

Appendix 2: Infrastructural Assessment Report

1.1 National Planning Framework

The National Planning Framework (NPF) emphasises the requirement for better linkage between the zoning of land for development and the availability of or investment in infrastructure that is required to facilitate development. The following three National Policy Objectives (NPOs) are relevant in this case, namely:

NPO 72a: Planning authorities will be required to apply a standardised, tiered approach to differentiate between (i) zoned land that is serviced and (ii) zoned land that is serviceable within the life of the plan.

NPO 72b: When considering zoning land for development purposes that require investment in service infrastructure, planning authorities will make a reasonable estimate of the full cost of delivery of the specified services and prepare a report, detailing the estimated cost at draft and final plan stages.

NPO 72c: When considering zoning land for development purposes that cannot be serviced within the life of the relevant plan, such lands should not be zoned for development.

Appendix 3 of the NPF provides a methodology for a tiered approach to land zoning as referred to in NPO 72a. The implementation of this tiered approach allows for greater co-ordination between land use zoning and infrastructure availability. Appendix 3 of the NPF provides a description of Tier 1 (Serviced Zoned Land) and Tier 2 (Serviceable Zoned Land) as follows:

Tier 1: Serviced Zoned Land	Land that is <u>able to connect to existing development services</u> i.e. road and footpath access, public lighting, foul sewer drainage, surface water drainage and water supply, for which there is <u>service capacity available</u> .
Tier 2: Serviceable Zoned Land	Land that is not currently sufficiently serviced to support new development but <u>has the potential to become fully serviced within the life of the Plan</u> . The potential for the delivery of the required services and / or capacity to support new development must be identified.

In this regard, lands have only been identified for development where they are able to connect to existing development services for which there is service capacity available or has the potential to become fully serviced within the life of the Plan.

2.1 Development Plan Guidelines

The Planning Authority engaged comprehensively with Irish Water (IW) in the preparation of the Plan. In the absence of updated Development Plan Guidelines, the advice from both IW and the Council's Water Services Section was used to inform zoning decisions. It is anticipated that further guidance on this methodology will be set out in detail in the updated Development Plan Guidelines for Planning Authorities.

3.1 Plan-led Approach

Section 33 (5) of the Water Services (no. 2) Act 2013 as amended by the Planning and Development Amendment Act 2018 concerns Irish Water's Water Services Strategic Plan (2015, under review in 2020), which sets out the strategic objectives for the delivery of water services over the next 25 years up to 2040 and sets a context for investment and implementation plans. This plan is reviewed every five years. It states that *'Irish Water shall when preparing a water services strategic plan have regard to proper planning and sustainable development in line with any development plans within the meaning of the Act 2000, in particular the Core Strategy under section 10 of the Act'*.

Accordingly, the Core Strategy shall set the desired population allocation within the county whilst the IW Water Services Strategic Plan shall follow pursuant by having regard to it.

The following policies set out in Chapter 11 of the County Development Plan demonstrate Offaly County Council's commitment to work in conjunction with Irish Water to deliver an improved water and wastewater infrastructure in the county:

WSP-02 It is Council policy to liaise and co-operate with Irish Water in the implementation and delivery of the 'Water Services Strategic Plan' (2015, under review in 2020), the 'Irish Water Business Plan 2015-2021', the 'Irish Water National Water Resources Plan' (expected in 2021) and the 'Irish Water Investment Plan 2020-2024' (or any amendment thereof) and other relevant investment works programmes of Irish Water, to provide infrastructure to service settlements in accordance with the Council's Core Strategy and Settlement Strategy.

WSP-03 It is Council policy to work in conjunction with Irish Water to protect existing water supply and wastewater infrastructure, to maximise the potential of existing capacity and to facilitate the timely delivery of new water supply and wastewater infrastructure to facilitate future growth in accordance with the Council's Core Strategy and Settlement Strategy.

4.1 Infrastructure Requirements

Wastewater and Water

As stated by Irish Water in their submission on the draft Offaly County Development Plan:

'The County is served by a large number of wastewater treatment plants. Available capacity at any plant varies daily. Where there are constraints, applications for developments are on a first come, first served basis. If no [IW] project is associated with a constrained area, then any infrastructure will be developer-led. Irish Water can work with developers to form the best solution for a particular site.'

On this basis, where there are deficiencies in the capacity of a particular wastewater treatment plant to cater for all of the proposed population allocation for a settlement that is advocated under the Development Plan, the sites that come forward first for development may be served by I.W. based on their first come first served approach, whilst later sites might require a developer-led approach to finance the infrastructure. Accordingly, it is impossible to identify the order of which sites will be developed first irrespective of the local authority encouraging sequential growth and infill / brownfield development of a settlement.

The following are a list of deficiencies in the waste water and water infrastructure within the settlements and the actions proposed to be undertaken in order to address these up to the year 2027.

Wastewater Deficiencies

Settlement	Proposed Additional Population 2021-2027	Current Wastewater treatment capacity headroom	Investment up to the year 2027
Birr	1263	Headroom for approximately 900 persons	Currently after heavy rain the incoming flow to the plant overflows to the river. The proposed wetlands will prevent this occurring and will pump the effluent to the Plant when storm subsides. Also, this wetland will prevent the Plant from washing out. It will not increase the capacity of the Plant. No current proposals to expand the plant. In the event of no remaining headroom, any proposed development would require developer investment.
Edenderry	721	Headroom for approximately 512 persons	Capacity will be increased on completion of upgrade to the treatment plant during the plan period. The expectant plant design capacity is for a population equivalent of 12,500. IW are in the process of appointing a consultant to design the new extension.
Daingean	172	Headroom for approximately 90 persons	Surface water getting into the network is a problem. Offaly County Council proposing it under the IW Small Towns and Villages Growth Programme for rectification.
Walsh Island	35	No capacity	An alteration of the treatment plant through improved aeration and improved sludge rates would increase it to 500 PE which is sufficient to cater for the proposed village growth.

Rhode	150	Headroom for approximately 60 persons	Offaly County Council proposing it for upgrade under the IW Smaller Towns and Villages Growth Programme.
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Water Deficiencies

Settlement	Proposed Additional Population 2021-2027	Problem	Investment up to the year 2027
Tullamore	4382	Very limited / constrained water supply capacity	See Paragraph below.
Birr	1263	Limited water supply capacity	See Paragraph below.
Edenderry	721	Very limited / constrained water supply capacity	See Paragraph below. There are 3 supplies feeding Edenderry. One supply from Rhode is experiencing problems and a new source will be provided which would be beneficial.
Portarlington (OY)	207	Very limited / constrained water supply capacity	See Paragraph below. Water is fed from Laois County Council. There are problems with supply and boreholes will be drilled on the Offaly side.
Daingean	172	Limited water supply capacity	See Paragraph below
Kilcormac	155	Limited water supply capacity	See Paragraph below. A booster pump will be provided which will be beneficial.
Mountbolus	24	In the year 2018 the Shallow well dried up and so water had to be tinkered in to the village.	A search for a new bore hole will be undertaken to address this.
Clonbullogue	81	Access to site for disinfection purposes is a problem.	Disinfection programme being implemented at present which will solve Clonbullogue issues. Access is being addressed.

Where there are water supply constraints, the availability of water will be on a first come, first served basis with priority given to domestic customers. Non-domestic developments will be asked by IW to review their proposals to reduce water requirements. In the meantime, IW and Offaly County Council are continually progressing leakage reduction activities, mains rehabilitation activities and lead replacement activities. These are priorities based on leakage rates, water quality issues and ongoing disruption to customer's supplies. IW and Offaly County Council will continue to monitor the

performance of the network to ensure that the most urgent works are priorities as required. The National Water Resources Plan – Framework was adopted in May 2021, with a subsequent Phase 2 to include delivery of four Regional Water Resources Plans which will develop a strategic plan for each water supply including short, medium and long term options to address risk across our water supplies. However according to IW although water is constrained in the above areas at critical times such as drought and freeze events, this need not necessarily halt growth.

Surface Water

There are some constraints in sewer networks in various locations around the county, depending on size and scale of proposed developments. Infrastructure will have to be assessed on a case by case basis. The Council estimate spending approximately €1,825,000 on surface water improvements during the plan period.

A Drainage Area Plan (DAP) is currently being prepared for Tullamore. This DAP will model the existing sewer network / future scenarios and develop solutions to overcome the current constraints. IW will develop concept designs for the noted constraints such as flooding, pollution and trunk sewer capacity upgrades.

IW are developing an additional Infrastructure Development Plan (expected to be completed December 2020). This will assess all zoned land in the Tullamore catchment and develop a flow profile from each site. This will identify the requirements to allow the site to develop and connect to the trunk network. The output of this study will outline any upgrades in the network as a result of the flow from each parcel of land individually and communally.

IW have also started the design of the proposed Southern Interceptor Sewer for Tullamore. This will inform requirements of trunk infrastructure required to be co-located within new roads and how the flow will be connected to the existing system and to the waste water treatment plant.

IW and the Council are continually progressing sewer rehabilitation activities, capital maintenance activities at pumping stations, storm water over flow assessments county wide. IW and the Council will continue to monitor the performance of the networks to ensure that the most urgent works are priorities as required.

Transport

Site access arrangements and some road improvement works will generally be developer-led.

The key settlements of Tullamore [Key town], Birr, Edenderry and Portarlinton [Self Sustaining (Growth) Towns] are or will be subject to Local Area Plans and governed by the requirement to include an 'Implementation and Infrastructure Delivery Schedule' in accordance with the Local Area Plan Guidelines 2013.

Local Transport Plans (LTPs) will be carried out in tandem with the above Local Area Plans during the Development Plan period. These LPP's will help inform the location and type of infrastructure relating to movement.

