codling wind park

Environmental Impact Assessment Report

Volume 4

Appendix 27.1 Traffic and Transport Assessment

TOBIN

Codling Wind Park
Onshore Transmission Infrastructure
Traffic and Transport Assessment

codling wind park

BUILT ON KNOWLEDGE

Document Control Sheet	
Document Reference	Traffic and Transport Assessment
Client:	Codling Wind Park (CWP) Project
Project Reference	11078

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A	Final Issue	GI	13/01/2024	MR	15/01/24	JOF	15/01/24
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1. NON-TECHNICAL SUMMARY

The Non-Technical Summary is a synopsis of the Traffic and Transport Assessment (TTA) for onshore transmission infrastructure (OTI) on the Poolbeg peninsula, Dublin as part of Codling Wind Park (CWP) Project .

The CWP Project is located in the Irish sea approximately 13 - 22 km off the east coast of Ireland, at County Wicklow. The OTI is situated on the Poolbeg Peninsula and includes the transition joint bays (TJBs), onshore export cables, the onshore substation, and the Electricity Supply Board Networks (ESBN) network cables to connect the onshore substation to the Poolbeg 220kV substation. There are also works at the landfall (landward of the high water mark (HWM)), where the offshore export cables are brought onshore and connected to the onshore export cables at the TJBs.

Key traffic aspects associated with the construction and operational and maintenance (O&M) phases of the OTI were discussed with the Dublin City Council (DCC) Transportation Planning Section, on 20th October 2022 and 14th June 2023.

Traffic counts were carried out on 6 no. junctions and a seasonal adjustment check was undertaken on the traffic count data to determine if the traffic on the date of the traffic count survey is representative of the annual average traffic for the year. Traffic counts were carried out at the following locations:

- Junction 1 (Neutral Period 2022) - R131(N) / Direct Access / R131(S) / North Wall Quay Roundabout;
- Junction 2 (Neutral Period 2022) - R131(NW) / Sean Moore Road / South Bank Road / R131(SW) / Pigeon House Road Roundabout;
- Junction 3 (Neutral Period 2022) - Pigeon House Road / South Bank Road T-Junction;
- Junction 4 (Neutral Period 2022) - Pigeon House Road / Shellybanks Road T-Junction;
- Junction 5 (September 2023) - Pigeon House Road / Ecocem Access/ Pigeon House Road / Dublin Waste To Energy Access Crossroad;
- Junction 6 (September 2023) - Pigeon House Road / Private Access T-Junction.

The construction phase of the CWP Project will generate higher levels of heavy vehicles (HV) and light vehicle (LV) traffic, when compared to the O&M phase. During the O&M phase , the onshore substation will be generally unmanned and the traffic generated will be minimal, with a small number of trips required for inspection, repairs, monitoring and maintenance purposes only. This will be on average of c. 1 visit per week.

Additionally, during the construction phase, the CWP Project will generate trips of Abnormal Indivisible Load (AIL) such as the transformers for the onshore substation.

For this reason, assessments were carried out based on the construction phase's traffic impact as per the TII Traffic and Transport Assessment Guidelines. The assessment has focused on the construction phase as per following:

- Base year: 2022 and 2023 (i.e. traffic counts year);
- Base year plus committed development traffic;
- 3 no. construction phase scenarios: 2026.

The traffic count data was forecasted using the TII Project Appraisal Guidelines Unit 5.3: Travel Demand Projections for alternative future demand sensitivity growth rates and three construction phase scenarios (Scenario 1 - HV peak traffic movements, Scenario 2 - LV peak

traffic movements, and Scenario 3 – Average traffic movements) were analysed including committed development traffic.

The junction assessments indicated that 5 no. junctions (i.e. Junction 2, Junction 3, Junction 4, Junction 5 and Junction 6) including committed development traffic are currently below the desirable operating capacity of 0.85 and will remain below capacity with the CWP Project during the construction phase.

Junction 1 presented a Ratio of Flow to Capacity (RFC) of 0.85 during baseflow traffic in 2026. The committed development traffic increased the RFC on arm C (R131 (S)) from 0.85 to 0.85 and 0.89 during morning and evening peak hours, respectively. With the CWP Project included, the RFC increased up to a maximum of 0.87 and 0.92 during the morning and evening peak hours of the three construction phase scenarios.

Therefore, comparing the construction phase traffic scenarios with the committed development traffic, all three scenarios traffic will slightly decrease the junction's performances (i.e. from 0.85 up to 0.87 in the morning peak hour, and from 0.89 up to 0.92 in the evening peak hour). There is a slightly decrease, this was not considered a significant issue overall in terms of the operation of the junction (or similar).

2. INTRODUCTION

TOBIN Ltd have been appointed by Codling Wind Park Ltd (CWPL), to prepare a TTA Report with regard to proposed OTI located on the Poolbeg peninsula and which is being developed as part of the proposed offshore wind farm. The CWP Project is a proposed offshore wind farm located in the Irish sea approximately 13 - 22 km off the east coast of Ireland, at County Wicklow.

The OTI comprises the transition joint bays (TJBs), onshore export cables, the onshore substation, and the Electricity Supply Board Networks (ESBN) network cables to connect the onshore substation to the Poolbeg 220kV substation[1]. This TTA also addresses the landfall area (landward of the high water mark (HWM)), where the offshore export cables are brought onshore and connected to the onshore export cables at TJBs (hereafter these works are referred to as the 'OTI').

A ten year planning permission is being sought for the CWP Project, with an operation lifetime of 25 years. The 25 year operational lifetime shall commence on full commercial operation of the project.

Construction phase is expected to commence in 2026 with a duration of 36 months.

This report presents the likely significant effects on the road network in the vicinity of the onshore development area, during the construction phase. The onshore development area and temporary construction compound locations are illustrated in **Diagram 2-1**.

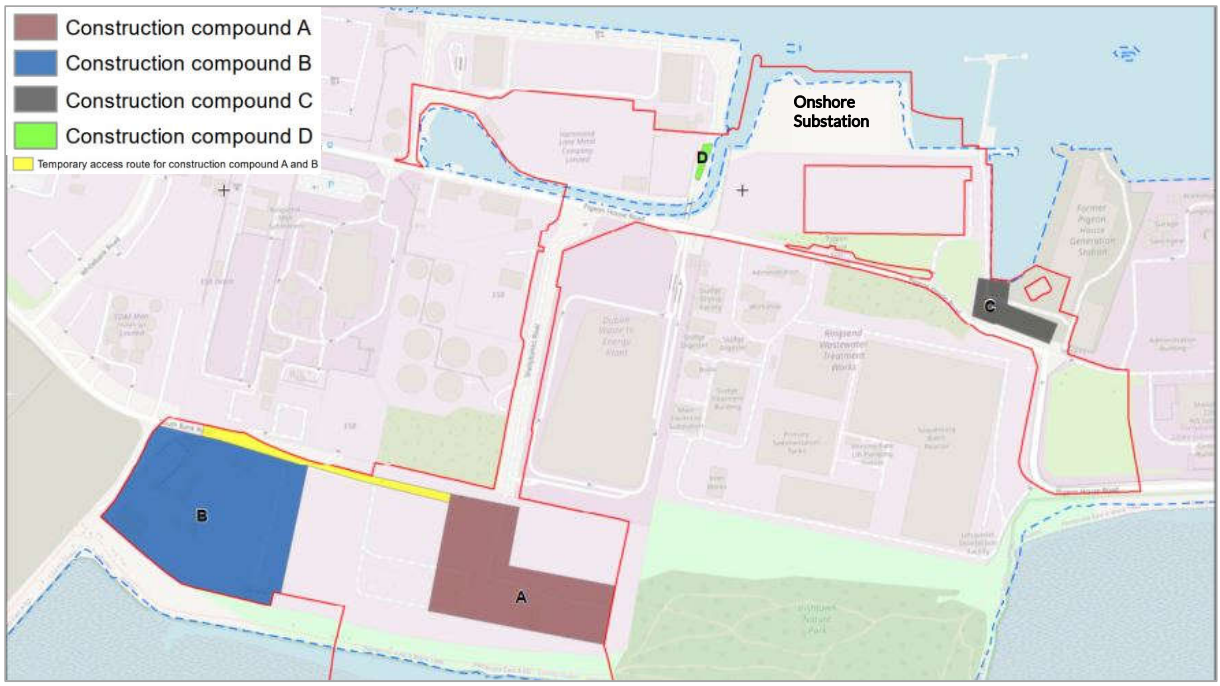


Diagram 2-1: Onshore Development Area and Compounds Location Map (Map data © OpenStreetMap)

[1] This substation is not yet constructed but will be located within the existing ESB Poolbeg Generating Station site boundary.

2.1 OBJECTIVES

The objective of this report is to assess the impact the OTI will have on the existing road network. This report presents the expected volume of traffic generated by during the OTI construction phase and assesses its impact on the operational capacity of the road network in the vicinity of the onshore development area .

The following 6 no. junctions have been analysed as part of this report, the location of these junctions is illustrated in **Diagram 3-2**:

- Junction 1 - R131 (N) / Direct Access / R131 (S) / North Wall Quay Roundabout;
- Junction 2 - R131 (Nw) / Sean Moore Road / South Bank Road / R131 (Sw) / Pigeon House Road Roundabout;
- Junction 3 - Pigeon House Road / South Bank Road T-Junction;
- Junction 4 - Pigeon House Road / Shellybanks Road T-Junction;
- Junction 5 - Pigeon House Road / Ecocem Access/ Pigeon House Road / Dublin Waste to Energy Access Crossroad;
- Junction 6 - Pigeon House Road / Private Access T-Junction.

2.2 STRUCTURE OF THE REPORT

This report is divided into seven chapters:

- Chapter 1 is a non-technical summary;
- Chapter 2 presents this introduction;
- Chapter 3 presents the report method and describes the site location, existing road network, traffic survey and traffic generated by CWP Project;
- Chapter 4 provides an overview of the existing and proposed traffic conditions, explaining how this information was obtained;
- Chapter 5 presents the analysis of baseline traffic and traffic generated by the CWP Project on existing traffic conditions (i.e., with and without the CWP Project and during peak and average construction works);
- Chapter 6 presents other road issues;
- Chapter 7 presents the conclusions.

3. ASSESSMENT METHODOLOGY

3.1 GUIDANCE AND LEGISLATIVE REVIEW

In preparing the TTA, the following references were consulted:

- Dublin City Development Plan 2022 – 2028;
- TII PE-PDV-02045 Traffic and Transport Assessment Guidelines (May 2014); and
- TII PE-PAG-02017 Project Appraisal Guidelines for National Roads Unit 5.3: Travel Demand Projections (October 2021).

Given that the construction phase is expected to cause higher traffic volumes, this TTA has analysed the junction capacity, including queue lengths and reserve capacity at the following assessments:

- Base year: 2022 and 2023 (i.e. traffic counts year);
- Base year plus committed development traffic;
- 3 no. construction phase scenarios: 2026
    - Scenario 1 - HV peak traffic movements,
    - Scenario 2 - LV peak traffic movements, and
    - Scenario 3 – Average traffic movements.

3.2 ASSESSMENT METHODOLOGY

To assess the traffic and transportation impacts associated with the CWP Project, the following approach was adopted:

- Data Collection:
    - Establish the baseline traffic flows of the existing roads;
    - Adjust traffic count data using standard growth rates to establish a do-nothing scenario;
    - Establish the traffic volumes generated by the project during the construction phase.
- Assessment of Effects:
    - Determination of impacts on surrounding road network during the construction phase.

3.3 SITE LOCATION

The OTI is located on the Poolbeg Peninsula, Dublin, adjacent to the River Liffey.

A permanent site access, in the form of a bridge over the cooling water discharge channel will be provided on the western boundary of the onshore substation. A bridge will be provided at this location from the beginning of the construction phase. It will access onto an existing private road (across from the ECOCEM Ireland site), with access to the Pigeon House Road.

A new temporary site access onto the Pigeon House Road, circa 30 metres east of an existing access as shown in **Diagram 3-1**, will also be provided for the onshore substation. This will be in place for the duration of the construction phase.

Four temporary construction compounds will be provided for the construction phase of the OTI (Compounds A-D). These together with the construction works area for landfall, onshore export cables and ESBN network cables will be accessed from the South Bank Road, Pigeon House Road and Shellybanks Road, as shown in **Diagram 3-1**.

In the vicinity of the onshore development area, the Pigeon House Road has a carriageway width of approximately 6.2 m and a speed limit of 50 km/h.

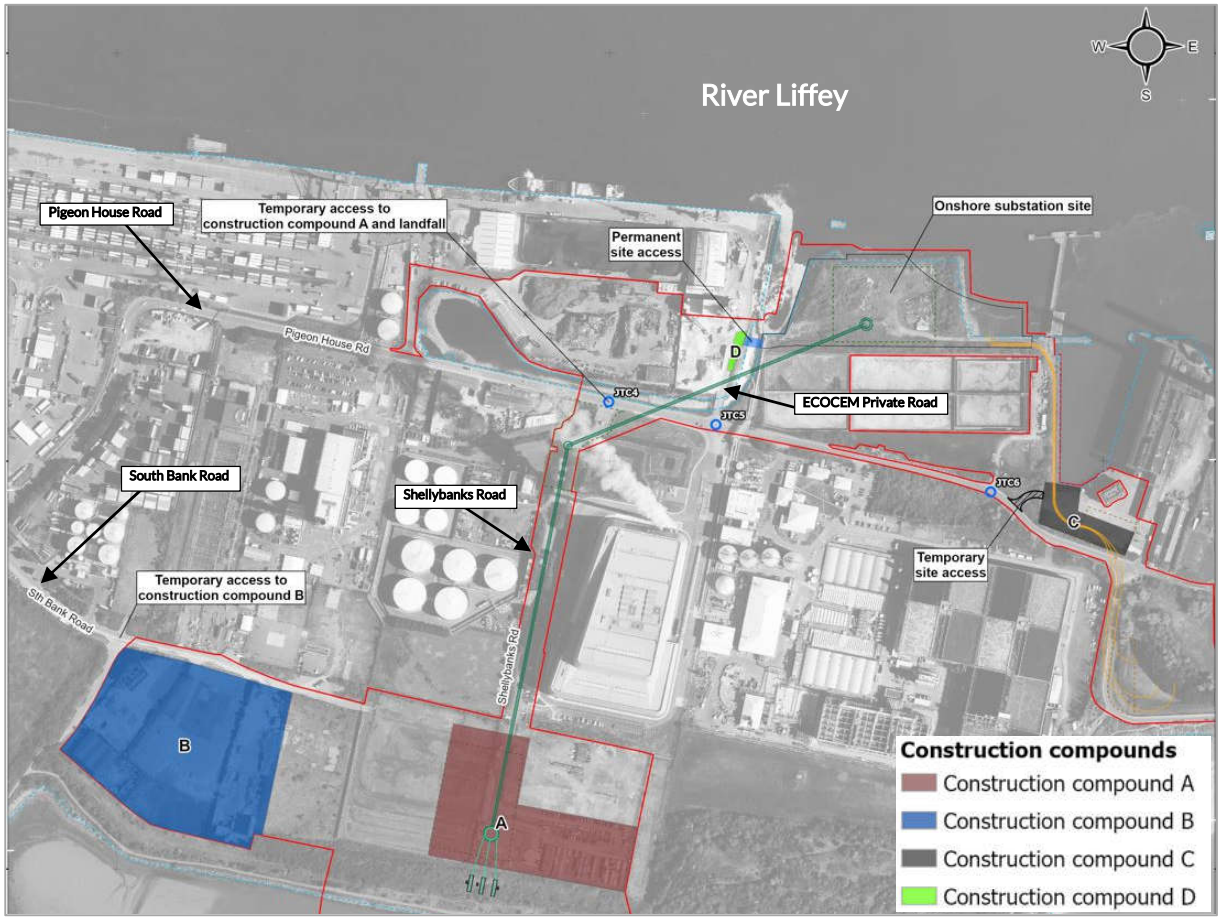


Diagram 3-1: Site Location Map (Extracted from Drawing No. CWP-TOB-ENG-08-01-MAP-0981)

The installation of the onshore export cables and ESBN network cables will require the provision of temporary tunnel and HDD compounds within the onshore development area. These are located within the boundaries of temporary construction compounds A and C and the onshore substation. The only exception is the reception tunnel compound which will be located at the top of the Shellybanks Road.

3.4 CONSULTATION

Key traffic aspects associated with the construction and O&M phases of the OTI were discussed with the Dublin City Council (DCC) Transportation Planning Section on 20th October 2022 and 14th June 2023. A scoping form was issued on the 4 July 2023 to the DCC Transportation Planning Section. This document outlined the proposed approach that the TTA would take and identified the junctions which would be included in the analysis.

The scoping form is presented on Annex A (Scoping Document).

3.5 EXISTING ROAD NETWORK

The existing road network in the vicinity of the onshore development area includes:

- National Road Network
    - M50
- Regional Road Network
    - R131;
    - R802.
- Local Road Network
    - South Bank Road;
    - Whitebank Road;
    - Pigeon House Road;
    - Shellybanks Road.

3.6 CUMULATIVE IMPACTS: PROPOSED NETWORK IMPROVEMENTS

The TTA shall consider committed developments within the vicinity of the onshore development area. This includes developments which have previously been granted planning permission, but which are yet to become operational. An allowance for these developments has been made for in the analysis. A desktop review of planning applications and publicly available information was undertaken in June 2024. The following projects were reviewed to determine if they would coincide with CWP Project:

- Dublin Port Company 3FM Project which includes for the Southern Port Access Route (SPAR);
- DPC MP2 Project;
- Pembroke Beach DAC / Becbay Ltd & Fabrizia Developments Ltd – Redevelopment of former glass bottle site;
- Electricity Supply Board (ESB) - Poolbeg Generating Station / Flexible Thermal Generation;
- ESB - Poolbeg Generating Station / Battery Energy Storage System (BESS);
- ESB - Dublin Bay Power Station / BESS;
- ESB - Dublin Bay Power Station / Flexible Thermal Generation;
- Circle K Ireland Energy - Terminal redevelopment at Alexandra Road;
- Irish Water (Uisce Éireann) - Ringsend Wastewater Treatment Plant Upgrade Project;
- Dublin Port Company - Capital Dredging Project;
- Dublin Port Company - Berth 50 Pontoons Poolbeg West Planning Scheme 2019;
- ESB - Dublin Bay Power Station Open Cycle Gas Turbine (OCGT);
- ESB - Poolbeg Generating Station OCGT;
- ESB - Poolbeg Generating Station / Substation (the Poolbeg 220kV substation) (Developer: EirGrid);
- National Transport Authority (NTA)- Bus Connects Ringsend to City Centre Scheme; and
- Poolbeg West Planning Scheme 2019.

The **DPC 3FM Project** is the third and final Masterplan project needed to complete the development of Dublin Port and bring it to its ultimate and final capacity by 2040. It is a key development for the Port and includes for network and road infrastructure improvements. The information available indicates an envisaged construction start dated in 2026 and this coincides with the construction of the CWP Project.

The proposed **SPAR**, to be developed as part of the **3FM Project** will be a private road for Port-related vehicles with a new bridge across the River Liffey adjacent to the existing Tom Clarke Bridge and running parallel to the East Link Toll Road. Based on information available from previous planning applications for the SPAR, a 14% reduction in all traffic on the R131 East Link Bridge is envisaged as a result of the construction of the SPAR. It is assumed all HV traffic currently travelling on the R131 East Link Bridge from north of the River Liffey to the southern port, will utilise the SPAR. .

The planning application has not been lodged at the time of CWP Project planning application. Therefore there was not sufficient information to determine potential impacts and this development has not been assessed as a committed development.

NTA: Bus Connects Ringsend to City Centre Scheme: Bus Connects will provide improvements to the public, transport network in the vicinity of the onshore development area. Information available indicates that Ringsend to City Centre Core Bus Corridor Scheme has not yet been submitted to An Bord Pleanala. It is envisaged to have the benefit of reducing the dependency on the passenger car and will increase the uptake on public transport. This will reduce traffic flows in the vicinity of the site and hence will not be assessed.. Therefore Bus Connects Ringsend to City Centre Scheme has not been incorporated into the committed development traffic generation in section 4.3.

Pembroke Beach DAC / Becbay Ltd & Fabrizia Developments Ltd: Former Irish Glass Bottle Site: As part of the planning for this proposed mixed-use development it refers to the upgrade of the signalisation of the Sean Moore Road Roundabout. Currently, there are no detailed plans relating to the proposed upgrade of this roundabout. Construction phase total daily traffic to and from the development will not exceeds 10% (or 5%) of the traffic flow on the adjoining road. Construction phase traffic is envisaged to be below the thresholds in the TII TTA guidance, hence it will not be assessed. Therefore Former Irish Glass Bottle Site has not been incorporated into the committed development traffic generation in section 4.3.

DPC MP2 Project: At construction phase staff traffic will travel to and from J1 and J2.The total daily traffic to and from the development will not exceed 10% (or 5%) of the traffic flow on the adjoining road. The information available indicates an envisaged operational phase in 2030. The CWP Project construction programme will be complete in 2029 and CWP Project proposed development will be operational for 2030. This DPC development is consolidation of passenger terminal buildings and the operational stage traffic is accounted for in the baseflow. Therefore Dublin Port Company MP2 Project has not been incorporated into the committed development traffic generation in section 4.3.

ESB - Poolbeg Generating Station / Flexible Thermal Generation (flexgen): This development is located within the existing ESB Poolbeg Generating Station. The proposed development area (including connection corridors and construction laydown areas) is approximately 5.6 hectares. Construction phase traffic trips are envisaged to be in excess of the 100 trips in / out combined in the peak hours for the proposed development It is assumed that the construction phase of this development will be completed before 2026. Operational phase traffic is envisaged to be below the thresholds in the TII TTA guidance, hence will not be assessed. Therefore the Poolbeg FlexGen has not been incorporated into the committed development traffic generation in section 4.3.

ESB - Poolbeg Generating Station / BESS: This development is located within the existing ESB Generating Station. The proposed development area (including connection corridors and construction laydown areas) is approximately 5.3 hectares. Construction phase traffic trips are envisaged to be in excess of the 100 trips in / out combined in the peak hours for the proposed development. It is assumed that the construction phase of this development will be completed before 2026. Operational phase traffic is envisaged to be below the thresholds in the TII TTA guidance, hence will not be assessed. Therefore Poolbeg Power Station Battery Storage Systems has not been incorporated into the committed development traffic generation in section 4.3.

ESB - Dublin Bay Power Station / BESS : The proposed development area (including connection corridors and construction laydown areas) is approximately 3.5 hectares. These works are proposed at the Dublin Bay Power Station. It was assumed this will be constructed and in operation by 2026. Therefore Dublin Bay Power Station BESS has not been incorporated into the committed development traffic generation in section 4.3.

ESB - Dublin Bay Power Station / FlexGen: This development is located on the Poolbeg Peninsula. The proposed development are (including connection corridors and construction laydown areas) is approximately 6.1 hectares. These works are proposed at the Dublin Bay Power Station. It was assumed this will be constructed and in operation by 2026. Therefore Dublin Bay Power Station FlexGen has not been incorporated into the committed development traffic generation in section 4.3.

Circle K Ireland Energy - Terminal redevelopment at Alexandra Road: The proposed development consists of dismantling a portion of the Terminal 1 site incl. the loading gantry, office buildings, workshops and control tower. Existing equipment including pumps will be moved to facilitate transfer of fuel to other terminals and Bill of Landing facilities will be moved as part of the works and the existing warehouse will be modified to store spare parts. The modifications also include relocating the Jet Fuel loading gantry and installing a new internal entrance gate and fence. The site is located in Terminal 1, Alexandra Road, Dublin Port. It is an existing operating development with 140 HV movements. Upon completion of the works the operation of the development will be 180 HV movements (i.e. additional 40 HVs). The haul route for HVs is via the port tunnel. There will be no additional HV movements associated with this development at J1 or J2 and hence will not impact on the CWP Project assessment. Information available indicates the construction traffic generated during the construction phase tends to be outside peak hours. The traffic generated by the construction phase will not be higher than the peak hour predicted volumes for the operational phase. Hence this development will not be assessed. Therefore Circle K Terminal Alexandra Road has not been incorporated into the committed development traffic generation in section 4.3.

Irish Water (Uisce Éireann) - Ringsend Wastewater Treatment Plant Upgrade Project: The proposed development consists of 2 no. units comprising a Combined Heat and Power Engine and Steam Generator unit with roof top plant areas. Construction phase has commenced in 2022 and is due to be completed in 2025. The construction hours are occurring between 6am and 6pm. These works are envisaged to be completed before commencement of the CWP Project development. Hence the development will not be assessed. Operational phase traffic is envisaged to be 68 movements in the peak hour. This is not in excess of the 100 trips in / out combined in the peak hours for the proposed development. Hence it will not be assessed. Therefore Ringsend Waste Water Treatment Plant has not been incorporated into the committed development traffic generation in section 4.3.

Dublin Port Capital Dredging Project: Information available indicates that all dredging and materials handling will be undertaken within the vessels with a limited requirement for any road traffic. Road traffic will be restricted to occasional service vehicles to the site compound for bunkering and removal of skips and private car use will be limited to circa of 10 dredging

contractor staff. As such, there will be no perceptible traffic impact on the national road network. Therefore Dublin Port Capital Dredging Project has not been incorporated into the committed development traffic generation in section 4.3.

Berth 50 Pontoons Dublin Port: Information available indicates this project was completed in early 2019 on a heavy duty pontoon system at Berth 50, Dublin Port. Therefore Berth 50 Pontoons Dublin Port has not been incorporated into the committed development traffic generation in section 4.3.

ESB – Dublin Bay Power Station/ Open Cycle Gas Turbine (OCGT): The proposed development will consist of the construction/installation of an OCGT generating unit & all associated works. These works are proposed at the Dublin Bay Power Station. Construction phase LVs 122 trips is in excess of the 100 trips in / out combined in the peak hours for the proposed development. Hence this development will be assessed as a committed development in TTA. Operational phase total daily traffic to and from the development was stated as not being in excess of 10% (or 5%) of the traffic flow on the adjoining road in their EIAR. Hence the operational has not been assessed.

ESB - Poolbeg Generating Station / Open Cycle Gas Turbine (OCGT): The proposed development will consist of the construction/installation of an Open Cycle Gas Turbine (OCGT) generating unit & all associated works. These works are proposed at the ESB Poolbeg Generating Station. Construction phase LVs 122 trips is in excess of the 100 trips in / out combined in the peak hours for the proposed development. Hence this development will be assessed as a committed development in TTA. Operation phase total daily traffic to and from the development was stated as not being in excess of 10% (or 5%) of the traffic flow on the adjoining road in their EIAR. Hence will not be assessed.

ESB - Poolbeg Generating Station / the Poolbeg 220kV substation (Developer: EirGrid): This project relates to replacing and enhancing the existing Poolbeg 220kV substation. It is noted this is the 220kV that CWP Project proposes to connect to. Hence the construction traffic has been assessed as a committed development in TTA.

Poolbeg West Planning Scheme 2019: The Planning Scheme refers to & records objectives relative to the upgrade and signalisation of the Sean Moore Road Roundabout. These are proposed as part of Phase 1+2 works under the planning scheme. Currently, there are no detailed plans relating to the proposed upgrade of the roundabout & it is not accounted for under in terms of committed development. Therefore Poolbeg West Planning Scheme 2019 has not been incorporated into the committed development traffic generation in section 4.3.

3.7 TRAFFIC SURVEY

In order to determine the magnitude of the existing traffic flows, a classified junction turning count was undertaken at 6 no. junctions. A traffic survey was carried out by Nationwide Data Collection Ltd on 15th of November 2022 between the hours of 07:00 and 19:00hrs at 3 no. junctions (i.e. Junction 1, 2 and 3) and an additional traffic survey was carried out by IDASO Ltd on 6th September 2023 between the hours of 07:00 and 19:00hrs at 3 no. junctions (Junction 4, 5 and 6). Count information was obtained at the following junctions:

- Junction 1: R131(N) / Direct Access / R131(S) / North Wall Quay Roundabout;
- Junction 2: R131(Nw) / Sean Moore Road / South Bank Road / R131(Sw) / Pigeon House Road Roundabout;
- Junction 3: Pigeon House Road / South Banks Road T-Junction;
- Junction 4: Pigeon House Road / Shellybanks Road T-Junction;

- Junction 5: Pigeon House Road / Ecocem Access/ Pigeon House Road / Dublin Waste To Energy Access Crossroad;
- Junction 6: Pigeon House Road / Private Access T-Junction.

These surveys segregated traffic flow between light vehicles (LV) and heavy vehicles (HV). The results of these surveys indicated that the peak traffic through the junctions 1 occurred between AM Peak (07:45 and 08:45) and PM peak (17:30 and 18:30). Traffic count location is presented on **Diagram 3-2**.

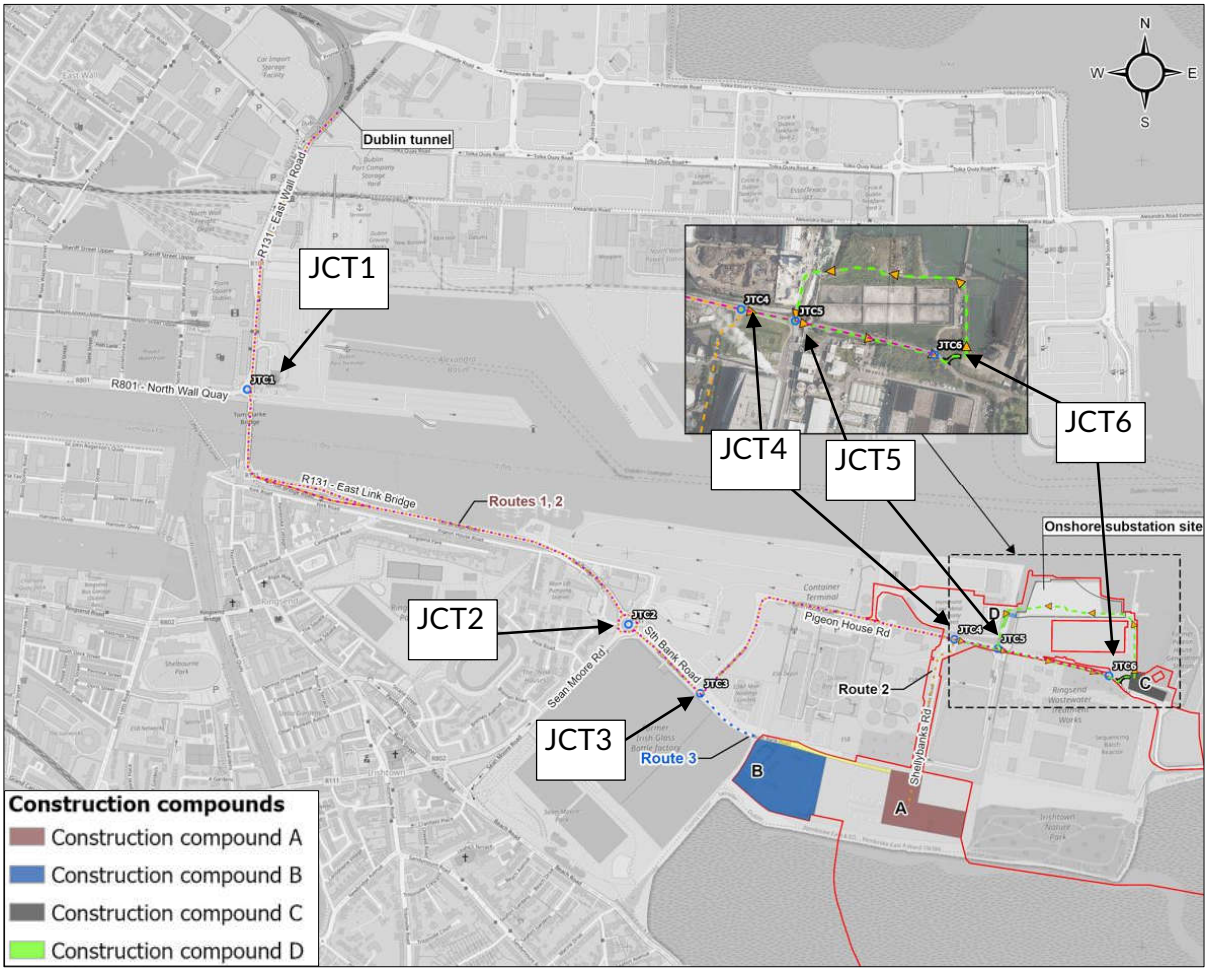


Diagram 3-2:Traffic Count Location (Extracted from (Extracted from Drawing No. CWP-TOB-ENG-08-01-MAP-0979) (Map Data © OpenStreetMap)

3.8 CONSTRUCTION PHASE

The construction phase is expected to start in 2026 and finish in 2029.

Over the 36 month construction phase, there will be 4 no. main phases for installation of the OTI, as presented on **Chapter 4 – Description of the Proposed Development** (there will be overlap between these):

- 36 months – Onshore substation construction and commissioning;
- 12 months – landfall works (Phase 1);
- 12 months – landfall works (Phase 2);
- 24 months – onshore export cable installation.

Table 3.1 and presents the volume of traffic expected to be generated daily by the construction phase during peak and average works for both onshore export cable options.

Table 3.1: HV And LV Daily Construction Volumes (OTI works)

Task Description	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
Establishment of temporary construction facilities including laydown areas (Permanent Works Compounds:Landfall Compound and Poolbeg Compounds)	5	5	5																																					
Preparation of internal access roads (temporary and permanent) (Onshore Substation Site)	1	1	1																																					
Initial site enabling/preparation	2	2	2																																					
Riverside Structures Concrete			18	18	**4**	4																																		
Onshore Substation Site cut and infill works		21	24	24	**92**	92	68	68																																
Landfall Tunnel Compound (Launch Shaft 1) Set up (including laydown areas, offices, welfare and haul roads)					**2**	2																																		
Reception Shaft Compound Set Up (Pigeon House Road: Shaft 2) (including laydown areas, offices, welfare and haul roads)					**2**	0																																		
Onshore Substation Site Compund (Launch Shaft 3) Set Up (including laydown areas, offices, welfare and haul roads)					**2**	2																																		
Tunnel construction at Landfall (Shaft 1 Compound)								14	1	5	9	9	10	0																										
Tunnel construction (Pigeon House Road: Reception Compound: Shaft 2)					**2**	5	8	0																																
Tunnel construction at the Onshore Substation Site (Launch Shaft 3 Compound)							14	7	15	12	0																														
Pipe jack works at Landfall (Launch Shaft 1)															1	1	8	13	4	1																				
Pipe jack works at the Onshore Substation Site (Launch Shaft 3)										1	5	13	2	2	1																									
Duct Installation																1					1																			
Backfill for tunnels and shafts (Shafts and Tunnel)																	2	1	0	1	13	12	12	6																
Demobilisation Shaft Sites & site finishing																									10															
Installation of ESBN Network Cable (i.e. grid connection from onshore substation to ESBN substation)				5	**9**																																		
Piling and Pile Caps for Buildings																					14	14	10	10	10															
TJB excavation & construction								7	6																															
TJB cut and haul off-site								8	8																															
Cable pulling and jointing within TJB area																													1	1	1	1				1	1	1		
TJB backfilling																																						1	1	1
Open excavation landfall																2	5	1	5	2	1																		
Transition zone cable laying																												1	1	1	1	1	1						
Temporary construction access ramp																	1																1						
Off-season works																																							
Building & Structures erection																															19	19	19	19	10	10			
Mechanical and electrical erection																																					10	10	
General civil activities - drainage installation, fencing, CCTV																										10	10	10	10	10	10								
Site finishing & reinstatement works																																						10	10
Testing and Commissioning	114																																						
Total HGV Daily One Way Movements	121	28	50	47	**114**	105	89	103	30	18	15	22	12	2	2	4	16	15	9	4	29	26	22	16	20	10	10	11	12	12	12	21	20	20	19	11	11	12	21	11

Testing and Commissioning	114																																				
Total HGV Daily One Way Movements	121	28	50	47	**114**	105	89	103	30	18	15	22	12	2	2	4	16	15	9	4	29	26	22	16	20	10	10	11	12	12	12	21	20	20	19	11	11	12	21	11
Total HGV Daily Two Way Movements (Access and Egress)	243	57	100	95	**227**	210	177	207	60	36	29	45	23	5	3	8	31	31	18	7	58	52	44	32	40	20	20	22	24	24	24	42	40	40	38	22	22	24	42	22
Total HGV Daily Two Way Movements with 10% Contingency	268	62	110	104	**250**	232	194	228	66	40	32	50	26	6	4	8	34	34	20	8	64	58	48	36	44	22	22	24	26	26	26	46	44	44	42	24	24	26	46	24
Average HGV Daily One Way Movements	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
Average HGV Daily Two Way Movements (Access and Egress)	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
Average HGV Daily Two Way Movements with 10% Contingency	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72

Total LV Daily One Way Movements	23	25	35	10	31	14	41	47	38	53	46	46	28	28	28	50	51	52	52	52	**77**	30	39	39	45	19	19	22	34	34	34	51	30	10	10	41	41	41	25	15
Total LV Daily Two Way Movements (Access and Egress)	46	50	70	20	62	28	82	94	76	106	92	92	56	56	56	100	102	104	104	104	**154**	60	78	78	90	38	38	44	68	68	68	102	60	20	20	82	82	82	50	30
Total LV Daily Two Way Movements with 10% Contingency	50	56	78	22	68	30	90	104	84	116	102	102	62	62	62	110	112	114	114	114	**170**	66	86	86	100	42	42	48	74	74	74	112	66	22	22	90	90	90	56	34
Average LV Daily One Way Movements	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Average LV Daily Two Way Movements (Access and Egress)	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
Average LV Daily Two Way Movements with 10% Contingency	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77

Key assumptions:

(1) It was assumed there are 4 weeks in a month;

(2) Assume construction operations are weekdays and on Saturdays;

(3) Construction operations from hours of 07:00-19:00 on weekdays and 07:00-14:00 on Saturdays;

(4) Assumed ratio of 1 person to 1 car (i.e. LV).

In this report, the peak and average construction works have been assessed in three scenarios:

- Peak HV traffic associated with the construction phase in Month 5;
- Peak LV traffic associated with the construction phase in Month 21; and
- Average LV and HV for the construction phase

4. TRIP GENERATION AND DISTRIBUTION

4.1 SEASONAL ADJUSTMENT

In order to undertake an analysis of the key junction, it is sometimes necessary to apply a correction factor to convert the traffic count data into seasonally adjusted traffic flows to take account of the seasonal variation that is experienced with traffic volumes. A comparison was undertaken between the TII traffic count information for the day of the survey in November 2022 and September 2023 and the annual average daily traffic (AADT) for the previous year. The traffic count on the day of the survey was higher than the average for the year; therefore, a seasonal adjustment was not required.

4.2 TRAFFIC GROWTH

The TII Project Appraisal Guidelines for National Roads Unit 5.3 - Travel Demand Projections presents annual growth rates for Dublin City. A Link-based Alternative Future Demand Sensitivity Growth Rates were applied to 2022 and 2023 traffic flows to estimate traffic flows for the future assessment year. **Table 4.1** shows the growth rates for Dublin City, split into light vehicles (LV) and heavy vehicles (HV) for the construction year analysed (2026). The derived growth factors were applied to 2022 and 2023 traffic flows to determine background traffic flows for the assessment year.

Table 4.1: Growth Factors for Light Good Vehicle (LV) and Heavy Good Vehicle (HV)

Vehicle	2026 (2022 Survey)	2026 (2023 Survey)
LV	1.0555	1.0414
HV	1.1233	1.0911

4.3 TRIP GENERATION

4.3.1 TRIP GENERATION OF COMMITTED DEVELOPMENTS

A desktop review of other planning applications within past 5 year were identified and analysed if the construction phase or operational phase would coincide with the construction phase of this application in 2026. The committed development traffic generation is summarised in

Table 4.2.

Table 4.2:Traffic Generation Committed Development

Planning Application	AM Peak Arrivals		PM Peak Departures	
	LV	HV	LV	HV
CEA-1338 & CEA-1327 Open Cycle Gas Turbine (OCGT) at the Dublin Bay Power Station and ESB Poolbeg Generating Station	56	5	56	5
CEA-1346 – located at the ESB Poolbeg Generating Station (Developer: EirGrid)	0	4	0	4
Total Committed Dev. - Year 2026	**56**	**9**	**56**	**9**

4.3.2 TRIP GENERATION OF PROPOSED PROJECT

Based on the proposed traffic movements summarised in **Table 3.1** the following scenarios have been assessed:

- Peak HV traffic associated with the construction phase in Month 5;
- Peak LV traffic associated with the construction phase in Month 21; and
- Average LV and HV for the construction phase

A summary of the predicted traffic movements during peak activity and average construction phase is provided in **Table 4.3**.

Table 4.3: Traffic Volumes During the Construction Phase – Peak and Average Works

Vehicle	AM PEAK (07:45-08:45hrs)		PM PEAK (17:30-18:30hrs)	
	Arrivals	Departures	Arrivals	Departures
Construction Phase Scenario 1 – Month 5				
LV	34	0	0	34
HV	10	10	10	10
Total	**44**	**10**	**10**	**44**
Construction Phase Scenario 2 – Month 21				
LV	84	0	0	84
HV	3	3	3	3
Total	**87**	**3**	**3**	**87**
Construction Phase Scenario 3 – Average				
LV	31	0	0	31
HV	2	2	2	2
Total	**33**	**2**	**2**	**33**

The following assumptions have been made in the development of the construction phase's generated traffic:

- It is assumed there are 4 weeks in a month;
- Assume construction operations are weekdays and on Saturdays;
- Construction operations from hours of 07:00-19:00 on weekdays and 07:00-14:00 on Saturdays;
- Assumed ratio of 1 person to 1 car (i.e. LV);
- All LVs are assumed to arrive in the morning peak (i.e. AM Peak) and depart in the evening (i.e. PM Peak);
- All HVs are assumed to be evenly distributed over the work day (i.e. 12 hours).

4.4 TRIP DISTRIBUTION

4.4.1 TRIP DISTRIBUTION – DO-NOTHING SCENARIO

With the results of the traffic survey, it was possible to determine origin-destination matrices during morning and evening peak hours at the 6 no. junctions. Origin-Destination matrices are provided in Annex B Origin Destination Matrices. Traffic flows are summarised in following Diagrams (**Diagram 4-1** to **Diagram 4-6**) and Tables (**Table 4.4** to **Table 4.9**).

Growth factors for light and heavy vehicles presented in **Table 4.1** were applied in order to estimate traffic distribution on future assessment year (2026) and summarised in following Tables (**Table 4.4** to **Table 4.9**).

- *Junction 1*

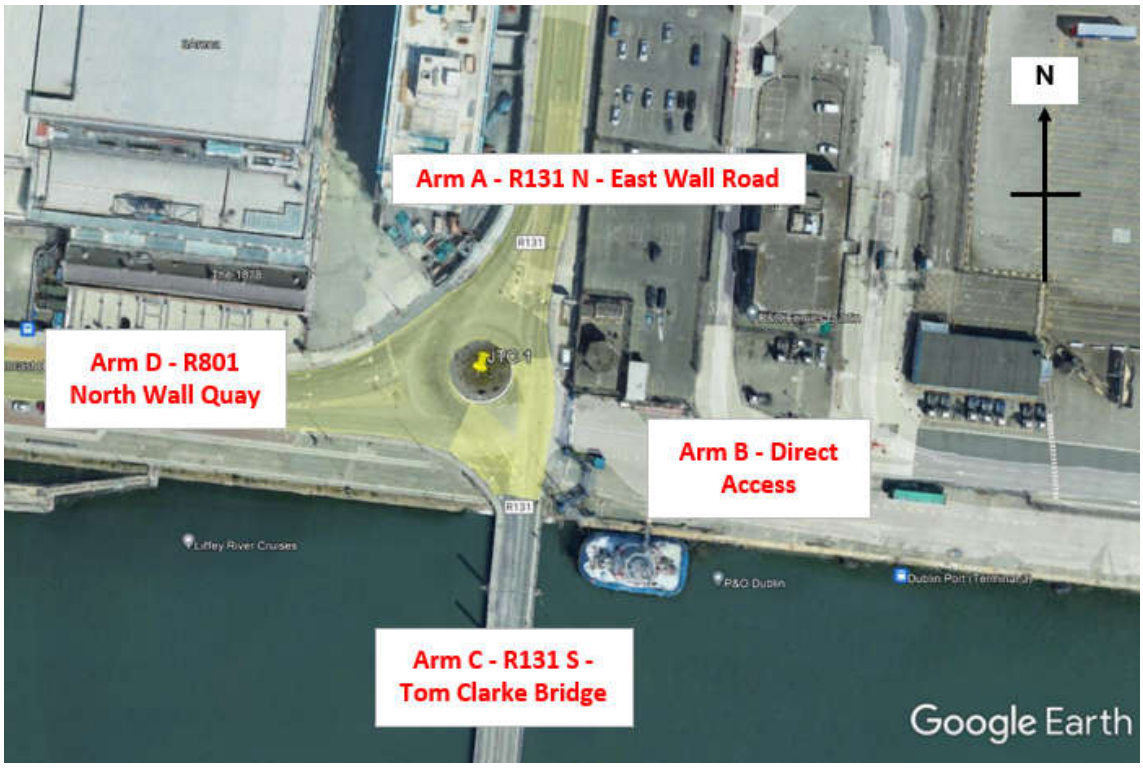


Diagram 4-1 Junction 1: R131 (N) / Direct Access/R131 East Wall Road Southbound (S)/ North Wall Quay

Table 4.4: Junction 1 R131 (N) / Direct Access/R131 East Wall Road Southbound (S)/ North Wall Quay

Link	2022			2026		
	LV	HV	Total	LV	HV	Total
AM Peak (07:45-08:45)						
R131 (N)	1,732	418	2,150	1,828	470	2,298
Direct Access	0	0	0	0	0	0
R131 (S)	1,538	231	1,769	1,623	259	1,883
North Wall Quay	663	166	829	700	186	886
PM Peak (17:30-18:30)						

Link	2022			2026		
	LV	HV	Total	LV	HV	Total
R131 (N)	1,746	183	1,929	1,843	206	2,049
Direct Access	0	0	0	0	0	0
R131 (S)	1,419	59	1,478	1,498	66	1,564
North Wall Quay	597	103	700	630	116	746

- *Junction 2*

Diagram 4-2 Junction 2: R131 East Link Bridge/ Sean Moore Road /South Bank Road/ R131 Sean Moore Road/ Pigeon House Road

Table 4.5: Junction 2 : R131 East Link Bridge/ Sean Moore Road /South Bank Road/ R131 Sean Moore Road/ Pigeon House Road

Link	2022			2026		
	LV	HV	Total	LV	HV	Total
AM Peak (07:45-08:45)						
R131 (NW)	1,360	226	1,586	1,436	254	1,689
Sean Moore Rd	20	84	104	21	94	115
South Bank Rd	122	133	255	129	149	278
R131 (SW)	1,398	70	1,468	1,476	79	1,554
Pigeon House Rd	26	3	29	27	3	31
PM Peak (17:30-18:30)						
R131 (NW)	1,334	43	1,377	1,408	48	1,456
Sean Moore Rd	31	13	44	33	15	47
South Bank Rd	135	29	164	142	33	175

Link	2022			2026		
	LV	HV	Total	LV	HV	Total
R131 (SW)	1,382	19	1,401	1,459	21	1,480
Pigeon House Rd	20	0	20	21	0	21

- *Junction 3*

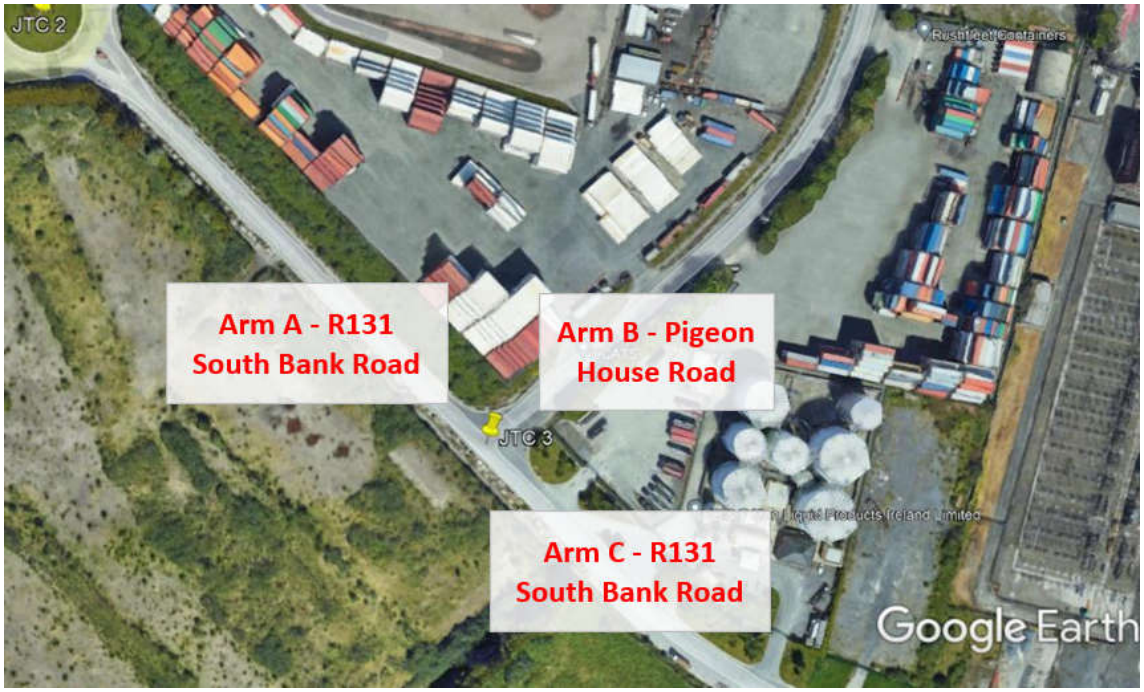


Diagram 4-3 Junction 3: R131 South Bank Road / Pigeon House Road / R131 South Bank Road

Table 4.6: Junction 3 R131 South Bank Road / Pigeon House Road / R131 South Bank Road

Link	2022			2026		
	LV	HV	Total	LV	HV	Total
AM Peak (07:45-08:45)						
R131 (NW)	125	132	257	132	148	280
Pigeon House Rd	122	104	226	129	117	246
R131 (SE)	31	62	93	33	70	102
PM Peak (17:30-18:30)						
R131 (NW)	227	28	255	240	31	271
Pigeon House Rd	201	12	213	212	13	226
R131 (SE)	38	20	58	40	22	63

- *Junction 4*

Diagram 4-4 Junction 4: Pigeon House Road / Shellybanks Road / Pigeon House Road

Table 4.7: Junction 4 Pigeon House Road / Shellybanks Road / Pigeon House Road

Link	2023			2026		
	LV	HV	Total	LV	HV	Total
AM Peak (07:45-08:45)						
Pigeon House Rd (W)	93	35	128	97	38	135
Shellybanks Rd	44	0	44	46	0	46
Pigeon House Rd (E)	113	37	150	118	40	158
PM Peak (17:30-18:30)						
Pigeon House Rd(W)	127	11	138	132	12	144
Shellybanks Rd	13	1	14	14	1	15
Pigeon House Rd (E)	138	12	150	144	13	157

