

EIAR VOLUME III

Appendices

CHAPTER 16 – TRAFFIC AND TRANSPORT

**Appendix 16.1: Turbine Delivery Route
Assessment Report**



Tullacondra Green Energy Project

Turbine Delivery Route Assessment Report

This report reviews and assesses the proposed delivery route options for the wind turbine components associated with Tullacondra Green Energy Project.

Document Name

23010-BFA-TC-TDR-RP-C-1002

Revision History

Revision Ref / Date Issued	Details	Issued to
P1 / 15 th December, 2023	Initial Issue	Larry O'Halloran/Tomás Leen (Tullacondra Green Energy Ltd)
P2/ 16 th January, 2024	General Revision	Larry O'Halloran/Tomás Leen (Tullacondra Green Energy Ltd)
P3/ 17 th January, 2024	Report Layout Update	Larry O'Halloran/Tomás Leen (Tullacondra Green Energy Ltd)
P4/20 th June, 2024	Issue for Submission	Larry O'Halloran/Tomás Leen (Tullacondra Green Energy Ltd)

Document Revision Code

Planning = "P"; For Information = "F"; Issue for Construction = "C"; Tender = "T";
As-Built = "AB"; Review and Comment = "R"; Coordination = "CO"

Contact

This report describes the work commissioned by Tullacondra Green Energy Ltd. and completed by BFA Consulting.

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1 INTRODUCTION

BFA Consulting were commissioned by Tullacondra Green Energy Ltd. to undertake a review of the proposed turbine delivery routes associated with Tullacondra Green Energy Project.

The scope of this report is to assess the proposed 2No. Turbine Delivery Routes (TDRs) for the project, identify potential issues, and to propose mitigation measures for the identified issues.

Insofar as possible, the proposed TDRs have been chosen as they utilise the same routes used by previously consented Croom Green Energy Project (from Ringaskiddy) and in-planning Annagh Wind Farm (from Foynes). By doing so, the proposed TDRs associated with this report have looked to reduce the amount of required works and disturbance along the routes.

Typically, it is the responsibility of the turbine manufacturer to ensure that the proposed TDRs and completed mitigation measures are adequate to meet their requirements for delivering the turbine components. Prior to the abnormal load delivery of the WTG components taking place, the turbine manufacturer will complete a trial run of the TDRs. The trial run will consist of an unloaded vehicle, configured to the exact project specific specifications and requirements, driving the TDR(s) in their entirety to confirm that the route is adequate to commence the delivery of the loaded vehicles.

The findings within this report are based on a desktop analysis only with design assumptions made based on the information available at the time of writing. The final detail design mitigation measures required for the TDRs will be determined via future survey work and the findings of the “trial run”.

The delivery of the turbine components along the TDRs will be subject to a Traffic Management Plan and/or Garda escort, the details and agreement of which are outside the scope of this report.

1.1 Site Location

Tullacondra Green Energy Project is located in the townland of Tullacondra, Co. Cork.

Route Layout drawing 23010-BFA-TC-TDR-DR-C-1501 has been provided in Appendix A which illustrates the location of the wind farm site as well as the proposed TDRs and respective Nodes.

1.2 Methodology

The assessment contained within this report includes modelling an appropriate Swept Path Analysis (SPA) for the delivery of the wind turbine generator (WTG) components to the site from the nominated port(s). The results of the SPA are then used to inform the required design and mitigation measures along the TDRs.

BFA Consulting have made the below assumptions in setting up the vehicle tracking models used in the various Swept Path Analyses for Tullacondra Green Energy Project:

- Blade delivery vehicle is a Super Wing Carrier (SWC).
- Blade overhang from rear trailer is fixed at 10.0m.
- Blade length is 75m.
- Tower component is 30m (L) x 6.5m (W).

- Tower delivery vehicle is clamp trailer.
- 84° inclination of blade on Blade-Lifter vehicle.

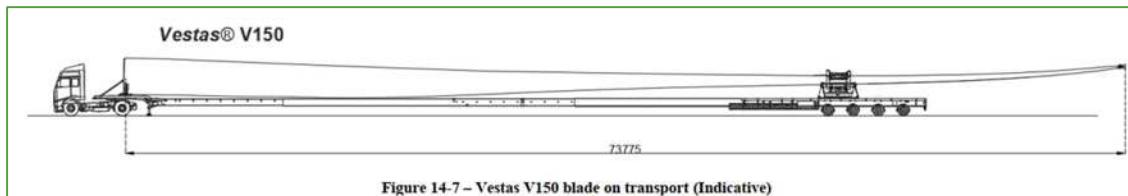


Figure 1.1: Example of a transport configuration for a turbine with a 150m rotor diameter



Figure 1.2: Typical Blade-Lifter vehicle

The proposed TDRs have been assessed and any location identified as requiring potential mitigation measures by the SPA have been assigned an unique “Node” identifier and included in Section 2 of this report.

Note that the requirement for “tree trimming” along the TDRs is assessed to be a highly variable mitigation measure due to the nature of the issue. Therefore, the full extent to which tree trimming and/or vegetation clearance is required along the TDRs shall be determined via the trial-run at detailed design stage.

Where the information has been provided to BFA Consulting, topographic surveys have been used to determine the constraints and features at a given Node location. Where no such survey has been provided, BFA Consulting have used Aerial Imagery to assess the extents of the road carriageways and constraints. It is BFA Consulting’s recommendation that at the detailed design stage of the project, any node which has identified the need for mitigation measures should be surveyed and inspected in detail to confirm the full extent of the required mitigation measures.

This report has assessed the horizontal geometric requirements of the turbine delivery vehicles only and therefore any observation noted regarding potential vertical geometry issues are based on a visual desktop assessment only. An assessment of the vertical geometry along the TDRs will take place at the detailed design stage when the specific requirements of the turbine delivery type, and moreover the transport vehicle set-up, are known.

1.3 Proposed Routes

There are 2No. TDR options associated with Tullacondra Green Energy Project: 1No. TDR originates from the port of Foynes, Co. Limerick, and 1No. TDR originates from the port of Ringaskiddy, Co. Cork.

Insofar as possible, the proposed TDRs have been chosen as they utilise the same routes used by previously consented Croom Green Energy Project (from Ringaskiddy) and in-planning Annagh Wind Farm (from Foynes). By doing so, the proposed TDRs associated with this report have looked to reduce the amount of required works and disturbance along the routes.

1.3.1 Option #1 – Foynes to Tullacondra Green Energy Project

The proposed TDR from Shannon Foynes Port has been assigned the label “Option #1” and the route is as follows:

Tullacondra Green Energy Project – Turbine Delivery Route – Option #1			
Start Location	Shannon Foynes Port	Distance of Route	98km
Load Dimensions	75m Blade	Delivery Vehicle	Super-Wing Carrier
<ol style="list-style-type: none"> 1. Exit Shannon Foynes Port. 2. Turn Left on N69. 3. Turn onto N18 (Limerick Southern Ring Road). 4. Take Exit #1 to M20 Southbound. 5. Take Exit #5 to N20 Southbound. 6. Turn Right onto L5523. 7. Arrive at Tullacondra Green Energy Project - Site Entrance. 			

Table 1.1: TDR Option #1

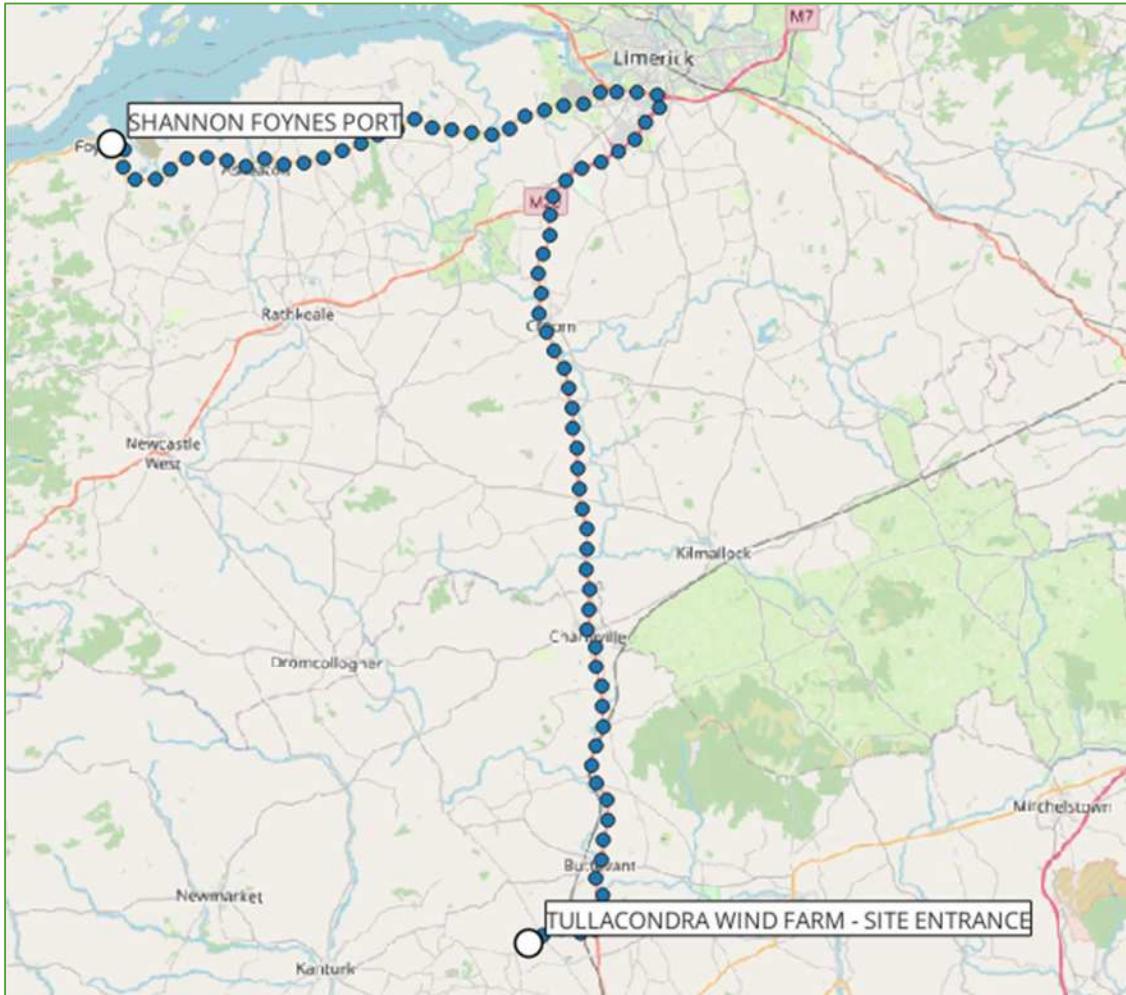


Figure 1.3: TDR Option #1

1.3.2 Option #2 – Ringaskiddy to Tullacondra Green Energy Project

The TDR from Ringaskiddy requires an alternative route to be used through/around Cork City for the delivery of the turbine blades than that of the remaining wind turbine components. This alternative route is required due to the dimensions of the Jack Lynch Tunnel only allowing for the passage of turbine blades through it, and not the other WTG components (tower sections, nacelles etc).

The proposed TDR for the turbine blades has been assigned the label “Option #2a” and the proposed route is as follows:

Tullacondra Green Energy Project – Turbine Delivery Route – Option #2a (WTG Blades)			
Start Location	Ringaskiddy Port	Distance of Route	67km
Load Dimensions	75m Blade	Delivery Vehicle	Super-Wing Carrier
1. Exit Ringaskiddy Port onto N28. 2. Turn right onto Eastbound N40. 3. Travel through Jack Lynch Tunnel. 4. Turn left onto N8. 5. Turn right (via contraflow turn) onto R635. 6. Turn right onto N20. 7. Turn left on L1200. 8. Turn left onto L5302-28. 9. Arrive at Tullacondra Green Energy Project – Site Entrance			

Table 1.2: TDR Option #2a

The proposed delivery route through Cork City for the remaining WTG components has been assigned the label “Option #2b” and is as follows:

Tullacondra Green Energy Project – Turbine Delivery Route – Option #2b (WTG Components)			
Start Location	Ringaskiddy Port	Distance of Route	64km
Load Dimensions	30m (L) x 6.5m (W)	Delivery Vehicle	Clamp Trailer
1. Exit Ringaskiddy Port onto N28. 2. Exit N28 onto Westbound N40. 3. Exit N40 at Exit 6 for N27 South Ring Road. 4. Turn right at Kinsale Road Roundabout onto N27. 5. Turn left to contraflow onto N8 – Anderson’s Quay. 6. Turn right to stay on N20 – Christy Ring Bridge. 7. Turn left to stay on N20 – Junction with R635. 8. Turn left on L1200. 9. Turn left onto L5302-28. 10. Arrive at Tullacondra Green Energy Project – Site Entrance			

Table 1.3: TDR Option #2b

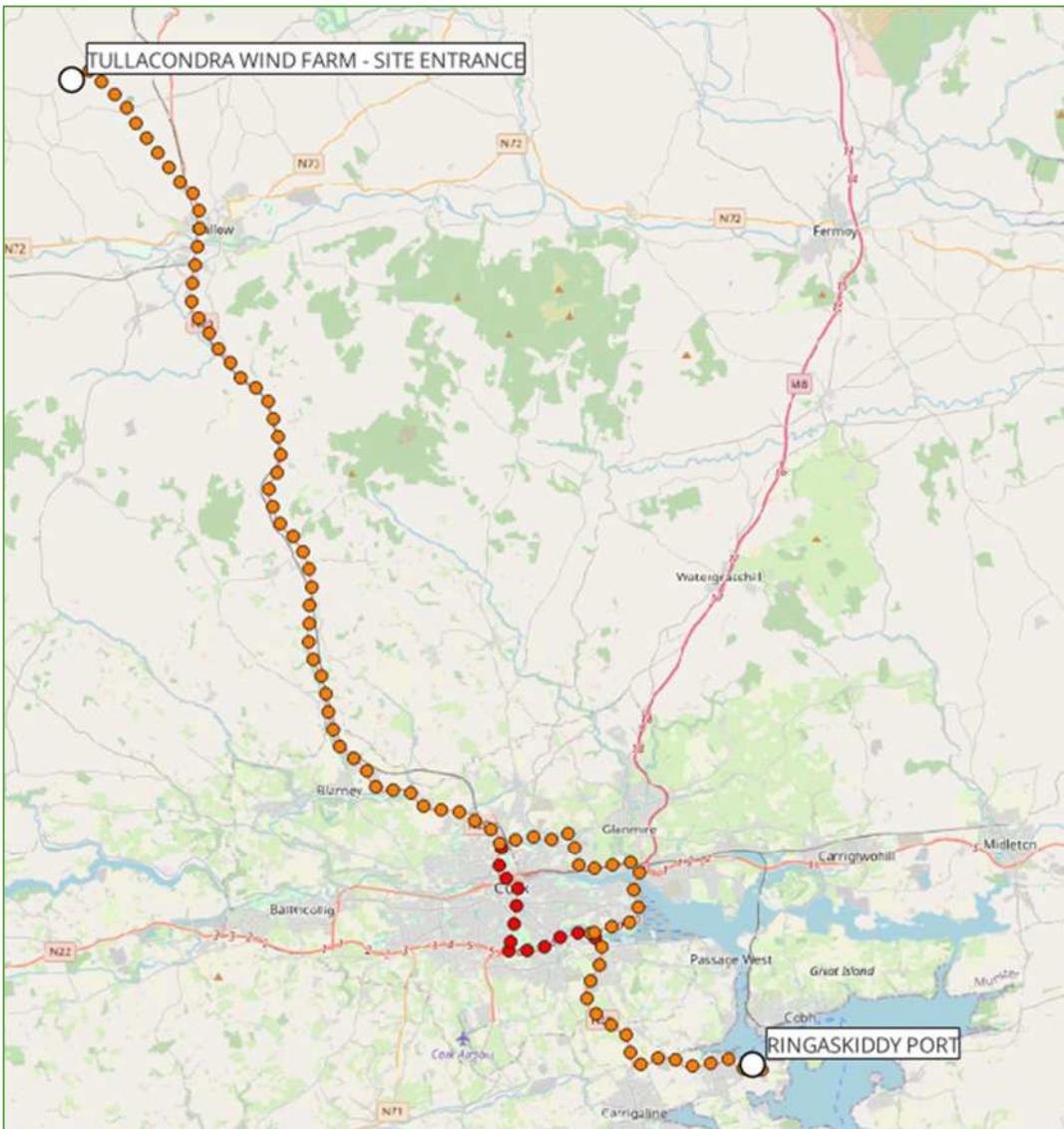


Figure 1.4: TDR Option#2.

Where:

..... Option #2a

..... Option #2b

2 SWEPT PATH ANALYSIS

2.1 Option #1 – Node 1

Location: Junction of Port of Foynes Access Road & N69 N: 650954 E: 525834	
Swept Path Analysis: 75m Blade on SuperWing carrier.	
Red – Wheelpath; Magenta – Blade Oversail; Green – Trailer Oversail	
Comment #1:	Street furniture to be removed from roadside and splitter island. Ramps to be used to allow vehicle traverse kerbs of the splitter island.
Comment #2:	Oversail of third-party lands required.
Comment #3	Manual steering required to assist navigation.
Comment #4	Tree/hedge trimming may be required.

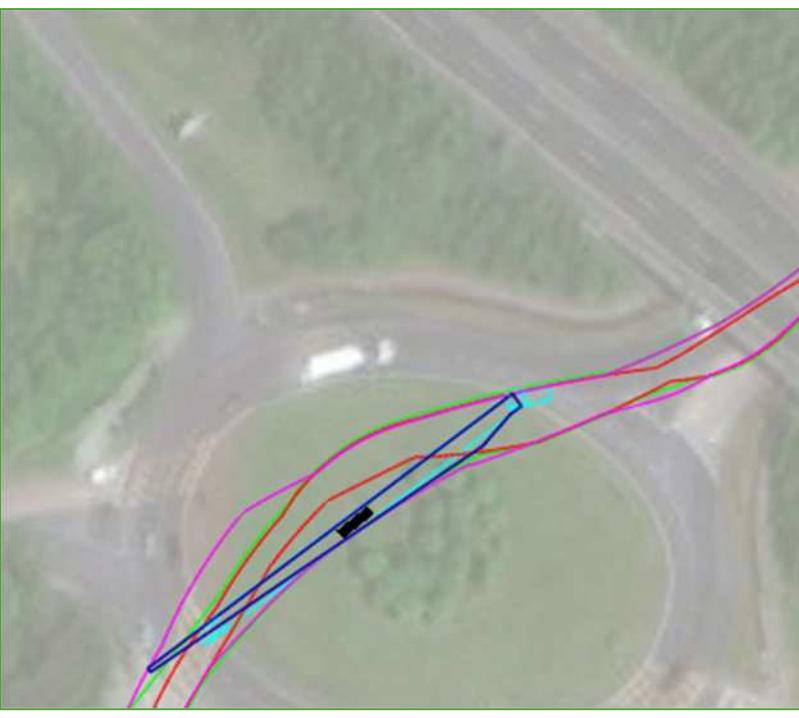
2.2 Option #1 – Node 2

<p>Location:</p> <p>N69: Ferry Bridge</p> <p>N: 652328 E: 548178</p>	
<p>Swept Path Analysis:</p> <p>75m Blade on SuperWing carrier.</p>	
<p style="text-align: center;">Red – Wheelpath; Magenta – Blade Oversail; Green – Trailer Oversail</p>	
Comment #1:	Tree/Hedge trimming required to avoid clashes with delivery vehicle.
Comment #2:	Utility Line/Poles to be diverted to avoid clashes with delivery vehicle.
Comment #3	Blade to be loaded in a specific configuration to allow navigation of node.

2.3 Option #1 – Node 3

Location: N69: Clarina Roundabout N: 653652 E: 550323	
Swept Path Analysis: 75m Blade on SuperWing carrier.	
	<p>Red – Wheelpath; Magenta – Blade Oversail; Green – Trailer Oversail</p>
Comment #1:	Street furniture to be removed.
Comment #2:	Modifications previously completed for traversing of abnormal loads are to be utilised. Survey at detailed design stage required of completed modifications to ensure their adequacy for the proposed WTG delivery vehicles.
Comment #3	Tree trimming may be required to avoid a clash with loaded vehicle.

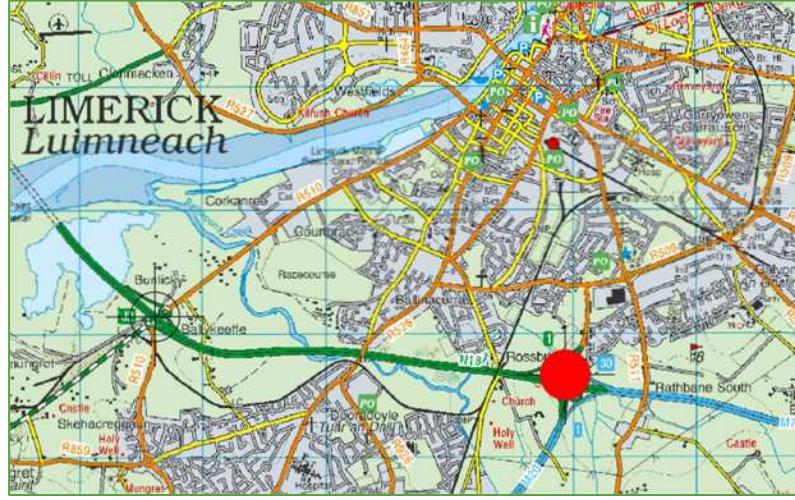
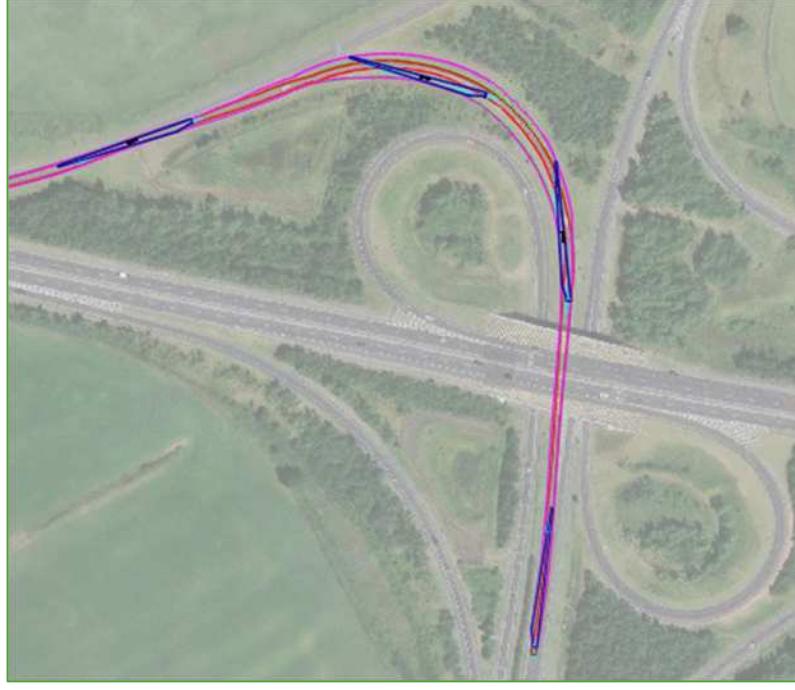
2.4 Option #1 – Node 4a

<p>Location:</p> <p>N69: Dock Road West Roundabout</p> <p>N: 655127 E: 554521</p>	
<p>Swept Path Analysis:</p> <p>75m Blade on SuperWing carrier.</p>	
<p style="text-align: center;">Red – Wheelpath; Magenta – Blade Oversail; Green – Trailer Oversail</p>	
Comment #1:	Street furniture to be removed.
Comment #2:	Tree/Hedge trimming required to avoid clashes with delivery vehicle.
Comment #3	Modifications previously completed for traversing of abnormal loads are to be utilised. Survey at detailed design required of completed modifications to ensure their adequacy for the proposed WTG delivery vehicles.

2.5 Option #1 – Node 4b

Location: N69: Dock Road East Roundabout N: 655233 E: 554659	
Swept Path Analysis: 75m Blade on SuperWing carrier.	
Red – Wheelpath; Magenta – Blade Oversail; Green – Trailer Oversail	
Comment #1:	Street furniture to be removed.
Comment #2:	Tree/Hedge trimming required to avoid clashes with delivery vehicle.
Comment #3	Temporary hardcore area to be installed in roundabout island to allow the abnormal load contraflow at this location. Any modifications previously completed at this location for traversing of abnormal loads are to be surveyed and used where applicable.
Comment #4	Delivery to travel contraflow around roundabout to N18 exit.
Comment #5	Manual steering required to assist navigation.

2.6 Option #1 – Node 5

<p>Location:</p> <p>N18 Exit #1 to 20</p> <p>N: 654698 E: 557909</p>	
<p>Swept Path Analysis:</p> <p>75m Blade on SuperWing carrier.</p>	 <p style="text-align: center;">Red – Wheelpath; Magenta – Blade Oversail; Green – Trailer Oversail</p>
Comment #1:	
Street furniture including street lighting and road signs to be removed.	
Comment #2:	
Manual steering required to assist navigation.	

2.7 Option #1 – Node 6

Location: M20 Exit #5 to N20 Southbound N: 648459 E: 551155	
Swept Path Analysis: 75m Blade on SuperWing carrier.	 <p data-bbox="567 1776 1372 1803">Red – Wheelpath; Magenta – Blade Oversail; Green – Trailer Oversail</p>
Comment #1:	
Comment #2:	

2.8 Option #1 – Node 7

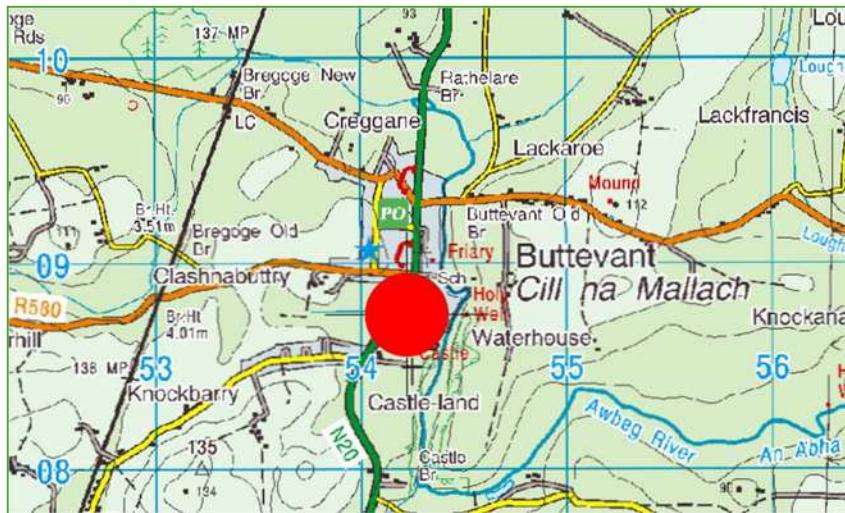
<p>Location:</p> <p>N20 - Ballymacrory</p> <p>N: 638578 E: 552049</p>	
<p>Swept Path Analysis:</p> <p>75m Blade on SuperWing carrier.</p>	
	<p>Red – Wheelpath; Magenta – Blade Oversail; Green – Trailer Oversail</p>
Comment #1:	Street furniture including roadside crash barrier and road signs to be removed.
Comment #2:	Tree/Hedge trimming required to avoid clashes with delivery vehicle.
Comment #3	Manual steering required to assist navigation.
Comment #4	Utility lines/poles may need to be redirected to avoid clash with blade oversail

2.9 Option #1 – Node 8

Location:

N20 - Buttevant

N: 608810
E: 554197



Swept Path Analysis:

75m Blade on
SuperWing carrier.

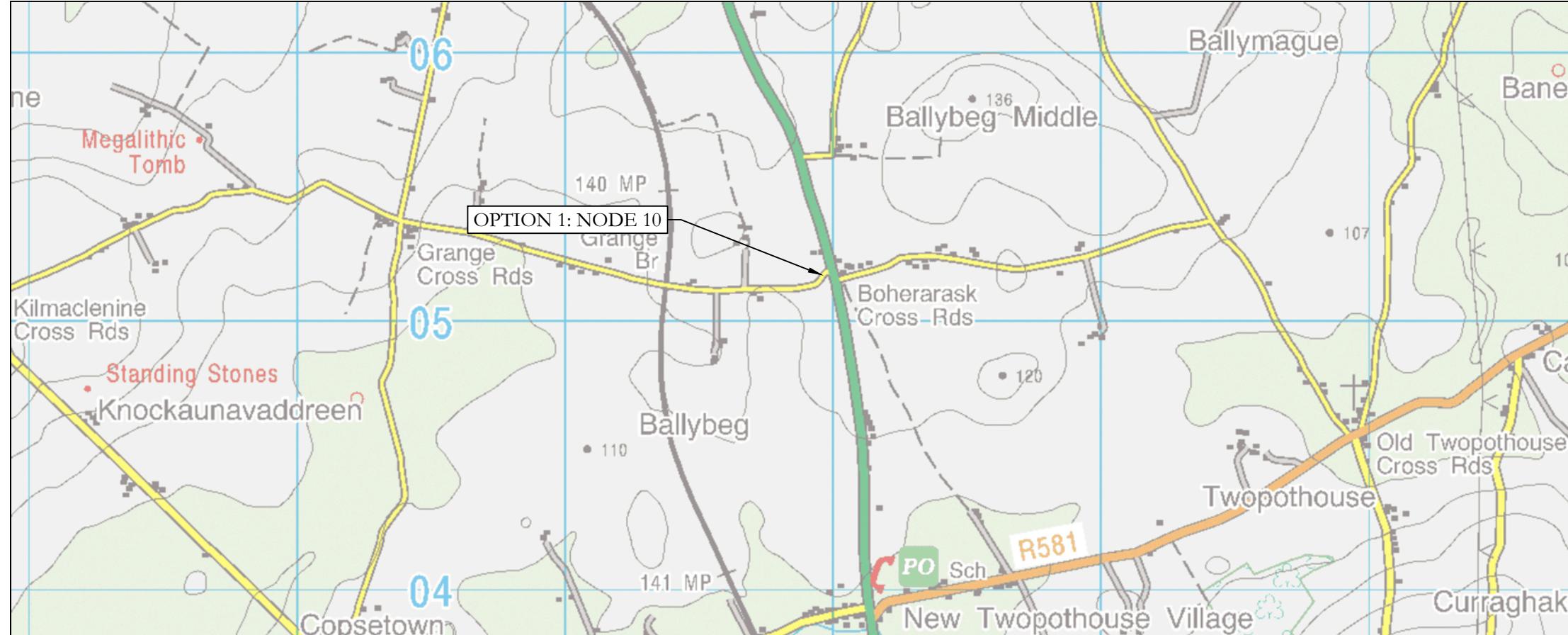


Red – Wheelpath; **Magenta** – Blade Oversail; **Green** – Trailer Oversail

Comment #1:	Street furniture to be removed.
Comment #2:	Tree/Hedge trimming may be required to avoid clashes with delivery vehicle.
Comment #3	Manual steering required to assist navigation.

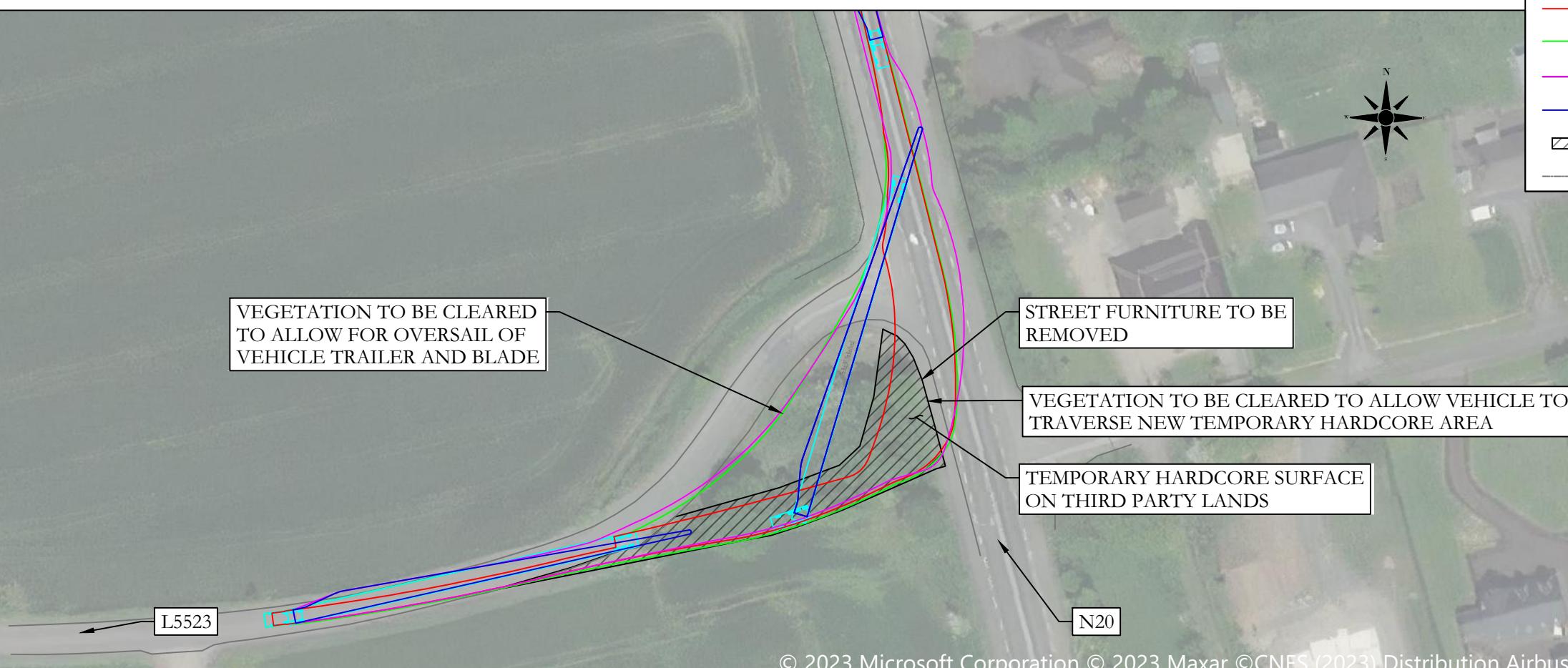
2.10 Option #1 – Node 9

<p>Location:</p> <p>N20 - Ballybeg Bends</p> <p>N: 607262 E: 554112</p>	
<p>Swept Path Analysis:</p> <p>75m Blade on SuperWing carrier.</p>	
	<p>Red – Wheelpath; Magenta – Blade Oversail; Green – Trailer Oversail</p>
Comment #1:	Road signs to be removed.
Comment #2:	Tree/Hedge trimming required to avoid clashes with delivery vehicle.
Comment #3	Manual steering required to assist navigation.



OPTION 1: NODE 10 - LOCATION

1:50,000



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PLAN VIEW - SWEPT PATH ANALYSIS

Scale 1:1000

GENERAL NOTES

1. DRAWING ISSUED FOR PLANNING APPLICATION PURPOSES ONLY.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS AND DOCUMENTATION.
3. DO NOT SCALE DRAWING.
4. NODES ILLUSTRATED ON DRAWING ARE BASED ON A DESKTOP STUDY ONLY.
5. SPA MODEL ILLUSTRATED A 75m BLADE BEING TRANSPORTED ON A SUPERWING CARRIER VEHICLE WITH 10m OVERHANG.
6. ALL MITIGATION MEASURES REQUIRED AT EACH NODE ARE SUBJECT TO APPROVAL FROM THE LOCAL AUTHORITY AND/OR APPROPRIATE THIRD PARTY.
7. ALL TRAFFIC MANAGEMENT WORKS TO CONFORM TO AN APPROVED TRAFFIC MANAGEMENT PLAN.
8. THE MINIMUM ROAD WIDTH FOR THE TDR WILL BE SPECIFIED BY THE TURBINE MANUFACTURER AND SHALL APPLY TO THE ILLUSTRATED TDRs IN THEIR ENTIRETY.
9. THE NODES HAVE BEEN DETERMINED BASED ON AN ASSUMED VEHICLE TYPE AND CONFIGURATION. NO MARGIN FOR DRIVER DISCRETION OR FACTOR OF SAFETY HAS BEEN USED IN DETERMINING THE NODES REQUIRED ALONG EACH TDR.

LEGEND

- DELIVERY VEHICLE WHEELPATH
- DELIVERY VEHICLE TRAILER OVERSAIL
- DELIVERY VEHICLE BLADE OVERSAIL
- EXISTING WATERCOURSE
- ▨ TEMPORARY HARDCORE SURFACE
- EXISTING EDGE OF PAVEMENT

P2	GENERAL REVISION	E.B.	B.F.	15 JAN 2024
P1	FIRST ISSUE	E.B.	B.F.	15 DEC 2023
Rev Description Drawn Checked Date				
Suitability Status: PLANNING				
Client: GREENSOURCE SUSTAINABLE DEVELOPMENTS				
Job Title: TULLACONDRA WIND FARM				
Drawing Title: TURBINE DELIVERY ROUTE OPTION 1: NODE 10				
Scale:	AS SHOWN	Sheet: A3		



Dwg No: 23010-BFA-TC-TDR-DR-C-1601

Rev: P2

2.12 Option #1 – Node 11

<p>Location:</p> <p>L5523 - Grange Bridge</p> <p>N: 605187 E: 553346</p>	
<p>Swept Path Analysis:</p> <p>75m Blade on SuperWing carrier.</p>	
	<p>Red – Wheelpath; Magenta – Blade Oversail; Green – Trailer Oversail</p>
Comment #1:	Tree/Hedge trimming required to avoid clashes with delivery vehicle.
Comment #2:	Blade to be loaded in a specific configuration to allow navigation.

2.13 Option #1 – Node 12

<p>Location:</p> <p>L5523: Grange East</p> <p>N: 605571 E: 552048</p>	
<p>Swept Path Analysis:</p> <p>75m Blade at 84° incline on Blade-Lifter Vehicle.</p>	
<p style="text-align: center;">Red – Wheelpath; Magenta – Blade Oversail; Green – Trailer Oversail</p>	
Comment #1:	Tree/Hedge trimming required to avoid clashes with delivery vehicle.
Comment #2:	Utility Line/Poles to be diverted to avoid clashes with delivery vehicle.
Comment #3	Public road to be widened to meet minimum requirements of the turbine manufacturer.
Comment #4	Blade to be loaded in a specific configuration to allow navigation.
Comment #5	Manual steering required to assist navigation.

2.14 Option #1 – Node 13

<p>Location:</p> <p>L5523: Grange East</p> <p>N: 605481 E: 551558</p>	
<p>Swept Path Analysis:</p> <p>75m Blade at 84° incline on Blade-Lifter Vehicle.</p>	
<p style="text-align: center;">Red – Wheelpath; Magenta – Blade Oversail; Green – Trailer Oversail</p>	
Comment #1:	Tree/Hedge trimming required to avoid clashes with delivery vehicle.
Comment #2:	Utility Line/Poles to be diverted to avoid clashes with delivery vehicle.
Comment #3	Public road to be widened to meet minimum requirements of the turbine manufacturer.
Comment #4	Blade to be loaded in a specific configuration to allow navigation.
Comment #5	Manual steering required to assist navigation.

2.15 Option #1 – Node 14

<p>Location:</p> <p>L5302: Site Entrance</p> <p>N: 604622 E: 549910</p>	
<p>Swept Path Analysis:</p> <p>75m Blade on SuperWing carrier.</p>	
	<p style="text-align: center;">Red – Wheelpath; Magenta – Blade Oversail; Green – Trailer Oversail</p>
Comment #1:	Tree/Hedge trimming required to avoid clashes with delivery vehicle.
Comment #2:	Road construction required as per the specifications of the wind farm road designs.

2.16 Option #2a – Node 1

<p>Location:</p> <p>N28: Shannonpark Roundabout</p> <p>N: 564531 E: 572924</p>	
<p>Swept Path Analysis:</p> <p>75m Blade on SuperWing carrier.</p>	
<p style="text-align: center;">Red – Wheelpath; Magenta – Blade Oversail; Green – Trailer Oversail</p>	
Comment #1:	Street furniture including street lighting and road signs to be removed.
Comment #2:	Tree/Hedge trimming required to avoid clashes with delivery vehicle.
Comment #3	Manual steering required to assist navigation.
Comment #4	Delivery vehicle to travel contraflow around roundabout to remain on N28.

2.17 Option #2a – Node 2

<p>Location:</p> <p>N28 - N40 Junction</p> <p>N: 570011 E: 571001</p>	
<p>Swept Path Analysis:</p> <p>75m Blade on SuperWing carrier.</p>	
	<p>Red – Wheelpath; Magenta – Blade Oversail; Green – Trailer Oversail</p>
<p>Comment #1:</p>	<p>Street furniture including roadside crash barrier and street lighting to be removed.</p>
<p>Comment #2:</p>	<p>Tree/Hedge trimming required to avoid clashes with delivery vehicle.</p>

2.18 Option #2a – Node 3

Location:

N8 - R635 – Cork City

N: 572494
E: 570770



Swept Path Analysis:

75m Blade on SuperWing carrier.



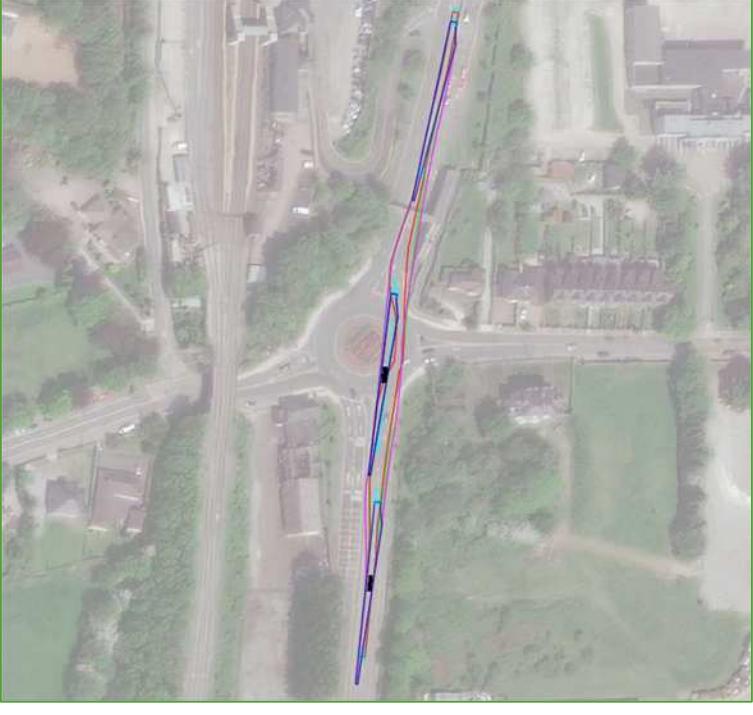
Red – Wheelpath; **Magenta** – Blade Oversail; **Green** – Trailer Oversail

Comment #1	Street furniture to be removed from roadside and splitter island. Ramps to be used to allow vehicle traverse kerbs of the splitter island.
Comment #2	Tree/Hedge trimming required to avoid clashes with delivery vehicle.
Comment #3	Oversail of third-party lands.
Comment #4	Manual steering required to assist navigation.
Comment #5	Delivery vehicle to travel contraflow when travelling from N8 to R635.

2.19 Option #2a – Node 4

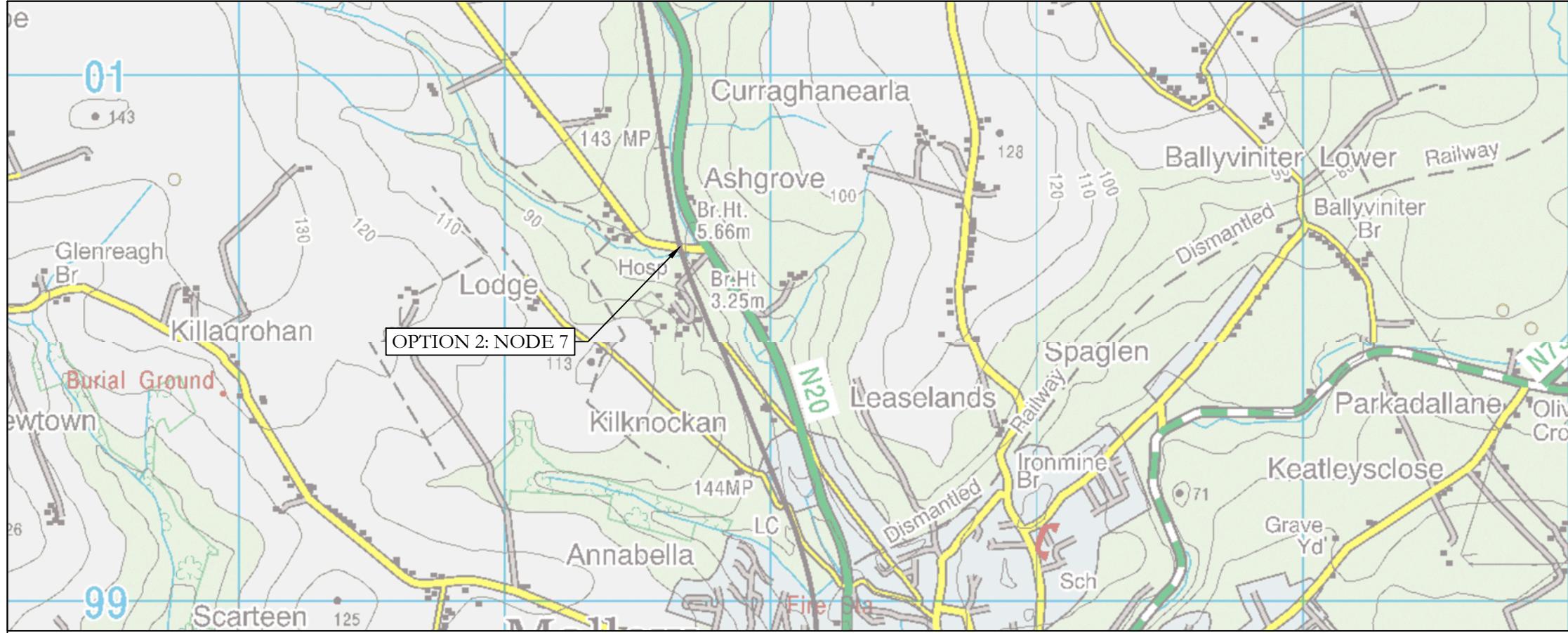
<p>Location:</p> <p>R635 - N20 – North Ring Road - Cork City</p> <p>N: 573513 E: 567642</p>	
<p>Swept Path Analysis:</p> <p>75m Blade on SuperWing carrier.</p>	
Red – Wheelpath; Magenta – Blade Oversail; Green – Trailer Oversail	
Comment #1:	Street furniture including street lighting, traffic signals and road signs to be removed.
Comment #2:	Delivery vehicle to travel contraflow at this location in the vicinity of the junction.
Comment #3	Tree/Hedge trimming required to avoid clashes with delivery vehicle.
Comment #4	Manual steering required to assist navigation.

2.20 Option #2a – Node 5

<p>Location:</p> <p>N20 – N72 – Roundabout Mallow</p> <p>N: 598605 E: 555189</p>	
<p>Swept Path Analysis:</p> <p>75m Blade on SuperWing carrier.</p>	
<p>Red – Wheelpath; Magenta – Blade Oversail; Green – Trailer Oversail</p>	
Comment #1:	Road signs in roundabout to be removed.
Comment #2:	Tree/Hedge trimming required to avoid clashes with delivery vehicle.
Comment #3:	Vehicle wheels to traverse apron of the roundabout. If apron structure is insufficient to support the axial loading of abnormal load vehicle, road structure works will be required.
Comment #4:	Delivery vehicle to travel contraflow around the roundabout.

2.21 Option #2a – Node 6

Location: N20 – Roundabout Mallow N: 599138 E: 555251	
Swept Path Analysis: 75m Blade on SuperWing carrier.	
Red – Wheelpath; Magenta – Blade Oversail; Green – Trailer Oversail	
Comment #1:	Manual steering required to assist navigation without the requirement of public road widening works.
Comment #2:	Tree/hedge trimming may be required.

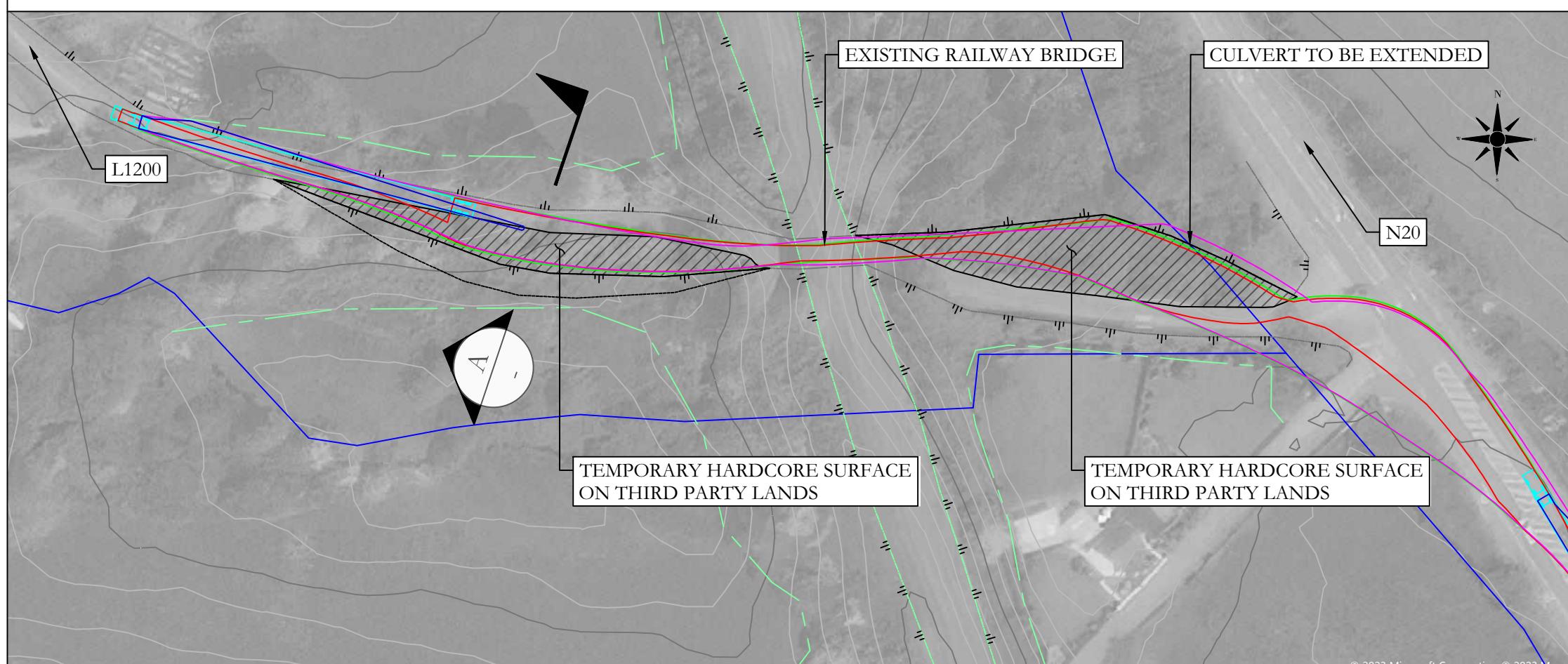


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4. NODES ILLUSTRATED ON DRAWING ARE BASED ON A DESKTOP STUDY ONLY.
5. SPA MODEL ILLUSTRATED A 75m BLADE BEING TRANSPORTED ON A SUPERWING CARRIER VEHICLE WITH 10m OVERHANG.
6. ALL MITIGATION MEASURES REQUIRED AT EACH NODE ARE SUBJECT TO APPROVAL FROM THE LOCAL AUTHORITY AND/OR APPROPRIATE THIRD PARTY.
7. ALL TRAFFIC MANAGEMENT WORKS TO CONFORM TO AN APPROVED TRAFFIC MANAGEMENT PLAN.
8. THE MINIMUM ROAD WIDTH FOR THE TDR WILL BE SPECIFIED BY THE TURBINE MANUFACTURER AND SHALL APPLY TO THE ILLUSTRATED TDRs IN THEIR ENTIRETY.
9. THE NODES HAVE BEEN DETERMINED BASED ON AN ASSUMED VEHICLE TYPE AND CONFIGURATION. NO MARGIN FOR DRIVER DISCRETION OR FACTOR OF SAFETY HAS BEEN USED IN DETERMINING THE NODES REQUIRED ALONG EACH TDR.

OPTION 2: NODE 7 - LOCATION

1:50,000



LEGEND

- DELIVERY VEHICLE WHEELPATH
- DELIVERY VEHICLE TRAILER OVERSAIL
- DELIVERY VEHICLE BLADE OVERSAIL
- EXISTING WATERCOURSE
- TEMPORARY HARDCORE SURFACE
- EXISTING EDGE OF PAVEMENT

P2	GENERAL REVISION	E.B.	B.F.	15 JAN 2024
P1	FIRST ISSUE	E.B.	B.F.	15 DEC 2023
Rev	Description	Drawn	Checked	Date
Suitability Status:				
PLANNING				
Client:				
GREENSOURCE SUSTAINABLE DEVELOPMENTS				
Job Title:				
TULLACONDRA WIND FARM				
Drawing Title:				
TURBINE DELIVERY ROUTE OPTION 2: NODE 7				
Scale:	AS SHOWN			Sheet: A3

PLAN VIEW - SWEPT PATH ANALYSIS

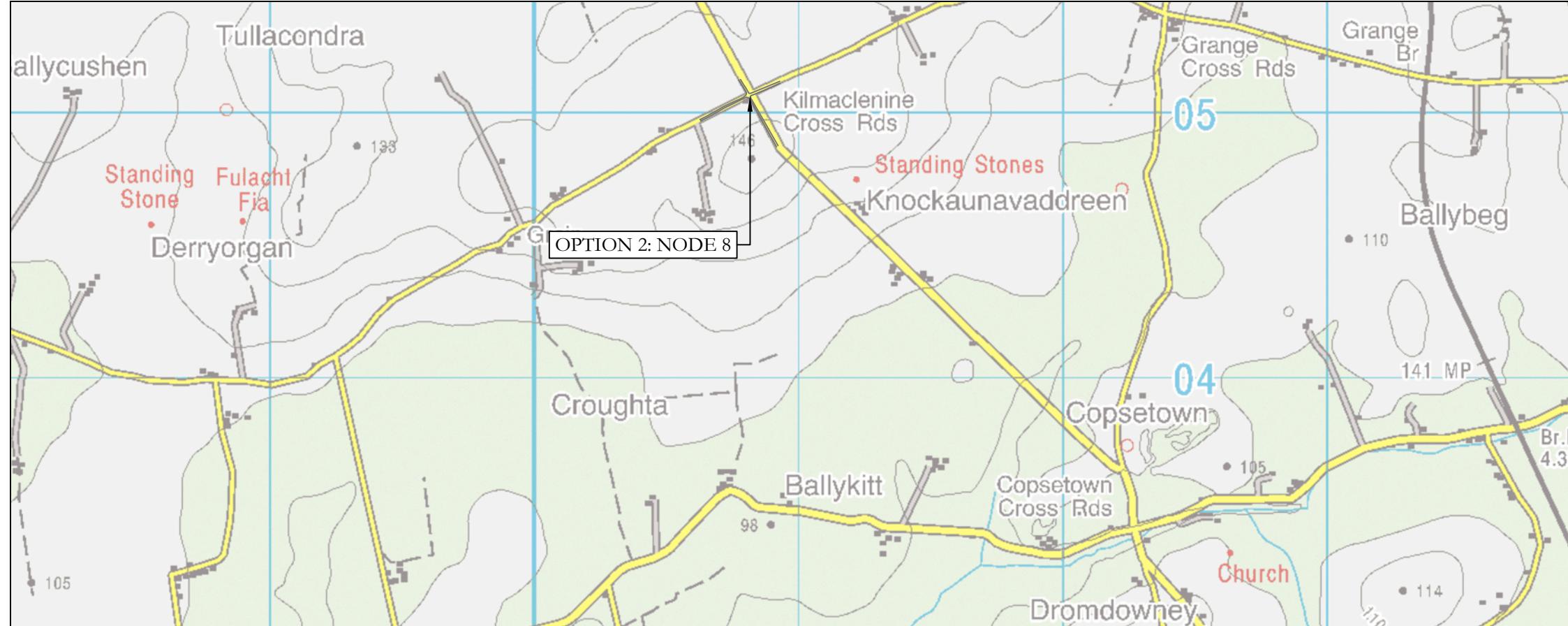
Scale 1:1000

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Dwg No:
23010-BFA-TC-TDR-DR-C-1603

Rev:
P2



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OPTION 2: NODE 8 - LOCATION

1:50,000



LEGEND

- DELIVERY VEHICLE WHEELPATH
- DELIVERY VEHICLE TRAILER OVERSAIL
- DELIVERY VEHICLE BLADE OVERSAIL
- EXISTING WATERCOURSE
- ▨ TEMPORARY HARDCORE SURFACE
- EXISTING EDGE OF PAVEMENT

P2	GENERAL REVISION	E.B.	B.F.	15 JAN 2024
P1	FIRST ISSUE	E.B.	B.F.	15 DEC 2023
Rev Description Drawn Checked Date				
Suitability Status:				
PLANNING				
Client:				
GREENSOURCE SUSTAINABLE DEVELOPMENTS				
Job Title:				
TULLACONDRA WIND FARM				
Drawing Title:				
TURBINE DELIVERY ROUTE OPTION 2: NODE 8				
Scale:				
AS SHOWN				Sheet: A3

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PLAN VIEW - SWEPT PATH ANALYSIS

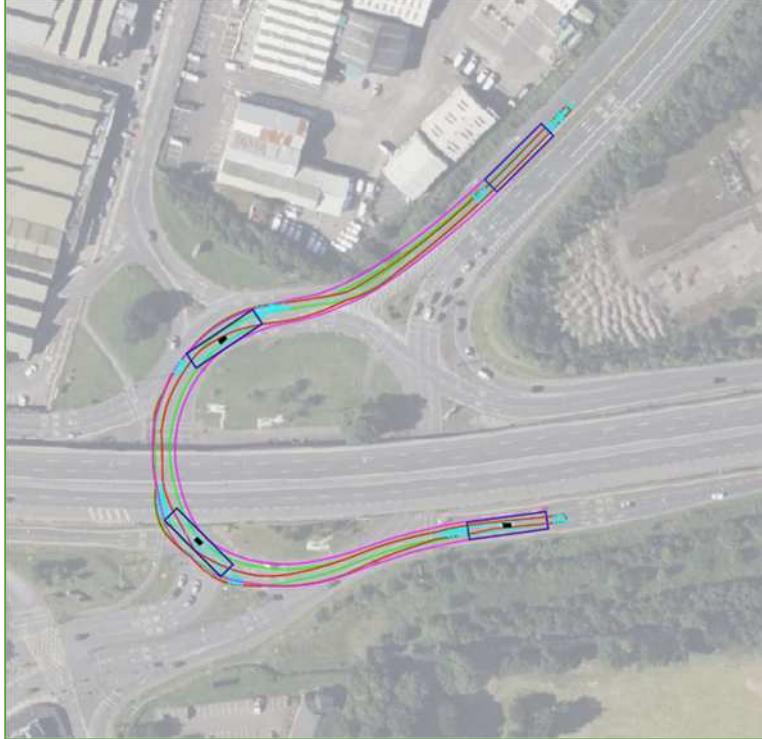
Scale 1:1000

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Dwg No:
23010-BFA-TC-TDR-DR-C-1604

Rev:
P2

2.24 Option #2b – Node 9

<p>Location:</p> <p>N40 – N27 Intersection – Cork City</p> <p>N: 569109 E: 567614</p>	
<p>Swept Path Analysis:</p> <p>30m x 6.5m Tower on Clamp Trailer</p>	
<p>Red – Wheelpath; Magenta – Blade Oversail; Green – Trailer Oversail</p>	
Comment #1:	Street furniture to be removed.
Comment #2:	Tree/Hedge trimming required to avoid clashes with delivery vehicle.

