

DRAFT

AECOM

Causeway Coast & Glens Tourism Traffic & Parking Infrastructure Study

Causeway Coasts & Glens Borough Council

Project Reference: Draft Report

September 2017

DRAFT**Quality information**

Prepared by	Checked by	Approved by
Laura McCoy Graduate Consultant	Tim Robinson Regional Director	Tim Robinson Regional Director

Revision History

Revision	Revision date	Details	Authorized	Name	Position
0	29/09/2017	Initial Draft	TJR	T Robinson	Regional Director

Distribution List

# Hard Copies	PDF Required	Association / Company Name

DRAFT

Prepared for:

Causeway Coasts & Glens Borough Council

Prepared by:

AECOM Limited
9th Floor
The Clarence West Building
2 Clarence Street West
Belfast
BT2 7GP
UK

T: +44 28 9060 7200
aecom.com

© 2016 AECOM Limited. All Rights Reserved.

This document has been prepared by AECOM Limited ("AECOM") for sole use of our client (the "Client") in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between AECOM and the Client. Any information provided by third parties and referred to herein has not been checked or verified by AECOM, unless otherwise expressly stated in the document. No third party may rely upon this document without the prior and express written agreement of AECOM.

DRAFT**Table of Contents**

1.	Introduction	7
1.1	Background	7
1.2	Structure of the Report	7
2.	Background.....	8
2.1	Introduction.....	8
2.2	Traffic.....	8
2.2.1	Introduction.....	8
2.2.2	Traffic Flows In Study Area.....	8
2.3	Parking	12
2.3.1	Current Parking Stock	12
2.3.2	Parking in Portrush	13
2.3.3	Parking at Tourist Nodes.....	16
2.4	Public Transport Provision.....	17
3.	Option Assessment Criteria	21
3.1	Introduction.....	21
3.2	Detailed Scoring Criteria.....	21
4.	Bushmills	24
4.1	Introduction.....	24
4.2	Sites Under Consideration.....	24
4.2.1	Dunluce School Gravel Sports Field.....	24
4.2.2	Giants Causeway and Bushmills Railway Car Park Extension.....	24
4.2.3	Fitzgerald Polo Lands.....	24
4.2.4	Main Street Car Park Extension	24
4.2.5	Dundarave Car Park Extension	24
4.2.6	Bushmills Distillery Car Park Extension.....	25
4.2.7	Former Dunluce Presbyterian Church Hall	25
4.3	Assessment.....	25
5.	Ballycastle.....	26
5.1	Introduction.....	26
5.2	Site Descriptions.....	26
5.2.1	Clare Road, West of Caravan Car Parks	26
5.2.2	Whitepark Road McQuillan GAC Grounds	26
5.2.3	Leyland Road former site of McQuillan GAC	26
5.2.4	Leyland Road Industrial Estate.....	26
5.2.5	Market Street (Leyland Road Junction)	27
5.2.6	Dalriada Hospital, Coleraine Road	27
5.2.7	St Patrick's and St Brigid's Church, Moyle Road	27
5.2.8	Sheskstown Recreation Centre	27
5.3	Assessment.....	27
6.	Portstewart.....	28
6.1	Introduction.....	28
6.2	Site Descriptions.....	28
6.2.1	NW 200 Pits A2 Portrush Road	28
6.2.2	Rockview Lane off B185 Station Road	28
6.2.3	Existing University of Ulster car park off B185 Cromore Road	28
6.2.4	Existing car park at Burnside Presbyterian Church off Mill Road.....	28
6.2.5	Existing car park at Flowerfield House off A2 Coleraine Road.....	29
6.2.6	Existing car park at Portstewart Baptist Church off A2 Coleraine Road.....	29
6.2.7	Reconfiguration of Existing car park at Portstewart Cemetery off A2 Coleraine Road.....	29
6.2.8	Open Space near Portstewart FC on St Johns Close off A2 Coleraine Road.....	29

DRAFT

6.2.9	Car Park at Portstewart Point	29
6.2.10	Dominican College	29
6.3	Assessment.....	29
7.	Portrush	31
7.1	Introduction.....	31
7.2	Potential Sites.....	31
7.2.1	Assessment.....	31
8.	Public Transport Measures	32
8.1	Introduction.....	32
8.2	Background	32
8.3	Networks	32
8.3.1	Train Services.....	32
8.3.2	Bus Services.....	32
8.3.3	Bus Stop Infrastructure.....	33
8.3.4	Buses	33
8.3.5	Ticketing	33
9.	Other Infrastructure Measures	35
9.1	Introduction.....	35
9.2	Static Direction Signing	35
9.3	Variable Message Signing	35
9.3.1	Introduction.....	35
9.3.2	Portrush.....	35
9.3.3	Bushmills	35
9.3.4	Portstewart	36
9.3.5	Ballycastle	36
9.4	Software Applications	36
10.	Summary and Conclusions	37
10.1	Summary of Key Findings	37
10.2	Potential Options	37
10.3	Next Steps	37
	Appendix A Traffic Flows	38
	Appendix B Car Park Locations	39
	Appendix C Sites in Bushmills.....	43
	Appendix D Site Walk Time Isochrones for Bushmills	44
	Appendix E Detailed Scoring for Bushmills	45
	Appendix F Sites in Ballycastle	46
	Appendix G Detailed Scoring for Ballycastle.....	47
	Appendix H Sites in Portstewart.....	48
	Appendix I Detailed Scoring for Portstewart.....	49
	Appendix J Sites In Portrush.....	50
	Appendix K Sample Bus Shelters	51
	Appendix L Sample Bus Livery	52

Figures

Figure 1.	Annual Average Daily Traffic Volumes – Tourist Routes Sites (2011 – 2015)	9
Figure 2.	Average Daily Traffic Volumes July – Tourist Routes Sites (2011 – 2015).....	10
Figure 3.	Average Daily Traffic Volumes August – Tourist Routes Sites (2011 – 2015).....	11
Figure 4.	Study Area Car Parks (source Causeway Coast & Glen).....	13
Figure 5.	Yearly Usage of East and West Strand Car Parks (2012 – 2014)	14
Figure 6.	Combined Usage of East and West Strand Car Parks (2011 – 2016).....	14
Figure 7.	Visitor Numbers at Three Key Attractions (2011 – 2015).....	16

DRAFT

Figure 8. Visitor Numbers at Other Attractions (2011 – 2015)	17
Figure 9. 402 Causeway Rambler and 172 Route (Source: Translink)	18

Tables

Table 1. Annual Average Daily Traffic Flow Volumes – Tourist Routes Sites (2011 – 2015)	9
Table 2. Study Area Car Park Provision	12
Table 3. Usage and Turnover Calculations for East and West Strand Car Parks	15
Table 4. Scoring Criteria	22
Table 5. Scoring Classifications.....	23
Table 6. Summary of Scoring - Bushmills.....	25
Table 7. Summary of Scoring – Ballycastle	27
Table 8. Summary of Scoring - Portstewart.....	30

DRAFT

1. Introduction

1.1 Background

In 2016 Causeway Coast and Glens Borough Council commissioned AECOM to undertake a study entitled 'Enabling Infrastructure for the British Open 2019'. In broad terms, the study sought to select and priorities 'Park & Stride / Park & Ride' facilities to alleviate pressures on the transportation infrastructure during large-scale events in Portrush.

Following discussions with the Council an opportunity exists to widen the context of the 2016 AECOM Study to include a larger Council area with the aim of identifying 'Park and Stride / Park and Ride' within the Hubs such as Bushmills, Portstewart and Ballycastle, as well as Portrush. These are to be strategically sited to facilitate a viable interconnected public transport services to the tourist sites (Nodes) and serve to drive economic benefit to the key resorts Hubs of Portstewart, Portrush, Bushmills and Ballycastle.

The brief identifies a series of nodes, hubs and links and examples of these are set out below:

Nodes	Rathlin Island, Benwarden Gardens Kinbane Castle, Dunseverick, Giants Causeway, Carrick a Rede, Bushmills Distillery Dark Hedges, Ballintoy, Dunluce Castle, White Park Bay
Hubs	Portstewart, Portrush, Bushmills, Ballycastle
Links	Highways - A2 Coast Road, A26, B62 Ballybogey, A44 Drones Road Public Transport - Relevant Translink Bus and Rail Services

The brief highlights that the Hubs (tourist resorts) and the Nodes (tourist sites) could be better linked by modes other than the car, in particular public transport.

In addition there are a number of car parks in the hubs that at peak times these become overloaded and hence there is a need to provide additional facilities that could be either Park & Ride or Park & Stride car parks.

1.2 Structure of the Report

The report will have the following structure:-

- Chapter 2 gives the background to the report including traffic and public transport information;
- Chapter 3 details the criteria used in the site assessments;
- Chapter 4 discusses the sites assessed for Bushmills;
- Chapter 5 discusses the sites assessed for Ballycastle;
- Chapter 6 discusses the sites assessed for Portstewart;
- Chapter 7 discusses the sites assessed for Portrush;
- Chapter 8 looks at options for improving public transport;
- Chapter 9 looks at options for improving other transportation infrastructure; and
- Chapter 10 Summary and Conclusions.

DRAFT

2. Background

2.1 Introduction

The following sections give background transport details about the study area including traffic flows, public transport services and parking provision.

2.2 Traffic

2.2.1 Introduction

To understand the traffic volumes within the study area, analysis of observed volumes from a number of Department for Infrastructure Roads (DfI Roads) permanent count sites has been carried out. The survey results have been extrapolated from Traffic and Travel Information annual reports produced by the DfI for the whole of Northern Ireland and as such are strategic in nature.

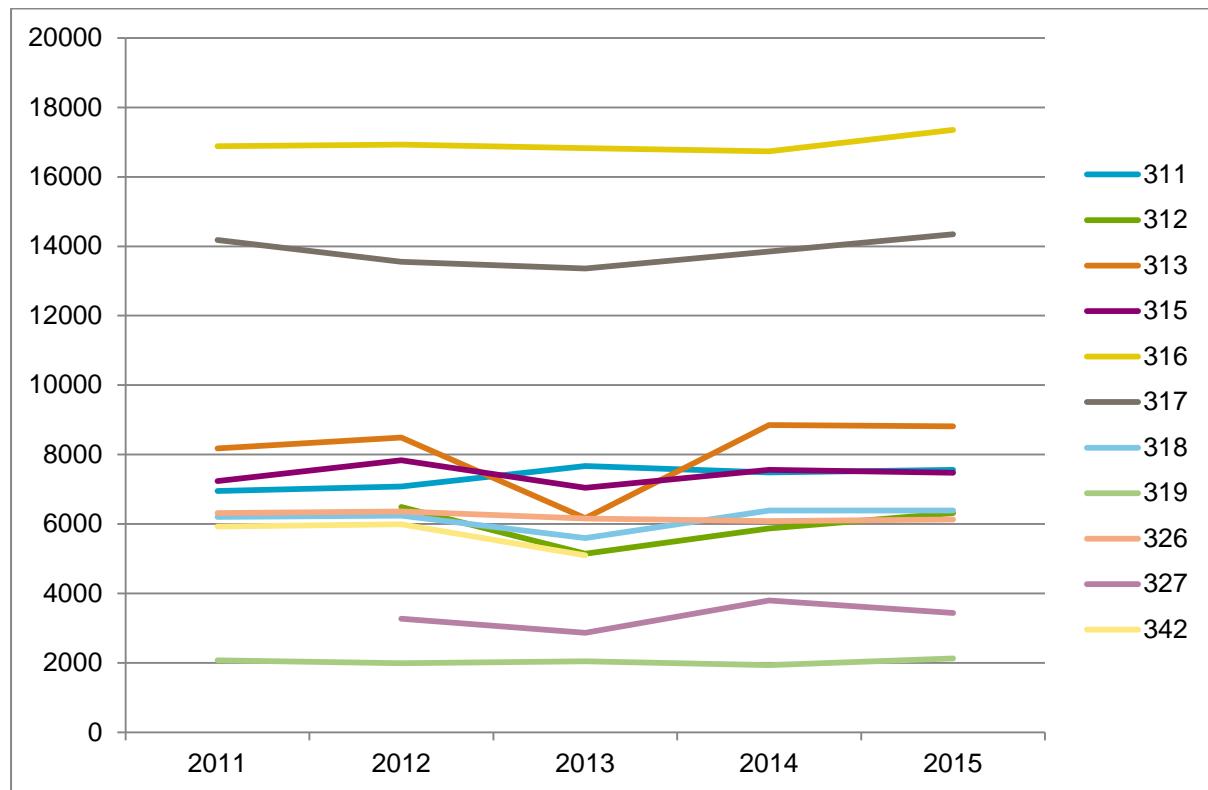
Data relating to tourist sites on the Causeway Coast has also been considered in order to understand demand and relate this to traffic flows identified from above.

2.2.2 Traffic Flows in Study Area

To understand the potential for changes in traffic volumes within the study area, analysis of observed volumes from a number of DfI permanent count sites has been carried out. A number of count sites that are located along the Causeway Coastal Route have been considered and these are shown schematically in Appendix A:

- Site 311 – A2 between Coleraine and Portstewart;
- Site 312 – A2 between Portrush and Portstewart;
- Site 313 – A29 Portrush Road between Coleraine and Portrush;
- Site 315 – B62 between Ballymoney and Ballybogey;
- Site 316 – A26 at Ballymoney bypass east of Ballybogey Road;
- Site 317 – A26 South East of Ballymoney, between Ballymoney and Ballymena;
- Site 318 – A44 between Ballycastle and Armoy;
- Site 319 – A2 south of Ballycastle between Cushendun and Cushendall;
- Site 326 – B185 between Coleraine and Portstewart;
- Site 327 – A2 between Bushmills and Ballycastle just north of Bushmills; and
- Site 342 – A2 east of Portrush.

Figure 1 and Table 1 overleaf shows the Annual Average Daily Traffic Volumes recorded at these 11 sites between 2011 and 2015 (latest available at time of writing). These are annual figures and as such they account for fluctuations in volumes throughout the year.

DRAFT**Figure 1. Annual Average Daily Traffic Volumes – Tourist Routes Sites (2011 – 2015)**

Source: AECOM

Table 1. Annual Average Daily Traffic Flow Volumes – Tourist Routes Sites (2011 – 2015)

Count Site	Year				
	2011	2012	2013	2014	2015
311	6,950	7,080	7,670	7,490	7,560
312	No data	6,490	5,150	5,870	6,320
313	8,180	8,490	6,170	8,850	8,810
315	7,240	7,840	7,040	7,560	7,480
316	16,880	16,930	16,830	16,730	17,350
317	14,180	13,550	13,360	13,850	14,350
318	6,210	6,240	5,600	6,390	6,390
319	2,080	1,990	2,050	1,940	2,130
326	6,320	6,360	6,160	6,090	6,130
327	No data	3,270	2,870	3,800	3,440
342	5,930	5,990	5,100	No data	No data

Source: AECOM / DfI Roads

The site with the highest traffic volume is Site 316 – A26 at Ballymoney bypass east of Ballybogey Road.

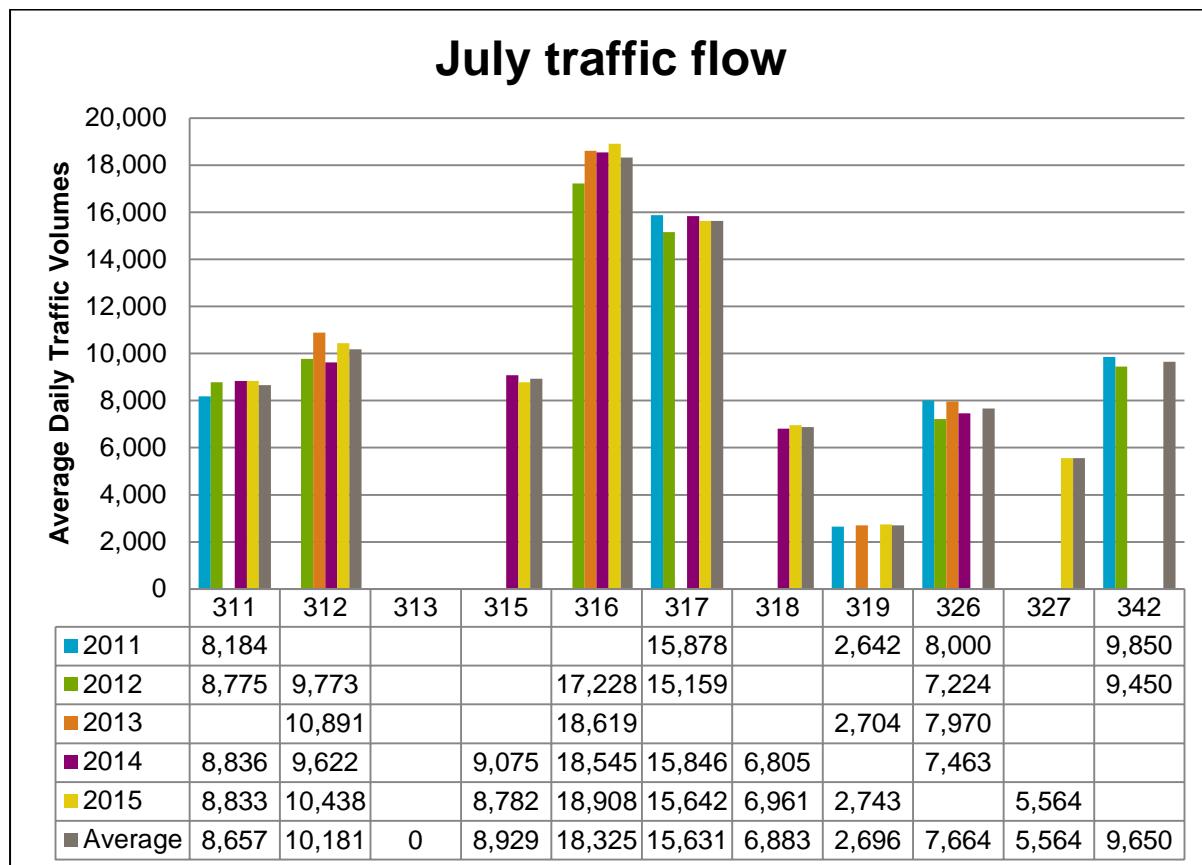
Site 319 – A2 south of Ballycastle between Cushendun and Cushendall is the site with the lowest traffic volumes.

The previous figures related to data for the whole of the year in question, i.e. the annual average daily traffic flow. In the figures below we examine average daily traffic over the summer months of July and August.

