

Chapter 10: Planning and Infrastructural Assessment

Strategic Aim:

To phase new development to ensure that it occurs in a sequential and efficient manner and in tandem with the delivery of supporting physical and social infrastructure.

10.1 Introduction

Appendix 3 of Project Ireland 2040; National Planning Framework (NPF) sets out a methodology for a two-tiered approach for zoning of land which is informed by an Infrastructural Assessment, which states that *'The potential for delivery of the required services and/or capacity to support new development must be identified and specific details provided by the Planning Authority at the time of publication of both the draft and final development or local area plan'*.

The NPF places an emphasis on the need for compact, smart and sustainable growth and requires 30% of all new housing to be within existing urban footprints (outside of the five cities), thus reducing the amount of greenfield land required to meet future housing requirements.

The NPF defines Tier 1 and 2 lands as follows;

'Tier 1: Serviced Zoned Land, comprising lands that are able to connect to existing development services for which there is service capacity available and can therefore accommodate new development; and

Tier 2: Serviceable Zoned Land, comprising lands that are not currently sufficiently serviced to support new development but have the potential to become fully serviced within the life of the plan.'

The NPF requires that where lands are identified as Tier 2 lands, the potential for delivery of the required services and/or capacity to support new development must be identified and specific details provided by the Planning Authority at the time of publication of the draft and final local area plan.

Table 10.2: titled 'Site Appraisals' evaluates the suitability of sites for zoning based on the principles of compact growth and sustainable mobility along with consideration of the availability of infrastructure and services and the physical suitability of the site. This Planning and Infrastructural Assessment (PIA) ensures that informed decisions are made as to whether or not to zone land or sites in this LAP for residential development and that the County Development Plan Core Strategy is supported.

10.2 Methodology

A review of potential sites within a defined study area is illustrated in Figure 10.1 below. A range of potential sites were identified which were further examined in terms of their suitability for development and zoning. Prior to this review a number of sites for assessment were omitted because they have extant permissions. Smaller infill sites within the town centre (under 1 ha in area) were also omitted from this PIA as their development would be in keeping with Offaly County Development Plan

and National Planning Framework policy and their development would have little bearing on existing services and infrastructure.

Advice was provided by relevant departments of Offaly County Council and external bodies in relation to;

- Any infrastructure deficits that would impede the development of lands;
- The current status of any plans/programmes in place to address these infrastructure deficits;
- The anticipated timeframe for the delivery of these projects.

As the NPF acknowledges that infrastructure and service availability is not the only criteria in determining the suitability of a site for development, it was decided to merge infrastructure and service availability with support for the principles of compact growth and sustainable mobility and the physical suitability of the subject site for development. A traffic light matrix has been developed in Table 10.2 titled 'Site Appraisals' in this regard that weighs adherence to the following criteria;

- Whether the zoning of the site for development promotes compact growth;
- Whether the zoning of the site for development promotes sustainable mobility;
- The availability of infrastructure and services on the site or in the vicinity of the site; and
- The physical suitability of the site for development, i.e. the contours and shape of the site, the accessibility of the site.

A green colour indicates strong adherence to the above criteria, an amber colour indicates medium adherence while a red colour indicates low adherence.

Whilst the Birr waste water treatment plant (WWTP) has limited capacity and IW have no proposals to expand the plant, having regard to the willingness of IW to facilitate the provision of necessary infrastructure through developer-led investment and the generally good service infrastructure (see Figure 10.3 below) in Birr and Crinkill, it is considered that the Local Plan Area in its entirety can be considered Tier 1 Lands in accordance with Appendix 3 of the NPF.

17 potential sites were identified within the study area, which are mapped in Figure 10.1 and described in Table 10.1 'List of Sites Assessed' below.