2.25 Option #2b – Node 10

<p>Location:</p> <p>N27 – Albert Street Cork City</p> <p>N: 571634 E: 568159</p>	
<p>Swept Path Analysis:</p> <p>30m x 6.5m Tower on Clamp Trailer</p>	
<p style="text-align: center;">Red – Wheelpath; Magenta – Blade Oversail; Green – Trailer Oversail</p>	
<p>Comment #1:</p>	<p>Street furniture including street lighting, railings and traffic signals to be removed from roadside and splitter islands. Ramps to be used to allow vehicle traverse kerbs of the splitter islands.</p>
<p>Comment #2:</p>	<p>Delivery vehicle to travel contraflow at this location in the vicinity of the junction.</p>
<p>Comment #3</p>	<p>Tree trimming may be required to avoid clashes with delivery vehicle.</p>

2.26 Option #2b – Node 11

<p>Location:</p> <p>N27 – N8 Anderson's Quay Cork City</p> <p>N: 572030 E: 568104</p>	
<p>Swept Path Analysis:</p> <p>30m x 6.5m Tower on Clamp Trailer</p>	
	<p>Red – Wheelpath; Magenta – Blade Oversail; Green – Trailer Oversail</p>
Comment #1:	Street furniture including traffic signals to be removed.
Comment #2:	Tree/Hedge trimming required to avoid clashes with delivery vehicle.
Comment #3	Delivery vehicle to travel contraflow along Anderson's Quay.

2.27 Option #2b – Node 12

Location:

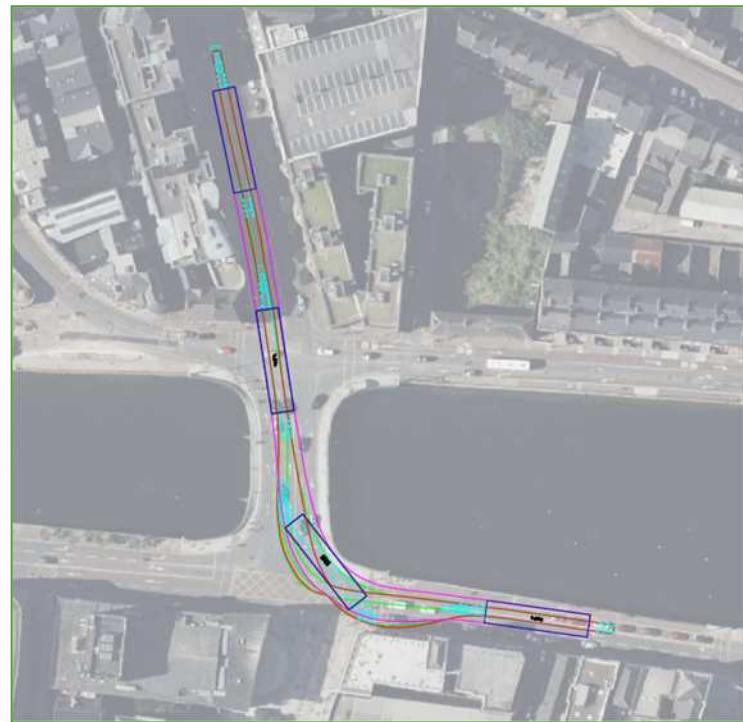
N20 – Christy Ring Bridge – Cork City

N: 572140
E: 567475



Swept Path Analysis:

30m x 6.5m Tower
on Clamp Trailer



Red – Wheelpath; **Magenta** – Blade Oversail; **Green** – Trailer Oversail

Comment #1: Street furniture including street lighting and traffic signals to be removed.

2.28 Option #2b – Node 13

Location:

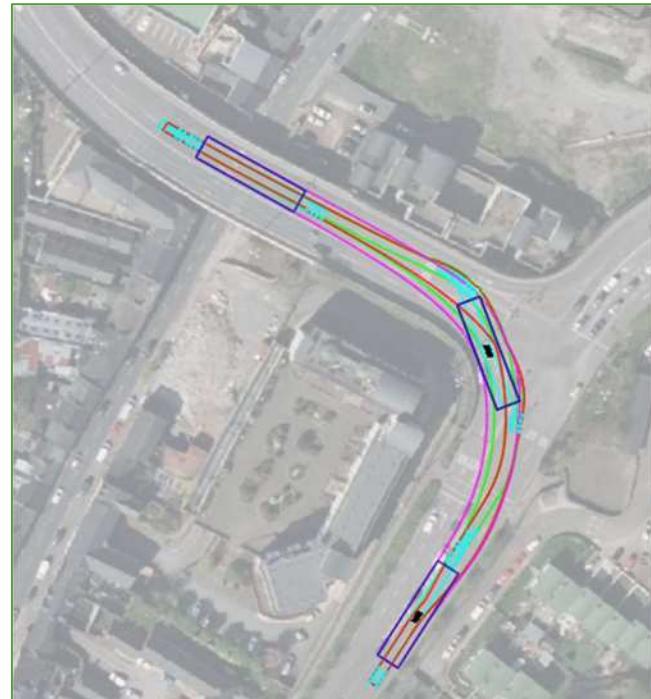
N20 – North City Link Road – Cork City

N: 573415
E: 567555



Swept Path Analysis:

30m x 6.5m Tower on Clamp Trailer



Red – Wheelpath; **Magenta** – Blade Oversail; **Green** – Trailer Oversail

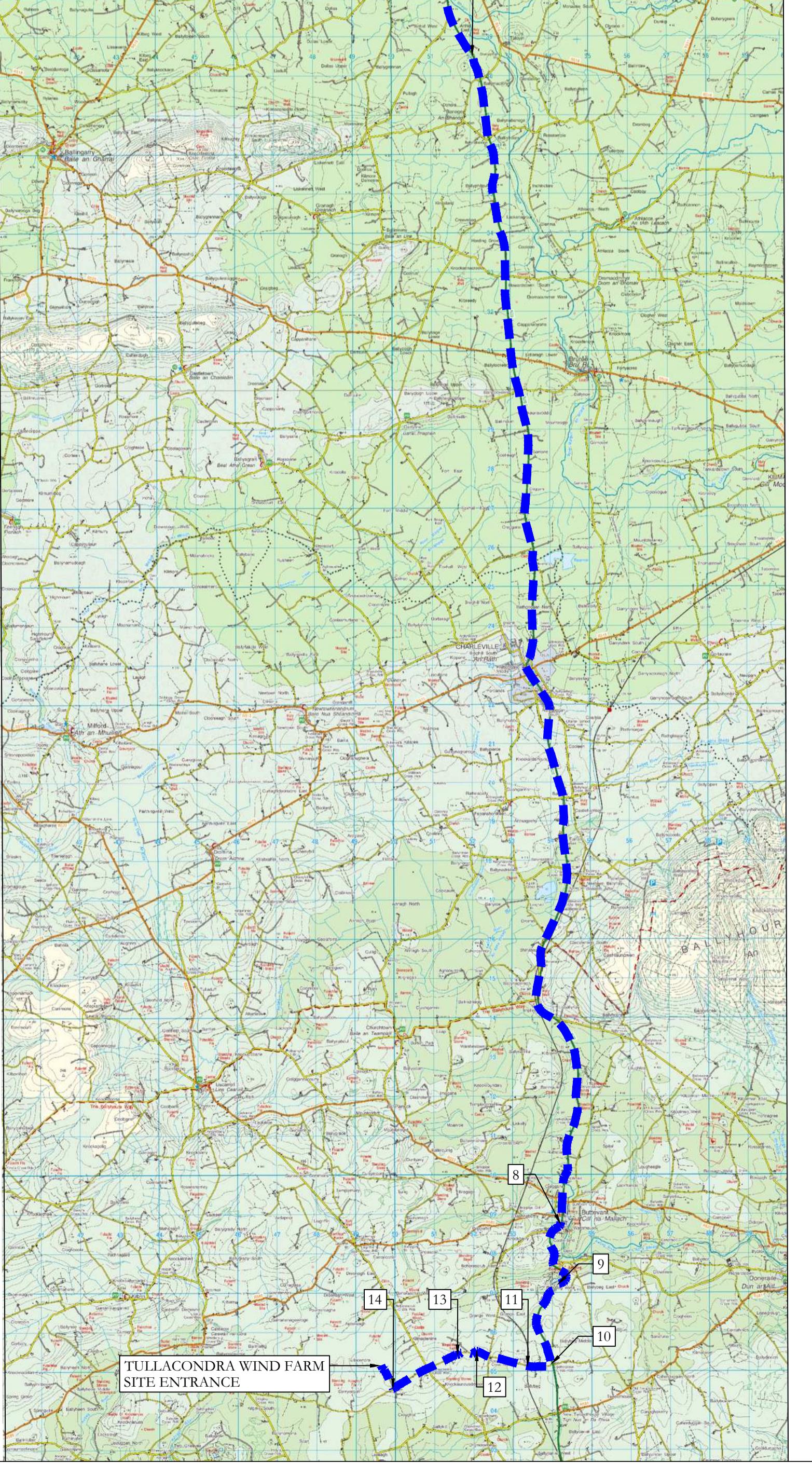
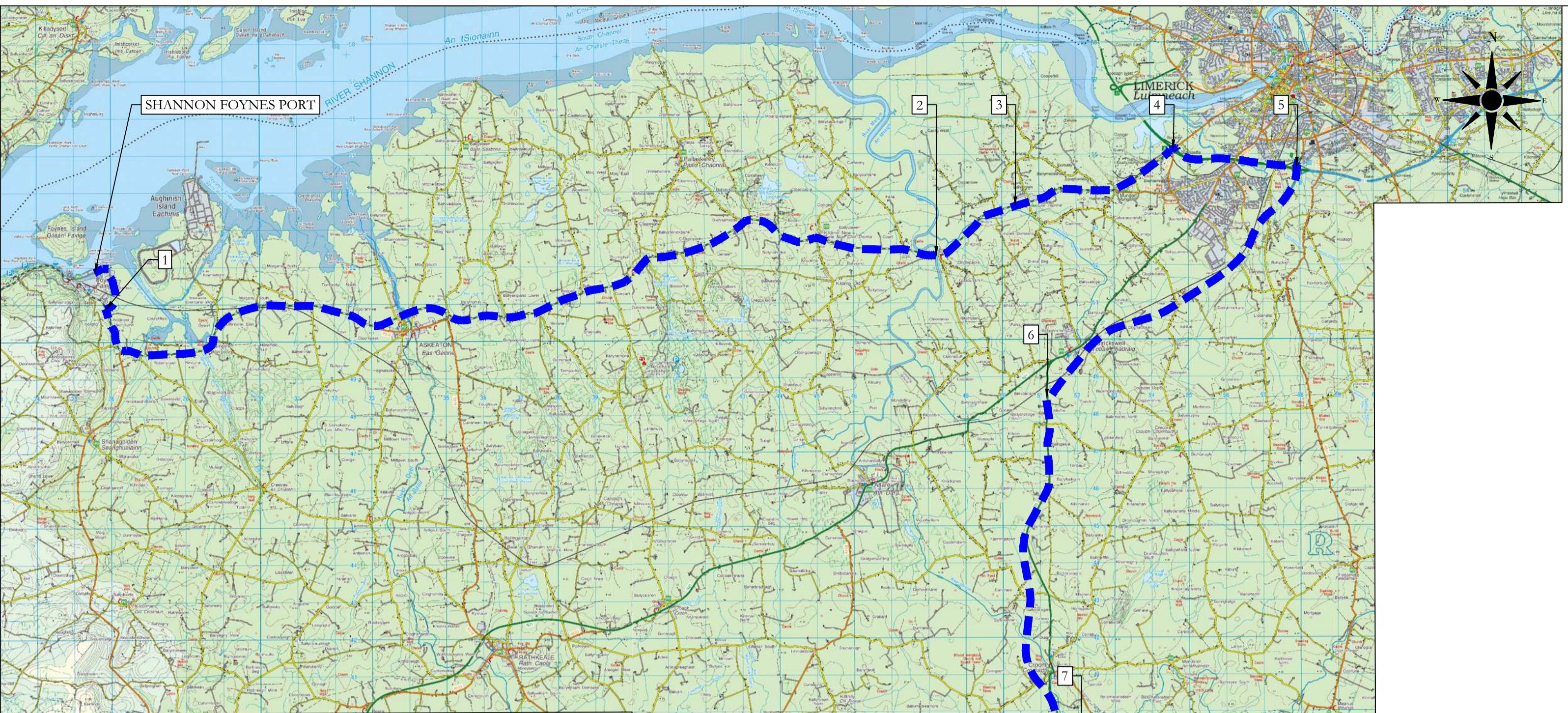
Comment #1:	Street furniture to be removed.
Comment #2:	Delivery vehicle to travel contraflow at this location in the vicinity of the junction.

3 CONCLUSIONS & RECOMMENDATIONS

Based on the findings of this report, it is recommended that the following criteria are in place prior to the delivery of the first turbine component for Tullacondra Green Energy Project:

1. Agreement with the Local Authority(s) regarding the design and implementation of the mitigation measures required along the public roads.
2. Landowner agreements are in place for locations identified as requiring third-party lands.
3. Agreements with the appropriate utility companies are in place regarding the re-location and/or mitigation measures required along the TDRs.
4. A vertical geometry assessment is carried out along the TDRs to assess and scope any mitigation measures that may be required due to vertical geometry not meeting the required specification for the turbine delivery vehicles.
5. A road condition survey is carried out to ensure the structural integrity of the public roads meets the requirements of the turbine delivery vehicles.
6. A trial run takes place to ensure that the TDR is fully compliant with all appropriate requirements and specifications prior to the first abnormal load delivery.
7. The structural integrity of bridges along the TDRs are to be surveyed and confirmed to be adequate by a structural engineer.
8. Vertical clearance heights of bridges and tunnels along the TDRs are to be checked and/or surveyed and their adequacy confirmed.
9. Tree trimming and vegetation clearing is to be completed and confirmed adequate via the trial run.
10. A topo survey is to be conducted and a detailed design completed for any Node stated to require oversail or road construction within third party lands.

APPENDIX A – Route Layout Map



TDR OPTION 1

TURBINE DELIVERY ROUTE NODES

Node	Northing	Easting
OPTION 1: NODE 1	650954	525834
OPTION 1: NODE 2	652328	548178
OPTION 1: NODE 3	653652	550323
OPTION 1: NODE 4	655177	554583
OPTION 1: NODE 5	654698	557909
OPTION 1: NODE 6	648459	551155
OPTION 1: NODE 7	638578	552049
OPTION 1: NODE 8	608810	554197
OPTION 1: NODE 9	607262	554112
OPTION 1: NODE 10	605238	553945
OPTION 1: NODE 11	605187	553346
OPTION 1: NODE 12	605571	552048
OPTION 1: NODE 13	605481	551558
OPTION 1: NODE 14	604622	549910

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KEYED NOTES

- [1] OPTION 1: NODE 1
- [2] OPTION 1: NODE 2
- [3] OPTION 1: NODE 3
- [4] OPTION 1: NODE 4a/NODE 4b
- [5] OPTION 1: NODE 5
- [6] OPTION 1: NODE 6
- [7] OPTION 1: NODE 7
- [8] OPTION 1: NODE 8
- [9] OPTION 1: NODE 9
- [10] OPTION 1: NODE 10
- [11] OPTION 1: NODE 11
- [12] OPTION 1: NODE 12
- [13] OPTION 1: NODE 13
- [14] OPTION 1: NODE 14
- [15] OPTION 2: NODE 1
- [16] OPTION 2: NODE 2
- [17] OPTION 2: NODE 3
- [18] OPTION 2: NODE 4
- [19] OPTION 2: NODE 5
- [20] OPTION 2: NODE 6
- [21] OPTION 2: NODE 7
- [22] OPTION 2: NODE 8
- [23] OPTION 2: NODE 9
- [24] OPTION 2: NODE 10
- [25] OPTION 2: NODE 11
- [26] OPTION 2: NODE 12
- [27] OPTION 2: NODE 13

LEGEND

- TDR OPTION 1
- TDR OPTION 2a (BLADES)
- TDR OPTION 2b (TOWER AND NACELLE)

P2 GENERAL REVISION E.B. B.F. 16 JAN 2024

P1 FIRST ISSUE E.B. B.F. 15 DEC 2023

Rev Description Drawn Checked Date

Suitability Status:

PLANNING

Client:

TULLACONDRA GREEN ENERGY LTD

Job Title:

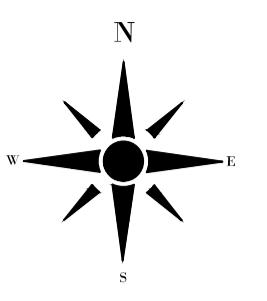
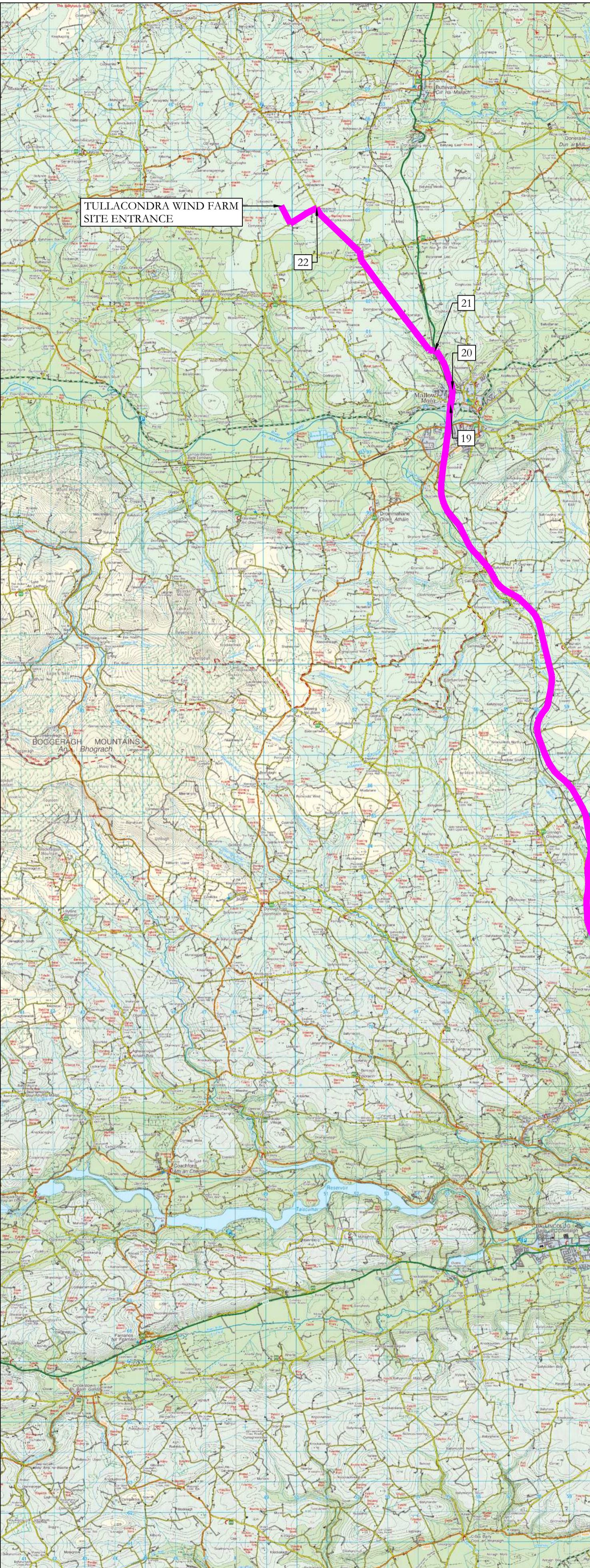
TULLACONDRA GREEN ENERGY PROJECT

Drawing Title:
TURBINE DELIVERY ROUTE
OPTION 1: ROUTE LAYOUT DRAWING

Scale: 1:100,000 Sheet: A1

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Dwg No: 23010-BFA-TC-TDR-DR-C-1501 Rev: P2



TDR OPTION 2

TURBINE DELIVERY ROUTE NODES

Node	Northing	Easting
OPTION 2: NODE 1	564531	572924
OPTION 2: NODE 2	570011	571001
OPTION 2: NODE 3	572494	570770
OPTION 2: NODE 4	573513	567642
OPTION 2: NODE 5	598605	555189
OPTION 2: NODE 6	599138	555251
OPTION 2: NODE 7	600399	554677
OPTION 2: NODE 8	605129	550786
OPTION 2: NODE 9	569109	567614
OPTION 2: NODE 10	571634	568159
OPTION 2: NODE 11	572030	568104
OPTION 2: NODE 12	572140	567475
OPTION 2: NODE 13	573415	567555

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- [13] OPTION 1: NODE 13
- [14] OPTION 1: NODE 14
- [15] OPTION 2: NODE 1
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- [24] OPTION 2: NODE 10
- [25] OPTION 2: NODE 11
- [26] OPTION 2: NODE 12
- [27] OPTION 2: NODE 13

LEGEND

- TDR OPTION 1
- TDR OPTION 2a (BLADES)
- TDR OPTION 2b (TOWER AND NACELLE)

P1 FIRST ISSUE E.B. B.F. 16 JAN 2024
Rev Description Drawn Checked Date

Suitability Status:

PLANNING

Client: TULLACONDRA GREEN ENERGY LTD

Job Title: TULLACONDRA GREEN ENERGY PROJECT
Drawing Title: TURBINE DELIVERY ROUTE
OPTION 2: ROUTE LAYOUT DRAWING

Scale: 1:100,000 Sheet: A1

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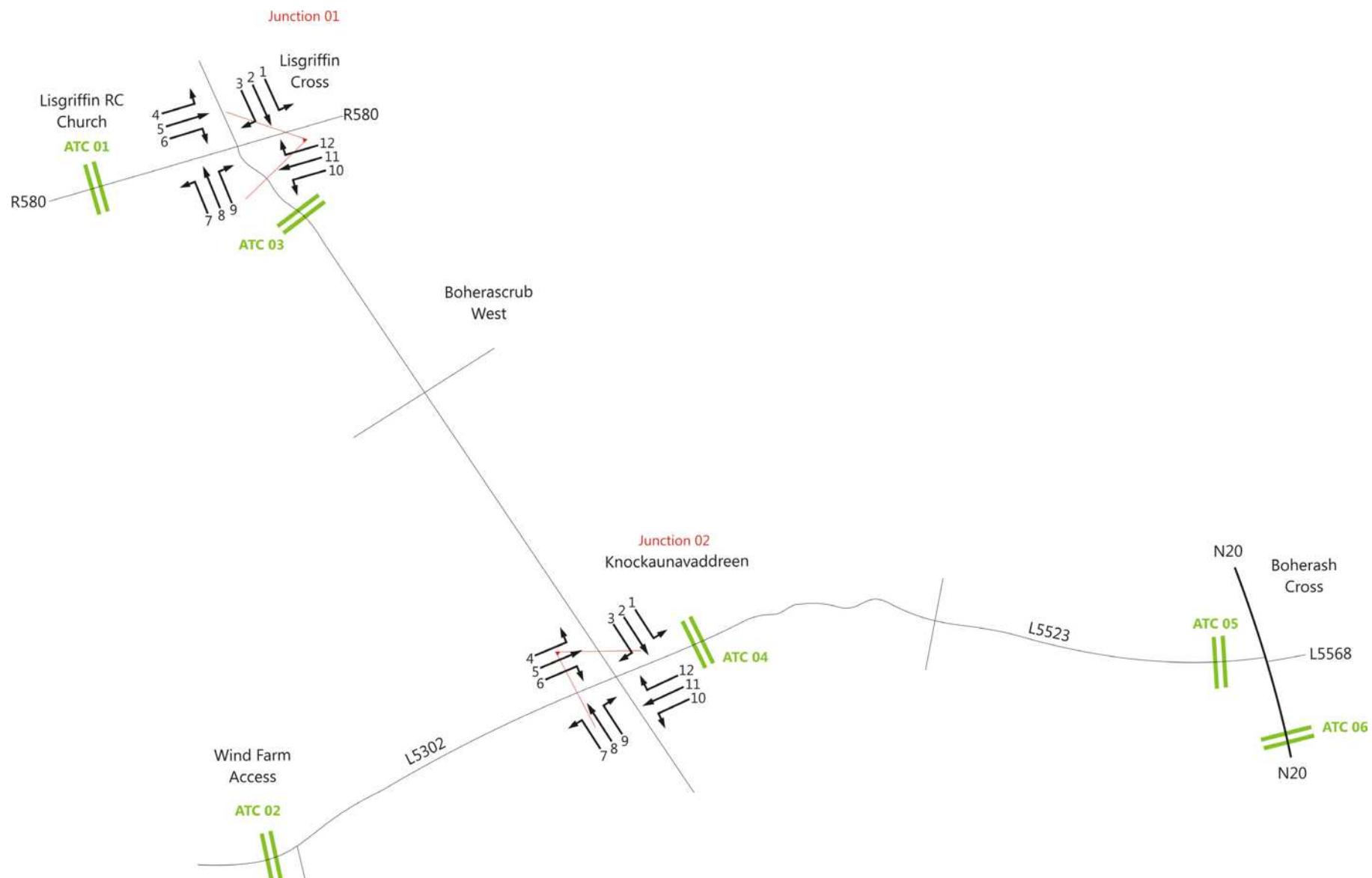
EIAR VOLUME III

Appendices

CHAPTER 16 – TRAFFIC AND TRANSPORT

Appendix 16.2: Traffic Count Data

Site/Movement Numbering



	Job number:	Job Date:	Drawing No:	traffinomics
	TRA/23/091	Week Commencing Tuesday 24 th April 2023	TRA/23/091-02	
Client:	Nicholas O'Dwyer Consulting Engineers		Author:	SPW

TRAFFINOMICS LIMITED

**TULLACONDRA WIND FARM TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS**

**APRIL 2023
TRA/23/091**

SITE: 01

DATE: 26th April 2023

LOCATION: R580 Lisgriffin Cross

DAY: Wednesday

TIME	MOVEMENT 1					TOT	PCU	MOVEMENT 2					TOT	PCU	MOVEMENT 3						
	CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS		
07:00	0	1	0	0	0	1	1	8	12	0	0	0	20	20	0	0	0	0	0	0	0
07:15	2	0	0	0	0	2	2	12	9	1	0	0	22	23	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	20	9	0	0	0	29	29	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	6	4	0	0	0	10	10	0	0	0	0	0	0	0
H/TOT	2	1	0	0	0	3	3	46	34	1	0	0	81	82	0	0	0	0	0	0	0
08:00	1	0	0	0	0	1	1	23	6	1	0	0	30	31	0	0	0	0	0	0	0
08:15	3	1	0	0	0	4	4	21	0	0	0	0	21	21	0	0	0	0	0	0	0
08:30	2	1	0	0	0	3	3	12	7	2	0	0	21	22	0	0	0	0	0	0	0
08:45	1	0	0	0	0	1	1	24	4	0	0	0	28	28	0	0	0	0	0	0	0
H/TOT	7	2	0	0	0	9	9	80	17	3	0	0	100	102	0	0	0	0	0	0	0
09:00	2	0	0	0	0	2	2	20	1	0	0	0	21	21	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	15	3	0	0	0	18	18	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	7	2	0	0	0	9	9	0	0	0	0	0	0	0
09:45	2	0	0	0	0	2	2	13	2	1	0	0	16	17	0	0	0	0	0	0	0
H/TOT	4	0	0	0	0	4	4	55	8	1	0	0	64	65	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	4	6	0	0	0	10	10	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	9	1	1	0	0	11	12	0	0	0	0	0	0	0
10:30	1	0	0	0	0	1	1	8	5	0	0	0	13	13	0	0	0	0	0	0	0
10:45	1	0	0	0	0	1	1	11	2	0	1	0	14	15	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	2	2	32	14	1	1	0	48	50	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	6	5	0	0	0	11	11	0	0	0	0	0	0	0
11:15	1	0	0	0	0	1	1	3	0	0	0	0	3	3	0	0	0	0	0	0	0
11:30	1	0	0	0	0	1	1	2	2	0	0	0	4	4	0	0	0	0	0	0	0
11:45	1	0	0	0	0	1	1	6	0	0	0	0	6	6	0	0	0	0	0	0	0
H/TOT	3	0	0	0	0	3	3	17	7	0	0	0	24	24	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0
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12:30	2	0	0	0	0	2	2	4	7	0	0	1	12	13	0	0	0	0	0	0	0
12:45	2	0	0	0	0	2	2	3	4	0	1	0	8	9	1	0	0	0	0	1	1
H/TOT	5	1	0	0	0	6	6	18	14	0	1	1	34	36	1	0	0	0	0	1	1

TRAFFINOMICS LIMITED
TULLACONDRA WIND FARM TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS
APRIL 2023
TRA/23/091

SITE: 01

DATE: 26th April 2023

LOCATION: R580 Lisgriffin Cross

DAY: Wednesday

TIME	MOVEMENT 1					TOT	PCU	MOVEMENT 2					TOT	PCU	MOVEMENT 3					TOT	PCU
	CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS		
13:00	0	0	0	0	0	0	0	3	3	0	0	0	6	6	0	0	0	0	0	0	0
13:15	1	0	0	0	0	1	1	6	1	0	0	0	7	7	0	0	0	0	0	0	0
13:30	1	0	0	0	0	1	1	7	6	0	0	0	13	13	0	0	0	0	0	0	0
13:45	1	0	0	0	0	1	1	6	2	0	0	0	8	8	0	0	0	0	0	0	0
H/TOT	3	0	0	0	0	3	3	22	12	0	0	0	34	34	0	0	0	0	0	0	0
14:00	2	0	1	0	0	3	4	7	0	0	0	0	7	7	0	0	0	0	0	0	0
14:15	1	1	0	0	0	2	2	7	0	0	0	0	7	7	0	0	0	0	0	0	0
14:30	0	1	0	0	0	1	1	8	1	1	0	0	10	11	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	12	1	0	0	0	13	13	0	0	0	0	0	0	0
H/TOT	3	2	1	0	0	6	7	34	2	1	0	0	37	38	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	7	1	0	0	0	8	8	0	0	0	0	0	0	0
15:15	1	0	1	0	0	2	3	5	0	0	0	0	5	5	1	0	0	0	0	1	1
15:30	2	1	0	0	0	3	3	5	1	0	0	0	6	6	0	0	0	0	0	0	0
15:45	1	0	0	0	0	1	1	7	1	0	1	0	9	10	0	0	0	0	0	0	0
H/TOT	4	1	1	0	0	6	7	24	3	0	1	0	28	29	1	0	0	0	0	1	1
16:00	0	2	0	0	0	2	2	6	1	1	0	0	8	9	0	0	0	0	0	0	0
16:15	2	0	0	0	0	2	2	5	5	0	0	0	10	10	0	0	0	0	0	0	0
16:30	1	0	0	0	0	1	1	8	4	1	0	0	13	14	0	0	0	0	0	0	0
16:45	1	0	1	0	0	2	3	4	1	1	0	0	6	7	0	0	0	0	0	0	0
H/TOT	4	2	1	0	0	7	8	23	11	3	0	0	37	39	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	6	5	0	0	0	11	11	1	2	0	0	0	3	3
17:15	0	0	0	0	0	0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0
17:30	1	0	0	0	0	1	1	9	0	0	0	0	9	9	0	0	1	0	0	1	2
17:45	1	0	0	0	0	1	1	6	1	0	0	0	7	7	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	2	2	27	6	0	0	0	33	33	1	2	1	0	0	4	5
18:00	1	0	0	0	0	1	1	9	1	0	0	0	10	10	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	7	4	0	0	0	11	11	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0
18:45	2	0	0	0	0	2	2	3	3	0	0	0	6	6	0	0	0	0	0	0	0
H/TOT	3	0	0	0	0	3	3	22	9	0	0	0	31	31	0	0	0	0	0	0	0
P/TOT	42	9	3	0	0	54	56	400	137	10	3	1	551	561	3	2	1	0	0	6	7

TRAFFINOMICS LIMITED

**TULLACONDRA WIND FARM TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS**

**APRIL 2023
TRA/23/091**

SITE: 01

DATE: 26th April 2023

LOCATION: R580 Lisgriffin Cross

DAY: Wednesday

TIME	MOVEMENT 4					TOT	PCU	MOVEMENT 5					TOT	PCU	MOVEMENT 6						
	CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS		
07:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1	2	0	0	0	0	2	2
07:15	0	0	0	0	0	0	0	1	0	0	1	0	2	3	2	0	0	0	0	2	2
07:30	0	0	0	0	0	0	0	3	1	1	2	0	7	10	4	1	0	0	0	5	5
07:45	0	0	0	0	0	0	0	2	3	0	0	0	5	5	3	0	1	0	0	4	5
H/TOT	0	0	0	0	0	0	0	7	4	1	3	0	15	19	11	1	1	0	0	13	14
08:00	0	0	0	0	0	0	0	3	2	1	1	0	7	9	2	0	0	0	0	2	2
08:15	1	0	0	0	0	1	1	14	1	0	2	0	17	20	3	2	0	0	0	5	5
08:30	0	0	0	0	0	0	0	9	2	0	0	0	11	11	3	0	0	0	0	3	3
08:45	0	0	0	0	0	0	0	7	1	0	0	0	8	8	4	0	0	0	0	4	4
H/TOT	1	0	0	0	0	0	1	33	6	1	3	0	43	47	12	2	0	0	0	14	14
09:00	0	0	0	0	0	0	0	5	1	1	1	0	8	10	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	1	1	0	2	0	4	7	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	1	0	1	0	0	2	3	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	3	1	0	0	0	4	4	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	10	3	2	3	0	18	23	1	0	0	0	0	1	1
10:00	0	0	0	0	0	0	0	3	2	0	0	0	5	5	1	0	0	0	0	1	1
10:15	0	0	0	0	0	0	0	2	0	0	0	0	2	2	1	0	0	0	0	1	1
10:30	0	0	0	0	0	0	0	3	0	1	0	0	4	5	1	0	0	0	0	1	1
10:45	0	0	0	0	0	0	0	1	1	0	1	0	3	4	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	9	3	1	1	0	14	16	4	0	0	0	0	4	4
11:00	0	0	0	0	0	0	0	7	1	0	1	0	9	10	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	5	1	0	0	0	6	6	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	5	1	0	1	0	7	8	2	0	0	0	0	2	2
11:45	0	0	0	0	0	0	0	3	2	0	0	0	5	5	2	1	0	0	0	3	3
H/TOT	0	0	0	0	0	0	0	20	5	0	2	0	27	30	4	1	0	0	0	5	5
12:00	0	0	0	0	0	0	0	4	0	1	1	0	6	8	0	1	0	0	0	1	1
12:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	0	0	0	1	1
12:30	0	0	0	0	0	0	0	3	2	1	0	0	6	7	2	0	0	0	0	2	2
12:45	0	0	0	0	0	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	12	2	2	1	0	17	19	3	1	0	0	0	4	4

TRAFFINOMICS LIMITED

TULLACONDRA WIND FARM TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS

APRIL 2023
TRA/23/091

SITE: 01

DATE: 26th April 2023

LOCATION: R580 Lisgriffin Cross

DAY: Wednesday

TIME	MOVEMENT 4					TOT	PCU	MOVEMENT 5					TOT	PCU	MOVEMENT 6					TOT	PCU
	CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS		
13:00	0	0	0	0	0	0	0	2	1	0	2	0	5	8	1	1	0	0	0	2	2
13:15	0	0	0	0	0	0	0	5	0	0	1	0	6	7	3	1	0	0	0	4	4
13:30	0	0	0	0	0	0	0	2	0	0	0	0	2	2	3	0	0	0	0	3	3
13:45	0	0	0	0	0	0	0	2	1	0	0	0	3	3	3	0	0	0	0	3	3
H/TOT	0	0	0	0	0	0	0	11	2	0	3	0	16	20	10	2	0	0	0	12	12
14:00	0	0	0	0	0	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	2	2	0	0	0	4	4	4	0	0	0	0	4	4
14:30	0	0	0	0	0	0	0	4	1	0	0	0	5	5	3	0	1	0	0	4	5
14:45	0	0	0	0	0	0	0	5	1	0	3	0	9	13	3	0	0	0	0	3	3
H/TOT	0	0	0	0	0	0	0	15	4	0	3	0	22	26	10	0	1	0	0	11	12
15:00	0	0	0	0	0	0	0	6	1	1	0	0	8	9	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	2	0	1	0	0	3	4	1	1	0	0	0	2	2
15:30	0	0	0	0	0	0	0	5	1	0	0	0	6	6	2	0	0	0	0	2	2
15:45	0	0	0	0	0	0	0	3	0	2	2	0	7	11	0	1	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	16	2	4	2	0	24	29	3	2	0	0	0	5	5
16:00	0	0	0	0	0	0	0	0	0	0	1	0	1	2	3	1	0	0	0	4	4
16:15	0	0	0	0	0	0	0	0	1	0	0	0	1	1	2	0	0	0	0	2	2
16:30	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	2	1	0	1	0	4	5	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	4	2	0	2	0	8	11	5	1	0	0	0	6	6
17:00	1	0	0	0	0	1	1	4	1	0	0	0	5	5	0	1	0	0	0	1	1
17:15	0	0	0	0	0	0	0	2	1	0	0	0	3	3	2	0	0	0	0	2	2
17:30	0	0	0	0	0	0	0	4	2	0	0	0	6	6	1	0	0	0	0	1	1
17:45	0	0	0	0	0	0	0	3	1	1	0	0	5	6	1	0	0	0	0	1	1
H/TOT	1	0	0	0	0	1	1	13	5	1	0	0	19	20	4	1	0	0	0	5	5
18:00	0	0	0	0	0	0	0	2	0	0	0	0	2	2	2	0	0	0	0	2	2
18:15	1	0	0	0	0	1	1	6	1	1	0	0	8	9	2	0	0	0	0	2	2
18:30	0	0	0	0	0	0	0	2	4	0	0	0	6	6	2	0	0	0	0	2	2
18:45	0	0	0	0	0	0	0	2	1	0	0	0	3	3	1	0	0	0	0	1	1
H/TOT	1	0	0	0	0	1	1	12	6	1	0	0	19	20	7	0	0	0	0	7	7
P/TOT	3	0	0	0	0	3	3	162	44	13	23	0	242	278	74	11	2	0	0	87	88

TRAFFINOMICS LIMITED

**TULLACONDRA WIND FARM TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS**

**APRIL 2023
TRA/23/091**

SITE: 01

DATE: 26th April 2023

LOCATION: R580 Lisgriffin Cross

DAY: Wednesday

TIME	MOVEMENT 7					TOT	PCU	MOVEMENT 8					TOT	PCU	MOVEMENT 9						
	CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS		
07:00	0	0	0	0	0	0	0	5	3	0	0	0	8	8	0	1	0	0	0	1	1
07:15	0	0	0	0	0	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	6	2	1	0	0	9	10	1	0	0	0	0	1	1
07:45	1	1	1	0	0	3	4	5	2	0	0	0	7	7	1	0	0	0	0	1	1
H/TOT	1	1	1	0	0	3	4	20	7	1	0	0	28	29	2	1	0	0	0	3	3
08:00	0	0	0	0	0	0	0	5	6	0	0	0	11	11	4	2	0	0	0	6	6
08:15	1	0	0	0	0	1	1	8	2	0	0	0	10	10	3	0	0	0	0	3	3
08:30	1	0	0	0	0	1	1	4	4	0	0	0	8	8	2	0	0	0	0	2	2
08:45	3	0	0	0	0	3	3	5	3	0	0	0	8	8	9	1	0	0	0	10	10
H/TOT	5	0	0	0	0	5	5	22	15	0	0	0	37	37	18	3	0	0	0	21	21
09:00	2	0	0	0	0	2	2	2	2	0	0	0	4	4	0	2	0	0	0	2	2
09:15	1	0	0	0	0	1	1	7	2	0	0	0	9	9	0	0	0	0	0	0	0
09:30	3	1	0	0	0	4	4	5	1	1	0	0	7	8	1	0	0	2	0	3	6
09:45	0	0	0	0	0	0	0	1	2	1	0	0	4	5	1	0	0	1	0	2	3
H/TOT	6	1	0	0	0	7	7	15	7	2	0	0	24	25	2	2	0	3	0	7	11
10:00	1	0	0	0	0	1	1	8	2	0	0	0	10	10	2	0	0	1	0	3	4
10:15	0	0	0	0	0	0	0	5	3	0	0	0	8	8	0	1	0	0	0	1	1
10:30	3	0	0	0	0	3	3	3	2	1	0	0	6	7	1	0	0	1	0	2	3
10:45	1	2	0	0	0	3	3	2	1	0	0	0	3	3	1	0	0	0	0	1	1
H/TOT	5	2	0	0	0	7	7	18	8	1	0	0	27	28	4	1	0	2	0	7	10
11:00	1	0	0	0	0	1	1	3	1	1	0	0	5	6	0	0	0	1	0	1	2
11:15	2	0	0	0	0	2	2	2	0	0	0	0	2	2	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	7	2	0	1	0	10	11	1	0	0	0	0	1	1
11:45	0	0	0	0	0	0	0	7	1	0	0	0	8	8	0	0	0	1	0	1	2
H/TOT	3	0	0	0	0	3	3	19	4	1	1	0	25	27	1	0	0	2	0	3	6
12:00	0	0	0	0	0	0	0	5	2	0	0	0	7	7	1	0	0	0	0	1	1
12:15	0	1	0	0	0	1	1	7	2	0	0	1	10	11	0	0	0	0	0	0	0
12:30	0	1	0	0	0	1	1	7	2	0	0	0	9	9	0	1	0	0	0	1	1
12:45	1	0	0	0	0	1	1	5	1	0	0	0	6	6	2	0	0	0	0	2	2
H/TOT	1	2	0	0	0	3	3	24	7	0	0	1	32	33	3	1	0	0	0	4	4

TRAFFINOMICS LIMITED

TULLACONDRA WIND FARM TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS

APRIL 2023
TRA/23/091

SITE: 01

DATE: 26th April 2023

LOCATION: R580 Lisgriffin Cross

DAY: Wednesday

TIME	MOVEMENT 7					TOT	PCU	MOVEMENT 8					TOT	PCU	MOVEMENT 9					TOT	PCU
	CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS		
13:00	1	0	0	0	0	1	1	10	1	0	0	0	11	11	0	1	0	0	0	1	1
13:15	3	1	0	0	0	4	4	4	1	0	0	0	5	5	2	0	0	0	0	2	2
13:30	2	0	0	0	0	2	2	8	1	1	0	1	11	13	1	0	0	0	0	1	1
13:45	2	1	0	0	0	3	3	5	3	0	0	0	8	8	1	0	0	0	0	1	1
H/TOT	8	2	0	0	0	10	10	27	6	1	0	1	35	37	4	1	0	0	0	5	5
14:00	4	0	0	0	0	4	4	8	3	0	0	0	11	11	2	0	0	0	0	2	2
14:15	3	1	0	0	0	4	4	12	2	0	0	0	14	14	4	0	0	0	0	4	4
14:30	1	0	0	0	0	1	1	10	1	0	0	0	11	11	1	1	0	0	0	2	2
14:45	4	0	0	0	0	4	4	4	2	0	0	0	6	6	0	0	0	0	0	0	0
H/TOT	12	1	0	0	0	13	13	34	8	0	0	0	42	42	7	1	0	0	0	8	8
15:00	1	0	0	0	0	1	1	7	0	0	0	0	7	7	0	1	0	0	0	1	1
15:15	1	1	0	0	0	2	2	16	7	3	1	0	27	30	0	1	0	0	0	1	1
15:30	5	1	0	0	0	6	6	12	3	0	1	0	16	17	2	0	0	0	0	2	2
15:45	0	1	0	0	0	1	1	7	4	0	0	0	11	11	1	0	1	0	0	2	3
H/TOT	7	3	0	0	0	10	10	42	14	3	2	0	61	65	3	2	1	0	0	6	7
16:00	1	1	0	0	0	2	2	11	3	0	0	0	14	14	0	0	0	0	0	0	0
16:15	2	0	0	0	0	2	2	8	7	0	0	0	15	15	2	0	0	0	0	2	2
16:30	3	0	0	0	0	3	3	18	6	0	0	0	24	24	3	0	0	0	0	3	3
16:45	2	0	0	0	0	2	2	14	9	0	0	0	23	23	3	0	0	0	0	3	3
H/TOT	8	1	0	0	0	9	9	51	25	0	0	0	76	76	8	0	0	0	0	8	8
17:00	3	0	1	0	0	4	5	21	17	0	0	0	38	38	3	1	0	0	0	4	4
17:15	2	0	1	0	0	3	4	22	15	0	0	0	37	37	1	1	0	0	0	2	2
17:30	0	0	0	0	0	0	0	19	5	0	0	0	24	24	1	2	0	0	0	3	3
17:45	1	0	0	0	0	1	1	15	9	0	0	0	24	24	1	0	0	0	0	1	1
H/TOT	6	0	2	0	0	8	9	77	46	0	0	0	123	123	6	4	0	0	0	10	10
18:00	3	0	0	0	0	3	3	16	8	0	0	0	24	24	2	1	0	0	0	3	3
18:15	1	1	0	0	0	2	2	13	1	0	0	0	14	14	4	2	0	0	0	6	6
18:30	2	1	0	0	0	3	3	20	4	0	0	0	24	24	4	0	0	0	0	4	4
18:45	1	0	0	0	0	1	1	15	3	0	0	0	18	18	2	0	0	0	0	2	2
H/TOT	7	2	0	0	0	9	9	64	16	0	0	0	80	80	12	3	0	0	0	15	15
P/TOT	69	15	3	0	0	87	89	413	163	9	3	2	590	600	70	19	1	7	0	97	107

TRAFFINOMICS LIMITED

**TULLACONDRA WIND FARM TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS**

**APRIL 2023
TRA/23/091**

SITE: 01

DATE: 26th April 2023

LOCATION: R580 Lisgriffin Cross

DAY: Wednesday

TIME	MOVEMENT 10					TOT	PCU	MOVEMENT 11					TOT	PCU	MOVEMENT 12						
	CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS		
07:00	0	0	0	0	0	0	0	3	0	0	1	0	4	5	0	0	0	0	0	0	0
07:15	4	0	0	0	0	4	4	7	1	0	2	0	10	13	3	0	0	0	0	3	3
07:30	1	1	0	0	0	2	2	1	0	0	0	0	1	1	0	0	0	0	0	0	0
07:45	0	1	0	0	0	1	1	2	2	0	0	0	4	4	1	0	0	0	0	1	1
H/TOT	5	2	0	0	0	7	7	13	3	0	3	0	19	23	4	0	0	0	0	4	4
08:00	1	0	0	0	0	1	1	3	2	0	0	0	5	5	2	0	0	0	0	2	2
08:15	4	0	0	0	0	4	4	2	1	1	0	0	4	5	1	1	0	0	0	2	2
08:30	0	0	0	0	0	0	0	3	1	0	0	0	4	4	2	0	0	0	0	2	2
08:45	0	0	0	0	0	0	0	6	1	0	0	0	7	7	1	0	1	0	0	2	3
H/TOT	5	0	0	0	0	5	5	14	5	1	0	0	20	21	6	1	1	0	0	8	9
09:00	1	1	1	0	0	3	4	3	0	0	2	0	5	8	2	0	1	0	0	3	4
09:15	1	0	0	0	0	1	1	6	0	0	1	0	7	8	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	4	0	0	0	0	4	4	4	0	0	0	0	4	4
09:45	1	0	0	0	0	1	1	4	2	0	0	0	6	6	1	1	0	0	0	2	2
H/TOT	3	1	1	0	0	5	6	17	2	0	3	0	22	26	7	1	1	0	0	9	10
10:00	2	0	0	0	0	2	2	1	0	0	1	0	2	3	1	0	0	0	0	1	1
10:15	2	0	0	0	0	2	2	5	1	0	0	0	6	6	0	1	0	0	0	1	1
10:30	1	0	0	0	0	1	1	5	0	1	0	0	6	7	2	0	0	0	0	2	2
10:45	1	0	0	0	0	1	1	5	0	0	0	0	5	5	1	0	0	0	0	1	1
H/TOT	6	0	0	0	0	6	6	16	1	1	1	0	19	21	4	1	0	0	0	5	5
11:00	3	0	0	0	0	3	3	10	1	0	0	0	11	11	1	0	0	0	0	1	1
11:15	2	1	0	0	0	3	3	2	2	0	0	0	4	4	1	0	0	0	0	1	1
11:30	1	0	0	0	0	1	1	3	0	0	0	0	3	3	3	0	0	0	0	3	3
11:45	1	0	0	0	0	1	1	13	0	0	0	0	13	13	0	0	0	0	0	0	0
H/TOT	7	1	0	0	0	8	8	28	3	0	0	0	31	31	5	0	0	0	0	5	5
12:00	2	0	0	0	0	2	2	9	0	0	0	0	9	9	0	1	0	0	0	1	1
12:15	0	0	0	0	0	0	0	7	0	1	0	0	8	9	1	0	0	0	0	1	1
12:30	0	0	0	0	0	0	0	2	2	1	0	0	5	6	1	1	0	0	0	2	2
12:45	2	1	0	0	0	3	3	1	0	0	0	0	1	1	0	0	1	0	0	1	2
H/TOT	4	1	0	0	0	5	5	19	2	2	0	0	23	24	2	2	1	0	0	5	6

TRAFFINOMICS LIMITED

TULLACONDRA WIND FARM TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS

APRIL 2023
TRA/23/091

SITE: 01

DATE: 26th April 2023

LOCATION: R580 Lisgriffin Cross

DAY: Wednesday

TIME	MOVEMENT 10					TOT	PCU	MOVEMENT 11					TOT	PCU	MOVEMENT 12					TOT	PCU
	CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS		
13:00	3	0	0	0	0	3	3	3	1	0	0	0	4	4	0	0	0	0	0	0	0
13:15	1	0	0	0	0	1	1	1	0	0	0	0	1	1	1	0	0	0	0	1	1
13:30	1	0	0	0	0	1	1	0	4	1	3	1	9	14	3	0	0	0	0	3	3
13:45	0	2	0	0	0	2	2	2	2	0	0	0	4	4	0	0	0	0	0	0	0
H/TOT	5	2	0	0	0	7	7	6	7	1	3	1	18	23	4	0	0	0	0	4	4
14:00	1	0	0	0	0	1	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0
14:15	1	1	0	0	0	2	2	1	1	1	1	0	4	6	0	0	0	0	0	0	0
14:30	4	0	0	0	0	4	4	9	1	1	2	0	13	16	2	1	0	0	0	3	3
14:45	5	0	0	0	0	5	5	2	2	0	0	0	4	4	2	0	0	0	0	2	2
H/TOT	11	1	0	0	0	12	12	13	4	2	3	0	22	27	4	1	0	0	0	5	5
15:00	2	0	0	0	0	2	2	3	0	0	0	0	3	3	2	0	0	0	0	2	2
15:15	3	0	0	1	0	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	2	0	0	2	0	4	7	4	1	0	0	0	5	5	1	0	0	0	0	1	1
15:45	0	0	0	1	0	1	2	2	1	1	1	0	5	7	1	0	0	0	0	1	1
H/TOT	7	0	0	4	0	11	16	9	2	1	1	0	13	15	4	0	0	0	0	4	4
16:00	0	0	0	1	0	1	2	0	1	0	0	0	1	1	1	0	0	0	0	1	1
16:15	0	0	0	0	0	0	0	1	2	0	1	0	4	5	0	0	0	0	0	0	0
16:30	1	1	0	0	0	2	2	3	0	0	0	0	3	3	2	0	0	0	0	2	2
16:45	1	0	0	0	0	1	1	0	0	0	1	0	1	2	1	0	0	0	0	1	1
H/TOT	2	1	0	1	0	4	5	4	3	0	2	0	9	12	4	0	0	0	0	4	4
17:00	0	0	0	0	0	0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0
17:15	3	0	0	0	0	3	3	7	1	0	0	0	8	8	3	0	0	0	0	3	3
17:30	1	0	0	0	0	1	1	3	0	0	0	0	3	3	1	1	0	0	0	2	2
17:45	1	1	0	0	0	2	2	3	0	0	0	0	3	3	0	0	0	0	0	0	0
H/TOT	5	1	0	0	0	6	6	15	2	0	0	0	17	17	4	1	0	0	0	5	5
18:00	0	0	0	0	0	0	0	7	2	0	2	0	11	14	3	0	0	0	0	3	3
18:15	2	1	0	0	0	3	3	1	3	0	1	0	5	6	1	0	0	0	0	1	1
18:30	0	0	0	0	0	0	0	2	2	0	1	0	5	6	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	6	1	1	0	0	8	9	0	0	0	0	0	0	0
H/TOT	2	1	0	0	0	3	3	16	8	1	4	0	29	35	4	0	0	0	0	4	4
P/TOT	62	11	1	5	0	79	86	170	42	9	20	1	242	274	52	7	3	0	0	62	64

TRAFFINOMICS LIMITED

**TULLACONDRA WIND FARM TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS**

**APRIL 2023
TRA/23/091**

SITE: 02

DATE: 26th April 2023

LOCATION: L5502/L5523 Knockaunavaddreen Cross

DAY: Wednesday

TIME	MOVEMENT 1					TOT	PCU	MOVEMENT 2					TOT	PCU	MOVEMENT 3						
	CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS		
07:00	2	0	0	0	0	2	2	15	13	0	0	0	28	28	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	10	6	1	0	0	17	18	1	0	0	0	0	1	1
07:30	0	0	0	0	0	0	0	26	9	0	0	0	35	35	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	17	9	0	0	0	26	26	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	2	2	68	37	1	0	0	106	107	1	0	0	0	0	1	1
08:00	0	0	0	0	0	0	0	28	8	0	0	0	36	36	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	16	1	1	0	0	18	19	0	1	0	0	0	1	1
08:30	0	1	1	0	0	2	3	15	4	1	0	0	20	21	2	0	0	0	0	2	2
08:45	1	0	0	0	0	1	1	26	5	0	0	0	31	31	2	1	0	0	0	3	3
H/TOT	1	1	1	0	0	3	4	85	18	2	0	0	105	106	4	2	0	0	0	6	6
09:00	0	0	0	0	0	0	0	23	2	0	0	0	25	25	1	0	0	0	0	1	1
09:15	1	0	0	2	0	3	6	11	2	0	0	0	13	13	1	0	0	0	0	1	1
09:30	0	0	0	1	0	1	2	16	2	0	0	0	18	18	1	0	0	0	0	1	1
09:45	0	1	0	0	0	1	1	14	2	0	1	0	17	18	0	0	0	0	0	0	0
H/TOT	1	1	0	3	0	5	9	64	8	0	1	0	73	74	3	0	0	0	0	3	3
10:00	1	0	0	1	0	2	3	11	1	1	0	0	13	14	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	8	3	2	0	0	13	14	0	0	0	0	0	0	0
10:30	0	0	0	2	0	2	5	11	5	1	0	0	17	18	0	0	0	0	0	0	0
10:45	0	1	0	0	0	1	1	12	1	0	1	0	14	15	0	1	0	0	0	1	1
H/TOT	1	1	0	3	0	5	9	42	10	4	1	0	57	60	0	1	0	0	0	1	1
11:00	0	0	0	0	0	0	0	6	5	0	0	0	11	11	1	0	0	0	0	1	1
11:15	0	0	0	0	0	0	0	6	1	0	0	0	7	7	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	8	2	0	0	0	10	10	0	0	0	0	0	0	0
11:45	2	0	0	0	0	2	2	6	0	0	0	0	6	6	0	1	0	0	0	1	1
H/TOT	2	0	0	0	0	2	2	26	8	0	0	0	34	34	1	1	0	0	0	2	2
12:00	0	0	0	0	0	0	0	4	1	0	0	0	5	5	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	9	4	0	0	0	13	13	1	0	0	0	0	1	1
12:30	0	0	0	0	0	0	0	5	6	0	0	1	12	13	0	0	0	0	0	0	0
12:45	0	0	0	1	0	1	2	5	5	0	0	0	10	10	0	1	0	0	0	1	1
H/TOT	0	0	0	1	0	1	2	23	16	0	0	1	40	41	1	1	0	0	0	2	2

TRAFFINOMICS LIMITED

TULLACONDRA WIND FARM TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS

APRIL 2023
TRA/23/091

SITE: 02

DATE: 26th April 2023

LOCATION: L5502/L5523 Knockaunavaddreen Cross

DAY: Wednesday

TIME	MOVEMENT 1					TOT	PCU	MOVEMENT 2					TOT	PCU	MOVEMENT 3					TOT	PCU
	CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS		
13:00	1	0	0	0	0	1	1	4	1	0	0	0	5	5	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	6	4	0	0	0	10	10	1	0	0	0	0	1	1
13:30	0	0	0	0	0	0	0	9	3	0	0	0	12	12	0	1	0	0	0	1	1
13:45	0	0	0	0	0	0	0	10	3	0	0	0	13	13	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	29	11	0	0	0	40	40	1	1	0	0	0	2	2
14:00	0	0	0	0	0	0	0	6	1	0	0	0	7	7	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0
14:30	2	0	0	0	0	2	2	9	1	0	0	0	10	10	1	1	0	0	0	2	2
14:45	0	0	1	0	0	1	2	10	2	1	0	0	13	14	1	0	0	0	0	1	1
H/TOT	2	0	1	0	0	3	4	32	4	1	0	0	37	38	2	1	0	0	0	3	3
15:00	1	1	0	0	0	2	2	10	0	0	0	0	10	10	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	7	2	0	0	0	9	9	0	1	0	0	0	1	1
15:30	0	0	1	0	0	1	2	5	1	0	0	0	6	6	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	10	4	1	1	0	16	18	0	0	0	0	0	0	0
H/TOT	1	1	1	0	0	3	4	32	7	1	1	0	41	43	0	1	0	0	0	1	1
16:00	1	0	0	0	0	1	1	13	1	0	0	0	14	14	1	0	0	0	0	1	1
16:15	0	0	2	0	0	2	3	1	2	0	0	0	3	3	0	0	0	0	0	0	0
16:30	1	0	1	0	0	2	3	10	5	0	0	0	15	15	0	1	0	0	0	1	1
16:45	0	0	0	0	0	0	0	3	0	1	0	0	4	5	2	2	0	0	0	4	4
H/TOT	2	0	3	0	0	5	7	27	8	1	0	0	36	37	3	3	0	0	0	6	6
17:00	0	0	0	0	0	0	0	3	5	0	0	0	8	8	0	0	0	0	0	0	0
17:15	0	0	1	0	0	1	2	11	1	0	0	0	12	12	0	1	0	0	0	1	1
17:30	0	0	0	0	0	0	0	9	2	0	0	0	11	11	1	0	0	0	0	1	1
17:45	1	0	1	0	0	2	3	10	0	0	0	0	10	10	0	0	0	0	0	0	0
H/TOT	1	0	2	0	0	3	4	33	8	0	0	0	41	41	1	1	0	0	0	2	2
18:00	0	0	0	0	0	0	0	6	1	0	0	0	7	7	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	9	3	0	0	0	12	12	1	0	0	0	0	1	1
18:30	0	0	0	0	0	0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	27	4	0	0	0	31	31	1	0	0	0	0	1	1
P/TOT	14	4	8	7	0	33	46	488	139	10	3	1	641	651	18	12	0	0	0	30	30

