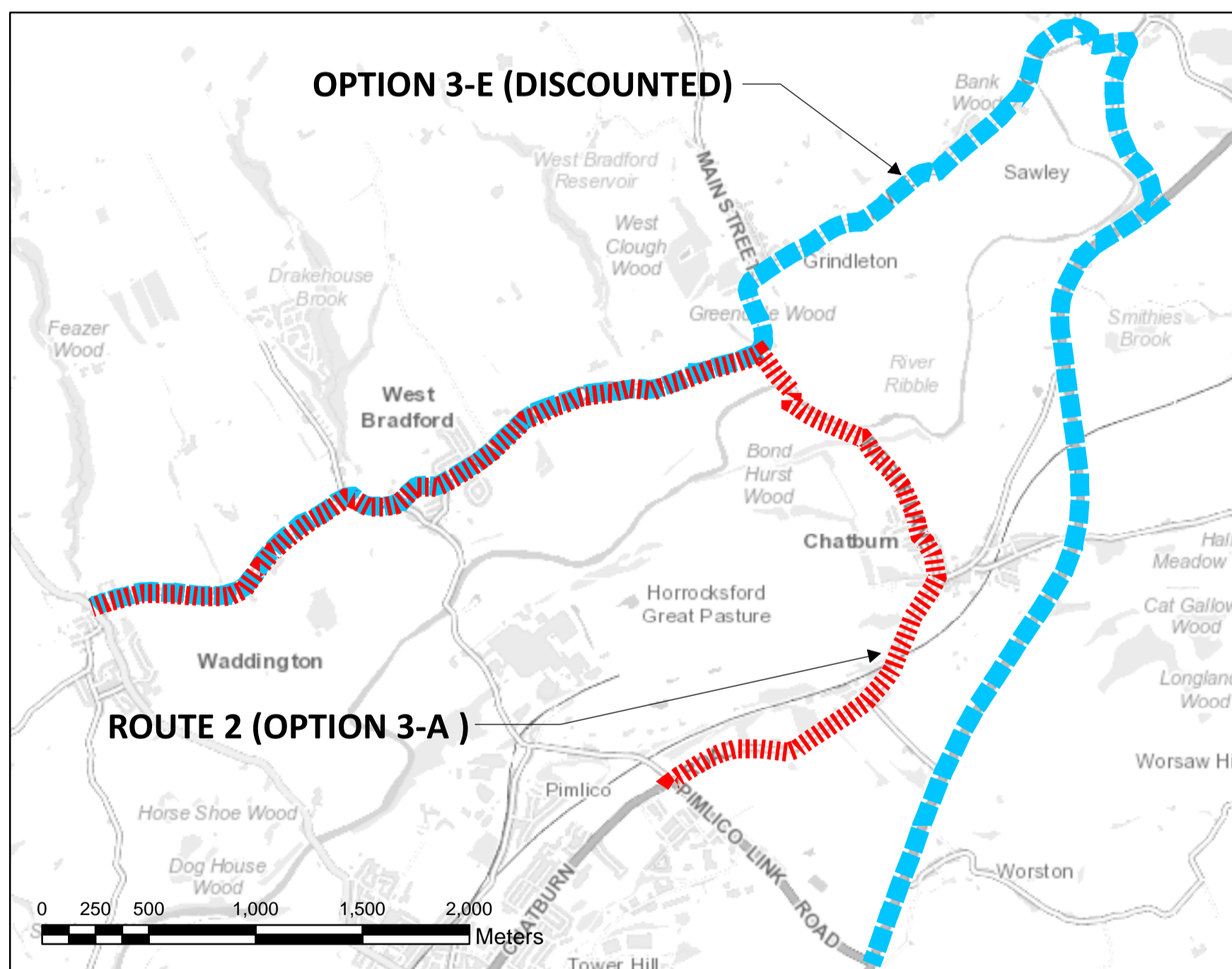
The swept path assessments indicate that some of the wider AILs will require temporary traffic management, the timing of movements will be agreed to minimise disturbance/disruption.

APPENDIX B3 - AIL ACCESS ROUTE OPTIONS

FIGURE B - 3 - 01

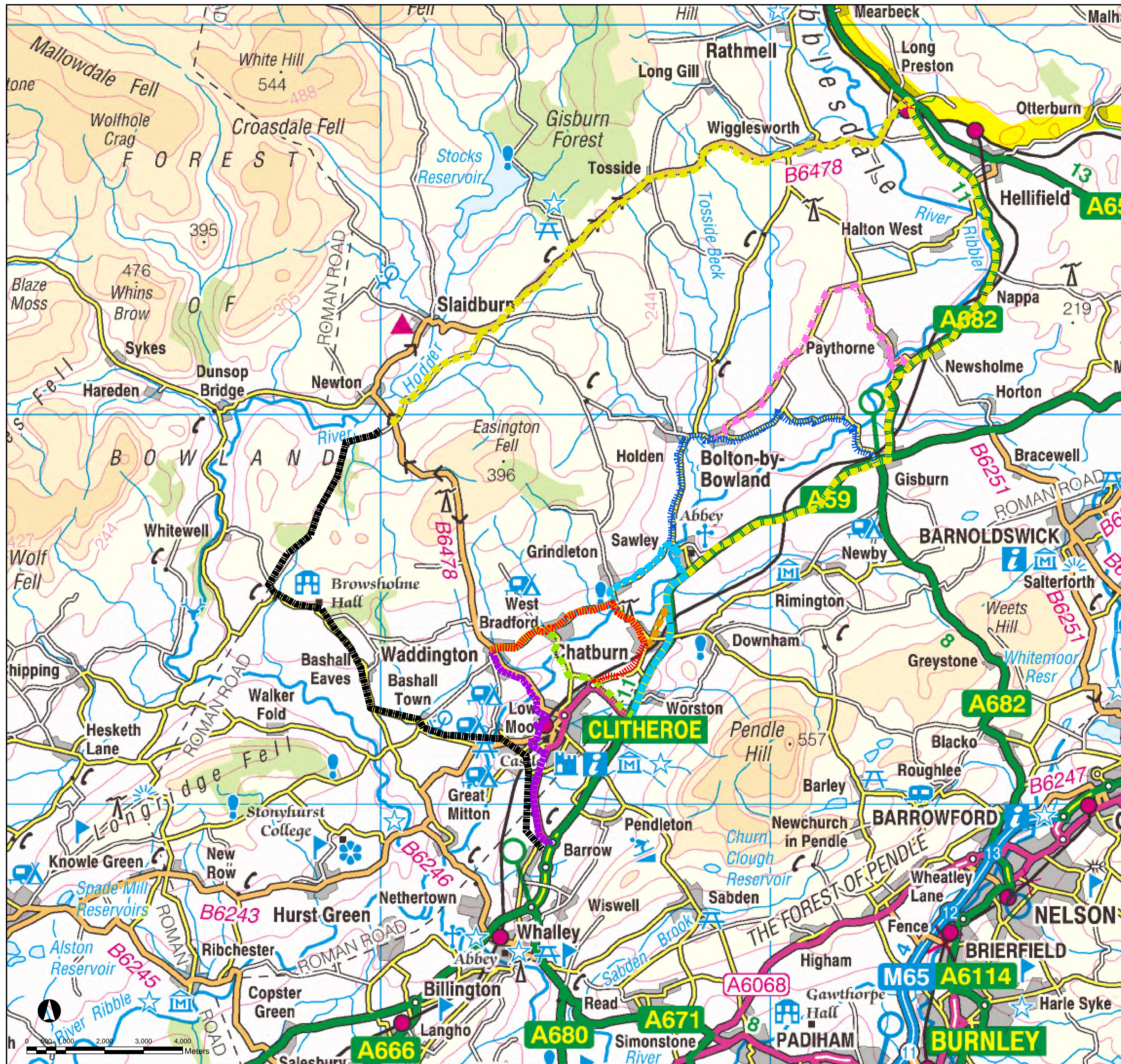


WIDER AREA
0 3 6 12 Kilometers



PREFERRED OPTIONS IDENTIFIED IN ROUTE SURVEY (SEPTEMBER 2020 ALS)

- Legend**
- Abnormal_Load_Route_3A
 - Abnormal_Load_Route_3B
 - Abnormal_Load_Route_3C
 - Abnormal_Load_Route_3D
 - Abnormal_Load_Route_3E
 - Abnormal_Load_Route_3F
 - Abnormal_Load_Route_3G
 - Abnormal_Load_Route_3H
 - Abnormal_Load_Route_3J