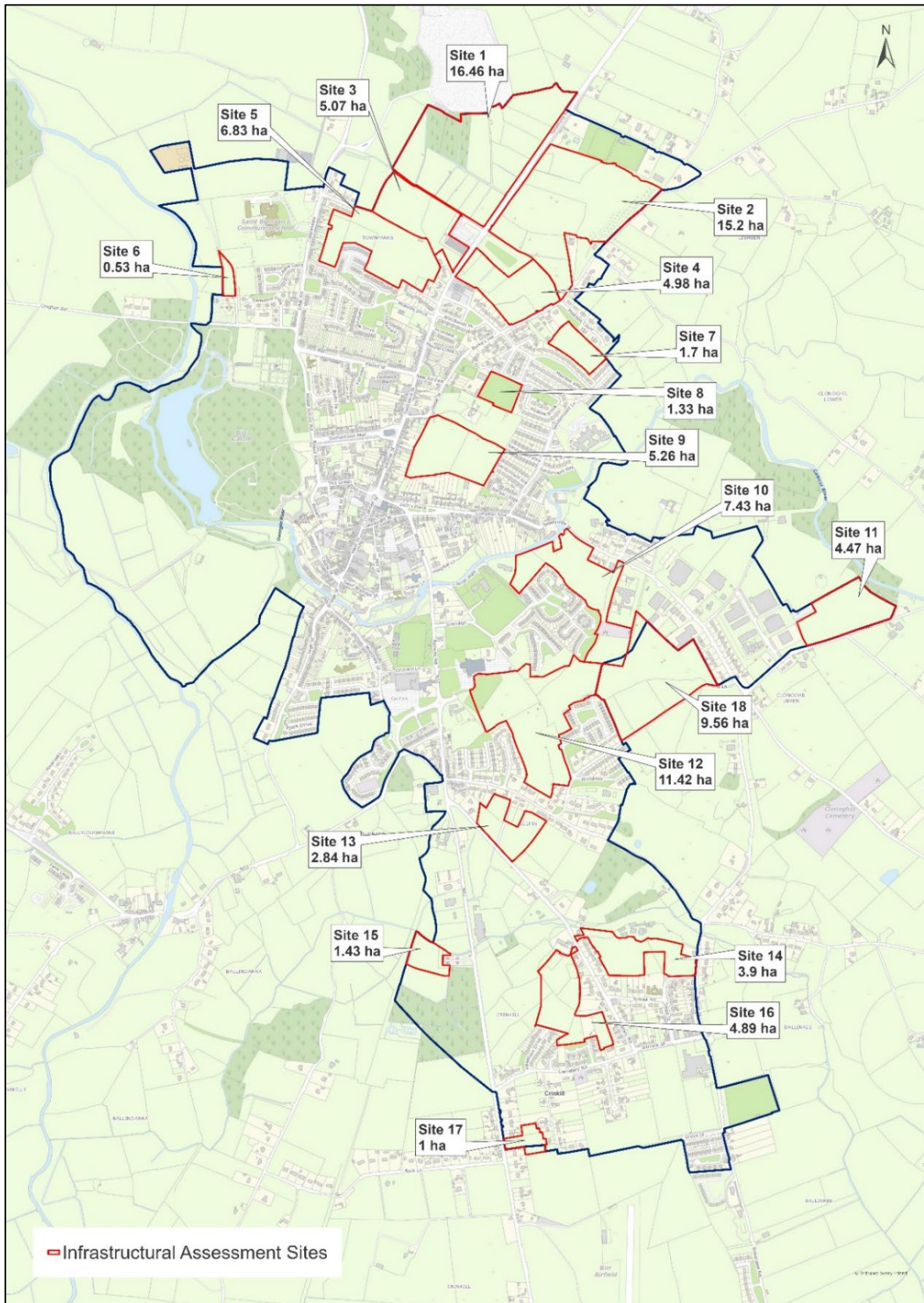


Figure 10.1 Location of sites assessed as part of this Planning and Infrastructural Assessment

Table 10.1 List of Sites Assessed

Site No.	Site Name	Site Area	Site Description
1	Woodfield or Tullynisk Td	16.46 ha.	<p>Poor quality agricultural land characterised by rough grazing land, mix of hedgerow and vegetation along with extensive woodland area to north west of site. Most of the land is predominantly flat apart from the north west corner, which is elevated. Large drains dissect the landholding in a number of locations.</p> <p>Land faces onto N62 (Tullamore Road) and service road to Aldi. A row of mature trees runs along the boundary of the landholding with the N62.</p>
2	Woodlands Td	15.2 ha.	<p>Landholding comprises a worked-out sandpit. Significant recolonisation and regrowth of vegetation has taken place. Apart from an extremely steep bank along the eastern boundary, the site is predominantly flat with some deposits of materials stockpiled. A row of mature trees runs along the boundary of the landholding with the N62.</p>
3	Townparks	5.07 ha.	<p>Grazing agricultural land that falls from its highest point at the north west towards the southeast. Hedgerows along field boundaries. Located north west of Aldi.</p>
4	Burkes Hill	4.98 ha.	<p>Landholding stretches from N62 Tullamore Road to Burke's Hill. Gradients are relatively flat on the western N62 side before becoming undulating/hilly to the southeast.</p>
5	Townparks	6.83 ha.	<p>Grazing agricultural land. Gradients fall from west to east. The landholding borders housing in Cappaneale and Macauley Drive. Field boundaries comprise hedgerows.</p>
6	Cappaneale	0.53 ha.	<p>Triangular shaped and flat parcel of land, located to the north (rear) of houses/mobile homes and is accessed from a road to the east of houses/mobile homes.</p>
7	Burke's Hill	1.7 ha.	<p>Infill site, undulating in nature at a higher elevation than adjacent housing developments; Meadow Court and Meadow Ville.</p>
8	Burke's Hill	1.33 ha.	<p>Currently or last used as a soccer pitch. Generally flat although falls to the east. Bordered by stonewall and mature trees to the south, and Eircom Telecoms building to the east. Meadow Ville and Meadow Brook housing developments are located to the north of the land.</p>
9	Rectory Lands	5.26 ha.	<p>Grazing agricultural land predominantly flat although falling to the southeast. Land to the north is very elevated. Field boundaries comprise mature hedgerow and mature trees. Groups of mature trees are along the southern boundary in particular. Extensive and intact stonewalls are along the eastern and southern boundaries. The subject lands lie adjacent to the Sandymount housing development to the</p>

