



MetroWest+

Portishead Branch Line (MetroWest Phase 1)

TR040011

Applicant: North Somerset District Council

2.7 Disused railway engineering plans / GRIP 4 Minor Civils – Part 2 of 2

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

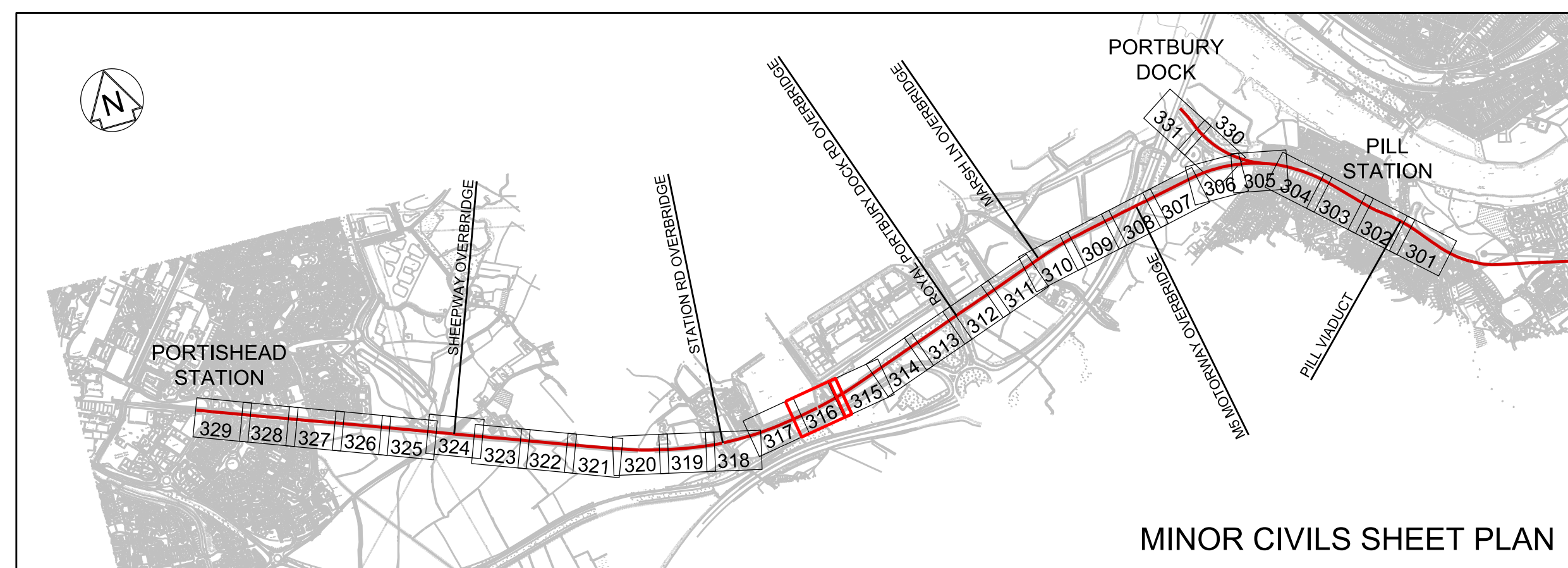
Author: Arup

Revision: Version 2

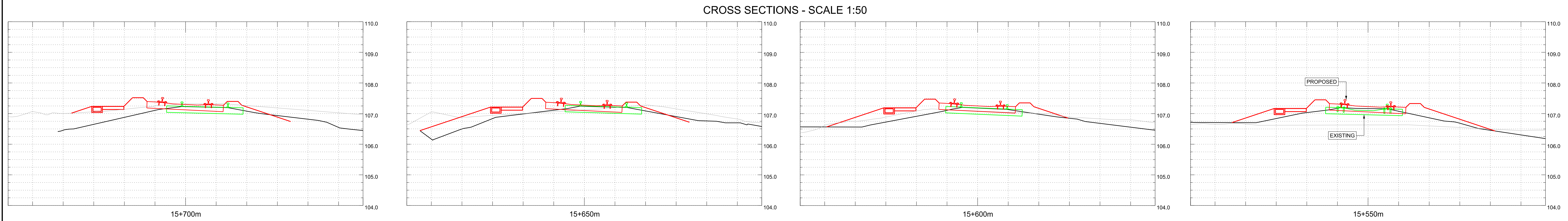
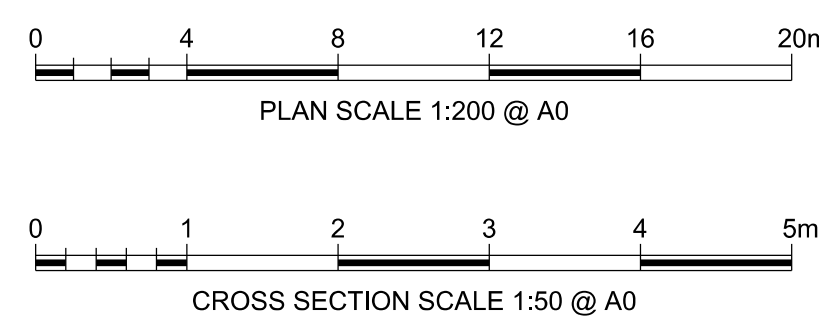
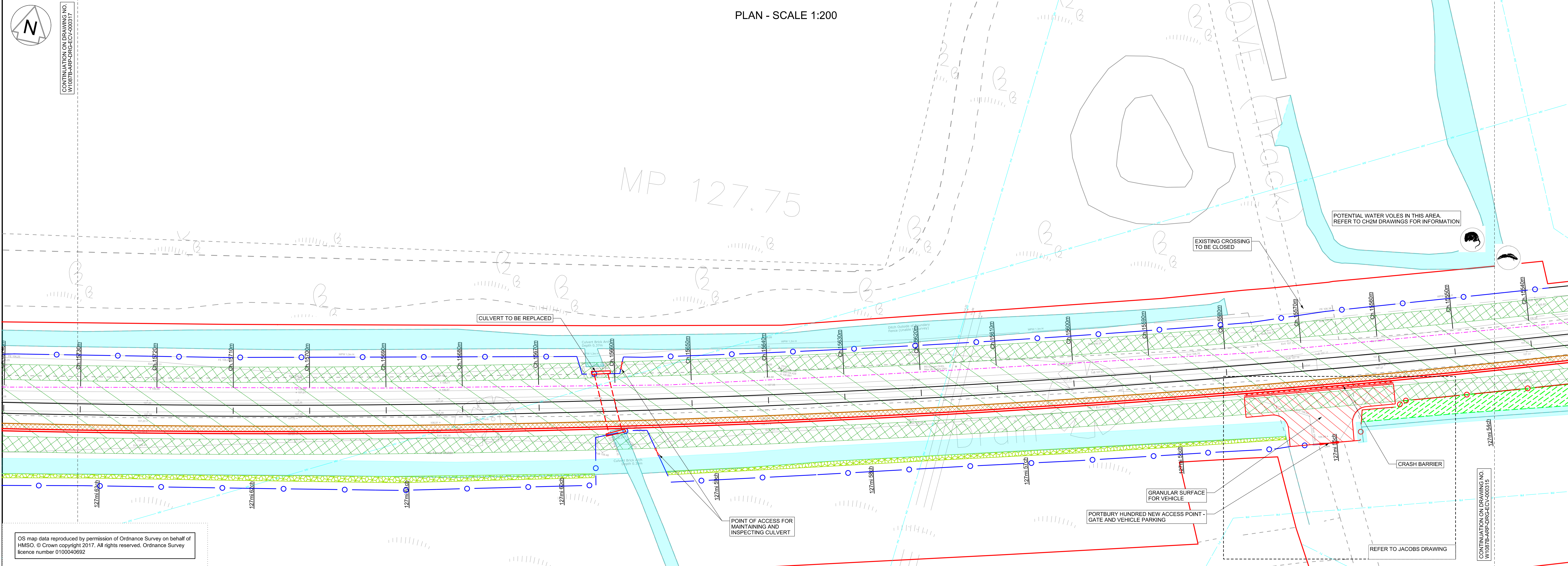
Date: September 2020



Version	Date	Status of version	Document Index	Document Revision	Changes
1	19 November 2019	Application	2.7 Disused railway engineering plans / GRIP 4 Minor Civils – Sheet 16 to 31: W1097B-ARP-DRG-ECV-000316 Rev A03 W1097B-ARP-DRG-ECV-000317 Rev A03 W1097B-ARP-DRG-ECV-000318 Rev A03 W1097B-ARP-DRG-ECV-000319 Rev A03 W1097B-ARP-DRG-ECV-000320 Rev A03 W1097B-ARP-DRG-ECV-000321 Rev A03 W1097B-ARP-DRG-ECV-000322 Rev A03 W1097B-ARP-DRG-ECV-000323 Rev A03 W1097B-ARP-DRG-ECV-000324 Rev A03 W1097B-ARP-DRG-ECV-000325 Rev A03 W1097B-ARP-DRG-ECV-000326 Rev A03 W1097B-ARP-DRG-ECV-000327 Rev A03 W1097B-ARP-DRG-ECV-000328 Rev A03 W1097B-ARP-DRG-ECV-000329 Rev A03 W1097B-ARP-DRG-ECV-000330 Rev A03 W1097B-ARP-DRG-ECV-000331 Rev A03	-	-
2	21 September 2020	Pre-Preliminary Meeting amendments	2.7 Disused railway engineering plans / GRIP 4 Minor Civils – Sheet 16 to 31: W1097B-ARP-DRG-ECV-000316 Rev A03 W1097B-ARP-DRG-ECV-000317 Rev A03 W1097B-ARP-DRG-ECV-000318 Rev A03 W1097B-ARP-DRG-ECV-000319 Rev A03 W1097B-ARP-DRG-ECV-000320 Rev A03 W1097B-ARP-DRG-ECV-000321 Rev A03 W1097B-ARP-DRG-ECV-000322 Rev A03 W1097B-ARP-DRG-ECV-000323 Rev A03 W1097B-ARP-DRG-ECV-000324 Rev A03 W1097B-ARP-DRG-ECV-000325 Rev A03 W1097B-ARP-DRG-ECV-000326 Rev A03 W1097B-ARP-DRG-ECV-000327 Rev A03 W1097B-ARP-DRG-ECV-000328 Rev A03 W1097B-ARP-DRG-ECV-000329 Rev A03 W1097B-ARP-DRG-ECV-000330 Rev A03 W1097B-ARP-DRG-ECV-000331 Rev A03	A04 N/A A04 N/A N/A N/A N/A N/A N/A A04 N/A N/A N/A N/A N/A N/A N/A N/A	‘Potential’ added to water voles label ‘Potential’ added to water voles label; text deleted ref. cable troughs; text deleted ref. retain and fence derelict store; text amended ref. building as a bat roost; and bat symbol and accompanying text box added Text deleted - ACO climate tunnels no longer required



- Legend/Notes
- | | |
|-----|--|
| 01. | ALL LEVELS AND DIMENSIONS ARE SHOWN IN METRES UNLESS NOTED OTHERWISE. |
| 02. | DO NOT SCALE FROM THIS DRAWING. ONLY FIGURED DIMENSIONS AND LEVELS TO BE USED. |
| 03. | CHANGEA DATUM IS 4000.00m AT THE 120M 40% MILE POST ON POOL LINE. REGULAR CHANGEA MARKERS PRESENTED ON LAYOUT DRAWINGS ARE MEASURED ALONG THE PROPOSED RAIL CENTRE LINE. |
| 04. | THIS DRAWING IS BASED UPON TOPOGRAPHICAL SURVEY PROVIDED BY SEVERN PARTNERSHIP ON 19TH SEPTEMBER 2015. |
| 05. | CROSS SECTIONS ARE BASED ON INFORMATION FROM TOPOGRAPHY, LIAR AND SITE VISIT MEASUREMENTS. CROSS SECTIONS TO BE VERIFIED AT DETAILED DESIGN. |
| 06. | CROSS SECTIONS ARE TAKEN FACING INCREASING CHANGEA. |



A01	15/03/19	ISSUED FOR INFORMATION	JB	RS	R
A02	03/05/19	FOR DCO PLANNING APPLICATION	JB	RS	R
A03	24/07/19	FOR DCO PLANNING APPLICATION	JB	RS	R
A04	28/08/20	FOR DCO PLANNING APPLICATION	JB	RS	R
Rev	Date	Description of Revisions	Drawn	Chkd	App'd
Status			Suitable for Issue		
FIT FOR INFORMATION					
S2					

8 FIT FOR INFORMATION



Contractor(s)

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Project

METROWEST PHASE 1

Drawing Title

Drawing Title

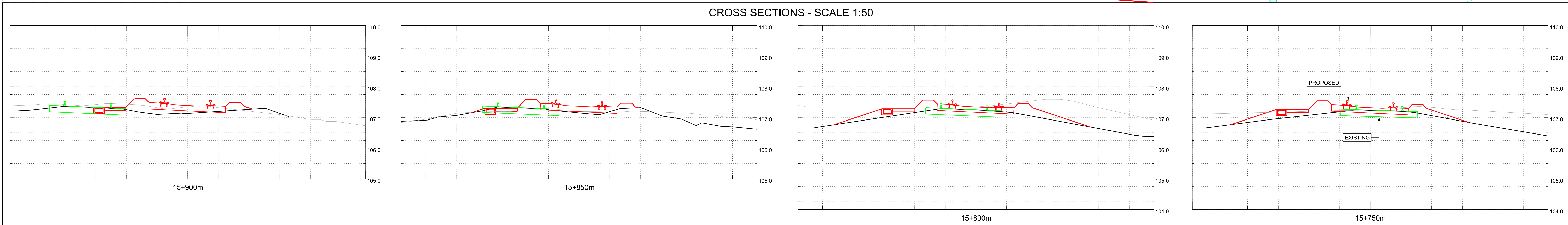
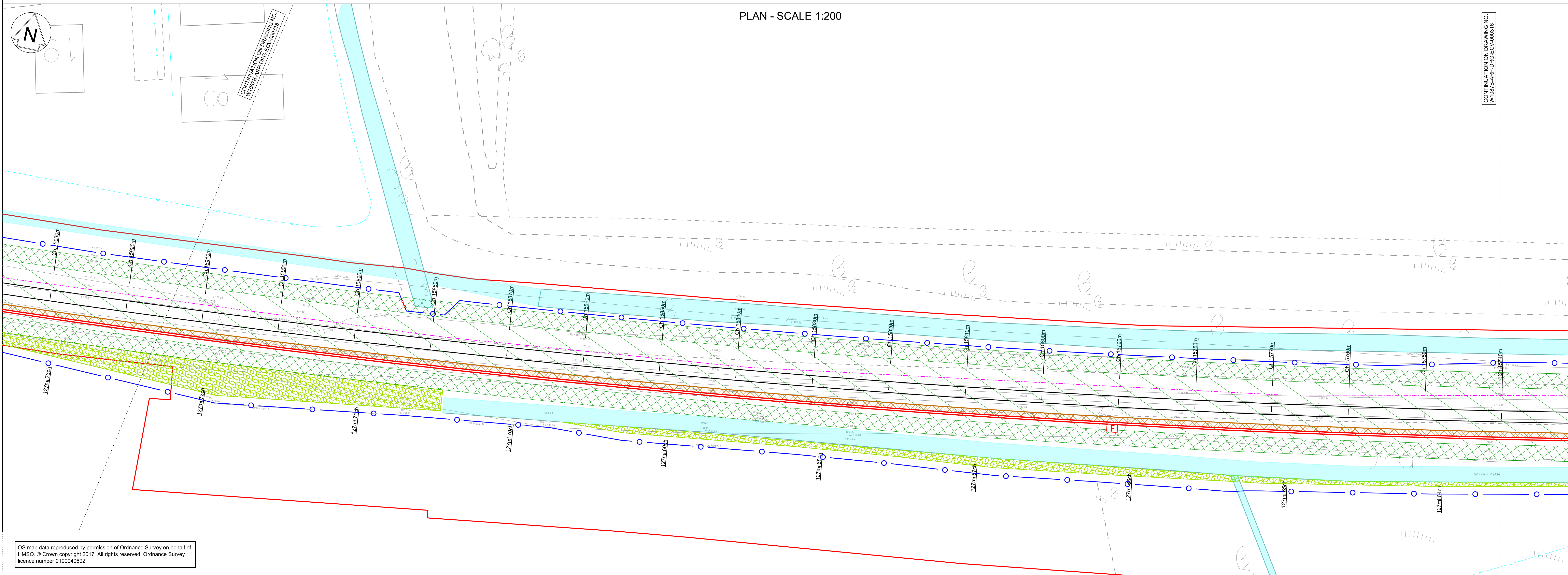
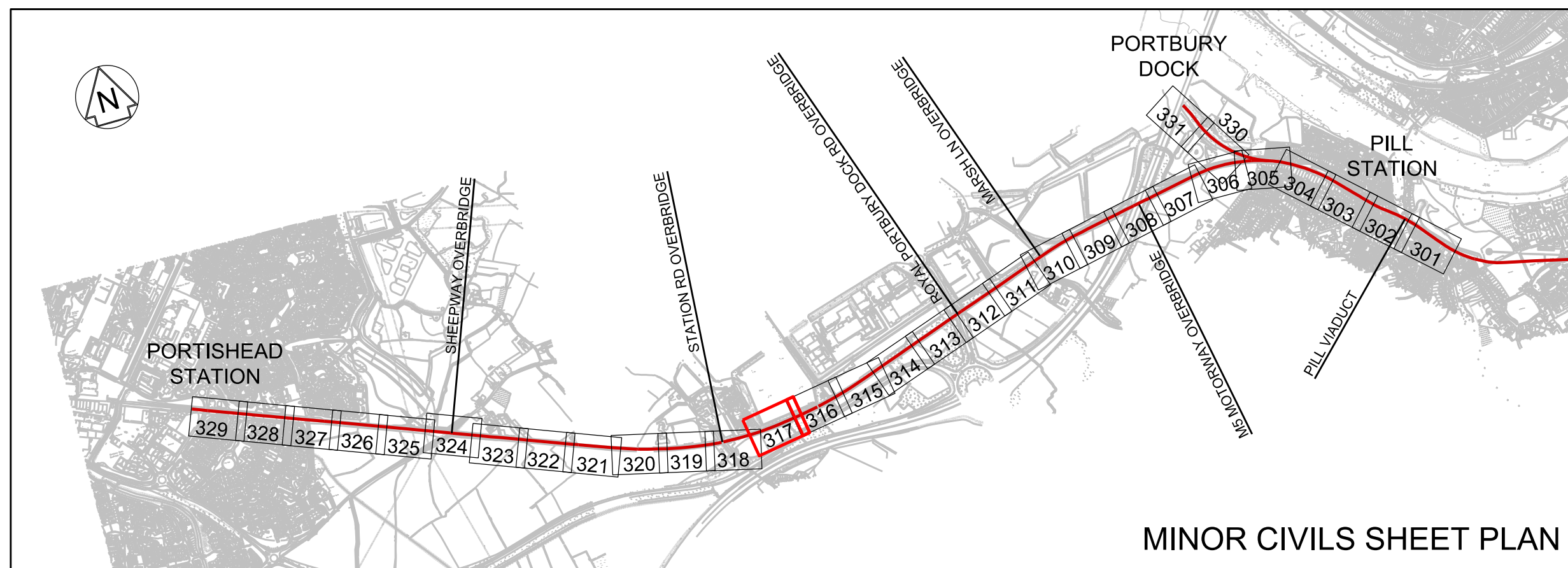
DISUSED RAILWAY ENGINEERING
PLANS
GRIP 4 MINOR CIVILS
CH.15540m TO CH.15730m