Capital Costs Estimates

The delivery of infrastructure is funding dependent. The key funding sources for the delivery of infrastructure are set out in Chapter 14 Implementation and Monitoring.

The estimation of capital costs for the required infrastructure is challenging due to a variety of parameters such as distance of rising mains, site investigations, wayleaves, landowners and contractors. IW has indicated that it does not have resources or capacity to carry out such an exercise and therefore no costings have been provided in terms of water services.

The Roads Section has estimated costs of approximately €26,000,000 (year 1) to €204,000,000 (year 6) on delivering roads projects (annual grants, larger strategic projects and various sources of funding) as per Chapter 8 of Volume 1 of this Plan titled Sustainable Transport Strategy. The Roads Section has estimated costs of approximately €82,000,000 for projects identified in the Volume 2 Settlement Plans, which does not include annual programme of works but rather projects. Roads related infrastructure listed in the Volume 2 Settlement Plans has estimated costs of approximately €82,000,000, which is included within the figure of €204,000,000 above. The cost per settlement would include larger projects and smaller footpaths and cycleway measures that will be addressed through the Town and Village Renewal Scheme.

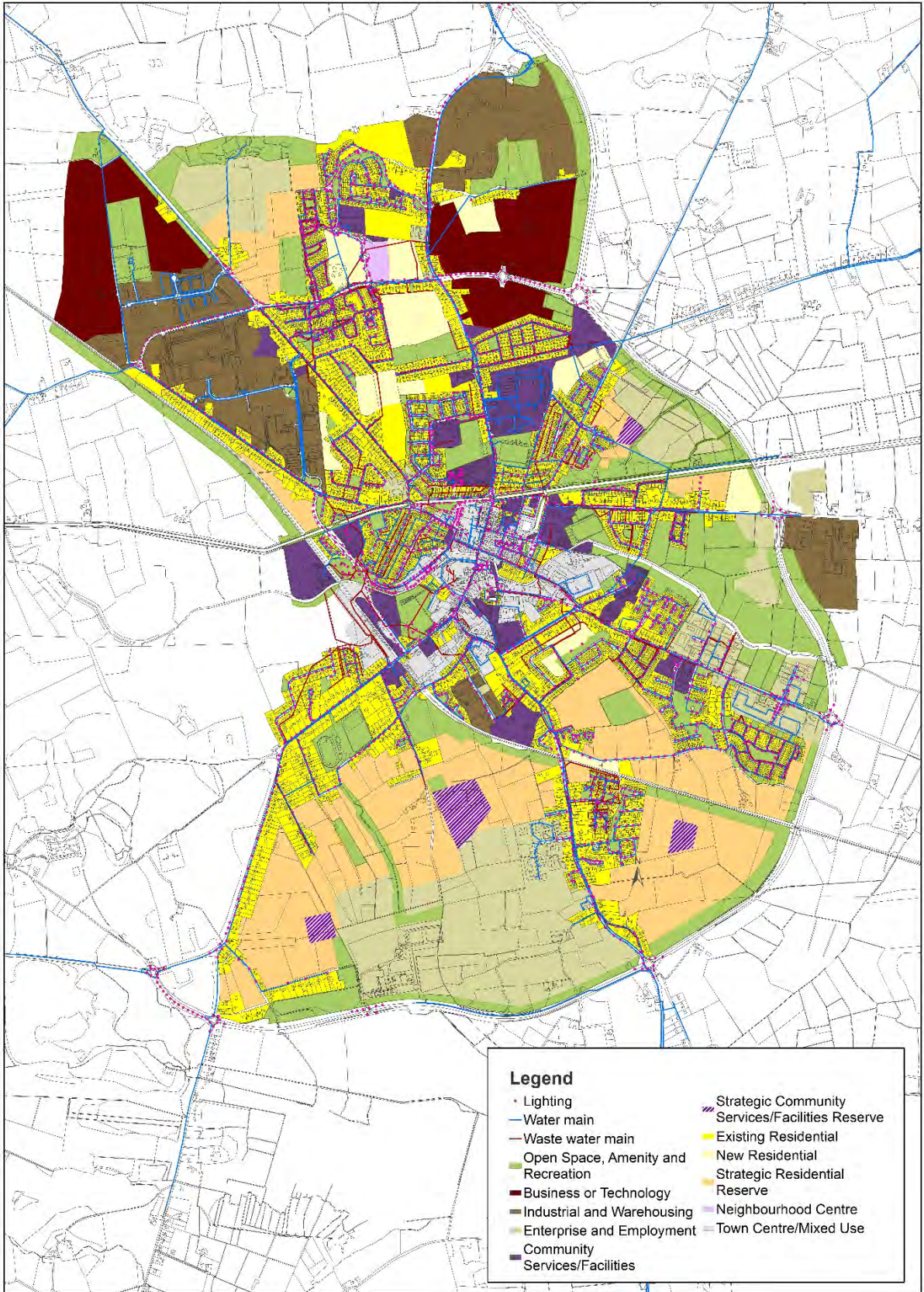
Additional Works

It should be noted that the infrastructure works included in this Plan are not exhaustive and there may be additional works required when a more detailed analysis of an area and land / site is carried out as part of a planning application. The level of works required will also be dependent on the nature and scale of the development on the subject lands / site. This will be assessed and reviewed in greater detail at the planning application stage of any development proposals on the subject lands / sites.

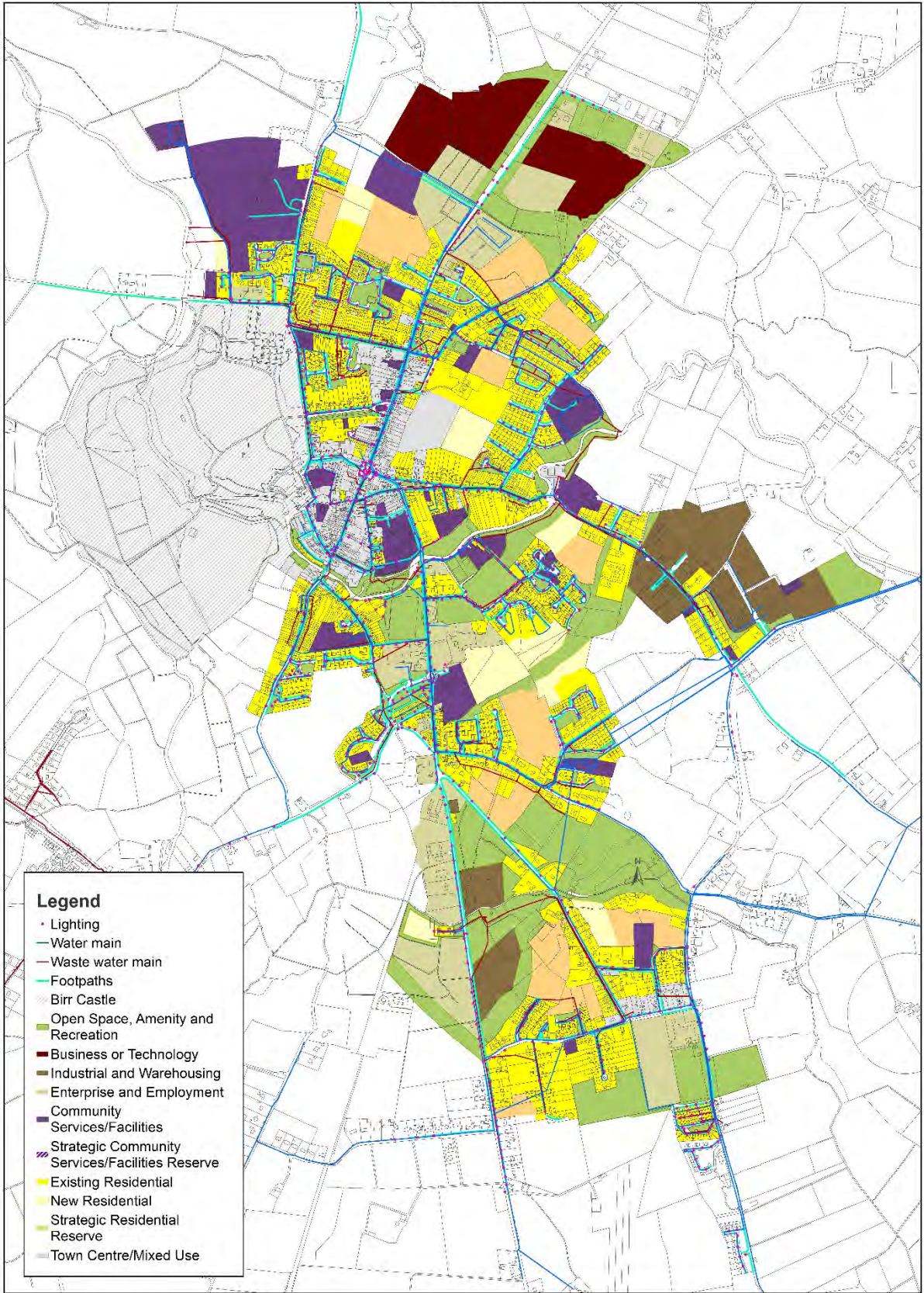
5.1 Infrastructure Provision

Zoning maps for each of the towns and villages that also identify the extent of existing water mains, waste water mains, footpaths and lighting are set out hereunder. These maps illustrate the proximity of infrastructure relative to a particular site and accordingly demonstrate whether a particular site is Tier 1 or 2.