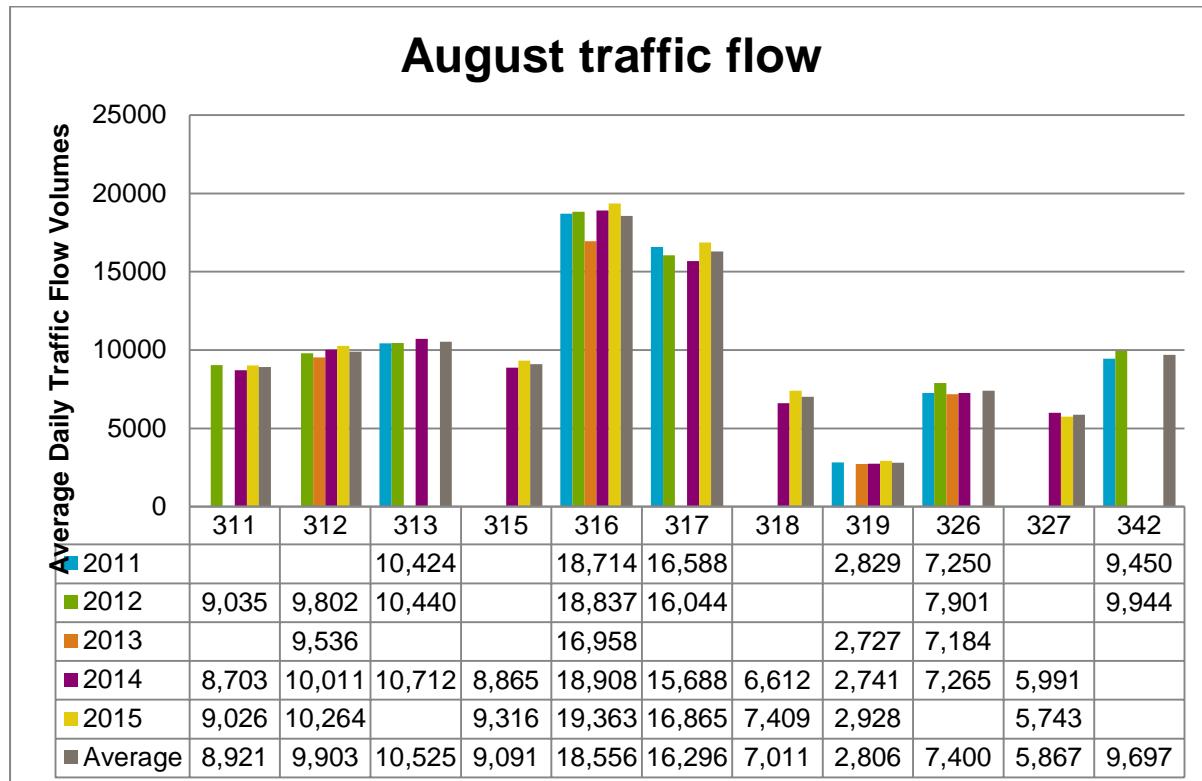
DRAFT

Figure 2 and Figure 3 show the Average Daily Traffic Volumes recorded at these 11 sites between 2011 and 2015 during the peak summer months of July and August. These are daily figures and as such they do not account for fluctuations in volumes throughout the year.

Figure 2. Average Daily Traffic Volumes July – Tourist Routes Sites (2011 – 2015)



Source: AECOM / DfI Roads

DRAFT**Figure 3. Average Daily Traffic Volumes August – Tourist Routes Sites (2011 – 2015)**

Source: AECOM / DfI Roads

Average daily traffic flow volumes are greater during July and August in comparison with average annual daily traffic flow volumes. This is attributed to the summer months of July and August being peak tourist season months for visitors.

Average daily traffic flow volumes during July and August highlight approximately 1,300 and 2,000 more vehicles per day were respectively recorded in comparison with average annual daily traffic flow volumes at Site 317., which is a 7-12% increase.

Similarly average daily traffic flow volumes at Site 316 reveal approximately 1,000 and 1,200 more vehicles were recorded during the months of July and August respectively, in comparison with average annual daily traffic flow volumes at this site.

Average daily traffic flow volumes revealed Site 312, A2 between Portrush and Portstewart recorded approximately 4,000 more vehicles during both July and August in comparison to average annual daily traffic flow volumes at the site.

Therefore comparisons between summer (July and August) average daily traffic flow volumes and average annual traffic flow volumes emphasise that on the primary tourist route sites during July and August increased vehicle volumes are recorded. This may result in the following issues:

- Increased vehicle congestion;
- Increased traffic delays and increased vehicle journey times; and
- Potentially increased pressure upon parking provision.

Appendix A includes a diagram showing all of the above sites on the network with their AADT Flow July flow and August flow. It can be seen that the July and August flows are almost double some of the average annual daily flows.

DRAFT

2.3 Parking

2.3.1 Current Parking Stock

These are a number of car parks that the council is responsible for within the study area. These are shown in the table below.

Table 2. Study Area Car Park Provision

Car Park Number	Location/Tariff	Spaces
	Ballintoy	95
	Free	95
28	Harbour Car Park	46
29	Portaneevy Car Park	49
	Ballycastle	487
	20p/hr	97
30	Ann Street Car Park	97
	Free	390
20	Castle Street Car Park	94
34	Fair Green Car Park	58
1	Fairhill Street Car Park	58
31	Harbour Car Park	61
32	Seafront Car Park	65
33	Sheskburn House	54
	Bushmills	339
	Free	339
38	Dundarave Car Park	80
37	Millennium Car Park	41
3	Old Bushmills Distillery Car Park	112
64	Beach Road, Portballintrae	106
	Portrush	1516
	Free	1516
4	Dunluce Avenue Car Park	240
52	Dunluce Centre Car Park	116
53	East Strand Car Park	537
55	Harbour Road Car Park	36
5	Lansdowne Car Park	219
56	Magheracross Car Park	43
51	Sandhill Drive Car Park	139
54	West Strand Car Park	186
65	Whiterocks	TBC
	Portstewart	286

DRAFT

Car Park Number	Location/Tariff	Spaces
	Free	286
7	Convention Avenue Car Park	107
59	Harbour Hill Car Park	62
60	Kinora Terrace	32
61	Lever Road Car Park	12
57	Rinagree Car Park	40
6	The Diamond Car Park	11
58	The Pitts Car Park	22

Figure 4 below shows an overview of the parking locations within the study area. A more detailed location maps for Portstewart, Portrush, Bushmills and Ballycastle are included in Appendix B. It is not a complete data set but gives an indication of parking in the study area.

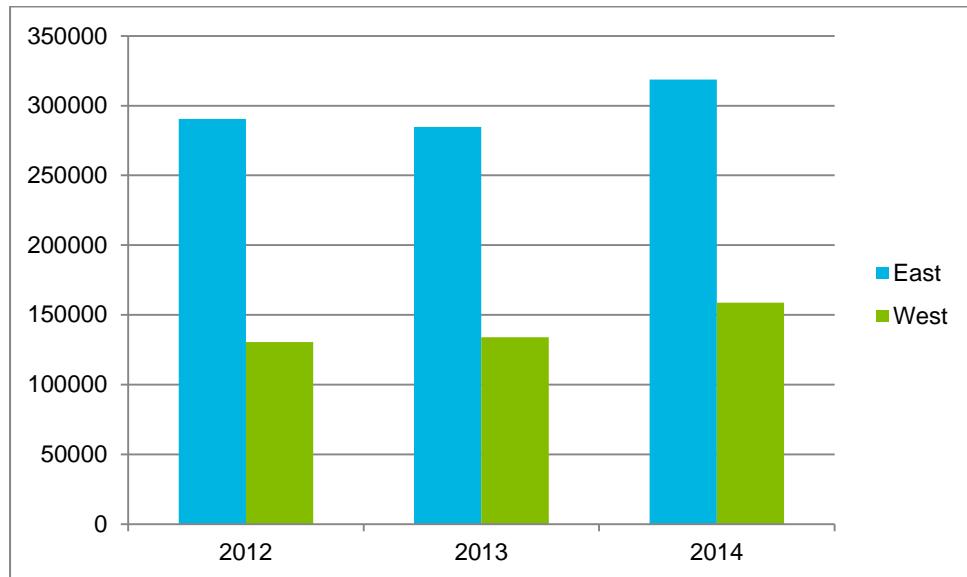
Figure 4. Study Area Car Parks (source Causeway Coast & Glen)



2.3.2 Parking in Portrush

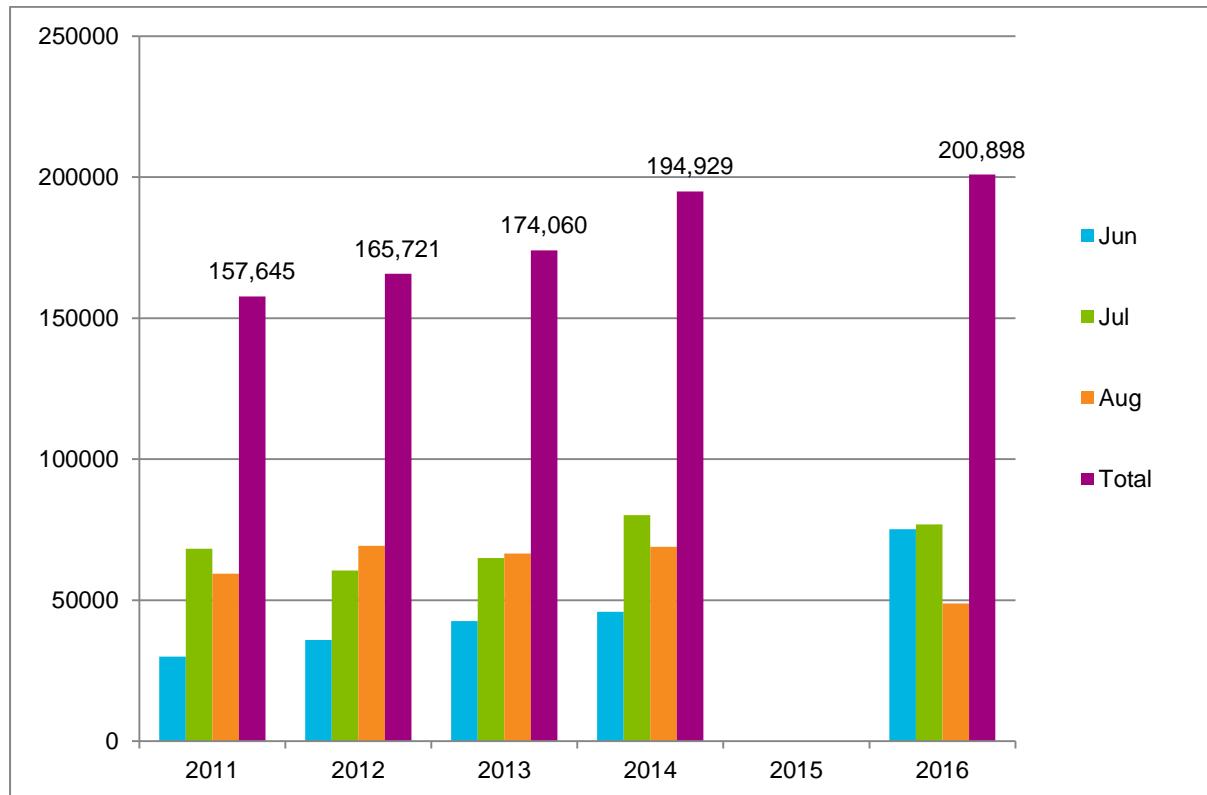
Data on the usage of car parks is sparse at present, although the Council is in receipt of data from 2011 – 2016 for the East Strand and West Strand car parks in Portrush. Both of these car parks are currently free. To analyse demand, a set of vehicle loop detectors were installed a few years ago at the two car parks to record overall usage.

Figure 5 shows the overall usage per year between 2012 and 2014 (only partial data is available for 2011, 2015 and 2016) at the East Strand and West Strand car parks.

DRAFT**Figure 5. Yearly Usage of East and West Strand Car Parks (2012 – 2014)**

It is apparent from Figure 5 that usage has increased over the period considered; with usage at the East Strand rising from 290,500 to 318,700 over the three years considered (+10%). At the West Strand, usage has increased from 130,600 to 158,700 over the three years considered (+22%).

Figure 6 shows the combined usage data over the three main summer months between June – August of the two car parks between 2011 and 2016 (excluding 2015 due to incomplete data).

Figure 6. Combined Usage of East and West Strand Car Parks (2011 – 2016)

The data in Figure 6 shows increasing year on year usage in June, and this may be reflective of the good weather that has generally been experienced in that month over the last few years.

DRAFT

The data for July, which is traditionally the peak holiday month in Northern Ireland is more mixed, although the general trend is upwards. Data for August suggests fluctuations in demand, however overall there has been an increase from 157,645 in 2011 to 200,898 in 2016, which is 27% overall or 5% per annum.

It should also be noted that the total 3-month figures for each of 2012, 2013 and 2014 represent 40% of the total usage for each of those years.

Table 3 shows the usage figures for the two car parks in July and August between 2011 and 2016. Dividing the two-way usage figures by the number of days in July effectively shows daily use, and this can then be divided by the number of spaces in the two car parks (537 and 186 spaces respectively) to estimate the number of times an individual space is used per day.

Table 3. Usage and Turnover Calculations for East and West Strand Car Parks

Site	Month	Jul-11	Jul-12	Jul-13	Jul-14	Jul-16
East Strand (537 spaces)	Uses	47818	41597	41588	54208	76912
	Per day	1543	1342	1342	1749	2481
	Turnover	2.9	2.5	2.5	3.3	4.6
	Month	Aug-11	Aug-12	Aug-13	Aug-14	Aug-16
	Uses	40143	48070	46208	44093	29897
	Per day	1295	1551	1491	1422	964
	Turnover	2.4	2.9	2.8	2.6	1.8
	Month	Jul-11	Jul-12	Jul-13	Jul-14	Jul-16
	Uses	20457	18889	18889	23343	n/a
	Per day	660	609	609	753	-
West Strand (186 spaces)	Turnover	3.5	3.3	3.3	4.0	-
	Month	Aug-11	Aug-12	Aug-13	Aug-14	Aug-16
	Uses	19198	21233	20352	24865	18921
	Per day	619	685	657	802	610
	Turnover	3.3	3.7	3.5	4.3	3.3

It is apparent from this analysis that the number of times that spaces are being in both car parks used is generally increasing in July. Volumes in August fluctuate more significantly and this may be associated with changeable weather.

At the East Strand car park, the volumes in August compared to July appear to fluctuate significantly, and this may be due to how the car park is used for events such as sports events and other events e.g. Airshow which would affect the overall volumes recorded.

At the West Strand car park, the July and August figures are more comparable i.e. a difference of no more than +/-2,400 users per month. As such the August data generally mirrors the July data in terms of increasing usage.

If the two car parks operate at capacity, this limits space turnover and therefore the total number of people who can park each day. This may discourage some users from returning to the area if they find it difficult to find a parking space. The lower turnover at East Strand compared to West Strand would suggest that people park for longer at East Strand, which may be reflective of the size of the car park, associated beach and number of attractions that are near to East Strand when compared to West Strand.

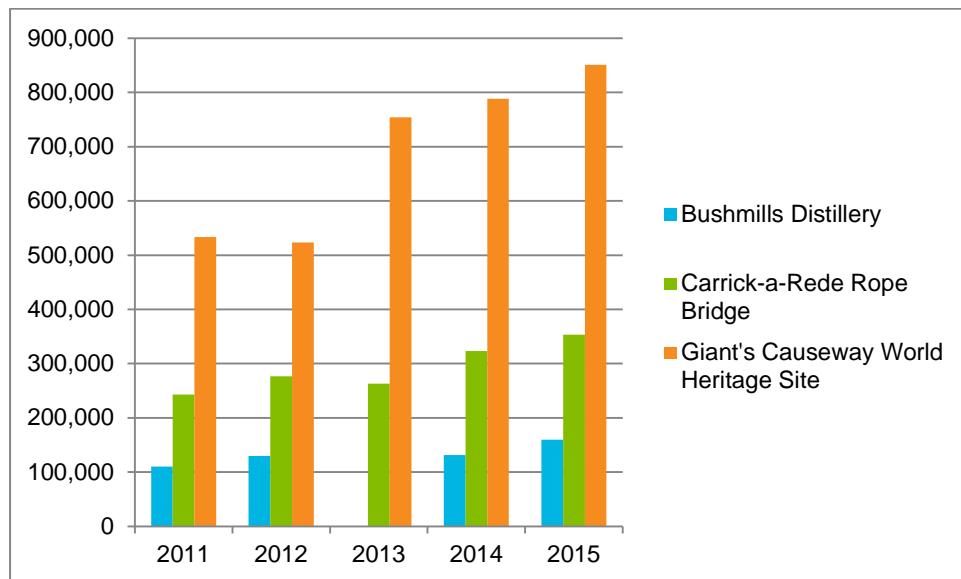
DRAFT

2.3.3 Visitors and Parking at Tourist Nodes

Data¹ relating to tourist sites on the Causeway Coast has been considered in order to understand wider demand issues across the Borough. Three of the key tourist sites have been considered; Bushmills Distillery, Carrick-a-Rede Rope Bridge and Giant's Causeway World Heritage Site.

Figure 7 shows increasing volumes at each of these three sites. At Bushmills Distillery and Carrick-a-Rede Rope Bridge volumes have increased by 46% between 2011 and 2015, and at the Giant's Causeway World Heritage Site volumes have increased by 60%.