- *Junction 5*

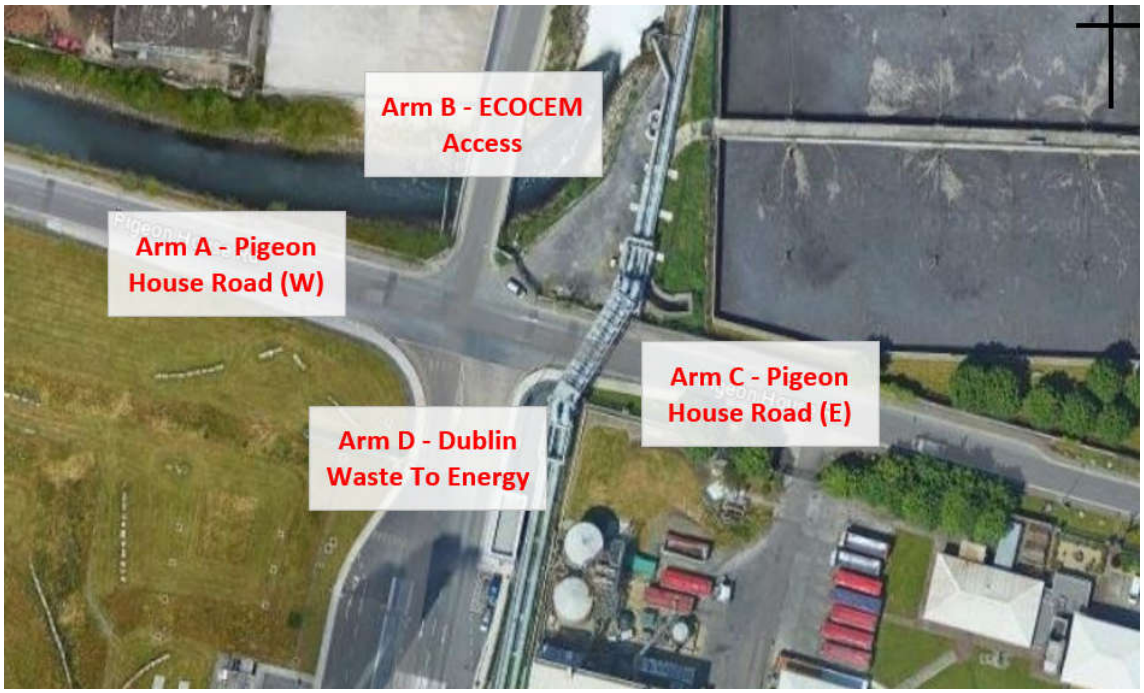


Diagram 4-5 Junction 5: Pigeon House Road / ECOCEM Access/ Pigeon House Road / Dublin Waste to Energy Access

Table 4.8: Junction 5 Pigeon House Road / ECOCEM Access/ Pigeon House Road / Dublin Waste to Energy Access

Link	2023			2026		
	LV	HV	Total	LV	HV	Total
AM Peak (07:45-08:45)						
Pigeon House Rd (W)	92	36	128	96	39	135
ECOCEM Access	4	2	6	4	2	6
Pigeon House Rd (E)	84	16	100	87	17	105
Dublin Waste To Energy Access	4	18	22	4	20	24
PM Peak (17:30-18:30)						
Pigeon House Rd (W)	127	11	138	132	12	144
ECOCEM Access	4	2	6	4	2	6
Pigeon House Rd (E)	121	1	122	126	1	127
Dublin Waste To Energy Access	2	8	10	2	9	11

- *Junction 6*

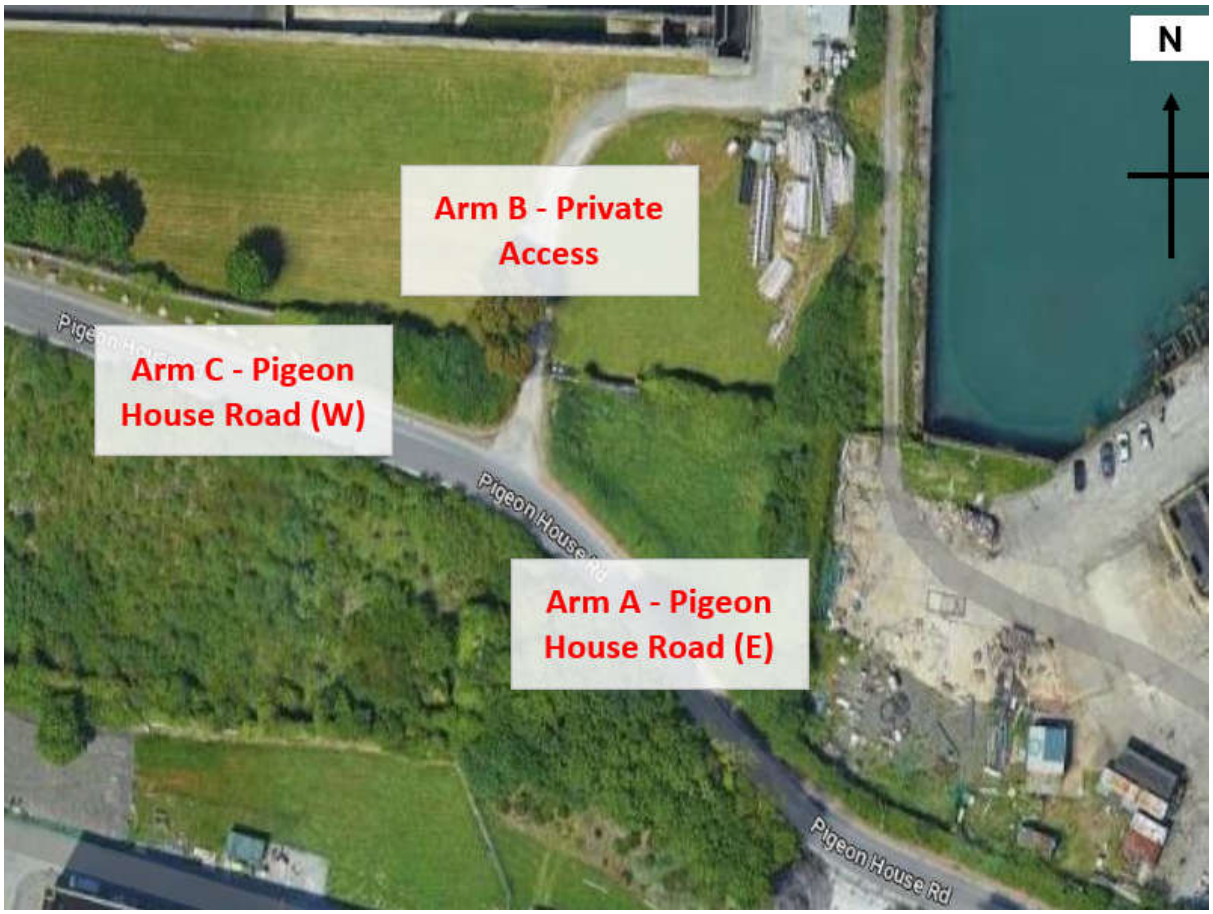


Diagram 4-6 Junction 5: Pigeon House Road / Private Access/ Pigeon House Road

Table 4.9: Junction 5 Pigeon House Road / Private Access/ Pigeon House Road

Link	2023			2026		
	LV	HV	Total	LV	HV	Total
AM Peak (07:45-08:45)						
Pigeon House Rd(W)	66	3	69	69	3	72
Private Access	0	0	0	0	0	0
Pigeon House Rd (E)	66	3	69	69	3	72
PM Peak (17:30-18:30)						
Pigeon House Rd(W)	118	1	119	123	1	124
Private Access	0	0	0	0	0	0
Pigeon House Rd (E)	118	1	119	123	1	124

4.4.2 TRIP DISTRIBUTION – WITH COMMITTED DEVELOPMENT

The committed developments will generate traffic movements that will impact the CWP Project construction phase route. In this analysis, summary of committed development trip distribution is provided in following Tables (**Table 4.10** to **Table 4.15**). The committed development would occur during AM and PM peak hours of the CWP Project.

Table 4.10: Junction 1 Committed Development Trip Distribution

Link	Committed Developments Traffic2026		
	LV	HV	Total
AM Peak (07:45-08:45)			
R131 (N)	44	49	93
Direct Access	0	0	0
R131 (S)	52	50	102
North Wall Quay	8	1	9
PM Peak (17:30-18:30)			
R131 (N)	37	55	92
Direct Access	0	0	0
R131 (S)	40	55	95
North Wall Quay	3	0	3

Table 4.11: Junction 2 Committed Development Trip Distribution

Link	Committed Developments Traffic2026		
	LV	HV	Total
AM Peak (07:45-08:45)			
R131 (NW)	51	50	101
Sean Moore Rd	0	0	0
South Bank Rd	106	55	161
R131 (SW)	55	5	60
Pigeon House Rd	0	0	0
PM Peak (17:30-18:30)			
R131 (NW)	40	55	95
Sean Moore Rd	0	0	0
South Bank Rd	106	55	161
R131 (SW)	66	0	66
Pigeon House Rd	0	0	0

Table 4.12: Junction 3 Committed Development Trip Distribution

Link	Committed Developments Traffic2026		
	LV	HV	Total
AM Peak (07:45-08:45)			

Link	Committed Developments Traffic2026		
	LV	HV	Total
R131 (NW)	106	55	161
Pigeon House Rd	106	55	161
R131 (SE)	0	0	0
PM Peak (17:30-18:30)			
R131 (NW)	106	55	161
Pigeon House Rd	106	55	161
R131 (SE)	0	0	0

Table 4.13: Junction 4 Committed Development Trip Distribution

Link	Committed Developments Traffic2026		
	LV	HV	Total
AM Peak (07:45-08:45)			
Pigeon House Rd	80	28	108
Shellybanks Rd	0	0	0
Pigeon House Rd	80	28	108
PM Peak (17:30-18:30)			
Pigeon House Rd	80	28	108
Shellybanks Rd	0	0	0
Pigeon House Rd	80	28	108

Table 4.14: Junction 5 Committed Development Trip Distribution

Link	Committed Developments Traffic2026		
	LV	HV	Total
AM Peak (07:45-08:45)			
Pigeon House Rd	80	28	108
ECOCEM Access	0	0	0
Pigeon House Rd	80	28	108
Dublin Waste to Energy Access	0	0	0
PM Peak (17:30-18:30)			
Pigeon House Rd	80	28	108
ECOCEM Access	0	0	0
Pigeon House Rd	80	28	108
Dublin Waste to Energy Access	0	0	0

Table 4.15: Junction 6 Committed Development Trip Distribution

Link	Committed Developments Traffic2026		
	LV	HV	Total
AM Peak (07:45-08:45)			
Pigeon House Rd	80	28	108
Private Access	0	0	0
Pigeon House Rd	80	28	108
PM Peak (17:30-18:30)			
Pigeon House Rd	80	28	108
Private Access	0	0	0
Pigeon House Rd	80	28	108

4.4.3 TRIP DISTRIBUTION – WITH THE PROPOSED PROJECT

The CWP Project will generate traffic movements in and out of the onshore development area during peak hours. HVs will access the site via the Dublin Tunnel and East Link Bridge. No HVs will be accessing from Sandymount or the City Centre Quays, in line with the DCC Heavy Goods Vehicles (HGV) Management Strategy (5+ axle restrictions).

HVs travelling to the onshore substation and Compound C will access the site via the new temporary access road and the eastern access road. To exit the onshore substation site, HVs will use the bridge over the cooling water discharge channel and be turning right onto the Pigeon House Road. The HV construction route is shown in **Diagram 4-7.**

LVs will have to access and exit the onshore substation site via the new temporary access road. Primary construction personnel will be required to park at Compound A, at the landfall area, and Compound B. The LV construction route is shown in **Diagram 4-8.**

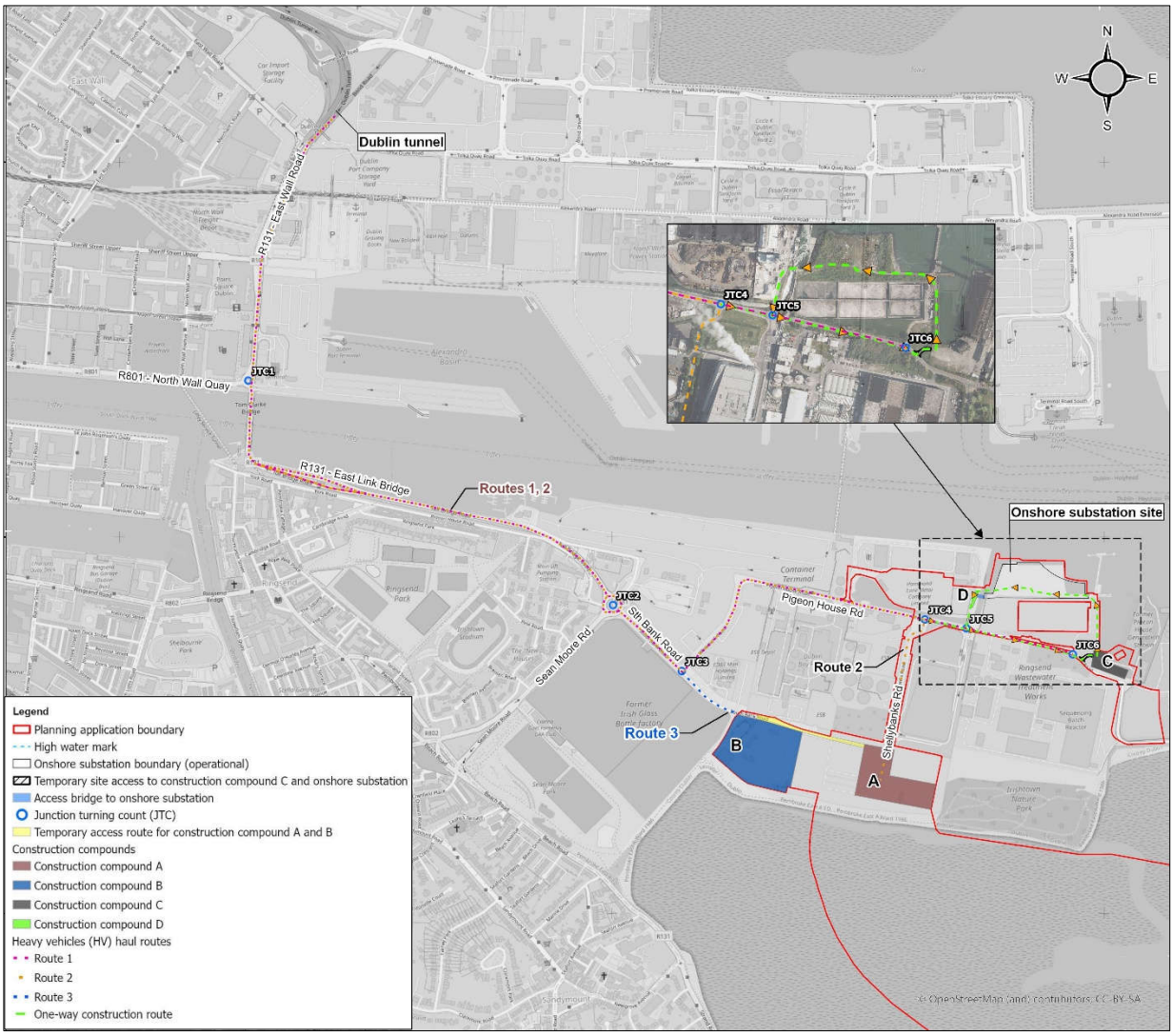


Diagram 4-7 HV Construction Route (Extracted from Drawing No. CWP-TOB-ENG-08-01-MAP-0979)

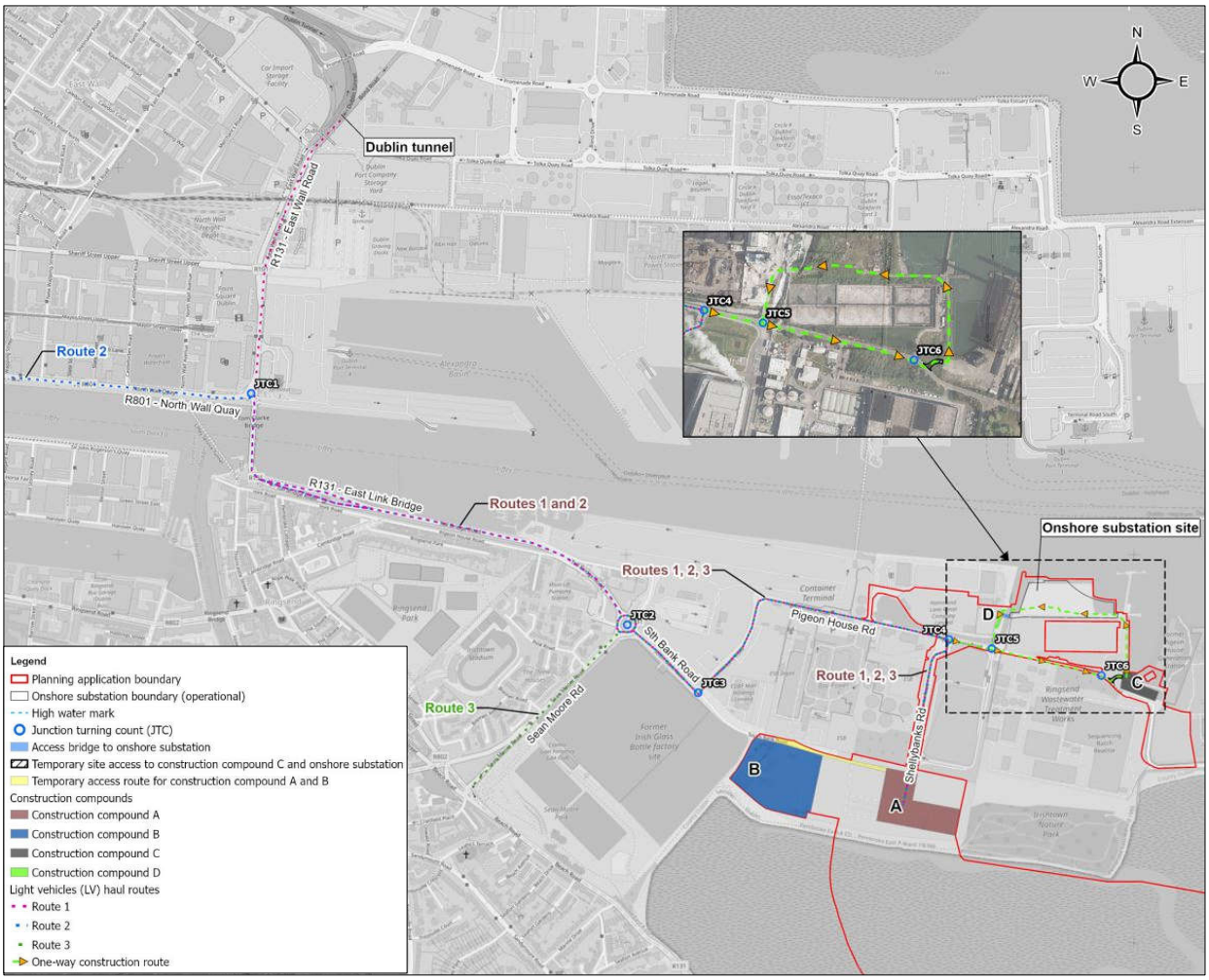


Diagram 4-8 LV Construction Route (Extracted from Drawing No. CWP-TOB-ENG-08-01-MAP-0980)

In this analysis, in the three scenarios were considered:

- HV in-site and out-site movements would occur during AM and PM peak hours, and
- LVs would arrive during AM peak and depart during PM peak hour.

Key assumptions from trip distribution for each scenario:

Scenario 1 – Peak HV Traffic (Month 5):

- Assumption that all HV traffic will travel into and out of the onshore substation site;
- For LVs – assume that all the construction personnel will park at Compound A and walk to the onshore substation site.

Scenario 2 – Peak LV Traffic (Month 21):

- From **Table 3.1**, during Month 21, most of HVs are associated with piling works for the onshore substation buildings. HV trips were split as:
    - 30% access and exit Compound A;
    - 10% access and exit Compound B; and
    - 60% access and exit Compound C.

- For LVs – assume that all the construction personnel will park at Compound A and walk to work areas.

Scenario 3 – Average Traffic:

- Assumption that HV trips will split as:
    - 30% access and exit Compound A,
    - 10% access and exit Compound B, and
    - 60% access and exit Compound C.
- For LVs – assume that all the construction personnel will park at Construction Compound A and walk to work areas.

In **Scenarios 1, 2 and 3**, 41 % LV shall arrive from Dublin Port and 7% from City Centre Quay and 52% from Sean Moore Road. Continuing to Junction 4 and turn left to Shellybanks Road. To exit the site, LV shall utilise the same route towards Sean Moore Road (Junction 2) and Junction 1.

In **Scenario 1**, 100% HV shall arrive from the Dublin Tunnel and continue towards onshore substation area via Junctions 4, 5 and 6. To exit the site, HV shall follow the one-way system and leave the onshore substation area via Junction 5 towards the Dublin Tunnel.

In **Scenarios 2 and 3**, 100% HV shall arrive from Dublin Tunnel. HV to continue to Junction 3, where 10% shall turn continue to Construction Compound B, and 90% HV shall continue to Junction 4. Then, 30% HV shall turn left at Shellybanks Road towards Construction. Compound A and remaining 60% towards Construction Compound C. To exit the site, HV shall follow the same arrival route, except at the onshore substation area where the one-way system is in place.

The trip distribution of traffic generated for each scenario (**Table 4.3**) is illustrated in the following **Diagram 4-9**, **Diagram 4-10**, and **Diagram 4-11**.

Diagram 4-9 Junction 1 to 6 – LV Trip Distribution % - Morning and Evening Peak Hour

Diagram 4-10 Junction 1 to 6 – HV Trip Distribution % (Scenario 1) - Morning and Evening Peak Hour

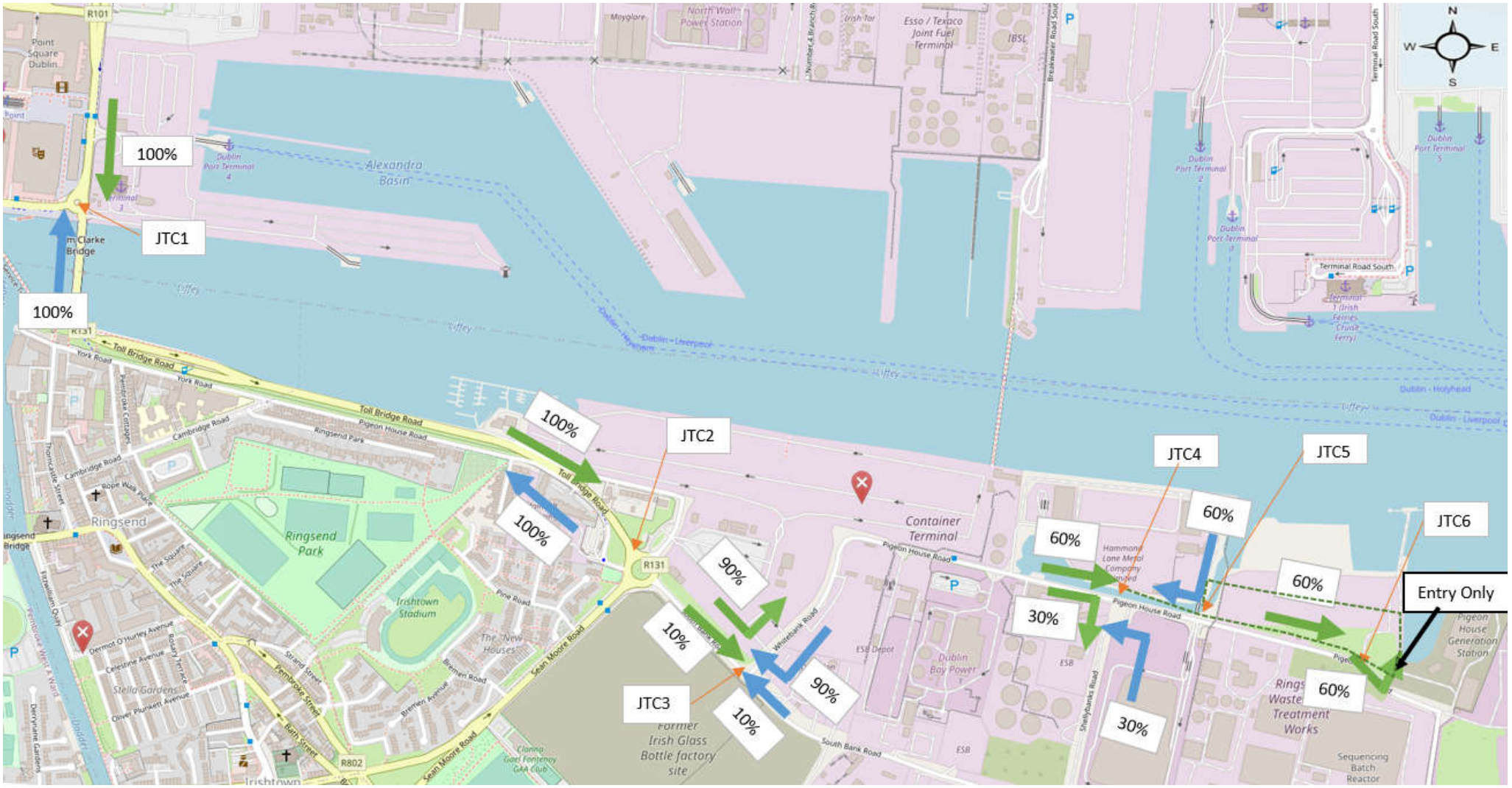


Diagram 4-11 Junction 1 to 6 – HV Trip Distribution % (Scenario 2 and 3) - Morning and Evening Peak

4.4.4 TRIP DISTRIBUTION – OPERATIONAL AND MAINTENANCE PHASE

After construction works are completed, the temporary site access at the onshore substation will be closed.

O&M traffic will access the main onshore substation via the permanent access bridge over the cooling water discharge channel (yellow route).

The ESB GIS building shall be accessed via existing eastern access road (blue route).

Vehicles requiring access to Uisce Éireann site, to the south of the onshore substation will access this site via the eastern access road (blue route) and exit the site via the bridge over the cooling water discharge channel (yellow route) i.e. a one way traffic flow.

The O&M phase routes are illustrated in **Diagram 4-12**.

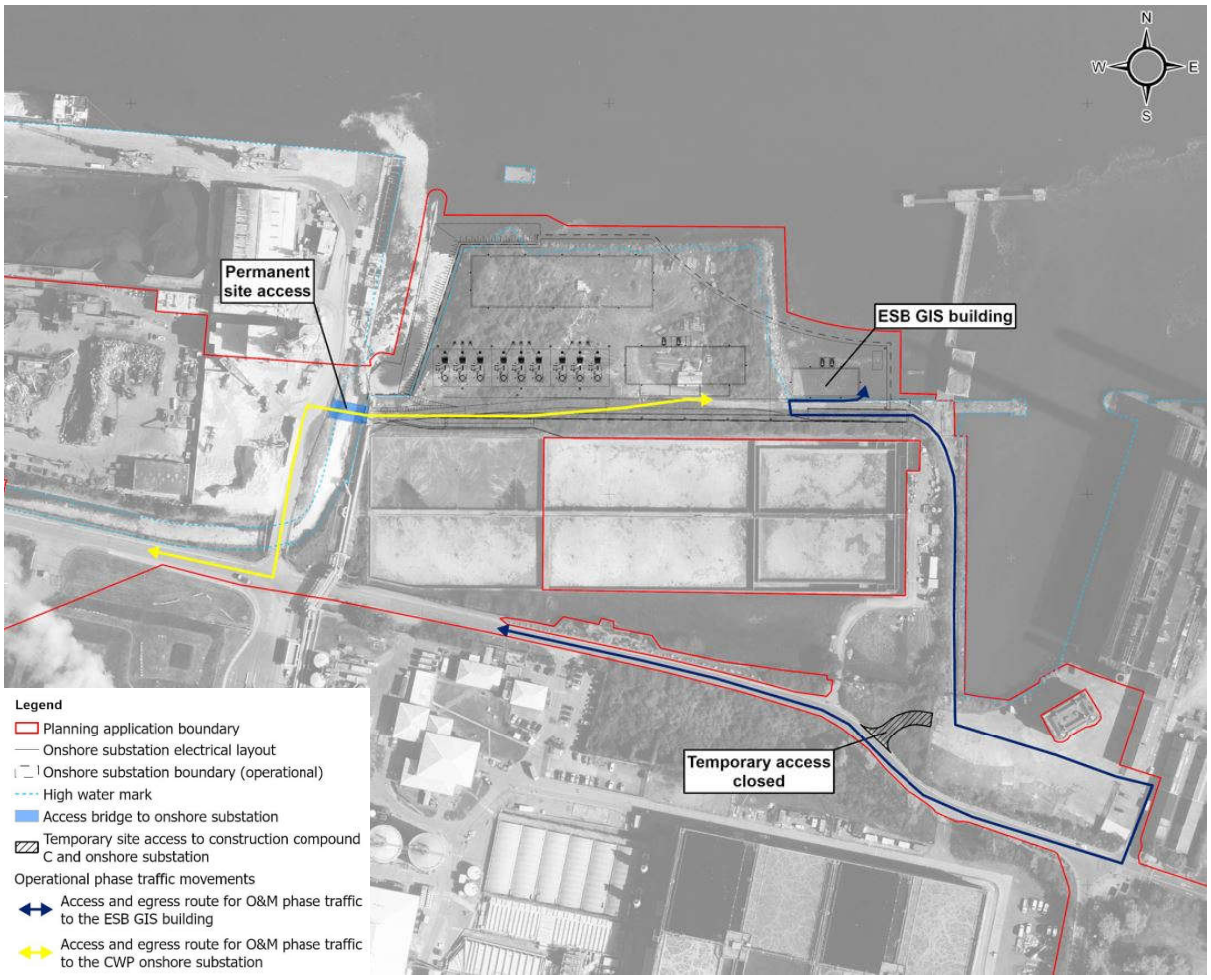


Diagram 4-12 O&M Phase Route (Extracted from Drawing No. CWP-TOB-ENG-08-01-MAP-0982)

5. TRAFFIC ANALYSIS

5.1 JUNCTION ANALYSIS

Junction 1 has been analysed using the Transport Research Laboratory (TRL) computer program JUNCTIONS 10 PICADY and ARCADY, a widely accepted tool used for the analysis of priority junctions and roundabouts.

The key parameters examined in the results of the analysis are the RFC - desirable value for PICADY/ ARCADY should be no greater than 0.85 – values over 1.00 indicate the approach arm is over capacity), the maximum queue length on any approach to the junction, and the average delay for each vehicle passing through the junction during the modelled period.

PICADY/ ARCADY requires the following input data:

- Basic modelling parameters (usually peak hour traffic counts synthesised over a 90-minute model period);
- Geometric parameters (including lane numbers & widths, visibility, storage provision, etc.);
- Traffic demand data (usually peak hour origin/destination matrix with composition of heavy goods vehicles input).

For the TTA, the vehicle types have been segregated into light vehicles (LV) and heavy vehicles (HV) prior to input. Traffic volumes input into PICADY/ ARCADY were in vehicles and, accordingly, commercial vehicle composition was set to the percentage of that arm.

5.2 ASSESSMENT TIME AND YEAR

A summary of the analyses results for Scenarios 1, 2 and 3 of Junctions 1, 2, 3, 4, 5 and 6 for the AM and PM peak hours are provided below. Full outputs from JUNCTIONS 10 PICADY/ ARCADY are included in Annex C (Junctions 10 Output).

The performance of the Junction 1 to Junction 6 has been analysed for the critical AM peak hour (07:45 - 08:45hrs) and PM peak hour (17:30 - 18:30). These analyses were carried out for the current year and initial of construction year for the three scenarios for the construction activity.

5.3 ANALYSIS RESULTS

A summary of the analyses results for Scenarios 1, 2 and 3 of Junctions 1, 2, 3, 4, 5 and 6 for the AM and PM peak hours are provided below. Full outputs from JUNCTIONS 10 PICADY/ ARCADY are included in Annex C (Junctions 10 Output).

5.3.1 Junction 1 – R131(N) / DIRECT ACCESS / R131(S) / NORTH WALL QUAY ROUNDABOUT

A summary of the analyses results:

Table 5.1: Junction 1 Results AM & PM Peak Hours

	AM						PM					
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS
	2022 Baseflow											
A - R131 (N)	3.6	8.63	0.79	A	9.91	A	0.7	2.82	0.42	A	7.55	A
B - Direct Access	0	0	0	A			0	0	0	A		
C - R131 (S)	3.2	16.71	0.77	C			3.7	14.82	0.79	B		
D - North Wall Quay	0.3	2.74	0.23	A			0.4	3.17	0.28	A		
	2026 Baseflow											
A - R131 (N)	5.5	12.47	0.85	B	14.84	B	0.8	2.99	0.45	A	9.95	A
B - Direct Access	0	0	0	A			0	0	0	A		
C - R131 (S)	5.3	26.74	0.85	D			5.3	20.79	0.85	C		
D - North Wall Quay	0.3	2.94	0.25	A			0.5	3.43	0.31	A		
	2026 Baseflow + Committed Development											
A - R131 (N)	6.7	14.81	0.88	B	16.17	C	0.8	2.99	0.45	A	12.67	B
B - Direct Access	0	0	0	A			0	0	0	A		
C - R131 (S)	5.3	26.7	0.85	D			7.1	27.14	0.89	D		
D - North Wall Quay	0.3	2.94	0.25	A			0.5	3.53	0.32	A		
	2026 Baseflow + Committed + Proposed Development - Scenario 1											
A - R131 (N)	7.5	16.52	0.89	C	18.16	C	0.8	3.08	0.46	A	15.85	C
B - Direct Access	0	0	0	A			0	0	0	A		
C - R131 (S)	6.1	30.25	0.87	D			9.3	34.7	0.92	D		
D - North Wall Quay	0.3	2.98	0.26	A			0.5	3.62	0.32	A		
	2026 Baseflow + Committed + Proposed Development - Scenario 2											
A - R131 (N)	7.7	16.85	0.89	C	15.53	C	0.8	3.03	0.45	A	16.29	C
B - Direct Access	0	0	0	A			0	0	0	A		
C - R131 (S)	5.4	27.29	0.86	D			9.6	35.58	0.92	E		

	AM						PM					
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS
	2022 Baseflow											
D - North Wall Quay	0.3	2.96	0.26	A			0.5	3.63	0.32	A		
	2026 Baseflow + Committed + Proposed Development - Scenario 3											
A - R131 (N)	6.9	15.17	0.88	C	16.49	C	0.8	3.03	0.45	A	13.96	B
B - Direct Access	0	0	0	A			0	0	0	A		
C - R131 (S)	5.4	27.11	0.86	D			8	30.18	0.9	D		
D - North Wall Quay	0.3	2.95	0.25	A			0.5	3.57	0.32	A		

The above results indicate that the R131 (N) / Direct Access/R131 East Wall Road Southbound (S)/ North Wall Quay presented a maximum RFC of 0.79 during morning peak and evening peak hours in 2022, which is below the desirable RFC 0.85. The overall junction presented a delay of 9.91s in the morning peak and 7.56s in the evening peak.

The growth of baseflow traffic from 2022 to the year of the assessment in 2026 will result in an increase in the RFC, from a maximum RFC of 0.85 during morning peak and evening peak hours, indicating R131 arms will reach their capacity. However, the overall junction delay increased by 4.93s in the morning peak and 2.4s in the evening park.

Comparing the committed development traffic with baseflow 2026, a maximum RFC of 0.88 during morning peak and 0.89 during evening peak hour, indicating R131 arms will reach their capacity. However, the overall junction delay increased by 1.33s in the morning peak and 2.72s in the evening park.

For Scenario 1 presented a maximum RFC of 0.89 in the morning peak and 0.92 in the evening peak, increasing the delay by 4s in the morning peak and 8s in the evening peak when comparing Baseflow 2026 with committed development traffic.

For Scenario 2 presented a maximum RFC of 0.89 in the morning peak and 0.92 in the evening peak, increasing the delay by 4s in the morning peak and 13s in the evening peak when comparing Baseflow 2026 with committed development traffic.

For Scenario 3 presented a maximum RFC of 0.88 in the morning peak and 0.9 in the evening peak, increasing the delay by 1s in the morning peak and 5s in the evening peak when comparing Baseflow 2026 with committed development traffic.

5.3.2 Junction 2 – R131(NW) / SEAN MOORE ROAD / SOUTH BANK ROAD / R131(SW) / PIGEON HOUSE ROAD ROUNDABOUT

A summary of the analyses results:

Table 5.2: Junction 2 Results AM & PM Peak Hours

	AM						PM					
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS
	2022 Baseflow											
A - R131 (NW)	1	3.35	0.51	A	3.21	A	0.4	2.01	0.27	A	2.36	A
B - Sean Moore Rd	0.1	3.58	0.05	A			0	2.22	0.02	A		
C - South Bank Rd	0.1	4.36	0.12	A			0.1	2.19	0.08	A		
D - R131 (SW)	0.4	2.42	0.28	A			0.6	2.65	0.38	A		
E - Pigeon House Rd	0	5.1	0.03	A			0	5.13	0.01	A		
	2026 Baseflow											
A - R131 (NW)	1.2	3.69	0.55	A	3.47	A	0.4	2.06	0.29	A	2.43	A
B - Sean Moore Rd	0.1	3.79	0.06	A			0	2.25	0.02	A		
C - South Bank Rd	0.2	4.66	0.13	A			0.1	2.24	0.08	A		
D - R131 (SW)	0.4	2.51	0.3	A			0.7	2.75	0.4	A		
E - Pigeon House Rd	0	5.33	0.04	A			0	5.34	0.01	A		
	2026 Baseflow + Committed Development											
A - R131 (NW)	1.3	3.97	0.57	A	3.65	A	0.4	2.06	0.29	A	2.48	A
B - Sean Moore Rd	0.1	3.95	0.06	A			0	2.25	0.02	A		
C - South Bank Rd	0.2	4.66	0.13	A			0.1	2.38	0.13	A		
D - R131 (SW)	0.5	2.57	0.32	A			0.7	2.82	0.4	A		
E - Pigeon House Rd	0	5.46	0.04	A			0	5.51	0.01	A		
	2026 Baseflow + Committed + Proposed Development - Scenario 1											
A - R131 (NW)	1.5	4.21	0.59	A	3.83	A	0.4	2.12	0.3	A	2.54	A
B - Sean Moore Rd	0.1	4.08	0.06	A			0	2.27	0.02	A		
C - South Bank Rd	0.2	4.77	0.15	A			0.2	2.51	0.16	A		
D - R131 (SW)	0.5	2.63	0.33	A			0.7	2.87	0.41	A		
E - Pigeon House Rd	0	5.63	0.04	A			0	5.67	0.01	A		
	2026 Baseflow + Committed + Proposed Development - Scenario 2											
A - R131 (NW)	1.5	4.33	0.6	A	3.88	A	0.4	2.08	0.29	A	2.52	A
B - Sean Moore Rd	0.1	4.17	0.06	A			0	2.26	0.02	A		
C - South Bank Rd	0.2	4.69	0.14	A			0.2	2.47	0.18	A		
D - R131 (SW)	0.5	2.66	0.34	A			0.7	2.88	0.41	A		
E - Pigeon House Rd	0	5.69	0.04	A			0	5.69	0.01	A		
	2026 Baseflow + Committed + Proposed Development - Scenario 3											

	AM						PM					
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS
	2022 Baseflow											
A - R131 (NW)	1.4	4.11	0.59	A	3.75	A	0.4	2.11	0.3	A	2.52	A
B - Sean Moore Rd	0.1	4.04	0.06	A			0	2.29	0.02	A		
C - South Bank Rd	0.2	4.68	0.14	A			0.1	2.4	0.13	A		
D - R131 (SW)	0.5	2.6	0.33	A			0.7	2.86	0.41	A		
E - Pigeon House Rd	0	5.56	0.04	A			0	5.61	0.01	A		

The above results indicate that R131(NW) / Sean Moore Road / South Bank Road / R131(SW) / Pigeon House Road Roundabout presented a maximum RFC of 0.51 during morning peak and 0.38 evening peak hours in 2022, which is below the desirable RFC 0.85. The overall junction presented a delay of 3s in the morning peak and 2s in the evening peak.

The growth of baseflow traffic from 2022 to the year of the assessment in 2026 will result in an increase in the RFC, from a maximum RFC of 0.55 during morning peak and 0.40 during evening peak hours. There was no increase to overall junction delay maintain 4s in the morning peak and 3s in the evening park.

Comparing the committed development traffic with baseflow 2026, there was no significant change to the maximum RFC, a maximum increase of 0.32 during morning peak and 0.13 evening peak hours. There was no major increase to overall junction delay maintain 0.18s in the morning peak and 0.05s in the evening park.

For Scenario 1 presented a maximum RFC of 0.59 in the morning peak and 0.29 in the evening peak, increasing the delay by 0.18s in the morning peak and 0.06s in the evening peak when comparing Baseflow 2026 with committed development traffic.

For Scenario 2 presented a maximum RFC of 0.6 in the morning peak and 0.29 in the evening peak, increasing the delay by 0.23s in the morning peak and 0.04s in the evening peak when comparing Baseflow 2026 with committed development traffic.

For Scenario 3 presented a maximum RFC of 0.59 in the morning peak and 0.41 in the evening peak, increasing the delay by 0.1s in the morning peak and 0.04s in the evening peak when comparing Baseflow 2026 with committed development traffic.

5.3.3 Junction 3 – R131 SOUTH BANK ROAD / PIGEON HOUSE ROAD / R131 SOUTH BANK ROAD T-JUNCTION

A summary of the analyses results:

Table 5.3: Junction 3 Results AM & PM Peak Hours

	AM						PM					
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS
	2022 Baseflow											
C- R131 (NW)	0	8.87	0.03	A	5.22	A	0	7.27	0.02	A	2.51	A
A- Pigeon House Rd	0.3	14.15	0.24	B			0.2	7.55	0.16	A		

	AM						PM					
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS
B- R131 (SE)	0.1	9.87	0.06	A			0	10.91	0	B		
	2026 Baseflow											
C- R131 (NW)	0	9.15	0.03	A	5.54	A	0	7.39	0.02	A	2.57	A
A- Pigeon House Rd	0.4	14.95	0.28	B			0.2	7.76	0.17	A		
B- R131 (SE)	0.1	10.06	0.07	B			0	10.95	0	B		
	2026 Baseflow + Committed Development											
C- R131 (NW)	0	9.28	0.03	A	4.9	A	0	7.92	0.02	B	4.26	A
A- Pigeon House Rd	0.4	15.23	0.28	C			0.4	9.38	0.3	C		
B- R131 (SE)	0.1	10.37	0.07	B			0	10.95	0	B		
	2026 Baseflow + Committed + Proposed Development - Scenario 1											
C- R131 (NW)	0	9.62	0.03	A	5.19	A	0	8.54	0.02	A	5.57	A
A- Pigeon House Rd	0.5	16.59	0.32	C			0.7	11.24	0.4	B		
B- R131 (SE)	0.1	10.6	0.07	B			0	11.03	0	B		
	2026 Baseflow + Committed + Proposed Development - Scenario 2											
C- R131 (NW)	0	9.49	0.03	A	4.46	A	0	9.06	0.02	A	6.44	A
A- Pigeon House Rd	0.4	15.87	0.29	C			0.8	11.84	0.46	A		
B- R131 (SE)	0.1	10.76	0.07	B			0	10.98	0	B		
	2026 Baseflow + Committed + Proposed Development - Scenario 3											
C- R131 (NW)	0	9.37	0.03	A	4.75	A	0	8.27	0.02	A	5.01	A
A- Pigeon House Rd	0.4	15.57	0.29	C			0.6	10.2	0.36	B		
B- R131 (SE)	0.1	10.52	0.07	B			0	10.97	0	B		

The above results indicate that R131 South Bank Road / Pigeon House Road / R131 South Bank Road T-Junction presented a maximum RFC of 0.24 during morning peak and 0.16 evening peak hours in 2022, which is below the desirable RFC 0.85. The overall junction presented a delay of 5s in the morning peak and 3s in the evening peak.

The growth of baseflow traffic from 2022 to the year of the assessment in 2026 will result in no significance increase to the RFC, a maximum RFC of 0.28 during morning peak and 0.17 during evening peak hours. There was no increase to overall junction delay maintain 5s in the morning peak and 3s in the evening park.

Comparing the committed development traffic with baseflow 2026, there was no significant change to the maximum RFC in morning peak, a maximum increase of 0.28 during morning peak

and 0.3 evening peak hours. There was no major increase to overall junction delay in the 0.64s morning peak and 1.69s in the evening park.

For Scenario 1 presented a maximum RFC of 0.32 in the morning peak and 0.4 in the evening peak, increasing the delay by 0.29s in the morning peak and 1.31s in the evening peak when comparing Baseflow 2026 with committed development traffic.

For Scenario 2 presented a maximum RFC of 0.29 in the morning peak and 0.46 in the evening peak, increasing the delay by 0.44s in the morning peak and 2.18s in the evening peak when comparing Baseflow 2026 with committed development traffic.

For Scenario 3 presented a maximum RFC of 0.29 in the morning peak and 0.46 in the evening peak, increasing the delay by 0.15s in the morning peak and 0.75s in the evening peak when comparing Baseflow 2026 with committed development traffic.

5.3.4 Junction 4 – PIGEON HOUSE ROAD / SHELLYBANKS ROAD T-JUNCTION

A summary of the analyses results:

Table 5.4: Junction 4 Results AM & PM Peak Hours

	AM						PM					
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS
	2023 Baseflow											
C-Pigeon House Road (W)	0	6.37	0.03	A	1.41	A	0	5.61	0.02	A	0.52	A
B-Shellybanks RD	0.1	5.76	0.05	A			0	0	0	A		
	2026 Baseflow											
C-Pigeon House Road (W)	0	6.39	0.03	A	1.38	A	0	5.62	0.03	A	0.53	A
B-Shellybanks RD	0.1	5.78	0.05	A			0	0	0	A		
	2026 Baseflow + Committed Development											
C-Pigeon House Road (W)	0	6.52	0.03	A	1.0	A	0	5.82	0.03	A	0.38	A
B-Shellybanks RD	0.1	5.78	0.05	A			0	0	0	A		
	2026 Baseflow + Committed + Proposed Development - Scenario 1											
C-Pigeon House Road (W)	0	6.78	0.03	A	2.36	A	0.2	6.3	0.16	A	1.94	A
B-Shellybanks RD	0.1	5.95	0.1	A			0	10.79	0	B		
	2026 Baseflow + Committed + Proposed Development - Scenario 2											
C-Pigeon House Road (W)	0	7.11	0.04	A	2.36	A	0.2	6.3	0.16	A	1.94	A

B-Shellybanks RD	0.2	6.5	0.19	A			0	10.79	0	B		
	2026 Baseflow + Committed + Proposed Development - Scenario 3											
C-Pigeon House Road (W)	0	6.77	0.03	A	1.56	A	0.1	5.87	0.08	A	1.08	A
B-Shellybanks RD	0.1	5.94	0.1	A			0	10.79	0	B		

The above results indicate that Pigeon House Road / Shellybanks Road T-Junction presented a maximum RFC of 0.05 during morning peak and 0.02 evening peak hours in 2023, which is below the desirable RFC 0.85. The overall junction presented a delay of 2s in the morning peak and less than 1s in the evening peak..

The growth of baseflow traffic from 2023 to the year of the assessment in 2026 will result in no significant increase to the RFC, a maximum RFC of 0.05 during morning peak and 0.03 during evening peak hours. There was no increase to overall junction delay, maintaining 2s in the morning peak and less than 1s in the evening park.

Comparing the committed development traffic with baseflow 2026, there was no change to the maximum RFC in morning peak and evening peak hours. There was no major increase to overall junction delay, with less than 0.03s in both morning and evening peak.

For Scenario 1 presented a maximum RFC of 0.03 in the morning peak and 0.16 in the evening peak, increasing the delay by 1.36s in the morning peak and 1.56s in the evening peak when comparing Baseflow 2026 with committed development traffic.

For Scenario 2 presented a maximum RFC of 0.19 in the morning peak and 0.16 in the evening peak, increasing the delay by 1.36s in the morning peak and 1.56s in the evening peak when comparing Baseflow 2026 with committed development traffic.

For Scenario 3 presented a maximum RFC of 0.1 in the morning peak and 0.08 in the evening peak, increasing the delay by 0.56s in the morning peak and 0.7s in the evening peak when comparing Baseflow 2026 with committed development traffic.

5.3.5 Junction 5 – PIGEON HOUSE ROAD / ECOCEM ACCESS/ PIGEON HOUSE ROAD / DUBLIN WASTE TO ENERGY ACCESS CROSSROAD

A summary of the analyses results:

Table 5.5: Junction 4 Results AM & PM Peak Hours

	AM						PM					
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS
	2023 Baseflow											
B- ECOCEM Access	0	0	0	A	2.52	A	0	0	0	A	0.85	A
A- Pigeon House Rd (W)	0	10.86	0.04	B			0	10.64	0.02	B		

	AM						PM					
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS
D- Dublin Waste To Energy Access	0	9.15	0.02	A			0	0	0	A		
C- Pigeon House Rd (E)	0	0	0	A			0	0	0	A		
	2026 Baseflow											
B- ECOCEM Access	0	0	0	A	2.6	A	0	0	0	A	0.83	A
A- Pigeon House Rd (W)	0	10.9	0.04	B			0	10.71	0.02	B		
D- Dublin Waste To Energy Access	0	9.24	0.03	A			0	0	0	A		
C- Pigeon House Rd (E)	0	0	0	A			0	0	0	A		
	2026 Baseflow + Committed Development											
B- ECOCEM Access	0	0	0	A	1.81	A	0	0	0	A	0.57	A
A- Pigeon House Rd (W)	0	10.9	0.04	B			0	11.04	0.02	B		
D- Dublin Waste To Energy Access	0	9.24	0.03	A			0	0	0	A		
C- Pigeon House Rd (E)	0	0	0	A			0	0	0	A		
	2026 Baseflow + Committed + Proposed Development - Scenario 1											
B- ECOCEM Access	0	14.41	0.05	B	2.66	A	0.1	12.44	0.05	B	1.66	A
A- Pigeon House Rd (W)	0	10.9	0.04	B			0	11.04	0.02	B		
D- Dublin Waste To Energy Access	0	9.24	0.03	A			0	0	0	A		
C- Pigeon House Rd (E)	0	0	0	A			0	0	0	A		
	2026 Baseflow + Committed + Proposed Development - Scenario 2											
B- ECOCEM Access	0	0	0	A	1.79	A	0	9.91	0.02	B	0.92	A
A- Pigeon House Rd (W)	0	10.9	0.04	B			0	11.04	0.02	B		
D- Dublin Waste To Energy Access	0	9.24	0.03	A			0	0	0	A		
C- Pigeon House Rd (E)	0	0	0	A			0	0	0	A		

	AM						PM					
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS
	2026 Baseflow + Committed + Proposed Development - Scenario 3											
B- ECOCEM Access	0	0	0	A	1.8	A	0	9.66	0.01	A	0.68	A
A- Pigeon House Rd (W)	0	10.9	0.04	B			0	11.34	0.02	B		
D- Dublin Waste To Energy Access	0	9.24	0.03	A			0	0	0	A		
C- Pigeon House Rd (E)	0	0	0	A			0	0	0	A		

The above results indicate that Pigeon House Road / Ecocem Access/ Pigeon House Road / Dublin Waste to Energy Access Crossroad presented a maximum RFC of 0.04 during morning peak and 0.02 evening peak hours in 2023, which is below the desirable RFC 0.85. The overall junction presented a delay of 3s in the morning peak and less than 1s in the evening peak.