Designed	J. BACINSKI	Signed	Date 28/08/2018
Drawn	J. BACINSKI	Signed	Date 28/08/2018
Checked	R. SNELL	Signed	Date 28/08/2018
Approved	R. SNELL	Signed	Date 28/08/2018

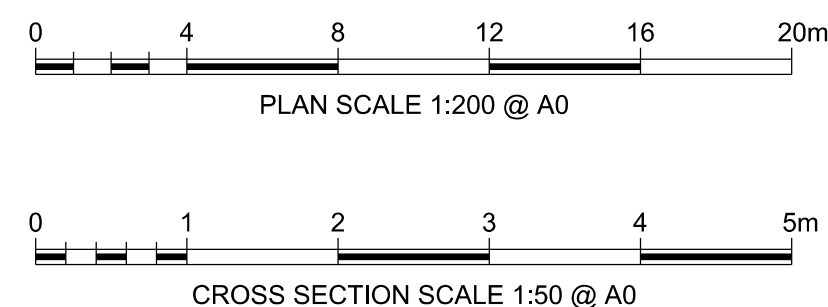
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Alternative Reference			Sheet

Drawing Number		16 of 31
W1097B-ARP-DRG-ECV-000316		Revision A04

LEGEND					
MINOR CIVILS		EXISTING UTILITIES	TELECOM LEGEND	SPECIES, ECOLOGY, LANDSCAPE	
EXISTING FENCE GRADE I		WATER MAIN		WATER VOLES	
EXISTING FENCE GRADE II		FOUL SEWER		BATS	
EXISTING FENCE GRADE III		RISING MAIN		DORMICE	
EXISTING FENCE REMOVED		SEWER SURFACE		OTTERS	
EXISTING FENCE MODIFIED/REPLACED WITH GRADE I FENCE		HIGH VOLTAGE ELECTRICITY - BELOW GROUND		REPTILES	
EXISTING FENCE MODIFIED/REPLACED WITH GRADE II FENCE		LOW VOLTAGE ELECTRICITY - BELOW GROUND		GREAT CRESTED NEWT	
EXISTING FENCE MODIFIED/REPLACED WITH GRADE III FENCE		LOW VOLTAGE ELECTRICITY - ABOVE GROUND		BIRD BOX (PROPOSED)	
PROPOSED FENCE GRADE I		GPSS PIPELINE		AREA OF VEGETATION TO BE RETAINED DURING CONSTRUCTION	
PROPOSED FENCE GRADE II		LOW PRESSURE GAS MAIN		WOODLAND TO BE PLANTED DURING CONSTRUCTION	
PROPOSED FENCE GRADE III		MEDIUM PRESSURE GAS MAIN		GRASSLAND TO BE PLANTED DURING CONSTRUCTION	
PROPOSED TROUGHING		BT CABLE - BELOW GROUND		HEDGE/TREES TO BE PLANTED DURING CONSTRUCTION	
EXISTING TROUGHING		BT CABLE - ABOVE GROUND			
REMOVED TROUGHING		CABLE & WIRELESS			
EXISTING TROUGHING MODIFIED/REPLACED		VIRGIN MEDIA CABLE - BELOW GROUND			
PROPOSED UNDER TRACK CROSSING (UTX)		VERIZON BACKBONE DUCT - BELOW GROUND			
EXISTING UNDER TRACK CROSSING (UTX)		EXISTING DITCHES TO BE RETAINED/REPLACED			
REMOVED UNDER TRACK CROSSING (UTX)					

[illegible]

- Legend/Notes
01. ALL LEVELS AND DIMENSIONS ARE SHOWN IN METRES UNLESS NOTED OTHERWISE.
 02. DO NOT SCALE FROM THIS DRAWING. ONLY FIGURED DIMENSIONS AND LEVELS TO BE USED.
 03. CHAINAGE DATUM IS 4000.000m AT THE 120M 400K MILE POST ON POD LINE. REGULAR CHAINAGE MARKERS PRESENTED ON LAYOUT DRAWINGS ARE MEASURED ALONG THE PROPOSED RAIL CENTRE LINE.
 04. THIS DRAWING IS BASED UPON TOPOGRAPHICAL SURVEY PROVIDED BY SEVERN PARTNERSHIP ON 10TH SEPTEMBER 2015.
 05. CROSS SECTIONS ARE BASED ON INFORMATION FROM TOPOGRAPHY, LIDAR AND SITE VISIT MEASUREMENTS. CROSS SECTIONS TO BE VERIFIED AT DETAILED DESIGN.
 06. CROSS SECTIONS ARE TAKEN FACING INCREASING CHAINAGE.



A01	15/03/19	ISSUED FOR INFORMATION	JB	RS	RS
A02	03/05/19	FOR DCO PLANNING APPLICATION	JB	RS	RS
A03	24/07/19	FOR DCO PLANNING APPLICATION	JB	RS	RS
Rev	Date	Description of Revisions	Drawn	Chkd	Appr
Status FIT FOR INFORMATION					Suitability S2



Contractor(s)	
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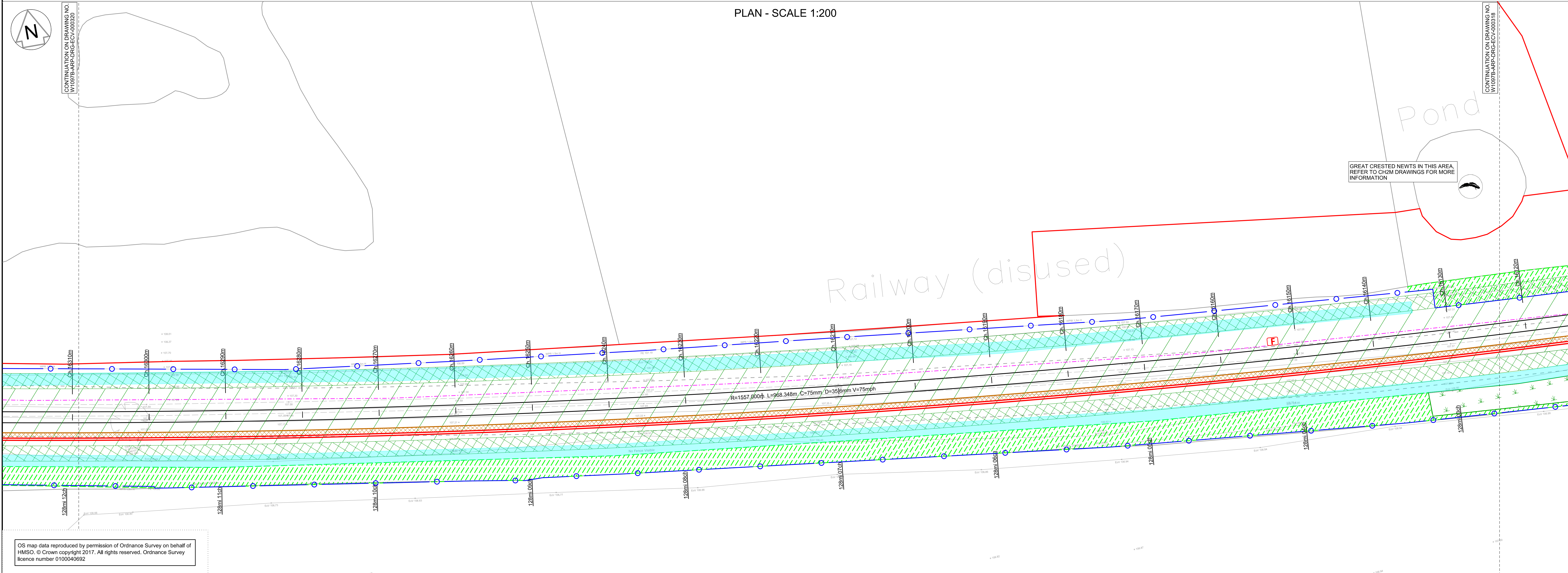
Project	METROWEST PHASE 1
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Drawing Title

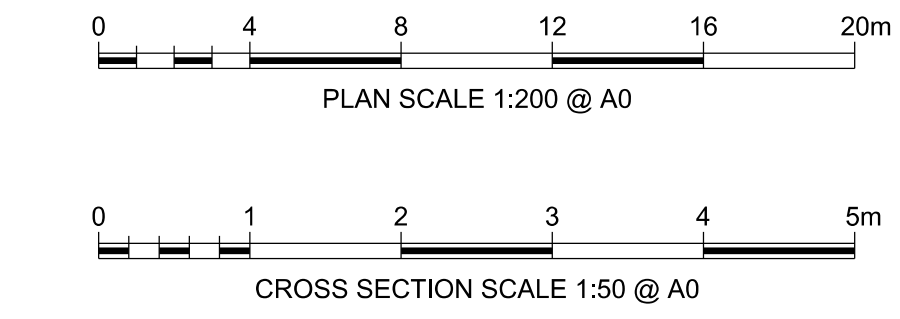
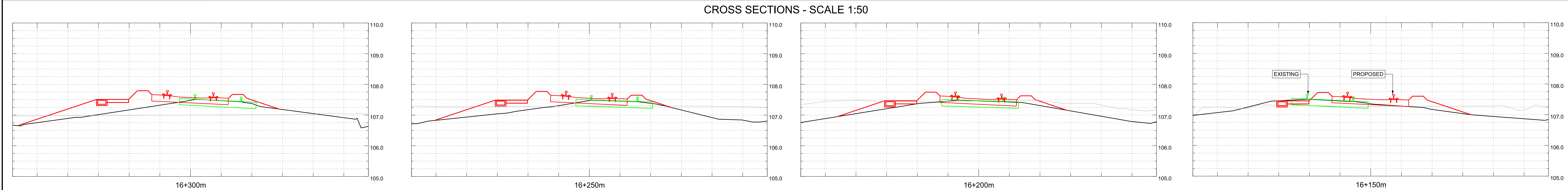
**DISUSED RAILWAY ENGINEERING
PLANS
GRIP 4 MINOR CIVILS
CH.15740m TO CH.15930m**

Designed	J. BACINSKI	Signed	Date	24/07/19
Drawn	J. BACINSKI	Signed	Date	24/07/19
Checked	R. SNELL	Signed	Date	24/07/19
Approved	R. SNELL	Signed	Date	24/07/19
Scale(s)	1:200	ELR & Mileage	POD 127M 64CH	
Alternative Reference		Sheet		

Drawing Number		17 of 31
W1097B-ARP-DRG-ECV-000317		Revision A03



- Legend/Notes
01. ALL LEVELS AND DIMENSIONS ARE SHOWN IN METRES UNLESS NOTED OTHERWISE.
 02. DO NOT SCALE FROM THIS DRAWING. ONLY FIGURED DIMENSIONS AND LEVELS TO BE USED.
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A01	15/03/19	ISSUED FOR INFORMATION	JB	RS	RS
A02	03/05/19	FOR DCO PLANNING APPLICATION	JB	RS	RS
A03	24/07/19	FOR DCO PLANNING APPLICATION	JB	RS	RS
Rev.	Date	Description of Revisions	Drawn	Chkd	Appr.

Status
FIT FOR INFORMATION

Subsidiary
S2



Contractor(s)

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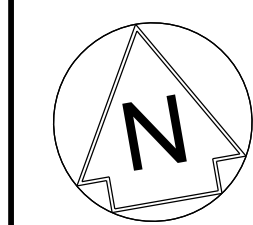
Project
METROWEST PHASE 1

Drawing Title
DISUSED RAILWAY ENGINEERING PLANS
GRIP 4 MINOR CIVILS
CH.16120m TO CH.16310m

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Drawn	J. BACINSKI	Signed		Date	24/07/19
Checked	R. SNELL	Signed		Date	24/07/19
Approved	R. SNELL	Signed		Date	24/07/19
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Alternative Reference				19 of 31	
Drawing Number	W1097B-ARP-DRG-ECV-000319			Revision	

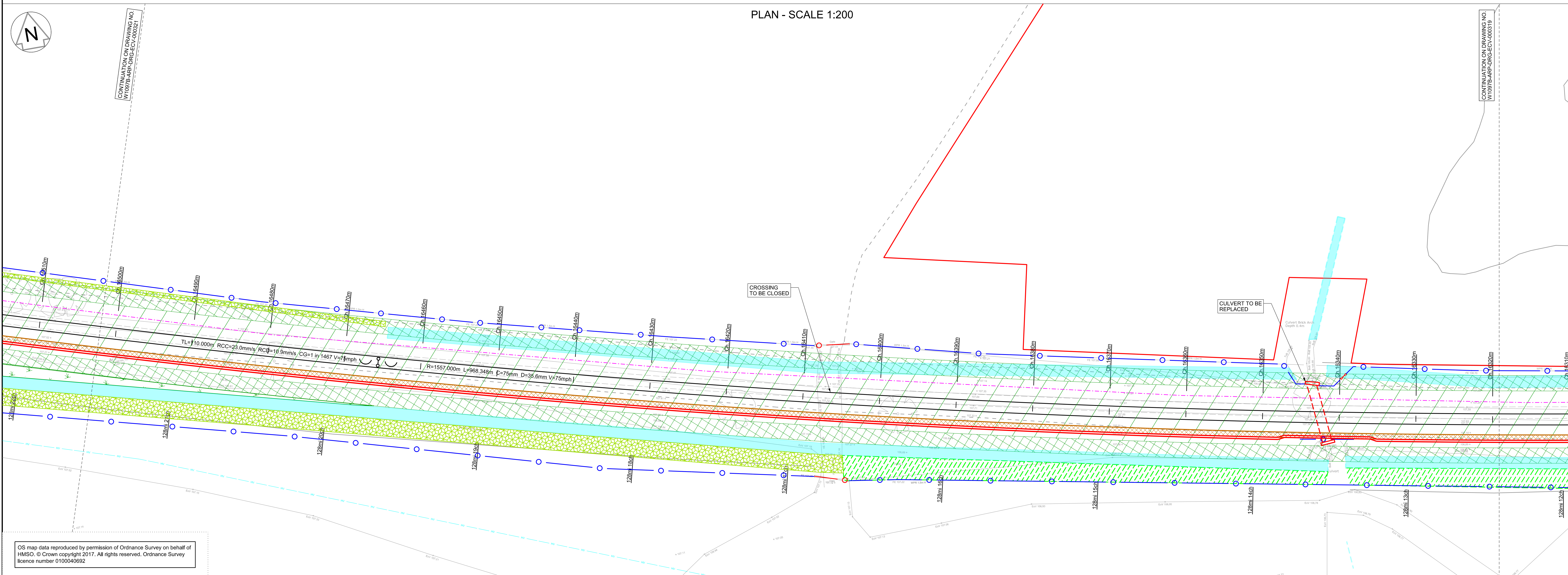
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MINOR CIVILS		EXISTING UTILITIES		TELECOM LEGEND		SPECIES, ECOLOGY, LANDSCAPE	
EXISTING FENCE GRADE I	— / — / —	PROPOSED CABINET LOCATION (NOT TO SCALE)	☒	WATER MAIN	—	WATER VOLES	☞
EXISTING FENCE GRADE II	— / — / —	PROPOSED SIGNAL (NOT TO SCALE)	☒	FOUL SEWER	—	BATS	☞
EXISTING FENCE GRADE III	— / — / —	EXISTING CABINET TO BE REMOVED/RELOCATED	☒	RISING MAIN	—	DORMICE	☞
EXISTING FENCE REMOVED	— / — / —	EXISTING SIGNAL TO BE REMOVED	☒	SEWER SURFACE	—	OTTERS	☞
EXISTING FENCE MODIFIED/REPLACED WITH GRADE I FENCE	— / — / —	EXISTING CABINET LOCATION	☒	HIGH VOLTAGE ELECTRICITY - BELOW GROUND	—	REPTILES	☞
EXISTING FENCE MODIFIED/REPLACED WITH GRADE II FENCE	— / — / —	MINOR EARTHWORKS RETAINING STRUCTURE	☒	LOW VOLTAGE ELECTRICITY - BELOW GROUND	—	GREAT CRESTED NEWT	☞
EXISTING FENCE MODIFIED/REPLACED WITH GRADE III FENCE	— / — / —	EARTHWORKS STRUCTURE	☒	HIGH VOLTAGE ELECTRICITY - ABOVE GROUND	—	BIRD BOX (PROPOSED)	☞
PROPOSED FENCE GRADE I	— / — / —	NOISE BARRIER	☒	LOW VOLTAGE ELECTRICITY - ABOVE GROUND	—	AREA OF VEGETATION TO BE RETAINED DURING CONSTRUCTION	☒
PROPOSED FENCE GRADE II	— / — / —	DEVELOPMENT CONSENT ORDER (DCO)	☒	GRSS PIPELINE	—	WOODLAND TO BE PLANTED DURING CONSTRUCTION	☒
PROPOSED FENCE GRADE III	— / — / —	LAND BOUNDARY	☒	LOW PRESSURE GAS MAIN	—	GRASSLAND TO BE PLANTED DURING CONSTRUCTION	☒
PROPOSED TROUING	— / — / —	CONTINUOUS POSITION OF SAFETY	☒	MEDIUM PRESSURE GAS MAIN	—	HEDGE/TREES TO BE PLANTED DURING CONSTRUCTION	☒
REMOVED TROUING	— / — / —	AUTHORISED WALKING ROUTE	☒	BT CABLE - BELOW GROUND	—		
EXISTING TROUING MODIFIED/REPLACED	— / — / —	EXTENT OF RAIL CORRIDOR TO BE CLEAR OF VEGETATION	☒	BT CABLE ABOVE GROUND	—		
PROPOSED UNDER TRACK CROSSING (UTX)	— / — / —	EXTENT OF RAIL CORRIDOR TO BE CLEAR OF VEGETATION WITH NETWORK RAIL (NR) OPTION TO CLEAR IN FUTURE SHOWN CROSS HATCHED	☒	CABLE & WIRELESS	—		
REMOVED UNDER TRACK CROSSING (UTX)	— / — / —			VIRGIN MEDIA CABLE - BELOW GROUND	—		
				VERIZON BACKBONE DUCT - BELOW GROUND	—		
				EXISTING DITCHES TO BE RETAINED/REPLACED	☒		