Figure 7. Visitor Numbers at Three Key Attractions (2011 – 2015)



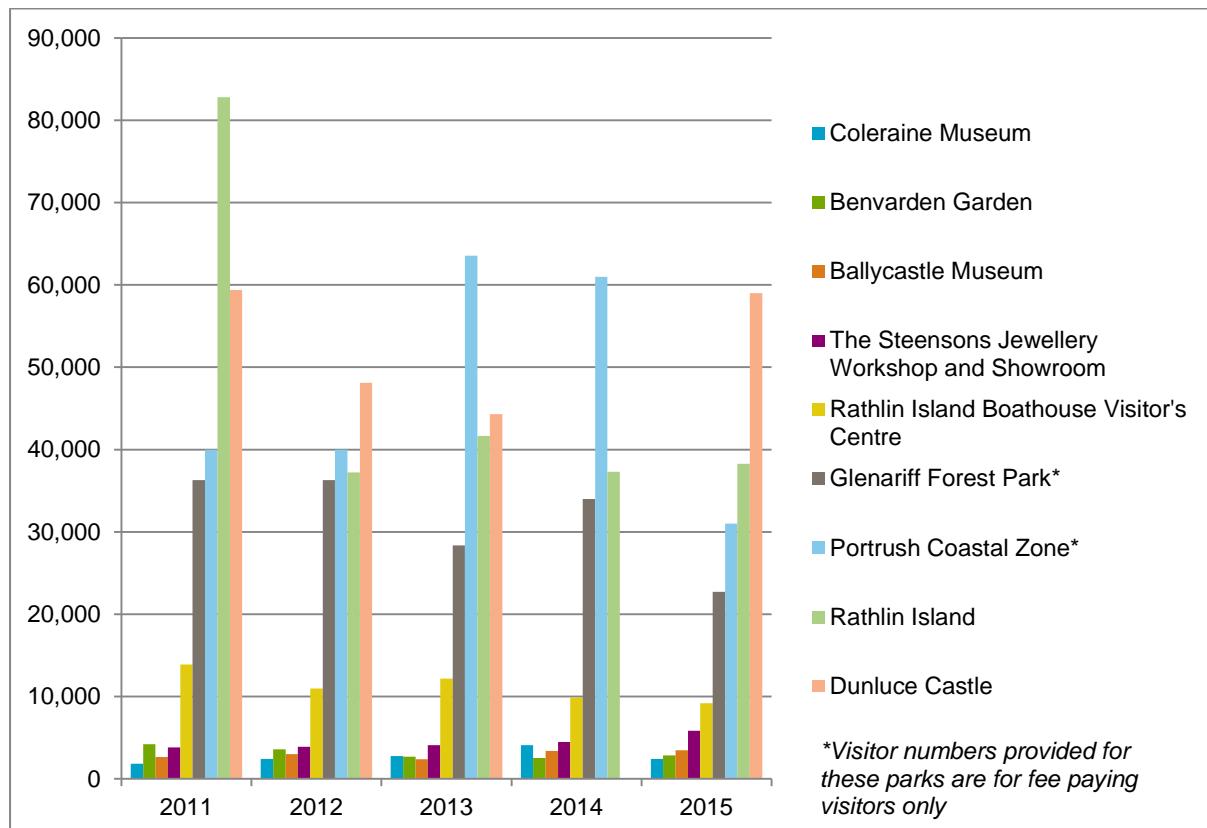
Discussions with the National Trust as part of this study have identified noticeable increases in visitor numbers and associated traffic, leading to parking problems and traffic congestion. Information provided by the National Trust has highlighted that paying visitors at the Giants Causeway between the start of 2013 and the end of 2016 had increased by over 25%.

The increased numbers have led to the introduction of timed tickets at Carrick a Rede in summer of 2017 in order to try and ameliorate congestion and parking problems in the summer of 2017

It is reasonable to assume that the increase in tourist volumes will have been reflected in increased parking and congestion problems, at other car parks within a reasonable proximity of these sites. For example the 'spillover' Park & Ride at Dunluce School in Bushmills was in more frequent operation in summer 2017 as a result of visitor numbers at the Giants Causeway.

Figure 8 shows estimated visitor numbers at other attractions within the Council area. The picture is more mixed, with only three out of nine attractions showing an increase between 2011 and 2015 (Coleraine Museum, Ballycastle Museum and the Steenisons Jewellery Workshop and Showroom in Glenarm). However it is noted that most of these sites have relatively low visitor volumes anyway so it is difficult to determine meaningful trends.

¹ Northern Ireland Visitor Attraction Survey, NISRA 2011- 2015

DRAFT**Figure 8. Visitor Numbers at Other Attractions (2011 – 2015)**

Whilst usage data is not currently available for most car park sites, it would be reasonable to assume that increased tourist volumes would have resulted in some increased car trips and therefore parking volumes. Therefore increases have been seen (anecdotally) at key car parking sites along the 'Causeway Coastal Route' i.e. Waterfoot, Cushendall, Cushendun, Ballycastle, Ballintoy, Bushmills, Portrush, and Portstewart.

2.4 Public Transport Provision

The Causeway Coast and Glens' area can be accessed by bus and rail services. These focus on Coleraine, the 218/219 bus service between Belfast and Coleraine has a half hourly frequency with up to three services per hour at peak times. The 234 bus service operates between Derry/Londonderry and Coleraine every two hours.

Train services from Belfast to Coleraine operate on an hourly frequency, with an hourly service connecting to Portrush.

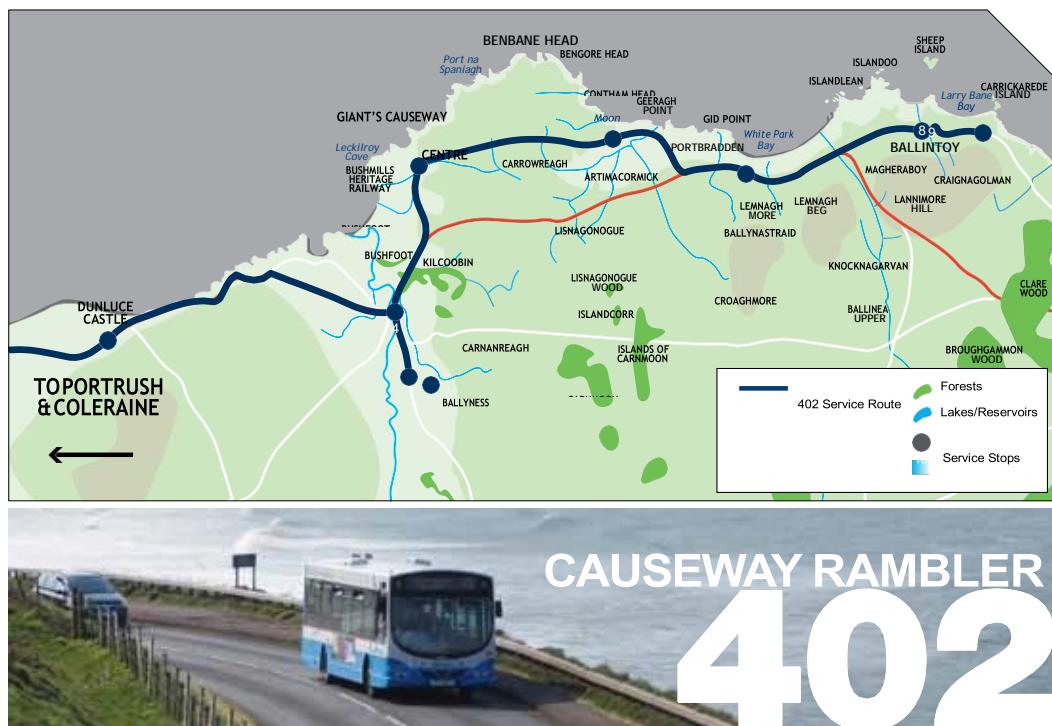
In the four primary Hubs: Portrush, Portstewart, Ballycastle and Bushmills. Several bus services serve these Hubs. These services are listed below.

The 172/402 Causeway Rambler bus service operates between Coleraine and Ballycastle. The 172 Rambler service serves Portrush. The service also serves the following nodes: Dunluce, Bushmills, Dunseverick and Ballintoy. The service operates every half hour during the summer months (note this was for 2017, previous years have been every hour). However from October the 172/402 Causeway Rambler service operates on an hourly frequency.

The 140a/140b Coleraine Triangle Service serves the hubs of Coleraine, Portrush and Portstewart. The Triangle Service has a frequency of four services per hour.

The 217 bus service operates between Ballymena and Ballycastle every two hours (Ballymena has onward bus and train connections).

The 178/178a operates from Coleraine to Ballycastle. The service does not operate on Sundays. The service has a frequency of three services daily from Monday to Friday and a frequency of two services daily on Saturdays.

DRAFT**Figure 9. 402 Causeway Rambler and 172 Route (Source: Translink)**

Service 331 serves Ballycastle Town and operates in a loop starting from and concluding at The Anzac public house but services the seafront. This service operates every fifteen minutes Monday to Friday.

The 221 bus service operates twice daily (one service in the morning and one service in the afternoon). This service serves Belfast Europa Buscentre and the Giant's Causeway. This service only operates from July 3rd to August 31st. The 243 bus service also serves the Giant's Causeway and operates one service from Derry/Londonderry at noon on Sundays during July and August only.

The 252 Antrim Coaster bus service operates between Larne and Ballycastle. However this service only operates from July 3rd to August 31st. The service has a frequency of twice daily Monday to Friday. The service does not operate on Saturday or Sunday. The following nodes are served by the 252: Ballygally, Glenarm, Carnlough, Glenariff, Cushendall and Cushendun.

In terms of tickets there are a range of tickets and fares available covering both bus and rail.

A Bus Rambler ticket costs just £9 (adult) or £4.50 (child) and allows you to 'hop-on, hop-off' all day for all Translink bus and coach services. An iLink card from £16.50 gives you a day's unlimited bus and rail travel. Family and Friend tickets costs £17 for up to two adults and two children and allows unlimited travel at any time on Ulsterbus, Goldline and NI Rail journeys between June 5th and August 31st. Outside of this peak period a Family and Friends ticket costs £22.00.

Bus and rail ticket tariffs are slightly lower during peak summer months in comparison with the rest of the year.

It should be noted that to encourage use of public transport.

Furthermore, the National Trust offer a discount of £1.50, £1.25 and £3.75 off a standard adult, child ticket and family ticket respectively at the Giant's Causeway Visitor Centre on the presentation of a valid Translink ticket.

In addition, the National Trust provides a Park & Ride service between Bushmills Village (Dundarave Car Park with 80 spaces). This operates between March and October and runs every 20 minutes.

DRAFT

Bus stop (for Bushmill direction) at Giants Causeway (source: Google)



Bus stop (for Portrush direction) at Dunluce Castle (source: Google)

DRAFT

There is associated bus stop infrastructure along the bus routes mentioned. The 172/402 service connects the main Hubs and a number of nodes. Bus stops range in standard of provision as illustrated by the images above. The first is at the Giants Causeway and the second is at Dunluce Castle and the third is at Carrick-a Rede on approach to Ballintoy.

DRAFT

3. Option Assessment Criteria

3.1 Introduction

This chapter details how the list of potential sites were scored. This multi-criteria assessment process enabled a hierarchy of sites to be determined so that they could be differentiated in a meaningful and evidence based manner.

3.2 Detailed Scoring Criteria

The sites were subjected to scoring according to five individual criterion, these are listed in Table 2 overleaf and include a description of each and how they would be scored.

Each of the seven criterion were then assigned specific scoring classifications. These are presented within Table 3 further overleaf, with the scoring for each ranging from 0 – 5. As can be seen, ranges were determined for each score out of five for each criterion. For example, for Accessibility Time, walk time beyond 10 minutes meant that the site was not favourably scored etc. through to a maximum score of 5 for sites that were at the centre of the Hub.

The scoring assessment for travel time was informed by the GIS accessibility analysis (Bushmills only) Other criterion such as infrastructure costs were informed using a combination of experience on recent similar projects, professional judgement, sites access etc..

It should be noted that the study brief stated a limit of 1kilometre distance from the Hub should be considered for the purposes of this study.

DRAFT**Table 4. Scoring Criteria**

CRITERIA	DESCRIPTION	HOW IT IS SCORED	FURTHER INFO
Accessibility & Travel Time	Consider the potential accessibility of option in terms of using the travel time outputs from accessibility analysis	Higher scoring according to lower walk times from site to central location	5 and 10 min walk time I isochrones
Infrastructure Deliverability	Consider the likelihood of actually developing the option on site	Higher scoring option would be one that can easily be delivered on site through standard engineering techniques with limited special construction requirements. A low scoring option would be one that has very specific design and/or build requirements or that has a large infrastructure requirements.	Considers issues such as accommodation works, drainage, or any special requirements to deliver an option on site
Infrastructure Costs	Consider the cost of infrastructure for each option, in its broadest sense	Those options with low infrastructure costs requirements would be allocated a high score, whilst options with high infrastructure costs would be allocated a lower score.	Includes issues such as the costs of accommodation works, land purchase, etc
Planning	Consider each option's planning status and whether there are specific design and/or associated planning issues	A high scoring option was one that raised no design or planning issues/concerns and was capable of achieving planning permission. A low scoring option was one that had specific design requirements or raised particular planning issues that could affect whether planning permission would be granted or not.	Existing zonings, planning applications, or consents may need to be changed
Traffic & Transportation	Consider the potential of each option achieving a satisfactory outcome with respect to traffic and transport issues	A high scoring option would be one where the site was a key access road that is also used by higher frequency public transport services. A low scoring option would be one on a low trafficked route with no public transport services.	Also considers whether there are specific design and/or infrastructure issues associated with each option e.g. site located on a protected route, right turn pockets, sight-line issues etc.
Economic Benefit to CC&GBC	Consider the likelihood of each option facilitating other economic benefits to the Hub	A high score would be allocated to an option that had high likelihood of adding spend to the local economy and/or had legacy benefits. A low score would be allocated to an option that had low likelihood of adding spend to the local economy and/or had little or no legacy benefits.	One point will be visitor "dwell time" in the area and associated spend. For example options closer to existing facilities would allow visitors the opportunity to dwell in Hub.

DRAFT**Table 5. Scoring Classifications**

Score		1 Poor proposal to address the criterion	2 Limited proposal to address criterion	3 Acceptable proposal to address the criterion	4 Good proposal to address the criterion	5 Excellent proposal to address the criterion	Measures
Description							
Accessibility	greater than 20 minutes	15-20	10-15	5-10	0-5	0	minutes
Infrastructure Deliverability	heavily contaminated or major civil works internally and externally	contaminated or major civil works internally	greenfield or similar requiring major earthworks	some earthworks required	minor clearance of vegetation		
Infrastructure Costs	greater than £500k per Ha	£400k-£500k	£300k-£400k	£200k-£300k	Public owned	Free or council owned	£k/ha
Planning	planning restrictions will not allow in this area	subject to onerous planning restrictions	which could be progressed with appropriate levels of surveys, reporting, mitigation etc	zoned for other use	current planning application on site for other use	within development limit	
Traffic & Transportation	no existing access and on protected route	no existing access	existing access with limited road frontage for sightlines and turning pocket and on protected route	existing access with limited road frontage for sightlines and turning pocket	existing access with sufficient road frontage for sightlines and turning pocket	existing access with sufficient road frontage for sightlines and turning pocket and some enabling works required with limited works required	
Economic Benefit	within 30 min walking distance to Bushmills	within 20 min walking distance to Bushmills	over 15 min walking distance to Bushmills	over 10 min walking distance to Bushmills	over 5 min walking distance to Bushmills	In centre	distance

DRAFT

4. Bushmills

4.1 Introduction

AECOM liaised with the Causeway Coast and Glens Borough Council, to review potential sites within Bushmills that can be utilised as a Park and Stride/ Park and Ride facility. Given Bushmills strategic location within the study area as well as its closeness to the areas major tourist attractions i.e. the Giants Causeway a more detailed assessment was undertaken at this location.

4.2 Sites Under Consideration

The sites identified are shown in Appendix C, with walk times for each site included in Appendix D.

4.2.1 Dunluce School Gravel Sports Field

The Dunluce School gravel sports field is located to the west of Bushmills Settlement Development Limit. The sports field has an existing gated access onto the A2 Dunluce Road, however this access is considered to be minimal and substandard in terms of geometry and visibility. Its location at the outskirts of Bushmills results in limited pedestrian access with a narrow footway noted on one side of the carriageway opposite to the site. The site could accommodate circa 500 spaces.

4.2.2 Giants Causeway and Bushmills Railway Car Park Extension

The car park extension is located to the north of Bushmills and is just outside the Settlement Development limit. The existing car park has a single access onto the Ballaghmore Road with the minor access appearing to conform to minimal standards. It is noted that the car park has a significant level difference to that of the Ballaghmore Road. Again footway provision immediately adjacent to the site is limited, with a footway noted on one side of the carriageway.

It should be noted that to the immediate southeast of the site an application has been lodged to extend the Bushmills railway to provide a new railway halt with commercial facilities (LA01/2016/1482/F). This proposal would add to and increase the connectivity of this location. The site could accommodate circa 240 spaces.

4.2.3 Fitzgerald Polo Lands

The site was previously agricultural fields but has recently been redeveloped as a polo field. There is no formal parking on site with parking taking place on a grassed area at the southern end of the site. Therefore in order to provide more formal parking using ground reinforcement systems rather than hard standing areas. The polo pitch is only used occasionally and therefore the parking area could be used for Park & Ride / Park & Stride. The area in question could accommodate circa 500 parking spaces.

4.2.4 Main Street Car Park Extension

The Main Street car park is located centrally in Bushmills with access via a priority junction onto Main Street. On first inspection the access is narrow and potentially substandard in terms of visibility splays. Given the central location of the car park, pedestrian facilities are excellent, with the acquisition of some adjacent derelict properties the site could accommodate circa 80 spaces.

4.2.5 Dundarave Car Park Extension

The Dundarave car park is located on the northern edge of the Development Settlement Limit, with access via a priority junction onto Dundarave Road leading to a further priority junction onto the A2 Whitepark Road (it currently has 80 spaces). The immediate Dundarave junction is limited in terms of geometry and visibility splays; however the A2 Whitepark Road junction would appear on first inspection to be adequate.

Again given the more central location of the site pedestrian facilities in the immediate vicinity and to/ from Bushmills centre are excellent. The overall site could accommodate 500 spaces in total.

DRAFT**4.2.6 Bushmills Distillery Car Park Extension**

The Bushmills Distillery car park is located to the south of Bushmills within the Settlement Development Limit. As a main tourist attraction facility the existing access onto Main Street is wide and on first inspection would look to have no issues in terms of access geometry or visibility. Equally pedestrian facilities in the immediate vicinity and to/ from Bushmills centre are good. There is currently a site opposite the existing car park and this site could accommodate circa 240 spaces.

4.2.7 Former Dunluce Presbyterian Church Hall

The church hall is located to the southwest of Bushmills and is just outside the Settlement Limit boundary. The site has an existing access onto Priestland Road which is substandard, furthermore the access is located within a 40mph and therefore may have issues in terms of delivering an access to standard with visibility splays. In addition the priority access on the opposite side of the road into Dunluce Cottages may add further constraint in terms of an access location.

As with other sites on the periphery of Bushmills, pedestrian access is limited with a footway on one side of the carriageway opposite the site. The site could accommodate circa 90 spaces.

4.3 Assessment

This section details the scores assigned to the seven sites within Bushmills. The scoring table is presented in Appendix E and is summarised in Table 6 below, with each site ranked according to score.

Table 6. Summary of Scoring - Bushmills

Site Name	Score	Rank
Dundarave Car Park Extension	28	1
Dunluce School Gravel Sports Field	22	2
Fitzgerald Polo Lands	22	2
Main Street Car Park Extension	21	4
Bushmills Distillery Car Park Extension	19	5
Giants Causeway and Bushmills Car Park Extension	19	5
Former Dunluce Presbyterian Church Hall	17	7

DRAFT

5. Ballycastle

5.1 Introduction

Sites in Ballycastle have proved more difficult to find than in Bushmills. There are a number of initial sites identified from site visit some of which lie outside the 1km limit identified in the study brief. Given the locations and occupancy levels, public council owned car parks have been excluded from the list.

