



WQ1 APPENDIX 3 - HIGHWAYS

TECHNICAL NOTE

Drax Bioenergy with Carbon Capture and Storage

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations, 2009 - Regulation 5(2)(k)

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PLATES

Plate 3.1 – Personal Injury Collision Study Area

1. INTRODUCTION

1.1. OVERVIEW

- 1.1.1. This Technical Note (TN01, TN) has been prepared by WSP on behalf of Drax Power Ltd ('the Applicant') in respect of a Proposed Scheme comprising the installation of post-combustion carbon capture technology to capture carbon dioxide from up to two existing 660 megawatt electrical ('MWe') biomass power generating units at the Drax Power Station (Unit 1 and Unit 2).
- 1.1.2. The site is approximately 125 ha and is split into the following parcels:
- a. Drax Power Station Site – the land occupied by the Drax Power Station, including a Flood Compensation Area;
 - b. East Construction Laydown Area – area required during the construction phase of the Proposed Scheme for temporary works situated to the east of the Drax Power Station, across New Road. (N.B. There are several parcels of land within the Drax Power Station Site which would be used for construction laydown. These areas have been termed 'Drax Power Station Site Construction Laydown Areas');
 - c. Habitat Provision Area - the land within the Order Limits that may be used for environmental mitigation for the Proposed Scheme. This parcel is located to the north and north east of the Drax Power Station;
 - d. Overhead Line Works Areas – works in and around the A645 and A614 for the diversion and undergrounding of overhead lines; and
 - e. Surrounding highway network.
- 1.1.3. The purpose of this TN is to respond to the highways and transportation queries raised by National Highways and their consultants Jacobs SYSTRA Joint Venture (JSJV) in their Technical Memorandum response dated 1 September 2022. For reference, their response is attached as **Appendix A**.
- 1.1.4. This TN focuses on the comments raised in relation to the Environmental Statement **Chapter 5 (Traffic and Transport)** (APP-041). Comments raised in relation to the **Outline Construction Management Traffic Plan (OCTMP)** (updated at D2, rev 5) and the **Framework Construction Worker Travel Plan (FCWTP)** (updated at D2, rev 3) have been addressed separately through updating each document respectively.

1.2. KEY POINTS RAISED

- 1.2.1. For reference, the key points raised by National Highways in relation to their review are summarised as follows:
- a. Provide further justification to explain the proposed sensitivity for the M62 mainline;
 - b. Suggest that the total vehicle trip generation is presented in Passenger Car Units so that HDVs are properly accounted for;

- c. Undertake a highway safety analysis for the period 2015 – 2019;
- d. Provide clarification on whether the peak periods have been assessed and if not, assess the worst case peak periods;
- e. The M62 Junction 36 should be assessed with and without the improvement scheme in place

1.2.2. The Technical Note addresses each of these points, and goes further by presenting additional supporting evidence to support the proposed management of impacts through the **CTMP** and **CWTP**.

2. M62 MAINLINE SENSITIVITY

2.1. OVERVIEW

- 2.1.1. Within JSJV response to the Environmental Statement, it is suggested that the M62 Junction 36 has a very high sensitivity, and the M62 eastbound and westbound mainlines may be impacted by the construction effects of the Proposed Scheme.

2.2. RESPONSE

- 2.2.1. A low sensitivity was assigned on the basis of the type of user groups who may use it and the type of land uses the link passes through. This is in line with IEMA guidance (1993) 'Guidelines for the Environmental Assessment of Road Traffic' that identify groups, locations and areas which may be sensitive to changes in traffic conditions. Given the existing very high traffic flow on the M62 J36, the sensitivity to an increase in traffic will be low, when compared to, for example, the same increase on a rural single track lane adjacent to a school.
- 2.2.2. As such, the M62 mainline was assigned a low sensitivity on the basis that there are no sensitive locations adjacent to the M62 mainline, such as hospitals, churches, schools or historical buildings and on the basis that pedestrians, cyclists and horse riders are prohibited from using motorways.
- 2.2.3. In the event that the M62 mainline was assigned a very high sensitivity, the level of traffic associated with the Proposed Scheme in relation to the Annual Average Daily Traffic on the mainline would be very low, and would have negligible impact on the operational performance of the mainline flow.
- 2.2.4. The operation of Junction 36 is considered separately in **Section 9.5 of Chapter 5 (Traffic and Transport)** (APP-041) and this Technical Note.

3. HIGHWAY SAFETY ANALYSIS

3.1. OVERVIEW

- 3.1.1. National Highways have requested that a highway safety analysis should be undertaken for the five-year period 1 January 2015 – 31 December 2019 inclusive, to ensure the analysis is unaffected by the Covid-19 pandemic.
- 3.1.2. National Highways also requested a more extensive analysis which includes more of the M62 Mainline to the east and west of the M62 Junction 36 to be undertaken.

3.2. RESPONSE

Overview

- 3.2.1. Personal Injury Collision (PIC) data has been obtained from East Riding of Yorkshire for the five-year period 1 January 2015 – 31 December 2019 inclusive.
- 3.2.2. The extent of the study area is shown on **Plate 3.1** and has been broken down into the following junctions / link to match what was submitted within the Environmental Statement:
 - a. Junction 4a – M62 Junction 36 Northern Dumbbell Roundabout
 - b. Junction 4b – M62 Junction 36 Southern Dumbbell Roundabout
 - c. Link 6 – M62 Mainline (East) – approximately 3.5km in length
 - d. Link 9 – M62 Mainline (West) – approximately 3.2km in length
- 3.2.3. The PIC data is included as **Appendix B**.



Plate 3.1 – Personal Injury Collision Study Area

3.2.4. A summary of the PIC data classified by severity and year for each junction / link is presented in **Table 3.1**.

Table 3.1 – PIC Summary (Severity and Year)

Severity	2015	2016	2017	2018	2019	5 Year Period	12 Month Average
Junction 4a – M62 Junction 36 Northern Dumbbell Roundabout							
Slight	0	0	0	1	0	1	0.2
Serious	0	0	0	0	1	1	0.2
Fatal	0	0	0	0	0	0	0
Total	0	0	0	1	1	2	0.4
Junction 4b – M62 Junction 36 Southern Dumbbell Roundabout							

Severity	2015	2016	2017	2018	2019	5 Year Period	12 Month Average
Slight	3	1	0	0	2	6	1.2
Serious	1	0	0	0	0	1	0.2
Fatal	0	0	0	0	0	0	0
Total	4	1	0	0	2	6	1.4
Link 6 – M62 Mainline (East)							
Slight	4	2	2	2	1	11	2.2
Serious	1	0	0	2	0	3	0.6
Fatal	0	0	0	1	0	1	0.2
Total	5	2	2	5	1	15	3
Link 9 – M62 Mainline (West)							
Slight	0	0	5	0	0	5	1
Serious	0	0	0	1	1	2	0.4
Fatal	0	0	0	0	0	0	0
Total	0	0	5	1	1	7	1.4
Total Study Area							
Slight	7	3	7	3	3	23	4.6
Serious	2	0	0	3	2	7	1.4
Fatal	0	0	0	1	0	1	0.2
Total	9	3	7	7	5	31	6.2

3.2.5. The PIC records in **Table 3.1** show that during the analysed period, there was a total of 32 collisions with the study area, of which, 24 were categorised as slight, 7 as serious and one as fatal.

3.2.6. There was an average of 6 collisions per year, ranging from 4 in 2016 to 9 in 2015. The trend shows a general reduction in total collisions occurring on this section of the Strategic Road Network, with a high of 9 recorded in 2015, lowering to 7 in 2017 and 2018, then reducing to 5 in 2019.

Cluster Analysis

- 3.2.7. Out of the 32 collisions, there are clusters of collisions at the following locations:
- a. Five slight and one serious collision at Junction 4B.
 - b. Four slight collisions on the Ouse Bridge (Link 9).
 - c. Two serious and one slight collision to the east of the M62 Junction 36 (Link 9).
 - d. One serious two slight collisions to the west of the M62 Junction 36 (Link 6).
 - e. One slight and one serious collision at Junction 4A.
 - f. Two slight collisions to west of the Ouse Bridge (Link 9).
 - g. Two slight collisions east of the Ouse Bridge (Link 9).
 - h. Two slight collisions to the west of the of the M62 Junction 36 (Link 6).
- 3.2.8. One serious and one fatal collision occurred to the east of the M62 Junction 36 (Link 9), which have also been considered in this analysis.
- 3.2.9. Vehicles involved in the collisions are denoted as follows:
- a. V1, V2,... Vn for cars
 - b. M1, M2,... Mn for motorcycles
 - c. T1, T2,... Tn for taxis
 - d. GV1, GV2,... GVn for van / goods vehicle
 - e. HGV1, HGV2,... HGVn for heavy goods vehicles
 - f. AV1, AV2,... AVn for agricultural vehicles

Junction 4a – M62 Junction 36 Northern Dumbbell Roundabout

- 3.2.10. The STATS19 collision descriptions for the slight and serious collisions that occurred at Junction 4a is summarised as follows:
- a. **Ref: 317646** – 01/08/2018 at 05:47 - Slight: HGV1 over-turns while negotiating roundabout.
 - b. **Ref: 859773** – 20/07/2019 at 08:40 - Serious: V2 loses control while weaving through traffic, colliding with street sign. V1 fails to stop and collides with V2.
- 3.2.11. The contributory factors for both collisions included “Loss of control (Driver/Rider - Error)” and the serious collision also included “Careless/Reckless (Driver/Rider - Behaviour)”.
- 3.2.12. Overall, based on the contributory factors assigned, both collisions that occurred at Junction 4a appear to be a result of driver error and therefore, there does not appear to be an inherent highway safety issues at Junction 4a.

Junction 4b - M62 Junction 36 Southern Dumbbell Roundabout

- 3.2.13. The STATS19 collision description’s for the six slight and one serious collision that occurred at Junction 4b is summarised as follows:

- a. **Ref: C052915** – 09/09/2015 at 15:46 - Slight: HGV1 collided with rear of V1.
- b. **Ref: C053915** – 19/09/2015 at 16:40 - Slight: V2 collided with rear of V1.
- c. **Ref: C026915** – 26/05/2015 at 14:47 - Slight: V1 lost control and collided with road sign.
- d. **Ref: 860588** – 20/06/2019 at 10:05 - Slight: HGV1 and V1 collided with each other on circulatory carriageway.
- e. **Ref: 57128** – 05/04/2016 at 13:11 - Slight: V1 fails to give way to V2, colliding with V2 on circulatory carriageway.
- f. **Ref: C029915** – 07/06/2015 at 10:45 - Serious: V1 lost control and collides with V2 on circulatory carriageway.
- g. **Ref: 862275** – 22/07/2019 at 12:59 – Slight: V1 collides with V2 as V1 merges with the main carriageway.

3.2.14. Out of the 6 collisions that occurred at this roundabout, 2 comprised rear-end shunts, 2 vehicles lost control, 1 collision was a result of a failure to give way and final collision involved a HGV and car colliding with each other.

3.2.15. There was a mixture of contributing factors for the collisions that occurred at Junction 4b. These are summarised as follows:

- a. 3 collisions included “Failed to judge other person's path/speed (Driver/Rider - Error)”.
- b. 3 collisions included “Failed to look properly (Driver/Rider - Error)”.
- c. 2 collisions included “Junction overshoot (Driver/Rider - Error)”.
- d. 2 collisions included “Poor turn or manoeuvre (Driver/Rider - Error)”.
- e. 1 collision included “Travelling too fast for conditions (Driver/Rider - Injudicious)”.
- f. 1 collision included “Loss of control (Driver/Rider - Error)”.
- g. 1 collision included “Careless/Reckless (Driver/Rider - Behaviour)”.
- h. 1 collision included “Disobeyed double white line (Driver/Rider - Injudicious)”.
- i. 1 collision included “Inexperienced or learner driver/rider (Driver/Rider - Behaviour)”.

3.2.16. Overall, based on the contributory factors assigned, all collisions that occurred at Junction 4b appear to be a result of driver error and there are no inherent highway safety issues at Junction 4b.

Link 6 - M62 Mainline (East)

3.2.17. The STATS19 collision descriptions for the 11 slight and 3 serious collisions that occurred on the M62 Mainline (East) is summarised as follows:

- a. **Ref: C044715** – 10/08/2015 at 16:21 - Slight: V1 lost control and collided with crash barrier.

- b. Ref: 304691** – 22/06/2018 at 20:00 - Serious: V1 failed to see queuing traffic ahead due to roadworks and collided with rear of V2 who was stationary in queuing traffic.
- c. Ref: C067815** – 13/11/2015 at 16:32 - Slight: V1 collides with rear of V2. V2 was slowing down due to queuing traffic ahead.
- d. Ref: 52012** – 15/03/2016 - Slight: HGV1 changed lane and collided with central reservation.
- e. Ref: 135216** – 05/11/2016 at 09:03 - Slight: V1 swerves to avoid object in road, loses control and rolls onto roof.
- f. Ref: 306043** – 27/06/2018 - Serious: V1 lost control and collided with a concrete bridge support.
- g. Ref: 303945** – 18/06/2018 at 14:50 - Slight: V1 and T1 collided with each other. Both vehicles were travelling in the same direction and it was unclear which vehicle was at fault.
- h. Ref: 804778** – 09/12/2018 at 15:51 - Slight: GV1 moves into lane 2. V1 swerves to avoid collision with GV1. V1 collides with central reservation and crash barrier.
- i. Ref: 216747** – 30/04/2017 at 17:02 - Slight: V1 changes from Lane 3 to Lane 2. V2 overtakes V1 and loses control, clips central reservation and spins into path of V1.
- j. Ref: 838699** – 12/04/2019 at 17:10 - Slight: A collision involving two cars. No other details are provided to determine the cause of the collision.
- k. Ref: C055015** – 15/09/2015 at 13:23 - Slight: HGV1 changed lane to avoid oncoming roadworks, failed to see V1 and collided with V1.
- l. Ref: C069815** – 13/11/2015 at 15:37 - Serious: GV2 was parked on hard shoulder and maintenance person was collecting roadworks signage. GV1 using mobile phone collides with rear of GV2 and maintenance person.
- m. Ref: C048315** – 24/08/2015 at 15:21 - Slight: GV1 changes lane to the left and collides with rear of HGV1. GV1 then spins out of control and collides with GV2.
- n. Ref: 222856** – 14/09/2017 at 11:13 - Slight: V1 (with caravan) lost control during windy conditions and hit central reservation.

3.2.18. Out of the 15 collisions that occurred on the M62 Mainline (East), 7 can be attributed to poor lane discipline, 4 collisions occurred due to loss of control incidents, 2 comprised rear end shunts, 1 as a result of being distracted by a mobile phone and there is not enough details to confirm details of the final collision.

3.2.19. There was a mixture of contributing factors for the collisions that occurred on the M62 Mainline (East). These are summarised as follows:

- a.** 8 collisions included “Loss of control (Driver/Rider - Error)”.
- b.** 4 collisions included “Failed to judge other person's path/speed (Driver/Rider - Error)”.

- c. 4 collisions included “Careless/Reckless (Driver/Rider - Behaviour)”.
- d. 2 collisions included “Poor turn or manoeuvre (Driver/Rider - Error)”.
- e. 2 collisions included “Travelling too fast for conditions (Driver/Rider - Injudicious)”.
- f. 2 collisions included “Swerved (Driver/Rider - Error)”.
- g. 2 collisions included “Distraction in vehicle (Driver/Rider - Impairment)”.
- h. 1 collision included “Slippery road due to weather (Road Environment Contrib)”.
- i. 1 collision included “Animal or object in carriageway (Road Environment Contrib)”.
- j. 1 collision included “Fatigue (Driver/Rider - Impairment)”.
- k. 1 collision included “Driver using mobile phone (Driver/Rider - Impairment)”.
- l. 1 collision included “Exceeding speed limit (Driver/Rider - Injudicious)”.
- m. 1 collision included “Failed to look properly (Driver/Rider - Error)”.
- n. 1 collision included “Nervous/Uncertain (Driver/Rider - Behaviour)”.
- o. 1 collision included “Following too close (Driver/Rider - Injudicious)”.
- p. 1 collision included “Rain, sleet, snow or fog (Driver/Rider - Vision Affected)”.
- q. 1 collision included “Sudden braking (Driver/Rider - Error)”.

3.2.20. A fatal collision also occurred on the M62 Mainline (East). This collision occurred on the 03/04/2018 and 09:30 with wet / damp conditions. The collision occurred as a result of a caravan travelling westbound, lost control and went through the central reservation and collided with a car on the eastbound carriageway. The only contributory factor given was “Loss of control (Driver/Rider - Error)”.

3.2.21. Overall, based on the contributory factors assigned, all collisions that occurred on the M62 Mainline (East) appear to be a result of driver error and / or prevailing environmental conditions at the time and therefore, there does not appear to be any inherent highway safety issues on the M62 Mainline (East).

Link 9 - M62 Mainline (West)

3.2.22. The STATS19 collision description’s for the 5 slight and 2 serious collisions that occurred on the M62 Mainline (West) is summarised as follows

- a. **Ref: 149041** – 17/01/2017 at 16:09 - Slight: GV1 collides with rear of V1.
- b. **Ref: 154776** – 04/02/2017 at 08:48 – Slight: V1 lost control, left carriageway and collided with a fence.
- c. **Ref: 156900** – 19/02/2017 at 22:20 – Slight: V1 broke suddenly due to an animal in the carriageway. V2 collided with rear of V1.
- d. **Ref: 224698** – 23/09/2017 at 06:07 – Slight: V1 collides with rear of HGV1. No other details are provided.
- e. **Ref: 235811** – 28/10/2017 at 17:00 – Slight: V1 lost control and collided with central reservation.

- f. Ref: 805163** – 27/12/2018 at 12:30 – Serious: HGV1 overtakes AV1 and changes lane before clearing AV1 and collided with AV1.
- g. Ref: 858792** – 17/07/2019 at 17:20 – Serious: M1 has lost control, with both rider and pillion falling from M1.

3.2.23. There was a mixture of contributing factors for the collisions that occurred on the M62 Mainline (West). These are summarised as follows:

- a.** 4 collisions included “Careless/Reckless (Driver/Rider - Behaviour)”.
- b.** 2 collisions included “Loss of control (Driver/Rider - Error)”.
- c.** 1 collision included “Animal or object in carriageway (Road Environment Contrib)”.
- d.** 1 collision included “Failed to judge other person's path/speed (Driver/Rider - Error)”.
- e.** 1 collision included “Aggressive driving (Driver/Rider - Behaviour)”.
- f.** 1 collision included “Travelling too fast for conditions (Driver/Rider - Injudicious)”.
- g.** 1 collision included “Swerved (Driver/Rider - Error)”.
- h.** 1 collision included “Dazzling sun (Driver/Rider - Vision Affected)”.
- i.** 1 collision included “Failed to look properly (Driver/Rider - Error)”.
- j.** 1 collision included “Following too close (Driver/Rider - Injudicious)”.
- k.** 1 collision included “Disobeyed double white line (Driver/Rider - Injudicious)”.
- l.** 1 collision included “Sudden braking (Driver/Rider - Error)”.

3.2.24. Overall, based on the contributory factors assigned, all collisions that occurred on the M62 Mainline (West) appear to be a result of driver error and / or prevailing environmental conditions at the time and therefore, there does not appear to be any inherent highway safety issues on the M62 Mainline (West).

Summary and Conclusions

3.2.25. Overall, the analysis of PIC data indicates the following:

- a.** The PIC assessment does not indicate any pattern associated with accidents in relation to year of occurrence. The trend shows a general reduction in total collisions occurring on this section of the Strategic Road Network, with a high of 9 recorded in 2015, lowering to 7 in 2017 and 2018, then reducing to 5 in 2019.
- b.** There was a mixture of contributing factors for the collisions that occurred within the study area. All contributory factors appear to be attributed to driver error and / or prevailing environmental conditions at the time and therefore, there does not appear to be any inherent highway safety issues on the Strategic Road Network.

- c. It is considered that the frequency, severity and spatial distribution of collision does not indicate a pattern that indicates there are inherent highway safety issues within the study area.
- d. This revised highway safety analysis does not change the original conclusions set out in **Chapter 5 (Traffic and Transport)** (APP-041) of the Environmental Statement.

4. PASSENGER CAR UNITS

4.1. OVERVIEW

4.1.1. National Highways suggest that the total vehicle trip generation should be presented with minor alterations in the Passenger Car Units assumptions (PCUs) so that the Heavy Duty Vehicles (HDVs) are properly accounted for, using the following values as presented in TAG Unit M3.1 Highway Assessment Modelling (May 2020):

- a. Large Goods Vehicle on all road types:
1.0
- b. Heavy Goods Vehicles on motorways and all-purpose dual carriageways:
2.5
- c. HGVs on other road types:
2.0

4.2. RESPONSE

4.2.1. The traffic survey data for the M62 J36 was provided to the Applicant by National Highways (included as **Appendix 5.3** (Traffic Flow Diagrams) (APP-121) and included the following conversion factors for PCUs:

- a. Car: 1.0
- b. Large Goods Vehicle: 1.0
- c. Rigid: 1.5
- d. Articulated: 2.3
- e. Public Service Vehicle: 2.0
- f. Motorcycle: 0.4
- g. Cycle: 0.2

4.2.2. The traffic surveys provided (including the PCU conversion factors) was considered to be acceptable by National Highways during the pre-application stage, therefore no adjustments were made subsequently.

4.2.3. These PCU values are typical PCU values to be used in traffic modelling software within the 'Traffic Signs Manual – Chapter 6 – Traffic Control', published by the Department for Transport and 'Traffic Modelling Guidelines Version 4.0', published by Transport for London.

4.2.4. Based on the above, the Applicant considers that the use of PCU values presented to date in the ES to be appropriate and reasonable (and agreed previously with National Highways) and therefore it is considered appropriate to continue using these values in all assessment scenarios.

5. PEAK HOUR ANALYSIS

5.1. OVERVIEW

- 5.1.1. National Highways seek clarification to confirm whether the worst-case peak for the M62 Junction 36 has been assessed and if the worst-case peak has not been assessed, then further analysis will be required.
- 5.1.2. National Highways request that the worst-case morning and evening weekday peak should be derived by considering the maximum combined base traffic flows and development traffic flows.

5.2. RESPONSE

Overview

- 5.2.1. The AM and PM network peaks included in the traffic flow diagrams [APP-121] and the assessment scenarios presented in **Chapter 5 (Traffic and Transport)** of the ES (APP-041) were 07:15 - 08:15 (morning) and 16:30 - 17:30 (evening).

Surveyed Peak Periods

- 5.2.2. WSP have undertaken a review of the traffic surveys provided to the Applicant by National Highways and can confirm that the AM and PM network peaks are from 07:30 – 08:30 and 16:30 – 17:30.
- 5.2.3. A summary of the traffic flows across the AM peak periods is shown in **Table 5.1** and across the PM peak period in **Table 5.2**, broken down into hourly periods by 15-minute increments. The traffic flows are also broken down into each roundabout that forms the M62 Junction 36 and are shown in PCUs.
- 5.2.4. Full details of the peak period analysis undertaken is included in **Appendix C**.

Table 5.1 - Traffic Flows (PCU) at the M62 Junction 36 – AM Time Period

Time Period	Northern Dumbbell Roundabout	Southern Dumbbell Roundabout	Total Flows
0700 - 0800	2286	2256	4543
0715 - 0815	2473	2528	5001
0730 - 0830	2563	2669	5231
0745 - 0845	2550	2654	5204
0800 - 0900	2475	2584	5059
0815 - 0915	2336	2417	4753

Time Period	Northern Dumbbell Roundabout	Southern Dumbbell Roundabout	Total Flows
0830 - 0930	2154	2215	4369
0845 - 0945	2031	2085	4116
0900 - 1000	1906	1951	3857

Table 5.2 - Traffic Flows (PCU) at the M62 Junction 36 – PM Time Period

Time Period	Northern Dumbbell Roundabout	Southern Dumbbell Roundabout	Total Flows
1600 - 1700	2433	2539	4972
1615 - 1715	2588	2667	5256
1630 - 1730	2676	2672	5348
1645 - 1745	2673	2638	5311
1700 - 1800	2625	2557	5181
1715 - 1815	2372	2288	4661
1730 - 1830	2138	1816	3954
1745 - 1845	1897	1816	3713
1800 - 1900	1671	1458	3129

5.2.5. In summary, the total traffic flows across the AM and PM peak hours at the M62 Junction 36 is summarised as follows:

- a. Northern Dumbbell Roundabout
 - 07:30 – 08:30 = 2563
 - 16:30 – 17:30 = 2676
- b. Southern Dumbbell Roundabout
 - 07:30 – 08:30 = 2669
 - 16:30 – 17:30 = 2672
- c. M62 Junction 36
 - 07:30 – 08:30 = 5231
 - 16:30 – 17:30 = 5348

Baseline Peak Periods

- 5.2.6. National Highways request that the worst-case morning and evening weekday peak should be derived by considering the maximum combined base traffic flows and development traffic flows.
- 5.2.7. Based on the above, a review of the committed developments has been undertaken, disaggregating the trips where possible so that they can be combined with the disaggregated surveyed flows at hourly periods every 15-minute increments in order to ensure the assessment scenarios are as accurate as possible.
- 5.2.8. The committed developments have been disaggregated as follows:
- a.** Committed Development 1 - Short List ID 2 - 2019/1343/EIA – Eggborough Demolition Works and Redevelopment
 - No vehicle trips associated with Committed Development 1 are predicted to use the M62 Junction 36. Therefore, trips associated with this development have not been disaggregated.
 - b.** Committed Development 2 - Short List ID 6 – Barlow Mound Resource Recovery Operations
 - A total of 185 two-way HGV movements are anticipated to use the M62 Junction 36 per day.
 - The proposed hours of working are 18 hours per day between 06:00 – 18:00.
 - The total number of two-way HGV movements has been divided by 18 hours to derive an hourly two-way HGV trip generation rate and then divided by 2 to derive a one-way HGV trip generation rate.
 - As the profile is predicted to be constant across the day, the same hourly HGV trip generation for this committed development has been added to each surveyed flow time period.
 - c.** Committed Development 3 - Short List ID 44 - 21/03027/STPLF - Erection of Employment Units – Rawcliffe Road Airmyn
 - The full trip generation between 07:00 – 19:00 was included in ‘Appendix 4 – Trip Generation Projections’ of the Transport Assessment submitted in support of the planning application and the trip assignment was included in ‘Appendix 5 – Network Diagrams’ (August 2021, submitted to East Riding of Yorkshire Council).
 - The committed development vehicle trips have been split into the following time periods:
 - 07:00 – 08:00
 - 08:00 – 09:00
 - 09:00 – 10:00
 - 16:00 – 17:00

- 17:00 – 18:00
 - 18:00 – 19:00
 - The relevant Committed Development 3 hourly vehicle trip rates were then added to the relevant surveyed flow time period. Where there was an overlap of 30 minutes, then the maximum committed development peak hour vehicle trips were added to the relevant surveyed flow time period, e.g. the 08:00 – 09:00 committed development vehicle trips were added to the 07:30 – 08:30 surveyed flow peak hour and the 17:00 – 18:00 committed development vehicle trips were added to the 16:30 – 17:30 surveyed flow peak hour as vehicle trips in these time periods were higher than the 07:00 – 08:00 and 16:00 – 17:00 committed development trips.
 - Committed Development 3 also included a committed development in their assessment for a Drive Thru. The Drive Thru committed development is located within ‘Appendix 5 – Network Diagrams’ in the Transport Assessment. These committed development vehicle trip rates were also split into hourly time periods between 07:00 – 10:00 and 16:00 and 19:00. The relevant vehicle trips were then added to the relevant surveyed flow time period, following the same methodology outlined above.
- d.** Committed Development 4 - Short List ID 71 - 19/01430/STPLF – Train Manufacturing Plant
- Only vehicle trips rates for the time period 08:00 – 09:00 and 17:00 – 18:00 for Committed Development 4 are available. These flows were taken from ‘Appendix 5 – Network Diagrams’ in the Transport Assessment prepared in support of Committed Development 3, as the flows were already distributed across the M62 Junction 36 and included the residual trips associated with the GOO-L Employment allocation.
 - The 08:00 – 09:00 Committed Development 4 vehicle trips were added to each surveyed flow time period in the AM peak hour.
 - The 17:00 – 18:00 Committed Development 4 vehicle trips were added to each surveyed flow time period in the PM peak hour.
- e.** Committed Development 5 - Short List ID 72 15/00305/STOUT - Up to 838 New Homes - A164 Rawcliffe Road
- The full TRICS output between 07:00 – 19:00 was included in ‘Appendix L’ of the Transport Assessment submitted in support of the planning application (January 2015, submitted to East Riding of Yorkshire Council).
 - The committed development vehicle trips have been split into the following time periods:
 - 07:00 – 08:00

- 08:00 – 09:00
 - 09:00 – 10:00
 - 16:00 – 17:00
 - 17:00 – 18:00
 - 18:00 – 19:00
- Applying the same methodology as used to assign the Committed Development 4 flows to the surveyed flows, the relevant committed development hourly vehicle trip rates were then added to the relevant surveyed flow time period. Where there was an overlap of 30 minutes, then the maximum committed development peak hour vehicle trips were added to the relevant surveyed flow time period, e.g. the 08:00 – 09:00 committed development vehicle trips were added to the 07:30 – 08:30 surveyed flow peak hour and the 17:00 – 18:00 committed development vehicle trips were added to the 16:30 – 17:30 surveyed flow peak hour.
- a. Committed Development 6 - Erection of a building for use as B8, B1(a) and B2
- Only vehicle trip rates for the AM peak hour and the PM peak hour were available. The vehicle trip rates were taken from the Transport Assessment prepared in 2008 as part of the outline planning application for the GOO-L allocation.
 - The AM peak hour Committed Development 6 vehicle trips were added to each surveyed flow time period in the AM peak hour.
 - The PM peak hour Committed Development 6 vehicle trips were added to each surveyed flow time period in the PM peak hour.

5.2.9. Based on the disaggregation of each committed development outlined above, a summary of the traffic flows across the AM peak period and PM peak period, which combines the committed development flows and the 2026 Future Baseline flows, is shown on **Table 5.3** and **Table 5.4**, respectively.

Table 5.3 - Disaggregated 2026 Do Minimum Flows – AM Time Period

Time Period	Northern Dumbbell Roundabout	Southern Dumbbell Roundabout	Total Flows
0700 - 0800	3204	3616	6820
0715 - 0815	3403	3905	7308
0730 - 0830	3572	4143	7716
0745 - 0845	3558	4128	7687
0800 - 0900	3479	4053	7532

Time Period	Northern Dumbbell Roundabout	Southern Dumbbell Roundabout	Total Flows
0815 - 0915	3331	3875	7206
0830 - 0930	3137	3660	6796
0845 - 0945	2965	3448	6413
0900 - 1000	2831	3305	6137

Table 5.4 - Disaggregated 2026 Do Minimum Flows – PM Time Period

Time Period	Northern Dumbbell Roundabout	Southern Dumbbell Roundabout	Total Flows
1600 - 1700	3261	4115	7376
1615 - 1715	3426	4252	7678
1630 - 1730	3538	4284	7822
1645 - 1745	3535	4248	7782
1700 - 1800	3484	4161	7645
1715 - 1815	3215	3876	7091
1730 - 1830	2966	3374	6340
1745 - 1845	2651	3307	5958
1800 - 1900	2410	2926	5337

5.2.10. In summary, the 2026 Do Minimum traffic flows across the AM and PM peak hours at the M62 Junction 36 is summarised as follows:

a. Northern Dumbbell Roundabout

- 07:30 – 08:30 = 3572
- 16:30 – 17:30 = 3538

b. Southern Dumbbell Roundabout

- 07:30 – 08:30 = 4143
- 16:30 – 17:30 = 4284

c. M62 Junction 36

- 07:30 – 08:30 = 7716
- 16:30 – 17:30 = 7822

5.2.11. Overall, the analysis shows that AM and PM peak periods are still between 07:30 – 08:30 and 16:30 and 17:30, respectively, even with the addition of disaggregated committed development trips.

2026 Do Something Traffic Flows

5.2.12. To establish whether adding the development trips to the 2026 Do Minimum scenario still results in the peak periods being between 07:30 – 08:30 and 16:30 and 17:30, the Proposed Scheme development trips have also been disaggregated so that they can be assigned into each hourly period at 15-minute increments.

5.2.13. For reference, the percentage of daily inbound and out trips for the periods 06:00 – 10:00 and 16:00 – 20:00 used in the **Traffic and Transport Chapter** (APP-041) of the ES is set out in **Table 5.5** and the disaggregated percentage of daily trips is set out in **Table 5.6** for comparative purposes.

Table 5.5 - Daily Profile of Construction Workers

Time Period	% of Daily Inbound	% of Daily Outbound
06:00 – 07:00	30%	0%
07:00 – 08:00	55%	0%
08:00 – 09:00	10%	0%
09:00 – 10:00	5%	0%
16:00 – 17:00	0%	10%
17:00 – 18:00	0%	15%
18:00 – 19:00	0%	70%
19:00 – 20:00	0%	5%

Table 5.6 - Daily Profile of Construction Workers

Time Period	% of Daily Inbound	% of Daily Outbound
06:00 – 07:00	30%	0%
07:00 – 08:00	55%	0%
07:15 – 08:15	43.75%	0%
07:30 – 08:30	32.5%	0%
07:45 – 08:45	21.25%	0%

Time Period	% of Daily Inbound	% of Daily Outbound
08:00 – 09:00	10%	0%
08:15 – 09:15	8.75%	0%
08:30 – 09:30	7.5%	0%
08:45 – 09:45	6.25%	0%
09:00 – 10:00	5%	0%
16:00 – 17:00	0%	10%
16:15 – 17:15	0%	11.25%
16:30 – 17:30	0%	12.5%
16:45 – 17:45	0%	13.75%
17:00 – 18:00	0%	15%
17:15 – 18:15	0%	28.75%
17:30 – 18:30	0%	42.5%
17:45 – 18:45	0%	56.25%
18:00 – 19:00	0%	70%

- 5.2.14. Based on the disaggregated daily profile of Construction Workers in **Table 5.6**, a summary of the development trips across the AM peak period and PM peak period is shown in **Table 5.7** and **Table 5.8**, respectively.
- 5.2.15. For reference, the resultant daily vehicle profile also includes the proposed HGV movements, which are evenly profiled across the day between 07:00 – 19:00.

Table 5.7 - Development Trips – Construction Phase – Peak Month – AM Time Period

Time Period	Northern Dumbbell Roundabout	Southern Dumbbell Roundabout	Total Flows
0700 - 0800	217	47	264
0715 - 0815	183	43	226
0730 - 0830	149	38	188
0745 - 0845	116	34	150
0800 - 0900	82	29	111
0815 - 0915	78	29	107
0830 - 0930	74	29	103
0845 - 0945	71	28	99
0900 - 1000	67	28	95

Table 5.8 - Development Trips – Construction Phase – Peak Month – PM Time Period

Time Period	Northern Dumbbell Roundabout	Southern Dumbbell Roundabout	Total Flows
16:00 – 17:00	82	52	134
16:15 – 17:15	86	55	141
16:30 – 17:30	89	59	148
16:45 – 17:45	93	62	155
17:00 – 18:00	97	65	162
17:15 – 18:15	138	101	239
17:30 – 18:30	179	137	316
17:45 – 18:45	221	173	393
18:00 – 19:00	262	209	471

5.2.16. Based on the disaggregation of the development trips outlined above, a summary of the traffic flows across the AM peak period and PM peak period which combines the development flows and the 2026 Do Minimum flows is shown on **Table 5.9** and **Table 5.10**, respectively.

Table 5.9 - Disaggregated 2026 Do Something Flows – AM Time Period

Time Period	Northern Dumbbell Roundabout	Southern Dumbbell Roundabout	Total Flows
0700 - 0800	3421	3663	7084
0715 - 0815	3586	3948	7534
0730 - 0830	3722	4182	7903
0745 - 0845	3674	4162	7836
0800 - 0900	3561	4082	7643
0815 - 0915	3409	3905	7313
0830 - 0930	3211	3688	6899
0845 - 0945	3036	3476	6512
0900 - 1000	2898	3333	6231

Table 5.10 - Disaggregated 2026 Do Something Flows – PM Time Period

Time Period	Northern Dumbbell Roundabout	Southern Dumbbell Roundabout	Total Flows
1600 - 1700	3343	4167	7510
1615 - 1715	3512	4307	7819
1630 - 1730	3627	4343	7970
1645 - 1745	3628	4309	7937
1700 - 1800	3580	4226	7807
1715 - 1815	3353	3977	7330
1730 - 1830	3145	3511	6656
1745 - 1845	2871	3480	6351

Time Period	Northern Dumbbell Roundabout	Southern Dumbbell Roundabout	Total Flows
1800 - 1900	2672	3135	5807

5.2.17. In summary, the 2026 Do Something traffic flows across the AM and PM peak hours at the M62 Junction 36 is summarised as follows:

a. Northern Dumbbell Roundabout

- 07:30 – 08:30 = 3722
- 16:30 – 17:30 = 3627

b. Southern Dumbbell Roundabout

- 07:30 – 08:30 = 4182
- 16:30 – 17:30 = 4343

c. M62 Junction 36

- 07:30 – 08:30 = 7903
- 16:30 – 17:30 = 7970

5.2.18. Overall, the analysis shows that the AM and PM peak periods are still between 07:30 – 08:30 and 16:30 and 17:30, respectively. This is a minor change from what was assessed and presented in the Environmental Statement for the AM peak only, which was assessed for 7:15-8:15. On this basis, it is considered appropriate to use the 07:30 – 08:30 and 16:30 – 17:30 as the worst-case peak hours to assess the impact of the Proposed Scheme on the M62 Junction 36 for the remainder of this Technical Note.

6. M62 JUNCTION 36 – REVISED ASSESSMENT SCENARIOS

6.1. OVERVIEW

- 6.1.1. At the request of National Highways, a revised junction analysis has been undertaken using revised worst-case peak periods, as outlined in **Section 5** of this TN.
- 6.1.2. As part of reviewing the Junctions 10 model, JSJV noted that the conflict entry angle (PHI) was set at 0. This has now been adjusted to 9.5 degrees and is incorporated into the revised assessment scenarios and sensitivity tests presented in a later section of this TN.

6.2. REVISED ASSESSMENT SCENARIOS

- 6.2.1. The revised assessment scenarios include all of the scenarios assessed in the Environmental Statement with the addition of a ‘2026 Future Baseline + Development’ scenario to highlight the impact of the Proposed Scheme upon the operation of the M62 Junction 36 in isolation.

6.3. RESULTS

- 6.3.1. A summary of the revised assessment scenarios is shown in **Table 6.1**. The full output is attached as **Appendix D**.

Table 6.1 - M62 Junction 36 - Revised Assessment Scenario Results

Arm	AM Peak			PM Peak		
	Queue (PCU)	Delay (Seconds)	Max (RFC)	Queue (PCU)	Delay (Seconds)	Max (RFC)
Scenario 1 – 2018 Baseline						
Overbridge (From west to east)	1.4	3.95	0.55	1.4	3.84	0.56
M62 Southbound Off-Slip	1.6	11.19	0.60	0.7	7.88	0.39
A614 Rawcliffe Road (East)	0.5	3.24	0.33	0.7	3.24	0.40
A161	0.3	4.14	0.20	0.4	4.20	0.26
A614 Rawcliffe Road (West)	2.5	9.54	0.70	3.4	12.08	0.77

Arm	AM Peak			PM Peak		
	Queue (PCU)	Delay (Seconds)	Max (RFC)	Queue (PCU)	Delay (Seconds)	Max (RFC)
Overbridge (From east to west)	1.2	5.38	0.53	1.6	6.02	0.60
M62 Northbound Off-Slip	0.9	3.34	0.43	0.9	3.26	0.43
Scenario 2 – 2022 Baseline						
Overbridge (From west to east)	1.5	4.13	0.57	1.5	4.02	0.58
M62 Southbound Off-Slip	1.8	12.58	0.63	0.8	8.37	0.41
A614 Rawcliffe Road (East)	0.6	3.37	0.35	0.7	3.37	0.42
A161	0.3	4.27	0.21	0.4	4.35	0.27
A614 Rawcliffe Road (West)	3.0	10.81	0.74	4.1	14.28	0.80
Overbridge (From east to west)	1.3	5.60	0.55	1.7	6.33	0.62
M62 Northbound Off-Slip	1.0	3.48	0.45	1.0	3.41	0.45
Scenario 3 – 2026 Future Baseline						
Overbridge (From west to east)	1.6	4.30	0.59	1.6	4.18	0.59
M62 Southbound Off-Slip	2.1	14.06	0.66	0.9	8.86	0.43
A614 Rawcliffe Road (East)	0.6	3.49	0.36	0.8	3.50	0.43
A161	0.3	4.39	0.22	0.4	4.50	0.28

Arm	AM Peak			PM Peak		
	Queue (PCU)	Delay (Seconds)	Max (RFC)	Queue (PCU)	Delay (Seconds)	Max (RFC)
A614 Rawcliffe Road (West)	3.4	12.20	0.76	4.9	16.88	0.83
Overbridge (From east to west)	1.4	5.81	0.56	1.8	6.63	0.64
M62 Northbound Off-Slip	1.1	3.63	0.47	1.0	3.55	0.47
Scenario 4 – 2026 Future Baseline + Proposed Scheme						
Overbridge (From west to east)	1.7	4.43	0.60	1.8	4.49	0.62
M62 Southbound Off-Slip	2.4	15.48	0.69	0.9	9.44	0.45
A614 Rawcliffe Road (East)	0.6	3.58	0.37	0.8	3.63	0.44
A161	0.3	4.50	0.23	0.4	4.69	0.29
A614 Rawcliffe Road (West)	3.8	13.37	0.79	7.3	23.81	0.88
Overbridge (From east to west)	1.5	5.92	0.57	1.8	6.63	0.64
M62 Northbound Off-Slip	1.4	4.08	0.53	1.1	3.64	0.48
Scenario 5 – 2026 Do Minimum						
Overbridge (From west to east)	5.0	9.81	0.82	2.4	5.60	0.69
M62 Southbound Off-Slip	153.2	795.78	1.44	2.8	20.80	0.72
A614 Rawcliffe Road (East)	2.4	9.10	0.69	1.6	5.40	0.60

Arm	AM Peak			PM Peak		
	Queue (PCU)	Delay (Seconds)	Max (RFC)	Queue (PCU)	Delay (Seconds)	Max (RFC)
A161	0.5	5.35	0.30	1.9	9.94	0.63
A614 Rawcliffe Road (West)	104.4	289.95	1.19	101.2	267.42	1.18
Overbridge (From east to west)	1.8	6.78	0.63	7.3	19.95	0.88
M62 Northbound Off-Slip	3.4	7.62	0.74	2.2	6.22	0.65
Scenario 6 – Do Something						
Overbridge (From west to east)	5.1	9.96	0.82	2.5	5.69	0.69
M62 Southbound Off-Slip	168.4	886.46	1.48	2.8	21.29	0.72
A614 Rawcliffe Road (East)	2.4	9.26	0.69	1.6	5.57	0.61
A161	0.5	5.46	0.31	2.0	10.64	0.65
A614 Rawcliffe Road (West)	118.2	326.83	1.22	136.6	375.99	1.24
Overbridge (From east to west)	1.9	6.83	0.63	7.3	19.94	0.88
M62 Northbound Off-Slip	4.7	9.72	0.80	2.3	6.50	0.67

6.3.2. In summary, the results show that under Scenarios 1 – 3, the M62 Junction 36 would continue to operate within capacity.

6.3.3. With the inclusion of Drax Development Trips to the 2026 Future Baseline (Scenario 4), the M62 Junction 36 would continue to work within capacity, with the A614 Rawcliffe Road (West) arm beginning to approach capacity. However, the impact of the Proposed Scheme on this arm is considered to be minimal in comparison to the 2026 Future Baseline scenario (Scenario 3) as the RFC is still below 1.0 and only

increases the queue by 2 vehicles and the delay by 7 seconds in the PM Peak. The junction continues to operate within capacity in the AM peak within this scenario.

- 6.3.4. With the addition of committed development traffic to the 2026 Future Baseline scenario (Scenario 5), the junction would operate over capacity with the M62 Southbound Off-Slip and the A614 Rawcliffe Road (West) operating over capacity in the AM Peak and the A614 Rawcliffe Road (West) operating over capacity in the PM Peak. The Overbridge (from east to west) would also begin to approach capacity in the PM peak. These results are similar to those presented in in Table 5.31 of **Chapter 5 (Traffic and Transport)** (APP-041) which also illustrated that the M62 Southbound Off-Slip would operate over capacity in the AM Peak, the A614 Rawcliffe Road (East) would operate over capacity in the PM peak and the Overbridge (from east to west) arm would be approaching capacity in the PM Peak.
- 6.3.5. In the 2026 Do Something scenario (Scenario 6), the operation of the M62 Junction would slightly worsen in comparison to the 2026 Do Minimum scenario (Scenario 5), with the same arms operating over or approaching capacity. However, the impact of development traffic associated with the Proposed Scheme is minimal with:
- a. The RFC on the M62 Southbound Off-Slip only increases by 0.04 in the AM peak;
 - b. The RFC on the A614 Rawcliffe Road (West) only increases by 0.03 in the AM peak and 0.04 in the PM Peak; and
 - c. The RFC on the Overbridge (from east to west) remains unchanged.

7. M62 JUNCTION 36 – SENSITIVITY TESTING – BLOCKING BACK

7.1. OVERVIEW

- 7.1.1. As part of reviewing the Junctions 10 model, JSJV noted that the option to model blocking back between the roundabouts had not been used, and suggest that the risk of blocking back between the junctions in the future scenarios appears high, in particular, the westbound link between the junctions blocking back to the eastern junction.
- 7.1.2. As such, JSJV request that a sensitivity test is undertaken to comment on the impact of blocking back, in particular on the eastern roundabout of the dumbbell arrangement.

7.2. ADJUSTMENTS TO TRAFFIC FLOWS AND PARAMETERS

- 7.2.1. To inform the sensitivity test, JSJV suggest that the following traffic flows and parameters should be amended:
- a. Remove all U-turning vehicles;
 - b. Remove the capacity adjustment;
 - c. Limit queueing to 28 vehicles for westbound traffic; and
 - d. Limit queueing to 44 vehicles for eastbound traffic.
- 7.2.2. As part of undertaking the sensitivity test:
- a. All U-turning vehicles have been removed which is a requirement when changing the Link Type from 'Simple (vertical queueing)' to 'Queue limited'. It is worth noting that the for the purpose of this sensitivity test, all U-turning vehicles have not been re-routed as each U-turn movement would be required to undertake a U-turn at the other dumbbell roundabout to continue to their journey in the same manner which is not possible to do when limiting queue lengths in the model.
 - b. The capacity adjustment on the A614 Rawcliffe Road (West) has been removed. No capacity adjustments were present on other arms.
 - c. The internal storage space for westbound traffic was set to 28 vehicles and the internal storage space for eastbound traffic was set to 44 vehicles.

7.3. RESULTS

- 7.3.1. A summary of the sensitivity test for the scenarios '2026 Future Baseline + Development', '2026 Do Minimum' and '2026 Do Something' scenarios is set out in **Table 7.1**. The full output is attached as **Appendix E**.

Table 7.1 - M62 Junction 36 – Sensitivity Test

Arm	AM Peak			PM Peak		
	Queue (PCU)	Delay (Seconds)	Max (RFC)	Queue (PCU)	Delay (Seconds)	Max (RFC)
Scenario 4 – 2026 Future Baseline + Proposed Scheme						
Overbridge (From west to east)	1.7	4.41	0.60	1.8	4.47	0.62
M62 Southbound Off-Slip	2.4	15.32	0.69	0.9	9.37	0.45
A614 Rawcliffe Road (East)	0.6	3.56	0.37	0.8	3.61	0.44
A161	0.3	4.46	0.22	0.4	4.62	0.29
A614 Rawcliffe Road (West)	1.7	5.67	0.61	2.2	6.91	0.68
Overbridge (From east to west)	1.5	5.92	0.57	1.8	6.63	0.64
M62 Northbound Off-Slip	1.4	4.08	0.53	1.1	3.64	0.48
Scenario 5 - 2026 Do Minimum						
Overbridge (From west to east)	7.5	13.71	0.87	3.0	6.52	0.74
M62 Southbound Off-Slip	164.0	800.64	1.58	3.3	24.89	0.75
A614 Rawcliffe Road (East)	2.4	9.35	0.69	1.5	5.34	0.59
A161	0.5	5.08	0.29	1.6	9.05	0.60
A614 Rawcliffe Road (West)	5.8	18.33	0.85	5.8	17.65	0.85

Arm	AM Peak			PM Peak		
	Queue (PCU)	Delay (Seconds)	Max (RFC)	Queue (PCU)	Delay (Seconds)	Max (RFC)
Overbridge (From east to west)	1.7	6.56	0.61	7.3	19.93	0.88
M62 Northbound Off-Slip	3.4	7.42	0.74	2.1	6.22	0.65
Scenario 6 – 2026 Do Something						
Overbridge (From west to east)	8.2	14.99	0.88	3.5	7.26	0.76
M62 Southbound Off-Slip	185.4	971.30	1.65	3.9	29.58	0.79
A614 Rawcliffe Road (East)	2.5	9.61	0.70	1.6	5.66	0.61
A161	0.5	5.18	0.29	1.8	9.85	0.62
A614 Rawcliffe Road (West)	6.7	20.80	0.87	8.6	24.92	0.90
Overbridge (From east to west)	1.7	6.56	0.61	7.3	19.88	0.88
M62 Northbound Off-Slip	4.5	9.35	0.79	2.3	6.49	0.67

7.3.2. In summary, the sensitivity test illustrates that the roundabout would operate within capacity in Scenario 4, but would operate over capacity in Scenarios 5 and 6.

7.3.3. Notwithstanding this, in relation to the queuing on the overbridge, in the worst-case 2026 Do Something Scenario, the following queues are predicted:

a. Overbridge (from west to east)

- AM Peak – 8.2 PCUs
- PM Peak – 3.5 PCUs

b. Overbridge (from east to west)

- AM Peak – 1.7 PCUs
- PM Peak – 7.3 PCUs

- 7.3.4. Overall, while the junction itself would operate over capacity in the future scenarios, the sensitivity test suggests that blocking is unlikely to occur between each dumbbell roundabout.

8. M62 JUNCTION 36 – WITH IMPROVEMENT SCHEME

8.1. OVERVIEW

- 8.1.1. National Highways requested that the Proposed Scheme be assessed with a proposed improvement in place “the proposed highway improvement scheme” for the Do Minimum and Do Something scenarios.
- 8.1.2. For reference, the proposed highway improvement scheme refers to the scheme listed within the East Riding Infrastructure Study (2014) and the plans included within Appendix G of Appendix E within the study.

8.2. MODELS

- 8.2.1. There are two models which have been developed to model the proposed highway improvement scheme at the M62 Junction 36, comprising:
- a. Junctions 10 Model
 - This model covers the northern roundabout, where it is proposed to sign both approach lanes on the A614 Rawcliffe Road (West) for straight ahead movements and reducing the size of the island on the Overbridge (from west to east) so that the exit lane can be widened to provide two lanes.
 - b. LinSig Model
 - Signalise the M62 Southbound Off-Slip and the A614 Rawcliffe Road overbridge arm (from west to east); and
 - Stop-up the circulatory carriageway of the roundabout at the A614 Rawcliffe Road overbridge arm so that all roundabout traffic that does not exit before then must exit at the overbridge arm.
- 8.2.2. WSP have obtained these models from East Riding of Yorkshire Council’s and National Highways transport consultants appointed to oversee a proposed highway improvement scheme at the M62 Junction 36.

8.3. SCHEME STATUS

- 8.3.1. It is understood that contributions have started to be collected but remain short of the cost of the scheme. Therefore, although committed within the ERYC Local Plan, timescales for delivery are not committed.
- 8.3.2. We are aware that National Highways have obtained a Section 106 contribution from development ‘Short List 44’ which is to be put towards the costs of design, costing and construction of the required improvements M62 Junction 36.
- 8.3.3. We are also aware that National Highways sought financial contributions from development ‘Short List ID 99’, however withdrew their Holding Direction as the scheme was already contributing to the Airmyn Road roundabout works.

- 8.3.4. It is also understood that National Highways are investigating the potential to seek a financial contribution from development 'Short List ID 100' in relation to the junction improvement scheme.
- 8.3.5. As part of your review of this Technical Note, please could you provide any further information on the status of the scheme and potential timelines for delivery.

8.4. ASSESSMENT SCENARIOS

- 8.4.1. As requested, the 2026 Do Minimum and 2026 Do Something scenarios have been assessed in both models. In addition to this and following the methodology for assessing the existing layout of the M62 Junction 26, a '2026 Future Baseline + Development' scenario has also been included to highlight the impact of the Proposed Scheme upon the proposed highway improvement scheme to the M62 Junction 36 in isolation.

8.5. RESULTS – NORTHERN ROUNDABOUT

- 8.5.1. A summary of the revised assessment scenarios for the northern roundabout of the M62 Junction 36 is set out in **Table 8.1**. The full output is attached as **Appendix F**.

Table 8.1 - M62 Junction 36 - Revised Assessment Scenario Results

Arm	AM Peak			PM Peak		
	Queue (PCU)	Delay (Seconds)	Max (RFC)	Queue (PCU)	Delay (Seconds)	Max (RFC)
Scenario 3 – 2026 Future Baseline						
Overbridge (From east to west)	2.4	9.73	0.69	3.7	13.23	0.78
M62 Northbound Off-Slip	2.7	8.97	0.69	2.5	8.98	0.69
A614 Rawcliffe Road (West)	2.0	6.85	0.64	2.4	8.10	0.70
Scenario 4 – 2026 Future Baseline + Proposed Scheme						
Overbridge (From east to west)	2.5	10.07	0.70	3.7	13.23	0.78
M62 Northbound Off-Slip	4.0	12.20	0.77	2.8	9.54	0.71

Arm	AM Peak			PM Peak		
	Queue (PCU)	Delay (Seconds)	Max (RFC)	Queue (PCU)	Delay (Seconds)	Max (RFC)
A614 Rawcliffe Road (West)	2.1	7.21	0.66	3.0	9.49	0.74
Scenario 5 - 2026 Do Minimum						
Overbridge (From east to west)	6.6	22.07	0.87	116.8	303.43	1.16
M62 Northbound Off-Slip	115.0	226.08	1.15	13.3	40.48	0.94
A614 Rawcliffe Road (West)	8.9	28.50	0.90	14.0	42.91	0.95
Scenario 6 – 2026 Do Something						
Overbridge (From east to west)	7.2	23.79	0.88	116.8	303.43	1.16
M62 Northbound Off-Slip	181.3	396.97	1.24	16.9	49.78	0.96
A614 Rawcliffe Road (West)	8.5	26.56	0.90	26.6	72.11	1.00

8.5.2. In summary, the northern roundabout would operate within capacity in Scenario 4 (2026 Future Baseline + Proposed Scheme). As shown in **Table 8.1**, the addition of the committed development traffic without and with the Proposed Scheme development trips illustrates that the junction would operate over capacity as a result of that committed development traffic even with the proposed highway improvement scheme in place.

8.5.3. However, the impact of development traffic associated with the Proposed Scheme between Scenario 5 and Scenario 6 is minimal with:

- a. The RFC on the Overbridge (from east to west) increases by just 0.01 in the AM peak and remains unchanged in the PM peak;
- b. The RFC on the M62 Northbound Off-Slip increases by 0.09 in the AM peak and only 0.02 in the PM peak; and
- c. The RFC on the A614 Rawcliffe Road (West) remains unchanged in the AM peak and increasing by 0.05 in the PM peak.

8.5.4. Overall, changes in RFC values at this level, particularly in the context that RFC values above 1.00 become unreliable due to the logarithmic and exponential growth in results, is not considered to result in a significant change of impact.

8.6. RESULTS – SOUTHERN ROUNDABOUT

8.6.1. A summary of the revised assessment scenarios for the southern roundabout of the M62 Junction 36 is set out in **Table 8.2**. The full output is attached as **Appendix G**.

Table 8.2 - M62 Junction 36 Improvement Scheme – Southern Roundabout Results

Scenario	Cycle Time (s)	PRC (%)	Delay (pcuHr)
Scenario 3 - 2026 Future Baseline AM	45	23.6	12.28
Scenario 3 - 2026 Future Baseline PM	45	22.5	11.43
Scenario 4 - 2026 Future Baseline + Development AM	45	19.2	12.95
Scenario 4 - 2026 Future Baseline + Development PM	45	14.4	13.09
Scenario 5 - 2026 Do Minimum AM	45	-90.6	455.21
Scenario 5 - 2026 Do Minimum PM	45	-27.1	166.77
Scenario 6 - 2026 Do Something AM	45	-94.4	477.43
Scenario 6 - 2026 Do Something PM	45	-31.4	180.75

8.6.2. In summary, the southern roundabout would operate within capacity in Scenario 4 (2026 Future Baseline + Proposed Scheme). As shown in **Table 8.2**, the addition of the committed development traffic without and with the Proposed Scheme development trips illustrates that the junction would operate over capacity.

8.6.3. However, the impact of development traffic associated with the Proposed Scheme between Scenario 5 and Scenario 6 is minimal with the PRC reducing by 3.8% across the junction in the AM peak period and by 4.3% in the PM peak.

8.6.4. Overall, changes in PRC values at this level, particularly in the context that PRC values below 0% become unreliable due to the logarithmic and exponential growth in the results is not considered to result in a significant change of impact.

9. ALTERNATIVE DEMAND ASSESSMENT - FUTURE REVIEW OF COMMITTED DEVELOPMENTS AND TRAFFIC GROWTH BETWEEN 2018 TO 2022

9.1. OVERVIEW

9.1.1. In addition to the sensitivity tests undertaken and presented above, a further review of the complex development phasing of the key land use contributors to future demand at Junction 36 has been undertaken to present a scenario which is more likely, based on recent information obtained in relation to each development. A new sensitivity test has been undertaken with these new assumptions applied, and to account for no growth in background traffic between 2018-2022.

9.2. COMMITTED DEVELOPMENT REVIEW

9.2.1. The rationale for undertaking this review is presented in **Table 9.1** for each development, which outlines what is assumed in all the modelling to date and what is a more realistic profile of traffic from each development with justification presented for each committed development.

Table 9.1 – Review of Committed Developments – Summary

Current Robust Assumptions	More Realistic Assumptions	Traffic Flow Comparisons
Short List ID 2 - 2019/1343/EIA – Eggborough Demolition Works and Redevelopment		
There are no vehicle trips associated with this committed development that are predicted to use the M62 Junction 36 and therefore, no vehicle trips are routed through the junction.	As there are no vehicle trips routed through the junction, no further amendments have been made.	Zero two-way vehicle trips through the junction in the AM peak hour and PM peak hour with the current robust assumptions applied. Zero two-way vehicle trips through the junction in the AM and PM peak hours with more realistic assumptions applied.
Short List ID 6 – Barlow Mound Resource Recovery Operations		
Currently included within the assumptions as it may come forward and cross over with the peak	Removed from the assessments as a planning application has yet to be submitted and so cannot at	A total of 15 two-way HGV trips (35 PCUs) were included as using the M62 Junction 36 in the AM and

Current Robust Assumptions	More Realistic Assumptions	Traffic Flow Comparisons
construction month of August 2026.	this stage be a 'Committed Development.	PM peak periods with the current robust assumptions applied. These would be removed with the more realistic assumptions.
Short List ID 44 - 21/03027/STPLF - Erection of Employment Units – Rawcliffe Road Airmyn		
<p>The 08:00 – 09:00 vehicle trips were added to the surveyed AM peak hour and the 17:00 – 18:00 vehicle trips were added to the surveyed PM peak hour.</p> <p>Short List ID 44 also included a committed development for a Drive-Thru. The 08:00 – 09:00 vehicle trips were added to the surveyed AM peak hour and the 17:00 – 18:00 vehicle trips were added to the surveyed PM peak hour.</p>	No change to these assumptions have been made.	A total of 122 two-way vehicle trips were included as using the M62 junction in the AM peak hour and 111 two-way vehicle trips in the peak hour with the current robust assumptions applied. These flows remain unchanged.
Short List ID 71 - 19/01430/STPLF – Train Manufacturing Plant		
Only vehicle trips for the time period 08:00 – 09:00 and 17:00 – 18:00 are available which account for the Train Manufacturing Plant plus residual vehicle trips associated with the wider outline 2008 planning approval for GOO-L.	No change to these assumptions have been made.	A total of 1394 two-way vehicle trips were included as using the M62 junction in the AM peak hour and 1346 two-way vehicle trips in the peak hour with the current robust assumptions applied. These flows remain unchanged.
Short List ID 72 15/00305/STOUT - Up to 838 New Homes - A164 Rawcliffe Road		

Current Robust Assumptions	More Realistic Assumptions	Traffic Flow Comparisons
<p>The 08:00 – 09:00 vehicle trips were added to the surveyed AM peak hour and the 17:00 – 18:00 vehicle trips were added to the surveyed PM peak hour.</p>	<p>A recent reserved matters application has been submitted for 600 dwellings of the 838 dwellings. Therefore on the basis that only a maximum of approximately 200 dwellings has come forward to date and it is likely that only a further 150 dwellings (assuming a build out rate of 50 dwellings per year) would be constructed by 2026, the total vehicle trips has reduced to reflect a reduction of 838 dwellings to approximately 350 dwellings.</p>	<p>A total of 266 two-way were included as using the M62 Junction 36 in the AM peak hour and 326 two-way trips in the PM peak periods with the current robust assumptions applied.</p> <p>With more realistic assumptions applied, these flows have reduced to 117 two-way vehicle trips in the AM peak hour and 150 two-way vehicle trips in the PM peak hour.</p>
<p>Short List ID 73 18/03879/STREM - Erection of a building for use as B8, B1(a) and B2.</p>		
<p>Only vehicle trip rates for the AM peak hour and the PM peak hour were available. The vehicle trip rates were taken from the Transport Assessment prepared in 2008 as part of the outline planning application for the GOO-L allocation.</p>	<p>All vehicle trips associated with this committed development have been removed as Short List ID 71 includes all trips associated with Short List ID 73.</p> <p>ID 73 was for B8 Distribution use with a floor area of 69,916sqm. This was already included as part of the 112,440sqm of B2 / B8 in the Siemens Transport Assessment (ID 71). Therefore, this committed development</p>	<p>A total of 253 two-way were included as using the M62 Junction 36 in the AM peak hour and 242 two-way trips in the PM peak periods with the current robust assumptions applied.</p> <p>All vehicle trips have been removed with more realistic assumptions applied.</p>

Current Robust Assumptions	More Realistic Assumptions	Traffic Flow Comparisons
	has been removed on the basis that it has been double counted.	

9.2.2. In addition to the above committed developments, the outline 2008 planning consent for the GOO-L allocation also included vehicle trips associated with:

- a. Car Showroom (1,208 sqm);
- b. A3 / A4 / A5 Land Uses (1,050 sqm); and
- c. A hotel (100 beds).

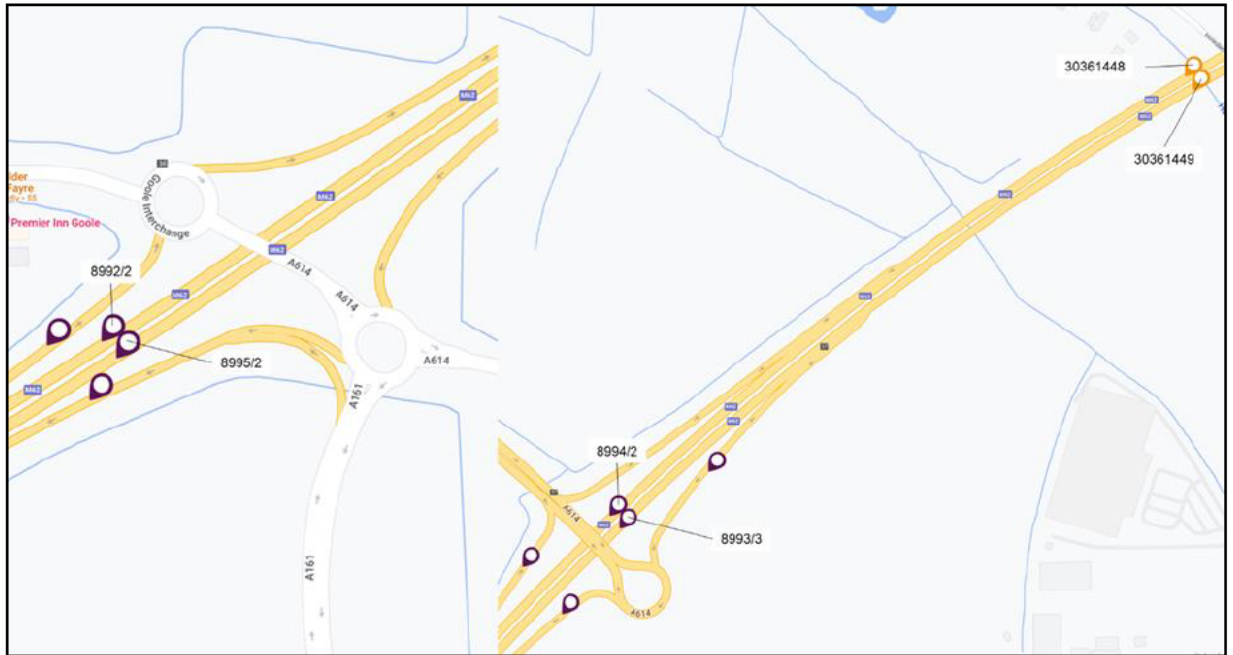
9.2.3. There is no remaining permitted development area within the GOO-L allocation, vehicle trips previously associated with each of the above bulleted land uses have been removed.

9.3. ACCOUNTING FOR NO GROWTH BETWEEN 2018 TO 2022

9.3.1. WSP have undertaken a review of traffic flows in the local area using data available from WebTRIS. The counters used in the review are illustrated on **Plate 9.1** and summarised as follows:

- a. 8992/2 – M62 Eastbound (Within Junction 36);
- b. 8995/2 – M62 Westbound (Within Junction 36);
- c. 8994/2 – M62 Eastbound (Within Junction 37);
- d. 8993/3 – M62 Westbound (Within Junction 37);
- e. 30361448 – M62 Eastbound (Between Junction 37 and 38); and
- f. 30361449 – M62 Westbound (Between Junction 37 and 38).

Plate 8.1 – WebTRIS Traffic Counter Locations



9.3.2. An overview of the changes in traffic flows at each counter is shown between **Table 9.2 - Table 9.7**. Each table includes the following Annual Daily Traffic (ADT) flows to provide a range of flows that can typically be expected to occur on the network:

- a. Peak daily flow – the maximum recorded ADT across any given day in that year;
- b. Maximum ADT – the maximum recorded monthly ADT in that year;
- c. Minimum ADT – the minimum recorded monthly ADT in that year; and
- d. Average ADT – the average of all monthly ADTs recorded in that year.

9.3.3. The full review of the WebTRIS data is included within **Appendix H**.

Table 9.2 – Counter 8992/2 – 2018 – 2022 Traffic Flows

Year	Peak Daily Flow	Maximum ADT (Month)	Minimum ADT (Month)	Average ADT (Month)
2018*	24,739	19,588	17,171	18,654
2019*	20,783	17,021	16,181	16,601
2020*	19,195	14,869	14,869	14,869
2021*	N/A	N/A	N/A	N/A
2022*	20,873	17,472	17,472	17,472
% 2018-2022	-15.6%	-10.8%	+1.8%	-6.3%

Year	Peak Daily Flow	Maximum ADT (Month)	Minimum ADT (Month)	Average ADT (Month)
2018* - data ranges from February to July inclusive.				
2019* - data ranges from November to December Inclusive.				
2020* - only includes January.				
2021* - no data available.				
2022* - only includes May.				

Table 9.3 – Counter 8995/2 – 2018 – 2022 Traffic Flows

Year	Peak Daily Flow	Maximum ADT (Month)	Minimum ADT (Month)	Average ADT (Month)
2018	27,830	23,413	18,150	20,990
2019	26,199	23,351	18,246	21,059
2020	25,311	20,647	6,727	15,903
2021	27,835	23,100	11,160	18,398
2022*	25,306	22,023	16,615	19,814
% 2018-2022	-9.1%	-5.9%	-8.5%	-5.6%
2022* - data ranges from January – November inclusive.				

Table 9.4 – Counter 8994/2 – 2018 – 2022 Traffic Flows

Year	Peak Daily Flow	Maximum ADT (Month)	Minimum ADT (Month)	Average ADT (Month)
2018	24,235	19,011	15,016	17,260
2019	23,259	18,576	15,152	17,083
2020	22,358	16,492	5735	12,871
2021	23,349	16,865	9,350	14,382
2022*	20,501	16,162	11,745	14,324
% 2018-2022	-15.4%	-15.0%	-21.8%	-17.0%
2022* - data ranges from January – April inclusive.				

Table 9.5 – Counter 8993/3 – 2018 – 2022 Traffic Flows

Year	Peak Daily Flow	Maximum ADT (Month)	Minimum ADT (Month)	Average ADT (Month)
2018*	20,622	18,230	15,065	17,156
2019	21,336	18,297	15,261	17,303
2020*	24,670	16,839	5,747	12,573
2021	20,220	18,148	9,614	14,769
2022*	19,880	17,133	5,721	14,052
% 2018-2022	-3.6%	-6.0%	-62.0%	-18.1%
2018* - data ranges from September – December inclusive. 2020* and 2022* - data ranges from January – July inclusive.				

Table 9.6 – Counter 30361448 – 2018 – 2022 Traffic Flows

Year	Peak Daily Flow	Maximum ADT (Month)	Minimum ADT (Month)	Average ADT (Month)
2018	27,384	21,872	17,369	19,959
2019	26,386	21,978	18,053	20,114
2020	25,424	19,007	6,457	15,263
2021*	25,891	18,833	11,159	15,699
2022*	22,244	19,611	15,486	17,946
% 2018-2022	-18.8%	-10.3%	-10.8%	-10.1%
2021* - September is excluded from this data. 2022* - data ranges from January – July inclusive.				

Table 9.7 – Counter 30361448 – 2018 – 2022 Traffic Flows

Year	Peak Daily Flow	Maximum ADT (Month)	Minimum ADT (Month)	Average ADT (Month)
2018	24,665	21,043	12,051	18,345

Year	Peak Daily Flow	Maximum ADT (Month)	Minimum ADT (Month)	Average ADT (Month)
2019	23,696	21,820	12,263	18,826
2020	21,901	18,261	6,605	11,461
2021*	22,398	19,993	5,186	14,035
2022*	N/A	N/A	N/A	N/A
% 2018-2021	N/A	N/A	N/A	N/A

2018* - data - March is excluded from the data.
2019* - data ranges from January to November inclusive.
2020* - data ranges from March to August inclusive and includes December.
2021* - data ranges from January to July inclusive.
2022* - no data available.

9.3.4. Overall, the data in **Table 9.2** to **Table 9.7** illustrate that traffic flows have reduced across all counters between 2018 and 2022. The reduction is in the range of -5% to – 18% for the average month ADT. To date, this reduction in overall traffic flows has not been accounted for within the junction modelling, indeed our assumptions have applied the opposite with additional growth on 2018 traffic counts to create the 2022 baseline (approximately %3.5). This methodology was agreed as appropriate during the scoping stages of the Transport Assessment with National Highways and the Local Authorities as data was not readily available during COVID19 and the subsequent recovery period. The combination of a reduction in observed traffic between 2018 – 2022, and the application of traffic growth assumptions to the 2018 traffic data is therefore an overly robust assumption, with an overstatement of traffic in the 2022 baseline. It should be noted that it was agreed with National Highways that the use of 2018 traffic counts (and subsequent growth applied to create 2022 flows) was a more robust approach than collecting new data in a ‘post covid’ era.

9.3.5. The broad reduction in annual daily traffic flows in this area (between -5% to –18%) is likely to be considerably more than the additional vehicle trips that the Proposed Scheme is predicted to generate in the peak month (see **Table 5.7** and **Table 5.8**). On this basis, it is considered that the impact of the Proposed Scheme on the operation of the M62 Junction 36 and the M62 would be no worse than how the junction operated in 2018, albeit without taking in to account the levels of committed development that are predicted to come forward.

9.4. RESULTS OF THE MORE REALISTIC ALTERNATIVE DEMAND SCENARIO

- 9.4.1. Based on a further review of the committed developments, as outlined in Section 9.2, the existing layout of the M62 Junction 36 has been modelled again to account for this review. Note this review does not account for the reductions in traffic flows since 2018 as outlined in Section 9.3. The traffic flow diagrams associated with this review are attached at **Appendix I**.
- 9.4.2. A summary of these results is set out in **Table 9.8** and the full output is attached at **Appendix J**.

Table 9.8 - M62 Junction 36 – Further Review of Committed Development Scenario Results

Arm	AM Peak			PM Peak		
	Queue (PCU)	Delay (Seconds)	Max (RFC)	Queue (PCU)	Delay (Seconds)	Max (RFC)
Scenario 2 – 2022 Baseline						
Overbridge (From west to east)	1.4	3.95	0.55	1.4	3.84	0.56
M62 Southbound Off-Slip	1.6	11.19	0.60	0.7	7.87	0.39
A614 Rawcliffe Road (East)	0.5	3.24	0.33	0.7	3.24	0.40
A161	0.3	4.14	0.20	0.4	4.20	0.26
A614 Rawcliffe Road (West)	2.5	9.55	0.70	3.4	12.07	0.77
Overbridge (From east to west)	1.2	5.38	0.53	1.6	6.02	0.60
M62 Northbound Off-Slip	0.9	3.34	0.43	0.9	3.27	0.43
Scenario 3 – 2026 Future Baseline						
Overbridge (From west to east)	1.5	4.10	0.57	1.5	3.99	0.57

Arm	AM Peak			PM Peak		
	Queue (PCU)	Delay (Seconds)	Max (RFC)	Queue (PCU)	Delay (Seconds)	Max (RFC)
M62 Southbound Off-Slip	1.8	12.31	0.63	0.8	8.30	0.41
A614 Rawcliffe Road (East)	0.6	3.35	0.35	0.7	3.35	0.41
A161	0.3	4.35	0.21	0.4	4.50	0.28
A614 Rawcliffe Road (West)	3.2	11.46	0.75	5.5	18.42	0.85
Overbridge (From east to west)	1.4	5.67	0.55	1.7	6.28	0.62
M62 Northbound Off-Slip	1.2	3.87	0.51	1.0	3.47	0.46
Scenario 4 – 2026 Future Baseline + Proposed Scheme						
Overbridge (From west to east)	1.6	4.22	0.58	1.7	4.27	0.60
M62 Southbound Off-Slip	2.0	13.45	0.65	0.8	8.81	0.42
A614 Rawcliffe Road (East)	0.6	3.43	0.35	0.8	3.48	0.42
A161	0.3	4.35	0.21	0.4	4.50	0.28
A614 Rawcliffe Road (West)	3.2	11.46	0.75	5.5	18.42	0.85
Overbridge (From east to west)	1.4	5.67	0.55	1.7	6.28	0.62
M62 Northbound Off-Slip	1.2	3.87	0.51	1.0	3.47	0.46
Scenario 5 – 2026 Do Minimum						

Arm	AM Peak			PM Peak		
	Queue (PCU)	Delay (Seconds)	Max (RFC)	Queue (PCU)	Delay (Seconds)	Max (RFC)
Overbridge (From west to east)	4.2	8.48	0.79	2.1	5.16	0.66
M62 Southbound Off-Slip	72.6	327.66	1.23	1.6	13.88	0.59
A614 Rawcliffe Road (East)	1.5	6.78	0.59	1.3	4.81	0.56
A161	0.4	4.91	0.27	1.3	7.81	0.54
A614 Rawcliffe Road (West)	33.3	102.23	1.03	25.4	78.83	1.00
Overbridge (From east to west)	1.6	6.16	0.59	4.3	12.48	0.81
M62 Northbound Off-Slip	2.4	5.73	0.66	1.5	4.74	0.56
Scenario 6 – Do Something						
Overbridge (From west to east)	4.3	8.70	0.79	2.3	5.36	0.67
M62 Southbound Off-Slip	82.1	387.35	1.26	1.7	14.45	0.60
A614 Rawcliffe Road (East)	1.6	6.89	0.59	1.4	4.99	0.57
A161	0.4	5.00	0.27	1.4	8.29	0.56
A614 Rawcliffe Road (West)	43.4	125.92	1.05	50.0	134.68	1.07
Overbridge (From east to west)	1.6	6.20	0.59	4.3	12.48	0.81
M62 Northbound Off-Slip	3.1	6.86	0.72	1.6	4.90	0.58

9.4.3. This alternative scenario presents an overall reduction in expected impacts at J36, however, the 2026 Do Minimum scenario still indicated some arms would operate over capacity, with the 2026 Do Something scenario worsening this, despite relatively small increases in actual trip numbers.

9.5. RESULTS OF THE MORE REALISTIC ALTERNATIVE DEMAND SCENARIO WITH IMPROVEMENT SCHEME

9.5.1. This demand has also been tested with the proposed highway improvement scheme with the following results for Scenario 5 and 6 which is summarised in **Table 9.9** and **Table 9.10**. The full output for the northern roundabout is attached at **Appendix K** and the full output for the southern roundabout is attached at **Appendix L**.

Table 9.9 - M62 Junction 36 Northern Roundabout – Alternative Demand with Highway Improvement Scenario Results

Arm	AM Peak			PM Peak		
	Queue (PCU)	Delay (Seconds)	Max (RFC)	Queue (PCU)	Delay (Seconds)	Max (RFC)
Scenario 5 - 2026 Do Minimum						
A614 (Overbridge)	4.0	14.21	0.79	57.1	135.25	1.07
M62 Northbound Off-slip	31.0	73.65	1.00	5.9	19.46	0.84
A614 Rawcliffe Road (West)	5.1	17.26	0.83	5.4	17.48	0.84
Scenario 6 – 2026 Do Something						
A614 (Overbridge)	4.2	14.90	0.80	57.1	135.25	1.07
M62 Northbound Off-slip	80.0	159.02	1.09	6.8	22.23	0.87
A614 Rawcliffe Road (West)	5.2	16.88	0.83	7.9	24.76	0.89

Table 9.10 - M62 Junction 36 Improvement Scheme Southern Roundabout - Alternative Demand with Highway Improvement Scenario Results

Scenario	Cycle Time (s)	PRC (%)	Delay (pcuHr)
Scenario 5 - 2026 Do Minimum AM	45	-61.8	277.53
Scenario 5 - 2026 Do Minimum PM	45	-14.7	62.16
Scenario 6 - 2026 Do Something AM	45	-65.4	299.14
Scenario 6 - 2026 Do Something PM	45	-19.6	80.77

9.5.2. It can be seen that with the proposed improvement scheme in place, the RFC and PRC are significantly improved, and the impacts on queues and delays are far less than the results with the overly robust assumptions.

10. IMPACT OF THE PROPOSED SCHEME ON THE M62 JUNCTION 36 AND THE PROPOSED MANAGEMENT OF IMPACTS

10.1. OVERVIEW

- 10.1.1. The previous sections present a range of potential impacts at M62 J36, including the results of a more realistic demand scenario in 2022 and 2026, and the positive impact of the proposed improvement scheme. The results show that with the more realistic demand, combined with the improvement option, the cumulative impacts of the Proposed Scheme and other developments are considerably lower than previously stated in Section 5.9 of the Environmental Statement Chapter 5 (Traffic and Transport) (APP-041).
- 10.1.2. Having established the range of impacts in these years, and considering that the impacts could reduce further still as 2022 traffic levels are actually lower than 2018 by between 5%-18% (**Table 9.2 to Table 9.7**), the Applicant's proposed approach to monitor and manage the impacts of our Proposed Scheme through a framework CWTP (REP-013) and outline CTMP (REP-011) is considered a reasonable and practical approach to managing potential impacts at M62 J36.
- 10.1.3. To support this, the following factors have been considered:
- a. Traffic between 2018 – 2022 has reduced by between 5%-18% (12 hour average month) (see Section 9.3),
 - b. There is uncertainty around the committed developments that are coming forward that could reduce the future impacts (see Section 9.2);
 - c. The Proposed Schemes' development trips represent a low percentage of the 2026 Future Baseline and 2026 Do Minimum trips (see Section 10.2);
 - d. The operation of the M62 Junction 36 without other committed developments and with the proposed Scheme is within accepted operational standards (see Section 6.3 and 7.3);
 - e. The month of the peak construction related traffic trips is 25% higher than the average for 2026. This demonstrates that the spike in trips is of a very short duration, with the shoulder years having a much lower trip generation (see Section 10.3).
 - f. The peak number of trips has been derived from the 'Parallel Build Out Option' (Option 2), of the Proposed Scheme; and although this provides greater flexibility to deliver the scheme, the Sequential Build (Option 1) may be delivered, which would result in a lower level of traffic (~50% trips) (see Section 10.4).
 - g. Construction traffic can be monitored and managed in an agile way to reflect the prevailing traffic conditions at the time of construction through a CWTP and CMTP.

10.2. IMPACT OF PROPOSED SCHEME ON TRAFFIC FLOWS

10.2.1. A comparison of the Proposed Scheme trips against the 2026 Future Baseline and 2026 Do Minimum scenarios is set out in **Table 10.1** and **Table 10.2**, respectively.

Table 10.1 - M62 Junction 36 – 2026 Future Baseline Scenario

Time Period	2026 Future Baseline Trips	Proposed Scheme Trips	Proposed Scheme Trips as a % of 2026 Future Baseline Trips
0700 - 0800	4843	264	5%
0715 - 0815	5331	226	4%
0730 - 0830	5577	188	3%
0745 - 0845	5548	150	3%
0800 - 0900	5393	111	2%
0815 - 0915	5068	107	2%
0830 - 0930	4658	103	2%
0845 - 0945	4388	99	2%
0900 - 1000	4112	95	2%
1600 - 1700	5285	134	3%
1615 - 1715	5586	141	3%
1630 - 1730	5685	148	3%
1645 - 1745	5645	155	3%
1700 - 1800	5508	162	3%
1715 - 1815	4954	239	5%
1730 - 1830	4203	316	8%
1745 - 1845	3946	393	10%
1800 - 1900	3325	471	14%

Table 10.2 - M62 Junction 36 – 2026 Do Minimum Scenario

Time Period	2026 Do Minimum Trips	Proposed Scheme Trips	Proposed Scheme Trips as a % of 2026 Do Minimum Trips
0700 - 0800	6820	264	4%
0715 - 0815	7308	226	3%
0730 - 0830	7716	188	2%
0745 - 0845	7687	150	2%
0800 - 0900	7532	111	1%
0815 - 0915	7206	107	1%
0830 - 0930	6796	103	2%
0845 - 0945	6413	99	2%
0900 - 1000	6137	95	2%
1600 - 1700	7376	134	2%
1615 - 1715	7678	141	2%
1630 - 1730	7822	148	2%
1645 - 1745	7782	155	2%
1700 - 1800	7645	162	2%
1715 - 1815	7091	239	3%
1730 - 1830	6340	316	5%
1745 - 1845	5958	393	7%
1800 - 1900	5337	471	9%

- 10.2.2. In the 2026 Future Baseline scenario, the addition of the Proposed Scheme trips would equate to 3% of vehicles through the M62 Junction 36 between 07:30 – 08:30 and 16:30 – 17:30.
- 10.2.3. In the 2026 Do Minimum scenario, the addition of the Proposed Scheme trips would equate to 2% of vehicles through the M62 Junction 36 between 07:30 – 08:30 and 16:30 – 17:30.

10.2.4. On this basis, it is considered that development trips associated with the Proposed Scheme in the worst-cast peak hour does not contribute significantly to the overall total flows at the dumbbell roundabouts of the M62 Junction 36.

10.3. DURATION OF THE PEAK CONSTRUCTION RELATED TRAFFIC TRIPS

10.3.1. The assessed worst case peak of construction traffic was taken from the month with the highest combined number of workers and HGV trips. This was predicted to be in August 2026 as forecasted in the Schedule Planner, where 1,000 workers would be required to construct the Proposed Scheme during the parallel build option (as shown in **Table 10.3**). Full details are available in the **Schedule Planner (Appendix 5.5 (APP-123))** which was submitted as part of the DCO Application.

Table 10.3 – Schedule Planner – Parallel Build Out Option – Peak Workers during 2026

	Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec
Workers	705	710	730	600	650	825	925	1000	835	680	680	430
Trips (AM 1 hour)	98	99	102	84	91	115	129	139	116	95	95	60
Trips PM (1 hour)	38	38	39	32	35	44	50	54	45	36	36	23
Average Trips 2026	AM – 102 (730 workers) PM – 39 (730 workers)											

10.3.2. As shown in **Table 10.3**, the peak number of trips assessed (August 2026) is 25% higher than the average trips for all months of 2026.

Table 10.4 – Schedule Planner – Average Daily Workers and Trips per month 2025 - 2027

	2025 AM	2025 PM	2026 AM	2026 PM	2027 AM	2027 PM
Average Workers	539		731		174	
Average Trips	75	29	102	39	24	9

- 10.3.3. In the context of the wider construction programme (**Table 10.4**), the peak period assessed (Aug 2026) is significantly higher than the average number of trips generated for the shoulder years of the construction programme. There are approximately 50% fewer trips in 2025 and 80% fewer trips in 2027, when compared to 2026.
- 10.3.4. Given the highly temporary nature of the peak in 2026, it is considered appropriate that the management of traffic through the framework CWTP and outline CTMP provides the flexibility to manage traffic in the context of the prevailing traffic conditions at the time of construction.

10.4. BUILD OUT OF THE PROPOSED SCHEME

- 10.4.1. Two options are being considered for the construction phase of the Proposed Scheme, which are summarised as follows:
- a. Option 1 ('Sequential' Programme): The Carbon Capture Plant associated with Unit 2 is programmed to be constructed first along with the Common Plant, with the Carbon Capture Plant associated with Unit 1 to follow sequentially; and
 - b. Option 2 ('Parallel' Programme): The Carbon Capture Plant associated with Unit 1 and Unit 2 as well as the Common Plant to be constructed at the same time.
- 10.4.2. All assessment scenarios have assessed Option 2 as the worst case for traffic and transport as Option 2 is predicted to generate a greater number of vehicle movements during the peak construction year than the corresponding peak construction year in Option 1. However, the Sequential Build may ultimately be the preferred delivery route, which would result in a lower peak of traffic than that assessed (circa 50% lower trips on average). **Table 10.5** shows the equivalent workers and trips generated for Option 1 (Sequential Build) to compare with **Table 10.4**.

Table 10.5 – Schedule Planner – Average Trips during peak periods throughout the construction programme (Sequential Build – Option 1)

	2025 AM	2025 PM	2026 AM	2026 PM	2027 AM	2027 PM
Average Workers	409		407		12	
Average Trips	57	22	57	22	2	1

10.4.3. It is therefore considered that the management of traffic through the CWTP and CTMP provides the flexibility to manage traffic in the context of the prevailing traffic conditions and of the preferred method of construction, whether this is Option 1 or Option 2.

10.5. MANAGEMENT OF THE PROPOSED SCHEME IMPACTS

10.5.1. It is proposed that the impact of the Proposed Scheme will be managed through the CTMP and CWTP, which will be produced in line with the Outline Construction Traffic Management Plan (OCTMP) and the Framework Construction Worker Travel Plan (FCWTP), which were submitted with the Application and secured through the dDCO – Schedule 2 Requirements (15) & (16).

10.5.2. There are a number of robust measures included in the FCWTP which include:

- a. Appointment of a Travel Plan Coordinator;
- b. The establishment of a Travel Plan Steering Group;
- c. Travel Surveys;
- d. Travel Plan Marketing;
- e. A Car Park Management Strategy;
- f. Car Sharing and Minibuses;
- g. Construction Worker Facilities;
- h. Senior staff to lead by example;
- i. Monitoring of traffic flows; and
- j. A Travel Plan budget.

10.5.3. Based on the measures set out, it is considered that the temporary construction phase impacts can be cost effectively mitigated through enhanced management of the construction traffic, with robust monitoring and reporting measures included in the CTMP and the CWTP. The robust measures include ways to increase vehicle occupancy, and if required, the number of minibuses could be increased to further reduce vehicle movements within the peak periods. These documents have also been updated with comments from National Highways provided in the Technical Memorandum to ensure National Highways can be satisfied that the impact of the Proposed Scheme on the operation of the M62 Junction 36 can be successfully managed and mitigated.

10.6. OTHER CONSIDERATIONS

Reduction in workforce

10.6.1. It should be noted that operations at Drax Power Station have changed since the collection of the baseline traffic data during 2018. The two remaining coal units (units 5 and 6) stopped generating electricity commercially in March 2021 and will cease operations entirely prior to works to construct the Proposed Scheme commencing. As a result there has been a reduction in operational traffic as the workforce has reduced

by approximately 230 people. This reduction has not been considered within the assessment scenarios considered within the ES or this Technical Note.

Drax Re-power DCO Consent

- 10.6.2. The Applicant also has the benefit of a DCO (The Drax Power (Generating Stations) Order 2019), which allows it to repower up to two of the existing coal-powered generating units with new gas turbines that can operate in both combined cycle and open cycle modes. The new units would have a new combined capacity of up to 3,600 MW in combined cycle mode (1,800 MW each). The Applicant has publicly stated that it has no plans to progress Drax Repower, and this is confirmed by article 8(3) of the draft DCO submitted with the Application.
- 10.6.3. The traffic and transport contained in the Repower DCO assessed peak construction years of 2022 and 2026 and concluded that although the traffic and transport impacts would give rise to temporary large adverse effects it was not deemed necessary to provide junction-specific mitigation to reduce this impact. This was accepted by all stakeholders, including National Highways, and no requirement to deliver any such works was included in the made DCO for that project by the Secretary of State.

10.7. SUMMARY AND CONCLUSIONS

- 10.7.1. This Technical Note has been prepared by WSP, on behalf Drax Power Ltd, in relation to highways and transportation queries raised by National Highways and their consultants Jacobs SYSTRA Joint Venture in their Technical Memorandum response dated 1st September 2022.
- 10.7.2. The comments were received in relation to a Proposed Scheme comprising the installation of post-combustion carbon capture technology to capture carbon dioxide from up to two existing 660 megawatt electrical ('MWe') biomass power generating units at the Drax Power Station (Unit 1 and Unit 2).
- 10.7.3. To summarise the key points:
 - a. The Applicant considers that the use of PCU assumptions used to date in the ES to be appropriate and reasonable with the impacts associated with HDVs accounted for. These values are consistent with the values provided in the surveyed flows provided by National Highways themselves and therefore, it is considered appropriate to continue using these values in all assessment scenarios;
 - b. WSP have undertaken a review of the traffic surveys provided to the Applicant by National Highways and can confirm that the AM and PM network peaks are from 07:30 – 08:30 and 16:30 – 17:30;
 - c. A review of the committed developments has been undertaken, disaggregating the trips where possible so that they can be combined with the disaggregated surveyed flows at hourly periods every 15-minute increments in order to ensure the assessment scenarios are as accurate as possible;

- d.** The AM and PM peak periods are still between 07:30 – 08:30 and 16:30 and 17:30, even with the addition of disaggregated committed development trips;
- e.** The Proposed Scheme development trips have also been disaggregated so that they can be assigned into each hourly period at 15-minute increments;
- f.** Even with the addition of the Proposed Scheme development trips in to the 2026 Do Minimum scenario, the AM and PM peak periods are still between 07:30 – 08:30 and 16:30 and 17:30. On this basis, it is considered appropriate to use these peak periods as the worst-case peak hours to assess the impact of the Proposed Scheme on the M62 Junction 36;
- g.** The revised assessment scenarios includes all of the scenarios assessed in the Environmental Statement with the addition of a '2026 Future Baseline + Development' scenario to highlight the impact of the Proposed Scheme upon the operation of the M62 Junction 36 in isolation;
- h.** The error associated with the missing conflict entry angle has been resolved and has been incorporated into the revised assessment scenarios and sensitivity tests'
- i.** In relation to the revised assessment scenarios undertaken on the existing layout of the M62 Junction 36:
 - The results show that under Scenarios 1 – 3, the M62 Junction would continue to operate within capacity.
 - With the inclusion of development traffic in to the 2026 Future Baseline scenario, the M62 Junction 36 would continue to work within capacity, with the exception of the A614 Rawcliffe Road (West) arm which begins to approach capacity.
 - In the 2026 Do Something scenario, the operation of the M62 Junction would slightly worsen, with the same arms operating over or approaching capacity. However, the impact of development traffic associated with the Proposed Scheme is minimal.
- j.** WSP have obtained the improvement scheme models at the M62 Junction 36 from East Riding of Yorkshire Council's and National Highways transport consultants appointed to oversee a proposed highway improvement scheme;
- k.** In relation to the revised assessment scenarios undertaken to model the improvement scheme at the M62 Junction 36:
- l.** The northern roundabout would operate within capacity in Scenario 4 (2026 Future Baseline + Proposed Scheme).
 - With the addition of the committed development traffic without and with the Proposed Scheme development trips illustrates that the junction would operate over capacity with the improvement scheme in place. However, the changes in RFCs between the 2026 Do Minimum scenario and 2026 Do Something scenario are minimal.

- The southern roundabout would operate within capacity in Scenario 4.
 - With the addition of the committed development traffic without and with the Proposed Scheme development trips illustrates that the junction would operate over capacity with the improvement scheme in place. However, the impact of development traffic associated with the Proposed Scheme between Scenario 5 and Scenario 6 is minimal with the PRC reducing by 3.8% across the junction in the AM peak period and by 4.3% in the PM peak.
- m.** A sensitivity test has been undertaken to removal all U-turning vehicles, remove the capacity adjustment, limited queuing to 28 vehicles for westbound traffic and limited queuing to 44 vehicles for eastbound traffic over the overbridge:
- The results illustrate maximum queuing of 8.2 PCUs. Therefore, while the junction itself would operate over capacity in the future scenarios, the sensitivity test suggests that blocking is unlikely to occur between each dumbbell roundabout.
 - In the 2026 Future Baseline scenario, the addition of the Proposed Scheme trips would equate to 3% of vehicles through the M62 Junction 36 between 07:30 – 08:30 and 16:30 – 17:30.
 - In the 2026 Do Minimum scenario, the addition of the Proposed Scheme trips would equate to 2% of vehicles through the M62 Junction 36 between 07:30 – 08:30 and 16:30 – 17:30
- n.** The results from the assessment scenarios and the sensitivity test illustrate that the impact of the Proposed Scheme in insolation does not result in a severe impact on the operation of the M62 Junction, with impacts only arising as a result of cumulative impacts from committed developments coming forward in the area;
- o.** Based on available WebTRIS data, traffic flows on the M62 have reduced between 2018 and 2022, which have not been accounted for in the junction modelling;
- p.** The reduction in annual traffic flows appears to be more than the additional vehicle trips that the Proposed Scheme is predicted to generate in the peak month;
- q.** Due to uncertainties with some of the committed developments, a decision has been taken to include the full committed development flows rather than prorating down the committed development trips rates in order to ensure a robust assessment has been undertaken.
- r.** The peak in construction workers is only for one month in the entire construction phase with an average of 731 workers across each month in 2026, which is a reduction of 269 workers that has been assessed in the assessment scenarios;

- s.** All assessment scenarios assessed Option 2 as the worst case for traffic and transport as Option 2 is predicted to generate a greater number of vehicle movements during the peak construction year than the corresponding peak construction year in Option 1;
- t.** It is considered that the temporary construction phase impacts can be cost effectively mitigated through enhanced management of the construction traffic, with robust monitoring and reporting measures included in the CTMP and the CWTP;
- u.** The reduction of 230 workers due to two remaining coal units ceasing commercial operation, which were active at the time when the traffic surveys were undertaken, have not been removed from the assessment scenarios;
- v.** A more realistic assessment of cumulative assessments illustrated that there would be an overall reduction of traffic at Junction 36 and an improvement future baseline prior to any improvement options. However, the 2026 Do Minimum scenario still indicated some arms would operate over capacity with the 2026 Do Something scenario illustrating that the impact of the Proposed Scheme on the operation of the junction would be negligible.

11. REFERENCES

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RESPONSE TO NATIONAL HIGHWAYS RELEVANT REPRESENTATIONS (SEPT 2022)

Appendix A – National Highways Relevant Representation Response

Drax Bioenergy with Carbon Capture and Storage

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation (5(2)(q))

Document Reference Number: 8.9.4

Applicant: Drax Power Limited

PINS Reference: EN010120



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September 2 2022

Dear Sir/Madam,

DRAX BIOENERGY WITH CARBON CAPTURE AND STORAGE PROJECT

As you will be aware, National Highways has confirmed its registration as an Interested Party for this application. Hence, to inform discussions during the pre-examination and examination of this application, we have undertaken a detailed review of the submitted transport related evidence. Our full comments are provided in the attached Technical Memorandum and are summarised below.

Existing highway operation

The Applicant should present collision data analysis for the period 2015-2019 to ensure that a full 5-year period, unaffected by the covid-19 pandemic, has been reviewed. National Highways would also note that the analysis provided by the Applicant does not include all recorded collisions on the SRN and further analysis is required to cover M62 Junction 36 and the M62 mainline east and west of the junction. Where a collision resulted in fatal or serious injury and/or where a cluster of collisions are recorded, National Highways requests that the causation factors be considered to identify any pre-existing trends that may be exacerbated by the proposal.

We are confident that the surveyed traffic flows for M62 Junction 36 (2018) are robust given that a comparison has identified that traffic flows have reduced at this location between 2018 and 2022, and the daily traffic profile appears not to have materially changed.

Operational Phase

The Applicant has provided insufficient evidence to justify the stated number of workers. However, even if the number of staff were to be doubled the impact at M62 Junction 36 would be in the order of 48 two-way trips. On this basis, and considering the previous agreements at the pre-application stage, National Highways would agree that the trip generation associated with the operational phase of development is unlikely to generate a significant impact on the operation of the SRN during the AM & PM peak hour periods.

Construction Phase

Clarification is required to confirm whether the worst-case peak for M62 Junction 36 has been assessed in the construction phase. If the worst-case peak has not been assessed, then further analysis will be required. The worst-case morning and evening weekday peak should be derived by considering the maximum combined base traffic flows and development traffic flows i.e., the worst-case peak period traffic flows may be outside of the traditional network peak. Hence, there may be a requirement to assess the shoulder peak periods of the worst-case peak periods.

We accept that Construction Option 2 is predicted to generate a greater number of vehicle movements during the peak construction year than the corresponding peak construction year in Option 1. We note that for 29 continuous months (Jan-25 to May-27) there are in excess of 100 two-way PCUs forecast to use M62 Junction 36 between 07:00 and 08:00. However, Option 1 also has the potential to create material impacts in different time periods. For example, there are forecast to be over 100 two-way PCUs using M62 Junction 36 between 07:00 and 08:00 for the following consecutive months:

- 16 consecutive months from May 2025 – August 2026; and
- 15 consecutive months from February 2028 – April 2029.

We would note that 100 PCUs is an arbitrary benchmark for the purposes of comparison. This benchmark has no relevance to Policy and should not be used to justify the proposed development's impact.

Consequently, we accept the proposal to assess Option 2 as an indication of greatest impact during any hourly peak period. However, a likely condition of the consent will relate to the preparation and agreement to Construction Phase Traffic Management Plan (CTMP) which will be directly related to the construction scenario that is selected by the Applicant; this is discussed later in this response.

For the purposes of future year assessment, the proposed background growth factors are acceptable.

We would also agree that M62 Junction 36 has a very high sensitivity, however, would state that both M62E and M62W may also be impacted during the construction phase and, as such, further justification should be provided to explain the suggested low sensitivity for the M62 mainline.

The proposed construction phase trip generation and trip distribution are acceptable. However, we would request that the total vehicle trip generation is presented in Passenger Car Units [PCUs] such that the HDVs are properly accounted for. We would also reiterate that further clarification is required to confirm that the worst-case peak periods (and potentially the corresponding shoulder periods) for M62 Junction 36 have been assessed.

National Highways is in the process of reviewing the submitted Junctions10 model for M62 Junction 36 and will provide our comments in due course. Hence, at this time, we would withhold any comments on the robustness of the model until we have reviewed the files.

National Highways would also withhold comment on the submitted assessment until all inputs have been agreed (peak periods and Do Minimum mitigation). We would, however, state that the following guidance in the DfT Circular 02/2013 is relevant:

*“Development proposals are likely to be acceptable if they can be accommodated within the existing capacity of a section (link or junction) of the strategic road network, **or they do not increase demand for use of a section that is already operating at over-capacity levels**, taking account of any travel plan, traffic management and/or capacity enhancement measures that may be agreed. However, development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe”.*

Decommissioning Phase

National Highways support the proposed approach to assess the construction phase and decommissioning together in terms of traffic impacts (due to a similar impact). However, we anticipate the need for the following planning condition:

Unless otherwise agreed in writing by the Local Planning Authority in consultation with National Highways (or its successors) decommissioning of the development hereby approved shall not commence unless and until a Decommissioning Traffic Management Plan has been submitted to and approved in writing by the Local Planning Authority in consultation with National Highways (or its successors). Thereafter unless otherwise approved in writing decommissioning shall be undertaken in accordance with the approved plan.

M62 Junction 36 planned improvements

As requested in our meeting on 25/08/2022, please see the following evidence regarding the referenced junction improvements at the M62 Junction 36:

- The scheme was derived as part of the East Riding of Yorkshire Local Plan which was adopted in April 2016. The scheme is currently under review, with modelling being carried out to understand whether the mitigation is still required (ERYC are currently doing the 5 year Local Plan review);
- The East Riding Infrastructure Study (2014) was the driver for the mitigation and includes a description and very basic plans within Appendix G of Appendix E; and
- Contributions have started to be collected by ERYC but remain well short of the cost of the scheme. Therefore, although committed within the ERYC Local Plan there are no timescales for delivery.

Considering the above, we request that the ES assesses with and without the scheme in place (in the DoMinimum and, consequently, the DoSomething scenarios).

Construction Phase Traffic Management Plan

National Highways anticipate the need for the following planning condition to be attached to any granted DCO:

Unless otherwise agreed in writing by the Local Planning Authority in consultation with National Highways (or its successors) no construction shall commence unless and until a Construction Phase Traffic Management Plan has been submitted to and approved in writing by the Local Planning Authority in consultation with National Highways (or its successors). Thereafter the construction shall be undertaken in accordance with the approved plan.

As a minimum, we would expect that the Construction Phase Traffic Management Plan address the following:

- Details and maintenance of any construction traffic management signage;
- Details and maintenance general road user management signage (e.g., Delays Likely and their duration);
- The need for and details of any general road user diversionary routes;
- A commitment to following due process regarding AILs; and
- The need for and maintenance of temporary works (to be informed by the operational assessments).

AIL and Dilapidation Surveys

It is proposed that a Highway Condition Survey (HCS) will be carried out along the designated route for abnormal and indivisible loads (AIL) ahead of the first AIL delivery, and after the final AIL. This is with a view to any construction related defects being made good. We support this approach and would request that the surveys be provided to National Highways for review within the Construction Phase Traffic Management Plan; a commitment to make good any defects should also be included in the plan.

We would also request that the Applicant engages closely with National Highways before undertaking any surveys or other works on the SRN as such works are of high risk to road users, contractors, and National Highways operatives. The details of works, relevant safety risks associated with any works shall be identified, and appropriate mitigations shall be agreed with National Highways prior to commencement.

No works to the SRN should be undertaken prior to an agreement with National Highways.

We are open to holding further discussions regarding AIL deliveries and the proposed Statement of Common Ground.

Framework Construction Worker Travel Plan

A firm financial commitment should be made to specific incentives, rather than a description of potential example incentives. However, we accept that an agreement regarding the monitoring of construction worker traffic could be included in the Statement of Common Ground.

If the construction site will have a capped number of parking spaces available to construction workers of no more than 450 spaces, then the proposed parking provision of 800 car parking spaces (500 standard spaces + 300 overflow spaces) should be justified or revised. The CWTP should also provide specific commitments to how the proposal to provide favourable parking locations for those that travel to the Site with two or more passengers will be enforced and how many car parking spaces will be specifically allocated for only workers who car share.

Subject to the impact at the SRN, there may be a requirement for National Highways to request that the arrival and departure movements for construction staff occur outside of the SRN peak periods. This could be achieved through the Construction Phase Traffic Management Plan.

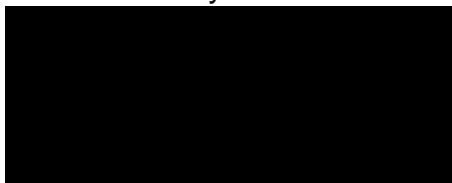
Environmental impacts

Whilst we would withhold comment on the effect on intimidation and fear until the impact of the Scheme at the SRN has been agreed upon, we would state that severance and pedestrian amenity are not matters for National Highways.

Conclusion

I trust this response is helpful, but should you require any further information please do not hesitate to contact me. I would suggest that we arrange a meeting to discuss the findings of our review. It may be beneficial for this meeting to take place following receipt of our Junction10 model review.

Yours sincerely



Simon GP Geoghegan
Planning and Development

Drax Bioenergy with Carbon Capture and Storage Project, Selby

Prepared for: Huw Williams
 Prepared by: Andy Tennant
 Date: 01/09/2022
 Case Reference: AA.22.11.13
 Document Reference: AA.22.11.13 TM
 Reviewed/approved by: Terry Dale

Limitation: This document has been prepared on behalf of, and for the exclusive use of National Highways, and is subject to, and issued in accordance with, the provisions of the National Highways Spatial Planning Contract. We accept no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this document by any third party.

Introduction

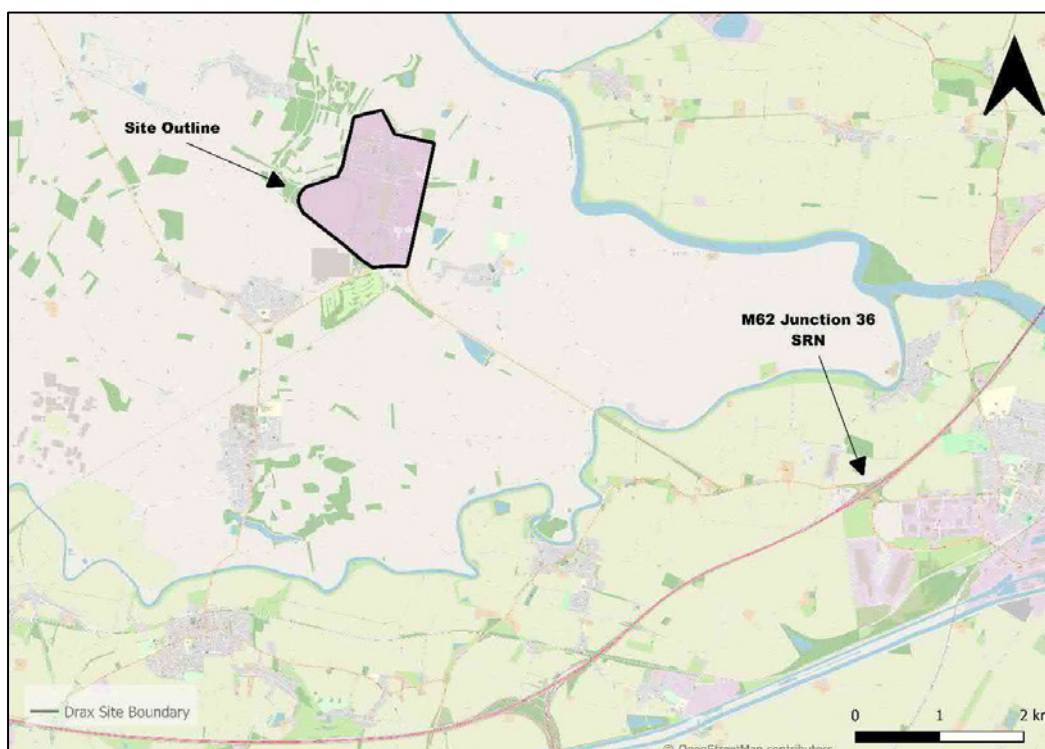
In July 2022, National Highways was consulted on the Drax Bioenergy with Carbon Capture and Storage Project [Drax BECCS].

Drax BECCS is classified as a Nationally Significant Infrastructure Project [NSIP], under the Planning Act 2008 (PA2008) and requires a Development Consent Order [DCO] for its construction and operation.

Jacobs SYSTRA Joint Venture [JSJV] has summarised the review process for NSIP applications, described the consultation history for Drax BECCS, and has reviewed the evidence submitted to support the application.

Drax BECCS location, in relation to the Strategic Road Network [SRN], is presented in Figure 1. The site is located approximately 7km from the M62 Junction 36.

Figure 1: Site location in relation to the SRN



NSIP review process

The major infrastructure projects dealt with by the Planning Inspectorate under the Planning Act 2008 [PA2008] are known as NSIPs. Projects are within the six general fields of energy; transport; water; waste water; waste and business and commercial. Examples include power stations; railways and major roads; reservoirs; harbours; airports; offshore wind farms and sewage treatment works. The thresholds for NSIPs are set out in sections 15 to 30 of the PA2008.

The PA2008 process was introduced to streamline the decision-making process for major infrastructure projects. The six stages in the process are:

- **Pre-application:** Before submitting an application, potential applicants have a statutory duty to carry out consultation on their proposals. The Planning Inspectorate cannot consider representations about the merits of a proposed application at the Pre-application stage of the process.
- **Acceptance:** The Acceptance stage begins when an applicant submits an application for development consent to the Planning Inspectorate. There follows a period of up to 28 days (excluding the date of receipt of the application) for the Planning Inspectorate, on behalf of the Secretary of State, to decide whether or not the application meets the standards required to be accepted for examination.
- **Pre-examination:** If the application is accepted for examination, the public will then be able to register with the Planning Inspectorate to become an Interested Party by making a Relevant Representation. A Relevant Representation is a summary of a person's views on an application, made in writing. An Examining Authority is also appointed at the Pre-examination stage, and all Interested Parties will be invited to attend a Preliminary Meeting, run and chaired by the Examining Authority. Although there is no statutory timescale for this stage of the process, it usually takes approximately three months from the Applicant's formal notification and publicity of an accepted application.
- **Examination:** The Planning Inspectorate has up to six months to carry out the examination. During this stage Interested Parties who have registered by making a Relevant Representation are invited to provide more details of their views in writing. Careful consideration is given by the Examining Authority to all the important and relevant matters including the representations of all Interested Parties, any supporting evidence submitted and answers provided to the Examining Authority's questions set out in writing or posed at hearings.
- **Recommendation and Decision:** The Planning Inspectorate must prepare a report on the application to the relevant Secretary of State, including a recommendation, within three months of the close of the six month Examination stage. The relevant Secretary of State then has a further three months to make the decision on whether to grant or refuse development consent.
- **Post-decision:** Once a decision has been issued by the relevant Secretary of State, there is a six week period in which the decision may be challenged in the High Court. This process of legal challenge is known as Judicial Review.

The Drax BECCS application is currently at the pre-examination stage. The application was accepted for examination on 20 June 2022.

National Highways policy

National Highways' document 'The strategic road network, Planning for the future: A guide to working with Highways England on planning matters' (2015) states the following regarding NSIPs:

- *121. As a statutory consultee in respect of all Nationally Significant Infrastructure Projects (NSIP) promoted by third parties, the promoters of such developments are required to consult with us where their proposals are likely to affect road or transport operation and/or planning on roads for which we are the highway authority. As with other planning matters we recommend that you enter into discussions with us at the earliest opportunity.*
- *122. The regulations relating to NSIPs do not specifically require that promoters identify their proposed access arrangements or any proposed highway mitigation works during the consultation stage prior to submitting a Development Consent Order (DCO) application.*
- *123. Promoters are encouraged to seek consensus with interested parties, including ourselves where applicable, in order to satisfy the Planning Inspectorate (PINS) that full and thorough pre-application consultation with interested parties has been carried out. Where possible, we will work towards agreeing a Statement of Common Ground at an early stage so that this can be an input to the examination.*
- *124. In any case, promoters must provide sufficient detail to allow the assessment of the impact of their proposals on the SRN, and the suitability and deliverability of their proposed transport arrangements, including means of access, when they submit their application and draft DCO.*
- *125. On the basis of the discussions held and the information provided we will make representations on proposals, or will seek to ensure that requirements we deem essential are incorporated in the DCO.*

Pre-application stage

This application has been subject to extension consultation with National Highways at the pre-application stage. In September 2020, National Highways undertook a review of a Transport Scoping Note [TSN]; the key conclusions were:

- The trip generation associated with the worst-case overlap between the demolition and construction phase of the development will affect a material impact on the operation of the SRN over the AM & PM peak hour periods; and
- The trip generation associated with the operational phase of development will not affect a material impact on the operation of the SRN during the AM & PM peak hour periods.

In February 2021, National Highways offered comments on the Environmental Impact Assessment [EIA] and Scoping Report [SR] for this development proposal. National Highways provided comments on the existing situation in terms of accessibility, safety, and SRN operation. The review also offered comments on baseline traffic flow conditions, likely significant effects, assessment scenarios and the significance of effects. Key conclusions drawn from this review included:

- The most significant impacts associated with the proposed scheme will be during the construction phase, with negligible vehicle movements during operation;

- Assumptions at this stage will need to be demonstrated within forthcoming assessment material, along with the identification of peak traffic flow impacts; and
- Detailed capacity assessments of the M62 J36 should be included as this will form the principal access route for construction traffic.

In February 2021, National Highways provided the following comments on a TSN:

- Effective Travel Plan measures and wider management of construction phase demands will be required to minimise the impacts on M62 J36 and the wider SRN. A monitoring and enforcement strategy will be required;
- If measures fail to avoid significant cumulative traffic flow impacts at M62 J36 then consideration may need to be given to capacity enhancements to mitigate the impact of development traffic increases. It may be necessary to monitor actual traffic flow increases, or arrivals at the site, throughout the Construction Phase;
- It may be necessary to demonstrate local area assignment assumptions and journey time variance, to determine the risk of construction staff using M62 J34 (instead of M62 J36) to access the M62 Westbound; and
- Confirmation should be provided that parking opportunities for construction personnel should be limited to the 400 designated spaces, that no alternative on-site parking will be available for use, and that off-site fly-parking will be managed.

In April 2021, National Highways provided confirmation that both DfT and National Highways are in agreement with the proposed AIL approach in principle.

In May 2021, National Highways reviewed a TSN, however, comments were provided via email on 4 May 2021 and the email is not available at time of writing.

In June 2021, National Highways shared M62 J36 Classified Turning Count and Queue data for review by the BECCS project team.

In January 2022, National Highways reviewed the Section 42 Letter, Section 48 Notice and Consultation Brochure also submitted to support the project proposal and the DCO application. National Highways reiterated its stance that it would support the production of a Construction Environmental Management Plan [CEMP], Construction Traffic Management Plan [CTMP], and outline a Construction Workers Travel Plan [CWTP].

Also, in January 2022, National Highways reviewed the Preliminary Environmental Impact Report [PIER] prepared by WSP and submitted as part of the DCO application. Comments at this stage included:

- Further trip estimates and junction capacity assessment work should be undertaken in the Environmental Statement;
- JSJV and National Highways will further review the proposed impact of the route from the Port of Goole on the M62 Junction 36 in the ES and CTMP;
- WSP state it is anticipated that there will be no residual traffic and transport effects associated with the Proposed Scheme during construction, operation or decommissioning. JSJV comment that this will be subject to further analysis in the ES;
- JSJV advised that the NSIP BECCS at Drax should consider the cumulative assessment of the Selby District Local Plan in its assessments;

- Given the proposed development's scale and proximity to the Strategic Road Network, JSJV would agree that a CTMP should be produced and agreed with National Highways prior to the determination of this planning application; and
- JSJV would support the production of a Construction Worker Travel Plan alongside the ES to demonstrate how the impact of construction workers will be minimised on the SRN.

Relevant Representation

JSJV has suggested that National Highways register as an Interested Party by making a Relevant Representation. Subsequently, National Highways has confirmed its registration as an Interested Party.

Meeting: 25/08/2022

National Highways and JSJV met with the applicant and their transport consultants (WSP) on 25/08/2022. Key comments from this meeting can be summarised as follows:

- JSJV and WSP discussed the potential for pre-commencement requirements;
- WSP noted that the AIL route has already been agreed in principle with DfT and NH and that application of the formal process will also be required in due course;
- NH and JSJV commented on the use of pre-covid 2018 traffic flows and stated that a comparison against 2022 survey data may be required;
- JSJV queried the proposed 20% mini bus usage for construction workers and stated that this must be justified through the CWTP;
- JSJV explained that we must consider peak traffic impacts across the duration of the construction period as well as peak hour snapshots of August 2026. This will inform the consideration of appropriate mitigation as may be required;
- NH queried WSP's proposed SRN network peak periods referencing WSP's traffic flow diagrams which state that "The network peaks included in the traffic flow diagrams from the NDC surveys are from 07:15 - 08:15 and 16:30 - 17:30". WSP to review; and
- The Applicant noted the need to consider how the proposed development's traffic coincides with the Read School parent/pupil pick up period.

The agreed actions can be summarised as follows:

- NH to investigate the Local Plan scheme at M62 junction 36 and provide any evidence associated with the scheme (timescales for delivery and supporting modelling);
- WSP to provide the proposed Junctions10 model for M62 junction 36; and
- WSP to provide the proposed trip distribution excel file.

Preparation for examination

National Highways has commissioned JSJV to review the evidence submitted to support the application. Upon review, JSJV would suggest that the following evidence may be relevant to National Highways and should be reviewed:

- Environment Statement [ES] Chapter 1: Introduction
- ES Chapter 2: Site and Project Description
- ES Chapter 5: Traffic and Transport
- ES Appendix 5.1: Outline Construction Management Traffic Plan [CTMP]
- ES Appendix 5.2: Construction Worker Travel Plan [CWTP]
- ES Appendix 5.3: Traffic flow diagrams
- ES Appendix 5.4: Personal Injury Collision [PIC] data
- ES Appendix 5.5 Schedule Planner
- ES Appendix 5.6: Junction modelling outputs

Site description

The application site is approximately 125 ha and is split into the following land parcels:

- Drax Power Station Site – the land occupied by the Drax Power Station;
- East Construction Laydown Area – area required during the construction phase of the Proposed Scheme for temporary works situated to the east of the Drax Power Station, across New Road. (N.B. There are several parcels of land within the Drax Power Station Site which would be used for construction laydown. These areas have been termed ‘Drax Power Station Site Construction Laydown Areas’);
- Habitat Provision Area – the land within the Order Limits that may be used for environmental mitigation for the Proposed Scheme. This parcel is located to the north and north east of the Drax Power Station; and
- Surrounding road network.

The proposed development comprises:

- Up to two Carbon Capture Plants;
- Additional Common Plant infrastructure and modification works to the Drax Power Station that are required to support and integrate with one or both Carbon Capture Plants;
- Infrastructure to transport compressed carbon dioxide from the Carbon Dioxide Processing and Compression Plant to storage and transport infrastructure operated by National Grid Carbon Limited;
- Minor vegetation and street furniture management and other works to facilitate access during construction;
- Additional supporting infrastructure and other works for the Proposed Scheme;
- Temporary construction laydown areas; and
- Habitat Provision Area.

ES Traffic and Transport chapter

Study area

The relevant sections of the study area considered as part of this assessment are:

- M62 Junction 36 Dumbbell Roundabout (Ref: Junction 4a / 4b);
- M62 eastbound mainline from Junction 36 (Ref: Link 6); and
- M62 westbound mainline from Junction 36 (Ref: Link 9).

Elements scoped out of the assessment

The A63 / A162 four-arm roundabout (Ref: Junction 7) has been removed from the study area. JSJV would suggest that this is acceptable because the junction is not located on, or in close proximity to, the SRN.

Elements scoped into the assessment

The following elements have been scoping in for the construction phase assessment:

- Construction Traffic - temporary increases in Heavy Duty Vehicular [HDV] traffic associated with the import and export of construction materials by road;
- Construction Worker Movements - temporary increases in Light Duty Vehicular [LDV] vehicular traffic associated with the construction workforce;
- Site Access - the creation of new construction site access to the east Construction Laydown Area from the public highway; and
- Abnormal & Indivisible Loads [AIL] - The delivery of AIL and associated demand and traffic management.

It has been proposed that decommissioning impacts are to be no worse than those during the construction phase following the implementation of a Decommissioning Traffic Management Plan [DTMP] for the works. Consequently, the construction phase and decommissioning have been assessed together. JSJV support this approach subject to the following planning condition being attached to any granted DCO:

Unless otherwise agreed in writing by the Local Planning Authority in consultation with National Highways (or its successors) decommissioning of the development hereby approved shall not commence unless and until a Decommissioning Traffic Management Plan has been submitted to and approved in writing by the Local Planning Authority in consultation with National Highways (or its successors). Thereafter unless otherwise approved in writing decommissioning shall be undertaken in accordance with the approved plan.

The inclusion of the above condition ensures that any effects from the demolition phase are to be reviewed and agreed upon by National Highways immediately prior to decommissioning.

The following elements have been scoped in for the operational phase assessment:

- Operational Traffic - increases in HDV traffic associated with the import and export of raw materials; and
- Operational Workforce Movements – increases in LDV traffic associated with the operational workforce.

The ES proposes that “a workforce of 50 full time staff will be required for the operational phase of the Proposed Scheme” and “given this, when compared to the workforce at the Drax Power Station Site at the time of collection of the baseline traffic flow data during 2018, there would be an overall net-reduction of circa 180 people in the workforce”.

The assessment of the operational phase has been limited to reviewing the change in traffic flows on the links and junctions within the study area. The assessment shows that there would be fewer than 30 two-way trips generated (LDV and HDV) at all junctions within the study area, this is with the exception of Junction 1 which would see a total of 34 two-way trips (LDV and HDV) in peak periods.

A total of 34 two-way movements are forecast on the basis of:

- 50 staff working across three shift patters, equating to 17 movements each way (17 workers arriving to start work and 17 workers departing from work); and
- A vehicle occupancy rate of one worker per vehicle. The distribution of construction workers for the operational phase was assumed to be the same as the distribution of construction workers during the construction phase, with 70% of trips using M62 Junction 36.

JSJV would suggest that the Applicant has provided insufficient evidence to justify the stated number of workers. However, given that 50 staff are forecast to generate 24 two-way trips at M62 Junction 36 and, therefore, even if the number of staff were to be doubled to 100, the impact at M62 junction 36 would be in the order of 48 two-way trips. On this basis, and considering the previous agreements at the pre-application stage, JSJV would agree that the trip generation associated with the operational phase of development is unlikely to generate a significant impact on the operation of the SRN during the AM & PM peak hour periods.

PIC analysis

PIC data has been analysed for the period 01/01/2017 to 31/01/2021. The ES identifies that the following collisions were recorded at M62 Jct. 36 and the links east and west of this junction on the M62.

Table 1: Proposed collision data analysis

Junction/link	Slight collisions	Serious collisions	Fatal collisions
M62 J36	2	1	0
Link 6 – M62 (E)	0	0	0
Link 9 – M62 (W)	0	0	0

JSJV has reviewed CrashMap () for the period 2017-2021. Figure 2 shows the recorded collisions at M62 Junction 36, Figure 3 shows the recorded collisions on the M62 west of Junction 36, and Figure 4 shows the recorded collisions on the M62 east of Junction 36.

Figure 2: Recorded collisions at M62 Junction 36 (2017-2021)

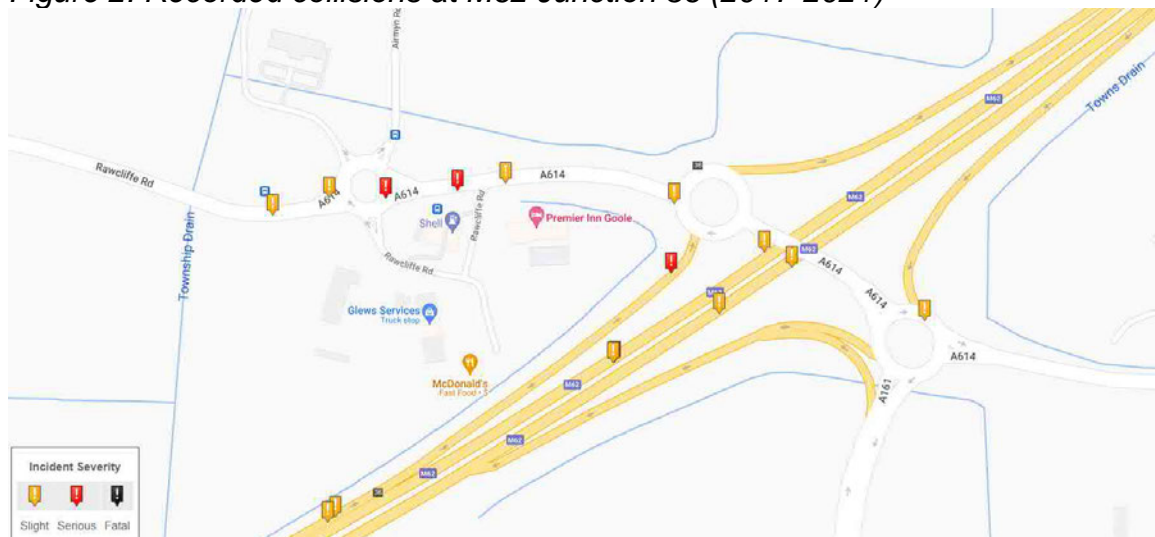


Figure 3: Recorded collisions on the M62 east of M62 Junction 36 (2017-2021)

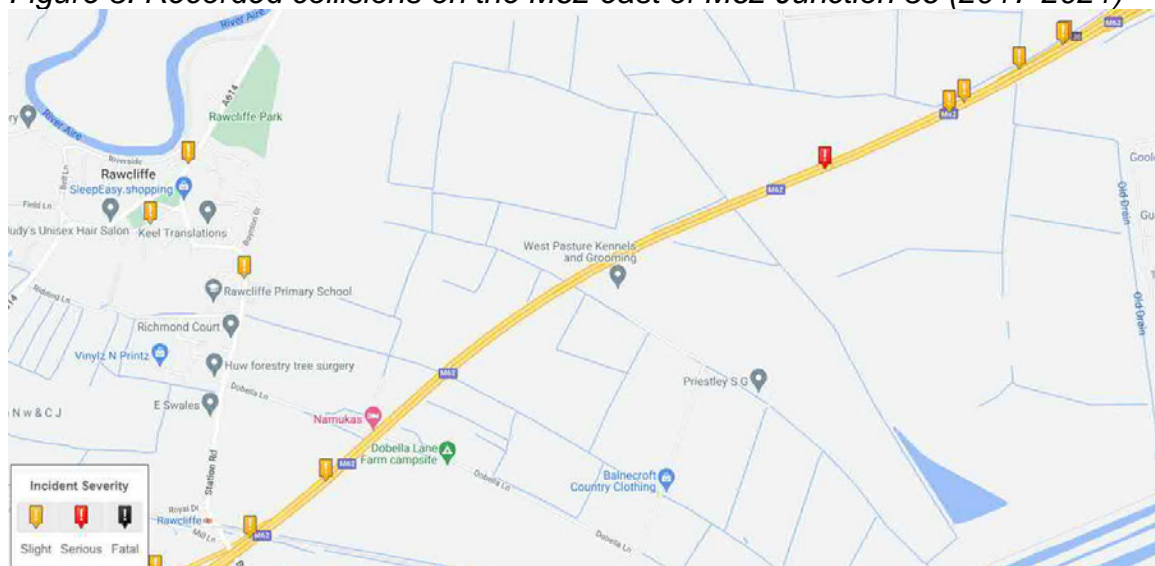
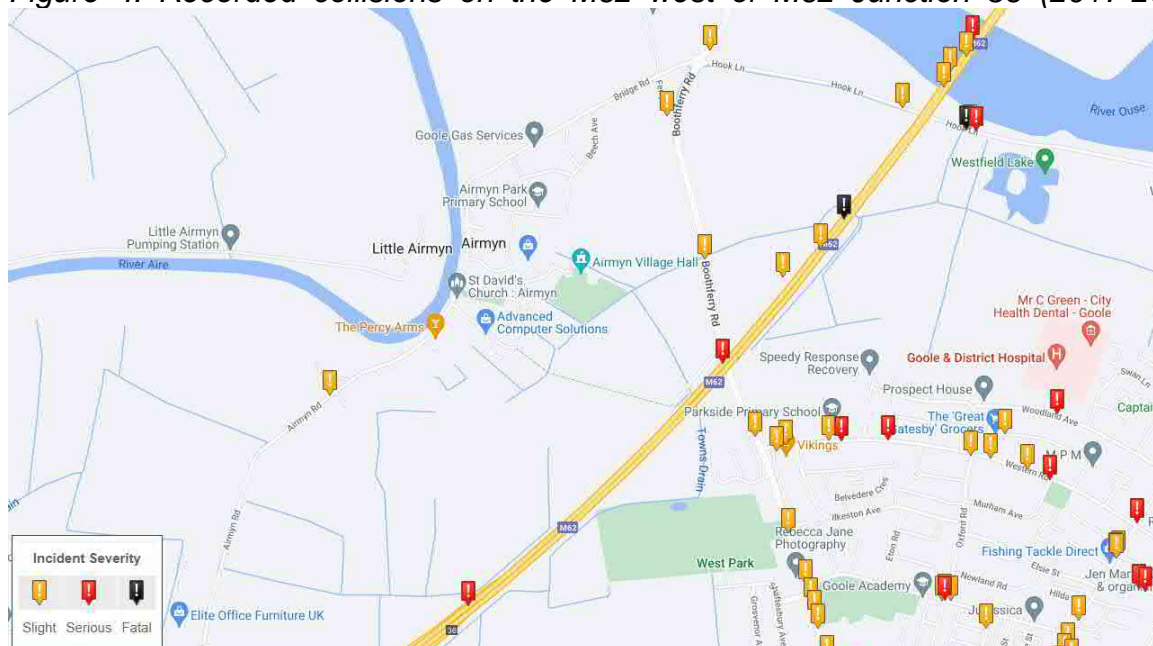


Figure 4: Recorded collisions on the M62 west of M62 Junction 36 (2017-2021)



JSJV would recommend that the Applicant present collision data analysis for the period 2015-2019 to ensure that a full 5-year period, unaffected by the covid-19 pandemic, has been reviewed.

JSJV would also note that the analysis provided by the Applicant does not include all recorded collisions on the SRN and a further analysis is required to cover M62 Junction 36 and the M62 mainline east and west of the junction. Where a collision resulted in fatal or serious injury and/or where a cluster of collisions are recorded, JSJV would recommend that the causation factors be considered to identify any pre-existing trends.

Base traffic flows

The ES has used surveyed traffic flows from October 2018 to assess M62 Junction 36. These surveyed traffic flows were provided by National Highways at the pre-application stage.

The following is stated within “ES Appendix 5.3 Traffic Flow Diagrams” document:

- Traffic surveys for Junction 4a and 4b (M62 Junction 36) are sourced from surveys provided to WSP by National Highways;
- The survey was undertaken by NDC on Thursday 11th October 2018; and
- The peak periods selected match the bold peak periods highlighted on the surveys in cell MI15 for the AM Peak and MI36 for the PM Peak.

In August 2022, with regards to the collection of traffic data, National Highways stated that:

“Having examined (neutral) traffic levels between February and June (2022), it appears that volumes across the SRN as a whole and individual stretches of the SRN are stable. We have no reason to think that this won’t continue into the autumn, and so the previous guidance note should be considered ‘withdrawn’ and surveys can take place as normal from September. This does not of course mean that things have returned to a pre-Covid situation.

Additionally, TAG unit M1.2 Data Sources and Surveys states the following:

“3.3.6 Surveys should typically be carried out during a ‘neutral’, or representative, month avoiding main and local holiday periods, local school holidays and half terms, and other abnormal traffic periods. However, there can be instances where a particular period (e.g. weekends or school holidays) is of interest, for example in regions with relatively high levels of seasonal tourism. The period for the surveys should be selected with careful consideration of the purpose of the transport model.

3.3.7 Neutral periods are defined as Mondays to Thursdays from March through to November (excluding August), provided adequate lighting is available, and avoiding the weeks before/after Easter, the Thursday before and all of the week of a bank holiday, and the school holidays. Surveys may be carried out outside of these days/months, ensuring that the conditions being surveyed (e.g. traffic flow) are representative of the transport conditions being analysed/modelled”.

JSJV has compared the October 2018 traffic survey data with available 2022 traffic survey data. The following WebTRIS points provide daily traffic flow data for the complete months of June 2022, July 2022, and October 2018:

- M62 J36 eastbound diverge;
- M62 J36 westbound merge; and
- M62 westbound mainline within J36.

In terms of monthly data across a year, the WebTRIS point for M62 westbound mainline within J36 has the most complete set of monthly data for 2018, with only the June 2018 monthly data being incomplete.

In line with TAG guidance, JSJV has excluded survey data for Thursday 2nd June 2022 because this was a bank holiday (Spring Bank Holiday – Moved for Platinum Jubilee).

October 2018 profile (Thursdays)

JSJV has reviewed the traffic flows for Thursdays in October 2018 on the westbound mainline of the M62. This is to ensure that the surveyed Thursday is comparable to the average Thursday in October.

Table 2: M62 westbound mainline

	07:00-08:00	16:00-17:00
11th October 2018	1931	1931
Average Thursday October 2018	1966	2003
Variance	-35	-72
Variance (%)	-2%	-4%

JSJV would conclude that Thursday 11th October is not materially different to the average Thursday in October 2018.

Monthly profile for October

JSJV has reviewed the traffic flows for each month of 2018 (except June) on the M62 westbound mainline. This is to review the profile of traffic flows across the year.

Figure 5: Monthly traffic flows in 2018

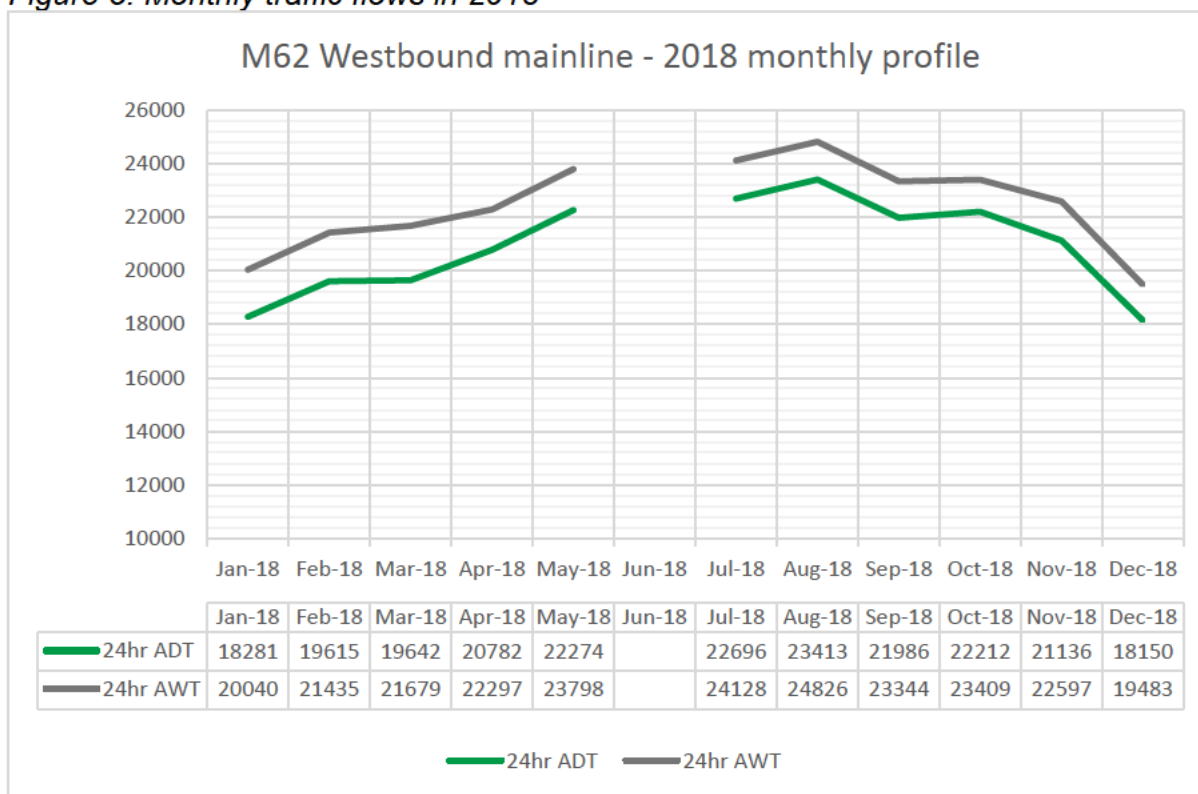


Figure 5 shows that August 2018 experienced the highest traffic flows in 2018 and December 2018 experienced the fewest. In terms of average traffic flows, October 2018 was a fairly average month in 2018.

2018 – 2022 comparison

M62 Junction 36 eastbound diverge

JSJV has compared average data for Thursdays in June and July 2022 with the surveyed day Thursday 11th October 2018. For both the average Thursdays in June and July 2022, and Thursday 11th October 2018, the peak periods at M62 Junction 36 eastbound diverge are 07:00-08:00 and 17:00-18:00.

Table 3: M62 Junction 36 eastbound diverge

	07:00-08:00	17:00-18:00
11th October 2018	739	768
Average Thursday, June/July 2022	565	594
Variance	174	174
Variance (%)	24%	23%

Compared to the 2022 traffic flows, Table 3 shows that the 2018 traffic flows at the M62 Junction 36 eastbound diverge are 24% higher in the morning peak period and 23% higher in the evening peak period.

M62 J36 westbound merge

JSJV has compared average data for Thursdays in June and July 2022 with the surveyed day Thursday 11th October 2018. For both the average Thursday in June and July 2022, and Thursday 11th October 2018, the peak periods at M62 J36 westbound merge are 07:00-08:00 and 16:00-17:00.

Table 4: M62 J36 westbound merge

	07:00-08:00	16:00-17:00
11th October 2018	636	629
Average Thursday, June/July 2022	510	550
Variance	126	79
Variance (%)	20%	13%

Compared to 2022 traffic flows, Table 4 shows that the 2018 traffic flows at the M62 Junction 36 eastbound diverge are 20% higher in the morning peak period and 13% higher in the evening peak period.

M62 westbound mainline within J36

JSJV has compared average data for Thursdays in June and July 2022 with the surveyed day Thursday 11th October 2018. For both the average Thursday in June and July 2022, and Thursday 11th October 2018, the peak periods at M62 westbound mainline within J36 are 07:00-08:00 and 16:00-17:00.

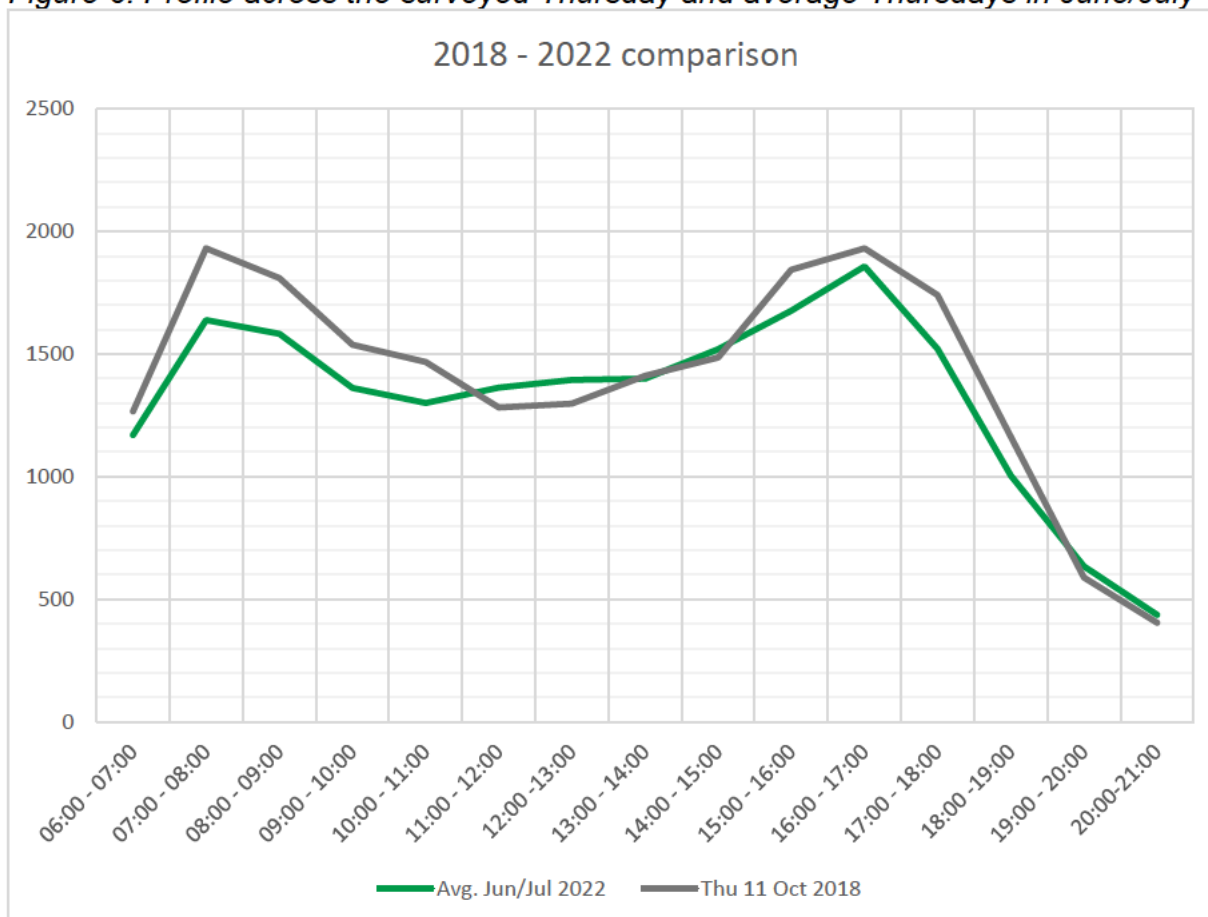
Table 5: M62 westbound mainline within J36

	07:00-08:00	16:00-17:00
11th October 2018	1931	1931
Average Thursday, June/July 2022	1638	1857
Variance	293	74
Variance (%)	15%	4%

Compared to 2022 traffic flows, Table 5 shows that the 2018 traffic flows at the M62 Junction 36 eastbound diverge are 15% higher in the morning peak period and 4% higher in the evening peak period.

The Figure 6 shows that the profile across the surveyed Thursday and average Thursdays in June/July.

Figure 6: Profile across the surveyed Thursday and average Thursdays in June/July



Given the above analysis, JSJV would conclude that the daily traffic profile has not materially changed from 2018 to 2022. We would, however, note that the traffic flows for the morning and evening peak periods have reduced from 2018 to 2022.

Base traffic flows conclusion

Consequently, JSJV would suggest that:

- The surveyed traffic flows from 2018 are robust because traffic flows have reduced from 2018 to 2022; and
- The daily traffic profile has not materially changed from 2018 to 2022.

Peak periods

The ES describes the network peak periods as 08:00 - 09:00 and 17:00 - 18:00.

The supporting evidence in the ES Appendix 5.3 provides the following analysis.

Table 6: 2018 traffic flows at M62 Junction 36 in the weekday AM

Time period	Total vehicles
07:00 to 08:00	2533
07:15 to 08:15	2770
07:30 to 08:30	2858
07:45 to 08:45	2799
08:00 to 09:00	2677
08:15 to 09:15	2482
08:30 to 09:30	2276
08:45 to 09:45	2121
09:00 to 10:00	1979

Table 7: 2018 traffic flows at M62 Junction 36 in the weekday PM

Time period	Total vehicles
16:00 to 17:00	2691
16:15 to 17:15	2872
16:30 to 17:30	2959
16:45 to 17:45	2961
17:00 to 18:00	2887
17:15 to 18:15	2596
17:30 to 18:30	2322
17:45 to 18:45	2049
18:00 to 19:00	1798

The evidence contained in ES Appendix 5.3 shows that the network peaks for M62 Junction 36 are from 07:30 - 08:30 and 16:45 - 17:45. JSJV would suggest that clarification is required to confirm whether the worst-case peak for M62 Junction 36 has been assessed. If the worst-case peak has not been assessed, then further analysis will be required. The worst-case morning and evening weekday peak should be derived by considering the maximum combined base traffic flows and development traffic flows.

JSJV would also note that there may be a requirement to assess the shoulder peak periods of the worst-case peak periods.

Proposed phasing plan

Two options are being considered for the construction of the Proposed Scheme:

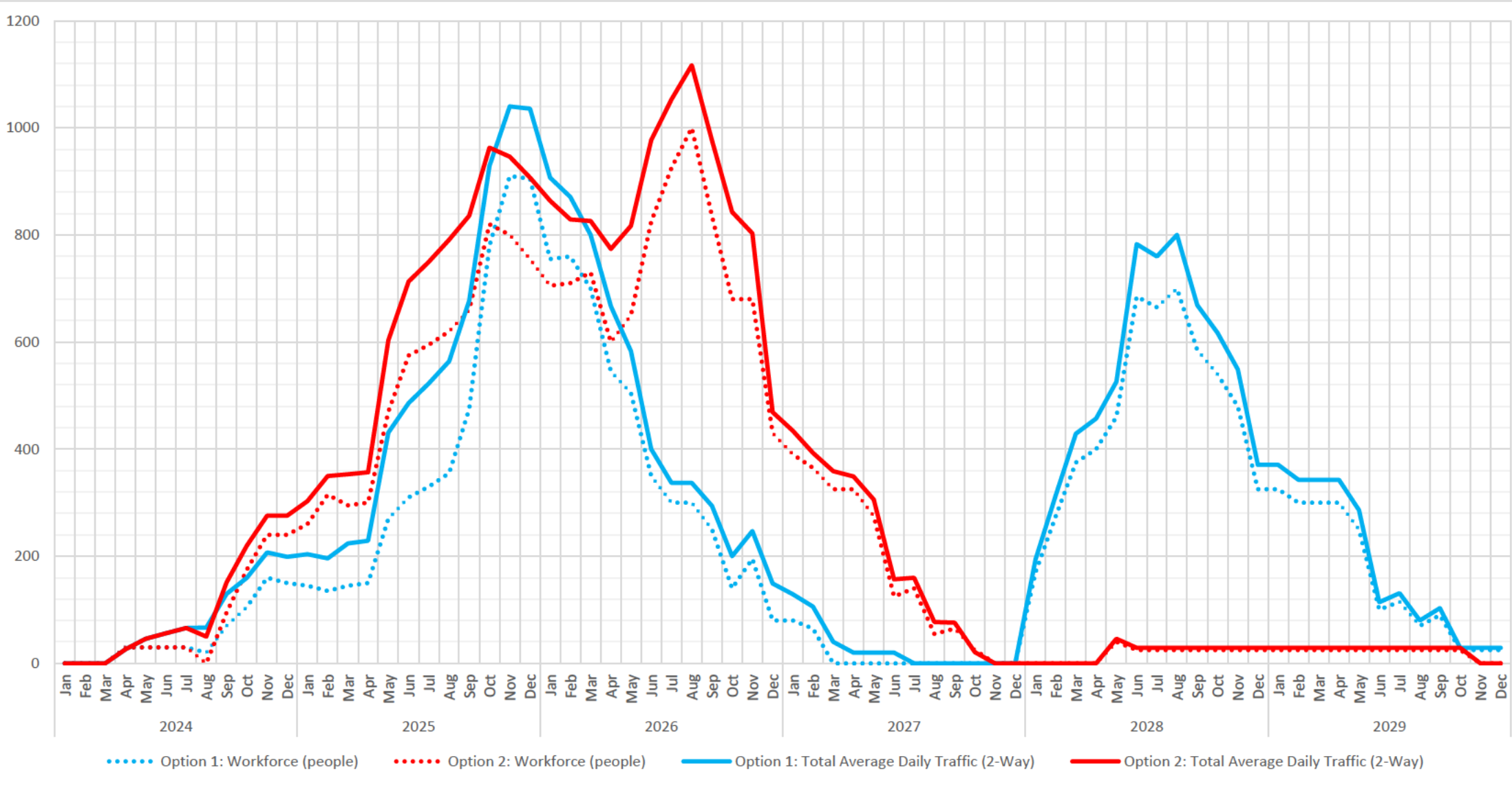
- Option 1: The Carbon Capture Plant associated with Unit 2 is programmed to be constructed first along with the Common Plant, with the Carbon Capture Plant associated with Unit 1 to follow sequentially; and
- Option 2: The Carbon Capture Plant associated with Unit 1 and Unit 2 as well as the Common Plant to be constructed at the same time.

The ES assesses Option 2 because it is seen as the “worst case for traffic and transport”. It is stated that “Option 2 is predicted to generate a greater number of vehicle movements during the peak construction year than the corresponding peak construction year in Option 1”.

The forecasted construction programme has been informed by a Schedule Planner, which the Applicant prepared in combination with an Engineering, Construction, Procurement contractor. It is stated that, “this assessment is based on the information provided, and, whilst not being definitive as to how the construction phase will take place, is considered to be a robust basis for assessment”.

Using the detailed Schedule Planner that is appended to the ES, JSJV has prepared the Figure 7 which shows the workforce and traffic associated with each construction option.

Figure 7: Graph showing the proposed workforce and traffic associated with each construction option.



The ES states that “Option 2 is predicted to generate a greater number of vehicle movements during the peak construction year than the corresponding peak construction year in Option 1”.

JSJV would make the following observations:

- The peak construction year for Option 1 is 2025, whereas the peak construction year for Option 2 is 2026; and
- The peak of Option 2, in terms of people and vehicle trip generation, is more spread out than Option 1. However, due to the combined construction of Units 1 and 2 in Option 2, Option 2 still results in a greater maximum monthly vehicle trip generation than Option 1.

On the basis that the duration of the construction peak is significantly greater for Option 2, JSJV agree that Option 2 is more likely to represent a worse-case scenario in terms of traffic and transport.

Notwithstanding the above, JSJV would note that Option 1 results in greater traffic generation than Option 2 over the Christmas period of 2025. Furthermore, Option 1 creates a second peak construction period in 2028 (June – August), whereas Option 2 only has one construction peak period (albeit, spread out across a longer time period) .

Further comments are provided later in the TM regarding how the duration of construction impact should be considered.

Assessment methodology

The environmental effects of traffic generated by the Proposed Scheme have been assessed with reference to the DMRB LA104 (Highways England, 2020b) and Guidelines for the Environmental Assessment of Road Traffic (Institute of Environmental Assessment, 1993) (hereafter referred to as ‘GEART’).

No allowance has been made for the delivery of construction materials by water or rail (in order to assess the ‘worst case’ construction phase and operational phase road traffic impact). Although Drax Power Station has water and rail facilities the Proposed Scheme will not involve use of, or modification of either facility. The rail facilities are currently operating at capacity. JSJV supports this worst-case assumption.

The following assessment scenarios have been considered:

- Existing: 2018 Baseline;
- Year of submission: 2022 Baseline - March and October 2018 surveyed traffic flows and TEMPRO traffic growth applied; and
- Peak construction year
 - 2026 Future Baseline - 2022 Baseline with TEMPRO traffic growth applied
 - 2026 Do Minimum – this will be the 2026 Future Baseline plus ‘reasonably foreseeable’ committed development (Without Development)
 - 2026 Do Something – this will be the 2026 Do Minimum plus construction traffic (With Development – Construction Phase)

JSJV supports the proposed assessment year of 2026 for the construction phase (with the Option 2 schedule) but would reiterate that the worst case should be assessed.

Background growth factors

The proposed TEMPro Growth Factors differ from those originally proposed within the EIA Scoping Report. It is explained that this is because TEMPro v7.2c was released after the submission of the EIA Scoping Report and that “the same methodology has been applied but the rates reflect the latest available forecasts and are therefore considered appropriate”.

Growth factors for the AM Peak Hour (07:00 – 09:59) and PM Peak Hour (16:00 – 18:59) are proposed for use in the peak hour junction capacity assessments. These growth factors were determined using the following criteria in TEMPro:

- Base year of 2018 and future years of 2022 and 2026.
- Location of Selby and East Riding.
- National Traffic Model (NTM) Adjusted (RTF 2018 Scenario 1 – Reference).
- Trip end origin / destination.
- Area Type (Rural).
- Road Type (All).

The proposed background growth factors are presented in Table 8Table 8.

Table 8: Proposed background growth factors

Assessment years	Location	AM peak	PM peak	Weekday
2018-2022	Selby	1.0368	1.0350	1.0359
	East Riding	1.0339	1.0317	1.0338
	Average	1.0354	1.0334	1.0349
2022-2026	Selby	1.0339	1.0332	1.0333
	East Riding	1.0350	1.0292	1.0299
	Average	1.0345	1.0332	1.0316

The below background growth factors were proposed at the scoping stage.

Table 9: Background growth factors that were proposed at the scoping stage

Average: Selby / East Riding	AM Peak	PM Peak
2018-2021	1.0361	1.0343
2018-2026	1.0981	1.0949

The review of the scoping note prompted the following comments from National Highways:

Noted. The proposed approach is considered appropriate.

We have reviewed the NTM adjusted TEMPro growth factors derived by WSP. Our own analysis using the TEMPro 7.2 dataset and the criteria adopted by WSP has identified very similar growth rates – for example, our own 2018-2028 growth rates are 1.11282 in the AM peak and 1.10963 in the PM peak. The difference in growth rates is not an issue of concern.

It is noted that WSP have derived growth rates for all road types. Highways England has reviewed alternative growth rates for motorway and principal road types. The motorway 2018-2028 growth rates are 1.11790 in the AM peak and 1.11470 in the PM peak. This equates to a growth differential of just 0.5% over a ten-year period and is unlikely to be a material issue. On this basis, Highways England accept the proposed use of WSP growth rates for all road types, and the NTM adjusted TEMPro growth rates shown in Table 4 are accepted for use.

JSJV has undertaken an independent analysis using TEMPro and the background traffic growth factors are shown in Table 10. JSJV is aware that TEMPro version 8.0 has been released but due to version 8.0 not becoming official until November 2022, JSJV has used TEMPro version 7.2.

Table 10: JSJV background growth factors

Assessment years	Location	Road type	AM peak	PM peak	Weekday
2018-2022	Selby	Motorway	1.0532	1.0514	1.0523
	East Riding		1.0502	1.0480	1.0502
	Average		1.0517	1.0497	1.0513
	Selby	Principle	1.0477	1.0459	1.0468
	East Riding		1.0448	1.0426	1.0447
	Average		1.0463	1.0443	1.0458
2022-2026	Selby	Motorway	1.0486	1.0479	1.0479
	East Riding		1.0451	1.0438	1.0446
	Average		1.0469	1.0459	1.0463
	Selby	Principle	1.0465	1.0458	1.0458
	East Riding		1.0430	1.0417	1.0425
	Average		1.0448	1.0438	1.0442

The difference to the proposed background growth factors is presented below.

Table 11: Review of proposed background growth factors

Assessment years	Location	Road type	AM peak	PM peak	Weekday
2018-2022	Average	Motorway	-0.0163	-0.0163	-0.0164
	Average	Principle	-0.0109	-0.0109	-0.0109
2022-2026	Average	Motorway	-0.0124	-0.0127	-0.0147
	Average	Principle	-0.0103	-0.0106	-0.0126

The proposed background growth factors are lower than those derived by JSJV for both the Motorway and Principal road types. However, in line with the previous comments at the scoping stage, the identified growth differential is unlikely to be a material issue and the proposed background growth factors are acceptable.

In order to avoid double counting, alternative assumptions have been applied to the future household and jobs forecasts to reflect that the peak hour traffic flows. Table 12 presents the proposed background growth factors with alternative assumptions applied.

Table 12: Proposed background growth factors with alternative assumptions

Assessment years	Location	AM peak	PM peak
2022-2026	Selby	1.0340	1.0333
	East Riding	1.0253	1.0238
	Average	1.0297	1.0286

The following developments have been scoped into the Traffic and Transport assessment:

- 2019/1343/EIA – Eggborough Demolition Works and Redevelopment;
- Barlow Mound Resource Recovery Operations;
- 21/03027/STPLF - Erection of Employment Units – Rawcliffe Road Airmyn;
- 19/01430/STPLF – Train Manufacturing Plant;
- 15/00305/STOUT - Up to 838 New Homes - A164 Rawcliffe Road; and
- 18/03879/STREM - Erection of a building for use as B8, B1(a) and B2.

JSJV supports the approach to use alternative assumptions to avoid double counting from the committed development traffic.

Netting off

It is acknowledged that the traffic generation from the consented DCO for 'Drax Repower' has not been discounted (netted-off) in order to form a robust assessment. JSJV supports this approach.

Sensitive receptors

The following sensitivity is suggested for the SRN:

- Link 6 (M62 E): low sensitivity because the road is a three-lane motorway with a National speed limit and is subject to Motorway regulations.
- Link 9 (M62 W): low sensitivity because the road is a three-lane motorway with a National speed limit and is subject to Motorway regulations.
- Junction 4 (M62 Junction 36): very high sensitivity in both the AM and PM peak periods.

JSJV would agree that M62 Junction 36 has a very high sensitivity, however, would suggest that both M62E and M62W may be potentially impacted by the construction impacts of the scheme and as such further justification should be provided to explain the proposed sensitivity for the M62 mainline.

Construction trip generation

Trip generation

The ES proposed the following assumptions regarding construction traffic generation:

“It is anticipated that 80% of the workforce would be based locally and therefore travel from home and 20% of the workforce would be transient and therefore travel from local accommodation. It has been assumed that workers travelling from home will travel by private car as a driver or passenger, with an average vehicle occupancy of two workers per vehicle, with the remaining 20% travelling by minibus, with an average occupancy of seven workers per vehicle.”

The justification is that, “these assumptions have previously been used as a basis for assessment within the Knottingley CCGT Power Station Transport Assessment (June 2013) which gained DCO consent in March 2015 and Eggborough CCGT Power Station which gained DCO consent in September 2018” and that “the Applicant has also confirmed these assumptions are in line with their experience of outages at Drax Power Station Site”.

The examination documents relating to the Knottingley CCGT Power Station have been archived and are no longer available on the National Infrastructure Planning website. However, JSJV has accessed the Transport Assessment for the Eggborough CCGT Power Station and can confirm that:

“In relation to traffic generation associated with construction workers, it has been assumed that 80% of workers will travel to site by private car with an average occupancy of two workers per vehicle and 20% will travel to site by minibus with an average occupancy of seven workers per vehicle. This is considered a realistic assumption given that the mode of arrival of construction workers can be controlled through travel planning measures and that construction workers would want to minimise their travel expenditure, particularly if having to pay for temporary accommodation. This assumption is based on those set out within the Knottingley CCGT Power Station Transport Assessment (June 2013) which gained DCO consent in March 2015 and was accepted by NYCC as a suitable basis for analysis during the scoping stage of this Transport Assessment. It is proposed that this level of traffic generation can be managed and maintained through availability of on-site parking spaces.”

Subject to a review of the proposed CWTP, JSJV supports the proposed assumptions for construction trip generation.

When this vehicle occupancy rate is applied to the workforce associated within the construction phase of the development, in the peak month of construction (August 2026), the following vehicle trip generations for construction workers, shown in Table 13, would be anticipated.

Table 13: Proposed Construction Worker Vehicle Generation (Peak Month)

Month of construction	Total workers per day	Number of cars / vans at 2 per vehicle	Number of minibuses at 7 per vehicle	Average two-way daily flow.
August 2026	1,000	400	29	858

JSJV accept the proposed Construction Worker Vehicle Generation.

It is proposed that the volume of HDVs on the network during the peak month of construction (in 2026) is to be a maximum of 270 two-way daily HDV movements (135 in and 135 out). JSJV can confirm that this level of HGV trip generation is in line with that contained in the proposed schedule planner and is, therefore, considered to be robust.

It is proposed that the HDV traffic will be managed through measures contained in the CTMP. JSJV supports this approach and has offered comments on the CTMP in a later section of this TM.

Profile across the day

During the construction phases it is proposed that the standard working periods would be Monday to Friday, 07:00 to 19:00, with all personnel working within a nine-hour period. It is also proposed that start-up and shutdown activities would take place during the one-hour period either side of standard working hours.

For the purposes of the assessment, it has been proposed that all construction worker related trips would arrive between 06:00 and 10:00 and depart between 16:00 and 20:00 (Mondays to Fridays). On Saturdays, it is proposed that working hours would be 07:00 and 14:30.

JSJV would note that the assumed arrival and departure profiles coincide with the network peak periods for M62 Junction 36.

It is stated that the proposed arrival and departure profile is based on that used for Eggborough CCGT Power Station which gained DCO consent in September 2018, and Keadby 3 Carbon Capture Power Station DCO, which is awaiting consent.

Table 14 shows the proposed percentage of daily inbound and outbound trips for the periods 06:00 – 10:00 and 16:00 – 20:00 used in this assessment.

Table 14: Construction Worker Vehicle Generation profile

Time period	% of daily inbound	% of daily outbound
06:00 – 07:00	30%	0%
07:00 – 08:00	55%	0%
08:00 – 09:00	10%	0%
09:00 – 10:00	5%	0%
16:00 – 17:00	0%	10%
17:00 – 18:00	0%	15%
18:00 – 19:00	0%	70%
19:00 – 20:00	0%	5%

JSJV would note that the proposed profile is not a direct match with that used for the Eggborough CCGT Power Station. Eggborough CCGT Power Station proposed 5% of daily outbound from 16:00 – 17:00 and 75% of daily outbound from 18:00 – 19:00. The average two-way daily flow of construction workers (agreed above) is 858. A difference of 5% of construction workers, therefore, represents 21 one-way trips. This difference is not considered to be a material concern and, therefore, the proposed Construction Worker Vehicle Generation profile is acceptable.

It is proposed that HDV deliveries are to be spread evenly over the 12-hour working day from 07:00 – 19:00.

The Eggborough CCGT Power Station Transport Assessment also assumed that the arrival and departure of HGVs from the Site will be spread evenly over the period 08:00 to 18:00 (10-hour working day).

It is proposed that the volume of HDVs on the network during the peak month of construction (in 2026) is to be a maximum of 270 two-way daily HDV movements (135 in and 135 out). Evenly split across a 12-hour day results in 11 one-way HDV movements per hour. Evenly split across a 10-hour day results in 14 one-way HDV movements per hour. This difference is not considered to be a material concern and, therefore, the proposed HDV profile is acceptable.

Based on the above, an overview of the daily vehicle profile for construction workers and HDV movements during peak month of the construction phase is presented in Table 15.

Table 15: Proposed Daily Vehicle Profile During Peak Month of Construction

Time period	Constructing worker vehicles (LDVs)		Construction HDVs	
06:00 – 07:00	129	0	0	0
07:00 – 08:00	236	0	11	11
08:00 – 09:00	43	0	11	11
09:00 – 10:00	21	0	11	11
10:00 - 11:00	0	0	11	11
11:00 - 12:00	0	0	11	11
12:00 - 13:00	0	0	11	11
13:00 - 14:00	0	0	11	11
14:00 - 15:00	0	0	11	11
15:00 - 16:00	0	0	11	11
16:00 – 17:00	0	43	11	11
17:00 – 18:00	0	64	11	11
18:00 – 19:00	0	300	11	11
19:00 – 20:00	0	21	0	0

The ES does state that the development is likely to generate 65 two-way trips in the AM peak hour (08:00–09:00) and 86 two-way trips in the PM peak hour (17:00– 18:00).

Whilst JSJV supports the above Proposed Daily Vehicle Profile, we would suggest that the total vehicle trip generation should be presented in Passenger Car Units [PCUs], so that the HDVs are properly accounted for. TAG UNIT M3.1 Highway Assignment Modelling (May 2020) states that the following PCU equivalent values should be used:

- LGVs on all road types: 1.0;
- HGVs on motorways and all-purpose dual carriageways: 2.5; and
- HGVs on other road types: 2.0

Considering the above, JSJV would suggest that, during the construction phase (Option 2), the development is likely to generate 98 two-way PCUs between 08:00 – 09:00 and 119 two-way PCUs between 17:00 – 18:00.

JSJV would also reiterate that further clarification is required to confirm that the worst case peak periods (and potentially the corresponding shoulder periods) for M62 Junction 36 have been assessed.

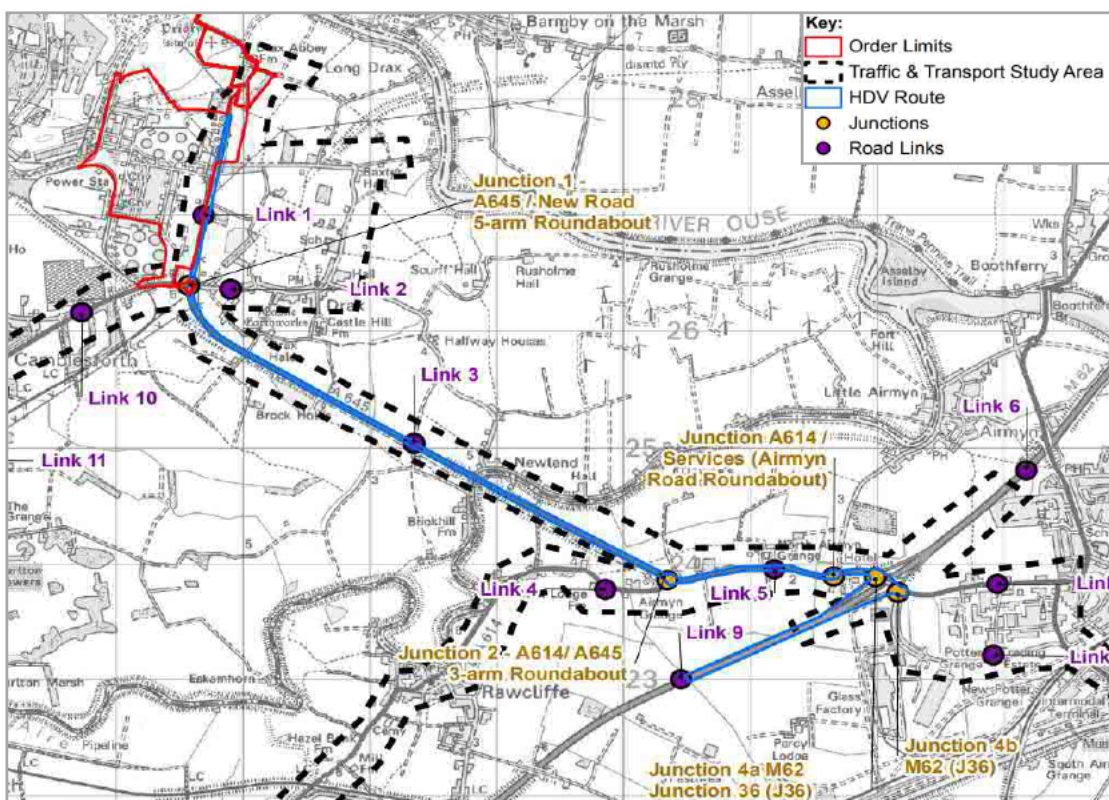
Construction trip distribution

Through EIA scoping for the development, National Highways and NYCC agreed that a gravity model could be used to distribute workers associated with the Proposed Scheme. Consequently, the proposed construction worker trip distribution is acceptable.

The gravity model was calibrated with an average trip length of 30 km, which reflected the remote nature of the application site, and the likely origin of workers from the neighbouring major urban centres of Hull, York, Leeds and Doncaster. The gravity model showed that 70% of car trips assigned via the M62 Junction 36, while the remaining 30% assigned via Selby.

It is proposed that the HDVs associated with the construction phase and decommissioning are distributed on fixed routes to and from the application site along the M62, A614 and A645 as show in Figure 8.

Figure 8: Proposed HDV routing



JSJV supports the assumption that 100% of the HDV trip generation will use M62 Junction 36 as this represents a worst-case scenario.

Trip assignment

JSJV has produced several figures showing the trip assignment at the M62 Junction 36. These have been prepared using the proposed trip generation, profile and trip distribution assumptions (70% of the construction worker trips use M62 Junction 36 and 100% of HDV trips use Junction 36).

Figure 9 shows the two-way trip assignment at M62 junction 36 across the working construction hours of a day. Figure 10 shows the two-way daily trip assignment at M62 junction 36 across the planned schedule for the Option 2 construction plan.

It is not possible to present trip assignment for the SRN peak periods because the ES does not include a trip profile for 15-minute periods. Consequently, Figure 11 shows the two-way trip assignment at M62 Junction 36 across the planned schedule for the Option 2 construction plan, for 08:00-09:00, 07:00 – 08:00, 17:00 to 18:00, and 16:00-17:00.

Figure 9: Two-way trip assignment at M62 junction 36 across the working construction hours of a day (PCUs)

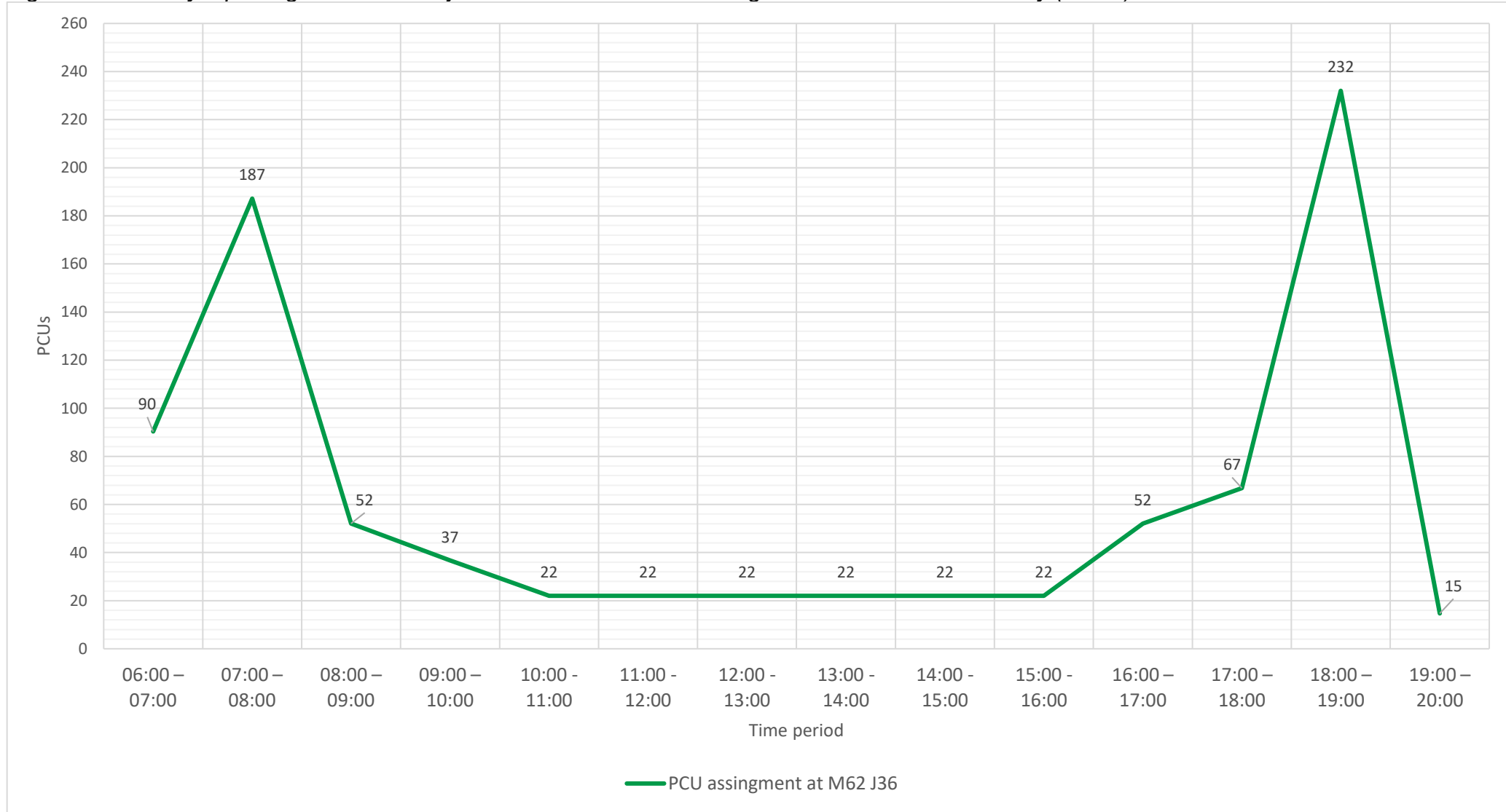




Figure 10: Two-way daily trip assignment at M62 Junction 36 across the planned schedule for the Option 2 construction plan (PCUs)

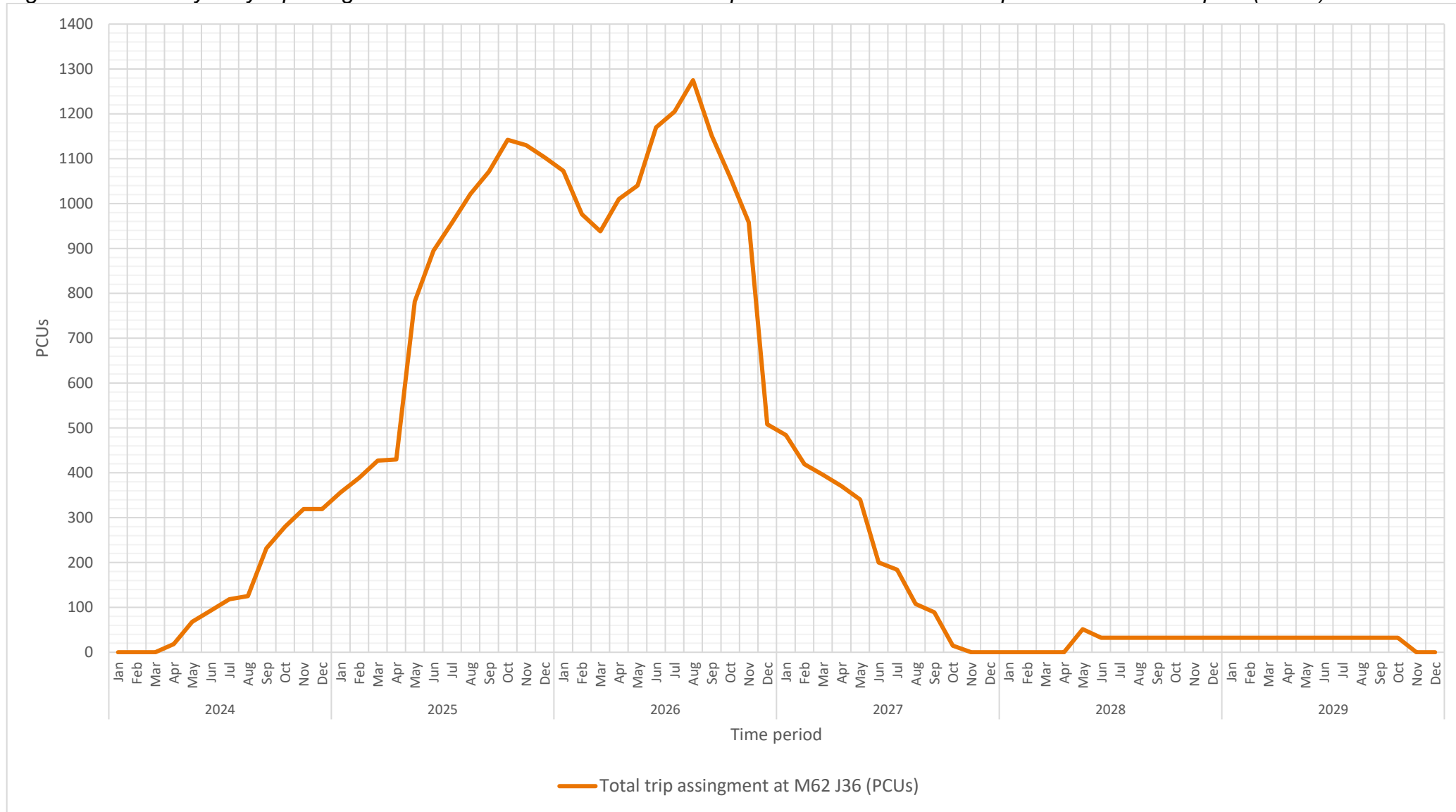


Figure 11: Two-way trip assignment at M62 Junction 36 across the planned schedule for the Option 2 construction plan

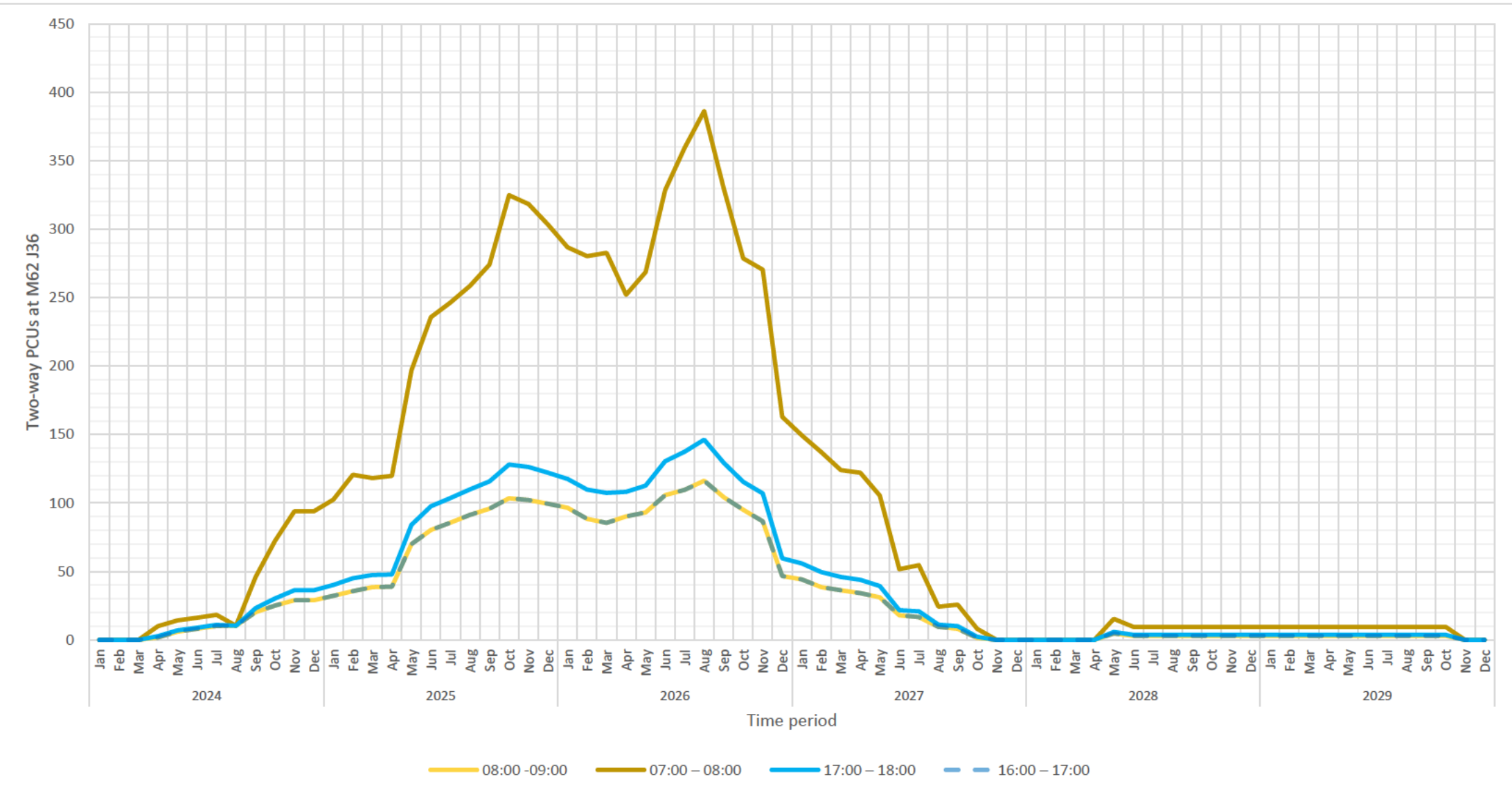
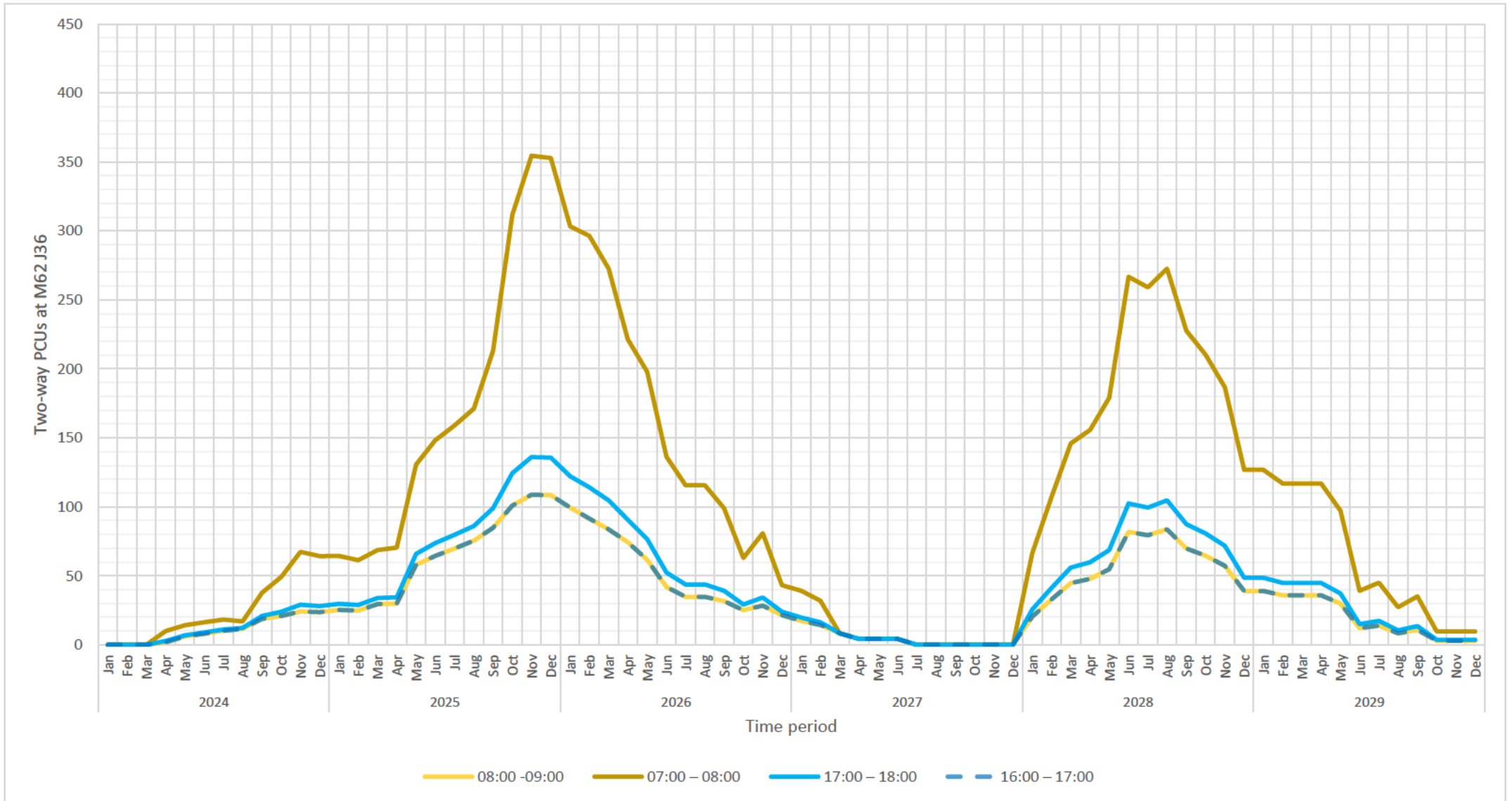


Figure 12: Two-way trip assignment at M62 Junction 36 across the planned schedule for the Option 1 construction plan



JSJV would reiterate that further analysis is required to assess the SRN peak periods (and, potentially, the corresponding shoulder peak periods).

However, the above figures show that, for 29 continuous months (Jan-25 to May-27), there are over 100 two-way PCUs forecast to use M62 Junction 36 between 07:00 and 08:00.

For Option 1 (as shown in Figure 12), there are forecast to be over 100 two-way PCUs using M62 Junction 36 between 07:00 and 08:00 for the following consecutive months:

- 16 consecutive months from May 2025 – August 2026; and
- 15 consecutive months from February 2028 – April 2029.

JSJV would note that 100 PCUs is an arbitrary benchmark for the purposes of comparison. This benchmark has no relevance to Policy and should not be used to justify the proposed development’s impact.

M62 Junction 36 Dumbbell Roundabout junction capacity assessment

The ES has assessed the impacts of the development on driver delay at M62 Junction 36 using Junctions10 software. The geometric parameters for the junction were based on OS Data. A full set of measurements and Junctions 10 output files are included in Junction Modelling (Appendix 5.6). The analysis of all junctions has been undertaken using the ‘ONE HOUR’ method, which synthesises a ‘bell curve’ profile for peak hour traffic.

JSJV is in the process of reviewing the proposed Junctions10 model and will provide our review comments in due course. We would withhold comment on the robustness of the proposed assessment until we have reviewed the modelling files.

Notwithstanding the above, the proposed assessment results are presented below.

Table 16: Proposed 2018 baseline results for M62 Junction 36.

Arm	AM Peak			PM Peak		
	Max RFC	Queue (PCU)	Delay (s)	Max RFC	Queue (PCU)	Delay (s)
Overbridge (From west to east)	0.52	1.20	3.69	0.56	1.40	3.84
M62 Southbound Off-Slip	0.52	1.20	9.11	0.39	0.70	7.88
A614 Rawcliffe Road (East)	0.31	0.50	3.07	0.40	0.70	3.24
A161	0.18	0.30	3.94	0.26	0.40	4.20
A614 Rawcliffe Road (West)	0.67	2.20	8.48	0.77	3.40	12.08
Overbridge (From east to west)	0.46	1.00	4.59	0.58	1.50	5.59
M62 Northbound Off-Slip	0.43	0.90	3.22	0.43	0.90	3.26

JSJV would suggest that in the 2018 baseline scenario, all arms of M62 Junction 36 operate within their capacity.

Table 17: Proposed 2022 baseline results for M62 Junction 36.

Arm	AM Peak			PM Peak		
	Max RFC	Queue (PCU)	Delay (s)	Max RFC	Queue (PCU)	Delay (s)
Overbridge (From west to east)	0.54	1.30	3.84	0.58	1.50	4.02
M62 Southbound Off-Slip	0.55	1.30	9.92	0.41	0.80	8.37
A614 Rawcliffe Road (East)	0.32	0.50	3.18	0.42	0.70	3.37
A161	0.19	0.30	4.05	0.27	0.40	4.35
A614 Rawcliffe Road (West)	0.70	2.50	9.42	0.80	4.10	14.28
Overbridge (From east to west)	0.48	1.00	4.73	0.60	1.60	5.86
M62 Northbound Off-Slip	0.45	1.00	3.36	0.45	1.00	3.41

JSJV would suggest that in the 2022 baseline scenario, all arms of M62 Junction 36 operate within their capacity.

Table 18: Proposed 2026 baseline results for M62 Junction 36.

Arm	AM Peak			PM Peak		
	Max RFC	Queue (PCU)	Delay (s)	Max RFC	Queue (PCU)	Delay (s)
Overbridge (From west to east)	0.55	1.40	3.98	0.59	1.60	4.18
M62 Southbound Off-Slip	0.58	1.50	10.80	0.43	0.90	8.86
A614 Rawcliffe Road (East)	0.34	0.50	3.28	0.43	0.80	3.50
A161	0.20	0.30	4.16	0.28	0.40	4.50
A614 Rawcliffe Road (West)	0.73	2.90	10.43	0.83	4.90	16.88
Overbridge (From east to west)	0.49	1.10	4.87	0.62	1.70	6.12
M62 Northbound Off-Slip	0.46	1.10	3.49	0.47	1.00	3.55

JSJV would suggest that in the 2026 baseline scenario, all arms of M62 Junction 36 operate within their capacity. However, JSJV would note that the reported RFC for

A614 Rawcliffe Road (West) shows that this arm is starting to experience increased queues and delay.

Table 19: Proposed 2026 Do Minimum results for M62 Junction 36.

Arm	AM Peak			PM Peak		
	Max RFC	Queue (PCU)	Delay (s)	Max RFC	Queue (PCU)	Delay (s)
Overbridge (From west to east)	0.79	4.30	8.57	0.68	2.30	5.39
M62 Southbound Off-Slip	1.38	128.50	641.60	0.73	3.00	21.50
A614 Rawcliffe Road (East)	0.67	2.10	8.55	0.60	1.60	5.44
A161	0.29	0.50	5.19	0.67	2.20	11.24
A614 Rawcliffe Road (West)	1.12	72.80	202.00	1.20	113.00	299.34
Overbridge (From east to west)	0.57	1.50	5.79	0.89	7.70	20.24
M62 Northbound Off-Slip	0.72	3.10	6.85	0.66	2.20	6.43

In the 2026 Do Minimum scenario, the following sections of M62 Junction 36 are operating in excess of their theoretical capacity: M62 Southbound Off-Slip and A614 Rawcliffe Road (West). The Overbridge (from east to west) is also shown to be experiencing queuing a delays.

Table 20: Proposed 2026 Do Something results for M62 Junction 36.

Arm	AM Peak			PM Peak		
	Max RFC	Queue (PCU)	Delay (s)	Max RFC	Queue (PCU)	Delay (s)
Overbridge (From west to east)	0.79	4.40	8.71	0.68	2.30	5.49
M62 Southbound Off-Slip	1.39	135.40	682.10	0.73	3.00	22.06
A614 Rawcliffe Road (East)	0.67	2.20	8.68	0.61	1.60	5.62
A161	0.29	0.50	5.27	0.69	2.40	12.23
A614 Rawcliffe Road (West)	1.15	86.20	234.30	1.28	153.90	440.50
Overbridge (From east to west)	0.57	1.50	5.80	0.89	7.70	20.23
M62 Northbound Off-Slip	0.74	3.50	7.54	0.67	2.30	6.73

JSJV would suggest that in the 2026 Do Something scenario, the following sections of M62 Junction 36 are operating over their theoretical capacity:

- M62 Southbound Off-Slip
- A614 Rawcliffe Road (West).

The Overbridge (from east to west) is also shown to be experiencing queuing a delays.

The ES states that:

Junction 4 [M62 J36] would operate over capacity in the 2026 Do Minimum assessment scenario i.e., without the addition of the Proposed Scheme construction traffic and that the Proposed Scheme would also increase driver delay.

JSJV agrees with the above statement.

The ES also states that:

It is understood that a highway improvement and contribution model has been identified at Junction 4 [M62 J36] to address the traffic impacts associated with committed development, including Short List 44 (ERYC Planning Reference: 21/03027/STPLF).

As part of National Highways changing their notice from 'Non Determination to 'No Objection' for Short List 44, National Highways accepted a financial contribution through a legal agreement (e.g. S106), with the financial contribution going towards the costs of design, costing and construction of required improvements listed in the Local Plan Infrastructure Study (June 2014) and the Local Plan Infrastructure Delivery Plan (March 2015) regarding essential junction improvements at the M62 Junction 36.

It is understood that the scheme comprises minor widening and partial signalisation of the junction and is due to be implemented between 2024 – 2029.

Further discussions are required with National Highways to consider the temporary impacts of the Proposed Scheme in the context of the above highway improvement scheme and the Applicant's current operation including reduced workforce, and Drax Repower DCO consent which assessed the same peak construction year.

JSJV has reviewed the planning context for planning application reference: 21/03027/STPLF and key information can be summarised as follows:

- The application seeks consent for the Erection of employment units (Use classes E(g)(ii) and/or E(g)(iii) and/or B2 and/or B8, with ancillary offices) and offices (Use class E(g)(i)) with electric vehicle charging hub and associated landscaping and infrastructure at Land South And South West Of Glews Garage Rawcliffe Road Airmyn East Riding Of Yorkshire;
- At the time of writing the application is awaiting decision (pending);
- On 25/03/2022, National Highways confirmed that subject to securing a financial contribution through a legal agreement (such as a S106) they have no objection to this development.

- This was on the understanding that the contribution being collected is towards the costs of design, costing and construction of required improvements listed in the Local Plan Infrastructure Study (June 2014) and the Local Plan Infrastructure Delivery Plan (March 2015) regarding essential junction improvements at the M62 Junction 36.

In addition to the above, JSJV can provide the following context for the junction improvements at the M62 Junction 36:

- The scheme was derived as part of the East Riding of Yorkshire Local Plan which was adopted in April 2016. The scheme is currently under review, with modelling being carried out to understand whether the mitigation is still required;
- The East Riding Infrastructure Study (2014) was the driver for the mitigation and includes a description and very basic plans within Appendix G of Appendix E; and
- Contributions have started to be collected by ERYC but remain well short of the cost of the scheme. Therefore, although committed within the ERYC Local Plan there are no timescales for delivery.

Considering the above, JSJV would suggest that the ES should assess with and without the scheme in place (in the DoMinimum and, consequently, the DoSomething scenarios).

The ES concludes that:

It is considered that the effect of the Proposed Scheme is negligible, but the cumulative impact of all committed development and background traffic growth is a temporary large adverse effect without mitigation being in place.

No mitigation measures are proposed other than the CTMP and CWTP.

The ES states the following:

In summary significant cumulative effects are predicted at Junction 4 should short listed developments be built out and other background growth is realised without an upgraded junction being delivered. However, the impacts of the Proposed Scheme traffic are minimal and it is considered that the temporary construction phase impacts can be cost effectively mitigated through enhanced management of the construction traffic, with robust monitoring and reporting measures included in the Outline Construction Traffic Management Plan (CTMP) (Appendix 5.1 3) and Framework Construction Worker Travel Plan (CWTP) (Appendix 5.2). This would include working with National Highways, NYCC, and ERoY

JSJV would withhold comment on the proposed assessment until all assessment inputs have been agreed upon (peak periods and DoMinimum mitigation) and until the proposed Junction10 model has been reviewed and approved. We would, however, suggest that the following guidance in the DfT Circular 02/2013 is relevant:

*“Development proposals are likely to be acceptable if they can be accommodated within the existing capacity of a section (link or junction) of the strategic road network, **or they do not increase demand for use of a section that is already operating at over-capacity levels**, taking account of any travel plan, traffic management and/or capacity enhancement measures that may be agreed. However, development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe”.*

Outline Construction Traffic Management Plan

JSJV can confirm that the construction programme and working hours in the CTMP correspond with those assessed in the Traffic and Transport chapter of the ES.

It is proposed that signage will be provided to ensure sufficient guidance for construction traffic and to ensure that the traffic does not deviate from a specified route. The CTMP explains that “*the location of signage will be developed as the Proposed Scheme progresses whilst also incorporating the outputs of ongoing consultation with the Local Highway Authority and National Highways*”.

JSJV would suggest that National Highways requests for the following planning condition to be attached to any granted DCO:

Unless otherwise agreed in writing by the Local Planning Authority in consultation with National Highways (or its successors) no construction shall commence unless and until a Construction Phase Traffic Management Plan has been submitted to and approved in writing by the Local Planning Authority in consultation with National Highways (or its successors). Thereafter the construction shall be undertaken in accordance with the approved plan.

As a minimum, JSJV would suggest that the Construction Phase Traffic Management Plan includes the following:

- Details and maintenance of any construction traffic management signage;
- Details and maintenance general road user management signage (e.g., Delays Likely and their duration);
- The need for and details of any general road user diversionary routes;
- A commitment to following due process regarding AILs; and
- The need for and maintenance of temporary works (to be informed by the operational assessments).

In order to facilitate the delivery of AILs, the ES proposes that it will be the responsibility of the haulage company to contact and inform the following key stakeholders in compliance with regulatory requirements. The ES states that “*the haulage company must be able to advise each of the following stakeholders in terms of proposed delivery dates and likely impacts*” and that “*the respective Highway Authorities should be given advance written notice of the AIL deliveries in compliance with regulatory requirements*”.

National Highways should be consulted on any proposed AIL movements for this site. A Special Order application must be completed 10 weeks before the scheduled date of any AIL move. Further, details of the required process are explained in National Highways’ “Aide Memoire for notification requirements for the movement of Abnormal Indivisible Loads or vehicles by road when not complying with The Road Vehicles (Construction and Use) Regulations 1986 (commonly known as C & U)”.

JSJV would advise that the haulage company can use National Highways’ [electronic service delivery for abnormal loads \(ESDAL\)](#) to:

- plot the route;
- notify the police, highways and bridge authorities of the abnormal load movements around the road network;
- get advance notice of any possible route problems; and
- save vehicle details and routes for future use.

It is proposed that a Highway Condition Survey (HCS) will be carried out along the designated route for abnormal and indivisible loads (AIL) ahead of the first AIL delivery, and after the final AIL. This is with a view to any construction related defects being made good. We support this approach but would suggest that the surveys be provided to National Highways for review within the Construction Phase Traffic Management Plan; a commitment to make good any defects should also be included in the plan.

We would also suggest that the Applicant engages closely with National Highways before undertaking any surveys or other works on the SRN as such works are of high risk to road users, contractors, and National Highways operatives. The details of works, relevant safety risks associated with any works shall be identified, and appropriate mitigations shall be agreed with National Highways prior to commencement.

No works to the SRN should be undertaken prior to an agreement with National Highways.

A swept path analysis and 3D survey of the route has been undertaken to identify where street furniture needs to be removed, overhead lines lifted or switched off, and vegetation pruned.

In addition to road modifications, it is stated that traffic management would be required.

It is proposed that a Statement of Common Ground will be prepared with National Highways to incorporate the agreed position on AIL movements. The CTMP also states the following:

“Further detailed assessment would be undertaken to determine the exact temporary mitigation required for the M62, and other local required temporary mitigations, as well as the agreement of traffic management and coordination of the delivery with National Highways and Local Authorities.”

Considering the above, JSJV would agree that further discussions are required with National Highways regarding AIL deliveries.

Framework Construction Worker Travel Plan

Travel plan measures

The following measures are proposed:

- Measure 1: Travel Plan Coordinator;
- Measure 2: Travel Plan Steering Group;
- Measure 3: Construction Worker Travel Surveys;
- Measure 4: Travel Plan Marketing;
- Measure 5: Car Park Management Strategy;
- Measure 6: Car Sharing and Minibuses;
- Measure 7: Construction Worker Facilities;
- Measure 8: Senior Staff to Lead by Example; and
- Measure 9: Monitoring of Traffic Flows.

JSJV supports the proposal for a “member of staff working for Drax will be appointed to the role of Travel Plan Coordinator [TPC] as part of their overall responsibilities”.

JSJV supports the proposal for the surveys to be funded by the Applicant and to be undertaken on a regular basis during the construction programme.

JSJV supports the proposal for a construction worker registration process will be integrated into the induction process to ensure that all construction workers are registered on a car sharing database and encouraged to assess car sharing to site with other construction workers, either by private car or contractor minibuses.

It is stated that additional incentives will also be offered to encourage car sharing. JSJV would suggest that a firm financial commitment should be made to specific incentives, rather than a description of potential example incentives.

The CWTP states the following:

“National Highways have requested the monitoring of construction worker traffic. The TPC and senior management will agree the arrangements for the monitoring of construction worker traffic with National Highways and review the data at the proposed TPSG to understand and agree if additional measures are required to support the management of the construction phase traffic impacts.”

JSJV supports this and would suggest that an agreement on monitoring of construction worker traffic could be included in the Statement of Common Ground.

Car parking

The CWTP states the following:

Construction workers will park within the existing 500 carparking spaces available within the Drax Power Station Site. However, provision for 300 overflow car parking spaces would be provided within the East Construction Laydown Area. The combined capacity of 800 carparking spaces across the two areas will not be required throughout the entire construction programme but is included to ensure operational resilience throughout the construction phase as the existing operational units will still require maintenance and outages.

This CWTP aims to reduce single occupancy car use amongst construction workers and achieve an average car occupancy of two for home workers, and seven for transient workers throughout the Proposed Scheme’s construction period

In order to achieve the vehicle occupancy targets for daily car journeys in the construction phase, the construction site will have a capped number of parking spaces available to construction workers, with no more than 450 spaces. The remaining spaces on Site will be used for other existing operations.

A car parking management scheme will be implemented which provides favourable parking locations for those that travel to the Site with two or more passengers; this will discourage single vehicle occupancy where possible. In addition, a car parking management strategy will be developed by the TPC and agreed by senior management and the Steering Group prior to the construction period.

The strategy will incorporate measures for both construction workers and other visitors and will be a 'live' document in the sense that it will be subject to change and be sufficiently flexible to adapt to changing targets and objectives. Monitoring of the strategy will be carried out by the TPC to ensure that targets are achieved, and to minimise non-compliance by construction workers and other visitors and reported to the TPSG.

JSJV would suggest that if the construction site will have a capped number of parking spaces available to construction workers of no more than 450 spaces, then the proposed parking provision of 800 car parking spaces (500 standard spaces + 300 overflow spaces) should be revised.

JSJV would suggest that the CWTP should provide specific commitments to how the proposal to provide favourable parking locations for those that travel to the Site with two or more passengers will be enforced and how many car parking spaces will be specifically allocated for only workers who car share.

Hours of operation

Subject to the impact at the SRN, there may be a requirement for National Highways to request that the arrival and departure movements for construction staff occur outside of the SRN peak periods. This would be achieved by recommending that a condition for a Construction Traffic Management Plan be attached to any granted DCO.

Environmental impacts

In February 2021 National Highways stated the following:

HE accepts the suitability of the identified likely significant effects shown in Table 6.1 of the SR, and summarised as follows:

- *Traffic flows – increase on existing roads.*
- *Delay – traffic delays to non-development traffic.*
- *Road safety – likely effect on road safety as evidence by personal injury collision data for the most recent five-year period.*
- *Intimidation and fear – influenced by traffic volume, number of HGVs, proximity to people, and protection deficiencies such as narrow footways.*
- *Severance – consideration of specific local conditions and impact on pedestrian routes.*
- *Pedestrian amenity – delay to pedestrians.*

JSJV would withhold comment on the effect on intimidation and fear until the impact of the Scheme at the SRN has been agreed upon.

JSJV would suggest that severance and pedestrian amenity are not matters for National Highways.

Summary and Conclusions

This review has highlighted the need for further information and the requirement for recommending conditions as follows:

Further information:

- 1) Revised collision data analysis for the SRN;
- 2) Clarification is required to confirm whether the worst-case peak (and, potentially, the corresponding shoulder peaks) for M62 Junction 36 has been assessed. If it the worst-case peak has not been assessed, further analysis will be required;
- 3) JSJV is in the process of reviewing the proposed Junctions10 model and will provide our review comments in due course. We would withhold comment on the robustness of the proposed assessment until we have reviewed the modelling files;
- 4) The ES should assess with and without the Local Plan improvements at M62 Junction 36 in place (in the DoMinimum and, consequently, the DoSomething scenarios);
- 5) Further discussions are required with National Highways regarding ALL deliveries and the proposed Highways Condition Survey;
- 6) A firm financial commitment should be made to specific incentives for car sharing, rather than a description of potential example incentives;
- 7) An agreement on monitoring of construction worker traffic could be included in the Statement of Common Ground;
- 8) If the construction site will have a capped number of parking spaces available to construction workers of no more than 450 spaces, then the proposed parking provision of 800 car parking spaces (500 standard spaces + 300 overflow spaces) should be revised; and
- 9) The CWTP should provide specific commitments to how the proposal to provide favourable parking locations for those that travel to the Site with two or more passengers will be enforced and how many car parking spaces will be specifically allocated for only workers who car share.

Draft conditions (subject to change/addition once the above points have been resolved):

- 1) *Unless otherwise agreed in writing by the Local Planning Authority in consultation with National Highways (or its successors) decommissioning of the development hereby approved shall not commence unless and until a Decommissioning Traffic Management Plan has been submitted to and approved in writing by the Local Planning Authority in consultation with National Highways (or its successors). Thereafter unless otherwise approved in writing decommissioning shall be undertaken in accordance with the approved plan.*
- 2) *Unless otherwise agreed in writing by the Local Planning Authority in consultation with National Highways (or its successors) no construction shall commence unless and until a Construction Phase Traffic Management Plan has been submitted to and approved in writing by the Local Planning Authority in consultation with National Highways (or its successors). Thereafter the construction shall be undertaken in accordance with the approved plan.*

Subject to the impact at the SRN, there may be a requirement for National Highways to request that the arrival and departure movements for construction staff occur outside of the SRN peak periods. This would be achieved by recommending that a condition for a Construction Phase Traffic Management Plan be attached to any granted DCO.

JSJV would suggest that the wording of any recommended planning conditions will be directly related to the construction scenario that is selected by the Applicant. This will then ensure that applications to discharge conditions must be supported by evidence that relates to the actual, selected, construction scenario.

RESPONSE TO NATIONAL HIGHWAYS RELEVANT REPRESENTATIONS (SEPT 2022)

Appendix B – Personal Injury Collision Data

Drax Bioenergy with Carbon Capture and Storage

The Planning Act 2008

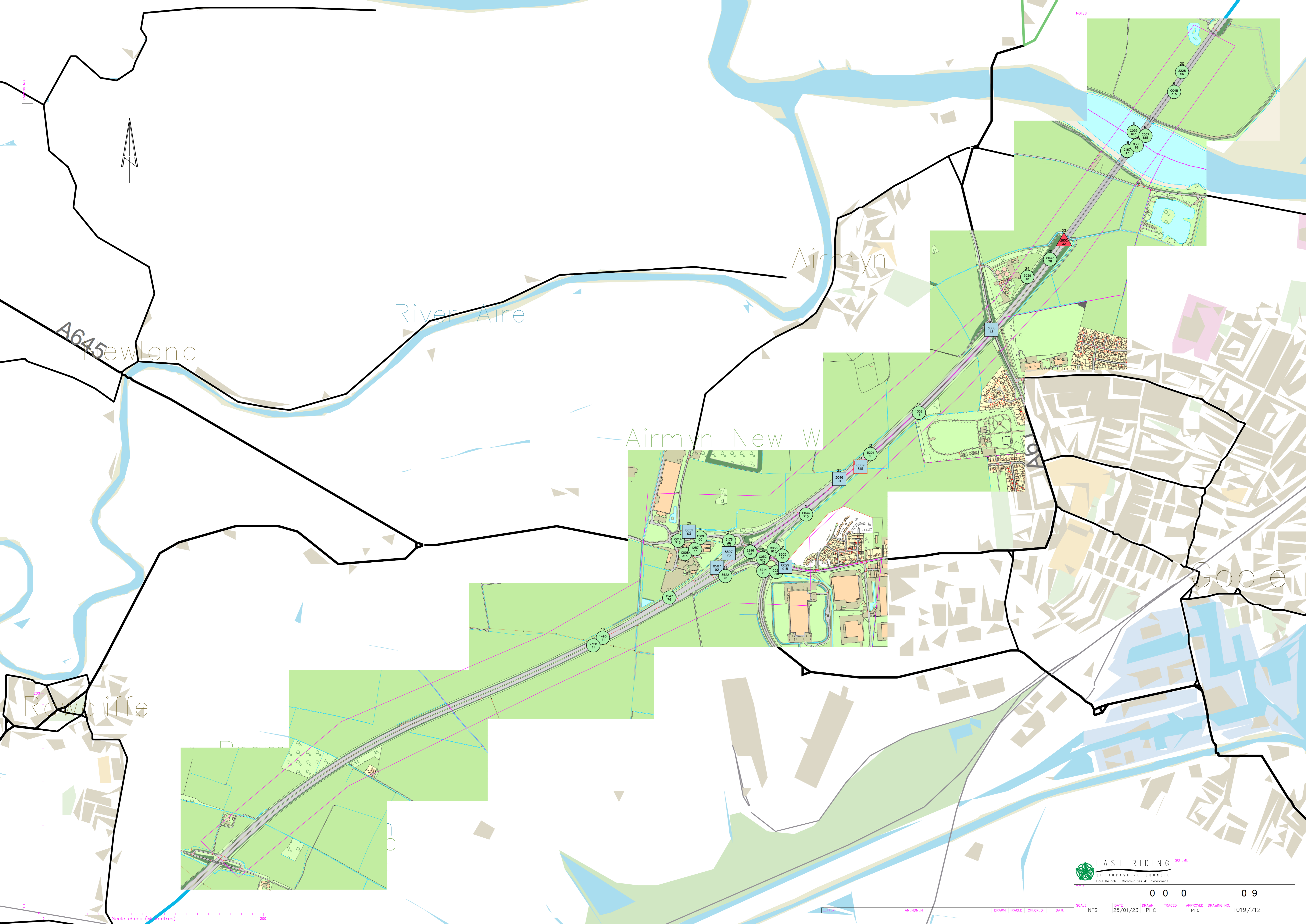
The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation (5(2)(q))

Document Reference Number: 8.9.4

Applicant: Drax Power Limited

PINS Reference: EN010120





Google

Airmyn New W

Airmyn

River Aire

A645
Newland

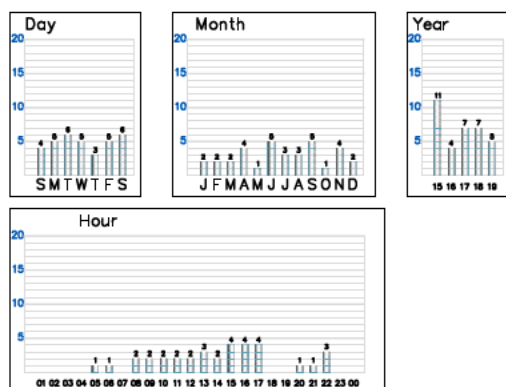
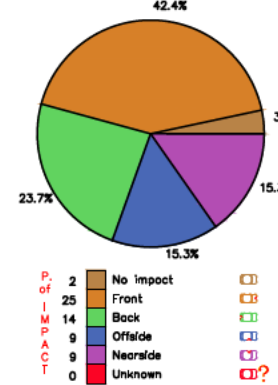
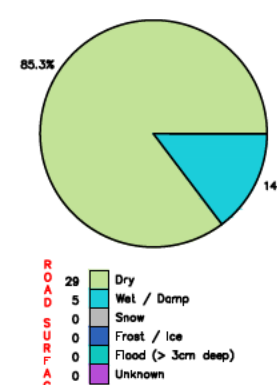
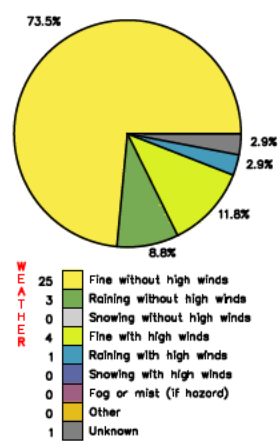
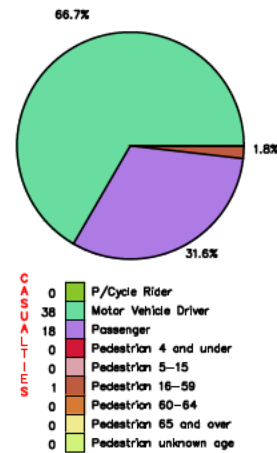
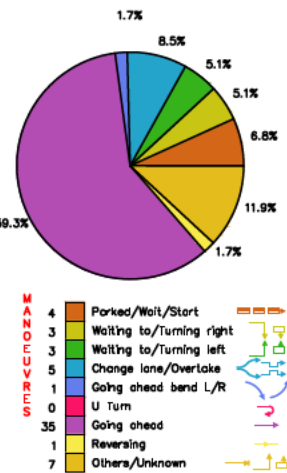
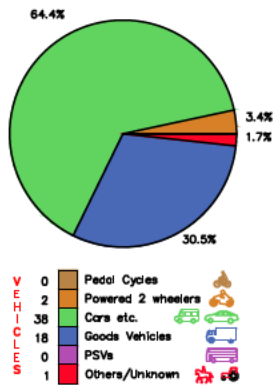
Rowcliffe

A61
A601

NOTES

Reference Number	C008 315	C014 715	C026 915	C029 915	C044 715	C048 315	C052 915	C055 015	C053 915	C067 815	C069 815	5201 2	5714 8	1352 16	1257 77	1490 41	1547 76	1569 00	2167 47	2228 58	2246 98	2358 11	2852 32	3039 45	3046 91	3060 43	3176 46	8047 78	8051 83	8386 99	8605 88	8587 82	8597 73	8622 75					
Date / Day	Fr16 Jan	Mo23 Mar	Tu26 May	Su07 Jun	Mo10 Aug	Mo24 Aug	We09 Sep	Tu15 Sep	Sa19 Sep	Fr13 Nov	Fr13 Nov	Tu15 Mar	Tu05 Apr	Sa05 Nov	We09 Nov	Tu17 Jan	Sa04 Feb	Su19 Feb	Su30 Apr	Th14 Sep	Sa23 Sep	Sa28 Oct	Tu03 Apr	Mo18 Jun	Fr22 Jun	We27 Jun	We01 Aug	Su09 Dec	Th27 Dec	Fr12 Apr	Th20 Jun	We17 Jul	So20 Jul	Mo22 Jul					
Year	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2016	2016	2016	2016	2017	2017	2017	2017	2017	2017	2017	2017	2017	2018	2018	2018	2018	2018	2018	2019	2019	2019	2019	2019	2019			
Time	1324	2130	1447	1045	1621	1521	1546	1323	1640	1632	1537	0903	1311	1106	2200	1609	0848	2220	1702	1113	0607	1700	0930	1450	2000	2230	0547	1551	1230	1710	1005	1720	0840	1259					
Severity																																							
Dark [] / Lit []																																							
Weather Conditions																																							
Road Surface																																							
Special Conditions																																							
Carriageway Hazards																																							
Vehicle Manoeuvres																																							
Vehicle 1	5	e																																					
Vehicle 2	6	t																																					
Vehicle 3	7	c																																					
Vehicle 4	8																																						
Casualty /age																																							
Failed to Give-Way																																							
Signal Ignored																																							
Loss of Control																																							
Hit Object IN C'way																																							
Hit Object OFF C'way																																							
Vehicle Left C'way																																							
Breath Test																																							
Contributory Factors	1/2																																						
	405																																						
	3/4																																						
* possible, ** very likely	5/6																																						
Without Tea/Ref																																							
User Route:																																							
1																																							
2																																							
3																																							
4																																							

200



SCHEME
Recorded Injury Collisions
M62 Goole

TITLE
RICs 01/01/2015 to 31/12/2019

SCALE	DATE	DRAWN	TRACED	APPROVED	DRAWING NO.
NTS	25/01/23	PHC	-	PHC	T019/713

LETTER	AMENDMENT	DRAWN	TRACED	CHECKED	DATE
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Scale check (Millimetres)

0

Causation Factors.txt

;; Contributory Factors, updated for Version 6

; number at column 3, Description at column 10.