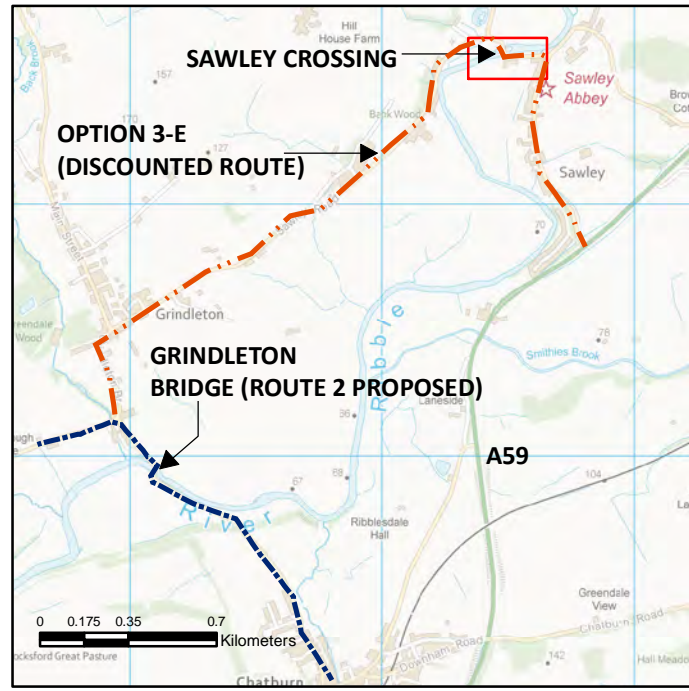


AIL Route Options Considered

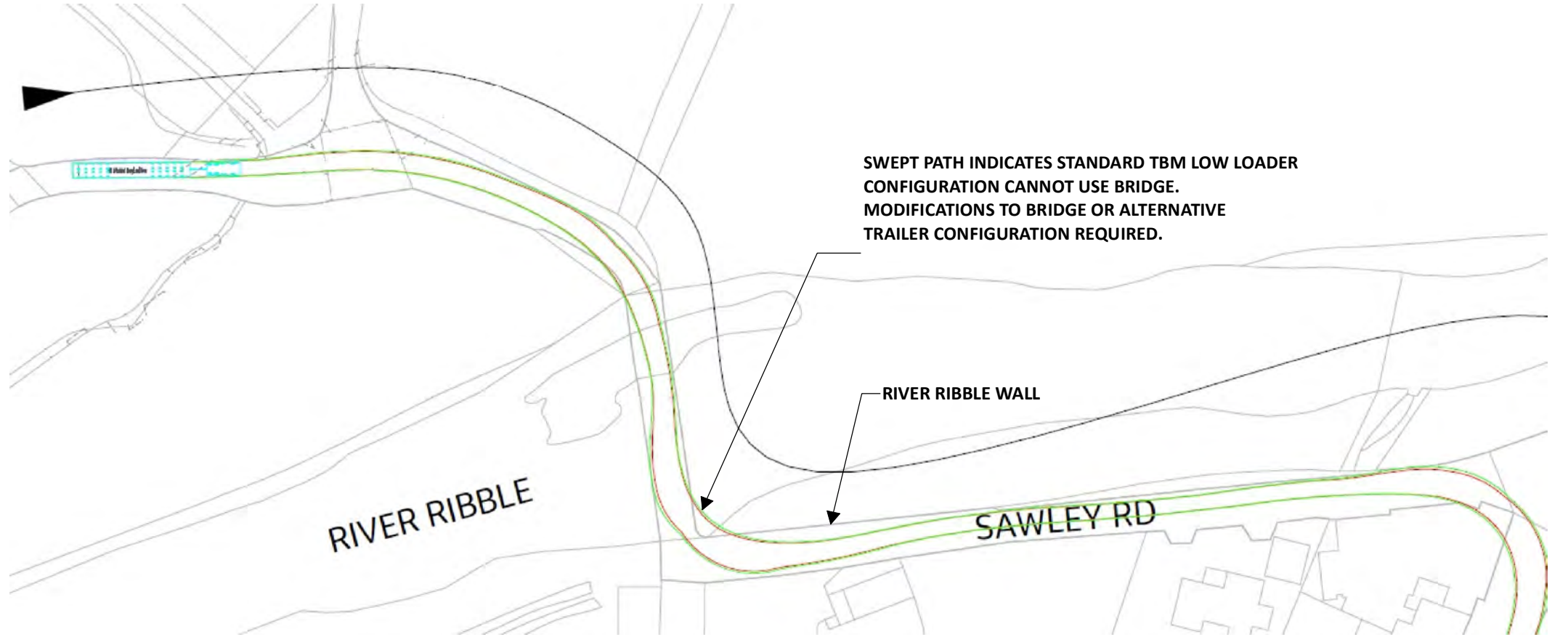
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APPENDIX B3 - AIL SWEEP PATH SAWLEY BRIDGE (DISCOUNTED OPTION)

FIGURE B - 3 - 02



WIDER AREA



Largest AIL (TBM) from site (Southbound)



Largest AIL (TBM) to site (Northbound)



EXAMPLE OF OVERBRIDGING TEMPORARY WORKS



SAWLEY ROAD PROXIMITY OF RIVER RIBBLE WALL (GOOGLE STREET VIEW) EASTWARD VIEW

APPENDIX B3 - AIL SWEPT PATH GRINDLETON BRIDGE
FIGURE B - 3 - 03

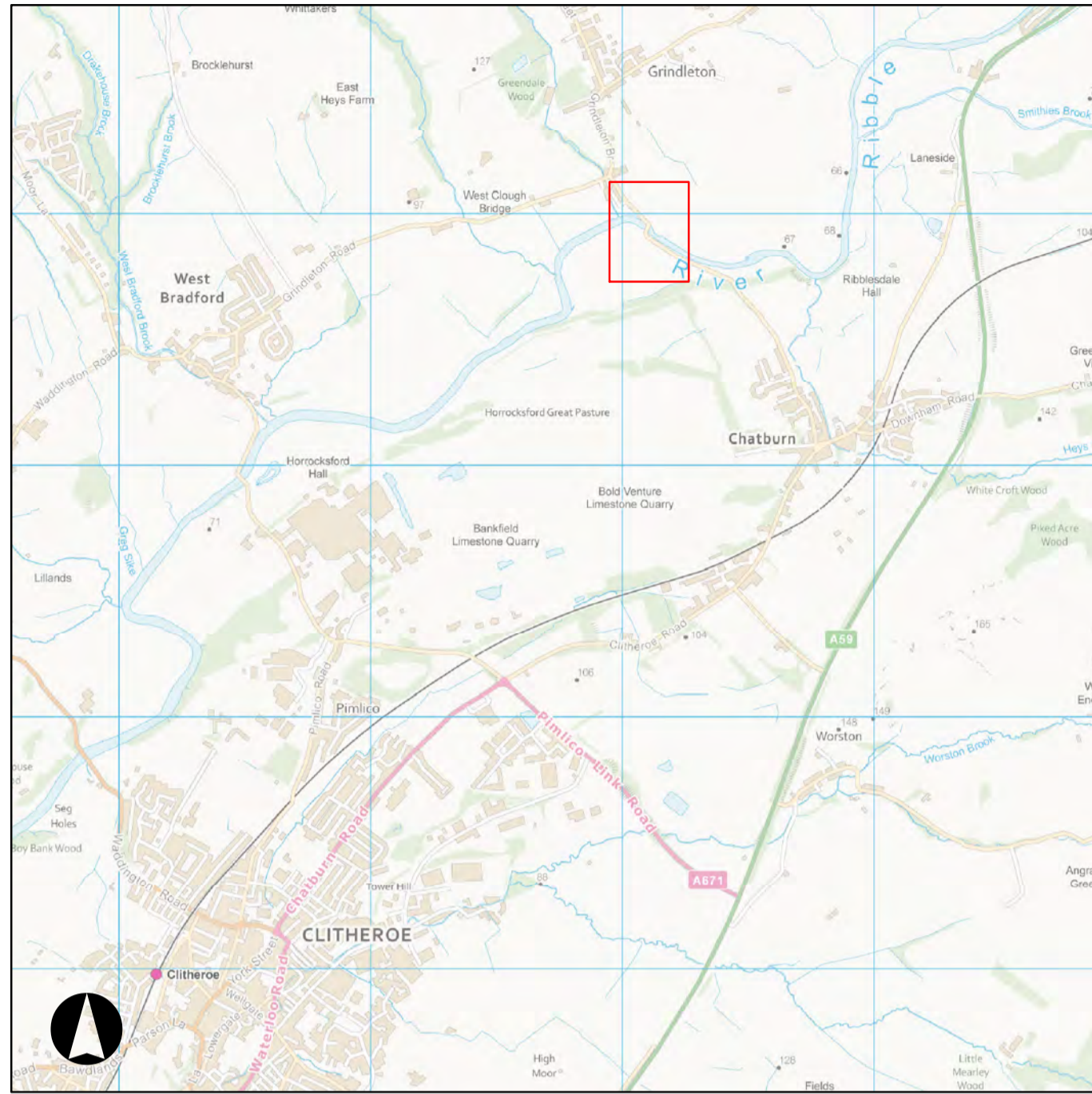
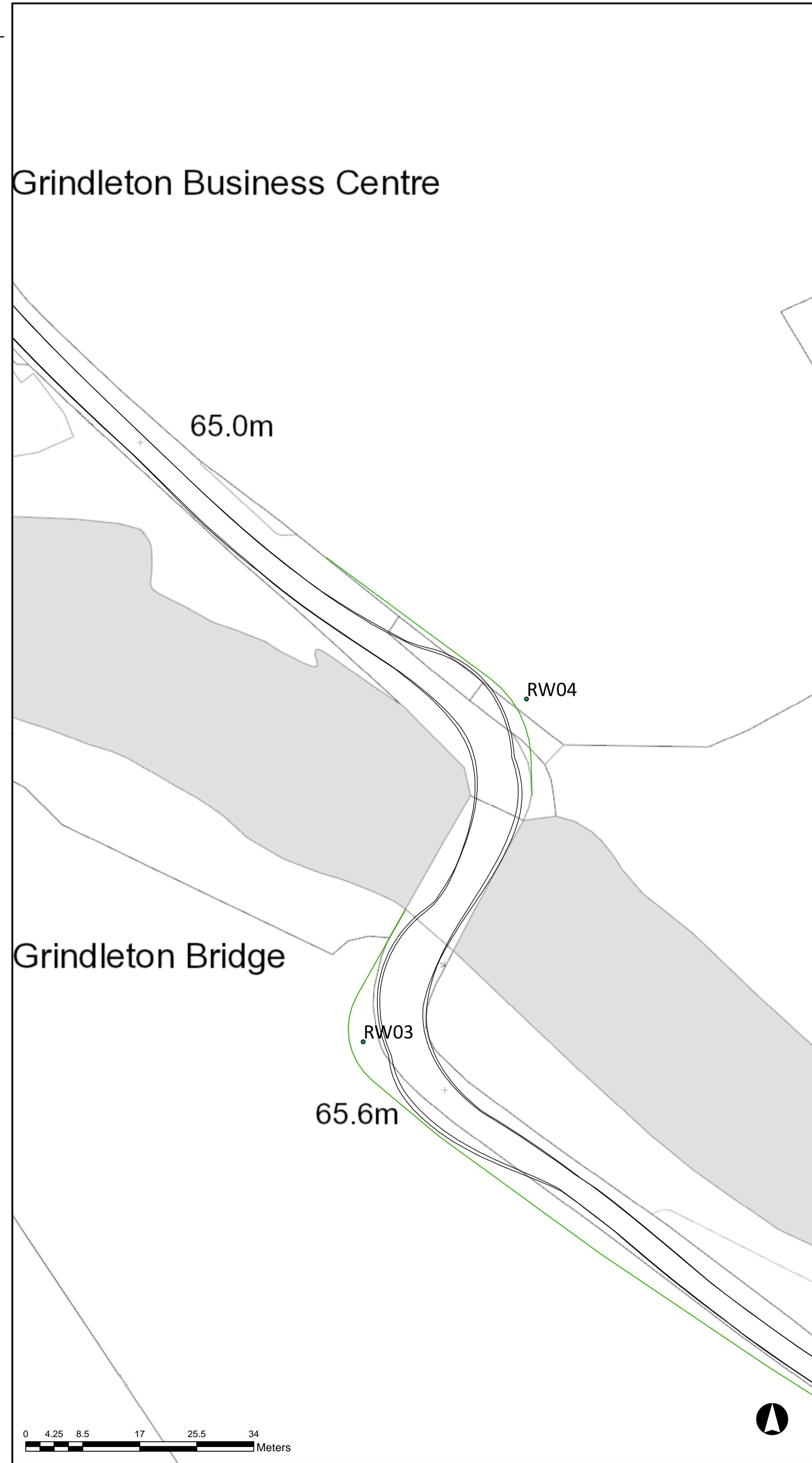


