

# C620 – Signalling

## ATS NR-ATNS to Berth Mapping Table

**CRL Document Number: C620-SIC-R2-RSP-CR001-50214**

Supplier Document Number: A6Z00041759126, H

Contract MDL Reference A10.054

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YES  NO

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### 2b. Review by Stakeholder (if required):

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## Document History

Rev. CRL	Date	Rev. SAP	Chapter	Reason for Issue:
1.0	2017-06-22	A	all	First version
2.0	2017-08-23	B	all	Considered Comments of C620-PMC-02994 NR West section: Split W-UR-029 to W-UR-29a and W-UR-29b NR East section: Split E-IO-017 to E-IO-17a and E-IO-17b (due to high amount of mapped Berths)
3.0	2017-12-18	C	all	General Update off all tables, based on [R01] to [R05]. <ul style="list-style-type: none"> <li>- Inserted an approach and an assumptions Section</li> <li>- Inserted TDIdentities to the ATNS fields</li> <li>- Checked and adjusted the existing Berth assignment</li> <li>- Redrawn LWOD Schemes in Chapter 3</li> </ul>
4.0	2018-12-05	D	all	- Error Correction - Adapted specification for TD Identities
5.0	2019-01-10	E	all	Chapter 2: Updated tables
6.0	2019-04-05	F	1 2 3	Updated description Updated tables Updated display arrangements
7.0	2020-03-13	G	2 + 3 2 + 3 2 + 3	CFX00451826 Heathrow CFX00451820 Config issues CFX00451815 Config issues
8.0	2020-07-14	H	1.8	Topic and content of the chapter changed
			1.10	Chapter deleted due to CFX00451815 being solved
			2.2 + 3.1	CFX00487961 TD.Net Heathrow Link - Relog

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## List of References

Ref.	Document Code	SAG Number	SRA Number	Document Title
[R01]	C620-XRL-R2-DWG-CR001-50001, 2.0	A6Z00045941305, -	n/a	NR Block Schematics for GEML and GWML
[R02]	C620-NRI-A-DWG-CR021-50001, 1.0	A6Z00045941305, -	n/a	Block Schematics Reading
[R03]	C620-SIC-R2-MRC-CR001-50197, 1.0	A6Z00043622151, -	n/a	MoM: ATNS Berth Mapping Table for LWOD - 06/04/2018
[R04]	C620-SIC-R2-MRC-CR001-50198, 1.0	A6Z00043622182, -	n/a	MoM: ATNS Berth Mapping Table for LWOD - 09/05/2018
[R05]	C620-XRL-R2-MRC-CRM01-50006, 1.0	A6Z00043809262, -	n/a	MoM: LWOD review 30/05/18
[R06]	CRL1-XRL-N2-LRG-CR001-50002, 23.0	A6Z00044679756, B	n/a	Network Rail Incoming Drawings RIR (Register Issue Record) - CARE Reporting
[R07]	CRL1-NRI-R2-DWG-CR001-50007, C02	A6Z00043689571, A	n/a	NR Scheme Plan - Pudding Mill Line to Maryland - 2 1/4 to 5 MP
[R08]	CRL1-NRI-R2-DWG-CR001-50006, C01	A6Z00043689481, -	n/a	NR Scheme Plan - Forest Gate - 5 to 6 MP
[R09]	CRL1-NRI-R2-DWG-CR001-50008, 0.8	A6Z00043689436, -	n/a	NR Scheme Plan - Manor Park to Seven Kings - 6 to 9 MP
[R10]	CRL1-NRI-R2-STP-CR001-50001, A08	A6Z00044862748, -	n/a	NR Scheme Plan - Goodmayes to Chadwell Heath - 9 to 12MP
[R11]	CRL1-NRI-R2-DWG-CR001-50009, 0.5	A6Z00043689515, -	n/a	NR Scheme Plan - Romford to Gidea Park - 12 to 14 1/2MP
[R12]	CRL1-NRI-R2-STP-CR001-50002, A02	A6Z00044862741, -	n/a	NR Scheme Plan - Harold Wood to Brentwood - 14 3/4 to 19MP
[R13]	CRL1-NRI-R2-DWG-CR001-50010, A03	A6Z00043689527, -	n/a	NR Scheme Plan - Shenfield - 19 to 22MP
[R14]	CRL1-NRI-N2-DWG-CRG04-50056, A	A6Z00043689870, -	n/a	NR Scheme Plan - Heathrow Airport Branch lines to Heathrow Terminals 4 & 5

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[R15]	CRL1-NRI-A-DWG-CRG04-50001, A	A6Z00043689861, -	n/a	NR Scheme Plan - Paddington to Westborne Park - 0 to 2 2/4 MP
[R16]	CRL1-NRI-A-DWG-CR074-50001, B	A6Z00043689619, -	n/a	NR Scheme Plan - Old Oak Common - 2 1/4 MP to 3 3/4 MP
[R17]	CRL1-NRI-R2-DWG-CR001-50018, A4	A6Z00043689912, -	n/a	NR Scheme Plan - Acton to Ealing Broadway - 3 3/4 MP to 6 1/2 MP
[R18]	CRL1-NRI-R2-DWG-CR001-50020, B1	A6Z00043689925, -	n/a	NR Scheme Plan - West Ealing - Hanwell and Elthorne - 6 1/2 MP to 7 1/2 MP
[R19]	CRL1-NRI-R2-DWG-CR001-50019, A1	A6Z00043689919, -	n/a	NR Scheme Plan - Hanwell Bridge to Southall Station 7 1/2MP to 9 1/2 MP
[R20]	CRL1-NRI-R2-DWG-CR001-50017, A2	A6Z00043689897, -	n/a	NR Scheme Plan - Southall West to Dawley - 9 1/2MP to 12 1/2MP
[R21]	CRL1-NRI-R2-DWG-CR001-50024, A	A6Z00043689956, -	n/a	NR Scheme Plan - West Drayton to Langley - Plan 1 Of 4
[R22]	CRL1-NRI-R2-DWG-CR001-50022, A	A6Z00043689940, -	n/a	NR Scheme Plan - Slough Station Area - 16 1/2mp to 20mp
[R23]	CRL1-NRI-R2-DWG-CR001-50023, A1	A6Z00043689944, -	n/a	NR Scheme Plan - Taplow to Burnham - Plan 3 Of 4
[R24]	CRL1-NRI-R2-DWG-CR001-50025, A	A6Z00043689963, -	n/a	NR Scheme Plan - Maidenhead to Ruscombe - Plan 4 Of 4
[R25]	CRL1-NRI-R2-DWG-CR001-50012, E	A6Z00043689877, -	n/a	NR Scheme Plan - Ruscombe
[R26]	CRL1-NRI-R2-DWG-CR001-50013, E	A6Z00043689880, -	n/a	NR Scheme Plan - Twyford
[R27]	CRL1-NRI-R2-DWG-CR001-50011, B	A6Z00043689871, -	n/a	NR Scheme Plan - Twyford West
[R28]	CRL1-NRI-R2-DWG-CR001-50015, B	A6Z00043689889, -	n/a	NR Scheme Plan - Sonning to New Junction
[R29]	CRL1-NRI-R2-DWG-CR001-50014, B	A6Z00043689884, -	n/a	NR Scheme Plan - Reading Station

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[R30]	C620-SIC-R2-RSP-CR001-50073, 5.0	A6Z00036352349, E	n/a	IRS ATS-027-TDN C620/NR TD.NET (CRL)
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Table 1 List of References

*Note 1: If no version is itemised, the latest version of the referred documents is always the valid one.*

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# 1 Introduction

## 1.1 Purpose and Scope

The ATS will map the received TD data from TD.Net to the ATS Train Number Symbols (ATNS), which are shown on the LWOD. Since the TD data is berth related, there are mapping rules defined in chapter 1, which assign each CRL relevant berth to a specific ATNS. The mapping tables itself are defined within chapters 2. The outcome on the LWOD is shown in chapter 3.