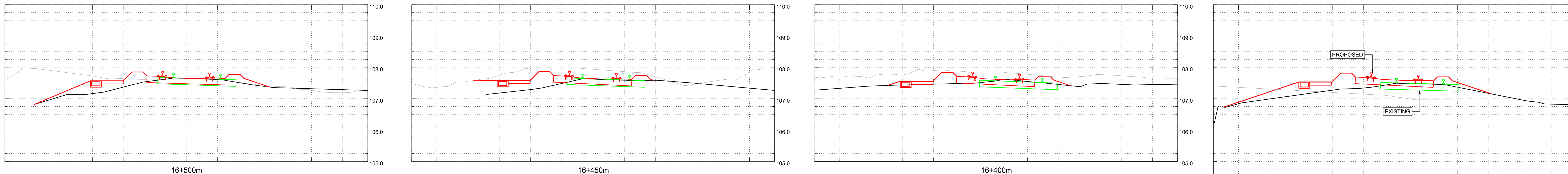
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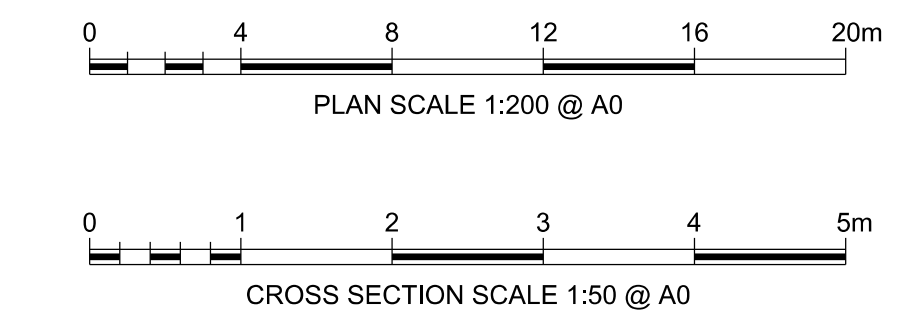
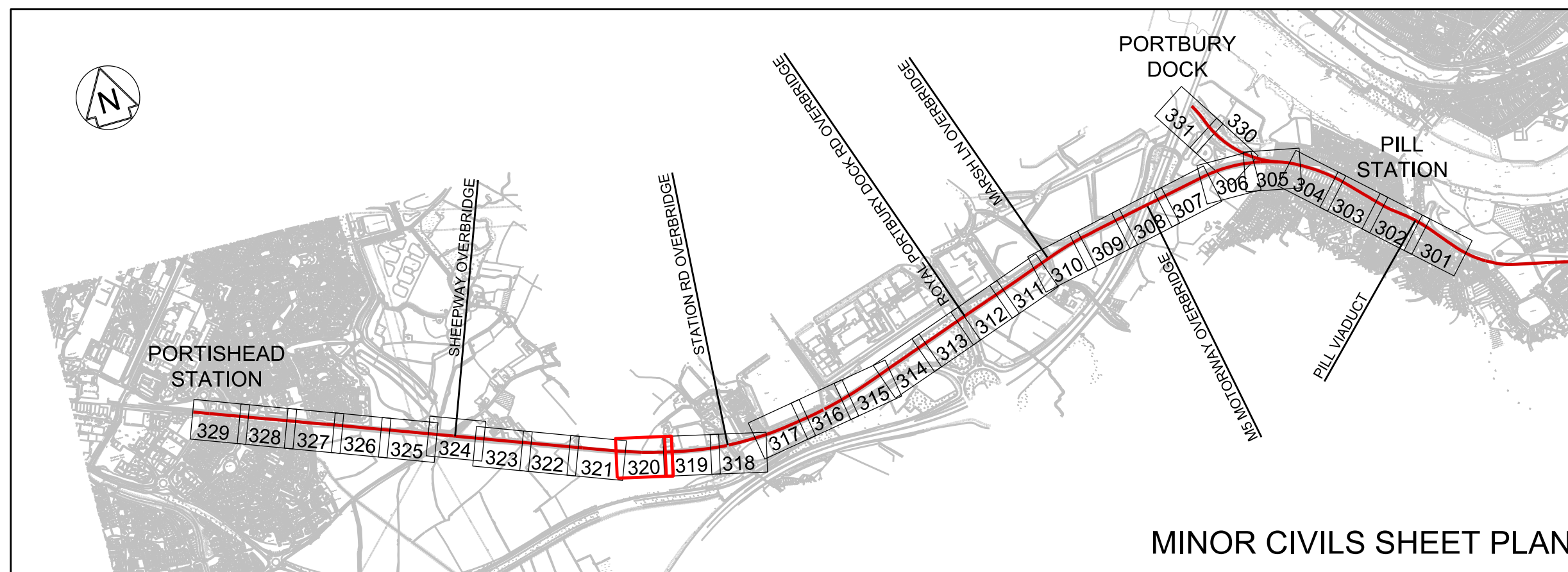


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CROSS SECTIONS - SCALE 1:50



- Legend/Notes
01. ALL LEVELS AND DIMENSIONS ARE SHOWN IN METRES UNLESS NOTED OTHERWISE.
 02. DO NOT SCALE FROM THIS DRAWING. ONLY FIGURED DIMENSIONS AND LEVELS TO BE USED.
 03. CHAINAGE DATUM IS 4000.000m AT THE 120M 40CH MILE POST ON POD LINE. REGULAR CHAINAGE MARKERS PRESENTED ON LAYOUT DRAWINGS ARE MEASURED ALONG THE PROPOSED RAIL CENTRE LINE.
 04. THIS DRAWING IS BASED UPON TOPOGRAPHICAL SURVEY PROVIDED BY SEVERN PARTNERSHIP ON 19TH SEPTEMBER 2015.
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A01	15/03/19	ISSUED FOR INFORMATION	JB	RS	RS
A02	03/05/19	FOR DCO PLANNING APPLICATION	JB	RS	RS
A03	24/07/19	FOR DCO PLANNING APPLICATION	JB	RS	RS
Rev	Date	Description of Revisions	Drawn	Chkd	Appr

Status
FIT FOR INFORMATION

Subsidiary
S2



Contractor(s)



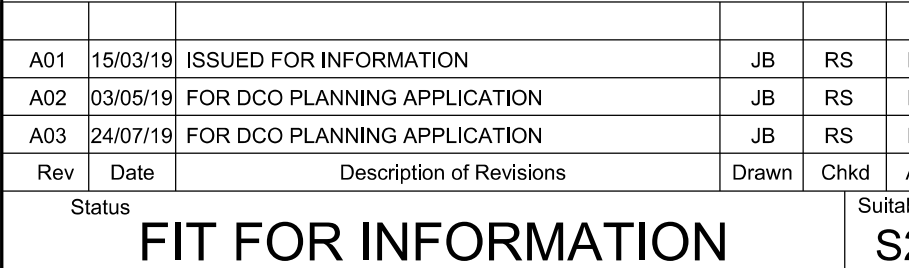
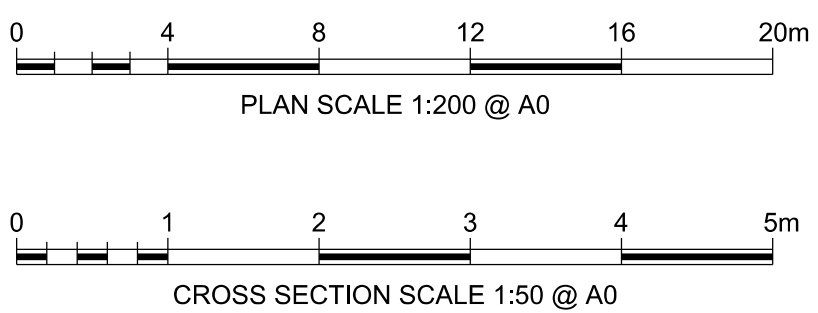
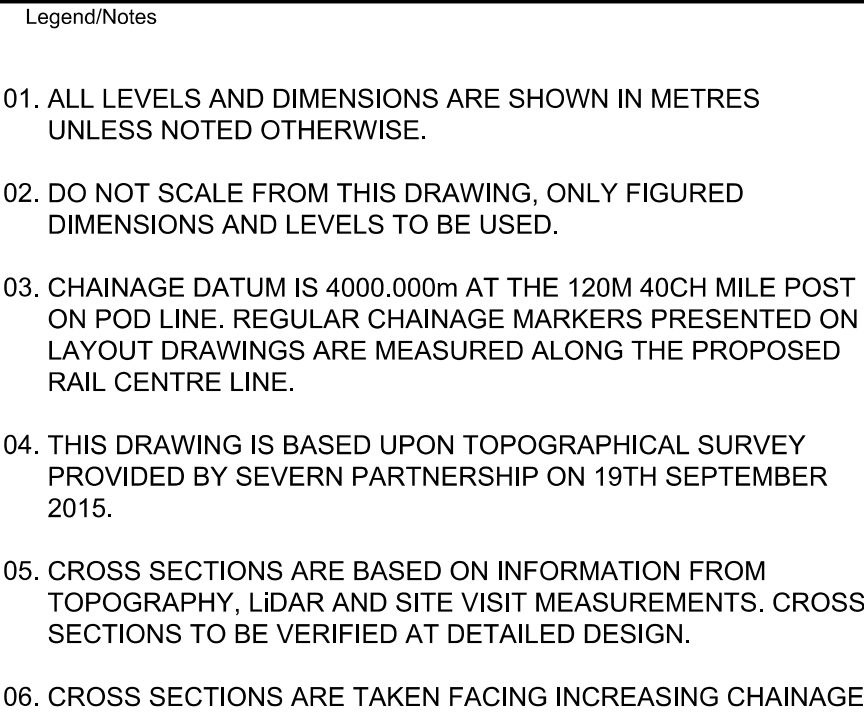
Project
METROWEST PHASE 1

Drawing Title
DISUSED RAILWAY ENGINEERING PLANS
GRIP 4 MINOR CIVILS
CH.16310m TO CH.16510m

Designed	J. BACINSKI	Signed		Date	24/07/19
Drawn	J. BACINSKI	Signed		Date	24/07/19
Checked	R. SNELL	Signed		Date	24/07/19
Approved	R. SNELL	Signed		Date	24/07/19
Scale(s)	1:200	ELR & Mileage	POD 128M 12CH	Sheet	
Alternative Reference				20 of 31	

Drawing Number
W1097B-ARP-DRG-ECV-000320 A03

MINOR CIVILS		EXISTING UTILITIES		TELECOM LEGEND		SPECIES, ECOLOGY, LANDSCAPE	
EXISTING FENCE GRADE I	— / — / —	PROPOSED CABINET LOCATION (NOT TO SCALE)		WATER MAIN		WATER VOLES	
EXISTING FENCE GRADE II	— / — / —	PROPOSED SIGNAL (NOT TO SCALE)		FOUL SEWER		BATS	
EXISTING FENCE GRADE III	— / — / —	EXISTING CABINET TO BE REMOVED/RELOCATED		RISING MAIN		DORMICE	
EXISTING FENCE REMOVED	— / — / —	EXISTING SIGNAL TO BE REMOVED		SEWER SURFACE		OTTERS	
EXISTING FENCE MODIFIED/REPLACED WITH GRADE I FENCE	— / — / —	EXISTING CABINET LOCATION		HIGH VOLTAGE ELECTRICITY - BELOW GROUND		REPTILES	
EXISTING FENCE MODIFIED/REPLACED WITH GRADE II FENCE	— / — / —	MINOR EARTHWORKS RETAINING STRUCTURE		LOW VOLTAGE ELECTRICITY - BELOW GROUND		GREAT CRESTED NEWT	
EXISTING FENCE MODIFIED/REPLACED WITH GRADE III FENCE	— / — / —	EARTHWORKS STRUCTURE		HIGH VOLTAGE ELECTRICITY - ABOVE GROUND		BIRD BOX (PROPOSED)	
PROPOSED FENCE GRADE I	— / — / —	NOISE BARRIER		LOW VOLTAGE ELECTRICITY - ABOVE GROUND		AREA OF VEGETATION TO BE RETAINED DURING CONSTRUCTION	
PROPOSED FENCE GRADE II	— / — / —	DEVELOPMENT CONSENT ORDER (DCO)		GRSS PIPELINE		WOODLAND TO BE PLANTED DURING CONSTRUCTION	
PROPOSED FENCE GRADE III	— / — / —	LAND BOUNDARY		LOW PRESSURE GAS MAIN		GRASSLAND TO BE PLANTED DURING CONSTRUCTION	
PROPOSED TROUING	— / — / —	CONTINUOUS POSITION OF SAFETY		MEDIUM PRESSURE GAS MAIN		HEDGE/TREES TO BE PLANTED DURING CONSTRUCTION	
REMOVED TROUING	— / — / —	AUTHORISED WALKING ROUTE		HIGH PRESSURE GAS MAIN			
EXISTING TROUING MODIFIED/REPLACED	— / — / —	EXTENT OF RAIL CORRIDOR TO BE CLEAR OF VEGETATION		BT CABLE - BELOW GROUND			
PROPOSED UNDER TRACK CROSSING (UTX)	— / — / —	EXTENT OF RAIL CORRIDOR TO BE CLEAR OF VEGETATION WITH NETWORK RAIL (NR) OPTION TO CLEAR IN FUTURE SHOWN CROSS HATCHED		BT CABLE - ABOVE GROUND			
REMOVED UNDER TRACK CROSSING (UTX)	— / — / —			CABLE & WIRELESS			
				VIRGIN MEDIA CABLE - BELOW GROUND			
				VERIZON BACKBONE DUCT - BELOW GROUND			
				EXISTING DITCHES TO BE RETAINED/REPLACED			



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Project	METROWEST PHASE 1
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Drawing Title

DISUSED RAILWAY ENGINEERING
PLANS
GRIP 4 MINOR CIVILS
CH.16510M TO 16700M

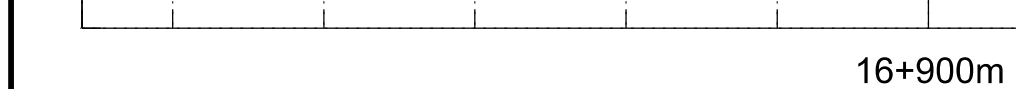
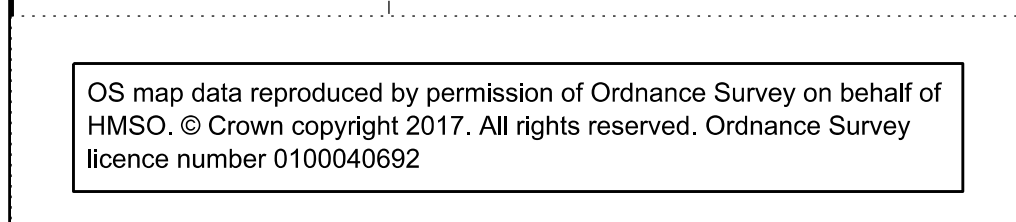
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Checked	R. SNELL	Signed	Date 24/0
Approved	R. SNELL	Signed	Date 24/0

1:200	POD 128M 22CH
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Alternative Reference: _____ Sheet: 21 of 31

Drawing Number	Revision
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Sheet Size 40.841



06. CROSS SECTIONS ARE TAKEN FACING INCREASING CHAINAGE.

Rev	Date	Description of Revisions	Drawn	Chkd	App'd
Status					Suitab
FIT FOR INFORMATION					S2

Status	FIT FOR INFORMATION	Suitab
		S2



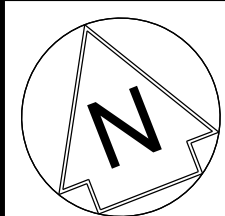
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Project	METROWEST PHASE 1
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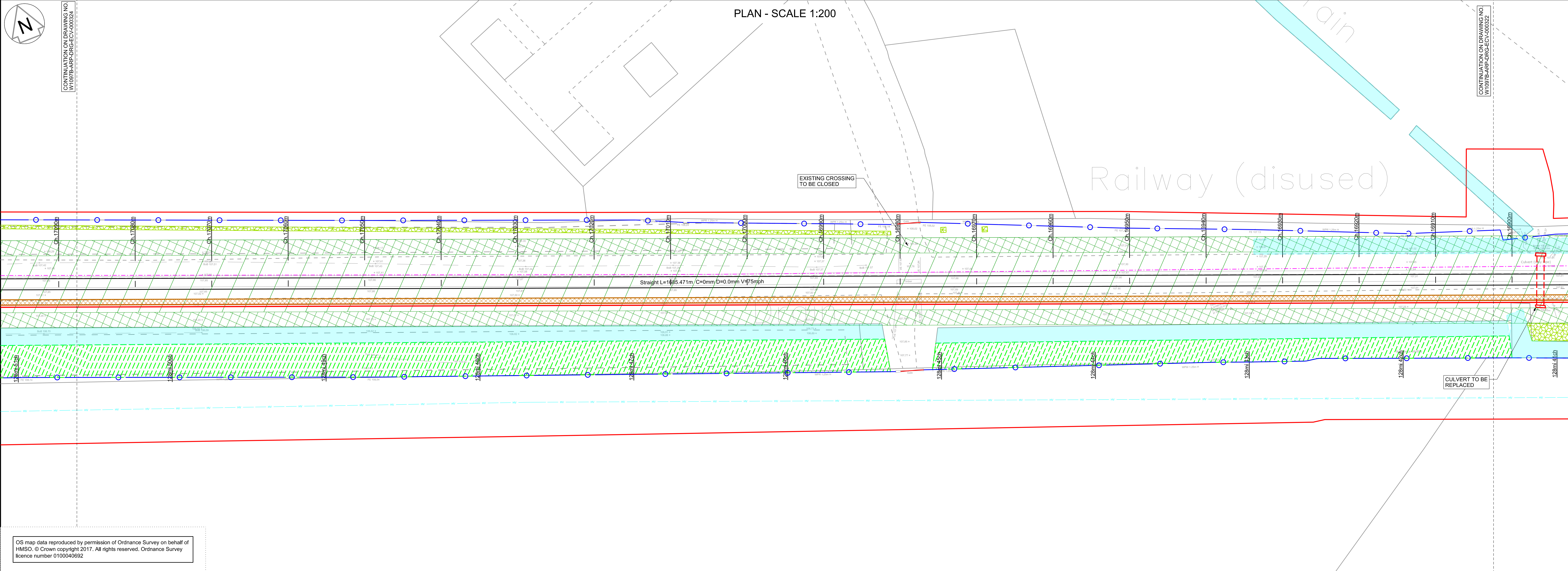
DISUSED RAILWAY ENGINEERING
PLANS
GRIP 4 MINOR CIVILS
CH.16700M TO 16900M

Drawn	J. BACINSKI	Signed	Date
Checked	R. SNELL	Signed	Date
Approved	R. SNELL	Signed	Date

