

## Appendix G

### *Allocation of Future Growth in Naas and Environs*

# Technical Note 6

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Project:	<b>M7 Naas Newbridge Bypass Upgrade Scheme</b>	Job No:	<b>60241946</b>
Subject:	<b>Future Year Forecasting &amp; Demand Allocation</b>		
Prepared by:	<b>Declan Keenan</b>	Date:	<b>29<sup>th</sup> April 2013</b>
Checked by:	<b>Philip Shiels</b>	Date:	<b>29<sup>th</sup> April 2013</b>
Approved by:	<b>Dan Brennan</b>	Date:	<b>29<sup>th</sup> April 2013</b>

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## 1.0 Overview

The function of this Technical Note is to assess the future land use zonings within the key urban areas of Naas, Sallins, Johnstown and Kill. This assessment will inform the allocation of future growth in the traffic model used as part of the design and appraisal of the following schemes:

- M7 Naas Newbridge Bypass Upgrade Scheme (Sanctioning Authority - NRA); and
- M7 Osberstown Interchange and Sallins Bypass (Sanctioning Authority - DTTAS).

The urban areas outlined above are all contained within the NRA National Traffic Model (NTM) zone 504, which is illustrated in Figure 1.1. Data on the land use zonings in NTM zone 504 are based on data from the following publications:

- Naas Local Area Plan (LAP) 2011 – 2017;
- Kildare County Development Plan (CDP) 2011 – 2017;
- Kildare County Development Plan 2011 – 2017 Variation No.1 (To Incorporate Small Towns) June 2012 (Kill); and
- Sallins Local Area Plan (LAP) 2009.

Both schemes are being appraised in accordance with the NRA Project Appraisal Guidelines (PAG).

## 2.0 Background

The NTM is a strategic traffic model of the national and regional road network and is used in the appraisal of national road schemes. The NTM consists of 874 zones, one of which covers the Naas area and its environs (Zone 504).

To inform the design and appraisal of a national road scheme the NRA provide growth factors for each zone in the NTM up to 2040 for three future growth scenarios, namely Low, Medium and High. Each scheme must be appraised based on the growth factors supplied by the NRA which are specified in the PAG.

## 3.0 Assessment

This Technical Note will focus on the following 3 key process:

- (1) Assess the quantum of additional traffic generated by the expected build out of the zoned lands in the 2011 – 2017 Naas LAP and 2011 – 2017 Kildare County Development Plan that are located within the NTM Zone 504;

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- (2) Compare the additional traffic in NTM Zone 504 generated by the zoned lands from (1) against the additional traffic estimated by the growth factors outlined in the PAG for NTM Zone 504;
- (3) Use the zoning of lands in the Naas LAP and Kildare County Development Plan to distribute the additional demand for NTM zone 504, for each NRA growth scenario.

The proposed design year for both schemes is 2030; therefore the NRA growth scenarios have been developed to represent the demand for this year. Although the land-use zonings for the Naas LAP and Kildare CDP cover the period 2011 -2017, the actual full build of both plans will be at a point well beyond the horizon of the current plans, and for the purpose of this exercise, has been assumed to be in line with the scheme design year.

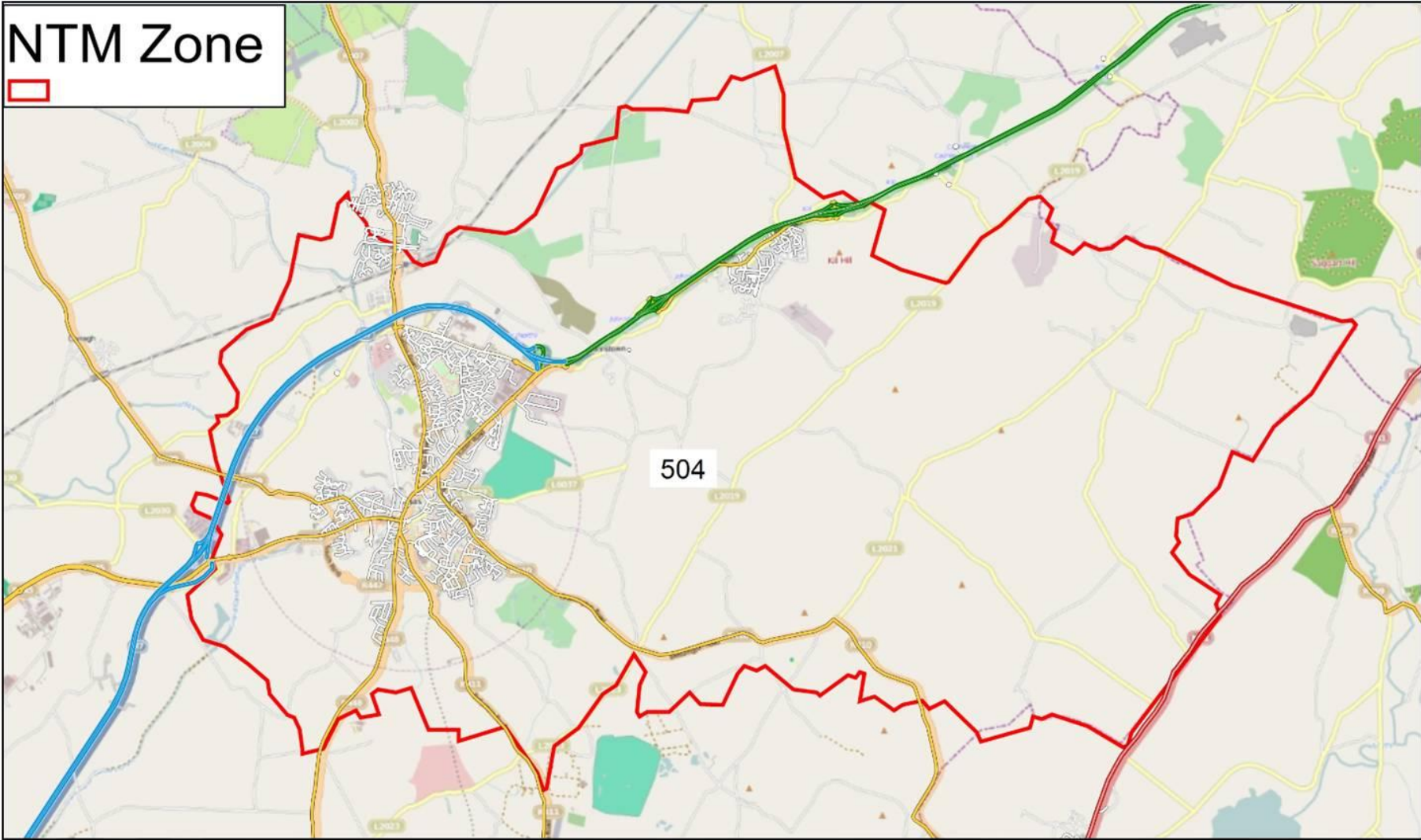


Figure 1.1 – NTM Zone 504 Area

## 4.0 Naas Local Area Plan 2011 – 2017

The zoning objectives of the Naas Local Area Plan (LAP) 2011 – 2017 and the quantum of zoned lands (Hectares) are presented in Table 4.1. The zoning map for the Naas LAP is illustrated in Figure 4.1

The table also illustrates the zoned lanes of the key development area in the Naas LAP known as the North Western Quadrant (NWQ). The NWQ is illustrated in Figure 4.2

Table 4.1 - Naas LAP Zoning Objectives

Naas LAP		Hectares (incl. NWQ)			North West Quadrant (Ha)
Ref	Specific Zoning Objective	Total	Existing	New	
A	Town Centre	47	47	-	-
B	Existing/Infill Residential	388	388	-	-
C	New Residential	136	-	136	25
E	Community and Education	56	29	27	21
F	Open Space and Amenity	177	177	-	-
G	Urban Village	5	-	5	5
H	Industry and Warehousing	70	60	10	2
I	Agriculture	577	577	-	-
J	Transport and Utilities	2	2	-	-
K	Commercial and Residential	5	5	-	-
L	Leisure and Amenity	4	2	2	-
M	Future Park/Green Belt	87	87	-	-
N	Neighbourhood Centre	4	3	1	-
Q	Enterprise and Employment	119	46	73	69
R	Retail/Commercial	9	3	2	-
U	Utilities/Services	2	2	-	-
W	White Land*	37	-	37	37
<b>Total (Ha)</b>		<b>1725</b>	<b>1428</b>	<b>293</b>	<b>159</b>

\* Zoning Objective of White Land is to 'ensure the consolidation of future development outside the period of this plan'. Therefore it is not considered as part of this assessment.

In order to estimate the potential impact of the zoning objectives of the LAP in terms of the generation of additional traffic the following methodology was applied:

- Trip rates for each land use in the Naas LAP were established using the TRICS database;
- These trips rates were then applied to the quantum of undeveloped lands in the Naas LAP;
- A number of assumptions were then applied to the zones lands, these include:
  - Plot Ratios per m<sup>2</sup> of GFA;
  - Housing Density per Hectare;
  - 80% full build out of zoned lands; and
  - Impact of shared and/or linked trips (22.5%)