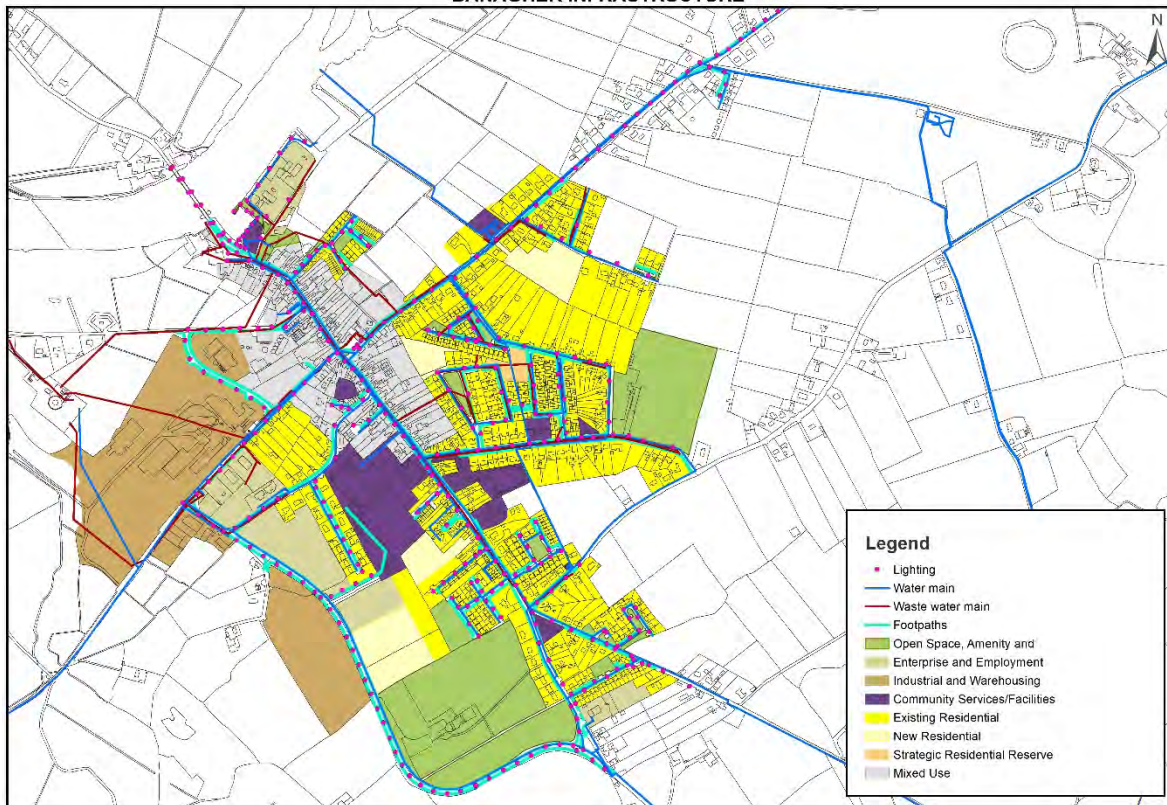
TULLAMORE INFRASTRUCTURE



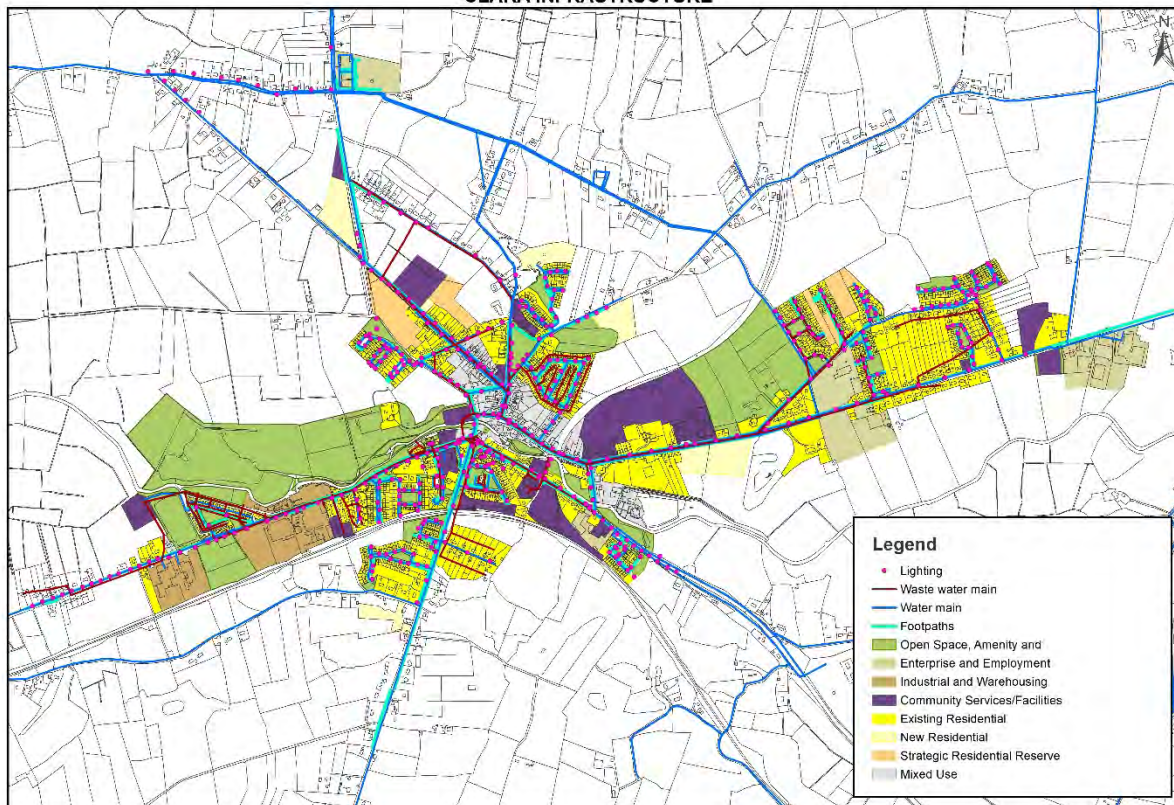
BIRR INFRASTRUCTURE



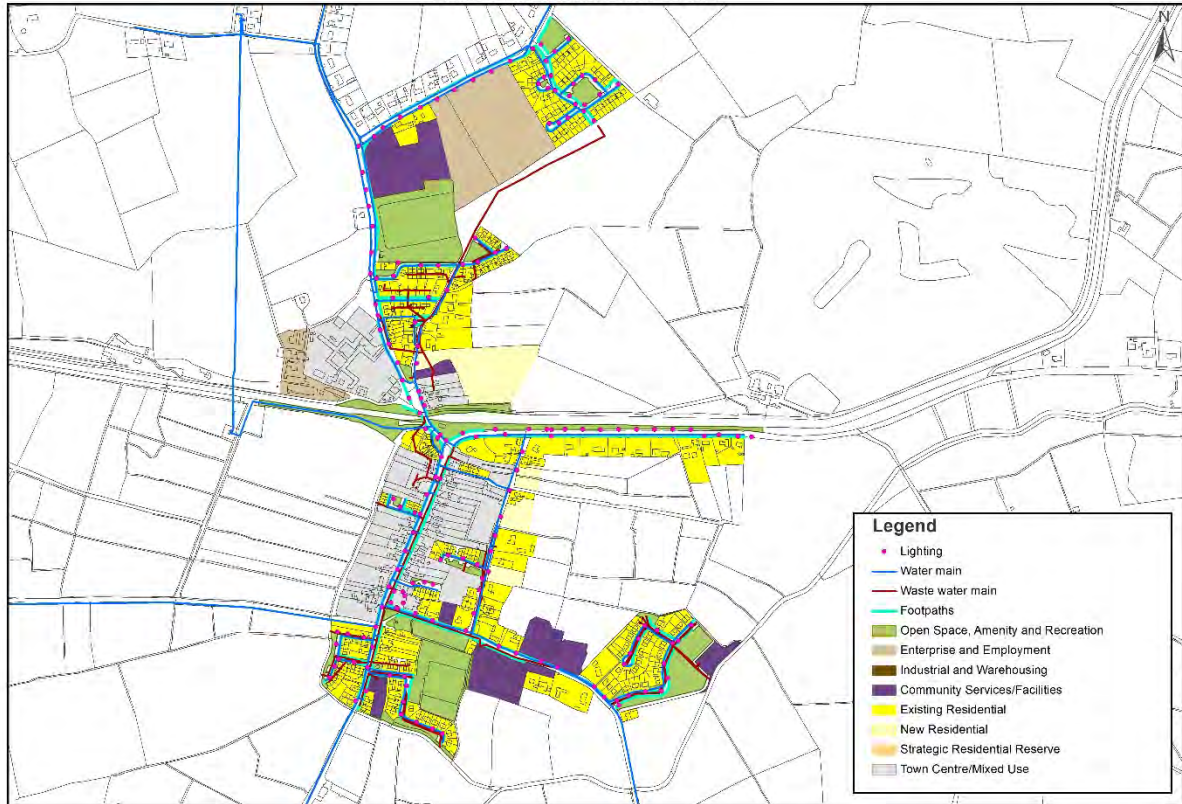
BANAGHER INFRASTRUCTURE