TRAFFINOMICS LIMITED

**TULLACONDRA WIND FARM TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS**

**APRIL 2023
TRA/23/091**

SITE: 02

DATE: 26th April 2023

LOCATION: L5502/L5523 Knockaunavaddreen Cross

DAY: Wednesday

TIME	MOVEMENT 4					TOT	PCU	MOVEMENT 5					TOT	PCU	MOVEMENT 6							
	CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS			
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3	
07:15	1	0	0	0	0	1	1	1	0	0	0	0	0	1	1	2	0	0	0	0	2	
07:30	1	2	0	0	0	3	3	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
07:45	2	0	0	0	0	2	2	1	0	0	0	0	0	1	1	2	0	0	0	0	2	
H/TOT	4	2	0	0	0	6	6	2	0	0	0	0	0	2	2	7	1	0	0	0	8	8
08:00	0	1	0	0	1	2	3	5	1	0	1	0	7	8	0	0	0	0	0	0	0	
08:15	1	0	0	0	0	1	1	2	0	3	0	0	5	7	1	0	0	0	0	1	1	
08:30	0	0	0	0	0	0	0	2	2	0	0	0	4	4	0	0	0	0	0	0	0	
08:45	2	0	0	0	0	2	2	1	0	0	0	0	1	1	1	0	0	0	0	1	1	
H/TOT	3	1	0	0	1	5	6	10	3	3	1	0	17	20	2	0	0	0	0	2	2	
09:00	0	1	0	0	0	1	1	1	1	0	0	0	2	2	0	0	0	0	0	0	0	
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
09:30	2	0	0	0	0	2	2	1	0	0	0	0	1	1	0	0	0	0	0	0	0	
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	2	1	0	0	0	3	3	2	1	0	0	0	3	3	0	0	0	0	0	0	0	
10:00	1	0	0	0	0	1	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	
10:15	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	
10:30	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	0	0	0	0	0	
10:45	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	1	0	0	0	1	1	
H/TOT	3	1	0	0	0	4	4	4	0	1	0	0	5	6	0	1	0	0	0	1	1	
11:00	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	0	0	0	0	0	
11:15	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	
11:30	0	1	0	0	0	1	1	2	1	0	0	0	3	3	1	0	0	0	0	1	1	
11:45	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	0	0	0	0	0	
H/TOT	0	1	0	0	0	1	1	2	2	2	0	0	6	7	1	0	0	0	0	1	1	
12:00	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:30	1	0	0	0	0	1	1	1	0	3	0	0	4	6	0	0	0	0	0	0	0	
12:45	1	0	0	0	0	1	1	0	1	1	0	0	2	3	1	0	0	0	0	1	1	
H/TOT	2	0	0	0	0	2	2	1	2	4	0	0	7	9	1	0	0	0	0	1	1	

TRAFFINOMICS LIMITED

TULLACONDRA WIND FARM TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS

APRIL 2023
TRA/23/091

SITE: 02

DATE: 26th April 2023

LOCATION: L5502/L5523 Knockaunavaddreen Cross

DAY: Wednesday

TIME	MOVEMENT 4					TOT	PCU	MOVEMENT 5					TOT	PCU	MOVEMENT 6					TOT	PCU
	CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS		
13:00	1	0	0	0	0	1	1	1	1	0	0	0	2	2	2	0	1	0	0	3	4
13:15	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	1	0	0	1	2	0	0	0	0	0	0	0	1	0	0	0	1	2	3
13:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	2	0	1	0	0	3	4	2	1	0	0	0	3	3	3	0	1	0	1	5	7
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
14:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	0	0	0	1	1
14:30	1	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1
14:45	0	1	0	0	0	1	1	0	1	0	0	0	1	1	0	0	0	0	0	0	0
H/TOT	1	1	0	0	0	2	2	1	1	0	0	0	2	2	3	0	0	0	0	3	3
15:00	1	1	0	0	0	2	2	1	0	0	0	0	1	1	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
15:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	2	0	0	0	2	2
15:45	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	1	0	0	0	1	1
H/TOT	3	1	0	0	0	4	4	2	0	0	0	0	2	2	1	3	0	0	0	4	4
16:00	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	1	0	1	0	2	3	0	2	1	0	0	3	4	1	0	0	0	0	1	1
16:30	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0
16:45	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	1	1
H/TOT	2	1	0	1	0	4	5	1	2	1	0	0	4	5	1	1	0	0	0	2	2
17:00	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	1	0	0	0	1	1	0	0	0	0	0	0	0	1	0	1	0	0	2	3
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	1	1	0	0	0	2	2	2	0	0	0	0	2	2	0	0	0	0	0	0	0
H/TOT	1	3	0	0	0	4	4	2	0	0	0	0	2	2	1	0	1	0	0	2	3
18:00	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	1	0	0	0	1	1
18:15	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	1	1
18:30	1	0	0	0	0	1	1	2	0	0	0	0	2	2	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	2	0	0	0	0	2	2	2	1	0	0	0	3	3
H/TOT	2	2	0	0	0	4	4	4	0	0	0	0	4	4	2	3	0	0	0	5	5
P/TOT	25	14	1	1	1	42	45	33	12	11	1	0	57	64	22	9	2	0	1	34	36

TRAFFINOMICS LIMITED

**TULLACONDRA WIND FARM TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS**

**APRIL 2023
TRA/23/091**

SITE: 02

DATE: 26th April 2023

LOCATION: L5502/L5523 Knockaunavaddreen Cross

DAY: Wednesday

TIME	MOVEMENT 7					TOT	PCU	MOVEMENT 8					TOT	PCU	MOVEMENT 9						
	CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS		
07:00	0	0	0	0	0	0	0	4	3	0	0	0	7	7	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	3	1	0	0	0	4	4	1	0	0	0	0	1	1
07:30	0	1	0	0	0	1	1	4	2	1	0	0	7	8	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	6	5	0	0	0	11	11	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	1	1	17	11	1	0	0	29	30	1	0	0	0	0	1	1
08:00	0	0	0	0	0	0	0	3	3	0	0	0	6	6	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	13	3	0	0	0	16	16	0	0	0	0	0	0	0
08:30	1	0	0	0	0	1	1	3	3	0	0	0	6	6	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	2	1	0	0	0	3	3	1	1	0	0	0	2	2
H/TOT	1	0	0	0	0	1	1	21	10	0	0	0	31	31	1	1	0	0	0	2	2
09:00	0	0	0	0	0	0	0	4	3	0	0	1	8	9	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	6	3	0	0	0	9	9	0	0	0	0	0	0	0
09:30	0	0	1	0	0	1	2	3	2	1	1	0	7	9	1	0	0	0	0	1	1
09:45	0	0	0	0	0	0	0	3	2	1	0	0	6	7	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	1	2	16	10	2	1	1	30	33	1	0	0	0	0	1	1
10:00	0	0	0	0	0	0	0	9	1	1	0	0	11	12	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	5	3	0	0	0	8	8	0	0	0	0	0	0	0
10:30	0	1	0	0	0	1	1	7	1	1	0	0	9	10	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	6	1	0	1	0	8	9	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	1	1	27	6	2	1	0	36	38	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	2	1	0	1	0	4	5	1	0	0	0	0	1	1
11:15	0	1	0	0	0	1	1	6	0	0	0	0	6	6	0	0	0	0	0	0	0
11:30	0	1	0	0	0	1	1	6	1	0	1	0	8	9	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	7	2	0	0	0	9	9	0	0	0	0	0	0	0
H/TOT	0	2	0	0	0	2	2	21	4	0	2	0	27	30	1	0	0	0	0	1	1
12:00	0	0	0	0	0	0	0	9	1	0	0	0	10	10	0	0	0	0	0	0	0
12:15	1	0	0	0	0	1	1	7	2	0	0	1	10	11	0	0	0	0	0	0	0
12:30	1	0	0	0	0	1	1	8	2	0	0	0	10	10	0	0	0	0	0	0	0
12:45	1	0	0	0	0	1	1	8	1	0	0	0	9	9	0	0	0	0	0	0	0
H/TOT	3	0	0	0	0	3	3	32	6	0	0	1	39	40	0	0	0	0	0	0	0

TRAFFINOMICS LIMITED

TULLACONDRA WIND FARM TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS

APRIL 2023
TRA/23/091

SITE: 02

DATE: 26th April 2023

LOCATION: L5502/L5523 Knockaunavaddreen Cross

DAY: Wednesday

TIME	MOVEMENT 7					TOT	PCU	MOVEMENT 8					TOT	PCU	MOVEMENT 9					TOT	PCU
	CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS		
13:00	1	0	0	0	0	1	1	10	1	0	0	0	11	11	0	0	0	0	0	0	0
13:15	1	0	0	0	0	1	1	9	2	0	0	0	11	11	1	0	0	0	0	1	1
13:30	1	0	0	0	0	1	1	7	4	0	0	1	12	13	1	0	0	0	0	1	1
13:45	0	0	0	0	0	0	0	5	4	0	0	0	9	9	0	0	0	0	0	0	0
H/TOT	3	0	0	0	0	3	3	31	11	0	0	1	43	44	2	0	0	0	0	2	2
14:00	1	0	0	0	0	1	1	11	2	0	0	0	13	13	0	0	0	1	0	1	2
14:15	1	0	0	0	0	1	1	10	3	0	0	0	13	13	0	0	0	0	0	0	0
14:30	0	2	0	0	0	2	2	13	1	0	0	0	14	14	0	0	0	0	0	0	0
14:45	1	0	0	0	0	1	1	7	1	0	0	0	8	8	0	0	0	0	0	0	0
H/TOT	3	2	0	0	0	5	5	41	7	0	0	0	48	48	0	0	0	1	0	1	2
15:00	2	0	0	0	0	2	2	7	4	0	0	0	11	11	0	0	0	0	0	0	0
15:15	2	0	0	0	0	2	2	16	6	1	1	0	24	26	0	0	0	0	0	0	0
15:30	0	1	0	0	0	1	1	13	4	0	1	1	19	21	0	0	0	0	0	0	0
15:45	1	0	0	0	0	1	1	10	6	0	0	0	16	16	0	0	0	0	0	0	0
H/TOT	5	1	0	0	0	6	6	46	20	1	2	1	70	74	0	0	0	0	0	0	0
16:00	1	0	0	0	0	1	1	13	5	0	0	0	18	18	0	0	0	0	0	0	0
16:15	2	0	0	0	0	2	2	15	5	0	0	0	20	20	0	0	0	0	0	0	0
16:30	0	1	0	0	0	1	1	15	8	0	0	0	23	23	1	0	0	0	0	1	1
16:45	0	0	1	0	0	1	2	27	9	0	0	0	36	36	0	0	0	0	0	0	0
H/TOT	3	1	1	0	0	5	6	70	27	0	0	0	97	97	1	0	0	0	0	1	1
17:00	0	0	0	0	0	0	0	23	18	1	0	0	42	43	0	0	0	0	0	0	0
17:15	2	0	0	0	0	2	2	24	13	1	0	0	38	39	1	0	0	0	0	1	1
17:30	0	1	0	0	0	1	1	21	8	0	0	0	29	29	0	0	0	0	0	0	0
17:45	1	0	0	0	0	1	1	16	7	0	0	0	23	23	0	0	0	0	0	0	0
H/TOT	3	1	0	0	0	4	4	84	46	2	0	0	132	133	1	0	0	0	0	1	1
18:00	0	0	0	0	0	0	0	18	5	0	0	0	23	23	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	19	2	0	0	0	21	21	0	0	0	0	0	0	0
18:30	1	0	0	0	0	1	1	27	4	0	0	0	31	31	0	0	0	0	0	0	0
18:45	2	0	0	0	0	2	2	13	6	1	0	0	20	21	0	0	0	0	0	0	0
H/TOT	3	0	0	0	0	3	3	77	17	1	0	0	95	96	0	0	0	0	0	0	0
P/TOT	24	9	2	0	0	35	36	483	175	9	6	4	677	693	8	1	0	1	0	10	11

TRAFFINOMICS LIMITED

**TULLACONDRA WIND FARM TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS**

**APRIL 2023
TRA/23/091**

SITE: 02

DATE: 26th April 2023

LOCATION: L5502/L5523 Knockaunavaddreen Cross

DAY: Wednesday

TIME	MOVEMENT 10					TOT	PCU	MOVEMENT 11					TOT	PCU	MOVEMENT 12					TOT	PCU
	CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS		
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
07:45	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	1	0	0	2
08:00	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	1	0	0	0	2
H/TOT	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2	1	1	0	0	0	2
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2
09:30	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	1	0	1
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	5
H/TOT	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	0	4	0	10
10:00	1	1	0	0	0	2	2	0	0	1	0	0	1	2	0	1	0	0	0	0	1
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	3
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	0	0	0	0	0
H/TOT	1	1	0	0	0	2	2	0	0	2	0	0	0	2	0	2	0	1	0	3	4
11:00	0	0	0	0	0	0	0	0	1	1	1	1	0	3	4	0	0	0	0	0	0
11:15	1	0	0	0	0	1	1	0	0	1	0	0	1	1	2	0	0	1	0	0	1
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	0	0	0	0
H/TOT	1	0	0	0	0	1	1	1	1	3	0	0	5	7	0	0	1	0	0	1	2
12:00	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	1	0	0	0	0	1
12:15	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	1	0	0	0	1
12:45	0	0	0	0	0	0	0	1	0	1	0	0	2	3	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	4	1	2	0	0	7	8	1	1	0	0	0	2	2

TRAFFINOMICS LIMITED

TULLACONDRA WIND FARM TRAFFIC COUNTS
MANUAL CLASSIFIED JUNCTION TURNING COUNTS

APRIL 2023
TRA/23/091

SITE: 02

DATE: 26th April 2023

LOCATION: L5502/L5523 Knockaunavaddreen Cross

DAY: Wednesday

TIME	MOVEMENT 10					TOT	PCU	MOVEMENT 11					TOT	PCU	MOVEMENT 12					TOT	PCU
	CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS			CAR	LGV	OGV1	OGV2	BUS		
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	2	0	0	0	0	2	2	4	0	0	0	0	4	4
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
14:15	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	0	0	0	1	1
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
14:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	2	0	0	0	0	2	2	5	0	0	0	0	5	5
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	3	4
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
15:30	0	0	0	0	0	0	0	2	0	0	0	0	2	2	2	0	1	0	0	3	4
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	2	0	0	0	0	2	2	4	0	3	0	0	7	9
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	2	0	0	0	2	2	1	0	0	0	0	1	1
16:45	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	2	0	0	0	0	2	2	2	0	1	0	0	3	4
17:00	0	0	0	0	0	0	0	1	0	0	1	0	2	3	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	1	1	1	0	3	4	0	0	0	0	0	0	0
17:45	1	0	0	0	0	1	1	2	1	0	0	0	3	3	1	0	0	0	0	1	1
H/TOT	1	0	0	0	0	1	1	4	3	1	1	0	9	11	1	0	0	0	0	1	1
18:00	0	0	0	0	0	0	0	0	2	1	0	0	3	3	1	0	0	0	0	1	1
18:15	0	0	0	0	0	0	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	2	1	0	0	3	3	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	1	0	0	1	2
H/TOT	0	0	0	0	0	0	0	7	2	0	0	0	9	9	1	0	1	0	0	2	3
P/TOT	3	1	0	0	0	4	4	27	9	8	1	0	45	50	20	4	7	5	0	36	46

TRAFFINOMICS LIMITED

TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS

SUMMARY

WEEK COMMENCING:

Tuesday 25 April 2023
TRA/23/091

SITE 01

LOCATION: R580 Kanturk Road @ Lisgriffin RC Church (Google Maps Ref: 52.224696, -8.751344)

SPEED SURVEY SUMMARY:

EASTBOUND 85% Speed = 55.26 km/h, 95% Speed = 59.18 km/h, Median = 48.06 km/h Maximum = 80.7 km/h, Minimum = 8.6 km/h, Mean = 47.2 km/h

WESTBOUND 85% Speed = 60.21 km/h, 95% Speed = 65.61 km/h, Median = 51.03 km/h Maximum = 78.7 km/h, Minimum = 9.9 km/h, Mean = 50.4 km/h

VOLUMETRIC VEHICLE COUNTS:

Direction	Time	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	No. Vehicles	7 day Mean
EASTBOUND	07-19	327	343	355	364	265	174	189	2017	288
WESTBOUND	07-19	323	335	346	339	251	193	220	2007	287
EASTBOUND	00-00	382	412	433	439	328	241	254	2489	356
WESTBOUND	00-00	388	409	405	394	310	255	274	2435	348

PEAK FLOW SUMMARY:

Peak	AM	IP	PM
Most Frequent Peak Hour	0900	1400	1700
Average Vehicles per Peak Hour	24	30	34

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**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

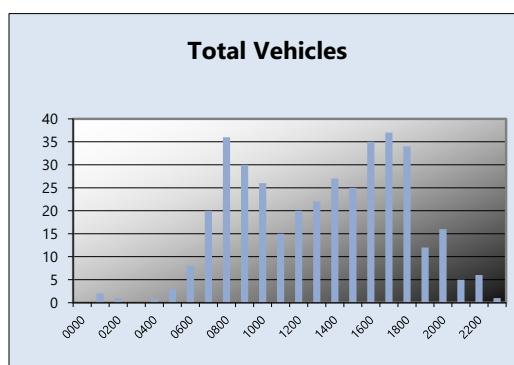
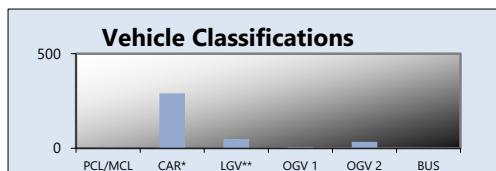
**Tuesday 25 April 2023
TRA/23/091**

**SITE 01
EASTBOUND**

	3	299	32	5	19	1	356
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TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	0	0	0	2	0	2	5
0200	0	0	1	0	0	0	1	1
0300	0	0	0	0	0	0	0	0
0400	0	0	1	0	0	0	1	1
0500	0	3	0	0	0	0	3	3
0600	0	7	0	0	1	0	8	9
0700	0	11	5	0	4	0	20	25
0800	0	31	3	0	2	0	36	39
0900	0	26	1	0	3	0	30	34
1000	0	16	8	0	2	0	26	29
1100	1	9	0	1	4	0	15	20
1200	0	14	1	1	4	0	20	26
1300	0	13	6	2	1	0	22	24
1400	0	19	6	0	2	0	27	30
1500	0	19	2	1	3	0	25	29
1600	0	26	6	0	3	0	35	39
1700	1	33	3	0	0	0	37	36
1800	0	28	3	1	2	0	34	37
1900	0	9	2	0	1	0	12	13
2000	0	14	1	1	0	0	16	17
2100	0	5	0	0	0	0	5	5
2200	0	6	0	0	0	0	6	6
2300	0	1	0	0	0	0	1	1
07-19	2	245	44	6	30	0	327	367
06-22	2	280	47	7	32	0	368	412
06-00	2	287	47	7	32	0	375	419
00-00	2	290	49	7	34	0	382	428

Peaks	Time	Vehicles	PCU's
AM	0800	36	38.6
IP	1400	27	29.6
PM	1700	37	38.9



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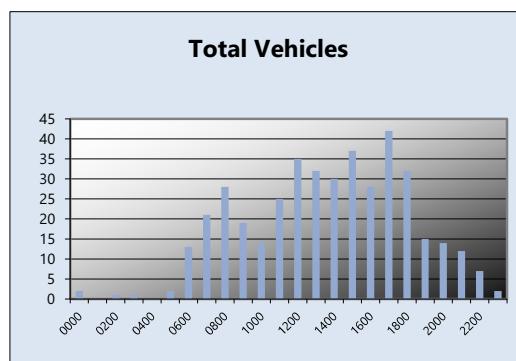
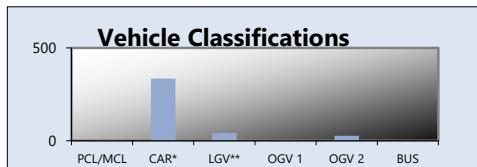
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Wednesday 26 April 2023
TRA/23/091**

**SITE 01
EASTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	2	0	0	0	0	2	2
0100	0	0	0	0	0	0	0	0
0200	0	0	1	0	0	0	1	1
0300	0	0	1	0	0	0	1	1
0400	0	0	0	0	0	0	0	0
0500	0	1	0	0	1	0	2	3
0600	0	9	1	0	3	0	13	17
0700	0	13	4	1	3	0	21	25
0800	0	21	3	0	3	1	28	33
0900	0	15	3	0	1	0	19	20
1000	0	12	0	0	2	0	14	17
1100	0	19	2	2	2	0	25	29
1200	0	25	5	1	4	0	35	41
1300	0	27	2	0	3	0	32	36
1400	0	25	5	0	0	0	30	30
1500	0	30	4	0	3	0	37	41
1600	0	25	2	0	1	0	28	29
1700	1	37	3	0	1	0	42	43
1800	1	27	4	0	0	0	32	31
1900	1	12	2	0	0	0	15	14
2000	0	14	0	0	0	0	14	14
2100	0	12	0	0	0	0	12	12
2200	0	7	0	0	0	0	7	7
2300	0	2	0	0	0	0	2	2
07-19	2	276	37	4	23	1	343	374
06-22	3	323	40	4	26	1	397	431
06-00	3	332	40	4	26	1	406	440
00-00	3	335	42	4	27	1	412	448

Peaks	Time	Vehicles	PCU's
AM	0800	28	32.9
IP	1200	35	40.7
PM	1700	42	42.5



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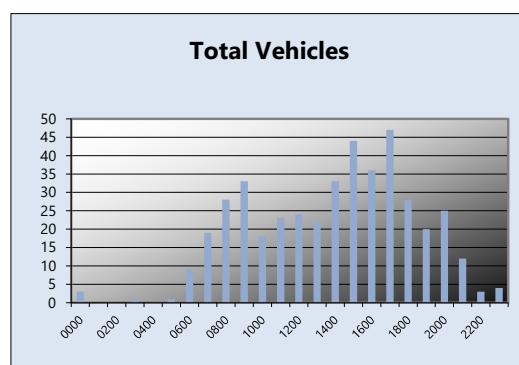
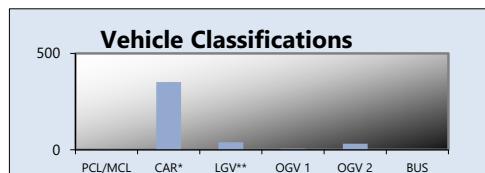
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Thursday 27 April 2023
TRA/23/091**

**SITE 01
EASTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	1	0	2	0	3	6
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	0	1	0	0	0	1	1
0400	0	0	0	0	0	0	0	0
0500	0	1	0	0	0	0	1	1
0600	0	6	1	0	2	0	9	12
0700	0	14	4	0	1	0	19	20
0800	0	26	1	0	1	0	28	29
0900	0	25	5	1	2	0	33	36
1000	0	12	2	2	1	1	18	21
1100	0	18	2	0	3	0	23	27
1200	0	17	3	1	3	0	24	28
1300	0	17	1	1	3	0	22	26
1400	0	27	3	0	3	0	33	37
1500	0	30	10	1	3	0	44	48
1600	0	32	2	0	2	0	36	39
1700	1	43	0	0	3	0	47	50
1800	2	26	0	0	0	0	28	26
1900	0	16	3	0	1	0	20	21
2000	0	23	0	0	1	1	25	27
2100	0	11	0	0	1	0	12	13
2200	0	3	0	0	0	0	3	3
2300	0	4	0	0	0	0	4	4
07-19	3	287	33	6	25	1	355	389
06-22	3	343	37	6	30	2	421	463
06-00	3	350	37	6	30	2	428	470
00-00	3	351	39	6	32	2	433	477

Peaks	Time	Vehicles	PCU's
AM	0900	33	36.1
IP	1400	33	36.9
PM	1700	47	50.1



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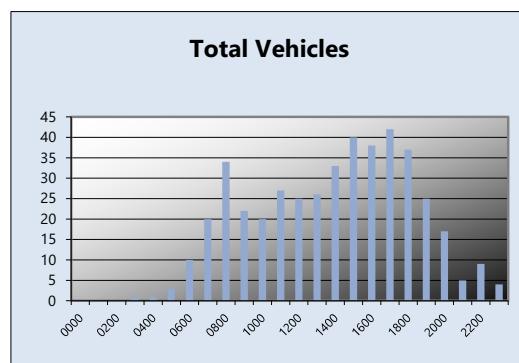
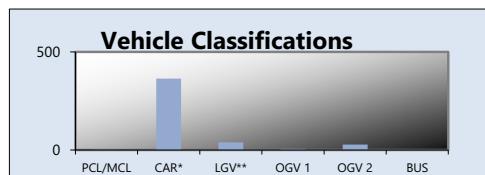
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Friday 28 April 2023
TRA/23/091**

**SITE 01
EASTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	0	1	0	0	0	1	1
0400	0	0	1	0	0	0	1	1
0500	0	2	0	1	0	0	3	4
0600	0	7	1	0	2	0	10	13
0700	0	12	5	1	2	0	20	23
0800	0	27	2	1	4	0	34	40
0900	0	17	1	0	4	0	22	27
1000	0	14	3	0	3	0	20	24
1100	0	21	3	0	3	0	27	31
1200	0	19	2	1	3	0	25	29
1300	0	22	2	0	2	0	26	29
1400	0	27	4	0	2	0	33	36
1500	0	35	2	1	2	0	40	43
1600	1	34	3	0	0	0	38	37
1700	0	40	2	0	0	0	42	42
1800	1	35	1	0	0	0	37	36
1900	0	21	3	0	1	0	25	26
2000	0	16	1	0	0	0	17	17
2100	0	5	0	0	0	0	5	5
2200	0	6	3	0	0	0	9	9
2300	0	4	0	0	0	0	4	4
07-19	2	303	30	4	25	0	364	397
06-22	2	352	35	4	28	0	421	458
06-00	2	362	38	4	28	0	434	471
00-00	2	364	40	5	28	0	439	476

Peaks	Time	Vehicles	PCU's
AM	0800	34	39.7
IP	1400	33	35.6
PM	1700	42	42



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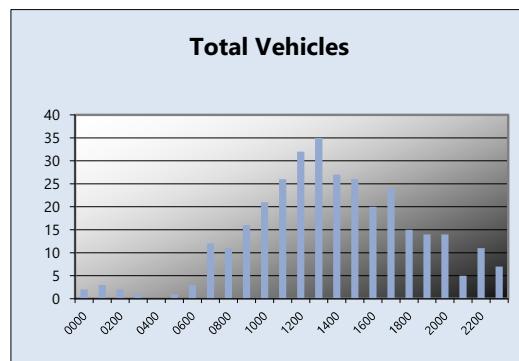
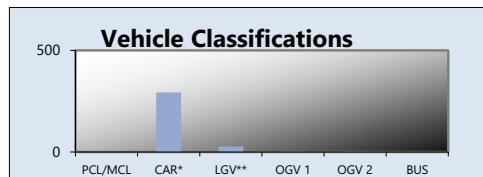
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Saturday 29 April 2023
TRA/23/091**

**SITE 01
EASTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	2	0	0	0	0	2	2
0100	1	2	0	0	0	0	3	2
0200	0	2	0	0	0	0	2	2
0300	0	0	1	0	0	0	1	1
0400	0	0	0	0	0	0	0	0
0500	0	1	0	0	0	0	1	1
0600	0	3	0	0	0	0	3	3
0700	0	10	0	1	1	0	12	14
0800	0	9	1	0	1	0	11	12
0900	0	15	1	0	0	0	16	16
1000	0	19	2	0	0	0	21	21
1100	0	23	3	0	0	0	26	26
1200	0	29	3	0	0	0	32	32
1300	0	30	5	0	0	0	35	35
1400	0	24	3	0	0	0	27	27
1500	0	24	2	0	0	0	26	26
1600	0	17	3	0	0	0	20	20
1700	0	19	2	2	1	0	24	26
1800	0	15	0	0	0	0	15	15
1900	0	13	1	0	0	0	14	14
2000	0	13	1	0	0	0	14	14
2100	0	5	0	0	0	0	5	5
2200	0	11	0	0	0	0	11	11
2300	0	7	0	0	0	0	7	7
07-19	0	234	25	3	3	0	265	270
06-22	0	268	27	3	3	0	301	306
06-00	0	286	27	3	3	0	319	324
00-00	1	293	28	3	3	0	328	333

Peaks	Time	Vehicles	PCU's
AM	0900	16	16
IP	1300	35	35
PM	1700	24	26.3



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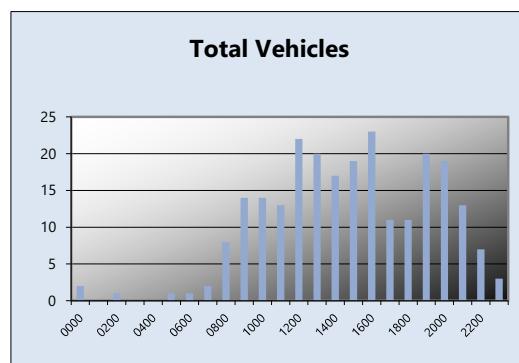
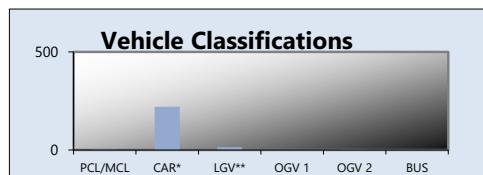
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Sunday 30 April 2023
TRA/23/091**

**SITE 01
EASTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	2	0	0	0	0	2	2
0100	0	0	0	0	0	0	0	0
0200	0	1	0	0	0	0	1	1
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	0	0	0	1	0	1	2
0600	0	1	0	0	0	0	1	1
0700	0	1	1	0	0	0	2	2
0800	0	8	0	0	0	0	8	8
0900	0	14	0	0	0	0	14	14
1000	0	14	0	0	0	0	14	14
1100	1	11	0	0	1	0	13	14
1200	0	20	2	0	0	0	22	22
1300	0	20	0	0	0	0	20	20
1400	1	14	2	0	0	0	17	16
1500	0	18	1	0	0	0	19	19
1600	0	22	1	0	0	0	23	23
1700	0	11	0	0	0	0	11	11
1800	0	9	2	0	0	0	11	11
1900	1	17	2	0	0	0	20	19
2000	0	19	0	0	0	0	19	19
2100	0	12	1	0	0	0	13	13
2200	1	5	1	0	0	0	7	6
2300	0	2	1	0	0	0	3	3
07-19	2	162	9	0	1	0	174	174
06-22	3	211	12	0	1	0	227	226
06-00	4	218	14	0	1	0	237	235
00-00	4	221	14	0	2	0	241	240

Peaks	Time	Vehicles	PCU's
AM	0900	14	14
IP	1200	22	22
PM	1600	23	23



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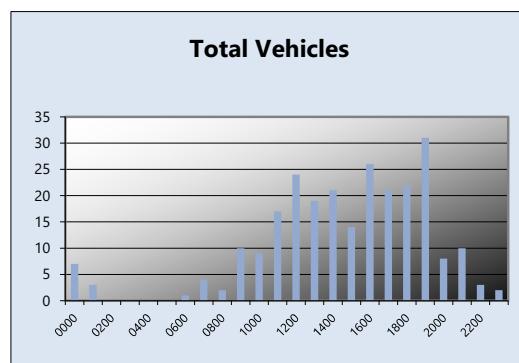
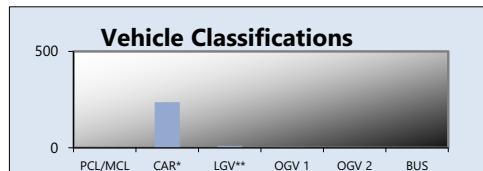
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Monday 1 May 2023
TRA/23/091**

**SITE 01
EASTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	6	0	0	1	0	7	8
0100	0	3	0	0	0	0	3	3
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0
0600	0	0	1	0	0	0	1	1
0700	0	4	0	0	0	0	4	4
0800	0	2	0	0	0	0	2	2
0900	0	8	1	1	0	0	10	11
1000	0	8	1	0	0	0	9	9
1100	0	17	0	0	0	0	17	17
1200	0	22	2	0	0	0	24	24
1300	1	16	1	1	0	0	19	19
1400	0	21	0	0	0	0	21	21
1500	0	14	0	0	0	0	14	14
1600	1	25	0	0	0	0	26	25
1700	0	18	3	0	0	0	21	21
1800	0	21	0	1	0	0	22	23
1900	0	30	1	0	0	0	31	31
2000	0	8	0	0	0	0	8	8
2100	0	10	0	0	0	0	10	10
2200	0	2	0	1	0	0	3	4
2300	0	2	0	0	0	0	2	2
07-19	2	176	8	3	0	0	189	189
06-22	2	224	10	3	0	0	239	239
06-00	2	228	10	4	0	0	244	244
00-00	2	237	10	4	1	0	254	256

Peaks	Time	Vehicles	PCU's
AM	0900	10	10.5
IP	1200	24	24
PM	1600	26	25.2



TRAFFINOMICS LIMITED

**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

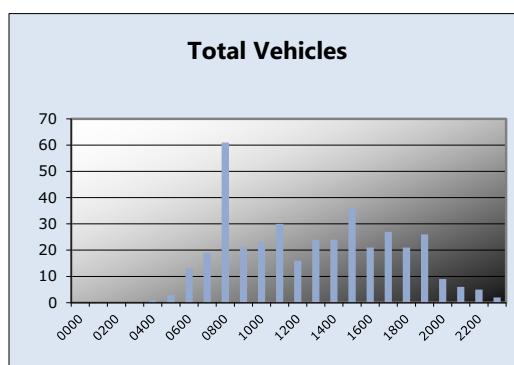
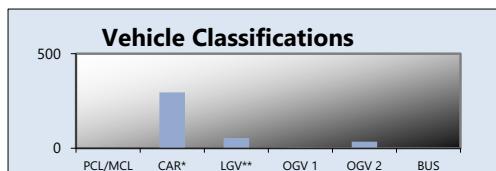
**Tuesday 25 April 2023
TRA/23/091**

**SITE 01
WESTBOUND**

	3	282	44	4	18	1	348	
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TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	1	0	0	0	0	1	1
0500	0	3	0	0	0	0	3	3
0600	0	10	1	1	1	0	13	15
0700	1	9	4	0	5	0	19	25
0800	0	51	6	0	4	0	61	66
0900	0	16	3	0	2	0	21	24
1000	0	19	3	0	1	0	23	24
1100	0	20	7	0	3	0	30	34
1200	0	11	2	0	3	0	16	20
1300	0	19	1	0	4	0	24	29
1400	0	17	3	2	2	0	24	28
1500	0	27	6	0	3	0	36	40
1600	0	14	7	0	0	0	21	21
1700	0	20	1	0	6	0	27	35
1800	0	20	1	0	0	0	21	21
1900	0	20	5	0	1	0	26	27
2000	0	7	2	0	0	0	9	9
2100	0	4	2	0	0	0	6	6
2200	0	5	0	0	0	0	5	5
2300	0	2	0	0	0	0	2	2
07-19	1	243	44	2	33	0	323	366
06-22	1	284	54	3	35	0	377	423
06-00	1	291	54	3	35	0	384	430
00-00	1	295	54	3	35	0	388	434

Peaks	Time	Vehicles	PCU's
AM	0800	61	66.2
IP	1300	24	29.2
PM	1700	27	34.8



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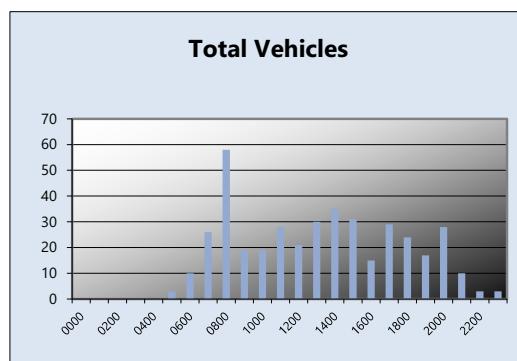
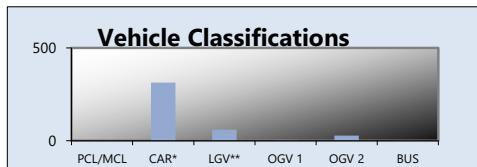
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Wednesday 26 April 2023
TRA/23/091**

**SITE 01
WESTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	1	1	0	1	0	3	4
0600	0	6	2	0	2	0	10	13
0700	0	18	5	1	2	0	26	29
0800	1	45	8	0	3	1	58	62
0900	0	12	3	0	3	1	19	24
1000	0	17	1	0	1	0	19	20
1100	0	20	3	1	4	0	28	34
1200	0	14	4	2	1	0	21	23
1300	0	21	6	0	3	0	30	34
1400	0	27	5	0	3	0	35	39
1500	0	24	5	0	2	0	31	34
1600	0	9	4	0	2	0	15	18
1700	0	25	3	1	0	0	29	30
1800	0	20	4	0	0	0	24	24
1900	0	15	1	0	1	0	17	18
2000	0	25	3	0	0	0	28	28
2100	0	9	1	0	0	0	10	10
2200	0	3	0	0	0	0	3	3
2300	0	2	1	0	0	0	3	3
07-19	1	252	51	5	24	2	335	370
06-22	1	307	58	5	27	2	400	439
06-00	1	312	59	5	27	2	406	445
00-00	1	313	60	5	28	2	409	449

Peaks	Time	Vehicles	PCU's
AM	0800	58	62.1
IP	1400	35	38.9
PM	1700	29	29.5



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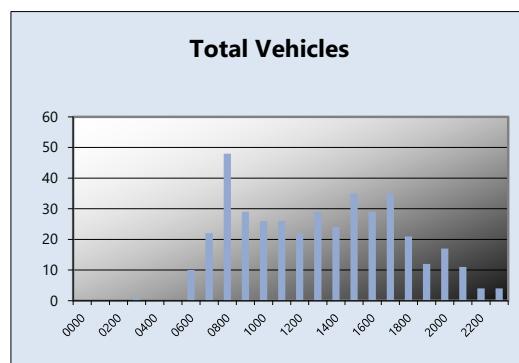
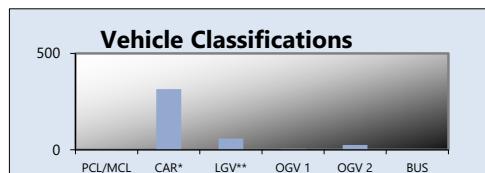
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Thursday 27 April 2023
TRA/23/091**

**SITE 01
WESTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	1	0	0	0	0	1	1
0400	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0
0600	0	9	0	0	1	0	10	11
0700	1	17	2	1	1	0	22	23
0800	0	42	4	0	2	0	48	51
0900	0	26	3	0	0	0	29	29
1000	0	16	8	0	2	0	26	29
1100	0	17	6	1	2	0	26	29
1200	0	14	5	0	2	1	22	26
1300	0	20	5	0	4	0	29	34
1400	0	17	3	1	3	0	24	28
1500	0	28	6	0	1	0	35	36
1600	0	21	5	0	3	0	29	33
1700	0	28	5	1	1	0	35	37
1800	0	16	3	0	2	0	21	24
1900	0	11	1	0	0	0	12	12
2000	0	14	1	1	1	0	17	19
2100	0	10	1	0	0	0	11	11
2200	0	4	0	0	0	0	4	4
2300	0	4	0	0	0	0	4	4
07-19	1	262	55	4	23	1	346	378
06-22	1	306	58	5	25	1	396	431
06-00	1	314	58	5	25	1	404	439
00-00	1	315	58	5	25	1	405	440

Peaks	Time	Vehicles	PCU's
AM	0800	48	50.6
IP	1300	29	34.2
PM	1700	35	36.8



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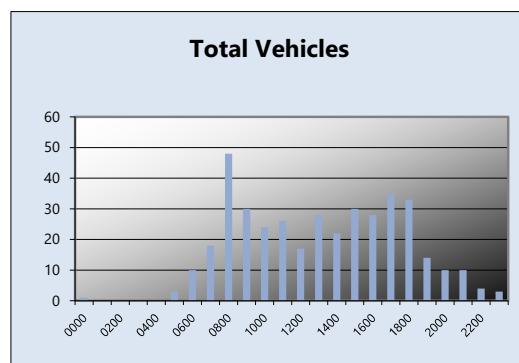
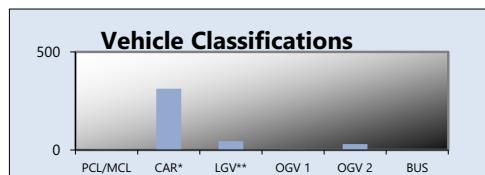
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Friday 28 April 2023
TRA/23/091**

**SITE 01
WESTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	1	0	0	0	0	1	1
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	3	0	0	0	0	3	3
0600	0	8	0	0	2	0	10	13
0700	1	12	3	0	2	0	18	20
0800	0	42	4	0	2	0	48	51
0900	0	24	2	0	4	0	30	35
1000	0	16	3	0	5	0	24	31
1100	1	15	7	0	3	0	26	29
1200	0	13	3	0	1	0	17	18
1300	0	20	3	1	4	0	28	34
1400	0	15	5	0	2	0	22	25
1500	0	25	2	1	2	0	30	33
1600	0	21	5	0	2	0	28	31
1700	0	31	3	0	1	0	35	36
1800	0	31	2	0	0	0	33	33
1900	0	11	1	1	1	0	14	16
2000	0	8	2	0	0	0	10	10
2100	0	10	0	0	0	0	10	10
2200	0	4	0	0	0	0	4	4
2300	0	3	0	0	0	0	3	3
07-19	2	265	42	2	28	0	339	375
06-22	2	302	45	3	31	0	383	423
06-00	2	309	45	3	31	0	390	430
00-00	2	313	45	3	31	0	394	434

Peaks	Time	Vehicles	PCU's
AM	0800	48	50.6
IP	1300	28	33.7
PM	1700	35	36.3



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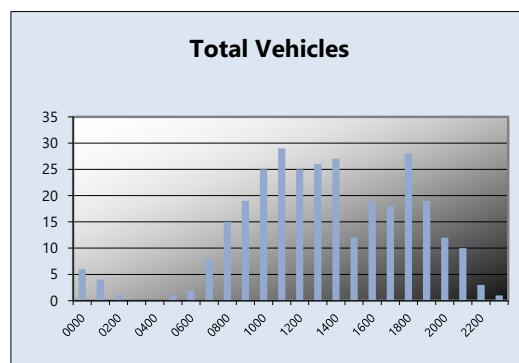
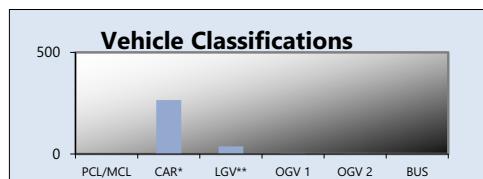
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Saturday 29 April 2023
TRA/23/091**

**SITE 01
WESTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	5	0	0	1	0	6	7
0100	0	4	0	0	0	0	4	4
0200	0	1	0	0	0	0	1	1
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	1	0	0	0	0	1	1
0600	0	2	0	0	0	0	2	2
0700	0	7	0	0	1	0	8	9
0800	0	13	2	0	0	0	15	15
0900	0	14	5	0	0	0	19	19
1000	1	20	3	1	0	0	25	25
1100	0	23	4	2	0	0	29	30
1200	0	21	4	0	0	0	25	25
1300	0	20	6	0	0	0	26	26
1400	0	23	4	0	0	0	27	27
1500	0	11	1	0	0	0	12	12
1600	0	18	1	0	0	0	19	19
1700	0	16	2	0	0	0	18	18
1800	0	25	3	0	0	0	28	28
1900	0	18	1	0	0	0	19	19
2000	0	10	1	1	0	0	12	13
2100	0	10	0	0	0	0	10	10
2200	0	2	1	0	0	0	3	3
2300	0	1	0	0	0	0	1	1
07-19	1	211	35	3	1	0	251	253
06-22	1	251	37	4	1	0	294	297
06-00	1	254	38	4	1	0	298	301
00-00	1	265	38	4	2	0	310	314

Peaks	Time	Vehicles	PCU's
AM	0900	19	19
IP	1400	27	27
PM	1800	28	28



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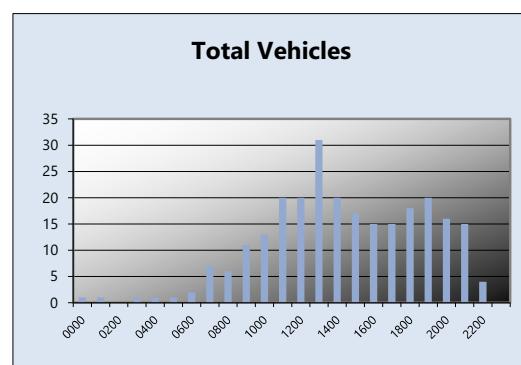
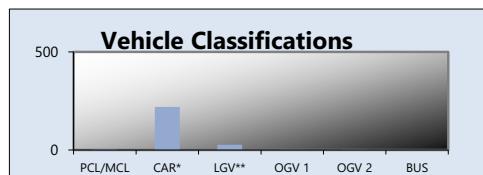
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Sunday 30 April 2023
TRA/23/091**

**SITE 01
WESTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	1	0	0	0	0	1	1
0100	0	1	0	0	0	0	1	1
0200	0	0	0	0	0	0	0	0
0300	0	1	0	0	0	0	1	1
0400	0	1	0	0	0	0	1	1
0500	0	0	0	0	1	0	1	2
0600	0	2	0	0	0	0	2	2
0700	0	4	3	0	0	0	7	7
0800	0	4	1	0	1	0	6	7
0900	1	10	0	0	0	0	11	10
1000	0	13	0	0	0	0	13	13
1100	0	20	0	0	0	0	20	20
1200	1	15	4	0	0	0	20	19
1300	0	28	3	0	0	0	31	31
1400	2	15	3	0	0	0	20	18
1500	0	15	2	0	0	0	17	17
1600	0	14	1	0	0	0	15	15
1700	1	11	3	0	0	0	15	14
1800	0	16	2	0	0	0	18	18
1900	0	19	0	1	0	0	20	21
2000	0	14	2	0	0	0	16	16
2100	0	14	1	0	0	0	15	15
2200	0	2	2	0	0	0	4	4
2300	0	0	0	0	0	0	0	0
07-19	5	165	22	0	1	0	193	190
06-22	5	214	25	1	1	0	246	244
06-00	5	216	27	1	1	0	250	248
00-00	5	220	27	1	2	0	255	254

Peaks	Time	Vehicles	PCU's
AM	0900	11	10.2
IP	1300	31	31
PM	1800	18	18



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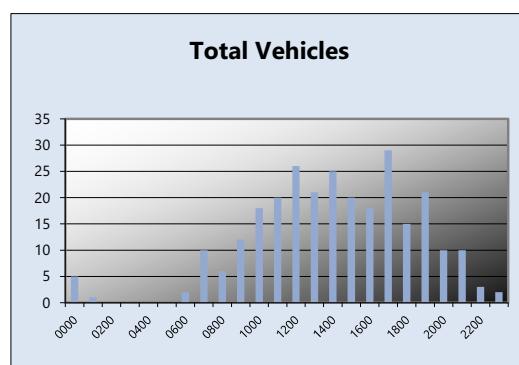
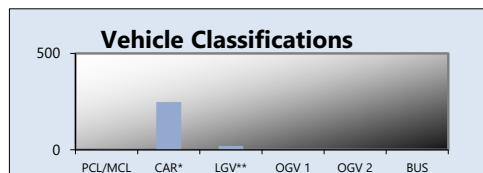
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Monday 1 May 2023
TRA/23/091**

**SITE 01
WESTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	1	4	0	0	0	0	5	4
0100	0	1	0	0	0	0	1	1
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0
0600	0	2	0	0	0	0	2	2
0700	0	8	2	0	0	0	10	10
0800	1	5	0	0	0	0	6	5
0900	0	11	1	0	0	0	12	12
1000	0	16	2	0	0	0	18	18
1100	0	17	1	2	0	0	20	21
1200	1	20	5	0	0	0	26	25
1300	1	19	1	0	0	0	21	20
1400	0	24	1	0	0	0	25	25
1500	0	20	0	0	0	0	20	20
1600	0	17	1	0	0	0	18	18
1700	0	27	2	0	0	0	29	29
1800	0	14	1	0	0	0	15	15
1900	0	20	1	0	0	0	21	21
2000	0	10	0	0	0	0	10	10
2100	0	9	1	0	0	0	10	10
2200	0	2	1	0	0	0	3	3
2300	0	2	0	0	0	0	2	2
07-19	3	198	17	2	0	0	220	219
06-22	3	239	19	2	0	0	263	262
06-00	3	243	20	2	0	0	268	267
00-00	4	248	20	2	0	0	274	272

Peaks	Time	Vehicles	PCU's
AM	0900	12	12
IP	1200	26	25.2
PM	1700	29	29



TRAFFINOMICS LIMITED

**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**SITE 01
EASTBOUND**

WEEK COMMENCING:

**Tuesday 25 April 2023
TRA/23/091**

TIME PERIOD	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	Average
0000	0	2	3	0	2	2	7	2
0100	2	0	0	0	3	0	3	1
0200	1	1	0	0	2	1	0	1
0300	0	1	1	1	1	0	0	1
0400	1	0	0	1	0	0	0	0
0500	3	2	1	3	1	1	0	2
0600	8	13	9	10	3	1	1	6
0700	20	21	19	20	12	2	4	14
0800	36	28	28	34	11	8	2	21
0900	30	19	33	22	16	14	10	21
1000	26	14	18	20	21	14	9	17
1100	15	25	23	27	26	13	17	21
1200	20	35	24	25	32	22	24	26
1300	22	32	22	26	35	20	19	25
1400	27	30	33	33	27	17	21	27
1500	25	37	44	40	26	19	14	29
1600	35	28	36	38	20	23	26	29
1700	37	42	47	42	24	11	21	32
1800	34	32	28	37	15	11	22	26
1900	12	15	20	25	14	20	31	20
2000	16	14	25	17	14	19	8	16
2100	5	12	12	5	5	13	10	9
2200	6	7	3	9	11	7	3	7
2300	1	2	4	4	7	3	2	3
07-19	327	343	355	364	265	174	189	288
06-22	368	397	421	421	301	227	239	339
06-00	375	406	428	434	319	237	244	349
00-00	382	412	433	439	328	241	254	356

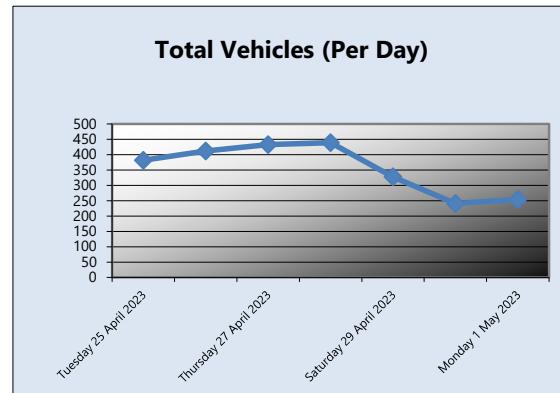
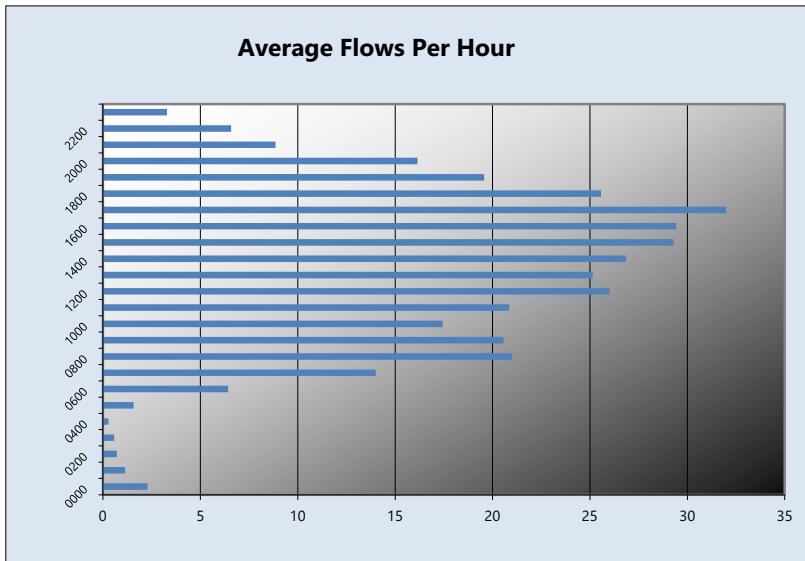
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**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**SITE 01
EASTBOUND**

WEEK COMMENCING:

**Tuesday 25 April 2023
TRA/23/091**



Peak Time & Volumetric Count Data

	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	Mode/Average
AM								
Time	0800	0800	0900	0800	0900	0900	0900	0900
Vehicles	36	28	33	34	16	14	10	24
IP								
Time	1400	1200	1400	1400	1300	1200	1200	1400
Vehicles	27	35	33	33	35	22	24	30
PM								
Time	1700	1700	1700	1700	1700	1600	1600	1700
Vehicles	37	42	47	42	24	23	26	34

TRAFFINOMICS LIMITED

**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**SITE 01
WESTBOUND**

WEEK COMMENCING:

**Tuesday 25 April 2023
TRA/23/091**

TIME PERIOD	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	Average
0000	0	0	0	1	6	1	5	2
0100	0	0	0	0	4	1	1	1
0200	0	0	0	0	1	0	0	0
0300	0	0	1	0	0	1	0	0
0400	1	0	0	0	0	1	0	0
0500	3	3	0	3	1	1	0	2
0600	13	10	10	10	2	2	2	7
0700	19	26	22	18	8	7	10	16
0800	61	58	48	48	15	6	6	35
0900	21	19	29	30	19	11	12	20
1000	23	19	26	24	25	13	18	21
1100	30	28	26	26	29	20	20	26
1200	16	21	22	17	25	20	26	21
1300	24	30	29	28	26	31	21	27
1400	24	35	24	22	27	20	25	25
1500	36	31	35	30	12	17	20	26
1600	21	15	29	28	19	15	18	21
1700	27	29	35	35	18	15	29	27
1800	21	24	21	33	28	18	15	23
1900	26	17	12	14	19	20	21	18
2000	9	28	17	10	12	16	10	15
2100	6	10	11	10	10	15	10	10
2200	5	3	4	4	3	4	3	4
2300	2	3	4	3	1	0	2	2
07-19	323	335	346	339	251	193	220	287
06-22	377	400	396	383	294	246	263	337
06-00	384	406	404	390	298	250	268	343
00-00	388	409	405	394	310	255	274	348

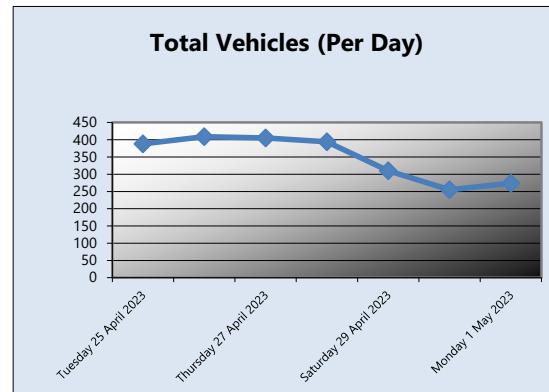
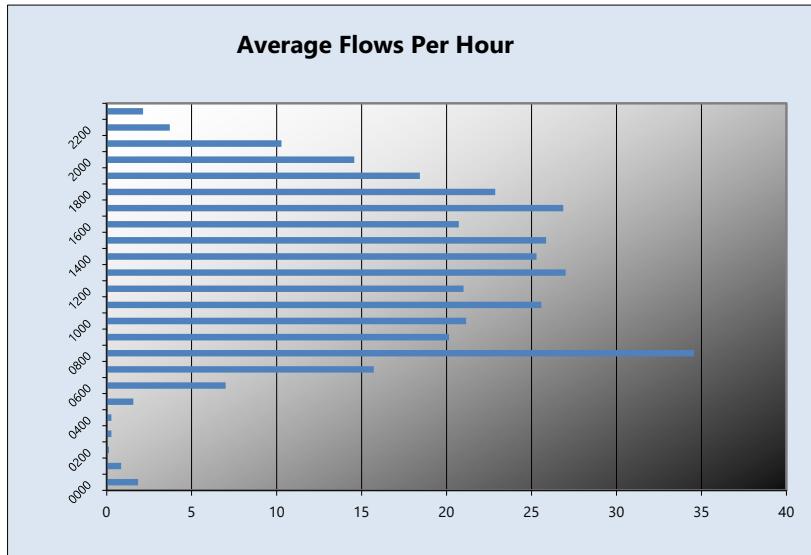
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**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**SITE 01
WESTBOUND**

WEEK COMMENCING:

**Tuesday 25 April 2023
TRA/23/091**



Peak Time & Volumetric Count Data

	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	Mode/Average
AM								
Time	0800	0800	0800	0800	0900	0900	0900	0800
Vehicles	61	58	61	48	19	11	12	39
IP								
Time	1300	1400	1300	1300	1400	1300	1200	1300
Vehicles	24	35	29	28	27	31	26	29
PM								
Time	1700	1700	1700	1700	1800	1800	1700	1700
Vehicles	27	29	35	35	28	18	29	29

Traffinomics Limited for
Nicholas O'Dwyer Consulting Engineers

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TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS AUTOMATIC TRAFFIC COUNTS

WEEK COMMENCING:

Tuesday 25 April 2023
TRA/23/091

SITE 01 EASTBOUND

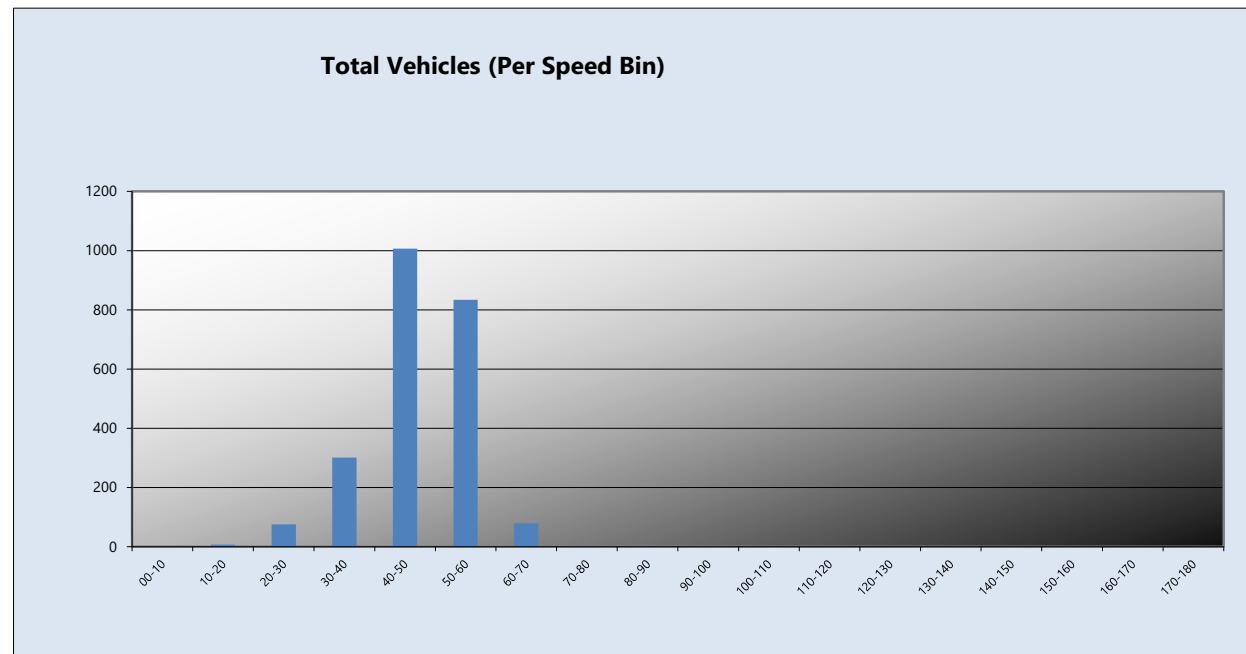
Profile:

Filter time: 00:00 25th April 2023 => 23:59 1st May 2023
 Speed range: 0 - 200 km/h.
 Separation: Greater than 4.00 seconds. - (Headway)
 Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)

Vehicles = 2308
 Maximum = 80.7 km/h, Minimum = 8.6 km/h, Mean = 47.2 km/h
 85% Speed = 55.26 km/h, 95% Speed = 59.18 km/h, Median = 48.06 km/h
 20 km/h Pace = 38 - 58, Number in Pace = 1858 (80.50%)
 Variance = 67.25, Standard Deviation = 8.20 km/h

Speed Bins:

Speed	Bin	
KPH	No.	%
00-10	1	0.0
10-20	7	0.3
20-30	76	3.3
30-40	301	13.0
40-50	1007	43.6
50-60	834	36.1
60-70	79	3.4
70-80	2	0.1
80-90	1	0.0
90-100	0	0.0
100-110	0	0.0
110-120	0	0.0
120-130	0	0.0
130-140	0	0.0
140-150	0	0.0
150-160	0	0.0
160-170	0	0.0
170-180	0	0.0



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TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS AUTOMATIC TRAFFIC COUNTS

WEEK COMMENCING:

Tuesday 25 April 2023
TRA/23/091

SITE 01 WESTBOUND

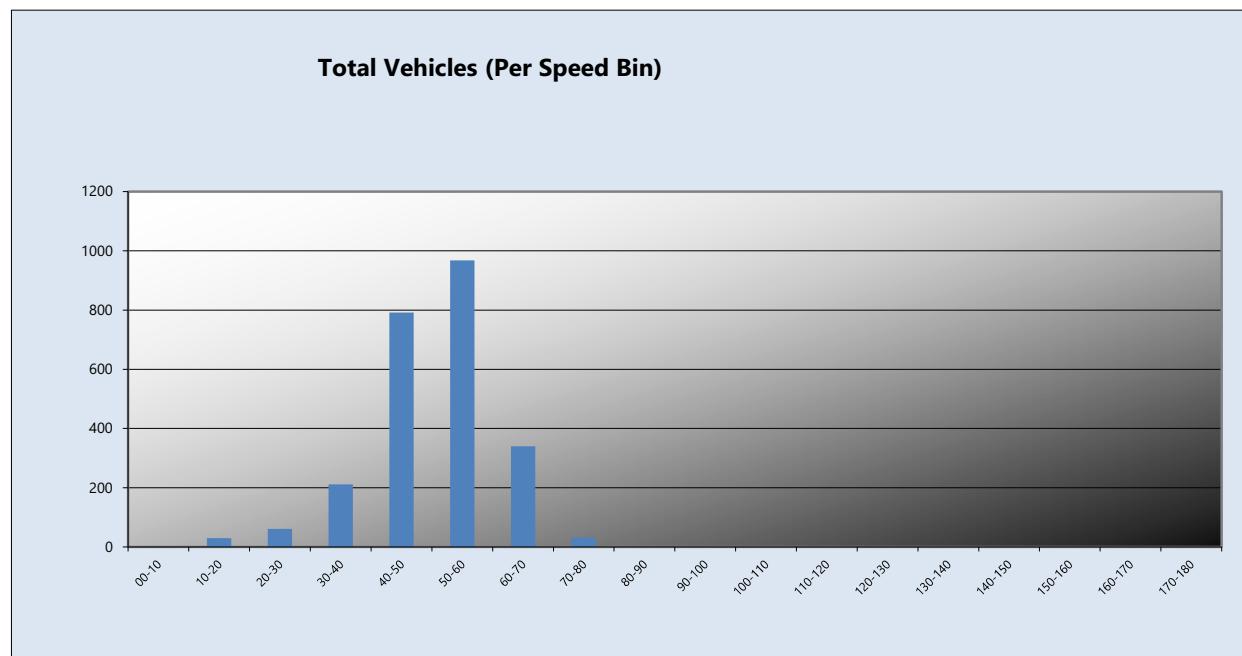
Profile:

Filter time: 00:00 25th April 2023 => 23:59 1st May 2023
 Speed range: 0 - 200 km/h.
 Separation: Greater than 4.00 seconds. - (Headway)
 Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)

Vehicles = 2435
 Maximum = 78.7 km/h, Minimum = 9.9 km/h, Mean = 50.4 km/h
 85% Speed = 60.21 km/h, 95% Speed = 65.61 km/h, Median = 51.03 km/h
 20 km/h Pace = 42 - 62, Number in Pace = 1773 (72.81%)
 Variance = 100.71, Standard Deviation = 10.04 km/h

Speed Bins:

Speed	Bin	
KPH	No.	%
00-10	1	0.0
10-20	30	1.2
20-30	61	2.5
30-40	211	8.7
40-50	792	32.5
50-60	968	39.8
60-70	340	14.0
70-80	32	1.3
80-90	0	0.0
90-100	0	0.0
100-110	0	0.0
110-120	0	0.0
120-130	0	0.0
130-140	0	0.0
140-150	0	0.0
150-160	0	0.0
160-170	0	0.0
170-180	0	0.0



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CLASSIFICATION SCHEMES:

Scheme F Classification Scheme (Non-metric)

Scheme F is an attempt to implement the FWHA's visual classification scheme as an axle-based classification scheme. This is one of several interpretations.

