



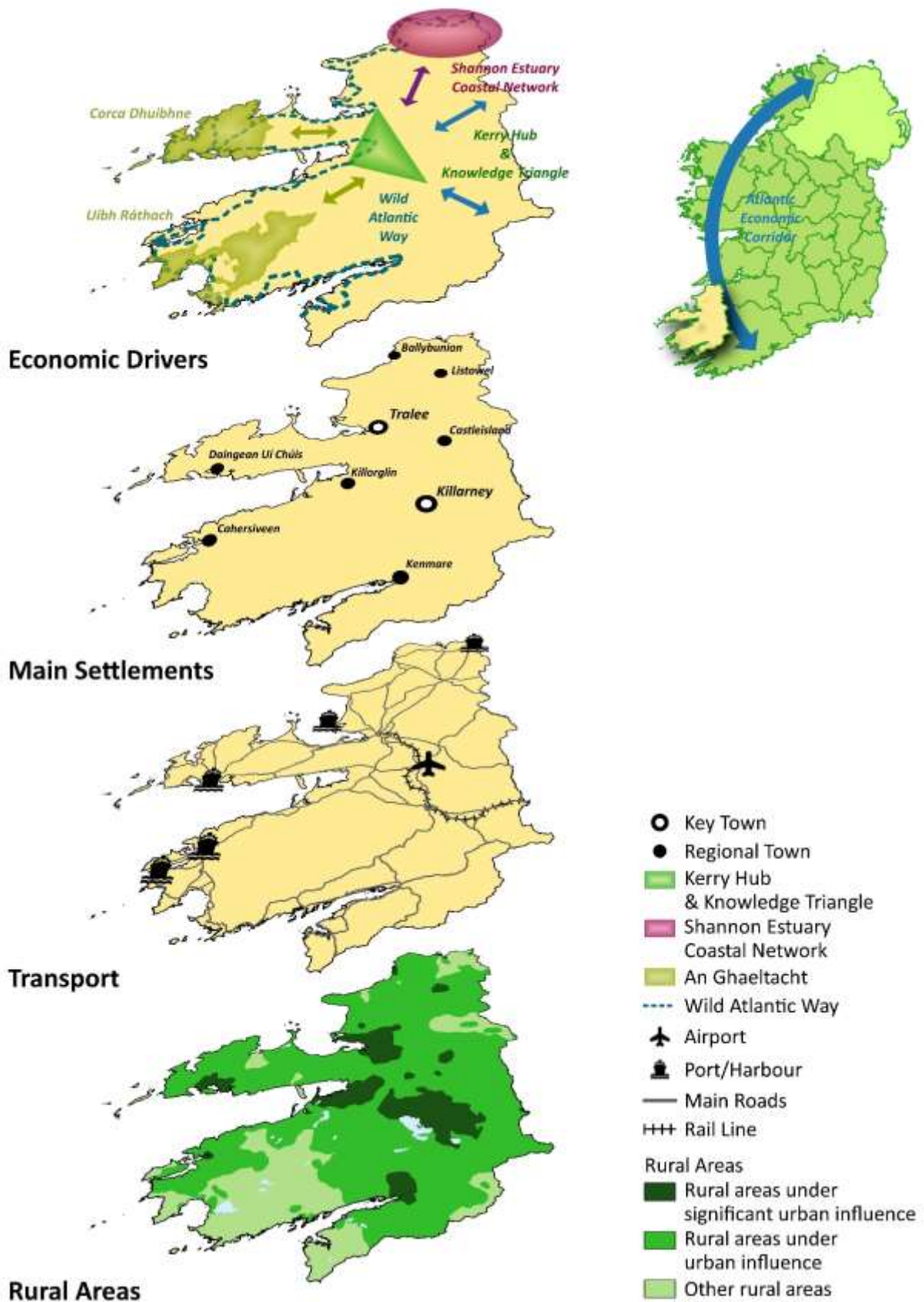
Chief Executive's Report on
Draft Plan Public Consultation
Draft Kerry County Development Plan 2022-2028
Appendix



Appendix

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1. Revised Core Strategy Map



2. Revised Core Strategy Table

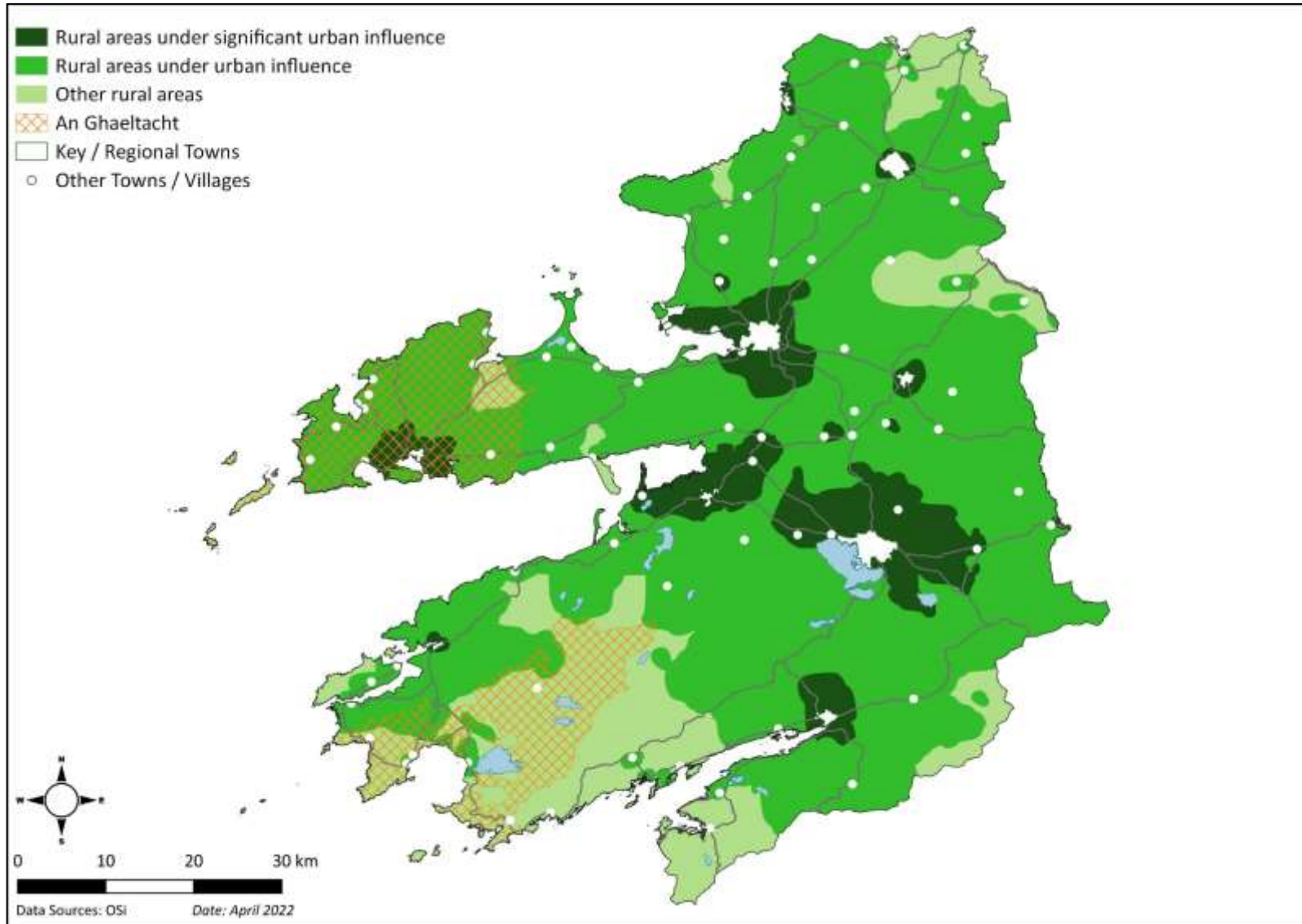
Settlement		Population		Housing		Land Zoning Required	
		Population 2016 (CSO)	Population 2022 (est.)	2022-2028 Pop. Growth	Housing Target	Existing Zoned Land (ha)	Zoned Land Required (ha)
County		147,707	156,902	9,363	7,000		
Key Town	Tralee	23,691	25,297	2,711	2,124	85.1	85.0
	Killarney	14,504	15,487	1,660	1,301	67.3	67.3
		38,195	40,784	4,371	3,425		
Regional Town	Listowel	4,820	5,127	529	415	10.8	10.8
	Castleisland	2,486	2,644	359	281	9.2	See Objective KCDP 3-7a
	Kenmare	2,376	2,527	261	204	29.9**	
	Killorglin	2,199	2,339	320	251	20.6**	
	Dingle/ Daingean Uí Chúis	2,050	2,181	282	221	17.5	
	Ballybunion	1,413	1,503	204	160	7.1	
	Cahersiveen	1,041	1,107	129	101	4.7	
		17,313	18,417	2,084	1,633		
District Town	Ardfert	749	797	78	61	6.5	See Objective KCDP 3-7a
	Ballyheigue	724	770	77	60	2.6	
	Ballylongford	391	416	45	35	1.1	
	Barraduff	170	308	57	45	2.4	
	Castlemaine	176	187	37	29	3.3	
	Farranfore	175	186	37	29	7.1	
	Fenit	538	572	112	88	6.6	
	Fieries	558	594	46	36	1.5	
	Kilcummin	435	463	40	31	2.2	
	Milltown*	928	987	218	171	6.1	
	Rathmore	790	840	73	57	4.2	
	Sneem	288	306	27	21	0.0	
	Tarbert	540	574	57	45	3.1	
Waterville	462	491	52	41	3.1		
		6,924	7,492	956	749		
Villages		6,698	7,125	552	432		
Small Village Settlements		1,547	1,646	465	186		
Rural Area		77,958	82,425	936	575		

* Having regard to the planned investment and masterplan for Milltown by Kerry County Council and allied partners, its appropriateness to be included as a regional town will be examined as part of the 2-year Review of the Development Plan.

** Existing zoning in Kenmare is that which is included in the Kenmare Functional Area Local Area Plan 2010-2016 and existing zoning in Killorglin is that which is included in the Killorglin Functional Area Local Area Plan 2010-2016, both prepared prior to the adoption of a Core Strategy.

Table 3.7: Population & Housing Growth 2022-2028

3. Revised Rural Area Type Map



4. Revised Settlement Capacity Audit

Settlement Capacity Audit

This is an analysis of the capacity of the key towns of Tralee and Killarney and the regional town of Listowel to accommodate new development in terms of suitable lands and infrastructure within the plan period. It confirms whether sites as zoned in their respective Town Plans are served by the necessary infrastructure so as to allow for their timely development. This 'Settlement Capacity Audit' (SCA) exercise accords with Appendix 3 (A Methodology for a Tiered Approach to Land Zoning) of the National Planning Framework, which distinguishes between lands that are Serviced (Tier 1) and those that are Serviceable (Tier 2).

The SCA is an infrastructural assessment of lands within settlements and includes the following infrastructure categories:

- Road access
- Footpath access
- Foul & surface water sewerage drainage
- Water supply
- Assumed residential density
- Estimated residential unit yield

The SCA exercise includes an examination of the capacity for new residential development within the built-up footprint of existing settlements in line with compact growth priorities of National Planning Policy 17.

The assessment identifies and maps zoned lands with residential development potential, including mixed use zoned lands. This includes the following:

- i. lands within the existing built up area;
- ii. serviced greenfield 'Tier 1' tranches of land; and
- iii. serviceable greenfield 'Tier 2' lands.

The estimated yield from sites identified in this audit have been used to justify the quantum of zoned land required to meet the housing targets for Tralee/Killarney/Listowel as set out in the Core Strategy (Table 3.7, Volume 1 Written Statement). The sites included in these calculations are zoned Proposed Residential (R1) and are Tier 1 lands. R4 and R1 (Tier 2) lands are not included in the overall estimated housing yield calculations. The lands zoned residential for Tralee, Killarney & Listowel are those as shown on the zoning maps included in Volume 2 and Volume 4.

Density and Potential Housing Yield

The Draft Plan provides strengthened policy support for sustainable higher densities, facilitates compact growth targets aligned with the National Policy Objectives of the NPF, the renewal of vacant brownfield sites and regeneration of opportunity sites amongst other initiatives.

The Planning Authority is required to have regard to Section 28 Guidelines with respect to densities and compact growth and in particular to the Specific Planning Policy Requirements (SPPR), set out in the Urban Development and Building Heights Guidelines for Planning Authorities, (2018) and the Apartment Guidelines (2018). The plan also had reference to circular letter NRUP 2/2021 regarding residential densities in towns and villages.

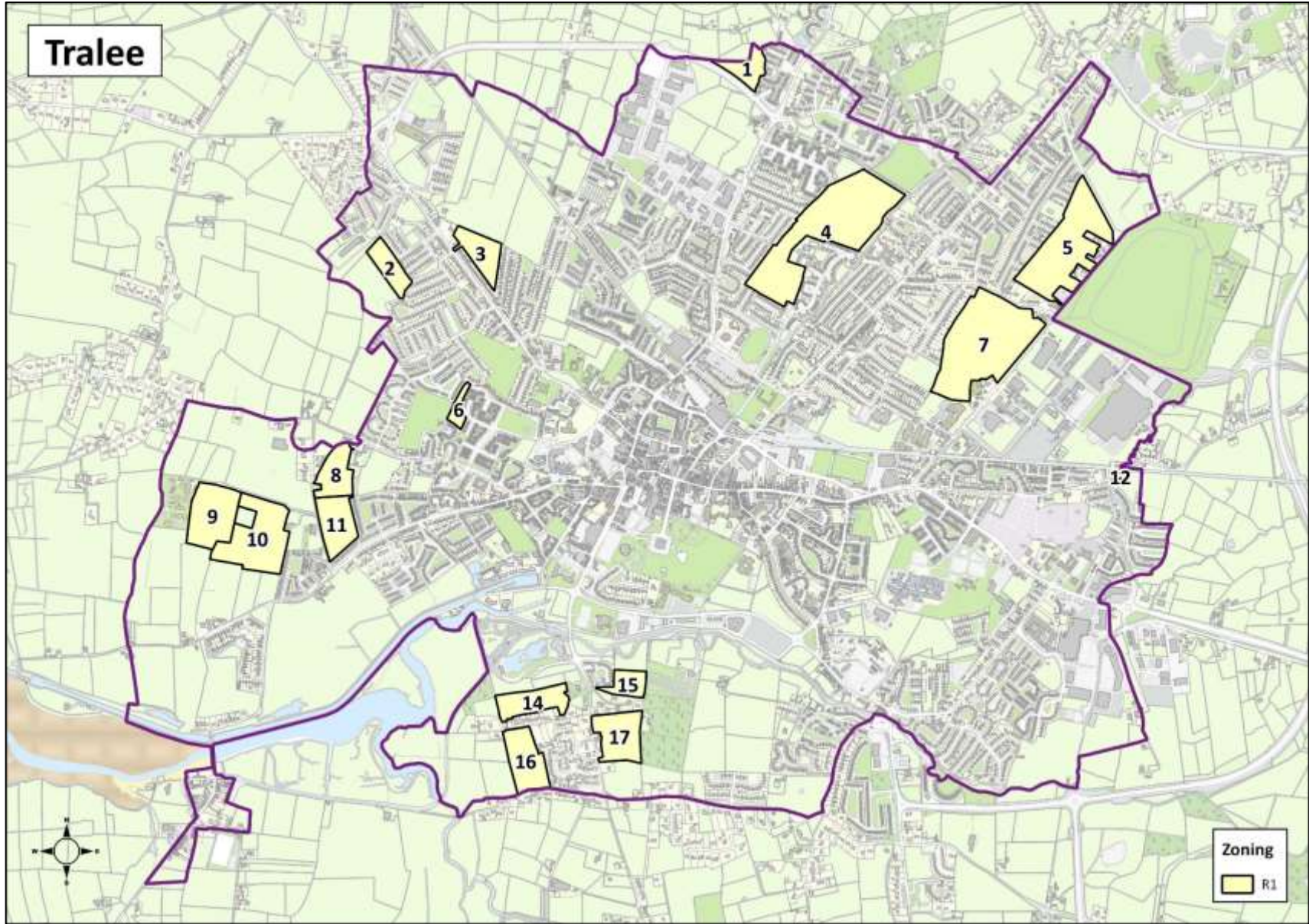
The Planning Authority seeks to ensure that all developments are carried out in a sustainable manner and comply with the 'Sustainable Residential Development in Urban Areas Guidelines. The appropriate density for applications for housing developments will be determined by and ensure the provision of a mix of unit types in proximity to existing and proposed transport and service infrastructure, in order to meet and adapt to the changing demographic trends and household profiles in a neighbourhood.

Higher densities and therefore higher housing yield will be considered on a case-by-case basis depending on amongst other issues – the location of the site, the design and quality of the scheme - how it complies with certain performance criteria and the quality of life proposed for incoming residents in addition to existing or proposed services in the area. The Town Plans for Tralee, Killarney and Listowel do not limit the consideration of higher densities to certain areas such as opportunity sites. Therefore, it is not considered necessary to specify specific locations outside of the town centre where higher densities may be suitable as doing so may exclude some suitable areas.

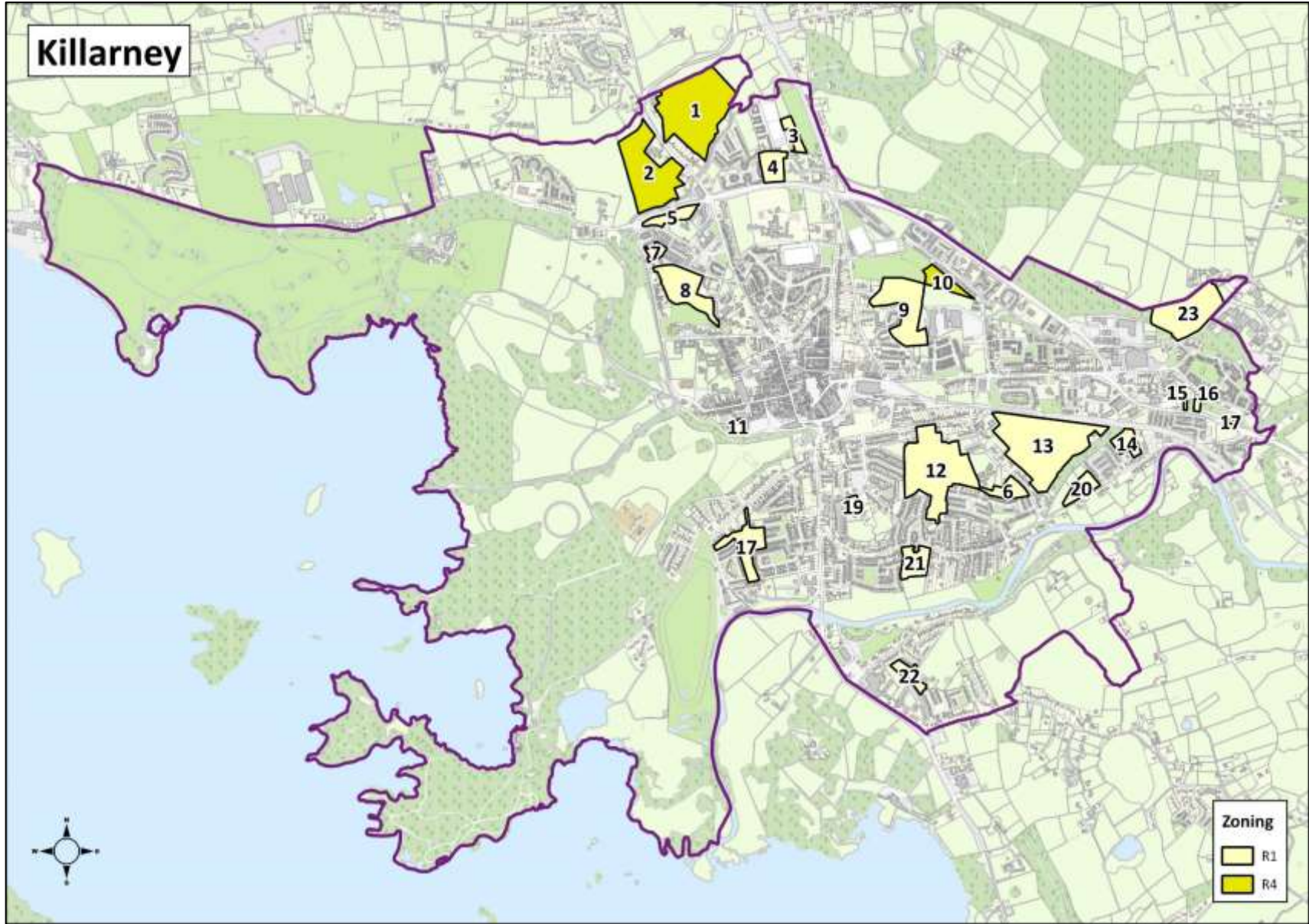
The Planning Authority is committed to facilitating increased densities with developments that provide for a mix of unit types to meet the needs of the changing demographic trends and household profiles in the towns. The existing policies and objectives proposed are not limited to greenfield, new residential areas but rather are applicable to all zoned lands that facilitate residential use.

The planning authority will also ensure that residential densities reflect the density of appropriate adjoining developments.

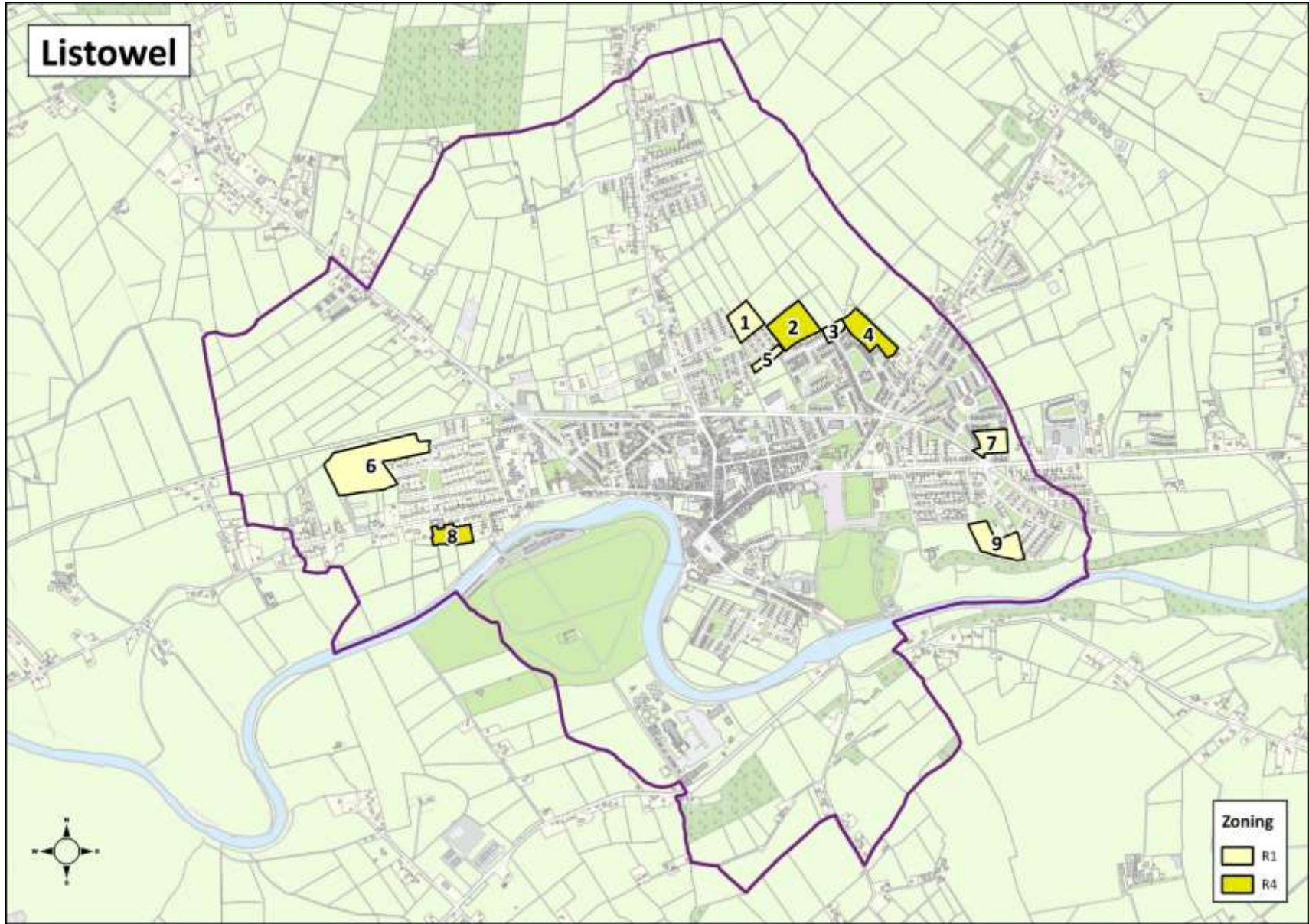
Tables 1-3 of the Settlement Capacity Audit include a potential housing yield for each site, which reflects the density of appropriate adjoining developments. Brownfield /Infill Sites (zoned M1 & M2) in town centre sites would have a potential yield of 35+ units per hectare. This ensures compliance with the NPF policy where 30% of units shall be delivered on brownfield/infill sites.



Tralee – Settlement Capacity Audit of Zoned Land										
ID	Zoning	Road Access	Footpaths	Public Lighting	Foul/storm Sewer	Water Supply	Tier	Area (ha)	Estimated Density Units p/ha	Potential Yield
T-1	R1	✓	✓	✓	-	✓	2	2.1	15-20	35-40
T-2	R1	✓	✓	✓	✓	✓	1	2.37	20-25	45-55
T-3	R1	✓	✓	✓	✓	✓	2	3.02	20-25	55-75
T-4	R1	✓	✓	✓	✓	✓	1	15.78	30-35	450-525
T-5	R1	✓	✓	✓	✓	✓	2	10.78	25-30	270-320
T-6	R1	✓	✓	✓	✓	✓	1	0.85	30-35	25-30
T-7	R1	✓	✓	✓	✓	✓	1	14.57	25-30	350-420
T-8	R1	✓	x	x	✓	✓	2	3.17	25-30	70-90
T-9	R1	✓	x	x	✓	✓	2	5.57	15-20	80-105
T-10	R1	✓	✓	✓	✓	✓	1	7.77	15-20	110-155
T-11	R1	✓	x	x	✓	✓	1	3.88	25-30	90-110
T-12	R1	✓	✓	✓	✓	✓	1	0.17	20-25	5-10
T-13	R1	✓	✓	✓	✓	✓	1	0.19	20-25	5
T-14	R1	✓	✓	✓	✓	✓	1	3.49	15-20	45-75
T-15	R1	✓	✓	✓	✓	✓	1	1.84	15-20	20-30
T-16	R1	✓	✓	✓	✓	✓	2	4.16	15-20	50-75
T-17	R1	✓	x	✓	✓	✓	2	4.33	15-20	55-80
The potential yield from Phase 1 residential lands allows for the remainder of the housing target to be achieved on brownfield/infill sites.										



Killarney – Settlement Capacity Audit of Zoned Land										
ID	Zoning	Road Access	Footpaths	Public Lighting	Foul/ Storm Sewer	Water Supply	Tier	Area (ha)	Estimated Density Units p/ha	Potential yield
K-1/2	R4	X	✓	✓	✓	✓	2	24.07	-	-
K-3	R1	✓	X	X	✓	✓	2	1.19	20-25	15-25
K-4	R1	✓	X	X	✓	✓	2	2.35	20-25	40-55
K-5	R1	✓	✓	✓	✓	✓	1	1.69	25-30	35-50
K-6	R4	✓	✓	✓	✓	✓	2	1.81	25-30	40-55
K-7	R1	✓	✓	✓	✓	✓	1	0.79	25-30	15-25
K-8	R1	✓	✓	✓	✓	✓	1	4.12	30-35	155-200
K-9	R1	✓	✓	✓	✓	✓	1	7.1	25-30	170-200
K-10	R4	✓	✓	✓	✓	✓	1	1.94	-	-
K-11	R1	✓	X	✓	✓	✓	1	0.45	35-40	10-20
K-12	R1	✓	✓	✓	✓	✓	2	13.03	25-30	300-370
K-13	R1	✓	✓	✓	✓	✓	2	15.15	25-20	350-430
K-14	R1	✓	✓	✓	✓	✓	1	1.66	20-25	25-40
K-15/16/17	R1	X	✓	✓	X	X	2	0.58	-	3
K-18	R1	✓	✓	✓	✓	✓	1	3.96	25-30	90-115
K-19	R1	✓	✓	✓	✓	✓	1	0.72	25-30	10-20
K-20	R1	✓	✓	✓	✓	✓	1	1.51	15-20	15-25
K-21	R1	✓	✓	✓	✓	✓	1	2.55	20-25	45-60
K-22	R1	✓	✓	✓	✓	✓	1	1.32	15-20	15-25
K-23	R1	✓	✓	✓	✓	✓	1	7.33	-	94
The potential yield from Phase 1 residential lands allows for the remainder of the housing target to be achieved on brownfield/infill sites.										

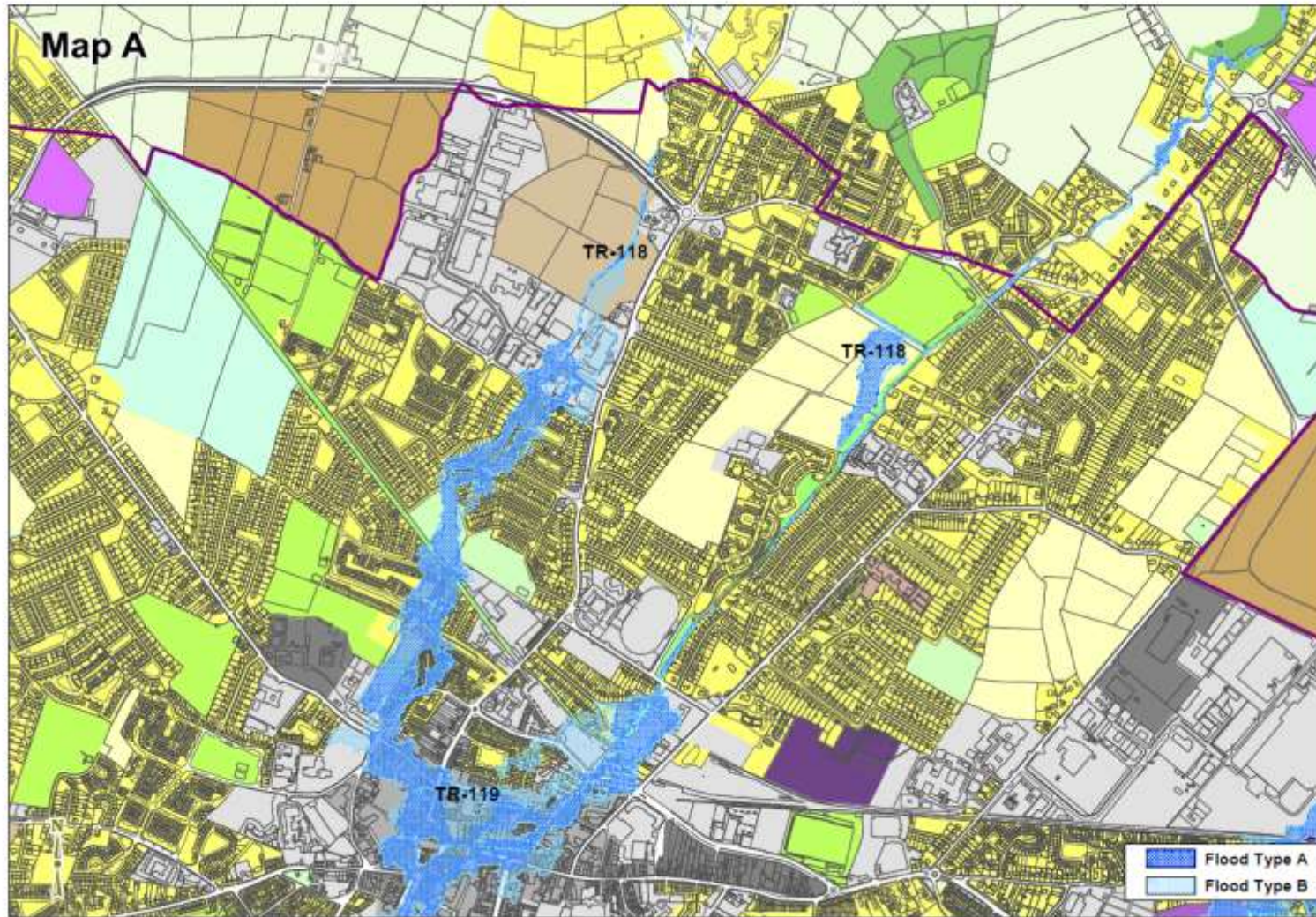


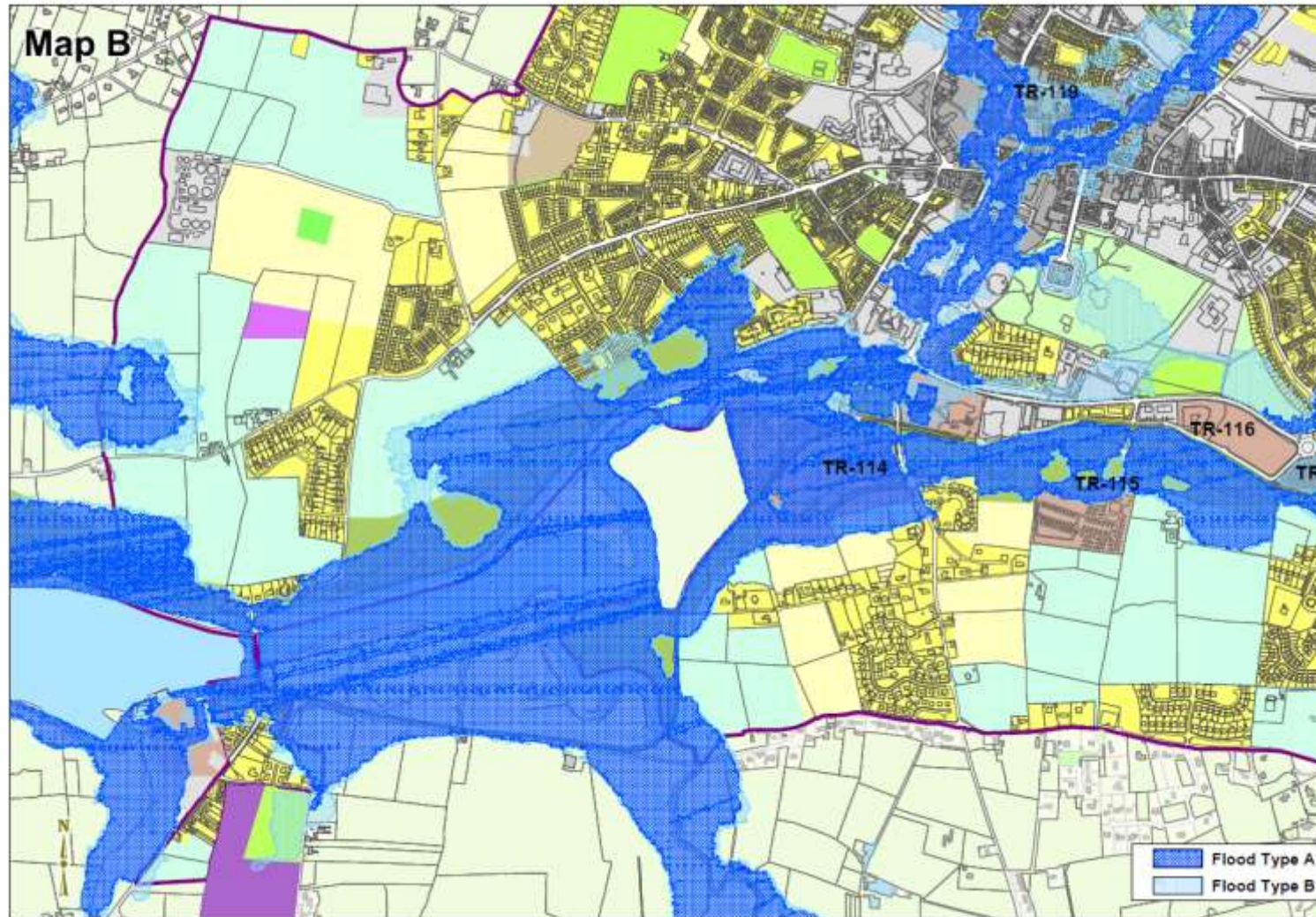
Listowel – Settlement Capacity Audit of Zoned Land										
ID	Zoning	Road Access	Footpaths	Public Lighting	Foul/ Storm Sewer	Water Supply	Tier	Area (ha)	Estimated Density Units p/ha	Potential Yield
L-1	R1	✓	✓	✓	✓	✓	1	1.32	30-35	40-50
L-2	R4	✓	✓	✓	✓	✓	2	2.2	-	-
L-3	R1	✓	✓	✓	✓	✓	1	0.45	25-30	10-20
L-4	R4	✓	✓	✓	✓	✓	2	1.79	-	-
L-5	R1	✓	✓	✓	✓	✓	1	0.45	20-25	10-20
L-6	R1	✓	✓	✓	✓	✓	1	5.53	15-20	85-120
L-7	R1	✓	✓	✓	✓	✓	1	1.17	25-30	25-40
L-8	R4	✓	✓	✓	✓	✓	2	1.14	-	-
L-9	R1	✓	✓	✓	✓	✓	1	1.85	15-20	25-40

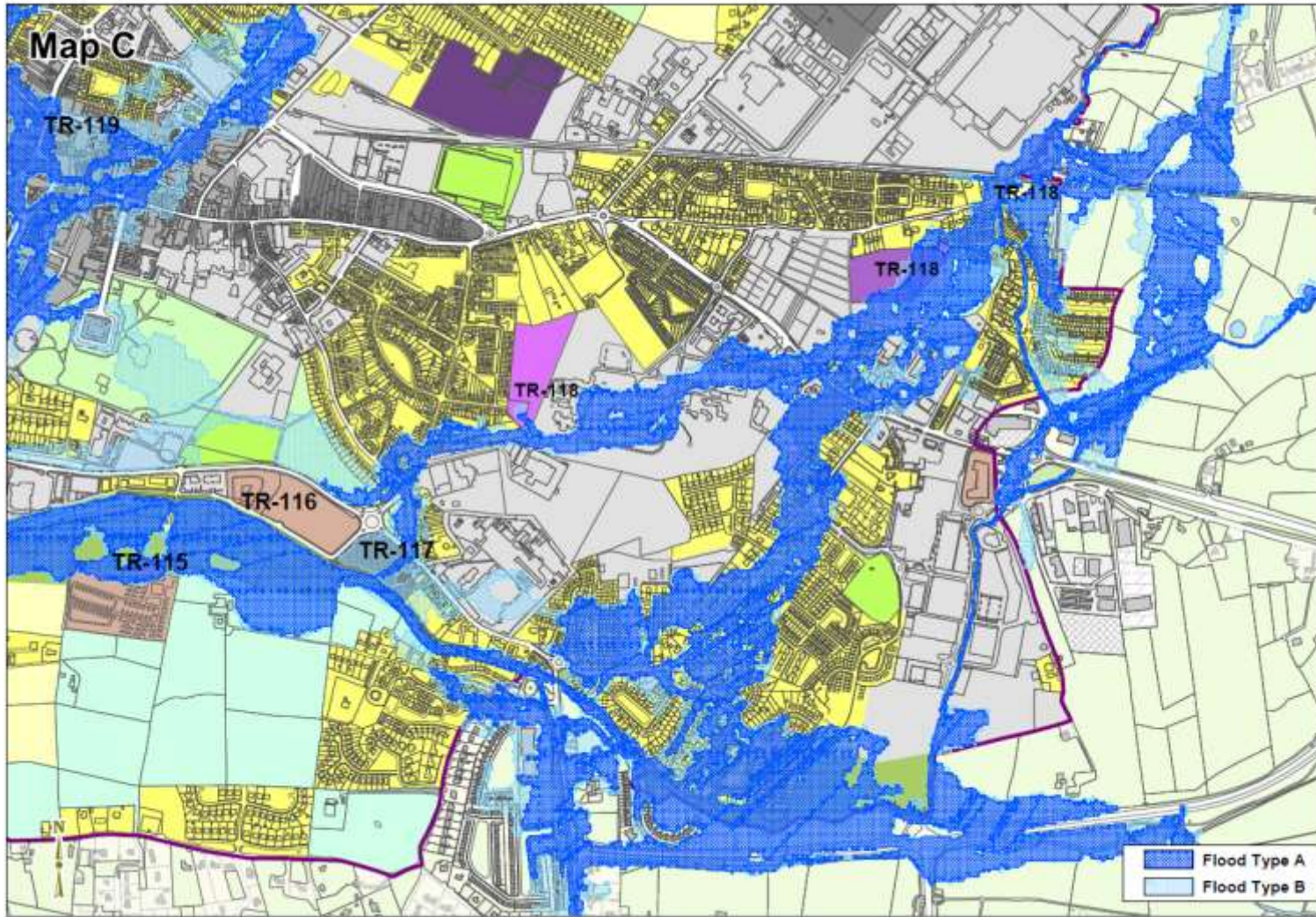
The potential yield from residential lands allows for the remainder of the housing target to be achieved on brownfield/infill sites.