The growth of baseflow traffic from 2023 to the year of the assessment in 2026 will result in no significance increase to the RFC, same maximum RFC of 0.04 during morning peak and 0.02 during evening peak hours. There was no increase to overall junction delay maintain 0.08s in the morning peak and less than 0.02s in the evening park.

Comparing the committed development traffic with baseflow 2026, there was no change to the maximum RFC in morning peak and evening peak hours. There was a decrease to overall junction delay, 0.79s in the morning peak and less than 0.26s in the evening park.

For Scenario 1 presented a maximum RFC of 0.05 in the morning peak and 0.05 in the evening peak, increasing the delay by 0.85s in the morning peak and 1.09s in the evening peak when comparing Baseflow 2026 with committed development traffic.

For Scenario 2 presented a maximum RFC of 0.04 in the morning peak and 0.02 in the evening peak, increasing the delay by 0.02s in the morning peak and 0.35s in the evening peak when comparing Baseflow 2026 with committed development traffic.

For Scenario 3 presented a maximum RFC of 0.04 in the morning peak and 0.02 in the evening peak, increasing the delay by 0.01s in the morning peak and 0.11s in the evening peak when comparing Baseflow 2026 with committed development traffic.

5.3.6 Junction 6 – PIGEON HOUSE ROAD / PRIVATE ACCESS T-JUNCTION

A summary of the analyses results:

Table 5.6: Junction 6 Results AM & PM Peak Hours

	AM						PM					
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS

	2023 Baseflow											
B- Private Access	0	0	0	A	0	A	0	0	0	A	0	A
C- Pigeon House Rd(W)	0	0	0	A			0	0	0	A		
	2026 Baseflow											
B- Private Access	0	0	0	A	0	A	0	0	0	A	0	A
C- Pigeon House Rd(W)	0	0	0	A			0	0	0	A		
	2026 Baseflow + Committed Development											
B- Private Access	0	0	0	A	0	A	0	0	0	A	0	A
C- Pigeon House Rd(W)	0	0	0	A			0	0	0	A		
	2026 Baseflow + Committed + Proposed Development - Scenario 1											
B- Private Access	0	0	0	A	0	A	0	0	0	A	0	A
C- Pigeon House Rd(W)	0	0	0	A			0	0	0	A		
	2026 Baseflow + Committed + Proposed Development - Scenario 2											
B- Private Access	0	0	0	A	0	A	0	0	0	A	0	A
C- Pigeon House Rd(W)	0	0	0	A			0	0	0	A		
	2026 Baseflow + Committed + Proposed Development - Scenario 3											
B- Private Access	0	0	0	A	0	A	0	0	0	A	0	A
C- Pigeon House Rd(W)	0	0	0	A			0	0	0	A		

The above results indicate that Pigeon House Road / Private Access T-Junction presented a maximum RFC of 0 during both peak hours. The overall junction presented a 0s delay.

6. OTHER ROAD ISSUES

6.1 ROAD SAFETY

The junctions have been designed in accordance with the Design Manual for Urban Roads and Streets – (DMURS, May 2019) from the Department of Transport, Tourism and Sport.

The visibility at the JTC 5 complies with the requirements of a 2.4 m 'x-distance' setback with a 'y-distance' of 45 m, distances required for a major road with a design speed of 50 km/h.

The visibility at the private access (JTC 6) complies with DMURS requirements for a design speed of 15 km/h, with a 2.4 m 'x-distance' setback and a 12 m 'y-distance' in both directions without any obstruction

6.2 PARKING PROVISION

Car parking facilities during the construction phase will be provided primarily at Compound A and Compound C is proposed as overflow car parking area.

Car parking facilities within onshore substation area to be provided for the O&M phase. There is minimal above ground infrastructure associated with the landfall, onshore export cables and ESBN network cables and hence no parking facilities are required for the O&M phase.

6.3 SWEPT PATH ANALYSIS

A Vehicle Swept Path Analysis has been completed for the construction traffic along the AIL route and at the site access. The purpose of the Swept Path Analysis is to identify and resolve potential issues and conflict points during the preliminary design stage. Details of this analysis on the final layout are shown in Annex A of the TMP.

6.4 PEDESTRIANS AND CYCLISTS

Once operational pedestrian facilities will be provided as required within the onshore substation site to facilitate safe pedestrian movements i.e. footpaths. No specific provision has been made to accommodate cyclists.

6.5 PUBLIC TRANSPORT

There is no regular public transport service in operation in the immediate vicinity of the onshore development area. The closest bus stop located at Sean Moore Road, approximately 1.5 km from the proposed site.

The road is service by Dublin Bus Route S2, with a frequency of 15 minutes.

7. CONCLUSIONS

The existing junctions in the vicinity of the onshore development area were analysed to ascertain the potential impact of the construction phase of the OTI for the CWP Project, on the surrounding road network including committed developments traffic.

The assessment accounted for three construction phase scenarios (Scenario 1 - HV peak traffic movements, Scenario 2 - LV peak traffic movements, and Scenario 3 –Average traffic movements). The analysis indicates that there will be no queues and minimal delays during the peak hours for the three scenarios at the 6 no. junctions.

The junction assessments indicate 5 no. junctions (i.e. Junction 2, Junction 3, Junction 4, Junction 5 and Junction 6) are currently below the desirable capacity of 0.85 and will remain below capacity with the proposed development during the construction phase.

Junction 1 presented an RFC of 0.85 during baseflow traffic in 2026. The committed development traffic increased the RFC on arm C (R131 (S)) from 0.85 to 0.85 and 0.89 during morning and evening peak hours, respectively. Therefore, the existing junction is currently near capacity.

Including the onshore development there will be a temporary increase in RFC up to a maximum of 0.87 and 0.92 during the morning and evening peak hours of the three construction phase scenarios. Therefore, comparing the construction phase traffic scenarios with the committed development traffic, all three scenarios traffic will slightly decrease the junction's performances (i.e. from 0.85 up to 0.87 in the morning peak hour, and from 0.89 up to 0.92 in the evening peak hour).There is a slightly decrease, this was not considered a significant issue overall in terms of the operation of the junction (or similar).

ANNEX A SCOPING DOCUMENT

SCOPING STUDY FOR:	Codling Wind Park, Onshore Transmission Infrastructure (OTI)
CLIENT:	Codling Wind Park Limited
LOCAL AUTHORITY:	Dublin City Council
SCOPING FORM SENT TO:	Heidi Thorsdalen
SENT BY:	Jessica Lima DATE: 04.07.2023 (Rev B)

Ref	Item	Requirements
1	Location, size, operating hours and nature of proposed description of proposal	Location: The OTI for the Codling Wind Park (CWP) will be located at the Poolbeg peninsula, Dublin. Operating Hours: During the operational phase, the onshore substation will be unmanned with the exception of maintenance inspections. During the construction phase, the general working hours would be Monday-Friday 7am-7pm and Saturday 7am-2pm. There will be q requirement for some 24/7 working hours during the construction phase i.e. HDD and/or tunnelling. Project Description: The CWP array site will be located off the east coast between Greystones & Wicklow. The OTI at Poolbeg will include the following components: • Landfall site where the offshore cables come onshore into 3No. underground transition joint bays; • Underground onshore cables connecting the landfall location to the onshore substation; • Onshore substation; • Construction compound(s) required for the duration of the construction programme.
2	Is the development in line with National, County and Local Area Plan policy?	Yes, the CWP Project will provide significant renewable electricity to the national grid & therefore aligns with both EU and national policy in this regard.
3	Description of existing uses of land	The onshore substation site is currently unused land on the southern bank of the River Liffey, reclaimed by Dublin Port Company in c. 1998. The site is surrounded on three boundaries by water and by the Ringsend Wastewater Treatment Plant (Uisce Éireann) stormwater tanks on the southern boundary.
4	Does the development involve the relocation of an existing use?	No.
5	Is a new or modified road access likely?	Proposals for the onshore substation include for: • Installation of permanent bridge over the cooling water channel • Provision of a c. 25m access road (along southern boundary of the Codling onshore substation site) • The new bridge & access road will facilitate access into and out of the Codling onshore substation

Ref	Item	Requirements
		• New entrance onto Pigeon House Road which will provide for a new access onto the existing access road on the eastern boundary • The existing access road on the eastern boundary will provide access into and out of the ESB GIS building which is being developed as part of the onshore substation plans. (EirGrid specifications require that this building retains separate access/exit points from the Codling onshore substation). • Irish Water vehicles will access their site (stormwater tanks) using the eastern access road & depart their site using the new access road & bridge over the cooling water channel (to the west).
6	What existing / proposed provisions are there for pedestrians, cyclists, public transport, disabled access, set down, loading areas?	No provisions proposed, existing to be maintained on the public road. Construction: on site carparks to be located within the compounds (off the public road) Operational: carparking to be provided at the substation.

7	What background data / information available?	Construction Stage:
		• LVs based on construction programme and construction operations.
		• HVs based on construction programme, construction operations and material quantities.
		Operational Stage:
		• Staff numbers provided by the client based on similar operations and available cark parking.
		• 2 no. access points;
		  ○ Bridge over cooling water channel & access road into the Codling onshore substation (western)
		  ○ Existing access road on eastern boundary into the ESB GIS Building (eastern)

8	Are traffic surveys of the existing conditions available or required?	Traffic surveys undertaken as previously agreed with DCC. • J1 - R131 East Wall Rd / R131 Tom Clarke Bridge/ R801 North Wall Quay. • J2 - R131 Tom Clarke Bridge/ Pigeon House Rd / South Bank Rd / Sean Moore Rd. • J3 - Pigeon House Rd / South Bank Rd (DCATS) • J4 - Pigeon House Rd / Shelley Banks Car Park • J5 - Pigeon House Rd / ESB Poolbeg
9	What will be the area of impact of the proposal, i.e. which adjacent local regional and National Road routes and junctions will be affected and require capacity calculations?	As previously discussed with DCC accessing junctions as per item 8.
10	Are trip distribution and assignment models to be used? or Existing trip distribution?	Construction Stage: • All vehicles will arrive to the site from the Sean Moore roundabout via the J3 (DCATS).

Ref	Item	Requirements

		• They will travel to the compound at the landfall, via Shellybanks Road (west of the Dublin Waste to Energy Plant)
		• Or travel to j5 to access the onshore substation.
		• All vehicles will depart via the same route.
		• LVs
		  ○ Sean Moore roundabout will match distributions on the R131 (south towards Irishtown or north toward Tom Clarke bridge)
		  ○ J1 Tom Clarke roundabout will match distributions on the R131 and R801.
		• HVs
		  ○ To and from the port tunnel via the Tom Clarke bridge through J1 and J2 to J3 (DCATS)
		• Abnormal Indivisible Load (AIL)-Assumed Port Tunnel to be confirmed.
		We note that the Port Tunnel have the following restrictions:
		Requirements
		→ Any vehicle in excess of 2.90 meters wide and/or in excess of 25.00 meters in length
		→ MAXIMUM VEHICLE HEIGHT OF 4.65 meters APPLIES TO ALL BOOKINGS
		Operational Stage:
		• LVs match existing distribution on the road network.
		• HVs low volume via Port Tunnel.

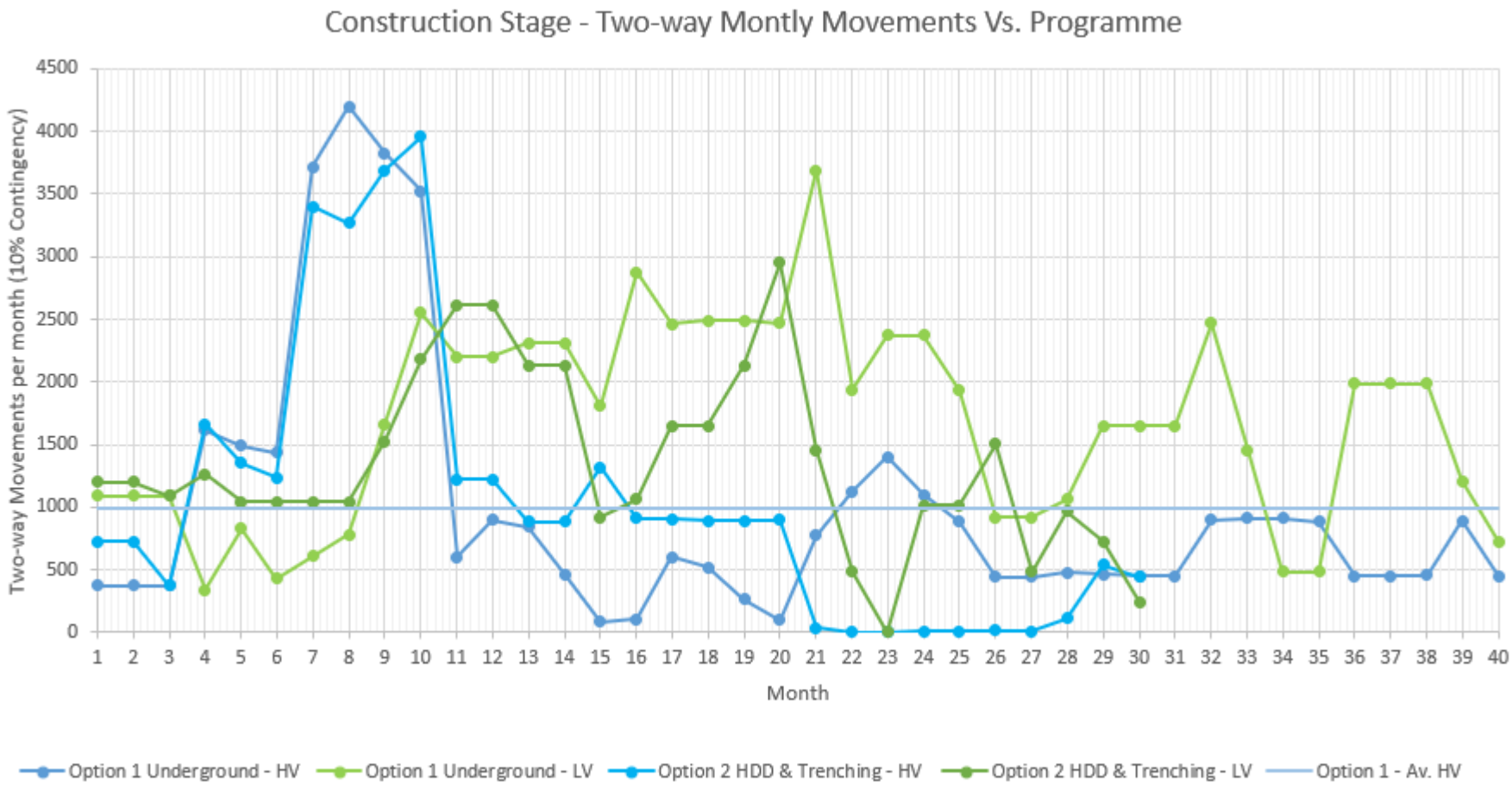
11	Are additional traffic scenarios to be assessed? (e.g. rat running, stress tests etc)	Construction Stage: 2 No. options for the underground cable route installation:[1] • Option 1 Underground tunnel • Option 2 Trenching and HDD

[1] ***July 2024 Note: Point 11****: In July 2023, different options were being considered for construction installation. However, the final assessment was based on the preferred option (a fixed design) as described in Chapter 4 Project Description of the EIAR.*

12	What will be the trip generation for the proposals?	Refer to graph at the end of document. Construction Stage: • Peak – Option 1 ○ Month 8 ▪ LVs – 781 per month/ 36 per day (2- way) (i.e. 18 arrivals & 18 departures) ▪ HVs 4,200 per month/16 per hour (2- way) ○ Month 21 ▪ LVs – 3692 per month/ 168 per day (2-way) (i.e. 84 arrivals & 84 departures) ▪ HVs 770 per month/4 per day (2-way) • Average – Option 1 ○ Average HVs & LVs over 40 months construction programme ▪ LVs – 1,670 per month / 76 per day (2-way) (i.e. 38 arrivals & 38 departures) ▪ HVs – 980 per month / 45 per day (2- way) Operational Stage: ○ Bridge over cooling water channel & access road into the Codling onshore substation (western) - 6 no. car parking spaces (i.e. 6 arrivals & 6 departures) ○ ESB GIS Building (eastern) – 4 no. car parking spaces (i.e. 4 arrivals & 4 departures)

Ref	Item	Requirements
13	Are further traffic generation surveys required? (i.e. if traffic surveys to develop pro rata rates etc)	No
14	What seasonal adjustment is to be undertaken?	Checking the month of traffic count data against the annual at the counter below. Its monthly volume is above average, hence, no seasonal adjustment undertaken. Station Id:TMU N01 040.0 S Description:N01 South of M50 Jn02 Santry, Whitehall
15	Link based Growth Rates? (Low Sensitivity, Central, High Sensitivity)	TII PE-PAG-02017 Location Dublin Metropolitan Area Table 6.1 & table 9.1
16	When are the critical time periods for assessment? (i.e. AM, PM and Noon peak hours)	AM peak: 7:45 – 8:45am Various peak across J1 to J5 with J1 & J2 with the highest volume of traffic and peaks within 15 minutes of each other. PM peak: 5:30-6:30pm Various peak across J1 to J5. J1 has the highest volume of traffic. Intermediate peaks at J2 to J5.
17	When will the site become fully operational?	Construction commencing in 2026 (40 months/3.3 years) Operational in 2029 Decommissioning in 2054 (25 year design life)
18	What are the assessment years? (Base, opening & future (+5 years & +15 years of operation or any additional)	Construction -2029 Operational-volumes below TTA thresholds Decommissioning -TBC
19	Are there significant phases to the project?	Yes as per item 17
20	Will the site attract traffic from the other adjacent sites? (Pass-by Traffic)	No
21	Are there any significant committed developments? (Granted Planning within the past 5 years and not commenced)	1. SPAR (not in planning yet) 2. Former Irish Glass Bottle Site 3. ESB Flex-gen project(s): some granted & some in planning 4. Irish Water Ringsend waste development 5. Small Committed developments assumed to be accounted for in the growth factors. (refer to attached spreadsheet for most considerations relative to committed development)
22	Details of any adjacent highway improvement proposals?	SPAR (although not in planning yet)
23	What capacity tests / traffic modelling software is to be used?	JUNCTION 10 PICADY and ARCADY
24	Will adjacent links become overloaded or significantly impacted?	Not envisaged but will be assessed
25	What are the sightlines / visibility splays requirements?	Existing entrance no works proposed.

Ref	Item	Requirements
	Are they available? (DMURS)	
26	What level of car parking provision is proposed? To what standard? (included: disabled parking provisions, electrical provisions)	Construction: 2 no. compounds all parking to be located within the site. Operational: 2 no. carparks at ESB GIS Building and Irish Water Building .
27	Are special provisions required for cyclists? To what standard?	NA
28	Are special provisions required for pedestrians or disabled facilities? To what standard?	NA
29	Proposals (if necessary) for public transport facilities?	NA
30	Will the proposals have an impact on road safety?	NA
31	Is a Road Safety Impact Assessment or Road Safety Audit required?	No
32	What Stage RSA?	TBC relative to the new site entrance proposed for the Pigeon House Road
33	Are there any other special circumstances relevant to this proposal?	AILs ○ Crane ○ Transformer ○ Machinery for Tunnelling


Construction Stage - Two-way Montly Movements Vs. Programme
Two-way Movements per month (10% Contingency)
4500
4000
3500
3000
2500
2000
1500
1000
500
0
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
Month
Option 1 Underground - HV
Option 1 Underground - LV
Option 2 HDD & Trenching - HV
Option 2 HDD & Trenching - LV
Option 1 - Av. HV

ANNEX B ORIGIN-DESTINATION MATRICES

Traffic Calculations for Codling Wind Park

Site 1 - R131(N)/Direct Access/R131(S)/North Wall Quay
AM Peak (07:45-08:45)

Seasonally Adjusted ***2022***

2026 ***Year of Construction***

Table 9.1 Metropolitan Area Dublin City	***LV***	***HV***
2016 - 2030 index	*1.0136*	*1.0295*
Years	*4*	*4*
Growth Factor	***1.0555***	***1.1233***

Baseflow Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	6	37	0	0	845	131	287	99
B	0	0	0	0	0	0	0	0
C	458	92	0	0	0	0	90	5
D	136	59	0	0	145	3	5	0

% HV				
Route	A	B	C	D
A	86%	0%	13%	26%
B	0%	0%	0%	0%
C	17%	0%	0%	5%
D	30%	0%	2%	0%

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	6	42	0	0	892	147	303	111
B	0	0	0	0	0	0	0	0
C	483	103	0	0	0	0	95	6
D	144	66	0	0	153	3	5	0

% HV				
Route	A	B	C	D
A	87%	0%	14%	27%
B	0%	0%	0%	0%
C	18%	0%	0%	6%
D	32%	0%	2%	0%

Committed Development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	0	0	0	0	23	8	0	0
B	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0
D	0	0	0	0	4	0	0	0

% HV				
Route	A	B	C	D
A	0%	0%	26%	0%
B	0%	0%	0%	0%
C	0%	0%	0%	0%
D	0%	0%	4%	0%

Baseflow with committed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	6	42	0	0	915	155	303	111
B	0	0	0	0	0	0	0	0
C	483	103	0	0	0	0	95	6
D	144	66	0	0	157	4	5	0

% HV				
Route	A	B	C	D
A	87%	0%	15%	27%
B	0%	0%	0%	0%
C	18%	0%	0%	6%
D	32%	0%	2%	0%

Scenario 1

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	0	0	0	0	14	10	0	0
B	0	0	0	0	0	0	0	0
C	0	10	0	0	0	0	0	0
D	0	0	0	0	2	0	0	0

% HV				
Route	A	B	C	D
A	0%	0%	42%	0%
B	0%	0%	0%	0%
C	100%	0%	0%	0%
D	0%	0%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	6	42	0	0	929	165	303	111
B	0	0	0	0	0	0	0	0
C	483	113	0	0	0	0	95	6
D	144	66	0	0	159	4	5	0

% HV				
Route	A	B	C	D
A	87%	0%	15%	27%
B	0%	0%	0%	0%
C	19%	0%	0%	6%
D	32%	0%	2%	0%

Scenario 2

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	0	0	0	0	34	3	0	0
B	0	0	0	0	0	0	0	0
C	0	3	0	0	0	0	0	0
D	0	0	0	0	6	0	0	0

% HV				
Route	A	B	C	D
A	0%	0%	8%	0%
B	0%	0%	0%	0%
C	100%	0%	0%	0%
D	0%	0%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	6	42	0	0	949	158	303	111
B	0	0	0	0	0	0	0	0
C	483	106	0	0	0	0	95	6
D	144	66	0	0	163	4	5	0

% HV				
Route	A	B	C	D
A	87%	0%	14%	27%
B	0%	0%	0%	0%
C	18%	0%	0%	6%
D	32%	0%	2%	0%

Scenario 3

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	0	0	0	0	13	2	0	0
B	0	0	0	0	0	0	0	0
C	0	2	0	0	0	0	0	0
D	0	0	0	0	2	0	0	0

% HV				
Route	A	B	C	D
A	0%	0%	13%	0%
B	0%	0%	0%	0%
C	100%	0%	0%	0%
D	0%	0%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	6	42	0	0	928	157	303	111
B	0	0	0	0	0	0	0	0
C	483	105	0	0	0	0	95	6
D	144	66	0	0	159	4	5	0

% HV				
Route	A	B	C	D
A	87%	0%	14%	27%
B	0%	0%	0%	0%
C	18%	0%	0%	6%
D	32%	0%	2%	0%

Traffic Calculations for Codling Wind Park

Site 1 - R131(N)/Direct Access/R131(S)/North Wall Quay
PM Peak (17:30-18:30)

Seasonally Adjusted ***2022***

2026 ***Year of Construction***

Table 9.1 Metropolitan Area Dublin City	***LV***	***HV***
2016 - 2030 index	*1.0136*	*1.0295*
Years	*4*	*4*
Growth Factor	***1.0555***	***1.1233***

Baseflow Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	20	25	0	0	547	12	198	37
B	0	0	0	0	0	0	0	0
C	728	45	0	0	0	0	59	0
D	253	64	0	0	85	2	2	0

% HV				
Route	A	B	C	D
A	56%	0%	2%	16%
B	0%	0%	0%	0%
C	6%	0%	0%	0%
D	20%	0%	2%	0%

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	21	28	0	0	577	13	209	42
B	0	0	0	0	0	0	0	0
C	768	51	0	0	0	0	62	0
D	267	72	0	0	90	2	2	0

% HV				
Route	A	B	C	D
A	57%	0%	2%	17%
B	0%	0%	0%	0%
C	6%	0%	0%	0%
D	21%	0%	2%	0%

Committed Development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0	0
C	20	9	0	0	0	0	1	0
D	0	0	0	0	0	0	0	0

% HV				
Route	A	B	C	D
A	0%	0%	0%	0%
B	0%	0%	0%	0%
C	31%	0%	0%	0%
D	0%	0%	0%	0%

1026

Baseflow with committed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	21	28	0	0	577	13	209	42
B	0	0	0	0	0	0	0	0
C	788	60	0	0	0	0	64	0
D	267	72	0	0	90	2	2	0

% HV				
Route	A	B	C	D
A	57%	0%	2%	17%
B	0%	0%	0%	0%
C	7%	0%	0%	0%
D	21%	0%	2%	0%

Scenario 1

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	0	0	0	0	0	10	0	0
B	0	0	0	0	0	0	0	0
C	12	10	0	0	0	0	1	0
D	0	0	0	0	0	0	0	0

% HV				
Route	A	B	C	D
A	0%	0%	100%	0%
B	0%	0%	0%	0%
C	46%	0%	0%	0%
D	0%	0%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	21	28	0	0	577	23	209	42
B	0	0	0	0	0	0	0	0
C	800	70	0	0	0	0	65	0
D	267	72	0	0	90	2	2	0

% HV				
Route	A	B	C	D
A	57%	0%	4%	17%
B	0%	0%	0%	0%
C	8%	0%	0%	0%
D	21%	0%	2%	0%

Scenario 2

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	0	0	0	0	0	3	0	0
B	0	0	0	0	0	0	0	0
C	29	3	0	0	0	0	3	0
D	0	0	0	0	0	0	0	0

% HV				
Route	A	B	C	D
A	0%	0%	100%	0%
B	0%	0%	0%	0%
C	9%	0%	0%	0%
D	0%	0%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	21	28	0	0	577	16	209	42
B	0	0	0	0	0	0	0	0
C	818	63	0	0	0	0	66	0
D	267	72	0	0	90	2	2	0

% HV				
Route	A	B	C	D
A	57%	0%	3%	17%
B	0%	0%	0%	0%
C	7%	0%	0%	0%
D	21%	0%	2%	0%

Scenario 3

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	0	0	0	0	0	2	0	0
B	0	0	0	0	0	0	0	0
C	11	2	0	0	0	0	1	0
D	0	0	0	0	0	0	0	0

% HV				
Route	A	B	C	D
A	0%	0%	100%	0%
B	0%	0%	0%	0%
C	15%	0%	0%	0%
D	0%	0%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	21	28	0	0	577	15	209	42
B	0	0	0	0	0	0	0	0
C	799	62	0	0	0	0	65	0
D	267	72	0	0	90	2	2	0

% HV				
Route	A	B	C	D
A	57%	0%	3%	17%
B	0%	0%	0%	0%
C	7%	0%	0%	0%
D	21%	0%	2%	0%

Traffic Calculations for Codling Wind Park

Site 2 - R131 (NW) / Sean Moore Rd / South Bank Rd / R131 (SW) / Pigeon House Rd
AM Peak (07:45-08:45)

Seasonally Adjusted ***2022***

2026 ***Year of Construction***

Table 9.1 Metropolitan Area Dublin City	***LV***	***HV***
2016 - 2030 index	*1.0136*	*1.0295*
Years	*4*	*4*
Growth Factor	***1.0555***	***1.1233***

Baseflow Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV	E - LV	E - HV
A	0	0	3	39	45	48	836	39	1	2
B	4	30	0	0	2	7	5	1	0	0
C	4	55	0	6	0	0	20	12	1	0
D	464	12	6	1	48	5	0	0	2	0
E	3	1	0	0	2	0	17	0	0	0

% HV

Route	A	B	C	D	E
A	0%	93%	52%	4%	67%
B	88%	0%	78%	17%	0%
C	93%	100%	0%	38%	0%
D	3%	14%	9%	0%	0%
E	25%	0%	0%	0%	0%

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV	E - LV	E - HV
A	0	0	3	44	47	54	882	44	1	2
B	4	34	0	0	2	8	5	1	0	0
C	4	62	0	7	0	0	21	13	1	0
D	490	13	6	1	51	6	0	0	2	0
E	3	1	0	0	2	0	18	0	0	0

% HV

Route	A	B	C	D	E
A	0%	93%	53%	5%	68%
B	89%	0%	79%	18%	0%
C	94%	100%	0%	39%	0%
D	3%	15%	10%	0%	0%
E	26%	0%	0%	0%	0%

Committed Development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV	E - LV	E - HV
A	0	0	0	0	27	8	0	0	0	0
B	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	29	1	0	0	0	0
E	0	0	0	0	0	0	0	0	0	0

% HV

Route	A	B	C	D	E
A	0%	0%	23%	0%	0%
B	0%	0%	0%	0%	0%
C	0%	0%	0%	0%	0%
D	0%	0%	3%	0%	0%
E	0%	0%	0%	0%	0%

Baseflow with committed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV	E - LV	E - HV
A	0	0	3	44	74	62	882	44	1	2
B	4	34	0	0	2	8	5	1	0	0
C	4	62	0	7	0	0	21	13	1	0
D	490	13	6	1	80	6	0	0	2	0
E	3	1	0	0	2	0	18	0	0	0

% HV

Route	A	B	C	D	E
A	0%	93%	46%	5%	68%
B	89%	0%	79%	18%	0%
C	94%	100%	0%	39%	0%
D	3%	15%	7%	0%	0%
E	26%	0%	0%	0%	0%

Scenario 1

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV	E - LV	E - HV
A	0	0	0	0	16	10	0	0	0	0
B	0	0	0	0	0	0	0	0	0	0
C	0	10	0	0	0	0	0	0	0	0
D	0	0	0	0	17	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0	0

% HV

Route	A	B	C	D	E
A	0%	0%	38%	0%	0%
B	0%	0%	0%	0%	0%
C	100%	0%	0%	0%	0%
D	0%	0%	0%	0%	0%
E	0%	0%	0%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV	E - LV	E - HV
A	0	0	3	44	90	72	882	44	1	2
B	4	34	0	0	2	8	5	1	0	0
C	4	72	0	7	0	0	21	13	1	0
D	490	13	6	1	97	6	0	0	2	0
E	3	1	0	0	2	0	18	0	0	0

% HV

Route	A	B	C	D	E
A	0%	93%	44%	5%	68%
B	89%	0%	79%	18%	0%
C	94%	100%	0%	39%	0%
D	3%	15%	6%	0%	0%
E	26%	0%	0%	0%	0%

Scenario 2

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV	E - LV	E - HV
A	0	0	0	0	40	3	0	0	0	0
B	0	0	0	0	0	0	0	0	0	0
C	0	3	0	0	0	0	0	0	0	0
D	0	0	0	0	44	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0	0

% HV

Route	A	B	C	D	E
A	0%	0%	7%	0%	0%
B	0%	0%	0%	0%	0%
C	100%	0%	0%	0%	0%
D	0%	0%	0%	0%	0%
E	0%	0%	0%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV	E - LV	E - HV
A	0	0	3	44	115	65	882	44	1	2
B	4	34	0	0	2	8	5	1	0	0
C	4	65	0	7	0	0	21	13	1	0
D	490	13	6	1	123	6	0	0	2	0
E	3	1	0	0	2	0	18	0	0	0

% HV

Route	A	B	C	D	E
A	0%	93%	36%	5%	68%
B	89%	0%	79%	18%	0%
C	94%	100%	0%	39%	0%
D	3%	15%	5%	0%	0%
E	26%	0%	0%	0%	0%

Scenario 3

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV	E - LV	E - HV
A	0	0	0	0	15	2	0	0	0	0
B	0	0	0	0	0	0	0	0	0	0
C	0	2	0	0	0	0	0	0	0	0
D	0	0	0	0	16	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0	0

% HV

Route	A	B	C	D	E
A	0%	0%	12%	0%	0%
B	0%	0%	0%	0%	0%
C	100%	0%	0%	0%	0%
D	0%	0%	0%	0%	0%
E	0%	0%	0%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV	E - LV	E - HV
A	0	0	3	44	89	64	882	44	1	2
B	4	34	0	0	2	8	5	1	0	0
C	4	64	0	7	0	0	21	13	1	0
D	490	13	6	1	96	6	0	0	2	0
E	3	1	0	0	2	0	18	0	0	0

% HV

Route	A	B	C	D	E
A	0%	93%	42%	5%	68%
B	89%	0%	79%	18%	0%
C	94%	100%	0%	39%	0%
D	3%	15%	6%	0%	0%
E	26%	0%	0%	0%	0%

Traffic Calculations for Codling Wind Park

Site 2 - R131 (NW) / Sean Moore Rd / South Bank Rd / R131 (SW) / Pigeon House Rd
PM Peak (17:30-18:30)

Seasonally Adjusted ***2022***

2026 ***Year of Construction***

Table 9.1 Metropolitan Area Dublin City	***LV***	***HV***
2016 - 2030 index	*1.0136*	*1.0295*
Years	*4*	*4*
Growth Factor	***1.0555***	***1.1233***

Baseflow Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV	E - LV	E - HV
A	0	0	7	3	9	9	571	2	2	0
B	3	8	0	0	1	2	10	0	0	0
C	42	10	1	0	0	2	68	0	1	0
D	697	11	9	0	13	6	0	0	10	0
E	3	0	0	0	0	0	4	0	0	0

% HV

Route	A	B	C	D	E
A	0%	30%	50%	0%	0%
B	73%	0%	67%	0%	0%
C	19%	0%	100%	0%	0%
D	2%	0%	32%	0%	0%
E	0%	0%	0%	0%	0%

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV	E - LV	E - HV
A	0	0	7	3	9	10	603	2	2	0
B	3	9	0	0	1	2	11	0	0	0
C	44	11	1	0	0	2	72	0	1	0
D	736	12	9	0	14	7	0	0	11	0
E	3	0	0	0	0	0	4	0	0	0

% HV

Route	A	B	C	D	E
A	0%	31%	52%	0%	0%
B	74%	0%	68%	0%	0%
C	20%	0%	100%	0%	0%
D	2%	0%	33%	0%	0%
E	0%	0%	0%	0%	0%

Committed Development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV	E - LV	E - HV
A	0	0	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0	0	0	0
C	21	9	0	0	0	0	35	0	0	0
D	0	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0	0

% HV

Route	A	B	C	D	E
A	0%	0%	0%	0%	0%
B	0%	0%	0%	0%	0%
C	30%	0%	0%	0%	0%
D	0%	0%	0%	0%	0%
E	0%	0%	0%	0%	0%

Baseflow with committed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV	E - LV	E - HV
A	0	0	7	3	9	10	603	2	2	0
B	3	9	0	0	1	2	11	0	0	0
C	66	20	1	0	0	2	106	0	1	0
D	736	12	9	0	14	7	0	0	11	0
E	3	0	0	0	0	0	4	0	0	0

% HV

Route	A	B	C	D	E
A	0%	31%	52%	0%	0%
B	74%	0%	68%	0%	0%
C	24%	0%	100%	0%	0%
D	2%	0%	33%	0%	0%
E	0%	0%	0%	0%	0%

Scenario 1

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV	E - LV	E - HV
A	0	0	0	0	0	10	0	0	0	0
B	0	0	0	0	0	0	0	0	0	0
C	13	10	0	0	0	0	21	0	0	0
D	0	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0	0

% HV

Route	A	B	C	D	E
A	0%	0%	100%	0%	0%
B	0%	0%	0%	0%	0%
C	44%	0%	0%	0%	0%
D	0%	0%	0%	0%	0%
E	0%	0%	0%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV	E - LV	E - HV
A	0	0	7	3	9	20	603	2	2	0
B	3	9	0	0	1	2	11	0	0	0
C	78	30	1	0	0	2	127	0	1	0
D	736	12	9	0	14	7	0	0	11	0
E	3	0	0	0	0	0	4	0	0	0

% HV

Route	A	B	C	D	E
A	0%	31%	68%	0%	0%
B	74%	0%	68%	0%	0%
C	28%	0%	100%	0%	0%
D	2%	0%	33%	0%	0%
E	0%	0%	0%	0%	0%

Scenario 2

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV	E - LV	E - HV
A	0	0	0	0	0	3	0	0	0	0
B	0	0	0	0	0	0	0	0	0	0
C	32	3	0	0	0	0	52	0	0	0
D	0	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0	0

% HV

Route	A	B	C	D	E
A	0%	0%	100%	0%	0%
B	0%	0%	0%	0%	0%
C	9%	0%	0%	0%	0%
D	0%	0%	0%	0%	0%
E	0%	0%	0%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV	E - LV	E - HV
A	0	0	7	3	9	13	603	2	2	0
B	3	9	0	0	1	2	11	0	0	0
C	97	23	1	0	0	2	159	0	1	0
D	736	12	9	0	14	7	0	0	11	0
E	3	0	0	0	0	0	4	0	0	0

% HV

Route	A	B	C	D	E
A	0%	31%	58%	0%	0%
B	74%	0%	68%	0%	0%
C	19%	0%	100%	0%	0%
D	2%	0%	33%	0%	0%
E	0%	0%	0%	0%	0%

Scenario 3

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV	E - LV	E - HV
A	0	0	0	0	15	2	0	0	0	0
B	0	0	0	0	0	0	0	0	0	0
C	0	2	0	0	0	0	0	0	0	0
D	0	0	0	0	16	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0	0

% HV

Route	A	B	C	D	E
A	0%	0%	12%	0%	0%
B	0%	0%	0%	0%	0%
C	100%	0%	0%	0%	0%
D	0%	0%	0%	0%	0%
E	0%	0%	0%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV	E - LV	E - HV
A	0	0	7	3	25	12	603	2	2	0
B	3	9	0	0	1	2	11	0	0	0
C	66	22	1	0	0	2	106	0	1	0
D	736	12	9	0	30	7	0	0	11	0
E	3	0	0	0	0	0	4	0	0	0

% HV

Route	A	B	C	D	E
A	0%	31%	33%	0%	0%
B	74%	0%	68%	0%	0%
C	25%	0%	100%	0%	0%
D	2%	0%	18%	0%	0%
E	0%	0%	0%	0%	0%

Traffic Calculations for Codling Wind Park

Site 3 - South Bank Rd (NW) /Pigeon House Rd / South Bank Rd (SE)
AM Peak (07:45-08:45)

Seasonally Adjusted ***2022***

2026 ***Year of Construction***

Table 9.1 Metropolitan Area Dublin City	***LV***	***HV***
2016 - 2030 index	*1.0136*	*1.0295*
Years	*4*	*4*
Growth Factor	***1.0555***	***1.1233***

Baseflow Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	87	33	13	27
B	21	54	0	0	7	3
C	4	18	7	14	0	0

% HV			
Route	A	B	C
A	0%	28%	68%
B	72%	0%	30%
C	82%	67%	0%

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	92	37	14	30
B	22	61	0	0	7	3
C	4	20	7	16	0	0

% HV			
Route	A	B	C
A	0%	29%	69%
B	73%	0%	31%
C	83%	68%	0%

Committed Development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	56	9	0	0
B	0	0	0	0	0	0
C	0	0	0	0	0	0

% HV			
Route	A	B	C
A	0%	14%	0%
B	0%	0%	0%
C	0%	0%	0%

Baseflow with committed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	148	46	14	30
B	22	61	0	0	7	3
C	4	20	7	16	0	0

% HV			
Route	A	B	C
A	0%	24%	69%
B	73%	0%	31%
C	83%	68%	0%

Scenario 1

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	34	10	0	0
B	0	10	0	0	0	0
C	0	0	0	0	0	0

% HV			
Route	A	B	C
A	0%	23%	0%
B	100%	0%	0%
C	0%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	181	56	14	30
B	22	71	0	0	7	3
C	4	20	7	16	0	0

% HV			
Route	A	B	C
A	0%	24%	69%
B	76%	0%	31%
C	83%	68%	0%

Scenario 2

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	84	2	0	1
B	0	2	0	0	0	0
C	1	0	0	0	0	0

% HV			
Route	A	B	C
A	0%	2%	100%
B	100%	0%	0%
C	0%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	232	48	14	31
B	22	63	0	0	7	3
C	5	20	7	16	0	0

% HV			
Route	A	B	C
A	0%	17%	70%
B	74%	0%	31%
C	79%	68%	0%

Scenario 3

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	31	1	0	1
B	0	1	0	0	0	0
C	1	0	0	0	0	0

% HV			
Route	A	B	C
A	0%	3%	100%
B	100%	0%	0%
C	0%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	179	47	14	31
B	22	62	0	0	7	3
C	5	20	7	16	0	0

% HV			
Route	A	B	C
A	0%	21%	70%
B	74%	0%	31%
C	79%	68%	0%

Traffic Calculations for Codling Wind Park

Site 3 - South Bank Rd (NW) /Pigeon House Rd / South Bank Rd (SE)
PM Peak (17:30-18:30)

Seasonally Adjusted ***2022***

2026 ***Year of Construction***

Table 9.1 Metropolitan Area Dublin City	***LV***	***HV***
2016 - 2030 index	*1.0136*	*1.0295*
Years	*4*	*4*
Growth Factor	***1.0555***	***1.1233***

Baseflow Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	120	4	3	13
B	75	6	0	0	6	1
C	29	5	0	1	0	0

% HV			
Route	A	B	C
A	0%	3%	81%
B	7%	0%	14%
C	15%	100%	0%

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	127	4	3	15
B	79	7	0	0	6	1
C	31	6	0	1	0	0

% HV			
Route	A	B	C
A	0%	3%	82%
B	8%	0%	15%
C	16%	100%	0%

Committed Development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	0	0
B	56	9	0	0	0	0
C	0	0	0	0	0	0

% HV			
Route	A	B	C
A	0%	0%	0%
B	14%	0%	0%
C	0%	0%	0%

Baseflow with committed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	127	4	3	15
B	135	16	0	0	6	1
C	31	6	0	1	0	0

% HV			
Route	A	B	C
A	0%	3%	82%
B	10%	0%	15%
C	16%	100%	0%

Scenario 1

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	10	0	0
B	34	10	0	0	0	0
C	0	0	0	0	0	0

% HV			
Route	A	B	C
A	0%	100%	0%
B	23%	0%	0%
C	0%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	127	14	3	15
B	169	26	0	0	6	1
C	31	6	0	1	0	0

% HV			
Route	A	B	C
A	0%	10%	82%
B	13%	0%	15%
C	16%	100%	0%

Scenario 2

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	2	0	1
B	84	2	0	0	0	0
C	1	0	0	0	0	0

% HV			
Route	A	B	C
A	0%	100%	100%
B	2%	0%	0%
C	0%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	127	6	3	16
B	219	18	0	0	6	1
C	32	6	0	1	0	0

% HV			
Route	A	B	C
A	0%	5%	83%
B	7%	0%	15%
C	15%	100%	0%

Scenario 3

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	1	0	1
B	31	1	0	0	0	0
C	1	0	0	0	0	0

% HV			
Route	A	B	C
A	0%	100%	100%
B	3%	0%	0%
C	0%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	127	5	3	16
B	167	17	0	0	6	1
C	32	6	0	1	0	0

% HV			
Route	A	B	C
A	0%	4%	83%
B	9%	0%	15%
C	15%	100%	0%

Traffic Calculations for Codling Wind Park

Site 4 - Pigeon House Rd (W) / Shellybanks Rd / Pigeon House Rd (E)
AM Peak (07:45-08:45)

Seasonally Adjusted ***2023***

2026 ***Year of Construction***

Table 9.1 Metropolitan Area Dublin City	***LV***	***HV***
2016 - 2030 index	*1.0136*	*1.0295*
Years	*3*	*3*
Growth Factor	***1.0414***	***1.0911***

Baseflow Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	1	0	24	14
B	11	0	0	0	5	0
C	57	21	27	2	0	0

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	1	0	25	15
B	11	0	0	0	5	0
C	59	23	28	2	0	0

% HV			
Route	A	B	C
A	0%	0%	37%
B	0%	0%	0%
C	27%	7%	0%

% HV			
Route	A	B	C
A	0%	0%	38%
B	0%	0%	0%
C	28%	7%	0%

Committed Development

Baseflow with committed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	0	0
B	0	0	0	0	0	0
C	56	9	0	0	0	0

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	1	0	25	15
B	11	0	0	0	5	0
C	115	32	28	2	0	0

% HV			
Route	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	14%	0%	0%

% HV			
Route	A	B	C
A	0%	0%	38%
B	0%	0%	0%
C	22%	7%	0%

Scenario 1

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	0	10
B	0	0	0	0	0	0
C	0	10	34	0	0	0

% HV			
Route	A	B	C
A	0%	0%	100%
B	0%	0%	0%
C	100%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	1	0	25	25
B	11	0	0	0	5	0
C	115	42	62	2	0	0

% HV			
Route	A	B	C
A	0%	0%	50%
B	0%	0%	0%
C	27%	3%	0%

Scenario 2

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	0	2
B	0	0	0	0	0	1
C	0	2	84	1	0	0

% HV			
Route	A	B	C
A	0%	0%	100%
B	0%	0%	100%
C	100%	1%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	1	0	25	17
B	11	0	0	0	5	1
C	115	34	112	3	0	0

% HV			
Route	A	B	C
A	0%	0%	41%
B	0%	0%	15%
C	23%	3%	0%

Scenario 3

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	0	1
B	0	0	0	0	0	1
C	0	1	31	1	0	0

% HV			
Route	A	B	C
A	0%	0%	100%
B	0%	0%	100%
C	100%	2%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	1	0	25	16
B	11	0	0	0	5	1
C	115	33	60	3	0	0

% HV			
Route	A	B	C
A	0%	0%	40%
B	0%	0%	10%
C	22%	4%	0%

Traffic Calculations for Codling Wind Park

Site 4 - Pigeon House Rd (W) / Shellybanks Rd / Pigeon House Rd (E)

PM Peak (17:30-18:30)

Seasonally Adjusted ***2023***

2026 ***Year of Construction***

Table 9.1 Metropolitan Area Dublin City	***LV***	***HV***
2016 - 2030 index	*1.0136*	*1.0295*
Years	*3*	*3*
Growth Factor	***1.0414***	***1.0911***

Baseflow Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	75	4
B	1	0	0	0	12	1
C	51	7	0	0	0	0

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	78	4
B	1	0	0	0	12	1
C	53	8	0	0	0	0

% HV			
Route	A	B	C
A	0%	0%	5%
B	0%	0%	8%
C	12%	0%	0%

% HV			
Route	A	B	C
A	0%	0%	5%
B	0%	0%	8%
C	13%	0%	0%

Committed Development

Baseflow with committed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	56	9
B	0	0	0	0	0	0
C	0	0	0	0	0	0

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	134	13
B	1	0	0	0	12	1
C	53	8	0	0	0	0

% HV			
Route	A	B	C
A	0%	0%	14%
B	0%	0%	0%
C	0%	0%	0%

% HV			
Route	A	B	C
A	0%	0%	9%
B	0%	0%	8%
C	13%	0%	0%

Scenario 1

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	0	10
B	0	0	0	0	34	0
C	0	10	0	0	0	0

% HV			
Route	A	B	C
A	0%	0%	100%
B	0%	0%	0%
C	100%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	134	23
B	1	0	0	0	46	1
C	53	18	0	0	0	0

% HV			
Route	A	B	C
A	0%	0%	15%
B	0%	0%	2%
C	25%	0%	0%

Scenario 2

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	0	2
B	0	0	0	0	84	1
C	0	2	0	1	0	0

% HV			
Route	A	B	C
A	0%	0%	100%
B	0%	0%	1%
C	100%	100%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	134	15
B	1	0	0	0	96	2
C	53	9	0	1	0	0

% HV			
Route	A	B	C
A	0%	0%	10%
B	0%	0%	2%
C	15%	100%	0%

Scenario 3

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	0	1
B	0	0	0	0	31	1
C	0	1	0	1	0	0

% HV			
Route	A	B	C
A	0%	0%	100%
B	0%	0%	2%
C	100%	100%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	134	15
B	1	0	0	0	44	2
C	53	9	0	1	0	0

% HV			
Route	A	B	C
A	0%	0%	10%
B	0%	0%	4%
C	14%	100%	0%

Traffic Calculations for Codling Wind Park

Site 5 - Pigeon House Rd (W) / ECOCEM Access / Pigeon House Rd (E) / Dublin Waste to Energy
AM Peak (07:45-08:45)

Seasonally Adjusted ***2023***

2026 ***Year of Construction***

Table 9.1 Metropolitan Area Dublin City	***LV***	***HV***
2016 - 2030 index	*1.0136*	*1.0295*
Years	*3*	*3*
Growth Factor	***1.0414***	***1.0911***

Baseflow Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	0	0	4	1	61	9	2	11
B	0	1	0	0	0	0	0	0
C	23	7	0	0	0	0	0	0
D	2	7	0	0	0	0	0	0

% HV				
Route	A	B	C	D
A	0%	20%	13%	85%
B	100%	0%	0%	0%
C	23%	0%	0%	0%
D	78%	0%	0%	0%

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	0	0	4	1	64	10	2	12
B	0	1	0	0	0	0	0	0
C	24	8	0	0	0	0	0	0
D	2	8	0	0	0	0	0	0

% HV				
Route	A	B	C	D
A	0%	21%	13%	85%
B	100%	0%	0%	0%
C	24%	0%	0%	0%
D	79%	0%	0%	0%

Committed Development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	0	0	0	0	56	9	0	0
B	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0

% HV				
Route	A	B	C	D
A	0%	0%	14%	0%
B	0%	0%	0%	0%
C	0%	0%	0%	0%
D	0%	0%	0%	0%

Baseflow with committed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	0	0	4	1	120	19	2	12
B	0	1	0	0	0	0	0	0
C	24	8	0	0	0	0	0	0
D	2	8	0	0	0	0	0	0

% HV				
Route	A	B	C	D
A	0%	21%	14%	85%
B	100%	0%	0%	0%
C	24%	0%	0%	0%
D	79%	0%	0%	0%

Scenario 1

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	0	0	0	0	0	10	0	0
B	0	10	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0

% HV				
Route	A	B	C	D
A	0%	0%	100%	0%
B	100%	0%	0%	0%
C	0%	0%	0%	0%
D	0%	0%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	0	0	4	1	120	29	2	12
B	0	11	0	0	0	0	0	0
C	24	8	0	0	0	0	0	0
D	2	8	0	0	0	0	0	0

% HV				
Route	A	B	C	D
A	0%	21%	19%	85%
B	100%	0%	0%	0%
C	24%	0%	0%	0%
D	79%	0%	0%	0%

Scenario 2

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	0	0	0	0	0	2	0	0
B	0	2	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0