; lines beginning with a semi colon or '[' or ']' are ignored

101 Poor or defective road surface (Road Environment Contrib)

102 Deposit on road e.g. oil, mud, chippings (Road Environment Contrib)

103 Slippery road due to weather (Road Environment Contrib)

104 Inadequate/Masked signs or road markings (Road Environment Contrib)

105 Defective traffic signals (Road Environment Contrib)

106 Traffic Calming (Road Environment Contrib)

107 Temporary road (Road Environment Contrib)

108 Road layout e.g. bend, hill or narrow (Road Environment Contrib)

109 Animal or object in carriageway (Road Environment Contrib)

201 Tyres illegal, defective or under inflated (Vehicle Defects)

202 Defective lights or indicators (Vehicle Defects)

203 Defective brakes (Vehicle Defects)

204 Defective steering or suspension (Vehicle Defects)

205 Defective or missing mirrors (Vehicle Defects)

206 Overloaded or poorly loaded vehicle/trailer (Vehicle Defects)

301 Disobeyed automatic traffic signal (Driver/Rider - Injudicious)

302 Disobeyed give way or stop sign markings (Driver/Rider - Injudicious)

303 Disobeyed double white line (Driver/Rider - Injudicious)

304 Disobeyed pedestrian crossing (Driver/Rider - Injudicious)

305 Illegal turn or direction of travel (Driver/Rider - Injudicious)

306 Exceeding speed limit (Driver/Rider - Injudicious)

307 Travelling too fast for conditions (Driver/Rider - Injudicious)

308 Following too close (Driver/Rider - Injudicious)

309 Vehicle travelling along pavement (Driver/Rider - Injudicious)

310 Cyclist entering road from pavement (Driver/Rider - Injudicious)

401 Junction overshoot (Driver/Rider - Error)

402 Junction restart (Driver/Rider - Error)

403 Poor turn or manoeuvre (Driver/Rider - Error)

404 Failed to signal/misleading signal (Driver/Rider - Error)

405 Failed to look properly (Driver/Rider - Error)

406 Failed to judge other person's path/speed (Driver/Rider - Error)

407 Passing too close to cyclist/pedestrian (Driver/Rider - Error)

408 Sudden braking (Driver/Rider - Error)

409 Swerved (Driver/Rider - Error)

410 Loss of control (Driver/Rider - Error)

501 Impaired by alcohol (Driver/Rider - Impairment)

502 Impaired by drugs (Driver/Rider - Impairment)

Causation Factors.txt

- 503 Fatigue (Driver/Rider - Impairment)
- 504 Uncorrected, defective eyesight (Driver/Rider - Impairment)
- 505 Illness or disability, mental or physical (Driver/Rider - Impairment)
- 506 Not displaying lights at night or poor visibility (Driver/Rider - Impairment)
- 507 Cyclist wearing dark clothing at night (Driver/Rider - Impairment)
- 508 Driver using mobile phone (Driver/Rider - Impairment)
- 509 Distraction in vehicle (Driver/Rider - Impairment)
- 510 Distraction outside vehicle (Driver/Rider - Impairment)
- 601 Aggressive driving (Driver/Rider - Behaviour)
- 602 Careless/Reckless (Driver/Rider - Behaviour)
- 603 Nervous/Uncertain (Driver/Rider - Behaviour)
- 604 Driving too slow for conditions (Driver/Rider - Behaviour)
- 605 Inexperienced or learner driver/rider (Driver/Rider - Behaviour)
- 606 Inexperience of driving on the left (Driver/Rider - Behaviour)
- 607 Inexperience with vehicle type (Driver/Rider - Behaviour)
- 701 Stationary or parked vehicle(s) (Driver/Rider - Vision Affected)
- 702 Vegetation (Driver/Rider - Vision Affected)
- 703 Road layout (Driver/Rider - Vision Affected)
- 704 Buildings, road signs, street furniture (Driver/Rider - Vision Affected)
- 705 Dazzling headlights (Driver/Rider - Vision Affected)
- 706 Dazzling sun (Driver/Rider - Vision Affected)
- 707 Rain, sleet, snow or fog (Driver/Rider - Vision Affected)
- 708 Spray from other vehicles (Driver/Rider - Vision Affected)
- 709 Visor or windscreen dirty or scratched (Driver/Rider - Vision Affected)
- 710 Vehicle blind spot (Driver/Rider - Vision Affected)
- 801 Crossed road masked by stationary or parked vehicle (Pedestrian)
- 802 Failed to look properly (Pedestrian)
- 803 Failed to judge vehicle's path/speed (Pedestrian)
- 804 Wrong use of pedestrian crossing (Pedestrian)
- 805 Dangerous action in carriageway (Pedestrian)
- 806 Impaired by alcohol (Pedestrian)
- 807 Impaired by drugs (Pedestrian)
- 808 Careless/Reckless (Pedestrian)
- 809 Pedestrian wearing dark clothing at night (Pedestrian)
- 810 Disability or illness (Pedestrian)
- 901 Stolen vehicle (Special Codes)
- 902 Vehicle in course of crime (Special Codes)
- 903 Emergency vehicle on call (Special Codes)
- 904 Vehicle door opened or closed negligently (Special Codes)
- 999 Other (Special Codes)
- L12 User code

Year	Month	Day	Event	Location	Category	Notes	Participants	Results	Comments
1992	12	15	Christmas Eve	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Traditional service with hymns and readings
1993	1	1	New Year's Day	London	Public Holiday	Bank Holiday	Queen Elizabeth II	12:00-13:00	Service at Westminster Abbey
1994	2	2	Shrove Tuesday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with traditional hymns
1995	3	3	Tuesday	London	Public Holiday	Bank Holiday	Queen Elizabeth II	12:00-13:00	Service at Westminster Abbey
1996	4	4	Good Friday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with Passion Play
1997	5	5	Good Friday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with Passion Play
1998	6	6	Good Friday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with Passion Play
1999	7	7	Good Friday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with Passion Play
2000	8	8	Good Friday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with Passion Play
2001	9	9	Good Friday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with Passion Play
2002	10	10	Good Friday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with Passion Play
2003	11	11	Good Friday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with Passion Play
2004	12	12	Good Friday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with Passion Play
2005	13	13	Good Friday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with Passion Play
2006	14	14	Good Friday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with Passion Play
2007	15	15	Good Friday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with Passion Play
2008	16	16	Good Friday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with Passion Play
2009	17	17	Good Friday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with Passion Play
2010	18	18	Good Friday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with Passion Play
2011	19	19	Good Friday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with Passion Play
2012	20	20	Good Friday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with Passion Play
2013	21	21	Good Friday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with Passion Play
2014	22	22	Good Friday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with Passion Play
2015	23	23	Good Friday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with Passion Play
2016	24	24	Good Friday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with Passion Play
2017	25	25	Good Friday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with Passion Play
2018	26	26	Good Friday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with Passion Play
2019	27	27	Good Friday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with Passion Play
2020	28	28	Good Friday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with Passion Play
2021	29	29	Good Friday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with Passion Play
2022	30	30	Good Friday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with Passion Play
2023	31	31	Good Friday	London	Religious	Service at St. Paul's Cathedral	Queen Elizabeth II, Prince Charles	19:00-21:00	Service with Passion Play

Reference Number	Casualty Veh No	Casualty Number	Casualty Class	Casualty Severity	Casualty Severity (CRASH)	Pedestrian Location	Pedestrian Movement	Pedestrian Direction	Seat Belt	School Pupil	School Code	DFT Special	Police Special	School Attended	Car Passenger	PSV Passenger	Roadworker	Cycle Helmet	LA Special	Admitted To Hospital	Most Severe Injury	Other Injury	Sex of Casualty	Age of Casualty	Casualty Postcode	Casualty Ethnicity	Self Defined Ethnicity
C082315	1	1	Driver or rider	Slight						Other					Not a passenger	Not a passenger							Male	19			
C014715	1	1	Driver or rider	Slight						Other					Not a passenger	Not a passenger							Female	19			
C026915	1	1	Vehicle or pillion passenger	Slight						Other					Front seat passenger	Not a passenger							Female	69			
C029915	2	1	Driver or rider	Serious						Other					Not a passenger	Not a passenger							Male	35			
C029915	1	2	Vehicle or pillion passenger	Slight						Other					Front seat passenger	Not a passenger							Female	56			
C044715	1	1	Driver or rider	Slight						Other					Not a passenger	Not a passenger							Female	25			
C044715	1	2	Vehicle or pillion passenger	Slight						Other					Front seat passenger	Not a passenger							Male	23			
C044715	1	3	Vehicle or pillion passenger	Slight						Other					Rear seat passenger	Not a passenger							Female	4			
C044715	1	4	Vehicle or pillion passenger	Slight						Other					Rear seat passenger	Not a passenger							Female	2			
C048315	1	1	Driver or rider	Slight						Other					Not a passenger	Not a passenger							Male	40			
C048315	3	2	Driver or rider	Slight						Other					Not a passenger	Not a passenger							Male	36			
C052915	1	1	Driver or rider	Slight						Other					Not a passenger	Not a passenger							Female	44			
C055015	2	1	Driver or rider	Slight						Other					Not a passenger	Not a passenger							Female	34			
C053915	1	1	Driver or rider	Slight						Other					Not a passenger	Not a passenger							Female	50			
C053915	1	2	Vehicle or pillion passenger	Slight						Other					Front seat passenger	Not a passenger							Male	50			
C067815	2	1	Driver or rider	Slight						Other					Not a passenger	Not a passenger							Female	71			
C069815	1	1	Driver or rider	Serious						Other					Not a passenger	Not a passenger							Male	25			
C069815	2	2	Driver or rider	Serious						Other					Not a passenger	Not a passenger							Male	25			
C069815	2	3	Pedestrian	Slight		In carriageway not crossing	In carriageway - not crossing	Standing still		Other					Not a passenger	Not a passenger	Yes						Male	23			
C069815	1	4	Vehicle or pillion passenger	Serious						Other					Not a passenger	Not a passenger							Male	3			
52012	1	1	Driver or rider	Slight	Slight				Worn but not independently confirmed						Not a passenger	Not a passenger		Not a cyclist					Male	54	OL8		
57148	2	2	Driver or rider	Slight	Slight										Not a passenger	Not a passenger		Not a cyclist					Male	54	SK23		
135216	1	1	Driver or rider	Slight	Slight				Worn and independently confirmed						Not a passenger	Not a passenger		Not a cyclist					Female	29	WF8		
125777	1	1	Vehicle or pillion passenger	Slight	Slight				Unknown						Rear seat passenger	Not a passenger		Not a cyclist					Male	17	DN8		
125777	1	2	Vehicle or pillion passenger	Slight	Slight				Unknown						Rear seat passenger	Not a passenger		Not a cyclist					Male	17	DN8		
149041	1	1	Driver or rider	Slight	Slight				Unknown						Not a passenger	Not a passenger		Not a cyclist					Male	46	S41		
149041	2	2	Driver or rider	Slight	Slight				Unknown						Not a passenger	Not a passenger		Not a cyclist					Male	43	HU3		
149041	2	3	Vehicle or pillion passenger	Slight	Slight				Unknown						Front seat passenger	Not a passenger		Not a cyclist					Male	65	HU7		
154776	1	1	Driver or rider	Slight	Slight				Worn but not independently confirmed						Not a passenger	Not a passenger		Not a cyclist					Male	48	S66		
156900	1	1	Driver or rider	Slight	Slight				Unknown						Not a passenger	Not a passenger		Not a cyclist					Male	20	YO43		
156900	1	2	Vehicle or pillion passenger	Slight	Slight				Unknown						Front seat passenger	Not a passenger		Not a cyclist					Female	17	YO43		
216747	1	1	Driver or rider	Slight	Slight				Unknown						Not a passenger	Not a passenger		Not a cyclist					Male	51		1	
216747	2	2	Driver or rider	Slight	Slight				Unknown						Not a passenger	Not a passenger		Not a cyclist					Male	52	DN19		
216747	1	3	Vehicle or pillion passenger	Slight	Slight				Unknown						Front seat passenger	Not a passenger		Not a cyclist					Male	19		1	
222856	1	1	Driver or rider	Slight	Slight				Worn but not independently confirmed						Not a passenger	Not a passenger		Not a cyclist					Female	21			1
224698	2	1	Driver or rider	Slight	Slight				Worn but not independently confirmed						Not a passenger	Not a passenger		Not a cyclist					Male	47		1	
235811	1	1	Driver or rider	Slight	Slight				Worn and independently confirmed						Not a passenger	Not a passenger		Not a cyclist					Female	34	YO25		
285232	1	1	Driver or rider	Serious					Not worn						Not a passenger	Not a passenger		Not a cyclist					Male	22		1	
285232	2	2	Driver or rider	Fatal	Fatal				Worn and independently confirmed						Not a passenger	Not a passenger		Not a cyclist					Male	41		1	
285232	2	3	Vehicle or pillion passenger	Fatal	Fatal				Worn and independently confirmed						Front seat passenger	Not a passenger		Not a cyclist					Male	37		1	
303945	1	1	Driver or rider	Slight	Slight				Worn but not independently confirmed						Not a passenger	Not a passenger		Not a cyclist					Male	41	HU3		
303945	2	2	Driver or rider	Slight	Slight				Worn but not independently confirmed						Not a passenger	Not a passenger		Not a cyclist					Male	51	HU7		
303945	2	3	Vehicle or pillion passenger	Slight	Slight				Worn but not independently confirmed						Front seat passenger	Not a passenger		Not a cyclist					Female	40		1	
304691	1	1	Driver or rider	Serious					Worn but not independently confirmed						Not a passenger	Not a passenger		Not a cyclist					Female	20	PO3		
304691	1	2	Vehicle or pillion passenger	Serious					Worn but not independently confirmed						Front seat passenger	Not a passenger		Not a cyclist					Female	21	PO1		
304691	2	3	Driver or rider	Slight	Slight				Worn but not independently confirmed						Not a passenger	Not a passenger		Not a cyclist					Male	46	DN14		
306043	1	1	Driver or rider	Serious					Unknown						Not a passenger	Not a passenger		Not a cyclist					Male	23	LS25		
317646	1	1	Driver or rider	Slight	Slight				Worn but not independently confirmed						Not a passenger	Not a passenger		Not a cyclist					Male	32		1	
804778	2	1	Vehicle or pillion passenger	Slight	Slight				Worn and independently confirmed						Front seat passenger	Not a passenger		Not a cyclist					Female	55	HU13		
805163	2	1	Driver or rider	Serious					Not worn						Not a passenger	Not a passenger		Not a cyclist					Male	26	DN14		
838699	1	1	Driver or rider	Slight	Slight				Unknown						Not a passenger	Not a passenger		Not a cyclist					Male	51	HU17		
865588	1	1	Driver or rider	Slight	Slight				Unknown						Not a passenger	Not a passenger		Not a cyclist					Female	40	HU15		
858792	1	1	Driver or rider	Serious					Not applicable						Not a passenger	Not a passenger		Not a cyclist					Male	44	SK21		
858792	1	2	Vehicle or pillion passenger	Slight	Slight				Not applicable						Not a passenger	Not a passenger		Not a cyclist					Female	13	SK21		
859773	2	1	Driver or rider	Serious					Worn but not independently confirmed						Not a passenger	Not a passenger		Not a cyclist					Male	33	WF10		
862275	1	1	Driver or rider	Slight	Slight				Worn but not independently confirmed						Not a passenger	Not a passenger		Not a cyclist					Female	18	HU6		
862275	3	2	Vehicle or pillion passenger	Slight	Slight				Worn but not independently confirmed						Front seat passenger	Not a passenger		Not a cyclist					Female	63	S13		

RESPONSE TO NATIONAL HIGHWAYS RELEVANT REPRESENTATIONS (SEPT 2022)

Appendix C – Traffic Flow Diagrams – Revised Assessment Scenario

Drax Bioenergy with Carbon Capture and Storage

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 –
Regulation (5(2)(q))

Document Reference Number: 8.9.4

Applicant: Drax Power Limited

PINS Reference: EN010120



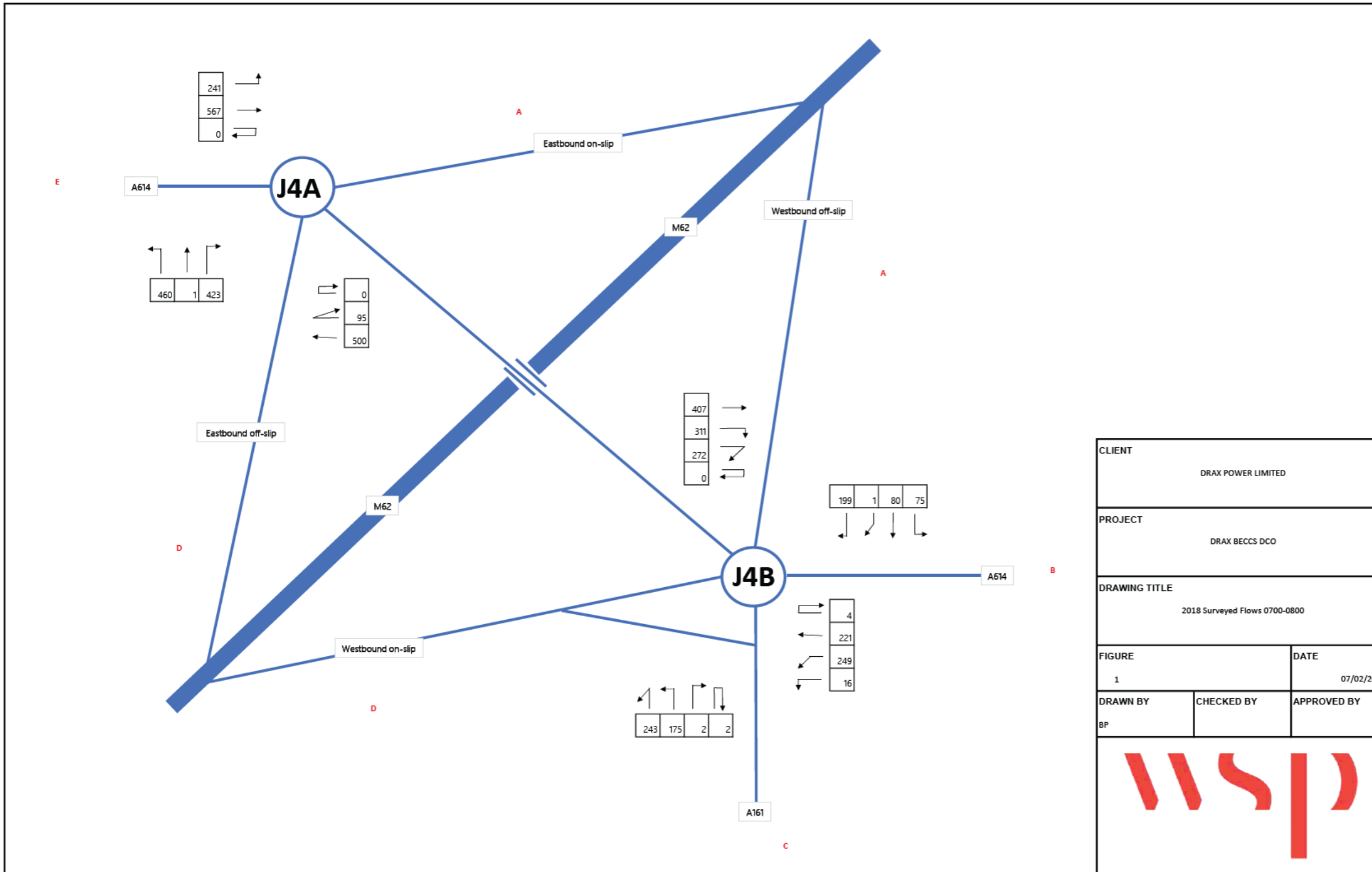
Existing Layout								
	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
2018 Baseline	0700 - 0800	2286	2256	4543	1600 - 1700	2433	2539	4972
	0715 - 0815	2473	2528	5001	1615 - 1715	2588	2667	5256
	0730 - 0830	2563	2669	5231	1630 - 1730	2676	2672	5348
	0745 - 0845	2550	2654	5204	1645 - 1745	2673	2638	5311
	0800 - 0900	2475	2584	5059	1700 - 1800	2625	2557	5181
	0815 - 0915	2336	2417	4753	1715 - 1815	2372	2288	4661
	0830 - 0930	2154	2215	4369	1730 - 1830	2138	1816	3954
	0845 - 0945	2031	2085	4116	1745 - 1845	1897	1816	3713
	0900 - 1000	1906	1951	3857	1800 - 1900	1671	1458	3129
	2022 Baseline	AM Period	4A	4B	4A 4B	PM Period	4A	4B
0700 - 0800		2367	2336	4704	1600 - 1700	2514	2623	5138
0715 - 0815		2560	2617	5178	1615 - 1715	2675	2756	5431
0730 - 0830		2653	2763	5416	1630 - 1730	2765	2761	5527
0745 - 0845		2640	2748	5388	1645 - 1745	2762	2726	5488
0800 - 0900		2563	2675	5238	1700 - 1800	2713	2642	5354
0815 - 0915		2419	2503	4921	1715 - 1815	2452	2365	4816
0830 - 0930		2230	2293	4523	1730 - 1830	2209	1877	4086
0845 - 0945		2103	2158	4261	1745 - 1845	1960	1877	3837
0900 - 1000		1973	2020	3993	1800 - 1900	1726	1507	3233
2026 Future Baseline	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
	0700 - 0800	2438	2406	4843	1600 - 1700	2586	2698	5285
	0715 - 0815	2636	2695	5331	1615 - 1715	2751	2835	5586
	0730 - 0830	2732	2845	5577	1630 - 1730	2844	2840	5685
	0745 - 0845	2718	2718	5436	1645 - 1745	2841	2804	5645
	0800 - 0900	2639	2755	5393	1700 - 1800	2790	2717	5508
	0815 - 0915	2491	2577	5068	1715 - 1815	2522	2432	4954
	0830 - 0930	2296	2361	4658	1730 - 1830	2272	1930	4203
	0845 - 0945	2165	2222	4388	1745 - 1845	2016	1930	3946
	0900 - 1000	2032	2080	4112	1800 - 1900	1776	1550	3325
2026 Future Baseline Development	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
	0700 - 0800	2654	2453	5107	1600 - 1700	2668	2750	5418
	0715 - 0815	2819	2738	5557	1615 - 1715	2837	2890	5727
	0730 - 0830	2881	2883	5765	1630 - 1730	2934	2899	5833
	0745 - 0845	2834	2864	5698	1645 - 1745	2934	2866	5800
	0800 - 0900	2721	2784	5504	1700 - 1800	2887	2783	5669
	0815 - 0915	2569	2606	5175	1715 - 1815	2660	2533	5193
	0830 - 0930	2371	2390	4761	1730 - 1830	2452	2067	4519
	0845 - 0945	2236	2251	4487	1745 - 1845	2237	2103	4340
	0900 - 1000	2098	2108	4206	1800 - 1900	2037	1759	3796
2026 Do Minimum	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
	0700 - 0800	3204	3616	6820	1600 - 1700	3261	4115	7376
	0715 - 0815	3403	3905	7308	1615 - 1715	3426	4252	7678
	0730 - 0830	3572	4143	7716	1630 - 1730	3538	4284	7822
	0745 - 0845	3558	4128	7687	1645 - 1745	3535	4248	7782
	0800 - 0900	3479	4053	7532	1700 - 1800	3484	4161	7645
	0815 - 0915	3331	3875	7206	1715 - 1815	3215	3876	7091
	0830 - 0930	3137	3660	6796	1730 - 1830	2966	3374	6340
	0845 - 0945	2965	3448	6413	1745 - 1845	2651	3307	5958
	0900 - 1000	2831	3305	6137	1800 - 1900	2410	2926	5337
2026 Do Something	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
	0700 - 0800	3421	3663	7084	1600 - 1700	3343	4167	7510
	0715 - 0815	3586	3948	7534	1615 - 1715	3512	4307	7819
	0730 - 0830	3722	4182	7903	1630 - 1730	3627	4343	7970
	0745 - 0845	3674	4162	7836	1645 - 1745	3628	4309	7937
	0800 - 0900	3561	4082	7643	1700 - 1800	3580	4226	7807
	0815 - 0915	3409	3905	7313	1715 - 1815	3353	3977	7330
	0830 - 0930	3211	3688	6899	1730 - 1830	3145	3511	6656
	0845 - 0945	3036	3476	6512	1745 - 1845	2871	3480	6351
	0900 - 1000	2898	3333	6231	1800 - 1900	2672	3135	5807

Sensitivity Tests								
2026 Do Something (with 0700 - 0800 and 1600 - 1700 Development Flows)	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
	0730 - 0830	3789	4190	7980	1630 - 1730	3620	4336	7956
2026 Do Something (with 0800 - 0900 and 1700 - 1800 Development Flows)	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
	0730 - 0830	3654	4173	7827	1630 - 1730	3635	4349	7984

Committed Development Trips								
838 Residential	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
	0700 - 0800	62	113	174	1600 - 1700	113	169	283
	0800 - 0900	94	172	266	1700 - 1800	130	196	326
	0900 - 1000	58	103	161	1800 - 1900	98	147	245
Siemens	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
	AM Peak Hour	517	877	1394	PM Peak Hour	365	981	1346
Employment Units	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
	0700 - 0800	22	15	38	1600 - 1700	46	32	78
	0800 - 0900	40	28	68	1700 - 1800	47	32	79
	0900 - 1000	40	28	68	1800 - 1900	21	14	35
Drive Thru	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
	0700 - 0800	49	34	82	1600 - 1700	65	45	110
	0800 - 0900	72	50	122	1700 - 1800	66	45	111
	0900 - 1000	67	47	114	1800 - 1900	65	45	111
BB Distribution	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
	AM Peak Hour	94	160	253	PM Peak Hour	62	180	242
Eggborough	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
	AM Peak Hour	0	0	0	PM Peak Hour	0	0	0
Barlow Mound	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
	AM Peak Hour	24	11	35	PM Peak Hour	24	10	33

Development Trips								
Development Trips	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
	0700 - 0800	217	47	264	1600 - 1700	82	52	134
	0715 - 0815	183	43	226	1615 - 1715	86	55	141
	0730 - 0830	149	38	188	1630 - 1730	89	59	148
	0745 - 0845	116	34	150	1645 - 1745	93	62	155
	0800 - 0900	82	29	111	1700 - 1800	97	65	162
	0815 - 0915	78	29	107	1715 - 1815	138	101	239
	0830 - 0930	74	29	103	1730 - 1830	179	137	316
	0845 - 0945	71	28	99	1745 - 1845	221	173	393
	0900 - 1000	67	28	95	1800 - 1900	262	209	471

Minor Improvement Scheme									
2018 Baseline	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B	
	0730 - 0830	2574	2680	5254	1630 - 1730	2695	2691	5386	
	TEMPRO 2018 - 2022								
	AM	1.0354							
PM	1.0334								
2022 Baseline	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B	
	0730 - 0830	2665	2775	5440	1630 - 1730	2785	2781	5566	
	TEMPRO 2022 - 2026								
	AM	1.0297							
PM	1.0286								
2026 Future Baseline	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B	
	0730 - 0830	2744	2857	5601	1630 - 1730	2864	2860	5725	
	Development Trips (%)								
	AM Period	4A 4B			PM Period	4A 4B			
0730 - 0830	2893	2895	5789	1630 - 1730	2954	2919	5873		
2026 Do Minimum	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B	
	0730 - 0830	3615	4185	7800	1630 - 1730	3652	4398	8050	
	2026 Do Something								
	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B	
0730 - 0830	3764	4211	7975	1630 - 1730	3741	4422	8164		




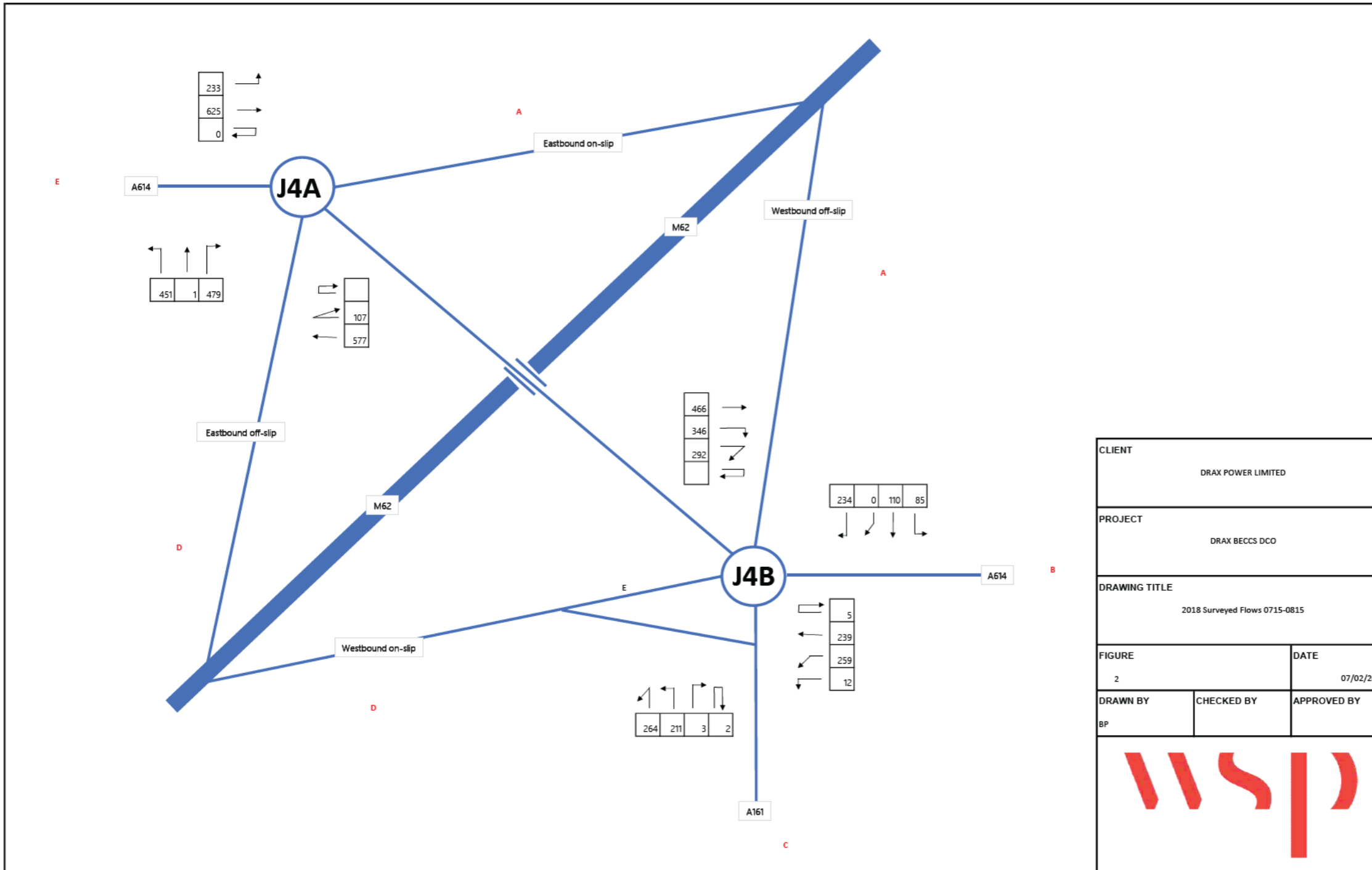
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	241	567	-	2286
B	-	-	-	-	
C	500	95	0	-	
D	460	1	423	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	407	311	272	2256
B	199	-	75	80	1	
C	221	-	4	16	249	
D	175	-	2	2	243	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 0700-0800		
FIGURE	DATE	
1	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




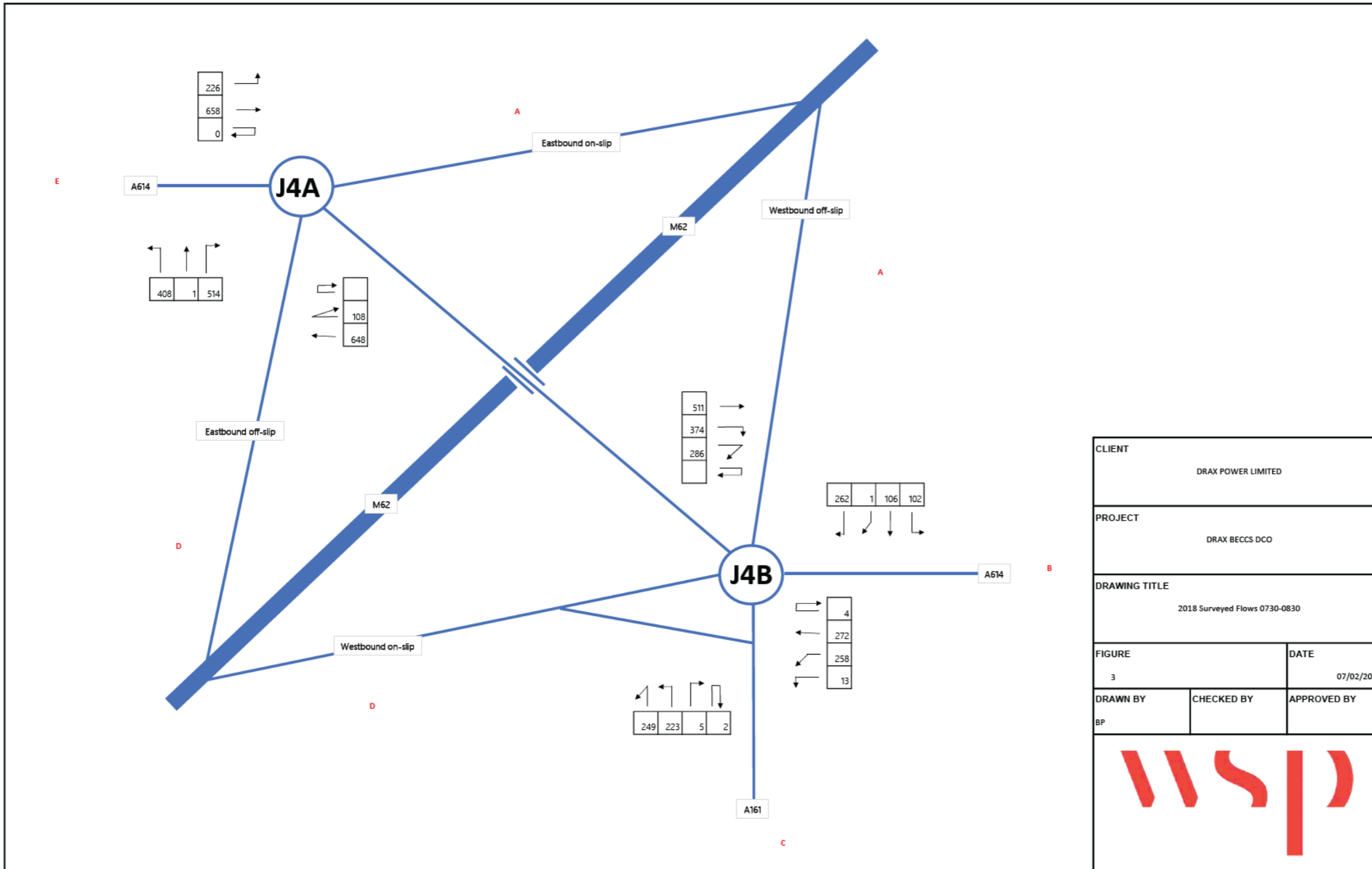
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	233	625	-	2473
B	-	-	-	-	
C	577	107	0	-	
D	451	1	479	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	466	346	292	2528
B	234	-	85	110	0	
C	239	-	5	12	259	
D	211	-	3	2	264	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 0715-0815		
FIGURE	DATE	
2	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		



J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT


	A	B	C	D
A	0	226	658	-
B	-	-	-	-
C	648	108	0	-
D	408	1	514	-

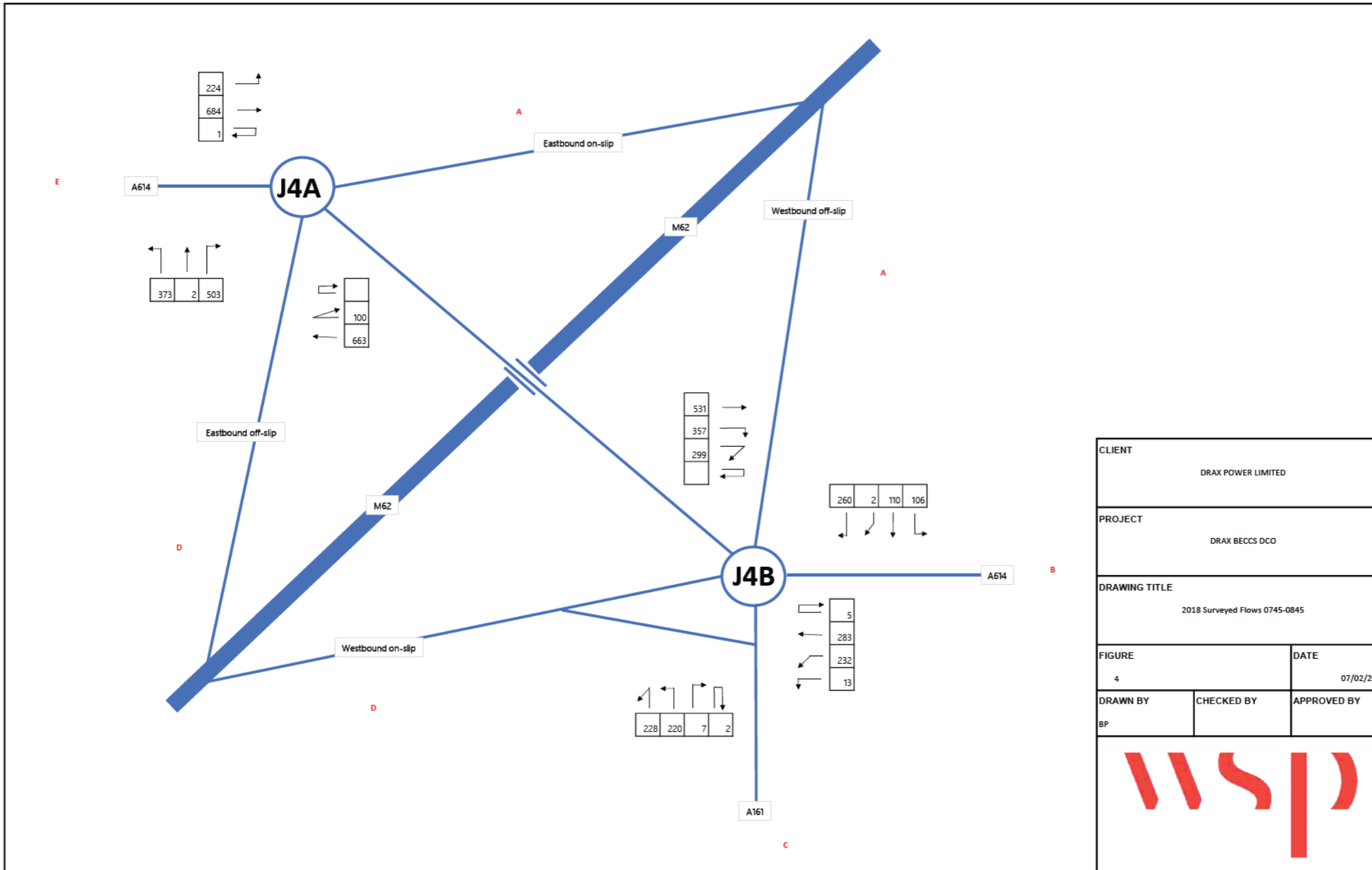
Total movements through junction
2563

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	511	374	286
B	262	-	102	106	1
C	272	-	4	13	258
D	223	-	5	2	249
E	-	-	-	-	-

Total movements through junction
2669

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 0730-0830		
FIGURE	DATE	
3	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




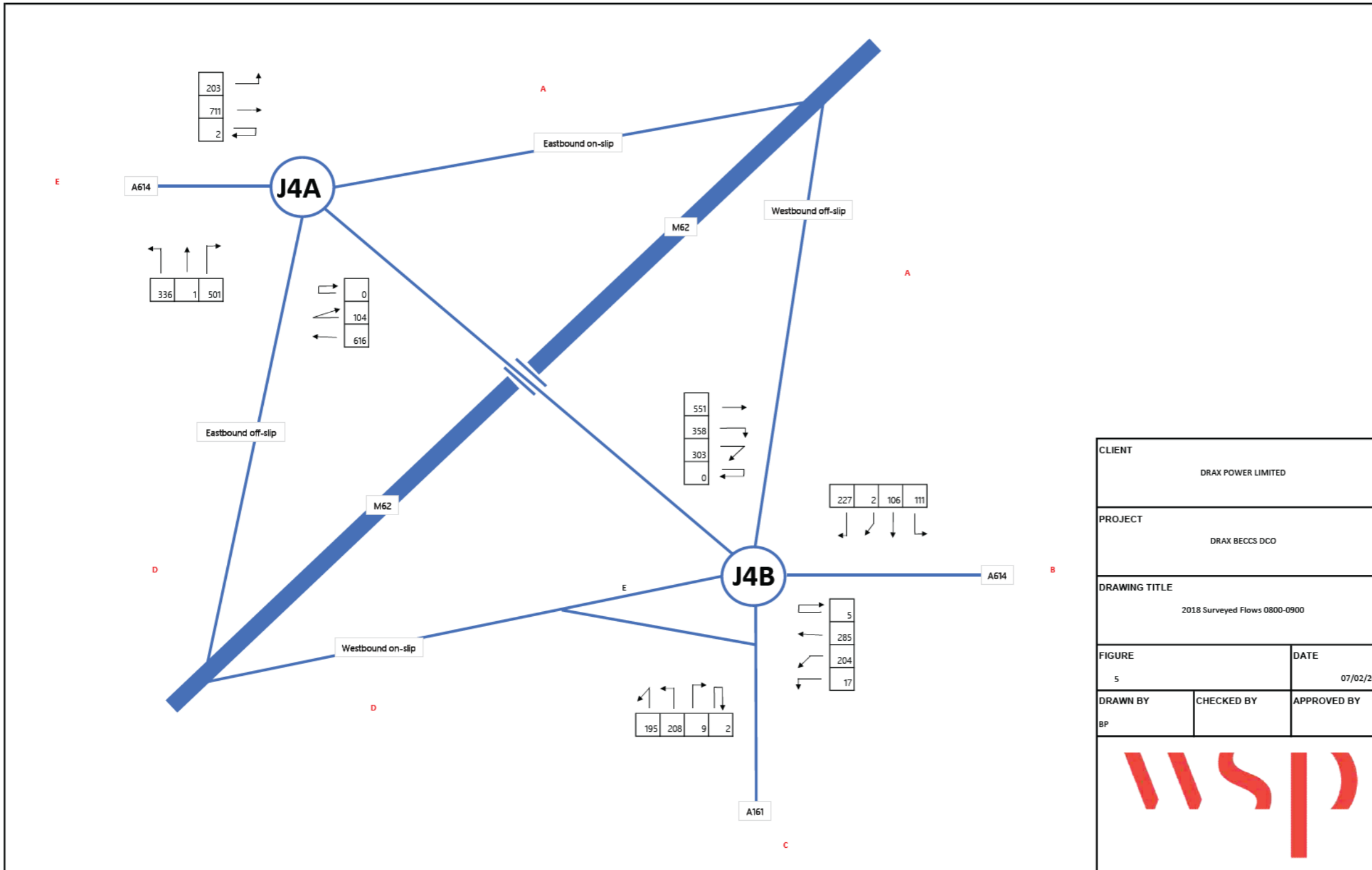
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	1	224	684	-	2550
B	-	-	-	-	
C	663	100	0	-	
D	373	2	503	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	531	357	299	2654
B	260	-	106	110	2	
C	283	-	5	13	232	
D	220	-	7	2	228	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 0745-0845		
FIGURE	DATE	
4	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




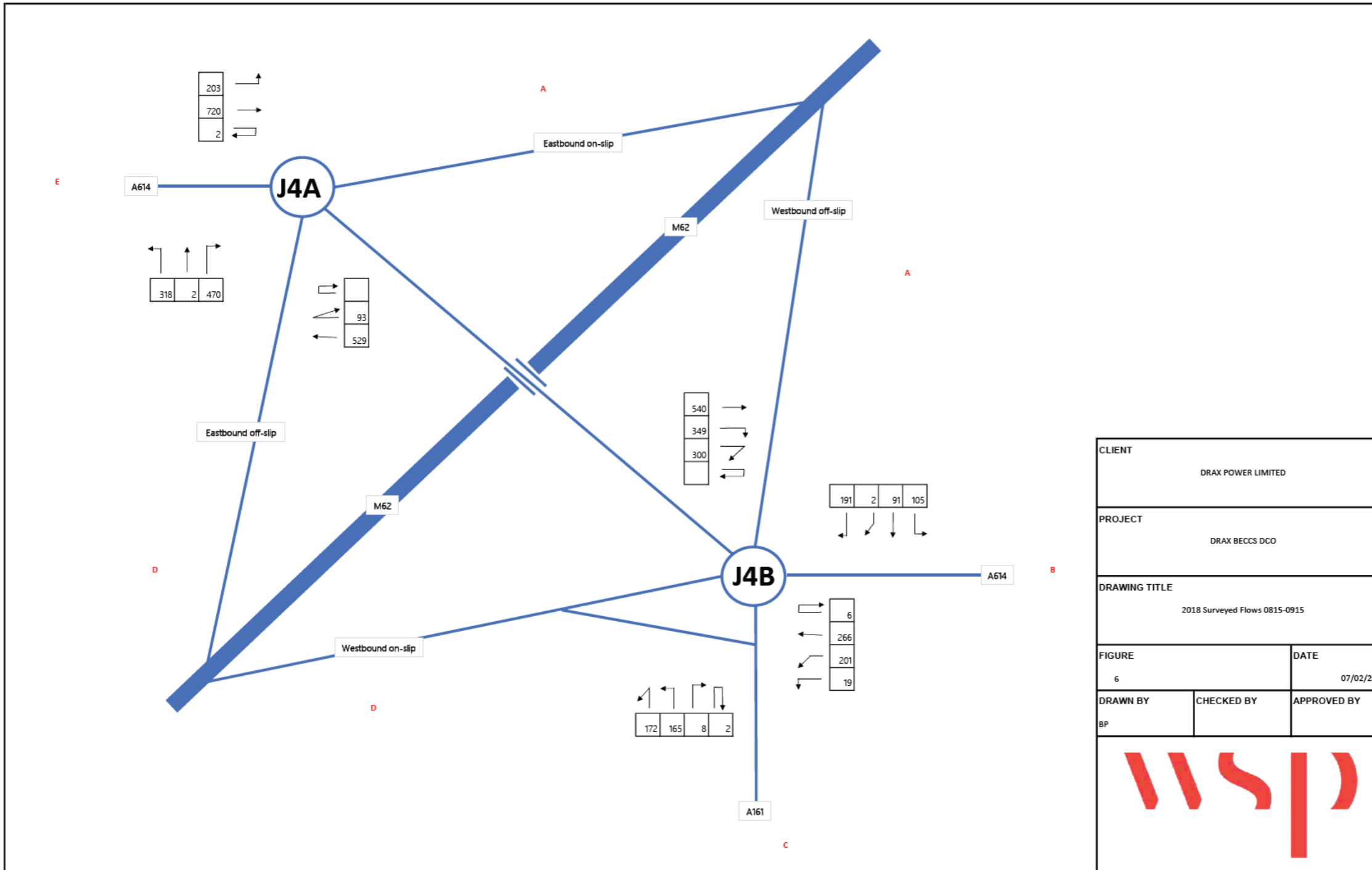
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	2	203	711	-	2475
B	-	-	-	-	
C	616	104	0	-	
D	336	1	501	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	551	358	303	2584
B	227	-	111	106	2	
C	285	-	5	17	204	
D	208	-	9	2	195	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 0800-0900		
FIGURE	DATE	
5	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




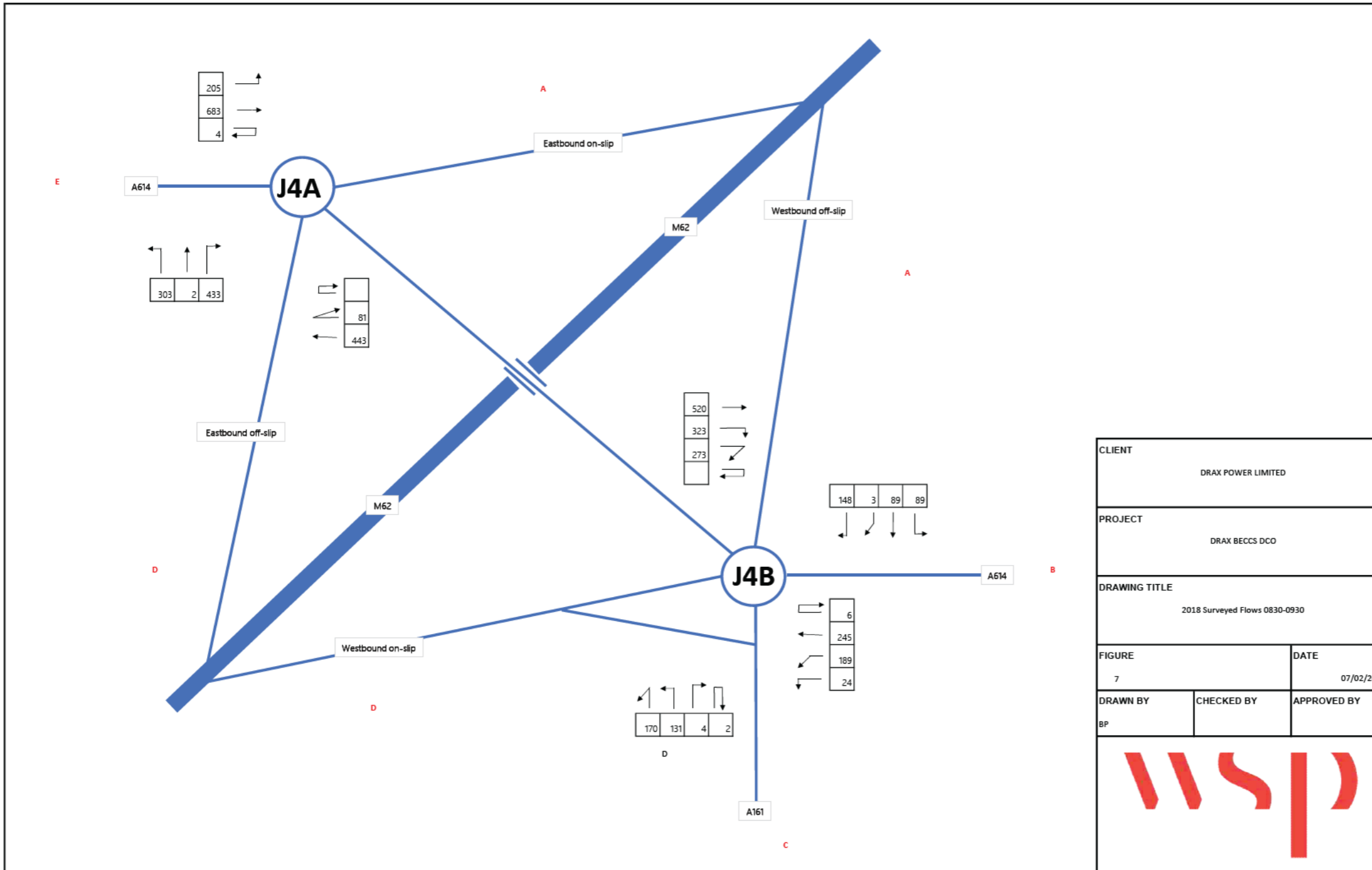
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	2	203	720	-	2336
B	-	-	-	-	
C	529	93	0	-	
D	318	2	470	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	540	349	300	2417
B	191	-	105	91	2	
C	266	-	6	19	201	
D	165	-	8	2	172	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 0815-0915		
FIGURE	DATE	
6	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




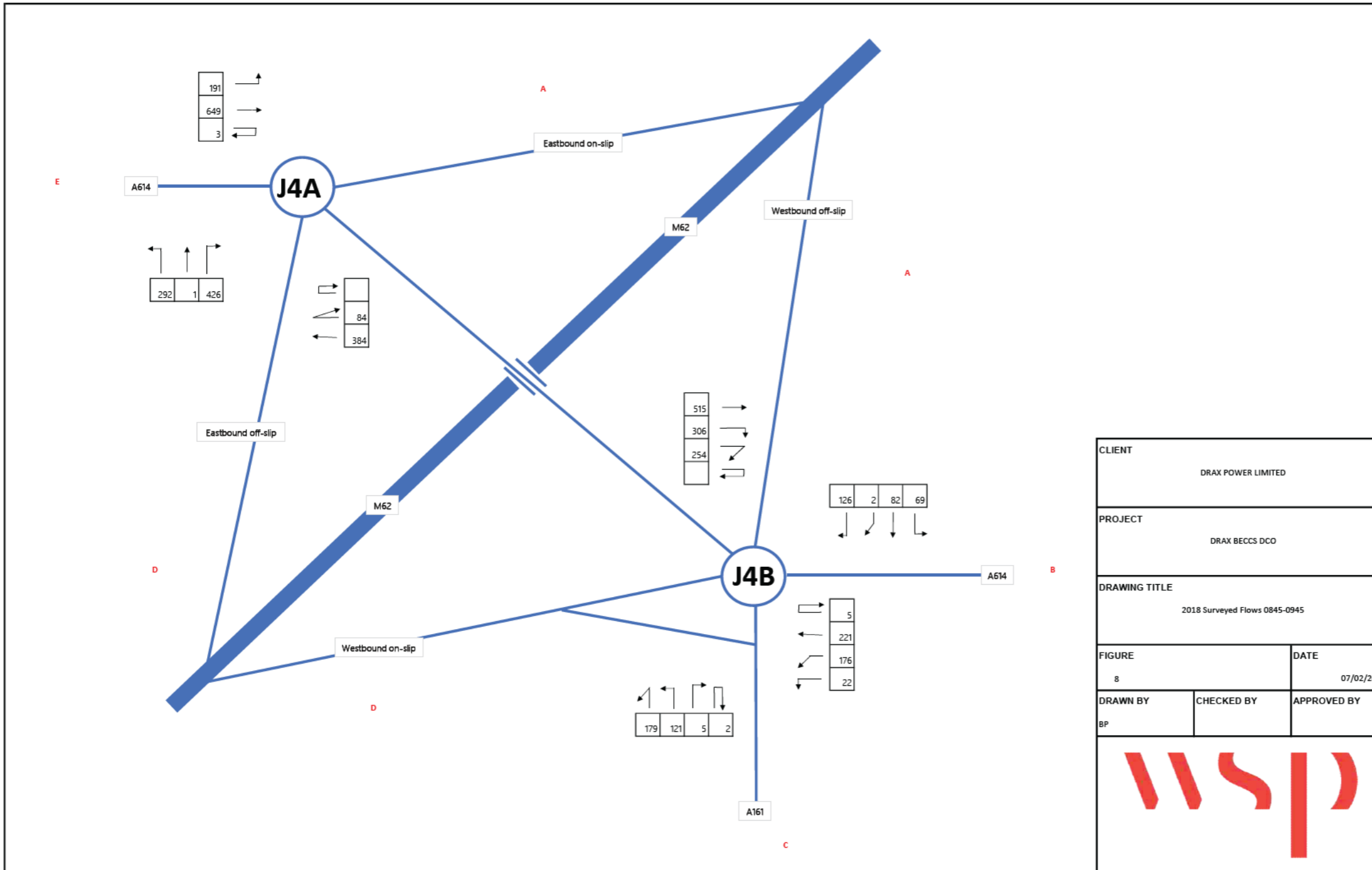
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	4	205	683	-	2154
B	-	-	-	-	
C	443	81	0	-	
D	303	2	433	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	520	323	273	2215
B	148	-	89	89	3	
C	245	-	6	24	189	
D	131	-	4	2	170	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 0830-0930		
FIGURE	DATE	
7	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




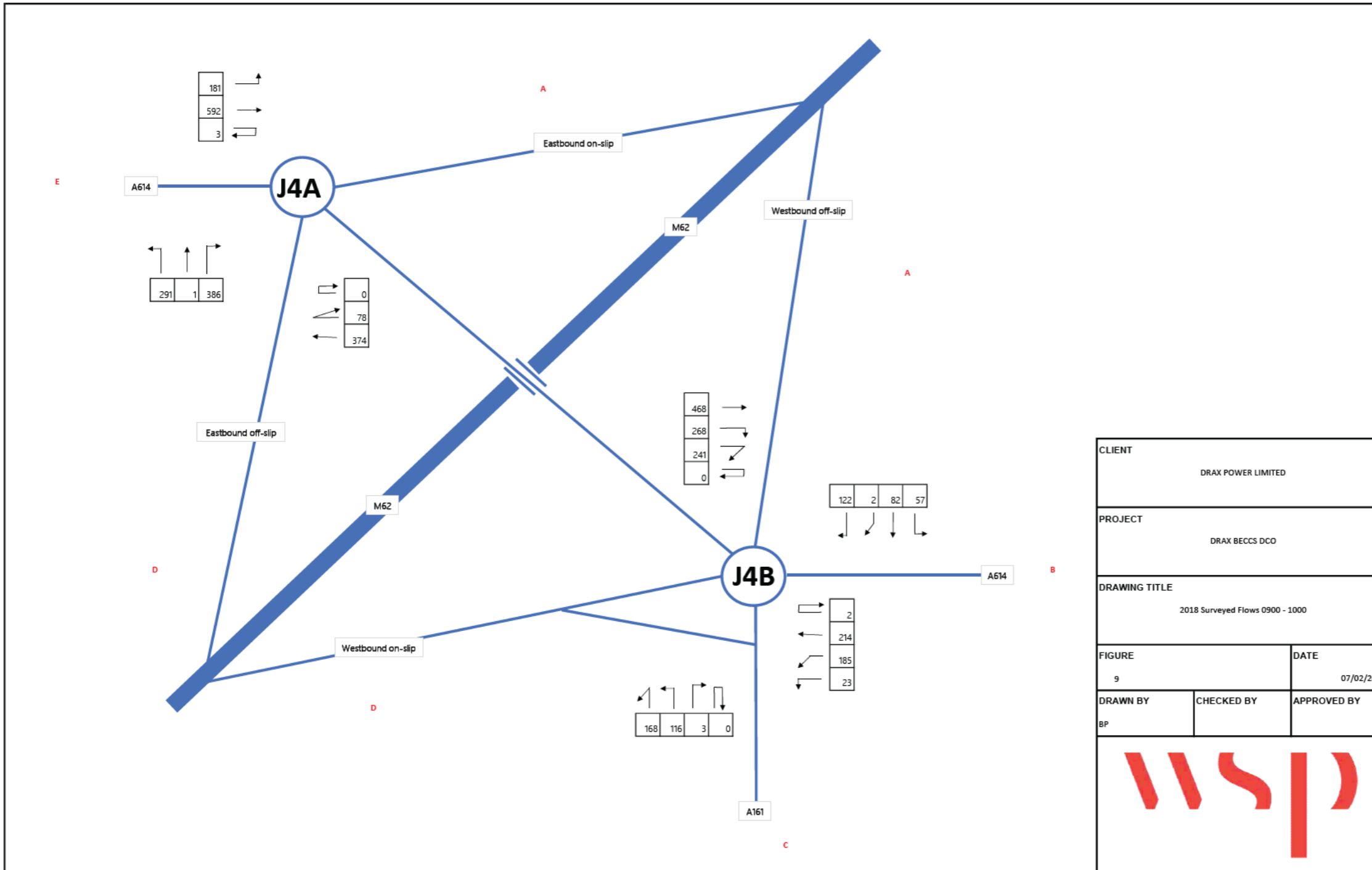
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	3	191	649	-	2031
B	-	-	-	-	
C	384	84	0	-	
D	292	1	426	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	515	306	254	2085
B	126	-	69	82	2	
C	221	-	5	22	176	
D	121	-	5	2	179	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 0845-0945		
FIGURE	DATE	
8	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




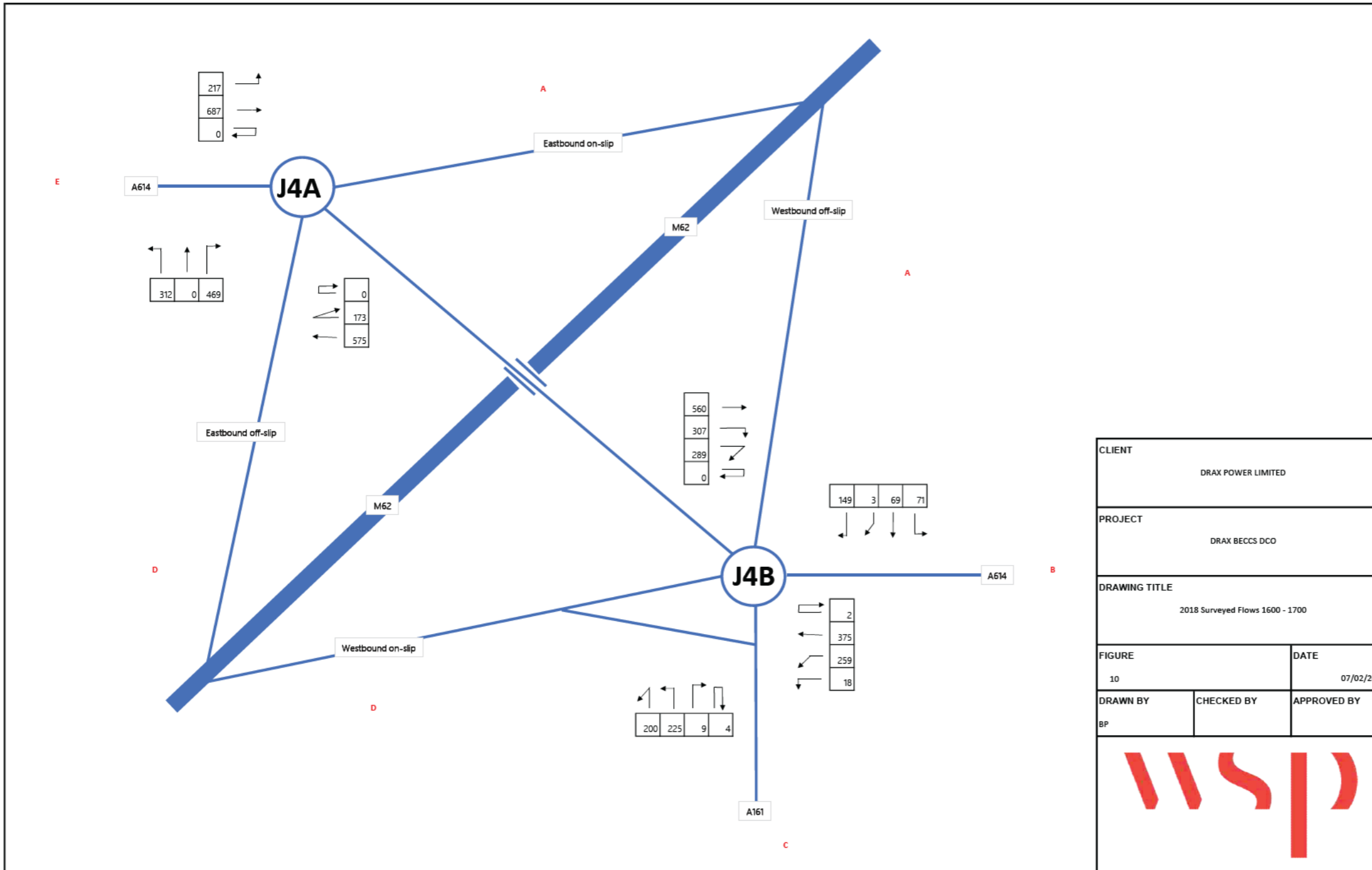
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	3	181	592	-	1906
B	-	-	-	-	
C	374	78	0	-	
D	291	1	386	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	468	268	241	1951
B	122	-	57	82	2	
C	214	-	2	23	185	
D	116	-	3	0	168	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 0900 - 1000		
FIGURE	DATE	
9	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




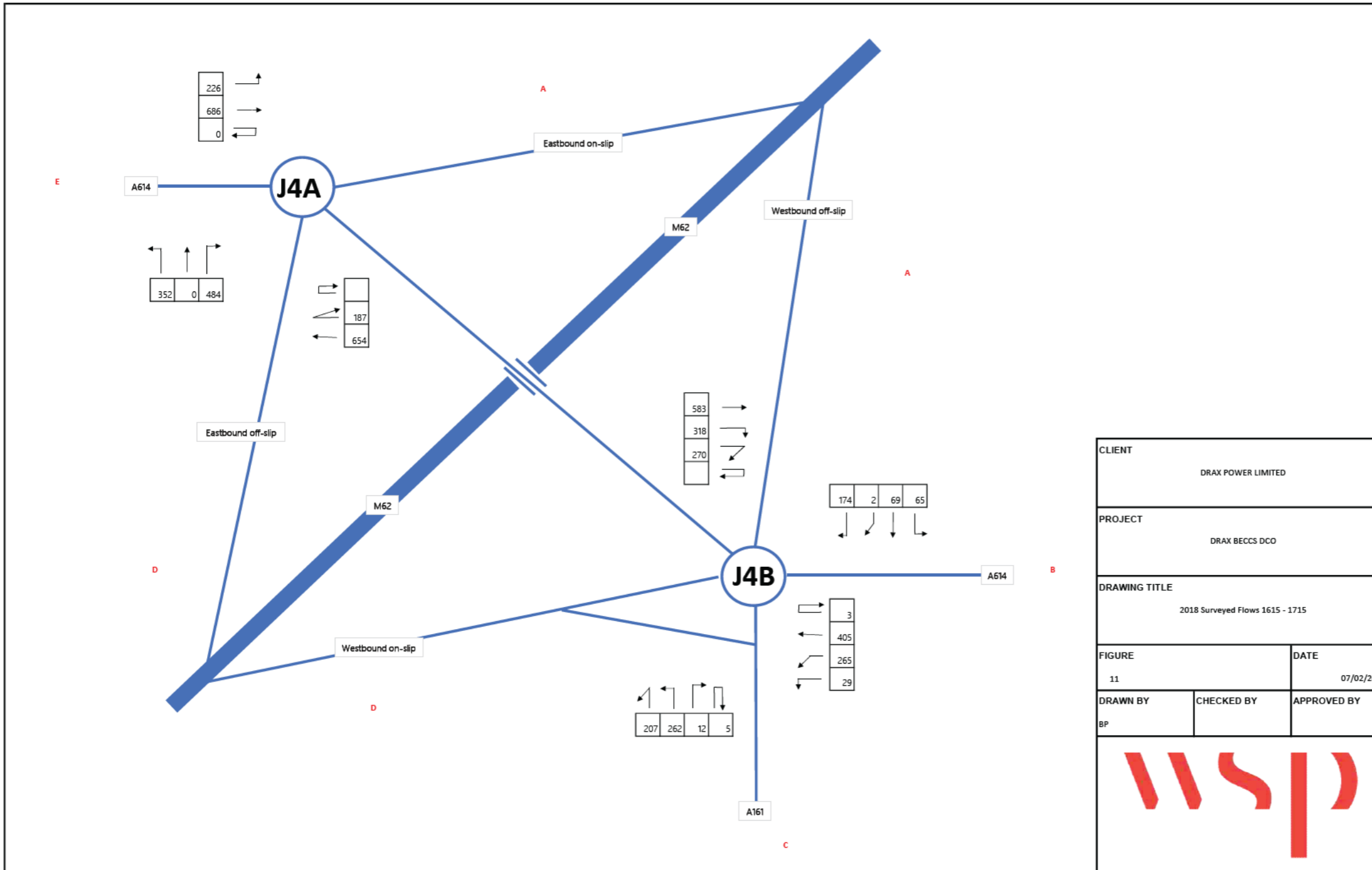
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	217	687	-	2433
B	-	-	-	-	
C	575	173	0	-	
D	312	0	469	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	560	307	289	2539
B	149	-	71	69	3	
C	375	-	2	18	259	
D	225	-	9	4	200	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 1600 - 1700		
FIGURE	DATE	
10	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		



J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT


	A	B	C	D
A	0	226	686	-
B	-	-	-	-
C	654	187	0	-
D	352	0	484	-

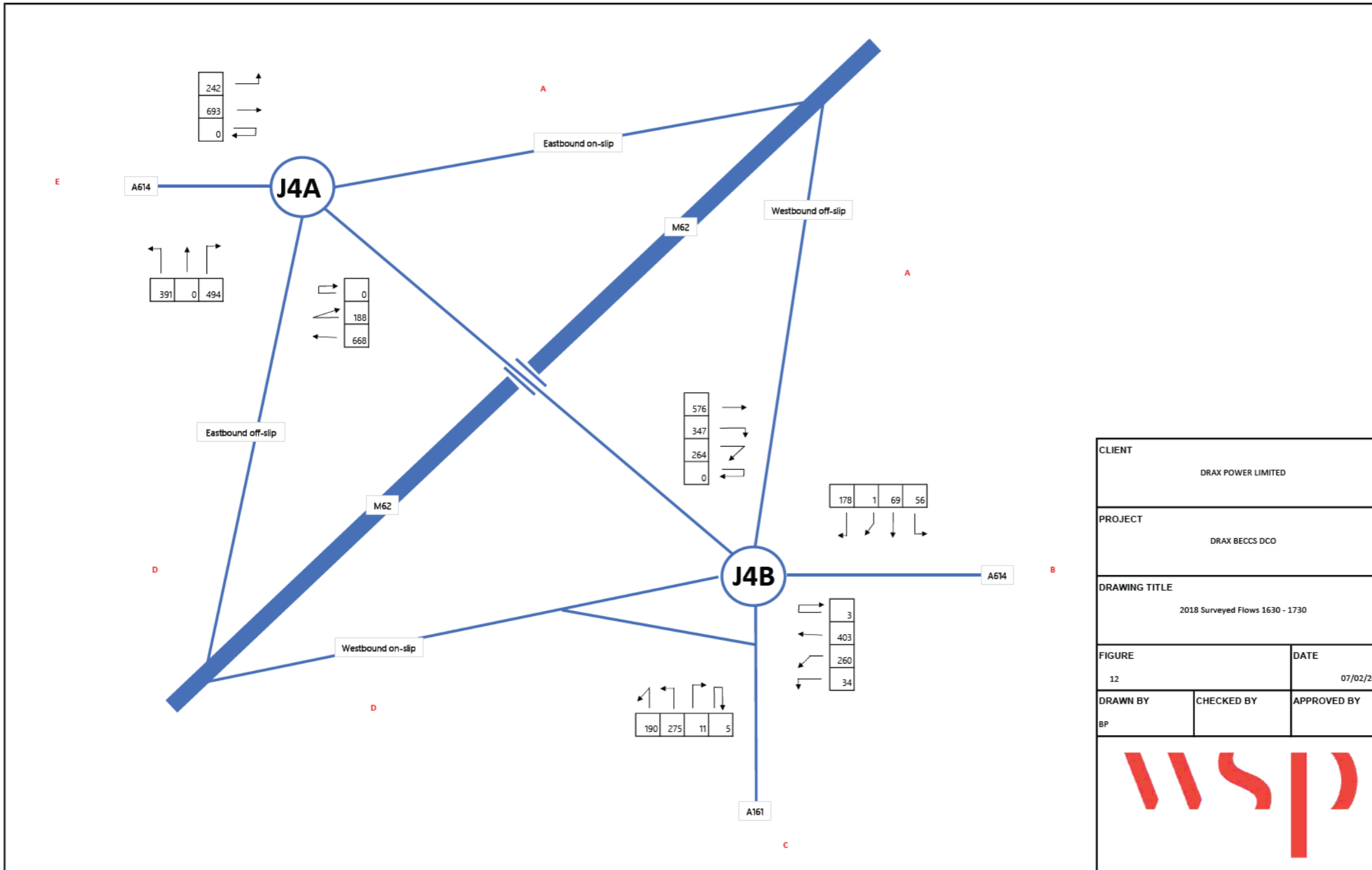
Total movements through junction
2588

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	583	318	270
B	174	-	65	69	2
C	405	-	3	29	265
D	262	-	12	5	207
E	-	-	-	-	-

Total movements through junction
2667

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 1615 - 1715		
FIGURE	DATE	
11	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




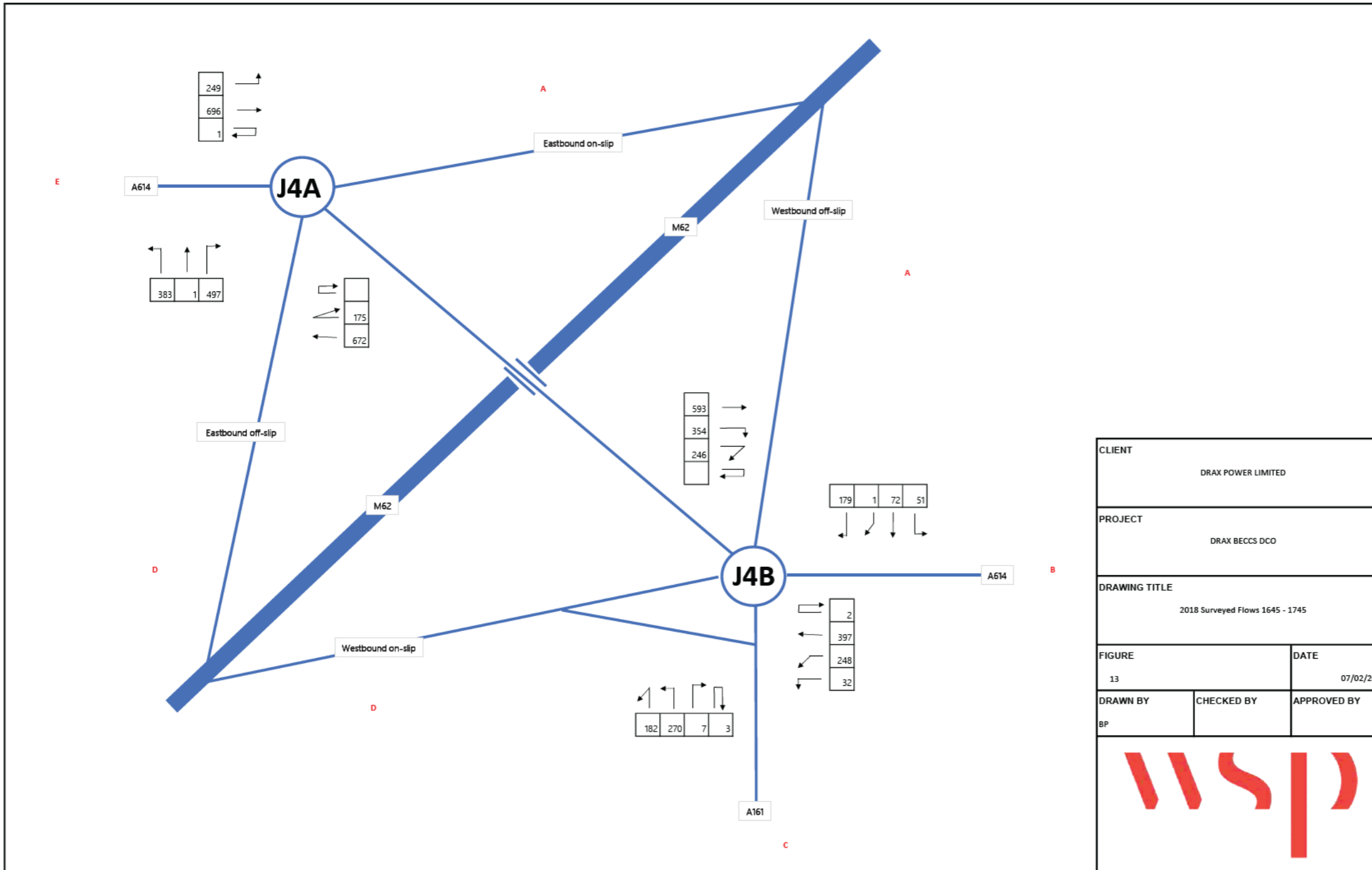
J4A M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	242	693	-	2676
B	-	-	-	-	
C	668	188	0	-	
D	391	0	494	-	

J4B M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	576	347	264	2672
B	178	-	56	69	1	
C	403	-	3	34	260	
D	275	-	11	5	190	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 1630 - 1730		
FIGURE	DATE	
12	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




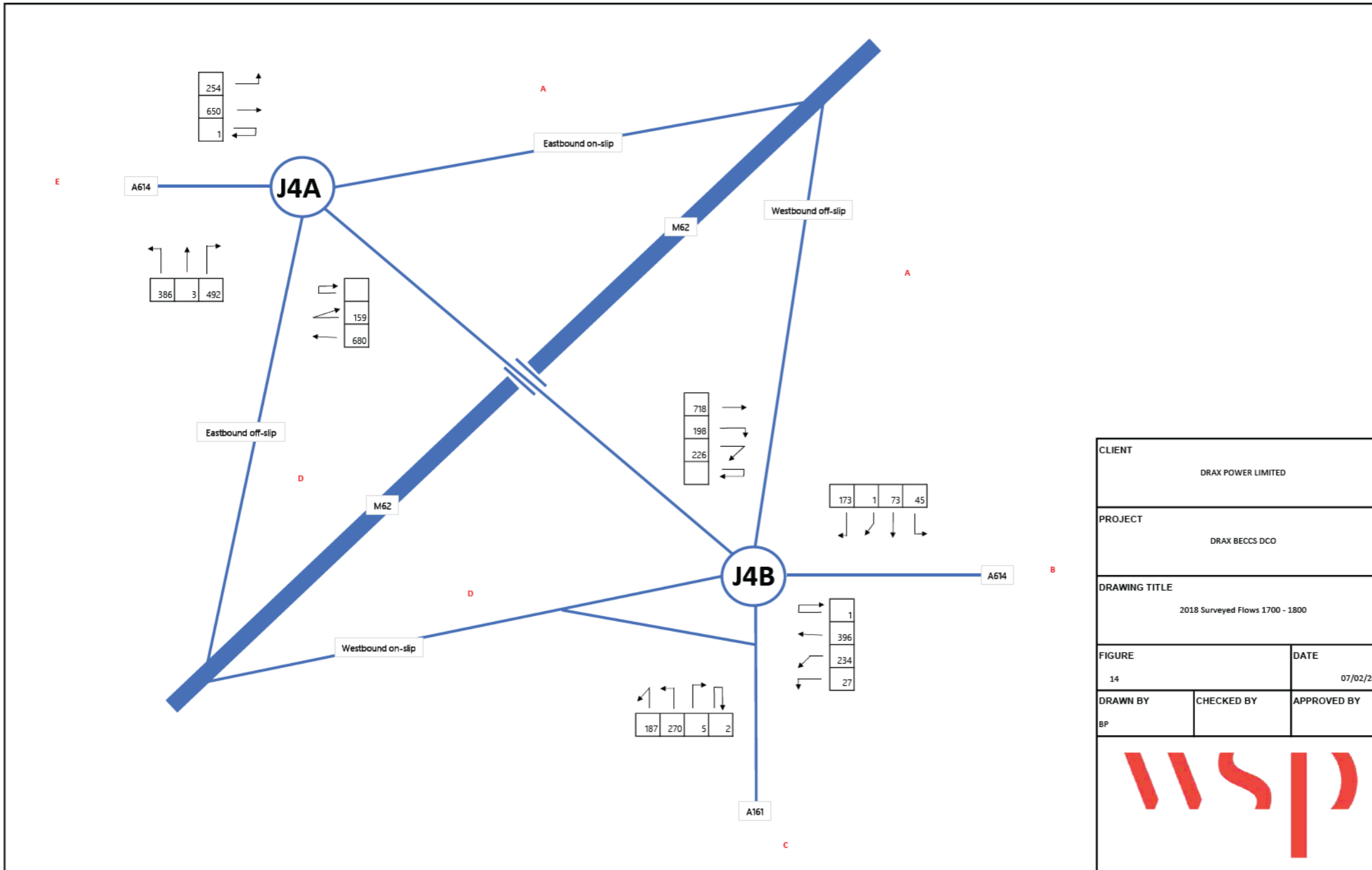
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	1	249	696	-	2673
B	-	-	-	-	
C	672	175	0	-	
D	383	1	497	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	593	354	246	2638
B	179	-	51	72	1	
C	397	-	2	32	248	
D	270	-	7	3	182	
E	-	-	-	-	-	

CLIENT		DRAX POWER LIMITED	
PROJECT		DRAX BECCS DCO	
DRAWING TITLE		2018 Surveyed Flows 1645 - 1745	
FIGURE	DATE		
13	07/02/2023		
DRAWN BY	CHECKED BY	APPROVED BY	
BP			
			




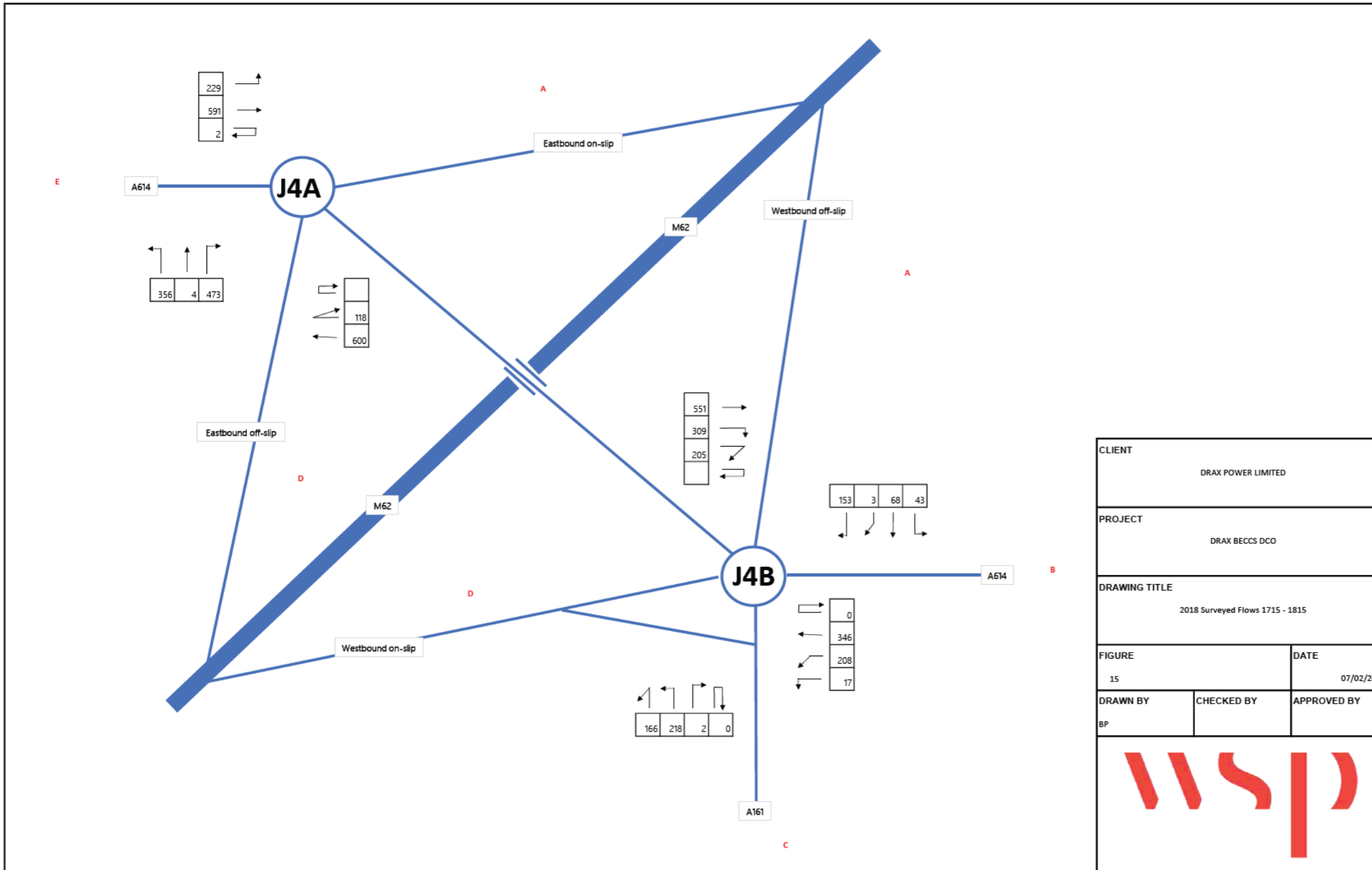
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	1	254	650	-	2625
B	-	-	-	-	
C	680	159	0	-	
D	386	3	492	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	718	198	226	2557
B	173	-	45	73	1	
C	396	-	1	27	234	
D	270	-	5	2	187	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 1700 - 1800		
FIGURE	DATE	
14	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




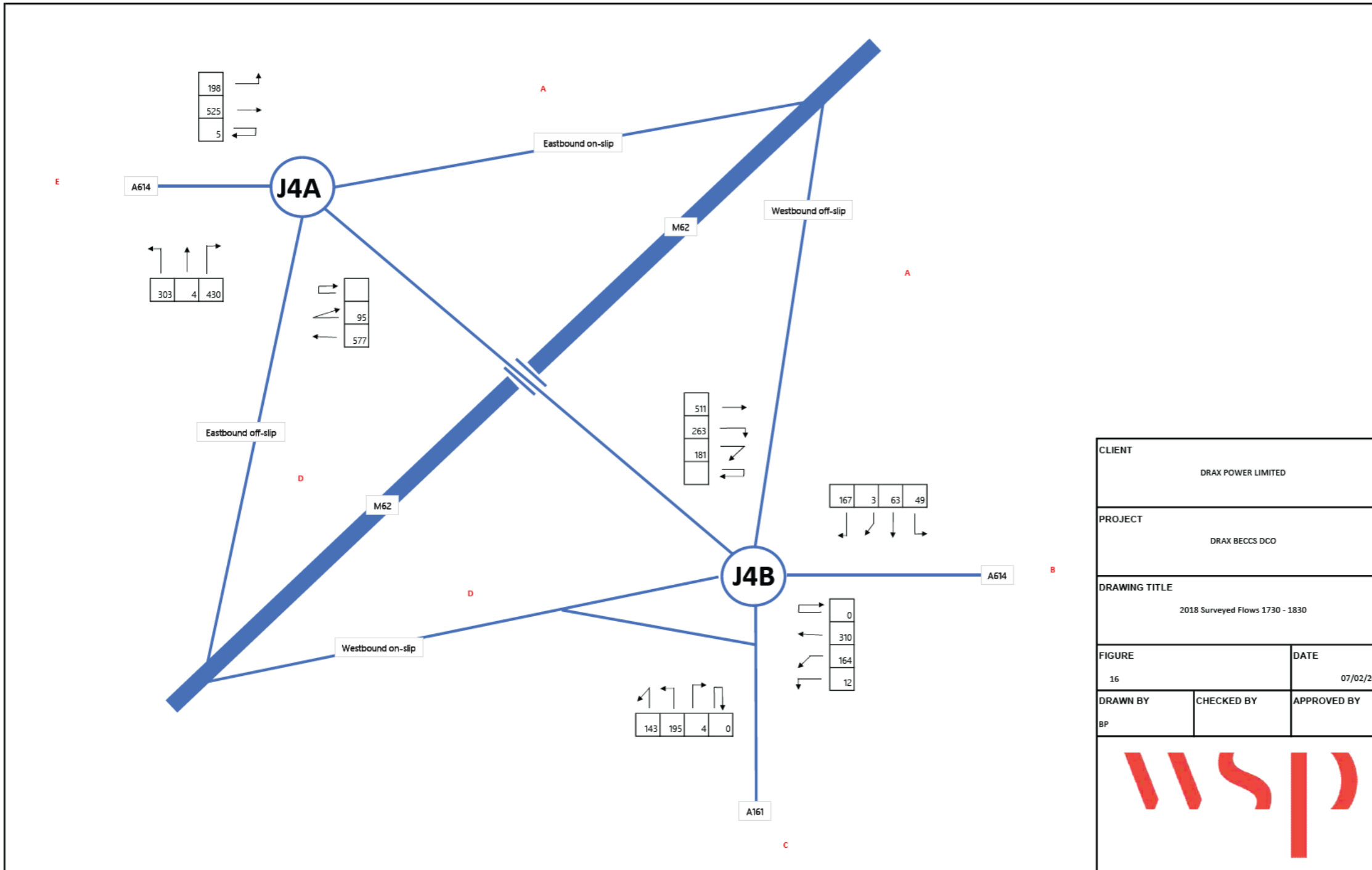
J4A M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	2	229	591	-	2372
B	-	-	-	-	
C	600	118	0	-	
D	356	4	473	-	

J4B M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	551	309	205	2288
B	153	-	43	68	3	
C	346	-	0	17	208	
D	218	-	2	0	166	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 1715 - 1815		
FIGURE	DATE	
15	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




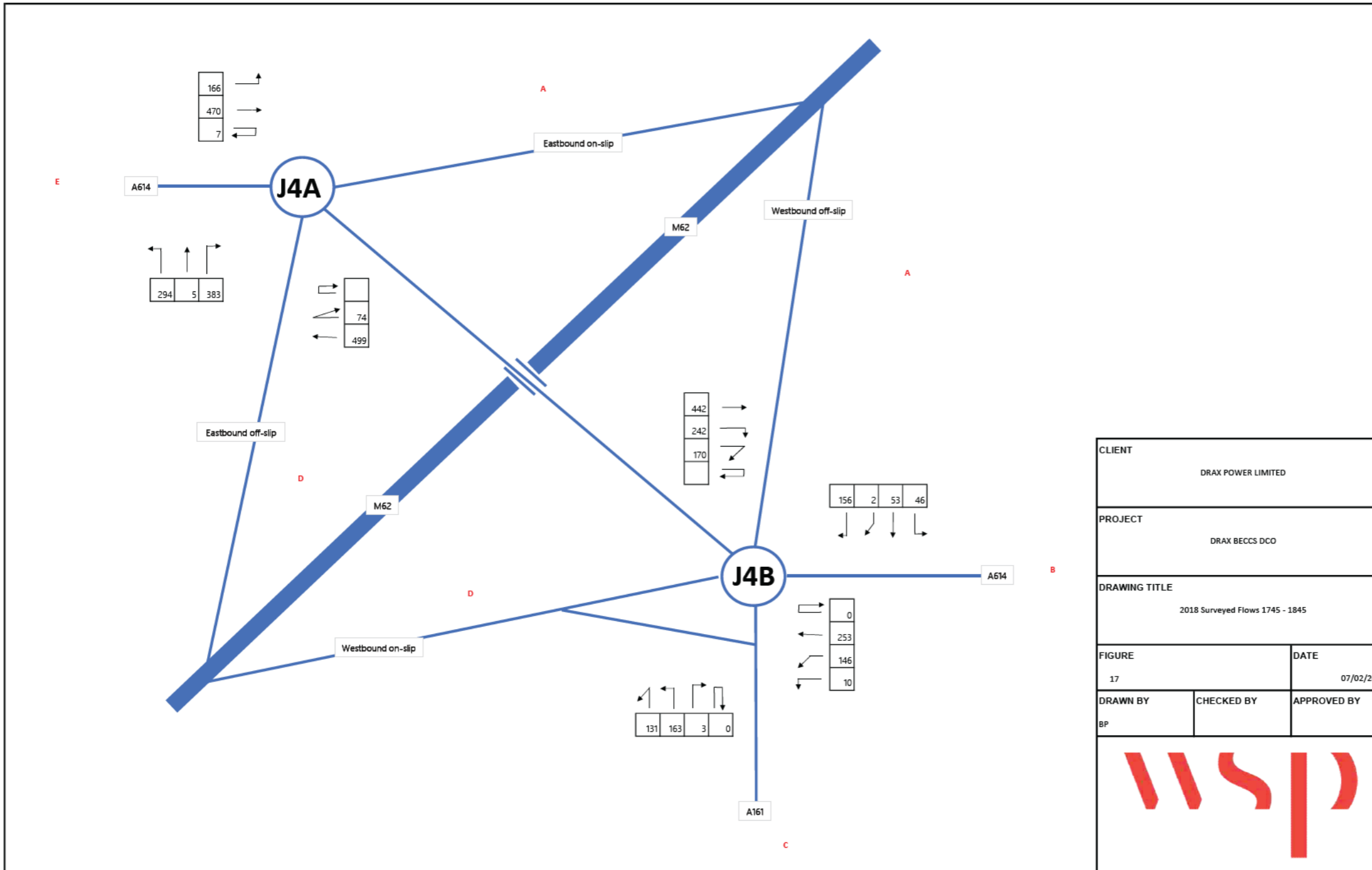
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	5	198	525	-	2138
B	-	-	-	-	
C	577	95	0	-	
D	303	4	430	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	511	263	181	2066
B	167	-	49	63	3	
C	310	-	0	12	164	
D	195	-	4	0	143	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 1730 - 1830		
FIGURE	DATE	
16	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




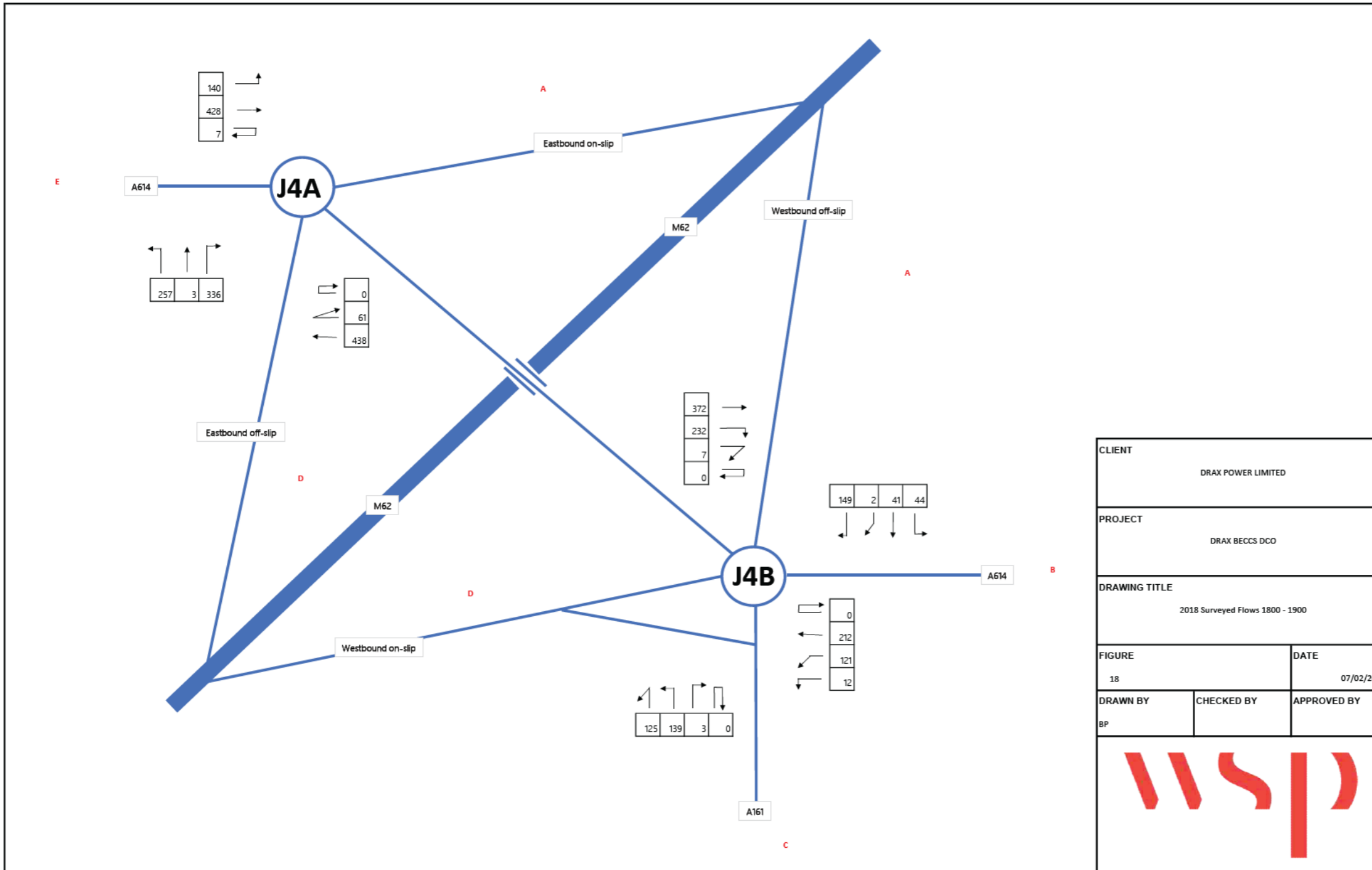
J4A M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	7	166	470	-	1897
B	-	-	-	-	
C	499	74	0	-	
D	294	5	383	-	

J4B M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	442	242	170	1816
B	156	-	46	53	2	
C	253	-	0	10	146	
D	163	-	3	0	131	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 1745 - 1845		
FIGURE	DATE	
17	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




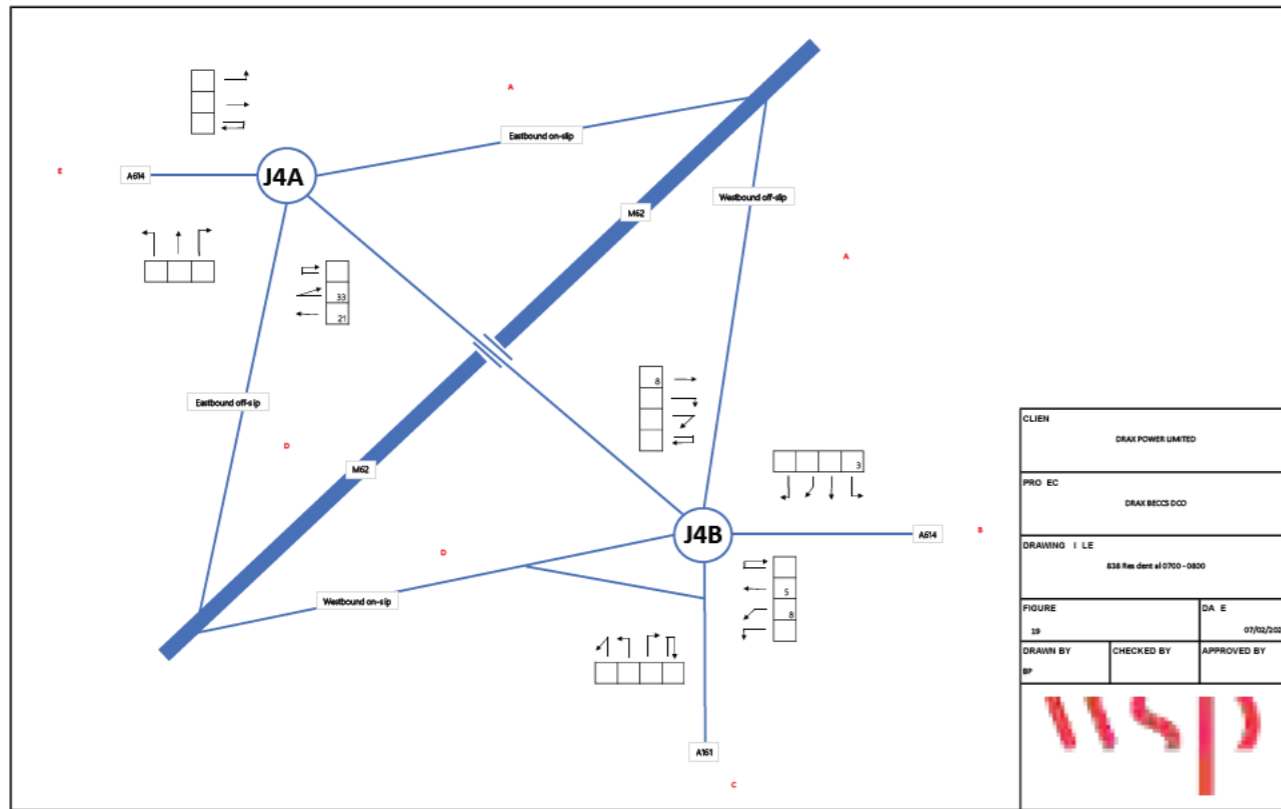
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	7	140	428	-	1671
B	-	-	-	-	
C	438	61	0	-	
D	257	3	336	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	372	232	7	1458
B	149	-	44	41	2	
C	212	-	0	12	121	
D	139	-	3	0	125	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 1800 - 1900		
FIGURE	DATE	
18	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		



4A: M2 UNC ION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	
A	0	0	4	-	Total movements through and on
B	-	-	-	-	
C	21	33	0	-	
D	0	0	4	-	

48: M2 UNC ION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	
A	0	-	8	0	0	Total movements through and on
B	0	-	3	0	0	
C	54	-	0	0	48	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT: DRAX POWER LIMITED
 PROJECT: DRAX BECCS DCO
 DRAWING TITLE: 638 Resurfacing of 0700-0800
 DATE: 03/02/2023
 DRAWN BY: BP
 CHECKED BY:
 APPROVED BY:

Vehicle Trip Rates

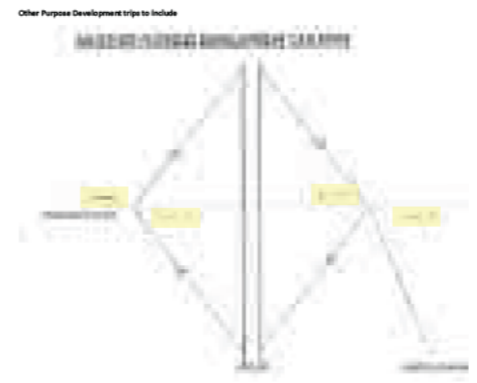
Direction	Vehicle Type	Rate	Dwell (s)
Eastbound	Heavy Goods Vehicle	0.070	55.7
	Other	0.368	225

Work Journey Purpose

Direction	Vehicle Type	Rate	Dwell (s)
Eastbound	Heavy Goods Vehicle	0.070	55.7
	Other	0.368	225

Trip Distribution - AM Peak

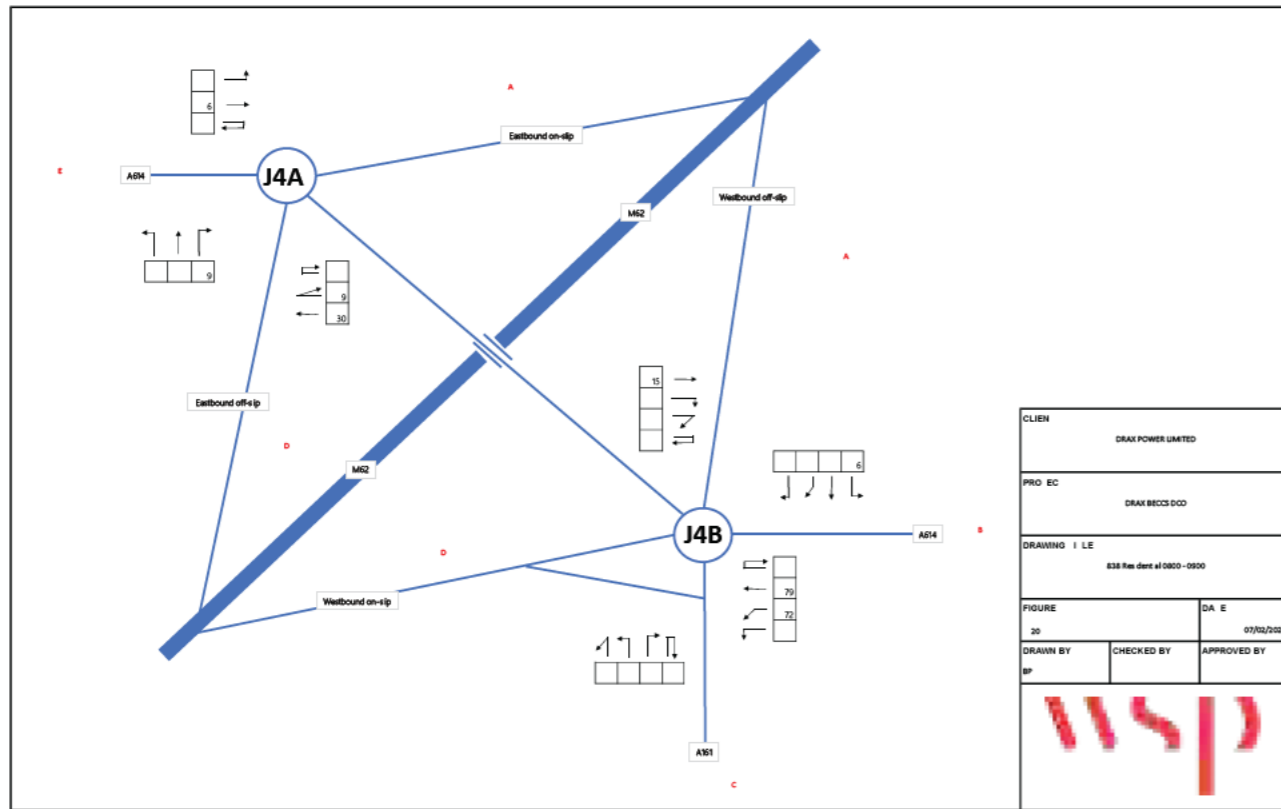
From	To	Rate	Dwell (s)
B	A	32.9	
B	E	20.9	
B	D	48.1	
A	B	3.97	
E	B	3.61	
D	B	4.34	



Notes:
 No education on the site via the M2 Junction 36.
 Other Purpose Development trips shown on the right hand side of the sheet. It is assumed that 'Other Purpose' trips will be the same in each hour.

Vehicle Arrivals 07:00-08:00	Vehicle Departures 07:00-08:00	Journey Purpose	Movement	No. of Work Trips at movement	No. of Other Trips at movement	No. of Total Trips at movement
Rate: 0.070, Dwell: 55.7	Rate: 0.368, Dwell: 225	57.60%	B to A: 25.44%	B to A: 32.9	B to A: 32.9	B to A: 32.9
		18.90%	B to E: 13.81%	B to E: 17.9	B to E: 3	B to E: 20.9
			B to D: 37.35%	B to D: 48.1	B to D: 48.1	B to D: 48.1
			A to B: 25.44%	A to B: 3.97	A to B: 3.97	A to B: 3.97
			E to B: 13.81%	E to B: 3.61	E to B: 2	E to B: 3.61
			D to B: 37.35%	D to B: 4.34	D to B: 4.34	D to B: 4.34





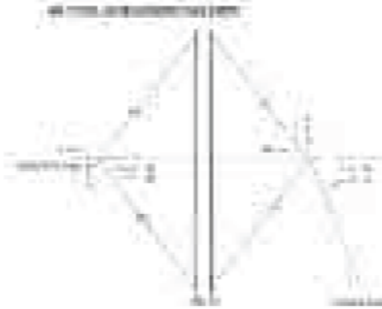
4A: M2 UNC ION 36 DUMBELL ROUNDABOUT

	A	B	C	D	
Total movements through and on	0	0	6	0	6
A	0	0	0	0	0
B	0	0	0	0	0
C	30	49	0	0	79
D	0	0	0	0	0

4B: M2 UNC ION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	
Total movements through and on	0	0	25	0	0	25
A	0	0	0	0	0	0
B	0	0	6	0	0	6
C	79	0	0	0	0	79
D	0	0	0	0	0	0
E	0	0	0	0	0	0

Det est of peak hou 08:00-09:001 per f on 438 Dwellng T empot Assessment for site on.



CLIENT: DRAX POWER LIMITED
 PROJECT: DRAX BECCS DCO
 DRAWING TITLE: 438 Resident at 0800-0900
 FIGURE: 20
 DATE: 03/02/2023
 DRAWN BY: BP
 CHECKED BY:
 APPROVED BY:

Vehicle Trip Rates

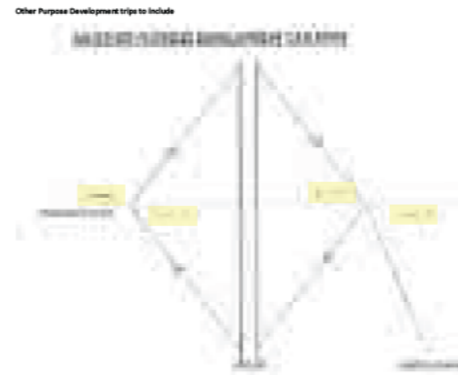
Vehicle	Rate	Dwell	Rate	Dwell
0.352	127	0.401	336	

Work Journey Purpose

Category	Percentage
57.60%	
18.90%	

Trip Distribution - AM Peak

Direction	Percentage
25.44%	
13.81%	
37.15%	
25.44%	
13.81%	
37.15%	



Notes:
 No education on the site via the M2 Junction 26.
 Other Purpose Development trips shown on the right hand side of the sheet. It is assumed that Other Purpose Development trips will be the same on each peak hour.

Vehicle Arrivals 08:00-09:00

Vehicle Departures 08:00-09:00

Journey Purpose

Movement

No. of Work Trips at movement

No. of Other Trips at movement

No. of Total Trips at movement

T p Rate	0.352
858 Dwell rps	127

T p Rate	0.401
838 Dwell rps	336

57.60%
18.90%

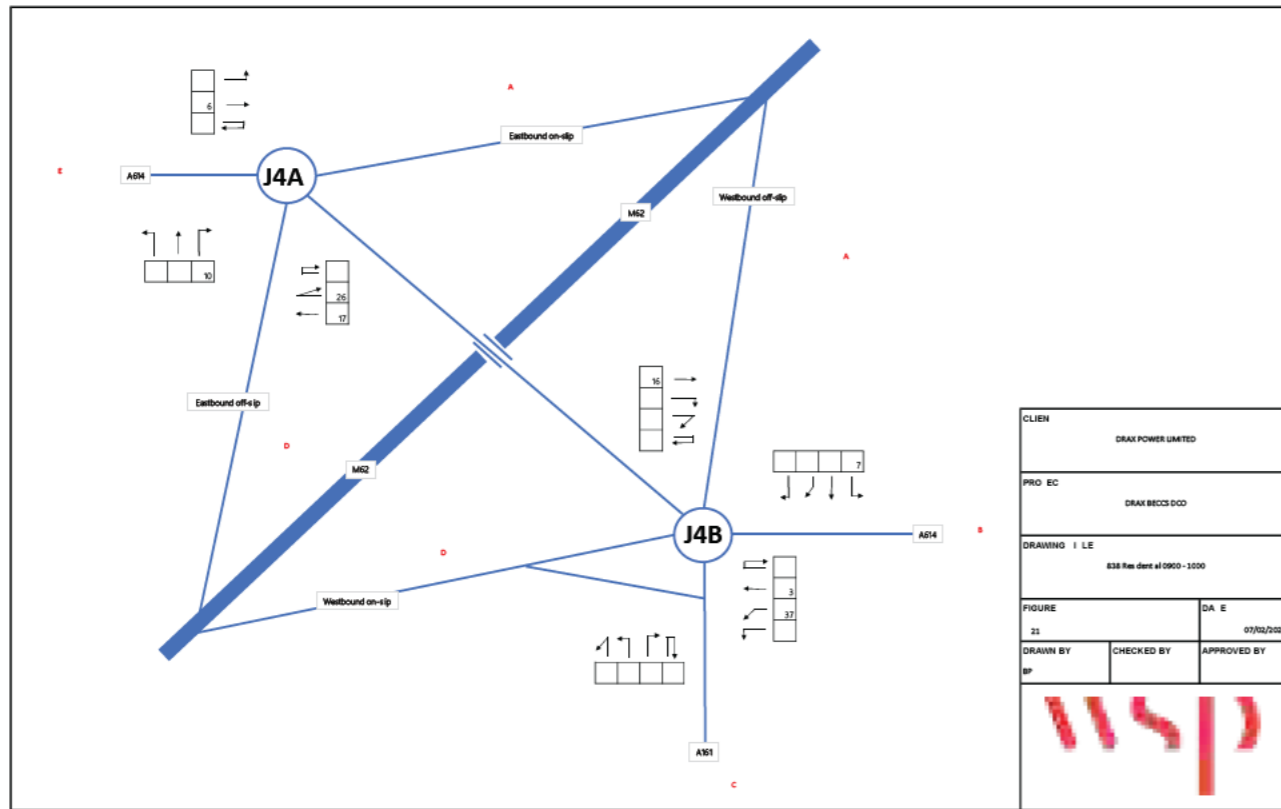
B to A	25.44%
B to E	13.81%
B to D	37.15%
A to B	25.44%
E to B	13.81%
D to B	37.15%

B to A	49.2
B to E	26.7
B to D	71.9
A to B	6.45
E to B	3.5
D to B	9.42

B to A	3
B to D	0
E to B	2
D to B	0

B to A	49.2
B to E	29.7
B to D	71.9
A to B	6.45
E to B	5.5
D to B	9.42





4A: M2 UNC ION 36 DUMBBELL ROUNDABOUT

	A	B	C	D
A	0	0	6	-
B	-	-	-	-
C	17	26	0	-
D	0	0	10	-

Total movements through and on 56

4B: M2 UNC ION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	26	0	0
B	0	-	7	0	0
C	43	-	0	0	37
D	0	-	0	0	0
E	-	-	-	-	-

Total movements through and on 105

CLIENT: DRAX POWER LIMITED
 PROJECT: DRAX BECOS DCO
 DRAWING TITLE: 638 Redent at 0900 - 1000
 FIGURE: 21
 DATE: 03/02/2023
 DRAWN BY: BP
 CHECKED BY:
 APPROVED BY:

Vehicle Trip Rates

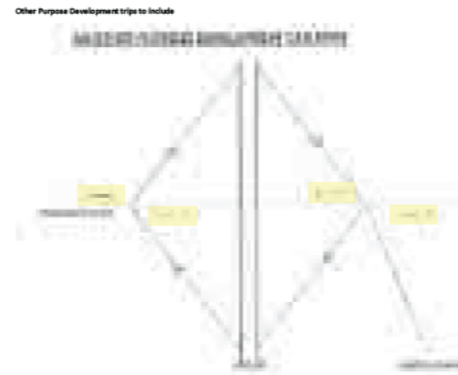
Direction	Vehicle Type	Rate	Dwell (s)
Eastbound	Motorway	0.162	136
	Trunk	0.209	175
	Primary	0.209	175
	Local	0.209	175
Westbound	Motorway	0.162	136
	Trunk	0.209	175
	Primary	0.209	175
	Local	0.209	175

Work Journey Purpose

Direction	Purpose	Rate	Dwell (s)
Eastbound	Work	0.162	136
	Other	0.209	175
	Other	0.209	175
	Other	0.209	175
Westbound	Work	0.162	136
	Other	0.209	175
	Other	0.209	175
	Other	0.209	175

Trip Distribution - AM Peak

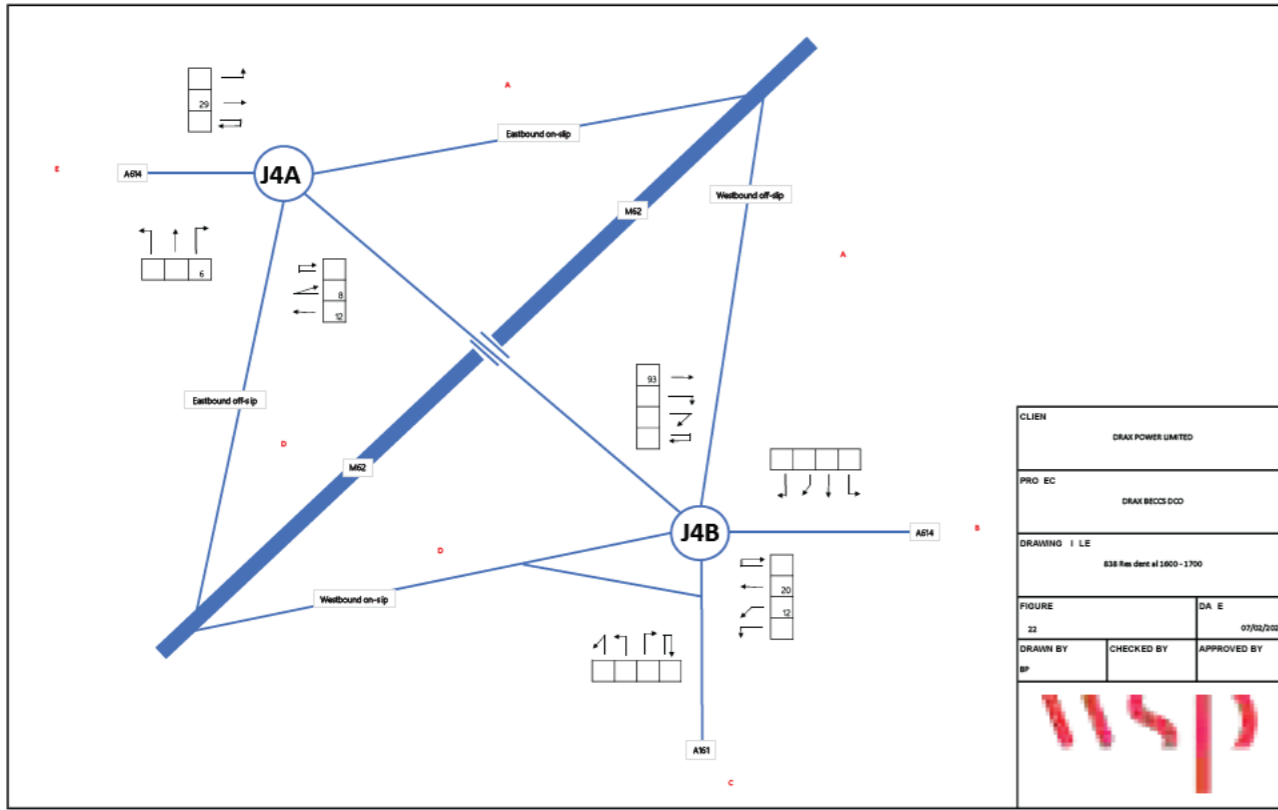
Direction	Purpose	Rate	Dwell (s)
Eastbound	Work	0.162	136
	Other	0.209	175
	Other	0.209	175
	Other	0.209	175
Westbound	Work	0.162	136
	Other	0.209	175
	Other	0.209	175
	Other	0.209	175



Notes:
 No education trips shown on the right hand side of the sheet. It is assumed that 'Other Purpose' trips will be the same in each peak hour.

Vehicle Arrivals 08:00 - 09:00	Vehicle Departures 08:00 - 09:00	Journey Purpose	Movement	No. of Work Trips at movement	No. of Other Trips at movement	No. of Total Trips at movement
T p Rate: 0.162	Rate: 0.209	57.60%	B to A	25.7	3	28.7
Dwell (s): 136	Dwell (s): 175	18.90%	B to E	13.9	0	13.9
			B to D	37.5	0	37.5
			A to B	6.87	0	6.87
			E to B	3.75	2	5.75
			D to B	10	0	10





4A: M2 UNC ION 36 DUMBBELL ROUNDABOUT

	A	B	C	D
A	0	0	29	-
B	-	-	-	-
C	12	8	0	-
D	0	0	64	-

Total movements through and on 113

4B: M2 UNC ION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	95	0	0
B	0	-	44	0	0
C	20	-	0	0	12
D	0	-	0	0	0
E	-	-	-	-	-

Total movements through and on 169

CLIENT: DRAX POWER LIMITED
 PROJECT: DRAX BECCS DCO
 DRAWING TITLE: 638 Resurfacing of 1800-1700
 DATE: 03/02/2023
 DRAWN BY: BP
 CHECKED BY:
 APPROVED BY:

Vehicle Trip Rates

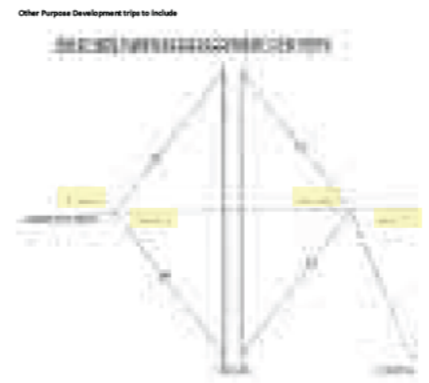
Direction	Vehicle Type	Rate	Dwell (s)
Eastbound	Heavy Goods Vehicle	0.312	261
	Other	0.190	159

Work Journey Purpose

Category	Percentage
Work	25.50%
Other	66.10%

Trip Distribution - AM Peak

Origin	Destination	Percentage
A	B	25.4%
B	E	13.8%
B	D	37.1%
A	B	25.4%
E	B	13.8%
D	B	37.1%



Notes:
 No education trips as per the M2 Junction 26.
 Other Purpose trips as shown on the right hand side of this sheet. It is assumed that 'Other Purpose' trips will be the same in each hour.

Vehicle Arrivals 16:00 - 17:00		Vehicle Departures 16:00 - 17:00	
Rate	Dwell (s)	Rate	Dwell (s)
0.312	261	0.190	159

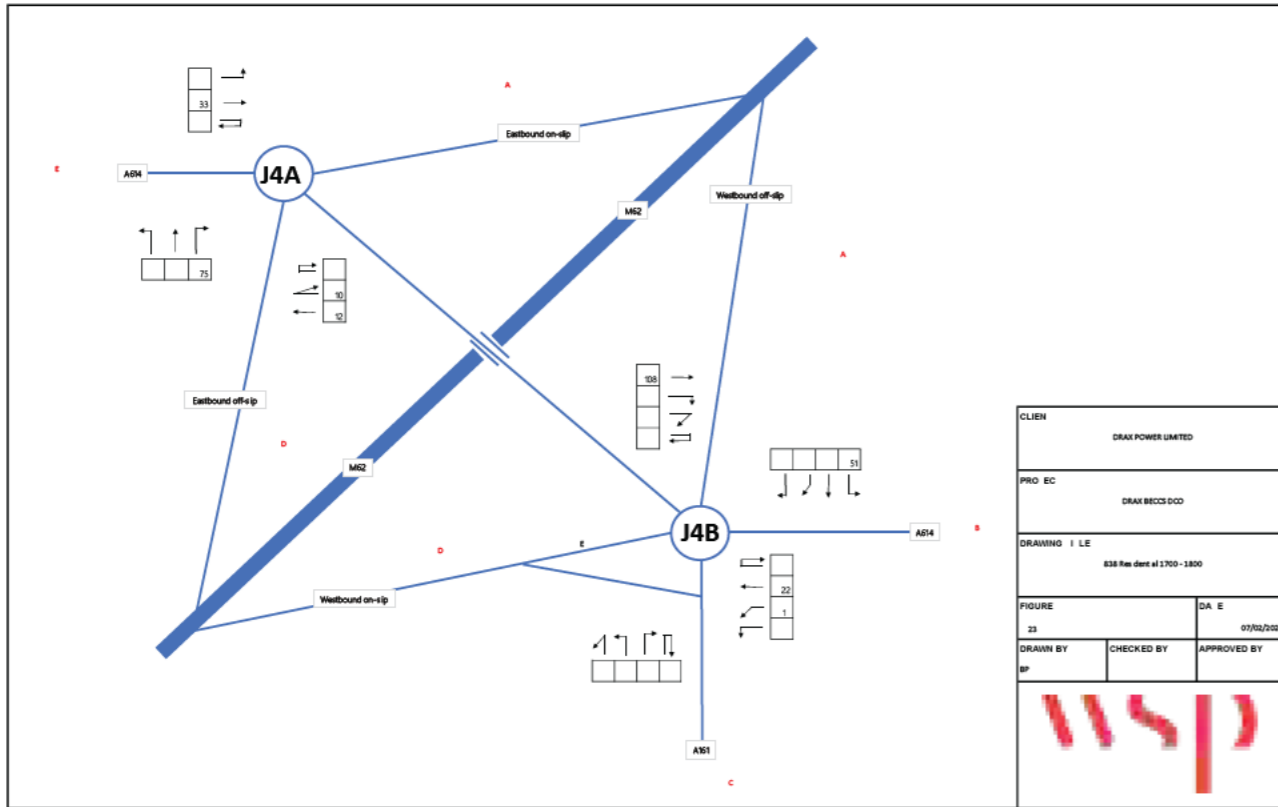
Journey Purpose

Work	25.50%
Other	66.10%

Movement

Movement	Percentage	No. of Work Trips at movement	No. of Other Trips at movement	No. of Total Trips at movement
B to A	25.4%	6.47	6.47	12.94
B to E	13.8%	4.6	7	11.6
B to D	37.1%	12.4	12.4	24.8
A to B	25.4%	4.4	4.4	8.8
E to B	13.8%	23.9	5	28.9
D to B	37.1%	64.2	64.2	128.4





4A: M2 UNC ION 36 DUMBELL ROUNDABOUT

	A	B	C	D
A	0	0	33	-
B	-	-	-	-
C	12	10	0	-
D	0	0	75	-

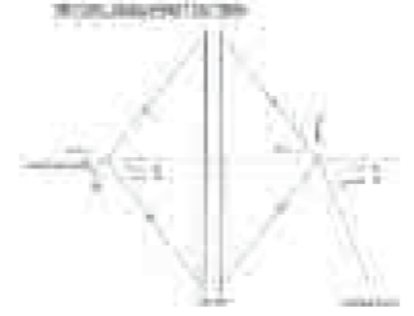
Total movements through and on 130

4B: M2 UNC ION 36 DUMBELL ROUNDABOUT


	A	B	C	D	E
A	0	-	108	0	0
B	0	-	51	0	0
C	22	-	0	0	14
D	0	-	0	0	0
E	-	-	-	-	-

Total movements through and on 195

Det est of peak hou 17:00 - 18:001 per f on 438 Dwellng T empot Assessment for site area.



CLIENT	DRAX POWER LIMITED	
PROJECT	DRAX BECCS DCO	
DRAWING TITLE	438 Residential 1700-1800	
FIGURE	DA E	
23	1	
DATE	03/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		



Vehicle Trip Rates

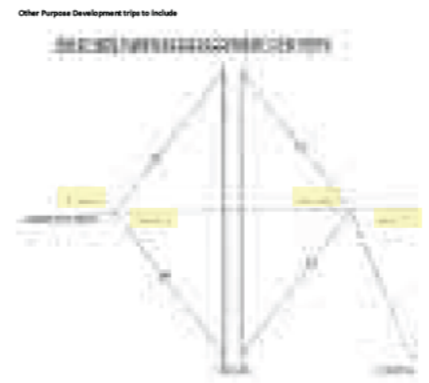
Vehicle	Rate	Dwell	Rate	Dwell
0365	306	0.218	183	

Work Journey Purpose

Category	Percentage
25.50%	
66.10%	

Trip Distribution - AM Peak

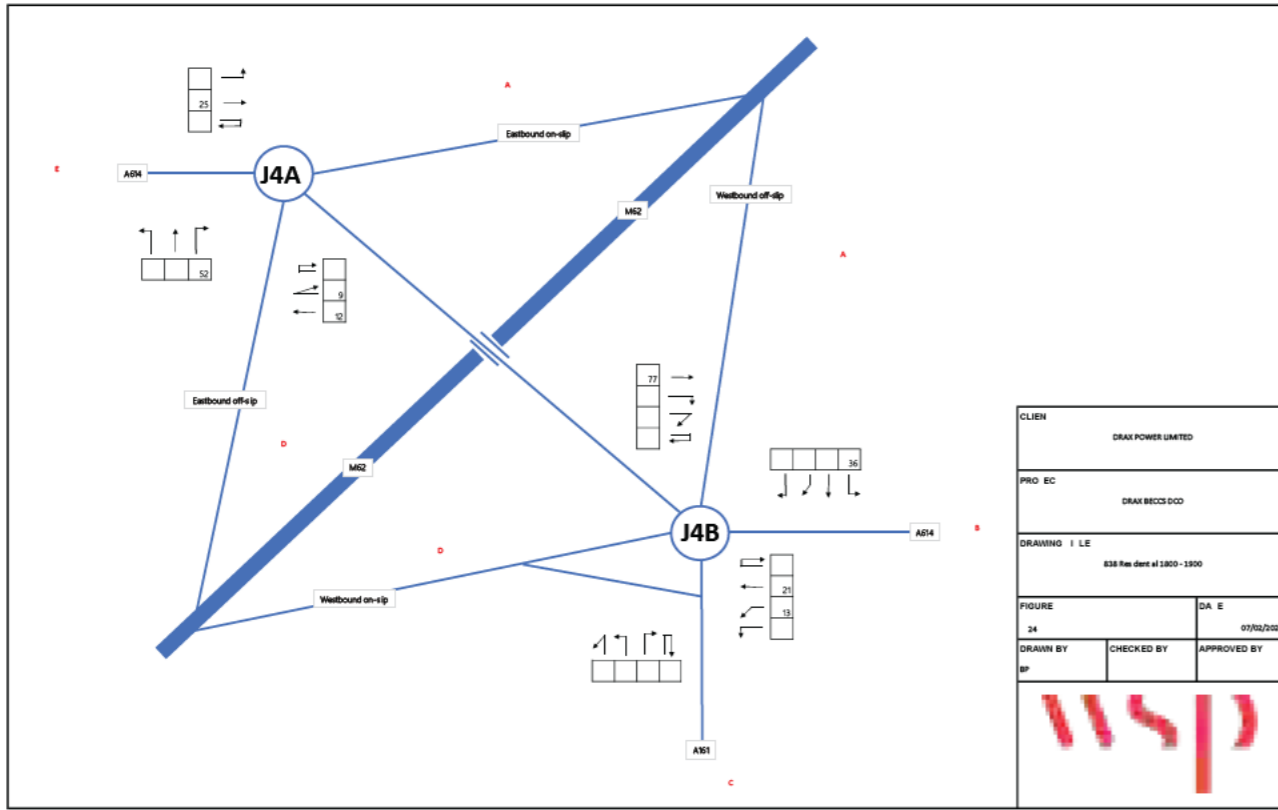
Direction	Percentage
25.44%	
13.81%	
37.15%	
25.44%	
13.81%	
37.15%	



Notes
 No education on 1 per se via the M2 Junction on 26.
 Other Purpose's per se shown on the right hand side of this sheet. It is assumed that Other Purpose's per se will be the same each peak hour.

Vehicle Arrivals 17:00 - 18:00		Vehicle Departures 17:00 - 18:00		Journey Purpose	Movement	No. of Work Trips at movement	No. of Other Trips at movement	No. of Total Trips at movement
T p Rate	858 Dwell rpg	T p Rate	818 Dwell rpg					
0.365	306	0.218	183	25.50%	B to A	9.71	B to A	9.71
				66.10%	B to E	5.27	B to E	12.3
					B to D	14.2	B to D	14.2
					A to B	51.4	A to B	51.4
					E to B	27.9	E to B	32.9
					D to B	75.1	D to B	75.1





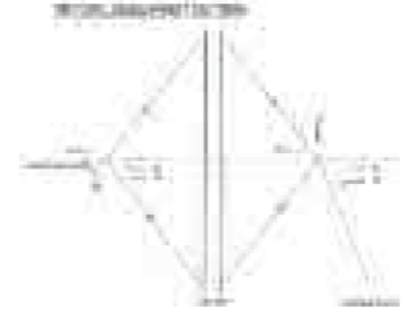
4A: M2 UNC ION 36 DUMBELL ROUNDABOUT

	A	B	C	D	
Total movements through and on	A	B	C	D	
A	0	0	25	-	25
B	-	-	-	-	-
C	12	9	0	-	21
D	0	0	52	-	52

4B: M2 UNC ION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	
Total movements through and on	A	B	C	D	E	
A	0	-	77	0	0	77
B	0	-	36	0	0	36
C	21	-	0	0	13	34
D	0	-	0	0	0	0
E	-	-	-	-	-	-

Det est of peak hou 17:00 - 18:001 per f on 438 Dwellng T empot Assessment for site area.



CLIENT: DRAX POWER LIMITED
 PROJECT: DRAX BECCS DCO
 DRAWING TITLE: 438 Residential 1800-1900
 DATE: 03/02/2023
 DRAWN BY: BP
 CHECKED BY:
 APPROVED BY:

Vehicle Trip Rates

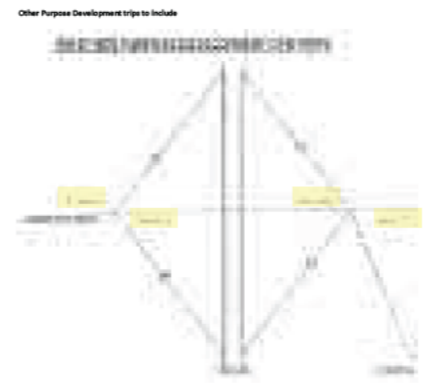
Vehicle	Rate	Dwell	Rate	Dwell
0.255	214	0.201	168	

Work Journey Purpose

Category	Percentage
Work	25.50%
Other	66.10%

Trip Distribution - AM Peak

Movement	Percentage
B to A	25.44%
B to E	13.81%
B to D	37.15%
A to B	25.44%
E to B	13.81%
D to B	37.15%



Notes:
 No education on the site at the M2 Junction 26.
 Other Purpose trips as shown on the right hand side of the sheet. It is assumed that 'Other Purpose' trips will be the same each peak hour.

Vehicle Arrivals 18:00 - 19:00

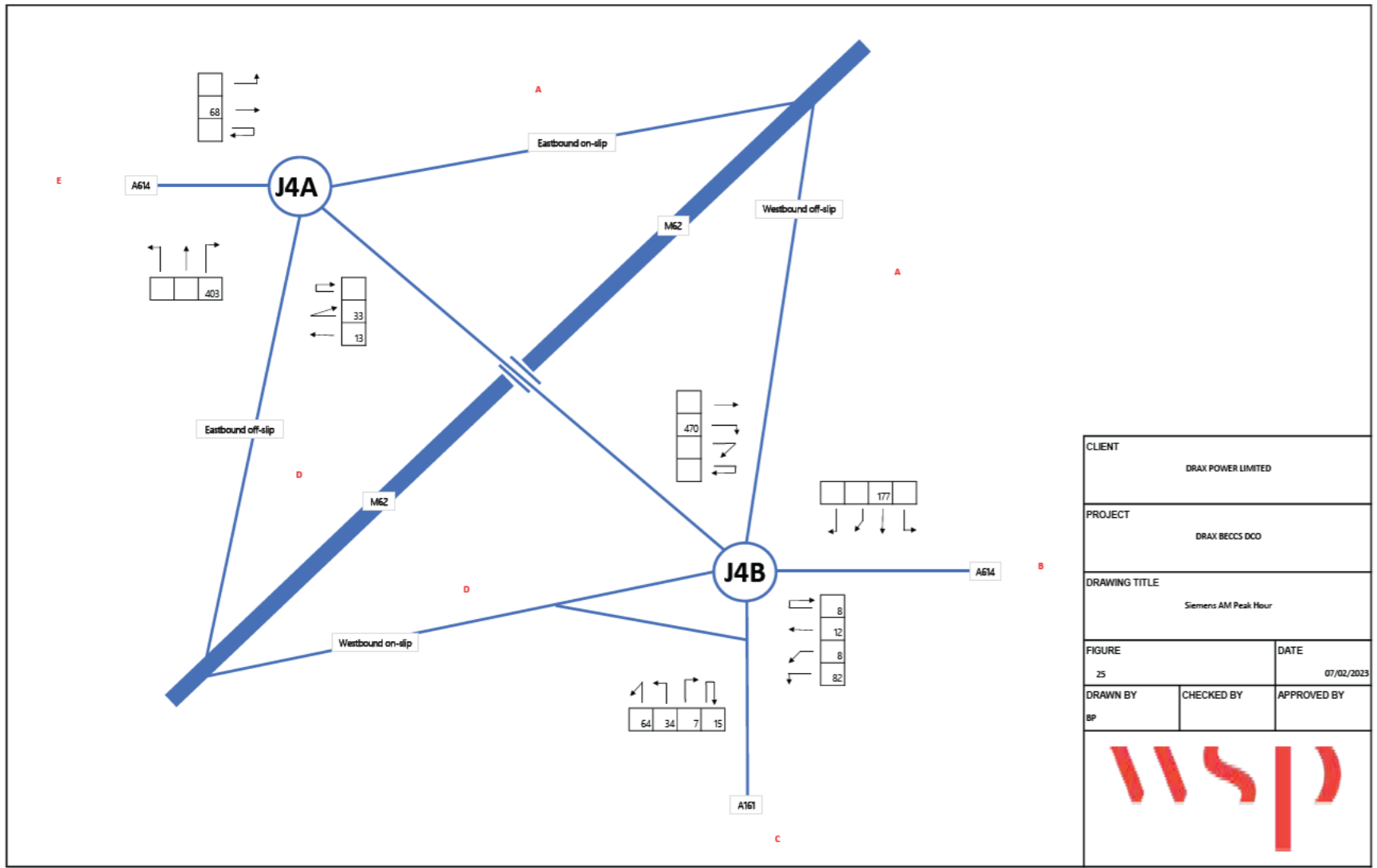
Rate	Dwell
0.255	214

Vehicle Departures 18:00 - 19:00

Rate	Dwell
0.201	168

Movement	No. of Work Trips at movement	No. of Other Trips at movement	No. of Total Trips at movement
B to A	6.96	0	6.96
B to E	4.86	7	11.9
B to D	13.1	0	13.1
A to B	35.9	0	35.9
E to B	19.5	5	24.5
D to B	32.5	0	32.5





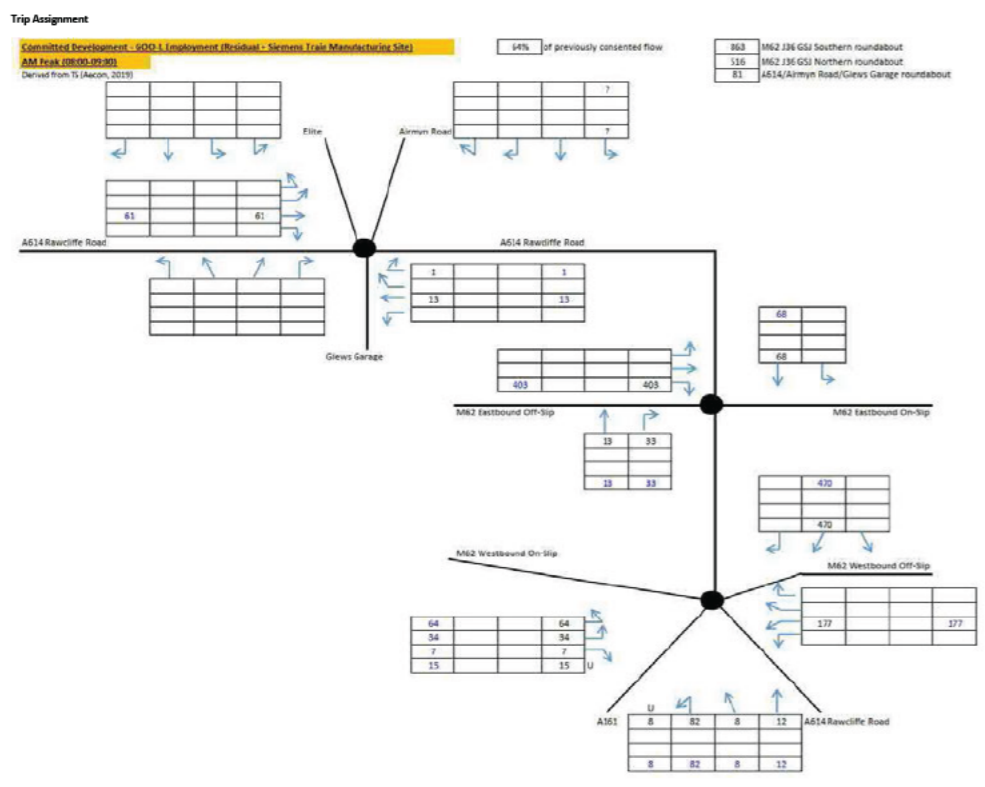
J4A: M62 JUNCTION 36 DUMBBELL ROUNDABOUT

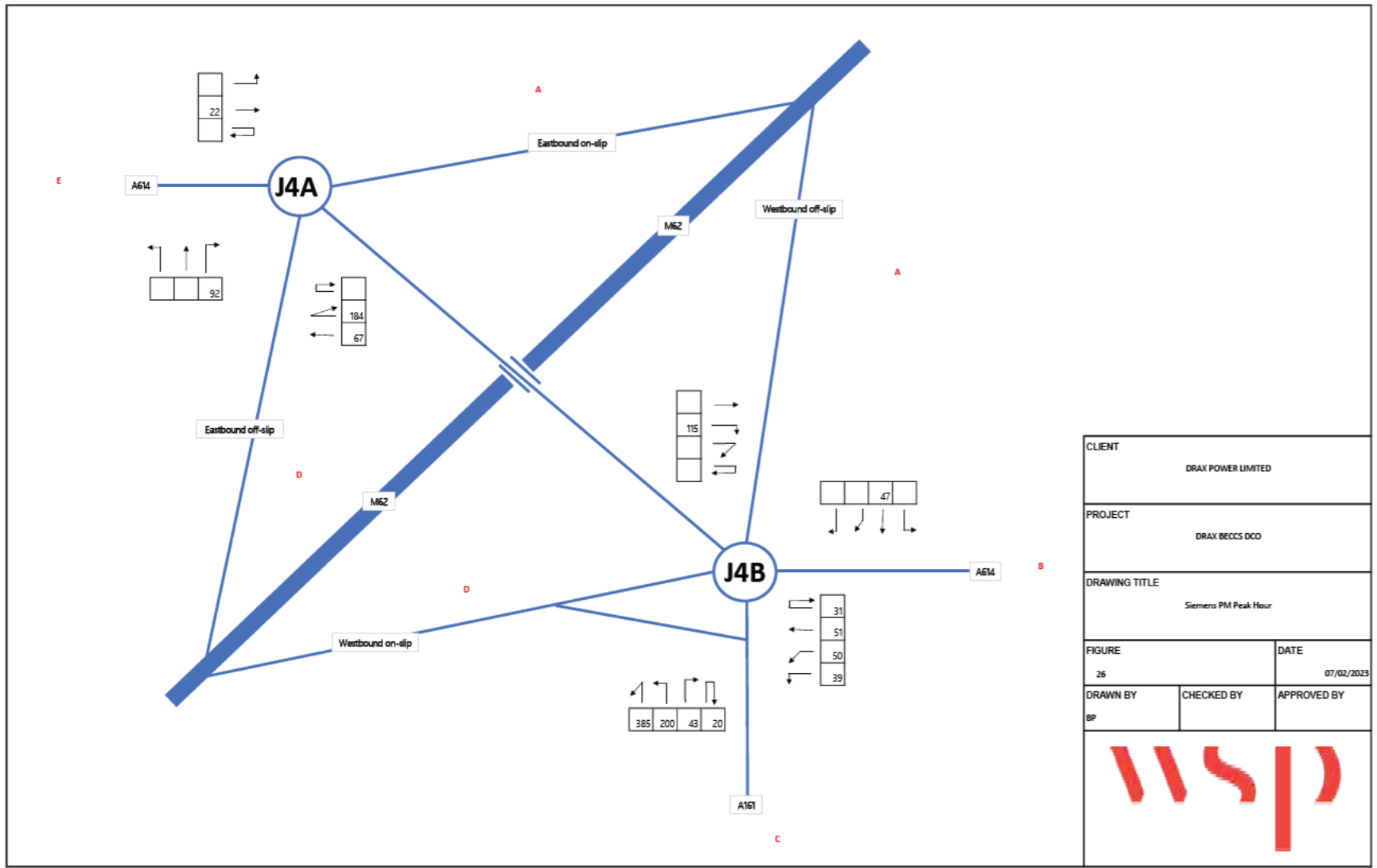
	A	B	C	D	Total movements through junction
A	0	0	68	-	68
B	-	-	-	-	-
C	13	33	0	-	46
D	0	0	403	-	403

J4B: M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	470	0	470
B	0	-	0	177	0	177
C	12	-	8	82	8	110
D	34	-	7	15	64	120
E	-	-	-	-	-	-

CLIENT		DRAX POWER LIMITED
PROJECT		DRAX BECCS DCO
DRAWING TITLE		Siemens AM Peak Hour
FIGURE	DATE	
25	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		





J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	0	22	-	365
B	-	-	-	-	
C	67	184	0	-	
D	0	0	92	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	115	0	981
B	0	-	0	47	0	
C	51	-	31	39	50	
D	200	-	43	20	385	
E	-	-	-	-	-	

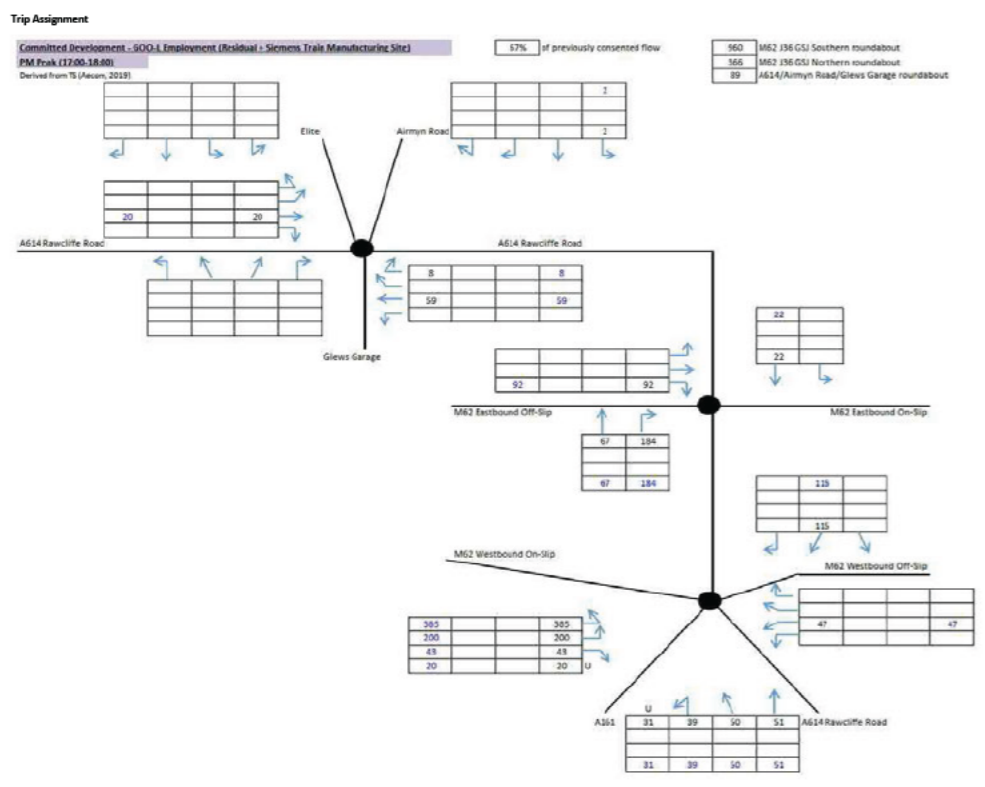
CLIENT: DRAX POWER LIMITED

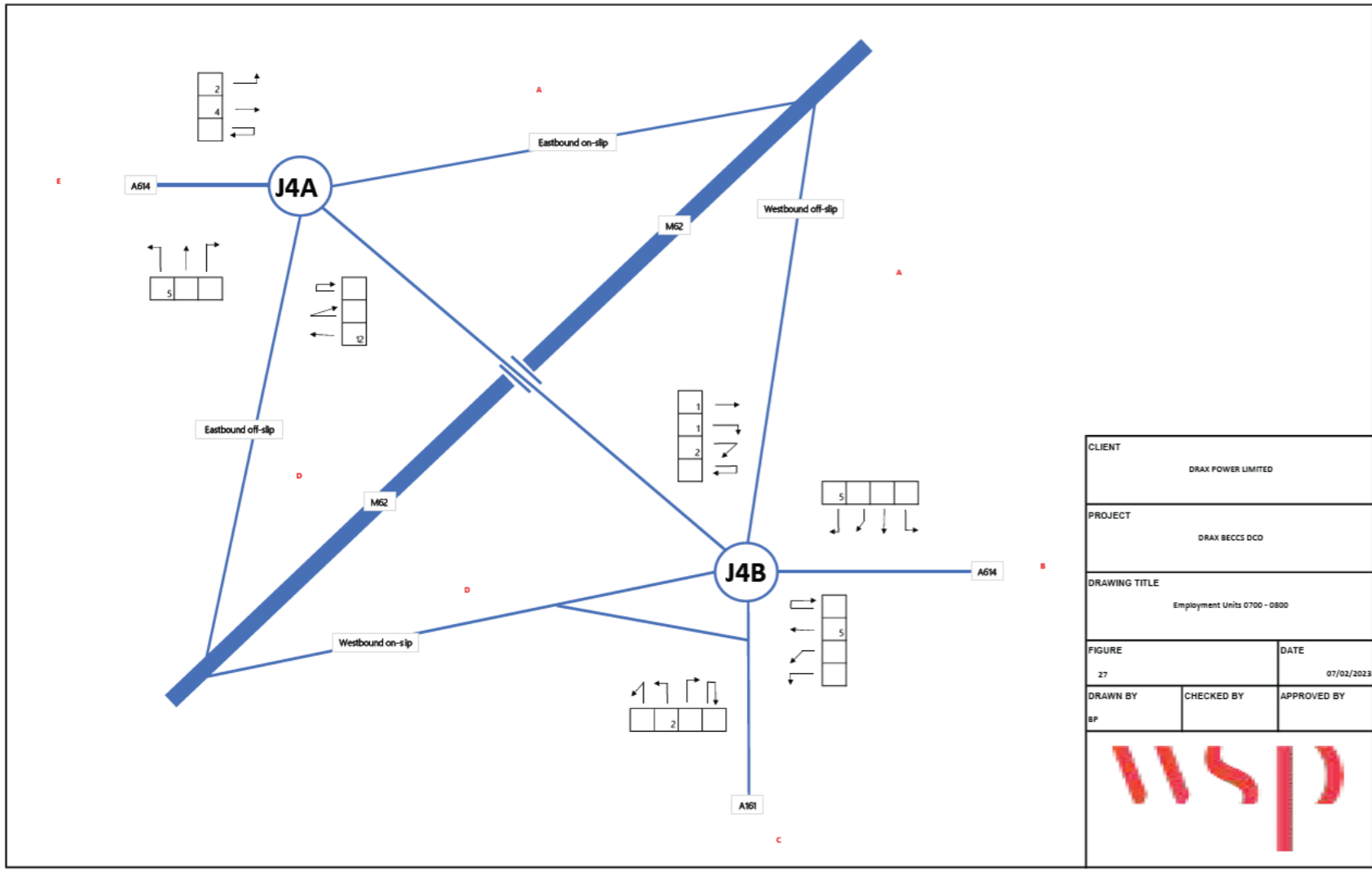
PROJECT: DRAX BECCS DCO

DRAWING TITLE: Siemens PM Peak Hour

FIGURE: 26 | DATE: 07/02/2023

DRAWN BY: BP | CHECKED BY: | APPROVED BY:





J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	
A	0	2	4	-	Total movements through junction 22
B	-	-	-	-	
C	12	0	0	-	
D	3	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	
A	0	-	1	1	2	Total movements through junction 15
B	3	-	0	0	0	
C	3	-	0	0	0	
D	2	-	0	0	0	
E	-	-	-	-	-	

CLIENT: DRAX POWER LIMITED

PROJECT: DRAX BECCS DCO

DRAWING TITLE: Employment Units 0700 - 0800

FIGURE: 27 | DATE: 07/02/2023

DRAWN BY: BP | CHECKED BY: | APPROVED BY: |

Trip Generation

Projected Trip Generation

Person Trip Rates (per 100m²)

Time	IN	OUT	TOTAL
07:00-08:00	0.405	0.133	0.538
08:00-09:00	0.705	0.375	0.980
09:00-10:00	0.640	0.329	0.969
10:00-11:00	0.591	0.451	1.042
11:00-12:00	0.527	0.560	1.087
12:00-13:00	0.525	0.576	1.101
13:00-14:00	0.579	0.587	1.166
14:00-15:00	0.444	0.572	1.016
15:00-16:00	0.422	0.542	0.964
16:00-17:00	0.460	0.639	1.119
17:00-18:00	0.438	0.384	1.148
18:00-19:00	0.114	0.387	0.501
TOTAL	5.771	5.855	11.626

Person Trips

IN	OUT	TOTAL	
31	10	41	
54	21	75	
49	25	74	
45	34	80	
40	43	83	
40	44	84	
44	45	89	
34	44	78	
32	41	74	
35	50	85	
27	60	87	
9	30	39	
TOTAL	440	447	887

7632 m² GFA | 82150 m² R² GFA

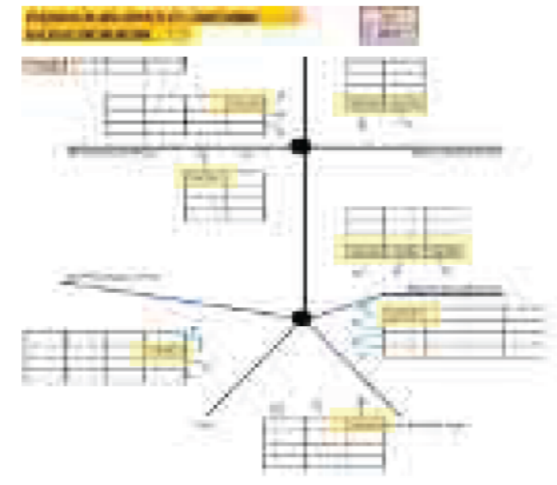
Mean: 02-D, MM, 3500 to 15000m², England (exc. GU) Wales and Scotland, Edge of Town & Free Standing, exc. Sat/Sun, 13+ | 5

Projected Modal Trip Generation

Vehicle Trip Generating	Modal Split	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)			12-Hour (07:00-19:00)		
		IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Car Driver	72.4%	39	15	54	20	43	63	313	324	642
Taxi	0.2%	0	0	0	0	0	0	1	1	2
Powered Two-Wheeler	1.4%	1	0	1	0	1	1	6	6	12
Vehicle Trips	74.0%	40	15	55	20	44	64	326	331	656

Trip Rate	Trip Generation		76.32 GFA	
Arrivals	Departures	Arrivals	Departures	74% Vehicle Trips
7 to 8	0.405	0.133	22.9	7.51

Trip Distribution

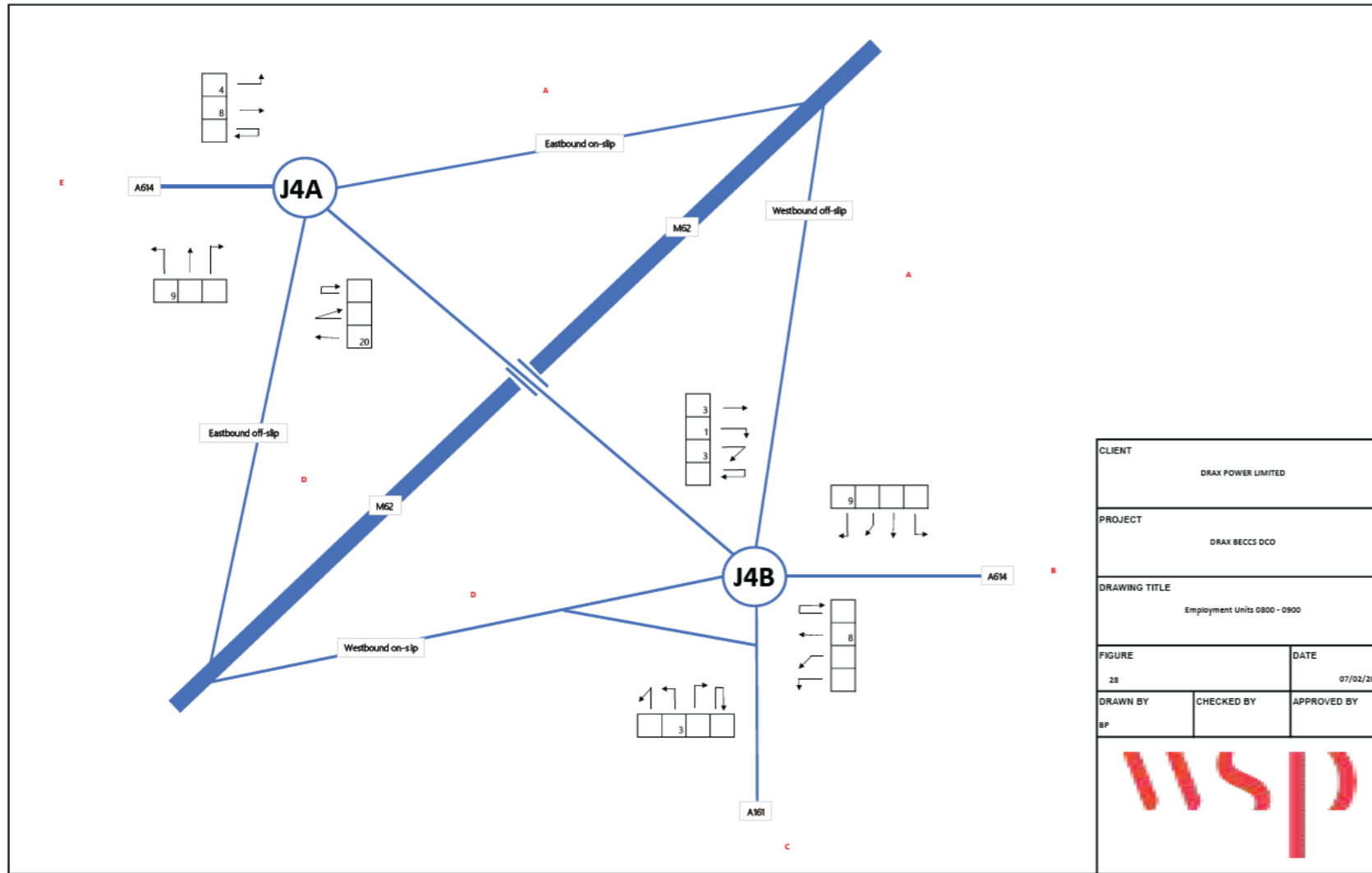


A to E	23.1%
B to E	19.8%
C to E	8.3%
D to E	21.5%
E to A	23.1%
E to B	19.8%
E to C	8.3%
E to D	21.5%

Trip Assignment



A to E	5
B to E	5
C to E	2
D to E	5
E to A	2
E to B	1
E to C	1
E to D	2



J4A: M2 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D
A	0	4	8	-
B	-	-	-	-
C	20	0	0	-
D	9	0	0	-

Total movements through junction
40

J4B: M2 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	3	1	3
B	9	-	0	0	0
C	8	-	0	0	0
D	3	-	0	0	0
E	-	-	-	-	-

Total movements through junction
28

CLIENT	DRAX POWER LIMITED	
PROJECT	DRAX BECCS DCO	
DRAWING TITLE	Employment Units 0800 - 0900	
FIGURE	28	DATE 07/02/2023
DRAWN BY	CHECKED BY	APPROVED BY
BP		



Trip Generation

Projected Trip Generation

7632 m² GFA 82150 ft² GFA

Person Trip Rates (per 100m²)

Time	IN	OUT	TOTAL
07:00-08:00	0.405	0.133	0.538
08:00-09:00	0.705	0.275	0.980
09:00-10:00	0.640	0.329	0.969
10:00-11:00	0.591	0.451	1.042
11:00-12:00	0.527	0.560	1.087
12:00-13:00	0.525	0.576	1.101
13:00-14:00	0.579	0.587	1.166
14:00-15:00	0.444	0.572	1.016
15:00-16:00	0.422	0.542	0.964
16:00-17:00	0.460	0.639	1.119
17:00-18:00	0.439	0.784	1.248
18:00-19:00	0.114	0.387	0.501

Person Trips

IN	OUT	TOTAL
31	10	41
54	21	75
49	25	74
45	34	80
40	43	83
40	44	84
44	45	89
34	44	78
32	41	74
35	50	85
27	60	87
9	30	39

TOTAL 5,771 5,855 11,626 440 447 887

Mean: 02-D, MM, 3500 to 15000m², England (exc. GU) Wales and Scotland, Edge of Town & Free Standing, exc. Sat/Sun, 13+ | 5)

Projected Modal Trip Generation

Vehicle Trip Generating	Modal Split	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)			12-Hour (07:00-19:00)		
		IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Car Driver	72.4%	39	15	54	20	43	63	313	324	642
Taxi	0.2%	0	0	0	0	0	0	1	1	2
Powered Two-Wheeler	1.4%	1	0	1	0	1	1	6	6	12

Vehicle Trips 74.0% 40 15 55 20 44 64 326 331 656

Trip Rate	Trip Generation		76.32 GFA		
Arrivals	Departures	Arrivals	Departures	74% Vehicle Trips	
7 to 8	0.705	0.275	39.8	15.3	

Trip Distribution

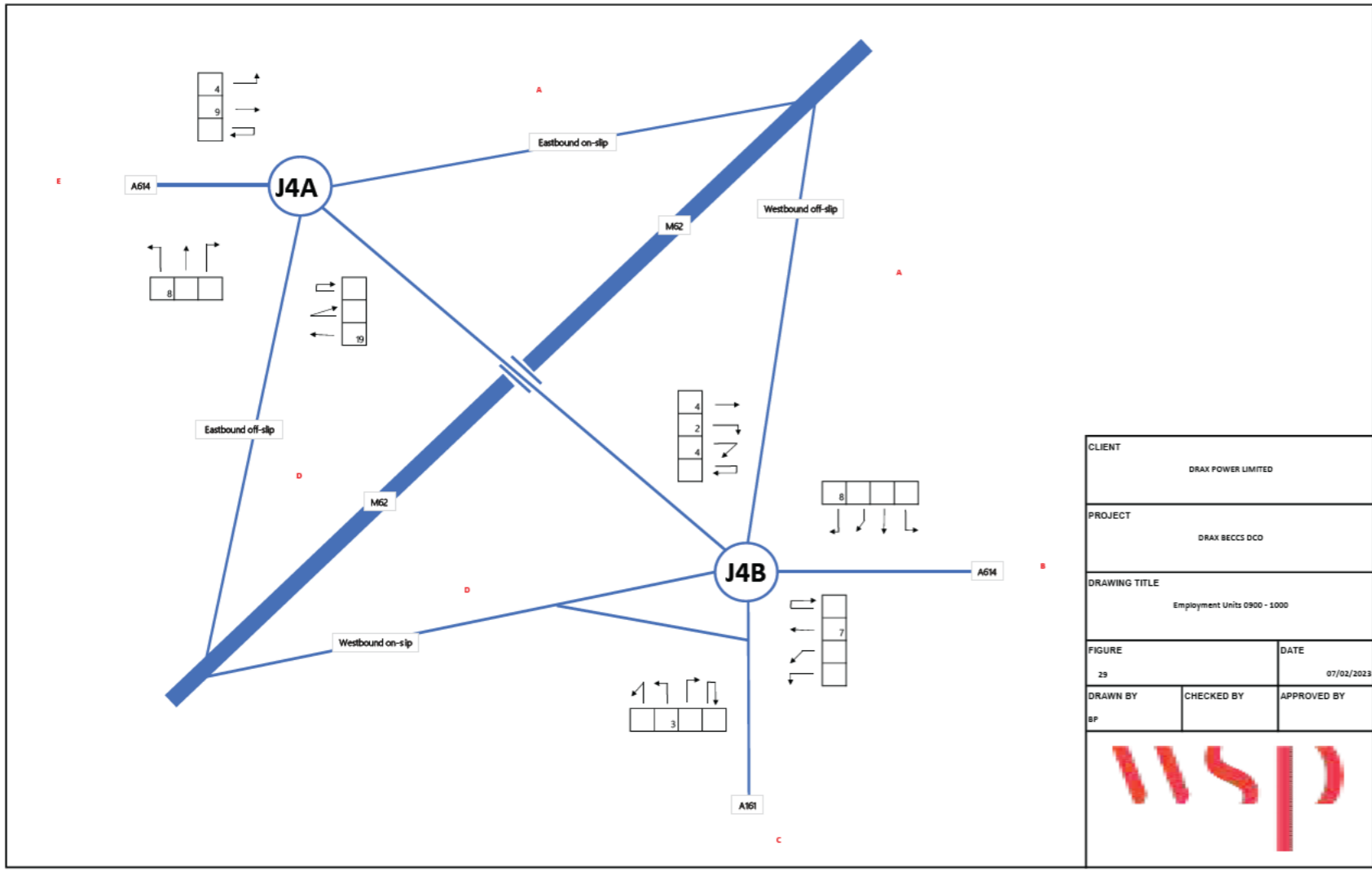


A to E	23.1%
B to E	19.8%
C to E	8.3%
D to E	21.5%
E to A	23.1%
E to B	19.8%
E to C	8.3%
E to D	21.5%

Trip Assignment



A to E	9
B to E	8
C to E	3
D to E	9
E to A	4
E to B	3
E to C	1
E to D	3



J4A: M2 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	4	9	-	40
B	-	-	-	-	
C	19	0	0	-	
D	8	0	0	-	

J4B: M2 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	4	2	4	28
B	8	-	0	0	0	
C	7	-	0	0	0	
D	3	-	0	0	0	
E	-	-	-	-	-	

CLIENT: DRAX POWER LIMITED

PROJECT: DRAX BECCS DCO

DRAWING TITLE: Employment Units 0900 - 1000

FIGURE: 29 | DATE: 07/02/2023

DRAWN BY: BP | CHECKED BY: | APPROVED BY: |

Trip Generation

Projected Trip Generation

Person Trip Rates (per 100m²)

Time	IN	OUT	TOTAL
07:00-08:00	0.405	0.133	0.538
08:00-09:00	0.705	0.375	0.980
09:00-10:00	0.640	0.329	0.969
10:00-11:00	0.591	0.451	1.042
11:00-12:00	0.527	0.560	1.087
12:00-13:00	0.525	0.576	1.101
13:00-14:00	0.579	0.587	1.166
14:00-15:00	0.444	0.572	1.016
15:00-16:00	0.422	0.542	0.964
16:00-17:00	0.460	0.639	1.119
17:00-18:00	0.438	0.384	1.148
18:00-19:00	0.114	0.387	0.501
TOTAL	5.771	5.855	11.626

Person Trips

IN	OUT	TOTAL	
31	10	41	
54	21	75	
49	25	74	
45	34	80	
40	43	83	
40	44	84	
44	45	89	
34	44	78	
32	41	74	
35	50	85	
27	60	87	
9	30	39	
TOTAL	440	447	887

7632 m² GFA | 82150 m² GFA

Mean: 02-D, MM, 3500 to 15000m², England (exc. GL) Wales and Scotland, Edge of Town & Free Standing, exc. Sat/Sun, 13+ | 5)

Projected Modal Trip Generation

Vehicle Trip Generating	Modal Split	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)			12-Hour (07:00-19:00)		
		IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Car Driver	72.4%	39	15	54	20	43	63	313	324	642
Taxi	0.2%	0	0	0	0	0	0	1	1	2
Powered Two-Wheeler	1.4%	1	0	1	0	1	1	6	6	12
Vehicle Trips	74.0%	40	15	55	20	44	64	326	331	656

Trip Rate

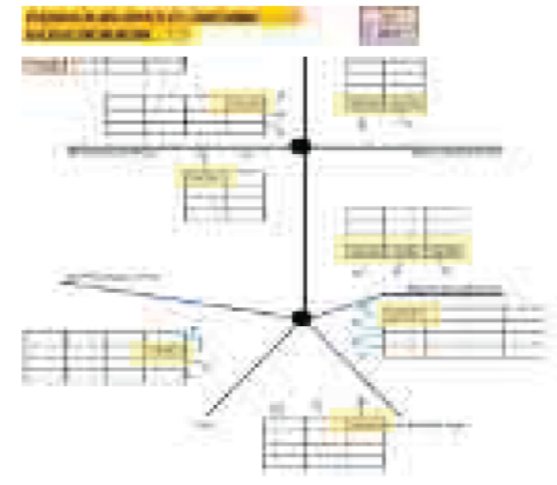
Arrivals	Departures	Trip Generation
7 to 8	0.640	0.329

Trip Generation: 76.32 GFA

74% Vehicle Trips

Arrivals	Departures
36.1	18.6

Trip Distribution

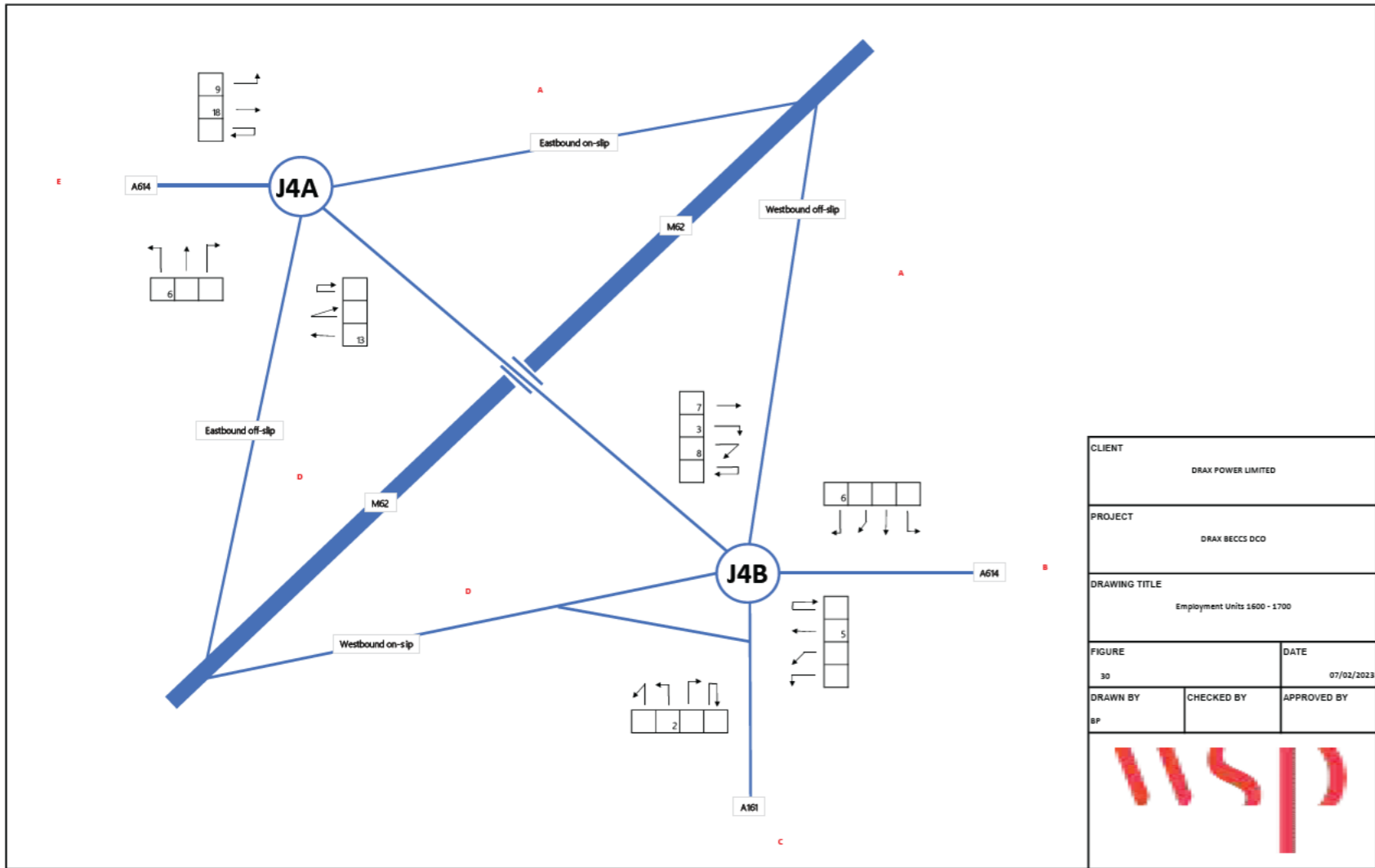


A to E	23.1%
B to E	19.8%
C to E	8.3%
D to E	21.5%
E to A	23.1%
E to B	19.8%
E to C	8.3%
E to D	21.5%

Trip Assignment



A to E	8
B to E	7
C to E	3
D to E	8
E to A	4
E to B	4
E to C	2
E to D	4



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D
A	0	9	18	-
B	-	-	-	-
C	13	0	0	-
D	6	0	0	-

Total movements through junction
46

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	7	3	8
B	6	-	0	0	0
C	5	-	0	0	0
D	2	-	0	0	0
E	-	-	-	-	-

Total movements through junction
32

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Employment Units 1600 - 1700		
FIGURE	DATE	
30	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		



Trip Generation

Projected Trip Generation

Person Trip Rates (per 100m²)

Time	IN	OUT	TOTAL
07:00-08:00	0.405	0.133	0.538
08:00-09:00	0.705	0.375	0.980
09:00-10:00	0.640	0.329	0.969
10:00-11:00	0.591	0.451	1.042
11:00-12:00	0.527	0.560	1.087
12:00-13:00	0.525	0.576	1.101
13:00-14:00	0.579	0.587	1.166
14:00-15:00	0.444	0.572	1.016
15:00-16:00	0.422	0.542	0.964
16:00-17:00	0.460	0.539	1.119
17:00-18:00	0.458	0.384	1.148
18:00-19:00	0.114	0.387	0.501
TOTAL	5.771	5.855	11.626

Person Trips

IN	OUT	TOTAL	
31	10	41	
54	21	75	
49	25	74	
45	34	80	
40	43	83	
40	44	84	
44	45	89	
34	44	78	
32	41	74	
35	50	85	
27	60	87	
9	30	39	
TOTAL	440	447	887

7632 m² GFA 82150 m² GFA

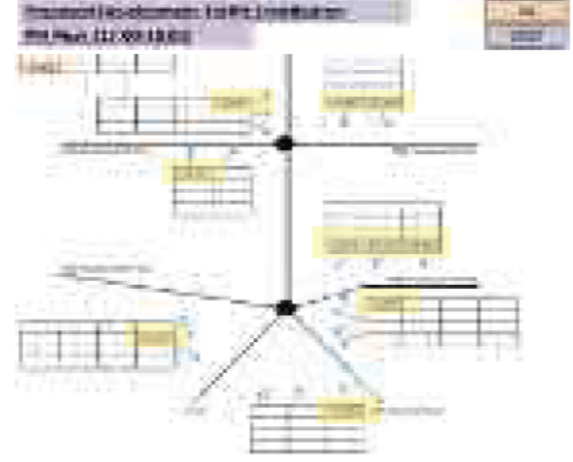
Mean: 02-D, MM, 3500 to 15000m², England (exc. GU) Wales and Scotland, Edge of Town & Free Standing, exc. Sat/Sun, 13+ | 5)

Projected Modal Trip Generation

Vehicle Trip Generating	Modal Split	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)			12-Hour (07:00-19:00)		
		IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Car Driver	72.4%	39	15	54	20	43	63	313	324	642
Taxi	0.2%	0	0	0	0	0	0	1	1	2
Powered Two-Wheeler	1.4%	1	0	1	0	1	1	6	6	12
Vehicle Trips	74.0%	40	15	55	20	44	64	326	331	656

Trip Rate	Trip Generation		76.32 GFA	
Arrivals	Departures	Arrivals	Departures	74% Vehicle Trips
7 to 8	0.460	0.659	26	37.2

Trip Distribution

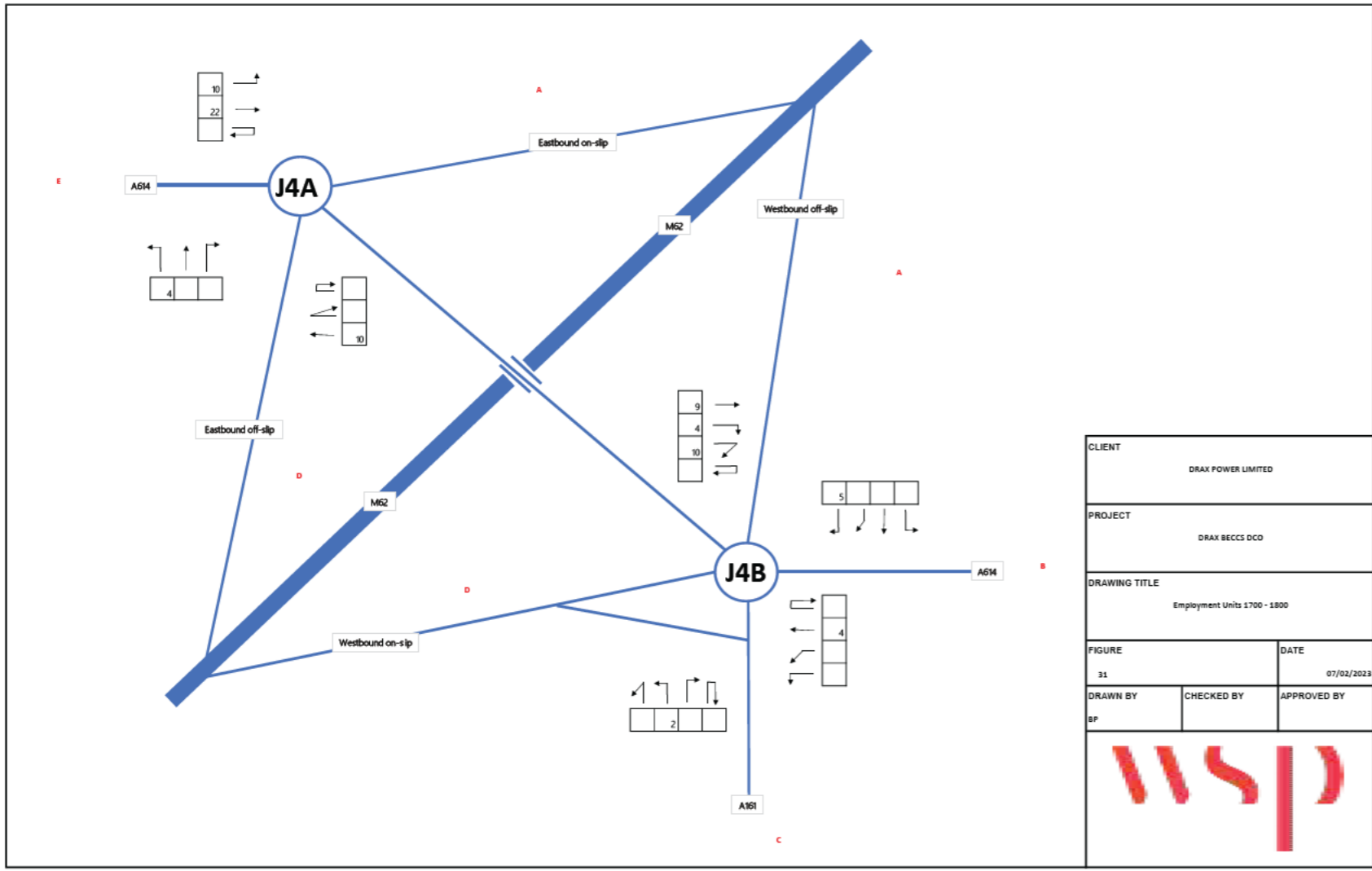


A to E	23.1%
B to E	19.8%
C to E	8.3%
D to E	21.5%
E to A	23.1%
E to B	19.8%
E to C	8.3%
E to D	21.5%

Trip Assignment



A to E	6
B to E	5
C to E	2
D to E	6
E to A	9
E to B	7
E to C	3
E to D	8



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	
A	0	10	22	-	Total movements through junction 47
B	-	-	-	-	
C	10	0	0	-	
D	4	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	
A	0	-	9	4	10	Total movements through junction 32
B	5	-	0	0	0	
C	4	-	0	0	0	
D	2	-	0	0	0	
E	-	-	-	-	-	

CLIENT: DRAX POWER LIMITED

PROJECT: DRAX BECCS DCO

DRAWING TITLE: Employment Units 1700 - 1800

FIGURE: 31 | DATE: 07/02/2023

DRAWN BY: BP | CHECKED BY: | APPROVED BY: |

Trip Generation

Projected Trip Generation

Person Trip Rates (per 100m2)

Time	IN	OUT	TOTAL
07:00-08:00	0.405	0.133	0.538
08:00-09:00	0.705	0.375	0.980
09:00-10:00	0.640	0.329	0.969
10:00-11:00	0.591	0.451	1.042
11:00-12:00	0.527	0.560	1.087
12:00-13:00	0.525	0.576	1.101
13:00-14:00	0.579	0.587	1.166
14:00-15:00	0.444	0.572	1.016
15:00-16:00	0.422	0.542	0.964
16:00-17:00	0.460	0.639	1.119
17:00-18:00	0.439	0.744	1.148
18:00-19:00	0.114	0.367	0.501
TOTAL	5.771	5.855	11.626

Person Trips

IN	OUT	TOTAL	
31	10	41	
54	21	75	
49	25	74	
45	34	80	
40	43	83	
40	44	84	
44	45	89	
34	44	78	
32	41	74	
35	50	85	
27	60	87	
9	30	39	
TOTAL	440	447	887

7632 m² GFA | 82150 ft² GFA

Mean: 02-D, MM, 3500 to 15000m2, England (exc. GU) Wales and Scotland, Edge of Town & Free Standing, exc. Sat/Sun, 13+ | 5)

Projected Modal Trip Generation

Vehicle Trip Generating	Modal Split	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)			12-Hour (07:00-19:00)		
		IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Car Driver	72.4%	39	15	54	20	43	63	313	324	642
Taxi	0.2%	0	0	0	0	0	0	1	1	2
Powered Two-Wheeler	1.4%	1	0	1	0	1	1	6	6	12
Vehicle Trips	74.0%	40	15	55	20	44	64	326	331	656

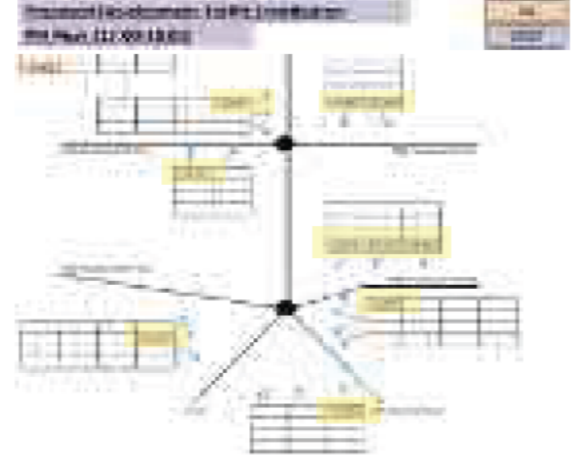
Trip Rate

Arrivals	Departures	Trip Generation
7 to 8	0.359	0.784

Trip Generation: 20.3 Arrivals, 44.3 Departures

76.32 GFA | 74% Vehicle Trips

Trip Distribution

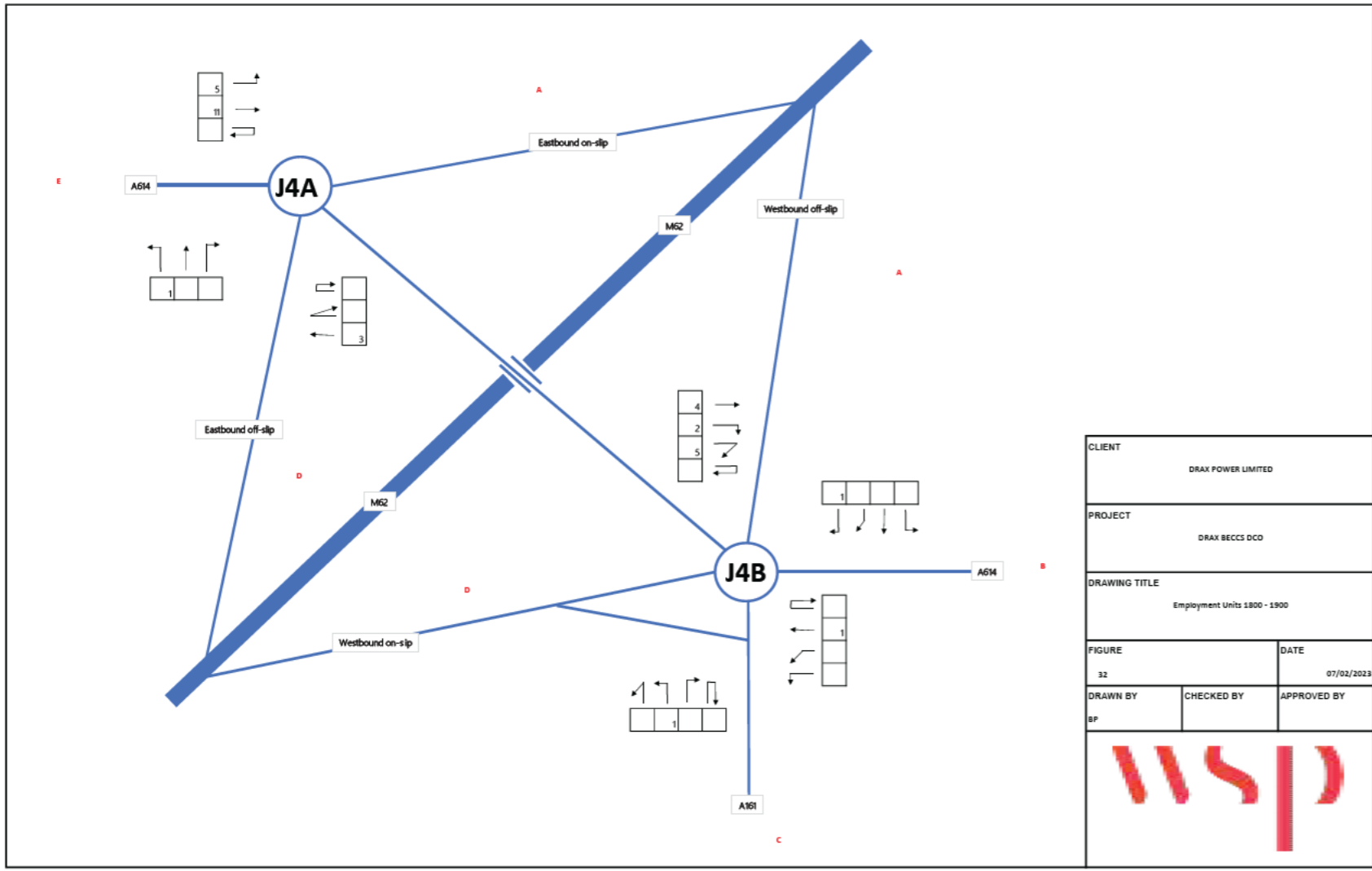


A to E	23.1%
B to E	19.8%
C to E	8.3%
D to E	21.5%
E to A	23.1%
E to B	19.8%
E to C	8.3%
E to D	21.5%

Trip Assignment



A to E	5
B to E	4
C to E	2
D to E	4
E to A	10
E to B	9
E to C	4
E to D	10




J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	
A	0	3	11	-	Total movements through junction 21
B	-	-	-	-	
C	3	0	0	-	
D	1	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	
A	0	-	4	2	3	Total movements through junction 14
B	1	-	0	0	0	
C	1	-	0	0	0	
D	1	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Employment Units 1800 - 1900		
FIGURE	DATE	
32	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Trip Generation

Projected Trip Generation

Person Trip Rates (per 100m²)

Time	IN	OUT	TOTAL
07:00-08:00	0.405	0.133	0.538
08:00-09:00	0.705	0.375	0.980
09:00-10:00	0.640	0.329	0.969
10:00-11:00	0.591	0.451	1.042
11:00-12:00	0.527	0.560	1.087
12:00-13:00	0.525	0.576	1.101
13:00-14:00	0.579	0.587	1.166
14:00-15:00	0.444	0.572	1.016
15:00-16:00	0.422	0.542	0.964
16:00-17:00	0.460	0.639	1.119
17:00-18:00	0.439	0.784	1.248
18:00-19:00	0.114	0.387	0.501
TOTAL	5.771	5.855	11.626

Person Trips

IN	OUT	TOTAL	
31	10	41	
54	21	75	
49	25	74	
45	34	80	
40	43	83	
40	44	84	
44	45	89	
34	44	78	
32	41	74	
35	50	85	
27	60	87	
9	30	39	
TOTAL	440	447	887

7632 m² GFA 82150 m² R² GFA

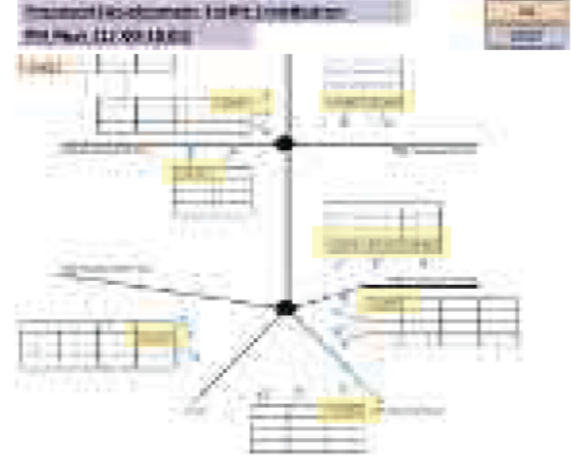
Mean: 02-D, MM, 3500 to 15000m², England (exc. GU) Wales and Scotland, Edge of Town & Free Standing, exc. Sat/Sun, 13+ | 5)

Projected Modal Trip Generation

Vehicle Trip Generating	Modal Split	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)			12-Hour (07:00-19:00)		
		IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Car Driver	72.4%	39	15	54	20	43	63	313	324	642
Taxi	0.2%	0	0	0	0	0	0	1	1	2
Powered Two-Wheeler	1.4%	1	0	1	0	1	1	6	6	12
Vehicle Trips	74.0%	40	15	55	20	44	64	326	331	656

Trip Rate	Trip Generation		76.32 GFA	
Arrivals	Departures	Arrivals	Departures	74% Vehicle Trips
7 to 8	0.114	0.387	6.44	21.9

Trip Distribution

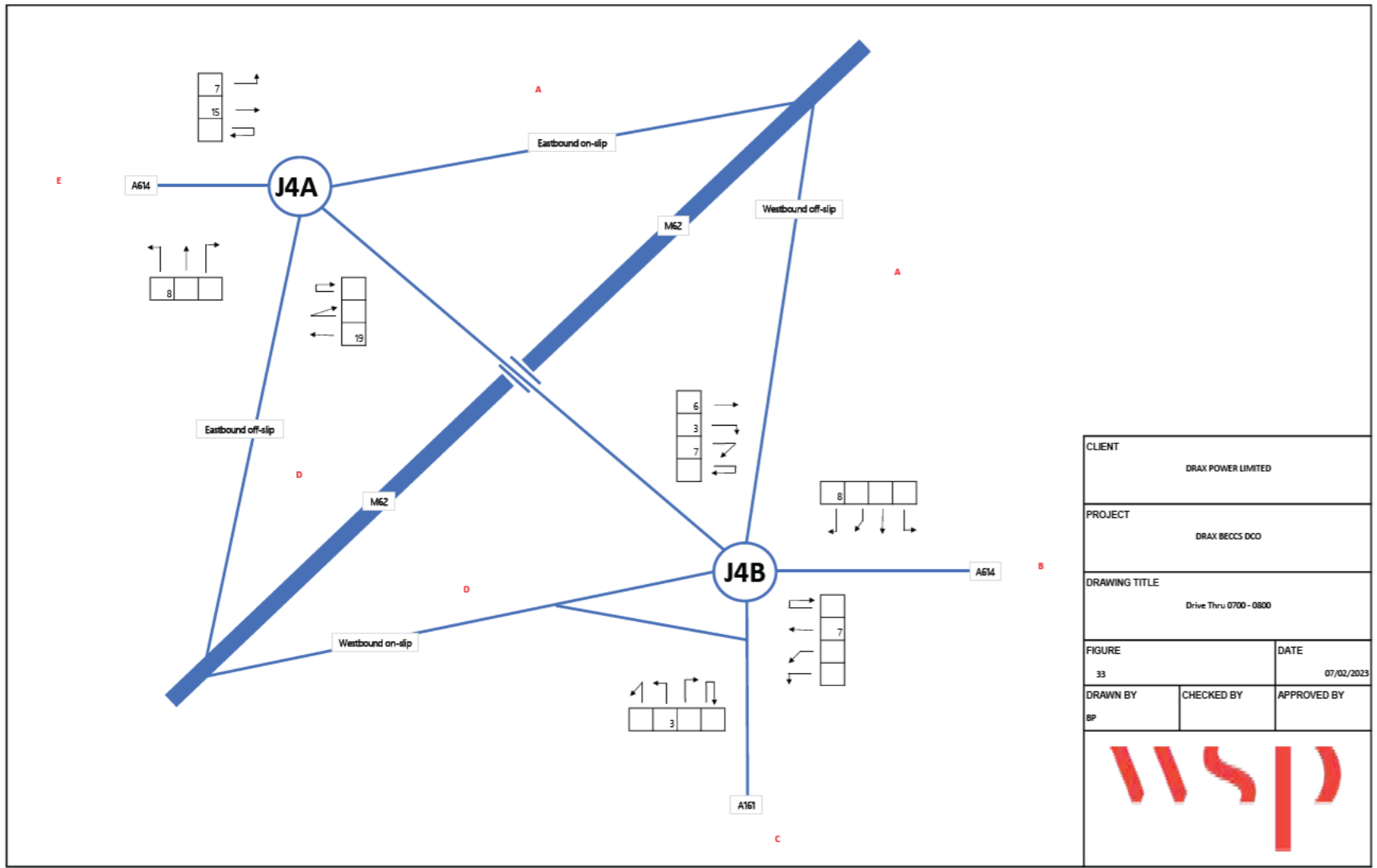


A to E	23.1%
B to E	19.8%
C to E	8.3%
D to E	21.5%
E to A	23.1%
E to B	19.8%
E to C	8.3%
E to D	21.5%

Trip Assignment



A to E	1
B to E	1
C to E	1
D to E	1
E to A	5
E to B	4
E to C	2
E to D	5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	7	15	-	49
B	-	-	-	-	
C	19	0	0	-	
D	8	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	6	3	7	34
B	8	-	0	0	0	
C	7	-	0	0	0	
D	3	-	0	0	0	
E	-	-	-	-	-	

CLIENT: DRAX POWER LIMITED

PROJECT: DRAX BECCS DCO

DRAWING TITLE: Drive Thru 0700 - 0800

FIGURE: 33 | DATE: 07/02/2023

DRAWN BY: BP | CHECKED BY: | APPROVED BY: |

Trip Generation

Area	Arrivals	Departures
7 to 8	8,664	7,231



Trip Rate

Area	Arrivals	Departures
7 to 8	8,664	7,231

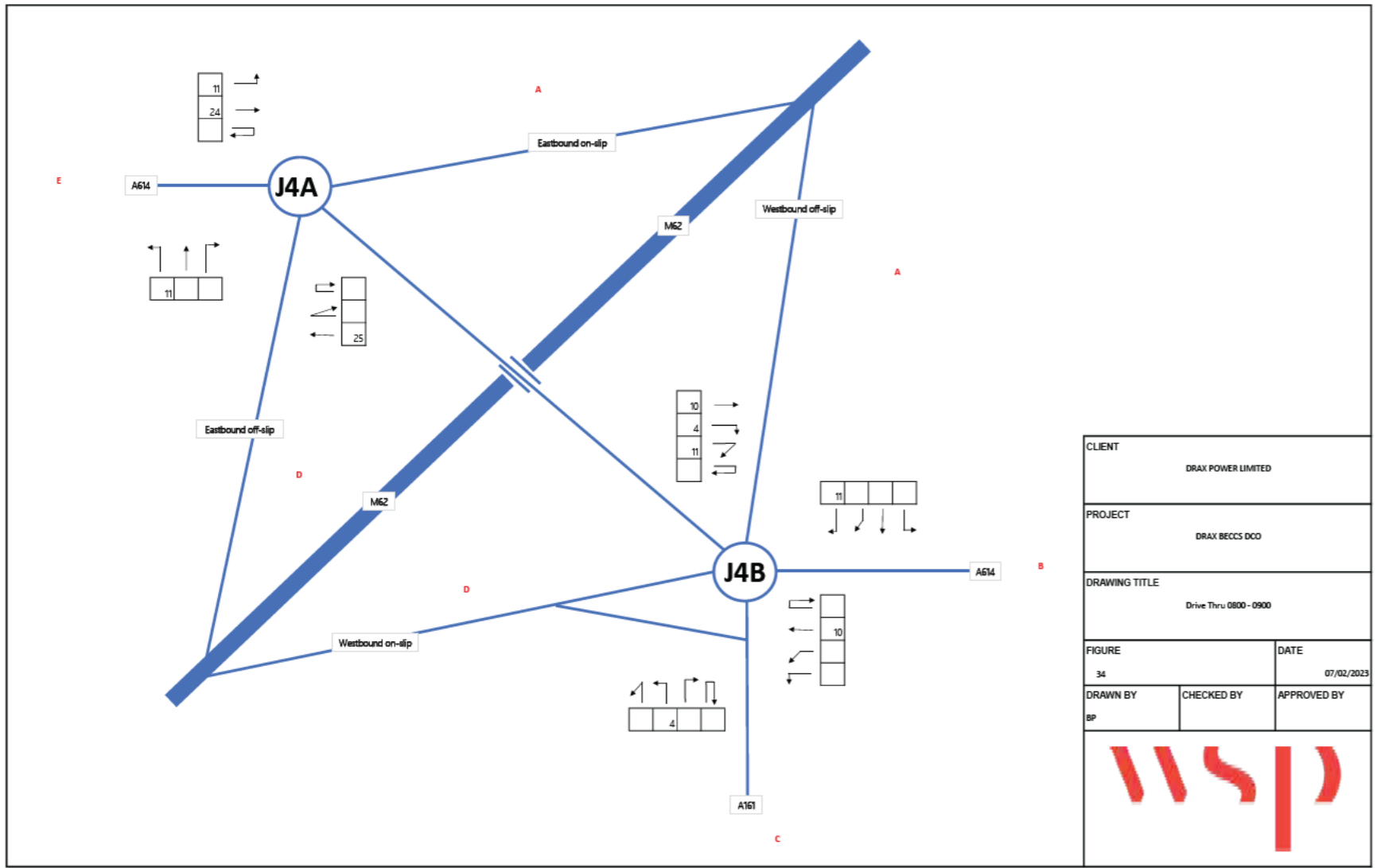
Trip Generation

Area	Arrivals	Departures
7 to 8	36.5	30.4

GFA 4.21

A to E	23.1%
B to E	19.8%
C to E	8.3%
D to E	21.5%
E to A	23.1%
E to B	19.8%
E to C	8.3%
E to D	21.5%

A to E	8
B to E	7
C to E	3
D to E	8
E to A	7
E to B	6
E to C	3
E to D	7




J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	11	24	-	72
B	-	-	-	-	
C	25	0	0	-	
D	11	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	10	4	11	50
B	11	-	0	0	0	
C	10	-	0	0	0	
D	4	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Drive Thru 0800 - 0900		
FIGURE	DATE	
34	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		

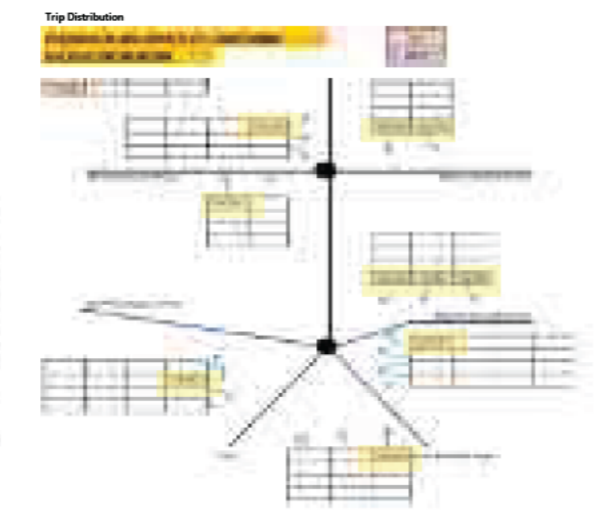


Trip Generation

Area	Arrivals	Departures
7 to 8	11,792	11,726

Trip Rate

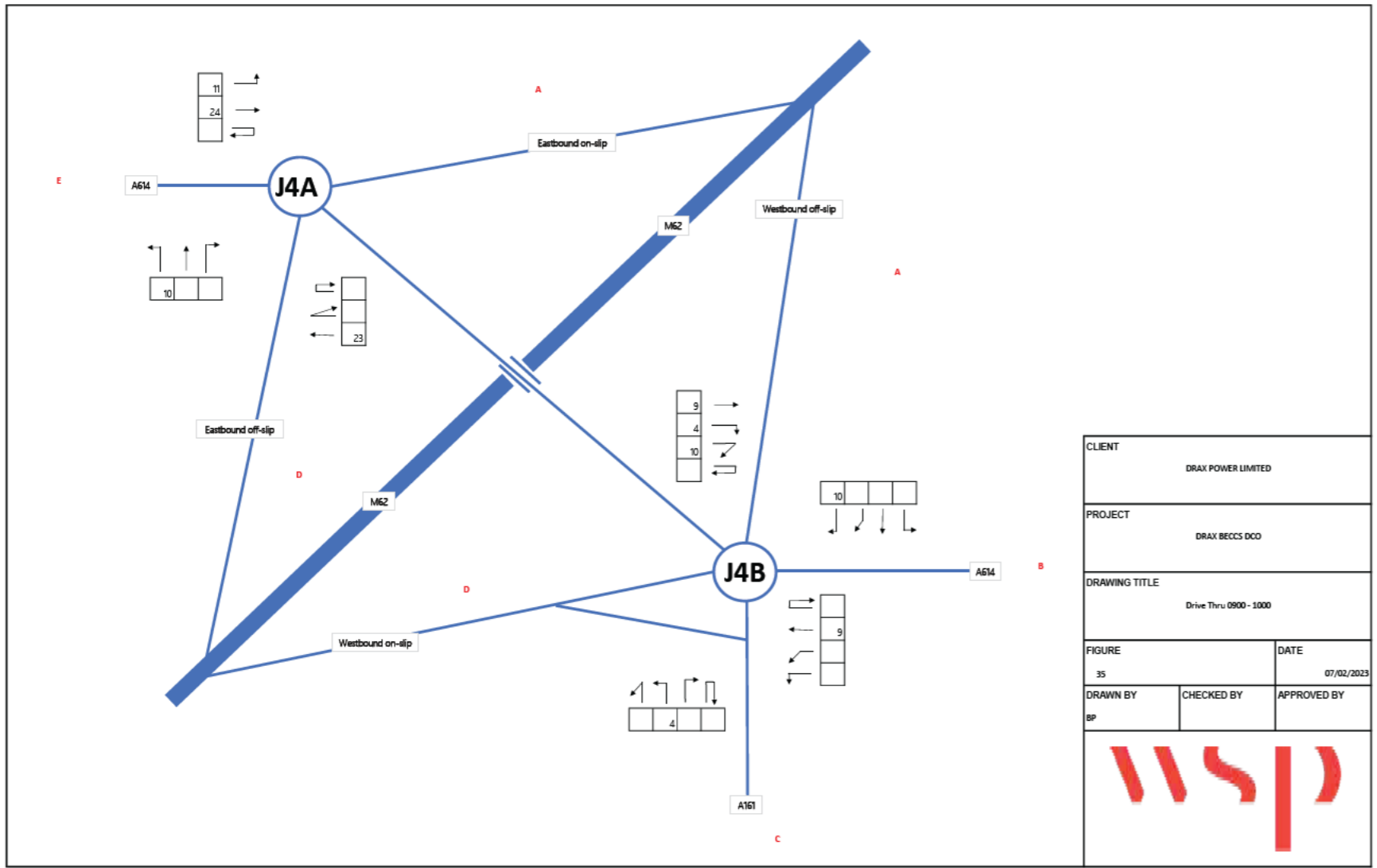
Area	Arrivals	Departures
7 to 8	11,792	11,726



A to E	23.1%
B to E	19.8%
C to E	8.3%
D to E	21.5%
E to A	23.1%
E to B	19.8%
E to C	8.3%
E to D	21.5%



A to E	11
B to E	10
C to E	4
D to E	11
E to A	11
E to B	10
E to C	4
E to D	11




J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	11	24	-	67
B	-	-	-	-	
C	23	0	0	-	
D	10	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	9	4	10	47
B	10	-	0	0	0	
C	9	-	0	0	0	
D	4	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Drive Thru 0900 - 1000		
FIGURE	DATE	
35	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		

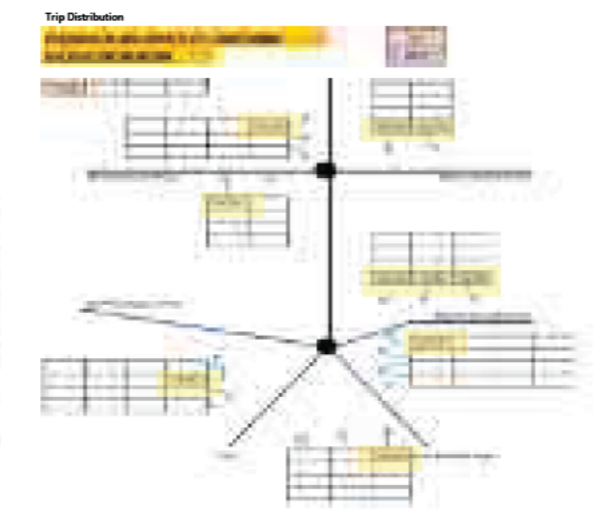


Trip Generation

Area	Arrivals	Departures
7 to 8	10,749	11,270

Trip Rate

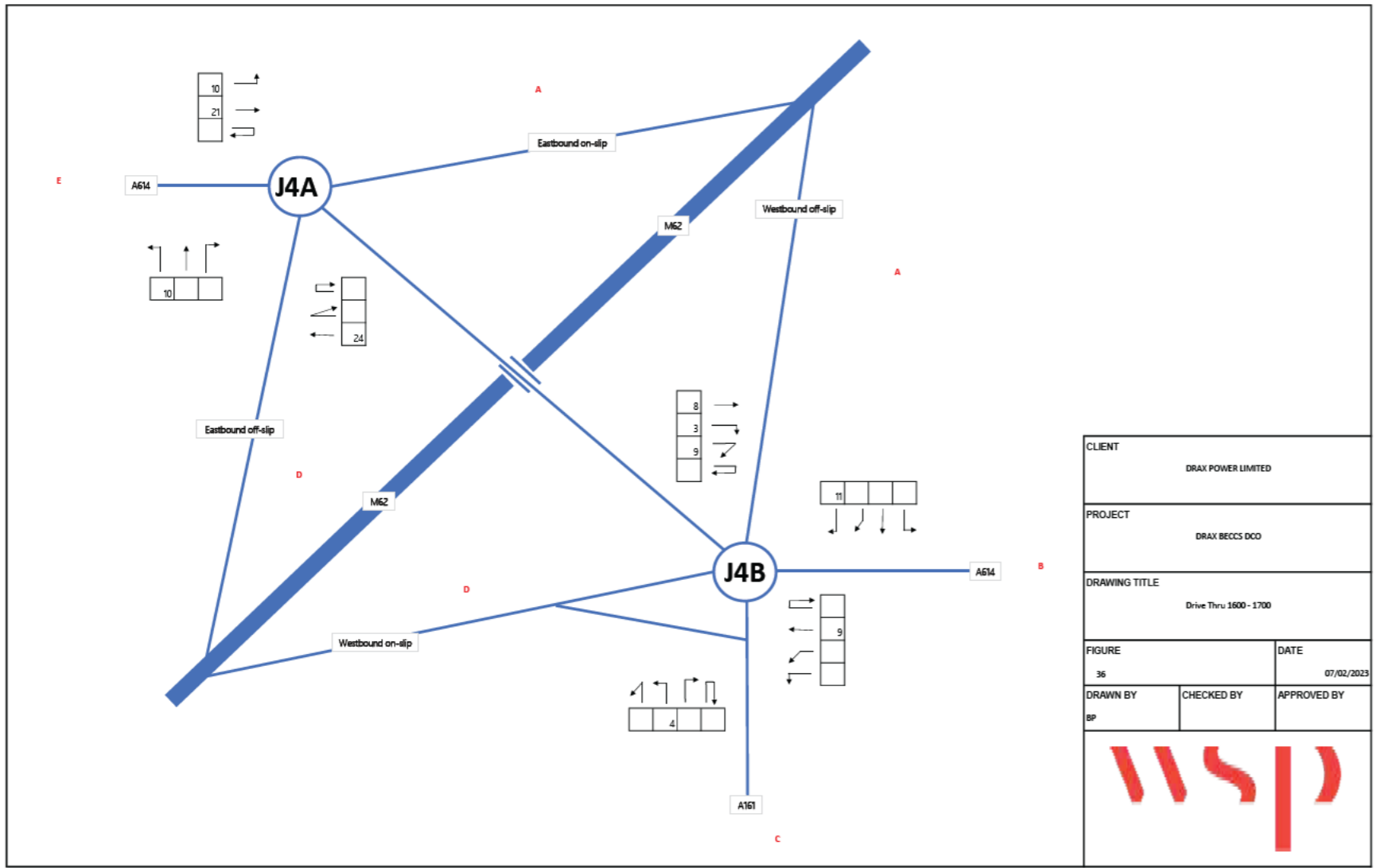
Area	Arrivals	Departures
7 to 8	10,749	11,270



A to E	23.1%
B to E	19.8%
C to E	8.3%
D to E	21.5%
E to A	23.1%
E to B	19.8%
E to C	8.3%
E to D	21.5%



A to E	10
B to E	9
C to E	4
D to E	10
E to A	11
E to B	9
E to C	4
E to D	10



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	10	21	-	65
B	-	-	-	-	
C	24	0	0	-	
D	10	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	8	3	9	45
B	11	-	0	0	0	
C	9	-	0	0	0	
D	4	-	0	0	0	
E	-	-	-	-	-	