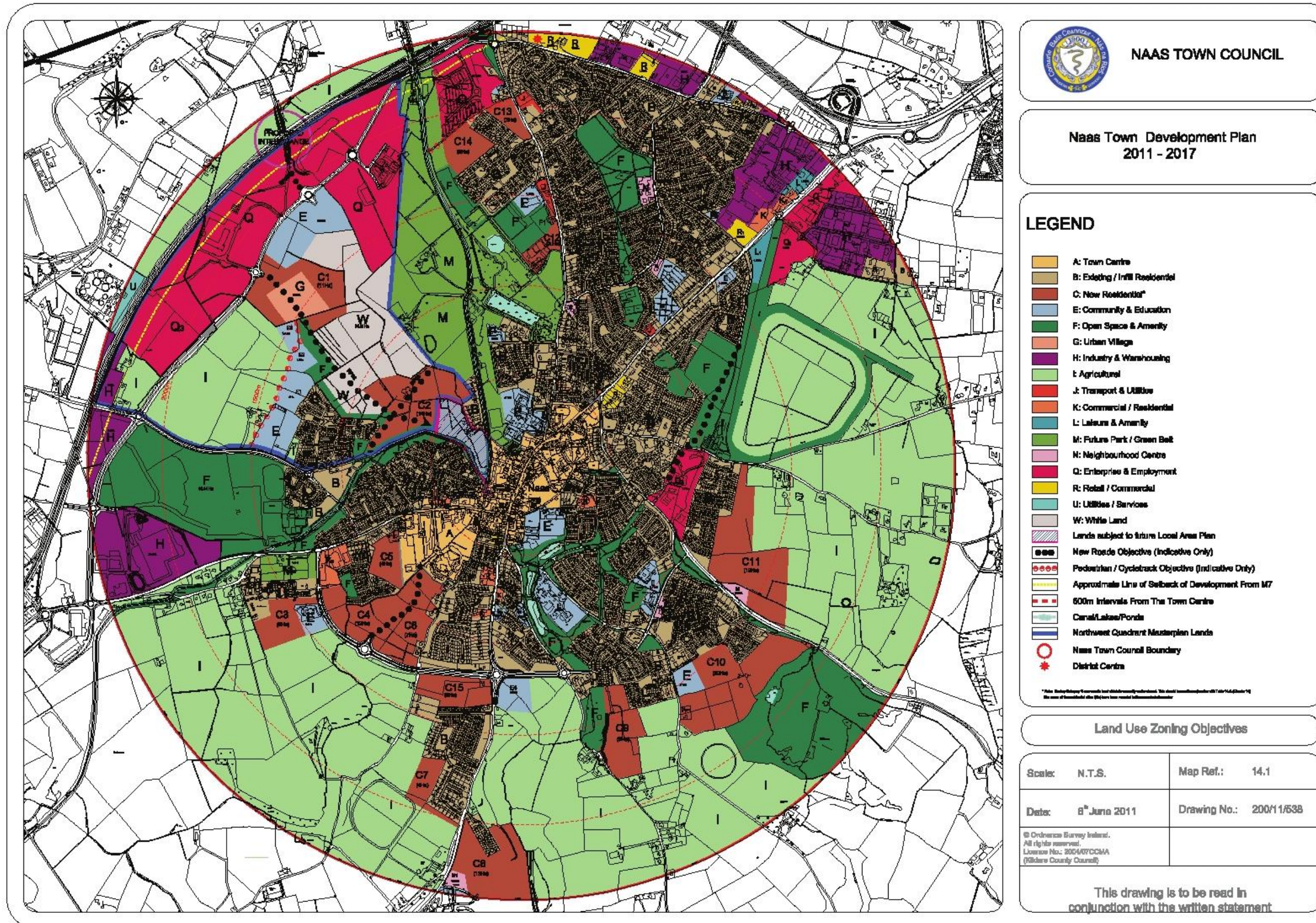


Figure 4.1: Naas LAP 2011 – 2017 Zoning Objectives

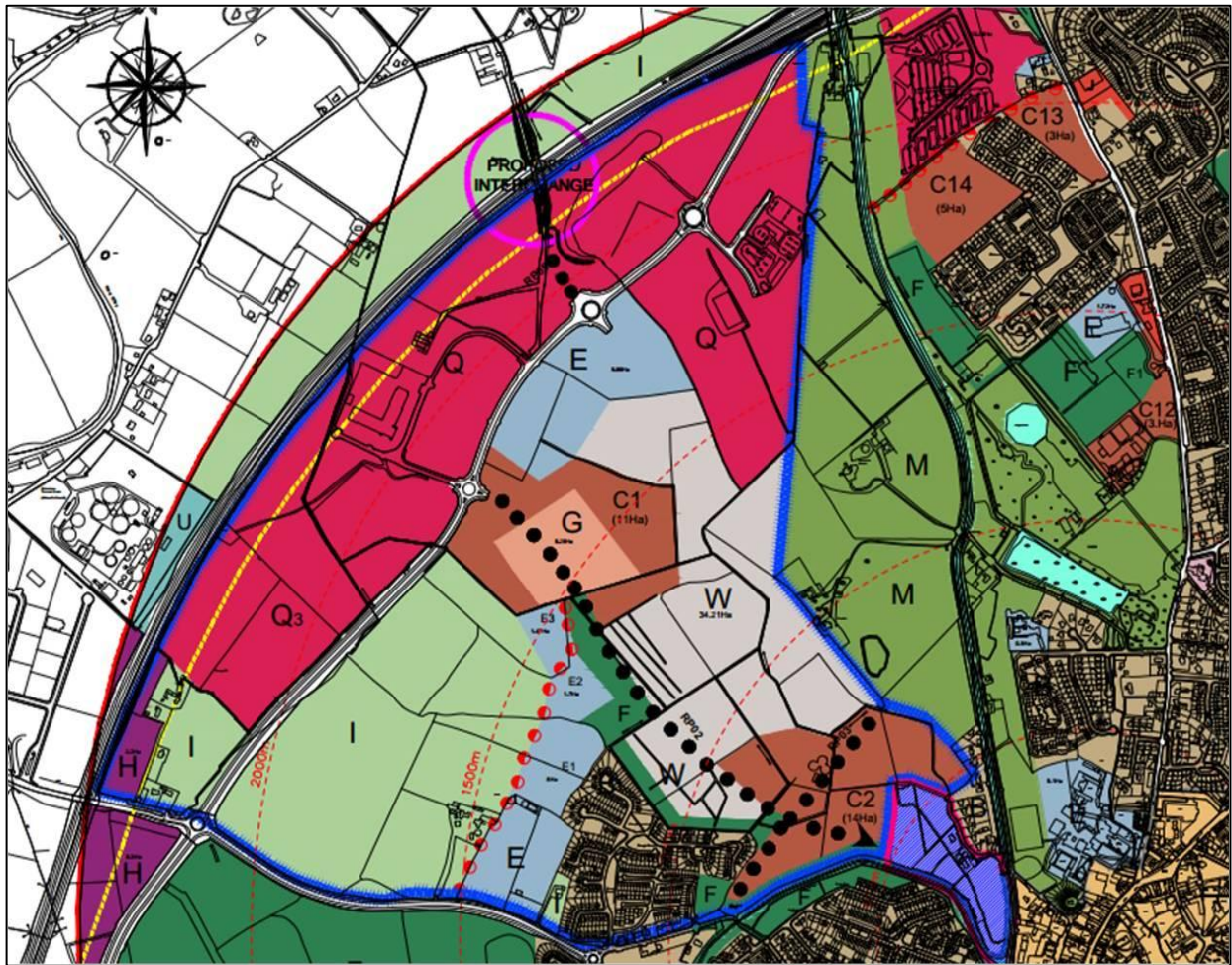


Figure 2.2 – Naas LAP ‘North Western Quadrant’ Zoning Objectives

4.1 Trip Rates

Trip rates for each land use objective of the LAP are provided in Table 4.2. Details of the generation of these trip rates are provided in Appendix A of this Technical Note.

Table 4.2 - Naas LAP Land Use Vehicular Trip Rates

Naas LAP		AM Peak (08:00 – 09:00)			Inter Peak (13:00 – 14:00)			PM Peak (17:00 – 18:00)		
Ref	Land Use	IN	Out	Total	IN	Out	Total	IN	Out	Total
C	New Residential	0.19	0.41	0.61	0.22	0.22	0.44	0.43	0.27	0.70
Q	Enterprise and Employment	0.99	0.16	1.15	0.42	0.46	0.88	0.20	0.94	1.14
E	Community & Education	2.91	1.97	4.88	0.65	0.38	1.03	0.20	0.94	1.14
H	Industrial/Warehousing	0.37	0.17	0.54	0.27	0.27	0.53	0.09	0.32	0.41
G	Urban Village	1.57	1.10	2.66	1.16	1.05	2.21	1.50	1.83	3.33
R	Retail Commercial	1.99	1.52	3.51	4.74	4.87	9.61	3.92	4.30	8.23

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## 4.3 Naas Local Area Plan Additional Traffic

The additional traffic generated as a result of the zoning objectives of the Naas LAP are presented in Table 4.3.

Table 4.3 – Naas LAP Additional Traffic

Naas Local Area Plan				Trips									
Zoning Objectives	Area (Ha)	Plot Ratio/House Density (Units or m <sup>2</sup> GFA/Ha)	Development Schedule (Units or Ha)	AM Peak			Inter Peak			PM Peak			
				IN	Out	Total	IN	Out	Total	IN	Out	Total	
New Residential	136	25	2,720	520	1,126	1,646	611	588	1,198	1,164	737	1,901	
Enterprise and Employment	73	0.25	16	1,448	229	1,678	619	672	1,291	298	1,369	1,667	
Community & Education	27	0.10	2	629	426	1,055	140	82	223	44	203	247	
Industrial/Warehousing	10	0.25	2	74	33	107	54	53	107	18	63	82	
Urban Village	5	0.25	1	157	110	266	116	105	221	150	183	333	
Retail Commercial	2	0.25	0.4	80	61	140	190	195	384	157	172	329	
<b>Total</b>	<b>253</b>			<b>Sub-Total</b>	<b>2,907</b>	<b>1,985</b>	<b>4,892</b>	<b>1,729</b>	<b>1,695</b>	<b>3,424</b>	<b>1,832</b>	<b>2,727</b>	<b>4,559</b>
				<b>Total*</b>	<b>2,253</b>	<b>1,538</b>	<b>3,791</b>	<b>1,340</b>	<b>1,314</b>	<b>2,654</b>	<b>1,419</b>	<b>2,113</b>	<b>3,533</b>

\*Takes into account the assumption of 22.5% shared or linked trips.



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## 4.4 North Western Quadrant Additional Traffic

The additional traffic generated as a result of the zoning objectives of the North Western Quadrant are presented in Table 4.4.

Table 4.4 – North Western Quadrant Additional Traffic

North Western Quadrant				Trips								
Zoning Objectives	Area (Ha)	Plot Ratio/House Density (Units or m <sup>2</sup> GFA/Ha)	Development Schedule (Units or Ha)	AM Peak			Inter Peak			PM Peak		
				IN	Out	Total	IN	Out	Total	IN	Out	Total
New Residential	25	25	2,720	96	207	303	112	108	220	214	136	350
Enterprise and Employment	69	0.25	16	1,369	217	1,586	585	635	1,221	282	1,294	1,576
Community & Education	21	0.10	2	489	332	821	109	64	173	34	158	192
Industrial/Warehousing	2	0.25	2	16	7	24	12	12	23	4	14	18
Urban Village	5	0.25	1	157	110	266	116	105	221	150	183	333
<b>Total</b>	<b>122</b>		<b>Sub-Total</b>	<b>2,126</b>	<b>872</b>	<b>2,998</b>	<b>934</b>	<b>924</b>	<b>1,859</b>	<b>684</b>	<b>1,784</b>	<b>2,468</b>
			<b>Total*</b>	<b>1,648</b>	<b>676</b>	<b>2,324</b>	<b>724</b>	<b>716</b>	<b>1,440</b>	<b>530</b>	<b>1,383</b>	<b>1,913</b>
			<b>% of LAP</b>	73%	44%	61%	54%	55%	54%	37%	65%	54%

\*Takes into account the assumption of 22.5% shared or linked trips.

## 4.5 Kildare County Development Plan 2011 - 2017

There are 4 other urban areas that are also included in Zone 504, Kill, Johnstown, Naas Environs and Sallins (part of). The future land use objectives of these areas are outlined in the Kildare County Development Plan 2011 – 2017 and Sallins Local Area Plan 2009. These areas and their land uses are illustrated in Appendix B.

### 4.5.1 Naas Environs

The environs of Naas are illustrated in Figures A, B and C in Appendix B. There are 3 distinct areas as follows:

- Naas North;
- Naas South; and
- Naas West – (located outside of zone 504, therefore not included in this assessment)

Although zoning objective are illustrated on each of the figures for the 3 areas which cover the 'Naas Environs' the actual quantum of development in terms of area is not provided. Therefore a number of assumptions have been made as to the likely quantum of development that may generate traffic for each area:

- Naas North
  - Industry & Warehousing – 3Ha
- Naas South
  - Low Density Residential – 5Ha (40 units)
  - Community and Education – 4Ha

### 4.5.2 Johnstown

The zoning objectives of Johnstown village are illustrated in Figure D in Appendix B. The following land uses are taken into consideration:

- Johnstown
  - New Residential – 4.1Ha (82 units)

### 4.5.3 Kill

The level of development in Kill is outlined in the following variation to the County Development Plan:

- Kildare County Development Plan 2011 – 2017 Variation No.1 (To Incorporate Small Towns) June 2012 (Kill).