			east, the town centre and Emmet St. to the west and Johns Place to the south.
10	Syngefield	7.43 ha.	Grazing agricultural land. Land is very undulating with highest point to centre of field and levels fall towards the Camcor River. Land is bounded by housing estate to south and low density houses to the north.
11	Clonoghill Upper	4.47 ha.	Grazing agricultural land. Land is very undulating/hilly. Highest point is crest of hill along northern boundary to the site. Syngefield Industrial Estate is located to the west, the remains of Clonoghill Castle to the north and the Camcor River to the east. An extensive stonewall runs along the field boundary with the R440.
12	Seefin and Scurragh	11.42 ha.	Predominantly grazing agricultural land but part of the lands are being developed for housing currently. The western part of the land is relatively flat before gradients rise to the middle and eastern part of the land. The highest point is the crest of the hill along the centre of the site in a north-south axis.
13	Seefin	2.84 ha.	Grazing agricultural land. Land is very prominent rising in gradient to the north, which is very elevated. The field boundaries and driveway are tree-lined with mature hedgerow.
14	Beechpark, Crinkill	3.9 ha.	Grazing agricultural land. Undulating in nature. Landholding truncated by school car park. Field boundaries to south and east are stonewalls. Field borders low-density housing to the west (Military Road) along with low-density housing and Crinkill National School to the south (School Road).
15	Roscrea rd.	1.43 ha.	Grazing agricultural land. Land is predominantly flat and is located to the west of houses/mobile homes. Field boundaries comprise mature hedgerow and trees.
16	Crinkill	4.89 ha.	Grazing agricultural land. Land is very undulating and hilly. Most prominent elevated part of the field is to the south. Field boundaries comprise mature hedgerow and trees. Land located north of Cemetery Road and Hawthorne Drive.
17	Leinster Villas	1 ha.	Grazing agricultural land. Land is relatively flat and located to the rear of low-density linear housing.
18	Clonoghill Upper	9.55 ha.	Grazing agricultural land. Undulating in nature and located to the south west of low-density linear housing in Syngefield and to the north east of a residential development in Woodlane.

10.3 Infrastructural Overview

10.3.1 Roads and Transportation

10.3.1.1 Responsibility for Delivery

Offaly County Council is responsible for the delivery of road infrastructure. Site access arrangements and some road improvement works will generally be developer-led.

10.3.1.2 Necessary Infrastructure

A number of sites require road improvement works as facilities are not in place. Improvement and upgrade works are identified in the Birr Local Transport Plan (LTP) generally for roads, cycle lanes and footpaths. In general, most facilities such as footpaths etc. are in place at the majority of the sites in the town centre but no cycle lanes are in place in other sections of the town.

The construction of a Northern relief road from the Banagher Road to the Tullamore Road to the north of the town and the South Central Distributor Road will improve the capacity of Birr Town Centre which is currently heavily congested in addition to opening up backlands for development.

10.3.2 Environment and Water Services

10.3.2.1 Responsibility for Delivery

The provision of public water and sewerage services is the responsibility of Irish Water, the national water services authority. Local authorities act as agents for Irish Water, providing services for the utility under service level agreements.

10.3.2.2 Necessary Infrastructure

Where new network provision or network reinforcements such as upgrades or extensions are required, these shall be developer driven unless there are committed Irish Water projects in place to progress such works. New connections to Irish Water networks are subject to their Connections Charging Policy.

Irish Water has no proposals to expand the Birr WWTP. In the event of no remaining headroom, any proposed development would require developer investment. Irish Water intends to provide a wetland adjacent to the Birr WWTP to ensure that during heavy rain, the incoming flow does not overflow to the Little Brosna River and to provide extra wastewater treatment.

The pumping station in Crinkill requires upgrade. The provision of a wetland adjacent to the pumping station within the Council landholding would provide important storm water attenuation.

In relation to Water Supply, the Birr / Kinnitty Water Supply Zone has capacity.

10.3.3 Drainage/SuDS

10.3.3.1 Responsibility for Delivery

Any drainage works on site will generally be developer-led.

10.3.3.2 Necessary Infrastructure

The public sewer network is required to be extended in the Townparks/Tullamore Road area to the north of the town.

A number of potential wetland/swales will be required at a number of locations in the town (see Section 6.13 Potential Green Infrastructure Projects in Chapter 6 Biodiversity and Green Infrastructure) to provide additional storage to reduce flood risk and improve water quality.

10.4 Site Assessment

All sites have been appraised based on infrastructural requirements and planning assessment criteria. Table 10.2 provides the site appraisal process and the weighting of infrastructure and planning criteria along with land use zoning recommendations.

