



MetroWest+

Portishead Branch Line (MetroWest Phase 1)

TR040011

Applicant: North Somerset District Council

2.36 - Cross Section Plans

**The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009, regulation 5(2)(o)
Planning Act 2008**

Author: CH2M

Date: November 2019



Document Index

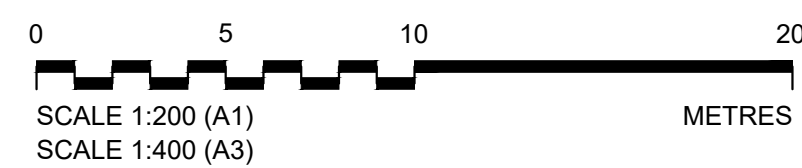
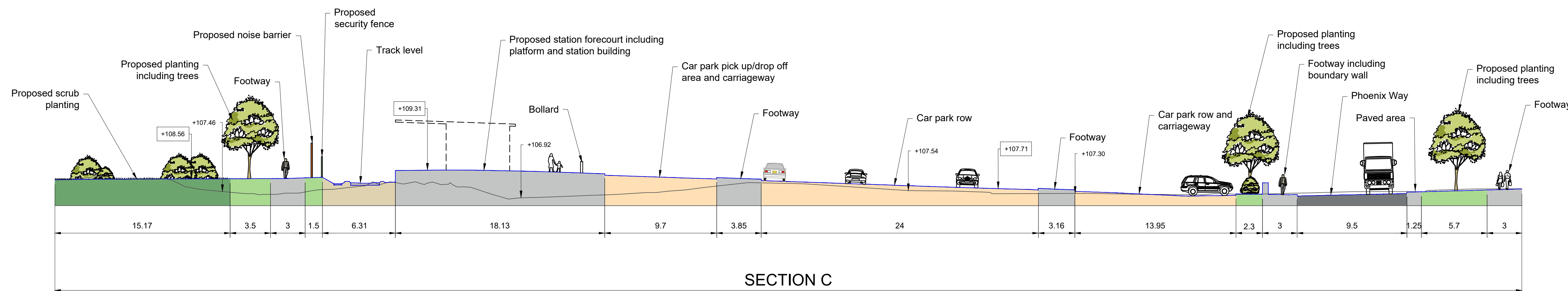
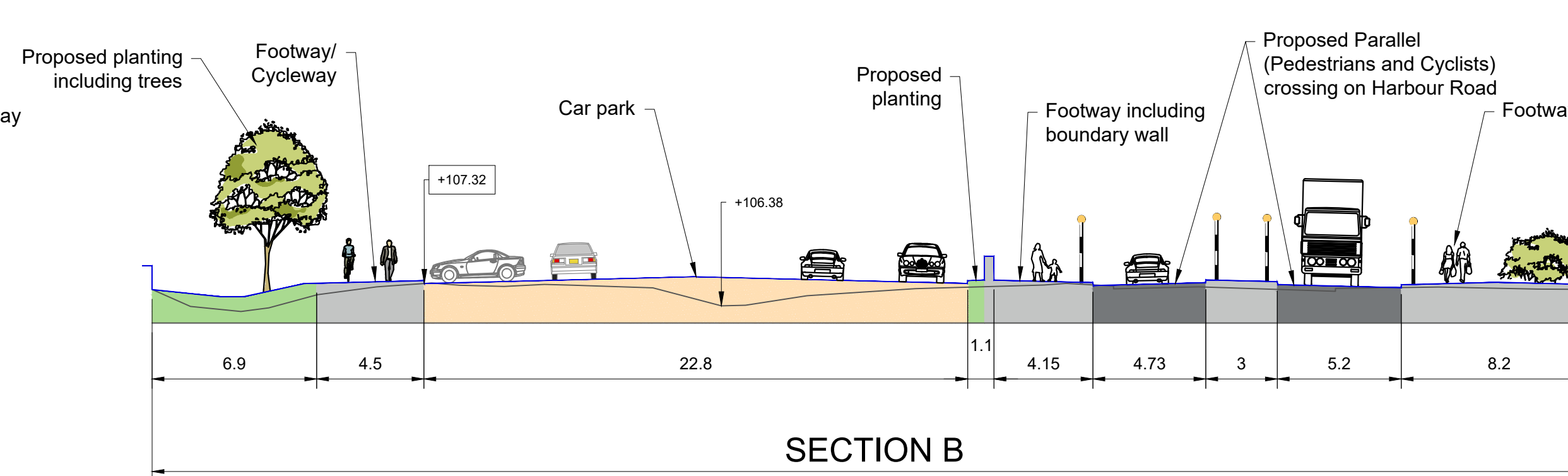
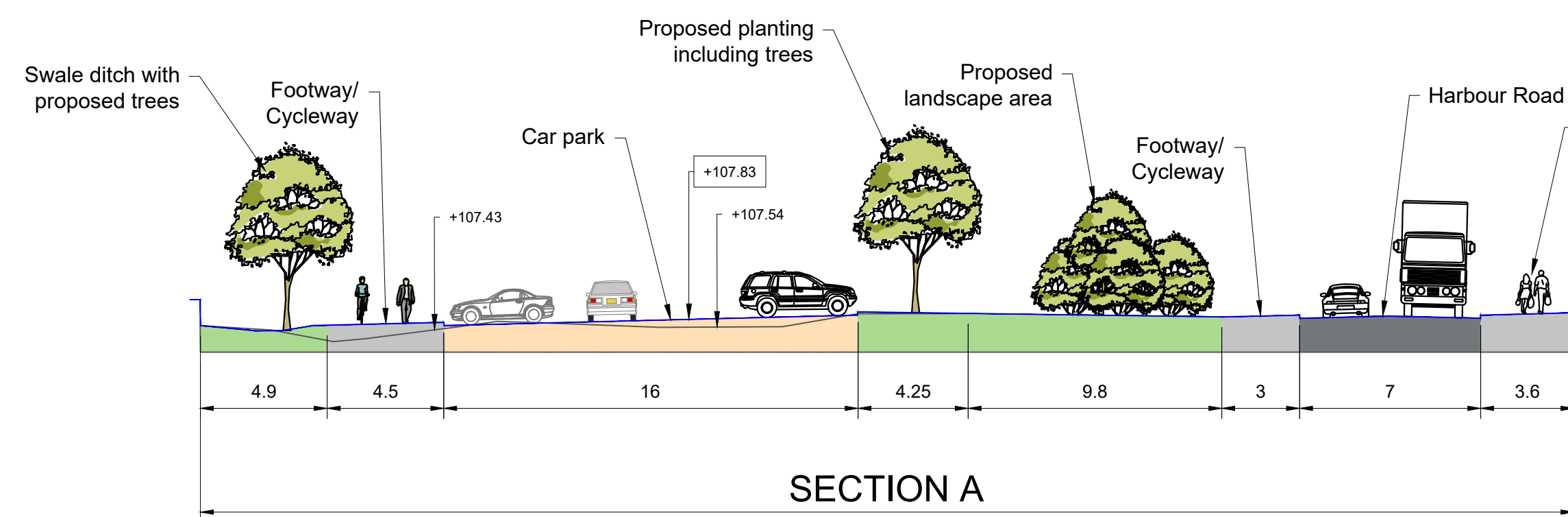
2.36	Cross Section Plans	The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009, regulation 5(2)(o)	<p>467470.BQ.04.20-104 Rev B 467470.BQ.04.20-219 Rev B 467470.BQ.04.20-292 Rev B 467470.BQ.04.20-410 Rev B 467470.BQ.04.20-531 Rev B 467470.BQ.04.20-630 Rev B 467470.BQ.04.20-SK300-SK304 Rev H 674946.BD.29.01-SK33 Rev A 674946.BD.29.01-SK35-SK36 Rev A</p>
------	---------------------	---	---

NOTES:

1. Refer to drawing 467470.BQ.04.20-100 to 102 for section locations

KEY:

- +115.34 Proposed Levels
- +113.60 Existing Levels



B	OHP	ADL	ADL	10/03/2019	Station building outline and spot levels added
A	OHP	ADL	ADL	31/07/2019	Minor amendments
Rev	By	Chkd	Apprvd	Date	Description

travelwest
Bath & North East Somerset, Bristol, North Somerset and South Gloucestershire
Councils working together to improve your local transport