Vehicle Class	Class	Vehicle Type	No. of Axles	Axle spacing in feet				
				Axle 1 to 2	Axle 2 to 3	Axle 3 to 4	Axle 4 to 5	Axle 5 to 6
PCL/MCL	1	motorcycle	2	<6.0				
CAR*	2	passenger car	2	6.0 - 10.0				
		car + 1 axle trailer	3	<10.0	10.0 - 18.0			
		car + 2 axle trailer	4	<10.0		<3.5		
		pickup	2	10.0 - 15.0				
LGV**	3	pickup + 1 axle trailer	3	10.0 - 15.0	10.0 - 18.0			
		pickup + 2 axle trailer	4	10.0 - 15.0		<3.5		
		pickup + 3 axle trailer	5	9.9 - 15.0			<3.5	
		bus	2	>20.0				
BUS	4	bus	3	>19.0				
		single unit truck - dual rear axle	2	14.9 - 20.0			<3.5	
OGV 1	5	3 axle truck	3		<18.0			
	6	4 axle truck	4					
OGV 2	7	2S1	3		>18.0			
		2S2	4		>5.0	>3.5		
		3S1	4		<5.0	>10.0		
		3S2	5		<6.1		3.5 - 8.0	
	8	5 axle combination	5					
		6 axle combination	6			3.5 - 5.0		
		3S3	6					
	9	2S1-2	5		>6.0			
	10	3S1-2	6					>10.0
	11	truck	7 or more					

Car* Cars and LGV based cars

LGV** Light Goods Vehicles with the exception of LGV based on cars

TRAFFINOMICS LIMITED

TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS

SUMMARY

WEEK COMMENCING:

Tuesday 25 April 2023
TRA/23/091

SITE 02

LOCATION: L5302 @ Proposed Access (Google Maps Ref: 52.186106, -8.744097)

SPEED SURVEY SUMMARY:

EASTBOUND 85% Speed = 55.94 km/h, 95% Speed = 60.35 km/h, Median = 48.33 km/h Maximum = 75.4 km/h, Minimum = 13.7 km/h, Mean = 47.1 km/h

WESTBOUND 85% Speed = 54.00 km/h, 95% Speed = 58.41 km/h, Median = 46.26 km/h Maximum = 76.5 km/h, Minimum = 11.4 km/h, Mean = 45.6 km/h

VOLUMETRIC VEHICLE COUNTS:

Direction	Time	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	No. Vehicles	7 day Mean
EASTBOUND	07-19	97	99	119	131	90	74	79	689	98
WESTBOUND	07-19	111	105	125	121	89	82	81	714	102
EASTBOUND	00-00	120	139	146	169	112	101	98	885	126
WESTBOUND	00-00	136	148	165	168	120	111	114	962	137

PEAK FLOW SUMMARY:

Peak	AM	IP	PM
Most Frequent Peak Hour	0800	1200	1800
Average Vehicles per Peak Hour	14	9	11

TRAFFINOMICS LIMITED

**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

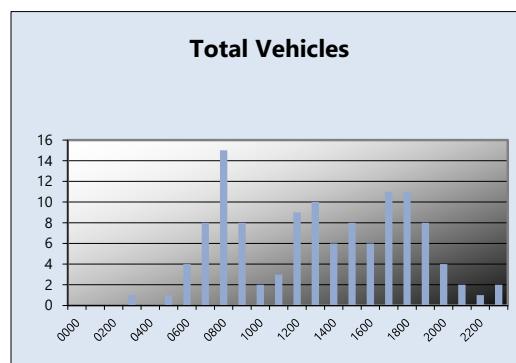
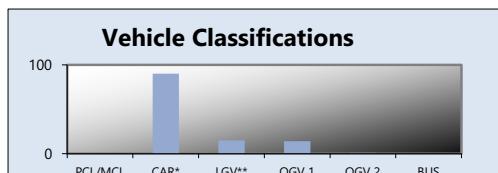
**Tuesday 25 April 2023
TRA/23/091**

**SITE 02
EASTBOUND**

	1	97	16	10	4	1	127
--	---	----	----	----	---	---	-----

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	1	0	0	0	0	1	1
0400	0	0	0	0	0	0	0	0
0500	0	1	0	0	0	0	1	1
0600	0	3	0	1	0	0	4	5
0700	0	7	0	1	0	0	8	9
0800	0	11	2	2	0	0	15	16
0900	0	5	2	0	1	0	8	9
1000	0	2	0	0	0	0	2	2
1100	0	1	1	1	0	0	3	4
1200	0	6	2	1	0	0	9	10
1300	0	9	1	0	0	0	10	10
1400	0	6	0	0	0	0	6	6
1500	0	6	1	1	0	0	8	9
1600	0	4	1	1	0	0	6	7
1700	0	8	1	2	0	0	11	12
1800	0	8	1	2	0	0	11	12
1900	0	5	3	0	0	0	8	8
2000	0	3	0	1	0	0	4	5
2100	0	1	0	1	0	0	2	3
2200	0	1	0	0	0	0	1	1
2300	0	2	0	0	0	0	2	2
07-19	0	73	12	11	1	0	97	104
06-22	0	85	15	14	1	0	115	123
06-00	0	88	15	14	1	0	118	126
00-00	0	90	15	14	1	0	120	128

Peaks	Time	Vehicles	PCU's
AM	0800	15	16
IP	1300	10	10
PM	1700	11	12



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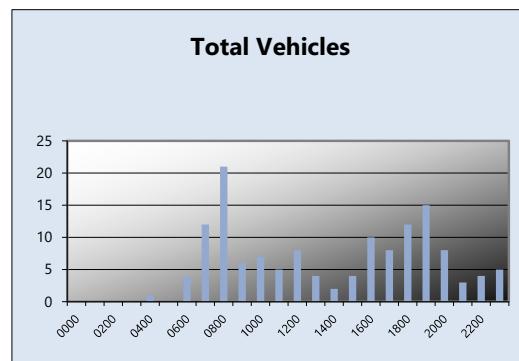
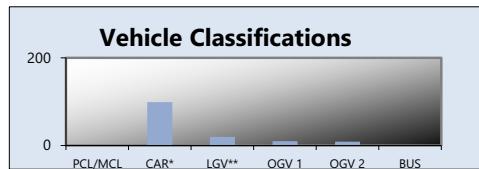
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Wednesday 26 April 2023
TRA/23/091**

**SITE 02
EASTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	1	0	0	0	0	1	1
0500	0	0	0	0	0	0	0	0
0600	0	3	1	0	0	0	4	4
0700	0	9	2	1	0	0	12	13
0800	0	15	2	4	0	0	21	23
0900	0	4	1	0	1	0	6	7
1000	0	5	1	1	0	0	7	8
1100	0	4	1	0	0	0	5	5
1200	0	4	3	0	1	0	8	9
1300	0	4	0	0	0	0	4	4
1400	0	1	0	0	1	0	2	3
1500	0	2	1	1	0	0	4	5
1600	0	5	2	2	0	1	10	12
1700	0	4	2	0	2	0	8	11
1800	0	10	1	0	1	0	12	13
1900	0	10	3	1	1	0	15	17
2000	0	8	0	0	0	0	8	8
2100	0	3	0	0	0	0	3	3
2200	0	3	0	0	1	0	4	5
2300	0	4	0	0	1	0	5	6
07-19	0	67	16	9	6	1	99	112
06-22	0	91	20	10	7	1	129	144
06-00	0	98	20	10	9	1	138	156
00-00	0	99	20	10	9	1	139	157

Peaks	Time	Vehicles	PCU's
AM	0800	21	23
IP	1200	8	9.3
PM	1800	12	13.3



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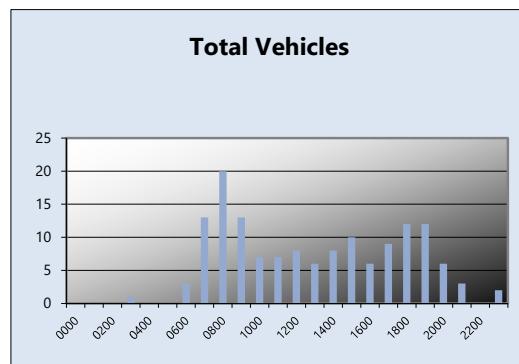
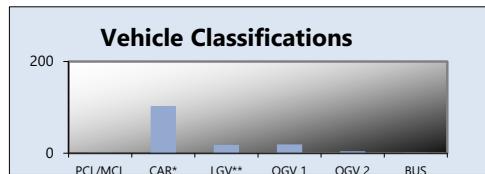
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Thursday 27 April 2023
TRA/23/091**

**SITE 02
EASTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	0	1	0	0	0	1	1
0400	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0
0600	0	1	0	2	0	0	3	4
0700	0	12	1	0	0	0	13	13
0800	0	14	4	2	0	0	20	21
0900	0	13	0	0	0	0	13	13
1000	0	3	1	3	0	0	7	9
1100	0	5	0	1	1	0	7	9
1200	0	7	1	0	0	0	8	8
1300	0	4	2	0	0	0	6	6
1400	1	5	0	1	1	0	8	9
1500	0	5	2	3	0	0	10	12
1600	0	5	0	0	0	1	6	7
1700	0	3	2	4	0	0	9	11
1800	0	9	2	0	1	0	12	13
1900	0	10	1	1	0	0	12	13
2000	0	4	1	1	0	0	6	7
2100	0	2	0	0	1	0	3	4
2200	0	0	0	0	0	0	0	0
2300	0	1	0	1	0	0	2	3
07-19	1	85	15	14	3	1	119	130
06-22	1	102	17	18	4	1	143	157
06-00	1	103	17	19	4	1	145	160
00-00	1	103	18	19	4	1	146	161

Peaks	Time	Vehicles	PCU's
AM	0800	20	21
IP	1200	8	9
PM	1800	12	13.3



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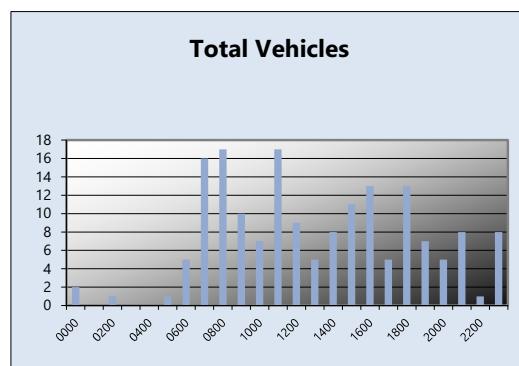
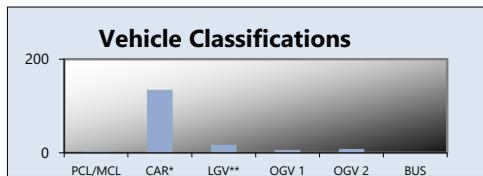
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Friday 28 April 2023
TRA/23/091**

**SITE 02
EASTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	2	0	0	0	0	2	2
0100	0	0	0	0	0	0	0	0
0200	0	0	0	1	0	0	1	2
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	1	0	0	0	0	1	1
0600	0	4	1	0	0	0	5	5
0700	0	14	2	0	0	0	16	16
0800	0	11	5	1	0	0	17	18
0900	0	7	1	0	2	0	10	13
1000	0	5	1	1	0	0	7	8
1100	0	14	0	1	2	0	17	20
1200	1	5	2	1	0	0	9	9
1300	0	5	0	0	0	0	5	5
1400	0	7	0	0	1	0	8	9
1500	0	9	1	0	1	0	11	12
1600	0	11	1	0	1	0	13	14
1700	0	3	1	0	1	0	5	6
1800	1	11	0	1	0	0	13	13
1900	1	6	0	0	0	0	7	6
2000	0	4	1	0	0	0	5	5
2100	0	8	0	0	0	0	8	8
2200	0	1	0	0	0	0	1	1
2300	0	7	1	0	0	0	8	8
07-19	2	102	14	5	8	0	131	142
06-22	3	124	16	5	8	0	156	167
06-00	3	132	17	5	8	0	165	176
00-00	3	135	17	6	8	0	169	180

Peaks	Time	Vehicles	PCU's
AM	0800	17	17.5
IP	1200	9	9.3
PM	1600	13	14.3



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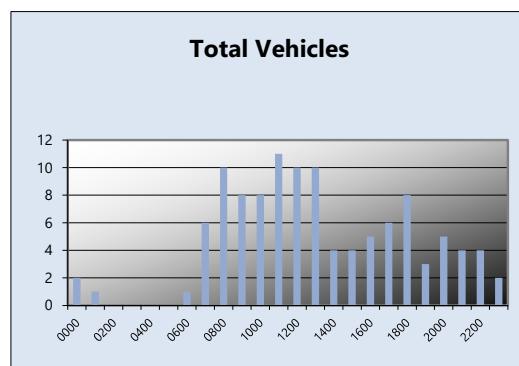
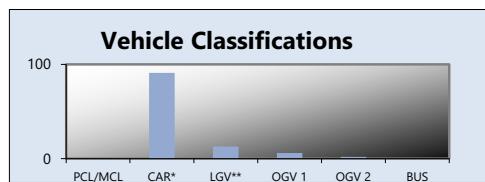
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Saturday 29 April 2023
TRA/23/091**

**SITE 02
EASTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	2	0	0	0	0	2	2
0100	0	0	1	0	0	0	1	1
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0
0600	0	1	0	0	0	0	1	1
0700	0	6	0	0	0	0	6	6
0800	0	7	2	1	0	0	10	11
0900	0	8	0	0	0	0	8	8
1000	0	7	0	1	0	0	8	9
1100	0	11	0	0	0	0	11	11
1200	0	8	2	0	0	0	10	10
1300	0	9	1	0	0	0	10	10
1400	0	1	1	0	2	0	4	7
1500	0	2	2	0	0	0	4	4
1600	0	4	1	0	0	0	5	5
1700	0	5	1	0	0	0	6	6
1800	0	7	1	0	0	0	8	8
1900	0	2	0	1	0	0	3	4
2000	0	4	0	1	0	0	5	6
2100	0	3	0	1	0	0	4	5
2200	0	2	1	1	0	0	4	5
2300	0	2	0	0	0	0	2	2
07-19	0	75	11	2	2	0	90	94
06-22	0	85	11	5	2	0	103	108
06-00	0	89	12	6	2	0	109	115
00-00	0	91	13	6	2	0	112	118

Peaks	Time	Vehicles	PCU's
AM	0800	10	10.5
IP	1200	10	10
PM	1800	8	8



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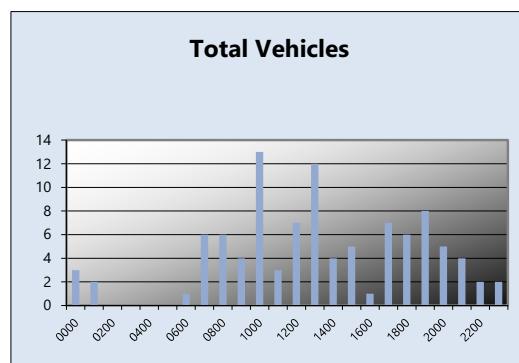
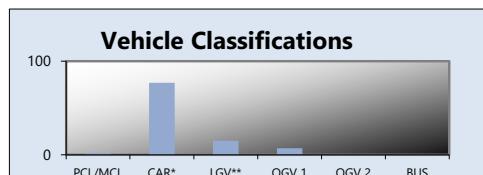
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Sunday 30 April 2023
TRA/23/091**

**SITE 02
EASTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	3	0	0	0	0	3	3
0100	0	1	1	0	0	0	2	2
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0
0600	0	0	0	1	0	0	1	2
0700	0	4	2	0	0	0	6	6
0800	0	5	1	0	0	0	6	6
0900	0	4	0	0	0	0	4	4
1000	0	10	1	2	0	0	13	14
1100	0	3	0	0	0	0	3	3
1200	0	4	2	1	0	0	7	8
1300	0	8	3	1	0	0	12	13
1400	1	3	0	0	0	0	4	3
1500	1	2	1	1	0	0	5	5
1600	0	1	0	0	0	0	1	1
1700	0	6	1	0	0	0	7	7
1800	0	5	1	0	0	0	6	6
1900	0	7	1	0	0	0	8	8
2000	0	4	1	0	0	0	5	5
2100	0	4	0	0	0	0	4	4
2200	0	1	0	1	0	0	2	3
2300	0	2	0	0	0	0	2	2
07-19	2	55	12	5	0	0	74	75
06-22	2	70	14	6	0	0	92	93
06-00	2	73	14	7	0	0	96	98
00-00	2	77	15	7	0	0	101	103

Peaks	Time	Vehicles	PCU's
AM	0700	6	6
IP	1300	12	12.5
PM	1700	7	7



TRAFFINOMICS LIMITED

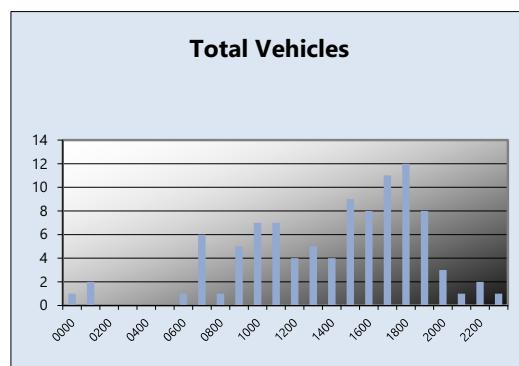
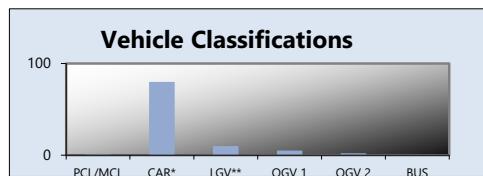
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Monday 1 May 2023
TRA/23/091**

**SITE 02
EASTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	1	0	0	0	0	1	1
0100	0	1	1	0	0	0	2	2
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0
0600	0	1	0	0	0	0	1	1
0700	0	4	2	0	0	0	6	6
0800	0	1	0	0	0	0	1	1
0900	0	5	0	0	0	0	5	5
1000	0	6	1	0	0	0	7	7
1100	0	5	2	0	0	0	7	7
1200	0	3	0	1	0	0	4	5
1300	1	4	0	0	0	0	5	4
1400	0	3	1	0	0	0	4	4
1500	0	7	1	1	0	0	9	10
1600	0	5	1	0	2	0	8	11
1700	0	10	1	0	0	0	11	11
1800	0	12	0	0	0	0	12	12
1900	0	6	0	2	0	0	8	9
2000	0	2	0	1	0	0	3	4
2100	0	1	0	0	0	0	1	1
2200	0	2	0	0	0	0	2	2
2300	0	1	0	0	0	0	1	1
07-19	1	65	9	2	2	0	79	82
06-22	1	75	9	5	2	0	92	96
06-00	1	78	9	5	2	0	95	99
00-00	1	80	10	5	2	0	98	102

Peaks	Time	Vehicles	PCU's
AM	0700	6	6
IP	1300	5	4.5
PM	1800	12	12



TRAFFINOMICS LIMITED

**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

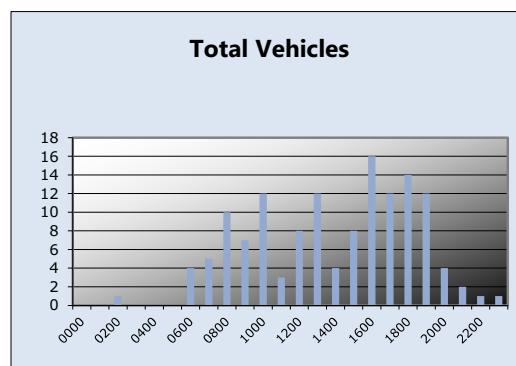
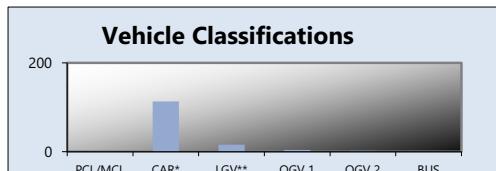
**Tuesday 25 April 2023
TRA/23/091**

**SITE 02
WESTBOUND**

	2	114	17	3	4	1	138
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TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0
0200	0	1	0	0	0	0	1	1
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0
0600	0	4	0	0	0	0	4	4
0700	0	4	1	0	0	0	5	5
0800	0	10	0	0	0	0	10	10
0900	0	5	1	1	0	0	7	8
1000	0	7	5	0	0	0	12	12
1100	0	2	1	0	0	0	3	3
1200	0	7	1	0	0	0	8	8
1300	0	9	3	0	0	0	12	12
1400	0	4	0	0	0	0	4	4
1500	0	5	2	1	0	0	8	9
1600	0	14	1	0	1	0	16	17
1700	0	12	0	0	0	0	12	12
1800	0	13	1	0	0	0	14	14
1900	0	12	0	0	0	0	12	12
2000	1	2	0	1	0	0	4	4
2100	0	0	0	1	1	0	2	4
2200	0	1	0	0	0	0	1	1
2300	0	1	0	0	0	0	1	1
07-19	0	92	16	2	1	0	111	113
06-22	1	110	16	4	2	0	133	137
06-00	1	112	16	4	2	0	135	139
00-00	1	113	16	4	2	0	136	140

Peaks	Time	Vehicles	PCU's
AM	0800	10	10
IP	1300	12	12
PM	1600	16	17.3



TRAFFINOMICS LIMITED

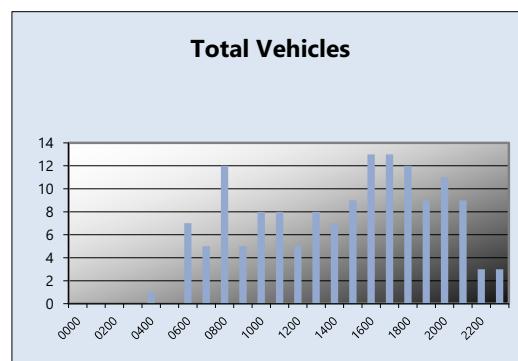
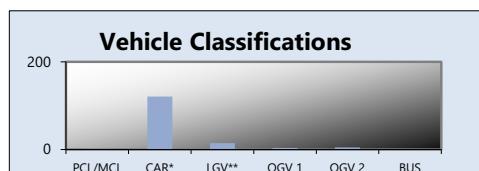
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Wednesday 26 April 2023
TRA/23/091**

**SITE 02
WESTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	1	0	0	0	0	1	1
0500	0	0	0	0	0	0	0	0
0600	0	6	1	0	0	0	7	7
0700	0	3	2	0	0	0	5	5
0800	0	12	0	0	0	0	12	12
0900	0	3	0	2	0	0	5	6
1000	0	7	1	0	0	0	8	8
1100	0	4	3	0	0	1	8	9
1200	0	4	1	0	0	0	5	5
1300	0	7	0	0	1	0	8	9
1400	0	7	0	0	0	0	7	7
1500	0	9	0	0	0	0	9	9
1600	0	12	0	0	1	0	13	14
1700	1	8	2	1	1	0	13	14
1800	0	10	1	0	1	0	12	13
1900	0	7	2	0	0	0	9	9
2000	1	9	1	0	0	0	11	10
2100	0	7	1	1	0	0	9	10
2200	0	3	0	0	0	0	3	3
2300	0	2	0	0	1	0	3	4
07-19	1	86	10	3	4	1	105	112
06-22	2	115	15	4	4	1	141	148
06-00	2	120	15	4	5	1	147	155
00-00	2	121	15	4	5	1	148	156

Peaks	Time	Vehicles	PCU's
AM	0800	12	12
IP	1300	8	9.3
PM	1600	13	14.3



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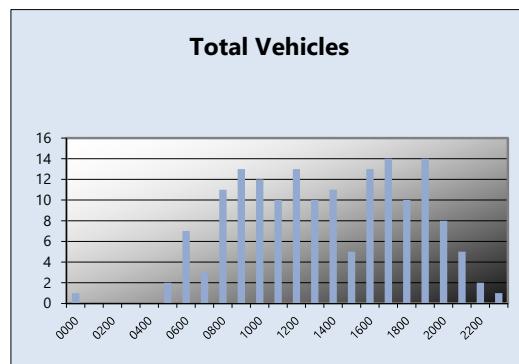
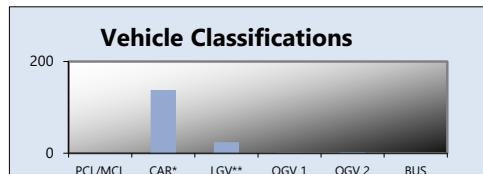
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Thursday 27 April 2023
TRA/23/091**

**SITE 02
WESTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	1	0	0	0	0	1	1
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	2	0	0	0	0	2	2
0600	0	6	1	0	0	0	7	7
0700	0	3	0	0	0	0	3	3
0800	0	10	0	1	0	0	11	12
0900	0	10	2	0	1	0	13	14
1000	0	9	3	0	0	0	12	12
1100	0	8	1	0	1	0	10	11
1200	0	12	1	0	0	0	13	13
1300	0	6	4	0	0	0	10	10
1400	0	7	4	0	0	0	11	11
1500	0	5	0	0	0	0	5	5
1600	0	11	2	0	0	0	13	13
1700	0	13	1	0	0	0	14	14
1800	0	8	2	0	0	0	10	10
1900	0	12	2	0	0	0	14	14
2000	0	8	0	0	0	0	8	8
2100	0	4	1	0	0	0	5	5
2200	0	2	0	0	0	0	2	2
2300	0	1	0	0	0	0	1	1
07-19	0	102	20	1	2	0	125	128
06-22	0	132	24	1	2	0	159	162
06-00	0	135	24	1	2	0	162	165
00-00	0	138	24	1	2	0	165	168

Peaks	Time	Vehicles	PCU's
AM	0900	13	14.3
IP	1200	13	13
PM	1700	14	14



TRAFFINOMICS LIMITED

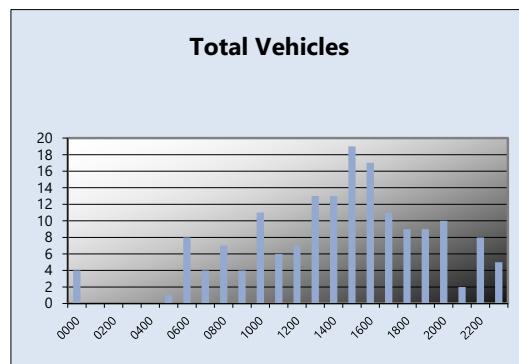
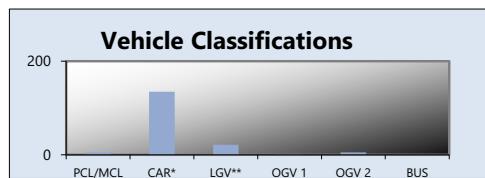
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Friday 28 April 2023
TRA/23/091**

**SITE 02
WESTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	2	2	0	0	0	4	4
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	1	0	0	0	0	1	1
0600	0	8	0	0	0	0	8	8
0700	0	4	0	0	0	0	4	4
0800	0	7	0	0	0	0	7	7
0900	0	4	0	0	0	0	4	4
1000	0	6	4	0	1	0	11	12
1100	1	5	0	0	0	0	6	5
1200	0	5	2	0	0	0	7	7
1300	1	10	2	0	0	0	13	12
1400	0	11	2	0	0	0	13	13
1500	0	13	3	0	3	0	19	23
1600	0	16	0	0	1	0	17	18
1700	0	9	1	1	0	0	11	12
1800	1	7	1	0	0	0	9	8
1900	1	5	3	0	0	0	9	8
2000	1	9	0	0	0	0	10	9
2100	0	2	0	0	0	0	2	2
2200	0	7	1	0	0	0	8	8
2300	0	4	1	0	0	0	5	5
07-19	3	97	15	1	5	0	121	126
06-22	5	121	18	1	5	0	150	153
06-00	5	132	20	1	5	0	163	166
00-00	5	135	22	1	5	0	168	171

Peaks	Time	Vehicles	PCU's
AM	0800	7	7
IP	1300	13	13
PM	1600	17	18.3



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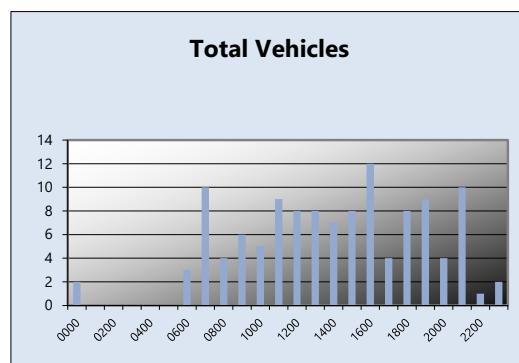
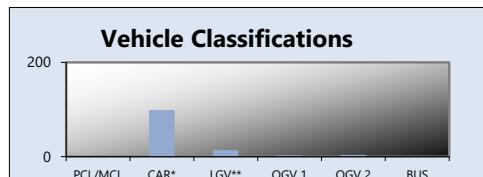
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Saturday 29 April 2023
TRA/23/091**

**SITE 02
WESTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	1	0	1	0	0	2	3
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0
0600	0	2	0	0	1	0	3	4
0700	0	10	0	0	0	0	10	10
0800	0	3	1	0	0	0	4	4
0900	0	5	0	0	1	0	6	7
1000	0	4	0	0	1	0	5	6
1100	0	8	1	0	0	0	9	9
1200	0	7	0	0	1	0	8	9
1300	0	8	0	0	0	0	8	8
1400	0	6	1	0	0	0	7	7
1500	0	6	2	0	0	0	8	8
1600	0	10	1	1	0	0	12	13
1700	0	1	3	0	0	0	4	4
1800	0	8	0	0	0	0	8	8
1900	0	7	1	1	0	0	9	10
2000	0	3	1	0	0	0	4	4
2100	0	9	1	0	0	0	10	10
2200	0	0	1	0	0	0	1	1
2300	0	1	1	0	0	0	2	2
07-19	0	76	9	1	3	0	89	93
06-22	0	97	12	2	4	0	115	121
06-00	0	98	14	2	4	0	118	124
00-00	0	99	14	3	4	0	120	127

Peaks	Time	Vehicles	PCU's
AM	0700	10	10
IP	1200	8	9.3
PM	1600	12	12.5



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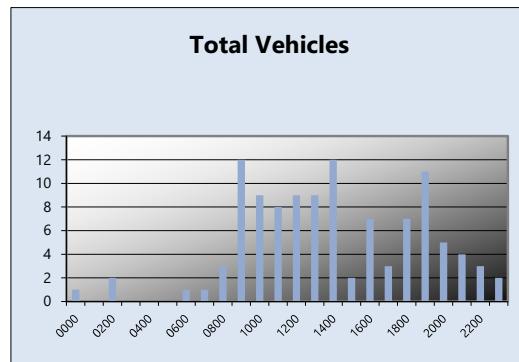
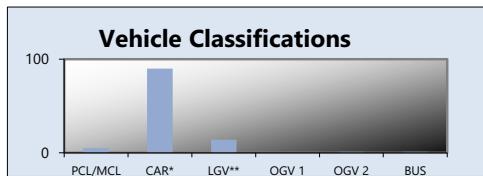
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Sunday 30 April 2023
TRA/23/091**

**SITE 02
WESTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	1	0	0	0	0	1	1
0100	0	0	0	0	0	0	0	0
0200	0	2	0	0	0	0	2	2
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0
0600	0	1	0	0	0	0	1	1
0700	0	1	0	0	0	0	1	1
0800	0	1	2	0	0	0	3	3
0900	0	11	1	0	0	0	12	12
1000	1	5	3	0	0	0	9	8
1100	0	7	1	0	0	0	8	8
1200	2	6	1	0	0	0	9	7
1300	1	7	1	0	0	0	9	8
1400	0	12	0	0	0	0	12	12
1500	0	2	0	0	0	0	2	2
1600	1	6	0	0	0	0	7	6
1700	0	2	1	0	0	0	3	3
1800	0	6	1	0	0	0	7	7
1900	0	9	2	0	0	0	11	11
2000	0	5	0	0	0	0	5	5
2100	0	1	1	0	1	1	4	6
2200	0	3	0	0	0	0	3	3
2300	0	2	0	0	0	0	2	2
07-19	5	66	11	0	0	0	82	78
06-22	5	82	14	0	1	1	103	101
06-00	5	87	14	0	1	1	108	106
00-00	5	90	14	0	1	1	111	109

Peaks	Time	Vehicles	PCU's
AM	0900	12	12
IP	1400	12	12
PM	1600	7	7



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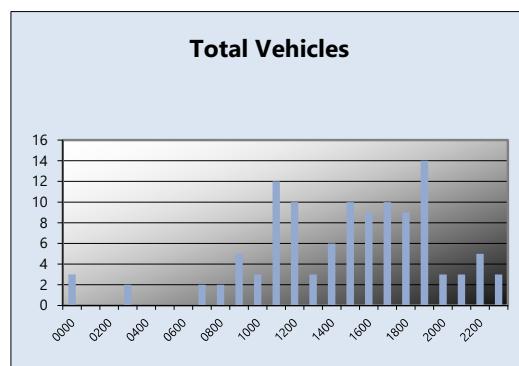
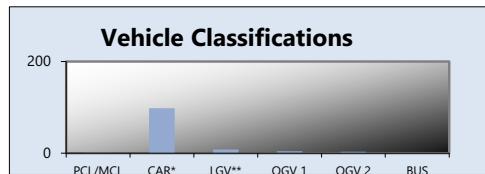
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Monday 1 May 2023
TRA/23/091**

**SITE 02
WESTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	2	1	0	0	0	3	3
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	2	0	0	0	0	2	2
0400	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0
0600	0	0	0	0	0	0	0	0
0700	0	2	0	0	0	0	2	2
0800	0	2	0	0	0	0	2	2
0900	0	2	1	1	1	0	5	7
1000	0	3	0	0	0	0	3	3
1100	0	11	1	0	0	0	12	12
1200	0	7	3	0	0	0	10	10
1300	0	2	0	1	0	0	3	4
1400	0	6	0	0	0	0	6	6
1500	1	8	0	1	0	0	10	10
1600	0	8	0	0	1	0	9	10
1700	0	10	0	0	0	0	10	10
1800	0	8	1	0	0	0	9	9
1900	0	13	1	0	0	0	14	14
2000	0	2	0	1	0	0	3	4
2100	0	3	0	0	0	0	3	3
2200	0	4	0	0	1	0	5	6
2300	0	3	0	0	0	0	3	3
07-19	1	69	6	3	2	0	81	84
06-22	1	87	7	4	2	0	101	105
06-00	1	94	7	4	3	0	109	114
00-00	1	98	8	4	3	0	114	119

Peaks	Time	Vehicles	PCU's
AM	0900	5	6.8
IP	1200	10	10
PM	1700	10	10.3



TRAFFINOMICS LIMITED

**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**SITE 02
EASTBOUND**

WEEK COMMENCING:

**Tuesday 25 April 2023
TRA/23/091**

TIME PERIOD	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	Average
0000	0	0	0	2	2	3	1	1
0100	0	0	0	0	1	2	2	1
0200	0	0	0	1	0	0	0	0
0300	1	0	1	0	0	0	0	0
0400	0	1	0	0	0	0	0	0
0500	1	0	0	1	0	0	0	0
0600	4	4	3	5	1	1	1	3
0700	8	12	13	16	6	6	6	10
0800	15	21	20	17	10	6	1	13
0900	8	6	13	10	8	4	5	8
1000	2	7	7	7	8	13	7	7
1100	3	5	7	17	11	3	7	8
1200	9	8	8	9	10	7	4	8
1300	10	4	6	5	10	12	5	7
1400	6	2	8	8	4	4	4	5
1500	8	4	10	11	4	5	9	7
1600	6	10	6	13	5	1	8	7
1700	11	8	9	5	6	7	11	8
1800	11	12	12	13	8	6	12	11
1900	8	15	12	7	3	8	8	9
2000	4	8	6	5	5	5	3	5
2100	2	3	3	8	4	4	1	4
2200	1	4	0	1	4	2	2	2
2300	2	5	2	8	2	2	1	3
07-19	97	99	119	131	90	74	79	98
06-22	115	129	143	156	103	92	92	119
06-00	118	138	145	165	109	96	95	124
00-00	120	139	146	169	112	101	98	126

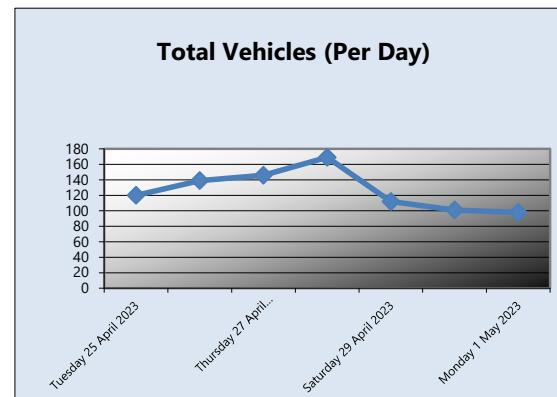
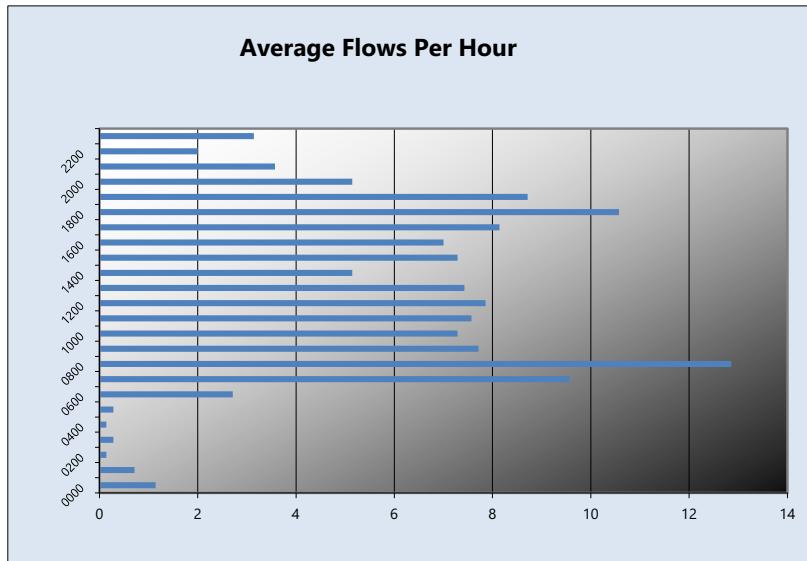
TRAFFINOMICS LIMITED

**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**SITE 02
EASTBOUND**

WEEK COMMENCING:

**Tuesday 25 April 2023
TRA/23/091**



Peak Time & Volumetric Count Data

	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	Mode/Average
AM								
Time	0800	0800	0800	0800	0800	0700	0700	0800
Vehicles	15	21	20	17	10	6	6	14
IP								
Time	1300	1200	1200	1200	1200	1300	1300	1200
Vehicles	10	8	8	9	10	12	5	9
PM								
Time	1700	1800	1800	1600	1800	1700	1800	1800
Vehicles	11	12	12	13	8	7	12	11

TRAFFINOMICS LIMITED

**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**SITE 02
WESTBOUND**

WEEK COMMENCING:

**Tuesday 25 April 2023
TRA/23/091**

TIME PERIOD	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	Average
0000	0	0	1	4	2	1	3	2
0100	0	0	0	0	0	0	0	0
0200	1	0	0	0	0	2	0	0
0300	0	0	0	0	0	0	2	0
0400	0	1	0	0	0	0	0	0
0500	0	0	2	1	0	0	0	0
0600	4	7	7	8	3	1	0	4
0700	5	5	3	4	10	1	2	4
0800	10	12	11	7	4	3	2	7
0900	7	5	13	4	6	12	5	7
1000	12	8	12	11	5	9	3	9
1100	3	8	10	6	9	8	12	8
1200	8	5	13	7	8	9	10	9
1300	12	8	10	13	8	9	3	9
1400	4	7	11	13	7	12	6	9
1500	8	9	5	19	8	2	10	9
1600	16	13	13	17	12	7	9	12
1700	12	13	14	11	4	3	10	10
1800	14	12	10	9	8	7	9	10
1900	12	9	14	9	9	11	14	11
2000	4	11	8	10	4	5	3	6
2100	2	9	5	2	10	4	3	5
2200	1	3	2	8	1	3	5	3
2300	1	3	1	5	2	2	3	2
07-19	111	105	125	121	89	82	81	102
06-22	133	141	159	150	115	103	101	129
06-00	135	147	162	163	118	108	109	135
00-00	136	148	165	168	120	111	114	137

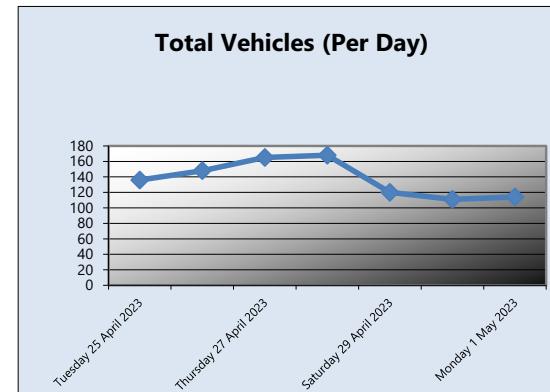
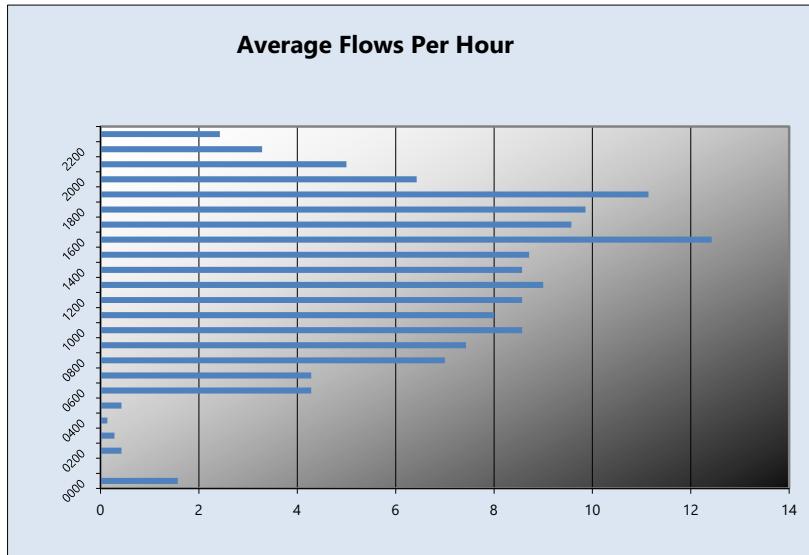
TRAFFINOMICS LIMITED

**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**SITE 02
WESTBOUND**

WEEK COMMENCING:

**Tuesday 25 April 2023
TRA/23/091**



Peak Time & Volumetric Count Data

	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	Mode/Average
AM								
Time	0800	0800	0900	0800	0700	0900	0900	0800
Vehicles	10	12	10	7	10	12	5	9
IP								
Time	1300	1300	1200	1300	1200	1400	1200	1300
Vehicles	12	8	13	13	8	12	10	11
PM								
Time	1600	1600	1700	1600	1600	1600	1700	1600
Vehicles	16	13	14	17	12	7	10	13

TRAFFINOMICS LIMITED

TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS AUTOMATIC TRAFFIC COUNTS

WEEK COMMENCING:

Tuesday 25 April 2023
TRA/23/091

SITE 02 EASTBOUND

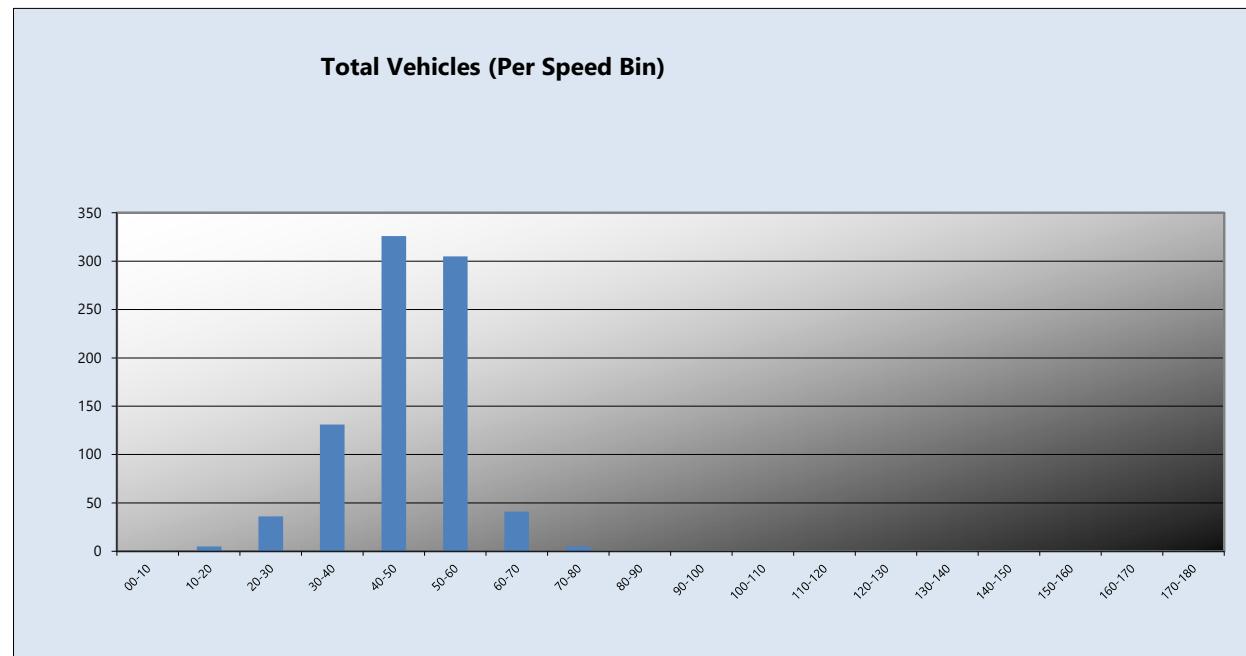
Profile:

Filter time: 00:00 25th April 2023 => 23:59 1st May 2023
 Speed range: 0 - 200 km/h.
 Separation: Greater than 4.00 seconds. - (Headway)
 Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)

Vehicles = 849
 Maximum = 75.4 km/h, Minimum = 13.7 km/h, Mean = 47.1 km/h
 85% Speed = 55.94 km/h, 95% Speed = 60.35 km/h, Median = 48.33 km/h
 20 km/h Pace = 40 - 60, Number in Pace = 638 (75.15%)
 Variance = 87.69, Standard Deviation = 9.36 km/h

Speed Bins:

Speed	Bin	
KPH	No.	%
00-10	0	0.0
10-20	5	0.6
20-30	36	4.2
30-40	131	15.4
40-50	326	38.4
50-60	305	35.9
60-70	41	4.8
70-80	5	0.6
80-90	0	0.0
90-100	0	0.0
100-110	0	0.0
110-120	0	0.0
120-130	0	0.0
130-140	0	0.0
140-150	0	0.0
150-160	0	0.0
160-170	0	0.0
170-180	0	0.0



TRAFFINOMICS LIMITED

TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS AUTOMATIC TRAFFIC COUNTS

WEEK COMMENCING:

Tuesday 25 April 2023
TRA/23/091

SITE 02 WESTBOUND

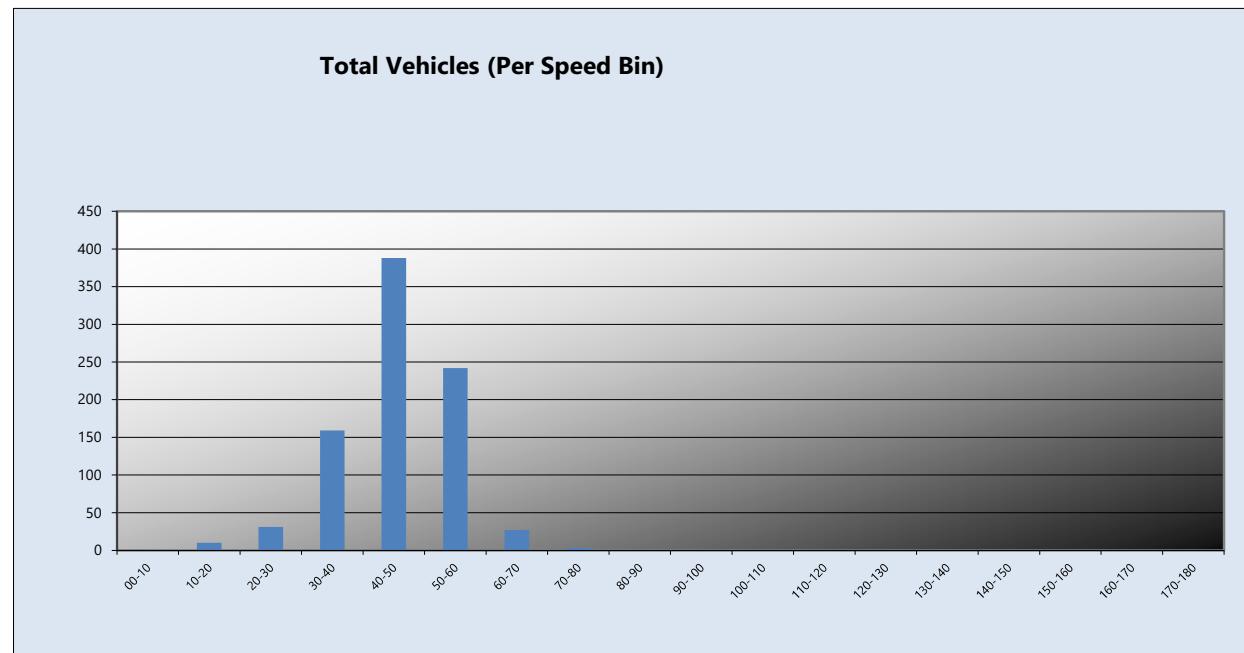
Profile:

Filter time: 00:00 25th April 2023 => 23:59 1st May 2023
 Speed range: 0 - 200 km/h.
 Separation: Greater than 4.00 seconds. - (Headway)
 Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)

Vehicles = 860
 Maximum = 76.5 km/h, Minimum = 11.4 km/h, Mean = 45.6 km/h
 85% Speed = 54.00 km/h, 95% Speed = 58.41 km/h, Median = 46.26 km/h
 20 km/h Pace = 36 - 56, Number in Pace = 667 (77.56%)
 Variance = 78.31, Standard Deviation = 8.85 km/h

Speed Bins:

Speed	Bin	
KPH	No.	%
00-10	0	0.0
10-20	10	1.2
20-30	31	3.6
30-40	159	18.5
40-50	388	45.1
50-60	242	28.1
60-70	27	3.1
70-80	3	0.3
80-90	0	0.0
90-100	0	0.0
100-110	0	0.0
110-120	0	0.0
120-130	0	0.0
130-140	0	0.0
140-150	0	0.0
150-160	0	0.0
160-170	0	0.0
170-180	0	0.0



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CLASSIFICATION SCHEMES:

Scheme F Classification Scheme (Non-metric)

Scheme F is an attempt to implement the FWHA's visual classification scheme as an axle-based classification scheme. This is one of several interpretations.