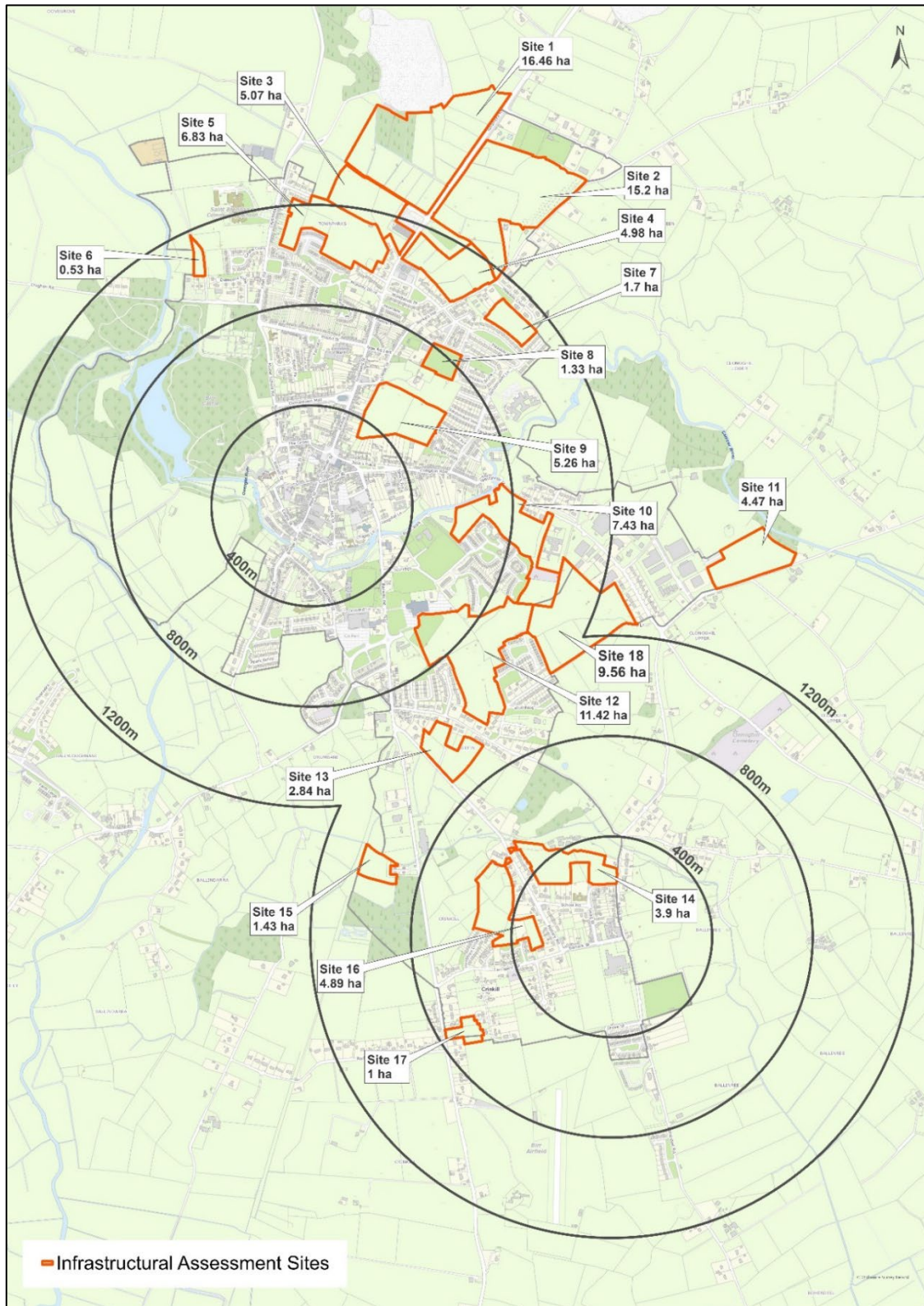


Figure 10.2 Distance of sites from Birr Town Centre and Crinkill Village Centre

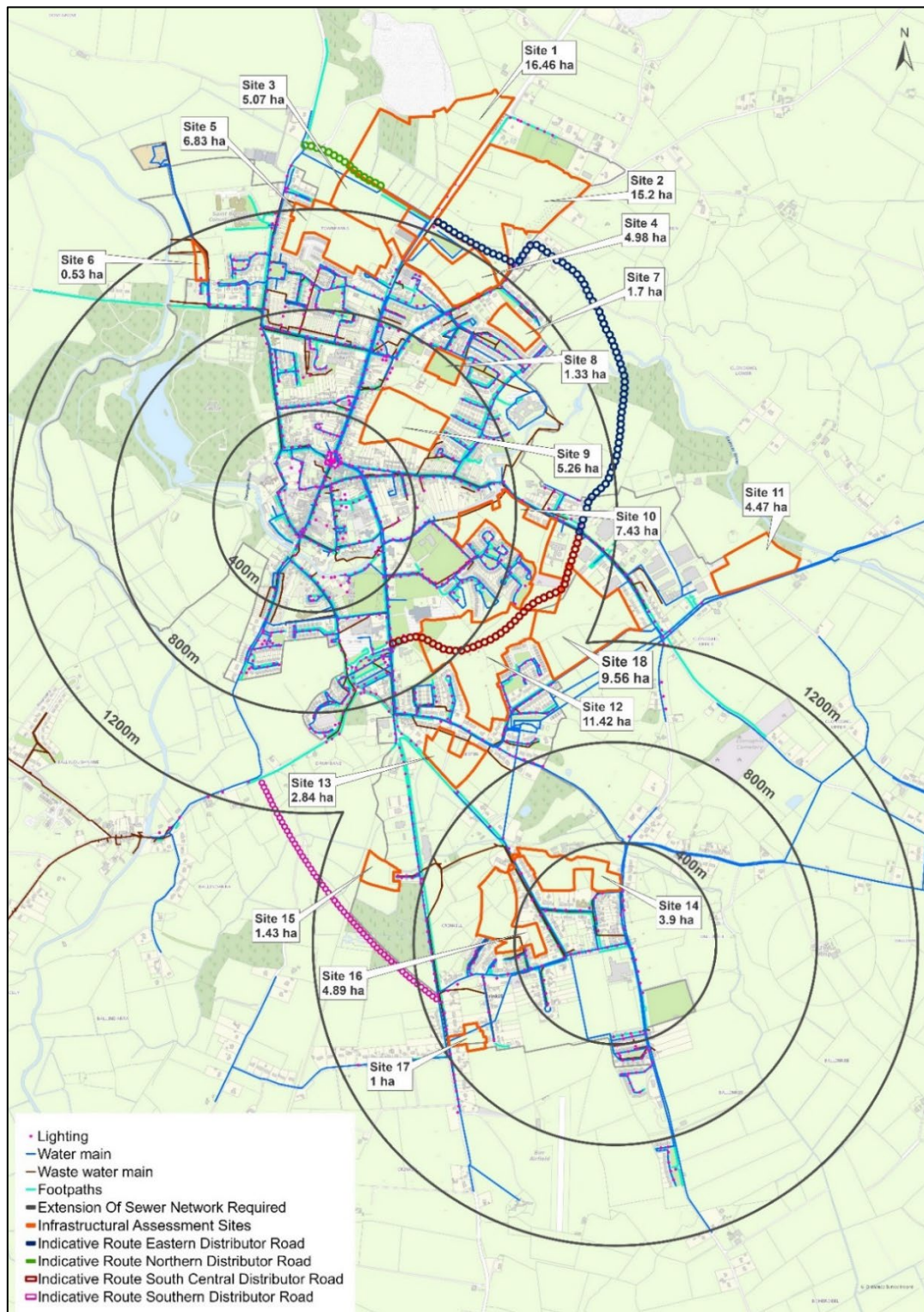


Figure 10.3 Distance of sites from Birr Town Centre and Crinkill Village Centre overlain with existing infrastructural services