5. Revised Flood Risk Maps

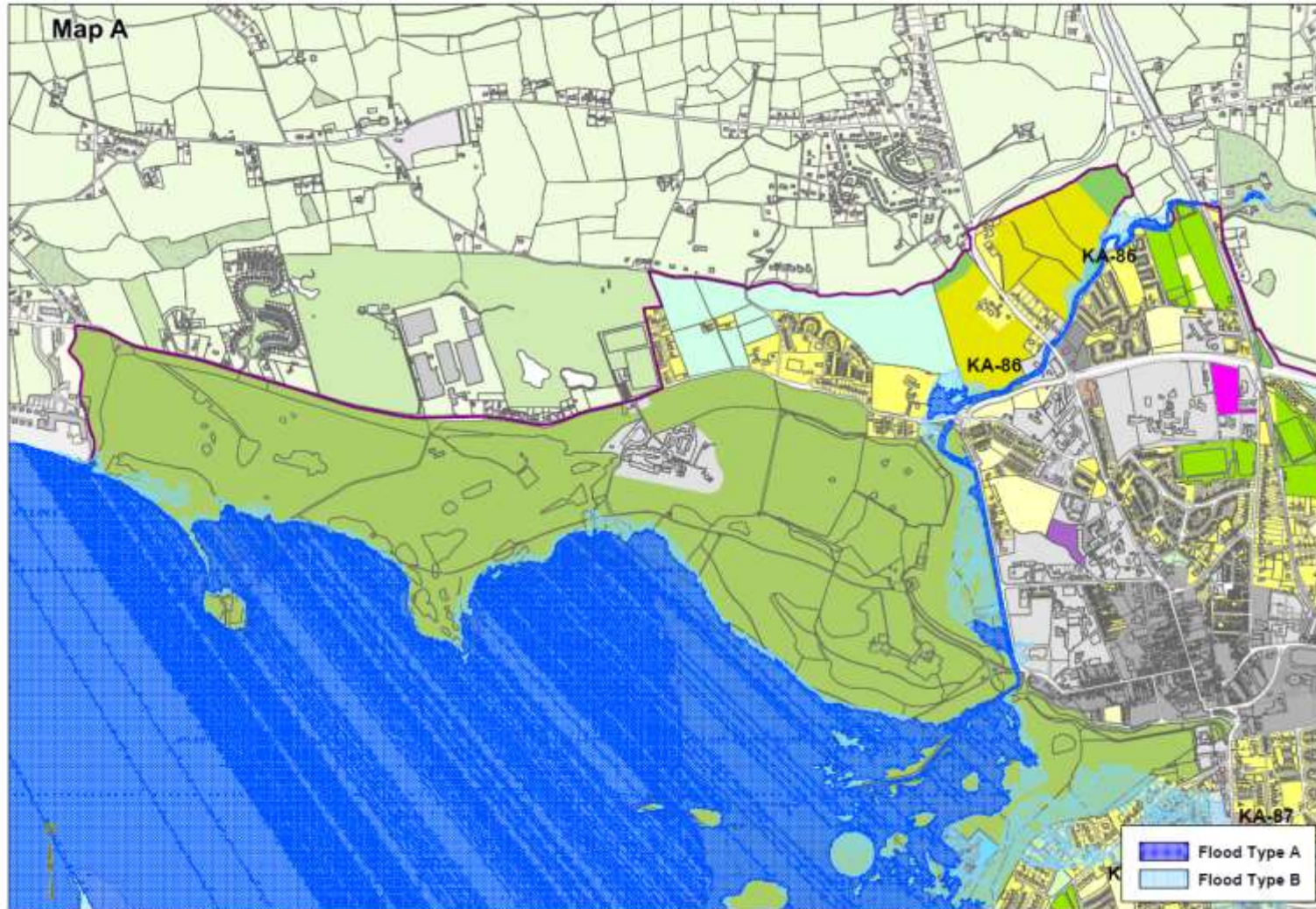
a. Tralee

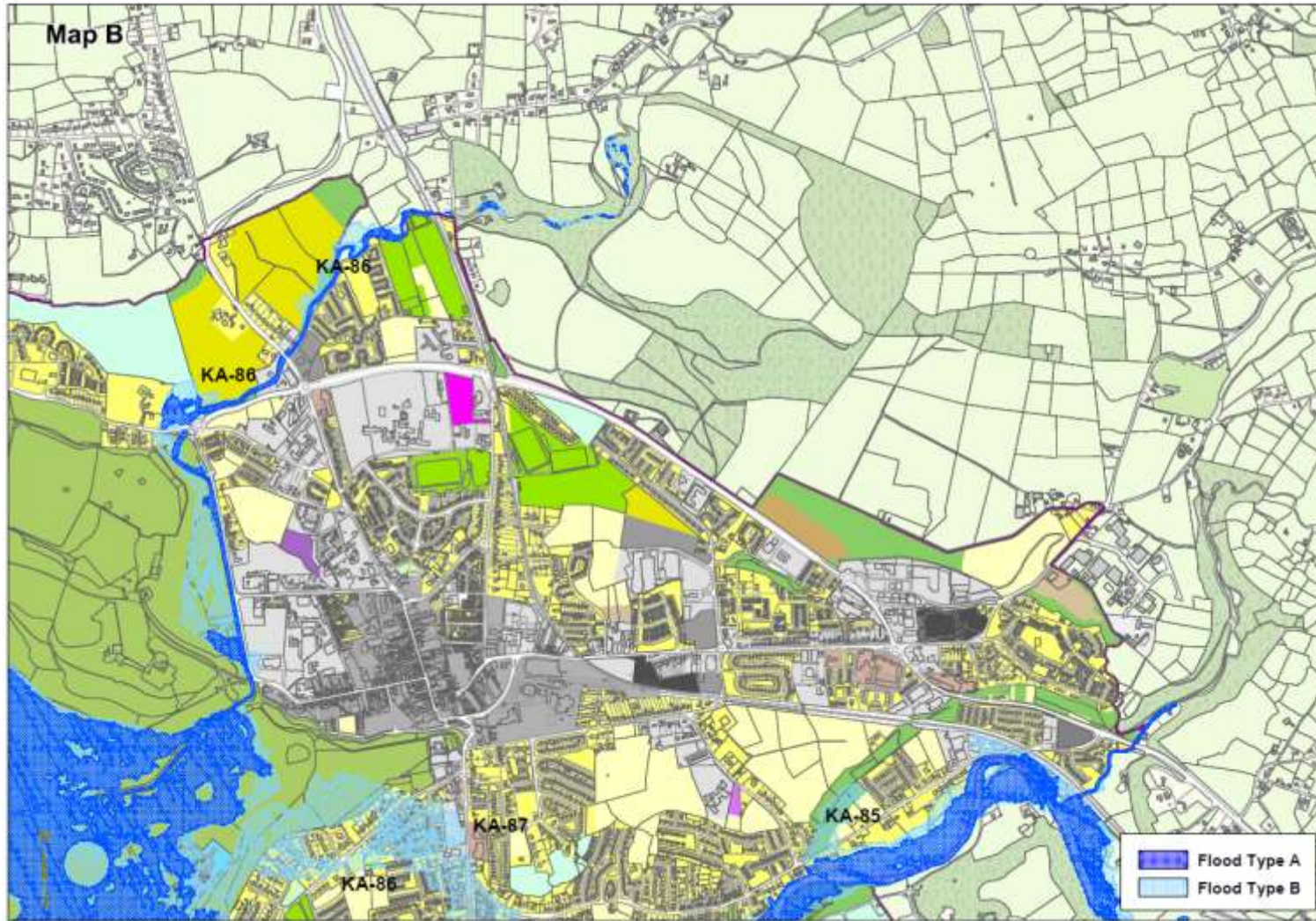


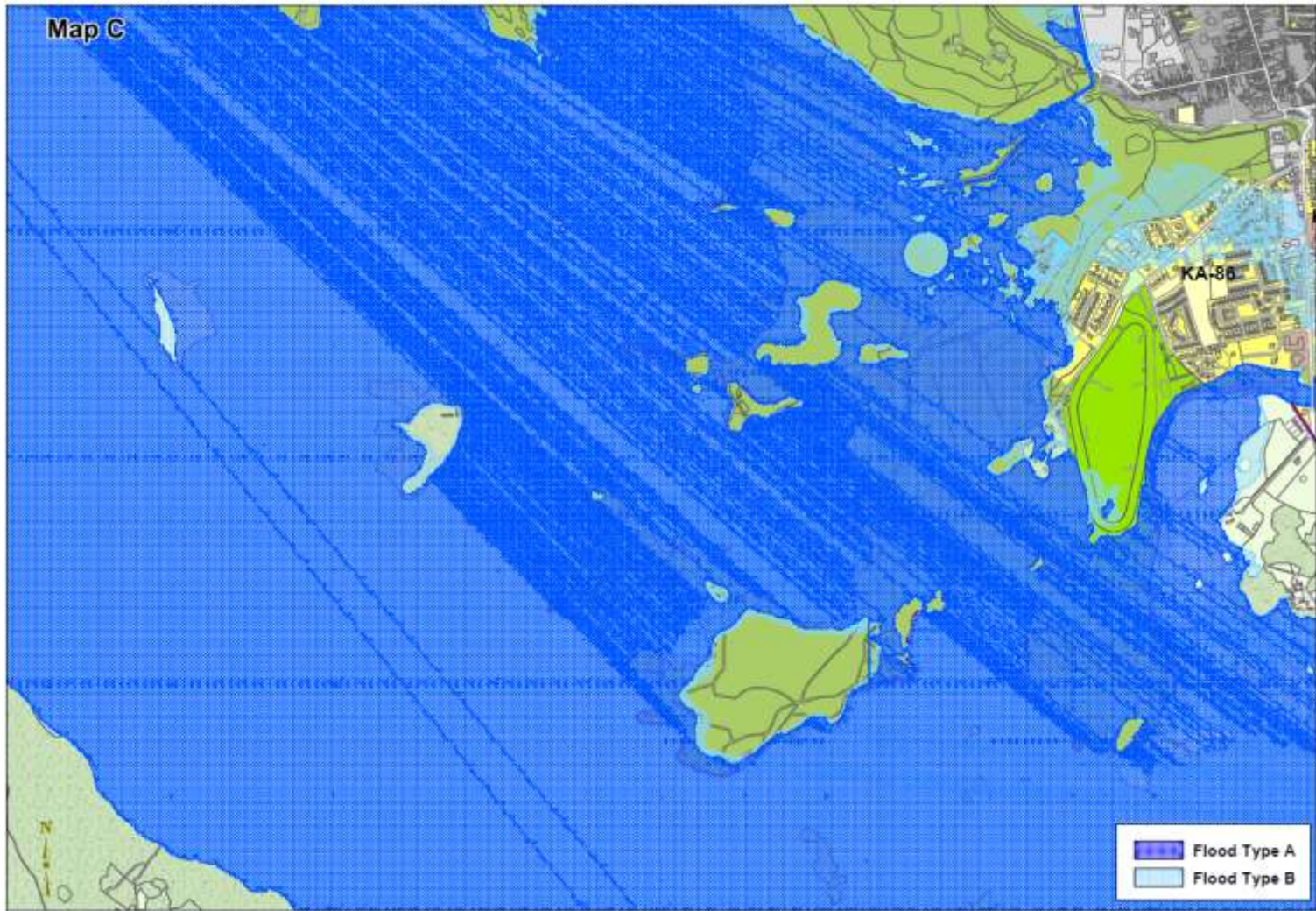




b. Killarney

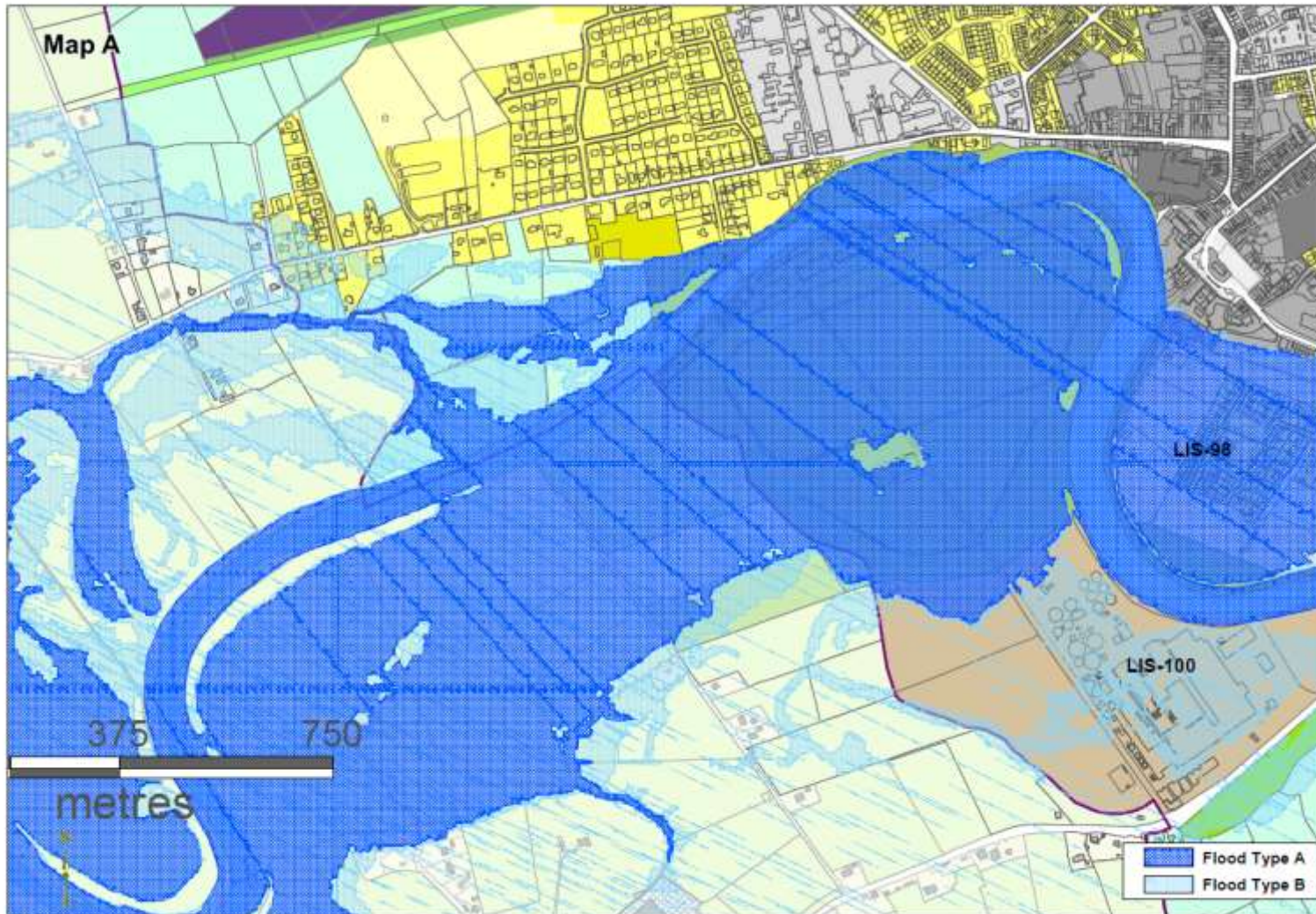


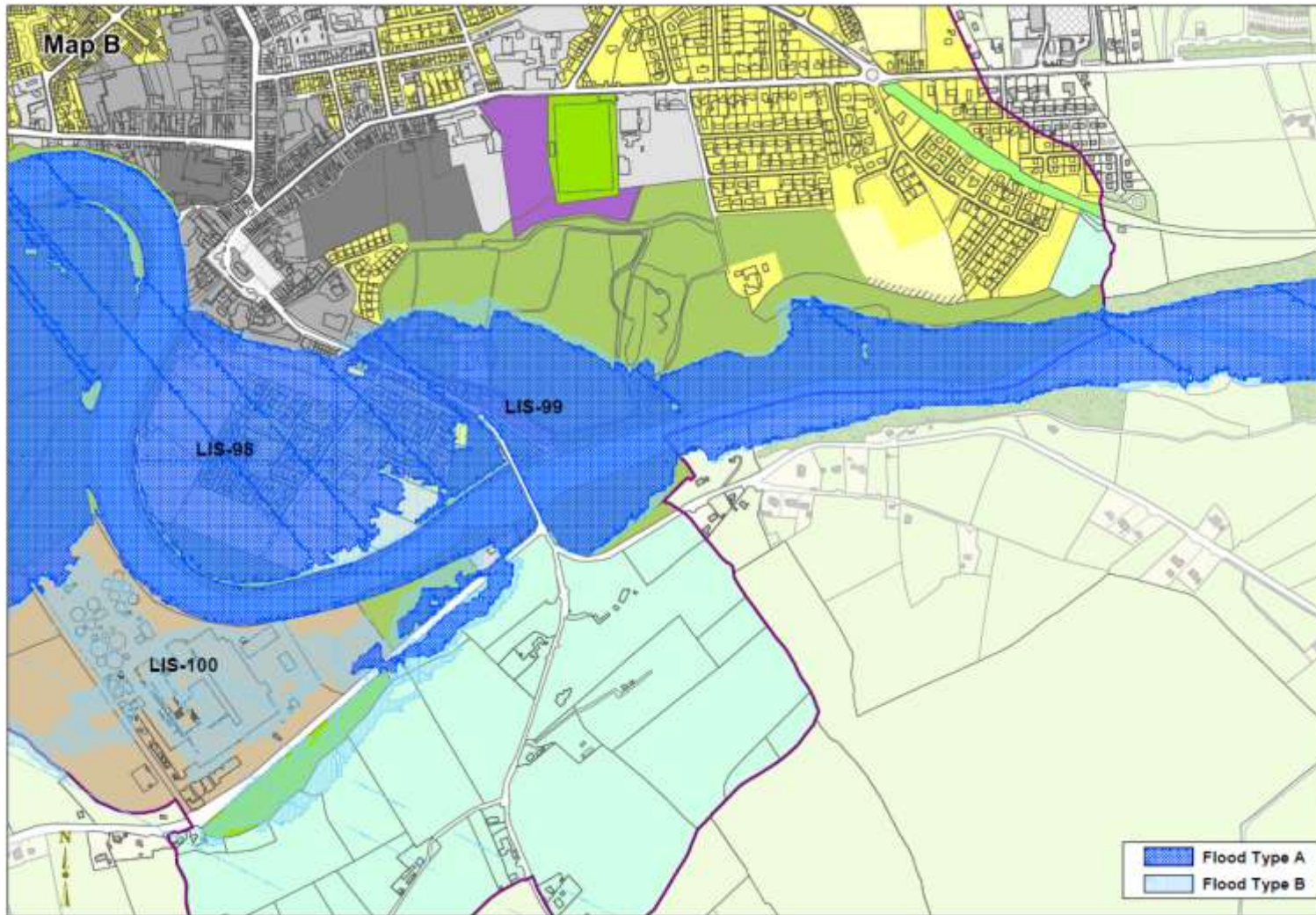


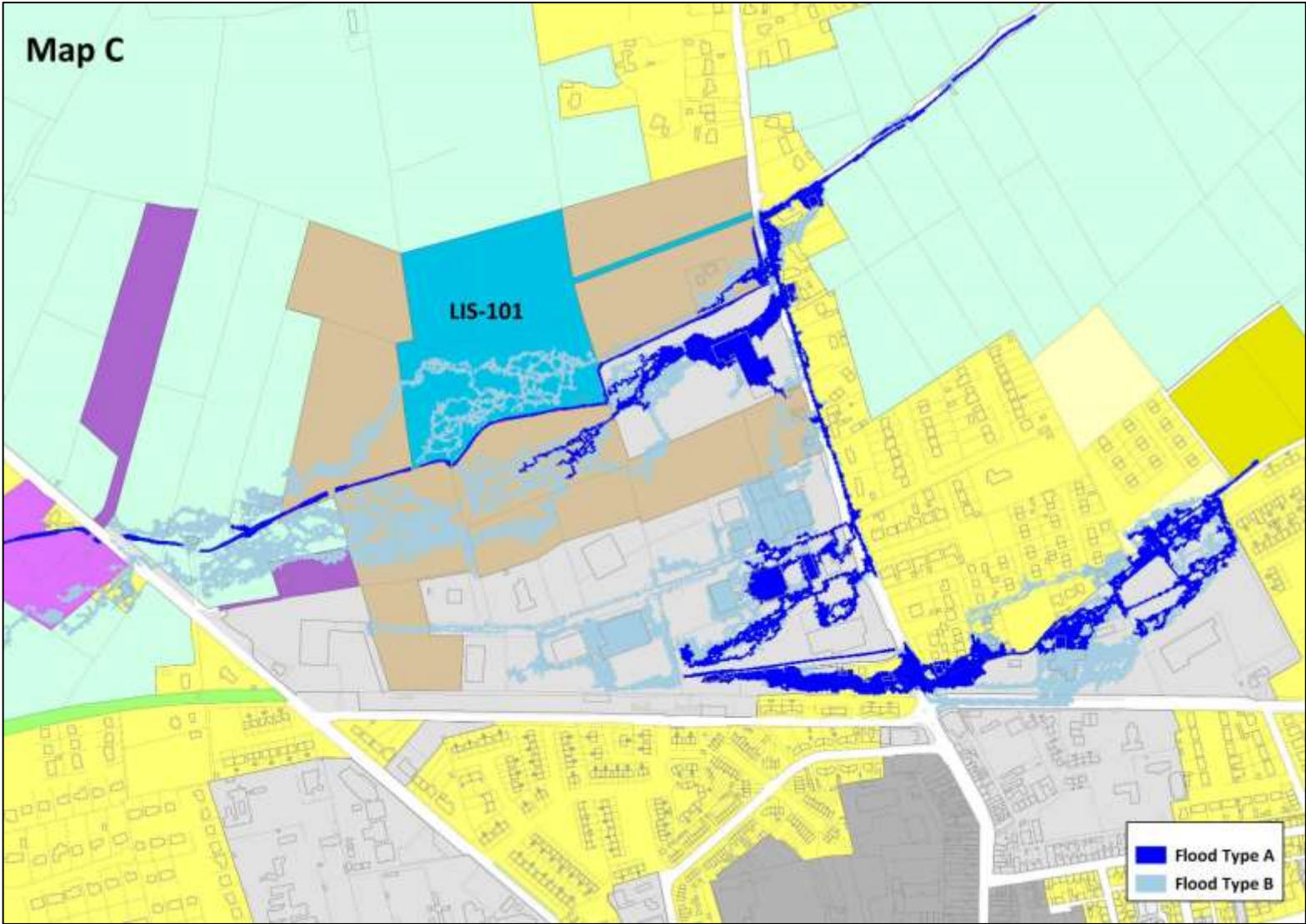




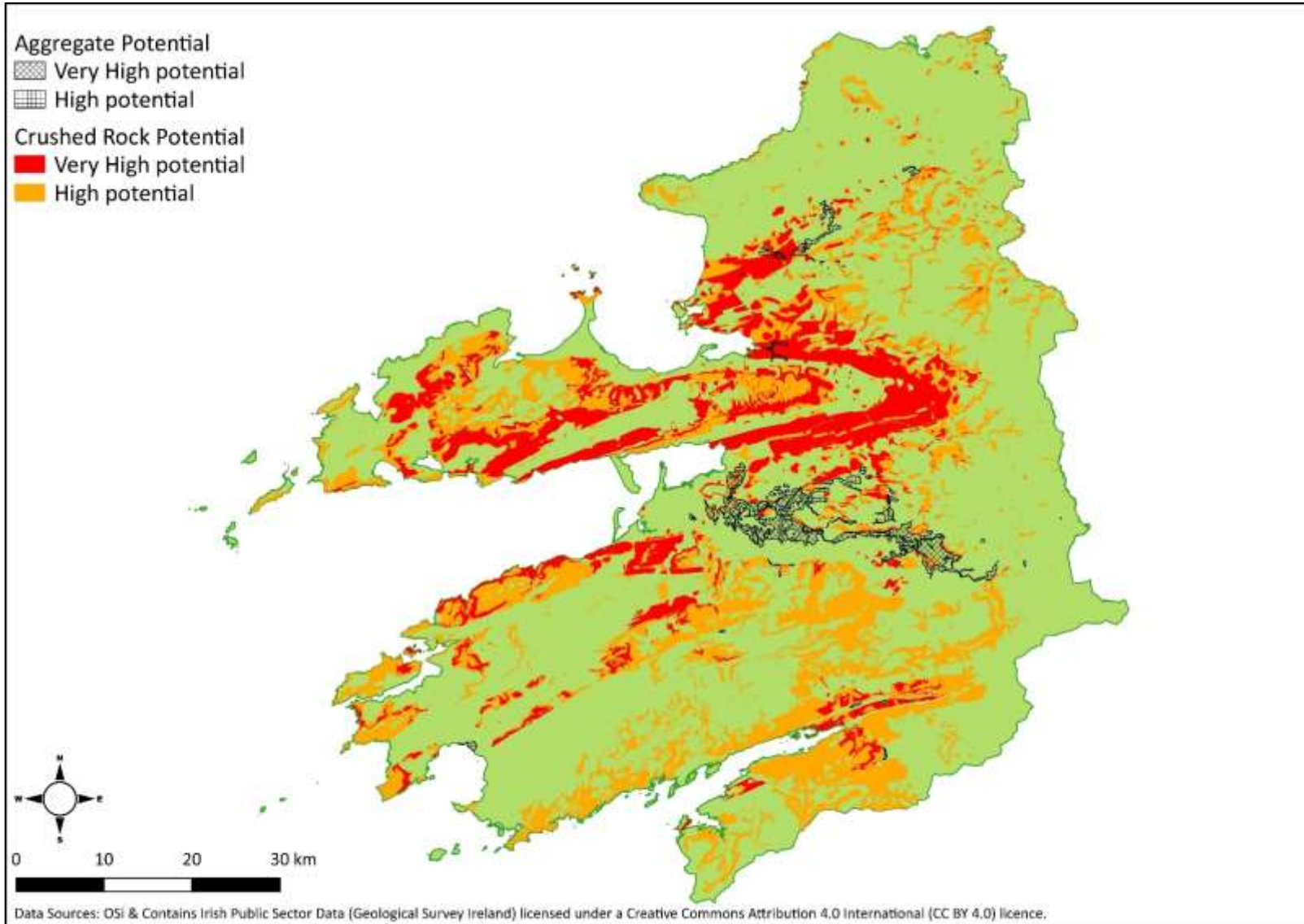
c. Listowel







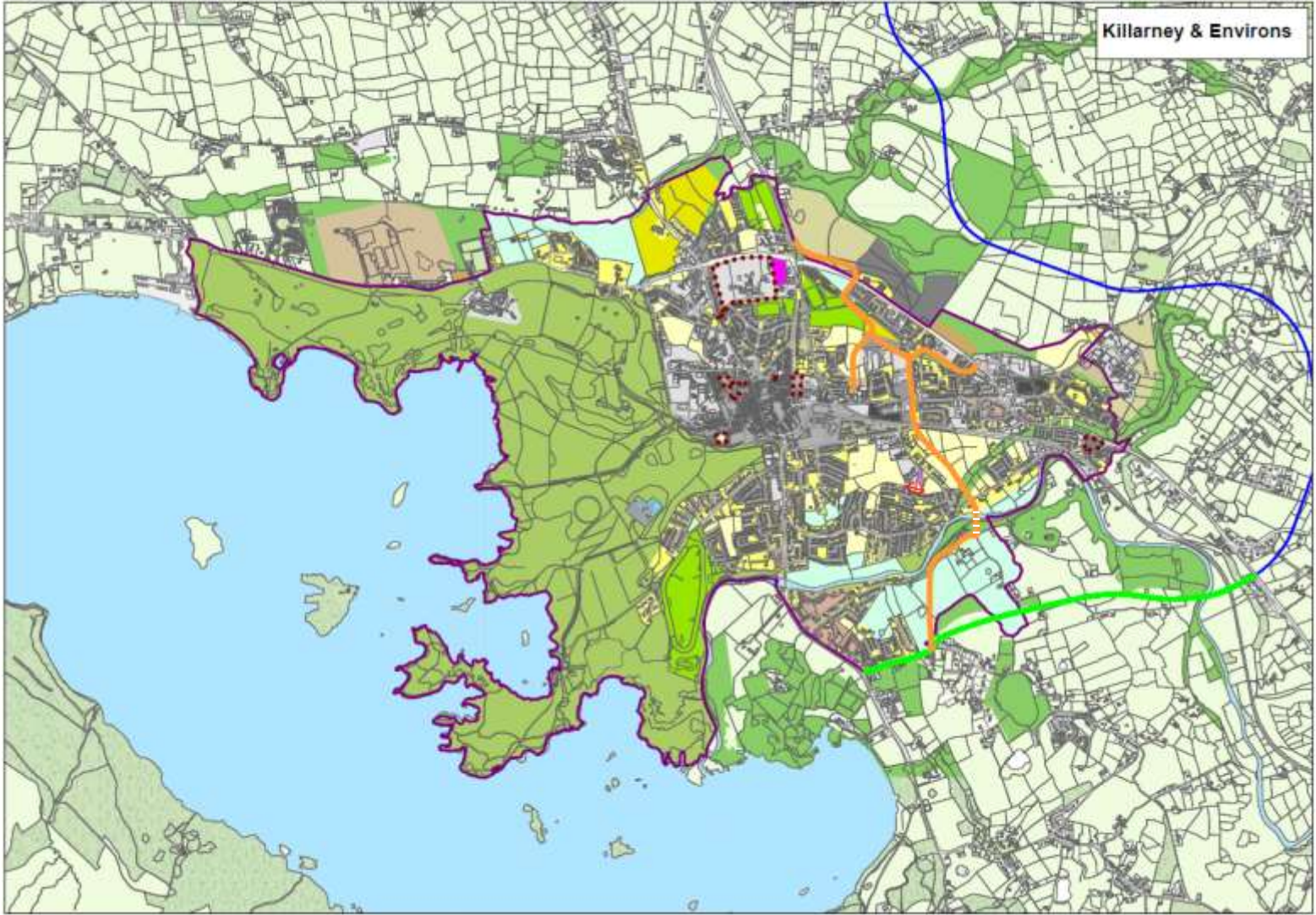
6. Map; Mineral & Aggregates Deposits in the County



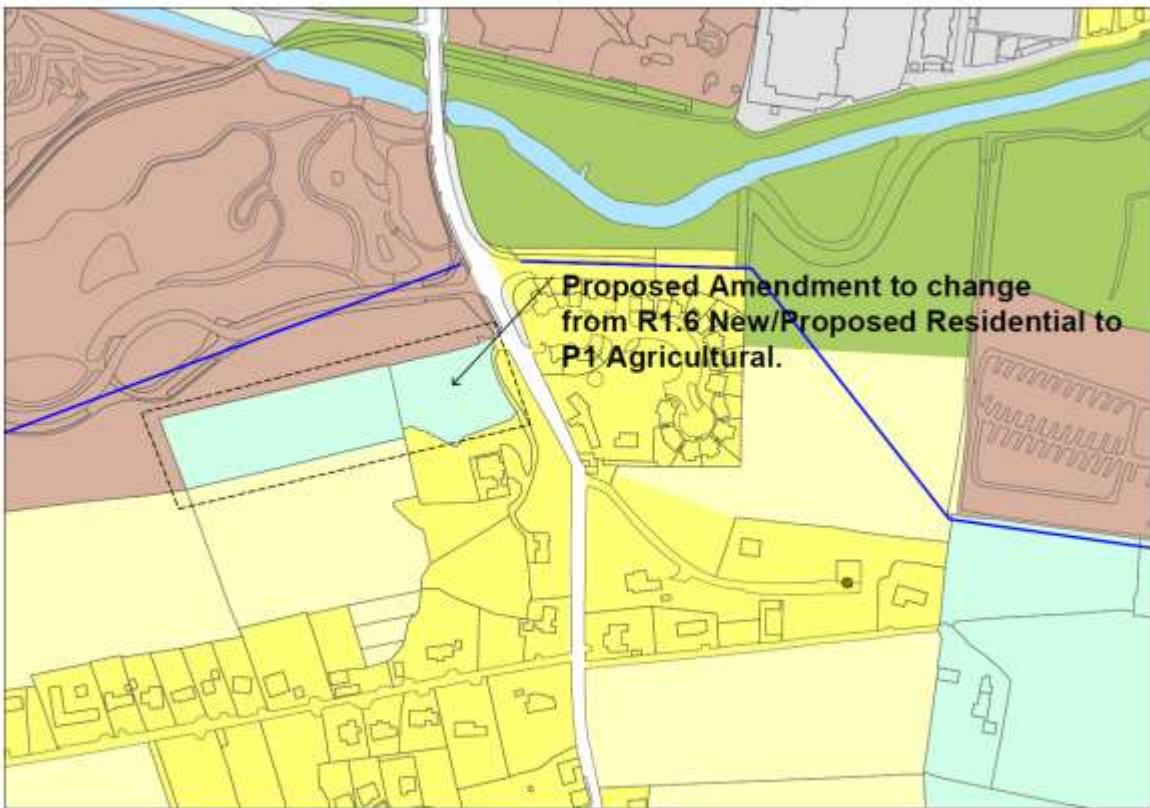
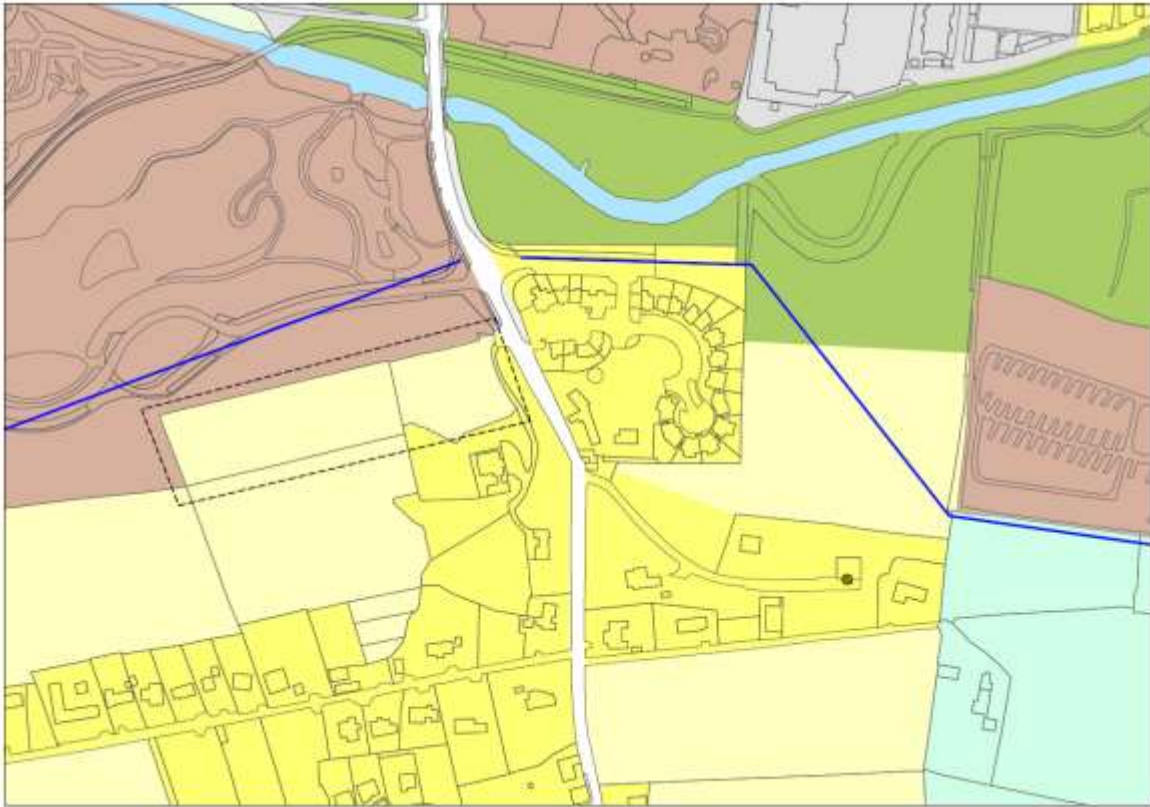
7. Map; Tralee Landuse zoning & environs



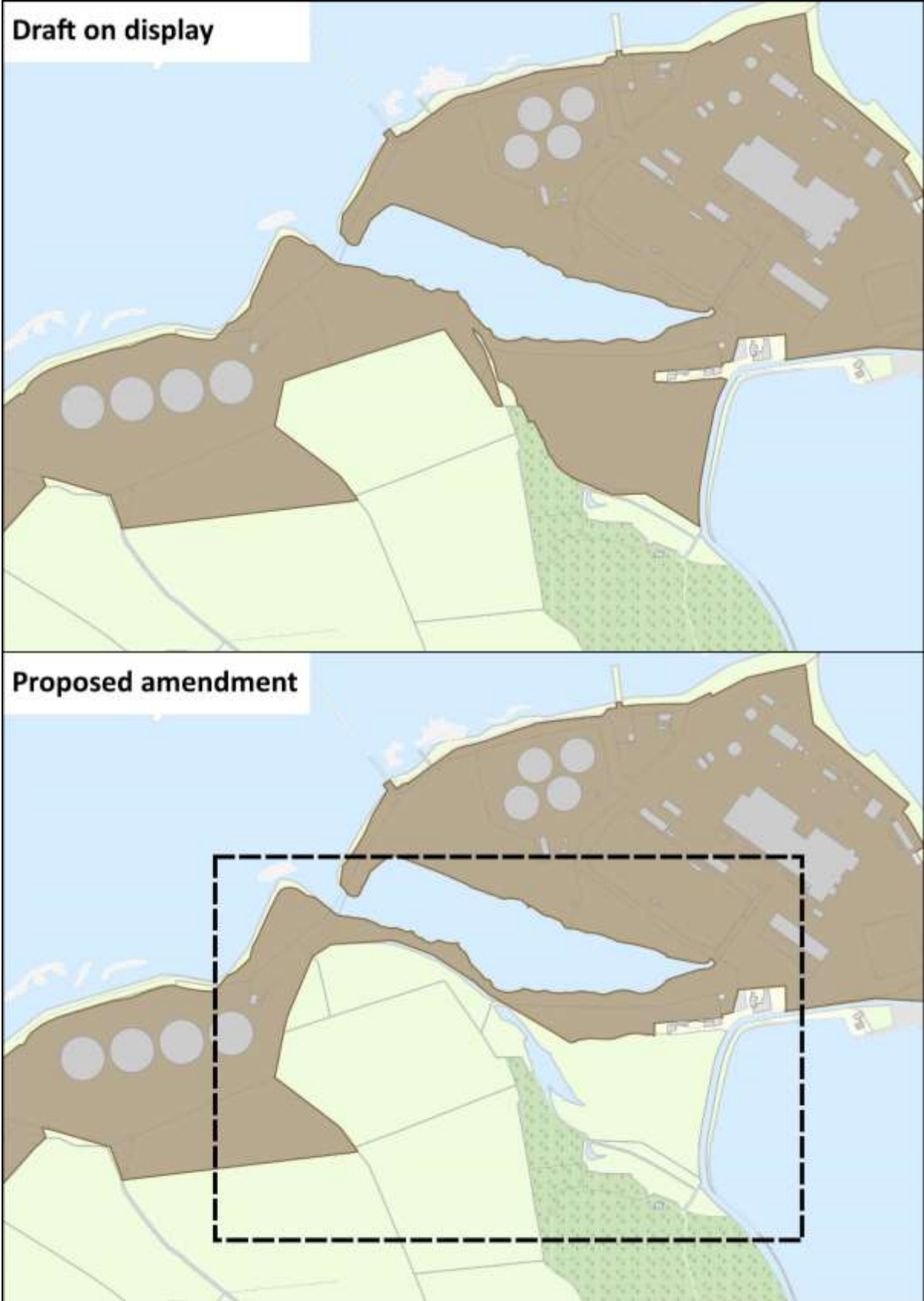
8. Map; Killarney Landuse zoning & environs



9. **Map; Amend zoning from R1 (proposed residential) to P1 (agriculture) in Ballyard, Tralee**



10. Map; revised zoning maps for Tarbert Island & Fort Shannon



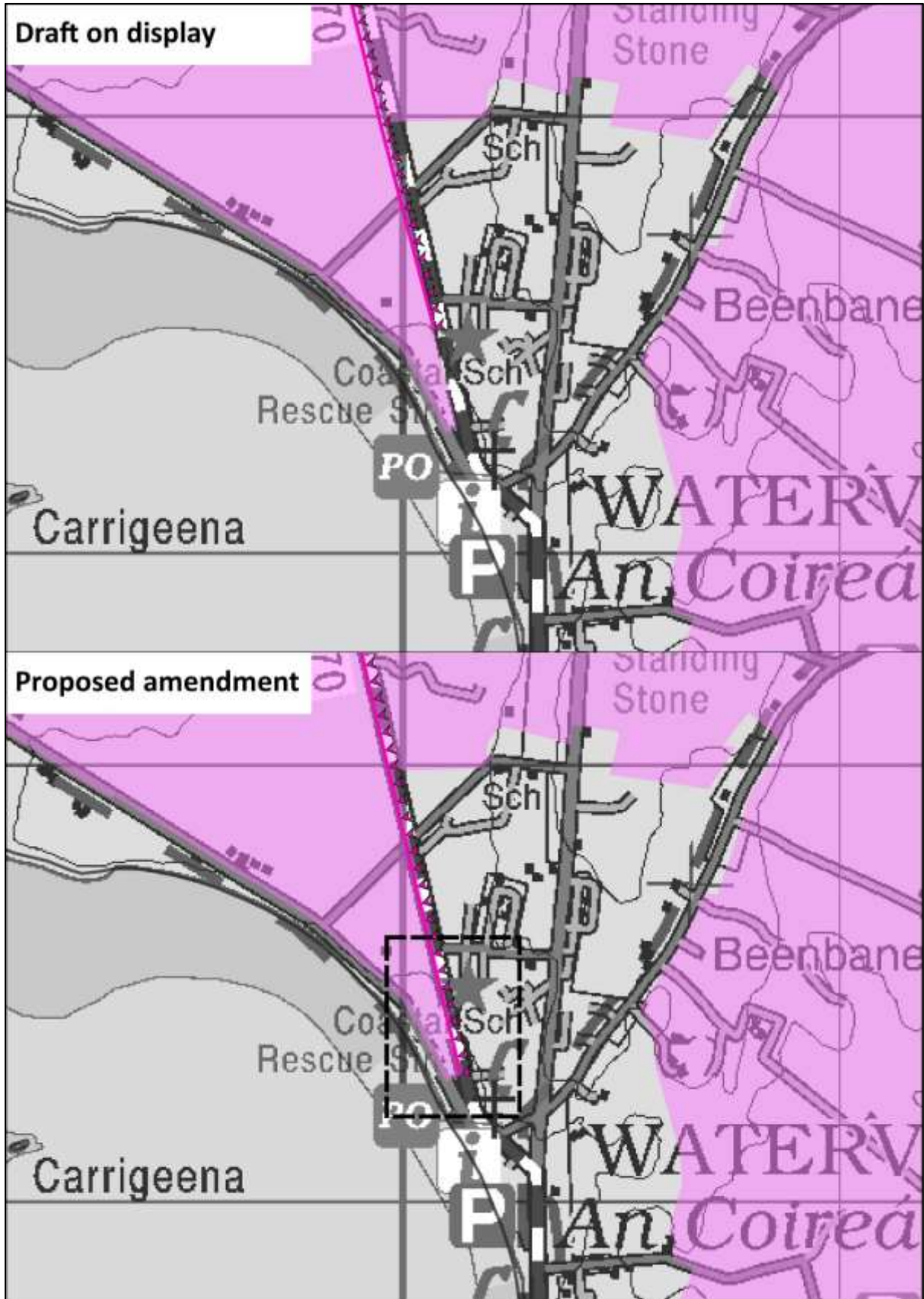
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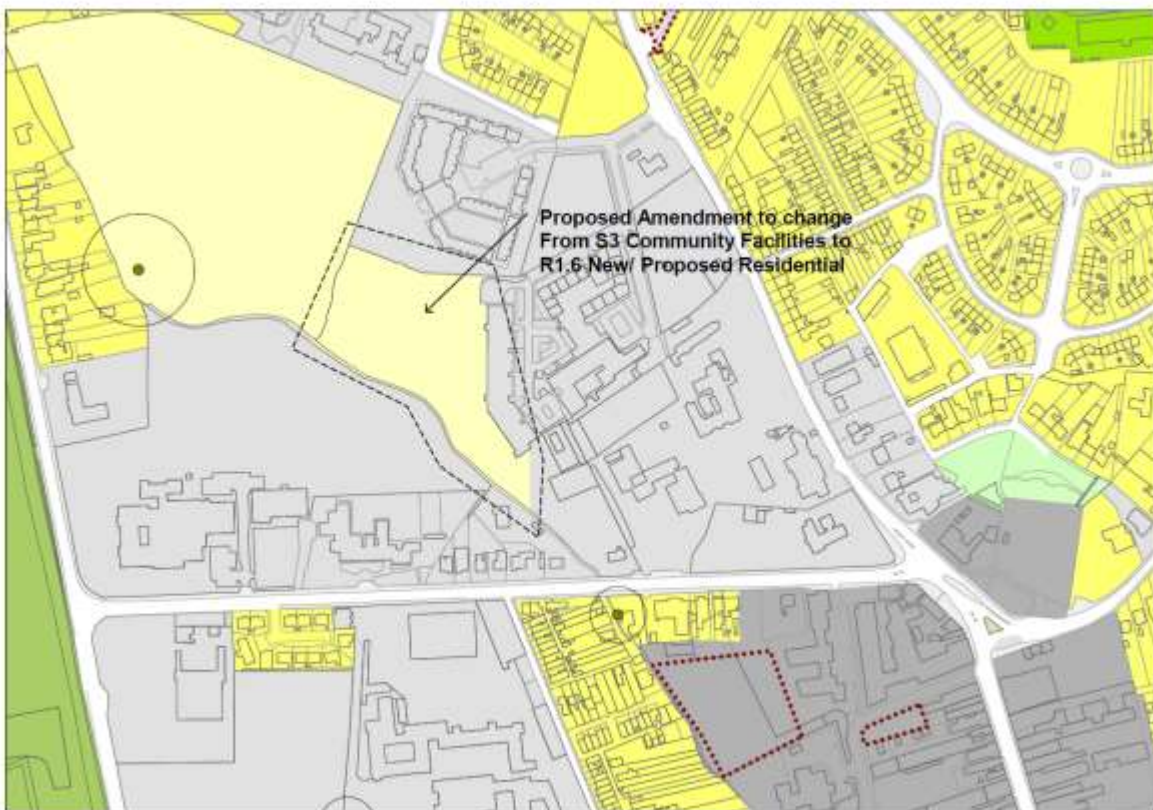
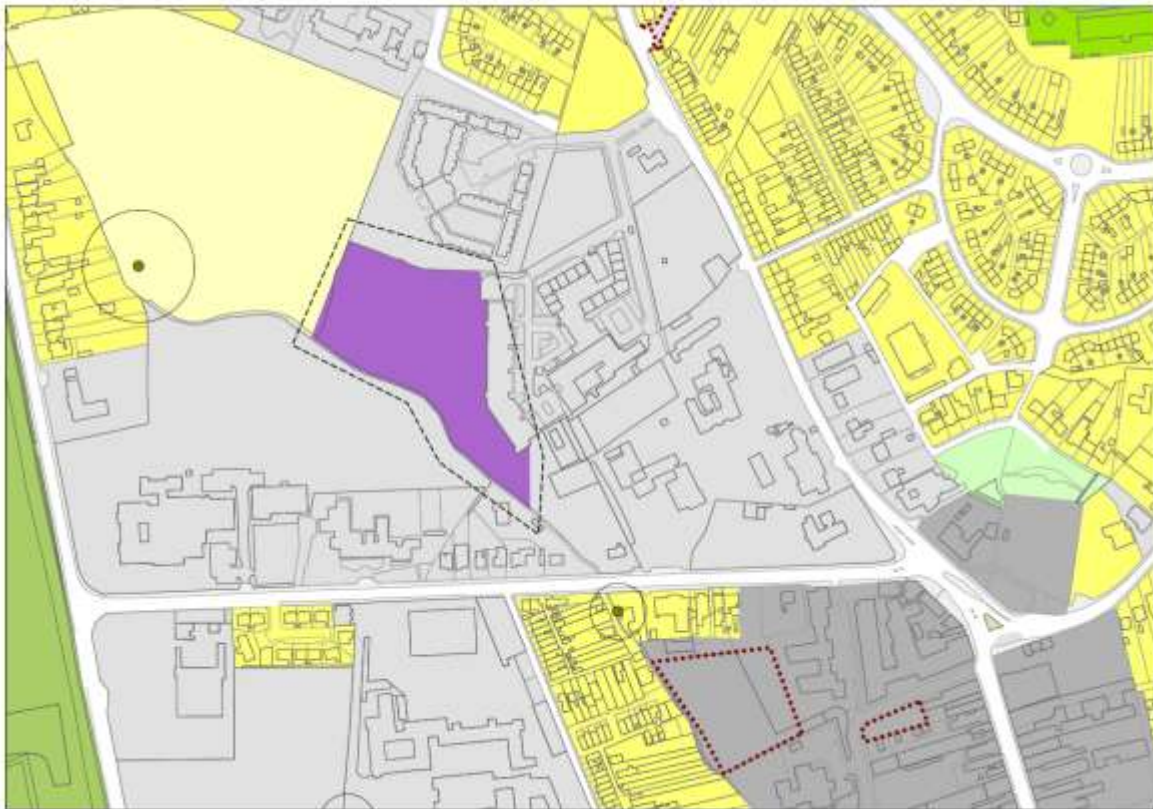
Proposed amendment



11. Map; Revised Views & Prospects (Waterville)



12. Map; Amend zoning from S3 (Community Facilities) to R1 (Proposed Residential) in Killarney



13. Land-use Zoning

1.0 Land Use Zoning

1.1. Introduction

This Draft Kerry County Development Plan 2022-2028 governs the overall land-use objectives for County Kerry and establishes a policy framework within which the more detailed town/settlement plans contained in Volume 2 of this Plan and the Municipal District Local Area Plans.

1.2 Strategic Aims

In accordance with the overall vision, goals and Core Strategy of the Development Plan, the following outlines the strategic aims within which the settlement plans and local area plans will be prepared: To ensure that adequate land is zoned to meet the needs of the population of the County, in compliance with the Core Strategy and populations targets;

- To ensure that sufficient land is zoned and serviced to provide for sustainable development and settlement growth throughout the County, in order to achieve the specified population targets of the Plan;
- To ensure that the land-use considerations in the settlement plans and local area plans are set within the policy framework of the County Development Plan;
- To ensure that social and physical infrastructure is developed in line with the growth of settlements in the County;
- To ensure that proposed developments are, where appropriate, directed to suitably zoned lands within designated settlement areas as provided for in the Plan.

1.3 Land-Use Zoning

Within the functional area of County Kerry, lands are zoned for particular purposes within the settlement plans contained in this Development Plan and in the local areas plans. In accordance with the overall strategy of this Plan, the County's zoning strategy is based on three important principles:

- Sufficient lands should be provided at appropriate locations throughout the County, in accordance with the population targets as set out in the Core Strategy, to facilitate the envisaged land-use requirements during the lifetime of this Plan;
- Sustainable development and the use/redevelopment of brown field sites within established settlements should be encouraged;
- Land-use zoning objectives should assist individuals in accessing the most appropriate location for new development.