CH2M HILL
1 The Square Temple Quay Bristol BS1 6DG
Tel +44 (0)117 910 2580 Fax +44 (0)117 910 2581
www.ch2m.com

ch2m

Project **PORTISHEAD BRANCH LINE (METROWEST PHASE 1)**

Drawing

PORTISHEAD STATION CROSS SECTIONS

Drawn by: OHP Date: 10/03/2019

Checked by: ADL Date: 25/03/2019

Approved by: ADL Date: 25/03/2019

Drawing No. Revision

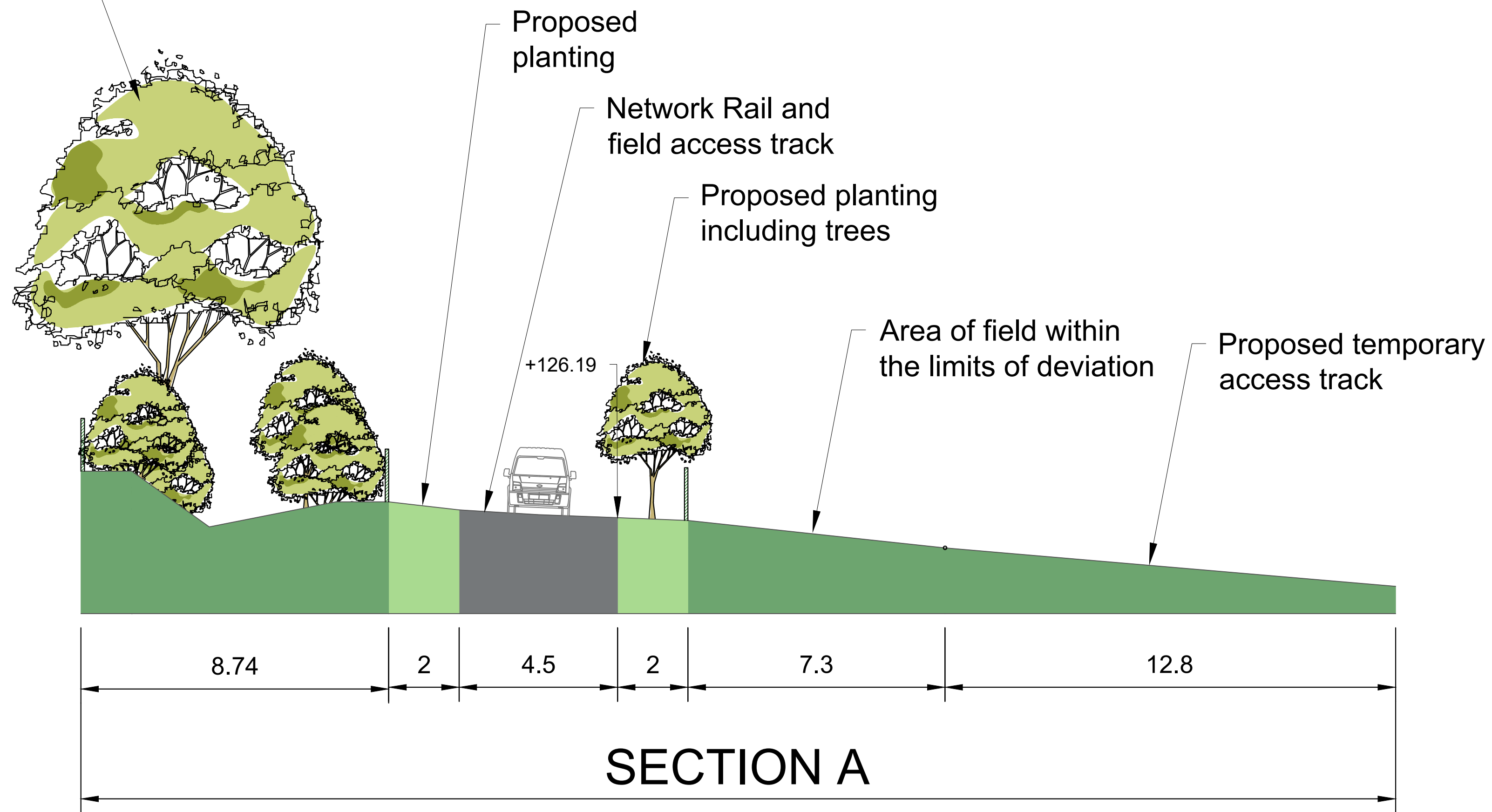
467470.BQ.04.20-104

B

Drawing Scale: 1:200 @ A1 or 1:400 @ A3

Project: 467470.BQ.04.20-104; Drawing: 467470.BQ.04.20-104; Title: PORTISHEAD STATION CROSS SECTIONS; Date: 10/03/2019; Author: OHP; Checker: ADL; Approver: ADL; Scale: 1:200 @ A1 or 1:400 @ A3

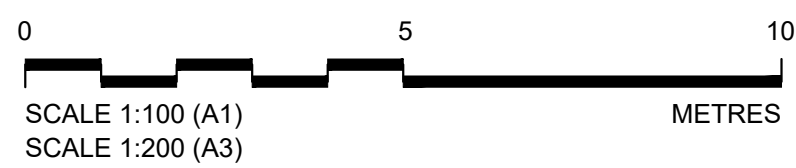
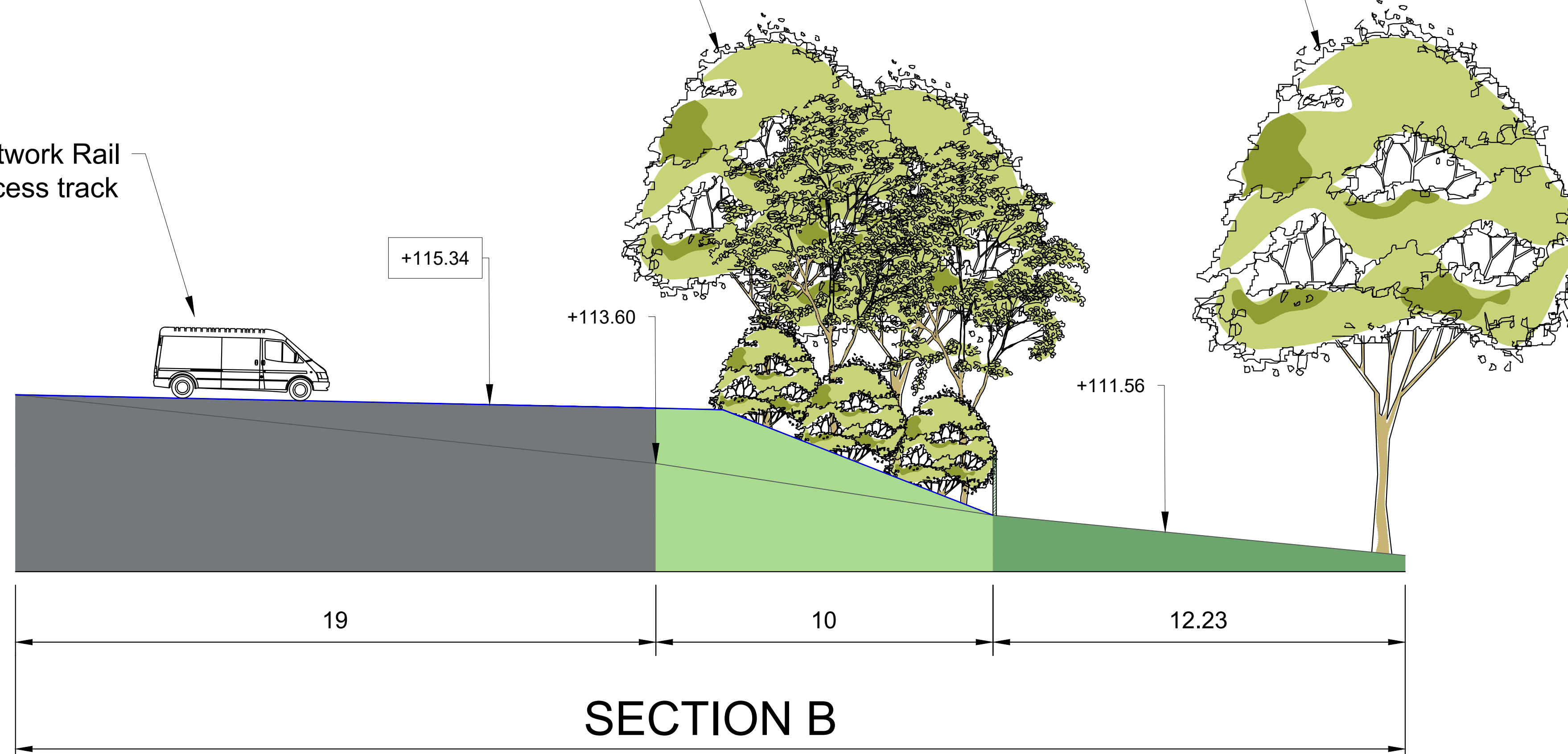
Existing vegetation



Proposed embankment with woodland planting

Existing lakeside trees

Network Rail access track



NOTES:

1. Refer to drawing 467470.BQ.04.20-220 to 221 for section locations

KEY:

+115.34	Proposed Levels
+113.60	Existing Levels

Rev	By	Chkd	Apprvd	Date	Description
B	OHP	ADL	ADL	02/02/2019	Minor amendments
A	OHP	ADL	ADL	31/07/2019	Minor amendments

travelwest
Bath & North East Somerset, Bristol, North Somerset and South Gloucestershire
Councils working together to improve your local transport