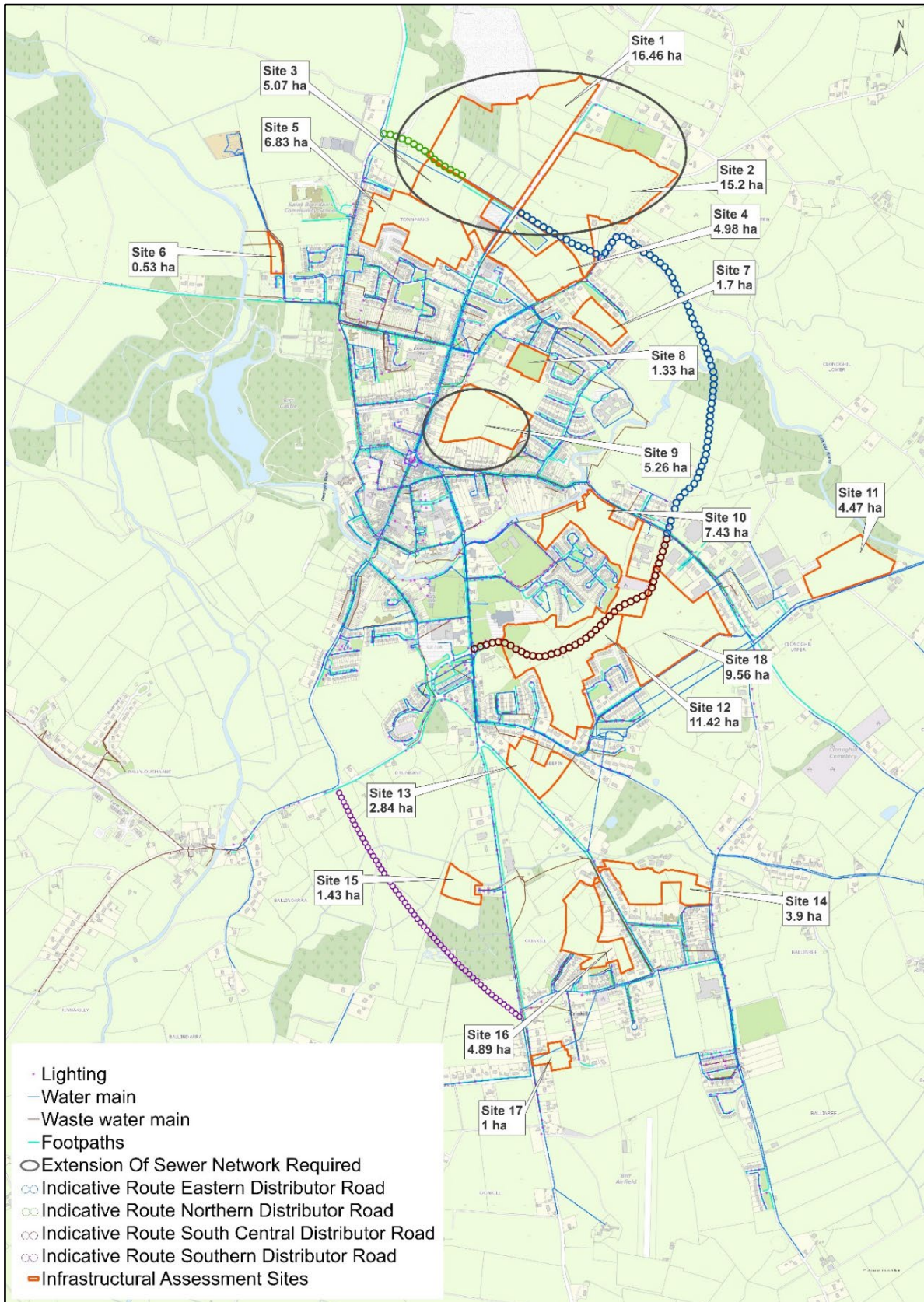


Figure 10.4 Location of Necessary Infrastructure in Birr

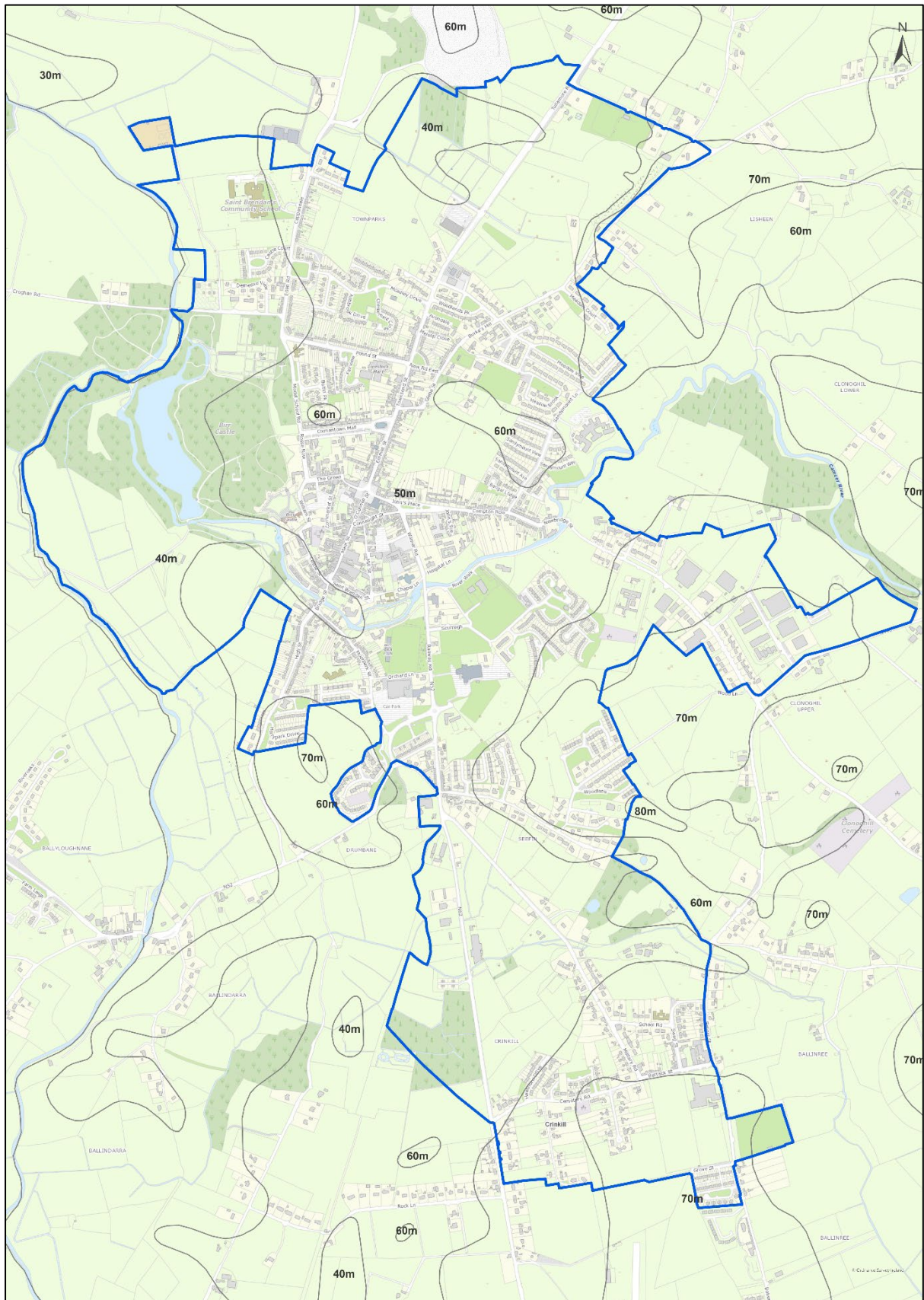


Figure 10.5 Topography of Birr

Table 10.2 Site Appraisals

Site No.	Criteria	Recommendation	Justification
1	Promotes compact growth	Zone combination of 'Business or Technology Park', 'Enterprise & Employment' and 'Open Space, Amenity and Recreation'	There are other lands more suitable for residential development that support compact growth but this site has potential to accommodate a campus style Business or Technology Park along with complimentary Enterprise and Employment uses. Whilst the landholding is on the edge of town, there is potential to incorporate cycling, walking and green infrastructure provision into any development on site.
	Promotes sustainable mobility		
	Availability of infrastructure & services		
	Physical suitability		
2	Promotes compact growth	Zone combination of 'Business or Technology Park', 'Enterprise & Employment' and 'Open Space, Amenity and Recreation'	There are other lands more suitable for residential development that support compact growth but this site has potential to accommodate a campus style Business or Technology Park along with complimentary Enterprise and Employment uses. Whilst the landholding is on the edge of town, there is potential to incorporate cycling, walking and green infrastructure provision into any development on site.
	Promotes sustainable mobility		
	Availability of infrastructure & services		
	Physical suitability		
3	Promotes compact growth & sustainable mobility	Zone a combination of 'Community Services/Facilities' and 'Enterprise & Employment'.	There are other lands more suitable for residential development that support compact growth but this site has potential to accommodate a campus style Business or Technology Park along with complimentary Enterprise and Employment uses. Whilst the landholding is on the edge of town, there is potential to incorporate cycling, walking and
	Promotes sustainable mobility		
	Availability of infrastructure & services		
	Physical suitability		

