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Appendix 14.1

Bridge Street Church Street LinSing Model

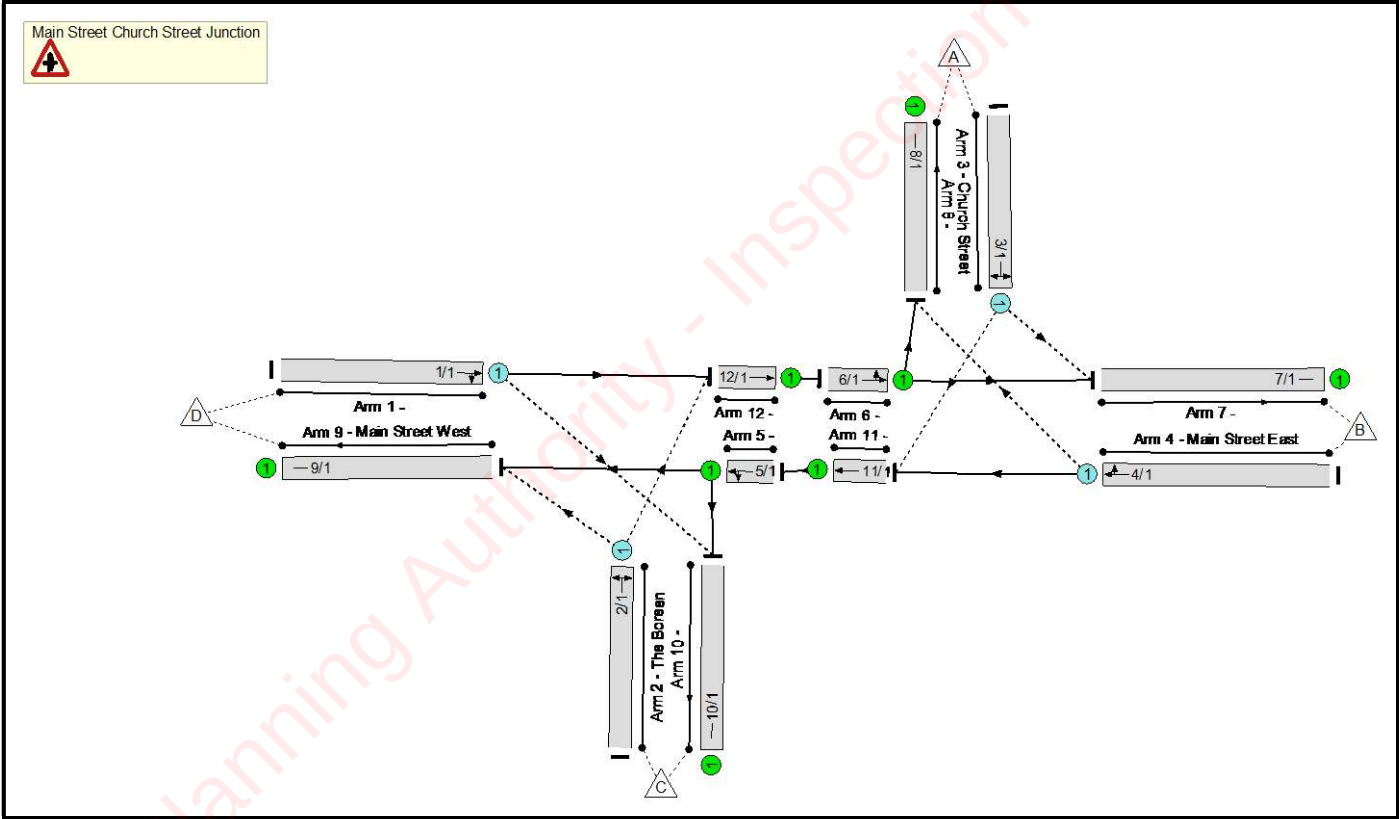
Keerglen Wind Farm

Mayo Planning Authority - Inspection Purposes Only

User and Project Details

Project:	Keerglen Wind Farm
Title:	Bridge Street, Church Street, The Boreen Junction
Location:	Crossmolina, Co. Mayo
Client:	ABO Energy
Checked By:	JA
Additional detail:	
File name:	New LinSig Model 2 - JA Copy.lsg3x
Author:	FQ
Company:	ROD
Address:	Dublin 18