CLIENT: DRAX POWER LIMITED

PROJECT: DRAX BECCS DCO

DRAWING TITLE: Drive Thru 1600 - 1700

FIGURE: 36 DATE: 07/02/2023

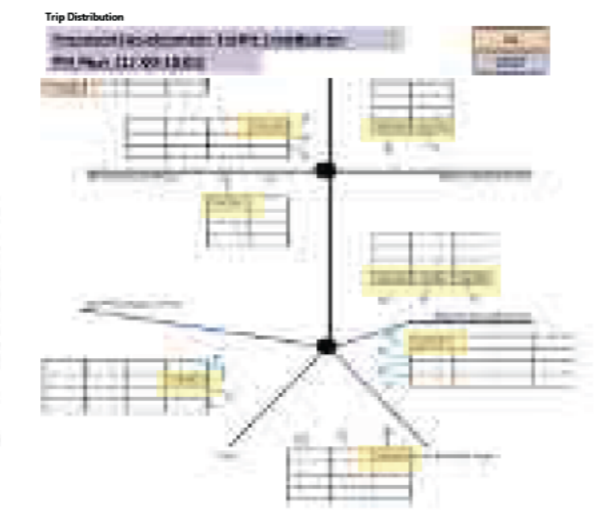
DRAWN BY: BP CHECKED BY: APPROVED BY:

Trip Generation

Area	Arrivals	Departures
7 to 8	11,326	9,945

Trip Rate

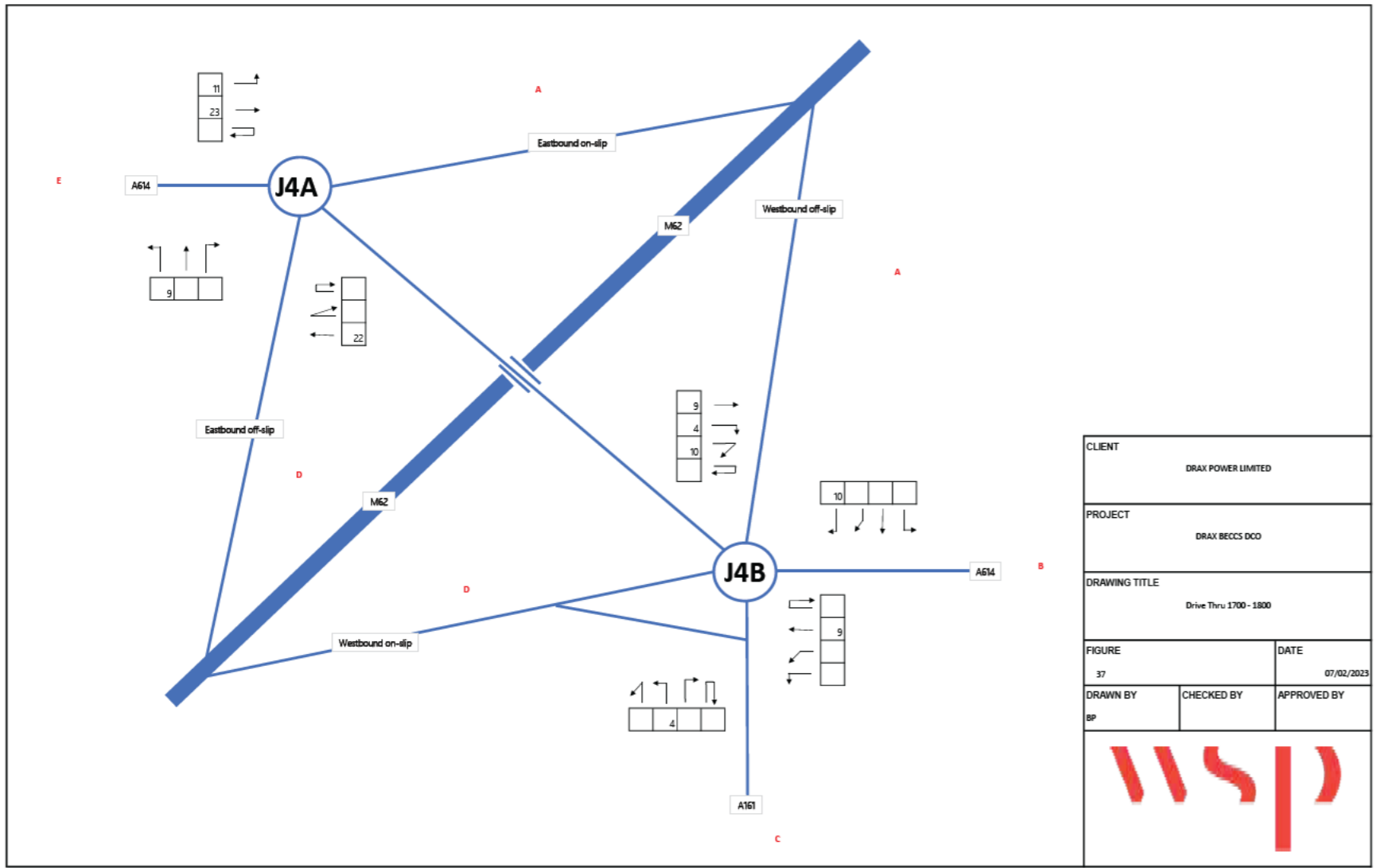
Area	Arrivals	Departures
7 to 8	11,326	9,945



A to E	23.1%
B to E	19.8%
C to E	8.3%
D to E	21.5%
E to A	23.1%
E to B	19.8%
E to C	8.3%
E to D	21.5%



A to E	11
B to E	9
C to E	4
D to E	10
E to A	10
E to B	8
E to C	3
E to D	9



CLIENT: DRAX POWER LIMITED

PROJECT: DRAX BECCS DCO

DRAWING TITLE: Drive Thru 1700 - 1800

FIGURE: 37 | DATE: 07/02/2023

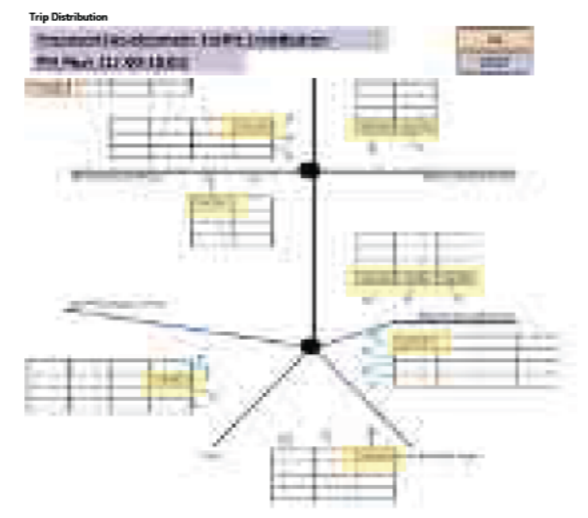
DRAWN BY: BP | CHECKED BY: | APPROVED BY: |

Trip Generation

Area	Arrivals	Departures
7 to 8	10,387	11,050

GFA 4.21

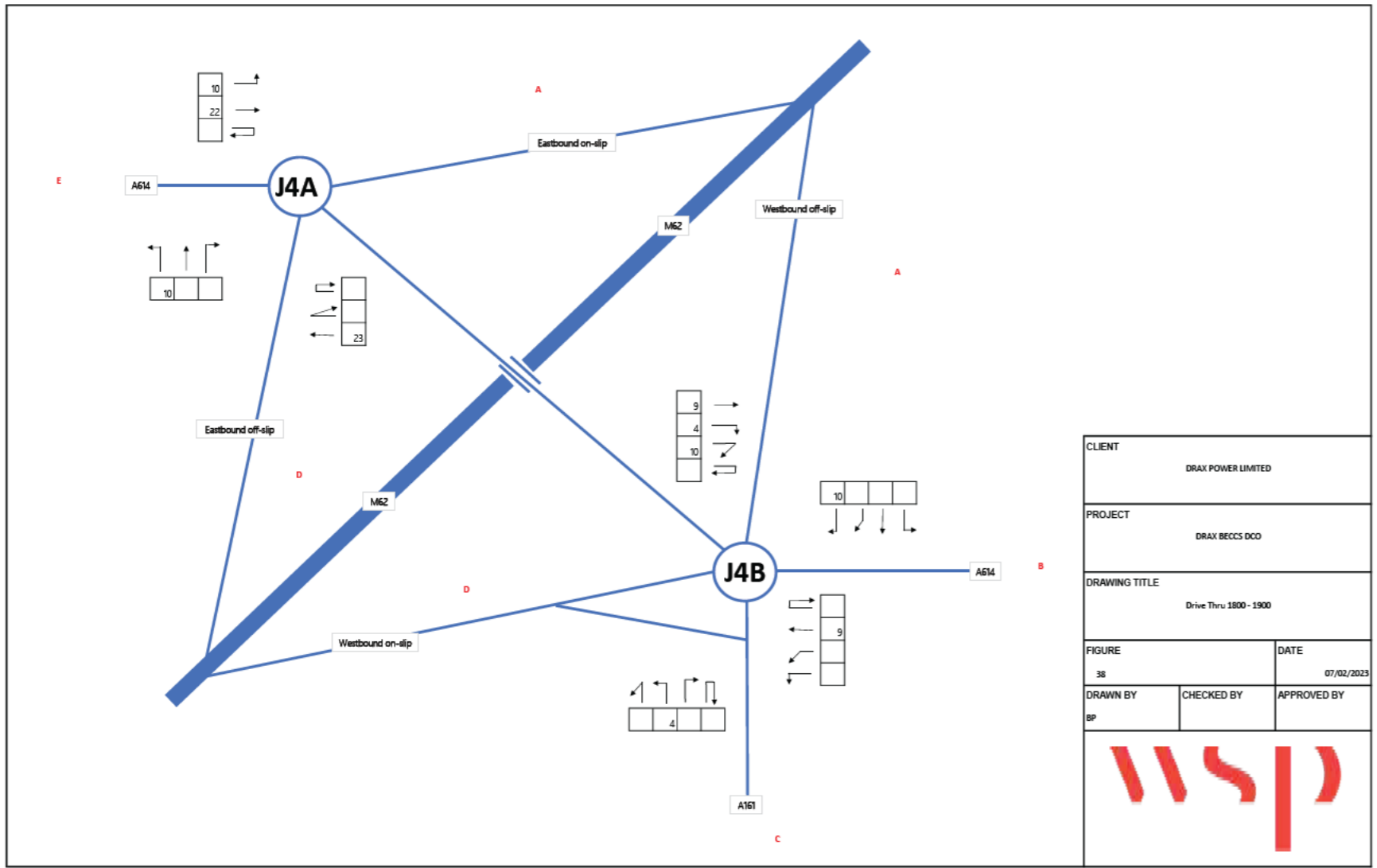
Trip Rate	Arrivals	Departures
7 to 8	10,387	11,050



A to E	23.1%
B to E	19.8%
C to E	8.3%
D to E	21.5%
E to A	23.1%
E to B	19.8%
E to C	8.3%
E to D	21.5%



A to E	10
B to E	9
C to E	4
D to E	9
E to A	11
E to B	9
E to C	4
E to D	10



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	
A	0	10	22	-	Total movements through junction 65
B	-	-	-	-	
C	23	0	0	-	
D	10	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	
A	0	-	9	4	10	Total movements through junction 45
B	10	-	0	0	0	
C	9	-	0	0	0	
D	4	-	0	0	0	
E	-	-	-	-	-	

CLIENT: DRAX POWER LIMITED

PROJECT: DRAX BECCS DCO

DRAWING TITLE: Drive Thru 1800 - 1900

FIGURE: 36 DATE: 07/02/2023

DRAWN BY: BP CHECKED BY: APPROVED BY:

Trip Generation

Area	Arrivals	Departures
7 to 8	10,718	10,608

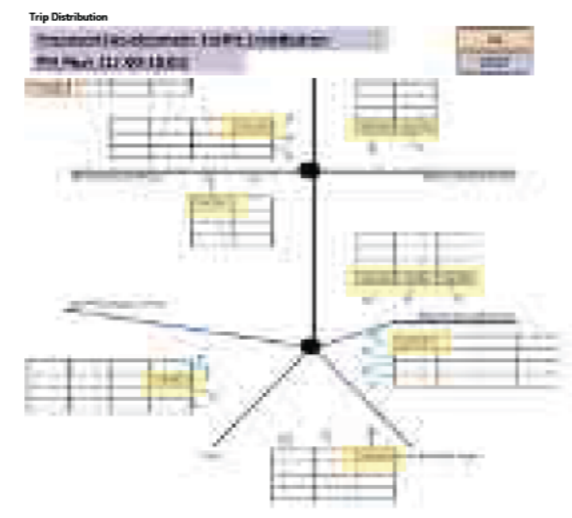
Trip Rate

7 to 8	10,718	10,608
--------	--------	--------

Trip Generation

Arrivals	Departures
45.1	44.7

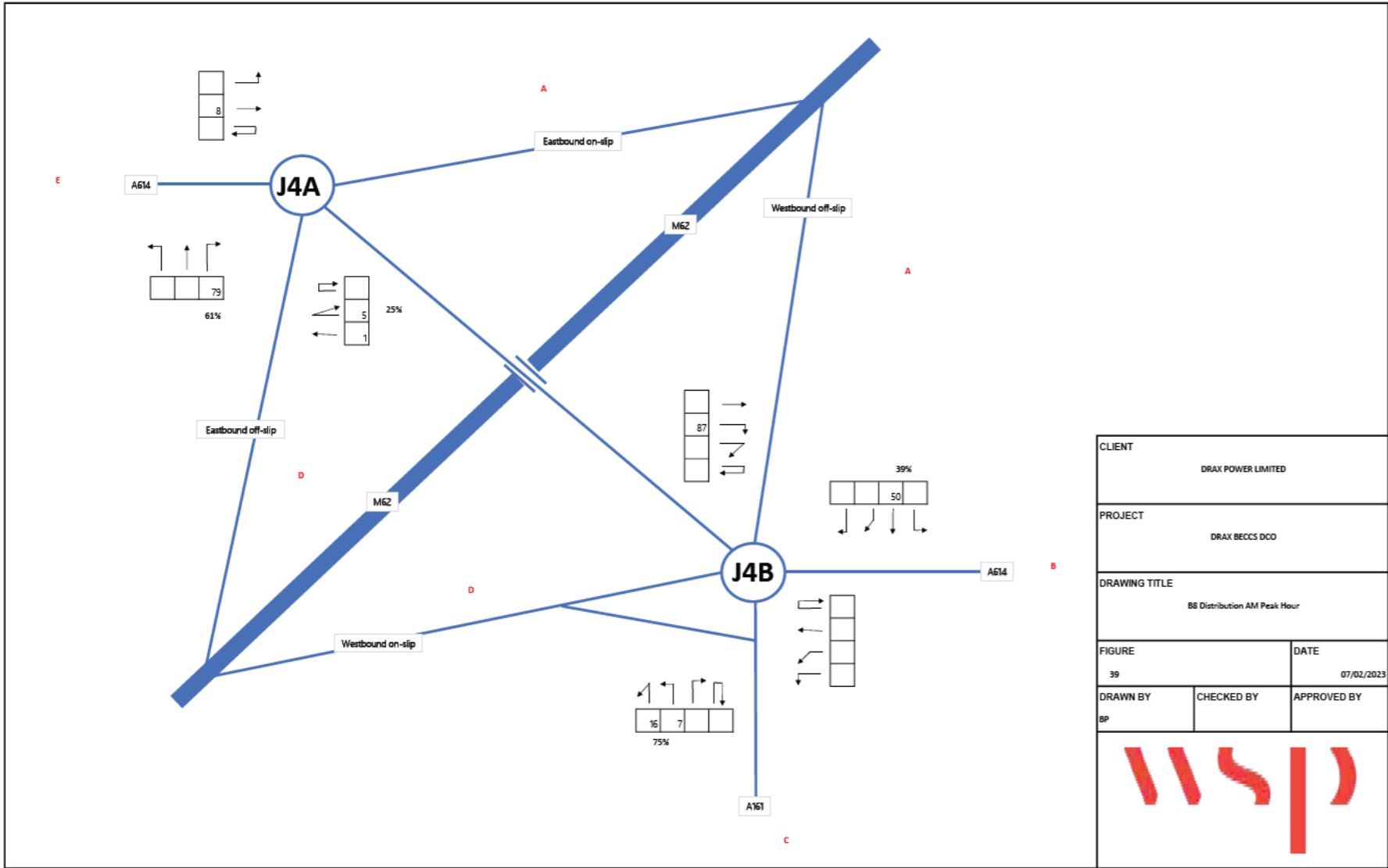
GFA 4.21



A to E	23.1%
B to E	19.8%
C to E	8.3%
D to E	21.5%
E to A	23.1%
E to B	19.8%
E to C	8.3%
E to D	21.5%



A to E	10
B to E	9
C to E	4
D to E	10
E to A	10
E to B	9
E to C	4
E to D	10



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	0	8	-	94
B	-	-	-	-	
C	1	5	0	-	
D	0	0	79	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	87	0	160
B	0	-	0	50	0	
C	0	-	0	0	0	
D	7	-	0	0	16	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
B8 Distribution AM Peak Hour		
FIGURE	DATE	
39	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		



Trip Generation

Category	Trips	Trips per hour	Trips per day
Industrial/Warehousing/Distribution	129	12.9	129
Docks	8	0.8	8
Goole town centre	21	2.1	21
West of M62	1	0.1	1
Total	159	15.9	159

Trip Distribution

B2 and B8 Industrial/Warehousing/Distribution

- 80% of trips to and from motorway
- 10% of trips to and from docks
- 5% of trips to and from Goole town centre
- 5% of trips to and from west of M62

Trip Assignment

Category	Trips	Trips per hour	Trips per day
Industrial/Warehousing/Distribution	103	10.3	103
Docks	8	0.8	8
Goole town centre	17	1.7	17
West of M62	1	0.1	1
Total	129	12.9	129

Sewall Bird & Axon

Category	Trips	Trips per hour	Trips per day
Industrial/Warehousing/Distribution	129	12.9	129
Docks	8	0.8	8
Goole town centre	21	2.1	21
West of M62	1	0.1	1
Total	159	15.9	159

0800 - 0900

SQM	33000	330
Arrival Trip Rate	0.49	
Departure Trip Rate	0.08	
Arrivals	162	
Departures	26.4	

Arrivals

80%	of trips to and from M62	129
5%	of trips to and from west of M62	8

Departures

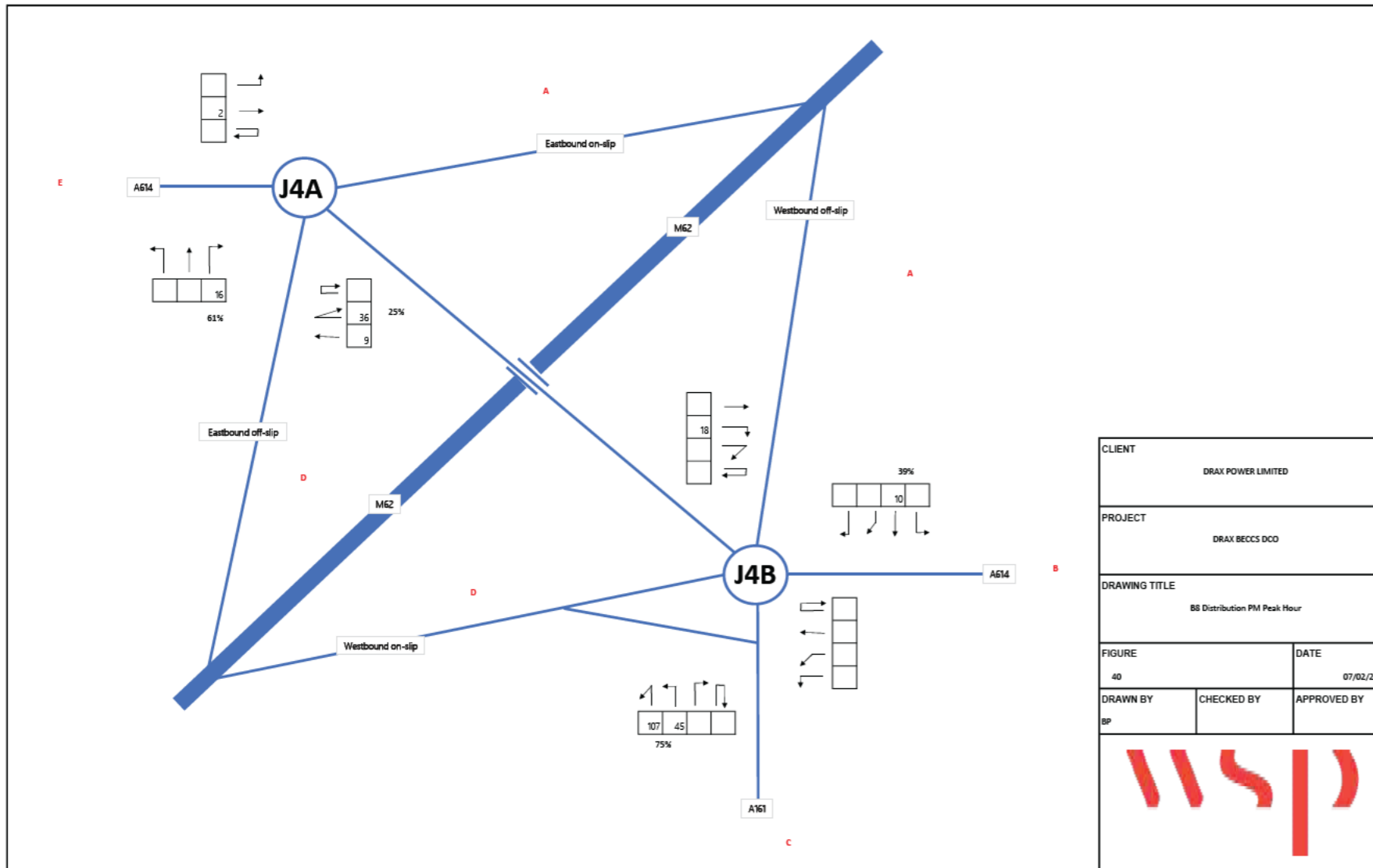
80%	of trips to and from M62	21
5%	of trips to and from west of M62	1

Arrivals

80%	of trips to and from M62	129
5%	of trips to and from west of M62	8

Departures

80%	of trips to and from M62	21
5%	of trips to and from west of M62	1




J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	0	2	-	62
B	-	-	-	-	
C	9	36	0	-	
D	0	0	16	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	18	0	180
B	0	-	0	10	0	
C	0	-	0	0	0	
D	45	-	0	0	107	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
B8 Distribution PM Peak Hour		
FIGURE	DATE	
40	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		



Trip Generation

Category	Trips	Trips per Hour	Trips per Day
Industrial/Warehousing/Distribution	330	11	264
Other	30	1	24
Total	360	12	288

Trip Distribution
B2 and B8 Industrial/Warehousing/Distribution

- 80% of trips to and from motorway
- 10% of trips to and from docks
- 5% of trips to and from Goole town centre
- 5% of trips to and from west of M62

Trip Assignment

Sewall Bird & Axon

Category	Trips	Trips per Hour	Trips per Day
Industrial/Warehousing/Distribution	330	11	264
Other	30	1	24
Total	360	12	288

1700 - 1800

SQM	33000	330
Arrival Trip Rate	0.1	
Departure Trip Rate	0.54	
Arrivals	33	
Departures	178	

Arrivals

80%	of trips to and from M62	26
5%	of trips to and from west of M62	2

Departures

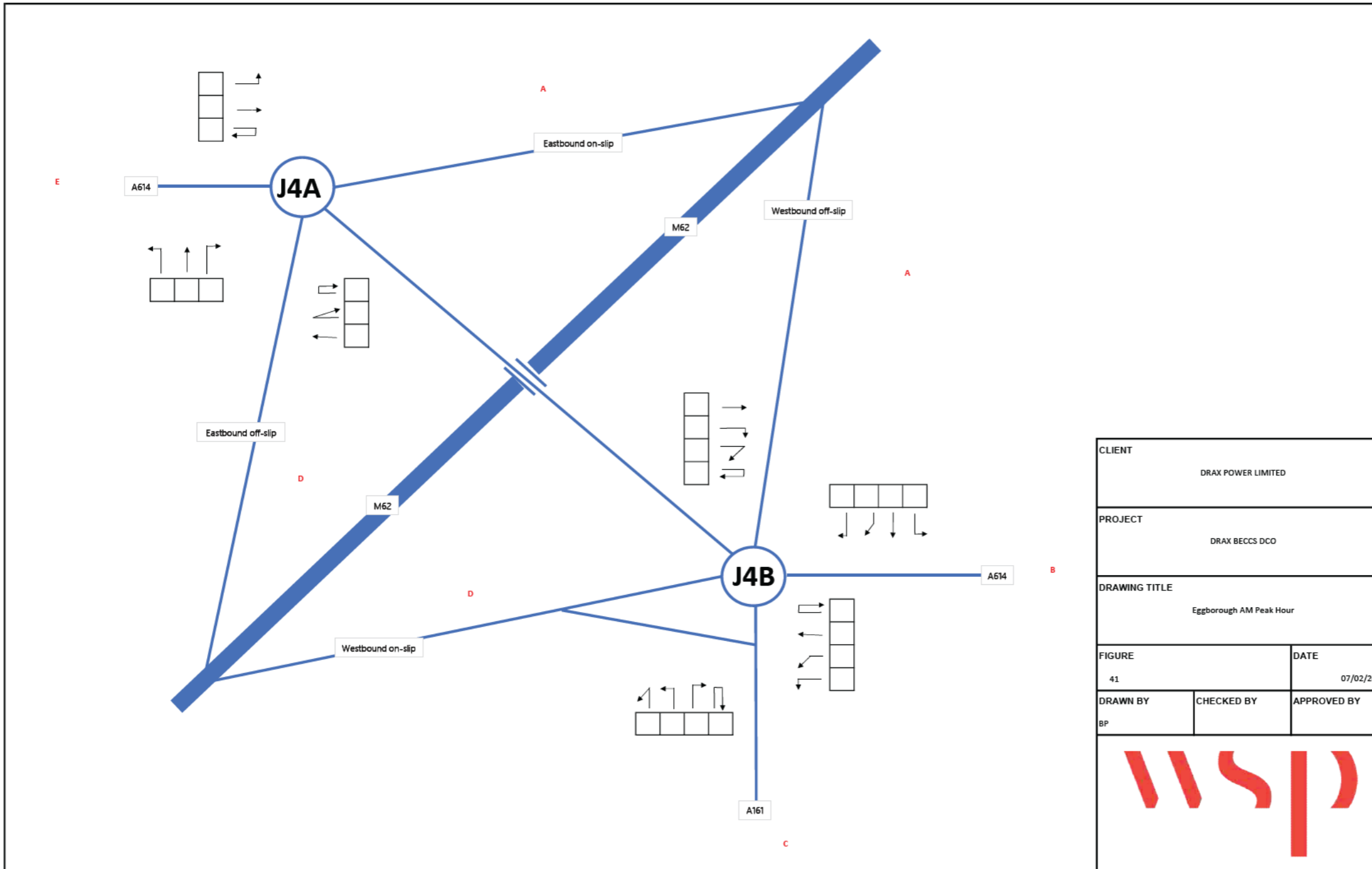
80%	of trips to and from M62	143
5%	of trips to and from west of M62	9

Arrivals

80%	of trips to and from M62	26
5%	of trips to and from west of M62	2

Departures

80%	of trips to and from M62	143
5%	of trips to and from west of M62	9



J4A M62 JUNCTION 36 DUMBBELL ROUNDABOUT


	A	B	C	D
A	0	0	0	-
B	-	-	-	-
C	0	0	0	-
D	0	0	0	-

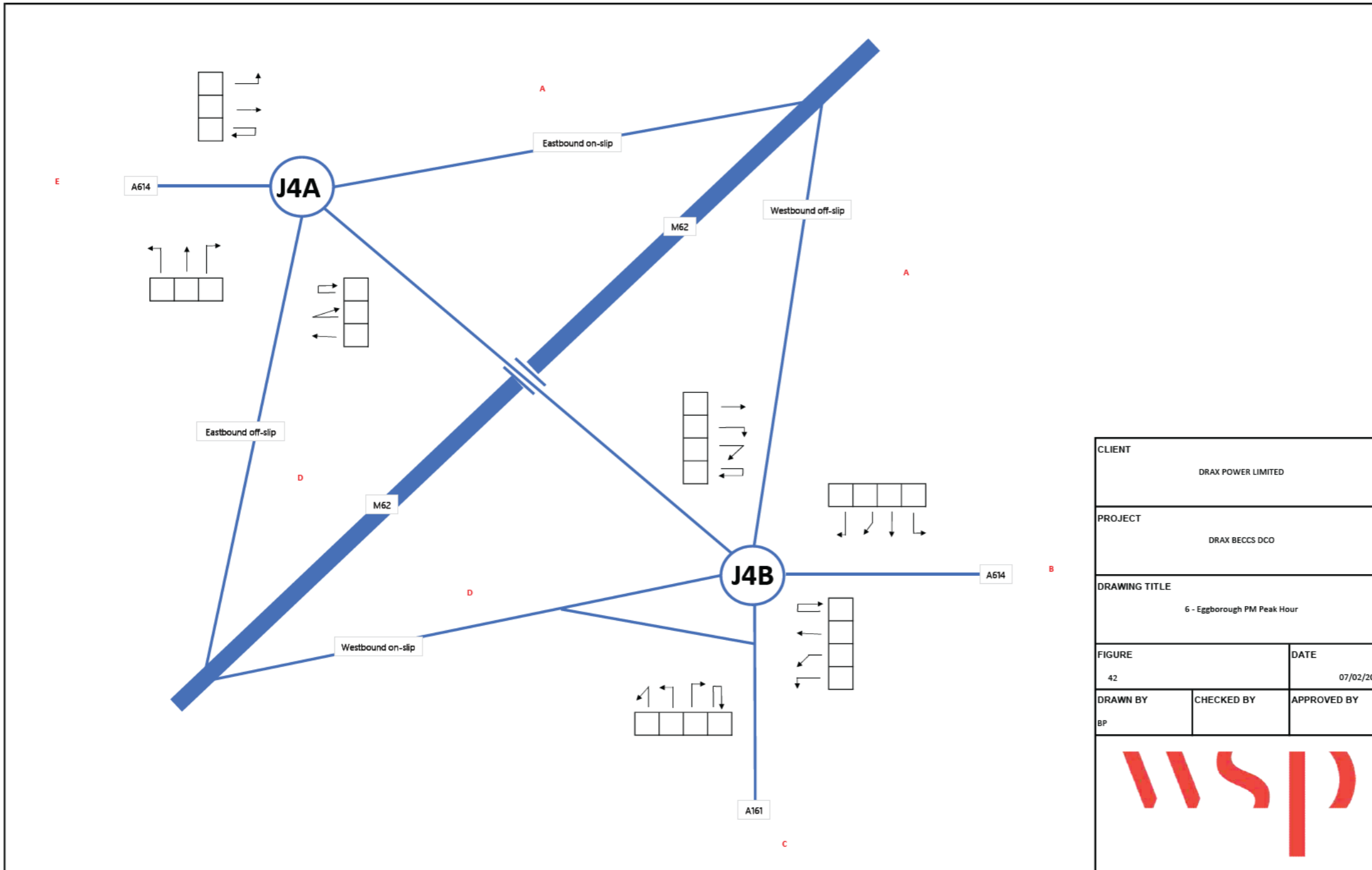
Total movements through junction
0

J4B M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	0	0	0
B	0	-	0	0	0
C	0	-	0	0	0
D	0	-	0	0	0
E	-	-	-	-	-

Total movements through junction
0

CLIENT		DRAX POWER LIMITED	
PROJECT		DRAX BECCS DCO	
DRAWING TITLE			
Eggborough AM Peak Hour			
FIGURE		DATE	
41		07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY	
BP			
			




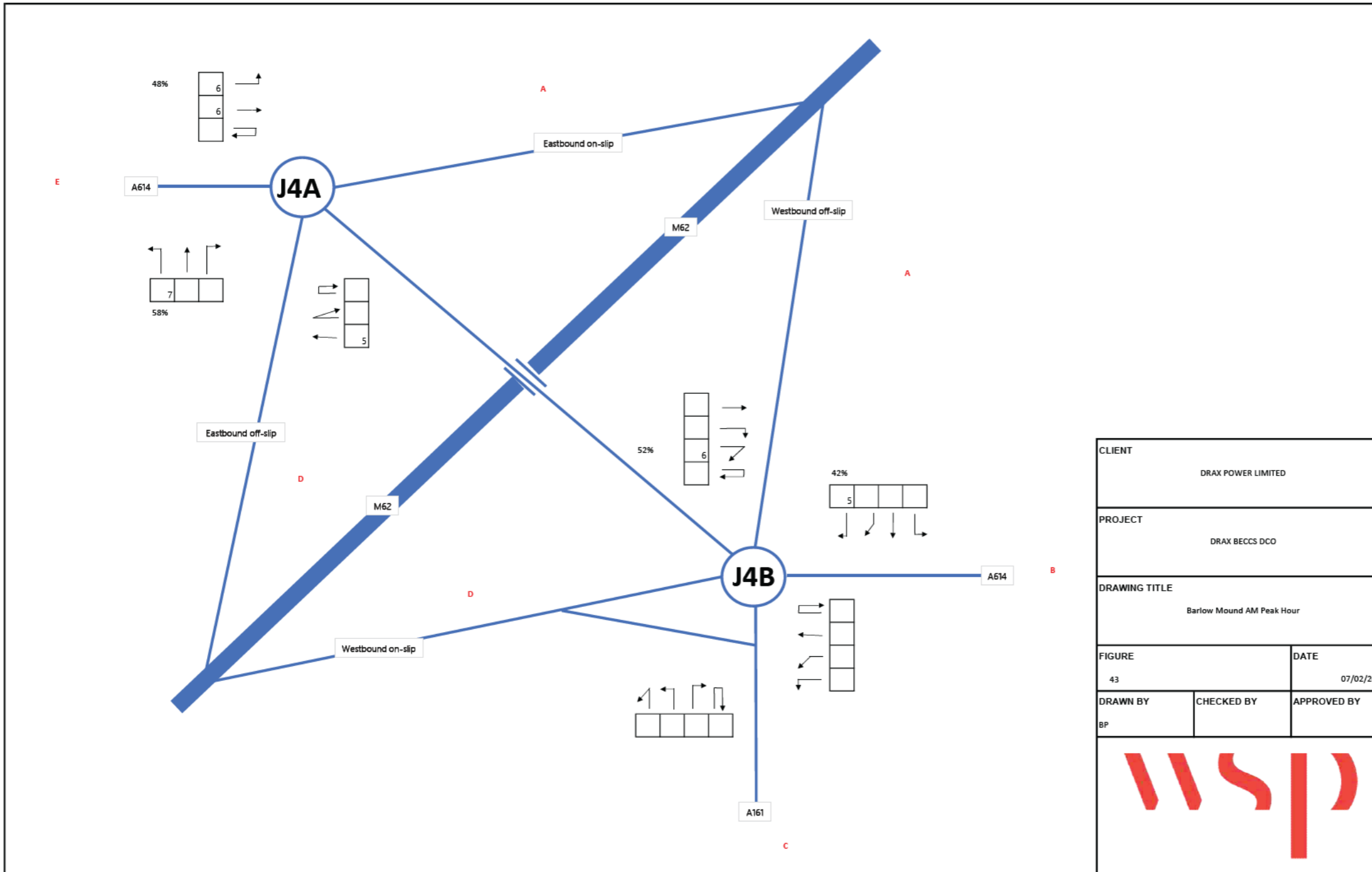
J4A M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	0	0	-	0
B	-	-	-	-	
C	0	0	0	-	
D	0	0	0	-	

J4B M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	0	0
B	0	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
6 - Eggborough PM Peak Hour		
FIGURE	DATE	
42	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		



J4A M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	6	6	-	24
B	-	-	-	-	
C	5	0	0	-	
D	7	0	0	-	

J4B M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	6	11
B	5	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		DRAX POWER LIMITED	
PROJECT		DRAX BECCS DCO	
DRAWING TITLE			
Barlow Mound AM Peak Hour			
FIGURE		DATE	
43		07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY	
BP			
			

Trip Generation

3.1.7 Under a 100% exportation by road scenario (assuming a 300 day working year), it is anticipated that there would be approximately 185 two way HGV movements per day (depending the size of lorries that are used), however under the more realistic 65% split scenario, daily to way HGV movements would reduce to 120 (lorry dependent).

- 185 HGV Trips (two-way)
- 2.3 HGV PCU Value
- 426 HGV PCU Trips (two-way)

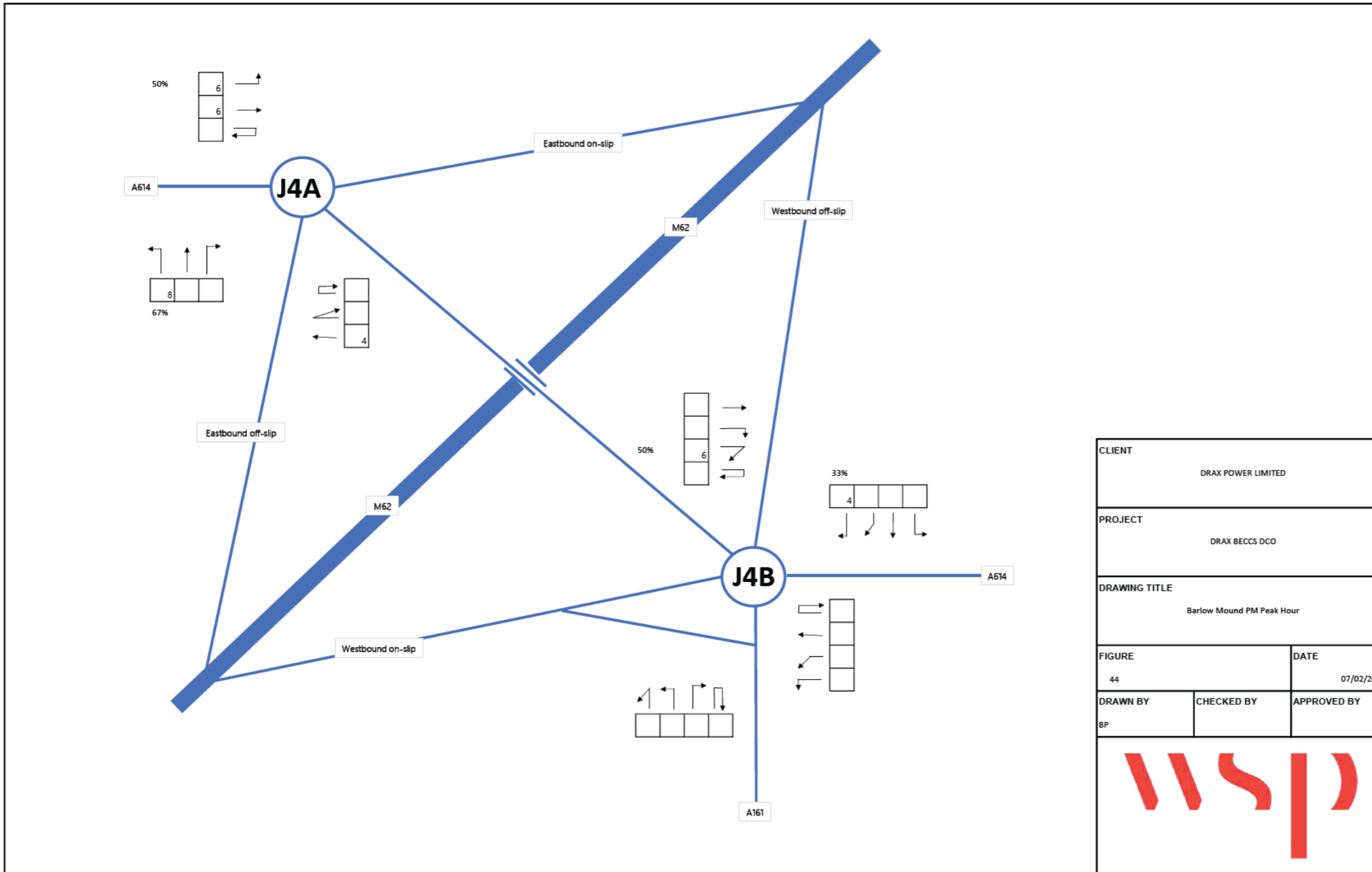
Trip Distribution

3.1.8 It is anticipated that the recovery of screened material off site would occur by both road in circa 20T or 18T lorries and rail (approximately a 85% and 35% split respectively). Although the final end point of material delivered by road cannot be confirmed at this stage, it is anticipated that material would leave Via Drax Power Station and would access the M62 via the A614 and the A161 to Junction 36. Despite the intention of using road movements to export approximately 65% of recovered material, assessments within the ES would consider a 100% by road scenario to provide for the event that recovery by rail is not possible. For ease of reference, all associated calculations in this Supporting Report are based on 85% of the total recoverable material being exported off site.

Trip Assignment

3.1.9 Hours of working are proposed to be 10 hours per day (06:00 to 06:00), seven days a week for the duration of the operational extraction phase, excluding bank holidays.

- 426 HGV PCU Trips (two-way)
- 18 hours per day
- 23.6 HGV trips per hour (two-way)
- 11.8 HGV trips per hour (one-way)




J4A M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	6	6	-	24
B	-	-	-	-	
C	4	0	0	-	
D	8	0	0	-	

J4B M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	6	10
B	4	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		DRAX POWER LIMITED	
PROJECT		DRAX BECCS DCO	
DRAWING TITLE			
Barlow Mound PM Peak Hour			
FIGURE	DATE		
44	07/02/2023		
DRAWN BY	CHECKED BY	APPROVED BY	
BP			
			

Trip Generation

3.1.7 Under a 100% exportation by road scenario (assuming a 300 day working year), it is anticipated that there would be approximately 185 two way HGV movements per day (depending the size of lorries that are used), however under the more realistic 65% split scenario, daily to way HGV movements would reduce to 120 (lorry dependent).

- 185 HGV Trips (two-way)
- 2.3 HGV PCU Value
- 426 HGV PCU Trips (two-way)

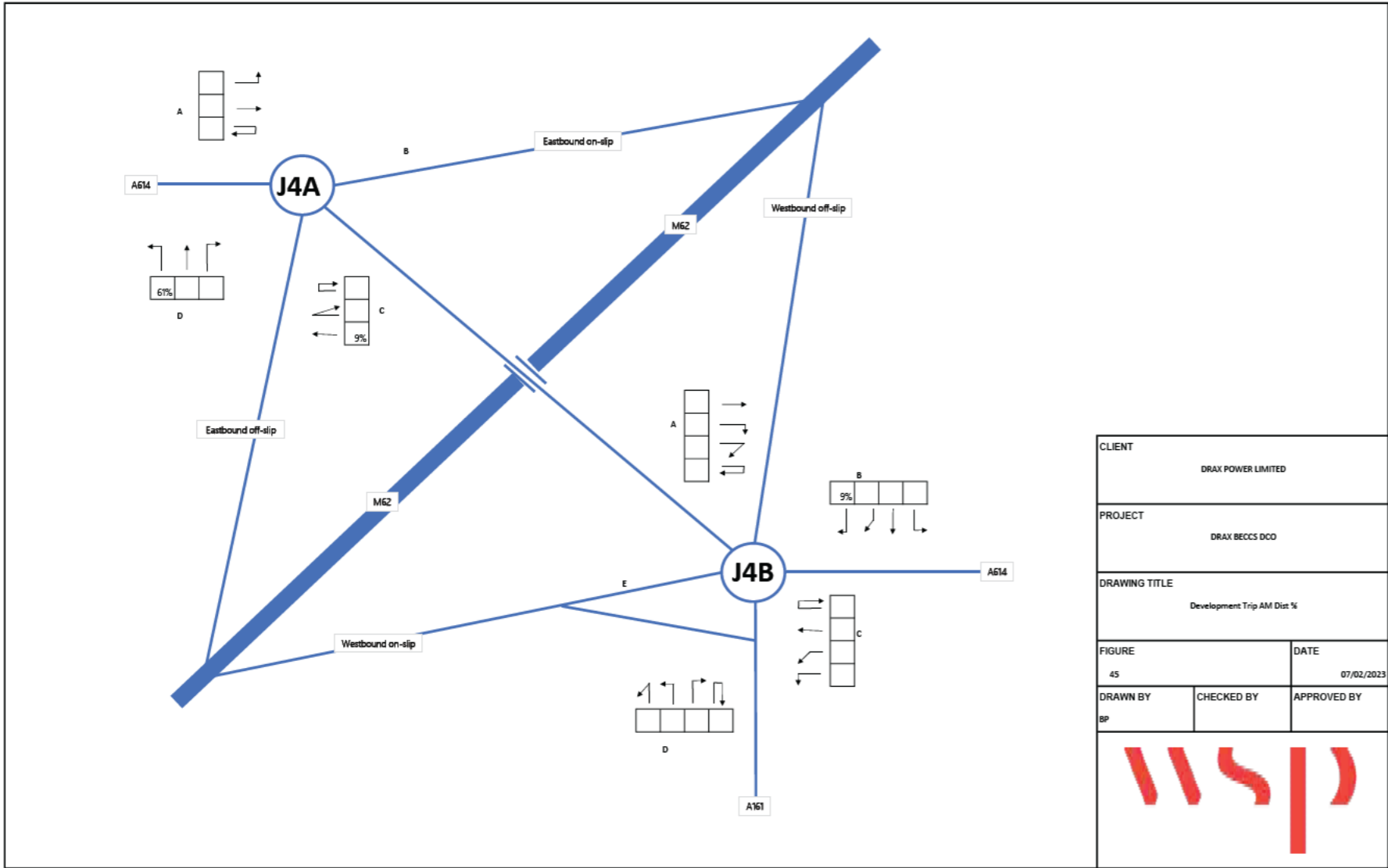
Trip Distribution

3.1.8 It is anticipated that the recovery of screened material off site would occur by both road in circa 20T or 18T lorries and rail (approximately a 85% and 35% split respectively). Although the final end point of material delivered by road cannot be confirmed at this stage, it is anticipated that material would leave Via Drax Power Station and would access the M62 via the A614 and the A161 to Junction 36. Despite the intention of using road movements to export approximately 65% of recovered material, assessments within the ES would consider a 100% by road scenario to provide for the event that recovery by rail is not possible. For ease of reference, all associated calculations in this Supporting Report are based on 85% of the total recoverable material being exported off site.

Trip Assignment

3.1.9 Hours of working are proposed to be 10 hours per day (06:00 to 00:00), seven days a week for the duration of the operational extraction phase, excluding bank holidays.

- 426 HGV PCU Trips (two-way)
- 18 hours per day
- 23.6 HGV trips per hour (two-way)
- 11.8 HGV trips per hour (one-way)




J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

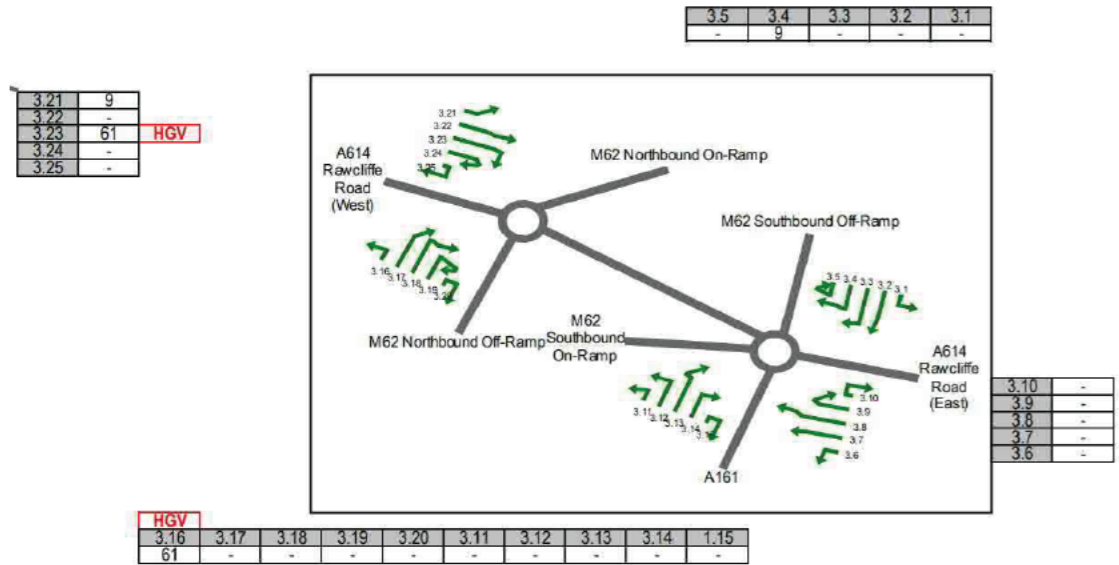
	A	B	C	D	Total movements through junction
A	0	0	0	-	1
B	-	-	-	-	
C	0	0	0	-	
D	1	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	0	0
B	0	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

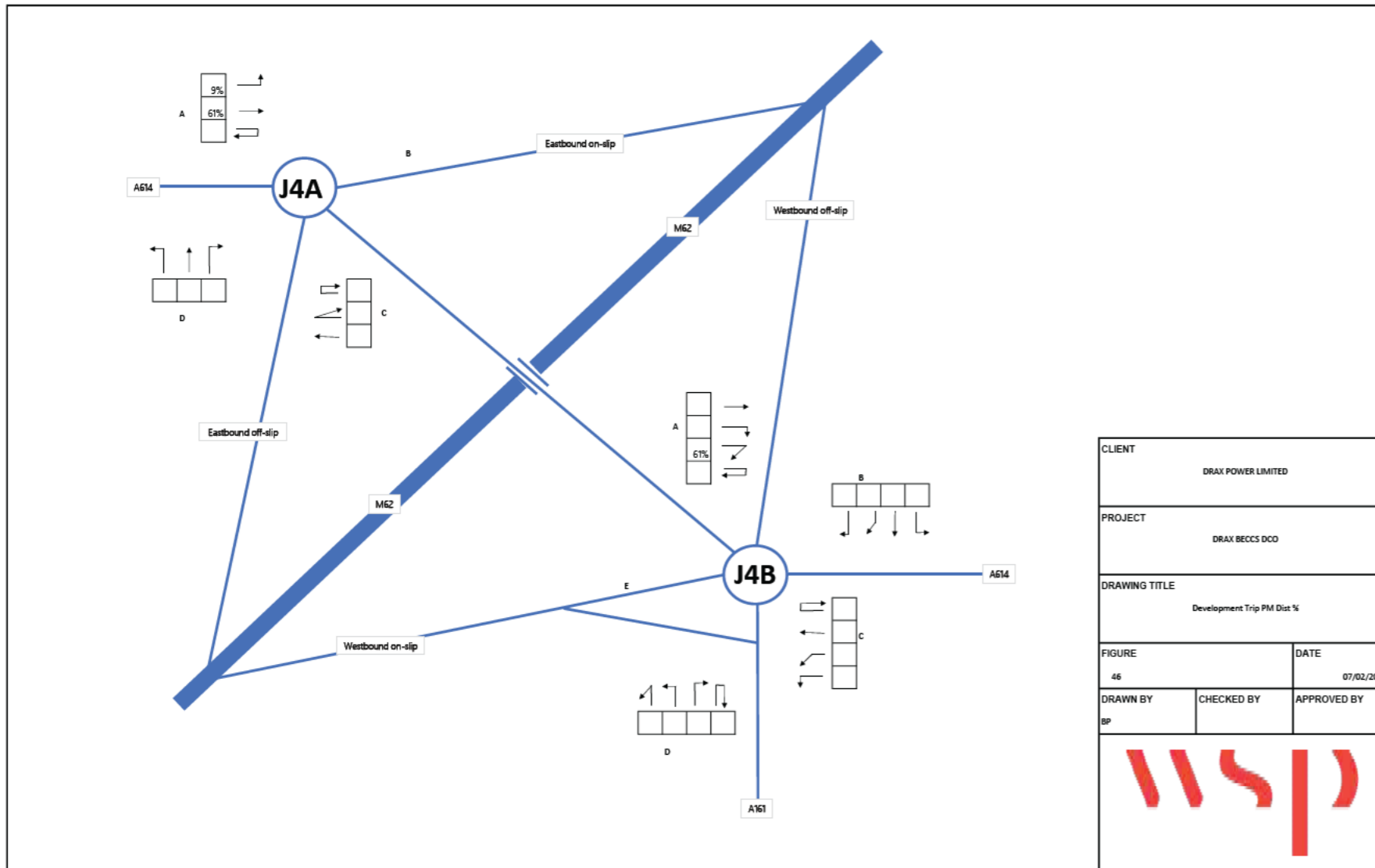
CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development Trip AM Dist %		
FIGURE	DATE	
45	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Construction Worker Trips
 Source: EN010091-000433-6.2.5.7 Environmental Statement - Volume 2 - Appendix 5.7 Gravity Model Distribution.pdf



<https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2023/07/20230720/EN010091-000433-6.2.5.7%20Environmental%20Statement%20-%20Volume%20-%20Appendix%205.7%20Gravity%20Model%20Distribution.pdf>

HGV Trips
 All route via the A645 to the M62 Junction 36 and then head to / from the west.



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

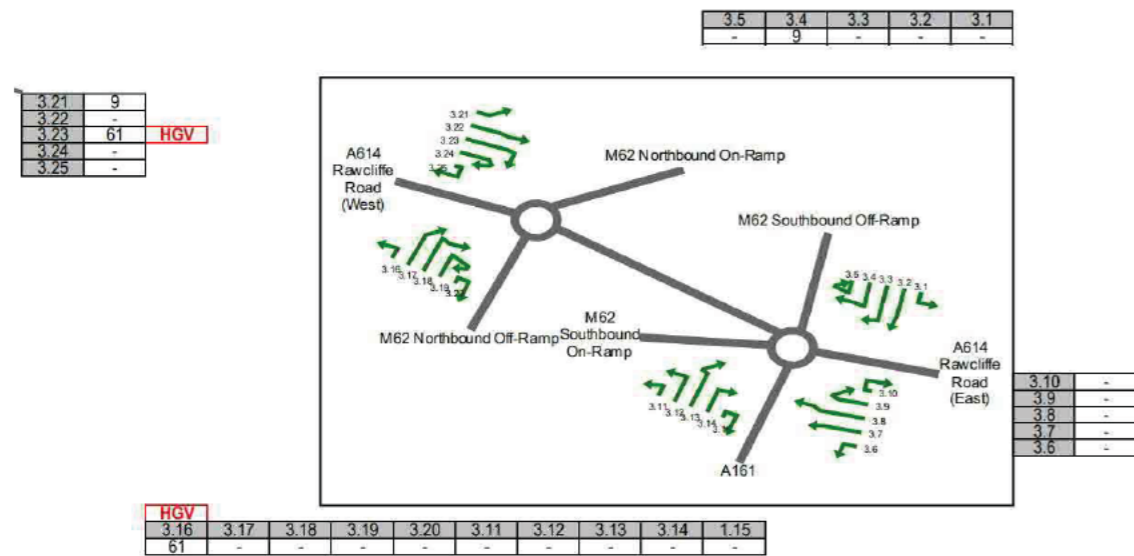
	A	B	C	D	Total movements through junction
A	0	0	1	-	1
B	-	-	-	-	
C	0	0	0	-	
D	0	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	1	1
B	0	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

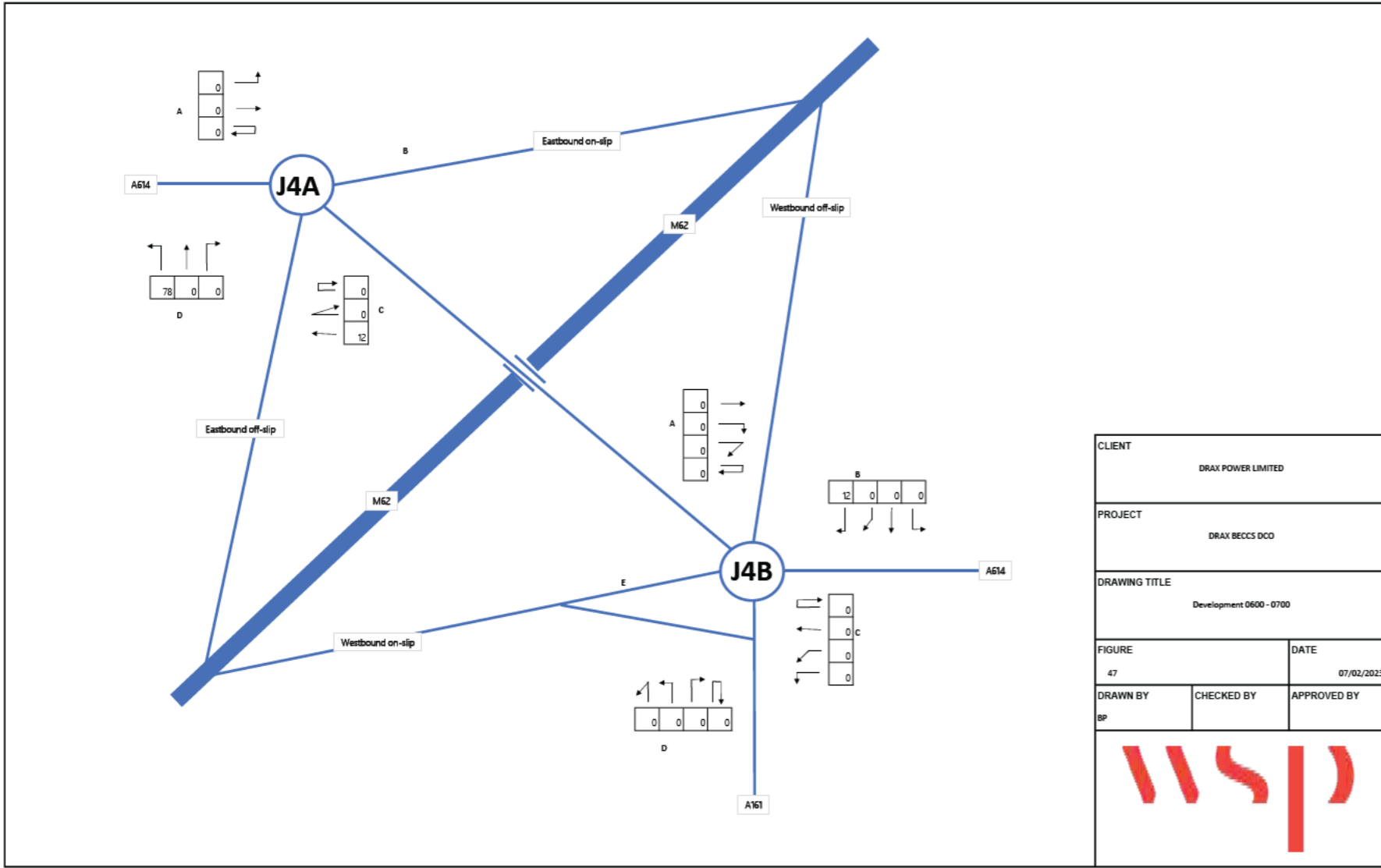
CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development Trip PM Dist %		
FIGURE		DATE
46		07/02/2023
DRAWN BY	CHECKED BY	APPROVED BY
BP		

Construction Worker Trips
 Source: EN010091-000433-6.2.5.7 Environmental Statement - Volume 2 - Appendix 5.7 Gravity Model Distribution.pdf



<https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/EN010091/EN010091-000433-6.2.5.7%20Environmental%20Statement%20-%20Volume%20-%20Appendix%205.7%20Gravity%20Model%20Distribution.pdf>

HGV Trips
 All route via the A645 to the M62 Junction 36 and then head to / from the west.



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	0	0	-	90
B	-	-	-	-	
C	12	0	0	-	
D	78	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	0	12
B	12	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 0600 - 0700		
FIGURE	DATE	
47	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

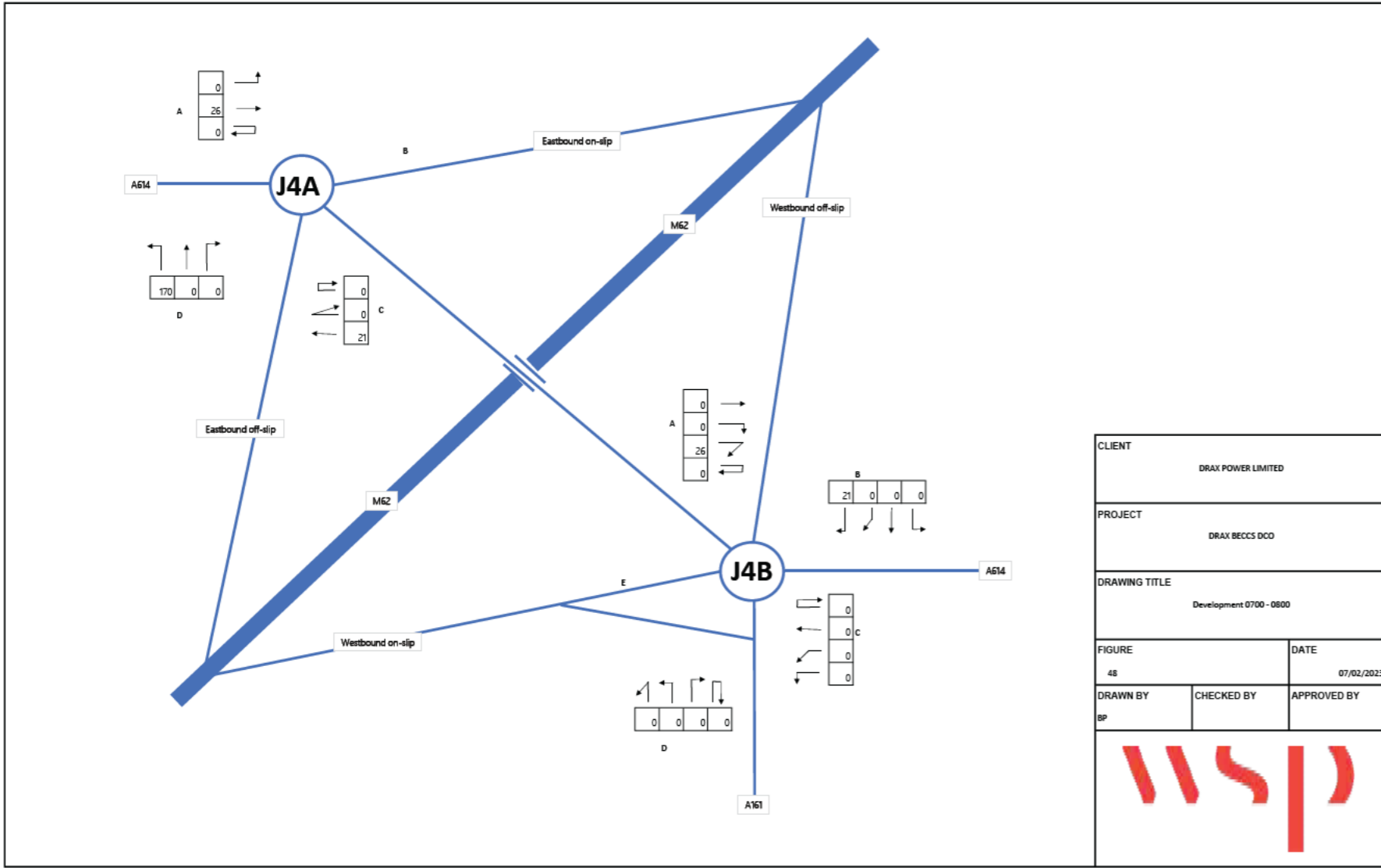
Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
06:00 - 07:00	30%	0%	129	0

WORKERS	ARRIVAL AND DEPARTURE PROFILE	TRIP GENERATION	HGVS	Construction HGVs			
				Hours	Arrivals	Departures	
Peak Workforce	1000	30%	Peak HGVS	135	00:00 - 01:00	0	0
2 Per Vehicle	2		Hours in Working Day	12	01:00 - 02:00	0	0
7 Per Minibus	7		Peak HGVs per hour	11.3	02:00 - 03:00	0	0
Vehicle	80%	800	PCU Value	2.3	03:00 - 04:00	0	0
Min bus	20%	200	Peak HGVs per hour (PCU)	25.9	04:00 - 05:00	0	0
Vehicle (2 Per Vehicle)	400				05:00 - 06:00	0	0
Min bus (7 Per Minibus)	28.6				06:00 - 07:00	0	0
Total	429				07:00 - 08:00	26	26
Vehicle Occupancy	2.33				08:00 - 09:00	26	26
					09:00 - 10:00	26	26
					10:00 - 11:00	26	26
					11:00 - 12:00	26	26
					12:00 - 13:00	26	26
					13:00 - 14:00	26	26
					14:00 - 15:00	26	26
					15:00 - 16:00	26	26
					16:00 - 17:00	26	26
					17:00 - 18:00	26	26
					18:00 - 19:00	26	26
					19:00 - 20:00	0	0
					20:00 - 21:00	0	0
					21:00 - 22:00	0	0
					22:00 - 23:00	0	0
					23:00 - 24:00	0	0
					Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	0	26	-	217
B	-	-	-	-	
C	21	0	0	-	
D	170	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	26	47
B	21	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 0700 - 0800		
FIGURE	DATE	
48	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

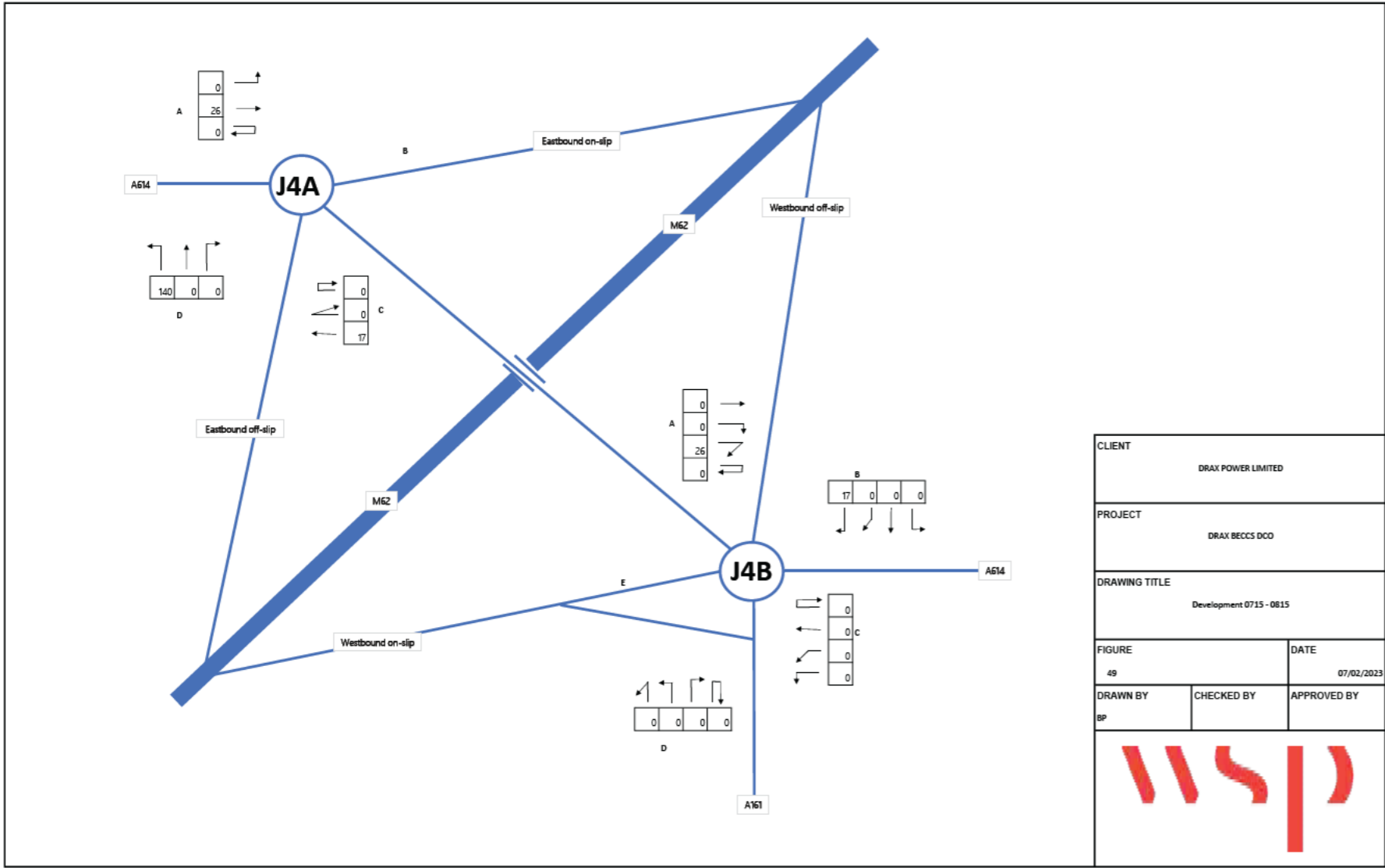
Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
07:00 - 08:00	55%	0%	236	0

WORKERS	ARRIVAL AND DEPARTURE PROFILE	TRIP GENERATION	HGVS	Construction HGVs			
				Hours	Arrivals	Departures	
Peak Workforce	1000	55%	Peak HGVS	135	00:00 - 01:00	0	0
2 Per Vehicle	2		Hours in Working Day	12	01:00 - 02:00	0	0
7 Per Minibus	7		Peak HGVs per hour	11.3	02:00 - 03:00	0	0
Vehicle	80%	800	PCU Value	2.3	03:00 - 04:00	0	0
Min bus	20%	200	Peak HGVs per hour (PCU)	25.9	04:00 - 05:00	0	0
Vehicle (2 Per Vehicle)	400				05:00 - 06:00	0	0
Min bus (7 Per Minibus)	28.6				06:00 - 07:00	0	0
Total	429				07:00 - 08:00	26	26
Vehicle Occupancy	2.33				08:00 - 09:00	26	26
					09:00 - 10:00	26	26
					10:00 - 11:00	26	26
					11:00 - 12:00	26	26
					12:00 - 13:00	26	26
					13:00 - 14:00	26	26
					14:00 - 15:00	26	26
					15:00 - 16:00	26	26
					16:00 - 17:00	26	26
					17:00 - 18:00	26	26
					18:00 - 19:00	26	26
					19:00 - 20:00	0	0
					20:00 - 21:00	0	0
					21:00 - 22:00	0	0
					22:00 - 23:00	0	0
					23:00 - 24:00	0	0
					Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	0	26	-	183
B	-	-	-	-	
C	17	0	0	-	
D	140	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	26	43
B	17	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	


CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 0715 - 0815		
FIGURE	DATE	
49	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

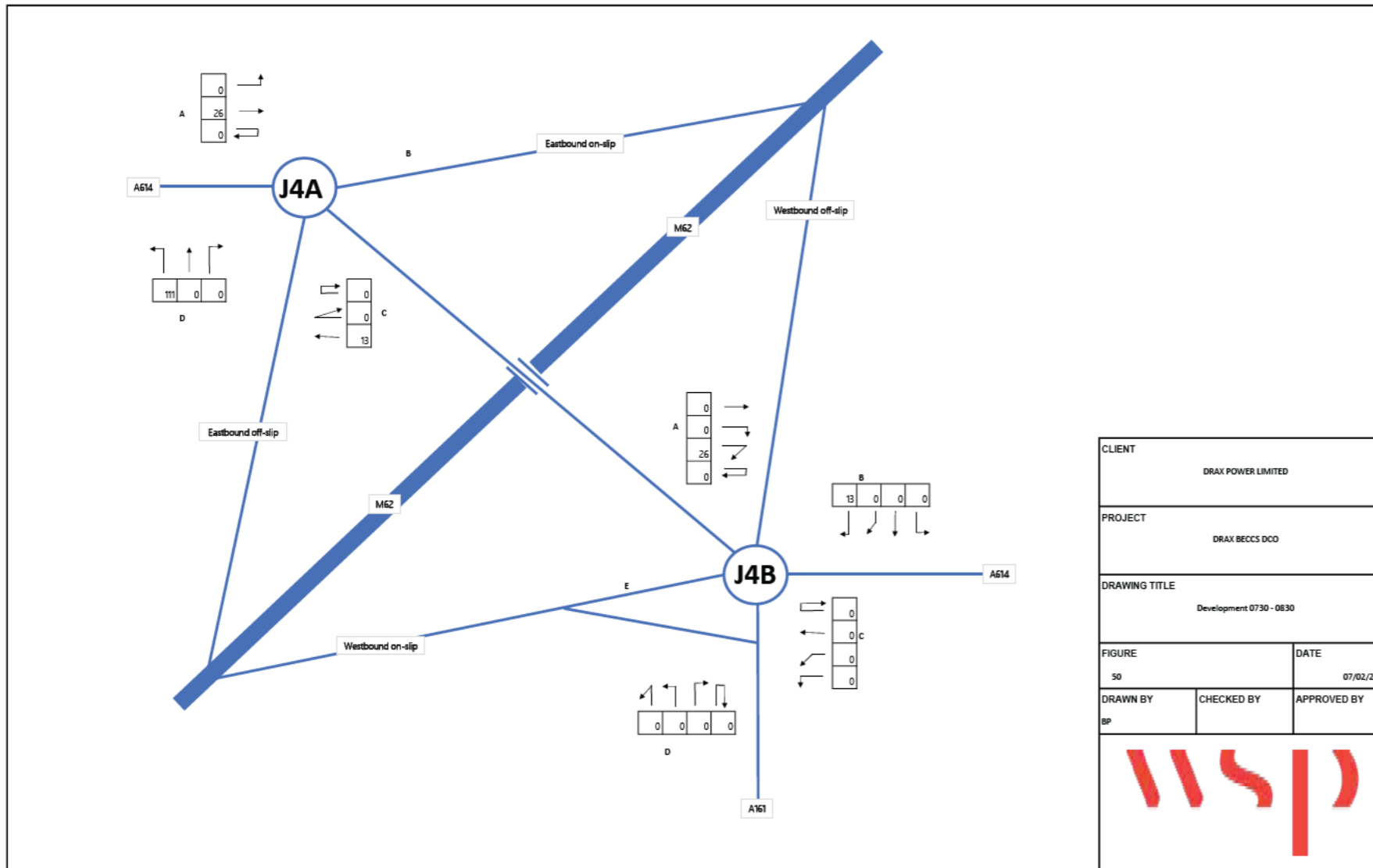
Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
07:15 - 08:15	43.75%	0%	188	0

WORKERS	ARRIVAL AND DEPARTURE PROFILE	TRIP GENERATION	HGVS	Construction HGVs			
				Hours	Arrivals	Departures	
Peak Workforce	1000	43.75%	Peak HGVS	135	00:00 - 01:00	0	0
2 Per Vehicle	2		Hours in Working Day	12	01:00 - 02:00	0	0
7 Per Minibus	7		Peak HGVs per hour	11.3	02:00 - 03:00	0	0
Vehicle	80%	800	PCU Value	2.3	03:00 - 04:00	0	0
Min bus	20%	200	Peak HGVs per hour (PCU)	25.9	04:00 - 05:00	0	0
Vehicle (2 Per Vehicle)	400				05:00 - 06:00	0	0
Min bus (7 Per Minibus)	28.6				06:00 - 07:00	0	0
Total	429				07:00 - 08:00	26	26
Vehicle Occupancy	2.33				08:00 - 09:00	26	26
					09:00 - 10:00	26	26
					10:00 - 11:00	26	26
					11:00 - 12:00	26	26
					12:00 - 13:00	26	26
					13:00 - 14:00	26	26
					14:00 - 15:00	26	26
					15:00 - 16:00	26	26
					16:00 - 17:00	26	26
					17:00 - 18:00	26	26
					18:00 - 19:00	26	26
					19:00 - 20:00	0	0
					20:00 - 21:00	0	0
					21:00 - 22:00	0	0
					22:00 - 23:00	0	0
					23:00 - 24:00	0	0
					Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	0	26	-	149
B	-	-	-	-	
C	13	0	0	-	
D	111	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	26	38
B	13	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 0730 - 0830		
FIGURE	DATE	
50	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
07:30 - 08:30	32.50%	0%	139	0

WORKERS

Peak Workforce	1000	
2 Per Vehicle	2	
7 Per Minibus	7	
Vehicle	80%	800
Min bus	20%	200
Vehicle (2 Per Vehicle)	400	
Min bus (7 Per Minibus)	28.6	
Total	429	
Vehicle Occupancy	2.33	

ARRIVAL AND DEPARTURE PROFILE

32.50%

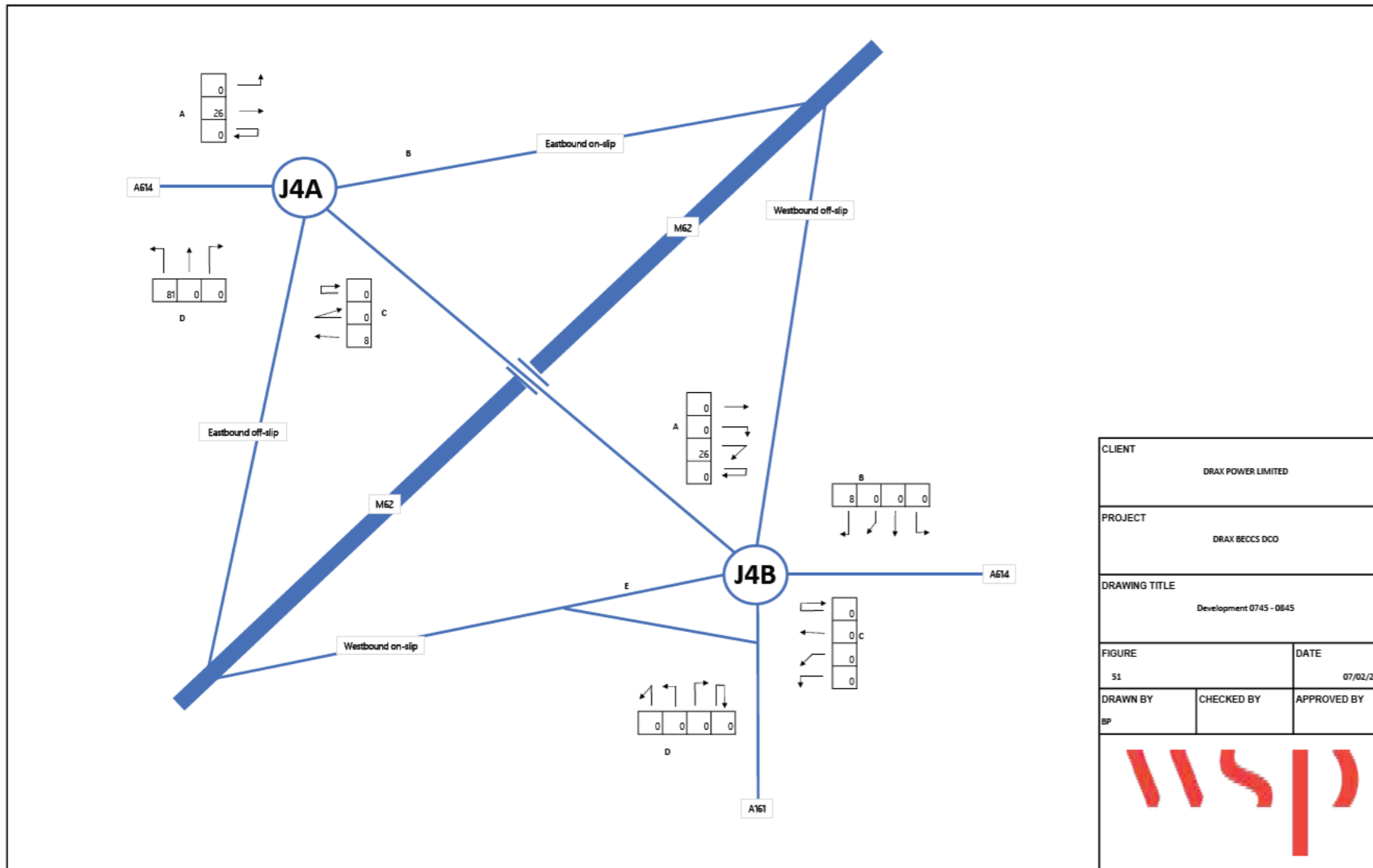
TRIP GENERATION

Vehicles	130
Minibus	9.29
Total	139

HGVs

Peak HGVs	135
Hours in Working Day	12
Peak HGVs per hour	11.3
PCU Value	2.3
Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	
A	0	0	26	-	Total movements through junction 116
B	-	-	-	-	
C	8	0	0	-	
D	81	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	
A	0	-	0	0	26	Total movements through junction 34
B	8	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 0745 - 0845		
FIGURE	DATE	
51	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
07:45 - 08:45	21.25%	0%	91	0

WORKERS

Peak Workforce	1000
2 Per Vehicle	2
7 Per Minibus	7
Vehicle	80%
Min bus	20%
Vehicle (2 Per Vehicle)	400
Min bus (7 Per Minibus)	28.6
Total	429
Vehicle Occupancy	2.33

ARRIVAL AND DEPARTURE PROFILE

21.25%

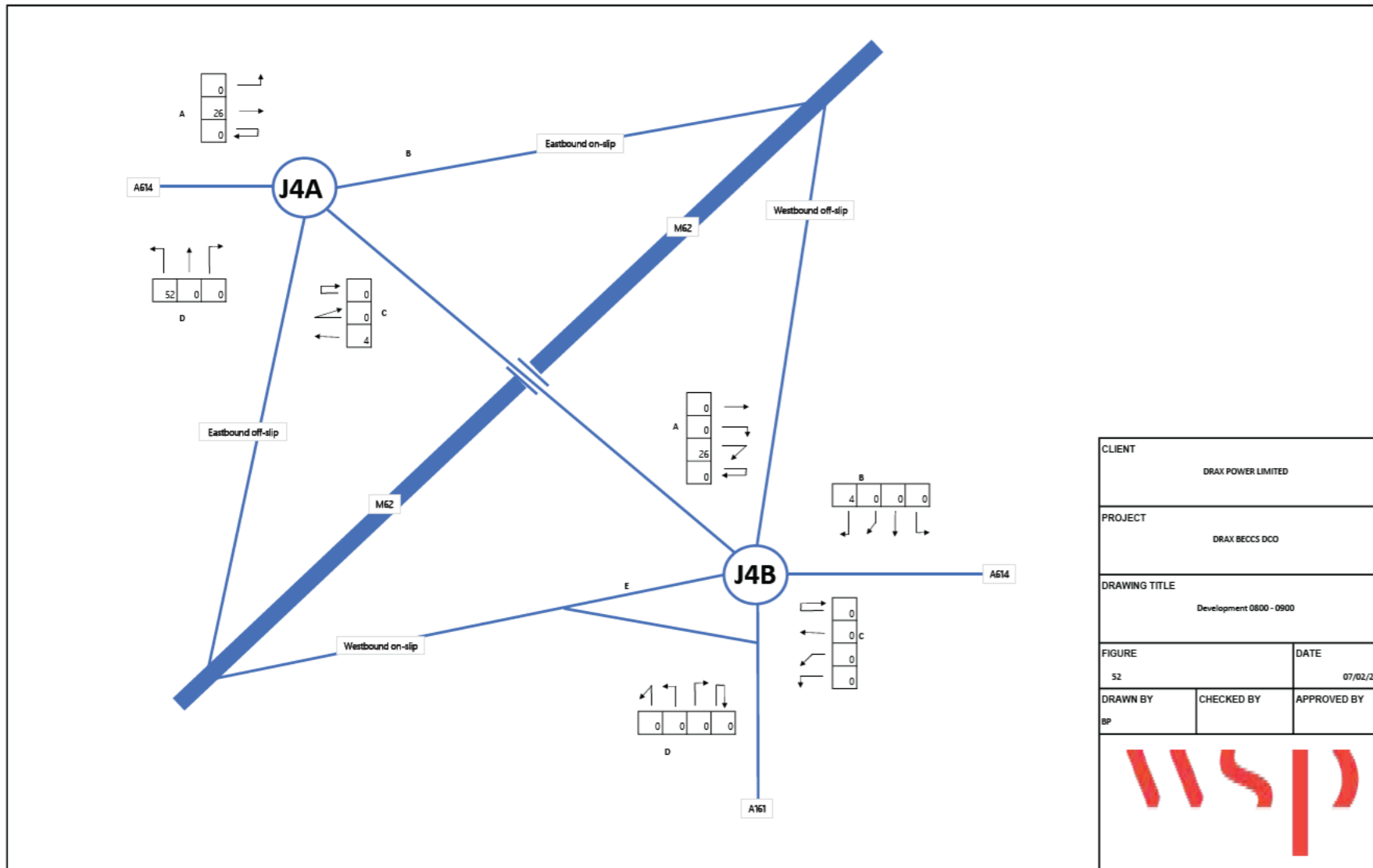
TRIP GENERATION

Vehicles	85
Minibus	6.07
Total	91.1

HGVs

Peak HGVs	135
Hours in Working Day	12
Peak HGVs per hour	11.3
PCU Value	2.3
Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	0	26	-	82
B	-	-	-	-	
C	4	0	0	-	
D	52	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	26	30
B	4	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 0800 - 0900		
FIGURE	DATE	
52	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
08:00 - 09:00	10.00%	0%	43	0

WORKERS

Peak Workforce	1000
2 Per Vehicle	2
7 Per Minibus	7
Vehicle	80%
Min bus	20%
Vehicle (2 Per Vehicle)	400
Min bus (7 Per Minibus)	28.6
Total	429
Vehicle Occupancy	2.33

ARRIVAL AND DEPARTURE PROFILE

10.00%

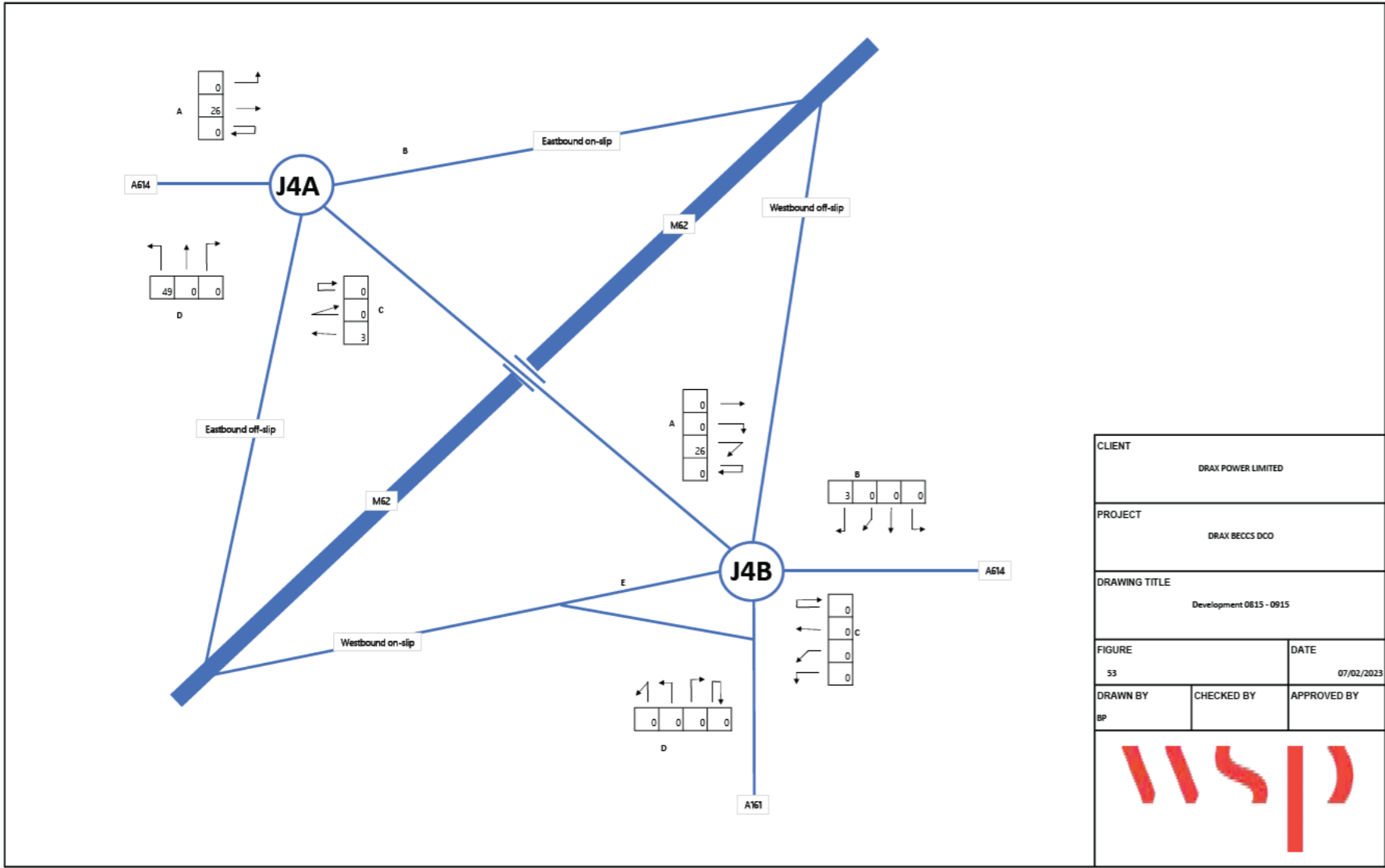
TRIP GENERATION

Vehicles	40
Minibus	2.86
Total	42.9

HGVs

Peak HGVs	135
Hours in Working Day	12
Peak HGVs per hour	11.3
PCU Value	2.3
Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	0	26	-	78
B	-	-	-	-	
C	3	0	0	-	
D	49	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	26	29
B	3	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 0815 - 0915		
FIGURE	DATE	
53	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		




Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

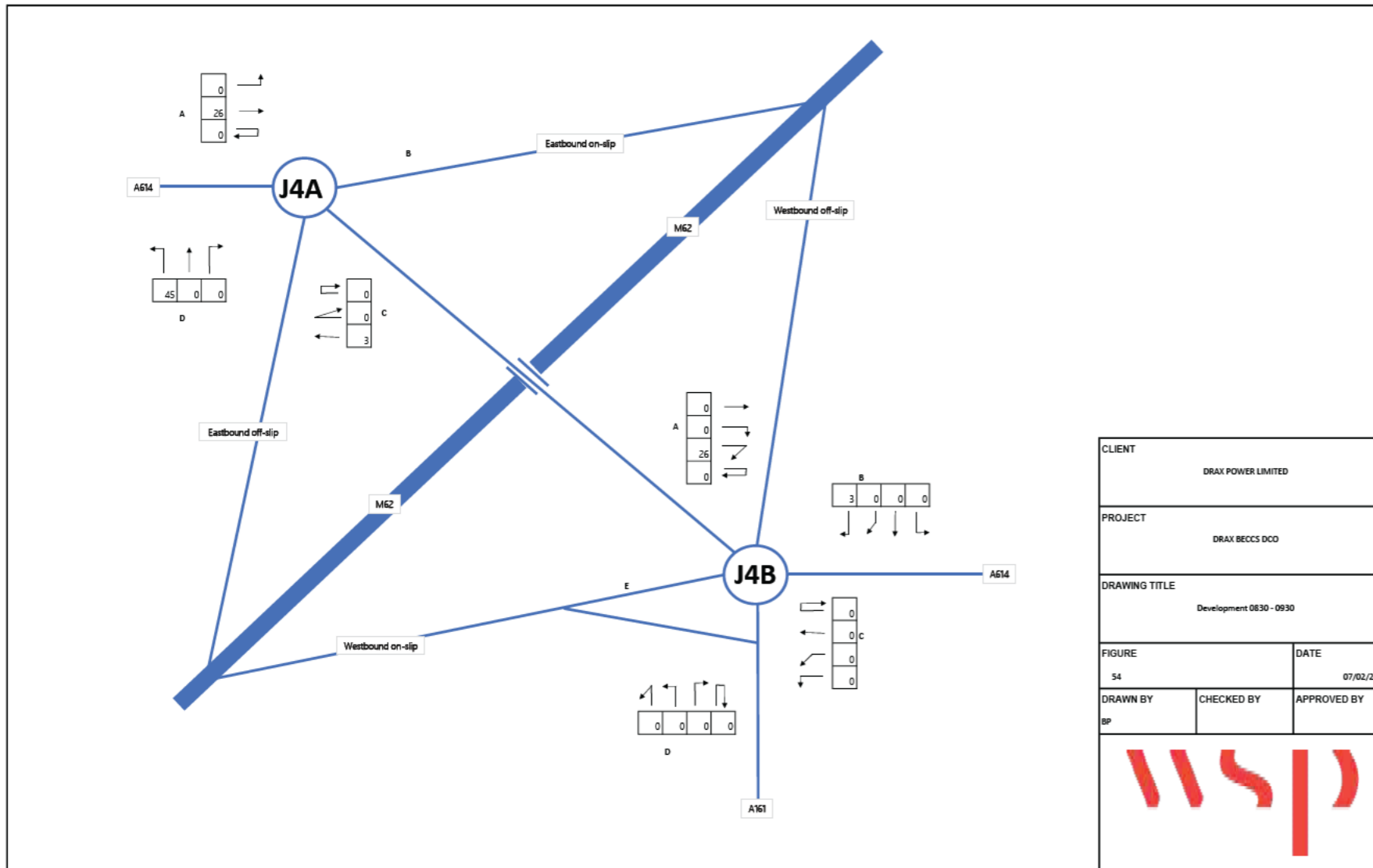
Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
08:15 - 09:15	8.75%	0%	38	0

WORKERS		ARRIVAL AND DEPARTURE PROFILE	
Peak Workforce	1000	8.75%	
2 Per Vehicle	2		
7 Per Minibus	7		
Vehicle	80%	800	
Min bus	20%	200	
Vehicle (2 Per Vehicle)	400		
Min bus (7 Per Minibus)	28.6		
Total	429		
Vehicle Occupancy	2.33		

TRIP GENERATION		HGVS	
Vehicles	35	Peak HGVS	135
Minibus	2.5	Hours in Working Day	12
Total	37.5	Peak HGVs per hour	11.3
		PCU Value	2.3
		Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	0	26	-	74
B	-	-	-	-	
C	3	0	0	-	
D	45	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	26	29
B	3	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 0830 - 0930		
FIGURE	DATE	
54	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
08:30 - 09:30	7.50%	0%	32	0

WORKERS

Peak Workforce	1000	
2 Per Vehicle	2	
7 Per Minibus	7	
Vehicle	80%	800
Min bus	20%	200
Vehicle (2 Per Vehicle)	400	
Min bus (7 Per Minibus)	28.6	
Total	429	
Vehicle Occupancy	2.33	

ARRIVAL AND DEPARTURE PROFILE

7.50%

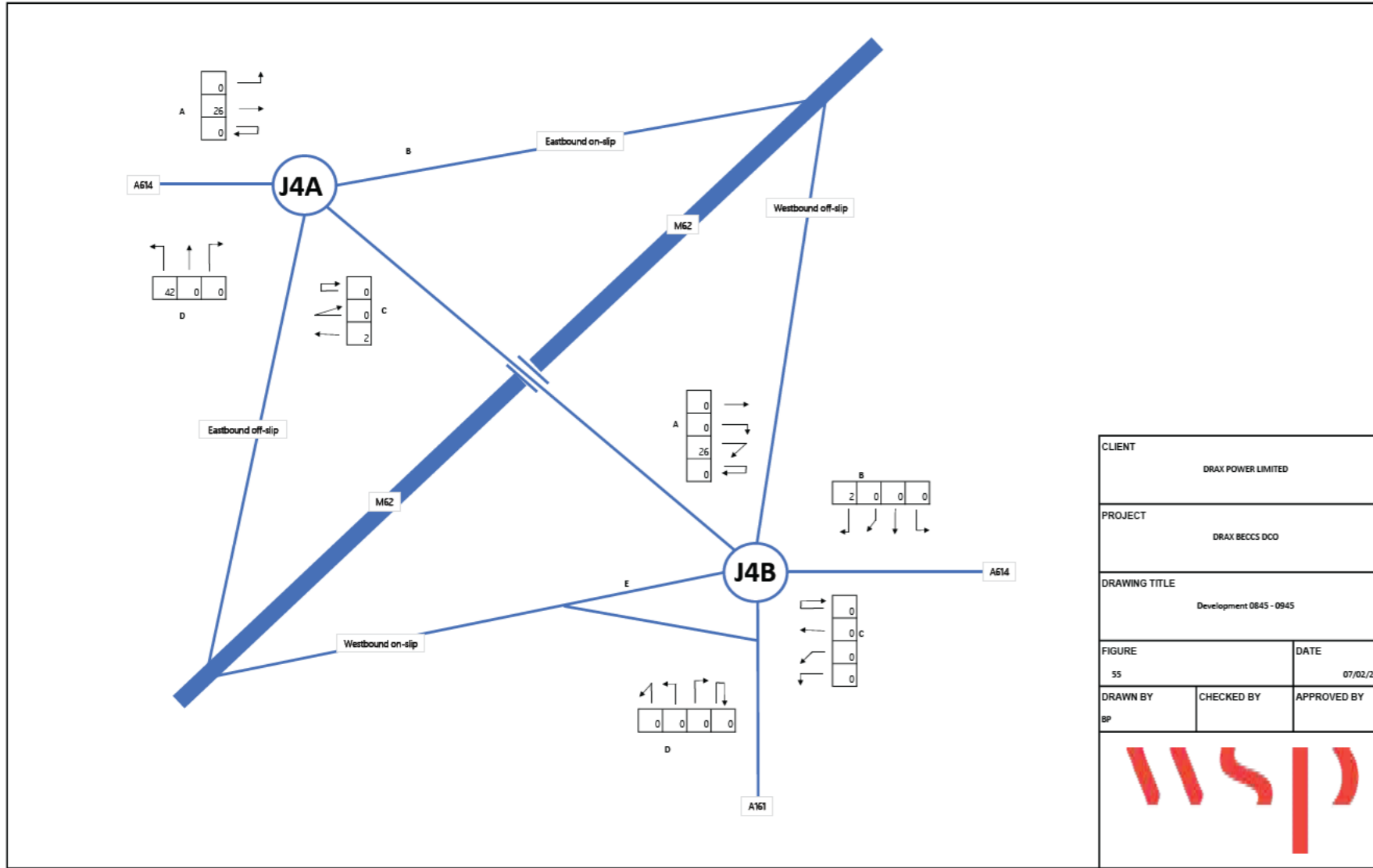
TRIP GENERATION

Vehicles	30
Minibus	2.14
Total	32.1

HGVs

Peak HGVs	135
Hours in Working Day	12
Peak HGVs per hour	11.3
PCU Value	2.3
Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	
A	0	0	26	-	Total movements through junction 71
B	-	-	-	-	
C	2	0	0	-	
D	42	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	
A	0	-	0	0	26	Total movements through junction 28
B	2	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 0845 - 0945		
FIGURE	DATE	
55	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		

Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
08:45 - 09:45	6.25%	0%	27	0

WORKERS

Peak Workforce	1000
2 Per Vehicle	2
7 Per Minibus	7
Vehicle	80%
Min bus	20%
Vehicle (2 Per Vehicle)	400
Min bus (7 Per Minibus)	28.6
Total	429
Vehicle Occupancy	2.33

ARRIVAL AND DEPARTURE PROFILE

6.25%

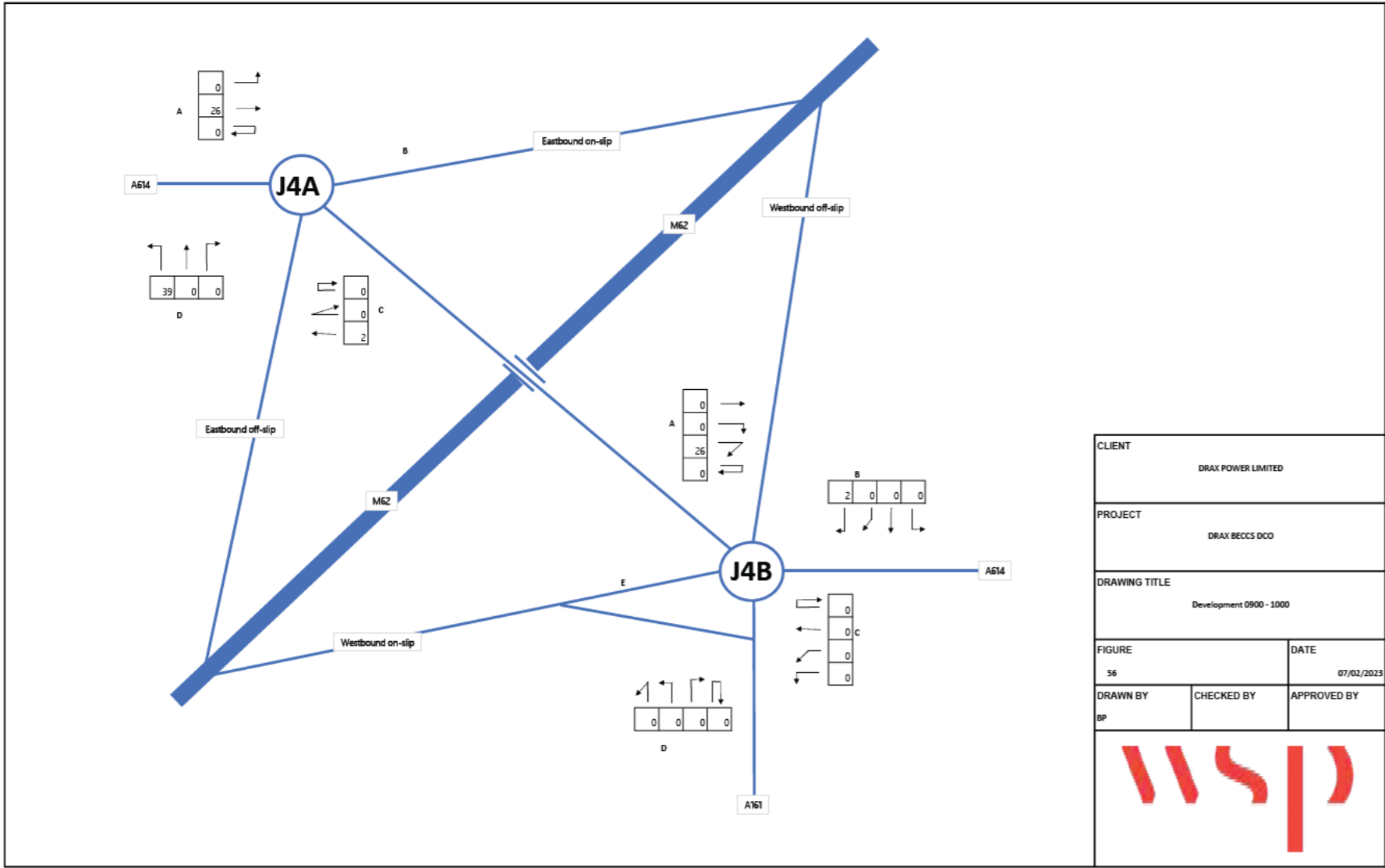
TRIP GENERATION

Vehicles	25
Minibus	1.79
Total	26.8

HGVs

Peak HGVs	135
Hours in Working Day	12
Peak HGVs per hour	11.3
PCU Value	2.3
Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	0	26	-	67
B	-	-	-	-	
C	2	0	0	-	
D	39	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	26	28
B	2	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 0900 - 1000		
FIGURE	DATE	
56	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		




Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

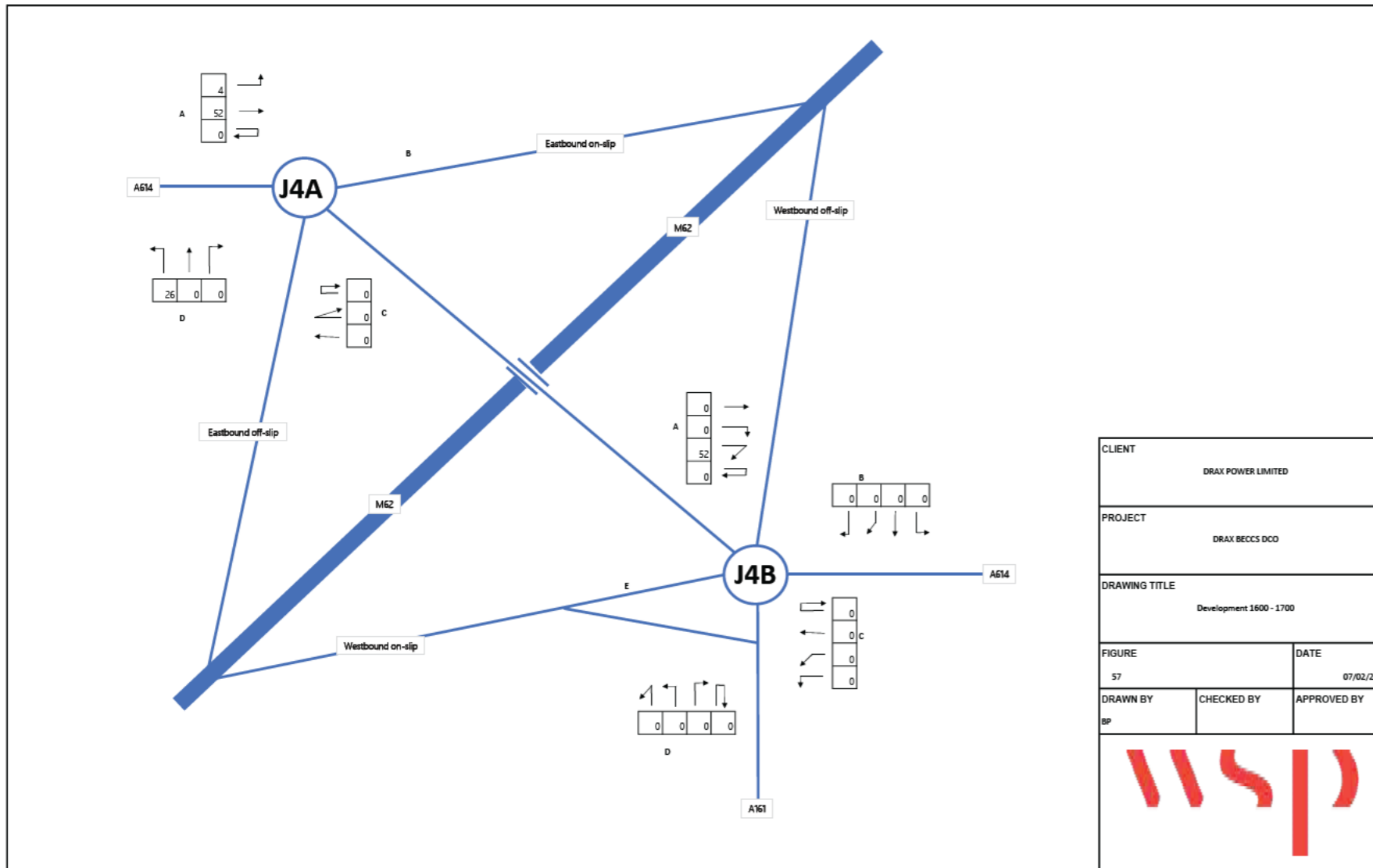
Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
09:00 - 10:00	5.00%	0%	21	0

WORKERS		ARRIVAL AND DEPARTURE PROFILE	
Peak Workforce	1000	5.00%	
2 Per Vehicle	2		
7 Per Minibus	7		
Vehicle	80%	800	
Min bus	20%	200	
Vehicle (2 Per Vehicle)	400		
Min bus (7 Per Minibus)	28.6		
Total	429		
Vehicle Occupancy	2.33		

TRIP GENERATION		HGVS	
Vehicles	20	Peak HGVS	135
Minibus	1.43	Hours in Working Day	12
Total	21.4	Peak HGVs per hour	11.3
		PCU Value	2.3
		Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	4	52	-	82
B	-	-	-	-	
C	0	0	0	-	
D	26	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	52	52
B	0	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 1600 - 1700		
FIGURE		DATE
57		07/02/2023
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
16:00 - 17:00	10.00%	0%	0	43

WORKERS

Peak Workforce	1000	
2 Per Vehicle	2	
7 Per Minibus	7	
Vehicle	80%	800
Min bus	20%	200
Vehicle (2 Per Vehicle)	400	
Min bus (7 Per Minibus)	28.6	
Total	429	
Vehicle Occupancy	2.33	

ARRIVAL AND DEPARTURE PROFILE

10.00%

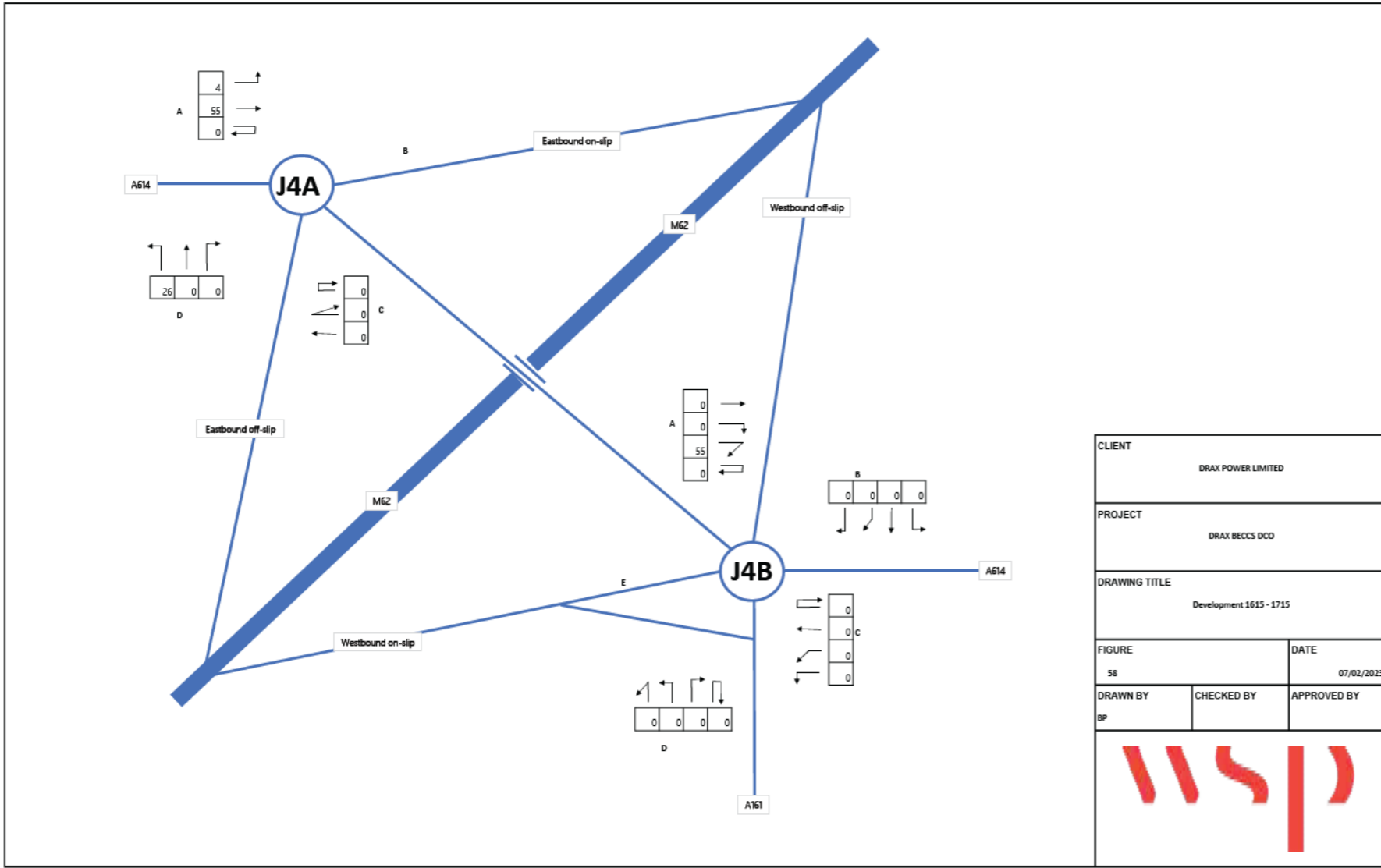
TRIP GENERATION

Vehicles	40
Minibus	2.86
Total	42.9

HGVs

Peak HGVs	135
Hours in Working Day	12
Peak HGVs per hour	11.3
PCU Value	2.3
Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	
A	0	4	55	-	Total movements through junction 86
B	-	-	-	-	
C	0	0	0	-	
D	26	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	
A	0	-	0	0	55	Total movements through junction 55
B	0	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 1615 - 1715		
FIGURE	DATE	
58	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
16:15 - 17:15	11.25%	0%	0	48

WORKERS

Peak Workforce	1000
2 Per Vehicle	2
7 Per Minibus	7
Vehicle	80%
Min bus	20%
Vehicle (2 Per Vehicle)	400
Min bus (7 Per Minibus)	28.6
Total	429
Vehicle Occupancy	2.33

ARRIVAL AND DEPARTURE PROFILE

11.25%

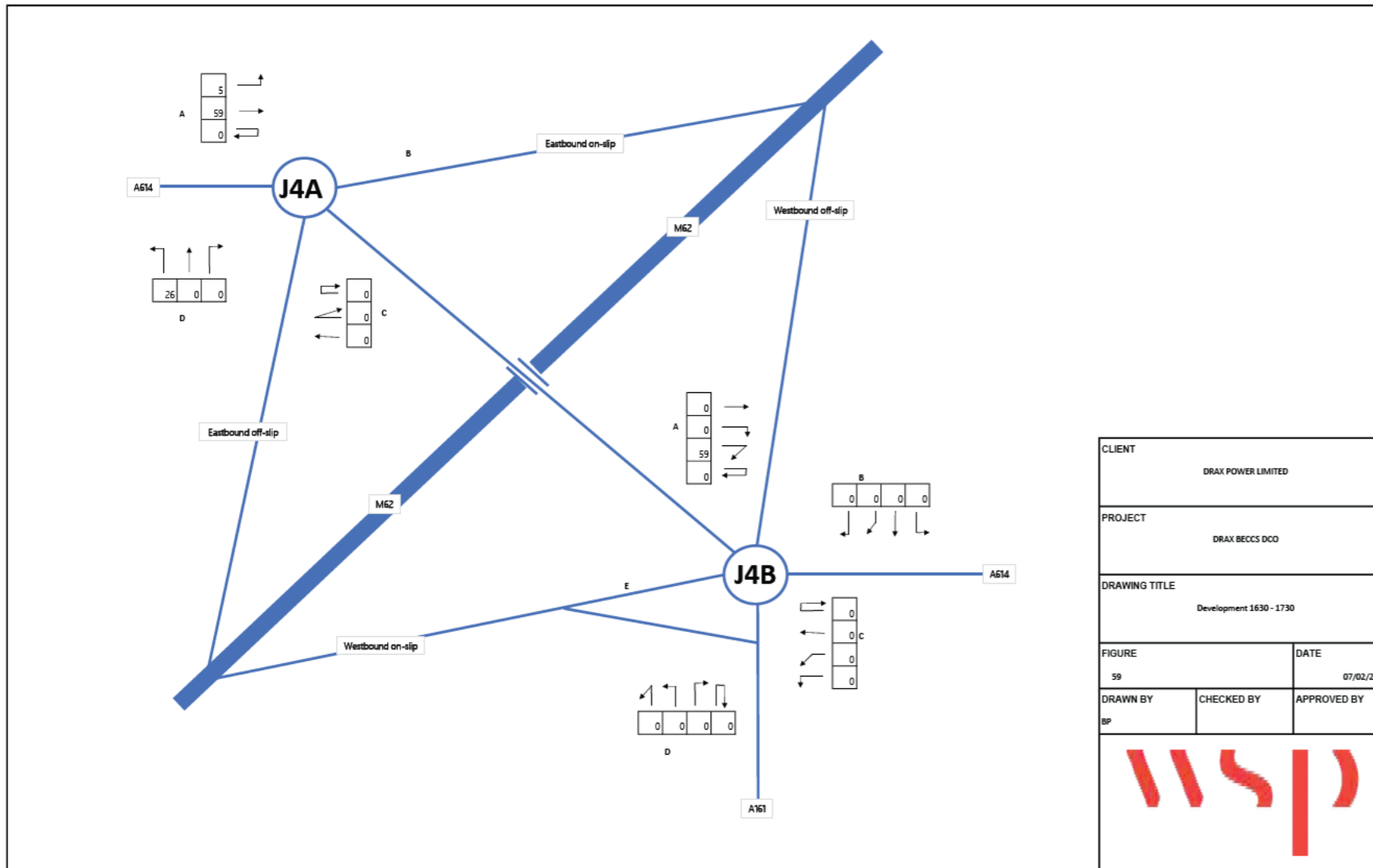
TRIP GENERATION

Vehicles	45
Minibus	3.21
Total	48.2

HGVs

Peak HGVs	135
Hours in Working Day	12
Peak HGVs per hour	11.3
PCU Value	2.3
Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	5	59	-	89
B	-	-	-	-	
C	0	0	0	-	
D	26	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	59	59
B	0	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 1630 - 1730		
FIGURE	DATE	
59	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
16:30 - 17:30	12.50%	0%	0	54

WORKERS

Peak Workforce	1000	
2 Per Vehicle	2	
7 Per Minibus	7	
Vehicle	80%	800
Min bus	20%	200
Vehicle (2 Per Vehicle)	400	
Min bus (7 Per Minibus)	28.6	
Total	429	
Vehicle Occupancy	2.33	

ARRIVAL AND DEPARTURE PROFILE

12.50%

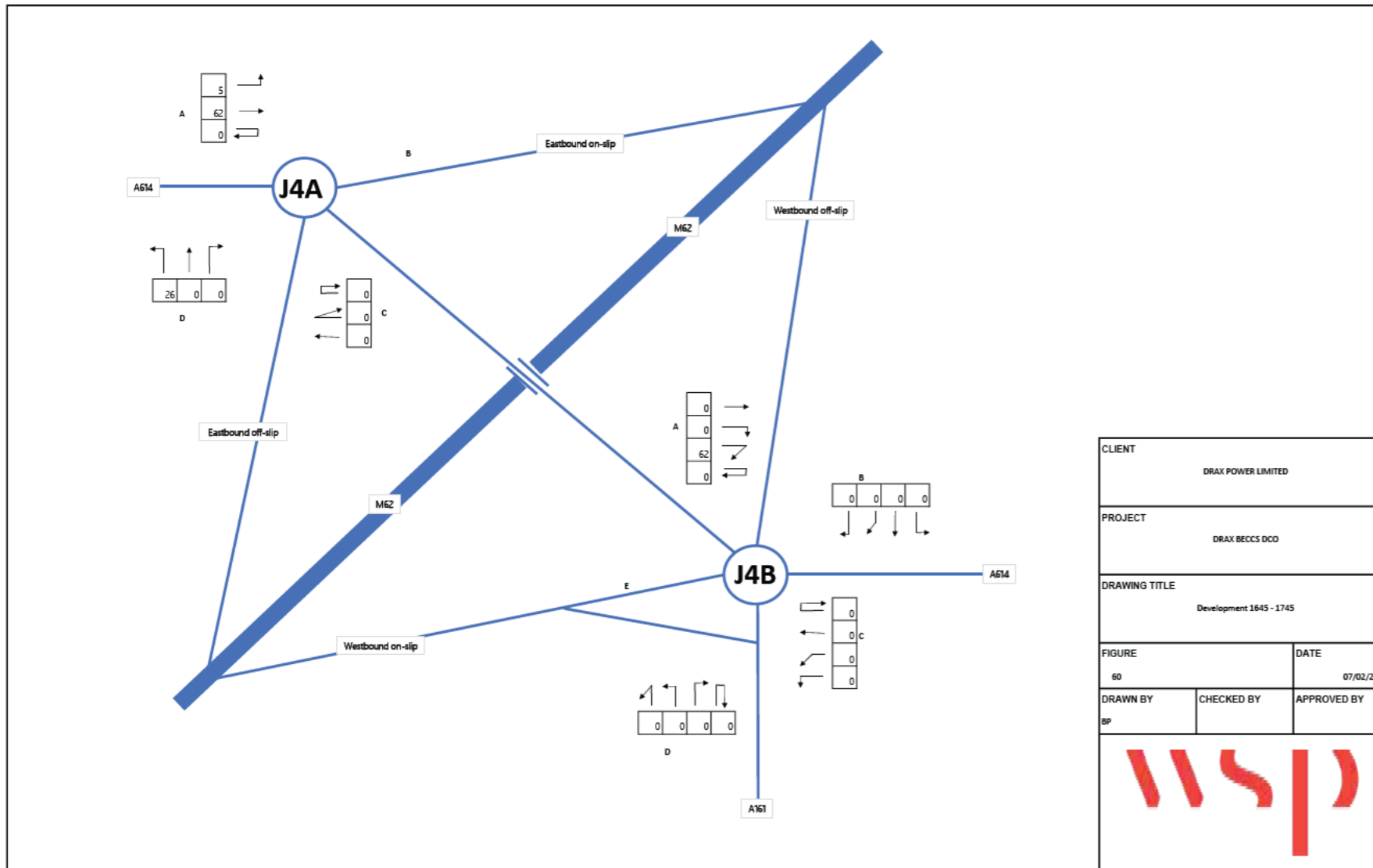
TRIP GENERATION

Vehicles	50
Minibus	3.57
Total	53.6

HGVs

Peak HGVs	135
Hours in Working Day	12
Peak HGVs per hour	11.3
PCU Value	2.3
Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	5	62	-	93
B	-	-	-	-	
C	0	0	0	-	
D	26	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	62	62
B	0	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 1645 - 1745		
FIGURE		DATE
60		07/02/2023
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
16:45 - 17:45	13.75%	0%	0	59

WORKERS

Peak Workforce	1000	
2 Per Vehicle	2	
7 Per Minibus	7	
Vehicle	80%	800
Min bus	20%	200
Vehicle (2 Per Vehicle)	400	
Min bus (7 Per Minibus)	28.6	
Total	429	
Vehicle Occupancy	2.33	

ARRIVAL AND DEPARTURE PROFILE

13.75%

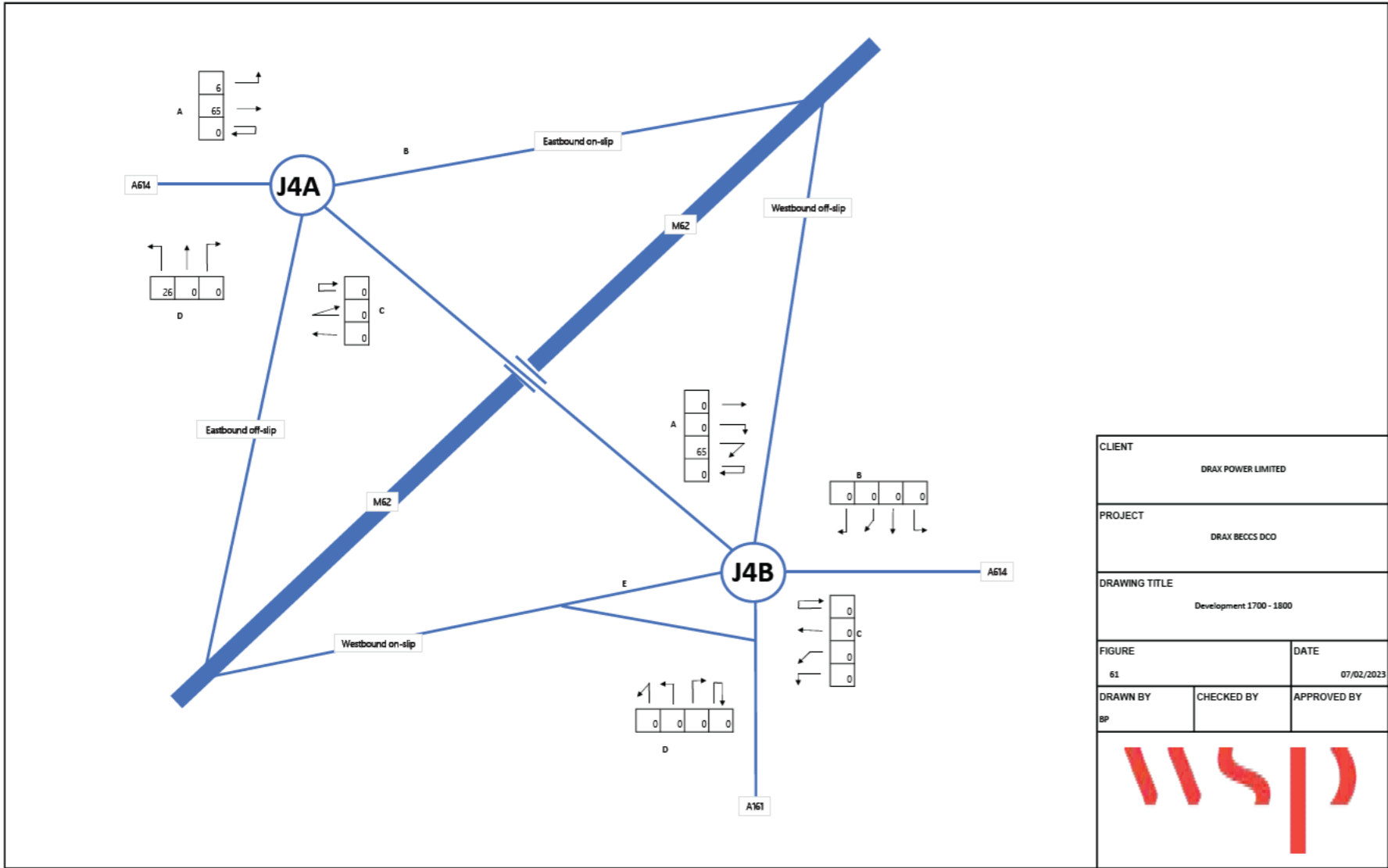
TRIP GENERATION

Vehicles	55
Minibus	3.93
Total	58.9

HGVs

Peak HGVs	135
Hours in Working Day	12
Peak HGVs per hour	11.3
PCU Value	2.3
Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	
A	0	6	65	-	Total movements through junction 97
B	-	-	-	-	
C	0	0	0	-	
D	26	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	
A	0	-	0	0	65	Total movements through junction 65
B	0	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	


CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 1700 - 1800		
FIGURE	DATE	
61	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
17:00 - 18:00	15.00%	0%	0	64

WORKERS

Peak Workforce	1000	
2 Per Vehicle	2	
7 Per Minibus	7	
Vehicle	80%	800
Min bus	20%	200
Vehicle (2 Per Vehicle)	400	
Min bus (7 Per Minibus)	28.6	
Total	429	
Vehicle Occupancy	2.33	

ARRIVAL AND DEPARTURE PROFILE

15.00%

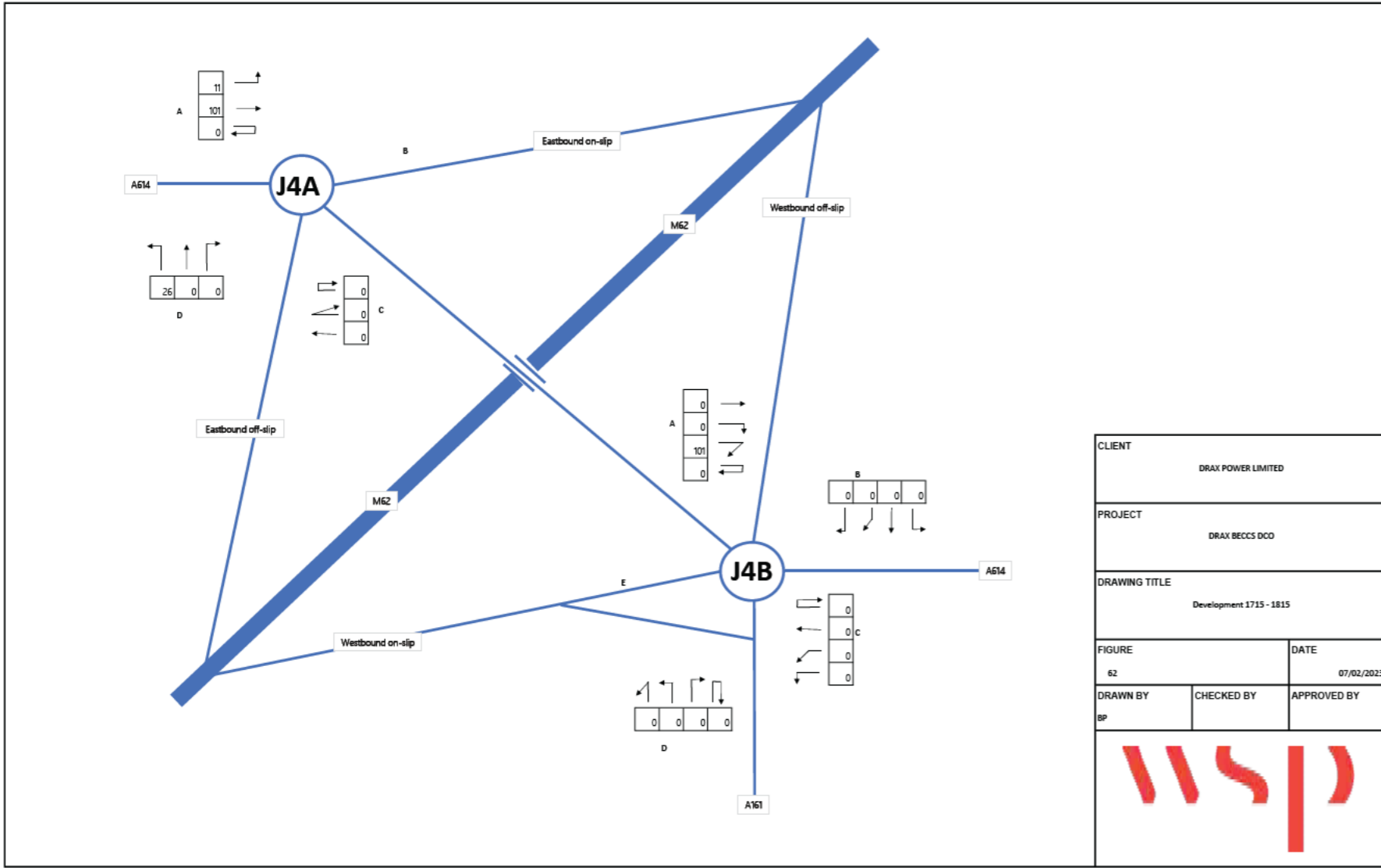
TRIP GENERATION

Vehicles	60
Minibus	4.29
Total	64.3

HGVs

Peak HGVs	135
Hours in Working Day	12
Peak HGVs per hour	11.3
PCU Value	2.3
Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	11	101	-	138
B	-	-	-	-	
C	0	0	0	-	
D	26	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	101	101
B	0	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 1715 - 1815		
FIGURE	DATE	
62	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

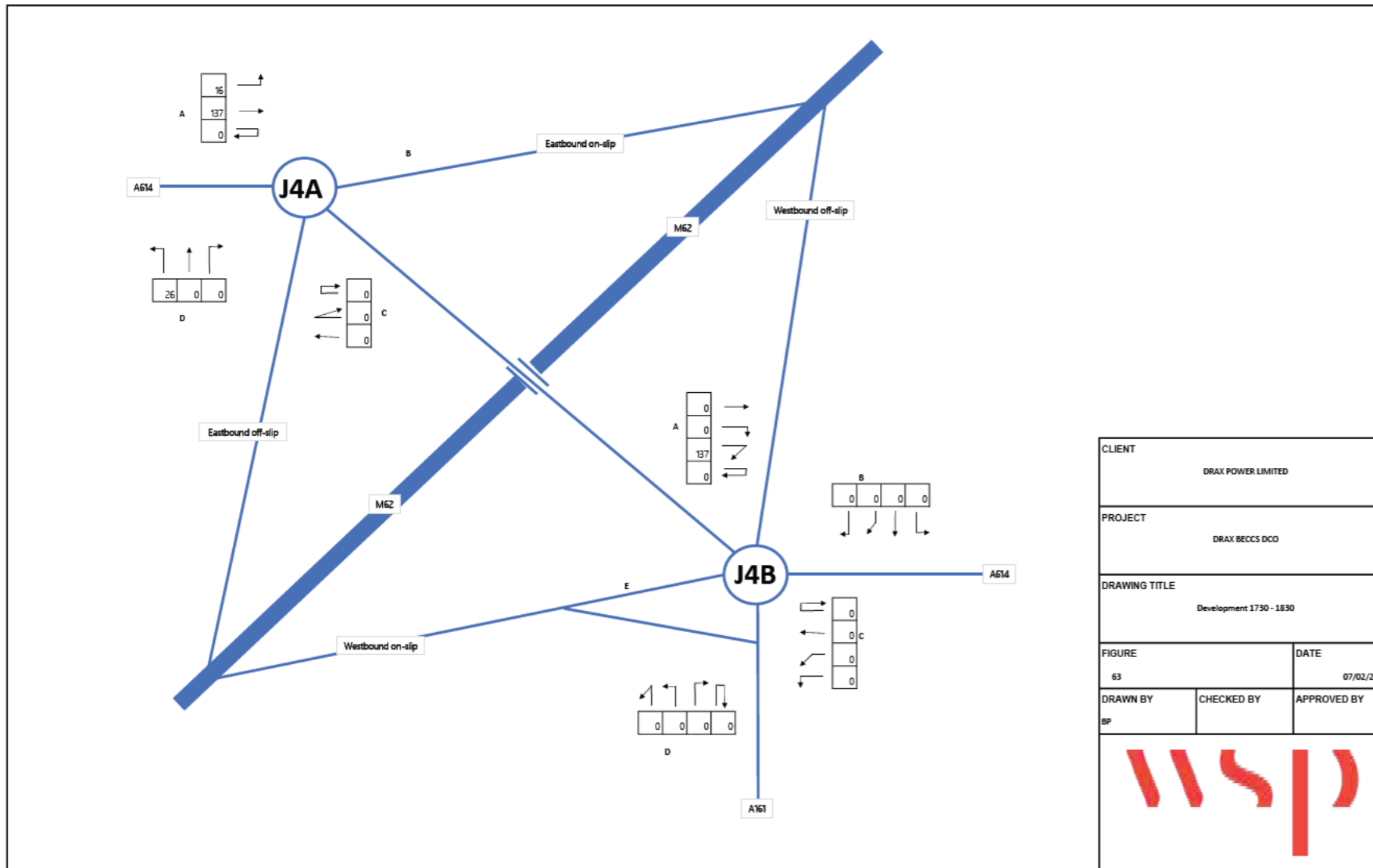
Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
17:15 - 18:15	28.75%	0%	0	123

WORKERS		ARRIVAL AND DEPARTURE PROFILE		TRIP GENERATION		HGVS		Construction HGVs		
								Hours	Arrivals	Departures
Peak Workforce	1000		28.75%	Vehicles	115	Peak HGVS	135	00:00 - 01:00	0	0
2 Per Vehicle	2			Minibus	8.21	Hours in Working Day	12	01:00 - 02:00	0	0
7 Per Minibus	7			Total	123	Peak HGVs per hour	11.3	02:00 - 03:00	0	0
Vehicle	80%	800				PCU Value	2.3	03:00 - 04:00	0	0
Min bus	20%	200				Peak HGVs per hour (PCU)	25.9	04:00 - 05:00	0	0
Vehicle (2 Per Vehicle)		400						05:00 - 06:00	0	0
Min bus (7 Per Minibus)		28.6						06:00 - 07:00	0	0
Total		429						07:00 - 08:00	26	26
Vehicle Occupancy		2.33						08:00 - 09:00	26	26
								09:00 - 10:00	26	26
								10:00 - 11:00	26	26
								11:00 - 12:00	26	26
								12:00 - 13:00	26	26
								13:00 - 14:00	26	26
								14:00 - 15:00	26	26
								15:00 - 16:00	26	26
								16:00 - 17:00	26	26
								17:00 - 18:00	26	26
								18:00 - 19:00	26	26
								19:00 - 20:00	0	0
								20:00 - 21:00	0	0
								21:00 - 22:00	0	0
								22:00 - 23:00	0	0
								23:00 - 24:00	0	0
								Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	16	137	-	179
B	-	-	-	-	
C	0	0	0	-	
D	26	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	137	137
B	0	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 1730 - 1830		
FIGURE	DATE	
63	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
17:30 - 18:30	42.50%	0%	0	182

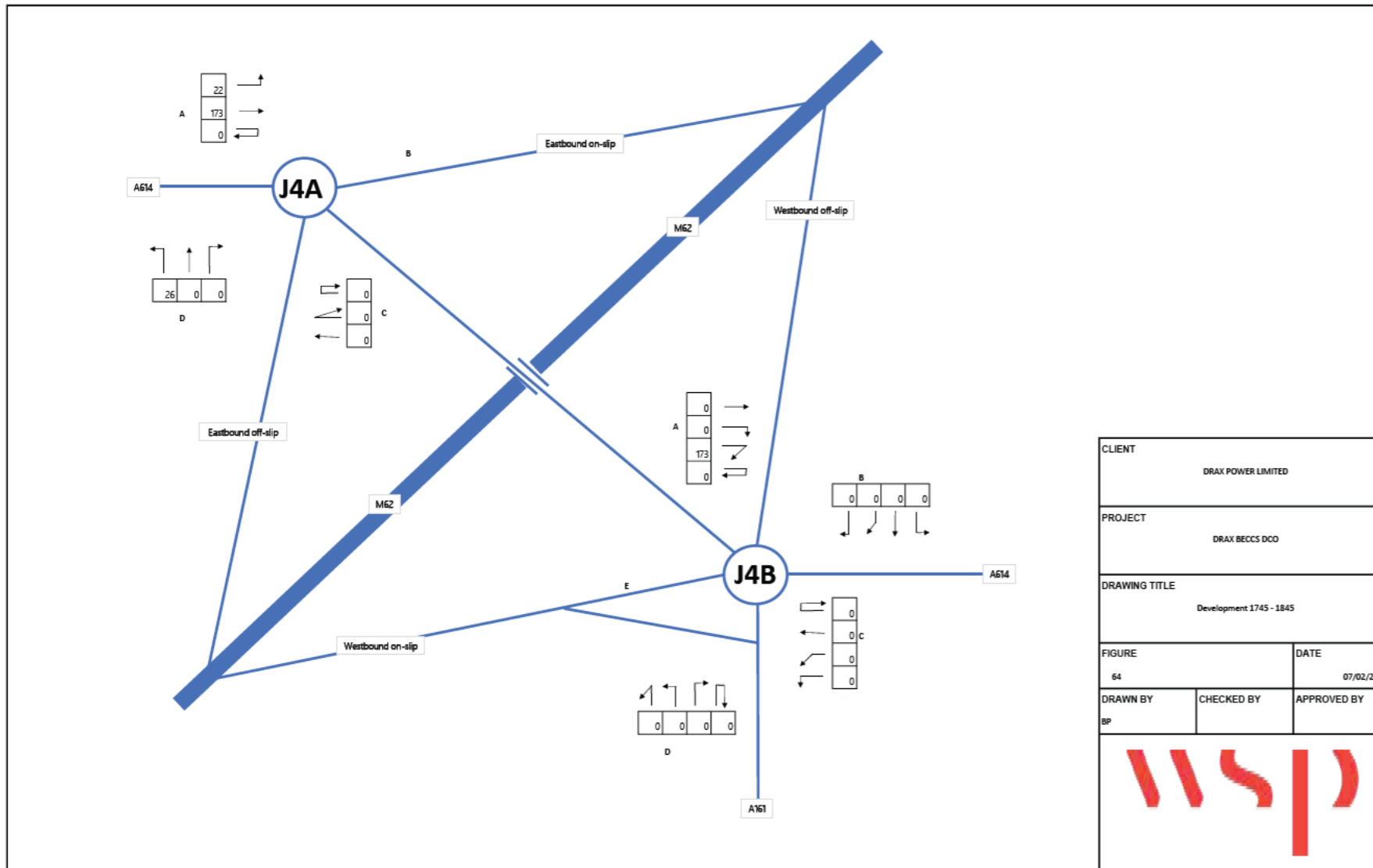
WORKERS	
Peak Workforce	1000
2 Per Vehicle	2
7 Per Minibus	7
Vehicle	80%
Min bus	20%
Vehicle (2 Per Vehicle)	400
Min bus (7 Per Minibus)	28.6
Total	429
Vehicle Occupancy	2.33

ARRIVAL AND DEPARTURE PROFILE	
	42.50%

TRIP GENERATION	
Vehicles	170
Minibus	12.1
Total	182

HGVS	
Peak HGVS	135
Hours in Working Day	12
Peak HGVs per hour	11.3
PCU Value	2.3
Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	22	173	-	221
B	-	-	-	-	
C	0	0	0	-	
D	26	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	173	173
B	0	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 1745 - 1845		
FIGURE	DATE	
64	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
17:45 - 18:45	56.25%	0%	0	241

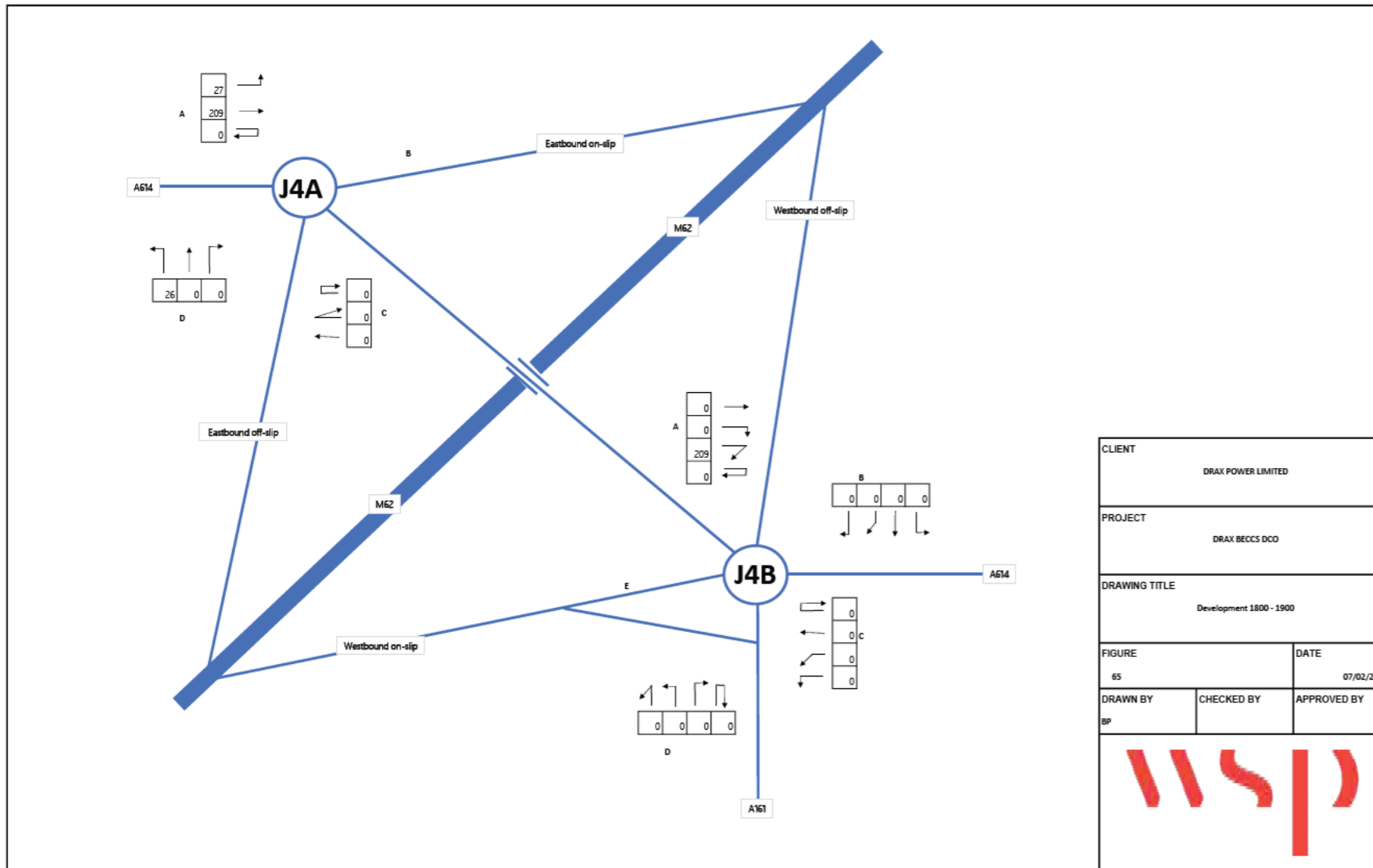
WORKERS	
Peak Workforce	1000
2 Per Vehicle	2
7 Per Minibus	7
Vehicle	80%
Min bus	20%
Vehicle (2 Per Vehicle)	400
Min bus (7 Per Minibus)	28.6
Total	429
Vehicle Occupancy	2.33

ARRIVAL AND DEPARTURE PROFILE	
	56.25%

TRIP GENERATION	
Vehicles	225
Minibus	16.1
Total	241

HGVS	
Peak HGVS	135
Hours in Working Day	12
Peak HGVs per hour	11.3
PCU Value	2.3
Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	27	209	-	262
B	-	-	-	-	
C	0	0	0	-	
D	26	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	209	209
B	0	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 1800 - 1900		
FIGURE	DATE	
65	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		



Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
18:00 - 19:00	70.00%	0%	0	300

15
70
70
70

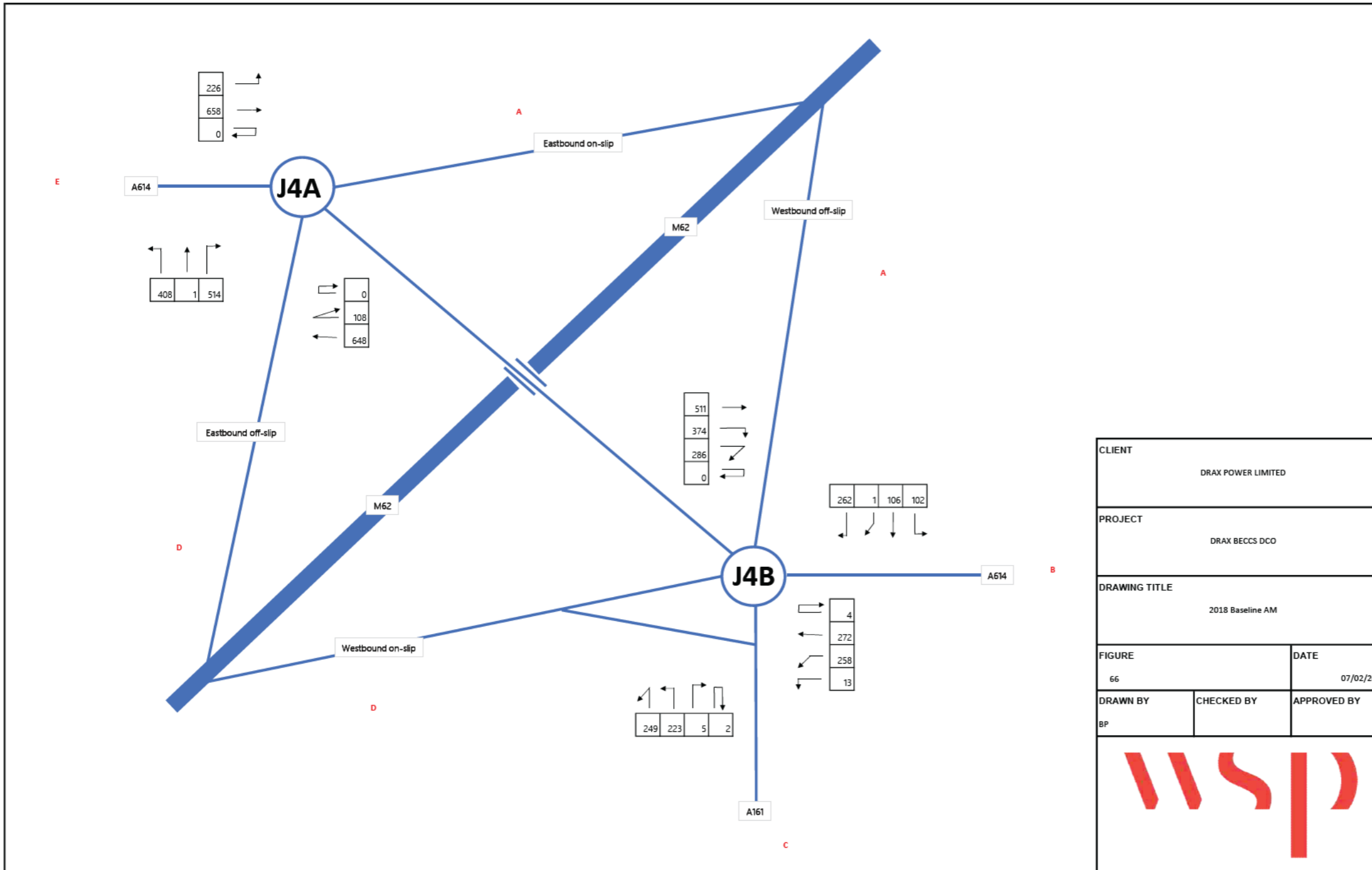
WORKERS	
Peak Workforce	1000
2 Per Vehicle	2
7 Per Minibus	7
Vehicle	80%
Min bus	20%
Vehicle (2 Per Vehicle)	400
Min bus (7 Per Minibus)	28.6
Total	429
Vehicle Occupancy	2.33

ARRIVAL AND DEPARTURE PROFILE	
	70.00%

TRIP GENERATION	
Vehicles	280
Minibus	20
Total	300

HGVS	
Peak HGVS	135
Hours in Working Day	12
Peak HGVs per hour	11.3
PCU Value	2.3
Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5




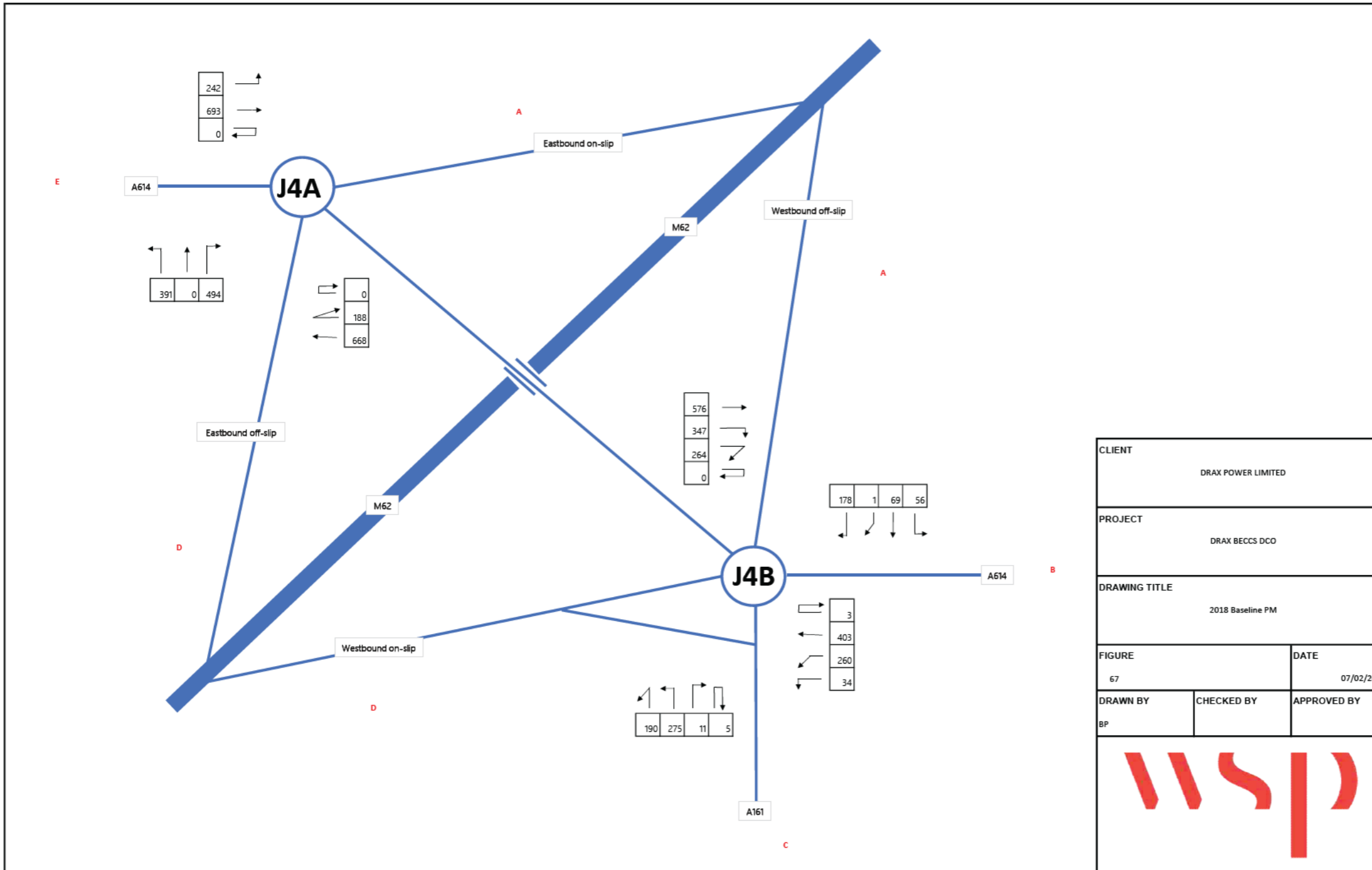
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	226	658	-	2563
B	-	-	-	-	
C	648	108	0	-	
D	408	1	514	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	511	374	286	2669
B	262	-	102	106	1	
C	272	-	4	13	258	
D	223	-	5	2	249	
E	-	-	-	-	-	

CLIENT		DRAX POWER LIMITED	
PROJECT		DRAX BECCS DCO	
DRAWING TITLE		2018 Baseline AM	
FIGURE	DATE		
66	07/02/2023		
DRAWN BY	CHECKED BY	APPROVED BY	
BP			
			




J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	242	693	-	2676
B	-	-	-	-	
C	668	188	0	-	
D	391	0	494	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	576	347	264	2672
B	178	-	56	69	1	
C	403	-	3	34	260	
D	275	-	11	5	190	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Baseline PM		
FIGURE	DATE	
67	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

	A	B	C	D
A	0	234	681	-
B	-	-	-	-
C	671	112	0	-
D	422	1	532	-

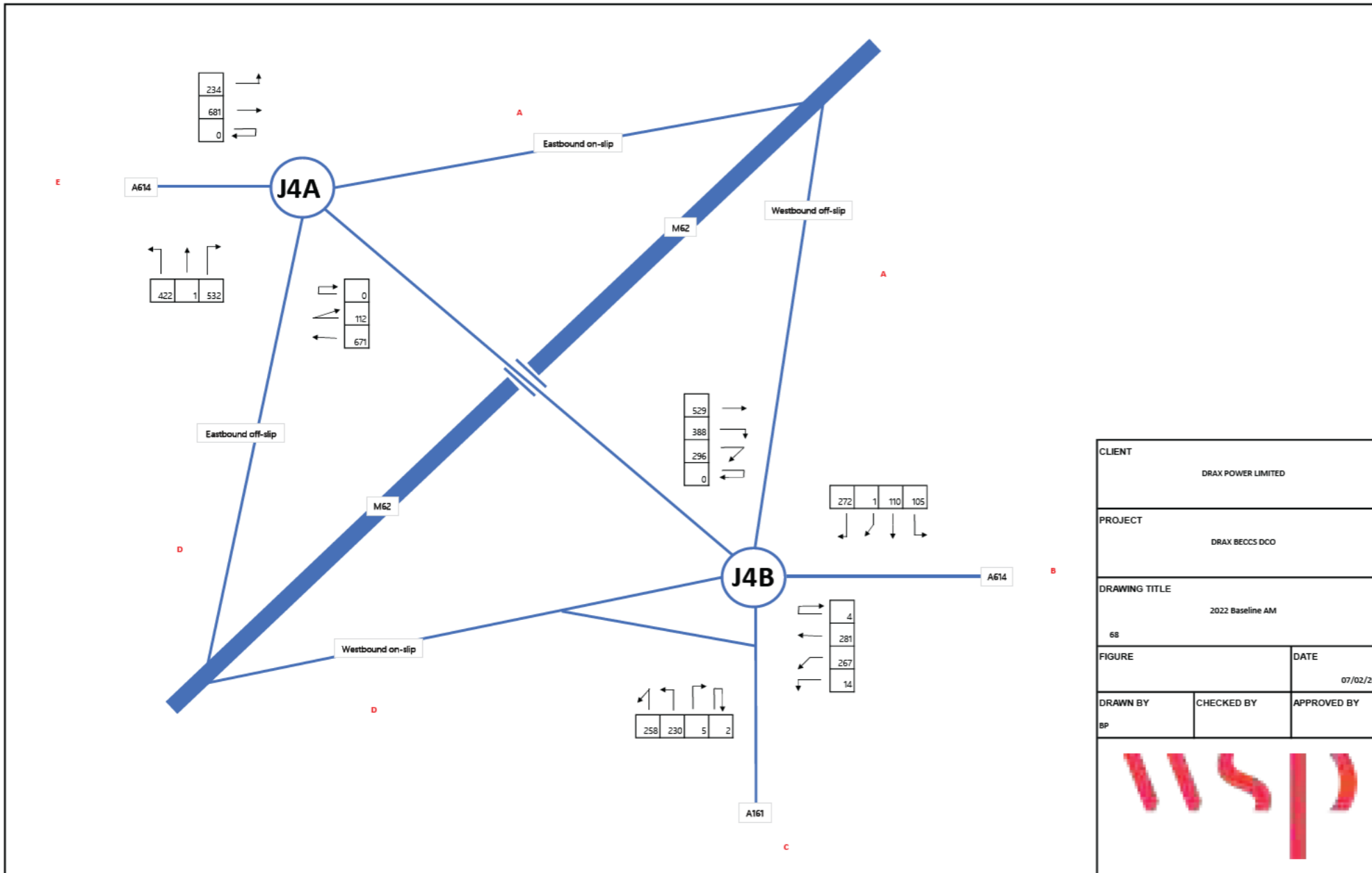
Total movements through junction
2653


1.0354

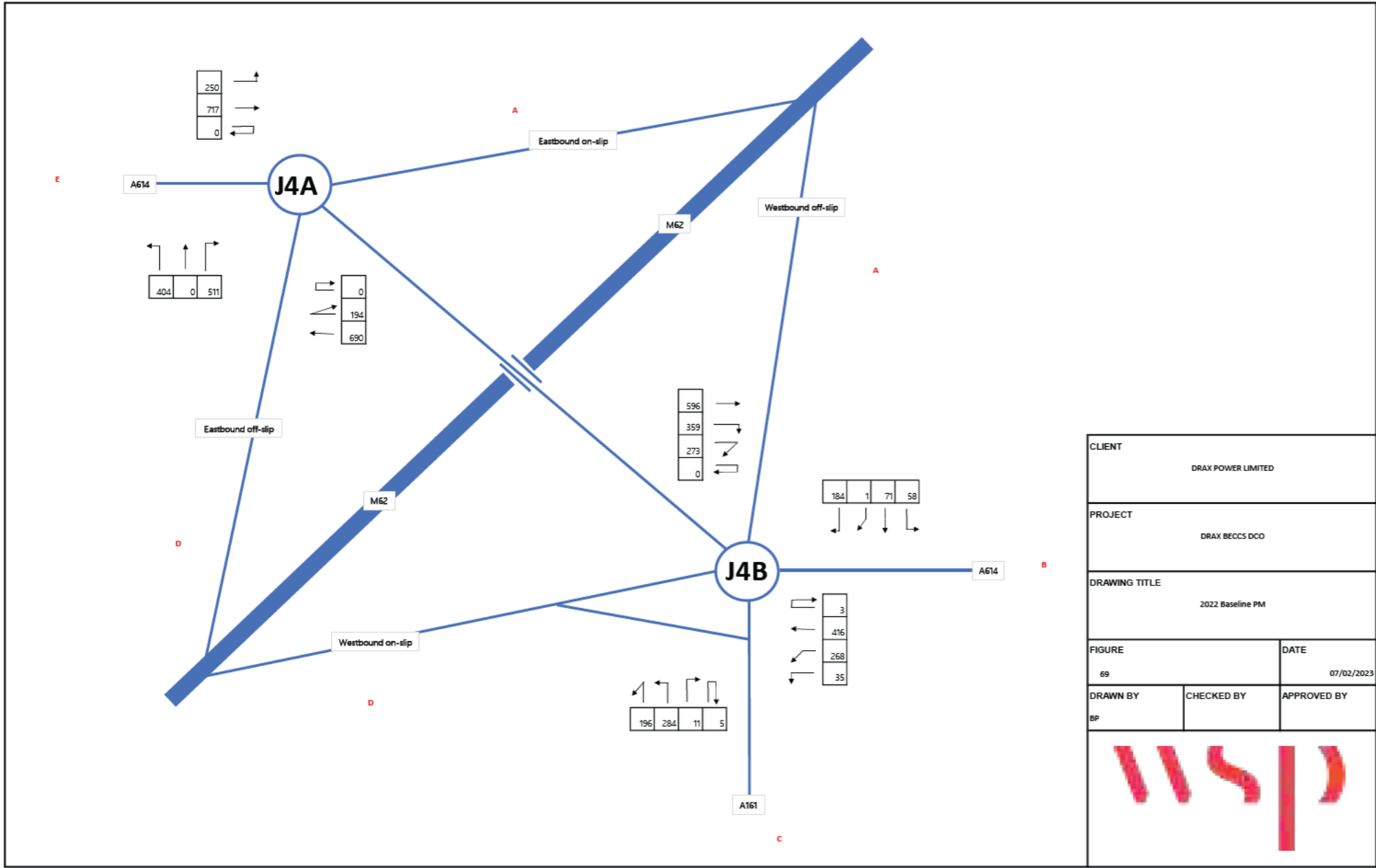
J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	529	388	296
B	272	-	105	110	1
C	281	-	4	14	267
D	230	-	5	2	258
E	-	-	-	-	-

Total movements through junction
2763



CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2022 Baseline AM		
FIGURE		
68		
FIGURE		DATE
		07/02/2023
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT


	A	B	C	D
A	0	250	717	-
B	-	-	-	-
C	690	194	0	-
D	404	0	511	-

Total movements through junction
2765

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	596	359	273
B	184	-	58	71	1
C	416	-	3	35	268
D	284	-	11	5	196
E	-	-	-	-	-

Total movements through junction
2761

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2022 Baseline PM		
FIGURE		DATE
69		07/02/2023
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D
A	0	241	701	-
B	-	-	-	-
C	691	115	0	-
D	434	1	548	-

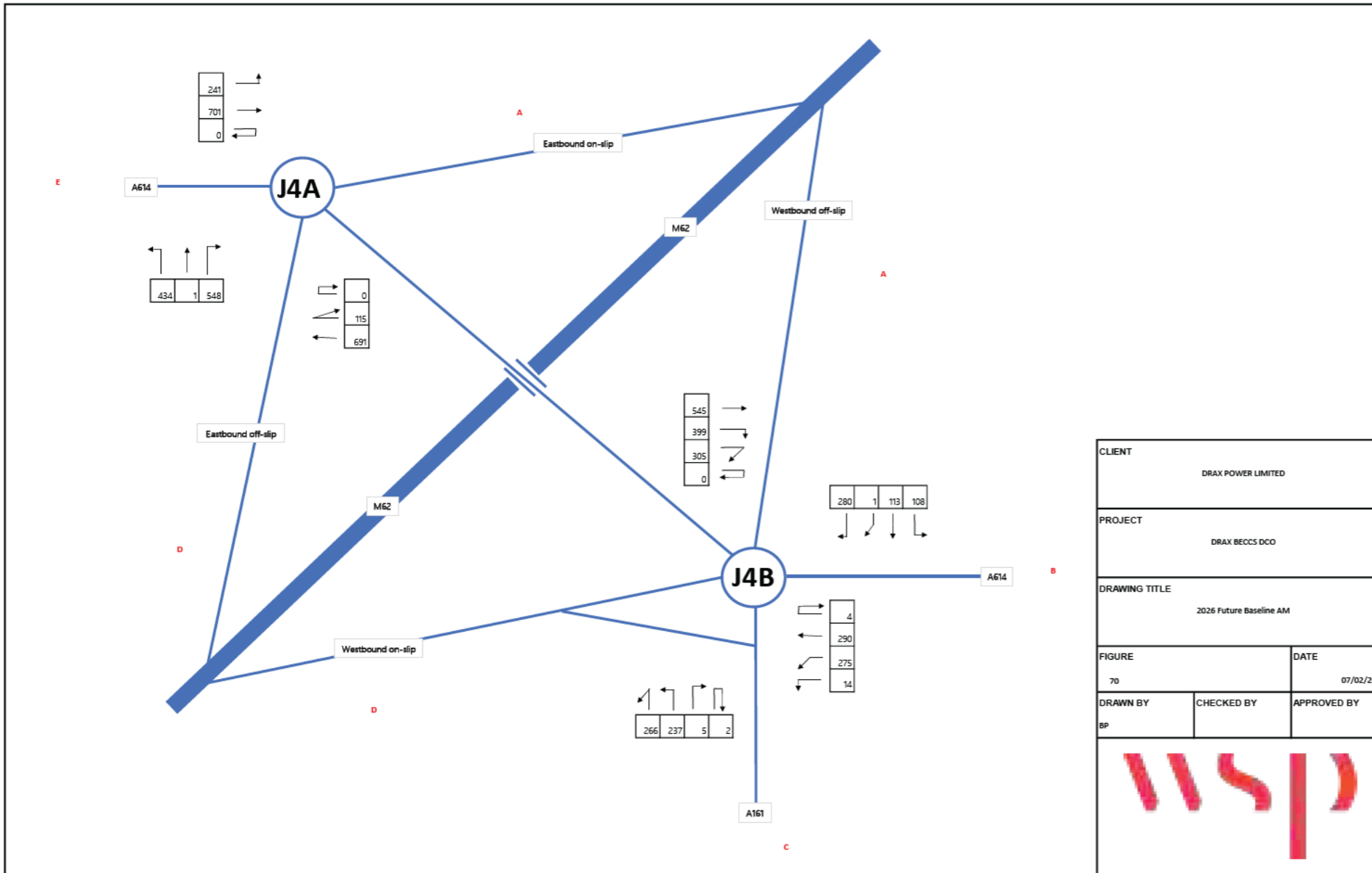
Total movements through junction
2732


1.0297

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	545	399	305
B	280	-	108	113	1
C	290	-	4	14	275
D	237	-	5	2	266
E	-	-	-	-	-

Total movements through junction
2845



CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2026 Future Baseline AM		
FIGURE	DATE	
70	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D
A	0	257	737	-
B	-	-	-	-
C	710	200	0	-
D	416	0	525	-

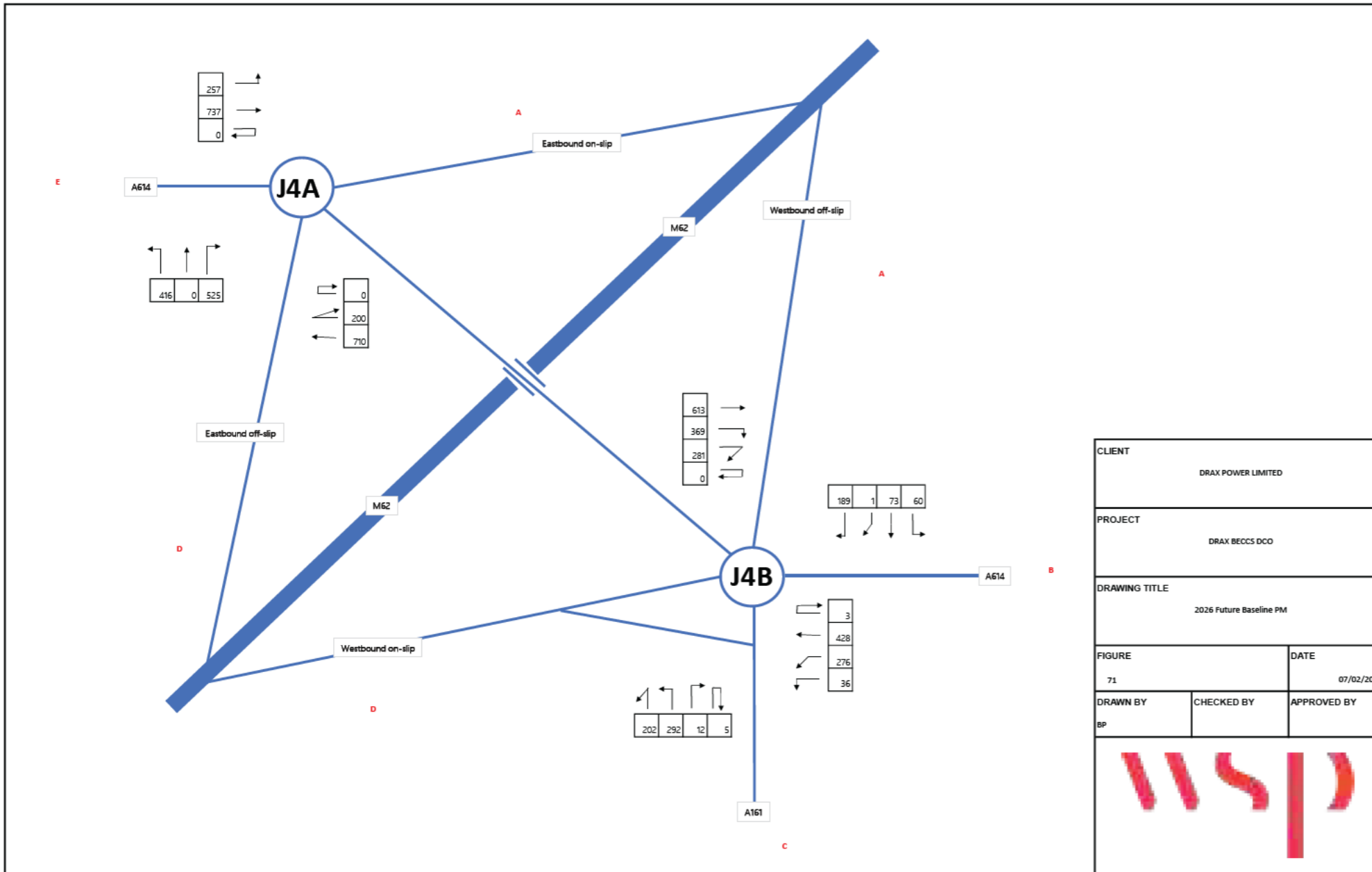
Total movements through junction
2844

1.0286

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	613	369	281
B	189	-	60	73	1
C	428	-	3	36	276
D	292	-	12	5	202
E	-	-	-	-	-

Total movements through junction
2840



CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2026 Future Baseline PM		
FIGURE	DATE	
71	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		

J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D
A	0	241	727	-
B	-	-	-	-
C	704	115	0	-
D	545	1	548	-

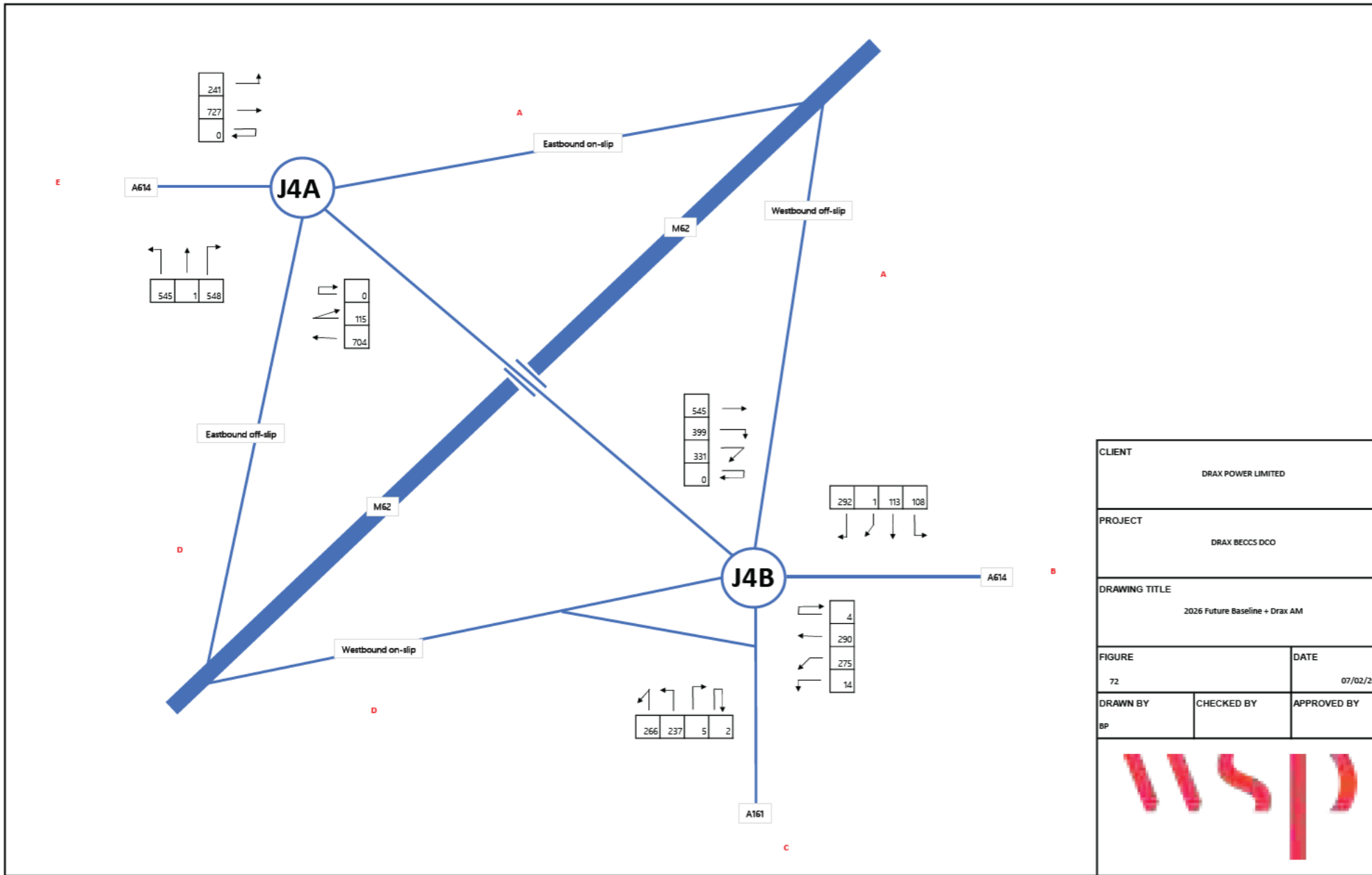
Total movements through junction
2881


1.0297

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	545	399	331
B	292	-	108	113	1
C	290	-	4	14	275
D	237	-	5	2	266
E	-	-	-	-	-

Total movements through junction
2883



CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2026 Future Baseline + Drax AM		
FIGURE		DATE
72		07/02/2023
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D
A	0	262	796	-
B	-	-	-	-
C	710	200	0	-
D	441	0	525	-

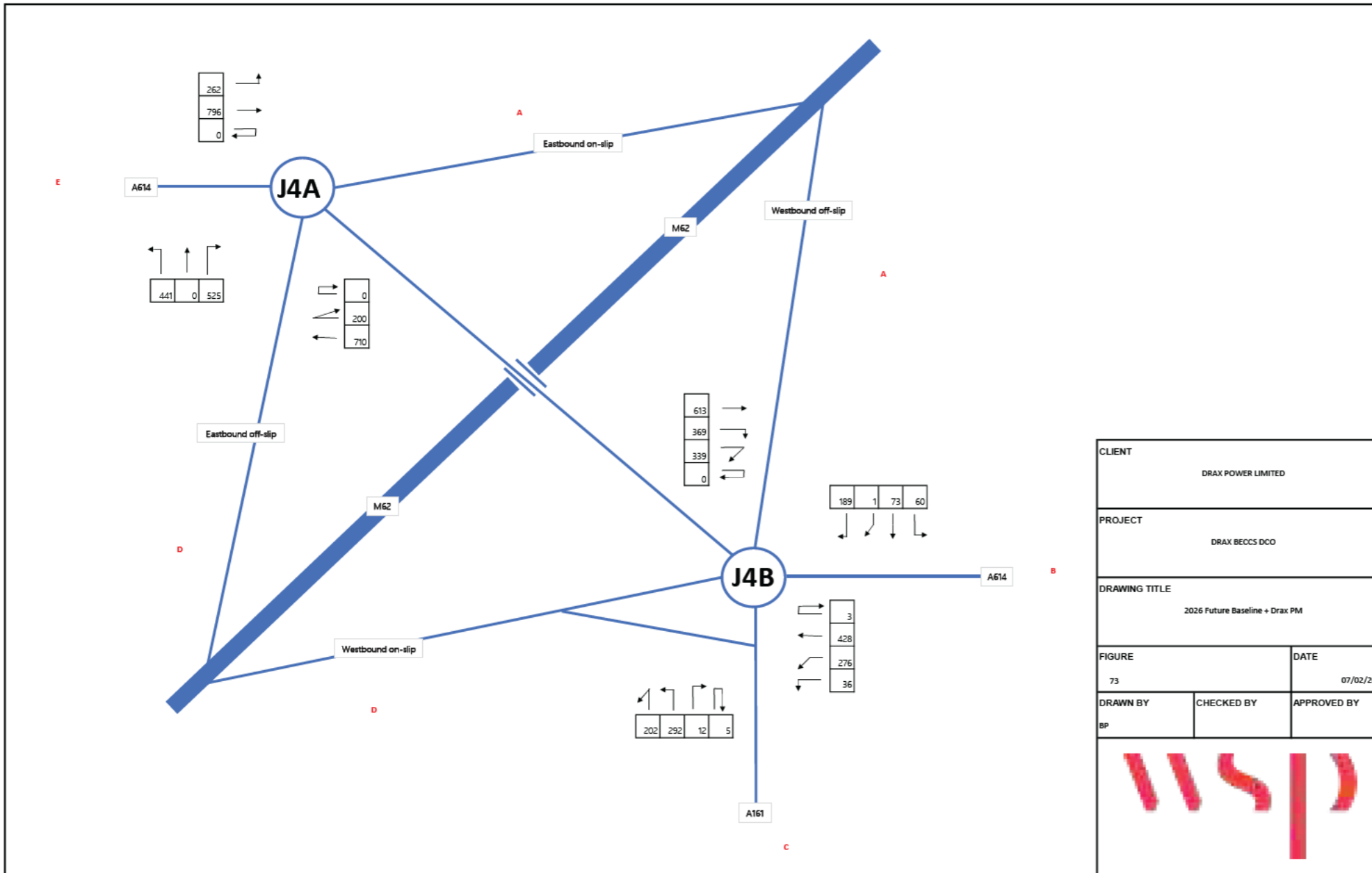
Total movements through junction
2934

1.0286

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	613	369	339
B	189	-	60	73	1
C	428	-	3	36	276
D	292	-	12	5	202
E	-	-	-	-	-

Total movements through junction
2899



CLIENT
DRAX POWER LIMITED

PROJECT
DRAX BECCS DCO

DRAWING TITLE
2026 Future Baseline + Drax PM

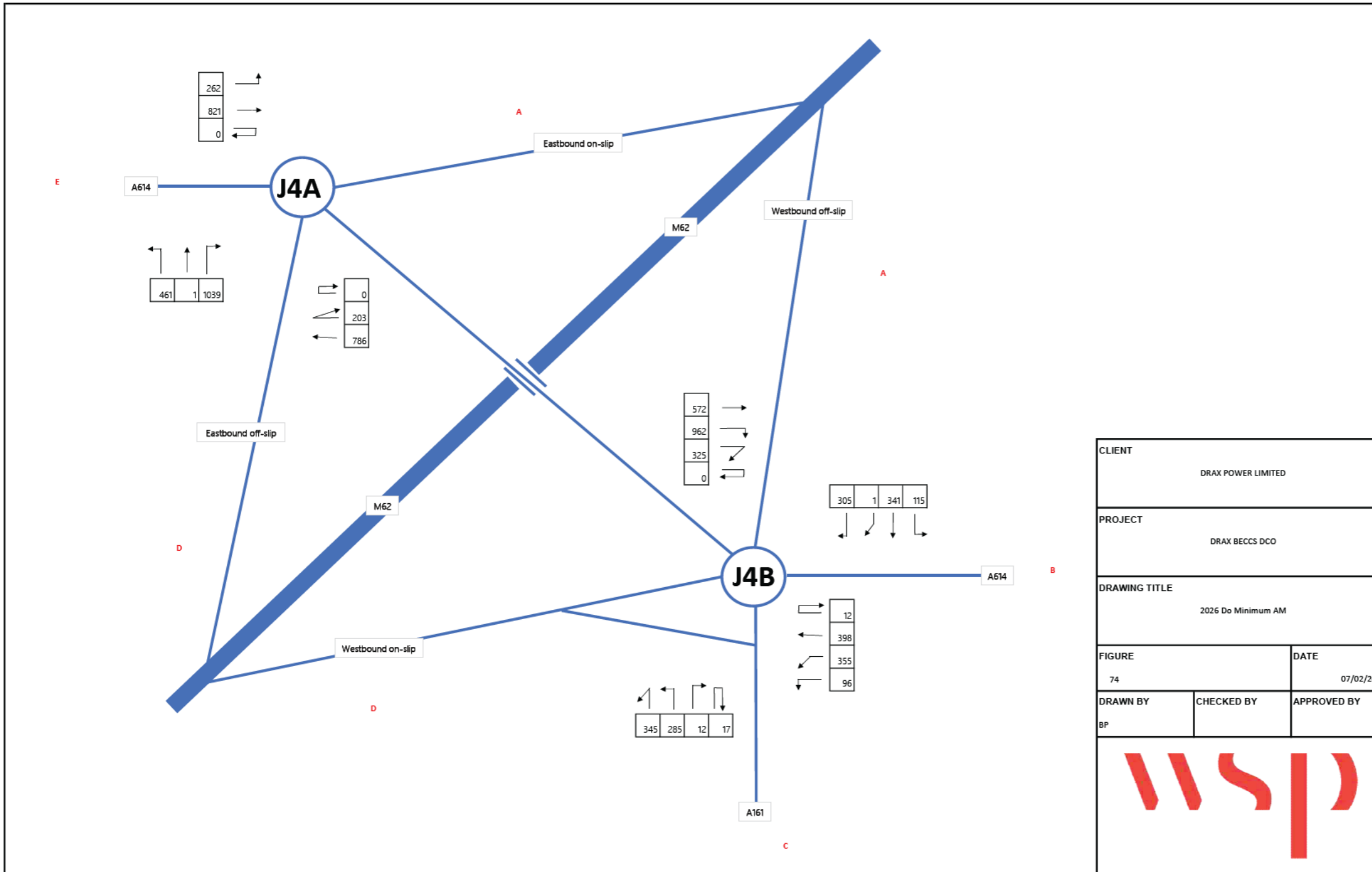
FIGURE
73

DATE
07/02/2023

DRAWN BY
BP

CHECKED BY

APPROVED BY




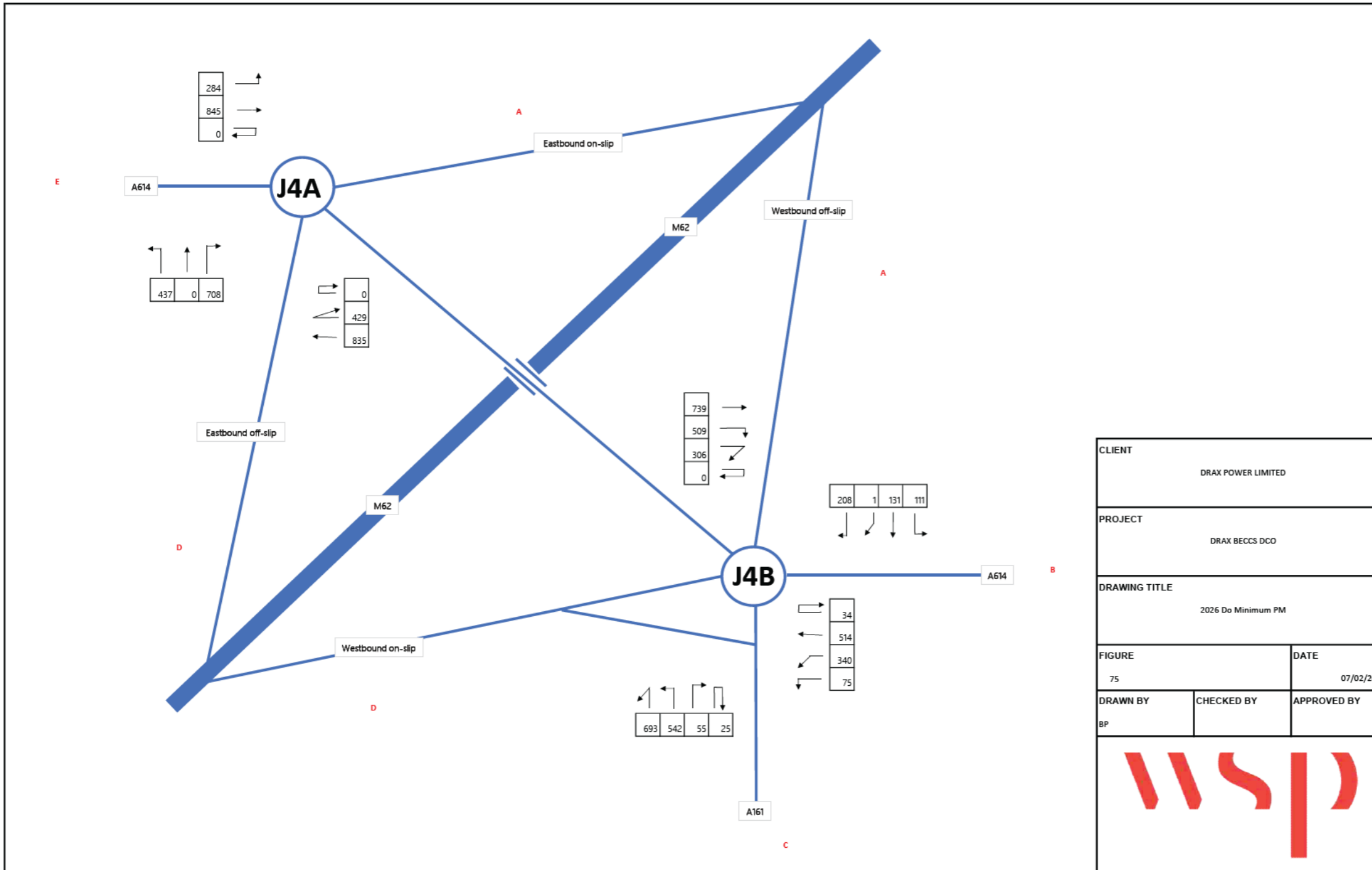
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	262	821	-	3572
B	-	-	-	-	
C	786	203	0	-	
D	461	1	1039	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	572	962	325	4143
B	305	-	115	341	1	
C	398	-	12	96	355	
D	285	-	12	17	345	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2026 Do Minimum AM		
FIGURE	DATE	
74	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




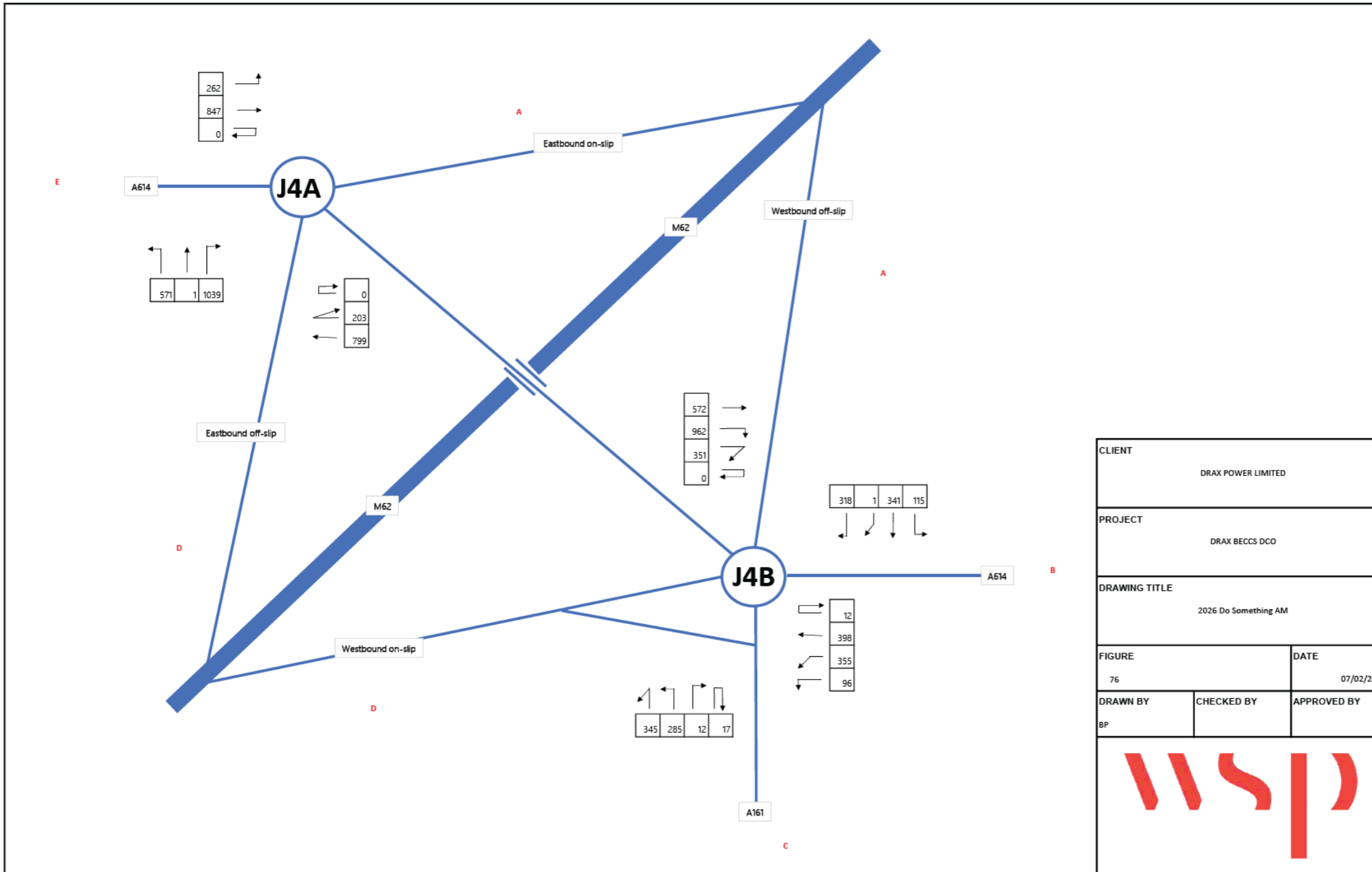
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	284	845	-	3538
B	-	-	-	-	
C	835	429	0	-	
D	437	0	708	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	739	509	306	4284
B	208	-	111	131	1	
C	514	-	34	75	340	
D	542	-	55	25	693	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2026 Do Minimum PM		
FIGURE	DATE	
75	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




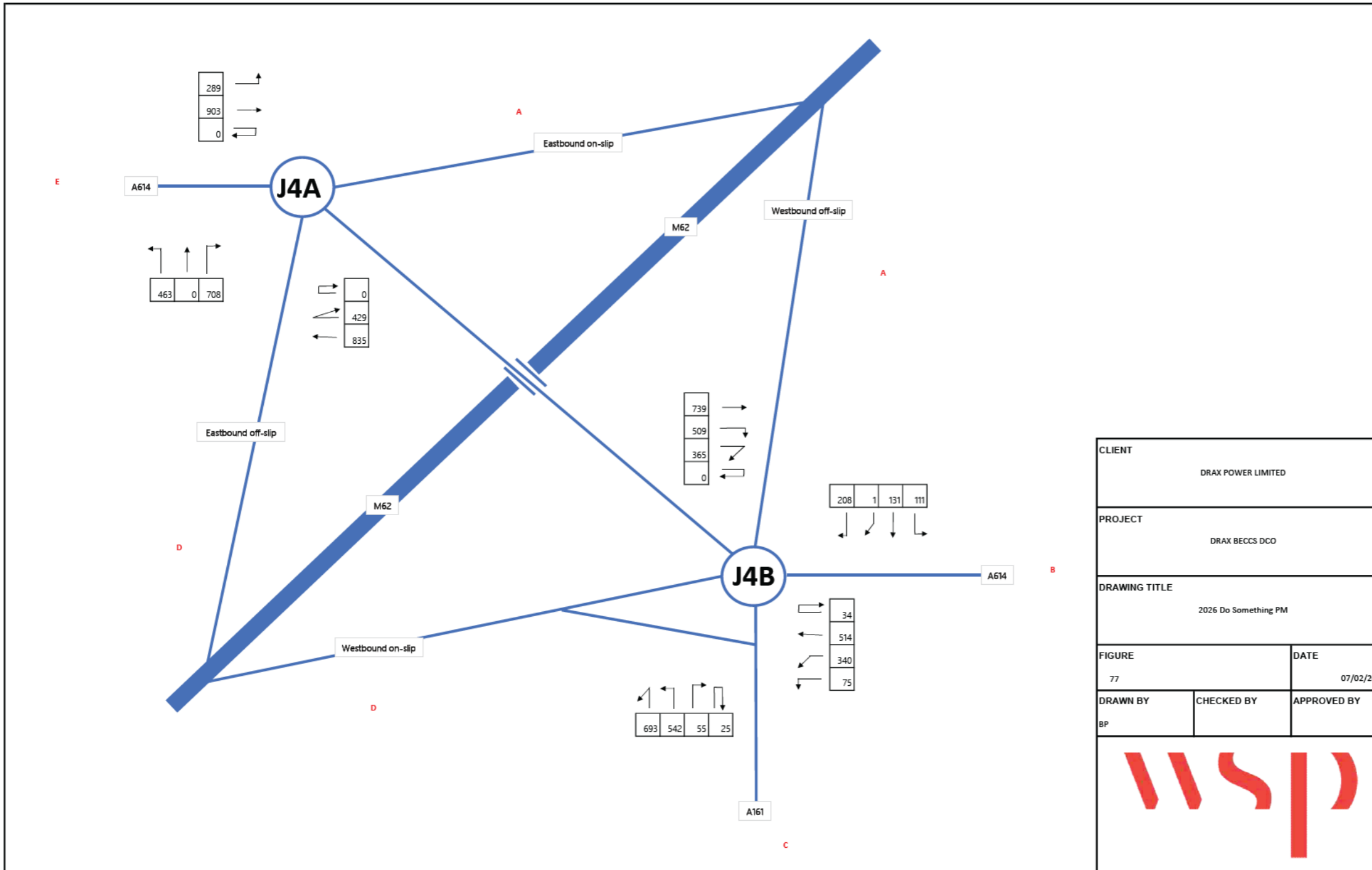
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	262	847	-	3722
B	-	-	-	-	
C	799	203	0	-	
D	571	1	1039	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	572	962	351	4182
B	318	-	115	341	1	
C	398	-	12	96	355	
D	285	-	12	17	345	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2026 Do Something AM		
FIGURE	DATE	
76	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




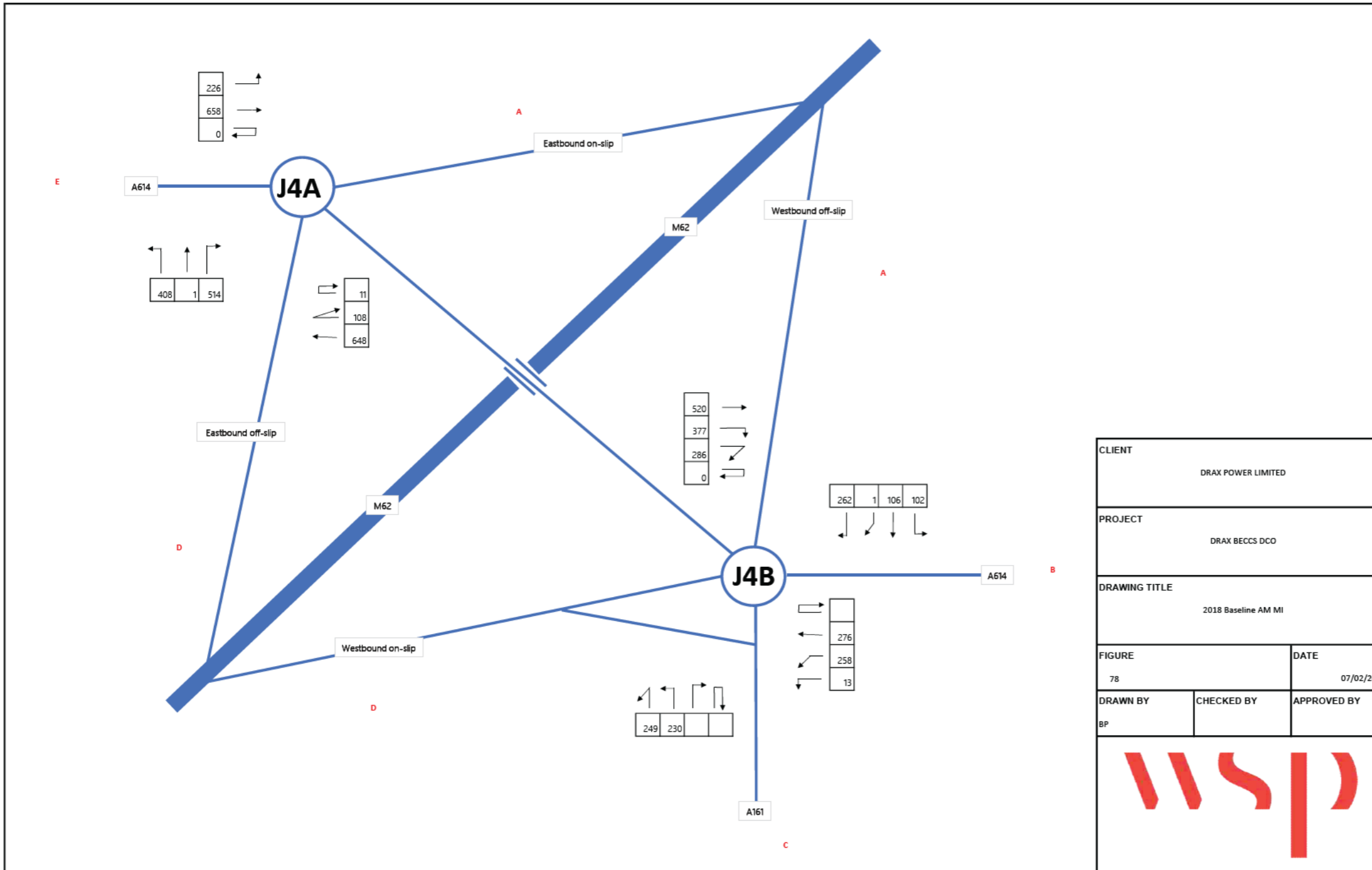
J4A M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	289	903	-	3627
B	-	-	-	-	
C	835	429	0	-	
D	463	0	708	-	

J4B M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	739	509	365	4343
B	208	-	111	131	1	
C	514	-	34	75	340	
D	542	-	55	25	693	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2026 Do Something PM		
FIGURE	DATE	
77	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

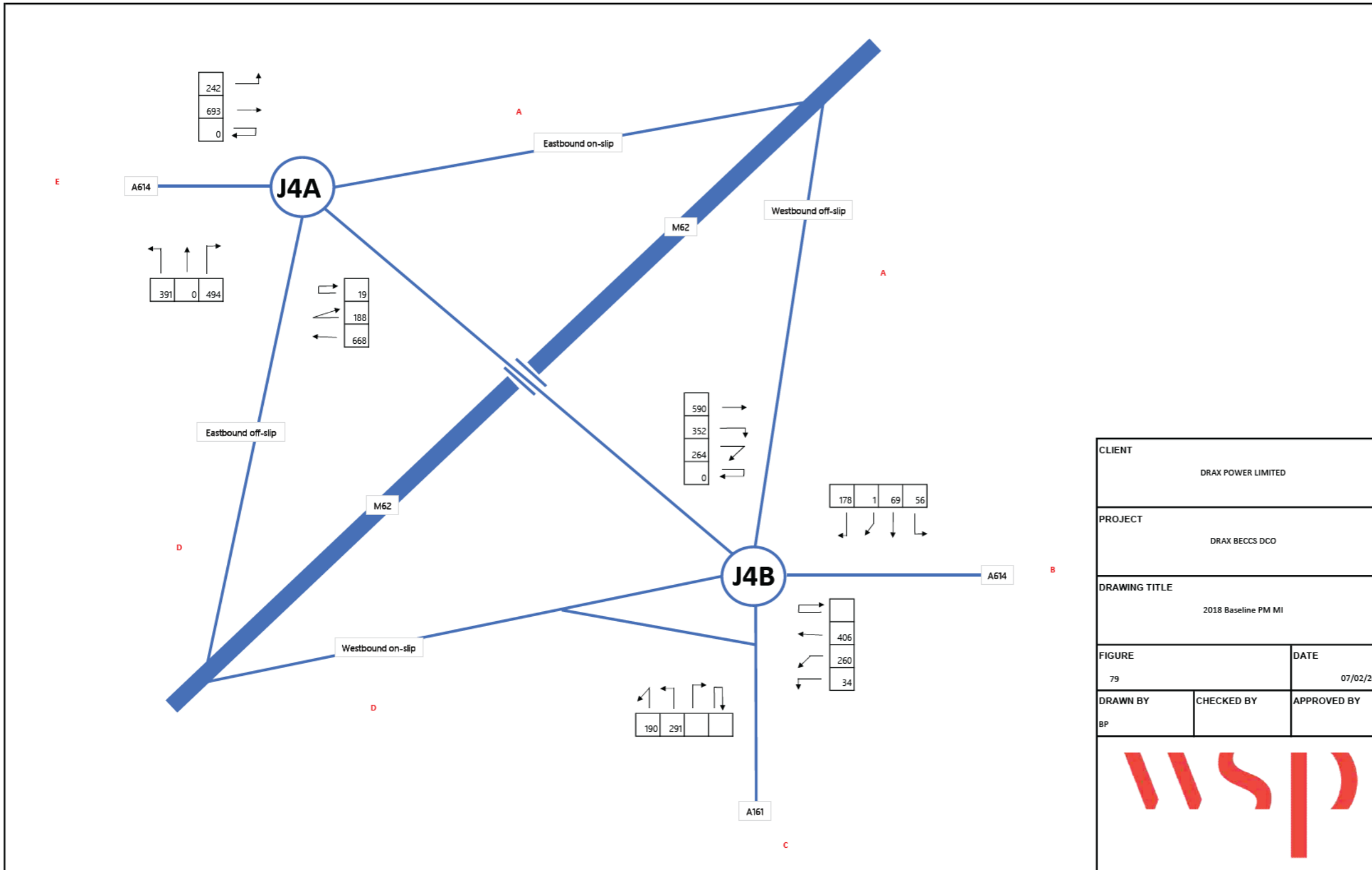
	A	B	C	D	Total movements through junction
A	0	226	658	-	2574
B	-	-	-	-	
C	648	108	11	-	
D	408	1	514	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	520	377	286	2680
B	262	-	102	106	1	
C	276	-	0	13	258	
D	230	-	0	0	249	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Baseline AM MI		
FIGURE	DATE	
78	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

MI = Minor Improvement Scheme as illustrated in the ERYC Infrastructure Study (2014)



J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

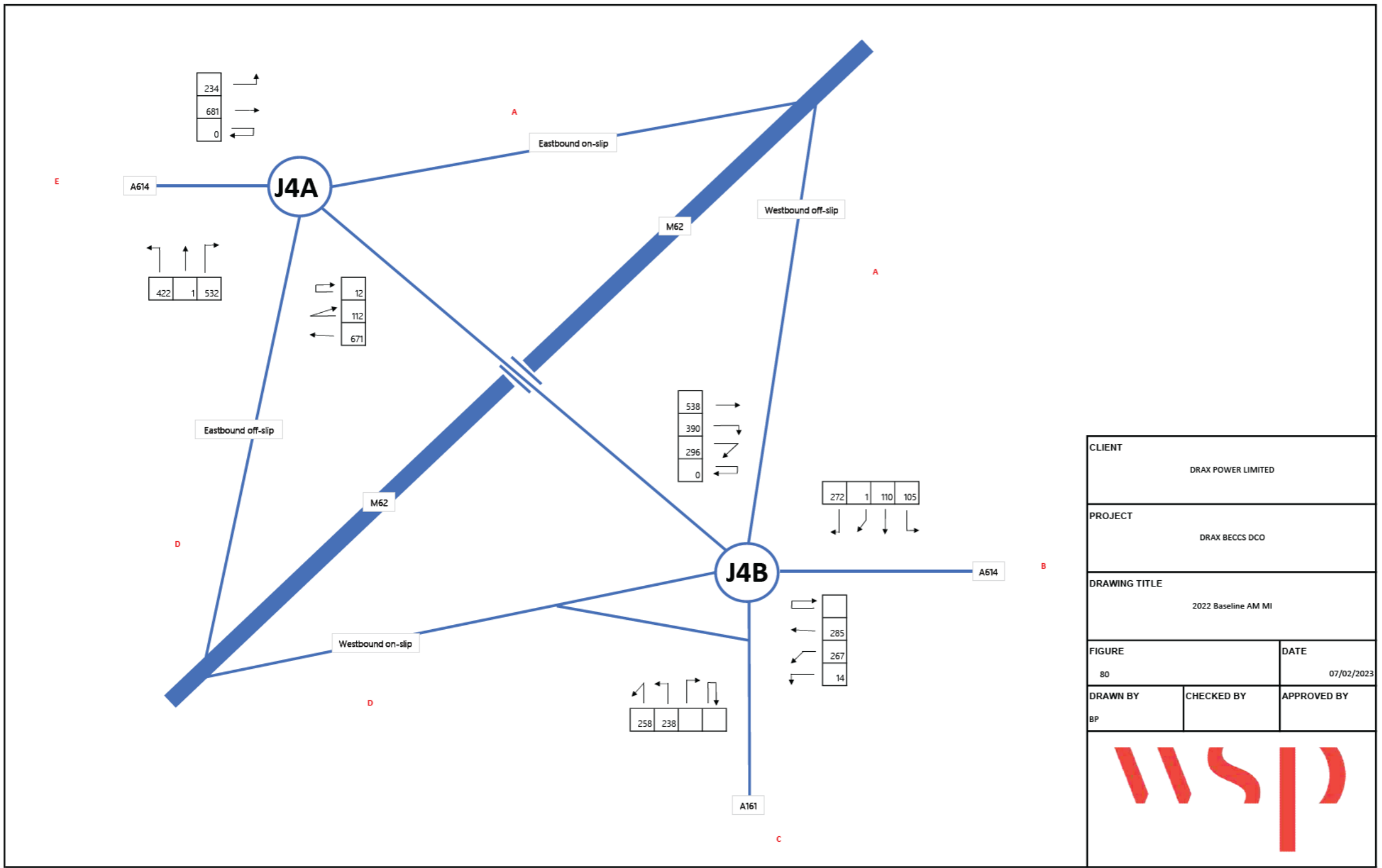
	A	B	C	D	Total movements through junction
A	0	242	693	-	2695
B	-	-	-	-	
C	668	188	19	-	
D	391	0	494	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	590	352	264	2691
B	178	-	56	69	1	
C	406	-	0	34	260	
D	291	-	0	0	190	
E	-	-	-	-	-	

CLIENT		DRAX POWER LIMITED	
PROJECT		DRAX BECCS DCO	
DRAWING TITLE		2018 Baseline PM MI	
FIGURE	DATE		
79	07/02/2023		
DRAWN BY	CHECKED BY	APPROVED BY	
BP			
			

MI = Minor Improvement Scheme as illustrated in the ERYC Infrastructure Study (2014)




J4A M62 JUNCTION 36 DUMBBELL ROUNDABOUT

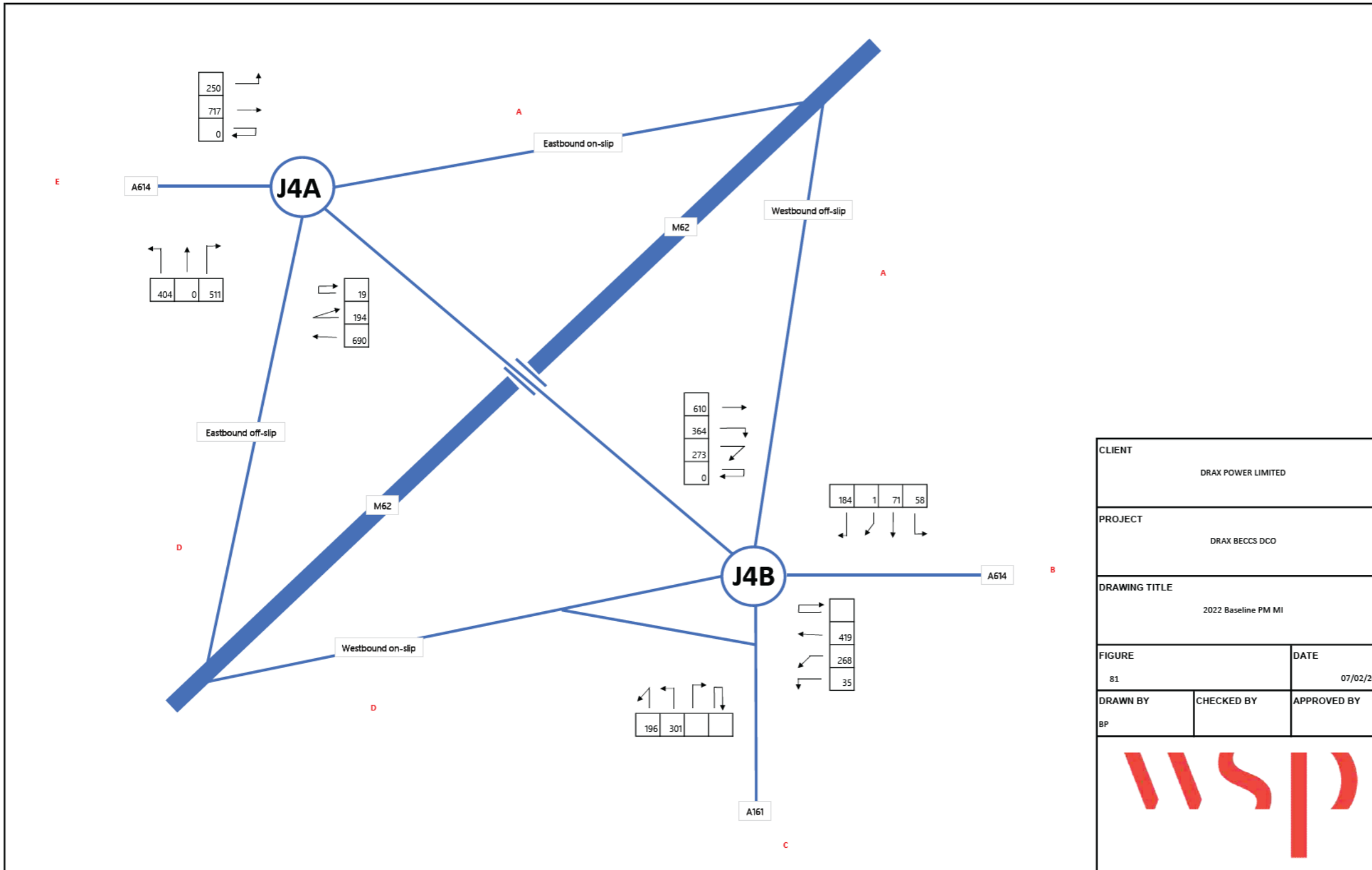
	A	B	C	D	Total movements through junction
A	0	234	681	-	2665
B	-	-	-	-	
C	671	112	12	-	
D	422	1	532	-	

J4B M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	538	390	296	2775
B	272	-	105	110	1	
C	285	-	0	14	267	
D	238	-	0	0	258	
E	-	-	-	-	-	

CLIENT		DRAX POWER LIMITED	
PROJECT		DRAX BECCS DCO	
DRAWING TITLE		2022 Baseline AM MI	
FIGURE	DATE		
80	07/02/2023		
DRAWN BY	CHECKED BY	APPROVED BY	
BP			
			

MI = Minor Improvement Scheme as illustrated in the ERYC Infrastructure Study (2014)




J4A M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	250	717	-	2785
B	-	-	-	-	
C	690	194	19	-	
D	404	0	511	-	