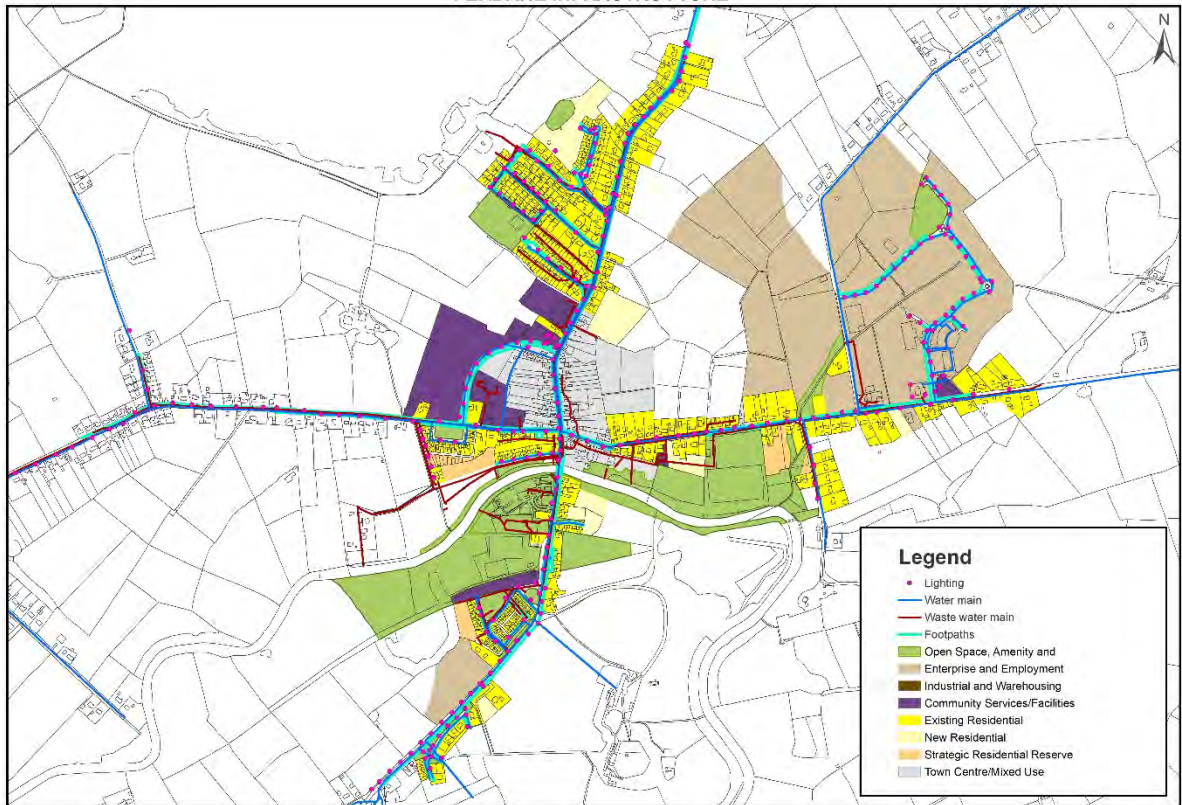
CLARA INFRASTRUCTURE



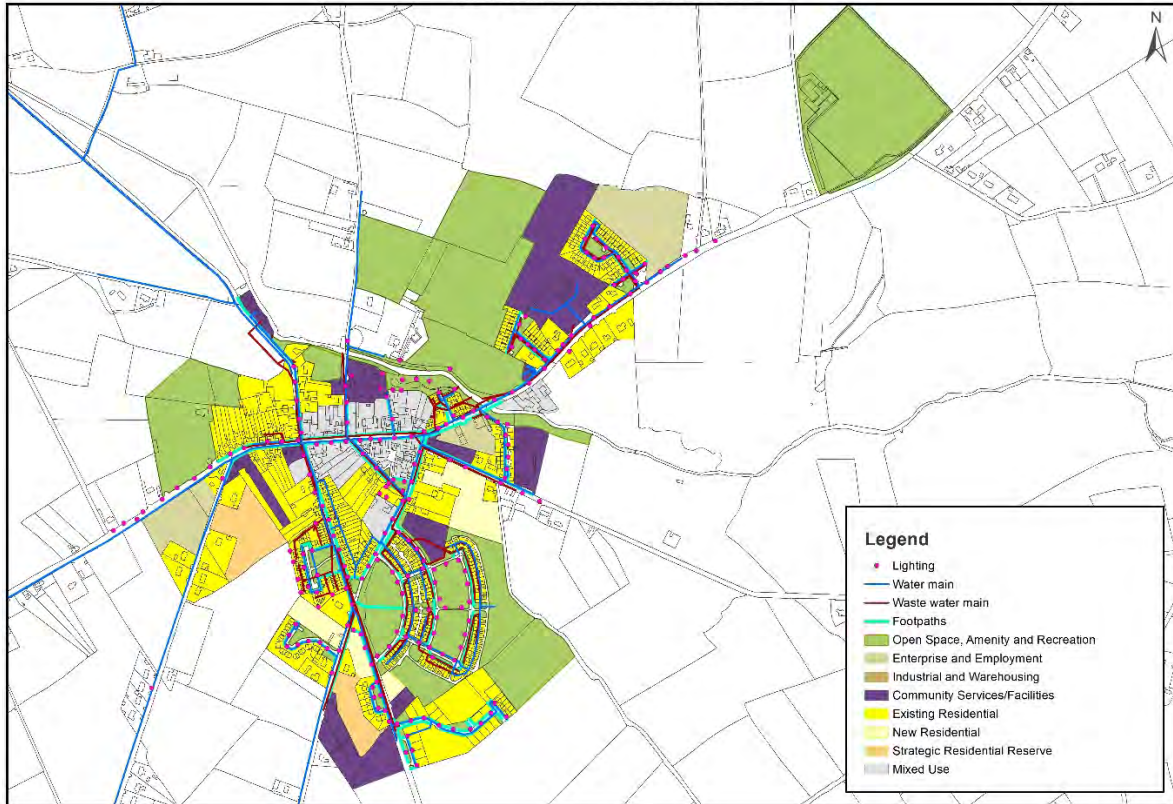
DAINGEAN INFRASTRUCTURE



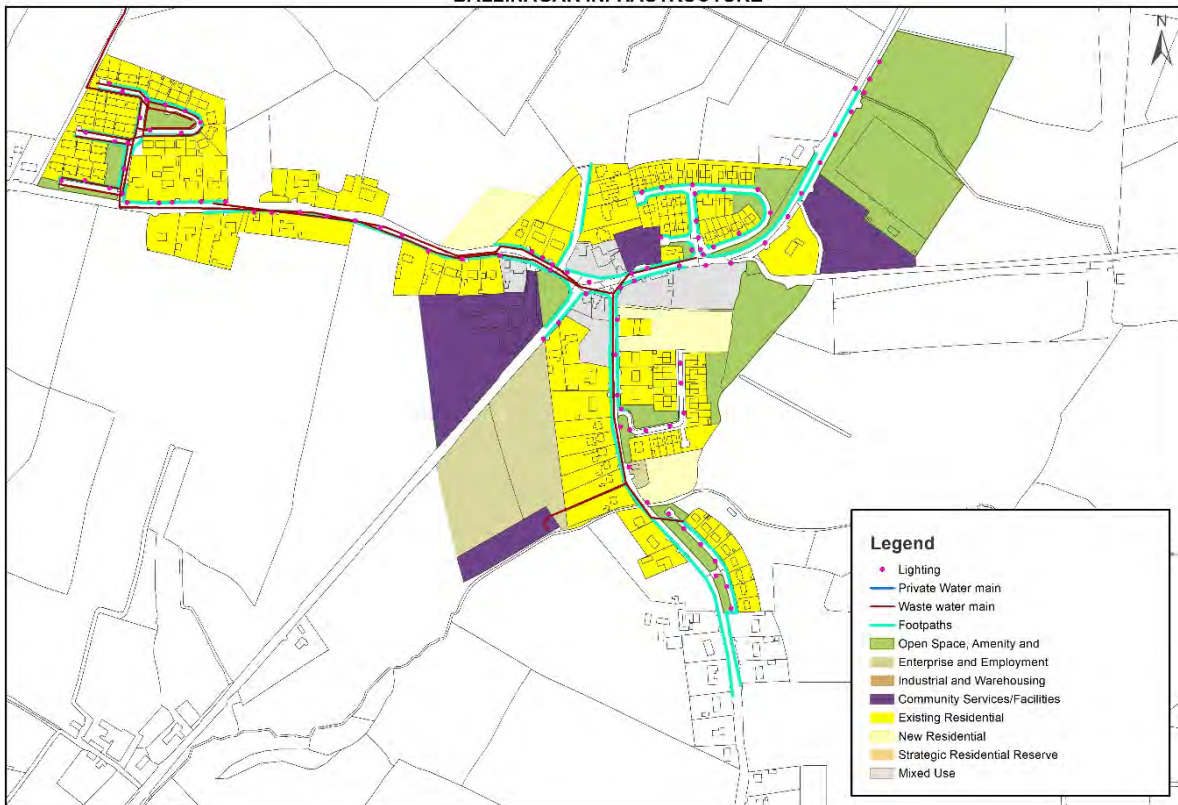