1:200	POB 128M 32CH
Alternative Reference	Sheet 23 of 31

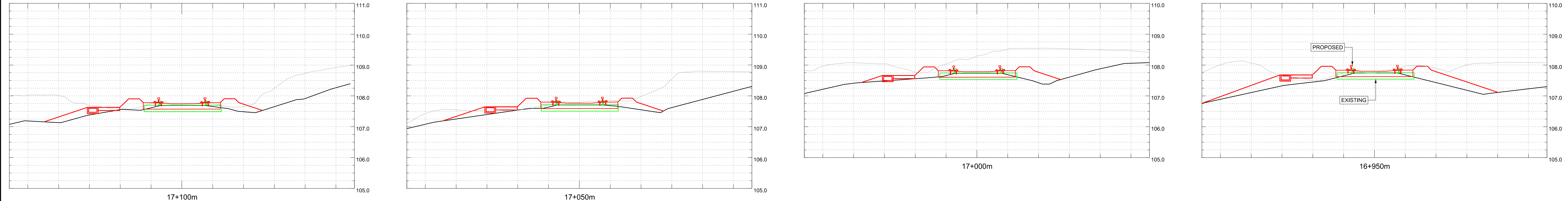


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W1097B-ARP-DRG-ECV-000324

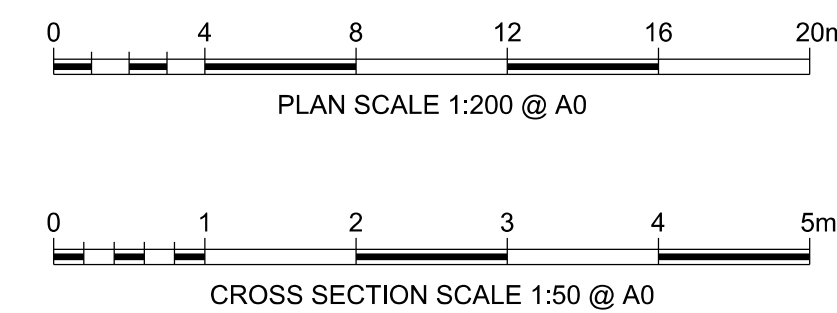
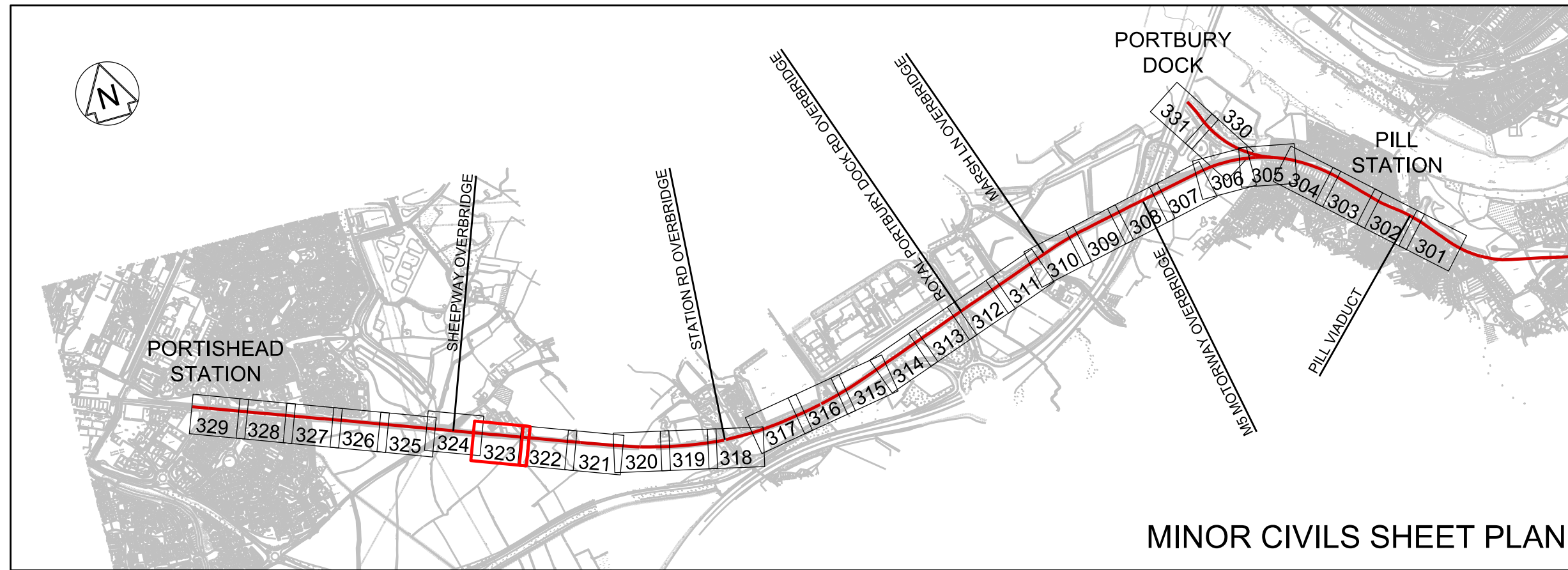


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CROSS SECTIONS - SCALE 1:50



- Legend/Notes
01. ALL LEVELS AND DIMENSIONS ARE SHOWN IN METRES UNLESS NOTED OTHERWISE.
 02. DO NOT SCALE FROM THIS DRAWING, ONLY FIGURED DIMENSIONS AND LEVELS TO BE USED.
 03. CHAINAGE DATUM IS 4000.000m AT THE 120M 40CH MILE POST ON POD LINE. REGULAR CHAINAGE MARKERS PRESENTED ON LAYOUT DRAWINGS ARE MEASURED ALONG THE PROPOSED RAIL CENTRE LINE.
 04. THIS DRAWING IS BASED UPON TOPOGRAPHICAL SURVEY PROVIDED BY SEVERN PARTNERSHIP ON 19TH SEPTEMBER 2015.
 05. CROSS SECTIONS ARE BASED ON INFORMATION FROM TOPOGRAPHY, LIDAR AND SITE VISIT MEASUREMENTS. CROSS SECTIONS TO BE VERIFIED AT DETAILED DESIGN.
 06. CROSS SECTIONS ARE TAKEN FACING INCREASING CHAINAGE.



A01	15/03/19	ISSUED FOR INFORMATION	JB	RS	RS
A02	03/05/19	FOR DCO PLANNING APPLICATION	JB	RS	RS
A03	24/07/19	FOR DCO PLANNING APPLICATION	JB	RS	RS
Rev.	Date	Description of Revisions	Drawn	Chkd	Appr.

Status
FIT FOR INFORMATION

Subsidiary
S2



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Project
METROWEST PHASE 1

Drawing Title
DISUSED RAILWAY ENGINEERING PLANS
GRIP 4 MINOR CIVILS
CH.16900M TO 17090M

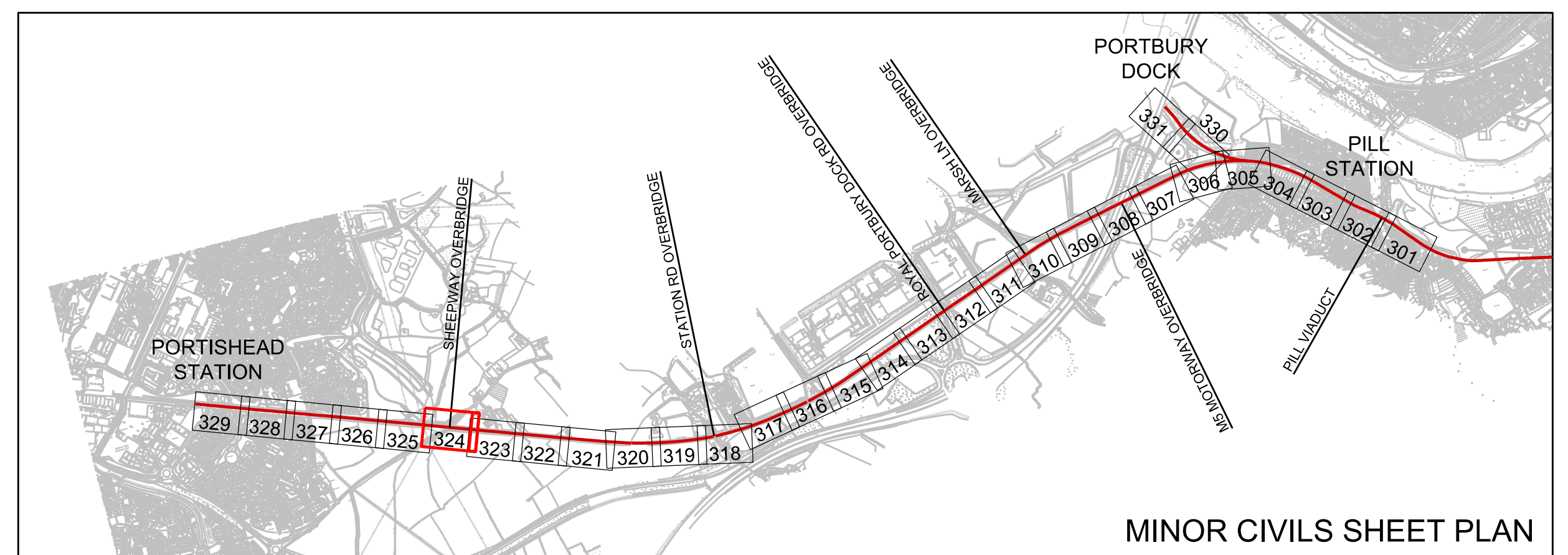
Designed	J. BACINSKI	Signed		Date	24/07/19
Drawn	J. BACINSKI	Signed		Date	24/07/19
Checked	R. SNELL	Signed		Date	24/07/19
Approved	R. SNELL	Signed		Date	24/07/19
Scale(s)	1:200	ELR & Mileage	POD 128M 41CH	Sheet	23 of 31
Alternative Reference				Revision	

Drawing Number
W1097B-ARP-DRG-ECV-000323 A03

Sheet Size A0 841 x 1190

MINOR CIVILS		EXISTING UTILITIES		TELECOM LEGEND		SPECIES, ECOLOGY, LANDSCAPE	
EXISTING FENCE GRADE I	— / — / —	PROPOSED CABINET LOCATION (NOT TO SCALE)		WATER MAIN		WATER VOLES	
EXISTING FENCE GRADE II	— / — / —	PROPOSED SIGNAL (NOT TO SCALE)		FOUL SEWER		BATS	
EXISTING FENCE GRADE III	— / — / —	EXISTING CABINET TO BE REMOVED/RELOCATED		RISING MAIN		DORMICE	
EXISTING FENCE REMOVED	— / — / —	EXISTING SIGNAL TO BE REMOVED		SEWER SURFACE		OTTERS	
EXISTING FENCE MODIFIED/REPLACED WITH GRADE I FENCE	— / — / —	EXISTING CABINET LOCATION		HIGH VOLTAGE ELECTRICITY - BELOW GROUND		REPTILES	
EXISTING FENCE MODIFIED/REPLACED WITH GRADE II FENCE	— / — / —	MINOR EARTHWORKS RETAINING STRUCTURE		LOW VOLTAGE ELECTRICITY - BELOW GROUND		GREAT CRESTED NEWT	
EXISTING FENCE MODIFIED/REPLACED WITH GRADE III FENCE	— / — / —	EARTHWORKS STRUCTURE		HIGH VOLTAGE ELECTRICITY - ABOVE GROUND		BIRD BOX (PROPOSED)	
PROPOSED FENCE GRADE I	— / — / —	NOISE BARRIER		LOW VOLTAGE ELECTRICITY - ABOVE GROUND		AREA OF VEGETATION TO BE RETAINED DURING CONSTRUCTION	
PROPOSED FENCE GRADE II	— / — / —	DEVELOPMENT CONSENT ORDER (DCO)		GRSS PIPELINE		WOODLAND TO BE PLANTED DURING CONSTRUCTION	
PROPOSED FENCE GRADE III	— / — / —	LAND BOUNDARY		MEDIUM PRESSURE GAS MAIN		GRASSLAND TO BE PLANTED DURING CONSTRUCTION	
PROPOSED TROUGHING	— / — / —	CONTINUOUS POSITION OF SAFETY		HIGH PRESSURE GAS MAIN		HEDGE/TREES TO BE PLANTED DURING CONSTRUCTION	
REMOVED TROUGHING	— / — / —	AUTHORISED WALKING ROUTE		BT CABLE - BELOW GROUND			
EXISTING TROUGHING MODIFIED/REPLACED	— / — / —	EXTENT OF RAIL CORRIDOR TO BE CLEAR OF VEGETATION		BT CABLE ABOVE GROUND			
PROPOSED UNDER TRACK CROSSING (UTX)	— / — / —	EXTENT OF RAIL CORRIDOR TO BE CLEAR OF VEGETATION WITH NETWORK RAIL (NR) OPTION TO CLEAR IN FUTURE SHOWN CROSS HATCHED		CABLE & WIRELESS			
REMOVED UNDER TRACK CROSSING (UTX)	— / — / —			VIRGIN MEDIA CABLE - BELOW GROUND			
				VERIZON BACKBONE DUCT - BELOW GROUND			
				EXISTING DITCHES TO BE RETAINED/REPLACED			

Drawing Number
W1097B-ARP-DRG-ECV-000324

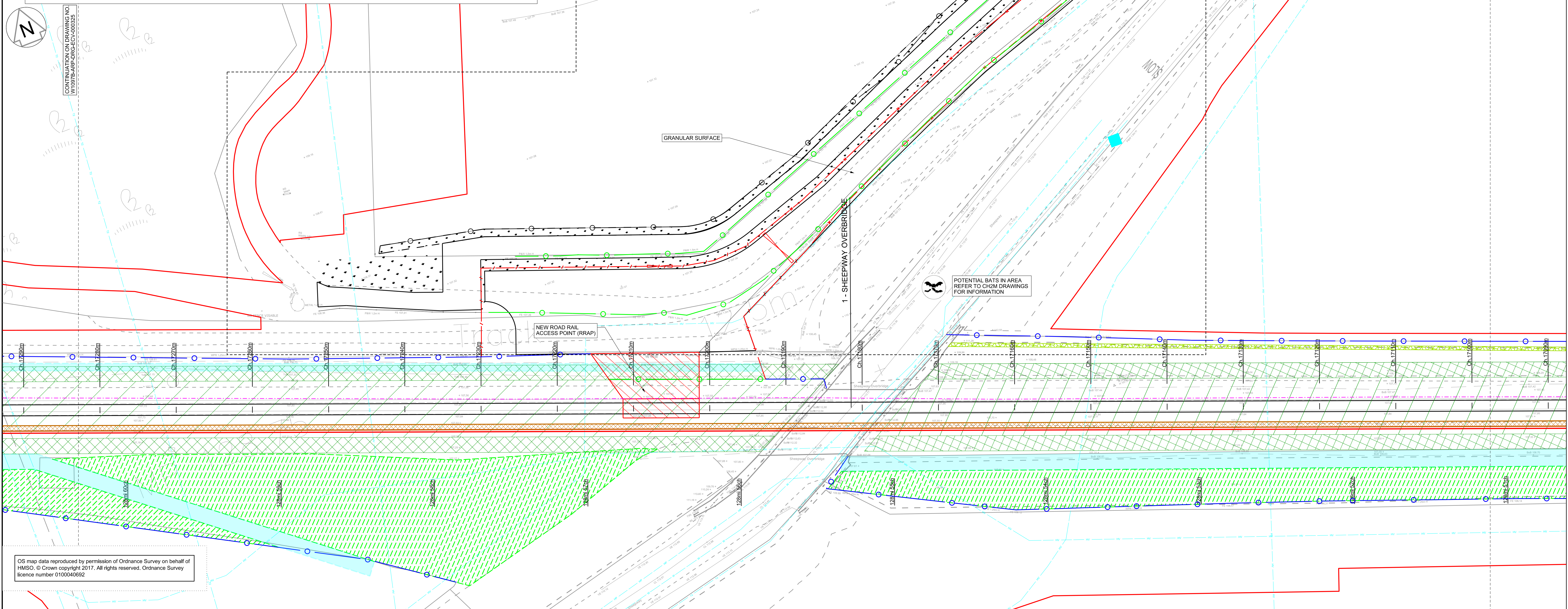


PROPOSED PERMANENT COMPOUND
REFER TO CH2M DESIGN WORKS EXTERNAL
TO COMPOUND BOUNDARY FENCE.
DRAWING NO. 467470.BQ.04.20-400 REV L

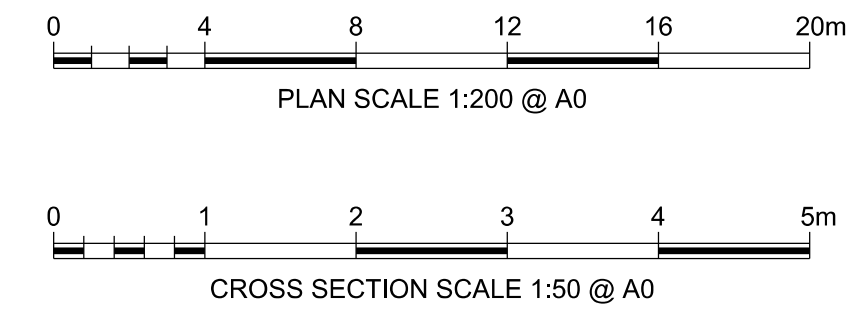
PLAN - SCALE 1:200

CONTINUATION ON DRAWING NO.
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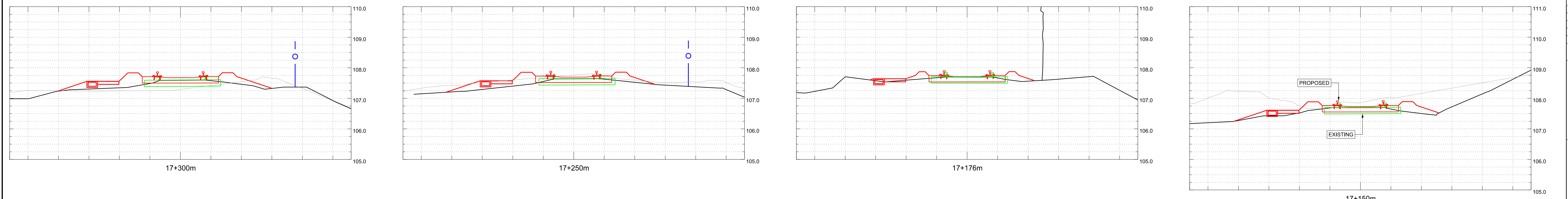
- Legend/Notes
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CROSS SECTIONS - SCALE 1:50



A01	15/03/19	ISSUED FOR INFORMATION	JB	RS	RS
A02	03/05/19	FOR DCO PLANNING APPLICATION	JB	RS	RS
A03	24/07/19	FOR DCO PLANNING APPLICATION	JB	RS	RS
A04	28/08/20	FOR DCO PLANNING APPLICATION	JB	RS	RS
Rev	Date	Description of Revisions	Drawn	Cred	Appr

STATUS
FIT FOR INFORMATION

SUBMITTAL
S2



Contractor(s)

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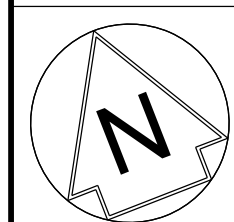
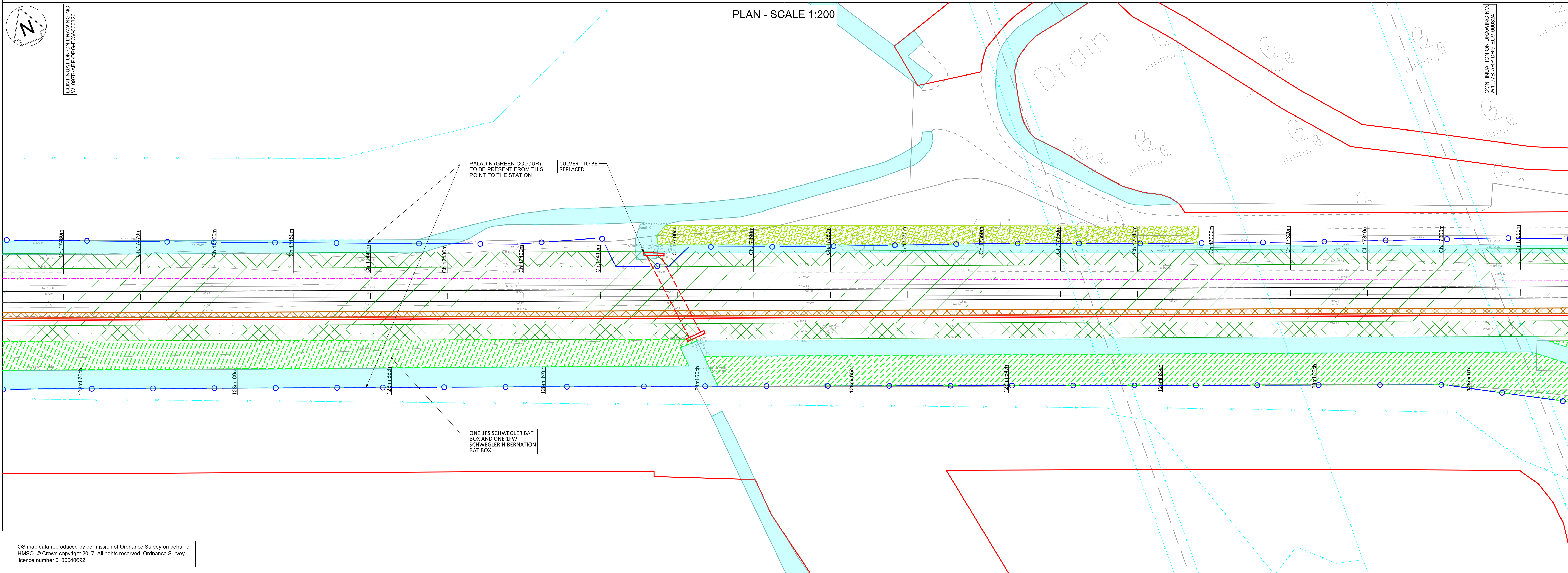
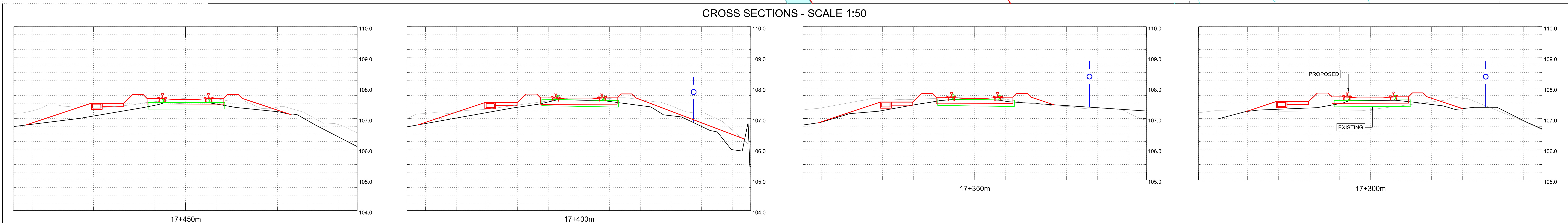
Project
METROWEST PHASE 1