J4B M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	610	364	273	2781
B	184	-	58	71	1	
C	419	-	0	35	268	
D	301	-	0	0	196	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2022 Baseline PM MI		
FIGURE	DATE	
81	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

MI = Minor Improvement Scheme as illustrated in the ERYC Infrastructure Study (2014)

J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D
A	0	241	701	-
B	-	-	-	-
C	691	115	12	-
D	434	1	548	-

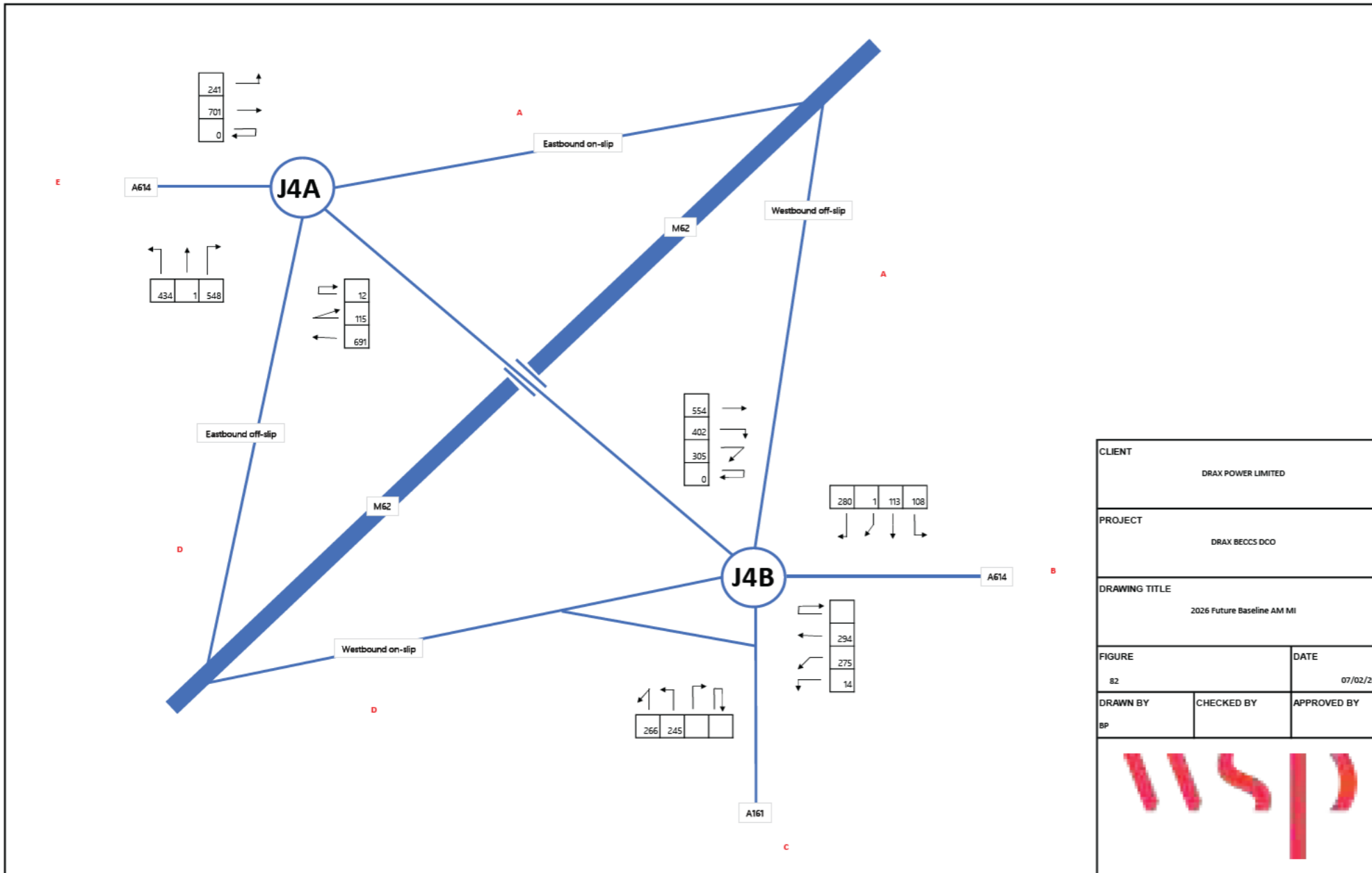
Total movements through junction
2744

1.0297

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	554	402	305
B	280	-	108	113	1
C	294	-	0	14	275
D	245	-	0	0	266
E	-	-	-	-	-

Total movements through junction
2857



CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2026 Future Baseline AM MI		
FIGURE	DATE	
B2	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

MI Minor Improvement Scheme as illustrated in the ERYC Infrastructure Study (2014)

J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D
A	0	257	737	-
B	-	-	-	-
C	710	200	20	-
D	416	0	525	-

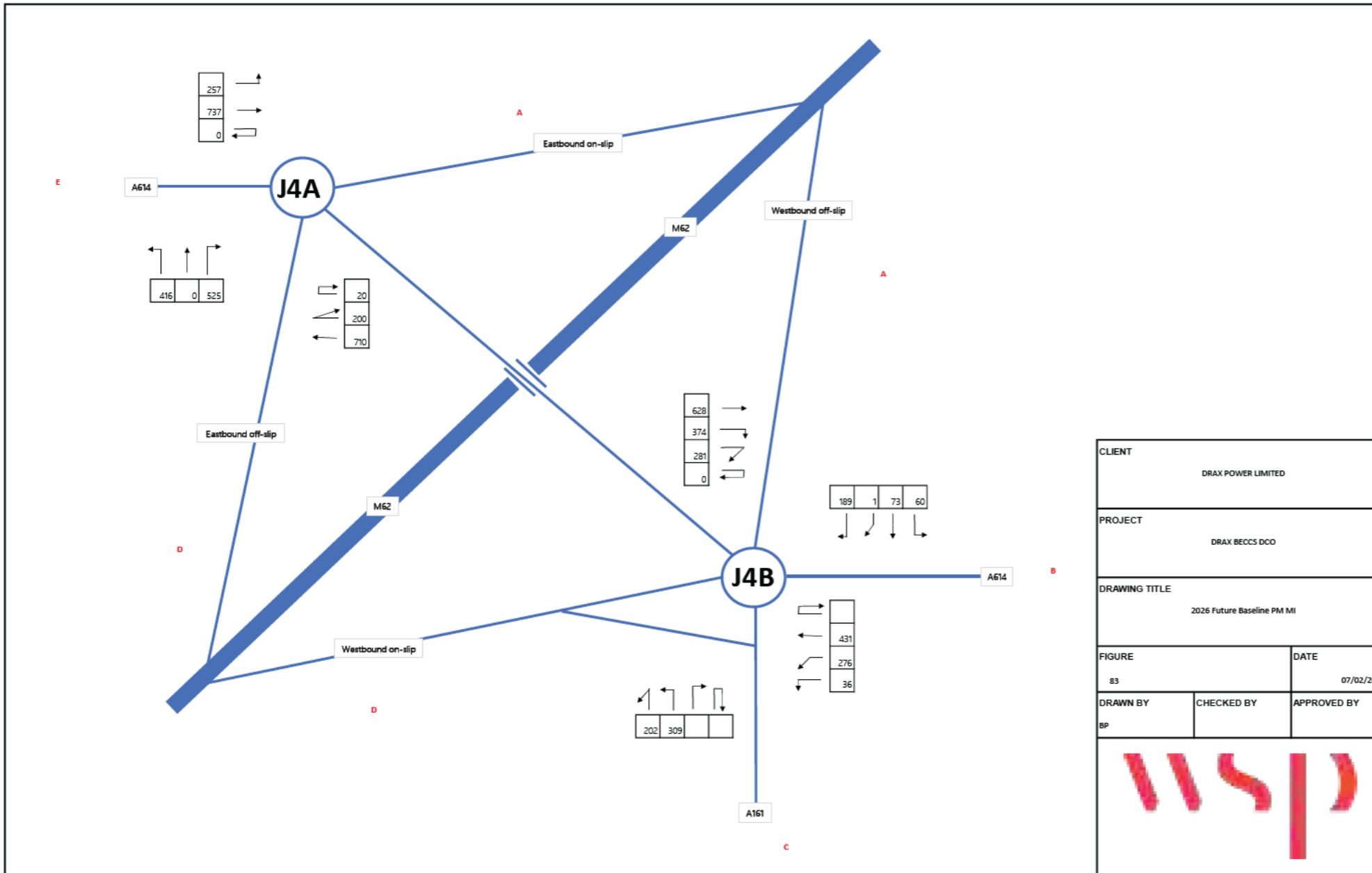
Total movements through junction
2864

1.0297

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	628	374	281
B	189	-	60	73	1
C	431	-	0	36	276
D	309	-	0	0	202
E	-	-	-	-	-

Total movements through junction
2860



CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2026 Future Baseline PM MI		
FIGURE	DATE	
B3	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

MI Minor Improvement Scheme as illustrated in the ERYC Infrastructure Study (2014)

J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D
A	0	241	727	-
B	-	-	-	-
C	704	115	12	-
D	545	1	548	-

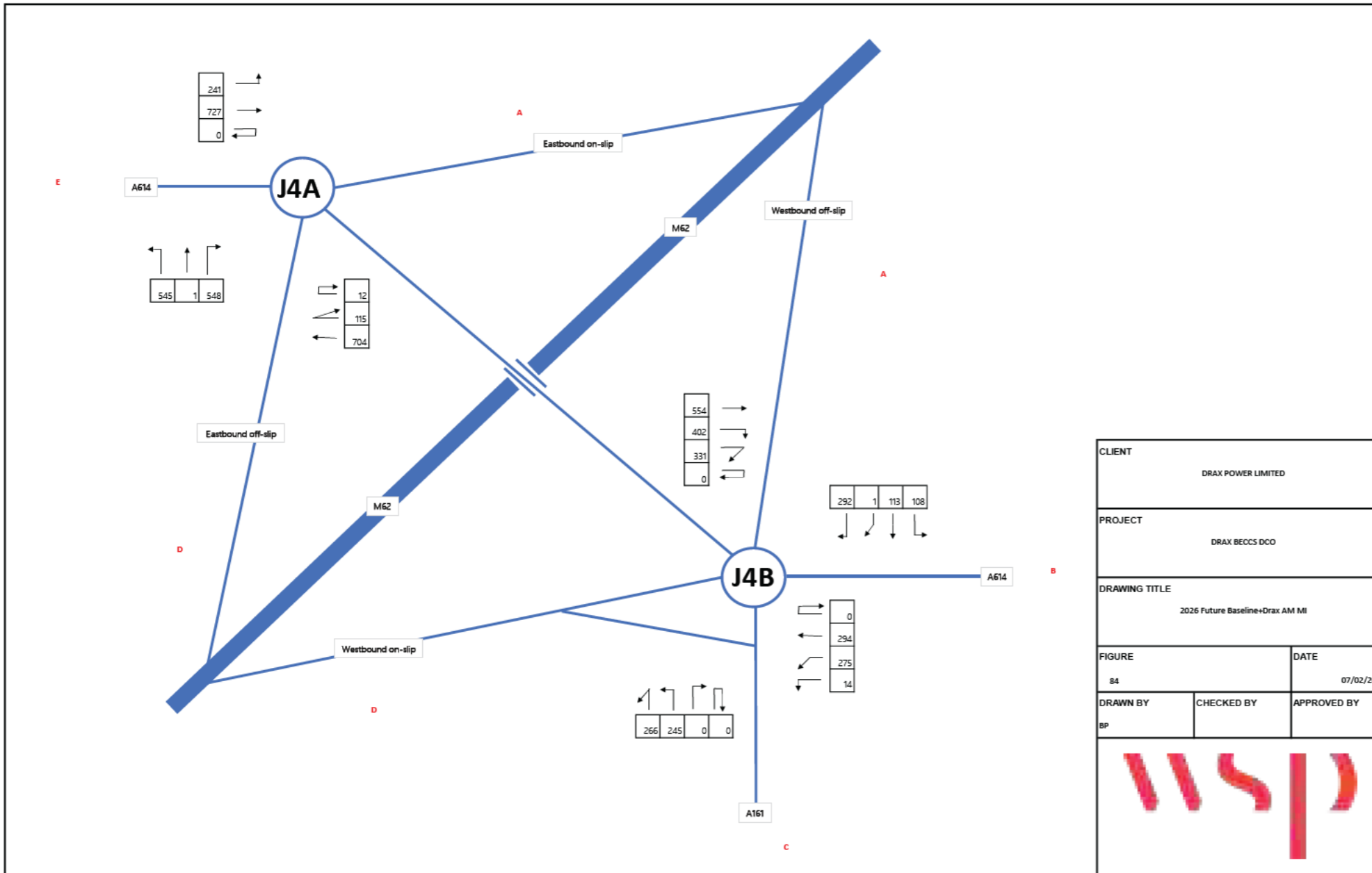
Total movements through junction
2893


1.0297

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

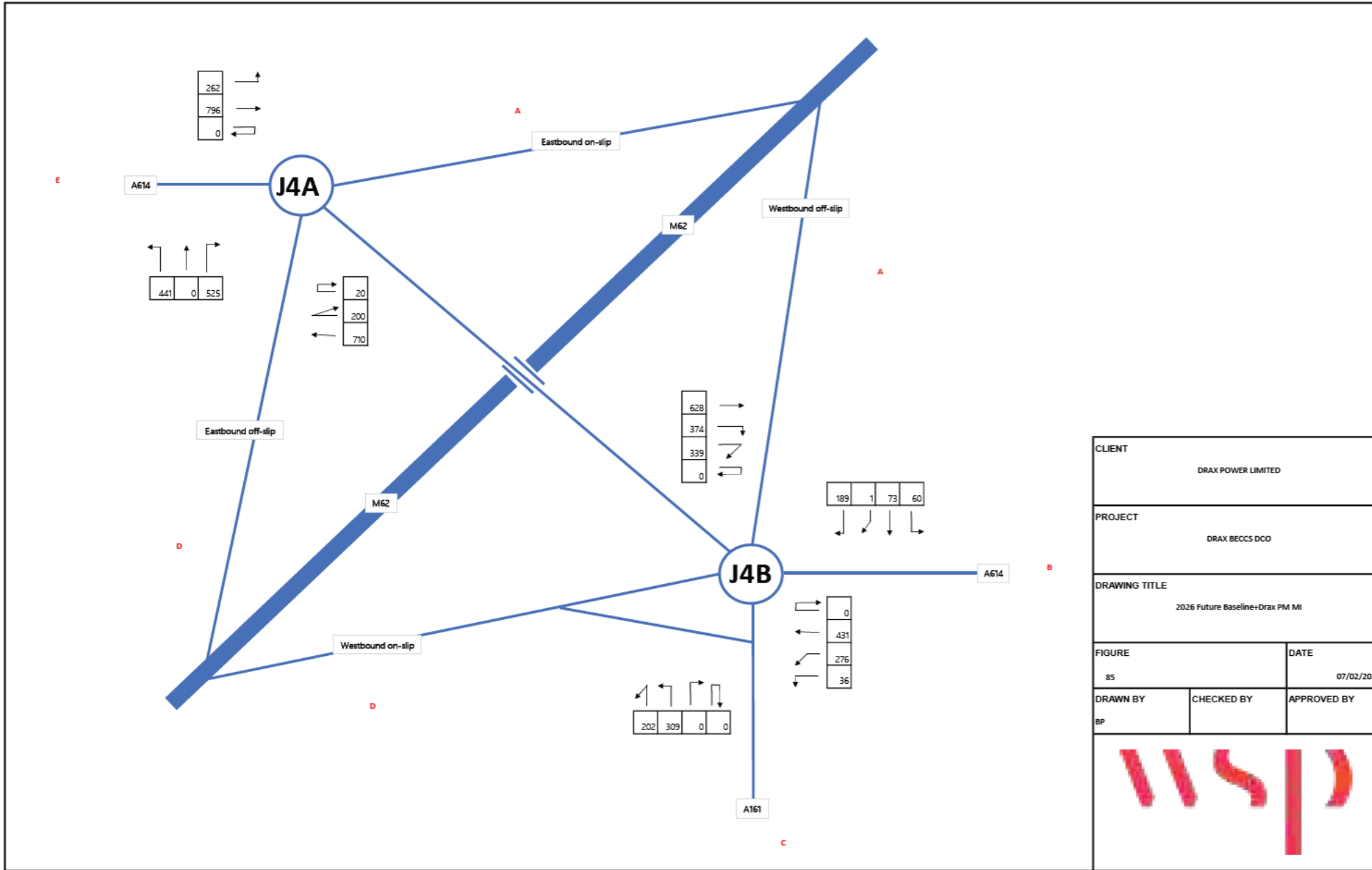
	A	B	C	D	E
A	0	-	554	402	331
B	292	-	108	113	1
C	294	-	0	14	275
D	245	-	0	0	266
E	-	-	-	-	-

Total movements through junction
2895



CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2026 Future Baseline+Drax AM MI		
FIGURE		DATE
84		07/02/2023
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

MI Minor Improvement Scheme as illustrated in the ERYC Infrastructure Study (2014)



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D
A	0	262	796	-
B	-	-	-	-
C	710	200	20	-
D	441	0	525	-


Total movements through junction
2954

1.0297

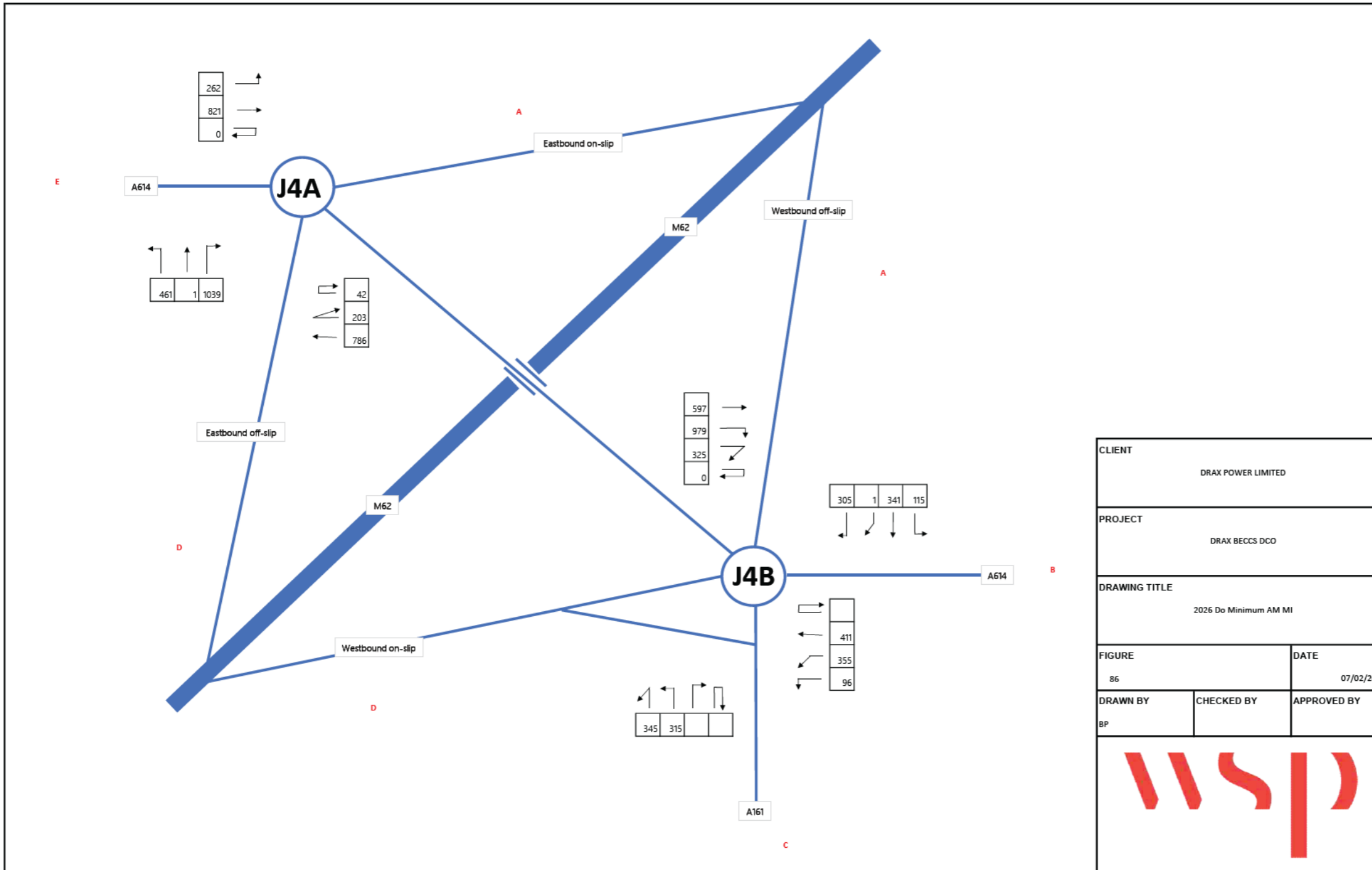
J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	628	374	339
B	189	-	60	73	1
C	431	-	0	36	276
D	309	-	0	0	202
E	-	-	-	-	-

Total movements through junction
2919

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2026 Future Baseline+Drax PM MI		
FIGURE		DATE
B5		07/02/2023
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

MI Minor Improvement Scheme as illustrated in the ERYC Infrastructure Study (2014)




J4A M62 JUNCTION 36 DUMBBELL ROUNDABOUT

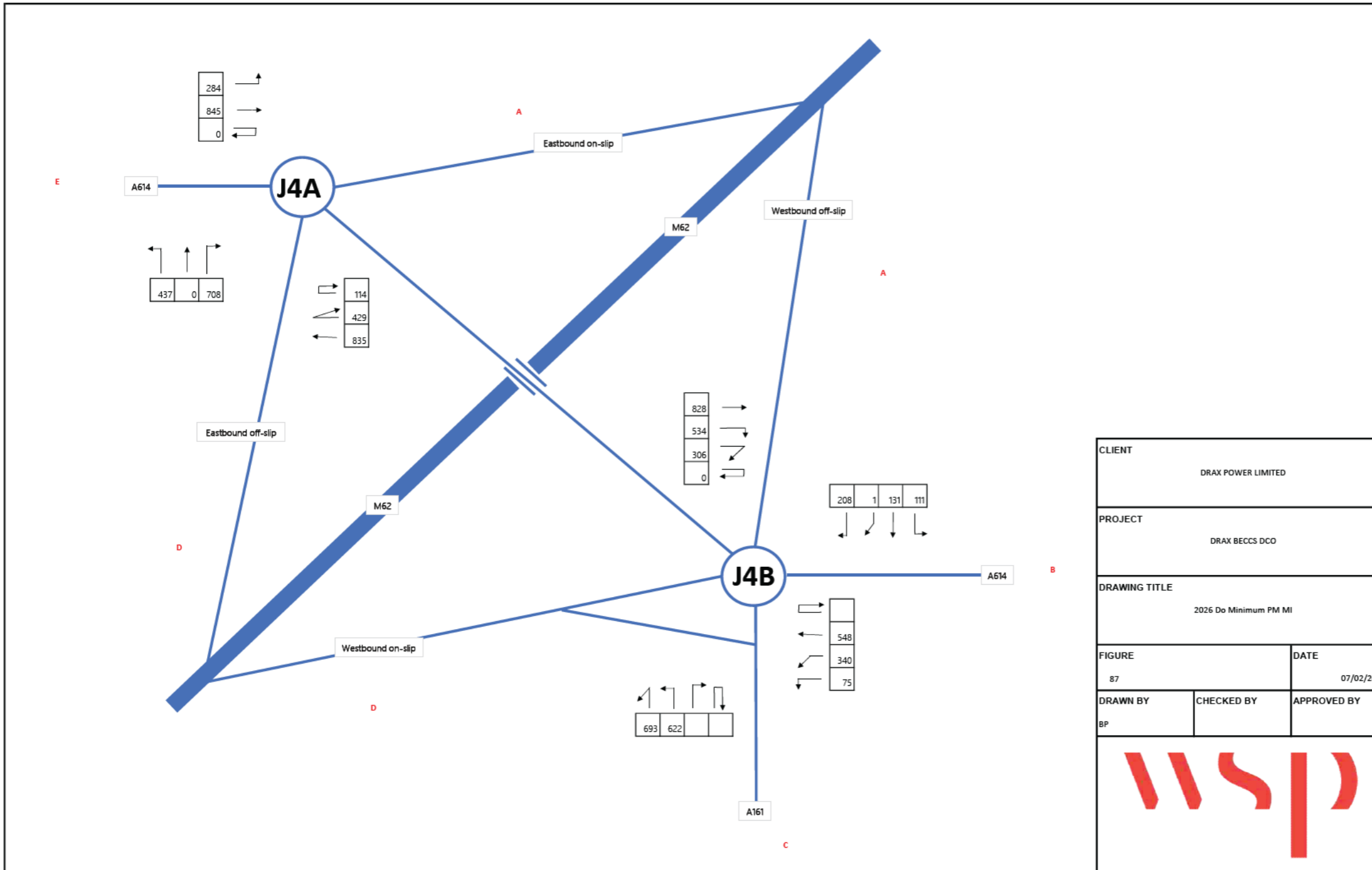
	A	B	C	D	Total movements through junction
A	0	262	821	-	3615
B	-	-	-	-	
C	786	203	42	-	
D	461	1	1039	-	

J4B M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	597	979	325	4185
B	305	-	115	341	1	
C	411	-	0	96	355	
D	315	-	0	0	345	
E	-	-	-	-	-	

CLIENT		DRAX POWER LIMITED	
PROJECT		DRAX BECCS DCO	
DRAWING TITLE			
2026 Do Minimum AM MI			
FIGURE		DATE	
86		07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY	
BP			
			

MI = Minor Improvement Scheme as illustrated in the ERYC Infrastructure Study (2014)




J4A M62 JUNCTION 36 DUMBBELL ROUNDABOUT

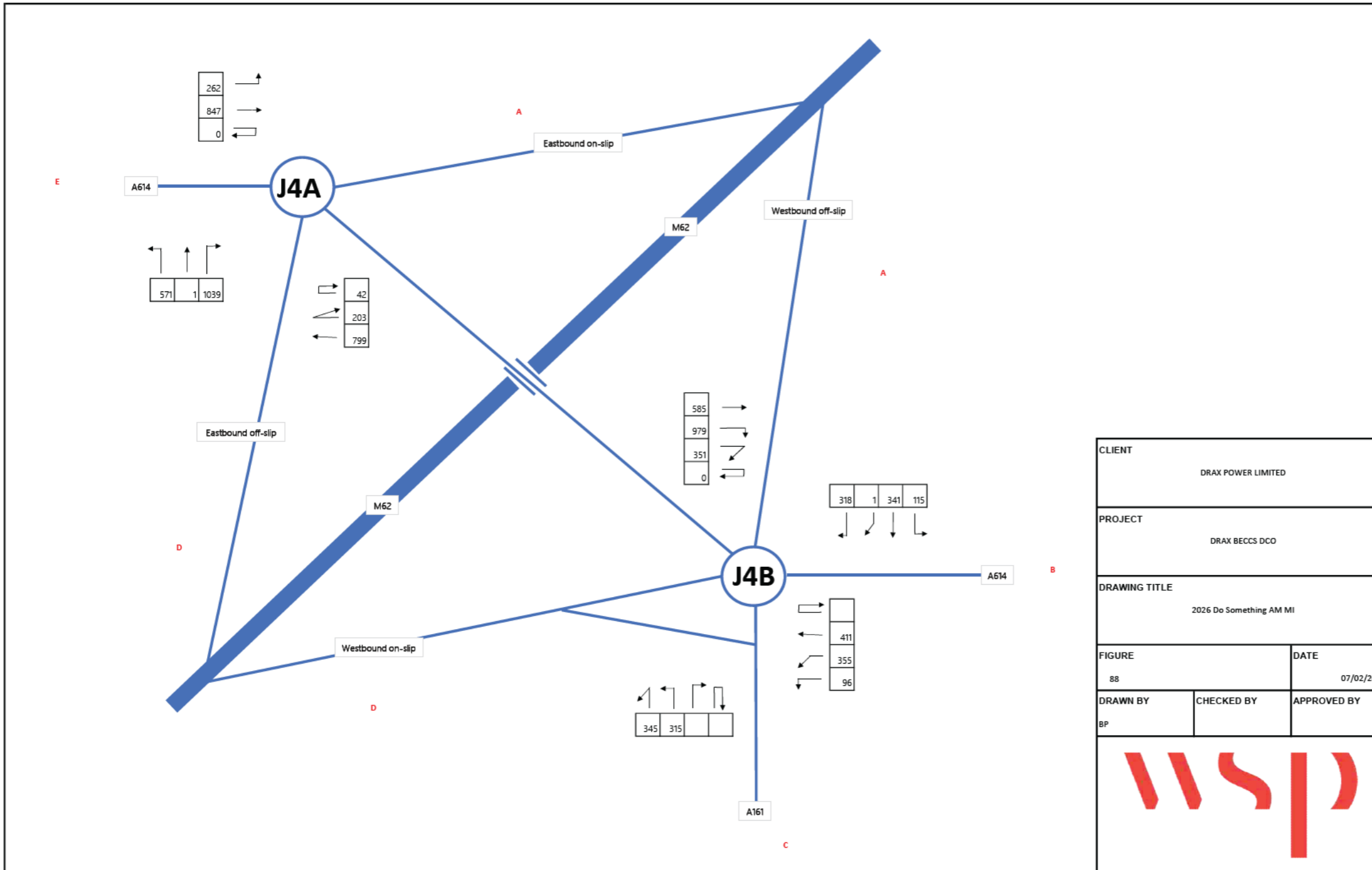
	A	B	C	D	Total movements through junction
A	0	284	845	-	3652
B	-	-	-	-	
C	835	429	114	-	
D	437	0	708	-	

J4B M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	828	534	306	4398
B	208	-	111	131	1	
C	548	-	0	75	340	
D	622	-	0	0	693	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2026 Do Minimum PM MI		
FIGURE	DATE	
87	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

MI = Minor Improvement Scheme as illustrated in the ERYC Infrastructure Study (2014)




J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

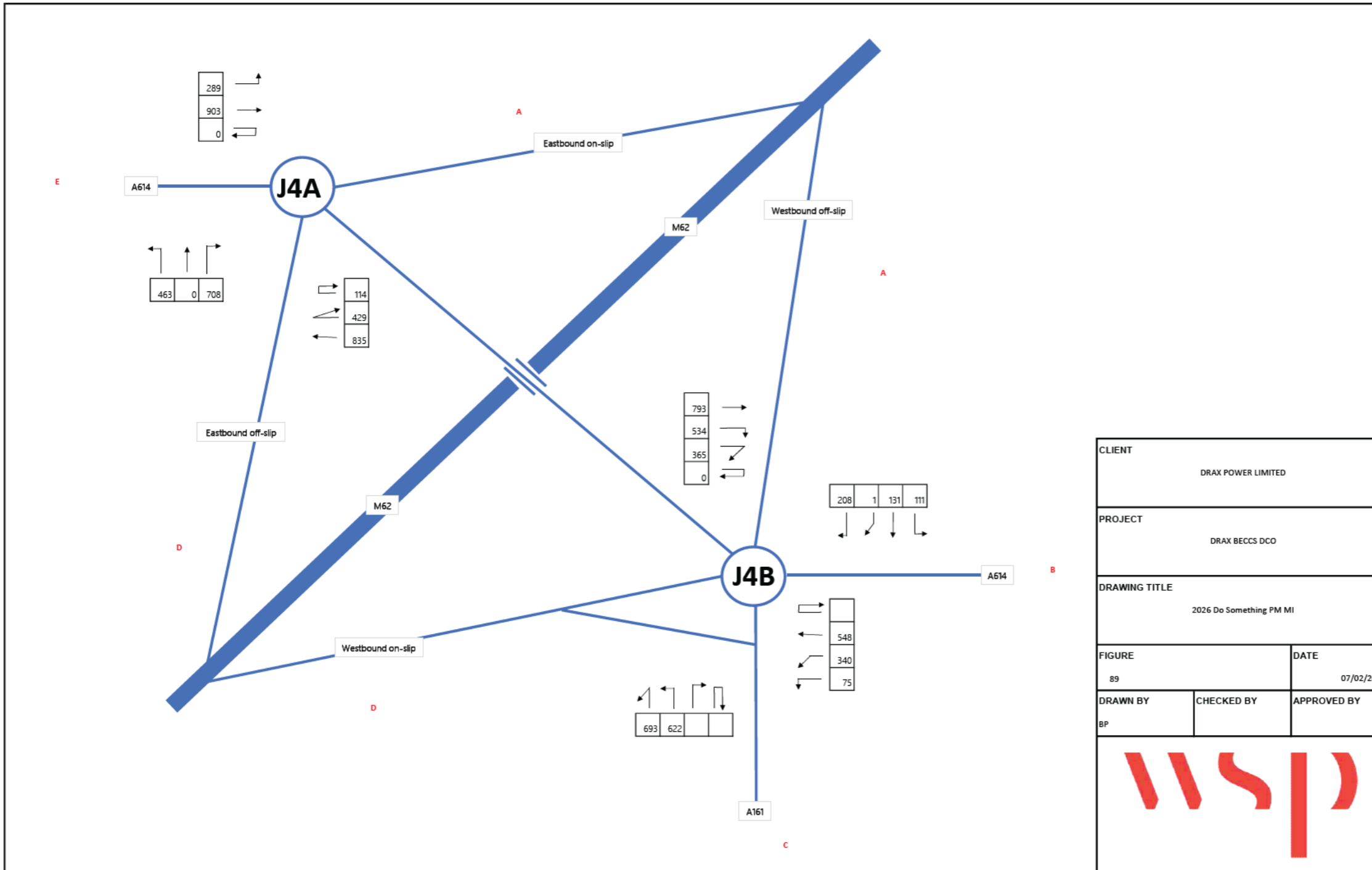
	A	B	C	D	Total movements through junction
A	0	262	847	-	3764
B	-	-	-	-	
C	799	203	42	-	
D	571	1	1039	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	585	979	351	4211
B	318	-	115	341	1	
C	411	-	0	96	355	
D	315	-	0	0	345	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2026 Do Something AM MI		
FIGURE	DATE	
88	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

MI = Minor Improvement Scheme as illustrated in the ERYC Infrastructure Study (2014)




J4A M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	289	903	-	3741
B	-	-	-	-	
C	835	429	114	-	
D	463	0	708	-	

J4B M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	793	534	365	4422
B	208	-	111	131	1	
C	548	-	0	75	340	
D	622	-	0	0	693	
E	-	-	-	-	-	

CLIENT		DRAX POWER LIMITED	
PROJECT		DRAX BECCS DCO	
DRAWING TITLE		2026 Do Something PM MI	
FIGURE	DATE		
89	07/02/2023		
DRAWN BY	CHECKED BY	APPROVED BY	
BP			
			

MI = Minor Improvement Scheme as illustrated in the ERYC Infrastructure Study (2014)

TAP 1		TAP 2		TAP 3		TAP 4		TAP 5		TAP 6		TAP 7		TAP 8		TAP 9		TAP 10		TAP 11		TAP 12		TAP 13		TAP 14		TAP 15		TAP 16		TAP 17		TAP 18		TAP 19		TAP 20		TAP 21		TAP 22		TAP 23		TAP 24		TAP 25		TAP 26		TAP 27		TAP 28		TAP 29		TAP 30		TAP 31		TAP 32		TAP 33		TAP 34		TAP 35		TAP 36		TAP 37		TAP 38		TAP 39		TAP 40		TAP 41		TAP 42		TAP 43		TAP 44		TAP 45		TAP 46		TAP 47		TAP 48		TAP 49		TAP 50		TAP 51		TAP 52		TAP 53		TAP 54		TAP 55		TAP 56		TAP 57		TAP 58		TAP 59		TAP 60		TAP 61		TAP 62		TAP 63		TAP 64		TAP 65		TAP 66		TAP 67		TAP 68		TAP 69		TAP 70		TAP 71		TAP 72		TAP 73		TAP 74		TAP 75		TAP 76		TAP 77		TAP 78		TAP 79		TAP 80		TAP 81		TAP 82		TAP 83		TAP 84		TAP 85		TAP 86		TAP 87		TAP 88		TAP 89		TAP 90		TAP 91		TAP 92		TAP 93		TAP 94		TAP 95		TAP 96		TAP 97		TAP 98		TAP 99		TAP 100	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100																																																																																																				

RESPONSE TO NATIONAL HIGHWAYS RELEVANT REPRESENTATIONS (SEPT 2022)

Appendix D – Junctions 10 Output – Existing Layout – Revised Assessment Scenarios

Drax Bioenergy with Carbon Capture and Storage

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 –
Regulation (5(2)(q))

Document Reference Number: 8.9.4

Applicant: Drax Power Limited

PINS Reference: EN010120



Junctions 10
ARCADY 10 - Roundabout Module
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Filename J4_wo Lane simulation - Existing Layout.j10
 Path W:\UNC\uk.wspgroup.com\Central Data\Projects\700720xx\70072063 - Drax BECCS DCO\03 Environment\05 Transport\29 - National Highways Response\02 - Analysis\Junction Models\Existing Layout\Model - Revised Assessment Scenario
 Report generation date 09/02/2023 15:30:02

- »2018 Baseline, AM
- »2018 Baseline, PM
- »2022 Future Baseline , AM
- »2022 Future Baseline , PM
- »2026 Future Baseline, AM
- »2026 Future Baseline, PM
- »2026 Future Baseline + Drax, AM
- »2026 Future Baseline + Drax, PM
- »2026 Do Minimum, AM
- »2026 Do Minimum, PM
- »2026 Do Something, AM
- »2026 Do Something, PM

Summary of junction performance

	AM				PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
2018 Baseline										
3E Site 3 A Link	D1	1.4	3.95	0.55	A	D2	1.4	3.84	0.56	A
3E Site 3 B M62 Southbound Off Ramp		1.6	11.19	0.60	B		0.7	7.88	0.39	A
3E Site 3 C A614 Rawcliffe Road (East)		0.5	3.24	0.33	A		0.7	3.24	0.40	A
3E Site 3 D A161		0.3	4.14	0.20	A		0.4	4.20	0.26	A
3W Site 3 A A614 Rawcliffe Road (West)		2.5	9.54	0.70	A		3.4	12.08	0.77	B
3W Site 3 C Link		1.2	5.38	0.53	A		1.6	6.02	0.60	A
3W Site 3 D M62 Northbound Off Ramp	0.9	3.34	0.43	A	0.9	3.26	0.43	A		
2022 Future Baseline										
3E Site 3 A Link	D3	1.5	4.13	0.57	A	D4	1.5	4.02	0.58	A
3E Site 3 B M62 Southbound Off Ramp		1.8	12.58	0.63	B		0.8	8.37	0.41	A
3E Site 3 C A614 Rawcliffe Road (East)		0.6	3.37	0.35	A		0.7	3.37	0.42	A
3E Site 3 D A161		0.3	4.27	0.21	A		0.4	4.35	0.27	A
3W Site 3 A A614 Rawcliffe Road (West)		3.0	10.81	0.74	B		4.1	14.28	0.80	B
3W Site 3 C Link		1.3	5.60	0.55	A		1.7	6.33	0.62	A
3W Site 3 D M62 Northbound Off Ramp	1.0	3.48	0.45	A	1.0	3.41	0.45	A		
2026 Future Baseline										
3E Site 3 A Link	D5	1.6	4.30	0.59	A	D6	1.6	4.18	0.59	A
3E Site 3 B M62 Southbound Off Ramp		2.1	14.08	0.68	B		0.9	8.86	0.43	A
3E Site 3 C A614 Rawcliffe Road (East)		0.6	3.49	0.36	A		0.8	3.50	0.43	A
3E Site 3 D A161		0.3	4.39	0.22	A		0.4	4.50	0.28	A
3W Site 3 A A614 Rawcliffe Road (West)		3.4	12.20	0.76	B		4.9	16.88	0.83	C
3W Site 3 C Link		1.4	5.81	0.56	A		1.8	6.63	0.64	A
3W Site 3 D M62 Northbound Off Ramp	1.1	3.63	0.47	A	1.0	3.55	0.47	A		
2026 Future Baseline + Drax										
3E Site 3 A Link	D7	1.7	4.43	0.60	A	D8	1.8	4.49	0.62	A
3E Site 3 B M62 Southbound Off Ramp		2.4	15.48	0.69	C		0.9	9.44	0.45	A
3E Site 3 C A614 Rawcliffe Road (East)		0.6	3.58	0.37	A		0.8	3.63	0.44	A
3E Site 3 D A161		0.3	4.50	0.23	A		0.4	4.69	0.29	A
3W Site 3 A A614 Rawcliffe Road (West)		3.8	13.37	0.79	B		7.3	23.81	0.88	C
3W Site 3 C Link		1.5	5.92	0.57	A		1.8	6.63	0.64	A
3W Site 3 D M62 Northbound Off Ramp	1.4	4.08	0.53	A	1.1	3.64	0.48	A		
2026 Do Minimum										
3E Site 3 A Link	D9	5.0	9.81	0.82	A	D10	2.4	5.60	0.69	A
3E Site 3 B M62 Southbound Off Ramp		153.2	796.78	1.44	F		2.8	20.80	0.72	C
3E Site 3 C A614 Rawcliffe Road (East)		2.4	9.10	0.69	A		1.6	5.40	0.60	A
3E Site 3 D A161		0.5	5.35	0.30	A		1.9	9.94	0.63	A
3W Site 3 A A614 Rawcliffe Road (West)		104.4	289.95	1.19	F		101.2	267.42	1.18	F
3W Site 3 C Link		1.8	6.78	0.63	A		7.3	19.95	0.88	C
3W Site 3 D M62 Northbound Off Ramp	3.4	7.62	0.74	A	2.2	6.22	0.65	A		
2026 Do Something										
3E Site 3 A Link	D11	5.1	9.96	0.82	A	D12	2.5	5.69	0.69	A
3E Site 3 B M62 Southbound Off Ramp		168.4	886.46	1.48	F		2.8	21.29	0.72	C
3E Site 3 C A614 Rawcliffe Road (East)		2.4	9.26	0.69	A		1.6	5.57	0.61	A
3E Site 3 D A161		0.5	5.46	0.31	A		2.0	10.64	0.65	B
3W Site 3 A A614 Rawcliffe Road (West)		118.2	326.83	1.22	F		136.6	375.99	1.24	F
3W Site 3 C Link		1.9	6.83	0.63	A		7.3	19.94	0.88	C
3W Site 3 D M62 Northbound Off Ramp	4.7	9.72	0.80	A	2.3	6.50	0.67	A		

There are warnings associated with one or more model runs - see the Data Errors and Warnings' tables for each Analysis or Demand Set.
 Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

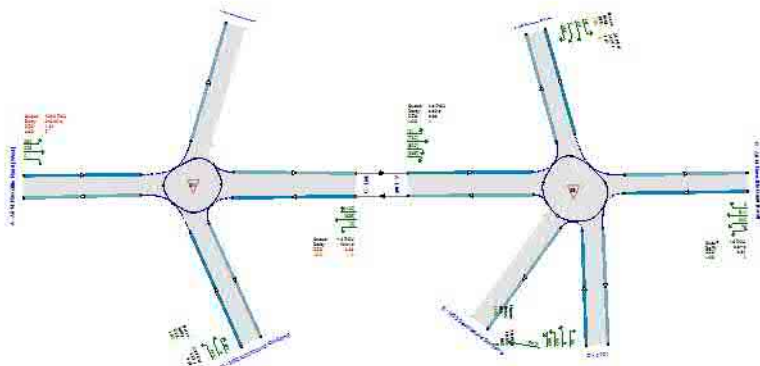
File summary

File Description	
Title	Site 3
Location	
Site number	
Date	28/03/2018
Version	

Status	
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INTW00749
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin



File:K:\au\ogha\traff\demand\PCUs

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Baseline	AM	ONE HOUR	07 30	09 00	15	✓
D2	2018 Baseline	PM	ONE HOUR	16 15	17 45	15	✓
D3	2022 Future Baseline	AM	ONE HOUR	07 30	09 00	15	✓
D4	2022 Future Baseline	PM	ONE HOUR	16 15	17 45	15	✓
D5	2026 Future Baseline	AM	ONE HOUR	07 30	09 00	15	✓
D6	2026 Future Baseline	PM	ONE HOUR	16 15	17 45	15	✓
D7	2026 Future Baseline + Drax	AM	ONE HOUR	07 30	09 00	15	✓
D8	2026 Future Baseline + Drax	PM	ONE HOUR	16 15	17 45	15	✓
D9	2026 Do Minimum	AM	ONE HOUR	07 30	09 00	15	✓
D10	2026 Do Minimum	PM	ONE HOUR	16 15	17 45	15	✓
D11	2026 Do Something	AM	ONE HOUR	07 30	09 00	15	✓
D12	2026 Do Something	PM	ONE HOUR	16 15	17 45	15	✓

Analysis Set Details

ID	include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2018 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	3W - Site 3 - C - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	3E - Site 3 - A - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	5.12	A
3W	Site 3	Standard Roundabout		B, C, D, A	6.08	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.59	A

Arms

Arms

Junction	Arm	Name	Description	No give way line
3E Site 3	A	Link		
	B	M62 Southbound Off-Ramp		
	C	A614 Rawcliffe Road (East)		
	D	A161		
	E	M62 Southbound On-Ramp		
3W Site 3	A	A614 Rawcliffe Road (West)		
	B	M62 Northbound On-Ramp		
	C	Link		
	D	M62 Northbound Off-Ramp		

Roundabout Geometry

Junction	Arm	V Approach road half width (m)	E Entry width (m)	I' Effective flare length (m)	R Entry radius (m)	D Inscribed circle diameter (m)	PHI Conflict (entry) angle (deg)	Entry only	Exit only
3E Site 3	A Link	6.80	7.80	61.7	19.8	70.0	29.0		
	B M62 Southbound Off Ramp	5.10	5.30	0.5	37.6	70.0	58.0		
	C A614 Rawcliffe Road (East)	5.90	9.70	29.7	18.0	70.0	37.0		
	D A161	3.40	9.10	16.8	18.3	70.0	21.0		
	E M62 Southbound On Ramp								✓
3W Site 3	A A614 Rawcliffe Road (West)	3.90	8.60	53.4	21.6	67.8	45.0		
	B M62 Northbound On Ramp								✓
	C Link	3.80	5.80	6.7	23.0	67.1	9.5		
	D M62 Northbound Off Ramp	6.70	9.80	34.2	27.9	67.8	14.0		

Bypass

Junction	Arm	Arm has bypass	Bypass utilisation (%)
3E Site 3	A Link		
	B M62 Southbound Off Ramp		
	C A614 Rawcliffe Road (East)		
	D A161	✓	100
	E M62 Southbound On Ramp		
3W Site 3	A A614 Rawcliffe Road (West)		
	B M62 Northbound On Ramp		
	C Link		
	D M62 Northbound Off Ramp		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Final slope	Final intercept (PCU/hr)
3E Site 3	A Link	0.610	2356
	B M62 Southbound Off Ramp	0.450	1455
	C A614 Rawcliffe Road (East)	0.629	2527
	D A161	0.545	1908
	E M62 Southbound On Ramp		
3W Site 3	A A614 Rawcliffe Road (West)	0.581	2182
	B M62 Northbound On Ramp		
	C Link	0.518	1574
	D M62 Northbound Off Ramp	0.733	2950

The slope and intercept shown above include any corrections and adjustments.

Arm Capacity Adjustments

Junction	Arm	Type	Reason	Direct capacity adjustment (PCU/hr)
3W Site 3	A A614 Rawcliffe Road (West)	Direct		-400

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Baseline	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Simple (vertical queueing)	Normal	0	100.00	
3W Site 3	C Link	3E	A	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	471	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	547	100.000
	D A161		ONE HOUR	✓	479	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	884	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	923	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To	A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
		A A614 Rawcliffe Road (West)	0	226	658
B M62 Northbound On Ramp	0	0	0	0	
C Link	648	108	0	0	
D M62 Northbound Off Ramp	408	1	514	0	

Proportions

From	To	A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
		A A614 Rawcliffe Road (West)	0.00	0.26	0.74
B M62 Northbound On Ramp	0.25	0.25	0.25	0.25	
C Link	0.86	0.14	0.00	0.00	
D M62 Northbound Off Ramp	0.44	0.00	0.56	0.00	

Demand (PCU/hr)

From	To	A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
		A Link	0	0	511	374
B M62 Southbound Off Ramp	262	0	102	106	1	
C A614 Rawcliffe Road (East)	272	0	4	13	258	
D A161	223	0	5	2	249	
E M62 Southbound On Ramp	0	0	0	0	0	

Proportions

From	To	A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
		A Link	0.00	0.00	0.44	0.32
B M62 Southbound Off Ramp	0.56	0.00	0.22	0.23	0.00	
C A614 Rawcliffe Road (East)	0.50	0.00	0.01	0.02	0.47	
D A161	0.47	0.00	0.01	0.00	0.52	
E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20	

Vehicle Mix

Heavy Vehicle Percentages

From	To	A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
		A A614 Rawcliffe Road (West)	0	13	8
B M62 Northbound On Ramp	0	0	0	0	
C Link	10	18	0	0	
D M62 Northbound Off Ramp	26	0	20	0	

Average PCU Per Veh

From	To	A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
		A A614 Rawcliffe Road (West)	1.000	1.125	1.076
B M62 Northbound On Ramp	1.000	1.000	1.000	1.000	
C Link	1.096	1.176	1.000	1.000	
D M62 Northbound Off Ramp	1.256	1.000	1.204	1.000	

Heavy Vehicle Percentages

From	To	A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
		A Link	0	0	11	20
B M62 Southbound Off Ramp	9	0	6	14	0	
C A614 Rawcliffe Road (East)	9	0	0	9	10	
D A161	15	0	50	100	33	
E M62 Southbound On Ramp	0	0	0	0	0	

Average PCU Per Veh

From	To	A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
		A Link	1.000	1.000	1.108	1.198
B M62 Southbound Off Ramp	1.087	1.000	1.060	1.143	1.000	
C A614 Rawcliffe Road (East)	1.087	1.000	1.000	1.091	1.097	
D A161	1.145	1.000	1.500	2.000	1.326	
E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000	

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	07:30 07:45	882	882
		07:45 08:00	1053	1053
		08:00 08:15	1289	1289
		08:15 08:30	1289	1289
		08:30 08:45	1053	1053
		08:45 09:00	882	882
	B M62 Southbound Off Ramp	07:30 07:45	355	355
		07:45 08:00	423	423
		08:00 08:15	519	519
		08:15 08:30	519	519
		08:30 08:45	423	423
		08:45 09:00	355	355
	C A614 Rawcliffe Road (East)	07:30 07:45	412	412
		07:45 08:00	492	492
		08:00 08:15	602	602
		08:15 08:30	602	602

3W Site 3	D A161	08:30 08:45	492	492	
		08:45 09:00	412	412	
		07:30 07:45	361	361	
		07:45 08:00	431	431	
		08:00 08:15	527	527	
		08:15 08:30	527	527	
	E M62 Southbound On Ramp	08:30 08:45	431	431	
		08:45 09:00	361	361	
		07:30 07:45	0	0	
		07:45 08:00	0	0	
		08:00 08:15	0	0	
		08:15 08:30	0	0	
	A A614 Rawcliffe Road (West)	08:30 08:45	08:30 08:45	666	666
			07:45 08:00	795	795
			08:00 08:15	973	973
			08:15 08:30	973	973
			08:30 08:45	795	795
			08:45 09:00	666	666
B M62 Northbound On Ramp		07:30 07:45	0	0	
		07:45 08:00	0	0	
		08:00 08:15	0	0	
		08:15 08:30	0	0	
		08:30 08:45	0	0	
		08:45 09:00	0	0	
C Link	07:30 07:45	569	569		
	07:45 08:00	680	680		
	08:00 08:15	832	832		
	08:15 08:30	832	832		
	08:30 08:45	680	680		
	08:45 09:00	569	569		
D M62 Northbound Off Ramp	07:30 07:45	695	695		
	07:45 08:00	830	830		
	08:00 08:15	1016	1016		
	08:15 08:30	1016	1016		
	08:30 08:45	830	830		
	08:45 09:00	695	695		

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.55	3.95	1.4	A	1075	1612
	B M62 Southbound Off Ramp	0.60	11.19	1.6	B	432	648
	C A614 Rawcliffe Road (East)	0.33	3.24	0.5	A	502	753
	D A161	0.20	4.14	0.3	A	440	317
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	0.70	9.54	2.5	A	811	1217
	B M62 Northbound On Ramp						
	C Link	0.53	5.38	1.2	A	694	1041
	D M62 Northbound Off Ramp	0.43	3.34	0.9	A	847	1270

Main Results for each time segment

07:30 - 07:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	879	879	220	0	0	8	2350	0.374	876	568	0.0	0.7	2.833	A
	B M62 Southbound Off Ramp	355	355	89	0	0	884	1058	0.335	352	0	0.0	0.5	5.562	A
	C A614 Rawcliffe Road (East)	412	412	103	0	0	771	2042	0.202	411	465	0.0	0.3	2.406	A
	D A161	361	173	43	187	0	812	1466	0.118	173	370	0.0	0.2	3.214	A
	E M62 Southbound On Ramp						576				408				
3W Site 3	A A614 Rawcliffe Road (West)	666		166			467	1510	0.441	662	791	0.0	0.8	4.601	A
	B M62 Northbound On Ramp						879				251				
	C Link	568		142			0	1574	0.361	565	879	0.0	0.6	3.940	A
	D M62 Northbound Off Ramp	695		174			565	2535	0.274	693	0	0.0	0.5	2.393	A

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1052	1052	263	0	0	10	2349	0.448	1051	680	0.7	0.9	3.221	A
	B M62 Southbound Off Ramp	423	423	106	0	0	1061	978	0.433	422	0	0.5	0.8	7.061	A
	C A614 Rawcliffe Road (East)	492	492	123	0	0	925	1946	0.253	491	558	0.3	0.4	2.700	A
	D A161	431	207	52	224	0	972	1378	0.150	207	444	0.2	0.2	3.549	A
	E M62 Southbound On Ramp						689				489				
3W Site 3	A A614 Rawcliffe Road (West)	795		199			560	1457	0.546	793	948	0.8	1.3	5.887	A
	B M62 Northbound On Ramp						1052				301				
	C Link	680		170			0	1574	0.432	679	1052	0.6	0.8	4.447	A
	D M62 Northbound Off Ramp	830		207			679	2452	0.338	829	0	0.5	0.6	2.717	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1286	1286	322	0	0	12	2348	0.548	1284	831	0.9	1.4	3.926	A
	B M62 Southbound Off Ramp	519	519	130	0	0	1296	872	0.594	516	0	0.8	1.6	10.937	B
	C A614 Rawcliffe Road (East)	602	602	151	0	0	1130	1817	0.332	602	682	0.4	0.5	3.230	A
	D A161	527	253	63	274	0	1189	1260	0.201	253	543	0.2	0.3	4.128	A
	E M62 Southbound On Ramp						843				599				
A A614 Rawcliffe Road (West)	973		243				685	1384	0.703	968	1160	1.3	2.5	9.325	A

3W Site 3	B M62 Northbound On Ramp					1286					367				
	C Link	831		208		0	1574	0.528	830	1286	0.8	1.2	5.342	A	
	D M62 Northbound Off Ramp	1016		254		830	2341	0.434	1015	0	0.6	0.9	3.323	A	

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1290	1290	323	0	0	12	2348	0.549	1290	833	1.4	1.4	3.954	A
	B M62 Southbound Off Ramp	519	519	130	0	0	1302	870	0.596	518	0	1.6	1.6	11.189	B
	C A614 Rawcliffe Road (East)	602	602	151	0	0	1136	1813	0.332	602	685	0.5	0.5	3.242	A
	D A161	527	253	63	274	0	1193	1258	0.201	253	545	0.3	0.3	4.138	A
	E M62 Southbound On Ramp						846				600				
3W Site 3	A A614 Rawcliffe Road (West)	973		243			686	1383	0.704	973	1164	2.5	2.5	9.544	A
	B M62 Northbound On Ramp						1290				369				
	C Link	833		208			0	1574	0.529	833	1290	1.2	1.2	5.379	A
	D M62 Northbound Off Ramp	1016		254			833	2339	0.435	1016	0	0.9	0.9	3.335	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1058	1058	264	0	0	10	2349	0.450	1060	683	1.4	1.0	3.247	A
	B M62 Southbound Off Ramp	423	423	106	0	0	1070	974	0.435	426	0	1.6	0.9	7.215	A
	C A614 Rawcliffe Road (East)	492	492	123	0	0	933	1940	0.253	492	563	0.5	0.4	2.714	A
	D A161	431	207	52	224	0	978	1375	0.150	207	448	0.3	0.2	3.563	A
	E M62 Southbound On Ramp						693				492				
3W Site 3	A A614 Rawcliffe Road (West)	795		199			561	1456	0.546	800	954	2.5	1.3	6.016	A
	B M62 Northbound On Ramp						1058				303				
	C Link	683		171			0	1574	0.434	684	1058	1.2	0.9	4.487	A
	D M62 Northbound Off Ramp	830		207			684	2448	0.339	831	0	0.9	0.6	2.730	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	884	884	221	0	0	8	2350	0.376	885	571	1.0	0.7	2.858	A
	B M62 Southbound Off Ramp	355	355	89	0	0	893	1054	0.337	356	0	0.9	0.6	5.646	A
	C A614 Rawcliffe Road (East)	412	412	103	0	0	779	2037	0.202	412	470	0.4	0.3	2.416	A
	D A161	361	173	43	187	0	817	1463	0.118	173	374	0.2	0.2	3.228	A
	E M62 Southbound On Ramp						579				411				
3W Site 3	A A614 Rawcliffe Road (West)	666		166			470	1509	0.441	667	798	1.3	0.9	4.667	A
	B M62 Northbound On Ramp						884				253				
	C Link	571		143			0	1574	0.363	572	884	0.9	0.6	3.979	A
	D M62 Northbound Off Ramp	695		174			572	2530	0.275	696	0	0.6	0.5	2.407	A

2018 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	3W - Site 3 - C - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	3E - Site 3 - A - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	4.21	A
3W	Site 3	Standard Roundabout		B, C, D, A	7.23	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.72	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018 Baseline	PM	ONE HOUR	16 15	17 45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Simple (vertical queueing)	Normal	0	100.00	
3W Site 3	C Link	3E	A	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	304	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	700	100.000
	D A161		ONE HOUR	✓	480	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	935	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	885	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	242	693	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	668	188	0	0
	D M62 Northbound Off Ramp	391	0	494	0

Proportions

From		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0.00	0.26	0.74	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.78	0.22	0.00	0.00
	D M62 Northbound Off Ramp	0.44	0.00	0.56	0.00

Demand (PCU/hr)

From		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0	0	576	347	264
	B M62 Southbound Off Ramp	178	0	56	69	1
	C A614 Rawcliffe Road (East)	403	0	3	34	260
	D A161	275	0	11	5	190
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

From		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0.00	0.00	0.49	0.29	0.22
	B M62 Southbound Off Ramp	0.58	0.00	0.18	0.23	0.00
	C A614 Rawcliffe Road (East)	0.58	0.00	0.00	0.05	0.37
	D A161	0.57	0.00	0.02	0.01	0.39
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	12	5	0
	B M62 Northbound On Ramp	0	0	0	0

Average PCU Per Veh

From		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	1.000	1.120	1.045	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000

C Link	6	6	0	0
D M62 Northbound Off Ramp	22	0	13	0

C Link	1.055	1.062	1.000	1.000
D M62 Northbound Off Ramp	1.220	1.000	1.126	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	5	15	19
	B M62 Southbound Off Ramp	13	0	15	19	0
	C A614 Rawcliffe Road (East)	2	0	0	20	7
	D A161	6	0	33	67	22
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.052	1.145	1.186
	B M62 Southbound Off Ramp	1.129	1.000	1.146	1.190	1.000
	C A614 Rawcliffe Road (East)	1.019	1.000	1.000	1.200	1.066
	D A161	1.062	1.000	1.333	1.667	1.219
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	16:15 16:30	894	894
		16:30 16:45	1068	1068
		16:45 17:00	1307	1307
		17:00 17:15	1307	1307
		17:15 17:30	1068	1068
	B M62 Southbound Off Ramp	17:30 17:45	894	894
		16:15 16:30	229	229
		16:30 16:45	274	274
		16:45 17:00	335	335
		17:00 17:15	335	335
	C A614 Rawcliffe Road (East)	17:15 17:30	274	274
		17:30 17:45	229	229
		16:15 16:30	527	527
		16:30 16:45	629	629
		16:45 17:00	770	770
	D A161	17:00 17:15	770	770
		17:15 17:30	629	629
		17:30 17:45	527	527
		16:15 16:30	362	362
		16:30 16:45	432	432
E M62 Southbound On Ramp	16:45 17:00	529	529	
	17:00 17:15	529	529	
	17:15 17:30	432	432	
	17:30 17:45	362	362	
	16:15 16:30	0	0	
3W Site 3	A A614 Rawcliffe Road (West)	16:30 16:45	0	0
		16:45 17:00	0	0
		17:00 17:15	0	0
		17:15 17:30	0	0
		17:30 17:45	0	0
	B M62 Northbound On Ramp	16:15 16:30	704	704
		16:30 16:45	841	841
		16:45 17:00	1030	1030
		17:00 17:15	1030	1030
		17:15 17:30	841	841
	C Link	17:30 17:45	704	704
		16:15 16:30	0	0
		16:30 16:45	0	0
		16:45 17:00	0	0
		17:00 17:15	0	0
	D M62 Northbound Off Ramp	17:15 17:30	0	0
		17:30 17:45	0	0
		16:15 16:30	644	644
		16:30 16:45	769	769
		16:45 17:00	942	942
D M62 Northbound Off Ramp	17:00 17:15	942	942	
	17:15 17:30	769	769	
	17:30 17:45	644	644	
	16:15 16:30	666	666	
	16:30 16:45	796	796	
	16:45 17:00	974	974	
	17:00 17:15	974	974	
	17:15 17:30	796	796	
	17:30 17:45	666	666	

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.56	3.84	1.4	A	1089	1634
	B M62 Southbound Off Ramp	0.39	7.88	0.7	A	279	419
	C A614 Rawcliffe Road (East)	0.40	3.24	0.7	A	642	963
	D A161	0.26	4.20	0.4	A	441	400
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	0.77	12.08	3.4	B	858	1287
	B M62 Northbound On Ramp						
	C Link	0.60	6.02	1.6	A	785	1177
	D M62 Northbound Off Ramp	0.43	3.26	0.9	A	812	1218

Main Results for each time segment

16:15 - 16:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	890	890	223	0	0	14	2347	0.379	888	642	0.0	0.7	2.724	A
	B M62 Southbound Off Ramp	229	229	57	0	0	902	1050	0.218	228	0	0.0	0.3	5.008	A
	C A614 Rawcliffe Road (East)	527	527	132	0	0	646	2121	0.248	525	483	0.0	0.3	2.353	A
	D A161	362	219	55	143	0	831	1455	0.150	218	340	0.0	0.2	3.131	A
	E M62 Southbound On Ramp						656				393				
3W Site 3	A A614 Rawcliffe Road (West)	704		176			511	1485	0.474	700	792	0.0	0.9	4.860	A
	B M62 Northbound On Ramp						890				321				
	C Link	642		160			0	1574	0.408	639	890	0.0	0.7	4.056	A
	D M62 Northbound Off Ramp	666		167			639	2481	0.269	665	0	0.0	0.4	2.307	A

16:30 - 16:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1066	1066	266	0	0	17	2345	0.454	1065	768	0.7	0.9	3.108	A
	B M62 Southbound Off Ramp	274	274	68	0	0	1081	969	0.282	273	0	0.3	0.4	5.919	A
	C A614 Rawcliffe Road (East)	629	629	157	0	0	775	2040	0.308	629	580	0.3	0.5	2.662	A
	D A161	432	261	65	170	0	995	1366	0.191	261	408	0.2	0.3	3.508	A
	E M62 Southbound On Ramp						785				471				
3W Site 3	A A614 Rawcliffe Road (West)	841		210			612	1426	0.590	839	950	0.9	1.5	6.495	A
	B M62 Northbound On Ramp						1066				385				
	C Link	768		192			0	1574	0.488	767	1066	0.7	1.0	4.708	A
	D M62 Northbound Off Ramp	796		199			767	2387	0.333	795	0	0.4	0.6	2.635	A

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1302	1302	325	0	0	21	2343	0.556	1300	941	0.9	1.4	3.810	A
	B M62 Southbound Off Ramp	335	335	84	0	0	1320	862	0.389	334	0	0.4	0.7	7.796	A
	C A614 Rawcliffe Road (East)	770	770	193	0	0	946	1932	0.399	770	708	0.5	0.7	3.232	A
	D A161	529	320	80	209	0	1217	1245	0.257	320	499	0.3	0.4	4.188	A
	E M62 Southbound On Ramp						961				576				
3W Site 3	A A614 Rawcliffe Road (West)	1030		257			749	1346	0.765	1023	1162	1.5	3.3	11.584	B
	B M62 Northbound On Ramp						1302				471				
	C Link	941		235			0	1574	0.598	938	1302	1.0	1.5	5.963	A
	D M62 Northbound Off Ramp	974		244			938	2262	0.431	973	0	0.6	0.9	3.253	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1307	1307	327	0	0	21	2343	0.558	1307	942	1.4	1.4	3.844	A
	B M62 Southbound Off Ramp	335	335	84	0	0	1328	858	0.391	335	0	0.7	0.7	7.877	A
	C A614 Rawcliffe Road (East)	770	770	193	0	0	951	1929	0.399	770	712	0.7	0.7	3.242	A
	D A161	529	320	80	209	0	1220	1243	0.258	320	501	0.4	0.4	4.199	A
	E M62 Southbound On Ramp						963				578				
3W Site 3	A A614 Rawcliffe Road (West)	1030		257			751	1345	0.765	1029	1166	3.3	3.4	12.082	B
	B M62 Northbound On Ramp						1307				473				
	C Link	942		236			0	1574	0.599	942	1307	1.5	1.6	6.018	A
	D M62 Northbound Off Ramp	974		244			942	2259	0.431	974	0	0.9	0.9	3.265	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1074	1074	268	0	0	17	2345	0.458	1075	771	1.4	0.9	3.142	A
	B M62 Southbound Off Ramp	274	274	68	0	0	1092	964	0.284	275	0	0.7	0.5	5.989	A
	C A614 Rawcliffe Road (East)	629	629	157	0	0	782	2036	0.309	630	585	0.7	0.5	2.676	A
	D A161	432	261	65	170	0	1000	1363	0.192	262	412	0.4	0.3	3.522	A
	E M62 Southbound On Ramp						788				474				
3W Site 3	A A614 Rawcliffe Road (West)	841		210			615	1425	0.590	848	955	3.4	1.6	6.725	A
	B M62 Northbound On Ramp						1074				389				
	C Link	771		193			0	1574	0.490	773	1074	1.6	1.0	4.762	A
	D M62 Northbound Off Ramp	796		199			773	2383	0.334	797	0	0.9	0.6	2.648	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	896	896	224	0	0	14	2347	0.382	897	645	0.9	0.7	2.748	A
	B M62 Southbound Off Ramp	229	229	57	0	0	911	1045	0.219	230	0	0.5	0.3	5.057	A
	C A614 Rawcliffe Road (East)	527	527	132	0	0	653	2117	0.249	527	488	0.5	0.3	2.366	A
	D A161	362	219	55	143	0	836	1452	0.151	219	344	0.3	0.2	3.145	A
	E M62 Southbound On Ramp						659				396				
3W Site 3	A A614 Rawcliffe Road (West)	704		176			514	1483	0.475	706	799	1.6	1.0	4.946	A
	B M62 Northbound On Ramp						896				325				
	C Link	645		161			0	1574	0.410	646	896	1.0	0.7	4.104	A
	D M62 Northbound Off Ramp	666		167			646	2476	0.269	667	0	0.6	0.4	2.321	A

2022 Future Baseline , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	3W - Site 3 - C - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	3E - Site 3 - A - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	5.49	A
3W	Site 3	Standard Roundabout		B, C, D, A	6.63	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.05	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2022 Future Baseline	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Simple (vertical queueing)	Normal	0	100.00	
3W Site 3	C Link	3E	A	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	488	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	566	100.000
	D A161		ONE HOUR	✓	495	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	915	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	955	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	234	681	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	671	112	0	0
	D M62 Northbound Off Ramp	422	1	532	0

Proportions

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0.00	0.26	0.74	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.86	0.14	0.00	0.00
	D M62 Northbound Off Ramp	0.44	0.00	0.56	0.00

Demand (PCU/hr)

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0	0	529	388	296
	B M62 Southbound Off Ramp	272	0	105	110	1
	C A614 Rawcliffe Road (East)	281	0	4	14	267
	D A161	230	0	5	2	258
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0.00	0.00	0.44	0.32	0.24
	B M62 Southbound Off Ramp	0.56	0.00	0.22	0.23	0.00
	C A614 Rawcliffe Road (East)	0.50	0.00	0.01	0.02	0.47
	D A161	0.46	0.00	0.01	0.00	0.52
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	13	8	0
	B M62 Northbound On Ramp	0	0	0	0

Average PCU Per Veh

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	1.000	1.125	1.076	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000

C Link	10	18	0	0
D M62 Northbound Off Ramp	26	0	20	0

C Link	1.096	1.176	1.000	1.000
D M62 Northbound Off Ramp	1.256	1.000	1.204	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	11	20	22
	B M62 Southbound Off Ramp	9	0	6	14	0
	C A614 Rawcliffe Road (East)	9	0	0	9	10
	D A161	15	0	50	100	33
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.108	1.198	1.222
	B M62 Southbound Off Ramp	1.087	1.000	1.060	1.143	1.000
	C A614 Rawcliffe Road (East)	1.087	1.000	1.000	1.091	1.097
	D A161	1.145	1.000	1.500	2.000	1.326
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	07:30 07:45	913	913
		07:45 08:00	1090	1090
		08:00 08:15	1336	1336
		08:15 08:30	1336	1336
		08:30 08:45	1090	1090
	08:45 09:00	913	913	
	B M62 Southbound Off Ramp	07:30 07:45	367	367
		07:45 08:00	439	439
		08:00 08:15	537	537
		08:15 08:30	537	537
		08:30 08:45	439	439
	08:45 09:00	367	367	
	C A614 Rawcliffe Road (East)	07:30 07:45	426	426
		07:45 08:00	509	509
		08:00 08:15	623	623
		08:15 08:30	623	623
		08:30 08:45	509	509
	08:45 09:00	426	426	
	D A161	07:30 07:45	373	373
		07:45 08:00	445	445
08:00 08:15		545	545	
08:15 08:30		545	545	
08:30 08:45		445	445	
08:45 09:00	373	373		
E M62 Southbound On Ramp	07:30 07:45	0	0	
	07:45 08:00	0	0	
	08:00 08:15	0	0	
	08:15 08:30	0	0	
	08:30 08:45	0	0	
08:45 09:00	0	0		
3W Site 3	A A614 Rawcliffe Road (West)	07:30 07:45	689	689
		07:45 08:00	823	823
		08:00 08:15	1007	1007
		08:15 08:30	1007	1007
		08:30 08:45	823	823
	08:45 09:00	689	689	
	B M62 Northbound On Ramp	07:30 07:45	0	0
		07:45 08:00	0	0
		08:00 08:15	0	0
		08:15 08:30	0	0
		08:30 08:45	0	0
	08:45 09:00	0	0	
	C Link	07:30 07:45	589	589
		07:45 08:00	704	704
		08:00 08:15	862	862
		08:15 08:30	862	862
		08:30 08:45	704	704
	08:45 09:00	589	589	
	D M62 Northbound Off Ramp	07:30 07:45	719	719
		07:45 08:00	859	859
08:00 08:15		1052	1052	
08:15 08:30		1052	1052	
08:30 08:45		859	859	
08:45 09:00	719	719		

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.57	4.13	1.5	A	1112	1669
	B M62 Southbound Off Ramp	0.63	12.58	1.8	B	448	672
	C A614 Rawcliffe Road (East)	0.35	3.37	0.6	A	519	779
	D A161	0.21	4.27	0.3	A	454	326
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	0.74	10.81	3.0	B	840	1259
	B M62 Northbound On Ramp						
	C Link	0.55	5.60	1.3	A	718	1077
	D M62 Northbound Off Ramp	0.45	3.48	1.0	A	876	1315

Main Results for each time segment

07:30 - 07:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	909	909	227	0	0	8	2350	0.387	906	587	0.0	0.7	2.891	A
	B M62 Southbound Off Ramp	367	367	92	0	0	915	1044	0.352	365	0	0.0	0.6	5.775	A
	C A614 Rawcliffe Road (East)	426	426	107	0	0	799	2025	0.210	425	481	0.0	0.3	2.454	A
	D A161	373	178	45	194	0	840	1450	0.123	178	384	0.0	0.2	3.266	A
	E M62 Southbound On Ramp						595				422				
3W Site 3	A A614 Rawcliffe Road (West)	689		172			484	1501	0.459	685	818	0.0	0.9	4.784	A
	B M62 Northbound On Ramp						909				260				
	C Link	587		147			0	1574	0.373	584	909	0.0	0.7	4.016	A
	D M62 Northbound Off Ramp	719		180			584	2521	0.285	717	0	0.0	0.5	2.444	A

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1089	1089	272	0	0	10	2349	0.463	1088	703	0.7	1.0	3.312	A
	B M62 Southbound Off Ramp	439	439	110	0	0	1097	962	0.456	437	0	0.6	0.9	7.483	A
	C A614 Rawcliffe Road (East)	509	509	127	0	0	958	1925	0.264	508	576	0.3	0.4	2.773	A
	D A161	445	213	53	232	0	1006	1360	0.157	213	461	0.2	0.2	3.625	A
	E M62 Southbound On Ramp						713				506				
3W Site 3	A A614 Rawcliffe Road (West)	823		206			579	1445	0.569	821	981	0.9	1.4	6.252	A
	B M62 Northbound On Ramp						1089				311				
	C Link	703		176			0	1574	0.446	702	1089	0.7	0.9	4.564	A
	D M62 Northbound Off Ramp	859		215			702	2435	0.353	858	0	0.5	0.7	2.796	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1330	1330	333	0	0	12	2348	0.567	1328	859	1.0	1.5	4.094	A
	B M62 Southbound Off Ramp	537	537	134	0	0	1340	853	0.630	534	0	0.9	1.8	12.201	B
	C A614 Rawcliffe Road (East)	623	623	156	0	0	1170	1791	0.348	622	704	0.4	0.6	3.357	A
	D A161	545	261	65	284	0	1230	1238	0.211	261	563	0.2	0.3	4.255	A
	E M62 Southbound On Ramp						871				619				
3W Site 3	A A614 Rawcliffe Road (West)	1007		252			709	1370	0.735	1001	1199	1.4	2.9	10.469	B
	B M62 Northbound On Ramp						1330				380				
	C Link	859		215			0	1574	0.546	858	1330	0.9	1.3	5.548	A
	D M62 Northbound Off Ramp	1052		263			858	2321	0.453	1050	0	0.7	1.0	3.470	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1335	1335	334	0	0	12	2348	0.569	1335	862	1.5	1.5	4.130	A
	B M62 Southbound Off Ramp	537	537	134	0	0	1347	849	0.633	537	0	1.8	1.8	12.577	B
	C A614 Rawcliffe Road (East)	623	623	156	0	0	1177	1787	0.349	623	708	0.6	0.6	3.372	A
	D A161	545	261	65	284	0	1234	1236	0.211	261	566	0.3	0.3	4.266	A
	E M62 Southbound On Ramp						874				621				
3W Site 3	A A614 Rawcliffe Road (West)	1007		252			710	1369	0.736	1007	1203	2.9	3.0	10.805	B
	B M62 Northbound On Ramp						1335				382				
	C Link	862		215			0	1574	0.548	862	1335	1.3	1.3	5.595	A
	D M62 Northbound Off Ramp	1052		263			862	2318	0.454	1052	0	1.0	1.0	3.484	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1096	1096	274	0	0	10	2349	0.466	1098	707	1.5	1.0	3.349	A
	B M62 Southbound Off Ramp	439	439	110	0	0	1108	957	0.458	442	0	1.8	0.9	7.693	A
	C A614 Rawcliffe Road (East)	509	509	127	0	0	968	1919	0.265	510	582	0.6	0.4	2.790	A
	D A161	445	213	53	232	0	1012	1356	0.157	213	465	0.3	0.2	3.641	A
	E M62 Southbound On Ramp						717				509				
3W Site 3	A A614 Rawcliffe Road (West)	823		206			581	1444	0.570	829	987	3.0	1.5	6.428	A
	B M62 Northbound On Ramp						1096				314				
	C Link	707		177			0	1574	0.449	708	1096	1.3	0.9	4.613	A
	D M62 Northbound Off Ramp	859		215			708	2430	0.353	860	0	1.0	0.7	2.811	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	915	915	229	0	0	8	2350	0.389	916	591	1.0	0.7	2.921	A
	B M62 Southbound Off Ramp	367	367	92	0	0	925	1040	0.353	369	0	0.9	0.6	5.878	A
	C A614 Rawcliffe Road (East)	426	426	107	0	0	808	2019	0.211	427	486	0.4	0.3	2.465	A
	D A161	373	178	45	194	0	846	1447	0.123	179	388	0.2	0.2	3.278	A
	E M62 Southbound On Ramp						599				426				
3W Site 3	A A614 Rawcliffe Road (West)	689		172			486	1499	0.460	691	825	1.5	0.9	4.859	A
	B M62 Northbound On Ramp						915				262				
	C Link	591		148			0	1574	0.375	592	915	0.9	0.7	4.059	A
	D M62 Northbound Off Ramp	719		180			592	2516	0.286	720	0	0.7	0.5	2.457	A

2022 Future Baseline , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	3W - Site 3 - C - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	3E - Site 3 - A - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	4.40	A
3W	Site 3	Standard Roundabout		B, C, D, A	8.14	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.28	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2022 Future Baseline	PM	ONE HOUR	16 15	17 45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Simple (vertical queueing)	Normal	0	100.00	
3W Site 3	C Link	3E	A	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	314	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	722	100.000
	D A161		ONE HOUR	✓	496	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	967	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	915	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	250	717	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	690	194	0	0
	D M62 Northbound Off Ramp	404	0	511	0

Proportions

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0.00	0.26	0.74	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.78	0.22	0.00	0.00
	D M62 Northbound Off Ramp	0.44	0.00	0.56	0.00

Demand (PCU/hr)

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0	0	596	359	273
	B M62 Southbound Off Ramp	184	0	58	71	1
	C A614 Rawcliffe Road (East)	416	0	3	35	268
	D A161	284	0	11	5	196
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0.00	0.00	0.49	0.29	0.22
	B M62 Southbound Off Ramp	0.59	0.00	0.18	0.23	0.00
	C A614 Rawcliffe Road (East)	0.58	0.00	0.00	0.05	0.37
	D A161	0.57	0.00	0.02	0.01	0.40
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	12	5	0
	B M62 Northbound On Ramp	0	0	0	0

Average PCU Per Veh

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	1.000	1.120	1.045	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000

C Link	6	6	0	0
D M62 Northbound Off Ramp	22	0	13	0

C Link	1.055	1.062	1.000	1.000
D M62 Northbound Off Ramp	1.220	1.000	1.126	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	5	15	19
	B M62 Southbound Off Ramp	13	0	15	19	0
	C A614 Rawcliffe Road (East)	2	0	0	20	7
	D A161	6	0	33	67	22
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.052	1.145	1.186
	B M62 Southbound Off Ramp	1.129	1.000	1.146	1.190	1.000
	C A614 Rawcliffe Road (East)	1.019	1.000	1.000	1.200	1.066
	D A161	1.062	1.000	1.333	1.667	1.219
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	16:15 16:30	925	925
		16:30 16:45	1104	1104
		16:45 17:00	1352	1352
		17:00 17:15	1352	1352
		17:15 17:30	1104	1104
	B M62 Southbound Off Ramp	17:30 17:45	925	925
		16:15 16:30	236	236
		16:30 16:45	282	282
		16:45 17:00	346	346
		17:00 17:15	346	346
	C A614 Rawcliffe Road (East)	17:15 17:30	282	282
		17:30 17:45	236	236
		16:15 16:30	544	544
		16:30 16:45	649	649
		16:45 17:00	795	795
	D A161	17:00 17:15	795	795
		17:15 17:30	649	649
		17:30 17:45	544	544
		16:15 16:30	373	373
		16:30 16:45	446	446
E M62 Southbound On Ramp	16:45 17:00	546	546	
	17:00 17:15	546	546	
	17:15 17:30	446	446	
	17:30 17:45	373	373	
	16:15 16:30	0	0	
3W Site 3	A A614 Rawcliffe Road (West)	16:30 16:45	0	0
		16:45 17:00	0	0
		17:00 17:15	0	0
		17:15 17:30	0	0
		17:30 17:45	0	0
	B M62 Northbound On Ramp	16:15 16:30	728	728
		16:30 16:45	869	869
		16:45 17:00	1065	1065
		17:00 17:15	1065	1065
		17:15 17:30	869	869
	C Link	17:30 17:45	728	728
		16:15 16:30	0	0
		16:30 16:45	0	0
		16:45 17:00	0	0
		17:00 17:15	0	0
	D M62 Northbound Off Ramp	17:15 17:30	0	0
		17:30 17:45	0	0
		16:15 16:30	666	666
		16:30 16:45	795	795
		16:45 17:00	973	973
A A614 Rawcliffe Road (West)	17:00 17:15	973	973	
	17:15 17:30	795	795	
	17:30 17:45	666	666	
	16:15 16:30	689	689	
	16:30 16:45	823	823	
B M62 Northbound On Ramp	16:45 17:00	1007	1007	
	17:00 17:15	1007	1007	
	17:15 17:30	823	823	
	17:30 17:45	689	689	
	16:15 16:30	689	689	

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.58	4.02	1.5	A	1126	1689
	B M62 Southbound Off Ramp	0.41	8.37	0.8	A	288	432
	C A614 Rawcliffe Road (East)	0.42	3.37	0.7	A	663	994
	D A161	0.27	4.35	0.4	A	455	413
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	0.80	14.28	4.1	B	887	1331
	B M62 Northbound On Ramp						
	C Link	0.62	6.33	1.7	A	811	1216
	D M62 Northbound Off Ramp	0.45	3.41	1.0	A	840	1259

Main Results for each time segment

16:15 - 16:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	920	920	230	0	0	14	2347	0.392	918	663	0.0	0.7	2.780	A
	B M62 Southbound Off Ramp	236	236	59	0	0	932	1036	0.228	235	0	0.0	0.3	5.136	A
	C A614 Rawcliffe Road (East)	544	544	136	0	0	668	2107	0.258	542	499	0.0	0.4	2.398	A
	D A161	373	226	56	148	0	858	1440	0.157	225	351	0.0	0.2	3.187	A
	E M62 Southbound On Ramp						677				406				
3W Site 3	A A614 Rawcliffe Road (West)	728		182			529	1475	0.494	724	819	0.0	1.0	5.074	A
	B M62 Northbound On Ramp						920				332				
	C Link	663		166			0	1574	0.421	660	920	0.0	0.8	4.149	A
	D M62 Northbound Off Ramp	689		172			660	2466	0.279	687	0	0.0	0.5	2.357	A

16:30 - 16:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1102	1102	275	0	0	17	2345	0.470	1101	794	0.7	1.0	3.196	A
	B M62 Southbound Off Ramp	282	282	71	0	0	1118	953	0.296	282	0	0.3	0.5	6.137	A
	C A614 Rawcliffe Road (East)	649	649	162	0	0	801	2024	0.321	649	599	0.4	0.5	2.732	A
	D A161	446	270	67	176	0	1028	1348	0.200	269	421	0.2	0.3	3.592	A
	E M62 Southbound On Ramp						811				486				
3W Site 3	A A614 Rawcliffe Road (West)	869		217			633	1414	0.615	867	982	1.0	1.7	6.964	A
	B M62 Northbound On Ramp						1102				398				
	C Link	794		198			0	1574	0.504	793	1102	0.8	1.1	4.868	A
	D M62 Northbound Off Ramp	823		206			793	2369	0.347	822	0	0.5	0.6	2.711	A

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1345	1345	336	0	0	21	2343	0.574	1343	972	1.0	1.5	3.973	A
	B M62 Southbound Off Ramp	346	346	86	0	0	1363	842	0.411	345	0	0.5	0.8	8.261	A
	C A614 Rawcliffe Road (East)	795	795	199	0	0	977	1913	0.416	794	731	0.5	0.7	3.355	A
	D A161	546	330	83	216	0	1257	1223	0.270	330	514	0.3	0.4	4.336	A
	E M62 Southbound On Ramp						992				594				
3W Site 3	A A614 Rawcliffe Road (West)	1065		266			775	1332	0.800	1056	1201	1.7	4.0	13.441	B
	B M62 Northbound On Ramp						1345				486				
	C Link	972		243			0	1574	0.617	969	1345	1.1	1.7	6.262	A
	D M62 Northbound Off Ramp	1007		252			969	2239	0.450	1006	0	0.6	0.9	3.400	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1352	1352	338	0	0	21	2343	0.577	1352	973	1.5	1.5	4.017	A
	B M62 Southbound Off Ramp	346	346	86	0	0	1372	838	0.413	346	0	0.8	0.8	8.368	A
	C A614 Rawcliffe Road (East)	795	795	199	0	0	983	1909	0.416	795	735	0.7	0.7	3.371	A
	D A161	546	330	83	216	0	1261	1221	0.271	330	517	0.4	0.4	4.349	A
	E M62 Southbound On Ramp						994				597				
3W Site 3	A A614 Rawcliffe Road (West)	1065		266			776	1331	0.800	1064	1204	4.0	4.1	14.282	B
	B M62 Northbound On Ramp						1352				489				
	C Link	973		243			0	1574	0.618	973	1352	1.7	1.7	6.327	A
	D M62 Northbound Off Ramp	1007		252			973	2236	0.451	1007	0	0.9	1.0	3.413	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1112	1112	278	0	0	17	2345	0.474	1114	796	1.5	1.0	3.238	A
	B M62 Southbound Off Ramp	282	282	71	0	0	1131	947	0.298	284	0	0.8	0.5	6.224	A
	C A614 Rawcliffe Road (East)	649	649	162	0	0	809	2019	0.322	650	605	0.7	0.5	2.746	A
	D A161	446	270	67	176	0	1033	1345	0.201	270	426	0.4	0.3	3.606	A
	E M62 Southbound On Ramp						814				490				
3W Site 3	A A614 Rawcliffe Road (West)	869		217			635	1413	0.615	879	987	4.1	1.7	7.298	A
	B M62 Northbound On Ramp						1112				403				
	C Link	796		199			0	1574	0.506	799	1112	1.7	1.1	4.923	A
	D M62 Northbound Off Ramp	823		206			799	2364	0.348	824	0	1.0	0.6	2.726	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	927	927	232	0	0	14	2347	0.395	928	666	1.0	0.7	2.808	A
	B M62 Southbound Off Ramp	236	236	59	0	0	942	1032	0.229	237	0	0.5	0.3	5.192	A
	C A614 Rawcliffe Road (East)	544	544	136	0	0	675	2103	0.258	544	505	0.5	0.4	2.412	A
	D A161	373	226	56	148	0	864	1437	0.157	226	355	0.3	0.2	3.201	A
	E M62 Southbound On Ramp						681				409				
3W Site 3	A A614 Rawcliffe Road (West)	728		182			532	1473	0.494	731	826	1.7	1.1	5.178	A
	B M62 Northbound On Ramp						927				335				
	C Link	666		167			0	1574	0.423	668	927	1.1	0.8	4.203	A
	D M62 Northbound Off Ramp	689		172			668	2460	0.280	690	0	0.6	0.5	2.371	A

2026 Future Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	3W - Site 3 - C - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	3E - Site 3 - A - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	5.87	A
3W	Site 3	Standard Roundabout		B, C, D, A	7.23	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.54	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2026 Future Baseline	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Simple (vertical queueing)	Normal	0	100.00	
3W Site 3	C Link	3E	A	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	502	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	583	100.000
	D A161		ONE HOUR	✓	510	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	942	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	983	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	241	701	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	691	115	0	0
	D M62 Northbound Off Ramp	434	1	548	0

Proportions

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0.00	0.26	0.74	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.86	0.14	0.00	0.00
	D M62 Northbound Off Ramp	0.44	0.00	0.56	0.00

Demand (PCU/hr)

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0	0	545	399	305
	B M62 Southbound Off Ramp	280	0	108	113	1
	C A614 Rawcliffe Road (East)	290	0	4	14	275
	D A161	237	0	5	2	266
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0.00	0.00	0.44	0.32	0.24
	B M62 Southbound Off Ramp	0.56	0.00	0.22	0.23	0.00
	C A614 Rawcliffe Road (East)	0.50	0.00	0.01	0.02	0.47
	D A161	0.46	0.00	0.01	0.00	0.52
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	13	8	0
	B M62 Northbound On Ramp	0	0	0	0

Average PCU Per Veh

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	1.000	1.125	1.076	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000

C Link	10	18	0	0
D M62 Northbound Off Ramp	26	0	20	0

C Link	1.096	1.176	1.000	1.000
D M62 Northbound Off Ramp	1.256	1.000	1.204	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	11	20	22
	B M62 Southbound Off Ramp	9	0	6	14	0
	C A614 Rawcliffe Road (East)	9	0	0	9	10
	D A161	15	0	50	100	33
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.108	1.198	1.222
	B M62 Southbound Off Ramp	1.087	1.000	1.060	1.143	1.000
	C A614 Rawcliffe Road (East)	1.087	1.000	1.000	1.091	1.097
	D A161	1.145	1.000	1.500	2.000	1.326
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	07:30 07:45	940	940
		07:45 08:00	1123	1123
		08:00 08:15	1375	1375
		08:15 08:30	1375	1375
		08:30 08:45	1123	1123
	08:45 09:00	940	940	
	B M62 Southbound Off Ramp	07:30 07:45	378	378
		07:45 08:00	451	451
		08:00 08:15	553	553
		08:15 08:30	553	553
		08:30 08:45	451	451
	08:45 09:00	378	378	
	C A614 Rawcliffe Road (East)	07:30 07:45	439	439
		07:45 08:00	524	524
		08:00 08:15	642	642
		08:15 08:30	642	642
		08:30 08:45	524	524
	08:45 09:00	439	439	
	D A161	07:30 07:45	384	384
		07:45 08:00	458	458
08:00 08:15		562	562	
08:15 08:30		562	562	
08:30 08:45		458	458	
08:45 09:00	384	384		
E M62 Southbound On Ramp	07:30 07:45	0	0	
	07:45 08:00	0	0	
	08:00 08:15	0	0	
	08:15 08:30	0	0	
	08:30 08:45	0	0	
08:45 09:00	0	0		
3W Site 3	A A614 Rawcliffe Road (West)	07:30 07:45	709	709
		07:45 08:00	847	847
		08:00 08:15	1037	1037
		08:15 08:30	1037	1037
		08:30 08:45	847	847
	08:45 09:00	709	709	
	B M62 Northbound On Ramp	07:30 07:45	0	0
		07:45 08:00	0	0
		08:00 08:15	0	0
		08:15 08:30	0	0
		08:30 08:45	0	0
	08:45 09:00	0	0	
	C Link	07:30 07:45	607	607
		07:45 08:00	725	725
		08:00 08:15	887	887
		08:15 08:30	887	887
		08:30 08:45	725	725
	08:45 09:00	607	607	
	D M62 Northbound Off Ramp	07:30 07:45	740	740
		07:45 08:00	884	884
08:00 08:15		1082	1082	
08:15 08:30		1082	1082	
08:30 08:45		884	884	
08:45 09:00	740	740		

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.59	4.30	1.6	A	1145	1718
	B M62 Southbound Off Ramp	0.66	14.06	2.1	B	461	691
	C A614 Rawcliffe Road (East)	0.36	3.49	0.6	A	535	802
	D A161	0.22	4.39	0.3	A	468	336
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	0.76	12.20	3.4	B	864	1297
	B M62 Northbound On Ramp						
	C Link	0.56	5.81	1.4	A	740	1110
	D M62 Northbound Off Ramp	0.47	3.63	1.1	A	902	1353

Main Results for each time segment

07:30 - 07:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	936	936	234	0	0	8	2350	0.398	933	605	0.0	0.8	2.946	A
	B M62 Southbound Off Ramp	378	378	94	0	0	941	1032	0.366	375	0	0.0	0.6	5.970	A
	C A614 Rawcliffe Road (East)	439	439	110	0	0	822	2010	0.218	438	495	0.0	0.3	2.496	A
	D A161	384	184	46	200	0	865	1436	0.128	183	395	0.0	0.2	3.315	A
	E M62 Southbound On Ramp						613				435				
3W Site 3	A A614 Rawcliffe Road (West)	709		177			498	1492	0.475	705	842	0.0	1.0	4.955	A
	B M62 Northbound On Ramp						936				267				
	C Link	605		151			0	1574	0.384	602	936	0.0	0.7	4.088	A
	D M62 Northbound Off Ramp	740		185			602	2508	0.295	738	0	0.0	0.5	2.491	A

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1121	1121	280	0	0	10	2349	0.477	1120	724	0.8	1.1	3.398	A
	B M62 Southbound Off Ramp	451	451	113	0	0	1129	947	0.476	450	0	0.6	1.0	7.884	A
	C A614 Rawcliffe Road (East)	524	524	131	0	0	986	1907	0.275	524	593	0.3	0.4	2.838	A
	D A161	458	219	55	239	0	1036	1343	0.163	219	473	0.2	0.2	3.697	A
	E M62 Southbound On Ramp						734				521				
3W Site 3	A A614 Rawcliffe Road (West)	847		212			596	1435	0.590	845	1010	1.0	1.5	6.608	A
	B M62 Northbound On Ramp						1121				320				
	C Link	724		181			0	1574	0.460	723	1121	0.7	0.9	4.677	A
	D M62 Northbound Off Ramp	884		221			723	2419	0.365	883	0	0.5	0.7	2.870	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1369	1369	342	0	0	12	2348	0.583	1367	885	1.1	1.6	4.254	A
	B M62 Southbound Off Ramp	553	553	138	0	0	1379	835	0.662	548	0	1.0	2.0	13.515	B
	C A614 Rawcliffe Road (East)	642	642	160	0	0	1203	1771	0.363	641	724	0.4	0.6	3.475	A
	D A161	562	269	67	293	0	1266	1218	0.221	268	578	0.2	0.3	4.375	A
	E M62 Southbound On Ramp						897				637				
3W Site 3	A A614 Rawcliffe Road (West)	1037		259			730	1358	0.764	1030	1235	1.5	3.3	11.701	B
	B M62 Northbound On Ramp						1369				391				
	C Link	885		221			0	1574	0.562	883	1369	0.9	1.4	5.753	A
	D M62 Northbound Off Ramp	1082		271			883	2302	0.470	1081	0	0.7	1.1	3.608	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1375	1375	344	0	0	12	2348	0.586	1375	888	1.6	1.6	4.298	A
	B M62 Southbound Off Ramp	553	553	138	0	0	1387	832	0.665	552	0	2.0	2.1	14.059	B
	C A614 Rawcliffe Road (East)	642	642	160	0	0	1211	1766	0.363	642	729	0.6	0.6	3.492	A
	D A161	562	269	67	293	0	1271	1215	0.221	269	581	0.3	0.3	4.391	A
	E M62 Southbound On Ramp						900				640				
3W Site 3	A A614 Rawcliffe Road (West)	1037		259			731	1357	0.764	1037	1239	3.3	3.4	12.205	B
	B M62 Northbound On Ramp						1375				393				
	C Link	888		222			0	1574	0.564	888	1375	1.4	1.4	5.810	A
	D M62 Northbound Off Ramp	1082		271			888	2298	0.471	1082	0	1.1	1.1	3.627	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1129	1129	282	0	0	10	2349	0.481	1131	729	1.6	1.1	3.442	A
	B M62 Southbound Off Ramp	451	451	113	0	0	1141	942	0.479	456	0	2.1	1.0	8.158	A
	C A614 Rawcliffe Road (East)	524	524	131	0	0	997	1900	0.276	525	600	0.6	0.4	2.856	A
	D A161	458	219	55	239	0	1044	1339	0.164	220	478	0.3	0.2	3.713	A
	E M62 Southbound On Ramp						739				525				
3W Site 3	A A614 Rawcliffe Road (West)	847		212			599	1434	0.591	854	1017	3.4	1.6	6.840	A
	B M62 Northbound On Ramp						1129				324				
	C Link	729		182			0	1574	0.463	731	1129	1.4	1.0	4.733	A
	D M62 Northbound Off Ramp	884		221			731	2414	0.366	885	0	1.1	0.7	2.888	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	943	943	236	0	0	8	2350	0.401	944	609	1.1	0.8	2.976	A
	B M62 Southbound Off Ramp	378	378	94	0	0	952	1027	0.368	379	0	1.0	0.6	6.086	A
	C A614 Rawcliffe Road (East)	439	439	110	0	0	831	2005	0.219	439	500	0.4	0.3	2.511	A
	D A161	384	184	46	200	0	872	1433	0.128	184	399	0.2	0.2	3.328	A
	E M62 Southbound On Ramp						617				438				
3W Site 3	A A614 Rawcliffe Road (West)	709		177			501	1491	0.476	712	850	1.6	1.0	5.044	A
	B M62 Northbound On Ramp						943				270				
	C Link	609		152			0	1574	0.387	610	943	1.0	0.7	4.137	A
	D M62 Northbound Off Ramp	740		185			610	2503	0.296	741	0	0.7	0.5	2.505	A

2026 Future Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	3W - Site 3 - C - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	3E - Site 3 - A - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	4.59	A
3W	Site 3	Standard Roundabout		B, C, D, A	9.20	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.90	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2026 Future Baseline	PM	ONE HOUR	16 15	17 45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Simple (vertical queueing)	Normal	0	100.00	
3W Site 3	C Link	3E	A	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	323	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	743	100.000
	D A161		ONE HOUR	✓	511	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	994	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	941	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	257	737	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	710	200	0	0
	D M62 Northbound Off Ramp	416	0	525	0

Proportions

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0.00	0.26	0.74	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.78	0.22	0.00	0.00
	D M62 Northbound Off Ramp	0.44	0.00	0.56	0.00

Demand (PCU/hr)

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0	0	613	369	281
	B M62 Southbound Off Ramp	189	0	60	73	1
	C A614 Rawcliffe Road (East)	428	0	3	36	276
	D A161	292	0	12	5	202
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0.00	0.00	0.49	0.29	0.22
	B M62 Southbound Off Ramp	0.58	0.00	0.19	0.23	0.00
	C A614 Rawcliffe Road (East)	0.58	0.00	0.00	0.05	0.37
	D A161	0.57	0.00	0.02	0.01	0.40
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	12	5	0
	B M62 Northbound On Ramp	0	0	0	0

Average PCU Per Veh

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	1.000	1.120	1.045	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000

C Link	6	6	0	0
D M62 Northbound Off Ramp	22	0	13	0

C Link	1.055	1.062	1.000	1.000
D M62 Northbound Off Ramp	1.220	1.000	1.126	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	5	15	19
	B M62 Southbound Off Ramp	13	0	15	19	0
	C A614 Rawcliffe Road (East)	2	0	0	20	7
	D A161	6	0	33	67	22
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.052	1.145	1.186
	B M62 Southbound Off Ramp	1.129	1.000	1.146	1.190	1.000
	C A614 Rawcliffe Road (East)	1.019	1.000	1.000	1.200	1.066
	D A161	1.062	1.000	1.333	1.667	1.219
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	16:15 16:30	951	951
		16:30 16:45	1135	1135
		16:45 17:00	1391	1391
		17:00 17:15	1391	1391
		17:15 17:30	1135	1135
	B M62 Southbound Off Ramp	17:30 17:45	951	951
		16:15 16:30	243	243
		16:30 16:45	290	290
		16:45 17:00	356	356
		17:00 17:15	356	356
	C A614 Rawcliffe Road (East)	17:15 17:30	290	290
		17:30 17:45	243	243
		16:15 16:30	560	560
		16:30 16:45	668	668
		16:45 17:00	818	818
	D A161	17:00 17:15	818	818
		17:15 17:30	668	668
		17:30 17:45	560	560
		16:15 16:30	385	385
		16:30 16:45	460	460
E M62 Southbound On Ramp	16:45 17:00	563	563	
	17:00 17:15	563	563	
	17:15 17:30	460	460	
	17:30 17:45	385	385	
	16:15 16:30	0	0	
3W Site 3	A A614 Rawcliffe Road (West)	16:30 16:45	0	0
		16:45 17:00	0	0
		17:00 17:15	0	0
		17:15 17:30	0	0
		17:30 17:45	0	0
	B M62 Northbound On Ramp	16:15 16:30	748	748
		16:30 16:45	894	894
		16:45 17:00	1094	1094
		17:00 17:15	1094	1094
		17:15 17:30	894	894
	C Link	17:30 17:45	748	748
		16:15 16:30	0	0
		16:30 16:45	0	0
		16:45 17:00	0	0
		17:00 17:15	0	0
	D M62 Northbound Off Ramp	17:15 17:30	0	0
		17:30 17:45	0	0
		16:15 16:30	685	685
		16:30 16:45	818	818
		16:45 17:00	1002	1002
D M62 Northbound Off Ramp	17:00 17:15	1002	1002	
	17:15 17:30	818	818	
	17:30 17:45	685	685	
	16:15 16:30	708	708	
	16:30 16:45	846	846	
	16:45 17:00	1036	1036	
	17:00 17:15	1036	1036	
	17:15 17:30	846	846	
	17:30 17:45	708	708	

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.59	4.18	1.6	A	1157	1736
	B M62 Southbound Off Ramp	0.43	8.86	0.9	A	296	445
	C A614 Rawcliffe Road (East)	0.43	3.50	0.8	A	682	1023
	D A161	0.28	4.50	0.4	A	469	426
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	0.83	16.88	4.9	C	912	1368
	B M62 Northbound On Ramp						
	C Link	0.64	6.63	1.8	A	834	1251
	D M62 Northbound Off Ramp	0.47	3.55	1.0	A	863	1295

Main Results for each time segment

16:15 - 16:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	946	946	236	0	0	15	2346	0.403	943	682	0.0	0.7	2.832	A
	B M62 Southbound Off Ramp	243	243	61	0	0	958	1024	0.237	242	0	0.0	0.4	5.257	A
	C A614 Rawcliffe Road (East)	560	560	140	0	0	686	2096	0.267	558	514	0.0	0.4	2.441	A
	D A161	385	233	58	152	0	883	1427	0.163	232	361	0.0	0.2	3.244	A
	E M62 Southbound On Ramp						697				418				
3W Site 3	A A614 Rawcliffe Road (West)	748		187			543	1466	0.510	744	842	0.0	1.1	5.272	A
	B M62 Northbound On Ramp						946				342				
	C Link	682		170			0	1574	0.433	679	946	0.0	0.8	4.233	A
	D M62 Northbound Off Ramp	708		177			679	2452	0.289	707	0	0.0	0.5	2.402	A

16:30 - 16:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1132	1132	283	0	0	18	2344	0.483	1131	816	0.7	1.0	3.278	A
	B M62 Southbound Off Ramp	290	290	73	0	0	1149	938	0.309	290	0	0.4	0.5	6.349	A
	C A614 Rawcliffe Road (East)	668	668	167	0	0	823	2010	0.332	668	616	0.4	0.5	2.797	A
	D A161	460	278	70	182	0	1057	1332	0.209	278	433	0.2	0.3	3.678	A
	E M62 Southbound On Ramp						835				500				
3W Site 3	A A614 Rawcliffe Road (West)	894		223			651	1404	0.637	891	1009	1.1	1.8	7.421	A
	B M62 Northbound On Ramp						1132				409				
	C Link	816		204			0	1574	0.519	815	1132	0.8	1.1	5.003	A
	D M62 Northbound Off Ramp	846		211			815	2352	0.360	845	0	0.5	0.7	2.782	A

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1380	1380	345	0	0	23	2342	0.589	1378	999	1.0	1.6	4.123	A
	B M62 Southbound Off Ramp	356	356	89	0	0	1401	826	0.431	354	0	0.5	0.9	8.720	A
	C A614 Rawcliffe Road (East)	818	818	205	0	0	1003	1896	0.432	817	751	0.5	0.8	3.479	A
	D A161	563	341	85	222	0	1293	1204	0.283	340	528	0.3	0.4	4.486	A
	E M62 Southbound On Ramp						1022				611				
3W Site 3	A A614 Rawcliffe Road (West)	1094		274			796	1319	0.830	1083	1235	1.8	4.7	15.502	C
	B M62 Northbound On Ramp						1380				499				
	C Link	999		250			0	1574	0.635	996	1380	1.1	1.8	6.550	A
	D M62 Northbound Off Ramp	1036		259			996	2219	0.467	1035	0	0.7	1.0	3.536	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1389	1389	347	0	0	23	2342	0.593	1389	1001	1.6	1.6	4.178	A
	B M62 Southbound Off Ramp	356	356	89	0	0	1411	821	0.433	356	0	0.9	0.9	8.862	A
	C A614 Rawcliffe Road (East)	818	818	205	0	0	1010	1892	0.433	818	757	0.8	0.8	3.498	A
	D A161	563	341	85	222	0	1297	1201	0.283	341	532	0.4	0.4	4.503	A
	E M62 Southbound On Ramp						1023				614				
3W Site 3	A A614 Rawcliffe Road (West)	1094		274			798	1318	0.830	1094	1239	4.7	4.9	16.879	C
	B M62 Northbound On Ramp						1389				503				
	C Link	1001		250			0	1574	0.636	1001	1389	1.8	1.8	6.631	A
	D M62 Northbound Off Ramp	1036		259			1001	2216	0.468	1036	0	1.0	1.0	3.554	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1144	1144	286	0	0	19	2344	0.488	1146	819	1.6	1.1	3.329	A
	B M62 Southbound Off Ramp	290	290	73	0	0	1165	931	0.312	292	0	0.9	0.5	6.456	A
	C A614 Rawcliffe Road (East)	668	668	167	0	0	832	2004	0.333	669	624	0.8	0.5	2.819	A
	D A161	460	278	70	182	0	1064	1328	0.209	279	438	0.4	0.3	3.697	A
	E M62 Southbound On Ramp						838				505				
3W Site 3	A A614 Rawcliffe Road (West)	894		223			653	1402	0.637	906	1016	4.9	1.9	7.894	A
	B M62 Northbound On Ramp						1144				415				
	C Link	819		205			0	1574	0.520	822	1144	1.8	1.2	5.073	A
	D M62 Northbound Off Ramp	846		211			822	2347	0.360	847	0	1.0	0.7	2.801	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	953	953	238	0	0	16	2346	0.406	954	685	1.1	0.8	2.864	A
	B M62 Southbound Off Ramp	243	243	61	0	0	970	1019	0.239	244	0	0.5	0.4	5.319	A
	C A614 Rawcliffe Road (East)	560	560	140	0	0	694	2091	0.268	560	520	0.5	0.4	2.454	A
	D A161	385	233	58	152	0	889	1424	0.164	233	365	0.3	0.2	3.259	A
	E M62 Southbound On Ramp						701				421				
3W Site 3	A A614 Rawcliffe Road (West)	748		187			547	1464	0.511	751	849	1.9	1.1	5.398	A
	B M62 Northbound On Ramp						953				345				
	C Link	685		171			0	1574	0.435	687	953	1.2	0.8	4.292	A
	D M62 Northbound Off Ramp	708		177			687	2446	0.290	709	0	0.7	0.5	2.416	A

2026 Future Baseline + Drax, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	3W - Site 3 - C - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	3E - Site 3 - A - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	6.24	A
3W	Site 3	Standard Roundabout		B, C, D, A	7.72	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.98	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2026 Future Baseline + Drax	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Simple (vertical queueing)	Normal	0	100.00	
3W Site 3	C Link	3E	A	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	514	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	583	100.000
	D A161		ONE HOUR	✓	510	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	968	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	1094	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	241	727	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	704	115	0	0
	D M62 Northbound Off Ramp	545	1	548	0

Proportions

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0.00	0.25	0.75	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.86	0.14	0.00	0.00
	D M62 Northbound Off Ramp	0.50	0.00	0.50	0.00

Demand (PCU/hr)

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0	0	545	399	331
	B M62 Southbound Off Ramp	292	0	108	113	1
	C A614 Rawcliffe Road (East)	290	0	4	14	275
	D A161	237	0	5	2	266
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0.00	0.00	0.43	0.31	0.26
	B M62 Southbound Off Ramp	0.57	0.00	0.21	0.22	0.00
	C A614 Rawcliffe Road (East)	0.50	0.00	0.01	0.02	0.47
	D A161	0.46	0.00	0.01	0.00	0.52
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	13	8	0
	B M62 Northbound On Ramp	0	0	0	0

Average PCU Per Veh

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	1.000	1.125	1.076	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000

C Link	10	18	0	0
D M62 Northbound Off Ramp	26	0	20	0

C Link	1.096	1.176	1.000	1.000
D M62 Northbound Off Ramp	1.256	1.000	1.204	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	11	20	22
	B M62 Southbound Off Ramp	9	0	6	14	0
	C A614 Rawcliffe Road (East)	9	0	0	9	10
	D A161	15	0	50	100	33
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.108	1.198	1.222
	B M62 Southbound Off Ramp	1.087	1.000	1.060	1.143	1.000
	C A614 Rawcliffe Road (East)	1.087	1.000	1.000	1.091	1.097
	D A161	1.145	1.000	1.500	2.000	1.326
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	07:30 07:45	960	960
		07:45 08:00	1146	1146
		08:00 08:15	1404	1404
		08:15 08:30	1404	1404
		08:30 08:45	1146	1146
	08:45 09:00	960	960	
	B M62 Southbound Off Ramp	07:30 07:45	387	387
		07:45 08:00	462	462
		08:00 08:15	566	566
		08:15 08:30	566	566
		08:30 08:45	462	462
	08:45 09:00	387	387	
	C A614 Rawcliffe Road (East)	07:30 07:45	439	439
		07:45 08:00	524	524
		08:00 08:15	642	642
		08:15 08:30	642	642
		08:30 08:45	524	524
	08:45 09:00	439	439	
	D A161	07:30 07:45	384	384
		07:45 08:00	458	458
08:00 08:15		562	562	
08:15 08:30		562	562	
08:30 08:45		458	458	
08:45 09:00	384	384		
E M62 Southbound On Ramp	07:30 07:45	0	0	
	07:45 08:00	0	0	
	08:00 08:15	0	0	
	08:15 08:30	0	0	
	08:30 08:45	0	0	
08:45 09:00	0	0		
3W Site 3	A A614 Rawcliffe Road (West)	07:30 07:45	729	729
		07:45 08:00	870	870
		08:00 08:15	1066	1066
		08:15 08:30	1066	1066
		08:30 08:45	870	870
	08:45 09:00	729	729	
	B M62 Northbound On Ramp	07:30 07:45	0	0
		07:45 08:00	0	0
		08:00 08:15	0	0
		08:15 08:30	0	0
		08:30 08:45	0	0
	08:45 09:00	0	0	
	C Link	07:30 07:45	617	617
		07:45 08:00	736	736
		08:00 08:15	902	902
		08:15 08:30	902	902
		08:30 08:45	736	736
	08:45 09:00	617	617	
	D M62 Northbound Off Ramp	07:30 07:45	824	824
		07:45 08:00	983	983
08:00 08:15		1205	1205	
08:15 08:30		1205	1205	
08:30 08:45		983	983	
08:45 09:00	824	824		

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.60	4.43	1.7	A	1169	1754
	B M62 Southbound Off Ramp	0.69	15.48	2.4	C	472	707
	C A614 Rawcliffe Road (East)	0.37	3.58	0.6	A	535	802
	D A161	0.23	4.50	0.3	A	468	336
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	0.79	13.37	3.8	B	888	1332
	B M62 Northbound On Ramp						
	C Link	0.57	5.92	1.5	A	751	1127
	D M62 Northbound Off Ramp	0.53	4.08	1.4	A	1004	1506

Main Results for each time segment

07:30 - 07:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	956	956	239	0	0	8	2350	0.407	952	614	0.0	0.8	2.989	A
	B M62 Southbound Off Ramp	387	387	97	0	0	961	1023	0.378	384	0	0.0	0.7	6.132	A
	C A614 Rawcliffe Road (East)	439	439	110	0	0	850	1992	0.220	438	495	0.0	0.3	2.522	A
	D A161	384	184	46	200	0	894	1421	0.129	183	395	0.0	0.2	3.356	A
	E M62 Southbound On Ramp						622				454				
3W Site 3	A A614 Rawcliffe Road (West)	729		182			498	1492	0.488	725	934	0.0	1.0	5.075	A
	B M62 Northbound On Ramp						956				267				
	C Link	614		153			0	1574	0.390	611	956	0.0	0.7	4.126	A
	D M62 Northbound Off Ramp	824		206			611	2502	0.329	821	0	0.0	0.6	2.629	A

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1144	1144	286	0	0	10	2349	0.487	1143	735	0.8	1.1	3.467	A
	B M62 Southbound Off Ramp	462	462	116	0	0	1153	937	0.493	461	0	0.7	1.0	8.227	A
	C A614 Rawcliffe Road (East)	524	524	131	0	0	1020	1886	0.278	524	593	0.3	0.4	2.882	A
	D A161	458	219	55	239	0	1070	1325	0.166	219	473	0.2	0.2	3.759	A
	E M62 Southbound On Ramp						745				545				
3W Site 3	A A614 Rawcliffe Road (West)	870		218			596	1435	0.606	868	1120	1.0	1.6	6.869	A
	B M62 Northbound On Ramp						1144				320				
	C Link	735		184			0	1574	0.467	734	1144	0.7	1.0	4.736	A
	D M62 Northbound Off Ramp	983		246			734	2412	0.408	983	0	0.6	0.8	3.094	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1397	1397	349	0	0	12	2348	0.595	1394	898	1.1	1.7	4.379	A
	B M62 Southbound Off Ramp	566	566	141	0	0	1406	823	0.688	561	0	1.0	2.3	14.735	B
	C A614 Rawcliffe Road (East)	642	642	160	0	0	1244	1745	0.368	641	724	0.4	0.6	3.556	A
	D A161	562	269	67	293	0	1307	1196	0.225	268	577	0.2	0.3	4.480	A
	E M62 Southbound On Ramp						910				665				
3W Site 3	A A614 Rawcliffe Road (West)	1066		266			729	1358	0.785	1057	1369	1.6	3.7	12.691	B
	B M62 Northbound On Ramp						1397				390				
	C Link	898		225			0	1574	0.571	896	1397	1.0	1.4	5.860	A
	D M62 Northbound Off Ramp	1205		301			896	2293	0.525	1202	0	0.8	1.3	4.050	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1403	1403	351	0	0	12	2348	0.598	1403	902	1.7	1.7	4.432	A
	B M62 Southbound Off Ramp	566	566	141	0	0	1415	819	0.691	566	0	2.3	2.4	15.482	C
	C A614 Rawcliffe Road (East)	642	642	160	0	0	1252	1740	0.369	642	729	0.6	0.6	3.576	A
	D A161	562	269	67	293	0	1313	1192	0.225	269	581	0.3	0.3	4.499	A
	E M62 Southbound On Ramp						914				668				
3W Site 3	A A614 Rawcliffe Road (West)	1066		266			731	1357	0.785	1065	1375	3.7	3.8	13.368	B
	B M62 Northbound On Ramp						1403				393				
	C Link	902		225			0	1574	0.573	901	1403	1.4	1.5	5.921	A
	D M62 Northbound Off Ramp	1205		301			901	2289	0.526	1204	0	1.3	1.4	4.079	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1154	1154	288	0	0	10	2349	0.491	1156	740	1.7	1.1	3.514	A
	B M62 Southbound Off Ramp	462	462	116	0	0	1166	931	0.496	467	0	2.4	1.1	8.569	A
	C A614 Rawcliffe Road (East)	524	524	131	0	0	1033	1878	0.279	525	600	0.6	0.4	2.906	A
	D A161	458	219	55	239	0	1079	1320	0.166	220	479	0.3	0.2	3.778	A
	E M62 Southbound On Ramp						750				549				
3W Site 3	A A614 Rawcliffe Road (West)	870		218			599	1434	0.607	879	1129	3.8	1.7	7.162	A
	B M62 Northbound On Ramp						1154				324				
	C Link	740		185			0	1574	0.470	742	1154	1.5	1.0	4.800	A
	D M62 Northbound Off Ramp	983		246			742	2406	0.409	985	0	1.4	0.9	3.120	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	962	962	241	0	0	8	2350	0.409	964	618	1.1	0.8	3.021	A
	B M62 Southbound Off Ramp	387	387	97	0	0	972	1018	0.380	389	0	1.1	0.7	6.265	A
	C A614 Rawcliffe Road (East)	439	439	110	0	0	860	1986	0.221	439	500	0.4	0.3	2.538	A
	D A161	384	184	46	200	0	901	1417	0.130	184	399	0.2	0.2	3.373	A
	E M62 Southbound On Ramp						626				458				
3W Site 3	A A614 Rawcliffe Road (West)	729		182			501	1491	0.489	731	943	1.7	1.1	5.176	A
	B M62 Northbound On Ramp						962				270				
	C Link	618		154			0	1574	0.393	619	962	1.0	0.7	4.176	A
	D M62 Northbound Off Ramp	824		206			619	2496	0.330	825	0	0.9	0.6	2.650	A

2026 Future Baseline + Drax, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	3W - Site 3 - C - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	3E - Site 3 - A - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	4.86	A
3W	Site 3	Standard Roundabout		B, C, D, A	11.85	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.37	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2026 Future Baseline + Drax	PM	ONE HOUR	16 15	17 45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Simple (vertical queueing)	Normal	0	100.00	
3W Site 3	C Link	3E	A	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	323	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	743	100.000
	D A161		ONE HOUR	✓	511	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	1058	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	966	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	262	796	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	710	200	0	0
	D M62 Northbound Off Ramp	441	0	525	0

Proportions

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0.00	0.25	0.75	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.78	0.22	0.00	0.00
	D M62 Northbound Off Ramp	0.46	0.00	0.54	0.00

Demand (PCU/hr)

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0	0	613	369	339
	B M62 Southbound Off Ramp	189	0	60	73	1
	C A614 Rawcliffe Road (East)	428	0	3	36	276
	D A161	292	0	12	5	202
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0.00	0.00	0.46	0.28	0.26
	B M62 Southbound Off Ramp	0.58	0.00	0.19	0.23	0.00
	C A614 Rawcliffe Road (East)	0.58	0.00	0.00	0.05	0.37
	D A161	0.57	0.00	0.02	0.01	0.40
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	12	5	0
	B M62 Northbound On Ramp	0	0	0	0

Average PCU Per Veh

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	1.000	1.120	1.045	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000

C Link	6	6	0	0
D M62 Northbound Off Ramp	22	0	13	0

C Link	1.055	1.062	1.000	1.000
D M62 Northbound Off Ramp	1.220	1.000	1.126	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	5	15	19
	B M62 Southbound Off Ramp	13	0	15	19	0
	C A614 Rawcliffe Road (East)	2	0	0	20	7
	D A161	6	0	33	67	22
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.052	1.145	1.186
	B M62 Southbound Off Ramp	1.129	1.000	1.146	1.190	1.000
	C A614 Rawcliffe Road (East)	1.019	1.000	1.000	1.200	1.066
	D A161	1.062	1.000	1.333	1.667	1.219
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	16:15 16:30	995	995
		16:30 16:45	1188	1188
		16:45 17:00	1454	1454
		17:00 17:15	1454	1454
		17:15 17:30	1188	1188
	B M62 Southbound Off Ramp	17:30 17:45	995	995
		16:15 16:30	243	243
		16:30 16:45	290	290
		16:45 17:00	356	356
		17:00 17:15	356	356
	C A614 Rawcliffe Road (East)	17:15 17:30	290	290
		17:30 17:45	243	243
		16:15 16:30	559	559
		16:30 16:45	668	668
		16:45 17:00	818	818
	D A161	17:00 17:15	818	818
		17:15 17:30	668	668
		17:30 17:45	559	559
		16:15 16:30	385	385
		16:30 16:45	459	459
E M62 Southbound On Ramp	16:45 17:00	563	563	
	17:00 17:15	563	563	
	17:15 17:30	459	459	
	17:30 17:45	385	385	
	16:15 16:30	0	0	
3W Site 3	A A614 Rawcliffe Road (West)	16:30 16:45	0	0
		16:45 17:00	0	0
		17:00 17:15	0	0
		17:15 17:30	0	0
		17:30 17:45	0	0
	B M62 Northbound On Ramp	16:15 16:30	797	797
		16:30 16:45	951	951
		16:45 17:00	1165	1165
		17:00 17:15	1165	1165
		17:15 17:30	951	951
	C Link	17:30 17:45	797	797
		16:15 16:30	0	0
		16:30 16:45	0	0
		16:45 17:00	0	0
		17:00 17:15	0	0
	D M62 Northbound Off Ramp	17:15 17:30	0	0
		17:30 17:45	0	0
		16:15 16:30	685	685
		16:30 16:45	818	818
		16:45 17:00	1002	1002
E M62 Southbound On Ramp	17:00 17:15	1002	1002	
	17:15 17:30	818	818	
	17:30 17:45	685	685	
	16:15 16:30	727	727	
	16:30 16:45	868	868	
A A614 Rawcliffe Road (West)	16:45 17:00	1064	1064	
	17:00 17:15	1064	1064	
	17:15 17:30	868	868	
	17:30 17:45	727	727	
	16:15 16:30	0	0	

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.62	4.49	1.8	A	1211	1817
	B M62 Southbound Off Ramp	0.45	9.44	0.9	A	296	445
	C A614 Rawcliffe Road (East)	0.44	3.63	0.8	A	682	1023
	D A161	0.29	4.69	0.4	A	469	425
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	0.88	23.81	7.3	C	971	1456
	B M62 Northbound On Ramp						
	C Link	0.64	6.63	1.8	A	834	1251
	D M62 Northbound Off Ramp	0.48	3.64	1.1	A	886	1330
	E M62 Southbound On Ramp						

Main Results for each time segment

16:15 - 16:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	990	990	247	0	0	15	2346	0.422	986	682	0.0	0.8	2.928	A
	B M62 Southbound Off Ramp	243	243	61	0	0	1001	1005	0.242	242	0	0.0	0.4	5.391	A
	C A614 Rawcliffe Road (East)	559	559	140	0	0	729	2069	0.270	558	514	0.0	0.4	2.485	A
	D A161	385	233	58	152	0	926	1403	0.166	232	361	0.0	0.2	3.307	A
	E M62 Southbound On Ramp						697				461				
3W Site 3	A A614 Rawcliffe Road (West)	797		199			543	1466	0.543	792	861	0.0	1.2	5.632	A
	B M62 Northbound On Ramp						990				345				
	C Link	682		170			0	1574	0.433	679	990	0.0	0.8	4.232	A
	D M62 Northbound Off Ramp	727		182			679	2452	0.297	725	0	0.0	0.5	2.431	A

16:30 - 16:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1184	1184	296	0	0	18	2345	0.505	1183	816	0.8	1.1	3.436	A
	B M62 Southbound Off Ramp	290	290	73	0	0	1201	915	0.317	290	0	0.4	0.5	6.582	A
	C A614 Rawcliffe Road (East)	668	668	167	0	0	875	1977	0.338	667	616	0.4	0.5	2.866	A
	D A161	459	278	69	182	0	1109	1304	0.213	277	433	0.2	0.3	3.777	A
	E M62 Southbound On Ramp						834				552				
3W Site 3	A A614 Rawcliffe Road (West)	951		238			651	1404	0.678	947	1032	1.2	2.2	8.318	A
	B M62 Northbound On Ramp						1184				414				
	C Link	816		204			0	1574	0.518	815	1184	0.8	1.1	5.002	A
	D M62 Northbound Off Ramp	868		217			815	2352	0.369	868	0	0.5	0.7	2.828	A

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1440	1440	360	0	0	22	2342	0.615	1437	999	1.1	1.7	4.402	A
	B M62 Southbound Off Ramp	356	356	89	0	0	1459	799	0.445	354	0	0.5	0.9	9.233	A
	C A614 Rawcliffe Road (East)	818	818	205	0	0	1064	1858	0.440	817	749	0.5	0.8	3.606	A
	D A161	563	340	85	222	0	1355	1170	0.291	340	527	0.3	0.4	4.665	A
	E M62 Southbound On Ramp						1021				674				
3W Site 3	A A614 Rawcliffe Road (West)	1165		291			796	1319	0.883	1147	1262	2.2	6.7	20.352	C
	B M62 Northbound On Ramp						1440				503				
	C Link	999		250			0	1574	0.634	996	1440	1.1	1.8	6.548	A
	D M62 Northbound Off Ramp	1064		266			996	2219	0.479	1062	0	0.7	1.1	3.624	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1453	1453	363	0	0	22	2342	0.620	1453	1001	1.7	1.8	4.488	A
	B M62 Southbound Off Ramp	356	356	89	0	0	1475	792	0.449	356	0	0.9	0.9	9.436	A
	C A614 Rawcliffe Road (East)	818	818	205	0	0	1074	1852	0.442	818	757	0.8	0.8	3.632	A
	D A161	563	340	85	222	0	1360	1167	0.292	340	531	0.4	0.4	4.689	A
	E M62 Southbound On Ramp						1023				678				
3W Site 3	A A614 Rawcliffe Road (West)	1165		291			798	1318	0.884	1163	1266	6.7	7.3	23.812	C
	B M62 Northbound On Ramp						1453				508				
	C Link	1001		250			0	1574	0.636	1001	1453	1.8	1.8	6.631	A
	D M62 Northbound Off Ramp	1064		266			1001	2216	0.480	1064	0	1.1	1.1	3.643	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1203	1203	301	0	0	18	2345	0.513	1206	819	1.8	1.2	3.516	A
	B M62 Southbound Off Ramp	290	290	73	0	0	1224	905	0.321	292	0	0.9	0.5	6.738	A
	C A614 Rawcliffe Road (East)	668	668	167	0	0	899	1969	0.339	669	627	0.8	0.5	2.895	A
	D A161	459	278	69	182	0	1118	1299	0.214	278	440	0.4	0.3	3.799	A
	E M62 Southbound On Ramp						837				559				
3W Site 3	A A614 Rawcliffe Road (West)	951		238			653	1402	0.678	971	1038	7.3	2.3	9.267	A
	B M62 Northbound On Ramp						1203				421				
	C Link	819		205			0	1574	0.520	822	1203	1.8	1.2	5.076	A
	D M62 Northbound Off Ramp	868		217			822	2347	0.370	870	0	1.1	0.7	2.846	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	998	998	250	0	0	15	2346	0.425	999	685	1.2	0.8	2.967	A
	B M62 Southbound Off Ramp	243	243	61	0	0	1015	999	0.243	244	0	0.5	0.4	5.464	A
	C A614 Rawcliffe Road (East)	559	559	140	0	0	738	2063	0.271	560	520	0.5	0.4	2.500	A
	D A161	385	233	58	152	0	933	1400	0.166	233	365	0.3	0.2	3.322	A
	E M62 Southbound On Ramp						700				465				
3W Site 3	A A614 Rawcliffe Road (West)	797		199			547	1464	0.544	801	868	2.3	1.3	5.801	A
	B M62 Northbound On Ramp						998				349				
	C Link	685		171			0	1574	0.435	687	998	1.2	0.8	4.294	A
	D M62 Northbound Off Ramp	727		182			687	2446	0.297	728	0	0.7	0.5	2.445	A

2026 Do Minimum, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	3W - Site 3 - C - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	3E - Site 3 - A - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	153.61	F
3W	Site 3	Standard Roundabout		B, C, D, A	93.83	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	126.07	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2026 Do Minimum	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Simple (vertical queueing)	Normal	0	100.00	
3W Site 3	C Link	3E	A	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	762	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	861	100.000
	D A161		ONE HOUR	✓	659	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	1083	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	1501	100.000

Origin-Destination Data

Demand (PCU/hr)

	From	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	262	821	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	786	203	0	0
	D M62 Northbound Off Ramp	461	1	1039	0

Proportions

	From	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0.00	0.24	0.76	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.79	0.21	0.00	0.00
	D M62 Northbound Off Ramp	0.31	0.00	0.69	0.00

Demand (PCU/hr)

	From	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0	0	572	962	325
	B M62 Southbound Off Ramp	305	0	115	341	1
	C A614 Rawcliffe Road (East)	398	0	12	96	355
	D A161	285	0	12	17	345
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

	From	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0.00	0.00	0.31	0.52	0.17
	B M62 Southbound Off Ramp	0.40	0.00	0.15	0.45	0.00
	C A614 Rawcliffe Road (East)	0.46	0.00	0.01	0.11	0.41
	D A161	0.43	0.00	0.02	0.03	0.52
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

	From	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	13	8	0
	B M62 Northbound On Ramp	0	0	0	0

Average PCU Per Veh

	From	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	1.000	1.125	1.076	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000

C Link	10	18	0	0
D M62 Northbound Off Ramp	26	0	20	0

C Link	1.096	1.176	1.000	1.000
D M62 Northbound Off Ramp	1.256	1.000	1.204	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	11	20	22
	B M62 Southbound Off Ramp	9	0	6	14	0
	C A614 Rawcliffe Road (East)	9	0	0	9	10
	D A161	15	0	50	100	33
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.108	1.198	1.222
	B M62 Southbound Off Ramp	1.087	1.000	1.060	1.143	1.000
	C A614 Rawcliffe Road (East)	1.087	1.000	1.000	1.091	1.097
	D A161	1.145	1.000	1.500	2.000	1.326
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	07:30 07:45	1400	1400
		07:45 08:00	1671	1671
		08:00 08:15	2047	2047
		08:15 08:30	2047	2047
		08:30 08:45	1671	1671
	08:45 09:00	1400	1400	
	B M62 Southbound Off Ramp	07:30 07:45	574	574
		07:45 08:00	685	685
		08:00 08:15	839	839
		08:15 08:30	839	839
		08:30 08:45	685	685
	08:45 09:00	574	574	
	C A614 Rawcliffe Road (East)	07:30 07:45	648	648
		07:45 08:00	774	774
		08:00 08:15	948	948
		08:15 08:30	948	948
		08:30 08:45	774	774
	08:45 09:00	648	648	
	D A161	07:30 07:45	496	496
		07:45 08:00	592	592
08:00 08:15		726	726	
08:15 08:30		726	726	
08:30 08:45		592	592	
08:45 09:00	496	496		
E M62 Southbound On Ramp	07:30 07:45	0	0	
	07:45 08:00	0	0	
	08:00 08:15	0	0	
	08:15 08:30	0	0	
	08:30 08:45	0	0	
08:45 09:00	0	0		
3W Site 3	A A614 Rawcliffe Road (West)	07:30 07:45	815	815
		07:45 08:00	974	974
		08:00 08:15	1192	1192
		08:15 08:30	1192	1192
		08:30 08:45	974	974
	08:45 09:00	815	815	
	B M62 Northbound On Ramp	07:30 07:45	0	0
		07:45 08:00	0	0
		08:00 08:15	0	0
		08:15 08:30	0	0
		08:30 08:45	0	0
	08:45 09:00	0	0	
	C Link	07:30 07:45	745	745
		07:45 08:00	889	889
		08:00 08:15	1089	1089
		08:15 08:30	1089	1089
		08:30 08:45	889	889
	08:45 09:00	745	745	
	D M62 Northbound Off Ramp	07:30 07:45	1130	1130
		07:45 08:00	1349	1349
08:00 08:15		1653	1653	
08:15 08:30		1653	1653	
08:30 08:45		1349	1349	
08:45 09:00	1130	1130		

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.82	9.81	5.0	A	1705	2558
	B M62 Southbound Off Ramp	1.44	795.78	153.2	F	699	1049
	C A614 Rawcliffe Road (East)	0.69	9.10	2.4	A	790	1185
	D A161	0.30	5.35	0.5	A	605	432
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	1.19	289.95	104.4	F	994	1491
	B M62 Northbound On Ramp						
	C Link	0.63	6.78	1.8	A	875	1312
	D M62 Northbound Off Ramp	0.74	7.62	3.4	A	1377	2066

Main Results for each time segment

07:30 - 07:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1391	1391	348	0	0	31	2337	0.595	1384	738	0.0	1.7	4.402	A
	B M62 Southbound Off Ramp	574	574	143	0	0	1415	819	0.700	564	0	0.0	2.4	15.096	C
	C A614 Rawcliffe Road (East)	648	648	162	0	0	1450	1615	0.401	645	529	0.0	0.7	4.032	A
	D A161	496	236	59	260	0	1042	1340	0.176	235	1053	0.0	0.3	3.852	A
	E M62 Southbound On Ramp						768				509				
3W Site 3	A A614 Rawcliffe Road (West)	815		204			931	1241	0.657	807	929	0.0	2.0	8.872	A
	B M62 Northbound On Ramp						1391				347				
	C Link	738		184			0	1574	0.469	734	1391	0.0	1.0	4.741	A
	D M62 Northbound Off Ramp	1130		283			734	2412	0.469	1126	0	0.0	1.1	3.401	A

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1659	1659	415	0	0	37	2333	0.711	1655	871	1.7	2.8	6.184	A
	B M62 Southbound Off Ramp	685	685	171	0	0	1692	695	0.986	645	0	2.4	12.4	57.736	F
	C A614 Rawcliffe Road (East)	774	774	194	0	0	1709	1453	0.533	772	628	0.7	1.2	5.747	A
	D A161	592	282	71	310	0	1234	1235	0.229	282	1247	0.3	0.3	4.465	A
	E M62 Southbound On Ramp						908				608				
3W Site 3	A A614 Rawcliffe Road (West)	974		243			1112	1136	0.857	959	1105	2.0	5.6	20.676	C
	B M62 Northbound On Ramp						1659				411				
	C Link	871		218			0	1574	0.553	869	1659	1.0	1.4	5.666	A
	D M62 Northbound Off Ramp	1349		337			869	2312	0.584	1347	0	1.1	1.7	4.534	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1891	1891	473	0	0	45	2328	0.812	1883	984	2.8	4.8	9.314	A
	B M62 Southbound Off Ramp	839	839	210	0	0	1928	588	1.426	586	0	12.4	75.5	286.068	F
	C A614 Rawcliffe Road (East)	948	948	237	0	0	1820	1383	0.686	944	694	1.2	2.3	8.851	A
	D A161	726	346	86	380	0	1403	1143	0.302	345	1361	0.3	0.5	5.331	A
	E M62 Southbound On Ramp						1029				719				
3W Site 3	A A614 Rawcliffe Road (West)	1192		298			1342	1002	1.190	992	1286	5.6	55.8	124.006	F
	B M62 Northbound On Ramp						1891				443				
	C Link	984		246			0	1574	0.625	982	1891	1.4	1.8	6.740	A
	D M62 Northbound Off Ramp	1653		413			982	2230	0.741	1646	0	1.7	3.4	7.434	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1900	1900	475	0	0	45	2328	0.816	1899	984	4.8	5.0	9.806	A
	B M62 Southbound Off Ramp	839	839	210	0	0	1945	581	1.444	581	0	75.5	140.1	654.833	F
	C A614 Rawcliffe Road (East)	948	948	237	0	0	1827	1379	0.688	948	699	2.3	2.4	9.099	A
	D A161	726	346	86	380	0	1407	1141	0.303	346	1367	0.5	0.5	5.354	A
	E M62 Southbound On Ramp						1030				724				
3W Site 3	A A614 Rawcliffe Road (West)	1192		298			1347	999	1.194	998	1290	55.8	104.4	289.945	F
	B M62 Northbound On Ramp						1900				445				
	C Link	984		246			0	1574	0.625	984	1900	1.8	1.8	6.782	A
	D M62 Northbound Off Ramp	1653		413			984	2228	0.742	1653	0	3.4	3.4	7.617	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1788	1788	447	0	0	37	2333	0.766	1792	870	5.0	4.0	7.872	A
	B M62 Southbound Off Ramp	685	685	171	0	0	1829	633	1.082	633	0	140.1	153.2	795.775	F
	C A614 Rawcliffe Road (East)	774	774	194	0	0	1793	1400	0.553	778	669	2.4	1.4	6.351	A
	D A161	592	282	71	310	0	1259	1222	0.231	283	1312	0.5	0.4	4.537	A
	E M62 Southbound On Ramp						907				635				
3W Site 3	A A614 Rawcliffe Road (West)	974		243			1119	1132	0.860	1120	1109	104.4	67.8	275.932	F
	B M62 Northbound On Ramp						1788				451				
	C Link	870		217			0	1574	0.552	871	1788	1.8	1.4	5.711	A
	D M62 Northbound Off Ramp	1349		337			871	2311	0.584	1356	0	3.4	1.7	4.630	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1601	1601	400	0	0	31	2337	0.685	1606	801	4.0	2.6	5.823	A
	B M62 Southbound Off Ramp	574	574	143	0	0	1637	719	0.798	714	0	153.2	118.1	684.885	F
	C A614 Rawcliffe Road (East)	648	648	162	0	0	1731	1439	0.451	650	620	1.4	0.9	4.986	A
	D A161	496	236	59	260	0	1145	1284	0.184	237	1236	0.4	0.3	4.068	A
	E M62 Southbound On Ramp						832				550				
3W Site 3	A A614 Rawcliffe Road (West)	815		204			949	1230	0.663	1077	985	67.8	2.3	70.317	F
	B M62 Northbound On Ramp						1601				426				
	C Link	801		200			0	1574	0.509	802	1601	1.4	1.2	5.192	A
	D M62 Northbound Off Ramp	1130		283			802	2362	0.479	1133	0	1.7	1.1	3.576	A

2026 Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	3W - Site 3 - C - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	3E - Site 3 - A - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	8.49	A
3W	Site 3	Standard Roundabout		B, C, D, A	94.49	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	47.40	E

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2026 Do Minimum	PM	ONE HOUR	16 15	17 45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Simple (vertical queueing)	Normal	0	100.00	
3W Site 3	C Link	3E	A	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	451	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	963	100.000
	D A161		ONE HOUR	✓	1315	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	1129	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	1145	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	284	845	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	835	429	0	0
	D M62 Northbound Off Ramp	437	0	708	0

Proportions

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0.00	0.25	0.75	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.66	0.34	0.00	0.00
	D M62 Northbound Off Ramp	0.38	0.00	0.62	0.00

Demand (PCU/hr)

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0	0	739	509	306
	B M62 Southbound Off Ramp	208	0	111	131	1
	C A614 Rawcliffe Road (East)	514	0	34	75	340
	D A161	542	0	55	25	693
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0.00	0.00	0.48	0.33	0.20
	B M62 Southbound Off Ramp	0.46	0.00	0.25	0.29	0.00
	C A614 Rawcliffe Road (East)	0.53	0.00	0.04	0.08	0.35
	D A161	0.41	0.00	0.04	0.02	0.53
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	12	5	0
	B M62 Northbound On Ramp	0	0	0	0

Average PCU Per Veh

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	1.000	1.120	1.045	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000

C Link	6	6	0	0
D M62 Northbound Off Ramp	22	0	13	0

C Link	1.055	1.062	1.000	1.000
D M62 Northbound Off Ramp	1.220	1.000	1.126	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	5	15	19
	B M62 Southbound Off Ramp	13	0	15	19	0
	C A614 Rawcliffe Road (East)	2	0	0	20	7
	D A161	6	0	33	67	22
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.052	1.145	1.186
	B M62 Southbound Off Ramp	1.129	1.000	1.146	1.190	1.000
	C A614 Rawcliffe Road (East)	1.019	1.000	1.000	1.200	1.066
	D A161	1.062	1.000	1.333	1.667	1.219
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	16:15 16:30	1170	1170
		16:30 16:45	1397	1397
		16:45 17:00	1711	1711
		17:00 17:15	1711	1711
		17:15 17:30	1397	1397
	B M62 Southbound Off Ramp	17:30 17:45	1170	1170
		16:15 16:30	340	340
		16:30 16:45	406	406
		16:45 17:00	497	497
		17:00 17:15	497	497
	C A614 Rawcliffe Road (East)	17:15 17:30	406	406
		17:30 17:45	340	340
		16:15 16:30	725	725
		16:30 16:45	866	866
		16:45 17:00	1060	1060
	D A161	17:00 17:15	1060	1060
		17:15 17:30	866	866
		17:30 17:45	725	725
		16:15 16:30	990	990
		16:30 16:45	1182	1182
E M62 Southbound On Ramp	16:45 17:00	1448	1448	
	17:00 17:15	1448	1448	
	17:15 17:30	1182	1182	
	17:30 17:45	990	990	
	16:15 16:30	0	0	
3W Site 3	A A614 Rawcliffe Road (West)	16:30 16:45	0	0
		16:45 17:00	0	0
		17:00 17:15	0	0
		17:15 17:30	0	0
		17:30 17:45	0	0
	B M62 Northbound On Ramp	16:15 16:30	850	850
		16:30 16:45	1015	1015
		16:45 17:00	1243	1243
		17:00 17:15	1243	1243
		17:15 17:30	1015	1015
	C Link	17:30 17:45	850	850
		16:15 16:30	0	0
		16:30 16:45	0	0
		16:45 17:00	0	0
		17:00 17:15	0	0
	D M62 Northbound Off Ramp	17:15 17:30	0	0
		17:30 17:45	0	0
		16:15 16:30	952	952
		16:30 16:45	1136	1136
		16:45 17:00	1392	1392
3E Site 3	A Link	17:00 17:15	1392	1392
		17:15 17:30	1136	1136
		17:30 17:45	952	952
		16:15 16:30	862	862
		16:30 16:45	1029	1029
	B M62 Northbound On Ramp	16:45 17:00	1261	1261
		17:00 17:15	1261	1261
		17:15 17:30	1029	1029
		17:30 17:45	862	862
		16:15 16:30	862	862

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.69	5.60	2.4	A	1424	2135
	B M62 Southbound Off Ramp	0.72	20.80	2.8	C	414	621
	C A614 Rawcliffe Road (East)	0.60	5.40	1.6	A	884	1325
	D A161	0.63	9.94	1.9	A	1207	856
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	1.18	267.42	101.2	F	1036	1554
	B M62 Northbound On Ramp						
	C Link	0.88	19.95	7.3	C	1159	1739
	D M62 Northbound Off Ramp	0.65	6.22	2.2	A	1051	1576

Main Results for each time segment

16:15 - 16:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1161	1161	290	0	0	85	2303	0.504	1157	947	0.0	1.1	3.461	A
	B M62 Southbound Off Ramp	340	340	85	0	0	1242	897	0.379	337	0	0.0	0.7	7.360	A
	C A614 Rawcliffe Road (East)	725	725	181	0	0	879	1974	0.367	723	700	0.0	0.6	3.006	A
	D A161	990	468	117	522	0	1050	1336	0.351	466	552	0.0	0.6	4.531	A
	E M62 Southbound On Ramp						1032				484				
3W Site 3	A A614 Rawcliffe Road (West)	850		212			851	1287	0.660	842	949	0.0	2.0	8.447	A
	B M62 Northbound On Ramp						1161				531				
	C Link	947		237			0	1574	0.602	941	1161	0.0	1.6	5.953	A
	D M62 Northbound Off Ramp	862		216			941	2260	0.381	859	0	0.0	0.7	2.974	A

16:30 - 16:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1385	1385	346	0	0	102	2293	0.604	1383	1134	1.1	1.7	4.364	A
	B M62 Southbound Off Ramp	406	406	101	0	0	1485	788	0.515	404	0	0.7	1.2	10.723	B
	C A614 Rawcliffe Road (East)	866	866	216	0	0	1052	1866	0.464	865	837	0.6	0.9	3.758	A
	D A161	1182	559	140	623	0	1257	1223	0.457	558	660	0.6	0.9	5.925	A
	E M62 Southbound On Ramp						1236				579				
3W Site 3	A A614 Rawcliffe Road (West)	1015		254			1019	1190	0.853	1001	1138	2.0	5.4	19.083	C
	B M62 Northbound On Ramp						1385				635				
	C Link	1134		283			0	1574	0.720	1129	1385	1.6	2.6	8.476	A
	D M62 Northbound Off Ramp	1029		257			1129	2122	0.485	1028	0	0.7	1.1	3.812	A

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1562	1562	391	0	0	125	2279	0.685	1559	1384	1.7	2.4	5.509	A
	B M62 Southbound Off Ramp	497	497	124	0	0	1684	698	0.712	491	0	1.2	2.6	19.459	C
	C A614 Rawcliffe Road (East)	1060	1060	265	0	0	1215	1763	0.601	1058	960	0.9	1.6	5.322	A
	D A161	1448	685	171	763	0	1510	1085	0.631	681	763	0.9	1.8	9.691	A
	E M62 Southbound On Ramp						1509				682				
3W Site 3	A A614 Rawcliffe Road (West)	1243		311			1241	1060	1.172	1049	1383	5.4	53.9	113.875	F
	B M62 Northbound On Ramp						1562				728				
	C Link	1384		346			0	1574	0.879	1368	1562	2.6	6.7	17.263	C
	D M62 Northbound Off Ramp	1261		315			1368	1947	0.648	1257	0	1.1	2.1	6.017	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1568	1568	392	0	0	125	2279	0.688	1568	1391	2.4	2.4	5.596	A
	B M62 Southbound Off Ramp	497	497	124	0	0	1693	694	0.716	496	0	2.6	2.8	20.803	C
	C A614 Rawcliffe Road (East)	1060	1060	265	0	0	1224	1758	0.603	1060	966	1.6	1.6	5.403	A
	D A161	1448	685	171	763	0	1516	1082	0.633	685	768	1.8	1.9	9.942	A
	E M62 Southbound On Ramp						1517				684				
3W Site 3	A A614 Rawcliffe Road (West)	1243		311			1251	1055	1.178	1054	1398	53.9	101.2	267.417	F
	B M62 Northbound On Ramp						1568				736				
	C Link	1391		348			0	1574	0.884	1389	1568	6.7	7.3	19.953	C
	D M62 Northbound Off Ramp	1261		315			1389	1932	0.653	1260	0	2.1	2.2	6.217	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1514	1514	379	0	0	103	2293	0.660	1515	1143	2.4	2.2	5.127	A
	B M62 Southbound Off Ramp	406	406	101	0	0	1618	728	0.557	411	0	2.8	1.5	13.255	B
	C A614 Rawcliffe Road (East)	866	866	216	0	0	1127	1819	0.476	868	902	1.6	1.0	3.975	A
	D A161	1182	559	140	623	0	1289	1205	0.464	563	706	1.9	1.0	6.180	A
	E M62 Southbound On Ramp						1246				606				
3W Site 3	A A614 Rawcliffe Road (West)	1015		254			1033	1181	0.859	1169	1161	101.2	62.7	252.117	F
	B M62 Northbound On Ramp						1514				688				
	C Link	1143		286			0	1574	0.726	1161	1514	7.3	2.9	9.575	A
	D M62 Northbound Off Ramp	1029		257			1161	2099	0.490	1033	0	2.2	1.1	3.935	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1351	1351	338	0	0	86	2303	0.587	1354	955	2.2	1.6	4.205	A
	B M62 Southbound Off Ramp	340	340	85	0	0	1440	808	0.420	342	0	1.5	0.8	8.935	A
	C A614 Rawcliffe Road (East)	725	725	181	0	0	987	1907	0.380	726	795	1.0	0.6	3.195	A
	D A161	990	468	117	522	0	1095	1311	0.357	470	618	1.0	0.6	4.703	A
	E M62 Southbound On Ramp						1041				524				
3W Site 3	A A614 Rawcliffe Road (West)	850		212			860	1282	0.663	1092	964	62.7	2.2	52.735	F
	B M62 Northbound On Ramp						1351				600				
	C Link	955		239			0	1574	0.606	960	1351	2.9	1.7	6.246	A
	D M62 Northbound Off Ramp	862		216			960	2246	0.384	864	0	1.1	0.7	3.025	A

2026 Do Something, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	3W - Site 3 - C - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	3E - Site 3 - A - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	171.66	F
3W	Site 3	Standard Roundabout		B, C, D, A	104.59	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	140.27	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2026 Do Something	AM	ONE HOUR	07 30	09 00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Simple (vertical queueing)	Normal	0	100.00	
3W Site 3	C Link	3E	A	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	775	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	861	100.000
	D A161		ONE HOUR	✓	659	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	1109	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	1611	100.000

Origin-Destination Data

Demand (PCU/hr)

	From	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	262	847	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	799	203	0	0
	D M62 Northbound Off Ramp	571	1	1039	0

Proportions

	From	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0.00	0.24	0.76	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.80	0.20	0.00	0.00
	D M62 Northbound Off Ramp	0.35	0.00	0.64	0.00

Demand (PCU/hr)

	From	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0	0	572	962	351
	B M62 Southbound Off Ramp	318	0	115	341	1
	C A614 Rawcliffe Road (East)	398	0	12	96	355
	D A161	285	0	12	17	345
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

	From	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0.00	0.00	0.30	0.51	0.19
	B M62 Southbound Off Ramp	0.41	0.00	0.15	0.44	0.00
	C A614 Rawcliffe Road (East)	0.46	0.00	0.01	0.11	0.41
	D A161	0.43	0.00	0.02	0.03	0.52
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

	From	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	13	8	0
	B M62 Northbound On Ramp	0	0	0	0

Average PCU Per Veh

	From	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	1.000	1.125	1.076	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000

C Link	10	18	0	0
D M62 Northbound Off Ramp	26	0	20	0

C Link	1.096	1.176	1.000	1.000
D M62 Northbound Off Ramp	1.256	1.000	1.204	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	11	20	22
	B M62 Southbound Off Ramp	9	0	6	14	0
	C A614 Rawcliffe Road (East)	9	0	0	9	10
	D A161	15	0	50	100	33
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.108	1.198	1.222
	B M62 Southbound Off Ramp	1.087	1.000	1.060	1.143	1.000
	C A614 Rawcliffe Road (East)	1.087	1.000	1.000	1.091	1.097
	D A161	1.145	1.000	1.500	2.000	1.326
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	07:30 07:45	1419	1419
		07:45 08:00	1695	1695
		08:00 08:15	2075	2075
		08:15 08:30	2075	2075
		08:30 08:45	1695	1695
	08:45 09:00	1419	1419	
	B M62 Southbound Off Ramp	07:30 07:45	583	583
		07:45 08:00	697	697
		08:00 08:15	853	853
		08:15 08:30	853	853
		08:30 08:45	697	697
	08:45 09:00	583	583	
	C A614 Rawcliffe Road (East)	07:30 07:45	648	648
		07:45 08:00	774	774
		08:00 08:15	948	948
		08:15 08:30	948	948
		08:30 08:45	774	774
	08:45 09:00	648	648	
	D A161	07:30 07:45	496	496
		07:45 08:00	592	592
08:00 08:15		726	726	
08:15 08:30		726	726	
08:30 08:45		592	592	
08:45 09:00	496	496		
E M62 Southbound On Ramp	07:30 07:45	0	0	
	07:45 08:00	0	0	
	08:00 08:15	0	0	
	08:15 08:30	0	0	
	08:30 08:45	0	0	
08:45 09:00	0	0		
3W Site 3	A A614 Rawcliffe Road (West)	07:30 07:45	835	835
		07:45 08:00	997	997
		08:00 08:15	1221	1221
		08:15 08:30	1221	1221
		08:30 08:45	997	997
	08:45 09:00	835	835	
	B M62 Northbound On Ramp	07:30 07:45	0	0
		07:45 08:00	0	0
		08:00 08:15	0	0
		08:15 08:30	0	0
		08:30 08:45	0	0
	08:45 09:00	0	0	
	C Link	07:30 07:45	754	754
		07:45 08:00	901	901
		08:00 08:15	1103	1103
		08:15 08:30	1103	1103
		08:30 08:45	901	901
	08:45 09:00	754	754	
	D M62 Northbound Off Ramp	07:30 07:45	1213	1213
		07:45 08:00	1448	1448
08:00 08:15		1774	1774	
08:15 08:30		1774	1774	
08:30 08:45		1448	1448	
08:45 09:00	1213	1213		

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.82	9.96	5.1	A	1729	2593
	B M62 Southbound Off Ramp	1.48	886.46	168.4	F	711	1067
	C A614 Rawcliffe Road (East)	0.69	9.26	2.4	A	790	1185
	D A161	0.31	5.46	0.5	A	605	432
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	1.22	326.83	118.2	F	1018	1526
	B M62 Northbound On Ramp						
	C Link	0.63	6.83	1.9	A	879	1318
	D M62 Northbound Off Ramp	0.80	9.72	4.7	A	1478	2218

Main Results for each time segment

07:30 - 07:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1410	1410	353	0	0	31	2337	0.603	1403	747	0.0	1.8	4.491	A
	B M62 Southbound Off Ramp	583	583	146	0	0	1434	811	0.720	573	0	0.0	2.7	16.106	C
	C A614 Rawcliffe Road (East)	648	648	162	0	0	1478	1598	0.406	645	529	0.0	0.7	4.106	A
	D A161	496	236	59	260	0	1070	1325	0.178	235	1053	0.0	0.3	3.907	A
	E M62 Southbound On Ramp						778				528				
3W Site 3	A A614 Rawcliffe Road (West)	835		209			930	1241	0.673	826	1021	0.0	2.2	9.254	A
	B M62 Northbound On Ramp						1410				347				
	C Link	747		187			0	1574	0.475	743	1410	0.0	1.0	4.791	A
	D M62 Northbound Off Ramp	1213		303			743	2405	0.504	1208	0	0.0	1.2	3.658	A

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1680	1680	420	0	0	37	2333	0.720	1676	878	1.8	2.9	6.376	A
	B M62 Southbound Off Ramp	697	697	174	0	0	1712	685	1.017	647	0	2.7	15.2	67.251	F
	C A614 Rawcliffe Road (East)	774	774	194	0	0	1733	1437	0.538	772	626	0.7	1.3	5.878	A
	D A161	592	282	71	310	0	1264	1219	0.232	282	1241	0.3	0.4	4.542	A
	E M62 Southbound On Ramp						915				631				
3W Site 3	A A614 Rawcliffe Road (West)	997		249			1111	1136	0.877	980	1211	2.2	6.4	22.871	C
	B M62 Northbound On Ramp						1680				410				
	C Link	878		220			0	1574	0.558	876	1680	1.0	1.4	5.722	A
	D M62 Northbound Off Ramp	1448		362			876	2307	0.628	1445	0	1.2	2.0	5.081	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1898	1898	474	0	0	45	2328	0.815	1890	989	2.9	4.9	9.468	A
	B M62 Southbound Off Ramp	853	853	213	0	0	1935	585	1.458	584	0	15.2	82.6	317.367	F
	C A614 Rawcliffe Road (East)	948	948	237	0	0	1832	1375	0.689	944	687	1.3	2.3	9.005	A
	D A161	726	346	86	380	0	1431	1128	0.306	345	1345	0.4	0.5	5.433	A
	E M62 Southbound On Ramp						1034				742				
3W Site 3	A A614 Rawcliffe Road (West)	1221		305			1339	1004	1.216	996	1412	6.4	62.7	137.238	F
	B M62 Northbound On Ramp						1898				436				
	C Link	989		247			0	1574	0.628	987	1898	1.4	1.8	6.794	A
	D M62 Northbound Off Ramp	1774		443			987	2226	0.797	1764	0	2.0	4.6	9.311	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1907	1907	477	0	0	45	2328	0.819	1906	989	4.9	5.1	9.960	A
	B M62 Southbound Off Ramp	853	853	213	0	0	1951	578	1.476	578	0	82.6	151.4	711.964	F
	C A614 Rawcliffe Road (East)	948	948	237	0	0	1838	1371	0.691	948	691	2.3	2.4	9.256	A
	D A161	726	346	86	380	0	1435	1126	0.307	346	1345	0.5	0.5	5.457	A
	E M62 Southbound On Ramp						1034				746				
3W Site 3	A A614 Rawcliffe Road (West)	1221		305			1345	1000	1.221	999	1417	62.7	118.2	324.569	F
	B M62 Northbound On Ramp						1907				438				
	C Link	989		247			0	1574	0.628	989	1907	1.8	1.9	6.835	A
	D M62 Northbound Off Ramp	1774		443			989	2225	0.797	1773	0	4.6	4.7	9.716	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1797	1797	449	0	0	37	2333	0.770	1801	874	5.1	4.1	8.011	A
	B M62 Southbound Off Ramp	697	697	174	0	0	1838	629	1.108	629	0	151.4	168.4	886.459	F
	C A614 Rawcliffe Road (East)	774	774	194	0	0	1805	1392	0.556	778	661	2.4	1.4	6.433	A
	D A161	592	282	71	310	0	1285	1208	0.234	283	1298	0.5	0.4	4.611	A
	E M62 Southbound On Ramp						911				657				
3W Site 3	A A614 Rawcliffe Road (West)	997		249			1119	1131	0.881	1121	1216	118.2	87.2	326.831	F
	B M62 Northbound On Ramp						1797				443				
	C Link	874		219			0	1574	0.555	876	1797	1.9	1.4	5.747	A
	D M62 Northbound Off Ramp	1448		362			876	2307	0.628	1459	0	4.7	2.1	5.244	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1680	1680	420	0	0	31	2337	0.719	1684	794	4.1	3.1	6.513	A
	B M62 Southbound Off Ramp	583	583	146	0	0	1715	684	0.853	680	0	168.4	144.4	828.983	F
	C A614 Rawcliffe Road (East)	648	648	162	0	0	1765	1418	0.457	650	630	1.4	0.9	5.125	A
	D A161	496	236	59	260	0	1171	1270	0.186	237	1244	0.4	0.3	4.124	A
	E M62 Southbound On Ramp						825				582				
3W Site 3	A A614 Rawcliffe Road (West)	835		209			946	1232	0.678	1173	1065	87.2	2.7	124.435	F
	B M62 Northbound On Ramp						1680				439				
	C Link	794		199			0	1574	0.505	795	1680	1.4	1.1	5.147	A
	D M62 Northbound Off Ramp	1213		303			795	2367	0.513	1216	0	2.1	1.3	3.831	A

2026 Do Something, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	3W - Site 3 - C - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	3E - Site 3 - A - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	8.79	A
3W	Site 3	Standard Roundabout		B, C, D, A	132.65	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	65.24	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2026 Do Something	PM	ONE HOUR	16 15	17 45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Simple (vertical queueing)	Normal	0	100.00	
3W Site 3	C Link	3E	A	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	451	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	963	100.000
	D A161		ONE HOUR	✓	1315	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	1192	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	1171	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	289	903	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	835	429	0	0
	D M62 Northbound Off Ramp	463	0	708	0

Proportions

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0.00	0.24	0.76	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.66	0.34	0.00	0.00
	D M62 Northbound Off Ramp	0.40	0.00	0.60	0.00

Demand (PCU/hr)

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0	0	739	509	365
	B M62 Southbound Off Ramp	208	0	111	131	1
	C A614 Rawcliffe Road (East)	514	0	34	75	340
	D A161	542	0	55	25	693
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0.00	0.00	0.46	0.32	0.23
	B M62 Southbound Off Ramp	0.46	0.00	0.25	0.29	0.00
	C A614 Rawcliffe Road (East)	0.53	0.00	0.04	0.08	0.35
	D A161	0.41	0.00	0.04	0.02	0.53
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	12	5	0
	B M62 Northbound On Ramp	0	0	0	0

Average PCU Per Veh

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	1.000	1.120	1.045	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000

C Link	6	6	0	0
D M62 Northbound Off Ramp	22	0	13	0

C Link	1.055	1.062	1.000	1.000
D M62 Northbound Off Ramp	1.220	1.000	1.126	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	5	15	19
	B M62 Southbound Off Ramp	13	0	15	19	0
	C A614 Rawcliffe Road (East)	2	0	0	20	7
	D A161	6	0	33	67	22
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.052	1.145	1.186
	B M62 Southbound Off Ramp	1.129	1.000	1.146	1.190	1.000
	C A614 Rawcliffe Road (East)	1.019	1.000	1.000	1.200	1.066
	D A161	1.062	1.000	1.333	1.667	1.219
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	16:15 16:30	1214	1214
		16:30 16:45	1450	1450
		16:45 17:00	1776	1776
		17:00 17:15	1776	1776
		17:15 17:30	1450	1450
		17:30 17:45	1214	1214
	B M62 Southbound Off Ramp	16:15 16:30	340	340
		16:30 16:45	406	406
		16:45 17:00	497	497
		17:00 17:15	497	497
		17:15 17:30	406	406
		17:30 17:45	340	340
	C A614 Rawcliffe Road (East)	16:15 16:30	725	725
		16:30 16:45	866	866
		16:45 17:00	1060	1060
		17:00 17:15	1060	1060
		17:15 17:30	866	866
		17:30 17:45	725	725
	D A161	16:15 16:30	990	990
		16:30 16:45	1182	1182
		16:45 17:00	1448	1448
		17:00 17:15	1448	1448
		17:15 17:30	1182	1182
		17:30 17:45	990	990
E M62 Southbound On Ramp	16:15 16:30	0	0	
	16:30 16:45	0	0	
	16:45 17:00	0	0	
	17:00 17:15	0	0	
	17:15 17:30	0	0	
	17:30 17:45	0	0	
3W Site 3	A A614 Rawcliffe Road (West)	16:15 16:30	897	897
		16:30 16:45	1072	1072
		16:45 17:00	1312	1312
		17:00 17:15	1312	1312
		17:15 17:30	1072	1072
		17:30 17:45	897	897
	B M62 Northbound On Ramp	16:15 16:30	0	0
		16:30 16:45	0	0
		16:45 17:00	0	0
		17:00 17:15	0	0
		17:15 17:30	0	0
		17:30 17:45	0	0
	C Link	16:15 16:30	952	952
		16:30 16:45	1136	1136
		16:45 17:00	1392	1392
		17:00 17:15	1392	1392
		17:15 17:30	1136	1136
		17:30 17:45	952	952
	D M62 Northbound Off Ramp	16:15 16:30	882	882
		16:30 16:45	1053	1053
		16:45 17:00	1289	1289
		17:00 17:15	1289	1289
		17:15 17:30	1053	1053
		17:30 17:45	882	882

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.69	5.69	2.5	A	1469	2203
	B M62 Southbound Off Ramp	0.72	21.29	2.8	C	414	621
	C A614 Rawcliffe Road (East)	0.61	5.57	1.6	A	884	1325
	D A161	0.65	10.64	2.0	B	1207	856
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	1.24	375.99	136.6	F	1094	1641
	B M62 Northbound On Ramp						
	C Link	0.88	19.94	7.3	C	1159	1738
	D M62 Northbound Off Ramp	0.67	6.50	2.3	A	1075	1612

RESPONSE TO NATIONAL HIGHWAYS RELEVANT REPRESENTATIONS (SEPT 2022)

Appendix E – Junctions 10 Output – Existing Layout – Sensitivity Test

Drax Bioenergy with Carbon Capture and Storage

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 –
Regulation (5(2)(q))

Document Reference Number: 8.9.4

Applicant: Drax Power Limited

PINS Reference: EN010120



Junctions 10			
ARCADY 10 - Roundabout Module			
Version 10.0.4.1663 © Copyright TRL Software Limited, 2021			
For sales and distribution information, program advice and maintenance, contact TRL Software +44 (0)1344 379777 software@trl.co.uk			
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution			

Filename J4_wo Lane simulation - Existing Layout - ST.j10
 Path \\uk.wspgroup.com\Central Data\Projects\700720xx\70072063 - Drax BECCS DCO\03 Environment\05 Transport\29 - National Highways Response\02 - Analysis\Junction Models\Existing Layout\Model - Sensitivity Test
 Report generation date 09/02/2023 15:38:09

- »2018 Baseline, AM
- »2018 Baseline, PM
- »2022 Future Baseline , AM
- »2022 Future Baseline , PM
- »2026 Future Baseline, AM
- »2026 Future Baseline, PM
- »2026 Future Baseline + Drax, AM
- »2026 Future Baseline + Drax, PM
- »2026 Do Minimum, AM
- »2026 Do Minimum, PM
- »2026 Do Something, AM
- »2026 Do Something, PM

Summary of junction performance

	AM				PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
2018 Baseline										
3E Site 3 A Link	D1	1.4	3.94	0.55	A	D2	1.4	3.82	0.56	A
3E Site 3 B M62 Southbound Off Ramp		1.6	11.10	0.59	B		0.7	7.82	0.39	A
3E Site 3 C A614 Rawcliffe Road (East)		0.5	3.23	0.33	A		0.7	3.22	0.40	A
3E Site 3 D A161		0.3	4.10	0.20	A		0.4	4.14	0.25	A
3W Site 3 A A614 Rawcliffe Road (West)		1.3	4.84	0.55	A		1.5	5.35	0.59	A
3W Site 3 C Link		1.2	5.38	0.53	A		1.6	6.02	0.60	A
3W Site 3 D M62 Northbound Off Ramp	0.9	3.34	0.43	A	0.9	3.26	0.43	A		
2022 Future Baseline										
3E Site 3 A Link	D3	1.5	4.11	0.57	A	D4	1.5	4.00	0.58	A
3E Site 3 B M62 Southbound Off Ramp		1.8	12.46	0.63	B		0.8	8.30	0.41	A
3E Site 3 C A614 Rawcliffe Road (East)		0.6	3.36	0.35	A		0.7	3.35	0.41	A
3E Site 3 D A161		0.3	4.23	0.21	A		0.4	4.29	0.27	A
3W Site 3 A A614 Rawcliffe Road (West)		1.4	5.14	0.57	A		1.7	5.75	0.62	A
3W Site 3 C Link		1.3	5.60	0.55	A		1.7	6.33	0.62	A
3W Site 3 D M62 Northbound Off Ramp	1.0	3.48	0.45	A	1.0	3.41	0.45	A		
2026 Future Baseline										
3E Site 3 A Link	D5	1.6	4.28	0.58	A	D6	1.6	4.16	0.59	A
3E Site 3 B M62 Southbound Off Ramp		2.1	13.92	0.68	B		0.9	8.79	0.43	A
3E Site 3 C A614 Rawcliffe Road (East)		0.6	3.48	0.36	A		0.8	3.48	0.43	A
3E Site 3 D A161		0.3	4.36	0.22	A		0.4	4.44	0.28	A
3W Site 3 A A614 Rawcliffe Road (West)		1.6	5.44	0.59	A		1.8	6.14	0.64	A
3W Site 3 C Link		1.4	5.81	0.56	A		1.8	6.63	0.64	A
3W Site 3 D M62 Northbound Off Ramp	1.1	3.63	0.47	A	1.0	3.55	0.47	A		
2026 Future Baseline + Drax										
3E Site 3 A Link	D7	1.7	4.41	0.60	A	D8	1.8	4.47	0.62	A
3E Site 3 B M62 Southbound Off Ramp		2.4	15.32	0.69	C		0.9	9.37	0.45	A
3E Site 3 C A614 Rawcliffe Road (East)		0.6	3.56	0.37	A		0.8	3.61	0.44	A
3E Site 3 D A161		0.3	4.46	0.22	A		0.4	4.62	0.29	A
3W Site 3 A A614 Rawcliffe Road (West)		1.7	5.67	0.61	A		2.2	6.91	0.68	A
3W Site 3 C Link		1.5	5.92	0.57	A		1.8	6.63	0.64	A
3W Site 3 D M62 Northbound Off Ramp	1.4	4.08	0.53	A	1.1	3.64	0.48	A		
2026 Do Minimum										
3E Site 3 A Link	D9	7.5	13.71	0.87	B	D10	3.0	6.52	0.74	A
3E Site 3 B M62 Southbound Off Ramp		164.0	800.64	1.58	F		3.3	24.89	0.75	C
3E Site 3 C A614 Rawcliffe Road (East)		2.4	9.35	0.69	A		1.5	5.34	0.59	A
3E Site 3 D A161		0.5	5.08	0.29	A		1.6	9.05	0.60	A
3W Site 3 A A614 Rawcliffe Road (West)		5.8	18.33	0.85	C		5.8	17.65	0.85	C
3W Site 3 C Link		1.7	6.56	0.61	A		7.3	19.93	0.88	C
3W Site 3 D M62 Northbound Off Ramp	3.4	7.42	0.74	A	2.1	6.22	0.65	A		
2026 Do Something										
3E Site 3 A Link	D11	8.2	14.99	0.88	B	D12	3.5	7.26	0.76	A
3E Site 3 B M62 Southbound Off Ramp		185.4	971.30	1.65	F		3.9	29.58	0.79	D
3E Site 3 C A614 Rawcliffe Road (East)		2.5	9.61	0.70	A		1.6	5.66	0.61	A
3E Site 3 D A161		0.5	5.18	0.29	A		1.8	9.85	0.62	A
3W Site 3 A A614 Rawcliffe Road (West)		6.7	20.80	0.87	C		8.6	24.92	0.90	C
3W Site 3 C Link		1.7	6.56	0.61	A		7.3	19.88	0.88	C
3W Site 3 D M62 Northbound Off Ramp	4.5	9.35	0.79	A	2.3	6.49	0.67	A		

There are warnings associated with one or more model runs - see the Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

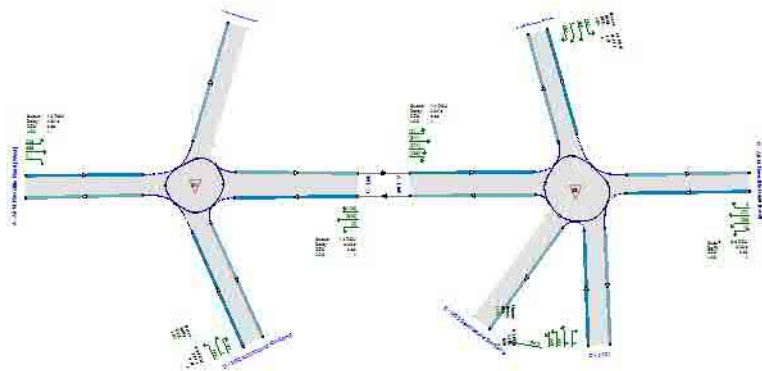
File Description

Title	Site 3
Location	
Site number	
Date	28/03/2018
Version	

Status	
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INTW00749
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin



File: \kru\log\trf\demand\PCUs
 The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Baseline	AM	ONE HOUR	07 30	09 00	15	✓
D2	2018 Baseline	PM	ONE HOUR	16 15	17 45	15	✓
D3	2022 Future Baseline	AM	ONE HOUR	07 30	09 00	15	✓
D4	2022 Future Baseline	PM	ONE HOUR	16 15	17 45	15	✓
D5	2026 Future Baseline	AM	ONE HOUR	07 30	09 00	15	✓
D6	2026 Future Baseline	PM	ONE HOUR	16 15	17 45	15	✓
D7	2026 Future Baseline + Drax	AM	ONE HOUR	07 30	09 00	15	✓
D8	2026 Future Baseline + Drax	PM	ONE HOUR	16 15	17 45	15	✓
D9	2026 Do Minimum	AM	ONE HOUR	07 30	09 00	15	✓
D10	2026 Do Minimum	PM	ONE HOUR	16 15	17 45	15	✓
D11	2026 Do Something	AM	ONE HOUR	07 30	09 00	15	✓
D12	2026 Do Something	PM	ONE HOUR	16 15	17 45	15	✓

Analysis Set Details

ID	include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2018 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	5.09	A
3W	Site 3	Standard Roundabout		B, C, D, A	4.46	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.78	A

Arms

Arms

Junction	Arm	Name	Description	No give way line
3E Site 3	A	Link		
	B	M62 Southbound Off-Ramp		
	C	A614 Rawcliffe Road (East)		
	D	A161		
	E	M62 Southbound On-Ramp		
3W Site 3	A	A614 Rawcliffe Road (West)		
	B	M62 Northbound On-Ramp		
	C	Link		
	D	M62 Northbound Off-Ramp		

Roundabout Geometry

Junction	Arm	V Approach road half width (m)	E Entry width (m)	I' Effective flare length (m)	R Entry radius (m)	D Inscribed circle diameter (m)	PHI Conflict (entry) angle (deg)	Entry only	Exit only
3E Site 3	A Link	6.80	7.80	61.7	19.8	70.0	29.0		
	B M62 Southbound Off Ramp	5.10	5.30	0.5	37.6	70.0	58.0		
	C A614 Rawcliffe Road (East)	5.90	9.70	29.7	18.0	70.0	37.0		
	D A161	3.40	9.10	16.8	18.3	70.0	21.0		
	E M62 Southbound On Ramp								✓
3W Site 3	A A614 Rawcliffe Road (West)	3.90	8.60	53.4	21.6	67.8	45.0		
	B M62 Northbound On Ramp								✓
	C Link	3.80	5.80	6.7	23.0	67.1	9.5		
	D M62 Northbound Off Ramp	6.70	9.80	34.2	27.9	67.8	14.0		

Bypass

Junction	Arm	Arm has bypass	Bypass utilisation (%)
3E Site 3	A Link		
	B M62 Southbound Off Ramp		
	C A614 Rawcliffe Road (East)		
	D A161	✓	100
	E M62 Southbound On Ramp		
3W Site 3	A A614 Rawcliffe Road (West)		
	B M62 Northbound On Ramp		
	C Link		
	D M62 Northbound Off Ramp		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Final slope	Final intercept (PCU/hr)
3E Site 3	A Link	0.610	2356
	B M62 Southbound Off Ramp	0.450	1455
	C A614 Rawcliffe Road (East)	0.629	2527
	D A161	0.545	1908
	E M62 Southbound On Ramp		
3W Site 3	A A614 Rawcliffe Road (West)	0.581	2182
	B M62 Northbound On Ramp		
	C Link	0.518	1574
	D M62 Northbound Off Ramp	0.733	2950

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Baseline	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Queue limited	Normal	0	100.00	44.00
3W Site 3	C Link	3E	A	Queue limited	Normal	0	100.00	28.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	471	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	543	100.000
	D A161		ONE HOUR	✓	477	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	884	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	923	100.000

Origin-Destination Data

3W - Site 3

Demand (PCU/hr)

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
From	A A614 Rawcliffe Road (West)	0	226	658	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	648	108	0	0
	D M62 Northbound Off Ramp	408	1	514	0

Proportions

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
From	A A614 Rawcliffe Road (West)	0.00	0.26	0.74	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.86	0.14	0.00	0.00
	D M62 Northbound Off Ramp	0.44	0.00	0.56	0.00

3E - Site 3

Demand (PCU/hr)

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	511	374	286
	B M62 Southbound Off Ramp	262	0	102	106	1
	C A614 Rawcliffe Road (East)	272	0	0	13	258
	D A161	223	0	5	0	249
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0.00	0.00	0.44	0.32	0.24
	B M62 Southbound Off Ramp	0.56	0.00	0.22	0.23	0.00
	C A614 Rawcliffe Road (East)	0.50	0.00	0.00	0.02	0.48
	D A161	0.47	0.00	0.01	0.00	0.52
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

3W - Site 3

Heavy Vehicle Percentages

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
From	A A614 Rawcliffe Road (West)	0	13	8	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	10	18	0	0
	D M62 Northbound Off Ramp	26	0	20	0

Average PCU Per Veh

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
From	A A614 Rawcliffe Road (West)	1.000	1.125	1.076	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000
	C Link	1.096	1.176	1.000	1.000
	D M62 Northbound Off Ramp	1.256	1.000	1.204	1.000

3E - Site 3

Heavy Vehicle Percentages

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	11	20	22
	B M62 Southbound Off Ramp	9	0	6	14	0
	C A614 Rawcliffe Road (East)	9	0	0	9	10
	D A161	15	0	50	100	33
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.108	1.198	1.222
	B M62 Southbound Off Ramp	1.087	1.000	1.060	1.143	1.000
	C A614 Rawcliffe Road (East)	1.087	1.000	1.000	1.091	1.097
	D A161	1.145	1.000	1.500	2.000	1.326
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	07:30 07:45	882	882
		07:45 08:00	1053	1053
		08:00 08:15	1289	1289
		08:15 08:30	1289	1289
		08:30 08:45	1053	1053
	B M62 Southbound Off Ramp	08:45 09:00	882	882
		07:30 07:45	355	355
		07:45 08:00	423	423
		08:00 08:15	519	519
		08:15 08:30	519	519
	C A614 Rawcliffe Road (East)	08:30 08:45	423	423
		08:45 09:00	355	355
		07:30 07:45	409	409
		07:45 08:00	488	488
		08:00 08:15	598	598
	D A161	08:15 08:30	598	598
		08:30 08:45	488	488
		08:45 09:00	409	409
		07:30 07:45	359	359
		07:45 08:00	429	429
		08:00 08:15	525	525
		08:15 08:30	525	525

3W Site 3	E M62 Southbound On Ramp	08:30 08:45	429	429
		08:45 09:00	359	359
		07:30 07:45	0	0
		07:45 08:00	0	0
		08:00 08:15	0	0
		08:15 08:30	0	0
	A A614 Rawcliffe Road (West)	08:30 08:45	0	0
		08:45 09:00	0	0
		07:30 07:45	666	666
		07:45 08:00	795	795
		08:00 08:15	973	973
		08:15 08:30	973	973
	B M62 Northbound On Ramp	08:30 08:45	795	795
		08:45 09:00	666	666
07:30 07:45		0	0	
07:45 08:00		0	0	
08:00 08:15		0	0	
08:15 08:30		0	0	
C Link	08:30 08:45	0	0	
	08:45 09:00	0	0	
	07:30 07:45	569	569	
	07:45 08:00	680	680	
	08:00 08:15	832	832	
	08:15 08:30	832	832	
D M62 Northbound Off Ramp	08:30 08:45	680	680	
	08:45 09:00	569	569	
	07:30 07:45	695	695	
	07:45 08:00	830	830	
	08:00 08:15	1016	1016	
	08:15 08:30	1016	1016	
		08:30 08:45	830	830
		08:45 09:00	695	695

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.55	3.94	1.4	A	1075	1612
	B M62 Southbound Off Ramp	0.59	11.10	1.6	B	432	648
	C A614 Rawcliffe Road (East)	0.33	3.23	0.5	A	498	747
	D A161	0.20	4.10	0.3	A	438	314
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	0.55	4.84	1.3	A	811	1217
	B M62 Northbound On Ramp						
	C Link	0.53	5.38	1.2	A	694	1041
	D M62 Northbound Off Ramp	0.43	3.34	0.9	A	847	1270

Main Results for each time segment

07:30 - 07:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	880	880	220	0	0	4	2353	0.374	877	568	0.0	0.7	2.829	A
	B M62 Southbound Off Ramp	355	355	89	0	0	881	1059	0.335	352	0	0.0	0.5	5.548	A
	C A614 Rawcliffe Road (East)	409	409	102	0	0	770	2043	0.200	408	463	0.0	0.3	2.402	A
	D A161	359	172	43	187	0	809	1467	0.117	171	369	0.0	0.2	3.195	A
	E M62 Southbound On Ramp						571				409				
3W Site 3	A A614 Rawcliffe Road (West)	666		166			467	1910	0.348	663	791	0.0	0.6	3.136	A
	B M62 Northbound On Ramp						880				251				
	C Link	568		142			0	1574	0.361	565	880	0.0	0.6	3.940	A
	D M62 Northbound Off Ramp	695		174			565	2535	0.274	693	0	0.0	0.5	2.393	A

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1053	1053	263	0	0	4	2353	0.447	1052	680	0.7	0.9	3.214	A
	B M62 Southbound Off Ramp	423	423	106	0	0	1056	980	0.432	422	0	0.5	0.8	7.034	A
	C A614 Rawcliffe Road (East)	488	488	122	0	0	924	1946	0.251	488	555	0.3	0.4	2.693	A
	D A161	429	205	51	224	0	969	1380	0.149	205	443	0.2	0.2	3.525	A
	E M62 Southbound On Ramp						684				489				
3W Site 3	A A614 Rawcliffe Road (West)	795		199			560	1857	0.428	794	948	0.6	0.8	3.682	A
	B M62 Northbound On Ramp						1053				301				
	C Link	680		170			0	1574	0.432	679	1053	0.6	0.8	4.447	A
	D M62 Northbound Off Ramp	830		207			679	2452	0.338	829	0	0.5	0.6	2.717	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1288	1288	322	0	0	5	2352	0.548	1286	831	0.9	1.4	3.919	A
	B M62 Southbound Off Ramp	519	519	130	0	0	1292	874	0.593	516	0	0.8	1.5	10.878	B
	C A614 Rawcliffe Road (East)	598	598	149	0	0	1129	1817	0.329	597	679	0.4	0.5	3.219	A
	D A161	525	251	63	274	0	1185	1262	0.199	251	541	0.2	0.3	4.096	A
	E M62 Southbound On Ramp						837				599				
3W Site 3	A A614 Rawcliffe Road (West)	973		243			685	1784	0.546	971	1160	0.8	1.3	4.810	A
	B M62 Northbound On Ramp						1288				368				
	C Link	831		208			0	1574	0.528	830	1288	0.8	1.2	5.342	A
	D M62 Northbound Off Ramp	1016		254			830	2341	0.434	1015	0	0.6	0.9	3.323	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service

Junction	Arm	Demand (PCU/hr)	demand (PCU/hr)	Arrivals (PCU)	demand (PCU/hr)	exit flow (PCU/hr)	flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	(exit side) (PCU/hr)	queue (PCU)	queue (PCU)	Delay (s)	level of service
3E Site 3	A Link	1290	1290	323	0	0	6	2352	0.549	1290	833	1.4	1.4	3.940	A
	B M62 Southbound Off Ramp	519	519	130	0	0	1296	873	0.594	518	0	1.5	1.6	11.099	B
	C A614 Rawcliffe Road (East)	598	598	149	0	0	1133	1815	0.329	598	681	0.5	0.5	3.228	A
	D A161	525	251	63	274	0	1188	1261	0.199	251	543	0.3	0.3	4.104	A
	E M62 Southbound On Ramp						839				600				
3W Site 3	A A614 Rawcliffe Road (West)	973		243			686	1783	0.546	973	1164	1.3	1.3	4.837	A
	B M62 Northbound On Ramp						1290				369				
	C Link	833		208			0	1574	0.529	833	1290	1.2	1.2	5.379	A
	D M62 Northbound Off Ramp	1016		254			833	2339	0.435	1016	0	0.9	0.9	3.335	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1056	1056	264	0	0	5	2353	0.449	1058	683	1.4	1.0	3.233	A
	B M62 Southbound Off Ramp	423	423	106	0	0	1062	978	0.433	426	0	1.6	0.8	7.173	A
	C A614 Rawcliffe Road (East)	488	488	122	0	0	930	1942	0.251	489	558	0.5	0.4	2.703	A
	D A161	429	205	51	224	0	973	1378	0.149	205	445	0.3	0.2	3.535	A
	E M62 Southbound On Ramp						687				491				
3W Site 3	A A614 Rawcliffe Road (West)	795		199			561	1856	0.428	797	954	1.3	0.8	3.705	A
	B M62 Northbound On Ramp						1056				302				
	C Link	683		171			0	1574	0.434	684	1056	1.2	0.9	4.486	A
	D M62 Northbound Off Ramp	830		207			684	2448	0.339	831	0	0.9	0.6	2.730	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	883	883	221	0	0	4	2353	0.375	884	571	1.0	0.7	2.849	A
	B M62 Southbound Off Ramp	355	355	89	0	0	888	1056	0.336	356	0	0.8	0.6	5.629	A
	C A614 Rawcliffe Road (East)	409	409	102	0	0	777	2039	0.201	409	467	0.4	0.3	2.411	A
	D A161	359	172	43	187	0	814	1464	0.117	172	372	0.2	0.2	3.208	A
	E M62 Southbound On Ramp						575				411				
3W Site 3	A A614 Rawcliffe Road (West)	666		166			470	1909	0.349	666	798	0.8	0.6	3.157	A
	B M62 Northbound On Ramp						883				253				
	C Link	571		143			0	1574	0.363	572	883	0.9	0.6	3.980	A
	D M62 Northbound Off Ramp	695		174			572	2530	0.275	696	0	0.6	0.5	2.405	A

2018 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	4.18	A
3W	Site 3	Standard Roundabout		B, C, D, A	4.87	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.53	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018 Baseline	PM	ONE HOUR	16 15	17 45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Queue limited	Normal	0	100.00	44.00
3W Site 3	C Link	3E	A	Queue limited	Normal	0	100.00	28.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	304	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	697	100.000
	D A161		ONE HOUR	✓	476	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	935	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	885	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	From				
	A A614 Rawcliffe Road (West)	0	242	693	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	668	188	0	0
	D M62 Northbound Off Ramp	391	0	494	0

Proportions

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
From	A A614 Rawcliffe Road (West)	0.00	0.26	0.74	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.78	0.22	0.00	0.00
	D M62 Northbound Off Ramp	0.44	0.00	0.56	0.00

Demand (PCU/hr)

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	From					
	A Link	0	0	576	347	264
	B M62 Southbound Off Ramp	178	0	56	69	1
	C A614 Rawcliffe Road (East)	403	0	0	34	260
	D A161	275	0	11	0	190
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0.00	0.00	0.49	0.29	0.22
	B M62 Southbound Off Ramp	0.58	0.00	0.18	0.23	0.00
	C A614 Rawcliffe Road (East)	0.58	0.00	0.00	0.05	0.37
	D A161	0.58	0.00	0.02	0.00	0.40
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	From				
	A A614 Rawcliffe Road (West)	0	12	5	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	6	6	0	0
	D M62 Northbound Off Ramp	22	0	13	0

Average PCU Per Veh

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
From	A A614 Rawcliffe Road (West)	1.000	1.120	1.045	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000
	C Link	1.055	1.062	1.000	1.000
	D M62 Northbound Off Ramp	1.220	1.000	1.126	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	5	15	19
	B M62 Southbound Off Ramp	13	0	15	19	0
	C A614 Rawcliffe Road (East)	2	0	0	20	7
	D A161	6	0	33	67	22
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.052	1.145	1.186
	B M62 Southbound Off Ramp	1.129	1.000	1.146	1.190	1.000
	C A614 Rawcliffe Road (East)	1.019	1.000	1.000	1.200	1.066
	D A161	1.062	1.000	1.333	1.667	1.219
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	16:15 16:30	894	894
		16:30 16:45	1068	1068
		16:45 17:00	1307	1307
		17:00 17:15	1307	1307
		17:15 17:30	1068	1068
		17:30 17:45	894	894
	B M62 Southbound Off Ramp	16:15 16:30	229	229
		16:30 16:45	274	274
		16:45 17:00	335	335
		17:00 17:15	335	335
		17:15 17:30	274	274
		17:30 17:45	229	229
	C A614 Rawcliffe Road (East)	16:15 16:30	525	525
		16:30 16:45	626	626
		16:45 17:00	767	767
		17:00 17:15	767	767
		17:15 17:30	626	626
		17:30 17:45	525	525
	D A161	16:15 16:30	358	358
		16:30 16:45	428	428
		16:45 17:00	524	524
		17:00 17:15	524	524
		17:15 17:30	428	428
		17:30 17:45	358	358
E M62 Southbound On Ramp	16:15 16:30	0	0	
	16:30 16:45	0	0	
	16:45 17:00	0	0	
	17:00 17:15	0	0	
	17:15 17:30	0	0	
	17:30 17:45	0	0	
3W Site 3	A A614 Rawcliffe Road (West)	16:15 16:30	704	704
		16:30 16:45	841	841
		16:45 17:00	1030	1030
		17:00 17:15	1030	1030
		17:15 17:30	841	841
		17:30 17:45	704	704
	B M62 Northbound On Ramp	16:15 16:30	0	0
		16:30 16:45	0	0
		16:45 17:00	0	0
		17:00 17:15	0	0
		17:15 17:30	0	0
		17:30 17:45	0	0
	C Link	16:15 16:30	644	644
		16:30 16:45	769	769
		16:45 17:00	942	942
		17:00 17:15	942	942
		17:15 17:30	769	769
		17:30 17:45	644	644
	D M62 Northbound Off Ramp	16:15 16:30	666	666
		16:30 16:45	796	796
		16:45 17:00	974	974
		17:00 17:15	974	974
		17:15 17:30	796	796
		17:30 17:45	666	666

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.56	3.82	1.4	A	1089	1634
	B M62 Southbound Off Ramp	0.39	7.82	0.7	A	279	419
	C A614 Rawcliffe Road (East)	0.40	3.22	0.7	A	639	959
	D A161	0.25	4.14	0.4	A	436	394
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	0.59	5.35	1.5	A	858	1287
	B M62 Northbound On Ramp						
	C Link	0.60	6.02	1.6	A	785	1177
	D M62 Northbound Off Ramp	0.43	3.26	0.9	A	812	1218

Main Results for each time segment

16:15 - 16:30

	Total	Junction	Junction	Bypass	Bypass	Circulating	Capacity		Throughput	Throughput	Start	End	Delay	Unsignalised

Junction	Arm	Demand (PCU/hr)	demand (PCU/hr)	Arrivals (PCU)	demand (PCU/hr)	exit flow (PCU/hr)	flow (PCU/hr)	(PCU/hr)	RFC	(PCU/hr)	(exit side) (PCU/hr)	queue (PCU)	queue (PCU)	(s)	level of service
3E Site 3	A Link	891	891	223	0	0	8	2350	0.379	899	642	0.0	0.7	2.719	A
	B M62 Southbound Off Ramp	229	229	57	0	0	897	1052	0.218	228	0	0.0	0.3	4.994	A
	C A614 Rawcliffe Road (East)	525	525	131	0	0	643	2123	0.247	523	482	0.0	0.3	2.347	A
	D A161	358	215	54	143	0	829	1456	0.148	215	337	0.0	0.2	3.101	A
	E M62 Southbound On Ramp						650				393				
3W Site 3	A A614 Rawcliffe Road (West)	704		176			511	1885	0.374	702	792	0.0	0.6	3.230	A
	B M62 Northbound On Ramp						891				322				
	C Link	642		160			0	1574	0.408	639	891	0.0	0.7	4.056	A
	D M62 Northbound Off Ramp	666		167			639	2481	0.269	665	0	0.0	0.4	2.307	A

16:30 - 16:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1066	1066	267	0	0	10	2349	0.454	1065	768	0.7	0.9	3.100	A
	B M62 Southbound Off Ramp	274	274	68	0	0	1075	972	0.282	273	0	0.3	0.4	5.896	A
	C A614 Rawcliffe Road (East)	626	626	157	0	0	771	2042	0.307	626	578	0.3	0.5	2.653	A
	D A161	428	257	64	170	0	993	1367	0.188	257	404	0.2	0.2	3.470	A
	E M62 Southbound On Ramp						778				471				
3W Site 3	A A614 Rawcliffe Road (West)	841		210			612	1826	0.460	840	950	0.6	0.9	3.879	A
	B M62 Northbound On Ramp						1066				386				
	C Link	768		192			0	1574	0.488	767	1066	0.7	1.0	4.708	A
	D M62 Northbound Off Ramp	796		199			767	2387	0.333	795	0	0.4	0.6	2.635	A

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1305	1305	326	0	0	12	2348	0.556	1303	941	0.9	1.4	3.804	A
	B M62 Southbound Off Ramp	335	335	84	0	0	1315	864	0.388	334	0	0.4	0.7	7.763	A
	C A614 Rawcliffe Road (East)	767	767	192	0	0	943	1934	0.397	766	706	0.5	0.7	3.216	A
	D A161	524	315	79	209	0	1215	1246	0.253	314	494	0.2	0.4	4.134	A
	E M62 Southbound On Ramp						953				577				
3W Site 3	A A614 Rawcliffe Road (West)	1030		257			749	1746	0.590	1027	1162	0.9	1.5	5.308	A
	B M62 Northbound On Ramp						1305				472				
	C Link	941		235			0	1574	0.598	938	1305	1.0	1.5	5.963	A
	D M62 Northbound Off Ramp	974		244			938	2282	0.431	973	0	0.6	0.9	3.253	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1307	1307	327	0	0	12	2348	0.557	1307	942	1.4	1.4	3.825	A
	B M62 Southbound Off Ramp	335	335	84	0	0	1319	862	0.389	335	0	0.7	0.7	7.823	A
	C A614 Rawcliffe Road (East)	767	767	192	0	0	946	1932	0.397	767	709	0.7	0.7	3.224	A
	D A161	524	315	79	209	0	1217	1245	0.253	315	496	0.4	0.4	4.143	A
	E M62 Southbound On Ramp						954				578				
3W Site 3	A A614 Rawcliffe Road (West)	1030		257			751	1745	0.590	1030	1166	1.5	1.5	5.350	A
	B M62 Northbound On Ramp						1307				473				
	C Link	942		236			0	1574	0.599	942	1307	1.5	1.6	6.018	A
	D M62 Northbound Off Ramp	974		244			942	2259	0.431	974	0	0.9	0.9	3.265	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1070	1070	267	0	0	10	2349	0.455	1072	771	1.4	0.9	3.122	A
	B M62 Southbound Off Ramp	274	274	68	0	0	1082	969	0.282	275	0	0.7	0.5	5.948	A
	C A614 Rawcliffe Road (East)	626	626	157	0	0	775	2040	0.307	627	581	0.7	0.5	2.664	A
	D A161	428	257	64	170	0	996	1365	0.188	258	406	0.4	0.2	3.479	A
	E M62 Southbound On Ramp						781				473				
3W Site 3	A A614 Rawcliffe Road (West)	841		210			615	1825	0.461	843	955	1.5	0.9	3.911	A
	B M62 Northbound On Ramp						1070				388				
	C Link	771		193			0	1574	0.490	773	1070	1.6	1.0	4.762	A
	D M62 Northbound Off Ramp	796		199			773	2383	0.334	797	0	0.9	0.6	2.646	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	895	895	224	0	0	8	2350	0.381	896	645	0.9	0.7	2.741	A
	B M62 Southbound Off Ramp	229	229	57	0	0	904	1049	0.219	230	0	0.5	0.3	5.036	A
	C A614 Rawcliffe Road (East)	525	525	131	0	0	648	2120	0.248	525	486	0.5	0.3	2.359	A
	D A161	358	215	54	143	0	834	1454	0.148	216	340	0.2	0.2	3.113	A
	E M62 Southbound On Ramp						653				396				
3W Site 3	A A614 Rawcliffe Road (West)	704		176			514	1883	0.374	705	799	0.9	0.6	3.253	A
	B M62 Northbound On Ramp						895				324				
	C Link	645		161			0	1574	0.410	646	895	1.0	0.7	4.104	A
	D M62 Northbound Off Ramp	666		167			646	2476	0.269	667	0	0.6	0.4	2.319	A

2022 Future Baseline , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	5.46	A
3W	Site 3	Standard Roundabout		B, C, D, A	4.68	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.08	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2022 Future Baseline	AM	ONE HOUR	07 30	09 00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Queue limited	Normal	0	100.00	44.00
3W Site 3	C Link	3E	A	Queue limited	Normal	0	100.00	28.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	488	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	562	100.000
	D A161		ONE HOUR	✓	493	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	915	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	955	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	From A A614 Rawcliffe Road (West)	0	234	681	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	671	112	0	0
	D M62 Northbound Off Ramp	422	1	532	0

Proportions

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
From	A A614 Rawcliffe Road (West)	0.00	0.26	0.74	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.86	0.14	0.00	0.00
	D M62 Northbound Off Ramp	0.44	0.00	0.56	0.00

Demand (PCU/hr)

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	From A Link	0	0	529	388	296
	B M62 Southbound Off Ramp	272	0	105	110	1
	C A614 Rawcliffe Road (East)	281	0	0	14	267
	D A161	230	0	5	0	258
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0.00	0.00	0.44	0.32	0.24
	B M62 Southbound Off Ramp	0.56	0.00	0.22	0.23	0.00
	C A614 Rawcliffe Road (East)	0.50	0.00	0.00	0.02	0.48
	D A161	0.47	0.00	0.01	0.00	0.52
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	From A A614 Rawcliffe Road (West)	0	13	8	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	10	18	0	0
	D M62 Northbound Off Ramp	26	0	20	0

Average PCU Per Veh

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
From	A A614 Rawcliffe Road (West)	1.000	1.125	1.076	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000
	C Link	1.096	1.176	1.000	1.000
	D M62 Northbound Off Ramp	1.256	1.000	1.204	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	11	20	22
	B M62 Southbound Off Ramp	9	0	6	14	0
	C A614 Rawcliffe Road (East)	9	0	0	9	10
	D A161	15	0	50	100	33
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.108	1.198	1.222
	B M62 Southbound Off Ramp	1.087	1.000	1.060	1.143	1.000
	C A614 Rawcliffe Road (East)	1.087	1.000	1.000	1.091	1.097
	D A161	1.145	1.000	1.500	2.000	1.326
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	07:30 07:45	913	913
		07:45 08:00	1090	1090
		08:00 08:15	1336	1336
		08:15 08:30	1336	1336
		08:30 08:45	1090	1090
		08:45 09:00	913	913
	B M62 Southbound Off Ramp	07:30 07:45	367	367
		07:45 08:00	439	439
		08:00 08:15	537	537
		08:15 08:30	537	537
		08:30 08:45	439	439
		08:45 09:00	367	367
	C A614 Rawcliffe Road (East)	07:30 07:45	423	423
		07:45 08:00	505	505
		08:00 08:15	619	619
		08:15 08:30	619	619
		08:30 08:45	505	505
		08:45 09:00	423	423
	D A161	07:30 07:45	371	371
		07:45 08:00	443	443
		08:00 08:15	543	543
		08:15 08:30	543	543
		08:30 08:45	443	443
		08:45 09:00	371	371
E M62 Southbound On Ramp	07:30 07:45	0	0	
	07:45 08:00	0	0	
	08:00 08:15	0	0	
	08:15 08:30	0	0	
	08:30 08:45	0	0	
	08:45 09:00	0	0	
3W Site 3	A A614 Rawcliffe Road (West)	07:30 07:45	689	689
		07:45 08:00	823	823
		08:00 08:15	1007	1007
		08:15 08:30	1007	1007
		08:30 08:45	823	823
		08:45 09:00	689	689
	B M62 Northbound On Ramp	07:30 07:45	0	0
		07:45 08:00	0	0
		08:00 08:15	0	0
		08:15 08:30	0	0
		08:30 08:45	0	0
		08:45 09:00	0	0
	C Link	07:30 07:45	589	589
		07:45 08:00	704	704
		08:00 08:15	862	862
		08:15 08:30	862	862
		08:30 08:45	704	704
		08:45 09:00	589	589
	D M62 Northbound Off Ramp	07:30 07:45	719	719
		07:45 08:00	859	859
		08:00 08:15	1052	1052
		08:15 08:30	1052	1052
		08:30 08:45	859	859
		08:45 09:00	719	719

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.57	4.11	1.5	A	1113	1669
	B M62 Southbound Off Ramp	0.63	12.46	1.8	B	448	672
	C A614 Rawcliffe Road (East)	0.35	3.36	0.6	A	516	774
	D A161	0.21	4.23	0.3	A	452	323
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	0.57	5.14	1.4	A	840	1259
	B M62 Northbound On Ramp						
	C Link	0.55	5.60	1.3	A	718	1077
	D M62 Northbound Off Ramp	0.45	3.48	1.0	A	876	1315

Main Results for each time segment

07:30 - 07:45

	Total	Junction	Junction	Bypass	Bypass	Circulating	Capacity		Throughput	Throughput	Start	End	Delay	Unsignalised

Junction	Arm	Demand (PCU/hr)	demand (PCU/hr)	Arrivals (PCU)	demand (PCU/hr)	exit flow (PCU/hr)	flow (PCU/hr)	(PCU/hr)	RFC	(PCU/hr)	(exit side) (PCU/hr)	queue (PCU)	queue (PCU)	(s)	level of service
3E Site 3	A Link	910	910	228	0	0	4	2353	0.387	907	587	0.0	0.7	2.887	A
	B M62 Southbound Off Ramp	367	367	92	0	0	911	1046	0.351	365	0	0.0	0.6	5.761	A
	C A614 Rawcliffe Road (East)	423	423	106	0	0	798	2025	0.209	422	478	0.0	0.3	2.450	A
	D A161	371	177	44	194	0	837	1452	0.122	176	383	0.0	0.2	3.246	A
	E M62 Southbound On Ramp						591				423				
3W Site 3	A A614 Rawcliffe Road (West)	689		172			484	1901	0.362	686	818	0.0	0.6	3.219	A
	B M62 Northbound On Ramp						910				260				
	C Link	587		147			0	1574	0.373	584	910	0.0	0.7	4.016	A
	D M62 Northbound Off Ramp	719		180			584	2521	0.285	717	0	0.0	0.5	2.444	A

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1089	1089	272	0	0	4	2353	0.463	1088	703	0.7	1.0	3.305	A
	B M62 Southbound Off Ramp	439	439	110	0	0	1093	964	0.455	437	0	0.6	0.9	7.454	A
	C A614 Rawcliffe Road (East)	505	505	126	0	0	957	1925	0.262	505	573	0.3	0.4	2.766	A
	D A161	443	211	53	232	0	1003	1362	0.155	211	459	0.2	0.2	3.600	A
	E M62 Southbound On Ramp						707				506				
3W Site 3	A A614 Rawcliffe Road (West)	823		206			579	1845	0.446	822	981	0.6	0.9	3.823	A
	B M62 Northbound On Ramp						1089				311				
	C Link	703		176			0	1574	0.446	702	1089	0.7	0.9	4.564	A
	D M62 Northbound Off Ramp	859		215			702	2435	0.353	858	0	0.5	0.7	2.796	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1333	1333	333	0	0	5	2352	0.567	1331	859	1.0	1.5	4.089	A
	B M62 Southbound Off Ramp	537	537	134	0	0	1337	854	0.629	534	0	0.9	1.8	12.137	B
	C A614 Rawcliffe Road (East)	619	619	155	0	0	1169	1792	0.345	618	701	0.4	0.6	3.346	A
	D A161	543	259	65	284	0	1226	1240	0.209	258	561	0.2	0.3	4.220	A
	E M62 Southbound On Ramp						865				620				
3W Site 3	A A614 Rawcliffe Road (West)	1007		252			709	1770	0.569	1005	1199	0.9	1.4	5.109	A
	B M62 Northbound On Ramp						1333				381				
	C Link	859		215			0	1574	0.546	858	1333	0.9	1.3	5.549	A
	D M62 Northbound Off Ramp	1052		263			858	2321	0.453	1050	0	0.7	1.0	3.470	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1335	1335	334	0	0	6	2352	0.568	1335	862	1.5	1.5	4.114	A
	B M62 Southbound Off Ramp	537	537	134	0	0	1341	852	0.630	537	0	1.8	1.8	12.464	B
	C A614 Rawcliffe Road (East)	619	619	155	0	0	1175	1789	0.346	619	703	0.6	0.6	3.358	A
	D A161	543	259	65	284	0	1230	1238	0.209	259	564	0.3	0.3	4.231	A
	E M62 Southbound On Ramp						868				621				
3W Site 3	A A614 Rawcliffe Road (West)	1007		252			710	1769	0.569	1007	1203	1.4	1.4	5.143	A
	B M62 Northbound On Ramp						1335				382				
	C Link	862		216			0	1574	0.548	862	1335	1.3	1.3	5.595	A
	D M62 Northbound Off Ramp	1052		263			862	2318	0.454	1052	0	1.0	1.0	3.484	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1093	1093	273	0	0	5	2353	0.465	1095	707	1.5	1.0	3.333	A
	B M62 Southbound Off Ramp	439	439	110	0	0	1099	961	0.457	442	0	1.8	0.9	7.638	A
	C A614 Rawcliffe Road (East)	505	505	126	0	0	965	1921	0.263	506	577	0.6	0.4	2.780	A
	D A161	443	211	53	232	0	1008	1359	0.155	212	463	0.3	0.2	3.612	A
	E M62 Southbound On Ramp						711				508				
3W Site 3	A A614 Rawcliffe Road (West)	823		206			581	1844	0.446	825	987	1.4	0.9	3.853	A
	B M62 Northbound On Ramp						1093				313				
	C Link	707		177			0	1574	0.449	708	1093	1.3	0.9	4.613	A
	D M62 Northbound Off Ramp	859		215			708	2430	0.353	860	0	1.0	0.7	2.813	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	914	914	229	0	0	4	2353	0.389	915	591	1.0	0.7	2.911	A
	B M62 Southbound Off Ramp	367	367	92	0	0	919	1042	0.353	369	0	0.9	0.6	5.856	A
	C A614 Rawcliffe Road (East)	423	423	106	0	0	806	2021	0.209	424	482	0.4	0.3	2.460	A
	D A161	371	177	44	194	0	843	1449	0.122	177	386	0.2	0.2	3.258	A
	E M62 Southbound On Ramp						594				425				
3W Site 3	A A614 Rawcliffe Road (West)	689		172			486	1899	0.363	690	825	0.9	0.6	3.241	A
	B M62 Northbound On Ramp						914				262				
	C Link	591		148			0	1574	0.375	592	914	0.9	0.7	4.061	A
	D M62 Northbound Off Ramp	719		180			592	2516	0.286	720	0	0.7	0.5	2.459	A

2022 Future Baseline , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	4.37	A
3W	Site 3	Standard Roundabout		B, C, D, A	5.16	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.77	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2022 Future Baseline	PM	ONE HOUR	16 15	17 45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Queue limited	Normal	0	100.00	44.00
3W Site 3	C Link	3E	A	Queue limited	Normal	0	100.00	28.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	314	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	719	100.000
	D A161		ONE HOUR	✓	491	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	967	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	915	100.000

Origin-Destination Data

Demand (PCU/hr)

3W - Site 3

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
From	A A614 Rawcliffe Road (West)	0	250	717	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	690	194	0	0
	D M62 Northbound Off Ramp	404	0	511	0

Proportions

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
From	A A614 Rawcliffe Road (West)	0.00	0.26	0.74	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.78	0.22	0.00	0.00
	D M62 Northbound Off Ramp	0.44	0.00	0.56	0.00

Demand (PCU/hr)

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	596	359	273
	B M62 Southbound Off Ramp	184	0	58	71	1
	C A614 Rawcliffe Road (East)	416	0	0	35	268
	D A161	284	0	11	0	196
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0.00	0.00	0.49	0.29	0.22
	B M62 Southbound Off Ramp	0.59	0.00	0.18	0.23	0.00
	C A614 Rawcliffe Road (East)	0.58	0.00	0.00	0.05	0.37
	D A161	0.58	0.00	0.02	0.00	0.40
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

3W - Site 3

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
From	A A614 Rawcliffe Road (West)	0	12	5	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	6	6	0	0
	D M62 Northbound Off Ramp	22	0	13	0

Average PCU Per Veh

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
From	A A614 Rawcliffe Road (West)	1.000	1.120	1.045	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000
	C Link	1.055	1.062	1.000	1.000
	D M62 Northbound Off Ramp	1.220	1.000	1.126	1.000

Heavy Vehicle Percentages

3E - Site 3

From		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
	A Link	0	0	5	15	19
	B M62 Southbound Off Ramp	13	0	15	19	0
	C A614 Rawcliffe Road (East)	2	0	0	20	7
	D A161	6	0	33	67	22
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

From		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
	A Link	1.000	1.000	1.052	1.145	1.186
	B M62 Southbound Off Ramp	1.129	1.000	1.146	1.190	1.000
	C A614 Rawcliffe Road (East)	1.019	1.000	1.000	1.200	1.066
	D A161	1.062	1.000	1.333	1.667	1.219
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	16:15 16:30	925	925
		16:30 16:45	1104	1104
		16:45 17:00	1352	1352
		17:00 17:15	1352	1352
		17:15 17:30	1104	1104
		17:30 17:45	925	925
	B M62 Southbound Off Ramp	16:15 16:30	236	236
		16:30 16:45	282	282
		16:45 17:00	346	346
		17:00 17:15	346	346
		17:15 17:30	282	282
		17:30 17:45	236	236
	C A614 Rawcliffe Road (East)	16:15 16:30	541	541
		16:30 16:45	646	646
		16:45 17:00	792	792
		17:00 17:15	792	792
		17:15 17:30	646	646
		17:30 17:45	541	541
	D A161	16:15 16:30	370	370
		16:30 16:45	441	441
		16:45 17:00	541	541
		17:00 17:15	541	541
		17:15 17:30	441	441
		17:30 17:45	370	370
E M62 Southbound On Ramp	16:15 16:30	0	0	
	16:30 16:45	0	0	
	16:45 17:00	0	0	
	17:00 17:15	0	0	
	17:15 17:30	0	0	
	17:30 17:45	0	0	
3W Site 3	A A614 Rawcliffe Road (West)	16:15 16:30	728	728
		16:30 16:45	869	869
		16:45 17:00	1065	1065
		17:00 17:15	1065	1065
		17:15 17:30	869	869
		17:30 17:45	728	728
	B M62 Northbound On Ramp	16:15 16:30	0	0
		16:30 16:45	0	0
		16:45 17:00	0	0
		17:00 17:15	0	0
		17:15 17:30	0	0
		17:30 17:45	0	0
	C Link	16:15 16:30	666	666
		16:30 16:45	795	795
		16:45 17:00	973	973
		17:00 17:15	973	973
		17:15 17:30	795	795
		17:30 17:45	666	666
	D M62 Northbound Off Ramp	16:15 16:30	689	689
		16:30 16:45	823	823
		16:45 17:00	1007	1007
		17:00 17:15	1007	1007
		17:15 17:30	823	823
		17:30 17:45	689	689

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.58	4.00	1.5	A	1126	1689
	B M62 Southbound Off Ramp	0.41	8.30	0.8	A	288	432
	C A614 Rawcliffe Road (East)	0.41	3.35	0.7	A	660	990
	D A161	0.27	4.29	0.4	A	451	406
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	0.62	5.75	1.7	A	887	1331
	B M62 Northbound On Ramp						
	C Link	0.62	6.33	1.7	A	811	1216
	D M62 Northbound Off Ramp	0.45	3.41	1.0	A	840	1259

Main Results for each time segment

16:15 - 16:30

	Total	Junction	Junction	Bypass	Bypass	Circulating	Capacity	Throughput	Throughput	Start	End	Delay	Unsignalised

Junction	Arm	Demand (PCU/hr)	demand (PCU/hr)	Arrivals (PCU)	demand (PCU/hr)	exit flow (PCU/hr)	flow (PCU/hr)	(PCU/hr)	RFC	(PCU/hr)	(exit side) (PCU/hr)	queue (PCU)	queue (PCU)	(s)	level of service
3E Site 3	A Link	922	922	230	0	0	8	2350	0.392	919	663	0.0	0.7	2.775	A
	B M62 Southbound Off Ramp	236	236	59	0	0	927	1038	0.228	235	0	0.0	0.3	5.122	A
	C A614 Rawcliffe Road (East)	541	541	135	0	0	665	2109	0.257	540	498	0.0	0.4	2.392	A
	D A161	370	222	56	148	0	856	1441	0.154	221	348	0.0	0.2	3.155	A
	E M62 Southbound On Ramp						671				406				
3W Site 3	A A614 Rawcliffe Road (West)	728		182			529	1875	0.388	725	819	0.0	0.7	3.325	A
	B M62 Northbound On Ramp						922				332				
	C Link	663		166			0	1574	0.421	660	922	0.0	0.8	4.149	A
	D M62 Northbound Off Ramp	689		172			660	2466	0.279	687	0	0.0	0.5	2.357	A

16:30 - 16:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1103	1103	276	0	0	10	2349	0.469	1102	794	0.7	1.0	3.188	A
	B M62 Southbound Off Ramp	282	282	71	0	0	1112	955	0.296	282	0	0.3	0.5	6.112	A
	C A614 Rawcliffe Road (East)	646	646	162	0	0	797	2026	0.319	646	597	0.4	0.5	2.722	A
	D A161	441	265	66	176	0	1025	1349	0.197	265	417	0.2	0.3	3.552	A
	E M62 Southbound On Ramp						804				487				
3W Site 3	A A614 Rawcliffe Road (West)	869		217			633	1814	0.479	868	982	0.7	1.0	4.044	A
	B M62 Northbound On Ramp						1103				398				
	C Link	794		198			0	1574	0.504	793	1103	0.8	1.1	4.868	A
	D M62 Northbound Off Ramp	823		206			793	2369	0.347	822	0	0.5	0.6	2.711	A