FERBANE INFRASTRUCTURE



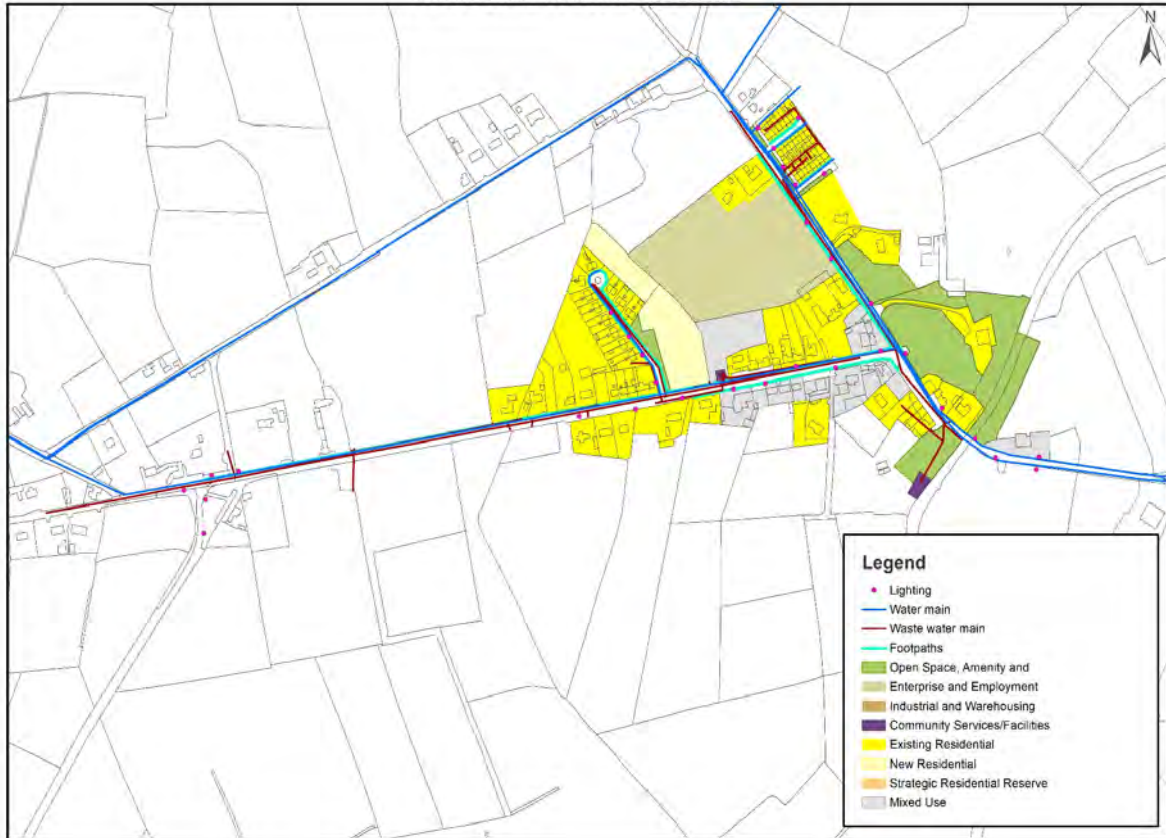
KILCORMAC INFRASTRUCTURE



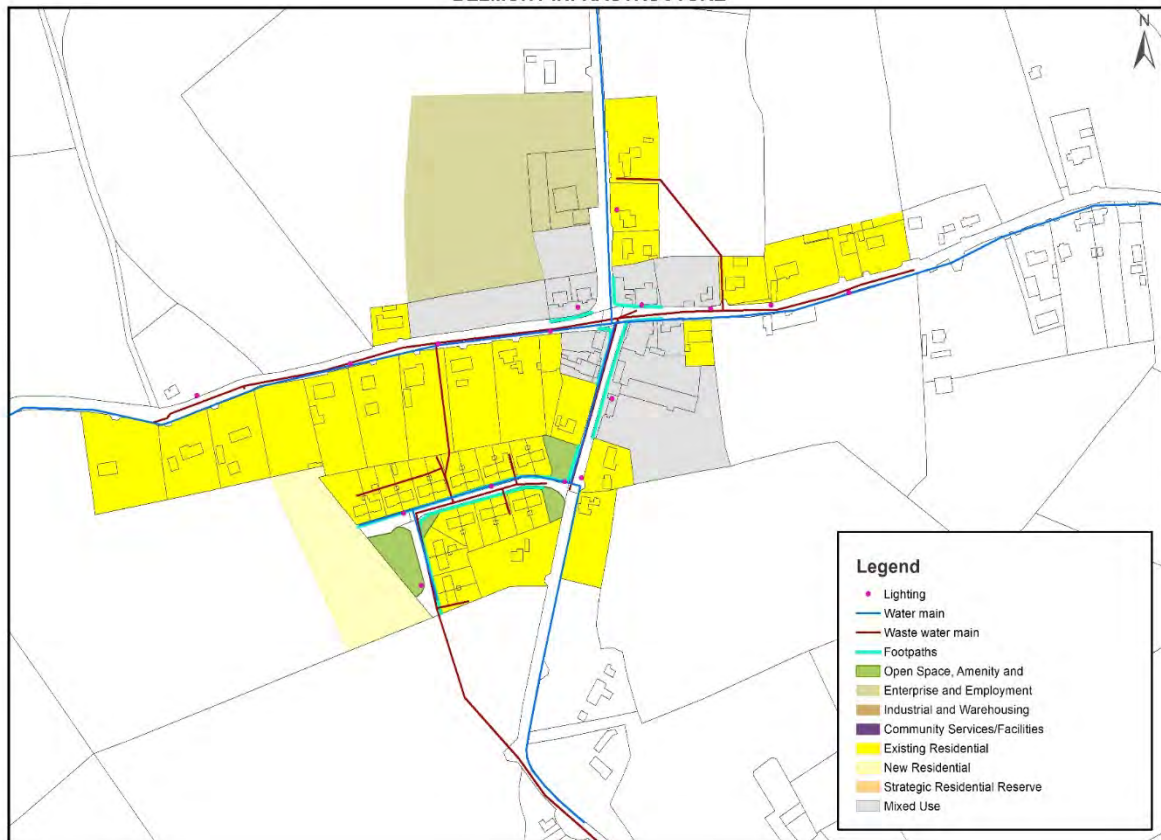
BALLINAGAR INFRASTRUCTURE



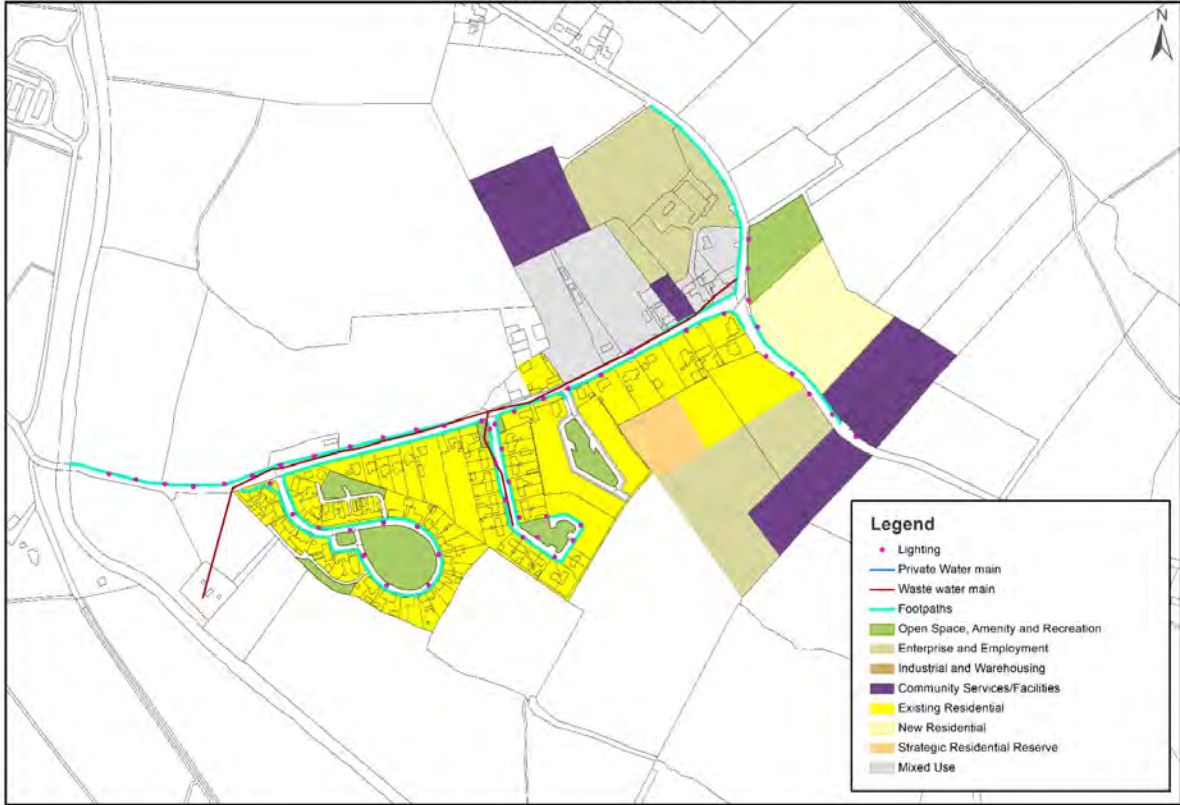