% HV				
Route	A	B	C	D
A	0%	0%	100%	0%
B	100%	0%	0%	0%
C	0%	0%	0%	0%
D	0%	0%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	0	0	4	1	120	21	2	12
B	0	3	0	0	0	0	0	0
C	24	8	0	0	0	0	0	0
D	2	8	0	0	0	0	0	0

% HV				
Route	A	B	C	D
A	0%	21%	15%	85%
B	100%	0%	0%	0%
C	24%	0%	0%	0%
D	79%	0%	0%	0%

Scenario 3

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	0	0	0	0	0	1	0	0
B	0	1	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0

% HV				
Route	A	B	C	D
A	0%	0%	100%	0%
B	100%	0%	0%	0%
C	0%	0%	0%	0%
D	0%	0%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	0	0	4	1	120	20	2	12
B	0	2	0	0	0	0	0	0
C	24	8	0	0	0	0	0	0
D	2	8	0	0	0	0	0	0

% HV				
Route	A	B	C	D
A	0%	21%	14%	85%
B	100%	0%	0%	0%
C	24%	0%	0%	0%
D	79%	0%	0%	0%

Traffic Calculations for Codling Wind Park

Site 5 - Pigeon House Rd (W) / ECOCEM Access / Pigeon House Rd (E) / Dublin Waste to Energy
PM Peak (17:30-18:30)

Seasonally Adjusted ***2023***

2026 ***Year of Construction***

Table 9.1 Metropolitan Area Dublin City	***LV***	***HV***
2016 - 2030 index	*1.0136*	*1.0295*
Years	*3*	*3*
Growth Factor	***1.0414***	***1.0911***

Baseflow Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	0	0	1	1	50	1	1	5
B	3	1	0	0	0	0	0	0
C	71	0	0	0	0	0	0	0
D	1	3	0	0	0	0	0	0

% HV				
Route	A	B	C	D
A	0%	50%	2%	83%
B	25%	0%	0%	0%
C	0%	0%	0%	0%
D	75%	0%	0%	0%

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	0	0	1	1	52	1	1	5
B	3	1	0	0	0	0	0	0
C	74	0	0	0	0	0	0	0
D	1	3	0	0	0	0	0	0

% HV				
Route	A	B	C	D
A	0%	51%	2%	84%
B	26%	0%	0%	0%
C	0%	0%	0%	0%
D	76%	0%	0%	0%

Committed Development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0	0
C	56	9	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0

% HV				
Route	A	B	C	D
A	0%	0%	0%	0%
B	0%	0%	0%	0%
C	14%	0%	0%	0%
D	0%	0%	0%	0%

Baseflow with committed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	0	0	1	1	52	1	1	5
B	3	1	0	0	0	0	0	0
C	130	9	0	0	0	0	0	0
D	1	3	0	0	0	0	0	0

% HV				
Route	A	B	C	D
A	0%	51%	2%	84%
B	26%	0%	0%	0%
C	6%	0%	0%	0%
D	76%	0%	0%	0%

Scenario 1

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	0	0	0	0	0	10	0	0
B	0	10	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0

% HV				
Route	A	B	C	D
A	0%	0%	100%	0%
B	100%	0%	0%	0%
C	0%	0%	0%	0%
D	0%	0%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	0	0	1	1	52	11	1	5
B	3	11	0	0	0	0	0	0
C	130	9	0	0	0	0	0	0
D	1	3	0	0	0	0	0	0

% HV				
Route	A	B	C	D
A	0%	51%	18%	84%
B	78%	0%	0%	0%
C	6%	0%	0%	0%
D	76%	0%	0%	0%

Scenario 2

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	0	0	0	0	0	2	0	0
B	0	2	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0

% HV				
Route	A	B	C	D
A	0%	0%	100%	0%
B	100%	0%	0%	0%
C	0%	0%	0%	0%
D	0%	0%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	0	0	1	1	52	3	1	5
B	3	3	0	0	0	0	0	0
C	130	9	0	0	0	0	0	0
D	1	3	0	0	0	0	0	0

% HV				
Route	A	B	C	D
A	0%	51%	5%	84%
B	48%	0%	0%	0%
C	6%	0%	0%	0%
D	76%	0%	0%	0%

Scenario 3

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	0	0	0	0	0	1	0	0
B	0	1	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0

% HV				
Route	A	B	C	D
A	0%	0%	100%	0%
B	100%	0%	0%	0%
C	0%	0%	0%	0%
D	0%	0%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV	D - LV	D - HV
A	0	0	1	1	52	2	1	5
B	3	2	0	0	0	0	0	0
C	130	9	0	0	0	0	0	0
D	1	3	0	0	0	0	0	0

% HV				
Route	A	B	C	D
A	0%	51%	4%	84%
B	42%	0%	0%	0%
C	6%	0%	0%	0%
D	76%	0%	0%	0%

Traffic Calculations for Codling Wind Park

Site 6 - Pigeon House Rd (W) / Private Access / Pigeon House Rd (E)
AM Peak (07:45-08:45)

Seasonally Adjusted ***2023***

2026 ***Year of Construction***

Table 9.1 Metropolitan Area Dublin City	***LV***	***HV***
2016 - 2030 index	*1.0136*	*1.0295*
Years	*3*	*3*
Growth Factor	***1.0414***	***1.0911***

Baseflow Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	19	0
B	0	0	0	0	0	0
C	47	3	0	0	0	0

% HV			
Route	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	6%	0%	0%

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	20	0
B	0	0	0	0	0	0
C	49	3	0	0	0	0

% HV			
Route	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	6%	0%	0%

Committed Development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	0	0
B	0	0	0	0	0	0
C	56	9	0	0	0	0

% HV			
Route	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	14%	0%	0%

Baseflow with committed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	20	0
B	0	0	0	0	0	0
C	105	12	0	0	0	0

% HV			
Route	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	10%	0%	0%

Scenario 1

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	0	0
B	0	0	0	0	0	0
C	0	10	0	0	0	0

% HV			
Route	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	100%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	20	0
B	0	0	0	0	0	0
C	105	22	0	0	0	0

% HV			
Route	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	18%	0%	0%

Scenario 2

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	0	0
B	0	0	0	0	0	0
C	0	2	0	0	0	0

% HV			
Route	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	100%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	20	0
B	0	0	0	0	0	0
C	105	14	0	0	0	0

% HV			
Route	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	12%	0%	0%

Scenario 3

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	0	0
B	0	0	0	0	0	0
C	0	1	0	0	0	0

% HV			
Route	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	100%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	20	0
B	0	0	0	0	0	0
C	105	13	0	0	0	0

% HV			
Route	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	11%	0%	0%

Traffic Calculations for Codling Wind Park

Site 6 - Pigeon House Rd (W) / Private Access / Pigeon House Rd (E)
PM Peak (17:30-18:30)

Seasonally Adjusted ***2023***

2026 ***Year of Construction***

Table 9.1 Metropolitan Area Dublin City	***LV***	***HV***
2016 - 2030 index	*1.0136*	*1.0295*
Years	*3*	*3*
Growth Factor	***1.0414***	***1.0911***

Baseflow Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	67	1
B	0	0	0	0	0	0
C	51	0	0	0	0	0

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	70	1
B	0	0	0	0	0	0
C	53	0	0	0	0	0

% HV			
Route	A	B	C
A	0%	0%	1%
B	0%	0%	0%
C	0%	0%	0%

% HV			
Route	A	B	C
A	0%	0%	2%
B	0%	0%	0%
C	0%	0%	0%

Committed Development

Baseflow with committed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	56	9
B	0	0	0	0	0	0
C	0	0	0	0	0	0

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	126	10
B	0	0	0	0	0	0
C	53	0	0	0	0	0

% HV			
Route	A	B	C
A	0%	0%	14%
B	0%	0%	0%
C	0%	0%	0%

% HV			
Route	A	B	C
A	0%	0%	7%
B	0%	0%	0%
C	0%	0%	0%

Scenario 1

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	0	0
B	0	0	0	0	0	0
C	0	10	0	0	0	0

% HV			
Route	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	100%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	126	10
B	0	0	0	0	0	0
C	53	10	0	0	0	0

% HV			
Route	A	B	C
A	0%	0%	7%
B	0%	0%	0%
C	16%	0%	0%

Scenario 2

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	0	0
B	0	0	0	0	0	0
C	0	2	0	0	0	0

% HV			
Route	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	100%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	126	10
B	0	0	0	0	0	0
C	53	2	0	0	0	0

% HV			
Route	A	B	C
A	0%	0%	7%
B	0%	0%	0%
C	3%	0%	0%

Scenario 3

Proposed Development Construction Traffic

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	0	0
B	0	0	0	0	0	0
C	0	1	0	0	0	0

% HV			
Route	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	100%	0%	0%

Baseflow with committed and proposed development

Route	A - LV	A - HV	B - LV	B - HV	C - LV	C - HV
A	0	0	0	0	126	10
B	0	0	0	0	0	0
C	53	1	0	0	0	0

% HV			
Route	A	B	C
A	0%	0%	7%
B	0%	0%	0%
C	2%	0%	0%

ANNEX C JUNCTIONS 10 OUTPUTS

Junctions 10

ARCADY 10 - Roundabout Module

For sales and distribution information, program advice and maintenance, contact TRL Software:
+44 (0)1344 379777 software@trl.co.uk trlsoftware.com

Filename: JTC 1.j10
Path: W:\Projects\11078 - Natural Power - Codling Bank Wind Farm\05-Design\01-Calculations\Traffic\08 Junction 10\New Counts - jan2024
Report generation date: 09/05/2024 11:32:02

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2022 Baseflow														
A - R131 N - East Wall Road	3.6	8.63	0.79	A	9.91	A	11 % [C - R131 S - Tom Clarke Bridge]	0.7	2.82	0.42	A	7.55	A	13 % [C - R131 S - Tom Clarke Bridge]
B - Direct Access	0.0	0.00	0.00	A				0.0	0.00	0.00	A			
C - R131 S - Tom Clarke Bridge	3.2	16.71	0.77	C				3.7	14.82	0.79	B			
D - R801 North Wall Quay	0.3	2.74	0.23	A				0.4	3.17	0.28	A			
2026 Baseflow														
A - R131 N - East Wall Road	5.5	12.47	0.85	B	14.84	B	3 % [C - R131 S - Tom Clarke Bridge]	0.8	2.99	0.45	A	9.95	A	6 % [C - R131 S - Tom Clarke Bridge]
B - Direct Access	0.0	0.00	0.00	A				0.0	0.00	0.00	A			
C - R131 S - Tom Clarke Bridge	5.3	26.74	0.85	D				5.3	20.79	0.85	C			
D - R801 North Wall Quay	0.3	2.94	0.25	A				0.5	3.43	0.31	A			
2026 Baseflow + Committed Development														
A - R131 N - East Wall Road	6.7	14.81	0.88	B	16.17	C	3 % [C - R131 S - Tom Clarke Bridge]	0.8	2.99	0.45	A	12.67	B	3 % [C - R131 S - Tom Clarke Bridge]
B - Direct Access	0.0	0.00	0.00	A				0.0	0.00	0.00	A			
C - R131 S - Tom Clarke Bridge	5.3	26.70	0.85	D				7.1	27.14	0.89	D			
D - R801 North Wall Quay	0.3	2.94	0.25	A				0.5	3.53	0.32	A			
2026 Baseflow + Committed + Proposed Development - Scenario 1														
A - R131 N - East Wall Road	7.5	16.52	0.89	C	18.16	C	1 % [C - R131 S - Tom Clarke Bridge]	0.8	3.08	0.46	A	15.85	C	0 % [C - R131 S - Tom Clarke Bridge]
B - Direct Access	0.0	0.00	0.00	A				0.0	0.00	0.00	A			
C - R131 S - Tom Clarke Bridge	6.1	30.25	0.87	D				9.3	34.70	0.92	D			
D - R801 North Wall Quay	0.3	2.98	0.26	A				0.5	3.62	0.32	A			
2026 Baseflow + Committed + Proposed Development - Scenario 2														
A - R131 N - East Wall Road	7.7	16.85	0.89	C	17.53	C	3 % [C - R131 S - Tom Clarke Bridge]	0.8	3.03	0.45	A	16.29	C	0 % [C - R131 S - Tom Clarke Bridge]
B - Direct Access	0.0	0.00	0.00	A				0.0	0.00	0.00	A			
C - R131 S - Tom Clarke Bridge	5.4	27.29	0.86	D				9.6	35.58	0.92	E			
D - R801 North Wall Quay	0.3	2.96	0.26	A				0.5	3.63	0.32	A			
2026 Baseflow + Committed + Proposed Development - Scenario 3														
A - R131 N - East Wall Road	6.9	15.17	0.88	C	16.49	C	3 % [C - R131 S - Tom Clarke Bridge]	0.8	3.03	0.45	A	13.96	B	1 % [C - R131 S - Tom Clarke Bridge]
B - Direct Access	0.0	0.00	0.00	A				0.0	0.00	0.00	A			
C - R131 S - Tom Clarke Bridge	5.4	27.11	0.86	D				8.0	30.18	0.90	D			
D - R801 North Wall Quay	0.3	2.95	0.25	A				0.5	3.57	0.32	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. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

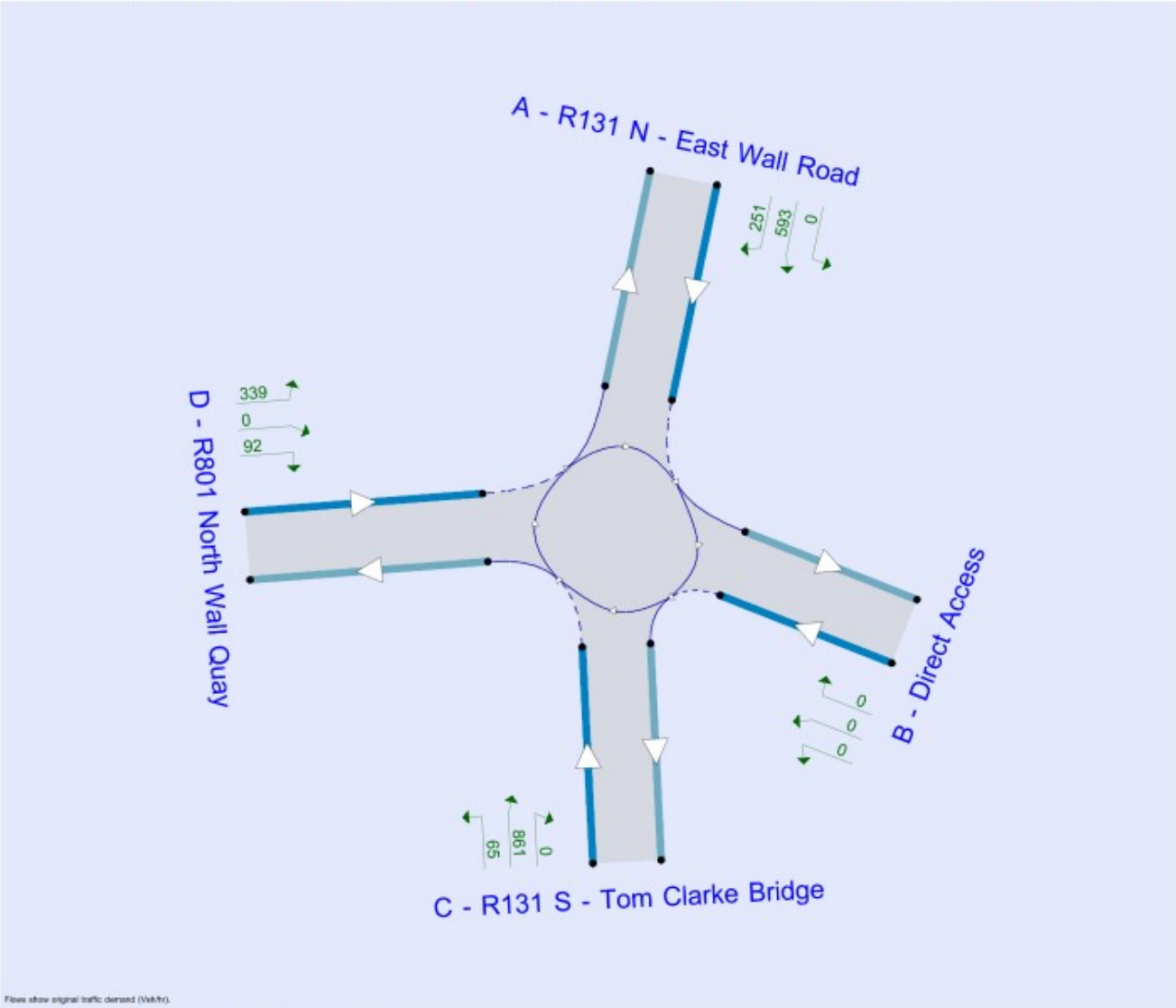
File summary

File Description

Title	Codling Wind Park
Location	Dublin
Site number	
Date	12/01/2024
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	
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	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓	✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022 Baseflow	AM	ONE HOUR	07:30	09:00	15
D2	2026 Baseflow	AM	ONE HOUR	07:30	09:00	15
D3	2026 Baseflow + Committed Development	AM	ONE HOUR	07:30	09:00	15
D4	2026 Baseflow + Committed + Proposed Development - Scenario 1	AM	ONE HOUR	07:30	09:00	15
D5	2026 Baseflow + Committed + Proposed Development - Scenario 2	AM	ONE HOUR	07:30	09:00	15
D6	2026 Baseflow + Committed + Proposed Development - Scenario 3	AM	ONE HOUR	07:30	09:00	15
D7	2022 Baseflow	PM	ONE HOUR	17:15	18:45	15
D8	2026 Baseflow	PM	ONE HOUR	17:15	18:45	15
D9	2026 Baseflow + Committed Development	PM	ONE HOUR	17:15	18:45	15
D10	2026 Baseflow + Committed + Proposed Development - Scenario 1	PM	ONE HOUR	17:15	18:45	15
D11	2026 Baseflow + Committed + Proposed Development - Scenario 2	PM	ONE HOUR	17:15	18:45	15
D12	2026 Baseflow + Committed + Proposed Development - Scenario 3	PM	ONE HOUR	17:15	18:45	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2022 Baseflow, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - R801 North Wall Quay - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1		Standard Roundabout		A, B, C, D	9.91	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	11	C - R131 S - Tom Clarke Bridge	9.91	A

Arms

Arms

Arm	Name	Description	No give-way line
A	R131 N - East Wall Road		
B	Direct Access		
C	R131 S - Tom Clarke Bridge		
D	R801 North Wall Quay		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
A - R131 N - East Wall Road	6.60	7.50	7.0	330.0	38.0	6.0		
B - Direct Access	3.00	3.00	0.0	3.0	38.0	0.0		
C - R131 S - Tom Clarke Bridge	3.60	7.80	3.0	31.0	38.0	5.0		
D - R801 North Wall Quay	5.80	8.60	35.0	81.0	38.0	9.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - R131 N - East Wall Road	0.842	2476
B - Direct Access	0.403	752
C - R131 S - Tom Clarke Bridge	0.630	1461
D - R801 North Wall Quay	0.881	2700

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)
D1	2022 Baseflow	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 N - East Wall Road		✓	1405	100.000
B - Direct Access		✓	0	100.000
C - R131 S - Tom Clarke Bridge		✓	645	100.000
D - R801 North Wall Quay		✓	348	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - R131 N - East Wall Road	B - Direct Access	C - R131 S - Tom Clarke Bridge	D - R801 North Wall Quay
From	A - R131 N - East Wall Road	43	0	976	386
	B - Direct Access	0	0	0	0
	C - R131 S - Tom Clarke Bridge	550	0	0	95
	D - R801 North Wall Quay	195	0	148	5

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - R131 N - East Wall Road	B - Direct Access	C - R131 S - Tom Clarke Bridge	D - R801 North Wall Quay
From	A - R131 N - East Wall Road	86	0	13	26
	B - Direct Access	0	0	0	0
	C - R131 S - Tom Clarke Bridge	17	0	0	5
	D - R801 North Wall Quay	30	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
A - R131 N - East Wall Road	0.79	8.63	3.6	12.7	A
B - Direct Access	0.00	0.00	0.0	~1	A
C - R131 S - Tom Clarke Bridge	0.77	16.71	3.2	15.4	C
D - R801 North Wall Quay	0.23	2.74	0.3	1.2	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1058	115	2001	0.529	1053	1.1	3.781	A
B - Direct Access	0	1168	200	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	486	325	1034	0.470	482	0.9	6.489	A
D - R801 North Wall Quay	262	443	1890	0.139	261	0.2	2.209	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1263	137	1985	0.636	1261	1.7	4.952	A
B - Direct Access	0	1398	92	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	580	389	987	0.587	578	1.4	8.741	A
D - R801 North Wall Quay	313	531	1809	0.173	313	0.2	2.405	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1547	168	1963	0.788	1540	3.6	8.361	A
B - Direct Access	0	1708	0	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	710	476	925	0.767	703	3.1	15.751	C
D - R801 North Wall Quay	383	647	1704	0.225	383	0.3	2.725	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1547	168	1963	0.788	1547	3.6	8.635	A
B - Direct Access	0	1715	0	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	710	478	924	0.769	710	3.2	16.710	C
D - R801 North Wall Quay	383	652	1699	0.226	383	0.3	2.735	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1263	138	1985	0.636	1271	1.8	5.091	A
B - Direct Access	0	1408	87	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	580	392	985	0.589	587	1.5	9.185	A
D - R801 North Wall Quay	313	539	1802	0.174	313	0.2	2.417	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1058	115	2001	0.529	1060	1.1	3.838	A
B - Direct Access	0	1176	197	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	486	328	1032	0.471	488	0.9	6.642	A
D - R801 North Wall Quay	262	448	1885	0.139	262	0.2	2.219	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	1.11	0.55	1.00	1.40	1.45			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	0.87	0.55	1.00	1.40	1.45			N/A	N/A
D - R801 North Wall Quay	0.16	0.00	0.00	0.16	0.16			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	1.72	0.05	0.46	4.58	7.44			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.39	0.06	0.85	3.08	4.45			N/A	N/A
D - R801 North Wall Quay	0.21	0.00	0.00	0.21	0.21			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	3.57	0.03	0.29	3.57	12.66			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	3.07	0.03	0.31	4.49	15.37			N/A	N/A
D - R801 North Wall Quay	0.29	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	3.64	0.03	0.27	3.64	3.64			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	3.19	0.03	0.29	3.19	10.61			N/A	N/A
D - R801 North Wall Quay	0.29	0.03	0.29	0.83	1.17			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	1.78	0.06	0.94	4.28	6.20			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.46	0.05	0.55	3.64	5.53			N/A	N/A
D - R801 North Wall Quay	0.21	0.00	0.00	0.21	0.21			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	1.13	0.04	0.41	2.84	4.74			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	0.90	0.04	0.36	2.17	3.95			N/A	N/A
D - R801 North Wall Quay	0.16	0.00	0.00	0.16	0.16			N/A	N/A

2026 Baseflow, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - R801 North Wall Quay - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1		Standard Roundabout		A, B, C, D	14.84	B

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	3	C - R131 S - Tom Clarke Bridge	14.84	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)
D2	2026 Baseflow	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 N - East Wall Road		✓	1501	100.000
B - Direct Access		✓	0	100.000
C - R131 S - Tom Clarke Bridge		✓	688	100.000
D - R801 North Wall Quay		✓	371	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - R131 N - East Wall Road	B - Direct Access	C - R131 S - Tom Clarke Bridge	D - R801 North Wall Quay
From	A - R131 N - East Wall Road	48	0	1039	414
	B - Direct Access	0	0	0	0
	C - R131 S - Tom Clarke Bridge	587	0	0	101
	D - R801 North Wall Quay	210	0	156	5

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - R131 N - East Wall Road	B - Direct Access	C - R131 S - Tom Clarke Bridge	D - R801 North Wall Quay
From	A - R131 N - East Wall Road	87	0	14	27
	B - Direct Access	0	0	0	0
	C - R131 S - Tom Clarke Bridge	18	0	0	6
	D - R801 North Wall Quay	32	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
A - R131 N - East Wall Road	0.85	12.47	5.5	27.7	B
B - Direct Access	0.00	0.00	0.0	~1	A
C - R131 S - Tom Clarke Bridge	0.85	26.74	5.3	27.6	D
D - R801 North Wall Quay	0.25	2.94	0.3	1.3	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1130	121	1979	0.571	1125	1.3	4.191	A
B - Direct Access	0	1246	159	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	518	350	1005	0.516	514	1.0	7.273	A
D - R801 North Wall Quay	279	474	1837	0.152	279	0.2	2.309	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1349	145	1962	0.688	1346	2.2	5.815	A
B - Direct Access	0	1491	42	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	618	419	955	0.648	616	1.8	10.508	B
D - R801 North Wall Quay	334	568	1751	0.190	333	0.2	2.538	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1653	177	1938	0.853	1640	5.3	11.598	B
B - Direct Access	0	1817	0	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	758	510	889	0.852	745	4.9	23.175	C
D - R801 North Wall Quay	408	688	1642	0.249	408	0.3	2.918	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1653	177	1938	0.853	1652	5.5	12.469	B
B - Direct Access	0	1829	0	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	758	514	887	0.854	756	5.3	26.738	D
D - R801 North Wall Quay	408	698	1633	0.250	408	0.3	2.938	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1349	145	1961	0.688	1363	2.3	6.140	A
B - Direct Access	0	1507	34	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	618	424	951	0.650	632	1.9	11.721	B
D - R801 North Wall Quay	334	583	1738	0.192	334	0.2	2.563	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1130	121	1978	0.571	1134	1.3	4.280	A
B - Direct Access	0	1255	154	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	518	353	1003	0.517	521	1.1	7.527	A
D - R801 North Wall Quay	279	481	1831	0.153	280	0.2	2.322	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	1.32	0.57	1.18	1.62	1.81			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.05	0.55	1.00	1.40	1.45			N/A	N/A
D - R801 North Wall Quay	0.18	0.00	0.00	0.18	0.18			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	2.16	0.04	0.45	5.90	9.98			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.78	0.06	0.80	4.45	6.62			N/A	N/A
D - R801 North Wall Quay	0.23	0.00	0.00	0.23	0.23			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	5.33	0.03	0.33	8.91	27.70			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	4.90	0.04	0.40	13.05	26.31			N/A	N/A
D - R801 North Wall Quay	0.33	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	5.54	0.03	0.29	5.54	16.93			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	5.32	0.03	0.33	8.83	27.63			N/A	N/A
D - R801 North Wall Quay	0.33	0.03	0.32	1.09	1.33			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	2.25	0.05	0.51	6.08	9.74			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.92	0.04	0.43	5.19	8.88			N/A	N/A
D - R801 North Wall Quay	0.24	0.00	0.00	0.24	0.24			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	1.35	0.04	0.35	3.32	6.73			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.09	0.03	0.32	2.25	5.49			N/A	N/A
D - R801 North Wall Quay	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2026 Baseflow + Committed Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - R801 North Wall Quay - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1		Standard Roundabout		A, B, C, D	16.17	C

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	3	C - R131 S - Tom Clarke Bridge	16.17	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)
D3	2026 Baseflow + Committed Development	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 N - East Wall Road		✓	1532	100.000
B - Direct Access		✓	0	100.000
C - R131 S - Tom Clarke Bridge		✓	688	100.000
D - R801 North Wall Quay		✓	376	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - R131 N - East Wall Road	B - Direct Access	C - R131 S - Tom Clarke Bridge	D - R801 North Wall Quay
From	A - R131 N - East Wall Road	48	0	1070	414
	B - Direct Access	0	0	0	0
	C - R131 S - Tom Clarke Bridge	587	0	0	101
	D - R801 North Wall Quay	210	0	161	5

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - R131 N - East Wall Road	B - Direct Access	C - R131 S - Tom Clarke Bridge	D - R801 North Wall Quay
From	A - R131 N - East Wall Road	87	0	15	27
	B - Direct Access	0	0	0	0
	C - R131 S - Tom Clarke Bridge	18	0	0	6
	D - R801 North Wall Quay	32	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
A - R131 N - East Wall Road	0.88	14.81	6.7	34.6	B
B - Direct Access	0.00	0.00	0.0	~1	A
C - R131 S - Tom Clarke Bridge	0.85	26.70	5.3	27.6	D
D - R801 North Wall Quay	0.25	2.94	0.3	1.3	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1153	125	1966	0.587	1148	1.4	4.368	A
B - Direct Access	0	1272	143	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	518	350	1005	0.516	514	1.0	7.272	A
D - R801 North Wall Quay	283	474	1840	0.154	282	0.2	2.309	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1377	149	1949	0.707	1373	2.4	6.216	A
B - Direct Access	0	1523	24	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	618	419	955	0.647	616	1.8	10.506	B
D - R801 North Wall Quay	338	568	1755	0.193	338	0.2	2.540	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1687	183	1925	0.876	1671	6.3	13.392	B
B - Direct Access	0	1854	0	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	758	509	890	0.851	745	4.9	23.097	C
D - R801 North Wall Quay	414	688	1645	0.252	414	0.3	2.923	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1687	183	1925	0.876	1685	6.7	14.813	B
B - Direct Access	0	1868	0	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	758	514	887	0.854	756	5.3	26.703	D
D - R801 North Wall Quay	414	698	1636	0.253	414	0.3	2.944	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1377	149	1949	0.707	1394	2.5	6.678	A
B - Direct Access	0	1543	14	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	618	425	951	0.651	632	1.9	11.745	B
D - R801 North Wall Quay	338	583	1741	0.194	338	0.2	2.566	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1153	125	1966	0.587	1157	1.4	4.474	A
B - Direct Access	0	1283	138	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	518	353	1003	0.517	521	1.1	7.532	A
D - R801 North Wall Quay	283	481	1834	0.154	283	0.2	2.321	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	1.40	0.58	1.29	1.75	1.89			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.05	0.55	1.00	1.40	1.45			N/A	N/A
D - R801 North Wall Quay	0.18	0.00	0.00	0.18	0.18			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	2.36	0.04	0.45	6.49	11.03			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.78	0.06	0.80	4.44	6.61			N/A	N/A
D - R801 North Wall Quay	0.24	0.00	0.00	0.24	0.24			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	6.32	0.04	0.36	13.88	34.62			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	4.88	0.04	0.40	12.97	26.23			N/A	N/A
D - R801 North Wall Quay	0.33	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	6.66	0.03	0.30	6.66	27.38			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	5.32	0.03	0.33	8.80	27.57			N/A	N/A
D - R801 North Wall Quay	0.34	0.03	0.32	1.11	1.34			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	2.47	0.05	0.47	6.80	11.27			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.92	0.04	0.43	5.21	8.88			N/A	N/A
D - R801 North Wall Quay	0.24	0.00	0.00	0.24	0.24			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	1.44	0.03	0.34	3.31	7.38			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.09	0.03	0.32	2.26	5.49			N/A	N/A
D - R801 North Wall Quay	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2026 Baseflow + Committed + Proposed Development - Scenario 1, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - R801 North Wall Quay - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1		Standard Roundabout		A, B, C, D	18.16	C

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	1	C - R131 S - Tom Clarke Bridge	18.16	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)
D4	2026 Baseflow + Committed + Proposed Development - Scenario 1	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 N - East Wall Road		✓	1556	100.000
B - Direct Access		✓	0	100.000
C - R131 S - Tom Clarke Bridge		✓	698	100.000
D - R801 North Wall Quay		✓	378	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - R131 N - East Wall Road	B - Direct Access	C - R131 S - Tom Clarke Bridge	D - R801 North Wall Quay
From	A - R131 N - East Wall Road	48	0	1094	414
	B - Direct Access	0	0	0	0
	C - R131 S - Tom Clarke Bridge	597	0	0	101
	D - R801 North Wall Quay	210	0	163	5

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - R131 N - East Wall Road	B - Direct Access	C - R131 S - Tom Clarke Bridge	D - R801 North Wall Quay
From	A - R131 N - East Wall Road	87	0	15	27
	B - Direct Access	0	0	0	0
	C - R131 S - Tom Clarke Bridge	19	0	0	6
	D - R801 North Wall Quay	32	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
A - R131 N - East Wall Road	0.89	16.52	7.5	38.6	C
B - Direct Access	0.00	0.00	0.0	~1	A
C - R131 S - Tom Clarke Bridge	0.87	30.25	6.1	33.0	D
D - R801 North Wall Quay	0.26	2.98	0.3	1.4	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1171	126	1967	0.596	1166	1.5	4.462	A
B - Direct Access	0	1292	134	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	525	350	997	0.527	521	1.1	7.495	A
D - R801 North Wall Quay	285	482	1832	0.155	284	0.2	2.324	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1399	151	1949	0.718	1395	2.5	6.447	A
B - Direct Access	0	1546	13	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	627	419	948	0.662	624	1.9	11.008	B
D - R801 North Wall Quay	340	577	1744	0.195	340	0.2	2.562	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1713	185	1925	0.890	1695	7.1	14.613	B
B - Direct Access	0	1880	0	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	769	509	884	0.870	754	5.5	25.372	D
D - R801 North Wall Quay	416	697	1633	0.255	416	0.3	2.957	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1713	185	1925	0.890	1711	7.5	16.524	C
B - Direct Access	0	1896	0	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	769	514	880	0.873	766	6.1	30.255	D
D - R801 North Wall Quay	416	708	1624	0.256	416	0.3	2.981	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1399	151	1949	0.718	1418	2.6	7.024	A
B - Direct Access	0	1570	1	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	627	426	943	0.665	644	2.1	12.615	B
D - R801 North Wall Quay	340	594	1729	0.197	340	0.2	2.593	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1171	127	1966	0.596	1176	1.5	4.581	A
B - Direct Access	0	1302	129	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	525	353	995	0.528	529	1.1	7.787	A
D - R801 North Wall Quay	285	489	1825	0.156	285	0.2	2.338	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	1.46	0.58	1.36	1.82	1.94			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.09	0.55	1.01	1.43	1.48			N/A	N/A
D - R801 North Wall Quay	0.18	0.00	0.00	0.18	0.18			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	2.48	0.04	0.45	6.85	11.72			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.89	0.06	0.81	4.79	7.17			N/A	N/A
D - R801 North Wall Quay	0.24	0.00	0.00	0.24	0.24			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	7.05	0.04	0.38	17.24	38.57			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	5.48	0.04	0.44	15.27	28.54			N/A	N/A
D - R801 North Wall Quay	0.34	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	7.50	0.03	0.31	8.20	34.86			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	6.08	0.03	0.35	12.47	32.99			N/A	N/A
D - R801 North Wall Quay	0.34	0.03	0.33	1.13	1.36			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	2.61	0.05	0.46	7.24	12.26			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	2.06	0.04	0.42	5.60	9.75			N/A	N/A
D - R801 North Wall Quay	0.25	0.00	0.00	0.25	0.25			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	1.49	0.03	0.33	3.26	7.71			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.14	0.03	0.32	2.20	5.80			N/A	N/A
D - R801 North Wall Quay	0.19	0.00	0.00	0.19	0.19			N/A	N/A

2026 Baseflow + Committed + Proposed Development - Scenario 2, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - R801 North Wall Quay - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1		Standard Roundabout		A, B, C, D	17.53	C

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	3	C - R131 S - Tom Clarke Bridge	17.53	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)
D5	2026 Baseflow + Committed + Proposed Development - Scenario 2	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 N - East Wall Road		✓	1569	100.000
B - Direct Access		✓	0	100.000
C - R131 S - Tom Clarke Bridge		✓	691	100.000
D - R801 North Wall Quay		✓	381	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - R131 N - East Wall Road	B - Direct Access	C - R131 S - Tom Clarke Bridge	D - R801 North Wall Quay
From	A - R131 N - East Wall Road	48	0	1107	414
	B - Direct Access	0	0	0	0
	C - R131 S - Tom Clarke Bridge	590	0	0	101
	D - R801 North Wall Quay	210	0	166	5

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - R131 N - East Wall Road	B - Direct Access	C - R131 S - Tom Clarke Bridge	D - R801 North Wall Quay
From	A - R131 N - East Wall Road	87	0	14	27
	B - Direct Access	0	0	0	0
	C - R131 S - Tom Clarke Bridge	18	0	0	6
	D - R801 North Wall Quay	32	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
A - R131 N - East Wall Road	0.89	16.85	7.7	39.4	C
B - Direct Access	0.00	0.00	0.0	~1	A
C - R131 S - Tom Clarke Bridge	0.86	27.29	5.4	28.6	D
D - R801 North Wall Quay	0.26	2.96	0.3	1.4	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1181	128	1977	0.597	1175	1.5	4.457	A
B - Direct Access	0	1304	132	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	520	350	1005	0.518	516	1.1	7.304	A
D - R801 North Wall Quay	287	477	1842	0.156	286	0.2	2.312	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1411	154	1959	0.720	1406	2.5	6.461	A
B - Direct Access	0	1560	11	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	621	419	955	0.650	618	1.8	10.587	B
D - R801 North Wall Quay	343	571	1755	0.195	342	0.2	2.547	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1728	188	1935	0.893	1709	7.2	14.828	B
B - Direct Access	0	1897	0	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	761	509	890	0.854	748	5.0	23.439	C
D - R801 North Wall Quay	419	691	1645	0.255	419	0.3	2.935	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1728	188	1934	0.893	1726	7.7	16.853	C
B - Direct Access	0	1914	0	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	761	514	887	0.858	759	5.4	27.288	D
D - R801 North Wall Quay	419	701	1637	0.256	419	0.3	2.957	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1411	154	1959	0.720	1431	2.6	7.064	A
B - Direct Access	0	1585	0	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	621	426	950	0.654	635	2.0	11.907	B
D - R801 North Wall Quay	343	586	1742	0.197	343	0.2	2.573	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1181	129	1977	0.597	1186	1.5	4.574	A
B - Direct Access	0	1315	127	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	520	353	1003	0.519	524	1.1	7.572	A
D - R801 North Wall Quay	287	483	1836	0.156	287	0.2	2.324	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	1.47	0.58	1.37	1.83	1.96			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.06	0.55	1.00	1.40	1.45			N/A	N/A
D - R801 North Wall Quay	0.18	0.00	0.00	0.18	0.18			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	2.51	0.04	0.45	6.92	11.86			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.80	0.06	0.80	4.51	6.72			N/A	N/A
D - R801 North Wall Quay	0.24	0.00	0.00	0.24	0.24			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	7.23	0.04	0.39	17.95	39.42			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	4.98	0.04	0.41	13.38	26.67			N/A	N/A
D - R801 North Wall Quay	0.34	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	7.71	0.03	0.32	9.03	36.51			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	5.45	0.03	0.33	9.42	28.57			N/A	N/A
D - R801 North Wall Quay	0.34	0.03	0.33	1.13	1.36			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	2.64	0.05	0.46	7.32	12.45			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.95	0.04	0.43	5.30	9.05			N/A	N/A
D - R801 North Wall Quay	0.25	0.00	0.00	0.25	0.25			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	1.50	0.03	0.33	3.25	7.79			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.10	0.03	0.32	2.25	5.55			N/A	N/A
D - R801 North Wall Quay	0.19	0.00	0.00	0.19	0.19			N/A	N/A

2026 Baseflow + Committed + Proposed Development - Scenario 3, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - R801 North Wall Quay - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1		Standard Roundabout		A, B, C, D	16.49	C

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	3	C - R131 S - Tom Clarke Bridge	16.49	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)
D6	2026 Baseflow + Committed + Proposed Development - Scenario 3	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 N - East Wall Road		✓	1547	100.000
B - Direct Access		✓	0	100.000
C - R131 S - Tom Clarke Bridge		✓	690	100.000
D - R801 North Wall Quay		✓	378	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - R131 N - East Wall Road	B - Direct Access	C - R131 S - Tom Clarke Bridge	D - R801 North Wall Quay
From	A - R131 N - East Wall Road	48	0	1085	414
	B - Direct Access	0	0	0	0
	C - R131 S - Tom Clarke Bridge	589	0	0	101
	D - R801 North Wall Quay	210	0	163	5

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - R131 N - East Wall Road	B - Direct Access	C - R131 S - Tom Clarke Bridge	D - R801 North Wall Quay
From	A - R131 N - East Wall Road	87	0	14	27
	B - Direct Access	0	0	0	0
	C - R131 S - Tom Clarke Bridge	18	0	0	6
	D - R801 North Wall Quay	32	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
A - R131 N - East Wall Road	0.88	15.17	6.9	35.7	C
B - Direct Access	0.00	0.00	0.0	~1	A
C - R131 S - Tom Clarke Bridge	0.86	27.11	5.4	28.3	D
D - R801 North Wall Quay	0.25	2.95	0.3	1.4	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1165	126	1978	0.589	1159	1.4	4.368	A
B - Direct Access	0	1285	141	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	519	350	1005	0.517	515	1.1	7.296	A
D - R801 North Wall Quay	285	476	1840	0.155	284	0.2	2.311	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1391	151	1960	0.710	1387	2.4	6.239	A
B - Direct Access	0	1538	21	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	620	419	955	0.649	617	1.8	10.558	B
D - R801 North Wall Quay	340	570	1754	0.194	340	0.2	2.544	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1703	185	1936	0.880	1687	6.5	13.640	B
B - Direct Access	0	1872	0	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	760	509	890	0.854	747	5.0	23.358	C
D - R801 North Wall Quay	416	690	1644	0.253	416	0.3	2.930	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1703	185	1936	0.880	1702	6.9	15.165	C
B - Direct Access	0	1887	0	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	760	514	887	0.857	758	5.4	27.113	D
D - R801 North Wall Quay	416	700	1636	0.254	416	0.3	2.951	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1391	151	1960	0.710	1408	2.5	6.726	A
B - Direct Access	0	1559	10	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	620	425	951	0.653	634	1.9	11.839	B
D - R801 North Wall Quay	340	585	1741	0.195	340	0.2	2.570	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	1165	127	1977	0.589	1169	1.4	4.475	A
B - Direct Access	0	1295	136	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	519	353	1003	0.518	523	1.1	7.558	A
D - R801 North Wall Quay	285	483	1834	0.155	285	0.2	2.323	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	1.42	0.58	1.31	1.77	1.91			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.05	0.55	1.00	1.40	1.45			N/A	N/A
D - R801 North Wall Quay	0.18	0.00	0.00	0.18	0.18			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	2.39	0.04	0.45	6.59	11.24			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.79	0.06	0.80	4.49	6.68			N/A	N/A
D - R801 North Wall Quay	0.24	0.00	0.00	0.24	0.24			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	6.51	0.04	0.36	14.73	35.73			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	4.96	0.04	0.41	13.27	26.56			N/A	N/A
D - R801 North Wall Quay	0.34	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	6.87	0.03	0.30	6.87	29.22			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	5.41	0.03	0.33	9.23	28.26			N/A	N/A
D - R801 North Wall Quay	0.34	0.03	0.33	1.12	1.35			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	2.50	0.05	0.47	6.91	11.53			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.94	0.04	0.43	5.26	8.98			N/A	N/A
D - R801 North Wall Quay	0.24	0.00	0.00	0.24	0.24			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	1.45	0.03	0.34	3.30	7.46			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.09	0.03	0.32	2.25	5.53			N/A	N/A
D - R801 North Wall Quay	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2022 Baseflow , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - R801 North Wall Quay - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1		Standard Roundabout		A, B, C, D	7.55	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	13	C - R131 S - Tom Clarke Bridge	7.55	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)
D7	2022 Baseflow	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 N - East Wall Road		✓	839	100.000
B - Direct Access		✓	0	100.000
C - R131 S - Tom Clarke Bridge		✓	832	100.000
D - R801 North Wall Quay		✓	406	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - R131 N - East Wall Road	B - Direct Access	C - R131 S - Tom Clarke Bridge	D - R801 North Wall Quay
From	A - R131 N - East Wall Road	45	0	559	235
	B - Direct Access	0	0	0	0
	C - R131 S - Tom Clarke Bridge	773	0	0	59
	D - R801 North Wall Quay	317	0	87	2

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - R131 N - East Wall Road	B - Direct Access	C - R131 S - Tom Clarke Bridge	D - R801 North Wall Quay
From	A - R131 N - East Wall Road	56	0	2	16
	B - Direct Access	0	0	0	0
	C - R131 S - Tom Clarke Bridge	6	0	0	0
	D - R801 North Wall Quay	20	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
A - R131 N - East Wall Road	0.42	2.82	0.7	2.4	A
B - Direct Access	0.00	0.00	0.0	~1	A
C - R131 S - Tom Clarke Bridge	0.79	14.82	3.7	17.6	B
D - R801 North Wall Quay	0.28	3.17	0.4	1.1	A

Main Results for each time segment

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	632	67	2223	0.284	630	0.4	2.258	A
B - Direct Access	0	697	448	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	626	212	1229	0.510	622	1.0	5.894	A
D - R801 North Wall Quay	306	612	1821	0.168	305	0.2	2.372	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	754	80	2213	0.341	754	0.5	2.467	A
B - Direct Access	0	834	388	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	748	253	1199	0.624	746	1.6	7.900	A
D - R801 North Wall Quay	365	733	1721	0.212	365	0.3	2.653	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	924	98	2199	0.420	923	0.7	2.821	A
B - Direct Access	0	1021	307	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	916	310	1157	0.792	908	3.5	14.038	B
D - R801 North Wall Quay	447	893	1589	0.281	447	0.4	3.149	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	924	98	2198	0.420	924	0.7	2.823	A
B - Direct Access	0	1022	306	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	916	310	1157	0.792	916	3.7	14.818	B
D - R801 North Wall Quay	447	900	1584	0.282	447	0.4	3.166	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	754	80	2213	0.341	755	0.5	2.470	A
B - Direct Access	0	835	388	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	748	254	1198	0.624	756	1.7	8.271	A
D - R801 North Wall Quay	365	743	1714	0.213	365	0.3	2.670	A

18:30 - 18:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	632	67	2223	0.284	632	0.4	2.265	A
B - Direct Access	0	699	447	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	626	212	1229	0.510	629	1.1	6.028	A
D - R801 North Wall Quay	306	618	1816	0.168	306	0.2	2.383	A

Queue Variation Results for each time segment

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.40	0.00	0.00	0.40	0.40			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.03	0.55	1.00	1.40	1.45			N/A	N/A
D - R801 North Wall Quay	0.20	0.00	0.00	0.20	0.20			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.52	0.52	1.00	1.40	1.45			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.62	0.06	0.76	3.95	5.89			N/A	N/A
D - R801 North Wall Quay	0.27	0.00	0.00	0.27	0.27			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.72	0.03	0.25	0.72	0.72			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	3.54	0.03	0.31	5.07	17.64			N/A	N/A
D - R801 North Wall Quay	0.39	0.03	0.25	0.45	0.48			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.72	0.03	0.28	0.72	2.39			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	3.66	0.03	0.28	3.66	10.81			N/A	N/A
D - R801 North Wall Quay	0.39	0.03	0.33	1.13	1.13			N/A	N/A

18:15 - 18:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.52	0.52	1.00	1.40	1.45			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.70	0.05	0.55	4.37	6.74			N/A	N/A
D - R801 North Wall Quay	0.27	0.00	0.00	0.27	0.27			N/A	N/A

18:30 - 18:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.40	0.00	0.00	0.40	0.40			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.05	0.04	0.36	2.64	4.84			N/A	N/A
D - R801 North Wall Quay	0.20	0.00	0.00	0.20	0.20			N/A	N/A

2026 Baseflow , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - R801 North Wall Quay - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1		Standard Roundabout		A, B, C, D	9.95	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	6	C - R131 S - Tom Clarke Bridge	9.95	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)
D8	2026 Baseflow	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 N - East Wall Road		✓	891	100.000
B - Direct Access		✓	0	100.000
C - R131 S - Tom Clarke Bridge		✓	881	100.000
D - R801 North Wall Quay		✓	433	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - R131 N - East Wall Road	B - Direct Access	C - R131 S - Tom Clarke Bridge	D - R801 North Wall Quay
From	A - R131 N - East Wall Road	49	0	591	251
	B - Direct Access	0	0	0	0
	C - R131 S - Tom Clarke Bridge	819	0	0	62
	D - R801 North Wall Quay	339	0	92	2

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - R131 N - East Wall Road	B - Direct Access	C - R131 S - Tom Clarke Bridge	D - R801 North Wall Quay
From	A - R131 N - East Wall Road	57	0	2	17
	B - Direct Access	0	0	0	0
	C - R131 S - Tom Clarke Bridge	6	0	0	0
	D - R801 North Wall Quay	21	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
A - R131 N - East Wall Road	0.45	2.99	0.8	1.8	A
B - Direct Access	0.00	0.00	0.0	~1	A
C - R131 S - Tom Clarke Bridge	0.85	20.79	5.3	27.4	C
D - R801 North Wall Quay	0.31	3.43	0.5	1.7	A

Main Results for each time segment

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	671	71	2211	0.303	669	0.4	2.332	A
B - Direct Access	0	740	428	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	663	227	1217	0.545	659	1.2	6.397	A
D - R801 North Wall Quay	326	649	1778	0.183	325	0.2	2.477	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	801	84	2200	0.364	800	0.6	2.570	A
B - Direct Access	0	885	365	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	792	271	1184	0.669	789	2.0	9.040	A
D - R801 North Wall Quay	389	777	1672	0.233	389	0.3	2.805	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	981	103	2186	0.449	980	0.8	2.983	A
B - Direct Access	0	1083	278	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	970	332	1139	0.852	958	5.0	18.685	C
D - R801 North Wall Quay	477	944	1535	0.311	476	0.4	3.397	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	981	103	2185	0.449	981	0.8	2.988	A
B - Direct Access	0	1084	277	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	970	333	1139	0.852	969	5.3	20.793	C
D - R801 North Wall Quay	477	955	1527	0.312	477	0.5	3.426	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	801	85	2200	0.364	802	0.6	2.577	A
B - Direct Access	0	887	364	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	792	272	1184	0.669	805	2.1	9.822	A
D - R801 North Wall Quay	389	793	1660	0.234	390	0.3	2.834	A

18:30 - 18:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	671	71	2211	0.303	671	0.4	2.338	A
B - Direct Access	0	742	427	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	663	228	1216	0.545	667	1.2	6.592	A
D - R801 North Wall Quay	326	657	1771	0.184	326	0.2	2.491	A

Queue Variation Results for each time segment

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.43	0.00	0.00	0.43	0.43			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.18	0.55	1.04	1.27	1.27			N/A	N/A
D - R801 North Wall Quay	0.22	0.00	0.00	0.22	0.22			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.57	0.08	0.76	1.35	1.43			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.96	0.05	0.71	5.08	7.80			N/A	N/A
D - R801 North Wall Quay	0.30	0.00	0.00	0.30	0.30			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.81	0.03	0.25	0.81	0.81			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	5.04	0.04	0.37	12.25	27.36			N/A	N/A
D - R801 North Wall Quay	0.45	0.03	0.25	0.45	0.48			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.81	0.03	0.27	0.81	1.80			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	5.35	0.03	0.31	5.96	24.99			N/A	N/A
D - R801 North Wall Quay	0.45	0.03	0.32	1.40	1.75			N/A	N/A

18:15 - 18:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.57	0.55	1.00	1.40	1.45			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	2.08	0.04	0.45	5.69	9.57			N/A	N/A
D - R801 North Wall Quay	0.31	0.00	0.00	0.31	0.31			N/A	N/A