CH2M HILL
1 The Square Temple Quay Bristol BS1 6DG
Tel +44 (0)117 910 2580 Fax +44 (0)117 910 2581
www.ch2m.com

ch2m

Project
**PORTISHEAD BRANCH LINE
(METROWEST PHASE 1)**

Drawing
**PILL TUNNEL EAST
CROSS SECTIONS**

Drawn by: OHP Date: 20/03/2019

Checked by: ADL Date: 25/03/2019

Approved by: ADL Date: 25/03/2019

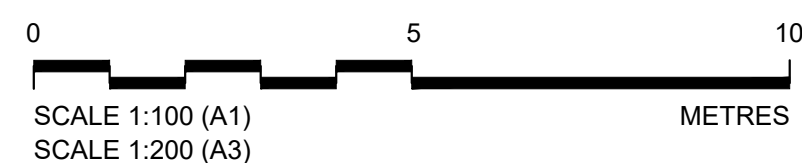
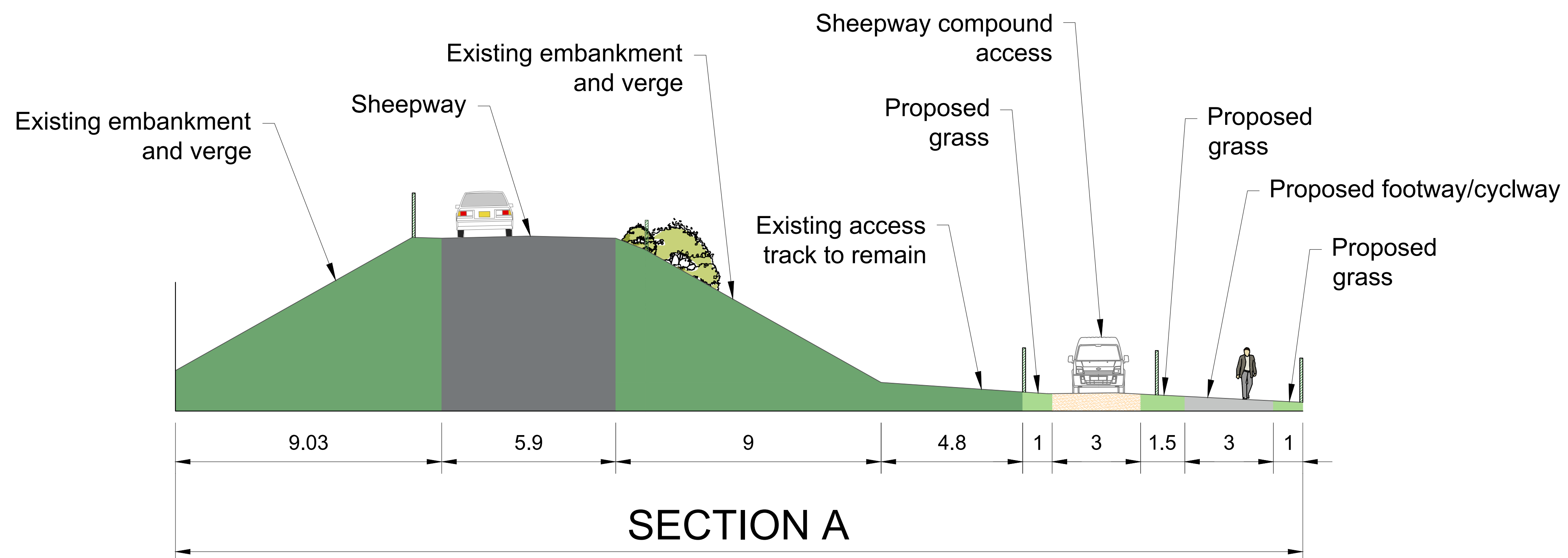
Drawing No. Revision

467470.BQ.04.20-219 B

Drawing Scale: 1:100 @ A1 or 1:200 @ A3

NOTES:

1. Refer to drawing 467470.BQ.04.20-400 to 401 for section locations
2. Proposed access and footway/cycleway to match with existing levels



B	OHP	ADL	ADL	02/02/2019	Minor amendments
A	OHP	ADL	ADL	31/07/2019	Minor amendments
Rev	By	Chkd	Apprvd	Date	Description



CH2M HILL
1 The Square Temple Quay Bristol BS1 6DG
Tel +44 (0)117 910 2580 Fax +44 (0)117 910 2581
www.ch2m.com



Project
**PORTISHEAD BRANCH LINE
(METROWEST PHASE 1)**

Drawing
**SHEEPWAY
CROSS SECTIONS**

Drawn by: OHP Date: 20/03/2019

Checked by: ADL Date: 25/03/2019

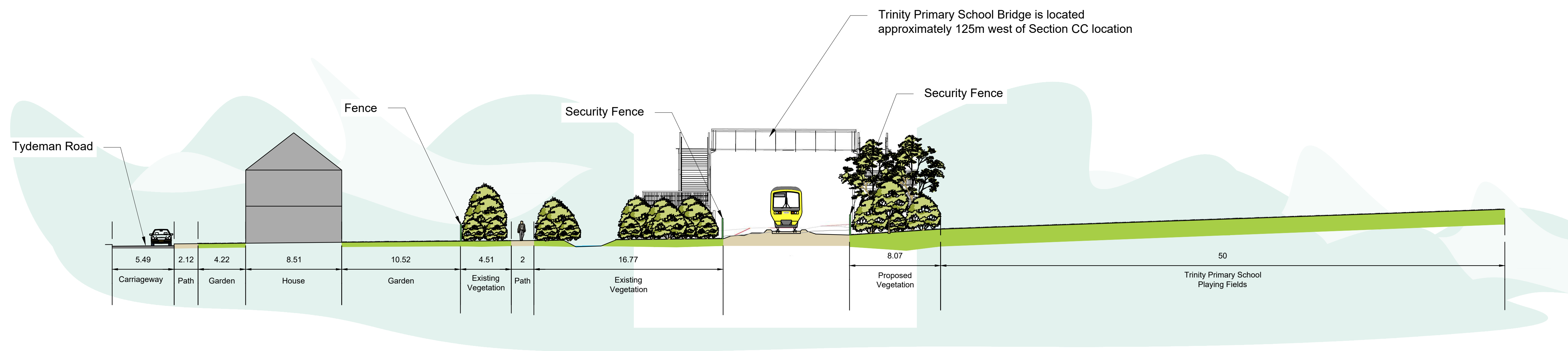
Approved by: ADL Date: 25/03/2019

Drawing No.	Revision
467470.BQ.04.20-410	B

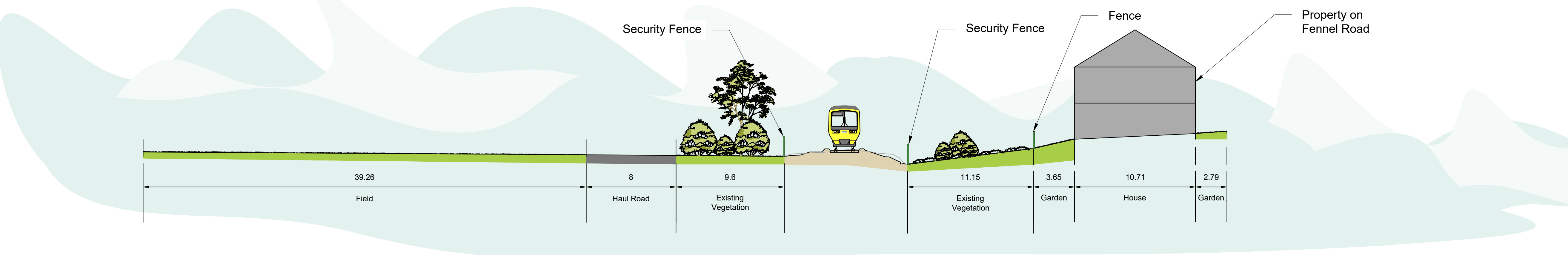
Drawing Scale: 1:100 @ A1 or 1:200 @ A3

Notes:

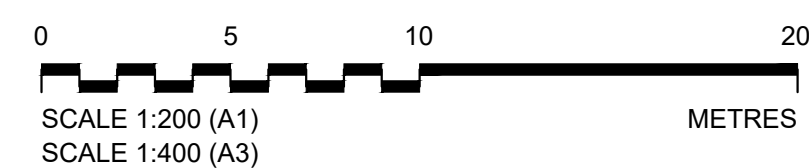
1. All dimensions are in metres unless noted otherwise
2. The levels for the rail corridor are based upon a Topographical Survey dated September 2015.
3. The levels beyond the Network Rail fence line have been derived from data captured using airborne RADAR technology that provides elevation point data every five metres with a vertical accuracy of +/-60cm - which is then subsequently interpolated. Therefore these levels should be used for contextual information only and are subject to confirmation.
4. Refer to drawing 467470.BQ.04.20-SK304 for section locations



Section CC



Section DD



H	OHP	ADL	ADL	31/10/2018	Note amendments
G	OHP	ADL	ADL	09/10/2018	Note amendments
F	OHP	ADL	ADL	31/07/2018	Further location detail added to sections
E	OHP	ADL	ADL	25/03/2018	Minor amendments
D	OHP	ADL	ADL	07/01/2018	Minor amendments
C	OHP	ADL	ADL	27/06/2018	Minor amendments
B	OHP	ADL	ADL	10/04/2018	Minor amendments
A	OHP	ADL	ADL	04/04/2018	Block of Rail Class 166 Turbo added to each section
Rev	By	Chkd	Apprvd	Date	Description



Bath & North East Somerset, Bristol, North Somerset and South Gloucestershire
Councils working together to improve your local transport

CH2M HILL
1 The Square Temple Quay Bristol BS1 6DG
Tel +44 (0)117 910 2580 Fax +44 (0)117 910 2581
www.ch2m.com



Project
**PORTISHEAD BRANCH LINE
(METROWEST PHASE 1)**

Drawing
**TYPICAL SECTIONS
SHEET 2 OF 4**

Drawn by: OHP Date: 13/03/2018

Checked by: ADL Date: 27/03/2018

Approved by: ADL Date: 27/03/2018

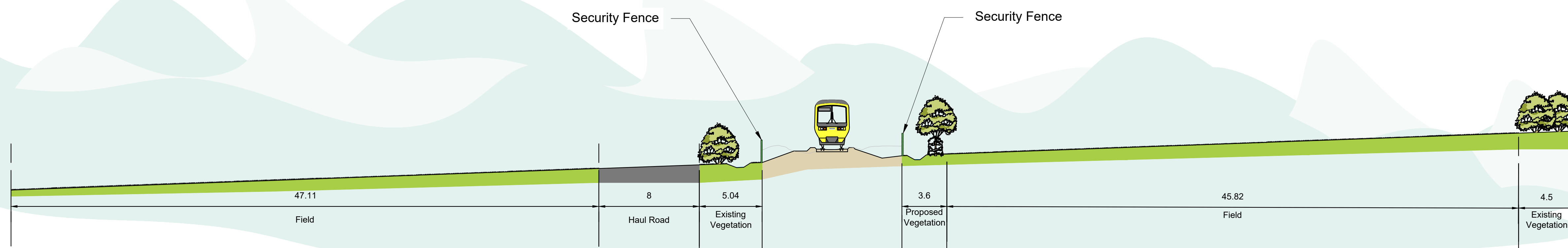
Drawing No.	Revision
467470.BQ.04.20-SK301	H