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1349	1349	337	0	0	12	2348	0.575	1347	972	1.0	1.5	3.970	A
	B M62 Southbound Off Ramp	346	346	86	0	0	1359	844	0.410	345	0	0.5	0.8	8.230	A
	C A614 Rawcliffe Road (East)	792	792	198	0	0	974	1915	0.413	791	730	0.5	0.7	3.340	A
	D A161	541	325	81	216	0	1255	1224	0.265	324	510	0.3	0.4	4.278	A
	E M62 Southbound On Ramp						984				595				
3W Site 3	A A614 Rawcliffe Road (West)	1065		266			775	1732	0.615	1062	1201	1.0	1.7	5.693	A
	B M62 Northbound On Ramp						1349				487				
	C Link	972		243			0	1574	0.617	969	1349	1.1	1.7	6.263	A
	D M62 Northbound Off Ramp	1007		252			969	2239	0.450	1006	0	0.6	0.9	3.400	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1352	1352	338	0	0	12	2348	0.576	1352	973	1.5	1.5	3.997	A
	B M62 Southbound Off Ramp	346	346	86	0	0	1364	842	0.411	346	0	0.8	0.8	8.305	A
	C A614 Rawcliffe Road (East)	792	792	198	0	0	978	1912	0.414	792	732	0.7	0.7	3.352	A
	D A161	541	325	81	216	0	1257	1223	0.266	325	512	0.4	0.4	4.288	A
	E M62 Southbound On Ramp						985				597				
3W Site 3	A A614 Rawcliffe Road (West)	1065		266			776	1731	0.615	1065	1204	1.7	1.7	5.749	A
	B M62 Northbound On Ramp						1352				489				
	C Link	973		243			0	1574	0.618	973	1352	1.7	1.7	6.328	A
	D M62 Northbound Off Ramp	1007		252			973	2236	0.451	1007	0	0.9	1.0	3.413	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1107	1107	277	0	0	10	2349	0.471	1109	796	1.5	1.0	3.216	A
	B M62 Southbound Off Ramp	282	282	71	0	0	1119	952	0.297	284	0	0.8	0.5	6.176	A
	C A614 Rawcliffe Road (East)	646	646	162	0	0	802	2023	0.320	647	600	0.7	0.5	2.733	A
	D A161	441	265	66	176	0	1029	1347	0.197	266	420	0.4	0.3	3.565	A
	E M62 Southbound On Ramp						806				489				
3W Site 3	A A614 Rawcliffe Road (West)	869		217			635	1813	0.480	872	987	1.7	1.0	4.085	A
	B M62 Northbound On Ramp						1107				401				
	C Link	796		199			0	1574	0.506	799	1107	1.7	1.1	4.923	A
	D M62 Northbound Off Ramp	823		206			799	2364	0.348	824	0	1.0	0.6	2.728	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	926	926	231	0	0	8	2350	0.394	927	666	1.0	0.7	2.798	A
	B M62 Southbound Off Ramp	236	236	59	0	0	935	1035	0.229	237	0	0.5	0.3	5.169	A
	C A614 Rawcliffe Road (East)	541	541	135	0	0	670	2106	0.257	542	502	0.5	0.4	2.403	A
	D A161	370	222	56	148	0	861	1439	0.154	222	351	0.3	0.2	3.166	A
	E M62 Southbound On Ramp						675				409				
3W Site 3	A A614 Rawcliffe Road (West)	728		182			532	1873	0.389	729	826	1.0	0.7	3.353	A
	B M62 Northbound On Ramp						926				335				
	C Link	666		167			0	1574	0.423	668	926	1.1	0.8	4.202	A
	D M62 Northbound Off Ramp	689		172			668	2460	0.280	690	0	0.6	0.5	2.371	A

2026 Future Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	5.84	A
3W	Site 3	Standard Roundabout		B, C, D, A	4.90	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.38	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
DS	2026 Future Baseline	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Queue limited	Normal	0	100.00	44.00
3W Site 3	C Link	3E	A	Queue limited	Normal	0	100.00	28.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	502	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	579	100.000
	D A161		ONE HOUR	✓	508	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	942	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	983	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	241	701	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	691	115	0	0
	D M62 Northbound Off Ramp	434	1	548	0

Proportions

From		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0.00	0.26	0.74	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.86	0.14	0.00	0.00
	D M62 Northbound Off Ramp	0.44	0.00	0.56	0.00

Demand (PCU/hr)

From		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0	0	545	399	305
	B M62 Southbound Off Ramp	280	0	108	113	1
	C A614 Rawcliffe Road (East)	290	0	0	14	275
	D A161	237	0	5	0	266
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

From		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0.00	0.00	0.44	0.32	0.24
	B M62 Southbound Off Ramp	0.56	0.00	0.22	0.23	0.00
	C A614 Rawcliffe Road (East)	0.50	0.00	0.00	0.02	0.47
	D A161	0.47	0.00	0.01	0.00	0.52
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	13	8	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	10	18	0	0
	D M62 Northbound Off Ramp	26	0	20	0

Average PCU Per Veh

From		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	1.000	1.125	1.076	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000
	C Link	1.096	1.176	1.000	1.000
	D M62 Northbound Off Ramp	1.256	1.000	1.204	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	11	20	22
	B M62 Southbound Off Ramp	9	0	6	14	0
	C A614 Rawcliffe Road (East)	9	0	0	9	10
	D A161	15	0	50	100	33
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.108	1.198	1.222
	B M62 Southbound Off Ramp	1.087	1.000	1.060	1.143	1.000
	C A614 Rawcliffe Road (East)	1.087	1.000	1.000	1.091	1.097
	D A161	1.145	1.000	1.500	2.000	1.326
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	07:30 07:45	940	940
		07:45 08:00	1123	1123
		08:00 08:15	1375	1375
		08:15 08:30	1375	1375
		08:30 08:45	1123	1123
		08:45 09:00	940	940
	B M62 Southbound Off Ramp	07:30 07:45	378	378
		07:45 08:00	451	451
		08:00 08:15	553	553
		08:15 08:30	553	553
		08:30 08:45	451	451
		08:45 09:00	378	378
	C A614 Rawcliffe Road (East)	07:30 07:45	436	436
		07:45 08:00	521	521
		08:00 08:15	637	637
		08:15 08:30	637	637
		08:30 08:45	521	521
		08:45 09:00	436	436
	D A161	07:30 07:45	382	382
		07:45 08:00	457	457
		08:00 08:15	559	559
		08:15 08:30	559	559
		08:30 08:45	457	457
		08:45 09:00	382	382
E M62 Southbound On Ramp	07:30 07:45	0	0	
	07:45 08:00	0	0	
	08:00 08:15	0	0	
	08:15 08:30	0	0	
	08:30 08:45	0	0	
	08:45 09:00	0	0	
3W Site 3	A A614 Rawcliffe Road (West)	07:30 07:45	709	709
		07:45 08:00	847	847
		08:00 08:15	1037	1037
		08:15 08:30	1037	1037
		08:30 08:45	847	847
		08:45 09:00	709	709
	B M62 Northbound On Ramp	07:30 07:45	0	0
		07:45 08:00	0	0
		08:00 08:15	0	0
		08:15 08:30	0	0
		08:30 08:45	0	0
		08:45 09:00	0	0
	C Link	07:30 07:45	607	607
		07:45 08:00	725	725
		08:00 08:15	887	887
		08:15 08:30	887	887
		08:30 08:45	725	725
		08:45 09:00	607	607
	D M62 Northbound Off Ramp	07:30 07:45	740	740
		07:45 08:00	884	884
		08:00 08:15	1082	1082
		08:15 08:30	1082	1082
		08:30 08:45	884	884
		08:45 09:00	740	740

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.58	4.28	1.6	A	1146	1718
	B M62 Southbound Off Ramp	0.66	13.92	2.1	B	461	691
	C A614 Rawcliffe Road (East)	0.36	3.48	0.6	A	531	797
	D A161	0.22	4.36	0.3	A	466	333
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	0.59	5.44	1.6	A	864	1297
	B M62 Northbound On Ramp						
	C Link	0.56	5.81	1.4	A	740	1110
	D M62 Northbound Off Ramp	0.47	3.63	1.1	A	902	1353

Main Results for each time segment

07:30 - 07:45

	Total	Junction	Junction	Bypass	Bypass	Circulating	Capacity		Throughput	Throughput	Start	End	Delay	Unsignalised

Junction	Arm	Demand (PCU/hr)	demand (PCU/hr)	Arrivals (PCU)	demand (PCU/hr)	exit flow (PCU/hr)	flow (PCU/hr)	(PCU/hr)	RFC	(PCU/hr)	(exit side) (PCU/hr)	queue (PCU)	queue (PCU)	(s)	level of service
3E Site 3	A Link	937	937	234	0	0	4	2353	0.398	934	605	0.0	0.8	2.942	A
	B M62 Southbound Off Ramp	378	378	94	0	0	938	1034	0.366	375	0	0.0	0.6	5.955	A
	C A614 Rawcliffe Road (East)	436	436	109	0	0	821	2011	0.217	435	492	0.0	0.3	2.492	A
	D A161	382	182	46	200	0	862	1438	0.127	182	393	0.0	0.2	3.295	A
	E M62 Southbound On Ramp						609				435				
3W Site 3	A A614 Rawcliffe Road (West)	709		177			498	1892	0.375	707	842	0.0	0.6	3.297	A
	B M62 Northbound On Ramp						937				268				
	C Link	605		151			0	1574	0.384	602	937	0.0	0.7	4.088	A
	D M62 Northbound Off Ramp	740		185			602	2508	0.295	738	0	0.0	0.5	2.491	A

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1122	1122	280	0	0	4	2353	0.477	1120	724	0.8	1.1	3.392	A
	B M62 Southbound Off Ramp	451	451	113	0	0	1125	949	0.475	450	0	0.6	1.0	7.853	A
	C A614 Rawcliffe Road (East)	521	521	130	0	0	985	1908	0.273	520	590	0.3	0.4	2.831	A
	D A161	457	218	54	239	0	1033	1345	0.162	217	472	0.2	0.2	3.673	A
	E M62 Southbound On Ramp						729				522				
3W Site 3	A A614 Rawcliffe Road (West)	847		212			596	1835	0.461	846	1010	0.6	0.9	3.955	A
	B M62 Northbound On Ramp						1122				321				
	C Link	724		181			0	1574	0.460	723	1122	0.7	0.9	4.677	A
	D M62 Northbound Off Ramp	884		221			723	2419	0.365	883	0	0.5	0.7	2.870	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1372	1372	343	0	0	5	2352	0.584	1370	885	1.1	1.6	4.251	A
	B M62 Southbound Off Ramp	553	553	138	0	0	1376	837	0.661	548	0	1.0	2.0	13.451	B
	C A614 Rawcliffe Road (East)	637	637	159	0	0	1203	1771	0.360	637	721	0.4	0.6	3.463	A
	D A161	559	266	67	293	0	1263	1220	0.218	266	577	0.2	0.3	4.341	A
	E M62 Southbound On Ramp						891				638				
3W Site 3	A A614 Rawcliffe Road (West)	1037		259			730	1758	0.590	1035	1235	0.9	1.5	5.400	A
	B M62 Northbound On Ramp						1372				392				
	C Link	885		221			0	1574	0.562	883	1372	0.9	1.4	5.753	A
	D M62 Northbound Off Ramp	1082		271			883	2302	0.470	1081	0	0.7	1.1	3.608	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1375	1375	344	0	0	6	2352	0.585	1375	888	1.6	1.6	4.281	A
	B M62 Southbound Off Ramp	553	553	138	0	0	1381	835	0.662	552	0	2.0	2.1	13.923	B
	C A614 Rawcliffe Road (East)	637	637	159	0	0	1209	1767	0.361	637	724	0.6	0.6	3.477	A
	D A161	559	266	67	293	0	1267	1218	0.219	266	579	0.3	0.3	4.355	A
	E M62 Southbound On Ramp						894				640				
3W Site 3	A A614 Rawcliffe Road (West)	1037		259			731	1757	0.590	1037	1239	1.5	1.6	5.443	A
	B M62 Northbound On Ramp						1375				393				
	C Link	888		222			0	1574	0.564	888	1375	1.4	1.4	5.810	A
	D M62 Northbound Off Ramp	1082		271			888	2298	0.471	1082	0	1.1	1.1	3.627	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1125	1125	281	0	0	5	2353	0.478	1128	729	1.6	1.1	3.423	A
	B M62 Southbound Off Ramp	451	451	113	0	0	1132	946	0.477	456	0	2.1	1.0	8.089	A
	C A614 Rawcliffe Road (East)	521	521	130	0	0	993	1903	0.274	521	595	0.6	0.4	2.845	A
	D A161	457	218	54	239	0	1039	1342	0.162	218	475	0.3	0.2	3.689	A
	E M62 Southbound On Ramp						733				524				
3W Site 3	A A614 Rawcliffe Road (West)	847		212			599	1834	0.462	849	1017	1.6	0.9	3.990	A
	B M62 Northbound On Ramp						1125				323				
	C Link	729		182			0	1574	0.463	731	1125	1.4	1.0	4.735	A
	D M62 Northbound Off Ramp	884		221			731	2414	0.366	885	0	1.1	0.7	2.890	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	942	942	235	0	0	4	2353	0.400	943	609	1.1	0.8	2.968	A
	B M62 Southbound Off Ramp	378	378	94	0	0	947	1030	0.367	379	0	1.0	0.6	6.065	A
	C A614 Rawcliffe Road (East)	436	436	109	0	0	829	2006	0.217	436	497	0.4	0.3	2.505	A
	D A161	382	182	46	200	0	868	1435	0.127	182	397	0.2	0.2	3.310	A
	E M62 Southbound On Ramp						613				438				
3W Site 3	A A614 Rawcliffe Road (West)	709		177			501	1891	0.375	710	850	0.9	0.7	3.321	A
	B M62 Northbound On Ramp						942				270				
	C Link	609		152			0	1574	0.387	610	942	1.0	0.7	4.137	A
	D M62 Northbound Off Ramp	740		185			610	2503	0.296	741	0	0.7	0.5	2.507	A

2026 Future Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	4.56	A
3W	Site 3	Standard Roundabout		B, C, D, A	5.44	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.00	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2026 Future Baseline	PM	ONE HOUR	16 15	17 45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Queue limited	Normal	0	100.00	44.00
3W Site 3	C Link	3E	A	Queue limited	Normal	0	100.00	28.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	323	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	740	100.000
	D A161		ONE HOUR	✓	506	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	994	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	941	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	From A A614 Rawcliffe Road (West)	0	257	737	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	710	200	0	0
	D M62 Northbound Off Ramp	416	0	525	0

Proportions

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
From	A A614 Rawcliffe Road (West)	0.00	0.26	0.74	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.78	0.22	0.00	0.00
	D M62 Northbound Off Ramp	0.44	0.00	0.56	0.00

Demand (PCU/hr)

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	From A Link	0	0	613	369	281
	B M62 Southbound Off Ramp	189	0	60	73	1
	C A614 Rawcliffe Road (East)	428	0	0	36	276
	D A161	292	0	12	0	202
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0.00	0.00	0.49	0.29	0.22
	B M62 Southbound Off Ramp	0.58	0.00	0.19	0.23	0.00
	C A614 Rawcliffe Road (East)	0.58	0.00	0.00	0.05	0.37
	D A161	0.58	0.00	0.02	0.00	0.40
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	From A A614 Rawcliffe Road (West)	0	12	5	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	6	6	0	0
	D M62 Northbound Off Ramp	22	0	13	0

Average PCU Per Veh

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
From	A A614 Rawcliffe Road (West)	1.000	1.120	1.045	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000
	C Link	1.055	1.062	1.000	1.000
	D M62 Northbound Off Ramp	1.220	1.000	1.126	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	5	15	19
	B M62 Southbound Off Ramp	13	0	15	19	0
	C A614 Rawcliffe Road (East)	2	0	0	20	7
	D A161	6	0	33	67	22
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.052	1.145	1.186
	B M62 Southbound Off Ramp	1.129	1.000	1.146	1.190	1.000
	C A614 Rawcliffe Road (East)	1.019	1.000	1.000	1.200	1.066
	D A161	1.062	1.000	1.333	1.667	1.219
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	16:15 16:30	951	951
		16:30 16:45	1135	1135
		16:45 17:00	1391	1391
		17:00 17:15	1391	1391
		17:15 17:30	1135	1135
		17:30 17:45	951	951
	B M62 Southbound Off Ramp	16:15 16:30	243	243
		16:30 16:45	290	290
		16:45 17:00	356	356
		17:00 17:15	356	356
		17:15 17:30	290	290
		17:30 17:45	243	243
	C A614 Rawcliffe Road (East)	16:15 16:30	557	557
		16:30 16:45	665	665
		16:45 17:00	815	815
		17:00 17:15	815	815
		17:15 17:30	665	665
		17:30 17:45	557	557
	D A161	16:15 16:30	381	381
		16:30 16:45	455	455
		16:45 17:00	557	557
		17:00 17:15	557	557
		17:15 17:30	455	455
		17:30 17:45	381	381
E M62 Southbound On Ramp	16:15 16:30	0	0	
	16:30 16:45	0	0	
	16:45 17:00	0	0	
	17:00 17:15	0	0	
	17:15 17:30	0	0	
	17:30 17:45	0	0	
3W Site 3	A A614 Rawcliffe Road (West)	16:15 16:30	748	748
		16:30 16:45	894	894
		16:45 17:00	1094	1094
		17:00 17:15	1094	1094
		17:15 17:30	894	894
		17:30 17:45	748	748
	B M62 Northbound On Ramp	16:15 16:30	0	0
		16:30 16:45	0	0
		16:45 17:00	0	0
		17:00 17:15	0	0
		17:15 17:30	0	0
		17:30 17:45	0	0
	C Link	16:15 16:30	685	685
		16:30 16:45	818	818
		16:45 17:00	1002	1002
		17:00 17:15	1002	1002
		17:15 17:30	818	818
		17:30 17:45	685	685
	D M62 Northbound Off Ramp	16:15 16:30	708	708
		16:30 16:45	846	846
		16:45 17:00	1036	1036
		17:00 17:15	1036	1036
		17:15 17:30	846	846
		17:30 17:45	708	708

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.59	4.16	1.6	A	1158	1736
	B M62 Southbound Off Ramp	0.43	8.79	0.9	A	296	445
	C A614 Rawcliffe Road (East)	0.43	3.48	0.8	A	679	1019
	D A161	0.28	4.44	0.4	A	464	418
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	0.64	6.14	1.8	A	912	1368
	B M62 Northbound On Ramp						
	C Link	0.64	6.63	1.8	A	834	1251
	D M62 Northbound Off Ramp	0.47	3.55	1.0	A	863	1295

Main Results for each time segment

16:15 - 16:30

	Total	Junction	Junction	Bypass	Bypass	Circulating	Capacity		Throughput	Throughput	Start	End	Delay	Unsignalised

Junction	Arm	Demand (PCU/hr)	demand (PCU/hr)	Arrivals (PCU)	demand (PCU/hr)	exit flow (PCU/hr)	flow (PCU/hr)	(PCU/hr)	RFC	(PCU/hr)	(exit side) (PCU/hr)	queue (PCU)	queue (PCU)	(s)	level of service
3E Site 3	A Link	947	947	237	0	0	9	2350	0.403	944	682	0.0	0.7	2.826	A
	B M62 Southbound Off Ramp	243	243	61	0	0	953	1027	0.237	242	0	0.0	0.4	5.241	A
	C A614 Rawcliffe Road (East)	557	557	139	0	0	683	2098	0.266	556	512	0.0	0.4	2.434	A
	D A161	381	229	57	152	0	881	1428	0.160	228	357	0.0	0.2	3.210	A
	E M62 Southbound On Ramp						691				418				
3W Site 3	A A614 Rawcliffe Road (West)	748		187			543	1866	0.401	746	842	0.0	0.7	3.409	A
	B M62 Northbound On Ramp						947				342				
	C Link	682		170			0	1574	0.433	679	947	0.0	0.8	4.233	A
	D M62 Northbound Off Ramp	708		177			679	2452	0.289	707	0	0.0	0.5	2.402	A

16:30 - 16:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1133	1133	283	0	0	11	2349	0.482	1132	816	0.7	1.0	3.269	A
	B M62 Southbound Off Ramp	290	290	73	0	0	1143	941	0.309	290	0	0.4	0.5	6.320	A
	C A614 Rawcliffe Road (East)	665	665	166	0	0	819	2012	0.331	665	614	0.4	0.5	2.786	A
	D A161	455	273	68	182	0	1055	1333	0.205	273	429	0.2	0.3	3.634	A
	E M62 Southbound On Ramp						827				501				
3W Site 3	A A614 Rawcliffe Road (West)	894		223			651	1804	0.495	892	1009	0.7	1.0	4.196	A
	B M62 Northbound On Ramp						1133				410				
	C Link	816		204			0	1574	0.519	815	1133	0.8	1.1	5.003	A
	D M62 Northbound Off Ramp	846		211			815	2352	0.360	845	0	0.5	0.7	2.782	A

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1386	1386	347	0	0	13	2347	0.591	1384	999	1.0	1.6	4.125	A
	B M62 Southbound Off Ramp	356	356	89	0	0	1397	827	0.430	354	0	0.5	0.9	8.696	A
	C A614 Rawcliffe Road (East)	815	815	204	0	0	1001	1898	0.429	814	751	0.5	0.8	3.463	A
	D A161	557	335	84	222	0	1291	1205	0.278	334	524	0.3	0.4	4.423	A
	E M62 Southbound On Ramp						1012				613				
3W Site 3	A A614 Rawcliffe Road (West)	1094		274			796	1719	0.637	1091	1235	1.0	1.8	6.069	A
	B M62 Northbound On Ramp						1386				501				
	C Link	999		250			0	1574	0.635	996	1386	1.1	1.8	6.550	A
	D M62 Northbound Off Ramp	1036		259			996	2219	0.467	1035	0	0.7	1.0	3.536	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1389	1389	347	0	0	13	2347	0.592	1389	1001	1.6	1.6	4.156	A
	B M62 Southbound Off Ramp	356	356	89	0	0	1403	825	0.431	356	0	0.9	0.9	8.787	A
	C A614 Rawcliffe Road (East)	815	815	204	0	0	1005	1895	0.430	815	754	0.8	0.8	3.476	A
	D A161	557	335	84	222	0	1293	1203	0.278	335	526	0.4	0.4	4.437	A
	E M62 Southbound On Ramp						1014				614				
3W Site 3	A A614 Rawcliffe Road (West)	1094		274			798	1718	0.637	1094	1239	1.8	1.8	6.137	A
	B M62 Northbound On Ramp						1389				503				
	C Link	1001		250			0	1574	0.636	1001	1389	1.8	1.8	6.631	A
	D M62 Northbound Off Ramp	1036		259			1001	2216	0.468	1036	0	1.0	1.0	3.554	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1138	1138	284	0	0	11	2349	0.484	1140	819	1.6	1.0	3.301	A
	B M62 Southbound Off Ramp	290	290	73	0	0	1151	938	0.310	292	0	0.9	0.5	6.392	A
	C A614 Rawcliffe Road (East)	665	665	166	0	0	824	2009	0.331	666	618	0.8	0.5	2.800	A
	D A161	455	273	68	182	0	1059	1331	0.205	274	431	0.4	0.3	3.649	A
	E M62 Southbound On Ramp						830				503				
3W Site 3	A A614 Rawcliffe Road (West)	894		223			653	1802	0.496	897	1016	1.8	1.1	4.245	A
	B M62 Northbound On Ramp						1138				412				
	C Link	819		205			0	1574	0.520	822	1138	1.8	1.2	5.075	A
	D M62 Northbound Off Ramp	846		211			822	2347	0.360	847	0	1.0	0.7	2.799	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	952	952	238	0	0	9	2350	0.405	953	685	1.0	0.8	2.853	A
	B M62 Southbound Off Ramp	243	243	61	0	0	962	1023	0.238	244	0	0.5	0.4	5.297	A
	C A614 Rawcliffe Road (East)	557	557	139	0	0	689	2094	0.266	558	517	0.5	0.4	2.446	A
	D A161	381	229	57	152	0	886	1425	0.161	229	361	0.3	0.2	3.222	A
	E M62 Southbound On Ramp						694				421				
3W Site 3	A A614 Rawcliffe Road (West)	748		187			547	1864	0.401	750	849	1.1	0.7	3.442	A
	B M62 Northbound On Ramp						952				345				
	C Link	685		171			0	1574	0.435	687	952	1.2	0.8	4.294	A
	D M62 Northbound Off Ramp	708		177			687	2446	0.290	709	0	0.7	0.5	2.417	A

2026 Future Baseline + Drax, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	6.20	A
3W	Site 3	Standard Roundabout		B, C, D, A	5.14	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.67	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2026 Future Baseline + Drax	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Queue limited	Normal	0	100.00	44.00
3W Site 3	C Link	3E	A	Queue limited	Normal	0	100.00	28.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	514	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	579	100.000
	D A161		ONE HOUR	✓	508	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	968	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	1094	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	From A A614 Rawcliffe Road (West)	0	241	727	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	704	115	0	0
	D M62 Northbound Off Ramp	545	1	548	0

Proportions

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
From	A A614 Rawcliffe Road (West)	0.00	0.25	0.75	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.86	0.14	0.00	0.00
	D M62 Northbound Off Ramp	0.50	0.00	0.50	0.00

Demand (PCU/hr)

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	From A Link	0	0	545	399	331
	B M62 Southbound Off Ramp	292	0	108	113	1
	C A614 Rawcliffe Road (East)	290	0	0	14	275
	D A161	237	0	5	0	266
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0.00	0.00	0.43	0.31	0.26
	B M62 Southbound Off Ramp	0.57	0.00	0.21	0.22	0.00
	C A614 Rawcliffe Road (East)	0.50	0.00	0.00	0.02	0.47
	D A161	0.47	0.00	0.01	0.00	0.52
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	From A A614 Rawcliffe Road (West)	0	13	8	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	10	18	0	0
	D M62 Northbound Off Ramp	26	0	20	0

Average PCU Per Veh

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
From	A A614 Rawcliffe Road (West)	1.000	1.125	1.076	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000
	C Link	1.096	1.176	1.000	1.000
	D M62 Northbound Off Ramp	1.256	1.000	1.204	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	11	20	22
	B M62 Southbound Off Ramp	9	0	6	14	0
	C A614 Rawcliffe Road (East)	9	0	0	9	10
	D A161	15	0	50	100	33
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.108	1.198	1.222
	B M62 Southbound Off Ramp	1.087	1.000	1.060	1.143	1.000
	C A614 Rawcliffe Road (East)	1.087	1.000	1.000	1.091	1.097
	D A161	1.145	1.000	1.500	2.000	1.326
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	07:30 07:45	960	960
		07:45 08:00	1146	1146
		08:00 08:15	1404	1404
		08:15 08:30	1404	1404
		08:30 08:45	1146	1146
		08:45 09:00	960	960
	B M62 Southbound Off Ramp	07:30 07:45	387	387
		07:45 08:00	462	462
		08:00 08:15	566	566
		08:15 08:30	566	566
		08:30 08:45	462	462
		08:45 09:00	387	387
	C A614 Rawcliffe Road (East)	07:30 07:45	436	436
		07:45 08:00	521	521
		08:00 08:15	637	637
		08:15 08:30	637	637
		08:30 08:45	521	521
		08:45 09:00	436	436
	D A161	07:30 07:45	382	382
		07:45 08:00	457	457
		08:00 08:15	559	559
		08:15 08:30	559	559
		08:30 08:45	457	457
		08:45 09:00	382	382
E M62 Southbound On Ramp	07:30 07:45	0	0	
	07:45 08:00	0	0	
	08:00 08:15	0	0	
	08:15 08:30	0	0	
	08:30 08:45	0	0	
	08:45 09:00	0	0	
3W Site 3	A A614 Rawcliffe Road (West)	07:30 07:45	729	729
		07:45 08:00	870	870
		08:00 08:15	1066	1066
		08:15 08:30	1066	1066
		08:30 08:45	870	870
		08:45 09:00	729	729
	B M62 Northbound On Ramp	07:30 07:45	0	0
		07:45 08:00	0	0
		08:00 08:15	0	0
		08:15 08:30	0	0
		08:30 08:45	0	0
		08:45 09:00	0	0
	C Link	07:30 07:45	617	617
		07:45 08:00	736	736
		08:00 08:15	902	902
		08:15 08:30	902	902
		08:30 08:45	736	736
		08:45 09:00	617	617
	D M62 Northbound Off Ramp	07:30 07:45	824	824
		07:45 08:00	983	983
		08:00 08:15	1205	1205
		08:15 08:30	1205	1205
		08:30 08:45	983	983
		08:45 09:00	824	824

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.60	4.41	1.7	A	1169	1754
	B M62 Southbound Off Ramp	0.69	15.32	2.4	C	472	707
	C A614 Rawcliffe Road (East)	0.37	3.56	0.6	A	531	797
	D A161	0.22	4.46	0.3	A	466	333
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	0.61	5.67	1.7	A	888	1332
	B M62 Northbound On Ramp						
	C Link	0.57	5.92	1.5	A	751	1127
	D M62 Northbound Off Ramp	0.53	4.08	1.4	A	1004	1506

Main Results for each time segment

07:30 - 07:45

	Total	Junction	Junction	Bypass	Bypass	Circulating	Capacity		Throughput	Throughput	Start	End	Delay	Unsignalised

Junction	Arm	Demand (PCU/hr)	demand (PCU/hr)	Arrivals (PCU)	demand (PCU/hr)	exit flow (PCU/hr)	flow (PCU/hr)	(PCU/hr)	RFC	(PCU/hr)	(exit side) (PCU/hr)	queue (PCU)	queue (PCU)	(s)	level of service
3E Site 3	A Link	957	957	239	0	0	4	2353	0.407	953	614	0.0	0.8	2.986	A
	B M62 Southbound Off Ramp	387	387	97	0	0	957	1025	0.378	384	0	0.0	0.7	6.117	A
	C A614 Rawcliffe Road (East)	436	436	109	0	0	850	1993	0.219	435	492	0.0	0.3	2.522	A
	D A161	382	182	46	200	0	891	1423	0.128	182	393	0.0	0.2	3.336	A
	E M62 Southbound On Ramp						618				455				
3W Site 3	A A614 Rawcliffe Road (West)	729		182			498	1892	0.385	726	934	0.0	0.7	3.351	A
	B M62 Northbound On Ramp						957				267				
	C Link	614		153			0	1574	0.390	611	957	0.0	0.7	4.126	A
	D M62 Northbound Off Ramp	824		206			611	2502	0.329	821	0	0.0	0.6	2.629	A

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1145	1145	286	0	0	4	2353	0.487	1144	735	0.8	1.1	3.460	A
	B M62 Southbound Off Ramp	462	462	116	0	0	1148	939	0.492	461	0	0.7	1.0	8.193	A
	C A614 Rawcliffe Road (East)	521	521	130	0	0	1019	1887	0.276	520	590	0.3	0.4	2.875	A
	D A161	457	218	54	239	0	1067	1327	0.164	217	472	0.2	0.2	3.734	A
	E M62 Southbound On Ramp						739				545				
3W Site 3	A A614 Rawcliffe Road (West)	870		218			596	1835	0.474	869	1120	0.7	1.0	4.047	A
	B M62 Northbound On Ramp						1145				320				
	C Link	735		184			0	1574	0.467	734	1145	0.7	1.0	4.736	A
	D M62 Northbound Off Ramp	983		246			734	2412	0.408	983	0	0.6	0.8	3.094	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1401	1401	350	0	0	5	2352	0.596	1398	898	1.1	1.7	4.380	A
	B M62 Southbound Off Ramp	566	566	141	0	0	1404	824	0.687	561	0	1.0	2.3	14.680	B
	C A614 Rawcliffe Road (East)	637	637	159	0	0	1244	1745	0.365	637	721	0.4	0.6	3.543	A
	D A161	559	266	67	293	0	1304	1197	0.223	266	576	0.2	0.3	4.446	A
	E M62 Southbound On Ramp						904				666				
3W Site 3	A A614 Rawcliffe Road (West)	1066		266			729	1758	0.606	1063	1369	1.0	1.6	5.618	A
	B M62 Northbound On Ramp						1401				392				
	C Link	898		225			0	1574	0.571	896	1401	1.0	1.4	5.861	A
	D M62 Northbound Off Ramp	1205		301			896	2293	0.525	1202	0	0.8	1.3	4.050	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1404	1404	351	0	0	6	2352	0.597	1404	902	1.7	1.7	4.415	A
	B M62 Southbound Off Ramp	566	566	141	0	0	1409	822	0.689	566	0	2.3	2.4	15.321	C
	C A614 Rawcliffe Road (East)	637	637	159	0	0	1250	1741	0.366	637	724	0.6	0.6	3.560	A
	D A161	559	266	67	293	0	1309	1195	0.223	266	579	0.3	0.3	4.462	A
	E M62 Southbound On Ramp						907				668				
3W Site 3	A A614 Rawcliffe Road (West)	1066		266			731	1757	0.607	1066	1375	1.6	1.7	5.665	A
	B M62 Northbound On Ramp						1404				393				
	C Link	902		225			0	1574	0.573	901	1404	1.4	1.5	5.921	A
	D M62 Northbound Off Ramp	1205		301			901	2289	0.526	1204	0	1.3	1.4	4.079	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1149	1149	287	0	0	5	2353	0.488	1152	740	1.7	1.1	3.495	A
	B M62 Southbound Off Ramp	462	462	116	0	0	1156	935	0.494	467	0	2.4	1.1	8.488	A
	C A614 Rawcliffe Road (East)	521	521	130	0	0	1028	1881	0.277	521	595	0.6	0.4	2.892	A
	D A161	457	218	54	239	0	1074	1323	0.164	218	476	0.3	0.2	3.750	A
	E M62 Southbound On Ramp						744				547				
3W Site 3	A A614 Rawcliffe Road (West)	870		218			599	1834	0.475	873	1129	1.7	1.0	4.088	A
	B M62 Northbound On Ramp						1149				322				
	C Link	740		185			0	1574	0.470	742	1149	1.5	1.0	4.800	A
	D M62 Northbound Off Ramp	983		246			742	2406	0.409	985	0	1.4	0.9	3.120	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	961	961	240	0	0	4	2353	0.409	963	618	1.1	0.8	3.013	A
	B M62 Southbound Off Ramp	387	387	97	0	0	966	1021	0.379	389	0	1.1	0.7	6.237	A
	C A614 Rawcliffe Road (East)	436	436	109	0	0	858	1988	0.219	436	497	0.4	0.3	2.533	A
	D A161	382	182	46	200	0	897	1419	0.128	182	397	0.2	0.2	3.352	A
	E M62 Southbound On Ramp						622				458				
3W Site 3	A A614 Rawcliffe Road (West)	729		182			501	1891	0.385	730	943	1.0	0.7	3.376	A
	B M62 Northbound On Ramp						961				269				
	C Link	618		154			0	1574	0.393	619	961	1.0	0.7	4.176	A
	D M62 Northbound Off Ramp	824		206			619	2496	0.330	825	0	0.9	0.6	2.650	A

2026 Future Baseline + Drax, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	4.82	A
3W	Site 3	Standard Roundabout		B, C, D, A	5.75	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.29	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2026 Future Baseline + Drax	PM	ONE HOUR	16 15	17 45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Queue limited	Normal	0	100.00	44.00
3W Site 3	C Link	3E	A	Queue limited	Normal	0	100.00	28.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	323	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	740	100.000
	D A161		ONE HOUR	✓	506	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	1058	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	966	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	262	796	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	710	200	0	0
	D M62 Northbound Off Ramp	441	0	525	0

Proportions

From		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0.00	0.25	0.75	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.78	0.22	0.00	0.00
	D M62 Northbound Off Ramp	0.46	0.00	0.54	0.00

Demand (PCU/hr)

From		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0	0	613	369	339
	B M62 Southbound Off Ramp	189	0	60	73	1
	C A614 Rawcliffe Road (East)	428	0	0	36	276
	D A161	292	0	12	0	202
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

From		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0.00	0.00	0.46	0.28	0.26
	B M62 Southbound Off Ramp	0.58	0.00	0.19	0.23	0.00
	C A614 Rawcliffe Road (East)	0.58	0.00	0.00	0.05	0.37
	D A161	0.58	0.00	0.02	0.00	0.40
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	12	5	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	6	6	0	0
	D M62 Northbound Off Ramp	22	0	13	0

Average PCU Per Veh

From		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	1.000	1.120	1.045	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000
	C Link	1.055	1.062	1.000	1.000
	D M62 Northbound Off Ramp	1.220	1.000	1.126	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	5	15	19
	B M62 Southbound Off Ramp	13	0	15	19	0
	C A614 Rawcliffe Road (East)	2	0	0	20	7
	D A161	6	0	33	67	22
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.052	1.145	1.186
	B M62 Southbound Off Ramp	1.129	1.000	1.146	1.190	1.000
	C A614 Rawcliffe Road (East)	1.019	1.000	1.000	1.200	1.066
	D A161	1.062	1.000	1.333	1.667	1.219
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	16:15 16:30	995	995
		16:30 16:45	1188	1188
		16:45 17:00	1454	1454
		17:00 17:15	1454	1454
		17:15 17:30	1188	1188
		17:30 17:45	995	995
	B M62 Southbound Off Ramp	16:15 16:30	243	243
		16:30 16:45	290	290
		16:45 17:00	356	356
		17:00 17:15	356	356
		17:15 17:30	290	290
		17:30 17:45	243	243
	C A614 Rawcliffe Road (East)	16:15 16:30	557	557
		16:30 16:45	665	665
		16:45 17:00	815	815
		17:00 17:15	815	815
		17:15 17:30	665	665
		17:30 17:45	557	557
	D A161	16:15 16:30	381	381
		16:30 16:45	455	455
		16:45 17:00	557	557
		17:00 17:15	557	557
		17:15 17:30	455	455
		17:30 17:45	381	381
E M62 Southbound On Ramp	16:15 16:30	0	0	
	16:30 16:45	0	0	
	16:45 17:00	0	0	
	17:00 17:15	0	0	
	17:15 17:30	0	0	
	17:30 17:45	0	0	
3W Site 3	A A614 Rawcliffe Road (West)	16:15 16:30	797	797
		16:30 16:45	951	951
		16:45 17:00	1165	1165
		17:00 17:15	1165	1165
		17:15 17:30	951	951
		17:30 17:45	797	797
	B M62 Northbound On Ramp	16:15 16:30	0	0
		16:30 16:45	0	0
		16:45 17:00	0	0
		17:00 17:15	0	0
		17:15 17:30	0	0
		17:30 17:45	0	0
	C Link	16:15 16:30	685	685
		16:30 16:45	818	818
		16:45 17:00	1002	1002
		17:00 17:15	1002	1002
		17:15 17:30	818	818
		17:30 17:45	685	685
	D M62 Northbound Off Ramp	16:15 16:30	727	727
		16:30 16:45	868	868
		16:45 17:00	1064	1064
		17:00 17:15	1064	1064
		17:15 17:30	868	868
		17:30 17:45	727	727

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.62	4.47	1.8	A	1212	1817
	B M62 Southbound Off Ramp	0.45	9.37	0.9	A	296	445
	C A614 Rawcliffe Road (East)	0.44	3.61	0.8	A	679	1019
	D A161	0.29	4.62	0.4	A	464	418
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	0.68	6.91	2.2	A	971	1456
	B M62 Northbound On Ramp						
	C Link	0.64	6.63	1.8	A	834	1251
	D M62 Northbound Off Ramp	0.48	3.64	1.1	A	886	1330

Main Results for each time segment

16:15 - 16:30

	Total	Junction	Junction	Bypass	Bypass	Circulating	Capacity		Throughput	Throughput	Start	End	Delay	Unsignalised

Junction	Arm	Demand (PCU/hr)	demand (PCU/hr)	Arrivals (PCU)	demand (PCU/hr)	exit flow (PCU/hr)	flow (PCU/hr)	(PCU/hr)	RFC	(PCU/hr)	(exit side) (PCU/hr)	queue (PCU)	queue (PCU)	(s)	level of service
3E Site 3	A Link	991	991	248	0	0	9	2350	0.422	988	682	0.0	0.8	2.923	A
	B M62 Southbound Off Ramp	243	243	61	0	0	997	1007	0.242	242	0	0.0	0.4	5.376	A
	C A614 Rawcliffe Road (East)	557	557	139	0	0	726	2070	0.269	556	512	0.0	0.4	2.478	A
	D A161	381	229	57	152	0	924	1404	0.163	228	358	0.0	0.2	3.274	A
	E M62 Southbound On Ramp						691				462				
3W Site 3	A A614 Rawcliffe Road (West)	797		199			543	1866	0.427	793	861	0.0	0.8	3.557	A
	B M62 Northbound On Ramp						991				346				
	C Link	682		170			0	1574	0.433	679	991	0.0	0.8	4.232	A
	D M62 Northbound Off Ramp	727		182			679	2452	0.297	725	0	0.0	0.5	2.431	A

16:30 - 16:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1186	1186	296	0	0	11	2349	0.505	1185	816	0.8	1.1	3.428	A
	B M62 Southbound Off Ramp	290	290	73	0	0	1195	918	0.316	290	0	0.4	0.5	6.556	A
	C A614 Rawcliffe Road (East)	665	665	166	0	0	871	1980	0.336	665	614	0.4	0.5	2.856	A
	D A161	455	273	68	182	0	1107	1305	0.209	273	429	0.2	0.3	3.734	A
	E M62 Southbound On Ramp						827				553				
3W Site 3	A A614 Rawcliffe Road (West)	951		238			651	1804	0.527	950	1032	0.8	1.2	4.472	A
	B M62 Northbound On Ramp						1186				414				
	C Link	816		204			0	1574	0.518	815	1186	0.8	1.1	5.002	A
	D M62 Northbound Off Ramp	868		217			815	2352	0.369	868	0	0.5	0.7	2.828	A

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1451	1451	363	0	0	13	2347	0.618	1448	999	1.1	1.8	4.428	A
	B M62 Southbound Off Ramp	356	356	89	0	0	1461	798	0.446	354	0	0.5	0.9	9.248	A
	C A614 Rawcliffe Road (East)	815	815	204	0	0	1064	1858	0.439	814	751	0.5	0.8	3.596	A
	D A161	557	335	84	222	0	1354	1170	0.286	334	524	0.3	0.4	4.606	A
	E M62 Southbound On Ramp						1012				676				
3W Site 3	A A614 Rawcliffe Road (West)	1165		291			796	1719	0.678	1161	1262	1.2	2.2	6.806	A
	B M62 Northbound On Ramp						1451				506				
	C Link	999		250			0	1574	0.634	996	1451	1.1	1.8	6.548	A
	D M62 Northbound Off Ramp	1064		266			996	2219	0.479	1062	0	0.7	1.1	3.624	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1454	1454	364	0	0	13	2347	0.620	1454	1001	1.8	1.8	4.471	A
	B M62 Southbound Off Ramp	356	356	89	0	0	1467	795	0.447	356	0	0.9	0.9	9.367	A
	C A614 Rawcliffe Road (East)	815	815	204	0	0	1069	1855	0.439	815	754	0.8	0.8	3.611	A
	D A161	557	335	84	222	0	1358	1168	0.287	335	526	0.4	0.4	4.622	A
	E M62 Southbound On Ramp						1014				678				
3W Site 3	A A614 Rawcliffe Road (West)	1165		291			798	1718	0.678	1165	1266	2.2	2.2	6.913	A
	B M62 Northbound On Ramp						1454				508				
	C Link	1001		250			0	1574	0.636	1001	1454	1.8	1.8	6.631	A
	D M62 Northbound Off Ramp	1064		266			1001	2216	0.480	1064	0	1.1	1.1	3.644	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1191	1191	298	0	0	11	2349	0.507	1194	819	1.8	1.2	3.465	A
	B M62 Southbound Off Ramp	290	290	73	0	0	1205	914	0.318	292	0	0.9	0.5	6.648	A
	C A614 Rawcliffe Road (East)	665	665	166	0	0	878	1975	0.337	666	619	0.8	0.5	2.872	A
	D A161	455	273	68	182	0	1112	1302	0.210	274	432	0.4	0.3	3.752	A
	E M62 Southbound On Ramp						830				556				
3W Site 3	A A614 Rawcliffe Road (West)	951		238			653	1802	0.528	955	1038	2.2	1.2	4.539	A
	B M62 Northbound On Ramp						1191				417				
	C Link	819		205			0	1574	0.520	822	1191	1.8	1.2	5.076	A
	D M62 Northbound Off Ramp	868		217			822	2347	0.370	870	0	1.1	0.7	2.846	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	996	996	249	0	0	9	2350	0.424	997	685	1.2	0.8	2.955	A
	B M62 Southbound Off Ramp	243	243	61	0	0	1007	1003	0.243	244	0	0.5	0.4	5.436	A
	C A614 Rawcliffe Road (East)	557	557	139	0	0	733	2066	0.270	558	517	0.5	0.4	2.493	A
	D A161	381	229	57	152	0	930	1401	0.163	229	361	0.3	0.2	3.287	A
	E M62 Southbound On Ramp						694				465				
3W Site 3	A A614 Rawcliffe Road (West)	797		199			547	1864	0.427	798	868	1.2	0.8	3.596	A
	B M62 Northbound On Ramp						996				349				
	C Link	685		171			0	1574	0.435	687	996	1.2	0.8	4.294	A
	D M62 Northbound Off Ramp	727		182			687	2446	0.297	728	0	0.7	0.5	2.447	A

2026 Do Minimum, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	157.30	F
3W	Site 3	Standard Roundabout		B, C, D, A	10.53	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	89.38	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2026 Do Minimum	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Queue limited	Normal	0	100.00	44.00
3W Site 3	C Link	3E	A	Queue limited	Normal	0	100.00	28.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	762	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	849	100.000
	D A161		ONE HOUR	✓	642	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	1083	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	1501	100.000

Origin-Destination Data

Demand (PCU/hr)

3W - Site 3

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
From	A A614 Rawcliffe Road (West)	0	262	821	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	786	203	0	0
	D M62 Northbound Off Ramp	461	1	1039	0

Proportions

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
From	A A614 Rawcliffe Road (West)	0.00	0.24	0.76	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.79	0.21	0.00	0.00
	D M62 Northbound Off Ramp	0.31	0.00	0.69	0.00

Demand (PCU/hr)

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	572	962	325
	B M62 Southbound Off Ramp	305	0	115	341	1
	C A614 Rawcliffe Road (East)	398	0	0	96	355
	D A161	285	0	12	0	345
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0.00	0.00	0.31	0.52	0.17
	B M62 Southbound Off Ramp	0.40	0.00	0.15	0.45	0.00
	C A614 Rawcliffe Road (East)	0.47	0.00	0.00	0.11	0.42
	D A161	0.44	0.00	0.02	0.00	0.54
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

3W - Site 3

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
From	A A614 Rawcliffe Road (West)	0	13	8	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	10	18	0	0
	D M62 Northbound Off Ramp	26	0	20	0

Average PCU Per Veh

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
From	A A614 Rawcliffe Road (West)	1.000	1.125	1.076	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000
	C Link	1.096	1.176	1.000	1.000
	D M62 Northbound Off Ramp	1.256	1.000	1.204	1.000

Heavy Vehicle Percentages

3E - Site 3

From		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
	A Link	0	0	11	20	22
	B M62 Southbound Off Ramp	9	0	6	14	0
	C A614 Rawcliffe Road (East)	9	0	0	9	10
	D A161	15	0	50	100	33
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

From		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
	A Link	1.000	1.000	1.108	1.198	1.222
	B M62 Southbound Off Ramp	1.087	1.000	1.060	1.143	1.000
	C A614 Rawcliffe Road (East)	1.087	1.000	1.000	1.091	1.097
	D A161	1.145	1.000	1.500	2.000	1.326
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	07:30 07:45	1400	1400
		07:45 08:00	1671	1671
		08:00 08:15	2047	2047
		08:15 08:30	2047	2047
		08:30 08:45	1671	1671
		08:45 09:00	1400	1400
	B M62 Southbound Off Ramp	07:30 07:45	574	574
		07:45 08:00	685	685
		08:00 08:15	839	839
		08:15 08:30	839	839
		08:30 08:45	685	685
		08:45 09:00	574	574
	C A614 Rawcliffe Road (East)	07:30 07:45	639	639
		07:45 08:00	763	763
		08:00 08:15	935	935
		08:15 08:30	935	935
		08:30 08:45	763	763
		08:45 09:00	639	639
	D A161	07:30 07:45	483	483
		07:45 08:00	577	577
		08:00 08:15	707	707
		08:15 08:30	707	707
		08:30 08:45	577	577
		08:45 09:00	483	483
E M62 Southbound On Ramp	07:30 07:45	0	0	
	07:45 08:00	0	0	
	08:00 08:15	0	0	
	08:15 08:30	0	0	
	08:30 08:45	0	0	
	08:45 09:00	0	0	
3W Site 3	A A614 Rawcliffe Road (West)	07:30 07:45	815	815
		07:45 08:00	974	974
		08:00 08:15	1192	1192
		08:15 08:30	1192	1192
		08:30 08:45	974	974
		08:45 09:00	815	815
	B M62 Northbound On Ramp	07:30 07:45	0	0
		07:45 08:00	0	0
		08:00 08:15	0	0
		08:15 08:30	0	0
		08:30 08:45	0	0
		08:45 09:00	0	0
	C Link	07:30 07:45	745	745
		07:45 08:00	889	889
		08:00 08:15	1089	1089
		08:15 08:30	1089	1089
		08:30 08:45	889	889
		08:45 09:00	745	745
	D M62 Northbound Off Ramp	07:30 07:45	1130	1130
		07:45 08:00	1349	1349
		08:00 08:15	1653	1653
		08:15 08:30	1653	1653
		08:30 08:45	1349	1349
		08:45 09:00	1130	1130

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.87	13.71	7.5	B	1706	2559
	B M62 Southbound Off Ramp	1.58	800.64	164.0	F	699	1049
	C A614 Rawcliffe Road (East)	0.69	9.35	2.4	A	779	1169
	D A161	0.29	5.08	0.5	A	589	409
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	0.85	18.33	5.8	C	994	1491
	B M62 Northbound On Ramp						
	C Link	0.61	6.56	1.7	A	878	1317
	D M62 Northbound Off Ramp	0.74	7.42	3.4	A	1377	2066

Main Results for each time segment

07:30 - 07:45

	Total	Junction	Junction	Bypass	Bypass	Circulating	Capacity	Throughput	Throughput	Start	End	Delay	Unsignalised

Junction	Arm	Demand (PCU/hr)	demand (PCU/hr)	Arrivals (PCU)	demand (PCU/hr)	exit flow (PCU/hr)	flow (PCU/hr)	(PCU/hr)	RFC	(PCU/hr)	(exit side) (PCU/hr)	queue (PCU)	queue (PCU)	(s)	level of service
3E Site 3	A Link	1394	1394	349	0	0	9	2350	0.593	1387	738	0.0	1.7	4.355	A
	B M62 Southbound Off Ramp	574	574	143	0	0	1396	827	0.693	564	0	0.0	2.4	14.657	B
	C A614 Rawcliffe Road (East)	639	639	160	0	0	1440	1622	0.394	636	521	0.0	0.7	3.975	A
	D A161	483	224	56	260	0	1034	1345	0.166	223	1042	0.0	0.2	3.705	A
	E M62 Southbound On Ramp						747				509				
3W Site 3	A A614 Rawcliffe Road (West)	815		204			931	1641	0.497	811	929	0.0	1.1	4.695	A
	B M62 Northbound On Ramp						1394				348				
	C Link	738		184			0	1574	0.469	734	1394	0.0	1.0	4.742	A
	D M62 Northbound Off Ramp	1130		283			734	2412	0.469	1126	0	0.0	1.1	3.402	A

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1668	1668	417	0	0	11	2349	0.710	1664	872	1.7	2.8	6.118	A
	B M62 Southbound Off Ramp	685	685	171	0	0	1674	702	0.975	648	0	2.4	11.5	53.951	F
	C A614 Rawcliffe Road (East)	763	763	191	0	0	1702	1457	0.524	761	620	0.7	1.2	5.632	A
	D A161	577	267	67	310	0	1226	1240	0.215	267	1237	0.2	0.3	4.277	A
	E M62 Southbound On Ramp						883				610				
3W Site 3	A A614 Rawcliffe Road (West)	974		243			1112	1536	0.634	970	1106	1.1	1.8	6.890	A
	B M62 Northbound On Ramp						1668				414				
	C Link	872		218			0	1574	0.554	871	1668	1.0	1.4	5.677	A
	D M62 Northbound Off Ramp	1349		337			871	2311	0.584	1347	0	1.1	1.7	4.538	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	2032	2032	508	0	0	13	2347	0.866	2016	966	2.8	6.9	12.174	B
	B M62 Southbound Off Ramp	839	839	210	0	0	2029	543	1.545	541	0	11.5	85.9	341.849	F
	C A614 Rawcliffe Road (East)	935	935	234	0	0	1856	1360	0.687	930	715	1.2	2.3	9.035	A
	D A161	707	327	82	380	0	1395	1148	0.285	326	1391	0.3	0.5	5.064	A
	E M62 Southbound On Ramp						979				742				
3W Site 3	A A614 Rawcliffe Road (West)	1192		298			1339	1404	0.849	1178	1272	1.8	5.5	16.380	C
	B M62 Northbound On Ramp						2032				484				
	C Link	966		242			0	1574	0.614	965	2032	1.4	1.7	6.547	A
	D M62 Northbound Off Ramp	1653		413			965	2243	0.737	1646	0	1.7	3.3	7.279	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	2047	2047	512	0	0	13	2347	0.872	2044	964	6.9	7.5	13.712	B
	B M62 Southbound Off Ramp	839	839	210	0	0	2058	530	1.582	530	0	85.9	163.1	758.568	F
	C A614 Rawcliffe Road (East)	935	935	234	0	0	1865	1354	0.690	935	722	2.3	2.4	9.348	A
	D A161	707	327	82	380	0	1399	1146	0.285	327	1401	0.5	0.5	5.084	A
	E M62 Southbound On Ramp						977				749				
3W Site 3	A A614 Rawcliffe Road (West)	1192		298			1343	1401	0.851	1191	1274	5.5	5.8	18.334	C
	B M62 Northbound On Ramp						2047				487				
	C Link	964		241			0	1574	0.612	964	2047	1.7	1.7	6.559	A
	D M62 Northbound Off Ramp	1653		413			964	2243	0.737	1653	0	3.3	3.4	7.425	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1688	1688	422	0	0	11	2349	0.719	1706	889	7.5	3.1	6.734	A
	B M62 Southbound Off Ramp	685	685	171	0	0	1717	683	1.002	681	0	163.1	164.0	800.642	F
	C A614 Rawcliffe Road (East)	763	763	191	0	0	1760	1421	0.537	768	639	2.4	1.3	6.054	A
	D A161	577	267	67	310	0	1253	1225	0.218	268	1275	0.5	0.3	4.347	A
	E M62 Southbound On Ramp						900				620				
3W Site 3	A A614 Rawcliffe Road (West)	974		243			1122	1530	0.637	989	1124	5.8	1.9	7.440	A
	B M62 Northbound On Ramp						1688				423				
	C Link	889		222			0	1574	0.565	890	1688	1.7	1.5	5.866	A
	D M62 Northbound Off Ramp	1349		337			890	2297	0.588	1356	0	3.4	1.8	4.694	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1405	1405	351	0	0	9	2350	0.598	1410	840	3.1	1.8	4.513	A
	B M62 Southbound Off Ramp	574	574	143	0	0	1419	817	0.702	812	0	164.0	104.5	596.848	F
	C A614 Rawcliffe Road (East)	639	639	160	0	0	1665	1480	0.432	641	565	1.3	0.8	4.693	A
	D A161	483	224	56	260	0	1141	1286	0.174	224	1165	0.3	0.2	3.920	A
	E M62 Southbound On Ramp						849				516				
3W Site 3	A A614 Rawcliffe Road (West)	815		204			957	1625	0.502	819	1016	1.9	1.1	4.874	A
	B M62 Northbound On Ramp						1405				372				
	C Link	840		210			0	1574	0.534	841	1405	1.5	1.3	5.466	A
	D M62 Northbound Off Ramp	1130		283			841	2333	0.484	1133	0	1.8	1.2	3.661	A

2026 Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	9.00	A
3W	Site 3	Standard Roundabout		B, C, D, A	14.76	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	11.62	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2026 Do Minimum	PM	ONE HOUR	16 15	17 45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Queue limited	Normal	0	100.00	44.00
3W Site 3	C Link	3E	A	Queue limited	Normal	0	100.00	28.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	451	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	929	100.000
	D A161		ONE HOUR	✓	1290	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	1129	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	1145	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	284	845	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	835	429	0	0
	D M62 Northbound Off Ramp	437	0	708	0

Proportions

From		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0.00	0.25	0.75	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.66	0.34	0.00	0.00
	D M62 Northbound Off Ramp	0.38	0.00	0.62	0.00

Demand (PCU/hr)

From		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0	0	739	509	306
	B M62 Southbound Off Ramp	208	0	111	131	1
	C A614 Rawcliffe Road (East)	514	0	0	75	340
	D A161	542	0	55	0	693
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

From		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0.00	0.00	0.48	0.33	0.20
	B M62 Southbound Off Ramp	0.46	0.00	0.25	0.29	0.00
	C A614 Rawcliffe Road (East)	0.55	0.00	0.00	0.08	0.37
	D A161	0.42	0.00	0.04	0.00	0.54
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	12	5	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	6	6	0	0
	D M62 Northbound Off Ramp	22	0	13	0

Average PCU Per Veh

From		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	1.000	1.120	1.045	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000
	C Link	1.055	1.062	1.000	1.000
	D M62 Northbound Off Ramp	1.220	1.000	1.126	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	5	15	19
	B M62 Southbound Off Ramp	13	0	15	19	0
	C A614 Rawcliffe Road (East)	2	0	0	20	7
	D A161	6	0	33	67	22
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.052	1.145	1.186
	B M62 Southbound Off Ramp	1.129	1.000	1.146	1.190	1.000
	C A614 Rawcliffe Road (East)	1.019	1.000	1.000	1.200	1.066
	D A161	1.062	1.000	1.333	1.667	1.219
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	16:15 16:30	1170	1170
		16:30 16:45	1397	1397
		16:45 17:00	1711	1711
		17:00 17:15	1711	1711
		17:15 17:30	1397	1397
		17:30 17:45	1170	1170
	B M62 Southbound Off Ramp	16:15 16:30	340	340
		16:30 16:45	406	406
		16:45 17:00	497	497
		17:00 17:15	497	497
		17:15 17:30	406	406
		17:30 17:45	340	340
	C A614 Rawcliffe Road (East)	16:15 16:30	699	699
		16:30 16:45	835	835
		16:45 17:00	1023	1023
		17:00 17:15	1023	1023
		17:15 17:30	835	835
		17:30 17:45	699	699
	D A161	16:15 16:30	971	971
		16:30 16:45	1160	1160
		16:45 17:00	1420	1420
		17:00 17:15	1420	1420
		17:15 17:30	1160	1160
		17:30 17:45	971	971
E M62 Southbound On Ramp	16:15 16:30	0	0	
	16:30 16:45	0	0	
	16:45 17:00	0	0	
	17:00 17:15	0	0	
	17:15 17:30	0	0	
	17:30 17:45	0	0	
3W Site 3	A A614 Rawcliffe Road (West)	16:15 16:30	850	850
		16:30 16:45	1015	1015
		16:45 17:00	1243	1243
		17:00 17:15	1243	1243
		17:15 17:30	1015	1015
		17:30 17:45	850	850
	B M62 Northbound On Ramp	16:15 16:30	0	0
		16:30 16:45	0	0
		16:45 17:00	0	0
		17:00 17:15	0	0
		17:15 17:30	0	0
		17:30 17:45	0	0
	C Link	16:15 16:30	952	952
		16:30 16:45	1136	1136
		16:45 17:00	1392	1392
		17:00 17:15	1392	1392
		17:15 17:30	1136	1136
		17:30 17:45	952	952
	D M62 Northbound Off Ramp	16:15 16:30	862	862
		16:30 16:45	1029	1029
		16:45 17:00	1261	1261
		17:00 17:15	1261	1261
		17:15 17:30	1029	1029
		17:30 17:45	862	862

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.74	6.52	3.0	A	1424	2136
	B M62 Southbound Off Ramp	0.75	24.89	3.3	C	414	621
	C A614 Rawcliffe Road (East)	0.59	5.34	1.5	A	852	1279
	D A161	0.60	9.05	1.6	A	1184	822
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	0.85	17.65	5.8	C	1036	1554
	B M62 Northbound On Ramp						
	C Link	0.88	19.93	7.3	C	1159	1739
	D M62 Northbound Off Ramp	0.65	6.22	2.1	A	1051	1576

Main Results for each time segment

16:15 - 16:30

	Total	Junction	Junction	Bypass	Bypass	Circulating	Capacity		Throughput	Throughput	Start	End	Delay	Unsignalised

Junction	Arm	Demand (PCU/hr)	demand (PCU/hr)	Arrivals (PCU)	demand (PCU/hr)	exit flow (PCU/hr)	flow (PCU/hr)	(PCU/hr)	RFC	(PCU/hr)	(exit side) (PCU/hr)	queue (PCU)	queue (PCU)	(s)	level of service
3E Site 3	A Link	1164	1164	291	0	0	41	2330	0.500	1160	947	0.0	1.1	3.389	A
	B M62 Southbound Off Ramp	340	340	85	0	0	1201	915	0.371	337	0	0.0	0.7	7.125	A
	C A614 Rawcliffe Road (East)	699	699	175	0	0	862	1985	0.352	697	676	0.0	0.6	2.926	A
	D A161	971	449	112	522	0	1025	1349	0.333	447	534	0.0	0.5	4.308	A
	E M62 Southbound On Ramp						988				484				
3W Site 3	A A614 Rawcliffe Road (West)	850		212			851	1687	0.504	846	949	0.0	1.1	4.525	A
	B M62 Northbound On Ramp						1164				532				
	C Link	947		237			0	1574	0.602	941	1164	0.0	1.6	5.955	A
	D M62 Northbound Off Ramp	862		216			941	2260	0.381	859	0	0.0	0.7	2.974	A

16:30 - 16:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1393	1393	348	0	0	49	2325	0.599	1391	1134	1.1	1.6	4.251	A
	B M62 Southbound Off Ramp	406	406	101	0	0	1440	808	0.502	404	0	0.7	1.1	10.195	B
	C A614 Rawcliffe Road (East)	835	835	209	0	0	1034	1877	0.445	834	810	0.6	0.8	3.616	A
	D A161	1160	537	134	623	0	1228	1239	0.433	536	640	0.5	0.8	5.528	A
	E M62 Southbound On Ramp						1183				580				
3W Site 3	A A614 Rawcliffe Road (West)	1015		254			1019	1590	0.638	1012	1138	1.1	1.8	6.589	A
	B M62 Northbound On Ramp						1393				638				
	C Link	1134		283			0	1574	0.720	1130	1393	1.6	2.6	8.480	A
	D M62 Northbound Off Ramp	1029		257			1130	2122	0.485	1028	0	0.7	1.1	3.813	A

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1697	1697	424	0	0	60	2319	0.732	1691	1384	1.6	2.9	6.294	A
	B M62 Southbound Off Ramp	497	497	124	0	0	1752	668	0.744	489	0	1.1	3.0	22.275	C
	C A614 Rawcliffe Road (East)	1023	1023	256	0	0	1256	1738	0.589	1020	985	0.8	1.5	5.244	A
	D A161	1420	657	164	763	0	1498	1092	0.602	654	778	0.8	1.6	8.836	A
	E M62 Southbound On Ramp						1444				708				
3W Site 3	A A614 Rawcliffe Road (West)	1243		311			1241	1460	0.851	1229	1383	1.8	5.4	15.632	C
	B M62 Northbound On Ramp						1697				773				
	C Link	1384		346			0	1574	0.879	1368	1697	2.6	6.7	17.231	C
	D M62 Northbound Off Ramp	1261		315			1368	1947	0.648	1257	0	1.1	2.1	6.014	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1709	1709	427	0	0	61	2319	0.737	1708	1391	2.9	3.0	6.517	A
	B M62 Southbound Off Ramp	497	497	124	0	0	1769	660	0.752	496	0	3.0	3.3	24.891	C
	C A614 Rawcliffe Road (East)	1023	1023	256	0	0	1270	1729	0.592	1023	995	1.5	1.5	5.344	A
	D A161	1420	657	164	763	0	1506	1087	0.605	657	786	1.6	1.6	9.052	A
	E M62 Southbound On Ramp						1452				712				
3W Site 3	A A614 Rawcliffe Road (West)	1243		311			1251	1455	0.854	1242	1398	5.4	5.8	17.646	C
	B M62 Northbound On Ramp						1709				784				
	C Link	1391		348			0	1574	0.884	1388	1709	6.7	7.3	19.927	C
	D M62 Northbound Off Ramp	1261		315			1388	1932	0.653	1260	0	2.1	2.1	6.216	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1410	1410	353	0	0	50	2325	0.607	1416	1144	3.0	1.7	4.404	A
	B M62 Southbound Off Ramp	406	406	101	0	0	1465	796	0.509	414	0	3.3	1.2	11.038	B
	C A614 Rawcliffe Road (East)	835	835	209	0	0	1054	1864	0.448	838	825	1.5	0.9	3.689	A
	D A161	1160	537	134	623	0	1241	1232	0.436	540	651	1.6	0.8	5.652	A
	E M62 Southbound On Ramp						1194				586				
3W Site 3	A A614 Rawcliffe Road (West)	1015		254			1033	1581	0.642	1030	1162	5.8	1.9	7.136	A
	B M62 Northbound On Ramp						1410				654				
	C Link	1144		286			0	1574	0.727	1162	1410	7.3	2.9	9.602	A
	D M62 Northbound Off Ramp	1029		257			1162	2098	0.491	1033	0	2.1	1.1	3.939	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1173	1173	293	0	0	42	2330	0.503	1175	954	1.7	1.1	3.456	A
	B M62 Southbound Off Ramp	340	340	85	0	0	1217	908	0.374	342	0	1.2	0.7	7.332	A
	C A614 Rawcliffe Road (East)	699	699	175	0	0	874	1978	0.354	701	684	0.9	0.6	2.960	A
	D A161	971	449	112	522	0	1034	1345	0.334	451	541	0.8	0.5	4.362	A
	E M62 Southbound On Ramp						996				489				
3W Site 3	A A614 Rawcliffe Road (West)	850		212			860	1682	0.505	853	963	1.9	1.1	4.638	A
	B M62 Northbound On Ramp						1173				540				
	C Link	954		239			0	1574	0.606	959	1173	2.9	1.7	6.241	A
	D M62 Northbound Off Ramp	862		216			959	2246	0.384	864	0	1.1	0.7	3.025	A

2026 Do Something, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	190.93	F
3W	Site 3	Standard Roundabout		B, C, D, A	12.07	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	106.85	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2026 Do Something	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Queue limited	Normal	0	100.00	44.00
3W Site 3	C Link	3E	A	Queue limited	Normal	0	100.00	28.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	775	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	849	100.000
	D A161		ONE HOUR	✓	642	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	1109	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	1611	100.000

Origin-Destination Data

Demand (PCU/hr)

3W - Site 3

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
From	A A614 Rawcliffe Road (West)	0	262	847	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	799	203	0	0
	D M62 Northbound Off Ramp	571	1	1039	0

Proportions

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
From	A A614 Rawcliffe Road (West)	0.00	0.24	0.76	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.80	0.20	0.00	0.00
	D M62 Northbound Off Ramp	0.35	0.00	0.64	0.00

Demand (PCU/hr)

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	572	962	351
	B M62 Southbound Off Ramp	318	0	115	341	1
	C A614 Rawcliffe Road (East)	398	0	0	96	355
	D A161	285	0	12	0	345
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0.00	0.00	0.30	0.51	0.19
	B M62 Southbound Off Ramp	0.41	0.00	0.15	0.44	0.00
	C A614 Rawcliffe Road (East)	0.47	0.00	0.00	0.11	0.42
	D A161	0.44	0.00	0.02	0.00	0.54
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

3W - Site 3

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
From	A A614 Rawcliffe Road (West)	0	13	8	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	10	18	0	0
	D M62 Northbound Off Ramp	26	0	20	0

Average PCU Per Veh

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
From	A A614 Rawcliffe Road (West)	1.000	1.125	1.076	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000
	C Link	1.096	1.176	1.000	1.000
	D M62 Northbound Off Ramp	1.256	1.000	1.204	1.000

Heavy Vehicle Percentages

3E - Site 3

From		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
	A Link	0	0	11	20	22
	B M62 Southbound Off Ramp	9	0	6	14	0
	C A614 Rawcliffe Road (East)	9	0	0	9	10
	D A161	15	0	50	100	33
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

From		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
	A Link	1.000	1.000	1.108	1.198	1.222
	B M62 Southbound Off Ramp	1.087	1.000	1.060	1.143	1.000
	C A614 Rawcliffe Road (East)	1.087	1.000	1.000	1.091	1.097
	D A161	1.145	1.000	1.500	2.000	1.326
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	07:30 07:45	1419	1419
		07:45 08:00	1695	1695
		08:00 08:15	2075	2075
		08:15 08:30	2075	2075
		08:30 08:45	1695	1695
		08:45 09:00	1419	1419
	B M62 Southbound Off Ramp	07:30 07:45	583	583
		07:45 08:00	697	697
		08:00 08:15	853	853
		08:15 08:30	853	853
		08:30 08:45	697	697
		08:45 09:00	583	583
	C A614 Rawcliffe Road (East)	07:30 07:45	639	639
		07:45 08:00	763	763
		08:00 08:15	935	935
		08:15 08:30	935	935
		08:30 08:45	763	763
		08:45 09:00	639	639
	D A161	07:30 07:45	483	483
		07:45 08:00	577	577
		08:00 08:15	707	707
		08:15 08:30	707	707
		08:30 08:45	577	577
		08:45 09:00	483	483
E M62 Southbound On Ramp	07:30 07:45	0	0	
	07:45 08:00	0	0	
	08:00 08:15	0	0	
	08:15 08:30	0	0	
	08:30 08:45	0	0	
	08:45 09:00	0	0	
3W Site 3	A A614 Rawcliffe Road (West)	07:30 07:45	835	835
		07:45 08:00	997	997
		08:00 08:15	1221	1221
		08:15 08:30	1221	1221
		08:30 08:45	997	997
		08:45 09:00	835	835
	B M62 Northbound On Ramp	07:30 07:45	0	0
		07:45 08:00	0	0
		08:00 08:15	0	0
		08:15 08:30	0	0
		08:30 08:45	0	0
		08:45 09:00	0	0
	C Link	07:30 07:45	754	754
		07:45 08:00	901	901
		08:00 08:15	1103	1103
		08:15 08:30	1103	1103
		08:30 08:45	901	901
		08:45 09:00	754	754
	D M62 Northbound Off Ramp	07:30 07:45	1213	1213
		07:45 08:00	1448	1448
		08:00 08:15	1774	1774
		08:15 08:30	1774	1774
		08:30 08:45	1448	1448
		08:45 09:00	1213	1213

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.88	14.99	8.2	B	1729	2594
	B M62 Southbound Off Ramp	1.65	971.30	185.4	F	711	1067
	C A614 Rawcliffe Road (East)	0.70	9.61	2.5	A	779	1169
	D A161	0.29	5.18	0.5	A	589	409
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	0.87	20.80	6.7	C	1018	1526
	B M62 Northbound On Ramp						
	C Link	0.61	6.56	1.7	A	882	1324
	D M62 Northbound Off Ramp	0.79	9.35	4.5	A	1478	2218

Main Results for each time segment

07:30 - 07:45

	Total	Junction	Junction	Bypass	Bypass	Circulating	Capacity	Throughput	Throughput	Start	End	Delay	Unsignalised

Junction	Arm	Demand (PCU/hr)	demand (PCU/hr)	Arrivals (PCU)	demand (PCU/hr)	exit flow (PCU/hr)	flow (PCU/hr)	(PCU/hr)	RFC	(PCU/hr)	(exit side) (PCU/hr)	queue (PCU)	queue (PCU)	(s)	level of service
3E Site 3	A Link	1413	1413	353	0	0	9	2350	0.601	1406	747	0.0	1.7	4.443	A
	B M62 Southbound Off Ramp	583	583	146	0	0	1415	819	0.712	573	0	0.0	2.6	15.619	C
	C A614 Rawcliffe Road (East)	639	639	160	0	0	1468	1604	0.398	636	521	0.0	0.7	4.046	A
	D A161	483	224	56	260	0	1062	1329	0.168	223	1042	0.0	0.2	3.757	A
	E M62 Southbound On Ramp						756				529				
3W Site 3	A A614 Rawcliffe Road (West)	835		209			930	1641	0.509	830	1021	0.0	1.1	4.803	A
	B M62 Northbound On Ramp						1413				348				
	C Link	747		187			0	1574	0.475	743	1413	0.0	1.0	4.792	A
	D M62 Northbound Off Ramp	1213		303			743	2405	0.504	1208	0	0.0	1.2	3.659	A

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1691	1691	423	0	0	11	2349	0.720	1686	879	1.7	2.9	6.326	A
	B M62 Southbound Off Ramp	697	697	174	0	0	1697	692	1.006	650	0	2.6	14.2	64.084	F
	C A614 Rawcliffe Road (East)	763	763	191	0	0	1728	1441	0.530	761	619	0.7	1.2	5.767	A
	D A161	577	267	67	310	0	1257	1223	0.218	267	1233	0.2	0.3	4.350	A
	E M62 Southbound On Ramp						890				633				
3W Site 3	A A614 Rawcliffe Road (West)	997		249			1111	1536	0.649	994	1212	1.1	2.0	7.166	A
	B M62 Northbound On Ramp						1691				414				
	C Link	879		220			0	1574	0.559	878	1691	1.0	1.4	5.735	A
	D M62 Northbound Off Ramp	1448		362			878	2306	0.628	1445	0	1.2	2.0	5.087	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	2057	2057	514	0	0	13	2347	0.876	2039	967	2.9	7.5	12.996	B
	B M62 Southbound Off Ramp	853	853	213	0	0	2052	532	1.603	531	0	14.2	94.7	387.741	F
	C A614 Rawcliffe Road (East)	935	935	234	0	0	1873	1349	0.693	930	711	1.2	2.4	9.266	A
	D A161	707	327	82	380	0	1423	1132	0.289	326	1380	0.3	0.5	5.161	A
	E M62 Southbound On Ramp						980				769				
3W Site 3	A A614 Rawcliffe Road (West)	1221		305			1335	1406	0.868	1204	1396	2.0	6.2	18.037	C
	B M62 Northbound On Ramp						2057				481				
	C Link	967		242			0	1574	0.615	966	2057	1.4	1.7	6.562	A
	D M62 Northbound Off Ramp	1774		443			966	2242	0.791	1764	0	2.0	4.4	9.035	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	2075	2075	519	0	0	13	2347	0.884	2072	964	7.5	8.2	14.989	B
	B M62 Southbound Off Ramp	853	853	213	0	0	2085	518	1.648	518	0	94.7	178.6	840.764	F
	C A614 Rawcliffe Road (East)	935	935	234	0	0	1884	1343	0.696	934	719	2.4	2.5	9.613	A
	D A161	707	327	82	380	0	1428	1130	0.289	327	1391	0.5	0.5	5.182	A
	E M62 Southbound On Ramp						978				777				
3W Site 3	A A614 Rawcliffe Road (West)	1221		305			1340	1403	0.870	1219	1397	6.2	6.7	20.796	C
	B M62 Northbound On Ramp						2075				485				
	C Link	964		241			0	1574	0.613	964	2075	1.7	1.7	6.561	A
	D M62 Northbound Off Ramp	1774		443			964	2243	0.791	1773	0	4.4	4.5	9.349	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1716	1716	429	0	0	11	2349	0.730	1736	891	8.2	3.3	7.098	A
	B M62 Southbound Off Ramp	697	697	174	0	0	1746	670	1.040	670	0	178.6	185.4	971.300	F
	C A614 Rawcliffe Road (East)	763	763	191	0	0	1779	1408	0.542	768	637	2.5	1.3	6.176	A
	D A161	577	267	67	310	0	1280	1211	0.221	268	1267	0.5	0.3	4.417	A
	E M62 Southbound On Ramp						902				645				
3W Site 3	A A614 Rawcliffe Road (West)	997		249			1122	1530	0.652	1015	1228	6.7	2.1	7.872	A
	B M62 Northbound On Ramp						1716				422				
	C Link	891		223			0	1574	0.566	893	1716	1.7	1.5	5.882	A
	D M62 Northbound Off Ramp	1448		362			893	2295	0.631	1458	0	4.5	2.1	5.310	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1425	1425	356	0	0	9	2350	0.606	1430	845	3.3	1.8	4.622	A
	B M62 Southbound Off Ramp	583	583	146	0	0	1440	808	0.722	803	0	185.4	130.4	708.781	F
	C A614 Rawcliffe Road (East)	639	639	160	0	0	1680	1471	0.435	641	562	1.3	0.8	4.746	A
	D A161	483	224	56	260	0	1166	1273	0.176	224	1156	0.3	0.2	3.969	A
	E M62 Southbound On Ramp						854				535				
3W Site 3	A A614 Rawcliffe Road (West)	835		209			956	1626	0.513	839	1105	2.1	1.2	4.995	A
	B M62 Northbound On Ramp						1425				370				
	C Link	845		211			0	1574	0.537	846	1425	1.5	1.3	5.500	A
	D M62 Northbound Off Ramp	1213		303			846	2330	0.521	1216	0	2.1	1.3	3.958	A

2026 Do Something, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	10.05	B
3W	Site 3	Standard Roundabout		B, C, D, A	17.21	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	13.33	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2026 Do Something	PM	ONE HOUR	16 15	17 45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Queue limited	Normal	0	100.00	44.00
3W Site 3	C Link	3E	A	Queue limited	Normal	0	100.00	28.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	451	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	929	100.000
	D A161		ONE HOUR	✓	1290	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	1192	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	1171	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	289	903	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	835	429	0	0
	D M62 Northbound Off Ramp	463	0	708	0

Proportions

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0.00	0.24	0.76	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.66	0.34	0.00	0.00
	D M62 Northbound Off Ramp	0.40	0.00	0.60	0.00

Demand (PCU/hr)

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0	0	739	509	365
	B M62 Southbound Off Ramp	208	0	111	131	1
	C A614 Rawcliffe Road (East)	514	0	0	75	340
	D A161	542	0	55	0	693
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0.00	0.00	0.46	0.32	0.23
	B M62 Southbound Off Ramp	0.46	0.00	0.25	0.29	0.00
	C A614 Rawcliffe Road (East)	0.55	0.00	0.00	0.08	0.37
	D A161	0.42	0.00	0.04	0.00	0.54
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	12	5	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	6	6	0	0
	D M62 Northbound Off Ramp	22	0	13	0

Average PCU Per Veh

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	1.000	1.120	1.045	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000
	C Link	1.055	1.062	1.000	1.000
	D M62 Northbound Off Ramp	1.220	1.000	1.126	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	5	15	19
	B M62 Southbound Off Ramp	13	0	15	19	0
	C A614 Rawcliffe Road (East)	2	0	0	20	7
	D A161	6	0	33	67	22
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.052	1.145	1.186
	B M62 Southbound Off Ramp	1.129	1.000	1.146	1.190	1.000
	C A614 Rawcliffe Road (East)	1.019	1.000	1.000	1.200	1.066
	D A161	1.062	1.000	1.333	1.667	1.219
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	16:15 16:30	1214	1214
		16:30 16:45	1450	1450
		16:45 17:00	1776	1776
		17:00 17:15	1776	1776
		17:15 17:30	1450	1450
		17:30 17:45	1214	1214
	B M62 Southbound Off Ramp	16:15 16:30	340	340
		16:30 16:45	406	406
		16:45 17:00	497	497
		17:00 17:15	497	497
		17:15 17:30	406	406
		17:30 17:45	340	340
	C A614 Rawcliffe Road (East)	16:15 16:30	699	699
		16:30 16:45	835	835
		16:45 17:00	1023	1023
		17:00 17:15	1023	1023
		17:15 17:30	835	835
		17:30 17:45	699	699
	D A161	16:15 16:30	971	971
		16:30 16:45	1160	1160
		16:45 17:00	1420	1420
		17:00 17:15	1420	1420
		17:15 17:30	1160	1160
		17:30 17:45	971	971
E M62 Southbound On Ramp	16:15 16:30	0	0	
	16:30 16:45	0	0	
	16:45 17:00	0	0	
	17:00 17:15	0	0	
	17:15 17:30	0	0	
	17:30 17:45	0	0	
3W Site 3	A A614 Rawcliffe Road (West)	16:15 16:30	897	897
		16:30 16:45	1072	1072
		16:45 17:00	1312	1312
		17:00 17:15	1312	1312
		17:15 17:30	1072	1072
		17:30 17:45	897	897
	B M62 Northbound On Ramp	16:15 16:30	0	0
		16:30 16:45	0	0
		16:45 17:00	0	0
		17:00 17:15	0	0
		17:15 17:30	0	0
		17:30 17:45	0	0
	C Link	16:15 16:30	952	952
		16:30 16:45	1136	1136
		16:45 17:00	1392	1392
		17:00 17:15	1392	1392
		17:15 17:30	1136	1136
		17:30 17:45	952	952
	D M62 Northbound Off Ramp	16:15 16:30	882	882
		16:30 16:45	1053	1053
		16:45 17:00	1289	1289
		17:00 17:15	1289	1289
		17:15 17:30	1053	1053
		17:30 17:45	882	882

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.76	7.26	3.5	A	1477	2216
	B M62 Southbound Off Ramp	0.79	29.58	3.9	D	414	621
	C A614 Rawcliffe Road (East)	0.61	5.66	1.6	A	852	1279
	D A161	0.62	9.85	1.8	A	1184	822
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	0.90	24.92	8.6	C	1094	1641
	B M62 Northbound On Ramp						
	C Link	0.88	19.88	7.3	C	1159	1739
	D M62 Northbound Off Ramp	0.67	6.49	2.3	A	1075	1612

Main Results for each time segment

16:15 - 16:30

	Total	Junction	Junction	Bypass	Bypass	Circulating	Capacity	Throughput	Throughput	Start	End	Delay	Unsignalised

Junction	Arm	Demand (PCU/hr)	demand (PCU/hr)	Arrivals (PCU)	demand (PCU/hr)	exit flow (PCU/hr)	flow (PCU/hr)	(PCU/hr)	RFC	(PCU/hr)	(exit side) (PCU/hr)	queue (PCU)	queue (PCU)	(s)	level of service
3E Site 3	A Link	1207	1207	302	0	0	41	2330	0.518	1203	947	0.0	1.2	3.526	A
	B M62 Southbound Off Ramp	340	340	85	0	0	1244	896	0.379	337	0	0.0	0.7	7.369	A
	C A614 Rawcliffe Road (East)	699	699	175	0	0	906	1958	0.357	697	675	0.0	0.6	2.990	A
	D A161	971	449	112	522	0	1069	1325	0.339	447	534	0.0	0.6	4.425	A
	E M62 Southbound On Ramp						988				528				
3W Site 3	A A614 Rawcliffe Road (West)	897		224			851	1687	0.532	893	969	0.0	1.2	4.784	A
	B M62 Northbound On Ramp						1207				536				
	C Link	947		237			0	1574	0.602	941	1207	0.0	1.6	5.954	A
	D M62 Northbound Off Ramp	882		220			941	2260	0.390	879	0	0.0	0.7	3.020	A

16:30 - 16:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1444	1444	361	0	0	49	2325	0.621	1442	1134	1.2	1.8	4.505	A
	B M62 Southbound Off Ramp	406	406	101	0	0	1491	785	0.517	403	0	0.7	1.2	10.799	B
	C A614 Rawcliffe Road (East)	835	835	209	0	0	1086	1845	0.453	834	809	0.6	0.9	3.733	A
	D A161	1160	537	134	623	0	1280	1210	0.443	535	640	0.6	0.9	5.760	A
	E M62 Southbound On Ramp						1183				633				
3W Site 3	A A614 Rawcliffe Road (West)	1072		268			1019	1590	0.674	1068	1162	1.2	2.1	7.275	A
	B M62 Northbound On Ramp						1444				642				
	C Link	1134		283			0	1574	0.720	1129	1444	1.6	2.6	8.477	A
	D M62 Northbound Off Ramp	1053		263			1129	2122	0.496	1051	0	0.7	1.1	3.899	A

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1754	1754	439	0	0	60	2319	0.757	1748	1383	1.8	3.3	6.920	A
	B M62 Southbound Off Ramp	497	497	124	0	0	1808	642	0.773	488	0	1.2	3.5	25.400	D
	C A614 Rawcliffe Road (East)	1023	1023	256	0	0	1315	1700	0.602	1020	981	0.9	1.6	5.527	A
	D A161	1420	657	164	763	0	1559	1058	0.621	654	776	0.9	1.7	9.547	A
	E M62 Southbound On Ramp						1443				770				
3W Site 3	A A614 Rawcliffe Road (West)	1312		328			1241	1461	0.898	1290	1411	2.1	7.7	20.295	C
	B M62 Northbound On Ramp						1754				777				
	C Link	1383		346			0	1574	0.878	1367	1754	2.6	6.6	17.160	C
	D M62 Northbound Off Ramp	1289		322			1367	1948	0.662	1285	0	1.1	2.2	6.266	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1771	1771	443	0	0	61	2319	0.764	1770	1391	3.3	3.5	7.264	A
	B M62 Southbound Off Ramp	497	497	124	0	0	1831	632	0.786	495	0	3.5	3.9	29.583	D
	C A614 Rawcliffe Road (East)	1023	1023	256	0	0	1332	1689	0.605	1023	993	1.6	1.6	5.661	A
	D A161	1420	657	164	763	0	1570	1052	0.625	657	785	1.7	1.8	9.846	A
	E M62 Southbound On Ramp						1451				776				
3W Site 3	A A614 Rawcliffe Road (West)	1312		328			1250	1455	0.902	1309	1427	7.7	8.6	24.920	C
	B M62 Northbound On Ramp						1771				788				
	C Link	1391		348			0	1574	0.884	1388	1771	6.6	7.3	19.881	C
	D M62 Northbound Off Ramp	1289		322			1388	1932	0.667	1289	0	2.2	2.3	6.494	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1470	1470	367	0	0	50	2325	0.632	1476	1146	3.5	1.9	4.735	A
	B M62 Southbound Off Ramp	406	406	101	0	0	1526	769	0.527	416	0	3.9	1.3	12.033	B
	C A614 Rawcliffe Road (East)	835	835	209	0	0	1113	1827	0.457	838	828	1.6	0.9	3.826	A
	D A161	1160	537	134	623	0	1297	1201	0.447	540	654	1.8	0.9	5.926	A
	E M62 Southbound On Ramp						1196				642				
3W Site 3	A A614 Rawcliffe Road (West)	1072		268			1034	1581	0.678	1097	1186	8.6	2.3	8.289	A
	B M62 Northbound On Ramp						1470				661				
	C Link	1146		286			0	1574	0.728	1163	1470	7.3	2.9	9.631	A
	D M62 Northbound Off Ramp	1053		263			1163	2097	0.502	1057	0	2.3	1.2	4.037	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1217	1217	304	0	0	42	2330	0.522	1220	955	1.9	1.2	3.603	A
	B M62 Southbound Off Ramp	340	340	85	0	0	1261	888	0.382	342	0	1.3	0.7	7.611	A
	C A614 Rawcliffe Road (East)	699	699	175	0	0	919	1949	0.359	701	685	0.9	0.6	3.025	A
	D A161	971	449	112	522	0	1079	1320	0.340	451	541	0.9	0.6	4.486	A
	E M62 Southbound On Ramp						996				533				
3W Site 3	A A614 Rawcliffe Road (West)	897		224			860	1682	0.533	902	983	2.3	1.2	4.928	A
	B M62 Northbound On Ramp						1217				544				
	C Link	955		239			0	1574	0.606	960	1217	2.9	1.7	6.244	A
	D M62 Northbound Off Ramp	882		220			960	2246	0.392	883	0	1.2	0.8	3.070	A

RESPONSE TO NATIONAL HIGHWAYS RELEVANT REPRESENTATIONS (SEPT 2022)

Appendix F – Junctions 10 Output – Revised Assessment Scenario - Improvement Scheme – Northern Roundabout

Drax Bioenergy with Carbon Capture and Storage

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 –
Regulation (5(2)(q))

Document Reference Number: 8.9.4

Applicant: Drax Power Limited

PINS Reference: EN010120



Junctions 10
ARCADY 10 - Roundabout Module
Version: 10.0.4.1693 © Copyright TRL Software Limited, 2021
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Filename: 36 N-West Rdbt Proposed DS - wo Lane Simulation.j10
Path: \\?\UNC\uk.wspgroup.com\Central Data\Projects\700720xx\70072063 - Drax BECCS DCO\03 Environment\05 Transport\29 - National Highways Response\02 - Analysis\Junction Models\Minor Improvement Scheme\Model - Revised Assessment Scenario
Report generation date: 09/02/2023 15:41:08

- »2026 Future Baseline, AM
- »2026 Future Baseline, PM
- »2026 Future Baseline + Drax, AM
- »2026 Future Baseline + Drax, PM
- »2026 Do Minimum, AM
- »2026 Do Minimum, PM
- »2026 Do Something, AM
- »2026 Do Something, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
2026 Future Baseline												
Arm A614B	D7	2.4	9.73	0.69	A	24 % [Arm OffSI]	D8	3.7	13.23	0.78	B	19 % [Arm A614B]
Arm OffSI		2.7	8.97	0.69	A			2.5	8.98	0.69	A	
Arm A614		2.0	6.85	0.64	A			2.4	8.10	0.70	A	
2026 Future Baseline + Drax												
Arm A614B	D9	2.5	10.07	0.70	B	15 % [Arm OffSI]	D10	3.7	13.23	0.78	B	19 % [Arm A614B]
Arm OffSI		4.0	12.20	0.77	B			2.8	9.54	0.71	A	
Arm A614		2.1	7.21	0.66	A			3.0	9.49	0.74	A	
2026 Do Minimum												
Arm A614B	D11	6.6	22.07	0.87	C	-14 % [Arm OffSI]	D12	116.8	303.43	1.16	F	-20 % [Arm A614B]
Arm OffSI		115.0	226.08	1.15	F			13.3	40.48	0.94	E	
Arm A614		8.9	28.50	0.90	D			14.0	42.91	0.95	E	
2026 Do Something												
Arm A614B	D13	7.2	23.79	0.88	C	-19 % [Arm OffSI]	D14	116.8	303.43	1.16	F	-20 % [Arm A614B]
Arm OffSI		181.3	396.97	1.24	F			16.9	49.78	0.96	E	
Arm A614		8.5	26.56	0.90	D			26.6	72.11	1.00	F	

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	13/01/2023
Version	

Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\UKBBP002
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75					✓	Delay	0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2026 Future Baseline	AM	ONE HOUR	00 00	01:30	15	✓
D8	2026 Future Baseline	PM	ONE HOUR	00 00	01:30	15	✓
D9	2026 Future Baseline + Drax	AM	ONE HOUR	00 00	01:30	15	✓
D10	2026 Future Baseline + Drax	PM	ONE HOUR	00 00	01:30	15	✓
D11	2026 Do Minimum	AM	ONE HOUR	00 00	01:30	15	✓
D12	2026 Do Minimum	PM	ONE HOUR	00 00	01:30	15	✓
D13	2026 Do Something	AM	ONE HOUR	00 00	01:30	15	✓
D14	2026 Do Something	PM	ONE HOUR	00 00	01:30	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2026 Future Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm A614 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A614B, OffSI, A614, OnSlp	8.47	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	24	Arm OffSI	8.47	A

Arms

Arms

Arm	Name	Description	No give-way line
A614B	A614 Bridge		
OffSI	E-bound off-slip		
A614	A614 West		
OnSlp	untitled		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
A614B	4.00	5.20	8.0	10.0	67.0	45.0		
OffSI	6.00	7.80	15.0	18.0	67.0	45.0	✓	
A614	3.60	7.90	58.0	19.0	67.0	45.0		
OnSlp								✓

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A614B	0.432	1311
OffSI	0.568	2085
A614	0.559	2027
OnSlp		

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2026 Future Baseline	AM	ONE HOUR	00:00	01:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A614B		ONE HOUR	✓	818	100.000
OffSI		ONE HOUR	✓	983	100.000
A614		ONE HOUR	✓	942	100.000
OnSlp					

Origin-Destination Data

Demand (PCU/hr)

	To				
	A614B	OffSI	A614	OnSlp	
From	A614B	12	0	691	115
	OffSI	548	0	434	1
	A614	701	0	0	241
	OnSlp	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A614B	OffSI	A614	OnSlp	
From	A614B	0	0	10	18
	OffSI	20	0	26	0
	A614	8	0	0	13
	OnSlp	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A614B	0.69	9.73	2.4	A	751	1126
OffSI	0.69	8.97	2.7	A	902	1353
A614	0.64	6.85	2.0	A	864	1297
OnSlp						

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	616	154	0	1311	0.470	612	945	0.0	1.0	5.688	A
OffSI	740	185	612	1738	0.426	736	0	0.0	0.9	4.391	A
A614	709	177	506	1744	0.407	706	842	0.0	0.7	3.779	A
OnSlp			945				267				

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	735	184	0	1311	0.561	734	1132	1.0	1.4	6.899	A
OffSI	884	221	734	1668	0.530	882	0	0.9	1.4	5.595	A
A614	847	212	606	1688	0.502	845	1009	0.7	1.1	4.661	A
OnSlp			1132				320				

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	901	225	0	1311	0.687	897	1383	1.4	2.4	9.558	A
OffSI	1082	271	897	1576	0.687	1077	0	1.4	2.6	8.763	A
A614	1037	259	741	1613	0.643	1034	1233	1.1	1.9	6.755	A
OnSlp			1383				392				

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	901	225	0	1311	0.687	900	1388	2.4	2.4	9.725	A
OffSI	1082	271	900	1574	0.688	1082	0	2.6	2.7	8.965	A
A614	1037	259	744	1611	0.644	1037	1238	1.9	2.0	6.852	A
OnSlp			1388				393				

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	735	184	0	1311	0.561	739	1139	2.4	1.4	7.032	A
OffSI	884	221	739	1665	0.531	889	0	2.7	1.4	5.718	A
A614	847	212	611	1685	0.503	850	1017	2.0	1.1	4.728	A
OnSlp			1139				322				

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	616	154	0	1311	0.470	618	952	1.4	1.0	5.778	A
OffSI	740	185	618	1734	0.427	742	0	1.4	0.9	4.454	A
A614	709	177	510	1742	0.407	711	849	1.1	0.8	3.819	A
OnSlp			952				269				

2026 Future Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm A614 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A614B, OffSI, A614, OnSlp	10.05	B

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	19	Arm A614B	10.05	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2026 Future Baseline	PM	ONE HOUR	00:00	01:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A614B		ONE HOUR	✓	930	100.000
OffSI		ONE HOUR	✓	941	100.000
A614		ONE HOUR	✓	994	100.000
OnSlp					

Origin-Destination Data

Demand (PCU/hr)

		To			
		A614B	OffSI	A614	OnSlp
From	A614B	20	0	710	200
	OffSI	525	0	416	0
	A614	737	0	0	257
	OnSlp	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A614B	OffSI	A614	OnSlp
From	A614B	0	0	6	6
	OffSI	13	0	22	0
	A614	5	0	0	12

OnSlip	0	0	0	0
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Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A614B	0.78	13.23	3.7	B	853	1280
OffSI	0.69	8.98	2.5	A	863	1295
A614	0.70	8.10	2.4	A	912	1368
OnSlip						

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	700	175	0	1311	0.534	695	961	0 0	1.2	6.150	A
OffSI	708	177	695	1690	0.419	705	0	0 0	0.8	4.254	A
A614	748	187	558	1715	0.436	745	843	0 0	0.8	3.948	A
OnSlip			961				342				

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	836	209	0	1311	0.638	834	1150	1 2	1.8	7.947	A
OffSI	846	211	834	1612	0.525	844	0	0 8	1.3	5.467	A
A614	894	223	668	1653	0.541	892	1010	0 8	1.2	5.035	A
OnSlip			1150				410				

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1024	256	0	1311	0.781	1017	1405	1.8	3.6	12.684	B
OffSI	1036	259	1017	1508	0.687	1031	0	1.3	2.5	8.738	A
A614	1094	274	816	1571	0.697	1090	1232	1.2	2.4	7 915	A
OnSlip			1405				500				

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1024	256	0	1311	0.781	1024	1411	3.6	3.7	13.227	B
OffSI	1036	259	1024	1504	0.689	1036	0	2.5	2.5	8 976	A
A614	1094	274	820	1568	0.698	1094	1239	2.4	2.4	8 097	A
OnSlip			1411				503				

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	836	209	0	1311	0.638	843	1159	3.7	1.9	8.272	A
OffSI	846	211	843	1606	0.527	851	0	2 5	1.3	5.603	A
A614	894	223	674	1650	0.542	898	1020	2.4	1.3	5.141	A
OnSlip			1159				414				

01:15 - 01:30

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Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	700	175	0	1311	0.534	703	968	19	1.2	6.298	A
OffSI	708	177	703	1686	0.420	710	0	13	0.9	4.318	A
A614	748	187	563	1712	0.437	750	851	13	0.8	4.000	A
OnSlp			968				345				

2026 Future Baseline + Drax, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm A614 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A614B, OffSI, A614, OnSlp	9.92	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	15	Arm OffSI	9.92	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2026 Future Baseline + Drax	AM	ONE HOUR	00:00	01:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A614B		ONE HOUR	✓	831	100.000
OffSI		ONE HOUR	✓	1094	100.000
A614		ONE HOUR	✓	968	100.000
OnSlp					

Origin-Destination Data

Demand (PCU/hr)

		To			
		A614B	OffSI	A614	OnSlp
From	A614B	12	0	704	115
	OffSI	548	0	545	1
	A614	727	0	0	241
	OnSlp	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A614B	OffSI	A614	OnSlp
From	A614B	0	0	10	18
	OffSI	20	0	26	0
	A614	8	0	0	13

OnSlp	0	0	0	0
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Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A614B	0.70	10.07	2.5	B	763	1144
OffSI	0.77	12.20	4.0	B	1004	1506
A614	0.66	7.21	2.1	A	888	1332
OnSlp						

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	626	156	0	1311	0.477	622	964	0 0	1.0	5.761	A
OffSI	824	206	622	1732	0.476	819	0	0 0	1.1	4.824	A
A614	729	182	506	1744	0.418	726	935	0 0	0.8	3.849	A
OnSlp			964				267				

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	747	187	0	1311	0.570	745	1155	1 0	1.4	7.038	A
OffSI	983	246	745	1662	0.592	981	0	1.1	1.8	6.472	A
A614	870	218	606	1688	0.516	869	1120	0 8	1.1	4.790	A
OnSlp			1155				320				

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	915	229	0	1311	0.698	911	1410	1.4	2.5	9.883	A
OffSI	1205	301	911	1568	0.768	1196	0	1.8	3.9	11.641	B
A614	1066	266	739	1613	0.661	1062	1367	1.1	2.1	7.082	A
OnSlp			1410				392				

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	915	229	0	1311	0.698	915	1417	2.5	2.5	10.074	B
OffSI	1205	301	915	1566	0.769	1204	0	3.9	4.0	12.197	B
A614	1066	266	744	1611	0.662	1066	1375	2.1	2.1	7.206	A
OnSlp			1417				393				

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	747	187	0	1311	0.570	751	1164	2 5	1.5	7.186	A
OffSI	983	246	751	1658	0.593	992	0	4 0	1.8	6.721	A
A614	870	218	613	1684	0.517	874	1131	2.1	1.2	4.872	A
OnSlp			1164				322				

01:15 - 01:30

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Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	626	156	0	1311	0.477	628	972	15	1.0	5.859	A
OffSI	824	206	628	1729	0.476	826	0	18	1.1	4.917	A
A614	729	182	511	1741	0.419	730	943	12	0.8	3.894	A
OnSlp			972				269				

2026 Future Baseline + Drax, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm A614 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A614B, OffSI, A614, OnSlp	10.68	B

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	19	Arm A614B	10.68	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2026 Future Baseline + Drax	PM	ONE HOUR	00 00	01:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A614B		ONE HOUR	✓	930	100.000
OffSI		ONE HOUR	✓	966	100.000
A614		ONE HOUR	✓	1058	100.000
OnSlp					

Origin-Destination Data

Demand (PCU/hr)

		To			
		A614B	OffSI	A614	OnSlp
From	A614B	20	0	710	200
	OffSI	525	0	441	0
	A614	796	0	0	262
	OnSlp	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A614B	OffSI	A614	OnSlp
From	A614B	0	0	6	6
	OffSI	13	0	22	0
	A614	5	0	0	12

OnSlp	0	0	0	0
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Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A614B	0.78	13.23	3.7	B	853	1280
OffSI	0.71	9.54	2.8	A	886	1330
A614	0.74	9.49	3.0	A	971	1456
OnSlp						

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	700	175	0	1311	0.534	695	1005	0 0	1.2	6.150	A
OffSI	727	182	695	1690	0.430	724	0	0 0	0.9	4.340	A
A614	797	199	558	1715	0.464	793	861	0 0	0.9	4.147	A
OnSlp			1005				346				

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	836	209	0	1311	0.638	834	1203	1 2	1.8	7.947	A
OffSI	868	217	834	1612	0.539	867	0	0 9	1.3	5.634	A
A614	951	238	668	1653	0.575	949	1032	0 9	1.4	5.437	A
OnSlp			1203				414				

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1024	256	0	1311	0.781	1017	1469	1.8	3.6	12.684	B
OffSI	1064	266	1017	1508	0.706	1058	0	1.3	2.7	9.255	A
A614	1165	291	816	1571	0.742	1159	1259	1.4	2.9	9.184	A
OnSlp			1469				506				

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1024	256	0	1311	0.781	1024	1476	3.6	3.7	13.227	B
OffSI	1064	266	1024	1504	0.707	1063	0	2.7	2.8	9.542	A
A614	1165	291	820	1568	0.743	1165	1267	2.9	3.0	9.493	A
OnSlp			1476				509				

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	836	209	0	1311	0.638	843	1213	3.7	1.9	8.272	A
OffSI	868	217	843	1606	0.541	874	0	2 8	1.4	5.791	A
A614	951	238	674	1650	0.577	957	1043	3 0	1.5	5.592	A
OnSlp			1213				418				

01:15 - 01:30

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Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	700	175	0	1311	0.534	703	1012	1.9	1.2	6.298	A
OffSI	727	182	703	1686	0.431	729	0	1.4	0.9	4.409	A
A614	797	199	563	1712	0.465	799	870	1.5	0.9	4.213	A
OnSlp			1012				349				

2026 Do Minimum, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm A614 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A614B, OffSI, A614, OnSlp	108.70	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-14	Arm OffSI	108.70	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2026 Do Minimum	AM	ONE HOUR	00:00	01:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A614B		ONE HOUR	✓	1031	100.000
OffSI		ONE HOUR	✓	1501	100.000
A614		ONE HOUR	✓	1083	100.000
OnSlp					

Origin-Destination Data

Demand (PCU/hr)

		To			
		A614B	OffSI	A614	OnSlp
From	A614B	42	0	786	203
	OffSI	1039	0	461	1
	A614	821	0	0	262
	OnSlp	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A614B	OffSI	A614	OnSlp
From	A614B	0	0	10	18
	OffSI	20	0	26	0
	A614	8	0	0	13

OnSlp	0	0	0	0
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Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A614B	0.87	22.07	6.6	C	946	1419
OffSI	1.15	226.08	115.0	F	1377	2066
A614	0.90	28.50	8.9	D	994	1491
OnSlp						

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	776	194	0	1311	0.592	770	1421	0.0	1.6	7.310	A
OffSI	1130	283	770	1648	0.686	1120	0	0.0	2.6	8.149	A
A614	815	204	959	1491	0.547	810	931	0.0	1.3	5.731	A
OnSlp			1421				348				

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	927	232	0	1311	0.707	923	1695	1.6	2.6	10.201	B
OffSI	1349	337	923	1561	0.864	1333	0	2.6	6.8	17.990	C
A614	974	243	1143	1388	0.701	969	1113	1.3	2.5	9.271	A
OnSlp			1695				417				

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1135	284	0	1311	0.866	1121	1925	2.6	6.2	19.679	C
OffSI	1653	413	1121	1449	1.141	1433	0	6.8	61.7	97.281	F
A614	1192	298	1259	1323	0.901	1171	1294	2.5	7.9	23.131	C
OnSlp			1925				505				

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1135	284	0	1311	0.866	1133	1944	6.2	6.6	22.065	C
OffSI	1653	413	1133	1441	1.147	1440	0	61.7	115.0	226.076	F
A614	1192	298	1267	1319	0.904	1189	1306	7.9	8.9	28.495	D
OnSlp			1944				512				

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	927	232	0	1311	0.707	942	1855	6.6	2.8	11.271	B
OffSI	1349	337	942	1550	0.871	1534	0	115.0	68.9	216.523	F
A614	974	243	1287	1308	0.745	996	1189	8.9	3.3	13.402	B
OnSlp			1855				427				

01:15 - 01:30

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Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	776	194	0	1311	0.592	781	1620	2.8	1.6	7.607	A
OffSI	1130	283	781	1642	0.688	1394	0	68.9	2.8	42.031	E
A614	815	204	1151	1383	0.590	822	1023	3.3	1.6	7.092	A
OnSlp			1620				354				

2026 Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm A614 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A614B, OffSI, A614, OnSlp	140.45	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-20	Arm A614B	140.45	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2026 Do Minimum	PM	ONE HOUR	00:00	01:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A614B		ONE HOUR	✓	1378	100.000
OffSI		ONE HOUR	✓	1145	100.000
A614		ONE HOUR	✓	1129	100.000
OnSlp					

Origin-Destination Data

Demand (PCU/hr)

		To			
		A614B	OffSI	A614	OnSlp
From	A614B	114	0	835	429
	OffSI	708	0	437	0
	A614	845	0	0	284
	OnSlp	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A614B	OffSI	A614	OnSlp
From	A614B	0	0	6	6
	OffSI	13	0	22	0
	A614	5	0	0	12

OnSlp	0	0	0	0
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Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A614B	1.16	303.43	116.8	F	1264	1897
OffSI	0.94	40.48	13.3	E	1051	1576
A614	0.95	42.91	14.0	E	1036	1554
OnSlp						

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1037	259	0	1311	0.792	1022	1246	0.0	3.7	12.599	B
OffSI	862	216	1022	1504	0.573	856	0	0.0	1.5	6.395	A
A614	850	212	932	1506	0.565	845	946	0.0	1.4	5.762	A
OnSlp			1246				531				

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1239	310	0	1311	0.945	1209	1488	3.7	11.1	30.836	D
OffSI	1029	257	1209	1398	0.736	1023	0	1.5	3.1	10.970	B
A614	1015	254	1109	1407	0.721	1010	1123	1.4	2.7	9.548	A
OnSlp			1488				630				

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1517	379	0	1311	1.158	1302	1772	11.1	64.8	115.723	F
OffSI	1261	315	1302	1346	0.937	1229	0	3.1	11.1	29.881	D
A614	1243	311	1273	1315	0.945	1209	1258	2.7	11.1	29.730	D
OnSlp			1772				710				

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1517	379	0	1311	1.158	1309	1804	64.8	116.8	257.045	F
OffSI	1261	315	1309	1342	0.940	1252	0	11.1	13.3	40.482	E
A614	1243	311	1290	1306	0.952	1232	1271	11.1	14.0	42.906	E
OnSlp			1804				717				

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1239	310	0	1311	0.945	1299	1559	116.8	101.8	303.425	F
OffSI	1029	257	1299	1348	0.764	1066	0	13.3	4.0	16.588	C
A614	1015	254	1171	1372	0.740	1058	1194	14.0	3.2	13.776	B
OnSlp			1559				671				

01:15 - 01:30

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Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1037	259	0	1311	0.792	1297	1286	101.8	36.9	195.451	F
OffSI	862	216	1297	1349	0.639	870	0	4.0	2.1	8.872	A
A614	850	212	1049	1440	0.590	856	1118	3.2	1.6	6.648	A
OnSlp			1286				619				

2026 Do Something, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm A614 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A614B, OffSI, A614, OnSlp	184.33	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-19	Arm OffSI	184.33	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2026 Do Something	AM	ONE HOUR	00:00	01:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A614B		ONE HOUR	✓	1044	100.000
OffSI		ONE HOUR	✓	1611	100.000
A614		ONE HOUR	✓	1109	100.000
OnSlp					

Origin-Destination Data

Demand (PCU/hr)

		To			
		A614B	OffSI	A614	OnSlp
From	A614B	42	0	799	203
	OffSI	1039	0	571	1
	A614	847	0	0	262
	OnSlp	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A614B	OffSI	A614	OnSlp
From	A614B	0	0	10	18
	OffSI	20	0	26	0
	A614	8	0	0	13

OnSlp	0	0	0	0
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Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A614B	0.88	23.79	7.2	C	958	1437
OffSI	1.24	396.97	181.3	F	1478	2217
A614	0.90	26.56	8.5	D	1018	1526
OnSlp						

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	786	196	0	1311	0.600	779	1439	0.0	1.6	7.439	A
OffSI	1213	303	779	1642	0.738	1200	0	0.0	3.3	9.656	A
A614	835	209	957	1492	0.560	829	1022	0.0	1.4	5.886	A
OnSlp			1439				348				

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	939	235	0	1311	0.716	934	1708	1.6	2.7	10.499	B
OffSI	1448	362	934	1555	0.932	1416	0	3.3	11.4	26.938	D
A614	997	249	1133	1393	0.716	992	1217	1.4	2.6	9.664	A
OnSlp			1708				417				

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1149	287	0	1311	0.877	1133	1888	2.7	6.7	20.878	C
OffSI	1774	443	1133	1441	1.231	1435	0	11.4	96.1	144.944	F
A614	1221	305	1192	1360	0.898	1201	1376	2.6	7.7	22.260	C
OnSlp			1888				505				

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1149	287	0	1311	0.877	1147	1901	6.7	7.2	23.793	C
OffSI	1774	443	1147	1434	1.237	1433	0	96.1	181.3	348.303	F
A614	1221	305	1194	1359	0.898	1218	1386	7.7	8.5	26.558	D
OnSlp			1901				512				

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	939	235	0	1311	0.716	956	1804	7.2	2.9	11.761	B
OffSI	1448	362	956	1542	0.939	1532	0	181.3	160.3	396.972	F
A614	997	249	1213	1349	0.739	1018	1274	8.5	3.2	12.569	B
OnSlp			1804				427				

01:15 - 01:30

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Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	786	196	0	1311	0.600	791	1721	2.9	1.7	7.762	A
OffSI	1213	303	791	1636	0.741	1624	0	160.3	57.7	244.088	F
A614	835	209	1234	1337	0.624	840	1181	3.2	1.9	7.996	A
OnSlp			1721				353				

2026 Do Something, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm A614 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A614B, OffSI, A614, OnSlp	150.33	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-20	Arm A614B	150.33	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2026 Do Something	PM	ONE HOUR	00:00	01:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A614B		ONE HOUR	✓	1378	100.000
OffSI		ONE HOUR	✓	1171	100.000
A614		ONE HOUR	✓	1192	100.000
OnSlp					

Origin-Destination Data

Demand (PCU/hr)

		To			
		A614B	OffSI	A614	OnSlp
From	A614B	114	0	835	429
	OffSI	708	0	463	0
	A614	903	0	0	289
	OnSlp	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A614B	OffSI	A614	OnSlp
From	A614B	0	0	6	6
	OffSI	13	0	22	0
	A614	5	0	0	12

OnSlp	0	0	0	0
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Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A614B	1.16	303.43	116.8	F	1264	1897
OffSI	0.96	49.78	16.9	E	1075	1612
A614	1.00	72.11	26.6	F	1094	1641
OnSlp						

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1037	259	0	1311	0.792	1022	1289	0.0	3.7	12.599	B
OffSI	882	220	1022	1504	0.586	875	0	0.0	1.6	6.592	A
A614	897	224	932	1506	0.596	891	966	0.0	1.5	6.185	A
OnSlp			1289				534				

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1239	310	0	1311	0.945	1209	1539	3.7	11.1	30.836	D
OffSI	1053	263	1209	1398	0.753	1046	0	1.6	3.4	11.650	B
A614	1072	268	1109	1407	0.762	1065	1146	1.5	3.2	11.000	B
OnSlp			1539				635				

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1517	379	0	1311	1.158	1302	1813	11.1	64.8	115.723	F
OffSI	1289	322	1302	1346	0.958	1249	0	3.4	13.4	34.247	D
A614	1312	328	1268	1318	0.996	1254	1283	3.2	17.9	41.548	E
OnSlp			1813				709				

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1517	379	0	1311	1.158	1309	1847	64.8	116.8	257.045	F
OffSI	1289	322	1309	1342	0.961	1275	0	13.4	16.9	49.783	E
A614	1312	328	1287	1307	1.004	1278	1298	17.9	26.6	72.108	F
OnSlp			1847				717				

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1239	310	0	1311	0.945	1299	1654	116.8	101.8	303.425	F
OffSI	1053	263	1299	1348	0.781	1102	0	16.9	4.5	19.943	C
A614	1072	268	1178	1368	0.783	1161	1223	26.6	4.2	25.218	D
OnSlp			1654				686				

01:15 - 01:30

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Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1037	259	0	1311	0.792	1297	1333	101.8	36.9	195.451	F
OffSI	882	220	1297	1349	0.654	890	0	4.5	2.3	9.316	A
A614	897	224	1049	1440	0.623	907	1138	4.2	1.8	7.323	A
OnSlp			1333				624				

RESPONSE TO NATIONAL HIGHWAYS RELEVANT REPRESENTATIONS (SEPT 2022)

Appendix G – LinSig Output – Revised Assessment Scenario - Improvement Scheme – Southern Roundabout

Drax Bioenergy with Carbon Capture and Storage

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 –
Regulation (5(2)(q))

Document Reference Number: 8.9.4

Applicant: Drax Power Limited

PINS Reference: EN010120

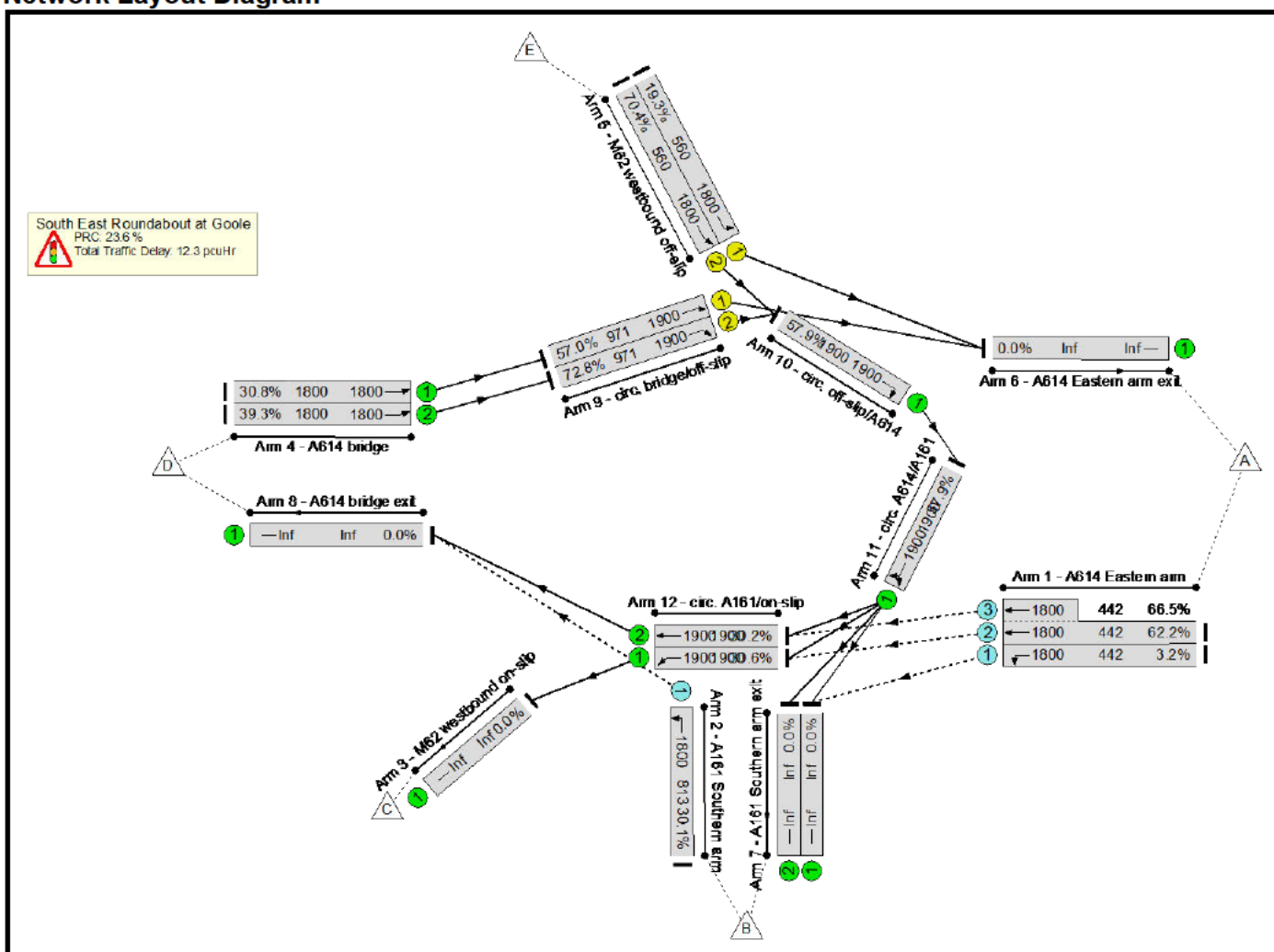


Basic Results Summary
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	J9 South East - Proposed.lsg3x
Author:	
Company:	
Address:	

Scenario 1: '2026 Future Baseline AM' (FG1: '2026 Future Baseline AM', Plan 1: 'Network Control Plan 1')
Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	72.8%	1397	0	0	12.3	-	-
South East Roundabout at Goole	-	-	-		-	-	-	-	-	-	72.8%	1397	0	0	12.3	-	-
1/1	A614 Eastern arm Left	O	-		-	-	-	14	1800	442	3.2%	14	0	0	0.0	6.6	0.1
1/2+1/3	A614 Eastern arm Ahead	O	-		-	-	-	569	1800:1800	442+442	62.2 : 66.5%	1138	0	0	1.7	10.6	2.8
2/1	A161 Southern arm Left	O	-		-	-	-	245	1800	813	30.1%	245	0	0	0.3	3.7	0.9
4/1	A614 bridge Ahead	U	-		-	-	-	554	1800	1800	30.8%	-	-	-	0.2	1.4	0.2
4/2	A614 bridge Ahead	U	-		-	-	-	707	1800	1800	39.3%	-	-	-	0.3	1.6	0.3
5/1	M62 westbound off-slip Left	U	A		1	13	-	108	1800	560	19.3%	-	-	-	0.5	15.3	1.1
5/2	M62 westbound off-slip Ahead	U	A		1	13	-	394	1800	560	70.4%	-	-	-	2.7	24.4	5.4
9/1	circ. bridge/off-slip Ahead	U	B		1	22	-	554	1900	971	57.0%	-	-	-	1.8	11.9	5.4
9/2	circ. bridge/off-slip Right	U	B		1	22	-	707	1900	971	72.8%	-	-	-	3.0	15.3	8.2
10/1	circ. off-slip/A614 Right	U	-		-	-	-	1101	1900	1900	57.9%	-	-	-	0.7	2.2	0.7
11/1	circ. A614/A161 Ahead Right	U	-		-	-	-	1101	1900	1900	57.9%	-	-	-	0.7	2.2	0.7
12/1	circ. A161/on-slip Ahead	U	-		-	-	-	581	1900	1900	30.6%	-	-	-	0.2	1.4	0.2

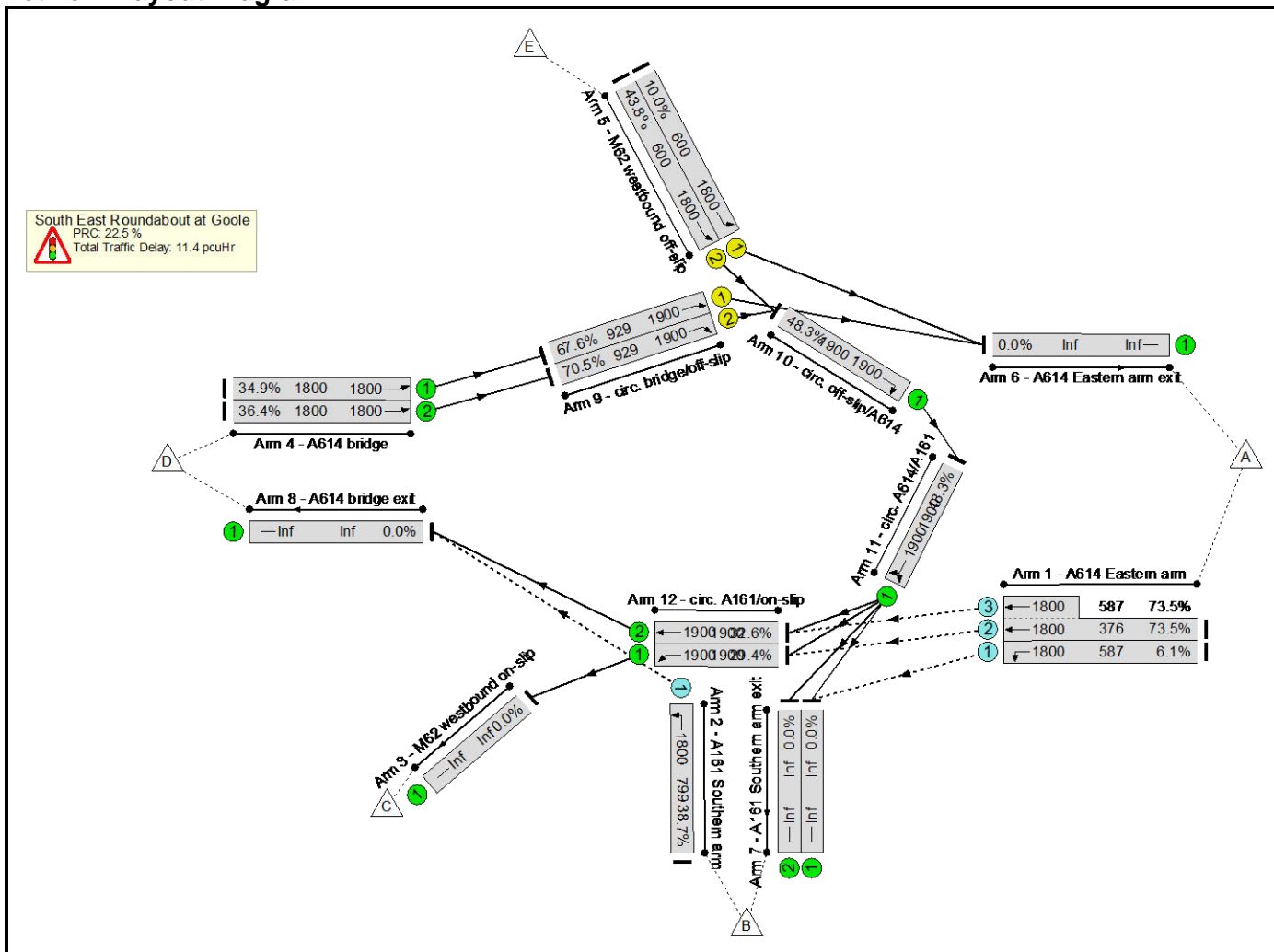
Basic Results Summary

12/2	circ. A161/on-slip Ahead	U	-	-	-	-	574	1900	1900	30.2%	-	-	-	0.2	1.4	0.2
		C1	PRC for Signalled Lanes (%):		23.6	Total Delay for Signalled Lanes (pcuHr):		7.97	Cycle Time (s):		45					
			PRC Over All Lanes (%):		23.6	Total Delay Over All Lanes(pcuHr):		12.28								

Basic Results Summary

Scenario 2: '2026 Future Baseline PM' (FG2: '2026 Future Baseline PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	73.5%	1759	0	0	11.4	-	-
South East Roundabout at Goole	-	-	-		-	-	-	-	-	-	73.5%	1759	0	0	11.4	-	-
1/1	A614 Eastern arm Left	O	-		-	-	-	36	1800	587	6.1%	36	0	0	0.1	5.1	0.2
1/2+1/3	A614 Eastern arm Ahead	O	-		-	-	-	707	1800:1800	376+587	73.5 : 73.5%	1414	0	0	2.2	11.2	5.6
2/1	A161 Southern arm Left	O	-		-	-	-	309	1800	799	38.7%	309	0	0	0.4	4.6	1.7
4/1	A614 bridge Ahead	U	-		-	-	-	628	1800	1800	34.9%	-	-	-	0.3	1.5	0.3
4/2	A614 bridge Ahead	U	-		-	-	-	655	1800	1800	36.4%	-	-	-	0.3	1.6	0.3
5/1	M62 westbound off-slip Left	U	A		1	14	-	60	1800	600	10.0%	-	-	-	0.2	13.7	0.6
5/2	M62 westbound off-slip Ahead	U	A		1	14	-	263	1800	600	43.8%	-	-	-	1.2	17.0	2.9
9/1	circ. bridge/off-slip Ahead	U	B		1	21	-	628	1900	929	67.6%	-	-	-	2.6	14.7	7.0
9/2	circ. bridge/off-slip Right	U	B		1	21	-	655	1900	929	70.5%	-	-	-	2.8	15.5	7.6
10/1	circ. off-slip/A614 Right	U	-		-	-	-	918	1900	1900	48.3%	-	-	-	0.5	1.8	0.5
11/1	circ. A614/A161 Ahead Right	U	-		-	-	-	918	1900	1900	48.3%	-	-	-	0.5	1.8	0.5
12/1	circ. A161/on-slip Ahead	U	-		-	-	-	558	1900	1900	29.4%	-	-	-	0.2	1.3	0.2

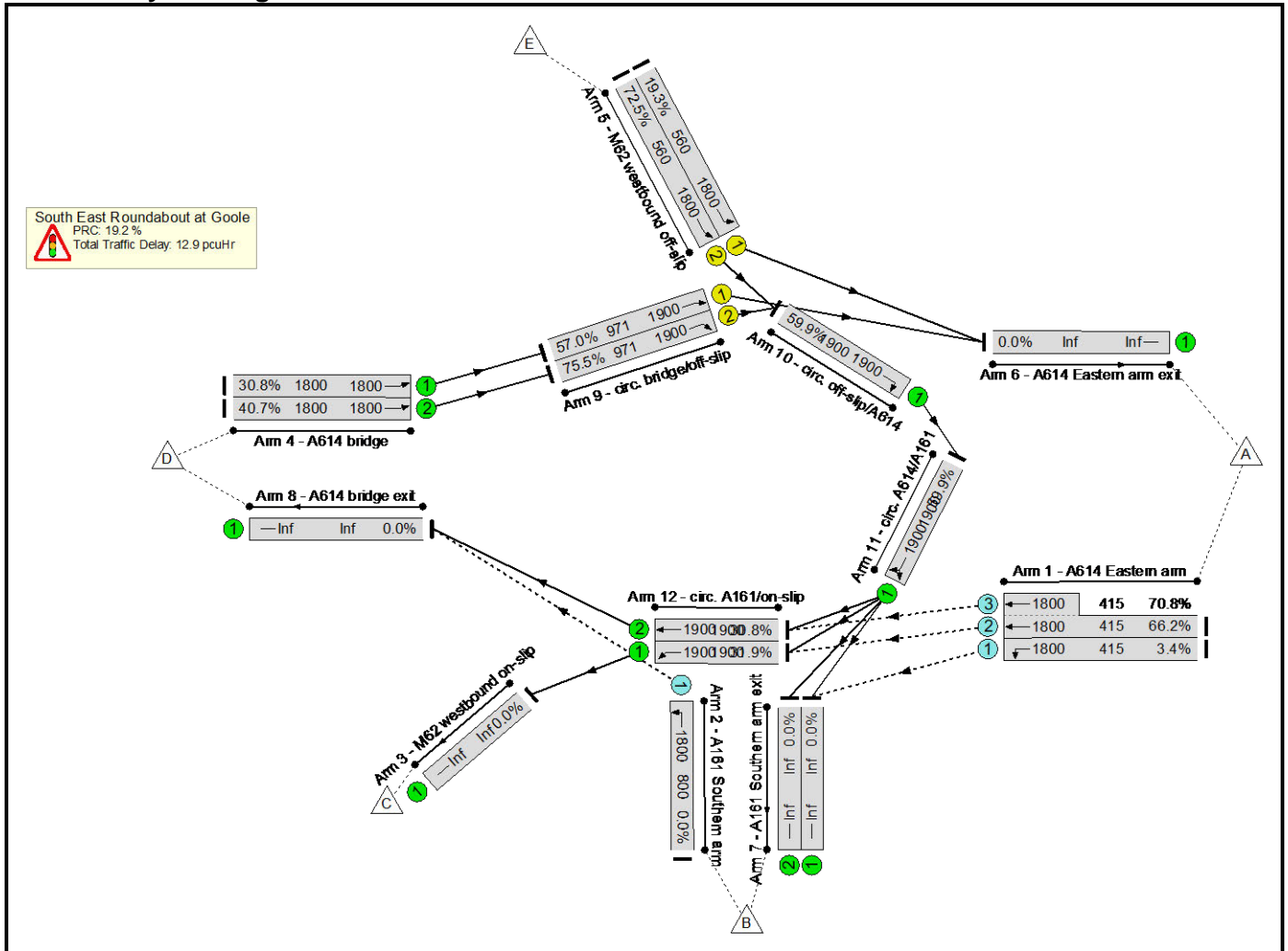
Basic Results Summary

12/2	circ. A161/on-slip Ahead	U	-	-	-	-	620	1900	1900	32.6%	-	-	-	0.2	1.4	0.2
		C1	PRC for Signalled Lanes (%):		27.6	Total Delay for Signalled Lanes (pcuHr):		6.86	Cycle Time (s):		45					
			PRC Over All Lanes (%):		22.5	Total Delay Over All Lanes(pcuHr):		11.43								

Basic Results Summary

Scenario 3: '2026 Future Baseline + Drax AM' (FG3: '2026 Future Baseline + Drax AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	75.5%	1152	0	0	12.9	-	-
South East Roundabout at Goole	-	-	-		-	-	-	-	-	-	75.5%	1152	0	0	12.9	-	-
1/1	A614 Eastern arm Left	O	-		-	-	-	14	1800	415	3.4%	14	0	0	0.0	7.3	0.1
1/2+1/3	A614 Eastern arm Ahead	O	-		-	-	-	569	1800:1800	415+415	66.2 : 70.8%	1138	0	0	2.0	12.4	3.0
2/1	A161 Southern arm Left	O	-		-	-	-	0	1800	800	0.0%	0	0	0	0.0	0.0	0.0
4/1	A614 bridge Ahead	U	-		-	-	-	554	1800	1800	30.8%	-	-	-	0.2	1.4	0.2
4/2	A614 bridge Ahead	U	-		-	-	-	733	1800	1800	40.7%	-	-	-	0.3	1.7	0.3
5/1	M62 westbound off-slip Left	U	A		1	13	-	108	1800	560	19.3%	-	-	-	0.5	15.3	1.1
5/2	M62 westbound off-slip Ahead	U	A		1	13	-	406	1800	560	72.5%	-	-	-	2.9	25.3	5.8
9/1	circ. bridge/off-slip Ahead	U	B		1	22	-	554	1900	971	57.0%	-	-	-	1.8	11.9	5.4
9/2	circ. bridge/off-slip Right	U	B		1	22	-	733	1900	971	75.5%	-	-	-	3.3	16.2	8.6
10/1	circ. off-slip/A614 Right	U	-		-	-	-	1139	1900	1900	59.9%	-	-	-	0.7	2.4	0.7
11/1	circ. A614/A161 Ahead Right	U	-		-	-	-	1139	1900	1900	59.9%	-	-	-	0.7	2.4	0.7
12/1	circ. A161/on-slip Ahead	U	-		-	-	-	607	1900	1900	31.9%	-	-	-	0.2	1.4	0.2

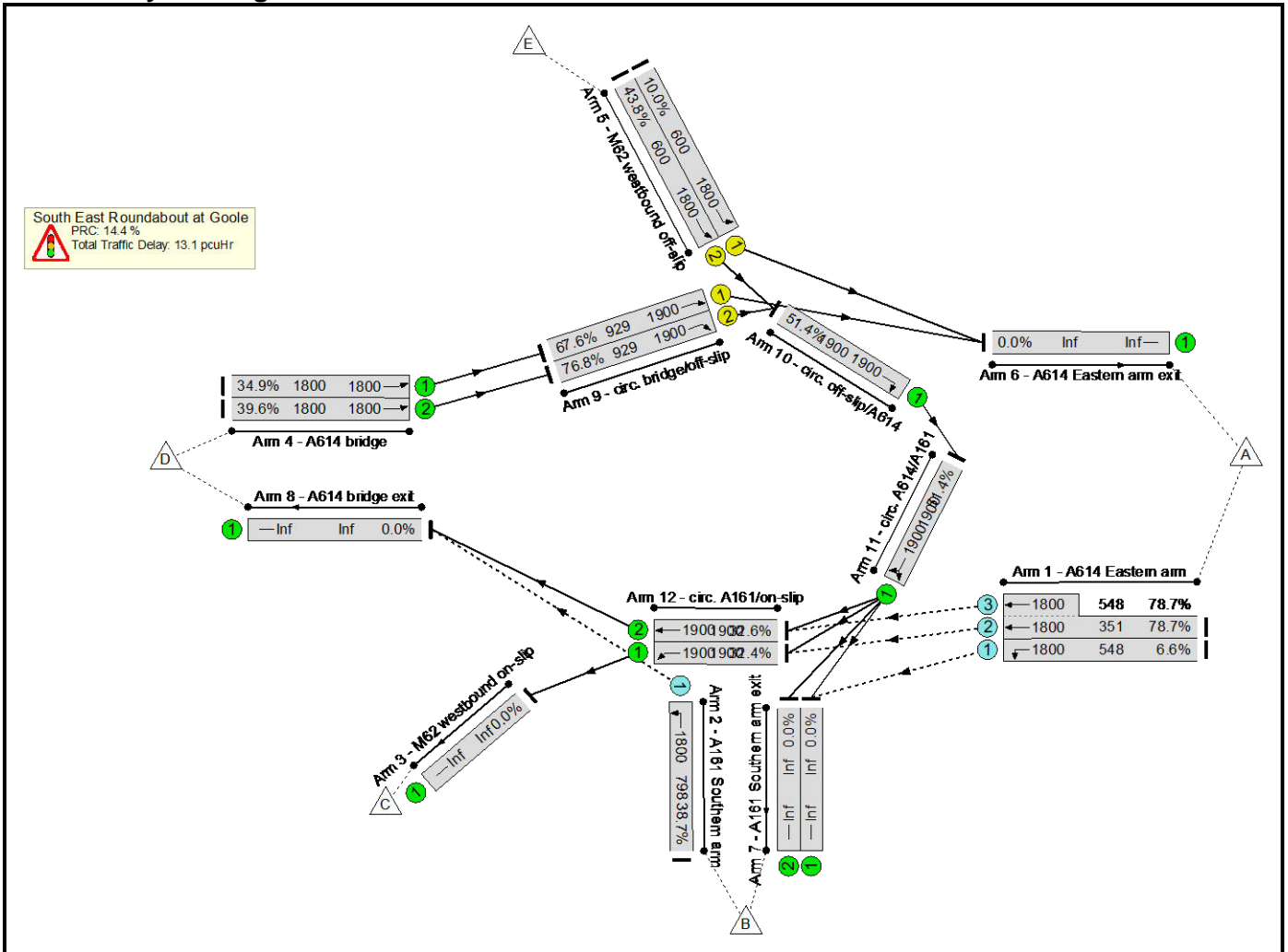
Basic Results Summary

12/2	circ. A161/on-slip Ahead	U	-	-	-	-	586	1900	1900	30.8%	-	-	-	0.2	1.4	0.2
		C1	PRC for Signalled Lanes (%):		19.2	Total Delay for Signalled Lanes (pcuHr):		8.45	Cycle Time (s):		45					
			PRC Over All Lanes (%):		19.2	Total Delay Over All Lanes(pcuHr):		12.95								

Basic Results Summary

Scenario 4: '2026 Future Baseline + Drax PM' (FG4: '2026 Future Baseline + Drax PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	78.7%	1759	0	0	13.1	-	-
South East Roundabout at Goole	-	-	-		-	-	-	-	-	-	78.7%	1759	0	0	13.1	-	-
1/1	A614 Eastern arm Left	O	-		-	-	-	36	1800	548	6.6%	36	0	0	0.1	5.9	0.2
1/2+1/3	A614 Eastern arm Ahead	O	-		-	-	-	707	1800:1800	351+548	78.7 : 78.7%	1414	0	0	2.9	15.0	6.4
2/1	A161 Southern arm Left	O	-		-	-	-	309	1800	798	38.7%	309	0	0	0.4	4.9	1.9
4/1	A614 bridge Ahead	U	-		-	-	-	628	1800	1800	34.9%	-	-	-	0.3	1.5	0.3
4/2	A614 bridge Ahead	U	-		-	-	-	713	1800	1800	39.6%	-	-	-	0.3	1.7	0.3
5/1	M62 westbound off-slip Left	U	A		1	14	-	60	1800	600	10.0%	-	-	-	0.2	13.7	0.6
5/2	M62 westbound off-slip Ahead	U	A		1	14	-	263	1800	600	43.8%	-	-	-	1.2	17.0	2.9
9/1	circ. bridge/off-slip Ahead	U	B		1	21	-	628	1900	929	67.6%	-	-	-	2.6	14.7	7.0
9/2	circ. bridge/off-slip Right	U	B		1	21	-	713	1900	929	76.8%	-	-	-	3.5	17.6	8.8
10/1	circ. off-slip/A614 Right	U	-		-	-	-	976	1900	1900	51.4%	-	-	-	0.5	1.9	0.5
11/1	circ. A614/A161 Ahead Right	U	-		-	-	-	976	1900	1900	51.4%	-	-	-	0.5	1.9	0.5
12/1	circ. A161/on-slip Ahead	U	-		-	-	-	616	1900	1900	32.4%	-	-	-	0.2	1.4	0.2

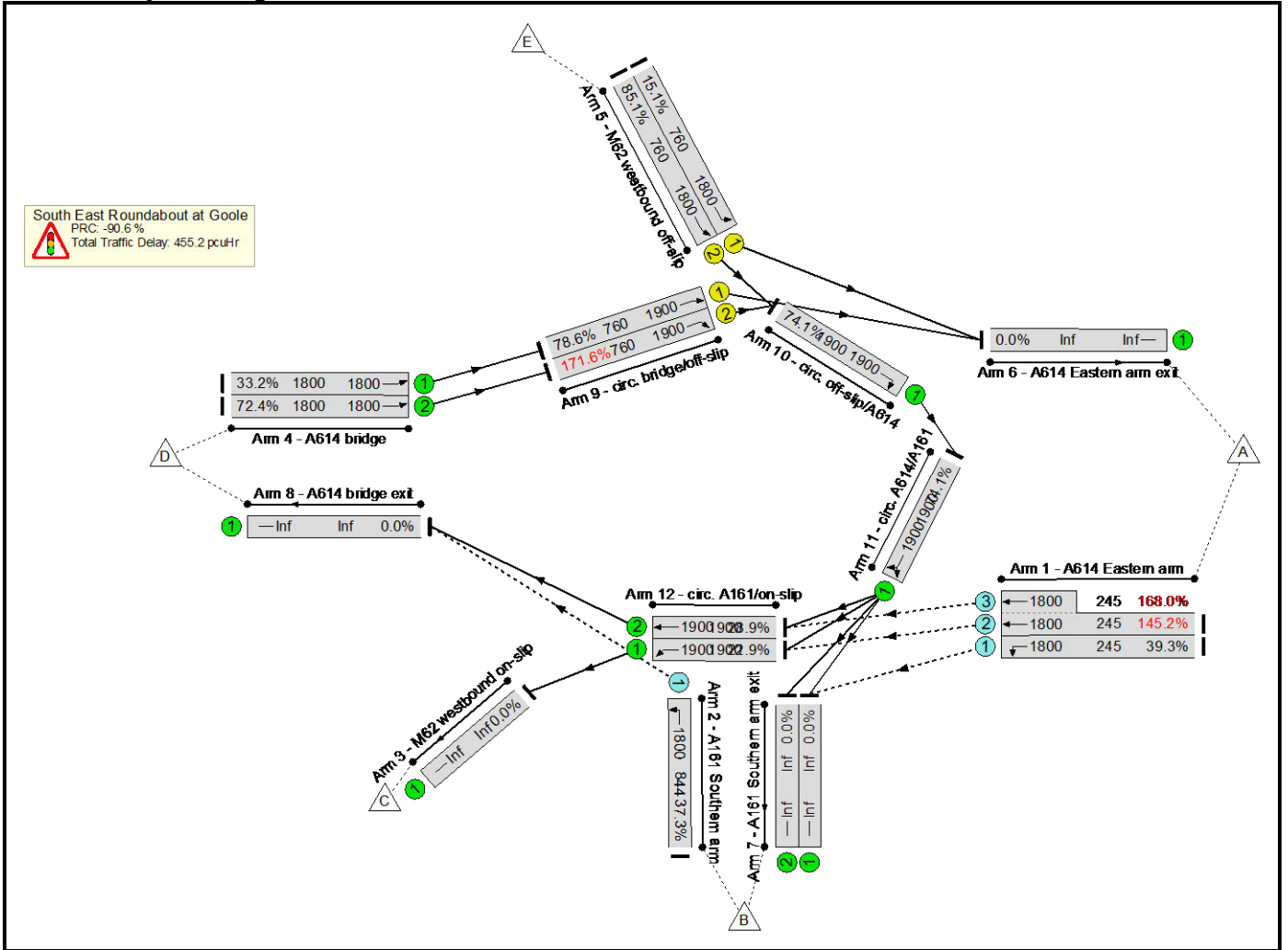
Basic Results Summary

12/2	circ. A161/on-slip Ahead	U	-	-	-	-	620	1900	1900	32.6%	-	-	-	0.2	1.4	0.2
		C1	PRC for Signalled Lanes (%):		17.3	Total Delay for Signalled Lanes (pcuHr):		7.53	Cycle Time (s):		45					
			PRC Over All Lanes (%):		14.4	Total Delay Over All Lanes(pcuHr):		13.09								

Basic Results Summary

Scenario 5: '2026 Do Minimum AM' (FG5: '2026 Do Minimum AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	171.6%	1389	0	0	455.2	-	-
South East Roundabout at Goole	-	-	-		-	-	-	-	-	-	171.6%	1389	0	0	455.2	-	-
1/1	A614 Eastern arm Left	O	-		-	-	-	96	1800	245	39.3%	96	0	0	0.5	18.4	0.8
1/2+1/3	A614 Eastern arm Ahead	O	-		-	-	-	766	1800:1800	245+245	145.2 : 168.0%	978	0	0	148.1	695.8	152.8
2/1	A161 Southern arm Left	O	-		-	-	-	315	1800	844	37.3%	315	0	0	0.3	3.7	0.9
4/1	A614 bridge Ahead	U	-		-	-	-	597	1800	1800	33.2%	-	-	-	0.2	1.5	0.2
4/2	A614 bridge Ahead	U	-		-	-	-	1304	1800	1800	72.4%	-	-	-	1.3	3.6	1.3
5/1	M62 westbound off-slip Left	U	A		1	18	-	115	1800	760	15.1%	-	-	-	0.3	10.8	1.0
5/2	M62 westbound off-slip Ahead	U	A		1	18	-	647	1800	760	85.1%	-	-	-	4.8	26.9	9.9
9/1	circ. bridge/off-slip Ahead	U	B		1	17	-	597	1900	760	78.6%	-	-	-	3.8	22.6	8.3
9/2	circ. bridge/off-slip Right	U	B		1	17	-	1304	1900	760	171.6%	-	-	-	292.7	808.0	302.0
10/1	circ. off-slip/A614 Right	U	-		-	-	-	1951	1900	1900	74.1%	-	-	-	1.4	3.6	1.4
11/1	circ. A614/A161 Ahead Right	U	-		-	-	-	1951	1900	1900	74.1%	-	-	-	1.4	3.6	1.4
12/1	circ. A161/on-slip Ahead	U	-		-	-	-	681	1900	1900	22.9%	-	-	-	0.1	1.2	0.1

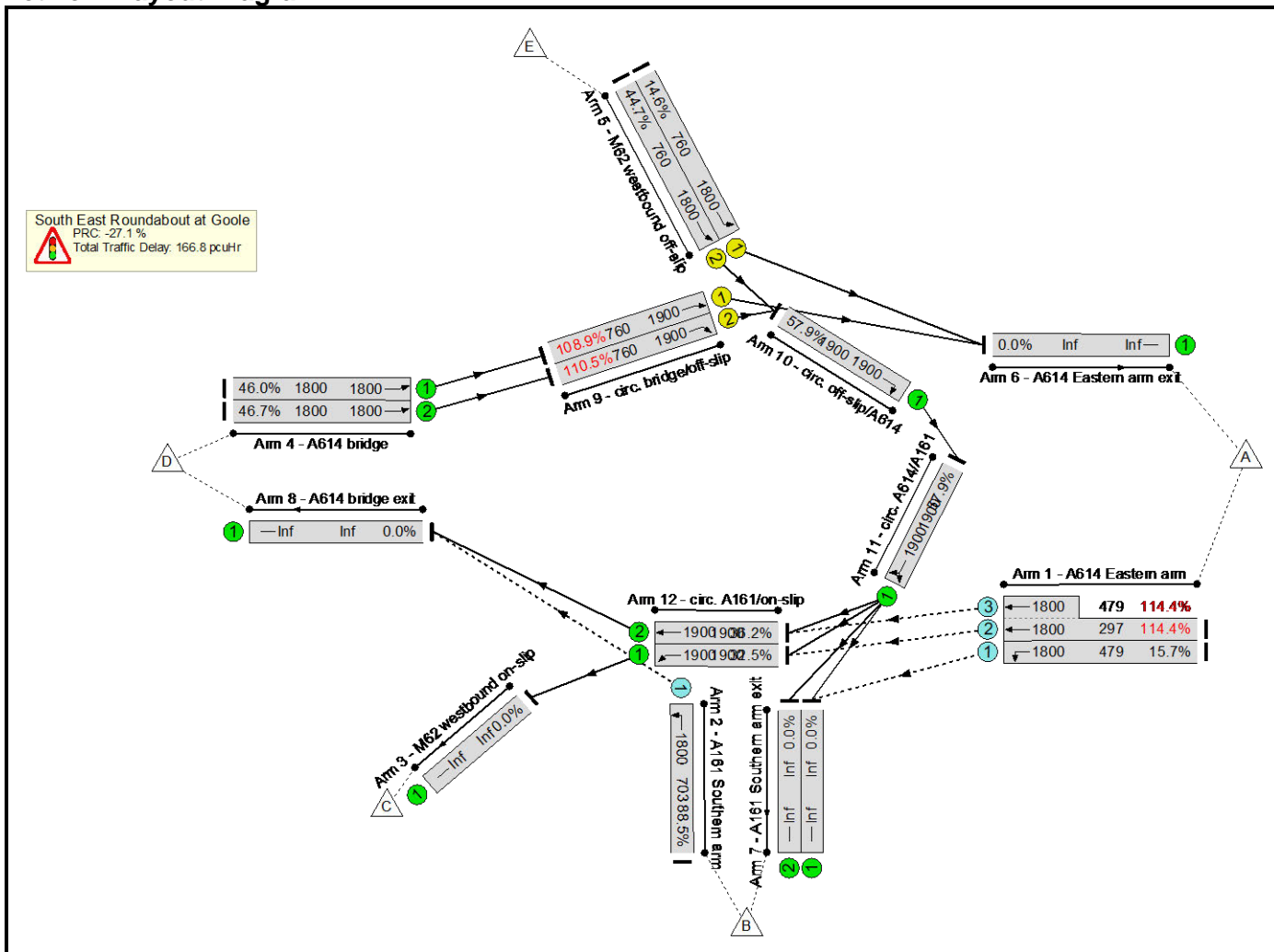
Basic Results Summary

12/2	circ. A161/on-slip Ahead	U	-	-	-	-	716	1900	1900	28.9%	-	-	-	0.2	1.3	0.2
		C1	PRC for Signalled Lanes (%):		-90.6		Total Delay for Signalled Lanes (pcuHr):		301.60		Cycle Time (s):		45			
			PRC Over All Lanes (%):		-90.6		Total Delay Over All Lanes(pcuHr):		455.21							

Basic Results Summary

Scenario 6: '2026 Do Minimum PM' (FG6: '2026 Do Minimum PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	114.4%	2335	0	0	166.8	-	-
South East Roundabout at Goole	-	-	-		-	-	-	-	-	-	114.4%	2335	0	0	166.8	-	-
1/1	A614 Eastern arm Left	O	-		-	-	-	75	1800	479	15.7%	75	0	0	0.2	8.3	0.5
1/2+1/3	A614 Eastern arm Ahead	O	-		-	-	-	888	1800:1800	297+479	114.4% : 114.4%	1638	0	0	63.3	256.5	74.4
2/1	A161 Southern arm Left	O	-		-	-	-	622	1800	703	88.5%	622	0	0	4.8	27.6	10.3
4/1	A614 bridge Ahead	U	-		-	-	-	828	1800	1800	46.0%	-	-	-	0.4	1.9	0.4
4/2	A614 bridge Ahead	U	-		-	-	-	840	1800	1800	46.7%	-	-	-	0.4	1.9	0.4
5/1	M62 westbound off-slip Left	U	A		1	18	-	111	1800	760	14.6%	-	-	-	0.3	10.8	0.9
5/2	M62 westbound off-slip Ahead	U	A		1	18	-	340	1800	760	44.7%	-	-	-	1.3	13.5	3.4
9/1	circ. bridge/off-slip Ahead	U	B		1	17	-	828	1900	760	108.9%	-	-	-	44.2	192.2	50.6
9/2	circ. bridge/off-slip Right	U	B		1	17	-	840	1900	760	110.5%	-	-	-	50.0	214.3	56.5
10/1	circ. off-slip/A614 Right	U	-		-	-	-	1180	1900	1900	57.9%	-	-	-	0.7	2.2	0.7
11/1	circ. A614/A161 Ahead Right	U	-		-	-	-	1180	1900	1900	57.9%	-	-	-	0.7	2.2	0.7
12/1	circ. A161/on-slip Ahead	U	-		-	-	-	647	1900	1900	32.5%	-	-	-	0.2	1.4	0.2

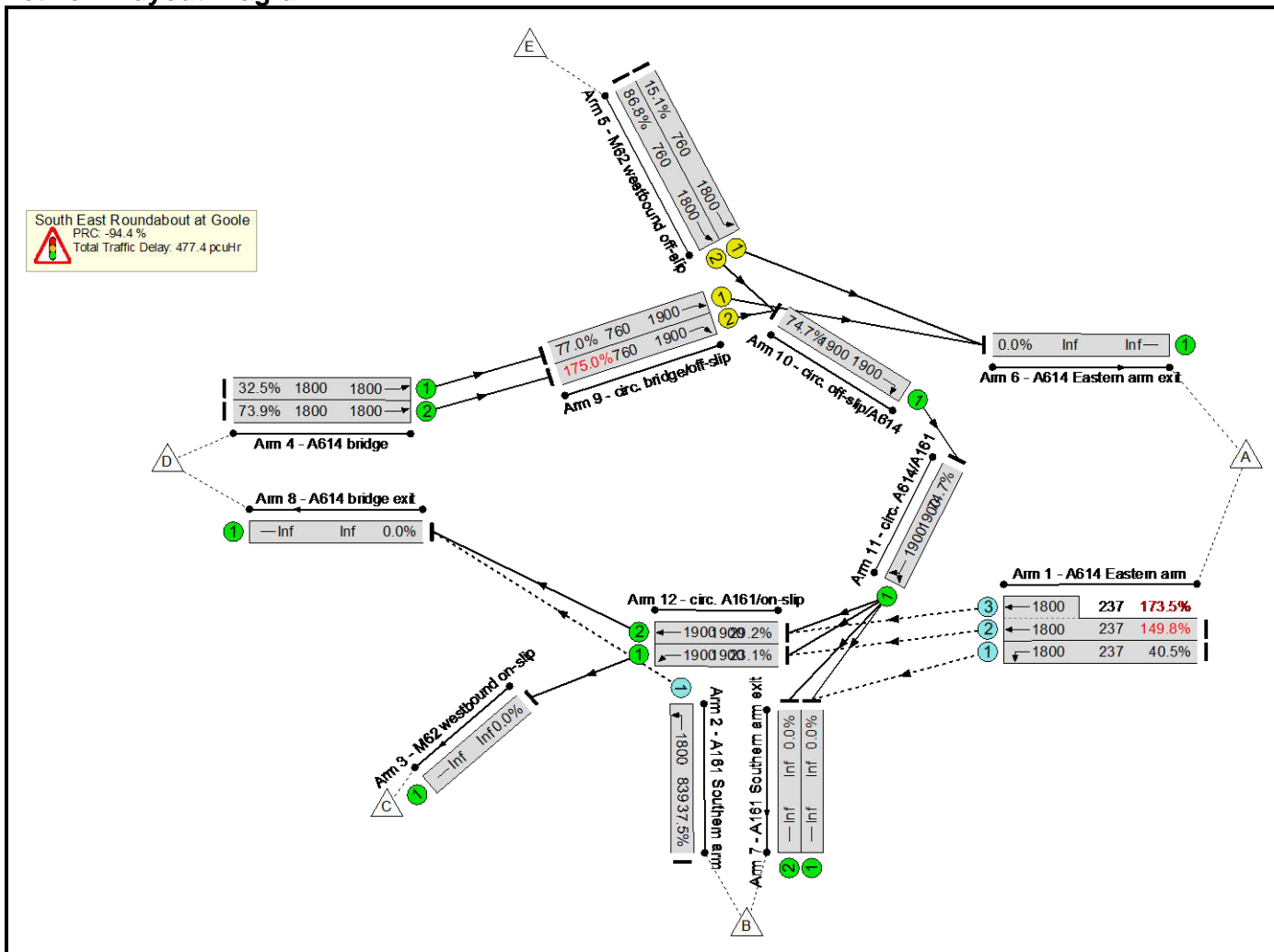
Basic Results Summary

12/2	circ. A161/on-slip Ahead	U	-	-	-	-	756	1900	1900	36.2%	-	-	-	0.3	1.5	0.3
		C1	PRC for Signalled Lanes (%):		-22.8	Total Delay for Signalled Lanes (pcuHr):		95.80	Cycle Time (s):		45					
			PRC Over All Lanes (%):		-27.1	Total Delay Over All Lanes(pcuHr):		166.77								

Basic Results Summary

Scenario 7: '2026 Do Something AM' (FG7: '2026 Do Something AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	175.0%	1359	0	0	477.4	-	-
South East Roundabout at Goole	-	-	-		-	-	-	-	-	-	175.0%	1359	0	0	477.4	-	-
1/1	A614 Eastern arm Left	O	-		-	-	-	96	1800	237	40.5%	96	0	0	0.5	19.2	0.8
1/2+1/3	A614 Eastern arm Ahead	O	-		-	-	-	766	1800:1800	237+237	149.8 : 173.5%	948	0	0	156.0	733.4	159.9
2/1	A161 Southern arm Left	O	-		-	-	-	315	1800	839	37.5%	315	0	0	0.3	3.7	0.9
4/1	A614 bridge Ahead	U	-		-	-	-	585	1800	1800	32.5%	-	-	-	0.2	1.5	0.2
4/2	A614 bridge Ahead	U	-		-	-	-	1330	1800	1800	73.9%	-	-	-	1.4	3.8	1.4
5/1	M62 westbound off-slip Left	U	A		1	18	-	115	1800	760	15.1%	-	-	-	0.3	10.8	1.0
5/2	M62 westbound off-slip Ahead	U	A		1	18	-	660	1800	760	86.8%	-	-	-	5.3	28.8	10.6
9/1	circ. bridge/off-slip Ahead	U	B		1	17	-	585	1900	760	77.0%	-	-	-	3.5	21.8	8.0
9/2	circ. bridge/off-slip Right	U	B		1	17	-	1330	1900	760	175.0%	-	-	-	306.4	829.4	315.9
10/1	circ. off-slip/A614 Right	U	-		-	-	-	1990	1900	1900	74.7%	-	-	-	1.5	3.7	1.5
11/1	circ. A614/A161 Ahead Right	U	-		-	-	-	1990	1900	1900	74.7%	-	-	-	1.5	3.7	1.5
12/1	circ. A161/on-slip Ahead	U	-		-	-	-	707	1900	1900	23.1%	-	-	-	0.1	1.2	0.1

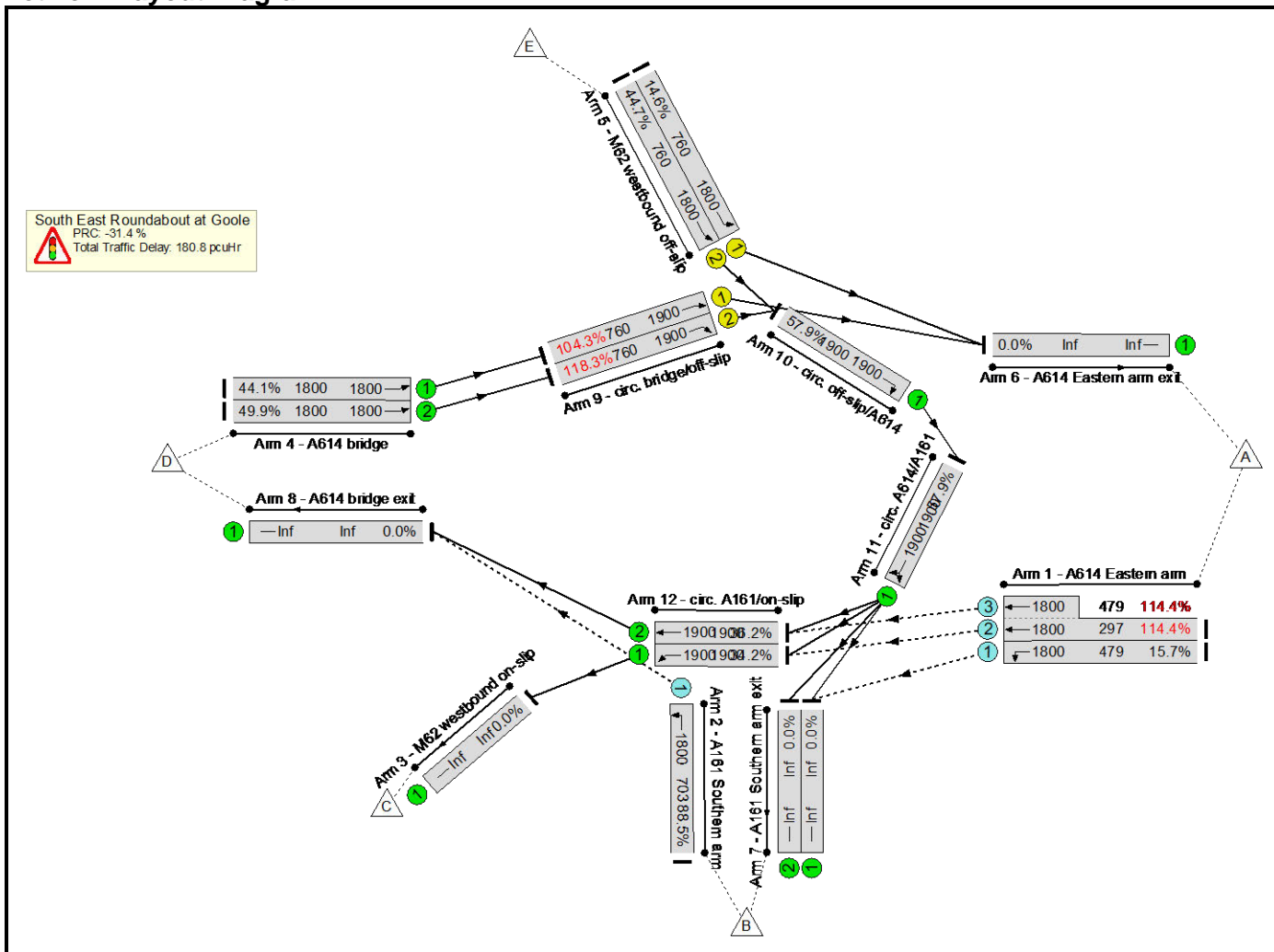
Basic Results Summary

12/2	circ. A161/on-slip Ahead	U	-	-	-	-	729	1900	1900	29.2%	-	-	-	0.2	1.3	0.2
		C1	PRC for Signalled Lanes (%):		-94.4		Total Delay for Signalled Lanes (pcuHr):		315.60		Cycle Time (s):		45			
			PRC Over All Lanes (%):		-94.4		Total Delay Over All Lanes(pcuHr):		477.43							

Basic Results Summary

Scenario 8: '2026 Do Something PM' (FG8: '2026 Do Something PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	118.3%	2335	0	0	180.8	-	-
South East Roundabout at Goole	-	-	-		-	-	-	-	-	-	118.3%	2335	0	0	180.8	-	-
1/1	A614 Eastern arm Left	O	-		-	-	-	75	1800	479	15.7%	75	0	0	0.2	8.3	0.5
1/2+1/3	A614 Eastern arm Ahead	O	-		-	-	-	888	1800:1800	297+479	114.4% : 114.4%	1638	0	0	63.3	256.5	74.4
2/1	A161 Southern arm Left	O	-		-	-	-	622	1800	703	88.5%	622	0	0	4.8	27.6	10.3
4/1	A614 bridge Ahead	U	-		-	-	-	793	1800	1800	44.1%	-	-	-	0.4	1.8	0.4
4/2	A614 bridge Ahead	U	-		-	-	-	899	1800	1800	49.9%	-	-	-	0.5	2.0	0.5
5/1	M62 westbound off-slip Left	U	A		1	18	-	111	1800	760	14.6%	-	-	-	0.3	10.8	0.9
5/2	M62 westbound off-slip Ahead	U	A		1	18	-	340	1800	760	44.7%	-	-	-	1.3	13.5	3.4
9/1	circ. bridge/off-slip Ahead	U	B		1	17	-	793	1900	760	104.3%	-	-	-	28.4	129.1	34.9
9/2	circ. bridge/off-slip Right	U	B		1	17	-	899	1900	760	118.3%	-	-	-	79.7	319.1	86.6
10/1	circ. off-slip/A614 Right	U	-		-	-	-	1239	1900	1900	57.9%	-	-	-	0.7	2.2	0.7
11/1	circ. A614/A161 Ahead Right	U	-		-	-	-	1239	1900	1900	57.9%	-	-	-	0.7	2.2	0.7
12/1	circ. A161/on-slip Ahead	U	-		-	-	-	706	1900	1900	34.2%	-	-	-	0.3	1.4	0.3

Basic Results Summary

12/2	circ. A161/on-slip Ahead	U	-	-	-	-	756	1900	1900	36.2%	-	-	-	0.3	1.5	0.3
		C1	PRC for Signalled Lanes (%):		-31.4		Total Delay for Signalled Lanes (pcuHr):		109.73		Cycle Time (s):		45			
			PRC Over All Lanes (%):		-31.4		Total Delay Over All Lanes(pcuHr):		180.75							

RESPONSE TO NATIONAL HIGHWAYS RELEVANT REPRESENTATIONS (SEPT 2022)

Appendix H – WebTRIS Analysis

Drax Bioenergy with Carbon Capture and Storage

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation (5(2)(q))

Document Reference Number: 8.9.4

Applicant: Drax Power Limited

PINS Reference: EN010120



Counter ID	8992/2			
Description	M62 eastbound (Within Junction 36)			
Year	Peak Daily Flow	Maximum ADT (Month)	Minimum ADT (Month)	Average ADT (Annual)
2018*	24,739	19,588	17,171	18,654
2019*	20,783	17,021	16,181	16,601
2020*	19,195	14,869	14,869	14,869
2021*	N/A	N/A	N/A	N/A
2022*	20,873	17,472	17,472	17,472

2018* data ranges from February to July inclusive.
 2019* data ranges from November to December inclusive.
 2020* only includes January.
 2021* no data available.
 2022* only includes May.

Counter ID	8995/2			
Description	M62 eastbound (Within Junction 36)			
Year	Peak Daily Flow	Maximum ADT (Month)	Minimum ADT (Month)	Average ADT (Annual)
2018	27,830	23,413	18,150	20,990
2019	26,199	23,351	18,246	21,059
2020	25,311	20,647	6,727	15,903
2021	27,835	23,100	11,160	18,398
2022*	25,306	22,023	16,615	19,814

2022* January - November inclusive.

Counter ID	8994/2			
Description	M62 eastbound (Within Junction 37)			
Year	Peak Daily Flow	Maximum AADF (Month)	Minimum AADF (Month)	Average AADF (Annual)
2018	24,235	19,011	15,016	17,260
2019	23,259	18,576	15,152	17,083
2020	22,358	16,492	5,735	12,871
2021	23,349	16,865	9,350	14,382
2022*	20,501	16,162	11,745	14,324

*2022 data ranges from January to April inclusive.

Counter ID	8993/3			
Description	M62 westbound (Within Junction 37)			
Year	Peak Daily Flow	Maximum AADF (Month)	Minimum AADF (Month)	Average AADF (Annual)
2018*	20,622	18,230	15,065	17,156
2019	21,336	18,297	15,261	17,303
2020*	24,670	16,839	5,747	12,573
2021	20,220	18,148	9,614	14,769
2022*	19,880	17,133	5,721	14,052

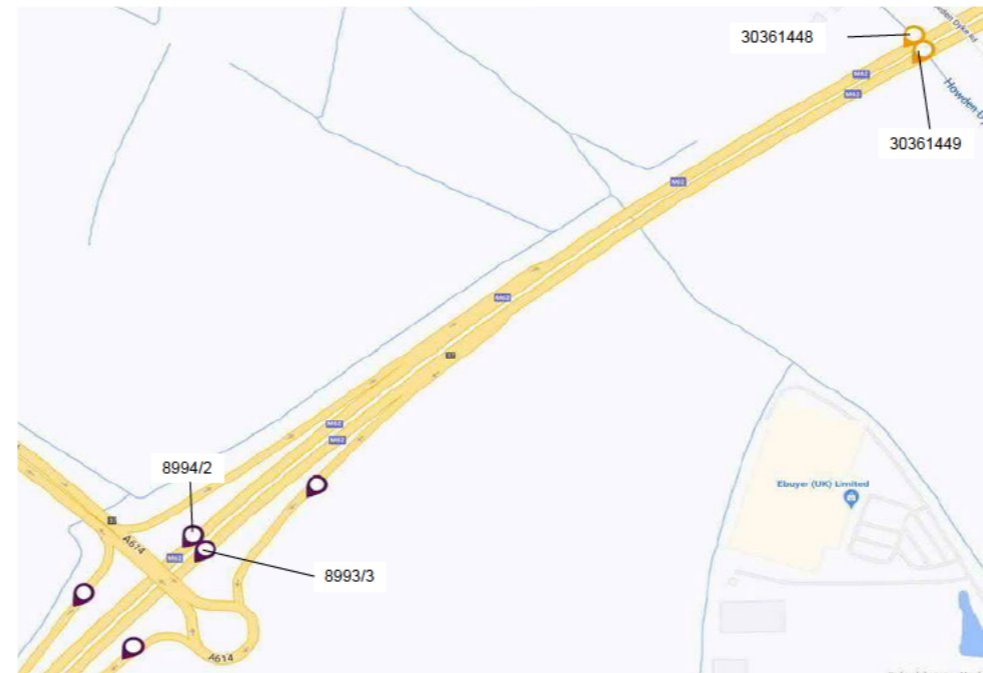
*2018 data ranges from September to December inclusive.
 *2020 data ranges from January to July inclusive.
 *2022 data ranges from January to July inclusive.

Counter ID	30361448			
Description	M62 eastbound (Between Junction 37 and Junction 38)			
Year	Peak Daily Flow	Maximum AADF (Month)	Minimum AADF (Month)	Average AADF (Annual)
2018	27,384	21,872	17,369	19,959
2019	26,386	21,978	18,053	20,114
2020	25,424	19,007	6,457	15,263
2021	25,891	18,833	11,159	15,699
2022*	22,244	19,611	15,486	17,946

*2021 data - September is excluded from the data.
 *2022 data ranges from January to July inclusive.

Counter ID	30361449			
Description	M62 eastbound			
Year	Peak Daily Flow	Maximum AADF (Month)	Minimum AADF (Month)	Average AADF (Annual)
2018	24,665	21,043	12,051	18,345
2019	23,696	21,820	12,263	18,826
2020	21,901	18,261	6,605	11,461
2021*	22,398	19,993	5,186	14,035
2022*				

*2018 data - March is excluded from the data.
 *2019 data ranges from January to November inclusive.
 *2020 data ranges from March to August inclusive and includes December.
 *2021 data ranges from January to July inclusive.
 *2022 data - no data available.



RESPONSE TO NATIONAL HIGHWAYS RELEVANT REPRESENTATIONS (SEPT 2022)

Appendix I – Traffic Flow Diagrams – Realistic Alternative Demand

Drax Bioenergy with Carbon Capture and Storage

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 –
Regulation (5(2)(q))

Document Reference Number: 8.9.4

Applicant: Drax Power Limited

PINS Reference: EN010120



Existing Layout							
AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
0700 - 0800	2286	2256	4543	1600 - 1700	2433	2539	4972
0715 - 0815	2473	2528	5001	1615 - 1715	2588	2667	5256
0730 - 0830	2563	2669	5231	1630 - 1730	2676	2672	5348
0745 - 0845	2550	2654	5204	1645 - 1745	2673	2638	5311
0800 - 0900	2475	2584	5059	1700 - 1800	2625	2557	5181
0815 - 0915	2336	2417	4753	1715 - 1815	2372	2288	4661
0830 - 0930	2154	2215	4369	1730 - 1830	2138	1816	3954
0845 - 0945	2031	2085	4116	1745 - 1845	1897	1816	3713
0900 - 1000	1906	1951	3857	1800 - 1900	1671	1458	3129
AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
0700 - 0800	2286	2256	4543	1600 - 1700	2433	2539	4972
0715 - 0815	2473	2528	5001	1615 - 1715	2588	2667	5256
0730 - 0830	2563	2669	5231	1630 - 1730	2676	2672	5348
0745 - 0845	2550	2654	5204	1645 - 1745	2673	2638	5311
0800 - 0900	2475	2584	5059	1700 - 1800	2625	2557	5181
0815 - 0915	2336	2417	4753	1715 - 1815	2372	2288	4661
0830 - 0930	2154	2215	4369	1730 - 1830	2138	1816	3954
0845 - 0945	2031	2085	4116	1745 - 1845	1897	1816	3713
0900 - 1000	1906	1951	3857	1800 - 1900	1671	1458	3129
AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
0700 - 0800	2354	2323	4678	1600 - 1700	2503	2611	5114
0715 - 0815	2546	2603	5149	1615 - 1715	2662	2743	5406
0730 - 0830	2639	2748	5386	1630 - 1730	2753	2749	5501
0745 - 0845	2625	2733	5358	1645 - 1745	2749	2713	5463
0800 - 0900	2549	2660	5209	1700 - 1800	2700	2630	5330
0815 - 0915	2405	2489	4894	1715 - 1815	2440	2354	4794
0830 - 0930	2218	2281	4498	1730 - 1830	2199	1868	4067
0845 - 0945	2091	2147	4238	1745 - 1845	1951	1868	3819
0900 - 1000	1962	2009	3971	1800 - 1900	1718	1500	3218
AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
0700 - 0800	2571	2370	4941	1600 - 1700	2584	2663	5248
0715 - 0815	2729	2646	5375	1615 - 1715	2748	2799	5547
0730 - 0830	2788	2782	5574	1630 - 1730	2842	2807	5649
0745 - 0845	2741	2767	5508	1645 - 1745	2842	2775	5617
0800 - 0900	2630	2690	5320	1700 - 1800	2797	2695	5491
0815 - 0915	2483	25 8	5002	1715 - 1815	2578	2455	5033
0830 - 0930	2292	2309	4601	1730 - 1830	2378	2005	4383
0845 - 0945	2 62	2175	4337	1745 - 1845	2171	2041	4212
0900 - 1000	2029	2037	4066	1800 - 1900	1980	1709	3689
AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
0700 - 0800	2911	3256	6168	1600 - 1700	2974	3660	6634
0715 - 0815	3133	35 6	6669	1615 - 1715	3134	3792	6926
0730 - 0830	3281	3735	7015	1630 - 1730	3232	3809	7041
0745 - 0845	3267	3720	6987	1645 - 1745	3229	3774	7003
0800 - 0900	3191	3647	6838	1700 - 1800	3180	3690	6870
0815 - 0915	3047	3476	6523	1715 - 1815	2920	3414	6334
0830 - 0930	2860	3267	6127	1730 - 1830	2679	2928	5607
0845 - 0945	2713	3101	5814	1745 - 1845	2391	2889	5280
0900 - 1000	2584	2963	5548	1800 - 1900	2158	2521	4679
AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
0700 - 0800	3158	3304	6462	1600 - 1700	3056	3712	6767
0715 - 0815	3316	3579	6895	1615 - 1715	3219	3847	7066
0730 - 0830	3430	3773	7203	1630 - 1730	3322	3867	7189
0745 - 0845	3 83	3754	7137	1645 - 1745	3322	3835	7158
0800 - 0900	3272	3676	6949	1700 - 1800	3277	3755	7032
0815 - 0915	3125	3505	6630	1715 - 1815	3058	3515	6573
0830 - 0930	2934	3296	6230	1730 - 1830	2858	3065	5923
0845 - 0945	2784	3129	5913	1745 - 1845	2611	3062	5673
0900 - 1000	2651	2991	5642	1800 - 1900	2420	2730	5150

Sensitivity Tests

2026 Do Something (with 0700 - 0800 and 1600 - 1700 Development Flows)	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
Development Flows	0730 - 0830	3497	3782	7279	1630 - 1730	3314	3861	7175
2026 Do Something (with 0800 - 0900 and 1700 - 1800 Development Flows)	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
Development Flows	0730 - 0830	3 62	3764	7126	1630 - 1730	3329	3874	7203

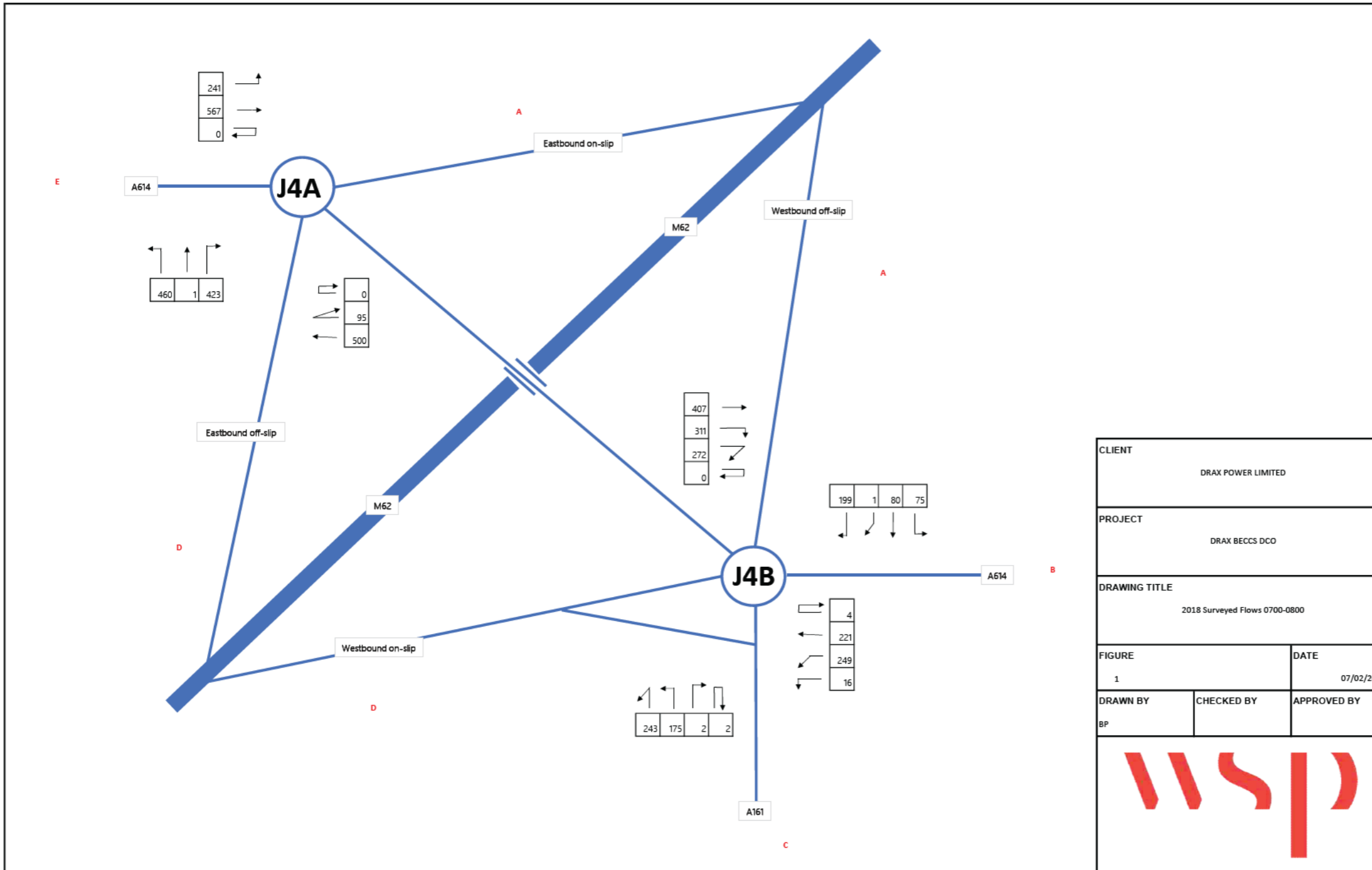
Committed Development Trips

838 Residential	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
	0700 - 0800	29	50	79	1600 - 1700	54	78	132
	0800 - 0900	42	75	117	1700 - 1800	61	89	150
	0900 - 1000	27	46	73	1800 - 1900	48	68	116
Siemens	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
AM Peak Hour	517	877	1394	PM Peak Hour	365	981	1346	
Employment Units	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
	0700 - 0800	22	15	38	1600 - 1700	46	32	78
	0800 - 0900	40	28	68	1700 - 1800	47	32	79
	0900 - 1000	40	28	68	1800 - 1900	21	14	35
Drive Thru	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
	0700 - 0800	49	34	82	1600 - 1700	65	45	110
	0800 - 0900	72	50	122	1700 - 1800	66	45	111
	0900 - 1000	67	47	114	1800 - 1900	65	45	111
BB Distribution	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
AM Peak Hour	0	0	0	PM Peak Hour	0	0	0	
Eggborough	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
AM Peak Hour	0	0	0	PM Peak Hour	0	0	0	
Barlow Mound	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
AM Peak Hour	0	0	0	PM Peak Hour	0	0	0	
Car Showroom	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
AM Peak Hour	-11	-15	-26	PM Peak Hour	-8	-13	-22	
A3 / A4 / A5	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
AM Peak Hour	0	0	0	PM Peak Hour	-27	-40	-67	
Hotel	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
AM Peak Hour	-18	-28	-46	PM Peak Hour	-23	-34	-57	

Development Trips

Development Trips	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
Development Trips	0700 - 0800	217	47	264	1600 - 1700	82	52	134
	0715 - 0815	83	43	226	1615 - 1715	86	55	141
	0730 - 0830	149	38	188	1630 - 1730	89	59	148
	0745 - 0845	116	34	150	1645 - 1745	93	62	155
	0800 - 0900	82	29	111	1700 - 1800	97	65	162
	0815 - 0915	78	29	107	1715 - 1815	138	101	239
	0830 - 0930	74	29	103	1730 - 1830	179	137	316
	0845 - 0945	71	28	99	1745 - 1845	221	173	393
	0900 - 1000	67	28	95	1800 - 1900	262	209	471

Minor Improvement Scheme								
	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
2018 Baseline	0730 - 0830	2574	2680	5254	1630 - 1730	2695	2691	5386
2022 Baseline	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
	0730 - 0830	2574	2680	5254	1630 - 1730	2695	2691	5386
2026 Future Baseline	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
AM	0730 - 0830	2650	2759	5410	1630 - 1730	2772	2768	5540
PM	1.0297							
2026 Future Baseline - Development	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
	0730 - 0830	2800	2798	5597	1630 - 1730	2861	2826	5688
Development Trips (%)								
4A 4B	AM Period	PM Period						
	6%	3%						
	4%	3%						
	3%	3%						
	3%	3%						
	2%	3%						
	2%	5%						
	2%	8%						
	2%	10%						
	2%	15%						
2026 Do Minimum	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
	0730 - 0830	3322	3776	7098	1630 - 1730	3346	3922	7268
2026 Do Something	AM Period	4A	4B	4A 4B	PM Period	4A	4B	4A 4B
	0730 - 0830	3472	3802	7274	1630 - 1730	3435	3947	7382




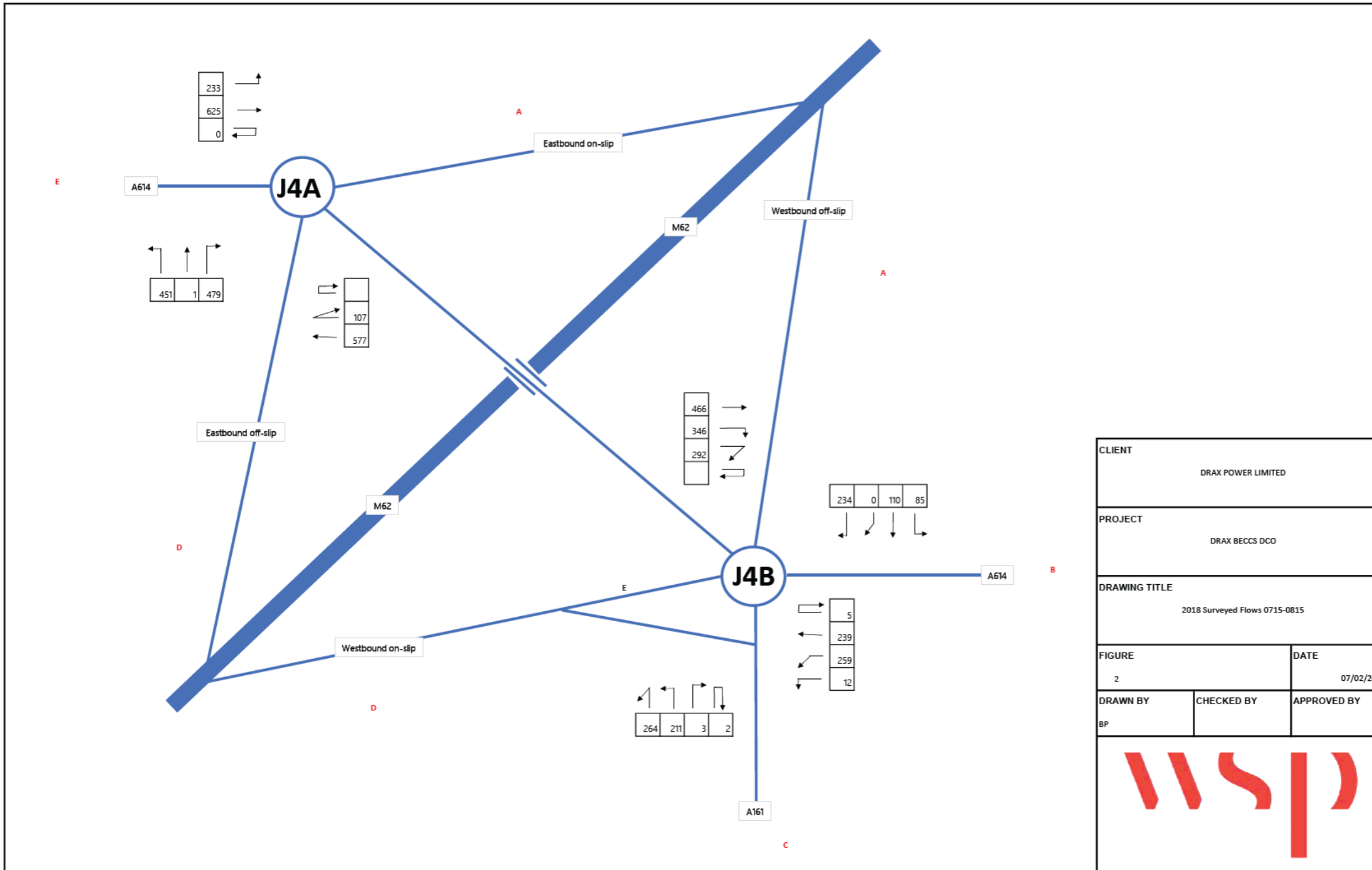
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	241	567	-	2286
B	-	-	-	-	
C	500	95	0	-	
D	460	1	423	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	407	311	272	2256
B	199	-	75	80	1	
C	221	-	4	16	249	
D	175	-	2	2	243	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 0700-0800		
FIGURE	DATE	
1	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




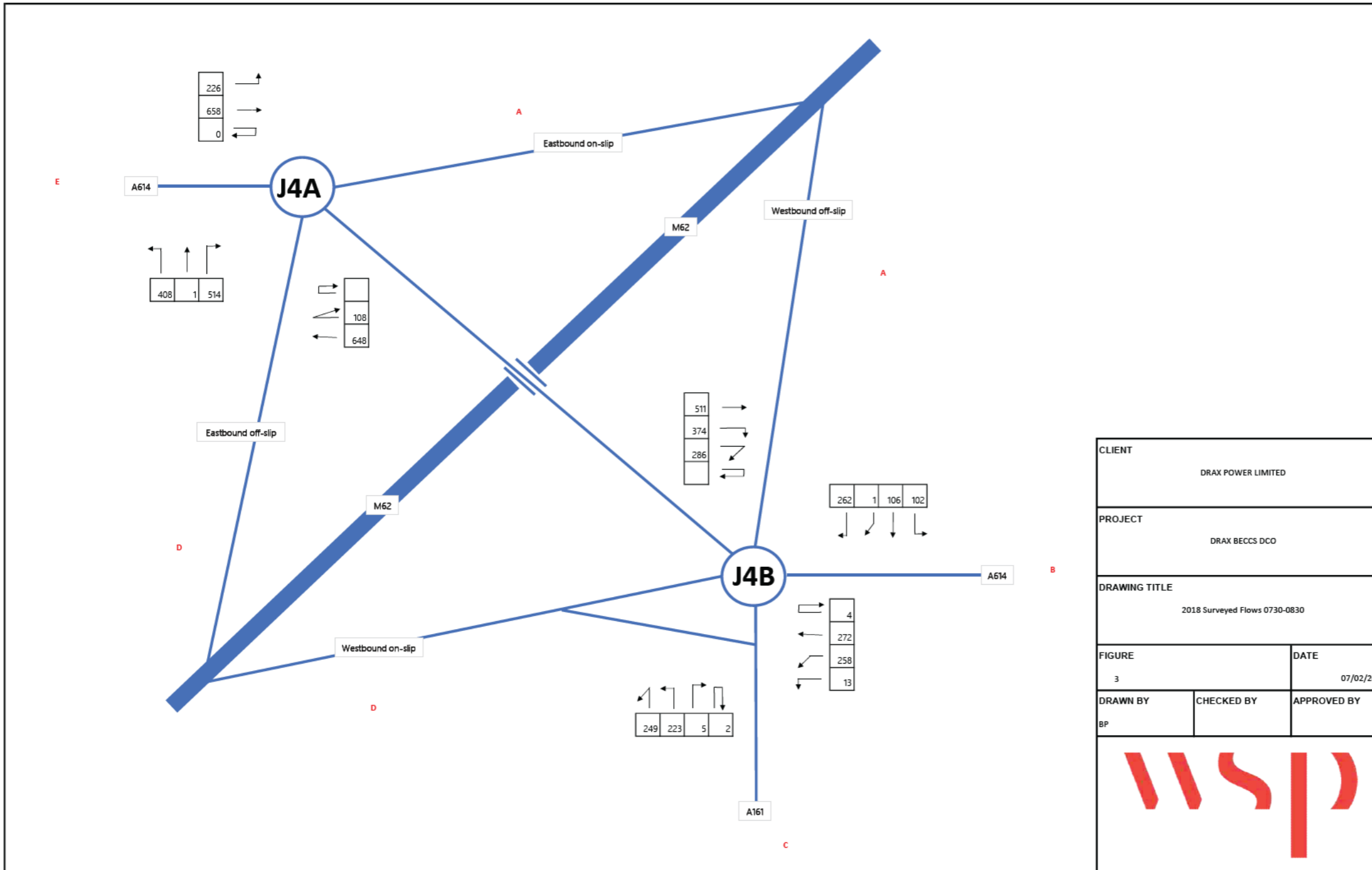
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	233	625	-	2473
B	-	-	-	-	
C	577	107	0	-	
D	451	1	479	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	466	346	292	2528
B	234	-	85	110	0	
C	239	-	5	12	259	
D	211	-	3	2	264	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 0715-0815		
FIGURE	DATE	
2	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




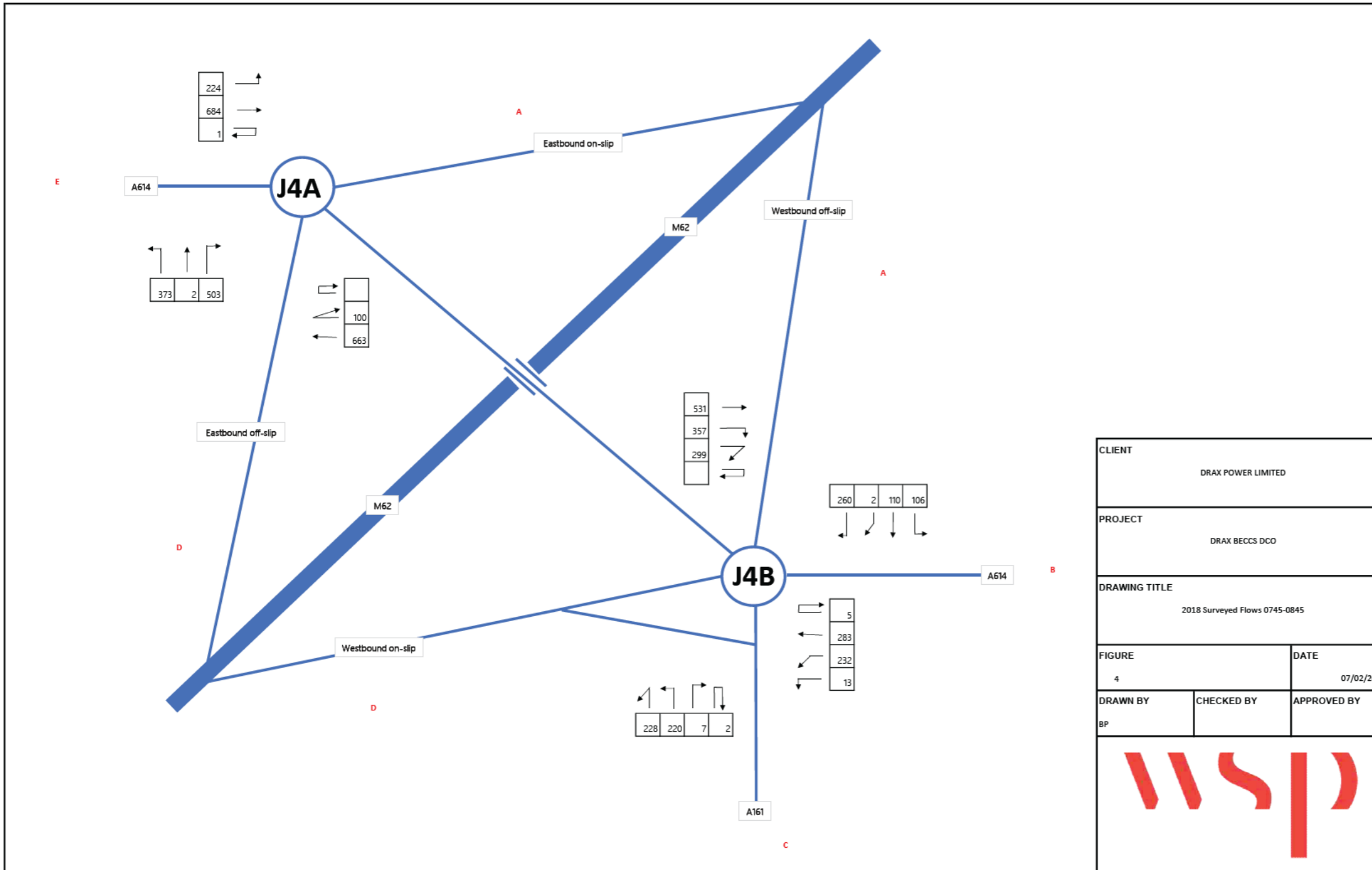
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	226	658	-	2563
B	-	-	-	-	
C	648	108	0	-	
D	408	1	514	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	511	374	286	2669
B	262	-	102	106	1	
C	272	-	4	13	258	
D	223	-	5	2	249	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 0730-0830		
FIGURE	DATE	
3	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




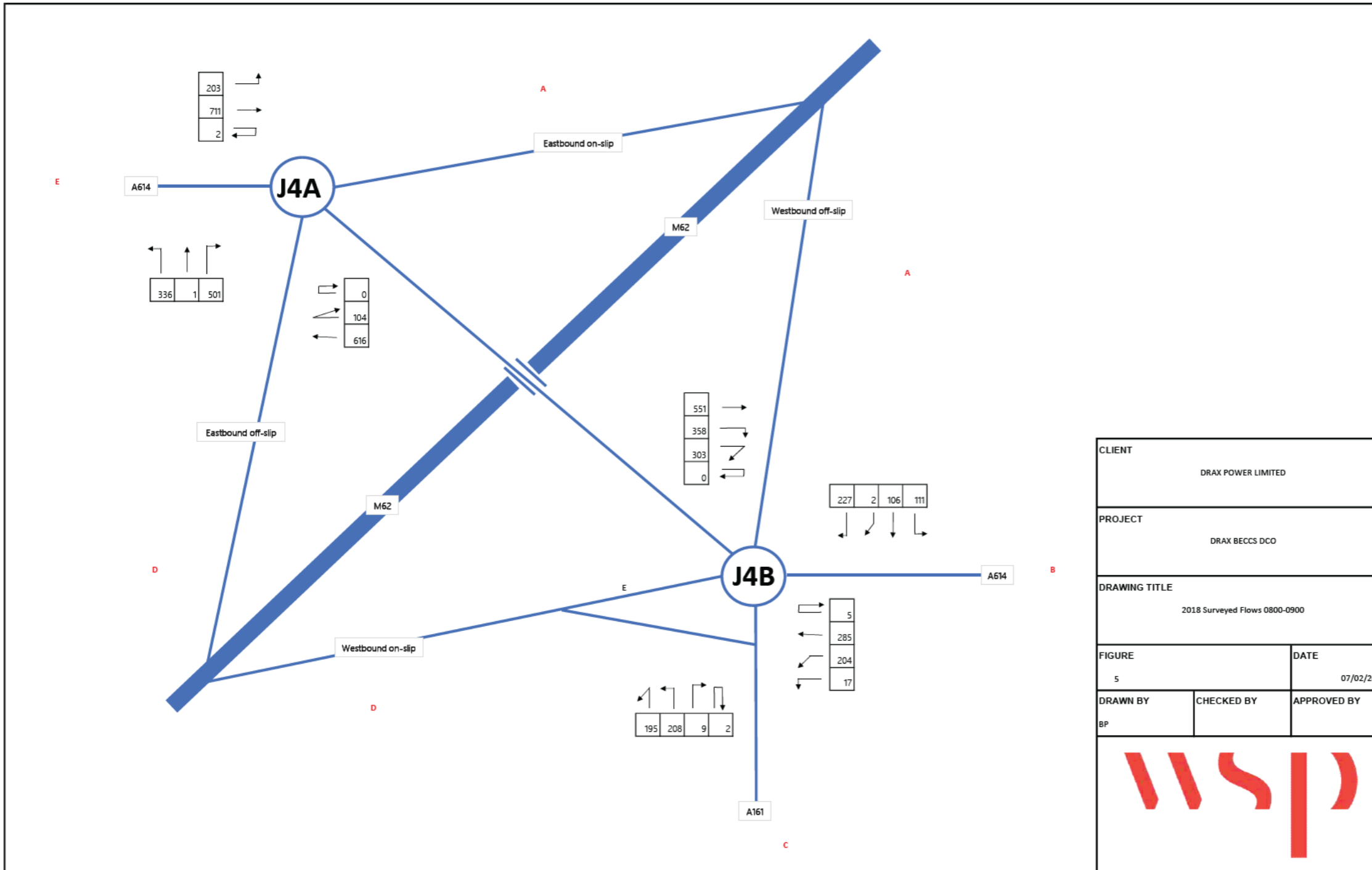
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	1	224	684	-	2550
B	-	-	-	-	
C	663	100	0	-	
D	373	2	503	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	531	357	299	2654
B	260	-	106	110	2	
C	283	-	5	13	232	
D	220	-	7	2	228	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 0745-0845		
FIGURE	DATE	
4	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




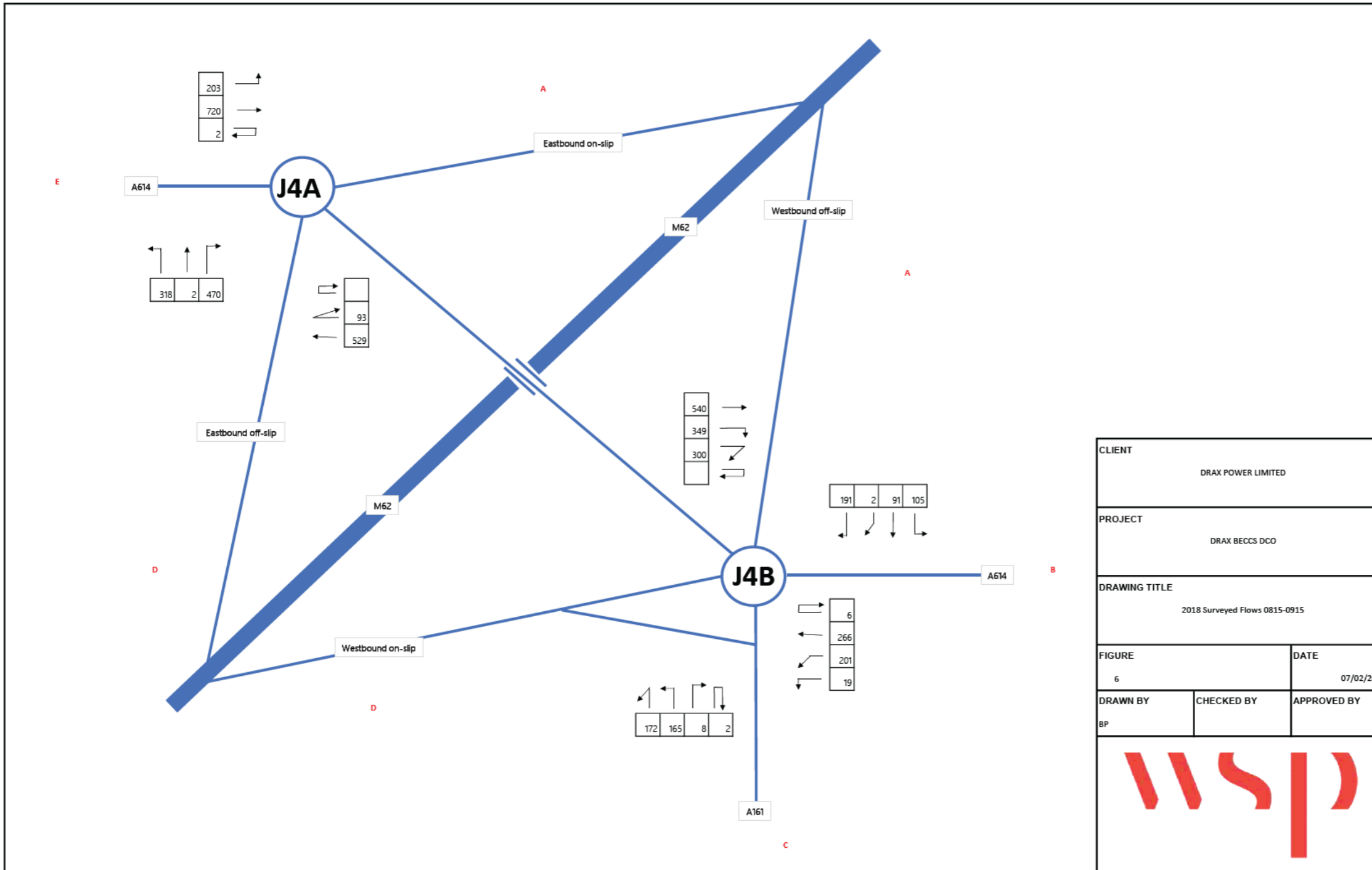
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	2	203	711	-	2475
B	-	-	-	-	
C	616	104	0	-	
D	336	1	501	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	551	358	303	2584
B	227	-	111	106	2	
C	285	-	5	17	204	
D	208	-	9	2	195	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 0800-0900		
FIGURE	DATE	
5	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




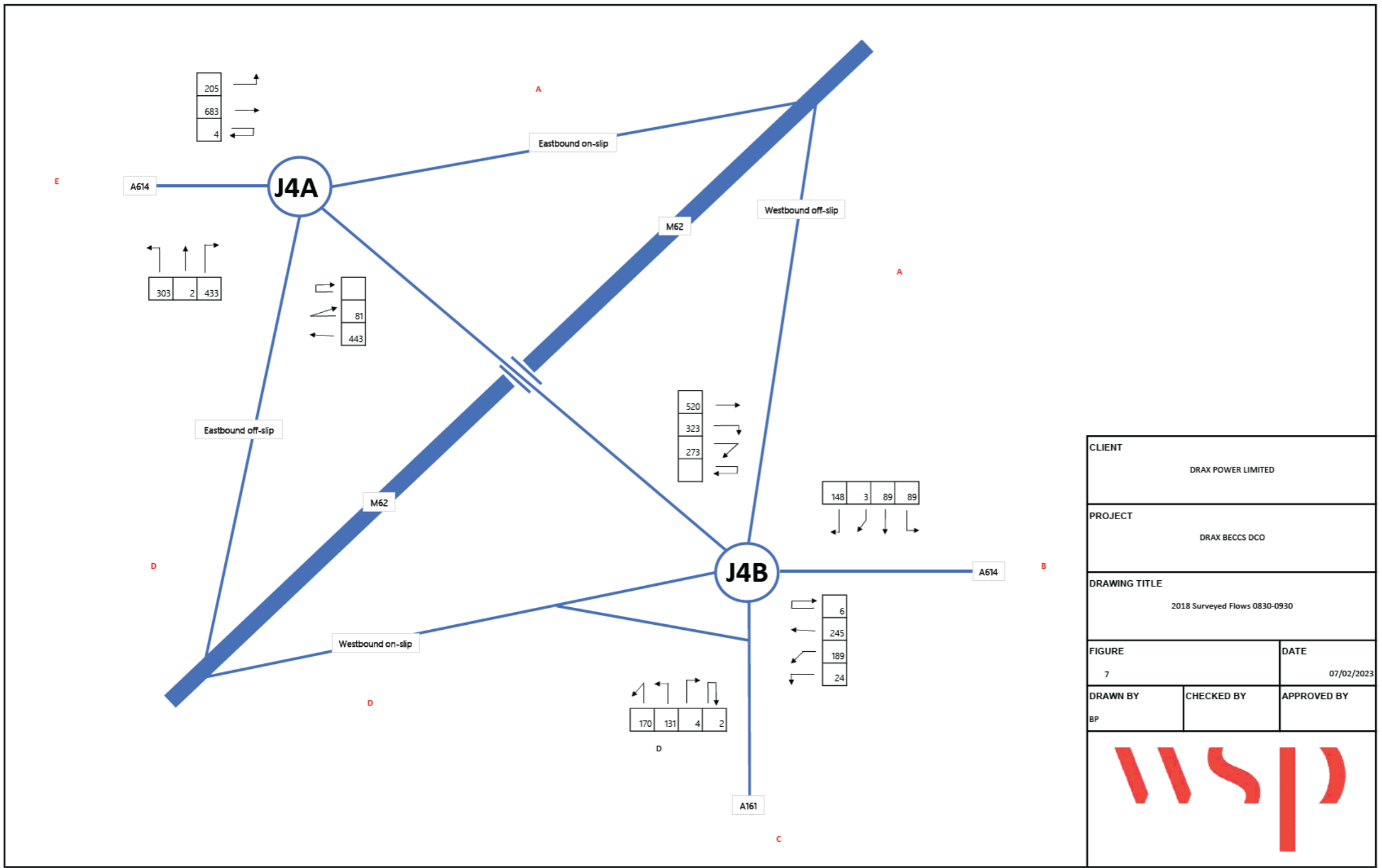
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	2	203	720	-	2336
B	-	-	-	-	
C	529	93	0	-	
D	318	2	470	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	540	349	300	2417
B	191	-	105	91	2	
C	266	-	6	19	201	
D	165	-	8	2	172	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 0815-0915		
FIGURE	DATE	
6	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
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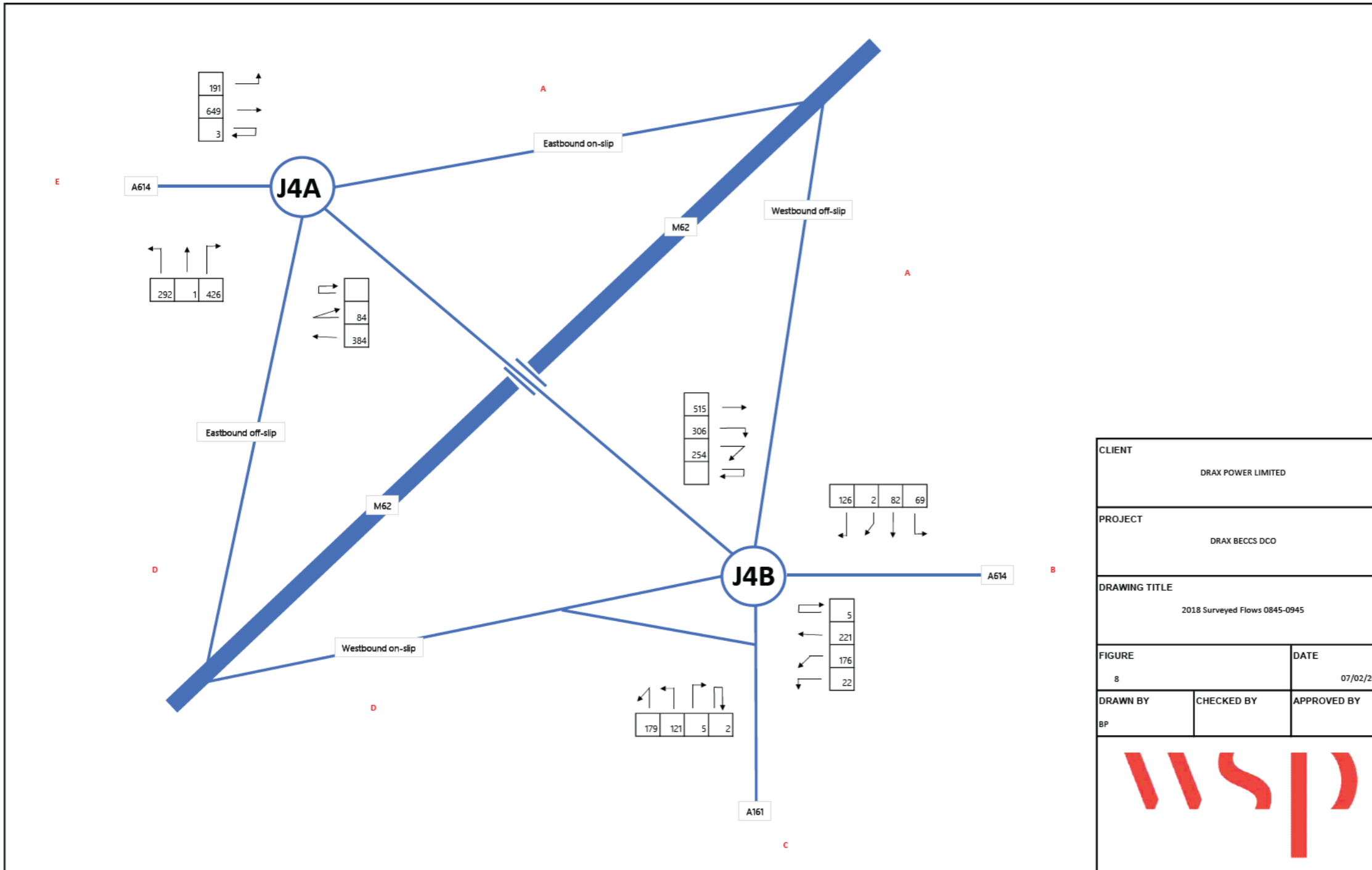
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	4	205	683	-	2154
B	-	-	-	-	
C	443	81	0	-	
D	303	2	433	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	520	323	273	2215
B	148	-	89	89	3	
C	245	-	6	24	189	
D	131	-	4	2	170	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 0830-0930		
FIGURE	DATE	
7	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




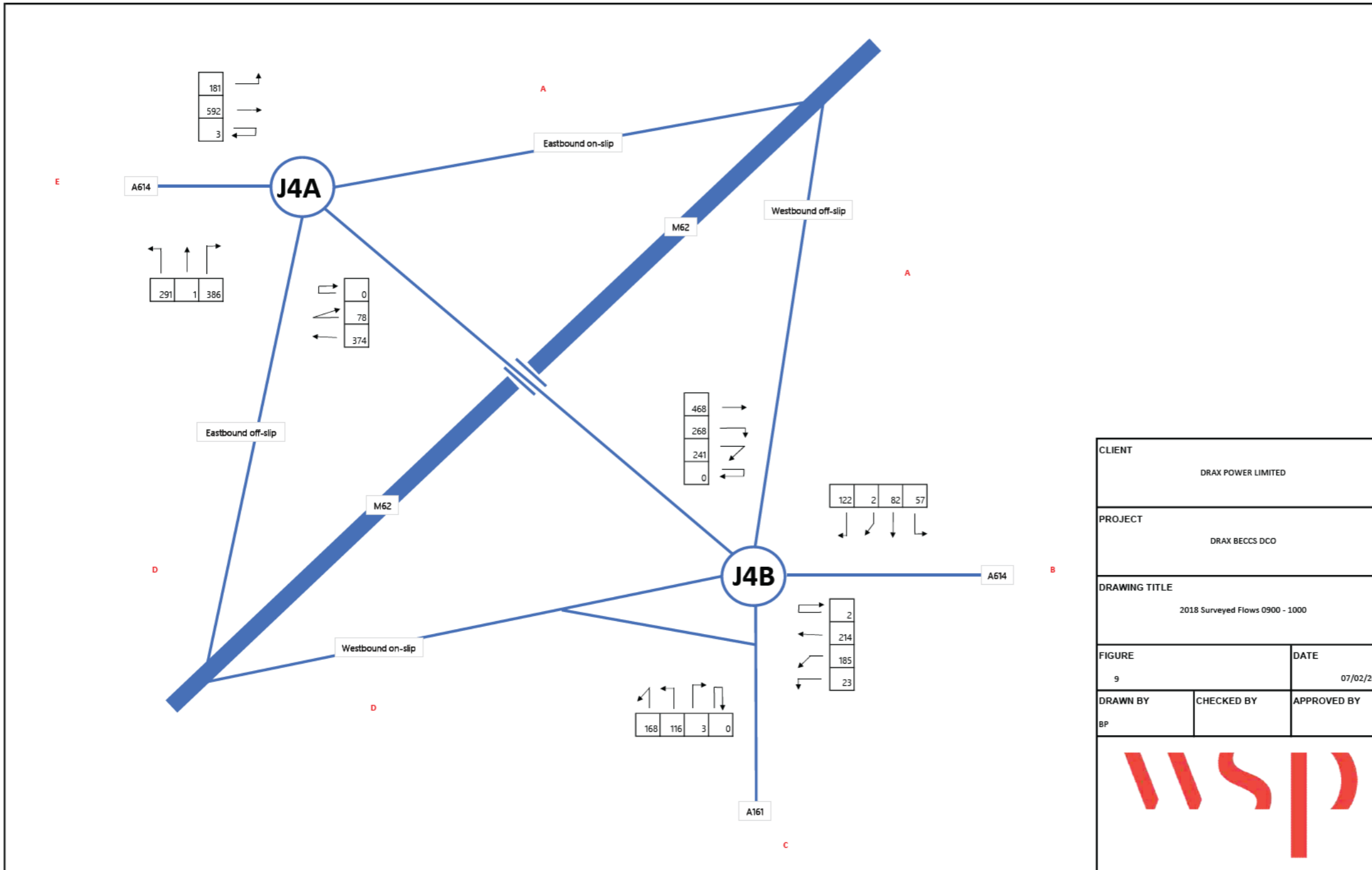
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	3	191	649	-	2031
B	-	-	-	-	
C	384	84	0	-	
D	292	1	426	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	515	306	254	2085
B	126	-	69	82	2	
C	221	-	5	22	176	
D	121	-	5	2	179	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 0845-0945		
FIGURE	DATE	
8	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