18:30 - 18:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.44	0.00	0.00	0.44	0.44			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.22	0.03	0.33	2.75	6.18			N/A	N/A
D - R801 North Wall Quay	0.23	0.00	0.00	0.23	0.23			N/A	N/A

2026 Baseflow + Committed Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - R801 North Wall Quay - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1		Standard Roundabout		A, B, C, D	12.67	B

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	3	C - R131 S - Tom Clarke Bridge	12.67	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)
D9	2026 Baseflow + Committed Development	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 N - East Wall Road		✓	891	100.000
B - Direct Access		✓	0	100.000
C - R131 S - Tom Clarke Bridge		✓	912	100.000
D - R801 North Wall Quay		✓	433	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - R131 N - East Wall Road	B - Direct Access	C - R131 S - Tom Clarke Bridge	D - R801 North Wall Quay
From	A - R131 N - East Wall Road	49	0	591	251
	B - Direct Access	0	0	0	0
	C - R131 S - Tom Clarke Bridge	848	0	0	64
	D - R801 North Wall Quay	339	0	92	2

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - R131 N - East Wall Road	B - Direct Access	C - R131 S - Tom Clarke Bridge	D - R801 North Wall Quay
From	A - R131 N - East Wall Road	57	0	2	17
	B - Direct Access	0	0	0	0
	C - R131 S - Tom Clarke Bridge	7	0	0	0
	D - R801 North Wall Quay	21	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
A - R131 N - East Wall Road	0.45	2.99	0.8	1.8	A
B - Direct Access	0.00	0.00	0.0	~1	A
C - R131 S - Tom Clarke Bridge	0.89	27.14	7.1	38.8	D
D - R801 North Wall Quay	0.32	3.53	0.5	1.8	A

Main Results for each time segment

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	671	71	2211	0.303	669	0.4	2.332	A
B - Direct Access	0	740	428	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	687	227	1206	0.569	681	1.3	6.797	A
D - R801 North Wall Quay	326	670	1756	0.186	325	0.2	2.515	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	801	84	2200	0.364	800	0.6	2.570	A
B - Direct Access	0	885	365	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	820	271	1174	0.699	816	2.2	9.965	A
D - R801 North Wall Quay	389	803	1646	0.236	389	0.3	2.863	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	981	103	2186	0.449	980	0.8	2.983	A
B - Direct Access	0	1083	278	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	1004	332	1129	0.889	987	6.5	22.972	C
D - R801 North Wall Quay	477	972	1506	0.316	476	0.5	3.492	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	981	103	2185	0.449	981	0.8	2.988	A
B - Direct Access	0	1084	277	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	1004	333	1129	0.889	1002	7.1	27.138	D
D - R801 North Wall Quay	477	985	1495	0.319	477	0.5	3.533	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	801	85	2200	0.364	802	0.6	2.577	A
B - Direct Access	0	887	364	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	820	272	1173	0.699	839	2.4	11.330	B
D - R801 North Wall Quay	389	824	1629	0.239	390	0.3	2.905	A

18:30 - 18:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	671	71	2211	0.303	671	0.4	2.340	A
B - Direct Access	0	742	427	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	687	228	1205	0.570	691	1.3	7.050	A
D - R801 North Wall Quay	326	679	1749	0.186	326	0.2	2.533	A

Queue Variation Results for each time segment

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.43	0.00	0.00	0.43	0.43			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.30	0.57	1.17	1.60	1.80			N/A	N/A
D - R801 North Wall Quay	0.23	0.00	0.00	0.23	0.23			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.57	0.08	0.76	1.35	1.43			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	2.24	0.05	0.72	5.93	9.19			N/A	N/A
D - R801 North Wall Quay	0.31	0.00	0.00	0.31	0.31			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.81	0.03	0.25	0.81	0.81			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	6.52	0.05	0.46	18.33	33.98			N/A	N/A
D - R801 North Wall Quay	0.46	0.03	0.25	0.46	0.48			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.81	0.03	0.27	0.81	1.80			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	7.13	0.04	0.35	14.50	38.75			N/A	N/A
D - R801 North Wall Quay	0.47	0.03	0.32	1.42	1.84			N/A	N/A

18:15 - 18:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.57	0.55	1.00	1.40	1.45			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	2.41	0.04	0.42	6.61	11.72			N/A	N/A
D - R801 North Wall Quay	0.32	0.00	0.00	0.32	0.32			N/A	N/A

18:30 - 18:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.44	0.00	0.00	0.44	0.44			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.35	0.03	0.32	2.65	6.94			N/A	N/A
D - R801 North Wall Quay	0.23	0.00	0.00	0.23	0.23			N/A	N/A

2026 Baseflow + Committed + Proposed Development - Scenario 1, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - R801 North Wall Quay - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1		Standard Roundabout		A, B, C, D	15.85	C

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	0	C - R131 S - Tom Clarke Bridge	15.85	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)
D10	2026 Baseflow + Committed + Proposed Development - Scenario 1	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 N - East Wall Road		✓	901	100.000
B - Direct Access		✓	0	100.000
C - R131 S - Tom Clarke Bridge		✓	934	100.000
D - R801 North Wall Quay		✓	433	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - R131 N - East Wall Road	B - Direct Access	C - R131 S - Tom Clarke Bridge	D - R801 North Wall Quay
From	A - R131 N - East Wall Road	49	0	601	251
	B - Direct Access	0	0	0	0
	C - R131 S - Tom Clarke Bridge	869	0	0	65
	D - R801 North Wall Quay	339	0	92	2

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - R131 N - East Wall Road	B - Direct Access	C - R131 S - Tom Clarke Bridge	D - R801 North Wall Quay
From	A - R131 N - East Wall Road	57	0	4	17
	B - Direct Access	0	0	0	0
	C - R131 S - Tom Clarke Bridge	8	0	0	0
	D - R801 North Wall Quay	21	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
A - R131 N - East Wall Road	0.46	3.08	0.8	1.6	A
B - Direct Access	0.00	0.00	0.0	~1	A
C - R131 S - Tom Clarke Bridge	0.92	34.70	9.3	50.7	D
D - R801 North Wall Quay	0.32	3.62	0.5	1.9	A

Main Results for each time segment

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	678	71	2186	0.310	677	0.4	2.381	A
B - Direct Access	0	747	422	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	703	227	1196	0.588	698	1.4	7.153	A
D - R801 North Wall Quay	326	686	1738	0.188	325	0.2	2.546	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	810	84	2175	0.372	809	0.6	2.633	A
B - Direct Access	0	894	357	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	840	271	1163	0.722	835	2.5	10.827	B
D - R801 North Wall Quay	389	821	1626	0.239	389	0.3	2.911	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	992	103	2161	0.459	991	0.8	3.074	A
B - Direct Access	0	1094	268	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	1028	332	1119	0.919	1006	8.2	27.426	D
D - R801 North Wall Quay	477	990	1485	0.321	476	0.5	3.567	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	992	103	2161	0.459	992	0.8	3.079	A
B - Direct Access	0	1095	268	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	1028	333	1119	0.919	1024	9.3	34.698	D
D - R801 North Wall Quay	477	1007	1471	0.324	477	0.5	3.619	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	810	85	2175	0.372	811	0.6	2.642	A
B - Direct Access	0	896	356	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	840	272	1163	0.722	866	2.7	13.091	B
D - R801 North Wall Quay	389	850	1602	0.243	390	0.3	2.970	A

18:30 - 18:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	678	71	2186	0.310	679	0.5	2.391	A
B - Direct Access	0	750	420	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	703	228	1195	0.588	708	1.5	7.471	A
D - R801 North Wall Quay	326	696	1730	0.188	326	0.2	2.566	A

Queue Variation Results for each time segment

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.45	0.00	0.00	0.45	0.45			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.40	0.57	1.30	1.77	1.91			N/A	N/A
D - R801 North Wall Quay	0.23	0.00	0.00	0.23	0.23			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.59	0.08	0.78	1.36	1.43			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	2.49	0.06	0.77	6.71	10.41			N/A	N/A
D - R801 North Wall Quay	0.31	0.00	0.00	0.31	0.31			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.84	0.03	0.25	0.84	0.84			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	8.16	0.06	1.21	23.78	39.43			N/A	N/A
D - R801 North Wall Quay	0.47	0.03	0.25	0.47	0.48			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.85	0.03	0.27	0.85	1.59			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	9.27	0.04	0.42	24.57	50.68			N/A	N/A
D - R801 North Wall Quay	0.48	0.03	0.32	1.44	1.91			N/A	N/A

18:15 - 18:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.60	0.55	1.00	1.40	1.45			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	2.71	0.04	0.41	7.42	13.64			N/A	N/A
D - R801 North Wall Quay	0.32	0.00	0.00	0.32	0.32			N/A	N/A

18:30 - 18:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.45	0.00	0.00	0.45	0.45			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.46	0.03	0.31	2.48	7.44			N/A	N/A
D - R801 North Wall Quay	0.23	0.00	0.00	0.23	0.23			N/A	N/A

2026 Baseflow + Committed + Proposed Development - Scenario 2, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - R801 North Wall Quay - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1		Standard Roundabout		A, B, C, D	16.29	C

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	0	C - R131 S - Tom Clarke Bridge	16.29	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)
D11	2026 Baseflow + Committed + Proposed Development - Scenario 2	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 N - East Wall Road		✓	894	100.000
B - Direct Access		✓	0	100.000
C - R131 S - Tom Clarke Bridge		✓	946	100.000
D - R801 North Wall Quay		✓	433	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - R131 N - East Wall Road	B - Direct Access	C - R131 S - Tom Clarke Bridge	D - R801 North Wall Quay
From	A - R131 N - East Wall Road	49	0	594	251
	B - Direct Access	0	0	0	0
	C - R131 S - Tom Clarke Bridge	880	0	0	66
	D - R801 North Wall Quay	339	0	92	2

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - R131 N - East Wall Road	B - Direct Access	C - R131 S - Tom Clarke Bridge	D - R801 North Wall Quay
From	A - R131 N - East Wall Road	57	0	3	17
	B - Direct Access	0	0	0	0
	C - R131 S - Tom Clarke Bridge	7	0	0	0
	D - R801 North Wall Quay	21	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
A - R131 N - East Wall Road	0.45	3.03	0.8	1.7	A
B - Direct Access	0.00	0.00	0.0	~1	A
C - R131 S - Tom Clarke Bridge	0.92	35.58	9.6	52.4	E
D - R801 North Wall Quay	0.32	3.63	0.5	1.9	A

Main Results for each time segment

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	673	71	2198	0.306	671	0.4	2.356	A
B - Direct Access	0	742	426	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	712	227	1206	0.591	707	1.4	7.129	A
D - R801 North Wall Quay	326	694	1737	0.188	325	0.2	2.549	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	804	84	2188	0.367	803	0.6	2.598	A
B - Direct Access	0	888	361	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	850	271	1174	0.725	846	2.5	10.841	B
D - R801 North Wall Quay	389	831	1624	0.240	389	0.3	2.916	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	984	103	2173	0.453	983	0.8	3.023	A
B - Direct Access	0	1087	274	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	1042	332	1129	0.922	1018	8.4	27.858	D
D - R801 North Wall Quay	477	1001	1483	0.322	476	0.5	3.574	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	984	103	2173	0.453	984	0.8	3.028	A
B - Direct Access	0	1088	273	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	1042	333	1129	0.923	1037	9.6	35.582	E
D - R801 North Wall Quay	477	1018	1469	0.325	477	0.5	3.628	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	804	85	2187	0.367	805	0.6	2.604	A
B - Direct Access	0	889	361	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	850	272	1173	0.725	878	2.8	13.229	B
D - R801 North Wall Quay	389	861	1599	0.243	390	0.3	2.979	A

18:30 - 18:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	673	71	2198	0.306	674	0.4	2.361	A
B - Direct Access	0	744	424	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	712	228	1205	0.591	717	1.5	7.450	A
D - R801 North Wall Quay	328	704	1728	0.189	328	0.2	2.569	A

Queue Variation Results for each time segment

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.44	0.00	0.00	0.44	0.44			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.41	0.57	1.31	1.78	1.92			N/A	N/A
D - R801 North Wall Quay	0.23	0.00	0.00	0.23	0.23			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.58	0.08	0.77	1.35	1.43			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	2.53	0.06	0.77	6.81	10.61			N/A	N/A
D - R801 North Wall Quay	0.31	0.00	0.00	0.31	0.31			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.82	0.03	0.25	0.82	0.82			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	8.42	0.06	1.34	24.54	40.23			N/A	N/A
D - R801 North Wall Quay	0.47	0.03	0.25	0.47	0.48			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.83	0.03	0.27	0.83	1.72			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	9.63	0.04	0.43	26.04	52.44			N/A	N/A
D - R801 North Wall Quay	0.48	0.03	0.32	1.44	1.92			N/A	N/A

18:15 - 18:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.58	0.55	1.00	1.40	1.45			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	2.75	0.04	0.41	7.53	13.88			N/A	N/A
D - R801 North Wall Quay	0.32	0.00	0.00	0.32	0.32			N/A	N/A

18:30 - 18:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.44	0.00	0.00	0.44	0.44			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.47	0.03	0.31	2.46	7.49			N/A	N/A
D - R801 North Wall Quay	0.23	0.00	0.00	0.23	0.23			N/A	N/A

2026 Baseflow + Committed + Proposed Development - Scenario 3, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - R801 North Wall Quay - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1		Standard Roundabout		A, B, C, D	13.96	B

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	1	C - R131 S - Tom Clarke Bridge	13.96	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)
D12	2026 Baseflow + Committed + Proposed Development - Scenario 3	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 N - East Wall Road		✓	893	100.000
B - Direct Access		✓	0	100.000
C - R131 S - Tom Clarke Bridge		✓	926	100.000
D - R801 North Wall Quay		✓	433	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - R131 N - East Wall Road	B - Direct Access	C - R131 S - Tom Clarke Bridge	D - R801 North Wall Quay
From	A - R131 N - East Wall Road	49	0	593	251
	B - Direct Access	0	0	0	0
	C - R131 S - Tom Clarke Bridge	861	0	0	65
	D - R801 North Wall Quay	339	0	92	2

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - R131 N - East Wall Road	B - Direct Access	C - R131 S - Tom Clarke Bridge	D - R801 North Wall Quay
From	A - R131 N - East Wall Road	57	0	3	17
	B - Direct Access	0	0	0	0
	C - R131 S - Tom Clarke Bridge	7	0	0	0
	D - R801 North Wall Quay	21	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
A - R131 N - East Wall Road	0.45	3.03	0.8	1.7	A
B - Direct Access	0.00	0.00	0.0	~1	A
C - R131 S - Tom Clarke Bridge	0.90	30.18	8.0	44.2	D
D - R801 North Wall Quay	0.32	3.57	0.5	1.9	A

Main Results for each time segment

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	672	71	2198	0.306	671	0.4	2.355	A
B - Direct Access	0	741	426	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	697	227	1206	0.578	692	1.3	6.929	A
D - R801 North Wall Quay	326	680	1748	0.186	325	0.2	2.529	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	803	84	2187	0.367	802	0.6	2.597	A
B - Direct Access	0	887	362	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	832	271	1174	0.709	828	2.4	10.308	B
D - R801 North Wall Quay	389	814	1637	0.238	389	0.3	2.884	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	983	103	2173	0.453	982	0.8	3.021	A
B - Direct Access	0	1086	274	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	1020	332	1129	0.903	1000	7.2	24.818	C
D - R801 North Wall Quay	477	984	1497	0.319	476	0.5	3.526	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	983	103	2173	0.453	983	0.8	3.026	A
B - Direct Access	0	1087	274	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	1020	333	1129	0.903	1016	8.0	30.181	D
D - R801 North Wall Quay	477	999	1484	0.321	477	0.5	3.571	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	803	85	2187	0.367	804	0.6	2.605	A
B - Direct Access	0	888	361	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	832	272	1173	0.710	854	2.5	12.008	B
D - R801 North Wall Quay	389	839	1617	0.241	390	0.3	2.933	A

18:30 - 18:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 N - East Wall Road	672	71	2198	0.306	673	0.4	2.362	A
B - Direct Access	0	744	425	0.000	0	0.0	0.000	A
C - R131 S - Tom Clarke Bridge	697	228	1205	0.578	702	1.4	7.211	A
D - R801 North Wall Quay	326	689	1740	0.187	326	0.2	2.547	A

Queue Variation Results for each time segment

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.44	0.00	0.00	0.44	0.44			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.35	0.57	1.23	1.69	1.85			N/A	N/A
D - R801 North Wall Quay	0.23	0.00	0.00	0.23	0.23			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.58	0.08	0.77	1.35	1.43			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	2.35	0.05	0.74	6.29	9.76			N/A	N/A
D - R801 North Wall Quay	0.31	0.00	0.00	0.31	0.31			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.82	0.03	0.25	0.82	0.82			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	7.22	0.05	0.58	20.85	36.65			N/A	N/A
D - R801 North Wall Quay	0.46	0.03	0.25	0.46	0.48			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.82	0.03	0.27	0.82	1.73			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	8.02	0.04	0.38	18.78	44.18			N/A	N/A
D - R801 North Wall Quay	0.47	0.03	0.32	1.43	1.87			N/A	N/A

18:15 - 18:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.58	0.55	1.00	1.40	1.45			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	2.54	0.04	0.42	6.96	12.59			N/A	N/A
D - R801 North Wall Quay	0.32	0.00	0.00	0.32	0.32			N/A	N/A

18:30 - 18:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - R131 N - East Wall Road	0.44	0.00	0.00	0.44	0.44			N/A	N/A
B - Direct Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C - R131 S - Tom Clarke Bridge	1.40	0.03	0.32	2.58	7.19			N/A	N/A
D - R801 North Wall Quay	0.23	0.00	0.00	0.23	0.23			N/A	N/A

Junctions 10

ARCADY 10 - Roundabout Module

Filename: JTC 2.j10
Path: W:\Projects\11078 - Natural Power - Codling Bank Wind Farm\05-Design\01-Calculations\Traffic\08 Junction 10\New Counts - jan2024
Report generation date: 09/05/2024 13:08:05

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2022 Baseflow														
A - R131 (NW)	1.0	3.35	0.51	A	3.21	A	85 % [A - R131 (NW)]	0.4	2.01	0.27	A	2.36	A	128 % [E - Pigeon House Rd]
B - Sean Moore Rd	0.1	3.58	0.05	A				0.0	2.22	0.02	A			
C - South Bank Rd	0.1	4.36	0.12	A				0.1	2.19	0.08	A			
D - R131 (SW)	0.4	2.42	0.28	A				0.6	2.65	0.38	A			
E - Pigeon House Rd	0.0	5.10	0.03	A				0.0	5.13	0.01	A			
2026 Baseflow														
A - R131 (NW)	1.2	3.69	0.55	A	3.47	A	72 % [A - R131 (NW)]	0.4	2.06	0.29	A	2.43	A	115 % [E - Pigeon House Rd]
B - Sean Moore Rd	0.1	3.79	0.06	A				0.0	2.25	0.02	A			
C - South Bank Rd	0.2	4.66	0.13	A				0.1	2.24	0.08	A			
D - R131 (SW)	0.4	2.51	0.30	A				0.7	2.75	0.40	A			
E - Pigeon House Rd	0.0	5.33	0.04	A				0.0	5.34	0.01	A			
2026 Baseflow + Committed Development														
A - R131 (NW)	1.3	3.97	0.57	A	3.65	A	63 % [A - R131 (NW)]	0.4	2.06	0.29	A	2.48	A	106 % [E - Pigeon House Rd]
B - Sean Moore Rd	0.1	3.95	0.06	A				0.0	2.25	0.02	A			
C - South Bank Rd	0.2	4.66	0.13	A				0.1	2.38	0.13	A			
D - R131 (SW)	0.5	2.57	0.32	A				0.7	2.82	0.40	A			
E - Pigeon House Rd	0.0	5.46	0.04	A				0.0	5.51	0.01	A			
2026 Baseflow + Committed + Proposed Development - Scenario 1														
A - R131 (NW)	1.5	4.21	0.59	A	3.83	A	57 % [A - R131 (NW)]	0.4	2.12	0.30	A	2.54	A	99 % [E - Pigeon House Rd]
B - Sean Moore Rd	0.1	4.08	0.06	A				0.0	2.27	0.02	A			
C - South Bank Rd	0.2	4.77	0.15	A				0.2	2.51	0.16	A			
D - R131 (SW)	0.5	2.63	0.33	A				0.7	2.87	0.41	A			
E - Pigeon House Rd	0.0	5.63	0.04	A				0.0	5.67	0.01	A			
2026 Baseflow + Committed + Proposed Development - Scenario 2														
A - R131 (NW)	1.5	4.33	0.60	A	3.88	A	54 % [A - R131 (NW)]	0.4	2.08	0.29	A	2.52	A	98 % [E - Pigeon House Rd]
B - Sean Moore Rd	0.1	4.17	0.06	A				0.0	2.26	0.02	A			
C - South Bank Rd	0.2	4.69	0.14	A				0.2	2.47	0.18	A			
D - R131 (SW)	0.5	2.66	0.34	A				0.7	2.88	0.41	A			
E - Pigeon House Rd	0.0	5.69	0.04	A				0.0	5.69	0.01	A			
2026 Baseflow + Committed + Proposed Development - Scenario 3														
A - R131 (NW)	1.4	4.11	0.59	A	3.75	A	59 % [A - R131 (NW)]	0.4	2.11	0.30	A	2.52	A	102 % [E - Pigeon House Rd]
B - Sean Moore Rd	0.1	4.04	0.06	A				0.0	2.29	0.02	A			
C - South Bank Rd	0.2	4.68	0.14	A				0.1	2.40	0.13	A			
D - R131 (SW)	0.5	2.60	0.33	A				0.7	2.86	0.41	A			
E - Pigeon House Rd	0.0	5.56	0.04	A				0.0	5.61	0.01	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. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

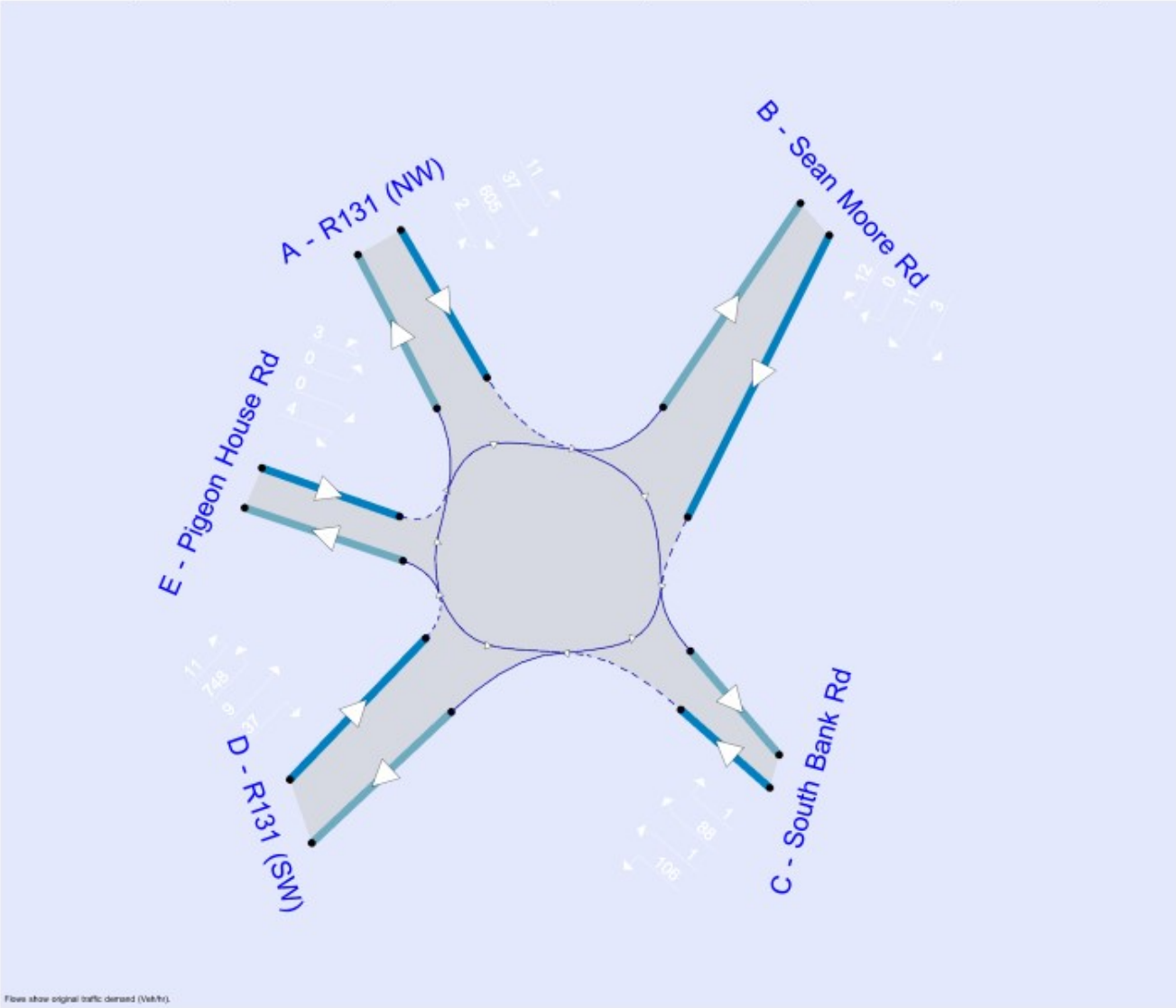
File summary

File Description

Title	Codling Wind Park
Location	Dublin
Site number	
Date	12/01/2024
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	
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	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022 Baseflow	AM	ONE HOUR	07:30	09:00	15
D2	2026 Baseflow	AM	ONE HOUR	07:30	09:00	15
D3	2026 Baseflow + Committed Development	AM	ONE HOUR	07:30	09:00	15
D4	2026 Baseflow + Committed + Proposed Development - Scenario 1	AM	ONE HOUR	07:30	09:00	15
D5	2026 Baseflow + Committed + Proposed Development - Scenario 2	AM	ONE HOUR	07:30	09:00	15
D6	2026 Baseflow + Committed + Proposed Development - Scenario 3	AM	ONE HOUR	07:30	09:00	15
D7	2022 Baseflow	PM	ONE HOUR	17:15	18:45	15
D8	2026 Baseflow	PM	ONE HOUR	17:15	18:45	15
D9	2026 Baseflow + Committed Development	PM	ONE HOUR	17:15	18:45	15
D10	2026 Baseflow + Committed + Proposed Development - Scenario 1	PM	ONE HOUR	17:15	18:45	15
D11	2026 Baseflow + Committed + Proposed Development - Scenario 2	PM	ONE HOUR	17:15	18:45	15
D12	2026 Baseflow + Committed + Proposed Development - Scenario 3	PM	ONE HOUR	17:15	18:45	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2022 Baseflow, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - South Bank Rd - 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
2		Standard Roundabout		A, B, C, D, E	3.21	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	85	A - R131 (NW)	3.21	A

Arms

Arms

Arm	Name	Description	No give-way line
A	R131 (NW)		
B	Sean Moore Rd		
C	South Bank Rd		
D	R131 (SW)		
E	Pigeon House Rd		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
A - R131 (NW)	7.10	8.87	3.7	15.0	55.0	4.0		
B - Sean Moore Rd	7.83	8.97	11.3	33.0	55.0	3.4		
C - South Bank Rd	4.30	8.85	31.2	20.0	55.0	2.8		
D - R131 (SW)	5.23	8.80	15.2	10.0	55.0	1.9		
E - Pigeon House Rd	3.20	5.40	2.2	10.0	55.0	4.7		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - R131 (NW)	0.757	2539
B - Sean Moore Rd	0.838	2927
C - South Bank Rd	0.747	2455
D - R131 (SW)	0.708	2309
E - Pigeon House Rd	0.499	1172

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)
D1	2022 Baseflow	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 (NW)		✓	1013	100.000
B - Sean Moore Rd		✓	49	100.000
C - South Bank Rd		✓	98	100.000
D - R131 (SW)		✓	538	100.000
E - Pigeon House Rd		✓	23	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - R131 (NW)	B - Sean Moore Rd	C - South Bank Rd	D - R131 (SW)	E - Pigeon House Rd
From	A - R131 (NW)	0	42	93	875	3
	B - Sean Moore Rd	34	0	9	6	0
	C - South Bank Rd	59	6	0	32	1
	D - R131 (SW)	476	7	53	0	2
	E - Pigeon House Rd	4	0	2	17	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - R131 (NW)	B - Sean Moore Rd	C - South Bank Rd	D - R131 (SW)	E - Pigeon House Rd
From	A - R131 (NW)	0	93	52	4	67
	B - Sean Moore Rd	88	0	78	17	0
	C - South Bank Rd	93	100	0	38	0
	D - R131 (SW)	3	14	9	0	0
	E - Pigeon House Rd	25	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A - R131 (NW)	0.51	3.35	1.0	A
B - Sean Moore Rd	0.05	3.58	0.1	A
C - South Bank Rd	0.12	4.36	0.1	A
D - R131 (SW)	0.28	2.42	0.4	A
E - Pigeon House Rd	0.03	5.10	0.0	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	763	64	2213	0.345	761	0.5	2.476	A
B - Sean Moore Rd	37	783	1248	0.030	37	0.0	2.972	A
C - South Bank Rd	74	702	1084	0.068	73	0.1	3.562	A
D - R131 (SW)	405	77	2126	0.191	404	0.2	2.090	A
E - Pigeon House Rd	17	477	856	0.020	17	0.0	4.294	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	911	76	2203	0.413	910	0.7	2.782	A
B - Sean Moore Rd	44	937	1169	0.038	44	0.0	3.200	A
C - South Bank Rd	88	840	1021	0.086	88	0.1	3.860	A
D - R131 (SW)	484	93	2106	0.230	483	0.3	2.218	A
E - Pigeon House Rd	21	571	803	0.026	21	0.0	4.601	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	1115	94	2190	0.509	1114	1.0	3.341	A
B - Sean Moore Rd	54	1147	1061	0.051	54	0.1	3.574	A
C - South Bank Rd	108	1028	934	0.116	108	0.1	4.356	A
D - R131 (SW)	592	113	2079	0.285	592	0.4	2.421	A
E - Pigeon House Rd	25	699	731	0.035	25	0.0	5.101	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	1115	94	2190	0.509	1115	1.0	3.349	A
B - Sean Moore Rd	54	1148	1060	0.051	54	0.1	3.576	A
C - South Bank Rd	108	1029	934	0.116	108	0.1	4.359	A
D - R131 (SW)	592	113	2079	0.285	592	0.4	2.421	A
E - Pigeon House Rd	25	699	731	0.035	25	0.0	5.103	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	911	76	2203	0.413	912	0.7	2.793	A
B - Sean Moore Rd	44	939	1168	0.038	44	0.0	3.205	A
C - South Bank Rd	88	842	1020	0.086	88	0.1	3.864	A
D - R131 (SW)	484	93	2106	0.230	484	0.3	2.220	A
E - Pigeon House Rd	21	571	802	0.026	21	0.0	4.605	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	763	64	2212	0.345	763	0.5	2.486	A
B - Sean Moore Rd	37	786	1246	0.030	37	0.0	2.976	A
C - South Bank Rd	74	705	1083	0.068	74	0.1	3.570	A
D - R131 (SW)	405	78	2125	0.191	405	0.2	2.092	A
E - Pigeon House Rd	17	478	855	0.020	17	0.0	4.300	A

2026 Baseflow, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - South Bank Rd - 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
2		Standard Roundabout		A, B, C, D, E	3.47	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	72	A - R131 (NW)	3.47	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)
D2	2026 Baseflow	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 (NW)		✓	1077	100.000
B - Sean Moore Rd		✓	54	100.000
C - South Bank Rd		✓	109	100.000
D - R131 (SW)		✓	568	100.000
E - Pigeon House Rd		✓	24	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - R131 (NW)	B - Sean Moore Rd	C - South Bank Rd	D - R131 (SW)	E - Pigeon House Rd
From	A - R131 (NW)	0	47	101	926	3
	B - Sean Moore Rd	38	0	10	6	0
	C - South Bank Rd	66	7	0	35	1
	D - R131 (SW)	503	7	56	0	2
	E - Pigeon House Rd	4	0	2	18	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - R131 (NW)	B - Sean Moore Rd	C - South Bank Rd	D - R131 (SW)	E - Pigeon House Rd
From	A - R131 (NW)	0	93	53	5	68
	B - Sean Moore Rd	89	0	79	18	0
	C - South Bank Rd	94	100	0	39	0
	D - R131 (SW)	3	15	10	0	0
	E - Pigeon House Rd	26	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A - R131 (NW)	0.55	3.69	1.2	A
B - Sean Moore Rd	0.06	3.79	0.1	A
C - South Bank Rd	0.13	4.66	0.2	A
D - R131 (SW)	0.30	2.51	0.4	A
E - Pigeon House Rd	0.04	5.33	0.0	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	811	68	2185	0.371	808	0.6	2.610	A
B - Sean Moore Rd	41	830	1207	0.034	41	0.0	3.085	A
C - South Bank Rd	82	744	1053	0.078	82	0.1	3.706	A
D - R131 (SW)	428	86	2111	0.203	427	0.3	2.136	A
E - Pigeon House Rd	18	508	836	0.022	18	0.0	4.402	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	968	81	2175	0.445	967	0.8	2.980	A
B - Sean Moore Rd	49	993	1123	0.043	49	0.0	3.348	A
C - South Bank Rd	98	890	986	0.099	98	0.1	4.055	A
D - R131 (SW)	511	103	2089	0.244	510	0.3	2.280	A
E - Pigeon House Rd	22	608	779	0.028	22	0.0	4.751	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	1186	99	2161	0.549	1184	1.2	3.678	A
B - Sean Moore Rd	59	1216	1009	0.059	59	0.1	3.789	A
C - South Bank Rd	120	1090	894	0.134	120	0.2	4.650	A
D - R131 (SW)	625	126	2059	0.304	625	0.4	2.510	A
E - Pigeon House Rd	26	745	702	0.038	26	0.0	5.330	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	1186	99	2161	0.549	1186	1.2	3.690	A
B - Sean Moore Rd	59	1218	1008	0.059	59	0.1	3.792	A
C - South Bank Rd	120	1091	893	0.134	120	0.2	4.656	A
D - R131 (SW)	625	127	2059	0.304	625	0.4	2.511	A
E - Pigeon House Rd	26	745	701	0.038	26	0.0	5.333	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	968	81	2175	0.445	970	0.8	2.993	A
B - Sean Moore Rd	49	996	1122	0.043	49	0.0	3.355	A
C - South Bank Rd	98	892	985	0.100	98	0.1	4.061	A
D - R131 (SW)	511	104	2089	0.244	511	0.3	2.283	A
E - Pigeon House Rd	22	609	779	0.028	22	0.0	4.758	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	811	68	2185	0.371	812	0.6	2.624	A
B - Sean Moore Rd	41	834	1205	0.034	41	0.0	3.092	A
C - South Bank Rd	82	747	1052	0.078	82	0.1	3.712	A
D - R131 (SW)	428	87	2111	0.203	428	0.3	2.140	A
E - Pigeon House Rd	18	510	835	0.022	18	0.0	4.410	A

2026 Baseflow + Committed Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - South Bank Rd - 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
2		Standard Roundabout		A, B, C, D, E	3.65	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	63	A - R131 (NW)	3.65	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)
D3	2026 Baseflow + Committed Development	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 (NW)		✓	1112	100.000
B - Sean Moore Rd		✓	54	100.000
C - South Bank Rd		✓	109	100.000
D - R131 (SW)		✓	598	100.000
E - Pigeon House Rd		✓	24	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - R131 (NW)	B - Sean Moore Rd	C - South Bank Rd	D - R131 (SW)	E - Pigeon House Rd
From	A - R131 (NW)	0	47	136	926	3
	B - Sean Moore Rd	38	0	10	6	0
	C - South Bank Rd	66	7	0	35	1
	D - R131 (SW)	503	7	86	0	2
	E - Pigeon House Rd	4	0	2	18	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - R131 (NW)	B - Sean Moore Rd	C - South Bank Rd	D - R131 (SW)	E - Pigeon House Rd
From	A - R131 (NW)	0	93	46	5	68
	B - Sean Moore Rd	89	0	79	18	0
	C - South Bank Rd	94	100	0	39	0
	D - R131 (SW)	3	15	7	0	0
	E - Pigeon House Rd	26	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A - R131 (NW)	0.57	3.97	1.3	A
B - Sean Moore Rd	0.06	3.95	0.1	A
C - South Bank Rd	0.13	4.66	0.2	A
D - R131 (SW)	0.32	2.57	0.5	A
E - Pigeon House Rd	0.04	5.46	0.0	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	837	90	2163	0.387	835	0.6	2.707	A
B - Sean Moore Rd	41	879	1181	0.034	41	0.0	3.156	A
C - South Bank Rd	82	744	1053	0.078	82	0.1	3.706	A
D - R131 (SW)	450	86	2114	0.213	449	0.3	2.161	A
E - Pigeon House Rd	18	531	825	0.022	18	0.0	4.462	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	1000	108	2149	0.465	999	0.9	3.125	A
B - Sean Moore Rd	49	1052	1092	0.044	49	0.0	3.448	A
C - South Bank Rd	98	890	986	0.099	98	0.1	4.055	A
D - R131 (SW)	538	103	2092	0.257	537	0.3	2.316	A
E - Pigeon House Rd	22	635	766	0.028	22	0.0	4.835	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	1224	132	2131	0.574	1222	1.3	3.952	A
B - Sean Moore Rd	59	1287	971	0.061	59	0.1	3.949	A
C - South Bank Rd	120	1089	894	0.134	120	0.2	4.650	A
D - R131 (SW)	658	126	2061	0.319	658	0.5	2.565	A
E - Pigeon House Rd	26	778	686	0.039	26	0.0	5.459	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	1224	132	2131	0.574	1224	1.3	3.968	A
B - Sean Moore Rd	59	1289	970	0.061	59	0.1	3.953	A
C - South Bank Rd	120	1091	893	0.134	120	0.2	4.656	A
D - R131 (SW)	658	127	2061	0.319	658	0.5	2.565	A
E - Pigeon House Rd	26	778	685	0.039	26	0.0	5.462	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	1000	108	2149	0.465	1002	0.9	3.143	A
B - Sean Moore Rd	49	1055	1091	0.045	49	0.0	3.454	A
C - South Bank Rd	98	893	985	0.100	98	0.1	4.063	A
D - R131 (SW)	538	104	2091	0.257	538	0.3	2.318	A
E - Pigeon House Rd	22	636	765	0.028	22	0.0	4.841	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	837	90	2162	0.387	838	0.6	2.722	A
B - Sean Moore Rd	41	883	1179	0.034	41	0.0	3.164	A
C - South Bank Rd	82	747	1052	0.078	82	0.1	3.712	A
D - R131 (SW)	450	87	2113	0.213	451	0.3	2.165	A
E - Pigeon House Rd	18	533	824	0.022	18	0.0	4.468	A

2026 Baseflow + Committed + Proposed Development - Scenario 1, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - South Bank Rd - 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
2		Standard Roundabout		A, B, C, D, E	3.83	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	57	A - R131 (NW)	3.83	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)
D4	2026 Baseflow + Committed + Proposed Development - Scenario 1	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 (NW)		✓	1139	100.000
B - Sean Moore Rd		✓	54	100.000
C - South Bank Rd		✓	119	100.000
D - R131 (SW)		✓	616	100.000
E - Pigeon House Rd		✓	24	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - R131 (NW)	B - Sean Moore Rd	C - South Bank Rd	D - R131 (SW)	E - Pigeon House Rd
From	A - R131 (NW)	0	47	163	926	3
	B - Sean Moore Rd	38	0	10	6	0
	C - South Bank Rd	76	7	0	35	1
	D - R131 (SW)	503	7	104	0	2
	E - Pigeon House Rd	4	0	2	18	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - R131 (NW)	B - Sean Moore Rd	C - South Bank Rd	D - R131 (SW)	E - Pigeon House Rd
From	A - R131 (NW)	0	93	44	5	68
	B - Sean Moore Rd	89	0	79	18	0
	C - South Bank Rd	94	100	0	39	0
	D - R131 (SW)	3	15	6	0	0
	E - Pigeon House Rd	26	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A - R131 (NW)	0.59	4.21	1.5	A
B - Sean Moore Rd	0.06	4.08	0.1	A
C - South Bank Rd	0.15	4.77	0.2	A
D - R131 (SW)	0.33	2.63	0.5	A
E - Pigeon House Rd	0.04	5.63	0.0	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	858	104	2145	0.400	855	0.7	2.785	A
B - Sean Moore Rd	41	913	1162	0.035	41	0.0	3.209	A
C - South Bank Rd	90	744	1044	0.086	89	0.1	3.770	A
D - R131 (SW)	464	94	2105	0.220	463	0.3	2.190	A
E - Pigeon House Rd	18	552	811	0.022	18	0.0	4.538	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	1024	124	2130	0.481	1023	0.9	3.249	A
B - Sean Moore Rd	49	1092	1069	0.045	49	0.0	3.525	A
C - South Bank Rd	107	890	977	0.109	107	0.1	4.136	A
D - R131 (SW)	554	112	2081	0.266	553	0.4	2.356	A
E - Pigeon House Rd	22	660	750	0.029	22	0.0	4.942	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	1254	152	2109	0.595	1252	1.4	4.189	A
B - Sean Moore Rd	59	1337	943	0.063	59	0.1	4.073	A
C - South Bank Rd	131	1089	886	0.148	131	0.2	4.764	A
D - R131 (SW)	678	137	2048	0.331	678	0.5	2.627	A
E - Pigeon House Rd	26	809	666	0.040	26	0.0	5.628	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	1254	152	2109	0.595	1254	1.5	4.209	A
B - Sean Moore Rd	59	1339	942	0.063	59	0.1	4.078	A
C - South Bank Rd	131	1091	885	0.148	131	0.2	4.771	A
D - R131 (SW)	678	138	2048	0.331	678	0.5	2.627	A
E - Pigeon House Rd	26	809	666	0.040	26	0.0	5.632	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	1024	124	2129	0.481	1026	0.9	3.267	A
B - Sean Moore Rd	49	1095	1068	0.045	49	0.0	3.534	A
C - South Bank Rd	107	893	976	0.110	107	0.1	4.145	A
D - R131 (SW)	554	113	2081	0.266	554	0.4	2.360	A
E - Pigeon House Rd	22	661	749	0.029	22	0.0	4.949	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	858	104	2144	0.400	859	0.7	2.801	A
B - Sean Moore Rd	41	917	1160	0.035	41	0.0	3.215	A
C - South Bank Rd	90	747	1043	0.086	90	0.1	3.780	A
D - R131 (SW)	464	94	2105	0.220	464	0.3	2.194	A
E - Pigeon House Rd	18	554	810	0.022	18	0.0	4.544	A

2026 Baseflow + Committed + Proposed Development - Scenario 2, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - South Bank Rd - 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
2		Standard Roundabout		A, B, C, D, E	3.88	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	54	A - R131 (NW)	3.88	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)
D5	2026 Baseflow + Committed + Proposed Development - Scenario 2	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 (NW)		✓	1156	100.000
B - Sean Moore Rd		✓	54	100.000
C - South Bank Rd		✓	112	100.000
D - R131 (SW)		✓	642	100.000
E - Pigeon House Rd		✓	24	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - R131 (NW)	B - Sean Moore Rd	C - South Bank Rd	D - R131 (SW)	E - Pigeon House Rd
From	A - R131 (NW)	0	47	180	926	3
	B - Sean Moore Rd	38	0	10	6	0
	C - South Bank Rd	69	7	0	35	1
	D - R131 (SW)	503	7	130	0	2
	E - Pigeon House Rd	4	0	2	18	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - R131 (NW)	B - Sean Moore Rd	C - South Bank Rd	D - R131 (SW)	E - Pigeon House Rd
From	A - R131 (NW)	0	93	36	5	68
	B - Sean Moore Rd	89	0	79	18	0
	C - South Bank Rd	94	100	0	39	0
	D - R131 (SW)	3	15	5	0	0
	E - Pigeon House Rd	26	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A - R131 (NW)	0.60	4.33	1.5	A
B - Sean Moore Rd	0.06	4.17	0.1	A
C - South Bank Rd	0.14	4.69	0.2	A
D - R131 (SW)	0.34	2.66	0.5	A
E - Pigeon House Rd	0.04	5.69	0.0	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	870	123	2147	0.405	868	0.7	2.808	A
B - Sean Moore Rd	41	945	1149	0.035	41	0.0	3.246	A
C - South Bank Rd	84	744	1050	0.080	84	0.1	3.726	A
D - R131 (SW)	483	88	2115	0.229	482	0.3	2.204	A
E - Pigeon House Rd	18	566	807	0.022	18	0.0	4.564	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	1039	147	2129	0.488	1038	0.9	3.297	A
B - Sean Moore Rd	49	1131	1054	0.046	48	0.0	3.579	A
C - South Bank Rd	101	890	983	0.102	101	0.1	4.079	A
D - R131 (SW)	577	106	2092	0.276	577	0.4	2.376	A
E - Pigeon House Rd	22	677	744	0.029	22	0.0	4.979	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	1273	180	2105	0.605	1271	1.5	4.302	A
B - Sean Moore Rd	59	1384	924	0.064	59	0.1	4.161	A
C - South Bank Rd	123	1089	891	0.138	123	0.2	4.684	A
D - R131 (SW)	707	130	2061	0.343	706	0.5	2.656	A
E - Pigeon House Rd	26	829	659	0.040	26	0.0	5.687	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	1273	181	2105	0.605	1273	1.5	4.325	A
B - Sean Moore Rd	59	1386	923	0.064	59	0.1	4.167	A
C - South Bank Rd	123	1091	891	0.138	123	0.2	4.691	A
D - R131 (SW)	707	130	2060	0.343	707	0.5	2.659	A
E - Pigeon House Rd	26	830	659	0.040	26	0.0	5.691	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	1039	148	2129	0.488	1041	1.0	3.319	A
B - Sean Moore Rd	49	1134	1052	0.046	49	0.0	3.586	A
C - South Bank Rd	101	893	982	0.103	101	0.1	4.089	A
D - R131 (SW)	577	106	2091	0.276	578	0.4	2.378	A
E - Pigeon House Rd	22	679	744	0.029	22	0.0	4.985	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	870	124	2146	0.405	871	0.7	2.825	A
B - Sean Moore Rd	41	949	1147	0.035	41	0.0	3.253	A
C - South Bank Rd	84	747	1049	0.080	84	0.1	3.735	A
D - R131 (SW)	483	89	2114	0.229	484	0.3	2.208	A
E - Pigeon House Rd	18	568	806	0.022	18	0.0	4.573	A

2026 Baseflow + Committed + Proposed Development - Scenario 3, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - South Bank Rd - 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
2		Standard Roundabout		A, B, C, D, E	3.75	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	59	A - R131 (NW)	3.75	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)
D6	2026 Baseflow + Committed + Proposed Development - Scenario 3	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 (NW)		✓	1130	100.000
B - Sean Moore Rd		✓	54	100.000
C - South Bank Rd		✓	111	100.000
D - R131 (SW)		✓	615	100.000
E - Pigeon House Rd		✓	24	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - R131 (NW)	B - Sean Moore Rd	C - South Bank Rd	D - R131 (SW)	E - Pigeon House Rd
From	A - R131 (NW)	0	47	154	926	3
	B - Sean Moore Rd	38	0	10	6	0
	C - South Bank Rd	68	7	0	35	1
	D - R131 (SW)	503	7	103	0	2
	E - Pigeon House Rd	4	0	2	18	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - R131 (NW)	B - Sean Moore Rd	C - South Bank Rd	D - R131 (SW)	E - Pigeon House Rd
From	A - R131 (NW)	0	93	42	5	68
	B - Sean Moore Rd	89	0	79	18	0
	C - South Bank Rd	94	100	0	39	0
	D - R131 (SW)	3	15	6	0	0
	E - Pigeon House Rd	26	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A - R131 (NW)	0.59	4.11	1.4	A
B - Sean Moore Rd	0.06	4.04	0.1	A
C - South Bank Rd	0.14	4.68	0.2	A
D - R131 (SW)	0.33	2.60	0.5	A
E - Pigeon House Rd	0.04	5.56	0.0	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	851	103	2155	0.395	848	0.6	2.749	A
B - Sean Moore Rd	41	905	1168	0.035	41	0.0	3.192	A
C - South Bank Rd	84	744	1051	0.080	83	0.1	3.719	A
D - R131 (SW)	463	88	2113	0.219	462	0.3	2.179	A
E - Pigeon House Rd	18	545	817	0.022	18	0.0	4.504	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	1016	123	2140	0.475	1015	0.9	3.197	A
B - Sean Moore Rd	49	1083	1077	0.045	49	0.0	3.501	A
C - South Bank Rd	100	890	984	0.101	100	0.1	4.071	A
D - R131 (SW)	553	105	2091	0.264	553	0.4	2.340	A
E - Pigeon House Rd	22	652	757	0.029	22	0.0	4.894	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	1244	151	2120	0.587	1242	1.4	4.094	A
B - Sean Moore Rd	59	1326	952	0.062	59	0.1	4.033	A
C - South Bank Rd	122	1089	892	0.137	122	0.2	4.673	A
D - R131 (SW)	677	129	2060	0.329	677	0.5	2.602	A
E - Pigeon House Rd	26	799	675	0.039	26	0.0	5.552	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	1244	151	2119	0.587	1244	1.4	4.112	A
B - Sean Moore Rd	59	1328	951	0.063	59	0.1	4.038	A
C - South Bank Rd	122	1091	891	0.137	122	0.2	4.679	A
D - R131 (SW)	677	129	2060	0.329	677	0.5	2.603	A
E - Pigeon House Rd	26	799	674	0.039	26	0.0	5.556	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	1016	123	2140	0.475	1018	0.9	3.216	A
B - Sean Moore Rd	49	1086	1075	0.045	49	0.0	3.509	A
C - South Bank Rd	100	893	983	0.102	100	0.1	4.080	A
D - R131 (SW)	553	105	2090	0.264	553	0.4	2.342	A
E - Pigeon House Rd	22	653	756	0.029	22	0.0	4.901	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	851	103	2154	0.395	852	0.7	2.767	A
B - Sean Moore Rd	41	909	1166	0.035	41	0.0	3.198	A
C - South Bank Rd	84	747	1050	0.080	84	0.1	3.729	A
D - R131 (SW)	463	88	2113	0.219	463	0.3	2.182	A
E - Pigeon House Rd	18	547	816	0.022	18	0.0	4.512	A

2022 Baseflow , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - South Bank Rd - 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
2		Standard Roundabout		A, B, C, D, E	2.36	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	128	E - Pigeon House Rd	2.36	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)
D7	2022 Baseflow	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 (NW)		✓	603	100.000
B - Sean Moore Rd		✓	24	100.000
C - South Bank Rd		✓	124	100.000
D - R131 (SW)		✓	746	100.000
E - Pigeon House Rd		✓	7	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - R131 (NW)	B - Sean Moore Rd	C - South Bank Rd	D - R131 (SW)	E - Pigeon House Rd
From	A - R131 (NW)	0	10	18	573	2
	B - Sean Moore Rd	11	0	3	10	0
	C - South Bank Rd	52	1	2	68	1
	D - R131 (SW)	708	9	19	0	10
	E - Pigeon House Rd	3	0	0	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - R131 (NW)	B - Sean Moore Rd	C - South Bank Rd	D - R131 (SW)	E - Pigeon House Rd
From	A - R131 (NW)	0	30	50	0	0
	B - Sean Moore Rd	73	0	67	0	0
	C - South Bank Rd	19	0	100	0	0
	D - R131 (SW)	2	0	32	0	0
	E - Pigeon House Rd	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A - R131 (NW)	0.27	2.01	0.4	A
B - Sean Moore Rd	0.02	2.22	0.0	A
C - South Bank Rd	0.08	2.19	0.1	A
D - R131 (SW)	0.38	2.65	0.6	A
E - Pigeon House Rd	0.01	5.13	0.0	A