It indicates that there will be an additional 149 residential units provided by 2017 under the existing plan.

### 4.5.4 Sallins (part of)

An area of Sallins to the south of the rail line is included in NTM Zone 504 and is taken into consideration in this assessment. There is an area of land zoned new residential to the south of the rail line and it is estimated that there will be approximately 75 units in this area.

The additional trips generated by these areas are presented in Table 4.5. The total number of additional trips generated in zone 504 is illustrated in Table 4.6

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Table 4.5 – Zone 504 Additional Traffic (Not Included in Naas LAP)

Naas Local Area Plan				Trips								
Zoning Objectives	Area (Ha)	Plot Ratio/House Density (Units or m <sup>2</sup> GFA/Ha)	Development Schedule (Units or Ha)	AM Peak			Inter Peak			PM Peak		
				IN	Out	Total	IN	Out	Total	IN	Out	Total
New Residential	-	25	346	66	143	209	78	75	152	148	94	242
Community & Education	4	0.10	0.32	93	63	156	21	12	33	7	30	37
Industrial/Warehousing	3	0.25	2	22	10	32	16	16	32	6	19	24
<b>Total</b>	-		<b>Sub-Total</b>	<b>181</b>	<b>216</b>	<b>398</b>	<b>115</b>	<b>103</b>	<b>217</b>	<b>160</b>	<b>143</b>	<b>303</b>
			<b>Total*</b>	<b>141</b>	<b>168</b>	<b>308</b>	<b>89</b>	<b>80</b>	<b>168</b>	<b>124</b>	<b>111</b>	<b>235</b>

\*Takes into account the assumption of 22.5% shared or linked trips.

Table 4.6 – Zone 504 Total Additional Trips

Zone 504	Trips								
Areas	AM Peak			Inter Peak			PM Peak		
	IN	Out	Total	IN	Out	Total	IN	Out	Total
Naas LAP (excl. NWQ)	605	876	1,490	640	607	1,231	915	752	1,667
North Western Quadrant	1,648	676	2,324	724	716	1,440	530	1,383	1,913
Areas not included in LAP	141	168	308	89	80	168	124	111	235
<b>Total</b>	<b>2,393</b>	<b>1,719</b>	<b>4,122</b>	<b>1,453</b>	<b>1,403</b>	<b>2,840</b>	<b>1,569</b>	<b>2,245</b>	<b>3,815</b>

## 5.0 Comparison of Future NTM Growth Scenarios & Land Use Zoning

Table 5.1 below shows the level of additional trips forecast for NTM Zone 504 for each NRA future growth scenario in the scheme Design Year (2030). The NRA growth scenarios are compared against the potential trips additional trips generated by the build out of the land zoned under the existing Naas LAP and Kildare CDP.

Table 5.1 - Zone 504 Additional Trips Comparison

Growth Scenario	Additional Trips								
	AM Peak			Inter Peak			PM Peak		
	In	Out	Total	In	Out	Total	In	Out	Total
NRA Low Growth (2030)	930	1,568	2,498	497	755	1,252	1,706	980	2,686
NRA Medium Growth (2030)	1,106	1,720	2,826	630	883	1,513	1,873	1,160	3,033
NRA High Growth (2030)	1,865	2,324	4,189	1,186	1,383	2,568	2,530	1,957	4,487
Land Use Zoning	2,393	1,719	4,122	1,453	1,403	2,840	1,569	2,245	3,815

The table shows that overall the additional trips forecast by the build out of the zoned lands in the LAP and CDP are reflective of the NRA High Growth scenario.

It should be noted that although the NRA High growth scenario overall has more outbound (origin) demand than inbound (destination) demand in the AM, this is not reflective of all the sub-zones with Zone 504. The allocation of demand for the NWQ is reflective of its high employment and education demand, with higher inbound trips than outbound in the AM and vice versa in the PM. This is presented in further detail in Section 6.

## 6.0 Allocation of NTM Future Growth

In the traffic model used to assess both schemes, NTM Zone 504 is split into a total of 16 sub-zones (50401 to 50416) as illustrated in Figure 6.1. The overall growth for Zone 504 in each NRA growth scenario is allocated between these sub-zones based on the land use zoning identified in each sub-zone and is presented in Table 6.1.

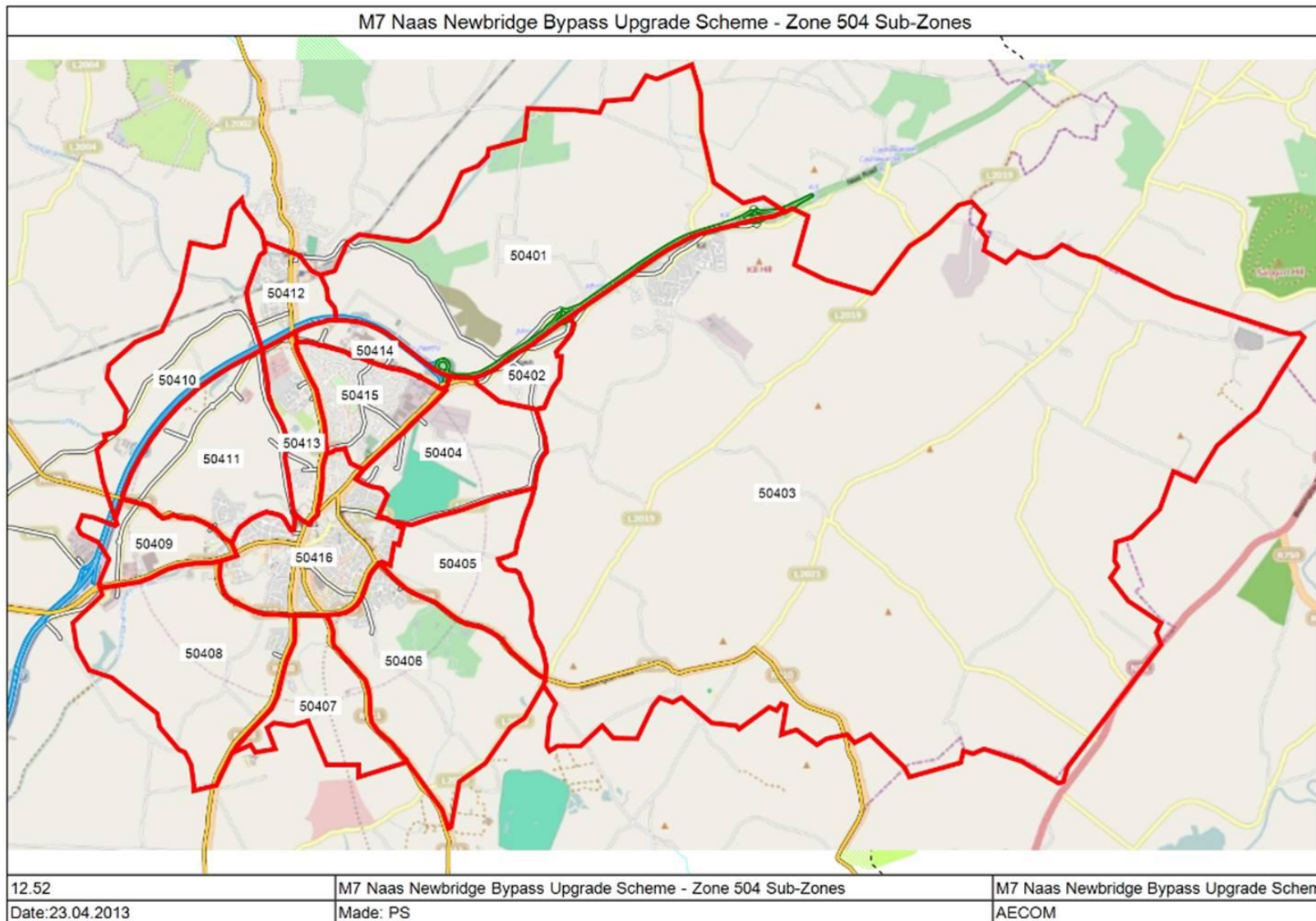


Figure 6.1 – Zone 504 (Sub-Zones)

Table 6.1– Allocation of Additional Traffic to Zone 504 Sub-Zones

Zone 504 Sub-Zones	Trips								
	AM Peak			Inter Peak			PM Peak		
	IN	Out	Total	IN	Out	Total	IN	Out	Total
50401	1%	2%	1%	1%	1%	1%	2%	1%	1%
50402	0%	0%	0%	0%	0%	0%	0%	0%	0%
50403	1%	3%	2%	2%	2%	2%	3%	1%	2%
50404	3%	1%	2%	2%	2%	2%	1%	3%	2%
50405	2%	7%	4%	5%	5%	5%	8%	4%	5%
50406	5%	12%	8%	8%	7%	7%	13%	6%	9%
50407	8%	11%	9%	6%	5%	5%	7%	5%	6%
50408	2%	6%	4%	4%	4%	4%	7%	3%	5%
50409	2%	1%	2%	2%	2%	2%	1%	2%	1%
50410	0%	0%	0%	0%	0%	0%	0%	0%	0%
50411	69%	40%	57%	51%	51%	51%	34%	62%	51%
50412	0%	1%	1%	1%	1%	1%	2%	1%	1%
50413	1%	4%	3%	3%	3%	3%	5%	2%	3%
50414	1%	0%	1%	1%	1%	1%	0%	1%	1%
50415	3%	3%	3%	10%	11%	11%	8%	6%	7%
50416	3%	9%	5%	6%	6%	6%	10%	4%	7%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

## 7.0 Conclusions

The key conclusions of the assessment are outlined below:

- The NRA high growth scenario is comparable to the forecasts based on the land use zonings in the Naas LAP and Kildare CDP; and
- The allocation of growth for the local area model zones that represent Naas, Johnstown, Kill and Sallins (part of) are based on the land use zoning objectives outlined in the Naas LAP and Kildare CDP.



# APPENDIX A

TRICS 2013(a)v6.11.1

Trip Rate Parameter: Gross floor area

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use 02 - EMPLOYMENT  
Category B - BUSINESS PARK  
VEHICLES

Selected regions and areas:

10 WALES  
CF CARDIFF 1 days  
CP CAERPHILL 1 days  
11 SCOTLAND  
EB CITY OF ED 1 days  
12 CONNAUGHT  
GA GALWAY 1 days  
14 LEINSTER  
WT WESTMEATH 1 days  
15 GREATER DUBLIN  
DL DUBLIN 2 days  
16 ULSTER (REPUBLIC OF IRELAND)  
DN DONEGAL 1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area  
Actual Range: 5985 to 46175 (units: sqm)  
Range Selected by User: 2587 to 116000 (units: sqm)

Public Transport Provision:  
Selection by: Include all surveys

Date Range: 01/01/04 to 12/09/12

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:  
Monday 1 days  
Tuesday 3 days

Wednesday 4 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count 8 days

Directional ATC Count 0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff whilst ATC surveys are undertaken using machines.