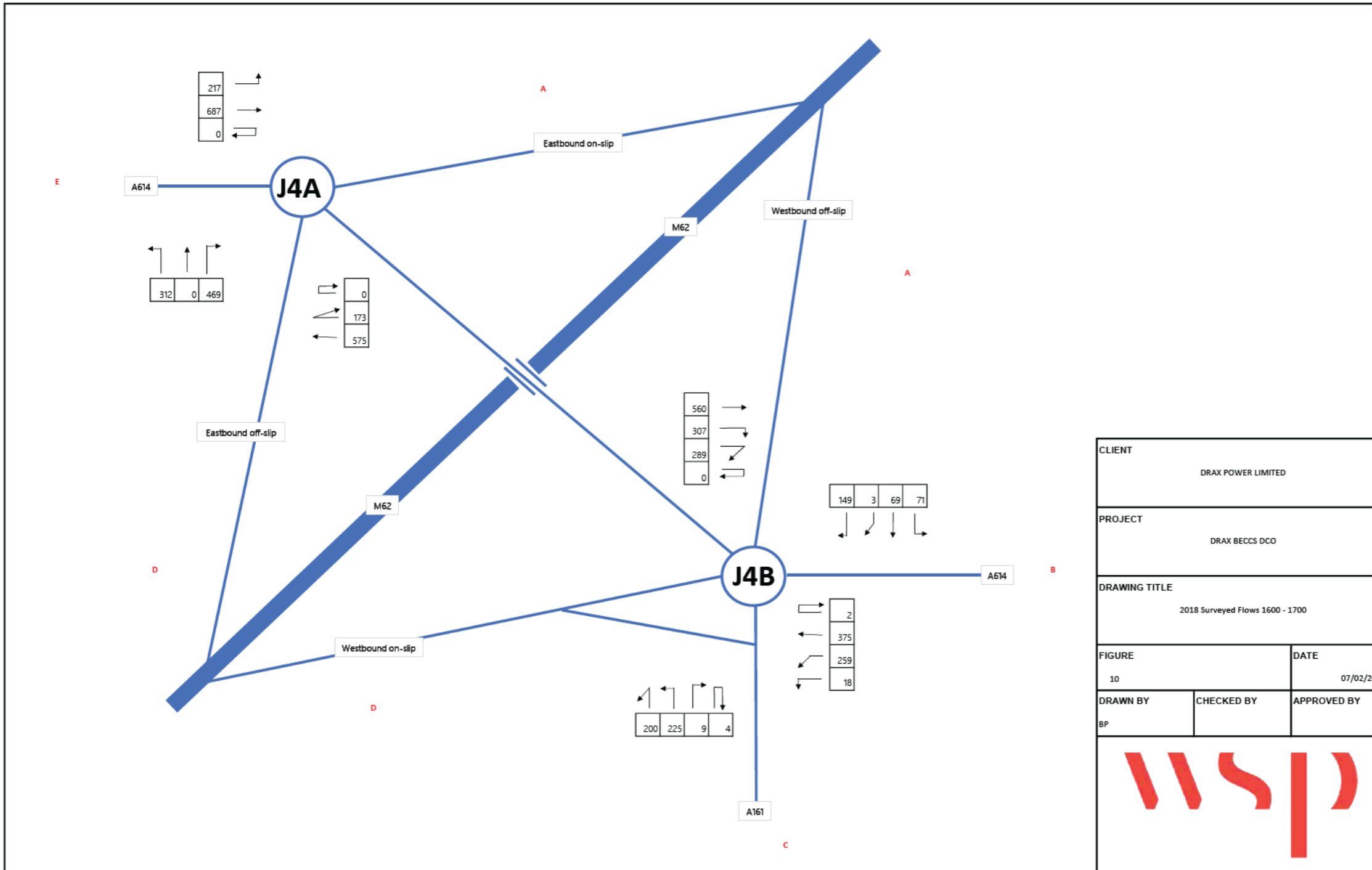
J4A M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	3	181	592	-	1906
B	-	-	-	-	
C	374	78	0	-	
D	291	1	386	-	

J4B M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	468	268	241	1951
B	122	-	57	82	2	
C	214	-	2	23	185	
D	116	-	3	0	168	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 0900 - 1000		
FIGURE	DATE	
9	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




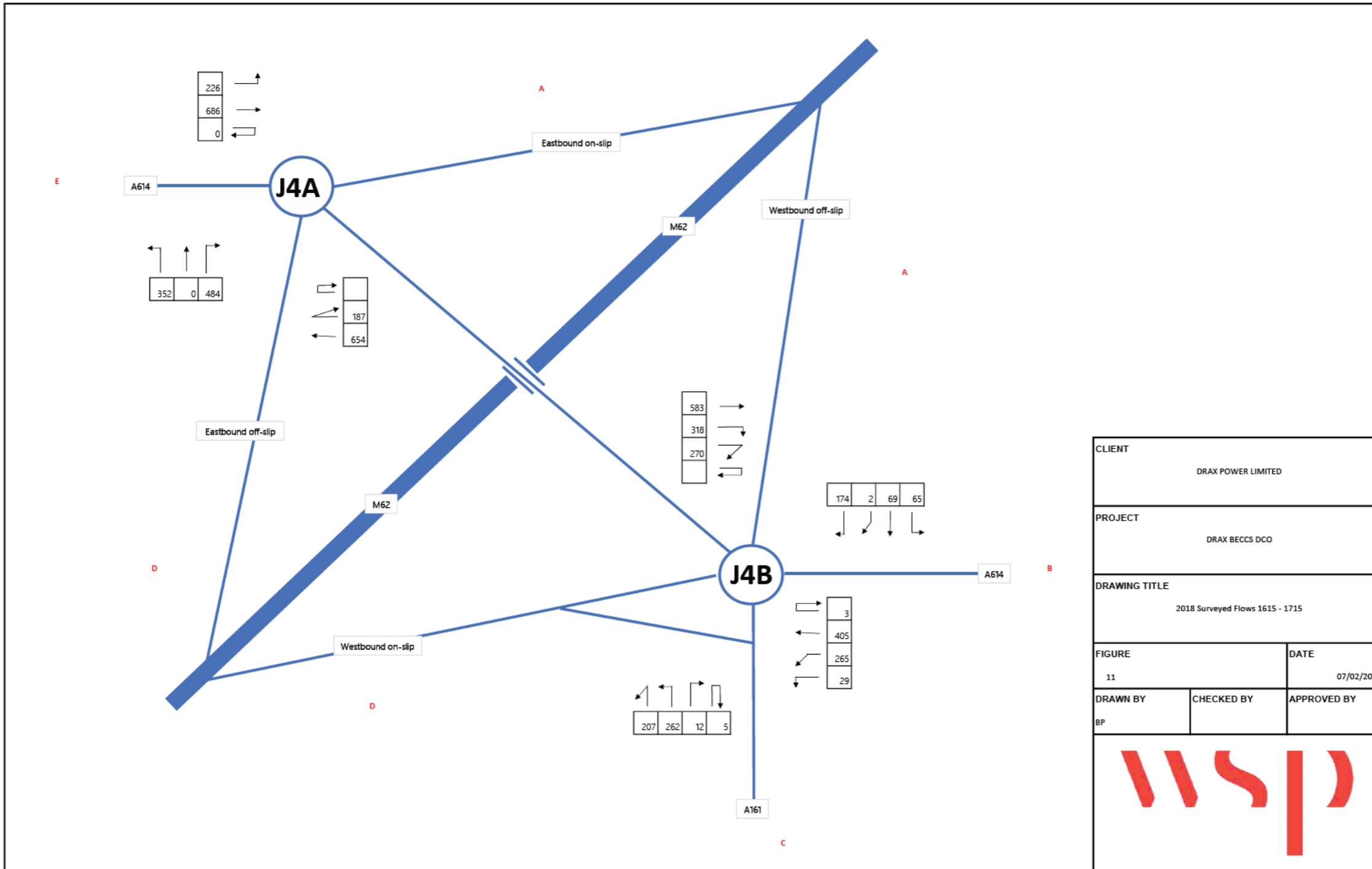
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	217	687	-	2433
B	-	-	-	-	
C	575	173	0	-	
D	312	0	469	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	560	307	289	2539
B	149	-	71	69	3	
C	375	-	2	18	259	
D	225	-	9	4	200	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 1600 - 1700		
FIGURE	DATE	
10	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




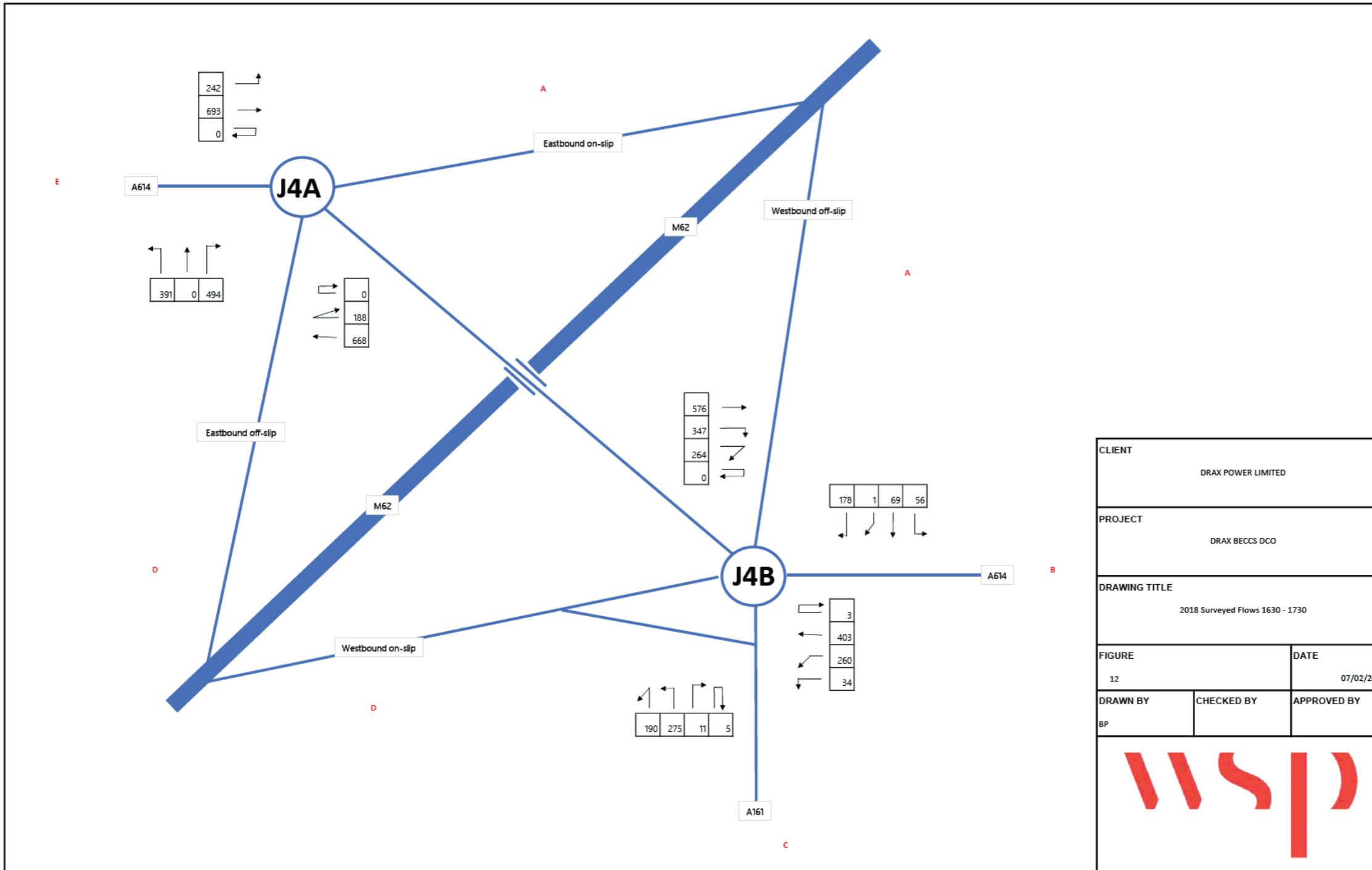
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	226	686	-	2588
B	-	-	-	-	
C	654	187	0	-	
D	352	0	484	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	583	318	270	2667
B	174	-	65	69	2	
C	405	-	3	29	265	
D	262	-	12	5	207	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 1615 - 1715		
FIGURE	DATE	
11	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




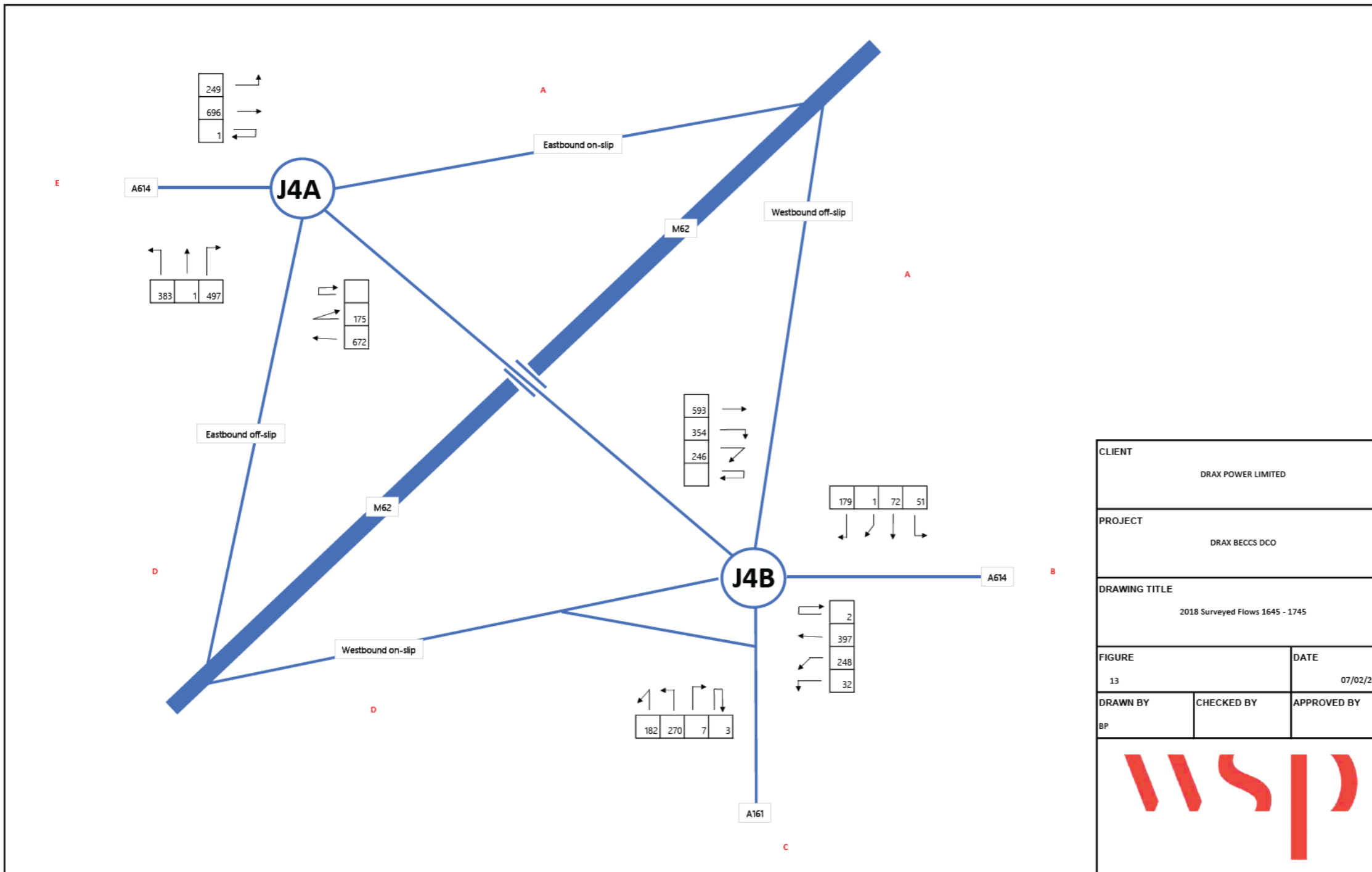
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	242	693	-	2676
B	-	-	-	-	
C	668	188	0	-	
D	391	0	494	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	576	347	264	2672
B	178	-	56	69	1	
C	403	-	3	34	260	
D	275	-	11	5	190	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 1630 - 1730		
FIGURE	DATE	
12	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




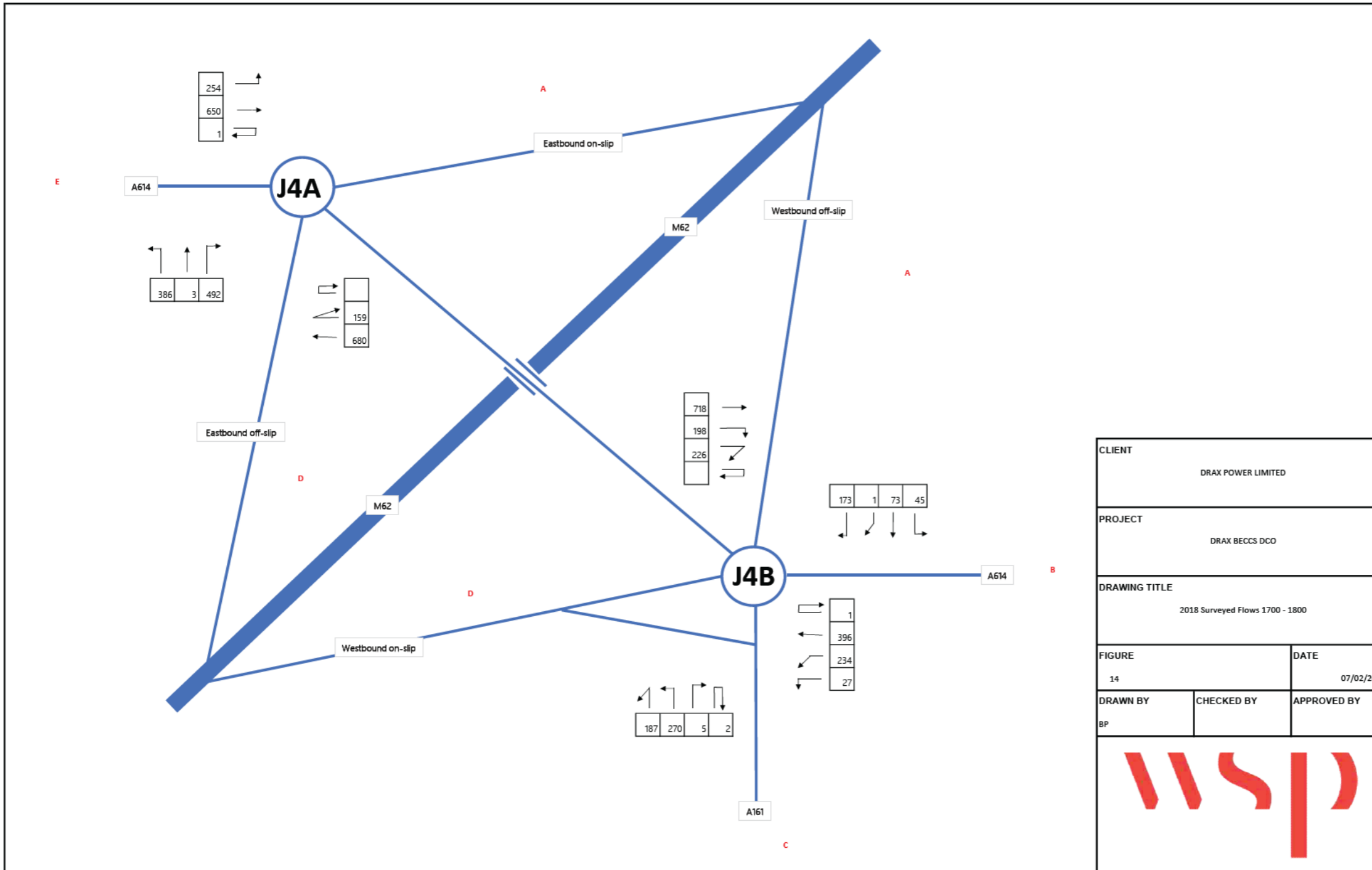
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	1	249	696	-	2673
B	-	-	-	-	
C	672	175	0	-	
D	383	1	497	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	593	354	246	2638
B	179	-	51	72	1	
C	397	-	2	32	248	
D	270	-	7	3	182	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 1645 - 1745		
FIGURE	DATE	
13	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




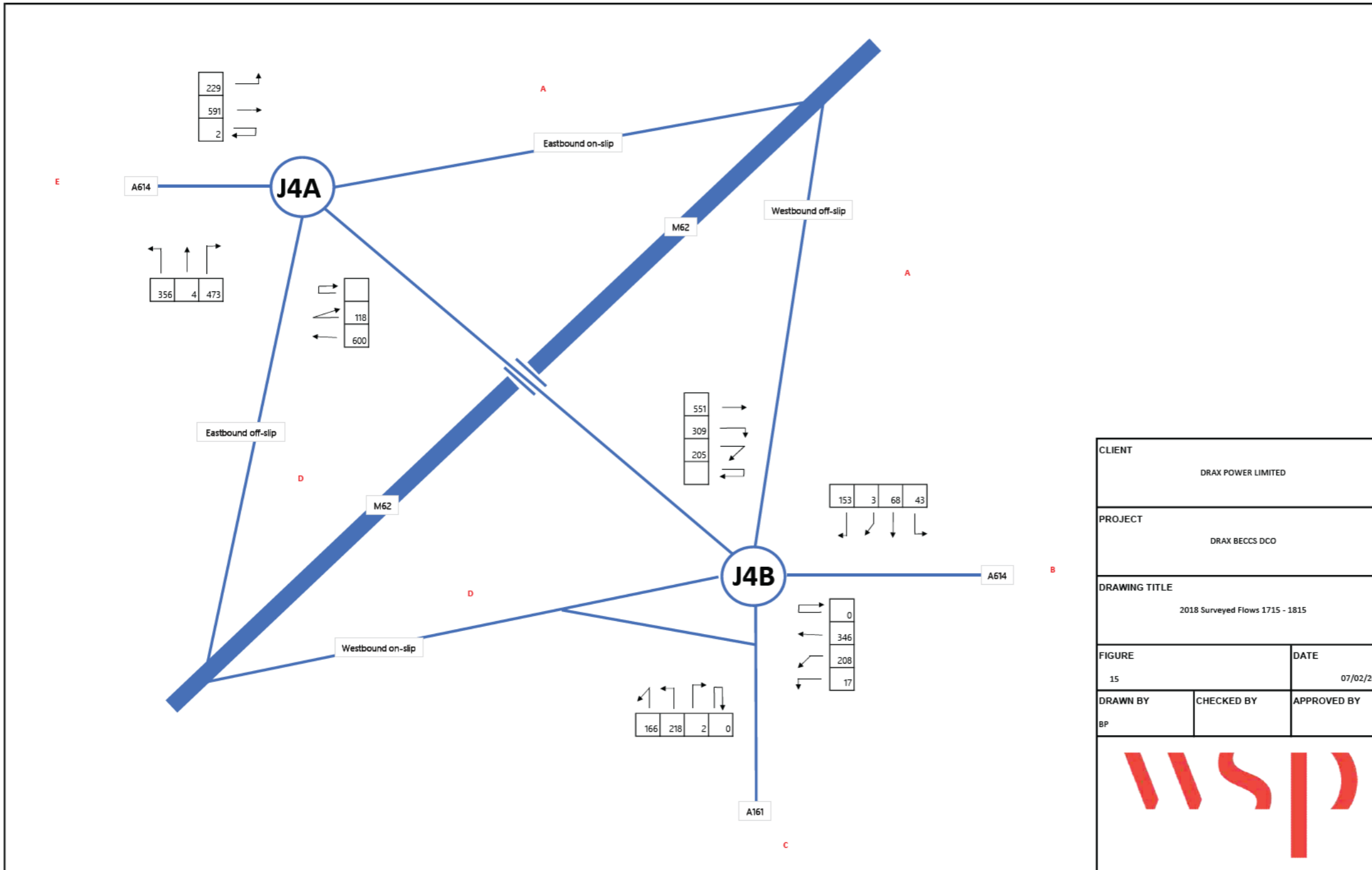
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	1	254	650	-	2625
B	-	-	-	-	
C	680	159	0	-	
D	386	3	492	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	718	198	226	2557
B	173	-	45	73	1	
C	396	-	1	27	234	
D	270	-	5	2	187	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 1700 - 1800		
FIGURE	DATE	
14	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




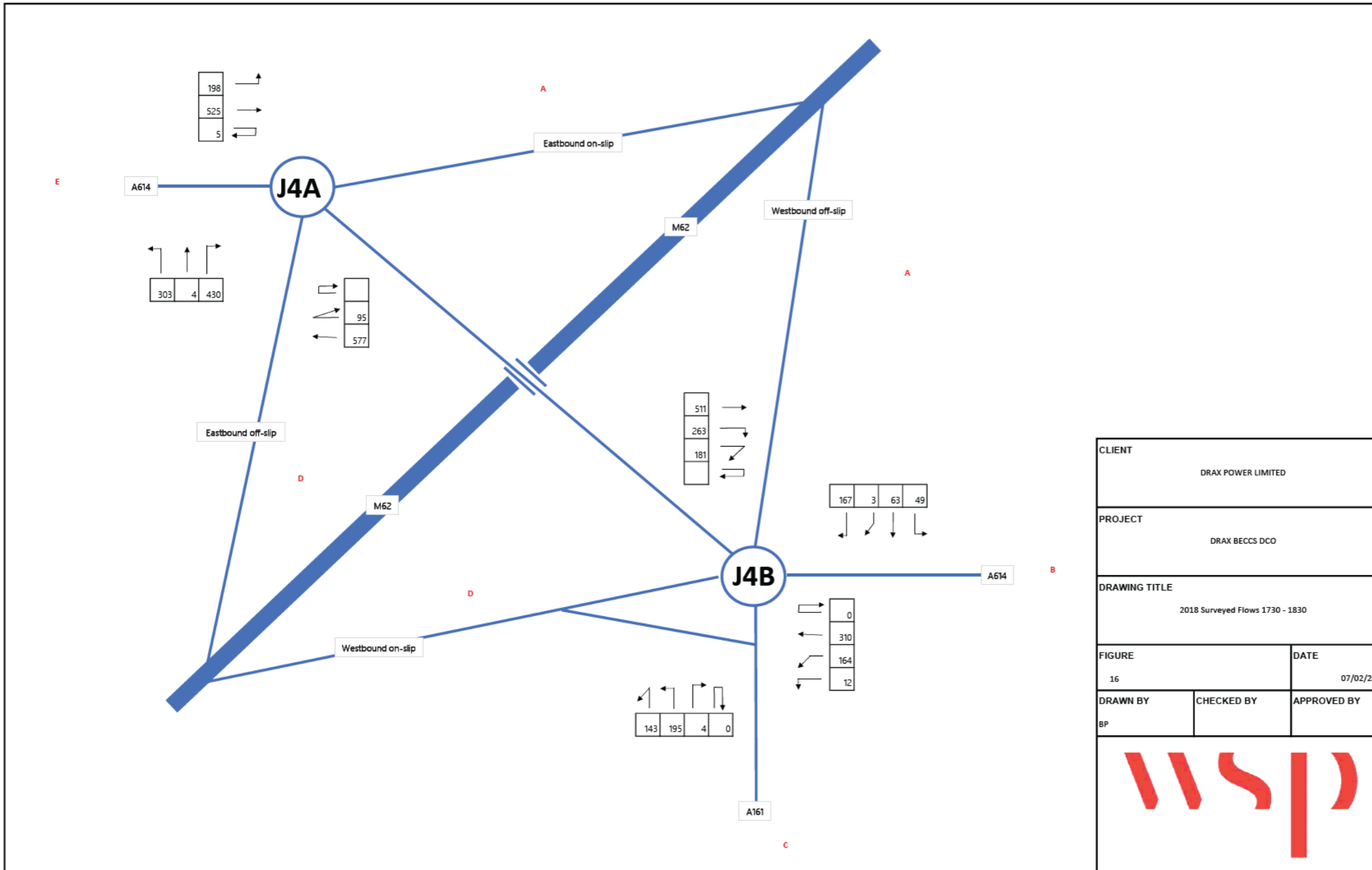
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	2	229	591	-	2372
B	-	-	-	-	
C	600	118	0	-	
D	356	4	473	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	551	309	205	2288
B	153	-	43	68	3	
C	346	-	0	17	208	
D	218	-	2	0	166	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 1715 - 1815		
FIGURE	DATE	
15	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		



J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT


	A	B	C	D
A	5	198	525	-
B	-	-	-	-
C	577	95	0	-
D	303	4	430	-

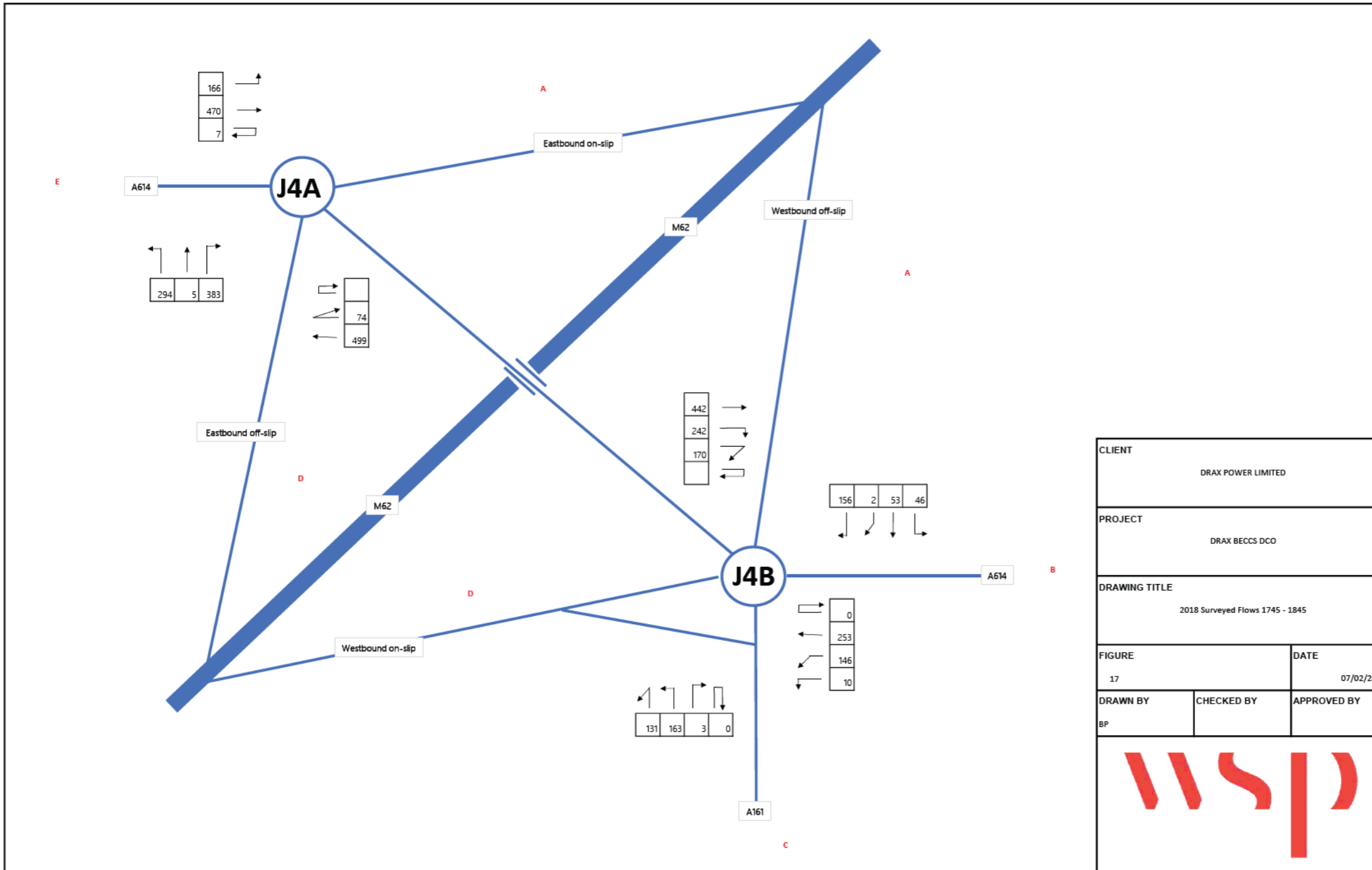
Total movements through junction
2138

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	511	263	181
B	167	-	49	63	3
C	310	-	0	12	164
D	195	-	4	0	143
E	-	-	-	-	-

Total movements through junction
2066

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 1730 - 1830		
FIGURE	DATE	
16	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




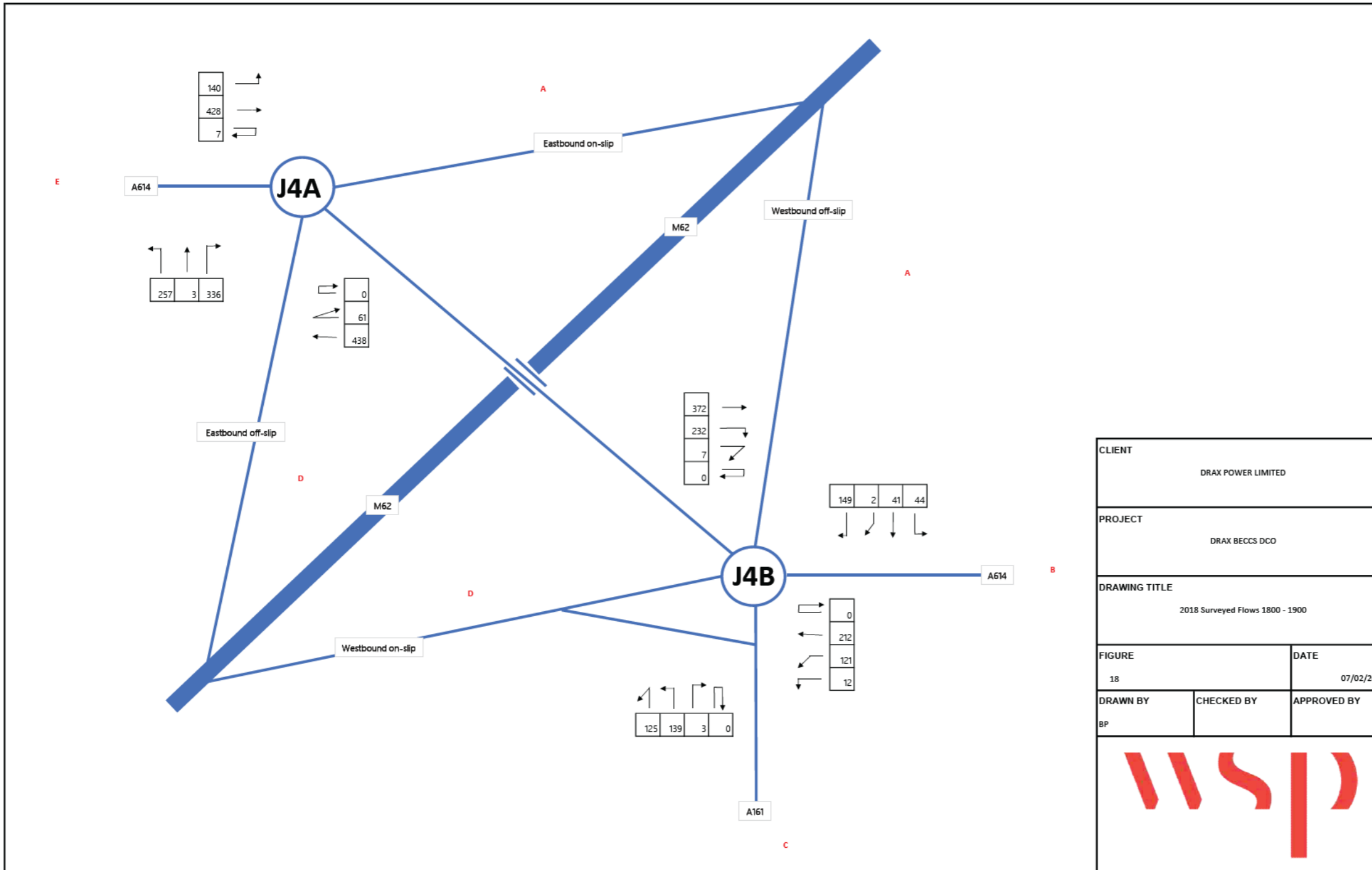
J4A M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	7	166	470	-	1897
B	-	-	-	-	
C	499	74	0	-	
D	294	5	383	-	

J4B M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	442	242	170	1816
B	156	-	46	53	2	
C	253	-	0	10	146	
D	163	-	3	0	131	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 1745 - 1845		
FIGURE	DATE	
17	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




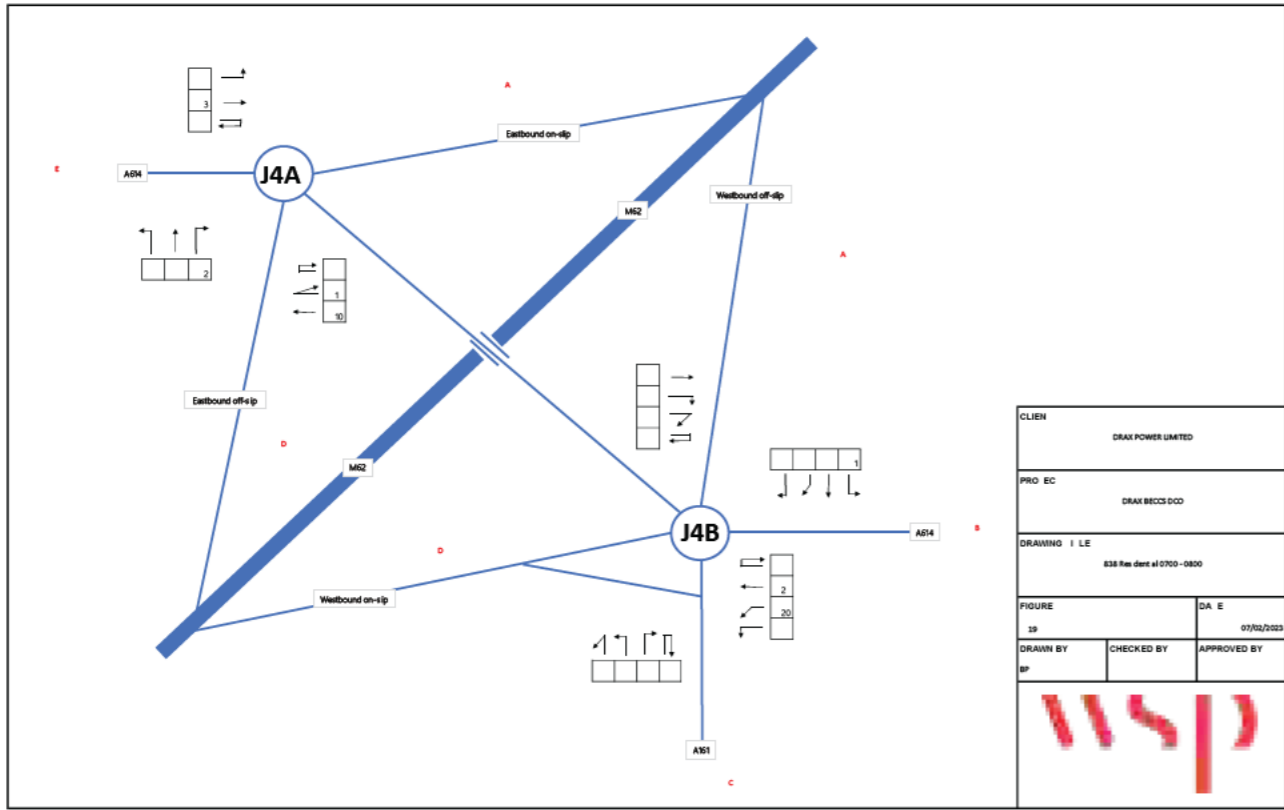
J4A M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	7	140	428	-	1671
B	-	-	-	-	
C	438	61	0	-	
D	257	3	336	-	

J4B M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	372	232	7	1458
B	149	-	44	41	2	
C	212	-	0	12	121	
D	139	-	3	0	125	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Surveyed Flows 1800 - 1900		
FIGURE	DATE	
18	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		



4A: M2 UNC ION 36 DUMBBELL ROUNDABOUT

	A	B	C	D
A	0	0	3	-
B	-	-	-	-
C	10	14	0	-
D	0	0	2	-

Total movements through and on: 29

4B: M2 UNC ION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	4	0	0
B	0	-	1	0	0
C	24	-	0	0	20
D	0	-	0	0	0
E	-	-	-	-	-

Total movements through and on: 50

Vehicle Trip Rates

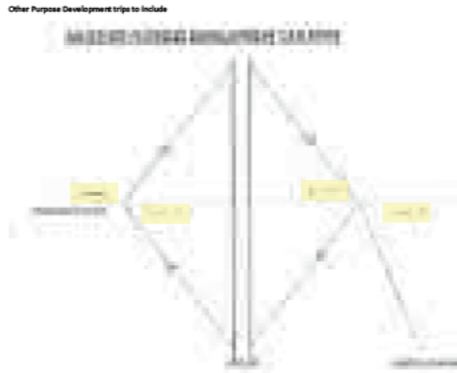
Vehicle	Rate	Dwell	Rate	Dwell
0.070	34.5	0.368	85.8	

Work Journey Purpose

Category	Percentage
Work	57.60%
Other	18.90%

Trip Distribution - AM Peak

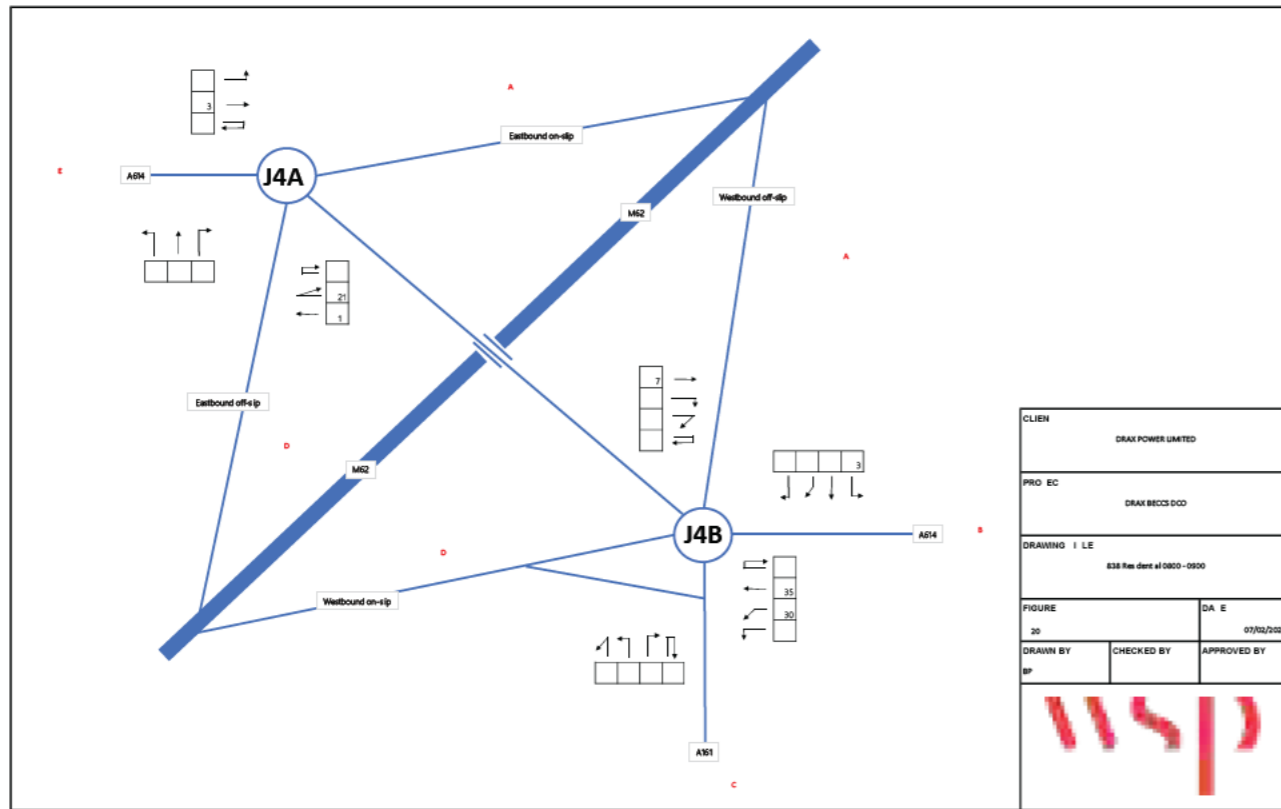
Movement	Percentage
B to A	25.44%
B to E	13.81%
B to D	37.15%
A to B	25.44%
E to B	13.81%
D to B	37.15%



Notes:
 No education on site as per the M2 Junction 26.
 Other Purpose development trips as shown on the right hand side of this sheet. It is assumed that 'Other Purpose' trips will be the same in each peak hour.

Vehicle Arrivals 07:00-08:00	Vehicle Departures 07:00-08:00	Journey Purpose	Movement	No. of Work Trips at movement	No. of Other Trips at movement	No. of Total Trips at movement
0.070	34.5	57.60%	B to A	13.7	1	14.7
		18.90%	B to E	7.46	3	10.5
			B to D	20.1	0	20.1
			A to B	1.24	0	1.24
			E to B	0.67	2	2.67
			D to B	1.81	0	1.81





4A: M2 UNC ION 36 DUMBELL ROUNDABOUT

	A	B	C	D	
A	0	0	3	-	
B	-	-	-	-	
C	14	23	0	-	
D	0	0	4	-	

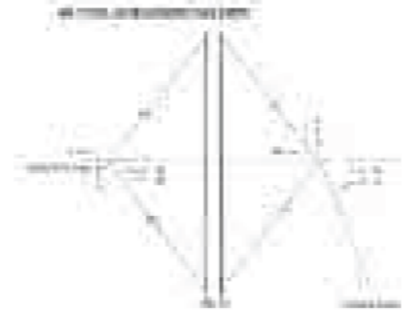
Total movements through and on 42

4B: M2 UNC ION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	
A	0	-	7	0	0	
B	0	-	3	0	0	
C	35	-	0	0	30	
D	0	-	0	0	0	
E	-	-	-	-	-	

Total movements through and on 75

Det est of peak hou 08:00-09:001 per f on 638 Dwelling T empot Assessment for site once.



Vehicle Trip Rates

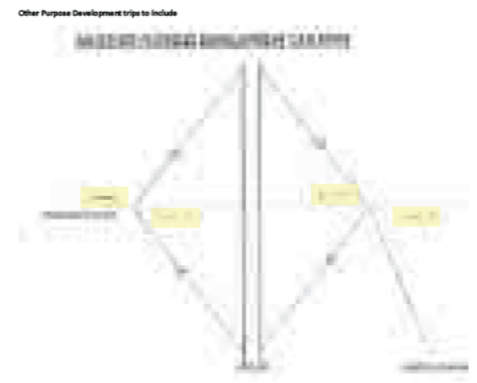
Vehicle	Rate	Dwell	Rate	Dwell
0.132	33.2	0.401	140	

Work Journey Purpose

Category	Percentage
57.60%	
18.90%	

Trip Distribution - AM Peak

Direction	Percentage
25.44%	
13.81%	
37.15%	
25.44%	
13.81%	
37.15%	



Notes:
No education on site as per the M2 Junction 26.
Other Purpose Development trips as shown on the right hand side of this sheet. It is assumed that Other Purpose Development trips will be the same each peak hour.

Vehicle Arrivals 08:00-09:00

0.132	33.2
-------	------

Vehicle Departures 08:00-09:00

0.401	140
-------	-----

Journey Purpose

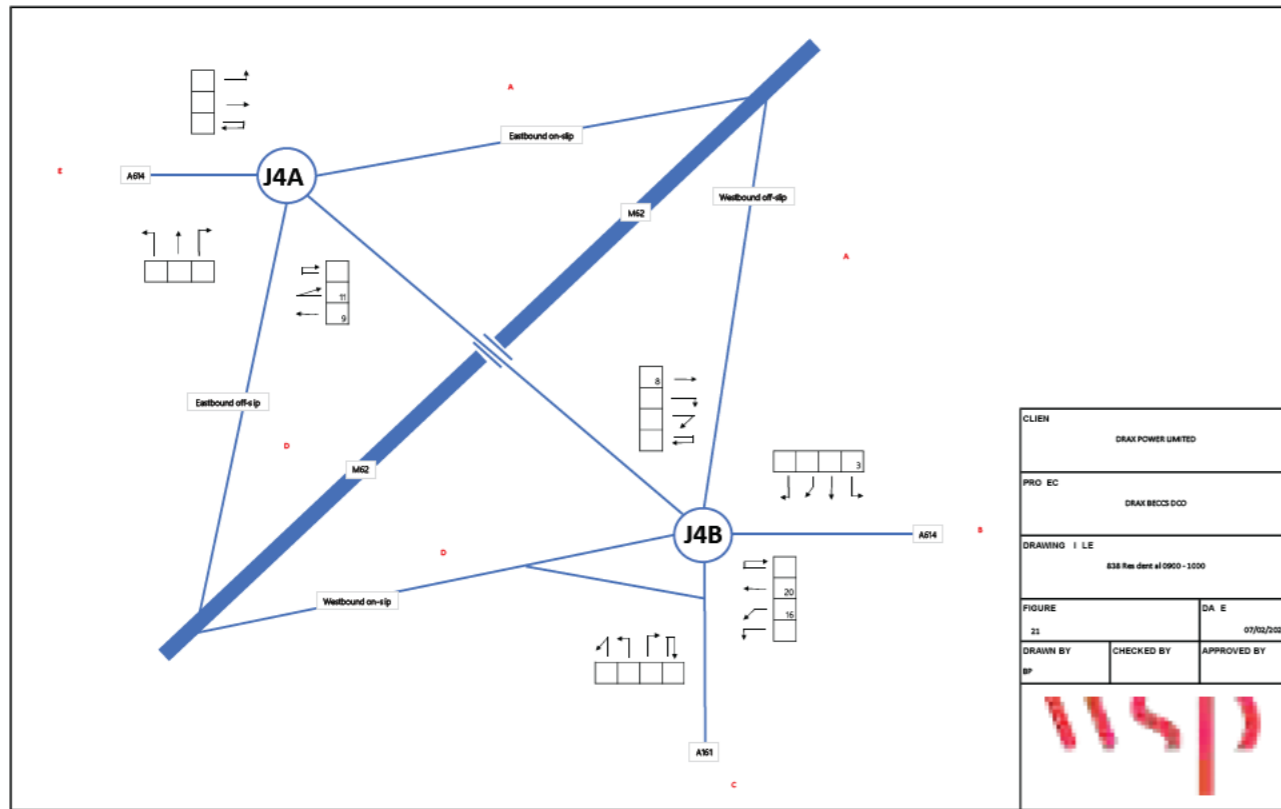
57.60%
18.90%

Movement

B to A	25.44%
B to E	13.81%
B to D	37.15%
A to B	25.44%
E to B	13.81%
D to B	37.15%

No. of Work Trips at movement	No. of Other Trips at movement	No. of Total Trips at movement
B to A: 20.6	B to A: 3	B to A: 23.6
B to E: 11.2	B to E: 3	B to E: 14.2
B to D: 30	B to D: 30	B to D: 60
A to B: 2.69	A to B: 2.69	A to B: 5.38
E to B: 1.46	E to B: 2	E to B: 3.46
D to B: 3.85	D to B: 2	D to B: 5.85





4A: M2 UNC ION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	
Total movements through and on					37
A	0	0	4	-	
B	-	-	-	-	
C	9	11	0	-	
D	0	0	4	-	

4B: M2 UNC ION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	
Total movements through and on						46
A	0	-	8	0	0	
B	0	-	3	0	0	
C	20	-	0	0	16	
D	0	-	0	0	0	
E	-	-	-	-	-	

Vehicle Trip Rates

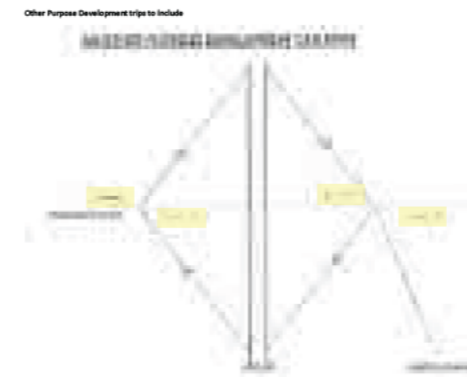
Vehicle	Rate	Dwell	Rate	Dwell
0.162	36.7	0.209	73.2	

Work Journey Purpose

Purpose	Percentage
57.60%	
18.90%	

Trip Distribution - AM Peak

Movement	Percentage
25.44%	
13.81%	
37.15%	
25.44%	
13.81%	
37.15%	



Notes
 No education on the M2 J4A roundabout.
 Other Purpose Development trips to include.

Vehicle Arrivals 08:00 - 09:00

T p Rate	350
Dwell (s)	36.7

Vehicle Departures 08:00 - 09:00

T p Rate	350
Dwell (s)	73.2

Journey Purpose

57.60%
18.90%

Movement

B to A	25.44%
B to E	13.81%
B to D	37.15%
A to B	25.44%
E to B	13.81%
D to B	37.15%

No. of Work Trips at movement

B to A	10.7
B to E	5.82
B to D	15.7
A to B	2.87
E to B	3.56
D to B	4.19

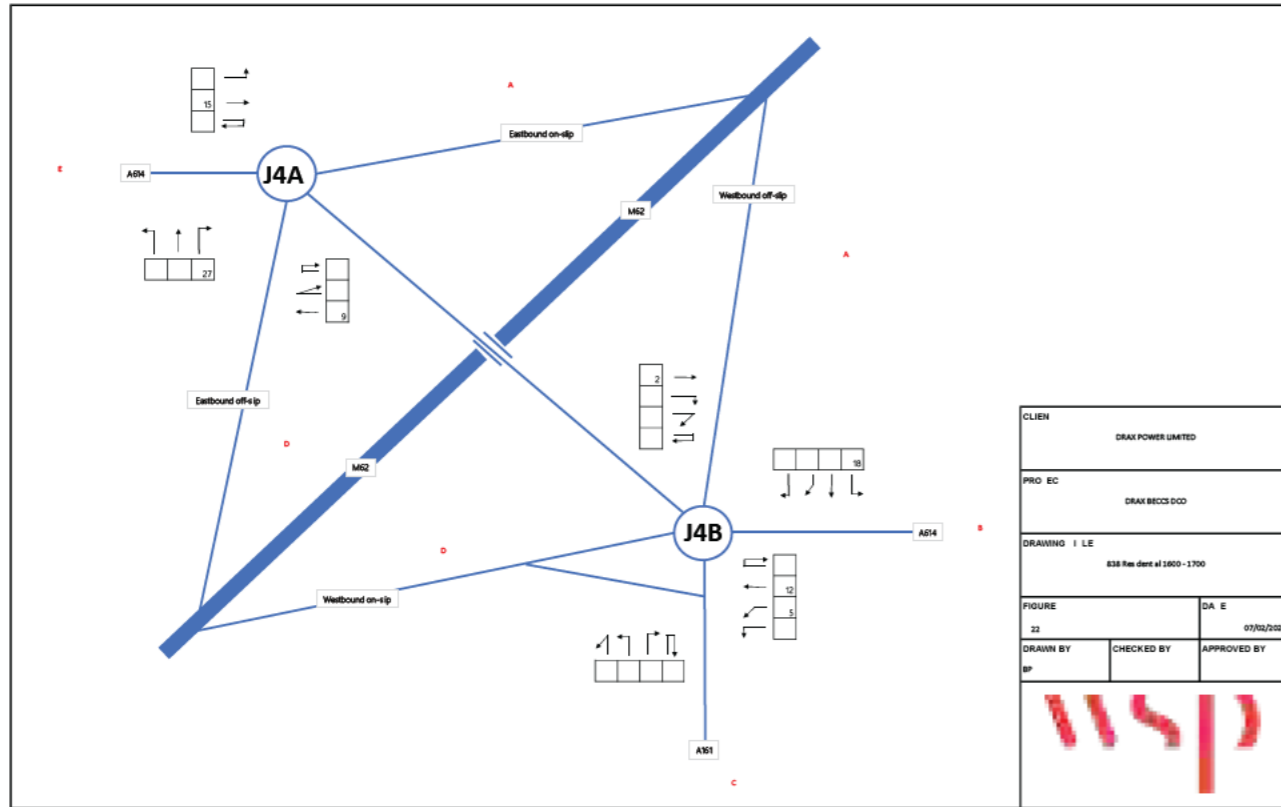
No. of Other Trips at movement

B to A	
B to E	3
B to D	
A to B	
E to B	2
D to B	

No. of Total Trips at movement

B to A	10.7
B to E	8.82
B to D	15.7
A to B	2.87
E to B	3.56
D to B	4.19





4A: M2 UNC ION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	
A	0	0	13	-	
B	-	-	-	-	
C	9	4	0	-	
D	0	0	27	-	

Total movements through and on 34

4B: M2 UNC ION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	
A	0	-	42	0	0	
B	0	-	16	0	0	
C	12	-	0	0	5	
D	0	-	0	0	0	
E	-	-	-	-	-	

Total movements through and on 75

CLIENT: DRAX POWER LIMITED
 PROJECT: DRAX BECCS DCO
 DRAWING TITLE: 638 Redundant 1800-1700
 DATE: 03/02/2023
 DRAWN BY: BP
 CHECKED BY:
 APPROVED BY:

Vehicle Trip Rates

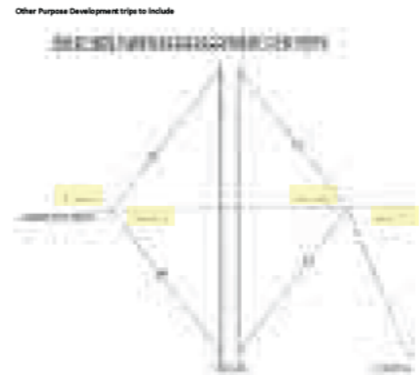
Direction	Vehicle Type	Rate	Dwell (s)
Eastbound	Light	0.312	109
Westbound	Light	0.190	66.5

Work Journey Purpose

Direction	Purpose	Rate	Dwell (s)
Eastbound	Work	0.250%	
Westbound	Work	66.10%	

Trip Distribution - AM Peak

From	To	Rate	Dwell (s)
B	A	25.44%	
B	E	13.81%	
B	D	37.15%	
A	B	25.44%	
E	B	13.81%	
D	B	37.15%	



Notes
 No education on the site at the M2 Junction 36.
 Other Purpose trips as shown on the right hand side of this sheet. It is assumed that Other Purpose trips will be the same in each peak hour.

Vehicle Arrivals 16:00-17:00

Rate	350
Dwell (s)	109

Vehicle Departures 16:00-17:00

Rate	350
Dwell (s)	66.5

Journey Purpose

Rate	25.90%
Dwell (s)	66.10%

Movement

B to A	25.44%
B to E	13.81%
B to D	37.15%
A to B	25.44%
E to B	13.81%
D to B	37.15%

No. of Work Trips at movement

B to A	3.54
B to E	1.92
B to D	5.16
A to B	16.4
E to B	9.97
D to B	26.8

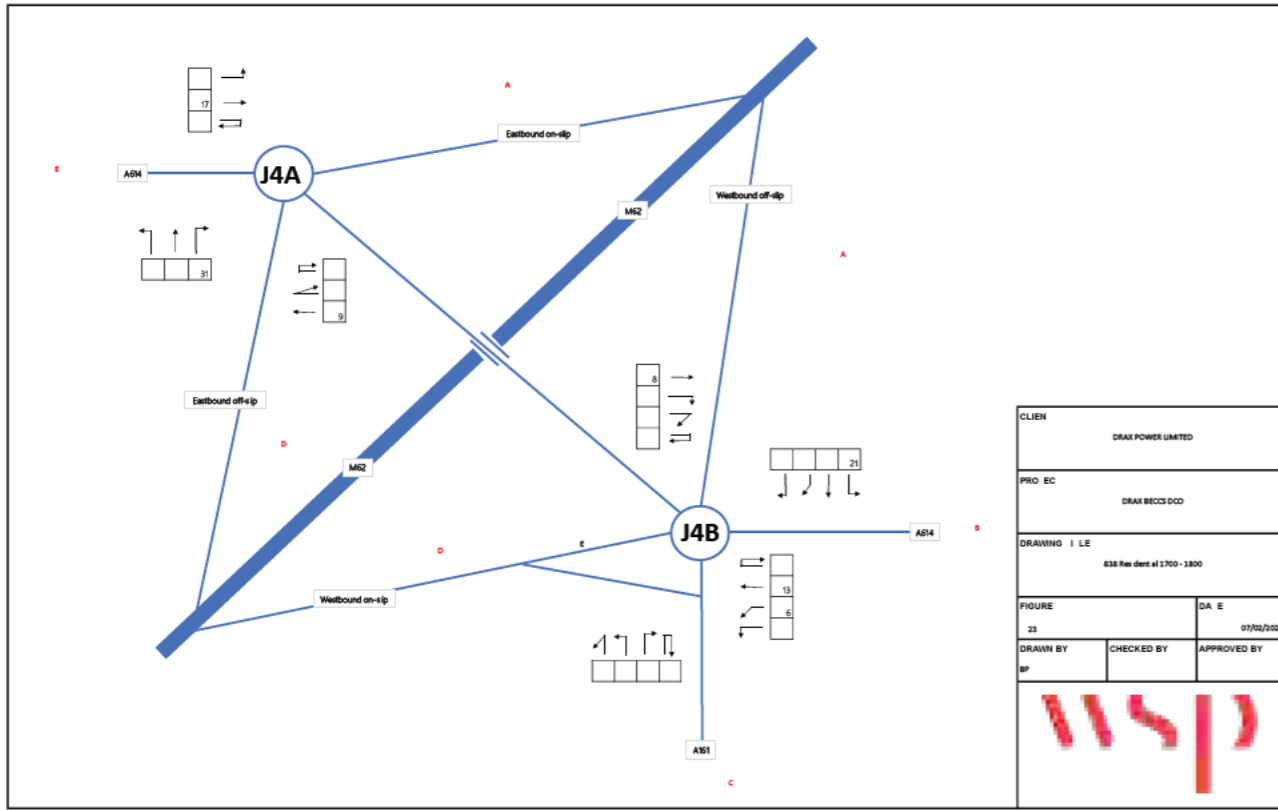
No. of Other Trips at movement

B to A	
B to E	7
B to D	
A to B	
E to B	5
D to B	

No. of Total Trips at movement

B to A	3.54
B to E	8.92
B to D	5.16
A to B	16.4
E to B	15
D to B	26.8





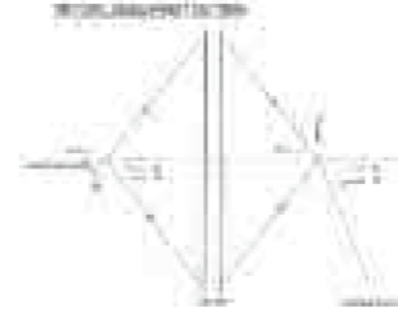
4A: M42 UNC ION 36 DUMBELL ROUNDABOUT

	A	B	C	D	
Total movements through and on					41
A	0	0	17	-	
B	-	-	-	-	
C	9	4	0	-	
D	0	0	31	-	

4B: M42 UNC ION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	
Total movements through and on						49
A	0	-	48	0	0	
B	0	-	21	0	0	
C	13	-	0	0	6	
D	0	-	0	0	0	
E	-	-	-	-	-	

Det est of peak hou 17:00 - 18:00 i p f on 638 Dwelling T emp t Assessment fo site ince.



Vehicle Trip Rates

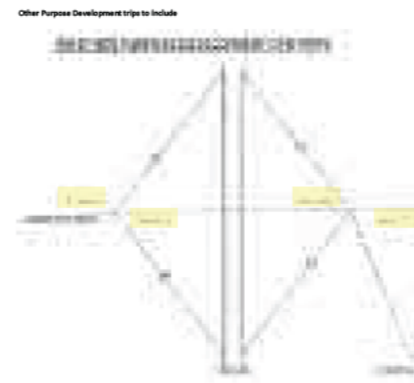
Vehicle	Rate	Dwell	Rate	Dwell
0.365	128	0.218	76.3	

Work Journey Purpose

Category	Percentage
25.50%	
66.10%	

Trip Distribution - AM Peak

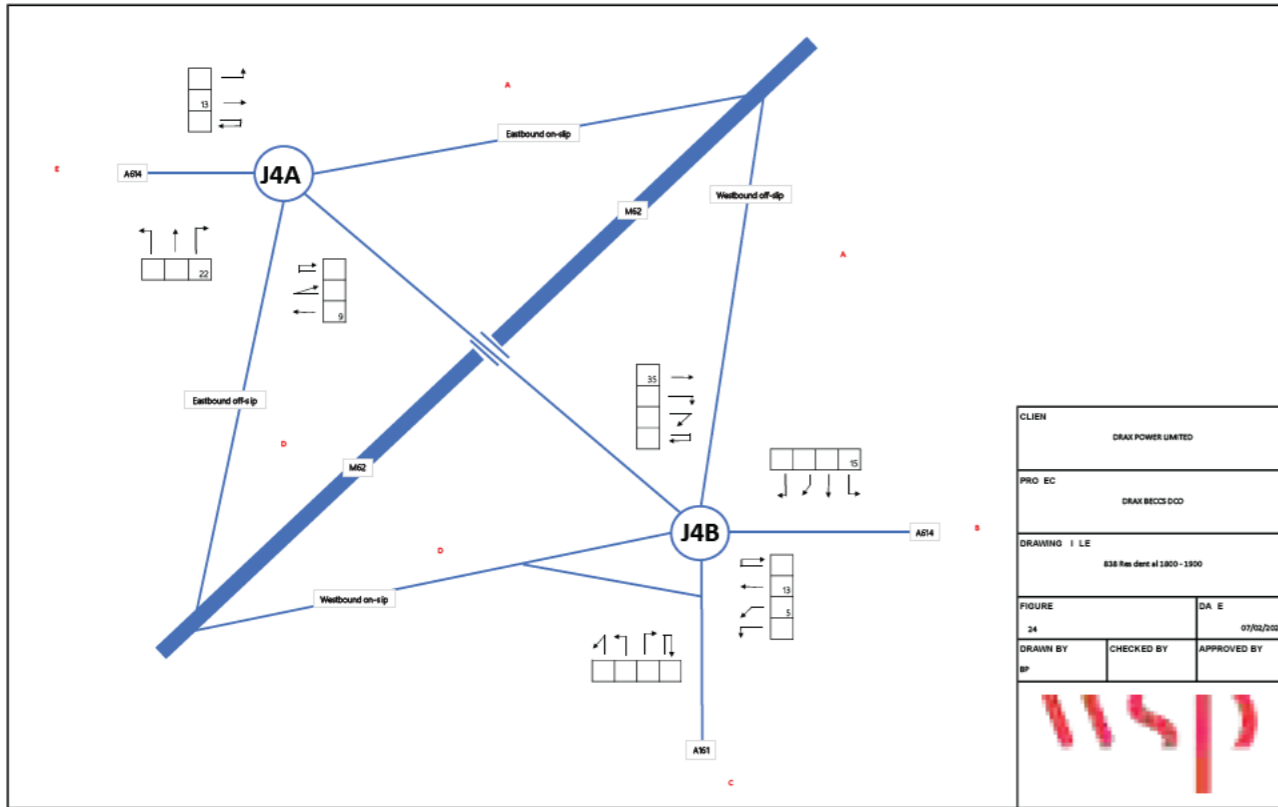
Movement	Percentage
8 to A	25.44%
8 to E	13.81%
8 to D	37.15%
A to B	25.44%
E to B	13.81%
D to B	37.15%



Notes
No education i p s e v s the M42 Junc on 26.
Other Pu pose' p s e shown on the ght hand's de of th sheet. It s assumed that 'Other Pu pose' p s w ll be the same i each peak hou .

Vehicle Arrivals 17:00-18:00	Vehicle Departures 17:00-18:00	Journey Purpose	Movement	No. of Work Trips at movement	No. of Other Trips at movement	No. of Total Trips at movement
T p Rate 350 Dwell rps	T p Rate 350 Dwell rps	25.50%	8 to A	8 to A 4.06	8 to A 4.06	8 to A 4.06
0.365 128	0.218 76.3	66.10%	8 to E	8 to E 2.2	8 to E 7	8 to E 9.2
			8 to D	8 to D 5.92	8 to D 5.92	8 to D 5.92
			A to B	A to B 21.5	A to B 21.5	A to B 21.5
			E to B	E to B 11.7	E to B 5	E to B 16.7
			D to B	D to B 31.4	D to B 31.4	D to B 31.4





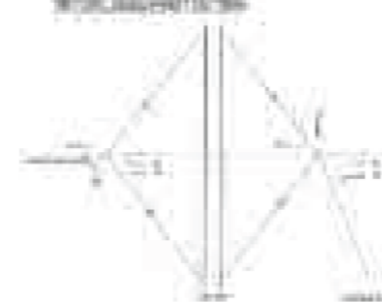
4A: M2 UNC ION 36 DUMBELL ROUNDABOUT

	A	B	C	D	
A	0	0	13	-	Total movements through and on
B	-	-	-	-	46
C	9	4	0	-	
D	0	0	12	-	

4B: M2 UNC ION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	
A	0	-	15	0	0	Total movements through and on
B	0	-	15	0	0	66
C	13	-	0	0	5	
D	0	-	0	0	0	
E	-	-	-	-	-	

Det est of peak hou 17:00-18:001 per f on 638 Dwelling T empot Assessment for site once.



Vehicle Trip Rates

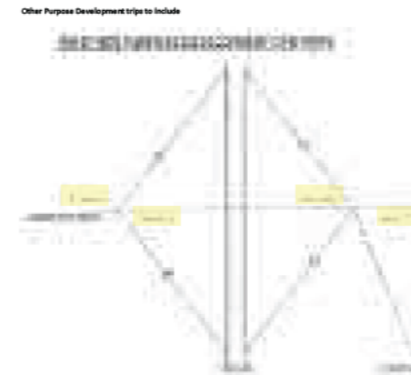
Vehicle	Rate	Dwell	Rate	Dwell
0.255	89.3	0.201	70.4	

Work Journey Purpose

Category	Percentage
Work	25.90%
Other	66.10%

Trip Distribution - AM Peak

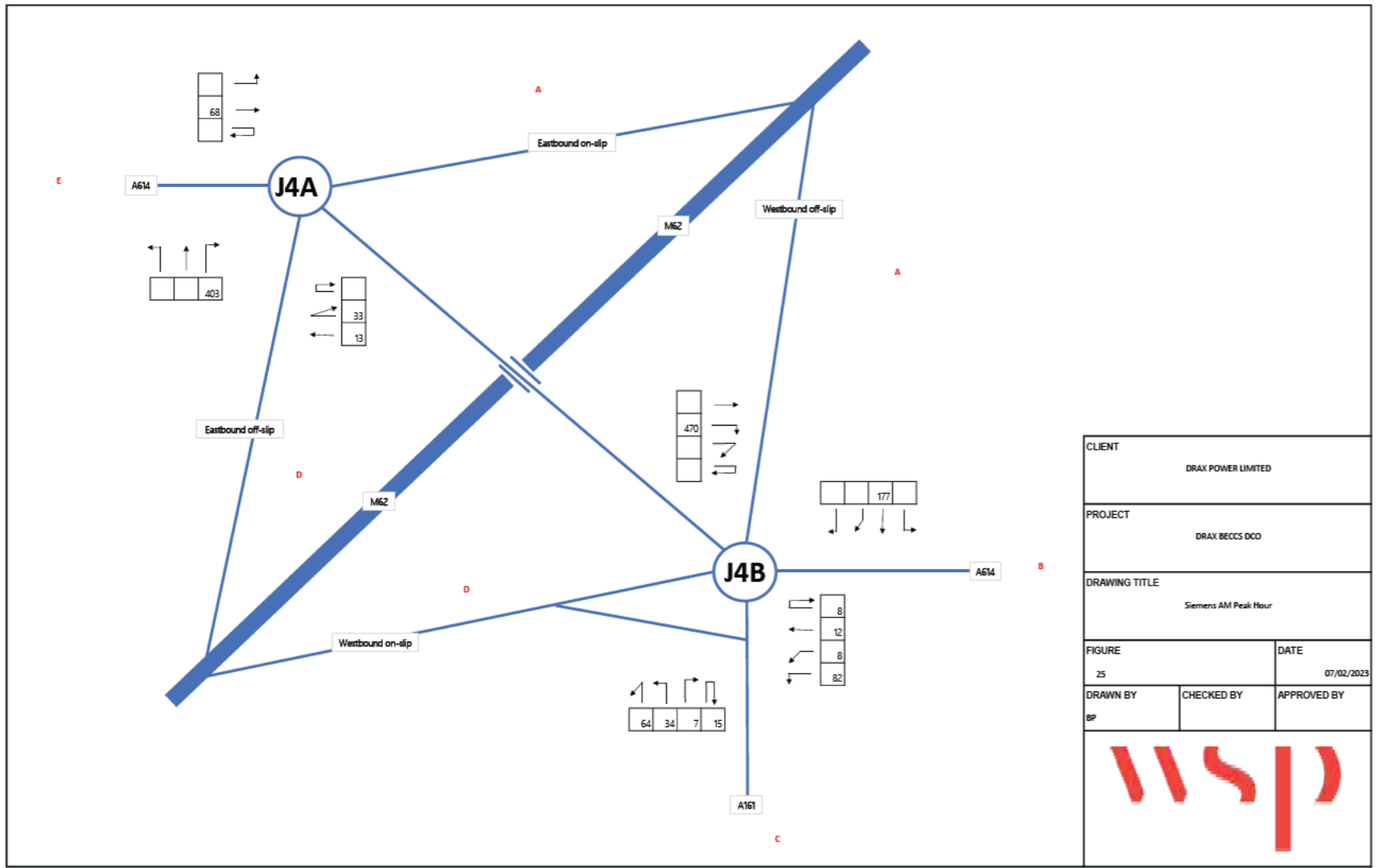
Direction	Percentage
B to A	25.44%
B to E	13.81%
B to D	37.15%
A to B	25.44%
E to B	13.81%
D to B	37.15%



Notes:
No education on 1 per se via the M2 Junction 26.
Other Purpose's per se shown on the right hand side of the sheet. It is assumed that 'Other Purpose's' per se will be the same each peak hour.

Vehicle Arrivals 18:00-19:00	Vehicle Departures 18:00-19:00	Journey Purpose	Movement	No. of Work Trips at movement	No. of Other Trips at movement	No. of Total Trips at movement
0.255	89.3	25.90%	B to A	3.74	3.74	7.48
		66.10%	B to E	2.05	7	9.05
			B to D	5.46	5.46	10.92
			A to B	15	15	30
			E to B	8.15	5	13.15
			D to B	21.9	21.9	43.8





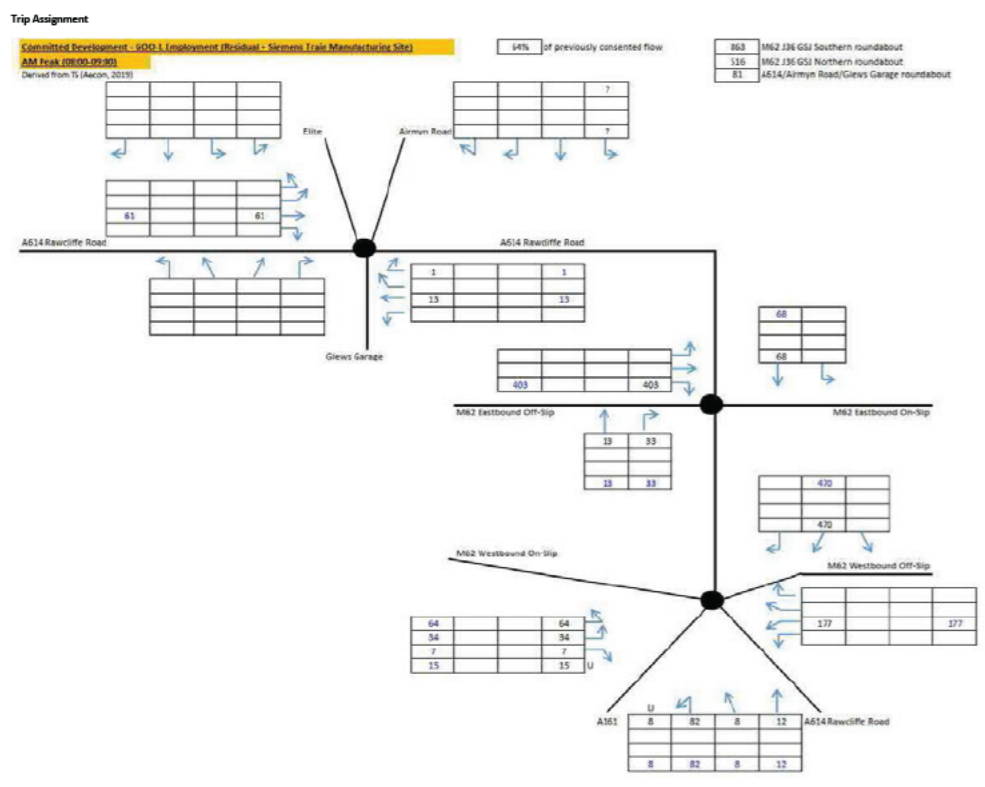
J4A: M62 JUNCTION 36 DUMBBELL ROUNDABOUT

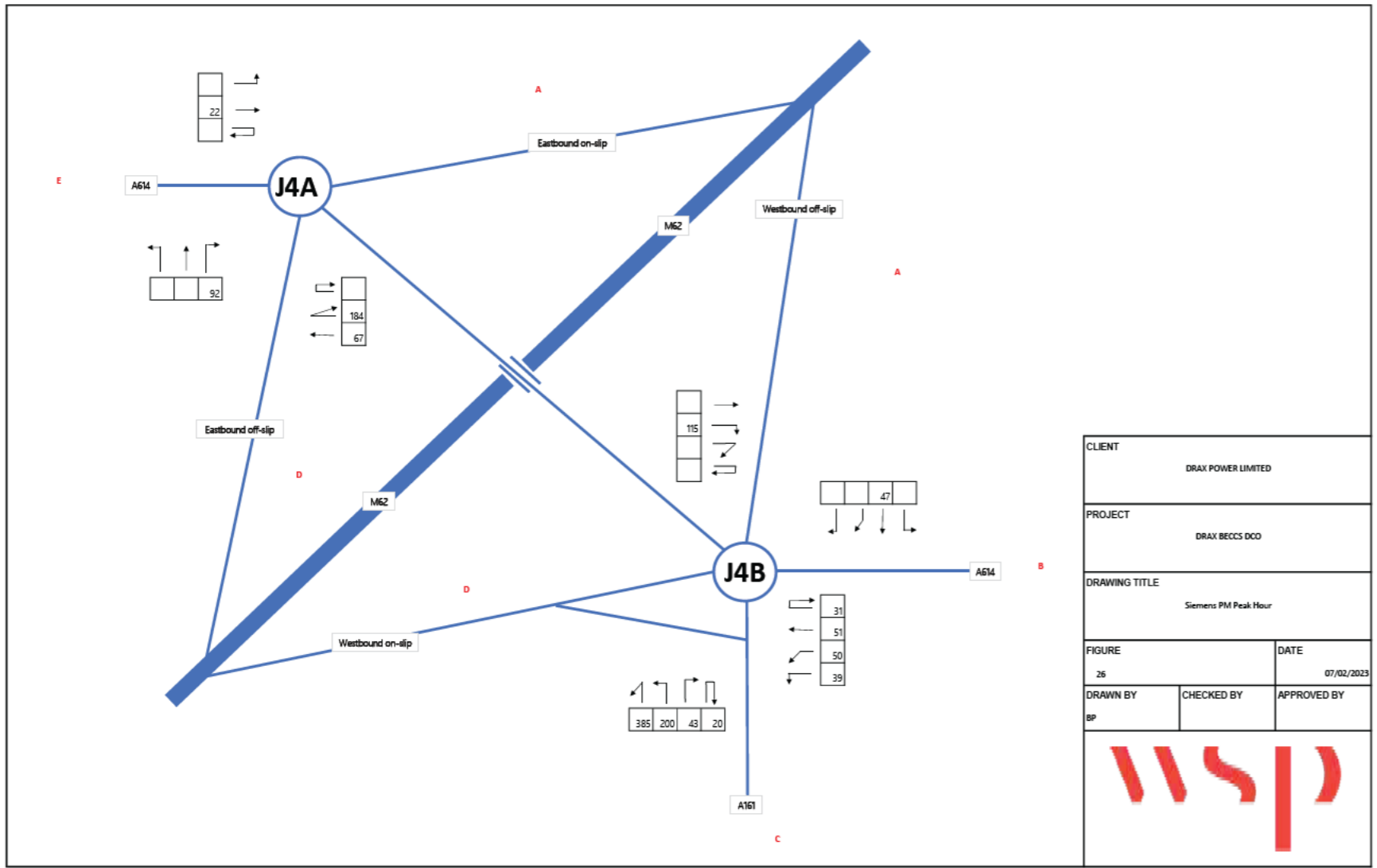
	A	B	C	D	Total movements through junction
A	0	0	68	-	517
B	-	-	-	-	
C	13	33	0	-	
D	0	0	403	-	

J4B: M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	470	0	877
B	0	-	0	177	0	
C	12	-	8	82	8	
D	34	-	7	15	64	
E	-	-	-	-	-	

CLIENT	DRAX POWER LIMITED	
PROJECT	DRAX BECCS DCO	
DRAWING TITLE	Siemens AM Peak Hour	
FIGURE	25	DATE
		07/02/2023
DRAWN BY	CHECKED BY	APPROVED BY
BP		





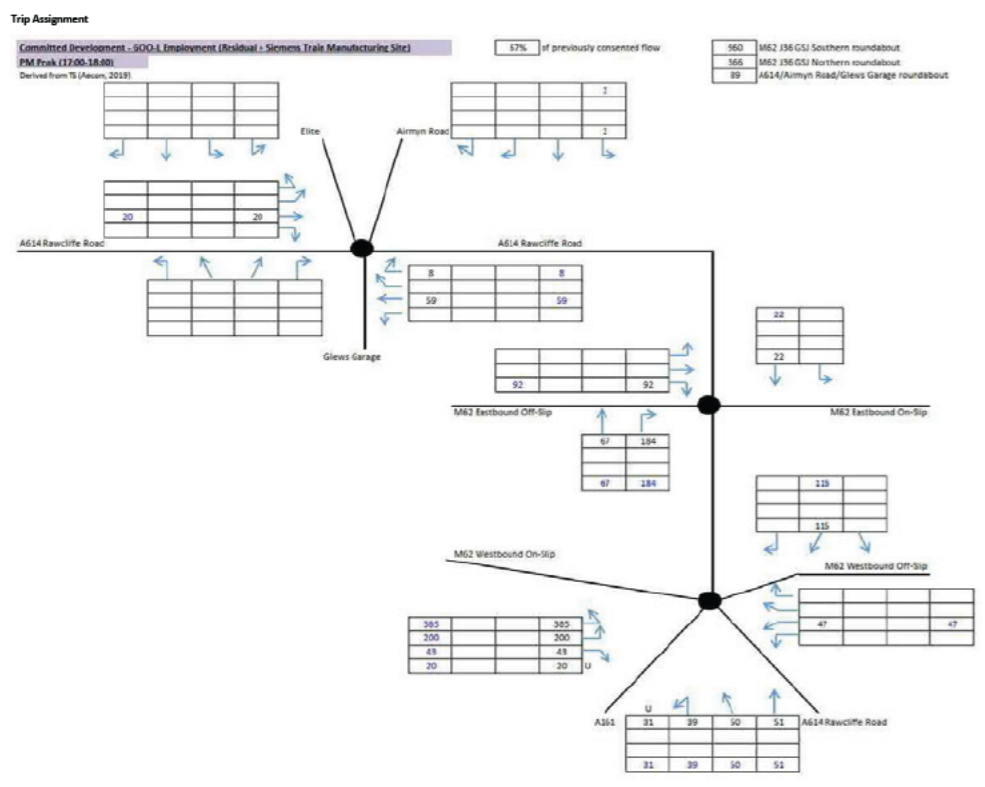
J4A: M62 JUNCTION 36 DUMBBELL ROUNDABOUT

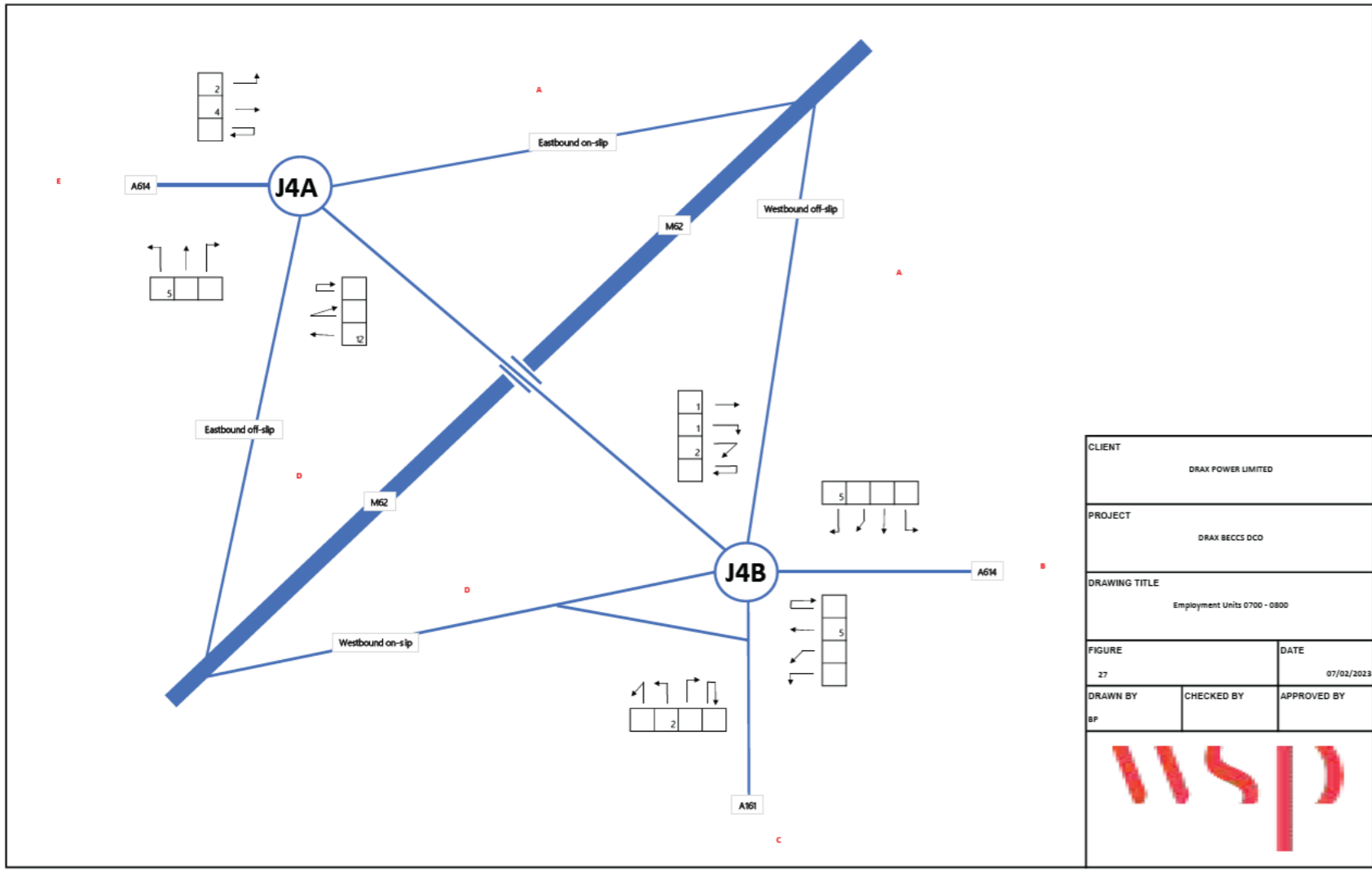
	A	B	C	D	Total movements through junction
A	0	0	22	-	365
B	-	-	-	-	
C	67	184	0	-	
D	0	0	92	-	

J4B: M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	115	0	981
B	0	-	0	47	0	
C	51	-	31	39	50	
D	200	-	43	20	385	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Siemens PM Peak Hour		
FIGURE		DATE
26		07/02/2023
DRAWN BY	CHECKED BY	APPROVED BY
BP		





J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	
A	0	2	4	-	Total movements through junction 22
B	-	-	-	-	
C	12	0	0	-	
D	3	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	
A	0	-	1	1	2	Total movements through junction 15
B	3	-	0	0	0	
C	3	-	0	0	0	
D	2	-	0	0	0	
E	-	-	-	-	-	

CLIENT: DRAX POWER LIMITED

PROJECT: DRAX BECCS DCO

DRAWING TITLE: Employment Units 0700 - 0800

FIGURE: 27 | DATE: 07/02/2023

DRAWN BY: BP | CHECKED BY: | APPROVED BY: |

Trip Generation

Projected Trip Generation

Person Trip Rates (per 100m²)

Time	IN	OUT	TOTAL
07:00-08:00	0.405	0.133	0.538
08:00-09:00	0.705	0.375	0.980
09:00-10:00	0.640	0.329	0.969
10:00-11:00	0.591	0.451	1.042
11:00-12:00	0.527	0.560	1.087
12:00-13:00	0.525	0.576	1.101
13:00-14:00	0.579	0.587	1.166
14:00-15:00	0.444	0.572	1.016
15:00-16:00	0.422	0.542	0.964
16:00-17:00	0.460	0.639	1.119
17:00-18:00	0.439	0.384	1.148
18:00-19:00	0.114	0.387	0.501
TOTAL	5.771	5.855	11.626

Person Trips

IN	OUT	TOTAL	
31	10	41	
54	21	75	
49	25	74	
45	34	80	
40	43	83	
40	44	84	
44	45	89	
34	44	78	
32	41	74	
35	50	85	
27	60	87	
9	30	39	
TOTAL	440	447	887

7632 m² GFA | 82150 m² R² GFA

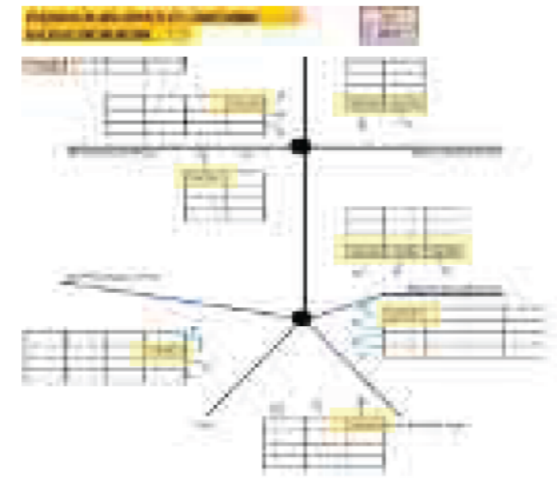
Mean: 02-D, MM, 3500 to 15000m², England (exc. GL) Wales and Scotland, Edge of Town & Free Standing, exc. Sat/Sun, 13+ | 5)

Projected Modal Trip Generation

Vehicle Trip Generating	Modal Split	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)			12-Hour (07:00-19:00)		
		IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Car Driver	72.4%	39	15	54	20	43	63	313	324	642
Taxi	0.2%	0	0	0	0	0	0	1	1	2
Powered Two-Wheeler	1.4%	1	0	1	0	1	1	6	6	12
Vehicle Trips	74.0%	40	15	55	20	44	64	326	331	656

Trip Rate	Trip Generation		76.32 GFA	
Arrivals	Departures	Arrivals	Departures	74% Vehicle Trips
7 to 8	0.405	0.133	22.9	7.51

Trip Distribution

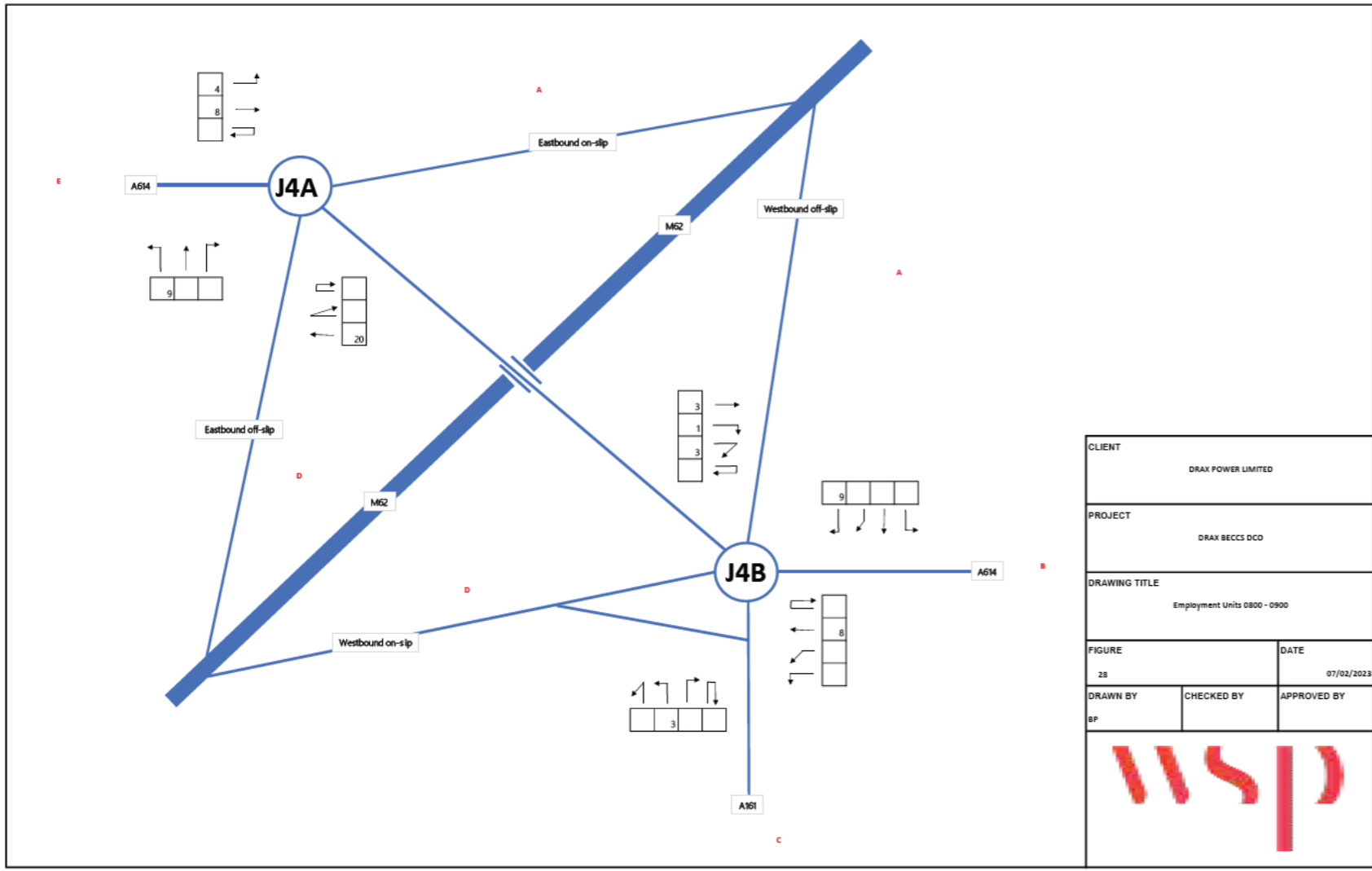


A to E	23.1%
B to E	19.8%
C to E	8.3%
D to E	21.5%
E to A	23.1%
E to B	19.8%
E to C	8.3%
E to D	21.5%

Trip Assignment



A to E	5
B to E	5
C to E	2
D to E	5
E to A	2
E to B	1
E to C	1
E to D	2



J4A: M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	
A	0	4	8	-	Total movements through junction 40
B	-	-	-	-	
C	20	0	0	-	
D	9	0	0	-	

J4B: M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	
A	0	-	3	1	3	Total movements through junction 28
B	9	-	0	0	0	
C	8	-	0	0	0	
D	3	-	0	0	0	
E	-	-	-	-	-	

CLIENT: DRAX POWER LIMITED

PROJECT: DRAX BECCS DCO

DRAWING TITLE: Employment Units 0800 - 0900

FIGURE: 28 | DATE: 07/02/2023

DRAWN BY: BP | CHECKED BY: | APPROVED BY: |

Trip Generation

Projected Trip Generation

Person Trip Rates (per 100m²)

Time	IN	OUT	TOTAL
07:00-08:00	0.405	0.133	0.538
08:00-09:00	0.705	0.275	0.980
09:00-10:00	0.640	0.329	0.969
10:00-11:00	0.591	0.451	1.042
11:00-12:00	0.527	0.560	1.087
12:00-13:00	0.525	0.576	1.101
13:00-14:00	0.579	0.587	1.166
14:00-15:00	0.444	0.572	1.016
15:00-16:00	0.422	0.542	0.964
16:00-17:00	0.460	0.639	1.119
17:00-18:00	0.439	0.784	1.248
18:00-19:00	0.114	0.387	0.501
TOTAL	5.771	5.855	11.626

Person Trips

IN	OUT	TOTAL	
31	10	41	
54	21	75	
49	25	74	
45	34	80	
40	43	83	
40	44	84	
44	45	89	
34	44	78	
32	41	74	
35	50	85	
27	60	87	
9	30	39	
TOTAL	440	447	887

7632 m² GFA | 82150 m² R² GFA

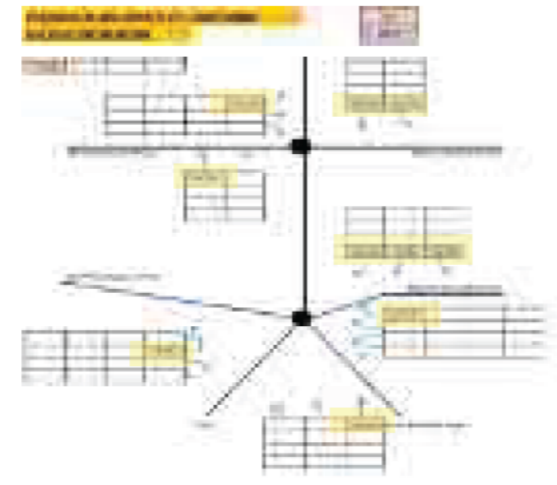
Mean: 02-D, MM, 3500 to 15000m², England (exc. GU) Wales and Scotland, Edge of Town & Free Standing, exc. Sat/Sun, 13+ | 5)

Projected Modal Trip Generation

Vehicle Trip Generating	Modal Split	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)			12-Hour (07:00-19:00)		
		IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Car Driver	72.4%	39	15	54	20	43	63	313	324	642
Taxi	0.2%	0	0	0	0	0	0	1	1	2
Powered Two-Wheeler	1.4%	1	0	1	0	1	1	6	6	12
Vehicle Trips	74.0%	40	15	55	20	44	64	326	331	656

Trip Rate	Trip Generation				76.32 GFA
Arrivals	Departures	Arrivals	Departures	74% Vehicle Trips	
7 to 8	0.705	0.275	39.8	15.3	

Trip Distribution

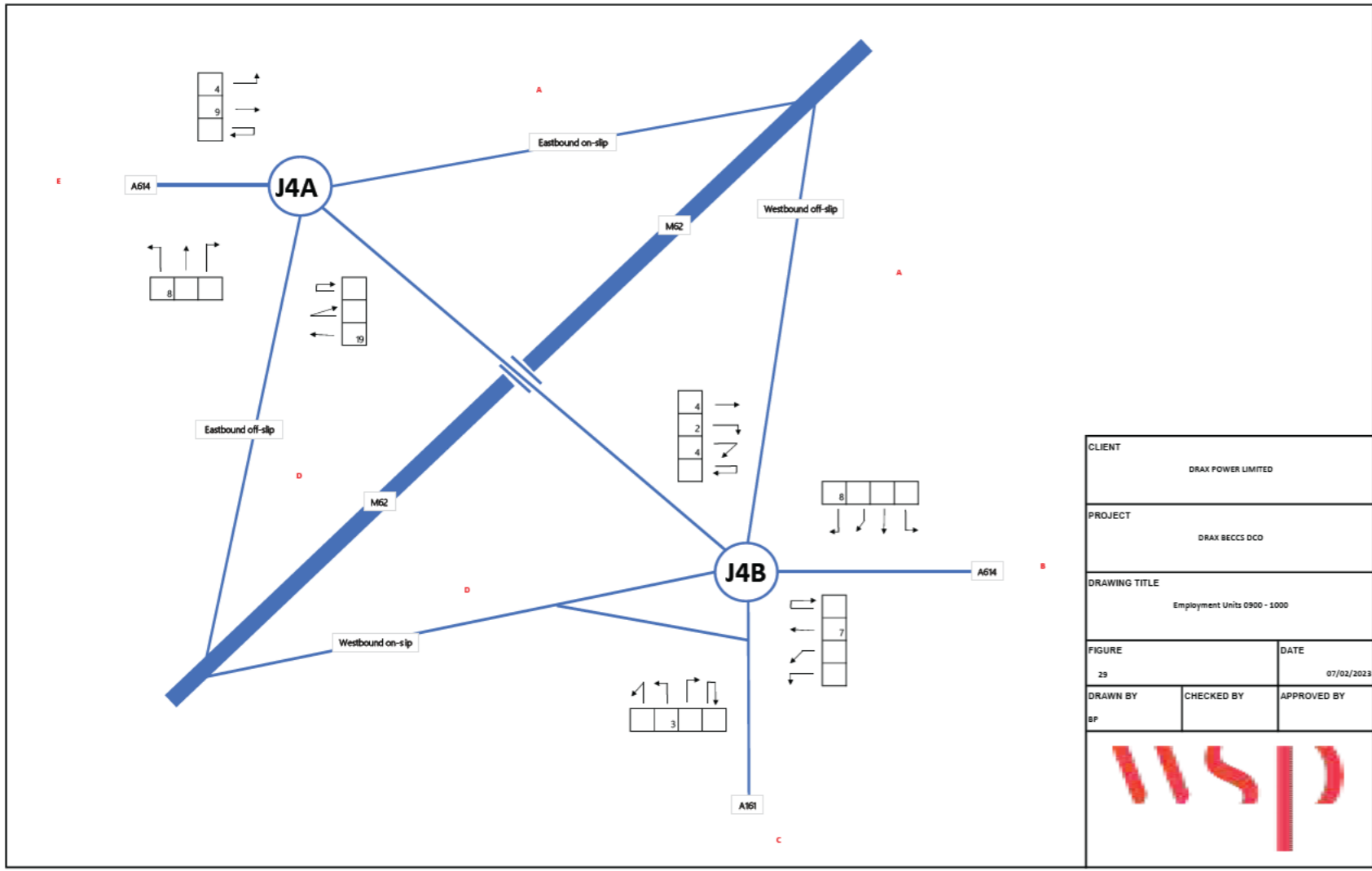


A to E	23.1%
B to E	19.8%
C to E	8.3%
D to E	21.5%
E to A	23.1%
E to B	19.8%
E to C	8.3%
E to D	21.5%

Trip Assignment



A to E	9
B to E	8
C to E	3
D to E	9
E to A	4
E to B	3
E to C	1
E to D	3



J4A: M2 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	
A	0	4	9	-	Total movements through junction 40
B	-	-	-	-	
C	19	0	0	-	
D	8	0	0	-	

J4B: M2 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	
A	0	-	4	2	4	Total movements through junction 28
B	8	-	0	0	0	
C	7	-	0	0	0	
D	3	-	0	0	0	
E	-	-	-	-	-	

CLIENT	DRAX POWER LIMITED	
PROJECT	DRAX BECCS DCO	
DRAWING TITLE	Employment Units 0900 - 1000	
FIGURE	29	DATE 07/02/2023
DRAWN BY	CHECKED BY	APPROVED BY
BP		



Trip Generation

Projected Trip Generation

Person Trip Rates (per 100m²)

Time	IN	OUT	TOTAL
07:00-08:00	0.405	0.133	0.538
08:00-09:00	0.705	0.375	0.980
09:00-10:00	0.640	0.329	0.969
10:00-11:00	0.591	0.451	1.042
11:00-12:00	0.527	0.560	1.087
12:00-13:00	0.525	0.576	1.101
13:00-14:00	0.579	0.587	1.166
14:00-15:00	0.444	0.572	1.016
15:00-16:00	0.422	0.542	0.964
16:00-17:00	0.460	0.639	1.119
17:00-18:00	0.438	0.384	1.148
18:00-19:00	0.114	0.387	0.501
TOTAL	5.771	5.855	11.626

Person Trips

IN	OUT	TOTAL	
31	10	41	
54	21	75	
49	25	74	
45	34	80	
40	43	83	
40	44	84	
44	45	89	
34	44	78	
32	41	74	
35	50	85	
27	60	87	
9	30	39	
TOTAL	440	447	887

7632 m² GFA, 82150 m² R² GFA

Mean: 02-D, MM, 3500 to 15000m², England (exc. GU) Wales and Scotland, Edge of Town & Free Standing, exc. Sat/Sun, 13+ | 5)

Projected Modal Trip Generation

Vehicle Trip Generating	Modal Split	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)			12-Hour (07:00-19:00)		
		IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Car Driver	72.4%	39	15	54	20	43	63	313	324	642
Taxi	0.2%	0	0	0	0	0	0	1	1	2
Powered Two-Wheeler	1.4%	1	0	1	0	1	1	6	6	12
Vehicle Trips	74.0%	40	15	55	20	44	64	326	331	656

Trip Rate	Trip Generation		76.32 GFA		
Arrivals	Departures	Arrivals	Departures	74% Vehicle Trips	
7 to 8	0.640	0.329	36.1	18.6	

Trip Distribution

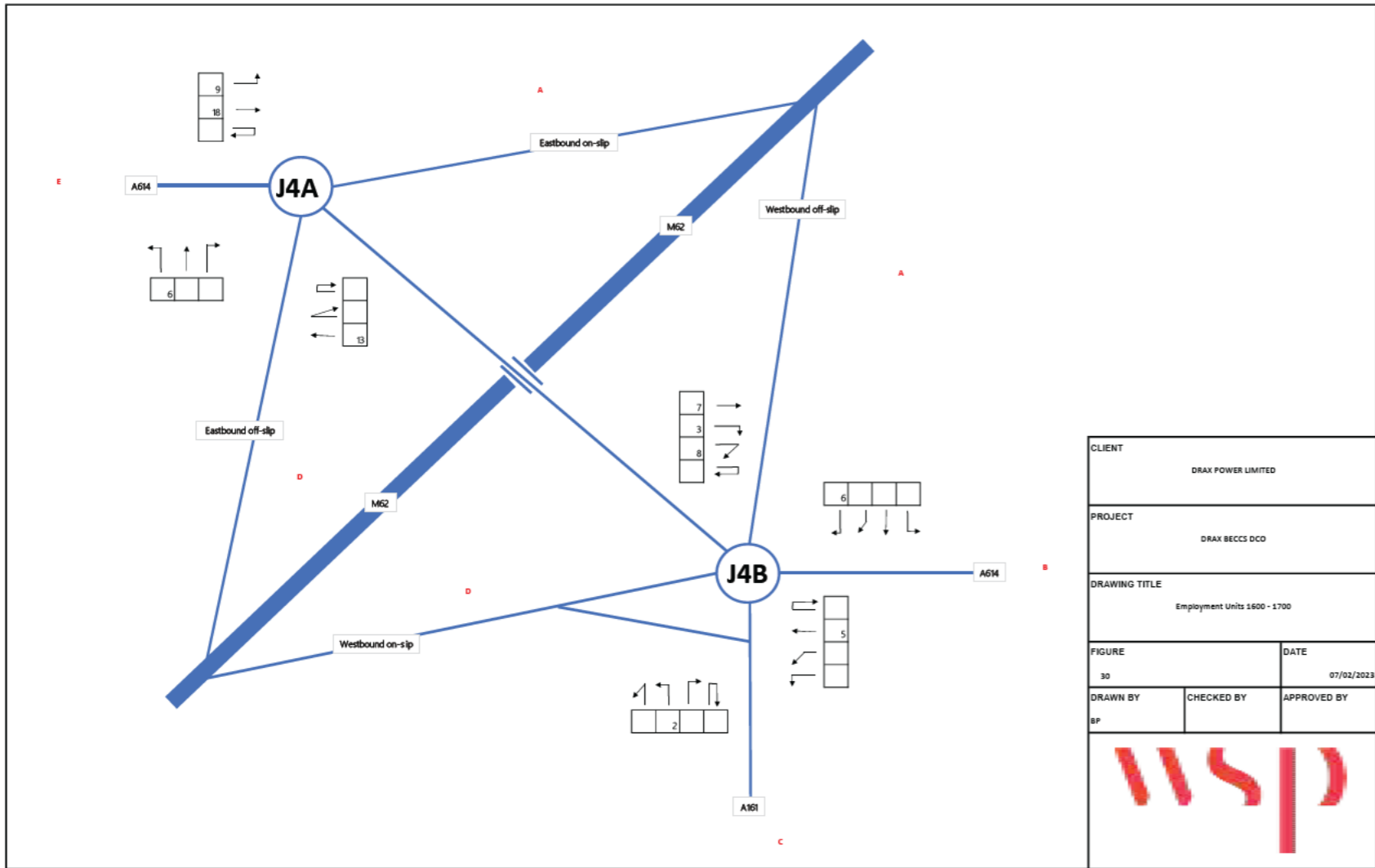


A to E	23.1%
B to E	19.8%
C to E	8.3%
D to E	21.5%
E to A	23.1%
E to B	19.8%
E to C	8.3%
E to D	21.5%

Trip Assignment



A to E	5
B to E	7
C to E	3
D to E	8
E to A	4
E to B	4
E to C	2
E to D	4



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D
A	0	9	18	-
B	-	-	-	-
C	13	0	0	-
D	6	0	0	-

Total movements through junction
46

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	7	3	8
B	6	-	0	0	0
C	5	-	0	0	0
D	2	-	0	0	0
E	-	-	-	-	-

Total movements through junction
32

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Employment Units 1600 - 1700		
FIGURE	DATE	
30	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		



Trip Generation

Projected Trip Generation

Person Trip Rates (per 100m²)

Time	IN	OUT	TOTAL
07:00-08:00	0.405	0.133	0.538
08:00-09:00	0.705	0.375	0.980
09:00-10:00	0.640	0.329	0.969
10:00-11:00	0.591	0.451	1.042
11:00-12:00	0.527	0.560	1.087
12:00-13:00	0.525	0.576	1.101
13:00-14:00	0.579	0.587	1.166
14:00-15:00	0.444	0.572	1.016
15:00-16:00	0.422	0.542	0.964
16:00-17:00	0.460	0.539	1.119
17:00-18:00	0.458	0.384	1.148
18:00-19:00	0.114	0.387	0.501
TOTAL	5.771	5.855	11.626

Person Trips

IN	OUT	TOTAL	
31	10	41	
54	21	75	
49	25	74	
45	34	80	
40	43	83	
40	44	84	
44	45	89	
34	44	78	
32	41	74	
35	50	85	
27	60	87	
9	30	39	
TOTAL	440	447	887

7632 m² GFA 82150 m² GFA

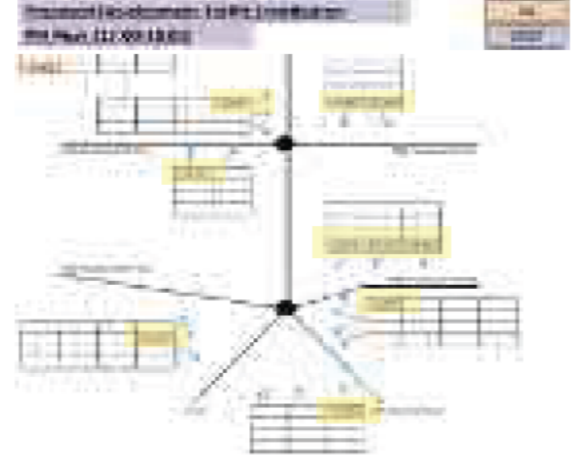
Mean: 02-D, MM, 3500 to 15000m², England (exc. GU) Wales and Scotland, Edge of Town & Free Standing, exc. Sat/Sun, 13+ | 5)

Projected Modal Trip Generation

Vehicle Trip Generating	Modal Split	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)			12-Hour (07:00-19:00)		
		IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Car Driver	72.4%	39	15	54	20	43	63	313	324	642
Taxi	0.2%	0	0	0	0	0	0	1	1	2
Powered Two-Wheeler	1.4%	1	0	1	0	1	1	6	6	12
Vehicle Trips	74.0%	40	15	55	20	44	64	326	331	656

Trip Rate	Trip Generation		76.32 GFA	
Arrivals	Departures	Arrivals	Departures	74% Vehicle Trips
7 to 8	0.460	0.659	26	37.2

Trip Distribution

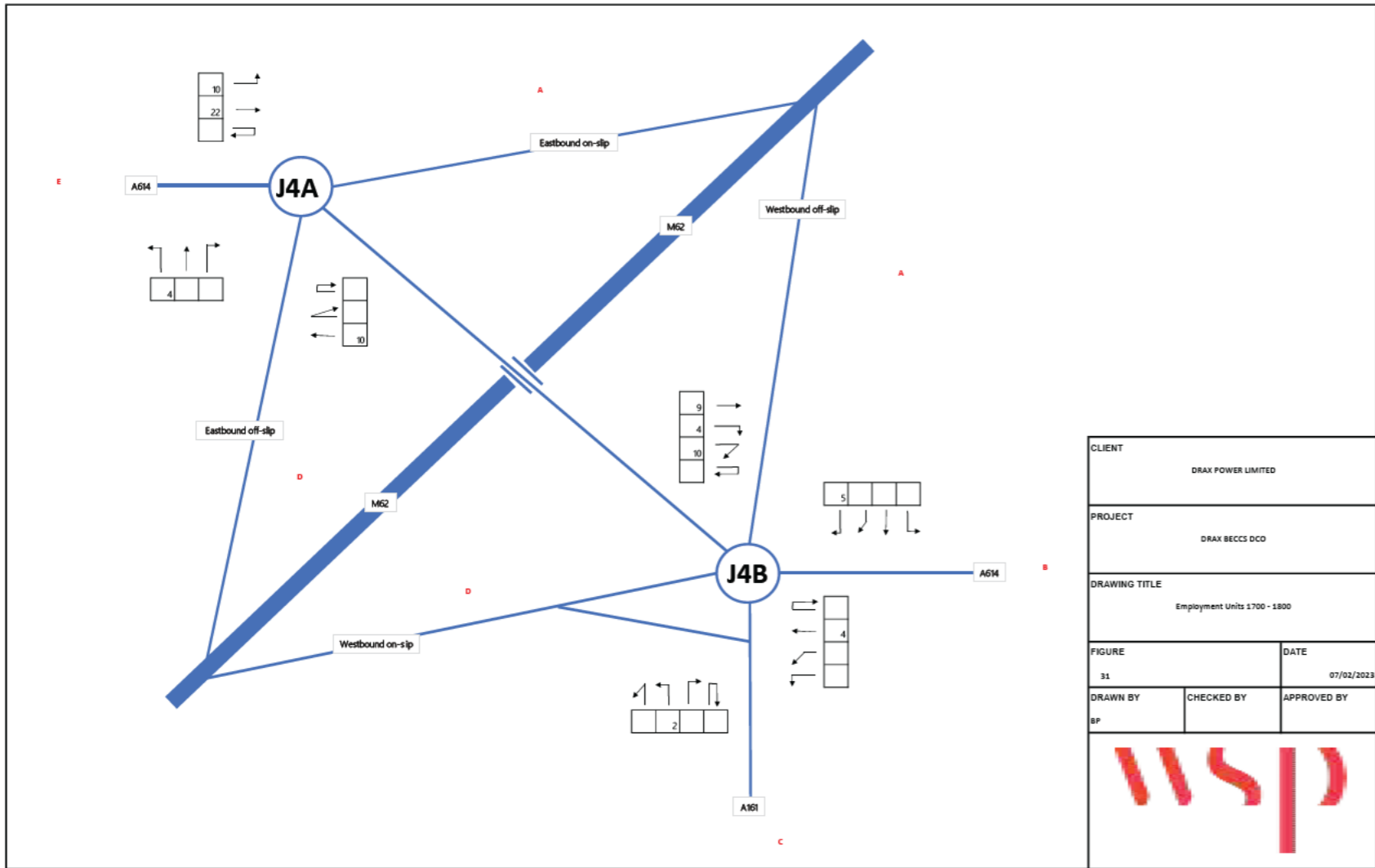


A to E	23.1%
B to E	19.8%
C to E	8.3%
D to E	21.5%
E to A	23.1%
E to B	19.8%
E to C	8.3%
E to D	21.5%

Trip Assignment



A to E	6
B to E	5
C to E	2
D to E	6
E to A	9
E to B	7
E to C	3
E to D	8



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	
A	0	10	22	-	Total movements through junction 47
B	-	-	-	-	
C	10	0	0	-	
D	4	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	
A	0	-	9	4	10	Total movements through junction 32
B	5	-	0	0	0	
C	4	-	0	0	0	
D	2	-	0	0	0	
E	-	-	-	-	-	

CLIENT: DRAX POWER LIMITED

PROJECT: DRAX BECCS DCO

DRAWING TITLE: Employment Units 1700 - 1800

FIGURE: 31 | DATE: 07/02/2023

DRAWN BY: BP | CHECKED BY: | APPROVED BY: |

Trip Generation

Projected Trip Generation

Person Trip Rates (per 100m2)

Time	IN	OUT	TOTAL
07:00-08:00	0.405	0.133	0.538
08:00-09:00	0.705	0.375	0.980
09:00-10:00	0.640	0.329	0.969
10:00-11:00	0.591	0.451	1.042
11:00-12:00	0.527	0.560	1.087
12:00-13:00	0.525	0.576	1.101
13:00-14:00	0.579	0.587	1.166
14:00-15:00	0.444	0.572	1.016
15:00-16:00	0.422	0.542	0.964
16:00-17:00	0.460	0.639	1.119
17:00-18:00	0.439	0.744	1.148
18:00-19:00	0.114	0.367	0.501
TOTAL	5.771	5.855	11.626

Person Trips

IN	OUT	TOTAL	
31	10	41	
54	21	75	
49	25	74	
45	34	80	
40	43	83	
40	44	84	
44	45	89	
34	44	78	
32	41	74	
35	50	85	
27	60	87	
9	30	39	
TOTAL	440	447	887

7632 m² GFA | 82150 ft² GFA

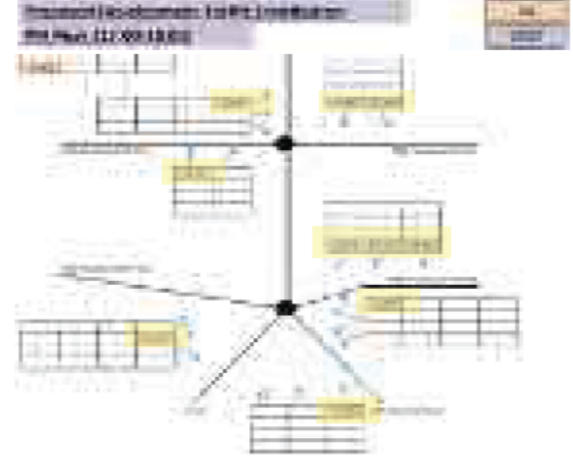
Mean: 02-D, MM, 3500 to 15000m2, England (exc. GU) Wales and Scotland, Edge of Town & Free Standing, exc. Sat/Sun, 13+ | 5)

Projected Modal Trip Generation

Vehicle Trip Generating	Modal Split	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)			12-Hour (07:00-19:00)		
		IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Car Driver	72.4%	39	15	54	20	43	63	319	324	642
Taxi	0.2%	0	0	0	0	0	0	1	1	2
Powered Two-Wheeler	1.4%	1	0	1	0	1	1	6	6	12
Vehicle Trips	74.0%	40	15	55	20	44	64	326	331	656

Trip Rate	Trip Generation		76.32 GFA	
Arrivals	Departures	Arrivals	Departures	74% Vehicle Trips
7 to 8	0.359	0.784	20.3	44.3

Trip Distribution

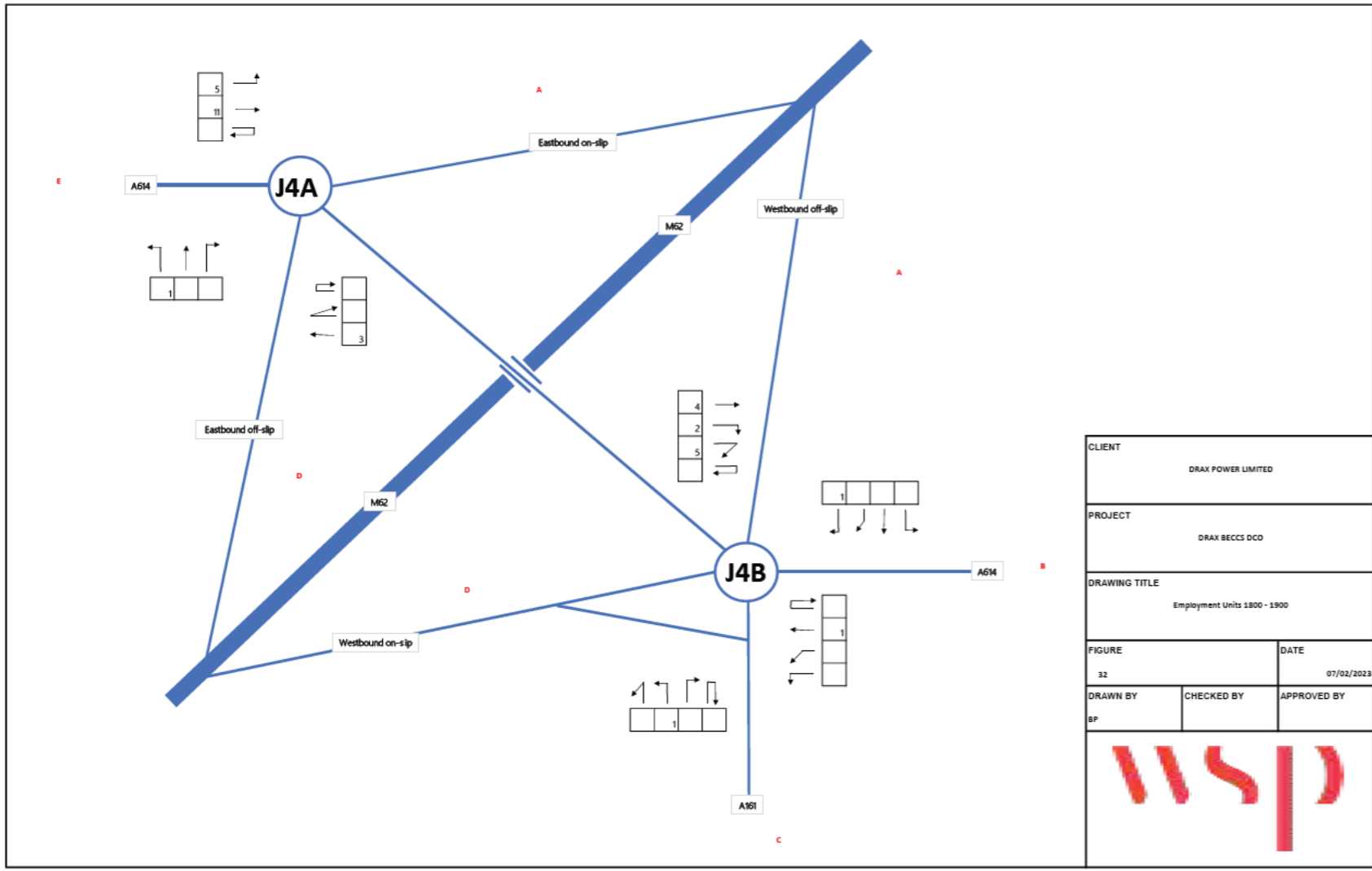


A to E	23.1%
B to E	19.8%
C to E	8.3%
D to E	21.5%
E to A	23.1%
E to B	19.8%
E to C	8.3%
E to D	21.5%

Trip Assignment



A to E	5
B to E	4
C to E	2
D to E	4
E to A	10
E to B	9
E to C	4
E to D	10



J4A: M2 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	
A	0	3	11	-	Total movements through junction 21
B	-	-	-	-	
C	3	0	0	-	
D	1	0	0	-	

J4B: M2 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	
A	0	-	4	2	3	Total movements through junction 14
B	1	-	0	0	0	
C	1	-	0	0	0	
D	1	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Employment Units 1800 - 1900		
FIGURE	DATE	
32	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		



Trip Generation

Projected Trip Generation

Person Trip Rates (per 100m2)

Time	IN	OUT	TOTAL
07:00-08:00	0.405	0.133	0.538
08:00-09:00	0.705	0.375	0.980
09:00-10:00	0.640	0.329	0.969
10:00-11:00	0.591	0.451	1.042
11:00-12:00	0.527	0.560	1.087
12:00-13:00	0.525	0.576	1.101
13:00-14:00	0.579	0.587	1.166
14:00-15:00	0.444	0.572	1.016
15:00-16:00	0.422	0.542	0.964
16:00-17:00	0.460	0.639	1.119
17:00-18:00	0.439	0.384	1.148
18:00-19:00	0.114	0.387	0.501
TOTAL	5.771	5.855	11.626

Person Trips

IN	OUT	TOTAL	
31	10	41	
54	21	75	
49	25	74	
45	34	80	
40	43	83	
40	44	84	
44	45	89	
34	44	78	
32	41	74	
35	50	85	
27	60	87	
9	30	39	
TOTAL	440	447	887

7632 m² GFA 82150 m² GFA

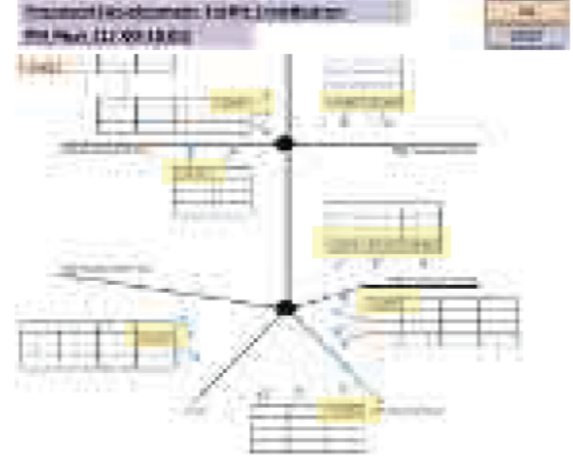
Mean: 02-D, MM, 3500 to 15000m2, England (exc. GU) Wales and Scotland, Edge of Town & Free Standing, exc. Sat/Sun, 13+ | 5)

Projected Modal Trip Generation

Vehicle Trip Generating	Modal Split	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)			12-Hour (07:00-19:00)		
		IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Car Driver	72.4%	39	15	54	20	43	63	313	324	642
Taxi	0.2%	0	0	0	0	0	0	1	1	2
Powered Two-Wheeler	1.4%	1	0	1	0	1	1	6	6	12
Vehicle Trips	74.0%	40	15	55	20	44	64	326	331	656

Trip Rate	Trip Generation		76.32 GFA	
Arrivals	Departures	Arrivals	Departures	74% Vehicle Trips
7 to 8	0.114	0.387	6.44	21.9

Trip Distribution

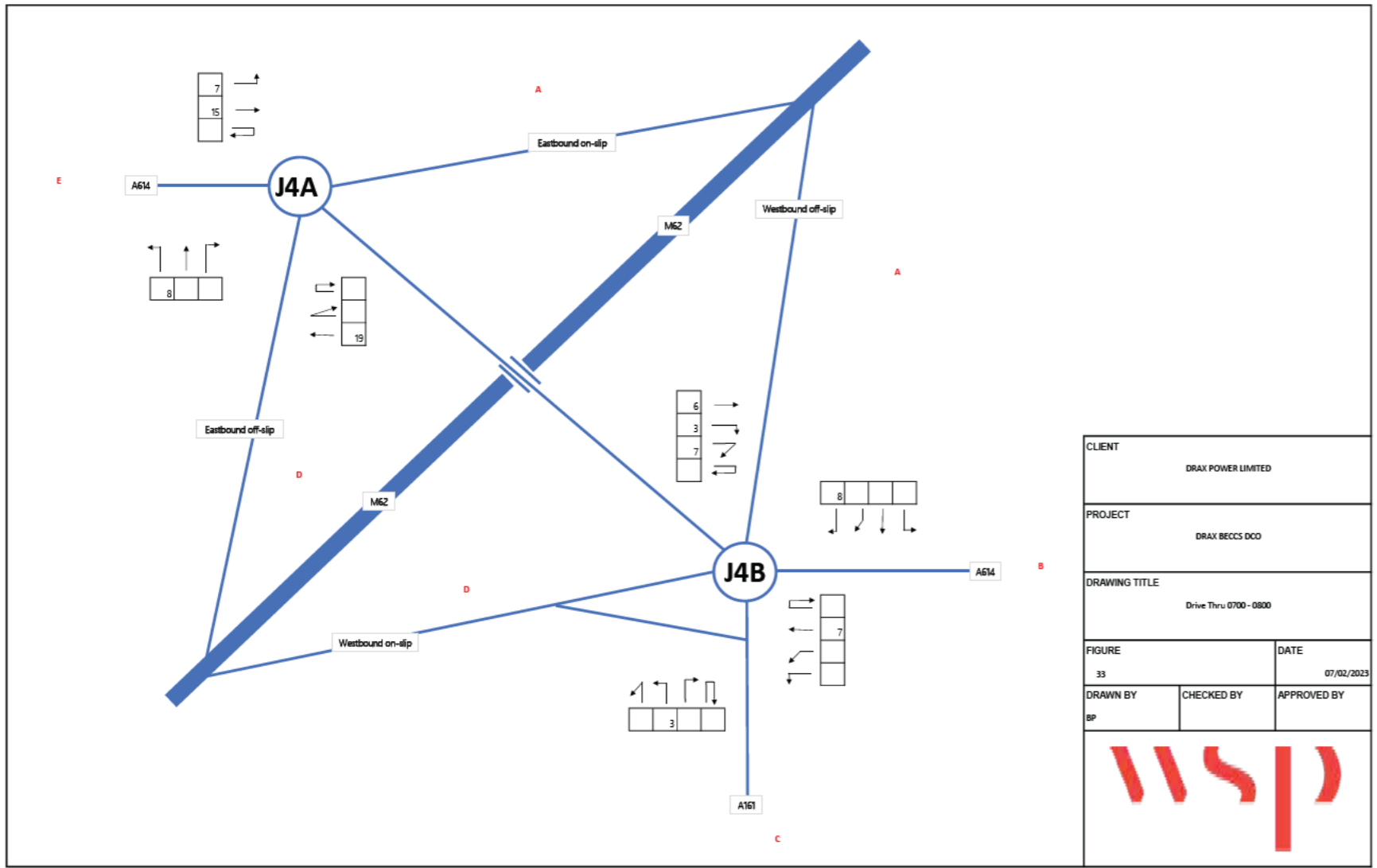


A to E	23.1%
B to E	19.8%
C to E	8.3%
D to E	21.5%
E to A	23.1%
E to B	19.8%
E to C	8.3%
E to D	21.5%

Trip Assignment



A to E	1
B to E	1
C to E	1
D to E	1
E to A	5
E to B	4
E to C	2
E to D	5




J4A: M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	7	15	-	49
B	-	-	-	-	
C	19	0	0	-	
D	8	0	0	-	

J4B: M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	6	3	7	34
B	8	-	0	0	0	
C	7	-	0	0	0	
D	3	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Drive Thru 0700 - 0800		
FIGURE	DATE	
33	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		



Trip Generation

Area	Arrivals	Departures
7 to 8	8,664	7,231

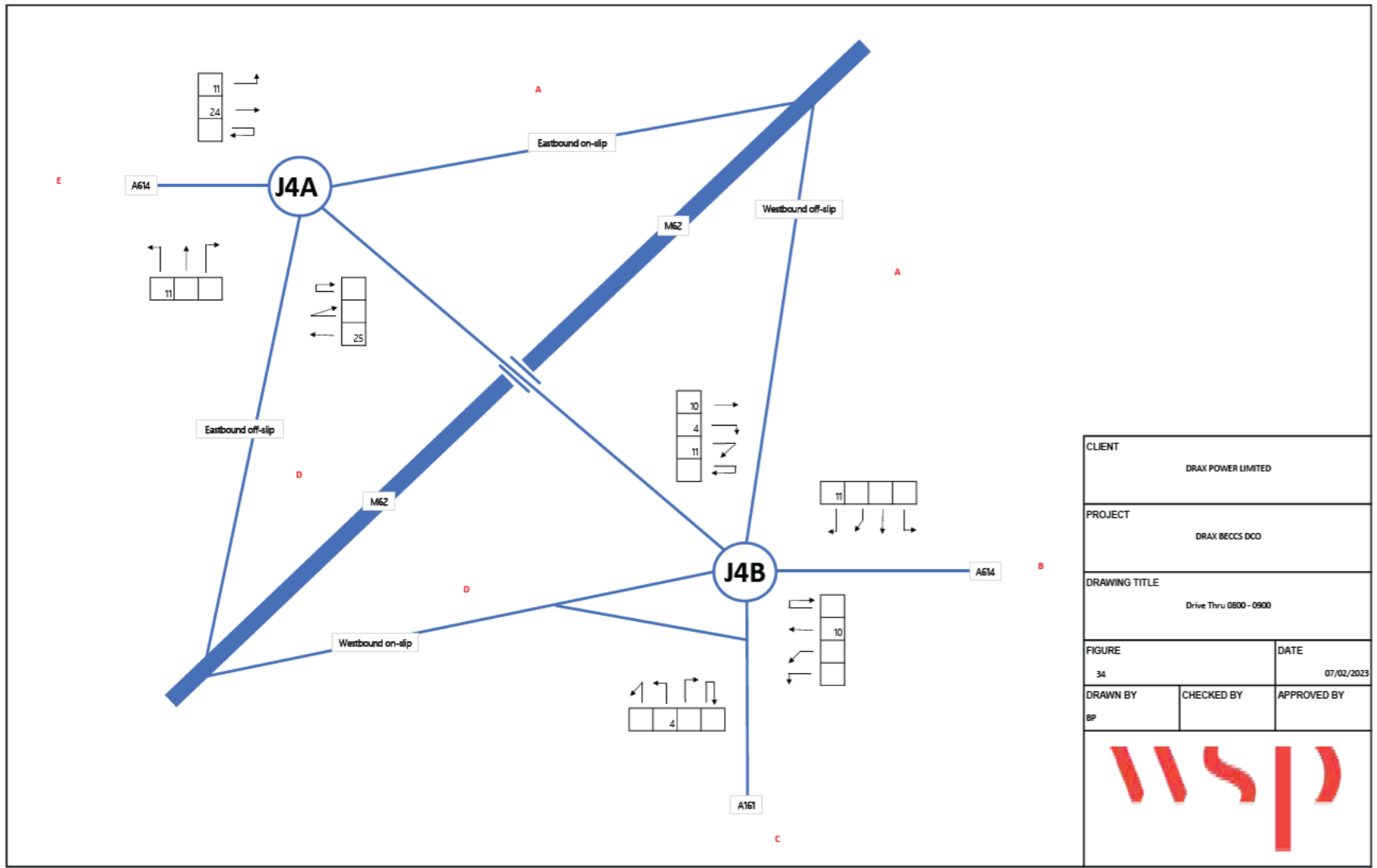
Trip Rate	Arrivals	Departures	Trip Generation	Arrivals	Departures	GFA
7 to 8	8,664	7,231	36.5	30.4	4.21	



A to E	23.1%
B to E	19.8%
C to E	8.3%
D to E	21.5%
E to A	23.1%
E to B	19.8%
E to C	8.3%
E to D	21.5%



A to E	8
B to E	7
C to E	3
D to E	8
E to A	7
E to B	6
E to C	3
E to D	7



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	11	24	-	72
B	-	-	-	-	
C	25	0	0	-	
D	11	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	10	4	11	50
B	11	-	0	0	0	
C	10	-	0	0	0	
D	4	-	0	0	0	
E	-	-	-	-	-	

CLIENT: DRAX POWER LIMITED

PROJECT: DRAX BECCS DCO

DRAWING TITLE: Drive Thru 0800 - 0900

FIGURE: 34 DATE: 07/02/2023

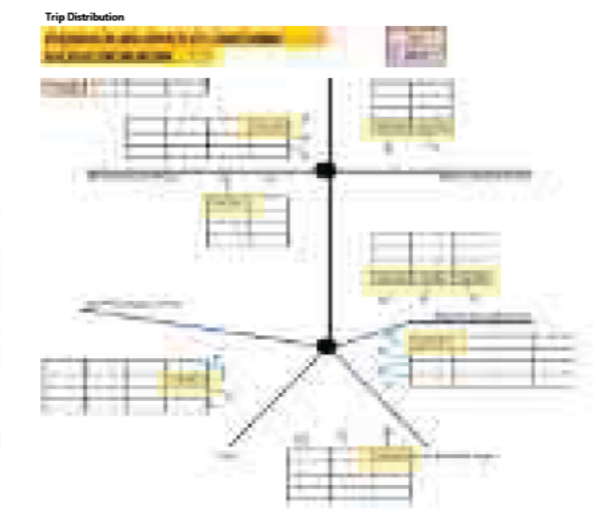
DRAWN BY: BP CHECKED BY: APPROVED BY:

Trip Generation

Area	Arrivals	Departures
7 to 8	11,792	11,726

Trip Rate

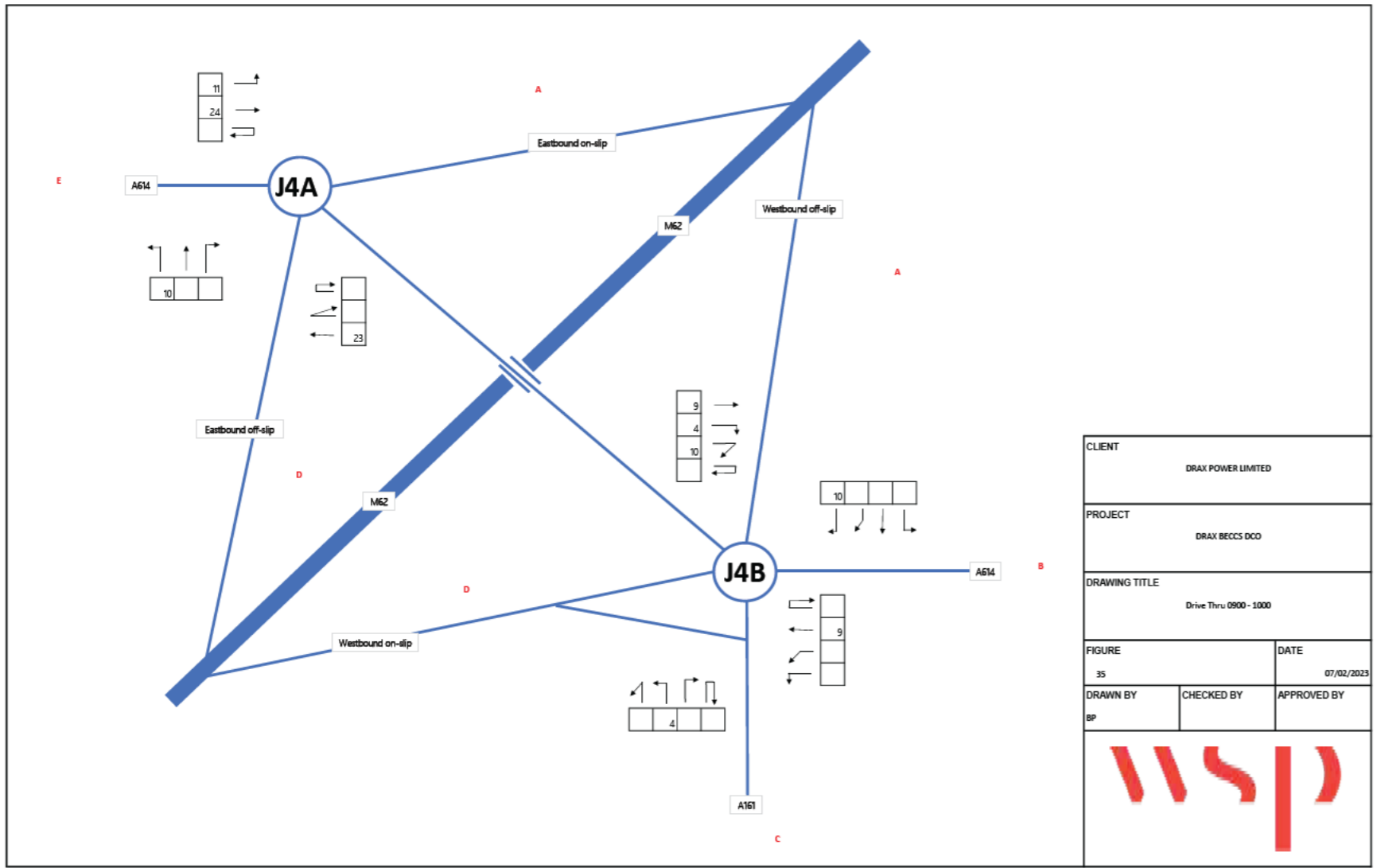
Area	Arrivals	Departures
7 to 8	11,792	11,726



A to E	23.1%
B to E	19.8%
C to E	8.3%
D to E	21.5%
E to A	23.1%
E to B	19.8%
E to C	8.3%
E to D	21.5%



A to E	11
B to E	10
C to E	4
D to E	11
E to A	11
E to B	10
E to C	4
E to D	11



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	11	24	-	67
B	-	-	-	-	
C	23	0	0	-	
D	10	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	9	4	10	47
B	10	-	0	0	0	
C	9	-	0	0	0	
D	4	-	0	0	0	
E	-	-	-	-	-	

CLIENT: DRAX POWER LIMITED

PROJECT: DRAX BECCS DCO

DRAWING TITLE: Drive Thru 0900 - 1000

FIGURE: 35 | DATE: 07/02/2023

DRAWN BY: BP | CHECKED BY: | APPROVED BY: |

Trip Generation

Area	Arrivals	Departures
7 to 8	10,749	11,270

Trip Rate

Area	Arrivals	Departures
7 to 8	10,749	11,270

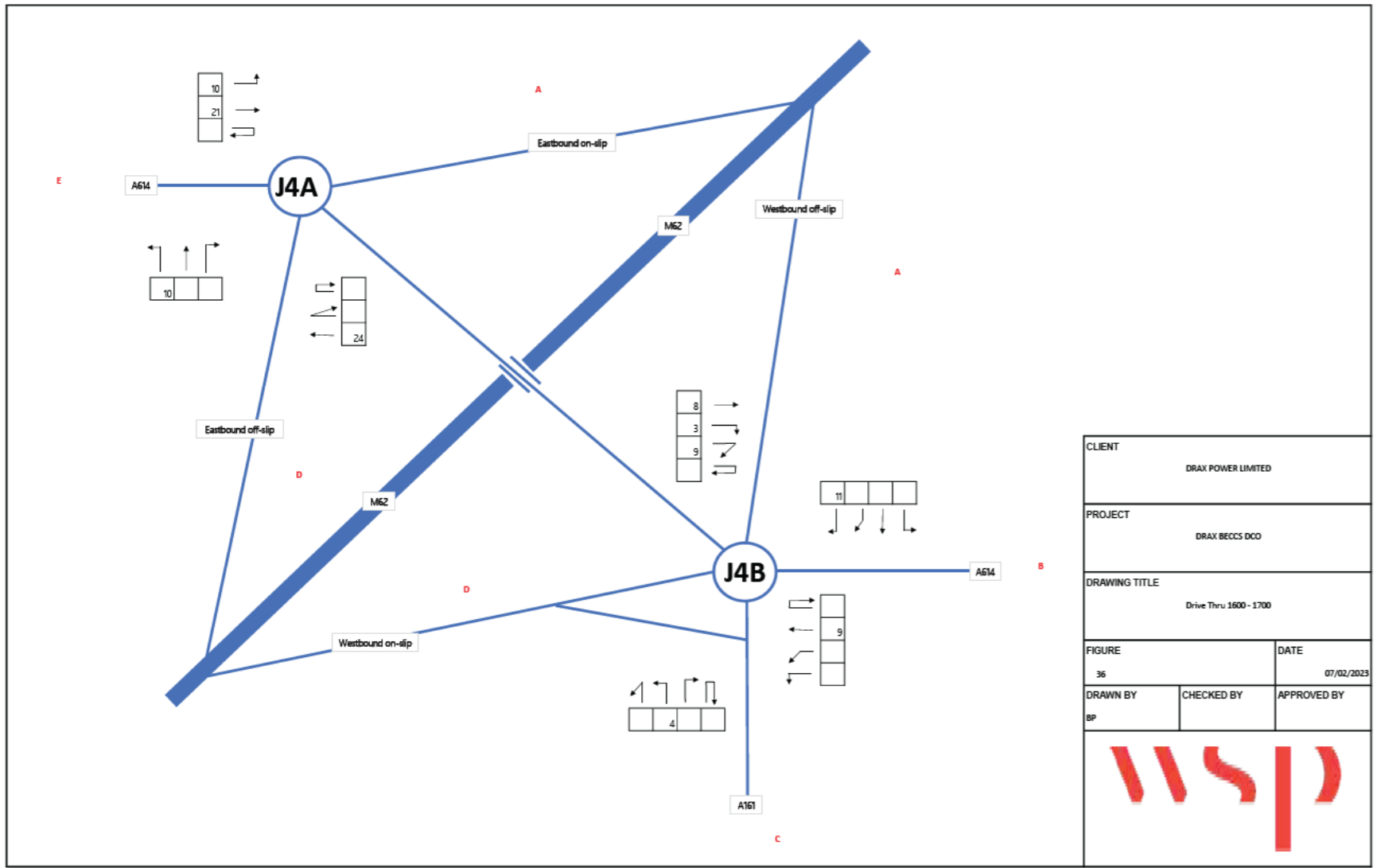
GFA 4.21



A to E	23.1%
B to E	19.8%
C to E	8.3%
D to E	21.5%
E to A	23.1%
E to B	19.8%
E to C	8.3%
E to D	21.5%



A to E	10
B to E	9
C to E	4
D to E	10
E to A	11
E to B	9
E to C	4
E to D	10



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	
A	0	10	21	-	Total movements through junction 65
B	-	-	-	-	
C	24	0	0	-	
D	10	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	
A	0	-	8	3	9	Total movements through junction 45
B	11	-	0	0	0	
C	9	-	0	0	0	
D	4	-	0	0	0	
E	-	-	-	-	-	

CLIENT: DRAX POWER LIMITED

PROJECT: DRAX BECCS DCO

DRAWING TITLE: Drive Thru 1600 - 1700

FIGURE: 36 DATE: 07/02/2023

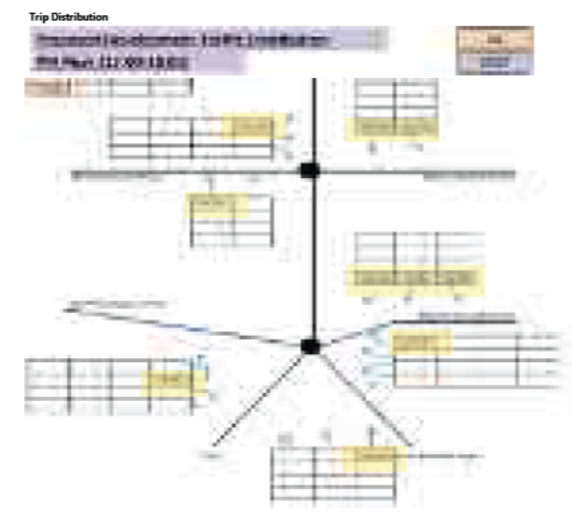
DRAWN BY: BP CHECKED BY: APPROVED BY:

Trip Generation

Area	Arrivals	Departures
7 to 8	11,326	9,945

GFA 4.21

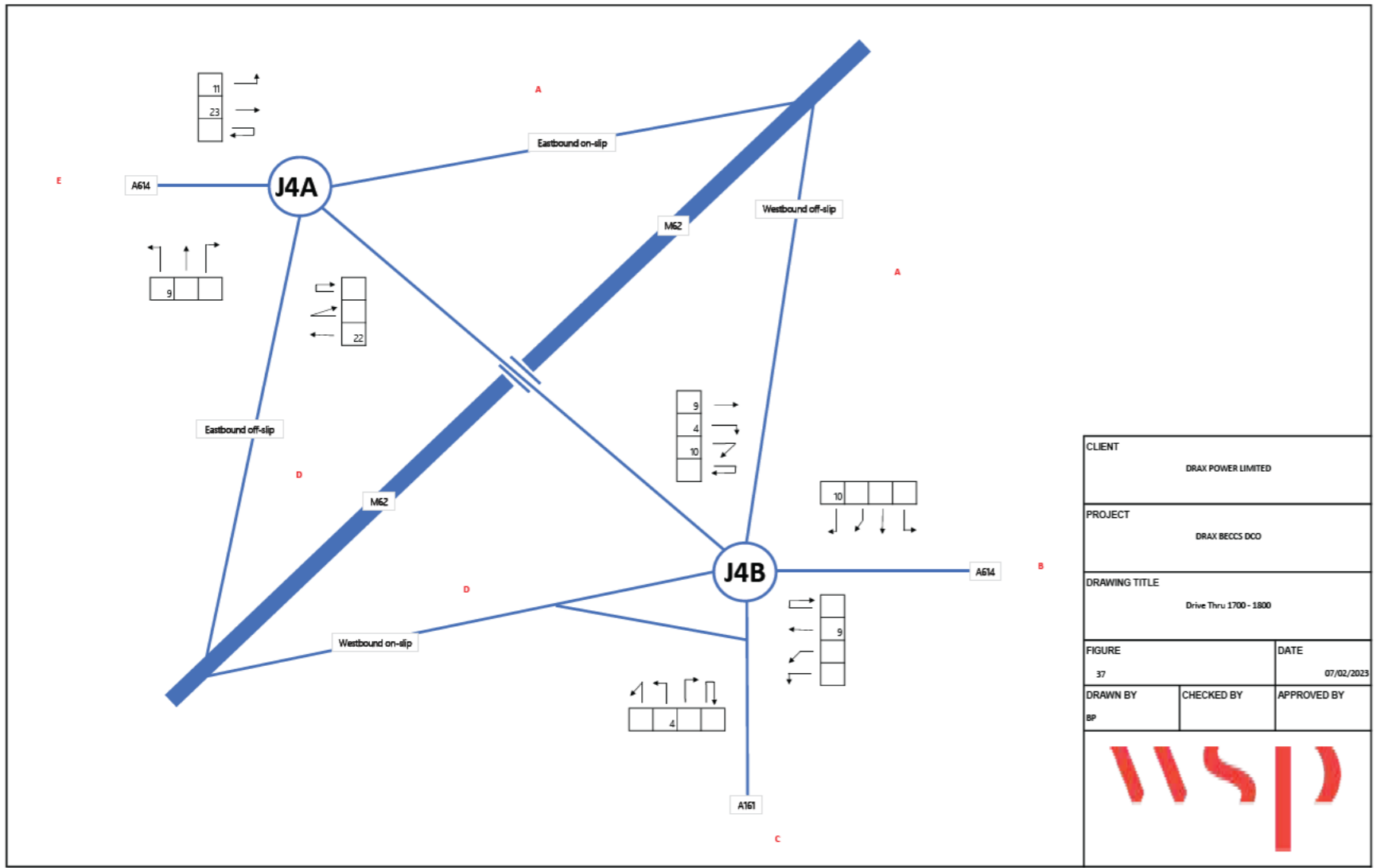
Trip Rate	Arrivals	Departures
7 to 8	11,326	9,945



A to E	23.1%
B to E	19.8%
C to E	8.3%
D to E	21.5%
E to A	23.1%
E to B	19.8%
E to C	8.3%
E to D	21.5%



A to E	11
B to E	9
C to E	4
D to E	10
E to A	10
E to B	8
E to C	3
E to D	9



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	
A	0	11	23	-	Total movements through junction 66
B	-	-	-	-	
C	22	0	0	-	
D	9	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	
A	0	-	9	4	10	Total movements through junction 45
B	10	-	0	0	0	
C	9	-	0	0	0	
D	4	-	0	0	0	
E	-	-	-	-	-	

CLIENT: DRAX POWER LIMITED

PROJECT: DRAX BECCS DCO

DRAWING TITLE: Drive Thru 1700 - 1800

FIGURE: 37 | DATE: 07/02/2023

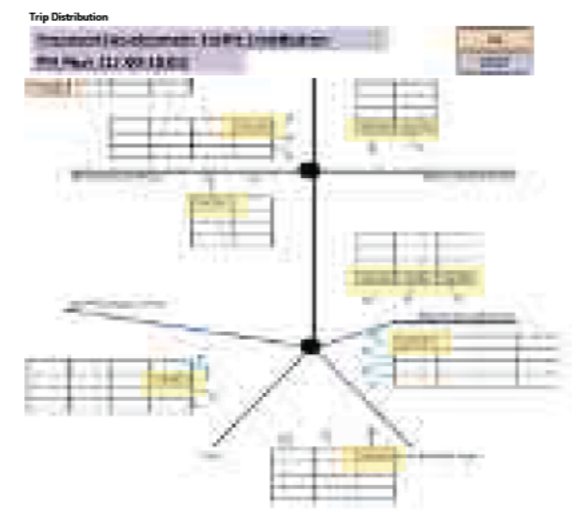
DRAWN BY: BP | CHECKED BY: | APPROVED BY: |

Trip Generation

Area	Arrivals	Departures
7 to 8	10,387	11,050

GFA 4.21

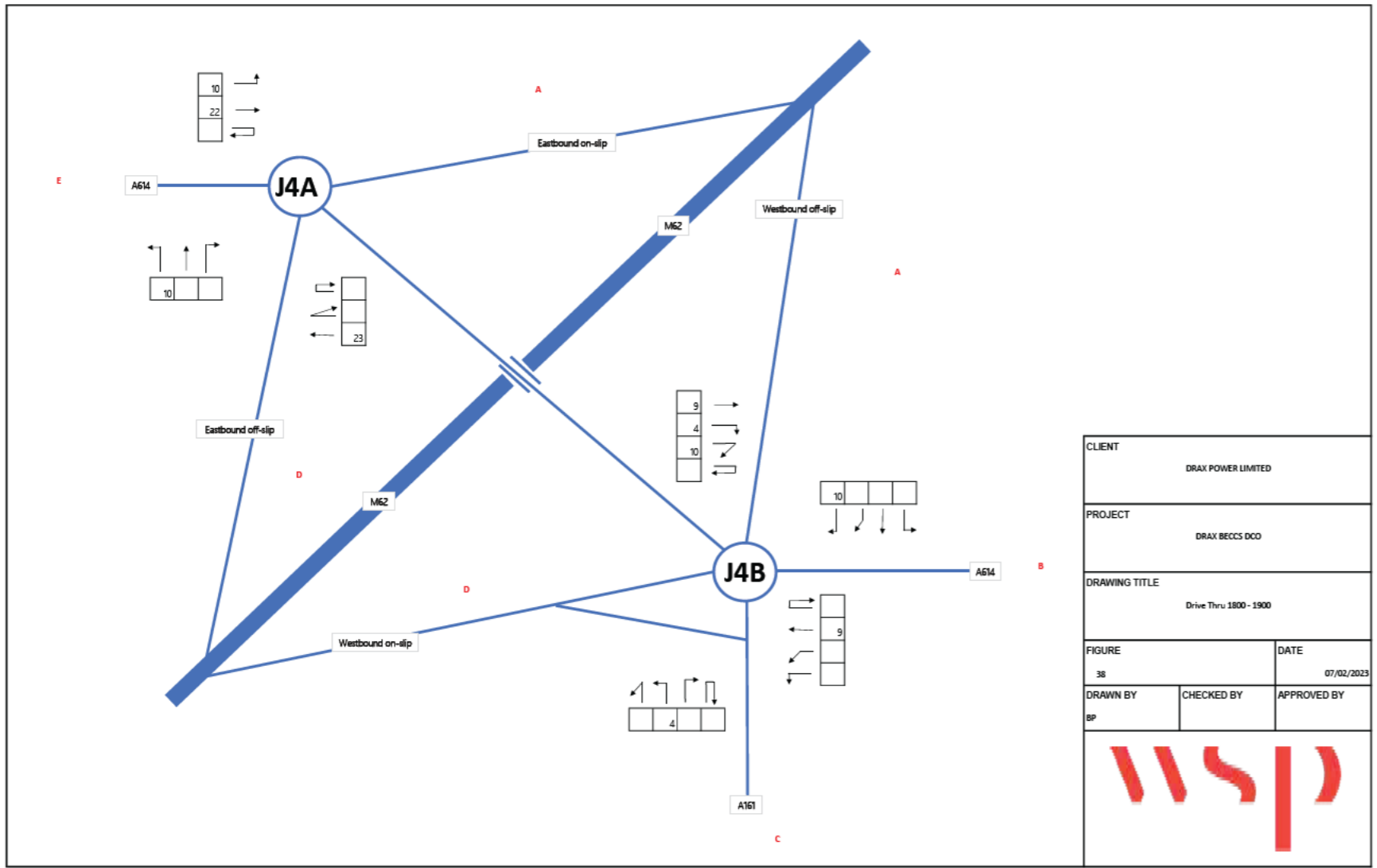
Trip Rate	Arrivals	Departures
7 to 8	10,387	11,050



A to E	23.1%
B to E	19.8%
C to E	8.3%
D to E	21.5%
E to A	23.1%
E to B	19.8%
E to C	8.3%
E to D	21.5%



A to E	10
B to E	9
C to E	4
D to E	9
E to A	11
E to B	9
E to C	4
E to D	10



J4A: M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	
A	0	10	22	-	Total movements through junction 65
B	-	-	-	-	
C	23	0	0	-	
D	10	0	0	-	

J4B: M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	
A	0	-	9	4	10	Total movements through junction 45
B	10	-	0	0	0	
C	9	-	0	0	0	
D	4	-	0	0	0	
E	-	-	-	-	-	

CLIENT: DRAX POWER LIMITED

PROJECT: DRAX BECCS DCO

DRAWING TITLE: Drive Thru 1800 - 1900

FIGURE: 36 | DATE: 07/02/2023

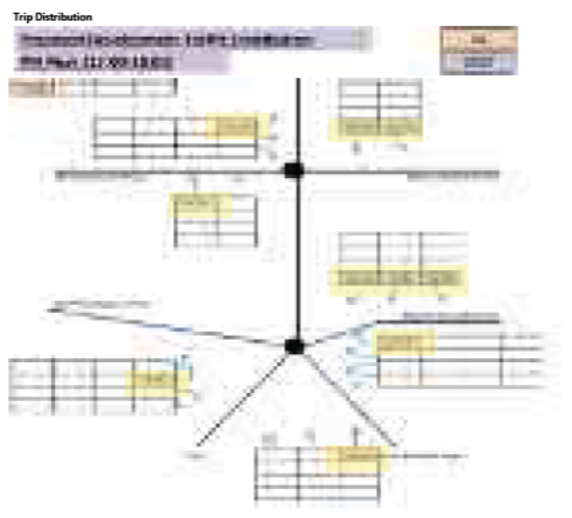
DRAWN BY: BP | CHECKED BY: | APPROVED BY: |

Trip Generation

Area	Arrivals	Departures
7 to 8	10,718	10,608

Trip Rate

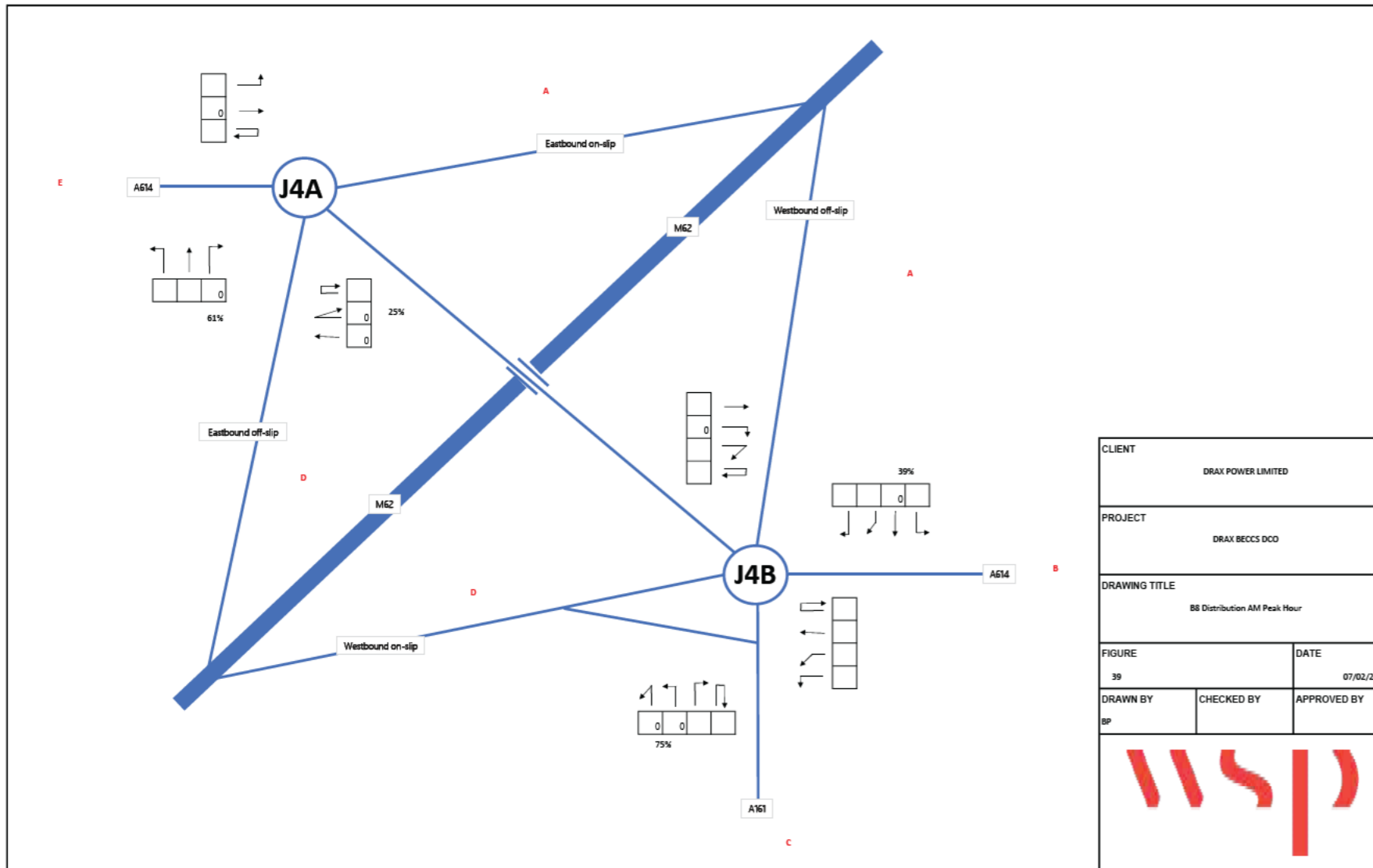
Area	Arrivals	Departures
7 to 8	10,718	10,608



A to E	23.1%
B to E	19.8%
C to E	8.3%
D to E	21.5%
E to A	23.1%
E to B	19.8%
E to C	8.3%
E to D	21.5%



A to E	10
B to E	9
C to E	4
D to E	10
E to A	10
E to B	9
E to C	4
E to D	10




J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	0	0	-	0
B	-	-	-	-	
C	0	0	0	-	
D	0	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	0	0
B	0	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
B8 Distribution AM Peak Hour		
FIGURE	DATE	
39	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		



Trip Generation

Category	Trips	Trips per hour	Trips per day
Industrial/Warehousing/Distribution	33000	1100	26400
Other	0	0	0
Total	33000	1100	26400

Trip Distribution

B2 and B8 Industrial/Warehousing/Distribution

- 80% of trips to and from motorway
- 10% of trips to and from docks
- 5% of trips to and from Goole town centre
- 5% of trips to and from west of M62

Trip Assignment

0800 - 0900

SQM 33000 0

Arrival Trip Rate 0.49
Departure Trip Rate 0.08

Arrivals 0
Departures 0

Arrivals

80% of trips to and from M62
5% of trips to and from west of M62

Departures

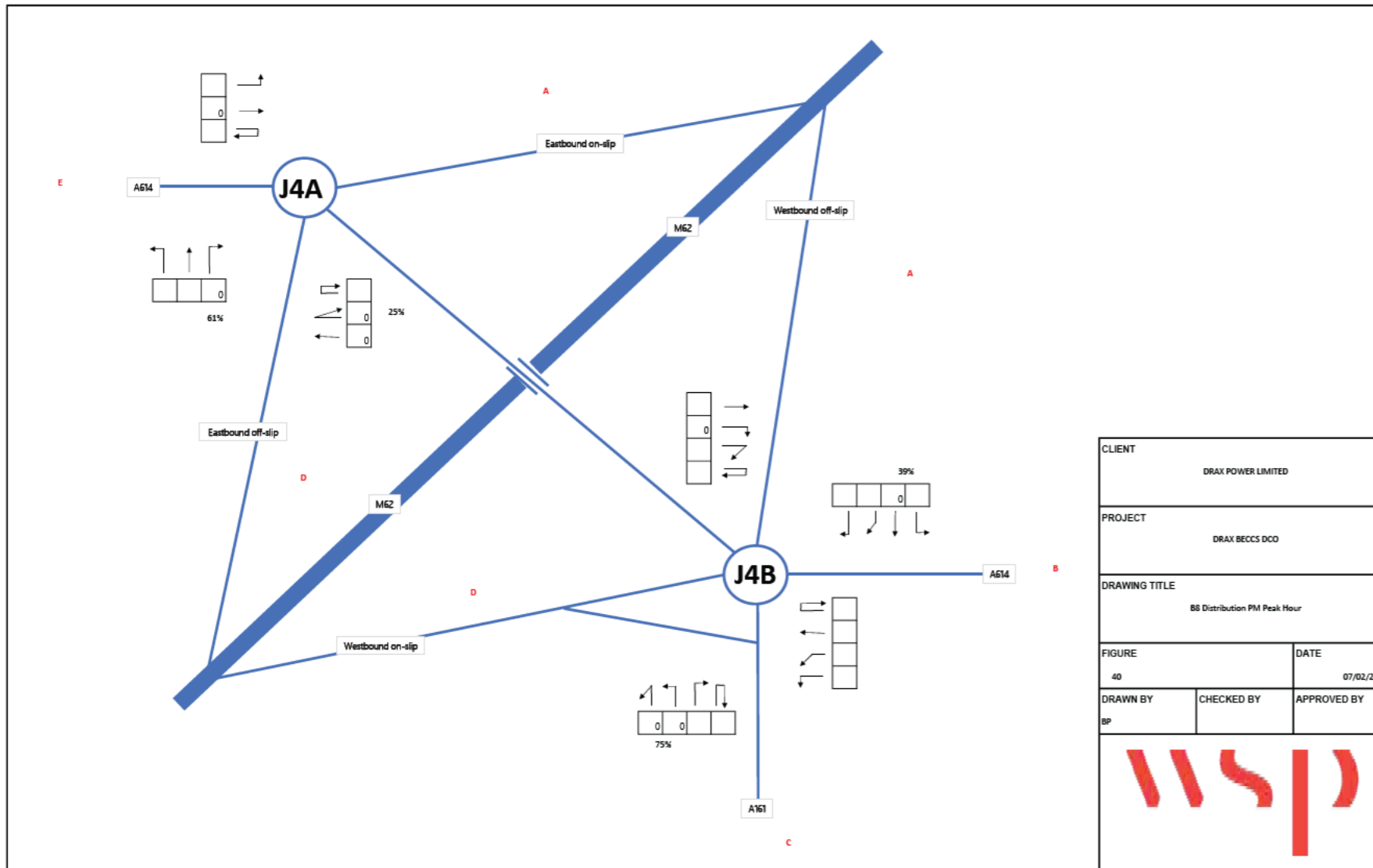
80% of trips to and from M62
5% of trips to and from west of M62

Arrivals

80% of trips to and from M62 0
5% of trips to and from west of M62 0

Departures

80% of trips to and from M62 0
5% of trips to and from west of M62 0



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	
A	0	0	0	-	Total movements through junction 0
B	-	-	-	-	
C	0	0	0	-	
D	0	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	
A	0	-	0	0	0	Total movements through junction 0
B	0	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
B8 Distribution PM Peak Hour		
FIGURE	DATE	
40	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		



Trip Generation

Category	Trips	Trips per Hour	Trips per Day
Industrial/Warehousing/Distribution	33000	11000	33000

Trip Distribution
B2 and B8 Industrial/Warehousing/Distribution

- 80% of trips to and from motorway
- 10% of trips to and from docks
- 5% of trips to and from Goole town centre
- 5% of trips to and from west of M62

Trip Assignment

Sewall Bird & Axon

Category	Trips	Trips per Hour	Trips per Day
Industrial/Warehousing/Distribution	33000	11000	33000

1700 - 1800

SQM	33000	0
Arrival Trip Rate	0.1	
Departure Trip Rate	0.54	
Arrivals	0	
Departures	0	

Arrivals

80%	of trips to and from M62	0
5%	of trips to and from west of M62	0

Departures

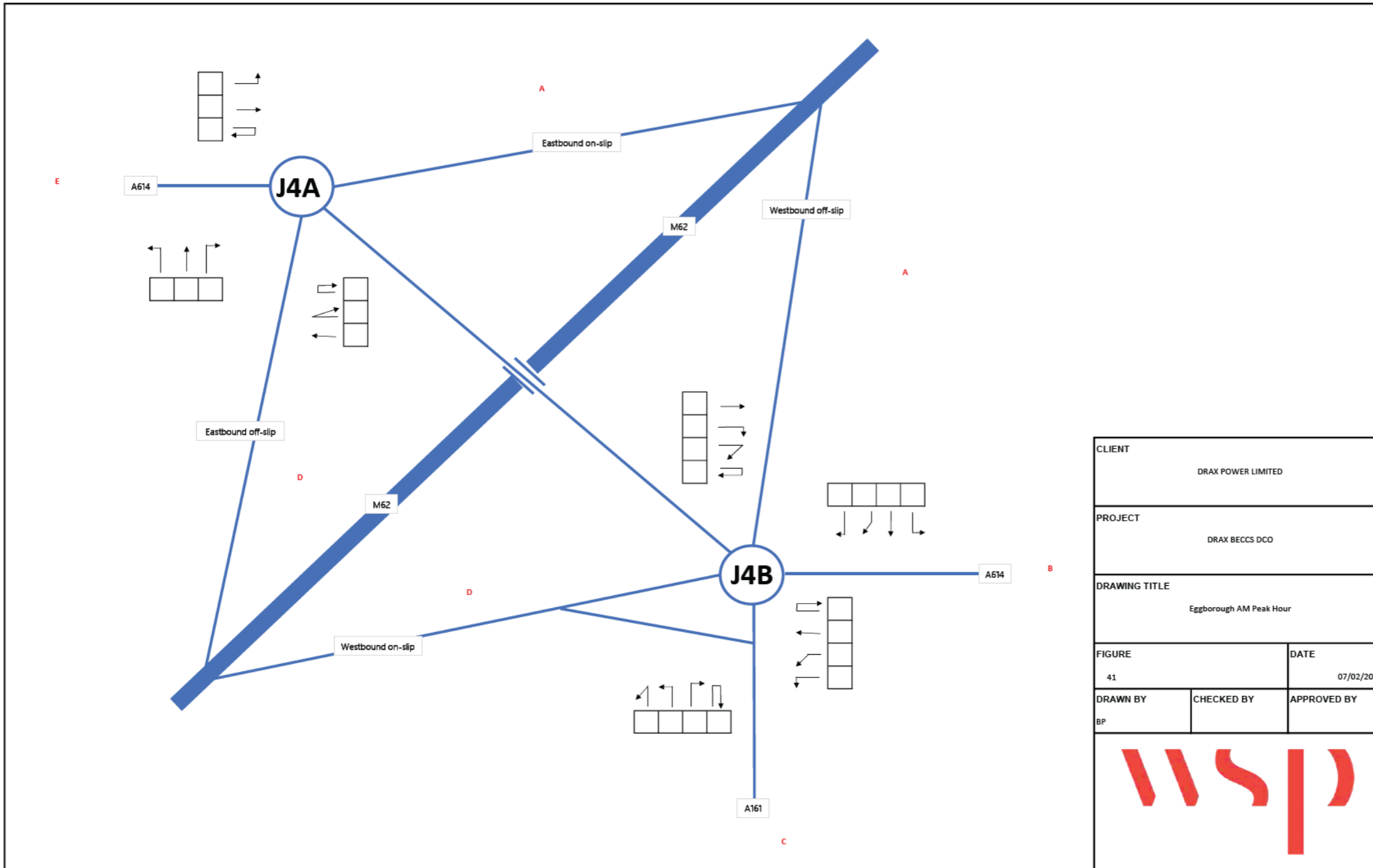
80%	of trips to and from M62	0
5%	of trips to and from west of M62	0

Arrivals

80%	of trips to and from M62	0
5%	of trips to and from west of M62	0

Departures

80%	of trips to and from M62	0
5%	of trips to and from west of M62	0



J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT


	A	B	C	D
A	0	0	0	-
B	-	-	-	-
C	0	0	0	-
D	0	0	0	-

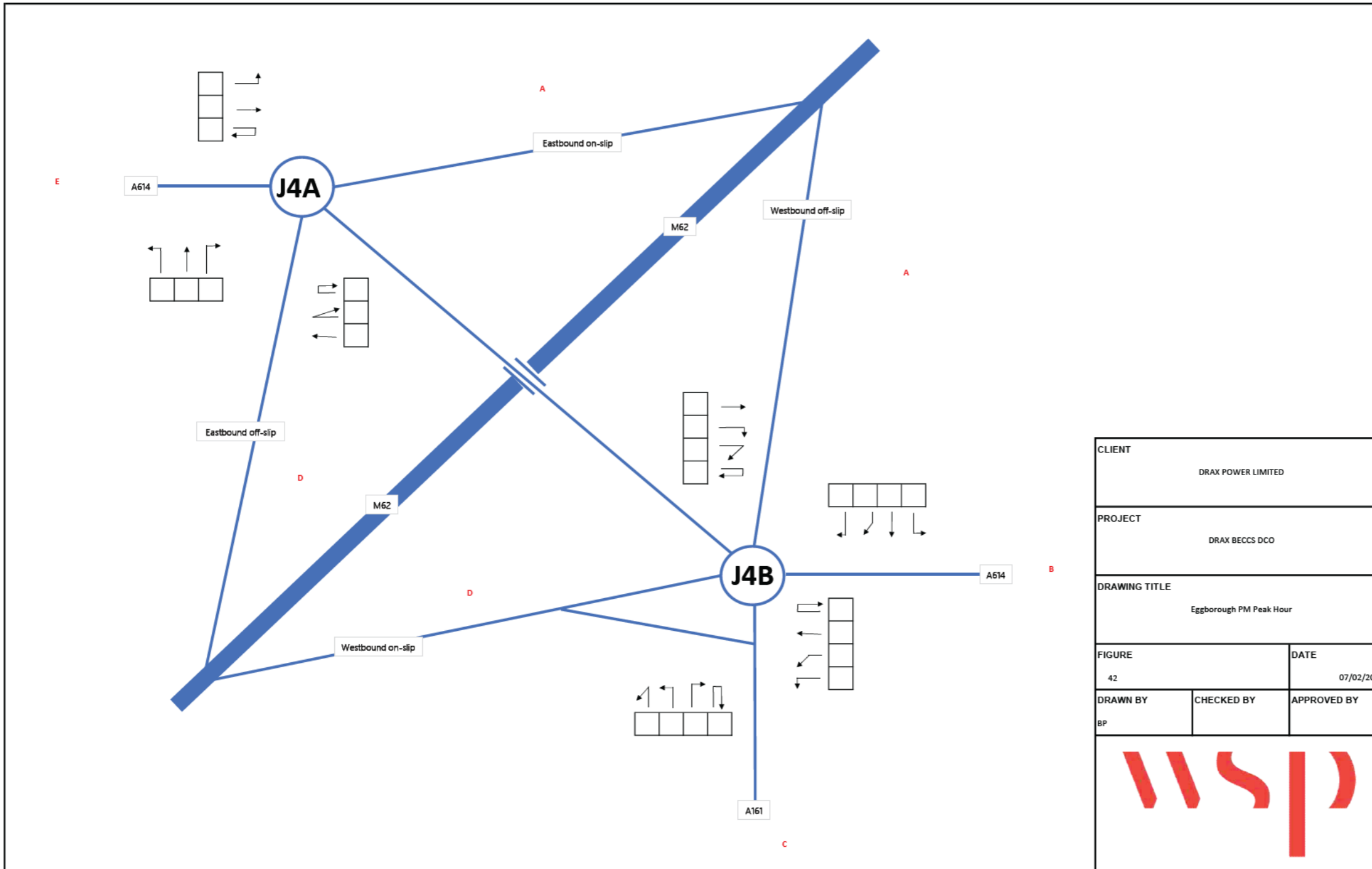
Total movements through junction
0

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	0	0	0
B	0	-	0	0	0
C	0	-	0	0	0
D	0	-	0	0	0
E	-	-	-	-	-

Total movements through junction
0

CLIENT		DRAX POWER LIMITED	
PROJECT		DRAX BECCS DCO	
DRAWING TITLE			
Eggborough AM Peak Hour			
FIGURE		DATE	
41		07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY	
BP			
			



J4A M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D
A	0	0	0	-
B	-	-	-	-
C	0	0	0	-
D	0	0	0	-

Total movements through junction


0

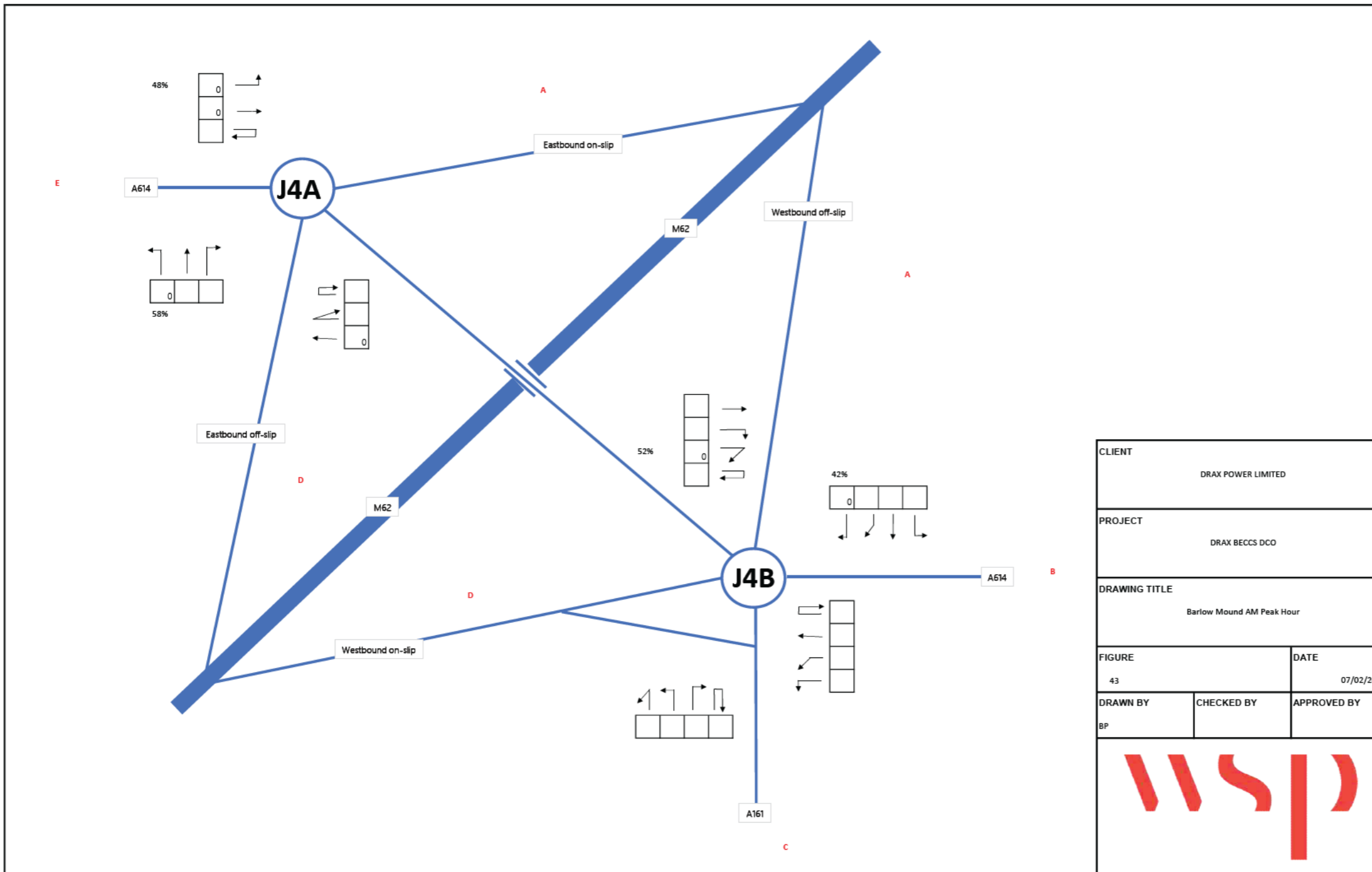
J4B M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	0	0	0
B	0	-	0	0	0
C	0	-	0	0	0
D	0	-	0	0	0
E	-	-	-	-	-

Total movements through junction

0

CLIENT		DRAX POWER LIMITED	
PROJECT		DRAX BECCS DCO	
DRAWING TITLE		Eggborough PM Peak Hour	
FIGURE	DATE		
42	07/02/2023		
DRAWN BY	CHECKED BY	APPROVED BY	
BP			
			



J4A M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	0	0	-	0
B	-	-	-	-	
C	0	0	0	-	
D	0	0	0	-	

J4B M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	0	0
B	0	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		DRAX POWER LIMITED	
PROJECT		DRAX BECCS DCO	
DRAWING TITLE			
Barlow Mound AM Peak Hour			
FIGURE		DATE	
43		07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY	
BP			
			

Trip Generation

3.1.7 Under a 100% exportation by road scenario (assuming a 300 day working year), it is anticipated that there would be approximately 185 two way HGV movements per day (depending the size of lorries that are used), however under the more realistic 65% split scenario, daily to way HGV movements would reduce to 120 (lorry dependent).

- 0 HGV Trips (two-way)
- 2.3 HGV PCU Value
- 0 HGV PCU Trips (two-way)

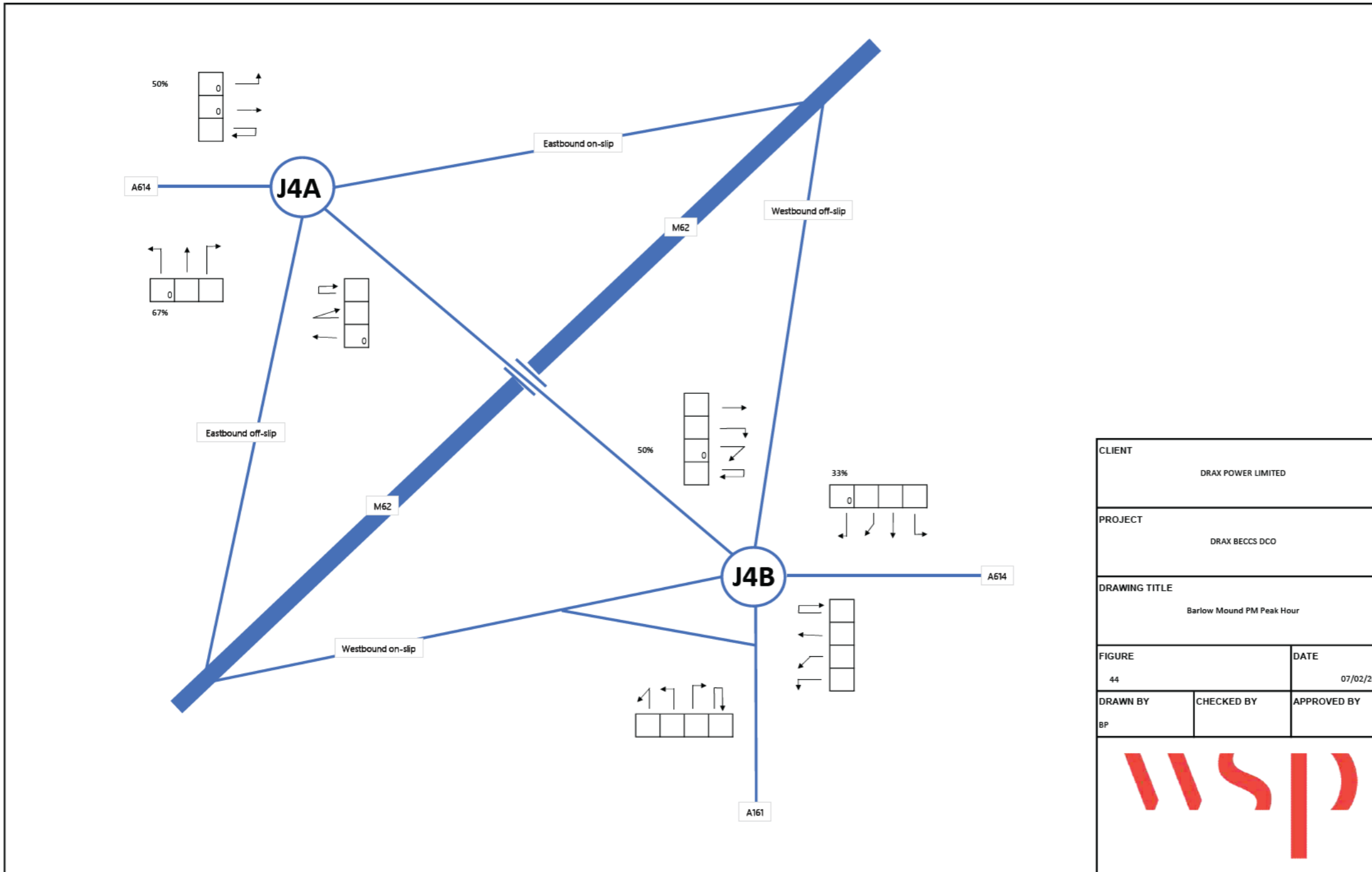
Trip Distribution

3.1.8 It is anticipated that the recovery of screened material off site would occur by both road in circa 20T or 18T lorries and rail (approximately a 85% and 35% split respectively). Although the final end point of material delivered by road cannot be confirmed at this stage, it is anticipated that material would leave Via Drax Power Station and would access the M62 via the A614 and the A161 to Junction 36. Despite the intention of using road movements to export approximately 65% of recovered material, assessments within the ES would consider a 100% by road scenario to provide for the event that recovery by rail is not possible. For ease of reference, all associated calculations in this Supporting Report are based on 85% of the total recoverable material being exported off site.

Trip Assignment

3.1.9 Hours of working are proposed to be 10 hours per day (06:00 to 00:00), seven days a week for the duration of the operational extraction phase, excluding bank holidays.

- 0 HGV PCU Trips (two-way)
- 18 hours per day
- 0 HGV trips per hour (two-way)
- 0 HGV trips per hour (one-way)



J4A M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	0	0	-	0
B	-	-	-	-	
C	0	0	0	-	
D	0	0	0	-	

J4B M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	0	0
B	0	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		DRAX POWER LIMITED
PROJECT		DRAX BECCS DCO
DRAWING TITLE		Barlow Mound PM Peak Hour
FIGURE	DATE	
44	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Trip Generation

3.1.7 Under a 100% exportation by road scenario (assuming a 300 day working year), it is anticipated that there would be approximately 185 two way HGV movements per day (depending the size of lorries that are used), however under the more realistic 65% split scenario, daily to way HGV movements would reduce to 120 (lorry dependent).

- 0 HGV Trips (two-way)
- 2.3 HGV PCU Value
- 0 HGV PCU Trips (two-way)

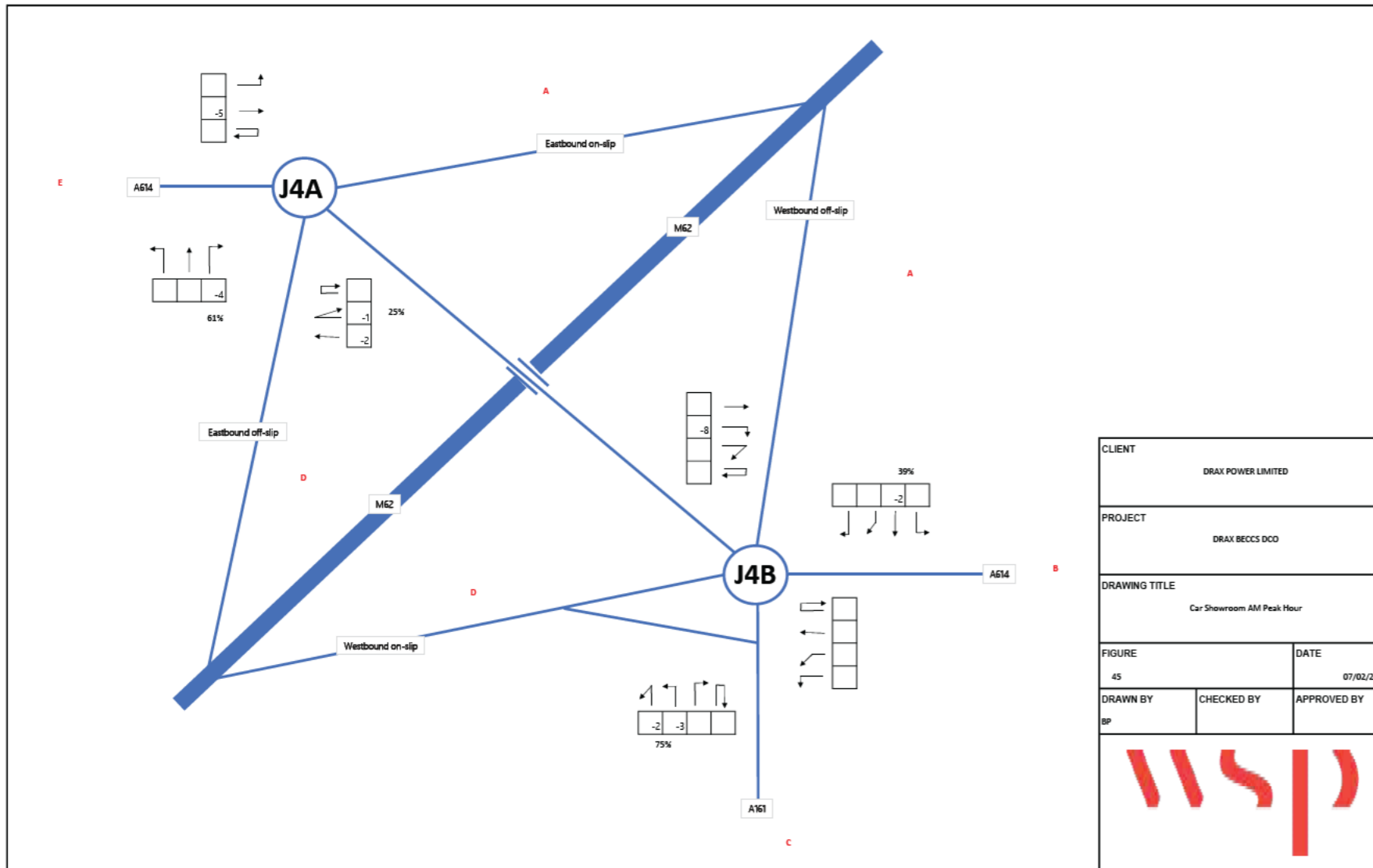
Trip Distribution

3.1.8 It is anticipated that the recovery of screened material off site would occur by both road in circa 20T or 18T lorries and rail (approximately a 85% and 35% split respectively). Although the final end point of material delivered by road cannot be confirmed at this stage, it is anticipated that material would leave Via Drax Power Station and would access the M62 via the A614 and the A161 to Junction 36. Despite the intention of using road movements to export approximately 65% of recovered material, assessments within the ES would consider a 100% by road scenario to provide for the event that recovery by rail is not possible. For ease of reference, all associated calculations in this Screening Report are based on 85% of the total recoverable material being exported off site.

Trip Assignment

3.1.9 Hours of working are proposed to be 10 hours per day (06:00 to 00:00), seven days a week for the duration of the operational extraction phase, excluding bank holidays.

- 0 HGV PCU Trips (two-way)
- 18 hours per day
- 0 HGV trips per hour (two-way)
- 0 HGV trips per hour (one-way)



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D
A	0	0	-5	-
B	-	-	-	-
C	-2	-1	0	-
D	0	0	-4	-

Total movements through junction
-11

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	0	-8	0
B	0	-	0	-2	0
C	0	-	0	0	0
D	-3	-	0	0	-2
E	-	-	-	-	-

Total movements through junction
-15

CLIENT	DRAX POWER LIMITED	
PROJECT	DRAX BECCS DCO	
DRAWING TITLE	Car Showroom AM Peak Hour	
FIGURE	45	DATE 07/02/2023
DRAWN BY	CHECKED BY	APPROVED BY
BP		



Trip Generation

Category	Trips	Rate	Notes
Hotel	1208	1.5	minus number to account for reduction in trips
Other	-12	-	
Total	1196	1.5	

Trip Distribution

- Hotel**
- 35% of trips to and from motorway
 - 0% of trips to and from docks
 - 40% of trips to and from Goole town centre
 - 25% of trips to and from west of M62

Trip Assignment

5.7.4 The traffic associated with the proposed pub/restaurant and the car showroom has been assigned to the highway network based on the distribution for the hotel.

0800 - 0900

SQM 1208 -12 minus number to account for reduction in trips

Arrival Trip Rate 1.5
Departure Trip Rate 0.63

Arrivals -18
Departures -7.6

Arrivals

35% of trips to and from M62
25% of trips to and from west of M62

Departures

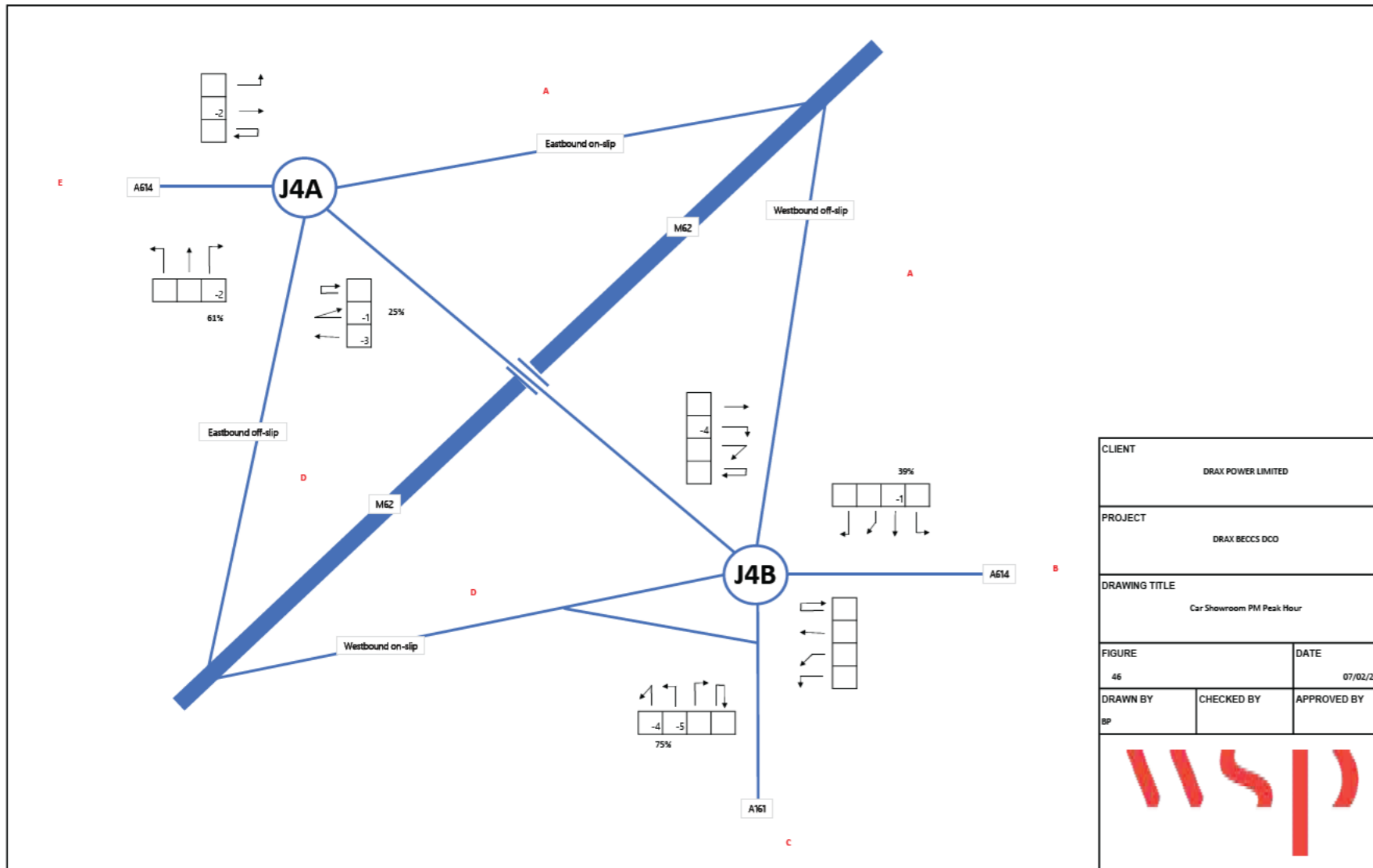
35% of trips to and from M62
25% of trips to and from west of M62

Arrivals

35% of trips to and from M62 -6
25% of trips to and from west of M62 -5

Departures

35% of trips to and from M62 -3
25% of trips to and from west of M62 -2



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D
A	0	0	-2	-
B	-	-	-	-
C	-3	-1	0	-
D	0	0	-2	-

Total movements through junction
-8

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	0	-4	0
B	0	-	0	-1	0
C	0	-	0	0	0
D	-5	-	0	0	-4
E	-	-	-	-	-

Total movements through junction
-13

CLIENT	DRAX POWER LIMITED	
PROJECT	DRAX BECCS DCO	
DRAWING TITLE	Car Showroom PM Peak Hour	
FIGURE	46	DATE 07/02/2023
DRAWN BY	CHECKED BY	APPROVED BY
BP		



Trip Generation

Category	Trips	Rate	Notes
Hotel	1208	1.12	
Other	-12	0.69	minus number to account for reduction in trips
Total	1196	1.12	

Trip Distribution

Hotel
 35% of trips to and from motorway
 0% of trips to and from docks
 40% of trips to and from Goole town centre
 25% of trips to and from west of M62

Trip Assignment

5.7.4 The traffic associated with the proposed pub/restaurant and the car showroom has been assigned to the highway network based on the distribution for the hotel.

0800 - 0900

SQM 1208 -12 minus number to account for reduction in trips

Arrival Trip Rate 0.69
 Departure Trip Rate 1.12

Arrivals -8.3
 Departures -14

Arrivals

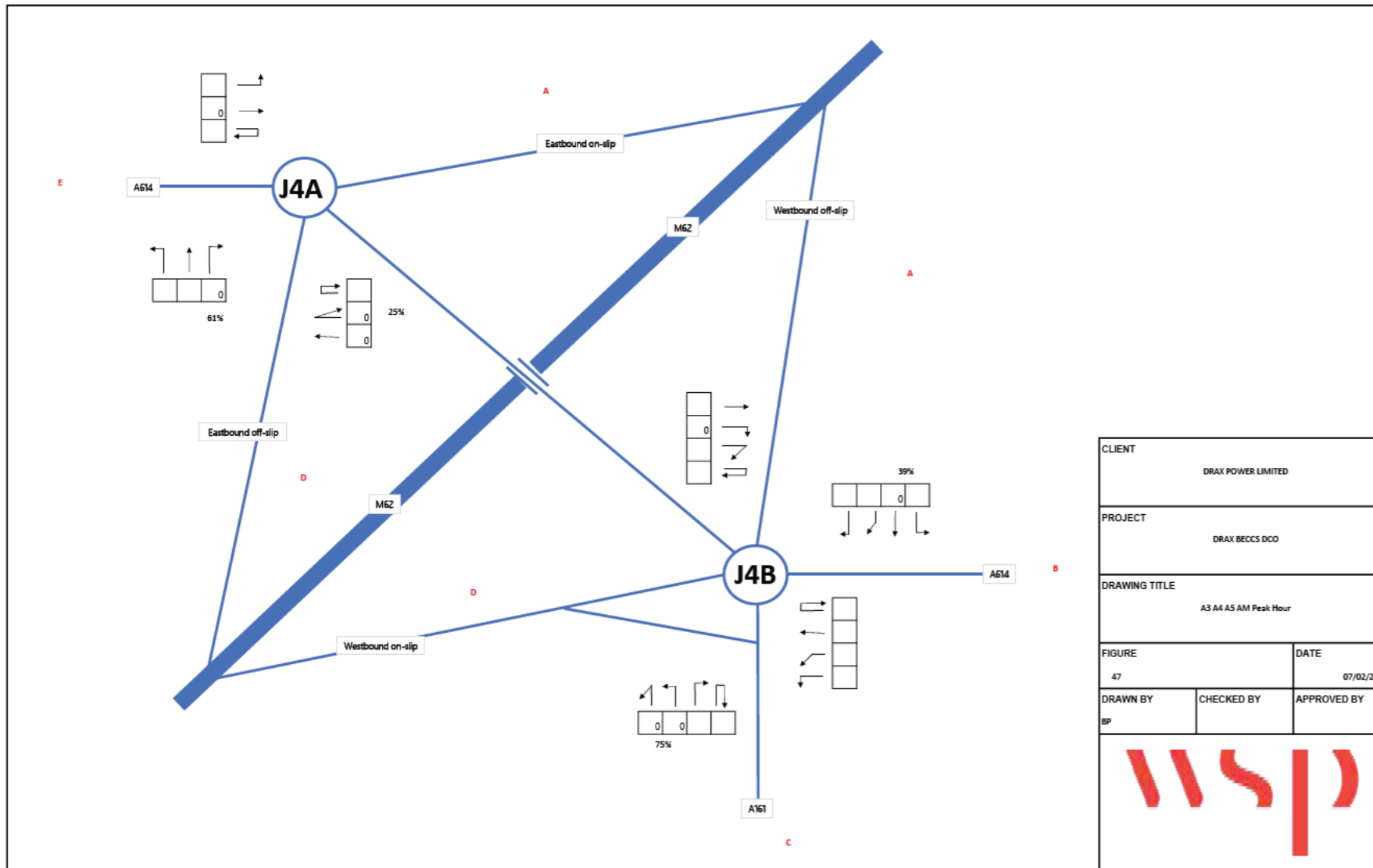
35% of trips to and from M62
 25% of trips to and from west of M62

Departures
 35% of trips to and from M62
 25% of trips to and from west of M62

Arrivals

35% of trips to and from M62 -3
 25% of trips to and from west of M62 -2

Departures
 35% of trips to and from M62 -5
 25% of trips to and from west of M62 -3



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	0	0	-	0
B	-	-	-	-	
C	0	0	0	-	
D	0	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	0	0
B	0	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
A3 A4 A5 AM Peak Hour		
FIGURE	DATE	
47	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Trip Generation

Category	Trips	Rate	Notes
Hotel	1050	1.0	1050
Goole town centre	400	1.0	400
West of M62	250	1.0	250
Total	1700		

Trip Distribution

- Hotel
- 35% of trips to and from motorway
- 0% of trips to and from docks
- 40% of trips to and from Goole town centre
- 25% of trips to and from west of M62

Trip Assignment

5.7.4 The traffic associated with the proposed pub/restaurant and the car showroom has been assigned to the highway network based on the distribution for the hotel.

The screenshot shows a table with columns for 'Category', 'Trips', 'Rate', and 'Notes'. It lists various trip categories and their corresponding values, including a total of 1700 trips.

0800 - 0900

SQM 1050 -11 minus number to account for reduction in trips

Arrival Trip Rate 0
Departure Trip Rate 0

Arrivals 0
Departures 0

Arrivals

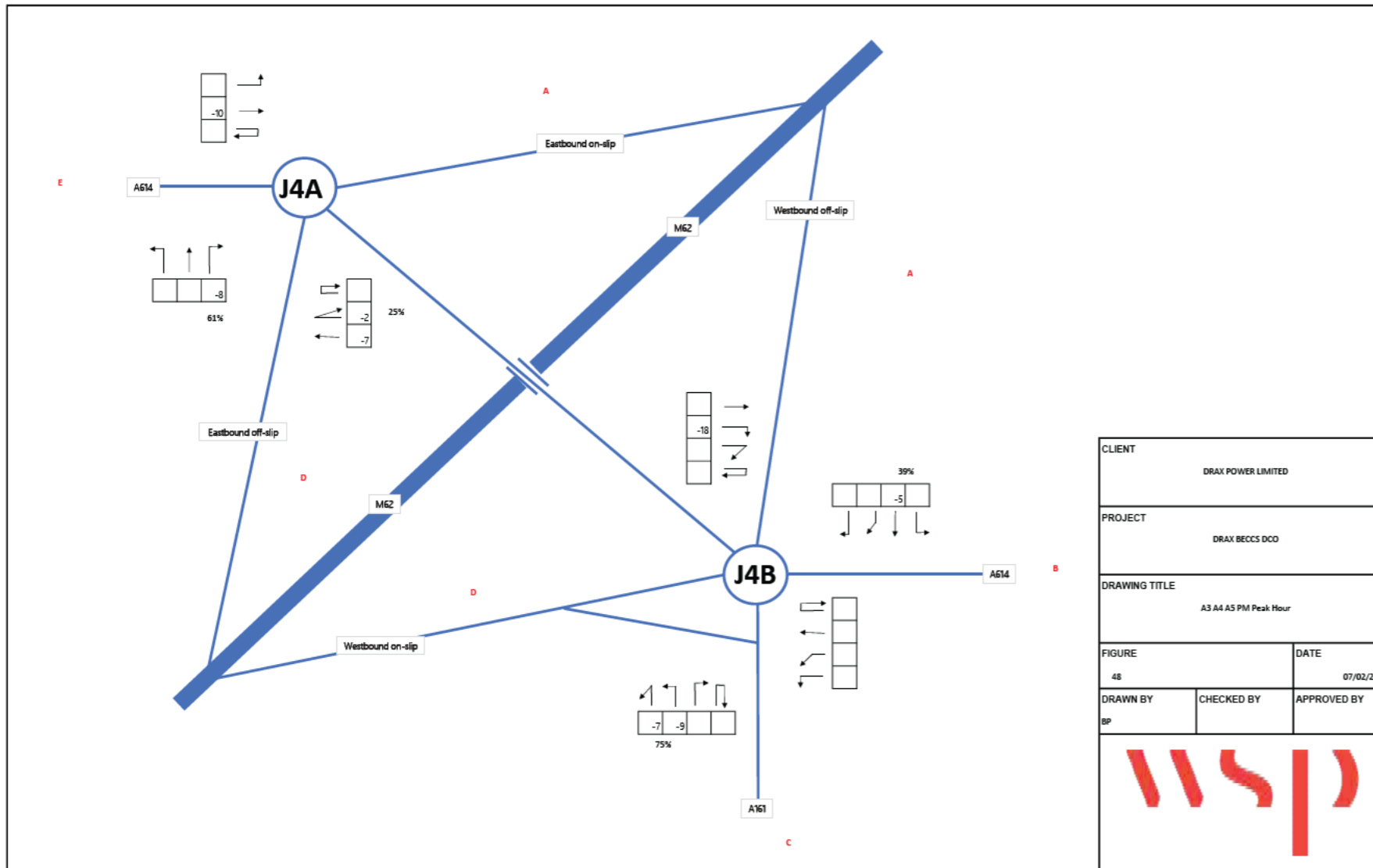
35% of trips to and from M62
25% of trips to and from west of M62

Departures
35% of trips to and from M62
25% of trips to and from west of M62

Arrivals

35% of trips to and from M62
25% of trips to and from west of M62

Departures
35% of trips to and from M62
25% of trips to and from west of M62



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	0	-10	-	-27
B	-	-	-	-	
C	-7	-2	0	-	
D	0	0	-8	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	-18	0	-40
B	0	-	0	-5	0	
C	0	-	0	0	0	
D	-9	-	0	0	-7	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
A3 A4 A5 PM Peak Hour		
FIGURE	DATE	
48	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Trip Generation

Category	Trips	Rate	Notes
Hotel	1050	3.68	
Pub/Restaurant	1050	2.65	
Car Showroom	1050	1.1	
Other	1050	0.1	
Total	4200	7.54	

Trip Distribution

Hotel
 35% of trips to and from motorway
 0% of trips to and from docks
 40% of trips to and from Goole town centre
 25% of trips to and from west of M62

5.7.4 The traffic associated with the proposed pubrestaurant and the car showroom has been assigned to the highway network based on the distribution for the hotel.