Site No.	Criteria	Recommendation	Justification
			green infrastructure provision into any development on site.
4	Promotes compact growth	Zone 'Enterprise & Employment' and 'Strategic Residential Reserve'.	Land bordering the Tullamore Road has the potential to avail of the sizeable land bank and good road access to accommodate 'Enterprise and Employment' uses. The land fronting onto Burke's Hill, albeit undulating and hilly has potential to be developed in time but for now there are other sites more suitable for residential development that support compact growth.
	Promotes sustainable mobility		
	Availability of infrastructure & services		
	Physical suitability		
5	Promotes compact growth	Zone a combination of New Residential and Strategic Residential Reserve.	The 'New Residential' zoning in this location provides a counter balance for the town relative to other areas where 'New Residential' zoning is proposed. Any development would have to provide for future potential access to 'Strategic Residential Reserve' lands to west and east. Lands proposed to be zoned 'Strategic Residential Reserve' have the potential to be developed in time but there are other lands more suitable for residential development that support compact growth in the Plan Area.
	Promotes sustainable mobility		
	Availability of infrastructure & services		
	Physical suitability		
6	Promotes compact growth	Zone 'New Residential'	Lands adjoin a social housing development and may provide an important site to build more social housing units in the lifetime of the Plan.
	Promotes sustainable mobility		
	Availability of infrastructure & services		
	Physical suitability		

Site No.	Criteria	Recommendation	Justification
7	Promotes compact growth & sustainable mobility	Zone 'Strategic Residential Reserve'	Land albeit elevated/hilly has potential to be developed in time having regard to access issues.
	Promotes sustainable mobility		
	Availability of infrastructure & Services		
	Physical suitability		
8	Promotes compact growth & sustainable mobility	Zone 'Strategic Residential Reserve'	This infill site has the potential to be accessed through Meadow Vale and Burke's Hill and is a logical extension of the adjacent 'New Residential' zoned areas in time.
	Promotes sustainable mobility		
	Availability of infrastructure & Services		
	Physical suitability		
9	Promotes compact growth & sustainable mobility	Zone a combination of 'Town Centre/Mixed Use' and 'New Residential'.	This infill site is located close to the town centre and has significant potential for connectivity and permeability linkages through the site and with adjacent areas.
	Promotes sustainable mobility		
	Availability of infrastructure & Services		
	Physical suitability		
10	Promotes compact growth	Combination of 'New Residential', 'Strategic Residential Reserve' and 'Open Space,	Land albeit hilly/undulating is located within 800 metres of the town centre and has potential to link in effectively with the town's Green Infrastructure network.
	Promotes sustainable mobility		

Site No.	Criteria	Recommendation	Justification
	Availability of infrastructure & Services	Amenity and Recreation’.	
	Physical suitability		
11	Promotes compact growth	Combination of ‘Industrial and Warehousing’ and ‘Open Space, Amenity and Recreation’.	Whilst the landholding is on the edge of town, there is potential to incorporate cycling, walking and green infrastructure provision into any development on site and to link up with the Camcor River Walking Trail.
	Promotes sustainable mobility		
	Availability of infrastructure & services		
	Physical suitability		
12	Promotes compact growth	Combination of ‘New Residential’ and ‘Open Space, Amenity and Recreation’ and ‘Strategic Residential Reserve.’	Whilst located on elevated lands, significant residential development has occurred to the north and south of the subject site. The development would offer potential for an important section of the South Central Distributor Road. The subject lands to the south of the landholding are considered suitable for a ‘Strategic Residential Reserve’ zoning as while not suitable for residential development in the current plan period it may be suitable for development in future LAPs.
	Promotes sustainable mobility		
	Availability of infrastructure & services		
	Physical suitability		
13	Promotes compact growth	‘Strategic Residential Reserve’	Land albeit elevated/hilly has potential to be developed in time having regard to access issues.
	Promotes sustainable mobility		
	Availability of infrastructure & services		
	Physical suitability		

Site No.	Criteria	Recommendation	Justification
14	Promotes compact growth	Combination of 'New Residential' and 'Strategic Residential Reserve'.	Land albeit elevated/hilly has potential to be developed in time having regard to access issues.
	Promotes sustainable mobility		
	Availability of infrastructure & services		
	Physical suitability		
15	Promotes compact growth	'New Residential'	Lands adjoin a social housing development and may provide an important site to build more social housing units in the lifetime of the Plan.
	Promotes sustainable mobility		
	Availability of infrastructure & Services		
	Physical suitability		
16	Promotes compact growth	'Strategic Residential Reserve'	Land albeit elevated/hilly has potential to be developed in time having regard to access issues.
	Promotes sustainable mobility		
	Availability of Infrastructure & Services		
	Physical suitability		
17	Promotes compact growth	'Strategic Residential Reserve'	There are other lands more suitable for residential development that support compact growth in the Plan Area. Limited potential to incorporate cycling, walking and green infrastructure provision into any development on site.
	Promotes sustainable mobility		
	Availability of infrastructure & Services		

Site No.	Criteria	Recommendation	Justification
	Physical suitability		
18	Promotes compact growth	Do not zone	There are other lands more suitable for residential development that support compact growth in the Plan Area. Limited potential to incorporate cycling, walking and green infrastructure provision into any development on site.
	Promotes sustainable mobility		
	Availability of infrastructure & Services		
	Physical suitability		