The document is based on following sources:

- Network Rail (NR) Scheme Plans and Block Schematics as provided in [R01], [R02] and [R06] - [R29].
- Design meetings with CRL, refer to [R03], [R04] and [R05].

This document is part of the Train Describer interface documentation. The overall interface for the TD.net part is based on the TD.net DIR [R30]. The detailed configuration is described in this document. This part of the Train describer interface is not interacting with the PS9 interface, which is relevant for the COS and GWML, GEML and NKL sections.

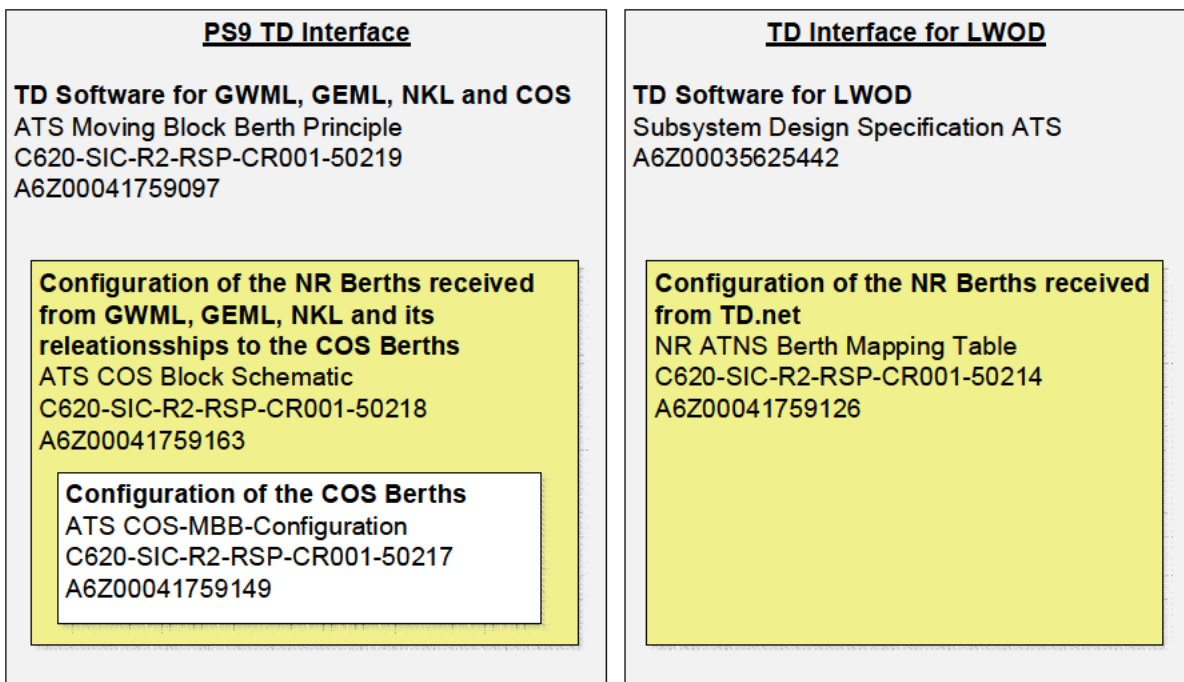


Figure 1 How to classify this Document

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## 1.2 Terms and Abbreviations

The following terms and abbreviations are used in this document:

Term / Abbreviation	Explanation
ATNS	ATS Train Number Symbols
DCC	Document Classification Code
GEML	Great Eastern Main Line
GWML	Great Western Main Line
LWOD	Line Wide Overview Display
NR	Network Rail
PS9	Serial Train Describer interface for exchanging Headcodes between <ul style="list-style-type: none"> <li>• GWML ATS – CRL ATS</li> <li>• GEML ATS – CRL ATS,</li> <li>• NKL ATS – CRL ATS and</li> </ul> for transmitting information to <ul style="list-style-type: none"> <li>• NR TRUST</li> </ul>
SAG	Now refers to Siemens Mobility GmbH Note: As of August 1, 2018, the Mobility Division of Siemens AG has been transferred into Siemens Mobility GmbH.
SRA	Now refers to Siemens Mobility Limited Note: As of June 1, 2018, Siemens Rail Automation Holdings Ltd has been renamed to Siemens Mobility Limited.

Table 2 Terms and Abbreviations

## 1.3 Chosen Approach to define the Mapping Tables

Overall bases for this document are the NR Scheme Plans and Block Schematics. This information was evaluated and sorted by the following scheme:

- Basic rules
  - There shall be one ATNS per station on LWOD
  - There shall be one ATNS per track between two stations on LWOD
  - The two main CRL-Service tracks shall be shown all the time on LWOD
  - The two adjacent NR-Service tracks (GWML and GEML) shall be shown all the time on LWOD
  - A CRL-service in normal operation shall be shown moving on the LWOD at a constant line (no flyovers shall be shown).
- Rules for stations
  - For stations with up to 4 platforms, all platforms shall be assigned to an individual ATNS

- For stations with more than 4 platforms, an additional ATNS shall be added to LWOD to show the additional platforms (e. g. West Drayton). However, this field can be assigned to more than one platform (e. g. Southall Station).
- For stations with more than 4 platforms, where CRL-services are using more than 4 platforms in normal operation, more than one platform can be assigned to an ATNS field (e. g. Reading).
- Rules for sidings and additional tracks (= more than 4 tracks)
  - For sidings, an additional ATNS is shown on the LWOD. To limit the amount of additional ATNS fields, usually only one ATNS field per siding is shown.
  - For large and complicated sidings, only the berths which are the last ones before approaching to a CRL track are considered.
  - In some cases, smaller sidings (like Slough Windsor Branch and Tamper sidings) are summarised to one single ATNS on LWOD, if there is not be enough space.
- Rules for lines
  - All Berths on a line between two stations shall be assigned to a single ATNS
  - Between two stations, there are sometimes no Berths available, because the track section between them is too short. In such a case there are no ATNS for the track section on LWOD available.
- Rule for normal/reverse traffic direction
  - ATNS shall be split up internally in normal traffic direction and reverse traffic direction, for the Berth where this differentiation is available.
  - ATNS shall not be split up on LWOD in normal traffic direction and reverse traffic direction.
- Rules for TD Identities
  - A berth is only unique with a Berth number and a TD Identity. The Berth number represents usually the signal number, which is not unique UK-wide. The TD Identity represents the Control Area of that signal, e. g. Stratford. Per Area a signal number / a berth number is unique.
- Rules for the boarders between stations and lines
  - Not all stations have exclusive block sections for the respective station areas, some stations and/or tracks have no signals. Therefore, the decision was made, to show the block section which is running through the station on LWOD as ATNS for the station. The consequence is that for those platforms may a train is shown on LWOD at the station, but in real world the train is in a longer distance before/after the station.
  - In some cases, a station signal berth was shifted to a line ATNS and vice versa. This was e. g. done in Brentwood, refer to Figure 2. The reason for this is, that there is a danger a train could “jump” from platform ATNS (0598, E-DE-020) to a second

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platform ATNS field (0498, E-UE-020/019). With shifting 0498 to a line ATNS field, this cannot happen.