Not all needs can be anticipated and therefore some flexibility is required, having regard to all other principles, policies and objectives.

1.3.1 Land Use Zoning /Myplan Classification

The three Town Plans and all the Local Area Plans use the Myplan.ie General Zone Types (GZTs) classification scheme. Myplan is an initiative of the Department of Housing, Planning and Local Government on behalf of all of the planning authorities across the country and can be accessed on the following website: <http://www.myplan.ie/>. The aim of Myplan is to create a one stop shop for information about plans that will assist with coordination between local authorities and more generally with the delivery of public services. Myplan incorporates many different sets of spatial information including the land use zonings of all the development plans and local area plans of all planning authorities in Ireland. Myplan sets out eight general zone types from primary sector to community services/facilities. Each zone type has a number of subcategories, for example education, health and community facilities are all subcategories of the general zone of community services/facilities. Each subcategory is coded. For example, under the general zone type of (R) residential, R1 indicates new/proposed residential while R2 denotes existing residential, while R4 indicates strategic residential reserve. The following constitute the general zone type categories:

1. Primary Sector
2. Commerce/Industry/Enterprise/Economic Development
3. Community Services/Facilities
4. Networks and Basic Infrastructure/Utilities
5. Residential
6. Green/Recreation/Conservation
7. Mixed Use
8. Other

The general zone type categories are further divided into subcategories which are detailed in the table below. Not all Myplan subcategories are utilised within the current plans and are marked with a * in the CODE column in the table.

USE	CODE	ZONING	OBJECTIVE	DESCRIPTION
Primary Sector	P1	Agriculture	Zoned for agriculture and related activities	Provide for the agricultural use of lands and related activities. Generally residential development is not permitted on agricultural zoned land however consideration will be given, in the case of an application, for the construction of a dwelling house for the landowner or the son or daughter of the landowner or the favoured niece or nephew of the landowner to be used as their full-time permanent residence.
	P2*	Forestry	To facilitate forestry	Recognises an existing commercial forestry plantation.
	P3*	Aquaculture & Fishing	To facilitate aquaculture & fishing	Provide for aquaculture or fishing related activities but does not relate to fish processing.
	P4*	Quarrying / Mining	To facilitate an existing quarry or mine	Recognises an existing quarry or mine.
	P5*	Mixed/general primary sector uses	To facilitate a mix of primary sector uses	Provide for a mix of primary sector uses.
	P6*	Other Primary Sector Uses	To facilitate uses not covered by specific primary sector zonings	Provide for a primary sector use not covered by the other primary sector land use categories.
Commerce/ Industry/ Enterprise/ Economic Development	C1.1	Commercial, Retail	Provide for commercial and retail uses.	Provide for the development of commercial or retail development at suitable locations, and if applicable subject to the requirements of the relevant retail strategy and retail planning guidelines.
	C1.2	Retail Warehouse	Provide for retail warehousing development	Facilitate the sale of bulky goods/goods in bulk within high quality settings and highly accessible locations subject to the requirements of the relevant retail strategy and retail planning guidelines.

USE	CODE	ZONING	OBJECTIVE	DESCRIPTION
	C2.1	Industrial, Enterprise, Employment	Provide for office-based development with a high density of employment or industrial development	Provide for office-based development where a high density of employees are to be accommodated based on the sustainability of high quality public transport accessibility. Provide for industrial uses that would not have the same impacts as General Industry (C2.2).
	C2.2*	General Industry	Provide for specialised industrial development	Provide locations specifically for specialised industry associated with environmental emissions, including noise and odour (eg. waste processing, aggregate processing, etc) and with intensive or hazardous processing (e.g. Seveso premises) which may give rise to land use conflict if located within other zonings. Such uses, activities and processes would be likely to produce adverse impacts, for example by way of noise, dust or odour
	C3	Office, Business/ Technology Park and related	To facilitate the development of business parks or technology parks	Facilitate opportunities for compatible industry and general employment uses, in a quality physical environment. General Employment areas should be highly accessible, well designed, permeable and legible with a modest density of employees. Policy safeguards are to be provided to prevent inappropriate intensive office uses at locations poorly served by public transport and the proliferation of retail or commercial uses requiring public access that are best located in mixed-use town core areas.
	C4	Warehouse (excluding retail warehouse)	Provide for distribution, warehouse, storage and logistics facilities based on appropriate access to a major road network	Facilitate logistics and warehouse type activity including storage, distribution and associated re-packaging of goods and products which have specific transportation requirements as they can generate considerable traffic volumes and hence benefit from being located within a purpose built, well designated environment which is well connected to the strategic road network and allows for the efficient movement of goods. Characterised by a low density of employees with appropriate policy safeguards to prevent unsustainable intensive employment uses at these locations.
	C5	Tourism and related	To allow for the development of tourist related uses	Encourage the sustainable provision of an all year-round tourism and recreational facility at appropriate locations.

USE	CODE	ZONING	OBJECTIVE	DESCRIPTION
	C6	Mixed/General Commercial/Industrial/Enterprise uses	To allow for the development of a mix of these types of uses.	Provide for a mix of commercial, enterprise and industrial type uses at appropriate locations.
	C7	Other Commerce/Industrial/Enterprise uses	To allow for other types of commercial uses not catered for in C1-C6	Provide for a commercial/enterprise/industrial sector use not covered by the other categories.
Community Services/Facilities	S1	Education	Provide for educational facilities	Providing for the wide range of educational facilities and related development. Where appropriate the provision of ancillary accommodation and facilities will be accommodated.
	S2	Health and related	Provide for and protect health care infrastructure	Facilitating the sustainable development of necessary health facilities. Where appropriate the provision of ancillary accommodation and facilities will be accommodated.
	S3	Community Facilities	Provide for and protect religious, community and social infrastructure.	Facilitating the sustainable development of necessary community, religious, social infrastructure for communities of local and neighbourhood importance such as places of worship, community centres and childcare facilities. Where appropriate the provision of ancillary accommodation and facilities will be accommodated.
	S4	General Public Administration	Provide for and protect civic infrastructure	Facilitating the sustainable development of necessary civic infrastructure for communities.
	S5	Mixed/General Community Services/Facilities uses	Provide for a mix of community uses	Facilitating the sustainable development of necessary community, health, religious, social and civic infrastructure for communities ranging from those of regional importance such as health facilities, to those of local and neighbourhood importance such as places of worship, community centres and childcare facilities. Where appropriate the provision of ancillary accommodation and facilities will be accommodated.

USE	CODE	ZONING	OBJECTIVE	DESCRIPTION
	S6	Other Community Services/Facilities uses	Provide for community uses not covered in S1-S5.	Facilitating the sustainable development of necessary community, health, religious, social and civic infrastructure for communities ranging from those of regional importance such as health facilities, to those of local and neighbourhood importance such as places of worship, community centres and childcare facilities. Where appropriate the provision of ancillary accommodation and facilities will be accommodated.
Networks and Basic Infrastructure /Utilities	N1.1*	Road	Provide for road infrastructure	Provides for the sustainable development of roads or related infrastructure.
	N1.2*	Rail	Provide for rail infrastructure	Provides for the development of rail related infrastructure.
	N1.3*	Airport	Provide for airport infrastructure	Provides for the development of airport related infrastructure.
	N1.4	Seaport/Harbour	Provide for harbour and marine related activities	Provides for harbour and marine related activities.
	N1.5	Mixed/General Transport uses	Provide for a mix of transport related uses	Provides for a mix of transport related uses.
	N1.6	Other Transport/General uses	Provide for transport and utilities infrastructure not covered in N1.1-N1.5	Provides for development associated with the provision of public transport services (including ports).
	N2.1*	Water	Provide for water infrastructure	Provides for development associated with the provision of water infrastructure.
	N2.2	Wastewater	Provide for wastewater infrastructure	Provides for development associated with the provision of wastewater infrastructure.
	N2.3*	Mixed/General Water/Wastewater uses	Provide for a mix of a water and wastewater infrastructure	Provides for development associated with the provision of water and wastewater infrastructure.
	N2.4	Other Water/Wastewater uses	Provide for water/wastewater infrastructure not covered in categories N2.1-N2.4	Provides for development associated with the provision of water and wastewater infrastructure.
	N3.1*	Gas	Provides for gas related infrastructure	The natural gas network extends to Listowel and could in the future be extended to other settlements in the county.
	N3.2*	Electricity	Provides for electricity related infrastructure	Provides for development associated with the provision of public utilities such as electricity network infrastructure.

USE	CODE	ZONING	OBJECTIVE	DESCRIPTION
	N3.3*	Mixed/General Gas and Electricity uses	Provides for a mix of gas and electricity uses	Provides for development associated with the provision of and public utilities such as electricity network infrastructure and gas infrastructure.
	N3.4*	Other Gas and Electricity uses	Provides for other gas and electricity uses	Provides for development associated with the provision of and public utilities such as electricity network infrastructure and gas infrastructure.
	N4*	Telecommunications	Provides for telecommunications infrastructure	Provides for development associated with the provision of telecommunications infrastructure
	N5*	Solid Waste	Provides for solid waste facilities	Provides for development associated with the provision of solid waste facilities.
	N6*	Other Networks and Basic Infrastructure/ Utilities uses	Provides for other infrastructure and utilities uses	Provides for development associated with the provision of public transport services (including ports) and public utilities such as electricity network infrastructure, telecommunications, water, wastewater, etc.
Residential	R1	New/Proposed Residential	Provide for new residential development in tandem with the provision of the necessary social and physical infrastructure	For new residential areas/town extensions to ensure the provision of high quality new residential environments. Provide an appropriate mix of house sizes, types and tenures in order to meet household needs and to promote balanced communities. May also include a range of other ancillary uses for residential, particularly those that have the potential to foster the development of new residential communities.
	R2	Existing Residential	Provide for residential development and protect and improve residential amenity	For existing predominately residential areas allowing for the protection of existing residential amenity balanced with new infill development. May also include a range of other ancillary uses for residential, particularly those that have the potential to foster the development of residential communities. These are uses that benefit from a close relationship to the immediate community, such as crèches, some schools and nursing homes. A limited range of other uses that support the overall residential function of the area may also be considered.

USE	CODE	ZONING	OBJECTIVE	DESCRIPTION
	R3	Residential, Mixed Residential and other uses	Provide for residential development and protect and improve residential amenity	For existing predominately residential areas allowing for the protection of existing residential amenity balanced with new infill development. Residential Areas are intended primarily for housing development but may also include a range of other ancillary uses for residential. These are uses that benefit from a close relationship to the immediate community, such as crèches, some schools and nursing homes. A limited range of other uses that support the overall residential function of the area may also be considered.
	R4	Strategic Residential Reserve	Provide for future new residential development in tandem with the provision of the necessary social and physical infrastructure	To provide for future residential areas/town extensions to ensure the provision of high quality new residential environments. Provide an appropriate mix of house sizes, types and tenures in order to meet household needs and to promote balanced communities. May also include a range of other ancillary uses for residential, particularly those that have the potential to foster the development of new residential communities. Residential Areas are intended primarily for housing development but may also include a range of other ancillary uses for residential, particularly those that have the potential to foster the development of new residential communities. These are uses that benefit from a close relationship to the immediate community, such as crèches, some schools and nursing homes. A limited range of other uses that support the overall residential function of the area may also be considered.

USE	CODE	ZONING	OBJECTIVE	DESCRIPTION
Green/ Recreation/ Conservation	G1	Open Space, Park	Preserve and provide for open space and recreational amenities	Provide recreational and amenity resources for the community including parks, amenity areas and natural areas. In some instances, these open spaces are located within or adjacent to environmental designations and sites of local biodiversity significance. Therefore, it is important to ensure the protection of the integrity of biodiversity and to recognise the importance of wildlife corridors and sites of nature conservation importance.
	G2	Walkway, Cycleway	Provide for walkways or cycleways	Provide recreational and amenity resources for the community such as walkways and cycleways.
	G3	Conservation, Amenity or Buffer Space, Landscape Protection	Protect and enhance high amenity areas	Protect highly sensitive and scenic locations from inappropriate development that would adversely affect the environmental quality of the locations. In some instances, these open spaces are located within or adjacent to environmental designations and sites of local biodiversity significance. Therefore, it is important to ensure the protection of the integrity of biodiversity and to recognise the importance of wildlife corridors and sites of nature conservation importance.
	G4	Active open space	Intended solely for the provision of recreational uses.	Provide recreational and amenity resources for the community including sporting and leisure facilities.
	G5	Mixed/General 'green'/Recreation/Conservation, Other	Preserve and provide for a mix of open space and recreational amenities	Provide for a mix of recreational and amenity resources for the community including parks, sporting and leisure facilities, amenity areas and natural areas. In some instances, these open spaces are located within or adjacent to environmental designations and sites of local biodiversity significance. Therefore, it is important to ensure the protection of the integrity of biodiversity and to recognise the importance of wildlife corridors and sites of nature conservation importance.
Mixed Use	M1	Mixed Use, General Development, Opportunity Site	Provide for mixed use development	Provides for a mix of uses on these lands, including both commercial and residential uses. A number of these sites are designated as opportunity sites with specific forms of development for some of these sites.

USE	CODE	ZONING	OBJECTIVE	DESCRIPTION
	M2	Town/ Village Centre	Provide for the development and enhancement of town core uses including retail, residential, commercial, civic and other uses	Consolidate the existing fabric of the core/central areas of settlements by densification of appropriate-commercial and residential developments ensuring a mix of commercial, recreational, civic, cultural, leisure, residential uses and urban streets, while delivering a quality urban environment. The zoning emphasises compact growth objectives and priority for public transport, pedestrians and cyclists while minimising the impact of private car based traffic.
	M3	District, Neighbourhood Centre	Provide for the development and enhancement of district centres in urban areas including for retail, residential, commercial, civic and other uses	Provide for the development of district level centres in cities and larger urban areas as part of an integrated strategy for mixed-use compact growth where key locations are identified for new development consolidation and densification.
	M4	Built up area	Existing built areas of mixed use	Provides for a mix of land uses which may have existing buildings in place, brownfield lands and undeveloped greenfield lands within the development boundary.
	M5	Other mix of uses	Provide for mixed use development	Provides for a mix of commercial and residential uses on the site. Specific objectives in relation to the development of these lands may be included in the relevant plan.
Other	O1	Strategic Reserve, White Land	To facilitate development at some time in the future.	Provide for the future sustainable development of these lands. Their specific zoning will be determined at a future date based on the needs of a settlement.
	O2	General	Used to designate lands for general development.	Provide for development in accordance with a specific development objective in relation to these lands, e.g. car parking.

1.3.2 Development in Existing Residential/Built Up Areas (R2/M2/M4)

In this plan significant areas of lands within the town and village boundaries have already been developed in the Municipal District's settlements. These are known as built up areas and constitute the majority portion of the lands zoned on the zoning maps and are typically zoned as (R2/M2/M4) - Development in Existing Residential/Town/Village Centre/Built Up Areas.

Built up/town and village centre areas include all lands within a development boundary, it includes a mix of land uses which may have existing buildings in place, brownfield lands and undeveloped greenfield lands within the development boundary. In the local area plan, such areas are shown as existing residential (R2) or town/village centre area (M2) or built up area (M4). This approach is consistent with the Myplan classification

system and allows a more positive and flexible response to proposals for the re-use/re-development of underused, derelict land or buildings particularly in the older parts of the main towns.

Within predominantly built up areas, development proposals normally involve infill development, redevelopment or refurbishment or changes of use. It is important to recognise that this is part of the cycle of development or redevelopment in settlements that contributes to the character of towns. In many ways, this is more sustainable than continually encouraging growth to concentrate only towards undeveloped areas. Indeed, a mix of harmonious uses is often considered a desirable and attractive characteristic.

It is therefore the policy of the Planning Authority to protect and improve existing/developed/residential areas and to provide facilities and amenities incidental to those areas. There is a range of additional uses open to consideration within these areas where it can be demonstrated that there is a need for such facilities and that it will not affect the predominant use of the area.

Within existing built up areas there will inevitably be some areas of land that are either undeveloped or have some potential to be considered for development. The inclusion of this land within an existing built up area does not imply any presumption in favour of development or redevelopment, unless this would enhance the character and amenity of the area.

While many areas are zoned M4 Built Up and many uses are “open to consideration” the council shall have regard to the established uses within the area.

It is the policy of the Local Authority to facilitate development that supports in general the primary land use of the surrounding existing built up area. Development that does not support or threatens the vitality or integrity of the primary use of these existing built up areas shall not be permitted.

Within the development boundaries of the towns and villages, in areas that are not subject to specific zoning objectives, proposals for development will be considered in relation to the following:

- The objectives of this and any other statutory plan;
- The character of the surrounding area; and
- Other planning and sustainable development considerations considered relevant to the proposal or its surroundings, including flood risk assessment and the potential for impact on sites of nature conservation importance.

1.3.3 Development and Land Uses in New Areas (Greenfield)

The aim of zoning objectives in relation to new areas is to provide a framework that will guide their development from the very beginning. In zoning new land for development, the intention is to foster the natural growth of the settlements by encouraging related developments to form sensible spatial groupings. By encouraging a sensible mix of uses and avoiding excessive homogeneous development, these areas should be livelier and more sustainable reflecting the character of many of the existing areas within the county.

1.3.4 Lands Zoned outside Settlement Boundaries

There are lands zoned for a range of uses outside settlement boundaries in Local Area Plans, mainly in the environs of the larger towns. The development of these lands will be subject to the provisions of the relevant (Municipal District/Electoral Area) Local Area Plan in addition to the objectives and development standards of this plan.

In addition, lands known as the Tarbert-Ballylongford Land Bank are zoned for industry. Proposals for marine related industry, general industrial development, and particularly those industries creating a synergism with existing uses and contributing to the development of a strategic energy hub at this location will also be encouraged.

1.3.5 Transitional Zonal Areas

While the zoning objectives and control standards indicate the different uses permitted in each zone, it is important to avoid abrupt transitions in scale and use in the boundary areas of adjoining land use zones. In dealing with development proposals in these areas it is necessary to avoid developments that would be detrimental to the amenities of the more environmentally sensitive zone. For instance, in zones abutting residential areas particular attention must be paid to the use, scale and density of development proposals in order to protect the amenities of the residential properties.

1.3.6 Non-Conforming Uses

Many uses exist in locations where they do not conform to designated use zoning objectives set out for that area and are normally long-term established uses that have developed over time. When extension to, or improvements of premises accommodating these uses are proposed, each shall be considered on its merits and permission may be granted where it can be shown that the proposal does not adversely affect amenities in the vicinity and is compatible with the proper planning and sustainable development of the area.

1.3.7 Uses not listed in the Indicative Zoning Matrix

Proposed land-uses which are not listed in the indicative land-use zoning matrix will be considered on a case-by-case basis having regard to the proper planning and sustainable development of the area and compliance with the relevant policies and objectives, standards and requirements as set out in this Plan, guidelines issued in accordance with Section 28 of the Planning and Development Act, 2000 (as amended) and guidance issued by other government bodies/ sections.

Zoning/Code	Res	CSF	NU	MU					CIEE						GRC	P	Oth
	R	S	N	M1	M2	M3	M4	M5	C1	C2	C3	C4	C5	C6	G1-G5	P1	O1/O2
Shop (Class1) (incl. post offices)	O	O	N	P	P	P	O	N	P	N	N	N	N	N	O	O	O
Financial/Professional Services (Class 2)	O	O	N	P	P	P	O	N	N	N	P	N	N	N	N	O	O
Office (Class 3)	O	O	N	P	P	P	O	O	N	N	P	N	N	P	N	O	O
Light Industry with Showroom (Class 4)	N	N	N	N	N	N	O	N	N	P	N	N	N	O	N	N	O
Wholesale Warehouse (Class 5)	N	N	N	O	N	N	O	N	O	N	N	P	N	O	N	O	O
Club/Guest House/Hostel (Class 6) & Hotel	O	O	N	O	P	P	O	O	N	N	N	N	P	P	O	N	O
Religious Activities (Class 7)	O	P	N	O	P	P	O	N	N	N	N	N	N	N	N	N	O
Medical Services/Day Centre/Crèche (Class 8)	O	P	N	P	P	P	O	N	N	N	N	N	N	O	N	N	O
Residential/Medical Care & Training (Class 9)	P	P	N	O	O	P	O	O	N	N	N	N	N	N	N	N	O
Gallery/Museum/Community Hall (Class 10)	O	P	N	P	O	P	O	O	N	N	N	N	N	O	N	N	O
Cinema/Theatre/Recreational Hall (Class 11)	O	O	N	P	O	P	O	N	N	N	N	N	O	O	O	N	O
Bookmakers/Amusement Arcade	N	N	N	O	O	O	O	N	N	N	N	N	N	N	N	N	n
Café/Restaurant	O	O	N	O	P	P	O	N	O	N	N	N	N	O	N	N	N
Call Centre/Telesales/Data-centre/Web-hosting	N	N	N	O	N	N	O	O	N	O	P	N	N	O	N	N	O
Camping/glamping etc.	O	O	O	N	O	N	O	N	N	N	N	N	P	N	O	O	O
Carparking (Surface/Multi-storey)	O	O	O	P	P	P	P	N	O	O	O	O	O	O	O	N	O
Fast Food/Take-Away	O	N	N	O	P	P	O	N	N	N	N	N	N	O	N	N	N
Funeral Home	N	O	N	O	O	O	O	N	N	N	N	N	N	O	O	N	O
Garden Centre	N	O	N	N	N	N	O	N	N	O	N	N	N	O	N	O	O
Motor Sales Showroom	N	N	N	O	N	O	O	O	N	O	N	N	N	O	N	N	O
Night-Club	N	N	N	O	P	P	O	N	N	N	N	N	N	N	N	N	O
Petrol Filling Station	N	N	N	O	N	O	O	N	N	N	N	N	N	N	N	N	O
Public facilities & infrastructure	O	O	P	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Residential Unit	P	O	N	O	O	O	O	O	N	N	N	N	O	O	N	O	O
Traveller Accommodation	P	O	N	O	N	N	P	N	N	N	N	N	N	N	N	O	O
Vehicle Repairs Garage	N	N	N	O	N	N	O	N	N	O	N	N	N	O	N	N	O
Superstore (>2500m²)	N	N	N	O	P	N	O	N	P	N	N	N	N	N	N	N	O
Warehouse/Storage Depots/Distribution Centres	N	N	N	N	N	N	O	N	O	O	O	P	N	O	N	N	O

Zoning/Code: Res - Residential CSF - Community Services/Facilities NU - Networks/Infrastructure/Utilities MU - Mixed Use CIEE – Commerce/Industry/Enterprise/Economic
GRC - Green/Recreation/Conservation P - Primary Oth - Other

N - Not Normally Permitted O - Open to Consideration P - Permitted in Principle

See Classes of use Schedule 2, Part 4, Planning & Development Regulations 2001, as amended

Zoning Matrix

14. Additional ACA (Waterville)
WATERVILLE: IVERAGH TERRACE, IVERAGH LODGE AND CABLE STATION



ARCHITECTURAL CHARACTER

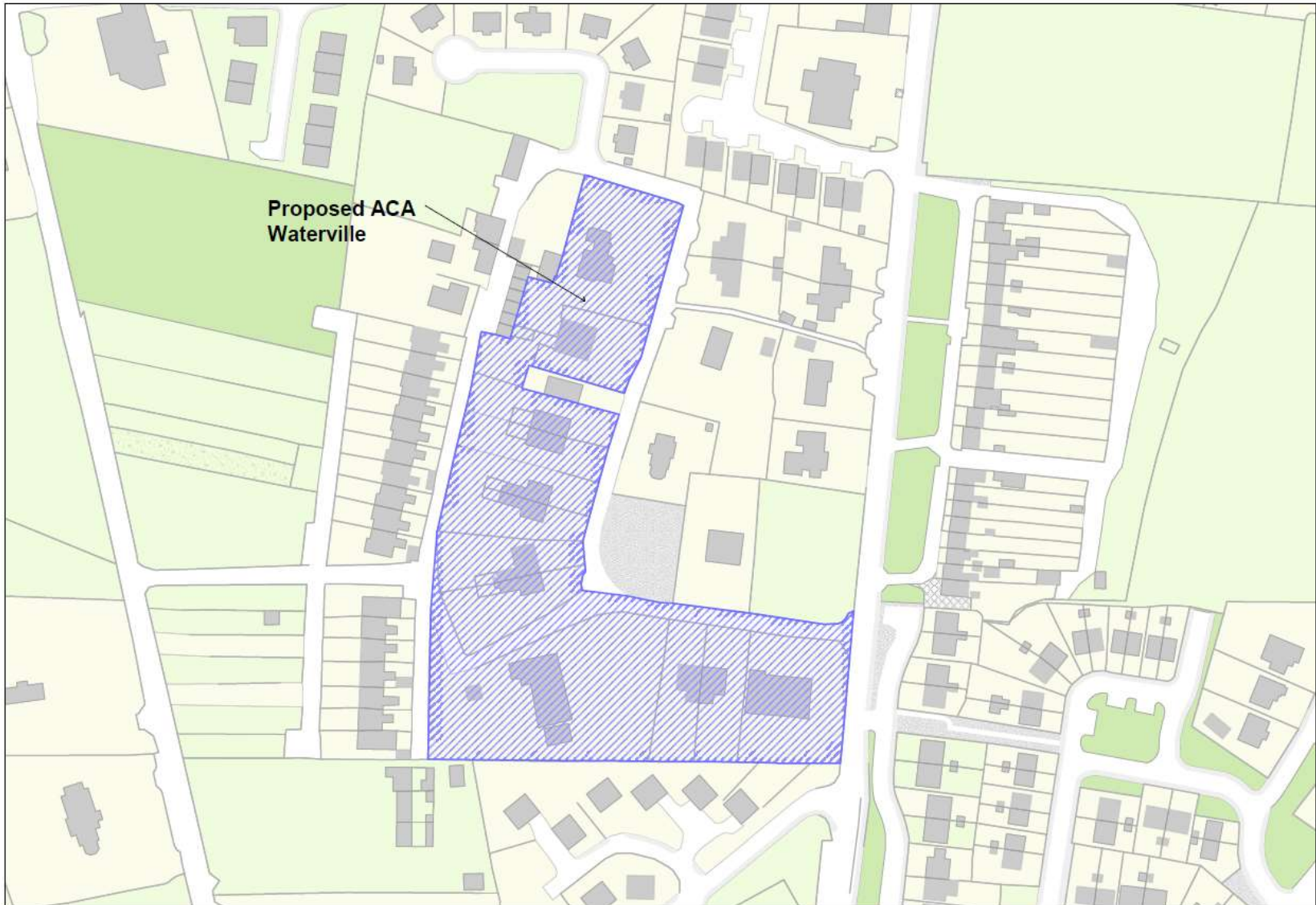
The ACA includes Iveragh Terrace, Iveragh Lodge and the Waterville Cable Station. The architectural character of the Cable Station and Iveragh Lodge is characterised by finely worked sandstone detailing to external finishes, slate roofs and steeply pitched roofs. Iveragh Terrace which comprises two storey houses, has a simpler material palette which includes fine render detailing to the front facades. Interestingly for Waterville, these houses incorporate half hipped roofs and finely detailed chimney stacks.

HISTORICAL CHARACTER

The nucleus of the village developed during the first half of the nineteenth century. The development of the cable station in the latter half of the 1800s promoted the expansion of the village, with the construction of several new buildings associated with the cable station. By the late 1890s it had adopted its current the layout including the development of terraced housing associated with the Commercial Cable Company. Iveragh Terrace and Iveragh Lodge predated the construction of the Waterville Cable Station.

STATEMENT OF SPECIAL SIGNIFICANCE

The special significance of this ACA is determined by its open layout and open space, the boundary walls and remaining architectural features (including wrought iron gates). The Waterville Cable Station, the sandstone water tower and Iveragh Lodge create strong visual markers on the landscape, both in terms of their finish, scale and siting. Future development proposals should protect and enhance the character and setting of protected structures within the ACA, should maintain the existing plot pattern, the building lines and architectural character of its components. Elements such as the decorative chimney stacks to the Iveragh Terrace structures should be retained as a feature of the ACA.



15. Additions/Deletions to Record of Protected Structure

Proposed Addition to the Record of Protected Structures

Planning Authority: Kerry County Council

Address: Dunmore Head, Dingle

Description: Lookout Post 38

Special Interest: Hist, Soc

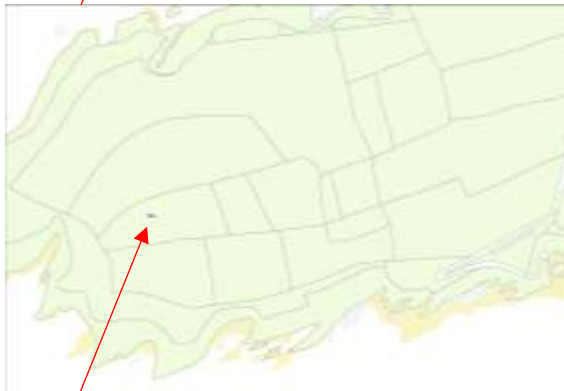
Appraisal: This lookout post was one of a network of 83 lookout posts established around the coast of Ireland to monitor shipping and aircraft movements. Often these locations were accompanied by a white sign showing Eire to inform aircraft pilots that they were flying above neutral Ireland. This structure is an important part of the county's social history and its contribution to the county's built heritage merits inclusion on the RPS.



Location Maps (not to scale)



Site



Site

Proposed Addition to the Record of Protected Structures

Planning Authority: Kerry County Council

Address: Leck Point, Ballubunion

Description: Lookout Post 43

Special Interest: Hist, Soc

Appraisal: This lookout post was one of a network of 83 lookout posts established around the coast of Ireland to monitor shipping and aircraft movements. Often these locations were accompanied by a white sign showing Eire to inform aircraft pilots that they were flying above neutral Ireland. This structure is an important part of the social history of County Kerry and its contribution to the county's built heritage merits inclusion on the RPS.



Location Maps (not to scale)



Site



Site

Proposed Addition to the Record of Protected Structures

Planning Authority: Kerry County Council

Address: Sybil Head

Description: Lookout Post 39

Special Interest: Hist, Soc

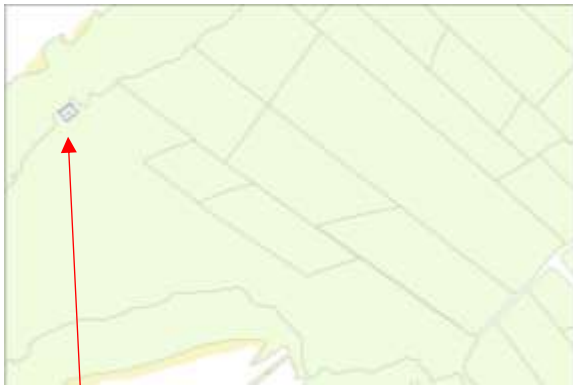
Appraisal: This lookout post was one of a network of 83 lookout posts established around the coast of Ireland to monitor shipping and aircraft movements. Often these locations were accompanied by a white sign showing Eire to inform aircraft pilots that they were flying above neutral Ireland. This structure is an important part of the social history of County Kerry and its contribution to the county's built heritage merits inclusion on the RPS.



Location Maps (not to scale)



Site



Site

Proposed Addition to the Record of Protected Structures

Planning Authority: Kerry County Council

Address: Fort Shannon, Tarbert

Description: WWII artillery emplacement

Special Interest: Hist, Soc

Appraisal: This emplacement was constructed in 1942 and represents a remarkable example of strategic planning and construction. Its location within the landscape within an embankment ensured that its critical infrastructure was obscured. Winston Churchill sanctioned the donation of two six-inch guns to be used for the defence of the location. Any attempt to enter the channel would have been under potential attack from these defensive weapons. Although these guns are no longer on site, the structure is in remarkably fine intact condition; a lasting testament to the craftsmanship of the Irish army.



Location Maps (not to scale)



Site



Site

Proposed Addition to the Record of Protected Structures

Planning Authority: Kerry County Council

Address: Foil Eye

Description: Lookout Post 83

Special Interest: Hist, Soc

Appraisal: This lookout post was one of a network of 83 lookout posts established around the coast of Ireland to monitor shipping and aircraft movements. Often these locations were accompanied by a white sign showing Eire to inform aircraft pilots that they were flying above neutral Ireland. This structure is an important part of the social history of County Kerry and its contribution to the county's built heritage merits inclusion on the RPS.



Location Maps (not to scale)



Site



Site

Proposed Addition to the Record of Protected Structures

Planning Authority: Kerry County Council

Address: Bolus Head

Description: Lookout Post 34

Special Interest: Hist, Soc

Appraisal: This lookout post was one of a network of 83 lookout posts established around the coast of Ireland to monitor shipping and aircraft movements. Often these locations were accompanied by a white sign showing Eire to inform aircraft pilots that they were flying above neutral Ireland. This structure is an important part of the social history of County Kerry and its contribution to the county's built heritage merits inclusion on the RPS.



Location Maps (not to scale)



Site



Site

Proposed Addition to the Record of Protected Structures

Planning Authority: Kerry County Council

Address: Lamb's Head

Description: Lookout Post 33

Special Interest: Hist, Soc

Appraisal: This lookout post was one of a network of 83 lookout posts established around the coast of Ireland to monitor shipping and aircraft movements. Often these locations were accompanied by a white sign showing Eire to inform aircraft pilots that they were flying above neutral Ireland. This structure is an important part of the social history of County Kerry and its contribution to the county's built heritage merits inclusion on the RPS.



Location Maps (not to scale)



Site



Site

Proposed Deletion to the Record of Protected Structures

Planning Authority: Kerry County Council

Address: Structure known as Flahive’s Bar, Strand Street, Dingle

Description: Two storey detached structure

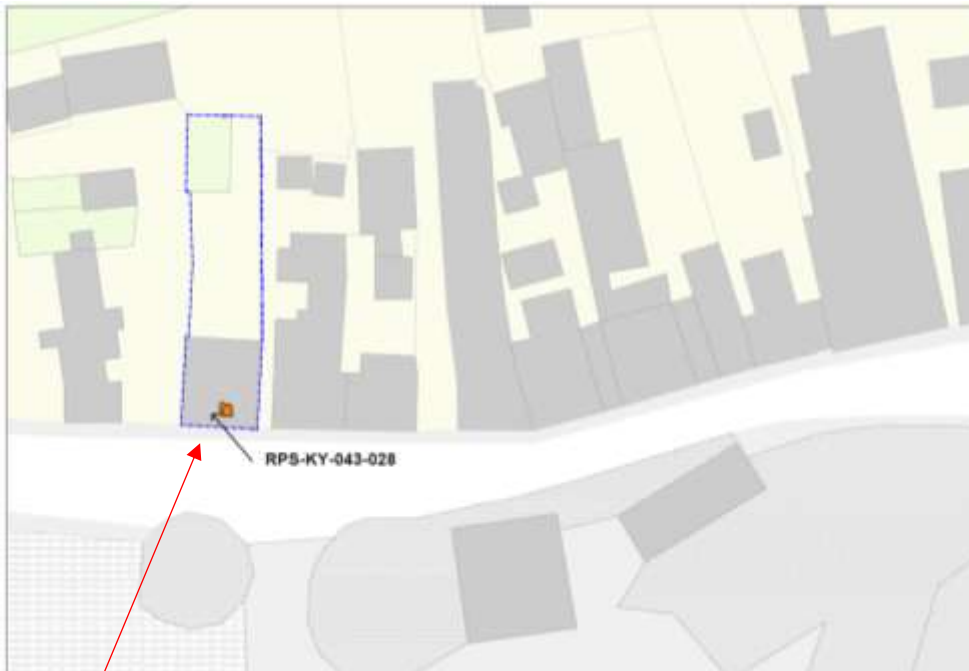
Special Interest: Arch

RPS Reference Number: 043-028

Appraisal: I have inspected this property and concur with the recommendation outlined in the submission. As the structure continues to be within a designated Architectural Conservation Area, I am satisfied this level of protection will ensure the character of the area is maintained.



Location Map (not to scale)



Site

Proposed Deletion to the Record of Protected Structures

Planning Authority: Kerry County Council

Address: Lahesrough North, Ballybunion

Description: Detached structure

Special Interest: Arch, Art

RPS Reference Number: 5-6

Appraisal: I have inspected this property and concur with the recommendation outlined in the submission.



Location Map (not to scale)



Site

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Glossary of Terms

DEM – Digital Elevation Model

DHPLG – Department of Housing, Planning & Local Government

DoECC – Department of Environment, Climate & Communications

EIP – European Innovation Partnership

EU – European Union

FPM – Freshwater Pearl Mussel

GHG – Greenhouse Gas

GIS – Geographical Information System

GLAS – Green Low-carbon, Agri0envrionmental Scheme

GSI – Geological Survey of Ireland

GW – Gigawatt

KCC – Kerry County Council

KV - Kilovolt

LARES – Local Authority Renewable Energy Strategy

LCA – Landscape Character Assessment

MW - Megawatt

NHA – Natural Heritage Area

pNHA – proposed Natural Heritage area

RE – Renewable Energy

RES – Renewable Energy Strategy

SAC – Special Area of Conservation

SEAI – Sustainable Energy Authority of Ireland

SID – Strategic Infrastructure Development

SPA – Special Protection Area

UCU – Unique Condition Units

UNESCO - United Nations Educational, Scientific and Cultural Organisation

WFD – Water Framework Directive

ZTV – Zone of Theoretical Visibility

Introduction

Over the last 20 years the county has seen the construction of a significant number of commercial renewable energy (RE) developments. The first wind farm developments were granted planning permission in 1997 (4 turbines in Beal and 23 turbines in the Stack's Mountains). As of July 2021, 362 wind turbines had been constructed across the county. There is also permission for 12 additional turbines which are yet to be constructed or are currently under construction. The locations of these turbines are shown on Map 6.1. The county of Kerry is therefore a significant contributor to the generation of renewable energy in the country as those constructed are currently contributing over 740MW of RE to the National Grid.

Kerry County Council recognises the importance of exploiting renewable energy sources in order to contribute to achieving national targets in relation to reductions in fossil fuel dependency and curbing greenhouse gas emissions. Kerry County Council also recognises its role in responding to climate change and the goal of achieving a low carbon, climate resilient and environmentally sustainable economy.

The number of wind turbines constructed in the county demonstrates how Kerry County Council has been successful to date in facilitating the development of renewable energy and it will ensure that the County continues to contribute significantly to the achievement of national targets. It should also be noted that other forms of renewable energy also exist in the County.

Each type of renewable energy and the related technologies for harvesting that energy has the potential to impact on the County's landscape, its ecological, recreational and/or cultural and built heritage resources.

Therefore, any review of renewable energy policy must carefully balance the need to achieve national targets in relation to climate change, while at the same time protecting the landscape of the county as a major economic asset and its areas of ecological, archaeological and cultural importance.

This document identifies areas open to consideration or unsuitable for wind energy developments. The methodology followed takes cognisance of Section 3.6 of the *Draft Revised Wind Energy Development Guidelines* (DHPLG, 2019) and the *Methodology for Local Authority Renewable Energy Strategies* (SEAI, 2013). This approach involves a sieve mapping analysis of key Ecological, Environmental, Archaeological, Landscape and technical areas. The results of this analysis are subsequently overlapped by the outputs of a comprehensive Landscape Character Assessment. Finally, the cumulative effects of constructed and permitted but not yet constructed wind energy developments are taken into consideration.

This document does not contain policy in respect of renewable energy. This document outlines the methodology used to identify within the development plan areas which are 'acceptable in principle' for wind energy development, where they would be 'open for consideration', and where they would be 'unsuitable for commercial wind energy development'. Policy in respect of these areas and renewable energy is contained in Chapter 12 of the Draft Kerry County Development Plan 2022-2028.

Methodology

In order to assist planning authorities to identify key areas where there are wind energy resources capable of exploitation in a manner consistent with proper planning and sustainable development, a step-by-step approach is outlined in the *Draft Revised Wind Energy Development Guidelines* (DHPLG, 2019). This ordered approach involves a sieve mapping analysis of the key environmental, landscape and technical criteria which must be balanced in order to identify the most suitable location for wind energy development.

The wind zoning methodology is informed by these guidelines and is also informed by the *Methodology for Local Authority Renewable Energy Strategies* (SEAI, 2013).

Viewshed analysis and GIS, which are particularly useful when identifying the suitability of areas for the deployment of wind energy, given the amount of information and considerations involved in such an analysis, also informed policy formulation.

Step 1	Areas of wind potential having regard to wind speeds and the national grid.
Step 2	<p>Overlay mapping of wind energy constraints:</p> <ul style="list-style-type: none"> • Settlements • Lakes • Elevated Areas • Kerry Airport • Areas of Prime Special Amenity • Archaeology • UNESCO World Heritage Site • Hen Harrier Areas • Other Ecologically Important Areas • Catchments & Water Framework Directive • Soils & Geology
Step 3	Undertake an analysis of cumulative impact of wind energy developments include a zone of theoretic visibility analysis.
Step 4	Analyse the areas not subject to constraints, including the sensitivity of the landscapes in these areas to wind energy development.
Step 5	Overlay Steps 1-4 to ascertain areas 'acceptable in principle' or 'open for consideration' for wind energy development.