IMAGE 1: HGV TRIAL 11th NOVEMBER 2020
4 AXLE RIGID ENTERING BRIDGE FROM NORTH BANK

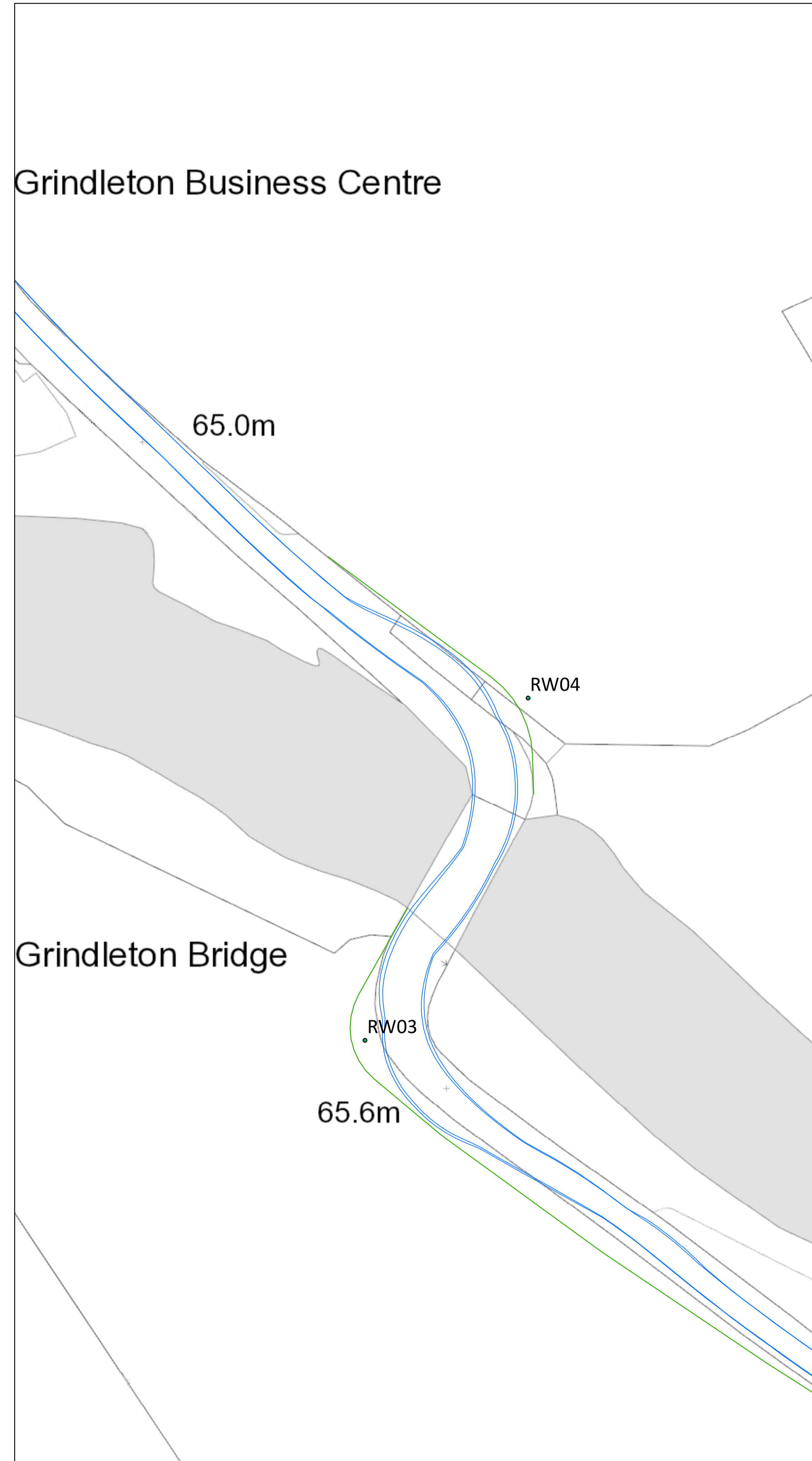


IMAGE 2: HGV TRIAL 11th NOVEMBER 2020
4 AXLE RIGID LEAVING BRIDGE TOWARDS SOUTH BANK

Legend
 PROPOSED ROAD MODIFICATIONS



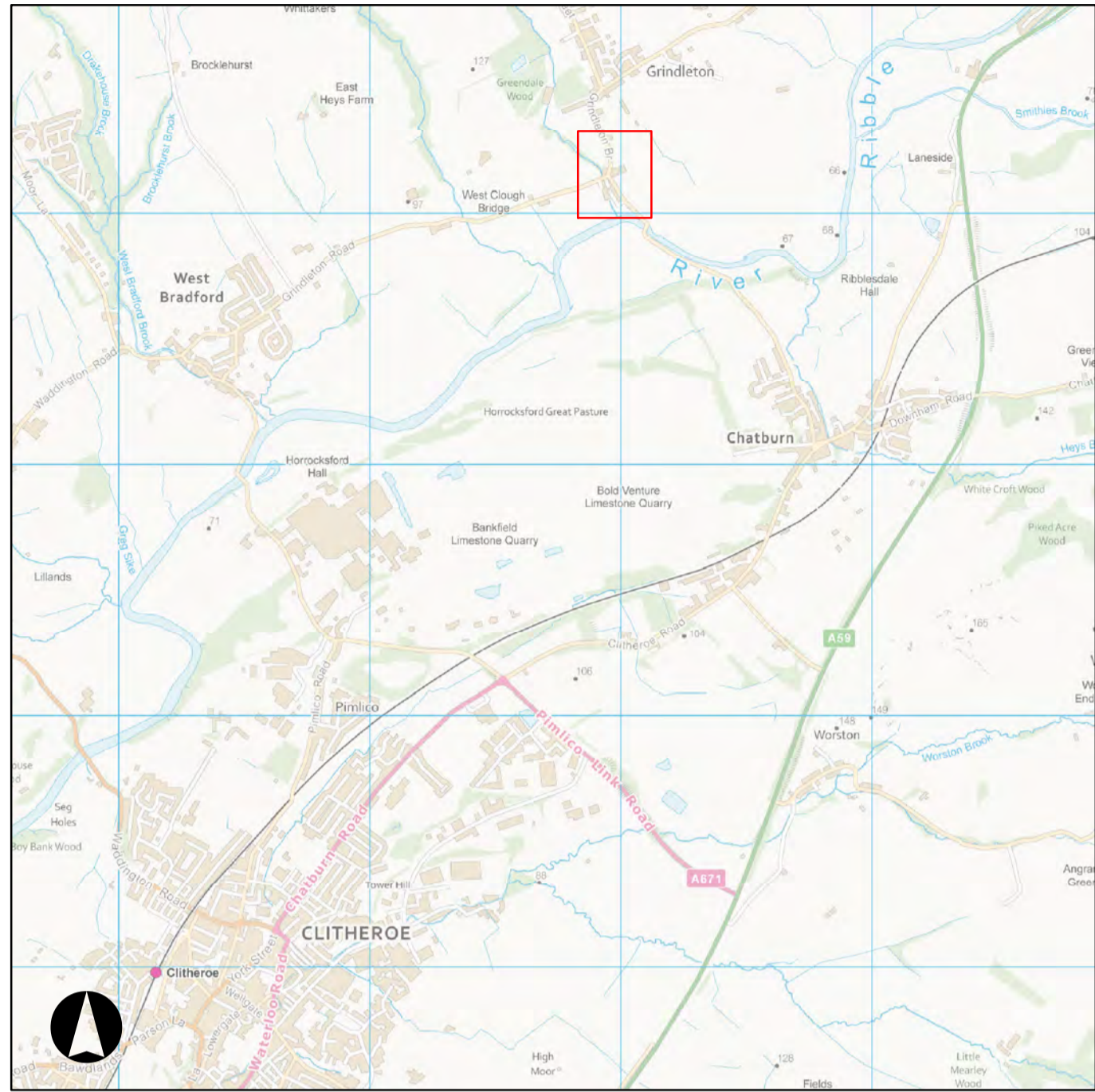
Largest AIL (TBM) to site (Northbound)



Largest AIL (TBM) from site (Southbound)

The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. United Utilities Water will not accept liability for any loss or damage caused by the actual position being different from those shown. Crown copyright and database rights 2017 Ordnance Survey 100022432.

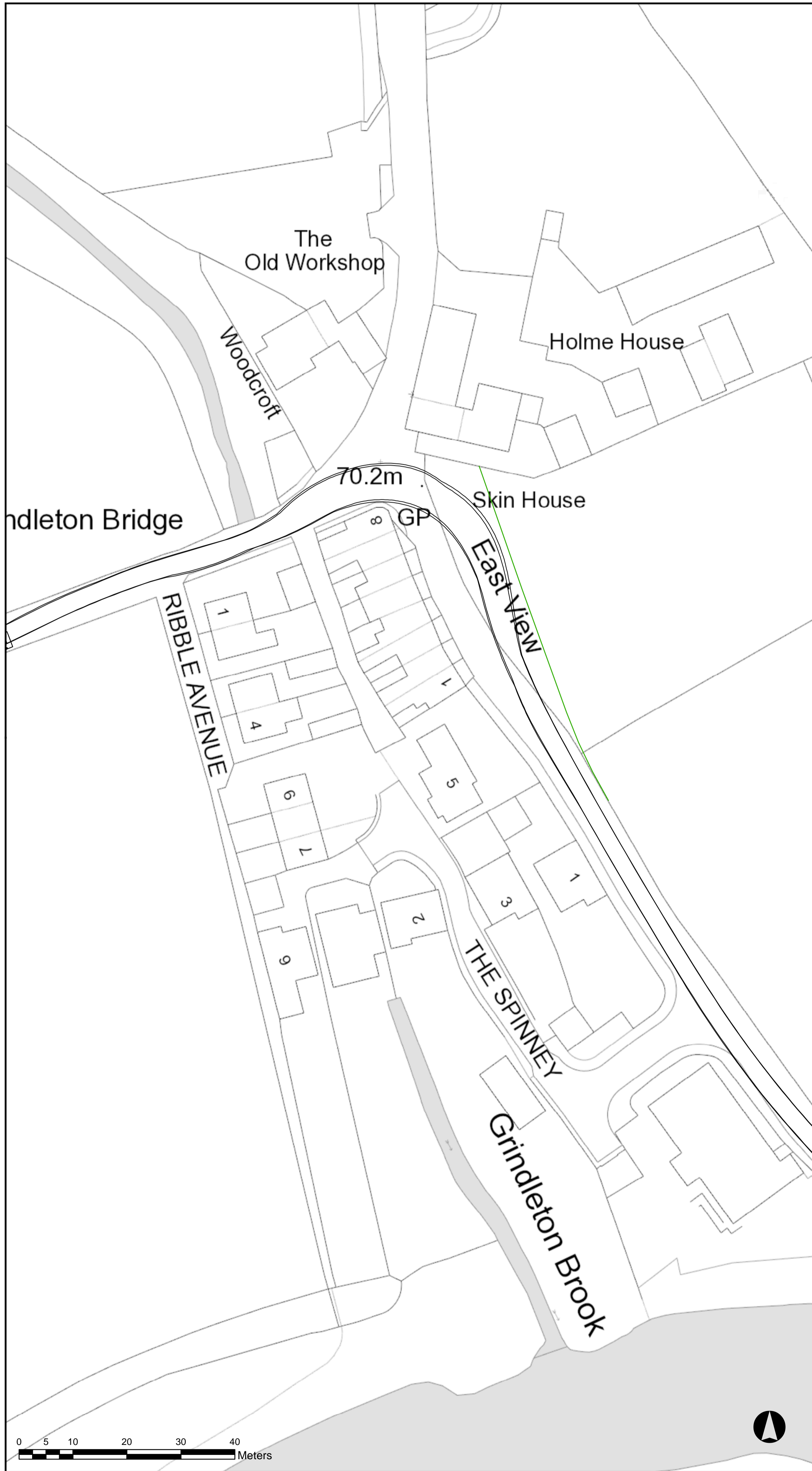
APPENDIX B3 - SWEEP PATHS GRINDLETON ROAD
FIGURE B - 3 - 04