Vehicle Class	Class	Vehicle Type	No. of Axles	Axle spacing in feet				
				Axle 1 to 2	Axle 2 to 3	Axle 3 to 4	Axle 4 to 5	Axle 5 to 6
PCL/MCL	1	motorcycle	2	<6.0				
CAR*	2	passenger car	2	6.0 - 10.0				
		car + 1 axle trailer	3	<10.0	10.0 - 18.0			
		car + 2 axle trailer	4	<10.0		<3.5		
		pickup	2	10.0 - 15.0				
LGV**	3	pickup + 1 axle trailer	3	10.0 - 15.0	10.0 - 18.0			
		pickup + 2 axle trailer	4	10.0 - 15.0		<3.5		
		pickup + 3 axle trailer	5	9.9 - 15.0			<3.5	
		bus	2	>20.0				
BUS	4	bus	3	>19.0				
		single unit truck - dual rear axle	2	14.9 - 20.0			<3.5	
OGV 1	5	3 axle truck	3		<18.0			
	6	4 axle truck	4					
OGV 2	7	2S1	3		>18.0			
	8	2S2	4		>5.0	>3.5		
		3S1	4		<5.0	>10.0		
	9	3S2	5		<6.1		3.5 - 8.0	
		5 axle combination	5					
	10	6 axle combination	6			3.5 - 5.0		
		3S3	6					
	11	2S1-2	5		>6.0			
	12	3S1-2	6					>10.0
	13	truck	7 or more					

Car* Cars and LGV based cars

LGV** Light Goods Vehicles with the exception of LGV based on cars

TRAFFINOMICS LIMITED

TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS

SUMMARY

WEEK COMMENCING:

Tuesday 25 April 2023
TRA/23/091

SITE 03

LOCATION: Mallow Road, Lisgriffin Village (Google Maps Ref: 52.223414, -8.746913)

SPEED SURVEY SUMMARY:

NORTHBOUND 85% Speed = 32.58 km/h, 95% Speed = 35.73 km/h, Median = 27.63 km/h Maximum = 60.7 km/h, Minimum = 5.4 km/h, Mean = 27.3 km/h

SOUTHBOUND 85% Speed = 34.02 km/h, 95% Speed = 38.61 km/h, Median = 26.82 km/h Maximum = 81.5 km/h, Minimum = 1.0 km/h, Mean = 26.9 km/h

VOLUMETRIC VEHICLE COUNTS:

Direction	Time	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	No. Vehicles	7 day Mean
NORTHBOUND	07-19	698	762	698	794	508	406	446	4312	616
SOUTHBOUND	07-19	665	720	671	757	521	444	519	4297	614
NORTHBOUND	00-00	842	937	884	1006	646	563	604	5482	783
SOUTHBOUND	00-00	880	966	909	996	643	546	640	5580	797

PEAK FLOW SUMMARY:

Peak	AM	IP	PM
Most Frequent Peak Hour	0800	1400	1700
Average Vehicles per Peak Hour	43	61	96

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**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

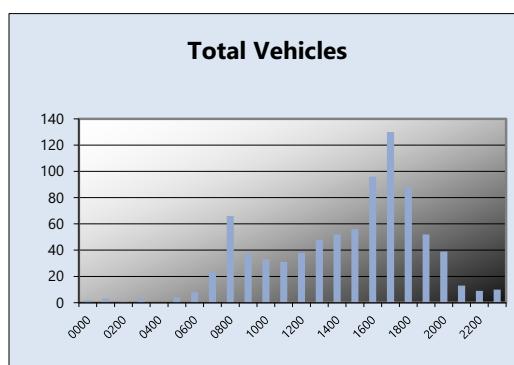
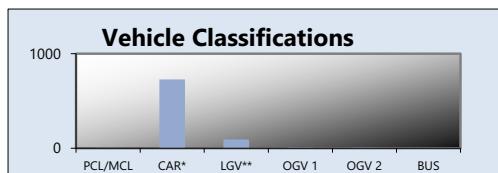
**Tuesday 25 April 2023
TRA/23/091**

**SITE 03
NORTHBOUND**

	4	688	78	8	6	2	784	
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TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	2	0	0	0	0	2	2
0100	0	3	0	0	0	0	3	3
0200	0	1	0	0	0	0	1	1
0300	0	2	1	0	0	0	3	3
0400	0	0	0	0	0	0	0	0
0500	0	3	1	0	0	0	4	4
0600	0	6	1	0	1	0	8	9
0700	0	20	3	0	0	0	23	23
0800	1	57	7	1	0	0	66	66
0900	0	34	3	0	0	0	37	37
1000	0	26	7	0	0	0	33	33
1100	0	28	1	2	0	0	31	32
1200	1	35	2	0	0	0	38	37
1300	0	40	5	1	1	1	48	51
1400	0	48	4	0	0	0	52	52
1500	1	47	7	1	0	0	56	56
1600	0	79	15	0	2	0	96	99
1700	0	115	14	0	1	0	130	131
1800	1	76	9	0	2	0	88	90
1900	0	46	5	1	0	0	52	53
2000	2	33	4	0	0	0	39	37
2100	0	13	0	0	0	0	13	13
2200	0	6	2	1	0	0	9	10
2300	0	8	2	0	0	0	10	10
07-19	4	605	77	5	6	1	698	706
06-22	6	703	87	6	7	1	810	818
06-00	6	717	91	7	7	1	829	838
00-00	6	728	93	7	7	1	842	851

Peaks	Time	Vehicles	PCU's
AM	0800	66	65.7
IP	1400	52	52
PM	1700	130	131.3



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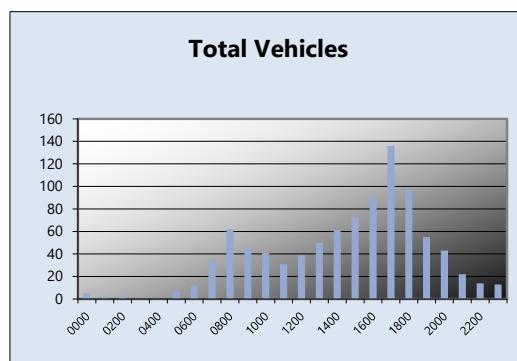
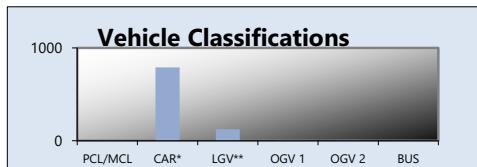
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Wednesday 26 April 2023
TRA/23/091**

**SITE 03
NORTHBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	4	1	0	0	0	5	5
0100	0	2	0	0	0	0	2	2
0200	0	1	1	0	0	0	2	2
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	4	2	1	0	0	7	8
0600	0	9	3	0	0	0	12	12
0700	0	30	4	1	0	0	35	36
0800	0	50	11	1	0	0	62	63
0900	0	34	9	0	3	0	46	50
1000	0	30	8	1	2	0	41	44
1100	1	24	3	2	1	0	31	33
1200	0	30	9	0	0	0	39	39
1300	0	44	5	1	0	0	50	51
1400	0	56	4	1	0	0	61	62
1500	0	57	13	0	3	0	73	77
1600	0	79	12	0	0	0	91	91
1700	2	109	25	0	0	0	136	134
1800	0	90	7	0	0	0	97	97
1900	1	48	6	0	0	0	55	54
2000	0	43	0	0	0	0	43	43
2100	0	21	1	0	0	0	22	22
2200	0	12	1	0	1	0	14	15
2300	0	13	0	0	0	0	13	13
07-19	3	633	110	7	9	0	762	775
06-22	4	754	120	7	9	0	894	906
06-00	4	779	121	7	10	0	921	934
00-00	4	790	125	8	10	0	937	951

Peaks	Time	Vehicles	PCU's
AM	0800	62	62.5
IP	1400	61	61.5
PM	1700	136	134.4



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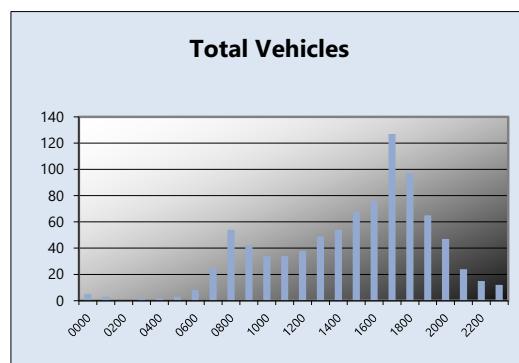
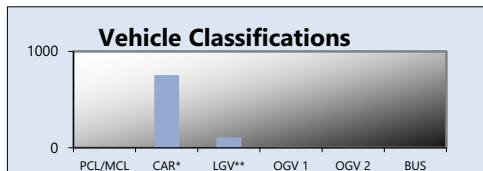
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Thursday 27 April 2023
TRA/23/091**

**SITE 03
NORTHBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	3	2	0	0	0	5	5
0100	0	3	0	0	0	0	3	3
0200	0	0	0	0	0	0	0	0
0300	0	2	0	0	0	0	2	2
0400	0	1	1	0	0	0	2	2
0500	0	3	0	0	0	0	3	3
0600	0	7	1	0	0	0	8	8
0700	0	19	6	0	0	0	25	25
0800	0	47	5	1	1	0	54	56
0900	0	37	4	1	0	0	42	43
1000	0	30	3	0	1	0	34	35
1100	0	28	6	0	0	0	34	34
1200	0	32	4	0	1	1	38	40
1300	0	40	8	1	0	0	49	50
1400	0	46	7	0	1	0	54	55
1500	0	55	12	1	0	0	68	69
1600	1	62	11	1	0	1	76	77
1700	1	105	19	2	0	0	127	127
1800	1	85	10	1	0	0	97	97
1900	0	56	5	1	2	1	65	69
2000	0	44	2	0	1	0	47	48
2100	0	24	0	0	0	0	24	24
2200	0	15	0	0	0	0	15	15
2300	0	10	2	0	0	0	12	12
07-19	3	586	95	8	4	2	698	707
06-22	3	717	103	9	7	3	842	856
06-00	3	742	105	9	7	3	869	883
00-00	3	754	108	9	7	3	884	898

Peaks	Time	Vehicles	PCU's
AM	0800	54	55.8
IP	1400	54	55.3
PM	1700	127	127.2



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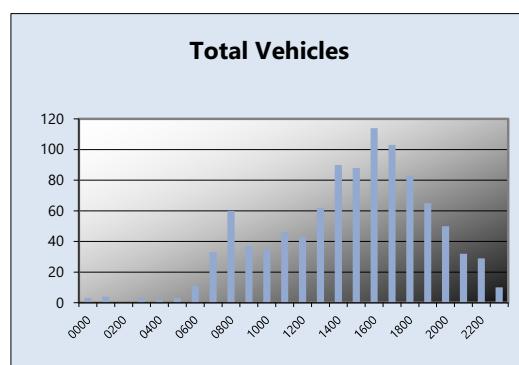
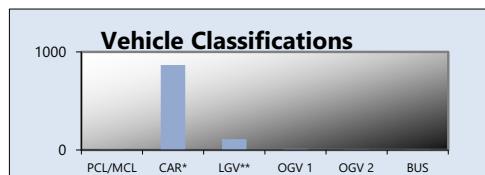
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Friday 28 April 2023
TRA/23/091**

**SITE 03
NORTHBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	3	0	0	0	0	3	3
0100	0	2	2	0	0	0	4	4
0200	0	0	0	0	0	0	0	0
0300	0	2	1	0	0	0	3	3
0400	0	1	1	0	0	0	2	2
0500	0	2	0	1	0	0	3	4
0600	0	8	3	0	0	0	11	11
0700	0	26	6	1	0	0	33	34
0800	0	56	2	1	0	1	60	62
0900	1	28	8	0	0	0	37	36
1000	0	24	9	0	1	1	35	37
1100	0	37	8	1	0	0	46	47
1200	0	32	8	1	0	2	43	46
1300	1	50	8	2	1	0	62	64
1400	0	82	8	0	0	0	90	90
1500	0	79	9	0	0	0	88	88
1600	0	100	10	2	2	0	114	118
1700	0	98	4	1	0	0	103	104
1800	1	72	7	1	1	1	83	85
1900	1	55	7	0	2	0	65	67
2000	0	46	4	0	0	0	50	50
2100	0	28	4	0	0	0	32	32
2200	0	27	2	0	0	0	29	29
2300	0	9	1	0	0	0	10	10
07-19	3	684	87	10	5	5	794	808
06-22	4	821	105	10	7	5	952	968
06-00	4	857	108	10	7	5	991	1007
00-00	4	867	112	11	7	5	1006	1022

Peaks	Time	Vehicles	PCU's
AM	0800	60	61.5
IP	1400	90	90
PM	1600	114	117.6



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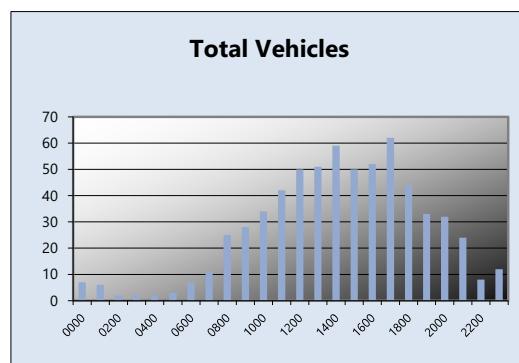
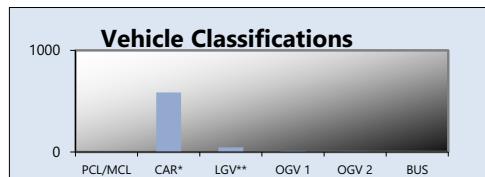
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Saturday 29 April 2023
TRA/23/091**

**SITE 03
NORTHBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	6	1	0	0	0	7	7
0100	0	6	0	0	0	0	6	6
0200	0	2	0	0	0	0	2	2
0300	1	0	1	0	0	0	2	1
0400	0	0	1	1	0	0	2	3
0500	0	1	1	1	0	0	3	4
0600	0	4	2	0	1	0	7	8
0700	0	11	0	0	0	0	11	11
0800	0	21	2	1	1	0	25	27
0900	0	21	6	0	1	0	28	29
1000	0	29	4	1	0	0	34	35
1100	0	36	4	2	0	0	42	43
1200	0	45	3	1	1	0	50	52
1300	0	47	4	0	0	0	51	51
1400	0	54	4	1	0	0	59	60
1500	0	48	1	1	0	0	50	51
1600	0	50	2	0	0	0	52	52
1700	0	59	2	1	0	0	62	63
1800	0	40	4	0	0	0	44	44
1900	0	32	1	0	0	0	33	33
2000	0	31	1	0	0	0	32	32
2100	0	23	1	0	0	0	24	24
2200	0	8	0	0	0	0	8	8
2300	0	11	1	0	0	0	12	12
07-19	0	461	36	8	3	0	508	516
06-22	0	551	41	8	4	0	604	613
06-00	0	570	42	8	4	0	624	633
00-00	1	585	46	10	4	0	646	655

Peaks	Time	Vehicles	PCU's
AM	0900	28	29.3
IP	1400	59	59.5
PM	1700	62	62.5



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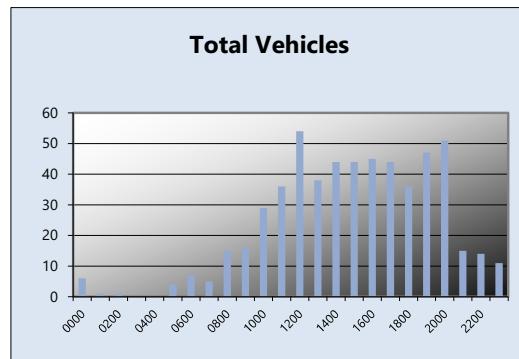
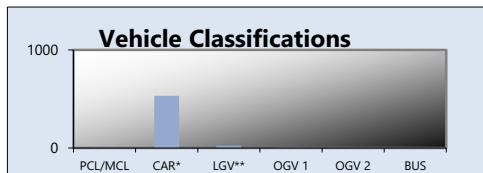
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Sunday 30 April 2023
TRA/23/091**

**SITE 03
NORTHBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	6	0	0	0	0	6	6
0100	0	1	0	0	0	0	1	1
0200	0	1	0	0	0	0	1	1
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	3	0	1	0	0	4	5
0600	0	7	0	0	0	0	7	7
0700	0	5	0	0	0	0	5	5
0800	0	15	0	0	0	0	15	15
0900	0	16	0	0	0	0	16	16
1000	0	26	3	0	0	0	29	29
1100	0	34	1	1	0	0	36	37
1200	0	52	2	0	0	0	54	54
1300	0	36	2	0	0	0	38	38
1400	0	38	6	0	0	0	44	44
1500	1	41	1	1	0	0	44	44
1600	0	45	0	0	0	0	45	45
1700	0	42	1	1	0	0	44	45
1800	0	34	2	0	0	0	36	36
1900	0	47	0	0	0	0	47	47
2000	0	48	3	0	0	0	51	51
2100	0	14	0	1	0	0	15	16
2200	1	13	0	0	0	0	14	13
2300	0	9	2	0	0	0	11	11
07-19	1	384	18	3	0	0	406	407
06-22	1	500	21	4	0	0	526	527
06-00	2	522	23	4	0	0	551	551
00-00	2	533	23	5	0	0	563	564

Peaks	Time	Vehicles	PCU's
AM	0900	16	16
IP	1200	54	54
PM	1600	45	45



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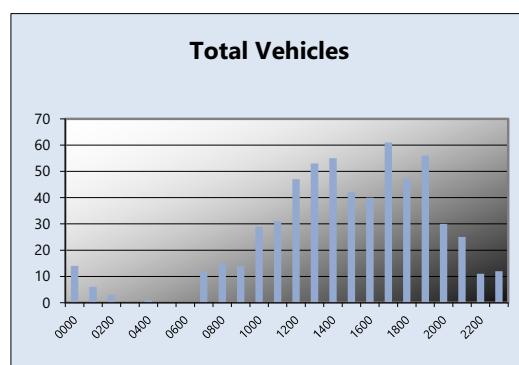
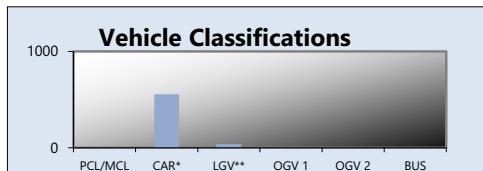
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Monday 1 May 2023
TRA/23/091**

**SITE 03
NORTHBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	14	0	0	0	0	14	14
0100	0	6	0	0	0	0	6	6
0200	0	3	0	0	0	0	3	3
0300	0	0	0	0	0	0	0	0
0400	0	1	0	0	0	0	1	1
0500	0	0	0	0	0	0	0	0
0600	0	0	0	0	0	0	0	0
0700	0	9	2	1	0	0	12	13
0800	1	9	5	0	0	0	15	14
0900	0	11	2	1	0	0	14	15
1000	0	27	1	1	0	0	29	30
1100	0	30	1	0	0	0	31	31
1200	2	43	2	0	0	0	47	45
1300	1	50	2	0	0	0	53	52
1400	0	52	2	0	1	0	55	56
1500	0	38	4	0	0	0	42	42
1600	0	40	0	0	0	0	40	40
1700	0	57	4	0	0	0	61	61
1800	1	42	4	0	0	0	47	46
1900	0	51	4	0	1	0	56	57
2000	0	29	1	0	0	0	30	30
2100	0	21	4	0	0	0	25	25
2200	0	11	0	0	0	0	11	11
2300	0	11	1	0	0	0	12	12
07-19	5	408	29	3	1	0	446	445
06-22	5	509	38	3	2	0	557	557
06-00	5	531	39	3	2	0	580	580
00-00	5	555	39	3	2	0	604	604

Peaks	Time	Vehicles	PCU's
AM	0800	15	14.5
IP	1400	55	56.3
PM	1700	61	61



TRAFFINOMICS LIMITED

**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

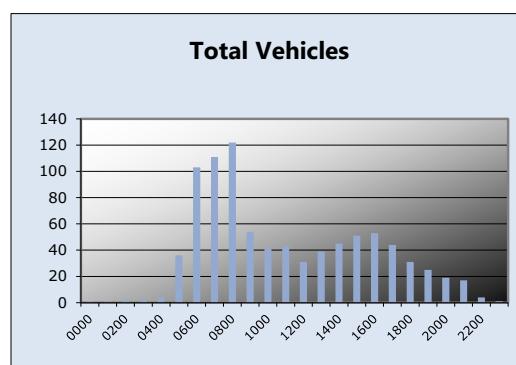
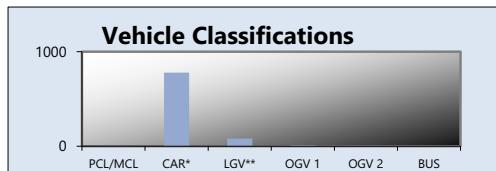
**Tuesday 25 April 2023
TRA/23/091**

**SITE 03
SOUTHBOUND**

	4	708	74	6	6	1	798	
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TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	1	0	0	0	0	1	1
0100	0	1	0	0	0	0	1	1
0200	0	2	0	0	0	0	2	2
0300	0	2	0	0	0	0	2	2
0400	0	3	1	0	0	0	4	4
0500	0	32	2	2	0	0	36	37
0600	1	84	15	3	0	0	103	104
0700	0	94	15	2	0	0	111	112
0800	0	110	11	0	1	0	122	123
0900	0	50	3	1	0	0	54	55
1000	0	35	6	0	0	0	41	41
1100	0	37	6	0	0	0	43	43
1200	0	29	2	0	0	0	31	31
1300	0	37	2	0	0	0	39	39
1400	1	39	3	1	1	0	45	46
1500	1	45	3	2	0	0	51	51
1600	0	47	5	0	1	0	53	54
1700	0	39	5	0	0	0	44	44
1800	0	31	0	0	0	0	31	31
1900	0	22	1	1	1	0	25	27
2000	0	19	0	0	0	0	19	19
2100	0	16	1	0	0	0	17	17
2200	0	3	1	0	0	0	4	4
2300	0	1	0	0	0	0	1	1
07-19	2	593	61	6	3	0	665	670
06-22	3	734	78	10	4	0	829	837
06-00	3	738	79	10	4	0	834	842
00-00	3	779	82	12	4	0	880	889

Peaks	Time	Vehicles	PCU's
AM	0800	122	123.3
IP	1400	45	46
PM	1600	53	54.3



TRAFFINOMICS LIMITED

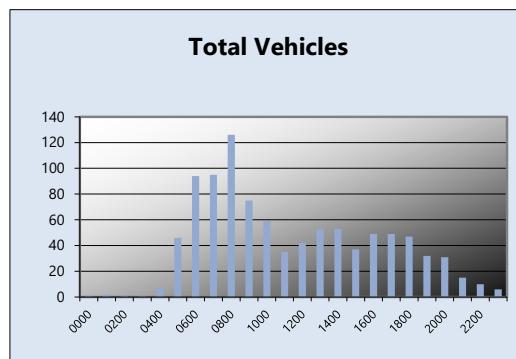
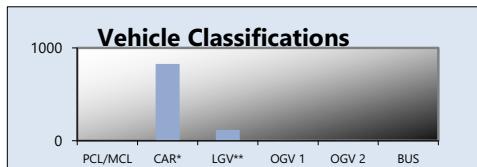
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Wednesday 26 April 2023
TRA/23/091**

**SITE 03
SOUTHBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	1	0	0	0	0	1	1
0100	0	2	0	0	0	0	2	2
0200	0	0	1	0	0	0	1	1
0300	0	0	1	0	0	0	1	1
0400	0	5	2	0	0	0	7	7
0500	0	40	5	0	1	0	46	47
0600	1	74	19	0	0	0	94	93
0700	0	78	17	0	0	0	95	95
0800	0	110	15	0	1	0	126	127
0900	2	63	8	0	2	0	75	76
1000	0	49	9	0	1	0	59	60
1100	0	33	2	0	0	0	35	35
1200	0	33	7	2	0	0	42	43
1300	0	40	12	0	1	0	53	54
1400	0	52	1	0	0	0	53	53
1500	0	32	3	0	2	0	37	40
1600	0	41	5	2	1	0	49	51
1700	1	47	1	0	0	0	49	48
1800	2	40	5	0	0	0	47	45
1900	0	31	1	0	0	0	32	32
2000	0	29	2	0	0	0	31	31
2100	0	15	0	0	0	0	15	15
2200	0	9	1	0	0	0	10	10
2300	0	5	1	0	0	0	6	6
07-19	5	618	85	4	8	0	720	728
06-22	6	767	107	4	8	0	892	900
06-00	6	781	109	4	8	0	908	916
00-00	6	829	118	4	9	0	966	975

Peaks	Time	Vehicles	PCU's
AM	0800	126	127.3
IP	1300	53	54.3
PM	1600	49	51.3



TRAFFINOMICS LIMITED

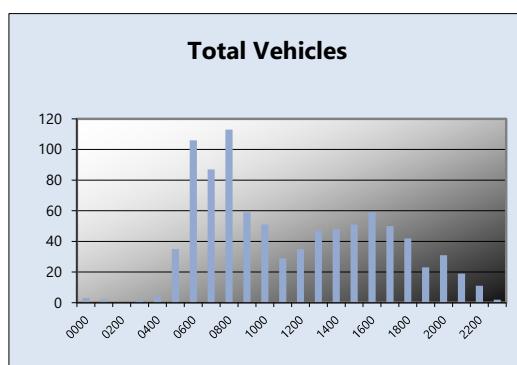
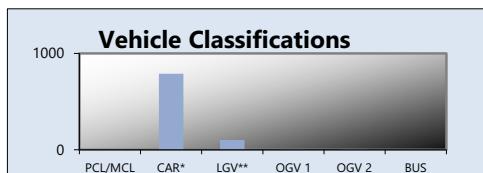
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Thursday 27 April 2023
TRA/23/091**

**SITE 03
SOUTHBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	3	0	0	0	0	3	3
0100	0	2	0	0	0	0	2	2
0200	0	0	0	0	0	0	0	0
0300	0	2	0	0	0	0	2	2
0400	0	2	2	0	0	0	4	4
0500	0	29	6	0	0	0	35	35
0600	1	81	23	0	1	0	106	107
0700	0	75	10	1	0	1	87	89
0800	0	101	11	1	0	0	113	114
0900	0	47	10	1	1	0	59	61
1000	0	48	2	0	1	0	51	52
1100	0	27	2	0	0	0	29	29
1200	1	30	2	1	1	0	35	36
1300	0	38	7	2	0	0	47	48
1400	0	41	6	1	0	0	48	49
1500	0	48	3	0	0	0	51	51
1600	0	54	5	0	0	0	59	59
1700	0	46	4	0	0	0	50	50
1800	0	37	1	0	4	0	42	47
1900	0	22	1	0	0	0	23	23
2000	0	28	2	0	1	0	31	32
2100	0	16	3	0	0	0	19	19
2200	0	10	1	0	0	0	11	11
2300	0	2	0	0	0	0	2	2
07-19	1	592	63	7	7	1	671	684
06-22	2	739	92	7	9	1	850	865
06-00	2	751	93	7	9	1	863	878
00-00	2	789	101	7	9	1	909	924

Peaks	Time	Vehicles	PCU's
AM	0800	113	113.5
IP	1400	48	48.5
PM	1600	59	59



TRAFFINOMICS LIMITED

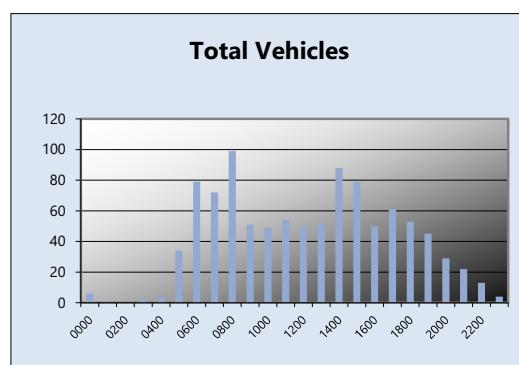
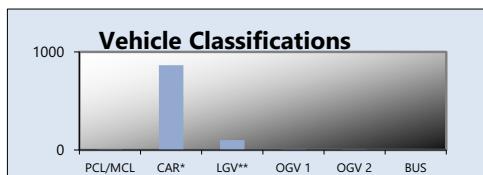
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Friday 28 April 2023
TRA/23/091**

**SITE 03
SOUTHBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	6	0	0	0	0	6	6
0100	0	1	0	0	0	0	1	1
0200	0	0	0	0	0	0	0	0
0300	0	1	1	0	0	0	2	2
0400	0	3	1	0	0	0	4	4
0500	0	27	7	0	0	0	34	34
0600	1	62	14	1	1	0	79	80
0700	1	53	16	1	1	0	72	73
0800	0	86	11	1	1	0	99	101
0900	1	47	2	1	0	0	51	51
1000	1	46	1	0	1	0	49	50
1100	0	44	9	1	0	0	54	55
1200	0	46	3	0	1	0	50	51
1300	1	46	2	1	0	1	51	52
1400	1	76	9	0	2	0	88	90
1500	1	73	3	2	0	0	79	79
1600	0	47	3	0	0	0	50	50
1700	0	54	5	0	2	0	61	64
1800	1	49	2	1	0	0	53	53
1900	0	35	10	0	0	0	45	45
2000	1	27	1	0	0	0	29	28
2100	0	21	1	0	0	0	22	22
2200	0	12	1	0	0	0	13	13
2300	0	4	0	0	0	0	4	4
07-19	7	667	66	8	8	1	757	767
06-22	9	812	92	9	9	1	932	942
06-00	9	828	93	9	9	1	949	959
00-00	9	866	102	9	9	1	996	1006

Peaks	Time	Vehicles	PCU's
AM	0800	99	100.8
IP	1400	88	89.8
PM	1700	61	63.6



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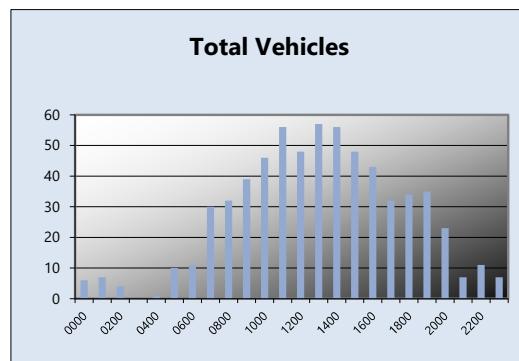
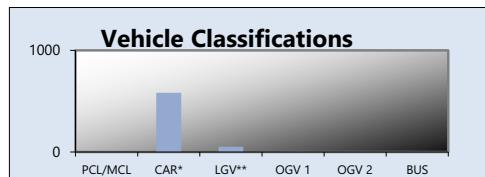
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Saturday 29 April 2023
TRA/23/091**

**SITE 03
SOUTHBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	6	0	0	0	0	6	6
0100	0	7	0	0	0	0	7	7
0200	0	4	0	0	0	0	4	4
0300	0	0	0	0	0	0	0	0
0400	0	0	1	0	0	0	1	1
0500	0	9	1	0	0	0	10	10
0600	1	7	3	0	0	0	11	10
0700	0	24	4	1	1	0	30	32
0800	0	28	3	1	0	0	32	33
0900	0	32	7	0	0	0	39	39
1000	0	37	7	0	1	1	46	48
1100	0	51	5	0	0	0	56	56
1200	0	46	2	0	0	0	48	48
1300	0	52	5	0	0	0	57	57
1400	0	56	0	0	0	0	56	56
1500	0	44	3	1	0	0	48	49
1600	0	38	3	1	0	1	43	45
1700	0	31	1	0	0	0	32	32
1800	0	32	2	0	0	0	34	34
1900	0	32	3	0	0	0	35	35
2000	0	22	1	0	0	0	23	23
2100	0	7	0	0	0	0	7	7
2200	0	11	0	0	0	0	11	11
2300	0	6	1	0	0	0	7	7
07-19	0	471	42	4	2	2	521	528
06-22	1	539	49	4	2	2	597	603
06-00	1	556	50	4	2	2	615	621
00-00	1	582	52	4	2	2	643	649

Peaks	Time	Vehicles	PCU's
AM	0900	39	39
IP	1300	57	57
PM	1600	43	44.5



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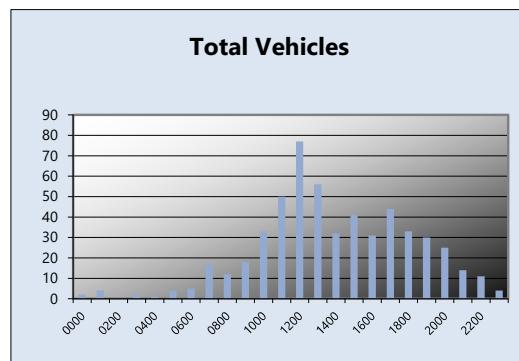
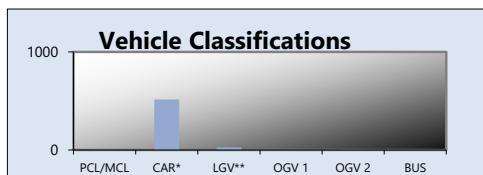
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Sunday 30 April 2023
TRA/23/091**

**SITE 03
SOUTHBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	2	0	0	0	0	2	2
0100	0	3	1	0	0	0	4	4
0200	0	0	0	0	0	0	0	0
0300	0	2	0	0	0	0	2	2
0400	0	1	0	0	0	0	1	1
0500	0	3	0	0	1	0	4	5
0600	0	5	0	0	0	0	5	5
0700	0	16	1	0	0	0	17	17
0800	0	12	0	0	0	0	12	12
0900	0	17	1	0	0	0	18	18
1000	0	31	2	0	0	0	33	33
1100	0	49	1	0	0	0	50	50
1200	1	72	3	0	1	0	77	78
1300	0	51	4	1	0	0	56	57
1400	0	29	3	0	0	0	32	32
1500	0	40	1	0	0	0	41	41
1600	0	29	2	0	0	0	31	31
1700	0	43	1	0	0	0	44	44
1800	0	33	0	0	0	0	33	33
1900	0	30	0	0	0	0	30	30
2000	0	24	1	0	0	0	25	25
2100	1	11	2	0	0	0	14	13
2200	0	9	2	0	0	0	11	11
2300	0	4	0	0	0	0	4	4
07-19	1	422	19	1	1	0	444	445
06-22	2	492	22	1	1	0	518	518
06-00	2	505	24	1	1	0	533	533
00-00	2	516	25	1	2	0	546	548

Peaks	Time	Vehicles	PCU's
AM	0900	18	18
IP	1200	77	77.5
PM	1700	44	44



TRAFFINOMICS LIMITED

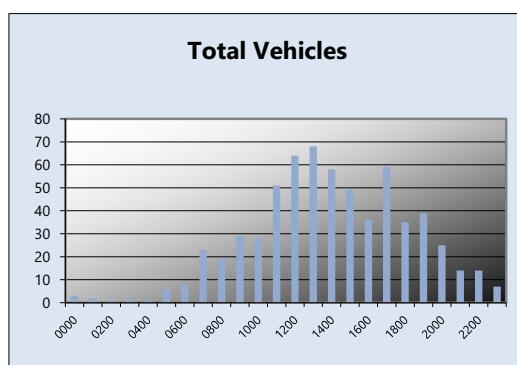
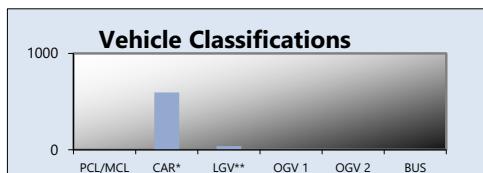
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Monday 1 May 2023
TRA/23/091**

**SITE 03
SOUTHBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	1	2	0	0	0	0	3	2
0100	0	2	0	0	0	0	2	2
0200	0	1	0	0	0	0	1	1
0300	0	1	0	0	0	0	1	1
0400	0	1	0	0	0	0	1	1
0500	0	5	1	0	0	0	6	6
0600	0	8	0	0	0	0	8	8
0700	0	16	7	0	0	0	23	23
0800	0	16	3	0	0	0	19	19
0900	0	26	3	0	0	0	29	29
1000	0	25	3	0	0	0	28	28
1100	0	47	3	1	0	0	51	52
1200	1	60	3	0	0	0	64	63
1300	1	64	2	1	0	0	68	68
1400	0	55	3	0	0	0	58	58
1500	0	47	1	0	1	0	49	50
1600	0	35	1	0	0	0	36	36
1700	0	59	0	0	0	0	59	59
1800	0	32	3	0	0	0	35	35
1900	0	38	1	0	0	0	39	39
2000	0	23	2	0	0	0	25	25
2100	0	14	0	0	0	0	14	14
2200	1	12	1	0	0	0	14	13
2300	0	6	1	0	0	0	7	7
07-19	2	482	32	2	1	0	519	520
06-22	2	565	35	2	1	0	605	606
06-00	3	583	37	2	1	0	626	626
00-00	4	595	38	2	1	0	640	639

Peaks	Time	Vehicles	PCU's
AM	0900	29	29
IP	1300	68	67.7
PM	1700	59	59



TRAFFINOMICS LIMITED

**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**SITE 03
NORTHBOUND**

WEEK COMMENCING:

**Tuesday 25 April 2023
TRA/23/091**

TIME PERIOD	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	Average
0000	2	5	5	3	7	6	14	6
0100	3	2	3	4	6	1	6	4
0200	1	2	0	0	2	1	3	1
0300	3	0	2	3	2	0	0	1
0400	0	0	2	2	2	0	1	1
0500	4	7	3	3	3	4	0	3
0600	8	12	8	11	7	7	0	8
0700	23	35	25	33	11	5	12	21
0800	66	62	54	60	25	15	15	42
0900	37	46	42	37	28	16	14	31
1000	33	41	34	35	34	29	29	34
1100	31	31	34	46	42	36	31	36
1200	38	39	38	43	50	54	47	44
1300	48	50	49	62	51	38	53	50
1400	52	61	54	90	59	44	55	59
1500	56	73	68	88	50	44	42	60
1600	96	91	76	114	52	45	40	73
1700	130	136	127	103	62	44	61	95
1800	88	97	97	83	44	36	47	70
1900	52	55	65	65	33	47	56	53
2000	39	43	47	50	32	51	30	42
2100	13	22	24	32	24	15	25	22
2200	9	14	15	29	8	14	11	14
2300	10	13	12	10	12	11	12	11
07-19	698	762	698	794	508	406	446	616
06-22	810	894	842	952	604	526	557	741
06-00	829	921	869	991	624	551	580	766
00-00	842	937	884	1006	646	563	604	783

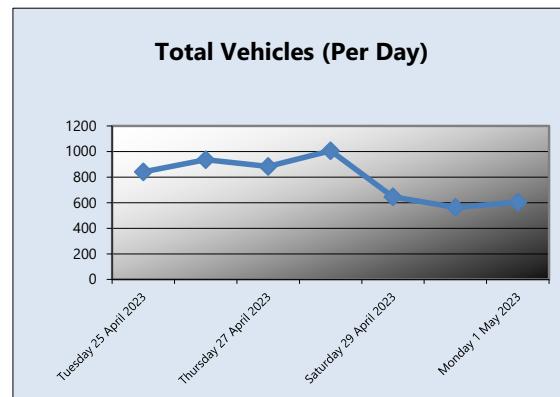
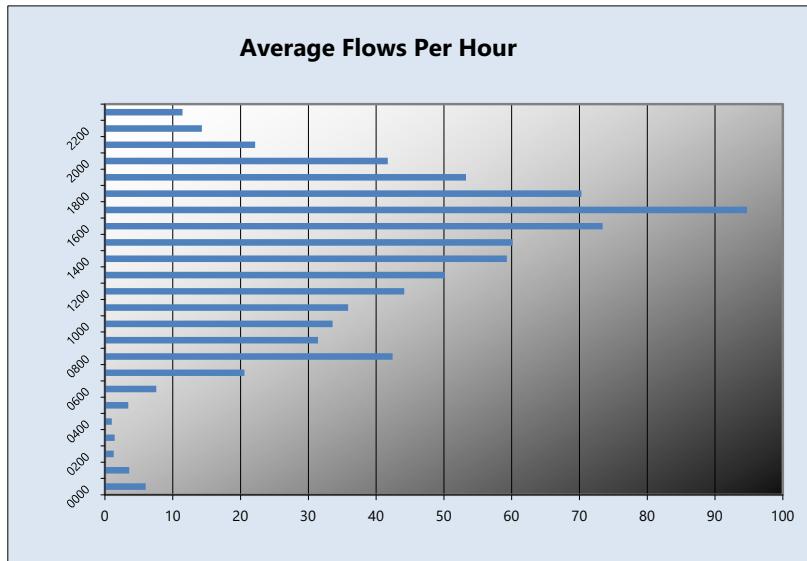
TRAFFINOMICS LIMITED

**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**SITE 03
NORTHBOUND**

WEEK COMMENCING:

**Tuesday 25 April 2023
TRA/23/091**



Peak Time & Volumetric Count Data

	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	Mode/Average
AM								
Time	0800	0800	0800	0800	0900	0900	0800	0800
Vehicles	66	62	54	60	28	16	15	43
IP								
Time	1400	1400	1400	1400	1400	1200	1400	1400
Vehicles	52	61	54	90	59	54	55	61
PM								
Time	1700	1700	1700	1600	1700	1600	1700	1700
Vehicles	130	136	127	114	62	45	61	96

TRAFFINOMICS LIMITED

**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**SITE 03
SOUTHBOUND**

WEEK COMMENCING:

**Tuesday 25 April 2023
TRA/23/091**

TIME PERIOD	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	Average
0000	1	1	3	6	6	2	3	3
0100	1	2	2	1	7	4	2	3
0200	2	1	0	0	4	0	1	1
0300	2	1	2	2	0	2	1	1
0400	4	7	4	4	1	1	1	3
0500	36	46	35	34	10	4	6	24
0600	103	94	106	79	11	5	8	58
0700	111	95	87	72	30	17	23	62
0800	122	126	113	99	32	12	19	75
0900	54	75	59	51	39	18	29	46
1000	41	59	51	49	46	33	28	44
1100	43	35	29	54	56	50	51	45
1200	31	42	35	50	48	77	64	50
1300	39	53	47	51	57	56	68	53
1400	45	53	48	88	56	32	58	54
1500	51	37	51	79	48	41	49	51
1600	53	49	59	50	43	31	36	46
1700	44	49	50	61	32	44	59	48
1800	31	47	42	53	34	33	35	39
1900	25	32	23	45	35	30	39	33
2000	19	31	31	29	23	25	25	26
2100	17	15	19	22	7	14	14	15
2200	4	10	11	13	11	11	14	11
2300	1	6	2	4	7	4	7	4
07-19	665	720	671	757	521	444	519	614
06-22	829	892	850	932	597	518	605	746
06-00	834	908	863	949	615	533	626	761
00-00	880	966	909	996	643	546	640	797

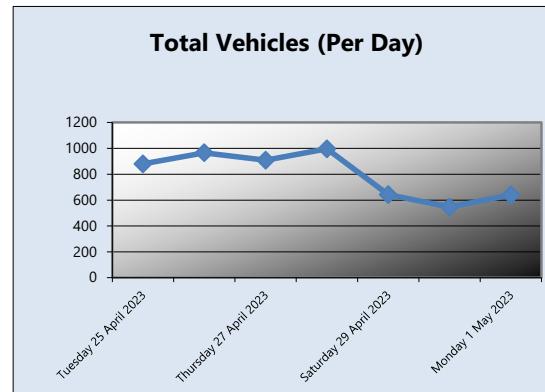
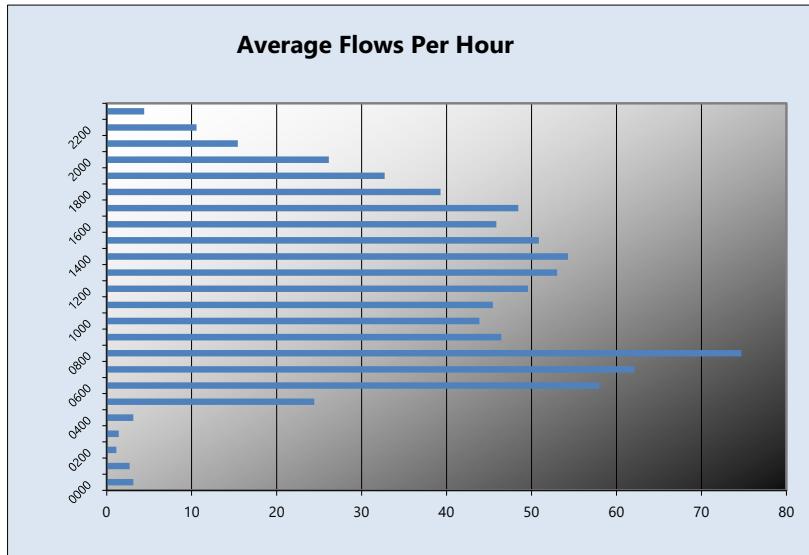
TRAFFINOMICS LIMITED

**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**SITE 03
SOUTHBOUND**

WEEK COMMENCING:

**Tuesday 25 April 2023
TRA/23/091**



Peak Time & Volumetric Count Data

	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	Mode/Average
AM								
Time	0800	0800	0800	0800	0900	0900	0900	0800
Vehicles	122	126	122	99	39	18	29	79
IP								
Time	1400	1300	1400	1400	1300	1200	1300	1400
Vehicles	45	53	48	88	57	77	68	62
PM								
Time	1600	1600	1600	1700	1600	1700	1700	1600
Vehicles	53	49	59	61	43	44	59	53

TRAFFINOMICS LIMITED

TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS AUTOMATIC TRAFFIC COUNTS

WEEK COMMENCING:

Tuesday 25 April 2023
TRA/23/091

SITE 03 NORTHBOUND

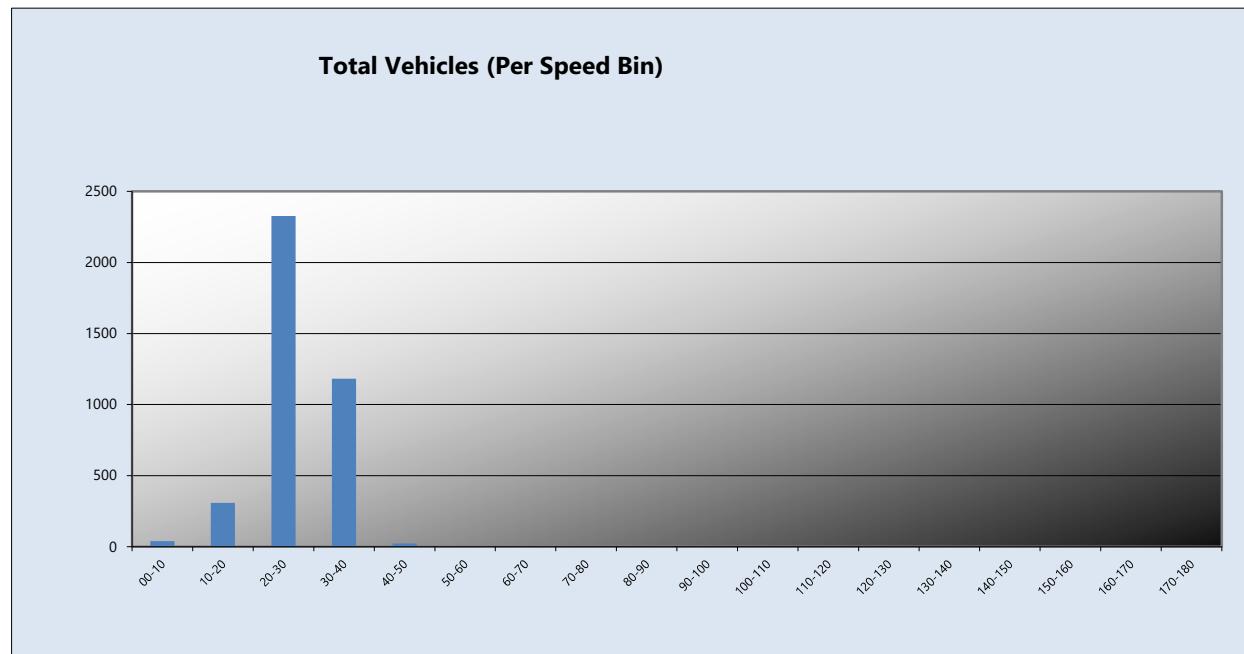
Profile:

Filter time: 00:00 25th April 2023 => 23:59 1st May 2023
 Speed range: 0 - 200 km/h.
 Separation: Greater than 4.00 seconds. - (Headway)
 Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)

Vehicles = 3883
 Maximum = 60.7 km/h, Minimum = 5.4 km/h, Mean = 27.3 km/h
 85% Speed = 32.58 km/h, 95% Speed = 35.73 km/h, Median = 27.63 km/h
 20 km/h Pace = 18 - 38, Number in Pace = 3613 (93.05%)
 Variance = 31.26, Standard Deviation = 5.59 km/h

Speed Bins:

Speed	Bin	
KPH	No.	%
00-10	40	1.0
10-20	309	8.0
20-30	2327	59.9
30-40	1183	30.5
40-50	23	0.6
50-60	0	0.0
60-70	1	0.0
70-80	0	0.0
80-90	0	0.0
90-100	0	0.0
100-110	0	0.0
110-120	0	0.0
120-130	0	0.0
130-140	0	0.0
140-150	0	0.0
150-160	0	0.0
160-170	0	0.0
170-180	0	0.0



TRAFFINOMICS LIMITED

TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS AUTOMATIC TRAFFIC COUNTS

WEEK COMMENCING:

Tuesday 25 April 2023

TRA/23/091

SITE 03 SOUTHBOUND

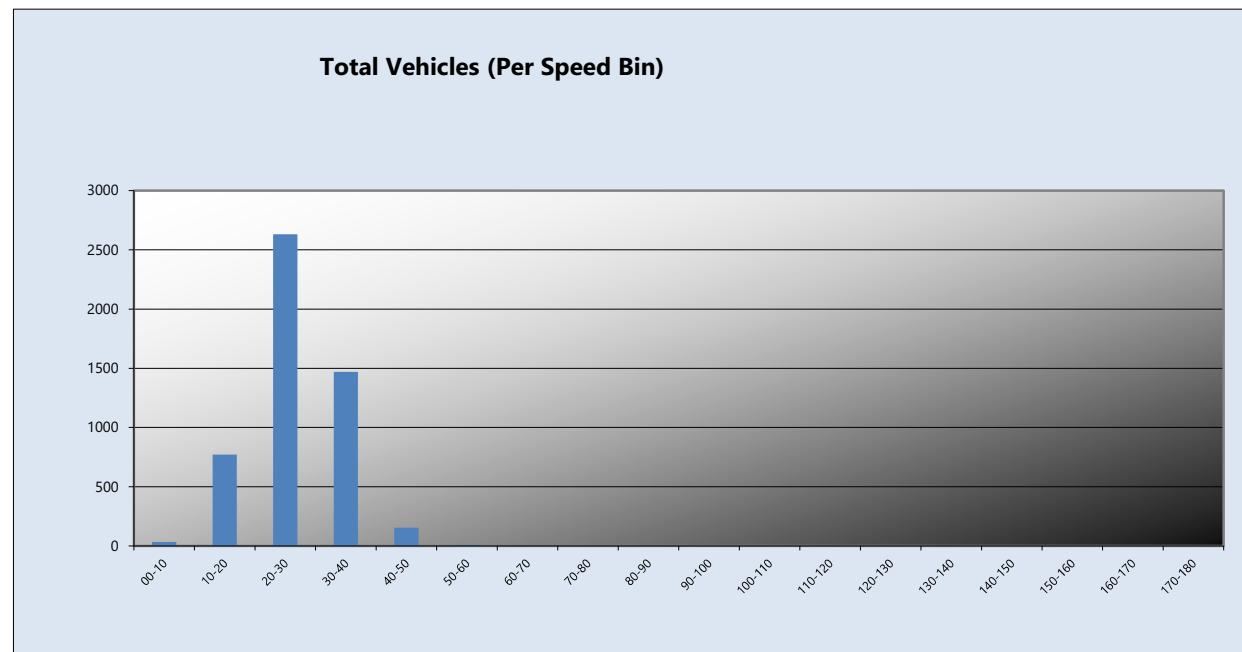
Profile:

Filter time: 00:00 25th April 2023 => 23:59 1st May 2023
 Speed range: 0 - 200 km/h.
 Separation: Greater than 4.00 seconds. - (Headway)
 Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)

Vehicles = 5073
 Maximum = 81.5 km/h, Minimum = 1.0 km/h, Mean = 26.9 km/h
 85% Speed = 34.02 km/h, 95% Speed = 38.61 km/h, Median = 26.82 km/h
 20 km/h Pace = 17 - 37, Number in Pace = 4316 (85.08%)
 Variance = 49.97, Standard Deviation = 7.07 km/h

Speed Bins:

Speed	Bin	
KPH	No.	%
00-10	34	0.7
10-20	771	15.2
20-30	2632	51.9
30-40	1470	29.0
40-50	154	3.0
50-60	8	0.2
60-70	3	0.1
70-80	0	0.0
80-90	1	0.0
90-100	0	0.0
100-110	0	0.0
110-120	0	0.0
120-130	0	0.0
130-140	0	0.0
140-150	0	0.0
150-160	0	0.0
160-170	0	0.0
170-180	0	0.0



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CLASSIFICATION SCHEMES:

Scheme F Classification Scheme (Non-metric)

Scheme F is an attempt to implement the FWHA's visual classification scheme as an axle-based classification scheme. This is one of several interpretations.