Main Results for each time segment

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	454	26	2466	0.184	453	0.2	1.788	A
B - Sean Moore Rd	18	464	1782	0.010	18	0.0	2.040	A
C - South Bank Rd	93	451	1928	0.048	93	0.1	1.961	A
D - R131 (SW)	562	52	2202	0.255	560	0.3	2.190	A
E - Pigeon House Rd	5	602	857	0.006	5	0.0	4.228	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	542	31	2461	0.220	542	0.3	1.874	A
B - Sean Moore Rd	22	555	1727	0.013	22	0.0	2.111	A
C - South Bank Rd	111	539	1867	0.060	111	0.1	2.050	A
D - R131 (SW)	671	62	2193	0.306	670	0.4	2.364	A
E - Pigeon House Rd	6	721	795	0.008	6	0.0	4.566	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	664	39	2455	0.270	664	0.4	2.009	A
B - Sean Moore Rd	26	680	1651	0.016	26	0.0	2.215	A
C - South Bank Rd	137	660	1784	0.077	136	0.1	2.185	A
D - R131 (SW)	821	76	2181	0.377	821	0.6	2.646	A
E - Pigeon House Rd	8	882	710	0.011	8	0.0	5.126	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	664	39	2455	0.270	664	0.4	2.010	A
B - Sean Moore Rd	26	680	1651	0.016	26	0.0	2.216	A
C - South Bank Rd	137	661	1783	0.077	137	0.1	2.185	A
D - R131 (SW)	821	76	2180	0.377	821	0.6	2.648	A
E - Pigeon House Rd	8	883	709	0.011	8	0.0	5.129	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	542	31	2461	0.220	542	0.3	1.875	A
B - Sean Moore Rd	22	556	1726	0.013	22	0.0	2.113	A
C - South Bank Rd	111	540	1867	0.060	112	0.1	2.050	A
D - R131 (SW)	671	62	2193	0.306	671	0.4	2.366	A
E - Pigeon House Rd	6	722	794	0.008	6	0.0	4.571	A

18:30 - 18:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	454	26	2466	0.184	454	0.2	1.791	A
B - Sean Moore Rd	18	466	1781	0.010	18	0.0	2.041	A
C - South Bank Rd	93	452	1928	0.048	93	0.1	1.964	A
D - R131 (SW)	562	52	2202	0.255	562	0.3	2.197	A
E - Pigeon House Rd	5	604	856	0.006	5	0.0	4.234	A

2026 Baseflow , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - South Bank Rd - 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
2		Standard Roundabout		A, B, C, D, E	2.43	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	115	E - Pigeon House Rd	2.43	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)
D8	2026 Baseflow	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 (NW)		✓	638	100.000
B - Sean Moore Rd		✓	26	100.000
C - South Bank Rd		✓	132	100.000
D - R131 (SW)		✓	788	100.000
E - Pigeon House Rd		✓	7	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - R131 (NW)	B - Sean Moore Rd	C - South Bank Rd	D - R131 (SW)	E - Pigeon House Rd
From	A - R131 (NW)	0	11	20	605	2
	B - Sean Moore Rd	12	0	3	11	0
	C - South Bank Rd	56	1	2	72	1
	D - R131 (SW)	748	9	20	0	11
	E - Pigeon House Rd	3	0	0	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - R131 (NW)	B - Sean Moore Rd	C - South Bank Rd	D - R131 (SW)	E - Pigeon House Rd
From	A - R131 (NW)	0	31	52	0	0
	B - Sean Moore Rd	74	0	68	0	0
	C - South Bank Rd	20	0	100	0	0
	D - R131 (SW)	2	0	33	0	0
	E - Pigeon House Rd	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A - R131 (NW)	0.29	2.06	0.4	A
B - Sean Moore Rd	0.02	2.25	0.0	A
C - South Bank Rd	0.08	2.24	0.1	A
D - R131 (SW)	0.40	2.75	0.7	A
E - Pigeon House Rd	0.01	5.34	0.0	A

Main Results for each time segment

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	480	27	2461	0.195	479	0.2	1.816	A
B - Sean Moore Rd	20	491	1763	0.011	20	0.0	2.064	A
C - South Bank Rd	99	476	1903	0.052	99	0.1	1.995	A
D - R131 (SW)	593	56	2198	0.270	592	0.4	2.239	A
E - Pigeon House Rd	5	637	838	0.006	5	0.0	4.322	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	574	32	2456	0.234	573	0.3	1.911	A
B - Sean Moore Rd	23	587	1705	0.014	23	0.0	2.140	A
C - South Bank Rd	119	570	1839	0.065	119	0.1	2.092	A
D - R131 (SW)	708	66	2188	0.324	708	0.5	2.432	A
E - Pigeon House Rd	6	762	772	0.008	6	0.0	4.698	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	702	40	2449	0.287	702	0.4	2.060	A
B - Sean Moore Rd	29	719	1625	0.018	29	0.0	2.254	A
C - South Bank Rd	145	698	1751	0.083	145	0.1	2.242	A
D - R131 (SW)	868	81	2175	0.399	867	0.7	2.751	A
E - Pigeon House Rd	8	933	683	0.011	8	0.0	5.332	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	702	40	2449	0.287	702	0.4	2.060	A
B - Sean Moore Rd	29	719	1625	0.018	29	0.0	2.255	A
C - South Bank Rd	145	698	1750	0.083	145	0.1	2.242	A
D - R131 (SW)	868	81	2175	0.399	868	0.7	2.753	A
E - Pigeon House Rd	8	934	682	0.011	8	0.0	5.336	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	574	32	2456	0.234	574	0.3	1.912	A
B - Sean Moore Rd	23	587	1705	0.014	23	0.0	2.140	A
C - South Bank Rd	119	570	1838	0.065	119	0.1	2.093	A
D - R131 (SW)	708	67	2188	0.324	709	0.5	2.437	A
E - Pigeon House Rd	6	763	772	0.008	6	0.0	4.702	A

18:30 - 18:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	480	27	2461	0.195	481	0.2	1.817	A
B - Sean Moore Rd	20	492	1763	0.011	20	0.0	2.064	A
C - South Bank Rd	99	478	1902	0.052	99	0.1	1.998	A
D - R131 (SW)	593	56	2198	0.270	594	0.4	2.246	A
E - Pigeon House Rd	5	639	837	0.006	5	0.0	4.329	A

2026 Baseflow + Committed Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - South Bank Rd - 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
2		Standard Roundabout		A, B, C, D, E	2.48	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	106	E - Pigeon House Rd	2.48	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)
D9	2026 Baseflow + Committed Development	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 (NW)		✓	638	100.000
B - Sean Moore Rd		✓	26	100.000
C - South Bank Rd		✓	196	100.000
D - R131 (SW)		✓	788	100.000
E - Pigeon House Rd		✓	7	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - R131 (NW)	B - Sean Moore Rd	C - South Bank Rd	D - R131 (SW)	E - Pigeon House Rd
From	A - R131 (NW)	0	11	20	605	2
	B - Sean Moore Rd	12	0	3	11	0
	C - South Bank Rd	86	1	2	106	1
	D - R131 (SW)	748	9	20	0	11
	E - Pigeon House Rd	3	0	0	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - R131 (NW)	B - Sean Moore Rd	C - South Bank Rd	D - R131 (SW)	E - Pigeon House Rd
From	A - R131 (NW)	0	31	52	0	0
	B - Sean Moore Rd	74	0	68	0	0
	C - South Bank Rd	24	0	100	0	0
	D - R131 (SW)	2	0	33	0	0
	E - Pigeon House Rd	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A - R131 (NW)	0.29	2.06	0.4	A
B - Sean Moore Rd	0.02	2.25	0.0	A
C - South Bank Rd	0.13	2.38	0.1	A
D - R131 (SW)	0.40	2.82	0.7	A
E - Pigeon House Rd	0.01	5.51	0.0	A

Main Results for each time segment

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	480	27	2461	0.195	479	0.2	1.816	A
B - Sean Moore Rd	20	491	1763	0.011	20	0.0	2.064	A
C - South Bank Rd	148	476	1877	0.079	147	0.1	2.081	A
D - R131 (SW)	593	78	2177	0.272	592	0.4	2.268	A
E - Pigeon House Rd	5	659	823	0.006	5	0.0	4.400	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	574	32	2456	0.234	573	0.3	1.911	A
B - Sean Moore Rd	23	587	1705	0.014	23	0.0	2.140	A
C - South Bank Rd	176	570	1813	0.097	176	0.1	2.198	A
D - R131 (SW)	708	93	2164	0.327	708	0.5	2.473	A
E - Pigeon House Rd	6	789	755	0.008	6	0.0	4.809	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	702	40	2449	0.287	702	0.4	2.060	A
B - Sean Moore Rd	29	719	1625	0.018	29	0.0	2.254	A
C - South Bank Rd	216	698	1726	0.125	216	0.1	2.382	A
D - R131 (SW)	868	114	2145	0.405	867	0.7	2.816	A
E - Pigeon House Rd	8	966	661	0.012	8	0.0	5.509	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	702	40	2449	0.287	702	0.4	2.060	A
B - Sean Moore Rd	29	719	1625	0.018	29	0.0	2.255	A
C - South Bank Rd	216	698	1726	0.125	216	0.1	2.383	A
D - R131 (SW)	868	115	2145	0.405	868	0.7	2.818	A
E - Pigeon House Rd	8	967	661	0.012	8	0.0	5.513	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	574	32	2456	0.234	574	0.3	1.912	A
B - Sean Moore Rd	23	587	1705	0.014	23	0.0	2.142	A
C - South Bank Rd	176	570	1813	0.097	176	0.1	2.201	A
D - R131 (SW)	708	94	2163	0.327	709	0.5	2.478	A
E - Pigeon House Rd	6	790	754	0.008	6	0.0	4.815	A

18:30 - 18:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	480	27	2461	0.195	481	0.2	1.817	A
B - Sean Moore Rd	20	492	1763	0.011	20	0.0	2.066	A
C - South Bank Rd	148	478	1876	0.079	148	0.1	2.084	A
D - R131 (SW)	593	78	2177	0.272	594	0.4	2.275	A
E - Pigeon House Rd	5	661	822	0.006	5	0.0	4.406	A

2026 Baseflow + Committed + Proposed Development - Scenario 1, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - South Bank Rd - 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
2		Standard Roundabout		A, B, C, D, E	2.54	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	99	E - Pigeon House Rd	2.54	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)
D10	2026 Baseflow + Committed + Proposed Development - Scenario 1	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 (NW)		✓	648	100.000
B - Sean Moore Rd		✓	26	100.000
C - South Bank Rd		✓	240	100.000
D - R131 (SW)		✓	788	100.000
E - Pigeon House Rd		✓	7	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - R131 (NW)	B - Sean Moore Rd	C - South Bank Rd	D - R131 (SW)	E - Pigeon House Rd
From	A - R131 (NW)	0	11	30	605	2
	B - Sean Moore Rd	12	0	3	11	0
	C - South Bank Rd	109	1	2	127	1
	D - R131 (SW)	748	9	20	0	11
	E - Pigeon House Rd	3	0	0	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - R131 (NW)	B - Sean Moore Rd	C - South Bank Rd	D - R131 (SW)	E - Pigeon House Rd
From	A - R131 (NW)	0	31	68	0	0
	B - Sean Moore Rd	74	0	68	0	0
	C - South Bank Rd	28	0	100	0	0
	D - R131 (SW)	2	0	33	0	0
	E - Pigeon House Rd	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A - R131 (NW)	0.30	2.12	0.4	A
B - Sean Moore Rd	0.02	2.27	0.0	A
C - South Bank Rd	0.16	2.51	0.2	A
D - R131 (SW)	0.41	2.87	0.7	A
E - Pigeon House Rd	0.01	5.67	0.0	A

Main Results for each time segment

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	488	27	2425	0.201	487	0.3	1.857	A
B - Sean Moore Rd	20	498	1755	0.011	20	0.0	2.074	A
C - South Bank Rd	181	476	1844	0.098	180	0.1	2.164	A
D - R131 (SW)	593	95	2160	0.275	592	0.4	2.293	A
E - Pigeon House Rd	5	677	811	0.007	5	0.0	4.467	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	583	32	2420	0.241	582	0.3	1.958	A
B - Sean Moore Rd	23	596	1694	0.014	23	0.0	2.153	A
C - South Bank Rd	216	570	1781	0.121	216	0.1	2.298	A
D - R131 (SW)	708	114	2143	0.331	708	0.5	2.508	A
E - Pigeon House Rd	6	809	740	0.009	6	0.0	4.905	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	713	40	2414	0.296	713	0.4	2.117	A
B - Sean Moore Rd	29	730	1612	0.018	29	0.0	2.273	A
C - South Bank Rd	264	698	1696	0.156	264	0.2	2.513	A
D - R131 (SW)	868	140	2120	0.409	867	0.7	2.872	A
E - Pigeon House Rd	8	991	643	0.012	8	0.0	5.666	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	713	40	2414	0.296	713	0.4	2.117	A
B - Sean Moore Rd	29	730	1612	0.018	29	0.0	2.273	A
C - South Bank Rd	264	698	1696	0.156	264	0.2	2.514	A
D - R131 (SW)	868	140	2120	0.409	868	0.7	2.874	A
E - Pigeon House Rd	8	992	643	0.012	8	0.0	5.670	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	583	32	2420	0.241	583	0.3	1.959	A
B - Sean Moore Rd	23	596	1694	0.014	23	0.0	2.154	A
C - South Bank Rd	216	570	1781	0.121	216	0.1	2.301	A
D - R131 (SW)	708	114	2143	0.331	709	0.5	2.513	A
E - Pigeon House Rd	6	811	739	0.009	6	0.0	4.912	A

18:30 - 18:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	488	27	2425	0.201	488	0.3	1.860	A
B - Sean Moore Rd	20	499	1754	0.011	20	0.0	2.077	A
C - South Bank Rd	181	478	1843	0.098	181	0.1	2.165	A
D - R131 (SW)	593	96	2160	0.275	594	0.4	2.300	A
E - Pigeon House Rd	5	679	810	0.007	5	0.0	4.476	A

2026 Baseflow + Committed + Proposed Development - Scenario 2, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - South Bank Rd - 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
2		Standard Roundabout		A, B, C, D, E	2.52	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	98	E - Pigeon House Rd	2.52	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)
D11	2026 Baseflow + Committed + Proposed Development - Scenario 2	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 (NW)		✓	641	100.000
B - Sean Moore Rd		✓	26	100.000
C - South Bank Rd		✓	284	100.000
D - R131 (SW)		✓	788	100.000
E - Pigeon House Rd		✓	7	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - R131 (NW)	B - Sean Moore Rd	C - South Bank Rd	D - R131 (SW)	E - Pigeon House Rd
From	A - R131 (NW)	0	11	23	605	2
	B - Sean Moore Rd	12	0	3	11	0
	C - South Bank Rd	121	1	2	159	1
	D - R131 (SW)	748	9	20	0	11
	E - Pigeon House Rd	3	0	0	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - R131 (NW)	B - Sean Moore Rd	C - South Bank Rd	D - R131 (SW)	E - Pigeon House Rd
From	A - R131 (NW)	0	31	58	0	0
	B - Sean Moore Rd	74	0	68	0	0
	C - South Bank Rd	19	0	100	0	0
	D - R131 (SW)	2	0	33	0	0
	E - Pigeon House Rd	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A - R131 (NW)	0.29	2.08	0.4	A
B - Sean Moore Rd	0.02	2.26	0.0	A
C - South Bank Rd	0.18	2.47	0.2	A
D - R131 (SW)	0.41	2.88	0.7	A
E - Pigeon House Rd	0.01	5.69	0.0	A

Main Results for each time segment

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	483	27	2450	0.197	482	0.2	1.828	A
B - Sean Moore Rd	20	493	1761	0.011	20	0.0	2.067	A
C - South Bank Rd	214	476	1924	0.111	213	0.1	2.104	A
D - R131 (SW)	593	104	2158	0.275	592	0.4	2.296	A
E - Pigeon House Rd	5	686	809	0.007	5	0.0	4.477	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	576	32	2445	0.236	576	0.3	1.925	A
B - Sean Moore Rd	23	589	1702	0.014	23	0.0	2.144	A
C - South Bank Rd	255	570	1859	0.137	255	0.2	2.244	A
D - R131 (SW)	708	125	2140	0.331	708	0.5	2.513	A
E - Pigeon House Rd	6	820	738	0.009	6	0.0	4.919	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	706	40	2439	0.289	705	0.4	2.077	A
B - Sean Moore Rd	29	722	1621	0.018	29	0.0	2.260	A
C - South Bank Rd	313	698	1770	0.177	312	0.2	2.469	A
D - R131 (SW)	868	153	2116	0.410	867	0.7	2.880	A
E - Pigeon House Rd	8	1004	641	0.012	8	0.0	5.688	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	706	40	2439	0.289	706	0.4	2.077	A
B - Sean Moore Rd	29	722	1621	0.018	29	0.0	2.260	A
C - South Bank Rd	313	698	1770	0.177	313	0.2	2.470	A
D - R131 (SW)	868	153	2116	0.410	868	0.7	2.882	A
E - Pigeon House Rd	8	1005	640	0.012	8	0.0	5.692	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	576	32	2445	0.236	577	0.3	1.928	A
B - Sean Moore Rd	23	590	1701	0.014	23	0.0	2.146	A
C - South Bank Rd	255	570	1859	0.137	256	0.2	2.245	A
D - R131 (SW)	708	125	2140	0.331	709	0.5	2.518	A
E - Pigeon House Rd	6	822	737	0.009	6	0.0	4.926	A

18:30 - 18:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	483	27	2450	0.197	483	0.2	1.832	A
B - Sean Moore Rd	20	494	1760	0.011	20	0.0	2.069	A
C - South Bank Rd	214	478	1923	0.111	214	0.1	2.105	A
D - R131 (SW)	593	105	2158	0.275	594	0.4	2.302	A
E - Pigeon House Rd	5	688	808	0.007	5	0.0	4.485	A

2026 Baseflow + Committed + Proposed Development - Scenario 3, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - South Bank Rd - 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
2		Standard Roundabout		A, B, C, D, E	2.52	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	102	E - Pigeon House Rd	2.52	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)
D12	2026 Baseflow + Committed + Proposed Development - Scenario 3	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 (NW)		✓	655	100.000
B - Sean Moore Rd		✓	26	100.000
C - South Bank Rd		✓	198	100.000
D - R131 (SW)		✓	805	100.000
E - Pigeon House Rd		✓	7	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - R131 (NW)	B - Sean Moore Rd	C - South Bank Rd	D - R131 (SW)	E - Pigeon House Rd
From	A - R131 (NW)	0	11	37	605	2
	B - Sean Moore Rd	12	0	3	11	0
	C - South Bank Rd	88	1	2	106	1
	D - R131 (SW)	748	9	37	0	11
	E - Pigeon House Rd	3	0	0	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - R131 (NW)	B - Sean Moore Rd	C - South Bank Rd	D - R131 (SW)	E - Pigeon House Rd
From	A - R131 (NW)	0	31	33	0	0
	B - Sean Moore Rd	74	0	68	0	0
	C - South Bank Rd	25	0	100	0	0
	D - R131 (SW)	2	0	18	0	0
	E - Pigeon House Rd	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A - R131 (NW)	0.30	2.11	0.4	A
B - Sean Moore Rd	0.02	2.29	0.0	A
C - South Bank Rd	0.13	2.40	0.1	A
D - R131 (SW)	0.41	2.86	0.7	A
E - Pigeon House Rd	0.01	5.61	0.0	A

Main Results for each time segment

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	493	40	2446	0.202	492	0.3	1.842	A
B - Sean Moore Rd	20	516	1748	0.011	20	0.0	2.083	A
C - South Bank Rd	149	476	1867	0.080	149	0.1	2.094	A
D - R131 (SW)	606	80	2177	0.278	605	0.4	2.288	A
E - Pigeon House Rd	5	674	816	0.006	5	0.0	4.441	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	589	48	2439	0.241	589	0.3	1.945	A
B - Sean Moore Rd	23	617	1686	0.014	23	0.0	2.164	A
C - South Bank Rd	178	570	1804	0.099	178	0.1	2.213	A
D - R131 (SW)	724	95	2163	0.335	723	0.5	2.501	A
E - Pigeon House Rd	6	806	746	0.008	6	0.0	4.868	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	721	58	2430	0.297	721	0.4	2.106	A
B - Sean Moore Rd	29	756	1602	0.018	29	0.0	2.288	A
C - South Bank Rd	218	698	1718	0.127	218	0.1	2.400	A
D - R131 (SW)	886	117	2143	0.414	886	0.7	2.861	A
E - Pigeon House Rd	8	987	650	0.012	8	0.0	5.605	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	721	58	2430	0.297	721	0.4	2.106	A
B - Sean Moore Rd	29	756	1601	0.018	29	0.0	2.288	A
C - South Bank Rd	218	698	1717	0.127	218	0.1	2.400	A
D - R131 (SW)	886	117	2143	0.414	886	0.7	2.863	A
E - Pigeon House Rd	8	988	649	0.012	8	0.0	5.609	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	589	48	2439	0.241	589	0.3	1.947	A
B - Sean Moore Rd	23	618	1686	0.014	23	0.0	2.165	A
C - South Bank Rd	178	570	1804	0.099	178	0.1	2.214	A
D - R131 (SW)	724	95	2162	0.335	724	0.5	2.506	A
E - Pigeon House Rd	6	807	745	0.008	6	0.0	4.875	A

18:30 - 18:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - R131 (NW)	493	40	2446	0.202	493	0.3	1.843	A
B - Sean Moore Rd	20	517	1747	0.011	20	0.0	2.084	A
C - South Bank Rd	149	478	1866	0.080	149	0.1	2.097	A
D - R131 (SW)	606	80	2176	0.278	607	0.4	2.295	A
E - Pigeon House Rd	5	676	814	0.006	5	0.0	4.450	A

Junctions 10

PICADY 10 - Priority Intersection Module

Filename: JTC 3.j10
Path: W:\Projects\11078 - Natural Power - Codling Bank Wind Farm\05-Design\01-Calculations\Traffic\08 Junction 10\New Counts - jan2024
Report generation date: 09/05/2024 13:06:28

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2022 Baseflow													
Stream B-C	0.0	8.87	0.03	A	5.22	A	135 % [Stream B-A]	0.0	7.27	0.02	A	2.51	A	326 % [Stream B-A]
Stream B-A	0.3	14.15	0.24	B				0.2	7.55	0.16	A			
Stream C-AB	0.1	9.87	0.06	A				0.0	10.91	0.00	B			
	2026 Baseflow													
Stream B-C	0.0	9.15	0.03	A	5.54	A	112 % [Stream B-A]	0.0	7.39	0.02	A	2.57	A	297 % [Stream B-A]
Stream B-A	0.4	14.95	0.28	B				0.2	7.76	0.17	A			
Stream C-AB	0.1	10.06	0.07	B				0.0	10.95	0.00	B			
	2026 Baseflow + Committed Development													
Stream B-C	0.0	9.28	0.03	A	4.90	A	105 % [Stream B-A]	0.0	7.92	0.02	A	4.26	A	147 % [Stream B-A]
Stream B-A	0.4	15.23	0.28	C				0.4	9.38	0.30	A			
Stream C-AB	0.1	10.37	0.07	B				0.0	10.95	0.00	B			
	2026 Baseflow + Committed + Proposed Development - Scenario 1													
Stream B-C	0.0	9.62	0.03	A	5.19	A	81 % [Stream B-A]	0.0	8.54	0.02	A	5.57	A	92 % [Stream B-A]
Stream B-A	0.5	16.59	0.32	C				0.7	11.24	0.40	B			
Stream C-AB	0.1	10.60	0.07	B				0.0	11.03	0.00	B			
	2026 Baseflow + Committed + Proposed Development - Scenario 2													
Stream B-C	0.0	9.49	0.03	A	4.46	A	92 % [Stream B-A]	0.0	9.06	0.02	A	6.44	A	71 % [Stream B-A]
Stream B-A	0.4	15.87	0.29	C				0.8	11.84	0.46	B			
Stream C-AB	0.1	10.76	0.07	B				0.0	10.98	0.00	B			
	2026 Baseflow + Committed + Proposed Development - Scenario 3													
Stream B-C	0.0	9.37	0.03	A	4.75	A	98 % [Stream B-A]	0.0	8.27	0.02	A	5.01	A	111 % [Stream B-A]
Stream B-A	0.4	15.57	0.29	C				0.6	10.20	0.36	B			
Stream C-AB	0.1	10.52	0.07	B				0.0	10.97	0.00	B			

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. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

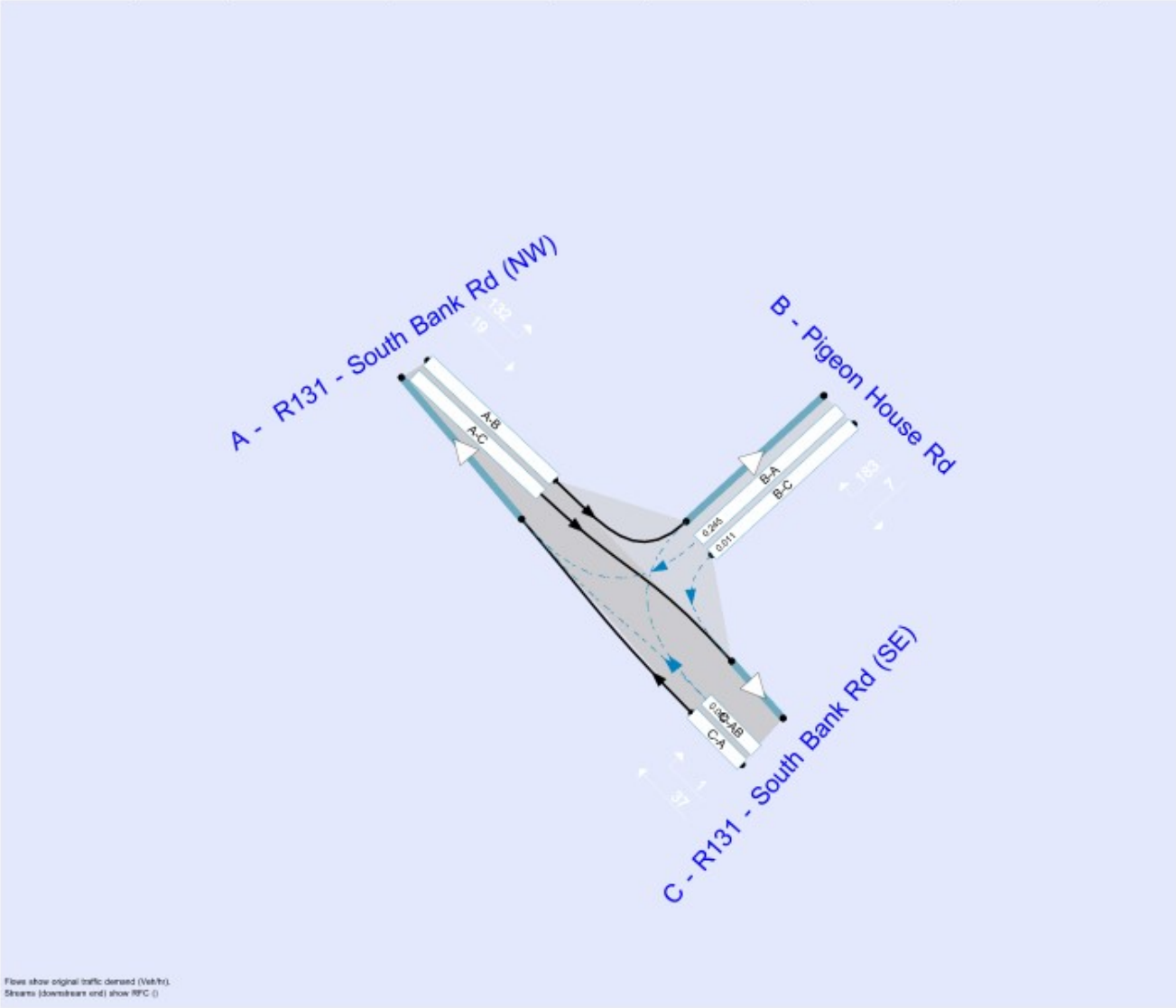
File summary

File Description

Title	Codling Wind Park
Location	Dublin
Site number	
Date	12/01/2024
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	
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	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022 Baseflow	AM	ONE HOUR	07:30	09:00	15
D2	2026 Baseflow	AM	ONE HOUR	07:30	09:00	15
D3	2026 Baseflow + Committed Development	AM	ONE HOUR	07:30	09:00	15
D4	2026 Baseflow + Committed + Proposed Development - Scenario 1	AM	ONE HOUR	07:30	09:00	15
D5	2026 Baseflow + Committed + Proposed Development - Scenario 2	AM	ONE HOUR	07:30	09:00	15
D6	2026 Baseflow + Committed + Proposed Development - Scenario 3	AM	ONE HOUR	07:30	09:00	15
D7	2022 Baseflow	PM	ONE HOUR	17:15	18:45	15
D8	2026 Baseflow	PM	ONE HOUR	17:15	18:45	15
D9	2026 Baseflow + Committed Development	PM	ONE HOUR	17:15	18:45	15
D10	2026 Baseflow + Committed + Proposed Development - Scenario 1	PM	ONE HOUR	17:15	18:45	15
D11	2026 Baseflow + Committed + Proposed Development - Scenario 2	PM	ONE HOUR	17:15	18:45	15
D12	2026 Baseflow + Committed + Proposed Development - Scenario 3	PM	ONE HOUR	17:15	18:45	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2022 Baseflow, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Pigeon House Rd - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
3		T-Junction	Two-way	Two-way	Two-way		5.22	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	135	Stream B-A	5.22	A

Arms

Arms

Arm	Name	Description	Arm type
A	R131 - South Bank Rd (NW)		Major
B	Pigeon House Rd		Minor
C	R131 - South Bank Rd (SE)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - R131 - South Bank Rd (SE)	10.50			217.0	✓	2.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Pigeon House Rd	One lane plus flare	10.00	7.10	4.50	3.80	3.80		1.00	185	40

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	632	0.093	0.234	0.147	0.335
B-C	617	0.076	0.192	-	-
C-B	700	0.218	0.218	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

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)
D1	2022 Baseflow	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 - South Bank Rd (NW)		✓	160	100.000
B - Pigeon House Rd		✓	85	100.000
C - R131 - South Bank Rd (SE)		✓	43	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - R131 - South Bank Rd (NW)	B - Pigeon House Rd	C - R131 - South Bank Rd (SE)
From	A - R131 - South Bank Rd (NW)	0	120	40
	B - Pigeon House Rd	75	0	10
	C - R131 - South Bank Rd (SE)	22	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R131 - South Bank Rd (NW)	B - Pigeon House Rd	C - R131 - South Bank Rd (SE)
From	A - R131 - South Bank Rd (NW)	0	28	68
	B - Pigeon House Rd	72	0	30
	C - R131 - South Bank Rd (SE)	82	67	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.03	8.87	0.0	A
B-A	0.24	14.15	0.3	B
C-AB	0.06	9.87	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	439	0.017	7	0.0	8.344	A
B-A	56	347	0.163	56	0.2	12.333	B
C-AB	16	398	0.040	16	0.0	9.422	A
C-A	17			17			
A-B	90			90			
A-C	30			30			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	9	430	0.021	9	0.0	8.548	A
B-A	67	343	0.197	67	0.2	13.057	B
C-AB	19	394	0.048	19	0.0	9.606	A
C-A	20			20			
A-B	108			108			
A-C	36			36			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	417	0.026	11	0.0	8.862	A
B-A	83	337	0.245	82	0.3	14.111	B
C-AB	23	388	0.060	23	0.1	9.864	A
C-A	24			24			
A-B	132			132			
A-C	44			44			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	417	0.026	11	0.0	8.867	A
B-A	83	337	0.245	83	0.3	14.145	B
C-AB	23	388	0.060	23	0.1	9.866	A
C-A	24			24			
A-B	132			132			
A-C	44			44			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	9	430	0.021	9	0.0	8.555	A
B-A	67	343	0.197	68	0.2	13.107	B
C-AB	19	394	0.048	19	0.1	9.613	A
C-A	20			20			
A-B	108			108			
A-C	36			36			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	438	0.017	8	0.0	8.356	A
B-A	56	347	0.163	57	0.2	12.419	B
C-AB	16	398	0.040	16	0.0	9.433	A
C-A	17			17			
A-B	90			90			
A-C	30			30			

2026 Baseflow, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Pigeon House Rd - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
3		T-Junction	Two-way	Two-way	Two-way		5.54	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	112	Stream B-A	5.54	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)
D2	2026 Baseflow	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 - South Bank Rd (NW)		✓	173	100.000
B - Pigeon House Rd		✓	94	100.000
C - R131 - South Bank Rd (SE)		✓	47	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - R131 - South Bank Rd (NW)	B - Pigeon House Rd	C - R131 - South Bank Rd (SE)
From	A - R131 - South Bank Rd (NW)	0	129	44
	B - Pigeon House Rd	83	0	11
	C - R131 - South Bank Rd (SE)	24	23	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R131 - South Bank Rd (NW)	B - Pigeon House Rd	C - R131 - South Bank Rd (SE)
From	A - R131 - South Bank Rd (NW)	0	29	69
	B - Pigeon House Rd	73	0	31
	C - R131 - South Bank Rd (SE)	83	68	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.03	9.15	0.0	A
B-A	0.28	14.95	0.4	B
C-AB	0.07	10.06	0.1	B
C-A				
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	431	0.019	8	0.0	8.515	A
B-A	62	343	0.182	62	0.2	12.763	B
C-AB	17	393	0.044	17	0.0	9.565	A
C-A	18			18			
A-B	97			97			
A-C	33			33			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	10	421	0.024	10	0.0	8.761	A
B-A	75	338	0.221	74	0.3	13.626	B
C-AB	21	389	0.053	21	0.1	9.772	A
C-A	22			22			
A-B	116			116			
A-C	40			40			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	12	406	0.030	12	0.0	9.149	A
B-A	91	332	0.275	91	0.4	14.905	B
C-AB	25	383	0.066	25	0.1	10.061	B
C-A	26			26			
A-B	142			142			
A-C	48			48			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	12	405	0.030	12	0.0	9.155	A
B-A	91	332	0.275	91	0.4	14.950	B
C-AB	25	383	0.066	25	0.1	10.063	B
C-A	26			26			
A-B	142			142			
A-C	48			48			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	10	420	0.024	10	0.0	8.770	A
B-A	75	338	0.221	75	0.3	13.689	B
C-AB	21	389	0.053	21	0.1	9.777	A
C-A	22			22			
A-B	116			116			
A-C	40			40			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	430	0.019	8	0.0	8.531	A
B-A	62	343	0.182	63	0.2	12.867	B
C-AB	17	393	0.044	17	0.0	9.577	A
C-A	18			18			
A-B	97			97			
A-C	33			33			

2026 Baseflow + Committed Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Pigeon House Rd - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
3		T-Junction	Two-way	Two-way	Two-way		4.90	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	105	Stream B-A	4.90	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)
D3	2026 Baseflow + Committed Development	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 - South Bank Rd (NW)		✓	238	100.000
B - Pigeon House Rd		✓	94	100.000
C - R131 - South Bank Rd (SE)		✓	47	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - R131 - South Bank Rd (NW)	B - Pigeon House Rd	C - R131 - South Bank Rd (SE)
From	A - R131 - South Bank Rd (NW)	0	194	44
	B - Pigeon House Rd	83	0	11
	C - R131 - South Bank Rd (SE)	24	23	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R131 - South Bank Rd (NW)	B - Pigeon House Rd	C - R131 - South Bank Rd (SE)
From	A - R131 - South Bank Rd (NW)	0	24	69
	B - Pigeon House Rd	73	0	31
	C - R131 - South Bank Rd (SE)	83	68	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.03	9.28	0.0	A
B-A	0.28	15.23	0.4	C
C-AB	0.07	10.37	0.1	B
C-A				
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	428	0.019	8	0.0	8.584	A
B-A	62	340	0.184	62	0.2	12.940	B
C-AB	17	386	0.045	17	0.0	9.751	A
C-A	18			18			
A-B	146			146			
A-C	33			33			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	10	417	0.024	10	0.0	8.848	A
B-A	75	335	0.223	74	0.3	13.814	B
C-AB	21	380	0.054	21	0.1	10.006	B
C-A	22			22			
A-B	174			174			
A-C	40			40			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	12	400	0.030	12	0.0	9.269	A
B-A	91	328	0.279	91	0.4	15.179	C
C-AB	25	373	0.068	25	0.1	10.368	B
C-A	26			26			
A-B	214			214			
A-C	48			48			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	12	400	0.030	12	0.0	9.276	A
B-A	91	328	0.279	91	0.4	15.227	C
C-AB	25	373	0.068	25	0.1	10.370	B
C-A	26			26			
A-B	214			214			
A-C	48			48			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	10	416	0.024	10	0.0	8.858	A
B-A	75	335	0.223	75	0.3	13.881	B
C-AB	21	380	0.054	21	0.1	10.012	B
C-A	22			22			
A-B	174			174			
A-C	40			40			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	427	0.019	8	0.0	8.598	A
B-A	62	340	0.184	63	0.2	13.009	B
C-AB	17	386	0.045	17	0.0	9.765	A
C-A	18			18			
A-B	146			146			
A-C	33			33			

2026 Baseflow + Committed + Proposed Development - Scenario 1, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Pigeon House Rd - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
3		T-Junction	Two-way	Two-way	Two-way		5.19	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	81	Stream B-A	5.19	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)
D4	2026 Baseflow + Committed + Proposed Development - Scenario 1	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 - South Bank Rd (NW)		✓	281	100.000
B - Pigeon House Rd		✓	104	100.000
C - R131 - South Bank Rd (SE)		✓	47	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - R131 - South Bank Rd (NW)	B - Pigeon House Rd	C - R131 - South Bank Rd (SE)
From	A - R131 - South Bank Rd (NW)	0	237	44
	B - Pigeon House Rd	93	0	11
	C - R131 - South Bank Rd (SE)	24	23	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R131 - South Bank Rd (NW)	B - Pigeon House Rd	C - R131 - South Bank Rd (SE)
From	A - R131 - South Bank Rd (NW)	0	24	69
	B - Pigeon House Rd	76	0	31
	C - R131 - South Bank Rd (SE)	83	68	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.03	9.62	0.0	A
B-A	0.32	16.59	0.5	C
C-AB	0.07	10.60	0.1	B
C-A				
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	420	0.020	8	0.0	8.742	A
B-A	70	332	0.211	69	0.3	13.626	B
C-AB	17	381	0.046	17	0.0	9.891	A
C-A	18			18			
A-B	178			178			
A-C	33			33			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	10	407	0.024	10	0.0	9.070	A
B-A	84	327	0.256	83	0.3	14.766	B
C-AB	21	374	0.055	21	0.1	10.182	B
C-A	22			22			
A-B	213			213			
A-C	40			40			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	12	387	0.031	12	0.0	9.611	A
B-A	102	319	0.321	102	0.5	16.518	C
C-AB	25	365	0.070	25	0.1	10.600	B
C-A	26			26			
A-B	261			261			
A-C	48			48			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	12	386	0.031	12	0.0	9.621	A
B-A	102	319	0.321	102	0.5	16.591	C
C-AB	25	365	0.070	25	0.1	10.602	B
C-A	26			26			
A-B	261			261			
A-C	48			48			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	10	406	0.024	10	0.0	9.085	A
B-A	84	327	0.256	84	0.4	14.862	B
C-AB	21	374	0.055	21	0.1	10.190	B
C-A	22			22			
A-B	213			213			
A-C	40			40			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	419	0.020	8	0.0	8.761	A
B-A	70	332	0.211	70	0.3	13.767	B
C-AB	17	381	0.046	17	0.0	9.903	A
C-A	18			18			
A-B	178			178			
A-C	33			33			

2026 Baseflow + Committed + Proposed Development - Scenario 2, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Pigeon House Rd - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
3		T-Junction	Two-way	Two-way	Two-way		4.46	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	92	Stream B-A	4.46	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)
D5	2026 Baseflow + Committed + Proposed Development - Scenario 2	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 - South Bank Rd (NW)		✓	325	100.000
B - Pigeon House Rd		✓	96	100.000
C - R131 - South Bank Rd (SE)		✓	48	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - R131 - South Bank Rd (NW)	B - Pigeon House Rd	C - R131 - South Bank Rd (SE)
From	A - R131 - South Bank Rd (NW)	0	280	45
	B - Pigeon House Rd	85	0	11
	C - R131 - South Bank Rd (SE)	25	23	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R131 - South Bank Rd (NW)	B - Pigeon House Rd	C - R131 - South Bank Rd (SE)
From	A - R131 - South Bank Rd (NW)	0	17	70
	B - Pigeon House Rd	74	0	31
	C - R131 - South Bank Rd (SE)	79	68	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.03	9.49	0.0	A
B-A	0.29	15.87	0.4	C
C-AB	0.07	10.76	0.1	B
C-A				
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	422	0.020	8	0.0	8.693	A
B-A	64	334	0.191	63	0.2	13.234	B
C-AB	17	377	0.046	17	0.0	9.986	A
C-A	19			19			
A-B	211			211			
A-C	34			34			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	10	410	0.024	10	0.0	8.993	A
B-A	76	328	0.233	76	0.3	14.255	B
C-AB	21	370	0.056	21	0.1	10.303	B
C-A	22			22			
A-B	252			252			
A-C	40			40			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	12	392	0.031	12	0.0	9.477	A
B-A	94	320	0.292	93	0.4	15.810	C
C-AB	25	360	0.071	25	0.1	10.757	B
C-A	27			27			
A-B	308			308			
A-C	50			50			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	12	392	0.031	12	0.0	9.485	A
B-A	94	320	0.292	94	0.4	15.867	C
C-AB	25	360	0.071	25	0.1	10.762	B
C-A	27			27			
A-B	308			308			
A-C	50			50			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	10	410	0.024	10	0.0	9.004	A
B-A	76	328	0.233	77	0.3	14.336	B
C-AB	21	370	0.056	21	0.1	10.309	B
C-A	22			22			
A-B	252			252			
A-C	40			40			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	422	0.020	8	0.0	8.709	A
B-A	64	334	0.192	64	0.2	13.356	B
C-AB	17	377	0.046	17	0.0	9.999	A
C-A	19			19			
A-B	211			211			
A-C	34			34			

2026 Baseflow + Committed + Proposed Development - Scenario 3, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Pigeon House Rd - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
3		T-Junction	Two-way	Two-way	Two-way		4.75	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	98	Stream B-A	4.75	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)
D6	2026 Baseflow + Committed + Proposed Development - Scenario 3	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 - South Bank Rd (NW)		✓	271	100.000
B - Pigeon House Rd		✓	95	100.000
C - R131 - South Bank Rd (SE)		✓	48	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - R131 - South Bank Rd (NW)	B - Pigeon House Rd	C - R131 - South Bank Rd (SE)
From	A - R131 - South Bank Rd (NW)	0	226	45
	B - Pigeon House Rd	84	0	11
	C - R131 - South Bank Rd (SE)	25	23	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R131 - South Bank Rd (NW)	B - Pigeon House Rd	C - R131 - South Bank Rd (SE)
From	A - R131 - South Bank Rd (NW)	0	21	70
	B - Pigeon House Rd	74	0	31
	C - R131 - South Bank Rd (SE)	79	68	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.03	9.37	0.0	A
B-A	0.29	15.57	0.4	C
C-AB	0.07	10.52	0.1	B
C-A				
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	425	0.019	8	0.0	8.633	A
B-A	63	336	0.188	62	0.2	13.096	B
C-AB	17	383	0.045	17	0.0	9.842	A
C-A	19			19			
A-B	170			170			
A-C	34			34			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	10	414	0.024	10	0.0	8.913	A
B-A	76	331	0.228	75	0.3	14.064	B
C-AB	21	376	0.055	21	0.1	10.120	B
C-A	22			22			
A-B	203			203			
A-C	40			40			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	12	397	0.031	12	0.0	9.363	A
B-A	92	324	0.286	92	0.4	15.521	C
C-AB	25	368	0.069	25	0.1	10.518	B
C-A	27			27			
A-B	249			249			
A-C	50			50			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	12	396	0.031	12	0.0	9.371	A
B-A	92	324	0.286	92	0.4	15.574	C
C-AB	25	368	0.069	25	0.1	10.520	B
C-A	27			27			
A-B	249			249			
A-C	50			50			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	10	413	0.024	10	0.0	8.924	A
B-A	76	331	0.228	76	0.3	14.136	B
C-AB	21	376	0.055	21	0.1	10.128	B
C-A	22			22			
A-B	203			203			
A-C	40			40			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	425	0.020	8	0.0	8.648	A
B-A	63	336	0.188	64	0.2	13.213	B
C-AB	17	383	0.045	17	0.0	9.854	A
C-A	19			19			
A-B	170			170			
A-C	34			34			

2022 Baseflow , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Pigeon House Rd - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
3		T-Junction	Two-way	Two-way	Two-way		2.51	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	326	Stream B-A	2.51	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)
D7	2022 Baseflow	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 - South Bank Rd (NW)		✓	140	100.000
B - Pigeon House Rd		✓	88	100.000
C - R131 - South Bank Rd (SE)		✓	35	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - R131 - South Bank Rd (NW)	B - Pigeon House Rd	C - R131 - South Bank Rd (SE)
From	A - R131 - South Bank Rd (NW)	0	124	16
	B - Pigeon House Rd	81	0	7
	C - R131 - South Bank Rd (SE)	34	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R131 - South Bank Rd (NW)	B - Pigeon House Rd	C - R131 - South Bank Rd (SE)
From	A - R131 - South Bank Rd (NW)	0	3	81
	B - Pigeon House Rd	7	0	14
	C - R131 - South Bank Rd (SE)	15	100	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.02	7.27	0.0	A
B-A	0.16	7.55	0.2	A
C-AB	0.00	10.91	0.0	B
C-A				
A-B				
A-C				

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	516	0.010	5	0.0	7.053	A
B-A	61	574	0.106	61	0.1	7.008	A
C-AB	1	337	0.002	1	0.0	10.705	B
C-A	26			26			
A-B	93			93			
A-C	12			12			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	6	510	0.012	6	0.0	7.143	A
B-A	73	570	0.128	73	0.1	7.231	A
C-AB	1	335	0.003	1	0.0	10.789	B
C-A	31			31			
A-B	111			111			
A-C	14			14			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	503	0.015	8	0.0	7.274	A
B-A	89	566	0.158	89	0.2	7.552	A
C-AB	1	331	0.003	1	0.0	10.907	B
C-A	37			37			
A-B	137			137			
A-C	18			18			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	502	0.015	8	0.0	7.274	A
B-A	89	566	0.158	89	0.2	7.555	A
C-AB	1	331	0.003	1	0.0	10.907	B
C-A	37			37			
A-B	137			137			
A-C	18			18			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	6	510	0.012	6	0.0	7.147	A
B-A	73	570	0.128	73	0.1	7.242	A
C-AB	1	335	0.003	1	0.0	10.789	B
C-A	31			31			
A-B	111			111			
A-C	14			14			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	515	0.010	5	0.0	7.058	A
B-A	61	574	0.106	61	0.1	7.022	A
C-AB	1	337	0.002	1	0.0	10.707	B
C-A	26			26			
A-B	93			93			
A-C	12			12			

2026 Baseflow , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Pigeon House Rd - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
3		T-Junction	Two-way	Two-way	Two-way		2.57	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	297	Stream B-A	2.57	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)
D8	2026 Baseflow	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 - South Bank Rd (NW)		✓	149	100.000
B - Pigeon House Rd		✓	93	100.000
C - R131 - South Bank Rd (SE)		✓	37	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - R131 - South Bank Rd (NW)	B - Pigeon House Rd	C - R131 - South Bank Rd (SE)
From	A - R131 - South Bank Rd (NW)	0	131	18
	B - Pigeon House Rd	86	0	7
	C - R131 - South Bank Rd (SE)	36	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R131 - South Bank Rd (NW)	B - Pigeon House Rd	C - R131 - South Bank Rd (SE)
From	A - R131 - South Bank Rd (NW)	0	3	82
	B - Pigeon House Rd	8	0	15
	C - R131 - South Bank Rd (SE)	16	100	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.02	7.39	0.0	A
B-A	0.17	7.76	0.2	A
C-AB	0.00	10.95	0.0	B
C-A				
A-B				
A-C				

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	509	0.010	5	0.0	7.150	A
B-A	65	567	0.114	64	0.1	7.148	A
C-AB	1	336	0.002	1	0.0	10.734	B
C-A	27			27			
A-B	99			99			
A-C	14			14			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	6	503	0.013	6	0.0	7.248	A
B-A	77	564	0.137	77	0.2	7.398	A
C-AB	1	333	0.003	1	0.0	10.824	B
C-A	32			32			
A-B	118			118			
A-C	16			16			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	495	0.016	8	0.0	7.394	A
B-A	95	559	0.170	95	0.2	7.751	A
C-AB	1	330	0.003	1	0.0	10.950	B
C-A	40			40			
A-B	144			144			
A-C	20			20			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	494	0.016	8	0.0	7.395	A
B-A	95	559	0.170	95	0.2	7.760	A
C-AB	1	330	0.003	1	0.0	10.950	B
C-A	40			40			
A-B	144			144			
A-C	20			20			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	6	503	0.013	6	0.0	7.250	A
B-A	77	564	0.137	77	0.2	7.406	A
C-AB	1	333	0.003	1	0.0	10.824	B
C-A	32			32			
A-B	118			118			
A-C	16			16			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	509	0.010	5	0.0	7.155	A
B-A	65	567	0.114	65	0.1	7.168	A
C-AB	1	336	0.002	1	0.0	10.734	B
C-A	27			27			
A-B	99			99			
A-C	14			14			

2026 Baseflow + Committed Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Pigeon House Rd - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
3		T-Junction	Two-way	Two-way	Two-way		4.26	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	147	Stream B-A	4.26	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)
D9	2026 Baseflow + Committed Development	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 - South Bank Rd (NW)		✓	149	100.000
B - Pigeon House Rd		✓	158	100.000
C - R131 - South Bank Rd (SE)		✓	37	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - R131 - South Bank Rd (NW)	B - Pigeon House Rd	C - R131 - South Bank Rd (SE)
From	A - R131 - South Bank Rd (NW)	0	131	18
	B - Pigeon House Rd	151	0	7
	C - R131 - South Bank Rd (SE)	36	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R131 - South Bank Rd (NW)	B - Pigeon House Rd	C - R131 - South Bank Rd (SE)
From	A - R131 - South Bank Rd (NW)	0	3	82
	B - Pigeon House Rd	10	0	15
	C - R131 - South Bank Rd (SE)	16	100	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.02	7.92	0.0	A
B-A	0.30	9.38	0.4	A
C-AB	0.00	10.95	0.0	B
C-A				
A-B				
A-C				