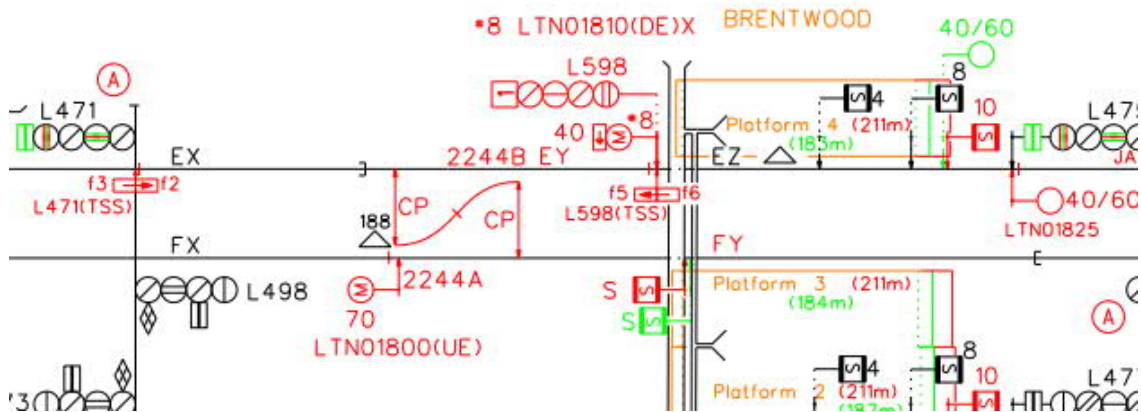


Figure 2 Brentwood [R06]

## 1.4 TD Identities

TD Identities are not provided by TD.net in a unique way. When receiving a stepping message, it is defined by the TD-scheme, that a berth numbers for the start berth and the target berth are transmitted. In addition to that, the TD Identity for the start berth will be transmitted as well, but not the one from the target berth.

To handle this issue, ATS will check for the received TD Identity if it is a code from GWML or GEML, refer to section 2.1. Based on this mapping, ATS will map the train to the respective berth number from this section, which are unique within GWML and GEML, refer to sections 2.2 and 2.3.

## 1.5 Assumptions Revision 4

After evaluating the outcome of the basic rules, it was decided in consultation with CRL and MTR to differ from the basic rules at some locations. Therefore, the following assumptions were made:

- It shall be avoided, that two trains are at the same time in the same ATNS on the main tracks.
  - Therefore, a decision was made to limit the maximal number of Berths for an ATNS to 5 and/or to evaluate the traffic for the respective Berths.
  - More than 5 Berths shall be allowed, if the traffic amount is not high.
  - For the siding it can have more than 5 Berths, so that it is likely that in daily operation more than one train occupies the same ATNS.

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- Agreed ATNS with more than 5 berths:
  - GWML: all 29b fields, refer to [R04]
  - GWML: all 027a&b fields, refer to [R05]
  - GEWL: DE-005, all 019 fields, refer to [R05]

## 1.6 Assumptions Revision 6

Following additional assumptions were made:

- Aldersbrook sidings (GEML) are excluded, due to space problems.
- If the TD block schematics are differently compared to the NR scheme plans, the scheme plans were used.

## 1.7 Assumptions Revision 7

Following additional assumptions were made:

- TD.net transmits CC telegrams for handovers between two TD Identities. This CC telegram uses the TD Identity of the next responsible area. However, this causes that for some berths two different TD Identities are valid. E. g.
  - `<itm:TDBerthStepHdr TDIdentity="LS" TDMessageType="CA" timeStamp="08:34:49Z"></itm:TDBerthStepHdr>`  
`<itm:TDBerthStepBody fromBerthAddress="0203" toBerthAddress="0223" trainIdentity="2W34"></itm:TDBerthStepBody>`
  - `<itm:TDBerthInterposeHdr TDIdentity="Q1" TDMessageType="CC" timeStamp="08:34:50Z"></itm:TDBerthInterposeHdr>`  
`<itm:TDBerthInterposeBody toBerthAddress="0223" trainIdentity="2W34"></itm:TDBerthInterposeBody>`
- This means both TD Identities must be configured as valid for the handovers.
- If not considered, the not configured TD Identity for that berth will cause, that a HC will be deleted from the system.

## 1.8 Assumption Revision 8

Following additional assumption is made:

- W-UR-013 contains 6 berths due to CFX00487961

## 1.9 Hints for Engineering

Mapping in chapter 2.2 and graphics in chapter 3.1 are updated. Check CFX or \_TC.doc for changes.

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## 2 Mapping Tables

### 2.1 TD Identity

TD Identity	GWML	GEML
D1	x	
D2	x	
D3	x	
D4	x	
D6	x	
Q1		x
Q2		x

Table 3 TD Identities for GWML and GEML

Project Crossrail – Contract C620	Contract MDL Reference: A10.054
CRL Document Nr.: C620-SIC-R2-RSP-CR001-50214	SAG Number: A6Z00041759126/PM1/000/Rev. H
ATS NR-ATNS to Berth Mapping Table	SRA Number: N/A
DCC: EEC / PM265	Revision 8.0 – Date 2020-07-14

## 2.2 GWML Territory

Up-Relief (normal) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
W-UR-001A	D3	0156								
W-UR-001B	D3	0164	0174							
W-UR-002	D3	0186								
W-UR-003	D3	0192	0202							
W-UR-004	D3	0206								
W-UR-005	D3	0210								
W-UR-006	D3	0214								
W-UR-007	D3	0224								
W-UR-008	D3	0232								
W-UR-008	D4	0232								
W-UR-009	D4	0238	0244							
W-UR-010	D4	0248								
W-UR-011	D4	0258	0266	0276						
W-UR-012	D4	0284								
W-UR-013	D4	0296	0306	0310	0304	0292	0293			
W-UR-014	D4	0466								
W-UR-015	D4	0472								
W-UR-015	D6	0472								