5.2 Site Descriptions

The following is a list of potential site following a site visit on 28th July 2017:

1. Clare Road, west of caravan car park;
2. Whitepark Road, McQuillan GAC Grounds;
3. Leyland Road former site of McQuillan GAC;
4. Leyland Road Industrial Estate;
5. Market Street / Leyland Road junction;
6. Dalriada Hospital, Coleraine Road;
7. St Patricks and St Brigids Church Moyle Street; and
8. Sheskburn Recreation Centre.

The above sites are shown on Appendix F.

5.2.1 Clare Road, West of Caravan Car Parks

Whilst outside the 1km limit there are possibly Park & Ride (P&R) opportunities in this general location. The combination of the area being served by the 172 / 402 bus service as well as potentially the 331 Ballycastle town service, could facilitate a P&R service with four buses per hour on existing services.

The main issue would be a site location. Work has begun on Clare Road on the new 'Leisure Park' associated with planning application 2015/0023/F and all other potential sites appear to be on utilised agricultural land.

5.2.2 Whitepark Road McQuillan GAC Grounds

Whilst outside the 1km limit there are possibly Park & Ride (P&R) opportunities in this location. The club has currently approximately 60 parking spaces. There are also a number of unmarked areas that could be used for parking. These could accommodate over 100 additional spaces.

The site is passed by the 331 Ballycastle town service and there could be the potential to divert the 172 / 402 route, to provide P&R services. However the main issue is that the ground is owned by Antrim GAA and that the council would have to come to some arrangement with regards leasing spaces over the peak summer period.

5.2.3 Leyland Road former site of McQuillan GAC

Whilst outside the 1km limit there are possibly Park & Ride (P&R) opportunities in this location. The site is passed by the 331 Ballycastle town service and there could be the potential to divert the 172 / 402 route, to provide P&R services. However the main issue is that the ground is assumed still owned by Antrim GAA and that the council would have to come to some arrangement with regards leasing spaces over the peak summer period.

5.2.4 Leyland Road Industrial Estate

Leyland Road industrial estate is an Invest NI industrial estate which is currently not fully developed. It is within a kilometre of the centre of Ballycastle. Here could be an opportunity to develop out of the site as parking (the overall site has approximately 0.85hectares).

DRAFT

The site is passed by the 331 Ballycastle town service and the 172 / 402 route (outbound only), to provide P&R services. However a main issue is that the ground is owned by Invest NI and that the council would have to come to some arrangement with regards leasing spaces over the busy summer period.

5.2.5 Market Street (Leyland Road Junction)

There is an area of derelict land on the eastern side of the junction of Market Street and Leyland Road. This site could accommodate approximately 50 parking spaces.

The site is passed by the 331 Ballycastle town service and the 172 / 402 route (outbound), to provide P&R services. However the main issue is that the ground is owned by a third party and the council would have to come to some arrangement with regards leasing spaces over the busy summer period.

5.2.6 Dalriada Hospital, Coleraine Road

Dalriada Hospital lies between Leyland Road and Coleraine Road. The site is within 500 metres from the town centre and is just over 1 km from the seafront. The site has currently a number of spaces available for public parking whilst attending the facility. The site is directly off the A44 Coleraine Road. a main access road in Ballycastle therefore has the potential to 'catch' pass by traffic. The site is passed by the 172 / 402 bus route (inbound only), which could potentially provide a P&R service.

There are areas of 'spare' ground around the existing car parks, which could accommodate increases of car parking provision total spaces 75-115. These could be dual purpose, to be freed up during the summer months for P&R / Park & Stride (P&S), but given back to the hospital during non-summer months. The land is assumed to be owned by the Northern Health & Social Care Trust and therefore discussions would need to take place with the Trust, should this location be taken further.

5.2.7 St Patrick's and St Brigid's Church, Moyle Road

Under planning permission 2013/0127/F the Church received approval to improve parking at the church and beside the Parochial Hall. This has provided approximately 200 spaces. Given the use of these spaces is likely to be at its greatest on Sunday mornings, it would potentially allow their general use at other times of the day during the peak tourist season. The site is close to the town centre and approximately 1 km from the seafront.

5.2.8 Sheskstown Recreation Centre

The Council is currently reviewing its leisure offer in the town. There is the possibility of a new leisure centre being built at the existing playing fields off Quay Road. This could free up the current council owned site for redevelopment some of which could be for tourist parking total parking provision is circa 50 spaces.

5.3 Assessment

This section details the scores assigned to the seven sites within Ballycastle. The scoring table is presented in Appendix G and is summarised in Table 7 below, with each site ranked according to score

Table 7. Summary of Scoring – Ballycastle

Site Name	Score	Rank
St Patricks and St Brigid's Church Moyle Street;	25	1
Dalriada Hospital, Coleraine Road;	23	2
Market Street / Leyland Road junction;	20	4
Market Street / Leyland Road junction;	20	4
Market Street / Leyland Road junction;	20	4
Leyland Road Industrial Estate;	19	5
Whitepark Road, McQuillan GAC Grounds;	13	6
Leyland Road former site of McQuillan GAC;	13	6
Clare Road, west of caravan car park;	6	8

DRAFT

6. Portstewart

6.1 Introduction

Sites in Portstewart within the 1km threshold stated in the brief, have proved more difficult to find than in Bushmills. As such, there are a number of initial sites identified from a site visit that lie outside the 1km limit identified in the study brief.

6.2 Site Descriptions

The following is a list of potential site following a site visit on 4th August 2017:

1. NW 200 Pits A2 Portrush Road
2. Rockview Lane off B185 Station Road
3. Existing University of Ulster car park off B185 Cromore Road;
4. Existing car park at Burnside Presbyterian Church off Mill Road;
5. Existing car park at Flowerfield House off A2 Coleraine Road.
6. Existing car park at Portstewart Baptist Church off A2 Coleraine Road.
7. Reconfiguration of Existing car park at Portstewart Cemetery off A2 Coleraine Road.
8. Open Space near Portstewart FC on St Johns Close off A2 Coleraine Road
9. Existing car park at Portstewart Point
10. Dominican College

The above sites are shown on Appendix H.

6.2.1 NW 200 Pits A2 Portrush Road

Whilst outside the 1km limit there are possibly Park & Ride (P&R) opportunities in this general location. The site has been used in the past for P&R at major events and the site being served by the 140a/140b bus service could facilitate a basic P&R service with three buses per hour on existing services. An appropriate allocated area within this site could accommodate approximately 400 spaces.

6.2.2 Rockview Lane off B185 Station Road

Whilst just outside the 1km limit there are possibly Park & Stride (P&S) opportunities in this location, as there are no regular public transport services going past this location. The site is currently undeveloped ground and assumed owned by a third party. If developed it is estimated could accommodate up 100 additional spaces.

6.2.3 Existing University of Ulster car park off B185 Cromore Road

Whilst significantly outside the 1km limit the site has been used in the past for P&R at major events however there are no passing local bus services and therefore a specific bus service would be required to shuttle between the site and Portstewart. Another issue is that the ground is owned by University of Ulster and therefore the Council would have to come to some arrangement with the University with regards leasing spaces over the peak summer period. However, given the distance away from Portstewart and lack of passing services this option has not been taken any further.

6.2.4 Existing car park at Burnside Presbyterian Church off Mill Road

Mill Road lies between Station Road and Coleraine Road. The church car park has approximately 150 spaces. Given the use of these spaces is likely to be at its greatest on Sunday mornings, it would potentially allow their general use at other times of the day/week during the peak tourist season. The site is served by the 140a/140b bus service could facilitate a P&R service with three buses per hour on existing services. An issue is that the ground is likely owned by the church and therefore the Council would have to come to some arrangement with the church with regards leasing spaces over the peak summer period.

DRAFT**6.2.5 Existing car park at Flowerfield House off A2 Coleraine Road**

Whilst outside the 1km limit there are possibly Park & Ride (P&R) opportunities in this location. Flowerfield House or Flowerfields Arts Centre is located off the A2 Coleraine Road just to the north of the junction of Meadowlands and A2 Coleraine Road. This site currently has an arts centre and has approximately 100 parking spaces. Whilst outside the 1km limit there are possibly Park & Ride (P&R) opportunities the site being served by the 140a/140b bus service on Coleraine Road which could facilitate a basic P&R service with three buses per hour on existing services.

6.2.6 Existing car park at Portstewart Baptist Church off A2 Coleraine Road

Whilst outside the 1km limit there are possibly Park & Ride (P&R) opportunities in this location. The church car park lies immediately off the A2 Coleraine Road. The church car park has approximately 170 spaces. Given the use of these spaces is likely to be at its greatest on Sunday mornings, it would potentially allow their general use at other times of the day/week during the peak tourist season. The site is served by the 140a/140b bus service could facilitate a P&R service with three buses per hour on existing services. An issue is that the ground is likely owned by the church and therefore the Council would have to come to some arrangement with the church with regards leasing spaces over the peak summer period.

6.2.7 Reconfiguration of Existing car park at Portstewart Cemetery off A2 Coleraine Road

Whilst outside the 1km limit there are possibly Park & Ride (P&R) opportunities in this location. There are informal parking places outside Portstewart Cemetery immediately off the A2 Coleraine Road, south of Portstewart Baptist Church. The site is served by the 140a/140b bus service could facilitate a P&R service with three buses per hour on existing services. The ground is likely owned by the Council or TNI. A reconfiguration and rationalisation of the space outside/around the cemetery could provide up to 100 parking spaces.

6.2.8 Open Space near Portstewart FC on St Johns Close off A2 Coleraine Road

Whilst just inside the 1km limit there are possibly Park & Stride (P&S) opportunities in this location. The location is off the A2 Coleraine Road and therefore use could also be made of the 140a/140b bus services on Coleraine Road with three buses per hour on existing services. The ground is likely owned by the Council the site is currently public open space so this could be contentious from a local community perspective although only a portion of the public open space would be required to accommodate around 100 parking spaces.

6.2.9 Car Park at Portstewart Point

The existing car park at Portstewart Point (circa 50 spaces) is accessed from Portmore Road (the main approach from the east) via Victoria Terrace. Pedestrians can access the Promenade from the car park via a designated direct pedestrian route. Site observations noted negligible occupancy in the car park.

6.2.10 Dominican College

Dominican College is located off the Coleraine Road, on Strand Road, on the eastern side of Portstewart. It is has a number of playing field within the school boundary (similar to Dunluce School temporary Park& Ride in Bushmills). A temporary car park on one of the playing field could accommodate approximately 250 car parking spaces. Use could also be made of the 140a/140b bus services on Strand Road as another way of getting into the town centre (as an alternative to walking). Also note the land is owned by third party e.g. School Trustees or CCMS and therefore the Council would have to come to some arrangement with regards leasing spaces over the peak summer period (similar to Dunluce School temporary Park& Ride in Bushmills).

6.3 Assessment

This section details the scores assigned to nine sites (one dropped from above) within Portstewart. The scoring table is presented in Appendix I and is summarised in Table 8 below, with each site ranked according to score

DRAFT**Table 8. Summary of Scoring - Portstewart**

Site Name	Score	Rank
Portstewart Point Car park	22	1
Dominican College off Strand Road	19	2
Reconfiguration of Existing car park at Portstewart Cemetery off A2 Coleraine Road.	19	2
Existing car park at Burnside Presbyterian Church off Mill Road;	18	4
Existing car park at Flowerfield House off A2 Coleraine Road.	18	4
Existing car park at Portstewart Baptist Church off A2 Coleraine Road.	18	4
Open Space near Portstewart FC on St Johns Close off A2 Coleraine Road	18	4
NW 200 Pits A2 Portrush Road	15	8
Rockview Lane off B185 Station Road	11	9

DRAFT

7. Portrush

7.1 Introduction

Sites in Portrush have been reviewed from the previous study (Enabling Infrastructure for the British Open Golf – Portrush 2019), except that they have examined only those sites close to Portrush (circa 1km for the centre) as opposed to the 10 km radius included in previous study.

There are a number of initial sites identified from the previous study review and site visit that lie slightly outside the 1km limit identified in the study brief. These sites are detailed below.

7.2 Potential Sites

The following is a list of potential sites that are around the 1km isochrones from the centre of Portrush these were identified following a review of the previous study:

- Catering College, Ballywillan Road;
- Site Adjacent to Skerries Caravan Park, Bushmills Road;
- Greenfield on edge of development limit Ballywillan Road;
- Dhu Varren - Open Ground Beside Housing Development, Dhu Varren Park; and
- Site between Carrick Dhu and Juniper Hill, Portstewart Road.

The above sites are shown in Appendix J.

All lie within 2 km's of the centre of Portrush but only the Catering College, Ballywillan Road lies within the 1km radius from the centre of Portrush and therefore this is the only site put forward in Portrush as part of this study.

7.2.1 Assessment

This scoring and assessment for this site was undertaken as part of the previous study (Enabling Infrastructure for the British Open Golf – Portrush 2019). The Catering College on the Ballywillan Road both scored highest in both the permanent and temporary site assessment. The site could cater for approximately 1300 car parking spaces

DRAFT

8. Public Transport Measures

8.1 Introduction

This section of the report identifies a number of public transport measures that in tandem with the opportunities for P&R / P&S suggested in previous sections will help encourage the use of P&R / P&S and general public transport to, between and around the hubs and nodes.

8.2 Background

Section 2 highlighted the current public transport provision in the study area. In general terms to attract more passengers' services need to service the right route, be reliable and quick, offer a relatively high frequency, have good quality staff and vehicles and be seen as being value for money. These attributes are required in order to overcome a number of barriers to public transport use. Potential barriers relative to this study are:

- Networks – failure to serve routes people want to travel on;
- Facilities – poor waiting facilities;
- Information – limited information regarding routes, times, etc.; and
- Image – unwillingness to use public transport because of above.

The following sections look at these issues in the context of public transport on Causeway Coast.

The previous sections looked at parking in the individual hubs and this section focuses on potential public transport measures to improve.

8.3 Networks

8.3.1 Train Services

As set out in Section 2 there are good train services to access the study area. Train Services to Coleraine (where there is a major bus interchange) and Portrush have an all year round hourly service.

8.3.2 Bus Services

The existing 172/402 service provides a connection between the main hubs of Portrush, Bushmills and Ballycastle.

In 2017 this combined service operated at roughly half an hour frequencies during the months of June, July, August and September.

It is noted that this year the 172/402 service will still operate beyond 'holiday period@ unlike previous years (where 172 only operated) albeit at a reduced frequency compared to the seasonal timetable (e.g. drops from approximately 19 services in Ballycastle direction to 11 services to Ballycastle direction).

Whilst there are direct bus services to the study area including nodes and hubs e.g. 221 and 252. The most popular way of travel by public transport to the hubs and nodes is by train and then bus.

In terms of the hubs and nodes this route has good network coverage in terms of public transport access. Portrush, Whiterocks, Dunluce Castle, Portballintrae, Bushmills, the Giants Causeway, Ballintoy, Carrick-a-Rede, Kinbane Castle, Whitepark Bay and Ballycastle are all served.

Discussions with National Trust have identified that the visitor numbers are increasing significantly as illustrated in Section 2 of this report. In addition the visitor numbers are spreading away from the traditional summer months of July and August and there is now a longer visitor season. For example the National Trust's P&R bus services from Bushmills to the Giants Causeway operates from March to October reflecting this trend.

Whilst the 402/172 service operates at half hourly frequencies during the June – September the service level drops either side of this. Extending the frequency to half hourly over a 6 or 8 month period should be considered

DRAFT

in order to better match visitor trends to the Causeway Coast and further encourage use of public transport to the study area..

8.3.3 Bus Stop Infrastructure

A number of key sites have limited or no bus stop infrastructure. A good example is at Dunluce Castle where bus stop poles are the only piece of infrastructure at one of Northern Ireland's premier tourist attractions.

There is some bus stop infrastructure at the Giants Causeway, where a shelter is provided albeit in one direction only.

Consideration should be given to providing upgraded bus stops in both directions, at key hubs and nodes serviced by the 172/402 service should be upgraded. This would include:

- Adequate shelter, waiting facilities as waiting areas, should be attractive convenient and well lit.
- Passenger information is important especially for occasional users such as tourists and stops should be well presented in this aspect. Real Time passenger information may also be an option.
- This may also include re-siting or adding in new bus stops at the nodes to operate more safely and conveniently.
- In addition to bus stops there is the potential to provide a public transport hub in Bushmills that integrates existing stage carriage services with the Park & Ride Service operated between the Giants Causeway and Bushmills.

Some examples of potential bus stop infrastructure upgrades are shown in Appendix K.

8.3.4 Buses

There also exists an opportunity for a specialist livery and branding for vehicles operating the 172/402 Coleraine to Ballycastle service. This could be a reprise branding as Causeway Rambler or a re-branding e.g. Causeway Coast Hopper or similar. An example at this bus livery/branding is shown in Appendix L.

8.3.5 Ticketing

A range of value for money tickets are currently available for public transport and a number of discounts are available 1st July – 31st August, in addition to other off peak discounts.

Three potential improvements have been identified:

- Extension of seasonal ticket offers;
- Combining bus and train rambler Sunday day tickets; and
- Open returns at present you want to have an overnight stay e.g. coming from Belfast you pay 2 singles.

Information on tourist growth to the major tourist attractions on the Causeway Coast has indicated greater spread away from the peak summer months of July and August. In order to better facilitate tourists travelling in periods around the 'shoulders' of the peak months, it may be worth considering extending the period of seasonal ticket offers by a number of months for example change the period from July and August to June to September, or equivalent.

Embellishment of some of the current ticket offers could also help attract more visitors to use public transport to visit the nodes and hubs. For example on Sundays there is a Sunday Rail Day Tracker Ticket (£7.50) and a Sunday Bus Rambler Ticket (£9.00). If for example, you wished to visit some of the nodes e.g. Dunluce Castle, Ballintoy etc. This requires the purchase of tickets. Whilst it is appreciated that this trip can be made on one ticket (an ilink card) this requires visitors to buy an ilink card at extra cost. It would be simpler for visitors to purchase one ticket i.e. a bus and rail rambler.

Whilst there are good discounted offers on returns, these are day returns, as standard returns are not open in terms of time. Therefore in people visiting the Causeway Coast by public transport and wishing to stay over one or two nights need to pay two separate fares. For example a discounted rail day return (Belfast to Portrush) is £12.30 after 9:30am so travelling after 9:30am on a Saturday and on Sunday would cost £24.30 as opposed to a

DRAFT

one day return of £18.50. If this was an open return for two or three days then this might make public transport more attractive from a pricing perspective.

In addition the extension of this principle to an iLink Card could allow, public transport connections (bus and rail) to the majority of nodes and hubs. An iLink fare to Portrush currently costs £16.50 but is only valid for one day. An open iLink Card for two or three days could be priced at around £20.00 and this would still provide an attractive proposition to visitors to the area.

The above would also be encouraged by discounts to admission tickets to attractions. For example the National Trust offer Translink passengers on discounted admission prices to the Giants Causeway Visitor Centre.