WIDER AREA 0 0.275 0.55 1.1 Kilometers



IMAGE 1: HGV TRIAL 11th NOVEMBER 2020
4 AXLE RIGID ENTERING EAST VIEW FROM GRINDLETON ROAD



Largest AIL (TBM) to site (Northbound)



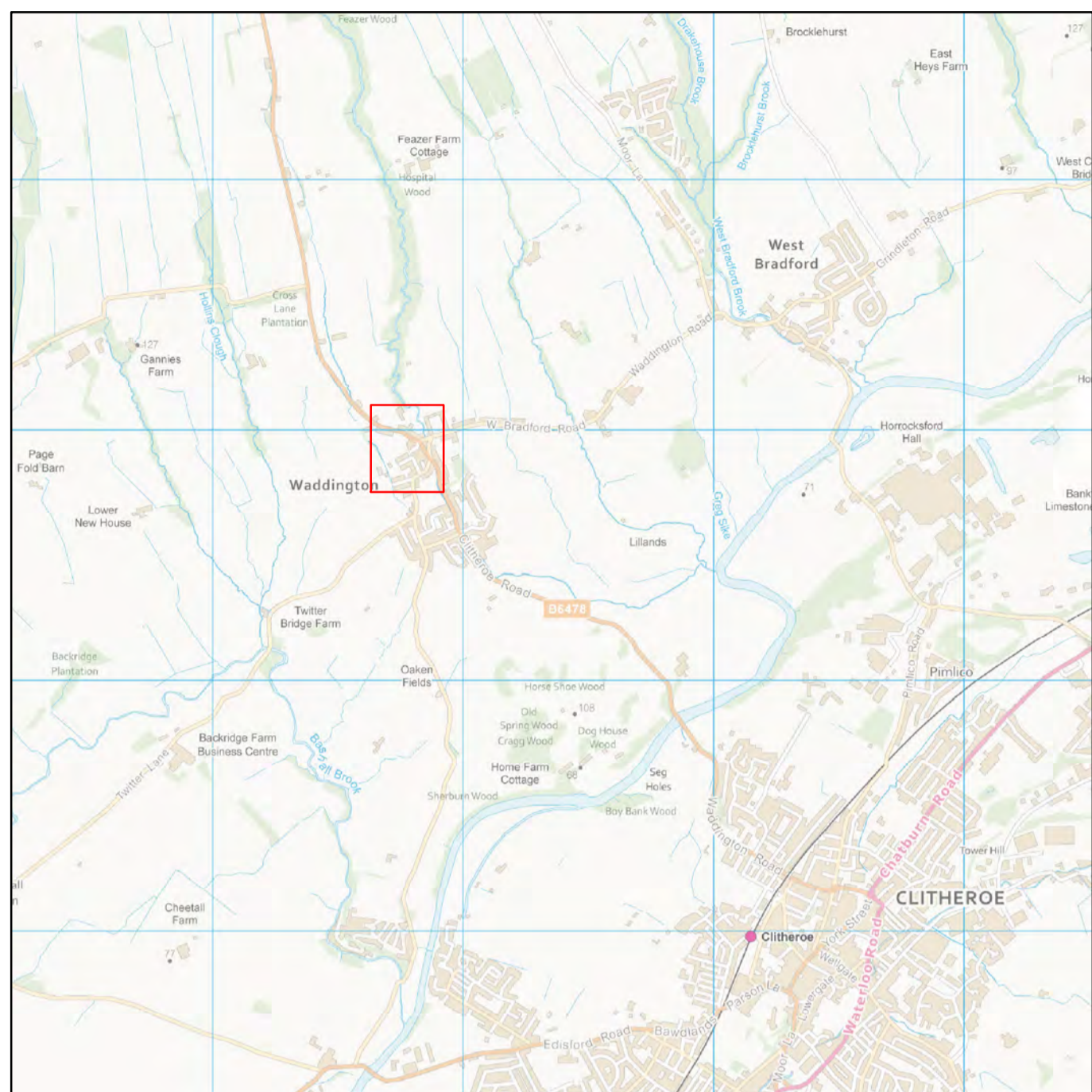
Largest AIL (TBM) from site (Southbound)

Legend
 PROPOSED ROAD MODIFICATION

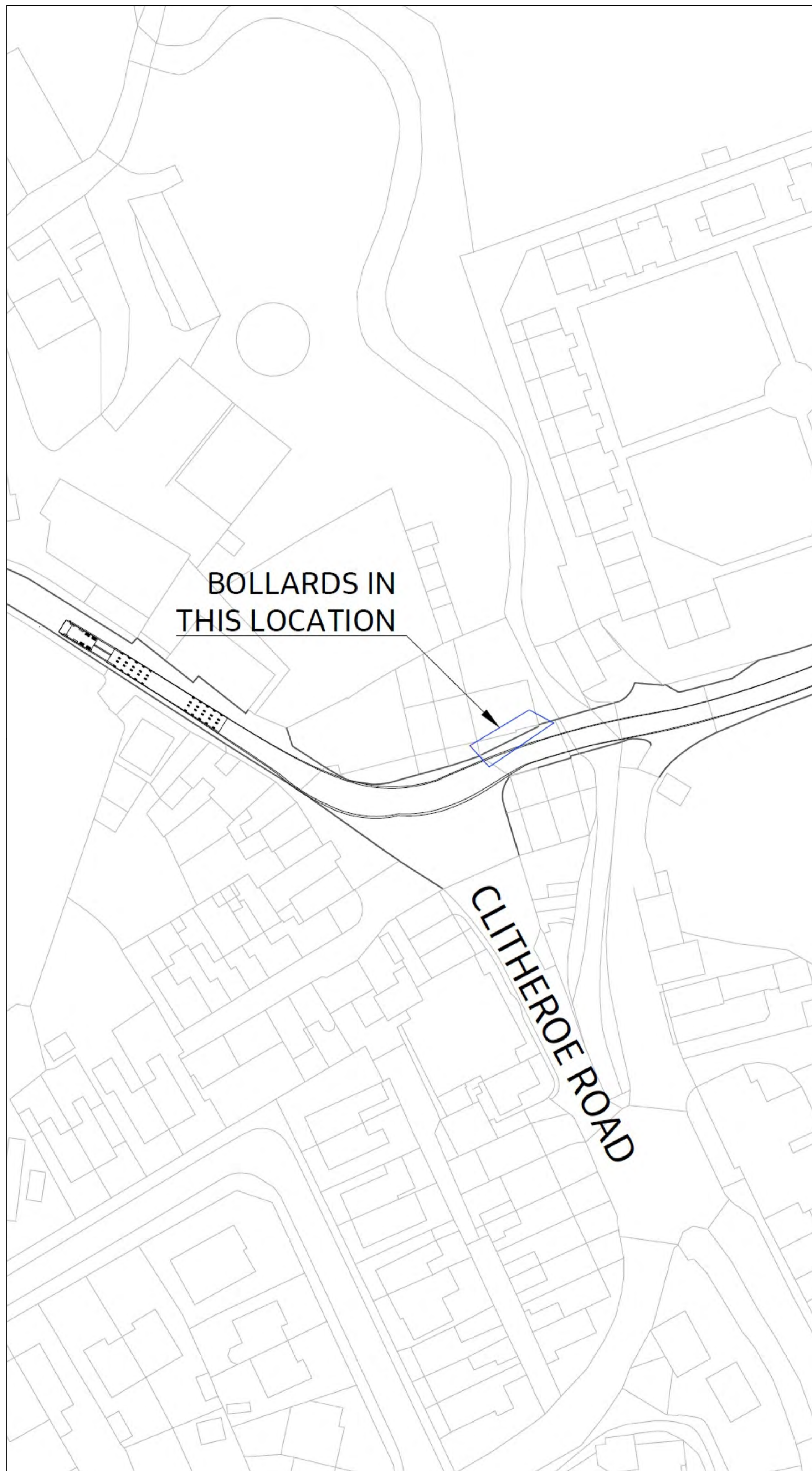
The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. United Utilities Water will not accept liability for any loss or damage caused by the actual position being different from those shown.
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APPENDIX B3 - SWEEP PATHS WADDINGTON