Vehicle Class	Class	Vehicle Type	No. of Axles	Axle spacing in feet				
				Axle 1 to 2	Axle 2 to 3	Axle 3 to 4	Axle 4 to 5	Axle 5 to 6
PCL/MCL	1	motorcycle	2	<6.0				
CAR*	2	passenger car	2	6.0 - 10.0				
		car + 1 axle trailer	3	<10.0	10.0 - 18.0			
		car + 2 axle trailer	4	<10.0		<3.5		
		pickup	2	10.0 - 15.0				
LGV**	3	pickup + 1 axle trailer	3	10.0 - 15.0	10.0 - 18.0			
		pickup + 2 axle trailer	4	10.0 - 15.0		<3.5		
		pickup + 3 axle trailer	5	9.9 - 15.0			<3.5	
		bus	2	>20.0				
BUS	4	bus	3	>19.0				
		single unit truck - dual rear axle	2	14.9 - 20.0			<3.5	
OGV 1	5	3 axle truck	3		<18.0			
	6	4 axle truck	4					
OGV 2	7	2S1	3		>18.0			
		2S2	4		>5.0	>3.5		
		3S1	4		<5.0	>10.0		
		3S2	5		<6.1		3.5 - 8.0	
	8	5 axle combination	5					
		6 axle combination	6			3.5 - 5.0		
		3S3	6					
	9	2S1-2	5		>6.0			
	10	3S1-2	6					>10.0
	11	truck	7 or more					
	12							
	13							

Car* Cars and LGV based cars

LGV** Light Goods Vehicles with the exception of LGV based on cars

TRAFFINOMICS LIMITED

TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS

SUMMARY

WEEK COMMENCING:

Tuesday 25 April 2023
TRA/23/091

SITE 04

LOCATION: L5523 East of Knockaunavaddreen Cross (Google Maps Ref: 52.195937, -8.719164)

SPEED SURVEY SUMMARY:

EASTBOUND	85% Speed = 46.09 km/h, 95% Speed = 49.40 km/h, Median = 39.69 km/h	Maximum = 60.1 km/h, Minimum = 6.5 km/h, Mean = 38.6 km/h
WESTBOUND	85% Speed = 53.91 km/h, 95% Speed = 59.77 km/h, Median = 45.54 km/h	Maximum = 75.2 km/h, Minimum = 11.2 km/h, Mean = 45.2 km/h

VOLUMETRIC VEHICLE COUNTS:

Direction	Time	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	No. Vehicles	7 day Mean
EASTBOUND	07-19	87	99	99	113	57	64	51	570	81
WESTBOUND	07-19	86	88	103	94	65	48	48	532	76
EASTBOUND	00-00	100	128	107	127	73	74	64	673	96
WESTBOUND	00-00	102	113	124	116	79	69	71	674	96

PEAK FLOW SUMMARY:

Peak	AM	IP	PM
Most Frequent Peak Hour	0800	1400	1700
Average Vehicles per Peak Hour	11	10	9

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**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

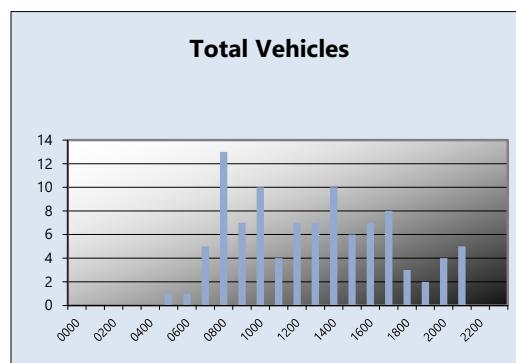
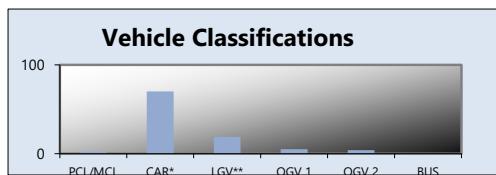
**Tuesday 25 April 2023
TRA/23/091**

**SITE 04
EASTBOUND**

	2	75	13	3	5	1	97	
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TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	1	0	0	0	0	1	1
0600	0	0	0	0	1	0	1	2
0700	0	4	1	0	0	0	5	5
0800	0	9	4	0	0	0	13	13
0900	0	5	2	0	0	0	7	7
1000	0	7	2	1	0	0	10	11
1100	0	2	2	0	0	0	4	4
1200	0	5	1	1	0	0	7	8
1300	0	6	1	0	0	0	7	7
1400	1	6	1	2	0	0	10	10
1500	1	3	1	1	0	0	6	6
1600	0	2	3	0	2	0	7	10
1700	0	8	0	0	0	0	8	8
1800	0	3	0	0	0	0	3	3
1900	0	1	1	0	0	0	2	2
2000	0	3	0	0	1	0	4	5
2100	0	5	0	0	0	0	5	5
2200	0	0	0	0	0	0	0	0
2300	0	0	0	0	0	0	0	0
07-19	2	60	18	5	2	0	87	91
06-22	2	69	19	5	4	0	99	105
06-00	2	69	19	5	4	0	99	105
00-00	2	70	19	5	4	0	100	106

Peaks	Time	Vehicles	PCU's
AM	0800	13	13
IP	1400	10	10.2
PM	1700	8	9.6



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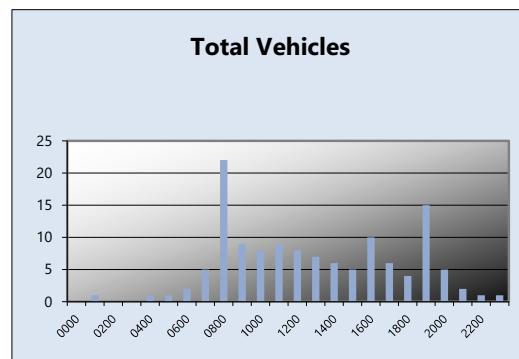
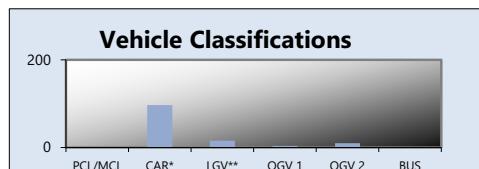
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Wednesday 26 April 2023
TRA/23/091**

**SITE 04
EASTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	1	0	0	0	0	1	1
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	1	0	0	0	0	1	1
0500	0	1	0	0	0	0	1	1
0600	0	0	0	0	2	0	2	5
0700	0	4	1	0	0	0	5	5
0800	0	15	5	1	1	0	22	24
0900	0	5	1	0	3	0	9	13
1000	0	6	1	0	1	0	8	9
1100	0	7	1	0	1	0	9	10
1200	0	5	2	0	1	0	8	9
1300	0	6	1	0	0	0	7	7
1400	0	5	0	0	1	0	6	7
1500	0	4	0	1	0	0	5	6
1600	0	6	2	1	0	1	10	12
1700	0	5	0	1	0	0	6	7
1800	0	4	0	0	0	0	4	4
1900	0	13	2	0	0	0	15	15
2000	0	5	0	0	0	0	5	5
2100	0	2	0	0	0	0	2	2
2200	0	1	0	0	0	0	1	1
2300	0	1	0	0	0	0	1	1
07-19	0	72	14	4	8	1	99	112
06-22	0	92	16	4	10	1	123	139
06-00	0	94	16	4	10	1	125	141
00-00	0	97	16	4	10	1	128	144

Peaks	Time	Vehicles	PCU's
AM	0800	22	23.8
IP	1200	8	9.3
PM	1600	10	11.5



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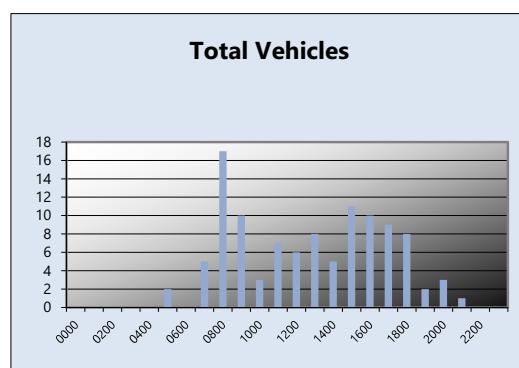
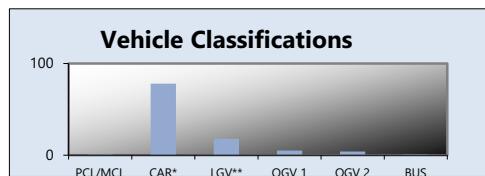
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Thursday 27 April 2023
TRA/23/091**

**SITE 04
EASTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	1	0	0	1	0	2	3
0600	0	0	0	0	0	0	0	0
0700	0	4	1	0	0	0	5	5
0800	0	12	4	0	1	0	17	18
0900	0	6	3	1	0	0	10	11
1000	0	3	0	0	0	0	3	3
1100	0	7	0	0	0	0	7	7
1200	0	4	1	1	0	0	6	7
1300	0	3	4	1	0	0	8	9
1400	0	3	2	0	0	0	5	5
1500	0	10	0	0	1	0	11	12
1600	1	7	0	1	0	1	10	11
1700	0	7	1	0	1	0	9	10
1800	0	5	2	1	0	0	8	9
1900	0	2	0	0	0	0	2	2
2000	0	3	0	0	0	0	3	3
2100	0	1	0	0	0	0	1	1
2200	0	0	0	0	0	0	0	0
2300	0	0	0	0	0	0	0	0
07-19	1	71	18	5	3	1	99	106
06-22	1	77	18	5	3	1	105	112
06-00	1	77	18	5	3	1	105	112
00-00	1	78	18	5	4	1	107	115

Peaks	Time	Vehicles	PCU's
AM	0800	17	18.3
IP	1300	8	8.5
PM	1600	10	10.7



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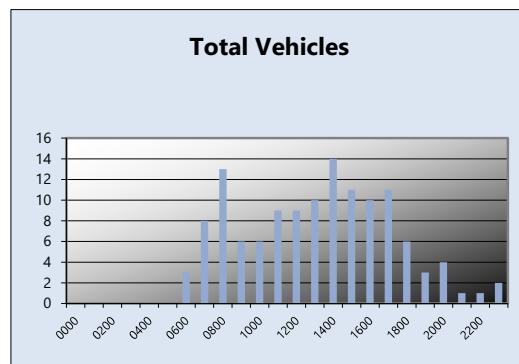
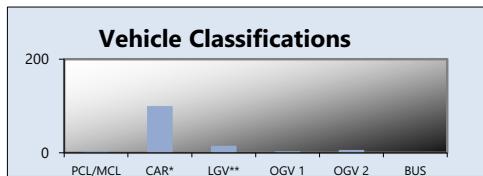
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Friday 28 April 2023
TRA/23/091**

**SITE 04
EASTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0
0600	0	2	0	0	1	0	3	4
0700	0	7	1	0	0	0	8	8
0800	0	9	4	0	0	0	13	13
0900	0	6	0	0	0	0	6	6
1000	0	5	1	0	0	0	6	6
1100	0	8	0	1	0	0	9	10
1200	1	5	1	0	2	0	9	11
1300	0	7	1	1	1	0	10	12
1400	0	12	1	1	0	0	14	15
1500	1	9	1	0	0	0	11	10
1600	0	8	1	0	1	0	10	11
1700	0	7	3	0	1	0	11	12
1800	0	6	0	0	0	0	6	6
1900	1	1	1	0	0	0	3	2
2000	0	4	0	0	0	0	4	4
2100	0	1	0	0	0	0	1	1
2200	0	1	0	0	0	0	1	1
2300	0	2	0	0	0	0	2	2
07-19	2	89	14	3	5	0	113	119
06-22	3	97	15	3	6	0	124	131
06-00	3	100	15	3	6	0	127	134
00-00	3	100	15	3	6	0	127	134

Peaks	Time	Vehicles	PCU's
AM	0800	13	13
IP	1400	14	14.5
PM	1700	11	12.3



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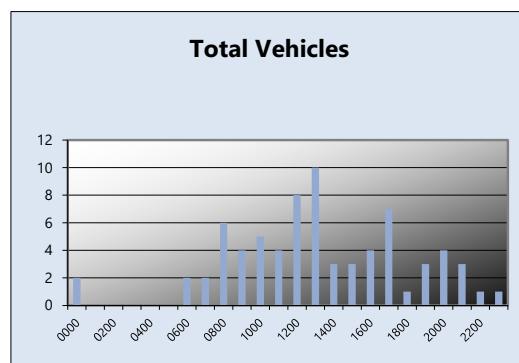
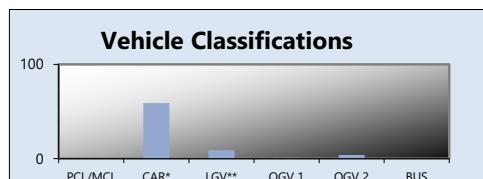
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Saturday 29 April 2023
TRA/23/091**

**SITE 04
EASTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	2	0	0	0	0	2	2
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0
0600	0	1	1	0	0	0	2	2
0700	0	2	0	0	0	0	2	2
0800	0	4	1	0	1	0	6	7
0900	0	3	0	1	0	0	4	5
1000	0	3	2	0	0	0	5	5
1100	0	4	0	0	0	0	4	4
1200	0	8	0	0	0	0	8	8
1300	0	7	3	0	0	0	10	10
1400	0	1	0	0	2	0	3	6
1500	0	1	1	0	1	0	3	4
1600	0	3	1	0	0	0	4	4
1700	0	7	0	0	0	0	7	7
1800	0	1	0	0	0	0	1	1
1900	0	3	0	0	0	0	3	3
2000	0	4	0	0	0	0	4	4
2100	0	3	0	0	0	0	3	3
2200	0	1	0	0	0	0	1	1
2300	0	1	0	0	0	0	1	1
07-19	0	44	8	1	4	0	57	63
06-22	0	55	9	1	4	0	69	75
06-00	0	57	9	1	4	0	71	77
00-00	0	59	9	1	4	0	73	79

Peaks	Time	Vehicles	PCU's
AM	0800	6	7.3
IP	1300	10	10
PM	1700	7	7



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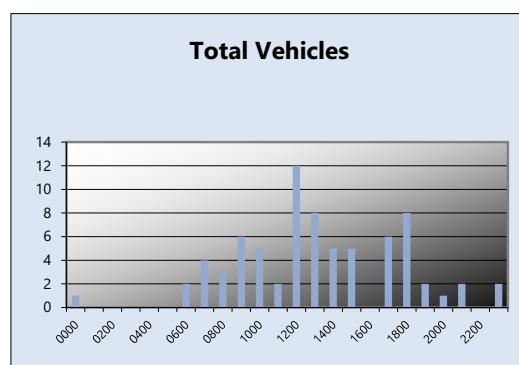
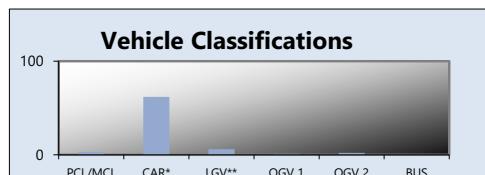
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Sunday 30 April 2023
TRA/23/091**

**SITE 04
EASTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	1	0	0	0	0	1	1
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0
0600	0	1	0	0	1	0	2	3
0700	0	2	2	0	0	0	4	4
0800	0	3	0	0	0	0	3	3
0900	0	5	1	0	0	0	6	6
1000	1	4	0	0	0	0	5	4
1100	0	2	0	0	0	0	2	2
1200	0	10	1	0	1	0	12	13
1300	0	7	1	0	0	0	8	8
1400	0	4	0	1	0	0	5	6
1500	0	5	0	0	0	0	5	5
1600	0	0	0	0	0	0	0	0
1700	1	5	0	0	0	0	6	5
1800	1	6	1	0	0	0	8	7
1900	0	2	0	0	0	0	2	2
2000	0	1	0	0	0	0	1	1
2100	0	2	0	0	0	0	2	2
2200	0	0	0	0	0	0	0	0
2300	0	2	0	0	0	0	2	2
07-19	3	53	6	1	1	0	64	63
06-22	3	59	6	1	2	0	71	72
06-00	3	61	6	1	2	0	73	74
00-00	3	62	6	1	2	0	74	75

Peaks	Time	Vehicles	PCU's
AM	0900	6	6
IP	1200	12	13.3
PM	1800	8	7.2



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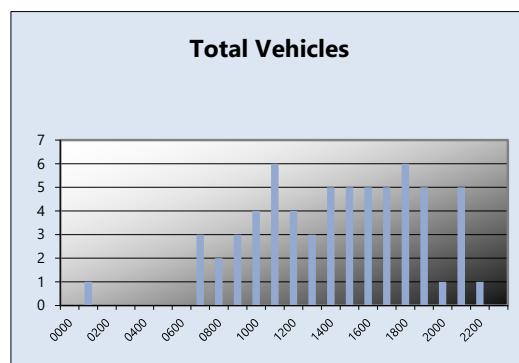
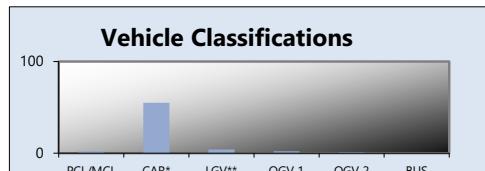
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Monday 1 May 2023
TRA/23/091**

**SITE 04
EASTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	1	0	0	0	0	1	1
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0
0600	0	0	0	0	0	0	0	0
0700	0	1	2	0	0	0	3	3
0800	0	2	0	0	0	0	2	2
0900	0	3	0	0	0	0	3	3
1000	1	3	0	0	0	0	4	3
1100	0	4	1	1	0	0	6	7
1200	0	3	0	0	1	0	4	5
1300	0	3	0	0	0	0	3	3
1400	0	3	1	1	0	0	5	6
1500	0	5	0	0	0	0	5	5
1600	0	5	0	0	0	0	5	5
1700	1	4	0	0	0	0	5	4
1800	0	6	0	0	0	0	6	6
1900	0	5	0	0	0	0	5	5
2000	0	1	0	0	0	0	1	1
2100	0	5	0	0	0	0	5	5
2200	0	1	0	0	0	0	1	1
2300	0	0	0	0	0	0	0	0
07-19	2	42	4	2	1	0	51	52
06-22	2	53	4	2	1	0	62	63
06-00	2	54	4	2	1	0	63	64
00-00	2	55	4	2	1	0	64	65

Peaks	Time	Vehicles	PCU's
AM	0700	3	3
IP	1400	5	5.5
PM	1800	6	6



TRAFFINOMICS LIMITED

**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

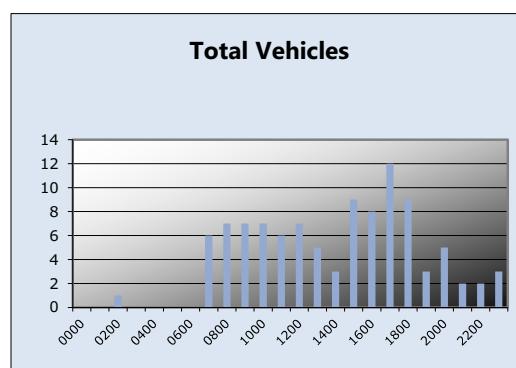
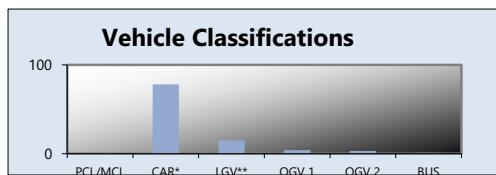
**Tuesday 25 April 2023
TRA/23/091**

**SITE 04
WESTBOUND**

	1	74	13	3	5	1	97
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TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0
0200	0	1	0	0	0	0	1	1
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0
0600	0	0	0	0	0	0	0	0
0700	0	2	4	0	0	0	6	6
0800	0	6	0	0	1	0	7	8
0900	0	6	1	0	0	0	7	7
1000	0	5	2	0	0	0	7	7
1100	0	5	0	1	0	0	6	7
1200	0	5	2	0	0	0	7	7
1300	0	3	1	0	0	1	5	6
1400	0	2	1	0	0	0	3	3
1500	0	6	1	2	0	0	9	10
1600	0	7	0	0	1	0	8	9
1700	0	10	0	1	1	0	12	14
1800	1	6	2	0	0	0	9	8
1900	0	2	1	0	0	0	3	3
2000	0	5	0	0	0	0	5	5
2100	0	2	0	0	0	0	2	2
2200	0	2	0	0	0	0	2	2
2300	0	3	0	0	0	0	3	3
07-19	1	63	14	4	3	1	86	92
06-22	1	72	15	4	3	1	96	102
06-00	1	77	15	4	3	1	101	107
00-00	1	78	15	4	3	1	102	108

Peaks	Time	Vehicles	PCU's
AM	0800	7	8.3
IP	1200	7	7
PM	1700	12	13.8



TRAFFINOMICS LIMITED

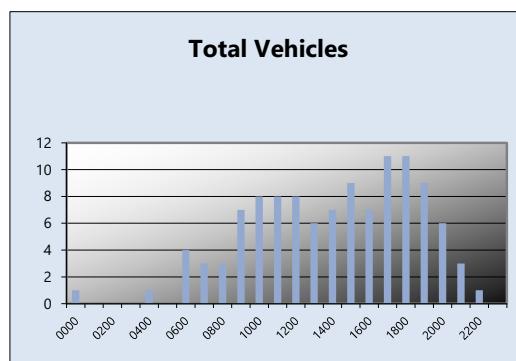
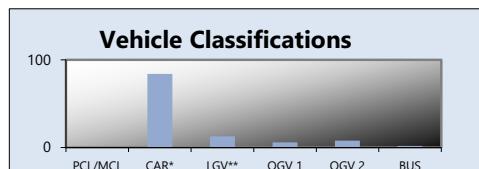
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Wednesday 26 April 2023
TRA/23/091**

**SITE 04
WESTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	1	0	0	0	0	1	1
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	1	0	1	2
0500	0	0	0	0	0	0	0	0
0600	0	3	1	0	0	0	4	4
0700	0	2	1	0	0	0	3	3
0800	0	3	0	0	0	0	3	3
0900	0	3	0	0	4	0	7	12
1000	0	5	2	0	1	0	8	9
1100	0	5	1	1	0	1	8	10
1200	0	6	2	0	0	0	8	8
1300	0	6	0	0	0	0	6	6
1400	0	7	0	0	0	0	7	7
1500	0	5	0	3	0	1	9	12
1600	0	6	0	1	0	0	7	8
1700	0	8	2	0	1	0	11	12
1800	0	8	2	1	0	0	11	12
1900	0	7	2	0	0	0	9	9
2000	0	6	0	0	0	0	6	6
2100	0	2	0	0	1	0	3	4
2200	0	1	0	0	0	0	1	1
2300	0	0	0	0	0	0	0	0
07-19	0	64	10	6	6	2	88	101
06-22	0	82	13	6	7	2	110	124
06-00	0	83	13	6	7	2	111	125
00-00	0	84	13	6	8	2	113	128

Peaks	Time	Vehicles	PCU's
AM	0900	7	12.2
IP	1200	8	8
PM	1700	11	12.3



TRAFFINOMICS LIMITED

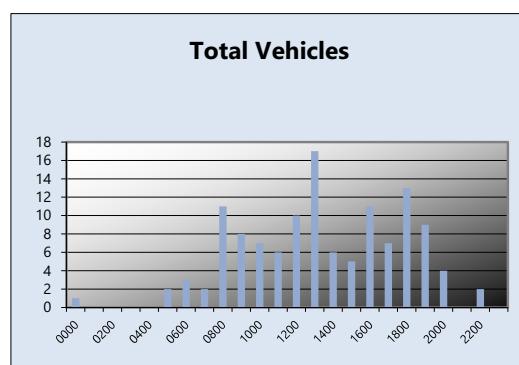
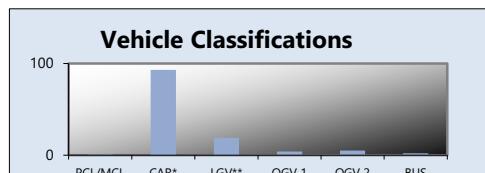
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Thursday 27 April 2023
TRA/23/091**

**SITE 04
WESTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	1	0	0	0	0	1	1
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	2	0	0	0	0	2	2
0600	0	2	1	0	0	0	3	3
0700	0	0	1	0	1	0	2	3
0800	0	10	0	1	0	0	11	12
0900	0	3	2	1	1	1	8	11
1000	0	6	0	1	0	0	7	8
1100	0	6	0	0	0	0	6	6
1200	0	6	3	0	0	1	10	11
1300	0	12	3	0	2	0	17	20
1400	0	3	3	0	0	0	6	6
1500	0	5	0	0	0	0	5	5
1600	0	10	0	0	1	0	11	12
1700	0	6	1	0	0	0	7	7
1800	1	7	4	1	0	0	13	13
1900	0	8	1	0	0	0	9	9
2000	0	4	0	0	0	0	4	4
2100	0	0	0	0	0	0	0	0
2200	0	2	0	0	0	0	2	2
2300	0	0	0	0	0	0	0	0
07-19	1	74	17	4	5	2	103	113
06-22	1	88	19	4	5	2	119	129
06-00	1	90	19	4	5	2	121	131
00-00	1	93	19	4	5	2	124	134

Peaks	Time	Vehicles	PCU's
AM	0800	11	11.5
IP	1300	17	19.6
PM	1800	13	12.7



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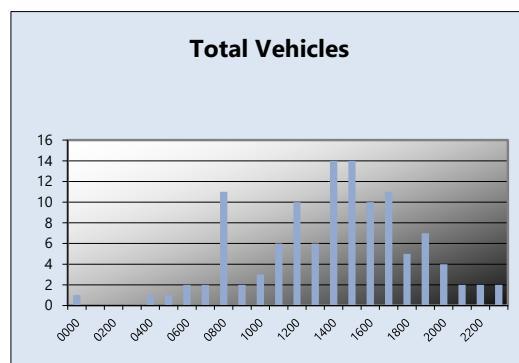
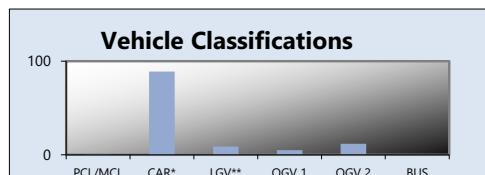
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Friday 28 April 2023
TRA/23/091**

**SITE 04
WESTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	1	0	0	0	0	1	1
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	1	0	1	2
0500	0	1	0	0	0	0	1	1
0600	0	2	0	0	0	0	2	2
0700	0	1	0	1	0	0	2	3
0800	0	9	1	0	1	0	11	12
0900	0	2	0	0	0	0	2	2
1000	0	2	0	0	1	0	3	4
1100	0	4	0	1	1	0	6	8
1200	0	7	1	0	2	0	10	13
1300	0	3	2	0	1	0	6	7
1400	0	12	0	0	2	0	14	17
1500	1	8	2	2	1	0	14	16
1600	0	8	1	0	1	0	10	11
1700	0	10	0	1	0	0	11	12
1800	0	5	0	0	0	0	5	5
1900	0	6	1	0	0	0	7	7
2000	0	4	0	0	0	0	4	4
2100	0	2	0	0	0	0	2	2
2200	0	1	1	0	0	0	2	2
2300	0	1	0	0	1	0	2	3
07-19	1	71	7	5	10	0	94	109
06-22	1	85	8	5	10	0	109	124
06-00	1	87	9	5	11	0	113	129
00-00	1	89	9	5	12	0	116	133

Peaks	Time	Vehicles	PCU's
AM	0800	11	12.3
IP	1400	14	16.6
PM	1700	11	11.5



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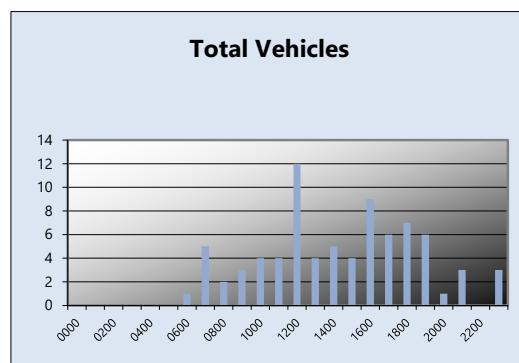
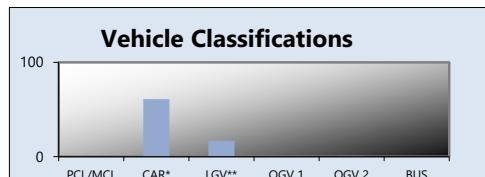
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Saturday 29 April 2023
TRA/23/091**

**SITE 04
WESTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0
0600	0	0	1	0	0	0	1	1
0700	0	5	0	0	0	0	5	5
0800	0	1	1	0	0	0	2	2
0900	0	3	0	0	0	0	3	3
1000	0	4	0	0	0	0	4	4
1100	0	3	1	0	0	0	4	4
1200	0	9	2	0	1	0	12	13
1300	0	4	0	0	0	0	4	4
1400	0	3	2	0	0	0	5	5
1500	0	2	2	0	0	0	4	4
1600	0	6	3	0	0	0	9	9
1700	0	3	3	0	0	0	6	6
1800	0	7	0	0	0	0	7	7
1900	0	5	1	0	0	0	6	6
2000	0	1	0	0	0	0	1	1
2100	0	3	0	0	0	0	3	3
2200	0	0	0	0	0	0	0	0
2300	0	2	1	0	0	0	3	3
07-19	0	50	14	0	1	0	65	66
06-22	0	59	16	0	1	0	76	77
06-00	0	61	17	0	1	0	79	80
00-00	0	61	17	0	1	0	79	80

Peaks	Time	Vehicles	PCU's
AM	0700	5	5
IP	1200	12	13.3
PM	1600	9	9



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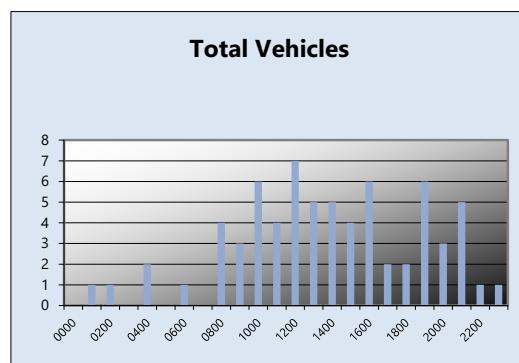
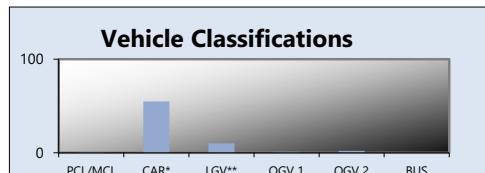
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Sunday 30 April 2023
TRA/23/091**

**SITE 04
WESTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	1	0	0	0	0	1	1
0200	0	1	0	0	0	0	1	1
0300	0	0	0	0	0	0	0	0
0400	0	1	1	0	0	0	2	2
0500	0	0	0	0	0	0	0	0
0600	0	1	0	0	0	0	1	1
0700	0	0	0	0	0	0	0	0
0800	0	2	1	0	1	0	4	5
0900	0	3	0	0	0	0	3	3
1000	0	4	2	0	0	0	6	6
1100	0	2	1	1	0	0	4	5
1200	0	5	2	0	0	0	7	7
1300	0	5	0	0	0	0	5	5
1400	0	5	0	0	0	0	5	5
1500	1	3	0	0	0	0	4	3
1600	0	6	0	0	0	0	6	6
1700	0	1	1	0	0	0	2	2
1800	0	2	0	0	0	0	2	2
1900	0	5	1	0	0	0	6	6
2000	0	3	0	0	0	0	3	3
2100	0	3	1	0	1	0	5	6
2200	0	1	0	0	0	0	1	1
2300	0	1	0	0	0	0	1	1
07-19	1	38	7	1	1	0	48	49
06-22	1	50	9	1	2	0	63	65
06-00	1	52	9	1	2	0	65	67
00-00	1	55	10	1	2	0	69	71

Peaks	Time	Vehicles	PCU's
AM	0800	4	5.3
IP	1200	7	7
PM	1600	6	6



TRAFFINOMICS LIMITED

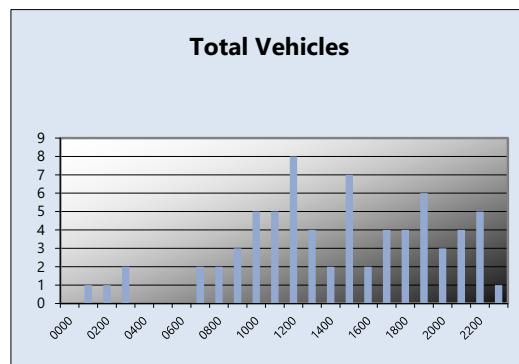
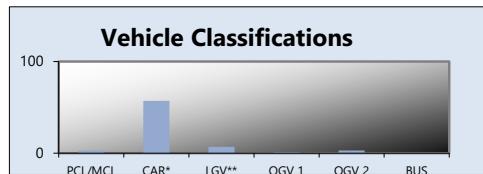
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Monday 1 May 2023
TRA/23/091**

**SITE 04
WESTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	1	0	0	0	0	1	1
0200	0	1	0	0	0	0	1	1
0300	0	2	0	0	0	0	2	2
0400	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0
0600	0	0	0	0	0	0	0	0
0700	0	2	0	0	0	0	2	2
0800	0	1	1	0	0	0	2	2
0900	0	1	1	0	1	0	3	4
1000	2	3	0	0	0	0	5	3
1100	0	4	0	0	1	0	5	6
1200	0	7	1	0	0	0	8	8
1300	0	3	1	0	0	0	4	4
1400	0	1	1	0	0	0	2	2
1500	0	6	0	1	0	0	7	8
1600	0	1	0	0	1	0	2	3
1700	0	4	0	0	0	0	4	4
1800	0	4	0	0	0	0	4	4
1900	0	4	2	0	0	0	6	6
2000	0	3	0	0	0	0	3	3
2100	0	4	0	0	0	0	4	4
2200	1	4	0	0	0	0	5	4
2300	0	1	0	0	0	0	1	1
07-19	2	37	5	1	3	0	48	51
06-22	2	48	7	1	3	0	61	64
06-00	3	53	7	1	3	0	67	69
00-00	3	57	7	1	3	0	71	73

Peaks	Time	Vehicles	PCU's
AM	0900	3	4.3
IP	1200	8	8
PM	1700	4	4



TRAFFINOMICS LIMITED

**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**SITE 04
EASTBOUND**

WEEK COMMENCING:

**Tuesday 25 April 2023
TRA/23/091**

TIME PERIOD	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	Average
0000	0	0	0	0	2	1	0	0
0100	0	1	0	0	0	0	1	0
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	1	0	0	0	0	0	0
0500	1	1	2	0	0	0	0	1
0600	1	2	0	3	2	2	0	1
0700	5	5	5	8	2	4	3	5
0800	13	22	17	13	6	3	2	11
0900	7	9	10	6	4	6	3	6
1000	10	8	3	6	5	5	4	6
1100	4	9	7	9	4	2	6	6
1200	7	8	6	9	8	12	4	8
1300	7	7	8	10	10	8	3	8
1400	10	6	5	14	3	5	5	7
1500	6	5	11	11	3	5	5	7
1600	7	10	10	10	4	0	5	7
1700	8	6	9	11	7	6	5	7
1800	3	4	8	6	1	8	6	5
1900	2	15	2	3	3	2	5	5
2000	4	5	3	4	4	1	1	3
2100	5	2	1	1	3	2	5	3
2200	0	1	0	1	1	0	1	1
2300	0	1	0	2	1	2	0	1
07-19	87	99	99	113	57	64	51	81
06-22	99	123	105	124	69	71	62	93
06-00	99	125	105	127	71	73	63	95
00-00	100	128	107	127	73	74	64	96

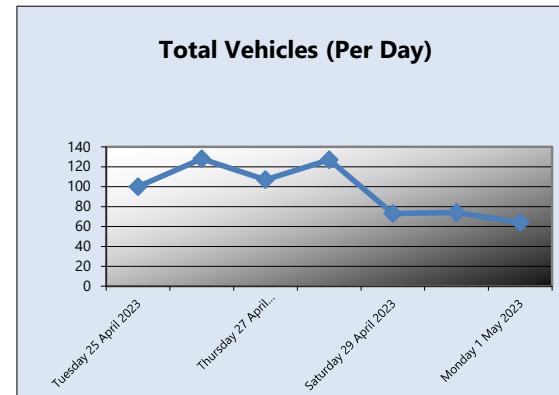
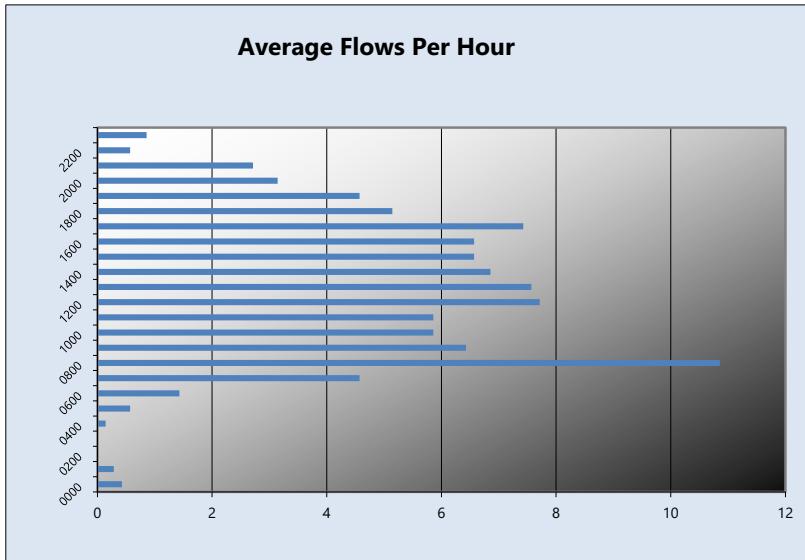
TRAFFINOMICS LIMITED

TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS

SITE 04
EASTBOUND

WEEK COMMENCING:

Tuesday 25 April 2023
TRA/23/091



Peak Time & Volumetric Count Data

	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	Mode/Average
AM								
Time	0800	0800	0800	0800	0800	0900	0700	0800
Vehicles	13	22	17	13	6	6	3	11
IP								
Time	1400	1200	1300	1400	1300	1200	1400	1400
Vehicles	10	8	8	14	10	12	5	10
PM								
Time	1700	1600	1600	1700	1700	1800	1800	1700
Vehicles	8	10	10	11	7	8	6	9

Traffinomics Limited for
Nicholas O'Dwyer Consulting Engineers

TRAFFINOMICS LIMITED

**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**SITE 04
WESTBOUND**

WEEK COMMENCING:

**Tuesday 25 April 2023
TRA/23/091**

TIME PERIOD	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	Average
0000	0	1	1	1	0	0	0	0
0100	0	0	0	0	0	1	1	0
0200	1	0	0	0	0	1	1	0
0300	0	0	0	0	0	0	2	0
0400	0	1	0	1	0	2	0	1
0500	0	0	2	1	0	0	0	0
0600	0	4	3	2	1	1	0	2
0700	6	3	2	2	5	0	2	3
0800	7	3	11	11	2	4	2	6
0900	7	7	8	2	3	3	3	5
1000	7	8	7	3	4	6	5	6
1100	6	8	6	6	4	4	5	6
1200	7	8	10	10	12	7	8	9
1300	5	6	17	6	4	5	4	7
1400	3	7	6	14	5	5	2	6
1500	9	9	5	14	4	4	7	7
1600	8	7	11	10	9	6	2	8
1700	12	11	7	11	6	2	4	8
1800	9	11	13	5	7	2	4	7
1900	3	9	9	7	6	6	6	7
2000	5	6	4	4	1	3	3	4
2100	2	3	0	2	3	5	4	3
2200	2	1	2	2	0	1	5	2
2300	3	0	0	2	3	1	1	1
07-19	86	88	103	94	65	48	48	76
06-22	96	110	119	109	76	63	61	91
06-00	101	111	121	113	79	65	67	94
00-00	102	113	124	116	79	69	71	96

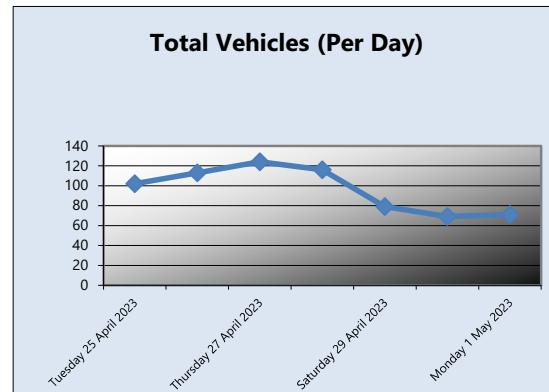
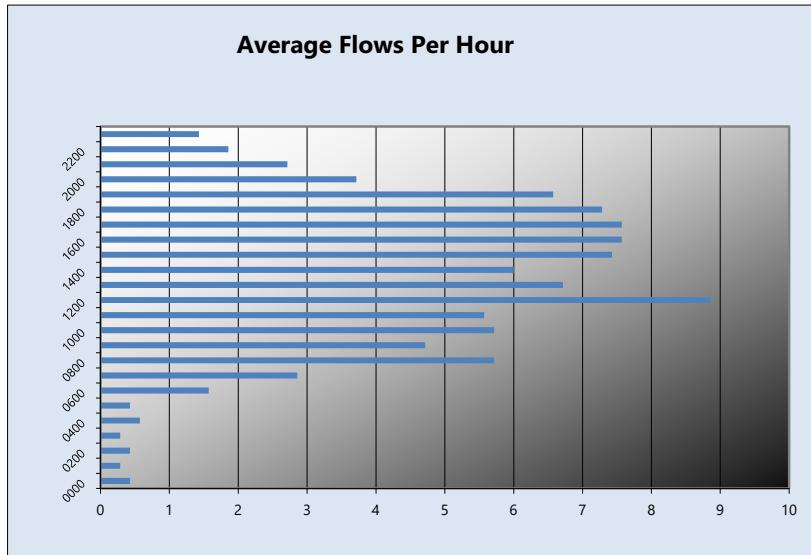
TRAFFINOMICS LIMITED

TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS

SITE 04
WESTBOUND

WEEK COMMENCING:

Tuesday 25 April 2023
TRA/23/091



Peak Time & Volumetric Count Data

	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	Mode/Average
AM								
Time	0800	0900	0800	0800	0700	0800	0900	0800
Vehicles	7	7	7	11	5	4	3	6
IP								
Time	1200	1200	1300	1400	1200	1200	1200	1200
Vehicles	7	8	17	14	12	7	8	10
PM								
Time	1700	1700	1800	1700	1600	1600	1700	1700
Vehicles	12	11	13	11	9	6	4	9

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TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS AUTOMATIC TRAFFIC COUNTS

WEEK COMMENCING:

Tuesday 25 April 2023
TRA/23/091

SITE 04 EASTBOUND

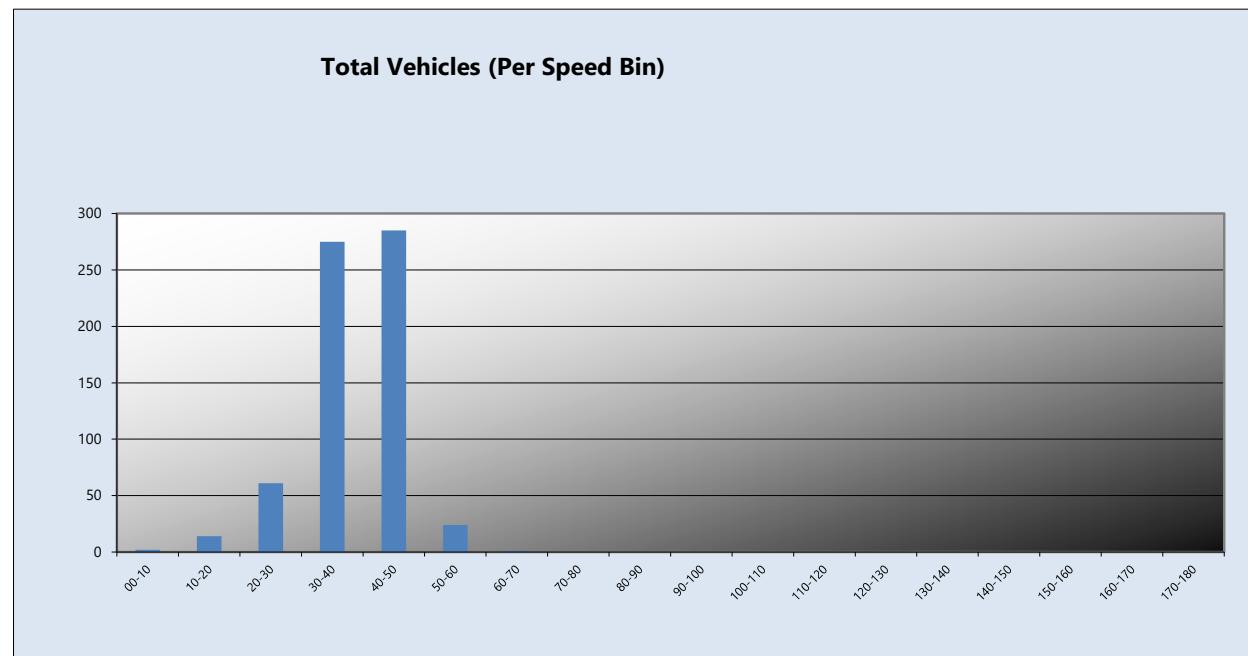
Profile:

Filter time: 00:00 25th April 2023 => 23:59 1st May 2023
 Speed range: 0 - 200 km/h.
 Separation: Greater than 4.00 seconds. - (Headway)
 Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)

Vehicles = 662
 Maximum = 60.1 km/h, Minimum = 6.5 km/h, Mean = 38.6 km/h
 85% Speed = 46.09 km/h, 95% Speed = 49.40 km/h, Median = 39.69 km/h
 20 km/h Pace = 30 - 50, Number in Pace = 560 (84.59%)
 Variance = 58.40, Standard Deviation = 7.64 km/h

Speed Bins:

Speed	Bin	
KPH	No.	%
00-10	2	0.3
10-20	14	2.1
20-30	61	9.2
30-40	275	41.5
40-50	285	43.1
50-60	24	3.6
60-70	1	0.2
70-80	0	0.0
80-90	0	0.0
90-100	0	0.0
100-110	0	0.0
110-120	0	0.0
120-130	0	0.0
130-140	0	0.0
140-150	0	0.0
150-160	0	0.0
160-170	0	0.0
170-180	0	0.0



TRAFFINOMICS LIMITED

TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS AUTOMATIC TRAFFIC COUNTS

WEEK COMMENCING:

Tuesday 25 April 2023
TRA/23/091

SITE 04 WESTBOUND

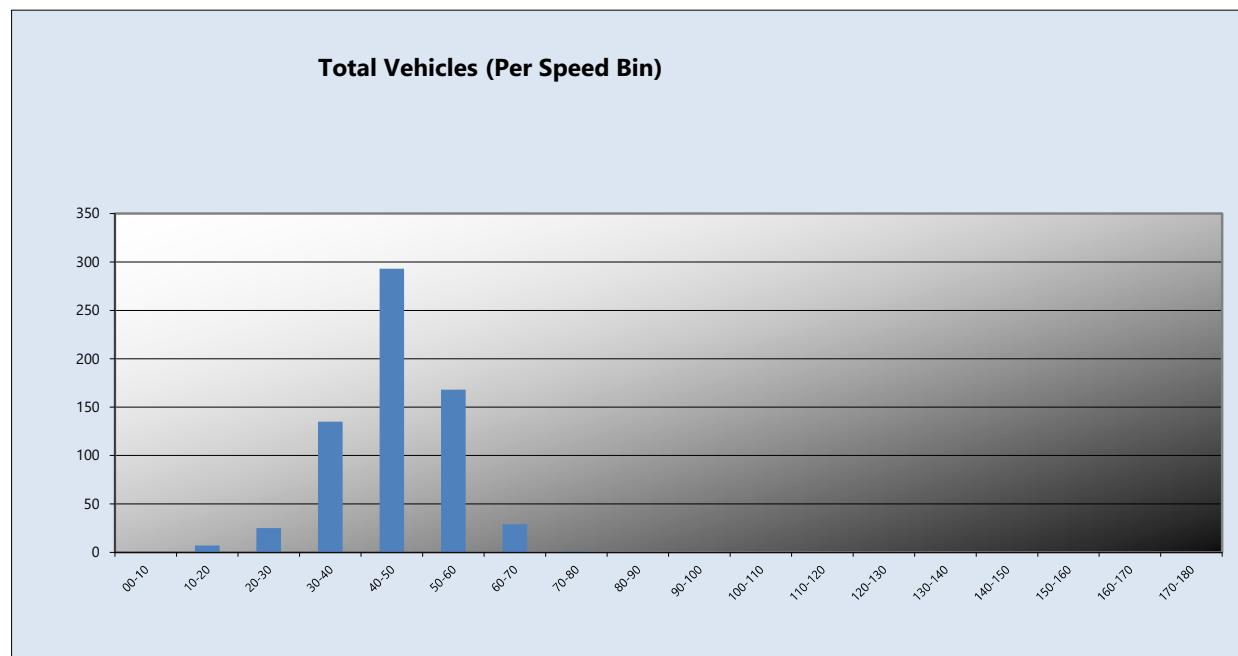
Profile:

Filter time: 00:00 25th April 2023 => 23:59 1st May 2023
 Speed range: 0 - 200 km/h.
 Separation: Greater than 4.00 seconds. - (Headway)
 Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)

Vehicles = 658
 Maximum = 75.2 km/h, Minimum = 11.2 km/h, Mean = 45.2 km/h
 85% Speed = 53.91 km/h, 95% Speed = 59.77 km/h, Median = 45.54 km/h
 20 km/h Pace = 35 - 55, Number in Pace = 508 (77.20%)
 Variance = 78.96, Standard Deviation = 8.89 km/h

Speed Bins:

Speed	Bin	
KPH	No.	%
00-10	0	0.0
10-20	7	1.1
20-30	25	3.8
30-40	135	20.5
40-50	293	44.5
50-60	168	25.5
60-70	29	4.4
70-80	1	0.2
80-90	0	0.0
90-100	0	0.0
100-110	0	0.0
110-120	0	0.0
120-130	0	0.0
130-140	0	0.0
140-150	0	0.0
150-160	0	0.0
160-170	0	0.0
170-180	0	0.0



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CLASSIFICATION SCHEMES:

Scheme F Classification Scheme (Non-metric)

Scheme F is an attempt to implement the FWHA's visual classification scheme as an axle-based classification scheme. This is one of several interpretations.

Vehicle Class	Class	Vehicle Type	No. of Axles	Axle spacing in feet				
				Axle 1 to 2	Axle 2 to 3	Axle 3 to 4	Axle 4 to 5	Axle 5 to 6
PCL/MCL	1	motorcycle	2	<6.0				
CAR*	2	passenger car	2	6.0 - 10.0				
		car + 1 axle trailer	3	<10.0	10.0 - 18.0			
		car + 2 axle trailer	4	<10.0		<3.5		
		pickup	2	10.0 - 15.0				
LGV**	3	pickup + 1 axle trailer	3	10.0 - 15.0	10.0 - 18.0			
		pickup + 2 axle trailer	4	10.0 - 15.0		<3.5		
		pickup + 3 axle trailer	5	9.9 - 15.0			<3.5	
		bus	2	>20.0				
BUS	4	bus	3	>19.0				
		single unit truck - dual rear axle	2	14.9 - 20.0			<3.5	
OGV 1	5	3 axle truck	3		<18.0			
	6	4 axle truck	4					
OGV 2	7	2S1	3		>18.0			
		2S2	4		>5.0	>3.5		
		3S1	4		<5.0	>10.0		
		3S2	5		<6.1		3.5 - 8.0	
	8	5 axle combination	5					
		6 axle combination	6			3.5 - 5.0		
		3S3	6					
	9	2S1-2	5		>6.0			
	10	3S1-2	6					>10.0
	11	truck	7 or more					

Car* Cars and LGV based cars

LGV** Light Goods Vehicles with the exception of LGV based on cars

TRAFFINOMICS LIMITED

TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS

SUMMARY

WEEK COMMENCING:

Tuesday 25 April 2023
TRA/23/091

SITE 05

LOCATION: L5523 West of N20 Boherash Cross Cross (Google Maps Ref: 52.196461, -8.675019)

SPEED SURVEY SUMMARY:

EASTBOUND	85% Speed = 66.33 km/h, 95% Speed = 72.27 km/h, Median = 56.61 km/h	Maximum = 87.2 km/h, Minimum = 14.7 km/h, Mean = 55.5 km/h
------------------	---	--

WESTBOUND	85% Speed = 60.62 km/h, 95% Speed = 65.34 km/h, Median = 52.29 km/h	Maximum = 83.8 km/h, Minimum = 14.2 km/h, Mean = 51.4 km/h
------------------	---	--

VOLUMETRIC VEHICLE COUNTS:

Direction	Time	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	No. Vehicles	7 day Mean
EASTBOUND	07-19	230	241	261	253	182	139	155	1461	209
WESTBOUND	07-19	231	246	270	240	197	135	160	1479	211
EASTBOUND	00-00	281	302	306	302	215	176	190	1772	253
WESTBOUND	00-00	288	293	329	298	236	178	203	1825	261

PEAK FLOW SUMMARY:

Peak	AM	IP	PM
Most Frequent Peak Hour	0800	1400	1700
Average Vehicles per Peak Hour	26	23	19

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**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

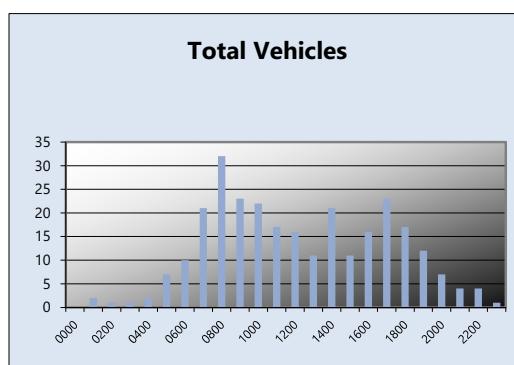
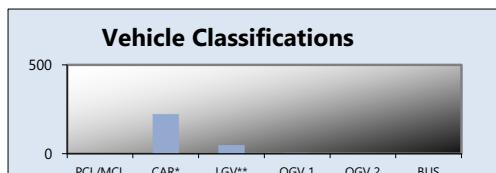
**Tuesday 25 April 2023
TRA/23/091**

**SITE 05
EASTBOUND**

	2	202	38	4	8	1	254
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TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	2	0	0	0	0	2	2
0200	0	1	0	0	0	0	1	1
0300	0	1	0	0	0	0	1	1
0400	0	1	1	0	0	0	2	2
0500	0	5	1	1	0	0	7	8
0600	0	9	0	0	1	0	10	11
0700	0	16	5	0	0	0	21	21
0800	2	26	3	0	1	0	32	32
0900	0	20	3	0	0	0	23	23
1000	0	12	8	2	0	0	22	23
1100	0	8	9	0	0	0	17	17
1200	0	13	2	1	0	0	16	17
1300	0	8	2	1	0	0	11	12
1400	0	18	2	0	1	0	21	22
1500	0	10	1	0	0	0	11	11
1600	0	12	4	0	0	0	16	16
1700	0	22	1	0	0	0	23	23
1800	0	14	3	0	0	0	17	17
1900	0	11	1	0	0	0	12	12
2000	0	5	2	0	0	0	7	7
2100	0	4	0	0	0	0	4	4
2200	0	3	1	0	0	0	4	4
2300	0	1	0	0	0	0	1	1
07-19	2	179	43	4	2	0	230	233
06-22	2	208	46	4	3	0	263	267
06-00	2	212	47	4	3	0	268	272
00-00	2	222	49	5	3	0	281	286

Peaks	Time	Vehicles	PCU's
AM	0800	32	31.7
IP	1400	21	22.3
PM	1700	23	23



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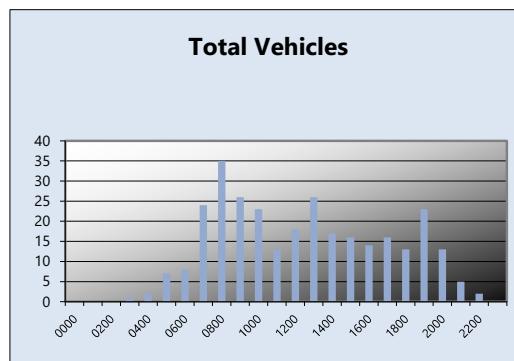
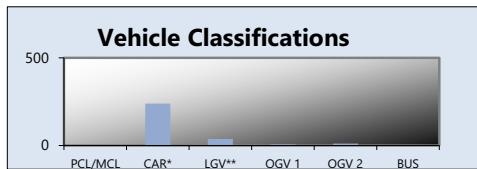
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Wednesday 26 April 2023
TRA/23/091**

**SITE 05
EASTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	1	0	0	0	0	1	1
0400	0	2	0	0	0	0	2	2
0500	0	4	2	0	0	1	7	8
0600	0	5	1	0	2	0	8	11
0700	0	19	5	0	0	0	24	24
0800	2	24	8	0	1	0	35	35
0900	1	17	7	0	1	0	26	27
1000	0	16	5	1	1	0	23	25
1100	0	11	2	0	0	0	13	13
1200	0	16	1	0	1	0	18	19
1300	0	22	0	2	2	0	26	30
1400	0	14	1	1	1	0	17	19
1500	0	15	0	0	1	0	16	17
1600	0	9	2	1	1	1	14	17
1700	0	14	1	0	1	0	16	17
1800	0	13	0	0	0	0	13	13
1900	0	21	2	0	0	0	23	23
2000	0	12	0	1	0	0	13	14
2100	0	3	1	1	0	0	5	6
2200	0	2	0	0	0	0	2	2
2300	0	0	0	0	0	0	0	0
07-19	3	190	32	5	10	1	241	255
06-22	3	231	36	7	12	1	290	308
06-00	3	233	36	7	12	1	292	310
00-00	3	240	38	7	12	2	302	321

Peaks	Time	Vehicles	PCU's
AM	0800	35	34.7
IP	1300	26	29.6
PM	1700	16	17.3



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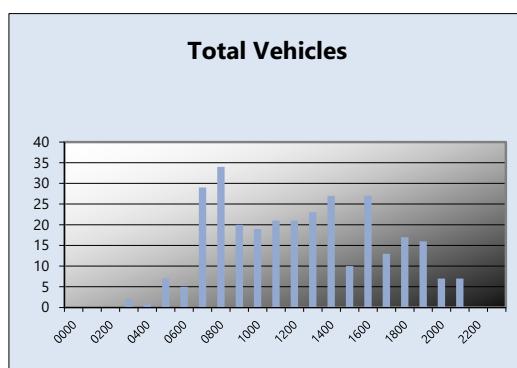
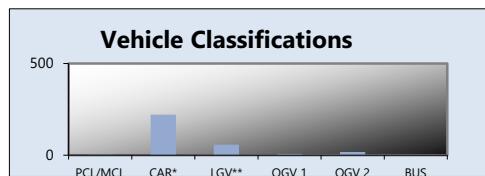
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Thursday 27 April 2023
TRA/23/091**

**SITE 05
EASTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	2	0	0	0	0	2	2
0400	0	0	1	0	0	0	1	1
0500	0	5	1	0	1	0	7	8
0600	0	5	0	0	0	0	5	5
0700	0	20	8	0	1	0	29	30
0800	1	25	6	0	2	0	34	36
0900	0	15	4	1	0	0	20	21
1000	0	13	6	0	0	0	19	19
1100	0	15	3	1	2	0	21	24
1200	0	11	6	2	2	0	21	25
1300	0	13	5	0	5	0	23	30
1400	1	18	5	1	2	0	27	29
1500	0	8	1	1	0	0	10	11
1600	1	19	5	1	0	1	27	28
1700	0	10	2	0	1	0	13	14
1800	0	15	2	0	0	0	17	17
1900	0	15	1	0	0	0	16	16
2000	0	7	0	0	0	0	7	7
2100	0	5	1	0	1	0	7	8
2200	0	0	0	0	0	0	0	0
2300	0	0	0	0	0	0	0	0
07-19	3	182	53	7	15	1	261	283
06-22	3	214	55	7	16	1	296	319
06-00	3	214	55	7	16	1	296	319
00-00	3	221	57	7	17	1	306	330

Peaks	Time	Vehicles	PCU's
AM	0800	34	35.8
IP	1400	27	29.5
PM	1600	27	27.7



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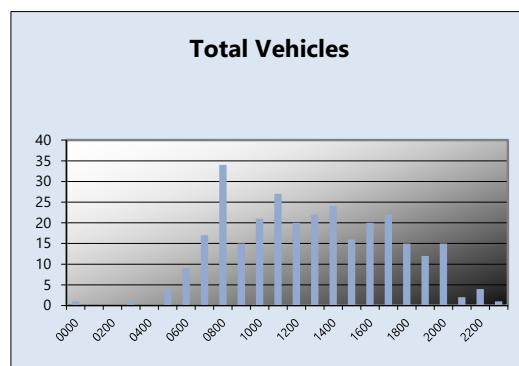
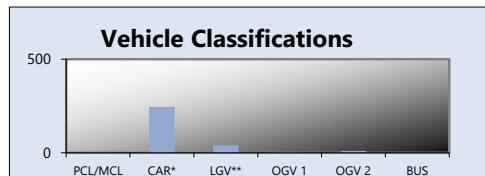
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Friday 28 April 2023
TRA/23/091**

**SITE 05
EASTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	1	0	0	0	0	1	1
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	1	0	0	0	0	1	1
0400	0	0	0	0	0	0	0	0
0500	0	3	1	0	0	0	4	4
0600	0	6	1	1	1	0	9	11
0700	0	15	2	0	0	0	17	17
0800	0	27	6	1	0	0	34	35
0900	1	11	3	0	0	0	15	14
1000	0	15	5	1	0	0	21	22
1100	0	19	7	1	0	0	27	28
1200	0	18	1	0	1	0	20	21
1300	0	19	0	0	3	0	22	26
1400	0	22	1	0	1	0	24	25
1500	0	13	2	0	1	0	16	17
1600	0	14	5	0	1	0	20	21
1700	0	17	3	0	2	0	22	25
1800	1	13	1	0	0	0	15	14
1900	0	12	0	0	0	0	12	12
2000	0	13	2	0	0	0	15	15
2100	0	2	0	0	0	0	2	2
2200	0	4	0	0	0	0	4	4
2300	0	1	0	0	0	0	1	1
07-19	2	203	36	3	9	0	253	265
06-22	2	236	39	4	10	0	291	304
06-00	2	241	39	4	10	0	296	309
00-00	2	246	40	4	10	0	302	315

Peaks	Time	Vehicles	PCU's
AM	0800	34	34.5
IP	1400	24	25.9
PM	1700	22	24.6



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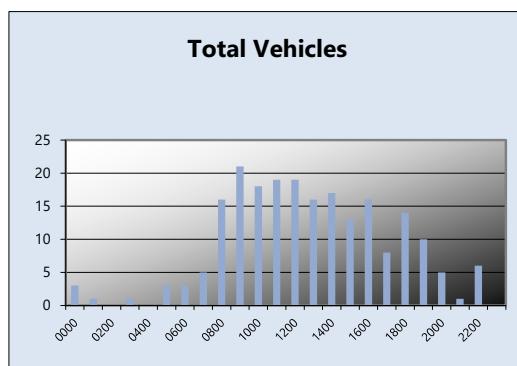
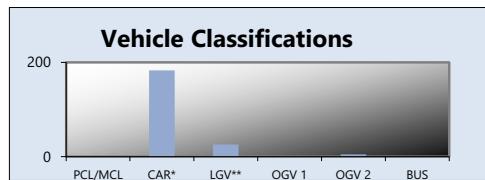
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Saturday 29 April 2023
TRA/23/091**

**SITE 05
EASTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	2	1	0	0	0	3	3
0100	0	1	0	0	0	0	1	1
0200	0	0	0	0	0	0	0	0
0300	0	0	1	0	0	0	1	1
0400	0	0	0	0	0	0	0	0
0500	0	2	1	0	0	0	3	3
0600	0	2	1	0	0	0	3	3
0700	0	5	0	0	0	0	5	5
0800	0	13	2	0	1	0	16	17
0900	0	18	3	0	0	0	21	21
1000	0	16	2	0	0	0	18	18
1100	0	18	0	1	0	0	19	20
1200	0	16	2	0	1	0	19	20
1300	0	13	3	0	0	0	16	16
1400	0	12	3	0	2	0	17	20
1500	0	11	1	0	1	0	13	14
1600	0	14	2	0	0	0	16	16
1700	0	8	0	0	0	0	8	8
1800	0	12	2	0	0	0	14	14
1900	0	10	0	0	0	0	10	10
2000	0	5	0	0	0	0	5	5
2100	0	1	0	0	0	0	1	1
2200	0	4	2	0	0	0	6	6
2300	0	0	0	0	0	0	0	0
07-19	0	156	20	1	5	0	182	189
06-22	0	174	21	1	5	0	201	208
06-00	0	178	23	1	5	0	207	214
00-00	0	183	26	1	5	0	215	222

Peaks	Time	Vehicles	PCU's
AM	0900	21	21
IP	1200	19	20.3
PM	1600	16	16



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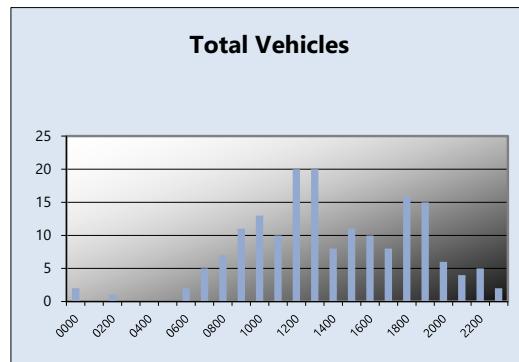
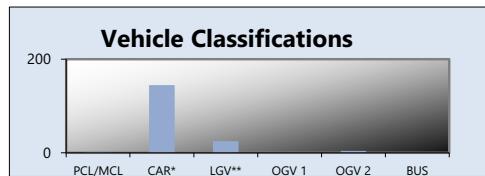
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Sunday 30 April 2023
TRA/23/091**