BALYCUMBER INFRASTRUCTURE



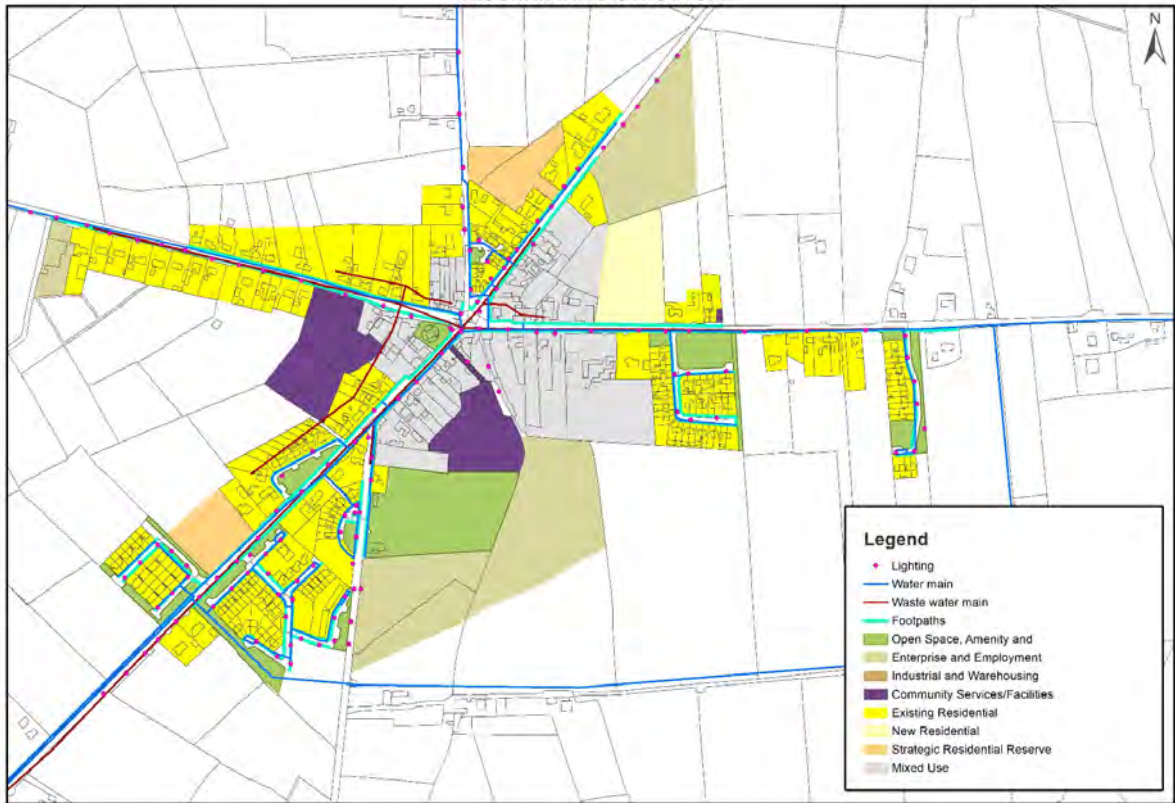
BELMONT INFRASTRUCTURE

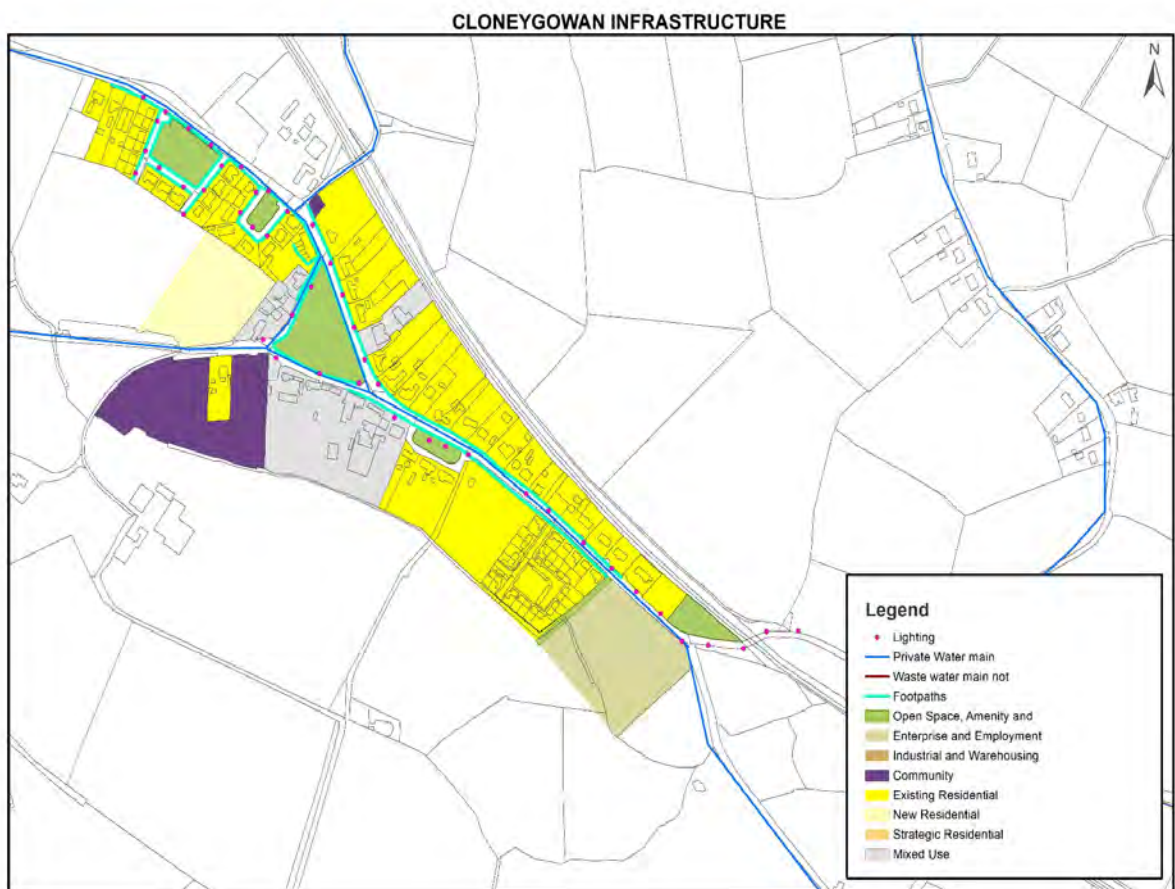
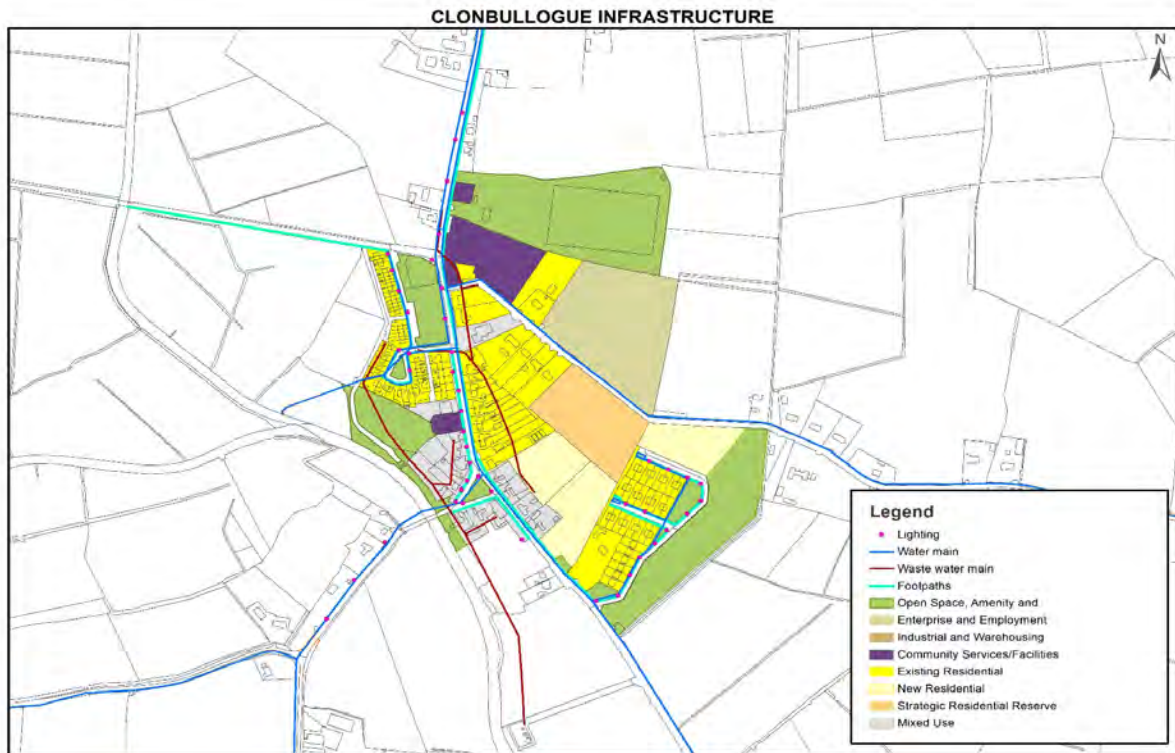