DRAFT

9. Other Infrastructure Measures

9.1 Introduction

A number of other infrastructure measures may be available to help facilitate Park & Ride / Park & Stride and encourage public transport use to the study area. These include making better use of the existing road and public transport networks and include traffic management and control, public transport and operations and travel and traffic information systems.

9.2 Static Direction Signing

There would appear to be an opportunity to enhance existing signage, in particular tourist parking signage, on the basis of the opportunities identified in previous sections.

Direction sign is used to guide traffic to its destination and in the case of this study to the particular hubs and nodes. Signing is specific moving in a hierarchy of destinations, from the Causeway Coast down to the individual destination or nodes.

Primary signage on the approach to the study area e.g. A26 on the approach to the A26/A44 junction. The tour hubs should be identified highlighting P&R facilities are available. Then, at the approaches to each of the hubs and nodes the Park & Ride / Park & Stride car parks would be further signed.

9.3 Variable Message Signing

9.3.1 Introduction

The down side of static signs is that they do not tell drivers whether there are spaces available therefore and opportunity exists to enhance with VMS. This could be at two levels, strategic, and local.

At a strategic level the primary static signs could be enhanced with VMS re. parking availability at the node similar to what takes place now with the VMAS at the Bushmills re the Giants Causeway..

At the local level

In addition in Portrush, Portstewart and Ballycastle where there are a choice of car parks available signs normally direct drivers to the most appropriate parking space. However what static signs do not do is tell drivers whether there are spaces available. In busy periods these hubs suffer from traffic congestion whilst vehicles circulate looking for parking spaces.

In circumstances where this occurs then consideration should be given to variable message signing as part of an integrated parking guidance information system. The applicability of such a measure is now looked at in the context of each of the hubs.

9.3.2 Portrush

Portrush, during busy periods and special events suffers, from traffic congestion caused by traffic searching for car parking spaces. In particular many visitors drive onto the peninsula which has limited road capacity and encourage traffic to pass through unsuitable areas such as Main Street.

A comprehensive system of VMS could allow these trips to be discouraged and direct people to appropriate car parks. Matrix signs can display space availability in real time when linked to a monitoring system, and this can be used to fill up car parks as appropriate.

This system would then be supplemented by the use of P&R / P&S as appropriate.

9.3.3 Bushmills

Bushmills currently has one VMS stating if car parking at Giants Causeway is full then to use car parking in Bushmills and then P&R from Bushmills to the Giants Causeway. The P&R service runs every 20 mins between March to October.

DRAFT

The Bushmills P&R car park has been more frequently oversubscribed with cars being diverted to an over flow temporary car park on the gravel playing pitches at Dunluce school. However if the extension to existing Dundarave car park is taken forward then the extra capacity provided would ameliorate this problem

However there are no VMS signs for those coming from the east. Therefore a review of locations would support parking in the village.

9.3.4 Portstewart

Portstewart suffers, from circulating traffic especially traffic looking for parking spaces along the Promenade and the off street car parks. A relatively simple VMS scheme, one sign on Portmore Road and the other on Coleraine Road could advise traffic when to use potential P&R/P&S sites.

9.3.5 Ballycastle

Tourist traffic in Ballycastle tends to travel through the town along North Street and Quay Road before either finding or circulating looking for a parking space. Again a simple VMS scheme on the outskirts of the town could advise of alternative parking arrangements. For example the two main routes into the town are the B15 on Shitepark Road, the A44 Magheramore Road and the A2 Strain Road. This could advise traffic when to use suitable existing car parks or alternatively potential P&R sites

9.4 Software Applications

Software application or app is piece of software that can run on a mobile phone or tablet or any other electronic device. Apps for parking have been significantly improved in recent times and there are now products available that can help with a number of the parking problems identified within this study. In particular apps there are that have been developed that can:

- Display availability of parking spots based on real time camera data
- Real time advanced navigation systems
- In app payment

The above can be used in applications for both public transport users and car drivers.

For public transport users Real Time Passenger Information is traditionally implemented at key bus stops via dot matrix signs highlighting the time of next bus arrival. Phone apps can also be used to provide such information

For car users apps can provide information on the availability of parking spaces at a particular location and providing information on alternatives.

DRAFT

10. Summary and Conclusions

10.1 Summary of Key Findings

The assessment has shown that there are a number of potential sites in each of the hubs that will satisfy the objectives of this commission.

Whilst this study has focused to a greater degree on Bushmills it has identified potential locations in Portstewart, Ballycastle and Portrush.

There are also a number of suggestions for improving public transport ranging from bus stop improvements to new ticket types.

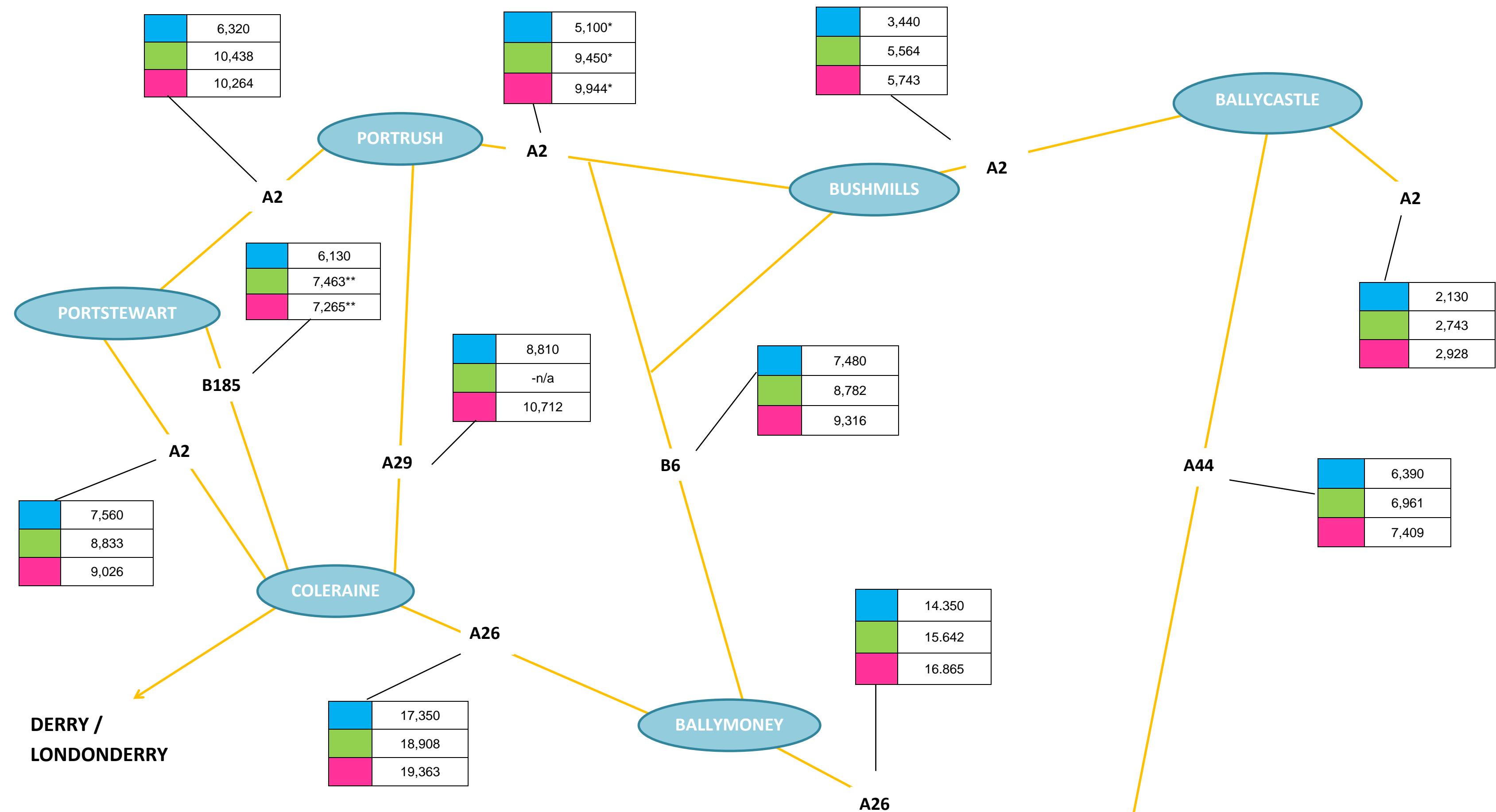
In addition other infrastructure improvements relation to signing and provision of information have been identified..

10.2 Potential Options

10.3 Next Steps

DRAFT

Appendix A Traffic Flows



**Vehicle Traffic Census Average Annual Daily Flows and
Average Monthly Daily Flows 2015 - in vehicles**

*2012

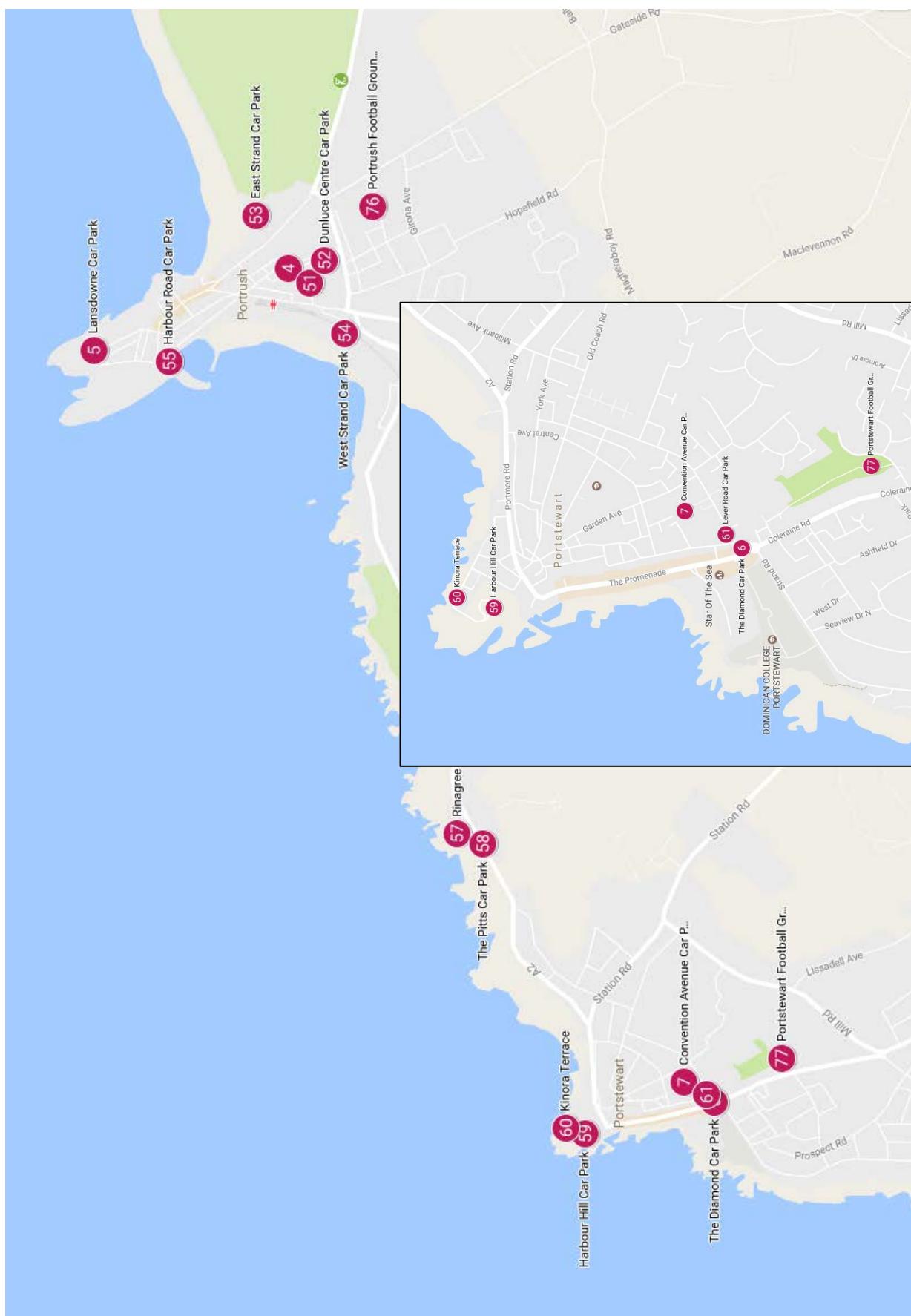
**2014

DRAFT

Appendix B Car Park Locations

DRAFT

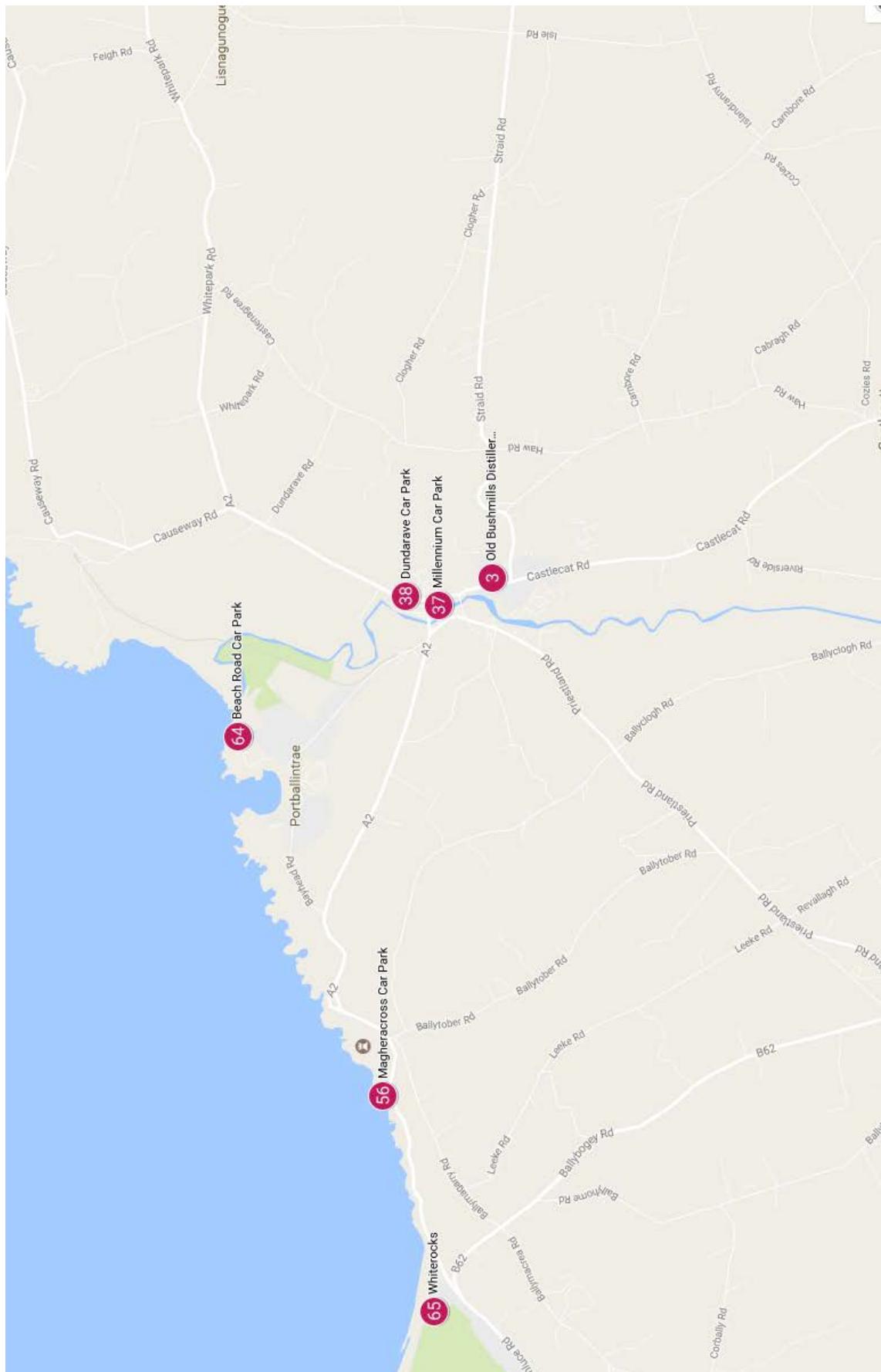
Map depicting car parks in Portstewart and Portrush.



Source: Google Maps.

DRAFT

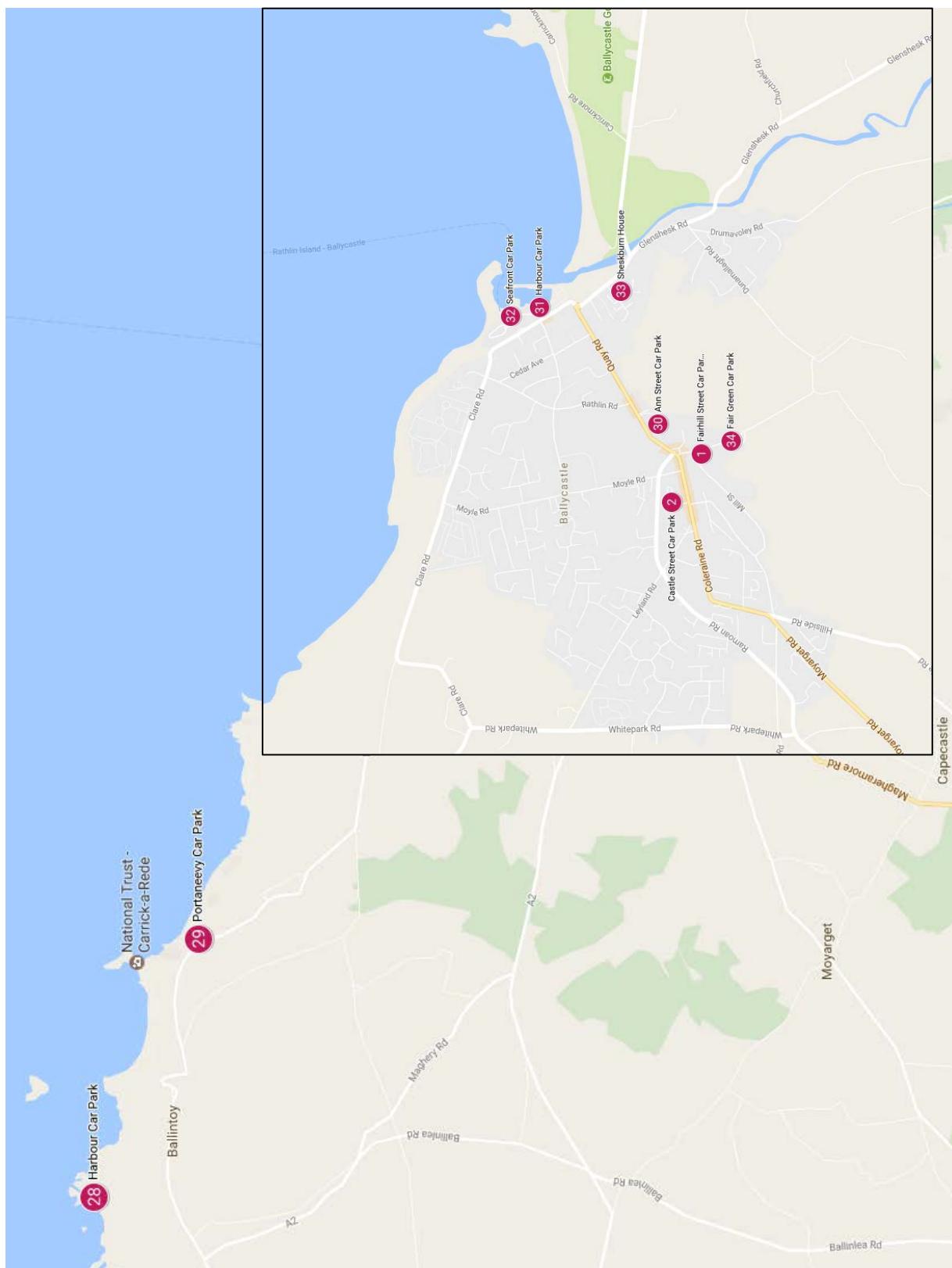
Map portraying car parks in Bushmills and the surrounding area.