Drawing Title
DISUSED RAILWAY ENGINEERING PLANS
GRIP 4 MINOR CIVILS
CH.17090M TO 17290M

Designed	J. BACINSKI	Signed		Date	28/08/20
Drawn	J. BACINSKI	Signed		Date	28/08/20
Checked	R. SNELL	Signed		Date	28/08/20
Approved	R. SNELL	Signed		Date	28/08/20
Scale(s)	1:200	ELR & Mileage	POD 128M 51CH	Sheet	24 of 31
Alternative Reference				Revision	

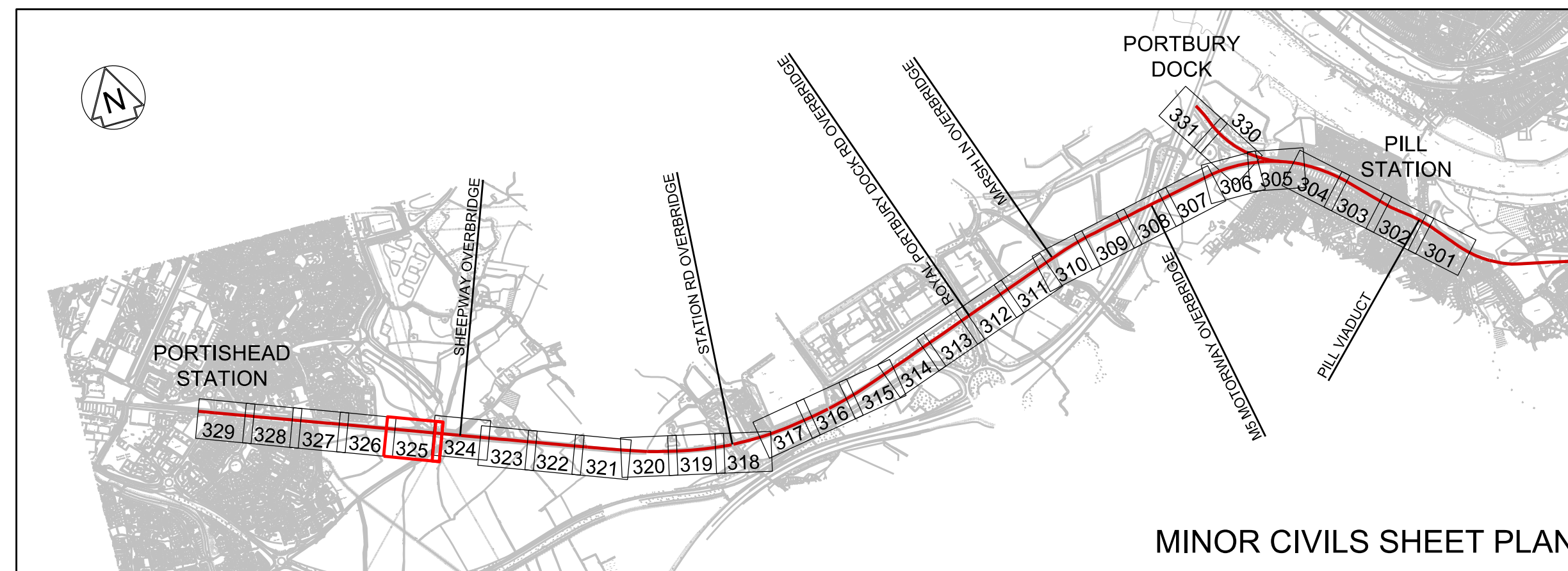
Drawing Number
W1097B-ARP-DRG-ECV-000324 A04

MINOR CIVILS		EXISTING UTILITIES		TELECOM LEGEND		SPECIES, ECOLOGY, LANDSCAPE	
EXISTING FENCE GRADE I	— / — / —	PROPOSED CABINET LOCATION (NOT TO SCALE)	☒	INDICATIVE LOCATION OF SCRATCH BURIED PROPOSED ARMOURD FIBRE CABLE	— — — — —	WATER VOLES	🦫
EXISTING FENCE GRADE II	— / — / —	PROPOSED SIGNAL (NOT TO SCALE)	☒	NOTE: EQUIPMENT SIZE NOT SHOWN TO SCALE		BATS	🦇
EXISTING FENCE GRADE III	— / — / —	EXISTING CABINET TO BE REMOVED/RELOCATED	☒	TELEPHONE (PROPOSED)	☒	DORMICE	🐭
EXISTING FENCE REMOVED	— / — / —	EXISTING SIGNAL TO BE REMOVED	☒	BOX ON POST (PROPOSED)	☒	OTTERS	🦦
EXISTING FENCE MODIFIED/REPLACED WITH GRADE I FENCE	— / — / —	EXISTING CABINET LOCATION	☒	FIBRE JOINT (PROPOSED)	☒	REPTILES	🐍
EXISTING FENCE MODIFIED/REPLACED WITH GRADE II FENCE	— / — / —	MINOR EARTHWORKS RETAINING STRUCTURE	☒	PROPOSED GLOBAL SYSTEM FOR MOBILE COMMUNICATIONS - RAILWAY (GSM-R) REPEATER SITE WITH REMOTE RADIO HEAD (RRH) AND ANTENNA	☒	GREAT CRISTED NEWT	🦎
EXISTING FENCE MODIFIED/REPLACED WITH GRADE III FENCE	— / — / —	EARTHWORKS STRUCTURE	☒	PROPOSED FIXED TELECOMMUNICATION NETWORK (FTN) ACCESS NODE WITH GLOBAL SYSTEM FOR MOBILE COMMUNICATIONS - RAILWAY (GSM-R) CO-LOCATED	☒	BIRD BOX (PROPOSED)	☒
PROPOSED FENCE GRADE I	— / — / —	NOISE BARRIER	☒	EXISTING FIXED TELECOMMUNICATION NETWORK (FTN) ACCESS NODE WITH GLOBAL SYSTEM FOR MOBILE COMMUNICATIONS - RAILWAY (GSM-R) CO-LOCATED	☒	AREA OF VEGETATION TO BE RETAINED DURING CONSTRUCTION	🌿
PROPOSED FENCE GRADE II	— / — / —	DEVELOPMENT CONSENT ORDER (DCO)	☒			WOODLAND TO BE PLANTED DURING CONSTRUCTION	🌳
PROPOSED FENCE GRADE III	— / — / —	LAND BOUNDARY	☒			GRASSLAND TO BE PLANTED DURING CONSTRUCTION	🌾
PROPOSED TROUGHING	— / — / —	CONTINUOUS POSITION OF SAFETY	☒			HEDGE/TREES TO BE PLANTED DURING CONSTRUCTION	🌳
REMOVED TROUGHING	— / — / —	AUTHORISED WALKING ROUTE	☒				
EXISTING TROUGHING MODIFIED/REPLACED	— / — / —	EXTENT OF RAIL CORRIDOR TO BE CLEAR OF VEGETATION	☒				
PROPOSED UNDER TRACK CROSSING (UTX)	— / — / —	EXTENT OF RAIL CORRIDOR TO BE CLEAR OF VEGETATION WITH NETWORK RAIL (NR) OPTION TO CLEAR IN FUTURE SHOWN CROSS HATCHED	☒				
REMOVED UNDER TRACK CROSSING (UTX)	— / — / —						

CONTINUATION ON DRAWING NO.
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MINOR CIVILS SHEET PLAN

0 4 8 12 16 20m
PLAN SCALE 1:200 @ A00 1 2 3 4 5m
CROSS SECTION SCALE 1:50 @ A0

A01	15/03/19	ISSUED FOR INFORMATION	JB	RS	RS
A02	03/05/19	FOR DCO PLANNING APPLICATION	JB	RS	RS
A03	24/07/19	FOR DCO PLANNING APPLICATION	JB	RS	RS
Rev	Date	Description of Revisions	Drawn	Chkd	Appr

Status
FIT FOR INFORMATION

S2



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Project

METROWEST PHASE 1

Drawing Title

DISUSED RAILWAY ENGINEERING
PLANS
GRIP 4 MINOR CIVILS
CH.17290M TO 17480M

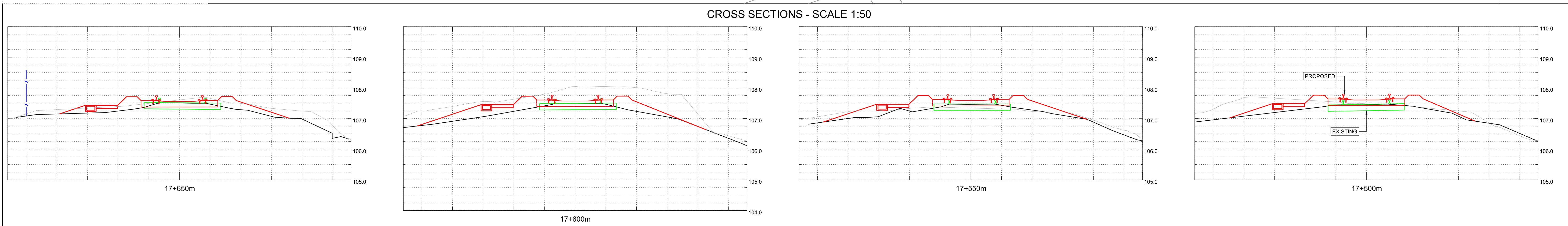
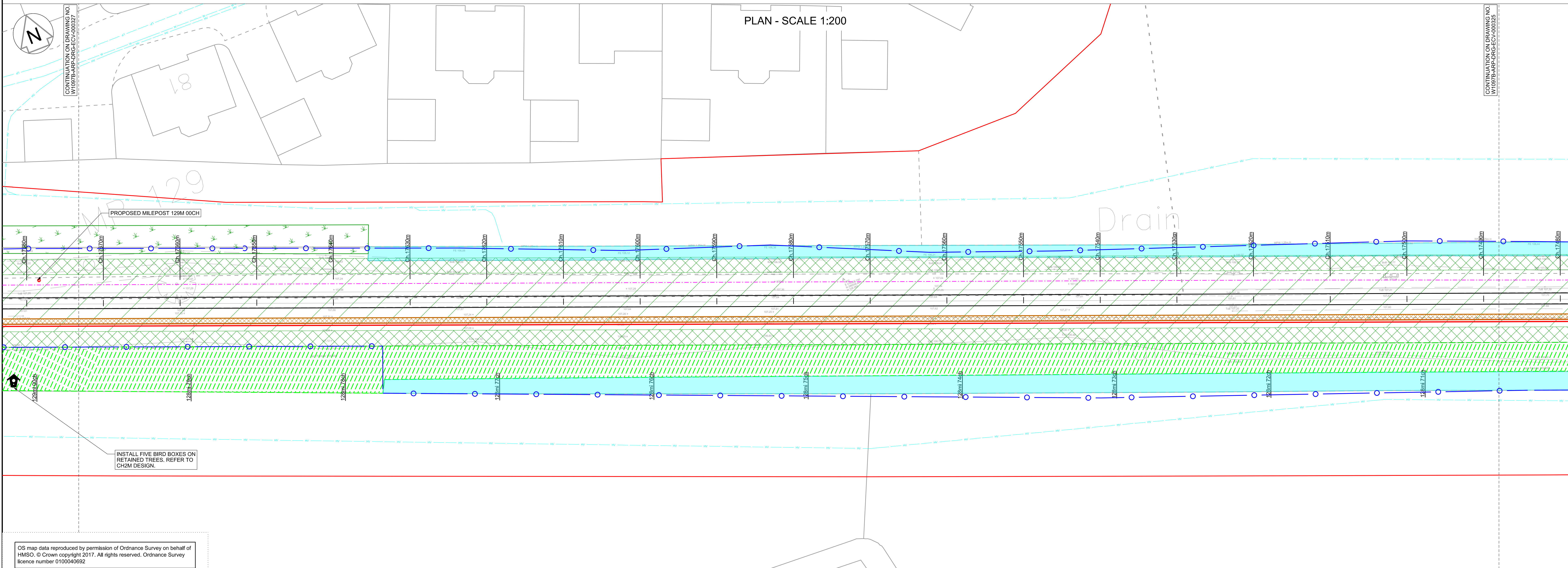
Designed	J. BACINSKI	Signed		Date	24/07/19
Drawn	J. BACINSKI	Signed		Date	24/07/19
Checked	R. SNELL	Signed		Date	24/07/19
Approved	R. SNELL	Signed		Date	24/07/19
Scale(s)	1:200	ELR & Mileage	POD 128M 61CH	Sheet	25 of 31
Alternative Reference				Revision	

Drawing Number

W1097B-ARP-DRG-ECV-000325 A03

Sheet Size A0 841 x 1190

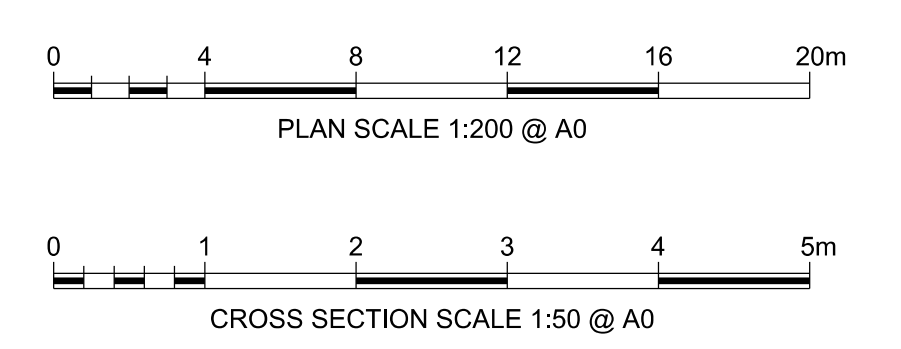
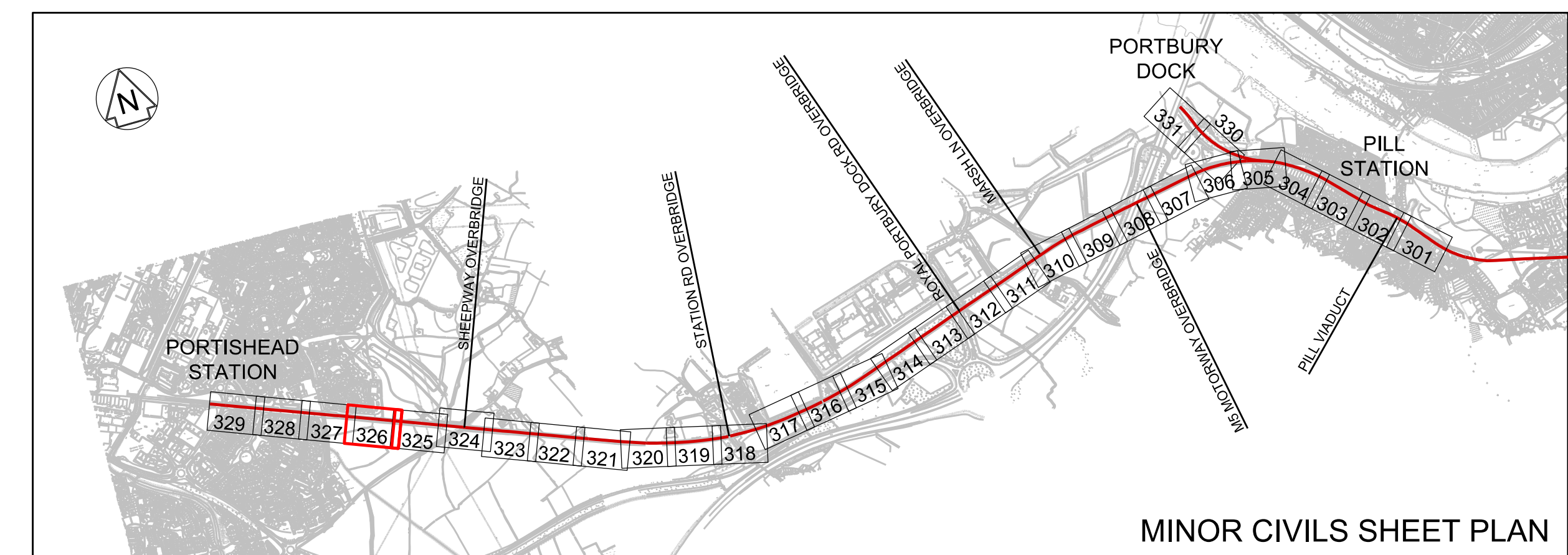
MINOR CIVILS		EXISTING UTILITIES		TELECOM LEGEND		SPECIES, ECOLOGY, LANDSCAPE	
EXISTING FENCE GRADE I	— / — / —	PROPOSED CABINET LOCATION (NOT TO SCALE)		WATER MAIN		WATER VOLES	
EXISTING FENCE GRADE II	— / — / —	PROPOSED SIGNAL (NOT TO SCALE)		FOUL SEWER		BATS	
EXISTING FENCE GRADE III	— / — / —	EXISTING CABINET TO BE REMOVED/RELOCATED		RISING MAIN		DORMICE	
EXISTING FENCE REMOVED	— / — / —	EXISTING SIGNAL TO BE REMOVED		SEWER SURFACE		OTTERS	
EXISTING FENCE MODIFIED/REPLACED WITH GRADE I FENCE	— / — / —	EXISTING CABINET LOCATION		HIGH VOLTAGE ELECTRICITY - BELOW GROUND		REPTILES	
EXISTING FENCE MODIFIED/REPLACED WITH GRADE II FENCE	— / — / —	MINOR EARTHWORKS RETAINING STRUCTURE		LOW VOLTAGE ELECTRICITY - BELOW GROUND		GREAT CRESTED NEWT	
EXISTING FENCE MODIFIED/REPLACED WITH GRADE III FENCE	— / — / —	EARTHWORKS STRUCTURE		LOW VOLTAGE ELECTRICITY - ABOVE GROUND		BIRD BOX (PROPOSED)	
PROPOSED FENCE GRADE I	— / — / —	NOISE BARRIER		GRSS PIPELINE		AREA OF VEGETATION TO BE RETAINED DURING CONSTRUCTION	
PROPOSED FENCE GRADE II	— / — / —	DEVELOPMENT CONSENT ORDER (DCO)		LOW PRESSURE GAS MAIN		WOODLAND TO BE PLANTED DURING CONSTRUCTION	
PROPOSED FENCE GRADE III	— / — / —	LAND BOUNDARY		MEDIUM PRESSURE GAS MAIN		GRASSLAND TO BE PLANTED DURING CONSTRUCTION	
PROPOSED TROUGHING	— / — / —	CONTINUOUS POSITION OF SAFETY		BT CABLE - BELOW GROUND		EDGE/TREES TO BE PLANTED DURING CONSTRUCTION	
REMOVED TROUGHING	— / — / —	AUTHORISED WALKING ROUTE		BT CABLE ABOVE GROUND			
EXISTING TROUGHING MODIFIED/REPLACED	— / — / —	EXTENT OF RAIL CORRIDOR TO BE CLEAR OF VEGETATION		CABLE & WIRELESS			
PROPOSED UNDER TRACK CROSSING (UTX)	— / — / —	EXTENT OF RAIL CORRIDOR TO BE CLEAR OF VEGETATION WITH NETWORK RAIL (NR) OPTION TO CLEAR IN FUTURE SHOWN CROSS HATCHED		VIRGIN MEDIA CABLE - BELOW GROUND			
REMOVED UNDER TRACK CROSSING (UTX)	— / — / —			VERIZON BACKBONE DUCT - BELOW GROUND			
				EXISTING DITCHES TO BE RETAINED/REPLACED			