Table 6.1 Steps undertaken to identify areas suitable for wind development

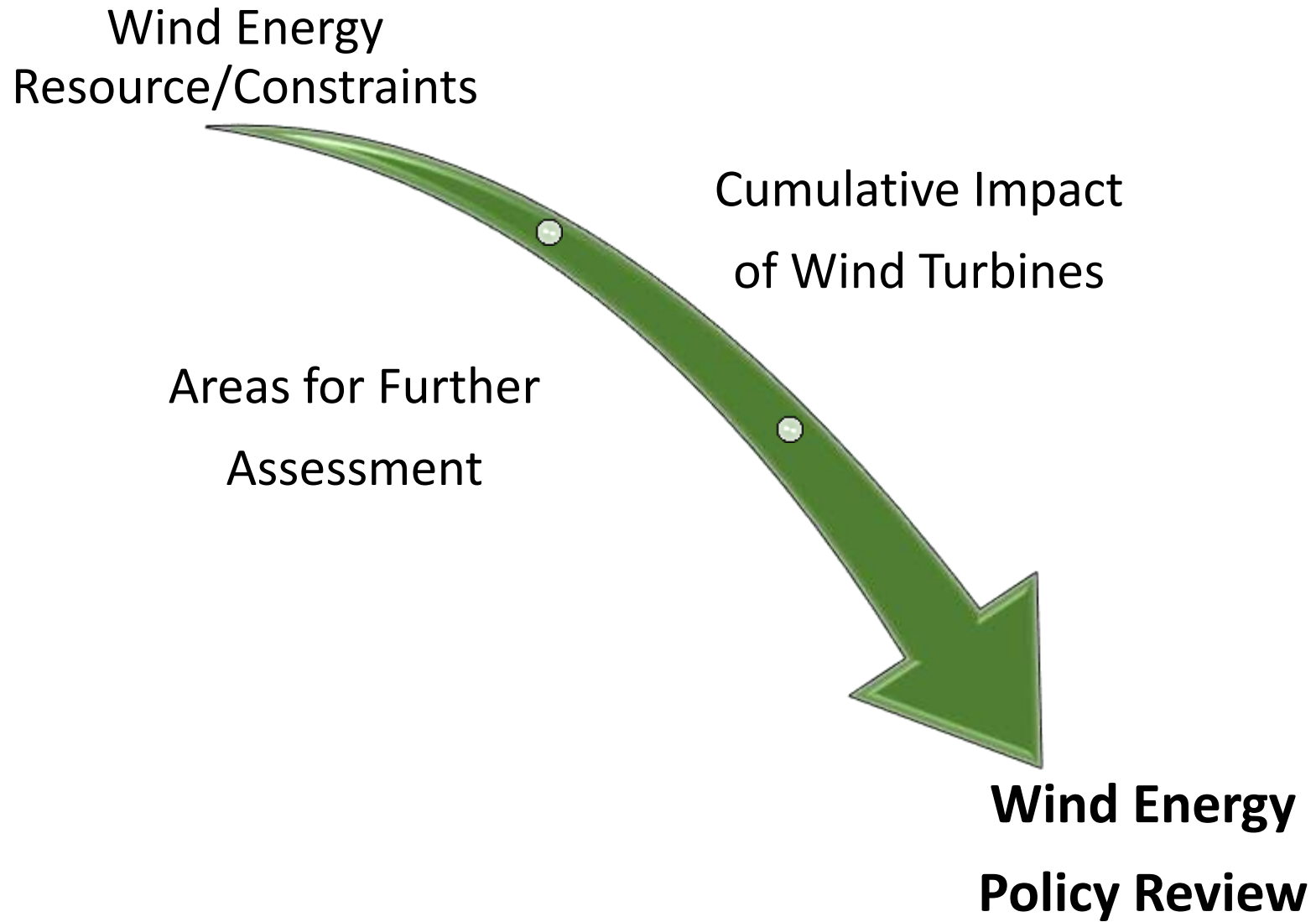


Figure 6.1: How the assessment informs wind energy policy

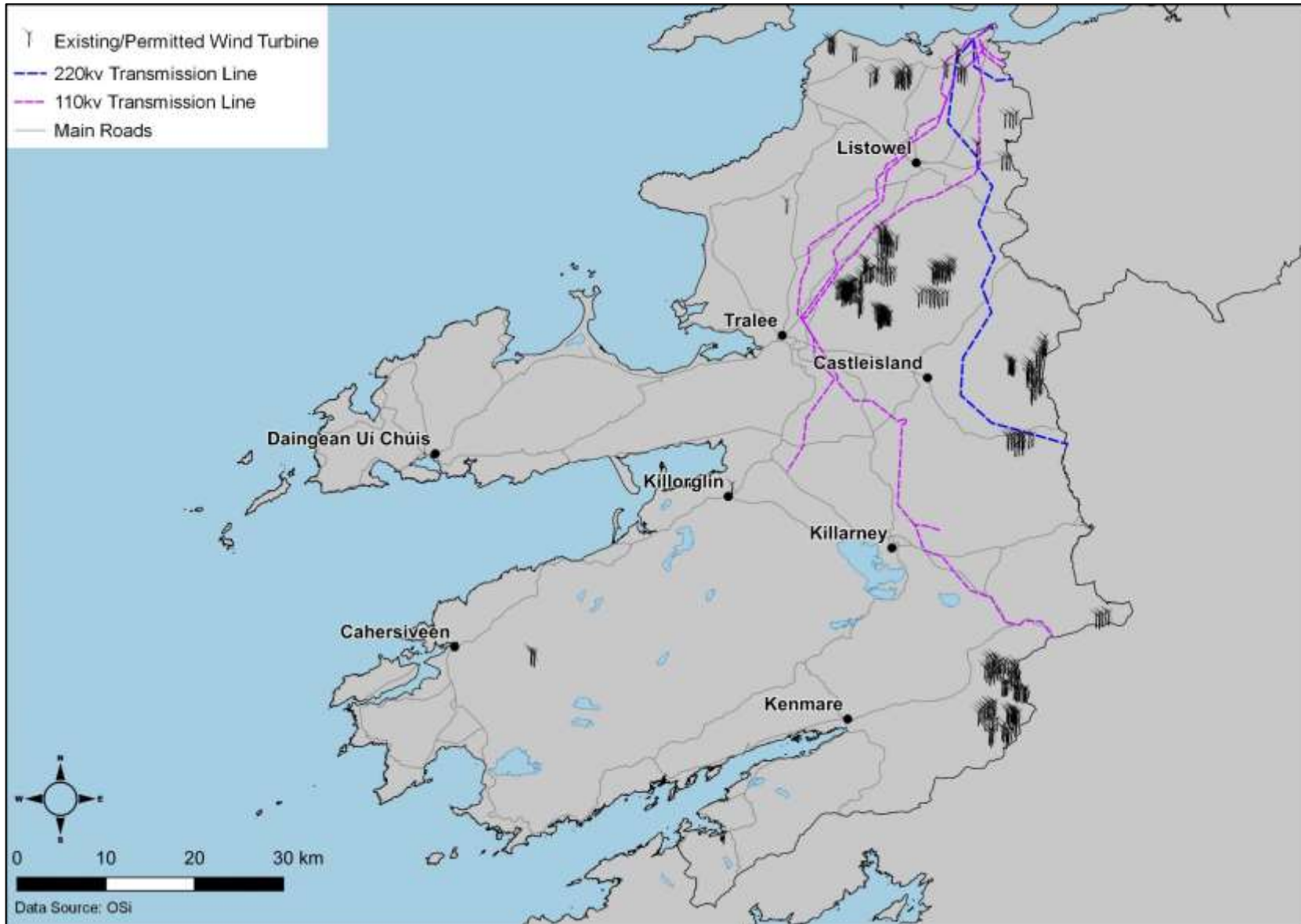
Step 1 – Wind Speeds / National Grid

Wind Speeds

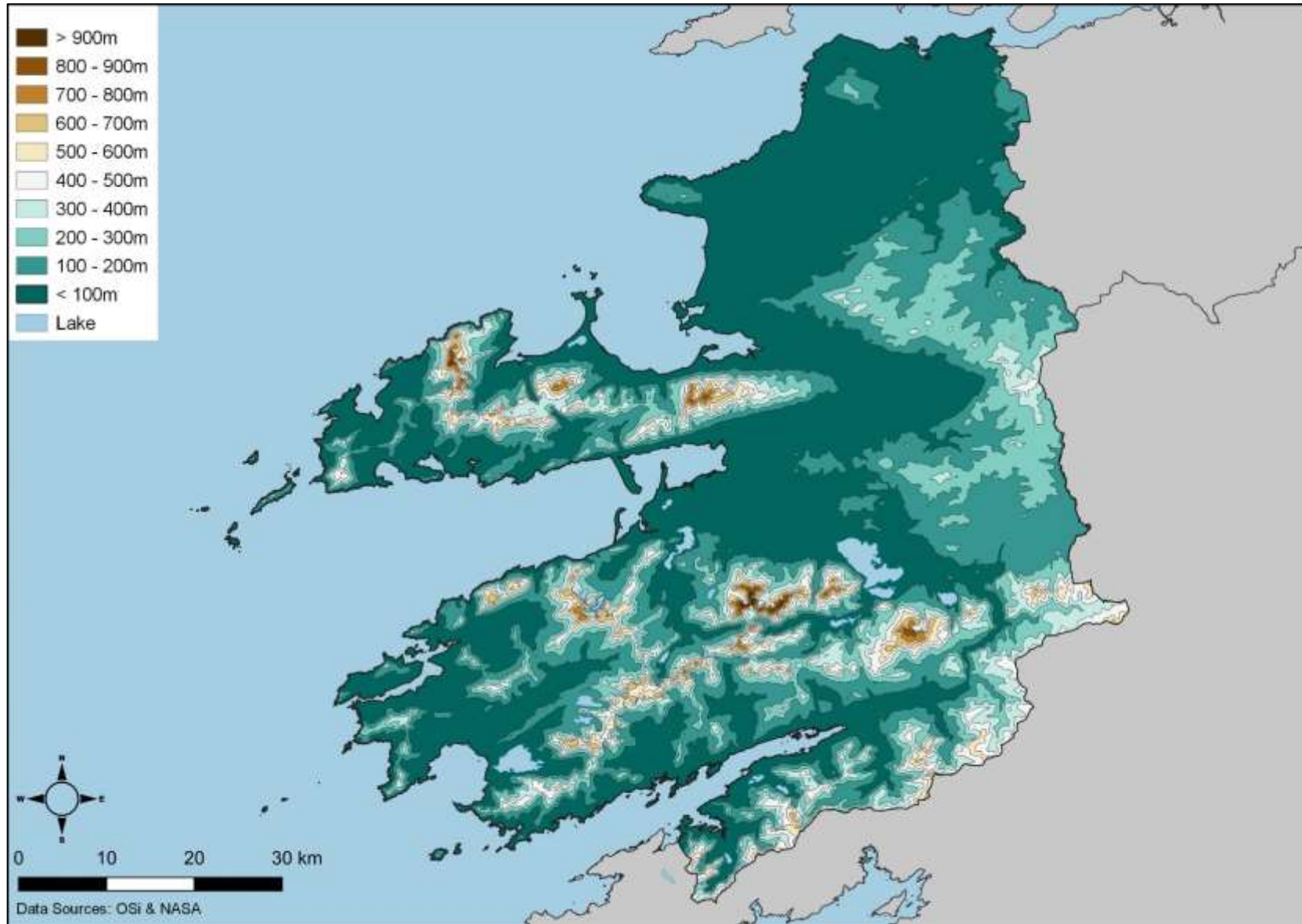
Sustainable Energy Authority of Ireland (SEAI) published a Wind Atlas in 2003 and updated it in 2013. It presents measured wind speeds across the country at 20m, 30m, 40m, 50m, 75m, 100m, 125m and 150m above ground level. Map 6.3 shows wind speeds at heights of 75m, 100m, 125m and 150m. Available wind speed is a key factor in determining the economic viability of potential wind energy locations. A site with wind speeds over 8 metres per second is ideal, although improvements in turbine technology is making lower wind speeds (potentially from 6.5 metres per second) more technically viable to exploit. Due to Kerry's geographic location wind speeds are generally favourable for wind energy development. For this reason, no areas have been deemed to be unsuitable for wind development on the grounds that wind speeds are inadequate.

Transmission Infrastructure

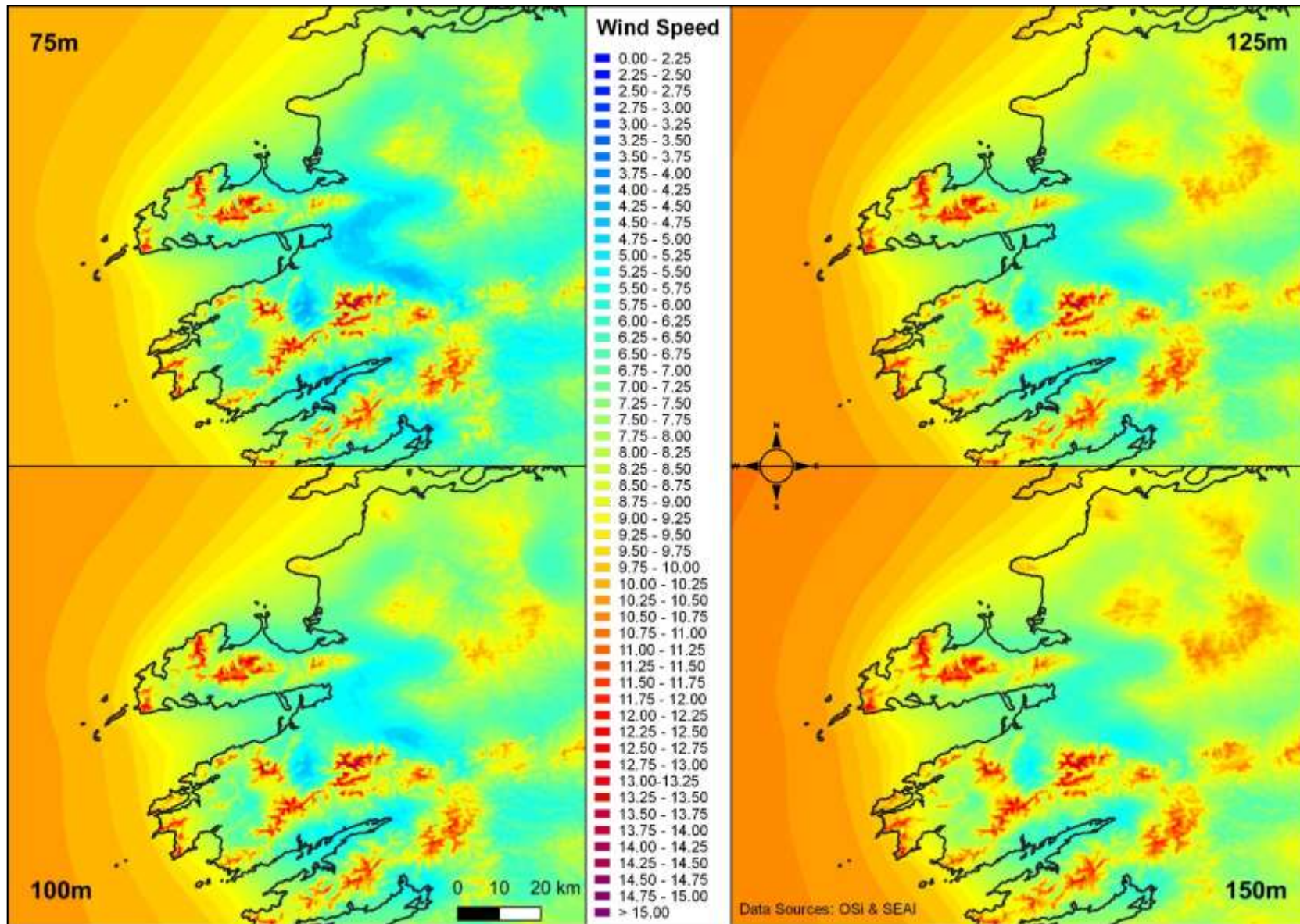
The grid infrastructure is concentrated in north and east Kerry with 220kv and 110kv transmission lines and associated substations (Map 6.1). The peninsulas of Dingle, Iveragh and Beara are not served by such infrastructure which is usually required to facilitate a proposed large-scale wind energy development.



Map 6.1: Permitted Wind Turbines (July 2021)



Map 6.2: Kerry Topography



Map 6.3: Wind Speeds

Step 2 – Constraints

Natura 2000

The Birds and Habitats Directives are the cornerstones of the EU’s nature and biodiversity policy. They enable all EU Member States to work together, under a common legislative framework, to conserve Europe’s most endangered, vulnerable and valuable species and habitats throughout their natural range within the EU, irrespective of political or administrative boundaries. They apply equally to European land and marine territory in the Member States.

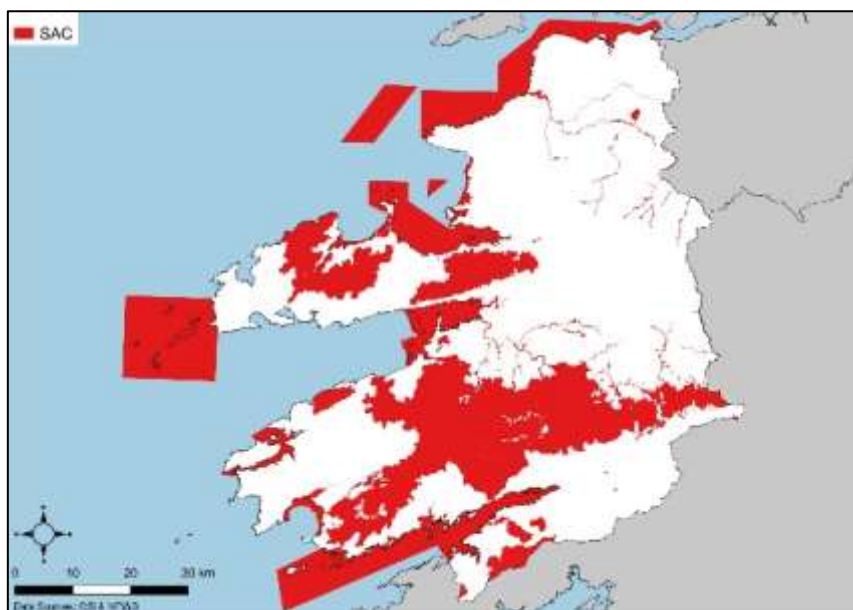
The overall objective of the two Directives is to ensure that the species and habitat types they protect are maintained or restored at a favourable conservation status throughout their natural range within the EU. To achieve this objective, the Directives set out two main types of measures:

- designating and conserving core sites for the protection of habitat types and habitats of species listed respectively in Annex I and II to the Habitats Directive and habitats of bird species listed in Annex I to the Birds Directive and of migratory birds. These sites make up the EU-wide Natura 2000 network.
- creating a strict protection regime for all European bird species and for species listed in Annex IV to the Habitats Directive. These measures apply across the entire natural range of the species within the EU, i.e. both within and outside protected sites.

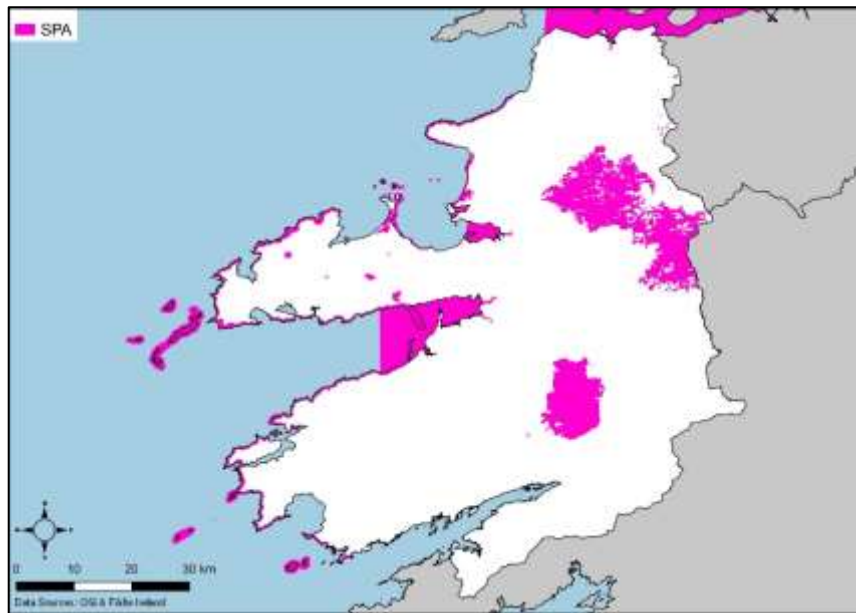
Special Areas of Conservation (SACs) are designated under the EU Habitats Directive (92/43/EEC) and Special Protection Areas (SPAs) under the EU Birds Directive (79/409/EEC). Member states are required to ensure that appropriate steps be taken to avoid the deterioration of these sites and their associated habitats and species.

SACs and SPAs are known collectively as Natura 2000 sites. SACs are designed to protect, conserve and, where possible and necessary, to enable the restoration of certain habitats and/or species. The purpose of SPAs is to protect rare or endangered birds and their habitats. Consideration of any wind energy development in, or near these areas, must be subject to Ireland’s obligations under the Habitats Directive (92/43/EEC), the EU (Birds) Directive (79/409/EEC) and the Environmental Impact Assessment Directive (85/337/EEC).

The scale, dimensions and characteristics of wind farm projects can significantly affect the quality and integrity of natural heritage areas. Typically, Kerry’s SPAs are concentrated in upland and coastal areas while SACs often occur on peatlands, along waterways and coastal areas.



Map 6.4: Special Areas of Conservation (SAC)

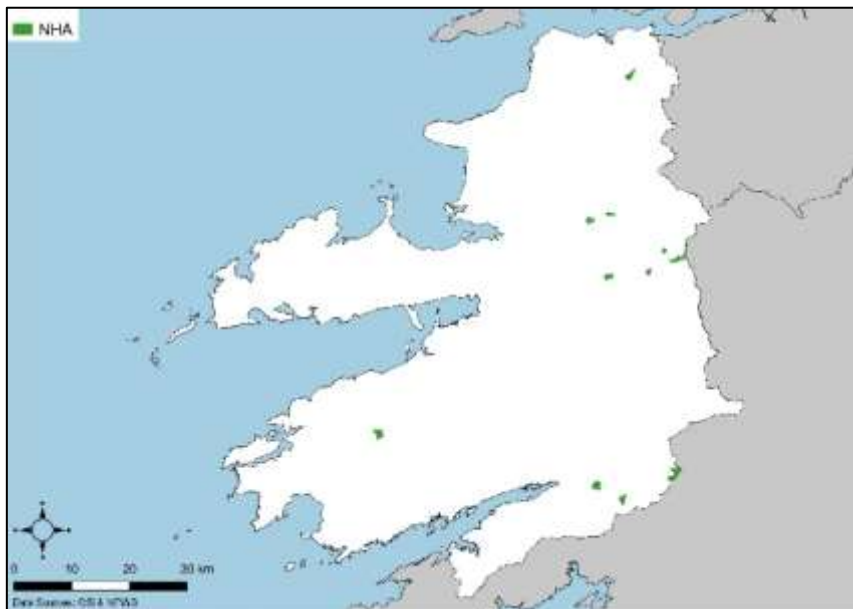


Map 6.5: Special Protection Areas (SPA)

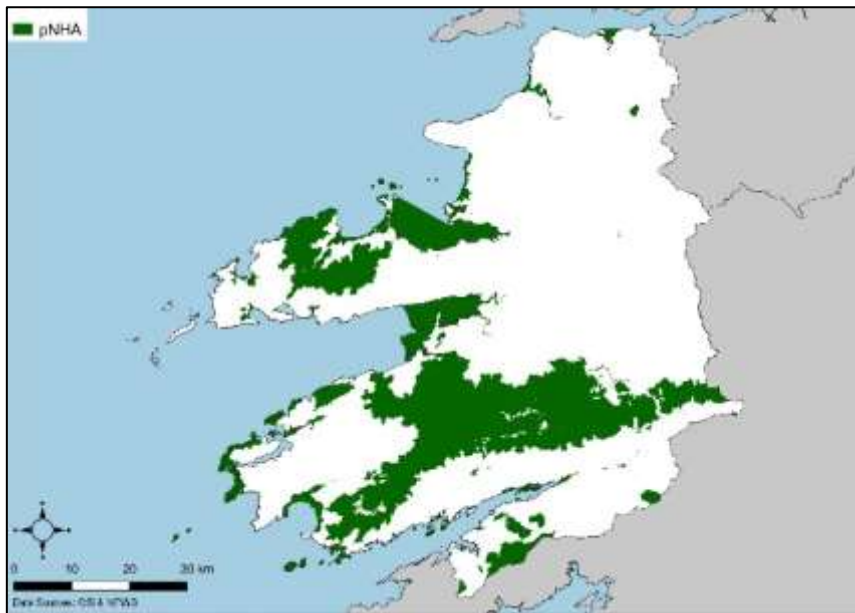
Kerry County Council recognises that the Habitats and Birds Directives do not, a priori, exclude wind farm developments in or adjacent to Natura 2000 sites. These need to be assessed on a case-by-case basis. Within this context an assessment of the Stacks to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA, has been undertaken which has resulted in it being included as an Accessible Resource Constraint.

Natural Heritage Areas

Natural Heritage Areas (NHA) are a national designation introduced by the Wildlife (Amendment) Act 2000 to protect natural heritage of national importance. Proposed Natural Heritage Areas (pNHA) were published on a non-statutory basis in 1995, but have not since been statutorily proposed or designated. These sites are of significance to wildlife and habitats and are therefore considered to be a constraint for windfarm development.



Map 6.6: Natural Heritage Areas (NHA)



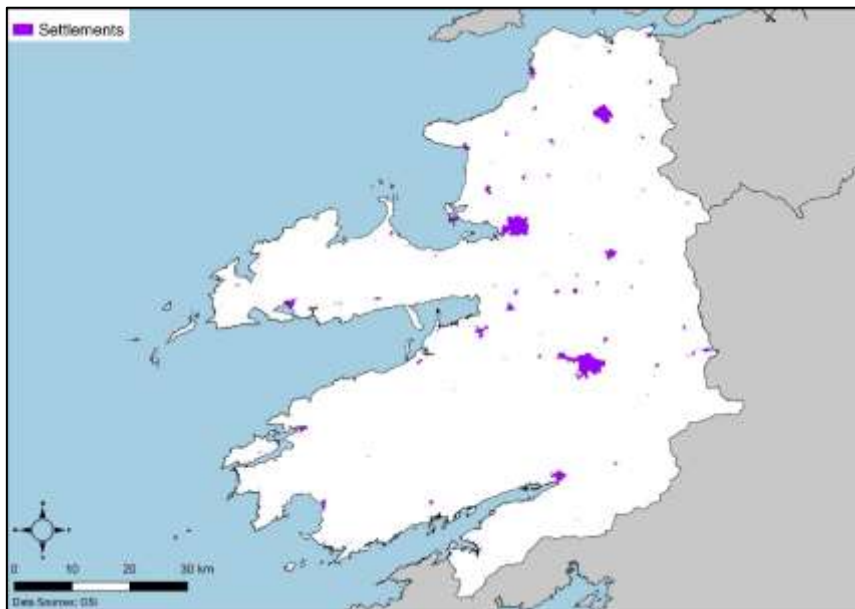
Map 6.7: Proposed Natural Heritage Areas (pNHA)

Both Natura 2000 sites and Natural Heritage areas may be a constraint for wind energy development, this will be required to be assessed in detail at project level. As part of this detailed ecological surveys would be required.

Practical Resource Constraints

Settlements

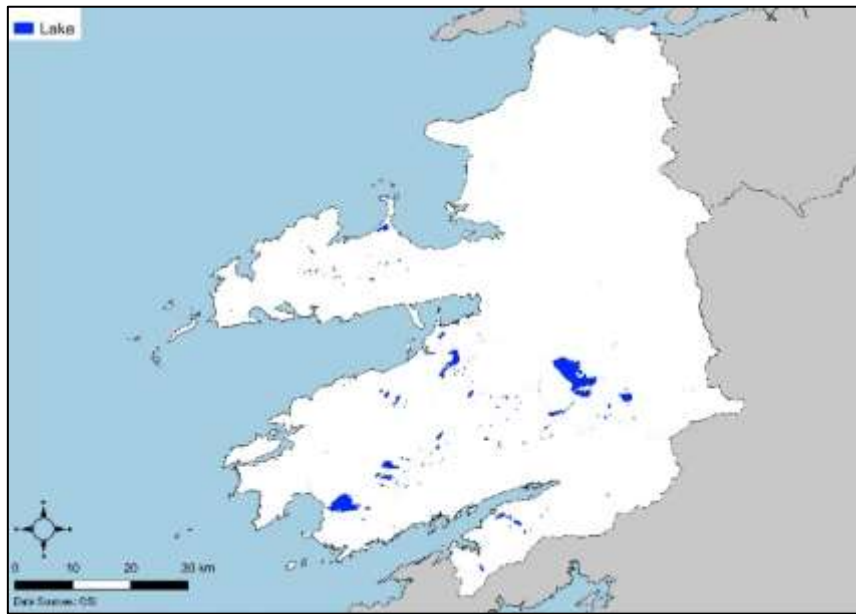
Urban areas are densely populated, and the development of wind turbines would have an unacceptable impact on residential amenity by way of noise and shadow flicker. Areas within settlement boundaries are subject to specific land use zonings in local area plans. Considering these areas for wind zoning would therefore contradict with its existing zoning. All settlements listed in Table 3.6 of the Draft Kerry County Development Plan 2022-2028 are therefore considered to be a constraint.



Map 6.8: Settlements

Lakes

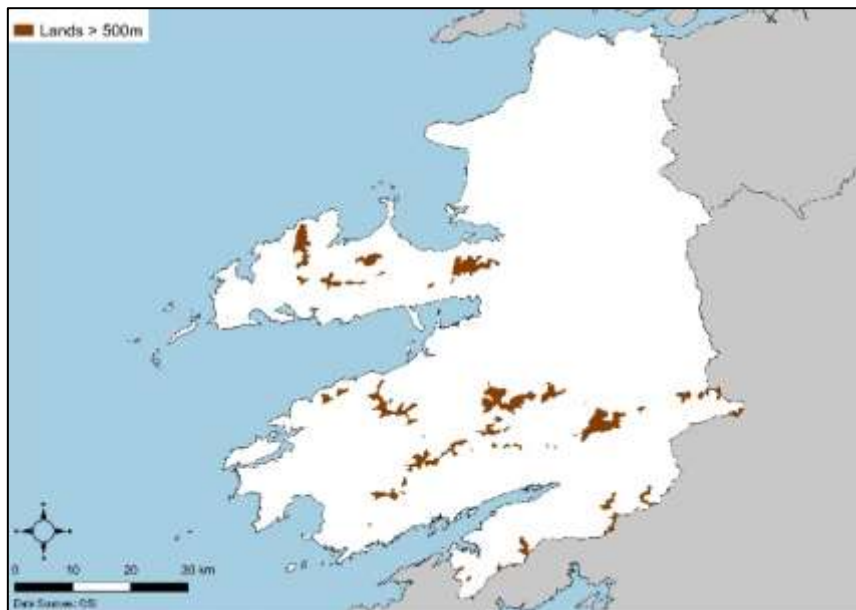
Development of wind turbines on lakes is not feasible having regard to their form as a water body.



Map 6.9: Lakes

Elevated Areas

Development at elevated areas, over 500m above sea level, would have a significant visual impact. In addition, there are technical challenges in relation to access. These areas are therefore being excluded. Approximately 3.2% of the county is over 500m above sea level.



Map 6.10: Lands over 500m

Practical Resource Constrains Conclusion

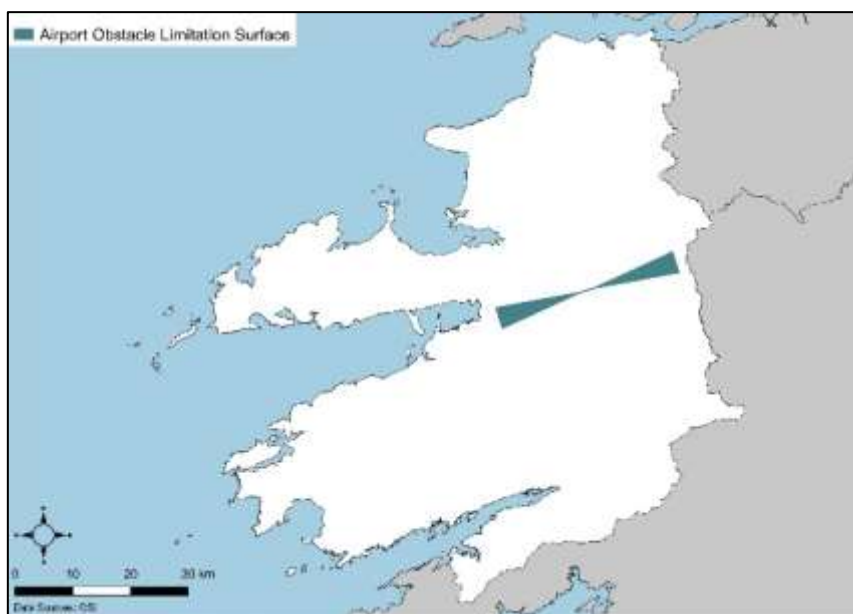
Development of a wind energy development in these areas (Maps 6.8 - 6.10) is not practical. The wind resource in this case would be areas outside of settlements, not being lakes and on lower elevations.

Accessible Resource Constraints

- Kerry Airport
- Areas of Prime Special Amenity
- Archaeology
- UNESCO World Heritage Site
- Hen Harrier Areas
- Other Ecologically Important Areas
- Catchments & Water Framework Directive
- Soils & Geology

Kerry Airport

Wind energy developments may have an impact on communication infrastructure through electromagnetic interference. An exclusion zone for wind turbines within flight paths is therefore necessary on the flight path associated with Kerry Airport, a distance of approximately 15 kilometres in both directions from the ends of the runway.

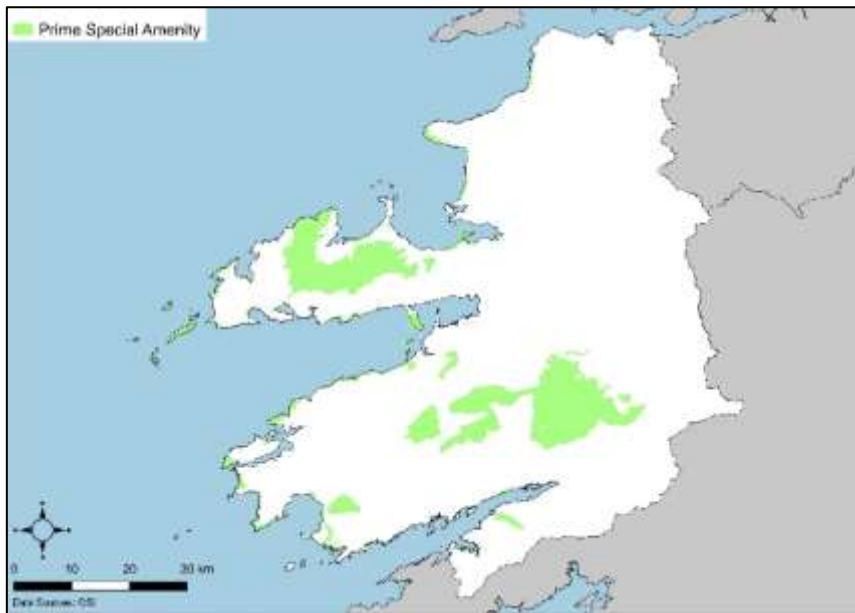


Map 6.11: Kerry Airport Obstacle Limitation Surface

Areas of Rural Prime Special Amenity Kerry County Development Plan 2015-2021

The Kerry County Development Plan 2015-2021 contains amenity zoning designations to protect the landscape from inappropriate development. In the preparation of amenity zoning designations for the County, the Planning Authority considered not only the quality of the landscape itself, but also the level of existing development and the ability of the landscape to absorb further development without altering its character to an unacceptable degree. Zoning designations are not wholly dependent on a hierarchy of quality landscapes. Amenity zonings also reflect the importance of a landscape to the overall amenity of a locality and its importance to communities within these areas.

Rural Prime Special Amenity Areas are those landscapes which are very sensitive and have little or no capacity to accommodate development. As wind turbines are a development of considerable scale, areas of rural prime special amenity are therefore considered to be a constraint for wind energy development.

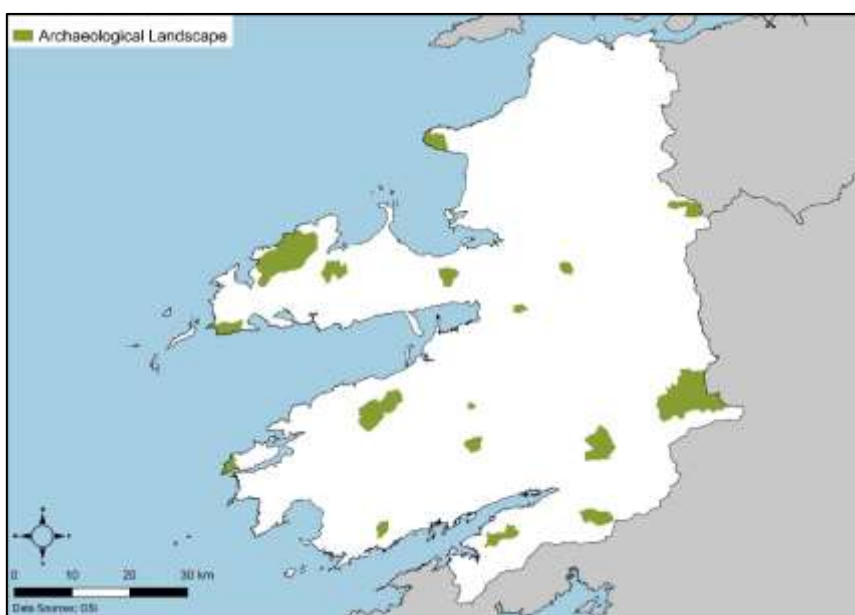


Map 6.12: Areas of Rural Prime Special Amenity

Archaeological Landscapes

Kerry's archaeological heritage is a rich and extensive resource and like all non-renewable resources, it needs to be protected and preserved for future generations. Proposals can have adverse impacts of a physical and/or visual nature. In many instances, adverse impacts may be mitigated following a detailed assessment of the impacts. Nonetheless, there are significant numbers of archaeological monuments recorded in the county, and the heritage values and landscape settings of these monuments must be preserved.

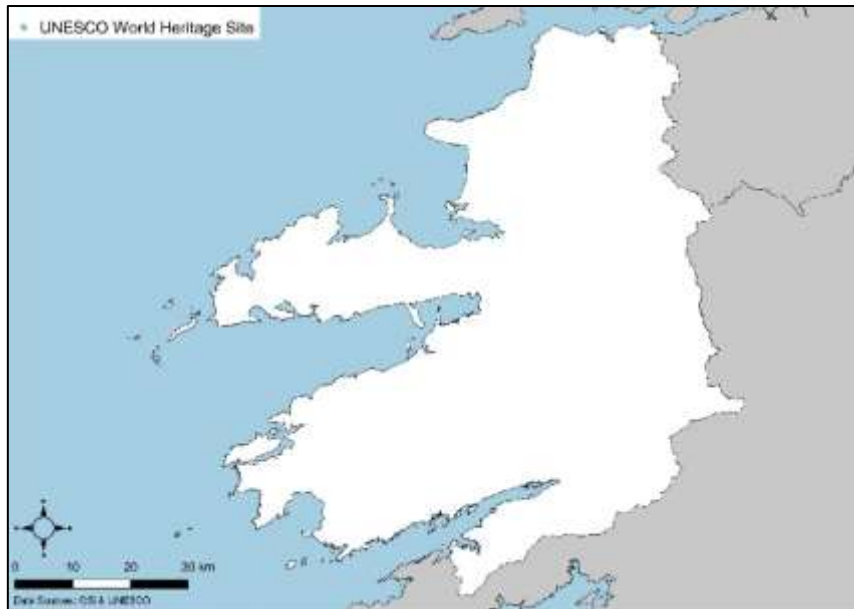
The Council's Archaeology Department has identified a number of archeologically significant landscapes which have been included for protection in the County Development Plan. These areas contain a significant number and range of associated archaeological monuments indicative of extended, coherent archaeological landscapes which are of local, regional, national and in some cases international significance. It is considered that the scale and nature of wind development would have a significant and adverse impact on these archeologically important landscapes. For this reason, these areas are considered unsuitable for wind development.



Map 6.13: Archaeological Landscapes

UNESCO World Heritage Site

Sceilg Mhichíl, also known as Skellig Michael, was inscribed on the World Heritage List in 1996, and is one of only two UNESCO World Heritage Sites in the Republic of Ireland. The United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Sites are places of importance to cultural or natural heritage as described in the UNESCO World Heritage Convention, established in 1972. For this reason, this site is considered unsuitable for wind development.



Map 6.14: UNESCO World Heritage Site

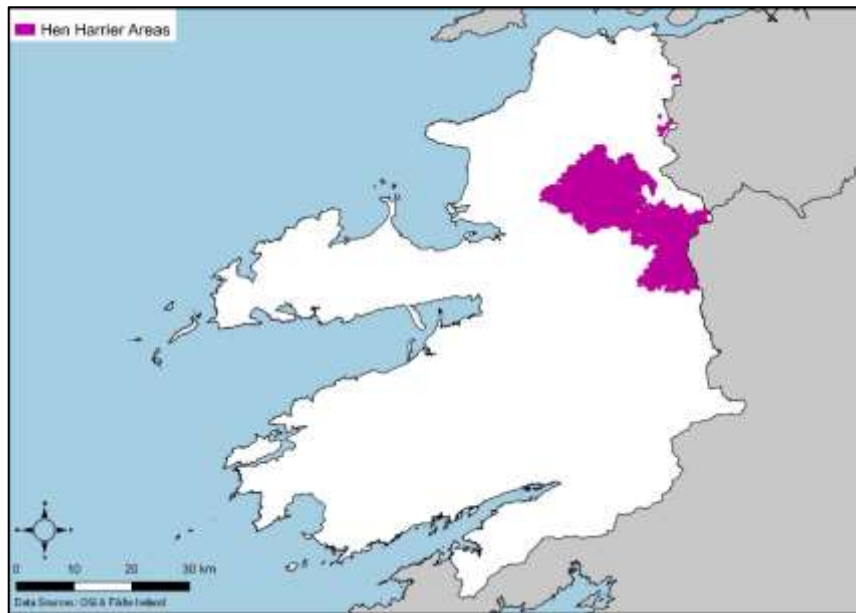
Hen Harrier Areas

The Stacks to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is partly located within the County of Kerry, the remainder located within Limerick and Cork. The special conservation interest of this SPA is the Hen Harrier.

The latest Hen Programme Hen Harrier Monitoring Report (November 2020) provides an overview of the breeding Hen Harrier population in the Country's SPA Network to 2020. The report outlines that the Stack's to Mullagherierk Mountains, West Limerick Hills and Mount Eagle SPA has undergone a serious population decline since designation, however the population appears to have stabilised, albeit at a lower level.

There is scientific understanding which indicates a disturbance displacement for hen harriers of 250m from operating wind turbines. A buffer of 250m has there been extended from the Stack's to Mullaghareirk Mountains, West Limerick and Mount Eagle SPA boundary to allow for disturbance displacement. This buffer has been included on Map 6.15.

Having regard to the Hen Harrier population decline within the SPA (and nationally) since designation and to the substantial number of existing and permitted Wind Turbines in the SPA, the SPA is excluded from consideration for additional wind farm development, save for repowering proposals. Areas within 250m of the SPA are similarly excluded given the potential for Hen Harrier displacement and other impacts.

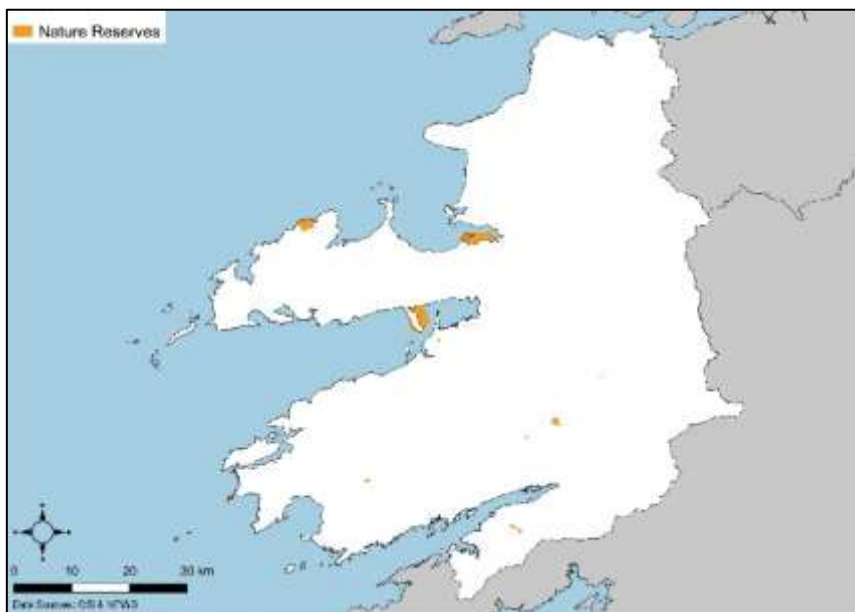


Map 6.15: Hen Harrier Areas (incl. 250m buffer)

Other Ecologically Important Areas

Nature Reserves

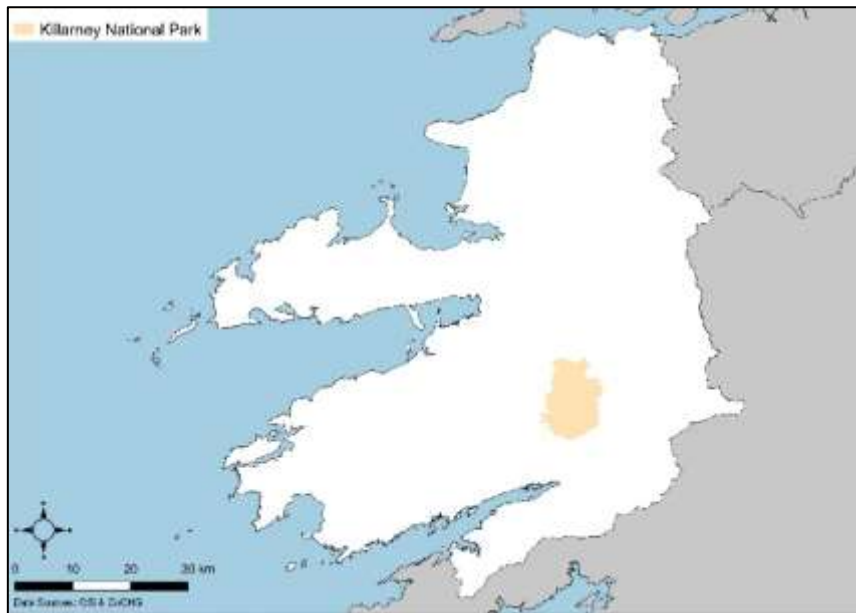
A Nature Reserve is an area of importance to wildlife, which is protected under Ministerial order. Excluding windfarms from these types of area is therefore prudent.



Map 6.16: Nature Reserves

Killarney National Park

Killarney National Park contains many features of national and international importance such as the native oakwoods and yew woods together with an abundance of evergreen trees and shrubs and a profusion of bryophytes and lichens which thrive in the mild Killarney climate. The native red deer are unique in Ireland with a presence in the country since the last Ice Age. Killarney National Park also forms the core of the UNESCO Kerry Biosphere Reserve. The Park is subject to other designations covered in this document but due to its importance it is being included separately as a constraint to windfarm development.



Map 6.17: Killarney National Park

Sensitive Catchments & Water Framework Directive

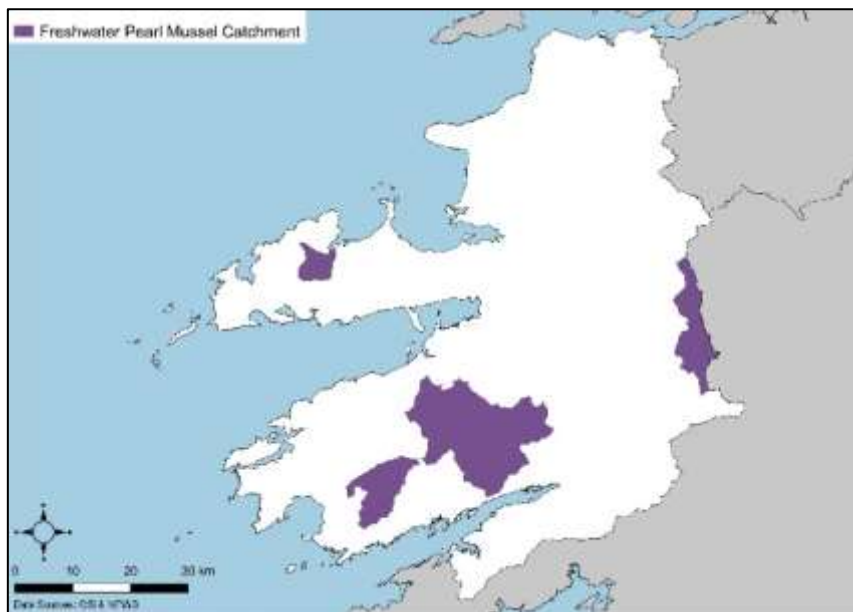
The EU Council Directive 2000/60/EC (Water Framework Directive) sets out a comprehensive framework for the management of water resources in the European Community.

Freshwater Pearl Mussel Catchments

There are 6 catchments designated under the European Communities Environmental Objectives (Freshwater Pearl Mussel) Regulations, 2009, in response to the presence of significant pearl mussel populations:

- Currane
- Gearhameen
- Kerry Blackwater
- Caragh
- Munster Blackwater
- Owenmore

The Conservation Status of the populations in question is poor and it is important that measures are taken to rectify this situation. The pressures which the pearl mussel populations are currently experiencing have been linked primarily to sedimentation. The generation of sediment therefore needs to be limited. In this context, given the risk of sediment generation associated with wind development, it is considered that ecologically these catchments are not suitable for wind development.

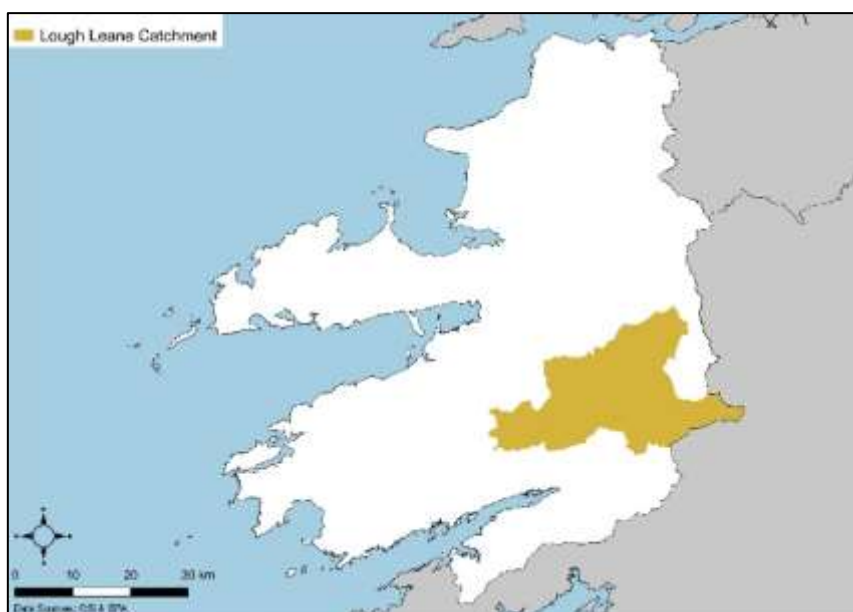


Map 6.18: Freshwater Pearl Mussel Catchments

Lough Leane Catchment

The Lough Leane Catchment is of significant importance to the county's tourism industry, and to tourism angling in particular. Water quality in this catchment was subject to an algae bloom in the late 1990's on foot of which a study of the catchment and of phosphorus loadings to the lake was undertaken. This study highlighted the need to reduce the annual total phosphorus load entering the lake. Given the potential for the release of sedimentary phosphorus arising from wind development this catchment is considered to be unsuitable for wind development.