Up-Relief (normal) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
W-UR-016	D6	0478								
W-UR-017	D6	0484								
W-UR-018	D6	0490								
W-UR-019	D6	0502	0508	0506						
W-UR-020	D6	0516								
W-UR-021	D6	0526	0536	0544						
W-UR-022	D6	0548								
W-UR-023	D6	0552								
W-UR-024	D6	0556								
W-UR-025	D6	0568								
W-UR-026	D6	0574								
W-UR-027A	D6	0594	0598	1604	1608	1612				
W-UR-027A	D1	1612								
W-UR-027B	D1	1616	1620	1622	1624	1628				
W-UR-028	D1	1630								
W-UR-029A	D1	1642	1644	1648	1652	1660	1664			
W-UR-029B	D1	1668	1676							
W-UR-030	D1	1698	1696							

Table 4 GWML Up-Relief (normal)

Project Crossrail – Contract C620	Contract MDL Reference: A10.054
CRL Document Nr.: C620-SIC-R2-RSP-CR001-50214	SAG Number: A6Z00041759126/PM1/000/Rev. H
ATS NR-ATNS to Berth Mapping Table	SRA Number: N/A
DCC: EEC / PM265	Revision 8.0 – Date 2020-07-14



Up-Relief (reverse) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
W-UR-001A	D3	[Not used]								
W-UR-001B	D3	[Not used]								
W-UR-002	D3	[Not used]								
W-UR-003	D3	6133								
W-UR-004	D3	[Not used]								
W-UR-005	D3	[Not used]								
W-UR-006	D3	0223								
W-UR-007	D3	[Not used]								
W-UR-008	D3	[Not used]								
W-UR-009	D3	[Not used]								
W-UR-009	D4	[Not used]								
W-UR-010	D4	[Not used]								
W-UR-011	D4	0281	0275	6189						
W-UR-012	D4	0289								
W-UR-013	D4	6251	0291							
W-UR-014	D4	0471								
W-UR-015	D4	[Not used]								
W-UR-016	D6	[Not used]								
W-UR-017	D6	6261								

Project Crossrail – Contract C620	Contract MDL Reference: A10.054
CRL Document Nr.: C620-SIC-R2-RSP-CR001-50214	SAG Number: A6Z00041759126/PM1/000/Rev. H
ATS NR-ATNS to Berth Mapping Table	SRA Number: N/A
DCC: EEC / PM265	Revision 8.0 – Date 2020-07-14

Up-Relief (reverse) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
W-UR-018	D6	6265								
W-UR-019	D6	6269								
W-UR-020	D6	0525								
W-UR-021	D6	6289								
W-UR-022	D6	[Not used]								
W-UR-023	D6	[Not used]								
W-UR-024	D6	[Not used]								
W-UR-025	D6	[Not used]								
W-UR-026	D6	0579								
W-UR-027A	D6	[Not used]								
W-UR-027B	D1	[Not used]								
W-UR-028	D1	1639								
W-UR-029A	D1	1653								
W-UR-029B	D1	1699	1697	1689						
W-UR-030	D1	1723	1721							

Table 5 GWML Up-Relief (reverse)

Down-Relief (normal) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
W-DR-001A	D3	0153	0137	0127	0123					
W-DR-001B	D3	0175	0163							
W-DR-002	D3	0187								
W-DR-003	D3	0203	0199							
W-DR-004	D3	0209								
W-DR-005	D3	0211								
W-DR-006	D3	0215								
W-DR-007	D3	0225								
W-DR-008	D3	0233								
W-DR-008	D4	0233								
W-DR-009	D4	0243	0239							
W-DR-010	D4	0253								
W-DR-011	D4	0283	0273	0265						
W-DR-012	D4	0287								
W-DR-013	D4	0463	0307	0303						
W-DR-014	D4	0469								
W-DR-015	D4	0477								
W-DR-015	D6	0477								
W-DR-016	D6	0483								
W-DR-017	D6	0487								

Project Crossrail – Contract C620	Contract MDL Reference: A10.054
CRL Document Nr.: C620-SIC-R2-RSP-CR001-50214	SAG Number: A6Z00041759126/PM1/000/Rev. H
ATS NR-ATNS to Berth Mapping Table	SRA Number: N/A
DCC: EEC / PM265	Revision 8.0 – Date 2020-07-14

Down-Relief (normal) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
W-DR-018	D6	0491								
W-DR-019	D6	0511	0507	0503						
W-DR-020	D6	0523								
W-DR-021	D6	0547	0535	0529						
W-DR-022	D6	0551								
W-DR-023	D6	0555								
W-DR-024	D6	0559								
W-DR-025	D6	0571								
W-DR-026	D6	0577								
W-DR-027A	D6	0595	1603	1607	1611					
W-DR-027A	D1	1611								
W-DR-027B	D1	1623	1627	1631	1635					
W-DR-028	D1	1637								
W-DR-029A	D1	1669	1665	1661	1657					
W-DR-029B	D1	1695	1693	1687	1677					
W-DR-030	D1	1717	1719							

Table 6 GWML Down-Relief (normal)

Project Crossrail – Contract C620	Contract MDL Reference: A10.054
CRL Document Nr.: C620-SIC-R2-RSP-CR001-50214	SAG Number: A6Z00041759126/PM1/000/Rev. H
ATNS NR-ATNS to Berth Mapping Table	SRA Number: N/A
DCC: EEC / PM265	Revision 8.0 – Date 2020-07-14

Down-Relief (reverse) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
W-DR-001A	D3	[Not used]								
W-DR-001B	D3	[Not used]								
W-DR-002	D3	[Not used]								
W-DR-003	D3	[Not used]								
W-DR-004	D3	0220								
W-DR-005	D3	[Not used]								
W-DR-006	D3	[Not used]								
W-DR-007	D3	[Not used]								
W-DR-008	D4	6162								
W-DR-009	D4	[Not used]								
W-DR-010	D4	[Not used]								
W-DR-011	D4	[Not used]								
W-DR-012	D4	[Not used]								
W-DR-013	D4	[Not used]								
W-DR-014	D4	[Not used]								
W-DR-015	D6	6258								
W-DR-016	D6	[Not used]								
W-DR-017	D6	6264								
W-DR-018	D6	[Not used]								
W-DR-019	D6	[Not used]								

Project Crossrail – Contract C620	Contract MDL Reference: A10.054
CRL Document Nr.: C620-SIC-R2-RSP-CR001-50214	SAG Number: A6Z00041759126/PM1/000/Rev. H
ATS NR-ATNS to Berth Mapping Table	SRA Number: N/A
DCC: EEC / PM265	Revision 8.0 – Date 2020-07-14

Down-Relief (reverse) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
W-DR-020	D6	0514								
W-DR-021	D6	6284								
W-DR-022	D6	[Not used]								
W-DR-023	D6	[Not used]								
W-DR-024	D6	[Not used]								
W-DR-025	D6	[Not used]								
W-DR-026	D6	0572								
W-DR-027A	D6	6298								
W-DR-027B	D1	6308								
W-DR-028	D1	[Not used]								
W-DR-029A	D1	[Not used]								
W-DR-029B	D1	1674								
W-DR-030	D1	1694	1692							

Table 7 GWML Down-Relief (reverse)

Project Crossrail – Contract C620	Contract MDL Reference: A10.054
CRL Document Nr.: C620-SIC-R2-RSP-CR001-50214	SAG Number: A6Z00041759126/PM1/000/Rev. H
ATS NR-ATNS to Berth Mapping Table	SRA Number: N/A
DCC: EEC / PM265	Revision 8.0 – Date 2020-07-14