Drawing Scale: 1:200 @ A1 or 1:400 @ A3

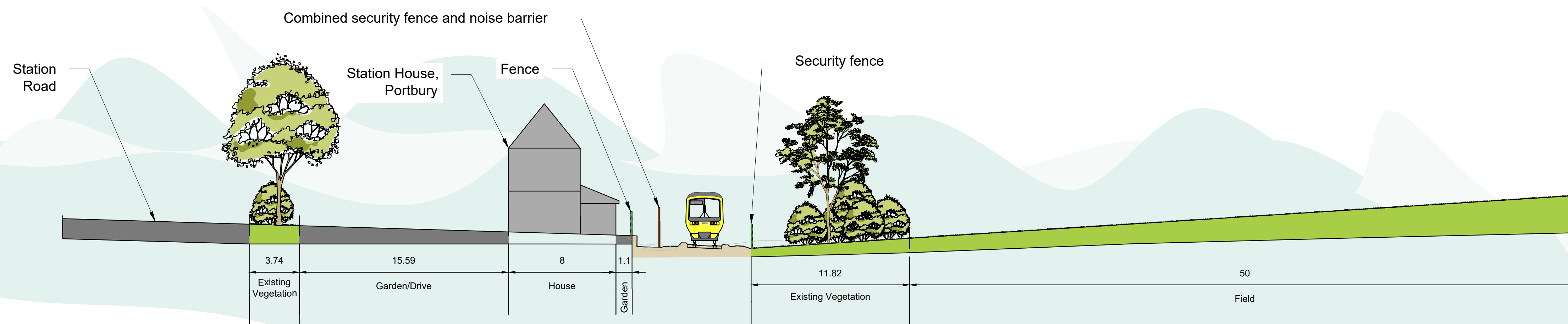
Drawing: 467470.BQ.04.20-SK301, Rev: H, Date: 27/03/2018, Project: PORTISHEAD BRANCH LINE (METROWEST PHASE 1), Scale: 1:200 @ A1 or 1:400 @ A3

Notes:

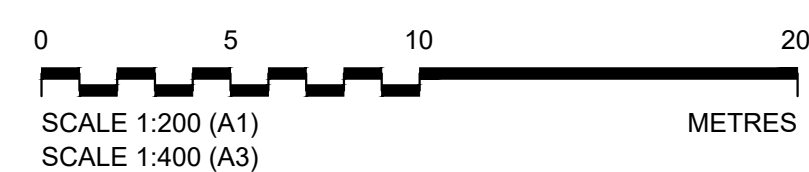
1. All dimensions are in metres unless noted otherwise
2. The levels for the rail corridor are based upon a Topographical Survey dated September 2015.
3. The levels beyond the Network Rail fence line have been derived from data captured using airborne RADAR technology that provides elevation point data every five metres with a vertical accuracy of +/-60cm - which is then subsequently interpolated. Therefore these levels should be used for contextual information only and are subject to confirmation.
4. Refer to drawing 467470.BQ.04.20-SK304 for section locations



Section EE



Section FF



Rev	By	Chkd	Apprvd	Date	Description
H	OHP	ADL	ADL	31/10/2018	Note amendments
G	OHP	ADL	ADL	09/10/2018	Note amendments
F	OHP	ADL	ADL	31/07/2018	Further location detail added to sections
E	OHP	ADL	ADL	25/03/2018	Minor amendments
D	OHP	ADL	ADL	07/01/2018	Minor amendments
C	OHP	ADL	ADL	27/06/2018	Minor amendments
B	OHP	ADL	ADL	10/04/2018	Minor amendments
A	OHP	ADL	ADL	04/04/2018	Block of Rail Class 185 Turbo added to each section

travelwest

Bath & North East Somerset, Bristol, North Somerset and South Gloucestershire
Councils working together to improve your local transport

CH2M HILL
1 The Square Temple Quay Bristol BS1 6DG
Tel +44 (0)117 910 2580 Fax +44 (0)117 910 2581
www.ch2m.com

ch2m

Project
**PORTISHEAD BRANCH LINE
(METROWEST PHASE 1)**

Drawing

TYPICAL SECTIONS

SHEET 3 OF 4

Drawn by: OHP Date: 13/03/2018

Checked by: ADL Date: 27/03/2018

Approved by: ADL Date: 27/03/2018

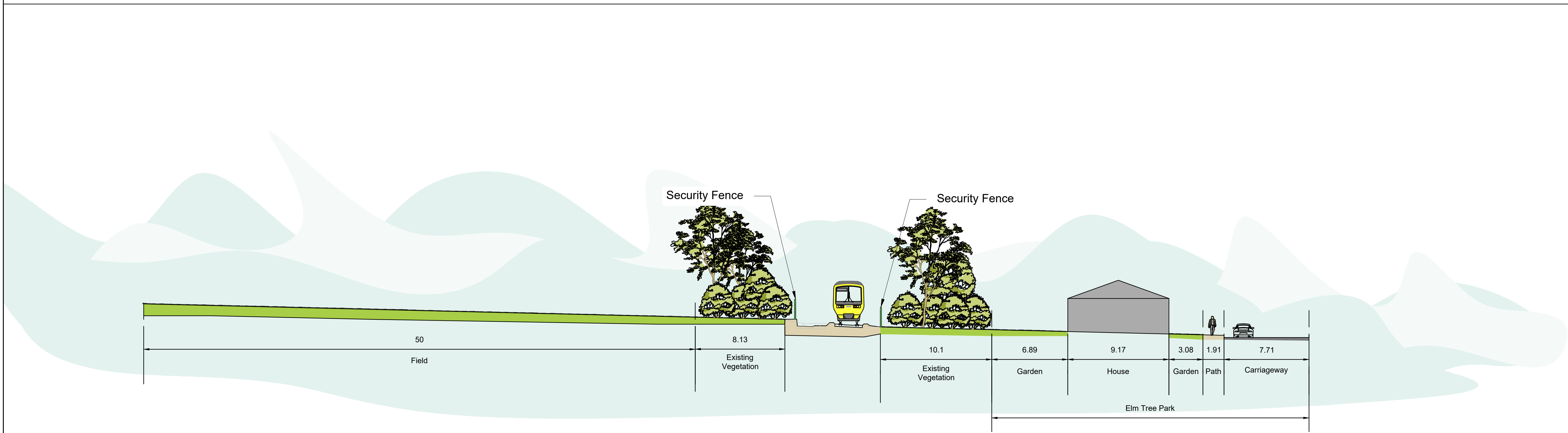
Drawing No.	Revision
467470.BQ.04.20-SK302	H

Drawing Scale: 1:200 @ A1 or 1:400 @ A3

Drawing: 467470.BQ.04.20-SK302, Rev: H, Date: 27/03/2018, Project: PORTISHEAD BRANCH LINE (METROWEST PHASE 1), Client: travelwest, Designer: CH2M HILL

Notes:

1. All dimensions are in metres unless noted otherwise
2. The levels for the rail corridor are based upon a Topographical Survey dated September 2015.
3. The levels beyond the Network Rail fence line have been derived from data captured using airborne RADAR technology that provides elevation point data every five metres with a vertical accuracy of +/-60cm - which is then subsequently interpolated. Therefore these levels should be used for contextual information only and are subject to confirmation.
4. Refer to drawing 467470.BQ.04.20-SK304 for section locations



Section GG

H	OHP	ADL	ADL	31/03/2018	Note amendments
G	OHP	ADL	ADL	02/10/2018	Note amendments
F	OHP	ADL	ADL	31/07/2018	Further location detail added to sections
E	OHP	ADL	ADL	25/03/2018	Minor amendments
D	OHP	ADL	ADL	07/01/2018	Minor amendments
C	OHP	ADL	ADL	27/06/2018	Minor amendments
B	OHP	ADL	ADL	10/04/2018	Minor amendments
A	OHP	ADL	ADL	04/04/2018	Block of Rail Class 185 Taxis added to each section
Rev	By	Chkd	Apprvd	Date	Description



CH2M HILL
 1 The Square Temple Quay Bristol BS1 6DG
 Tel +44 (0)117 910 2580 Fax +44 (0)117 910 2581
 www.ch2m.com