Selected Locations:

Town Centre 0

Edge of Town Centre 0

Suburban Area (PPS6 Out of Ce 3

Edge of Town 5

Neighbourhood Centre (PPS6 L 0

Free Standing (PPS6 Out of Tow 0

Not Known 0

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing Edge of Town Suburban Area Neighbourhood Centre Edge of Town Centre Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Zone 3

Commercial Zone 2

Development Zone 0

Residential Zone 0

Retail Zone 0

Built-Up Zone 0

Village 0

Out of Town 0

High Street 0

No Sub Category 3

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone Industrial Zone Development Zone Residential Zone Retail Zone Built-Up Village Zone Out of Town High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

B1 7 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose which can be found within the Library module of TRICS®.

Population within 1 mile:

1,001 to 5,000	2 days
5,001 to 10,000	1 days
10,001 to 15,000	2 days
15,001 to 20,000	1 days
20,001 to 25,000	1 days
25,001 to 50,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	2 days
50,001 to 75,000	1 days
100,001 to 125,000	1 days
125,001 to 250,000	1 days
250,001 to 500,000	1 days
500,001 or More	2 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	5 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	1 days
No	7 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

- 1 CF-02-B-03 BUSINESS F CARDIFF  
FORTRAN ROAD  
ST MELLONS  
CARDIFF  
Edge of Town  
Industrial Zone  
Total Gross floor area: 9520 sqm  
Survey date: MONDAY 18/10/2010 Survey Typ MANUAL
- 2 CP-02-B-01 BUSINESS F CAERPHILLY  
VAN ROAD

CAERPHILLY  
Edge of Town  
Commercial Zone  
Total Gross floor area: 14450 sqm  
Survey date: TUESDAY 17/07/2012 Survey Typ MANUAL  
3 DL-02-B-02 BUSINESS F DUBLIN  
BURTON HALL AVENUE  
LEOPARDSTOWN  
DUBLIN  
Edge of Town  
Commercial Zone  
Total Gross floor area: 5985 sqm  
Survey date: WEDNESD/ 12/05/2010 Survey Typ MANUAL  
4 DL-02-B-04 BUSINESS F DUBLIN  
TANEY DRIVE  
DUNDRUM  
DUBLIN  
Suburban Area (PPS6 Out of Centre)  
No Sub Category  
Total Gross floor area: 20530 sqm  
Survey date: WEDNESD/ 12/09/2012 Survey Typ MANUAL  
5 DN-02-B-01 BUSINESS F DONEGAL  
N56  
KNOCKNAMONA  
LETTERKENNY  
Edge of Town  
No Sub Category  
Total Gross floor area: 7951 sqm  
Survey date: WEDNESD/ 30/09/2009 Survey Typ MANUAL  
6 EB-02-B-03 BUSINESS F CITY OF EDINBURGH  
LOGIE GREEN ROAD  
  
EDINBURGH  
Suburban Area (PPS6 Out of Centre)  
Industrial Zone  
Total Gross floor area: 6675 sqm  
Survey date: TUESDAY 01/05/2007 Survey Typ MANUAL  
7 GA-02-B-01 BUSINESS F GALWAY  
WELLPARK ROAD

GALWAY  
 Suburban Area (PPS6 Out of Centre)  
 Industrial Zone  
 Total Gross floor area: 46175 sqm  
 Survey date: WEDNESDAY 20/09/2006 Survey Typ MANUAL  
 8 WT-02-B-01 BUSINESS/ WESTMEATH  
 DUBLIN ROAD  
 GARRycastle  
 ATHLONE  
 Edge of Town  
 No Sub Category  
 Total Gross floor area: 22150 sqm  
 Survey date: TUESDAY 19/06/2007 Survey Typ MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site it displays a unique site reference code and site address the selected trip rate calculation parameter and its value the day of the week and date of each survey and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK

Calculation Factor: 100 sqm

Count Type: VEHICLES

Time Range	ARRIVALS			DEPARTURES			TOTALS			
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	
00:00-00:30										
00:30-01:00										
01:00-01:30										
01:30-02:00										
02:00-02:30										
02:30-03:00										
03:00-03:30										
03:30-04:00										
04:00-04:30										
04:30-05:00										
05:00-05:30										
05:30-06:00										
06:00-06:30										
06:30-07:00										
07:00-07:30		8	16680	0.129	8	16680	0.026	8	16680	0.155
07:30-08:00		8	16680	0.312	8	16680	0.054	8	16680	0.366
08:00-08:30		8	16680	0.45	8	16680	0.077	8	16680	0.527

08:30-09:00	8	16680	0.542	8	16680	0.08	8	16680	0.622
09:00-09:30	8	16680	0.474	8	16680	0.112	8	16680	0.586
09:30-10:00	8	16680	0.281	8	16680	0.118	8	16680	0.399
10:00-10:30	8	16680	0.19	8	16680	0.101	8	16680	0.291
10:30-11:00	8	16680	0.121	8	16680	0.103	8	16680	0.224
11:00-11:30	8	16680	0.094	8	16680	0.085	8	16680	0.179
11:30-12:00	8	16680	0.127	8	16680	0.145	8	16680	0.272
12:00-12:30	8	16680	0.13	8	16680	0.232	8	16680	0.362
12:30-13:00	8	16680	0.226	8	16680	0.27	8	16680	0.496
13:00-13:30	8	16680	0.257	8	16680	0.247	8	16680	0.504
13:30-14:00	8	16680	0.235	8	16680	0.172	8	16680	0.407
14:00-14:30	8	16680	0.182	8	16680	0.211	8	16680	0.393
14:30-15:00	8	16680	0.139	8	16680	0.133	8	16680	0.272
15:00-15:30	8	16680	0.128	8	16680	0.166	8	16680	0.294
15:30-16:00	8	16680	0.112	8	16680	0.139	8	16680	0.251
16:00-16:30	8	16680	0.122	8	16680	0.269	8	16680	0.391
16:30-17:00	8	16680	0.094	8	16680	0.367	8	16680	0.461
17:00-17:30	8	16680	0.102	8	16680	0.524	8	16680	0.626
17:30-18:00	8	16680	0.102	8	16680	0.414	8	16680	0.516
18:00-18:30	8	16680	0.053	8	16680	0.222	8	16680	0.275
18:30-19:00	8	16680	0.044	8	16680	0.142	8	16680	0.186
19:00-19:30									
19:30-20:00									
20:00-20:30									
20:30-21:00									
21:00-21:30									
21:30-22:00									
22:00-22:30									
22:30-23:00									
23:00-23:30									
23:30-24:00									
Daily Trip Rates:			4.646			4.409			9.055

Parameter summary

Trip rate parameter range selec 5985 - 46175 (units: sqm)

Survey date date range: 01/01/04 - 12/09/12

Number of weekdays (Monday: 8

Number of Saturdays: 0

Number of Sundays: 0

Surveys manually removed from: 1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first followed by the range of minimum and maximum survey dates selected by the user. Then the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.



TRICS 2013(a)v6.11.1

Trip Rate Parameter: Number of dwellings

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use 03 - RESIDENTIAL  
Category A - HOUSES PRIVATELY OWNED  
VEHICLES

Selected regions and areas:

11 SCOTLAND		
AG	ANGUS	1 days
EA	EAST AYRSHIRE	1 days
HI	HIGHLAND	1 days
PK	PERTH & KINROSS	1 days
12 CONNAUGHT		
CS	SLIGO	1 days
GA	GALWAY	3 days
RO	ROSCOMMON	2 days
13 MUNSTER		
CR	CORK	1 days
WA	WATERFORD	1 days
14 LEINSTER		
KD	KILDARE	1 days
KK	KILKENNY	1 days
17 ULSTER (NORTHERN IRELAND)		
AN	ANTRIM	2 days
AR	ARMAGH	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of dwellings  
Actual Range: 7 to 185 (units: )  
Range Selected by User: 4 to 437 (units: )

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/04 to 07/09/12

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Tuesday	6 days
Wednesday	4 days
Thursday	7 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	17 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff whilst ATC surveys are undertaken using machines.

Selected Locations:

Town Centre	0
Edge of Town Centre	0
Suburban Area (PPS6 Out of Ce	11
Edge of Town	6
Neighbourhood Centre (PPS6 L	0
Free Standing (PPS6 Out of Tow	0
Not Known	0

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing Edge of Town Suburban Area Neighbourhood Centre Edge of Town Centre Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Zone	0
Commercial Zone	0
Development Zone	0
Residential Zone	12
Retail Zone	0
Built-Up Zone	1
Village	0
Out of Town	0
High Street	0
No Sub Category	4

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone Industrial Zone Development Zone Residential Zone Retail Zone Built-Up Village Zone Out of Town High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

C3 17 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose which can be found within the Library module of TRICS®.

Population within 1 mile:

1,001 to 5,000	6 days
5,001 to 10,000	2 days
10,001 to 15,000	4 days
15,001 to 20,000	3 days
25,001 to 50,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,000 or Less	2 days
5,001 to 25,000	2 days
25,001 to 50,000	3 days
50,001 to 75,000	5 days
75,001 to 100,000	3 days
100,001 to 125,000	1 days
250,001 to 500,000	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	14 days

This data displays the number of selected surveys within a radius of 5-miles of selected survey sites.

Travel Plan:

No	17 days
----	---------

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1 AG-03-A-01 BUNGALOWS/DET., ANGUS  
KEPTIE ROAD

ARBROATH  
Suburban Area (PPS6 Out of Centre)  
Residential Zone

Total Number of dwellings: 7

Survey date: TUESDAY 22/05/2012 Survey Typ MANUAL  
2 AN-03-A-06 SEMI-DET., NEWTO\ANTRIM  
GLENMOUNT ROAD

NEWTOWNABBEY  
Suburban Area (PPS6 Out of Centre)  
No Sub Category

Total Number of dwellings: 132  
Survey date: THURSDAY 10/06/2010 Survey Typ MANUAL  
3 AN-03-A-07 THE CEDARS, ANTRI ANTRIM  
CASTLE WAY

ANTRIM  
Suburban Area (PPS6 Out of Centre)  
Residential Zone

Total Number of dwellings: 55  
Survey date: TUESDAY 20/12/2011 Survey Typ MANUAL  
4 AR-03-A-01 MIXED HOUSES, LUF ARMAGH  
BIRCHDALE MANOR

LURGAN  
Edge of Town  
Residential Zone

Total Number of dwellings: 153  
Survey date: TUESDAY 15/06/2010 Survey Typ MANUAL  
5 CR-03-A-01 BUNGALOWS, CORK CORK  
CURRAGH ROAD  
TURNER'S CROSS  
CORK

Suburban Area (PPS6 Out of Centre)  
Residential Zone

Total Number of dwellings: 48  
Survey date: THURSDAY 08/12/2005 Survey Typ MANUAL  
6 CS-03-A-02 DETACHED, SLIGO SLIGO  
CHURCH HILL