Network Layout Diagram



Full Input Data And Results

Give-Way Lane Input Data

Junction: Main Street Church Street Junction											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/1	10/1 (Right)	1439	0	5/1	1.09	All	-	-	-	-	-
2/1 (The Boreen)	9/1 (Left)	1439	0	5/1	1.09	All	-	-	-	-	-
	12/1 (Right)	1439	0	1/1	1.09	All					
	7/1 (Left)	1439	0	5/1	1.09	All					
3/1 (Church Street)	11/1 (Right)	1439	0	6/1	1.09	All	-	-	-	-	-
				4/1	1.09	All					
4/1 (Main Street East)	8/1 (Right)	1439	0	6/1	1.09	All	-	-	-	-	-

Full Input Data And Results

Lane Input Data

Junction: Main Street Church Street Junction												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1	O		2	3	60.0	Geom	-	3.25	0.00	Y	Arm 10 Right Arm 12 Ahead	Inf Inf
2/1 (The Boreen)	O		2	3	60.0	Geom	-	3.25	0.00	Y	Arm 9 Left Arm 12 Right	Inf Inf
3/1 (Church Street)	O		2	3	60.0	Geom	-	3.25	0.00	Y	Arm 7 Left	Inf
4/1 (Main Street East)	O		2	3	60.0	Geom	-	3.25	0.00	Y	Arm 11 Right	Inf
											Arm 8 Right	Inf
											Arm 11 Ahead	Inf
5/1	U		2	3	1.0	Geom	-	3.25	0.00	Y	Arm 9 Ahead Arm 10 Left	Inf Inf
6/1	U		2	3	1.0	Geom	-	3.25	0.00	Y	Arm 7 Ahead Arm 8 Left	Inf Inf
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1 (Main Street West)	U		2	3	60.0	Inf	-	-	-	-	-	-
10/1	U		2	3	60.0	Inf	-	-	-	-	-	-
11/1	U		2	3	1.0	Inf	-	-	-	-	-	-
12/1	U		2	3	1.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'Baseline'	16:00	17:00	01:00	
2: 'Peak construction activities'	16:00	17:00	01:00	

Full Input Data And Results

Scenario 1: 'Baseline' (FG1: 'Baseline', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	85	0	11	96
	B	96	0	13	180	289
	C	0	15	0	4	19
	D	20	152	1	0	173
	Tot.	116	252	14	195	577

Traffic Lane Flows

Lane	Scenario 1: Baseline
Junction: Main Street Church Street Junction	
1/1	173
2/1	19
3/1	96
4/1	289
5/1	204
6/1	187
7/1	252
8/1	116
9/1	195
10/1	14
11/1	204
12/1	187

Lane Saturation Flows

Junction: Main Street Church Street Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1	3.25	0.00	Y	Arm 10 Right Arm 12 Ahead	Inf Inf	0.6 % 99.4 %	1940	1940
2/1 (The Boreen)	3.25	0.00	Y	Arm 9 Left Arm 12 Right	Inf Inf	21.1 % 78.9 %	1940	1940
3/1 (Church Street)	3.25	0.00	Y	Arm 7 Left Arm 11 Right	Inf Inf	88.5 % 11.5 %	1940	1940
4/1 (Main Street East)	3.25	0.00	Y	Arm 8 Right Arm 11 Ahead	Inf Inf	33.2 % 66.8 %	1940	1940
5/1	3.25	0.00	Y	Arm 9 Ahead Arm 10 Left	Inf Inf	93.6 % 6.4 %	1940	1940
6/1	3.25	0.00	Y	Arm 7 Ahead Arm 8 Left	Inf Inf	89.3 % 10.7 %	1940	1940
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Main Street West Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	Infinite Saturation Flow						Inf	Inf
12/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: 'Peak Construction Activities' (FG2: 'Peak construction activities', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	120	0	46	166
	B	96	0	13	180	289
	C	0	15	0	4	19
	D	20	151	1	0	172
	Tot.	116	286	14	230	646