Project
**PORTISHEAD BRANCH LINE
 (METROWEST PHASE 1)**

Drawing
**TYPICAL SECTIONS
 SHEET 4 OF 4**

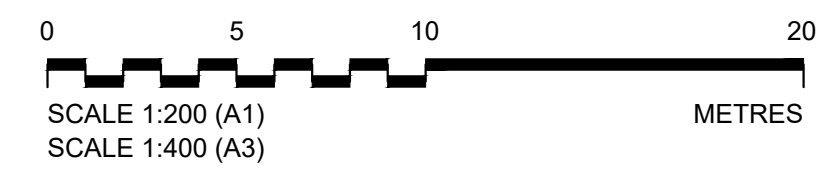
Drawn by: OHP Date: 13/03/2018

Checked by: ADL Date: 27/03/2018

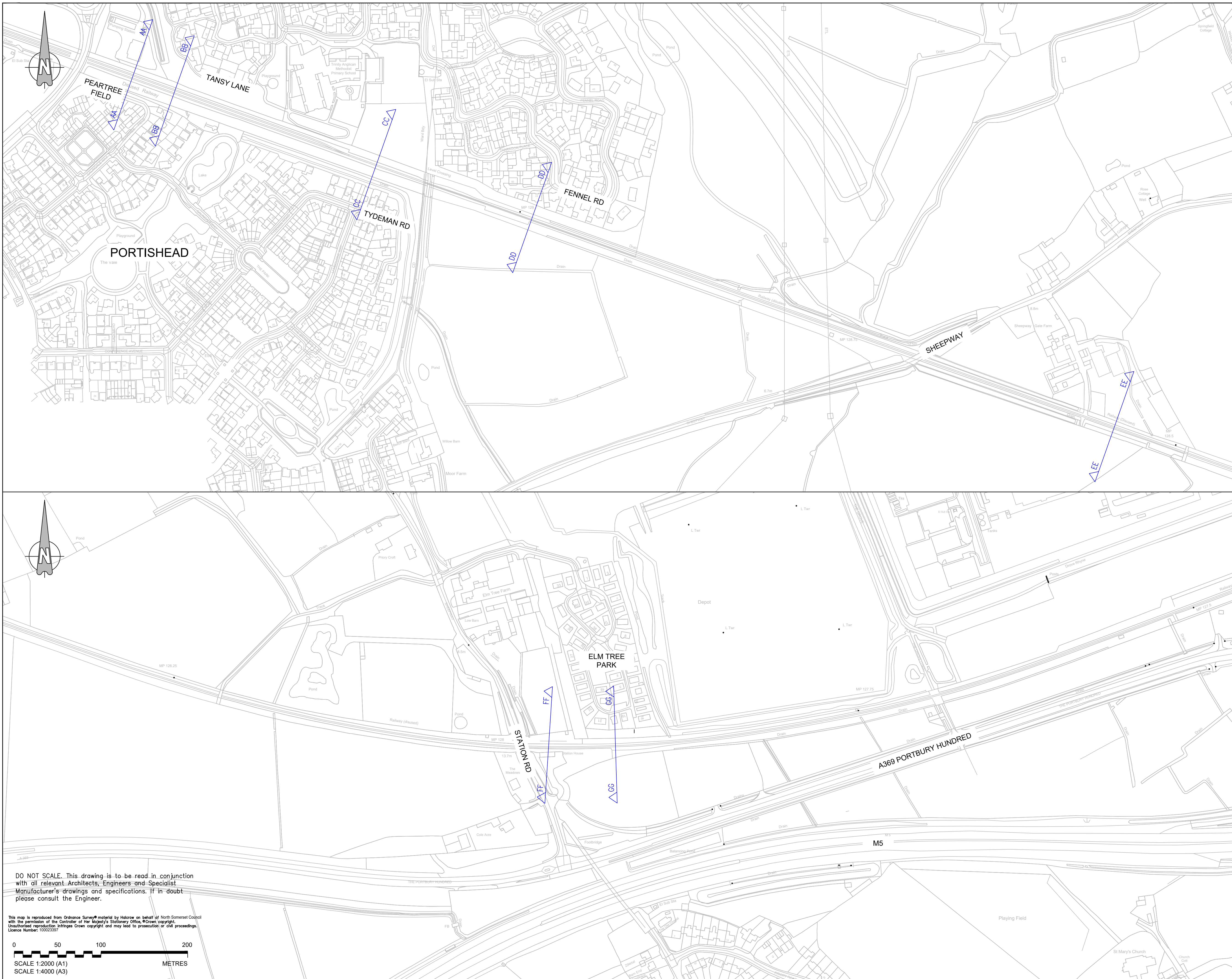
Approved by: ADL Date: 27/03/2018

Drawing No.	Revision
467470.BQ.04.20-SK303	H

Drawing Scale: 1:200 @ A1 or 1:400 @ A3



Drawing: 467470.BQ.04.20-SK303 Rev: H Date: 27/03/2018



Notes:

1. All dimensions are in metres unless noted otherwise
2. The levels for the rail corridor are based upon a Topographical Survey dated September 2015.
3. The levels beyond the Network Rail fence line have been derived from data captured using airborne RADAR technology that provides elevation point data every five metres with a vertical accuracy of +/-60cm - which is then subsequently interpolated. Therefore these levels should be used for contextual information only and are subject to confirmation.

Rev	By	Chkd	Apprvd	Date	Description
H	OHP	ADL	ADL	31/10/2018	Note amendments
G	OHP	ADL	ADL	09/10/2018	Note amendments
F	OHP	ADL	ADL	31/07/2018	Further location detail added to sections
E	OHP	ADL	ADL	25/03/2018	Minor amendments
D	OHP	ADL	ADL	07/01/2018	Minor amendments
C	OHP	ADL	ADL	27/06/2018	Minor amendments
B	OHP	ADL	ADL	10/04/2018	Minor amendments
A	OHP	ADL	ADL	04/04/2018	Block of Rail Class 166 Tabor added to each section



CH2M HILL
 1 The Square Temple Quay Bristol BS1 6DG
 Tel +44 (0)117 910 2580 Fax +44 (0)117 910 2581
 www.ch2m.com



Project **PORTISHEAD BRANCH LINE (METROWEST PHASE 1)**

Drawing **TYPICAL SECTIONS LOCATION PLAN**

Drawn by: OHP Date: 04/04/2018

Checked by: ADL Date: 04/04/2018

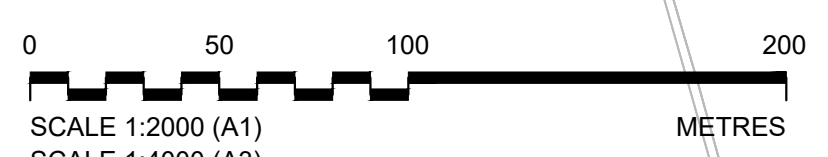
Approved by: ADL Date: 04/04/2018

Drawing No. **467470.BQ.04.20-SK304** Revision **H**

Drawing Scale: 1:2000 @ A1 or 1:4000 @ A3

DO NOT SCALE. This drawing is to be read in conjunction with all relevant Architects, Engineers and Specialist Manufacturer's drawings and specifications. If in doubt please consult the Engineer.

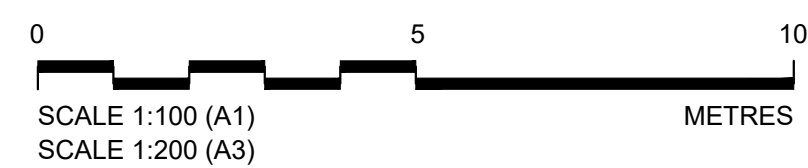
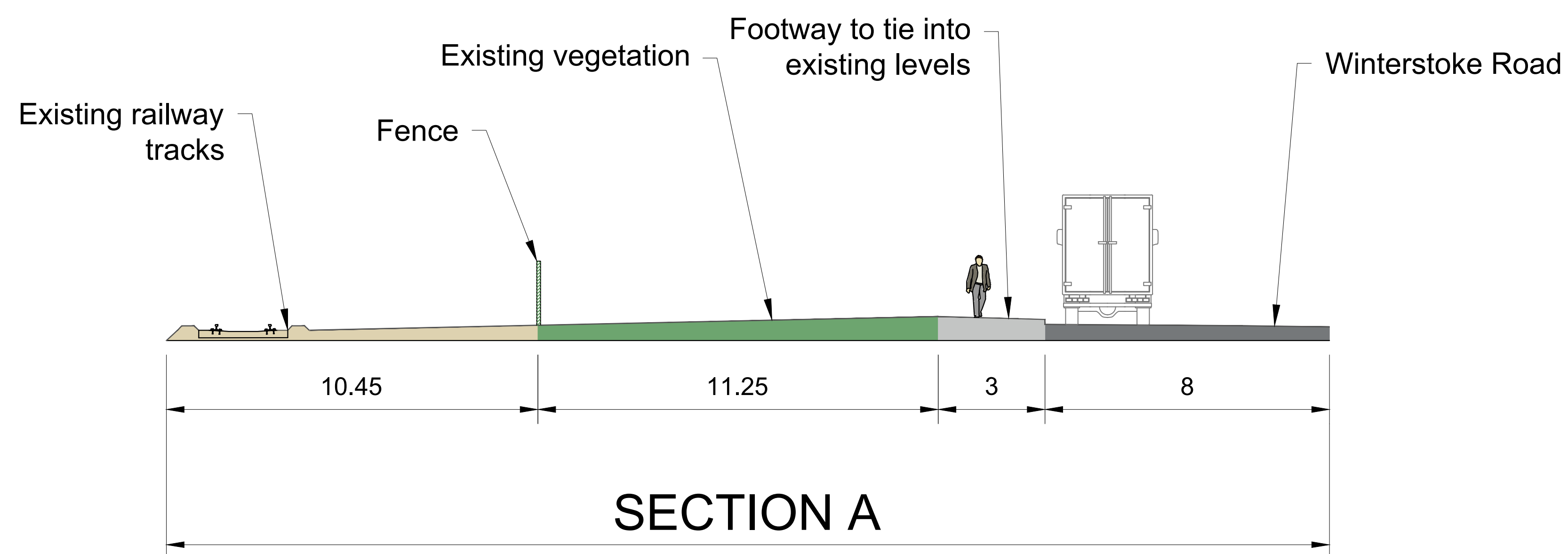
This map is reproduced from Ordnance Survey material by permission of the Controller of Her Majesty's Stationery Office, © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Licence Number: 100023399