Up-Main (normal) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
W-UM-001A	D3	[not used]								
W-UM-001B	D3	0160								
W-UM-002	D3	0178								
W-UM-003	D3	0194								
W-UM-004	D3	0204								
W-UM-005	D3	[Not used]								
W-UM-006	D3	0212								
W-UM-007	D3	[Not used]								
W-UM-008	D3	0222								
W-UM-008	D4	0222								
W-UM-009	D4	0234	0246							
W-UM-010	D4	0254								
W-UM-011	D4	0270								
W-UM-012	D4	0280								
W-UM-013	D4	0298	0308	0300						
W-UM-014	D4	0464								
W-UM-015	D4	0470								
W-UM-016	D4	0476								
W-UM-016	D6	0476								
W-UM-017	D6	0482								

Project Crossrail – Contract C620	Contract MDL Reference: A10.054
CRL Document Nr.: C620-SIC-R2-RSP-CR001-50214	SAG Number: A6Z00041759126/PM1/000/Rev. H
ATS NR-ATNS to Berth Mapping Table	SRA Number: N/A
DCC: EEC / PM265	Revision 8.0 – Date 2020-07-14

Up-Main (normal) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
W-UM-018	D6	0488								
W-UM-019	D6	0500	0504							
W-UM-020	D6	0512								
W-UM-021	D6	0534	0542							
W-UM-022	D6	0546								
W-UM-023	D6	0550								
W-UM-024	D6	0554								
W-UM-025	D6	0566								
W-UM-026	D6	0570								
W-UM-027A	D6	0592	0596	1602	1606					
W-UM-027B	D6	1610								
W-UM-027B	D1	1610	1614	1618						
W-UM-028	D1	1626								
W-UM-029A	D1	1640	1646	1650	1658	1662				
W-UM-029B	D1	1666	1672							
W-UM-030	D1	1690	1688							

Table 8 GWML Up-Main (normal)

Project Crossrail – Contract C620	Contract MDL Reference: A10.054
CRL Document Nr.: C620-SIC-R2-RSP-CR001-50214	SAG Number: A6Z00041759126/PM1/000/Rev. H
ATS NR-ATNS to Berth Mapping Table	SRA Number: N/A
DCC: EEC / PM265	Revision 8.0 – Date 2020-07-14



Up-Main (reverse) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
W-UM-001A	D3	[Not used]								
W-UM-001B	D3	[Not used]								
W-UM-002	D3	[Not used]								
W-UM-003	D3	[Not used]								
W-UM-004	D3	[Not used]								
W-UM-005	D3	[Not used]								
W-UM-006	D3	[Not used]								
W-UM-007	D3	[Not used]								
W-UM-008	D3	[Not used]								
W-UM-009	D4	[Not used]								
W-UM-010	D4	[Not used]								
W-UM-011	D4	[Not used]								
W-UM-012	D4	[Not used]								
W-UM-013	D4	0301								
W-UM-014	D4	[Not used]								
W-UM-015	D4	[Not used]								
W-UM-016	D4	[Not used]								
W-UM-017	D6	[Not used]								
W-UM-018	D6	[Not used]								
W-UM-019	D6	6271								

Project Crossrail – Contract C620	Contract MDL Reference: A10.054
CRL Document Nr.: C620-SIC-R2-RSP-CR001-50214	SAG Number: A6Z00041759126/PM1/000/Rev. H
ATS NR-ATNS to Berth Mapping Table	SRA Number: N/A
DCC: EEC / PM265	Revision 8.0 – Date 2020-07-14

Up-Main (reverse) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
W-UM-020	D6	[Not used]								
W-UM-021	D6	[Not used]								
W-UM-022	D6	[Not used]								
W-UM-023	D6	[Not used]								
W-UM-024	D6	[Not used]								
W-UM-025	D6	[Not used]								
W-UM-026	D6	0575								
W-UM-027A	D6	[Not used]								
W-UM-027B	D1	[Not used]								
W-UM-028	D1	[Not used]								
W-UM-029A	D1	[Not used]								
W-UM-029B	D1	[Not used]								
W-UM-030	D1	1713	1715							

Table 9 GWML Up-Main (reverse)

Project Crossrail – Contract C620	Contract MDL Reference: A10.054
CRL Document Nr.: C620-SIC-R2-RSP-CR001-50214	SAG Number: A6Z00041759126/PM1/000/Rev. H
ATS NR-ATNS to Berth Mapping Table	SRA Number: N/A
DCC: EEC / PM265	Revision 8.0 – Date 2020-07-14

Down-Main (normal) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
W-DM-001A	D3	0125	0135	0151						
W-DM-001B	D3	0159	0173							
W-DM-002	D3	0179								
W-DM-003	D3	0191	0201							
W-DM-004	D3	0207								
W-DM-005	D3	0213								
W-DM-006	D3	[Not Used]								
W-DM-007	D3	0231								
W-DM-008	D3	0237								
W-DM-008	D4	0237								
W-DM-009	D4	0249								
W-DM-010	D4	0255								
W-DM-011	D4	0271								
W-DM-012	D4	0285								
W-DM-013	D4	0461	0305	0319						
W-DM-014	D4	0467								
W-DM-015	D4	0475								
W-DM-015	D6	0475								
W-DM-016	D6	0481								
W-DM-017	D6	0485								

Project Crossrail – Contract C620	Contract MDL Reference: A10.054
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ATS NR-ATNS to Berth Mapping Table	SRA Number: N/A
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Down-Main (normal) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
W-DM-018	D6	0489								
W-DM-019	D6	0505	0501							
W-DM-020	D6	0519								
W-DM-021	D6	0545	0533							
W-DM-022	D6	0549								
W-DM-023	D6	0553								
W-DM-024	D6	0557								
W-DM-025	D6	0569								
W-DM-026	D6	0573								
W-DM-027A	D6	0593	1601	1605	1609					
W-DM-027A	D1	1609								
W-DM-027B	D1	1621	1625	1629	1633					
W-DM-028	D1	1655								
W-DM-029A	D1	1659	1663	1667						
W-DM-029B	D1	1685	1675							
W-DM-030	D1	1707	1709	1711						

Table 10 GWML Down-Main (normal)

Project Crossrail – Contract C620	Contract MDL Reference: A10.054
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ATS NR-ATNS to Berth Mapping Table	SRA Number: N/A
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Down-Main (reverse) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
W-DM-001A	D3	[Not used]								
W-DM-001B	D3	[Not used]								
W-DM-002	D3	[Not used]								
W-DM-003	D3	6146								
W-DM-004	D3	[Not used]								
W-DM-005	D3	[Not used]								
W-DM-006	D3	[Not used]								
W-DM-007	D3	[Not used]								
W-DM-008	D4	[Not used]								
W-DM-009	D4	[Not used]								
W-DM-010	D4	0252								
W-DM-011	D4	0268								
W-DM-012	D4	0278								
W-DM-013	D4	0318	0290							
W-DM-014	D4	[Not used]								
W-DM-015	D6	[Not used]								
W-DM-016	D6	[Not used]								
W-DM-017	D6	[Not used]								
W-DM-018	D6	[Not used]								
W-DM-019	D6	[Not used]								