It is noted that the submission received from the Development Applications Unit of the Department of Housing, Local Government and Heritage outlined that 'there was a considerable impact on Lough Leane, and in particular Ross Bay, after the summer drought of 2018'. While this is attributed to probable lack of dilution and flushing of wastewater discharges during the summer peak, it highlights the vulnerability of Lough Leane to water quality and hydrological changes in the catchment.

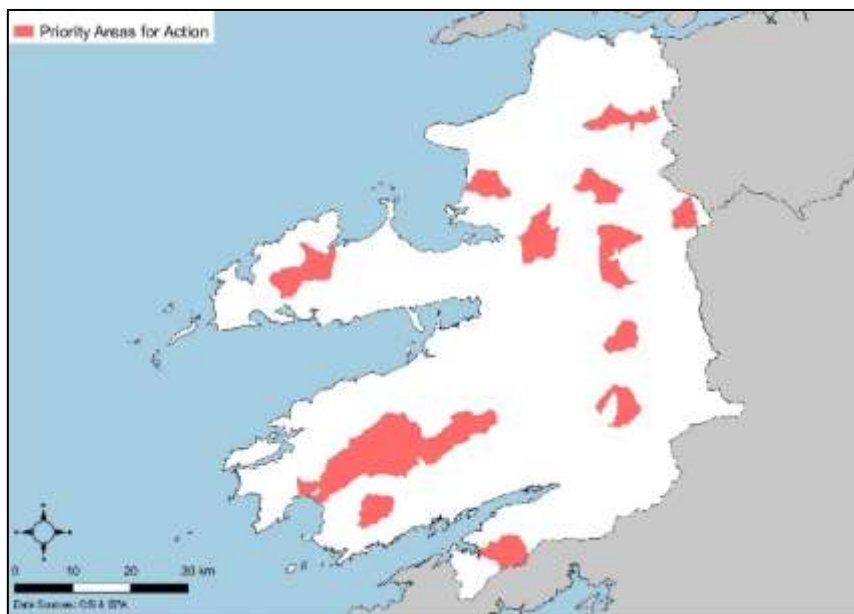


Map 6.19: Lough Leane Catchment

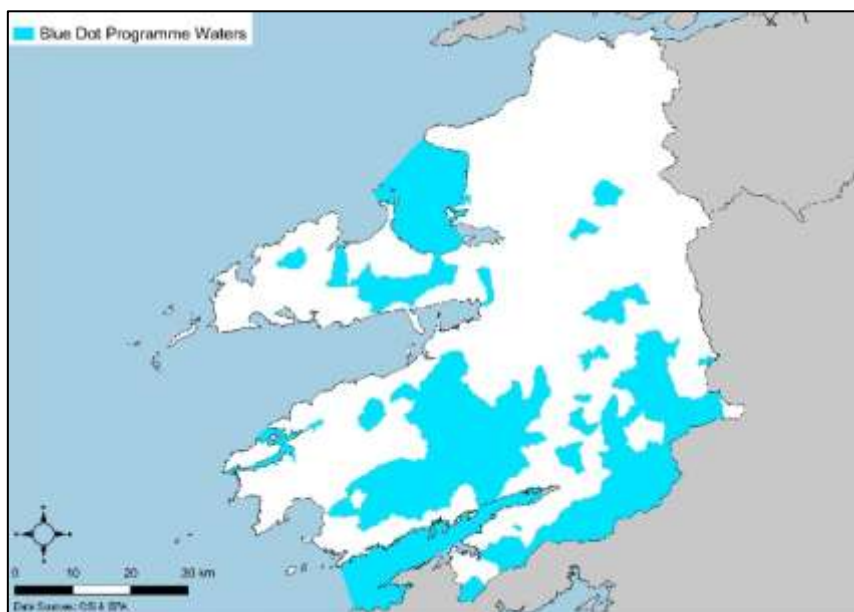
Water Framework Directive (WFD) and Water Quality

The River Basin Management Plan 2018-2021 was published by the Department of Housing, Planning and Local Government in April 2018. The Plan identifies 190 Areas for Action across the country, with a total of 726 water bodies within these Areas. The Areas for Action were selected based on the priorities in the River Basin Management Plan, the evidence from the Water Framework Directive characterisation process, and the expertise, data and knowledge of public body staff with responsibilities for water and the different pressure types. The Plan seeks to improve water quality in these areas.

In addition, the WFD Blue Dot Programme aims to protect and restore high-status waters. The scale and associated works with wind energy development pose a risk to the implementation of the River Basin Management Plans and restoration of high status waters. In order to avoid this risk, such waters are considered to be a constraint to wind energy development.



Map 6.20: River Basin Management Plan 2018-2021 Priority Areas for Action



Map 6.21: River Basin Management Plan 2018-2021 Blue Dot Programme Waters

Soils & Geology

Peat Soils

Habitat loss and fragmentation can have consequences for peatland biodiversity conservation. The changes come about when one habitat type is removed and replaced by another or when land use activities cause degradation of the quality of the habitat and species composition. Development of most peatland sites (including upland and lowland bog types, fens and heaths) can lead to impacts on natural heritage.

In addition, peatlands act as carbon sinks holding the bulk of Ireland's carbon store, which is locked up in the peat soil. The construction of wind turbines on peatlands can result in the desiccation of the peat soil thereby upsetting the carbon accumulation process, leading to an increase in the amount of carbon dioxide released to the atmosphere.

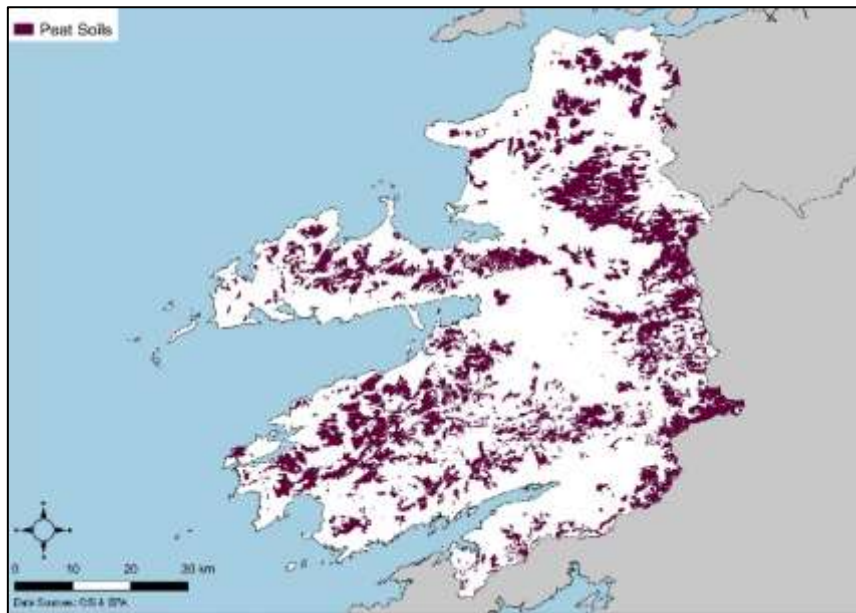
The *Climate Action Plan 2021* (DoECC) identifies peat as being the largest store of carbon in the Irish landscape, with this store being very vulnerable.

47% of peat soils in the county are subject to a Natura 2000 or Natural Heritage Area designation. These are a mix of raised and blanket bogs and heaths many of which have not been subject to detailed survey. These include:

- Glanmore Bog SAC / pNHA
- Maulagowna Bog SAC / pNHA
- Moanveanlagh Bog SAC / pNHA
- Sheheree (Ardagh) Bog SAC / pNHA
- Anna More Bog NHA
- Bunnaruddee Bog NHA
- Doughill Bog NHA
- Hungry Hill Bog NHA
- Knockatarriv/Knockariddera Bogs NHA
- Knockroe Bog NHA
- Mount Eagle Bogs NHA
- Sillahertane Bog NHA
- Slaheny River Bog NHA
- Ballagh Bog pNHA
- Dromlusk Bog pNHA
- Mullaghanish Bog pNHA

The conservation of raised bogs in Kerry is especially important in ensuring that the range of the habitat is conserved. Many of the lands with peat soils and which are outside of designations are 'wetlands' and are of biodiversity and flood risk management value.

Having regard to the increased risk associated with peat desiccation and the resultant loss of carbon sinks, it is considered that these types of soils are not considered suitable for wind energy development in Kerry. It is considered appropriate to rule out such areas at this the planning policy stage, so as to strategically guide development to more appropriate lands.



Map 6.22: Peat Soils¹

Landslide Susceptibility

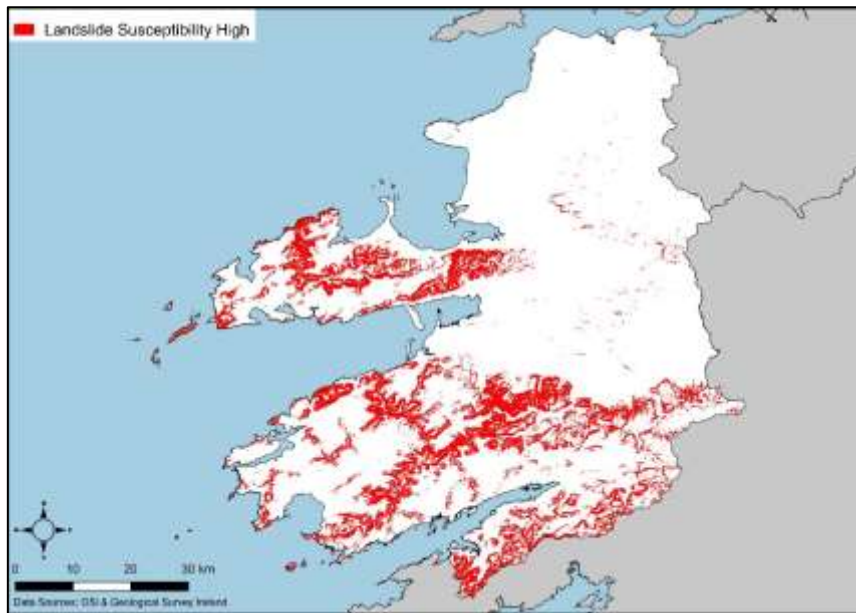
A landslide susceptibility map identifies areas which are subject to landslides and is measured from low to high. It takes into account where the landslides occur and what causes them (slope, soil type and the impact of the flow of water in an area). The Geological Survey of Ireland (GSI) have carried out such a mapping project which was published in 2016. The aim of this mapping is to identify areas predisposed to landslides.

The methodology to create a landslide susceptibility map used Unique Condition Units (UCU). The concept is that if a landslide has occurred in a particular set of conditions, then if those conditions occur elsewhere those locations would also be susceptible to landslides. UCUs are parcels of terrain where a set of attributes are combined in a unique way. In the context of landslide susceptibility mapping the attributes considered include slope, soil type and an index measuring overland flow concentration from intense rainfall events.

The approach taken to categorisation of landslide susceptibility is through a four band scale ranging from 'Low' to 'High'. This uses the relatively simple concept of doubling the number of landslides within each band, such that the upper band has just over half of all known events.

Areas that have a high susceptibility of landslides are considered to be unsuitable for wind energy development.

¹ National Soils Database, Environmental Protection Agency



Map 6.23: Landslide Susceptibility²

Geological Heritage Sites

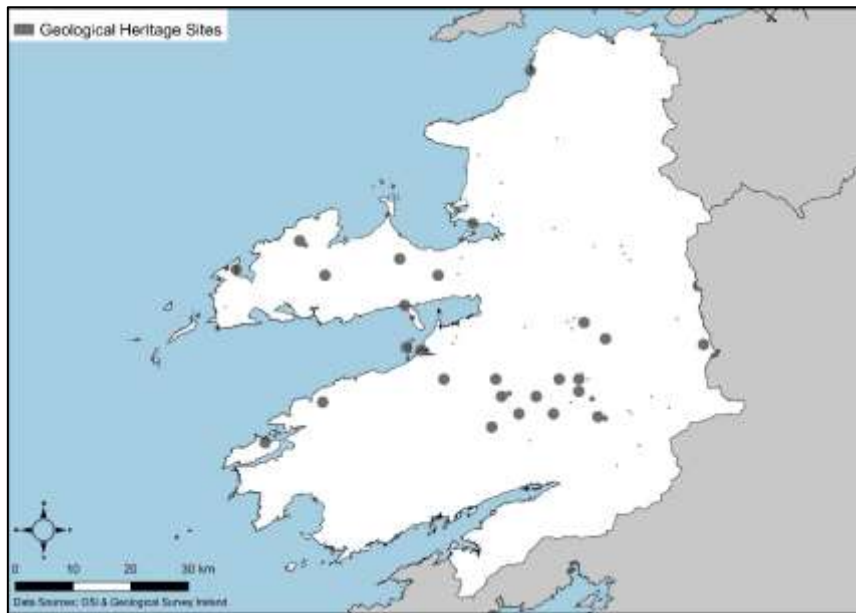
Ireland has a long and interesting geological history which has given us a great diversity of rock types and land forms for a country of its size. The GSI has identified sites as County Geological Sites to ensure their conservation.

The sites of geological heritage are assessed under 16 geological themes. Each theme considers specific aspects, such as stratigraphy, sedimentology, structural geology, volcanic rocks, etc and addresses all aspects of the particular geology involved, but some sites may be considered within two or more themes. Of the 16 themes, 15 are present in Kerry.

Kerry's geological heritage sites have not yet been audited. Buffer zones have been applied to potential sites of interest by the GSI.

County Geological Sites have no statutory protection but may be included within County Development Plans. Geological sites in the county are listed in Appendix (iv), Table 10.6 of the Kerry County Development Plan 2015-2021. It is an objective of the development plan to seek the preservation of important features of geological interest and to maintain the conservation value of those features of geological interest and protect them from inappropriate development. Wind farm development may affect these sites and they have, therefore been included as a constraint to wind energy development.

² GSI National Land Susceptibility Map, Geological Survey of Ireland



Map 6.24: Geological Heritage Sites

Access Resource Constraints Conclusion

Development of a wind energy development in the areas (Maps 6.11 - 6.24) covered in this section is not acceptable.

Constraints Conclusion

Figure 6.2 outlines all the areas that have been deemed unsuitable for wind energy developments. These areas have been mapped in a sieve overlay manner. The results are shown on Map 6.25.

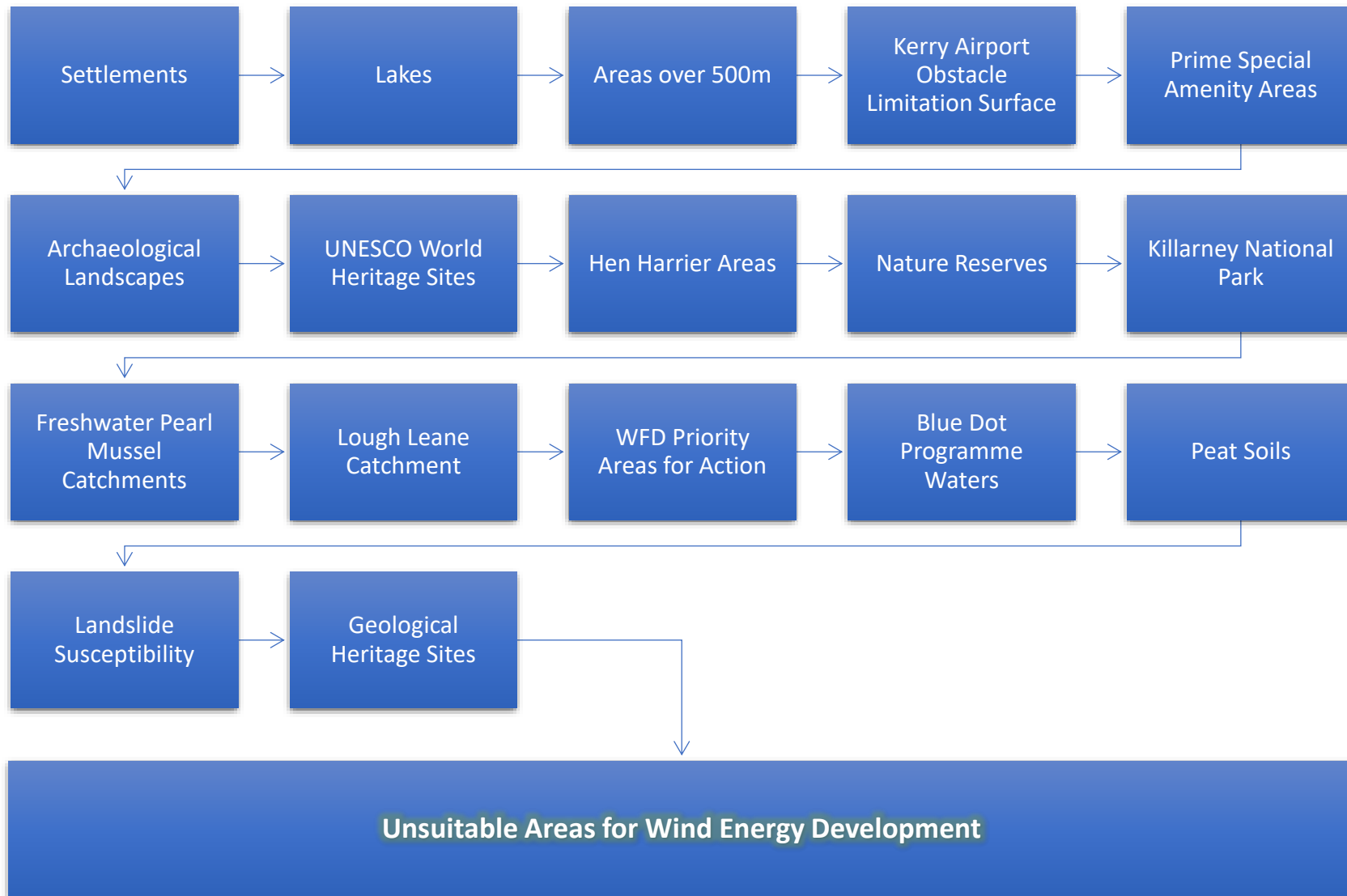
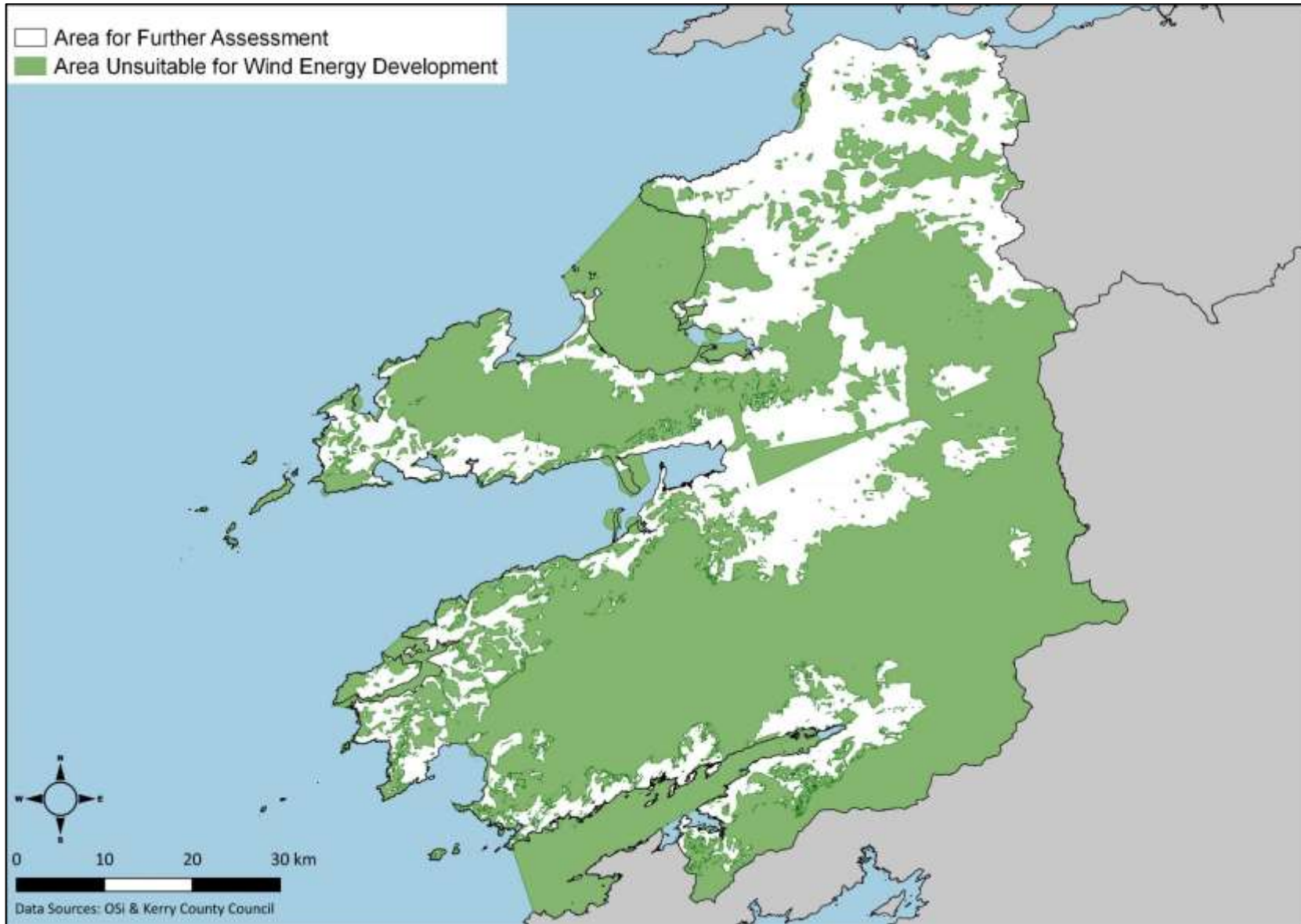


Figure 6.2: Wind Energy Resource Model



Map 6.25: Unsuitable Areas for Wind Energy Development

Step 3 – Cumulative Impact of Wind Energy

Cumulative Impacts are additional changes caused by a proposed development in conjunction with other similar developments, or as the combined effect of a set of developments, taken together.

Cumulative impact is a critical consideration in the case of landscape and visual impacts of windfarms due to the current number of existing and consented developments in the landscape, proposed developments in the planning system and the long-term implications of national policy that encourages the development of onshore wind energy generation.

The characteristics of wind turbines that lead to cumulative impacts include:

- The large scale and striking visual appearance of wind turbines and windfarms in most landscapes.
- The great extent of their visibility and the potential for intervisibility between wind turbine developments and as seen by receptors.

Large modern turbines are prominent, large scale, man-made features and there are few other precedents in terms of scale, height and appearance in most landscapes. They are much taller than any natural features such as trees or most buildings and other structures. Of similar built structures in rural landscapes, electricity pylons are significantly smaller than the largest turbines and although broadcasting masts are often taller they are usually singular and infrequent. Furthermore, most landscape features are static whereas wind turbines rotate. Smaller turbines may also present issues of scale and appearance in more localised contexts, as well as visual confusion when seen together with larger turbines.

Key factors that affect the perception of cumulative change include:

- the distance between individual windfarms and/or turbines
- the distance over which they are visible
- the overall character of the landscape and its sensitivity to windfarms
- the siting and design of the windfarms themselves (particularly turbine height and windfarm size)
- the way in which the landscape is experienced

Zones of Theoretical Visibility (ZTV)

'Zone of Theoretical Visibility' (ZTV) analysis is the process of determining the visibility of an object in the surrounding landscape, using computer modelling and digital terrain mapping (SNH Guidelines, 2012).

In order to create these zones of theoretical visibility data is needed, and for this assessment elevation is required along with details of the objects being assessed, i.e. wind turbines. As this is a theoretical exercise all permitted wind turbines are included in the assessment.

Digital Elevation Model (DEM)

A DEM is a representation of elevation values over a topographic surface. The DEM used was sourced from the EU DEM³. The EU-DEM has a 25-metre resolution.

Turbines

The location and heights of turbines, in Kerry and in adjoining counties, are based on co-ordinates and drawings submitted in their respective planning applications, with locations cross checked against satellite imagery. The heights above sea level of the turbine bases was also determined⁴.

Using the DEM and the location of wind turbines, ZTV maps were then created in QGIS (GIS software) using its Viewshed Visibility Analysis plugin/tool. As these are 'theoretical' maps, they only show land from which the proposal may theoretically be visible. That is, it treats the world as 'bare earth and does not take account of potential screening by vegetation or buildings (Guidelines for LVIA, 3rd edition).

³ <https://www.eea.europa.eu/data-and-maps/data/copernicus-land-monitoring-service-eu-dem>

⁴ <https://www.daftlogic.com/sandbox-google-maps-find-altitude.htm>

This assessment is **theoretical**, and it should be noted that there are extensive areas of forestry in parts of the county where wind turbines are existing/permited. There are extensive areas of forestry in the Stack's Mountains which would screen the potential visibility of the turbines in those areas. This forestry is coniferous in nature, so in theory its potential to screen turbines is limited over time as felling will occur once the forests reach commercial maturity, however, limited screening exists and may continue to exist as forestry continues to grow and is replanted.

The following parameters were used in the ZTV analysis:

- Turbines used in the study are those permitted in Kerry and adjoining counties
- The ZTV is measured to the blade tip
- The target height is 1.6m, average eye level
- Measured to a distance of 20km from the turbine

Turbines are concentrated in north, east and southeast Kerry. The prevalence of turbines in these areas are also reflected in the location of turbines in the adjoining counties of Cork and Limerick.

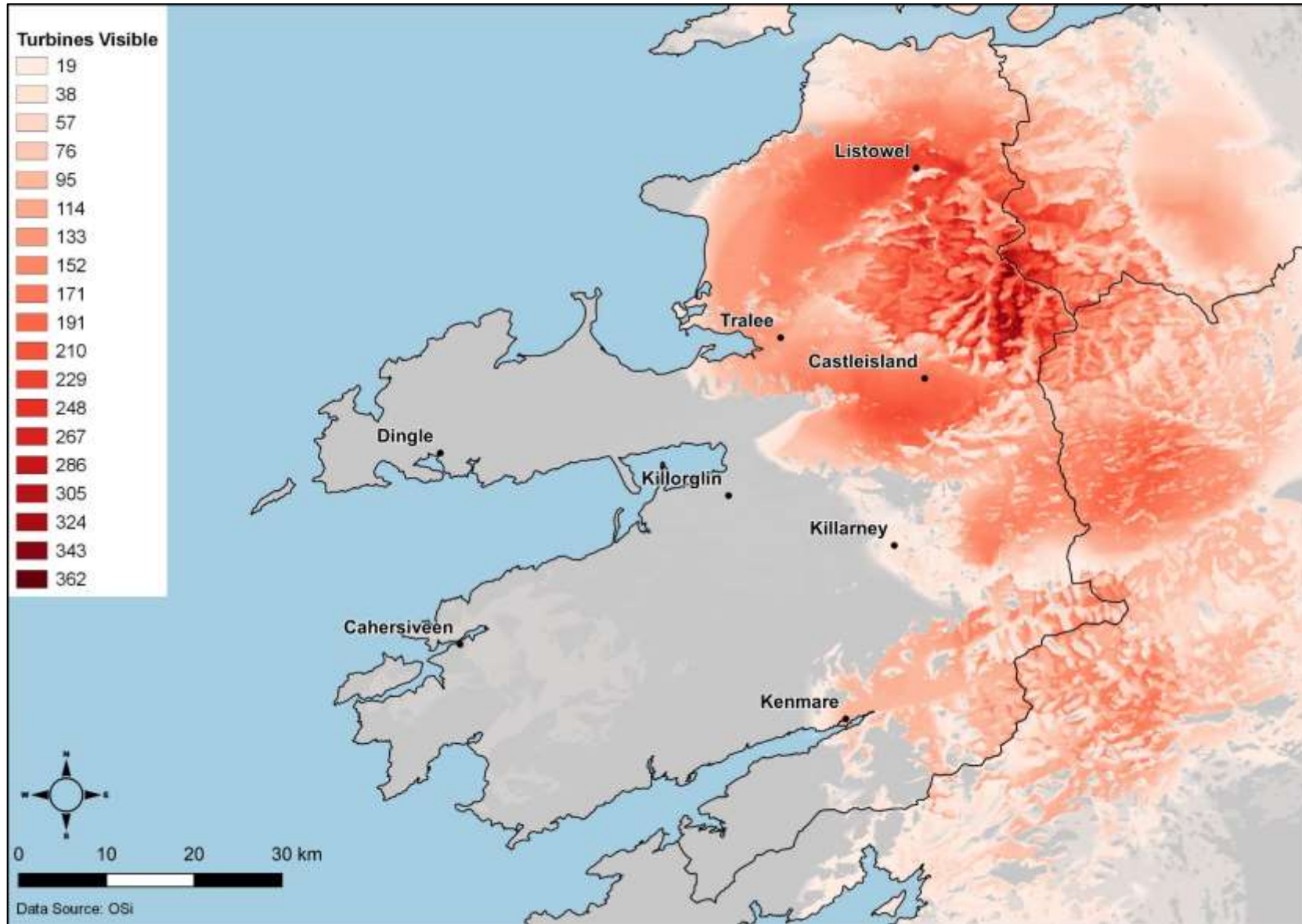
In addition to the 374 permitted wind turbines in Kerry⁵, wind turbines within 20km of the county were included in this analysis. These included 20 wind turbines in County Clare, 96 in County Limerick, and 187 in County Cork.

Assessing the scale of impact

Map 6.26 shows where turbines are visible at a distance of 20km and the number of turbines that can theoretically be seen. Approximately 39% (187,314 hectares) of the county is outside of this area. These are therefore areas of the county where no turbines are theoretically visible at a distance of 20km. Turbines may well be visible from a distance of greater than 20km, but this would have a negligible effect on the calculation of cumulative impact.

When the ZTV map (Map 6.26) is examined it is clear that turbines have a significant impact, and that a need therefore exists to calculate the extent of this impact. The darker the shade of red on the map, the greater the number of turbines that are theoretically visible from that point. Areas in green are those from where no turbines are theoretically visible.

⁵ July 2021

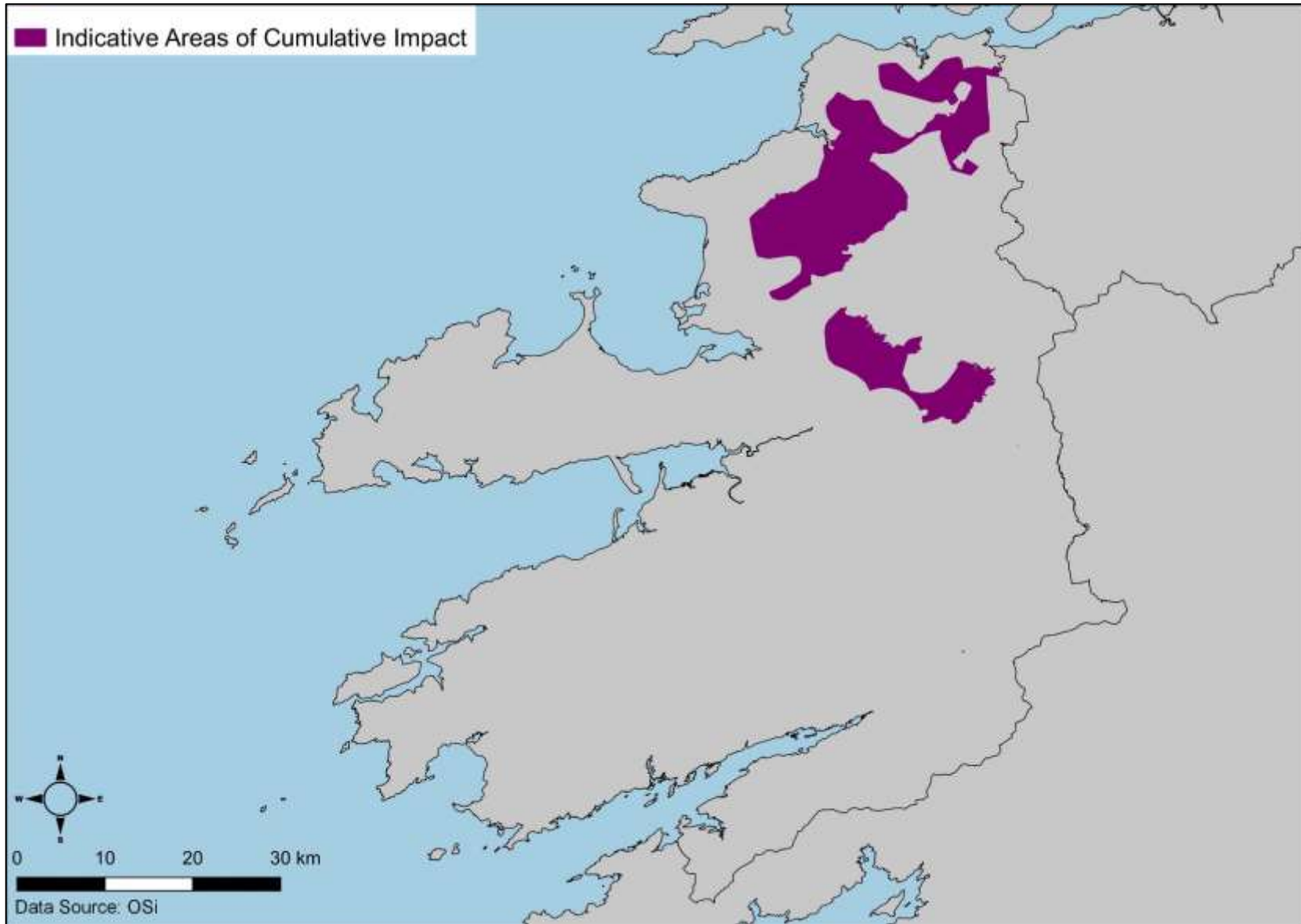


Map 6.26: Permitted Wind Turbine Zones of Theoretical Visibility

Cumulative Impact Conclusion

Given the distribution of wind turbines and their cumulative impact as demonstrated on Map 6.26, it is clear that new wind farms will continue to have a cumulative effect on large parts of the county.

Having regard to the extent of completed and permitted developments to date and to the zone of theoretical visibility analysis, it is considered that the following areas as shown on Map 6.27 have reached their capacity to absorb additional wind energy development.



Map 6.27: Areas of Cumulative Impact

Step 4 – Areas for Further Assessment

Following the identification of constraints in Step 2, the remaining areas of the county can be assessed with regards to their visual sensitivity to wind energy development. This allows for the cumulative impact of wind energy as outlined in Step 3 to be considered in conjunction with criteria that determine the suitability of an area to wind energy development. Each area will be assessed against the same criteria in an objective manner.

The individual parts not subject to constraints have been grouped into 27 areas for assessment, and these are shown on Map 6.28.

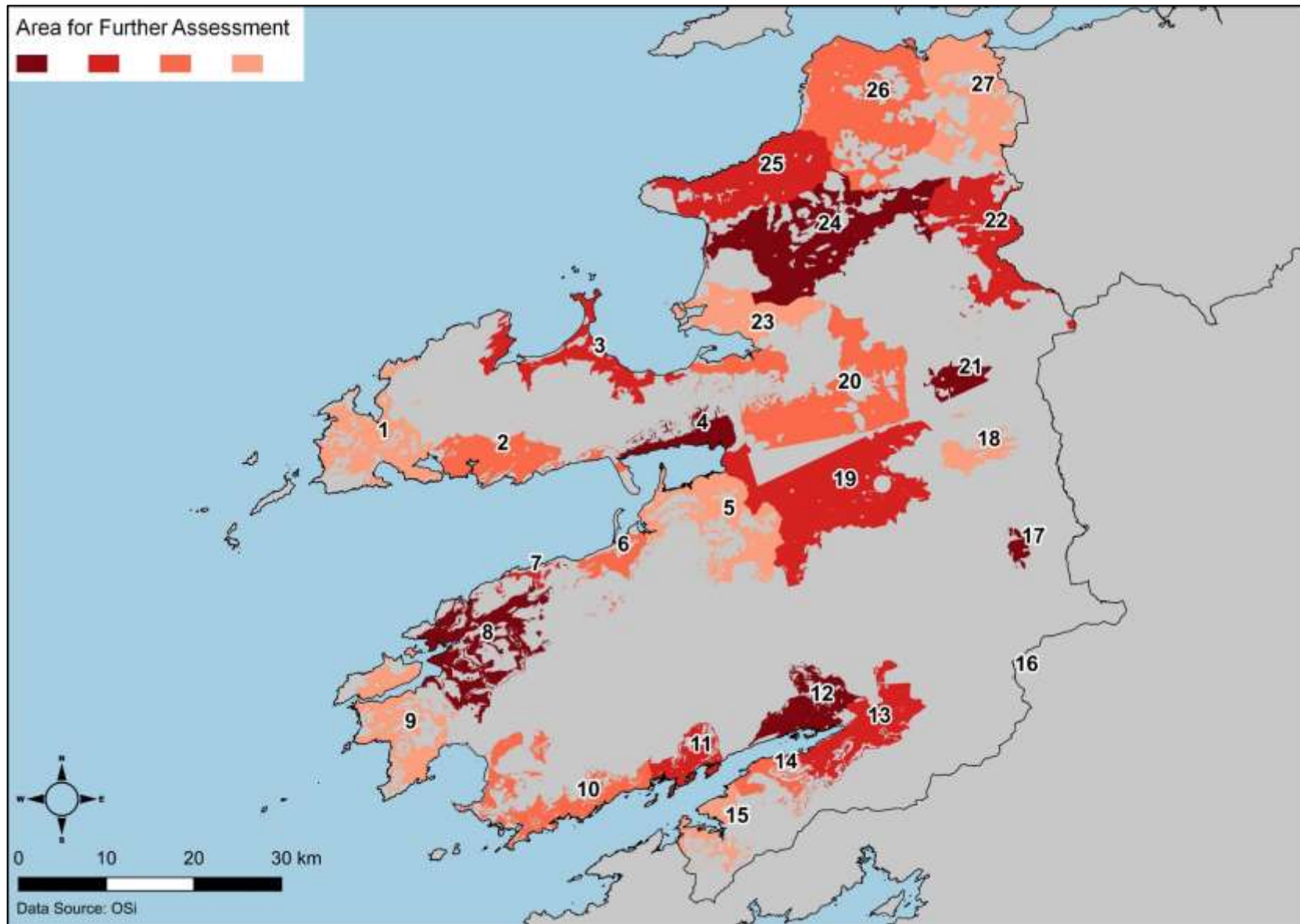
Photographs used as examples for the areas date from the first quarter of 2018 and February 2019.

Methodology

Each area is assessed using the following criteria:

- Size of Area
- Infrastructure
- Population
- Landscape Sensitivity to Wind Energy Development

Following the assessment of the area a conclusion is reached as to whether the area is sensitive to wind energy development or has wind energy potential.



Map 6.28: Areas for Further Assessment

Area 1

Size of Area

This area is made up of a number of parts of varying size, measuring a total of 68.1km². The size of some of these parts would be impractical in terms of zoning.

Infrastructure

This area is located on the Dingle Peninsula and is not served by the existing 110/220kv transmission network.

Population

There is high level of residential development in the area, a density of 23 houses per km². These houses are located around the town of Dingle, and along the road network across the area.

Landscape Sensitivity

This area includes lands on the western part of the Dingle Peninsula, including areas around Dingle, Ventry and Smerwick Harbours.

The headlands of Ceann Sibéal, Ballydavid and Sleá Head are prominent features in this area.

Views & prospects as contained in the Kerry County Development Plan are found on numerous roads in the area, with there being views to Brandon, across the harbours, towards the prominent headlands, and the coast.

The Sleá Head drive runs through the area. This forms part of the Wild Atlantic Way, which has a number of discovery points on Sleá Head.

Due to the scenic coastal nature of this area, wind turbines would be difficult to integrate.

Conclusion

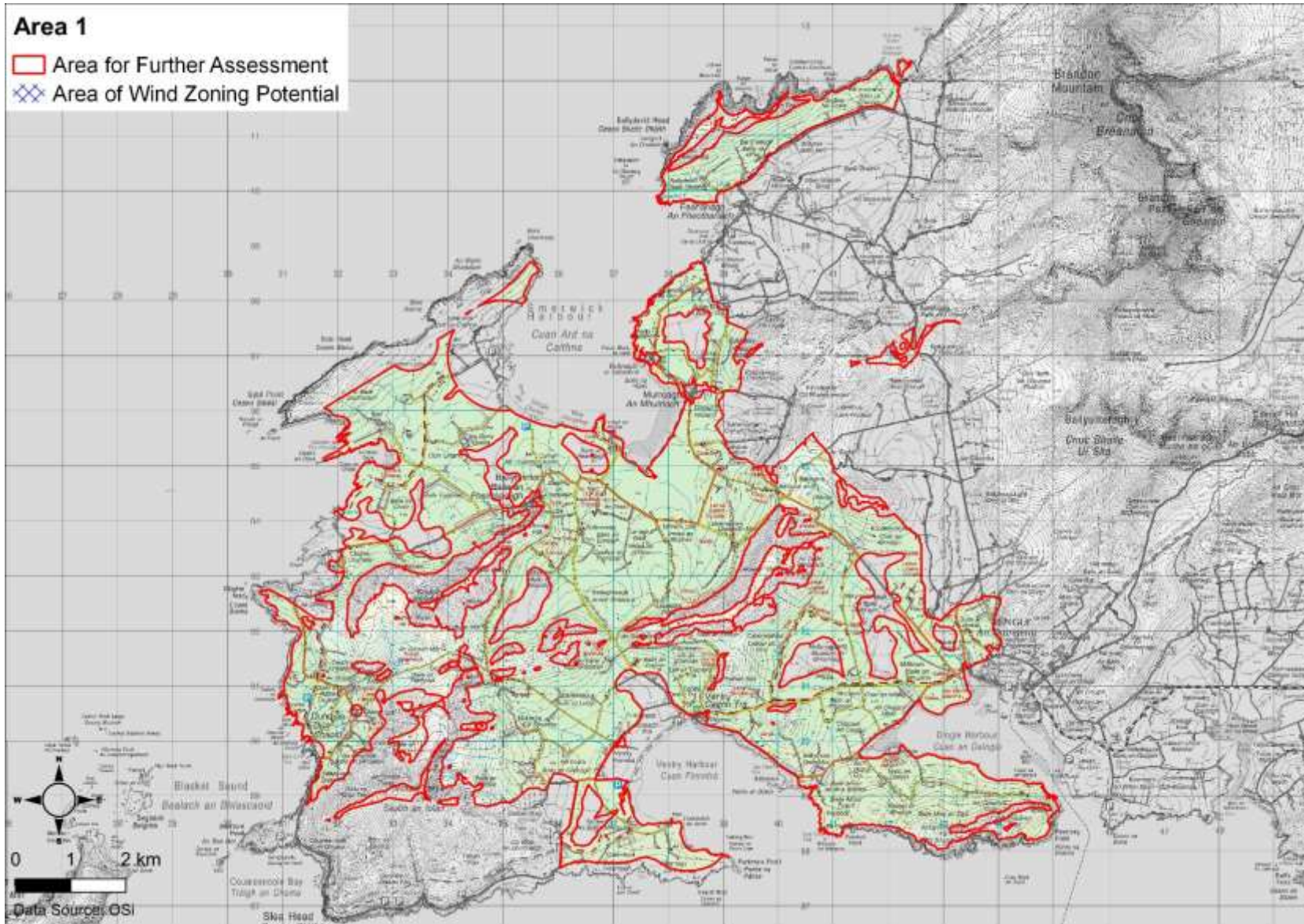
This area is located at the end of the Dingle Peninsula which is surrounded by the Atlantic Ocean on three sides. Due to its coastal nature it has a high scenic value with the topography of the area considered to be unsuitable for the integration of a commercial wind energy development.

This landscape is therefore sensitive to wind energy development, with no parts of the area considered to have wind energy potential.

Landscapes in Area 1







Map 6.29: Area 1 for Further Assessment

Area 2

Size of Area

This area is made up of a number of parts of varying size, measuring a total of 55.8km². The size of some of these parts, particularly in the eastern part of the area would be impractical in terms of zoning.

Infrastructure

This area is located on the Dingle Peninsula and is not served by the existing 110/220kv transmission network.

Population

Housing density in this area is 13 houses per km². Housing is spread across the area due to the extensive road network.

Landscape Sensitivity

This area is located between Daingean Uí Chúis and Inch on the Dingle Peninsula. It is enclosed by the coastline of Dingle Bay on its southern side and the ridge of mountains that runs along the spine of the peninsula on its northern side.

There are views & prospects in the Kerry County Development Plan from the N86. Due to the narrow width of the area, wind energy development would impact negatively on these views. The Wild Atlantic Way runs through the area, following the N86, which is an important tourist route between Tralee and Daingean Uí Chúis, and has a Discovery Point at Inch Beach to the east.

Due to the coastal and mountainous nature of this landscape, wind turbines would be difficult to integrate.