BRACKNAGH INFRASTRUCTURE

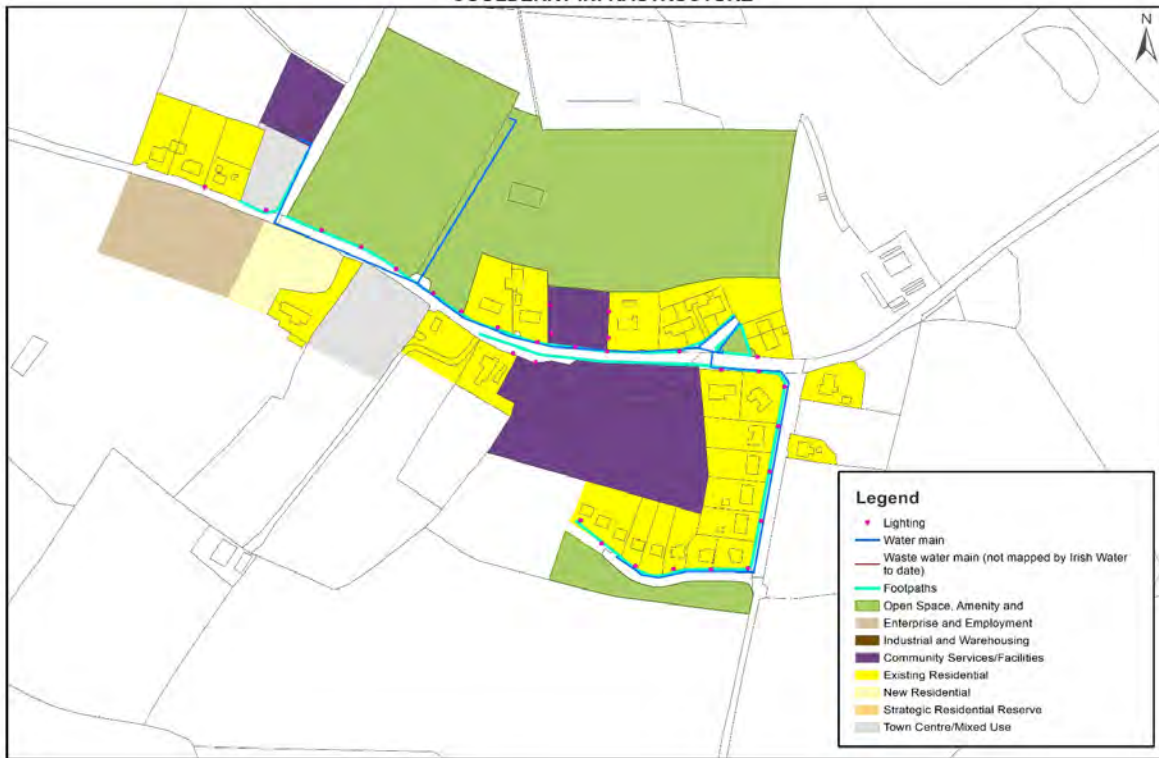


CLOGHAN INFRASTRUCTURE

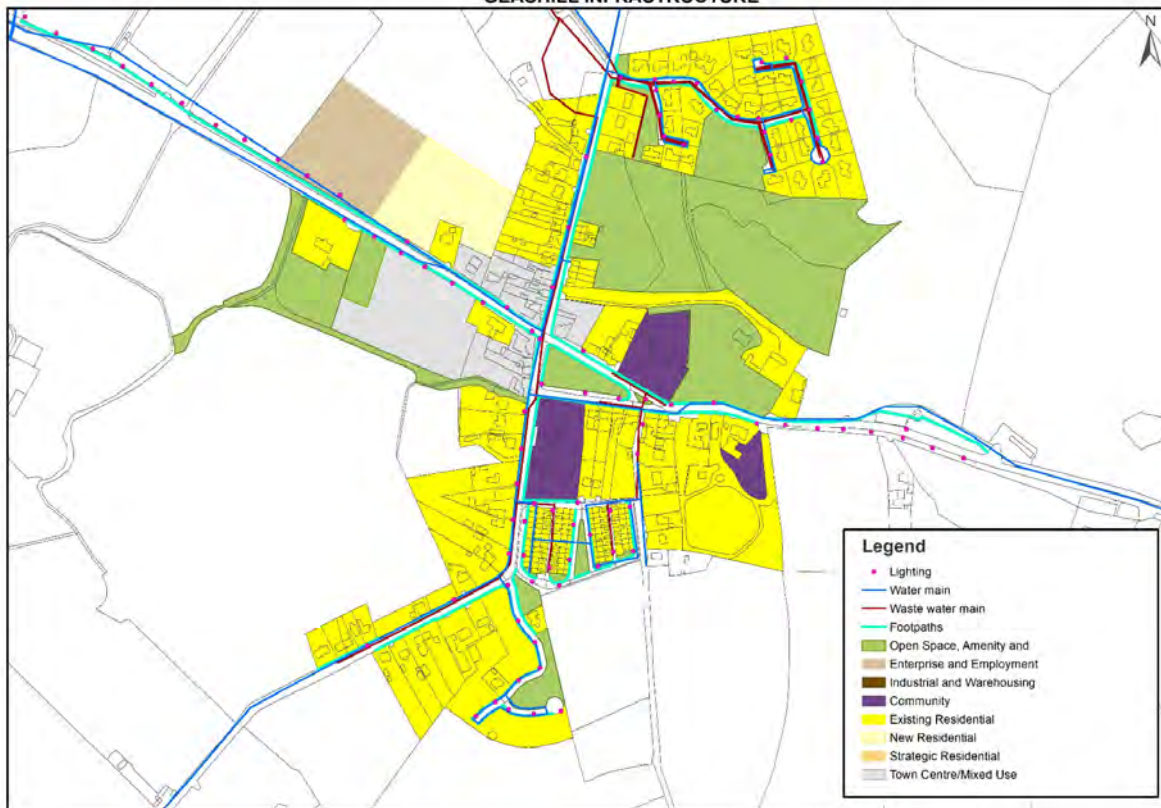




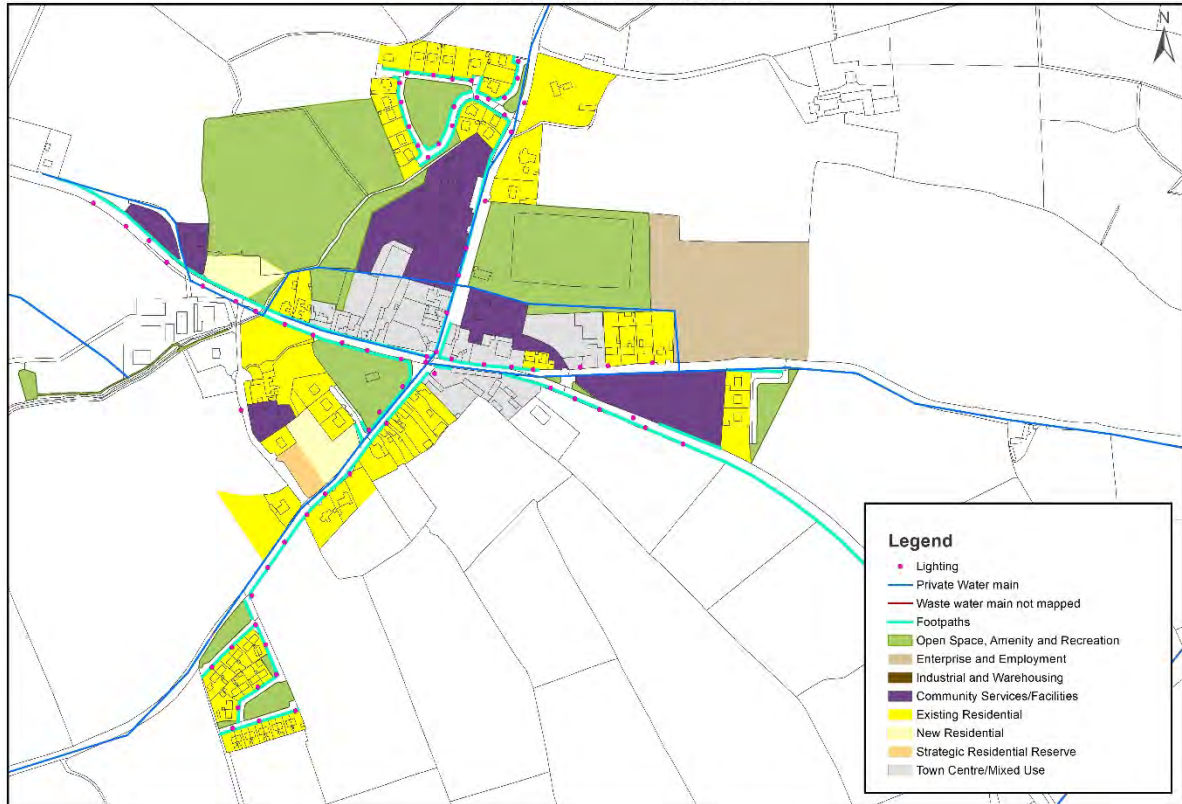
COOLDERRY INFRASTRUCTURE



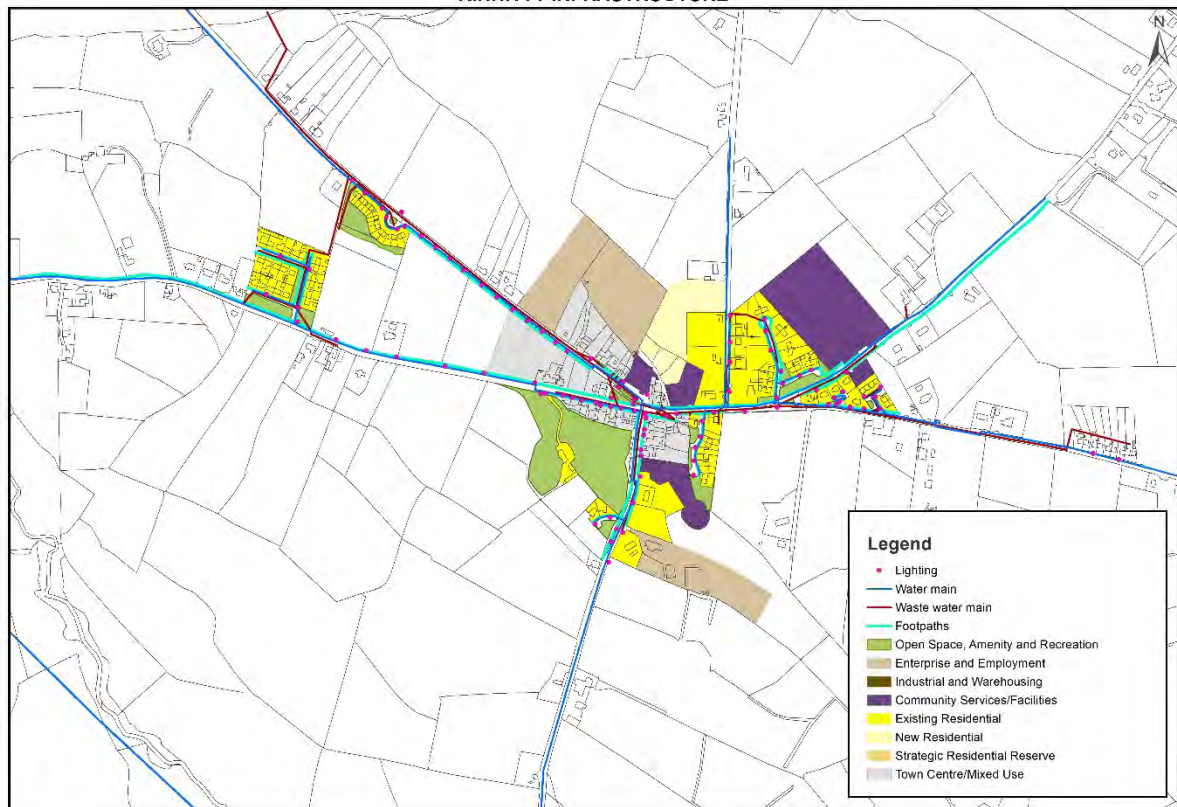