Project Crossrail – Contract C620	Contract MDL Reference: A10.054
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ATS NR-ATNS to Berth Mapping Table	SRA Number: N/A
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Down-Main (reverse) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
W-DM-020	D6	0510								
W-DM-021	D6	6282								
W-DM-022	D6	[Not used]								
W-DM-023	D6	[Not used]								
W-DM-024	D6	[Not used]								
W-DM-025	D6	[Not used]								
W-DM-026	D6	[Not used]								
W-DM-027A	D6	[Not used]								
W-DM-027B	D1	[Not used]								
W-DM-028	D1	[Not used]								
W-DM-029A	D1	[Not used]								
W-DM-029B	D1	1670								
W-DM-030	D1	1686	1684	1682						

Table 11 GWML Down-Main (reverse)

Project Crossrail – Contract C620	Contract MDL Reference: A10.054
CRL Document Nr.: C620-SIC-R2-RSP-CR001-50214	SAG Number: A6Z00041759126/PM1/000/Rev. H
ATS NR-ATNS to Berth Mapping Table	SRA Number: N/A
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Sidings and Stations ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
W-IO-001B	D3	0169	0162	0154	0152	0139	6131	0177	0166	
W-IO-003	D3	0190	0197	0205						
W-IO-007A	D3	0229	0227							
W-IO-007B	D3	0216	0218							
W-IO-009	D4	0251	0245	0236						
W-IO-010	D4	0250	0256	6184	0257	0259	0261	0263		
W-IO-011	D4	0279	0272	6195						
W-IO-012	D4	0282	R282	A282						
W-IO-014	D4	0468	0473							
W-IO-015	D6	0474	6259	6257						
W-IO-016	D6	0480								
W-IO-017	D6	6262	6263							
W-IO-020	D6	0527	3535							
W-IO-021	D6	0528	6287	0532	3538					
W-IO-026	D6	3576	0581	6290						
W-IO-027A	D6	6296	3570	0578						
W-IO-027B	D6	0580	0582	0584	0586	0588	0590			
W-IO-029A	D1	1632								
W-IO-029B	D2	1681	1691							
W-IO-029B	D1	1679	1656							

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Project Crossrail – Contract C620	Contract MDL Reference: A10.054
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ATS NR-ATNS to Berth Mapping Table	SRA Number: N/A
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Table 12 GWML Sidings and Stations

Heathrow (normal) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
W-UA-000	D4	0316								
W-UA-001	D4	0332	0326							
W-UA-002	D4	0336								
W-UA-003	D4	0356	0360							
W-UA-004	D4	R364	F364	A354	B364					
W-UA-005	D4	[Not used]								
W-UA-006	D4	A348	R348	F348	B348					
W-DA-000	D4	0321	0313	0320	0323					
W-DA-001	D4	0331	0327							
W-DA-002	D4	0335								
W-DA-003	D4	0357	0361							
W-DA-004	D4	R362	F362	A362	B362					
W-DA-005	D4	0345								
W-DA-006	D4	A352	R352	F352	B352					

Table 13 GWML Heathrow (normal)

Project Crossrail – Contract C620	Contract MDL Reference: A10.054
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ATS NR-ATNS to Berth Mapping Table	SRA Number: N/A
DCC: EEC / PM265	Revision 8.0 – Date 2020-07-14



Heathrow (reverse) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
W-UA-000	D4	0315	0325							
W-UA-001	D4	0329	0333							
W-UA-002	D4	0337								
W-UA-003	D4	0397	0391							
W-UA-004	D4	[Not used]								
W-UA-005	D4	[Not used]								
W-UA-006	D4	[Not used]								
W-DA-000	D4	[Not used]								
W-DA-001	D4	0330	0324							
W-DA-002	D4	0334								
W-DA-003	D4	0392	0396							
W-DA-004	D4	[Not used]								
W-DA-005	D4	0340								
W-DA-006	D4	[Not used]								

Table 14 GWML Heathrow (reverse)

### 2.3 GEML Territory

Down Main (Normal) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
E-DM-001	Q1	0299								
E-DM-002	Q1	0309								
E-DM-003	Q1	0321								
E-DM-004	Q1	0329								
E-DM-005	Q1	0345								
E-DM-006	Q1	0351								
E-DM-007	Q1	0359								
E-DM-008	Q1	0369								
E-DM-009	Q1	[Not used]								
E-DM-010	Q1	0379								
E-DM-011	Q1	[Not used]								
E-DM-012	Q1	0389								
E-DM-013A	Q1	0401	0395	0409						
E-DM-013B	Q1	0411	0405							
E-DM-014	Q1	0419								
E-DM-015	Q1	0429	0425							
E-DM-016	Q1	0435								
E-DM-017	Q1	0443								

Project Crossrail – Contract C620	Contract MDL Reference: A10.054
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ATS NR-ATNS to Berth Mapping Table	SRA Number: N/A
DCC: EEC / PM265	Revision 8.0 – Date 2020-07-14

Down Main (Normal) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
E-DM-018	Q1	R449								
E-DM-018	Q2	0449	R449							
E-DM-019	Q2	0473	0469	0465	0461	0457	0453			
E-DM-020	Q2	0477								
E-DM-021	Q2	0493	0489	0485	0481					
E-DM-022	Q2	0499								

Table 15 GEML Down Main (Normal)

Down Main (Reverse) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
E-DM-001	Q1	0304								
E-DM-002	Q1	[Not used]								
E-DM-003	Q1	[Not used]								
E-DM-004	Q1	[Not used]								
E-DM-005	Q1	[Not used]								
E-DM-006	Q1	[Not used]								
E-DM-007	Q1	[Not used]								
E-DM-008	Q1	[Not used]								

Down Main (Reverse) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
E-DM-009	Q1	[Not used]								
E-DM-010	Q1	[Not used]								
E-DM-011	Q1	[Not used]								
E-DM-012	Q1	[Not used]								
E-DM-013A	Q1	[Not used]								
E-DM-013B	Q1	5100								
E-DM-014	Q1	[Not used]								
E-DM-015	Q1	[Not used]								
E-DM-016	Q1	[Not used]								
E-DM-017	Q1	[Not used]								
E-DM-018	Q2	[Not used]								
E-DM-019	Q2	[Not used]								
E-DM-020	Q2	[Not used]								
E-DM-021	Q2	[Not used]								
E-DM-022	Q2	0520								

Table 16 GEML Down Main (Reverse)

Project Crossrail – Contract C620	Contract MDL Reference: A10.054
CRL Document Nr.: C620-SIC-R2-RSP-CR001-50214	SAG Number: A6Z00041759126/PM1/000/Rev. H
ATS NR-ATNS to Berth Mapping Table	SRA Number: N/A
DCC: EEC / PM265	Revision 8.0 – Date 2020-07-14