SLIGO  
Suburban Area (PPS6 Out of Centre)  
No Sub Category

Total Number of dwellings: 35  
Survey date: THURSDAY 14/06/2007 Survey Typ MANUAL

7 EA-03-A-01 DETACHED, KILMA EAST AYRSHIRE  
TALISKER AVENUE

KILMARNOCK  
Edge of Town  
Residential Zone  
Total Number of dwellings: 39  
Survey date: THURSDAY 05/06/2008 Survey Typ MANUAL

8 GA-03-A-01 SEMI DETACHED, G/ GALWAY  
HEADFORD ROAD  
KNOCKAYARRAGH  
GALWAY  
Edge of Town  
No Sub Category  
Total Number of dwellings: 123  
Survey date: WEDNESDAY 20/09/2006 Survey Typ MANUAL

9 GA-03-A-02 TERRACED, GALWA\ GALWAY  
BOHERMORE  
TOWNPARKS  
GALWAY  
Suburban Area (PPS6 Out of Centre)  
Residential Zone  
Total Number of dwellings: 185  
Survey date: TUESDAY 19/09/2006 Survey Typ MANUAL

10 GA-03-A-03 SEMI DET./TERRACE GALWAY  
MONEENEGEISHA ROAD  
WELLPARK  
GALWAY  
Suburban Area (PPS6 Out of Centre)  
Built-Up Zone  
Total Number of dwellings: 24  
Survey date: WEDNESDAY 20/09/2006 Survey Typ MANUAL

11 HI-03-A-13 HOUSING, INVERNE: HIGHLAND  
KINGSMILLS ROAD

INVERNESS  
Edge of Town  
Residential Zone  
Total Number of dwellings: 9  
Survey date: THURSDAY 21/05/2009 Survey Typ MANUAL

12 KD-03-A-02 TERRACED/SEMI-D., KILDARE

CEDARWOOD PARK  
 MORRISTOWN ROAD  
 NEWBRIDGE  
 Suburban Area (PPS6 Out of Centre)  
 Residential Zone  
 Total Number of dwellings: 71  
 Survey date: TUESDAY 12/05/2009 Survey Typ MANUAL

13 KK-03-A-03 MIXED HOUSING, KI KILKENNY  
 FRESHFORD ROAD  
 FRIARSINCH  
 KILKENNY  
 Edge of Town  
 Residential Zone  
 Total Number of dwellings: 70  
 Survey date: WEDNESDAY 26/11/2008 Survey Typ MANUAL

14 PK-03-A-01 DETAC. & BUNGALC PERTH & KINROSS  
 TULLYLUMB TERRACE  
 GORNHILL  
 PERTH  
 Suburban Area (PPS6 Out of Centre)  
 Residential Zone  
 Total Number of dwellings: 36  
 Survey date: WEDNESDAY 11/05/2011 Survey Typ MANUAL

15 RO-03-A-01 MIXED HOUSES, RO: ROSCOMMON  
 GALWAY ROAD  
  
 ROSCOMMON  
 Edge of Town  
 No Sub Category  
 Total Number of dwellings: 80  
 Survey date: THURSDAY 07/05/2009 Survey Typ MANUAL

16 RO-03-A-02 SEMI D. & B'GLWS, I ROSCOMMON  
 SLIGO ROAD  
  
 BALLAGHADERREEN  
 Suburban Area (PPS6 Out of Centre)  
 Residential Zone  
 Total Number of dwellings: 31  
 Survey date: THURSDAY 14/07/2011 Survey Typ MANUAL

17 WA-03-A-01 DET./SEMI-DET., W/ WATERFORD  
 DUNMORE ROAD



Daily Trip Rates:

2.757

2.924

5.681

Parameter summary

Trip rate parameter range selected 7 - 185 (units: )

Survey date range: 01/01/04 - 07/09/12

Number of weekdays (Monday) 17

Number of Saturdays: 0

Number of Sundays: 0

Surveys manually removed from 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first followed by the range of minimum and maximum survey dates selected by the user. Then the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.



TRICS 2013(a)v6.11.1

Trip Rate Parameter: Gross floor area

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use 04 - EDUCATION

Category A - PRIMARY

VEHICLES

Selected regions and areas:

10 WALES		
WR	WREXHAM	1 days
11 SCOTLAND		
DU	DUNDEE CITY	1 days
FA	FALKIRK	1 days
12 CONNAUGHT		
CS	SLIGO	1 days
13 MUNSTER		
LI	LIMERICK	1 days
14 LEINSTER		
KK	KILKENNY	1 days
15 GREATER DUBLIN		
DL	DUBLIN	1 days
17 ULSTER (NORTHERN IRELAND)		
AR	ARMAGH	1 days
DO	DOWN	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter:	Gross floor area
Actual Range:	1350 to 3700 (units: sqm)
Range Selected by User:	1350 to 3700 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/04 to 21/05/12

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	2 days
Wednesday	2 days
Thursday	1 days
Friday	4 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	9 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff whilst ATC surveys are undertaken using machines.

Selected Locations:

Town Centre	0
Edge of Town Centre	4
Suburban Area (PPS6 Out of Ce	3
Edge of Town	0
Neighbourhood Centre (PPS6 L	2
Free Standing (PPS6 Out of Tov	0
Not Known	0

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing Edge of Town Suburban Area Neighbourhood Centre Edge of Town Centre Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Zone	0
Commercial Zone	0
Development Zone	0
Residential Zone	4
Retail Zone	0
Built-Up Zone	0
Village	2
Out of Town	0
High Street	0
No Sub Category	3

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone Industrial Zone Development Zone Residential Zone Retail Zone Built-Up Village Zone Out of Town High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

C2 1 days  
D1 8 days

This data displays the number of surveys which can be found within the Library module of TRICS®.

Population within 1 mile:

1,001 to 5,000 2 days  
5,001 to 10,000 1 days  
10,001 to 15,000 3 days  
15,001 to 20,000 1 days  
25,001 to 50,000 2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,000 or Less 1 days  
5,001 to 25,000 2 days  
75,001 to 100,000 3 days  
100,001 to 125,000 1 days  
125,001 to 250,000 1 days  
500,001 or More 1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0 3 days  
1.1 to 1.5 5 days  
1.6 to 2.0 1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling within a radius of 5-miles of selected survey sites.

Travel Plan:

No 9 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1 AR-04-A-01 PRIMARY SCH ARMAGH  
COLLEGE HILL

ARMAGH

Edge of Town Centre

No Sub Category

Total Gross floor area: 2260 sqm

Survey date: FRIDAY 15/09/2006 Survey Typ: MANUAL  
2 CS-04-A-01 PRIMARY SCH SLIGO  
PEARSE ROAD

SLIGO

Edge of Town Centre

No Sub Category

Total Gross floor area: 3700 sqm

Survey date: FRIDAY 15/06/2007 Survey Typ: MANUAL

3 DL-04-A-01 PRIMARY SCH DUBLIN

LONG MILE ROAD

WALKINSTOWN

DUBLIN

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Gross floor area: 2748 sqm

Survey date: WEDNESDAY 28/09/2011 Survey Typ: MANUAL

4 DO-04-A-01 PRIMARY SCH DOWN

CHURCH GROVE

KIRCUBBIN

Neighbourhood Centre (PPS6 Local Centre)

Village

Total Gross floor area: 1350 sqm

Survey date: MONDAY 19/12/2011 Survey Typ: MANUAL

5 DU-04-A-01 PRIMARY SCH DUNDEE CITY

FALKLAND CRESCENT

BROUGHTY FERRY

DUNDEE

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Gross floor area: 3288 sqm

Survey date: MONDAY 21/05/2012 Survey Typ: MANUAL

6 FA-04-A-02 PRIMARY SCH FALKIRK

NEW HALLGLEN ROAD

HALLGLEN

NEAR FALKIRK

Neighbourhood Centre (PPS6 Local Centre)

Village

Total Gross floor area: 2080 sqm

Survey date: WEDNESDAY 25/04/2007 Survey Typ: MANUAL



06:00-07:00									
07:00-08:00	9	2421	0.395	9	2421	0.161	9	2421	0.556
08:00-09:00	9	2421	2.91	9	2421	1.974	9	2421	4.884
09:00-10:00	9	2421	1.57	9	2421	1.492	9	2421	3.062
10:00-11:00	9	2421	0.262	9	2421	0.234	9	2421	0.496
11:00-12:00	9	2421	0.257	9	2421	0.34	9	2421	0.597
12:00-13:00	9	2421	0.45	9	2421	0.376	9	2421	0.826
13:00-14:00	9	2421	0.849	9	2421	0.386	9	2421	1.235
14:00-15:00	9	2421	1.193	9	2421	1.193	9	2421	2.386
15:00-16:00	9	2421	1.12	9	2421	2.153	9	2421	3.273
16:00-17:00	9	2421	0.266	9	2421	0.812	9	2421	1.078
17:00-18:00	8	2441	0.056	8	2441	0.2	8	2441	0.256
18:00-19:00	5	2429	0.041	5	2429	0.066	5	2429	0.107
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			9.369			9.387			18.756

#### Parameter summary

Trip rate parameter range sele 1350 - 3700 (units: sqm)  
 Survey date date range: 01/01/04 - 21/05/12  
 Number of weekdays (Monday 9  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys manually removed froi 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first followed by the range of minimum and maximum survey dates selected by the user. Then the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRICS 2013(a)v6.11.1

Trip Rate Parameter: Gross floor area

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use 02 - EMPLOYMENT  
Category D - INDUSTRIAL ESTATE  
VEHICLES

Selected regions and areas:

11 SCOTLAND  
EA EAST AYRSI 1 days  
HI HIGHLAND 1 days  
15 GREATER DUBLIN  
DL DUBLIN 1 days  
17 ULSTER (NORTHERN IRELAND)  
AR ARMAGH 1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area  
Actual Range: 552 to 120000 (units: sqm)  
Range Selected by User: 552 to 234115 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/04 to 25/05/12

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday 1 days  
Tuesday 2 days  
Wednesday 1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count 4 days  
Directional ATC Count 0 days

This data displays the number of surveys per location category within the selected set. The main location categories consist of Free Standing Edge of Town Suburban Area Neighbourhood Centre Edge of Town Centre Town Centre and Not Known.

Selected Locations:

Town Centre	0
Edge of Town Centre	1
Suburban Area (PPS6 Out of Ce	1
Edge of Town	2
Neighbourhood Centre (PPS6 L	0
Free Standing (PPS6 Out of Tov	0
Not Known	0

This data displays the number of manual classified surveys and the number of unclassified ATC surveys the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff whilst ATC surveys are undertaken using machines.

Selected Location Sub Categories:

Industrial Zone	2
Commercial Zone	0
Development Zone	0
Residential Zone	0
Retail Zone	0
Built-Up Zone	0
Village	0
Out of Town	0
High Street	0
No Sub Category	2

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing Edge of Town Suburban Area Neighbourhood Centre Edge of Town Centre Town Centre and Not Known.

Filtering Stage 3 selection:

Use Class:

Not Known	1 days
B1	2 days
B2	1 days

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone Industrial Zone Development Zone Residential Zone Retail Zone Built-Up Village Zone Out of Town High Street and No Sub Category.