**SITE 05
EASTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	2	0	0	0	0	2	2
0100	0	0	0	0	0	0	0	0
0200	0	1	0	0	0	0	1	1
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0
0600	0	0	1	0	1	0	2	3
0700	0	3	2	0	0	0	5	5
0800	1	6	0	0	0	0	7	6
0900	0	9	2	0	0	0	11	11
1000	0	11	2	0	0	0	13	13
1100	0	9	1	0	0	0	10	10
1200	0	18	1	0	1	0	20	21
1300	0	18	2	0	0	0	20	20
1400	0	7	0	0	1	0	8	9
1500	0	8	3	0	0	0	11	11
1600	1	7	2	0	0	0	10	9
1700	0	6	2	0	0	0	8	8
1800	0	13	2	0	1	0	16	17
1900	0	12	3	0	0	0	15	15
2000	0	6	0	0	0	0	6	6
2100	0	4	0	0	0	0	4	4
2200	0	3	2	0	0	0	5	5
2300	0	2	0	0	0	0	2	2
07-19	2	115	19	0	3	0	139	141
06-22	2	137	23	0	4	0	166	170
06-00	2	142	25	0	4	0	173	177
00-00	2	145	25	0	4	0	176	180

Peaks	Time	Vehicles	PCU's
AM	0900	11	11
IP	1200	20	21.3
PM	1800	16	17.3



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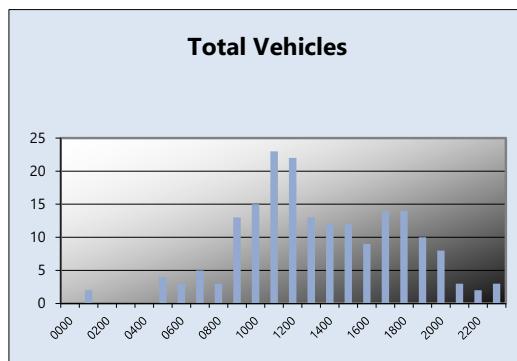
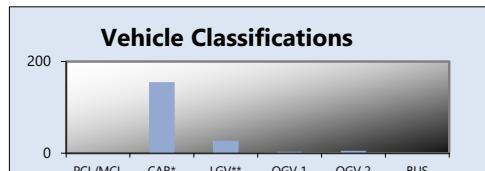
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Monday 1 May 2023
TRA/23/091**

**SITE 05
EASTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	2	0	0	0	0	2	2
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0
0500	0	4	0	0	0	0	4	4
0600	0	3	0	0	0	0	3	3
0700	0	4	1	0	0	0	5	5
0800	0	2	1	0	0	0	3	3
0900	0	10	3	0	0	0	13	13
1000	0	10	4	0	1	0	15	16
1100	0	15	5	2	1	0	23	25
1200	0	19	2	0	1	0	22	23
1300	0	10	1	0	2	0	13	16
1400	0	10	2	0	0	0	12	12
1500	0	10	1	1	0	0	12	13
1600	0	7	2	0	0	0	9	9
1700	0	13	1	0	0	0	14	14
1800	0	13	1	0	0	0	14	14
1900	0	9	1	0	0	0	10	10
2000	0	7	1	0	0	0	8	8
2100	0	3	0	0	0	0	3	3
2200	0	2	0	0	0	0	2	2
2300	0	2	1	0	0	0	3	3
07-19	0	123	24	3	5	0	155	163
06-22	0	145	26	3	5	0	179	187
06-00	0	149	27	3	5	0	184	192
00-00	0	155	27	3	5	0	190	198

Peaks	Time	Vehicles	PCU's
AM	0900	13	13
IP	1200	22	23.3
PM	1700	14	14



TRAFFINOMICS LIMITED

**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Tuesday 25 April 2023
TRA/23/091**

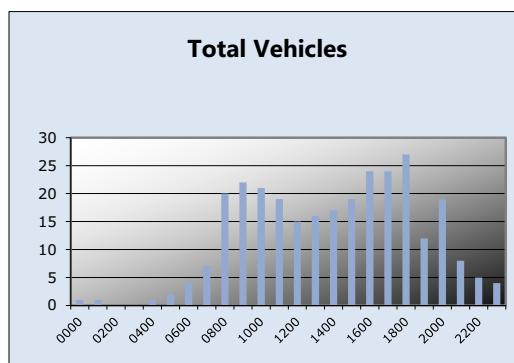
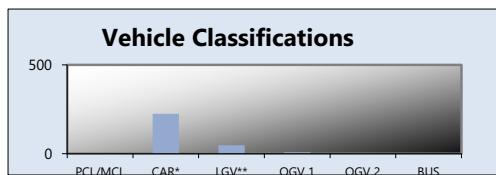
**SITE 05
WESTBOUND**

246

	2	207	39	6	9	1	261
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TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	1	0	0	0	0	1	1
0100	0	1	0	0	0	0	1	1
0200	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0
0400	0	0	1	0	0	0	1	1
0500	0	1	0	1	0	0	2	3
0600	0	3	1	0	0	0	4	4
0700	0	4	3	0	0	0	7	7
0800	0	17	1	1	1	0	20	22
0900	0	17	5	0	0	0	22	22
1000	0	14	6	1	0	0	21	22
1100	0	15	3	1	0	0	19	20
1200	0	9	4	0	2	0	15	18
1300	1	10	3	2	0	0	16	16
1400	1	16	0	0	0	0	17	16
1500	0	16	1	1	1	0	19	21
1600	0	22	2	0	0	0	24	24
1700	0	22	2	0	0	0	24	24
1800	1	20	6	0	0	0	27	26
1900	0	6	4	1	0	1	12	14
2000	0	16	3	0	0	0	19	19
2100	0	7	1	0	0	0	8	8
2200	0	4	1	0	0	0	5	5
2300	0	3	1	0	0	0	4	4
07-19	3	182	36	6	4	0	231	237
06-22	3	214	45	7	4	1	274	281
06-00	3	221	47	7	4	1	283	290
00-00	3	224	48	8	4	1	288	296

Peaks	Time	Vehicles	PCU's
AM	0900	22	22
IP	1400	17	17.6
PM	1800	27	26.2



TRAFFINOMICS LIMITED

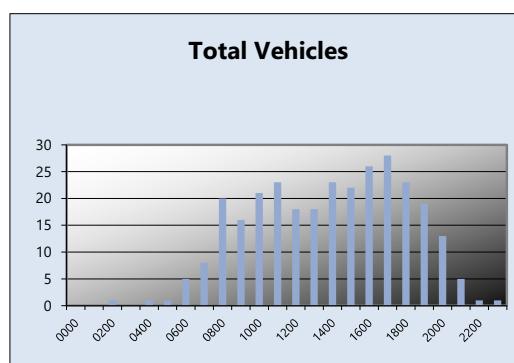
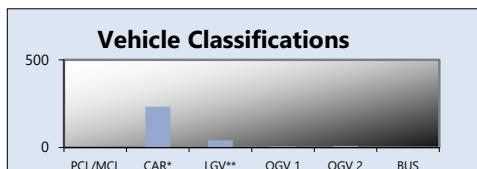
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Wednesday 26 April 2023
TRA/23/091**

**SITE 05
WESTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0
0200	0	1	0	0	0	0	1	1
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	1	0	1	2
0500	0	0	1	0	0	0	1	1
0600	0	3	2	0	0	0	5	5
0700	0	5	2	1	0	0	8	9
0800	0	13	5	1	1	0	20	22
0900	0	10	5	0	1	0	16	17
1000	0	16	3	1	0	1	21	23
1100	0	16	4	1	2	0	23	26
1200	0	17	1	0	0	0	18	18
1300	0	16	0	1	1	0	18	20
1400	0	22	0	0	1	0	23	24
1500	0	19	2	1	0	0	22	23
1600	0	25	0	0	1	0	26	27
1700	0	21	5	1	1	0	28	30
1800	0	17	6	0	0	0	23	23
1900	0	16	3	0	0	0	19	19
2000	0	12	1	0	0	0	13	13
2100	0	3	1	0	1	0	5	6
2200	0	1	0	0	0	0	1	1
2300	0	0	1	0	0	0	1	1
07-19	0	197	33	7	8	1	246	261
06-22	0	231	40	7	9	1	288	304
06-00	0	232	41	7	9	1	290	306
00-00	0	233	42	7	10	1	293	311

Peaks	Time	Vehicles	PCU's
AM	0800	20	21.8
IP	1400	23	24.3
PM	1700	28	29.8



TRAFFINOMICS LIMITED

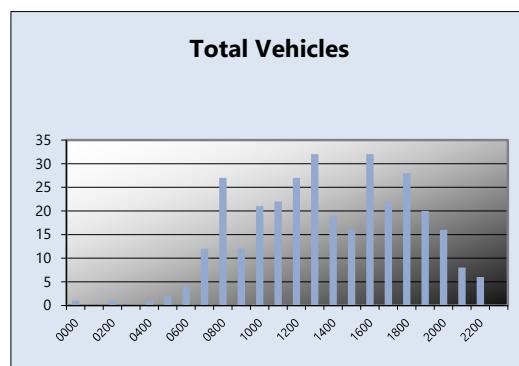
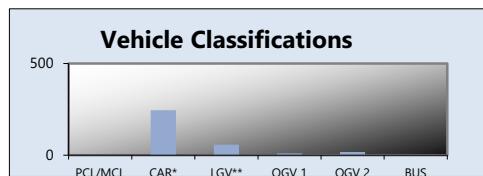
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Thursday 27 April 2023
TRA/23/091**

**SITE 05
WESTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	1	0	0	0	0	1	1
0100	0	0	0	0	0	0	0	0
0200	0	1	0	0	0	0	1	1
0300	0	0	0	0	0	0	0	0
0400	0	0	1	0	0	0	1	1
0500	0	2	0	0	0	0	2	2
0600	0	3	1	0	0	0	4	4
0700	0	6	4	0	2	0	12	15
0800	0	18	4	3	2	0	27	31
0900	0	7	3	2	0	0	12	13
1000	0	19	1	0	1	0	21	22
1100	0	14	4	1	3	0	22	26
1200	0	19	7	0	1	0	27	28
1300	0	19	6	2	5	0	32	40
1400	0	15	3	0	1	0	19	20
1500	0	14	2	0	0	0	16	16
1600	1	25	5	0	1	0	32	33
1700	0	21	1	0	0	0	22	22
1800	0	22	5	1	0	0	28	29
1900	0	13	7	0	0	0	20	20
2000	0	14	1	0	1	0	16	17
2100	0	7	1	0	0	0	8	8
2200	0	5	1	0	0	0	6	6
2300	0	0	0	0	0	0	0	0
07-19	1	199	45	9	16	0	270	295
06-22	1	236	55	9	17	0	318	344
06-00	1	241	56	9	17	0	324	350
00-00	1	245	57	9	17	0	329	355

Peaks	Time	Vehicles	PCU's
AM	0800	27	31.1
IP	1300	32	39.5
PM	1600	32	32.5



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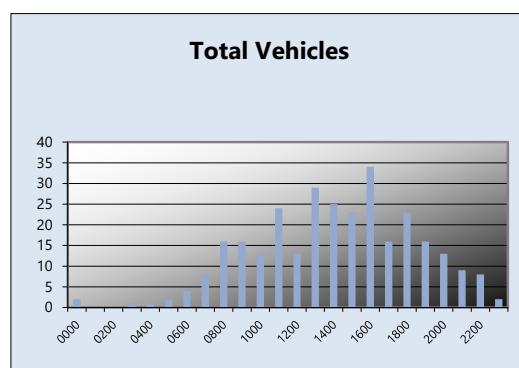
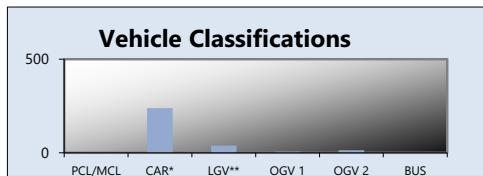
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Friday 28 April 2023
TRA/23/091**

**SITE 05
WESTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	2	0	0	0	0	2	2
0100	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0
0300	0	1	0	0	0	0	1	1
0400	0	0	0	0	1	0	1	2
0500	0	2	0	0	0	0	2	2
0600	0	3	0	1	0	0	4	5
0700	0	7	0	1	0	0	8	9
0800	0	11	4	0	1	0	16	17
0900	0	13	3	0	0	0	16	16
1000	0	9	3	0	1	0	13	14
1100	0	18	4	1	1	0	24	26
1200	0	11	0	0	2	0	13	16
1300	0	25	2	0	2	0	29	32
1400	0	19	2	2	2	0	25	29
1500	0	19	2	0	2	0	23	26
1600	1	26	6	0	1	0	34	35
1700	0	13	3	0	0	0	16	16
1800	0	20	3	0	0	0	23	23
1900	0	15	0	1	0	0	16	17
2000	0	9	4	0	0	0	13	13
2100	0	8	1	0	0	0	9	9
2200	0	6	1	0	1	0	8	9
2300	0	2	0	0	0	0	2	2
07-19	1	191	32	4	12	0	240	257
06-22	1	226	37	6	12	0	282	300
06-00	1	234	38	6	13	0	292	311
00-00	1	239	38	6	14	0	298	318

Peaks	Time	Vehicles	PCU's
AM	0800	16	17.3
IP	1300	29	31.6
PM	1600	34	34.5



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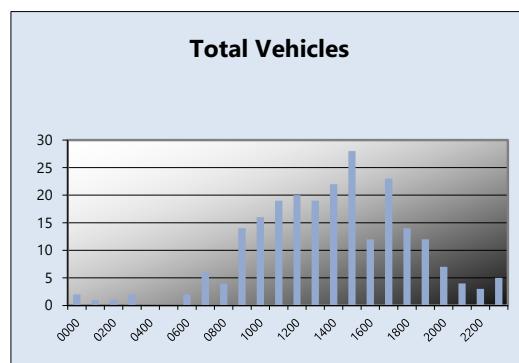
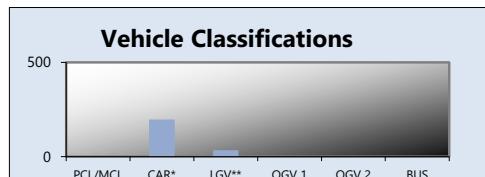
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Saturday 29 April 2023
TRA/23/091**

**SITE 05
WESTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	1	1	0	0	0	2	2
0100	0	1	0	0	0	0	1	1
0200	0	1	0	0	0	0	1	1
0300	0	1	1	0	0	0	2	2
0400	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0
0600	0	1	1	0	0	0	2	2
0700	0	6	0	0	0	0	6	6
0800	0	4	0	0	0	0	4	4
0900	0	11	2	0	1	0	14	15
1000	0	13	3	0	0	0	16	16
1100	0	16	3	0	0	0	19	19
1200	0	16	1	1	2	0	20	23
1300	0	16	3	0	0	0	19	19
1400	0	20	2	0	0	0	22	22
1500	0	24	4	0	0	0	28	28
1600	0	9	2	0	1	0	12	13
1700	0	19	4	0	0	0	23	23
1800	0	13	1	0	0	0	14	14
1900	0	9	3	0	0	0	12	12
2000	0	7	0	0	0	0	7	7
2100	0	4	0	0	0	0	4	4
2200	0	1	2	0	0	0	3	3
2300	0	4	1	0	0	0	5	5
07-19	0	167	25	1	4	0	197	203
06-22	0	188	29	1	4	0	222	228
06-00	0	193	32	1	4	0	230	236
00-00	0	197	34	1	4	0	236	242

Peaks	Time	Vehicles	PCU's
AM	0900	14	15.3
IP	1400	22	23.1
PM	1700	23	23



TRAFFINOMICS LIMITED

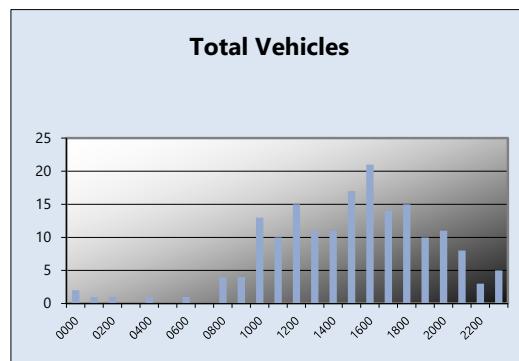
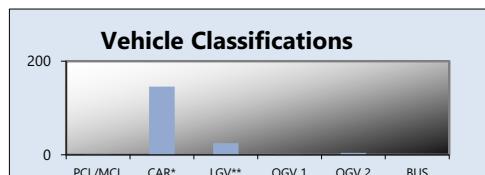
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Sunday 30 April 2023
TRA/23/091**

**SITE 05
WESTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	2	0	0	0	0	2	2
0100	0	1	0	0	0	0	1	1
0200	0	1	0	0	0	0	1	1
0300	0	0	0	0	0	0	0	0
0400	0	0	0	0	1	0	1	2
0500	0	0	0	0	0	0	0	0
0600	0	1	0	0	0	0	1	1
0700	0	0	0	0	0	0	0	0
0800	0	2	1	0	1	0	4	5
0900	0	4	0	0	0	0	4	4
1000	0	9	3	0	1	0	13	14
1100	1	7	1	1	0	0	10	10
1200	0	13	2	0	0	0	15	15
1300	0	10	1	0	0	0	11	11
1400	0	11	0	0	0	0	11	11
1500	1	15	1	0	0	0	17	16
1600	0	18	3	0	0	0	21	21
1700	0	10	4	0	0	0	14	14
1800	0	13	2	0	0	0	15	15
1900	0	9	1	0	0	0	10	10
2000	0	8	3	0	0	0	11	11
2100	0	6	1	0	1	0	8	9
2200	0	3	0	0	0	0	3	3
2300	0	3	2	0	0	0	5	5
07-19	2	112	18	1	2	0	135	137
06-22	2	136	23	1	3	0	165	168
06-00	2	142	25	1	3	0	173	176
00-00	2	146	25	1	4	0	178	182

Peaks	Time	Vehicles	PCU's
AM	0800	4	5.3
IP	1200	15	15
PM	1600	21	21



TRAFFINOMICS LIMITED

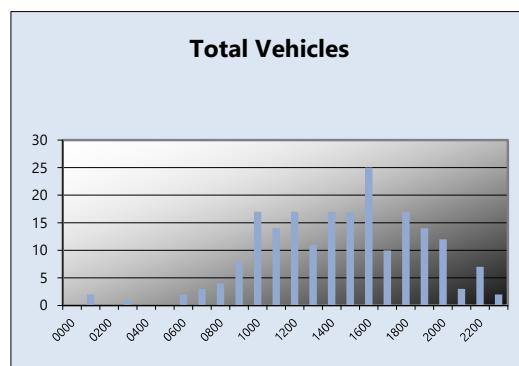
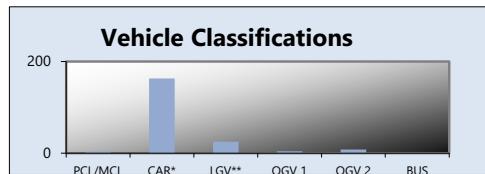
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Monday 1 May 2023
TRA/23/091**

**SITE 05
WESTBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	0	0	0	0	0	0	0
0100	0	2	0	0	0	0	2	2
0200	0	0	0	0	0	0	0	0
0300	0	1	0	0	0	0	1	1
0400	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0
0600	0	1	1	0	0	0	2	2
0700	0	3	0	0	0	0	3	3
0800	0	3	1	0	0	0	4	4
0900	0	6	2	0	0	0	8	8
1000	1	14	1	0	1	0	17	18
1100	1	11	1	0	1	0	14	15
1200	0	12	1	1	3	0	17	21
1300	0	10	1	0	0	0	11	11
1400	0	16	0	0	1	0	17	18
1500	0	13	3	1	0	0	17	18
1600	0	20	3	1	1	0	25	27
1700	0	9	1	0	0	0	10	10
1800	0	15	2	0	0	0	17	17
1900	1	7	5	1	0	0	14	14
2000	0	10	2	0	0	0	12	12
2100	0	2	1	0	0	0	3	3
2200	0	6	0	0	1	0	7	8
2300	0	2	0	0	0	0	2	2
07-19	2	132	16	3	7	0	160	169
06-22	3	152	25	4	7	0	191	200
06-00	3	160	25	4	8	0	200	210
00-00	3	163	25	4	8	0	203	213

Peaks	Time	Vehicles	PCU's
AM	0900	8	8
IP	1200	17	21.4
PM	1600	25	26.8



TRAFFINOMICS LIMITED

**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**SITE 05
EASTBOUND**

WEEK COMMENCING:

**Tuesday 25 April 2023
TRA/23/091**

TIME PERIOD	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	Average
0000	0	0	0	1	3	2	0	1
0100	2	0	0	0	1	0	2	1
0200	1	0	0	0	0	1	0	0
0300	1	1	2	1	1	0	0	1
0400	2	2	1	0	0	0	0	1
0500	7	7	7	4	3	0	4	5
0600	10	8	5	9	3	2	3	6
0700	21	24	29	17	5	5	5	15
0800	32	35	34	34	16	7	3	23
0900	23	26	20	15	21	11	13	18
1000	22	23	19	21	18	13	15	19
1100	17	13	21	27	19	10	23	19
1200	16	18	21	20	19	20	22	19
1300	11	26	23	22	16	20	13	19
1400	21	17	27	24	17	8	12	18
1500	11	16	10	16	13	11	12	13
1600	16	14	27	20	16	10	9	16
1700	23	16	13	22	8	8	14	15
1800	17	13	17	15	14	16	14	15
1900	12	23	16	12	10	15	10	14
2000	7	13	7	15	5	6	8	9
2100	4	5	7	2	1	4	3	4
2200	4	2	0	4	6	5	2	3
2300	1	0	0	1	0	2	3	1
07-19	230	241	261	253	182	139	155	209
06-22	263	290	296	291	201	166	179	241
06-00	268	292	296	296	207	173	184	245
00-00	281	302	306	302	215	176	190	253

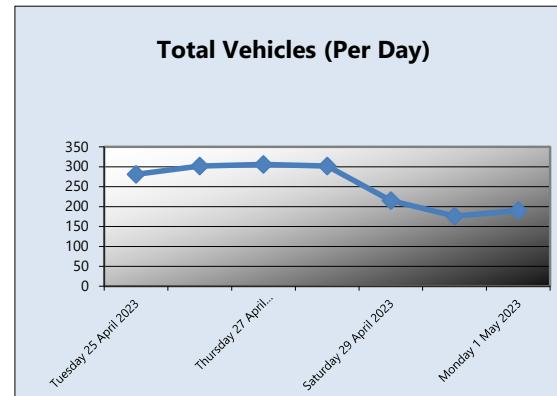
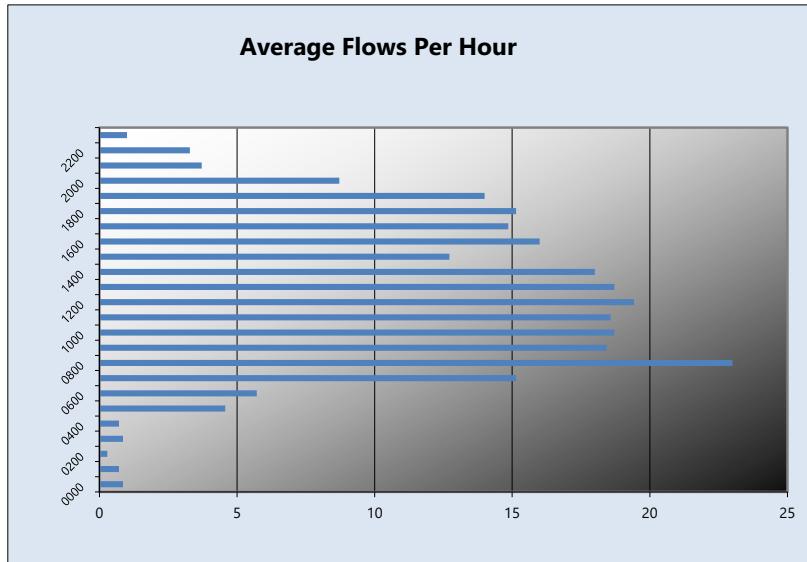
TRAFFINOMICS LIMITED

TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS

SITE 05
EASTBOUND

WEEK COMMENCING:

Tuesday 25 April 2023
TRA/23/091



Peak Time & Volumetric Count Data

	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	Mode/Average
AM								
Time	0800	0800	0800	0800	0900	0900	0900	0800
Vehicles	32	35	34	34	21	11	13	26
IP								
Time	1400	1300	1400	1400	1200	1200	1200	1400
Vehicles	21	26	27	24	19	20	22	23
PM								
Time	1700	1700	1600	1700	1600	1800	1700	1700
Vehicles	23	16	27	22	16	16	14	19

TRAFFINOMICS LIMITED

**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**SITE 05
WESTBOUND**

WEEK COMMENCING:

**Tuesday 25 April 2023
TRA/23/091**

TIME PERIOD	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	Average
0000	1	0	1	2	2	2	0	1
0100	1	0	0	0	1	1	2	1
0200	0	1	1	0	1	1	0	1
0300	0	0	0	1	2	0	1	1
0400	1	1	1	1	0	1	0	1
0500	2	1	2	2	0	0	0	1
0600	4	5	4	4	2	1	2	3
0700	7	8	12	8	6	0	3	6
0800	20	20	27	16	4	4	4	14
0900	22	16	12	16	14	4	8	13
1000	21	21	21	13	16	13	17	17
1100	19	23	22	24	19	10	14	19
1200	15	18	27	13	20	15	17	18
1300	16	18	32	29	19	11	11	19
1400	17	23	19	25	22	11	17	19
1500	19	22	16	23	28	17	17	20
1600	24	26	32	34	12	21	25	25
1700	24	28	22	16	23	14	10	20
1800	27	23	28	23	14	15	17	21
1900	12	19	20	16	12	10	14	15
2000	19	13	16	13	7	11	12	13
2100	8	5	8	9	4	8	3	6
2200	5	1	6	8	3	3	7	5
2300	4	1	0	2	5	5	2	3
07-19	231	246	270	240	197	135	160	211
06-22	274	288	318	282	222	165	191	249
06-00	283	290	324	292	230	173	200	256
00-00	288	293	329	298	236	178	203	261

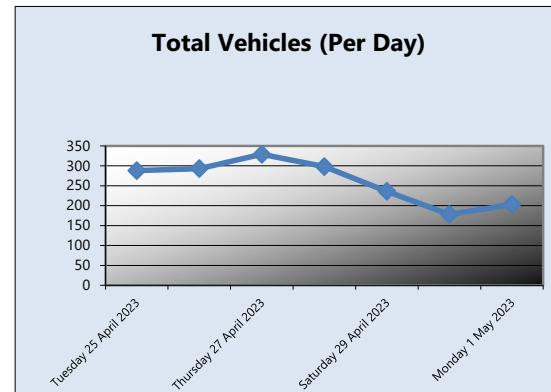
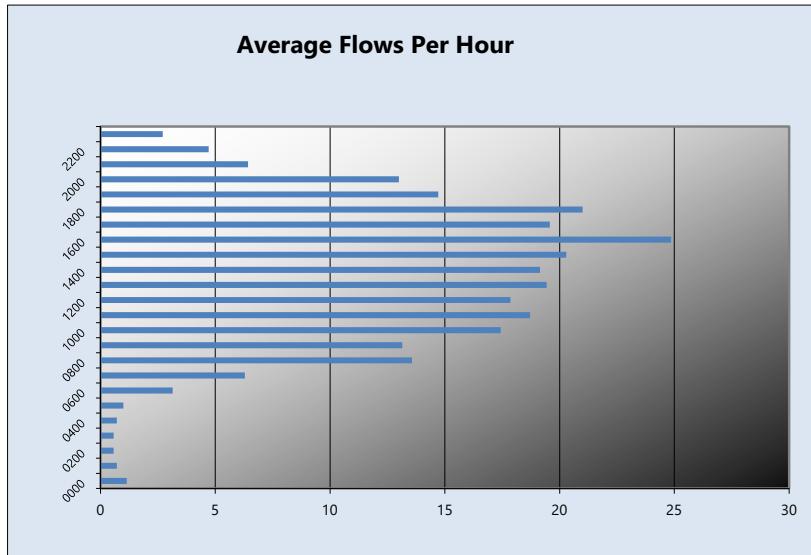
TRAFFINOMICS LIMITED

**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**SITE 05
WESTBOUND**

WEEK COMMENCING:

**Tuesday 25 April 2023
TRA/23/091**



Peak Time & Volumetric Count Data

	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	Mode/Average
AM								
Time	0900	0800	0800	0800	0900	0800	0900	0800
Vehicles	22	20	22	16	14	4	8	15
IP								
Time	1400	1400	1300	1300	1400	1200	1200	1400
Vehicles	17	23	32	29	22	15	17	22
PM								
Time	1800	1700	1600	1600	1700	1600	1600	1600
Vehicles	27	28	32	34	23	21	25	27

Traffinomics Limited for
Nicholas O'Dwyer Consulting Engineers

TRAFFINOMICS LIMITED

TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS AUTOMATIC TRAFFIC COUNTS

WEEK COMMENCING:

Tuesday 25 April 2023
TRA/23/091

SITE 05 EASTBOUND

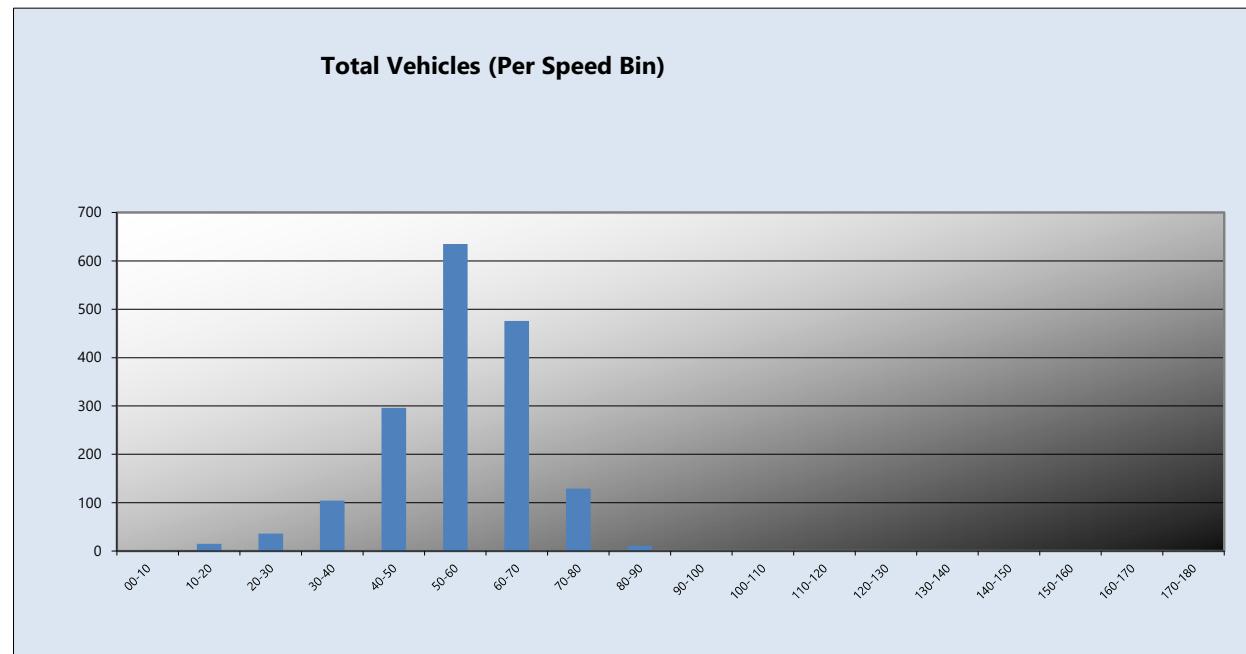
Profile:

Filter time: 00:00 25th April 2023 => 23:59 1st May 2023
 Speed range: 0 - 200 km/h.
 Separation: Greater than 4.00 seconds. - (Headway)
 Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)

Vehicles = 1702
 Maximum = 87.2 km/h, Minimum = 14.7 km/h, Mean = 55.5 km/h
 85% Speed = 66.33 km/h, 95% Speed = 72.27 km/h, Median = 56.61 km/h
 20 km/h Pace = 48 - 68, Number in Pace = 1134 (66.63%)
 Variance = 129.33, Standard Deviation = 11.37 km/h

Speed Bins:

Speed	Bin	
KPH	No.	%
00-10	0	0.0
10-20	15	0.9
20-30	36	2.1
30-40	104	6.1
40-50	296	17.4
50-60	635	37.3
60-70	476	28.0
70-80	129	7.6
80-90	11	0.6
90-100	0	0.0
100-110	0	0.0
110-120	0	0.0
120-130	0	0.0
130-140	0	0.0
140-150	0	0.0
150-160	0	0.0
160-170	0	0.0
170-180	0	0.0



TRAFFINOMICS LIMITED

TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS AUTOMATIC TRAFFIC COUNTS

WEEK COMMENCING:

Tuesday 25 April 2023

TRA/23/091

SITE 05 WESTBOUND

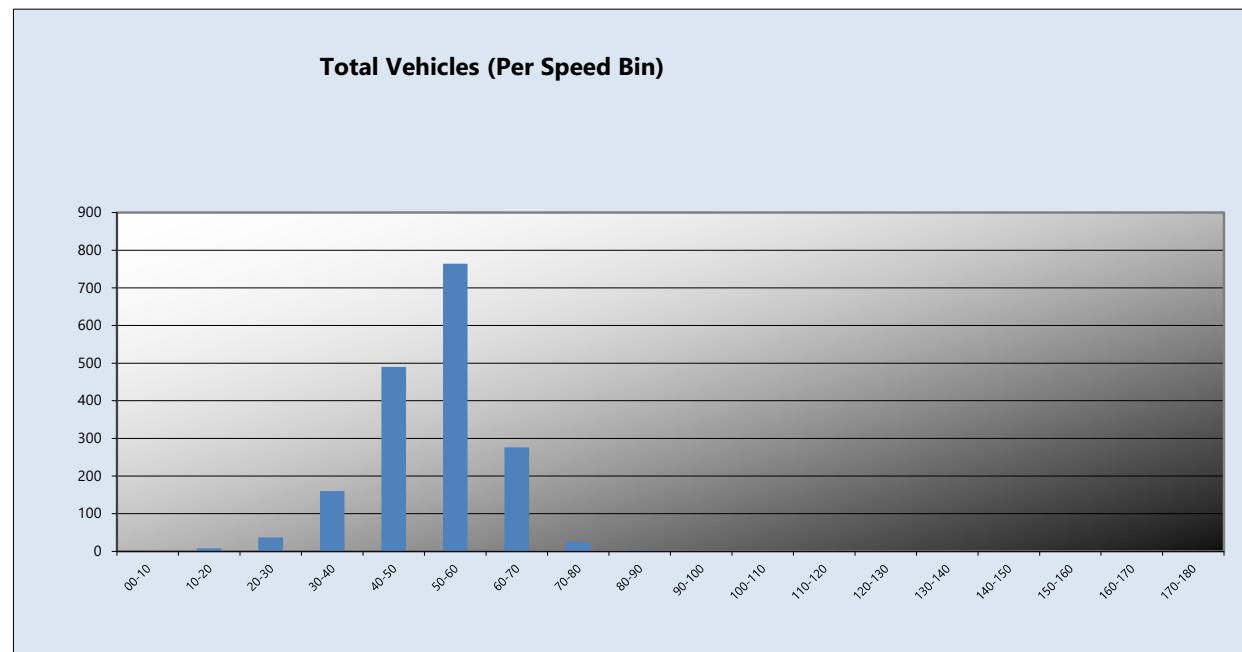
Profile:

Filter time: 00:00 25th April 2023 => 23:59 1st May 2023
 Speed range: 0 - 200 km/h.
 Separation: Greater than 4.00 seconds. - (Headway)
 Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)

Vehicles = 1762
 Maximum = 83.8 km/h, Minimum = 14.2 km/h, Mean = 51.4 km/h
 85% Speed = 60.62 km/h, 95% Speed = 65.34 km/h, Median = 52.29 km/h
 20 km/h Pace = 43 - 63, Number in Pace = 1312 (74.46%)
 Variance = 91.12, Standard Deviation = 9.55 km/h

Speed Bins:

Speed	Bin	
KPH	No.	%
00-10	0	0.0
10-20	8	0.5
20-30	37	2.1
30-40	160	9.1
40-50	490	27.8
50-60	764	43.4
60-70	276	15.7
70-80	25	1.4
80-90	2	0.1
90-100	0	0.0
100-110	0	0.0
110-120	0	0.0
120-130	0	0.0
130-140	0	0.0
140-150	0	0.0
150-160	0	0.0
160-170	0	0.0
170-180	0	0.0



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CLASSIFICATION SCHEMES:

Scheme F Classification Scheme (Non-metric)

Scheme F is an attempt to implement the FWHA's visual classification scheme as an axle-based classification scheme. This is one of several interpretations.

Vehicle Class	Class	Vehicle Type	No. of Axles	Axle spacing in feet				
				Axle 1 to 2	Axle 2 to 3	Axle 3 to 4	Axle 4 to 5	Axle 5 to 6
PCL/MCL	1	motorcycle	2	<6.0				
CAR*	2	passenger car	2	6.0 - 10.0				
		car + 1 axle trailer	3	<10.0	10.0 - 18.0			
		car + 2 axle trailer	4	<10.0		<3.5		
		pickup	2	10.0 - 15.0				
LGV**	3	pickup + 1 axle trailer	3	10.0 - 15.0	10.0 - 18.0			
		pickup + 2 axle trailer	4	10.0 - 15.0		<3.5		
		pickup + 3 axle trailer	5	9.9 - 15.0			<3.5	
		bus	2	>20.0				
BUS	4	bus	3	>19.0				
		single unit truck - dual rear axle	2	14.9 - 20.0			<3.5	
OGV 1	5	3 axle truck	3		<18.0			
	6	4 axle truck	4					
OGV 2	7	2S1	3		>18.0			
		2S2	4		>5.0	>3.5		
		3S1	4		<5.0	>10.0		
		3S2	5		<6.1		3.5 - 8.0	
	8	5 axle combination	5					
		6 axle combination	6			3.5 - 5.0		
		3S3	6					
	9	2S1-2	5		>6.0			
	10	3S1-2	6					>10.0
	11	truck	7 or more					

Car* Cars and LGV based cars

LGV** Light Goods Vehicles with the exception of LGV based on cars

TRAFFINOMICS LIMITED

TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS

SUMMARY

WEEK COMMENCING:

Tuesday 25 April 2023
TRA/23/091

SITE 06

LOCATION: N20 South of Boherash Cross (Google Maps Ref: 52.197037, -8.673477)

SPEED SURVEY SUMMARY:

NORTHBOUND 85% Speed = 99.99 km/h, 95% Speed = 107.64 km/h, Median = 88.83 km/h Maximum = 174.5 km/h, Minimum = 23.9 km/h, Mean = 89.0 km/h

SOUTHBOUND 85% Speed = 98.91 km/h, 95% Speed = 108.18 km/h, Median = 86.49 km/h Maximum = 175.5 km/h, Minimum = 2.7 km/h, Mean = 86.3 km/h

VOLUMETRIC VEHICLE COUNTS:

Direction	Time	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	No. Vehicles	7 day Mean
NORTHBOUND	07-19	4771	4910	5001	5124	4278	3474	3282	30840	4406
SOUTHBOUND	07-19	4832	5049	5045	4871	4011	3746	3645	31199	4457
NORTHBOUND	00-00	5845	5971	6227	6510	5157	4571	4168	38449	5493
SOUTHBOUND	00-00	6035	6204	6322	6276	5061	4677	4756	39331	5619

PEAK FLOW SUMMARY:

Peak	AM	IP	PM
Most Frequent Peak Hour	0800	1400	1600
Average Vehicles per Peak Hour	357	406	481

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**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

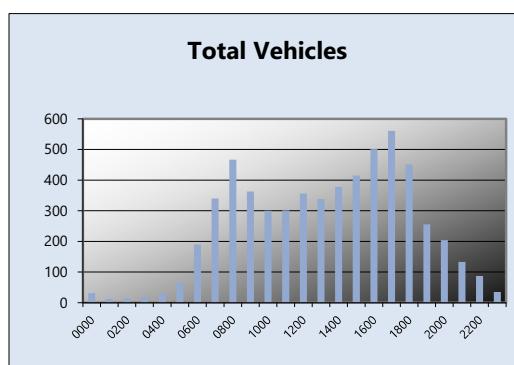
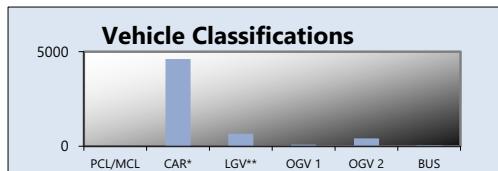
**Tuesday 25 April 2023
TRA/23/091**

**SITE 06
NORTHBOUND**

	19	4525	553	67	280	51	5493
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TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	29	0	0	2	0	31	34
0100	0	11	0	0	1	0	12	13
0200	0	9	2	0	3	0	14	18
0300	0	5	4	0	8	1	18	29
0400	0	15	4	0	9	2	30	44
0500	0	32	8	3	19	2	64	92
0600	0	121	32	4	30	3	190	234
0700	1	255	46	5	28	5	340	383
0800	0	367	55	7	34	4	467	519
0900	2	273	49	11	26	2	363	403
1000	1	207	45	13	32	2	300	349
1100	0	224	36	4	34	3	301	350
1200	1	275	42	8	26	4	356	397
1300	2	256	42	5	29	4	338	381
1400	1	300	38	11	24	4	378	418
1500	2	330	52	2	28	1	415	452
1600	2	419	53	5	19	3	501	530
1700	0	491	46	3	17	4	561	589
1800	0	375	53	3	15	5	451	477
1900	1	217	24	1	10	3	256	272
2000	0	177	17	2	6	2	204	215
2100	0	116	9	0	6	2	133	143
2200	0	77	3	1	5	1	87	95
2300	0	27	4	0	3	1	35	40
07-19	12	3772	557	77	312	41	4771	5247
06-22	13	4403	639	84	364	51	5554	6110
06-00	13	4507	646	85	372	53	5676	6245
00-00	13	4608	664	88	414	58	5845	6475

Peaks	Time	Vehicles	PCU's
AM	0800	467	518.7
IP	1400	378	417.9
PM	1700	561	588.6



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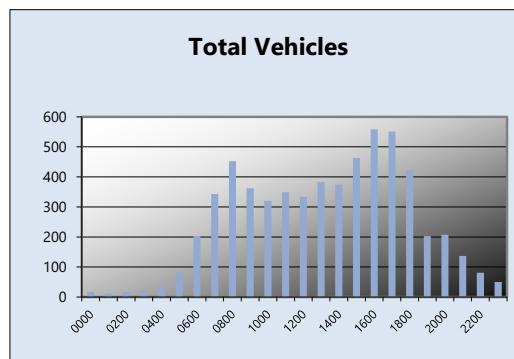
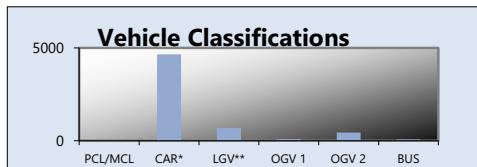
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Wednesday 26 April 2023
TRA/23/091**

**SITE 06
NORTHBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	12	1	0	3	1	17	22
0100	0	6	1	1	3	0	11	15
0200	0	7	4	0	6	0	17	25
0300	0	7	4	0	9	1	21	34
0400	0	17	7	1	8	0	33	44
0500	0	50	8	1	19	3	81	109
0600	0	134	34	3	28	4	203	245
0700	1	263	45	7	24	3	343	380
0800	0	353	50	8	36	5	452	508
0900	0	265	45	5	40	7	362	424
1000	2	230	43	15	26	4	320	364
1100	2	251	52	4	35	5	349	400
1200	0	253	41	7	26	6	333	376
1300	1	293	46	7	32	4	383	431
1400	1	284	51	8	24	6	374	414
1500	2	363	50	4	37	7	463	519
1600	3	459	60	6	26	4	558	596
1700	1	478	56	3	9	4	551	567
1800	1	360	31	8	19	3	422	453
1900	2	169	19	0	10	3	203	217
2000	1	178	16	0	10	2	207	221
2100	0	118	11	1	5	2	137	146
2200	0	72	7	0	2	0	81	84
2300	0	39	6	0	5	0	50	57
07-19	14	3852	570	82	334	58	4910	5432
06-22	17	4451	650	86	387	69	5660	6262
06-00	17	4562	663	86	394	69	5791	6402
00-00	17	4661	688	89	442	74	5971	6651

Peaks	Time	Vehicles	PCU's
AM	0800	452	507.8
IP	1300	383	431.3
PM	1600	558	596.4



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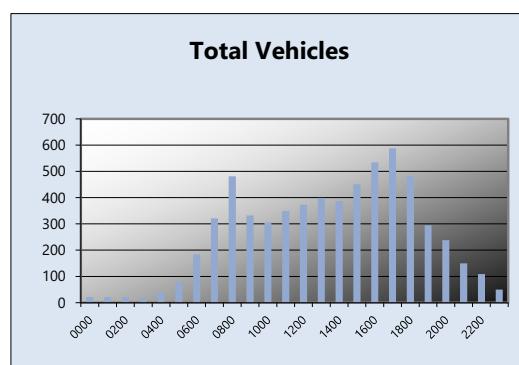
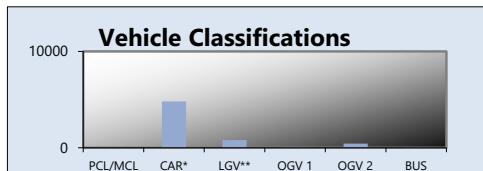
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Thursday 27 April 2023
TRA/23/091**

**SITE 06
NORTHBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	16	4	0	1	1	22	24
0100	0	13	2	0	5	1	21	29
0200	0	10	4	0	7	0	21	30
0300	0	7	2	0	6	1	16	25
0400	0	17	6	1	14	2	40	61
0500	0	44	16	1	17	2	80	105
0600	0	114	36	4	27	3	184	224
0700	0	234	50	5	28	4	321	364
0800	1	376	50	13	33	8	481	538
0900	2	239	53	9	24	5	332	371
1000	0	219	38	6	39	3	305	362
1100	0	251	53	2	38	5	349	404
1200	2	272	53	5	35	6	373	425
1300	1	294	54	8	37	5	399	455
1400	0	283	59	7	30	8	387	438
1500	1	361	57	9	20	3	451	484
1600	2	431	67	5	22	7	534	571
1700	1	499	62	3	16	7	588	617
1800	2	410	53	3	13	0	481	498
1900	2	240	41	1	10	1	295	308
2000	0	208	17	1	9	3	238	253
2100	0	131	14	1	3	1	150	155
2200	0	97	8	1	2	1	109	113
2300	0	44	1	1	4	0	50	56
07-19	12	3869	649	75	335	61	5001	5525
06-22	14	4562	757	82	384	69	5868	6466
06-00	14	4703	766	84	390	70	6027	6635
00-00	14	4810	800	86	440	77	6227	6908

Peaks	Time	Vehicles	PCU's
AM	0800	481	537.6
IP	1300	399	455.3
PM	1700	588	616.5



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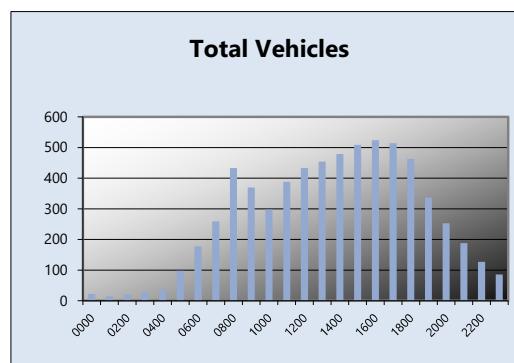
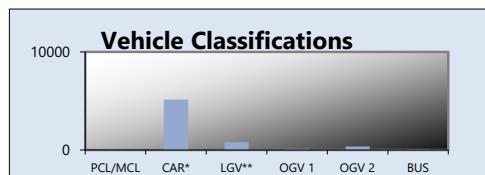
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Friday 28 April 2023
TRA/23/091**

**SITE 06
NORTHBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	20	1	0	1	0	22	23
0100	0	11	2	0	1	0	14	15
0200	0	12	5	0	3	0	20	24
0300	0	12	5	0	10	2	29	44
0400	0	18	3	0	13	1	35	53
0500	0	59	12	5	19	3	98	128
0600	0	110	26	4	32	5	177	226
0700	1	180	42	8	28	0	259	299
0800	4	315	67	17	22	8	433	475
0900	2	251	71	7	31	8	370	420
1000	0	215	47	6	27	3	298	339
1100	1	299	56	9	17	6	388	420
1200	2	325	65	6	32	3	433	479
1300	0	372	46	9	23	4	454	492
1400	0	376	68	7	25	3	479	518
1500	0	419	68	5	12	5	509	532
1600	1	444	58	6	10	5	524	544
1700	8	437	51	3	12	3	514	528
1800	2	403	39	4	11	4	463	482
1900	0	303	23	2	6	3	337	349
2000	0	213	27	1	11	1	253	269
2100	0	159	16	5	7	1	188	201
2200	0	114	9	1	3	0	127	131
2300	0	77	5	0	3	1	86	91
07-19	21	4036	678	87	250	52	5124	5528
06-22	21	4821	770	99	306	62	6079	6572
06-00	21	5012	784	100	312	63	6292	6794
00-00	21	5144	812	105	359	69	6510	7081

Peaks	Time	Vehicles	PCU's
AM	0800	433	474.9
IP	1400	479	518
PM	1600	524	544.2



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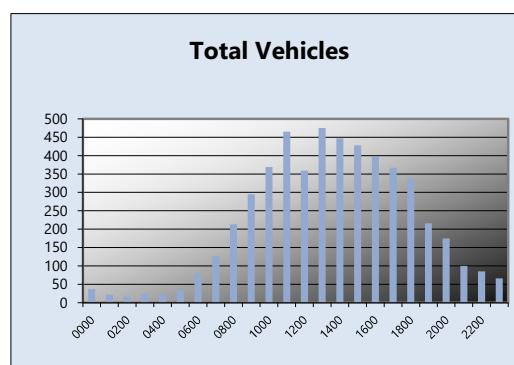
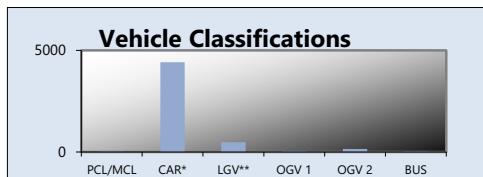
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Saturday 29 April 2023
TRA/23/091**

**SITE 06
NORTHBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	30	4	1	0	2	37	40
0100	0	20	0	0	2	0	22	25
0200	0	12	1	0	4	0	17	22
0300	0	12	3	0	9	0	24	36
0400	0	8	6	0	10	0	24	37
0500	0	15	2	1	12	3	33	52
0600	0	50	11	0	17	2	80	104
0700	0	87	22	3	14	0	126	146
0800	0	158	31	6	15	3	213	239
0900	2	251	26	6	7	3	295	309
1000	1	317	35	3	13	0	369	387
1100	2	409	40	3	9	2	465	479
1200	2	313	37	3	2	2	359	364
1300	10	409	41	4	7	4	475	482
1400	3	388	49	1	3	3	447	452
1500	3	392	26	3	2	2	428	432
1600	2	354	37	2	2	1	398	401
1700	1	322	35	1	7	1	367	377
1800	0	306	21	2	4	3	336	345
1900	1	185	23	2	4	1	216	222
2000	2	153	14	1	3	2	175	180
2100	0	90	8	0	1	1	100	102
2200	0	76	6	0	2	1	85	89
2300	0	60	5	0	1	0	66	67
07-19	26	3706	400	37	85	24	4278	4410
06-22	29	4184	456	40	110	30	4849	5019
06-00	29	4320	467	40	113	31	5000	5175
00-00	29	4417	483	42	150	36	5157	5386

Peaks	Time	Vehicles	PCU's
AM	0900	295	308.5
IP	1300	475	482.1
PM	1600	398	401



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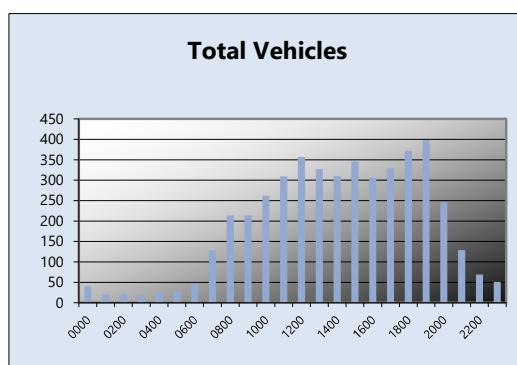
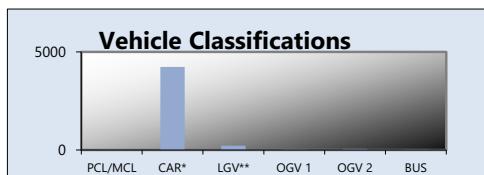
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Sunday 30 April 2023
TRA/23/091**

**SITE 06
NORTHBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	33	2	0	3	2	40	46
0100	0	18	2	0	0	0	20	20
0200	0	17	1	1	2	0	21	24
0300	0	16	1	0	1	1	19	21
0400	0	18	7	0	1	1	27	29
0500	0	19	5	1	3	1	29	34
0600	0	38	6	1	3	0	48	52
0700	0	109	16	0	3	0	128	132
0800	0	188	16	5	1	4	214	222
0900	0	193	15	0	4	2	214	221
1000	1	238	16	2	2	3	262	268
1100	1	282	21	2	1	2	309	313
1200	0	327	23	1	4	2	357	365
1300	4	298	14	5	3	3	327	333
1400	1	297	8	2	2	0	310	313
1500	2	333	10	0	1	0	346	346
1600	1	292	9	0	3	1	306	310
1700	2	318	6	3	0	0	329	329
1800	0	357	12	0	2	1	372	376
1900	2	376	13	2	5	0	398	404
2000	0	233	8	3	2	0	246	250
2100	0	122	3	2	2	0	129	133
2200	0	65	1	0	3	0	69	73
2300	0	50	1	0	0	0	51	51
07-19	12	3232	166	20	26	18	3474	3526
06-22	14	4001	196	28	38	18	4295	4365
06-00	14	4116	198	28	41	18	4415	4489
00-00	14	4237	216	30	51	23	4571	4664

Peaks	Time	Vehicles	PCU's
AM	0800	214	221.8
IP	1200	357	364.7
PM	1800	372	375.6



TRAFFINOMICS LIMITED

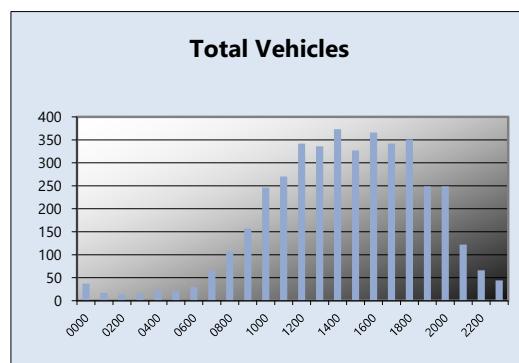
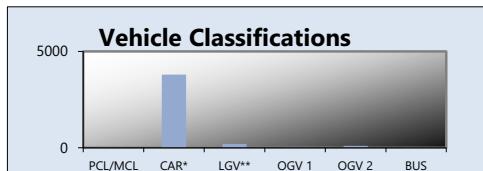
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Monday 1 May 2023
TRA/23/091**

**SITE 06
NORTHBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	33	0	1	3	0	37	41
0100	0	16	0	0	1	0	17	18
0200	0	10	2	0	1	0	13	14
0300	0	9	1	0	4	1	15	21
0400	0	14	2	0	6	1	23	32
0500	0	16	0	0	5	0	21	28
0600	0	21	3	0	5	1	30	38
0700	1	57	2	0	5	0	65	71
0800	0	81	16	1	7	2	107	119
0900	0	139	8	3	6	1	157	167
1000	1	223	13	3	6	0	246	255
1100	3	251	11	1	4	0	270	273
1200	3	318	17	0	3	1	342	345
1300	1	316	10	4	3	2	336	343
1400	3	346	19	0	3	2	373	377
1500	1	296	19	5	6	0	327	337
1600	5	329	25	1	5	1	366	370
1700	1	324	12	2	1	2	342	346
1800	1	321	12	3	11	3	351	369
1900	0	233	11	1	3	1	249	254
2000	1	231	12	1	4	0	249	254
2100	0	114	5	0	2	1	122	126
2200	0	60	1	0	5	0	66	73
2300	0	38	3	1	2	0	44	47
07-19	20	3001	164	23	60	14	3282	3370
06-22	21	3600	195	25	74	17	3932	4041
06-00	21	3698	199	26	81	17	4042	4161
00-00	21	3796	204	27	101	19	4168	4315

Peaks	Time	Vehicles	PCU's
AM	0900	157	167.3
IP	1400	373	376.5
PM	1600	366	370



TRAFFINOMICS LIMITED

**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

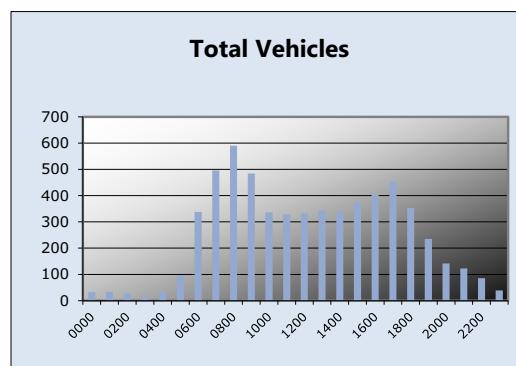
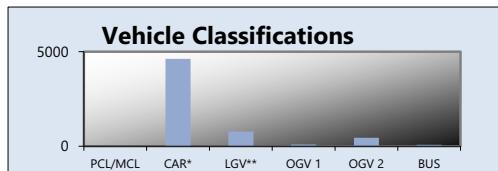
**Tuesday 25 April 2023
TRA/23/091**

**SITE 06
SOUTHBOUND**

	22	4271	901	75	300	53	5619
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TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	28	1	0	3	0	32	36
0100	0	27	3	0	4	0	34	39
0200	0	21	2	0	5	0	28	35
0300	0	10	2	2	1	0	15	17
0400	0	19	4	3	8	0	34	46
0500	0	66	15	2	12	2	97	116
0600	0	242	62	4	25	5	338	378
0700	2	374	76	6	37	1	496	547
0800	3	476	74	5	28	4	590	631
0900	1	368	65	8	35	7	484	540
1000	0	229	61	4	32	10	336	390
1100	1	228	43	6	46	4	328	394
1200	1	232	44	6	44	5	332	396
1300	3	249	49	4	32	6	343	390
1400	1	254	44	9	25	7	340	383
1500	0	294	48	6	18	8	374	408
1600	3	314	51	13	22	0	403	436
1700	1	384	38	3	19	8	453	486
1800	2	290	39	3	18	1	353	377
1900	1	197	24	1	9	3	235	249
2000	0	119	12	3	5	3	142	153
2100	0	98	9	0	12	4	123	143
2200	0	72	9	0	4	1	86	92
2300	0	26	5	3	5	0	39	47
07-19	18	3692	632	73	356	61	4832	5378
06-22	19	4348	739	81	407	76	5670	6300
06-00	19	4446	753	84	416	77	5795	6440
00-00	19	4617	780	91	449	79	6035	6728