Up Main (Normal) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
E-UM-001	Q1	0306								
E-UM-002	Q1	0316								
E-UM-003	Q1	0326								
E-UM-004	Q1	0340								
E-UM-005	Q1	0356								
E-UM-006	Q1	0364								
E-UM-007	Q1	0376								
E-UM-008	Q1	0390								
E-UM-009	Q1	[Not used]								
E-UM-010	Q1	0400								
E-UM-011	Q1	0408								
E-UM-012	Q1	0416								
E-UM-013A	Q1	0424	0430							
E-UM-013B	Q1	0438								
E-UM-014	Q1	0444								
E-UM-015	Q1	0454								
E-UM-016	Q1	0462								
E-UM-017	Q1	0472	0476							
E-UM-017	Q2	0476								
E-UM-018	Q1	0480								

Project Crossrail – Contract C620	Contract MDL Reference: A10.054
CRL Document Nr.: C620-SIC-R2-RSP-CR001-50214	SAG Number: A6Z00041759126/PM1/000/Rev. H
ATS NR-ATNS to Berth Mapping Table	SRA Number: N/A
DCC: EEC / PM265	Revision 8.0 – Date 2020-07-14

Up Main (Normal) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
E-UM-018	Q2	0480								
E-UM-019	Q2	0484	0488	0492	0496					
E-UM-020	Q2	0500								
E-UM-021	Q2	0504	0508	0514	0510					
E-UM-022	Q2	0522	0524							

Table 17 GEML Up Main (Normal)

Up Main (Reverse) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
E-UM-001	Q1	0301								
E-UM-002	Q1	0311								
E-UM-003	Q1	6145								
E-UM-004	Q1	[Not used]								
E-UM-005	Q1	[Not used]								
E-UM-006	Q1	0953								
E-UM-007	Q1	[Not used]								
E-UM-008	Q1	[Not used]								
E-UM-009	Q1	[Not used]								

Up Main (Reverse) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
E-UM-010	Q1	[Not used]								
E-UM-011	Q1	[Not used]								
E-UM-012	Q1	[Not used]								
E-UM-013A	Q1	[Not used]								
E-UM-013B	Q1	5107								
E-UM-014	Q1	5111								
E-UM-015	Q1	[Not used]								
E-UM-016	Q1	[Not used]								
E-UM-017	Q1	[Not used]								
E-UM-018	Q2	[Not used]								
E-UM-019	Q2	[Not used]								
E-UM-020	Q2	[Not used]								
E-UM-021	Q2	5135	5139							
E-UM-022	Q2	0501	0503							

Table 18 GEML Up Main (Reverse)

Down Electric (Normal) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
E-DE-001	Q1	0305	0303	0297						
E-DE-002	Q1	0307								
E-DE-003	Q1	0325	0323	0317	0313					
E-DE-004	Q1	0327								
E-DE-005	Q1	0347	0343	0339	0333	0935	0331			
E-DE-006	Q1	0349								
E-DE-007	Q1	0363	0357	0355	0353					
E-DE-008	Q1	0365								
E-DE-009	Q1	0375	0373	0371						
E-DE-010	Q1	0377								
E-DE-011	Q1	0385	0383	0381						
E-DE-012	Q1	0387								
E-DE-013A	Q1	0391	0393	0397	0399					
E-DE-013B	Q1	0403	0407	0413	0415					
E-DE-014	Q1	0417								
E-DE-015	Q1	0427	0423	0421						
E-DE-016	Q1	0431								
E-DE-017	Q1	0445	0441	0433						
E-DE-018	Q1	R477								
E-DE-018	Q2	0447	R477							

Project Crossrail – Contract C620	Contract MDL Reference: A10.054
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ATS NR-ATNS to Berth Mapping Table	SRA Number: N/A
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Down Electric (Normal) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
E-DE-019	Q2	0471	0467	0463	0459	0455	0451			
E-DE-020	Q2	0475								
E-DE-021	Q2	0491	0487	0483	0479					
E-DE-022	Q2	0495	R602							

Table 19 GEML Down Electric (Normal)

Down Electric (Reverse) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
E-DE-001	Q1	[Not used]								
E-DE-002	Q1	[Not used]								
E-DE-003	Q1	0328								
E-DE-004	Q1	[Not used]								
E-DE-005	Q1	[Not used]								
E-DE-006	Q1	0368								
E-DE-007	Q1	[Not used]								
E-DE-008	Q1	[Not used]								
E-DE-009	Q1	[Not used]								
E-DE-010	Q1	[Not used]								

Down Electric (Reverse) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
E-DE-011	Q1	[Not used]								
E-DE-012	Q1	[Not used]								
E-DE-013A	Q1	[Not used]								
E-DE-013B	Q1	5102								
E-DE-014	Q1	[Not used]								
E-DE-015	Q1	[Not used]								
E-DE-016	Q1	0458								
E-DE-017	Q1	5116								
E-DE-018	Q2	[Not used]								
E-DE-019	Q2	[Not used]								
E-DE-020	Q2	0598								
E-DE-021	Q2	[Not used]								
E-DE-022	Q2	0516	0526							

Table 20 GEML Down Electric (Reverse)

Up Electric (Normal) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
E-UE-001	Q1	[Not used]								

Up Electric (Normal) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
E-UE-002	Q1	0314								
E-UE-003	Q1	0320	0324	0330						
E-UE-004	Q1	0338								
E-UE-005	Q1	0346	0350	0352	0358					
E-UE-006	Q1	0362								
E-UE-007	Q1	0372	0374	0386	0388	0370				
E-UE-008	Q1	0392								
E-UE-009	Q1	0394	0396	0398	0402					
E-UE-010	Q1	0404								
E-UE-011	Q1	0406	0410	0412						
E-UE-012	Q1	0414								
E-UE-013A	Q1	0418	0420	0422	0426					
E-UE-013B	Q1	0428	0432	0436	0440					
E-UE-014	Q1	0442								
E-UE-015	Q1	0446	0448	0452	0456					
E-UE-016	Q1	0460								
E-UE-017	Q1	0464	0470	0474						
E-UE-017	Q2	0474								
E-UE-018	Q1	0478								
E-UE-018	Q2	0478								

Project Crossrail – Contract C620	Contract MDL Reference: A10.054
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ATS NR-ATNS to Berth Mapping Table	SRA Number: N/A
DCC: EEC / PM265	Revision 8.0 – Date 2020-07-14

Up Electric (Normal) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
E-UE-019	Q2	0482	0486	0490	0494	0498				
E-UE-020	Q2	[Not used]								
E-UE-021	Q2	0506	0512	0502						
E-UE-022	Q2	0518								

Table 21 GEML Up Electric (Normal)

Up Electric (Reverse) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
E-UE-001	Q1	[Not used]								
E-UE-002	Q1	0315								
E-UE-003	Q1	0319								
E-UE-004	Q1	[Not used]								
E-UE-005	Q1	5087								
E-UE-006	Q1	0951								
E-UE-007	Q1	[Not used]								
E-UE-008	Q1	[Not used]								
E-UE-009	Q1	[Not used]								
E-UE-010	Q1	[Not used]								