Drawing: 467470.BQ.04.20-SK304; Project: Portishead Branch Line (Metrowest Phase 1); Date: 04/04/2018; Scale: 1:2000 @ A1 or 1:4000 @ A3

NOTES:

1. Refer to drawing 674946.BD.29.01-SK31 for section locations



Rev	By	Chkd	Appvd	Date	Description
A	OHP	ADL	ADL	10/03/2019	Minor amendments

travelwest

Bath & North East Somerset, Bristol, North Somerset and South Gloucestershire
Councils working together to improve your local transport

CH2M HILL
1 The Square Temple Quay Bristol BS1 6DG
Tel +44 (0)117 910 2580 Fax +44 (0)117 910 2581
www.ch2m.com

ch2m

Project
**PORTISHEAD BRANCH LINE
(METROWEST PHASE 1)**

Drawing
**WINTERSTOKE ROAD
CROSS SECTION**

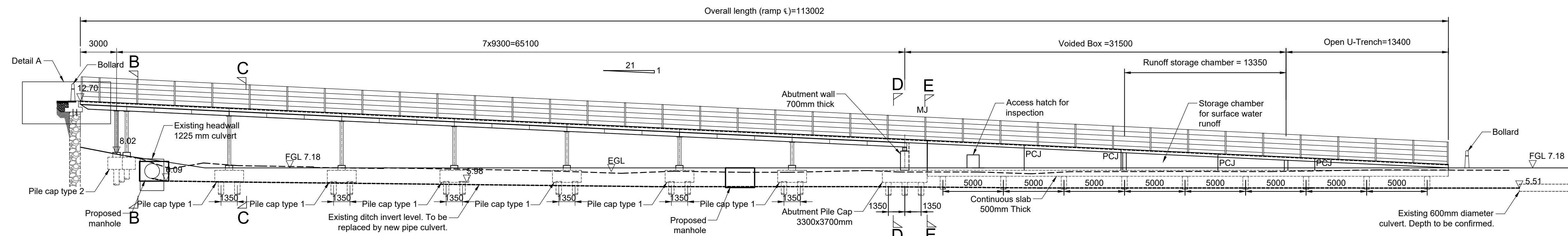
Drawn by: OHP Date: 20/03/2019

Checked by: ADL Date: 25/03/2019

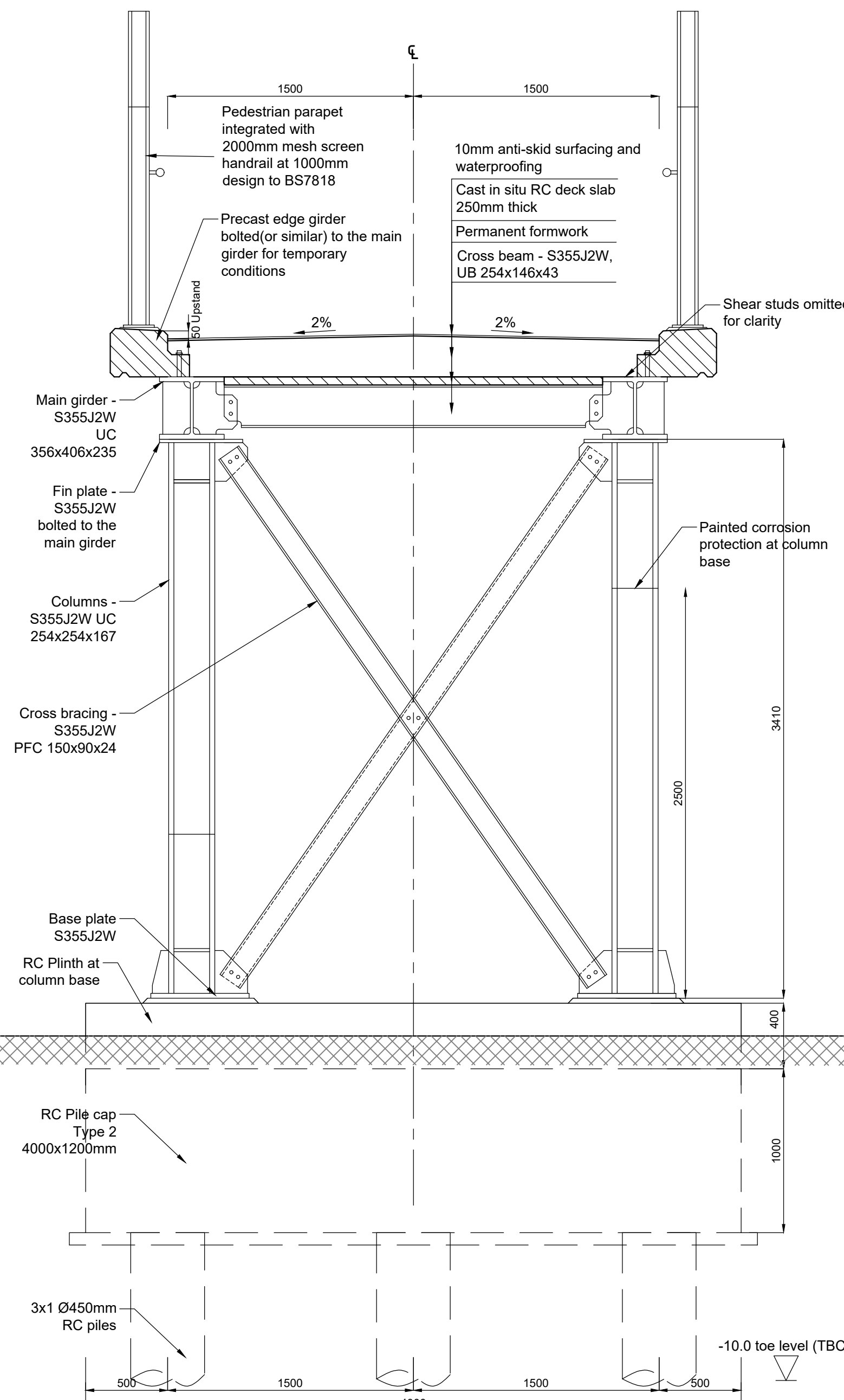
Approved by: ADL Date: 25/03/2019

Drawing No.	Revision
674946.BD.29.01-SK33	A

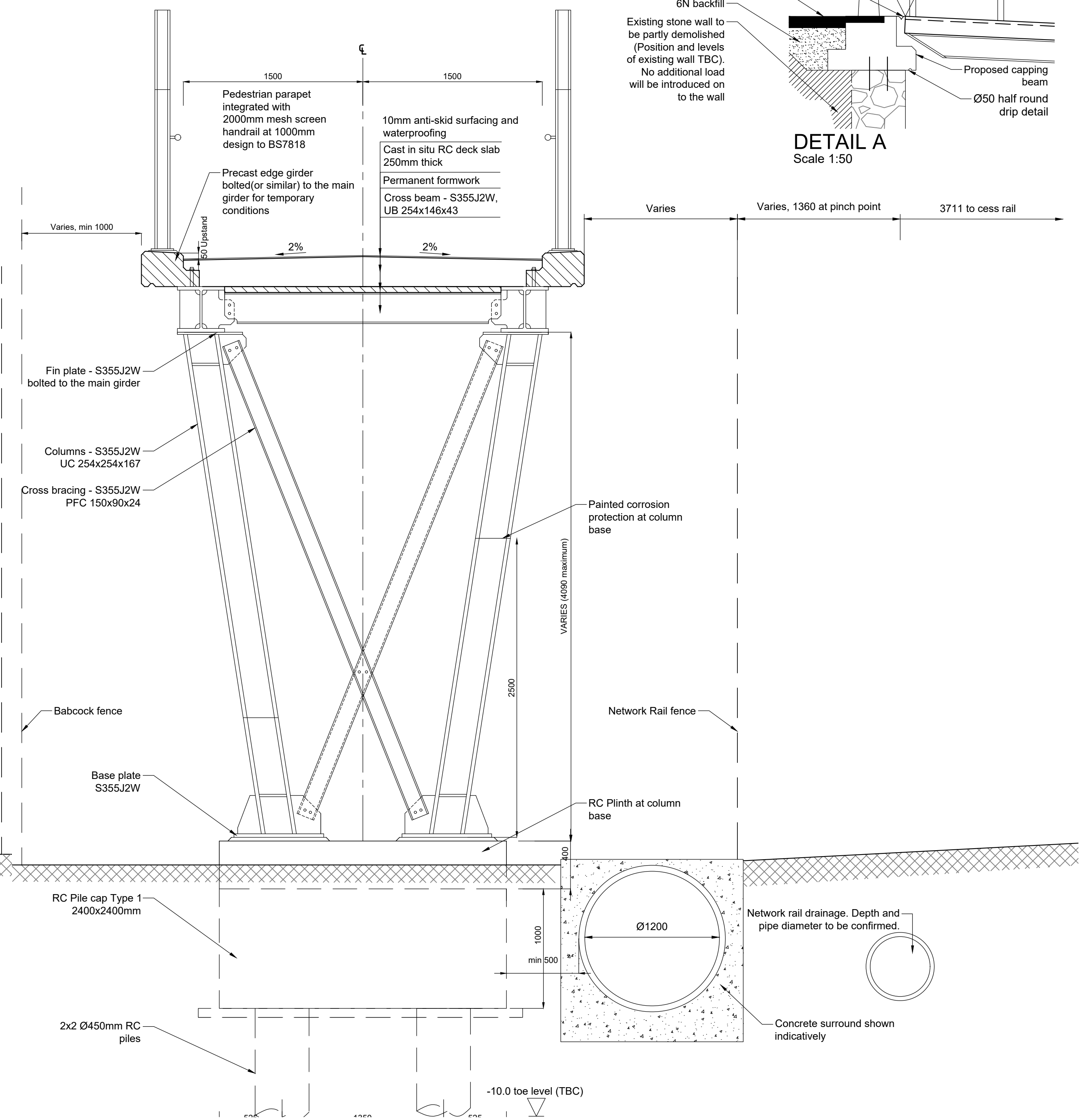
Drawing Scale: 1:100 @ A1 or 1:200 @ A3