Traffic Lane Flows

Lane	Scenario 2: Peak Construction Activities
Junction: Main Street Church Street Junction	
1/1	172
2/1	19
3/1	166
4/1	289
5/1	239
6/1	186
7/1	286
8/1	116
9/1	230
10/1	14
11/1	239
12/1	186

Lane Saturation Flows

Junction: Main Street Church Street Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1	3.25	0.00	Y	Arm 10 Right Arm 12 Ahead	Inf Inf	0.6 % 99.4 %	1940	1940
2/1 (The Boreen)	3.25	0.00	Y	Arm 9 Left Arm 12 Right	Inf Inf	21.1 % 78.9 %	1940	1940
3/1 (Church Street)	3.25	0.00	Y	Arm 7 Left Arm 11 Right	Inf Inf	72.3 % 27.7 %	1940	1940
4/1 (Main Street East)	3.25	0.00	Y	Arm 8 Right Arm 11 Ahead	Inf Inf	33.2 % 66.8 %	1940	1940
5/1	3.25	0.00	Y	Arm 9 Ahead Arm 10 Left	Inf Inf	94.6 % 5.4 %	1940	1940
6/1	3.25	0.00	Y	Arm 7 Ahead Arm 8 Left	Inf Inf	89.2 % 10.8 %	1940	1940
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Main Street West Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	Infinite Saturation Flow						Inf	Inf
12/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 1: 'Baseline' (FG1: 'Baseline', Plan 1: 'Network Control Plan 1')

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	17.7%
Main Street Church Street Junction	-	-	N/A	-	-		-	-	-	-	-	-	17.7%
1/1	Right Ahead	O	N/A	N/A	-		-	-	-	173	1940	1933	8.9%
2/1	The Boreen Left Right	O	N/A	N/A	-		-	-	-	19	1940	1063	1.8%
3/1	Church Street Left Right	O	N/A	N/A	-		-	-	-	96	1940	1188	8.1%
4/1	Main Street East Right Ahead	O	N/A	N/A	-		-	-	-	289	1940	1631	17.7%
5/1	Ahead Left	U	N/A	N/A	-		-	-	-	204	1940	1940	10.5%
6/1	Ahead Left	U	N/A	N/A	-		-	-	-	187	1940	1940	9.6%
7/1		U	N/A	N/A	-		-	-	-	252	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	116	Inf	Inf	0.0%
9/1	Main Street West	U	N/A	N/A	-		-	-	-	195	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	14	Inf	Inf	0.0%
11/1	Ahead	U	N/A	N/A	-		-	-	-	204	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	187	Inf	Inf	0.0%

Full Input Data And Results

[illegible]

Full Input Data And Results

Scenario 2: 'Peak Construction Activities' (FG2: 'Peak construction activities', Plan 1: 'Network Control Plan 1')

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	17.7%
Main Street Church Street Junction	-	-	N/A	-	-		-	-	-	-	-	-	17.7%
1/1	Right Ahead	O	N/A	N/A	-		-	-	-	172	1940	1933	8.9%
2/1	The Boreen Left Right	O	N/A	N/A	-		-	-	-	19	1940	1025	1.9%
3/1	Church Street Left Right	O	N/A	N/A	-		-	-	-	166	1940	1129	14.7%
4/1	Main Street East Right Ahead	O	N/A	N/A	-		-	-	-	289	1940	1631	17.7%
5/1	Ahead Left	U	N/A	N/A	-		-	-	-	239	1940	1940	12.3%
6/1	Ahead Left	U	N/A	N/A	-		-	-	-	186	1940	1940	9.6%
7/1		U	N/A	N/A	-		-	-	-	286	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	116	Inf	Inf	0.0%
9/1	Main Street West	U	N/A	N/A	-		-	-	-	230	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	14	Inf	Inf	0.0%
11/1	Ahead	U	N/A	N/A	-		-	-	-	239	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	186	Inf	Inf	0.0%

Full Input Data And Results

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Appendix 14.2

Temporary Construction Traffic Access Junction

Keerglen Wind Farm

Mayo Planning Authority - Inspection Purposes Only



No.	Revision	Date	By	Chk'd	App'd
P0	ISSUED FOR DISCUSSION	11/06/2024	AC	JA	JB
P1	JUNCTION LOCATION AMENDED	25/06/2024	JA	JA	JB