Conclusion

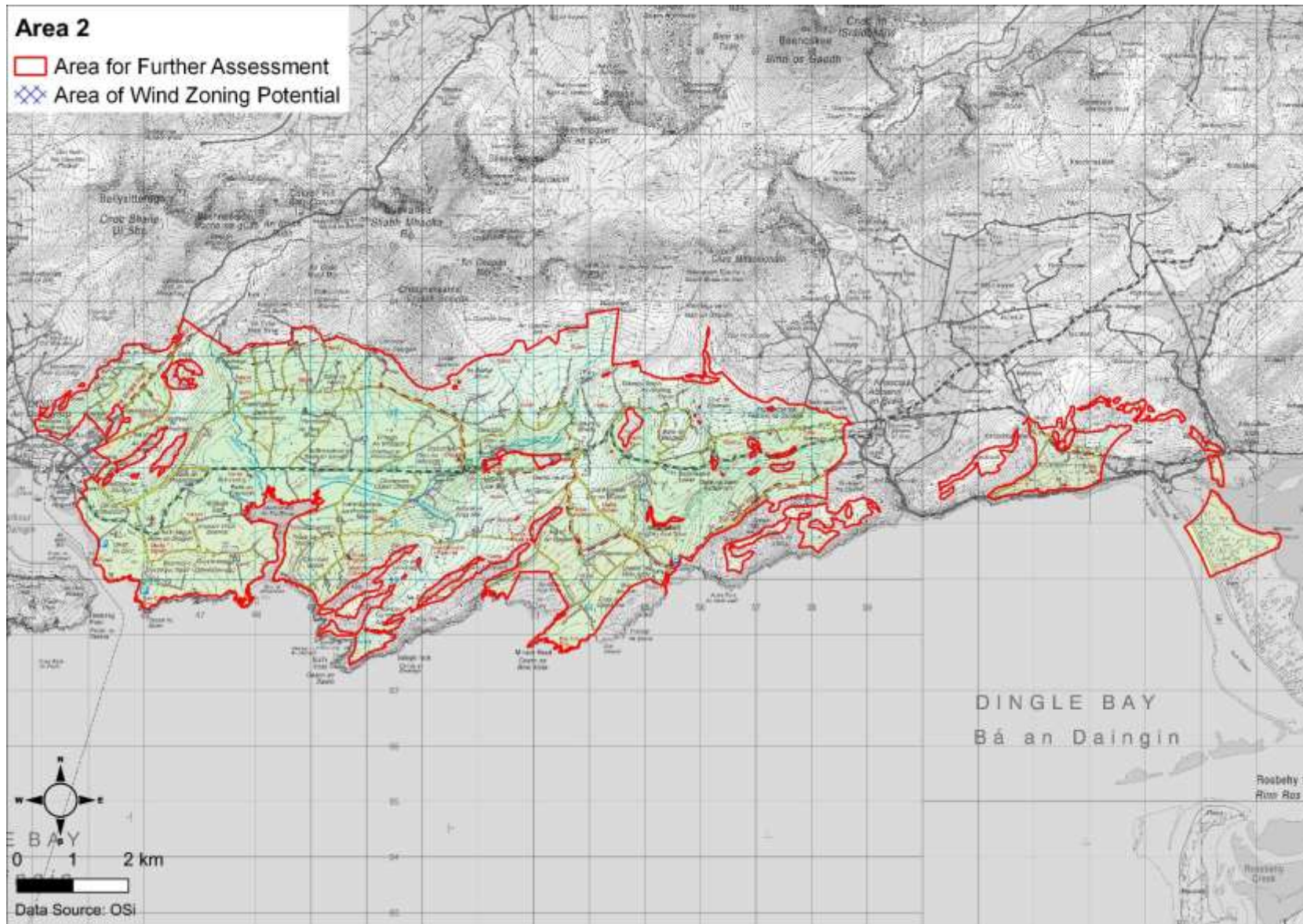
This area is located on the southern side of the Dingle Peninsula which overlooks Dingle Bay. Due to its coastal nature it has a high scenic value with the topography of the area considered to be unsuitable for the integration of a commercial wind energy development.

This landscape is therefore sensitive to wind energy development, with no parts of the area considered to have wind energy potential.

Landscapes in Area 2







Map 6.30: Area 2 for Further Assessment

Area 3

Size of Area

This area is made up of a number of parts of varying size, measuring a total of 48.9km². The size of some of these parts would be impractical in terms of zoning. The area is also narrow in nature as it is located between mountains to the south and the sea to the north.

Infrastructure

This area is located on the Dingle Peninsula and is not served by the existing 110/220kv transmission network.

Population

The pattern of housing in the area would follow the coast, with a density of 24 houses per km² in the area.

Landscape Sensitivity

This area stretches along the north coast of the Dingle Peninsula from Cé Bhréanainn in the west to Camp in the east. Part of the area is located on the northern tip of the Maharees Peninsula, which is a flat coastal area defined by extensive sand dune systems. The remainder is on a narrow strip of lands between the mountains which run along the spine of the peninsula, or in glacial valleys in the mountains.

There are views from the main road through the area, the N86 in the eastern part, towards the coast and the mountains, and from the Castlegregory Road, and the R560. These would be affected by wind energy development due to the narrow width of the area.

Large sections of road in the vicinity are designated views & prospects in the Kerry County Development Plan. The R560 on the northern side of the Dingle Peninsula forms part of the Wild Atlantic Way, and has a Discovery Point at Castlegregory Beach to the south. The N86, Tralee-Dingle Road, is an important tourist route.

Wind turbines would be difficult to integrate in this scenic coastal and mountainous landscape.

Conclusion

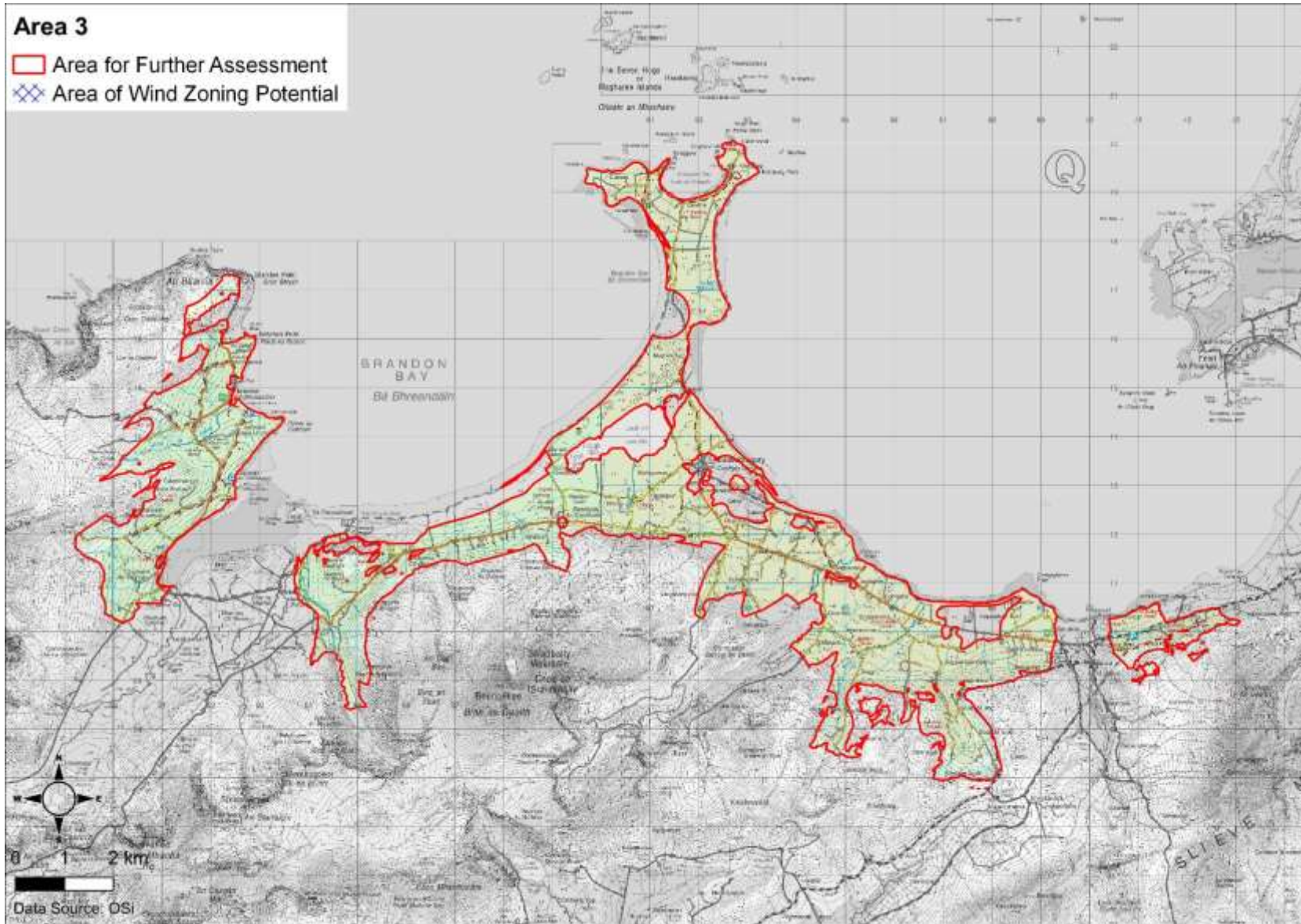
This area is located on the northern side of the Dingle Peninsula which overlooks Brandon Bay and Tralee Bay. Due to its coastal nature it has a high scenic value with the topography of the area considered to be unsuitable for the integration of a commercial wind energy development.

This landscape is therefore sensitive to wind energy development, with no parts of the area considered to have wind energy potential.

Landscapes in Area 3







Map 6.31: Area 3 for Further Assessment

Area 4

Size of Area

This area is made up of a narrow area, measuring a total of 26.1km², located between Castlemaine Harbour and the Slieve Mish Mountains.

Infrastructure

This area is located on the Dingle Peninsula and is not served by the existing 110/220kv transmission network. The eastern side of the area would be approx. 7km from the Oughtragh substation on the 110kv transmission network.

Population

A high level of residential development is found in the area, a density of 17 houses per km². This development is found along the R561 and on smaller roads perpendicular to the regional road.

Landscape Sensitivity

This area is located between Inch and Castlemaine on the southern side of the Dingle Peninsula, between the Slieve Mish Mountains and Castlemaine Harbour.

This area is the lower slopes of the Slieve Mish Mountains, which slope down to the coast.

There are views & prospects in the Kerry County Development Plan from the R561 in this direction, and from the R561 on the other side of the Harbour in this direction.

It is a coastal and mountainous landscape, within which wind turbines would be difficult to integrate.

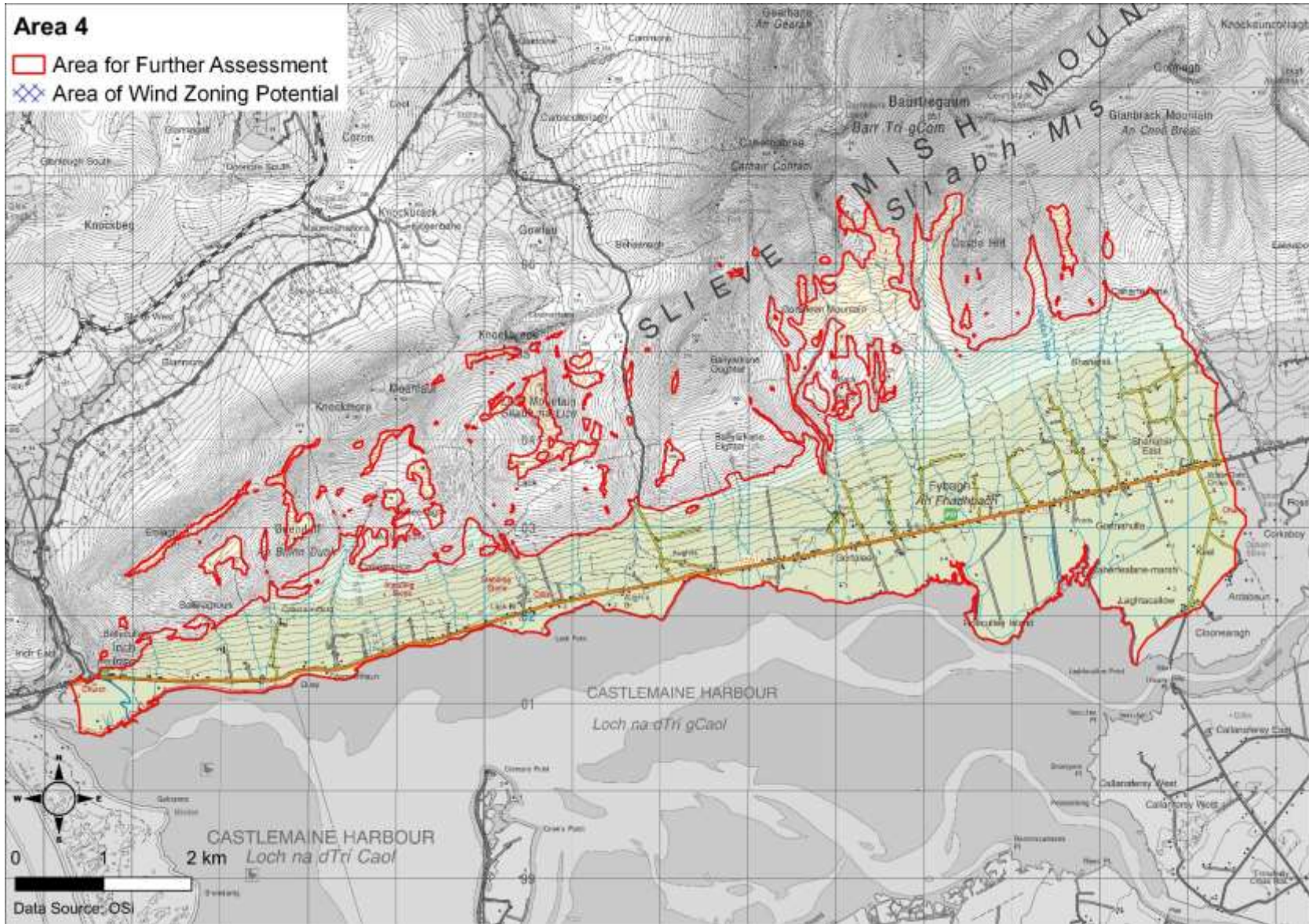
Conclusion

This area is located on the southern side of the Dingle Peninsula which overlooks Castlemaine Harbour. Due to its coastal nature it has a high scenic value with the topography of the area considered to be unsuitable for the integration of a commercial wind energy development.

This landscape is therefore sensitive to wind energy development, with no parts of the area considered to have wind energy potential.

Landscape in Area 4





Map 6.32: Area 4 for Further Assessment

Area 5

Size of Area

This area is made up of a number of parts of varying size, measuring a total of 78.7km². The size of some of these parts would be impractical in terms of zoning.

Infrastructure

This area is close to Killorglin where there is a 110kv substation at Oughtragh.

Population

A high level of residential development is found in the area, a density of 28 houses per km². This development is located around the town of Killorglin and on the dense network of roads in the area.

Landscape Sensitivity

This area is located to the west and south of Killorglin. The western part borders Castlemaine Harbour and the southern part is located on the lower slopes of MacGillycuddy's Reeks. The central part of the area would be in close proximity to the scenic Caragh Lake. The eastern part of the area would be along the River Laune.

There would be extensive views of this area from the north and from across Castlemaine Harbour.

There are views & prospects in the Kerry County Development Plan from the N70 and from the N72. The N70 is part of the Ring of Kerry and Wild Atlantic Way.

This area has various scenic qualities, with coastal, lake and mountainous areas. Wind turbines in this area would detract from the quality of this landscape.

Conclusion

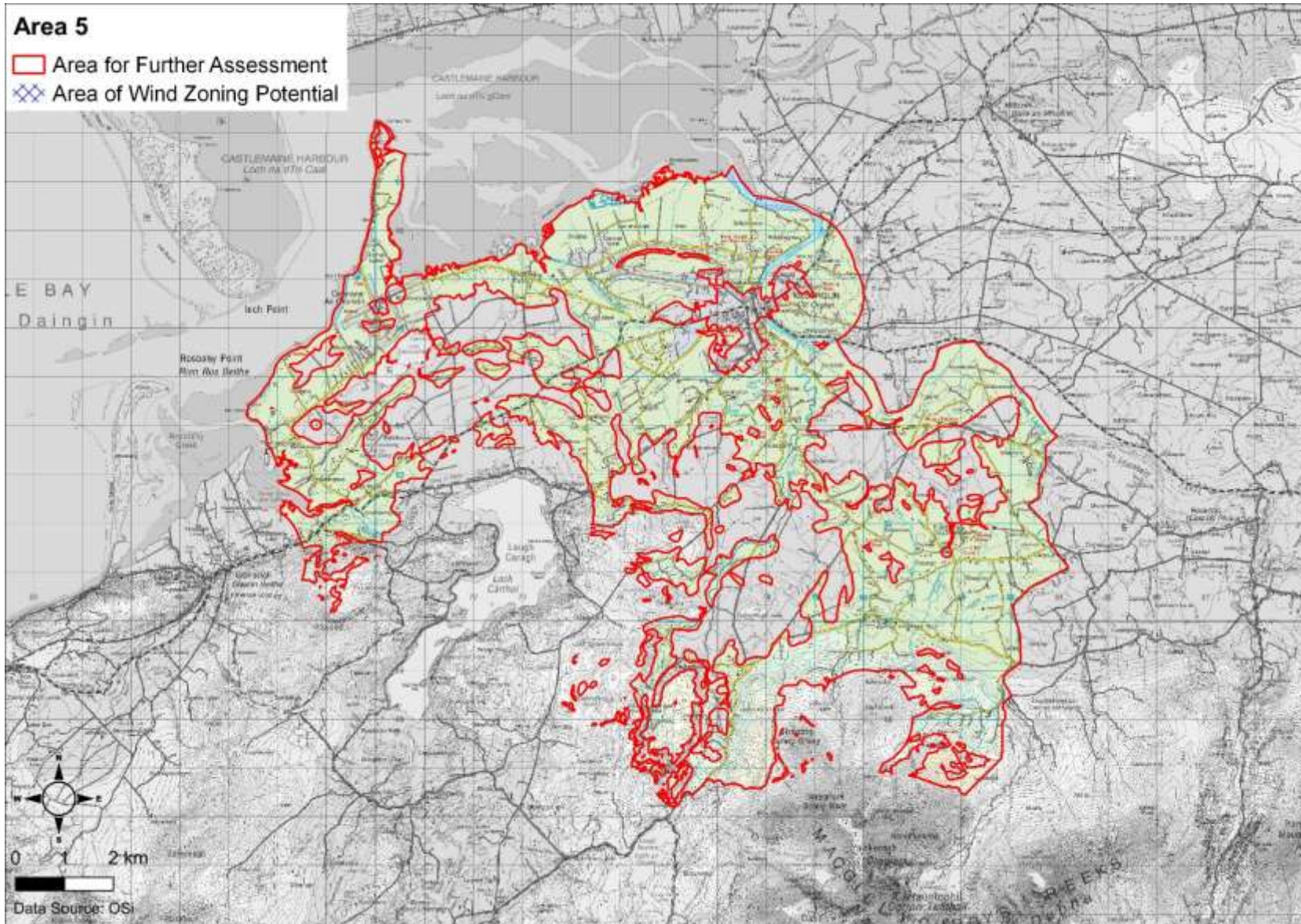
This area includes Caragh Lake and provides a setting for the MacGillycuddy Reeks, both of which are of significant tourism importance to the county, with their protection from wind energy development warranted. The area includes Killorglin and its hinterlands, with the area stretching along the coast of Castlemaine Harbour. The piecemeal nature of the area assessed does not lend itself to zoning with the larger parts of the area being located in the areas around Killorglin, the coastline and MacGillycuddy's Reeks.

This landscape is therefore sensitive to wind energy development, with no parts of the area considered to have wind energy potential.

Landscapes in Area 5







Map 6.33: Area 5 for Further Assessment

Area 6

Size of Area

This area is made up of a number of parts of varying size, measuring a total of 18.9km². The size of some of these parts would be impractical in terms of zoning.

Infrastructure

This area is located on the Iveragh Peninsula and is not served by the existing 110/220kv transmission network.

Population

A high level of residential development is found in the area, a density of 25 houses per km². These are located around Glenbeigh and in the area in close proximity to the N70.

Landscape Sensitivity

This area is located on both sides of the N70 between Glenbeigh and Mountain Stage, extending southwards to areas in the vicinity of Coomasharn Lake which is one of a number of lakes formed in the cirques on the eastern side of the mountains in the area. The northern part of the area is close to Rossbeigh Beach. The area is enclosed by mountains.

There are views from the N70 up the valley towards Coomasaharn Lake, with views & prospects on the N70 in the Kerry County Development Plan, and also from the N70 towards Dingle Bay. This road also forms part of the Ring of Kerry and Wild Atlantic Way.

This is a scenic mountainous area of limited size, within which it would be difficult to integrate wind turbines.

Conclusion

This area is located on the northern side of the Iveragh Dingle Peninsula overlooking Dingle Bay. Due to its coastal nature it has a high scenic value with the topography of the area considered to be unsuitable for the integration of a commercial wind energy development.

The substantial part of this area is along the N70 and around Glenbeigh, with neither location suitable for wind energy zoning.

This landscape is therefore sensitive to wind energy development, with no parts of the area considered to have wind energy potential.

Landscapes in Area 6



Area 7

Size of Area

This area is made up of a number of small parts of varying size, measuring a total of 5.0km². The size of these parts would be impractical in terms of zoning.

Infrastructure

This area is located on the Iveragh Peninsula and is not served by the existing 110/220kv transmission network.

Population

Housing density is 21 houses per km². These are generally located around Kells and extending westwards from same.

Landscape Sensitivity

This area is located around Kells, on the slopes of mountains that border the southern coast of Dingle Bay.

The eastern part of the area includes the Gleensk Viaduct.

The area also includes a number of small lakes.

There are views & prospects in the Kerry County Development Plan from the N70. The N70 forms part of the Ring of Kerry and the Wild Atlantic Way.

This is a highly scenic coastal landscape, with recognised views across Dingle Bay. Wind turbines in this area would affect its scenic qualities.

Conclusion

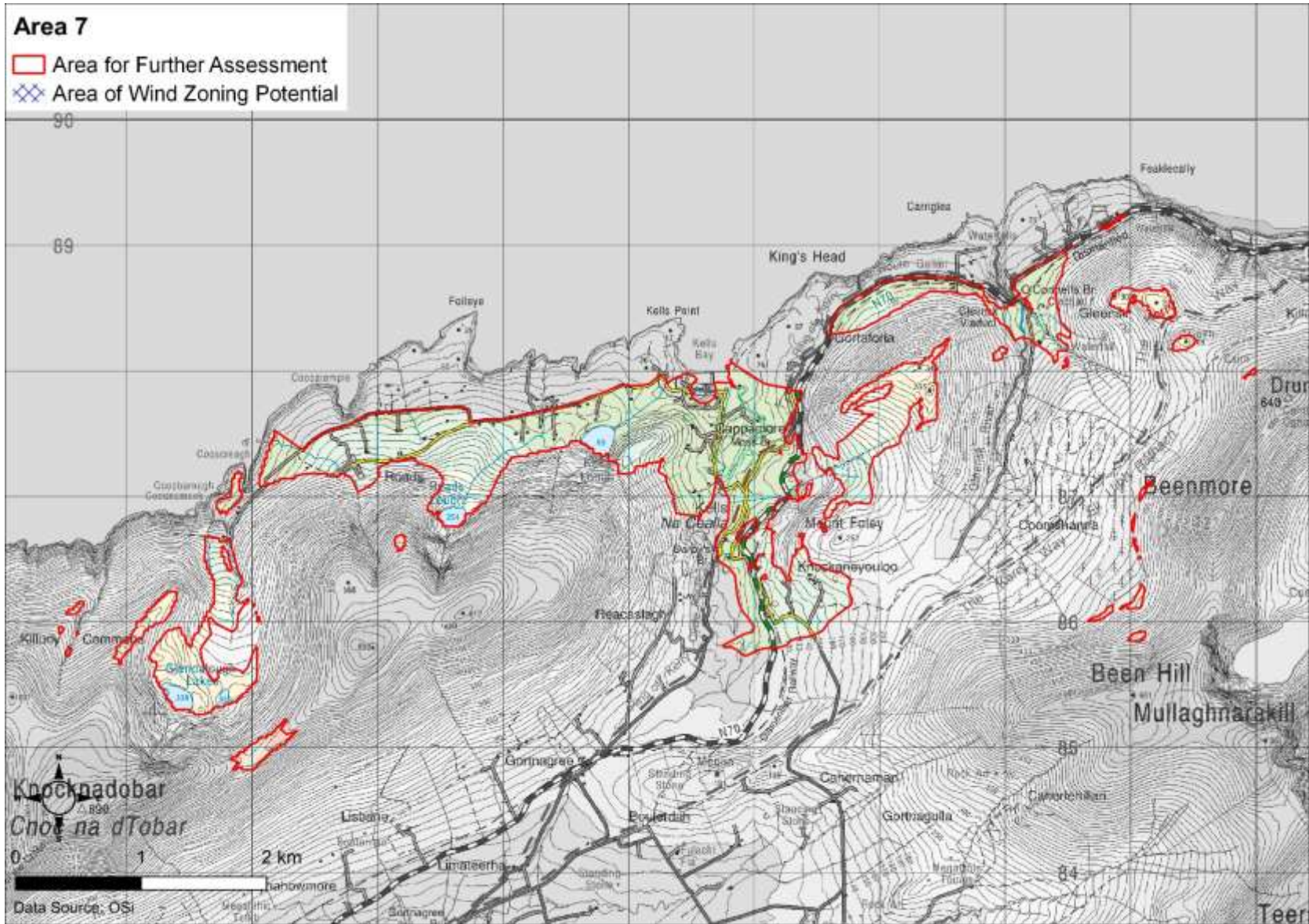
This area is located on the northern side of the Iveragh Dingle Peninsula overlooking Dingle Bay. Due to its coastal nature it has a high scenic value with the topography of the area considered to be unsuitable for the integration of a commercial wind energy development.

The small geographical size and fragmented nature of the area is not suitable for wind energy zoning.

This landscape is therefore sensitive to wind energy development, with no parts of the area considered to have wind energy potential.

Landscape in Area 7





Map 6.35: Area 7 for Further Assessment

Area 8

Size of Area

This area is made up of a number of parts of varying size, measuring a total of 73.7km². The size of some of these parts would be impractical in terms of zoning.

Infrastructure

It is close to the existing Knockaneden Wind Farm which is served by the 38kv transmission network. The Iveragh Peninsula is not served by the 110/220kv transmission network.

Population

Housing density is lower in this area relative to other areas, at a density of 15 houses per km². Housing is located around Cahersiveen and along the road network in the area.

Landscape Sensitivity

This area surrounds the town of Cahersiveen, on the slopes of Cnoc na dTobar to the north, and around Benteen to the south.

The area borders the existing Knockaneden Wind Farm (4 x 105m turbines).

This is considered to be a scenic landscape surrounded by high mountains.

There are views & prospects in the Kerry County Development Plan from the N70. The N70 forms part of the Ring of Kerry and the Wild Atlantic Way.

Development of wind turbines in this area would affect the naturalness of this scenic area. There are important views of Valentia Island from the area.

Conclusion

Due to the coastal nature of this area it has a high scenic value, with the topography of the area considered to be unsuitable for the integration of a commercial wind energy development.

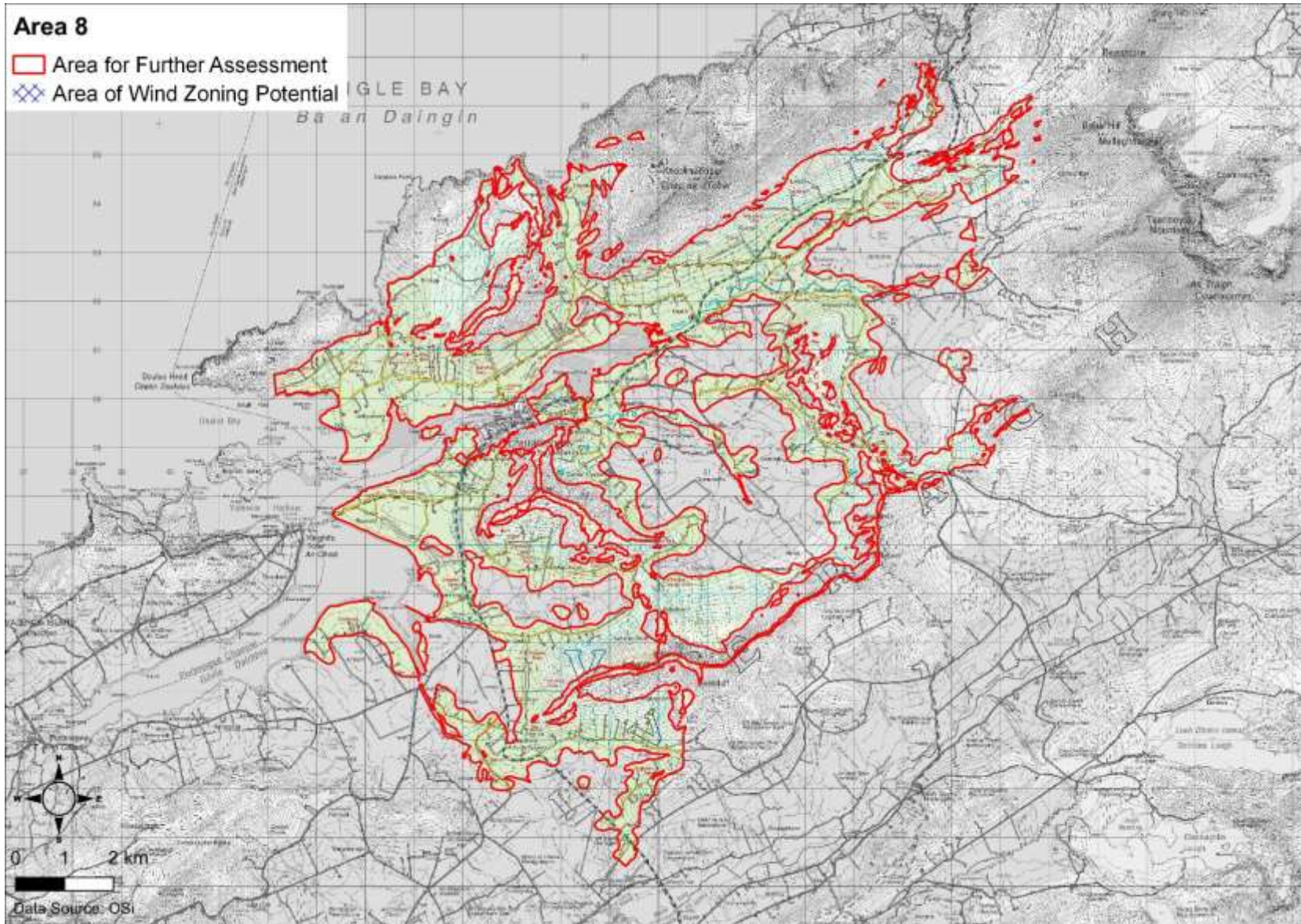
The fragmented nature of the area being assessed is not suitable for wind energy zoning.

This landscape is therefore sensitive to wind energy development, with no parts of the area considered to have wind energy potential.

Landscapes in Area 8







Map 6.36: Area 8 for Further Assessment

Area 9

Size of Area

This area is made up of a number of small parts, measuring a total of 63.1km². The size of some of these areas would be impractical in terms of zoning.

Infrastructure

This area is located on the Iveragh Peninsula and is not served by the existing 110/220kv transmission network.

Population

Housing density is lower in this area relative to other areas, at a density of 18 houses per km².

Landscape Sensitivity

This area is located on Valentia Island, and in the scenic valleys between Portmagee and Baile an Sceilg.

This is a scenic coastal landscape, with views across Saint Finan's Bay towards the Skelligs, and across Ballinskellig's Bay.

There are views & prospects in the Kerry County Development Plan along extensive stretches of the roads along the coast. The Wild Atlantic Way is found on Valentia Island and follows the coast in this area. There are a number of Discovery Points on the Wild Atlantic Way in the area.

Due to the scenic coastal nature of this landscape, wind turbines would be difficult to integrate.

Conclusion

Due to the coastal nature of this area it has a high scenic value, with the topography of the area considered to be unsuitable for the integration of a commercial wind energy development.

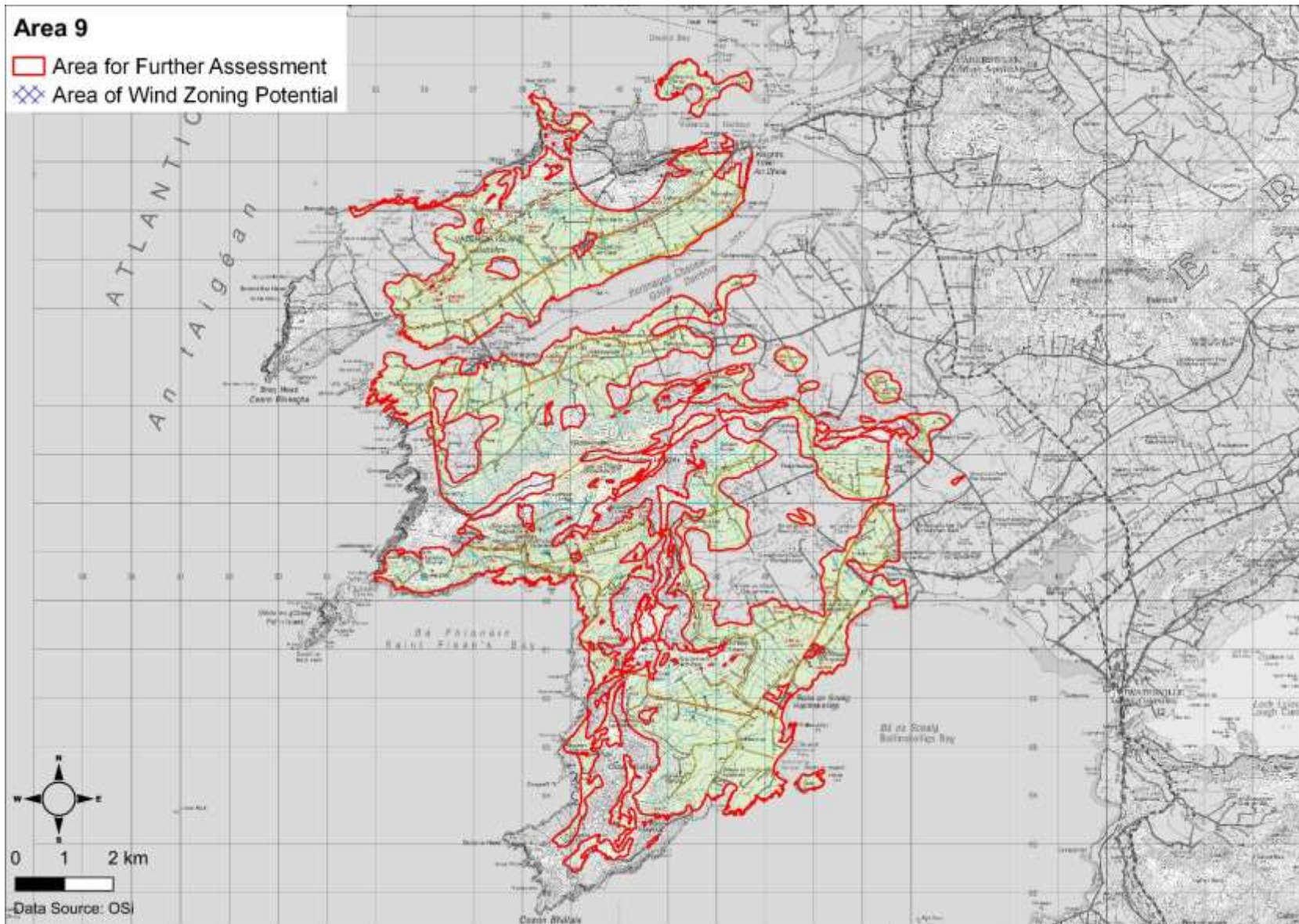
The larger parts of the area are on Valentia Island, around Portmagee, and around Baile an Sceilg, which would be sensitive to wind energy development.

This landscape is therefore sensitive to wind energy development, with no parts of the area considered to have wind energy potential.

Landscapes in Area 9







Map 6.37: Area 9 for Further Assessment

Area 10

Size of Area

This area is made up of a number of small parts, measuring a total of 61.2km². The size of some of these areas would be impractical in terms of zoning.

Infrastructure

This area is located on the Iveragh Peninsula and is not served by the existing 110/220kv transmission network.

Population

Housing density is 18 houses per km². Housing would be located around Waterville, Caherdaniel and Castlecove, and along the roads in the area, including the N70.

Landscape Sensitivity

This area is located on the eastern side of Lough Currane, and on along the coastline between Waterville and Sneem. The area in general borders the coast.

Lough Currane is a renowned fishing lake.

Derrynane House is located in the area. The area around Derrynane, together with Derrynane House, make up Derrynane National Historic Park.

There are views & prospects in the Kerry County Development Plan from the N70. The Wild Atlantic Way driving route and Ring of Kerry pass through the area. Discovery Points on the Wild Atlantic Way are found in this area.

This is a very scenic part of the county's coastline where it would be difficult to integrate wind turbines.

Conclusion

Due to the coastal nature of this area, overlooking Ballinskelligs Bay and Kenmare Bay, it has a high scenic value, with the topography of the area considered to be unsuitable for the integration of a commercial wind energy development.

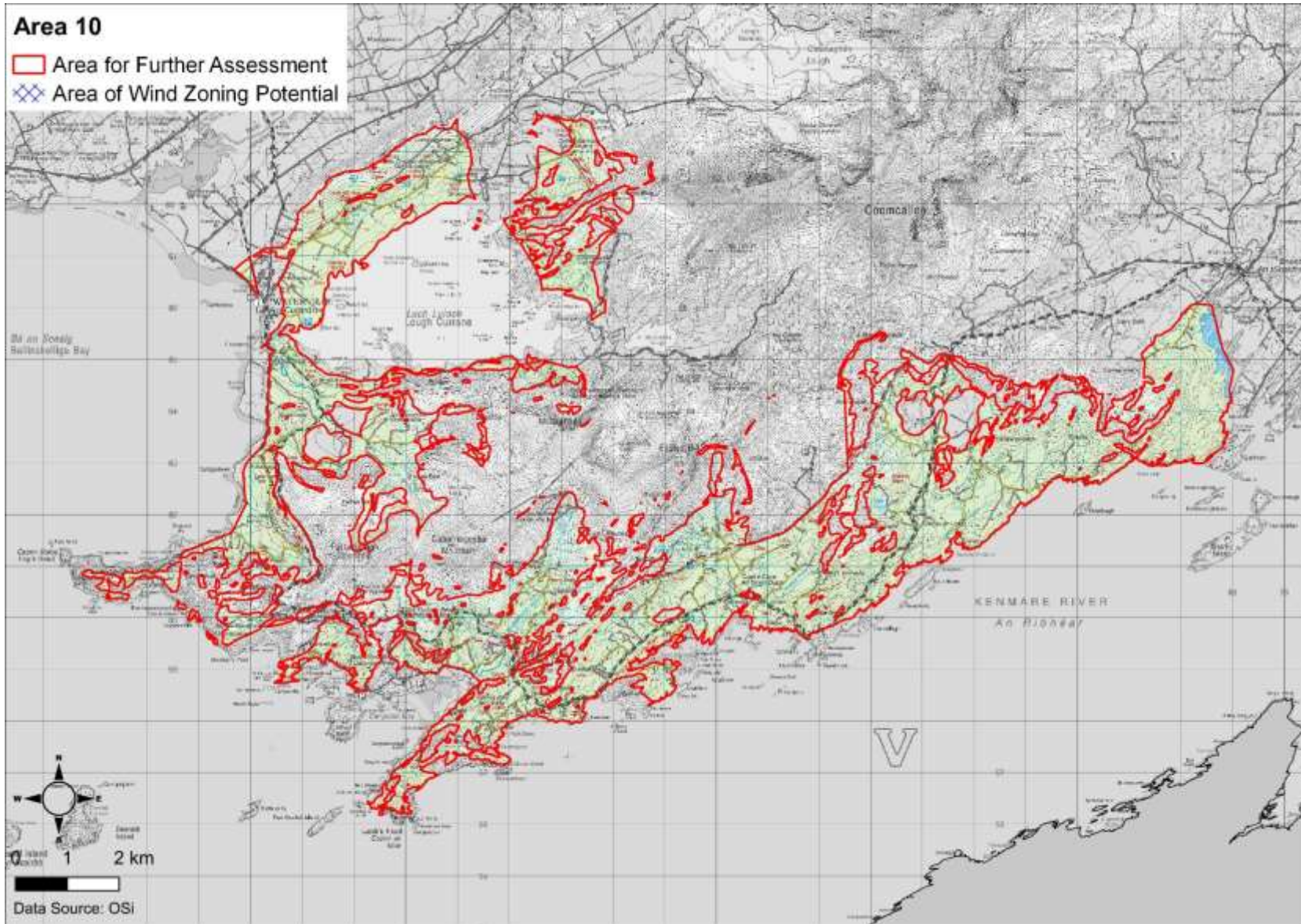
The narrow and piecemeal nature of the area being assessed between mountains and the coastline also makes the area unsuitable for wind energy zoning.

This landscape is therefore sensitive to wind energy development, with no parts of the area considered to have wind energy potential.

Landscapes in Area 10







Map 6.38: Area 10 for Further Assessment

Area 11

Size of Area

This area measures 26.4km², with a number of smaller parts. The size of some parts would be impractical in terms of zoning.

Infrastructure

This area is located on the Iveragh Peninsula and is not served by the existing 110/220kv transmission network.

Population

Housing density is low in this area relative to other areas, a density of 11 houses per km². Housing follows the road network in the area.

Landscape Sensitivity

This area is located between Sneem and Blackwater on both sides of the N70 which passes through the area, and is bordered on its northern side by the R568.

This is a remote landscape with many natural elements.

There are views & prospects in the Kerry County Development Plan from the R568 in both directions and on the N70. The R568 road between Sneem and Molls Gap is an important tourist route linking Sneem to Molls Gap. The N70 forms part of the Ring of Kerry and Wild Atlantic Way.

Due to the scenic coastal nature of this area, it would be difficult to integrate wind turbines.

Conclusion

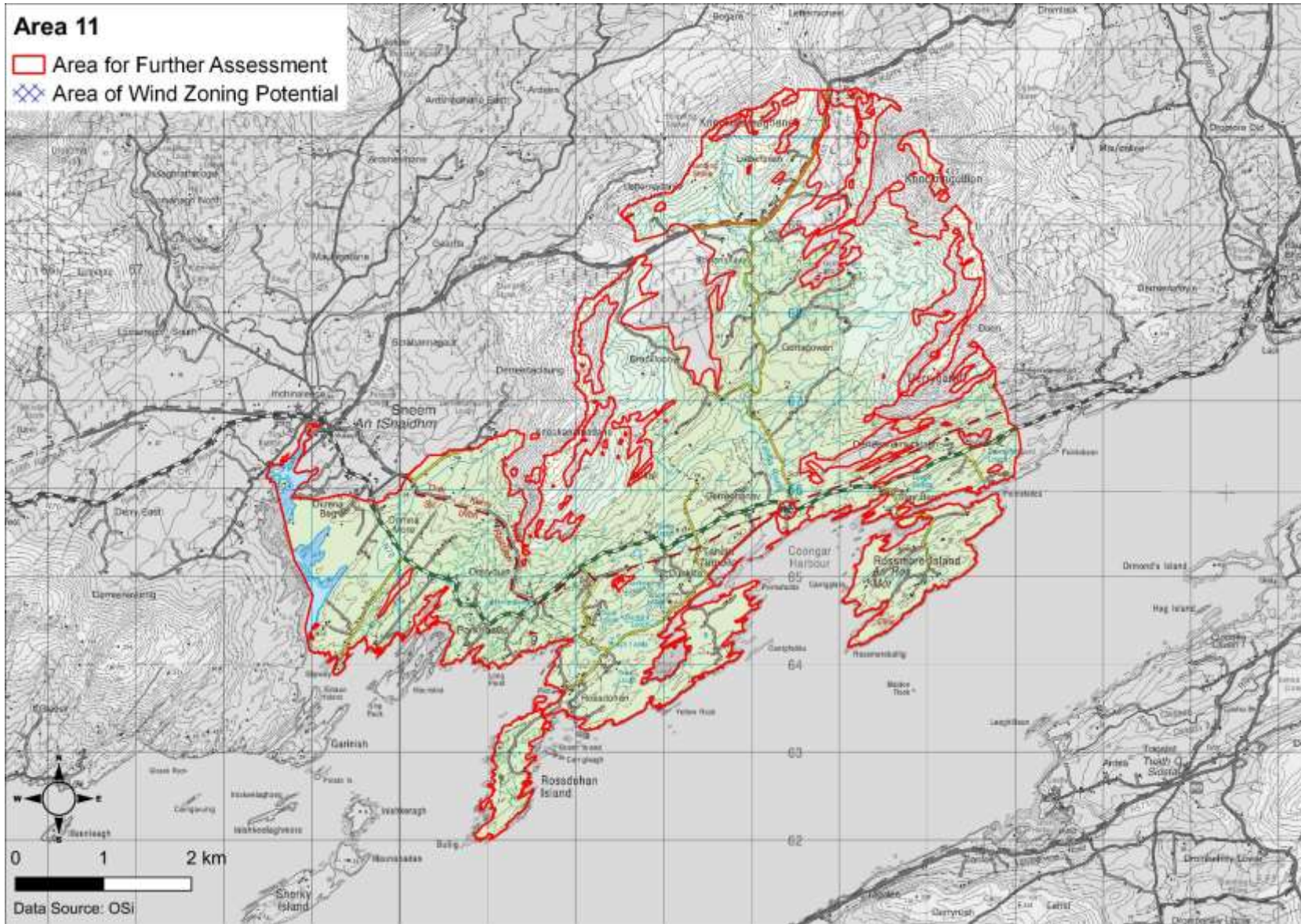
Due to the coastal and remote nature of this area it has a high scenic value which makes the area unsuitable for the integration of a commercial wind energy development.

The narrow and piecemeal nature of the area being assessed is not suitable for wind energy zoning.

This landscape is therefore sensitive to wind energy development, with no parts of the area considered to have wind energy potential.

Landscape in Area 11





Map 6.39: Area 11 for Further Assessment

Area 12

Size of Area

This area measures a total of 43.1km².

Infrastructure

This area is located on the Iveragh Peninsula and is not served by the existing 110/220kv transmission network.

Population

Housing density is low in this area relative to other areas, a density of 15 houses per km². Housing is located around Kenmare, on the N70 and roads off same.

Landscape Sensitivity

The area is located between Blackwater and Kenmare, extending north towards Molls Gap.