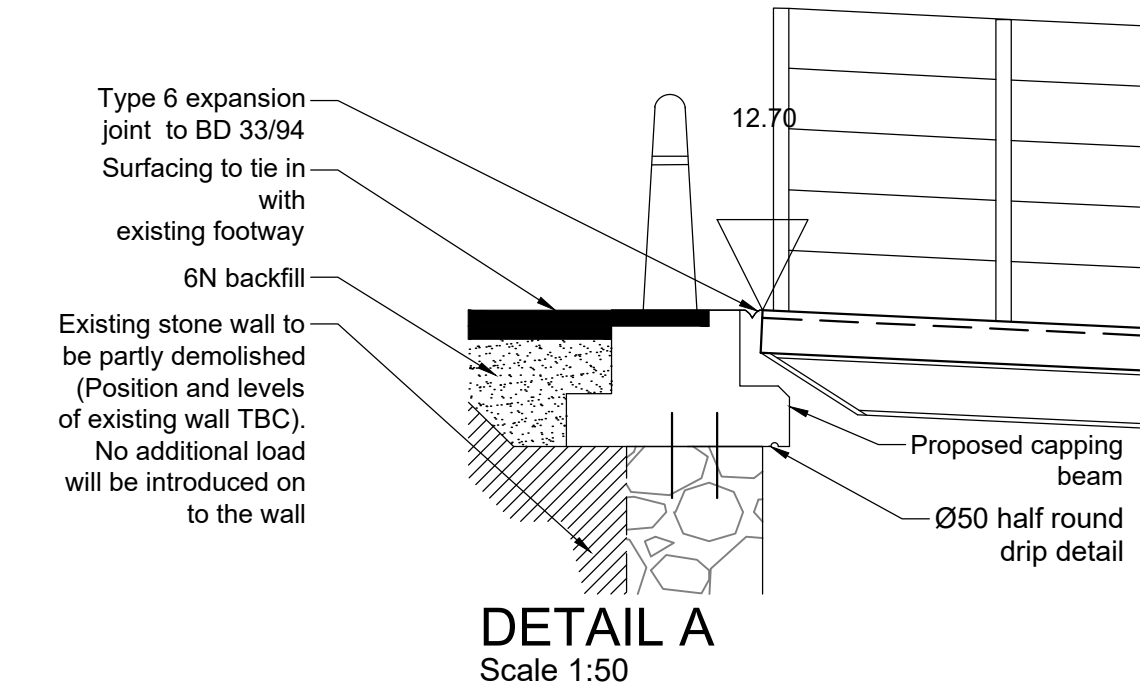
DEVELOPED ELEVATION VIEW A-A
Scale 1:200



TYPICAL SECTION B-B
Scale 1:25

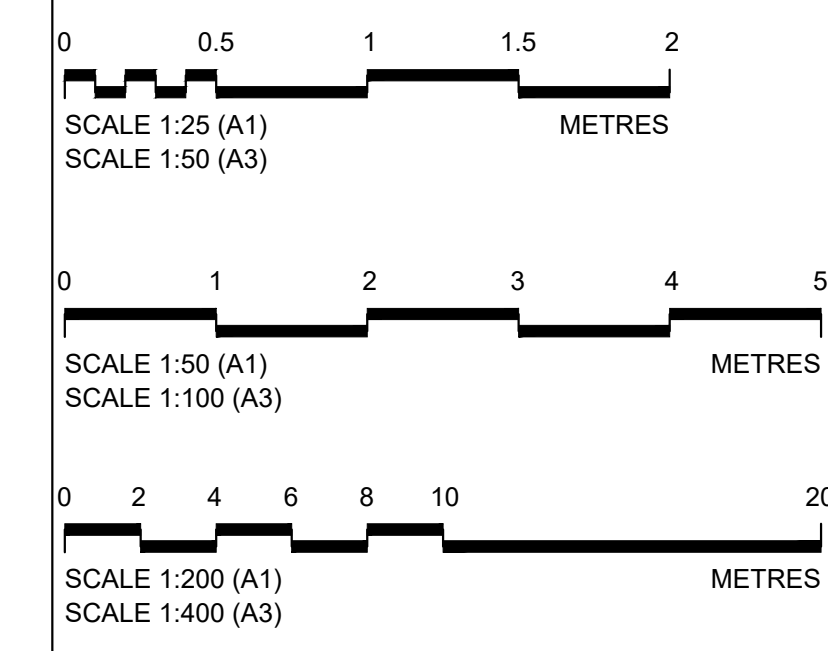


TYPICAL CROSS SECTION C-C
Scale 1:25



DETAIL A
Scale 1:50

- NOTES:
- All levels are in meters AOD unless stated otherwise.
 - This drawing should not be scaled and only written dimensions should be used
 - Drawing to be read in conjunction with drg. 674946.BD.29.01-SK34 and 674946.BD.29.01-SK36



Rev	By	Chkd	Apprvd	Date	Description
A	FG	ADL	ADL	20/02/2018	Issue for OCO Application, drawing previously called 674946-02-SRR-A1/A2-DR-CB-0017



CH2M HILL
1 The Square Temple Quay Bristol BS1 6DG
Tel +44 (0)117 910 2580 Fax +44 (0)117 910 2581
www.ch2m.com

Project
**PORTISHEAD BRANCH LINE
(METROWEST PHASE 1)**

Drawing
**ASHTON VALE RAMP
SHEET 1 OF 2**

Drawn by: FG	Date: 04/17/2018
Checked by: SW	Date: 04/17/2018
Approved by: JM	Date: 04/17/2018

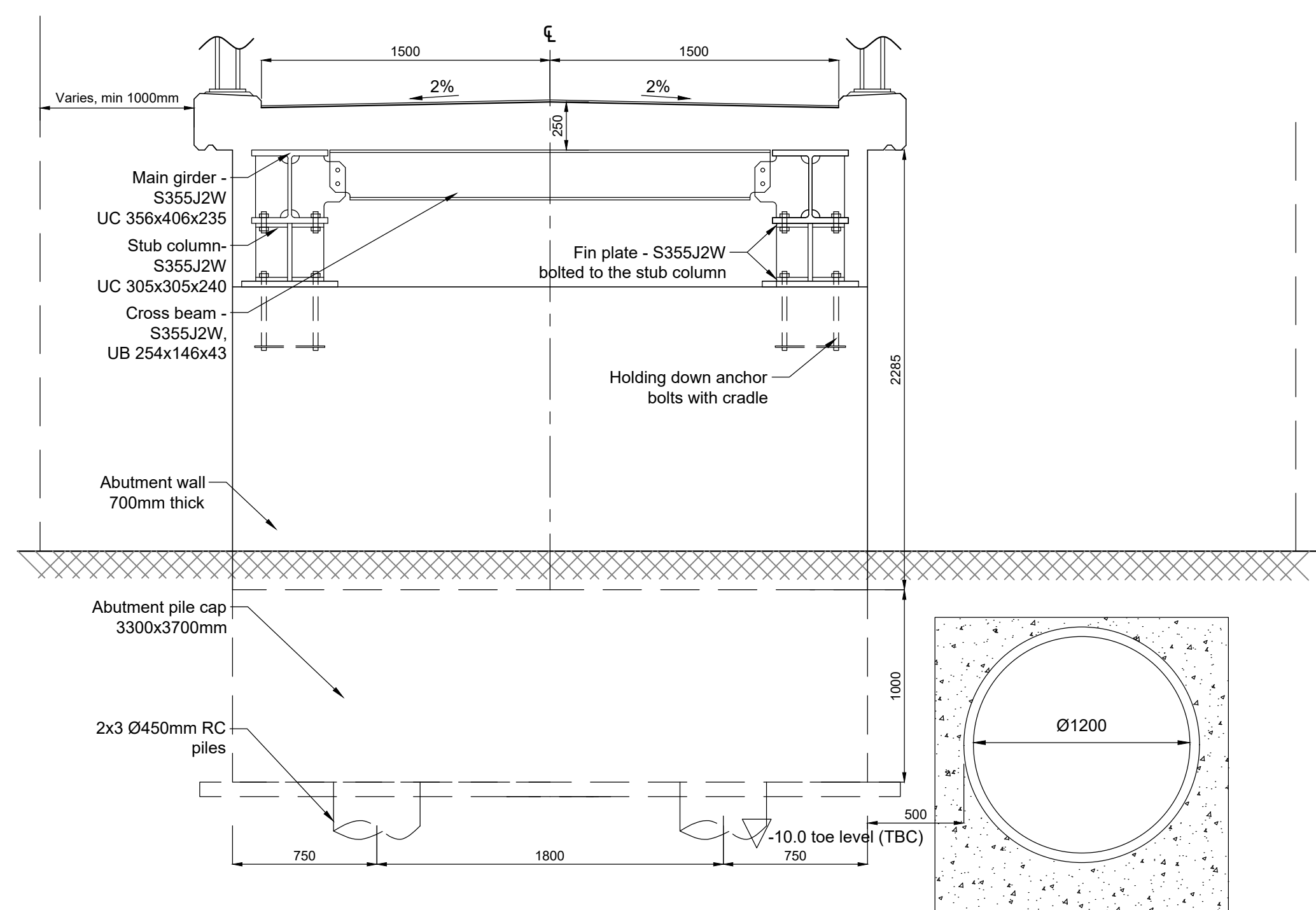
Drawing No.	Revision
674946.BD.29.01-SK35	A