Peaks	Time	Vehicles	PCU's
AM	0800	590	630.5
IP	1300	343	396.4
PM	1700	453	486.4



TRAFFINOMICS LIMITED

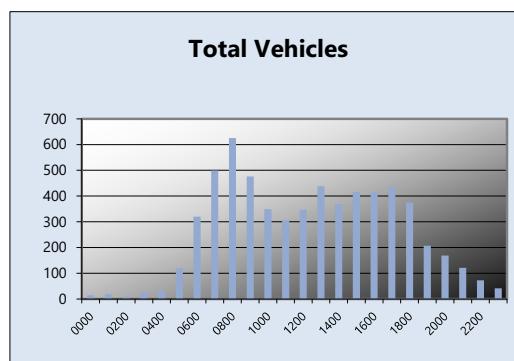
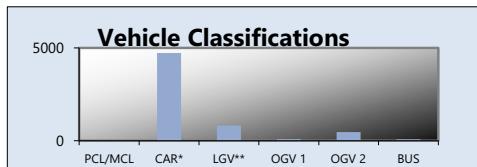
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Wednesday 26 April 2023
TRA/23/091**

**SITE 06
SOUTHBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	8	3	0	4	0	15	20
0100	0	8	3	0	8	0	19	29
0200	0	5	0	0	4	0	9	14
0300	0	11	8	2	6	0	27	36
0400	0	16	7	1	8	1	33	45
0500	0	77	17	5	18	3	120	149
0600	0	233	52	4	26	5	320	361
0700	4	381	79	7	26	2	499	535
0800	3	495	77	12	34	4	625	677
0900	0	344	79	4	40	9	476	539
1000	1	248	43	8	44	5	349	414
1100	1	216	45	6	30	8	306	355
1200	3	245	43	6	43	7	347	411
1300	0	346	43	12	34	3	438	491
1400	0	259	57	7	35	11	369	429
1500	0	319	63	8	19	6	415	450
1600	0	336	44	2	29	3	414	456
1700	2	365	48	4	14	3	436	458
1800	1	310	48	0	13	3	375	394
1900	1	178	13	3	9	3	207	222
2000	0	144	16	1	5	3	169	179
2100	0	96	12	1	10	2	121	137
2200	0	52	13	0	7	1	73	83
2300	0	31	6	0	5	0	42	49
07-19	15	3864	669	76	361	64	5049	5608
06-22	16	4515	762	85	411	77	5866	6507
06-00	16	4598	781	85	423	78	5981	6639
00-00	16	4723	819	93	471	82	6204	6932

Peaks	Time	Vehicles	PCU's
AM	0800	625	676.8
IP	1300	438	491.2
PM	1700	436	457.6



TRAFFINOMICS LIMITED

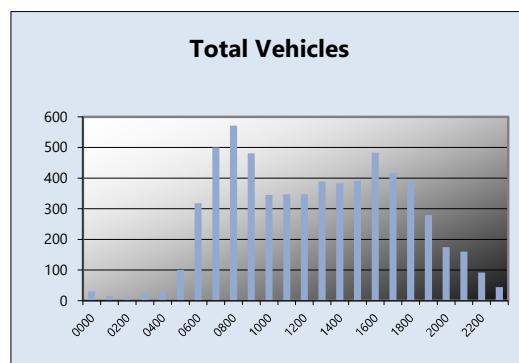
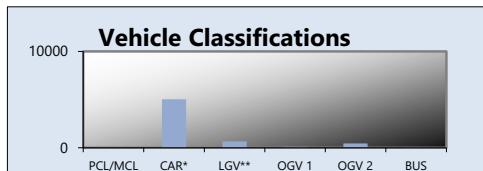
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Thursday 27 April 2023
TRA/23/091**

**SITE 06
SOUTHBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	21	2	0	7	0	30	39
0100	0	9	2	0	4	0	15	20
0200	0	7	0	0	3	0	10	14
0300	0	15	1	3	4	2	25	34
0400	1	10	8	1	8	1	29	40
0500	0	68	15	2	13	2	100	120
0600	0	244	52	6	14	2	318	341
0700	2	386	69	4	37	2	500	551
0800	1	472	61	8	24	5	571	610
0900	0	368	59	15	35	4	481	538
1000	1	265	38	3	38	0	345	395
1100	0	257	45	3	39	3	347	402
1200	0	269	30	7	37	4	347	403
1300	2	295	44	7	39	2	389	444
1400	1	297	42	14	26	3	383	426
1500	1	297	53	10	27	3	391	433
1600	2	399	40	9	30	3	483	528
1700	2	352	32	4	23	4	417	451
1800	0	354	22	5	8	2	391	406
1900	0	245	19	0	12	3	279	298
2000	1	153	13	1	4	3	175	183
2100	0	138	12	1	7	2	160	172
2200	1	79	6	0	5	1	92	99
2300	0	36	4	1	3	0	44	48
07-19	12	4011	535	89	363	35	5045	5587
06-22	13	4791	631	97	400	45	5977	6580
06-00	14	4906	641	98	408	46	6113	6727
00-00	15	5036	669	104	447	51	6322	6994

Peaks	Time	Vehicles	PCU's
AM	0800	571	610.4
IP	1300	389	443.6
PM	1600	483	527.9



TRAFFINOMICS LIMITED

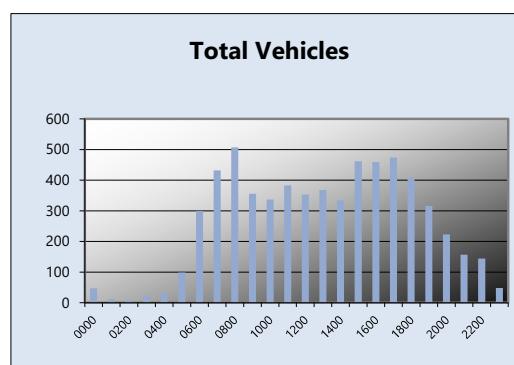
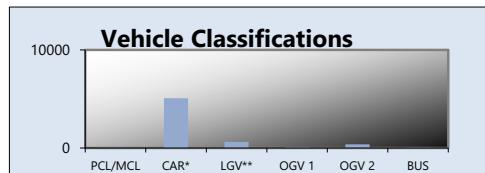
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Friday 28 April 2023
TRA/23/091**

**SITE 06
SOUTHBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	45	0	0	2	0	47	50
0100	0	4	2	0	4	1	11	17
0200	0	5	3	1	0	0	9	10
0300	0	11	2	3	4	0	20	27
0400	0	11	11	0	9	0	31	43
0500	0	69	13	4	11	2	99	117
0600	0	199	61	8	28	4	300	344
0700	1	317	60	14	39	1	432	490
0800	3	410	58	7	26	3	507	545
0900	1	257	50	7	37	4	356	411
1000	0	266	28	10	28	5	337	383
1100	2	291	51	3	32	4	383	429
1200	2	281	34	3	32	1	353	396
1300	2	302	33	5	22	4	368	402
1400	0	281	31	3	16	3	334	359
1500	0	383	45	11	21	2	462	497
1600	7	378	44	3	22	5	459	489
1700	1	417	31	5	15	5	474	500
1800	2	363	29	0	10	2	406	419
1900	2	282	17	2	12	1	316	332
2000	0	201	14	1	5	2	223	232
2100	0	143	4	0	7	3	157	169
2200	0	130	8	0	5	1	144	152
2300	1	42	3	0	2	0	48	50
07-19	21	3946	494	71	300	39	4871	5319
06-22	23	4771	590	82	352	49	5867	6396
06-00	24	4943	601	82	359	50	6059	6598
00-00	24	5088	632	90	389	53	6276	6861

Peaks	Time	Vehicles	PCU's
AM	0800	507	544.9
IP	1300	368	401.5
PM	1700	474	500.2



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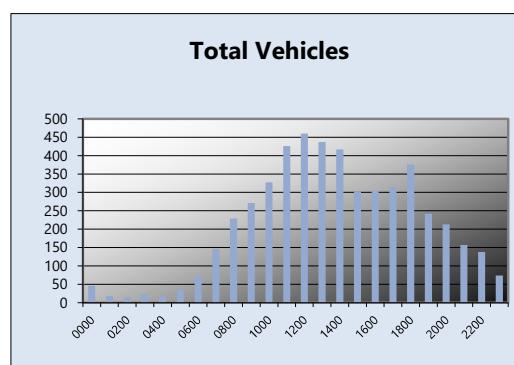
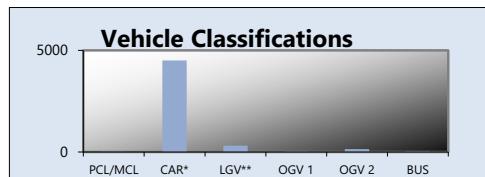
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Saturday 29 April 2023
TRA/23/091**

**SITE 06
SOUTHBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	35	4	1	5	1	46	54
0100	0	16	1	0	1	0	18	19
0200	0	13	0	0	1	0	14	15
0300	0	13	6	1	2	1	23	27
0400	0	9	3	1	4	0	17	23
0500	0	25	7	1	2	1	36	40
0600	1	48	11	4	8	0	72	84
0700	1	111	25	2	7	0	146	155
0800	1	190	21	2	13	2	229	248
0900	1	231	25	3	10	1	271	286
1000	3	285	21	3	11	4	327	344
1100	2	381	22	3	16	2	426	449
1200	0	416	29	4	9	2	460	476
1300	4	400	17	0	14	2	437	454
1400	3	382	19	1	10	2	417	430
1500	2	273	20	0	5	3	303	311
1600	0	278	14	2	7	3	304	317
1700	1	284	21	1	6	2	315	325
1800	1	349	20	0	4	2	376	382
1900	1	223	9	3	3	3	242	250
2000	1	202	7	1	1	1	213	215
2100	0	143	7	1	3	3	157	164
2200	0	128	4	1	3	2	138	144
2300	1	66	5	0	2	0	74	76
07-19	19	3580	254	21	112	25	4011	4177
06-22	22	4196	288	30	127	32	4695	4890
06-00	23	4390	297	31	132	34	4907	5110
00-00	23	4501	318	35	147	37	5061	5288

Peaks	Time	Vehicles	PCU's
AM	0900	271	285.7
IP	1200	460	475.7
PM	1800	376	382.4



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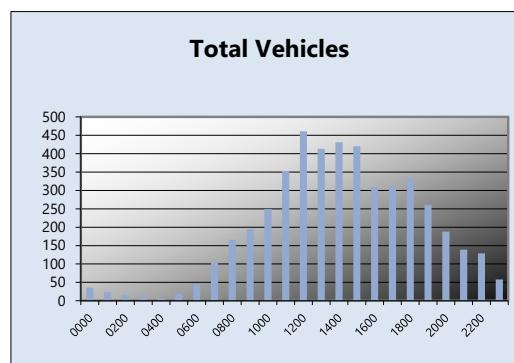
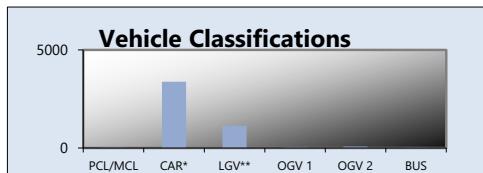
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Sunday 30 April 2023
TRA/23/091**

**SITE 06
SOUTHBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	1	31	3	0	1	0	36	37
0100	0	19	0	1	3	0	23	27
0200	0	15	0	0	1	0	16	17
0300	0	12	0	0	0	0	12	12
0400	0	5	0	0	0	0	5	5
0500	0	17	0	0	2	0	19	22
0600	0	41	1	0	3	0	45	49
0700	0	94	7	0	0	2	103	105
0800	0	149	10	4	1	2	166	171
0900	1	181	7	0	4	2	195	201
1000	2	227	16	0	3	2	250	254
1100	5	327	14	1	5	1	353	357
1200	0	436	12	2	11	0	461	476
1300	0	298	112	0	1	2	413	416
1400	4	292	122	5	7	1	431	440
1500	3	259	150	4	2	2	420	424
1600	3	183	113	4	3	3	309	316
1700	6	188	110	3	4	1	312	315
1800	3	197	124	4	4	1	333	339
1900	3	144	104	4	3	3	261	268
2000	0	99	80	2	6	1	188	198
2100	1	64	66	2	4	2	139	146
2200	0	68	56	1	4	0	129	135
2300	0	35	23	0	0	0	58	58
07-19	27	2831	797	27	45	19	3746	3815
06-22	31	3179	1048	35	61	25	4379	4476
06-00	31	3282	1127	36	65	25	4566	4669
00-00	32	3381	1130	37	72	25	4677	4789

Peaks	Time	Vehicles	PCU's
AM	0900	195	201.4
IP	1200	461	476.3
PM	1800	333	338.8



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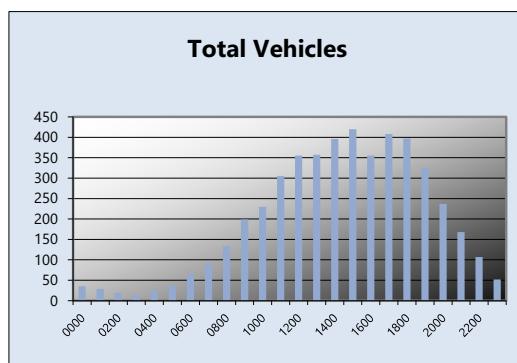
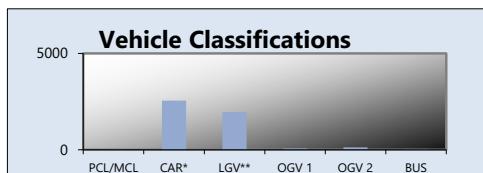
**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**Monday 1 May 2023
TRA/23/091**

**SITE 06
SOUTHBOUND**

TIME	PCL/MCL	CAR*	LGV**	OGV 1	OGV 2	BUS	TOTAL	PCU
0000	0	17	14	2	2	0	35	39
0100	0	10	16	1	2	0	29	32
0200	0	11	8	0	0	0	19	19
0300	0	8	4	0	1	0	13	14
0400	0	18	2	2	3	0	25	30
0500	0	12	18	2	1	3	36	41
0600	1	20	39	1	4	0	65	70
0700	2	34	46	3	5	0	90	96
0800	0	45	76	4	6	2	133	145
0900	0	73	110	6	9	1	199	215
1000	0	123	94	2	7	4	230	244
1100	2	155	128	10	8	2	305	321
1200	3	192	147	2	8	3	355	367
1300	1	196	144	2	10	4	357	374
1400	4	211	165	7	8	1	396	408
1500	1	252	151	6	6	4	420	434
1600	3	219	117	2	8	6	355	370
1700	1	195	190	10	11	1	408	428
1800	0	220	165	7	3	2	397	406
1900	1	195	124	0	3	2	325	330
2000	0	151	77	0	7	2	237	248
2100	1	94	65	0	6	2	168	177
2200	0	74	30	1	2	0	107	110
2300	0	24	23	1	3	1	52	57
07-19	17	1915	1533	61	89	30	3645	3808
06-22	20	2375	1838	62	109	36	4440	4633
06-00	20	2473	1891	64	114	37	4599	4800
00-00	20	2549	1953	71	123	40	4756	4975

Peaks	Time	Vehicles	PCU's
AM	0900	199	214.7
IP	1400	396	407.7
PM	1700	408	427.5



TRAFFINOMICS LIMITED

**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**SITE 06
NORTHBOUND**

WEEK COMMENCING:

**Tuesday 25 April 2023
TRA/23/091**

TIME PERIOD	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	Average
0000	31	17	22	22	37	40	37	29
0100	12	11	21	14	22	20	17	17
0200	14	17	21	20	17	21	13	18
0300	18	21	16	29	24	19	15	20
0400	30	33	40	35	24	27	23	30
0500	64	81	80	98	33	29	21	58
0600	190	203	184	177	80	48	30	130
0700	340	343	321	259	126	128	65	226
0800	467	452	481	433	213	214	107	338
0900	363	362	332	370	295	214	157	299
1000	300	320	305	298	369	262	246	300
1100	301	349	349	388	465	309	270	347
1200	356	333	373	433	359	357	342	365
1300	338	383	399	454	475	327	336	387
1400	378	374	387	479	447	310	373	393
1500	415	463	451	509	428	346	327	420
1600	501	558	534	524	398	306	366	455
1700	561	551	588	514	367	329	342	465
1800	451	422	481	463	336	372	351	411
1900	256	203	295	337	216	398	249	279
2000	204	207	238	253	175	246	249	225
2100	133	137	150	188	100	129	122	137
2200	87	81	109	127	85	69	66	89
2300	35	50	50	86	66	51	44	55
07-19	4771	4910	5001	5124	4278	3474	3282	4406
06-22	5554	5660	5868	6079	4849	4295	3932	5177
06-00	5676	5791	6027	6292	5000	4415	4042	5320
00-00	5845	5971	6227	6510	5157	4571	4168	5493

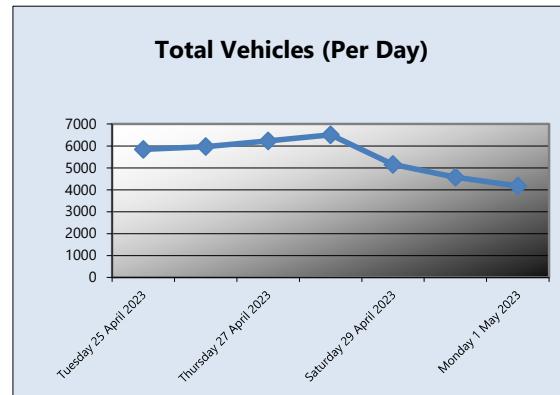
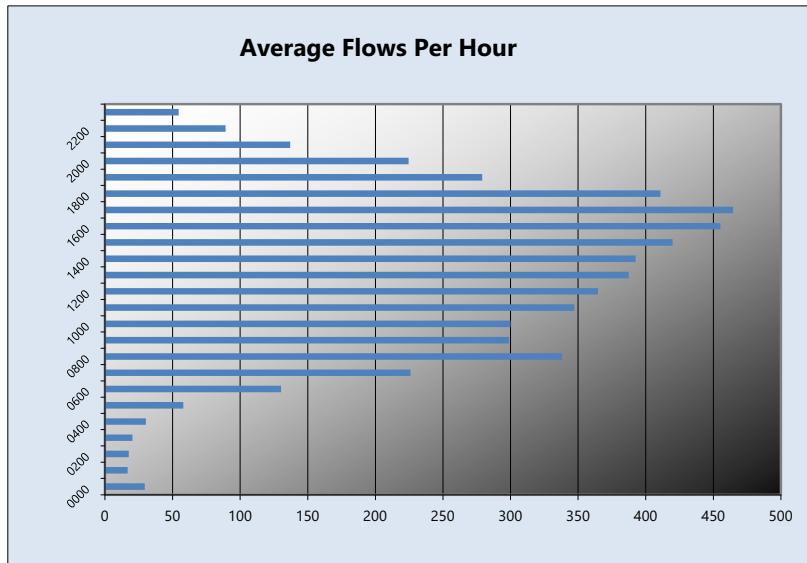
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**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**SITE 06
NORTHBOUND**

WEEK COMMENCING:

**Tuesday 25 April 2023
TRA/23/091**



Peak Time & Volumetric Count Data

	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	Mode/Average
AM								
Time	0800	0800	0800	0800	0900	0800	0900	0800
Vehicles	467	452	481	433	295	214	157	357
IP								
Time	1400	1300	1300	1400	1300	1200	1400	1400
Vehicles	378	383	399	479	475	357	373	406
PM								
Time	1700	1600	1700	1600	1600	1800	1600	1600
Vehicles	561	558	588	524	398	372	366	481

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**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**SITE 06
SOUTHBOUND**

WEEK COMMENCING:

**Tuesday 25 April 2023
TRA/23/091**

TIME PERIOD	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	Average
0000	32	15	30	47	46	36	35	34
0100	34	19	15	11	18	23	29	21
0200	28	9	10	9	14	16	19	15
0300	15	27	25	20	23	12	13	19
0400	34	33	29	31	17	5	25	25
0500	97	120	100	99	36	19	36	72
0600	338	320	318	300	72	45	65	208
0700	496	499	500	432	146	103	90	324
0800	590	625	571	507	229	166	133	403
0900	484	476	481	356	271	195	199	352
1000	336	349	345	337	327	250	230	311
1100	328	306	347	383	426	353	305	350
1200	332	347	347	353	460	461	355	379
1300	343	438	389	368	437	413	357	392
1400	340	369	383	334	417	431	396	381
1500	374	415	391	462	303	420	420	398
1600	403	414	483	459	304	309	355	390
1700	453	436	417	474	315	312	408	402
1800	353	375	391	406	376	333	397	376
1900	235	207	279	316	242	261	325	266
2000	142	169	175	223	213	188	237	192
2100	123	121	160	157	157	139	168	146
2200	86	73	92	144	138	129	107	110
2300	39	42	44	48	74	58	52	51
07-19	4832	5049	5045	4871	4011	3746	3645	4457
06-22	5670	5866	5977	5867	4695	4379	4440	5271
06-00	5795	5981	6113	6059	4907	4566	4599	5431
00-00	6035	6204	6322	6276	5061	4677	4756	5619

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Nicholas O'Dwyer Consulting Engineers

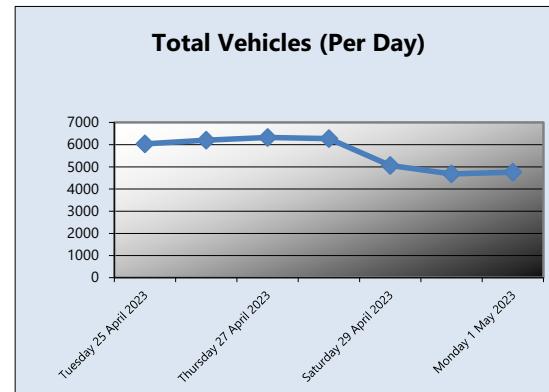
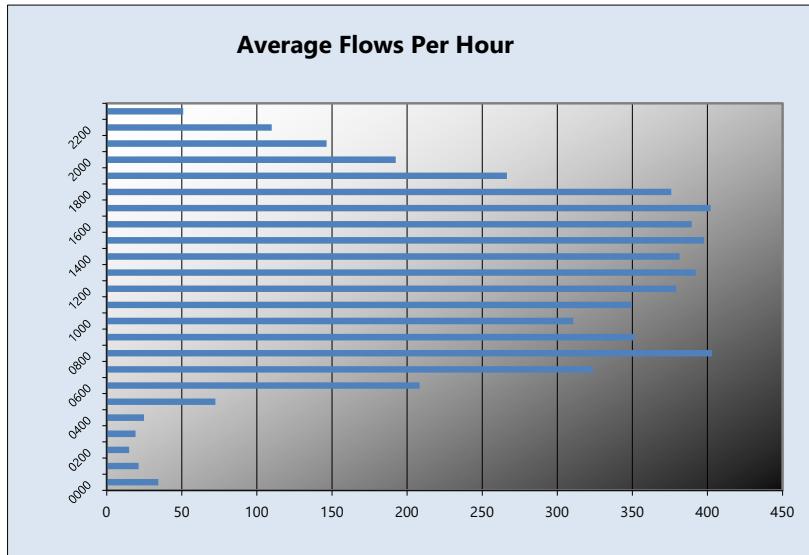
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**TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS
AUTOMATIC TRAFFIC COUNTS**

**SITE 06
SOUTHBOUND**

WEEK COMMENCING:

**Tuesday 25 April 2023
TRA/23/091**



Peak Time & Volumetric Count Data

	Tuesday 25 April 2023	Wednesday 26 April 2023	Thursday 27 April 2023	Friday 28 April 2023	Saturday 29 April 2023	Sunday 30 April 2023	Monday 1 May 2023	Mode/Average
AM								
Time	0800	0800	0800	0800	0900	0900	0900	0800
Vehicles	590	625	590	507	271	195	199	425
IP								
Time	1300	1300	1300	1300	1200	1200	1400	1300
Vehicles	343	438	389	368	460	461	396	408
PM								
Time	1700	1700	1600	1700	1800	1800	1700	1700
Vehicles	453	436	483	474	376	333	408	423

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TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS AUTOMATIC TRAFFIC COUNTS

WEEK COMMENCING:

Tuesday 25 April 2023
TRA/23/091

SITE 06 NORTHBOUND

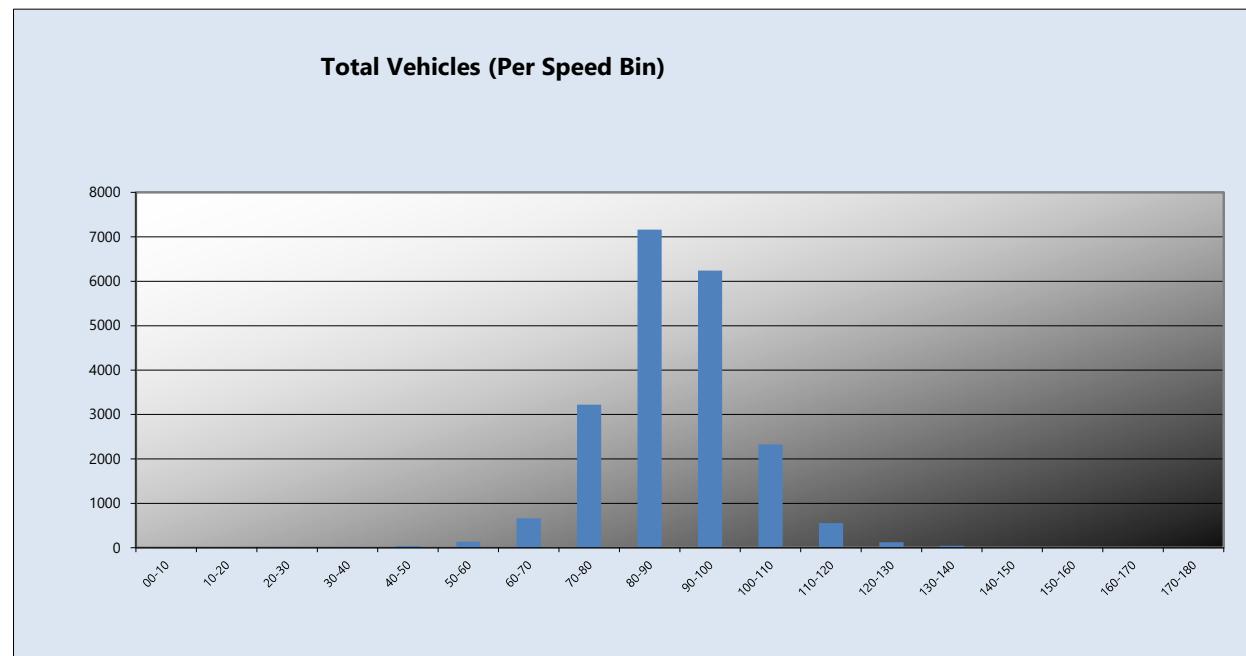
Profile:

Filter time: 00:00 25th April 2023 => 23:59 1st May 2023
 Speed range: 0 - 200 km/h.
 Separation: Greater than 4.00 seconds. - (Headway)
 Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)

Vehicles = 20548
 Maximum = 174.5 km/h, Minimum = 23.9 km/h, Mean = 89.0 km/h
 85% Speed = 99.99 km/h, 95% Speed = 107.64 km/h, Median = 88.83 km/h
 20 km/h Pace = 79 - 99, Number in Pace = 13533 (65.86%)
 Variance = 134.91, Standard Deviation = 11.62 km/h

Speed Bins:

Speed	Bin	
KPH	No.	%
00-10	0	0.0
10-20	0	0.0
20-30	7	0.0
30-40	16	0.1
40-50	41	0.2
50-60	135	0.7
60-70	664	3.2
70-80	3219	15.7
80-90	7161	34.9
90-100	6240	30.4
100-110	2324	11.3
110-120	555	2.7
120-130	123	0.6
130-140	45	0.2
140-150	12	0.1
150-160	2	0.0
160-170	2	0.0
170-180	2	0.0



TRAFFINOMICS LIMITED

TULLACONDRA WINDFARM TRAFFIC COUNT/SPEED SURVEYS AUTOMATIC TRAFFIC COUNTS

WEEK COMMENCING:

Tuesday 25 April 2023
TRA/23/091

SITE 06 SOUTHBOUND

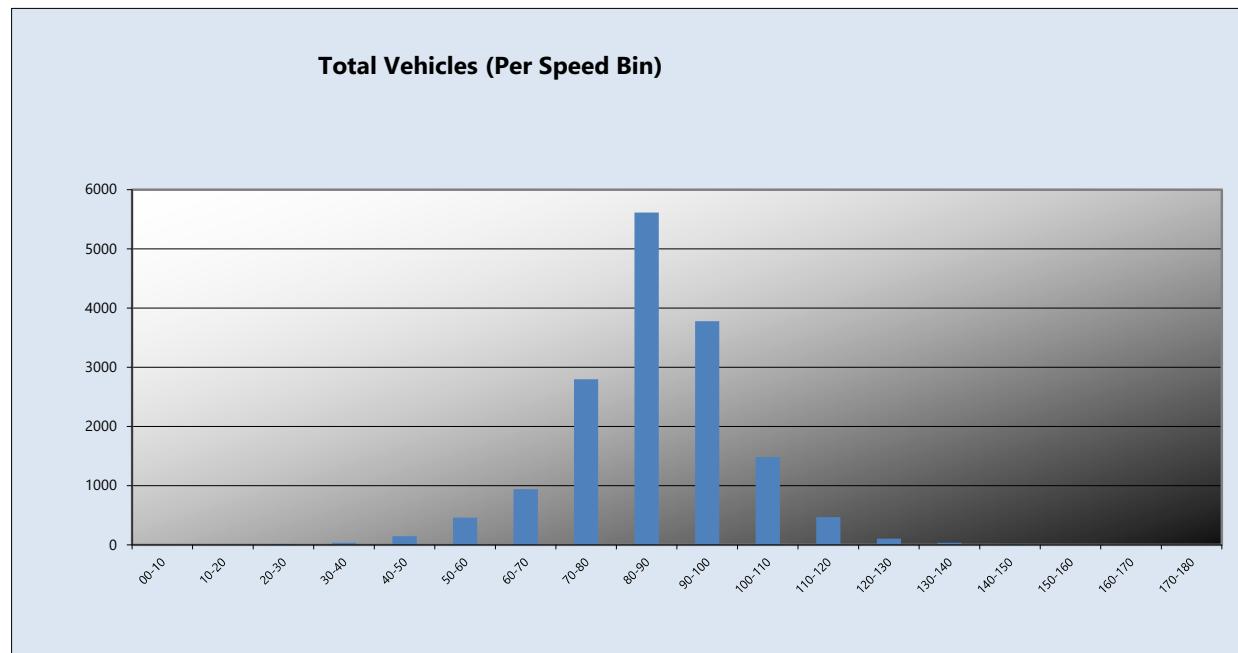
Profile:

Filter time: 00:00 25th April 2023 => 23:59 1st May 2023
 Speed range: 0 - 200 km/h.
 Separation: Greater than 4.00 seconds. - (Headway)
 Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)

Vehicles = 15906
 Maximum = 175.5 km/h, Minimum = 2.7 km/h, Mean = 86.3 km/h
 85% Speed = 98.91 km/h, 95% Speed = 108.18 km/h, Median = 86.49 km/h
 20 km/h Pace = 77 - 97, Number in Pace = 9770 (61.42%)
 Variance = 193.79, Standard Deviation = 13.92 km/h

Speed Bins:

Speed	Bin	
KPH	No.	%
00-10	1	0.0
10-20	8	0.1
20-30	13	0.1
30-40	35	0.2
40-50	144	0.9
50-60	458	2.9
60-70	940	5.9
70-80	2799	17.6
80-90	5614	35.3
90-100	3780	23.8
100-110	1484	9.3
110-120	469	2.9
120-130	104	0.7
130-140	35	0.2
140-150	11	0.1
150-160	5	0.0
160-170	5	0.0
170-180	1	0.0



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CLASSIFICATION SCHEMES:

Scheme F Classification Scheme (Non-metric)

Scheme F is an attempt to implement the FWHA's visual classification scheme as an axle-based classification scheme. This is one of several interpretations.

Vehicle Class	Class	Vehicle Type	No. of Axles	Axle spacing in feet				
				Axle 1 to 2	Axle 2 to 3	Axle 3 to 4	Axle 4 to 5	Axle 5 to 6
PCL/MCL	1	motorcycle	2	<6.0				
CAR*	2	passenger car	2	6.0 - 10.0				
		car + 1 axle trailer	3	<10.0	10.0 - 18.0			
		car + 2 axle trailer	4	<10.0		<3.5		
		pickup	2	10.0 - 15.0				
LGV**	3	pickup + 1 axle trailer	3	10.0 - 15.0	10.0 - 18.0			
		pickup + 2 axle trailer	4	10.0 - 15.0		<3.5		
		pickup + 3 axle trailer	5	9.9 - 15.0			<3.5	
		bus	2	>20.0				
BUS	4	bus	3	>19.0				
		single unit truck - dual rear axle	2	14.9 - 20.0			<3.5	
OGV 1	5	3 axle truck	3		<18.0			
	6	4 axle truck	4					
OGV 2	7	2S1	3		>18.0			
		2S2	4		>5.0	>3.5		
		3S1	4		<5.0	>10.0		
		3S2	5		<6.1		3.5 - 8.0	
	8	5 axle combination	5					
		6 axle combination	6			3.5 - 5.0		
		3S3	6					
	9	2S1-2	5		>6.0			
	10	3S1-2	6					>10.0
	11	truck	7 or more					
	12							
	13							

Car* Cars and LGV based cars

LGV** Light Goods Vehicles with the exception of LGV based on cars

EIAR VOLUME III
Appendices

CHAPTER 17 – AIR QUALITY

Appendix 17.1: Air Quality Standards

APPENDIX 17.1

AIR QUALITY STANDARDS

The Air Quality Framework Directive (1996) established a framework under which the European Commission (EC) could set limit or target values for specified pollutants. The directive identified several pollutants for which limit or target values have been, or will be set in, subsequent ‘daughter directives’. The framework and daughter directives were consolidated by Directive 2008/50/EC on Ambient Air Quality and Cleaner Air for Europe, which retains the existing air quality standards and introduces new objectives for fine particulates (PM_{2.5}).

The air quality standards (AQSs) in Europe are set in EU directives, the Clean Air for Europe (CAFE) Directive was published in 2008. The CAFE directive was transposed into Irish legislation by the Air Quality Standards Regulations 2011.

The relevant standards for Europe to protect human health are summarised in Table A17.1.

Table A17.1: Air quality standards relevant to the proposed development

Substance	Averaging period	Exceedances allowed per year	Ground level concentration limit ($\mu\text{g}/\text{m}^3$)
Nitrogen dioxide (NO ₂)	1 calendar year	-	40
	1 hour	18	200
Fine particles (PM ₁₀)	1 calendar year	-	40
	24 hours	35	50
Fine particles (PM _{2.5})	1 calendar year	-	Stage 1: 25 Stage 2: 20

Local Air Quality Management Review and Assessment Technical Guidance published by the Department for Environment, Food and Rural Affairs (Defra) advises that an exceedance of the 1 hour mean NO₂ objective is unlikely to occur where the annual mean concentration is below 60 $\mu\text{g}/\text{m}^3$, where road transport is the main source of pollution. This concentration has been used to screen whether the hourly mean objective is likely to be achieved.

Gothenburg Protocol

In 1999, Ireland signed the Gothenburg Protocol to the 1979 UN Convention on Long Range Transboundary Air Pollution. European Commission Directive 2001/81/EC and the National Emissions Ceiling Directive (NECD), prescribes the same emissions limits as the 1999 Gothenburg Protocol. A National Programme for the progressive reduction of emissions of four transboundary pollutants, nitrogen oxides (NO_x), sulphur dioxide (SO₂), volatile organic compounds (VOCs) and ammonia (NH₃), has been in place since April 2005. The data available from the EU in 2010 indicated that Ireland complied with the emissions ceilings for SO₂, VOCs and NH₃ but failed to comply with the ceiling for NO_x. COM (2013) 920 Final is the “proposal for a Directive on the reduction of national emissions of certain atmospheric pollutants and amending Directive 2003/35/EC”, which will apply the 2010 NECD limits until 2020 and establish some new national

emission reduction commitments which will be applicable from 2020 and 2030 for SO₂, NOx, non-methane volatile organic compounds (NMVOC), NH₃, and methane (CH₄). Irelands reduction targets are shown in Table A17.2.

Table A17.2: The reduction targets for Ireland, shown as a percentage reduction from 2005 levels, for four transboundary pollutants (SO₂, NO_x, VOCs, NH₃) and PM_{2.5}

Pollutant	Percentage reduction below 2005 level	
	2020-2029	2030
SO ₂	65%	85%
NO _x	49%	69%
VOC	25%	32%
NH ₃	1%	5%
PM _{2.5}	18%	41%

Clean Air Strategy

The Ireland's first Clean Air Strategy was published in April 2023. This strategy identifies and promotes the integrated measures across government to reduce air pollution and promote cleaner ambient air. The strategy commits Ireland to achieving the new WHO (World Health Organisation) guidelines values for air quality by 2040, with progress to be measured against interim targets by 2026 and 2030.

EIAR VOLUME III

Appendices

CHAPTER 17 – AIR QUALITY

Appendix 17.2: Construction Dust
Assessment Methodology

APPENDIX 17.2

CONSTRUCTION DUST ASSESSMENT

METHODOLOGY

This appendix contains the construction dust assessment methodology used in the assessment.

To assess the potential impacts, construction activities are divided into demolition, earthworks, construction and trackout. The descriptors included in this section are based upon the IAQM construction dust guidance (IAQM, 2014). The assessment follows the steps recommended in the guidance.

Step 1: Screen the requirement for assessment

The first step is to screen out the requirement for a construction dust assessment, this is usually a somewhat conservative level of screening. An assessment is usually required where there is:

- a 'human receptor' within:
 - 350m of the boundary of the site.
 - 50m of the route used by construction vehicles on the public highway, up to 500m from the site entrance(s).
- an 'ecological receptor':
 - 50m of the boundary of the site.
 - 50m of the route(s) used by construction vehicles on the public highway, up to 500m from the site entrance(s).

Step 2A: Defining the Potential Dust Emission Magnitude

Demolition

The dust emission magnitude category for demolition is varied for each site in terms of timing, building type, duration and scale. Examples of the potential dust emission classes are provided in the guidance as follows:

- **Large:** Total building volume >50,000m³, potentially dusty construction material (e.g. concrete), on-site crushing and screening, demolition activities >20m above ground level.
- **Medium:** Total building volume 20,000m³ – 50,000m³, potentially dusty construction material, demolition activities 10m – 20m above ground level.
- **Small:** Total building volume <20,000m³, construction material with low potential for dust release (e.g. metal cladding or timber), demolition activities <10m above ground, demolition during wetter months.

Earthworks

The dust emission magnitude category for earthworks is varied for each site in terms of timing, geology, topography and duration. Examples of the potential dust emission classes are provided in the guidance as follows:

- **Large:** Total site area >10,000m², potentially dusty soil type (e.g. clay), >10 heavy earth moving vehicles active at any one time, formation of bunds >8m in height, total material moved >100,000 tonnes.
- **Medium:** Total site area 2,5000 – 10,000m², moderately dusty soil type (e.g. silt), 5 – 10 heavy earth moving vehicles active at any one time, formation of bunds 4 – 8m in height, total material moved 20,000 tonnes – 100,000 tonnes.
- **Small:** Total site area < 2,5000m², soil type with large grain size (e.g. sand), <5 heavy earth moving vehicles active at any one time, formation of bunds <4m in height, total material moved <20 000 tonnes, earthworks during wetter months.

Construction

The dust emission magnitude category for construction is varied for each site in terms of timing, building type, duration, and scale. Examples of the potential dust emissions classes are provided in the guidance as follows:

- **Large:** Total building volume >100,000m³, on site concrete batching, sandblasting.
- **Medium:** Total building volume 25,000 – 100,000m³, potentially dusty construction material (e.g. concrete), on site concrete batching.
- **Small:** Total building volume <25,000m³, construction material with low potential for dust release (e.g. metal cladding or timber).

Trackout

Factors which determine the dust emission magnitude class of trackout activities are vehicle size, vehicle speed, vehicle number, geology and duration. Examples of the potential dust emissions classes are provided in the guidance as follows:

- **Large:** >50 HDV (>3.5t) outward movements in any one day, potentially dusty surface material (e.g. high clay content), unpaved road length >100m.
- **Medium:** 10 – 50 HDV (>3.5t) outward movements in any one day, moderately dusty surface material (e.g. high clay content), unpaved road length 50 – 100m.
- **Small:** <10 HDV (>3.5t) outward movements in any one day, surface material with low potential for dust release, unpaved road length <50m.

Step 2B: Defining the Sensitivity of the Area

The sensitivity of the area is defined for dust soiling, human health and ecosystems. The sensitivity of the area takes into account the following factors:

- the specific sensitivities of receptors in the area.
- the proximity and number of those receptors.
- in the case of PM₁₀, the local background concentration.

- site-specific factors, such as whether there are natural shelters such as trees, to reduce the risk of wind-blown dust.

Table A16.3 has been used to define the sensitivity of different types of receptors to dust soiling, health effects and ecological effects.

Based on the sensitivities assigned of the different types of receptors surrounding the site and numbers of receptors within certain distances of the site, a sensitivity classification for the area can be defined for each. Tables A16.4 to A16.6 indicate the method used to determine the sensitivity of the area for dust soiling, human health and ecological impacts, respectively.

For trackout, as per the guidance, it is only considered necessary to consider trackout impacts up to 50m from the edge of the road.

Table A16.3: Sensitivity of the area surrounding the site

Sensitivity of Area	Dust Soiling	Human Receptors	Ecological Receptors
High	<ul style="list-style-type: none"> Users can reasonably expect an enjoyment of a high level of amenity. The appearance, aesthetics or value of their property would be diminished by soiling. The people or property would reasonably be expected to be present continuously, or at least regularly for extended periods, as part of the normal pattern of use of the land. Examples include dwellings, museums and other culturally important collections, medium and long term car parks and car showrooms. 	<ul style="list-style-type: none"> Locations where members of the public are exposed over a time period relevant to the air quality objective for pm₁₀ (in the case of the 24-hour objectives, a relevant location would be one where individuals may be exposed for eight hours or more in a day) Examples include residential properties, hospitals, schools and residential care homes should also be considered as having equal sensitivity to residential areas for the purposes of this assessment. 	<ul style="list-style-type: none"> Locations with an international or national designation and the designated features may be affected by dust soiling. Locations where there is a community of a particularly dust sensitive species such as vascular species included in the red data list for great britain. Examples include a special area of conservation (sac) designated for acid heathlands or a local site designated for lichens adjacent to the demolition of a large site containing concrete (alkali) buildings.
Medium	<ul style="list-style-type: none"> Users would expect to enjoy a reasonable level of amenity, but would not reasonably expect to enjoy the same level of amenity as in their home. The appearance, aesthetics or value of their property could be diminished by soiling. The people or property wouldn't reasonably be expected to be present here continuously or regularly for extended periods as part of the normal pattern of use of the land. Examples include parks and places of work. 	<ul style="list-style-type: none"> Locations where the people exposed are workers and exposure is over a time period relevant to the air quality objective for pm₁₀ (in the case of the 24-hour objectives, a relevant location would be one where individuals may be exposed for eight hours or more in a day). Examples include office and shop workers, but will generally not include workers occupationally exposed to pm₁₀, as protection is covered by health and safety at work legislation. 	<ul style="list-style-type: none"> Locations where there is a particularly important plant species, where its dust sensitivity is uncertain or unknown. Locations with a national designation where the features may be affected by dust deposition. Example is a site of special scientific interest (sssi) with dust sensitive features.
Low	<ul style="list-style-type: none"> The enjoyment of amenity would not reasonably be expected. Property would not reasonably be expected to be diminished in appearance, aesthetics or value by soiling. There is transient exposure, where the people or property would reasonably be expected to be present only for limited periods of time as part of the normal pattern of use of the land. Examples include playing fields, farmland (unless commercially-sensitive horticultural), footpaths, short term car parks and roads. 	<ul style="list-style-type: none"> Locations where human exposure is transient. Indicative examples include public footpaths, playing fields, parks and shopping streets. 	<ul style="list-style-type: none"> Locations with a local designation where the features may be affected by dust deposition. Example is a local nature reserve with dust sensitive features.

Table A16.4: Sensitivity of the area to dust soiling effects on people and property

Receptor sensitivity	Number of receptors	Distance from the source (m)			
		<20	<50	<100	<350
High	>100	High	High	Medium	Low
	10-100	High	Medium	Low	Low
	1-10	Medium	Low	Low	Low
Medium	>1	Medium	Low	Low	Low
Low	>1	Low	Low	Low	Low

Table A16.5: Sensitivity of the area to human impacts

Receptor sensitivity	Annual mean PM ₁₀ concentrations	Number of receptors	Distance from the source (m)				
			<20	<50	<100	<200	<350
High	>32µg/m ³	>100	High	High	High	Medium	Low
		10-100	High	High	Medium	Low	Low
		1-10	High	Medium	Low	Low	Low
	28-32µg/m ³	>100	High	High	Medium	Low	Low
		10-100	High	Medium	Low	Low	Low
		1-10	High	Medium	Low	Low	Low
	24-28µg/m ³	>100	High	Medium	Low	Low	Low
		10-100	High	Medium	Low	Low	Low
		1-10	Medium	Low	Low	Low	Low
	<24µg/m ³	>100	Medium	Low	Low	Low	Low
		10-100	Low	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
Medium	>32µg/m ³	>10	High	Medium	Low	Low	Low
		1-10	Medium	Low	Low	Low	Low
	28-32µg/m ³	>10	Medium	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
	24-28µg/m ³	>10	Low	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
	<24 µg/m ³	>10	Low	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
Low	-	>1	Low	Low	Low	Low	Low

Table A16.6: Sensitivity of the area to ecological impacts

Receptor sensitivity	Dust Emissions Magnitude	
	Large	Medium
High	High	Medium
Medium	Medium	Low
Low	Low	Low

Step 2C: Defining the Risk of Impacts

The final step is to use both the dust emission magnitude classification with the sensitivity of the area, to determine a potential risk of impacts for each construction activity, before the application of mitigation. Tables A16.7 to A16.9 indicate the method used to assign the level of risk for each construction activity.

Table A16.7: Risk of dust impacts from demolition

Receptor sensitivity	Dust Emissions Magnitude		
	Large	Medium	Small
High	High risk	Medium risk	Medium risk
Medium	High risk	Medium risk	Low risk
Low	Medium risk	Low risk	Negligible

Table A16.8: Risk of dust impacts from earthworks/construction

Receptor sensitivity	Dust Emissions Magnitude		
	Large	Medium	Small
High	High risk	Medium risk	Low risk
Medium	Medium risk	Medium risk	Low risk
Low	Low risk	Low risk	Negligible

Table A16.9: Risk of dust impacts from trackout

Receptor sensitivity	Dust Emissions Magnitude		
	Large	Medium	Small
High	High risk	Medium risk	Low risk
Medium	Medium risk	Low risk	Negligible
Low	Low risk	Low risk	Negligible

EIAR VOLUME III

Appendices

CHAPTER 18 – CLIMATE

Appendix 18.1: Emission Factors

APPENDIX 18.1

Emission factors

The below factors were used in the calculation of emissions for the construction, operation and decommissioning phases of the proposed development.

Emission factors (ICE 2019)

Materials	Embodied carbon – kgCO ₂ e per kg
Aluminium General, European Mix, Inc Imports	6.67
Steel, Rebar	1.99
Steel, Section	1.55
Steel, Engineering Steel	1.27
General concrete, In-Situ	0.103
GEN 1	0.097
Steel wire rod	2.270
Aggregates and sand, general, from virgin land won resources, bulk, loose	0.004
Timber, Hardwood	-1.286
Pre-caste concrete block	0.093
Materials	Embodied carbon – kgCO ₂ e per t
Asphalt 5.5% binder	55.3

Emission factors (One Click)

Materials	kgCO ₂ e per kg
Cast Iron, Europe	1.66
Glass Reinforced Plastic - Fibreglass, UK	8.1
Copper, Virgin, UK	3.81

Emission factors (Defra 2023)

Freight Goods	kgCO₂e per tkm
Rigid HGV (> 17 tonnes) average laden	0.153754532
Articulated HGV Diesel (>3.5 -33t), average laden	0.115775454
Average container ship	0.01611857
Fuel type	KgCO₂e per litre
Gas Oil	2.76
Diesel (average biofuel blend)	2.51
Waste Disposal	kgCO₂e per tonne
Concrete (Landfill)	1.234
Concrete (Recycling)	0.985
Aggregates (Landfill)	1.234
Aggregates (Recycling)	0.985
Metals (Landfill)	1.264
Metals (Recycling)	0.985
Wood (Landfill)	925.245
Wood (Recycling)	21.281
Electric Mixed (Landfill)	8.884
Electric Mixed (Recycling)	21.281
Insulation (Landfill)	1.234
Insulation (Recycling)	0.985
Organic: garden waste (Landfill)	646.607
Asphalt (Recycling)	0.985
Asphalt (Landfill)	1.234

Emission factors (Online EPD)

Materials	kgCO₂e per km
EPD: Medium Voltage Three Core Underground Cable	53,500

Notes: 1km cable = 4643kg, 5t

EIAR VOLUME III

Appendices

CHAPTER 18 – CLIMATE

Appendix 18.2: Input and Output Data
for the Calculation of Emissions

APPENDIX 18.2

Input and output data for the calculation of emissions

The below input data was used in the calculation of emissions during the construction, operation and decommissioning phases of the proposed development. The results of the calculations are provided alongside the input data provided.

Deliveries to site (plant)

Plant	Total Weight (t)	Distance (km)	Delivery Vehicle	tkm	A4 (kgCO ₂ e) – One way	A4 (kgCO ₂ e) – Two way
Excavator (x2)	40	22	Artic	880	102	204
Wheel loader	20	22	Artic	440	51	102
Motor grader	20	22	Artic	440	51	102
Roller (x3)	29	22	Artic	627	73	145
Tipper (x2)	50	22	Artic	1100	127	255
Felling Vehicles (x4)	120	22	Artic	2640	306	611
Plant for piped culverts	20	22	Artic	440	51	102
Check dam plant	20	22	Artic	440	51	102
Boom supports	211	22	Artic	4646	538	1,076
Specialised vehicles	80	22	Artic	1760	204	408
Total	530	N/A	N/A	13,413	1,553	3,106

Deliveries to site (equipment)

Equipment	Total Weight (t)	Distance (km)	Delivery Vehicle	tkm	A4 (kgCO ₂ e) – One way	A4 (kgCO ₂ e) – Two way
Portacabins	15	22	Artic	334	39	79
Main Compound Welfare Facilities	8	22	Artic	165	19	38
Remote Welfare Facilities	4	22	Artic	83	10	19
Water Tanks	1	22	Artic	22	3	5
Septic Tanks	1	22	Artic	20	2	5
Generators	2	22	Artic	45	5	10
Transformers/switch gear	220	1,600	Artic	4,840	51,094	N/A
Total	251	N/A	N/A	5,515	51,172	156

Offsite deliveries (construction waste)

Material	Total Weight (t)	Distance (km)	Delivery vehicle	tkm	A5 off-site transport (kgCO ₂ e)
Cleared Waste Debris	80	32	8-wheeler	2,576	298
Felled trees	6,780	32	8-wheeler	218,316	25,276
Excavated material	40	32	8-wheeler	1,288	149
Roadside berm material	40	32	8-wheeler	1,288	149
Excavated rock material to crusher	520	32	8-wheeler	16,744	1,939
Construction waste - soil	8,888	32	8-wheeler	286,192	33,134
Construction waste - rock	42	32	8-wheeler	1,354	157
Total	16,390	N/A	N/A	526,404	61,101

Disposal (construction waste)

Material	Total Weight (t)	Distance (km)	Delivery vehicle	tkm	A5 Landfill (kgCO ₂ e)	A5 Recycling (kgCO ₂ e)
Cleared waste debris	80	32	8-wheeler	2,576	69	24
Felled trees	6,780	32	8-wheeler	218,316	876,799	115,427
Excavated material	40	32	8-wheeler	1,288	35	12
Roadside berm material	40	32	8-wheeler	1,288	35	12
Excavated rock material to crusher	520	32	8-wheeler	16,744	449	154
Construction waste - soil	8,888	32	8-wheeler	286,192	7,678	2,626
Construction waste - rock	42	32	8-wheeler	1,354	36	12
Total	16,390	N/A	N/A	526,404	885,100	118,267

Offsite deliveries (end of life)

Equipment	Total Weight (t)	Disposal distance (km)	tkm	C2 kgCO ₂ e	C3 kgCO ₂ e
Transformers/switch gear	220	32	7,084	820	4,682

Product stage (materials)

Material Category	Material	Total Weight (t)	A1 – 3 (kgCO ₂ e)
Aggregates and sand	Aggregates	56,216	246,469
Subtotal	N/A	56,216	246,469
Cabling	Cables for cable works	80	856,000
	Cables	80	856,000
Subtotal	N/A	160	1,712,000
Fencing	Timber fence	27	-35,107
	Concrete foundations for fence	36	3,539
	Steel fencing wire	24	54,388
	Concrete fencing foundations	96	9,312
	Timber fencing posts	422	-543,196
Subtotal	N/A	607	-510,064
Turbine parts	Steel	9,855	15,275,250
	Fiberglass	1,890	15,309,000
	Cast iron	1,485	2,465,100
	Copper	135	514,350
	Aluminium	135	900,277
Subtotal	N/A	13,500	34,463,977
Concrete	Concrete	16,608	1,710,624
Subtotal	N/A	16,608	1,710,624
Steel	Steel for foundations	320	636,800
	Steel for substation	160	318,400
Subtotal	N/A	480	955,200
Asphalt surfacing	Asphalt surfacing	6,720	371,616
Subtotal	N/A	6,720	371,616
Grand total	N/A	94,290	38,949,822

Deliveries to site (materials)

Material Category	Material	Total Weight (t)	Delivery Distance (km)	Delivery vehicle	A4 (tkm)	A4 (kgCO ₂ e)
Aggregate s and sand	Aggregat es	56,216	13	8-wheeler	716,750	110,204
Subtotal	N/A	56,216	N/A	N/A	716,750	110,204

Material Category	Material	Total Weight (t)	Delivery Distance (km)	Delivery vehicle	A4 (tkm)	A4 (kgCO ₂ e)
Cabling	Cables for cable works	80	1,600	8-wheeler	128,000	18,580
	Cables	80	1,600	8-wheeler	128,000	18,580
Subtotal	N/a	160	N/A	N/A	256,000	37,159
Fencing	Timber fence	27	45	8-wheeler	1,229	189
	Concrete foundations for fence	36	45	8-wheeler	1,642	2520
	Steel fencing wire	24	45	8-wheeler	1,098	169
	Concrete fencing foundations	96	45	8-wheeler	4,320	664
	Timber fencing posts	422	45	8-wheeler	19,008	2,923
Subtotal	N/A	607	N/A	N/A	27,296	4,197
Turbine parts	Steel	9,855	1,600	Artic	15,768,000	1,727,335
	Fiberglas s	1,890	1,600	Artic	3,024,000	331,270
	Cast iron	1,485	1,600	Artic	2,376,000	260,283
	Copper	135	1,600	Artic	216,000	23,662
	Aluminum	135	1,600	Artic	216,000	23,662
Subtotal	N/A	13,500	N/A	N/A	21,600,000	2,366,213
Concrete	Concrete	16,608	19	Artic	315,552	36,533
Subtotal	N/A	16,608	N/A	N/A	315,552	36,533
Steel	Steel for foundations	320	19	Artic	6,080	704
	Steel for substation	160	19	Artic	3,040	352
Subtotal	N/A	480	N/A	N/A	9,120	1,056
Asphalt surfacing	Asphalt surfacing	6,720	19	8-wheeler	127,680	19,631
Subtotal	N/A	6,720	N/A	N/A	127,680	19,631
Grand total	N/a	94,290	N/A	N/A	23,052,398	2,574,993

Offsite deliveries (materials)

Material Category	Material	Total Weight (t)	Disposal Distance (km)	C2 tkm	C2 (kgCO ₂ e)
Aggregates and sand	Aggregates	56,216	32	1,810,146	278,318
Subtotal	N/A	56,216	N/A	1,810,146	278,318
Cabling	Cables for cable works	80	32	2,576	396
	Cables	80	32	2,576	396
Subtotal	N/A	160	N/A	5,152	792
Fencing	Timber fence	27	32	879	135
	Concrete foundations for fence	36	32	1,175	181
	Steel fencing wire	24	32	786	121
	Concrete fencing foundations	96	32	3,091	475
	Timber fencing posts	422	32	13,601	2,091
Subtotal	N/A	607	N/A	19,531.88	3,003
Turbine parts	Steel	9,855	32	317,331	48,791
	Fiberglass	1,890	32	60,858	9,357
	Cast iron	1,485	32	47,817	7,352
	Copper	135	32	4,347	668
	Aluminium	135	32	4,347	668
Subtotal	N/a	13,500	N/A	434,700	66,837
Concrete	Concrete	16,608	32	534,778	61,914
Subtotal	N/A	16,608	N/A	534,778	61,914
Steel	Steel for foundations	320	32	10,304	1,584
	Steel for substation	160	32	5,152	792
Subtotal	N/A	480	N/A	15,456	2,376
Asphalt surfacing	Asphalt surfacing	6,720	32	216,384	33,270
Subtotal	N/A	6,720	N/A	216,384	33,270
Grand total	N/A	94,290	N/A	3,036,147	446,511

Disposal (materials)

Material Category	Material	Total Weight (t)	C4 Landfill (kgCO ₂ e)	C3 Recycling (kgCO ₂ e)
Aggregates and sand	Aggregates	56,216	48,560	16,610
Subtotal	N/A	56,216	48,560	16,610

Material Category	Material	Total Weight (t)	C4 Landfill (kgCO ₂ e)	C3 Recycling (kgCO ₂ e)
Cabling	Cables for cable works	80	498	511
	Cables	80	498	511
Subtotal	N/A	160	995	1,021
Fencing	Timber fence	27	17,681	174
	Concrete foundations for fence	36	32	11
	Steel fencing wire	24	22	7
	Concrete fencing foundations	96	83	28
	Timber fencing posts	422	273,576	2,697
Subtotal	N/a	607	291,394	2,917
Turbine parts	Steel	9,855	0	9,706
	Fiberglass	1,890	0	1,861
	Cast iron	1,485	0	1,463
	Copper	135	0	133
	Aluminium	135	0	133
Subtotal	N/A	13,500	0	13,296
Concrete	Concrete	16,608	14,346	4,907
Subtotal	N/A	16,608	14,346	4,907
Steel	Steel for foundations	320	283	95
	Steel for substation	160	142	47
Subtotal	N/A	480	425	142
Asphalt surfacing	Asphalt surfacing	6,720	5,805	1,986
Subtotal	N/A	6,720	5,805	1,986
Grand total	N/A	94,290	361,524	40,880

Fuel use

Fuel Type	A5 (kgCO ₂ e)	C1 (kgCO ₂ el)
Plant fuel use	1,599,991	1,439,992
Construction worker travel	152,438	137,194
Total	1,752,429	1,577,186

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Tullacondra Green Energy Limited

Environmental Impact Assessment Report

Volume III – Appendices

Tullacondra Green Energy Project, Co. Cork

604162

JUNE 2024

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