LEGEND									
MINOR CIVILS			EXISTING UTILITIES		TELECOM LEGEND		SPECIES, ECOLOGY, LANDSCAPE		
EXISTING FENCE GRADE I		PROPOSED CABINET LOCATION (NOT TO SCALE)		WATER MAIN		INDICATIVE LOCATION OF SCRATCH BURIED PROPOSED ARMoured FIBRE CABLE		WATER VOLES	
EXISTING FENCE GRADE II		PROPOSED SIGNAL (NOT TO SCALE)		FOUL SEWER		NOTE: EQUIPMENT SIZE NOT SHOWN TO SCALE		BATS	
EXISTING FENCE GRADE III		EXISTING CABINET TO BE REMOVED/RELOCATED		RIISING MAIN		TELEPHONE (PROPOSED)		DORMICE	
EXISTING FENCE REMOVED		EXISTING SIGNAL TO BE REMOVED		SEWER SURFACE		BOX ON POST (PROPOSED)		OTTERS	
EXISTING FENCE MODIFIED/REPLACED WITH GRADE I FENCE		EXISTING CABINET LOCATION		LOW VOLTAGE ELECTRICITY - BELOW GROUND		FIBRE JOINT (PROPOSED)		REPTILES	
EXISTING FENCE MODIFIED/REPLACED WITH GRADE II FENCE		MINOR EARTHWORKS RETAINING STRUCTURE		LOW VOLTAGE ELECTRICITY - ABOVE GROUND		PROPOSED GLOBAL SYSTEM FOR MOBILE COMMUNICATIONS - RAILWAY (GSM-R) REPEATER SITE WITH REMOTE RADIO HEAD (RRH) AND ANTENNA		GREAT CRESTED NEWT	
EXISTING FENCE MODIFIED/REPLACED WITH GRADE III FENCE		EARTHWORKS STRUCTURE		GPSS PIPELINE		PROPOSED FIXED TELECOMMUNICATION NETWORK (FTN) ACCESS NODE WITH GLOBAL SYSTEM FOR MOBILE COMMUNICATIONS - RAILWAY (GSM-R) CO-LOCATED		BIRD BOX (PROPOSED)	
PROPOSED FENCE GRADE I		NOISE BARRIER		LOW PRESSURE GAS MAIN		EXISTING FIXED TELECOMMUNICATION NETWORK (FTN) ACCESS NODE WITH GLOBAL SYSTEM FOR MOBILE COMMUNICATIONS - RAILWAY (GSM-R) CO-LOCATED		AREA OF VEGETATION TO BE RETAINED DURING CONSTRUCTION	
PROPOSED FENCE GRADE II		DEVELOPMENT CONSENT ORDER (DCO)		MEDIUM PRESSURE GAS MAIN				WOODLAND TO BE PLANTED DURING CONSTRUCTION	
PROPOSED FENCE GRADE III		LAND BOUNDARY		HIGH PRESSURE GAS MAIN				GRASSLAND TO BE PLANTED DURING CONSTRUCTION	
PROPOSED TROUHING		CONTINUOUS POSITION OF SAFETY		BT CABLE - BELOW GROUND				HEDGE/TREES TO BE PLANTED DURING CONSTRUCTION	
EXISTING TROUHING		AUTHORISED WALKING ROUTE		BT CABLE ABOVE GROUND					
REMOVED TROUHING		EXTENT OF RAIL CORRIDOR TO BE CLEAR OF VEGETATION		CABLE & WIRELESS					
EXISTING TROUHING MODIFIED/REPLACED		EXTENT OF RAIL CORRIDOR TO BE CLEAR OF VEGETATION		VIRGIN MEDIA CABLE - BELOW GROUND					
PROPOSED UNDER TRACK CROSSING (UTX)		EXTENT OF RAIL CORRIDOR TO BE CLEAR OF VEGETATION WITH NETWORK RAIL (NR) OPTION TO CLEAR IN FUTURE SHOWN CROSS HATCHED		VERIZON BACKBONE DUCT - BELOW GROUND					
EXISTING UNDER TRACK CROSSING (UTX)				EXISTING DITCHES TO BE RETAINED/REPLACED					
REMOVED UNDER TRACK CROSSING (UTX)									

Legend/Notes

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UNLESS NOTED OTHERWISE.
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ON FOD LINE. REGULAR CHAINAGE MARKERS PRESENTED ON
FLAT DRAWINGS ARE MEASURED ALONG THE PROPOSED
RAIL CENTRE LINE.
04. THIS DRAWING IS BASED UPON TOPOGRAPHICAL SURVEY
PROVIDED BY SEVERN PARTNERSHIP ON 19TH SEPTEMBER
2015.
05. CROSS SECTIONS ARE BASED ON INFORMATION FROM
TOPOGRAPHY, LIDAR AND SITE VISIT MEASUREMENTS. CROSS
SECTIONS TO BE VERIFIED AT DETAILED DESIGN.
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A01	15/03/19	ISSUED FOR INFORMATION			JB	RS	RS
A02	03/05/19	FOR DCO PLANNING APPLICATION			JB	RS	RS
A03	24/07/19	FOR DCO PLANNING APPLICATION			JB	RS	RS
Rev	Date	Description of Revisions			Drawn	Chkd	Appr
Status	FIT FOR INFORMATION						Subality S2


$$\Delta_{\alpha_1, \alpha_2, \dots, \alpha_n}(n)$$

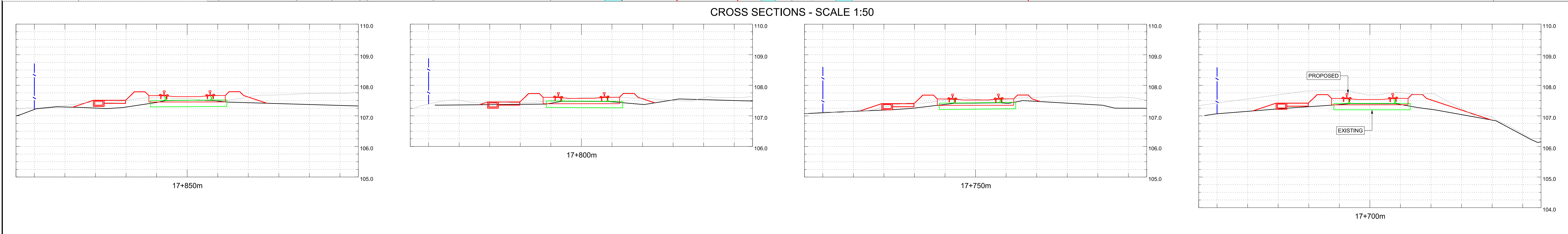
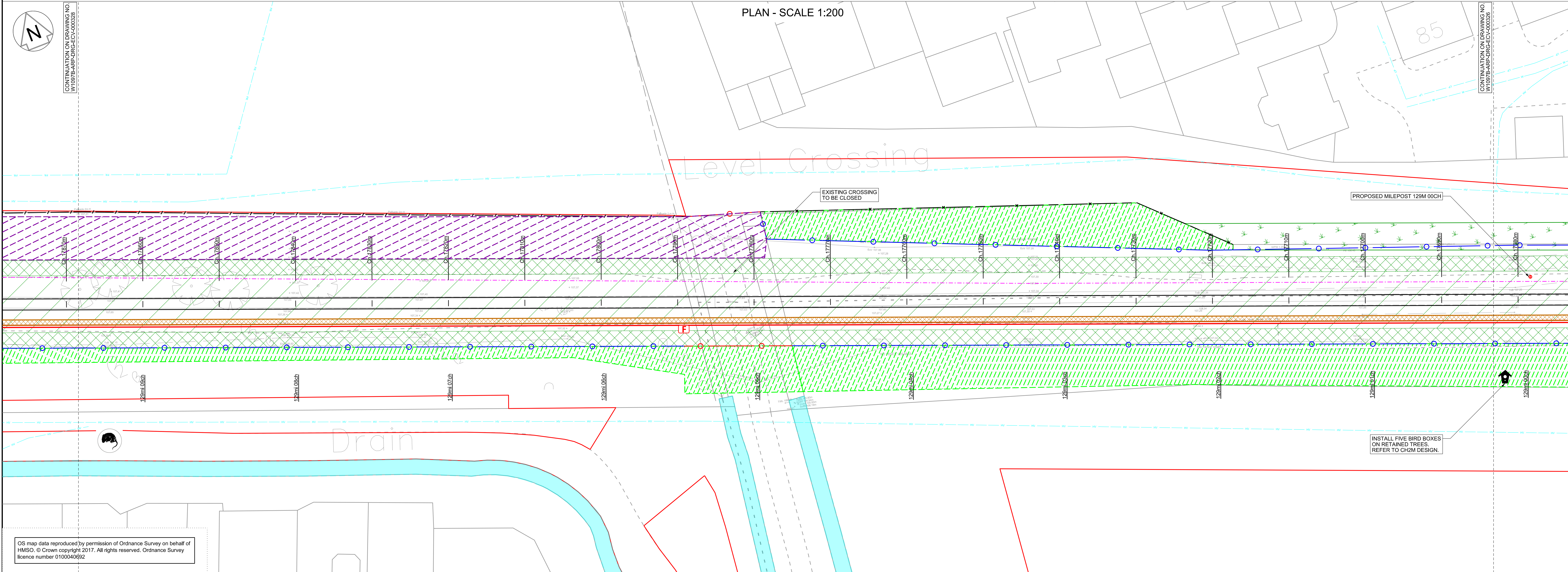

Project METROWEST PHASE 1

Drawing Title

**DISUSED RAILWAY ENGINEERING
PLANS
GRIP 4 MINOR CIVILS
CH.17480M TO CH.17680M**

Designed	J. BACINSKI	Signed	Date	24/07/19
Drawn	J. BACINSKI	Signed	Date	24/07/19
Checked	R. SNELL	Signed	Date	24/07/19
Approved	R. SNELL	Signed	Date	24/07/19
Scale(s)	1:200	ELR & Mileage	POD 128M 71CH	
Alternative Reference			Sheet	

Drawing Number		26 of 31
W1097B-ARP-DRG-ECV-000326		Revision A03



LEGEND			
MINOR CIVILS	EXISTING UTILITIES	TELECOM LEGEND	SPECIES, ECOLOGY, LANDSCAPE
EXISTING FENCE GRADE I EXISTING FENCE GRADE II EXISTING FENCE GRADE III EXISTING FENCE REMOVED EXISTING FENCE MODIFIED/REPLACED WITH GRADE I FENCE EXISTING FENCE MODIFIED/REPLACED WITH GRADE II FENCE EXISTING FENCE MODIFIED/REPLACED WITH GRADE III FENCE PROPOSED FENCE GRADE I PROPOSED FENCE GRADE II PROPOSED FENCE GRADE III PROPOSED TROUING REMOVED TROUING EXISTING TROUING MODIFIED/REPLACED PROPOSED UNDER TRACK CROSSING (UTX) REMOVED UNDER TRACK CROSSING (UTX)	PROPOSED CABINET LOCATION (NOT TO SCALE) PROPOSED SIGNAL (NOT TO SCALE) EXISTING CABINET TO BE REMOVED/RELOCATED EXISTING SIGNAL TO BE REMOVED EXISTING CABINET LOCATION MINOR EARTHWORKS RETAINING STRUCTURE EARTHWORKS STRUCTURE NOISE BARRIER DEVELOPMENT CONSENT ORDER (DCO) LAND BOUNDARY CONTINUOUS POSITION OF SAFETY AUTHORISED WALKING ROUTE EXTENT OF RAIL CORRIDOR TO BE CLEAR OF VEGETATION EXTENT OF RAIL CORRIDOR TO BE CLEAR OF VEGETATION WITH NETWORK RAIL (NR) OPTION TO CLEAR IN FUTURE SHOWN CROSS HATCHED	WATER MAIN FOUL SEWER RISING MAIN SEWER SURFACE HIGH VOLTAGE ELECTRICITY - BELOW GROUND LOW VOLTAGE ELECTRICITY - BELOW GROUND HIGH VOLTAGE ELECTRICITY - ABOVE GROUND LOW VOLTAGE ELECTRICITY - ABOVE GROUND GRSS PIPELINE LOW PRESSURE GAS MAIN MEDIUM PRESSURE GAS MAIN BT CABLE - BELOW GROUND BT CABLE ABOVE GROUND CABLE & WIRELESS VIRGIN MEDIA CABLE - BELOW GROUND VERIZON BACKBONE DUCT - BELOW GROUND EXISTING DITCHES TO BE RETAINED/REPLACED	INDICATIVE LOCATION OF SCRATCH BURIED PROPOSED ARMoured FIBRE CABLE NOTE: EQUIPMENT SIZE NOT SHOWN TO SCALE TELEPHONE (PROPOSED) BOX ON POST (PROPOSED) FIBRE JOINT (PROPOSED) PROPOSED GLOBAL SYSTEM FOR MOBILE COMMUNICATIONS - RAILWAY (GSM-R) REPEATER SITE WITH REMOTE RADIO HEAD (RRH) AND ANTENNA PROPOSED FIXED TELECOMMUNICATION NETWORK (FTN) ACCESS NODE WITH GLOBAL SYSTEM FOR MOBILE COMMUNICATIONS - RAILWAY (GSM-R) CO-LOCATED EXISTING FIXED TELECOMMUNICATION NETWORK (FTN) ACCESS NODE WITH GLOBAL SYSTEM FOR MOBILE COMMUNICATIONS - RAILWAY (GSM-R) CO-LOCATED WATER VOLES BATS DORMICE OTTERS REPTILES GREAT CRESTED NEWT BIRD BOX (PROPOSED) AREA OF VEGETATION TO BE RETAINED DURING CONSTRUCTION WOODLAND TO BE PLANTED DURING CONSTRUCTION GRASSLAND TO BE PLANTED DURING CONSTRUCTION HEDGE/TREES TO BE PLANTED DURING CONSTRUCTION

- Legend/Notes
01. ALL LEVELS AND DIMENSIONS ARE SHOWN IN METRES UNLESS NOTED OTHERWISE.
 02. DO NOT SCALE FROM THIS DRAWING, ONLY FIGURED DIMENSIONS AND LEVELS TO BE USED.
 03. CHAINAGE DATUM IS 4000.000m AT THE 120M 40CH MILE POST ON POD LINE. REGULAR CHAINAGE MARKERS PRESENTED ON LAYOUT DRAWINGS ARE MEASURED ALONG THE PROPOSED RAIL CENTRE LINE.
 04. THIS DRAWING IS BASED UPON TOPOGRAPHICAL SURVEY PROVIDED BY SEVERN PARTNERSHIP ON 19TH SEPTEMBER 2015.
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 06. CROSS SECTIONS ARE TAKEN FACING INCREASING CHAINAGE.

Rev	Date	Description of Revisions	Drawn	Chkd	Appr	Subsidiary
A01	15/03/19	ISSUE FOR INFORMATION	JB	RS	RS	
A02	03/05/19	FOR DCO PLANNING APPLICATION	JB	RS	RS	
A03	24/07/19	FOR DCO PLANNING APPLICATION	JB	RS	RS	

STATUS
FIT FOR INFORMATION
S2



Contractor(s)