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	490	0.011	5	0.0	7.420	A
B-A	114	558	0.204	113	0.3	8.058	A
C-AB	1	336	0.002	1	0.0	10.734	B
C-A	27			27			
A-B	99			99			
A-C	14			14			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	6	479	0.013	6	0.0	7.609	A
B-A	136	555	0.245	135	0.3	8.579	A
C-AB	1	333	0.003	1	0.0	10.824	B
C-A	32			32			
A-B	118			118			
A-C	16			16			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	462	0.017	8	0.0	7.917	A
B-A	166	550	0.302	166	0.4	9.364	A
C-AB	1	330	0.003	1	0.0	10.950	B
C-A	40			40			
A-B	144			144			
A-C	20			20			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	462	0.017	8	0.0	7.921	A
B-A	166	550	0.302	166	0.4	9.384	A
C-AB	1	330	0.003	1	0.0	10.950	B
C-A	40			40			
A-B	144			144			
A-C	20			20			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	6	479	0.013	6	0.0	7.617	A
B-A	136	555	0.245	136	0.3	8.607	A
C-AB	1	333	0.003	1	0.0	10.826	B
C-A	32			32			
A-B	118			118			
A-C	16			16			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	490	0.011	5	0.0	7.428	A
B-A	114	558	0.204	114	0.3	8.105	A
C-AB	1	336	0.002	1	0.0	10.734	B
C-A	27			27			
A-B	99			99			
A-C	14			14			

2026 Baseflow + Committed + Proposed Development - Scenario 1, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Pigeon House Rd - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
3		T-Junction	Two-way	Two-way	Two-way		5.57	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	92	Stream B-A	5.57	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)
D10	2026 Baseflow + Committed + Proposed Development - Scenario 1	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 - South Bank Rd (NW)		✓	159	100.000
B - Pigeon House Rd		✓	201	100.000
C - R131 - South Bank Rd (SE)		✓	37	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - R131 - South Bank Rd (NW)	B - Pigeon House Rd	C - R131 - South Bank Rd (SE)
From	A - R131 - South Bank Rd (NW)	0	141	18
	B - Pigeon House Rd	194	0	7
	C - R131 - South Bank Rd (SE)	36	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R131 - South Bank Rd (NW)	B - Pigeon House Rd	C - R131 - South Bank Rd (SE)
From	A - R131 - South Bank Rd (NW)	0	10	82
	B - Pigeon House Rd	13	0	15
	C - R131 - South Bank Rd (SE)	16	100	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.02	8.54	0.0	A
B-A	0.40	11.24	0.7	B
C-AB	0.00	11.03	0.0	B
C-A				
A-B				
A-C				

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	474	0.011	5	0.0	7.677	A
B-A	146	543	0.269	145	0.4	9.008	A
C-AB	1	334	0.002	1	0.0	10.787	B
C-A	27			27			
A-B	106			106			
A-C	14			14			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	6	457	0.014	6	0.0	7.987	A
B-A	174	539	0.324	174	0.5	9.847	A
C-AB	1	331	0.003	1	0.0	10.888	B
C-A	32			32			
A-B	127			127			
A-C	16			16			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	430	0.018	8	0.0	8.533	A
B-A	214	534	0.400	213	0.7	11.197	B
C-AB	1	327	0.003	1	0.0	11.032	B
C-A	40			40			
A-B	155			155			
A-C	20			20			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	429	0.018	8	0.0	8.543	A
B-A	214	534	0.400	214	0.7	11.238	B
C-AB	1	327	0.003	1	0.0	11.032	B
C-A	40			40			
A-B	155			155			
A-C	20			20			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	6	456	0.014	6	0.0	8.000	A
B-A	174	539	0.324	175	0.5	9.909	A
C-AB	1	331	0.003	1	0.0	10.889	B
C-A	32			32			
A-B	127			127			
A-C	16			16			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	473	0.011	5	0.0	7.692	A
B-A	146	543	0.269	147	0.4	9.093	A
C-AB	1	334	0.002	1	0.0	10.787	B
C-A	27			27			
A-B	106			106			
A-C	14			14			

2026 Baseflow + Committed + Proposed Development - Scenario 2, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Pigeon House Rd - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
3		T-Junction	Two-way	Two-way	Two-way		6.44	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	71	Stream B-A	6.44	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)
D11	2026 Baseflow + Committed + Proposed Development - Scenario 2	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 - South Bank Rd (NW)		✓	152	100.000
B - Pigeon House Rd		✓	244	100.000
C - R131 - South Bank Rd (SE)		✓	38	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - R131 - South Bank Rd (NW)	B - Pigeon House Rd	C - R131 - South Bank Rd (SE)
From	A - R131 - South Bank Rd (NW)	0	133	19
	B - Pigeon House Rd	237	0	7
	C - R131 - South Bank Rd (SE)	37	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R131 - South Bank Rd (NW)	B - Pigeon House Rd	C - R131 - South Bank Rd (SE)
From	A - R131 - South Bank Rd (NW)	0	5	83
	B - Pigeon House Rd	7	0	15
	C - R131 - South Bank Rd (SE)	15	100	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.02	9.06	0.0	A
B-A	0.46	11.84	0.8	B
C-AB	0.00	10.98	0.0	B
C-A				
A-B				
A-C				

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	463	0.011	5	0.0	7.856	A
B-A	178	574	0.311	177	0.4	9.019	A
C-AB	1	336	0.002	1	0.0	10.751	B
C-A	28			28			
A-B	100			100			
A-C	14			14			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	6	441	0.014	6	0.0	8.271	A
B-A	213	570	0.374	212	0.6	10.047	B
C-AB	1	333	0.003	1	0.0	10.845	B
C-A	33			33			
A-B	120			120			
A-C	17			17			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	406	0.019	8	0.0	9.047	A
B-A	261	565	0.462	260	0.8	11.766	B
C-AB	1	329	0.003	1	0.0	10.977	B
C-A	41			41			
A-B	146			146			
A-C	21			21			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	405	0.019	8	0.0	9.064	A
B-A	261	565	0.462	261	0.8	11.840	B
C-AB	1	329	0.003	1	0.0	10.977	B
C-A	41			41			
A-B	146			146			
A-C	21			21			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	6	441	0.014	6	0.0	8.290	A
B-A	213	570	0.374	214	0.6	10.133	B
C-AB	1	333	0.003	1	0.0	10.845	B
C-A	33			33			
A-B	120			120			
A-C	17			17			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	462	0.011	5	0.0	7.878	A
B-A	178	574	0.311	179	0.5	9.125	A
C-AB	1	336	0.002	1	0.0	10.754	B
C-A	28			28			
A-B	100			100			
A-C	14			14			

2026 Baseflow + Committed + Proposed Development - Scenario 3, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Pigeon House Rd - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
3		T-Junction	Two-way	Two-way	Two-way		5.01	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	111	Stream B-A	5.01	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)
D12	2026 Baseflow + Committed + Proposed Development - Scenario 3	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - R131 - South Bank Rd (NW)		✓	151	100.000
B - Pigeon House Rd		✓	190	100.000
C - R131 - South Bank Rd (SE)		✓	38	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - R131 - South Bank Rd (NW)	B - Pigeon House Rd	C - R131 - South Bank Rd (SE)
From	A - R131 - South Bank Rd (NW)	0	132	19
	B - Pigeon House Rd	183	0	7
	C - R131 - South Bank Rd (SE)	37	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - R131 - South Bank Rd (NW)	B - Pigeon House Rd	C - R131 - South Bank Rd (SE)
From	A - R131 - South Bank Rd (NW)	0	4	83
	B - Pigeon House Rd	9	0	15
	C - R131 - South Bank Rd (SE)	15	100	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.02	8.27	0.0	A
B-A	0.36	10.20	0.6	B
C-AB	0.00	10.97	0.0	B
C-A				
A-B				
A-C				

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	481	0.011	5	0.0	7.570	A
B-A	138	563	0.245	136	0.3	8.408	A
C-AB	1	336	0.002	1	0.0	10.745	B
C-A	28			28			
A-B	99			99			
A-C	14			14			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	6	466	0.014	6	0.0	7.828	A
B-A	165	560	0.294	164	0.4	9.095	A
C-AB	1	333	0.003	1	0.0	10.838	B
C-A	33			33			
A-B	119			119			
A-C	17			17			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	443	0.017	8	0.0	8.266	A
B-A	201	554	0.363	201	0.6	10.166	B
C-AB	1	329	0.003	1	0.0	10.968	B
C-A	41			41			
A-B	145			145			
A-C	21			21			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	443	0.017	8	0.0	8.273	A
B-A	201	554	0.363	201	0.6	10.198	B
C-AB	1	329	0.003	1	0.0	10.968	B
C-A	41			41			
A-B	145			145			
A-C	21			21			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	6	466	0.014	6	0.0	7.836	A
B-A	165	560	0.294	165	0.4	9.138	A
C-AB	1	333	0.003	1	0.0	10.840	B
C-A	33			33			
A-B	119			119			
A-C	17			17			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	480	0.011	5	0.0	7.585	A
B-A	138	563	0.245	138	0.3	8.473	A
C-AB	1	336	0.002	1	0.0	10.747	B
C-A	28			28			
A-B	99			99			
A-C	14			14			

Junctions 10

PICADY 10 - Priority Intersection Module

For sales and distribution information, program advice and maintenance, contact TRL Software:
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Filename: JTC 4.j10
Path: W:\Projects\11078 - Natural Power - Codling Bank Wind Farm\05-Design\01-Calculations\Traffic\08 Junction 10\New Counts - jan2024
Report generation date: 09/05/2024 14:33:14

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2023 Baseflow													
Stream B-AC	0.0	6.37	0.03	A	1.41	A	734 % [Stream B-AC]	0.0	5.61	0.02	A	0.52	A	900 % []
Stream C-B	0.1	5.76	0.05	A				0.0	0.00	0.00	A			
	2026 Baseflow													
Stream B-AC	0.0	6.39	0.03	A	1.38	A	702 % [Stream B-AC]	0.0	5.62	0.03	A	0.53	A	900 % []
Stream C-B	0.1	5.78	0.05	A				0.0	0.00	0.00	A			
	2026 Baseflow + Committed Development													
Stream B-AC	0.0	6.52	0.03	A	1.02	A	564 % [Stream B-AC]	0.0	5.82	0.03	A	0.38	A	761 % [Stream B-AC]
Stream C-B	0.1	5.78	0.05	A				0.0	0.00	0.00	A			
	2026 Baseflow + Committed + Proposed Development - Scenario 1													
Stream B-AC	0.0	6.78	0.03	A	1.40	A	407 % [Stream B-AC]	0.1	5.81	0.08	A	0.89	A	475 % [Stream B-AC]
Stream C-B	0.1	5.95	0.10	A				0.0	0.00	0.00	A			
	2026 Baseflow + Committed + Proposed Development - Scenario 2													
Stream B-AC	0.0	7.11	0.04	A	2.36	A	317 % [Stream C-B]	0.2	6.30	0.16	A	1.94	A	297 % [Stream B-AC]
Stream C-B	0.2	6.50	0.19	A				0.0	10.79	0.00	B			
	2026 Baseflow + Committed + Proposed Development - Scenario 3													
Stream B-AC	0.0	6.77	0.03	A	1.56	A	458 % [Stream B-AC]	0.1	5.87	0.08	A	1.08	A	504 % [Stream B-AC]
Stream C-B	0.1	5.94	0.10	A				0.0	10.79	0.00	B			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

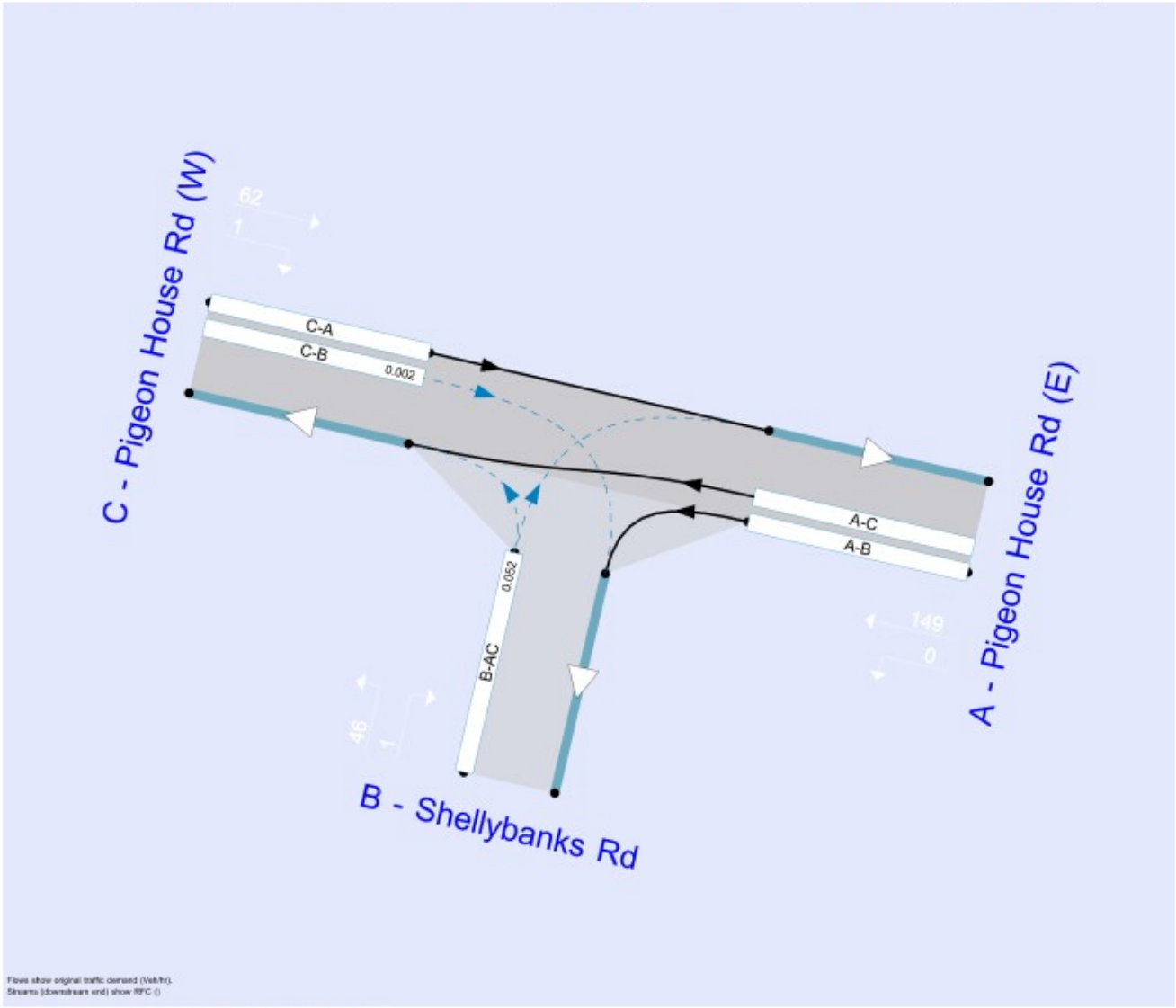
File summary

File Description

Title	Codling Wind Park
Location	Dublin
Site number	
Date	12/01/2024
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	
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	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 Baseflow	AM	ONE HOUR	07:30	09:00	15
D2	2026 Baseflow	AM	ONE HOUR	07:30	09:00	15
D3	2026 Baseflow + Committed Development	AM	ONE HOUR	07:30	09:00	15
D4	2026 Baseflow + Committed + Proposed Development - Scenario 1	AM	ONE HOUR	07:30	09:00	15
D5	2026 Baseflow + Committed + Proposed Development - Scenario 2	AM	ONE HOUR	07:30	09:00	15
D6	2026 Baseflow + Committed + Proposed Development - Scenario 3	AM	ONE HOUR	07:30	09:00	15
D7	2023 Baseflow	PM	ONE HOUR	17:15	18:45	15
D8	2026 Baseflow	PM	ONE HOUR	17:15	18:45	15
D9	2026 Baseflow + Committed Development	PM	ONE HOUR	17:15	18:45	15
D10	2026 Baseflow + Committed + Proposed Development - Scenario 1	PM	ONE HOUR	17:15	18:45	15
D11	2026 Baseflow + Committed + Proposed Development - Scenario 2	PM	ONE HOUR	17:15	18:45	15
D12	2026 Baseflow + Committed + Proposed Development - Scenario 3	PM	ONE HOUR	17:15	18:45	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023 Baseflow, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4		T-Junction	Two-way	Two-way	Two-way		1.41	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	734	Stream B-AC	1.41	A

Arms

Arms

Arm	Name	Description	Arm type
A	Pigeon House Rd (E)		Major
B	Shellybanks Rd		Minor
C	Pigeon House Rd (W)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Pigeon House Rd (W)	6.32			250.0		-

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Shellybanks Rd	One lane	4.60	20	32

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	580	0.104	0.263	0.166	0.376
B-C	747	0.113	0.286	-	-
C-B	719	0.275	0.275	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

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)
D1	2023 Baseflow	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (E)		✓	39	100.000
B - Shellybanks Rd		✓	16	100.000
C - Pigeon House Rd (W)		✓	107	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Pigeon House Rd (E)	B - Shellybanks Rd	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	1	38
	B - Shellybanks Rd	11	0	5
	C - Pigeon House Rd (W)	78	29	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Pigeon House Rd (E)	B - Shellybanks Rd	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	37
	B - Shellybanks Rd	0	0	0
	C - Pigeon House Rd (W)	27	7	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.03	6.37	0.0	A
C-A				
C-B	0.05	5.76	0.1	A
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	12	596	0.020	12	0.0	6.164	A
C-A	59			59			
C-B	22	661	0.033	22	0.0	5.625	A
A-B	0.75			0.75			
A-C	29			29			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	14	590	0.024	14	0.0	6.248	A
C-A	70			70			
C-B	26	659	0.040	26	0.0	5.682	A
A-B	0.90			0.90			
A-C	34			34			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	583	0.030	18	0.0	6.367	A
C-A	86			86			
C-B	32	657	0.049	32	0.1	5.761	A
A-B	1			1			
A-C	42			42			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	583	0.030	18	0.0	6.367	A
C-A	86			86			
C-B	32	657	0.049	32	0.1	5.761	A
A-B	1			1			
A-C	42			42			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	14	590	0.024	14	0.0	6.248	A
C-A	70			70			
C-B	26	659	0.040	26	0.0	5.683	A
A-B	0.90			0.90			
A-C	34			34			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	12	596	0.020	12	0.0	6.165	A
C-A	59			59			
C-B	22	661	0.033	22	0.0	5.628	A
A-B	0.75			0.75			
A-C	29			29			

2026 Baseflow, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4		T-Junction	Two-way	Two-way	Two-way		1.38	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	702	Stream B-AC	1.38	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)
D2	2026 Baseflow	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (E)		✓	41	100.000
B - Shellybanks Rd		✓	16	100.000
C - Pigeon House Rd (W)		✓	112	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Pigeon House Rd (E)	B - Shellybanks Rd	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	1	40
	B - Shellybanks Rd	11	0	5
	C - Pigeon House Rd (W)	82	30	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Pigeon House Rd (E)	B - Shellybanks Rd	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	38
	B - Shellybanks Rd	0	0	0
	C - Pigeon House Rd (W)	28	7	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.03	6.39	0.0	A
C-A				
C-B	0.05	5.78	0.1	A
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	12	594	0.020	12	0.0	6.180	A
C-A	62			62			
C-B	23	661	0.034	22	0.0	5.637	A
A-B	0.75			0.75			
A-C	30			30			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	14	589	0.024	14	0.0	6.267	A
C-A	74			74			
C-B	27	659	0.041	27	0.0	5.697	A
A-B	0.90			0.90			
A-C	36			36			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	581	0.030	18	0.0	6.391	A
C-A	90			90			
C-B	33	656	0.050	33	0.1	5.779	A
A-B	1			1			
A-C	44			44			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	581	0.030	18	0.0	6.392	A
C-A	90			90			
C-B	33	656	0.050	33	0.1	5.779	A
A-B	1			1			
A-C	44			44			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	14	589	0.024	14	0.0	6.268	A
C-A	74			74			
C-B	27	659	0.041	27	0.0	5.698	A
A-B	0.90			0.90			
A-C	36			36			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	12	594	0.020	12	0.0	6.183	A
C-A	62			62			
C-B	23	661	0.034	23	0.0	5.642	A
A-B	0.75			0.75			
A-C	30			30			

2026 Baseflow + Committed Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4		T-Junction	Two-way	Two-way	Two-way		1.02	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	564	Stream B-AC	1.02	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)
D3	2026 Baseflow + Committed Development	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (E)		✓	41	100.000
B - Shellybanks Rd		✓	16	100.000
C - Pigeon House Rd (W)		✓	177	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Pigeon House Rd (E)	B - Shellybanks Rd	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	1	40
	B - Shellybanks Rd	11	0	5
	C - Pigeon House Rd (W)	147	30	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Pigeon House Rd (E)	B - Shellybanks Rd	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	38
	B - Shellybanks Rd	0	0	0
	C - Pigeon House Rd (W)	22	7	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.03	6.52	0.0	A
C-A				
C-B	0.05	5.78	0.1	A
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	12	587	0.021	12	0.0	6.261	A
C-A	111			111			
C-B	23	661	0.034	22	0.0	5.637	A
A-B	0.75			0.75			
A-C	30			30			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	14	580	0.025	14	0.0	6.368	A
C-A	132			132			
C-B	27	659	0.041	27	0.0	5.697	A
A-B	0.90			0.90			
A-C	36			36			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	570	0.031	18	0.0	6.521	A
C-A	162			162			
C-B	33	656	0.050	33	0.1	5.779	A
A-B	1			1			
A-C	44			44			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	570	0.031	18	0.0	6.521	A
C-A	162			162			
C-B	33	656	0.050	33	0.1	5.779	A
A-B	1			1			
A-C	44			44			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	14	580	0.025	14	0.0	6.371	A
C-A	132			132			
C-B	27	659	0.041	27	0.0	5.698	A
A-B	0.90			0.90			
A-C	36			36			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	12	587	0.021	12	0.0	6.262	A
C-A	111			111			
C-B	23	661	0.034	23	0.0	5.642	A
A-B	0.75			0.75			
A-C	30			30			

2026 Baseflow + Committed + Proposed Development - Scenario 1, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4		T-Junction	Two-way	Two-way	Two-way		1.40	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	407	Stream B-AC	1.40	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)
D4	2026 Baseflow + Committed + Proposed Development - Scenario 1	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (E)		✓	51	100.000
B - Shellybanks Rd		✓	16	100.000
C - Pigeon House Rd (W)		✓	221	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Pigeon House Rd (E)	B - Shellybanks Rd	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	1	50
	B - Shellybanks Rd	11	0	5
	C - Pigeon House Rd (W)	157	64	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Pigeon House Rd (E)	B - Shellybanks Rd	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	50
	B - Shellybanks Rd	0	0	0
	C - Pigeon House Rd (W)	27	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.03	6.78	0.0	A
C-A				
C-B	0.10	5.95	0.1	A
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	12	573	0.021	12	0.0	6.418	A
C-A	118			118			
C-B	48	683	0.071	48	0.1	5.669	A
A-B	0.75			0.75			
A-C	38			38			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	14	563	0.026	14	0.0	6.564	A
C-A	141			141			
C-B	58	680	0.085	57	0.1	5.786	A
A-B	0.90			0.90			
A-C	45			45			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	549	0.032	18	0.0	6.777	A
C-A	173			173			
C-B	70	675	0.104	70	0.1	5.949	A
A-B	1			1			
A-C	55			55			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	549	0.032	18	0.0	6.778	A
C-A	173			173			
C-B	70	675	0.104	70	0.1	5.949	A
A-B	1			1			
A-C	55			55			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	14	563	0.026	14	0.0	6.568	A
C-A	141			141			
C-B	58	680	0.085	58	0.1	5.790	A
A-B	0.90			0.90			
A-C	45			45			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	12	573	0.021	12	0.0	6.420	A
C-A	118			118			
C-B	48	683	0.071	48	0.1	5.675	A
A-B	0.75			0.75			
A-C	38			38			

2026 Baseflow + Committed + Proposed Development - Scenario 2, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4		T-Junction	Two-way	Two-way	Two-way		2.36	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	317	Stream C-B	2.36	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)
D5	2026 Baseflow + Committed + Proposed Development - Scenario 2	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (E)		✓	43	100.000
B - Shellybanks Rd		✓	17	100.000
C - Pigeon House Rd (W)		✓	264	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Pigeon House Rd (E)	B - Shellybanks Rd	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	1	42
	B - Shellybanks Rd	11	0	6
	C - Pigeon House Rd (W)	149	115	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Pigeon House Rd (E)	B - Shellybanks Rd	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	41
	B - Shellybanks Rd	0	0	15
	C - Pigeon House Rd (W)	23	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.04	7.11	0.0	A
C-A				
C-B	0.19	6.50	0.2	A
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	13	550	0.023	13	0.0	6.695	A
C-A	112			112			
C-B	87	686	0.126	86	0.1	5.998	A
A-B	0.75			0.75			
A-C	32			32			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	540	0.028	15	0.0	6.863	A
C-A	134			134			
C-B	103	683	0.151	103	0.2	6.203	A
A-B	0.90			0.90			
A-C	38			38			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	19	525	0.036	19	0.0	7.111	A
C-A	164			164			
C-B	127	680	0.186	126	0.2	6.500	A
A-B	1			1			
A-C	46			46			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	19	525	0.036	19	0.0	7.112	A
C-A	164			164			
C-B	127	680	0.186	127	0.2	6.503	A
A-B	1			1			
A-C	46			46			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	540	0.028	15	0.0	6.865	A
C-A	134			134			
C-B	103	683	0.151	104	0.2	6.212	A
A-B	0.90			0.90			
A-C	38			38			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	13	550	0.023	13	0.0	6.701	A
C-A	112			112			
C-B	87	686	0.126	87	0.1	6.013	A
A-B	0.75			0.75			
A-C	32			32			

2026 Baseflow + Committed + Proposed Development - Scenario 3, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4		T-Junction	Two-way	Two-way	Two-way		1.56	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	458	Stream B-AC	1.56	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)
D6	2026 Baseflow + Committed + Proposed Development - Scenario 3	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (E)		✓	42	100.000
B - Shellybanks Rd		✓	17	100.000
C - Pigeon House Rd (W)		✓	210	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Pigeon House Rd (E)	B - Shellybanks Rd	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	1	41
	B - Shellybanks Rd	11	0	6
	C - Pigeon House Rd (W)	148	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Pigeon House Rd (E)	B - Shellybanks Rd	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	40
	B - Shellybanks Rd	0	0	10
	C - Pigeon House Rd (W)	22	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.03	6.77	0.0	A
C-A				
C-B	0.10	5.94	0.1	A
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	13	570	0.022	13	0.0	6.459	A
C-A	111			111			
C-B	47	679	0.069	46	0.1	5.683	A
A-B	0.75			0.75			
A-C	31			31			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	562	0.027	15	0.0	6.587	A
C-A	133			133			
C-B	56	677	0.082	56	0.1	5.791	A
A-B	0.90			0.90			
A-C	37			37			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	19	550	0.034	19	0.0	6.772	A
C-A	163			163			
C-B	68	674	0.101	68	0.1	5.941	A
A-B	1			1			
A-C	45			45			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	19	550	0.034	19	0.0	6.773	A
C-A	163			163			
C-B	68	674	0.101	68	0.1	5.941	A
A-B	1			1			
A-C	45			45			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	562	0.027	15	0.0	6.591	A
C-A	133			133			
C-B	56	677	0.082	56	0.1	5.793	A
A-B	0.90			0.90			
A-C	37			37			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	13	570	0.022	13	0.0	6.463	A
C-A	111			111			
C-B	47	679	0.069	47	0.1	5.689	A
A-B	0.75			0.75			
A-C	31			31			

2023 Baseflow , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4		T-Junction	Two-way	Two-way	Two-way		0.52	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		0.52	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)
D7	2023 Baseflow	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (E)		✓	79	100.000
B - Shellybanks Rd		✓	14	100.000
C - Pigeon House Rd (W)		✓	58	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Pigeon House Rd (E)	B - Shellybanks Rd	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	79
	B - Shellybanks Rd	1	0	13
	C - Pigeon House Rd (W)	58	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Pigeon House Rd (E)	B - Shellybanks Rd	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	5
	B - Shellybanks Rd	0	0	8
	C - Pigeon House Rd (W)	12	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.02	5.61	0.0	A
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	665	0.016	10	0.0	5.498	A
C-A	44			44			
C-B	0	702	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	59			59			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	13	662	0.019	13	0.0	5.544	A
C-A	52			52			
C-B	0	698	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	71			71			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	657	0.023	15	0.0	5.609	A
C-A	64			64			
C-B	0	694	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	87			87			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	657	0.023	15	0.0	5.609	A
C-A	64			64			
C-B	0	694	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	87			87			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	13	662	0.019	13	0.0	5.546	A
C-A	52			52			
C-B	0	698	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	71			71			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	665	0.016	11	0.0	5.500	A
C-A	44			44			
C-B	0	702	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	59			59			

2026 Baseflow , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4		T-Junction	Two-way	Two-way	Two-way		0.53	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		0.53	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)
D8	2026 Baseflow	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (E)		✓	82	100.000
B - Shellybanks Rd		✓	15	100.000
C - Pigeon House Rd (W)		✓	61	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Pigeon House Rd (E)	B - Shellybanks Rd	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	82
	B - Shellybanks Rd	1	0	14
	C - Pigeon House Rd (W)	61	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Pigeon House Rd (E)	B - Shellybanks Rd	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	5
	B - Shellybanks Rd	0	0	8
	C - Pigeon House Rd (W)	13	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.03	5.62	0.0	A
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	665	0.017	11	0.0	5.504	A
C-A	46			46			
C-B	0	701	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	62			62			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	13	662	0.020	13	0.0	5.553	A
C-A	55			55			
C-B	0	697	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	74			74			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	17	657	0.025	16	0.0	5.621	A
C-A	67			67			
C-B	0	693	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	90			90			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	17	657	0.025	17	0.0	5.621	A
C-A	67			67			
C-B	0	693	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	90			90			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	13	662	0.020	14	0.0	5.555	A
C-A	55			55			
C-B	0	697	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	74			74			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	665	0.017	11	0.0	5.507	A
C-A	46			46			
C-B	0	701	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	62			62			

2026 Baseflow + Committed Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4		T-Junction	Two-way	Two-way	Two-way		0.38	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	761	Stream B-AC	0.38	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)
D9	2026 Baseflow + Committed Development	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (E)		✓	147	100.000
B - Shellybanks Rd		✓	15	100.000
C - Pigeon House Rd (W)		✓	61	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Pigeon House Rd (E)	B - Shellybanks Rd	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	147
	B - Shellybanks Rd	1	0	14
	C - Pigeon House Rd (W)	61	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Pigeon House Rd (E)	B - Shellybanks Rd	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	9
	B - Shellybanks Rd	0	0	8
	C - Pigeon House Rd (W)	13	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.03	5.82	0.0	A
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	650	0.017	11	0.0	5.632	A
C-A	46			46			
C-B	0	686	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	111			111			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	13	644	0.021	13	0.0	5.708	A
C-A	55			55			
C-B	0	679	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	132			132			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	17	635	0.026	16	0.0	5.817	A
C-A	67			67			
C-B	0	670	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	162			162			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	17	635	0.026	17	0.0	5.817	A
C-A	67			67			
C-B	0	670	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	162			162			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	13	644	0.021	14	0.0	5.711	A
C-A	55			55			
C-B	0	679	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	132			132			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	650	0.017	11	0.0	5.634	A
C-A	46			46			
C-B	0	686	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	111			111			

2026 Baseflow + Committed + Proposed Development - Scenario 1, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4		T-Junction	Two-way	Two-way	Two-way		0.89	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	475	Stream B-AC	0.89	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)
D10	2026 Baseflow + Committed + Proposed Development - Scenario 1	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (E)		✓	157	100.000
B - Shellybanks Rd		✓	48	100.000
C - Pigeon House Rd (W)		✓	71	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Pigeon House Rd (E)	B - Shellybanks Rd	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	157
	B - Shellybanks Rd	1	0	47
	C - Pigeon House Rd (W)	71	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Pigeon House Rd (E)	B - Shellybanks Rd	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	15
	B - Shellybanks Rd	0	0	2
	C - Pigeon House Rd (W)	25	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.08	5.81	0.1	A
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	36	690	0.052	36	0.1	5.500	A
C-A	53			53			
C-B	0	681	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	118			118			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	43	683	0.063	43	0.1	5.627	A
C-A	64			64			
C-B	0	674	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	141			141			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	53	672	0.079	53	0.1	5.809	A
C-A	78			78			
C-B	0	664	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	173			173			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	53	672	0.079	53	0.1	5.809	A
C-A	78			78			
C-B	0	664	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	173			173			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	43	683	0.063	43	0.1	5.630	A
C-A	64			64			
C-B	0	674	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	141			141			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	36	690	0.052	36	0.1	5.503	A
C-A	53			53			
C-B	0	681	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	118			118			

2026 Baseflow + Committed + Proposed Development - Scenario 2, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4		T-Junction	Two-way	Two-way	Two-way		1.94	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	297	Stream B-AC	1.94	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)
D11	2026 Baseflow + Committed + Proposed Development - Scenario 2	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (E)		✓	149	100.000
B - Shellybanks Rd		✓	99	100.000
C - Pigeon House Rd (W)		✓	64	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Pigeon House Rd (E)	B - Shellybanks Rd	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	149
	B - Shellybanks Rd	1	0	98
	C - Pigeon House Rd (W)	63	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Pigeon House Rd (E)	B - Shellybanks Rd	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	10
	B - Shellybanks Rd	0	0	2
	C - Pigeon House Rd (W)	15	100	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.16	6.30	0.2	A
C-A				
C-B	0.00	10.79	0.0	B
A-B				
A-C				

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	696	0.107	74	0.1	5.785	A
C-A	47			47			
C-B	1	342	0.002	1	0.0	10.535	B
A-B	0			0			
A-C	112			112			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	89	689	0.129	89	0.1	5.996	A
C-A	57			57			
C-B	1	339	0.003	1	0.0	10.642	B
A-B	0			0			
A-C	134			134			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	109	680	0.160	109	0.2	6.301	A
C-A	69			69			
C-B	1	335	0.003	1	0.0	10.794	B
A-B	0			0			
A-C	164			164			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	109	680	0.160	109	0.2	6.304	A
C-A	69			69			
C-B	1	335	0.003	1	0.0	10.794	B
A-B	0			0			
A-C	164			164			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	89	689	0.129	89	0.1	5.999	A
C-A	57			57			
C-B	1	339	0.003	1	0.0	10.644	B
A-B	0			0			
A-C	134			134			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	696	0.107	75	0.1	5.793	A
C-A	47			47			
C-B	1	342	0.002	1	0.0	10.537	B
A-B	0			0			
A-C	112			112			

2026 Baseflow + Committed + Proposed Development - Scenario 3, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4		T-Junction	Two-way	Two-way	Two-way		1.08	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	504	Stream B-AC	1.08	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)
D12	2026 Baseflow + Committed + Proposed Development - Scenario 3	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (E)		✓	149	100.000
B - Shellybanks Rd		✓	47	100.000
C - Pigeon House Rd (W)		✓	63	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Pigeon House Rd (E)	B - Shellybanks Rd	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	149
	B - Shellybanks Rd	1	0	46
	C - Pigeon House Rd (W)	62	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Pigeon House Rd (E)	B - Shellybanks Rd	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	10
	B - Shellybanks Rd	0	0	4
	C - Pigeon House Rd (W)	14	100	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.08	5.87	0.1	A
C-A				
C-B	0.00	10.79	0.0	B
A-B				
A-C				

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	35	681	0.052	35	0.1	5.575	A
C-A	47			47			
C-B	1	342	0.002	1	0.0	10.535	B
A-B	0			0			
A-C	112			112			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	42	674	0.063	42	0.1	5.696	A
C-A	56			56			
C-B	1	339	0.003	1	0.0	10.642	B
A-B	0			0			
A-C	134			134			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	52	665	0.078	52	0.1	5.870	A
C-A	68			68			
C-B	1	335	0.003	1	0.0	10.794	B
A-B	0			0			
A-C	164			164			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	52	665	0.078	52	0.1	5.870	A
C-A	68			68			
C-B	1	335	0.003	1	0.0	10.794	B
A-B	0			0			
A-C	164			164			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	42	674	0.063	42	0.1	5.698	A
C-A	56			56			
C-B	1	339	0.003	1	0.0	10.644	B
A-B	0			0			
A-C	134			134			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	35	681	0.052	35	0.1	5.578	A
C-A	47			47			
C-B	1	342	0.002	1	0.0	10.535	B
A-B	0			0			
A-C	112			112			

Junctions 10

PICADY 10 - Priority Intersection Module

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Filename: JTC 5.j10
Path: W:\Projects\11078 - Natural Power - Codling Bank Wind Farm\05-Design\01-Calculations\Traffic\08 Junction 10\New Counts - jan2024
Report generation date: 09/05/2024 14:57:13

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2023 Baseflow													
Stream B-ACD	0.0	0.00	0.00	A	2.52	A	900 % []	0.0	0.00	0.00	A	0.85	A	900 % []
Stream A-D	0.0	10.86	0.04	B				0.0	10.64	0.02	B			
Stream D-ABC	0.0	9.15	0.02	A				0.0	0.00	0.00	A			
Stream C-B	0.0	0.00	0.00	A				0.0	0.00	0.00	A			
	2026 Baseflow													
Stream B-ACD	0.0	0.00	0.00	A	2.60	A	900 % []	0.0	0.00	0.00	A	0.83	A	900 % []
Stream A-D	0.0	10.90	0.04	B				0.0	10.71	0.02	B			
Stream D-ABC	0.0	9.24	0.03	A				0.0	0.00	0.00	A			
Stream C-B	0.0	0.00	0.00	A				0.0	0.00	0.00	A			
	2026 Baseflow + Committed Development													
Stream B-ACD	0.0	0.00	0.00	A	1.81	A	900 % []	0.0	0.00	0.00	A	0.57	A	842 % [Stream A-D]
Stream A-D	0.0	10.90	0.04	B				0.0	11.04	0.02	B			
Stream D-ABC	0.0	9.24	0.03	A				0.0	0.00	0.00	A			
Stream C-B	0.0	0.00	0.00	A				0.0	0.00	0.00	A			
	2026 Baseflow + Committed + Proposed Development - Scenario 1													
Stream B-ACD	0.0	14.41	0.05	B	2.66	A	325 % [Stream B-ACD]	0.1	12.44	0.05	B	1.66	A	441 % [Stream B-ACD]
Stream A-D	0.0	10.90	0.04	B				0.0	11.04	0.02	B			
Stream D-ABC	0.0	9.24	0.03	A				0.0	0.00	0.00	A			
Stream C-B	0.0	0.00	0.00	A				0.0	0.00	0.00	A			
	2026 Baseflow + Committed + Proposed Development - Scenario 2													
Stream B-ACD	0.0	0.00	0.00	A	1.79	A	900 % []	0.0	9.91	0.02	A	0.92	A	716 % [Stream B-ACD]
Stream A-D	0.0	10.90	0.04	B				0.0	11.04	0.02	B			
Stream D-ABC	0.0	9.24	0.03	A				0.0	0.00	0.00	A			
Stream C-B	0.0	0.00	0.00	A				0.0	0.00	0.00	A			
	2026 Baseflow + Committed + Proposed Development - Scenario 3													
Stream B-ACD	0.0	0.00	0.00	A	1.80	A	900 % []	0.0	9.66	0.01	A	0.68	A	615 % [Stream A-D]
Stream A-D	0.0	10.90	0.04	B				0.0	11.34	0.02	B			
Stream D-ABC	0.0	9.24	0.03	A				0.0	0.00	0.00	A			
Stream C-B	0.0	0.00	0.00	A				0.0	0.00	0.00	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

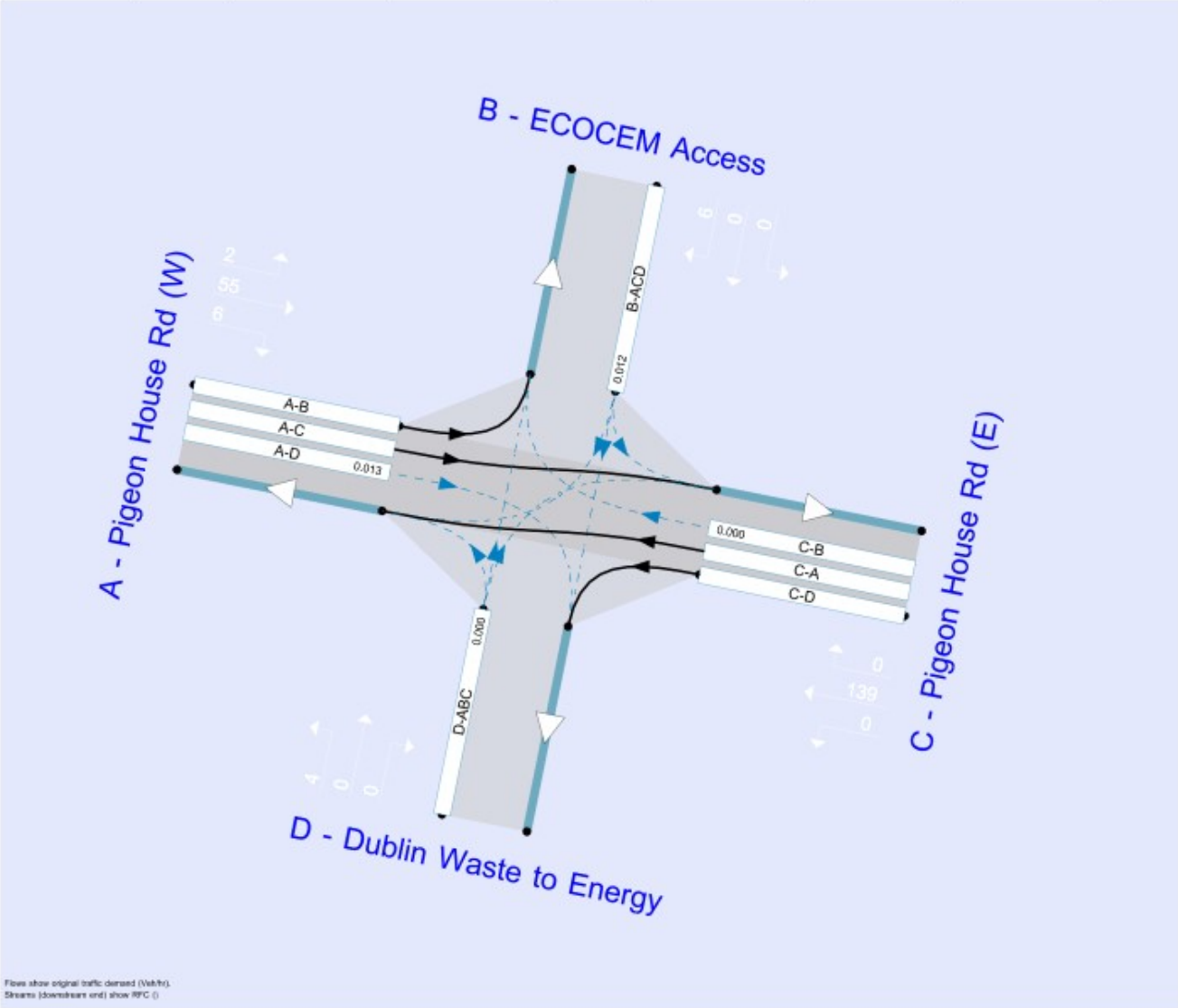
File summary

File Description

Title	Codling Wind Park
Location	Dublin
Site number	
Date	12/01/2024
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	
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	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 Baseflow	AM	ONE HOUR	07:30	09:00	15
D2	2026 Baseflow	AM	ONE HOUR	07:30	09:00	15
D3	2026 Baseflow + Committed Development	AM	ONE HOUR	07:30	09:00	15
D4	2026 Baseflow + Committed + Proposed Development - Scenario 1	AM	ONE HOUR	07:30	09:00	15
D5	2026 Baseflow + Committed + Proposed Development - Scenario 2	AM	ONE HOUR	07:30	09:00	15
D6	2026 Baseflow + Committed + Proposed Development - Scenario 3	AM	ONE HOUR	07:30	09:00	15
D7	2023 Baseflow	PM	ONE HOUR	17:15	18:45	15
D8	2026 Baseflow	PM	ONE HOUR	17:15	18:45	15
D9	2026 Baseflow + Committed Development	PM	ONE HOUR	17:15	18:45	15
D10	2026 Baseflow + Committed + Proposed Development - Scenario 1	PM	ONE HOUR	17:15	18:45	15
D11	2026 Baseflow + Committed + Proposed Development - Scenario 2	PM	ONE HOUR	17:15	18:45	15
D12	2026 Baseflow + Committed + Proposed Development - Scenario 3	PM	ONE HOUR	17:15	18:45	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023 Baseflow, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5		Crossroads	Two-way	Two-way	Two-way	Two-way		2.52	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		2.52	A

Arms

Arms

Arm	Name	Description	Arm type
A	Pigeon House Rd (W)		Major
B	ECOCEM Access		Minor
C	Pigeon House Rd (E)		Major
D	Dublin Waste to Energy		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Pigeon House Rd (W)	8.00			130.0		-
C - Pigeon House Rd (E)	8.00			250.0		-

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - ECOCEM Access	One lane	5.00	22	17
D - Dublin Waste to Energy	One lane	4.27	47	35

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	649	-	-	-	-	-	-	0.230	0.328	0.230	-	-	-
B-A	592	0.098	0.249	0.249	-	-	-	0.157	0.355	-	0.249	0.249	0.124
B-C	762	0.107	0.269	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	592	0.098	0.249	0.249	-	-	-	0.157	0.355	0.157	-	-	-
B-D, offside lane	592	0.098	0.249	0.249	-	-	-	0.157	0.355	0.157	-	-	-
C-B	719	0.254	0.254	0.363	-	-	-	-	-	-	-	-	-
D-A	728	-	-	-	-	-	-	0.258	-	0.102	-	-	-
D-B, nearside lane	575	0.152	0.152	0.345	-	-	-	0.242	0.242	0.096	-	-	-
D-B, offside lane	575	0.152	0.152	0.345	-	-	-	0.242	0.242	0.096	-	-	-
D-C	575	-	0.152	0.345	0.121	0.242	0.242	0.242	0.242	0.096	-	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

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)
D1	2023 Baseflow	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (W)		✓	88	100.000
B - ECOCEM Access		✓	1	100.000
C - Pigeon House Rd (E)		✓	30	100.000
D - Dublin Waste to Energy		✓	9	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Pigeon House Rd (W)	B - ECOCEM Access	C - Pigeon House Rd (E)	D - Dublin Waste to Energy
From	A - Pigeon House Rd (W)	0	5	70	13
	B - ECOCEM Access	1	0	0	0
	C - Pigeon House Rd (E)	30	0	0	0
	D - Dublin Waste to Energy	9	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Pigeon House Rd (W)	B - ECOCEM Access	C - Pigeon House Rd (E)	D - Dublin Waste to Energy
From	A - Pigeon House Rd (W)	0	20	13	85
	B - ECOCEM Access	100	0	0	0
	C - Pigeon House Rd (E)	23	0	0	0
	D - Dublin Waste to Energy	78	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.00	0.00	0.0	A
A-B				
A-C				
A-D	0.04	10.86	0.0	B
D-ABC	0.02	9.15	0.0	A
C-D				
C-A				
C-B	0.00	0.00	0.0	A

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	482	0.000	0	0.0	0.000	A
A-B	4			4			
A-C	53			53			
A-D	10	347	0.028	10	0.0	10.653	B
D-ABC	7	405	0.017	7	0.0	9.038	A
C-D	0			0			
C-A	23			23			
C-B	0	696	0.000	0	0.0	0.000	A

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	478	0.000	0	0.0	0.000	A
A-B	4			4			
A-C	63			63			
A-D	12	347	0.034	12	0.0	10.741	B
D-ABC	8	404	0.020	8	0.0	9.087	A
C-D	0			0			
C-A	27			27			
C-B	0	691	0.000	0	0.0	0.000	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	473	0.000	0	0.0	0.000	A
A-B	6			6			
A-C	77			77			
A-D	14	346	0.041	14	0.0	10.854	B
D-ABC	10	403	0.025	10	0.0	9.154	A
C-D	0			0			
C-A	33			33			
C-B	0	685	0.000	0	0.0	0.000	A

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	473	0.000	0	0.0	0.000	A
A-B	6			6			
A-C	77			77			
A-D	14	346	0.041	14	0.0	10.856	B
D-ABC	10	403	0.025	10	0.0	9.154	A
C-D	0			0			
C-A	33			33			
C-B	0	685	0.000	0	0.0	0.000	A

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	478	0.000	0	0.0	0.000	A
A-B	4			4			
A-C	63			63			
A-D	12	347	0.034	12	0.0	10.745	B
D-ABC	8	404	0.020	8	0.0	9.090	A
C-D	0			0			
C-A	27			27			
C-B	0	691	0.000	0	0.0	0.000	A

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	482	0.000	0	0.0	0.000	A
A-B	4			4			
A-C	53			53			
A-D	10	347	0.028	10	0.0	10.661	B
D-ABC	7	405	0.017	7	0.0	9.042	A
C-D	0			0			
C-A	23			23			
C-B	0	696	0.000	0	0.0	0.000	A

2026 Baseflow, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5		Crossroads	Two-way	Two-way	Two-way	Two-way		2.60	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		2.60	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)
D2	2026 Baseflow	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (W)		✓	92	100.000
B - ECOCEM Access		✓	1	100.000
C - Pigeon House Rd (E)		✓	32	100.000
D - Dublin Waste to Energy		✓	10	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Pigeon House Rd (W)	B - ECOCEM Access	C - Pigeon House Rd (E)	D - Dublin Waste to Energy
From	A - Pigeon House Rd (W)	0	5	73	14
	B - ECOCEM Access	1	0	0	0
	C - Pigeon House Rd (E)	32	0	0	0
	D - Dublin Waste to Energy	10	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Pigeon House Rd (W)	B - ECOCEM Access	C - Pigeon House Rd (E)	D - Dublin Waste to Energy
From	A - Pigeon House Rd (W)	0	21	13	85
	B - ECOCEM Access	100	0	0	0
	C - Pigeon House Rd (E)	24	0	0	0
	D - Dublin Waste to Energy	79	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.00	0.00	0.0	A
A-B				
A-C				
A-D	0.04	10.90	0.0	B
D-ABC	0.03	9.24	0.0	A
C-D				
C-A				
C-B	0.00	0.00	0.0	A

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	481	0.000	0	0.0	0.000	A
A-B	4			4			
A-C	55			55			
A-D	11	347	0.030	10	0.0	10.685	B
D-ABC	8	402	0.019	7	0.0	9.115	A
C-D	0			0			
C-A	24			24			
C-B	0	695	0.000	0	0.0	0.000	A

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	477	0.000	0	0.0	0.000	A
A-B	4			4			
A-C	66			66			
A-D	13	347	0.036	13	0.0	10.780	B
D-ABC	9	402	0.022	9	0.0	9.169	A
C-D	0			0			
C-A	29			29			
C-B	0	690	0.000	0	0.0	0.000	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	472	0.000	0	0.0	0.000	A
A-B	6			6			
A-C	80			80			
A-D	15	346	0.045	15	0.0	10.902	B
D-ABC	11	400	0.028	11	0.0	9.244	A
C-D	0			0			
C-A	35			35			
C-B	0	683	0.000	0	0.0	0.000	A