Drawing Scale: AS SHOWN AT A1

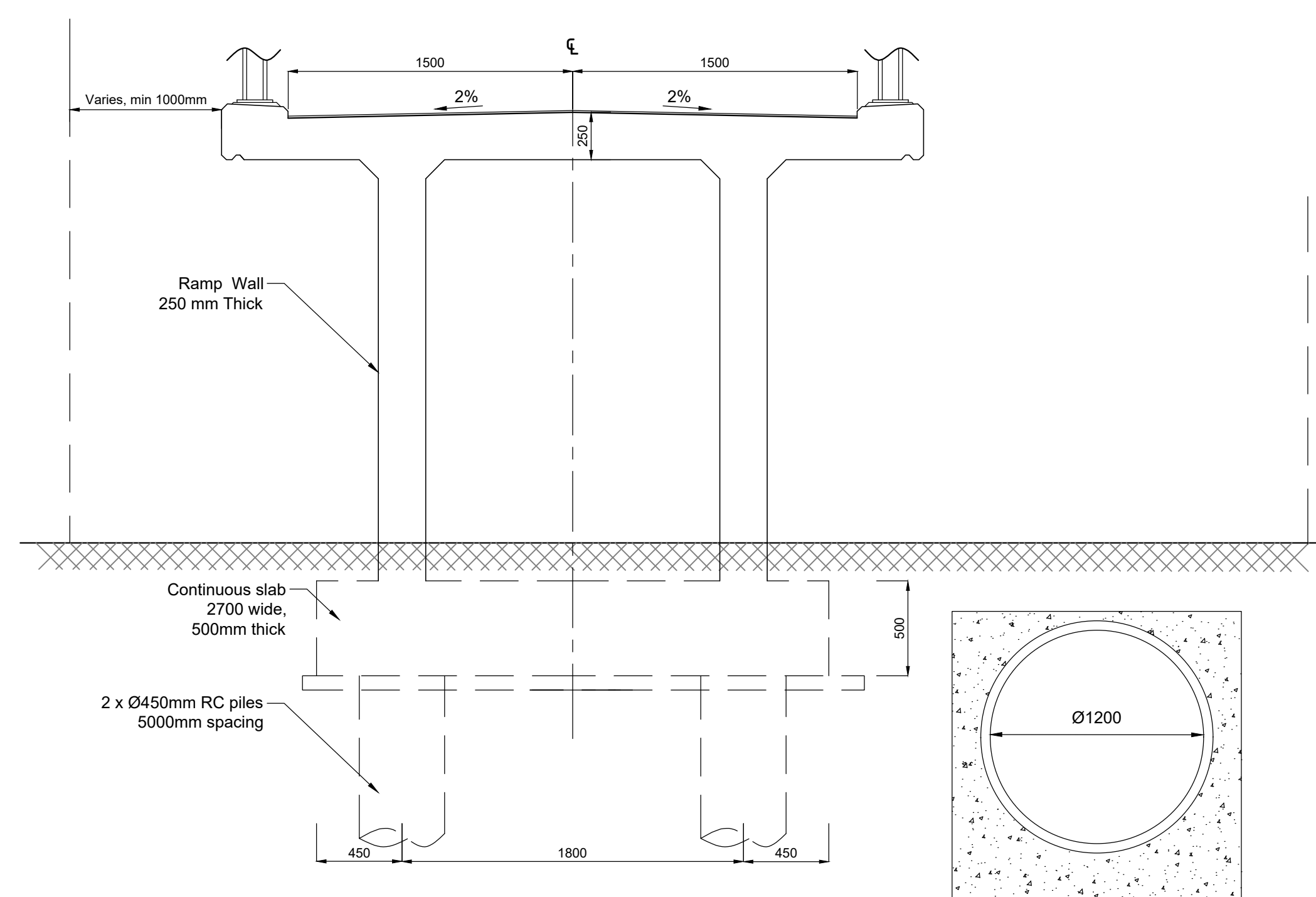
Drawing file path & name: U:\Projects\674946 NSC - 2016 Bristol Framework\674946.BD.29.01 Ashton Vale Alternative Access\90 AutoCAD\674946.BD.29.01-SK35 Rev A.dwg

NOTES:

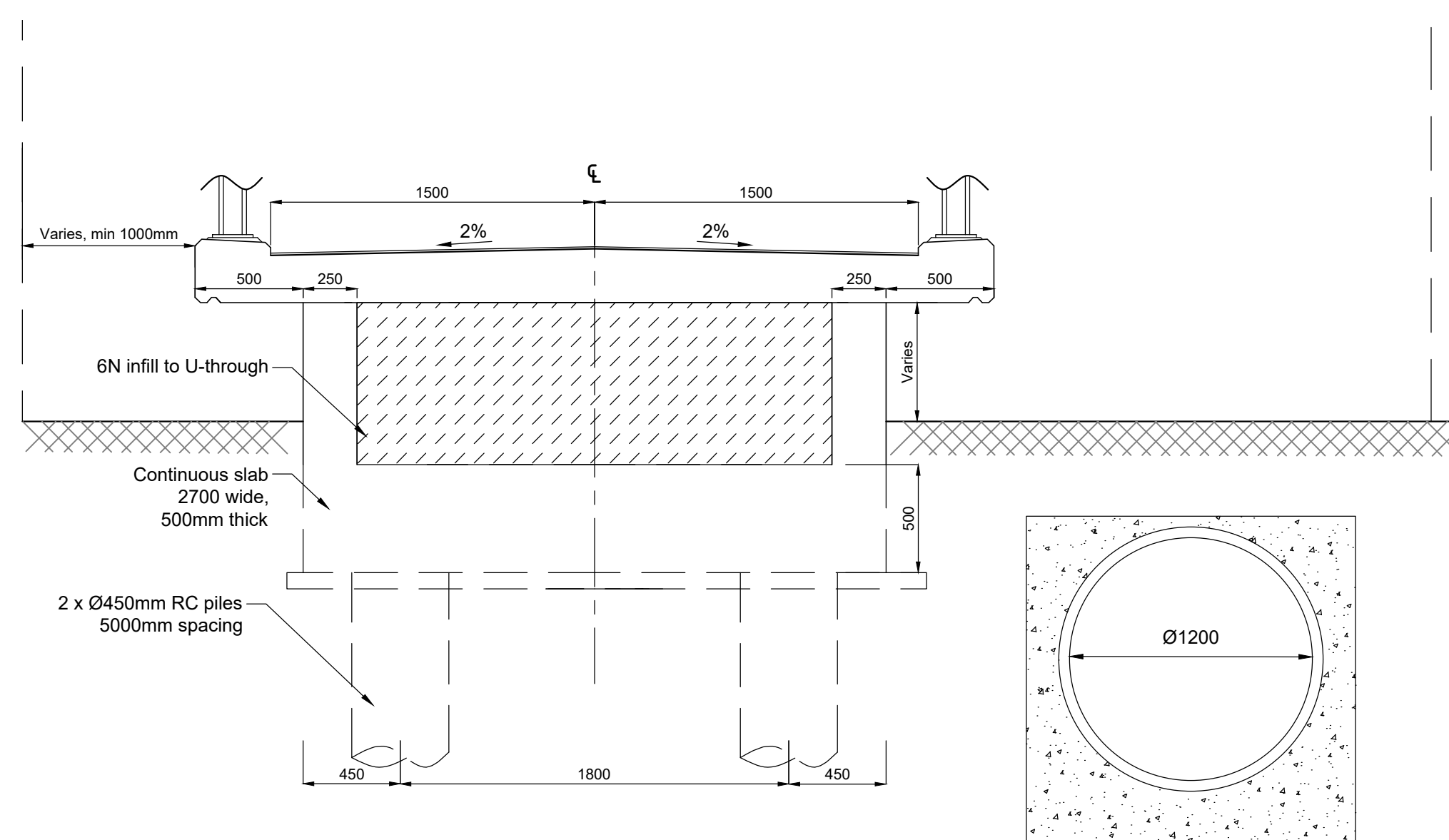
1. All levels are in meters AOD unless stated otherwise.
2. This drawing should not be scaled and only written dimensions should be used
3. Drawing to be read in conjunction with drg. 674946.BD.29.01-SK34 and 674946.BD.29.01-SK35



TYPICAL CROSS SECTION D-D
Scale 1:25



TYPICAL CROSS SECTION E-E
Scale 1:25



TYPICAL CROSS SECTION F-F
Scale 1:25



Rev	By	Chkd	Apprvd	Date	Description
A	FG	ADL	ADL	20/02/2019	Issue for ODO Application, drawing previously called 674946-CH2M-SBR-A1/A2-DR-CS-0023



CH2M HILL
1 The Square Temple Quay Bristol BS1 6DG
Tel +44 (0)117 910 2580 Fax +44 (0)117 910 2581
www.ch2m.com



Project
**PORTISHEAD BRANCH LINE
(METROWEST PHASE 1)**

Drawing
**ASHTON VALE RAMP
SHEET 2 OF 2**

Drawn by: FG	Date: 04/17/2018
Checked by: SW	Date: 04/17/2018
Approved by: JM	Date: 04/17/2018

Drawing No.	Revision
674946.BD.29.01-SK36	A

Drawing Scale: AS SHOWN AT A1