Source: Google Maps.

DRAFT

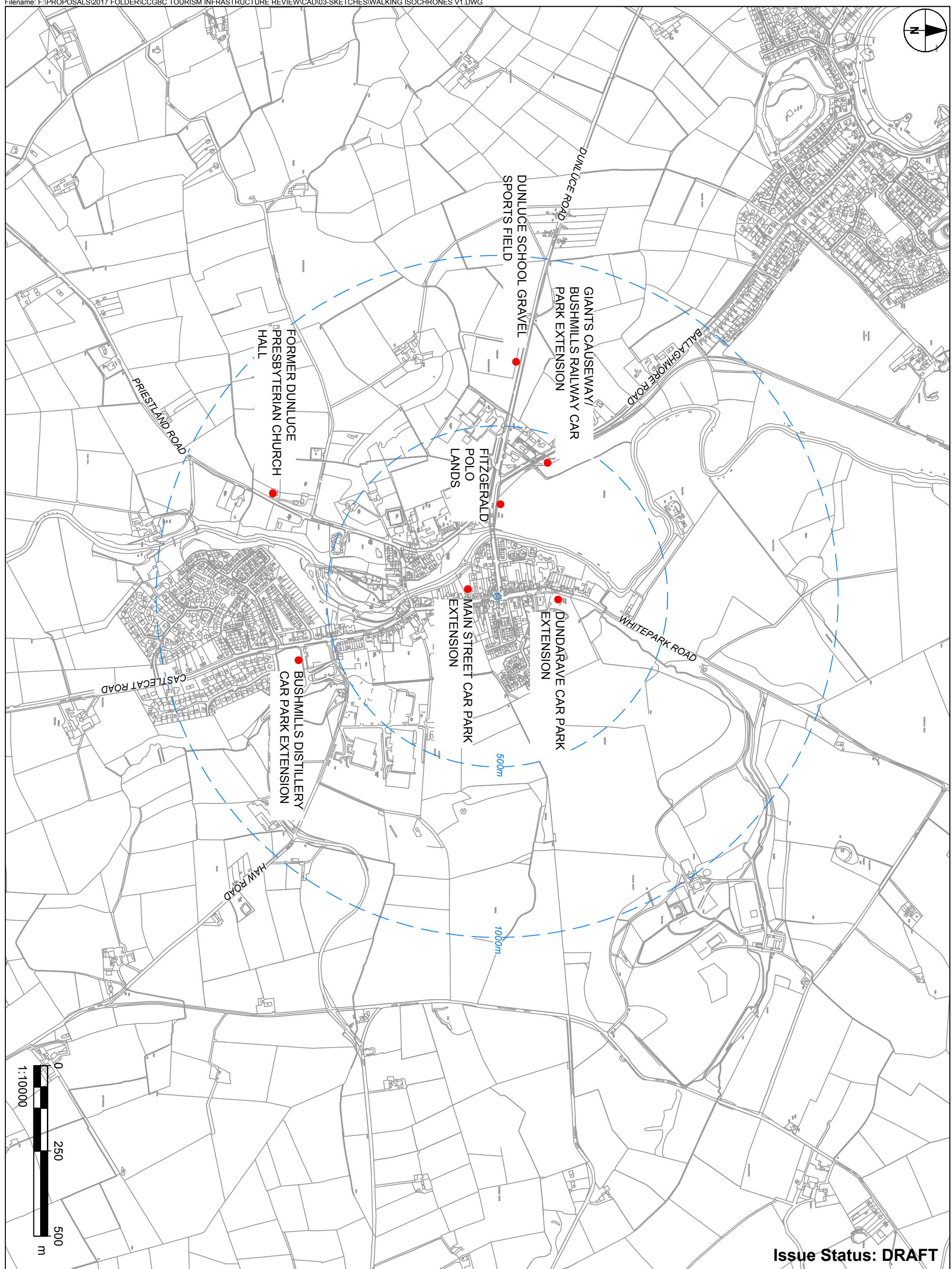
Map denoting car parks in Ballycastle.



Source: Google Maps.