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	472	0.000	0	0.0	0.000	A
A-B	6			6			
A-C	80			80			
A-D	15	346	0.045	15	0.0	10.905	B
D-ABC	11	400	0.028	11	0.0	9.244	A
C-D	0			0			
C-A	35			35			
C-B	0	683	0.000	0	0.0	0.000	A

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	477	0.000	0	0.0	0.000	A
A-B	4			4			
A-C	66			66			
A-D	13	347	0.036	13	0.0	10.784	B
D-ABC	9	402	0.022	9	0.0	9.172	A
C-D	0			0			
C-A	29			29			
C-B	0	690	0.000	0	0.0	0.000	A

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	481	0.000	0	0.0	0.000	A
A-B	4			4			
A-C	55			55			
A-D	11	347	0.030	11	0.0	10.693	B
D-ABC	8	402	0.019	8	0.0	9.116	A
C-D	0			0			
C-A	24			24			
C-B	0	695	0.000	0	0.0	0.000	A

2026 Baseflow + Committed Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5		Crossroads	Two-way	Two-way	Two-way	Two-way		1.81	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		1.81	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)
D3	2026 Baseflow + Committed Development	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (W)		✓	157	100.000
B - ECOCEM Access		✓	1	100.000
C - Pigeon House Rd (E)		✓	32	100.000
D - Dublin Waste to Energy		✓	10	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Pigeon House Rd (W)	B - ECOCEM Access	C - Pigeon House Rd (E)	D - Dublin Waste to Energy
From	A - Pigeon House Rd (W)	0	5	138	14
	B - ECOCEM Access	1	0	0	0
	C - Pigeon House Rd (E)	32	0	0	0
	D - Dublin Waste to Energy	10	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Pigeon House Rd (W)	B - ECOCEM Access	C - Pigeon House Rd (E)	D - Dublin Waste to Energy
From	A - Pigeon House Rd (W)	0	21	14	85
	B - ECOCEM Access	100	0	0	0
	C - Pigeon House Rd (E)	24	0	0	0
	D - Dublin Waste to Energy	79	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.00	0.00	0.0	A
A-B				
A-C				
A-D	0.04	10.90	0.0	B
D-ABC	0.03	9.24	0.0	A
C-D				
C-A				
C-B	0.00	0.00	0.0	A

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	470	0.000	0	0.0	0.000	A
A-B	4			4			
A-C	104			104			
A-D	11	347	0.030	10	0.0	10.685	B
D-ABC	8	402	0.019	7	0.0	9.115	A
C-D	0			0			
C-A	24			24			
C-B	0	680	0.000	0	0.0	0.000	A

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	463	0.000	0	0.0	0.000	A
A-B	4			4			
A-C	124			124			
A-D	13	347	0.036	13	0.0	10.780	B
D-ABC	9	402	0.022	9	0.0	9.169	A
C-D	0			0			
C-A	29			29			
C-B	0	673	0.000	0	0.0	0.000	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	455	0.000	0	0.0	0.000	A
A-B	6			6			
A-C	152			152			
A-D	15	346	0.045	15	0.0	10.902	B
D-ABC	11	400	0.028	11	0.0	9.244	A
C-D	0			0			
C-A	35			35			
C-B	0	663	0.000	0	0.0	0.000	A

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	455	0.000	0	0.0	0.000	A
A-B	6			6			
A-C	152			152			
A-D	15	346	0.045	15	0.0	10.905	B
D-ABC	11	400	0.028	11	0.0	9.244	A
C-D	0			0			
C-A	35			35			
C-B	0	663	0.000	0	0.0	0.000	A

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	463	0.000	0	0.0	0.000	A
A-B	4			4			
A-C	124			124			
A-D	13	347	0.036	13	0.0	10.784	B
D-ABC	9	402	0.022	9	0.0	9.172	A
C-D	0			0			
C-A	29			29			
C-B	0	673	0.000	0	0.0	0.000	A

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	470	0.000	0	0.0	0.000	A
A-B	4			4			
A-C	104			104			
A-D	11	347	0.030	11	0.0	10.693	B
D-ABC	8	402	0.019	8	0.0	9.116	A
C-D	0			0			
C-A	24			24			
C-B	0	680	0.000	0	0.0	0.000	A

2026 Baseflow + Committed + Proposed Development - Scenario 1, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5		Crossroads	Two-way	Two-way	Two-way	Two-way		2.66	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	325	Stream B-ACD	2.66	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)
D4	2026 Baseflow + Committed + Proposed Development - Scenario 1	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (W)		✓	167	100.000
B - ECOCEM Access		✓	11	100.000
C - Pigeon House Rd (E)		✓	32	100.000
D - Dublin Waste to Energy		✓	10	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Pigeon House Rd (W)	B - ECOCEM Access	C - Pigeon House Rd (E)	D - Dublin Waste to Energy
From	A - Pigeon House Rd (W)	0	5	148	14
	B - ECOCEM Access	11	0	0	0
	C - Pigeon House Rd (E)	32	0	0	0
	D - Dublin Waste to Energy	10	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Pigeon House Rd (W)	B - ECOCEM Access	C - Pigeon House Rd (E)	D - Dublin Waste to Energy
From	A - Pigeon House Rd (W)	0	21	19	85
	B - ECOCEM Access	100	0	0	0
	C - Pigeon House Rd (E)	24	0	0	0
	D - Dublin Waste to Energy	79	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.05	14.41	0.0	B
A-B				
A-C				
A-D	0.04	10.90	0.0	B
D-ABC	0.03	9.24	0.0	A
C-D				
C-A				
C-B	0.00	0.00	0.0	A

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	8	273	0.030	8	0.0	13.600	B
A-B	4			4			
A-C	111			111			
A-D	11	347	0.030	10	0.0	10.685	B
D-ABC	8	402	0.019	7	0.0	9.115	A
C-D	0			0			
C-A	24			24			
C-B	0	677	0.000	0	0.0	0.000	A

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	10	268	0.037	10	0.0	13.931	B
A-B	4			4			
A-C	133			133			
A-D	13	347	0.036	13	0.0	10.780	B
D-ABC	9	402	0.022	9	0.0	9.169	A
C-D	0			0			
C-A	29			29			
C-B	0	669	0.000	0	0.0	0.000	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	12	262	0.046	12	0.0	14.402	B
A-B	6			6			
A-C	163			163			
A-D	15	346	0.045	15	0.0	10.902	B
D-ABC	11	400	0.028	11	0.0	9.244	A
C-D	0			0			
C-A	35			35			
C-B	0	657	0.000	0	0.0	0.000	A

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	12	262	0.046	12	0.0	14.406	B
A-B	6			6			
A-C	163			163			
A-D	15	346	0.045	15	0.0	10.905	B
D-ABC	11	400	0.028	11	0.0	9.244	A
C-D	0			0			
C-A	35			35			
C-B	0	657	0.000	0	0.0	0.000	A

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	10	268	0.037	10	0.0	13.939	B
A-B	4			4			
A-C	133			133			
A-D	13	347	0.036	13	0.0	10.782	B
D-ABC	9	402	0.022	9	0.0	9.172	A
C-D	0			0			
C-A	29			29			
C-B	0	669	0.000	0	0.0	0.000	A

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	8	273	0.030	8	0.0	13.619	B
A-B	4			4			
A-C	111			111			
A-D	11	347	0.030	11	0.0	10.693	B
D-ABC	8	402	0.019	8	0.0	9.118	A
C-D	0			0			
C-A	24			24			
C-B	0	677	0.000	0	0.0	0.000	A

2026 Baseflow + Committed + Proposed Development - Scenario 2, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5		Crossroads	Two-way	Two-way	Two-way	Two-way		1.79	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		1.79	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)
D5	2026 Baseflow + Committed + Proposed Development - Scenario 2	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (W)		✓	159	100.000
B - ECOCEM Access		✓	3	100.000
C - Pigeon House Rd (E)		✓	32	100.000
D - Dublin Waste to Energy		✓	10	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Pigeon House Rd (W)	B - ECOCEM Access	C - Pigeon House Rd (E)	D - Dublin Waste to Energy
From	A - Pigeon House Rd (W)	0	5	140	14
	B - ECOCEM Access	3	0	0	0
	C - Pigeon House Rd (E)	32	0	0	0
	D - Dublin Waste to Energy	10	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Pigeon House Rd (W)	B - ECOCEM Access	C - Pigeon House Rd (E)	D - Dublin Waste to Energy
From	A - Pigeon House Rd (W)	0	21	15	85
	B - ECOCEM Access	100	0	0	0
	C - Pigeon House Rd (E)	24	0	0	0
	D - Dublin Waste to Energy	79	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.00	0.00	0.0	A
A-B				
A-C				
A-D	0.04	10.90	0.0	B
D-ABC	0.03	9.24	0.0	A
C-D				
C-A				
C-B	0.00	0.00	0.0	A

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	489	0.000	0	0.0	0.000	A
A-B	4			4			
A-C	105			105			
A-D	11	347	0.030	10	0.0	10.685	B
D-ABC	8	402	0.019	7	0.0	9.115	A
C-D	0			0			
C-A	24			24			
C-B	0	680	0.000	0	0.0	0.000	A

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	463	0.000	0	0.0	0.000	A
A-B	4			4			
A-C	126			126			
A-D	13	347	0.036	13	0.0	10.780	B
D-ABC	9	402	0.022	9	0.0	9.169	A
C-D	0			0			
C-A	29			29			
C-B	0	672	0.000	0	0.0	0.000	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	454	0.000	0	0.0	0.000	A
A-B	6			6			
A-C	154			154			
A-D	15	346	0.045	15	0.0	10.902	B
D-ABC	11	400	0.028	11	0.0	9.244	A
C-D	0			0			
C-A	35			35			
C-B	0	662	0.000	0	0.0	0.000	A

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	454	0.000	0	0.0	0.000	A
A-B	6			6			
A-C	154			154			
A-D	15	346	0.045	15	0.0	10.905	B
D-ABC	11	400	0.028	11	0.0	9.244	A
C-D	0			0			
C-A	35			35			
C-B	0	661	0.000	0	0.0	0.000	A

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	463	0.000	0	0.0	0.000	A
A-B	4			4			
A-C	126			126			
A-D	13	347	0.036	13	0.0	10.782	B
D-ABC	9	402	0.022	9	0.0	9.172	A
C-D	0			0			
C-A	29			29			
C-B	0	672	0.000	0	0.0	0.000	A

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	469	0.000	0	0.0	0.000	A
A-B	4			4			
A-C	105			105			
A-D	11	347	0.030	11	0.0	10.693	B
D-ABC	8	402	0.019	8	0.0	9.116	A
C-D	0			0			
C-A	24			24			
C-B	0	680	0.000	0	0.0	0.000	A

2026 Baseflow + Committed + Proposed Development - Scenario 3, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5		Crossroads	Two-way	Two-way	Two-way	Two-way		1.80	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		1.80	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)
D6	2026 Baseflow + Committed + Proposed Development - Scenario 3	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (W)		✓	159	100.000
B - ECOCEM Access		✓	2	100.000
C - Pigeon House Rd (E)		✓	32	100.000
D - Dublin Waste to Energy		✓	10	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Pigeon House Rd (W)	B - ECOCEM Access	C - Pigeon House Rd (E)	D - Dublin Waste to Energy
From	A - Pigeon House Rd (W)	0	5	140	14
	B - ECOCEM Access	2	0	0	0
	C - Pigeon House Rd (E)	32	0	0	0
	D - Dublin Waste to Energy	10	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Pigeon House Rd (W)	B - ECOCEM Access	C - Pigeon House Rd (E)	D - Dublin Waste to Energy
From	A - Pigeon House Rd (W)	0	21	14	85
	B - ECOCEM Access	100	0	0	0
	C - Pigeon House Rd (E)	24	0	0	0
	D - Dublin Waste to Energy	79	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.00	0.00	0.0	A
A-B				
A-C				
A-D	0.04	10.90	0.0	B
D-ABC	0.03	9.24	0.0	A
C-D				
C-A				
C-B	0.00	0.00	0.0	A

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	469	0.000	0	0.0	0.000	A
A-B	4			4			
A-C	105			105			
A-D	11	347	0.030	10	0.0	10.685	B
D-ABC	8	402	0.019	7	0.0	9.115	A
C-D	0			0			
C-A	24			24			
C-B	0	680	0.000	0	0.0	0.000	A

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	463	0.000	0	0.0	0.000	A
A-B	4			4			
A-C	126			126			
A-D	13	347	0.036	13	0.0	10.780	B
D-ABC	9	402	0.022	9	0.0	9.169	A
C-D	0			0			
C-A	29			29			
C-B	0	672	0.000	0	0.0	0.000	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	454	0.000	0	0.0	0.000	A
A-B	6			6			
A-C	154			154			
A-D	15	346	0.045	15	0.0	10.902	B
D-ABC	11	400	0.028	11	0.0	9.244	A
C-D	0			0			
C-A	35			35			
C-B	0	662	0.000	0	0.0	0.000	A

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	454	0.000	0	0.0	0.000	A
A-B	6			6			
A-C	154			154			
A-D	15	346	0.045	15	0.0	10.905	B
D-ABC	11	400	0.028	11	0.0	9.244	A
C-D	0			0			
C-A	35			35			
C-B	0	662	0.000	0	0.0	0.000	A

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	463	0.000	0	0.0	0.000	A
A-B	4			4			
A-C	126			126			
A-D	13	347	0.036	13	0.0	10.782	B
D-ABC	9	402	0.022	9	0.0	9.172	A
C-D	0			0			
C-A	29			29			
C-B	0	672	0.000	0	0.0	0.000	A

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	469	0.000	0	0.0	0.000	A
A-B	4			4			
A-C	105			105			
A-D	11	347	0.030	11	0.0	10.693	B
D-ABC	8	402	0.019	8	0.0	9.116	A
C-D	0			0			
C-A	24			24			
C-B	0	680	0.000	0	0.0	0.000	A

2023 Baseflow , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5		Crossroads	Two-way	Two-way	Two-way	Two-way		0.85	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		0.85	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)
D7	2023 Baseflow	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (W)		✓	59	100.000
B - ECOCEM Access		✓	4	100.000
C - Pigeon House Rd (E)		✓	71	100.000
D - Dublin Waste to Energy		✓	4	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Pigeon House Rd (W)	B - ECOCEM Access	C - Pigeon House Rd (E)	D - Dublin Waste to Energy
From	A - Pigeon House Rd (W)	0	2	51	6
	B - ECOCEM Access	4	0	0	0
	C - Pigeon House Rd (E)	71	0	0	0
	D - Dublin Waste to Energy	4	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Pigeon House Rd (W)	B - ECOCEM Access	C - Pigeon House Rd (E)	D - Dublin Waste to Energy
From	A - Pigeon House Rd (W)	0	50	2	83
	B - ECOCEM Access	25	0	0	0
	C - Pigeon House Rd (E)	0	0	0	0
	D - Dublin Waste to Energy	75	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.00	0.00	0.0	A
A-B				
A-C				
A-D	0.02	10.64	0.0	B
D-ABC	0.00	0.00	0.0	A
C-D				
C-A				
C-B	0.00	0.00	0.0	A

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	572	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	38			38			
A-D	5	348	0.013	4	0.0	10.476	B
D-ABC	0	494	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	53			53			
C-B	0	705	0.000	0	0.0	0.000	A

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	569	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	46			46			
A-D	5	347	0.016	5	0.0	10.545	B
D-ABC	0	490	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	64			64			
C-B	0	703	0.000	0	0.0	0.000	A

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	564	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	56			56			
A-D	7	345	0.019	7	0.0	10.638	B
D-ABC	0	485	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	78			78			
C-B	0	699	0.000	0	0.0	0.000	A

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	564	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	56			56			
A-D	7	345	0.019	7	0.0	10.638	B
D-ABC	0	485	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	78			78			
C-B	0	699	0.000	0	0.0	0.000	A

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	568	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	46			46			
A-D	5	347	0.016	5	0.0	10.545	B
D-ABC	0	490	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	64			64			
C-B	0	703	0.000	0	0.0	0.000	A

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	572	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	38			38			
A-D	5	348	0.013	5	0.0	10.478	B
D-ABC	0	493	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	53			53			
C-B	0	705	0.000	0	0.0	0.000	A

2026 Baseflow , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5		Crossroads	Two-way	Two-way	Two-way	Two-way		0.83	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		0.83	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)
D8	2026 Baseflow	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (W)		✓	61	100.000
B - ECOCEM Access		✓	4	100.000
C - Pigeon House Rd (E)		✓	74	100.000
D - Dublin Waste to Energy		✓	4	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Pigeon House Rd (W)	B - ECOCEM Access	C - Pigeon House Rd (E)	D - Dublin Waste to Energy
From	A - Pigeon House Rd (W)	0	2	53	6
	B - ECOCEM Access	4	0	0	0
	C - Pigeon House Rd (E)	74	0	0	0
	D - Dublin Waste to Energy	4	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Pigeon House Rd (W)	B - ECOCEM Access	C - Pigeon House Rd (E)	D - Dublin Waste to Energy
From	A - Pigeon House Rd (W)	0	51	2	84
	B - ECOCEM Access	26	0	0	0
	C - Pigeon House Rd (E)	0	0	0	0
	D - Dublin Waste to Energy	76	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.00	0.00	0.0	A
A-B				
A-C				
A-D	0.02	10.71	0.0	B
D-ABC	0.00	0.00	0.0	A
C-D				
C-A				
C-B	0.00	0.00	0.0	A

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	570	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	40			40			
A-D	5	346	0.013	4	0.0	10.542	B
D-ABC	0	492	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	56			56			
C-B	0	705	0.000	0	0.0	0.000	A

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	566	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	48			48			
A-D	5	345	0.016	5	0.0	10.614	B
D-ABC	0	488	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	67			67			
C-B	0	702	0.000	0	0.0	0.000	A

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	561	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	58			58			
A-D	7	343	0.019	7	0.0	10.711	B
D-ABC	0	483	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	81			81			
C-B	0	698	0.000	0	0.0	0.000	A

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	561	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	58			58			
A-D	7	343	0.019	7	0.0	10.711	B
D-ABC	0	483	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	81			81			
C-B	0	698	0.000	0	0.0	0.000	A

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	566	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	48			48			
A-D	5	345	0.016	5	0.0	10.617	B
D-ABC	0	488	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	67			67			
C-B	0	702	0.000	0	0.0	0.000	A

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	570	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	40			40			
A-D	5	346	0.013	5	0.0	10.547	B
D-ABC	0	492	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	56			56			
C-B	0	705	0.000	0	0.0	0.000	A

2026 Baseflow + Committed Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5		Crossroads	Two-way	Two-way	Two-way	Two-way		0.57	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	842	Stream A-D	0.57	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)
D9	2026 Baseflow + Committed Development	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (W)		✓	61	100.000
B - ECOCEM Access		✓	4	100.000
C - Pigeon House Rd (E)		✓	139	100.000
D - Dublin Waste to Energy		✓	4	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Pigeon House Rd (W)	B - ECOCEM Access	C - Pigeon House Rd (E)	D - Dublin Waste to Energy
From	A - Pigeon House Rd (W)	0	2	53	6
	B - ECOCEM Access	4	0	0	0
	C - Pigeon House Rd (E)	139	0	0	0
	D - Dublin Waste to Energy	4	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Pigeon House Rd (W)	B - ECOCEM Access	C - Pigeon House Rd (E)	D - Dublin Waste to Energy
From	A - Pigeon House Rd (W)	0	51	2	84
	B - ECOCEM Access	26	0	0	0
	C - Pigeon House Rd (E)	6	0	0	0
	D - Dublin Waste to Energy	76	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.00	0.00	0.0	A
A-B				
A-C				
A-D	0.02	11.04	0.0	B
D-ABC	0.00	0.00	0.0	A
C-D				
C-A				
C-B	0.00	0.00	0.0	A

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	563	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	40			40			
A-D	5	339	0.013	4	0.0	10.760	B
D-ABC	0	480	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	105			105			
C-B	0	705	0.000	0	0.0	0.000	A

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	558	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	48			48			
A-D	5	336	0.016	5	0.0	10.878	B
D-ABC	0	475	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	125			125			
C-B	0	702	0.000	0	0.0	0.000	A

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	551	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	58			58			
A-D	7	333	0.020	7	0.0	11.042	B
D-ABC	0	467	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	153			153			
C-B	0	698	0.000	0	0.0	0.000	A

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	551	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	58			58			
A-D	7	333	0.020	7	0.0	11.042	B
D-ABC	0	467	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	153			153			
C-B	0	698	0.000	0	0.0	0.000	A

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	558	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	48			48			
A-D	5	336	0.016	5	0.0	10.879	B
D-ABC	0	475	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	125			125			
C-B	0	702	0.000	0	0.0	0.000	A

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	0	563	0.000	0	0.0	0.000	A
A-B	2			2			
A-C	40			40			
A-D	5	339	0.013	5	0.0	10.762	B
D-ABC	0	480	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	105			105			
C-B	0	705	0.000	0	0.0	0.000	A

2026 Baseflow + Committed + Proposed Development - Scenario 1, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5		Crossroads	Two-way	Two-way	Two-way	Two-way		1.66	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	441	Stream B-ACD	1.66	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)
D10	2026 Baseflow + Committed + Proposed Development - Scenario 1	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (W)		✓	71	100.000
B - ECOCEM Access		✓	14	100.000
C - Pigeon House Rd (E)		✓	139	100.000
D - Dublin Waste to Energy		✓	4	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Pigeon House Rd (W)	B - ECOCEM Access	C - Pigeon House Rd (E)	D - Dublin Waste to Energy
From	A - Pigeon House Rd (W)	0	2	63	6
	B - ECOCEM Access	14	0	0	0
	C - Pigeon House Rd (E)	139	0	0	0
	D - Dublin Waste to Energy	4	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Pigeon House Rd (W)	B - ECOCEM Access	C - Pigeon House Rd (E)	D - Dublin Waste to Energy
From	A - Pigeon House Rd (W)	0	51	18	84
	B - ECOCEM Access	78	0	0	0
	C - Pigeon House Rd (E)	6	0	0	0
	D - Dublin Waste to Energy	76	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.05	12.44	0.1	B
A-B				
A-C				
A-D	0.02	11.04	0.0	B
D-ABC	0.00	0.00	0.0	A
C-D				
C-A				
C-B	0.00	0.00	0.0	A

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	11	314	0.034	10	0.0	11.867	B
A-B	2			2			
A-C	47			47			
A-D	5	339	0.013	4	0.0	10.760	B
D-ABC	0	478	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	105			105			
C-B	0	701	0.000	0	0.0	0.000	A

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	13	310	0.041	13	0.0	12.103	B
A-B	2			2			
A-C	57			57			
A-D	5	336	0.016	5	0.0	10.878	B
D-ABC	0	472	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	125			125			
C-B	0	697	0.000	0	0.0	0.000	A

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	15	305	0.051	15	0.1	12.433	B
A-B	2			2			
A-C	69			69			
A-D	7	333	0.020	7	0.0	11.042	B
D-ABC	0	463	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	153			153			
C-B	0	693	0.000	0	0.0	0.000	A

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	15	305	0.051	15	0.1	12.435	B
A-B	2			2			
A-C	69			69			
A-D	7	333	0.020	7	0.0	11.042	B
D-ABC	0	463	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	153			153			
C-B	0	693	0.000	0	0.0	0.000	A

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	13	310	0.041	13	0.0	12.109	B
A-B	2			2			
A-C	57			57			
A-D	5	336	0.016	5	0.0	10.881	B
D-ABC	0	472	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	125			125			
C-B	0	697	0.000	0	0.0	0.000	A

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	11	314	0.034	11	0.0	11.882	B
A-B	2			2			
A-C	47			47			
A-D	5	339	0.013	5	0.0	10.764	B
D-ABC	0	478	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	105			105			
C-B	0	701	0.000	0	0.0	0.000	A

2026 Baseflow + Committed + Proposed Development - Scenario 2, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5		Crossroads	Two-way	Two-way	Two-way	Two-way		0.92	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	716	Stream B-ACD	0.92	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)
D11	2026 Baseflow + Committed + Proposed Development - Scenario 2	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (W)		✓	63	100.000
B - ECOCEM Access		✓	6	100.000
C - Pigeon House Rd (E)		✓	139	100.000
D - Dublin Waste to Energy		✓	4	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Pigeon House Rd (W)	B - ECOCEM Access	C - Pigeon House Rd (E)	D - Dublin Waste to Energy
From	A - Pigeon House Rd (W)	0	2	55	6
	B - ECOCEM Access	6	0	0	0
	C - Pigeon House Rd (E)	139	0	0	0
	D - Dublin Waste to Energy	4	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Pigeon House Rd (W)	B - ECOCEM Access	C - Pigeon House Rd (E)	D - Dublin Waste to Energy
From	A - Pigeon House Rd (W)	0	51	5	84
	B - ECOCEM Access	48	0	0	0
	C - Pigeon House Rd (E)	6	0	0	0
	D - Dublin Waste to Energy	76	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.02	9.91	0.0	A
A-B				
A-C				
A-D	0.02	11.04	0.0	B
D-ABC	0.00	0.00	0.0	A
C-D				
C-A				
C-B	0.00	0.00	0.0	A

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	5	379	0.012	4	0.0	9.603	A
A-B	2			2			
A-C	41			41			
A-D	5	339	0.013	4	0.0	10.760	B
D-ABC	0	480	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	105			105			
C-B	0	704	0.000	0	0.0	0.000	A

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	5	375	0.014	5	0.0	9.732	A
A-B	2			2			
A-C	49			49			
A-D	5	336	0.016	5	0.0	10.878	B
D-ABC	0	474	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	125			125			
C-B	0	701	0.000	0	0.0	0.000	A

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	7	370	0.018	7	0.0	9.912	A
A-B	2			2			
A-C	61			61			
A-D	7	333	0.020	7	0.0	11.042	B
D-ABC	0	466	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	153			153			
C-B	0	697	0.000	0	0.0	0.000	A

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	7	370	0.018	7	0.0	9.912	A
A-B	2			2			
A-C	61			61			
A-D	7	333	0.020	7	0.0	11.042	B
D-ABC	0	466	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	153			153			
C-B	0	697	0.000	0	0.0	0.000	A

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	5	375	0.014	5	0.0	9.734	A
A-B	2			2			
A-C	49			49			
A-D	5	336	0.016	5	0.0	10.879	B
D-ABC	0	474	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	125			125			
C-B	0	701	0.000	0	0.0	0.000	A

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	5	379	0.012	5	0.0	9.606	A
A-B	2			2			
A-C	41			41			
A-D	5	339	0.013	5	0.0	10.762	B
D-ABC	0	480	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	105			105			
C-B	0	704	0.000	0	0.0	0.000	A

2026 Baseflow + Committed + Proposed Development - Scenario 3, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5		Crossroads	Two-way	Two-way	Two-way	Two-way		0.68	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	615	Stream A-D	0.68	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)
D12	2026 Baseflow + Committed + Proposed Development - Scenario 3	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (W)		✓	62	100.000
B - ECOCEM Access		✓	5	100.000
C - Pigeon House Rd (E)		✓	182	100.000
D - Dublin Waste to Energy		✓	4	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Pigeon House Rd (W)	B - ECOCEM Access	C - Pigeon House Rd (E)	D - Dublin Waste to Energy
From	A - Pigeon House Rd (W)	0	2	54	6
	B - ECOCEM Access	5	0	0	0
	C - Pigeon House Rd (E)	182	0	0	0
	D - Dublin Waste to Energy	4	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Pigeon House Rd (W)	B - ECOCEM Access	C - Pigeon House Rd (E)	D - Dublin Waste to Energy
From	A - Pigeon House Rd (W)	0	51	4	84
	B - ECOCEM Access	42	0	0	0
	C - Pigeon House Rd (E)	15	0	0	0
	D - Dublin Waste to Energy	76	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.01	9.66	0.0	A
A-B				
A-C				
A-D	0.02	11.34	0.0	B
D-ABC	0.00	0.00	0.0	A
C-D				
C-A				
C-B	0.00	0.00	0.0	A

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	390	0.010	4	0.0	9.308	A
A-B	2			2			
A-C	41			41			
A-D	5	333	0.014	4	0.0	10.950	B
D-ABC	0	470	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	137			137			
C-B	0	704	0.000	0	0.0	0.000	A

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	385	0.012	4	0.0	9.454	A
A-B	2			2			
A-C	49			49			
A-D	5	329	0.016	5	0.0	11.111	B
D-ABC	0	463	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	164			164			
C-B	0	702	0.000	0	0.0	0.000	A

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	6	378	0.015	5	0.0	9.659	A
A-B	2			2			
A-C	59			59			
A-D	7	324	0.020	7	0.0	11.338	B
D-ABC	0	452	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	200			200			
C-B	0	698	0.000	0	0.0	0.000	A

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	6	378	0.015	6	0.0	9.659	A
A-B	2			2			
A-C	59			59			
A-D	7	324	0.020	7	0.0	11.338	B
D-ABC	0	452	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	200			200			
C-B	0	698	0.000	0	0.0	0.000	A

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	385	0.012	5	0.0	9.455	A
A-B	2			2			
A-C	49			49			
A-D	5	329	0.016	5	0.0	11.114	B
D-ABC	0	463	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	164			164			
C-B	0	702	0.000	0	0.0	0.000	A

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	4	390	0.010	4	0.0	9.311	A
A-B	2			2			
A-C	41			41			
A-D	5	333	0.014	5	0.0	10.953	B
D-ABC	0	470	0.000	0	0.0	0.000	A
C-D	0			0			
C-A	137			137			
C-B	0	704	0.000	0	0.0	0.000	A

Junctions 10

PICADY 10 - Priority Intersection Module

Filename: JTC 6.j10
Path: W:\Projects\11078 - Natural Power - Codling Bank Wind Farm\05-Design\01-Calculations\Traffic\08 Junction 10\New Counts - jan2024
Report generation date: 09/05/2024 15:09:37

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2023 Baseflow													
Stream B-AC	0.0	0.00	0.00	A	0.00	A	900 % []	0.0	0.00	0.00	A	0.00	A	900 % []
Stream C-B	0.0	0.00	0.00	A				0.0	0.00	0.00	A			
	2026 Baseflow													
Stream B-AC	0.0	0.00	0.00	A	0.00	A	900 % []	0.0	0.00	0.00	A	0.00	A	900 % []
Stream C-B	0.0	0.00	0.00	A				0.0	0.00	0.00	A			
	2026 Baseflow + Committed Development													
Stream B-AC	0.0	0.00	0.00	A	0.00	A	900 % []	0.0	0.00	0.00	A	0.00	A	900 % []
Stream C-B	0.0	0.00	0.00	A				0.0	0.00	0.00	A			
	2026 Baseflow + Committed + Proposed Development - Scenario 1													
Stream B-AC	0.0	0.00	0.00	A	0.00	A	900 % []	0.0	0.00	0.00	A	0.00	A	900 % []
Stream C-B	0.0	0.00	0.00	A				0.0	0.00	0.00	A			
	2026 Baseflow + Committed + Proposed Development - Scenario 2													
Stream B-AC	0.0	0.00	0.00	A	0.00	A	900 % []	0.0	0.00	0.00	A	0.00	A	900 % []
Stream C-B	0.0	0.00	0.00	A				0.0	0.00	0.00	A			
	2026 Baseflow + Committed + Proposed Development - Scenario 3													
Stream B-AC	0.0	0.00	0.00	A	0.00	A	900 % []	0.0	0.00	0.00	A	0.00	A	900 % []
Stream C-B	0.0	0.00	0.00	A				0.0	0.00	0.00	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. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

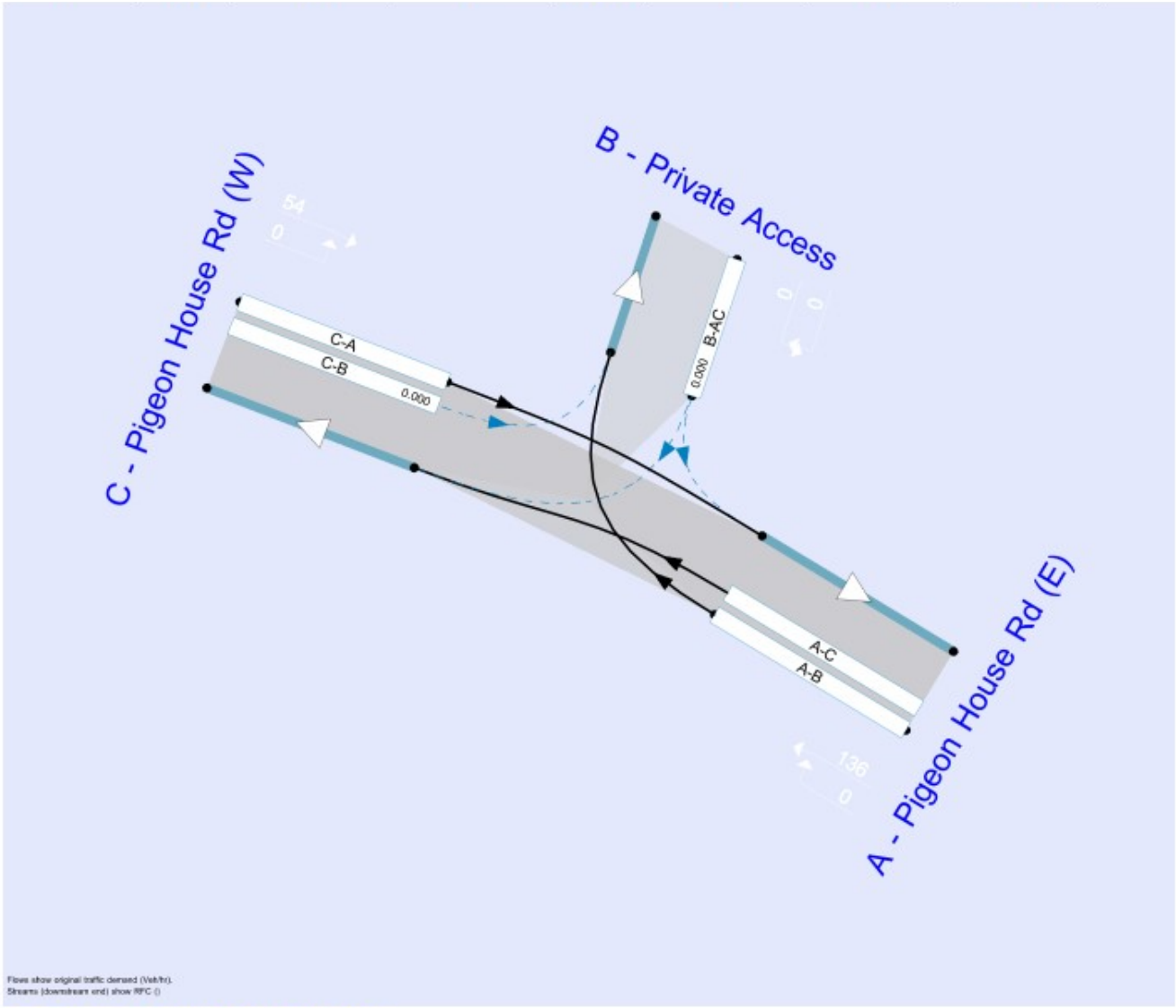
File summary

File Description

Title	Codling Wind Park
Location	Dublin
Site number	
Date	12/01/2024
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	
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	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 Baseflow	AM	ONE HOUR	07:30	09:00	15
D2	2026 Baseflow	AM	ONE HOUR	07:30	09:00	15
D3	2026 Baseflow + Committed Development	AM	ONE HOUR	07:30	09:00	15
D4	2026 Baseflow + Committed + Proposed Development - Scenario 1	AM	ONE HOUR	07:30	09:00	15
D5	2026 Baseflow + Committed + Proposed Development - Scenario 2	AM	ONE HOUR	07:30	09:00	15
D6	2026 Baseflow + Committed + Proposed Development - Scenario 3	AM	ONE HOUR	07:30	09:00	15
D7	2023 Baseflow	PM	ONE HOUR	17:15	18:45	15
D8	2026 Baseflow	PM	ONE HOUR	17:15	18:45	15
D9	2026 Baseflow + Committed Development	PM	ONE HOUR	17:15	18:45	15
D10	2026 Baseflow + Committed + Proposed Development - Scenario 1	PM	ONE HOUR	17:15	18:45	15
D11	2026 Baseflow + Committed + Proposed Development - Scenario 2	PM	ONE HOUR	17:15	18:45	15
D12	2026 Baseflow + Committed + Proposed Development - Scenario 3	PM	ONE HOUR	17:15	18:45	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023 Baseflow, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Pigeon House Rd (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
6		T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		0.00	A

Arms

Arms

Arm	Name	Description	Arm type
A	Pigeon House Rd (E)		Major
B	Private Access		Minor
C	Pigeon House Rd (W)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Pigeon House Rd (W)	5.62			82.2		-

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Private Access	One lane	5.00	17	15

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	589	0.109	0.276	0.173	0.394
B-C	760	0.118	0.299	-	-
C-B	622	0.245	0.245	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

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)
D1	2023 Baseflow	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (E)		✓	19	100.000
B - Private Access		✓	0	100.000
C - Pigeon House Rd (W)		✓	50	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Pigeon House Rd (E)	B - Private Access	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	19
	B - Private Access	0	0	0
	C - Pigeon House Rd (W)	50	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Pigeon House Rd (E)	B - Private Access	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	0
	B - Private Access	0	0	0
	C - Pigeon House Rd (W)	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	655	0.000	0	0.0	0.000	A
C-A	38			38			
C-B	0	618	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	14			14			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	654	0.000	0	0.0	0.000	A
C-A	45			45			
C-B	0	617	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	17			17			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	651	0.000	0	0.0	0.000	A
C-A	55			55			
C-B	0	616	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	21			21			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	651	0.000	0	0.0	0.000	A
C-A	55			55			
C-B	0	616	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	21			21			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	654	0.000	0	0.0	0.000	A
C-A	45			45			
C-B	0	617	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	17			17			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	655	0.000	0	0.0	0.000	A
C-A	38			38			
C-B	0	618	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	14			14			

2026 Baseflow, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Pigeon House Rd (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
6		T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		0.00	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)
D2	2026 Baseflow	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (E)		✓	20	100.000
B - Private Access		✓	0	100.000
C - Pigeon House Rd (W)		✓	52	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Pigeon House Rd (E)	B - Private Access	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	20
	B - Private Access	0	0	0
	C - Pigeon House Rd (W)	52	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Pigeon House Rd (E)	B - Private Access	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	0
	B - Private Access	0	0	0
	C - Pigeon House Rd (W)	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	655	0.000	0	0.0	0.000	A
C-A	39			39			
C-B	0	618	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	15			15			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	653	0.000	0	0.0	0.000	A
C-A	47			47			
C-B	0	617	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	18			18			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	651	0.000	0	0.0	0.000	A
C-A	57			57			
C-B	0	616	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	22			22			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	651	0.000	0	0.0	0.000	A
C-A	57			57			
C-B	0	616	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	22			22			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	653	0.000	0	0.0	0.000	A
C-A	47			47			
C-B	0	617	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	18			18			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	655	0.000	0	0.0	0.000	A
C-A	39			39			
C-B	0	618	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	15			15			

2026 Baseflow + Committed Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Pigeon House Rd (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
6		T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		0.00	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)
D3	2026 Baseflow + Committed Development	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (E)		✓	20	100.000
B - Private Access		✓	0	100.000
C - Pigeon House Rd (W)		✓	117	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Pigeon House Rd (E)	B - Private Access	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	20
	B - Private Access	0	0	0
	C - Pigeon House Rd (W)	117	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Pigeon House Rd (E)	B - Private Access	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	0
	B - Private Access	0	0	0
	C - Pigeon House Rd (W)	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	649	0.000	0	0.0	0.000	A
C-A	88			88			
C-B	0	618	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	15			15			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	646	0.000	0	0.0	0.000	A
C-A	105			105			
C-B	0	617	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	18			18			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	642	0.000	0	0.0	0.000	A
C-A	129			129			
C-B	0	616	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	22			22			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	642	0.000	0	0.0	0.000	A
C-A	129			129			
C-B	0	616	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	22			22			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	646	0.000	0	0.0	0.000	A
C-A	105			105			
C-B	0	617	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	18			18			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	649	0.000	0	0.0	0.000	A
C-A	88			88			
C-B	0	618	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	15			15			

2026 Baseflow + Committed + Proposed Development - Scenario 1, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Pigeon House Rd (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
6		T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		0.00	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)
D4	2026 Baseflow + Committed + Proposed Development - Scenario 1	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (E)		✓	20	100.000
B - Private Access		✓	0	100.000
C - Pigeon House Rd (W)		✓	127	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Pigeon House Rd (E)	B - Private Access	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	20
	B - Private Access	0	0	0
	C - Pigeon House Rd (W)	127	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Pigeon House Rd (E)	B - Private Access	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	0
	B - Private Access	0	0	0
	C - Pigeon House Rd (W)	18	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	647	0.000	0	0.0	0.000	A
C-A	96			96			
C-B	0	618	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	15			15			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	644	0.000	0	0.0	0.000	A
C-A	114			114			
C-B	0	617	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	18			18			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	639	0.000	0	0.0	0.000	A
C-A	140			140			
C-B	0	616	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	22			22			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	639	0.000	0	0.0	0.000	A
C-A	140			140			
C-B	0	616	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	22			22			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	644	0.000	0	0.0	0.000	A
C-A	114			114			
C-B	0	617	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	18			18			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	647	0.000	0	0.0	0.000	A
C-A	96			96			
C-B	0	618	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	15			15			

2026 Baseflow + Committed + Proposed Development - Scenario 2, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Pigeon House Rd (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
6		T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		0.00	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)
D5	2026 Baseflow + Committed + Proposed Development - Scenario 2	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (E)		✓	20	100.000
B - Private Access		✓	0	100.000
C - Pigeon House Rd (W)		✓	119	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Pigeon House Rd (E)	B - Private Access	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	20
	B - Private Access	0	0	0
	C - Pigeon House Rd (W)	119	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Pigeon House Rd (E)	B - Private Access	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	0
	B - Private Access	0	0	0
	C - Pigeon House Rd (W)	12	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	648	0.000	0	0.0	0.000	A
C-A	90			90			
C-B	0	618	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	15			15			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	645	0.000	0	0.0	0.000	A
C-A	107			107			
C-B	0	617	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	18			18			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	641	0.000	0	0.0	0.000	A
C-A	131			131			
C-B	0	616	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	22			22			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	641	0.000	0	0.0	0.000	A
C-A	131			131			
C-B	0	616	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	22			22			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	645	0.000	0	0.0	0.000	A
C-A	107			107			
C-B	0	617	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	18			18			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	648	0.000	0	0.0	0.000	A
C-A	90			90			
C-B	0	618	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	15			15			

2026 Baseflow + Committed + Proposed Development - Scenario 3, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Pigeon House Rd (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
6		T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		0.00	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)
D6	2026 Baseflow + Committed + Proposed Development - Scenario 3	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (E)		✓	20	100.000
B - Private Access		✓	0	100.000
C - Pigeon House Rd (W)		✓	118	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Pigeon House Rd (E)	B - Private Access	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	20
	B - Private Access	0	0	0
	C - Pigeon House Rd (W)	118	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Pigeon House Rd (E)	B - Private Access	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	0
	B - Private Access	0	0	0
	C - Pigeon House Rd (W)	11	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	648	0.000	0	0.0	0.000	A
C-A	89			89			
C-B	0	618	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	15			15			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	645	0.000	0	0.0	0.000	A
C-A	106			106			
C-B	0	617	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	18			18			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	641	0.000	0	0.0	0.000	A
C-A	130			130			
C-B	0	616	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	22			22			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	641	0.000	0	0.0	0.000	A
C-A	130			130			
C-B	0	616	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	22			22			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	645	0.000	0	0.0	0.000	A
C-A	106			106			
C-B	0	617	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	18			18			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	648	0.000	0	0.0	0.000	A
C-A	89			89			
C-B	0	618	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	15			15			

2023 Baseflow , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Pigeon House Rd (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
6		T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		0.00	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)
D7	2023 Baseflow	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (E)		✓	68	100.000
B - Private Access		✓	0	100.000
C - Pigeon House Rd (W)		✓	51	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Pigeon House Rd (E)	B - Private Access	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	68
	B - Private Access	0	0	0
	C - Pigeon House Rd (W)	51	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Pigeon House Rd (E)	B - Private Access	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	1
	B - Private Access	0	0	0
	C - Pigeon House Rd (W)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	645	0.000	0	0.0	0.000	A
C-A	38			38			
C-B	0	609	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	51			51			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	641	0.000	0	0.0	0.000	A
C-A	46			46			
C-B	0	606	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	61			61			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	636	0.000	0	0.0	0.000	A
C-A	56			56			
C-B	0	603	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	75			75			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	636	0.000	0	0.0	0.000	A
C-A	56			56			
C-B	0	603	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	75			75			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	641	0.000	0	0.0	0.000	A
C-A	46			46			
C-B	0	606	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	61			61			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	645	0.000	0	0.0	0.000	A
C-A	38			38			
C-B	0	609	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	51			51			

2026 Baseflow , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Pigeon House Rd (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
6		T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		0.00	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)
D8	2026 Baseflow	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (E)		✓	71	100.000
B - Private Access		✓	0	100.000
C - Pigeon House Rd (W)		✓	53	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Pigeon House Rd (E)	B - Private Access	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	71
	B - Private Access	0	0	0
	C - Pigeon House Rd (W)	53	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Pigeon House Rd (E)	B - Private Access	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	2
	B - Private Access	0	0	0
	C - Pigeon House Rd (W)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	644	0.000	0	0.0	0.000	A
C-A	40			40			
C-B	0	608	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	53			53			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	640	0.000	0	0.0	0.000	A
C-A	48			48			
C-B	0	606	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	64			64			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	634	0.000	0	0.0	0.000	A
C-A	58			58			
C-B	0	602	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	78			78			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	634	0.000	0	0.0	0.000	A
C-A	58			58			
C-B	0	602	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	78			78			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	640	0.000	0	0.0	0.000	A
C-A	48			48			
C-B	0	606	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	64			64			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	644	0.000	0	0.0	0.000	A
C-A	40			40			
C-B	0	608	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	53			53			

2026 Baseflow + Committed Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Pigeon House Rd (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
6		T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		0.00	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)
D9	2026 Baseflow + Committed Development	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (E)		✓	136	100.000
B - Private Access		✓	0	100.000
C - Pigeon House Rd (W)		✓	53	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Pigeon House Rd (E)	B - Private Access	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	136
	B - Private Access	0	0	0
	C - Pigeon House Rd (W)	53	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Pigeon House Rd (E)	B - Private Access	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	7
	B - Private Access	0	0	0
	C - Pigeon House Rd (W)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	628	0.000	0	0.0	0.000	A
C-A	40			40			
C-B	0	595	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	102			102			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	621	0.000	0	0.0	0.000	A
C-A	48			48			
C-B	0	590	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	122			122			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	611	0.000	0	0.0	0.000	A
C-A	58			58			
C-B	0	582	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	150			150			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	611	0.000	0	0.0	0.000	A
C-A	58			58			
C-B	0	582	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	150			150			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	621	0.000	0	0.0	0.000	A
C-A	48			48			
C-B	0	590	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	122			122			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	628	0.000	0	0.0	0.000	A
C-A	40			40			
C-B	0	595	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	102			102			

2026 Baseflow + Committed + Proposed Development - Scenario 1, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Pigeon House Rd (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
6		T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		0.00	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)
D10	2026 Baseflow + Committed + Proposed Development - Scenario 1	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (E)		✓	136	100.000
B - Private Access		✓	0	100.000
C - Pigeon House Rd (W)		✓	63	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Pigeon House Rd (E)	B - Private Access	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	136
	B - Private Access	0	0	0
	C - Pigeon House Rd (W)	63	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Pigeon House Rd (E)	B - Private Access	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	7
	B - Private Access	0	0	0
	C - Pigeon House Rd (W)	16	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	626	0.000	0	0.0	0.000	A
C-A	47			47			
C-B	0	595	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	102			102			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	619	0.000	0	0.0	0.000	A
C-A	57			57			
C-B	0	590	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	122			122			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	608	0.000	0	0.0	0.000	A
C-A	69			69			
C-B	0	582	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	150			150			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	608	0.000	0	0.0	0.000	A
C-A	69			69			
C-B	0	582	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	150			150			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	619	0.000	0	0.0	0.000	A
C-A	57			57			
C-B	0	590	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	122			122			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	626	0.000	0	0.0	0.000	A
C-A	47			47			
C-B	0	595	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	102			102			

2026 Baseflow + Committed + Proposed Development - Scenario 2, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Pigeon House Rd (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
6		T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		0.00	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)
D11	2026 Baseflow + Committed + Proposed Development - Scenario 2	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (E)		✓	136	100.000
B - Private Access		✓	0	100.000
C - Pigeon House Rd (W)		✓	55	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Pigeon House Rd (E)	B - Private Access	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	136
	B - Private Access	0	0	0
	C - Pigeon House Rd (W)	55	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Pigeon House Rd (E)	B - Private Access	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	7
	B - Private Access	0	0	0
	C - Pigeon House Rd (W)	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	627	0.000	0	0.0	0.000	A
C-A	41			41			
C-B	0	595	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	102			102			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	620	0.000	0	0.0	0.000	A
C-A	49			49			
C-B	0	590	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	122			122			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	610	0.000	0	0.0	0.000	A
C-A	61			61			
C-B	0	582	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	150			150			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	610	0.000	0	0.0	0.000	A
C-A	61			61			
C-B	0	582	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	150			150			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	620	0.000	0	0.0	0.000	A
C-A	49			49			
C-B	0	590	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	122			122			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	627	0.000	0	0.0	0.000	A
C-A	41			41			
C-B	0	595	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	102			102			

2026 Baseflow + Committed + Proposed Development - Scenario 3, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Pigeon House Rd (W) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
6		T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		0.00	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)
D12	2026 Baseflow + Committed + Proposed Development - Scenario 3	PM	ONE HOUR	17:15	18:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pigeon House Rd (E)		✓	138	100.000
B - Private Access		✓	0	100.000
C - Pigeon House Rd (W)		✓	54	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Pigeon House Rd (E)	B - Private Access	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	138
	B - Private Access	0	0	0
	C - Pigeon House Rd (W)	54	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Pigeon House Rd (E)	B - Private Access	C - Pigeon House Rd (W)
From	A - Pigeon House Rd (E)	0	0	7
	B - Private Access	0	0	0
	C - Pigeon House Rd (W)	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	628	0.000	0	0.0	0.000	A
C-A	41			41			
C-B	0	595	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	102			102			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	620	0.000	0	0.0	0.000	A
C-A	49			49			
C-B	0	590	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	122			122			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	611	0.000	0	0.0	0.000	A
C-A	59			59			
C-B	0	582	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	150			150			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	611	0.000	0	0.0	0.000	A
C-A	59			59			
C-B	0	582	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	150			150			

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	620	0.000	0	0.0	0.000	A
C-A	49			49			
C-B	0	590	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	122			122			

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	628	0.000	0	0.0	0.000	A
C-A	41			41			
C-B	0	595	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	102			102			

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