Trip Assignment

Category	Trips	Rate	Notes
Hotel	1050	3.68	
Pub/Restaurant	1050	2.65	
Car Showroom	1050	1.1	
Other	1050	0.1	
Total	4200	7.54	

0800 - 0900

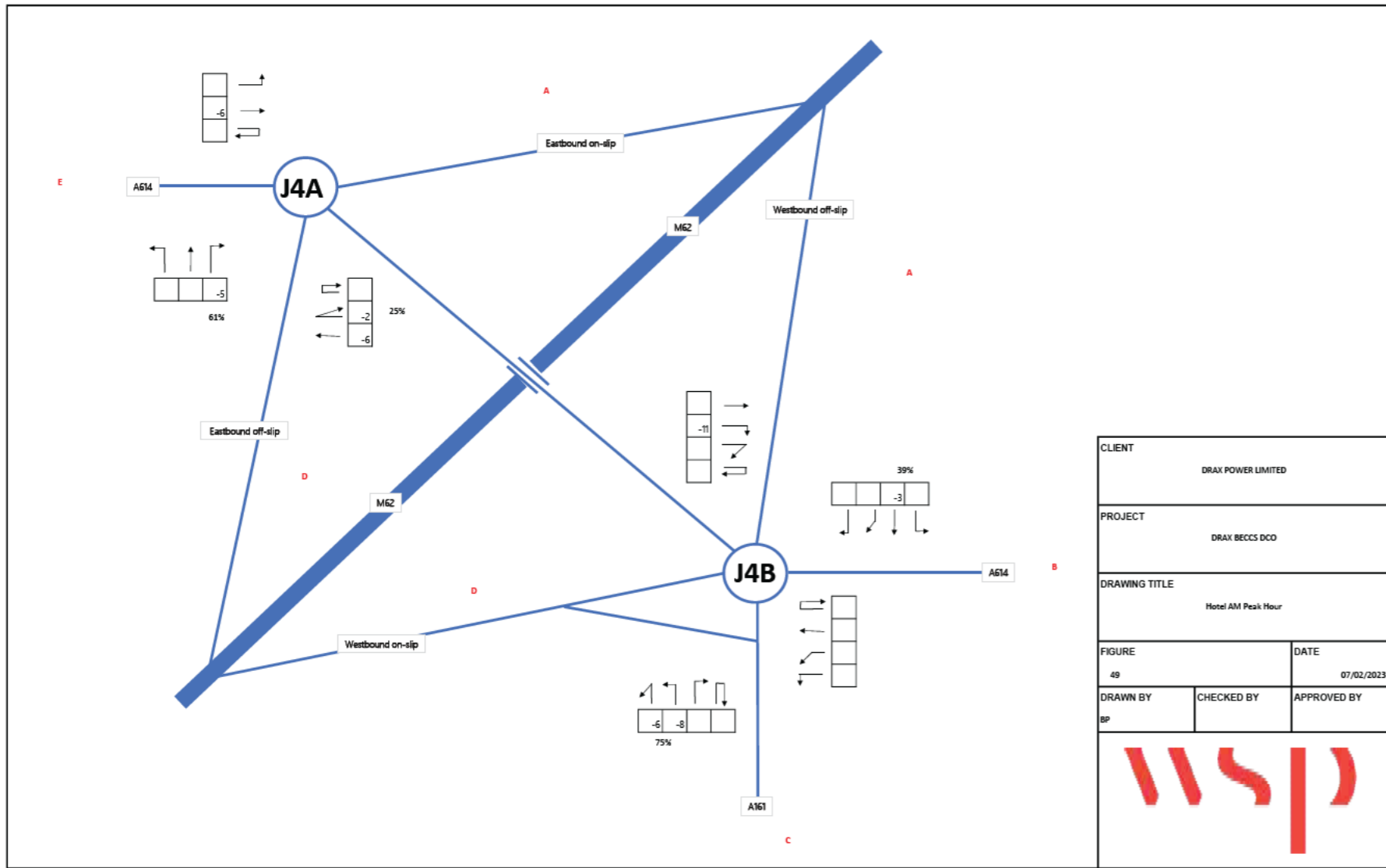
SQM	1050	-11	minus number to account for reduction in trips
Arrival Trip Rate	3.68		
Departure Trip Rate	2.65		
Arrivals	-39		
Departures	-28		

Arrivals

35%	of trips to and from M62	
25%	of trips to and from west of M62	
Departures		
35%	of trips to and from M62	
25%	of trips to and from west of M62	

Arrivals

35%	of trips to and from M62	-14
25%	of trips to and from west of M62	-10
Departures		
35%	of trips to and from M62	-10
25%	of trips to and from west of M62	-7



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT


	A	B	C	D
A	0	0	-6	-
B	-	-	-	-
C	-6	-2	0	-
D	0	0	-5	-

Total movements through junction
-18

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	0	-11	0
B	0	-	0	-3	0
C	0	-	0	0	0
D	-8	-	0	0	-6
E	-	-	-	-	-

Total movements through junction
-28

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Hotel AM Peak Hour		
FIGURE		DATE
49		07/02/2023
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Trip Generation

Category	Trips	Rate	Notes
Hotel	100	0.23	Arrival Trip Rate
Motorway	100	0.25	Departure Trip Rate
Goole town centre	100	0.40	Arrival Trip Rate
West of M62	100	0.25	Departure Trip Rate

Trip Distribution

Hotel
 35% of trips to and from motorway
 0% of trips to and from docks
 40% of trips to and from Goole town centre
 25% of trips to and from west of M62

Trip Assignment

Arrivals
 35% of trips to and from M62
 25% of trips to and from west of M62

Departures
 35% of trips to and from M62
 25% of trips to and from west of M62

Sewell Bird & Axon

Category	Trips	Rate	Notes
Hotel	100	0.23	Arrival Trip Rate
Motorway	100	0.25	Departure Trip Rate
Goole town centre	100	0.40	Arrival Trip Rate
West of M62	100	0.25	Departure Trip Rate

0800 - 0900

SQM 100 -100 minus number to account for reduction in trips

Arrival Trip Rate 0.23
 Departure Trip Rate 0.23

Arrivals -23
 Departures -23

Arrivals

35% of trips to and from M62
 25% of trips to and from west of M62

Departures

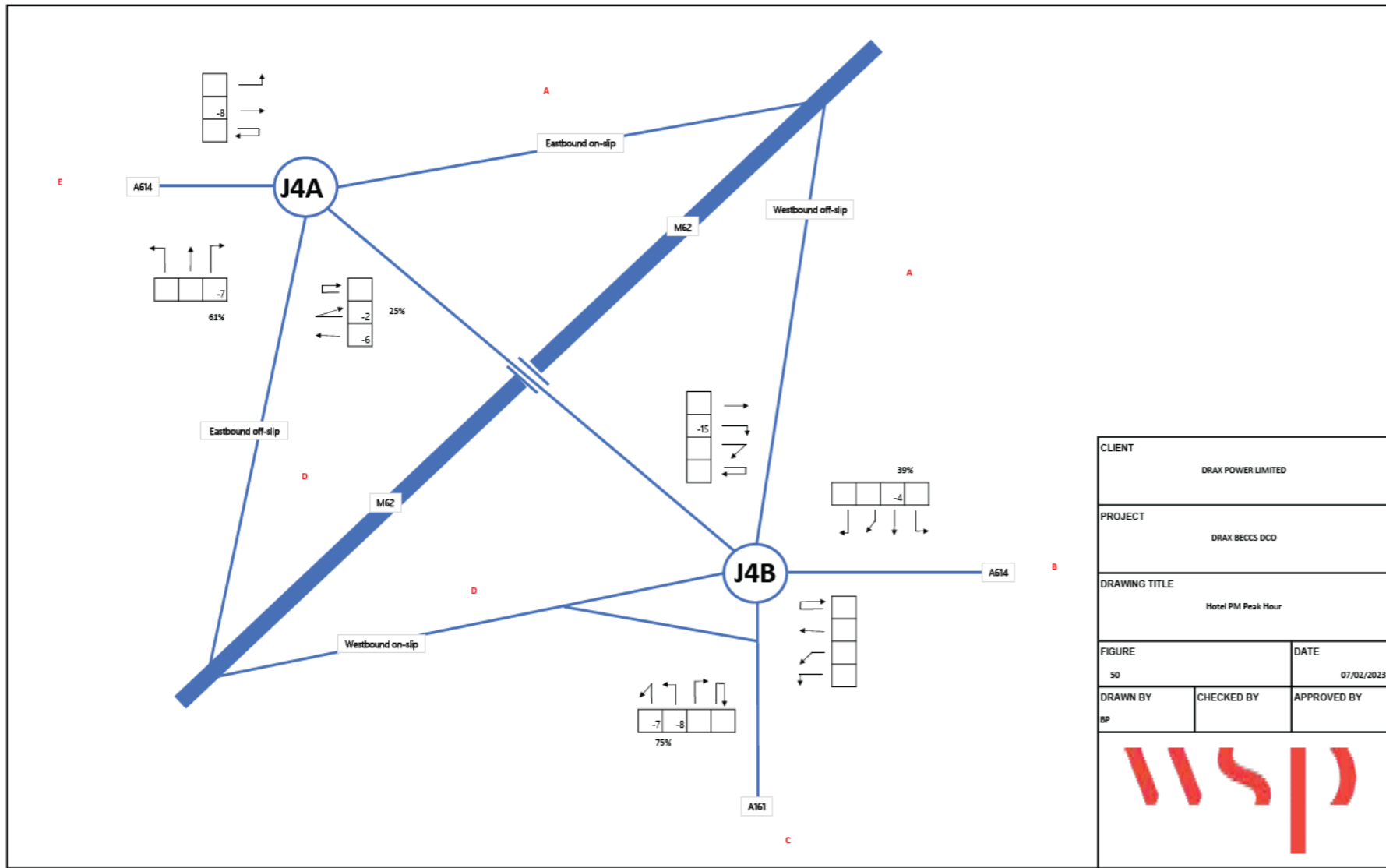
35% of trips to and from M62
 25% of trips to and from west of M62

Arrivals

35% of trips to and from M62 -8
 25% of trips to and from west of M62 -6

Departures

35% of trips to and from M62 -8
 25% of trips to and from west of M62 -6



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D
A	0	0	-8	-
B	-	-	-	-
C	-6	-2	0	-
D	0	0	-7	-


Total movements through junction
-23

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	0	-15	0
B	0	-	0	-4	0
C	0	-	0	0	0
D	-8	-	0	0	-7
E	-	-	-	-	-

Total movements through junction
-34

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Hotel PM Peak Hour		
FIGURE		DATE
50		07/02/2023
DRAWN BY	CHECKED BY	APPROVED BY
BP		



Trip Generation

Category	Trips	Trips per Hour	Trips per Day
Hotel	100	10	240
Motorway	100	10	240
Docks	0	0	0
Goole town centre	100	10	240
West of M62	100	10	240

Trip Distribution

Hotel
 35% of trips to and from motorway
 0% of trips to and from docks
 40% of trips to and from Goole town centre
 25% of trips to and from west of M62

Trip Assignment

35% of trips to and from M62
 25% of trips to and from west of M62

0800 - 0900

SQM 100 -100 minus number to account for reduction in trips

Arrival Trip Rate 0.32
 Departure Trip Rate 0.25

Arrivals -32
 Departures -25

Arrivals

35% of trips to and from M62
 25% of trips to and from west of M62

Departures

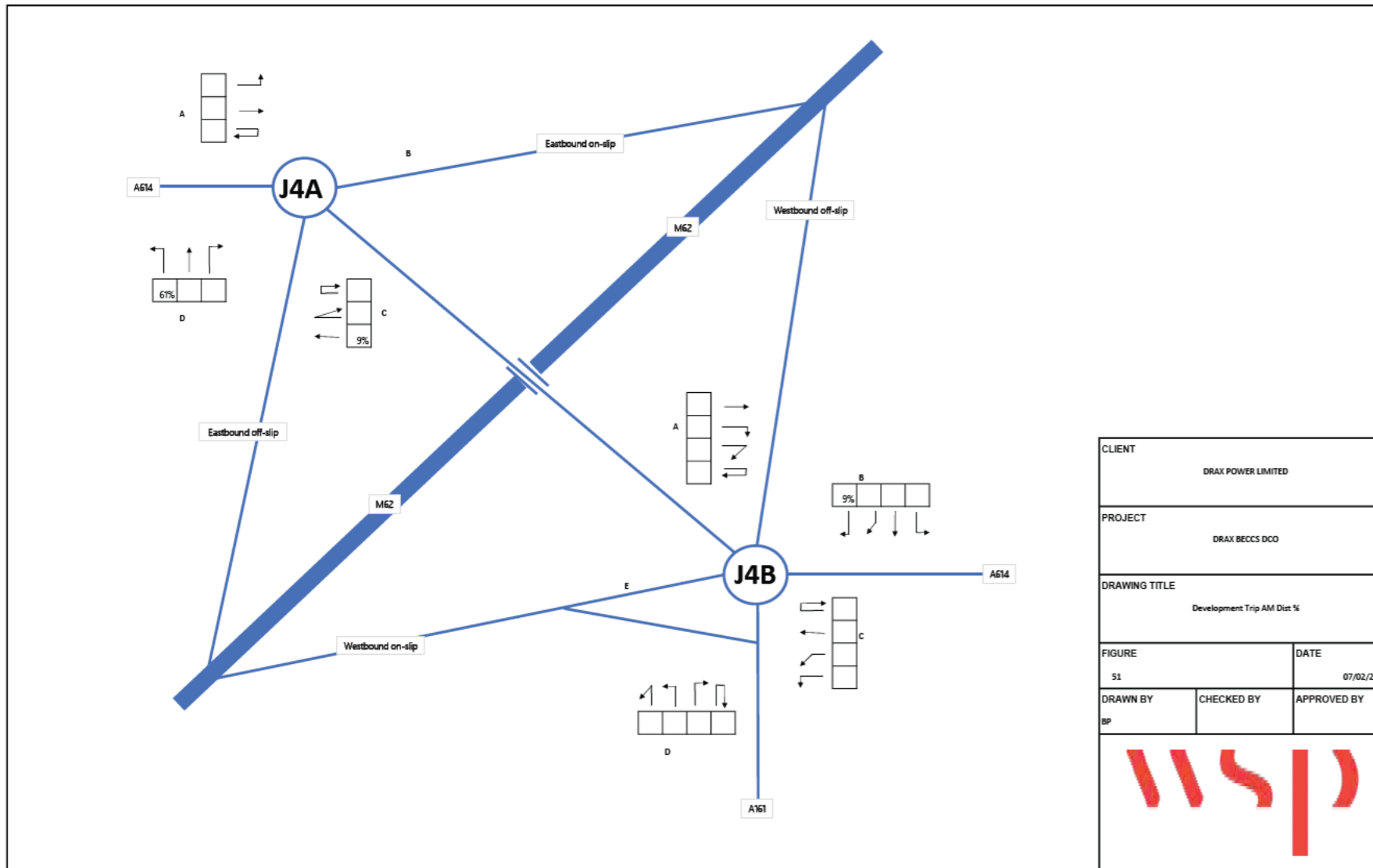
35% of trips to and from M62
 25% of trips to and from west of M62

Arrivals

35% of trips to and from M62 -11
 25% of trips to and from west of M62 -6

Departures

35% of trips to and from M62 -9
 25% of trips to and from west of M62 -6



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

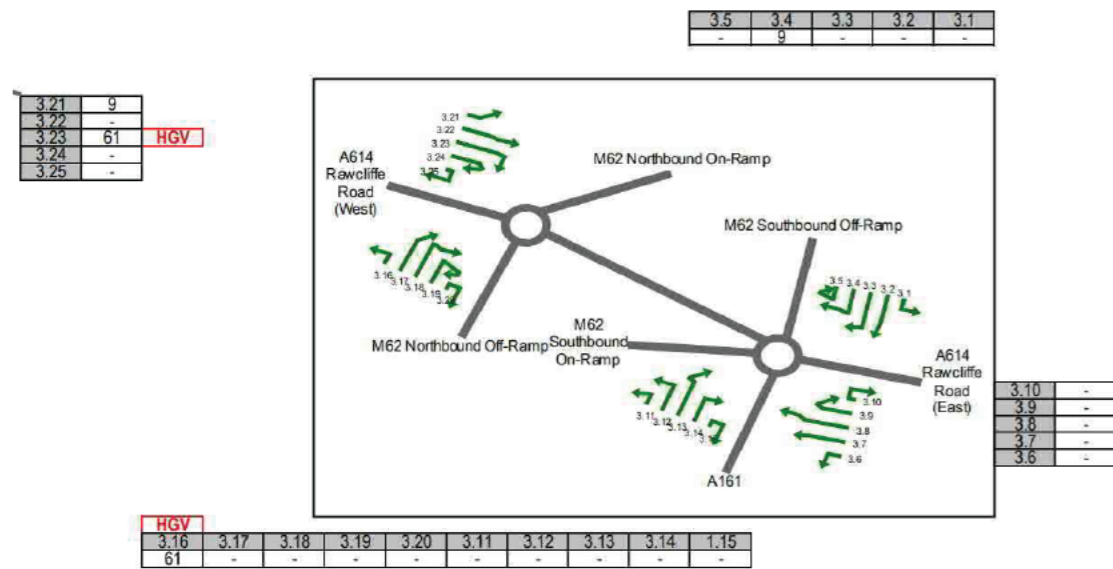
	A	B	C	D	Total movements through junction
A	0	0	0	-	1
B	-	-	-	-	
C	0	0	0	-	
D	1	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	0	0
B	0	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

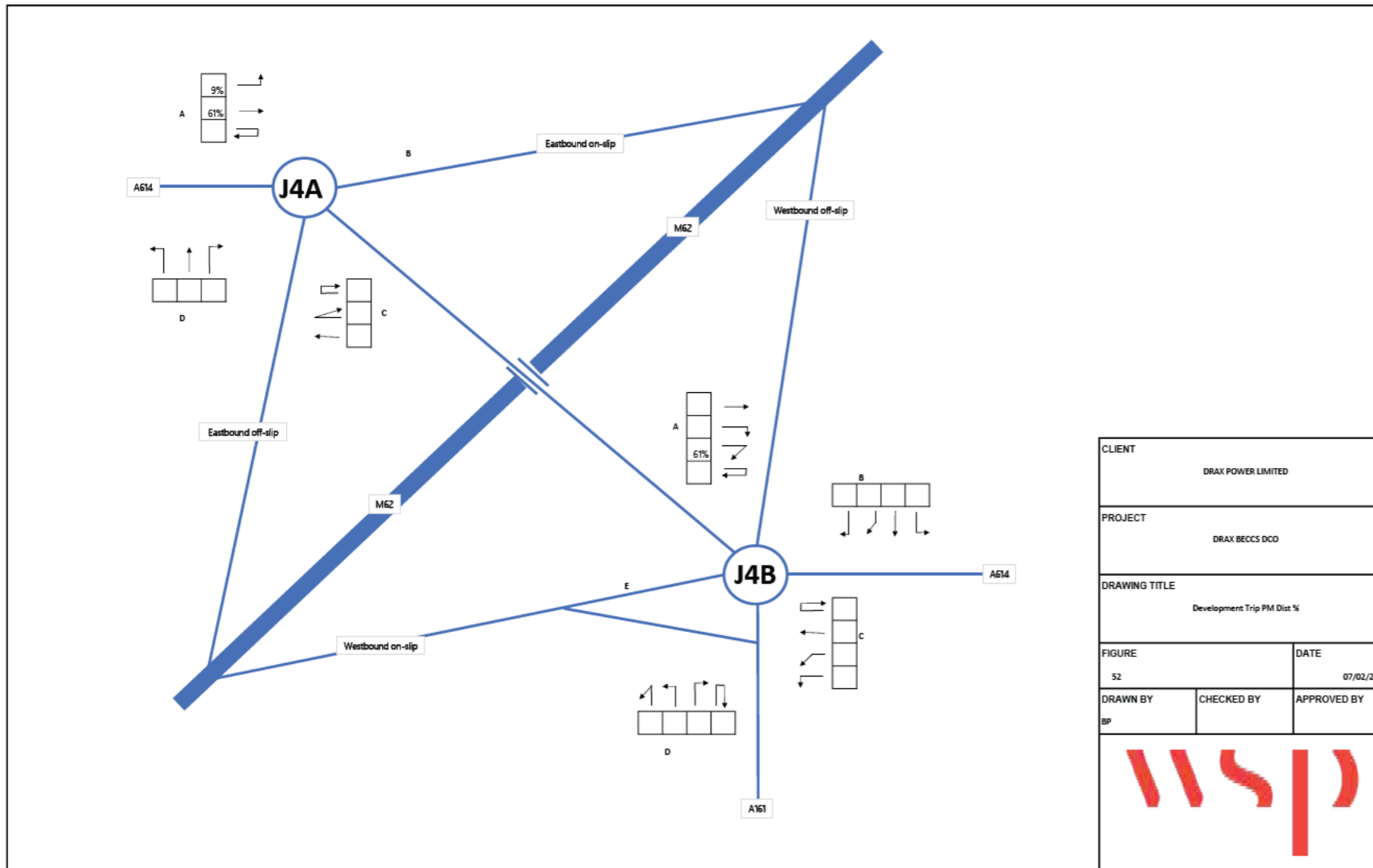
CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development Trip AM Dist %		
FIGURE	DATE	
51	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Construction Worker Trips
 Source: EN010091-000433-6.2.5.7 Environmental Statement - Volume 2 - Appendix 5.7 Gravity Model Distribution.pdf



<https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2023/07/20230720/EN010091-000433-6.2.5.7%20Environmental%20Statement%20-%20Volume%20-%205%20Appendix%205.7%20Gravity%20Model%20Distribution.pdf>

HGV Trips
 All route via the A645 to the M62 Junction 36 and then head to / from the west.



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

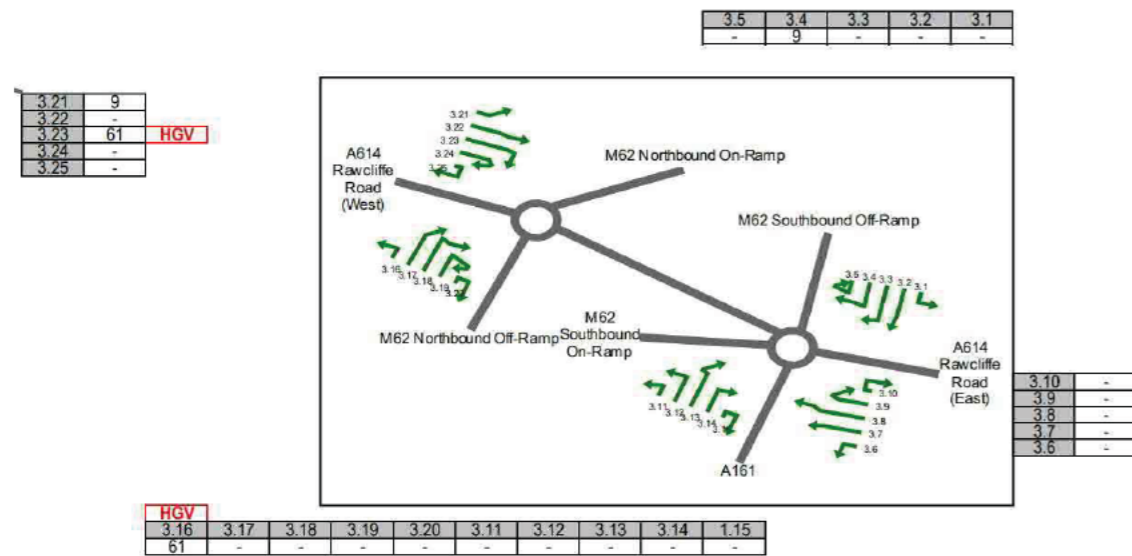
	A	B	C	D	Total movements through junction
A	0	0	1	-	1
B	-	-	-	-	
C	0	0	0	-	
D	0	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	1	1
B	0	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

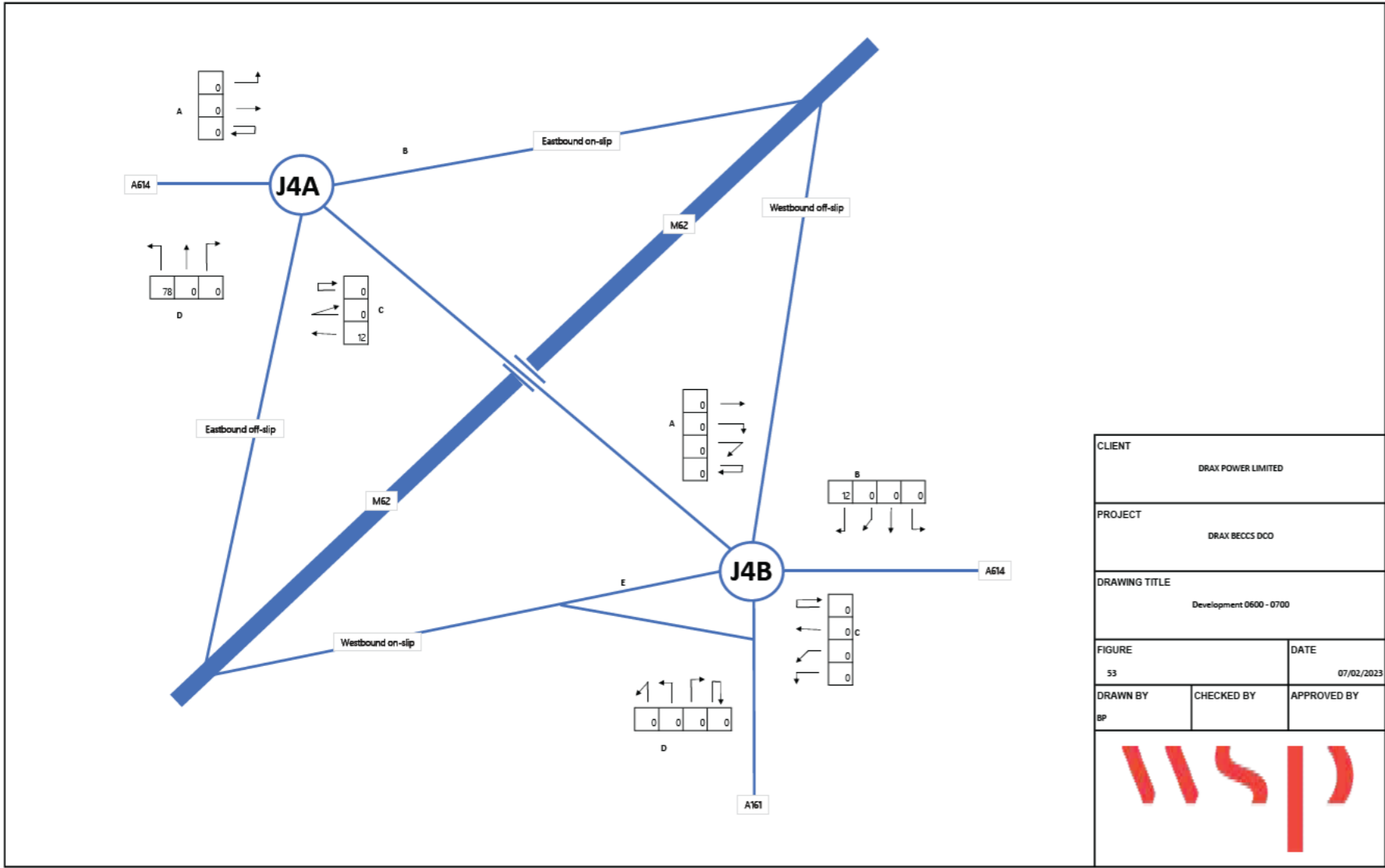
CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development Trip PM Dist %		
FIGURE		DATE
52		07/02/2023
DRAWN BY	CHECKED BY	APPROVED BY
BP		

Construction Worker Trips
 Source: EN010091-000433-6.2.5.7 Environmental Statement - Volume 2 - Appendix 5.7 Gravity Model Distribution.pdf



<https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/EN010091/EN010091-000433-6.2.5.7%20Environmental%20Statement%20-%20Volume%20-%20Appendix%205.7%20Gravity%20Model%20Distribution.pdf>

HGV Trips
 All route via the A645 to the M62 Junction 36 and then head to / from the west.



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	
A	0	0	0	-	Total movements through junction 90
B	-	-	-	-	
C	12	0	0	-	
D	78	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	
A	0	-	0	0	0	Total movements through junction 12
B	12	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	


CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 0600 - 0700		
FIGURE	DATE	
53	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

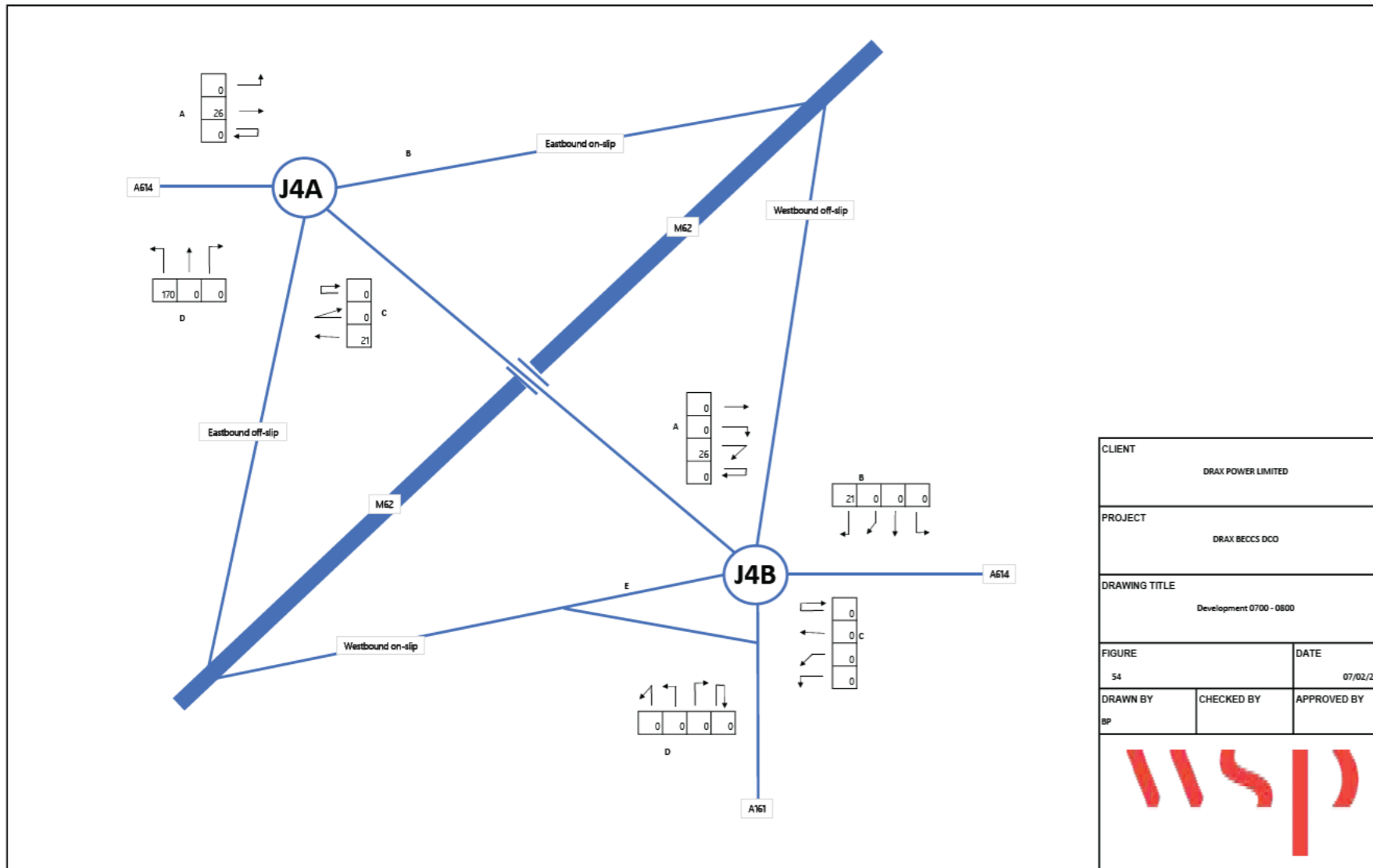
Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
06:00 - 07:00	30%	0%	129	0

WORKERS	ARRIVAL AND DEPARTURE PROFILE	TRIP GENERATION	HGVS	Construction HGVs			
				Hours	Arrivals	Departures	
Peak Workforce	1000	30%	Peak HGVS	135	00:00 - 01:00	0	0
2 Per Vehicle	2		Hours in Working Day	12	01:00 - 02:00	0	0
7 Per Minibus	7		Peak HGVs per hour	11.3	02:00 - 03:00	0	0
Vehicle	80%	800	PCU Value	2.3	03:00 - 04:00	0	0
Min bus	20%	200	Peak HGVs per hour (PCU)	25.9	04:00 - 05:00	0	0
Vehicle (2 Per Vehicle)	400				05:00 - 06:00	0	0
Min bus (7 Per Minibus)	28.6				06:00 - 07:00	0	0
Total	429				07:00 - 08:00	26	26
Vehicle Occupancy	2.33				08:00 - 09:00	26	26
					09:00 - 10:00	26	26
					10:00 - 11:00	26	26
					11:00 - 12:00	26	26
					12:00 - 13:00	26	26
					13:00 - 14:00	26	26
					14:00 - 15:00	26	26
					15:00 - 16:00	26	26
					16:00 - 17:00	26	26
					17:00 - 18:00	26	26
					18:00 - 19:00	26	26
					19:00 - 20:00	0	0
					20:00 - 21:00	0	0
					21:00 - 22:00	0	0
					22:00 - 23:00	0	0
					23:00 - 24:00	0	0
					Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	0	26	-	217
B	-	-	-	-	
C	21	0	0	-	
D	170	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	26	47
B	21	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 0700 - 0800		
FIGURE	DATE	
54	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
07:00 - 08:00	55%	0%	236	0

WORKERS

Peak Workforce	1000	
2 Per Vehicle	2	
7 Per Minibus	7	
Vehicle	80%	800
Min bus	20%	200
Vehicle (2 Per Vehicle)	400	
Min bus (7 Per Minibus)	28.6	
Total	429	
Vehicle Occupancy	2.33	

ARRIVAL AND DEPARTURE PROFILE

55%

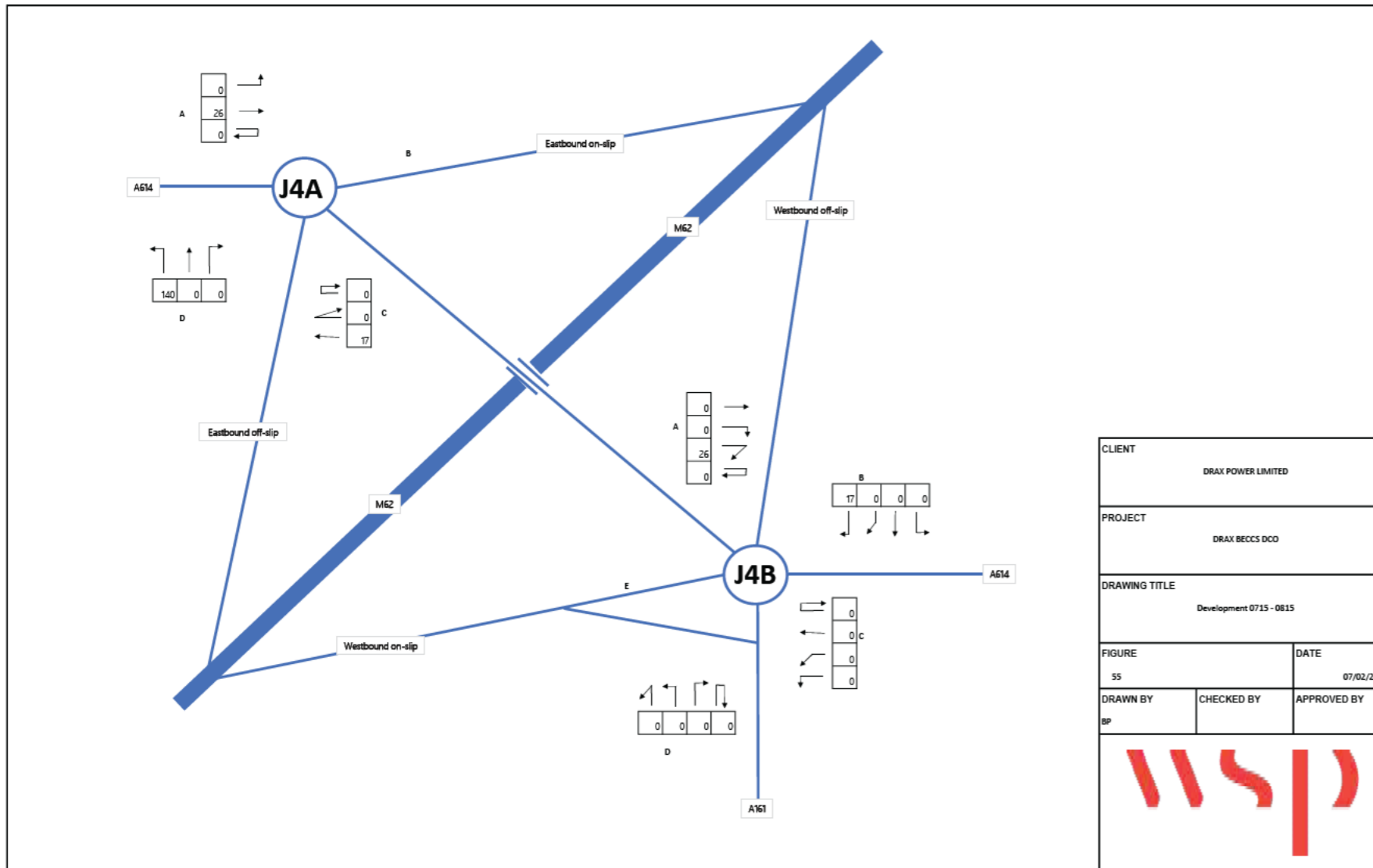
TRIP GENERATION

Vehicles	220
Minibus	15.7
Total	236

HGVs

Peak HGVs	135
Hours in Working Day	12
Peak HGVs per hour	11.3
PCU Value	2.3
Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	0	26	-	183
B	-	-	-	-	
C	17	0	0	-	
D	140	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	26	43
B	17	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 0715 - 0815		
FIGURE	DATE	
55	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

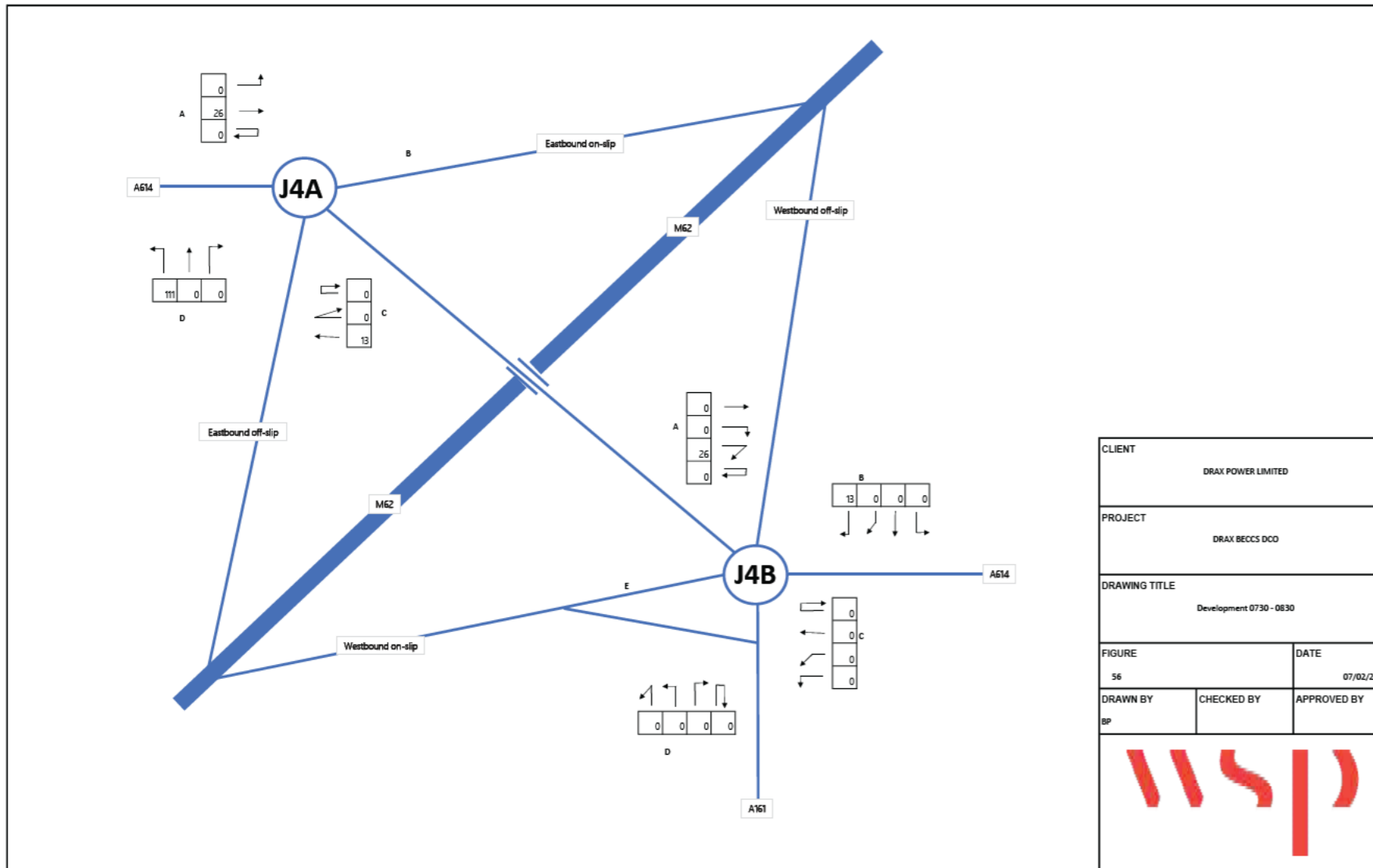
Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
07:15 - 08:15	43.75%	0%	188	0

WORKERS		ARRIVAL AND DEPARTURE PROFILE	
Peak Workforce	1000	43.75%	
2 Per Vehicle	2		
7 Per Minibus	7		
Vehicle	80%	800	
Min bus	20%	200	
Vehicle (2 Per Vehicle)	400		
Min bus (7 Per Minibus)	28.6		
Total	429		
Vehicle Occupancy	2.33		

TRIP GENERATION		HGVS	
Vehicles	175	Peak HGVS	135
Minibus	12.5	Hours in Working Day	12
Total	188	Peak HGVs per hour	11.3
		PCU Value	2.3
		Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	0	26	-	149
B	-	-	-	-	
C	13	0	0	-	
D	111	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	26	38
B	13	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 0730 - 0830		
FIGURE	DATE	
56	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

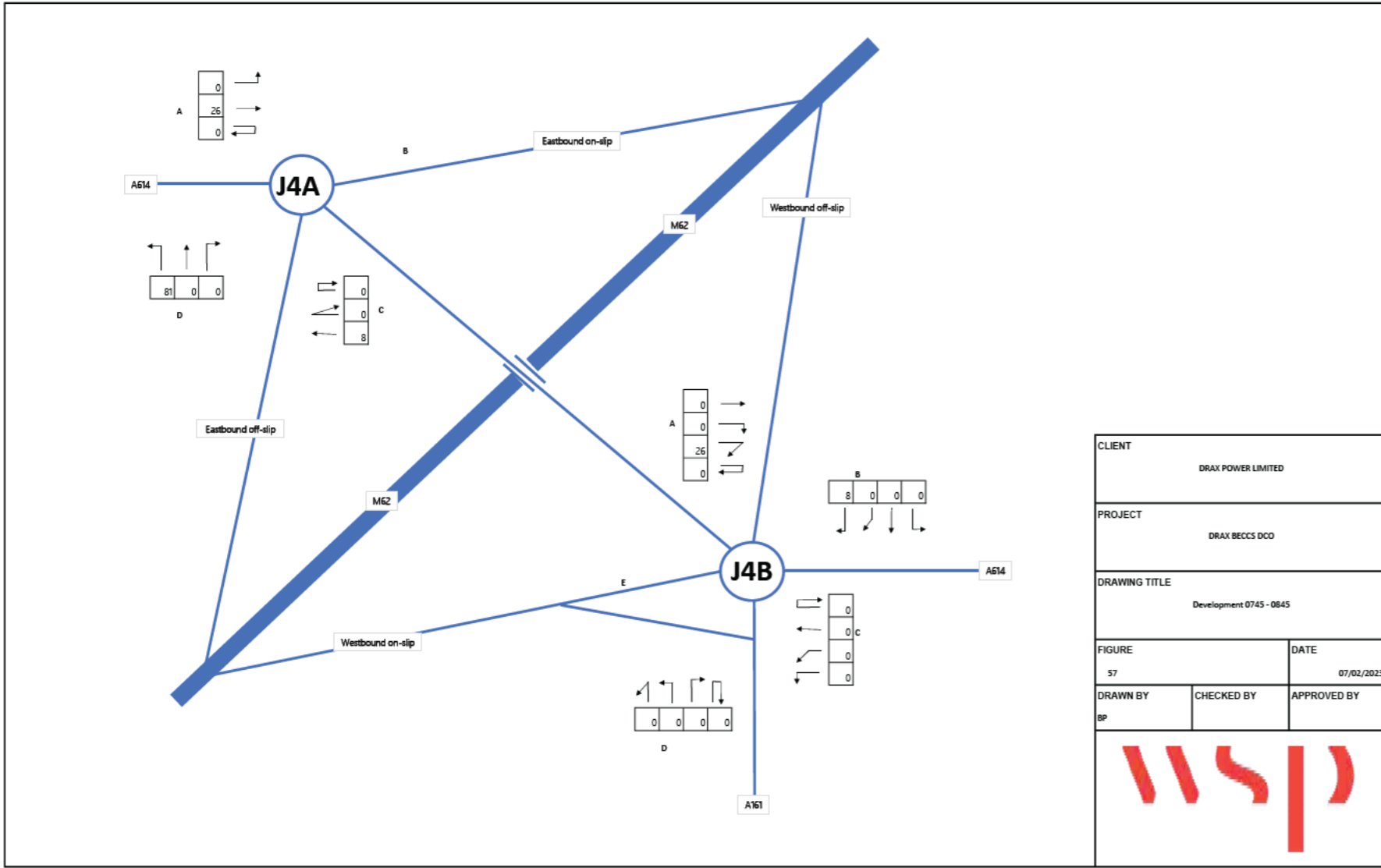
Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
07:30 - 08:30	32.50%	0%	139	0

WORKERS	ARRIVAL AND DEPARTURE PROFILE	TRIP GENERATION	HGVS	Construction HGVs			
				Hours	Arrivals	Departures	
Peak Workforce	1000	32.50%	Peak HGVS	135	00:00 - 01:00	0	0
2 Per Vehicle	2		Hours in Working Day	12	01:00 - 02:00	0	0
7 Per Minibus	7		Peak HGVs per hour	11.3	02:00 - 03:00	0	0
Vehicle	80%	800	PCU Value	2.3	03:00 - 04:00	0	0
Min bus	20%	200	Peak HGVs per hour (PCU)	25.9	04:00 - 05:00	0	0
Vehicle (2 Per Vehicle)	400				05:00 - 06:00	0	0
Min bus (7 Per Minibus)	28.6				06:00 - 07:00	0	0
Total	429				07:00 - 08:00	26	26
Vehicle Occupancy	2.33				08:00 - 09:00	26	26
					09:00 - 10:00	26	26
					10:00 - 11:00	26	26
					11:00 - 12:00	26	26
					12:00 - 13:00	26	26
					13:00 - 14:00	26	26
					14:00 - 15:00	26	26
					15:00 - 16:00	26	26
					16:00 - 17:00	26	26
					17:00 - 18:00	26	26
					18:00 - 19:00	26	26
					19:00 - 20:00	0	0
					20:00 - 21:00	0	0
					21:00 - 22:00	0	0
					22:00 - 23:00	0	0
					23:00 - 24:00	0	0
					Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	0	26	-	116
B	-	-	-	-	
C	8	0	0	-	
D	81	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	26	34
B	8	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 0745 - 0845		
FIGURE	DATE	
57	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
07:45 - 08:45	21.25%	0%	91	0

WORKERS

Peak Workforce	1000
2 Per Vehicle	2
7 Per Minibus	7
Vehicle	80%
Min bus	20%
Vehicle (2 Per Vehicle)	400
Min bus (7 Per Minibus)	28.6
Total	429
Vehicle Occupancy	2.33

ARRIVAL AND DEPARTURE PROFILE

21.25%

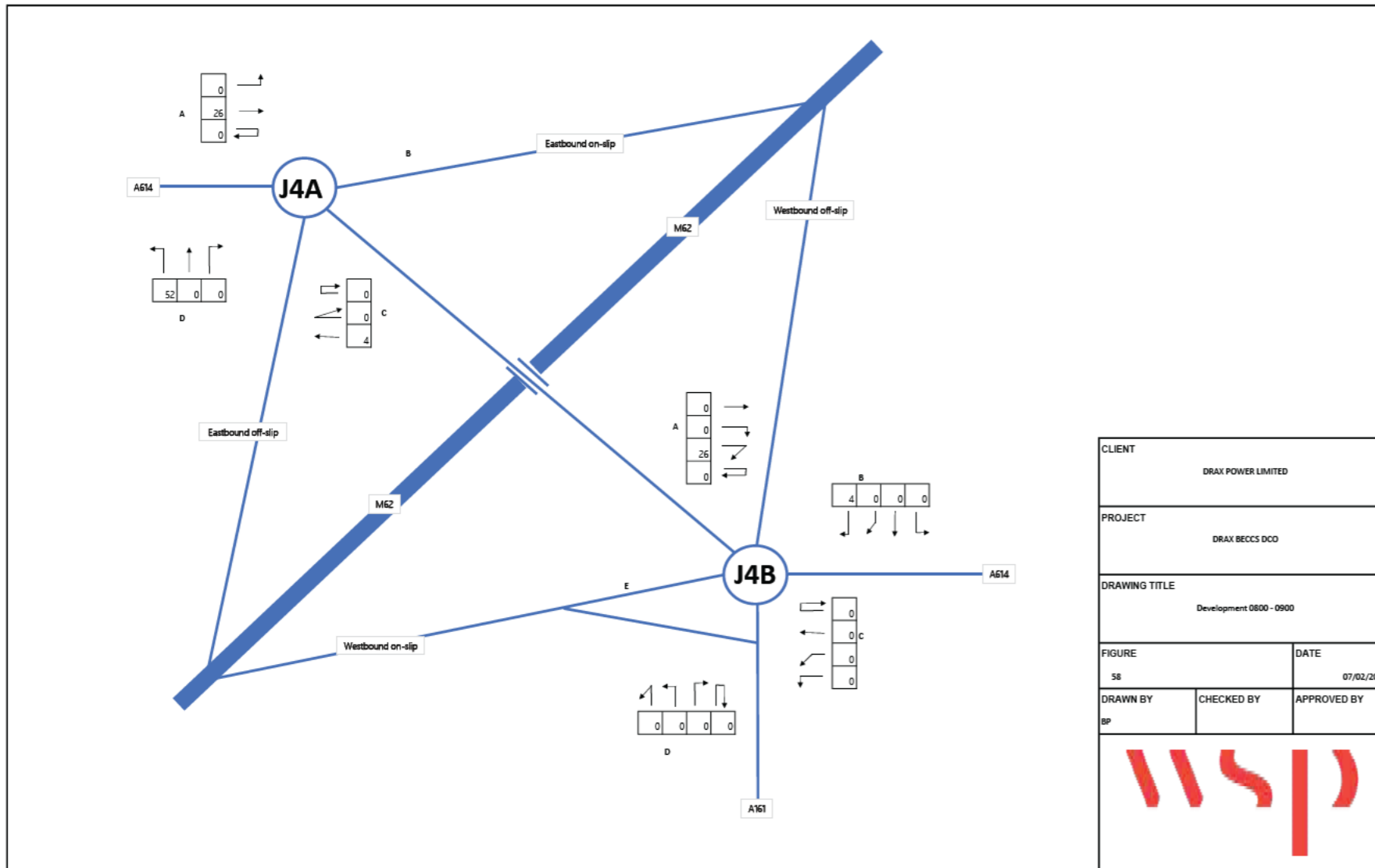
TRIP GENERATION

Vehicles	85
Minibus	6.07
Total	91.1

HGVs

Peak HGVs	135
Hours in Working Day	12
Peak HGVs per hour	11.3
PCU Value	2.3
Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	0	26	-	82
B	-	-	-	-	
C	4	0	0	-	
D	52	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	26	30
B	4	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 0800 - 0900		
FIGURE	DATE	
58	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

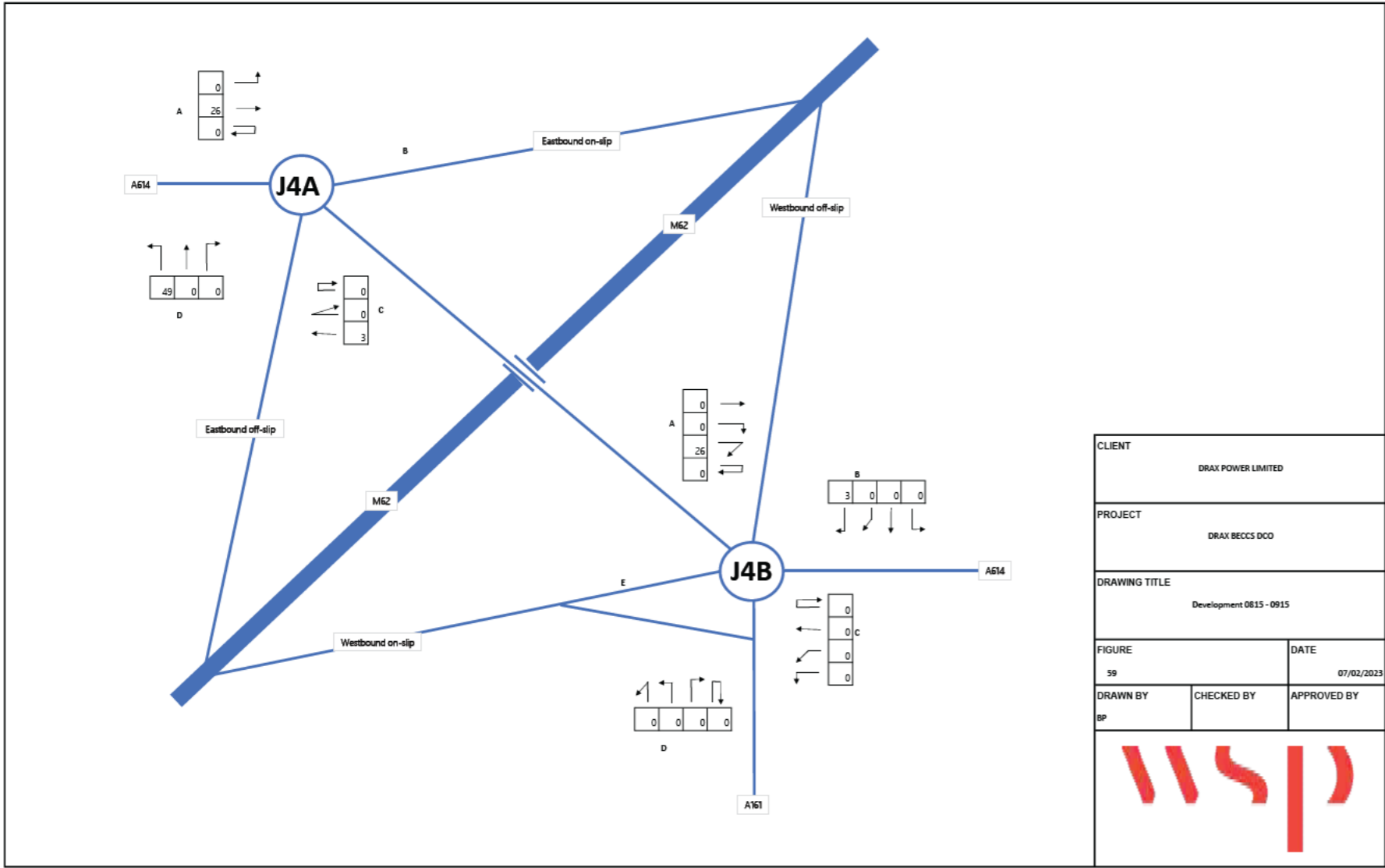
Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
08:00 - 09:00	10.00%	0%	43	0

WORKERS	ARRIVAL AND DEPARTURE PROFILE
Peak Workforce	1000
2 Per Vehicle	2
7 Per Minibus	7
Vehicle	80% 800
Min bus	20% 200
Vehicle (2 Per Vehicle)	400
Min bus (7 Per Minibus)	28.6
Total	429
Vehicle Occupancy	2.33

TRIP GENERATION	HGVs
Vehicles	40
Minibus	2.86
Total	42.9
Peak HGVs	135
Hours in Working Day	12
Peak HGVs per hour	11.3
PCU Value	2.3
Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	0	26	-	78
B	-	-	-	-	
C	3	0	0	-	
D	49	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	26	29
B	3	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 0815 - 0915		
FIGURE	DATE	
59	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

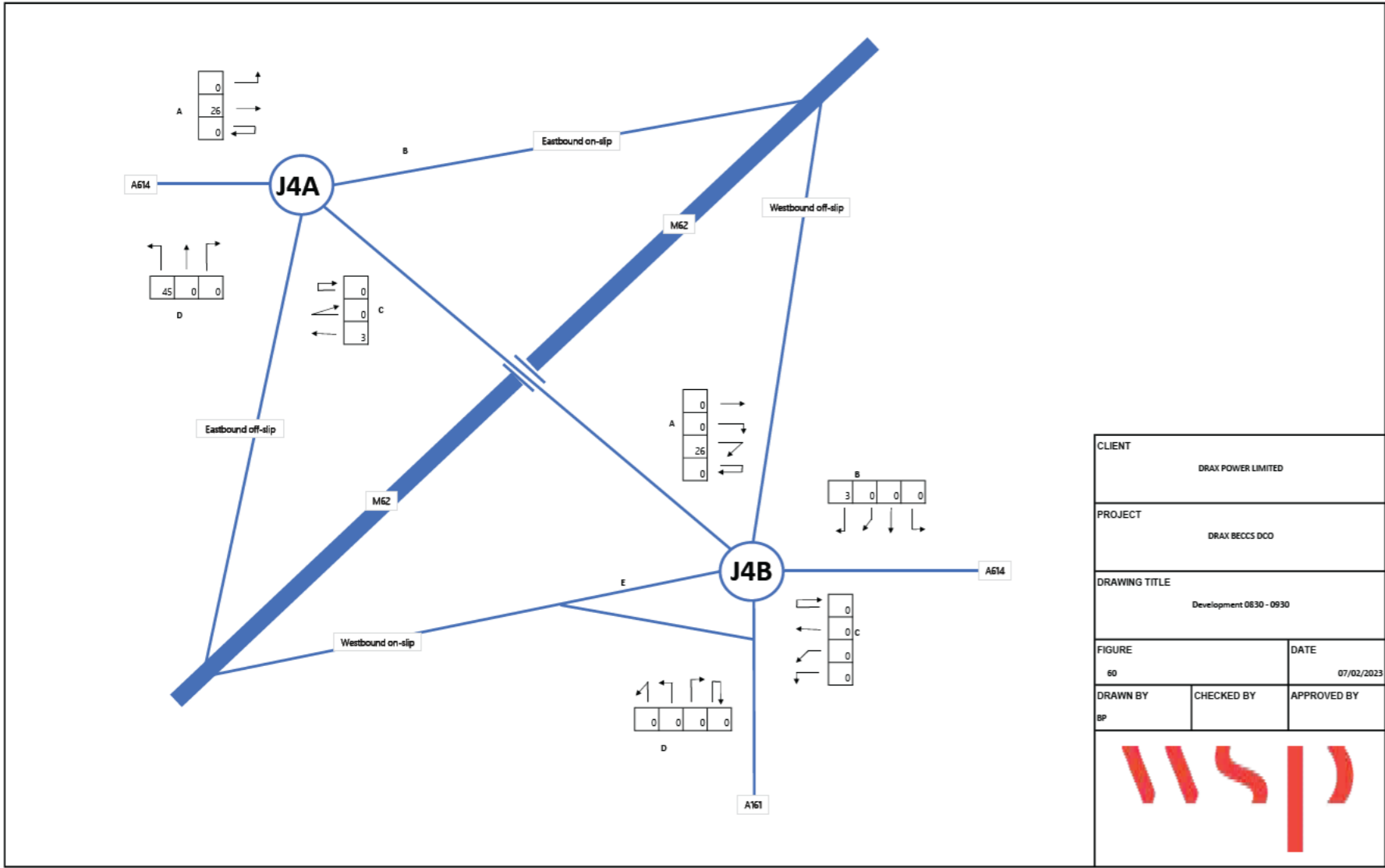
Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
08:15 - 09:15	8.75%	0%	38	0

WORKERS		ARRIVAL AND DEPARTURE PROFILE	
Peak Workforce	1000	8.75%	
2 Per Vehicle	2		
7 Per Minibus	7		
Vehicle	80%	800	
Min bus	20%	200	
Vehicle (2 Per Vehicle)	400		
Min bus (7 Per Minibus)	28.6		
Total	429		
Vehicle Occupancy	2.33		

TRIP GENERATION		HGVS	
Vehicles	35	Peak HGVS	135
Minibus	2.5	Hours in Working Day	12
Total	37.5	Peak HGVs per hour	11.3
		PCU Value	2.3
		Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	0	26	-	74
B	-	-	-	-	
C	3	0	0	-	
D	45	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	26	29
B	3	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 0830 - 0930		
FIGURE	DATE	
60	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		




Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

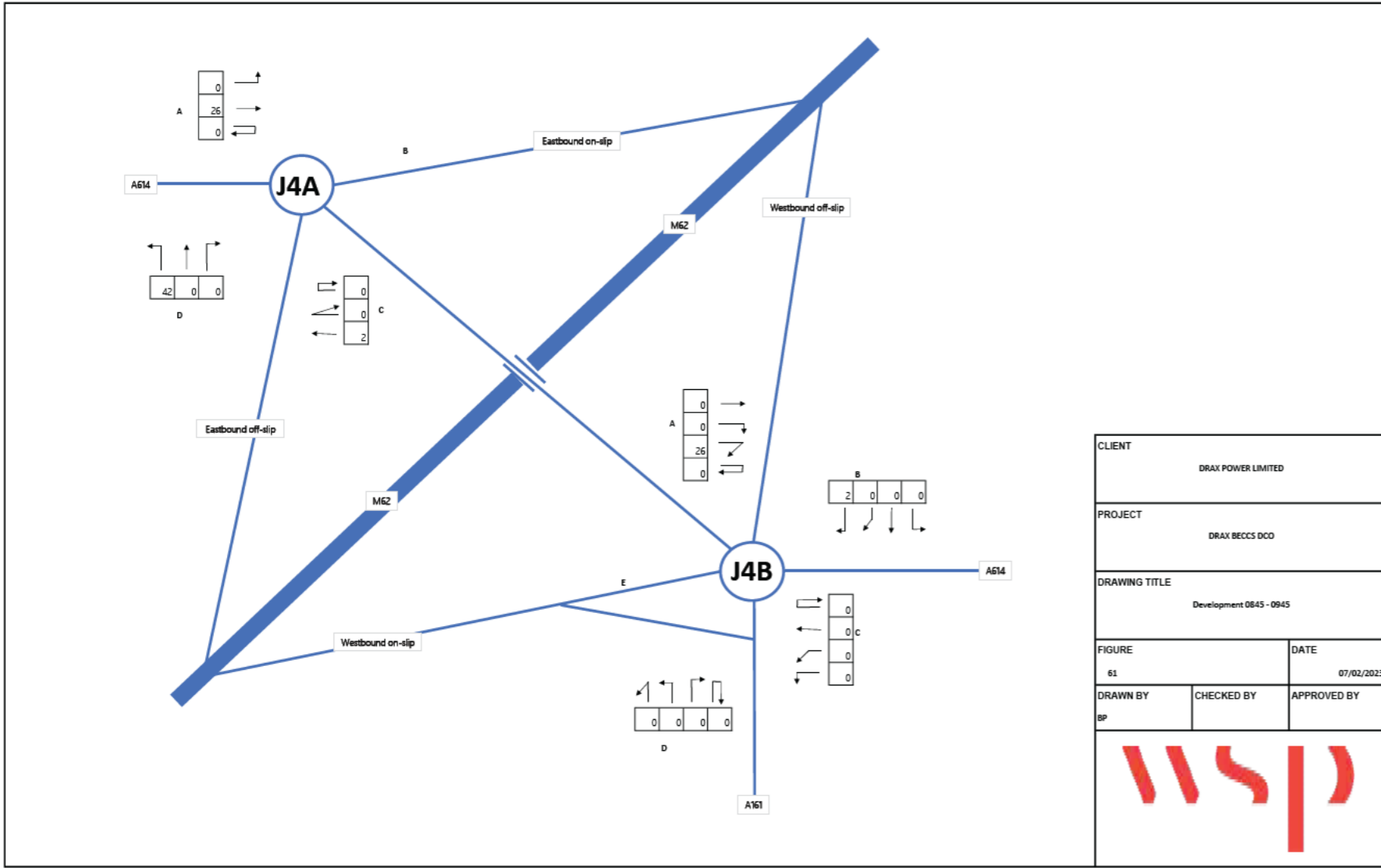
Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
08:30 - 09:30	7.50%	0%	32	0

WORKERS		ARRIVAL AND DEPARTURE PROFILE	
Peak Workforce	1000	7.50%	
2 Per Vehicle	2		
7 Per Minibus	7		
Vehicle	80%	800	
Min bus	20%	200	
Vehicle (2 Per Vehicle)	400		
Min bus (7 Per Minibus)	28.6		
Total	429		
Vehicle Occupancy	2.33		

TRIP GENERATION		HGVS	
Vehicles	30	Peak HGVS	135
Minibus	2.14	Hours in Working Day	12
Total	32.1	Peak HGVs per hour	11.3
		PCU Value	2.3
		Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	0	26	-	71
B	-	-	-	-	
C	2	0	0	-	
D	42	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	26	28
B	2	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 0845 - 0945		
FIGURE	DATE	
61	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		



Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

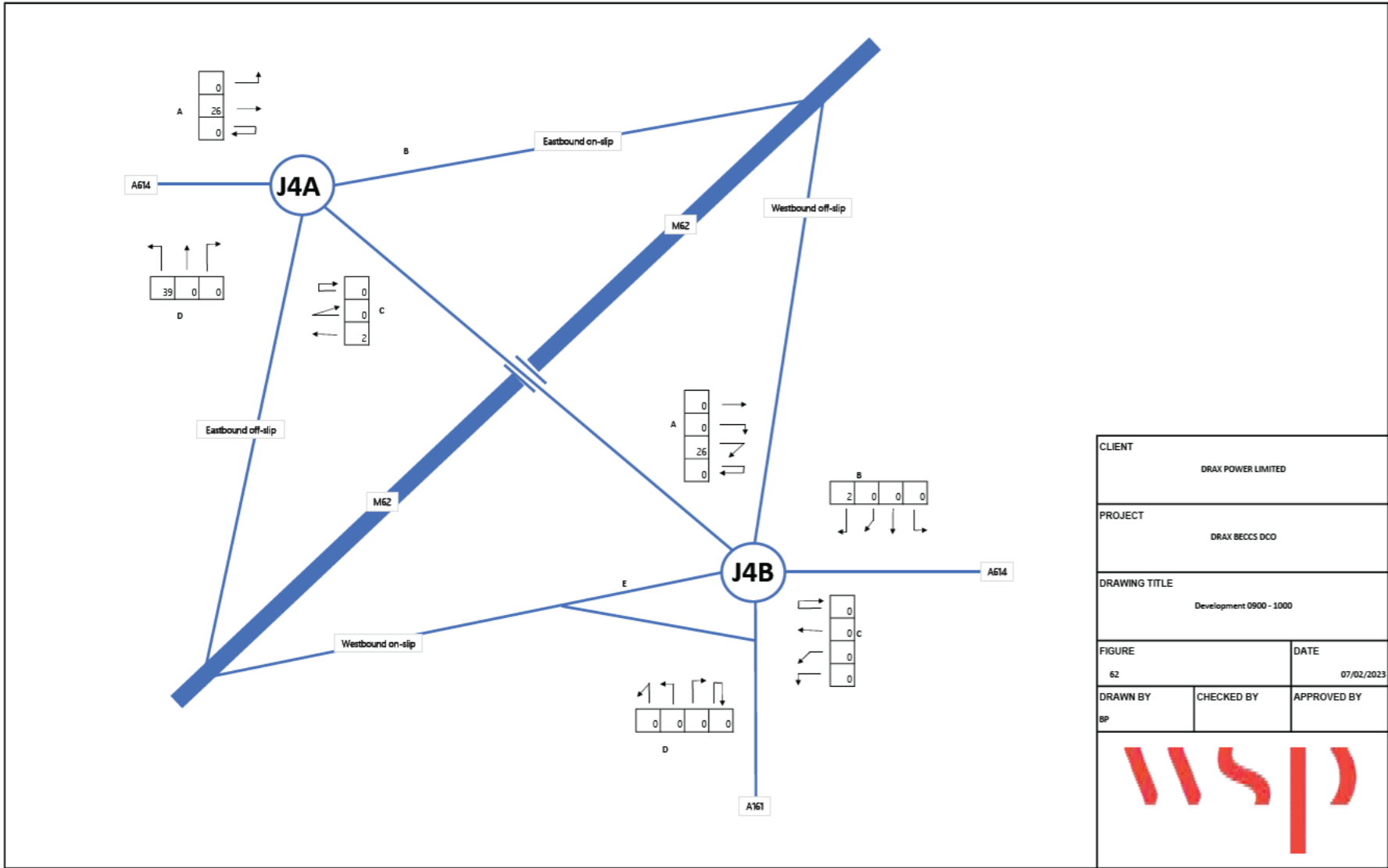
Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
08:45 - 09:45	6.25%	0%	27	0

WORKERS		ARRIVAL AND DEPARTURE PROFILE	
Peak Workforce	1000	6.25%	
2 Per Vehicle	2		
7 Per Minibus	7		
Vehicle	80%	800	
Min bus	20%	200	
Vehicle (2 Per Vehicle)	400		
Min bus (7 Per Minibus)	28.6		
Total	429		
Vehicle Occupancy	2.33		

TRIP GENERATION		HGVS	
Vehicles	25	Peak HGVS	135
Minibus	1.79	Hours in Working Day	12
Total	26.8	Peak HGVs per hour	11.3
		PCU Value	2.3
		Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	0	26	-	67
B	-	-	-	-	
C	2	0	0	-	
D	39	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	26	28
B	2	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 0900 - 1000		
FIGURE	DATE	
62	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		




Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

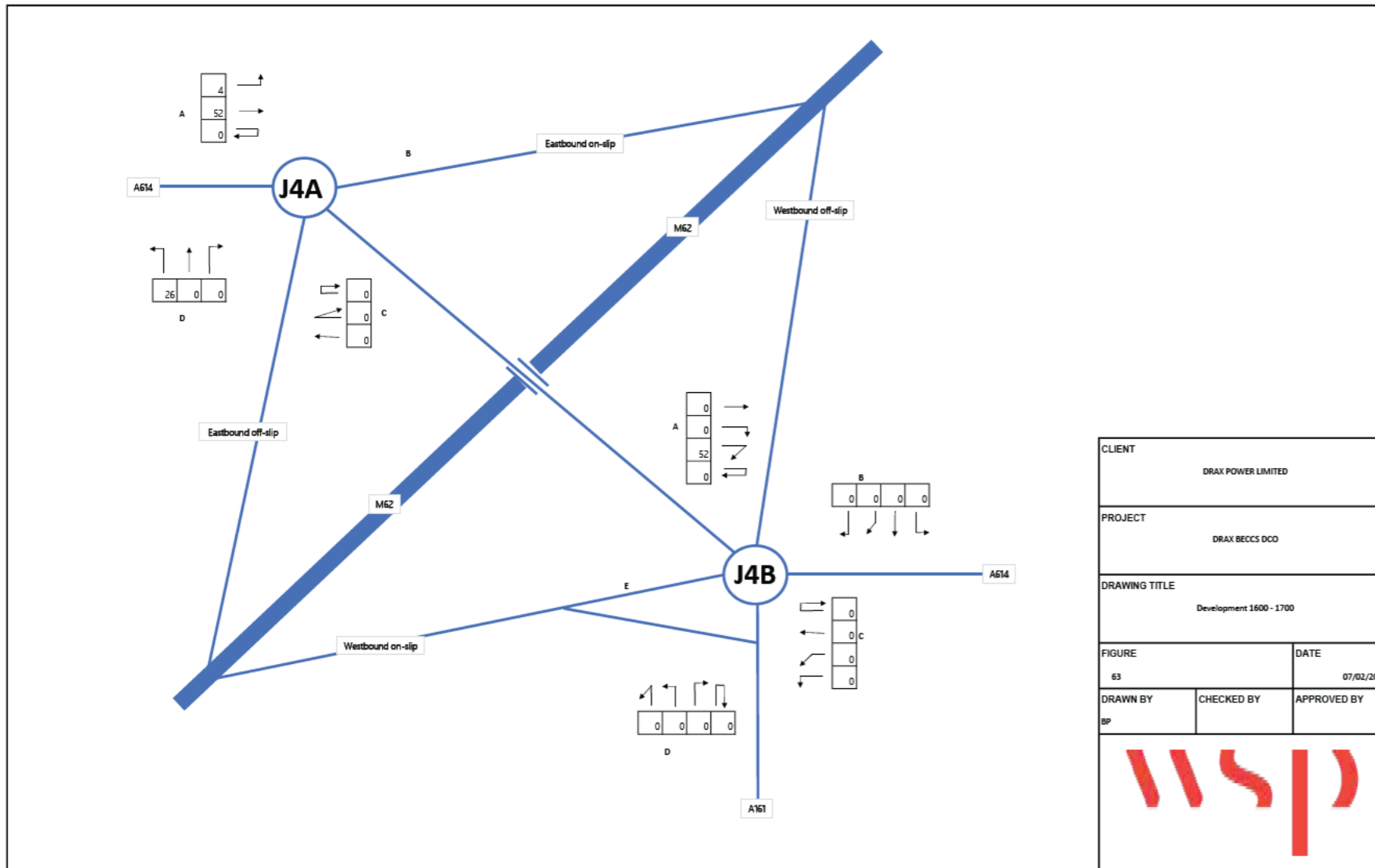
Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
09:00 - 10:00	5.00%	0%	21	0

WORKERS		ARRIVAL AND DEPARTURE PROFILE	
Peak Workforce	1000	5.00%	
2 Per Vehicle	2		
7 Per Minibus	7		
Vehicle	80%	800	
Min bus	20%	200	
Vehicle (2 Per Vehicle)	400		
Min bus (7 Per Minibus)	28.6		
Total	429		
Vehicle Occupancy	2.33		

TRIP GENERATION		HGVS	
Vehicles	20	Peak HGVS	135
Minibus	1.43	Hours in Working Day	12
Total	21.4	Peak HGVs per hour	11.3
		PCU Value	2.3
		Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	4	52	-	82
B	-	-	-	-	
C	0	0	0	-	
D	26	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	52	52
B	0	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 1600 - 1700		
FIGURE	DATE	
63	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
16:00 - 17:00	10.00%	0%	0	43

WORKERS

Peak Workforce	1000	
2 Per Vehicle	2	
7 Per Minibus	7	
Vehicle	80%	800
Min bus	20%	200
Vehicle (2 Per Vehicle)	400	
Min bus (7 Per Minibus)	28.6	
Total	429	
Vehicle Occupancy	2.33	

ARRIVAL AND DEPARTURE PROFILE

10.00%

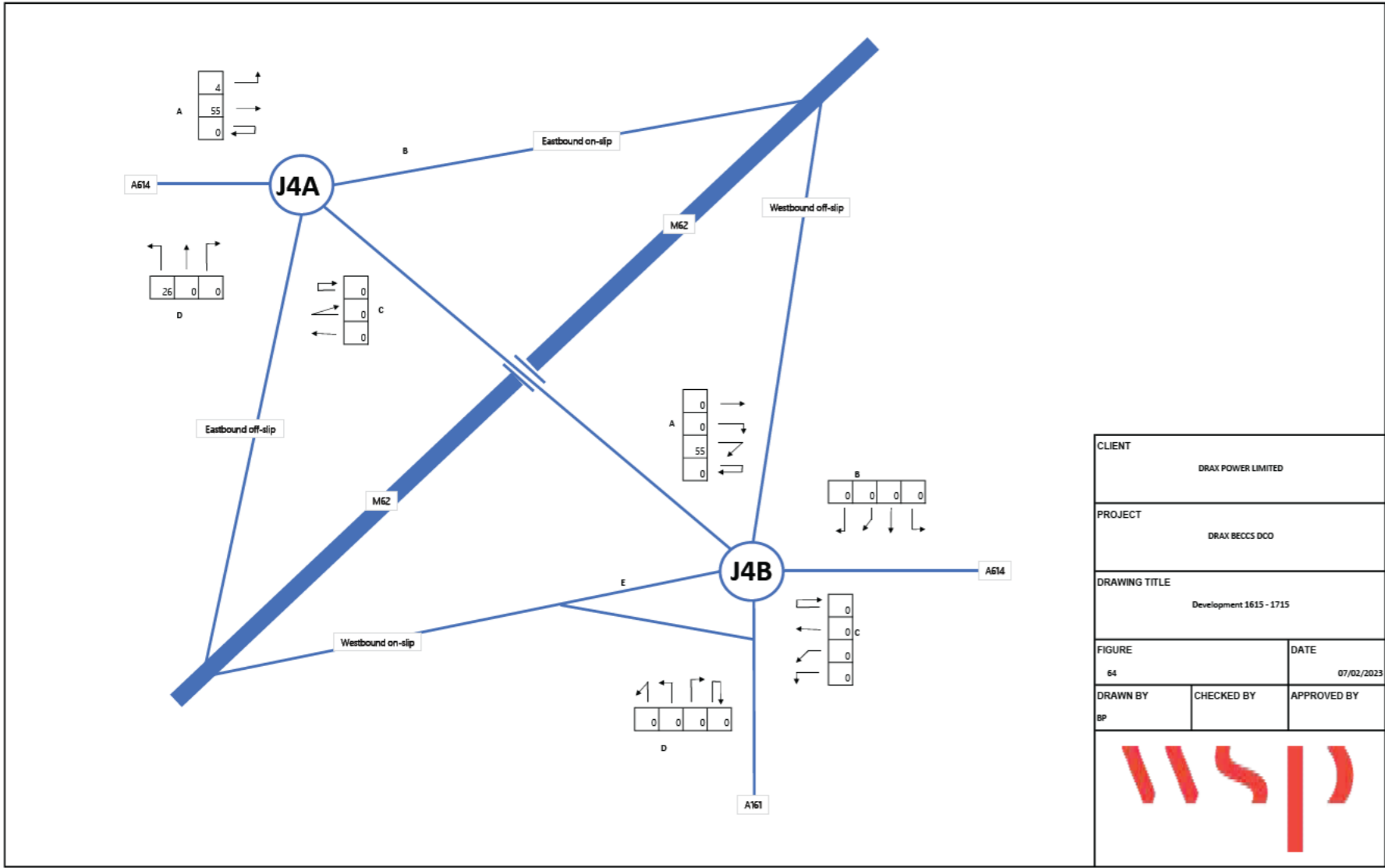
TRIP GENERATION

Vehicles	40
Minibus	2.86
Total	42.9

HGVs

Peak HGVs	135
Hours in Working Day	12
Peak HGVs per hour	11.3
PCU Value	2.3
Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	4	55	-	86
B	-	-	-	-	
C	0	0	0	-	
D	26	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	55	55
B	0	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 1615 - 1715		
FIGURE	DATE	
64	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		




Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
16:15 - 17:15	11.25%	0%	0	48

WORKERS

Peak Workforce	1000	
2 Per Vehicle	2	
7 Per Minibus	7	
Vehicle	80%	800
Min bus	20%	200
Vehicle (2 Per Vehicle)	400	
Min bus (7 Per Minibus)	28.6	
Total	429	
Vehicle Occupancy	2.33	

ARRIVAL AND DEPARTURE PROFILE

11.25%

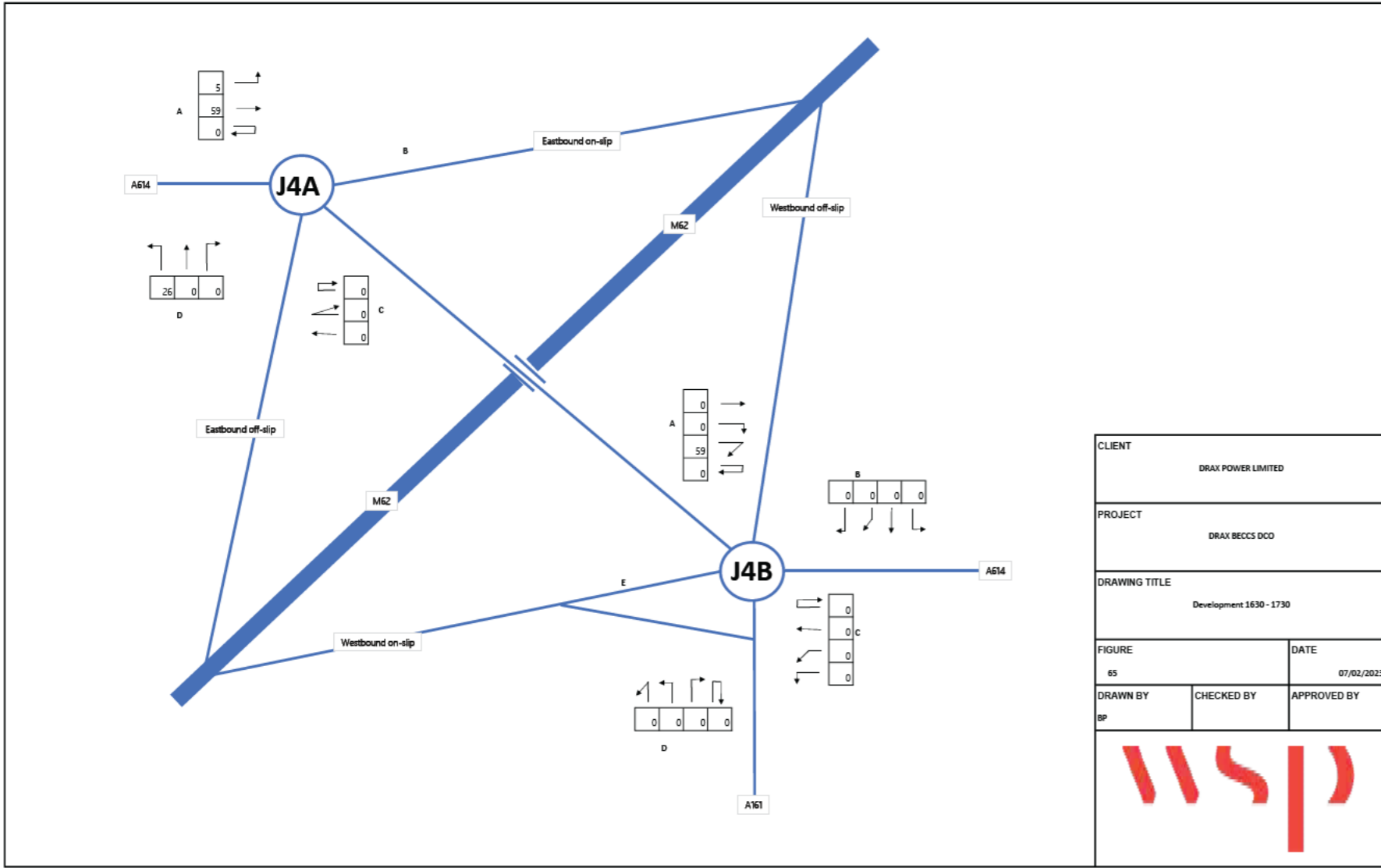
TRIP GENERATION

Vehicles	45
Minibus	3.21
Total	48.2

HGVs

Peak HGVs	135
Hours in Working Day	12
Peak HGVs per hour	11.3
PCU Value	2.3
Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	5	59	-	89
B	-	-	-	-	
C	0	0	0	-	
D	26	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	59	59
B	0	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 1630 - 1730		
FIGURE	DATE	
65	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		




Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

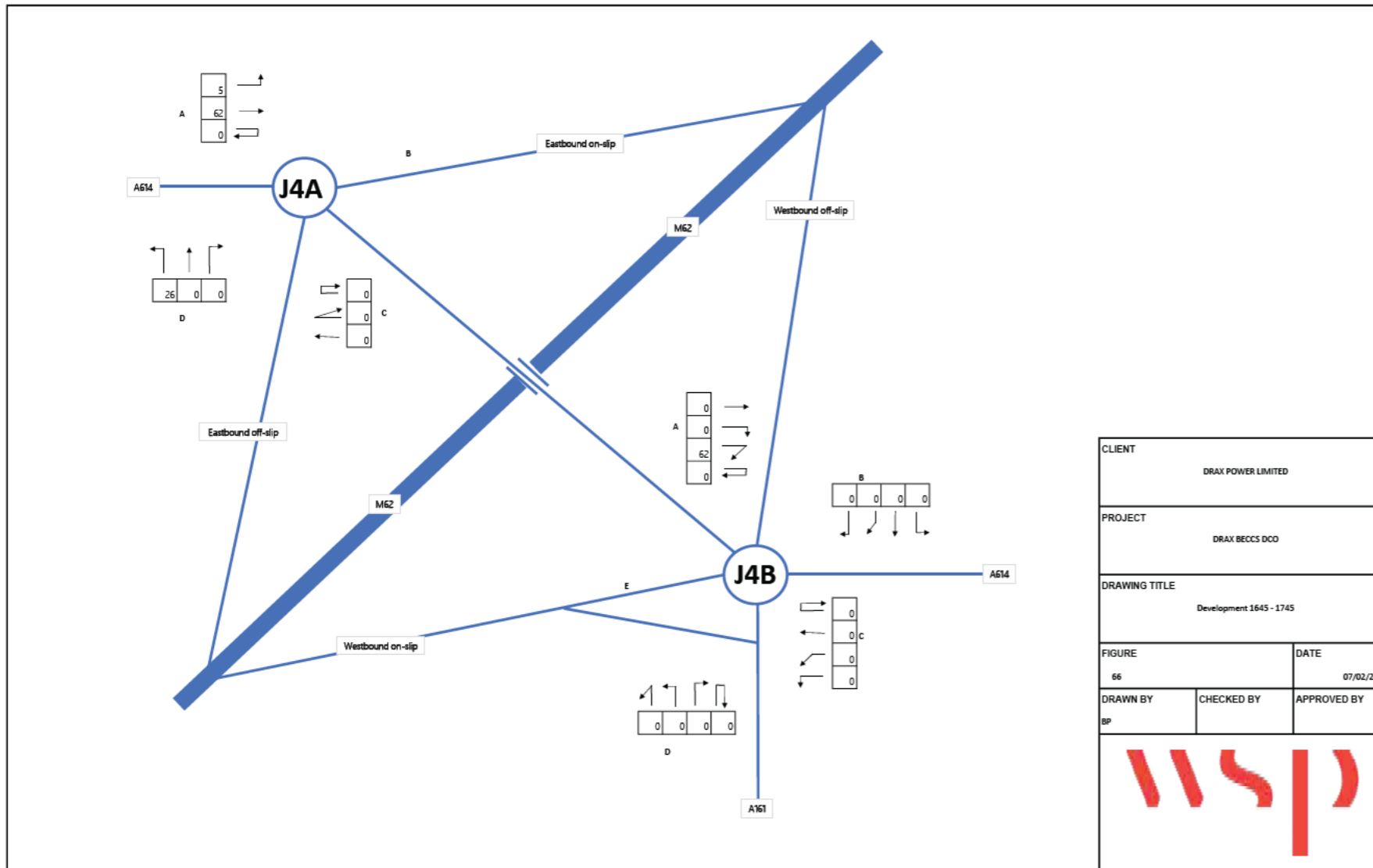
Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
16:30 - 17:30	12.50%	0%	0	54

WORKERS	ARRIVAL AND DEPARTURE PROFILE
Peak Workforce	1000
2 Per Vehicle	2
7 Per Minibus	7
Vehicle	80%
Min bus	20%
Vehicle (2 Per Vehicle)	400
Min bus (7 Per Minibus)	28.6
Total	429
Vehicle Occupancy	2.33

TRIP GENERATION	HGVs
Vehicles	50
Minibus	3.57
Total	53.6
Peak HGVS	135
Hours in Working Day	12
Peak HGVs per hour	11.3
PCU Value	2.3
Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	5	62	-	93
B	-	-	-	-	
C	0	0	0	-	
D	26	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	62	62
B	0	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 1645 - 1745		
FIGURE	DATE	
66	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
16:45 - 17:45	13.75%	0%	0	59

WORKERS

Peak Workforce	1000	
2 Per Vehicle	2	
7 Per Minibus	7	
Vehicle	80%	800
Min bus	20%	200
Vehicle (2 Per Vehicle)	400	
Min bus (7 Per Minibus)	28.6	
Total	429	
Vehicle Occupancy	2.33	

ARRIVAL AND DEPARTURE PROFILE

13.75%

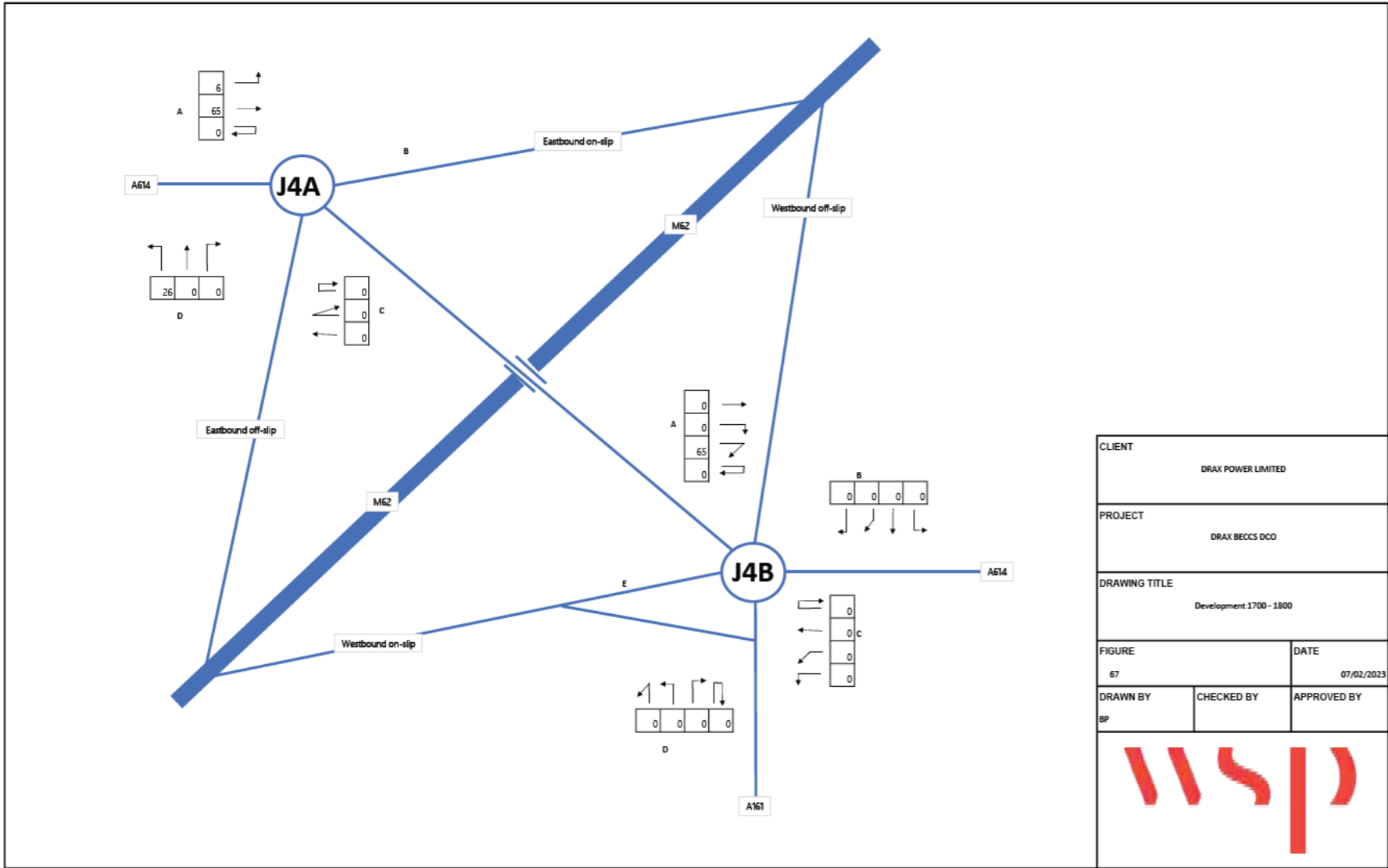
TRIP GENERATION

Vehicles	55
Minibus	3.93
Total	58.9

HGVs

Peak HGVs	135
Hours in Working Day	12
Peak HGVs per hour	11.3
PCU Value	2.3
Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	
A	0	6	65	-	Total movements through junction 97
B	-	-	-	-	
C	0	0	0	-	
D	26	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	
A	0	-	0	0	65	Total movements through junction 65
B	0	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	


CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 1700 - 1800		
FIGURE	DATE	
67	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
17:00 - 18:00	15.00%	0%	0	64

WORKERS

Peak Workforce	1000	
2 Per Vehicle	2	
7 Per Minibus	7	
Vehicle	80%	800
Min bus	20%	200
Vehicle (2 Per Vehicle)	400	
Min bus (7 Per Minibus)	28.6	
Total	429	
Vehicle Occupancy	2.33	

ARRIVAL AND DEPARTURE PROFILE

15.00%

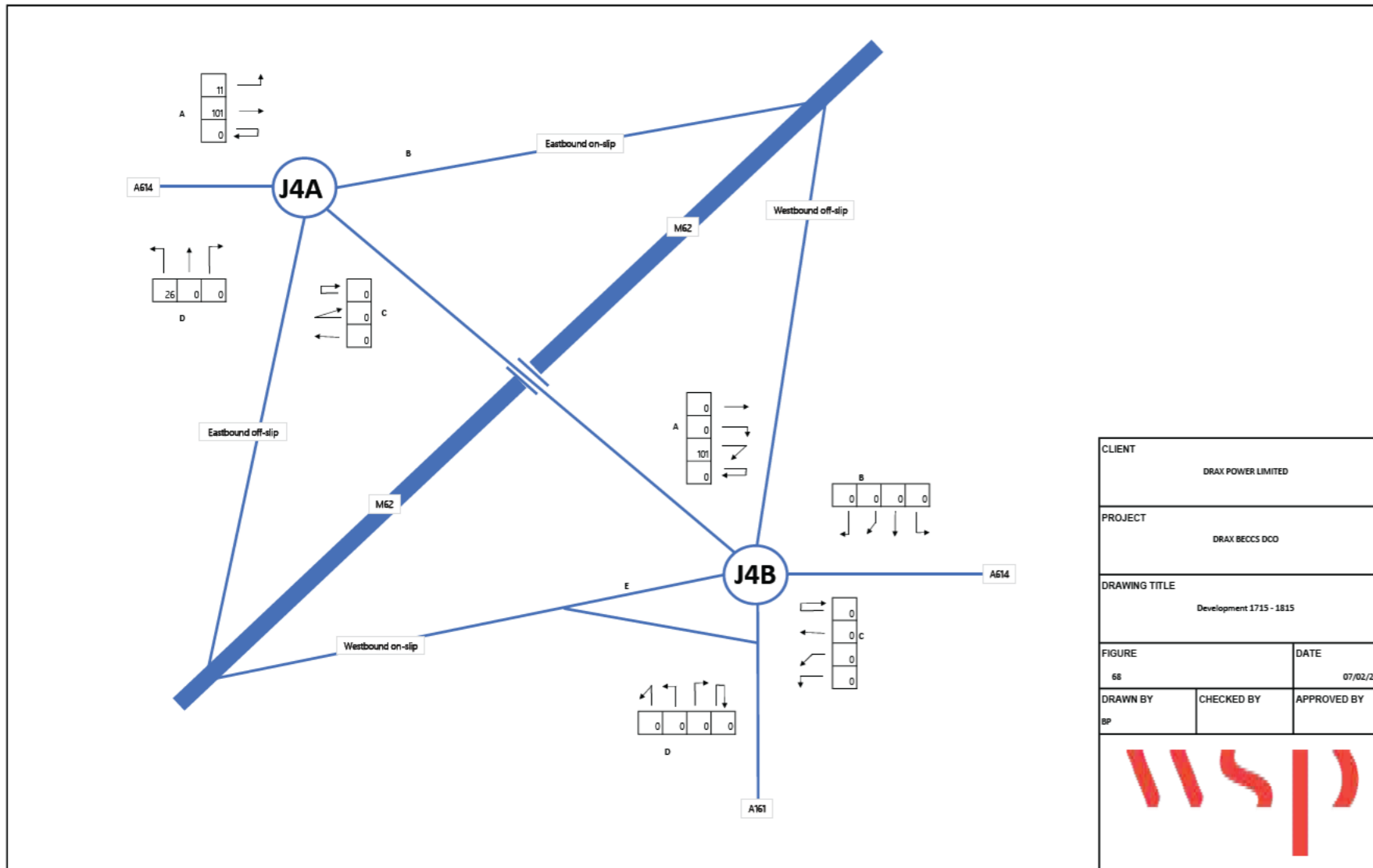
TRIP GENERATION

Vehicles	60
Minibus	4.29
Total	64.3

HGVs

Peak HGVs	135
Hours in Working Day	12
Peak HGVs per hour	11.3
PCU Value	2.3
Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	11	101	-	138
B	-	-	-	-	
C	0	0	0	-	
D	26	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	101	101
B	0	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 1715 - 1815		
FIGURE	DATE	
68	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
17:15 - 18:15	28.75%	0%	0	123

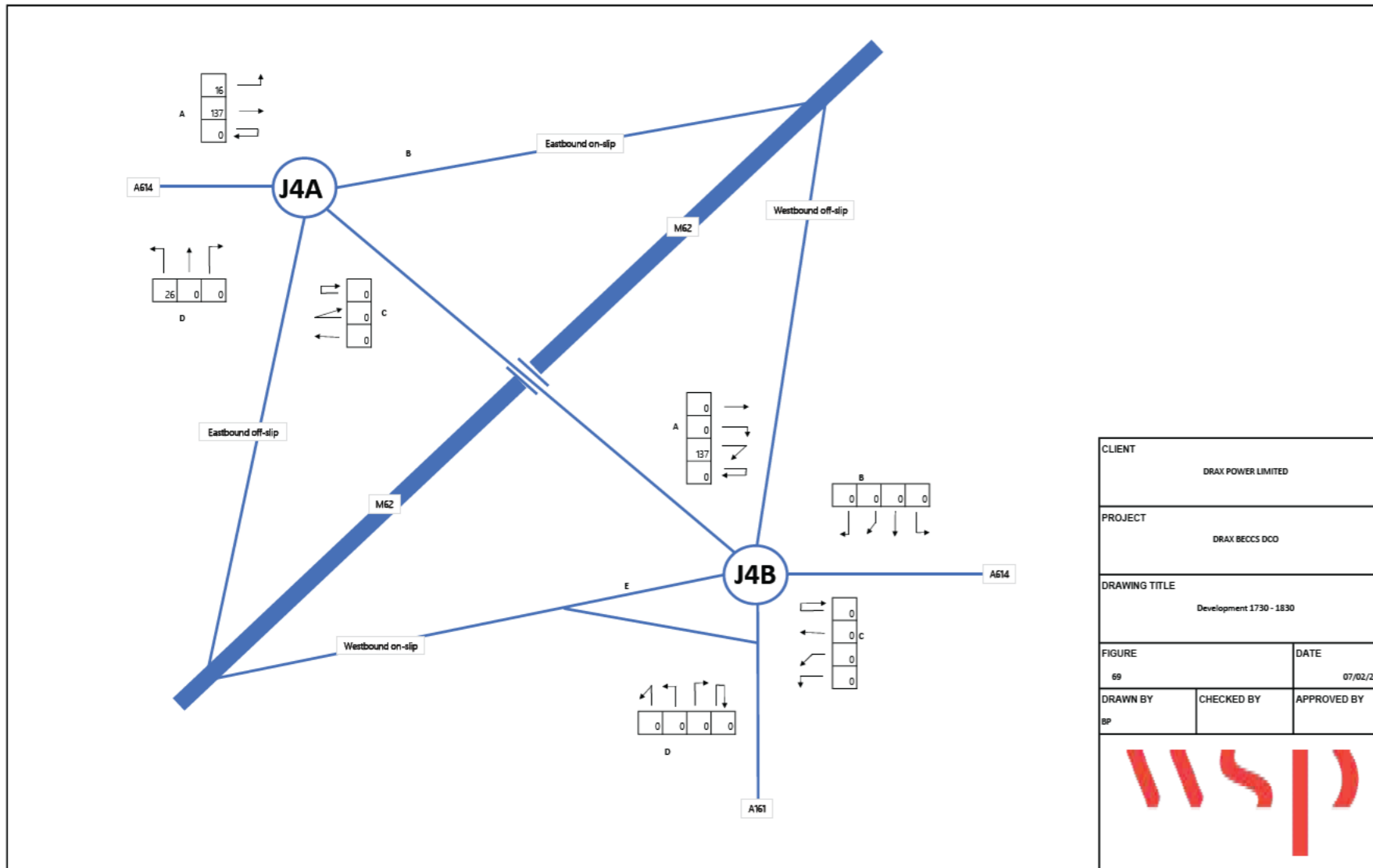
WORKERS	
Peak Workforce	1000
2 Per Vehicle	2
7 Per Minibus	7
Vehicle	80%
Min bus	20%
Vehicle (2 Per Vehicle)	400
Min bus (7 Per Minibus)	28.6
Total	429
Vehicle Occupancy	2.33

ARRIVAL AND DEPARTURE PROFILE	
	28.75%

TRIP GENERATION	
Vehicles	115
Minibus	8.21
Total	123

HGVS	
Peak HGVS	135
Hours in Working Day	12
Peak HGVs per hour	11.3
PCU Value	2.3
Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	16	137	-	179
B	-	-	-	-	
C	0	0	0	-	
D	26	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	137	137
B	0	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 1730 - 1830		
FIGURE	DATE	
69	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
17:30 - 18:30	42.50%	0%	0	182

WORKERS

Peak Workforce	1000
2 Per Vehicle	2
7 Per Minibus	7
Vehicle	80% 800
Min bus	20% 200
Vehicle (2 Per Vehicle)	400
Min bus (7 Per Minibus)	28.6
Total	429
Vehicle Occupancy	2.33

ARRIVAL AND DEPARTURE PROFILE

42.50%

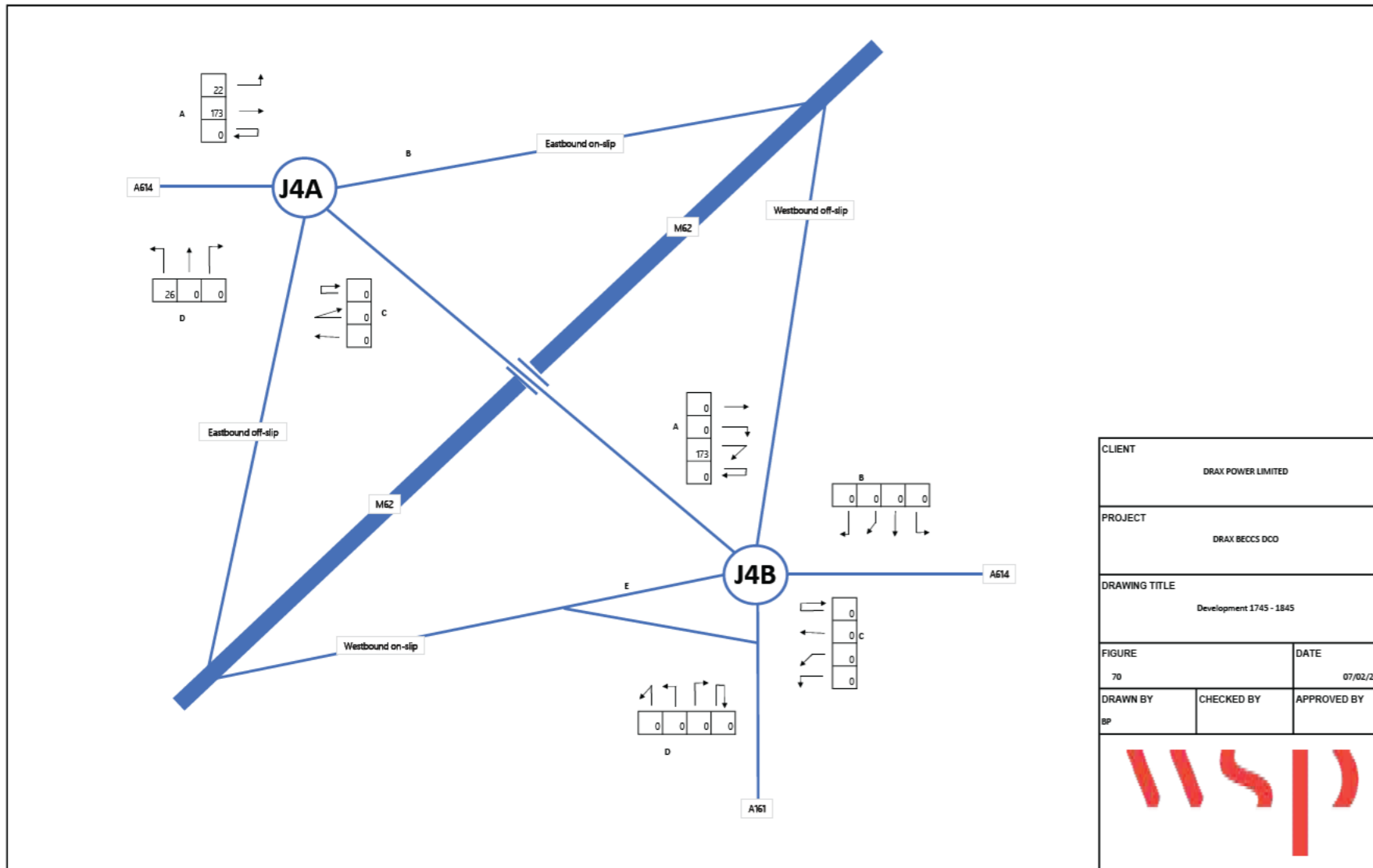
TRIP GENERATION

Vehicles	170
Minibus	12.1
Total	182

HGVs

Peak HGVs	135
Hours in Working Day	12
Peak HGVs per hour	11.3
PCU Value	2.3
Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	22	173	-	221
B	-	-	-	-	
C	0	0	0	-	
D	26	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	173	173
B	0	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 1745 - 1845		
FIGURE	DATE	
70	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
17:45 - 18:45	56.25%	0%	0	241

WORKERS

Peak Workforce	1000	
2 Per Vehicle	2	
7 Per Minibus	7	
Vehicle	80%	800
Min bus	20%	200
Vehicle (2 Per Vehicle)	400	
Min bus (7 Per Minibus)	28.6	
Total	429	
Vehicle Occupancy	2.33	

ARRIVAL AND DEPARTURE PROFILE

56.25%

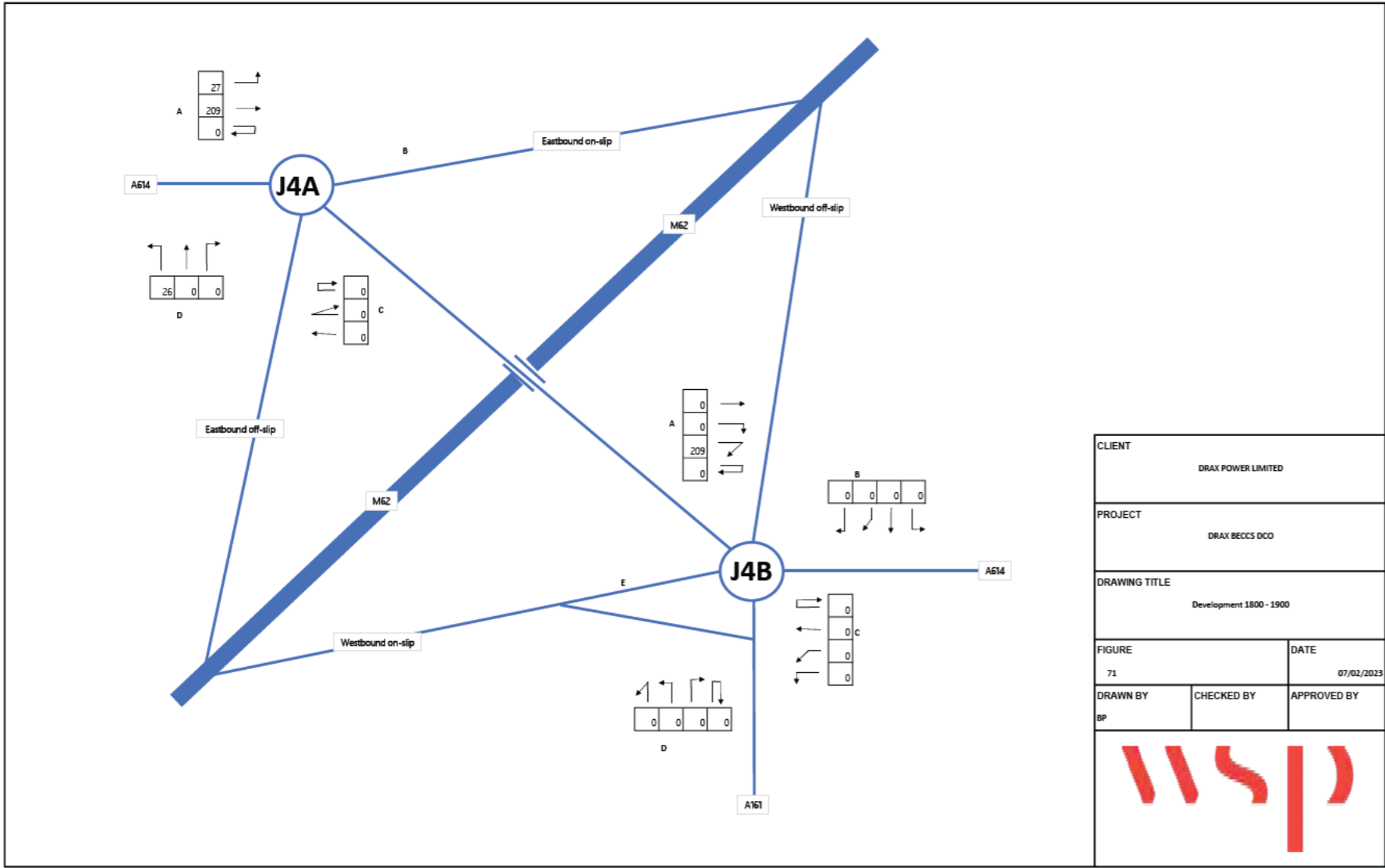
TRIP GENERATION

Vehicles	225
Minibus	16.1
Total	241

HGVs

Peak HGVs	135
Hours in Working Day	12
Peak HGVs per hour	11.3
PCU Value	2.3
Peak HGVs per hour (PCU)	25.9

Hours	Construction HGVs	
	Arrivals	Departures
00:00 - 01:00	0	0
01:00 - 02:00	0	0
02:00 - 03:00	0	0
03:00 - 04:00	0	0
04:00 - 05:00	0	0
05:00 - 06:00	0	0
06:00 - 07:00	0	0
07:00 - 08:00	26	26
08:00 - 09:00	26	26
09:00 - 10:00	26	26
10:00 - 11:00	26	26
11:00 - 12:00	26	26
12:00 - 13:00	26	26
13:00 - 14:00	26	26
14:00 - 15:00	26	26
15:00 - 16:00	26	26
16:00 - 17:00	26	26
17:00 - 18:00	26	26
18:00 - 19:00	26	26
19:00 - 20:00	0	0
20:00 - 21:00	0	0
21:00 - 22:00	0	0
22:00 - 23:00	0	0
23:00 - 24:00	0	0
Total	310.5	310.5



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	27	209	-	262
B	-	-	-	-	
C	0	0	0	-	
D	26	0	0	-	

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	0	0	209	209
B	0	-	0	0	0	
C	0	-	0	0	0	
D	0	-	0	0	0	
E	-	-	-	-	-	


CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
Development 1800 - 1900		
FIGURE	DATE	
71	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

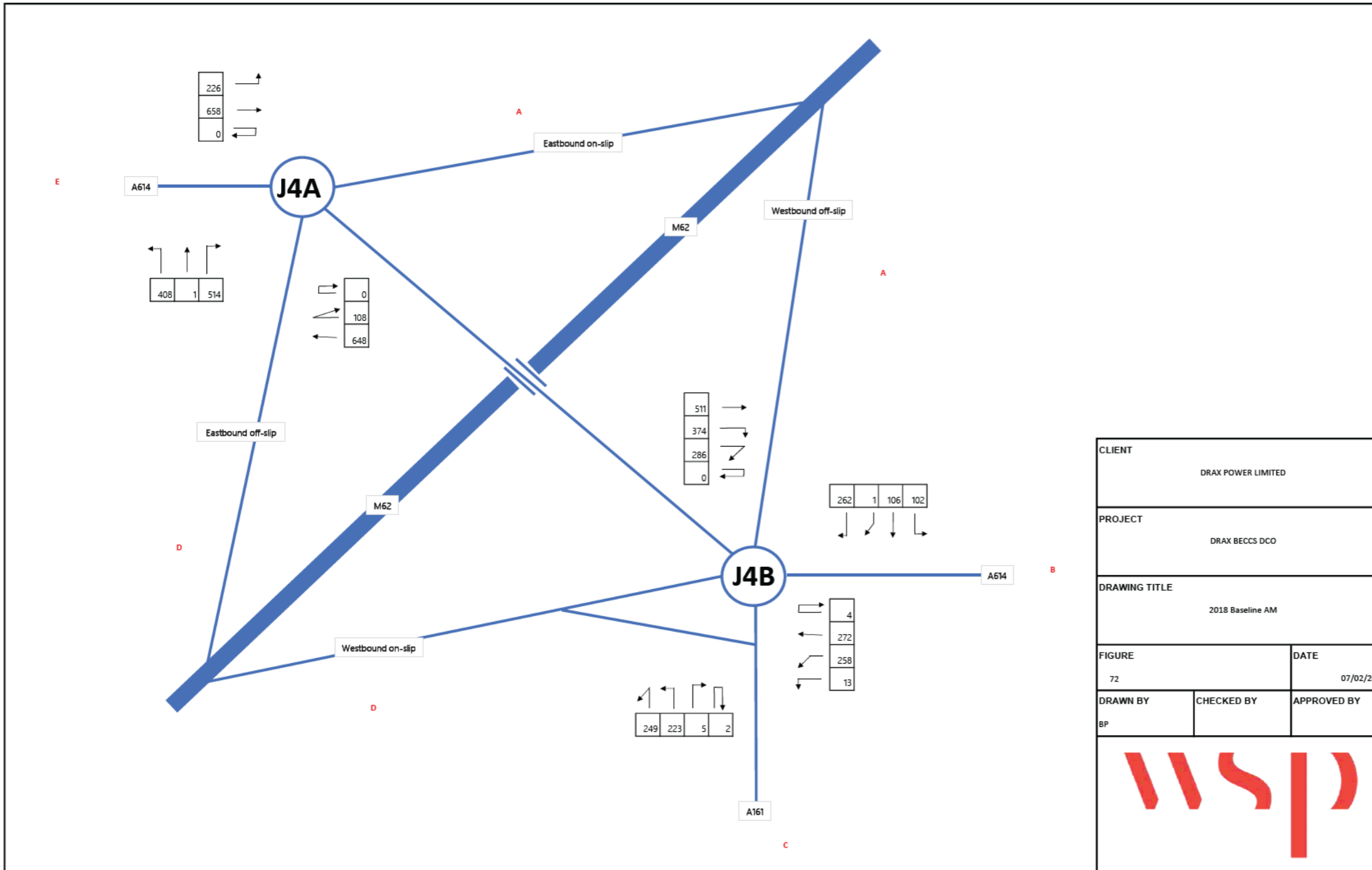
Table 16: Daily vehicle profile during peak month of construction

Hour Beginning	% of Daily Inbound	% of Daily Outbound
06:00	30%	0%
07:00	55%	0%
08:00	10%	0%
09:00	5%	0%
16:00	0%	10%
17:00	0%	15%
18:00	0%	70%
19:00	0%	5%
Total	100%	100%

Source: EN010114-000285-K3 - Document 6.3.10 - ES Appendix 10A Transport Assessment.pdf

Hours	% of Daily Inbound	% of Daily Outbound	Arrivals	Departures
18:00 - 19:00	70.00%	0%	0	300






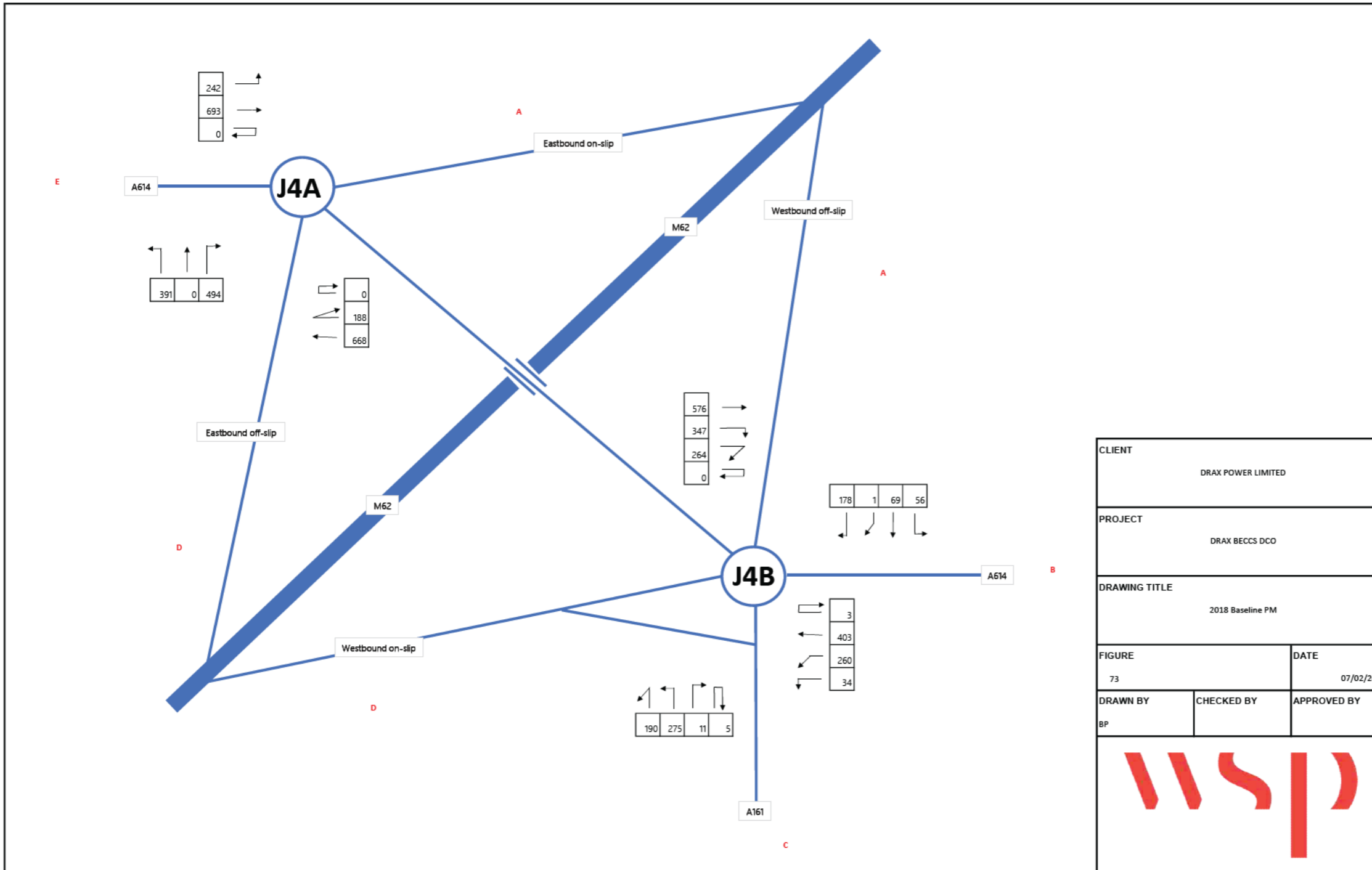
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	226	658	-	2563
B	-	-	-	-	
C	648	108	0	-	
D	408	1	514	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	511	374	286	2669
B	262	-	102	106	1	
C	272	-	4	13	258	
D	223	-	5	2	249	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Baseline AM		
FIGURE	DATE	
72	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




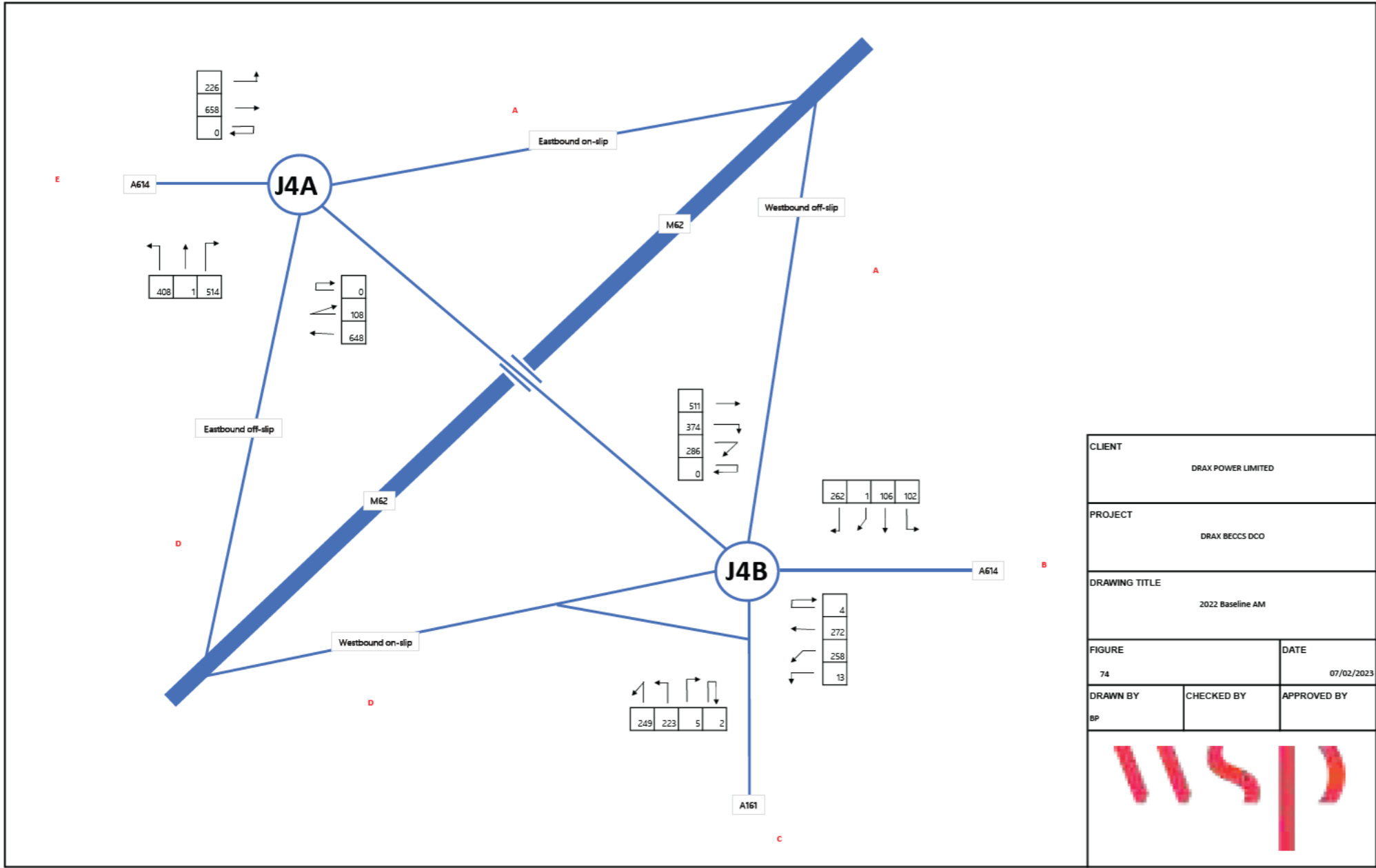
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	242	693	-	2676
B	-	-	-	-	
C	668	188	0	-	
D	391	0	494	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	576	347	264	2672
B	178	-	56	69	1	
C	403	-	3	34	260	
D	275	-	11	5	190	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Baseline PM		
FIGURE	DATE	
73	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

TEMPRO 2018 - 2022

	A	B	C	D
A	0	226	658	-
B	-	-	-	-
C	648	108	0	-
D	408	1	514	-


Total movements through junction
2563

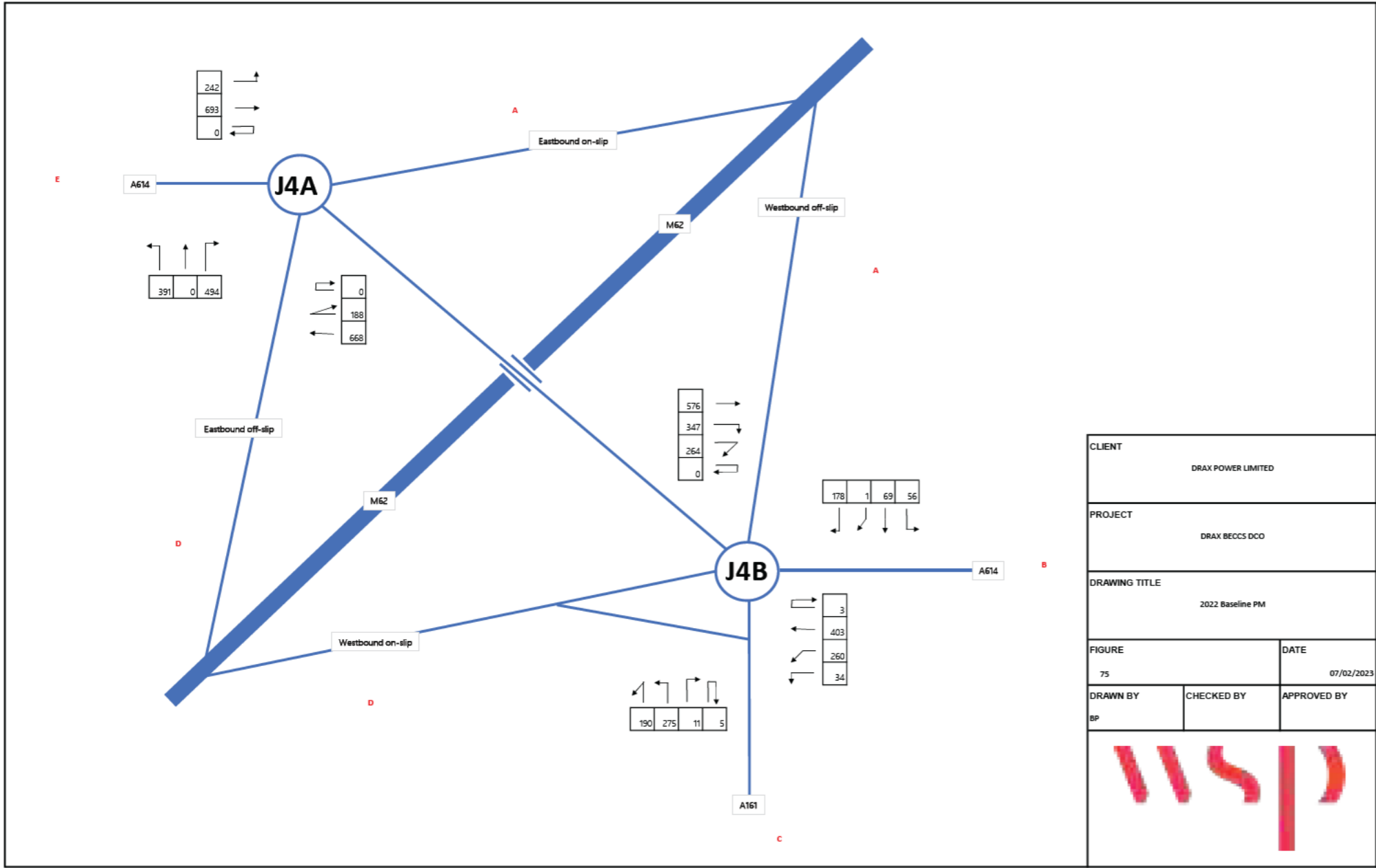
1.0000

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	511	374	286
B	262	-	102	106	1
C	272	-	4	13	258
D	223	-	5	2	249
E	-	-	-	-	-

Total movements through junction
2669

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2022 Baseline AM		
FIGURE	DATE	
74	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		



J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

TEMPRO 2018 - 2022

	A	B	C	D
A	0	242	693	-
B	-	-	-	-
C	668	188	0	-
D	391	0	494	-


Total movements through junction
2676

1.0000

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	576	347	264
B	178	-	56	69	1
C	403	-	3	34	260
D	275	-	11	5	190
E	-	-	-	-	-

Total movements through junction
2672

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2022 Baseline PM		
FIGURE	DATE	
75	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D
A	0	233	677	-
B	-	-	-	-
C	668	112	0	-
D	420	1	529	-

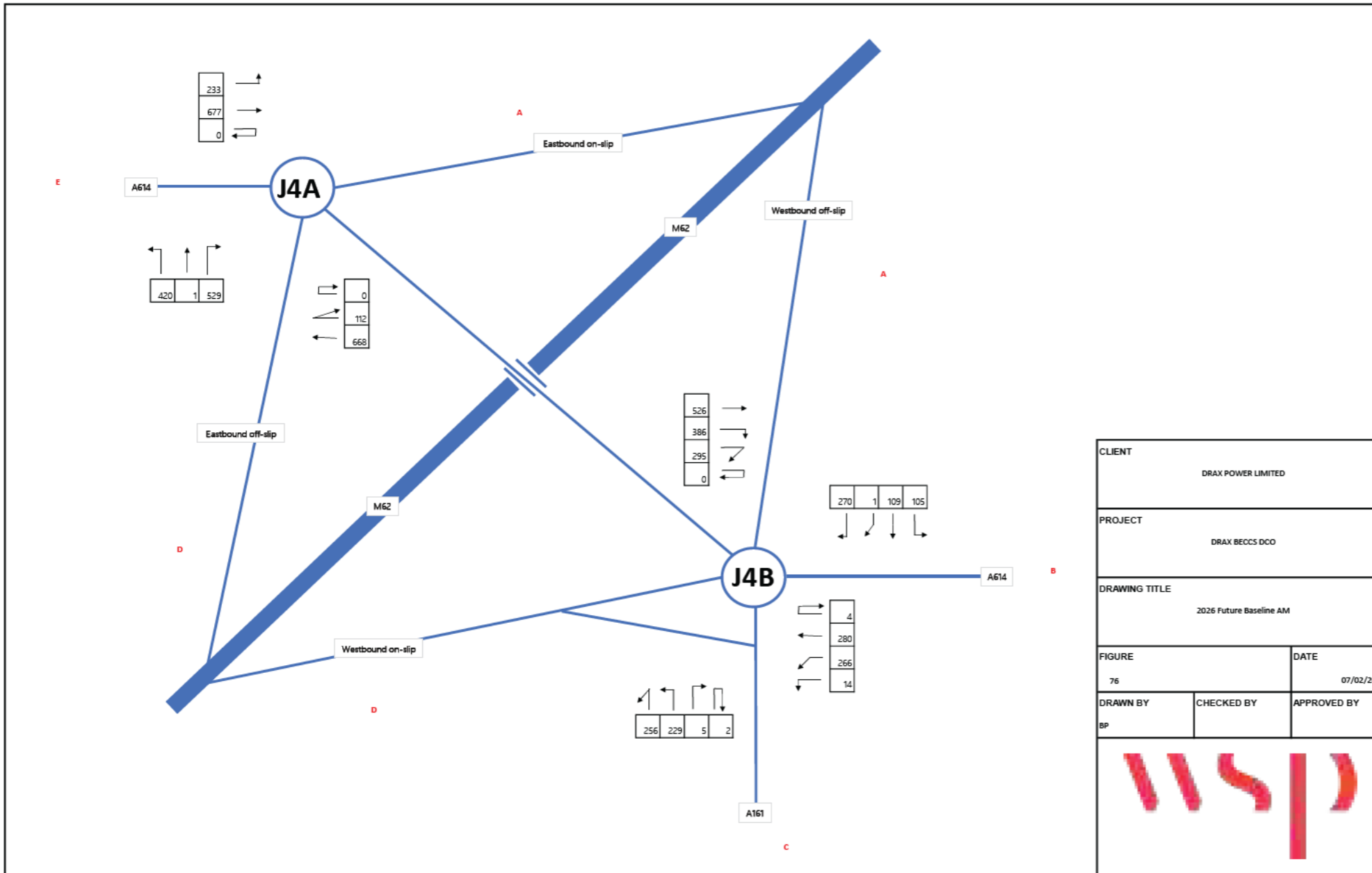
Total movements through junction
2639


1.0297

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	526	386	295
B	270	-	105	109	1
C	280	-	4	14	266
D	229	-	5	2	256
E	-	-	-	-	-

Total movements through junction
2748



CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2026 Future Baseline AM		
FIGURE		DATE
76		07/02/2023
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D
A	0	249	713	-
B	-	-	-	-
C	687	193	0	-
D	402	0	508	-

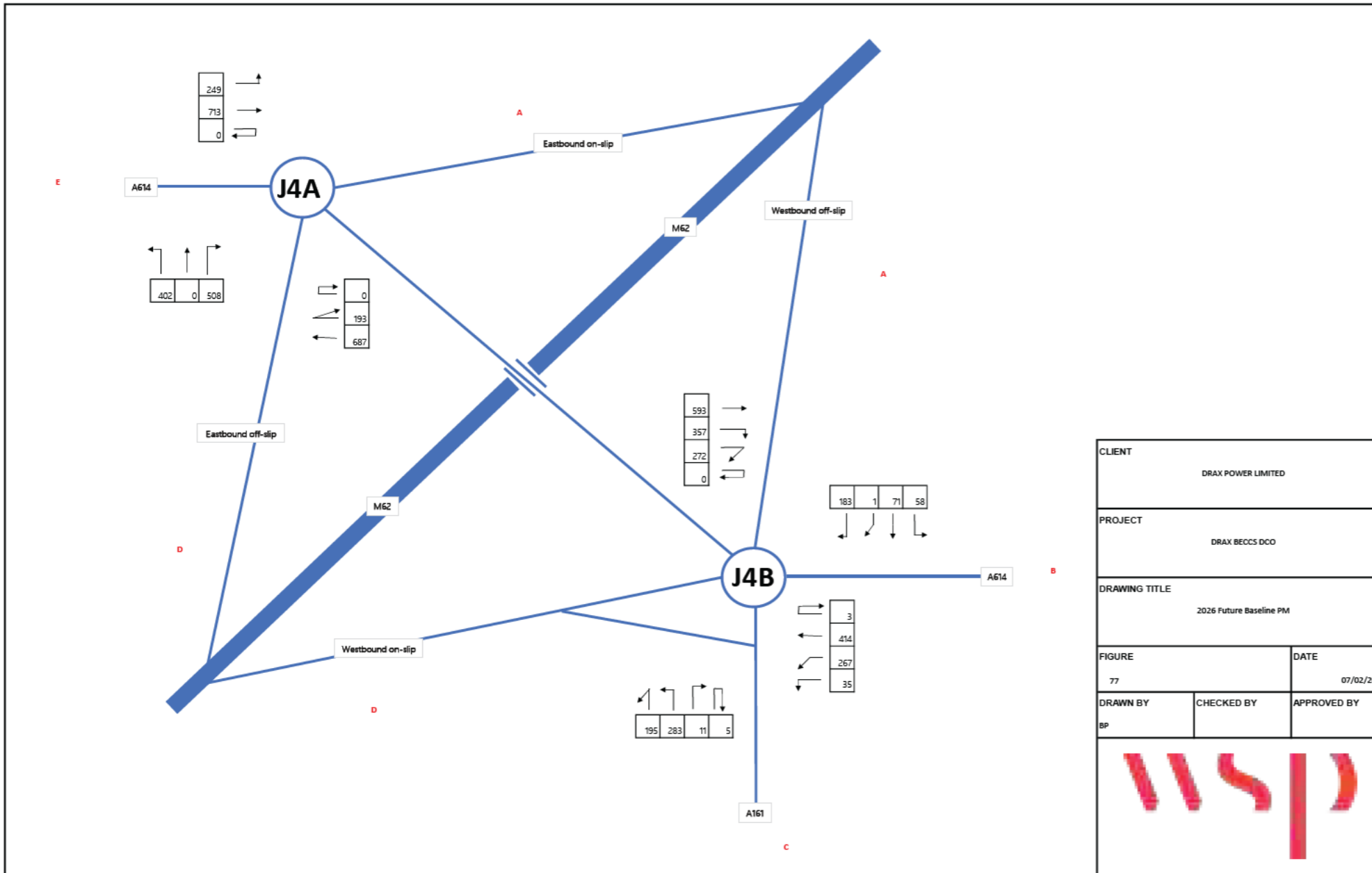
Total movements through junction
2753


1.0286

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	593	357	272
B	183	-	58	71	1
C	414	-	3	35	267
D	283	-	11	5	195
E	-	-	-	-	-

Total movements through junction
2749



CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2026 Future Baseline PM		
FIGURE	DATE	
77	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D
A	0	233	703	-
B	-	-	-	-
C	680	112	0	-
D	530	1	529	-

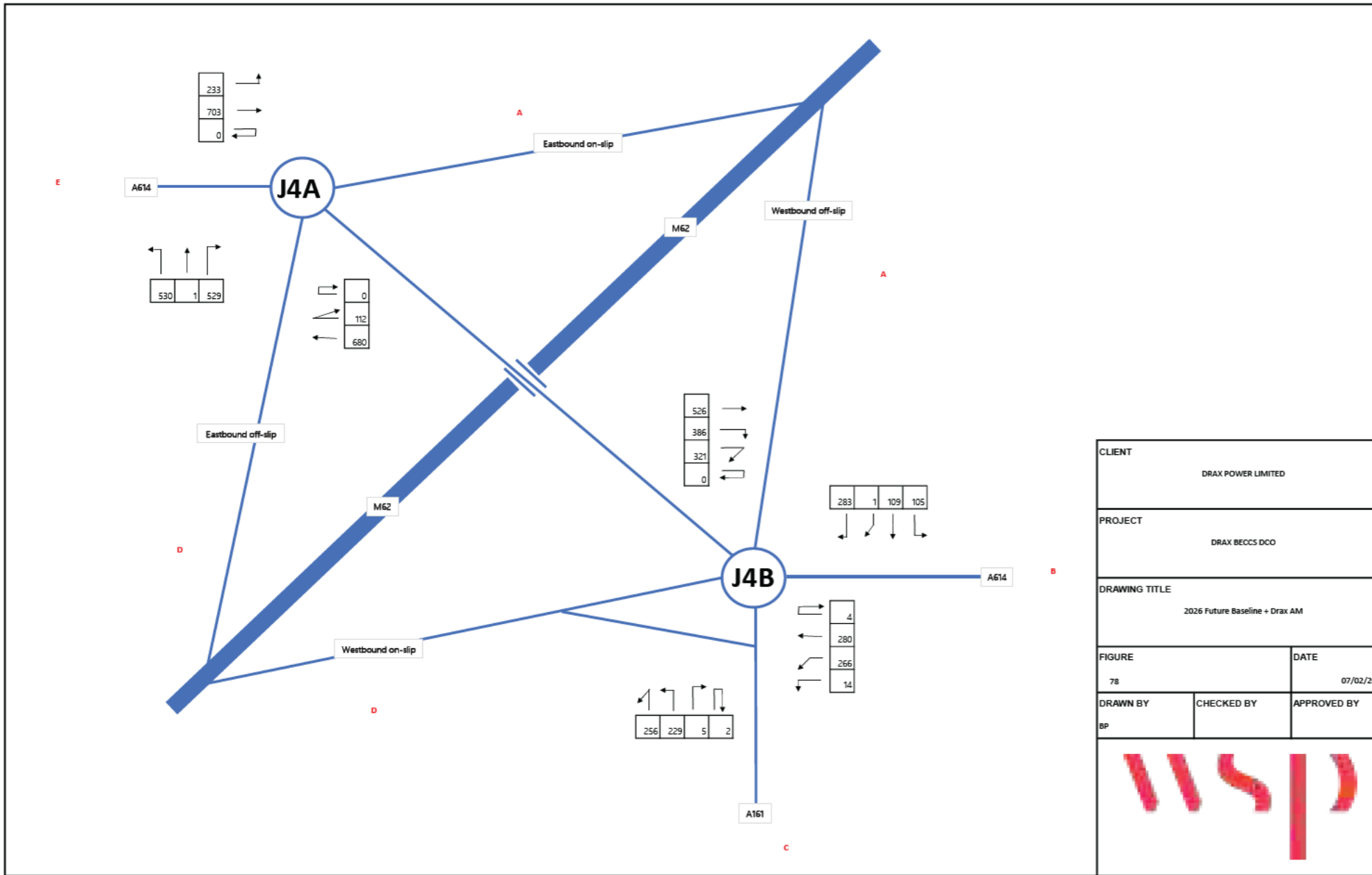
Total movements through junction
2788


1.0297

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	526	386	321
B	283	-	105	109	1
C	280	-	4	14	266
D	229	-	5	2	256
E	-	-	-	-	-

Total movements through junction
2786



CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2026 Future Baseline + Drax AM		
FIGURE		DATE
78		07/02/2023
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D
A	0	254	772	-
B	-	-	-	-
C	687	193	0	-
D	428	0	508	-

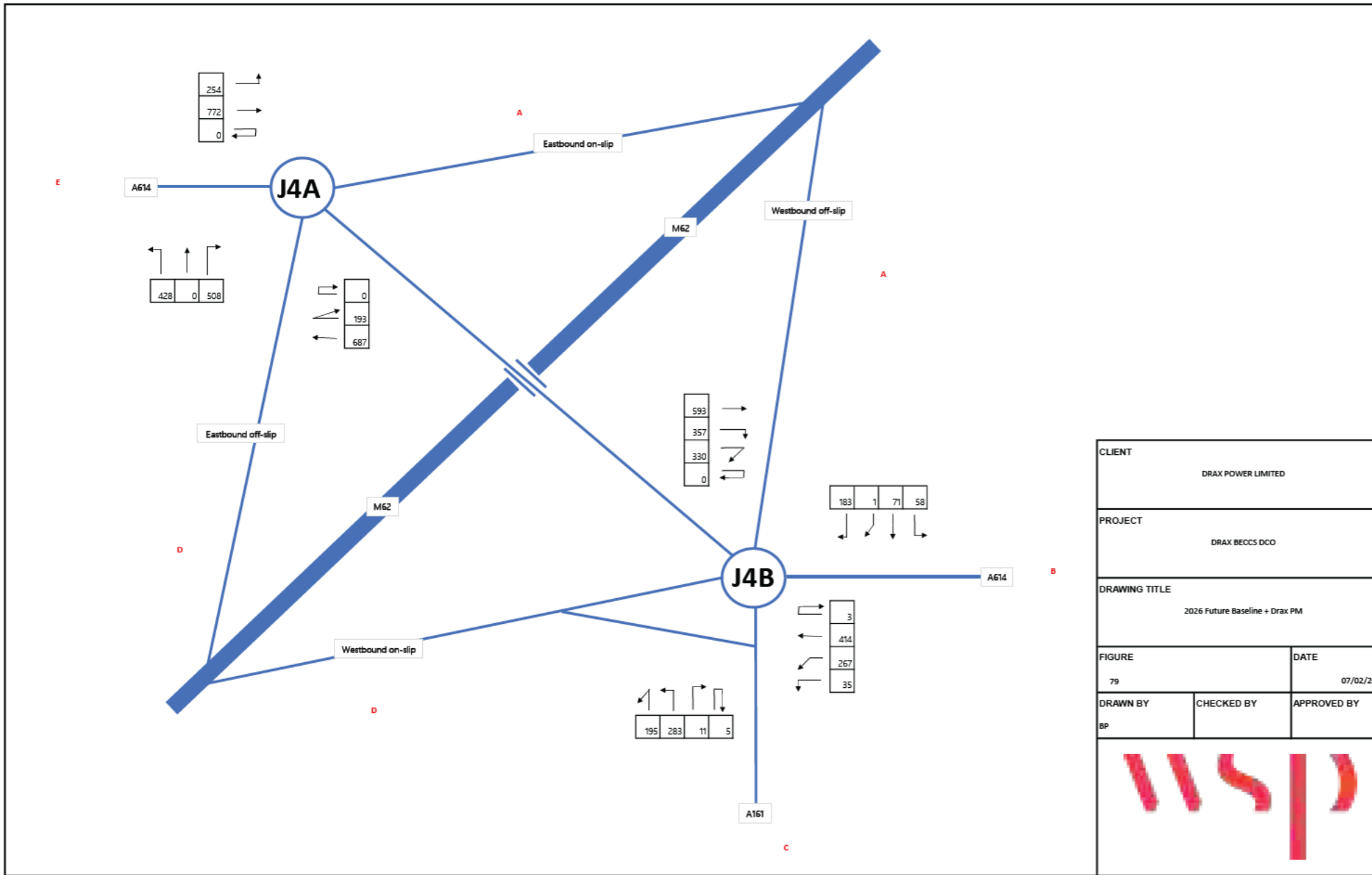
Total movements through junction
2842


1.0286

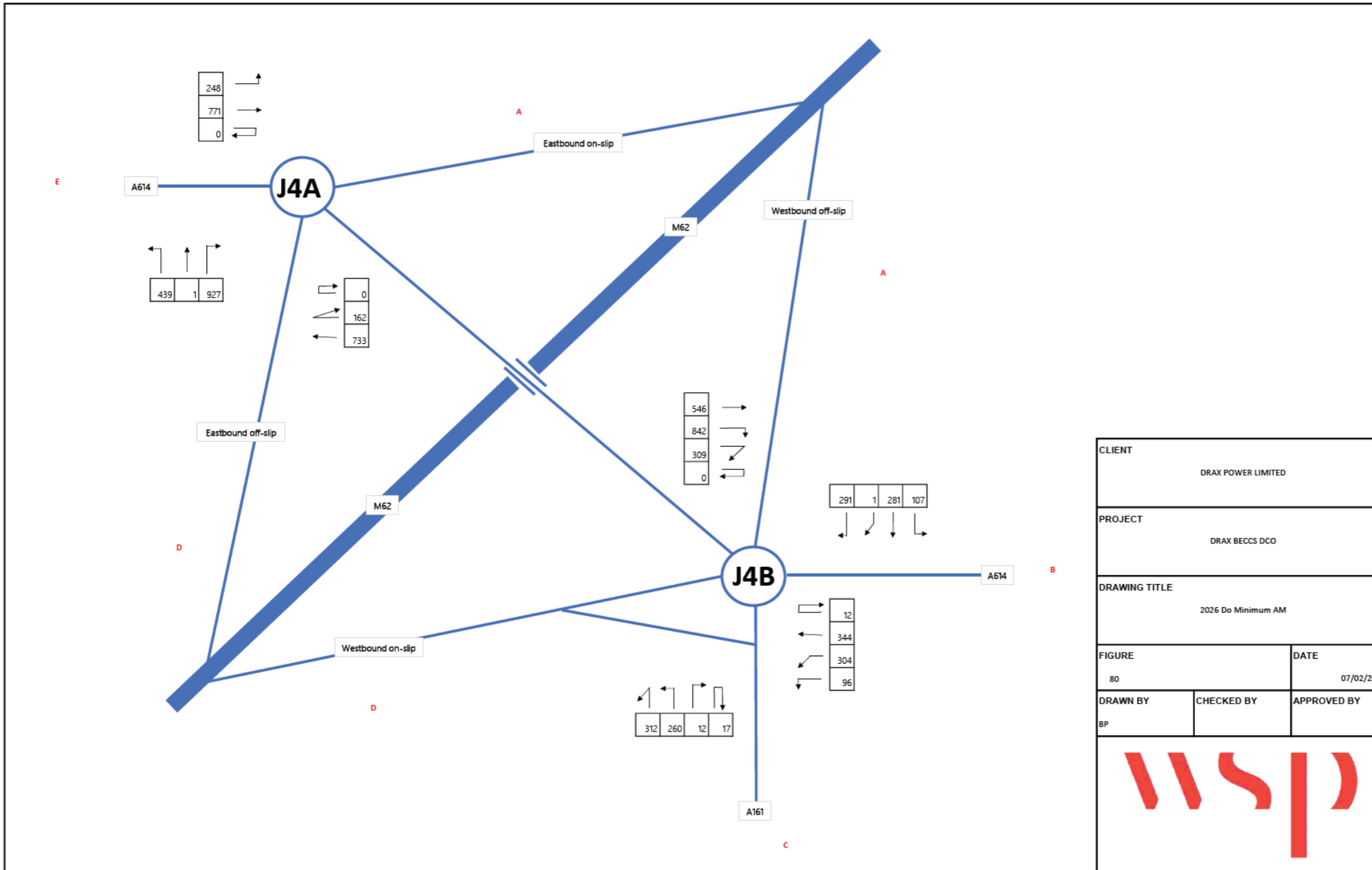
J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	593	357	330
B	183	-	58	71	1
C	414	-	3	35	267
D	283	-	11	5	195
E	-	-	-	-	-

Total movements through junction
2807



CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2026 Future Baseline + Drax PM		
FIGURE	DATE	
79	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




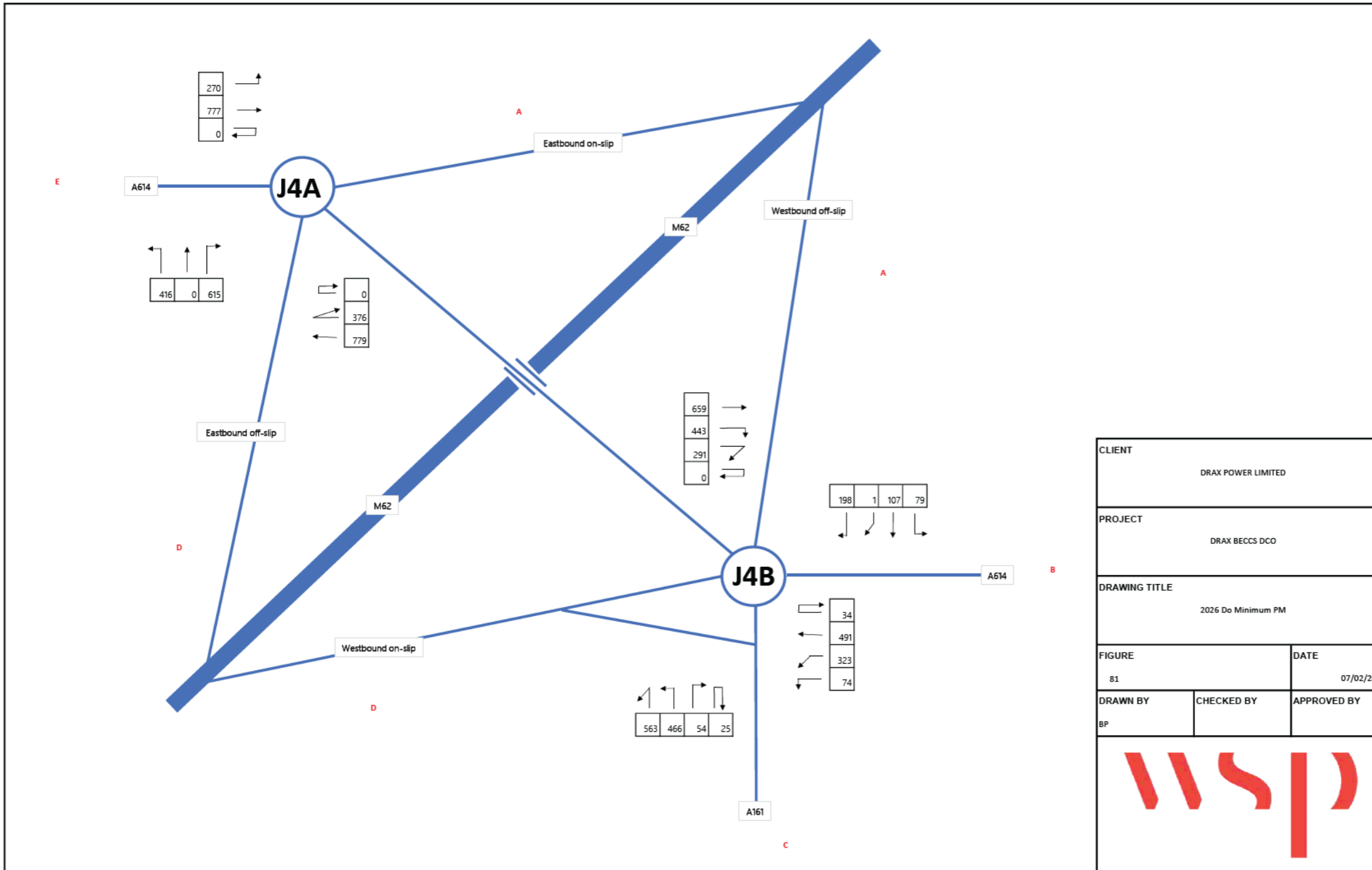
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	248	771	-	3281
B	-	-	-	-	
C	733	162	0	-	
D	439	1	927	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	546	842	309	3735
B	291	-	107	281	1	
C	344	-	12	96	304	
D	260	-	12	17	312	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2026 Do Minimum AM		
FIGURE	DATE	
80	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




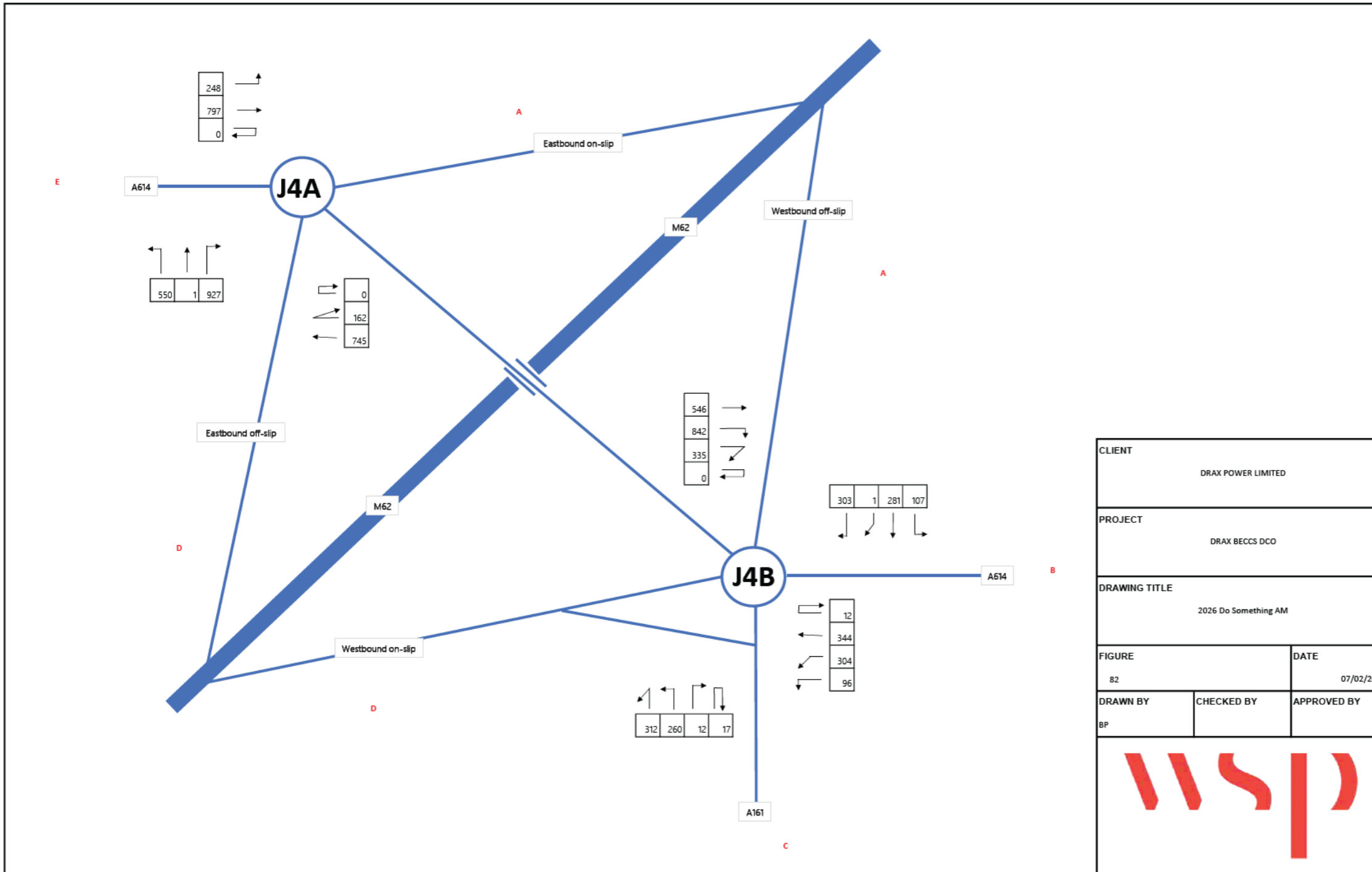
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	270	777	-	3232
B	-	-	-	-	
C	779	376	0	-	
D	416	0	615	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	659	443	291	3809
B	198	-	79	107	1	
C	491	-	34	74	323	
D	466	-	54	25	563	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2026 Do Minimum PM		
FIGURE	DATE	
81	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




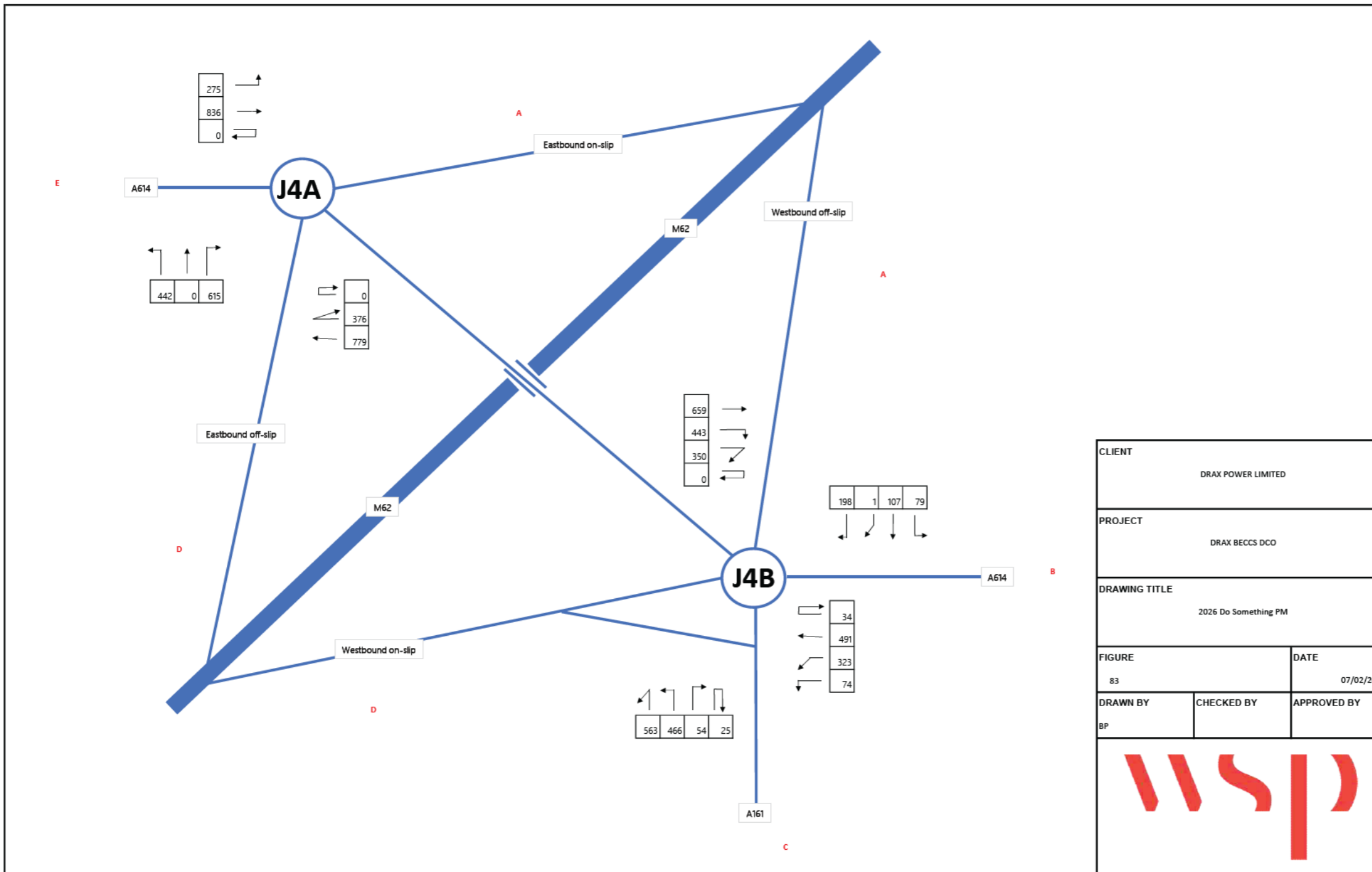
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	248	797	-	3430
B	-	-	-	-	
C	745	162	0	-	
D	550	1	927	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	546	842	335	3773
B	303	-	107	281	1	
C	344	-	12	96	304	
D	260	-	12	17	312	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2026 Do Something AM		
FIGURE	DATE	
82	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




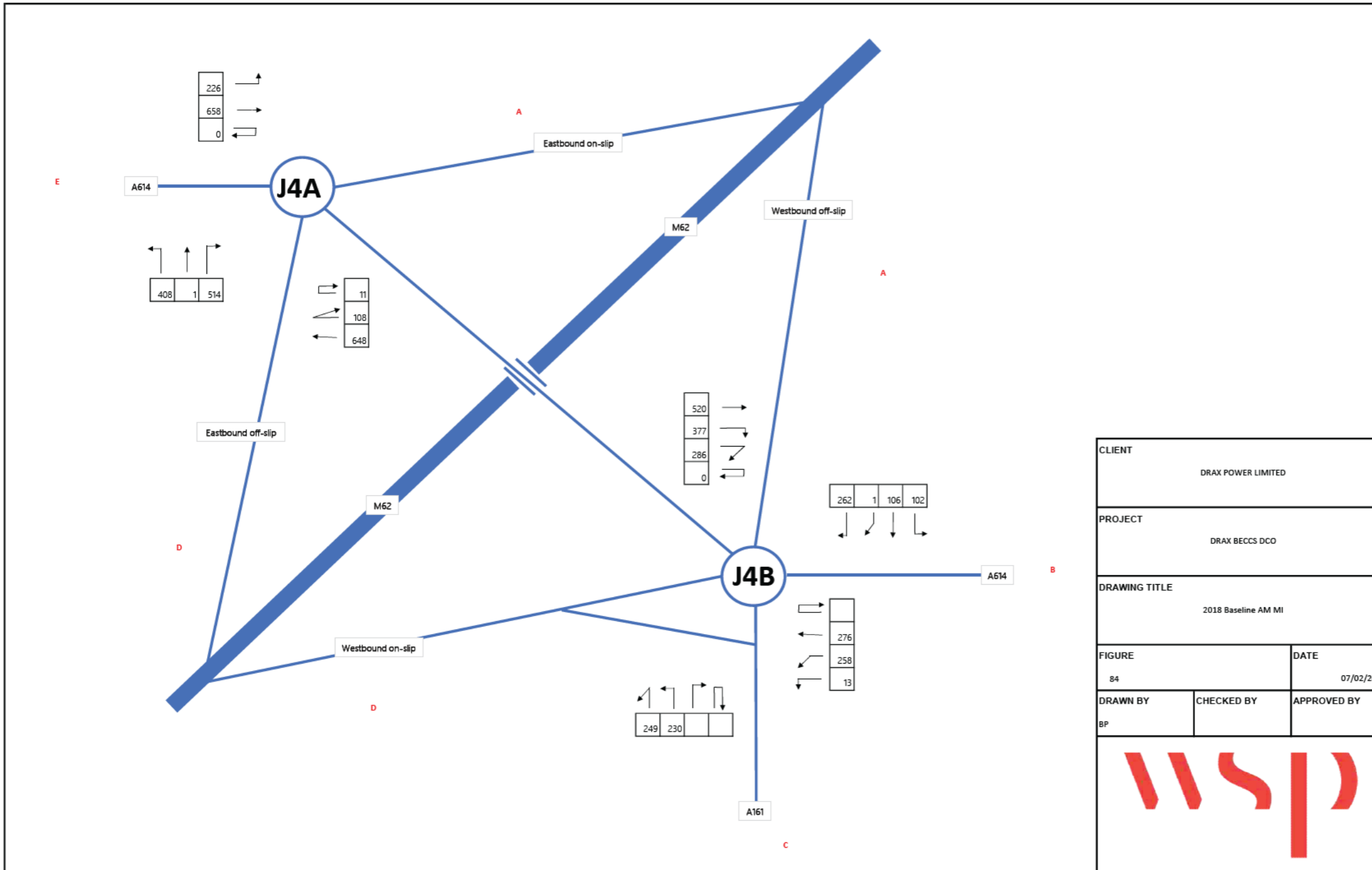
J4A M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	275	836	-	3322
B	-	-	-	-	
C	779	376	0	-	
D	442	0	615	-	

J4B M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	659	443	350	3867
B	198	-	79	107	1	
C	491	-	34	74	323	
D	466	-	54	25	563	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2026 Do Something PM		
FIGURE	DATE	
83	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		




J4A M62 JUNCTION 36 DUMBBELL ROUNDABOUT

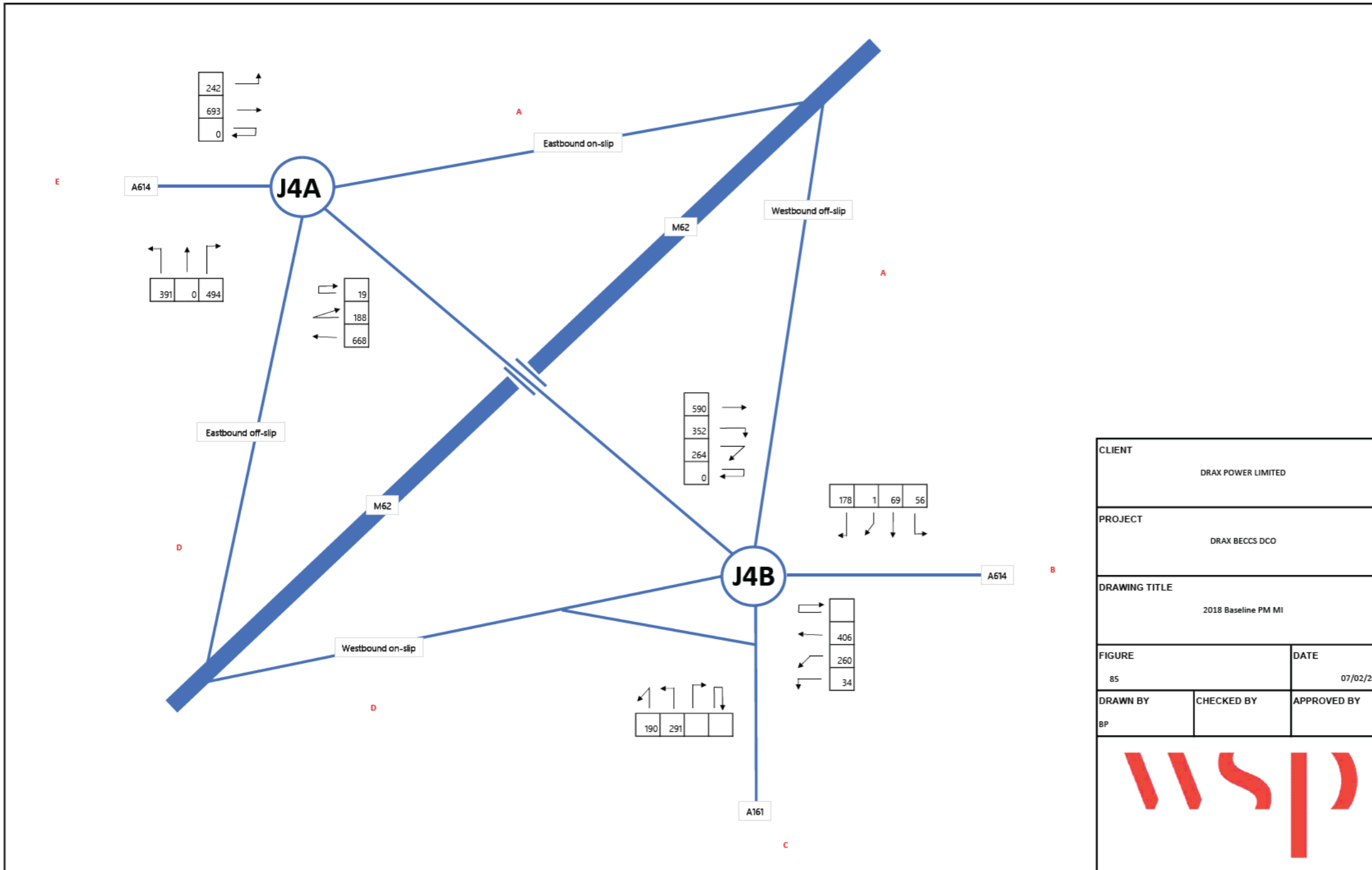
	A	B	C	D	Total movements through junction
A	0	226	658	-	2574
B	-	-	-	-	
C	648	108	11	-	
D	408	1	514	-	

J4B M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	520	377	286	2680
B	262	-	102	106	1	
C	276	-	0	13	258	
D	230	-	0	0	249	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2018 Baseline AM MI		
FIGURE	DATE	
84	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

MI = Minor Improvement Scheme as illustrated in the ERYC Infrastructure Study (2014)




J4A M62 JUNCTION 36 DUMBBELL ROUNDABOUT

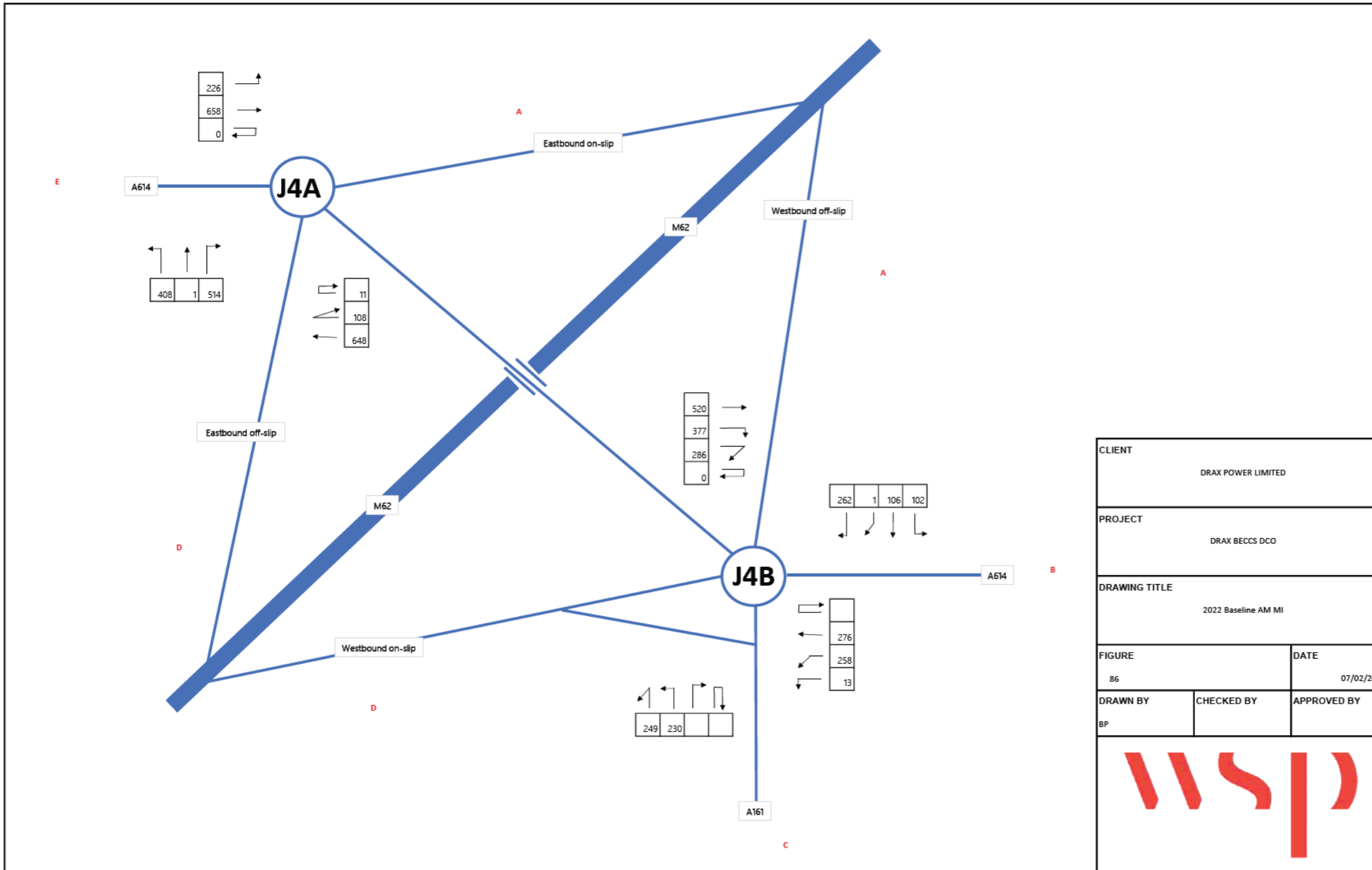
	A	B	C	D	Total movements through junction
A	0	242	693	-	2695
B	-	-	-	-	
C	668	188	19	-	
D	391	0	494	-	

J4B M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	590	352	264	2691
B	178	-	56	69	1	
C	406	-	0	34	260	
D	291	-	0	0	190	
E	-	-	-	-	-	

CLIENT		DRAX POWER LIMITED	
PROJECT		DRAX BECCS DCO	
DRAWING TITLE		2018 Baseline PM MI	
FIGURE	DATE		
85	07/02/2023		
DRAWN BY	CHECKED BY	APPROVED BY	
BP			
			

MI = Minor Improvement Scheme as illustrated in the ERYC Infrastructure Study (2014)




J4A M62 JUNCTION 36 DUMBBELL ROUNDABOUT

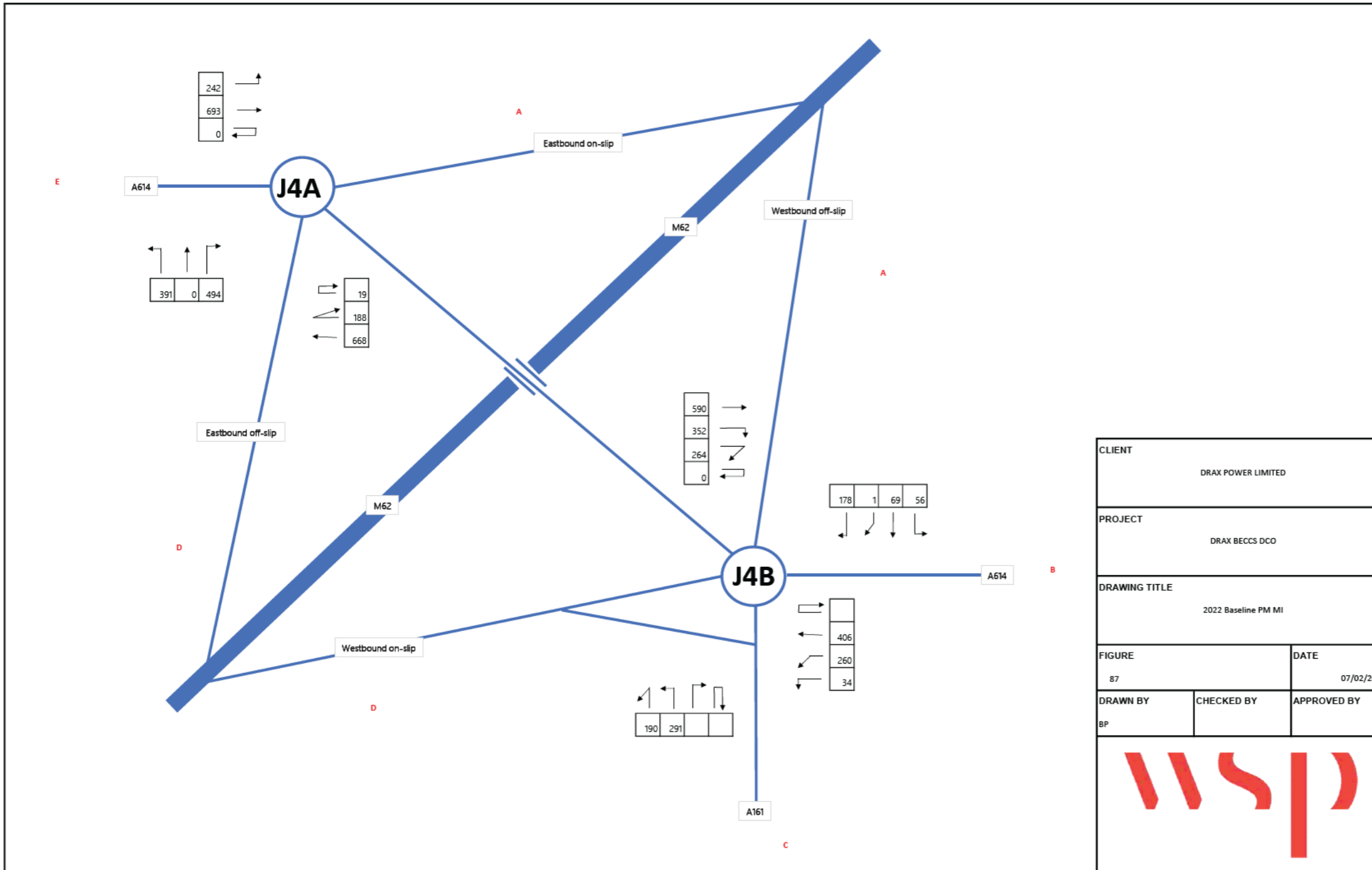
	A	B	C	D	Total movements through junction
A	0	226	658	-	2574
B	-	-	-	-	
C	648	108	11	-	
D	408	1	514	-	

J4B M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	520	377	286	2680
B	262	-	102	106	1	
C	276	-	0	13	258	
D	230	-	0	0	249	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2022 Baseline AM MI		
FIGURE	DATE	
86	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

MI = Minor Improvement Scheme as illustrated in the ERYC Infrastructure Study (2014)



J4A M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	242	693	-	2695
B	-	-	-	-	
C	668	188	19	-	
D	391	0	494	-	

J4B M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	590	352	264	2691
B	178	-	56	69	1	
C	406	-	0	34	260	
D	291	-	0	0	190	
E	-	-	-	-	-	

CLIENT		DRAX POWER LIMITED	
PROJECT		DRAX BECCS DCO	
DRAWING TITLE		2022 Baseline PM MI	
FIGURE	DATE		
87	07/02/2023		
DRAWN BY	CHECKED BY	APPROVED BY	
BP			
			

MI = Minor Improvement Scheme as illustrated in the ERYC Infrastructure Study (2014)

J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D
A	0	233	677	-
B	-	-	-	-
C	668	112	12	-
D	420	1	529	-

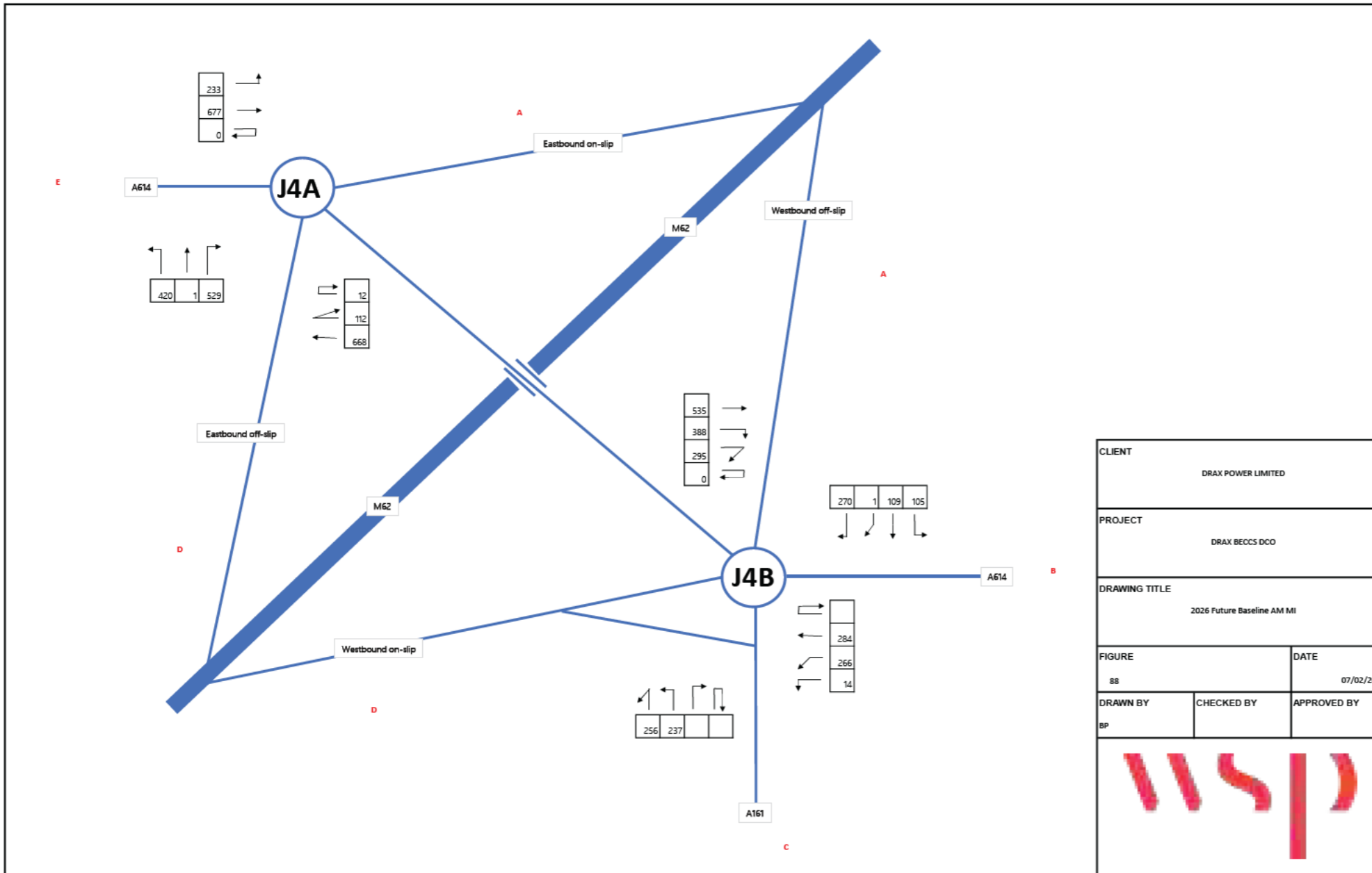
Total movements through junction
2650


1.0297

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	535	388	295
B	270	-	105	109	1
C	284	-	0	14	266
D	237	-	0	0	256
E	-	-	-	-	-

Total movements through junction
2759



CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2026 Future Baseline AM MI		
FIGURE		DATE
88		07/02/2023
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

MI Minor Improvement Scheme as illustrated in the ERYC Infrastructure Study (2014)

J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D
A	0	249	713	-
B	-	-	-	-
C	687	193	19	-
D	402	0	508	-

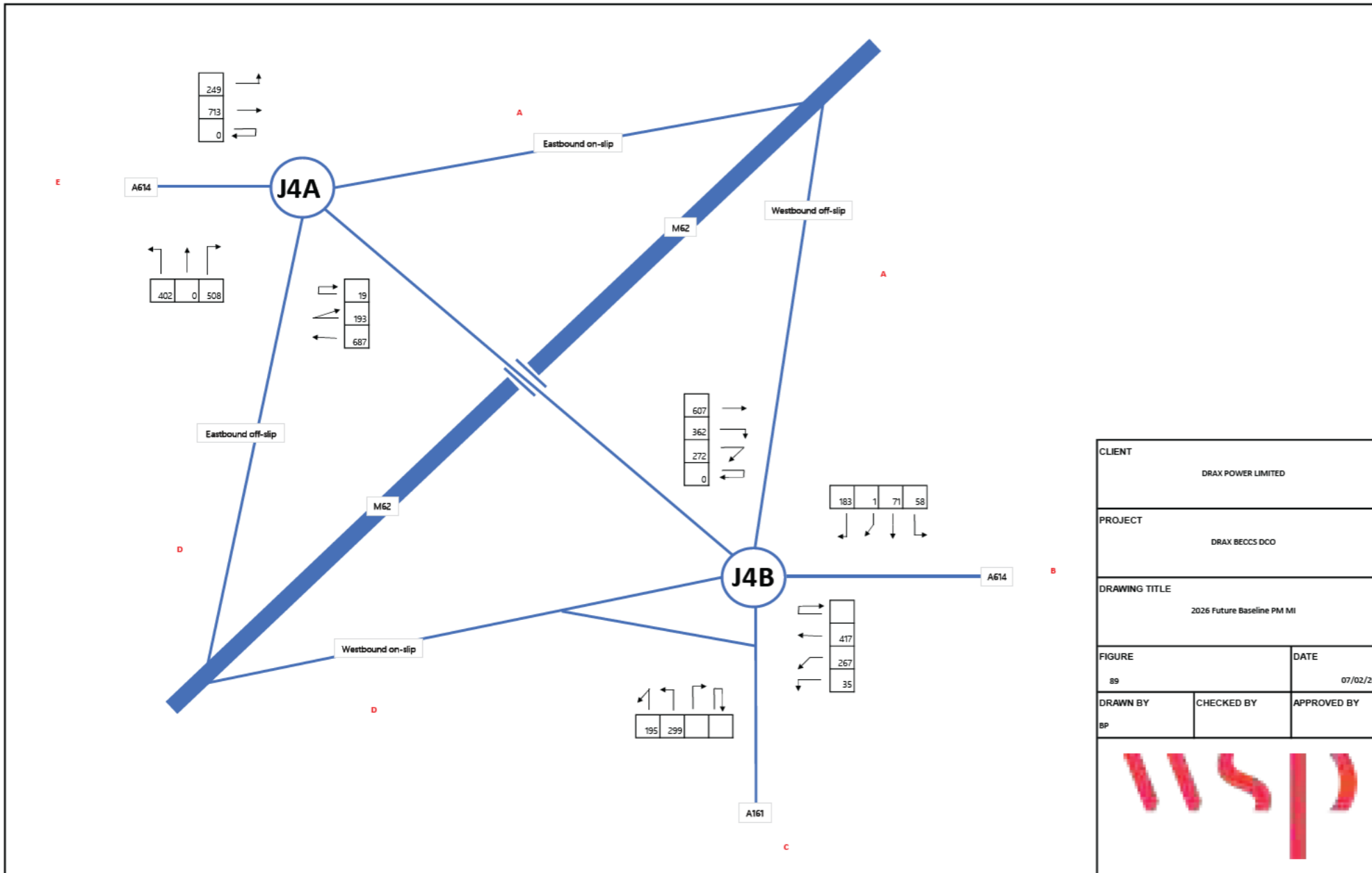
Total movements through junction
2772


1.0297

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	607	362	272
B	183	-	58	71	1
C	417	-	0	35	267
D	299	-	0	0	195
E	-	-	-	-	-

Total movements through junction
2768



CLIENT		DRAX POWER LIMITED	
PROJECT		DRAX BECCS DCO	
DRAWING TITLE		2026 Future Baseline PM MI	
FIGURE	DATE		
B9	07/02/2023		
DRAWN BY	CHECKED BY	APPROVED BY	
BP			
			

MI Minor Improvement Scheme as illustrated in the ERYC Infrastructure Study (2014)

J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D
A	0	233	703	-
B	-	-	-	-
C	680	112	12	-
D	530	1	529	-

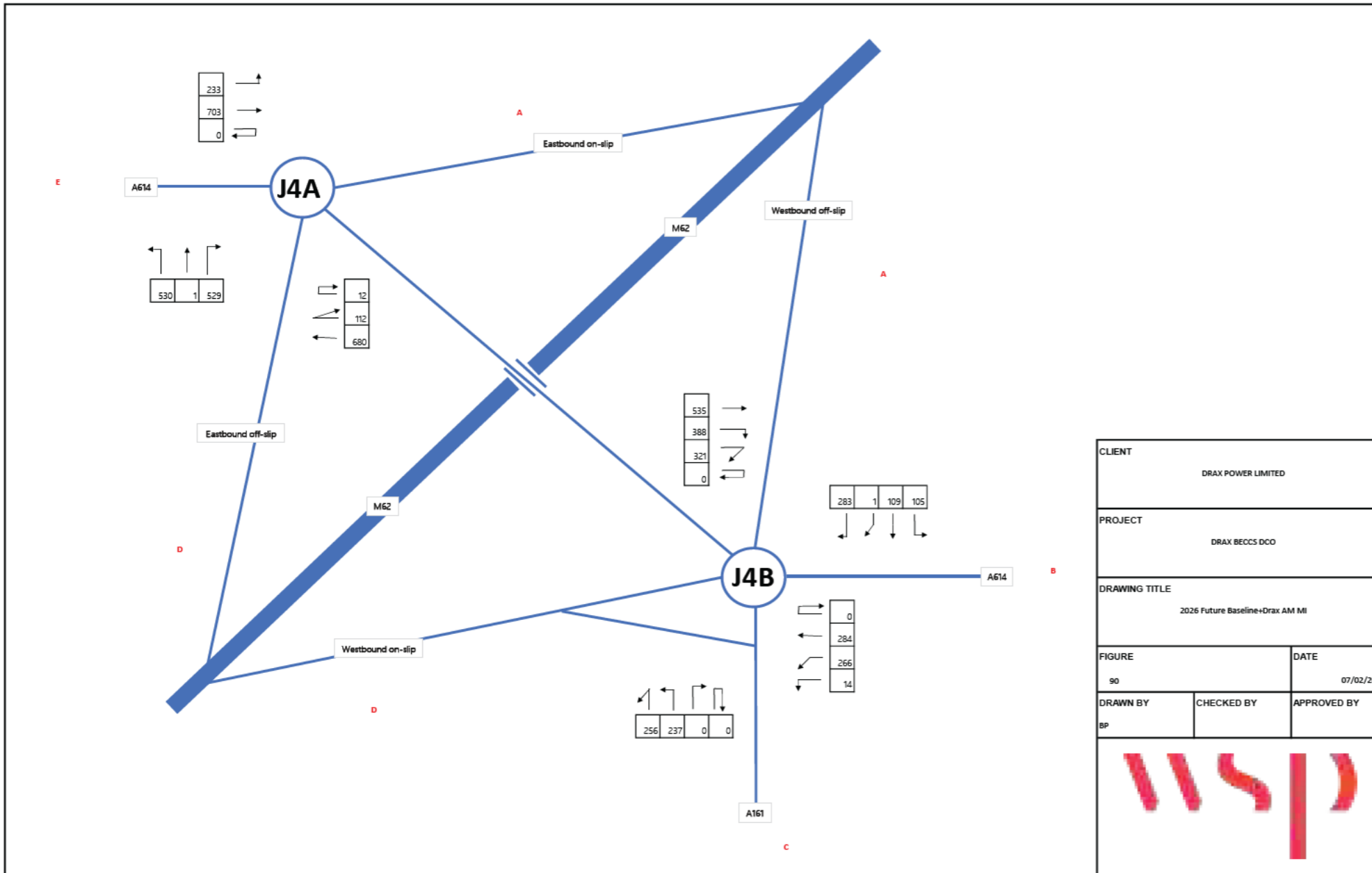
Total movements through junction
2800


1.0297

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D	E
A	0	-	535	388	321
B	283	-	105	109	1
C	284	-	0	14	266
D	237	-	0	0	256
E	-	-	-	-	-

Total movements through junction
2798



CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2026 Future Baseline+Drax AM MI		
FIGURE		DATE
90		07/02/2023
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

MI Minor Improvement Scheme as illustrated in the ERYC Infrastructure Study (2014)

J4A: M62 JUNCTION 36 DUMBELL ROUNDABOUT

	A	B	C	D
A	0	254	772	-
B	-	-	-	-
C	687	193	19	-
D	428	0	508	-

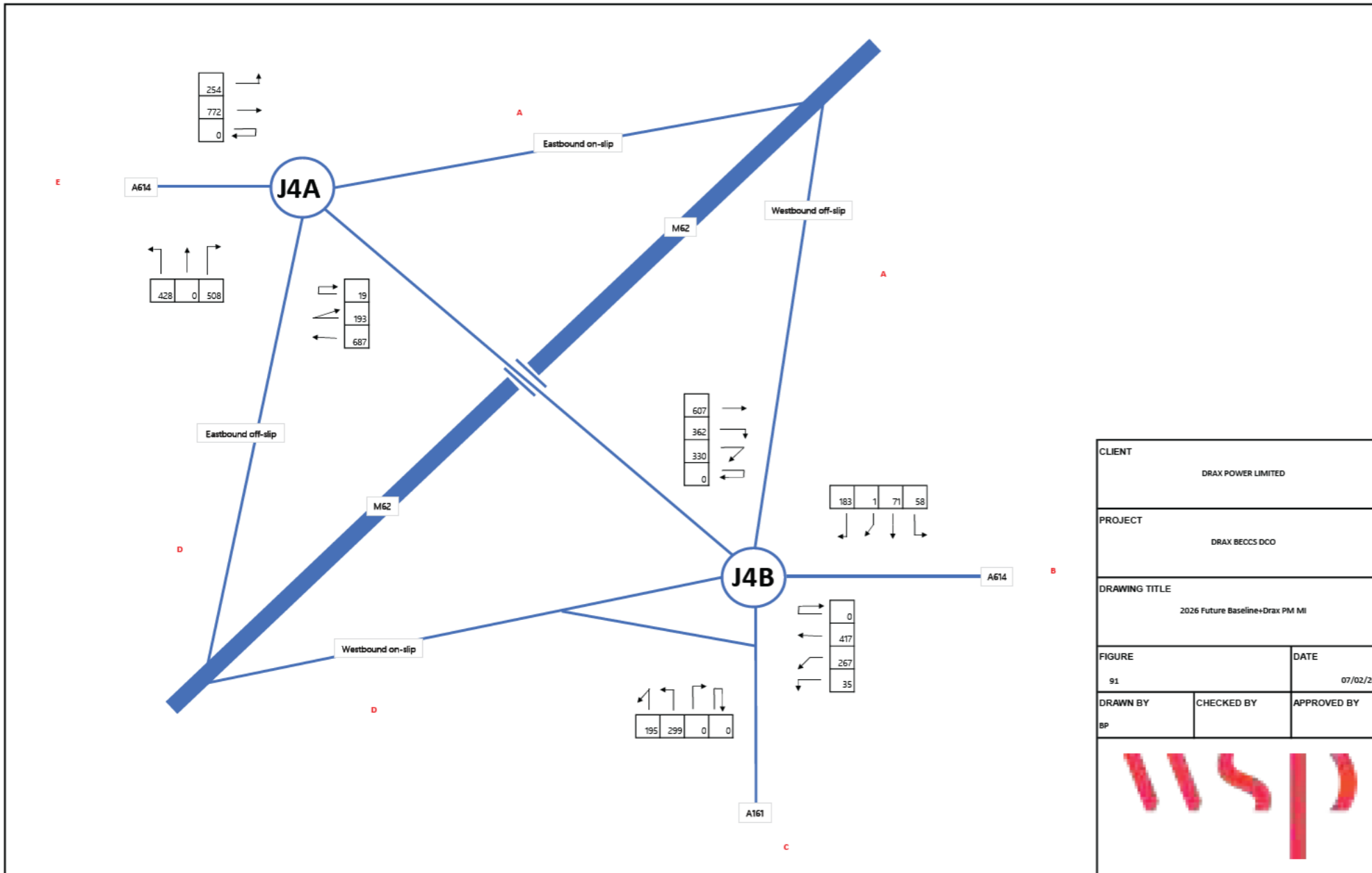
Total movements through junction
2861


1.0297

J4B: M62 JUNCTION 36 DUMBELL ROUNDABOUT

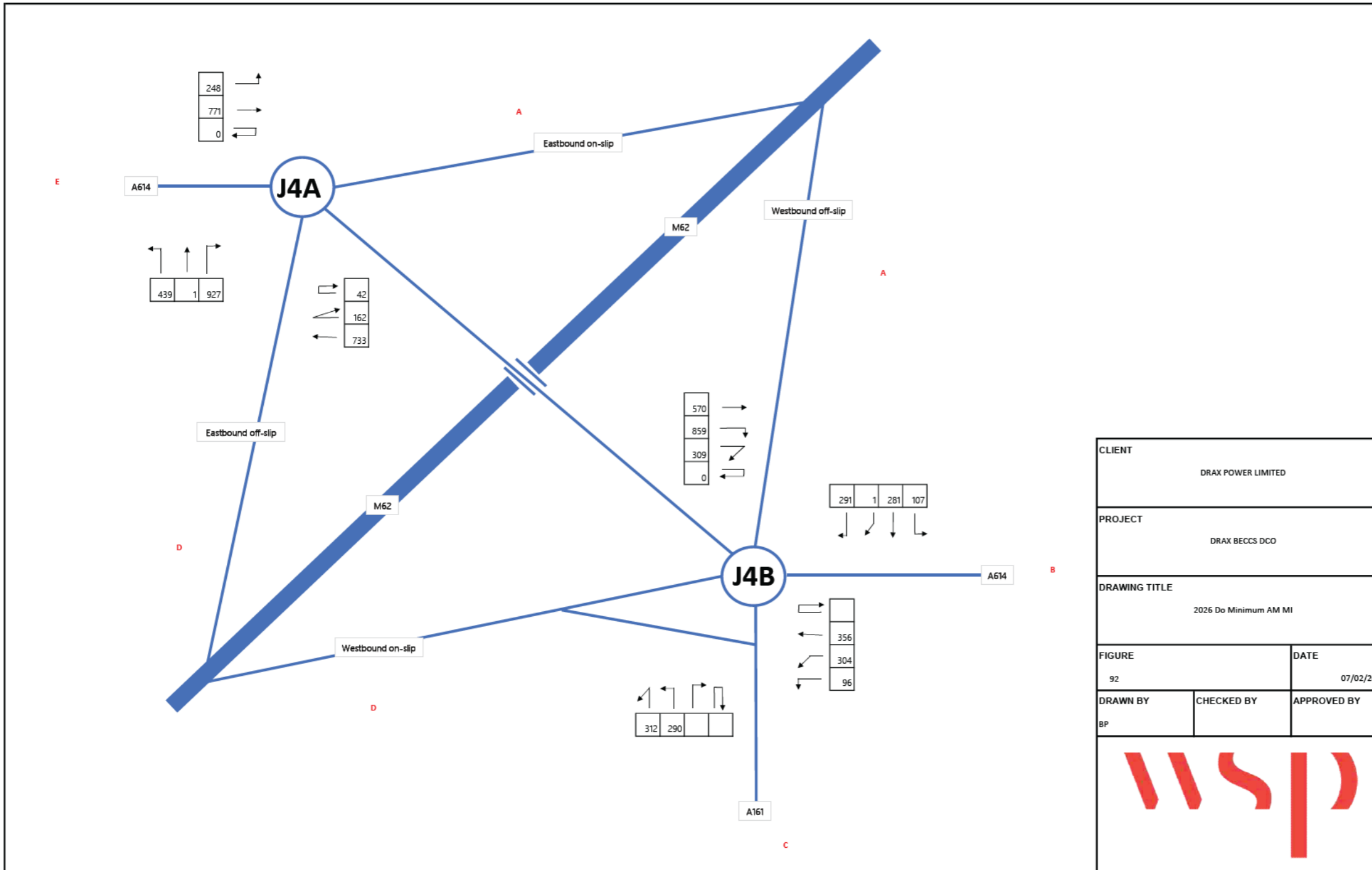
	A	B	C	D	E
A	0	-	607	362	330
B	183	-	58	71	1
C	417	-	0	35	267
D	299	-	0	0	195
E	-	-	-	-	-

Total movements through junction
2826



CLIENT		DRAX POWER LIMITED	
PROJECT		DRAX BECCS DCO	
DRAWING TITLE			
2026 Future Baseline+Drax PM MI			
FIGURE		DATE	
91		07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY	
BP			
			

MI Minor Improvement Scheme as illustrated in the ERYC Infrastructure Study (2014)




J4A M62 JUNCTION 36 DUMBBELL ROUNDABOUT

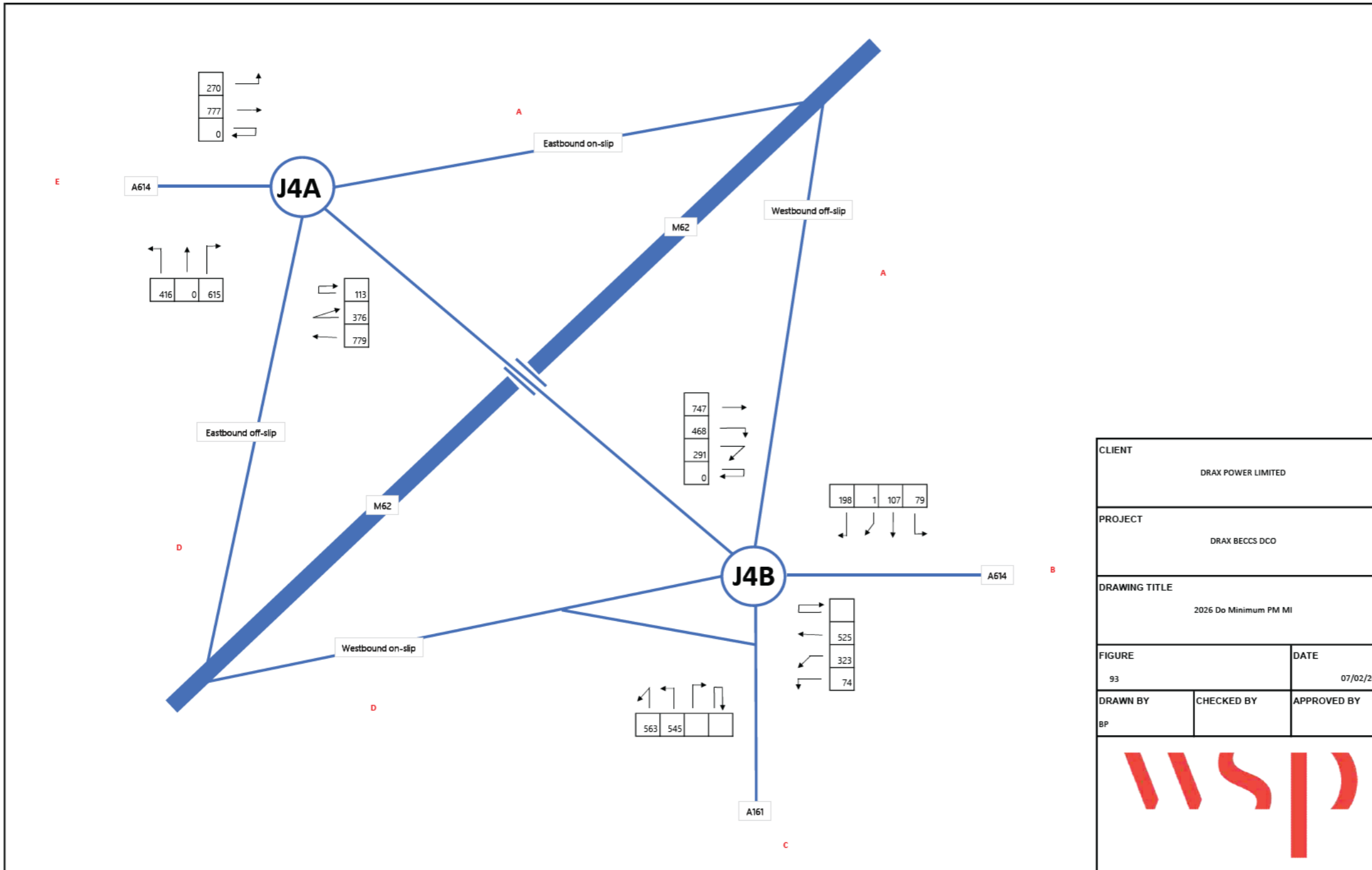
	A	B	C	D	Total movements through junction
A	0	248	771	-	3322
B	-	-	-	-	
C	733	162	42	-	
D	439	1	927	-	

J4B M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	570	859	309	3776
B	291	-	107	281	1	
C	356	-	0	96	304	
D	290	-	0	0	312	
E	-	-	-	-	-	

CLIENT		DRAX POWER LIMITED	
PROJECT		DRAX BECCS DCO	
DRAWING TITLE		2026 Do Minimum AM MI	
FIGURE	DATE		
92	07/02/2023		
DRAWN BY	CHECKED BY	APPROVED BY	
BP			
			

MI = Minor Improvement Scheme as illustrated in the ERYC Infrastructure Study (2014)




J4A M62 JUNCTION 36 DUMBBELL ROUNDABOUT

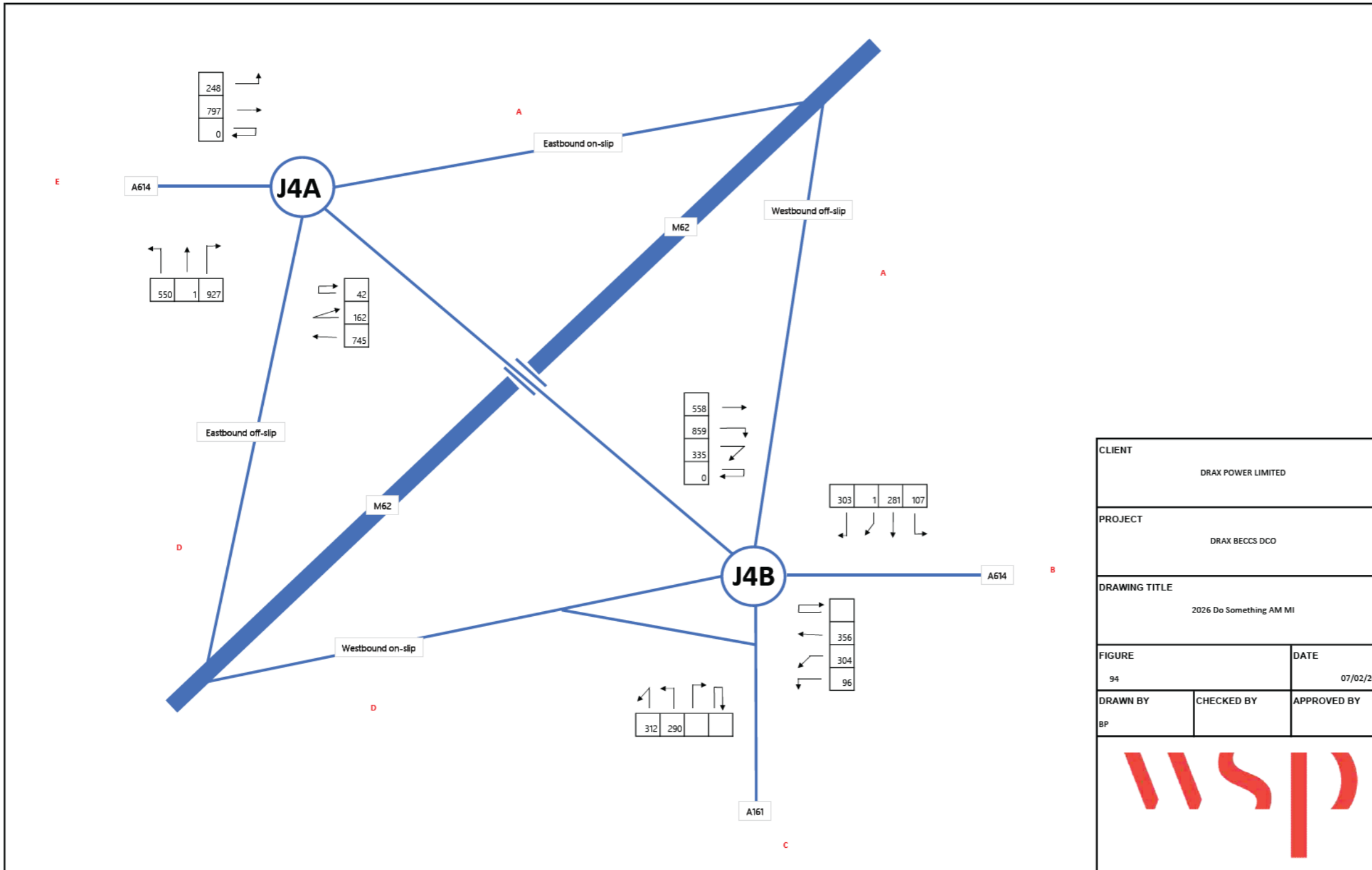
	A	B	C	D	Total movements through junction
A	0	270	777	-	3346
B	-	-	-	-	
C	779	376	113	-	
D	416	0	615	-	

J4B M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	747	468	291	3922
B	198	-	79	107	1	
C	525	-	0	74	323	
D	545	-	0	0	563	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2026 Do Minimum PM MI		
FIGURE	DATE	
93	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

MI = Minor Improvement Scheme as illustrated in the ERYC Infrastructure Study (2014)




J4A M62 JUNCTION 36 DUMBBELL ROUNDABOUT

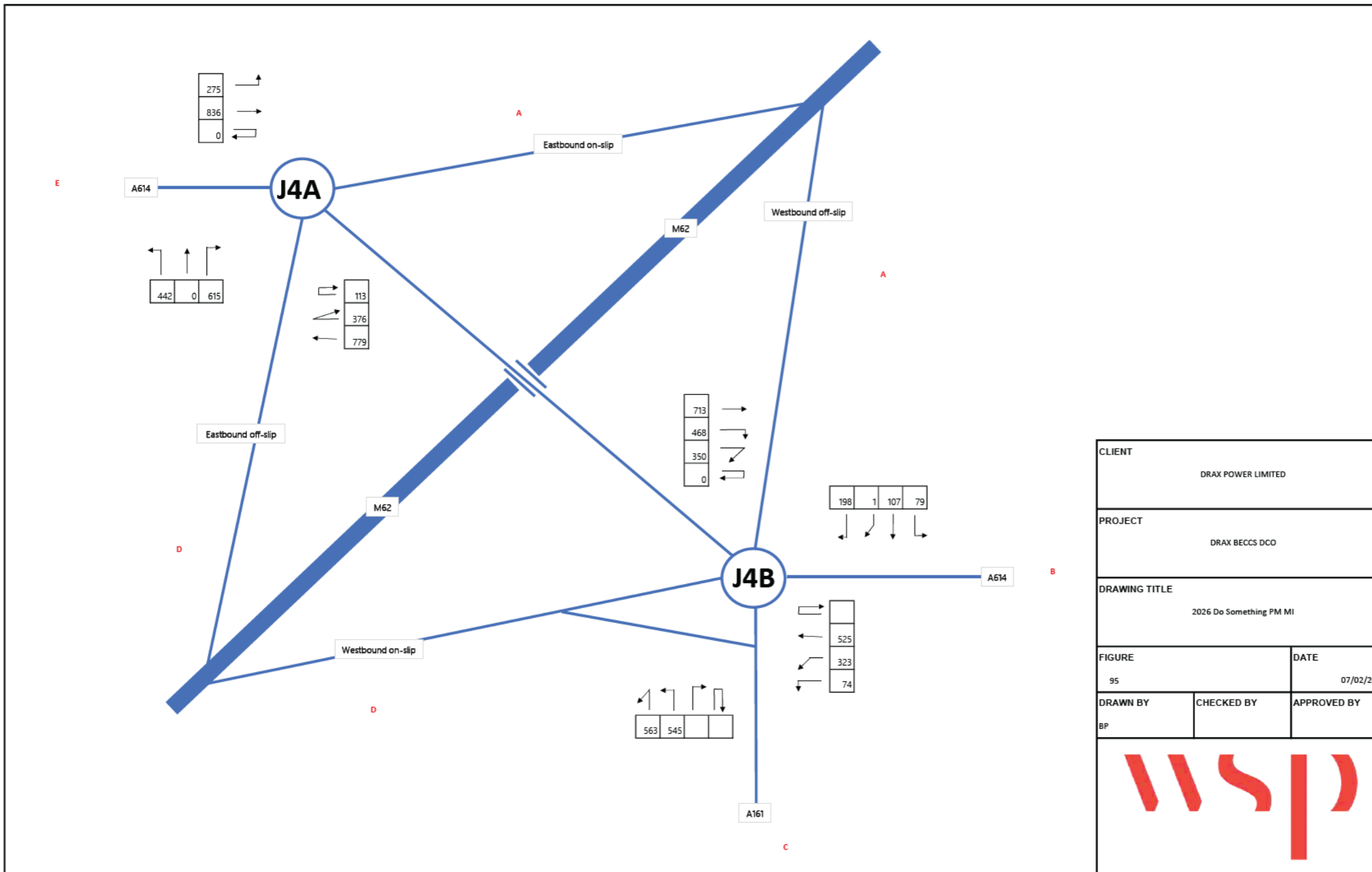
	A	B	C	D	Total movements through junction
A	0	248	797	-	3472
B	-	-	-	-	
C	745	162	42	-	
D	550	1	927	-	

J4B M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	558	859	335	3802
B	303	-	107	281	1	
C	356	-	0	96	304	
D	290	-	0	0	312	
E	-	-	-	-	-	

CLIENT		DRAX POWER LIMITED	
PROJECT		DRAX BECCS DCO	
DRAWING TITLE			
2026 Do Something AM MI			
FIGURE		DATE	
94		07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY	
BP			
			

MI = Minor Improvement Scheme as illustrated in the ERYC Infrastructure Study (2014)




J4A M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	Total movements through junction
A	0	275	836	-	3435
B	-	-	-	-	
C	779	376	113	-	
D	442	0	615	-	

J4B M62 JUNCTION 36 DUMBBELL ROUNDABOUT

	A	B	C	D	E	Total movements through junction
A	0	-	713	468	350	3947
B	198	-	79	107	1	
C	525	-	0	74	323	
D	545	-	0	0	563	
E	-	-	-	-	-	

CLIENT		
DRAX POWER LIMITED		
PROJECT		
DRAX BECCS DCO		
DRAWING TITLE		
2026 Do Something PM MI		
FIGURE	DATE	
95	07/02/2023	
DRAWN BY	CHECKED BY	APPROVED BY
BP		
		

MI = Minor Improvement Scheme as illustrated in the ERYC Infrastructure Study (2014)

TAP 1		TAP 2		TAP 3		TAP 4		TAP 5		TAP 6		TAP 7		TAP 8		TAP 9		TAP 10		TAP 11		TAP 12		TAP 13		TAP 14		TAP 15		TAP 16		TAP 17		TAP 18		TAP 19		TAP 20		TAP 21		TAP 22		TAP 23		TAP 24		TAP 25		TAP 26		TAP 27		TAP 28		TAP 29		TAP 30		TAP 31		TAP 32		TAP 33		TAP 34		TAP 35		TAP 36		TAP 37		TAP 38		TAP 39		TAP 40		TAP 41		TAP 42		TAP 43		TAP 44		TAP 45		TAP 46		TAP 47		TAP 48		TAP 49		TAP 50		TAP 51		TAP 52		TAP 53		TAP 54		TAP 55		TAP 56		TAP 57		TAP 58		TAP 59		TAP 60		TAP 61		TAP 62		TAP 63		TAP 64		TAP 65		TAP 66		TAP 67		TAP 68		TAP 69		TAP 70		TAP 71		TAP 72		TAP 73		TAP 74		TAP 75		TAP 76		TAP 77		TAP 78		TAP 79		TAP 80		TAP 81		TAP 82		TAP 83		TAP 84		TAP 85		TAP 86		TAP 87		TAP 88		TAP 89		TAP 90		TAP 91		TAP 92		TAP 93		TAP 94		TAP 95		TAP 96		TAP 97		TAP 98		TAP 99		TAP 100	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100																																																																																																				

RESPONSE TO NATIONAL HIGHWAYS RELEVANT REPRESENTATIONS (SEPT 2022)

Appendix J – Junctions 10 Output - Existing Layout - Realistic Alternative Demand

Drax Bioenergy with Carbon Capture and Storage

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 –
Regulation (5(2)(q))

Document Reference Number: 8.9.4

Applicant: Drax Power Limited

PINS Reference: EN010120



Junctions 10
ARCADY 10 - Roundabout Module
Version 10.0.4.1663 © Copyright TRL Software Limited, 2021
For sales and distribution information, program advice and maintenance, contact TRL Software +44 (0)1344 379777 software@trl.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename J4_wo Lane simulation - Existing Layout.j10
 Path W:\UNC\uk.wspgroup.com\Central Data\Projects\700720xx\70072063 - Drax BECCS DCO\03 Environment\05 Transport\29 - National Highways Response\02 - Analysis\Junction Models\Existing Layout\Model - Reduced Cumulative Developments
 Report generation date 09/02/2023 15:55:12

- »2018 Baseline, AM
- »2018 Baseline, PM
- »2022 Future Baseline , AM
- »2022 Future Baseline , PM
- »2026 Future Baseline, AM
- »2026 Future Baseline, PM
- »2026 Future Baseline + Drax, AM
- »2026 Future Baseline + Drax, PM
- »2026 Do Minimum, AM
- »2026 Do Minimum, PM
- »2026 Do Something, AM
- »2026 Do Something, PM

Summary of junction performance

	AM				PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
2018 Baseline										
3E Site 3 A Link	D1	1.4	3.95	0.55	A	D2	1.4	3.84	0.56	A
3E Site 3 B M62 Southbound Off Ramp		1.6	11.19	0.60	B		0.7	7.88	0.39	A
3E Site 3 C A614 Rawcliffe Road (East)		0.5	3.24	0.33	A		0.7	3.24	0.40	A
3E Site 3 D A161		0.3	4.14	0.20	A		0.4	4.20	0.26	A
3W Site 3 A A614 Rawcliffe Road (West)		2.5	9.54	0.70	A		3.4	12.08	0.77	B
3W Site 3 C Link		1.2	5.38	0.53	A		1.6	6.02	0.60	A
3W Site 3 D M62 Northbound Off Ramp	0.9	3.34	0.43	A	0.9	3.26	0.43	A		
2022 Future Baseline										
3E Site 3 A Link	D3	1.4	3.95	0.55	A	D4	1.4	3.84	0.56	A
3E Site 3 B M62 Southbound Off Ramp		1.6	11.19	0.60	B		0.7	7.87	0.39	A
3E Site 3 C A614 Rawcliffe Road (East)		0.5	3.24	0.33	A		0.7	3.24	0.40	A
3E Site 3 D A161		0.3	4.14	0.20	A		0.4	4.20	0.26	A
3W Site 3 A A614 Rawcliffe Road (West)		2.5	9.55	0.70	A		3.4	12.07	0.77	B
3W Site 3 C Link		1.2	5.38	0.53	A		1.6	6.02	0.60	A
3W Site 3 D M62 Northbound Off Ramp	0.9	3.34	0.43	A	0.9	3.27	0.43	A		
2026 Future Baseline										
3E Site 3 A Link	D5	1.5	4.10	0.57	A	D6	1.5	3.99	0.57	A
3E Site 3 B M62 Southbound Off Ramp		1.8	12.31	0.63	B		0.8	8.30	0.41	A
3E Site 3 C A614 Rawcliffe Road (East)		0.6	3.35	0.35	A		0.7	3.35	0.41	A
3E Site 3 D A161		0.3	4.25	0.21	A		0.4	4.33	0.27	A
3W Site 3 A A614 Rawcliffe Road (West)		2.9	10.59	0.73	B		4.0	13.87	0.79	B
3W Site 3 C Link		1.3	5.56	0.54	A		1.7	6.28	0.62	A
3W Site 3 D M62 Northbound Off Ramp	1.0	3.46	0.45	A	0.9	3.39	0.45	A		
2026 Future Baseline + Drax										
3E Site 3 A Link	D7	1.6	4.22	0.58	A	D8	1.7	4.27	0.60	A
3E Site 3 B M62 Southbound Off Ramp		2.0	13.45	0.65	B		0.8	8.81	0.42	A
3E Site 3 C A614 Rawcliffe Road (East)		0.6	3.43	0.35	A		0.8	3.48	0.42	A
3E Site 3 D A161		0.3	4.35	0.21	A		0.4	4.50	0.28	A
3W Site 3 A A614 Rawcliffe Road (West)		3.2	11.48	0.75	B		5.5	18.42	0.85	C
3W Site 3 C Link		1.4	5.67	0.55	A		1.7	6.28	0.62	A
3W Site 3 D M62 Northbound Off Ramp	1.2	3.87	0.51	A	1.0	3.47	0.46	A		
2026 Do Minimum										
3E Site 3 A Link	D9	4.2	8.48	0.79	A	D10	2.1	5.16	0.66	A
3E Site 3 B M62 Southbound Off Ramp		72.6	327.66	1.23	F		1.6	13.88	0.59	B
3E Site 3 C A614 Rawcliffe Road (East)		1.5	6.78	0.59	A		1.3	4.81	0.56	A
3E Site 3 D A161		0.4	4.91	0.27	A		1.3	7.81	0.54	A
3W Site 3 A A614 Rawcliffe Road (West)		33.3	102.23	1.03	F		25.4	78.83	1.00	F
3W Site 3 C Link		1.6	6.16	0.59	A		4.3	12.48	0.81	B
3W Site 3 D M62 Northbound Off Ramp	2.4	5.73	0.66	A	1.5	4.74	0.56	A		
2026 Do Something										
3E Site 3 A Link	D11	4.3	8.70	0.79	A	D12	2.3	5.36	0.67	A
3E Site 3 B M62 Southbound Off Ramp		82.1	387.35	1.26	F		1.7	14.45	0.60	B
3E Site 3 C A614 Rawcliffe Road (East)		1.6	6.89	0.59	A		1.4	4.99	0.57	A
3E Site 3 D A161		0.4	5.00	0.27	A		1.4	8.29	0.56	A
3W Site 3 A A614 Rawcliffe Road (West)		43.4	125.92	1.05	F		50.0	134.68	1.07	F
3W Site 3 C Link		1.6	6.20	0.59	A		4.3	12.48	0.81	B
3W Site 3 D M62 Northbound Off Ramp	3.1	6.86	0.72	A	1.6	4.90	0.58	A		

There are warnings associated with one or more model runs - see the Data Errors and Warnings' tables for each Analysis or Demand Set.
 Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

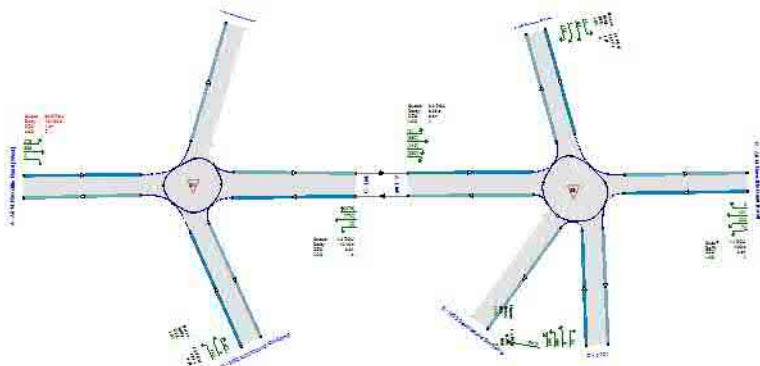
File summary

File Description	
Title	Site 3
Location	
Site number	
Date	28/03/2018
Version	

Status	
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INTW00749
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin



File: \\khu-ugoh\tr\demand\PCUs

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Baseline	AM	ONE HOUR	07 30	09 00	15	✓
D2	2018 Baseline	PM	ONE HOUR	16 15	17 45	15	✓
D3	2022 Future Baseline	AM	ONE HOUR	07 30	09 00	15	✓
D4	2022 Future Baseline	PM	ONE HOUR	16 15	17 45	15	✓
D5	2026 Future Baseline	AM	ONE HOUR	07 30	09 00	15	✓
D6	2026 Future Baseline	PM	ONE HOUR	16 15	17 45	15	✓
D7	2026 Future Baseline + Drax	AM	ONE HOUR	07 30	09 00	15	✓
D8	2026 Future Baseline + Drax	PM	ONE HOUR	16 15	17 45	15	✓
D9	2026 Do Minimum	AM	ONE HOUR	07 30	09 00	15	✓
D10	2026 Do Minimum	PM	ONE HOUR	16 15	17 45	15	✓
D11	2026 Do Something	AM	ONE HOUR	07 30	09 00	15	✓
D12	2026 Do Something	PM	ONE HOUR	16 15	17 45	15	✓

Analysis Set Details

ID	include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2018 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	3W - Site 3 - C - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	3E - Site 3 - A - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	5.12	A
3W	Site 3	Standard Roundabout		B, C, D, A	6.08	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.59	A

Arms

Arms

Junction	Arm	Name	Description	No give way line
3E Site 3	A	Link		
	B	M62 Southbound Off-Ramp		
	C	A614 Rawcliffe Road (East)		
	D	A161		
	E	M62 Southbound On-Ramp		
3W Site 3	A	A614 Rawcliffe Road (West)		
	B	M62 Northbound On-Ramp		
	C	Link		
	D	M62 Northbound Off-Ramp		

Roundabout Geometry

Junction	Arm	V Approach road half width (m)	E Entry width (m)	I' Effective flare length (m)	R Entry radius (m)	D Inscribed circle diameter (m)	PHI Conflict (entry) angle (deg)	Entry only	Exit only
3E Site 3	A Link	6.80	7.80	61.7	19.8	70.0	29.0		
	B M62 Southbound Off Ramp	5.10	5.30	0.5	37.6	70.0	58.0		
	C A614 Rawcliffe Road (East)	5.90	9.70	29.7	18.0	70.0	37.0		
	D A161	3.40	9.10	16.8	18.3	70.0	21.0		
	E M62 Southbound On Ramp								✓
3W Site 3	A A614 Rawcliffe Road (West)	3.90	8.60	53.4	21.6	67.8	45.0		
	B M62 Northbound On Ramp								✓
	C Link	3.80	5.80	6.7	23.0	67.1	9.5		
	D M62 Northbound Off Ramp	6.70	9.80	34.2	27.9	67.8	14.0		

Bypass

Junction	Arm	Arm has bypass	Bypass utilisation (%)
3E Site 3	A Link		
	B M62 Southbound Off Ramp		
	C A614 Rawcliffe Road (East)		
	D A161	✓	100
	E M62 Southbound On Ramp		
3W Site 3	A A614 Rawcliffe Road (West)		
	B M62 Northbound On Ramp		
	C Link		
	D M62 Northbound Off Ramp		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Final slope	Final intercept (PCU/hr)
3E Site 3	A Link	0.610	2356
	B M62 Southbound Off Ramp	0.450	1455
	C A614 Rawcliffe Road (East)	0.629	2527
	D A161	0.545	1908
	E M62 Southbound On Ramp		
3W Site 3	A A614 Rawcliffe Road (West)	0.581	2182
	B M62 Northbound On Ramp		
	C Link	0.518	1574
	D M62 Northbound Off Ramp	0.733	2950

The slope and intercept shown above include any corrections and adjustments.