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	1 days
15,001 to 20,000	1 days
20,001 to 25,000	1 days



This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	2 days
50,001 to 75,000	1 days
250,001 to 500,000	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling and the number of surveys that were undertaken at sites without Travel Plans.

Travel Plan:

No	4 days
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This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

- 1 AR-02-D-01      INDUSTRIA ARMAGH  
HAMILTONSBAWN ROAD  
  
ARMAGH  
Edge of Town  
No Sub Category  
Total Gross floor area:            11548 sqm  
Survey date:      TUESDAY      08/06/2010 Survey Typ MANUAL
- 2 DL-02-D-03      INDUSTRIA DUBLIN  
CLOVERHILL ROAD  
  
DUBLIN  
Suburban Area (PPS6 Out of Centre)  
Industrial Zone  
Total Gross floor area:            120000 sqm  
Survey date:      TUESDAY      26/06/2007 Survey Typ MANUAL
- 3 EA-02-D-02      INDUSTRIA EAST AYRSHIRE  
JAMES LITTLE STREET  
  
KILMARNOCK  
Edge of Town Centre

Industrial Zone  
 Total Gross floor area: 552 sqm  
 Survey date: WEDNESD/ 11/06/2008 Survey Typ MANUAL  
 4 HI-02-D-03 IND. EST./E HIGHLAND  
 NORTH ROAD  
 INVERLOCHY  
 FORT WILLIAM  
 Edge of Town  
 No Sub Category  
 Total Gross floor area: 35000 sqm  
 Survey date: MONDAY 18/05/2009 Survey Typ MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site it displays a unique site reference code and site address the selected trip rate calculation parameter and its value the day of the week and date of each survey and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE

Calculation Factor: 100 sqm

Count Type: VEHICLES

Time Range	ARRIVALS			DEPARTURES			TOTALS			
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	
00:00-00:30										
00:30-01:00										
01:00-01:30										
01:30-02:00										
02:00-02:30										
02:30-03:00										
03:00-03:30										
03:30-04:00										
04:00-04:30										
04:30-05:00										
05:00-05:30										
05:30-06:00										
06:00-06:30										
06:30-07:00										
07:00-07:30		4	41775	0.06	4	41775	0.031	4	41775	0.091
07:30-08:00		4	41775	0.133	4	41775	0.038	4	41775	0.171
08:00-08:30		4	41775	0.19	4	41775	0.069	4	41775	0.259
08:30-09:00		4	41775	0.18	4	41775	0.096	4	41775	0.276
09:00-09:30		4	41775	0.154	4	41775	0.081	4	41775	0.235

09:30-10:00	4	41775	0.138	4	41775	0.096	4	41775	0.234
10:00-10:30	4	41775	0.084	4	41775	0.093	4	41775	0.177
10:30-11:00	4	41775	0.095	4	41775	0.085	4	41775	0.18
11:00-11:30	4	41775	0.07	4	41775	0.086	4	41775	0.156
11:30-12:00	4	41775	0.082	4	41775	0.087	4	41775	0.169
12:00-12:30	4	41775	0.121	4	41775	0.124	4	41775	0.245
12:30-13:00	4	41775	0.14	4	41775	0.153	4	41775	0.293
13:00-13:30	4	41775	0.121	4	41775	0.155	4	41775	0.276
13:30-14:00	4	41775	0.154	4	41775	0.098	4	41775	0.252
14:00-14:30	4	41775	0.08	4	41775	0.077	4	41775	0.157
14:30-15:00	4	41775	0.099	4	41775	0.098	4	41775	0.197
15:00-15:30	4	41775	0.103	4	41775	0.112	4	41775	0.215
15:30-16:00	4	41775	0.105	4	41775	0.129	4	41775	0.234
16:00-16:30	4	41775	0.117	4	41775	0.149	4	41775	0.266
16:30-17:00	4	41775	0.087	4	41775	0.178	4	41775	0.265
17:00-17:30	4	41775	0.057	4	41775	0.172	4	41775	0.229
17:30-18:00	4	41775	0.035	4	41775	0.144	4	41775	0.179
18:00-18:30	4	41775	0.028	4	41775	0.06	4	41775	0.088
18:30-19:00	4	41775	0.022	4	41775	0.044	4	41775	0.066
19:00-19:30									
19:30-20:00									
20:00-20:30									
20:30-21:00									
21:00-21:30									
21:30-22:00									
22:00-22:30									
22:30-23:00									
23:00-23:30									
23:30-24:00									
Daily Trip Rates:			2.455			2.455			4.91

#### Parameter summary

Trip rate parameter range selected: 552 - 120000 (units: sqm)

Survey date range: 01/01/04 - 25/05/12

Number of weekdays (Monday): 4

Number of Saturdays: 0

Number of Sundays: 0

Surveys manually removed from: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first

followed by the range of minimum and maximum survey dates selected by the user. Then the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRICS 2013(a)v6.11.2

Trip Rate Parameter: Gross floor area

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use 01 - RETAIL  
Category I - SHOPPING CENTRE - LOCAL SHOPS  
VEHICLES

Selected regions and areas:

9 NORTH			
	TW	TYNE & WEAR	2 days
11 SCOTLAND			
	EB	CITY OF EDINBURGH	1 days
15 GREATER DUBLIN			
	DL	DUBLIN	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area  
Actual Range: 540 to 2442 (units: sqm)  
Range Selected by User: 500 to 650 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/05 to 21/11/12

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Tuesday 1 days  
Wednesday 2 days  
Thursday 1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count 4 days  
Directional ATC Count 0 days

This data displays the number of the total adding to the total whilst ATC surveys are undertaken using machines.

Selected Locations:

Town Centre	0
Edge of Town Centre	0
Suburban Area (PPS6 Out of Ce	2
Edge of Town	0
Neighbourhood Centre (PPS6 L	2
Free Standing (PPS6 Out of Tow	0
Not Known	0

This data displays the number of manual classified surveys and the number of unclassified ATC surveys the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff whilst ATC surveys are undertaken using machines.

Selected Location Sub Categories:

Industrial Zone	0
Commercial Zone	0
Development Zone	0
Residential Zone	4
Retail Zone	0
Built-Up Zone	0
Village	0
Out of Town	0
High Street	0
No Sub Category	0

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing Edge of Town Suburban Area Neighbourhood Centre Edge of Town Centre Town Centre and Not Known.

Filtering Stage 3 selection:

Use Class:

A1	4 days
----	--------

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose which can be found within the Library module of TRICS®.

Population within 1 mile:

5,001 to 10,000	1 days
20,001 to 25,000	1 days
25,001 to 50,000	1 days
50,001 to 100,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

125,001 to 250,000      1 days  
 250,001 to 500,000      2 days  
 500,001 or More          1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0                  4 days

This data displays the number of surveys within a radius of 5-miles of selected survey sites.

Petrol filling station:

Included in the survey count    0 days

Excluded from count or no fillir 4 days

This data displays the number of surveys that do not.

Travel Plan:

No                              4 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1	DL-01-I-03	LOCAL SHOPS	DUBLIN
	RAVENSDALE PARK		
	TERENURE		
	DUBLIN		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:		07/09/1906 sqm
	Survey date:	WEDNESDAY	28/09/2011 Survey Typ MANUAL
2	EB-01-I-01	LOCAL SHOPS	CITY OF EDINBURGH
	COLINTON ROAD		
	CRAIGLOCKHART		
	EDINBURGH		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:		04/04/1902 sqm
	Survey date:	THURSDAY	28/10/2010 Survey Typ MANUAL
3	TW-01-I-01	LOCAL SHOPS	TYNE & WEAR
	FARRINGDON ROAD		
	MARDEN		
	NORTH SHIELDS		
	Neighbourhood Centre (PPS6 Local Centre)		

Residential Zone  
 Total Gross floor area: 29/04/1902 sqm  
 Survey date: TUESDAY 17/10/2006 Survey Typ MANUAL  
 4 TW-01-I-02 LOCAL SHOPS TYNE & WEAR  
 DURHAM ROAD  
 BARNES PARK  
 SUNDERLAND  
 Neighbourhood Centre (PPS6 Local Centre)  
 Residential Zone  
 Total Gross floor area: 540 sqm  
 Survey date: WEDNESDAY 21/11/2012 Survey Typ MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site it displays a unique site reference code and site address the selected trip rate calculation parameter and its value the day of the week and date of each survey and whether the survey was a manual classified count or an ATC count.

Manually Deselected Sites

Site Ref	Reason for Deselection
DE-01-I-01	None
DE-01-I-02	None

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

Calculation Factor: 100 sqm

Count Type: VEHICLES

Time Range	No. Days	ARRIVALS			DEPARTURES			TOTALS		
		Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	
00:00-01:00										
01:00-02:00										
02:00-03:00										
03:00-04:00										
04:00-05:00										
05:00-06:00										
06:00-07:00		1	540	1.296	1	540	1.296	1	540	2.592
07:00-08:00		4	1164	1.61	4	1164	1.417	4	1164	3.027
08:00-09:00		4	1164	1.568	4	1164	1.095	4	1164	2.663
09:00-10:00		4	1164	1.868	4	1164	1.46	4	1164	3.328
10:00-11:00		4	1164	2.018	4	1164	1.696	4	1164	3.714
11:00-12:00		4	1164	1.396	4	1164	2.04	4	1164	3.436
12:00-13:00		4	1164	1.396	4	1164	1.396	4	1164	2.792



13:00-14:00	4	1164	1.16	4	1164	1.052	4	1164	2.212
14:00-15:00	4	1164	1.009	4	1164	0.945	4	1164	1.954
15:00-16:00	4	1164	1.009	4	1164	0.88	4	1164	1.889
16:00-17:00	4	1164	1.31	4	1164	1.396	4	1164	2.706
17:00-18:00	4	1164	1.503	4	1164	1.825	4	1164	3.328
18:00-19:00	4	1164	1.31	4	1164	1.417	4	1164	2.727
19:00-20:00	4	1164	0.644	4	1164	0.966	4	1164	1.61
20:00-21:00	3	1269	0.762	3	1269	0.841	3	1269	1.603
21:00-22:00	1	540	4.444	1	540	4.444	1	540	8.888
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			24.303			24.166			48.469

Parameter summary

Trip rate parameter range selec 540 - 2442 (units: sqm)

Survey date date range: 01/01/05 - 21/11/12

Number of weekdays (Monday: 4

Number of Saturdays: 0

Number of Sundays: 0

Surveys manually removed fror 2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first followed by the range of minimum and maximum survey dates selected by the user. Then the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