FIGURE B - 3 - 05



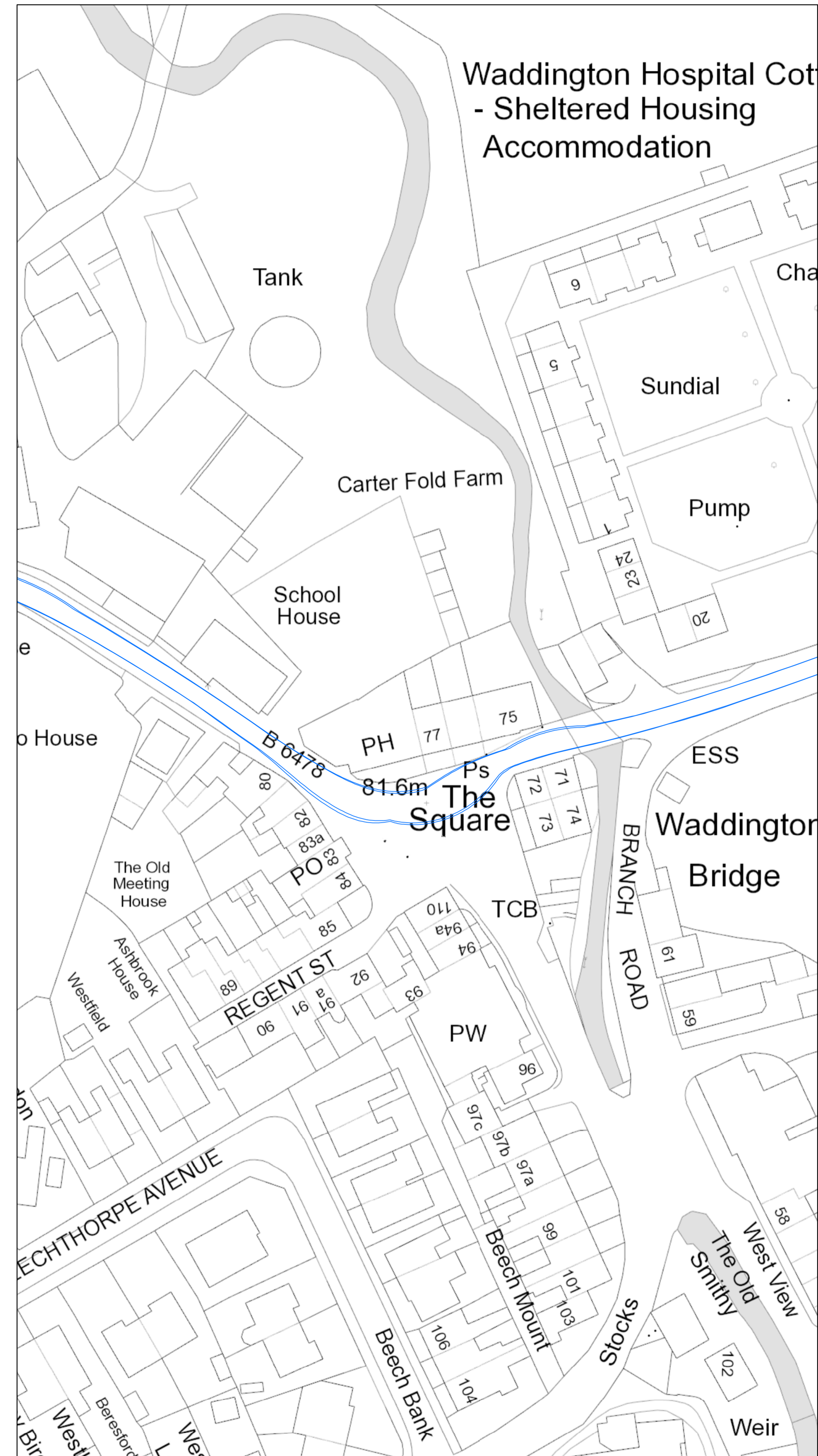
WIDER AREA 0 0.275 0.55 1.1 Kilometers



BOLLARDS IN THIS LOCATION

CLITHEROE ROAD

Largest AIL (TBM) to site (Northbound)



Waddington Hospital Cottages - Sheltered Housing Accommodation

Tank

Carter Fold Farm

School House

The Square

81.6m

B 6478

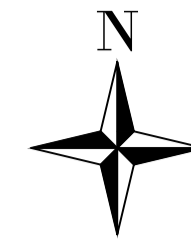
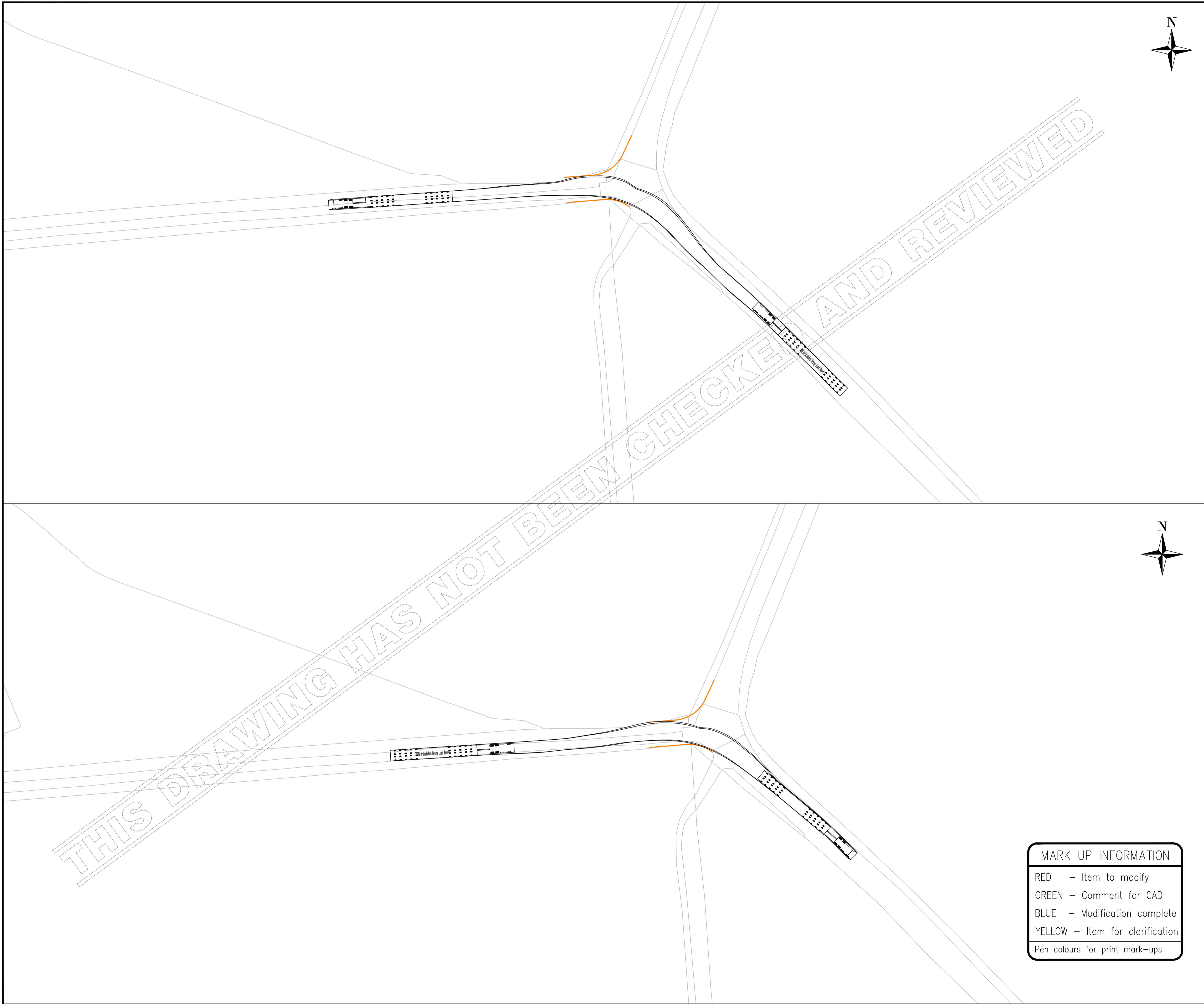
Largest AIL (TBM) from site (Southbound)



**IMAGE 1: HGV TRIAL 11th NOVEMBER 2020
4 AXLE RIGID LEAVING THE SQUARE**



**IMAGE 2: HGV TRIAL 11th NOVEMBER 2020
4 AXLE RIGID LEAVING THE SQUARE (REAR SHOT)**



NOTES

1. DO NOT SCALE FROM THIS DRAWING
2. VEHICLE MEASUREMENTS

TBM ARTICULATED HEAVY TRANSPORT	
OVERALL LENGTH	34.335m
OVERALL WIDTH	3.000m
OVERALL BODY HEIGHT	3.638m
MIN. BODY GROUND CLEARANCE	0.221m
TRACK WIDTH	3.000m
3. AN OVERRUN AREA HAS BEEN PROPOSED TO ALLOW EXTRA LEEWAY FOR THE TBM TO MANOEUVRE SAFELY INTO THE ACCESS POINT

LEGEND

	PROPOSED KERB
	EXISTING KERB

CURRENT ISSUE INFORMATION

P01.1	MB	SP	--	--		
VERSION	AUTH	CHKD	REVD	REASON FOR ISSUE	DATE	
S0		WORK IN PROGRESS (WIP)				
SUITABILITY CODE	SUITABILITY DESCRIPTION					



MARK UP INFORMATION

RED - Item to modify
 GREEN - Comment for CAD
 BLUE - Modification complete
 YELLOW - Item for clarification

Pen colours for print mark-ups

HAWESWATER AQUEDUCT RESILIENCE PROGRAMME

PROPOSED MARL HILL SECTION

BONSTONE COMPOUND ACCESS JUNCTION WITH B6478

ABNORMAL LOAD VEHICLE TRACKING

SCALE 1:500	SHEET SIZE A1
DRAWING NUMBER B27070CQ-JAC-XX-DR-C-TR4_VT-1113	REVISION P01.1

**APPENDIX B3 - AIL PROPOSED JUNCTION SWEEP PATHS
JUNCTIONS FIGURE B-3 - 07**

BRADDUP COMPOUND - B6478 SLAIDBURN ROAD JUNCTION



WIDER AREA 0 0.1 0.2 0.4 Kilometers

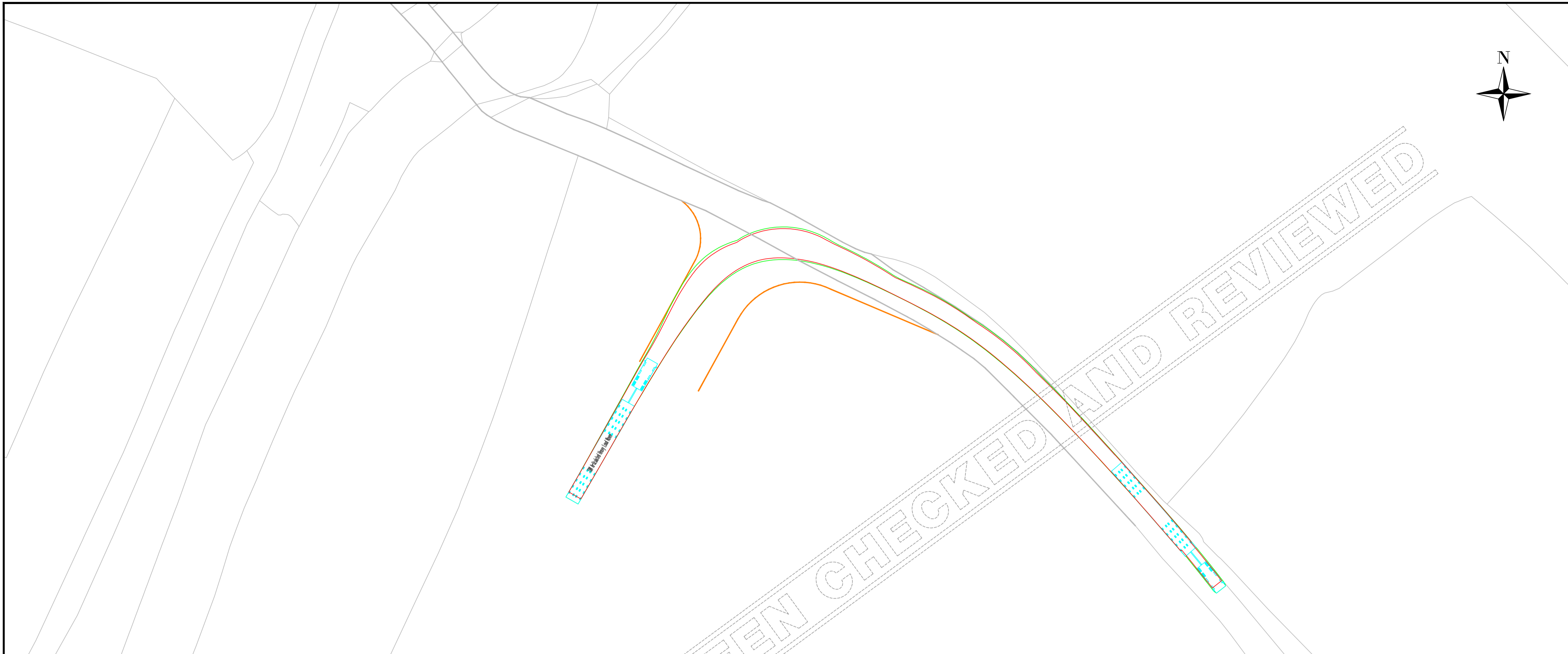


AIL - Tunnel Boring Machine Components from site (Southbound)