Arm Capacity Adjustments

Junction	Arm	Type	Reason	Direct capacity adjustment (PCU/hr)
3W Site 3	A A614 Rawcliffe Road (West)	Direct		-400

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Baseline	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Simple (vertical queueing)	Normal	0	100.00	
3W Site 3	C Link	3E	A	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	471	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	547	100.000
	D A161		ONE HOUR	✓	479	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	884	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	923	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	226	658	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	648	108	0	0
	D M62 Northbound Off Ramp	408	1	514	0

Proportions

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0.00	0.26	0.74	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.86	0.14	0.00	0.00
	D M62 Northbound Off Ramp	0.44	0.00	0.56	0.00

Demand (PCU/hr)

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0	0	511	374	286
	B M62 Southbound Off Ramp	262	0	102	106	1
	C A614 Rawcliffe Road (East)	272	0	4	13	258
	D A161	223	0	5	2	249
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0.00	0.00	0.44	0.32	0.24
	B M62 Southbound Off Ramp	0.56	0.00	0.22	0.23	0.00
	C A614 Rawcliffe Road (East)	0.50	0.00	0.01	0.02	0.47
	D A161	0.47	0.00	0.01	0.00	0.52
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	13	8	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	10	18	0	0
	D M62 Northbound Off Ramp	26	0	20	0

Average PCU Per Veh

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	1.000	1.125	1.076	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000
	C Link	1.096	1.176	1.000	1.000
	D M62 Northbound Off Ramp	1.256	1.000	1.204	1.000

Heavy Vehicle Percentages

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0	0	11	20	22
	B M62 Southbound Off Ramp	9	0	6	14	0
	C A614 Rawcliffe Road (East)	9	0	0	9	10
	D A161	15	0	50	100	33
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	1.000	1.000	1.108	1.198	1.222
	B M62 Southbound Off Ramp	1.087	1.000	1.060	1.143	1.000
	C A614 Rawcliffe Road (East)	1.087	1.000	1.000	1.091	1.097
	D A161	1.145	1.000	1.500	2.000	1.326
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)	
3E Site 3	A Link	07:30 07:45	882	882	
		07:45 08:00	1053	1053	
		08:00 08:15	1289	1289	
		08:15 08:30	1289	1289	
		08:30 08:45	1053	1053	
		08:45 09:00	882	882	
		B M62 Southbound Off Ramp	07:30 07:45	355	355
			07:45 08:00	423	423
	08:00 08:15		519	519	
	08:15 08:30		519	519	
	08:30 08:45		423	423	
	08:45 09:00		355	355	
	C A614 Rawcliffe Road (East)		07:30 07:45	412	412
			07:45 08:00	492	492
		08:00 08:15	602	602	
		08:15 08:30	602	602	

		08:30 08:45	492	492
		08:45 09:00	412	412
D A161		07:30 07:45	361	361
		07:45 08:00	431	431
		08:00 08:15	527	527
		08:15 08:30	527	527
		08:30 08:45	431	431
		08:45 09:00	361	361
E M62 Southbound On Ramp		07:30 07:45	0	0
		07:45 08:00	0	0
		08:00 08:15	0	0
		08:15 08:30	0	0
		08:30 08:45	0	0
		08:45 09:00	0	0
3W Site 3	A A614 Rawcliffe Road (West)	07:30 07:45	666	666
		07:45 08:00	795	795
		08:00 08:15	973	973
		08:15 08:30	973	973
		08:30 08:45	795	795
		08:45 09:00	666	666
	B M62 Northbound On Ramp	07:30 07:45	0	0
		07:45 08:00	0	0
		08:00 08:15	0	0
		08:15 08:30	0	0
		08:30 08:45	0	0
		08:45 09:00	0	0
C Link	07:30 07:45	569	569	
	07:45 08:00	680	680	
	08:00 08:15	832	832	
	08:15 08:30	832	832	
	08:30 08:45	680	680	
	08:45 09:00	569	569	
D M62 Northbound Off Ramp	07:30 07:45	695	695	
	07:45 08:00	830	830	
	08:00 08:15	1016	1016	
	08:15 08:30	1016	1016	
	08:30 08:45	830	830	
	08:45 09:00	695	695	

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.55	3.95	1.4	A	1075	1612
	B M62 Southbound Off Ramp	0.60	11.19	1.6	B	432	648
	C A614 Rawcliffe Road (East)	0.33	3.24	0.5	A	502	753
	D A161	0.20	4.14	0.3	A	440	317
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	0.70	9.54	2.5	A	811	1217
	B M62 Northbound On Ramp						
	C Link	0.53	5.38	1.2	A	694	1041
	D M62 Northbound Off Ramp	0.43	3.34	0.9	A	847	1270

Main Results for each time segment

07:30 - 07:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	879	879	220	0	0	8	2350	0.374	876	568	0.0	0.7	2.833	A
	B M62 Southbound Off Ramp	355	355	89	0	0	884	1058	0.335	352	0	0.0	0.5	5.562	A
	C A614 Rawcliffe Road (East)	412	412	103	0	0	771	2042	0.202	411	465	0.0	0.3	2.406	A
	D A161	361	173	43	187	0	812	1466	0.118	173	370	0.0	0.2	3.214	A
	E M62 Southbound On Ramp						576				408				
3W Site 3	A A614 Rawcliffe Road (West)	666		166			467	1510	0.441	662	791	0.0	0.8	4.601	A
	B M62 Northbound On Ramp						879				251				
	C Link	568		142			0	1574	0.361	565	879	0.0	0.6	3.940	A
	D M62 Northbound Off Ramp	695		174			565	2535	0.274	693	0	0.0	0.5	2.393	A

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1052	1052	263	0	0	10	2349	0.448	1051	680	0.7	0.9	3.221	A
	B M62 Southbound Off Ramp	423	423	106	0	0	1061	978	0.433	422	0	0.5	0.8	7.061	A
	C A614 Rawcliffe Road (East)	492	492	123	0	0	925	1946	0.253	491	558	0.3	0.4	2.700	A
	D A161	431	207	52	224	0	972	1378	0.150	207	444	0.2	0.2	3.549	A
	E M62 Southbound On Ramp						689				489				
3W Site 3	A A614 Rawcliffe Road (West)	795		199			560	1457	0.546	793	948	0.8	1.3	5.887	A
	B M62 Northbound On Ramp						1052				301				
	C Link	680		170			0	1574	0.432	679	1052	0.6	0.8	4.447	A
	D M62 Northbound Off Ramp	830		207			679	2452	0.338	829	0	0.5	0.6	2.717	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1286	1286	322	0	0	12	2348	0.548	1284	831	0.9	1.4	3.926	A
	B M62 Southbound Off Ramp	519	519	130	0	0	1296	872	0.594	516	0	0.8	1.6	10.937	B
	C A614 Rawcliffe Road (East)	602	602	151	0	0	1130	1817	0.332	602	682	0.4	0.5	3.230	A
	D A161	527	253	63	274	0	1189	1260	0.201	253	543	0.2	0.3	4.128	A
	E M62 Southbound On Ramp						843				599				
A A614 Rawcliffe Road (West)	973		243				685	1384	0.703	968	1160	1.3	2.5	9.325	A

3W Site 3	B M62 Northbound On Ramp					1286					367				
	C Link	831		208		0	1574	0.528	830	1286	0.8	1.2	5.342	A	
	D M62 Northbound Off Ramp	1016		254		830	2341	0.434	1015	0	0.6	0.9	3.323	A	

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1290	1290	323	0	0	12	2348	0.549	1290	833	1.4	1.4	3.954	A
	B M62 Southbound Off Ramp	519	519	130	0	0	1302	870	0.596	518	0	1.6	1.6	11.189	B
	C A614 Rawcliffe Road (East)	602	602	151	0	0	1136	1813	0.332	602	685	0.5	0.5	3.242	A
	D A161	527	253	63	274	0	1193	1258	0.201	253	545	0.3	0.3	4.138	A
	E M62 Southbound On Ramp						846				600				
3W Site 3	A A614 Rawcliffe Road (West)	973		243			686	1383	0.704	973	1164	2.5	2.5	9.544	A
	B M62 Northbound On Ramp						1290				369				
	C Link	833		208			0	1574	0.529	833	1290	1.2	1.2	5.379	A
	D M62 Northbound Off Ramp	1016		254			833	2339	0.435	1016	0	0.9	0.9	3.335	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1058	1058	264	0	0	10	2349	0.450	1060	683	1.4	1.0	3.247	A
	B M62 Southbound Off Ramp	423	423	106	0	0	1070	974	0.435	426	0	1.6	0.9	7.215	A
	C A614 Rawcliffe Road (East)	492	492	123	0	0	933	1940	0.253	492	563	0.5	0.4	2.714	A
	D A161	431	207	52	224	0	978	1375	0.150	207	448	0.3	0.2	3.563	A
	E M62 Southbound On Ramp						693				492				
3W Site 3	A A614 Rawcliffe Road (West)	795		199			561	1456	0.546	800	954	2.5	1.3	6.016	A
	B M62 Northbound On Ramp						1058				303				
	C Link	683		171			0	1574	0.434	684	1058	1.2	0.9	4.487	A
	D M62 Northbound Off Ramp	830		207			684	2448	0.339	831	0	0.9	0.6	2.730	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	884	884	221	0	0	8	2350	0.376	885	571	1.0	0.7	2.858	A
	B M62 Southbound Off Ramp	355	355	89	0	0	893	1054	0.337	356	0	0.9	0.6	5.646	A
	C A614 Rawcliffe Road (East)	412	412	103	0	0	779	2037	0.202	412	470	0.4	0.3	2.416	A
	D A161	361	173	43	187	0	817	1463	0.118	173	374	0.2	0.2	3.228	A
	E M62 Southbound On Ramp						579				411				
3W Site 3	A A614 Rawcliffe Road (West)	666		166			470	1509	0.441	667	798	1.3	0.9	4.667	A
	B M62 Northbound On Ramp						884				253				
	C Link	571		143			0	1574	0.363	572	884	0.9	0.6	3.979	A
	D M62 Northbound Off Ramp	695		174			572	2530	0.275	696	0	0.6	0.5	2.407	A

2018 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	3W - Site 3 - C - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	3E - Site 3 - A - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	4.21	A
3W	Site 3	Standard Roundabout		B, C, D, A	7.23	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.72	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018 Baseline	PM	ONE HOUR	16 15	17 45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Simple (vertical queueing)	Normal	0	100.00	
3W Site 3	C Link	3E	A	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	304	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	700	100.000
	D A161		ONE HOUR	✓	480	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	935	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	885	100.000

Origin-Destination Data

Demand (PCU/hr)

	From	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	242	693	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	668	188	0	0
	D M62 Northbound Off Ramp	391	0	494	0

Proportions

	From	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0.00	0.26	0.74	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.78	0.22	0.00	0.00
	D M62 Northbound Off Ramp	0.44	0.00	0.56	0.00

Demand (PCU/hr)

	From	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0	0	576	347	264
	B M62 Southbound Off Ramp	178	0	56	69	1
	C A614 Rawcliffe Road (East)	403	0	3	34	260
	D A161	275	0	11	5	190
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

	From	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0.00	0.00	0.49	0.29	0.22
	B M62 Southbound Off Ramp	0.58	0.00	0.18	0.23	0.00
	C A614 Rawcliffe Road (East)	0.58	0.00	0.00	0.05	0.37
	D A161	0.57	0.00	0.02	0.01	0.39
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

	From	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	12	5	0
	B M62 Northbound On Ramp	0	0	0	0

Average PCU Per Veh

	From	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	1.000	1.120	1.045	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000

C Link	6	6	0	0
D M62 Northbound Off Ramp	22	0	13	0

C Link	1.055	1.062	1.000	1.000
D M62 Northbound Off Ramp	1.220	1.000	1.126	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	5	15	19
	B M62 Southbound Off Ramp	13	0	15	19	0
	C A614 Rawcliffe Road (East)	2	0	0	20	7
	D A161	6	0	33	67	22
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.052	1.145	1.186
	B M62 Southbound Off Ramp	1.129	1.000	1.146	1.190	1.000
	C A614 Rawcliffe Road (East)	1.019	1.000	1.000	1.200	1.066
	D A161	1.062	1.000	1.333	1.667	1.219
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	16:15 16:30	894	894
		16:30 16:45	1068	1068
		16:45 17:00	1307	1307
		17:00 17:15	1307	1307
		17:15 17:30	1068	1068
	B M62 Southbound Off Ramp	17:30 17:45	894	894
		16:15 16:30	229	229
		16:30 16:45	274	274
		16:45 17:00	335	335
		17:00 17:15	335	335
	C A614 Rawcliffe Road (East)	17:15 17:30	274	274
		17:30 17:45	229	229
		16:15 16:30	527	527
		16:30 16:45	629	629
		16:45 17:00	770	770
	D A161	17:00 17:15	770	770
		17:15 17:30	629	629
		17:30 17:45	527	527
		16:15 16:30	362	362
		16:30 16:45	432	432
E M62 Southbound On Ramp	16:45 17:00	529	529	
	17:00 17:15	529	529	
	17:15 17:30	432	432	
	17:30 17:45	362	362	
	16:15 16:30	0	0	
3W Site 3	A A614 Rawcliffe Road (West)	16:30 16:45	0	0
		16:45 17:00	0	0
		17:00 17:15	0	0
		17:15 17:30	0	0
		17:30 17:45	0	0
	B M62 Northbound On Ramp	16:15 16:30	704	704
		16:30 16:45	841	841
		16:45 17:00	1030	1030
		17:00 17:15	1030	1030
		17:15 17:30	841	841
	C Link	17:30 17:45	704	704
		16:15 16:30	0	0
		16:30 16:45	0	0
		16:45 17:00	0	0
		17:00 17:15	0	0
	D M62 Northbound Off Ramp	17:15 17:30	0	0
		17:30 17:45	0	0
		16:15 16:30	644	644
		16:30 16:45	769	769
		16:45 17:00	942	942
D M62 Northbound Off Ramp	17:00 17:15	942	942	
	17:15 17:30	769	769	
	17:30 17:45	644	644	
	16:15 16:30	666	666	
	16:30 16:45	796	796	
	16:45 17:00	974	974	
	17:00 17:15	974	974	
	17:15 17:30	796	796	
	17:30 17:45	666	666	

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.56	3.84	1.4	A	1089	1634
	B M62 Southbound Off Ramp	0.39	7.88	0.7	A	279	419
	C A614 Rawcliffe Road (East)	0.40	3.24	0.7	A	642	963
	D A161	0.26	4.20	0.4	A	441	400
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	0.77	12.08	3.4	B	858	1287
	B M62 Northbound On Ramp						
	C Link	0.60	6.02	1.6	A	785	1177
	D M62 Northbound Off Ramp	0.43	3.26	0.9	A	812	1218

Main Results for each time segment

16:15 - 16:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	890	890	223	0	0	14	2347	0.379	888	642	0.0	0.7	2.724	A
	B M62 Southbound Off Ramp	229	229	57	0	0	902	1050	0.218	228	0	0.0	0.3	5.008	A
	C A614 Rawcliffe Road (East)	527	527	132	0	0	646	2121	0.248	525	483	0.0	0.3	2.353	A
	D A161	362	219	55	143	0	831	1455	0.150	218	340	0.0	0.2	3.131	A
	E M62 Southbound On Ramp						656				393				
3W Site 3	A A614 Rawcliffe Road (West)	704		176			511	1485	0.474	700	792	0.0	0.9	4.860	A
	B M62 Northbound On Ramp						890				321				
	C Link	642		160			0	1574	0.408	639	890	0.0	0.7	4.056	A
	D M62 Northbound Off Ramp	666		167			639	2481	0.269	665	0	0.0	0.4	2.307	A

16:30 - 16:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1066	1066	266	0	0	17	2345	0.454	1065	768	0.7	0.9	3.108	A
	B M62 Southbound Off Ramp	274	274	68	0	0	1081	969	0.282	273	0	0.3	0.4	5.919	A
	C A614 Rawcliffe Road (East)	629	629	157	0	0	775	2040	0.308	629	580	0.3	0.5	2.662	A
	D A161	432	261	65	170	0	995	1366	0.191	261	408	0.2	0.3	3.508	A
	E M62 Southbound On Ramp						785				471				
3W Site 3	A A614 Rawcliffe Road (West)	841		210			612	1426	0.590	839	950	0.9	1.5	6.495	A
	B M62 Northbound On Ramp						1066				385				
	C Link	768		192			0	1574	0.488	767	1066	0.7	1.0	4.708	A
	D M62 Northbound Off Ramp	796		199			767	2387	0.333	795	0	0.4	0.6	2.635	A

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1302	1302	325	0	0	21	2343	0.556	1300	941	0.9	1.4	3.810	A
	B M62 Southbound Off Ramp	335	335	84	0	0	1320	862	0.389	334	0	0.4	0.7	7.796	A
	C A614 Rawcliffe Road (East)	770	770	193	0	0	946	1932	0.399	770	708	0.5	0.7	3.232	A
	D A161	529	320	80	209	0	1217	1245	0.257	320	499	0.3	0.4	4.188	A
	E M62 Southbound On Ramp						961				576				
3W Site 3	A A614 Rawcliffe Road (West)	1030		257			749	1346	0.765	1023	1162	1.5	3.3	11.584	B
	B M62 Northbound On Ramp						1302				471				
	C Link	941		235			0	1574	0.598	938	1302	1.0	1.5	5.963	A
	D M62 Northbound Off Ramp	974		244			938	2262	0.431	973	0	0.6	0.9	3.253	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1307	1307	327	0	0	21	2343	0.558	1307	942	1.4	1.4	3.844	A
	B M62 Southbound Off Ramp	335	335	84	0	0	1328	858	0.391	335	0	0.7	0.7	7.877	A
	C A614 Rawcliffe Road (East)	770	770	193	0	0	951	1929	0.399	770	712	0.7	0.7	3.242	A
	D A161	529	320	80	209	0	1220	1243	0.258	320	501	0.4	0.4	4.199	A
	E M62 Southbound On Ramp						963				578				
3W Site 3	A A614 Rawcliffe Road (West)	1030		257			751	1345	0.765	1029	1166	3.3	3.4	12.082	B
	B M62 Northbound On Ramp						1307				473				
	C Link	942		236			0	1574	0.599	942	1307	1.5	1.6	6.018	A
	D M62 Northbound Off Ramp	974		244			942	2259	0.431	974	0	0.9	0.9	3.265	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1074	1074	268	0	0	17	2345	0.458	1075	771	1.4	0.9	3.142	A
	B M62 Southbound Off Ramp	274	274	68	0	0	1092	964	0.284	275	0	0.7	0.5	5.989	A
	C A614 Rawcliffe Road (East)	629	629	157	0	0	782	2036	0.309	630	585	0.7	0.5	2.676	A
	D A161	432	261	65	170	0	1000	1363	0.192	262	412	0.4	0.3	3.522	A
	E M62 Southbound On Ramp						788				474				
3W Site 3	A A614 Rawcliffe Road (West)	841		210			615	1425	0.590	848	955	3.4	1.6	6.725	A
	B M62 Northbound On Ramp						1074				389				
	C Link	771		193			0	1574	0.490	773	1074	1.6	1.0	4.762	A
	D M62 Northbound Off Ramp	796		199			773	2383	0.334	797	0	0.9	0.6	2.648	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	896	896	224	0	0	14	2347	0.382	897	645	0.9	0.7	2.748	A
	B M62 Southbound Off Ramp	229	229	57	0	0	911	1045	0.219	230	0	0.5	0.3	5.057	A
	C A614 Rawcliffe Road (East)	527	527	132	0	0	653	2117	0.249	527	488	0.5	0.3	2.366	A
	D A161	362	219	55	143	0	836	1452	0.151	219	344	0.3	0.2	3.145	A
	E M62 Southbound On Ramp						659				396				
3W Site 3	A A614 Rawcliffe Road (West)	704		176			514	1483	0.475	706	799	1.6	1.0	4.946	A
	B M62 Northbound On Ramp						896				325				
	C Link	645		161			0	1574	0.410	646	896	1.0	0.7	4.104	A
	D M62 Northbound Off Ramp	666		167			646	2476	0.269	667	0	0.6	0.4	2.321	A

2022 Future Baseline , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	3W - Site 3 - C - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	3E - Site 3 - A - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	5.12	A
3W	Site 3	Standard Roundabout		B, C, D, A	6.08	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.59	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2022 Future Baseline	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Simple (vertical queueing)	Normal	0	100.00	
3W Site 3	C Link	3E	A	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	471	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	547	100.000
	D A161		ONE HOUR	✓	479	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	884	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	923	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	From A A614 Rawcliffe Road (West)	0	226	658	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	648	108	0	0
	D M62 Northbound Off Ramp	408	1	514	0

Proportions

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
From	A A614 Rawcliffe Road (West)	0.00	0.26	0.74	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.86	0.14	0.00	0.00
	D M62 Northbound Off Ramp	0.44	0.00	0.56	0.00

Demand (PCU/hr)

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	From A Link	0	0	511	374	286
	B M62 Southbound Off Ramp	262	0	102	106	1
	C A614 Rawcliffe Road (East)	272	0	4	13	258
	D A161	223	0	5	2	249
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0.00	0.00	0.44	0.32	0.24
	B M62 Southbound Off Ramp	0.56	0.00	0.22	0.23	0.00
	C A614 Rawcliffe Road (East)	0.50	0.00	0.01	0.02	0.47
	D A161	0.47	0.00	0.01	0.00	0.52
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	From A A614 Rawcliffe Road (West)	0	13	8	0
	B M62 Northbound On Ramp	0	0	0	0

Average PCU Per Veh

		To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
From	A A614 Rawcliffe Road (West)	1.000	1.125	1.076	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000

C Link	10	18	0	0
D M62 Northbound Off Ramp	26	0	20	0

C Link	1.096	1.176	1.000	1.000
D M62 Northbound Off Ramp	1.256	1.000	1.204	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	11	20	22
	B M62 Southbound Off Ramp	9	0	6	14	0
	C A614 Rawcliffe Road (East)	9	0	0	9	10
	D A161	15	0	50	100	33
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.108	1.198	1.222
	B M62 Southbound Off Ramp	1.087	1.000	1.060	1.143	1.000
	C A614 Rawcliffe Road (East)	1.087	1.000	1.000	1.091	1.097
	D A161	1.145	1.000	1.500	2.000	1.326
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	07:30 07:45	882	882
		07:45 08:00	1053	1053
		08:00 08:15	1289	1289
		08:15 08:30	1289	1289
		08:30 08:45	1053	1053
	B M62 Southbound Off Ramp	08:45 09:00	882	882
		07:30 07:45	355	355
		07:45 08:00	423	423
		08:00 08:15	519	519
		08:15 08:30	519	519
	C A614 Rawcliffe Road (East)	08:30 08:45	423	423
		08:45 09:00	355	355
		07:30 07:45	412	412
		07:45 08:00	492	492
		08:00 08:15	602	602
	D A161	08:15 08:30	602	602
		08:30 08:45	492	492
		08:45 09:00	412	412
		07:30 07:45	361	361
		07:45 08:00	431	431
E M62 Southbound On Ramp	08:00 08:15	527	527	
	08:15 08:30	527	527	
	08:30 08:45	431	431	
	08:45 09:00	361	361	
	07:30 07:45	0	0	
3W Site 3	A A614 Rawcliffe Road (West)	07:45 08:00	0	0
		08:00 08:15	0	0
		08:15 08:30	0	0
		08:30 08:45	0	0
		08:45 09:00	0	0
	B M62 Northbound On Ramp	07:30 07:45	666	666
		07:45 08:00	795	795
		08:00 08:15	973	973
		08:15 08:30	973	973
		08:30 08:45	795	795
	C Link	08:45 09:00	666	666
		07:30 07:45	0	0
		07:45 08:00	0	0
		08:00 08:15	0	0
		08:15 08:30	0	0
	D M62 Northbound Off Ramp	08:30 08:45	0	0
		08:45 09:00	0	0
		07:30 07:45	569	569
		07:45 08:00	680	680
		08:00 08:15	832	832
E M62 Southbound On Ramp	08:15 08:30	832	832	
	08:30 08:45	680	680	
	08:45 09:00	569	569	
	07:30 07:45	695	695	
	07:45 08:00	830	830	
A A614 Rawcliffe Road (West)	08:00 08:15	1016	1016	
	08:15 08:30	1016	1016	
	08:30 08:45	830	830	
	08:45 09:00	695	695	
	07:30 07:45	695	695	

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.55	3.95	1.4	A	1075	1612
	B M62 Southbound Off Ramp	0.60	11.19	1.6	B	432	648
	C A614 Rawcliffe Road (East)	0.33	3.24	0.5	A	502	753
	D A161	0.20	4.14	0.3	A	440	317
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	0.70	9.55	2.5	A	811	1217
	B M62 Northbound On Ramp						
	C Link	0.53	5.38	1.2	A	694	1041
	D M62 Northbound Off Ramp	0.43	3.34	0.9	A	847	1271
	E M62 Southbound On Ramp						

Main Results for each time segment

07:30 - 07:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	879	879	220	0	0	8	2350	0.374	876	568	0.0	0.7	2.833	A
	B M62 Southbound Off Ramp	355	355	89	0	0	884	1058	0.335	352	0	0.0	0.5	5.562	A
	C A614 Rawcliffe Road (East)	412	412	103	0	0	771	2042	0.202	411	465	0.0	0.3	2.406	A
	D A161	361	173	43	187	0	812	1466	0.118	173	370	0.0	0.2	3.214	A
	E M62 Southbound On Ramp						576				408				
3W Site 3	A A614 Rawcliffe Road (West)	666		166			467	1510	0.441	662	791	0.0	0.8	4.601	A
	B M62 Northbound On Ramp						879				251				
	C Link	568		142			0	1574	0.361	565	879	0.0	0.6	3.940	A
	D M62 Northbound Off Ramp	695		174			565	2535	0.274	693	0	0.0	0.5	2.393	A

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1052	1052	263	0	0	10	2349	0.448	1051	680	0.7	0.9	3.221	A
	B M62 Southbound Off Ramp	423	423	106	0	0	1061	978	0.433	422	0	0.5	0.8	7.061	A
	C A614 Rawcliffe Road (East)	492	492	123	0	0	925	1946	0.253	491	558	0.3	0.4	2.700	A
	D A161	431	207	52	224	0	972	1378	0.150	207	444	0.2	0.2	3.549	A
	E M62 Southbound On Ramp						689				489				
3W Site 3	A A614 Rawcliffe Road (West)	795		199			560	1457	0.546	793	948	0.8	1.3	5.888	A
	B M62 Northbound On Ramp						1052				301				
	C Link	680		170			0	1574	0.432	679	1052	0.6	0.8	4.447	A
	D M62 Northbound Off Ramp	830		207			679	2452	0.338	829	0	0.5	0.6	2.717	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1286	1286	322	0	0	12	2348	0.548	1284	831	0.9	1.4	3.926	A
	B M62 Southbound Off Ramp	519	519	130	0	0	1296	872	0.594	516	0	0.8	1.6	10.937	B
	C A614 Rawcliffe Road (East)	602	602	151	0	0	1130	1817	0.332	602	682	0.4	0.5	3.230	A
	D A161	527	253	63	274	0	1189	1260	0.201	253	543	0.2	0.3	4.128	A
	E M62 Southbound On Ramp						843				599				
3W Site 3	A A614 Rawcliffe Road (West)	973		243			685	1384	0.703	968	1160	1.3	2.5	9.326	A
	B M62 Northbound On Ramp						1286				367				
	C Link	831		208			0	1574	0.528	830	1286	0.8	1.2	5.342	A
	D M62 Northbound Off Ramp	1016		254			830	2341	0.434	1015	0	0.6	0.9	3.324	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1290	1290	323	0	0	12	2348	0.549	1290	833	1.4	1.4	3.954	A
	B M62 Southbound Off Ramp	519	519	130	0	0	1302	870	0.596	518	0	1.6	1.6	11.189	B
	C A614 Rawcliffe Road (East)	602	602	151	0	0	1136	1813	0.332	602	685	0.5	0.5	3.242	A
	D A161	527	253	63	274	0	1193	1258	0.201	253	545	0.3	0.3	4.138	A
	E M62 Southbound On Ramp						846				600				
3W Site 3	A A614 Rawcliffe Road (West)	973		243			686	1383	0.704	973	1164	2.5	2.5	9.546	A
	B M62 Northbound On Ramp						1290				369				
	C Link	833		208			0	1574	0.529	833	1290	1.2	1.2	5.379	A
	D M62 Northbound Off Ramp	1016		254			833	2339	0.435	1016	0	0.9	0.9	3.336	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1058	1058	264	0	0	10	2349	0.450	1060	683	1.4	1.0	3.247	A
	B M62 Southbound Off Ramp	423	423	106	0	0	1070	974	0.435	426	0	1.6	0.9	7.218	A
	C A614 Rawcliffe Road (East)	492	492	123	0	0	933	1940	0.253	492	563	0.5	0.4	2.714	A
	D A161	431	207	52	224	0	978	1375	0.150	207	448	0.3	0.2	3.563	A
	E M62 Southbound On Ramp						693				492				
3W Site 3	A A614 Rawcliffe Road (West)	795		199			562	1455	0.546	800	954	2.5	1.3	6.017	A
	B M62 Northbound On Ramp						1058				303				
	C Link	683		171			0	1574	0.434	684	1058	1.2	0.9	4.486	A
	D M62 Northbound Off Ramp	830		207			684	2448	0.339	831	0	0.9	0.6	2.732	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	884	884	221	0	0	8	2350	0.376	885	571	1.0	0.7	2.858	A
	B M62 Southbound Off Ramp	355	355	89	0	0	893	1054	0.337	356	0	0.9	0.6	5.648	A
	C A614 Rawcliffe Road (East)	412	412	103	0	0	779	2037	0.202	412	470	0.4	0.3	2.416	A
	D A161	361	173	43	187	0	817	1463	0.118	173	374	0.2	0.2	3.228	A
	E M62 Southbound On Ramp						579				411				
3W Site 3	A A614 Rawcliffe Road (West)	666		166			470	1509	0.441	667	798	1.3	0.9	4.667	A
	B M62 Northbound On Ramp						884				253				
	C Link	571		143			0	1574	0.363	572	884	0.9	0.6	3.980	A
	D M62 Northbound Off Ramp	695		174			572	2530	0.275	696	0	0.6	0.5	2.407	A

2022 Future Baseline , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	3W - Site 3 - C - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	3E - Site 3 - A - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	4.21	A
3W	Site 3	Standard Roundabout		B, C, D, A	7.22	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.72	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2022 Future Baseline	PM	ONE HOUR	16 15	17 45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Simple (vertical queueing)	Normal	0	100.00	
3W Site 3	C Link	3E	A	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	304	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	700	100.000
	D A161		ONE HOUR	✓	481	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	935	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	885	100.000

Origin-Destination Data

Demand (PCU/hr)

	From	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	242	693	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	668	188	0	0
	D M62 Northbound Off Ramp	391	0	494	0

Proportions

	From	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0.00	0.26	0.74	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.78	0.22	0.00	0.00
	D M62 Northbound Off Ramp	0.44	0.00	0.56	0.00

Demand (PCU/hr)

	From	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0	0	576	347	264
	B M62 Southbound Off Ramp	178	0	56	69	1
	C A614 Rawcliffe Road (East)	403	0	3	34	260
	D A161	275	0	11	5	190
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

	From	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0.00	0.00	0.49	0.29	0.22
	B M62 Southbound Off Ramp	0.59	0.00	0.18	0.23	0.00
	C A614 Rawcliffe Road (East)	0.58	0.00	0.00	0.05	0.37
	D A161	0.57	0.00	0.02	0.01	0.40
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

	From	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	12	5	0
	B M62 Northbound On Ramp	0	0	0	0

Average PCU Per Veh

	From	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	1.000	1.120	1.045	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000

C Link	6	6	0	0
D M62 Northbound Off Ramp	22	0	13	0

C Link	1.055	1.062	1.000	1.000
D M62 Northbound Off Ramp	1.220	1.000	1.126	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	5	15	19
	B M62 Southbound Off Ramp	13	0	15	19	0
	C A614 Rawcliffe Road (East)	2	0	0	20	7
	D A161	6	0	33	67	22
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.052	1.145	1.186
	B M62 Southbound Off Ramp	1.129	1.000	1.146	1.190	1.000
	C A614 Rawcliffe Road (East)	1.019	1.000	1.000	1.200	1.066
	D A161	1.062	1.000	1.333	1.667	1.219
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	16:15 16:30	894	894
		16:30 16:45	1067	1067
		16:45 17:00	1307	1307
		17:00 17:15	1307	1307
		17:15 17:30	1067	1067
	B M62 Southbound Off Ramp	17:30 17:45	894	894
		16:15 16:30	229	229
		16:30 16:45	273	273
		16:45 17:00	335	335
		17:00 17:15	335	335
	C A614 Rawcliffe Road (East)	17:15 17:30	273	273
		17:30 17:45	229	229
		16:15 16:30	527	527
		16:30 16:45	629	629
		16:45 17:00	771	771
	D A161	17:00 17:15	771	771
		17:15 17:30	629	629
		17:30 17:45	527	527
		16:15 16:30	362	362
		16:30 16:45	432	432
E M62 Southbound On Ramp	16:45 17:00	530	530	
	17:00 17:15	530	530	
	17:15 17:30	432	432	
	17:30 17:45	362	362	
	16:15 16:30	0	0	
3W Site 3	A A614 Rawcliffe Road (West)	16:30 16:45	0	0
		16:45 17:00	0	0
		17:00 17:15	0	0
		17:15 17:30	0	0
		17:30 17:45	0	0
	B M62 Northbound On Ramp	16:15 16:30	704	704
		16:30 16:45	841	841
		16:45 17:00	1029	1029
		17:00 17:15	1029	1029
		17:15 17:30	841	841
	C Link	17:30 17:45	704	704
		16:15 16:30	0	0
		16:30 16:45	0	0
		16:45 17:00	0	0
		17:00 17:15	0	0
	D M62 Northbound Off Ramp	17:15 17:30	0	0
		17:30 17:45	0	0
		16:15 16:30	644	644
		16:30 16:45	770	770
		16:45 17:00	942	942
D M62 Northbound Off Ramp	17:00 17:15	942	942	
	17:15 17:30	770	770	
	17:30 17:45	644	644	
	16:15 16:30	666	666	
	16:30 16:45	796	796	
	16:45 17:00	974	974	
	17:00 17:15	974	974	
	17:15 17:30	796	796	
	17:30 17:45	666	666	

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.56	3.84	1.4	A	1089	1633
	B M62 Southbound Off Ramp	0.39	7.87	0.7	A	279	419
	C A614 Rawcliffe Road (East)	0.40	3.24	0.7	A	642	963
	D A161	0.26	4.20	0.4	A	441	401
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	0.77	12.07	3.4	B	858	1287
	B M62 Northbound On Ramp						
	C Link	0.60	6.02	1.6	A	785	1178
	D M62 Northbound Off Ramp	0.43	3.27	0.9	A	812	1218

Main Results for each time segment

16:15 - 16:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	890	890	222	0	0	14	2347	0.379	887	642	0.0	0.7	2.724	A
	B M62 Southbound Off Ramp	229	229	57	0	0	901	1050	0.218	228	0	0.0	0.3	5.005	A
	C A614 Rawcliffe Road (East)	527	527	132	0	0	646	2121	0.248	526	483	0.0	0.3	2.353	A
	D A161	362	219	55	143	0	831	1455	0.151	218	340	0.0	0.2	3.133	A
	E M62 Southbound On Ramp						656				393				
3W Site 3	A A614 Rawcliffe Road (West)	704		176			511	1485	0.474	700	793	0.0	0.9	4.858	A
	B M62 Northbound On Ramp						890				322				
	C Link	642		161			0	1574	0.408	639	890	0.0	0.7	4.057	A
	D M62 Northbound Off Ramp	666		167			639	2481	0.269	665	0	0.0	0.4	2.308	A

16:30 - 16:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1065	1065	266	0	0	17	2345	0.454	1064	769	0.7	0.9	3.107	A
	B M62 Southbound Off Ramp	273	273	68	0	0	1081	969	0.282	273	0	0.3	0.4	5.916	A
	C A614 Rawcliffe Road (East)	629	629	157	0	0	775	2040	0.308	629	579	0.3	0.5	2.662	A
	D A161	432	262	65	171	0	996	1365	0.192	261	408	0.2	0.3	3.510	A
	E M62 Southbound On Ramp						786				471				
3W Site 3	A A614 Rawcliffe Road (West)	841		210			612	1426	0.589	838	950	0.9	1.5	6.492	A
	B M62 Northbound On Ramp						1065				386				
	C Link	769		192			0	1574	0.488	768	1065	0.7	1.0	4.709	A
	D M62 Northbound Off Ramp	796		199			768	2387	0.333	795	0	0.4	0.6	2.636	A

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1301	1301	325	0	0	21	2343	0.555	1299	941	0.9	1.4	3.809	A
	B M62 Southbound Off Ramp	335	335	84	0	0	1320	862	0.389	334	0	0.4	0.7	7.789	A
	C A614 Rawcliffe Road (East)	771	771	193	0	0	947	1932	0.399	770	707	0.5	0.7	3.233	A
	D A161	530	320	80	209	0	1218	1244	0.257	320	498	0.3	0.4	4.191	A
	E M62 Southbound On Ramp						962				576				
3W Site 3	A A614 Rawcliffe Road (West)	1029		257			749	1346	0.765	1022	1163	1.5	3.3	11.572	B
	B M62 Northbound On Ramp						1301				471				
	C Link	941		235			0	1574	0.598	939	1301	1.0	1.5	5.966	A
	D M62 Northbound Off Ramp	974		244			939	2262	0.431	973	0	0.6	0.9	3.254	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1307	1307	327	0	0	21	2343	0.558	1307	942	1.4	1.4	3.843	A
	B M62 Southbound Off Ramp	335	335	84	0	0	1327	858	0.390	335	0	0.7	0.7	7.869	A
	C A614 Rawcliffe Road (East)	771	771	193	0	0	951	1929	0.400	771	711	0.7	0.7	3.242	A
	D A161	530	320	80	209	0	1221	1243	0.258	320	501	0.4	0.4	4.202	A
	E M62 Southbound On Ramp						963				578				
3W Site 3	A A614 Rawcliffe Road (West)	1029		257			751	1345	0.765	1029	1166	3.3	3.4	12.069	B
	B M62 Northbound On Ramp						1307				473				
	C Link	942		236			0	1574	0.599	942	1307	1.5	1.6	6.021	A
	D M62 Northbound Off Ramp	974		244			942	2259	0.431	974	0	0.9	0.9	3.265	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1073	1073	268	0	0	17	2345	0.458	1075	771	1.4	0.9	3.141	A
	B M62 Southbound Off Ramp	273	273	68	0	0	1092	964	0.284	274	0	0.7	0.5	5.985	A
	C A614 Rawcliffe Road (East)	629	629	157	0	0	782	2036	0.309	630	585	0.7	0.5	2.674	A
	D A161	432	262	65	171	0	1000	1363	0.192	262	412	0.4	0.3	3.521	A
	E M62 Southbound On Ramp						788				474				
3W Site 3	A A614 Rawcliffe Road (West)	841		210			615	1425	0.590	848	955	3.4	1.6	6.719	A
	B M62 Northbound On Ramp						1073				389				
	C Link	771		193			0	1574	0.490	773	1073	1.6	1.0	4.764	A
	D M62 Northbound Off Ramp	796		199			773	2383	0.334	797	0	0.9	0.6	2.649	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	896	896	224	0	0	14	2347	0.382	897	645	0.9	0.7	2.747	A
	B M62 Southbound Off Ramp	229	229	57	0	0	911	1046	0.219	229	0	0.5	0.3	5.052	A
	C A614 Rawcliffe Road (East)	527	527	132	0	0	653	2117	0.249	527	488	0.5	0.3	2.364	A
	D A161	362	219	55	143	0	836	1452	0.151	219	344	0.3	0.2	3.144	A
	E M62 Southbound On Ramp						660				396				
3W Site 3	A A614 Rawcliffe Road (West)	704		176			514	1483	0.475	706	799	1.6	1.0	4.946	A
	B M62 Northbound On Ramp						896				325				
	C Link	645		161			0	1574	0.410	646	896	1.0	0.7	4.105	A
	D M62 Northbound Off Ramp	666		167			646	2476	0.269	667	0	0.6	0.4	2.320	A

2026 Future Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	3W - Site 3 - C - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	3E - Site 3 - A - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	5.42	A
3W	Site 3	Standard Roundabout		B, C, D, A	6.54	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.97	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2026 Future Baseline	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Simple (vertical queueing)	Normal	0	100.00	
3W Site 3	C Link	3E	A	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	485	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	564	100.000
	D A161		ONE HOUR	✓	492	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	910	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	950	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	233	677	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	668	112	0	0
	D M62 Northbound Off Ramp	420	1	529	0

Proportions

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0.00	0.26	0.74	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.86	0.14	0.00	0.00
	D M62 Northbound Off Ramp	0.44	0.00	0.56	0.00

Demand (PCU/hr)

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0	0	526	386	295
	B M62 Southbound Off Ramp	270	0	105	109	1
	C A614 Rawcliffe Road (East)	280	0	4	14	266
	D A161	229	0	5	2	256
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0.00	0.00	0.44	0.32	0.24
	B M62 Southbound Off Ramp	0.56	0.00	0.22	0.22	0.00
	C A614 Rawcliffe Road (East)	0.50	0.00	0.01	0.02	0.47
	D A161	0.47	0.00	0.01	0.00	0.52
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	13	8	0
	B M62 Northbound On Ramp	0	0	0	0

Average PCU Per Veh

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	1.000	1.125	1.076	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000

C Link	10	18	0	0
D M62 Northbound Off Ramp	26	0	20	0

C Link	1.096	1.176	1.000	1.000
D M62 Northbound Off Ramp	1.256	1.000	1.204	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	11	20	22
	B M62 Southbound Off Ramp	9	0	6	14	0
	C A614 Rawcliffe Road (East)	9	0	0	9	10
	D A161	15	0	50	100	33
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.108	1.198	1.222
	B M62 Southbound Off Ramp	1.087	1.000	1.060	1.143	1.000
	C A614 Rawcliffe Road (East)	1.087	1.000	1.000	1.091	1.097
	D A161	1.145	1.000	1.500	2.000	1.326
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	07:30 07:45	909	909
		07:45 08:00	1085	1085
		08:00 08:15	1329	1329
		08:15 08:30	1329	1329
		08:30 08:45	1085	1085
	08:45 09:00	909	909	
	B M62 Southbound Off Ramp	07:30 07:45	365	365
		07:45 08:00	436	436
		08:00 08:15	534	534
		08:15 08:30	534	534
		08:30 08:45	436	436
	08:45 09:00	365	365	
	C A614 Rawcliffe Road (East)	07:30 07:45	425	425
		07:45 08:00	507	507
		08:00 08:15	621	621
		08:15 08:30	621	621
		08:30 08:45	507	507
	08:45 09:00	425	425	
	D A161	07:30 07:45	370	370
		07:45 08:00	442	442
08:00 08:15		542	542	
08:15 08:30		542	542	
08:30 08:45		442	442	
08:45 09:00	370	370		
E M62 Southbound On Ramp	07:30 07:45	0	0	
	07:45 08:00	0	0	
	08:00 08:15	0	0	
	08:15 08:30	0	0	
	08:30 08:45	0	0	
08:45 09:00	0	0		
3W Site 3	A A614 Rawcliffe Road (West)	07:30 07:45	685	685
		07:45 08:00	818	818
		08:00 08:15	1002	1002
		08:15 08:30	1002	1002
		08:30 08:45	818	818
	08:45 09:00	685	685	
	B M62 Northbound On Ramp	07:30 07:45	0	0
		07:45 08:00	0	0
		08:00 08:15	0	0
		08:15 08:30	0	0
		08:30 08:45	0	0
	08:45 09:00	0	0	
	C Link	07:30 07:45	587	587
		07:45 08:00	701	701
		08:00 08:15	859	859
		08:15 08:30	859	859
		08:30 08:45	701	701
	08:45 09:00	587	587	
	D M62 Northbound Off Ramp	07:30 07:45	715	715
		07:45 08:00	854	854
08:00 08:15		1046	1046	
08:15 08:30		1046	1046	
08:30 08:45		854	854	
08:45 09:00	715	715		

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.57	4.10	1.5	A	1106	1659
	B M62 Southbound Off Ramp	0.63	12.31	1.8	B	445	668
	C A614 Rawcliffe Road (East)	0.35	3.35	0.6	A	518	776
	D A161	0.21	4.25	0.3	A	451	325
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	0.73	10.59	2.9	B	835	1253
	B M62 Northbound On Ramp						
	C Link	0.54	5.56	1.3	A	714	1072
	D M62 Northbound Off Ramp	0.45	3.46	1.0	A	872	1308

Main Results for each time segment

07:30 - 07:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	904	904	226	0	0	8	2350	0.385	901	584	0.0	0.7	2.880	A
	B M62 Southbound Off Ramp	365	365	91	0	0	910	1046	0.349	363	0	0.0	0.6	5.736	A
	C A614 Rawcliffe Road (East)	425	425	106	0	0	794	2028	0.209	423	478	0.0	0.3	2.447	A
	D A161	370	178	44	193	0	836	1452	0.122	177	382	0.0	0.2	3.258	A
	E M62 Southbound On Ramp						592				421				
3W Site 3	A A614 Rawcliffe Road (West)	685		171			481	1502	0.456	681	813	0.0	0.9	4.754	A
	B M62 Northbound On Ramp						904				259				
	C Link	584		146			0	1574	0.371	581	904	0.0	0.6	4.004	A
	D M62 Northbound Off Ramp	715		179			581	2523	0.283	713	0	0.0	0.5	2.436	A

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1082	1082	271	0	0	10	2349	0.461	1081	699	0.7	1.0	3.295	A
	B M62 Southbound Off Ramp	436	436	109	0	0	1091	965	0.452	435	0	0.6	0.9	7.401	A
	C A614 Rawcliffe Road (East)	507	507	127	0	0	953	1928	0.263	507	573	0.3	0.4	2.762	A
	D A161	442	212	53	230	0	1001	1362	0.156	212	458	0.2	0.2	3.614	A
	E M62 Southbound On Ramp						709				504				
3W Site 3	A A614 Rawcliffe Road (West)	818		205			576	1447	0.565	816	975	0.9	1.4	6.191	A
	B M62 Northbound On Ramp						1082				310				
	C Link	699		175			0	1574	0.444	698	1082	0.6	0.9	4.545	A
	D M62 Northbound Off Ramp	854		214			698	2438	0.350	853	0	0.5	0.7	2.783	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1323	1323	331	0	0	12	2348	0.563	1321	855	1.0	1.5	4.063	A
	B M62 Southbound Off Ramp	534	534	133	0	0	1333	856	0.624	531	0	0.9	1.8	11.962	B
	C A614 Rawcliffe Road (East)	621	621	155	0	0	1163	1796	0.346	620	700	0.4	0.6	3.338	A
	D A161	542	260	65	282	0	1224	1241	0.209	259	559	0.2	0.3	4.236	A
	E M62 Southbound On Ramp						867				616				
3W Site 3	A A614 Rawcliffe Road (West)	1002		250			705	1372	0.730	996	1193	1.4	2.8	10.273	B
	B M62 Northbound On Ramp						1323				379				
	C Link	855		214			0	1574	0.543	853	1323	0.9	1.3	5.515	A
	D M62 Northbound Off Ramp	1046		262			853	2324	0.450	1045	0	0.7	1.0	3.446	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1328	1328	332	0	0	12	2348	0.565	1328	858	1.5	1.5	4.099	A
	B M62 Southbound Off Ramp	534	534	133	0	0	1340	853	0.626	534	0	1.8	1.8	12.312	B
	C A614 Rawcliffe Road (East)	621	621	155	0	0	1169	1792	0.347	621	704	0.6	0.6	3.353	A
	D A161	542	260	65	282	0	1228	1239	0.210	260	562	0.3	0.3	4.248	A
	E M62 Southbound On Ramp						870				618				
3W Site 3	A A614 Rawcliffe Road (West)	1002		250			707	1371	0.731	1002	1197	2.8	2.9	10.587	B
	B M62 Northbound On Ramp						1328				381				
	C Link	858		214			0	1574	0.545	858	1328	1.3	1.3	5.561	A
	D M62 Northbound Off Ramp	1046		262			858	2321	0.451	1046	0	1.0	1.0	3.460	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1089	1089	272	0	0	10	2349	0.464	1091	703	1.5	1.0	3.332	A
	B M62 Southbound Off Ramp	436	436	109	0	0	1101	960	0.454	439	0	1.8	0.9	7.606	A
	C A614 Rawcliffe Road (East)	507	507	127	0	0	962	1922	0.264	508	579	0.6	0.4	2.776	A
	D A161	442	212	53	230	0	1007	1359	0.156	213	462	0.3	0.2	3.630	A
	E M62 Southbound On Ramp						713				507				
3W Site 3	A A614 Rawcliffe Road (West)	818		205			578	1446	0.566	824	982	2.9	1.4	6.360	A
	B M62 Northbound On Ramp						1089				313				
	C Link	703		176			0	1574	0.447	705	1089	1.3	0.9	4.591	A
	D M62 Northbound Off Ramp	854		214			705	2433	0.351	855	0	1.0	0.7	2.801	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	910	910	227	0	0	8	2350	0.387	911	588	1.0	0.7	2.910	A
	B M62 Southbound Off Ramp	365	365	91	0	0	919	1042	0.350	366	0	0.9	0.6	5.836	A
	C A614 Rawcliffe Road (East)	425	425	106	0	0	803	2023	0.210	425	483	0.4	0.3	2.460	A
	D A161	370	178	44	193	0	842	1449	0.123	178	386	0.2	0.2	3.273	A
	E M62 Southbound On Ramp						596				424				
3W Site 3	A A614 Rawcliffe Road (West)	685		171			484	1501	0.457	687	821	1.4	0.9	4.828	A
	B M62 Northbound On Ramp						910				261				
	C Link	588		147			0	1574	0.373	589	910	0.9	0.7	4.048	A
	D M62 Northbound Off Ramp	715		179			589	2518	0.284	716	0	0.7	0.5	2.451	A

2026 Future Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	3W - Site 3 - C - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	3E - Site 3 - A - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	4.37	A
3W	Site 3	Standard Roundabout		B, C, D, A	7.98	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.18	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2026 Future Baseline	PM	ONE HOUR	16 15	17 45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Simple (vertical queueing)	Normal	0	100.00	
3W Site 3	C Link	3E	A	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	313	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	719	100.000
	D A161		ONE HOUR	✓	494	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	962	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	910	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	249	713	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	687	193	0	0
	D M62 Northbound Off Ramp	402	0	508	0

Proportions

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0.00	0.26	0.74	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.78	0.22	0.00	0.00
	D M62 Northbound Off Ramp	0.44	0.00	0.56	0.00

Demand (PCU/hr)

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0	0	593	357	272
	B M62 Southbound Off Ramp	183	0	58	71	1
	C A614 Rawcliffe Road (East)	414	0	3	35	267
	D A161	283	0	11	5	195
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0.00	0.00	0.49	0.29	0.22
	B M62 Southbound Off Ramp	0.58	0.00	0.19	0.23	0.00
	C A614 Rawcliffe Road (East)	0.58	0.00	0.00	0.05	0.37
	D A161	0.57	0.00	0.02	0.01	0.39
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	12	5	0
	B M62 Northbound On Ramp	0	0	0	0

Average PCU Per Veh

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	1.000	1.120	1.045	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000

C Link	6	6	0	0
D M62 Northbound Off Ramp	22	0	13	0

C Link	1.055	1.062	1.000	1.000
D M62 Northbound Off Ramp	1.220	1.000	1.126	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	5	15	19
	B M62 Southbound Off Ramp	13	0	15	19	0
	C A614 Rawcliffe Road (East)	2	0	0	20	7
	D A161	6	0	33	67	22
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.052	1.145	1.186
	B M62 Southbound Off Ramp	1.129	1.000	1.146	1.190	1.000
	C A614 Rawcliffe Road (East)	1.019	1.000	1.000	1.200	1.066
	D A161	1.062	1.000	1.333	1.667	1.219
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	16:15 16:30	920	920
		16:30 16:45	1099	1099
		16:45 17:00	1345	1345
		17:00 17:15	1345	1345
		17:15 17:30	1099	1099
	B M62 Southbound Off Ramp	17:30 17:45	920	920
		16:15 16:30	236	236
		16:30 16:45	281	281
		16:45 17:00	345	345
		17:00 17:15	345	345
	C A614 Rawcliffe Road (East)	17:15 17:30	281	281
		17:30 17:45	236	236
		16:15 16:30	542	542
		16:30 16:45	647	647
		16:45 17:00	792	792
	D A161	17:00 17:15	792	792
		17:15 17:30	647	647
		17:30 17:45	542	542
		16:15 16:30	372	372
		16:30 16:45	444	444
E M62 Southbound On Ramp	16:45 17:00	544	544	
	17:00 17:15	544	544	
	17:15 17:30	444	444	
	17:30 17:45	372	372	
	16:15 16:30	0	0	
3W Site 3	A A614 Rawcliffe Road (West)	16:30 16:45	0	0
		16:45 17:00	0	0
		17:00 17:15	0	0
		17:15 17:30	0	0
		17:30 17:45	0	0
	B M62 Northbound On Ramp	16:15 16:30	724	724
		16:30 16:45	865	865
		16:45 17:00	1059	1059
		17:00 17:15	1059	1059
		17:15 17:30	865	865
	C Link	17:30 17:45	724	724
		16:15 16:30	0	0
		16:30 16:45	0	0
		16:45 17:00	0	0
		17:00 17:15	0	0
	D M62 Northbound Off Ramp	17:15 17:30	0	0
		17:30 17:45	0	0
		16:15 16:30	663	663
		16:30 16:45	791	791
		16:45 17:00	969	969
A A614 Rawcliffe Road (West)	17:00 17:15	969	969	
	17:15 17:30	791	791	
	17:30 17:45	663	663	
	16:15 16:30	685	685	
	16:30 16:45	818	818	
	16:45 17:00	1002	1002	
	17:00 17:15	1002	1002	
	17:15 17:30	818	818	
	17:30 17:45	685	685	

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.57	3.99	1.5	A	1120	1680
	B M62 Southbound Off Ramp	0.41	8.30	0.8	A	287	431
	C A614 Rawcliffe Road (East)	0.41	3.35	0.7	A	660	990
	D A161	0.27	4.33	0.4	A	454	412
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	0.79	13.87	4.0	B	883	1324
	B M62 Northbound On Ramp						
	C Link	0.62	6.28	1.7	A	807	1211
	D M62 Northbound Off Ramp	0.45	3.39	0.9	A	835	1253

Main Results for each time segment

16:15 - 16:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	915	915	229	0	0	15	2347	0.390	912	660	0.0	0.7	2.772	A
	B M62 Southbound Off Ramp	236	236	59	0	0	927	1038	0.227	234	0	0.0	0.3	5.118	A
	C A614 Rawcliffe Road (East)	542	542	135	0	0	665	2109	0.257	540	497	0.0	0.4	2.392	A
	D A161	372	225	56	147	0	855	1442	0.156	225	350	0.0	0.2	3.181	A
	E M62 Southbound On Ramp						675				404				
3W Site 3	A A614 Rawcliffe Road (West)	724		181			526	1476	0.491	720	815	0.0	1.0	5.037	A
	B M62 Northbound On Ramp						915				331				
	C Link	660		165			0	1574	0.419	657	915	0.0	0.8	4.135	A
	D M62 Northbound Off Ramp	685		171			657	2468	0.278	683	0	0.0	0.4	2.349	A

16:30 - 16:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1095	1095	274	0	0	18	2345	0.467	1094	790	0.7	1.0	3.181	A
	B M62 Southbound Off Ramp	281	281	70	0	0	1112	955	0.295	281	0	0.3	0.5	6.106	A
	C A614 Rawcliffe Road (East)	647	647	162	0	0	797	2026	0.319	646	596	0.4	0.5	2.723	A
	D A161	444	269	67	175	0	1023	1350	0.199	269	420	0.2	0.3	3.583	A
	E M62 Southbound On Ramp						808				484				
3W Site 3	A A614 Rawcliffe Road (West)	865		216			629	1416	0.611	862	977	1.0	1.6	6.884	A
	B M62 Northbound On Ramp						1095				396				
	C Link	790		198			0	1574	0.502	789	1095	0.8	1.1	4.839	A
	D M62 Northbound Off Ramp	818		205			789	2371	0.345	817	0	0.4	0.6	2.698	A

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1337	1337	334	0	0	21	2342	0.571	1335	967	1.0	1.5	3.945	A
	B M62 Southbound Off Ramp	345	345	86	0	0	1357	845	0.408	344	0	0.5	0.8	8.194	A
	C A614 Rawcliffe Road (East)	792	792	198	0	0	973	1915	0.413	791	727	0.5	0.7	3.338	A
	D A161	544	329	82	215	0	1252	1226	0.269	329	512	0.3	0.4	4.320	A
	E M62 Southbound On Ramp						989				592				
3W Site 3	A A614 Rawcliffe Road (West)	1059		265			770	1334	0.794	1050	1195	1.6	3.8	13.102	B
	B M62 Northbound On Ramp						1337				483				
	C Link	967		242			0	1574	0.614	965	1337	1.1	1.7	6.217	A
	D M62 Northbound Off Ramp	1002		250			965	2242	0.447	1001	0	0.6	0.9	3.376	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1344	1344	336	0	0	22	2342	0.574	1344	969	1.5	1.5	3.988	A
	B M62 Southbound Off Ramp	345	345	86	0	0	1365	841	0.410	345	0	0.8	0.8	8.296	A
	C A614 Rawcliffe Road (East)	792	792	198	0	0	978	1912	0.414	792	732	0.7	0.7	3.353	A
	D A161	544	329	82	215	0	1255	1224	0.269	329	515	0.4	0.4	4.332	A
	E M62 Southbound On Ramp						990				594				
3W Site 3	A A614 Rawcliffe Road (West)	1059		265			772	1333	0.794	1059	1199	3.8	4.0	13.873	B
	B M62 Northbound On Ramp						1344				486				
	C Link	969		242			0	1574	0.615	969	1344	1.7	1.7	6.281	A
	D M62 Northbound Off Ramp	1002		250			969	2239	0.447	1002	0	0.9	0.9	3.389	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1105	1105	276	0	0	18	2345	0.471	1107	793	1.5	1.0	3.224	A
	B M62 Southbound Off Ramp	281	281	70	0	0	1125	950	0.296	283	0	0.8	0.5	6.192	A
	C A614 Rawcliffe Road (East)	647	647	162	0	0	805	2021	0.320	648	602	0.7	0.5	2.738	A
	D A161	444	269	67	175	0	1029	1347	0.200	270	424	0.4	0.3	3.596	A
	E M62 Southbound On Ramp						810				488				
3W Site 3	A A614 Rawcliffe Road (West)	865		216			632	1415	0.611	874	983	4.0	1.7	7.194	A
	B M62 Northbound On Ramp						1105				401				
	C Link	793		198			0	1574	0.504	795	1105	1.7	1.1	4.900	A
	D M62 Northbound Off Ramp	818		205			795	2367	0.346	819	0	0.9	0.6	2.715	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	922	922	230	0	0	15	2347	0.393	923	663	1.0	0.7	2.798	A
	B M62 Southbound Off Ramp	236	236	59	0	0	937	1034	0.228	236	0	0.5	0.3	5.173	A
	C A614 Rawcliffe Road (East)	542	542	135	0	0	671	2105	0.257	542	502	0.5	0.4	2.404	A
	D A161	372	225	56	147	0	860	1439	0.157	226	353	0.3	0.2	3.195	A
	E M62 Southbound On Ramp						678				407				
3W Site 3	A A614 Rawcliffe Road (West)	724		181			529	1475	0.491	727	822	1.7	1.0	5.139	A
	B M62 Northbound On Ramp						922				334				
	C Link	663		166			0	1574	0.421	665	922	1.1	0.8	4.189	A
	D M62 Northbound Off Ramp	685		171			665	2462	0.278	686	0	0.6	0.5	2.364	A

2026 Future Baseline + Drax, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	3W - Site 3 - C - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	3E - Site 3 - A - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	5.73	A
3W	Site 3	Standard Roundabout		B, C, D, A	6.93	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.33	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2026 Future Baseline + Drax	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Simple (vertical queueing)	Normal	0	100.00	
3W Site 3	C Link	3E	A	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	498	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	564	100.000
	D A161		ONE HOUR	✓	492	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	936	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	1060	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	233	703	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	680	112	0	0
	D M62 Northbound Off Ramp	530	1	529	0

Proportions

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0.00	0.25	0.75	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.86	0.14	0.00	0.00
	D M62 Northbound Off Ramp	0.50	0.00	0.50	0.00

Demand (PCU/hr)

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0	0	526	386	321
	B M62 Southbound Off Ramp	283	0	105	109	1
	C A614 Rawcliffe Road (East)	280	0	4	14	266
	D A161	229	0	5	2	256
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0.00	0.00	0.43	0.31	0.26
	B M62 Southbound Off Ramp	0.57	0.00	0.21	0.22	0.00
	C A614 Rawcliffe Road (East)	0.50	0.00	0.01	0.02	0.47
	D A161	0.47	0.00	0.01	0.00	0.52
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	13	8	0
	B M62 Northbound On Ramp	0	0	0	0

Average PCU Per Veh

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	1.000	1.125	1.076	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000

C Link	10	18	0	0
D M62 Northbound Off Ramp	26	0	20	0

C Link	1.096	1.176	1.000	1.000
D M62 Northbound Off Ramp	1.256	1.000	1.204	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	11	20	22
	B M62 Southbound Off Ramp	9	0	6	14	0
	C A614 Rawcliffe Road (East)	9	0	0	9	10
	D A161	15	0	50	100	33
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.108	1.198	1.222
	B M62 Southbound Off Ramp	1.087	1.000	1.060	1.143	1.000
	C A614 Rawcliffe Road (East)	1.087	1.000	1.000	1.091	1.097
	D A161	1.145	1.000	1.500	2.000	1.326
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	07:30 07:45	928	928
		07:45 08:00	1108	1108
		08:00 08:15	1358	1358
		08:15 08:30	1358	1358
		08:30 08:45	1108	1108
	B M62 Southbound Off Ramp	08:45 09:00	928	928
		07:30 07:45	375	375
		07:45 08:00	448	448
		08:00 08:15	548	548
		08:15 08:30	548	548
	C A614 Rawcliffe Road (East)	08:30 08:45	448	448
		08:45 09:00	375	375
		07:30 07:45	425	425
		07:45 08:00	507	507
		08:00 08:15	621	621
	D A161	08:15 08:30	621	621
		08:30 08:45	507	507
		08:45 09:00	425	425
		07:30 07:45	370	370
		07:45 08:00	442	442
E M62 Southbound On Ramp	08:00 08:15	542	542	
	08:15 08:30	542	542	
	08:30 08:45	442	442	
	08:45 09:00	370	370	
	07:30 07:45	0	0	
3W Site 3	A A614 Rawcliffe Road (West)	07:45 08:00	0	0
		08:00 08:15	0	0
		08:15 08:30	0	0
		08:30 08:45	0	0
		08:45 09:00	0	0
	B M62 Northbound On Ramp	07:30 07:45	705	705
		07:45 08:00	841	841
		08:00 08:15	1031	1031
		08:15 08:30	1031	1031
		08:30 08:45	841	841
	C Link	08:45 09:00	705	705
		07:30 07:45	0	0
		07:45 08:00	0	0
		08:00 08:15	0	0
		08:15 08:30	0	0
	D M62 Northbound Off Ramp	08:30 08:45	0	0
		08:45 09:00	0	0
		07:30 07:45	596	596
		07:45 08:00	712	712
		08:00 08:15	872	872
E M62 Southbound On Ramp	08:15 08:30	872	872	
	08:30 08:45	712	712	
	08:45 09:00	596	596	
	07:30 07:45	798	798	
	07:45 08:00	953	953	
A A614 Rawcliffe Road (West)	08:00 08:15	1167	1167	
	08:15 08:30	1167	1167	
	08:30 08:45	953	953	
	08:45 09:00	798	798	
	07:30 07:45	0	0	

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.58	4.22	1.6	A	1130	1695
	B M62 Southbound Off Ramp	0.65	13.45	2.0	B	457	685
	C A614 Rawcliffe Road (East)	0.35	3.43	0.6	A	518	776
	D A161	0.21	4.35	0.3	A	451	325
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	0.75	11.46	3.2	B	859	1288
	B M62 Northbound On Ramp						
	C Link	0.55	5.67	1.4	A	726	1089
	D M62 Northbound Off Ramp	0.51	3.87	1.2	A	973	1459
	E M62 Southbound On Ramp						

Main Results for each time segment

07:30 - 07:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	924	924	231	0	0	8	2350	0.393	921	594	0.0	0.7	2.922	A
	B M62 Southbound Off Ramp	375	375	94	0	0	929	1038	0.361	372	0	0.0	0.6	5.892	A
	C A614 Rawcliffe Road (East)	425	425	106	0	0	823	2010	0.211	423	478	0.0	0.3	2.475	A
	D A161	370	178	44	193	0	865	1437	0.124	177	382	0.0	0.2	3.299	A
	E M62 Southbound On Ramp						602				440				
3W Site 3	A A614 Rawcliffe Road (West)	705		176			481	1502	0.469	701	905	0.0	1.0	4.873	A
	B M62 Northbound On Ramp						924				259				
	C Link	594		148			0	1574	0.377	591	924	0.0	0.7	4.043	A
	D M62 Northbound Off Ramp	798		200			591	2516	0.317	796	0	0.0	0.6	2.567	A

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1105	1105	276	0	0	10	2349	0.471	1104	711	0.7	1.0	3.360	A
	B M62 Southbound Off Ramp	448	448	112	0	0	1114	954	0.469	446	0	0.6	1.0	7.723	A
	C A614 Rawcliffe Road (East)	507	507	127	0	0	987	1906	0.266	507	573	0.3	0.4	2.805	A
	D A161	442	212	53	230	0	1036	1343	0.158	212	458	0.2	0.2	3.675	A
	E M62 Southbound On Ramp						721				527				
3W Site 3	A A614 Rawcliffe Road (West)	841		210			576	1447	0.582	839	1085	1.0	1.5	6.423	A
	B M62 Northbound On Ramp						1105				310				
	C Link	711		178			0	1574	0.452	710	1105	0.7	0.9	4.606	A
	D M62 Northbound Off Ramp	953		238			710	2429	0.392	952	0	0.6	0.8	2.993	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1351	1351	338	0	0	12	2348	0.575	1348	869	1.0	1.6	4.181	A
	B M62 Southbound Off Ramp	548	548	137	0	0	1361	844	0.650	544	0	1.0	2.0	12.974	B
	C A614 Rawcliffe Road (East)	621	621	155	0	0	1205	1770	0.351	620	700	0.4	0.6	3.415	A
	D A161	542	260	65	282	0	1266	1218	0.213	259	559	0.2	0.3	4.336	A
	E M62 Southbound On Ramp						881				645				
3W Site 3	A A614 Rawcliffe Road (West)	1031		258			705	1372	0.751	1024	1327	1.5	3.1	11.048	B
	B M62 Northbound On Ramp						1351				379				
	C Link	869		217			0	1574	0.552	867	1351	0.9	1.3	5.623	A
	D M62 Northbound Off Ramp	1167		292			867	2314	0.504	1165	0	0.8	1.2	3.845	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1356	1356	339	0	0	12	2348	0.578	1356	872	1.6	1.6	4.222	A
	B M62 Southbound Off Ramp	548	548	137	0	0	1368	840	0.653	548	0	2.0	2.0	13.445	B
	C A614 Rawcliffe Road (East)	621	621	155	0	0	1212	1765	0.352	621	704	0.6	0.6	3.431	A
	D A161	542	260	65	282	0	1271	1215	0.214	260	562	0.3	0.3	4.351	A
	E M62 Southbound On Ramp						884				647				
3W Site 3	A A614 Rawcliffe Road (West)	1031		258			707	1371	0.752	1030	1332	3.1	3.2	11.464	B
	B M62 Northbound On Ramp						1356				381				
	C Link	872		218			0	1574	0.554	872	1356	1.3	1.4	5.673	A
	D M62 Northbound Off Ramp	1167		292			872	2311	0.505	1167	0	1.2	1.2	3.868	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1113	1113	278	0	0	10	2349	0.474	1116	715	1.6	1.1	3.399	A
	B M62 Southbound Off Ramp	448	448	112	0	0	1125	949	0.472	452	0	2.0	1.0	7.970	A
	C A614 Rawcliffe Road (East)	507	507	127	0	0	998	1900	0.267	508	579	0.6	0.4	2.824	A
	D A161	442	212	53	230	0	1043	1340	0.158	213	463	0.3	0.2	3.693	A
	E M62 Southbound On Ramp						725				531				
3W Site 3	A A614 Rawcliffe Road (West)	841		210			579	1445	0.582	848	1093	3.2	1.5	6.629	A
	B M62 Northbound On Ramp						1113				313				
	C Link	715		179			0	1574	0.454	717	1113	1.4	0.9	4.658	A
	D M62 Northbound Off Ramp	953		238			717	2424	0.393	955	0	1.2	0.8	3.015	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	930	930	232	0	0	8	2350	0.396	931	598	1.1	0.8	2.954	A
	B M62 Southbound Off Ramp	375	375	94	0	0	939	1033	0.363	376	0	1.0	0.6	6.002	A
	C A614 Rawcliffe Road (East)	425	425	106	0	0	832	2004	0.212	425	483	0.4	0.3	2.487	A
	D A161	370	178	44	193	0	871	1433	0.124	178	386	0.2	0.2	3.315	A
	E M62 Southbound On Ramp						606				444				
3W Site 3	A A614 Rawcliffe Road (West)	705		176			484	1500	0.470	707	913	1.5	1.0	4.948	A
	B M62 Northbound On Ramp						930				261				
	C Link	598		149			0	1574	0.380	598	930	0.9	0.7	4.089	A
	D M62 Northbound Off Ramp	798		200			598	2511	0.318	799	0	0.8	0.6	2.586	A

2026 Future Baseline + Drax, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	3W - Site 3 - C - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	3E - Site 3 - A - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	4.62	A
3W	Site 3	Standard Roundabout		B, C, D, A	9.74	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.19	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2026 Future Baseline + Drax	PM	ONE HOUR	16 15	17 45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Simple (vertical queueing)	Normal	0	100.00	
3W Site 3	C Link	3E	A	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	313	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	719	100.000
	D A161		ONE HOUR	✓	494	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	1026	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	936	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	254	772	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	687	193	0	0
	D M62 Northbound Off Ramp	428	0	508	0

Proportions

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0.00	0.25	0.75	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.78	0.22	0.00	0.00
	D M62 Northbound Off Ramp	0.46	0.00	0.54	0.00

Demand (PCU/hr)

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0	0	593	357	330
	B M62 Southbound Off Ramp	183	0	58	71	1
	C A614 Rawcliffe Road (East)	414	0	3	35	267
	D A161	283	0	11	5	195
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0.00	0.00	0.46	0.28	0.26
	B M62 Southbound Off Ramp	0.58	0.00	0.19	0.23	0.00
	C A614 Rawcliffe Road (East)	0.58	0.00	0.00	0.05	0.37
	D A161	0.57	0.00	0.02	0.01	0.39
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	12	5	0
	B M62 Northbound On Ramp	0	0	0	0

Average PCU Per Veh

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	1.000	1.120	1.045	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000

C Link	6	6	0	0
D M62 Northbound Off Ramp	22	0	13	0

C Link	1.055	1.062	1.000	1.000
D M62 Northbound Off Ramp	1.220	1.000	1.126	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	5	15	19
	B M62 Southbound Off Ramp	13	0	15	19	0
	C A614 Rawcliffe Road (East)	2	0	0	20	7
	D A161	6	0	33	67	22
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.052	1.145	1.186
	B M62 Southbound Off Ramp	1.129	1.000	1.146	1.190	1.000
	C A614 Rawcliffe Road (East)	1.019	1.000	1.000	1.200	1.066
	D A161	1.062	1.000	1.333	1.667	1.219
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	16:15 16:30	964	964
		16:30 16:45	1151	1151
		16:45 17:00	1409	1409
		17:00 17:15	1409	1409
		17:15 17:30	1151	1151
	B M62 Southbound Off Ramp	17:30 17:45	964	964
		16:15 16:30	236	236
		16:30 16:45	281	281
		16:45 17:00	345	345
		17:00 17:15	345	345
	C A614 Rawcliffe Road (East)	17:15 17:30	281	281
		17:30 17:45	236	236
		16:15 16:30	541	541
		16:30 16:45	646	646
		16:45 17:00	792	792
	D A161	17:00 17:15	792	792
		17:15 17:30	646	646
		17:30 17:45	541	541
		16:15 16:30	372	372
		16:30 16:45	444	444
	E M62 Southbound On Ramp	16:45 17:00	544	544
		17:00 17:15	544	544
		17:15 17:30	444	444
		17:30 17:45	372	372
		16:15 16:30	0	0
3W Site 3	A A614 Rawcliffe Road (West)	16:30 16:45	0	0
		16:45 17:00	0	0
		17:00 17:15	0	0
		17:15 17:30	0	0
		17:30 17:45	0	0
	B M62 Northbound On Ramp	16:15 16:30	772	772
		16:30 16:45	922	922
		16:45 17:00	1130	1130
		17:00 17:15	1130	1130
		17:15 17:30	922	922
	C Link	17:30 17:45	772	772
		16:15 16:30	0	0
		16:30 16:45	0	0
		16:45 17:00	0	0
		17:00 17:15	0	0
	D M62 Northbound Off Ramp	17:15 17:30	0	0
		17:30 17:45	0	0
		16:15 16:30	663	663
		16:30 16:45	791	791
		16:45 17:00	969	969
	E M62 Southbound On Ramp	17:00 17:15	969	969
		17:15 17:30	791	791
		17:30 17:45	663	663
		16:15 16:30	705	705
		16:30 16:45	841	841
A A614 Rawcliffe Road (West)	16:45 17:00	1031	1031	
	17:00 17:15	1031	1031	
	17:15 17:30	841	841	
	17:30 17:45	705	705	
	16:15 16:30	0	0	

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.60	4.27	1.7	A	1174	1761
	B M62 Southbound Off Ramp	0.42	8.81	0.8	A	287	431
	C A614 Rawcliffe Road (East)	0.42	3.48	0.8	A	660	990
	D A161	0.28	4.50	0.4	A	453	412
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	0.85	18.42	5.5	C	941	1412
	B M62 Northbound On Ramp						
	C Link	0.62	6.28	1.7	A	807	1211
	D M62 Northbound Off Ramp	0.46	3.47	1.0	A	859	1288
	E M62 Southbound On Ramp						

Main Results for each time segment

16:15 - 16:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	959	959	240	0	0	14	2347	0.409	956	660	0.0	0.8	2.866	A
	B M62 Southbound Off Ramp	236	236	59	0	0	970	1019	0.231	234	0	0.0	0.3	5.245	A
	C A614 Rawcliffe Road (East)	541	541	135	0	0	708	2082	0.260	540	497	0.0	0.4	2.434	A
	D A161	372	225	56	147	0	898	1419	0.159	224	350	0.0	0.2	3.243	A
	E M62 Southbound On Ramp						674				448				
3W Site 3	A A614 Rawcliffe Road (West)	772		193			526	1476	0.523	768	834	0.0	1.2	5.367	A
	B M62 Northbound On Ramp						959				334				
	C Link	660		165			0	1574	0.419	657	959	0.0	0.8	4.135	A
	D M62 Northbound Off Ramp	705		176			657	2468	0.286	703	0	0.0	0.5	2.378	A

16:30 - 16:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1148	1148	287	0	0	17	2345	0.490	1147	790	0.8	1.1	3.330	A
	B M62 Southbound Off Ramp	281	281	70	0	0	1164	932	0.302	281	0	0.3	0.5	6.325	A
	C A614 Rawcliffe Road (East)	646	646	162	0	0	849	1993	0.324	646	596	0.4	0.5	2.786	A
	D A161	444	269	67	175	0	1075	1322	0.203	269	419	0.2	0.3	3.677	A
	E M62 Southbound On Ramp						807				536				
3W Site 3	A A614 Rawcliffe Road (West)	922		231			629	1416	0.651	919	1000	1.2	1.9	7.652	A
	B M62 Northbound On Ramp						1148				401				
	C Link	790		198			0	1574	0.502	789	1148	0.8	1.1	4.838	A
	D M62 Northbound Off Ramp	841		210			789	2371	0.355	841	0	0.5	0.6	2.743	A

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1399	1399	350	0	0	21	2343	0.597	1396	967	1.1	1.6	4.210	A
	B M62 Southbound Off Ramp	345	345	86	0	0	1417	818	0.421	343	0	0.5	0.8	8.659	A
	C A614 Rawcliffe Road (East)	792	792	198	0	0	1035	1877	0.422	791	726	0.5	0.8	3.456	A
	D A161	544	329	82	215	0	1314	1192	0.276	329	511	0.3	0.4	4.485	A
	E M62 Southbound On Ramp						988				655				
3W Site 3	A A614 Rawcliffe Road (West)	1130		282			770	1334	0.847	1116	1224	1.9	5.2	16.644	C
	B M62 Northbound On Ramp						1399				488				
	C Link	967		242			0	1574	0.614	965	1399	1.1	1.7	6.216	A
	D M62 Northbound Off Ramp	1031		258			965	2243	0.460	1029	0	0.6	1.0	3.460	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1408	1408	352	0	0	21	2343	0.601	1408	969	1.6	1.7	4.273	A
	B M62 Southbound Off Ramp	345	345	86	0	0	1429	813	0.424	345	0	0.8	0.8	8.806	A
	C A614 Rawcliffe Road (East)	792	792	198	0	0	1042	1872	0.423	792	732	0.8	0.8	3.477	A
	D A161	544	329	82	215	0	1319	1189	0.277	329	515	0.4	0.4	4.504	A
	E M62 Southbound On Ramp						990				658				
3W Site 3	A A614 Rawcliffe Road (West)	1130		282			772	1333	0.847	1128	1228	5.2	5.5	18.420	C
	B M62 Northbound On Ramp						1408				492				
	C Link	969		242			0	1574	0.615	969	1408	1.7	1.7	6.281	A
	D M62 Northbound Off Ramp	1031		258			969	2239	0.460	1031	0	1.0	1.0	3.474	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1162	1162	290	0	0	17	2345	0.495	1164	793	1.7	1.1	3.390	A
	B M62 Southbound Off Ramp	281	281	70	0	0	1181	924	0.305	283	0	0.8	0.5	6.438	A
	C A614 Rawcliffe Road (East)	646	646	162	0	0	860	1987	0.325	647	604	0.8	0.5	2.807	A
	D A161	444	269	67	175	0	1082	1318	0.204	269	425	0.4	0.3	3.695	A
	E M62 Southbound On Ramp						810				542				
3W Site 3	A A614 Rawcliffe Road (West)	922		231			632	1415	0.652	936	1006	5.5	2.0	8.225	A
	B M62 Northbound On Ramp						1162				406				
	C Link	793		198			0	1574	0.504	795	1162	1.7	1.1	4.900	A
	D M62 Northbound Off Ramp	841		210			795	2367	0.356	843	0	1.0	0.6	2.761	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	967	967	242	0	0	14	2347	0.412	968	663	1.1	0.8	2.898	A
	B M62 Southbound Off Ramp	236	236	59	0	0	982	1014	0.233	236	0	0.5	0.3	5.306	A
	C A614 Rawcliffe Road (East)	541	541	135	0	0	716	2077	0.261	542	503	0.5	0.4	2.447	A
	D A161	372	225	56	147	0	904	1415	0.159	225	354	0.3	0.2	3.258	A
	E M62 Southbound On Ramp						678				452				
3W Site 3	A A614 Rawcliffe Road (West)	772		193			529	1475	0.524	776	841	2.0	1.2	5.502	A
	B M62 Northbound On Ramp						967				338				
	C Link	663		166			0	1574	0.421	665	967	1.1	0.8	4.188	A
	D M62 Northbound Off Ramp	705		176			665	2462	0.286	705	0	0.6	0.5	2.391	A

2026 Do Minimum, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	3W - Site 3 - C - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	3E - Site 3 - A - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	65.69	F
3W	Site 3	Standard Roundabout		B, C, D, A	35.82	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	51.72	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2026 Do Minimum	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Simple (vertical queueing)	Normal	0	100.00	
3W Site 3	C Link	3E	A	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	680	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	756	100.000
	D A161		ONE HOUR	✓	601	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	1019	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	1367	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	248	771	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	733	162	0	0
	D M62 Northbound Off Ramp	439	1	927	0

Proportions

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0.00	0.24	0.76	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.82	0.18	0.00	0.00
	D M62 Northbound Off Ramp	0.32	0.00	0.68	0.00

Demand (PCU/hr)

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0	0	546	842	309
	B M62 Southbound Off Ramp	291	0	107	281	1
	C A614 Rawcliffe Road (East)	344	0	12	96	304
	D A161	260	0	12	17	312
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0.00	0.00	0.32	0.50	0.18
	B M62 Southbound Off Ramp	0.43	0.00	0.16	0.41	0.00
	C A614 Rawcliffe Road (East)	0.46	0.00	0.02	0.13	0.40
	D A161	0.43	0.00	0.02	0.03	0.52
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	13	8	0
	B M62 Northbound On Ramp	0	0	0	0

Average PCU Per Veh

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	1.000	1.125	1.076	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000

C Link	10	18	0	0
D M62 Northbound Off Ramp	26	0	20	0

C Link	1.096	1.176	1.000	1.000
D M62 Northbound Off Ramp	1.256	1.000	1.204	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	11	20	22
	B M62 Southbound Off Ramp	9	0	6	14	0
	C A614 Rawcliffe Road (East)	9	0	0	9	10
	D A161	15	0	50	100	33
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.108	1.198	1.222
	B M62 Southbound Off Ramp	1.087	1.000	1.060	1.143	1.000
	C A614 Rawcliffe Road (East)	1.087	1.000	1.000	1.091	1.097
	D A161	1.145	1.000	1.500	2.000	1.326
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	07:30 07:45	1278	1278
		07:45 08:00	1526	1526
		08:00 08:15	1868	1868
		08:15 08:30	1868	1868
		08:30 08:45	1526	1526
	08:45 09:00	1278	1278	
	B M62 Southbound Off Ramp	07:30 07:45	512	512
		07:45 08:00	611	611
		08:00 08:15	749	749
		08:15 08:30	749	749
		08:30 08:45	611	611
	08:45 09:00	512	512	
	C A614 Rawcliffe Road (East)	07:30 07:45	569	569
		07:45 08:00	680	680
		08:00 08:15	832	832
		08:15 08:30	832	832
		08:30 08:45	680	680
	08:45 09:00	569	569	
	D A161	07:30 07:45	452	452
		07:45 08:00	540	540
08:00 08:15		662	662	
08:15 08:30		662	662	
08:30 08:45		540	540	
08:45 09:00	452	452		
E M62 Southbound On Ramp	07:30 07:45	0	0	
	07:45 08:00	0	0	
	08:00 08:15	0	0	
	08:15 08:30	0	0	
	08:30 08:45	0	0	
08:45 09:00	0	0		
3W Site 3	A A614 Rawcliffe Road (West)	07:30 07:45	767	767
		07:45 08:00	916	916
		08:00 08:15	1122	1122
		08:15 08:30	1122	1122
		08:30 08:45	916	916
	08:45 09:00	767	767	
	B M62 Northbound On Ramp	07:30 07:45	0	0
		07:45 08:00	0	0
		08:00 08:15	0	0
		08:15 08:30	0	0
		08:30 08:45	0	0
	08:45 09:00	0	0	
	C Link	07:30 07:45	674	674
		07:45 08:00	805	805
		08:00 08:15	985	985
		08:15 08:30	985	985
		08:30 08:45	805	805
	08:45 09:00	674	674	
	D M62 Northbound Off Ramp	07:30 07:45	1029	1029
		07:45 08:00	1229	1229
08:00 08:15		1505	1505	
08:15 08:30		1505	1505	
08:30 08:45		1229	1229	
08:45 09:00	1029	1029		

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.79	8.48	4.2	A	1557	2335
	B M62 Southbound Off Ramp	1.23	327.66	72.6	F	624	936
	C A614 Rawcliffe Road (East)	0.59	6.78	1.5	A	694	1041
	D A161	0.27	4.91	0.4	A	551	398
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	1.03	102.23	33.3	F	935	1403
	B M62 Northbound On Ramp						
	C Link	0.59	6.16	1.6	A	820	1231
	D M62 Northbound Off Ramp	0.66	5.73	2.4	A	1254	1882

Main Results for each time segment

07:30 - 07:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1271	1271	318	0	0	31	2337	0.544	1266	669	0.0	1.4	3.917	A
	B M62 Southbound Off Ramp	512	512	128	0	0	1297	872	0.587	506	0	0.0	1.5	10.684	B
	C A614 Rawcliffe Road (East)	569	569	142	0	0	1298	1711	0.333	567	505	0.0	0.5	3.423	A
	D A161	452	218	54	235	0	943	1394	0.156	217	922	0.0	0.2	3.626	A
	E M62 Southbound On Ramp						700				459				
3W Site 3	A A614 Rawcliffe Road (West)	767		192			817	1307	0.587	761	875	0.0	1.5	7.095	A
	B M62 Northbound On Ramp						1271				307				
	C Link	669		167			0	1574	0.425	666	1271	0.0	0.8	4.385	A
	D M62 Northbound Off Ramp	1029		257			666	2461	0.418	1026	0	0.0	0.9	3.050	A

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1520	1520	380	0	0	37	2333	0.652	1517	799	1.4	2.2	5.149	A
	B M62 Southbound Off Ramp	611	611	153	0	0	1554	757	0.808	601	0	1.5	4.1	24.133	C
	C A614 Rawcliffe Road (East)	680	680	170	0	0	1551	1552	0.438	678	604	0.5	0.8	4.483	A
	D A161	540	260	65	280	0	1127	1294	0.201	259	1103	0.2	0.3	4.128	A
	E M62 Southbound On Ramp						836				550				
3W Site 3	A A614 Rawcliffe Road (West)	916		229			978	1214	0.755	909	1048	1.5	3.2	12.601	B
	B M62 Northbound On Ramp						1520				367				
	C Link	799		200			0	1574	0.508	798	1520	0.8	1.1	5.140	A
	D M62 Northbound Off Ramp	1229		307			798	2365	0.520	1227	0	0.9	1.3	3.855	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1811	1811	453	0	0	45	2328	0.778	1804	926	2.2	4.0	7.940	A
	B M62 Southbound Off Ramp	749	749	187	0	0	1849	624	1.200	613	0	4.1	37.9	140.963	F
	C A614 Rawcliffe Road (East)	832	832	208	0	0	1759	1421	0.586	830	703	0.8	1.5	6.804	A
	D A161	662	318	80	344	0	1316	1191	0.267	318	1273	0.3	0.4	4.889	A
	E M62 Southbound On Ramp						971				663				
3W Site 3	A A614 Rawcliffe Road (West)	1122		280			1186	1092	1.027	1049	1239	3.2	21.4	55.367	F
	B M62 Northbound On Ramp						1811				424				
	C Link	926		231			0	1574	0.588	924	1811	1.1	1.6	6.131	A
	D M62 Northbound Off Ramp	1505		376			924	2272	0.662	1501	0	1.3	2.4	5.663	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1834	1834	458	0	0	45	2328	0.788	1833	926	4.0	4.2	8.481	A
	B M62 Southbound Off Ramp	749	749	187	0	0	1878	611	1.225	610	0	37.9	72.6	327.660	F
	C A614 Rawcliffe Road (East)	832	832	208	0	0	1776	1411	0.590	832	712	1.5	1.5	6.779	A
	D A161	662	318	80	344	0	1322	1188	0.268	318	1286	0.4	0.4	4.913	A
	E M62 Southbound On Ramp						971				669				
3W Site 3	A A614 Rawcliffe Road (West)	1122		280			1189	1091	1.029	1075	1242	21.4	33.3	102.226	F
	B M62 Northbound On Ramp						1834				430				
	C Link	926		231			0	1574	0.588	926	1834	1.6	1.6	6.163	A
	D M62 Northbound Off Ramp	1505		376			926	2271	0.663	1505	0	2.4	2.4	5.731	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1619	1619	405	0	0	37	2333	0.694	1625	843	4.2	2.7	6.004	A
	B M62 Southbound Off Ramp	611	611	153	0	0	1662	708	0.863	698	0	72.6	51.0	313.154	F
	C A614 Rawcliffe Road (East)	680	680	170	0	0	1705	1455	0.467	682	654	1.5	1.0	5.090	A
	D A161	540	260	65	280	0	1191	1259	0.206	260	1196	0.4	0.3	4.280	A
	E M62 Southbound On Ramp						880				571				
3W Site 3	A A614 Rawcliffe Road (West)	916		229			990	1207	0.759	1034	1087	33.3	3.7	35.429	E
	B M62 Northbound On Ramp						1619				405				
	C Link	843		211			0	1574	0.536	844	1619	1.6	1.3	5.481	A
	D M62 Northbound Off Ramp	1229		307			844	2331	0.527	1233	0	2.4	1.4	4.013	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1286	1286	321	0	0	31	2337	0.550	1291	759	2.7	1.4	4.051	A
	B M62 Southbound Off Ramp	512	512	128	0	0	1322	861	0.595	709	0	51.0	1.7	66.756	F
	C A614 Rawcliffe Road (East)	569	569	142	0	0	1486	1593	0.357	571	545	1.0	0.6	3.844	A
	D A161	452	218	54	235	0	1038	1343	0.162	218	1019	0.3	0.2	3.798	A
	E M62 Southbound On Ramp						790				466				
3W Site 3	A A614 Rawcliffe Road (West)	767		192			838	1295	0.592	776	954	3.7	1.6	7.656	A
	B M62 Northbound On Ramp						1286				327				
	C Link	759		190			0	1574	0.482	760	1286	1.3	1.0	4.916	A
	D M62 Northbound Off Ramp	1029		257			760	2392	0.430	1031	0	1.4	0.9	3.231	A

2026 Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	3W - Site 3 - C - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	3E - Site 3 - A - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	6.73	A
3W	Site 3	Standard Roundabout		B, C, D, A	31.50	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	18.11	C

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2026 Do Minimum	PM	ONE HOUR	16 15	17 45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Simple (vertical queueing)	Normal	0	100.00	
3W Site 3	C Link	3E	A	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	385	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	922	100.000
	D A161		ONE HOUR	✓	1108	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	1047	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	1031	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	270	777	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	779	376	0	0
	D M62 Northbound Off Ramp	416	0	615	0

Proportions

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0.00	0.26	0.74	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.67	0.33	0.00	0.00
	D M62 Northbound Off Ramp	0.40	0.00	0.60	0.00

Demand (PCU/hr)

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0	0	659	443	291
	B M62 Southbound Off Ramp	198	0	79	107	1
	C A614 Rawcliffe Road (East)	491	0	34	74	323
	D A161	466	0	54	25	563
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0.00	0.00	0.47	0.32	0.21
	B M62 Southbound Off Ramp	0.51	0.00	0.21	0.28	0.00
	C A614 Rawcliffe Road (East)	0.53	0.00	0.04	0.08	0.35
	D A161	0.42	0.00	0.05	0.02	0.51
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	12	5	0
	B M62 Northbound On Ramp	0	0	0	0

Average PCU Per Veh

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	1.000	1.120	1.045	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000

C Link	6	6	0	0
D M62 Northbound Off Ramp	22	0	13	0

C Link	1.055	1.062	1.000	1.000
D M62 Northbound Off Ramp	1.220	1.000	1.126	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	5	15	19
	B M62 Southbound Off Ramp	13	0	15	19	0
	C A614 Rawcliffe Road (East)	2	0	0	20	7
	D A161	6	0	33	67	22
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.052	1.145	1.186
	B M62 Southbound Off Ramp	1.129	1.000	1.146	1.190	1.000
	C A614 Rawcliffe Road (East)	1.019	1.000	1.000	1.200	1.066
	D A161	1.062	1.000	1.333	1.667	1.219
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	16:15 16:30	1049	1049
		16:30 16:45	1252	1252
		16:45 17:00	1534	1534
		17:00 17:15	1534	1534
		17:15 17:30	1252	1252
		17:30 17:45	1049	1049
	B M62 Southbound Off Ramp	16:15 16:30	290	290
		16:30 16:45	346	346
		16:45 17:00	424	424
		17:00 17:15	424	424
		17:15 17:30	346	346
		17:30 17:45	290	290
	C A614 Rawcliffe Road (East)	16:15 16:30	694	694
		16:30 16:45	829	829
		16:45 17:00	1015	1015
		17:00 17:15	1015	1015
		17:15 17:30	829	829
		17:30 17:45	694	694
	D A161	16:15 16:30	834	834
		16:30 16:45	996	996
		16:45 17:00	1220	1220
		17:00 17:15	1220	1220
		17:15 17:30	996	996
		17:30 17:45	834	834
E M62 Southbound On Ramp	16:15 16:30	0	0	
	16:30 16:45	0	0	
	16:45 17:00	0	0	
	17:00 17:15	0	0	
	17:15 17:30	0	0	
	17:30 17:45	0	0	
3W Site 3	A A614 Rawcliffe Road (West)	16:15 16:30	788	788
		16:30 16:45	941	941
		16:45 17:00	1153	1153
		17:00 17:15	1153	1153
		17:15 17:30	941	941
		17:30 17:45	788	788
	B M62 Northbound On Ramp	16:15 16:30	0	0
		16:30 16:45	0	0
		16:45 17:00	0	0
		17:00 17:15	0	0
		17:15 17:30	0	0
		17:30 17:45	0	0
	C Link	16:15 16:30	870	870
		16:30 16:45	1038	1038
		16:45 17:00	1272	1272
		17:00 17:15	1272	1272
		17:15 17:30	1038	1038
		17:30 17:45	870	870
	D M62 Northbound Off Ramp	16:15 16:30	776	776
		16:30 16:45	927	927
		16:45 17:00	1135	1135
		17:00 17:15	1135	1135
		17:15 17:30	927	927
		17:30 17:45	776	776

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.66	5.16	2.1	A	1276	1914
	B M62 Southbound Off Ramp	0.59	13.88	1.6	B	353	530
	C A614 Rawcliffe Road (East)	0.56	4.81	1.3	A	846	1269
	D A161	0.54	7.81	1.3	A	1017	750
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	1.00	78.83	25.4	F	961	1441
	B M62 Northbound On Ramp						
	C Link	0.81	12.48	4.3	B	1059	1589
	D M62 Northbound Off Ramp	0.56	4.74	1.5	A	946	1419

Main Results for each time segment

16:15 - 16:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1042	1042	261	0	0	85	2304	0.452	1039	866	0.0	0.9	3.140	A
	B M62 Southbound Off Ramp	290	290	72	0	0	1123	950	0.305	288	0	0.0	0.5	6.223	A
	C A614 Rawcliffe Road (East)	694	694	174	0	0	795	2027	0.342	692	616	0.0	0.5	2.817	A
	D A161	834	410	103	424	0	1002	1362	0.301	408	485	0.0	0.5	4.154	A
	E M62 Southbound On Ramp						950				460				
3W Site 3	A A614 Rawcliffe Road (West)	788		197			742	1351	0.584	782	893	0.0	1.5	6.671	A
	B M62 Northbound On Ramp						1042				482				
	C Link	866		216			0	1574	0.550	861	1042	0.0	1.3	5.299	A
	D M62 Northbound Off Ramp	776		194			861	2319	0.335	774	0	0.0	0.6	2.704	A

16:30 - 16:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1246	1246	312	0	0	101	2294	0.543	1245	1036	0.9	1.3	3.794	A
	B M62 Southbound Off Ramp	346	346	87	0	0	1346	850	0.407	345	0	0.5	0.8	8.170	A
	C A614 Rawcliffe Road (East)	829	829	207	0	0	953	1928	0.430	828	739	0.5	0.8	3.422	A
	D A161	996	490	122	506	0	1200	1254	0.391	489	581	0.5	0.7	5.180	A
	E M62 Southbound On Ramp						1138				551				
3W Site 3	A A614 Rawcliffe Road (West)	941		235			889	1265	0.744	935	1071	1.5	2.9	11.400	B
	B M62 Northbound On Ramp						1246				578				
	C Link	1036		259			0	1574	0.658	1034	1246	1.3	2.0	7.004	A
	D M62 Northbound Off Ramp	927		232			1034	2192	0.423	926	0	0.6	0.8	3.300	A

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1488	1488	372	0	0	124	2280	0.653	1485	1267	1.3	2.0	4.992	A
	B M62 Southbound Off Ramp	424	424	106	0	0	1609	732	0.579	421	0	0.8	1.5	13.168	B
	C A614 Rawcliffe Road (East)	1015	1015	254	0	0	1144	1808	0.562	1013	885	0.8	1.3	4.733	A
	D A161	1220	600	150	620	0	1460	1113	0.539	598	698	0.7	1.3	7.672	A
	E M62 Southbound On Ramp						1391				666				
3W Site 3	A A614 Rawcliffe Road (West)	1153		288			1085	1151	1.002	1094	1306	2.9	17.5	45.881	E
	B M62 Northbound On Ramp						1488				692				
	C Link	1267		317			0	1574	0.805	1259	1488	2.0	4.1	11.756	B
	D M62 Northbound Off Ramp	1135		284			1259	2027	0.560	1133	0	0.8	1.5	4.664	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1509	1509	377	0	0	124	2280	0.662	1509	1271	2.0	2.1	5.164	A
	B M62 Southbound Off Ramp	424	424	106	0	0	1633	721	0.588	424	0	1.5	1.6	13.881	B
	C A614 Rawcliffe Road (East)	1015	1015	254	0	0	1159	1798	0.565	1015	898	1.3	1.3	4.813	A
	D A161	1220	600	150	620	0	1466	1108	0.541	600	707	1.3	1.3	7.806	A
	E M62 Southbound On Ramp						1396				672				
3W Site 3	A A614 Rawcliffe Road (West)	1153		288			1091	1148	1.004	1121	1315	17.5	25.4	78.835	F
	B M62 Northbound On Ramp						1509				703				
	C Link	1271		318			0	1574	0.808	1271	1509	4.1	4.3	12.476	B
	D M62 Northbound Off Ramp	1135		284			1271	2018	0.562	1135	0	1.5	1.5	4.736	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1318	1318	330	0	0	102	2293	0.575	1321	1043	2.1	1.5	4.109	A
	B M62 Southbound Off Ramp	346	346	87	0	0	1423	815	0.425	349	0	1.6	0.9	8.920	A
	C A614 Rawcliffe Road (East)	829	829	207	0	0	996	1901	0.436	831	776	1.3	0.8	3.529	A
	D A161	996	490	122	506	0	1221	1243	0.394	492	606	1.3	0.7	5.304	A
	E M62 Southbound On Ramp						1145				568				
3W Site 3	A A614 Rawcliffe Road (West)	941		235			897	1261	0.747	1030	1084	25.4	3.3	22.464	C
	B M62 Northbound On Ramp						1318				608				
	C Link	1043		261			0	1574	0.663	1052	1318	4.3	2.1	7.401	A
	D M62 Northbound Off Ramp	927		232			1052	2179	0.425	929	0	1.5	0.9	3.353	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1054	1054	264	0	0	85	2304	0.458	1056	872	1.5	0.9	3.199	A
	B M62 Southbound Off Ramp	290	290	72	0	0	1142	942	0.308	291	0	0.9	0.5	6.368	A
	C A614 Rawcliffe Road (East)	694	694	174	0	0	807	2020	0.344	695	626	0.8	0.6	2.849	A
	D A161	834	410	103	424	0	1011	1357	0.302	411	492	0.7	0.5	4.200	A
	E M62 Southbound On Ramp						957				465				
3W Site 3	A A614 Rawcliffe Road (West)	788		197			748	1347	0.585	795	904	3.3	1.5	7.035	A
	B M62 Northbound On Ramp						1054				490				
	C Link	872		218			0	1574	0.554	875	1054	2.1	1.3	5.469	A
	D M62 Northbound Off Ramp	776		194			875	2308	0.336	777	0	0.9	0.6	2.733	A

2026 Do Something, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	3W - Site 3 - C - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	3E - Site 3 - A - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	77.22	F
3W	Site 3	Standard Roundabout		B, C, D, A	42.97	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	60.91	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2026 Do Something	AM	ONE HOUR	07 30	09 00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Simple (vertical queueing)	Normal	0	100.00	
3W Site 3	C Link	3E	A	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	692	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	756	100.000
	D A161		ONE HOUR	✓	601	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	1045	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	1478	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	248	797	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	745	162	0	0
	D M62 Northbound Off Ramp	550	1	927	0

Proportions

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0.00	0.24	0.76	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.82	0.18	0.00	0.00
	D M62 Northbound Off Ramp	0.37	0.00	0.63	0.00

Demand (PCU/hr)

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0	0	546	842	335
	B M62 Southbound Off Ramp	303	0	107	281	1
	C A614 Rawcliffe Road (East)	344	0	12	96	304
	D A161	260	0	12	17	312
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

From	To	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0.00	0.00	0.32	0.49	0.19
	B M62 Southbound Off Ramp	0.44	0.00	0.15	0.41	0.00
	C A614 Rawcliffe Road (East)	0.46	0.00	0.02	0.13	0.40
	D A161	0.43	0.00	0.02	0.03	0.52
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	13	8	0
	B M62 Northbound On Ramp	0	0	0	0

Average PCU Per Veh

From	To	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	1.000	1.125	1.076	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000

C Link	10	18	0	0
D M62 Northbound Off Ramp	26	0	20	0

C Link	1.096	1.176	1.000	1.000
D M62 Northbound Off Ramp	1.256	1.000	1.204	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	11	20	22
	B M62 Southbound Off Ramp	9	0	6	14	0
	C A614 Rawcliffe Road (East)	9	0	0	9	10
	D A161	15	0	50	100	33
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.108	1.198	1.222
	B M62 Southbound Off Ramp	1.087	1.000	1.060	1.143	1.000
	C A614 Rawcliffe Road (East)	1.087	1.000	1.000	1.091	1.097
	D A161	1.145	1.000	1.500	2.000	1.326
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	07:30 07:45	1297	1297
		07:45 08:00	1549	1549
		08:00 08:15	1897	1897
		08:15 08:30	1897	1897
		08:30 08:45	1549	1549
	08:45 09:00	1297	1297	
	B M62 Southbound Off Ramp	07:30 07:45	521	521
		07:45 08:00	622	622
		08:00 08:15	762	762
		08:15 08:30	762	762
		08:30 08:45	622	622
	08:45 09:00	521	521	
	C A614 Rawcliffe Road (East)	07:30 07:45	569	569
		07:45 08:00	680	680
		08:00 08:15	832	832
		08:15 08:30	832	832
		08:30 08:45	680	680
	08:45 09:00	569	569	
	D A161	07:30 07:45	452	452
		07:45 08:00	540	540
08:00 08:15		662	662	
08:15 08:30		662	662	
08:30 08:45		540	540	
08:45 09:00	452	452		
E M62 Southbound On Ramp	07:30 07:45	0	0	
	07:45 08:00	0	0	
	08:00 08:15	0	0	
	08:15 08:30	0	0	
	08:30 08:45	0	0	
08:45 09:00	0	0		
3W Site 3	A A614 Rawcliffe Road (West)	07:30 07:45	787	787
		07:45 08:00	939	939
		08:00 08:15	1151	1151
		08:15 08:30	1151	1151
		08:30 08:45	939	939
	08:45 09:00	787	787	
	B M62 Northbound On Ramp	07:30 07:45	0	0
		07:45 08:00	0	0
		08:00 08:15	0	0
		08:15 08:30	0	0
		08:30 08:45	0	0
	08:45 09:00	0	0	
	C Link	07:30 07:45	683	683
		07:45 08:00	815	815
		08:00 08:15	999	999
		08:15 08:30	999	999
		08:30 08:45	815	815
	08:45 09:00	683	683	
	D M62 Northbound Off Ramp	07:30 07:45	1113	1113
		07:45 08:00	1329	1329
08:00 08:15		1627	1627	
08:15 08:30		1627	1627	
08:30 08:45		1329	1329	
08:45 09:00	1113	1113		

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.79	8.70	4.3	A	1581	2371
	B M62 Southbound Off Ramp	1.26	387.35	82.1	F	635	952
	C A614 Rawcliffe Road (East)	0.59	6.89	1.6	A	694	1041
	D A161	0.27	5.00	0.4	A	551	398
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	1.05	125.92	43.4	F	959	1438
	B M62 Northbound On Ramp						
	C Link	0.59	6.20	1.6	A	831	1247
	D M62 Northbound Off Ramp	0.72	6.86	3.1	A	1356	2034

Main Results for each time segment

07:30 - 07:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1290	1290	323	0	0	31	2337	0.552	1285	678	0.0	1.4	3.990	A
	B M62 Southbound Off Ramp	521	521	130	0	0	1315	864	0.603	514	0	0.0	1.6	11.183	B
	C A614 Rawcliffe Road (East)	569	569	142	0	0	1325	1694	0.336	567	505	0.0	0.5	3.476	A
	D A161	452	218	54	235	0	971	1379	0.158	217	921	0.0	0.2	3.674	A
	E M62 Southbound On Ramp						709				479				
3W Site 3	A A614 Rawcliffe Road (West)	787		197			817	1307	0.602	780	967	0.0	1.6	7.344	A
	B M62 Northbound On Ramp						1290				307				
	C Link	678		170			0	1574	0.431	675	1290	0.0	0.8	4.427	A
	D M62 Northbound Off Ramp	1113		278			675	2455	0.453	1109	0	0.0	1.0	3.259	A

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1543	1543	386	0	0	37	2333	0.661	1539	809	1.4	2.2	5.294	A
	B M62 Southbound Off Ramp	622	622	156	0	0	1576	747	0.833	610	0	1.6	4.7	26.976	D
	C A614 Rawcliffe Road (East)	680	680	170	0	0	1582	1532	0.444	678	604	0.5	0.9	4.588	A
	D A161	540	260	65	280	0	1159	1276	0.204	259	1101	0.2	0.3	4.201	A
	E M62 Southbound On Ramp						846				573				
3W Site 3	A A614 Rawcliffe Road (West)	939		235			977	1214	0.774	932	1157	1.6	3.5	13.530	B
	B M62 Northbound On Ramp						1543				366				
	C Link	809		202			0	1574	0.514	808	1543	0.8	1.2	5.205	A
	D M62 Northbound Off Ramp	1329		332			808	2357	0.564	1327	0	1.0	1.6	4.258	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1825	1825	456	0	0	45	2328	0.784	1818	930	2.2	4.1	8.151	A
	B M62 Southbound Off Ramp	762	762	190	0	0	1863	618	1.233	609	0	4.7	42.8	157.787	F
	C A614 Rawcliffe Road (East)	832	832	208	0	0	1776	1411	0.590	830	697	0.9	1.5	6.721	A
	D A161	662	318	80	344	0	1345	1175	0.271	318	1290	0.3	0.4	4.980	A
	E M62 Southbound On Ramp						975				688				
3W Site 3	A A614 Rawcliffe Road (West)	1151		288			1184	1094	1.052	1060	1366	3.5	26.2	63.767	F
	B M62 Northbound On Ramp						1825				419				
	C Link	930		233			0	1574	0.591	928	1825	1.2	1.6	6.171	A
	D M62 Northbound Off Ramp	1627		407			928	2269	0.717	1622	0	1.6	3.0	6.737	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1846	1846	461	0	0	45	2328	0.793	1845	930	4.1	4.3	8.697	A
	B M62 Southbound Off Ramp	762	762	190	0	0	1890	606	1.258	605	0	4.8	82.1	371.985	F
	C A614 Rawcliffe Road (East)	832	832	208	0	0	1790	1402	0.594	832	704	1.5	1.6	6.887	A
	D A161	662	318	80	344	0	1351	1172	0.272	318	1271	0.4	0.4	5.003	A
	E M62 Southbound On Ramp						975				694				
3W Site 3	A A614 Rawcliffe Road (West)	1151		288			1188	1091	1.054	1082	1369	26.2	43.4	125.920	F
	B M62 Northbound On Ramp						1846				424				
	C Link	930		232			0	1574	0.591	930	1846	1.6	1.6	6.198	A
	D M62 Northbound Off Ramp	1627		407			930	2268	0.718	1627	0	3.0	3.1	6.861	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1673	1673	418	0	0	37	2333	0.717	1678	840	4.3	3.0	6.491	A
	B M62 Southbound Off Ramp	622	622	156	0	0	1715	684	0.909	675	0	82.1	68.8	387.349	F
	C A614 Rawcliffe Road (East)	680	680	170	0	0	1732	1438	0.473	682	658	1.6	1.0	5.204	A
	D A161	540	260	65	280	0	1218	1244	0.209	260	1196	0.4	0.3	4.345	A
	E M62 Southbound On Ramp						877				601				
3W Site 3	A A614 Rawcliffe Road (West)	939		235			988	1207	0.778	1096	1188	43.4	4.3	57.884	F
	B M62 Northbound On Ramp						1673				411				
	C Link	840		210			0	1574	0.534	841	1673	1.6	1.3	5.463	A
	D M62 Northbound Off Ramp	1329		332			841	2333	0.570	1334	0	3.1	1.6	4.433	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1307	1307	327	0	0	31	2337	0.559	1313	801	3.0	1.5	4.147	A
	B M62 Southbound Off Ramp	521	521	130	0	0	1344	851	0.612	788	0	68.8	2.0	136.644	F
	C A614 Rawcliffe Road (East)	569	569	142	0	0	1576	1536	0.371	571	556	1.0	0.6	4.069	A
	D A161	452	218	54	235	0	1100	1309	0.166	218	1047	0.3	0.2	3.916	A
	E M62 Southbound On Ramp						832				486				
3W Site 3	A A614 Rawcliffe Road (West)	787		197			843	1292	0.609	797	1073	4.3	1.7	8.074	A
	B M62 Northbound On Ramp						1307				333				
	C Link	801		200			0	1574	0.509	801	1307	1.3	1.2	5.173	A
	D M62 Northbound Off Ramp	1113		278			801	2362	0.471	1115	0	1.6	1.1	3.535	A

2026 Do Something, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3W - Site 3 - D - M62 Northbound Off-Ramp - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3W - Site 3 - A - A614 Rawcliffe Road (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3E - Site 3 - A - Link - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	3W - Site 3 - C - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	3E - Site 3 - A - Link	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
3E	Site 3	Standard Roundabout		B, C, D, E, A	7.02	A
3W	Site 3	Standard Roundabout		B, C, D, A	50.93	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	27.32	D

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2026 Do Something	PM	ONE HOUR	16 15	17 45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
3E Site 3	A Link	3W	C	Simple (vertical queueing)	Normal	0	100.00	
3W Site 3	C Link	3E	A	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O D data	Average Demand (PCU/hr)	Scaling Factor (%)
3E Site 3	A Link	✓				
	B M62 Southbound Off Ramp		ONE HOUR	✓	385	100.000
	C A614 Rawcliffe Road (East)		ONE HOUR	✓	922	100.000
	D A161		ONE HOUR	✓	1108	100.000
	E M62 Southbound On Ramp					
3W Site 3	A A614 Rawcliffe Road (West)		ONE HOUR	✓	1111	100.000
	B M62 Northbound On Ramp					
	C Link	✓				
	D M62 Northbound Off Ramp		ONE HOUR	✓	1057	100.000

Origin-Destination Data

Demand (PCU/hr)

	From	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	275	836	0
	B M62 Northbound On Ramp	0	0	0	0
	C Link	779	376	0	0
	D M62 Northbound Off Ramp	442	0	615	0

Proportions

	From	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0.00	0.25	0.75	0.00
	B M62 Northbound On Ramp	0.25	0.25	0.25	0.25
	C Link	0.67	0.33	0.00	0.00
	D M62 Northbound Off Ramp	0.42	0.00	0.58	0.00

Demand (PCU/hr)

	From	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0	0	659	443	350
	B M62 Southbound Off Ramp	198	0	79	107	1
	C A614 Rawcliffe Road (East)	491	0	34	74	323
	D A161	466	0	54	25	563
	E M62 Southbound On Ramp	0	0	0	0	0

Proportions

	From	To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
3E - Site 3	A Link	0.00	0.00	0.45	0.31	0.24
	B M62 Southbound Off Ramp	0.51	0.00	0.21	0.28	0.00
	C A614 Rawcliffe Road (East)	0.53	0.00	0.04	0.08	0.35
	D A161	0.42	0.00	0.05	0.02	0.51
	E M62 Southbound On Ramp	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

Heavy Vehicle Percentages

	From	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	0	12	5	0
	B M62 Northbound On Ramp	0	0	0	0

Average PCU Per Veh

	From	To			
		A A614 Rawcliffe Road (West)	B M62 Northbound On Ramp	C Link	D M62 Northbound Off Ramp
3W - Site 3	A A614 Rawcliffe Road (West)	1.000	1.120	1.045	1.000
	B M62 Northbound On Ramp	1.000	1.000	1.000	1.000

C Link	6	6	0	0
D M62 Northbound Off Ramp	22	0	13	0

C Link	1.055	1.062	1.000	1.000
D M62 Northbound Off Ramp	1.220	1.000	1.126	1.000

Heavy Vehicle Percentages

3E - Site 3

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	0	0	5	15	19
	B M62 Southbound Off Ramp	13	0	15	19	0
	C A614 Rawcliffe Road (East)	2	0	0	20	7
	D A161	6	0	33	67	22
	E M62 Southbound On Ramp	0	0	0	0	0

Average PCU Per Veh

		To				
		A Link	B M62 Southbound Off Ramp	C A614 Rawcliffe Road (East)	D A161	E M62 Southbound On Ramp
From	A Link	1.000	1.000	1.052	1.145	1.186
	B M62 Southbound Off Ramp	1.129	1.000	1.146	1.190	1.000
	C A614 Rawcliffe Road (East)	1.019	1.000	1.000	1.200	1.066
	D A161	1.062	1.000	1.333	1.667	1.219
	E M62 Southbound On Ramp	1.000	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Junction	Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
3E Site 3	A Link	16:15 16:30	1093	1093
		16:30 16:45	1305	1305
		16:45 17:00	1599	1599
		17:00 17:15	1599	1599
		17:15 17:30	1305	1305
		17:30 17:45	1093	1093
	B M62 Southbound Off Ramp	16:15 16:30	290	290
		16:30 16:45	346	346
		16:45 17:00	424	424
		17:00 17:15	424	424
		17:15 17:30	346	346
		17:30 17:45	290	290
	C A614 Rawcliffe Road (East)	16:15 16:30	694	694
		16:30 16:45	829	829
		16:45 17:00	1015	1015
		17:00 17:15	1015	1015
		17:15 17:30	829	829
		17:30 17:45	694	694
	D A161	16:15 16:30	834	834
		16:30 16:45	996	996
		16:45 17:00	1220	1220
		17:00 17:15	1220	1220
		17:15 17:30	996	996
		17:30 17:45	834	834
E M62 Southbound On Ramp	16:15 16:30	0	0	
	16:30 16:45	0	0	
	16:45 17:00	0	0	
	17:00 17:15	0	0	
	17:15 17:30	0	0	
	17:30 17:45	0	0	
3W Site 3	A A614 Rawcliffe Road (West)	16:15 16:30	836	836
		16:30 16:45	999	999
		16:45 17:00	1223	1223
		17:00 17:15	1223	1223
		17:15 17:30	999	999
		17:30 17:45	836	836
	B M62 Northbound On Ramp	16:15 16:30	0	0
		16:30 16:45	0	0
		16:45 17:00	0	0
		17:00 17:15	0	0
		17:15 17:30	0	0
		17:30 17:45	0	0
	C Link	16:15 16:30	870	870
		16:30 16:45	1038	1038
		16:45 17:00	1272	1272
		17:00 17:15	1272	1272
		17:15 17:30	1038	1038
		17:30 17:45	870	870
	D M62 Northbound Off Ramp	16:15 16:30	796	796
		16:30 16:45	950	950
		16:45 17:00	1164	1164
		17:00 17:15	1164	1164
		17:15 17:30	950	950
		17:30 17:45	796	796

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
3E Site 3	A Link	0.67	5.36	2.3	A	1330	1995
	B M62 Southbound Off Ramp	0.60	14.45	1.7	B	353	530
	C A614 Rawcliffe Road (East)	0.57	4.99	1.4	A	846	1269
	D A161	0.56	8.29	1.4	A	1017	750
	E M62 Southbound On Ramp						
3W Site 3	A A614 Rawcliffe Road (West)	1.07	134.68	50.0	F	1019	1529
	B M62 Northbound On Ramp						
	C Link	0.81	12.48	4.3	B	1059	1589
	D M62 Northbound Off Ramp	0.58	4.90	1.6	A	970	1455

Main Results for each time segment

16:15 - 16:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1086	1086	271	0	0	85	2304	0.471	1082	866	0.0	1.0	3.259	A
	B M62 Southbound Off Ramp	290	290	72	0	0	1167	931	0.312	288	0	0.0	0.5	6.410	A
	C A614 Rawcliffe Road (East)	694	694	174	0	0	838	2000	0.347	692	616	0.0	0.6	2.877	A
	D A161	834	410	103	424	0	1046	1338	0.307	408	484	0.0	0.5	4.260	A
	E M62 Southbound On Ramp						950				504				
3W Site 3	A A614 Rawcliffe Road (West)	836		209			742	1351	0.619	830	912	0.0	1.7	7.253	A
	B M62 Northbound On Ramp						1086				486				
	C Link	866		216			0	1574	0.550	861	1086	0.0	1.3	5.299	A
	D M62 Northbound Off Ramp	796		199			861	2319	0.343	793	0	0.0	0.6	2.740	A

16:30 - 16:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1298	1298	324	0	0	101	2294	0.566	1296	1036	1.0	1.4	3.996	A
	B M62 Southbound Off Ramp	346	346	87	0	0	1397	827	0.419	345	0	0.5	0.8	8.555	A
	C A614 Rawcliffe Road (East)	829	829	207	0	0	1004	1896	0.437	828	738	0.6	0.8	3.527	A
	D A161	996	490	122	506	0	1252	1226	0.400	489	580	0.5	0.7	5.380	A
	E M62 Southbound On Ramp						1138				603				
3W Site 3	A A614 Rawcliffe Road (West)	999		250			889	1265	0.789	991	1094	1.7	3.7	13.540	B
	B M62 Northbound On Ramp						1298				582				
	C Link	1036		259			0	1574	0.658	1033	1298	1.3	2.0	7.002	A
	D M62 Northbound Off Ramp	950		238			1033	2192	0.433	949	0	0.6	0.9	3.366	A

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1519	1519	380	0	0	124	2280	0.666	1516	1267	1.4	2.2	5.208	A
	B M62 Southbound Off Ramp	424	424	106	0	0	1640	718	0.591	421	0	0.8	1.6	13.770	B
	C A614 Rawcliffe Road (East)	1015	1015	254	0	0	1190	1779	0.571	1013	871	0.8	1.4	4.905	A
	D A161	1220	600	150	620	0	1515	1083	0.554	598	688	0.7	1.3	8.139	A
	E M62 Southbound On Ramp						1391				721				
3W Site 3	A A614 Rawcliffe Road (West)	1223		306			1085	1151	1.063	1121	1334	3.7	29.4	65.894	F
	B M62 Northbound On Ramp						1519				687				
	C Link	1267		317			0	1574	0.805	1258	1519	2.0	4.1	11.747	B
	D M62 Northbound Off Ramp	1164		291			1258	2027	0.574	1161	0	0.9	1.5	4.821	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1535	1535	384	0	0	124	2280	0.673	1535	1271	2.2	2.3	5.362	A
	B M62 Southbound Off Ramp	424	424	106	0	0	1659	709	0.598	424	0	1.6	1.7	14.454	B
	C A614 Rawcliffe Road (East)	1015	1015	254	0	0	1203	1771	0.573	1015	880	1.4	1.4	4.986	A
	D A161	1220	600	150	620	0	1523	1078	0.556	600	695	1.3	1.4	8.292	A
	E M62 Southbound On Ramp						1396				727				
3W Site 3	A A614 Rawcliffe Road (West)	1223		306			1091	1148	1.066	1141	1344	29.4	50.0	134.683	F
	B M62 Northbound On Ramp						1535				696				
	C Link	1271		318			0	1574	0.808	1271	1535	4.1	4.3	12.476	B
	D M62 Northbound Off Ramp	1164		291			1271	2018	0.577	1164	0	1.5	1.6	4.901	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1442	1442	361	0	0	102	2293	0.629	1444	1043	2.3	1.9	4.711	A
	B M62 Southbound Off Ramp	346	346	87	0	0	1546	760	0.455	349	0	1.7	1.0	10.112	B
	C A614 Rawcliffe Road (East)	829	829	207	0	0	1088	1843	0.450	831	806	1.4	0.9	3.735	A
	D A161	996	490	122	506	0	1293	1204	0.407	492	627	1.4	0.8	5.599	A
	E M62 Southbound On Ramp						1145				640				
3W Site 3	A A614 Rawcliffe Road (West)	999		250			897	1261	0.792	1180	1108	50.0	4.8	71.558	F
	B M62 Northbound On Ramp						1442				634				
	C Link	1043		261			0	1574	0.663	1052	1442	4.3	2.1	7.401	A
	D M62 Northbound Off Ramp	950		238			1052	2179	0.436	953	0	1.6	0.9	3.422	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
3E Site 3	A Link	1102	1102	276	0	0	85	2304	0.478	1106	872	1.9	1.0	3.347	A
	B M62 Southbound Off Ramp	290	290	72	0	0	1191	920	0.315	292	0	1.0	0.5	6.599	A
	C A614 Rawcliffe Road (East)	694	694	174	0	0	855	1990	0.349	695	628	0.9	0.6	2.914	A
	D A161	834	410	103	424	0	1057	1332	0.308	411	493	0.8	0.5	4.316	A
	E M62 Southbound On Ramp						957				511				
3W Site 3	A A614 Rawcliffe Road (West)	836		209			749	1347	0.621	849	924	4.8	1.8	7.859	A
	B M62 Northbound On Ramp						1102				495				
	C Link	872		218			0	1574	0.554	875	1102	2.1	1.3	5.472	A
	D M62 Northbound Off Ramp	796		199			875	2308	0.345	797	0	0.9	0.6	2.775	A

RESPONSE TO NATIONAL HIGHWAYS RELEVANT REPRESENTATIONS (SEPT 2022)

Appendix K – Junctions 10 Output - Realistic Alternative Demand – Improvement Scheme – Northern Roundabout

Drax Bioenergy with Carbon Capture and Storage

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 –
Regulation (5(2)(q))

Document Reference Number: 8.9.4

Applicant: Drax Power Limited

PINS Reference: EN010120



<h1>Junctions 10</h1>
<h2>ARCADY 10 - Roundabout Module</h2>
Version: 10.0.4.1693 © Copyright TRL Software Limited, 2021
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Filename: 36 N-West Rdbt Proposed DS - wo Lane Simulation.j10

Path: \\?\UNC\uk.wspgroup.com\Central Data\Projects\700720xx\70072063 - Drax BECCS DCO\03 Environment\05 Transport\29 - National Highways Response\02 - Analysis\Junction Models\Minor Improvement Scheme\Model - Reduced Cumulative Development

Report generation date: 09/02/2023 15:59:31

- »2026 Future Baseline, AM
- »2026 Future Baseline, PM
- »2026 Future Baseline + Drax, AM
- »2026 Future Baseline + Drax, PM
- »2026 Do Minimum, AM
- »2026 Do Minimum, PM
- »2026 Do Something, AM
- »2026 Do Something, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
2026 Future Baseline												
Arm A614B	D7	2.2	9.09	0.67	A	28 % [Arm OffSI]	D8	3.2	11.84	0.76	B	23 % [Arm A614B]
Arm OffSI		2.3	8.10	0.66	A			2.2	8.06	0.66	A	
Arm A614		1.7	6.32	0.62	A			2.1	7.32	0.67	A	
2026 Future Baseline + Drax												
Arm A614B	D9	2.3	9.37	0.68	A	18 % [Arm OffSI]	D10	3.2	11.84	0.76	B	23 % [Arm A614B]
Arm OffSI		3.4	10.62	0.74	B			2.4	8.54	0.68	A	
Arm A614		1.9	6.62	0.63	A			2.6	8.44	0.71	A	
2026 Do Minimum												
Arm A614B	D11	4.0	14.21	0.79	B	-6 % [Arm OffSI]	D12	57.1	135.25	1.07	F	-13 % [Arm A614B]
Arm OffSI		31.0	73.65	1.00	F			5.9	19.46	0.84	C	
Arm A614		5.1	17.26	0.83	C			5.4	17.48	0.84	C	
2026 Do Something												
Arm A614B	D13	4.2	14.90	0.80	B	-11 % [Arm OffSI]	D14	57.1	135.25	1.07	F	-13 % [Arm A614B]
Arm OffSI		80.0	159.02	1.09	F			6.8	22.23	0.87	C	
Arm A614		5.2	16.88	0.83	C			7.9	24.76	0.89	C	

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	13/01/2023
Version	

Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\UKBBP002
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75					✓	Delay	0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2026 Future Baseline	AM	ONE HOUR	00 00	01:30	15	✓
D8	2026 Future Baseline	PM	ONE HOUR	00 00	01:30	15	✓
D9	2026 Future Baseline + Drax	AM	ONE HOUR	00 00	01:30	15	✓
D10	2026 Future Baseline + Drax	PM	ONE HOUR	00 00	01:30	15	✓
D11	2026 Do Minimum	AM	ONE HOUR	00 00	01:30	15	✓
D12	2026 Do Minimum	PM	ONE HOUR	00 00	01:30	15	✓
D13	2026 Do Something	AM	ONE HOUR	00 00	01:30	15	✓
D14	2026 Do Something	PM	ONE HOUR	00 00	01:30	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2026 Future Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm A614 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A614B, OffSI, A614, OnSlp	7.79	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	28	Arm OffSI	7.79	A

Arms

Arms

Arm	Name	Description	No give-way line
A614B	A614 Bridge		
OffSI	E-bound off-slip		
A614	A614 West		
OnSlp	untitled		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
A614B	4.00	5.20	8.0	10.0	67.0	45.0		
OffSI	6.00	7.80	15.0	18.0	67.0	45.0	✓	
A614	3.60	7.90	58.0	19.0	67.0	45.0		
OnSlp								✓

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A614B	0.432	1311
OffSI	0.568	2085
A614	0.559	2027
OnSlp		

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2026 Future Baseline	AM	ONE HOUR	00:00	01:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A614B		ONE HOUR	✓	792	100.000
OffSI		ONE HOUR	✓	950	100.000
A614		ONE HOUR	✓	910	100.000
OnSlp					

Origin-Destination Data

Demand (PCU/hr)

	To				
	A614B	OffSI	A614	OnSlp	
From	A614B	12	0	668	112
	OffSI	529	0	420	1
	A614	677	0	0	233
	OnSlp	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A614B	OffSI	A614	OnSlp	
From	A614B	0	0	10	18
	OffSI	20	0	26	0
	A614	8	0	0	13
	OnSlp	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A614B	0.67	9.09	2.2	A	727	1090
OffSI	0.66	8.10	2.3	A	872	1308
A614	0.62	6.32	1.7	A	835	1253
OnSlp						

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	596	149	0	1311	0.455	593	913	0.0	0.9	5.534	A
OffSI	715	179	593	1748	0.409	712	0	0.0	0.8	4.242	A
A614	685	171	490	1753	0.391	682	815	0.0	0.7	3.664	A
OnSlp			913				259				

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	712	178	0	1311	0.543	710	1093	0.9	1.3	6.635	A
OffSI	854	214	710	1682	0.508	852	0	0.8	1.3	5.309	A
A614	818	205	587	1699	0.482	817	976	0.7	1.0	4.452	A
OnSlp			1093				311				

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	872	218	0	1311	0.665	869	1337	1.3	2.1	8.964	A
OffSI	1046	261	869	1592	0.657	1042	0	1.3	2.3	7.961	A
A614	1002	250	717	1626	0.616	999	1193	1.0	1.7	6.245	A
OnSlp			1337				380				

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	872	218	0	1311	0.665	872	1341	2.1	2.2	9.094	A
OffSI	1046	261	872	1590	0.658	1046	0	2.3	2.3	8.104	A
A614	1002	250	720	1624	0.617	1002	1198	1.7	1.7	6.315	A
OnSlp			1341				381				

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	712	178	0	1311	0.543	715	1099	2.2	1.3	6.743	A
OffSI	854	214	715	1679	0.509	858	0	2.3	1.3	5.404	A
A614	818	205	591	1697	0.482	821	983	1.7	1.0	4.505	A
OnSlp			1099				312				

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	596	149	0	1311	0.455	598	919	1.3	0.9	5.616	A
OffSI	715	179	598	1745	0.410	717	0	1.3	0.9	4.297	A
A614	685	171	494	1751	0.391	686	821	1.0	0.7	3.700	A
OnSlp			919				261				

2026 Future Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm A614 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A614B, OffSI, A614, OnSlp	9.03	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	23	Arm A614B	9.03	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2026 Future Baseline	PM	ONE HOUR	00:00	01:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A614B		ONE HOUR	✓	899	100.000
OffSI		ONE HOUR	✓	910	100.000
A614		ONE HOUR	✓	962	100.000
OnSlp					

Origin-Destination Data

Demand (PCU/hr)

		To			
		A614B	OffSI	A614	OnSlp
From	A614B	19	0	687	193
	OffSI	508	0	402	0
	A614	713	0	0	249
	OnSlp	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A614B	OffSI	A614	OnSlp
From	A614B	0	0	6	6
	OffSI	13	0	22	0
	A614	5	0	0	12

OnSlip	0	0	0	0
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Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A614B	0.76	11.84	3.2	B	825	1237
OffSI	0.66	8.06	2.2	A	835	1253
A614	0.67	7.32	2.1	A	883	1324
OnSlip						

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	677	169	0	1311	0.516	672	929	0.0	1.1	5.931	A
OffSI	685	171	672	1703	0.402	682	0	0.0	0.8	4.105	A
A614	724	181	539	1725	0.420	721	815	0.0	0.8	3.816	A
OnSlip			929				331				

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	808	202	0	1311	0.617	806	1113	1.1	1.7	7.520	A
OffSI	818	205	806	1627	0.503	817	0	0.8	1.2	5.177	A
A614	865	216	646	1666	0.519	863	977	0.8	1.1	4.780	A
OnSlip			1113				396				

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	990	247	0	1311	0.755	984	1360	1.7	3.1	11.469	B
OffSI	1002	250	984	1526	0.656	998	0	1.2	2.2	7.898	A
A614	1059	265	789	1586	0.668	1055	1193	1.1	2.1	7.194	A
OnSlip			1360				484				

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	990	247	0	1311	0.755	990	1365	3.1	3.2	11.843	B
OffSI	1002	250	990	1523	0.658	1002	0	2.2	2.2	8.059	A
A614	1059	265	793	1584	0.669	1059	1199	2.1	2.1	7.318	A
OnSlip			1365				487				

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	808	202	0	1311	0.617	814	1120	3.2	1.7	7.763	A
OffSI	818	205	814	1623	0.504	822	0	2.2	1.2	5.279	A
A614	865	216	651	1663	0.520	869	985	2.1	1.2	4.861	A
OnSlip			1120				400				

01:15 - 01:30

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Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	677	169	0	1311	0.516	679	936	1.7	1.1	6.061	A
OffSI	685	171	679	1699	0.403	687	0	1.2	0.8	4.160	A
A614	724	181	544	1723	0.420	726	822	1.2	0.8	3.860	A
OnSlp			936				334				

2026 Future Baseline + Drax, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm A614 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A614B, OffSI, A614, OnSlp	8.92	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	18	Arm OffSI	8.92	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2026 Future Baseline + Drax	AM	ONE HOUR	00:00	01:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A614B		ONE HOUR	✓	804	100.000
OffSI		ONE HOUR	✓	1060	100.000
A614		ONE HOUR	✓	936	100.000
OnSlp					

Origin-Destination Data

Demand (PCU/hr)

		To			
		A614B	OffSI	A614	OnSlp
From	A614B	12	0	680	112
	OffSI	529	0	530	1
	A614	703	0	0	233
	OnSlp	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A614B	OffSI	A614	OnSlp
From	A614B	0	0	10	18
	OffSI	20	0	26	0
	A614	8	0	0	13

OnSlip	0	0	0	0
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Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A614B	0.68	9.37	2.3	A	738	1107
OffSI	0.74	10.62	3.4	B	973	1459
A614	0.63	6.62	1.9	A	859	1288
OnSlip						

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	605	151	0	1311	0.462	602	932	0.0	0.9	5.602	A
OffSI	798	200	602	1743	0.458	794	0	0.0	1.0	4.641	A
A614	705	176	490	1753	0.402	702	906	0.0	0.7	3.728	A
OnSlip			932				259				

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	723	181	0	1311	0.552	721	1116	0.9	1.3	6.753	A
OffSI	953	238	721	1675	0.569	951	0	1.0	1.6	6.084	A
A614	841	210	587	1699	0.495	840	1085	0.7	1.1	4.578	A
OnSlip			1116				310				

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	885	221	0	1311	0.675	882	1364	1.3	2.2	9.227	A
OffSI	1167	292	882	1584	0.737	1160	0	1.6	3.3	10.268	B
A614	1031	258	716	1626	0.634	1027	1326	1.1	1.9	6.526	A
OnSlip			1364				380				

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	885	221	0	1311	0.675	885	1369	2.2	2.3	9.374	A
OffSI	1167	292	885	1582	0.738	1167	0	3.3	3.4	10.622	B
A614	1031	258	720	1624	0.634	1030	1332	1.9	1.9	6.617	A
OnSlip			1369				381				

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	723	181	0	1311	0.552	726	1124	2.3	1.4	6.873	A
OffSI	953	238	726	1673	0.570	960	0	3.4	1.7	6.267	A
A614	841	210	592	1696	0.496	845	1094	1.9	1.1	4.634	A
OnSlip			1124				312				

01:15 - 01:30

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Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	605	151	0	1311	0.462	607	939	1.4	1.0	5.686	A
OffSI	798	200	607	1740	0.459	800	0	1.7	1.1	4.720	A
A614	705	176	494	1751	0.403	706	914	1.1	0.7	3.770	A
OnSlp			939				261				

2026 Future Baseline + Drax, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm A614 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A614B, OffSI, A614, OnSlp	9.54	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	23	Arm A614B	9.54	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2026 Future Baseline + Drax	PM	ONE HOUR	00:00	01:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A614B		ONE HOUR	✓	899	100.000
OffSI		ONE HOUR	✓	936	100.000
A614		ONE HOUR	✓	1026	100.000
OnSlp					

Origin-Destination Data

Demand (PCU/hr)

		To			
		A614B	OffSI	A614	OnSlp
From	A614B	19	0	687	193
	OffSI	508	0	428	0
	A614	772	0	0	254
	OnSlp	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A614B	OffSI	A614	OnSlp
From	A614B	0	0	6	6
	OffSI	13	0	22	0
	A614	5	0	0	12

OnSlip	0	0	0	0
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Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A614B	0.76	11.84	3.2	B	825	1237
OffSI	0.68	8.54	2.4	A	859	1288
A614	0.71	8.44	2.6	A	941	1412
OnSlip						

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	677	169	0	1311	0.516	672	974	0.0	1.1	5.931	A
OffSI	705	176	672	1703	0.414	701	0	0.0	0.8	4.189	A
A614	772	193	539	1725	0.448	769	835	0.0	0.9	4.000	A
OnSlip			974				335				

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	808	202	0	1311	0.617	806	1165	1.1	1.7	7.520	A
OffSI	841	210	806	1627	0.517	840	0	0.8	1.2	5.335	A
A614	922	231	646	1666	0.554	921	1000	0.9	1.3	5.140	A
OnSlip			1165				401				

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	990	247	0	1311	0.755	984	1424	1.7	3.1	11.469	B
OffSI	1031	258	984	1526	0.675	1026	0	1.2	2.4	8.341	A
A614	1130	282	789	1586	0.712	1125	1221	1.3	2.6	8.236	A
OnSlip			1424				490				

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	990	247	0	1311	0.755	990	1430	3.1	3.2	11.843	B
OffSI	1031	258	990	1523	0.677	1030	0	2.4	2.4	8.536	A
A614	1130	282	793	1584	0.713	1129	1227	2.6	2.6	8.443	A
OnSlip			1430				492				

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	808	202	0	1311	0.617	814	1174	3.2	1.7	7.763	A
OffSI	841	210	814	1623	0.519	846	0	2.4	1.3	5.452	A
A614	922	231	651	1663	0.555	927	1009	2.6	1.3	5.255	A
OnSlip			1174				404				

01:15 - 01:30

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Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	677	169	0	1311	0.516	679	980	1.7	1.1	6.061	A
OffSI	705	176	679	1699	0.415	706	0	1.3	0.8	4.247	A
A614	772	193	544	1723	0.448	774	842	1.3	0.9	4.056	A
OnSlp			980				338				

2026 Do Minimum, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm A614 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A614B, OffSI, A614, OnSlp	39.60	E

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-6	Arm OffSI	39.60	E

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2026 Do Minimum	AM	ONE HOUR	00:00	01:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A614B		ONE HOUR	✓	937	100.000
OffSI		ONE HOUR	✓	1367	100.000
A614		ONE HOUR	✓	1019	100.000
OnSlp					

Origin-Destination Data

Demand (PCU/hr)

		To			
		A614B	OffSI	A614	OnSlp
From	A614B	42	0	733	162
	OffSI	927	0	439	1
	A614	771	0	0	248
	OnSlp	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A614B	OffSI	A614	OnSlp
From	A614B	0	0	10	18
	OffSI	20	0	26	0
	A614	8	0	0	13

OnSlip	0	0	0	0
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Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A614B	0.79	14.21	4.0	B	860	1290
OffSI	1.00	73.65	31.0	F	1254	1882
A614	0.83	17.26	5.1	C	935	1403
OnSlip						

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	705	176	0	1311	0.538	700	1301	0.0	1.3	6.485	A
OffSI	1029	257	700	1687	0.610	1022	0	0.0	1.9	6.520	A
A614	767	192	846	1554	0.494	763	876	0.0	1.1	4.945	A
OnSlip			1301				308				

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	842	211	0	1311	0.643	840	1557	1.3	1.9	8.421	A
OffSI	1229	307	840	1608	0.764	1221	0	1.9	3.8	11.122	B
A614	916	229	1012	1461	0.627	913	1049	1.1	1.8	7.134	A
OnSlip			1557				368				

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1032	258	0	1311	0.787	1024	1859	1.9	3.8	13.571	B
OffSI	1505	376	1024	1504	1.001	1434	0	3.8	21.4	42.952	E
A614	1122	280	1197	1358	0.826	1110	1262	1.8	4.7	15.198	C
OnSlip			1859				448				

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1032	258	0	1311	0.787	1031	1888	3.8	4.0	14.210	B
OffSI	1505	376	1031	1500	1.004	1467	0	21.4	31.0	73.649	F
A614	1122	280	1220	1345	0.834	1120	1278	4.7	5.1	17.264	C
OnSlip			1888				452				

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	842	211	0	1311	0.643	850	1647	4.0	2.0	8.799	A
OffSI	1229	307	850	1602	0.767	1336	0	31.0	4.3	22.450	C
A614	916	229	1092	1416	0.647	928	1094	5.1	2.0	8.252	A
OnSlip			1647				374				

01:15 - 01:30

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Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	705	176	0	1311	0.538	708	1319	2.0	1.3	6.655	A
OffSI	1029	257	708	1683	0.612	1038	0	4.3	2.0	6.905	A
A614	767	192	859	1546	0.496	771	888	2.0	1.1	5.092	A
OnSlp			1319				311				

2026 Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm A614 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A614B, OffSI, A614, OnSlp	62.72	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-13	Arm A614B	62.72	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2026 Do Minimum	PM	ONE HOUR	00:00	01:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A614B		ONE HOUR	✓	1268	100.000
OffSI		ONE HOUR	✓	1031	100.000
A614		ONE HOUR	✓	1047	100.000
OnSlp					

Origin-Destination Data

Demand (PCU/hr)

		To			
		A614B	OffSI	A614	OnSlp
From	A614B	113	0	779	376
	OffSI	615	0	416	0
	A614	777	0	0	270
	OnSlp	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A614B	OffSI	A614	OnSlp
From	A614B	0	0	6	6
	OffSI	13	0	22	0
	A614	5	0	0	12

OnSlp	0	0	0	0
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Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A614B	1.07	135.25	57.1	F	1164	1745
OffSI	0.84	19.46	5.9	C	946	1419
A614	0.84	17.48	5.4	C	961	1441
OnSlp						

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	955	239	0	1311	0.728	944	1126	0.0	2.7	10.069	B
OffSI	776	194	944	1549	0.501	772	0	0.0	1.2	5.362	A
A614	788	197	824	1566	0.503	784	891	0.0	1.1	4.887	A
OnSlp			1126				482				

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1140	285	0	1311	0.870	1126	1347	2.7	6.1	19.300	C
OffSI	927	232	1126	1445	0.641	923	0	1.2	2.0	7.977	A
A614	941	235	985	1476	0.638	938	1065	1.1	1.8	7.101	A
OnSlp			1347				576				

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1396	349	0	1311	1.065	1285	1630	6.1	34.0	68.117	F
OffSI	1135	284	1285	1356	0.837	1122	0	2.0	5.4	17.026	C
A614	1153	288	1165	1376	0.838	1140	1242	1.8	5.0	15.537	C
OnSlp			1630				675				

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1396	349	0	1311	1.065	1304	1647	34.0	57.1	135.249	F
OffSI	1135	284	1304	1345	0.844	1133	0	5.4	5.9	19.462	C
A614	1153	288	1179	1368	0.843	1151	1258	5.0	5.4	17.483	C
OnSlp			1647				684				

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1140	285	0	1311	0.870	1287	1384	57.1	20.3	112.616	F
OffSI	927	232	1287	1354	0.684	940	0	5.9	2.6	10.409	B
A614	941	235	1057	1436	0.655	954	1170	5.4	2.1	8.185	A
OnSlp			1384				628				

01:15 - 01:30

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Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	955	239	0	1311	0.728	1024	1145	20.3	3.0	16.341	C
OffSI	776	194	1024	1504	0.516	782	0	2.6	1.3	5 849	A
A614	788	197	861	1545	0.510	792	945	2.1	1.1	5.125	A
OnSlp			1145				508				

2026 Do Something, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm A614 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A614B, OffSI, A614, OnSlp	76.85	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-11	Arm OffSI	76.85	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2026 Do Something	AM	ONE HOUR	00:00	01:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A614B		ONE HOUR	✓	949	100.000
OffSI		ONE HOUR	✓	1478	100.000
A614		ONE HOUR	✓	1045	100.000
OnSlp					

Origin-Destination Data

Demand (PCU/hr)

		To			
		A614B	OffSI	A614	OnSlp
From	A614B	42	0	745	162
	OffSI	927	0	550	1
	A614	797	0	0	248
	OnSlp	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A614B	OffSI	A614	OnSlp
From	A614B	0	0	10	18
	OffSI	20	0	26	0
	A614	8	0	0	13

OnSlp	0	0	0	0
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Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A614B	0.80	14.90	4.2	B	871	1306
OffSI	1.09	159.02	80.0	F	1356	2034
A614	0.83	16.88	5.2	C	959	1438
OnSlp						

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	714	179	0	1311	0.545	709	1320	0.0	1.3	6.578	A
OffSI	1113	278	709	1682	0.661	1103	0	0.0	2.3	7.482	A
A614	787	197	845	1554	0.506	782	967	0.0	1.1	5.062	A
OnSlp			1320				307				

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	853	213	0	1311	0.651	850	1577	1.3	2.0	8.612	A
OffSI	1329	332	850	1602	0.829	1316	0	2.3	5.4	14.771	B
A614	939	235	1009	1463	0.642	936	1157	1.1	1.9	7.418	A
OnSlp			1577				368				

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1045	261	0	1311	0.797	1037	1836	2.0	4.1	14.150	B
OffSI	1627	407	1037	1496	1.088	1469	0	5.4	44.9	73.403	F
A614	1151	288	1145	1386	0.830	1139	1361	1.9	4.8	15.192	C
OnSlp			1836				448				

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1045	261	0	1311	0.797	1044	1855	4.1	4.2	14.898	B
OffSI	1627	407	1044	1492	1.091	1487	0	44.9	80.0	159.023	F
A614	1151	288	1158	1379	0.834	1149	1373	4.8	5.2	16.876	C
OnSlp			1855				452				

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	853	213	0	1311	0.651	861	1749	4.2	2.1	9.039	A
OffSI	1329	332	861	1596	0.833	1572	0	80.0	19.2	118.192	F
A614	939	235	1172	1372	0.685	950	1261	5.2	2.4	9.558	A
OnSlp			1749				374				

01:15 - 01:30

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Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	714	179	0	1311	0.545	718	1375	2.1	1.3	6.760	A
OffSI	1113	278	718	1678	0.663	1179	0	19.2	2.5	10.014	B
A614	787	197	895	1527	0.515	792	1002	2.4	1.2	5.385	A
OnSlp			1375				311				

2026 Do Something, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm A614 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A614B, OffSI, A614, OnSlp	64.76	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-13	Arm A614B	64.76	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2026 Do Something	PM	ONE HOUR	00:00	01:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A614B		ONE HOUR	✓	1268	100.000
OffSI		ONE HOUR	✓	1057	100.000
A614		ONE HOUR	✓	1111	100.000
OnSlp					

Origin-Destination Data

Demand (PCU/hr)

		To			
		A614B	OffSI	A614	OnSlp
From	A614B	113	0	779	376
	OffSI	615	0	442	0
	A614	836	0	0	275
	OnSlp	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A614B	OffSI	A614	OnSlp
From	A614B	0	0	6	6
	OffSI	13	0	22	0
	A614	5	0	0	12

OnSlp	0	0	0	0
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Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A614B	1.07	135.25	57.1	F	1164	1745
OffSI	0.87	22.23	6.8	C	970	1455
A614	0.89	24.76	7.9	C	1019	1529
OnSlp						

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	955	239	0	1311	0.728	944	1170	0.0	2.7	10.069	B
OffSI	796	199	944	1549	0.514	791	0	0.0	1.2	5.501	A
A614	836	209	824	1566	0.534	832	911	0.0	1.2	5.193	A
OnSlp			1170				486				

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1140	285	0	1311	0.870	1126	1400	2.7	6.1	19.300	C
OffSI	950	238	1126	1445	0.657	946	0	1.2	2.2	8.346	A
A614	999	250	985	1476	0.677	995	1088	1.2	2.2	7.916	A
OnSlp			1400				580				

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1396	349	0	1311	1.065	1285	1688	6.1	34.0	68.117	F
OffSI	1164	291	1285	1356	0.858	1148	0	2.2	6.2	18.900	C
A614	1223	306	1163	1377	0.889	1204	1269	2.2	7.1	20.276	C
OnSlp			1688				679				

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1396	349	0	1311	1.065	1304	1710	34.0	57.1	135.249	F
OffSI	1164	291	1304	1345	0.865	1161	0	6.2	6.8	22.230	C
A614	1223	306	1178	1368	0.894	1220	1287	7.1	7.9	24.761	C
OnSlp			1710				689				

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	1140	285	0	1311	0.870	1287	1445	57.1	20.3	112.616	F
OffSI	950	238	1287	1354	0.702	966	0	6.8	2.8	11.217	B
A614	999	250	1058	1435	0.696	1020	1194	7.9	2.5	9.709	A
OnSlp			1445				634				

01:15 - 01:30

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Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A614B	955	239	0	1311	0.728	1024	1191	20.3	3.0	16.341	C
OffSI	796	199	1024	1504	0.529	802	0	2.8	1.3	6.031	A
A614	836	209	861	1545	0.541	841	964	2.5	1.3	5.494	A
OnSlp			1191				512				

RESPONSE TO NATIONAL HIGHWAYS RELEVANT REPRESENTATIONS (SEPT 2022)

Appendix L – LinSig Output - Realistic Alternative Demand – Improvement Scheme – Southern Roundabout

Drax Bioenergy with Carbon Capture and Storage

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 –
Regulation (5(2)(q))

Document Reference Number: 8.9.4

Applicant: Drax Power Limited

PINS Reference: EN010120

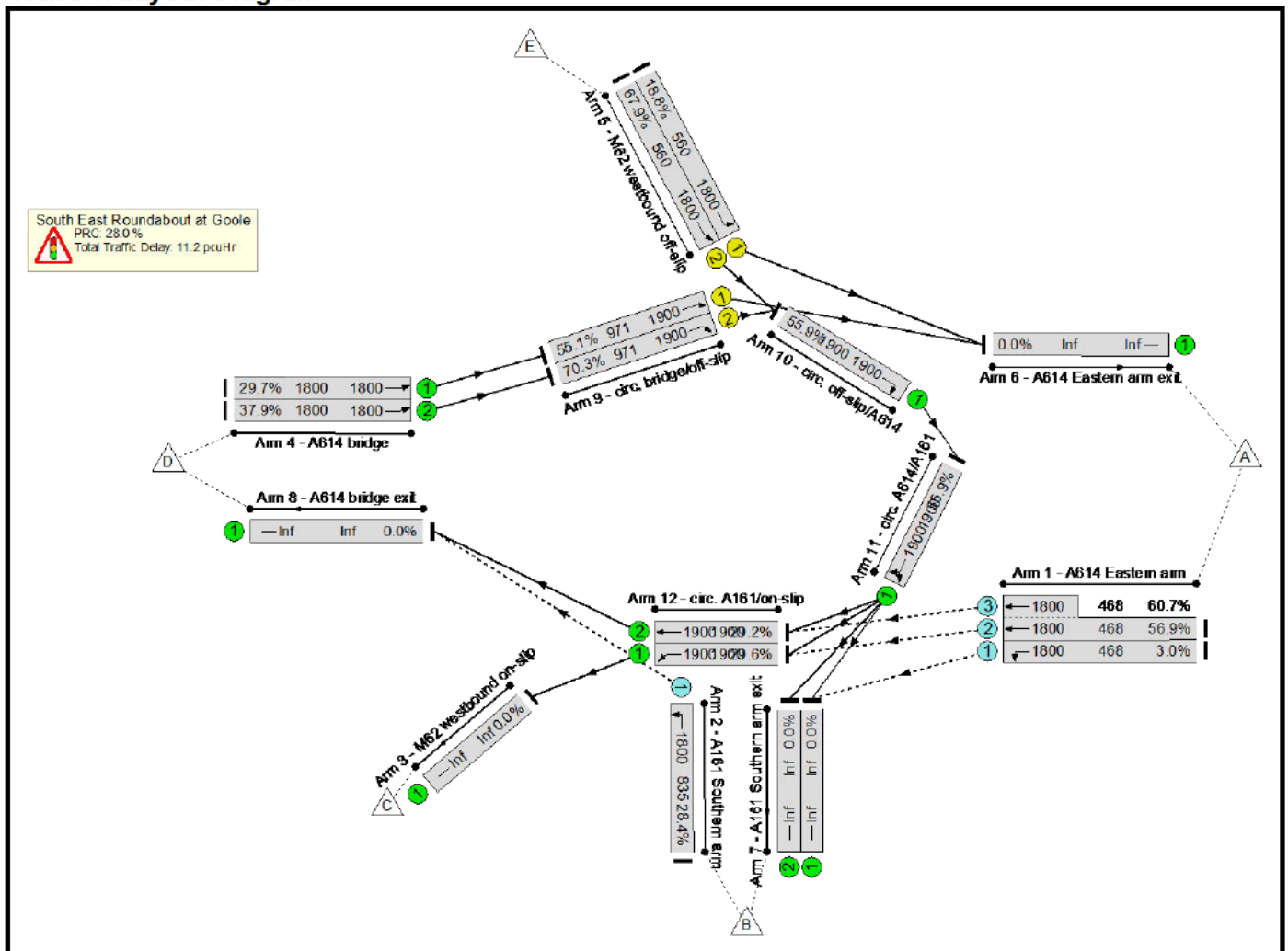


Basic Results Summary
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	J9 South East - Proposed.lsg3x
Author:	
Company:	
Address:	

Scenario 1: '2026 Future Baseline AM' (FG1: '2026 Future Baseline AM', Plan 1: 'Network Control Plan 1')
Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	70.3%	1351	0	0	11.2	-	-
South East Roundabout at Goole	-	-	-		-	-	-	-	-	-	70.3%	1351	0	0	11.2	-	-
1/1	A614 Eastern arm Left	O	-		-	-	-	14	1800	468	3.0%	14	0	0	0.0	6.2	0.1
1/2+1/3	A614 Eastern arm Ahead	O	-		-	-	-	550	1800:1800	468+468	56.9 : 60.7%	1100	0	0	1.4	9.0	2.4
2/1	A161 Southern arm Left	O	-		-	-	-	237	1800	835	28.4%	237	0	0	0.2	3.4	0.8
4/1	A614 bridge Ahead	U	-		-	-	-	535	1800	1800	29.7%	-	-	-	0.2	1.4	0.2
4/2	A614 bridge Ahead	U	-		-	-	-	683	1800	1800	37.9%	-	-	-	0.3	1.6	0.3
5/1	M62 westbound off-slip Left	U	A		1	13	-	105	1800	560	18.8%	-	-	-	0.4	15.3	1.0
5/2	M62 westbound off-slip Ahead	U	A		1	13	-	380	1800	560	67.9%	-	-	-	2.5	23.4	5.2
9/1	circ. bridge/off-slip Ahead	U	B		1	22	-	535	1900	971	55.1%	-	-	-	1.7	11.6	5.1
9/2	circ. bridge/off-slip Right	U	B		1	22	-	683	1900	971	70.3%	-	-	-	2.8	14.6	7.6
10/1	circ. off-slip/A614 Right	U	-		-	-	-	1063	1900	1900	55.9%	-	-	-	0.6	2.1	0.6
11/1	circ. A614/A161 Ahead Right	U	-		-	-	-	1063	1900	1900	55.9%	-	-	-	0.6	2.1	0.6
12/1	circ. A161/on-slip Ahead	U	-		-	-	-	562	1900	1900	29.6%	-	-	-	0.2	1.3	0.2

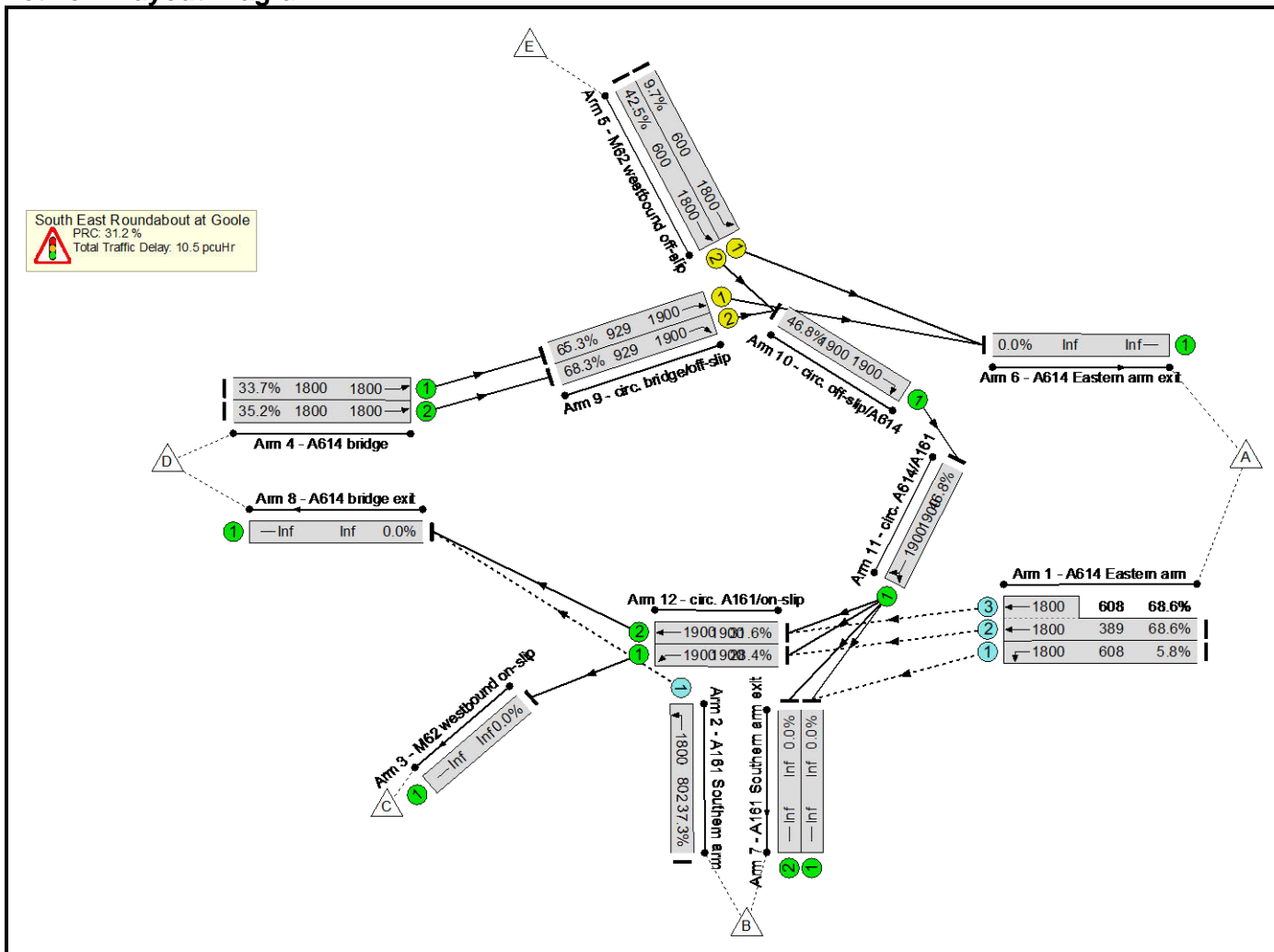
Basic Results Summary

12/2	circ. A161/on-slip Ahead	U	-	-	-	-	554	1900	1900	29.2%	-	-	-	0.2	1.3	0.2
		C1	PRC for Signalled Lanes (%):		28.0	Total Delay for Signalled Lanes (pcuHr):		7.41	Cycle Time (s):		45					
			PRC Over All Lanes (%):		28.0	Total Delay Over All Lanes(pcuHr):		11.24								

Basic Results Summary

Scenario 2: '2026 Future Baseline PM' (FG2: '2026 Future Baseline PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	68.6%	1702	0	0	10.5	-	-
South East Roundabout at Goole	-	-	-		-	-	-	-	-	-	68.6%	1702	0	0	10.5	-	-
1/1	A614 Eastern arm Left	O	-		-	-	-	35	1800	608	5.8%	35	0	0	0.0	4.7	0.1
1/2+1/3	A614 Eastern arm Ahead	O	-		-	-	-	684	1800:1800	389+608	68.6 : 68.6%	1368	0	0	1.8	9.4	3.9
2/1	A161 Southern arm Left	O	-		-	-	-	299	1800	802	37.3%	299	0	0	0.4	4.3	1.5
4/1	A614 bridge Ahead	U	-		-	-	-	607	1800	1800	33.7%	-	-	-	0.3	1.5	0.3
4/2	A614 bridge Ahead	U	-		-	-	-	634	1800	1800	35.2%	-	-	-	0.3	1.5	0.3
5/1	M62 westbound off-slip Left	U	A		1	14	-	58	1800	600	9.7%	-	-	-	0.2	13.7	0.5
5/2	M62 westbound off-slip Ahead	U	A		1	14	-	255	1800	600	42.5%	-	-	-	1.2	16.9	2.8
9/1	circ. bridge/off-slip Ahead	U	B		1	21	-	607	1900	929	65.3%	-	-	-	2.4	14.2	6.5
9/2	circ. bridge/off-slip Right	U	B		1	21	-	634	1900	929	68.3%	-	-	-	2.6	14.9	7.1
10/1	circ. off-slip/A614 Right	U	-		-	-	-	889	1900	1900	46.8%	-	-	-	0.4	1.8	0.4
11/1	circ. A614/A161 Ahead Right	U	-		-	-	-	889	1900	1900	46.8%	-	-	-	0.4	1.8	0.4
12/1	circ. A161/on-slip Ahead	U	-		-	-	-	540	1900	1900	28.4%	-	-	-	0.2	1.3	0.2

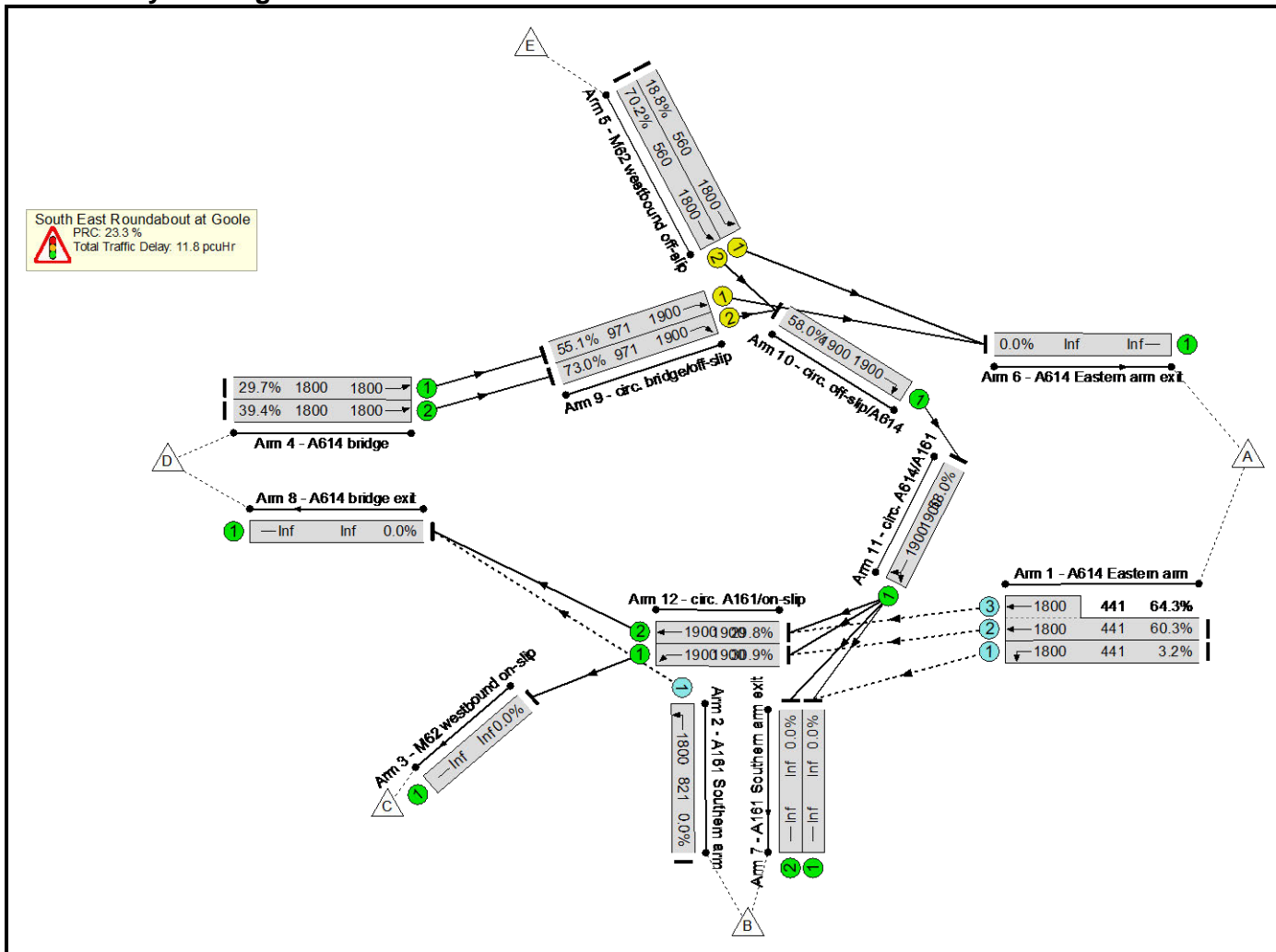
Basic Results Summary

12/2	circ. A161/on-slip Ahead	U	-	-	-	-	600	1900	1900	31.6%	-	-	-	0.2	1.4	0.2
		C1	PRC for Signalled Lanes (%):		31.9	Total Delay for Signalled Lanes (pcuHr):		6.43	Cycle Time (s):		45					
			PRC Over All Lanes (%):		31.2	Total Delay Over All Lanes(pcuHr):		10.46								

Basic Results Summary

Scenario 3: '2026 Future Baseline + Drax AM' (FG3: '2026 Future Baseline + Drax AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	73.0%	1114	0	0	11.8	-	-
South East Roundabout at Goole	-	-	-		-	-	-	-	-	-	73.0%	1114	0	0	11.8	-	-
1/1	A614 Eastern arm Left	O	-		-	-	-	14	1800	441	3.2%	14	0	0	0.0	6.6	0.1
1/2+1/3	A614 Eastern arm Ahead	O	-		-	-	-	550	1800:1800	441+441	60.3 : 64.3%	1100	0	0	1.6	10.3	2.6
2/1	A161 Southern arm Left	O	-		-	-	-	0	1800	821	0.0%	0	0	0	0.0	0.0	0.0
4/1	A614 bridge Ahead	U	-		-	-	-	535	1800	1800	29.7%	-	-	-	0.2	1.4	0.2
4/2	A614 bridge Ahead	U	-		-	-	-	709	1800	1800	39.4%	-	-	-	0.3	1.6	0.3
5/1	M62 westbound off-slip Left	U	A		1	13	-	105	1800	560	18.8%	-	-	-	0.4	15.3	1.0
5/2	M62 westbound off-slip Ahead	U	A		1	13	-	393	1800	560	70.2%	-	-	-	2.7	24.3	5.4
9/1	circ. bridge/off-slip Ahead	U	B		1	22	-	535	1900	971	55.1%	-	-	-	1.7	11.6	5.1
9/2	circ. bridge/off-slip Right	U	B		1	22	-	709	1900	971	73.0%	-	-	-	3.0	15.4	8.2
10/1	circ. off-slip/A614 Right	U	-		-	-	-	1102	1900	1900	58.0%	-	-	-	0.7	2.3	0.7
11/1	circ. A614/A161 Ahead Right	U	-		-	-	-	1102	1900	1900	58.0%	-	-	-	0.7	2.3	0.7
12/1	circ. A161/on-slip Ahead	U	-		-	-	-	588	1900	1900	30.9%	-	-	-	0.2	1.4	0.2

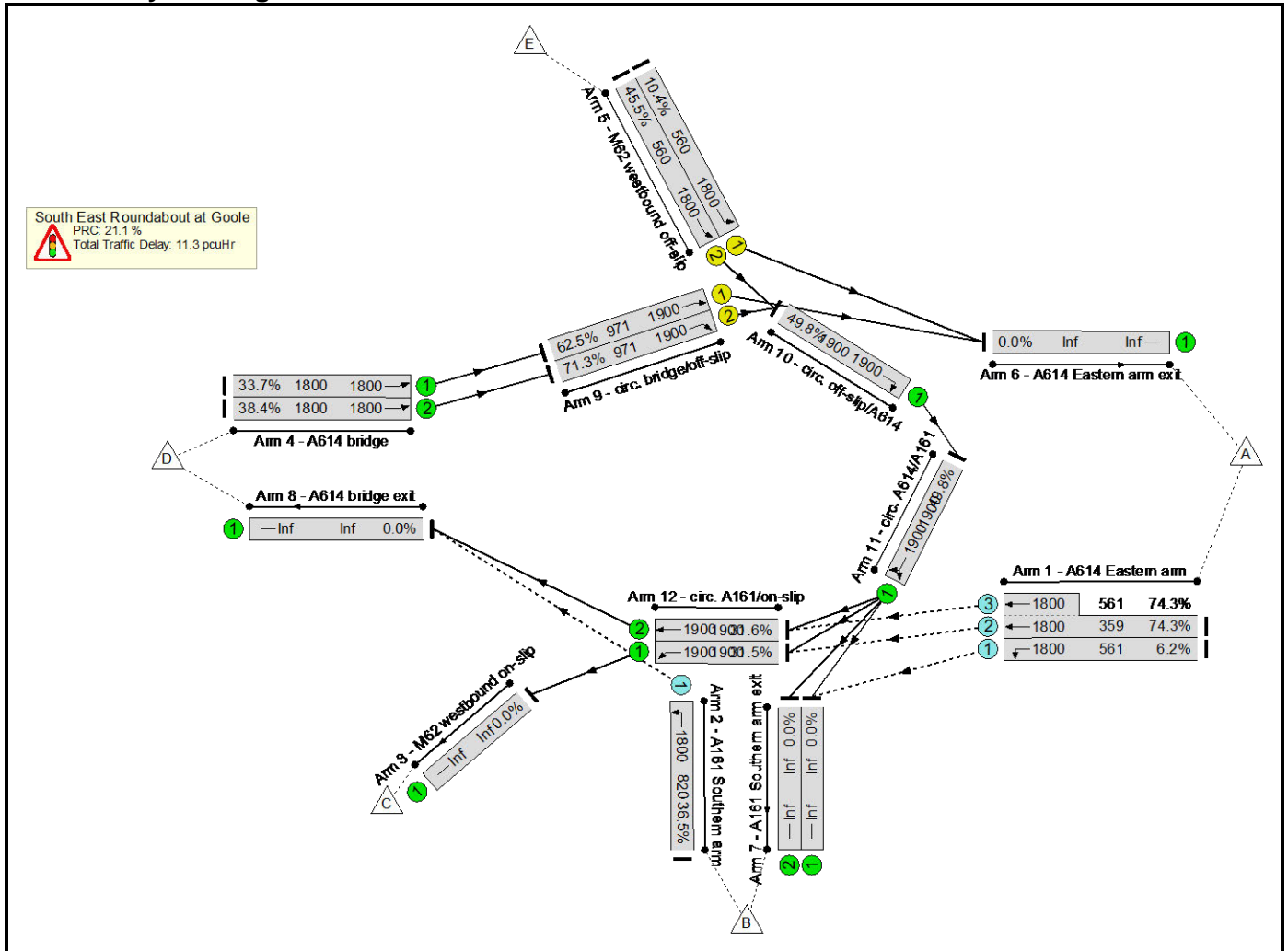
Basic Results Summary

12/2	circ. A161/on-slip Ahead	U	-	-	-	-	567	1900	1900	29.8%	-	-	-	0.2	1.3	0.2
		C1	PRC for Signalled Lanes (%):		23.3	Total Delay for Signalled Lanes (pcuHr):		7.85	Cycle Time (s):		45					
			PRC Over All Lanes (%):		23.3	Total Delay Over All Lanes(pcuHr):		11.80								

Basic Results Summary

Scenario 4: '2026 Future Baseline + Drax PM' (FG4: '2026 Future Baseline + Drax PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	74.3%	1702	0	0	11.3	-	-
South East Roundabout at Goole	-	-	-		-	-	-	-	-	-	74.3%	1702	0	0	11.3	-	-
1/1	A614 Eastern arm Left	O	-		-	-	-	35	1800	561	6.2%	35	0	0	0.1	5.5	0.2
1/2+1/3	A614 Eastern arm Ahead	O	-		-	-	-	684	1800:1800	359+561	74.3 : 74.3%	1368	0	0	2.3	12.2	5.6
2/1	A161 Southern arm Left	O	-		-	-	-	299	1800	820	36.5%	299	0	0	0.4	4.3	1.4
4/1	A614 bridge Ahead	U	-		-	-	-	607	1800	1800	33.7%	-	-	-	0.3	1.5	0.3
4/2	A614 bridge Ahead	U	-		-	-	-	692	1800	1800	38.4%	-	-	-	0.3	1.6	0.3
5/1	M62 westbound off-slip Left	U	A		1	13	-	58	1800	560	10.4%	-	-	-	0.2	14.6	0.6
5/2	M62 westbound off-slip Ahead	U	A		1	13	-	255	1800	560	45.5%	-	-	-	1.3	18.3	3.0
9/1	circ. bridge/off-slip Ahead	U	B		1	22	-	607	1900	971	62.5%	-	-	-	2.2	12.8	6.2
9/2	circ. bridge/off-slip Right	U	B		1	22	-	692	1900	971	71.3%	-	-	-	2.9	14.9	7.8
10/1	circ. off-slip/A614 Right	U	-		-	-	-	947	1900	1900	49.8%	-	-	-	0.5	1.9	0.5
11/1	circ. A614/A161 Ahead Right	U	-		-	-	-	947	1900	1900	49.8%	-	-	-	0.5	1.9	0.5
12/1	circ. A161/on-slip Ahead	U	-		-	-	-	598	1900	1900	31.5%	-	-	-	0.2	1.4	0.2

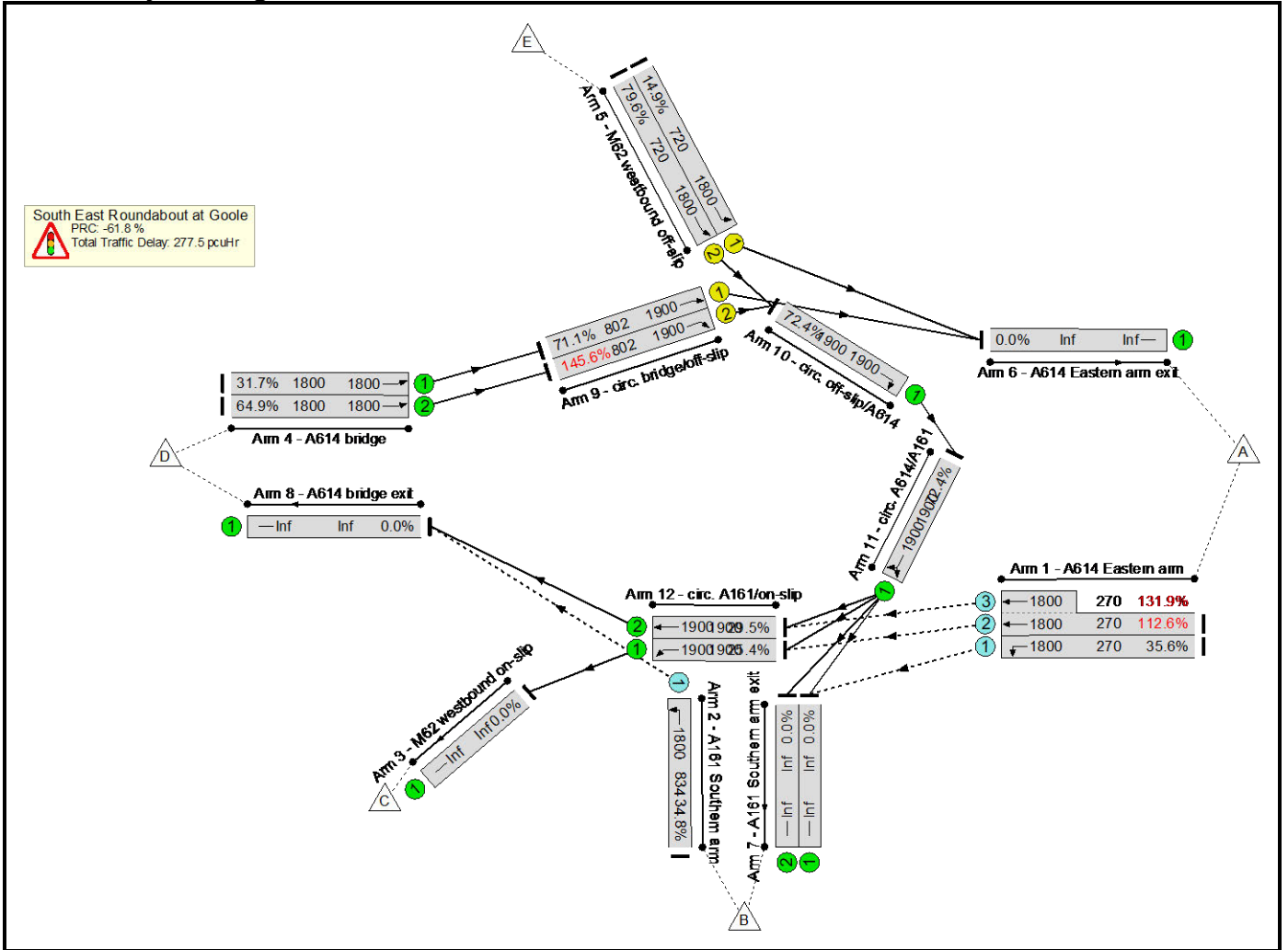
Basic Results Summary

12/2	circ. A161/on-slip Ahead	U	-	-	-	-	600	1900	1900	31.6%	-	-	-	0.2	1.4	0.2
		C1	PRC for Signalled Lanes (%):		26.3	Total Delay for Signalled Lanes (pcuHr):		6.55	Cycle Time (s):		45					
			PRC Over All Lanes (%):		21.1	Total Delay Over All Lanes(pcuHr):		11.29								

Basic Results Summary

Scenario 5: '2026 Do Minimum AM' (FG5: '2026 Do Minimum AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	145.6%	1466	0	0	277.5	-	-
South East Roundabout at Goole	-	-	-		-	-	-	-	-	-	145.6%	1466	0	0	277.5	-	-
1/1	A614 Eastern arm Left	O	-		-	-	-	96	1800	270	35.6%	96	0	0	0.4	16.3	0.8
1/2+1/3	A614 Eastern arm Ahead	O	-		-	-	-	660	1800:1800	270+270	112.6 : 131.9%	1080	0	0	67.1	365.8	72.5
2/1	A161 Southern arm Left	O	-		-	-	-	290	1800	834	34.8%	290	0	0	0.3	3.7	0.9
4/1	A614 bridge Ahead	U	-		-	-	-	570	1800	1800	31.7%	-	-	-	0.2	1.5	0.2
4/2	A614 bridge Ahead	U	-		-	-	-	1168	1800	1800	64.9%	-	-	-	0.9	2.8	0.9
5/1	M62 westbound off-slip Left	U	A		1	17	-	107	1800	720	14.9%	-	-	-	0.3	11.6	0.9
5/2	M62 westbound off-slip Ahead	U	A		1	17	-	573	1800	720	79.6%	-	-	-	3.8	23.8	8.1
9/1	circ. bridge/off-slip Ahead	U	B		1	18	-	570	1900	802	71.1%	-	-	-	2.9	18.4	7.1
9/2	circ. bridge/off-slip Right	U	B		1	18	-	1168	1900	802	145.6%	-	-	-	198.5	612.0	207.2
10/1	circ. off-slip/A614 Right	U	-		-	-	-	1741	1900	1900	72.4%	-	-	-	1.3	3.4	1.3
11/1	circ. A614/A161 Ahead Right	U	-		-	-	-	1741	1900	1900	72.4%	-	-	-	1.3	3.4	1.3
12/1	circ. A161/on-slip Ahead	U	-		-	-	-	614	1900	1900	25.4%	-	-	-	0.2	1.3	0.2

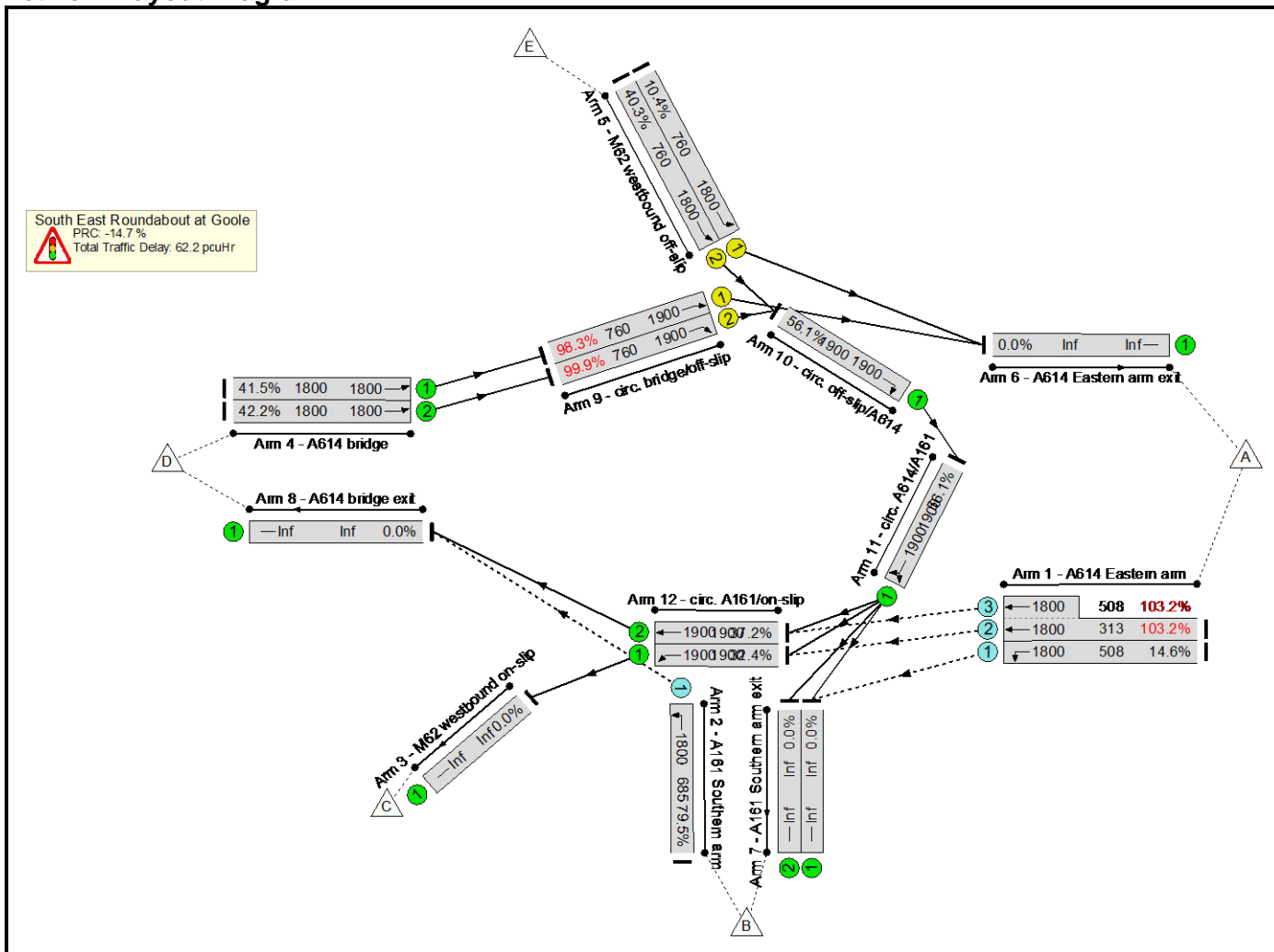
Basic Results Summary

12/2	circ. A161/on-slip Ahead	U	-	-	-	-	647	1900	1900	29.5%	-	-	-	0.2	1.3	0.2
		C1	PRC for Signalled Lanes (%):		-61.8		Total Delay for Signalled Lanes (pcuHr):		205.60		Cycle Time (s):		45			
			PRC Over All Lanes (%):		-61.8		Total Delay Over All Lanes(pcuHr):		277.53							

Basic Results Summary

Scenario 6: '2026 Do Minimum PM' (FG6: '2026 Do Minimum PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	103.2%	2282	0	0	62.2	-	-
South East Roundabout at Goole	-	-	-		-	-	-	-	-	-	103.2%	2282	0	0	62.2	-	-
1/1	A614 Eastern arm Left	O	-		-	-	-	74	1800	508	14.6%	74	0	0	0.2	7.9	0.5
1/2+1/3	A614 Eastern arm Ahead	O	-		-	-	-	848	1800:1800	313+508	103.2% : 103.2%	1663	0	0	25.3	107.4	37.0
2/1	A161 Southern arm Left	O	-		-	-	-	545	1800	685	79.5%	545	0	0	2.9	19.1	7.5
4/1	A614 bridge Ahead	U	-		-	-	-	747	1800	1800	41.5%	-	-	-	0.4	1.7	0.4
4/2	A614 bridge Ahead	U	-		-	-	-	759	1800	1800	42.2%	-	-	-	0.4	1.7	0.4
5/1	M62 westbound off-slip Left	U	A		1	18	-	79	1800	760	10.4%	-	-	-	0.2	10.5	0.7
5/2	M62 westbound off-slip Ahead	U	A		1	18	-	306	1800	760	40.3%	-	-	-	1.1	13.0	3.0
9/1	circ. bridge/off-slip Ahead	U	B		1	17	-	747	1900	760	98.3%	-	-	-	13.6	65.4	19.9
9/2	circ. bridge/off-slip Right	U	B		1	17	-	759	1900	760	99.9%	-	-	-	16.4	77.6	22.8
10/1	circ. off-slip/A614 Right	U	-		-	-	-	1065	1900	1900	56.1%	-	-	-	0.6	2.2	0.6
11/1	circ. A614/A161 Ahead Right	U	-		-	-	-	1065	1900	1900	56.1%	-	-	-	0.6	2.2	0.6
12/1	circ. A161/on-slip Ahead	U	-		-	-	-	615	1900	1900	32.4%	-	-	-	0.2	1.4	0.2

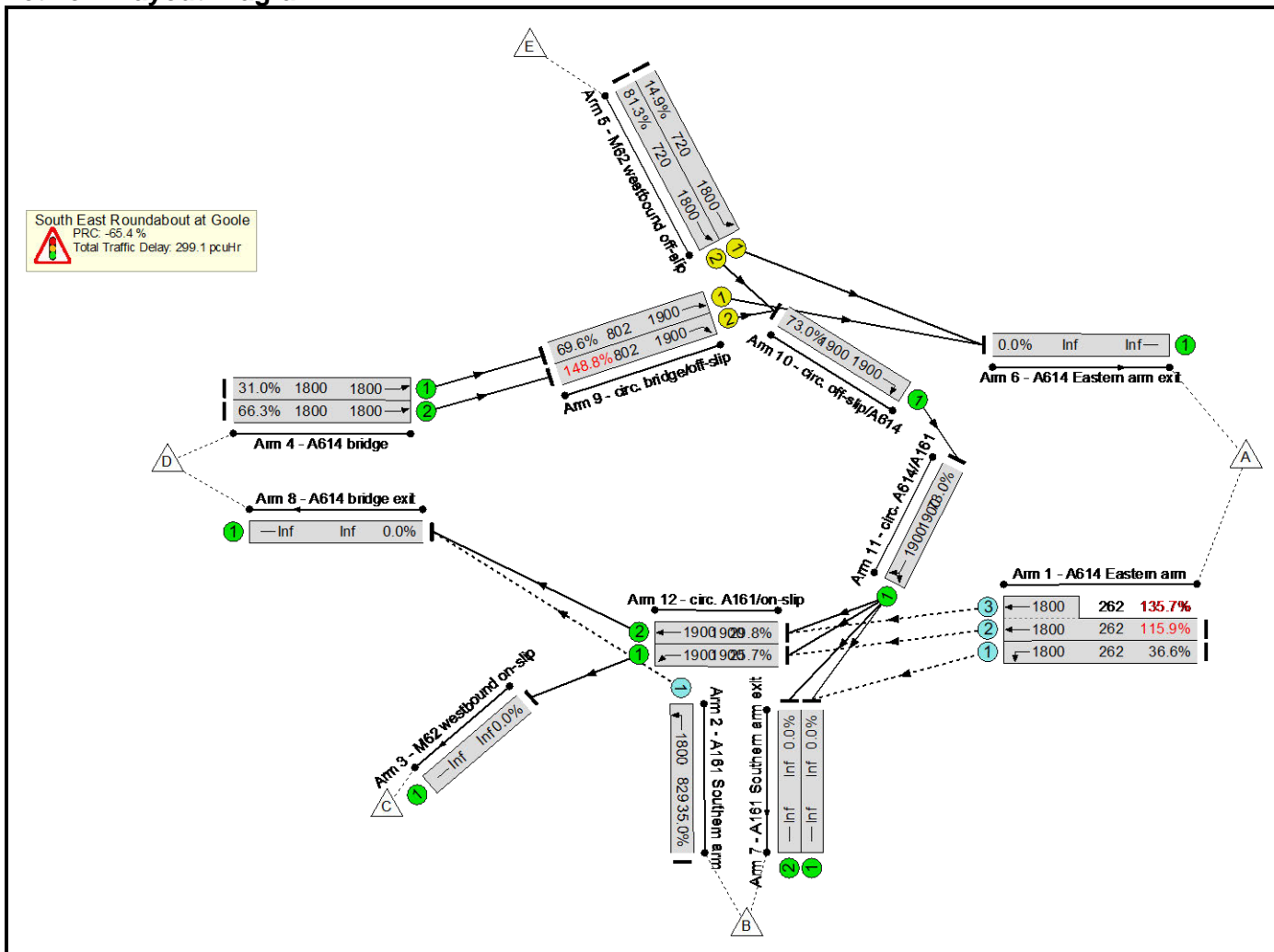
Basic Results Summary

12/2	circ. A161/on-slip Ahead	U	-	-	-	-	723	1900	1900	37.2%	-	-	-	0.3	1.5	0.3
		C1	PRC for Signalled Lanes (%):		-11.0	Total Delay for Signalled Lanes (pcuHr):		31.28	Cycle Time (s):		45					
			PRC Over All Lanes (%):		-14.7	Total Delay Over All Lanes(pcuHr):		62.16								

Basic Results Summary

Scenario 7: '2026 Do Something AM' (FG7: '2026 Do Something AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	148.8%	1435	0	0	299.1	-	-
South East Roundabout at Goole	-	-	-		-	-	-	-	-	-	148.8%	1435	0	0	299.1	-	-
1/1	A614 Eastern arm Left	O	-		-	-	-	96	1800	262	36.6%	96	0	0	0.5	16.9	0.8
1/2+1/3	A614 Eastern arm Ahead	O	-		-	-	-	660	1800:1800	262+262	115.9 : 135.7%	1049	0	0	74.7	407.3	79.8
2/1	A161 Southern arm Left	O	-		-	-	-	290	1800	829	35.0%	290	0	0	0.3	3.7	1.0
4/1	A614 bridge Ahead	U	-		-	-	-	558	1800	1800	31.0%	-	-	-	0.2	1.4	0.2
4/2	A614 bridge Ahead	U	-		-	-	-	1194	1800	1800	66.3%	-	-	-	1.0	3.0	1.0
5/1	M62 westbound off-slip Left	U	A		1	17	-	107	1800	720	14.9%	-	-	-	0.3	11.6	0.9
5/2	M62 westbound off-slip Ahead	U	A		1	17	-	585	1800	720	81.3%	-	-	-	4.1	24.9	8.4
9/1	circ. bridge/off-slip Ahead	U	B		1	18	-	558	1900	802	69.6%	-	-	-	2.8	17.9	6.7
9/2	circ. bridge/off-slip Right	U	B		1	18	-	1194	1900	802	148.8%	-	-	-	212.3	640.0	221.1
10/1	circ. off-slip/A614 Right	U	-		-	-	-	1779	1900	1900	73.0%	-	-	-	1.3	3.5	1.3
11/1	circ. A614/A161 Ahead Right	U	-		-	-	-	1779	1900	1900	73.0%	-	-	-	1.3	3.5	1.3
12/1	circ. A161/on-slip Ahead	U	-		-	-	-	640	1900	1900	25.7%	-	-	-	0.2	1.3	0.2

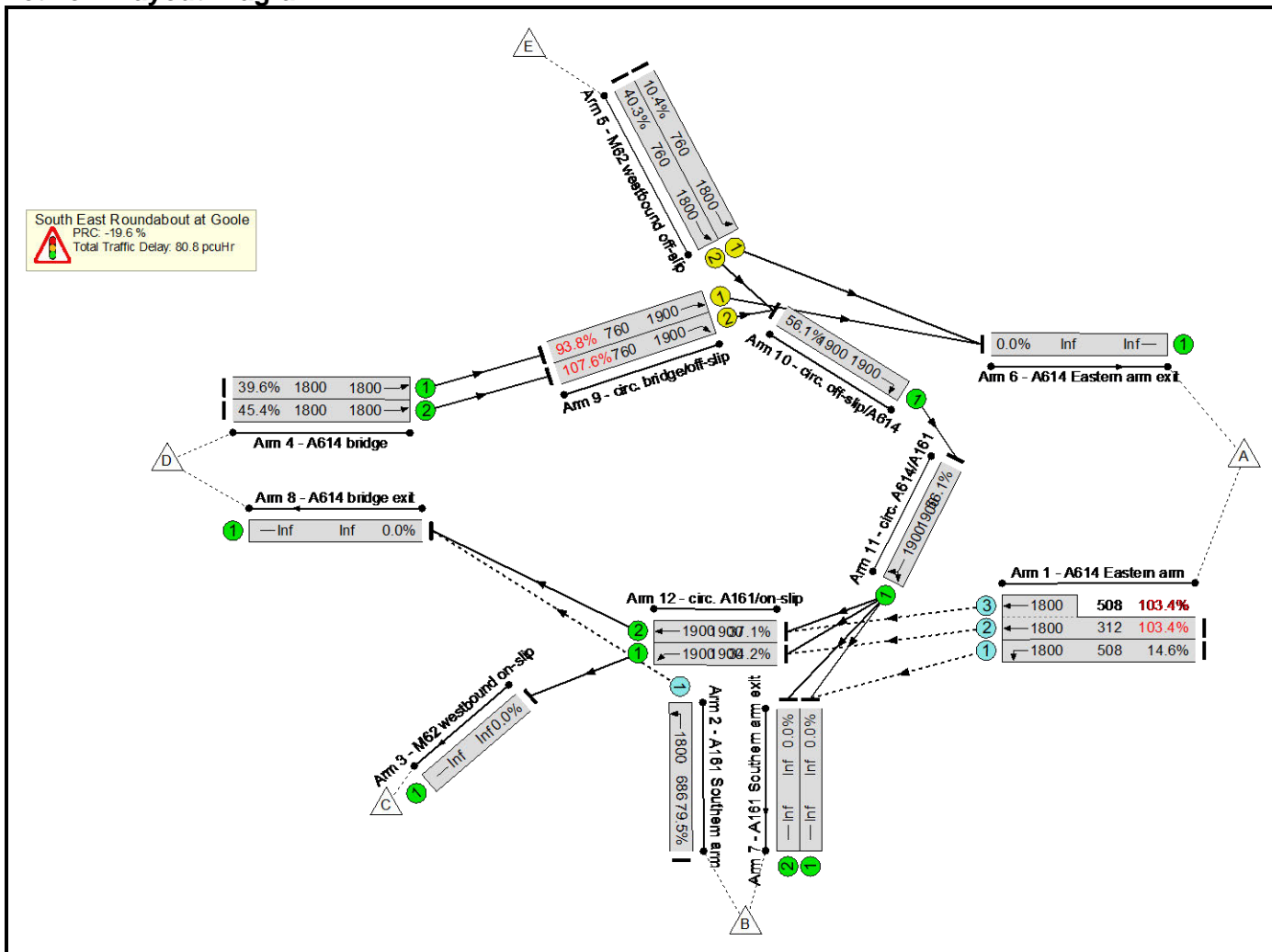
Basic Results Summary

12/2	circ. A161/on-slip Ahead	U	-	-	-	-	659	1900	1900	29.8%	-	-	-	0.2	1.3	0.2
		C1	PRC for Signalled Lanes (%):		-65.4		Total Delay for Signalled Lanes (pcuHr):		219.45		Cycle Time (s):		45			
			PRC Over All Lanes (%):		-65.4		Total Delay Over All Lanes(pcuHr):		299.14							

Basic Results Summary

Scenario 8: '2026 Do Something PM' (FG8: '2026 Do Something PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	107.6%	2281	0	0	80.8	-	-
South East Roundabout at Goole	-	-	-		-	-	-	-	-	-	107.6%	2281	0	0	80.8	-	-
1/1	A614 Eastern arm Left	O	-		-	-	-	74	1800	508	14.6%	74	0	0	0.2	7.9	0.5
1/2+1/3	A614 Eastern arm Ahead	O	-		-	-	-	848	1800:1800	312+508	103.4 : 103.4%	1662	0	0	25.7	109.2	37.4
2/1	A161 Southern arm Left	O	-		-	-	-	545	1800	686	79.5%	545	0	0	2.9	19.0	7.5
4/1	A614 bridge Ahead	U	-		-	-	-	713	1800	1800	39.6%	-	-	-	0.3	1.7	0.3
4/2	A614 bridge Ahead	U	-		-	-	-	818	1800	1800	45.4%	-	-	-	0.4	1.8	0.4
5/1	M62 westbound off-slip Left	U	A		1	18	-	79	1800	760	10.4%	-	-	-	0.2	10.5	0.7
5/2	M62 westbound off-slip Ahead	U	A		1	18	-	306	1800	760	40.3%	-	-	-	1.1	13.0	3.0
9/1	circ. bridge/off-slip Ahead	U	B		1	17	-	713	1900	760	93.8%	-	-	-	8.6	43.4	14.6
9/2	circ. bridge/off-slip Right	U	B		1	17	-	818	1900	760	107.6%	-	-	-	39.5	173.8	45.9
10/1	circ. off-slip/A614 Right	U	-		-	-	-	1124	1900	1900	56.1%	-	-	-	0.6	2.2	0.6
11/1	circ. A614/A161 Ahead Right	U	-		-	-	-	1124	1900	1900	56.1%	-	-	-	0.6	2.2	0.6
12/1	circ. A161/on-slip Ahead	U	-		-	-	-	674	1900	1900	34.2%	-	-	-	0.3	1.4	0.3

Basic Results Summary

12/2	circ. A161/on-slip Ahead	U	-	-	-	-	723	1900	1900	37.1%	-	-	-	0.3	1.5	0.3
		C1	PRC for Signalled Lanes (%):		-19.6	Total Delay for Signalled Lanes (pcuHr):		49.43	Cycle Time (s):		45					
			PRC Over All Lanes (%):		-19.6	Total Delay Over All Lanes(pcuHr):		80.77								