# APPENDIX B

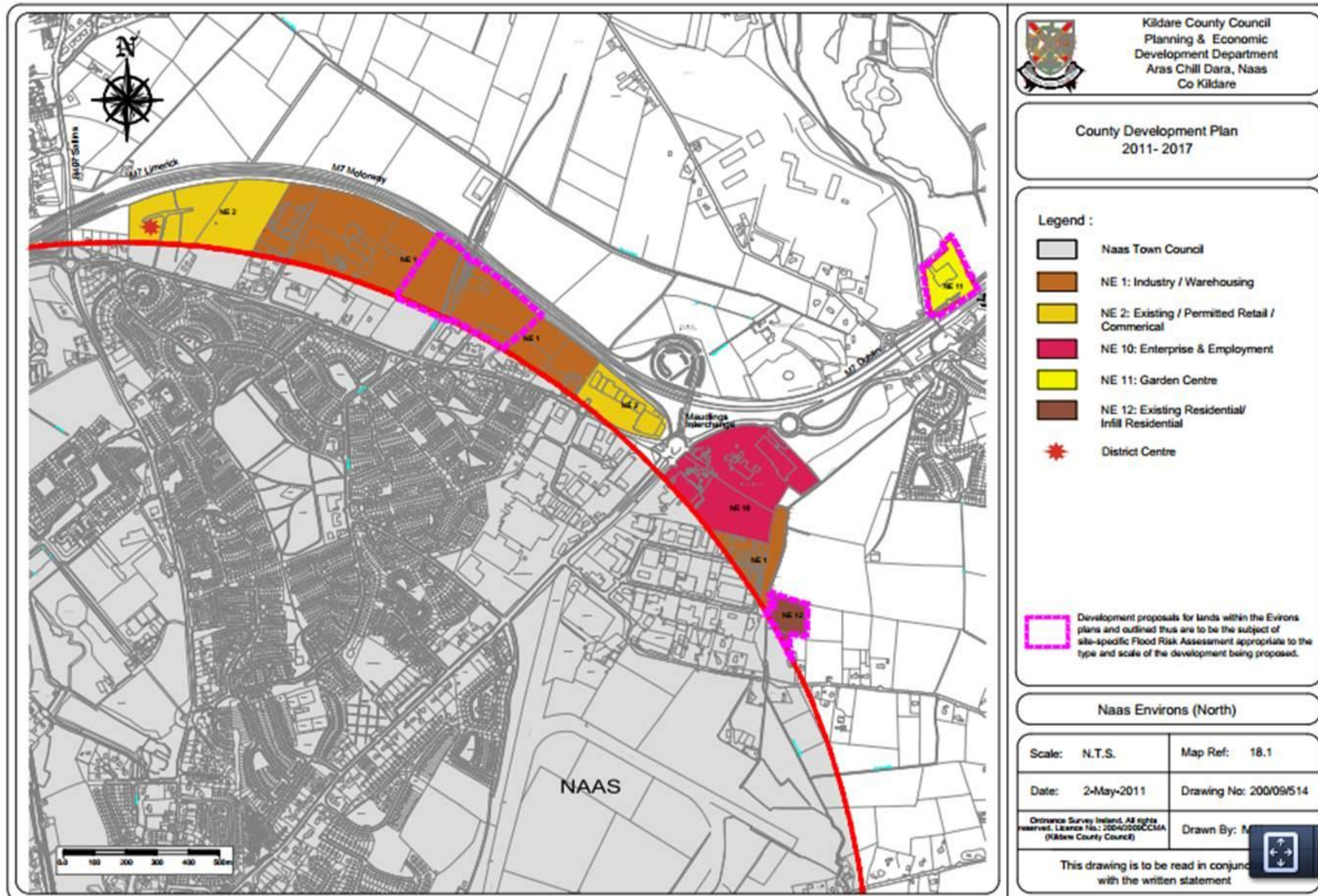


Figure A – Naas Environs (North)

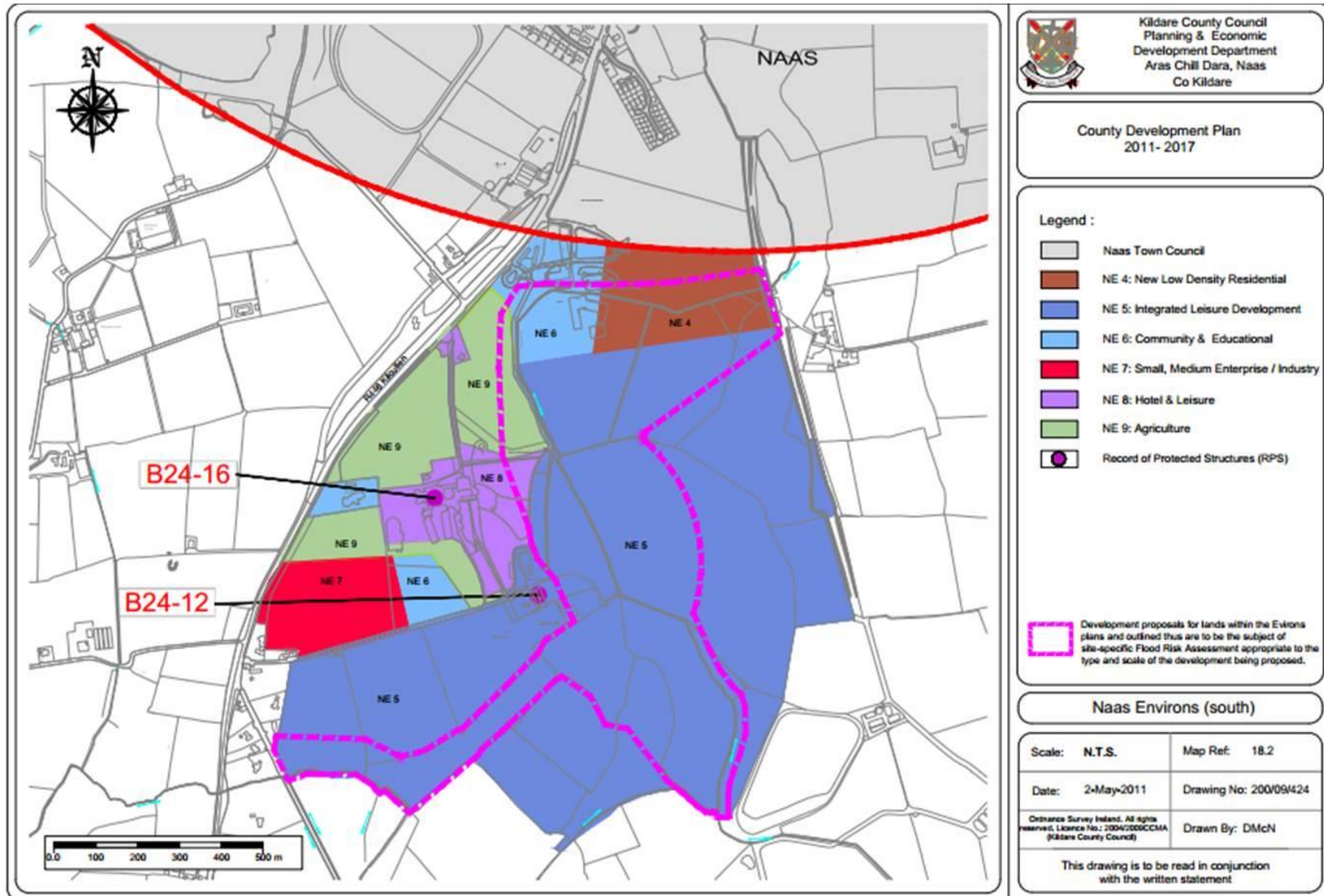


Figure B – Naas Environs (South)

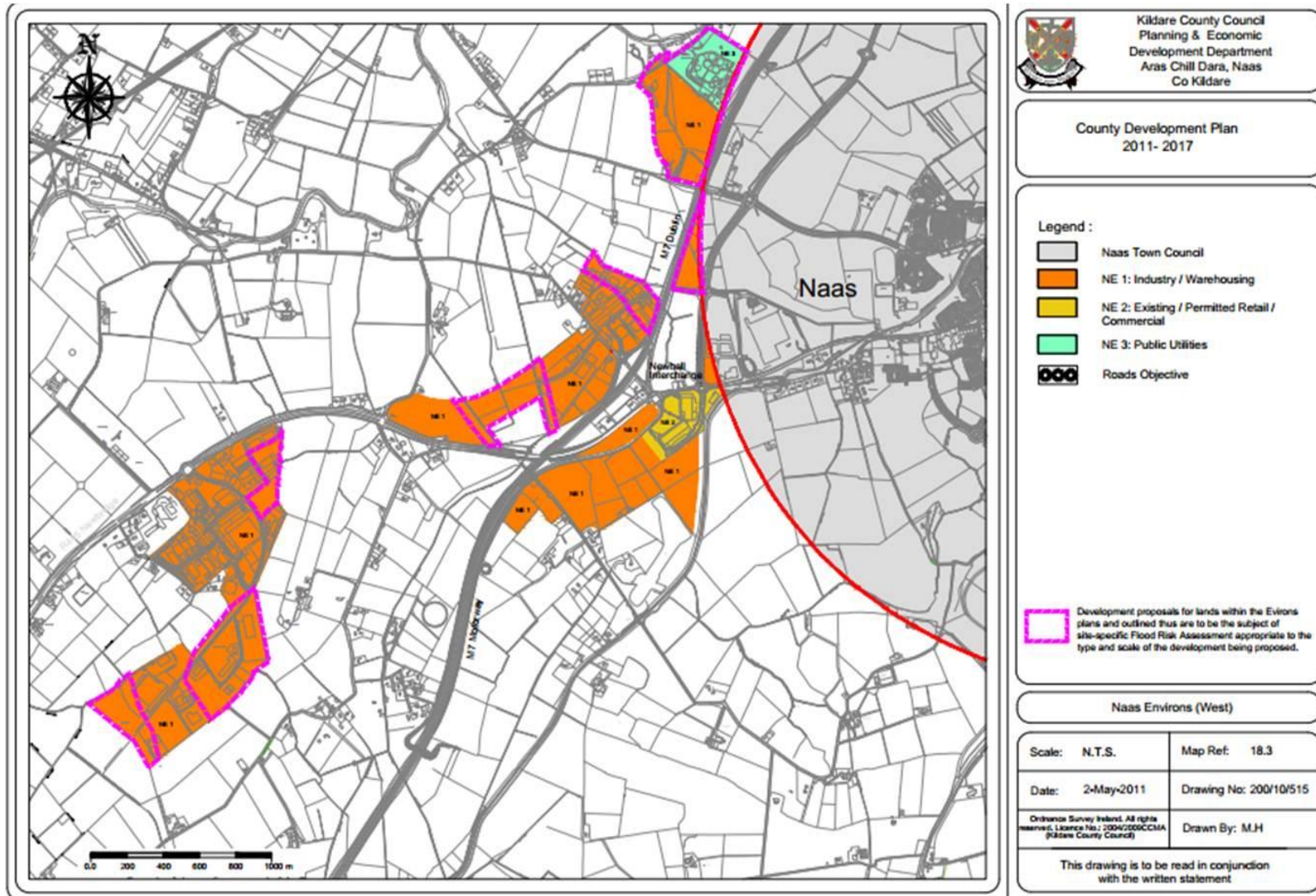


Figure C – Naas Environs (West)