AIL - Tunnel Boring Machine Components to site (Southbound)

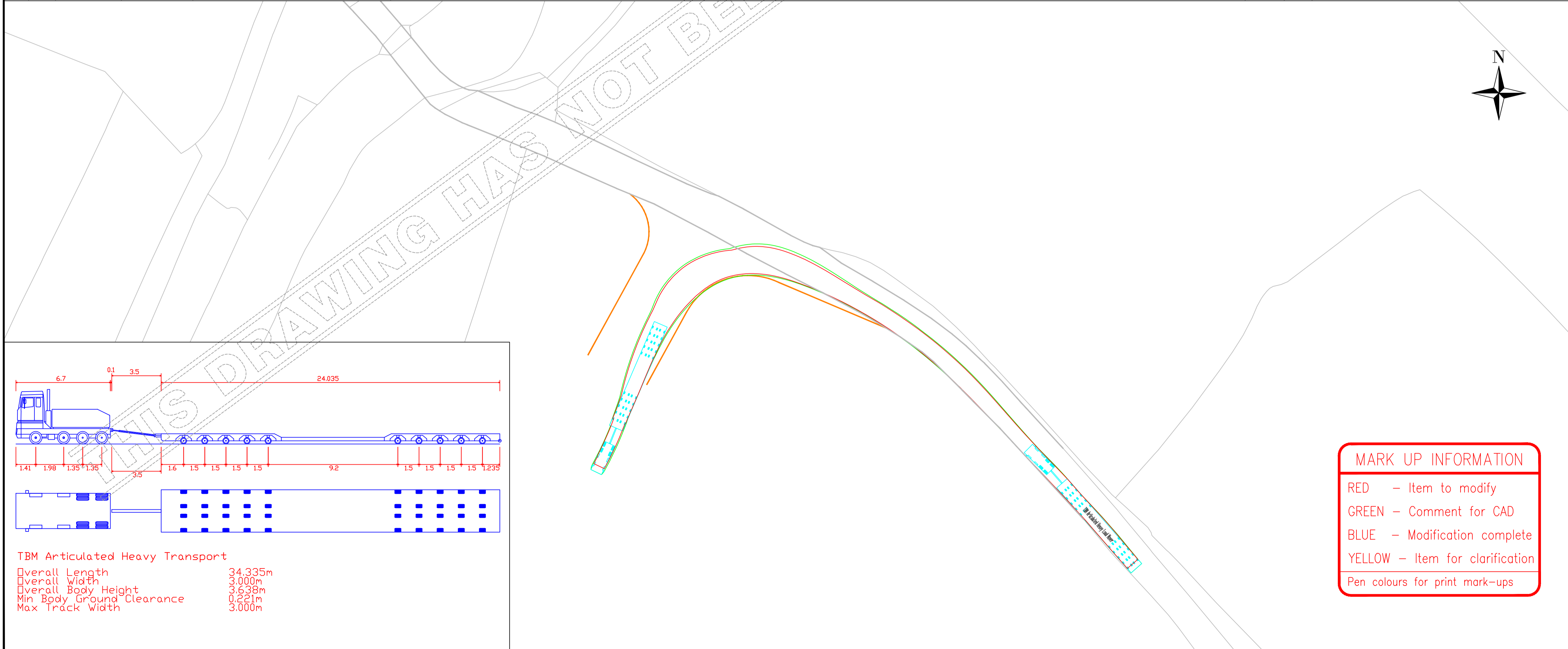
The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. United Utilities Water will not accept liability for any loss or damage caused by the actual position being different from those shown. Crown copyright and database rights 2017 Ordnance Survey 100022432.



NOTES
1. DO NOT SCALE FROM THIS DRAWING

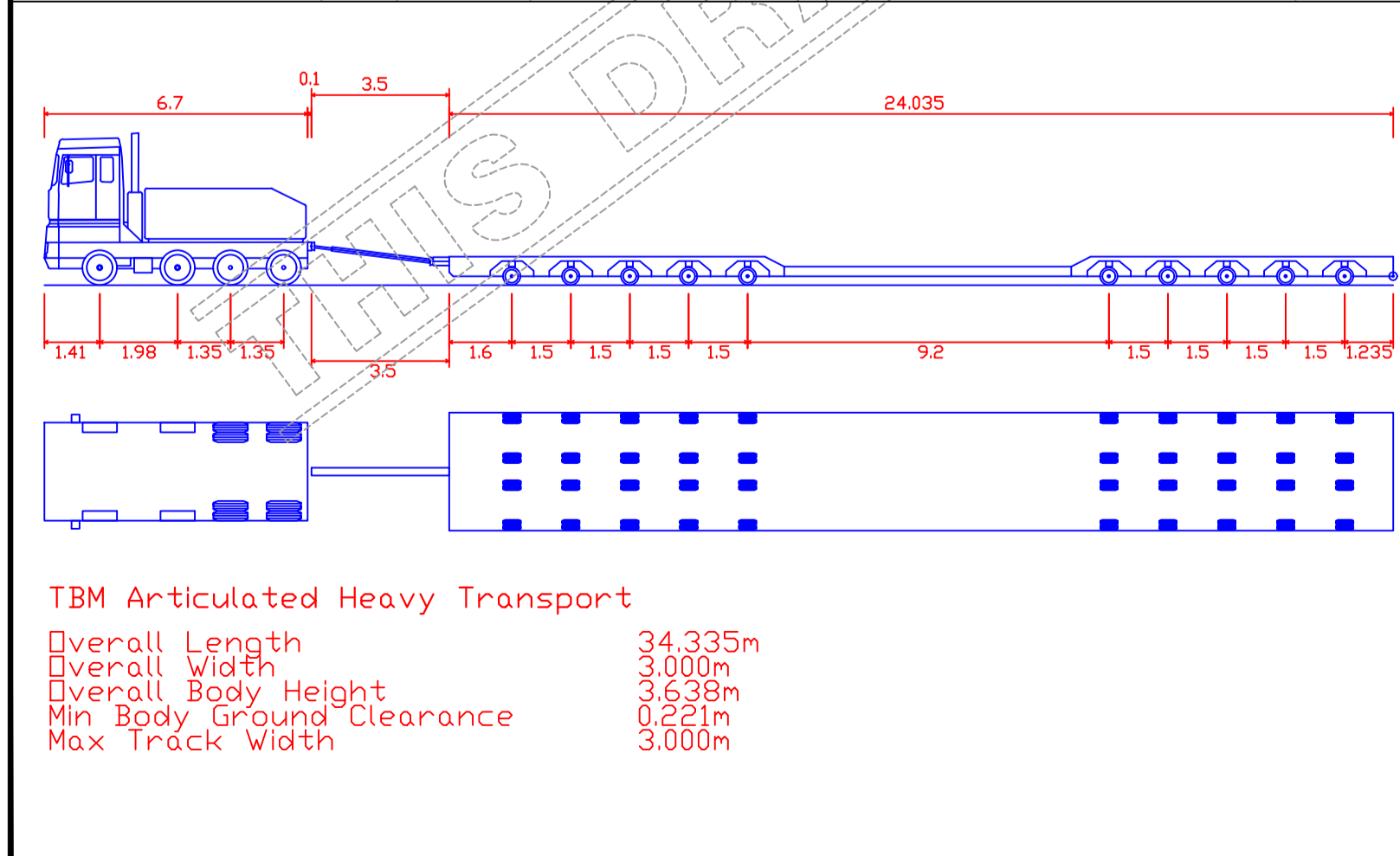
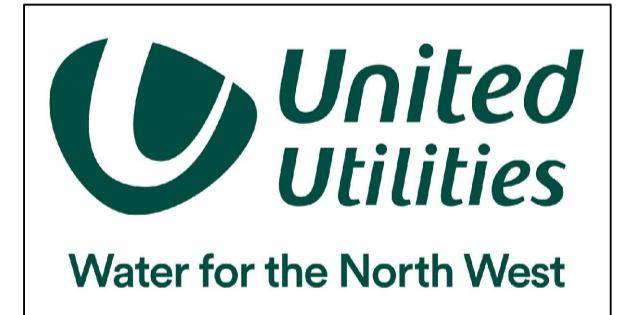
LEGEND

	PROPOSED KERB
	EXISTING KERB



CURRENT ISSUE INFORMATION

P01.2	HS	SP	--	--	--
VERSION	AUTH	CHKD	REVD	REASON FOR ISSUE	DATE
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SUITABILITY CODE		SUITABILITY DESCRIPTION			