Up Electric (Reverse) ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
E-UE-011	Q1	[Not used]								
E-UE-012	Q1	[Not used]								
E-UE-013A	Q1	[Not used]								
E-UE-013B	Q1	5109								
E-UE-014	Q1	[Not used]								
E-UE-015	Q1	[Not used]								
E-UE-016	Q1	0979								
E-UE-017	Q1	5125								
E-UE-018	Q2	[Not used]								
E-UE-019	Q2	[Not used]								
E-UE-020	Q2	[Not used]								
E-UE-021	Q2	0601								
E-UE-022	Q2	0497								

Table 22 GEML Up Electric (Reverse)

Sidings and Stations ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
E-IO-003	Q1	0332	0334	0336						

Sidings and Stations ATNS Name	TD Identity	1st Berth	2nd Berth	3rd Berth	4th Berth	5th Berth	6th Berth	7th Berth	8th Berth	9th Berth
E-IO-005	Q1	0335	0341	0354	0360					
E-IO-007	Q1	0378	0380	0382	0384	0361				
E-IO-013A	Q1	A936	B936	R936						
E-IO-015	Q1	0450	UMIN							
E-IO-017A	Q1	0988	0986	0984	0982	0468				
E-IO-017B	Q1	0983	0981	0987	0985	0990				

Table 23 GEML Sidings and Stations

### 3 LWOD Display Arrangement of ATNS

#### 3.1 GWML Territory

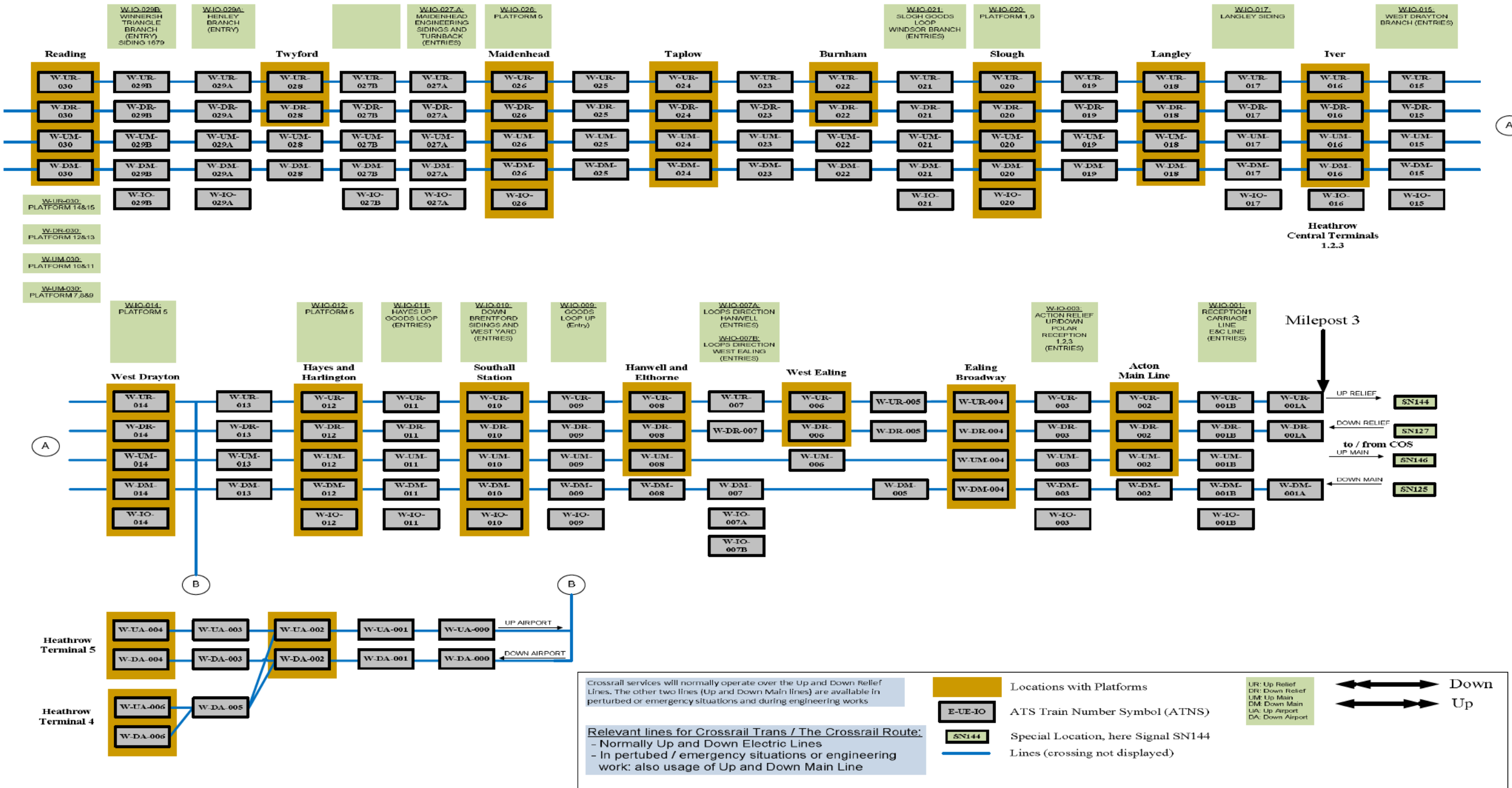


Figure 3 LWOD GWML

### 3.2 GEML Territory

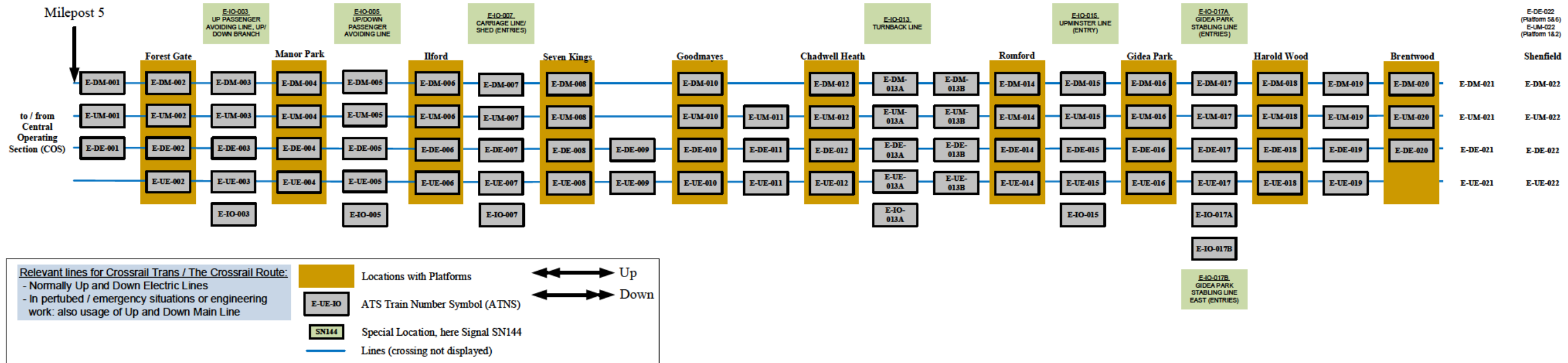


Figure 4 LWOD GEML