It is located on the northern side of the N70 Ring of Kerry and it is located on both sides of the N71, the Kenmare to Molls Gap/Killarney Road, one of the most important tourist routes in the country. Wind energy development would affect views towards Molls Gap and from Molls Gap towards Kenmare.

Mountains on the northern side, Peakeen Mountain (555m), do provide height from which to measure scale. Area is enclosed by high ground surrounding Kenmare Bay. Higher ground and the bay provide a scenic setting for Kenmare.

There are views & prospects in the Kerry County Development Plan from the, N70, N71 and R568. The N71 also forms part of the Wild Atlantic Way.

Due to the scenic nature of this landscape, with many natural features, it would be difficult to integrate wind turbines.

Conclusion

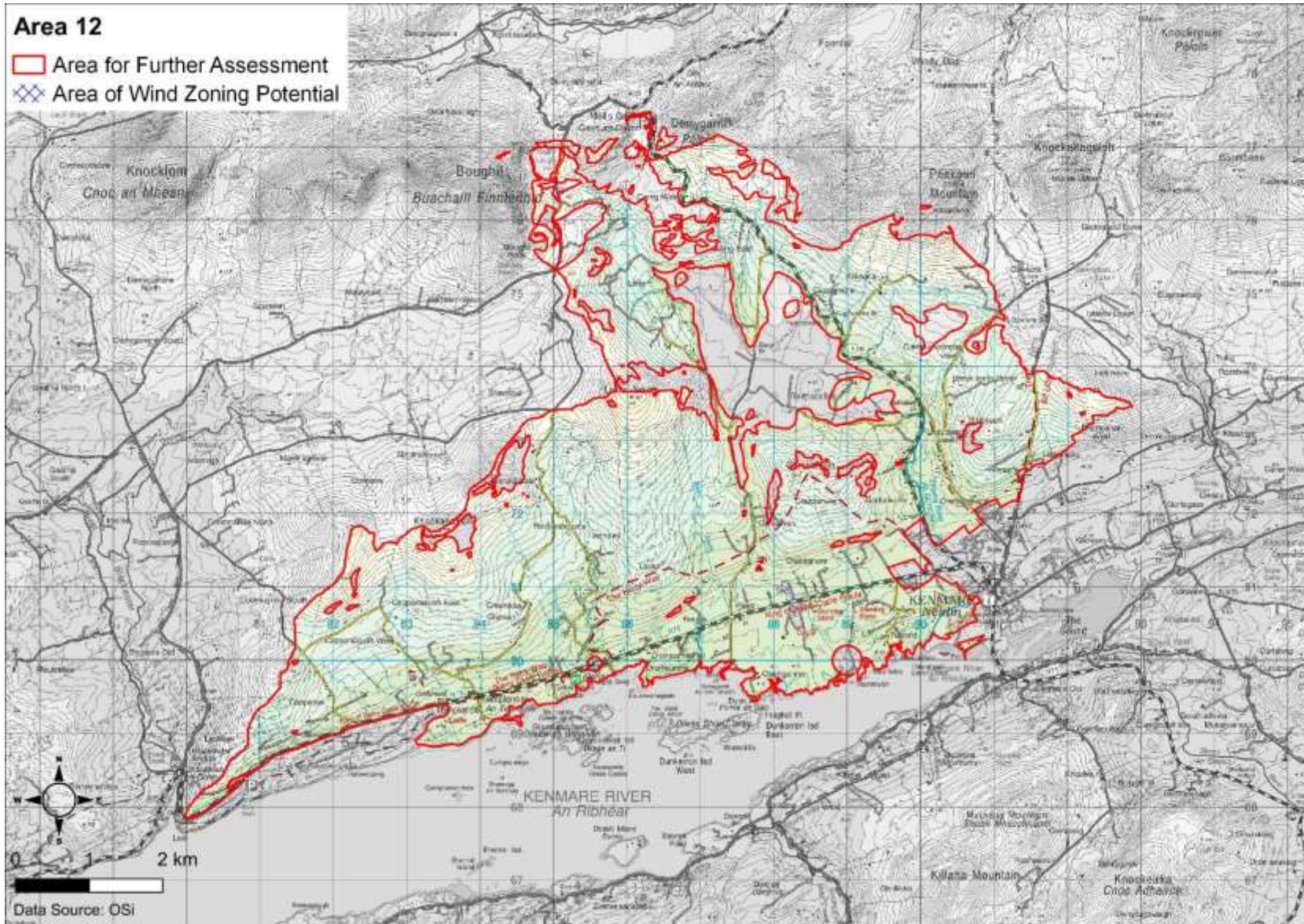
Due to the coastal nature of this area and the importance of the mountains in this area, namely Molls Gap, it has a high scenic value, therefore the area considered to be unsuitable for the integration of a commercial wind energy development.

The nature of the area being assessed, which includes a narrow coastal strip between the mountains and the coast, and the town of Kenmare plus its immediate hinterlands, makes it suitable for wind energy zoning.

This landscape is therefore sensitive to wind energy development, with no parts of the area considered to have wind energy potential.

Landscapes in Area 12





Map 6.40: Area 12 for Further Assessment

Area 13

Size of Area

This area measures 62.8km² and it is piecemeal in places.

Infrastructure

Parts of the area are located on the Beara Peninsula and is not served by the existing 110/220kv transmission network. Kenmare is not served by the 110kv transmission network.

Population

Housing density is low in this area relative to other areas, a density of 13 houses per km². Housing would be located along the road network, in particular near Kenmare.

Landscape Sensitivity

This area is located to the east and south of Kenmare. It is an elevated area on its northern and southern sides that has many natural features. With the lower part of the area a farming landscape along the Roughty River to the east of Kenmare and along the Sheen River to the south of Kenmare.

Mountains on the northern side, and mountains of similar height on the southern side, do provide height from which to measure scale, but this scale is also affected by the proximity of the bay and the town of Kenmare.

There are views to and from the mountains with Kenmare Bay being the main focus for views from the higher ground. There are views from the R569 towards the mountains on both sides of the Roughty River Valley. The N70 and the R571 are part of the Wild Atlantic Way.

The Roughty and Slaheny valleys are scenic in nature, as is the area along Kenmare Bay. It would be difficult to integrate wind turbines into this area.

Conclusion

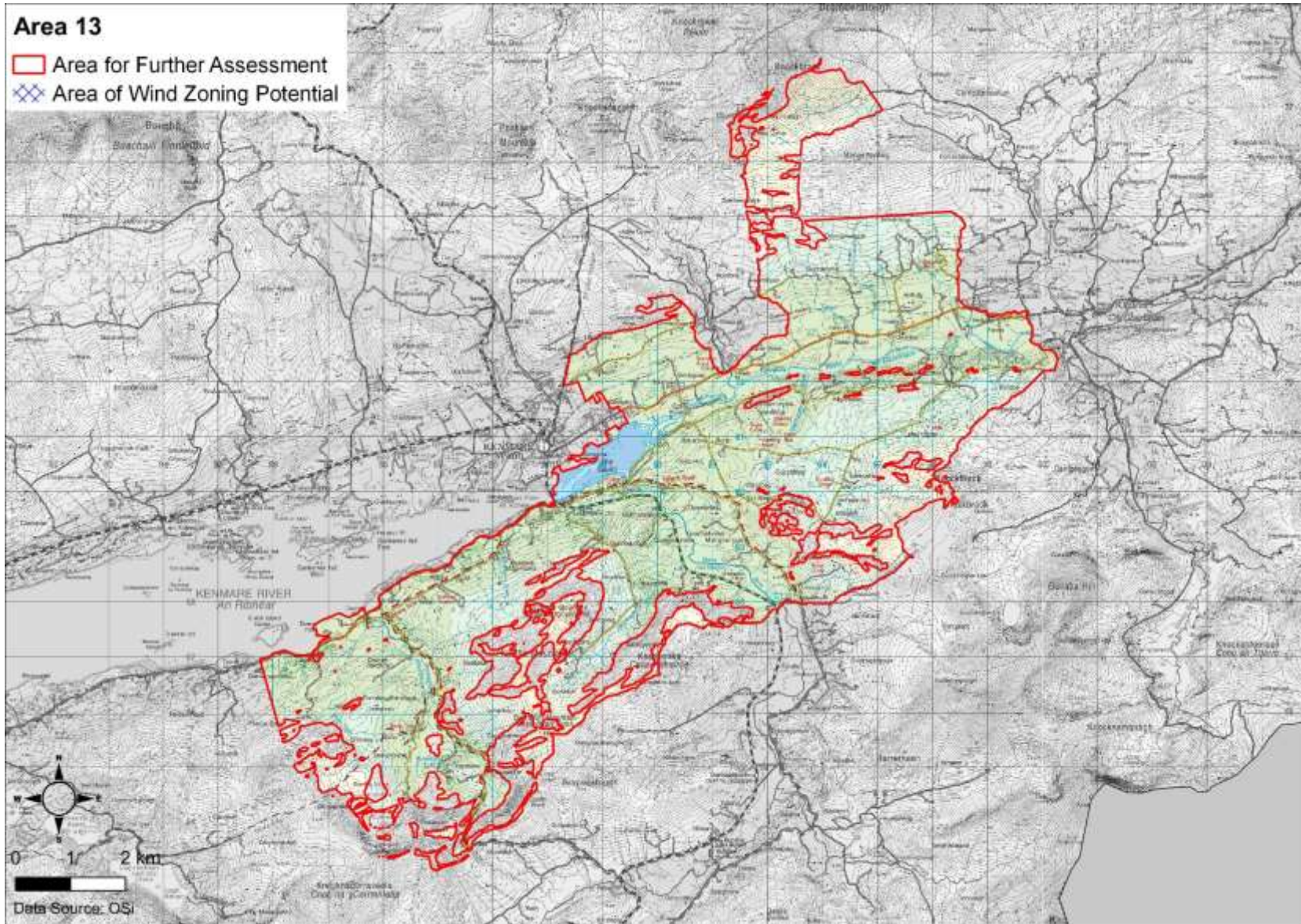
Due to the narrow nature of part of the western part of the area between mountains and the coast, it has a high scenic value. The eastern part of the area along the Roughty Valley is also of scenic value. This makes this area unsuitable for the integration of a commercial wind energy development.

This landscape is therefore sensitive to wind energy development, with no parts of the area considered to have wind energy potential.

Landscapes in Area 13







Map 6.41: Area 13 for Further Assessment

Area 14

Size of Area

This area is made up of a number of parts, measuring a total of 20.9km². The size of some of these parts would be impractical in terms of zoning.

Infrastructure

This area is located on the Beara Peninsula and is not served by the existing 110/220kv transmission network.

Population

Housing density is low in this area relative to other areas, a density of 8 houses per km². Housing would be located along the road network in the area.

Landscape Sensitivity

This area is located to the west of Kenmare, bordering Kenmare Bay and on the sides of Gleninchaquin.

This is a very scenic landscape with many natural features. The area includes parts on the slopes of Gleninchaquin which has a park with a number of marked walks and a waterwall. Mountains such as Coomnadiha (644m) provide a measure of height. A high ridge of mountains encloses this glacial valley with a number of lakes.

There are views & prospects in the Kerry County Development Plan from the R571 into the valley. The R571 which follows the coast is part of the Wild Atlantic Way.

Due to the coastal and mountainous nature of this scenic area, it would be difficult to integrate wind turbines.

Conclusion

Due to the coastal nature of the northern part of the area it has a high scenic value, with the southern part of the area overlooking the scenic Gleninchaquin, with the topography of the area considered to be unsuitable for the integration of a commercial wind energy development.

The piecemeal nature of the area being assessed is also not considered suitable for wind energy zoning.

This landscape is therefore sensitive to wind energy development, with no parts of the area considered to have wind energy potential.

Landscape in Area 14



Area 15

Size of Area

This area is made up of a number of parts, measuring a total of 23.7km². The size of the smaller parts of this area would be impractical in terms of zoning.

Infrastructure

This area is located on the Beara Peninsula and is not served by the existing 110/220kv transmission network.

Population

Housing density is low in this area relative to other areas, a density of 11 houses per km². Housing would be located along the road network in the area.

Landscape Sensitivity

This area is located around Lauragh, with the northern part bordering Kilmakilloge Harbour and Kenmare Bay. The southern part is located around Glanmore Lake.

A high ridge of mountains encloses this glacial valley which contains Glanmore Lake. This is a very scenic landscape with many natural features which contributes to the setting of Kenmare Bay. The area borders the scenic Glanmore Lake which is located underneath the Healy Pass Road.

The northern part borders Kenmare Bay which is a scenic coastal landscape.

There are views & prospects in the Kerry County Development Plan on the Healy Pass Road (R574) in this direction. The R571 which follows the coast is part of the Wild Atlantic Way.

Due to the scenic nature of this area, it would be difficult to integrate wind turbines.

Conclusion

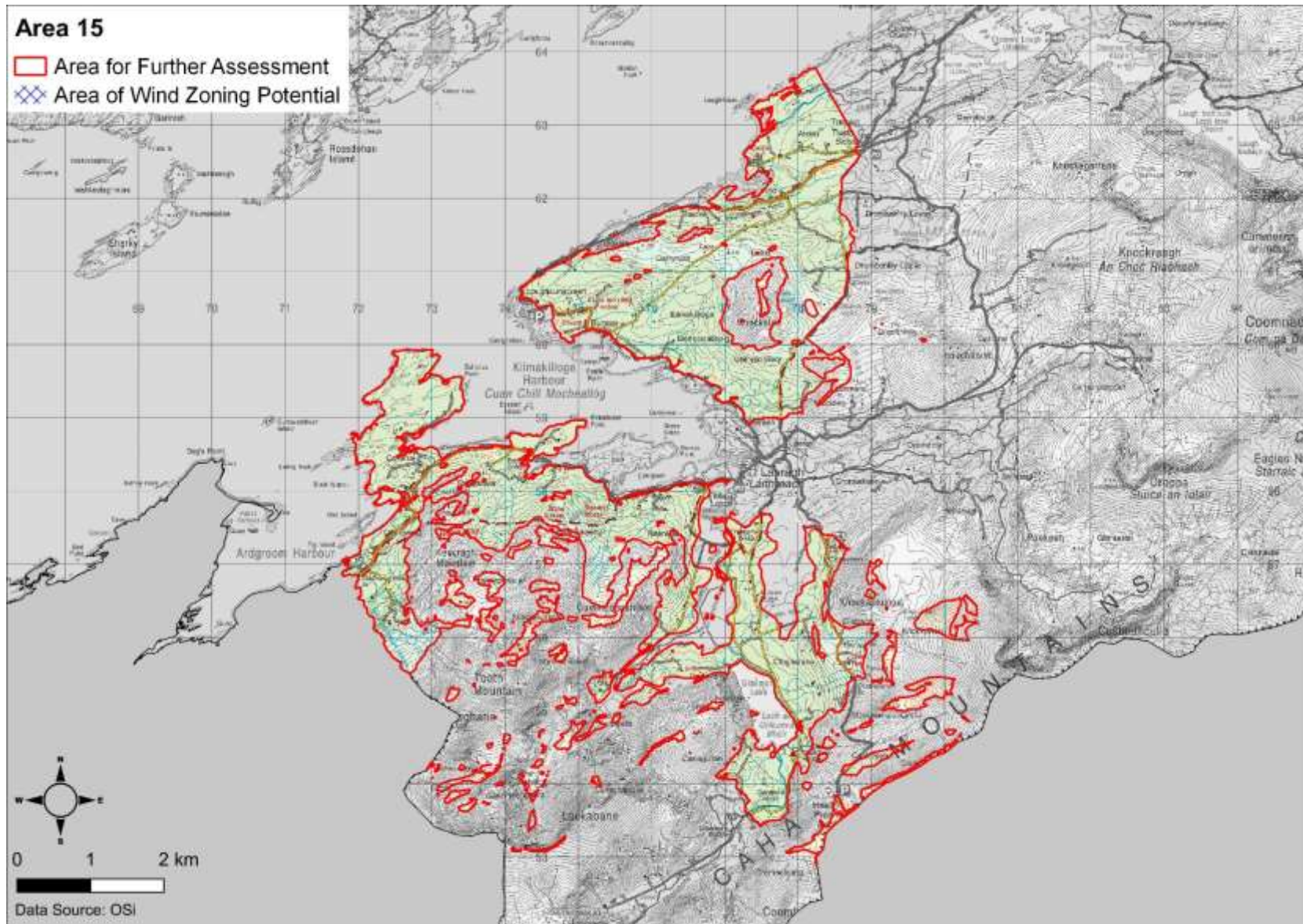
Due to the coastal nature of this area overlooking Kenmare Bay it has a high scenic value, with the topography of the area which includes the Healy Pass and Glanmore Lake considered to be unsuitable for the integration of a commercial wind energy development.

The piecemeal nature of the area being assessed is also not suitable for wind energy zoning.

This landscape is therefore sensitive to wind energy development, with no parts of the area considered to have wind energy potential.

Landscapes in Area 15





Map 6.43: Area 15 for Further Assessment

Area 16

Size of Area

The parts of this area are all small in size, measuring a total 0.1km², but they are adjacent to an existing windfarm so potentially could facilitate an extension of this wind farms on lands that would not be subject to constraints.

Infrastructure

Served by an existing substation, Glanlee, which is part of the 110kv transmission network.

Population

There is no housing in the vicinity of this area.

Landscape Sensitivity

This area is located in an elevated area east of Kilgarvan. This is an elevated landscape that has many natural features. This naturalness has been lessened with the construction of wind farms and with the planting of forestry.

There are a significant number of wind turbines in this area, but the size of this area would only allow for a very limited increase to this number.

Views & prospects in the Kerry County Development Plan are found on the R569 in this direction.

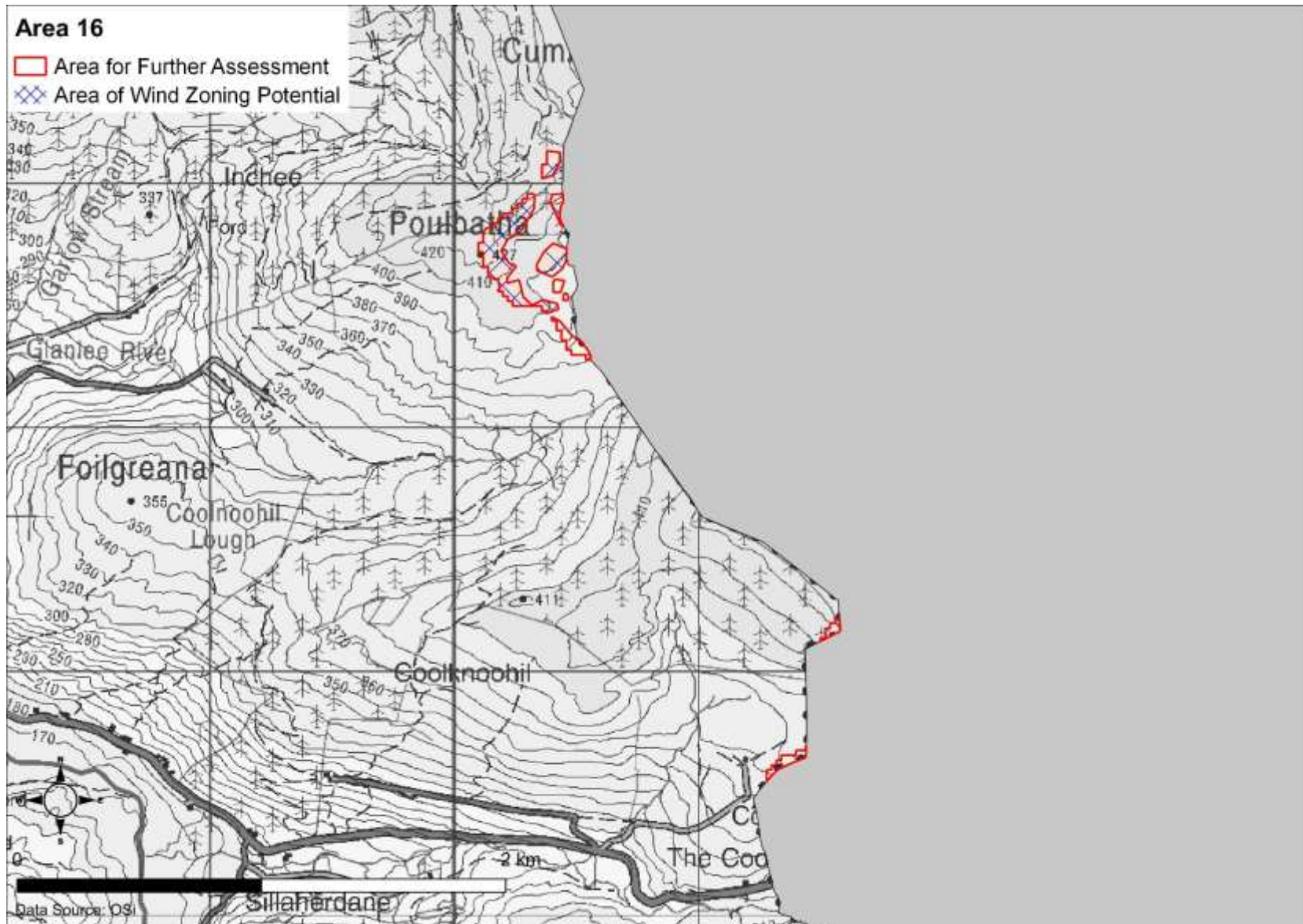
As the area contains existing wind farms, this area which is on the eastern side of existing wind energy development could accommodate some additional development.

Conclusion

This area is considered to have potential for wind energy development. Given the number of existing wind turbines in the area the cumulative impact of any additional turbines would have to be considered, along with the limited size of this area, it would therefore be 'open for consideration' as a result.

Landscape in Area 16





Map 6.44: Area 16 for Further Assessment

Area 17

Size of Area

Is small relative to some of the other areas, 6.8km², but would be of sufficient size to be considered for wind energy zoning.

Infrastructure

The 110kv transmission network is approx. 5km from the area.

Population

Housing density is 17 houses per km². Housing is located on the road network in the area, both the N72 and other roads in the area which is located between Barraduff and Rathmore.

Landscape Sensitivity

This area is located between Barraduff and Rathmore with the N72 Killarney/Mallow Road dissecting the area along with the rail line.

This area has a number of river valleys.

Due to the level of human intervention, housing, and forestry, this area's perception has been lowered. The Paps Mountains to the south are visible from large parts of the area. The Paps which are a dramatic landscape feature have cultural associations. The protection of this landscape is therefore required due to the proximity of the area to The Paps.

There are views & prospects from the R570 in the Kerry County Development Plan in this direction.

Due to the setting that this area provides to the Paps mountains, it would be difficult to integrate wind turbines.

Conclusion

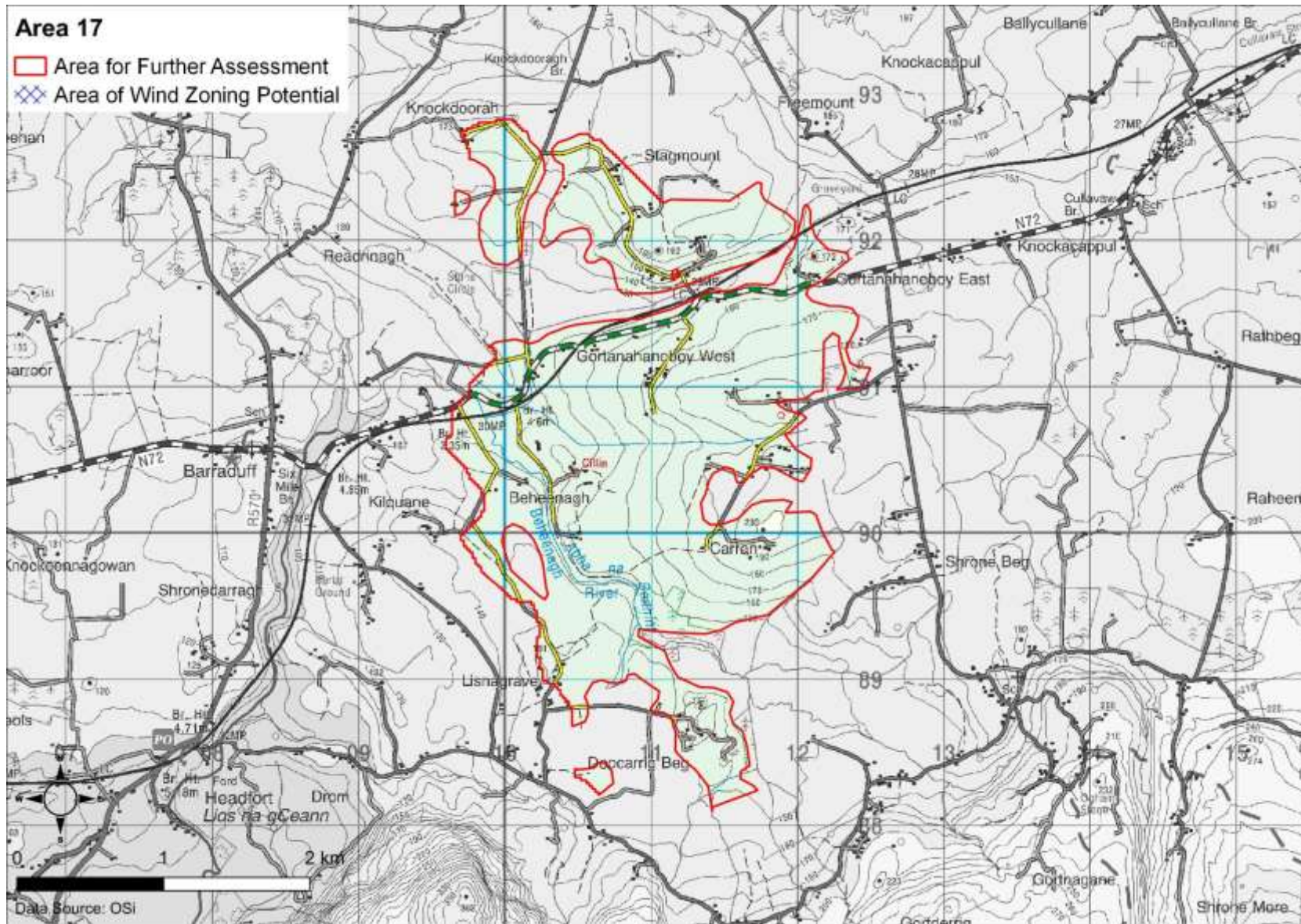
This area provides a setting to the Paps Mountains to the south which are an archaeological landscape of International Significance.

The nature of this area is considered to be piecemeal if the location of existing infrastructure is taken into consideration.

This landscape is therefore sensitive to wind energy development, with no parts of the area considered to have wind energy potential.

Landscape in Area 17





Map 6.45: Area 17 for Further Assessment

Area 18

Size of Area

Is of sufficient size, 21.3km², to be considered for wind energy zoning.

Infrastructure

The 220kv transmission line is adjacent to the area and a 110kv transmission line can be found to the east. Ballynahulla substation is approx. 5km east of the area.

Population

Housing density is 11 houses per km², this would be low relative to other areas. Housing would follow the road network in the area.

Landscape Sensitivity

This area is located to the east and south of Scartaglin. The steeply sided river valleys create a sense of scale combined with the more elevated parts of the area. The ridges that dissect the river valleys separate the various parts of the area.

To the east of this area is a windfarm of 12 turbines (+1 not constructed).

This is a remote area, more so to the east, characterised by farming in the southern part of the area and by coniferous forestry plantations in the east.

The changes in elevation across the area this leads to the creation of views.

There is an existing wind farm in the eastern part of this area, with this part of the area having the capacity to accommodate further wind turbines. The western part of the area is more open where it would be harder to integrate wind turbines.

Conclusion

This landscape in the western part of the area is sensitive to wind energy development due to its topography and visibility over significant distances from the north, south and west.

The landscape in the eastern part of the area has some potential for wind energy development as it would adjoin an existing wind farm. Due to the existing turbines in the area, low population density and topography, it is considered to be 'open for consideration'.

Landscapes in Area 18



Area 19

Size of Area

Is of sufficient size to be considered for wind energy zoning, 171.5km².

Infrastructure

The 110kv transmission network passes through the area with substations at Oughtragh and Knockearagh.

Population

Housing density is 17 houses per km². This housing follows the extensive road network in the area which results in few parts of the area not being in close proximity to a residential dwelling.

Landscape Sensitivity

The western part of the area provides a setting for MacGillycuddy's Reeks. The Reeks on the southern side of the area provide scale to what is a large area. The eastern part of the area is elevated but to a lesser extent. The central part of the area contains a low undulating landscape as there are a number of river valleys and small hills in the area. The area also extends to the start of Castlemaine Harbour between Killorglin and Milltown.

As the area is large and mostly flat, it results in the landscape having a greater ability to relate to larger turbines.

The Reeks give the area a dramatic backdrop. The area is a farming landscape interspersed with housing, it therefore shows signs of human modification.

There are views from the N72 and N22 southwards to the Reeks, with views of the Reeks from large parts of the area.

There are views & prospects in the Kerry County Development Plan from the N72 in a southerly direction across the River Laune to MacGillycuddy's Reeks, with views & prospects also found on the N22, and on the N70 outside Killorglin in this direction. The R561 from Inch to Castlemaine and the N70 also forms part of the Wild Atlantic Way.

The southern part of the area provides a setting for MacGillycuddy's Reeks and Killarney where it would be difficult to integrate wind turbines. The undulating nature of the remainder of the nature, and areas close to the coastal, would also render it difficult to accommodate wind energy development.

Conclusion

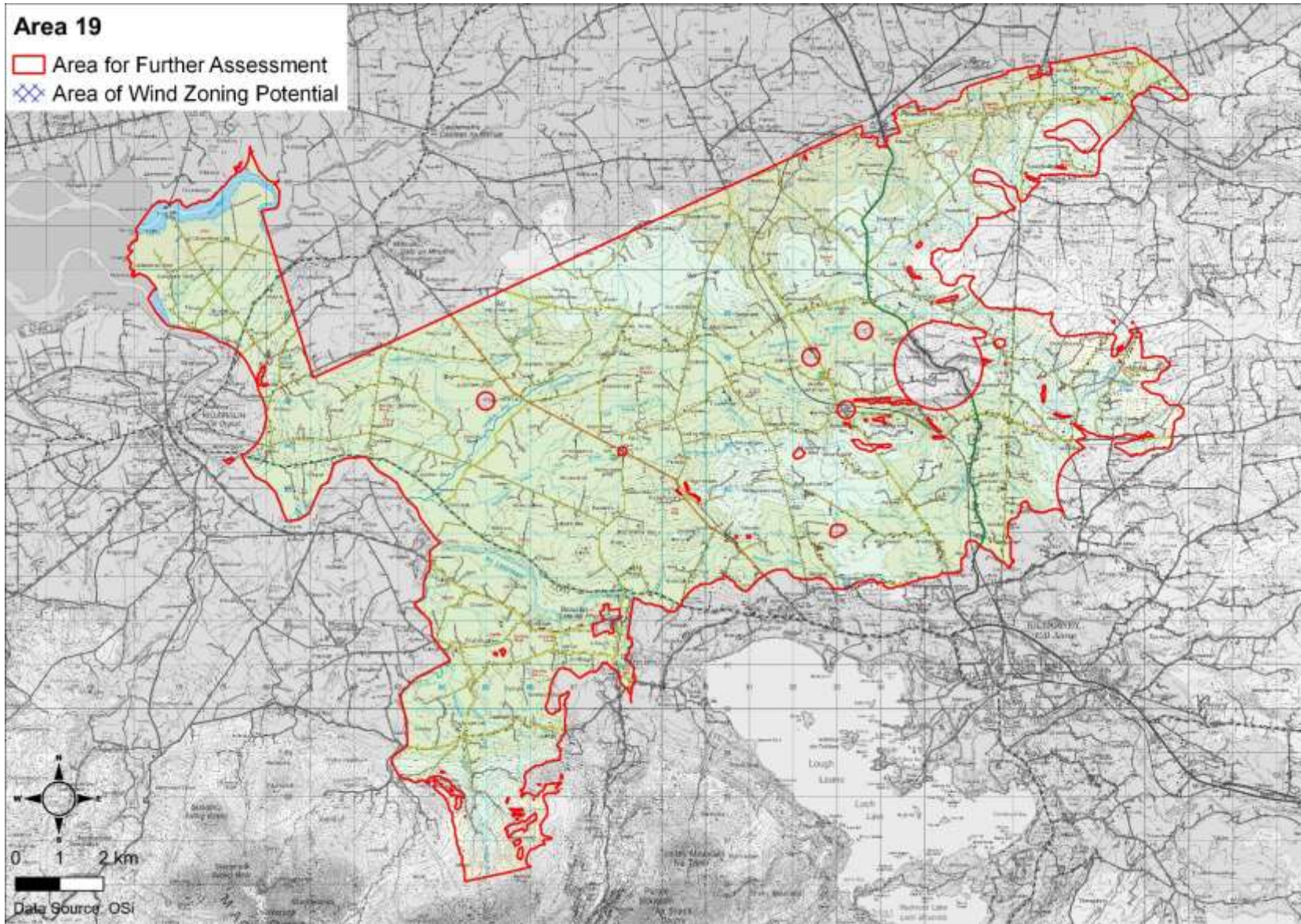
The southern part of the area provides a setting to MacGillycuddy's Reeks which contain Ireland's highest mountains, views of which are necessary to protect. The area includes the densely populated hinterlands of Killarney and Killorglin which would not be suited to wind energy development. The northern part of the area is in close proximity to Kerry Airport. The eastern part of the area includes the N22 which combined with route options being considered for its upgrade, would not make this area suitable for wind energy zoning.

This landscape is therefore sensitive to wind energy development, with no parts of the area considered to have wind energy potential.

Landscapes in Area 19







Map 6.47: Area 19 for Further Assessment

Area 20

Size of Area

Is of sufficient size to be considered for zoning, 144.4km². Does contain some smaller parts, particularly in the area of the Slieve Mish Mountains.

Infrastructure

The 110kv transmission network is found in the area, with substations at Tralee, Reamore and Oughtragh.

Population

Housing density is 16 houses per km². Housing is located around Tralee, around the many villages in the area, and on the extensive network of roads in the area.

Landscape Sensitivity

This area is located between Tralee and Castleisland including an area between Farranfore and Castlemaine, and on the northern side of the Dingle Peninsula between Tralee and Camp. This area is surrounded by a ridge of hills to the north and west, with the area being in general the floor of very wide river valley. The landscape therefore is open as a result. As the area is large and mostly flat, it results in the landscape having a greater ability to relate to larger turbines. The area west of Tralee would be a coastal landscape on the slopes of the Slieve Mish Mountains.

The Slieve Mish Mountains are a distinctive landmark in close proximity to Tralee Bay.

This is a farming landscape which has been subject to long term modification. It is a settled landscape with Tralee to the west, and a number of other villages and towns in the area.

From the N70 there are views to the south as far as MacGillycuddy's Reeks and westwards to the sea. There are views of the Slieve Mish mountains from the Fieries-Castlemaine road (R561). The Wild Atlantic Way passes through Tralee and on to the Dingle Peninsula.

There are views & prospects in the Kerry County Development Plan on the N86 to the west of Tralee.

Having regard to the extent of completed and permitted developments to the north of this area in the Stack's Mountains, as per Step 3, it is considered that the northern part of this area has reached its capacity to absorb additional wind energy development.

Due to the setting that this area provides for Tralee and Tralee Bay, it would be difficult to integrate wind turbines.

Conclusion

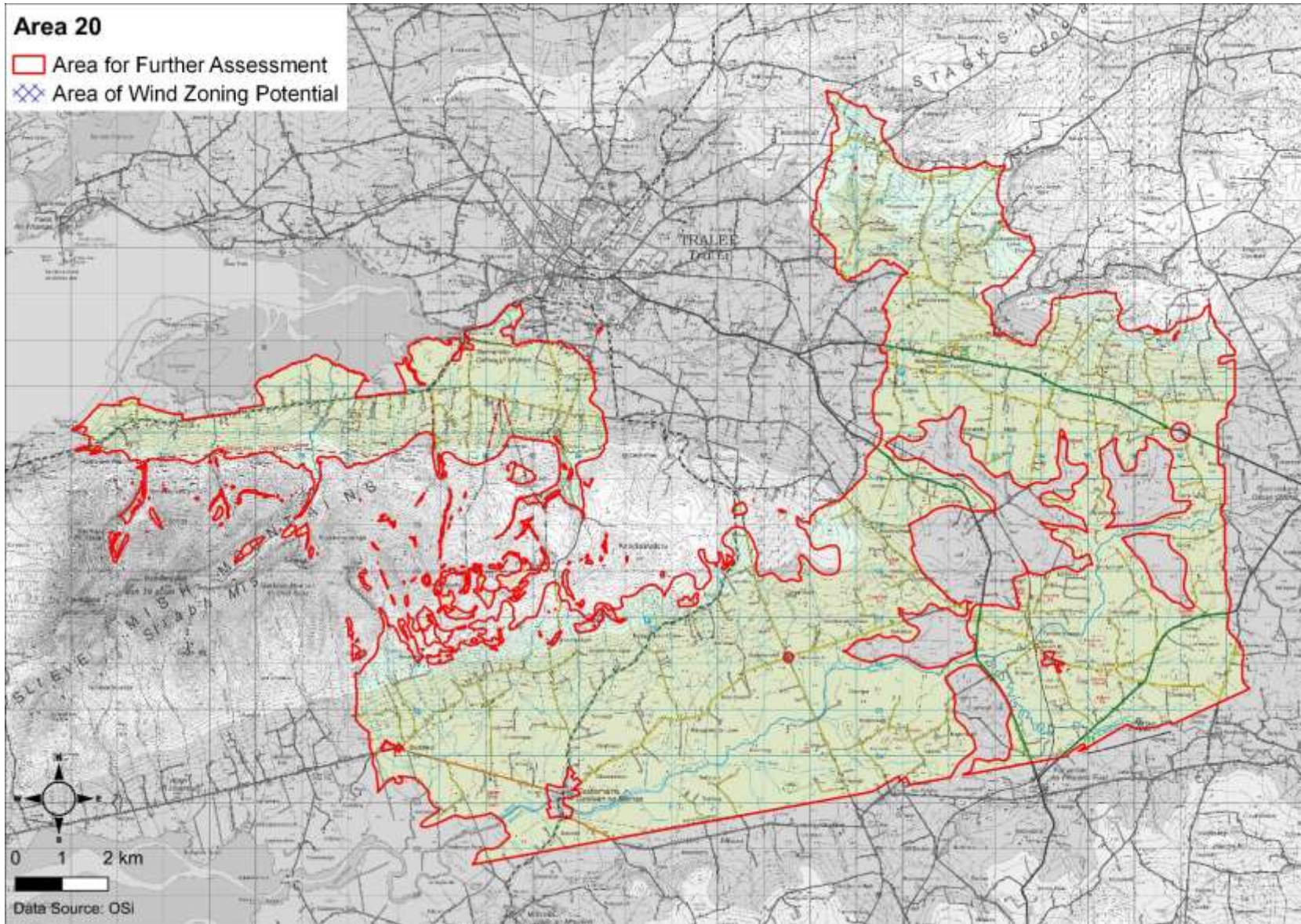
The western part of the area forms the setting for Tralee and the Slieve Mish Mountains which are an important landscape element on the Dingle Peninsula. The southern part of the area includes Castlemaine and its hinterlands, with the northeastern part of the area including the hinterlands of Castleisland. There is also a network of settlements extending across the area. The eastern part of the area is in close proximity to Kerry Airport. Infrastructure including the N21, N22, N23 and the Tralee-Dublin rail line pass through the central part of the area. The cumulative impact of wind turbines is also a key consideration in this area with 75 turbines located in the Stack's Mountains to the north.

This landscape is therefore sensitive to wind energy development, with no parts of the area considered to have wind energy potential.

Landscapes in Area 20







Map 6.48: Area 20 for Further Assessment

Area 21

Size of Area

Relative to some areas it is small but could be considered for wind energy zoning, it measures 16.6km².

Infrastructure

The 220kv transmission line passes through the area.

Population

The town of Castleisland borders the western side of this area. Housing density is 21 houses per km². Housing follows the road network with the proximity to Castleisland affecting the level of development.

Landscape Sensitivity

This area is surrounded by a ridge of hills, enclosing the Shanowen/Maine rivers to the east of Castleisland. This is a farming landscape which has been subject to long term modification.

Surrounding most of the area is high ground from which there are views down into the area and across it. Similarly, from the lower parts of the area there are views upwards.

Views & prospects in the Kerry County Development Plan are found at Mount Eagle in this direction.

Due to the setting that this area provides to Castleisland, and views afforded from the viewing point at Crag, it would be difficult to integrate wind turbines.

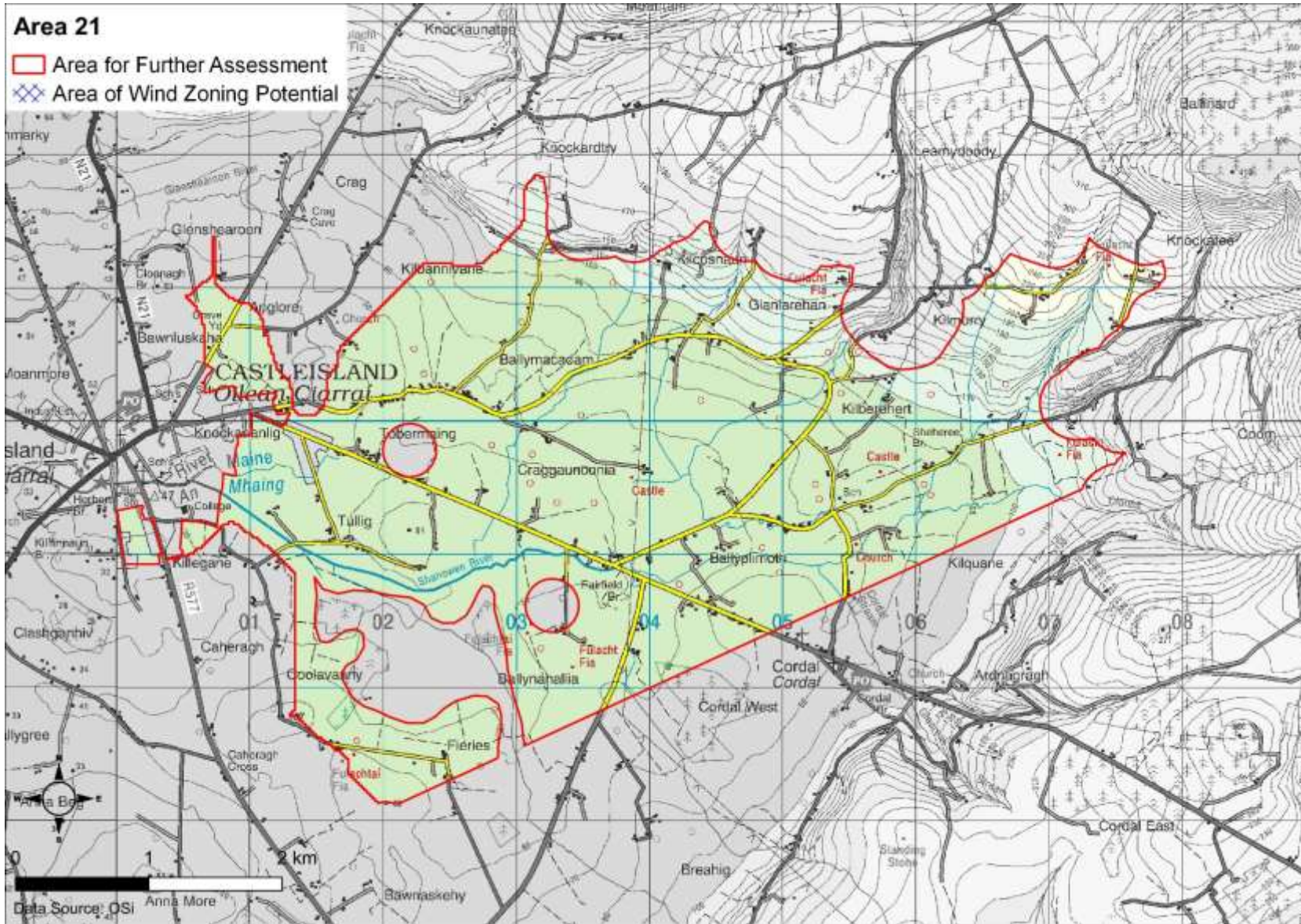
Conclusion

This is a relatively small area which is located between Castleisland and the village of Cordal. Development in this area, particularly around Castleisland town would be difficult due to impacts on a large urban population. The viewing point on the N21 at Glounsharoon is a unique viewing point in the County as it provides the first views of MacGillycuddy's Reeks to the south and the Slieve Mish Mountains to the west for visitors.

This landscape is therefore sensitive to wind energy development, with no parts of the area considered to have wind energy potential.

Landscape in Area 21





Map 6.49: Area 21 for Further Assessment

Area 22

Size of Area

Is of sufficient size to be considered for zoning, 86.7km². It does contain some smaller parts.

Infrastructure

The 110kv and 220kv transmission networks pass through the area with substations at Trien and Knockanure.

Population

Housing density is 11 houses per km². Housing would generally be located along the River Feale near Duagh and around Knocknagoshel to the south.

Landscape Sensitivity

This area is located to the southeast of Listowel, between the Stack's Mountains and the border with Limerick.

The River Feale Valley is a distinctive landform and is a unique feature in the county. The river valleys in the area create a sense of enclosure. The landscape is characterised by river valleys that are orientated north/south flowing in the direction of the River Feale. These valleys are separated by higher ground which is c.200m in height.

Human intervention exists in a number of ways including, roads, housing, wind turbines, and the use of the land, be it for agriculture or coniferous forestry impacting higher parts of the landscape. The area is remote in terms of its distance from the main settlements in the county and in the manner in which it is cut off from the rest of the county by high ground. The northeastern part of the area is close to the town of Listowel, with the central part of the area close to Abbeyfeale in Co. Limerick. There are tracts of coniferous forestry in the area which has affected its naturalness.

There are views & prospects in the Kerry County Development Plan on the N21, on both sides of the River Feale., and on the eastern side of the Smearlagh Valley with the elevated nature of these roads contributing to the views.

The Stack's Mountains screen this area from wider views which would allow for wind turbines to be accommodated in part of the area. The River Feale Valley and its scenic qualities would not allow for wind turbines to integrate successfully.