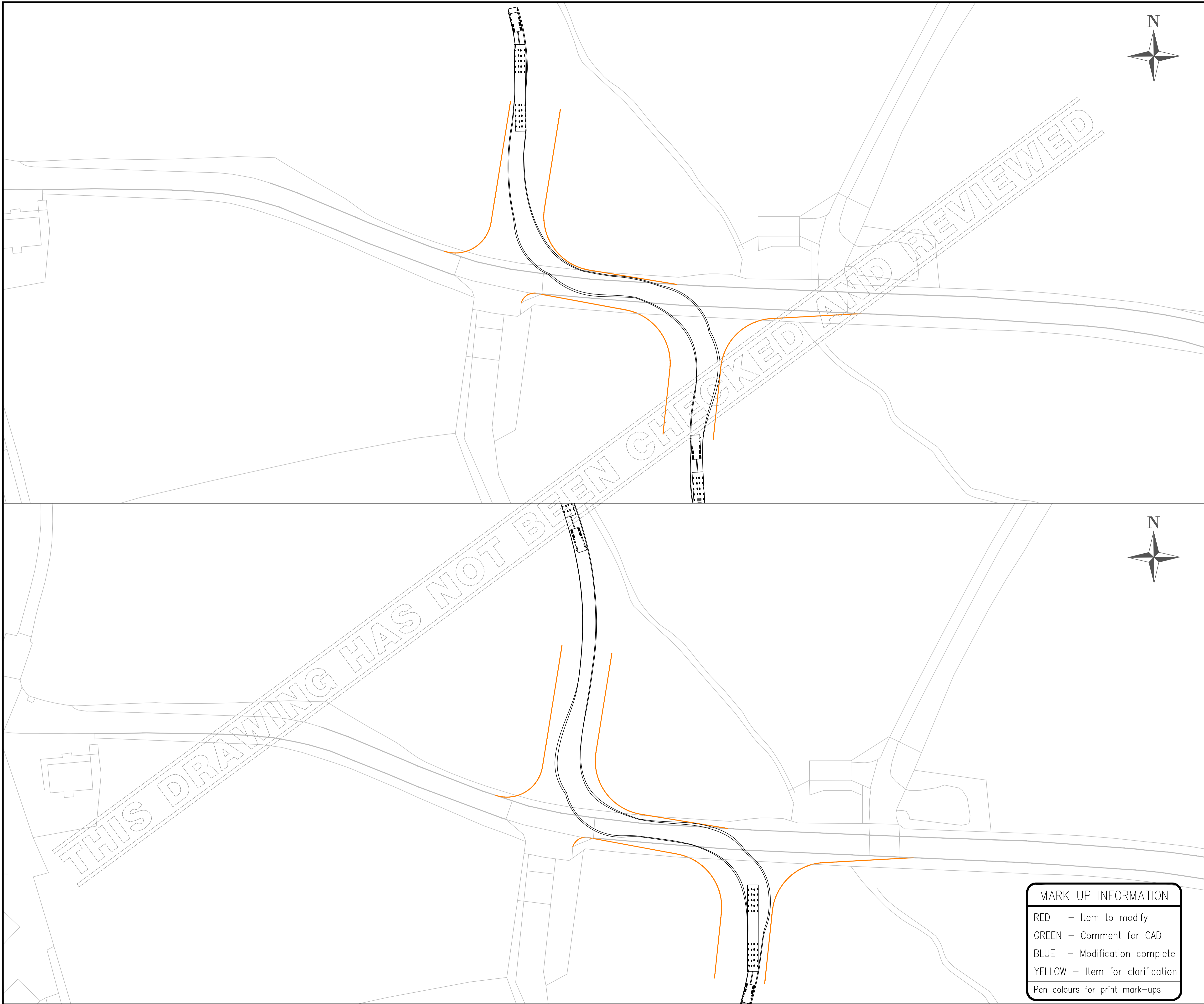


MARK UP INFORMATION

- RED - Item to modify
- GREEN - Comment for CAD
- BLUE - Modification complete
- YELLOW - Item for clarification
- Pen colours for print mark-ups

HAWESWATER AQUEDUCT RESILIENCE PROGRAMME
PROPOSED BOWLAND SECTION - TEMPORARY HAUL ROAD
HALLGATE HILL JUNCTION ABNORMAL LOAD
VEHICLE TRACKING

SCALE 1:500	SHEET SIZE A1
DRAWING NUMBER B27070CQ-JAC-XX-DR-C-TR3_VT-1112	REVISION P01.3



NOTES

- DO NOT SCALE FROM THIS DRAWING
- VEHICLE MEASUREMENTS

TBM ARTICULATED HEAVY TRANSPORT	
OVERALL LENGTH	34.335m
OVERALL WIDTH	3.000m
OVERALL BODY HEIGHT	3.638m
MIN. BODY GROUND CLEARANCE	0.221m
TRACK WIDTH	3.000m

LEGEND

	PROPOSED KERB
	EXISTING KERB

CURRENT ISSUE INFORMATION

P01.1	HS	SP	--	--	-
VERSION	AUTH	CHKD	REVD	REASON FOR ISSUE	DATE
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SUITABILITY CODE	SUITABILITY DESCRIPTION				

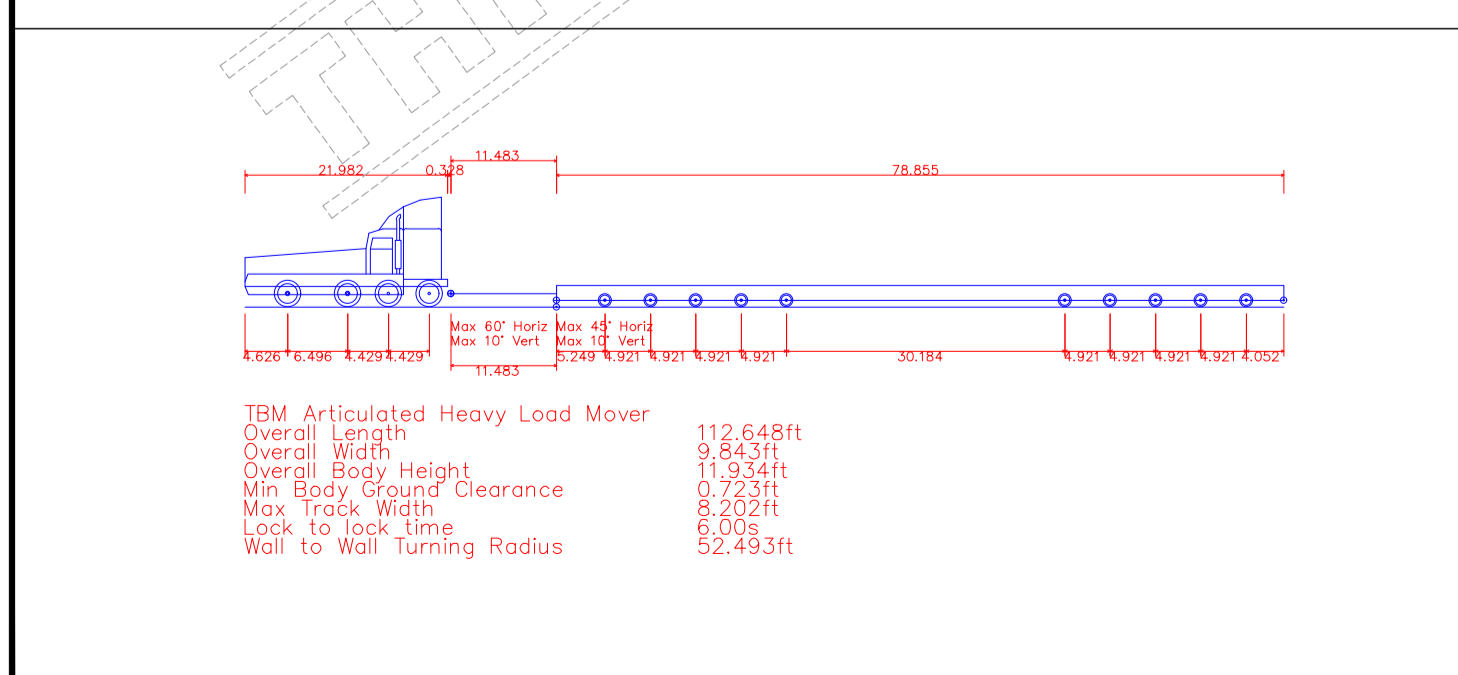
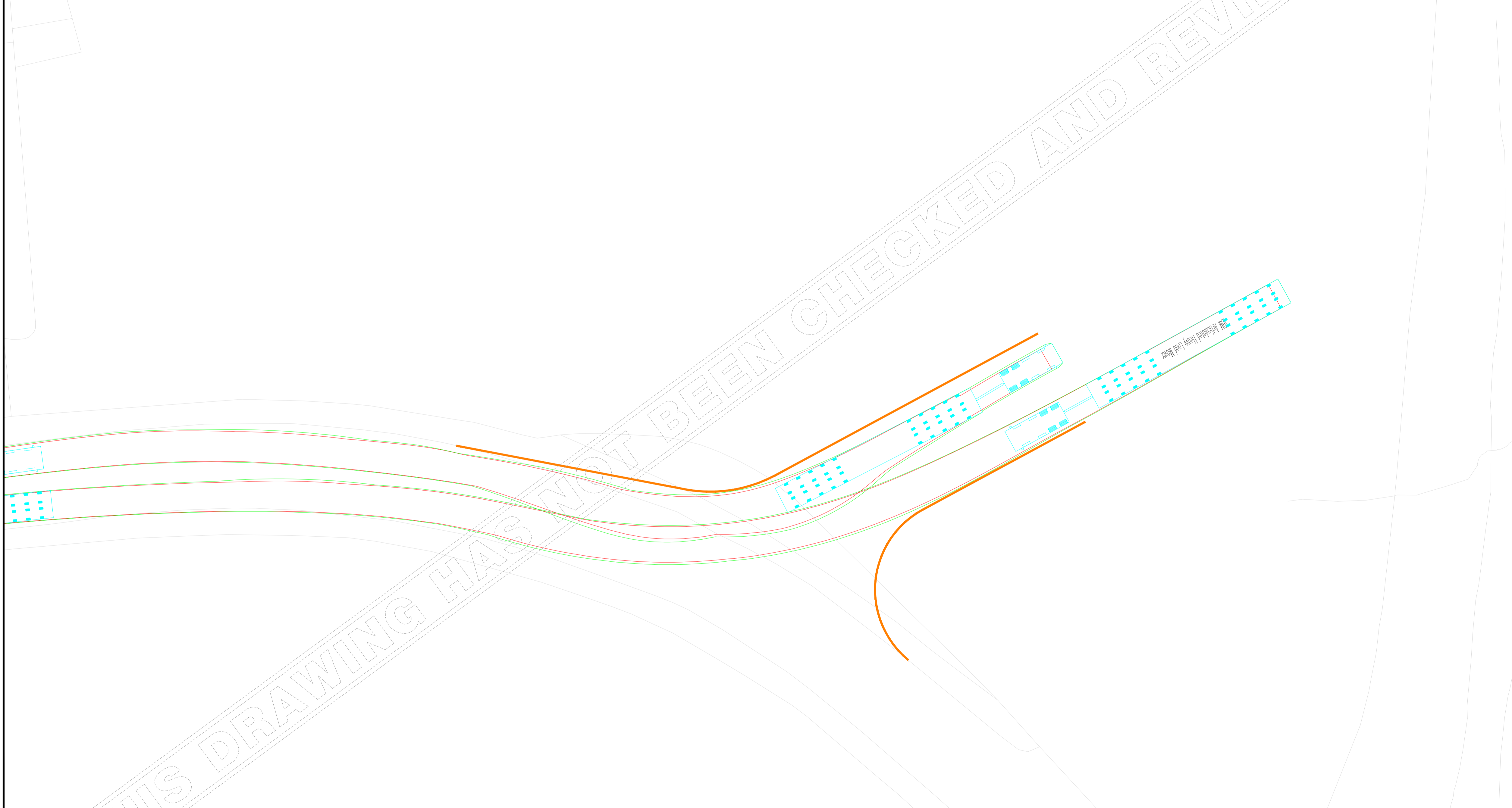
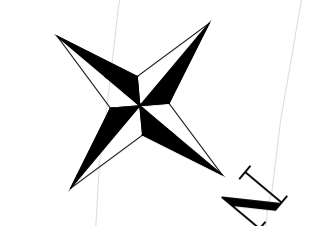
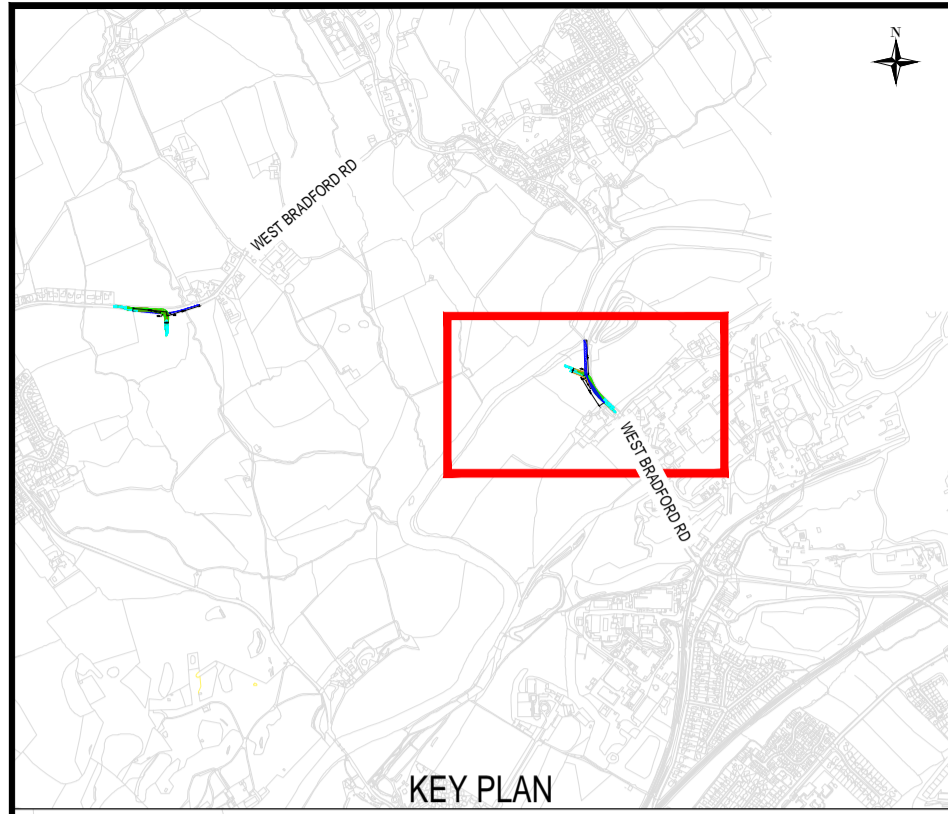