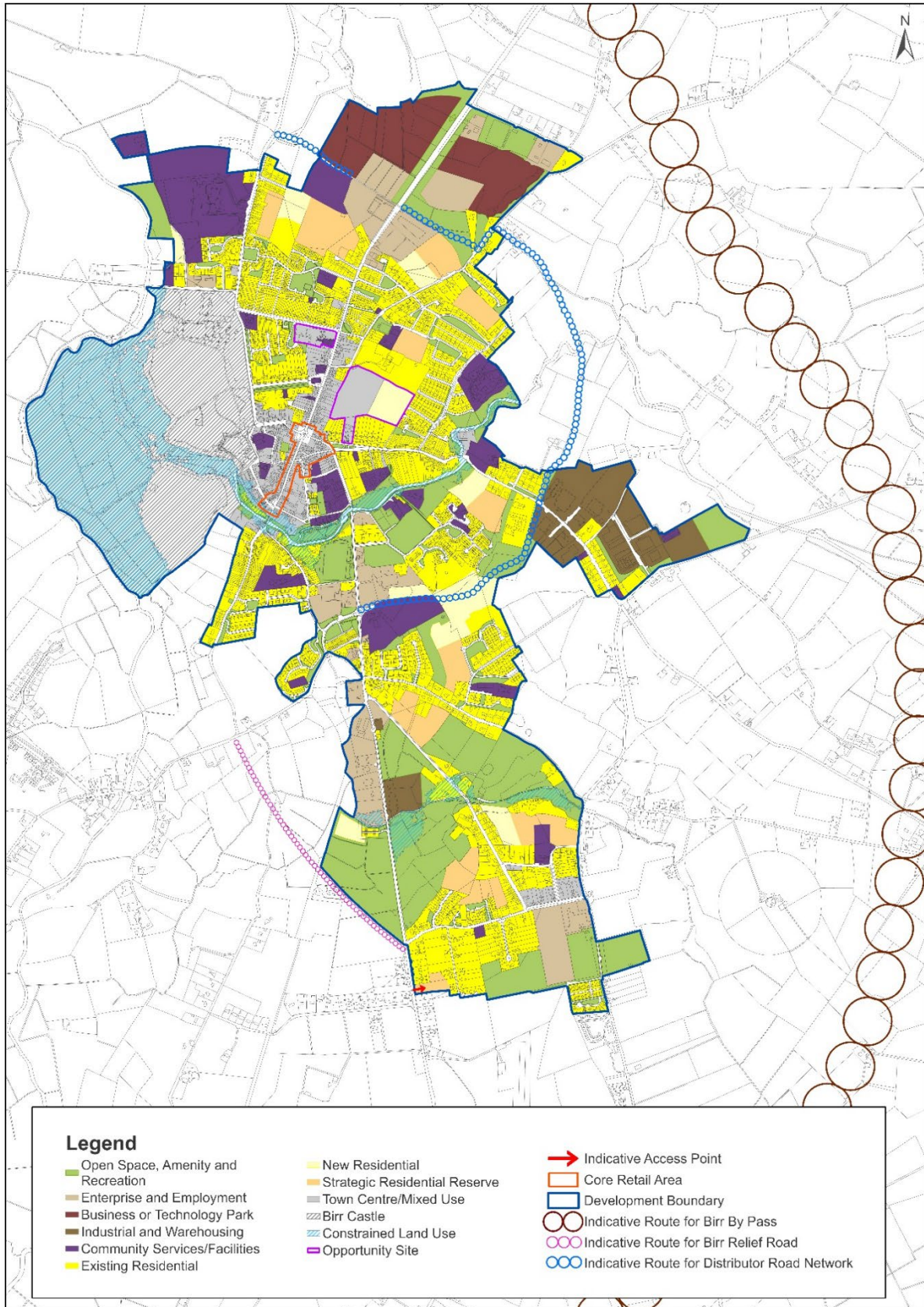


Figure 10.7 Zoning Objectives Map for Plan Area

10.5 Findings and Implications

The PIA has informed the overall development strategy and the policies and objectives of the Birr Local Area Plan, specifically the zoning proposals for lands zoned new residential. Seven sites identified are recommended for 'New Residential' zonings in the LAP having regard to their serviceability and physical suitability for development, and their adherence to the principles of compact growth and sustainable mobility.

10.6 Infrastructure Delivery Schedule

The Plan seeks to ensure that the required infrastructural and site-servicing requirements for these lands, as outlined in the PIA, are delivered prior to or in tandem with development of these sites, where appropriate and reasonable. The lifetime of the Local Area Plan is six years. The infrastructure delivery schedule is staged in the following phases in order to achieve the timely delivery of infrastructure.

Table 10.3 Infrastructure Delivery Stages

Short term	Year 1 and Year 2
Medium term	Year 3 and 4
Long term	Year 5 +
On-going	Throughout the plan lifetime and beyond

This schedule should be regarded as a 'living' programme. It will be reviewed at regular intervals to assess how the implementation is progressing, which is influenced by the availability of resources, funding, economic climate and engagement by providers.

Table 10.4 Required Infrastructure

Required Infrastructure	Delivery Schedule	Estimated Cost	Funding Source
Roads and Transportation			
Northern Distributor Road	Short Term	€2 million	Department of Transport Specific Improvement Grant
Eastern Distributor Road	Long Term	€10 million	Department of Transport Strategic Improvement Grant

South Central Distributor Road	Medium Term	€4 million	Department of Transport Specific Improvement Grant and Development Contribution
South West Distributor Road	Long Term	€6.25 million	Department of Transport Strategic Improvement Grant
Environment and Water Services			
New Wetland adjacent to Birr WWTP	Short Term	Responsibility of Irish Water	Irish Water
New Wetland adjacent to the Crinkill Pumping Station	Short Term	€60,000	Irish Water
Drainage/SuDS			
Extension of public sewer network in Townparks/Tullamore Road area of Birr	Long Term	€200,000	Responsibility of Irish Water
Provision of wetland/swales at locations outlined in Figure 6.13 Potential Green Infrastructure Projects	On going	€120,000	Responsibility of Irish Water