No.	Revision	Date	By	Chk'd	App'd
P0	ISSUED FOR DISCUSSION	11/06/2024	AC	JA	JB
P1	JUNCTION LOCATION AMENDED	25/06/2024	JA	JA	JB



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UK t +44 (0) 113 360 1720

Drawn	Designed	Checked	Approved	Suitability Code - Description
AC	AC	JA	JB	S4 - Stage Approval

Project Stage	PLANNING				
Project Title	Keerglen Wind Farm				
Drawing Title	TEMPORARY CONSTRUCTION TRAFFIC ACCESS JUNCTION				
Drawing Number	Project	Originator	Volume	Location	Type Role Number
KWF	-	ROD	-	GEN	- SW_AE - SK - CH - 300101
Scale (A1)	1:500	Date:	JUNE'2024	Job No:	16,226
				Rev:	P1

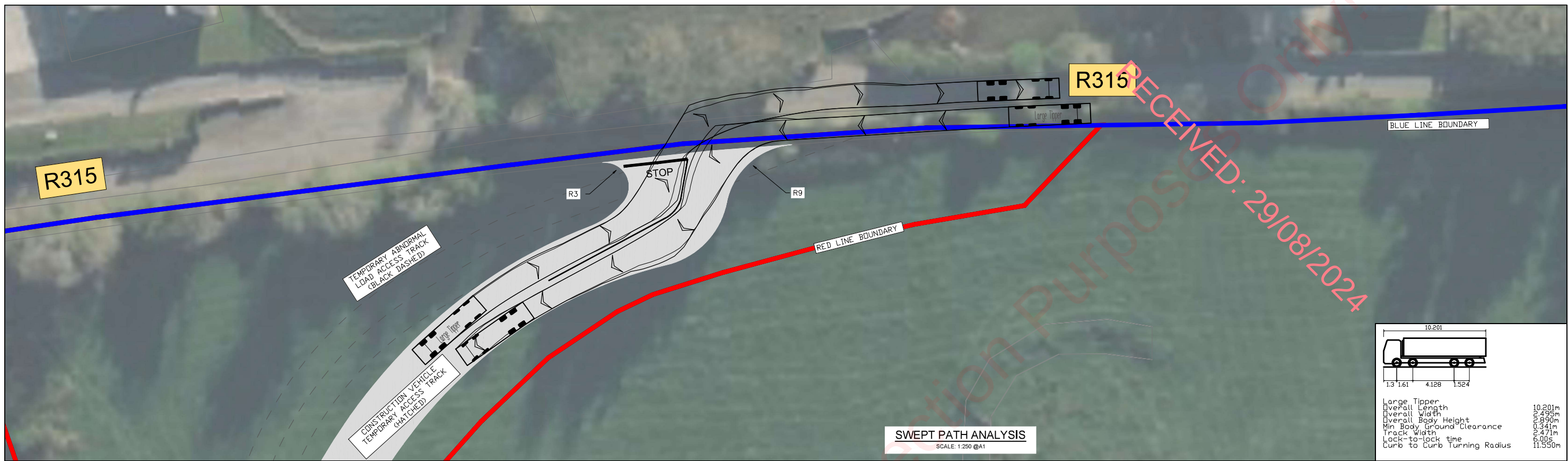
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Appendix 14.3

Temporary Construction Traffic Access Junction Analysis

Keerglen Wind Farm

Mayo Planning Authority - Inspection Purposes Only



No.	Revision	Date	By	Chk'd	App'd
P1	JUNCTION LOCATION AMENDED	25/06/2024	JA	JA	JB



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Drawn	Designed	Checked	Approved	Suitability Code - Description
AC	AC	JA	JB	S4 - Stage Approval

Project Stage	PLANNING
Project Title	Keerglen Wind Farm
Drawing Title	TEMPORARY CONSTRUCTION TRAFFIC ACCESS JUNCTION ANALYSIS
Drawing Number	Project - KWF - ROD - GEN - SW_AE - SK - CH - 300102
Scale (A1)	AS SHOWN
Date	JUNE 2024
Job No.	16.226
Rev.	P1

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