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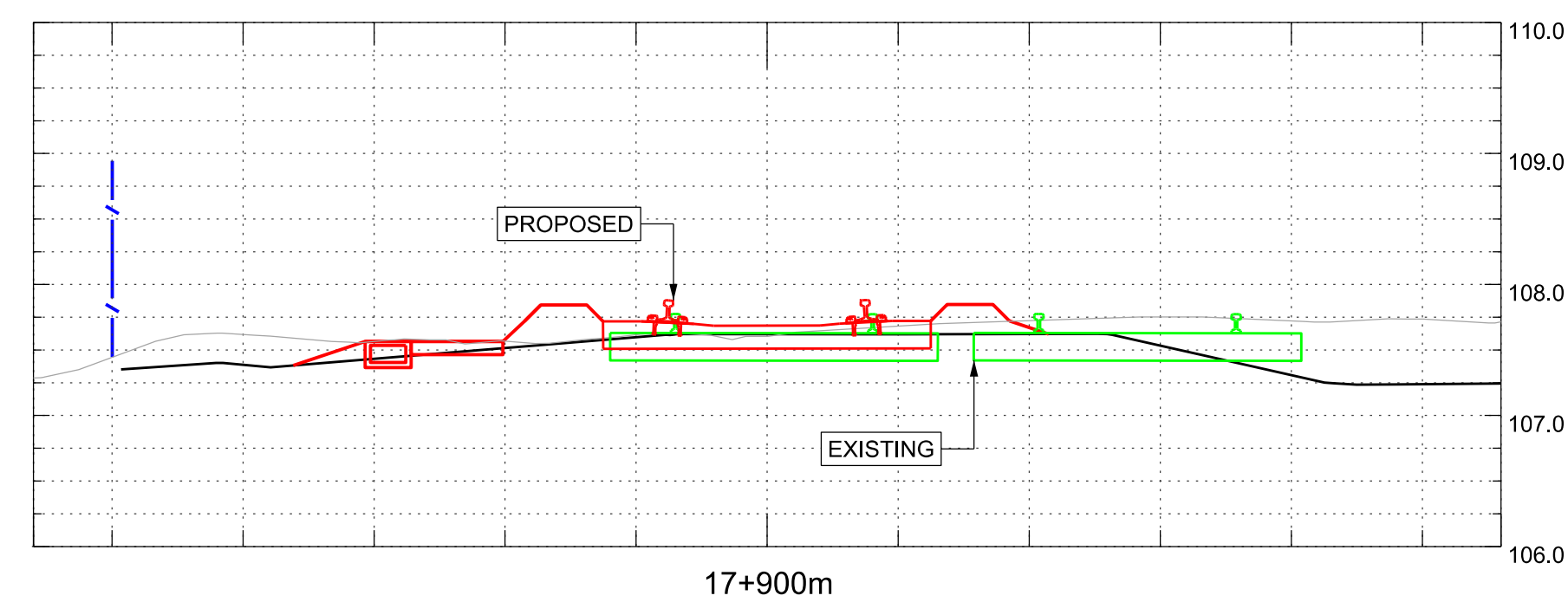
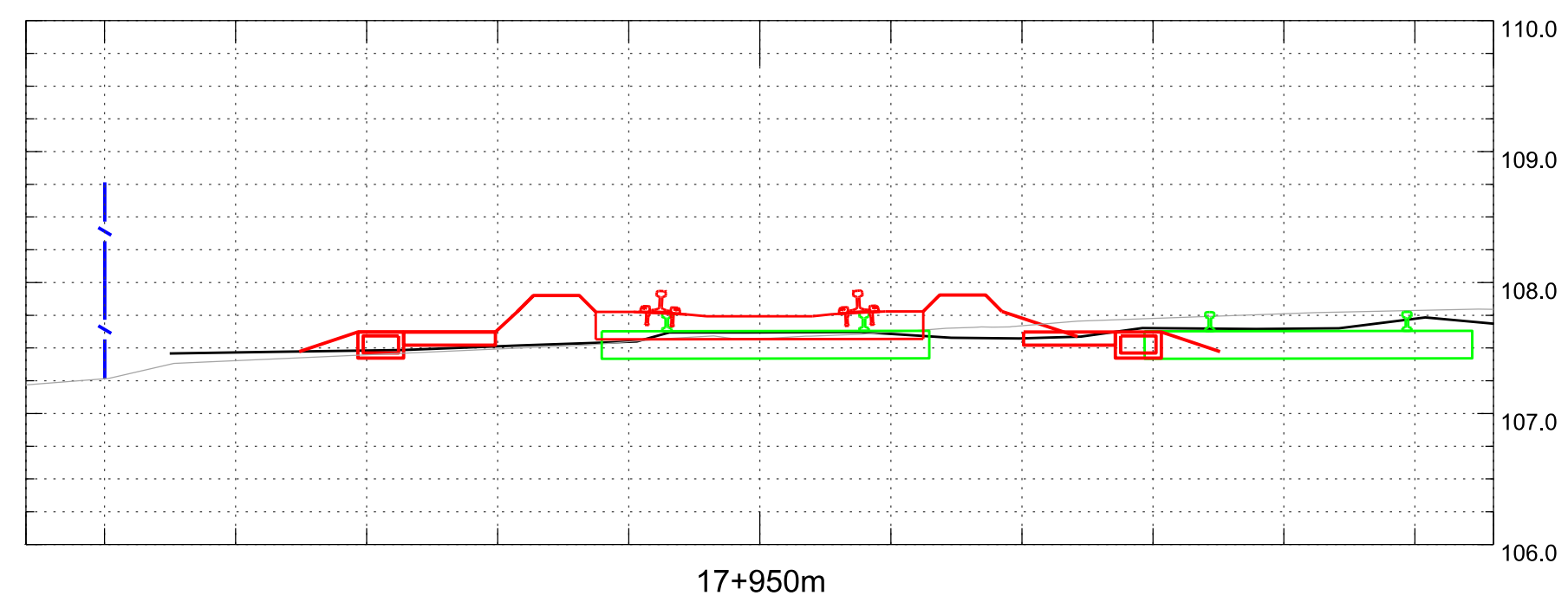
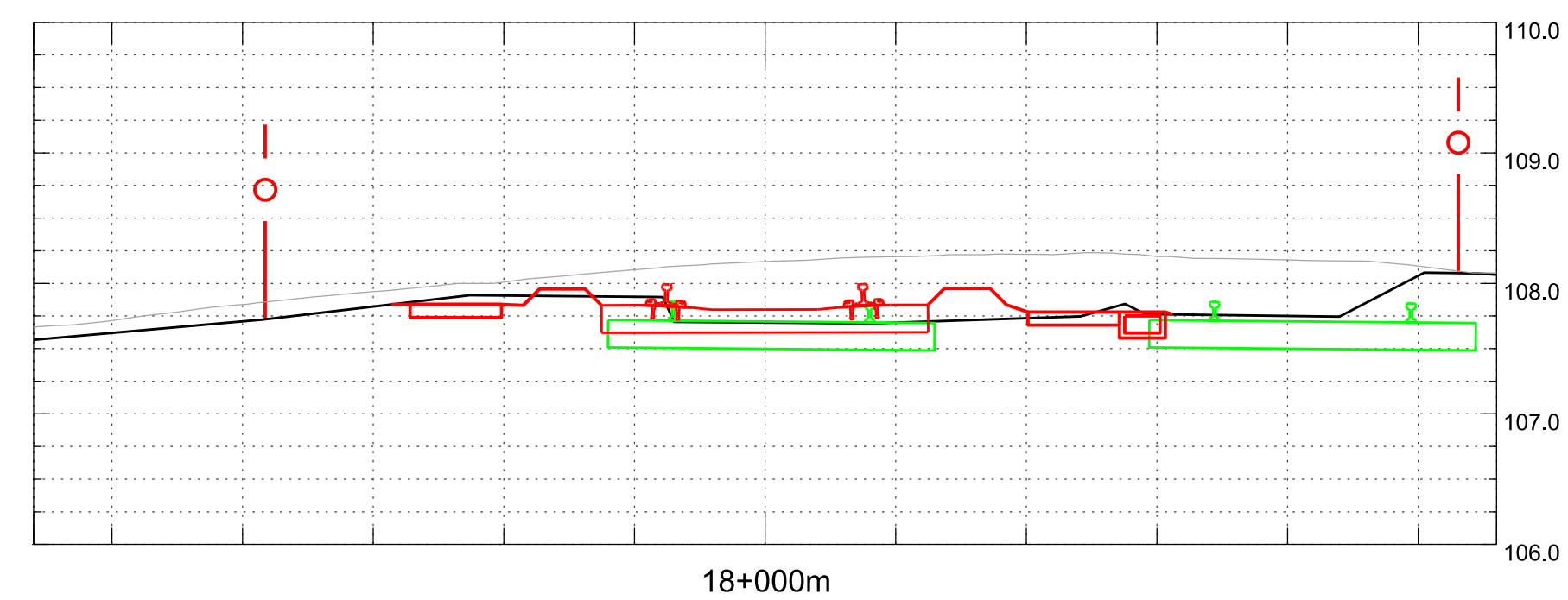
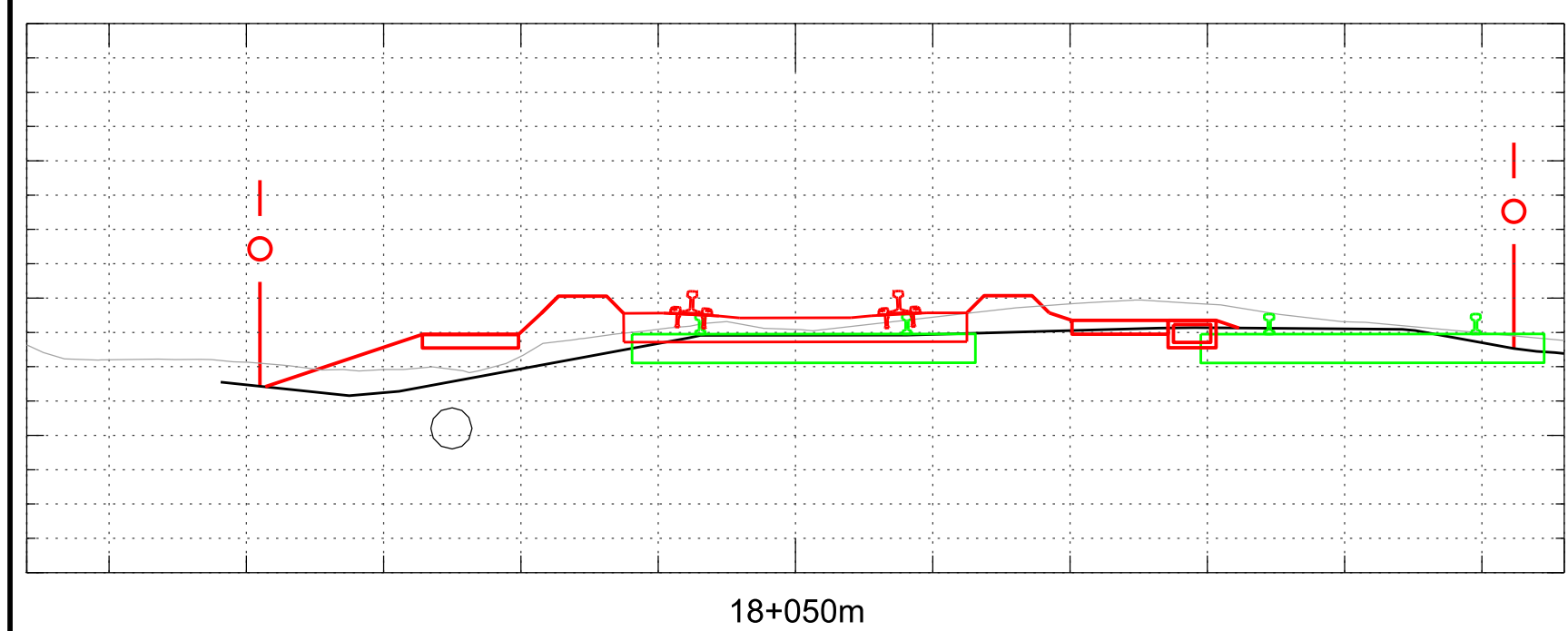
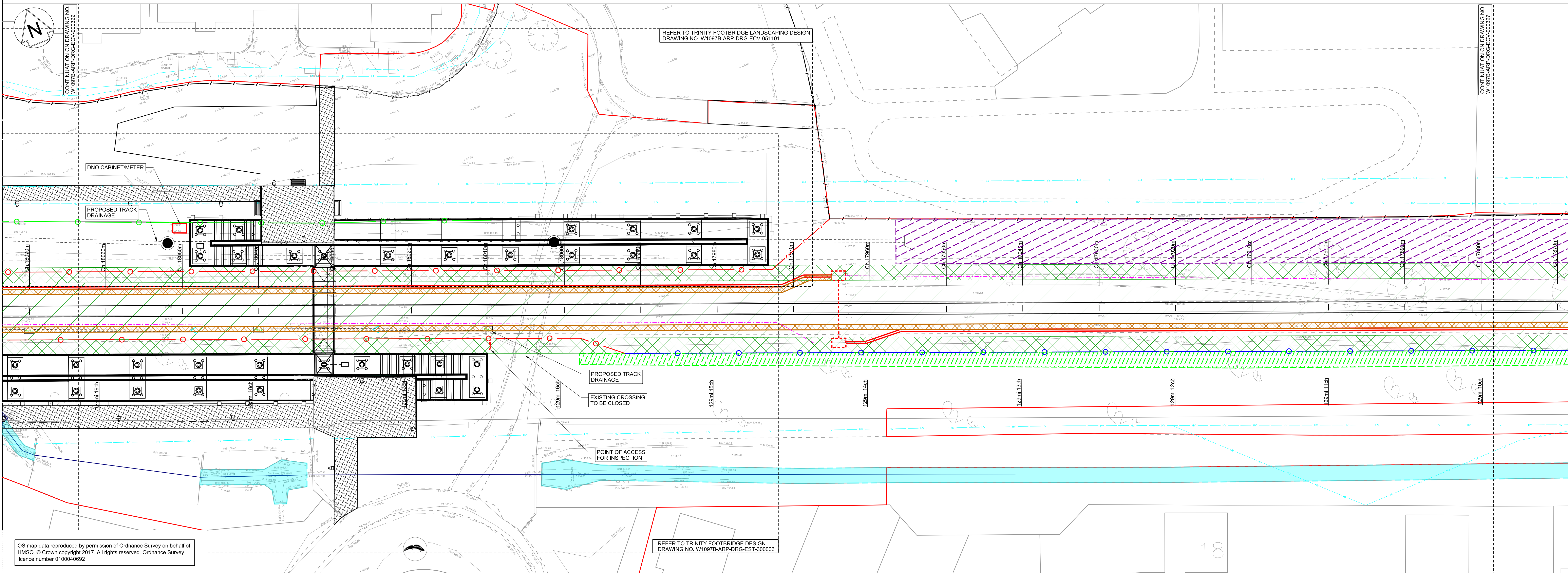
Project
METROWEST PHASE 1

Drawing Title
DISUSED RAILWAY ENGINEERING PLANS
GRIP 4 MINOR CIVILS
CH.17680M TO CH.17870M

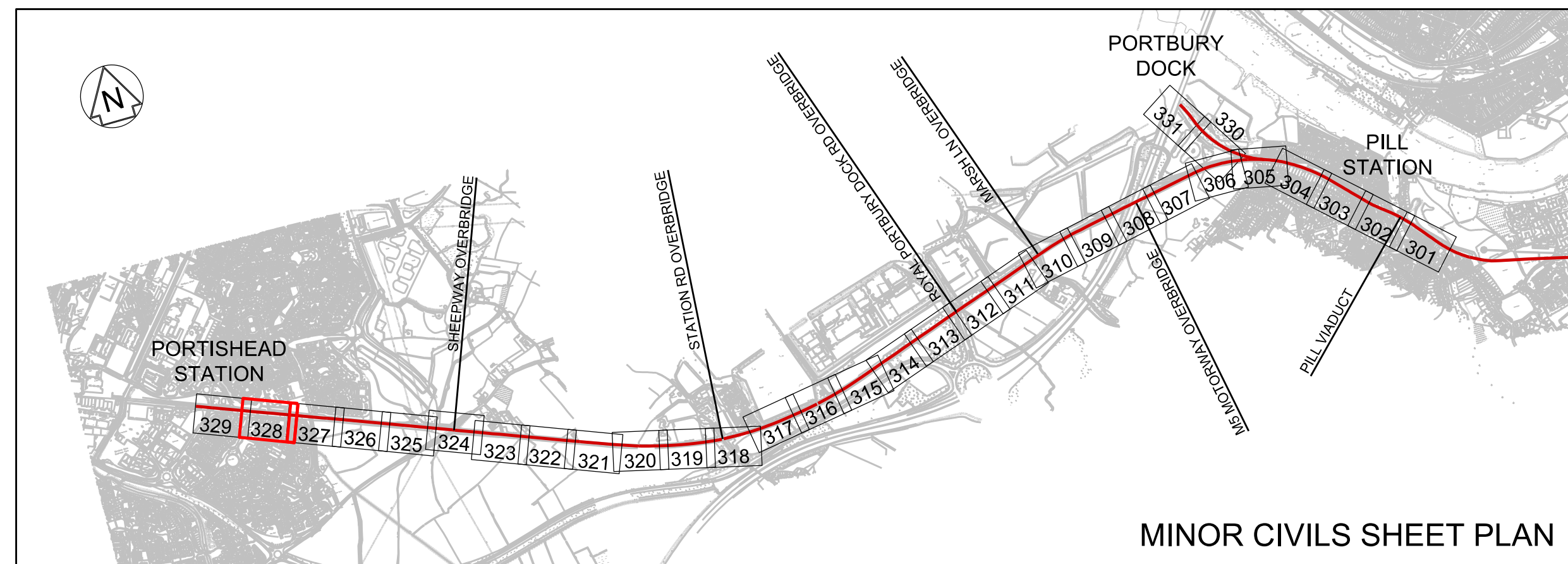
Designed	J. BACINSKI	Signed		Date	24/07/19
Drawn	J. BACINSKI	Signed		Date	24/07/19
Checked	R. SNELL	Signed		Date	24/07/19
Approved	R. SNELL	Signed		Date	24/07/19

Scale(s)
1:200
Alternative Reference
W1097B-ARP-DRG-ECV-000327

ELR & Mileage
POD 129M 00CH
Sheet
27 of 31
Revision



01. ALL LEVELS AND DIMENSIONS ARE SHOWN IN METRES UNLESS NOTED OTHERWISE.
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PLAN SCALE 1:200 @ A0

CROSS SECTION SCALE 1:50 @ A0

A01	15/03/19	ISSUE FOR INFORMATION	JB	RS	RS
A02	03/05/19	FOR DCO PLANNING APPLICATION	JB	RS	RS
A03	24/07/19	FOR DCO PLANNING APPLICATION	JB	RS	RS
Rev	Date	Description of Revisions	Drawn	Chkd	Appr
Status	FIT FOR INFORMATION				Subsidiary
					S2



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Project

METROWEST PHASE 1

Drawing Title
DISUSED RAILWAY ENGINEERING PLANS
GRIP 4 MINOR CIVILS
CH.18700M TO CH.18070M

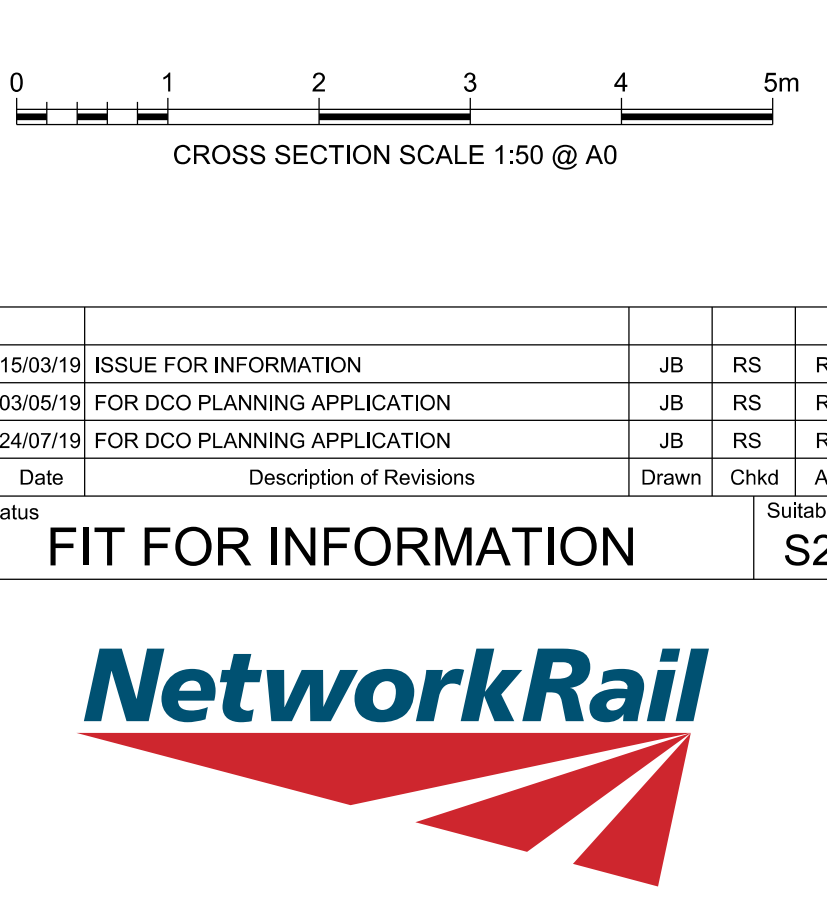
Designed	J. BACINSKI	Signed		Date	24/07/19
Drawn	J. BACINSKI	Signed		Date	24/07/19
Checked	R. SNELL	Signed		Date	24/07/19
Approved	R. SNELL	Signed		Date	24/07/19

Scale(s)	1:200	ELR & Mileage	POD 129M 10CH
Alternative Reference		Sheet	28 of 31
Drawing Number	W1097B-ARP-DRG-ECV-000328		
	Revision		