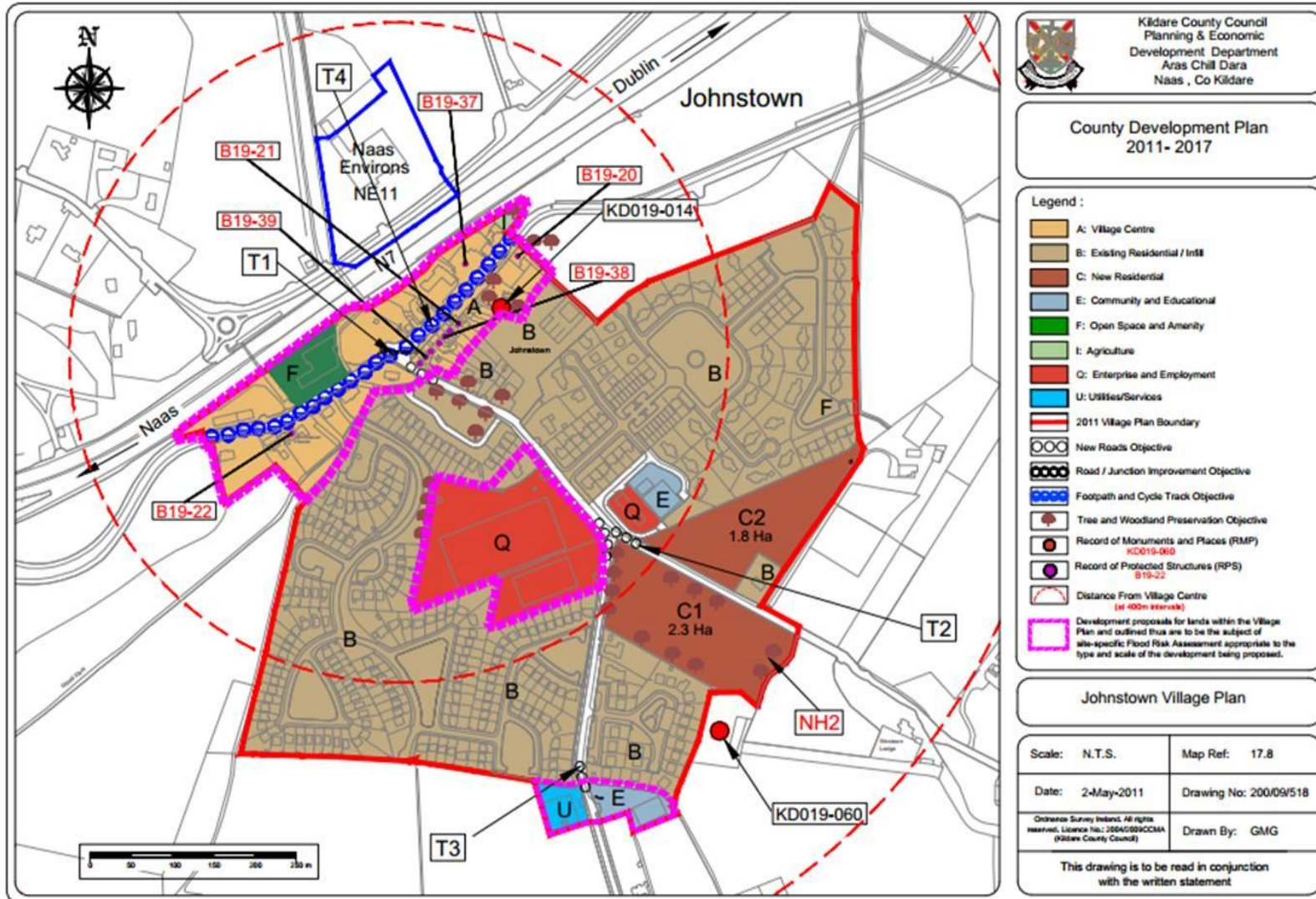


Figure D - Johnstown Land Use Zonings

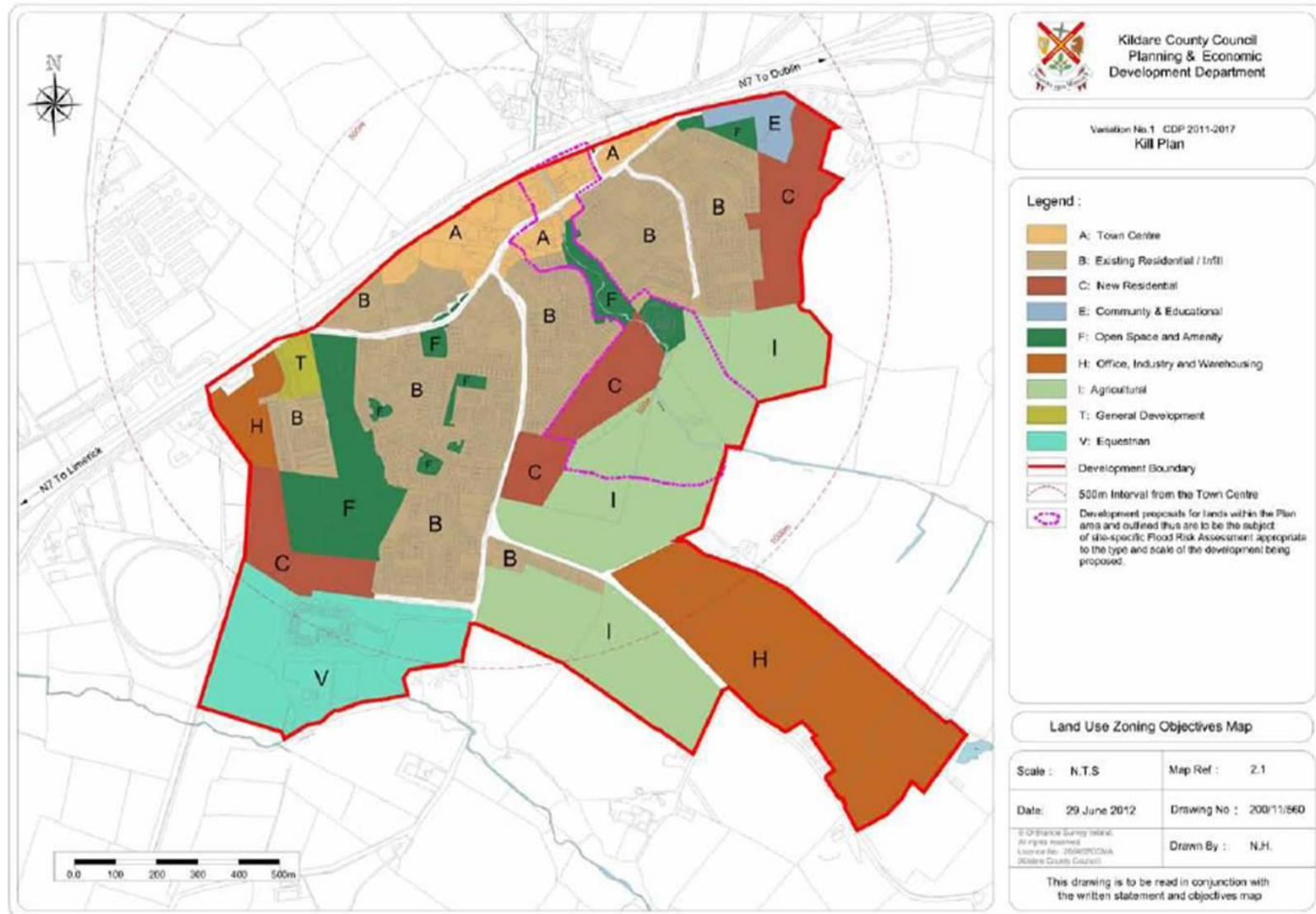


Figure E - Kill Land Use Zonings

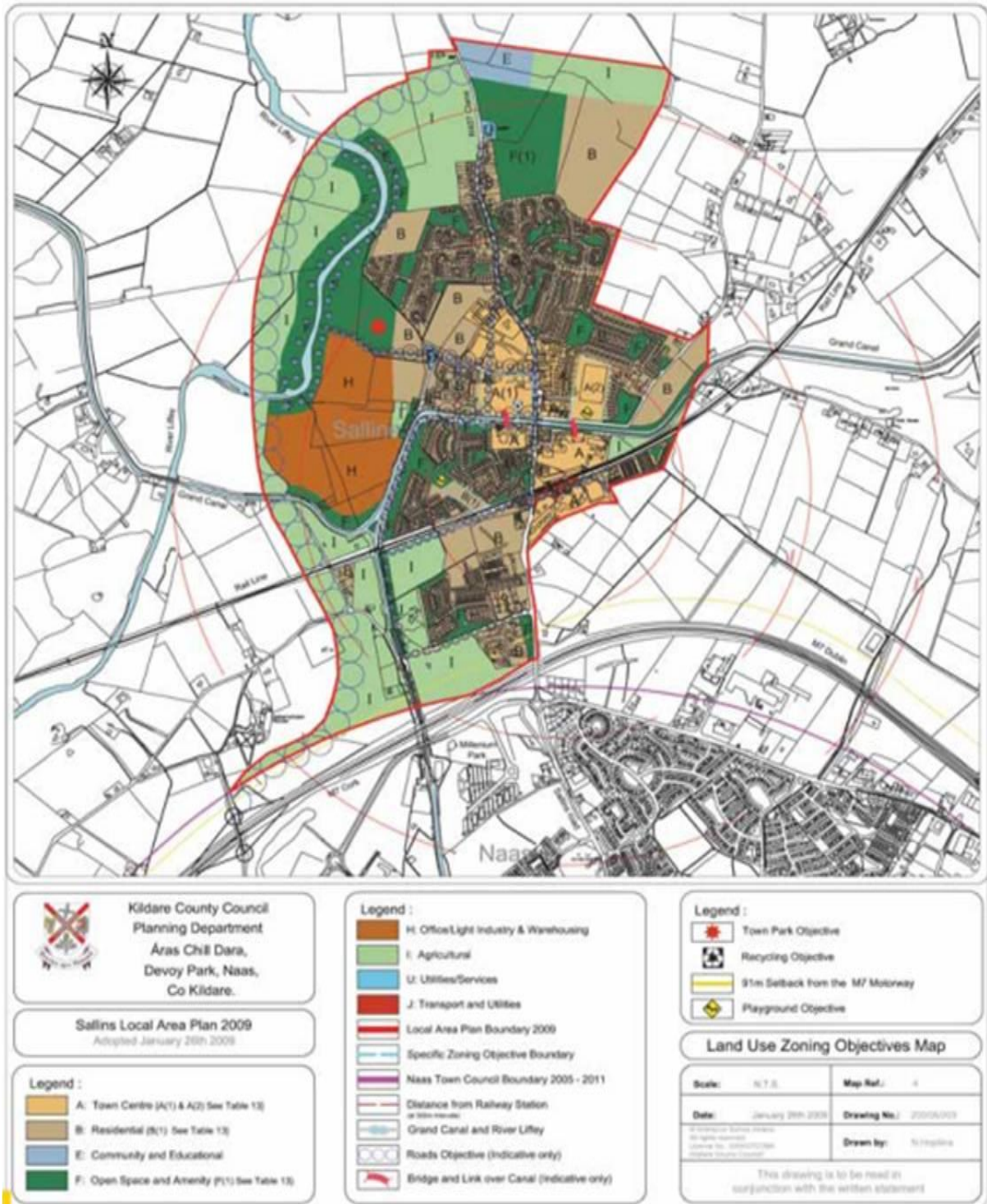


Figure F – Sallins LAP