HAWESWATER AQUEDUCT RESILIENCE PROGRAMME
 PROPOSED BOWLAND SECTION
 NEWTON-IN-BOWLAND COMPOUND
 VEHICLE ACROSS JUNCTION (STAGGERED)
 ABNORMAL LOAD VEHICLE TRACKING (TBM)

MARK UP INFORMATION

RED – Item to modify
 GREEN – Comment for CAD
 BLUE – Modification complete
 YELLOW – Item for clarification
 Pen colours for print mark-ups

SCALE 1:500	SHEET SIZE A1
DRAWING NUMBER B27070CQ-JAC-XX-DR-C-TR3_VT-1107	REVISION P01.1



MARK UP INFORMATION

RED - Item to modify
 GREEN - Comment for CAD
 BLUE - Modification complete
 YELLOW - Item for clarification
 Pen colours for print mark-ups

NOTES
 1. DO NOT SCALE FROM THIS DRAWING.

LEGEND

	EXISTING KERB
	PROPOSED KERB

CURRENT ISSUE INFORMATION

P01.2	HS	SP	--	--	--
VERSION	AUTH	CHKD	REVD	REASON FOR ISSUE	DATE
S0				WORK IN PROGRESS (WIP)	
SUITABILITY CODE	SUITABILITY DESCRIPTION				



HAVESWATER AQUEDUCT RESILIENCE PROGRAMME

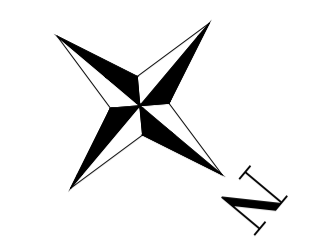
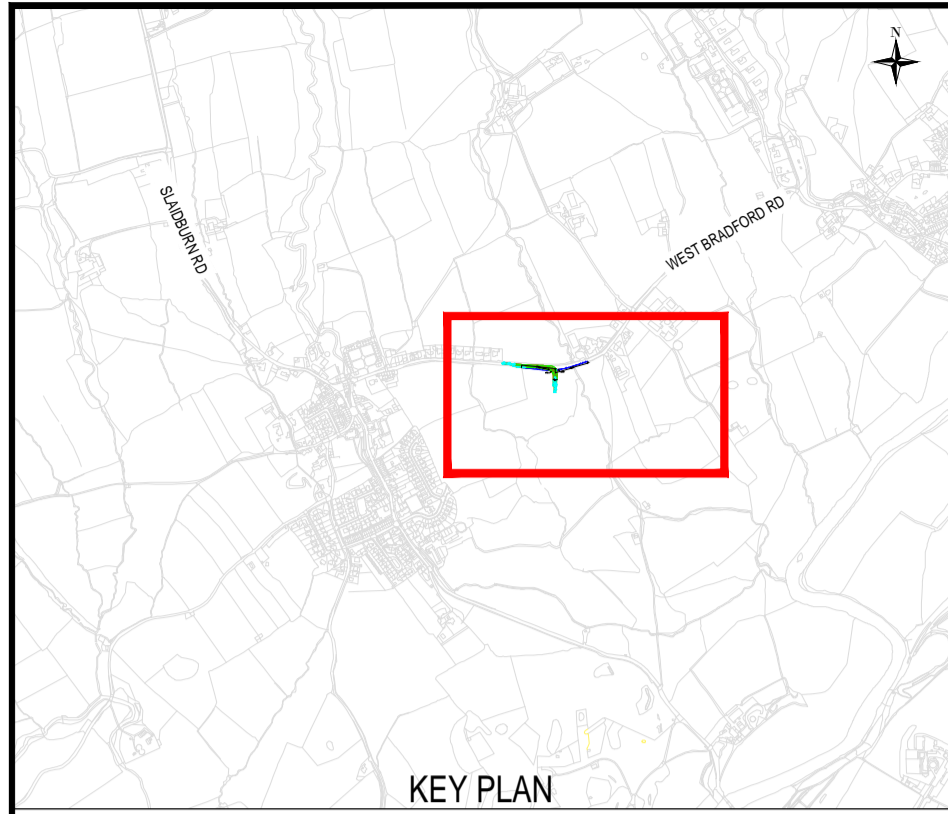
PROPOSED CLITHEROE SECTION

RIVER RIBBLE HAUL RD

ACCESS DESIGN - BEFORE RIVER RIBBLE (A59, PIMLICO LINK RD, WEST BRADFORD RD)

VEHICLE TRACKING TBM

SCALE 1:250	SHEET SIZE A1
DRAWING NUMBER B27070CQ-JAC-XX-DR-C-TR4_VT-1129	REVISION P01.2



NOTES
1. DO NOT SCALE FROM THIS DRAWING.

LEGEND

	EXISTING KERB
	PROPOSED KERB

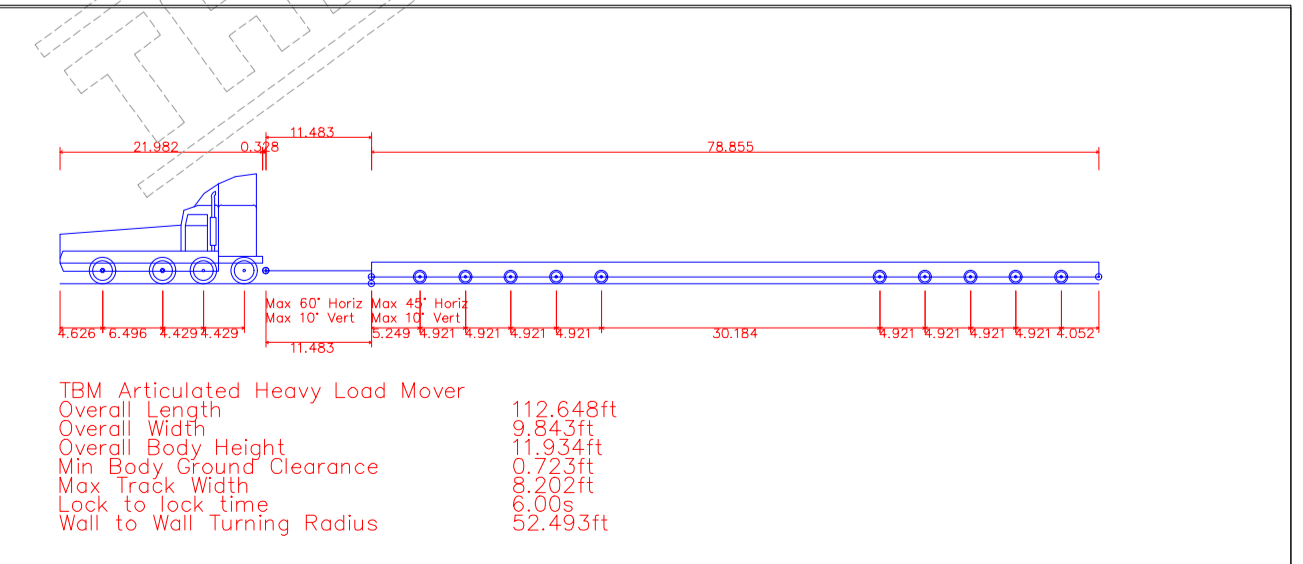
CURRENT ISSUE INFORMATION

P01.1	HS	SP	--	--	--
VERSION	AUTH	CHKD	REVD	REASON FOR ISSUE	DATE
S0				WORK IN PROGRESS (WIP)	
SUITABILITY CODE	SUITABILITY DESCRIPTION				



HAWESWATER AQUEDUCT RESILIENCE PROGRAMME
PROPOSED CLITHEROE SECTION
RIVER RIBBLE HAUL RD
ACCESS DESIGN - AFTER RIVER RIBBLE (WEST BRADFORD RD, WADDINGTON VILLAGE, SLAIDBURN RD)
VEHICLE TRACKING TBM

MARK UP INFORMATION
RED - Item to modify
GREEN - Comment for CAD
BLUE - Modification complete
YELLOW - Item for clarification
Pen colours for print mark-ups



SCALE 1:500	SHEET SIZE A1
DRAWING NUMBER B27070CQ-JAC-XX-DR-C-TR4_VT-1131	REVISION P01.1

Appendix C1 – Affected Bus Routes

Identified bus services which may be affected as a result of the Proposed Bowland and Marl Hill Sections

Bus Service Number	Bus Operator
25	Pilkington Bus
25A	Pilkington Bus
59	Stagecoach
66	Boomerang Travel Ltd
67	Pilkington Bus
109	The Burnley Bus Company
280	Stagecoach
462	P&S Nelson
616	Longridge Coaches
617	Longridge Coaches
622	Hodsons Coaches
623	Pilkington Bus
643	Hodsons Coaches
852	The Burnley Bus Company
903	P&S Nelson