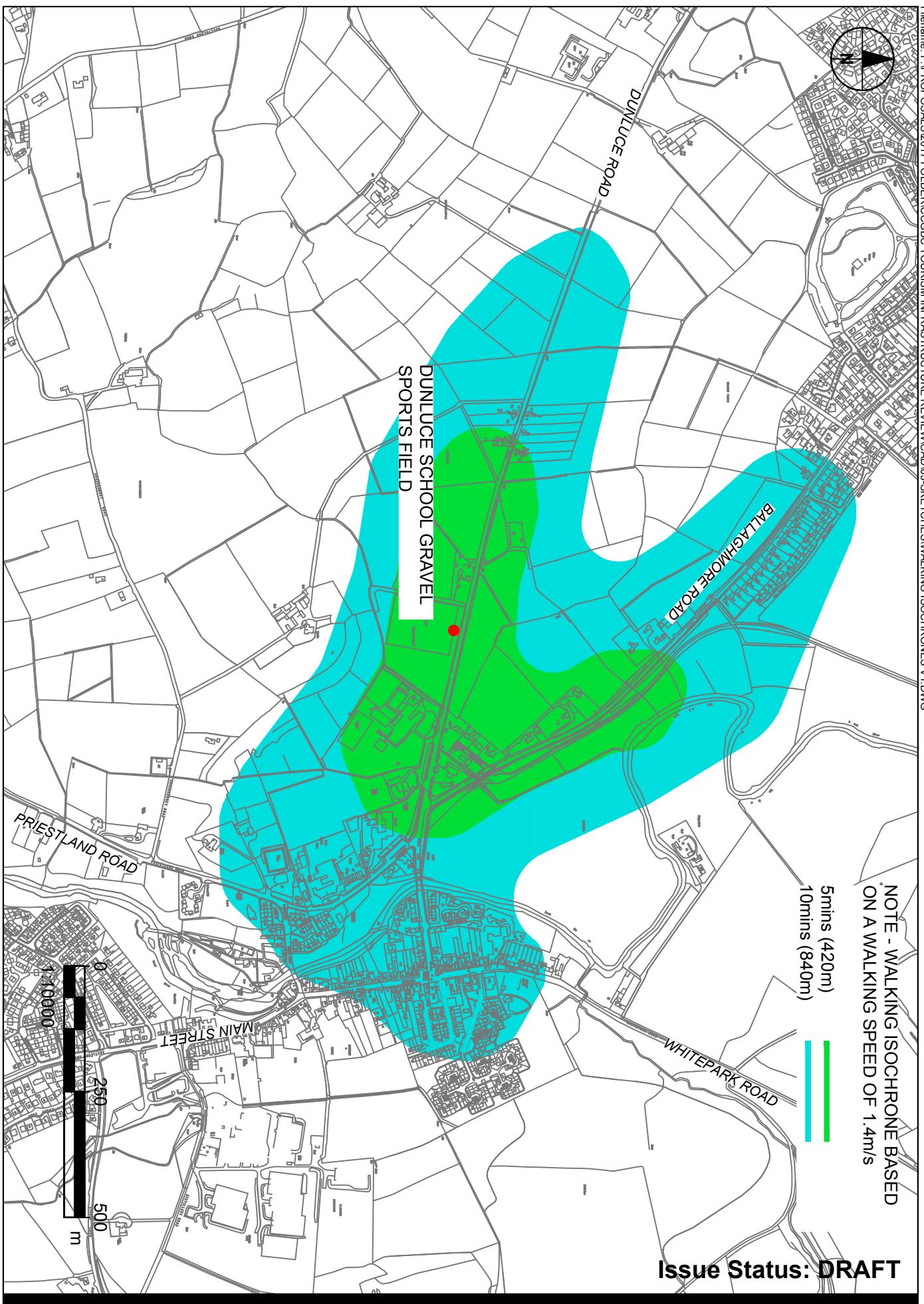
DRAFT

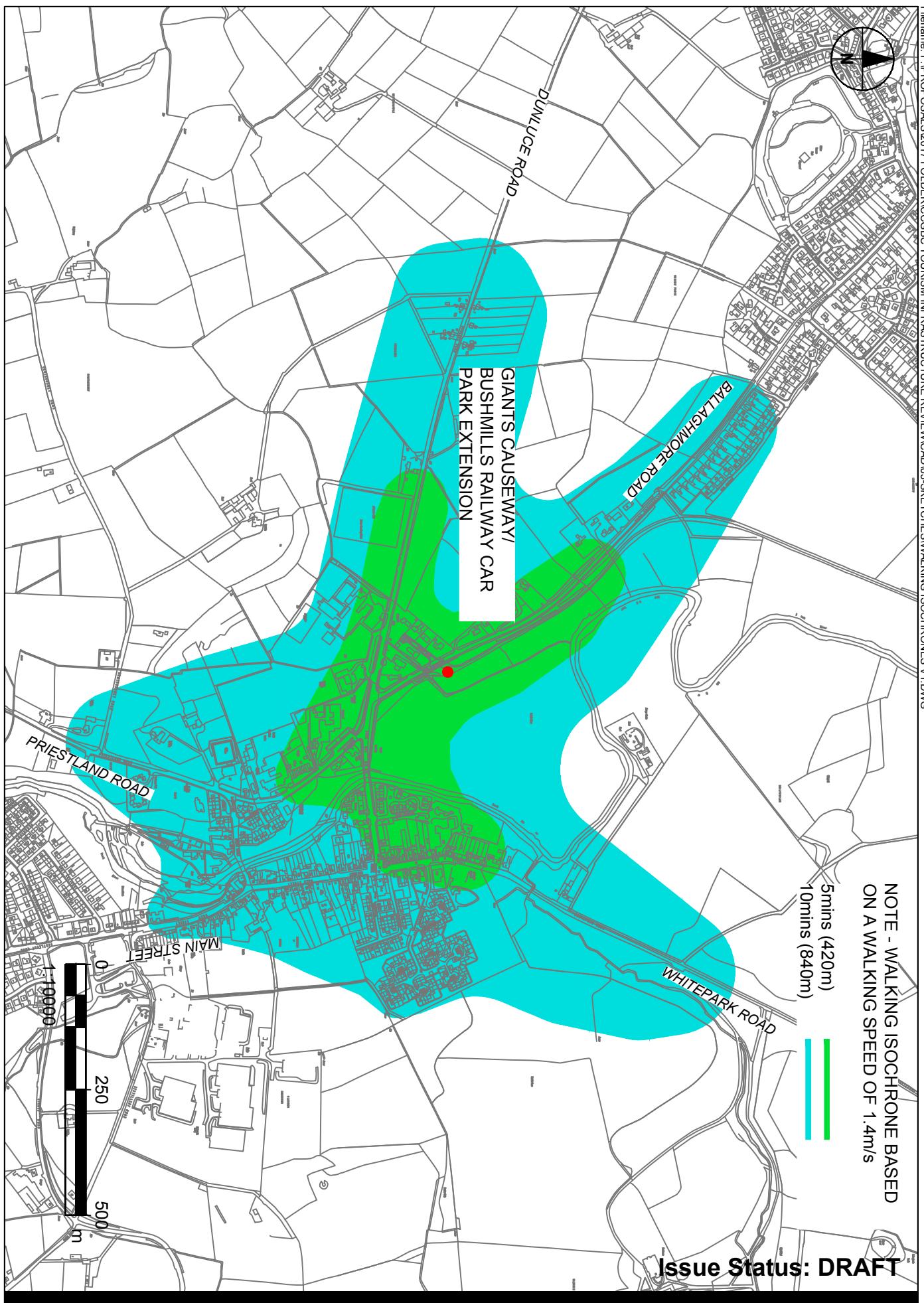
Appendix C Sites in Bushmills

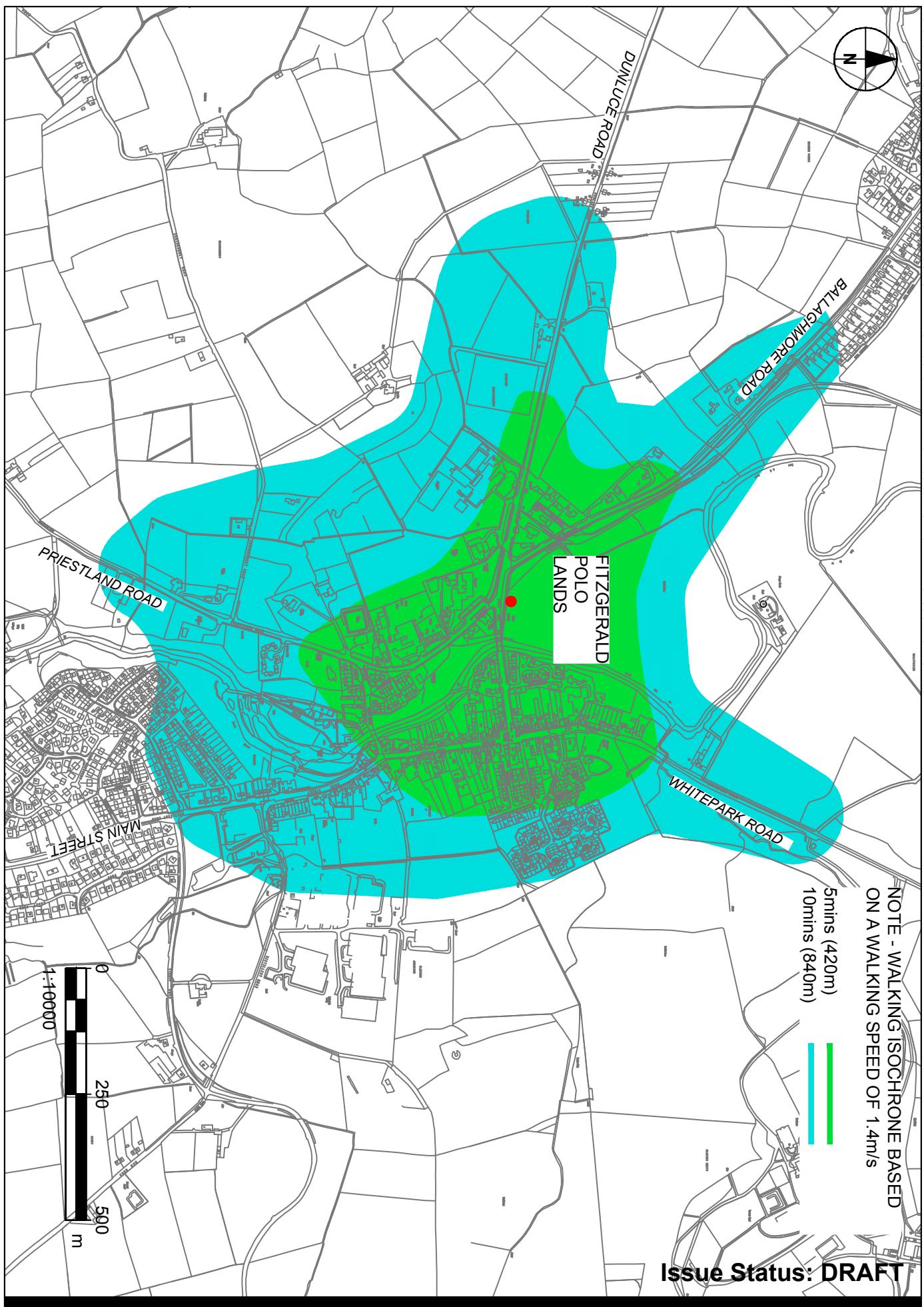


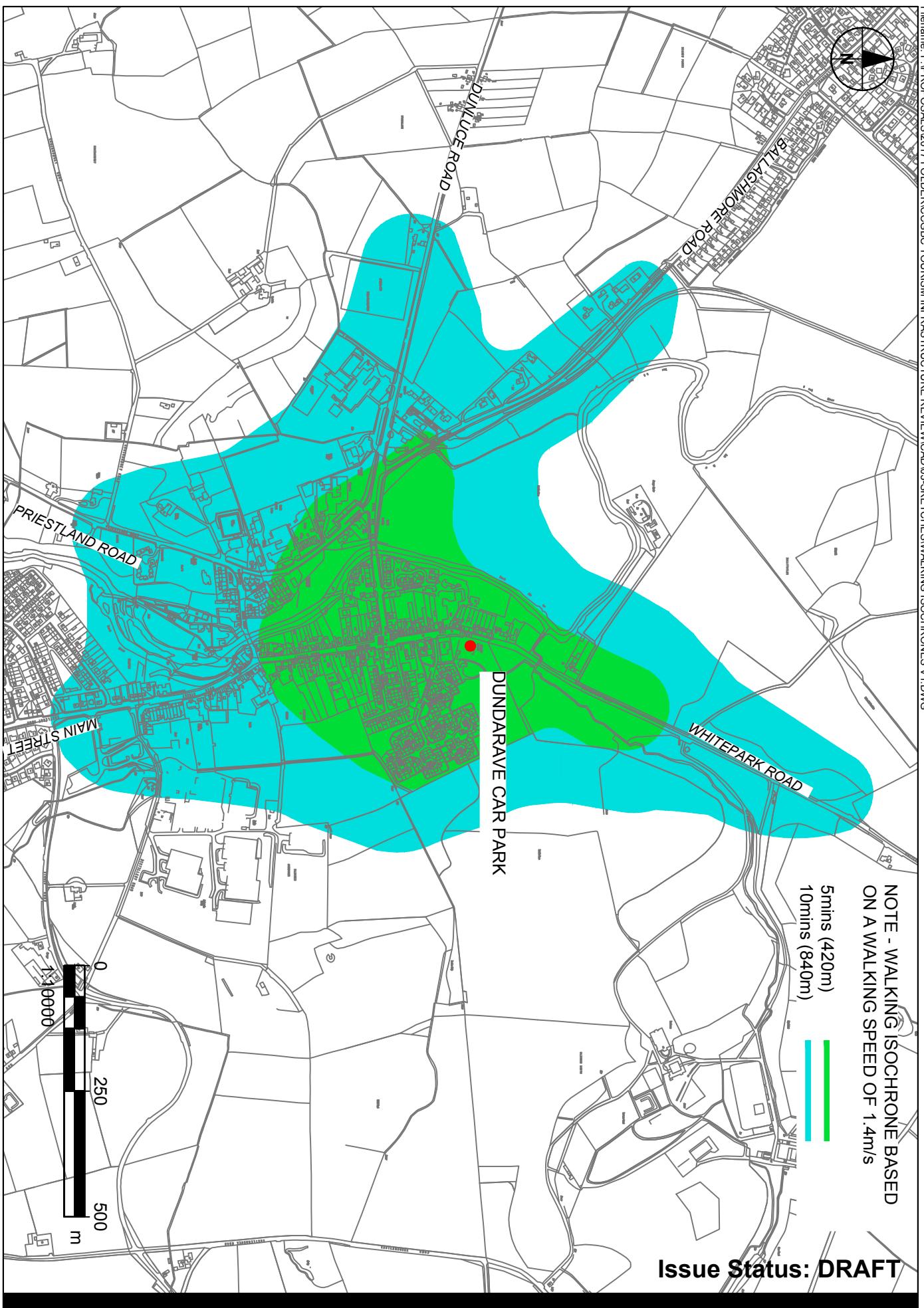
DRAFT

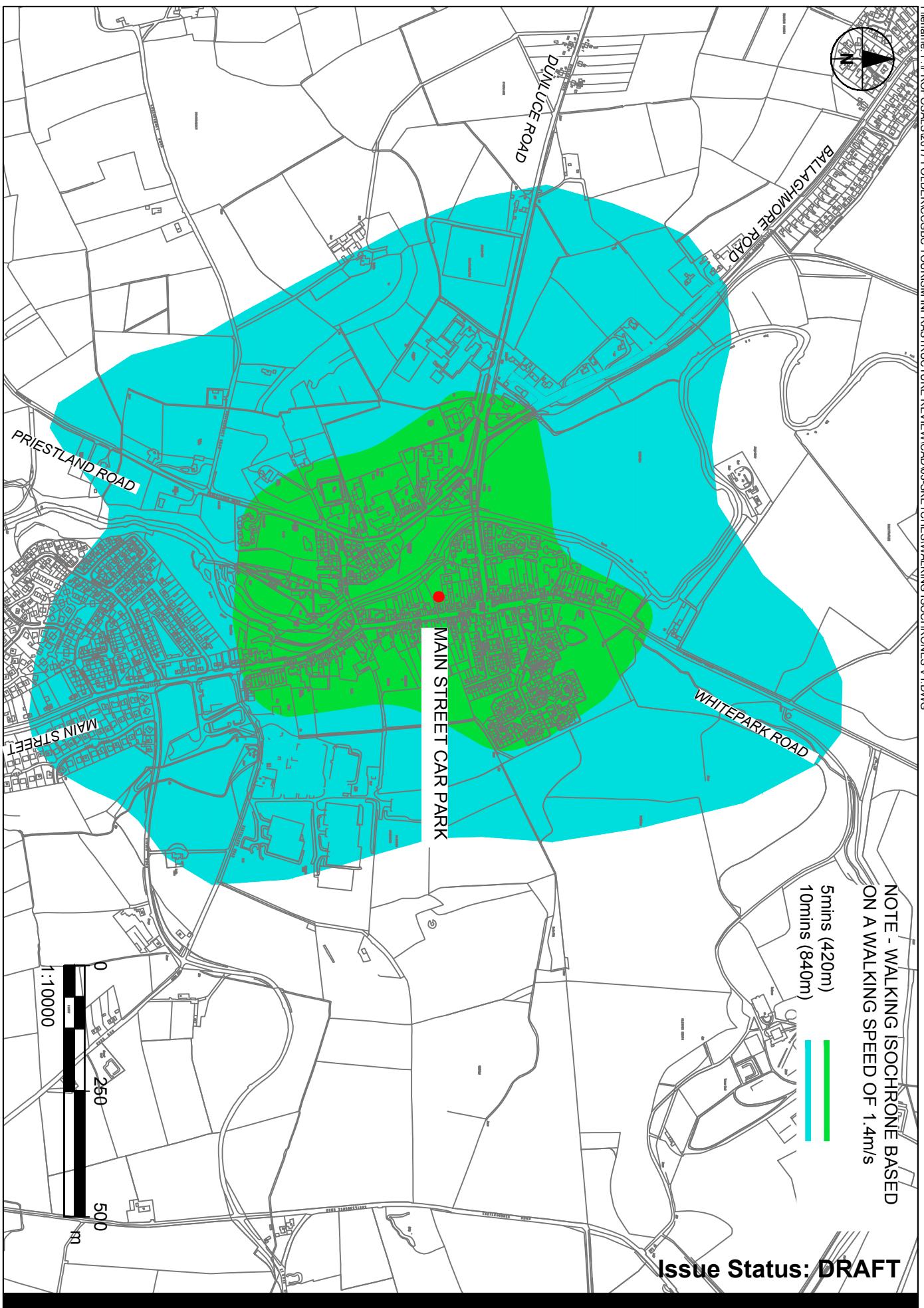
Appendix D Site Walk Time Isochrones for Bushmills

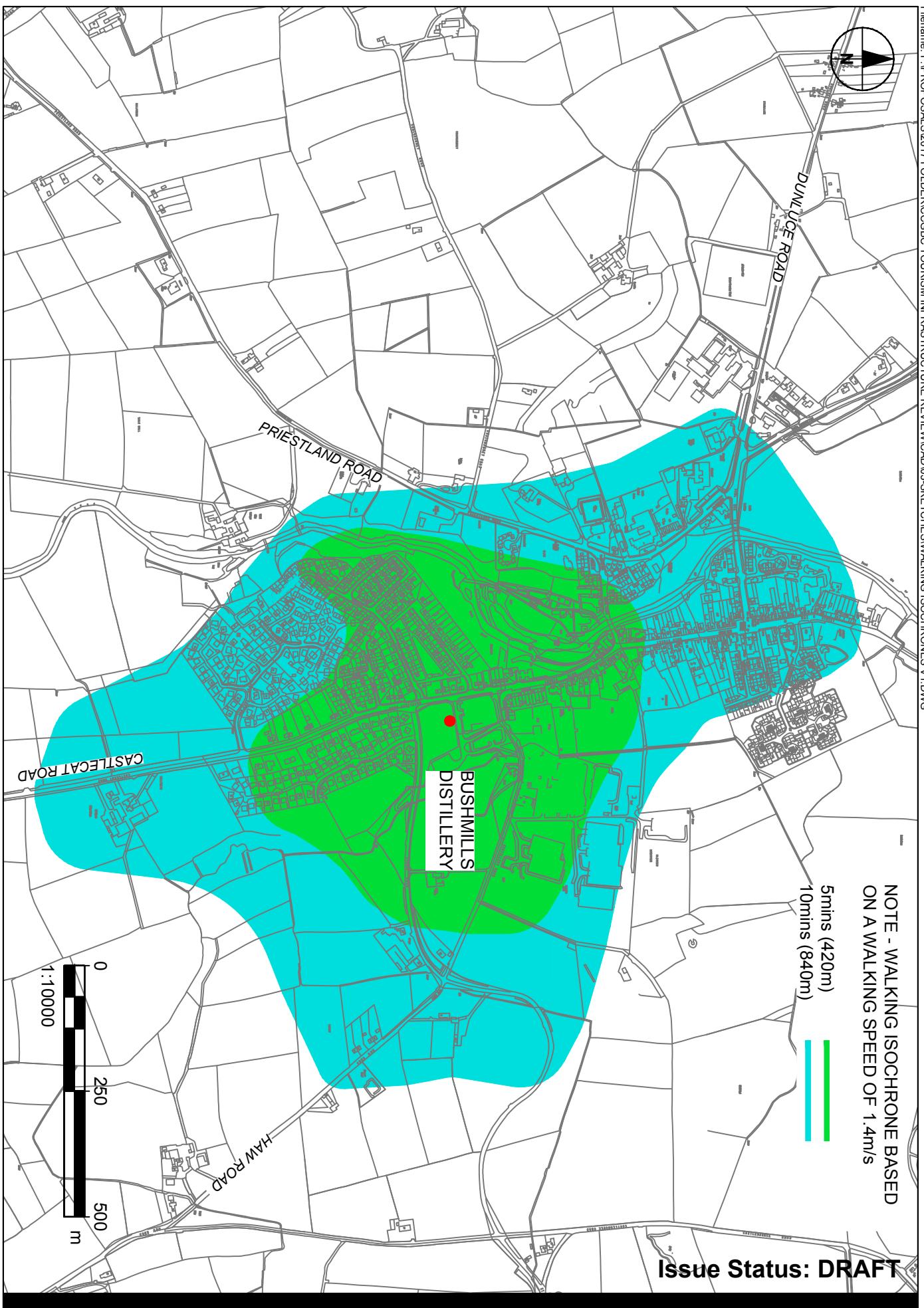


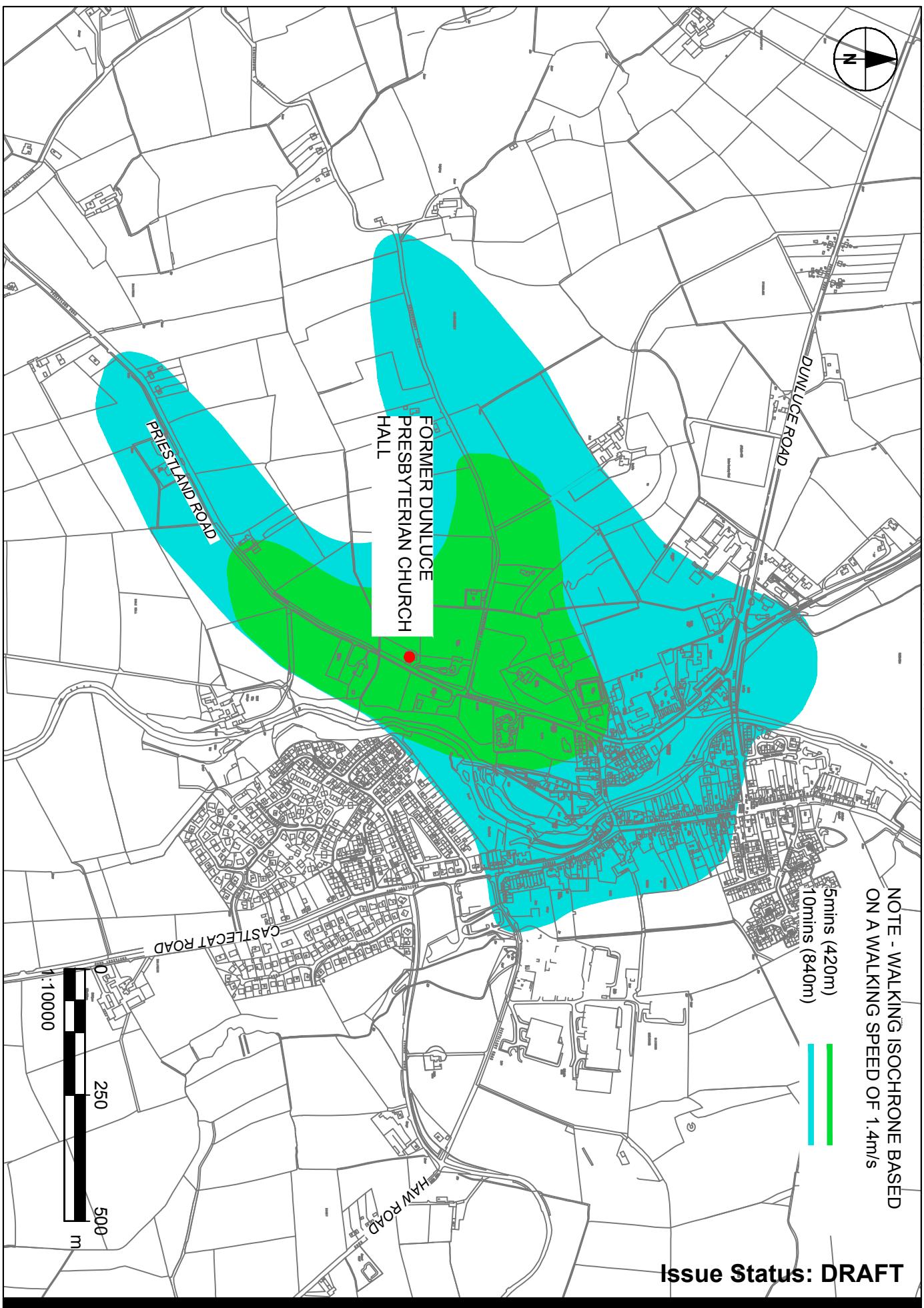












DRAFT

Appendix E Detailed Scoring for Bushmills

CCGBC Tourism and Parking Infrastructure

Scoring of Options against Key Criteria

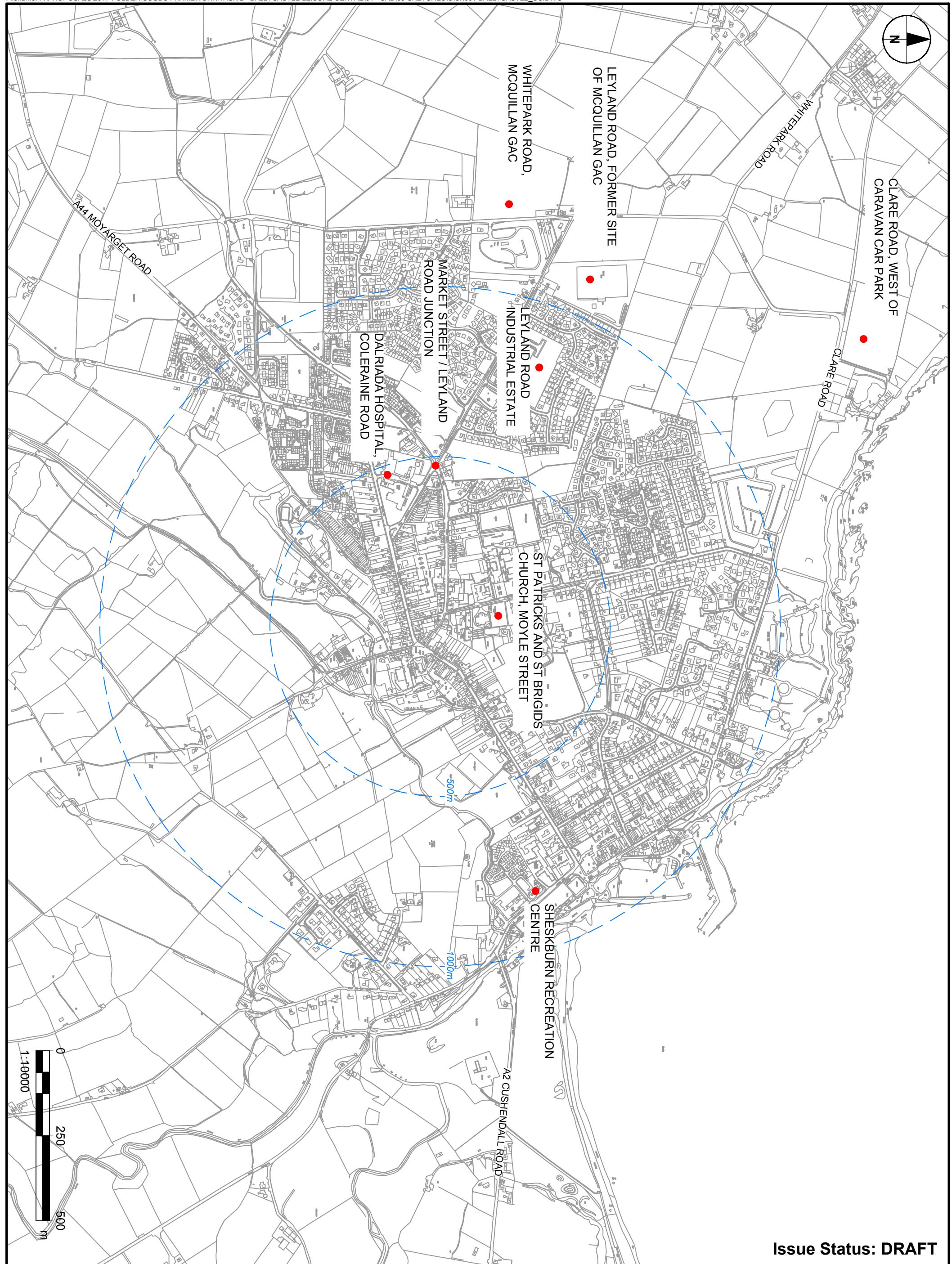
	Criteria						Score	Rank
Criterion	Accessibility & Travel Time	Infrastructure Deliverability	Infrastructure Costs including Land Costs	Planning	Traffic & Transportation	Economic Benefit to CCGBC		
Description of criterion	Consider the potential accessibility of option in terms of using the travel time outputs from accessibility analysis	Consider the likelihood of actually developing the option on site	Consider the cost of infrastructure for each option, in its broadest sense	Consider each option's planning status and whether there are specific design and/or associated planning issues	Consider the potential of each option achieving a satisfactory outcome with respect to traffic and transport issues	Consider the likelihood of each option facilitating other economic benefits to the Hub		
How it is scored	Higher scoring according to lower travel times	Higher scoring option would be one that can easily be delivered on site through standard engineering techniques with limited special construction requirements. A low scoring option would be one that has very specific design and/or build requirements or that has a large infrastructure requirements.	Those options with low infrastructure costs requirements would be allocated a high score, whilst options with high infrastructure costs would be allocated a lower score.	A high scoring option was one that raised no design or infrastructure issues/concerns and was capable of achieving planning permission. A low scoring option was one that had specific design requirements or raised particular planning issues that could affect whether planning permission would be granted or not.	A high scoring option was one that raised no design or infrastructure issues/concerns and was capable of achieving a positive consultation response from Transport NI and Translink. A low scoring option was one that had specific design of infrastructure requirements or raised particular issues that would be likely to obtain a negative consultation response from Transport NI and Translink.	A high score would be allocated to an options that had high likelihood of adding spend to the local economy and/or had legacy benefits. A low score would be allocated to an options that had low likelihood of adding spend to the local economy and/or had little or no legacy benefits.		
Further info	Includes consideration of travel time by car; travel time for shuttle; walk time from site	Considers issues such as accommodation works, drainage, or any special requirements to deliver an option on site	Includes issues such as the costs of accommodation works, land purchase, etc	Existing zonings, planning applications, or consents may need to be changed	Also considers whether there are specific design and/or infrastructure issues associated with each option e.g. site located on a protected route, right turn pockets, sight-line issues etc	One point will be visitor "dwell time" in the area and associated spend. For example options close to existing facilities would allow visitors the opportunity to dwell in Hub.		
Site	Scoring Range	1-5	1-5	1-5	1-5	1-5	1-5	
1 Dunluce School Gravel Sports Field	3	5	4	4	4	2	22	2
2 GC&Bushmills Railway Car Park Extension	4	3	2	3	4	3	19	5
2 Fitzgerald Polo Lands	4	4	2	3	5	4	22	2
4 Main Street Car Park Extension	5	3	3	3	3	4	21	4
5 Dundarave Car Park Extension	5	5	5	5	4	4	28	1
6 Bushmills Distillery Car Park Extension	3	4	3	5	2	2	19	5
7 Former Dunluce Presbyterian Church Hall	2	4	1	5	3	2	17	7

n/a if temporary n/a if temporary

0	greater than 20 minutes		greater than £500k per Ha	planning restrictions will not allow in this area	no existing access and on protected route	greater than 1000 metres from centre
1	15-20	heavily contaminated or major civil works internally and externally	£400k-£500k	subject to onerous planning restrictions	no existing access	within 1000 metres of centre
2	10-15	contaminated or major civil works internally	£300k-£400k	subject to planning restrictions which could be progressed with appropriate levels of surveys, reporting, mitigation etc	existing access with limited road frontage for sightlines and turning pocket and on protected route	within 750 metres of centre
3	5-10	greenfield or similar requiring major earthworks	£200k-£300k	zoned for other use	existing access with limited road frontage for sightlines and turning pocket	within 500 metres of centre
4	0-5	some earthworks required	other public sector owned	current planning application on site for other use	existing access with sufficient road frontage for sightlines and turning pocket and some enabling works required with limited works required	within 250 metres of centre
5	0	minor clearance of vegetation	Free or council owned	within development limit	existing access with sufficient road frontage for sightlines and turning pocket	in centre
	minutes		£k/ha			