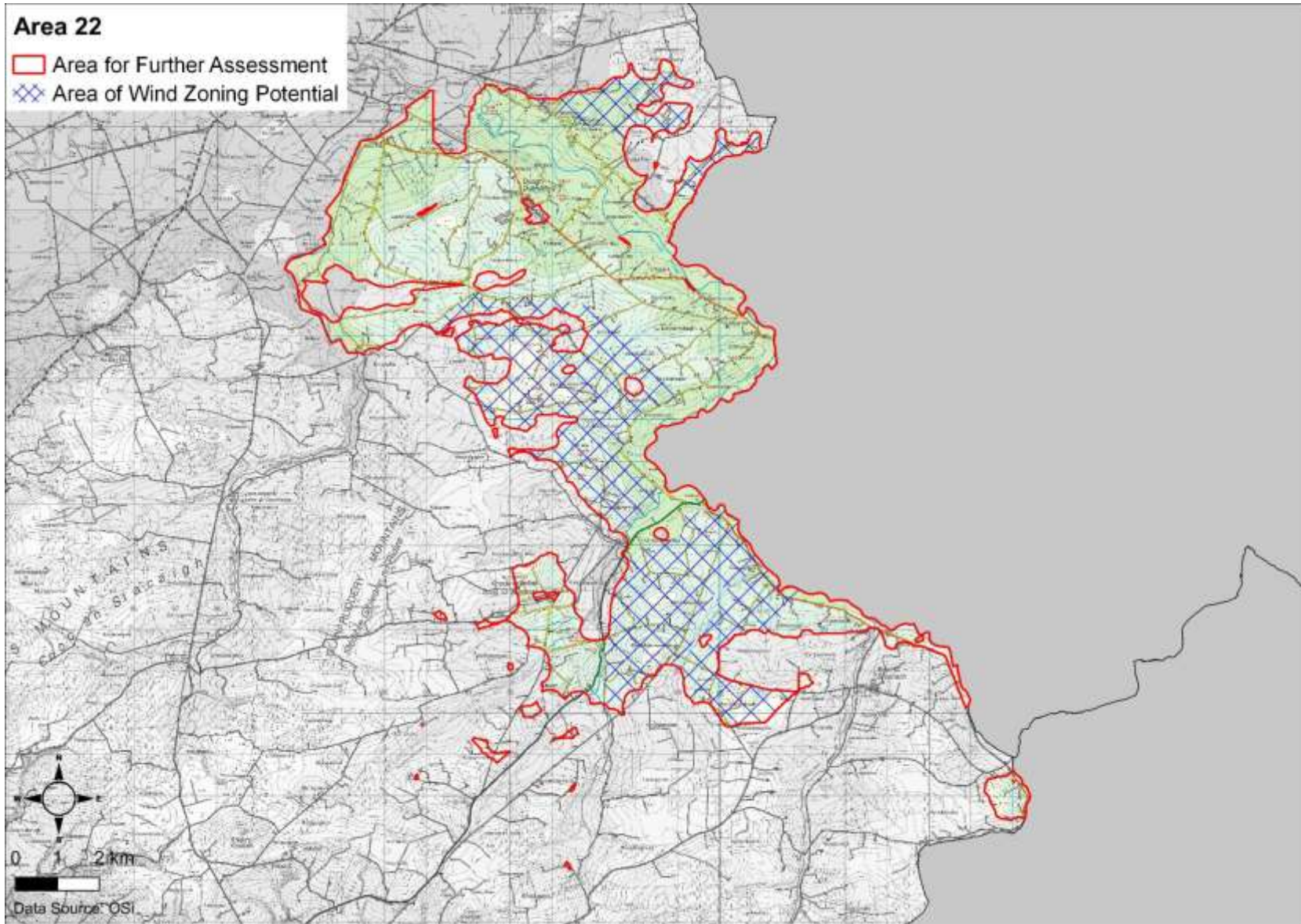
Conclusion

This landscape in the northern part of the area along the River Feale would be sensitive to wind energy development due to the scenic value of this area. The area around Knocknagoshel would also be sensitive to wind energy development due to the level of residential development around the village.

An area on the northern boundary maintains a level topography, is devoid of significant levels of dwellings and borders an area in County Limerick where wind energy development is open to consideration. Areas to the south have a low level of population, with landuse consisting of forestry, farm land and some marginal lands, and where topography is suited to wind energy development. The landscape in these areas is therefore considered to have potential for wind energy development. As there are existing windfarms to the north, south and southeast of the area, the cumulative impact of these combined with any proposed development would have to be carefully considered.

Landscapes in Area 22





Map 6.50: Area 22 for Further Assessment

Area 23

Size of Area

Is of sufficient size to be considered for zoning, 54.3km².

Infrastructure

The 110kv transmission network passes through the area with a substations at Tralee.

Population

Housing density is 36 houses per km². The area includes the environs of Tralee with housing stretching along the road network towards Ardfert and Fenit, including all areas in between.

Landscape Sensitivity

This area is located between Tralee, Fenit and Ardfert. It therefore includes the environs of Tralee and a stretch of coastline from Tralee to Barrow. The Stack's Mountains are located to the east of the area. The area around Ardfert is generally flat with a low ridge between Ardfert and Tralee.

The landscape has been modified by the number of constructed elements found within it. With the number of houses, and other elements such as farming and wind turbines to the east, this area shows signs of modification. It is an open landscape with wide vistas across the area influenced by its topography. Landcover also contributes to its openness.

With the R558 along the coast there are views of the coast towards the Dingle Peninsula, with views from the R551 northwards due to its higher elevation than the lands to the north.

Views & prospects in the Kerry County Development Plan are found on the R558 and in the Barrow area. The coast road is part of the Wild Atlantic Way. Discovery points can be found in Banna and Fenit.

Having regard to the extent of completed and permitted developments to the east of this area in the Stack's Mountains and the proximity of this area to same, as per Step 3, it is considered that the majority of this area has reached its capacity to absorb additional wind energy development.

This is an open landscape with wide ranging views, also including scenic coastal areas, which would not allow for the successful integration of wind turbines.

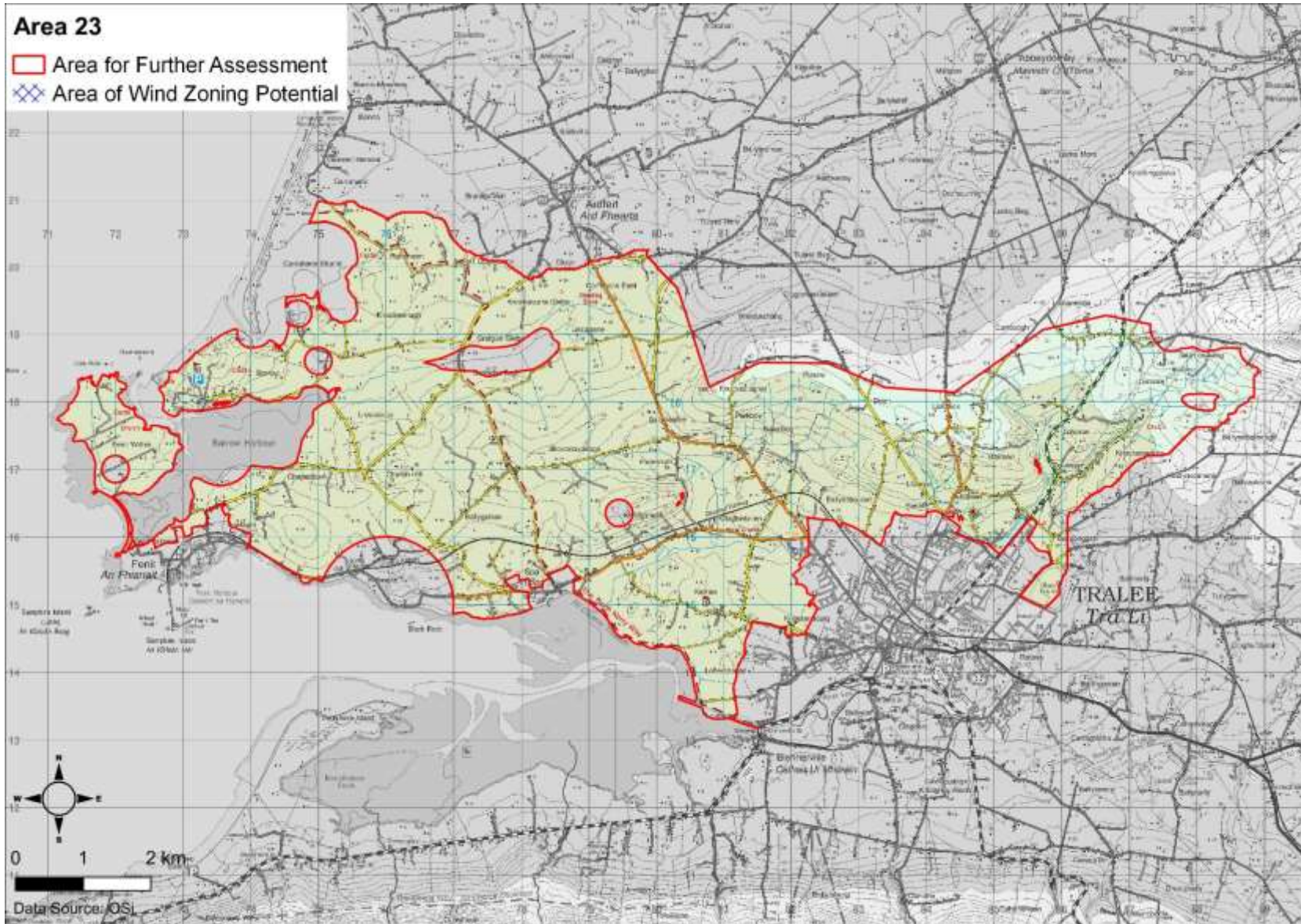
Conclusion

This area has a dense network of road with associated housing development in close proximity to Tralee. It is the most densely populated of all areas assessed. It contains a number of settlements. The western part of the area is an open coastal landscape where the integration of wind turbines into the landscape would be difficult.

This landscape is therefore sensitive to wind energy development, with no parts of the area considered to have wind energy potential.

Landscapes in Area 23





Map 6.51: Area 23 for Further Assessment

Area 24

Size of Area

Is of sufficient size to be considered for zoning, 148.1km².

Infrastructure

The 110kv transmission network passes through the area with substations at Clahane and Tralee.

Population

Housing density is 16 houses per km². Housing is located along the road network and in the area around Listowel with areas not within close proximity of a dwelling limited.

Landscape Sensitivity

This area is located between Tralee and Listowel, to the west of the N69. It extends as far as the coastline at Ballyheigue and Banna. The area is large and contained by the Stack's Mountains to the southeast. These hills therefore provide a measure of scale in the southern part of the area, but the remainder of the area is generally flat. As the central part of the area is large and mostly flat, it results in the landscape having a greater ability to relate to larger turbines.

The landscape has been modified by the number of constructed elements found within it. With the number of houses, and other elements such as forestry, farming, and wind turbines to the southeast, this area shows signs of modification. It is an open landscape with wide vistas across the area influenced by its topography. Landcover also contributes to its openness.

With areas of high ground to the south, with the N69 national secondary road linking Tralee to Listowel in the area, it allows for wide ranging views to the north. Views & prospects in the Kerry County Development Plan on the eastern side of the Smearlagh valley in a westerly direction, and there are also views & prospects along the coast. The coast road is part of the Wild Atlantic Way. Discovery points can be found in Ballyheigue and Banna.

The eastern part of the area is in close proximity to 95 existing wind turbines. Having regard to the extent of completed and permitted developments to the east of this area in the Stack's Mountains and to the north, as per Step 3, it is considered that the majority of this area has reached its capacity to absorb additional wind energy development.

This is an open landscape with wide ranging views, also including scenic coastal areas, which would not allow for the successful integration of wind turbines.

Conclusion

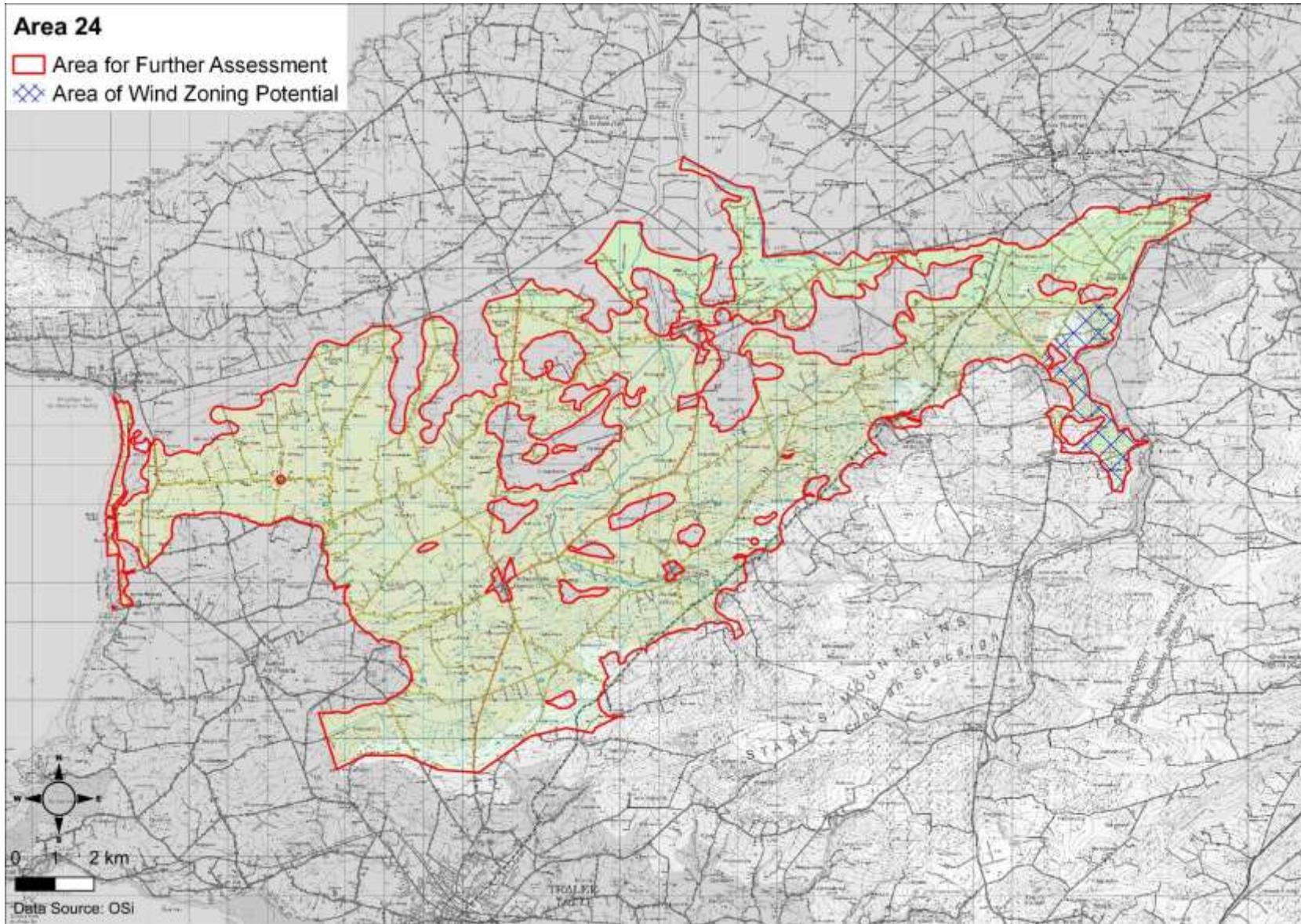
Wind turbines would impact on the heritage of the area which includes the nearby Rattoo Tower, the only round tower in the county. Other impacts include visual impact on an open landscape and impacts on population. Wind energy development in this area is therefore considered to be unsuitable for a number of reasons. This landscape is therefore sensitive to wind energy development, with the majority of the area not considered to have wind energy potential.

A limited area close to the eastern boundary has some potential for wind energy development as it would be a landscape that is linked to Area for Further Assessment 22, it has low population levels, and its topography, it is considered to be 'open for consideration'.

Landscapes in Area 24







Map 6.52: Area 24 for Further Assessment

Area 25

Size of Area

Is of sufficient size to be considered for zoning, 101.3km².

Infrastructure

The 110kv transmission network passes through the area with substations at Clahane and Tralee.

Population

Housing density is 18 houses per km². Housing is located around Ballyheigue, Ballyduff and Causeway, and all areas in between.

Landscape Sensitivity

This area is located on the northern coast of the county, stretching from Kerry Head to the Cashen River. Topography rises up to a high point on Kerry Head, with the area along the coast higher than areas to the south.

The landscape has been modified by the number of constructed elements found within it. With the number of houses, and other elements such as forestry and farming, this area shows signs of modification. It is an open landscape with wide vistas across the area influenced by its topography. Landcover also contributes to its openness.

With the area being higher than lands to the south, it allows for wide ranging views in that direction.

Views & prospects in the Kerry County Development are located along extensive stretches along the coast. The coast road is part of the Wild Atlantic Way. Discovery points can be found in Ballyheigue.

It includes Rattoo Tower, the only round tower in the county.

This is an open landscape, higher than areas around it, with wide ranging views, also including scenic coastal areas, which would not allow for the successful integration of wind turbines.

Conclusion

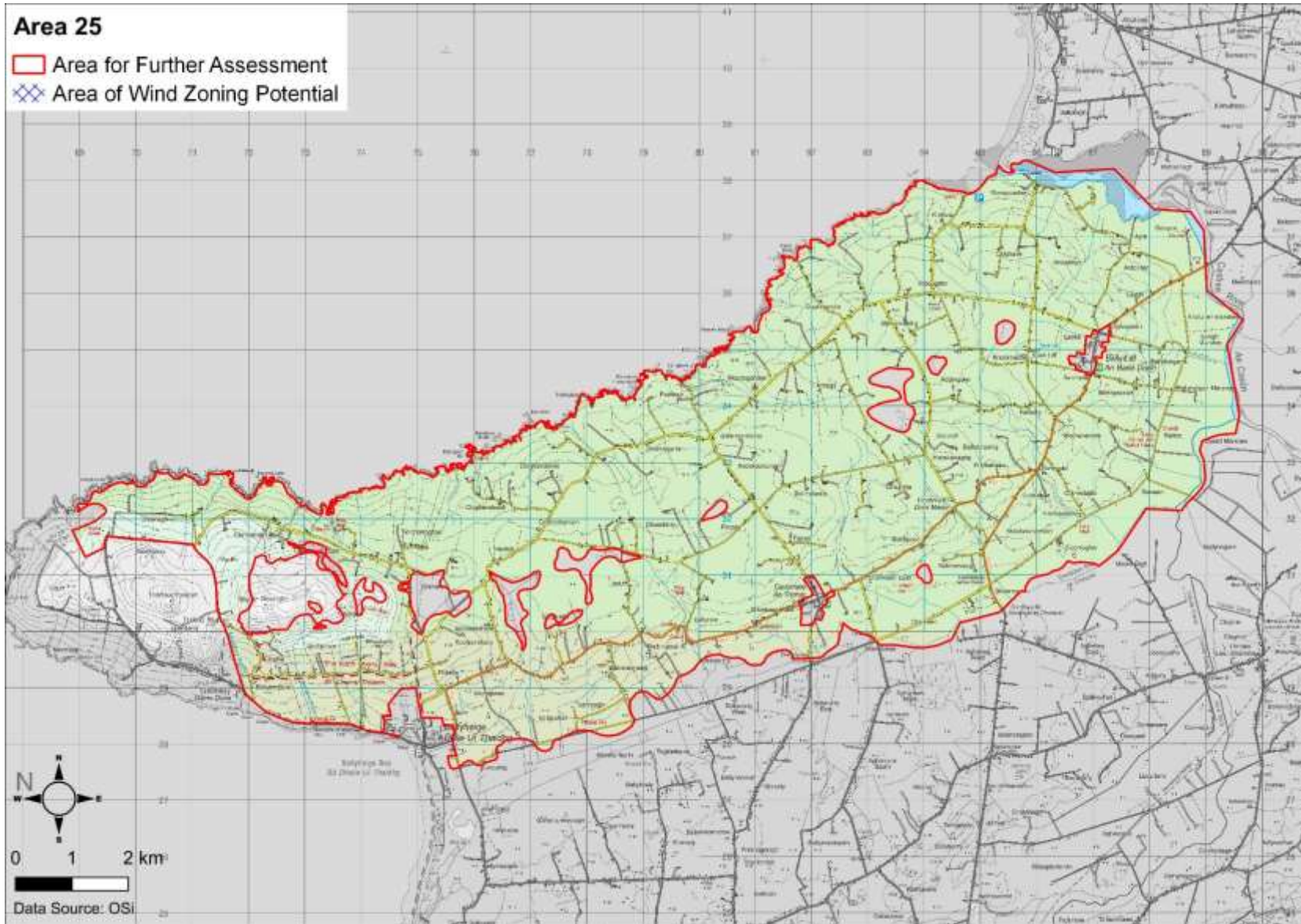
This is a coastal landscape of high scenic value. Development of wind turbines in this area would be visible from large parts of North Kerry and would interfere with the landmark in the landscape that is Kerry Head. Wind turbines in the eastern part of the area would impact on the heritage of the area which includes Rattoo Tower, the only round tower in the county.

This landscape is therefore sensitive to wind energy development, with no parts of the area considered to have wind energy potential.

Landscapes in Area 25







Map 6.53: Area 25 for Further Assessment

Area 26

Size of Area

Is of sufficient size to be considered for zoning, 146.1km². Does contain some smaller parts.

Infrastructure

The 110kv transmission network runs along the eastern edge of the area.

Population

Housing density is 15 houses per km². Housing is located around the towns of Ballybunion and Listowel.

Landscape Sensitivity

This area is located on the northern side of the Listowel to Ballybunion Road, extending from there to the Shannon Estuary including Knockanore and Beal. Knockanore (267m) is a very distinctive feature in the northwestern part of the area, with the remainder of the area being flat in nature.

The landscape has been modified by the number of constructed elements found within it.

With the number of houses, and other elements such as forestry, farming, and wind turbines, this area shows signs of modification.

It is an open landscape with wide vistas across the area influenced by its topography. Landcover also contributes to its openness.

There are views & prospects in the Kerry County Development Plan eastwards from a local road on the western side of Knockanore, and along the coast. The R551 to the west of the area is part of the Wild Atlantic Way, with Discovery Points located at Carrigafoyle Castle, Beal Strand, and Ballybunion Beach.

Having regard to the extent of completed and permitted developments in this area, as per Step 3, it is considered that this area has reached its capacity to absorb additional wind energy development.

Due to the open nature of this area, and its scenic coastline, it would be difficult to integrate wind turbines into this area.

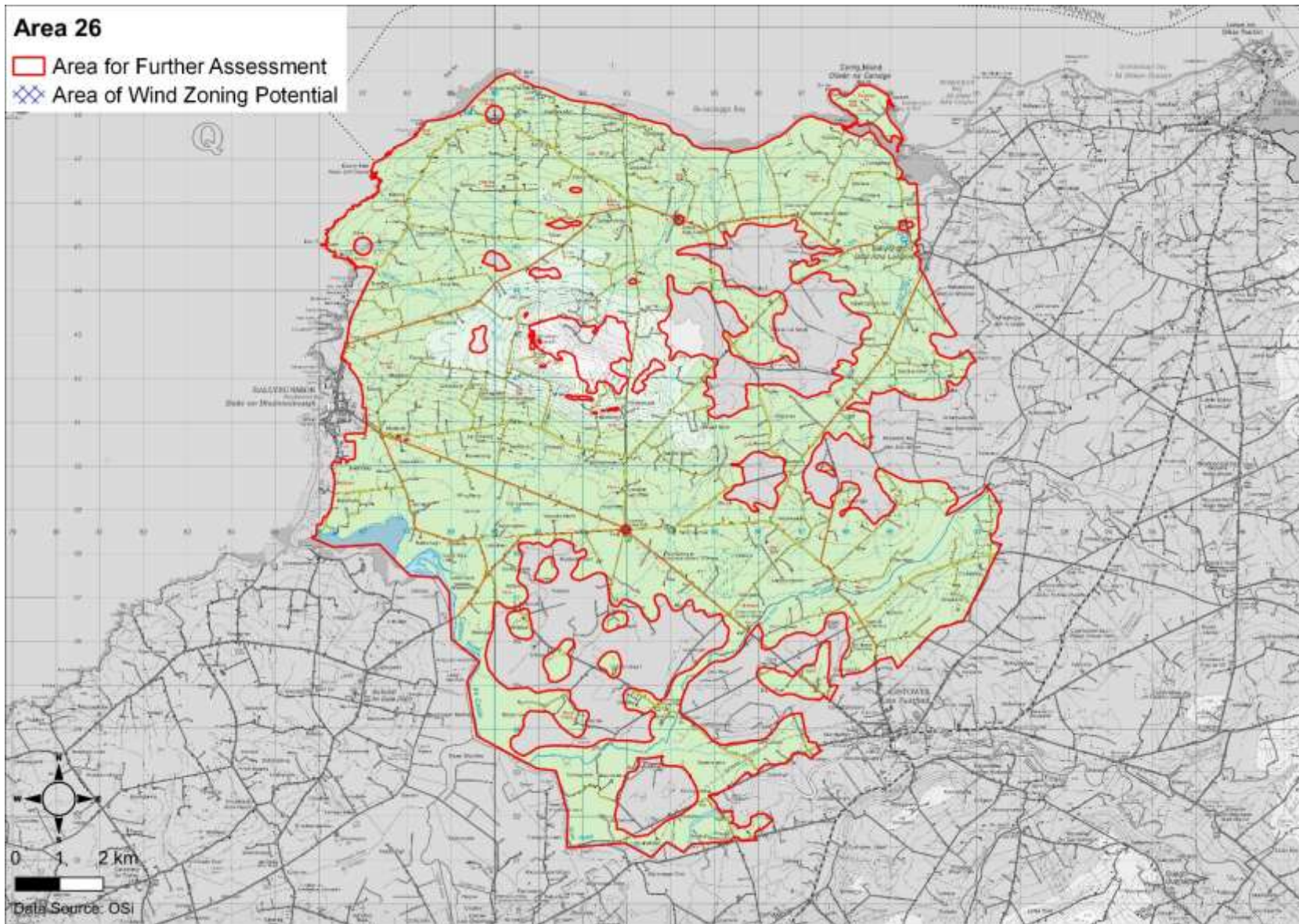
Conclusion

The coastal part of this area is of high scenic value, stretching from Ballybunion to Ballylongford. Knockanore Mountain is also considered to be an importantly unique feature in this landscape. Its protection as a landmark from additional wind farm development is therefore warranted.

This landscape is therefore sensitive to additional wind energy development, with no parts of the area considered to have further wind energy potential.

Landscapes in Area 26





Map 6.54: Area 26 for Further Assessment

Area 27

Size of Area

Is of sufficient size to be considered for zoning, 97.0km².

Infrastructure

The 110kv and 220kv transmission network passes through the area. The area is located between the Kilpaddoge and Knockanure substations.

Population

Housing density is 13 houses per km². Housing is located along the road network with the area containing a number of settlements.

Landscape Sensitivity

This area is located to the north of Listowel and extends northwards from Listowel to the Shannon Estuary on both sides of the N69. The western part of the area is flat in nature with little change in relief. Lands rise on the eastern boundary of the area. In between there are a number of rivers, the Galey River being the most significant, but these rivers have minimal impact on the landform.

The landscape has been modified by the number of constructed elements found within it, including Tarbert Power Station to the north. Some natural areas still exist, for example Bunnaruddee Bog. It is an open landscape with wide vistas across the area influenced by its topography. Landcover also contributes to its openness. Part of the area borders the Shannon Estuary and contains the Tarbert / Ballylongford Land Bank which is zoned for industry in the Development Plan.

There are views & prospects in the Kerry County Development Plan near Ballylongford. The R551 is part of the Wild Atlantic Way. The Tarbert to Killimer Ferry to the east and Carrigafoyle Castle to the west are Discovery Points on the Wild Atlantic Way.

Having regard to the extent of completed and permitted developments to the west of this area, as per Step 3, it is considered that the western part of this area has reached its capacity to absorb additional wind energy development.

Part of this area provides a setting to Listowel, with part of the area bordering the scenic Shannon Estuary, it would be difficult to integrate wind turbines in these areas. The hills on the eastern side of the area provide a measure of scale that would allow for some wind energy development.

Conclusion

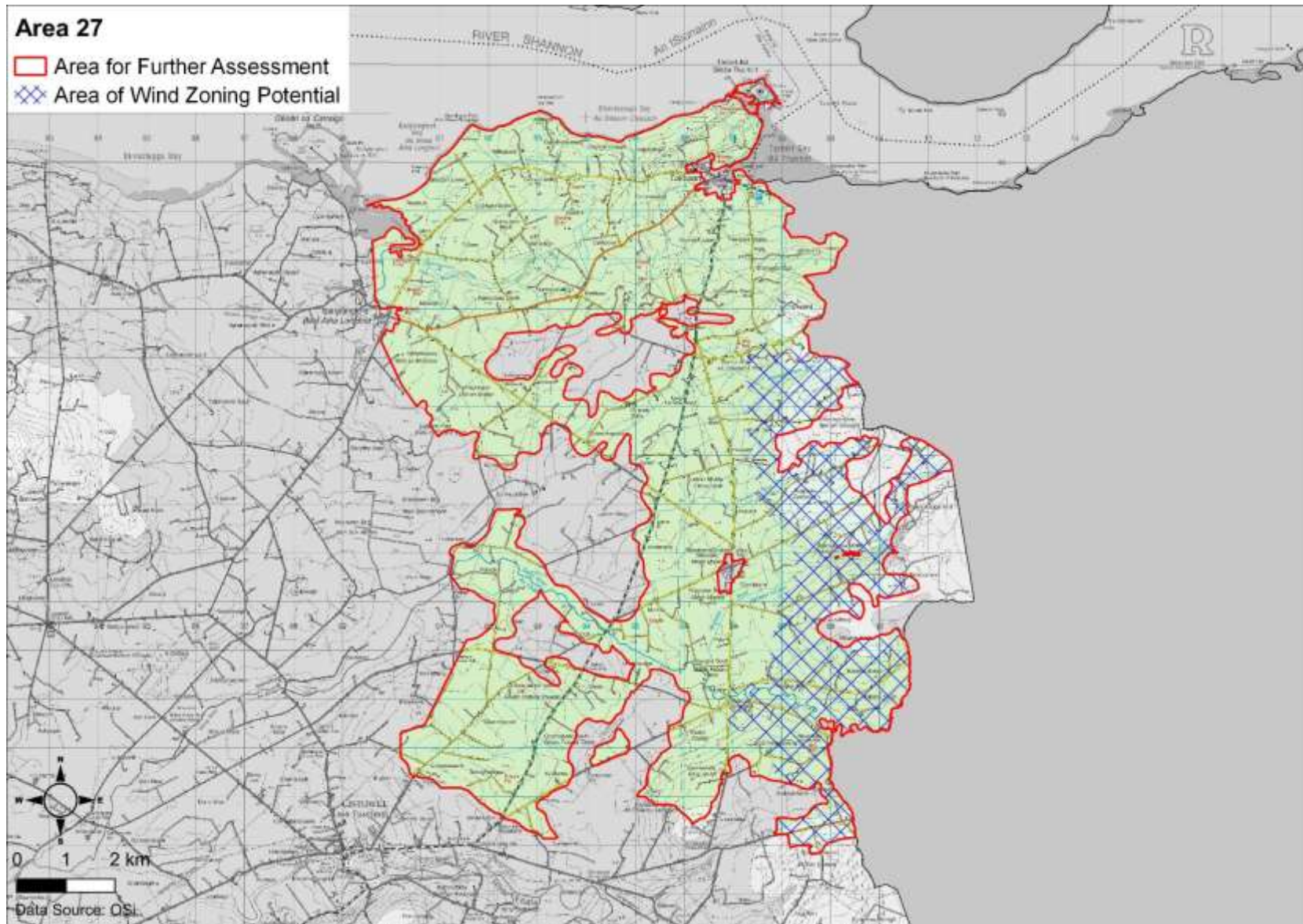
The cumulative impact of additional wind development in conjunction with existing and permitted wind farms in the western part of the area is significant and would have a negative impact on the character of the landscape. This landscape in the western part of the area is therefore sensitive to additional wind energy development.

The area on the eastern boundary has suitable topography which provides a measure of scale and a backdrop, is devoid of significant levels of dwellings and borders an area in County Limerick where wind energy development is open to consideration. The landscape in this area is therefore considered to have potential for wind energy development.

Landscapes in Area 27







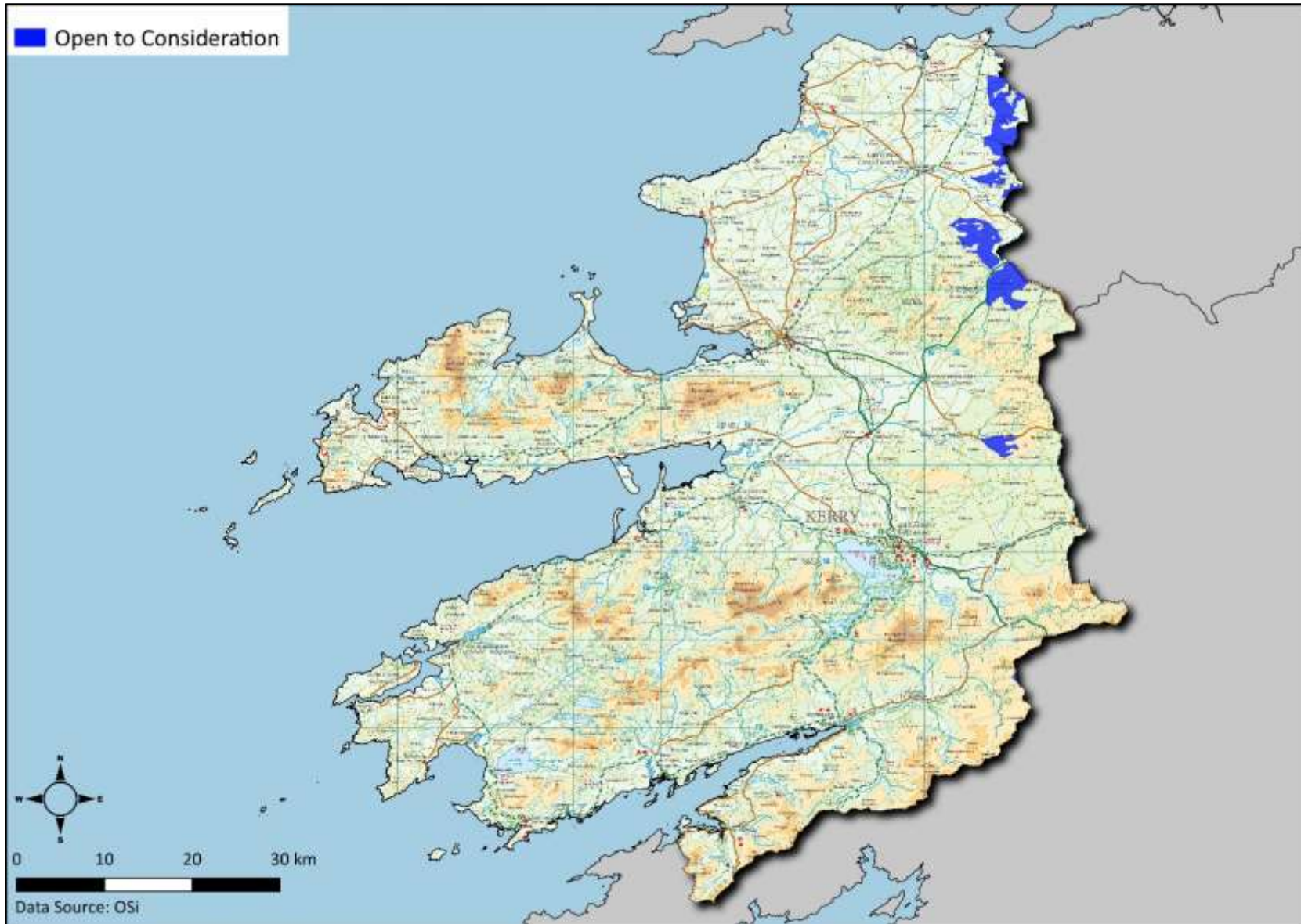
Map 6.55: Area 27 for Further Assessment

Areas for Further Assessment Conclusion

Each of the 27 areas have been analysed comprehensively with potential for wind energy identified in 4 of the areas.

Step 5 – Wind Energy Policy Review

Steps 1-4 have been overlaid to identify areas 'open to consideration' (see Map 6.56).



Map 6.56: Proposed Wind Energy Zoning

Reference Documents

These documents are referenced in this document or have informed its preparation.

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Addendum - Kerry County Development Plan Wind Farm Development Policy Review and the Stacks to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA Environmental Assessment Unit Strategic Policy Recommendation

Existing land use policy and context

The Stacks to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is partly located within the County of Kerry, the remainder located within Limerick and Cork. Existing Kerry County Council land use policies and objectives prohibit the consideration Wind Farms within the Stacks to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA. No turbines have been permitted within by the KCC in this SPA since 2014. The current Cork County Development Plan outlines that wind developments are ‘normally discouraged’ while the current Limerick County Development Plan outlines that wind developments are ‘open to consideration’ within the SPA. In all cases, project level Article 6 Habitats Directive Assessments are required, where necessary.

The other main land uses in the SPA are forestry, which is largely coniferous in nature and agriculture predominantly consisting of cattle grazing on semi-natural wet. In this regard the following are of relevance:

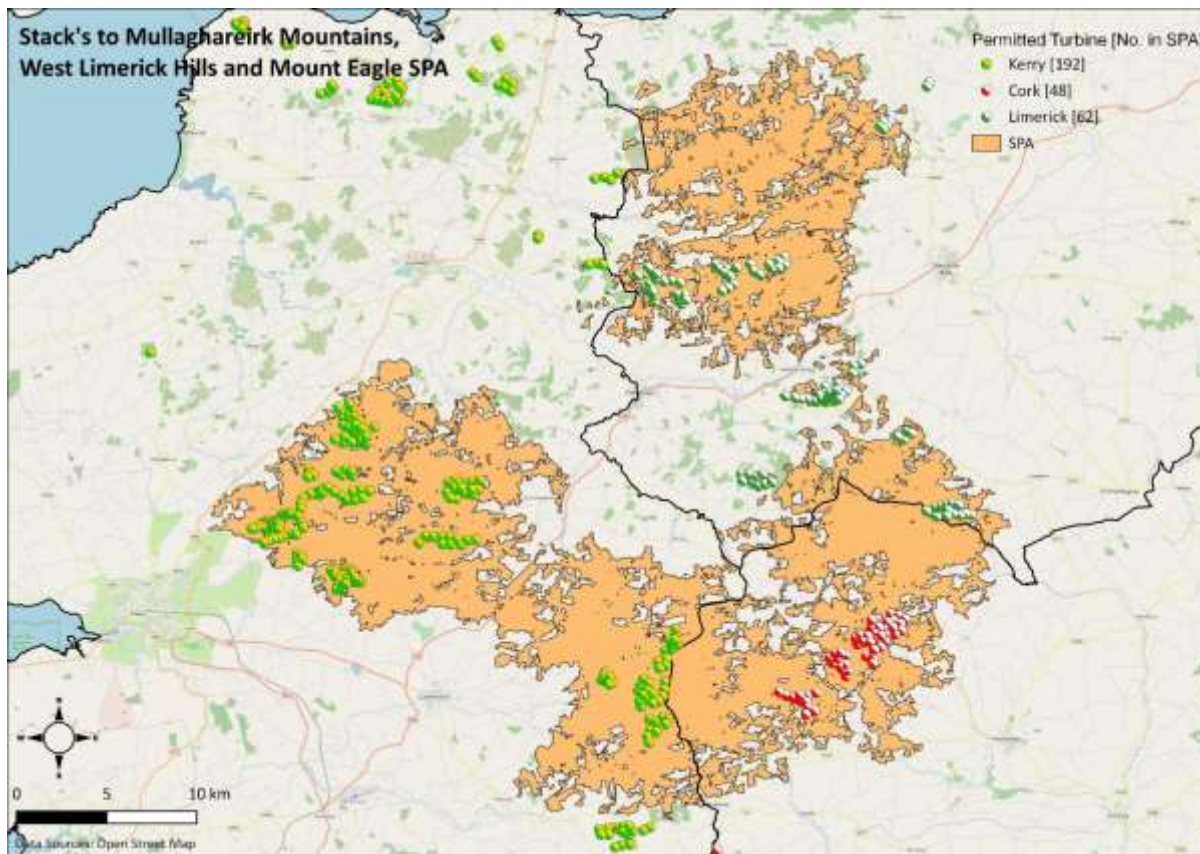
<p>Hen Harrier Threat Response Plan (under preparation)</p>	<p>To tackle the decline in Hen Harrier populations in Ireland, a process has been underway since 2015 to develop a ‘Threat Response Plan’. This process is led by the Department of Culture, Heritage and the Gaeltacht and focuses on the key land uses of agriculture, forestry and wind farm development. The plan seeks to address pressures facing populations within those SPAs designate for breeding Hen Harrier, and also issues facing the species within the wider countryside.</p>
<p>Hen Harrier (Farm) Project⁶</p>	<p>The Hen Harrier Project is a 5-year EIP (European Innovation Partnership) Locally Led Project. This is a results and action based project, which incentivises farmers to improve the SPA’s management and conservation condition for the Hen Harrier. The Project is co-funded by the EU and Dept. of Agriculture, Food and the Marine as part of Ireland's Rural Development Programme 2014-2020. To date this program has produced monitoring reports for 2016 to 2020 inclusive.</p>
<p>GLAS Agricultural Scheme</p>	<p>Conservation of the Hen Harrier is a priority action under GLAS (Green Low-carbon, Argi-environmental Scheme) and farmers in the SPA have priority access to Glass. Farmers with Hen Harrier habitat qualified automatically for GLAS under Tier one, with some of the highest per hectare payments - €370 per hectare capped at €5,000 per annum and with automatic qualification for GLAS plus should they manage sufficient habitat. GLAS plus brings potential payment up to €7,000 per annum. There are currently 2,674 farmers covering 42,216 hectares of habitat in GLAS taking the Hen Harrier action. This represents nearly 70% of all farmers with Hen Harrier land.</p>
<p>Forests, products and people Ireland’s forest policy – a renewed vision (2014)</p>	<p>The Strategic Goal of this document is outlined to be ‘to develop an internationally competitive and sustainable forest sector that provides a full range of economic, environmental and social benefits to society and which accords with the Forest Europe definition of sustainable forest management’. It includes a number of policies and actions including environmental commitments.</p> <p>The document outlines that the Forest Service is currently engaged in specific initiatives regarding Freshwater Pearl Mussel (FPM) and Hen Harrier, both of which are species of high conservation value and under significant threat. Further details are set out in the document entitled Environmental Report on the Forest Policy Review.</p>

⁶ <http://www.henharrierproject.ie/>



Existing Wind Development in the SPA

Within the functional area of Kerry County Council (KCC) 192 turbines are permitted within the SPA of which 190 are constructed. The majority of those permitted by Cork and Limerick County Councils in the SPA have similarly being constructed. In total there are approx. 302 turbines permitted in the SPA – the vast majority of which are constructed. No wind turbine has been permitted by KCC in the SPA since 2014.



Map 6.57: Permitted wind turbines in the vicinity of the Hen Harrier SPA

Hen Harrier Population Data

The latest Hen Programme Hen Harrier Monitoring Report (November 2020) provides an overview of the breeding Hen Harrier population in the Country’s SPA Network to 2020. The report outlines that the Stack’s to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA has undergone a serious population decline since designation, however the population appears to have stabilised, albeit at a lower level.

In 2020 there were a total of 58 confirmed territories and 4 possible breeding pairs of Hen Harrier within the SPAs (a population range of 58 – 62 pairs). This is slightly less than the total numbers of territorial pairs recorded within the SPAs in 2017 (70 pairs); 2018 (68 pairs); and 2019 (63 pairs).

The relationship between types of impacts on birds and the project lifecycle for onshore wind energy developments.

The following table is published in the European Commission notice (November 2020) Guidance document on wind energy developments and EU nature legislation. It provides an overview of the relationship between types of impacts on birds and the project lifecycle for onshore wind energy developments.



Types of impacts	Project phase				
	Pre-construction	Construction	Operation	Decommissioning	Repowering
Habitat loss and degradation		X	X	X	X
Disturbance and displacement	X	X	X	X	X
Habitat fragmentation		X	X	X	
Collision			X	X	
Barrier effect		X	X	X	
Indirect effects	X	X	X	X	X

Table 6.2: Relationship between types of impacts on birds and the project lifecycle for onshore wind energy developments

The main impact types on birds as identified above (Habitat loss and degradation, Disturbance and displacement, Habitat fragmentation, Collision, Barrier effect and Indirect effects are summarised in Box 5-11 of the EU guidance document.

Policy Review recommendation

Having regard to the Hen Harrier population decline within the SPA (and nationally) since designation and to the substantial number of existing and permitted Wind Turbines in the SPA, it is recommended that the SPA should continue to be excluded from consideration for additional wind farm development, save for repowering proposals. Areas within 250m of the SPA should be similarly be excluded given the potential for displacement and other impacts.

It is considered that it would be unreasonable to exclude consideration of repowering proposals within the SPA. Repowering proposals are likely to differ from new applications in so far as they may be able to avail of the existing infrastructure and accordingly may not result in direct habitat loss of value within Hen Harrier SPAs. While the impact of repowering proposals will depend on the local context, the overall Hen Harrier population health within the SPA, in relation to ‘Favourable Conservation Status’, is likely to be an underlying consideration at impact assessment stage. Such proposals should therefore be assessed on a case-by-case basis.

Repowering proposals may require grid upgrade works and / or transport upgrade works if taller turbines with greater capacity are proposed. In addition, displacement effects resulting from the unavailability of otherwise suitable habitat may still arise, as may disturbance risks (particularly during the construction stage) and collision risks (at the operational stage). In certain instances, wind farms have a requirement for pre and post construction monitoring of their effects upon adjacent protected habitats or species. In other cases, proactive habitat and species management measures were required. Data from same may further improve scientific understanding of potential impacts of wind farms on Hen Harriers and may provide evidence of use in assessing repowering planning applications.