W1097B-ARP-DRG-ECV-000328 A03

LEGEND

MINOR CIVILS	EXISTING UTILITIES	TELECOM LEGEND	SPECIES, ECOLOGY, LANDSCAPE
EXISTING FENCE GRADE I EXISTING FENCE GRADE II EXISTING FENCE GRADE III EXISTING FENCE REMOVED EXISTING FENCE MODIFIED/REPLACED WITH GRADE I FENCE EXISTING FENCE MODIFIED/REPLACED WITH GRADE II FENCE EXISTING FENCE MODIFIED/REPLACED WITH GRADE III FENCE PROPOSED FENCE GRADE I PROPOSED FENCE GRADE II PROPOSED FENCE GRADE III PROPOSED TROUING REMOVED TROUING EXISTING TROUING MODIFIED/REPLACED PROPOSED UNDER TRACK CROSSING (UTX) EXISTING UNDER TRACK CROSSING (UTX) REMOVED UNDER TRACK CROSSING (UTX)	PROPOSED CABINET LOCATION (NOT TO SCALE) PROPOSED SIGNAL (NOT TO SCALE) EXISTING CABINET TO BE REMOVED/RELOCATED EXISTING SIGNAL TO BE REMOVED EXISTING CABINET LOCATION MINOR EARTHWORKS RETAINING STRUCTURE EARTHWORKS STRUCTURE NOISE BARRIER DEVELOPMENT CONSENT ORDER (DCO) LAND BOUNDARY CONTINUOUS POSITION OF SAFETY AUTHORISED WALKING ROUTE EXTENT OF RAIL CORRIDOR TO BE CLEAR OF VEGETATION EXTENT OF RAIL CORRIDOR TO BE CLEAR OF VEGETATION WITH NETWORK RAIL (NR) OPTION TO CLEAR IN FUTURE SHOWN CROSS HATCHED	WATER MAIN FOUL SEWER RISING MAIN SEWER SURFACE HIGH VOLTAGE ELECTRICITY - BELOW GROUND LOW VOLTAGE ELECTRICITY - BELOW GROUND HIGH VOLTAGE ELECTRICITY - ABOVE GROUND LOW VOLTAGE ELECTRICITY - ABOVE GROUND GRSS PIPELINE LOW PRESSURE GAS MAIN MEDIUM PRESSURE GAS MAIN HIGH PRESSURE GAS MAIN BT CABLE - BELOW GROUND BT CABLE ABOVE GROUND CABLE & WIRELESS VIRGIN MEDIA CABLE - BELOW GROUND VERIZON BACKBONE DUCT - BELOW GROUND EXISTING DITCHES TO BE RETAINED/REPLACED	INDICATIVE LOCATION OF SCRATCH BURIED PROPOSED ARMOURD FIBRE CABLE NOTE: EQUIPMENT SIZE NOT SHOWN TO SCALE TELEPHONE (PROPOSED) BOX ON POST (PROPOSED) FIBRE JOINT (PROPOSED) PROPOSED GLOBAL SYSTEM FOR MOBILE COMMUNICATIONS - RAILWAY (GSM-R) REPEATER SITE WITH REMOTE RADIO HEAD (RRH) AND ANTENNA PROPOSED FIXED TELECOMMUNICATION NETWORK (FTN) ACCESS NODE WITH GLOBAL SYSTEM FOR MOBILE COMMUNICATIONS - RAILWAY (GSM-R) CO-LOCATED EXISTING FIXED TELECOMMUNICATION NETWORK (FTN) ACCESS NODE WITH GLOBAL SYSTEM FOR MOBILE COMMUNICATIONS - RAILWAY (GSM-R) CO-LOCATED WATER VOLES BATS DORMICE OTTERS REPTILES GREAT CRESTED NEWT BIRD BOX (PROPOSED) AREA OF VEGETATION TO BE RETAINED DURING CONSTRUCTION WOODLAND TO BE PLANTED DURING CONSTRUCTION GRASSLAND TO BE PLANTED DURING CONSTRUCTION HEDGE/TREES TO BE PLANTED DURING CONSTRUCTION



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REVIEWED BY

Drawing Title
DISCLOSED RAILWAY ENGINEERING

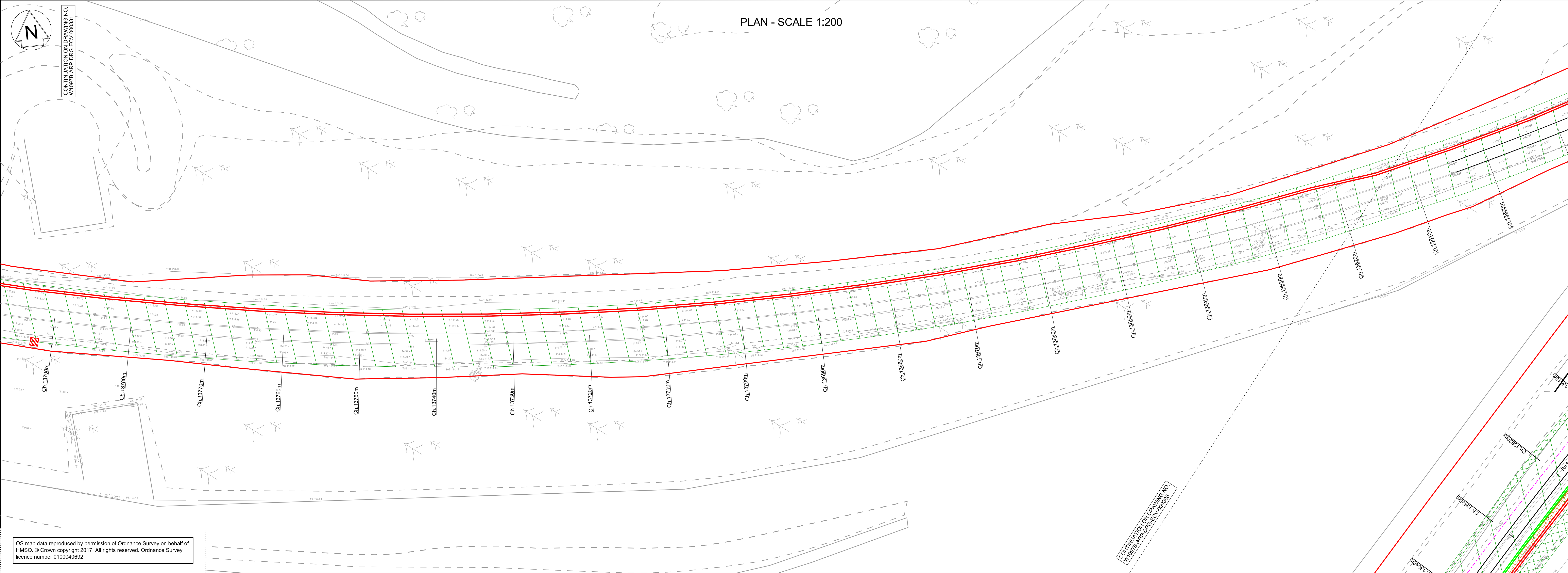
GRIP 4 MINOR CIVILS

Drawn	J. BACINSKI	Signed	Date 24/07
Checked	D. SMITH	Signed	Date

Scale(s)	1:200	EDR & Airphoto	POD 129M 20CH
Alternative Reference			Sheet

W1097B-ARP-DRG-ECV-000329 A03

W1097B-ARP-DRG-ECV-000329 A03



- Legend/Notes
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LEGEND			
MINOR CIVILS	EXISTING UTILITIES	TELECOM LEGEND	SPECIES, ECOLOGY, LANDSCAPE
EXISTING FENCE GRADE I EXISTING FENCE GRADE II EXISTING FENCE GRADE III EXISTING FENCE REMOVED EXISTING FENCE MODIFIED/REPLACED WITH GRADE I FENCE EXISTING FENCE MODIFIED/REPLACED WITH GRADE II FENCE EXISTING FENCE MODIFIED/REPLACED WITH GRADE III FENCE PROPOSED FENCE GRADE I PROPOSED FENCE GRADE II PROPOSED FENCE GRADE III PROPOSED TROUING EXISTING TROUING REMOVED TROUING EXISTING TROUING MODIFIED/REPLACED PROPOSED UNDER TRACK CROSSING (UTX) EXISTING UNDER TRACK CROSSING (UTX) REMOVED UNDER TRACK CROSSING (UTX)	PROPOSED CABINET LOCATION (NOT TO SCALE) PROPOSED SIGNAL (NOT TO SCALE) EXISTING CABINET TO BE REMOVED/RELOCATED EXISTING SIGNAL TO BE REMOVED EXISTING CABINET LOCATION MINOR EARTHWORKS RETAINING STRUCTURE EARTHWORKS STRUCTURE NOISE BARRIER DEVELOPMENT CONSENT ORDER (DCO) LAND BOUNDARY CONTINUOUS POSITION OF SAFETY AUTHORISED WALKING ROUTE EXTENT OF RAIL CORRIDOR TO BE CLEAR OF VEGETATION EXTENT OF RAIL CORRIDOR TO BE CLEAR OF VEGETATION WITH NETWORK RAIL (NR) OPTION TO CLEAR IN FUTURE SHOWN CROSS HATCHED	WATER MAIN FOUL SEWER RISING MAIN SEWER SURFACE HIGH VOLTAGE ELECTRICITY - BELOW GROUND LOW VOLTAGE ELECTRICITY - BELOW GROUND HIGH VOLTAGE ELECTRICITY - ABOVE GROUND LOW VOLTAGE ELECTRICITY - ABOVE GROUND GRSS PIPELINE LOW PRESSURE GAS MAIN MEDIUM PRESSURE GAS MAIN HIGH PRESSURE GAS MAIN BT CABLE - BELOW GROUND BT CABLE ABOVE GROUND CABLE & WIRELESS VIRGIN MEDIA CABLE - BELOW GROUND VERIZON BACKBONE DUCT - BELOW GROUND EXISTING DITCHES TO BE RETAINED/REPLACED	INDICATIVE LOCATION OF SCRATCH BURIED PROPOSED ARMOURD FIBRE CABLE NOTE: EQUIPMENT SIZE NOT SHOWN TO SCALE TELEPHONE (PROPOSED) BOX ON POST (PROPOSED) FIBRE JOINT (PROPOSED) PROPOSED GLOBAL SYSTEM FOR MOBILE COMMUNICATIONS - RAILWAY (GSM-R) REPEATER SITE WITH REMOTE RADIO HEAD (RRH) AND ANTENNA PROPOSED FIXED TELECOMMUNICATION NETWORK (FTN) ACCESS NODE WITH GLOBAL SYSTEM FOR MOBILE COMMUNICATIONS - RAILWAY (GSM-R) CO-LOCATED EXISTING FIXED TELECOMMUNICATION NETWORK (FTN) ACCESS NODE WITH GLOBAL SYSTEM FOR MOBILE COMMUNICATIONS - RAILWAY (GSM-R) CO-LOCATED WATER VOLES BATS DORMICE OTTERS REPTILES GREAT CRESTED NEWT BIRD BOX (PROPOSED) AREA OF VEGETATION TO BE RETAINED DURING CONSTRUCTION WOODLAND TO BE PLANTED DURING CONSTRUCTION GRASSLAND TO BE PLANTED DURING CONSTRUCTION HEDGE/TREES TO BE PLANTED DURING CONSTRUCTION

A01	15/03/19	ISSUED FOR INFORMATION	JB	RS	RS
A02	03/05/19	FOR DCO PLANNING APPLICATION	JB	RS	RS
A03	24/07/19	FOR DCO PLANNING APPLICATION	JB	RS	RS
Rev	Date	Description of Revisions	Drawn	Chkd	Appr

Status
FIT FOR INFORMATION
S2



Contractor(s)

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Project
METROWEST PHASE 1

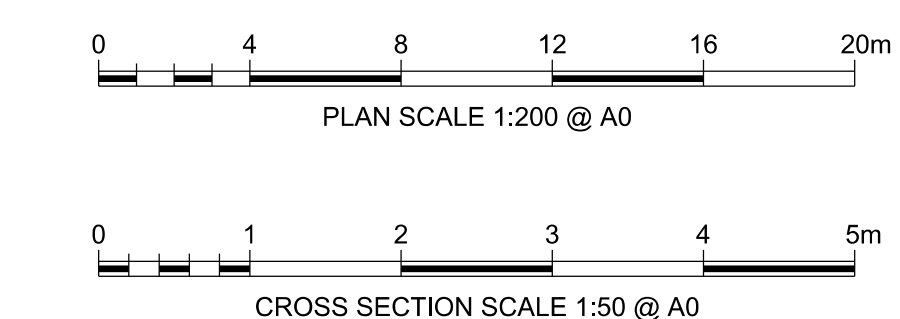
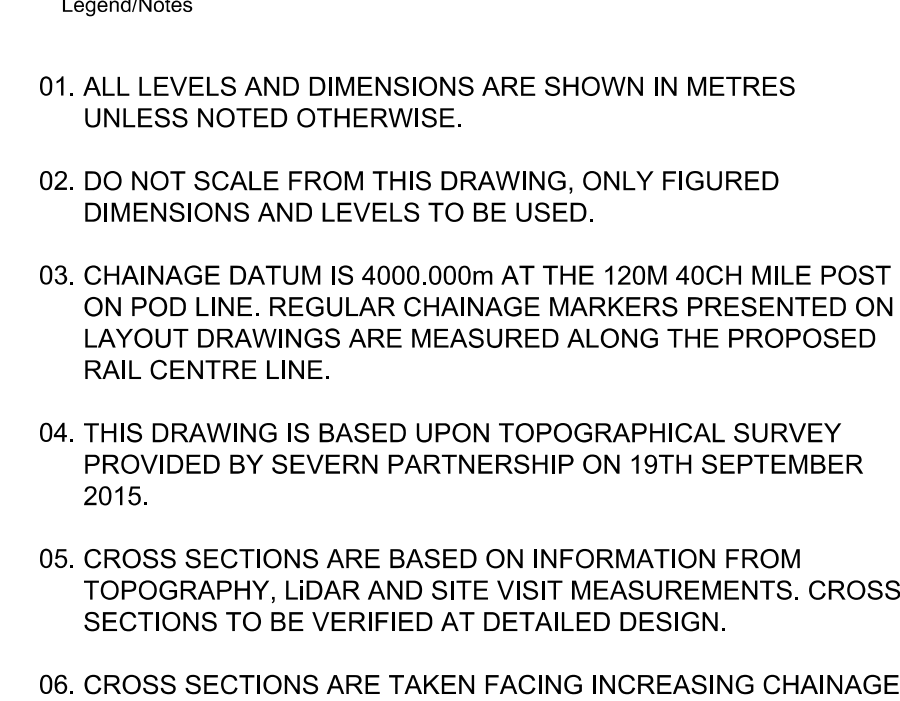
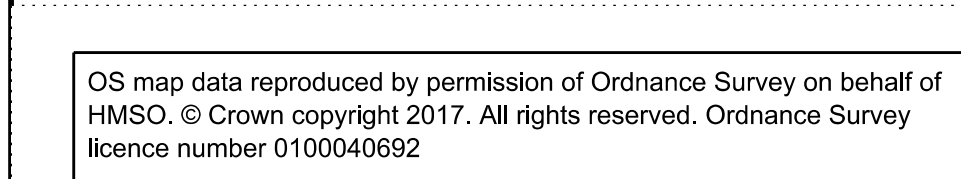
Drawing Title
**DISUSED RAILWAY ENGINEERING PLANS
GRIP 4 MINOR CIVILS
PORTBURY DOCK**

Designed	J. BACINSKI	Signed		Date	24/07/19
Drawn	J. BACINSKI	Signed		Date	24/07/19
Checked	R. SNELL	Signed		Date	24/07/19
Approved	R. SNELL	Signed		Date	24/07/19

Scale(s)
1:200
Alternative Reference
POD 126M 36CH

Sheet
30 of 31

Drawing Number
W1097B-ARP-DRG-ECV-000330

[illegible]

Contractor(s)



Project METROWEST PHASE 1

Drawing Title

DISUSED RAILWAY ENGINEERING
PLANS
GRIP 4 MINOR CIVILS
PORTBURY DOCK

Designed	J. BACINSKI	Signed	Date
Drawn	J. BACINSKI	Signed	Date
Checked	R. SNELL	Signed	Date
Approved	R. SNELL	Signed	Date
Scale(s)	FLR & Miseson		

1:200	POD 126M 47CH
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Alternative Reference Sheet 31 of 3

Drawing Number	Revision
AA/1003B APP DRG EGV 000331	A02

31	A03
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Check Size: 60,844

LEGEND									
MINOR CIVILS			EXISTING UTILITIES			TELECOM LEGEND		SPECIES, ECOLOGY, LANDSCAPE	
EXISTING FENCE GRADE I		PROPOSED CABINET LOCATION (NOT TO SCALE)		WATER MAIN		INDICATIVE LOCATION OF SCRATCH BURIED PROPOSED ARMOURIED FIBRE CABLE		WATER VOLES	
EXISTING FENCE GRADE II		PROPOSED SIGNAL (NOT TO SCALE)		FOUL SEWER		NOTE: EQUIPMENT SIZE NOT SHOWN TO SCALE		BATS	
EXISTING FENCE GRADE III		EXISTING CABINET TO TO BE REMOVED/RELOCATED		RISING MAIN		TELEPHONE (PROPOSED)		DORMICE	
EXISTING FENCE REMOVED		EXISTING SIGNAL TO BE REMOVED		SEWER SURFACE		BOX ON POST (PROPOSED)		OTTERS	
EXISTING FENCE MODIFIED/REPLACED WITH GRADE I FENCE		EXISTING CABINET LOCATION		HIGH VOLTAGE ELECTRICITY - BELOW GROUND		FIBRE JOINT (PROPOSED)		REPTILES	
EXISTING FENCE MODIFIED/REPLACED WITH GRADE II FENCE		MINOR EARTHWORKS RETAINING STRUCTURE		LOW VOLTAGE ELECTRICITY - BELOW GROUND		PROPOSED GLOBAL SYSTEM FOR MOBILE COMMUNICATIONS - RAILWAY (GSM-R) REPEATER SITE WITH REMOTE RADIO HEAD (RRH) AND ANTENNA		GREAT CRESTED NEWT	
EXISTING FENCE MODIFIED/REPLACED WITH GRADE III FENCE		EARTHWORKS STRUCTURE		HIGH VOLTAGE ELECTRICITY - ABOVE GROUND				BIRD BOX (PROPOSED)	
PROPOSED FENCE GRADE I		NOISE BARRIER		LOW VOLTAGE ELECTRICITY - ABOVE GROUND		PROPOSED FIXED TELECOMMUNICATION NETWORK (FTTH) ACCESS NODE WITH GLOBAL SYSTEM FOR MOBILE COMMUNICATIONS - RAILWAY (GSM-R) CO-LOCATED		AREA OF VEGETATION TO BE RETAINED DURING CONSTRUCTION	
PROPOSED FENCE GRADE II		DEVELOPMENT CONSENT ORDER (DCO)		GPSS PIPELINE		EXISTING FIXED TELECOMMUNICATION NETWORK (FTTH) ACCESS NODE WITH GLOBAL SYSTEM FOR MOBILE COMMUNICATIONS - RAILWAY (GSM-R) CO-LOCATED		WOODLAND TO BE PLANTED DURING CONSTRUCTION	
PROPOSED FENCE GRADE III		LAND BOUNDARY		MEDIUM PRESSURE GAS MAIN				GRASSLAND TO BE PLANTED DURING CONSTRUCTION	
PROPOSED TROUGHING		CONTINUOUS POSITION OF SAFETY		HIGH PRESSURE GAS MAIN					
EXISTING TROUGHING		AUTHORISED WALKING ROUTE		BT CABLE - BELOW GROUND					
REMOVED TROUGHING				FT CABLE ABOVE GROUND					
EXISTING TROUGHING MODIFIED/REPLACED		EXTENT OF RAIL CORRIDOR TO BE CLEAR OF VEGETATION		CABLE & WIRELESS					
PROPOSED UNDER TRACK CROSSING (UTX)				VIRGIN MEDIA CABLE - BELOW GROUND					
EXISTING UNDER TRACK CROSSING (UTX)		EXTENT OF RAIL CORRIDOR TO BE CLEAR OF VEGETATION WITH NETWORK RAIL (NR) OPTION TO CLUTURE IN FUTURE SHOWN CROSS HATCHED		VERIZON BACKBONE DUCT - BELOW GROUND					
REMOVED UNDER TRACK CROSSING (UTX)				EXISTING DITCHES TO BE RETAINED/REPLACED					