DRAFT

Appendix F Sites in Ballycastle



DRAFT

Appendix G Detailed Scoring for Ballycastle

CCGBC Tourism and Parking Infrastructure

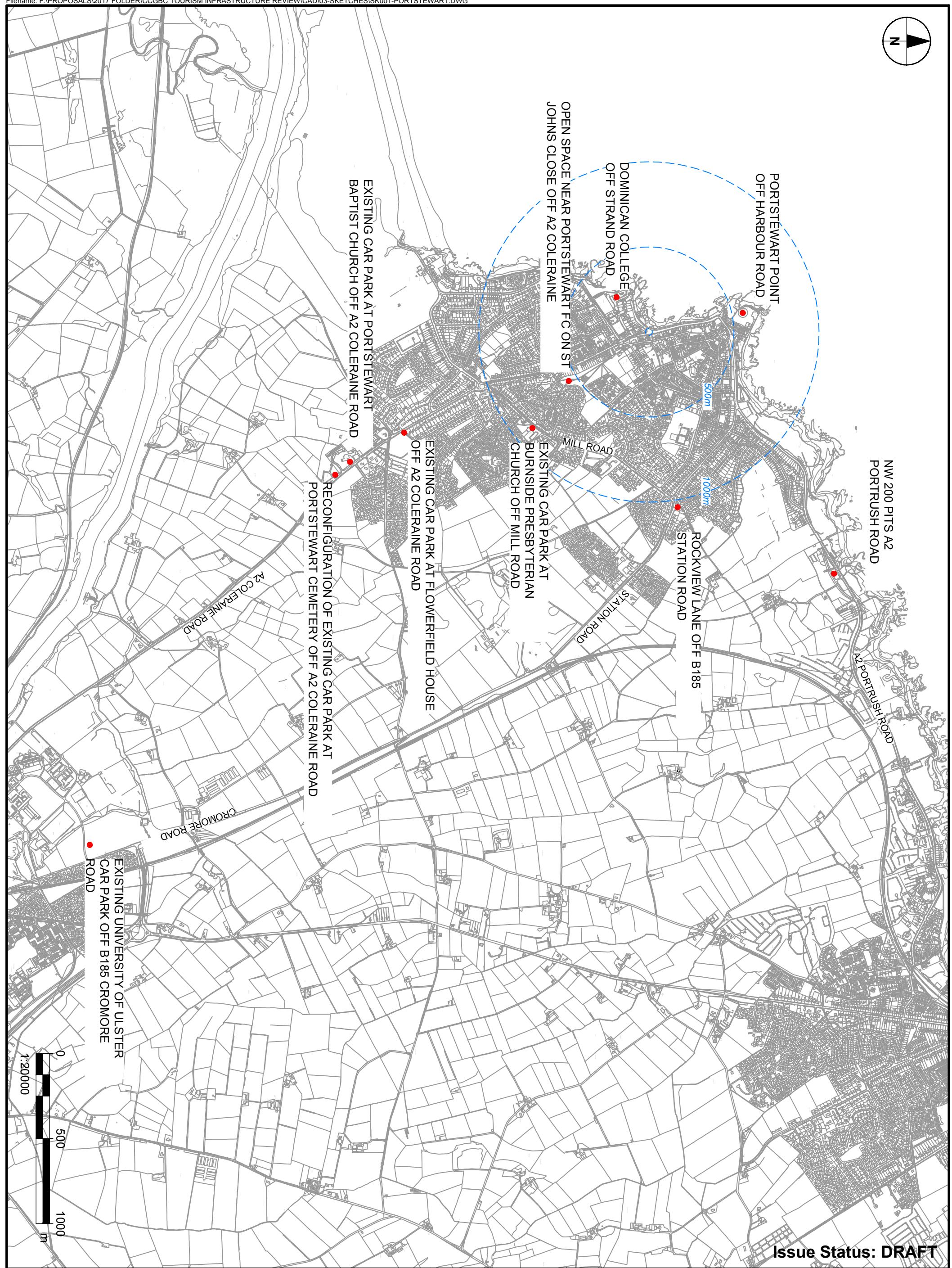
Scoring of Options against Key Criteria

	Criteria						Score	Rank
Criterion	Accessibility & Travel Time	Infrastructure Deliverability	Infrastructure Costs including Land Costs	Planning	Traffic & Transportation	Economic Benefit to CCGBC		
Description of criterion	Consider the potential accessibility of option in terms of using the travel time outputs from accessibility analysis	Consider the likelihood of actually developing the option on site	Consider the cost of infrastructure for each option, in its broadest sense	Consider each option's planning status and whether there are specific design and/or associated planning issues	Consider the potential of each option achieving a satisfactory outcome with respect to traffic and transport issues	Consider the likelihood of each option facilitating other economic benefits to the Hub		
How it is scored	Higher scoring according to lower travel times	Higher scoring option would be one that can easily be delivered on site through standard engineering techniques with limited special construction requirements. A low scoring option would be one that has very specific design and/or build requirements or that has a large infrastructure requirements.	Those options with low infrastructure costs requirements would be allocated a high score, whilst options with high infrastructure costs would be allocated a lower score.	A high scoring option was one that raised no design or infrastructure issues/concerns and was capable of achieving planning permission. A low scoring option was one that had specific design requirements or raised particular planning issues that could affect whether planning permission would be granted or not.	A high scoring option was one that raised no design or infrastructure issues/concerns and was capable of achieving a positive consultation response from Transport NI and Translink. A low scoring option was one that had specific design of infrastructure requirements or raised particular issues that would be likely to obtain a negative consultation response from Transport NI and Translink.	A high score would be allocated to an options that had high likelihood of adding spend to the local economy and/or had legacy benefits. A low score would be allocated to an options that had low likelihood of adding spend to the local economy and/or had little or no legacy benefits.		
Further info	Includes consideration of travel time by car; travel time for shuttle; walk time from site	Considers issues such as accommodation works, drainage, or any special requirements to deliver an option on site	Includes issues such as the costs of accommodation works, land purchase, etc	Existing zonings, planning applications, or consents may need to be changed	Also considers whether there are specific design and/or infrastructure issues associated with each option e.g. site located on a protected route, right turn pockets, sight-line issues etc	One point will be visitor "dwell time" in the area and associated spend. For example options close to existing facilities would allow visitors the opportunity to dwell in Hub.		
Site	Scoring Range	1-5	1-5	1-5	1-5	1-5	1-5	
1	1. Clare Road, west of caravan car park;	0	2	1	2	1	0	6
2	2. Whitepark Road, McQuillan GAC Grounds;	0	3	3	3	4	0	13
2	3. Leyland Road former site of McQuillan GAC;	0	3	3	3	4	0	13
4	4. Leyland Road Industrial Estate;	1	4	4	4	5	1	19
5	5. Market Street / Leyland Road junction;	3	3	5	3	3	3	20
6	6. Dalriada Hospital, Coleraine Road;	3	4	4	5	4	3	23
7	7. St Patricks and St Brigid's Church Moyle Street; and	4	4	3	5	5	4	25
8	8. Shesburn Recreation Centre.	1	5	5	5	5	1	1
							22	3

0	greater than 20 minutes		greater than £500k per Ha	planning restrictions will not allow in this area	no existing access and on protected route	greater than 1000 metres from centre
1	15-20	heavily contaminated or major civil works internally and externally	£400k-£500k	subject to onerous planning restrictions	no existing access	within 1000 metres of centre
2	10-15	contaminated or major civil works internally	£300k-£400k	subject to planning restrictions which could be progressed with appropriate levels of surveys, reporting, mitigation etc	existing access with limited road frontage for sightlines and turning pocket and on protected route	within 750 metres of centre
3	5-10	greenfield or similar requiring major earthworks	£200k-£300k	zoned for other use	existing access with limited road frontage for sightlines and turning pocket	within 500 metres of centre
4	0-5	some earthworks required	other public sector owned	current planning application on site for other use	existing access with sufficient road frontage for sightlines and turning pocket and some enabling works required with limited works required	within 250 metres of centre
5	0	minor clearance of vegetation	Free or council owned	within development limit	existing access with sufficient road frontage for sightlines and turning pocket	in centre
	minutes		£k/ha			

DRAFT

Appendix H Sites in Portstewart



DRAFT

Appendix I Detailed Scoring for Portstewart

CCGBC Tourism and Parking Infrastructure

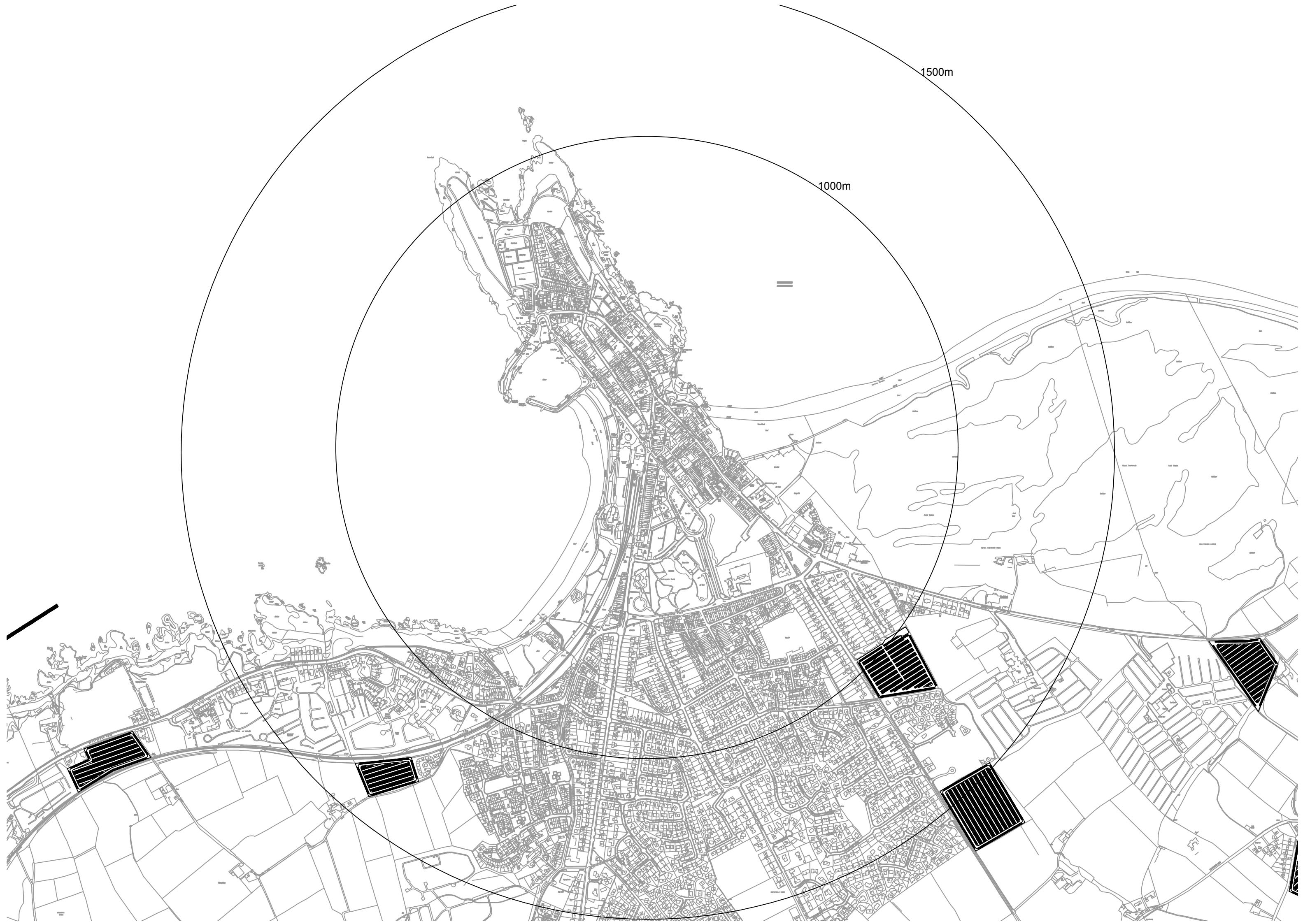
Scoring of Options against Key Criteria

	Criteria						Score	Rank
Criterion	Accessibility & Travel Time	Infrastructure Deliverability	Infrastructure Costs including Land Costs	Planning	Traffic & Transportation	Economic Benefit to CCGBC		
Description of criterion	Consider the potential accessibility of option in terms of using the travel time outputs from accessibility analysis	Consider the likelihood of actually developing the option on site	Consider the cost of infrastructure for each option, in its broadest sense	Consider each option's planning status and whether there are specific design and/or associated planning issues	Consider the potential of each option achieving a satisfactory outcome with respect to traffic and transport issues	Consider the likelihood of each option facilitating other economic benefits to the Hub		
How it is scored	Higher scoring according to lower travel times	Higher scoring option would be one that can easily be delivered on site through standard engineering techniques with limited special construction requirements. A low scoring option would be one that has very specific design and/or build requirements or that has a large infrastructure requirements.	Those options with low infrastructure costs requirements would be allocated a high score, whilst options with high infrastructure costs would be allocated a lower score.	A high scoring option was one that raised no design or planning issues/concerns and was capable of achieving planning permission. A low scoring option was one that had specific design requirements or raised particular planning issues that could affect whether planning permission would be granted or not.	A high scoring option was one that raised no design or infrastructure issues/concerns and was capable of achieving a positive consultation response from Transport NI and Translink. A low scoring option was one that had specific design of infrastructure requirements or raised particular issues that would be likely to obtain a negative consultation response from Transport NI and Translink.	A high score would be allocated to an options that had high likelihood of adding spend to the local economy and/or had legacy benefits. A low score would be allocated to an options that had low likelihood of adding spend to the local economy and/or had little or no legacy benefits.		
Further info	Includes consideration of travel time by car; travel time for shuttle; walk time from site	Considers issues such as accommodation works, drainage, or any special requirements to deliver an option on site	Includes issues such as the costs of accommodation works, land purchase, etc	Existing zonings, planning applications, or consents may need to be changed	Also considers whether there are specific design and/or infrastructure issues associated with each option e.g. site located on a protected route, right turn pockets, sight-line issues etc	One point will be visitor "dwell time" in the area and associated spend. For example options close to existing facilities would allow visitors the opportunity to dwell in Hub.		
Site	Scoring Range	1-5	1-5	1-5	1-5	1-5	1-5	
1	1. NW 200 Pits A2 Portrush Road 2. Rockview Lane off B185 Station Road 3. Dominican College	0	4	5	2	4	0	15 8
2	4. Existing car park at Burnside Presbyterian Church off Mill Road; 5. Existing car park at Flowerfield House off A2 Coleraine Road.	0	3	1	3	4	0	11 9
3	6. Existing car park at Portstewart Baptist Church off A2 Coleraine Road.	3	4	3	3	3	3	19 2
4	7. Existing car park at Portstewart Point.	1	5	3	4	4	1	18 4
5	8. Reconfiguration of Existing car park at Portstewart Cemetery off A2 Coleraine Road.	0	5	5	3	5	0	18 4
6		0	5	3	5	5	0	18 4
7		2	3	5	5	3	2	20 1
8		0	4	5	5	5	0	19 2
9	9. Open Space near Portstewart FC on St Johns Close off A2 Coleraine Road	2	3	5	3	3	2	18 4

0	greater than 20 minutes		greater than £500k per Ha	planning restrictions will not allow in this area	no existing access and on protected route	greater than 1000 metres from centre
1	15-20	heavily contaminated or major civil works internally and externally	£400k-£500k	subject to onerous planning restrictions	no existing access	within 1000 metres of centre
2	10-15	contaminated or major civil works internally	£300k-£400k	subject to planning restrictions which could be progressed with appropriate levels of surveys, reporting, mitigation etc	existing access with limited road frontage for sightlines and turning pocket and on protected route	within 750 metres of centre
3	5-10	greenfield or similar requiring major earthworks	£200k-£300k	zoned for other use	existing access with limited road frontage for sightlines and turning pocket	within 500 metres of centre
4	0-5	some earthworks required	other public sector owned	current planning application on site for other use	existing access with sufficient road frontage for sightlines and turning pocket and some enabling works required with limited works required	within 250 metres of centre
5	0	minor clearance of vegetation	Free or council owned	within development limit	existing access with sufficient road frontage for sightlines and turning pocket	in centre
	minutes		£k/ha			

DRAFT

Appendix J Sites In Portrush



DRAFT

Appendix K Sample Bus Shelters





www.alamy.com - DEHKTC



DRAFT

Appendix L Sample Bus Livery