GEASHILL INFRASTRUCTURE



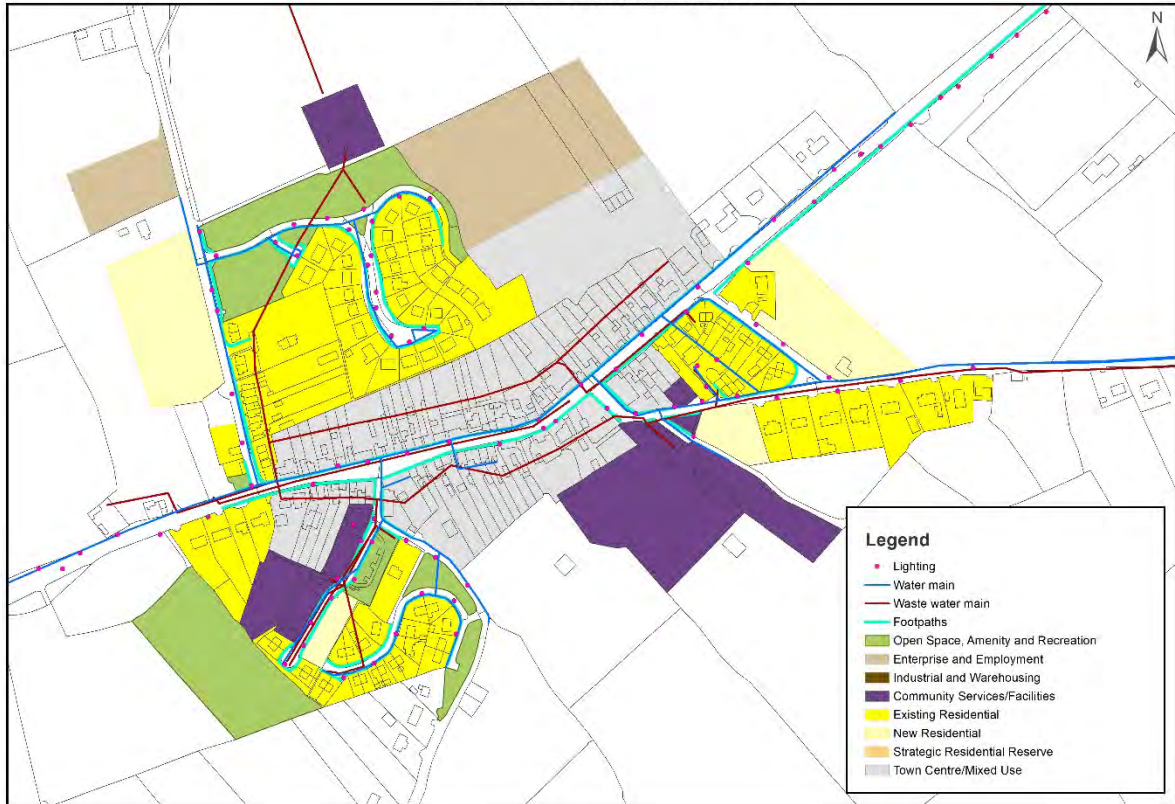
KILLEIGH INFRASTRUCTURE



KINNITTY INFRASTRUCTURE



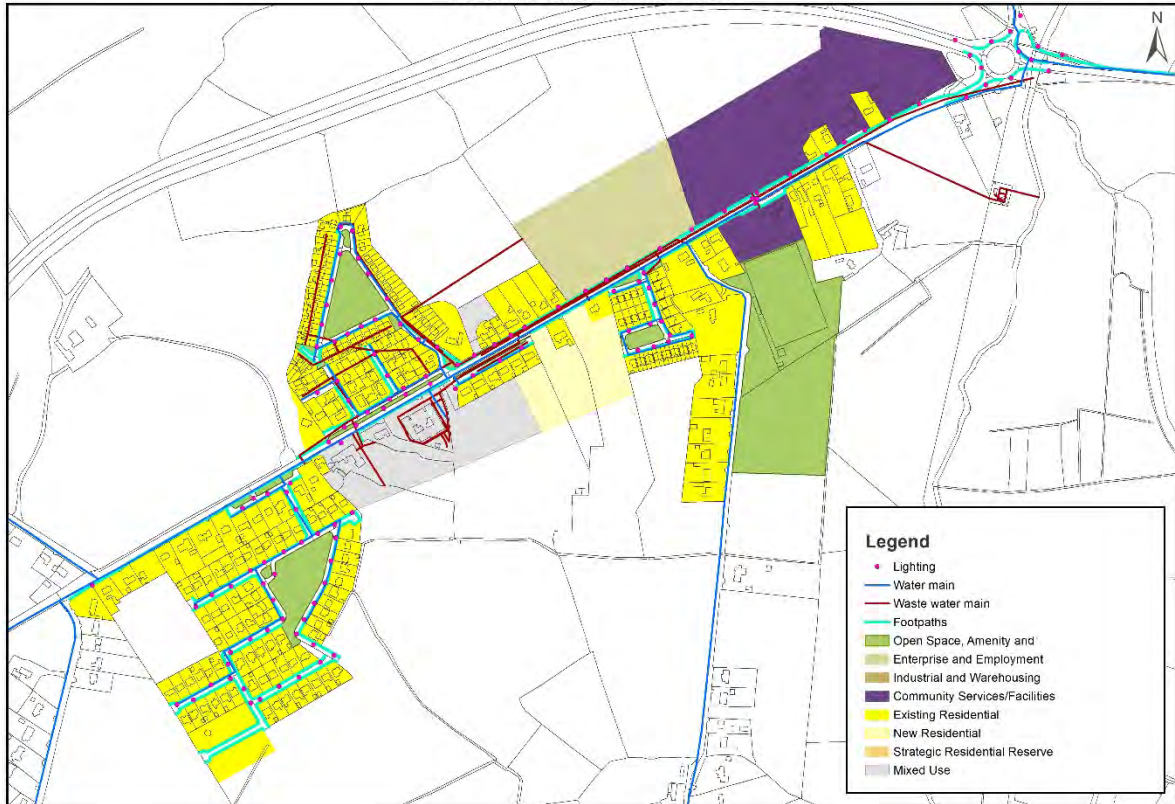
MONEYGALL INFRASTRUCTURE



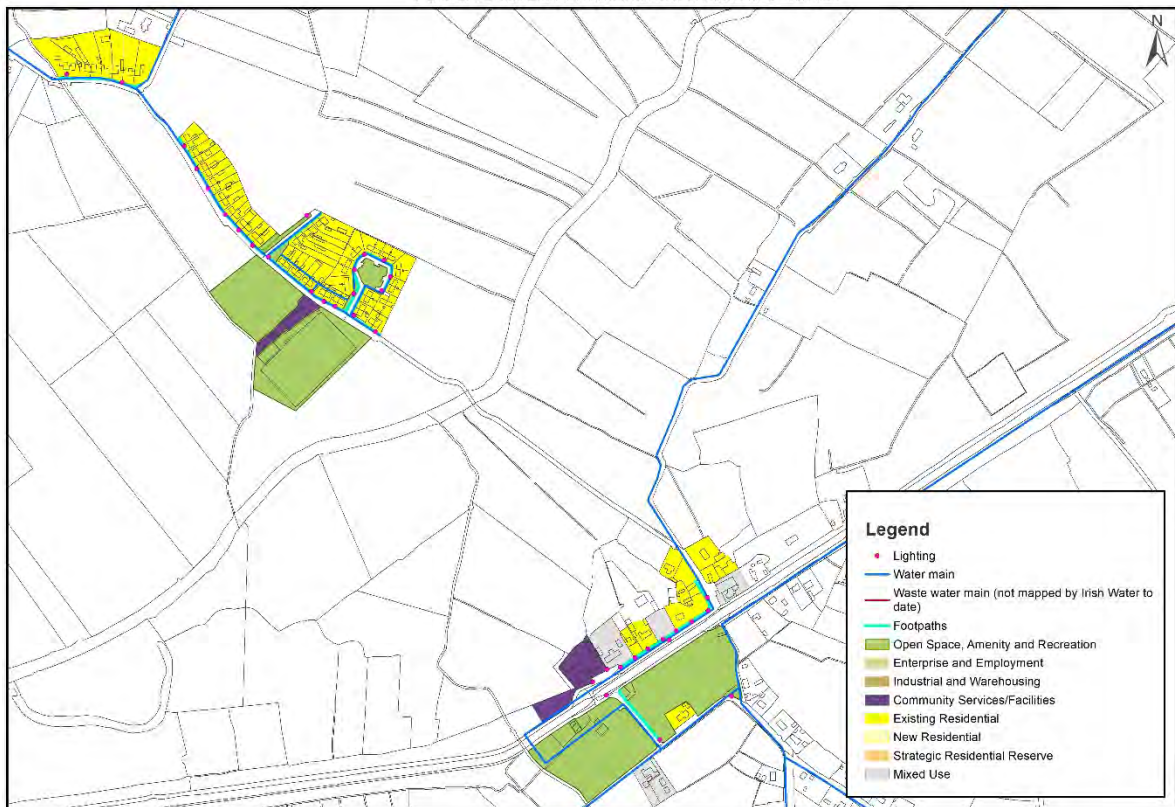
MOUNTBOLUS INFRASTRUCTURE



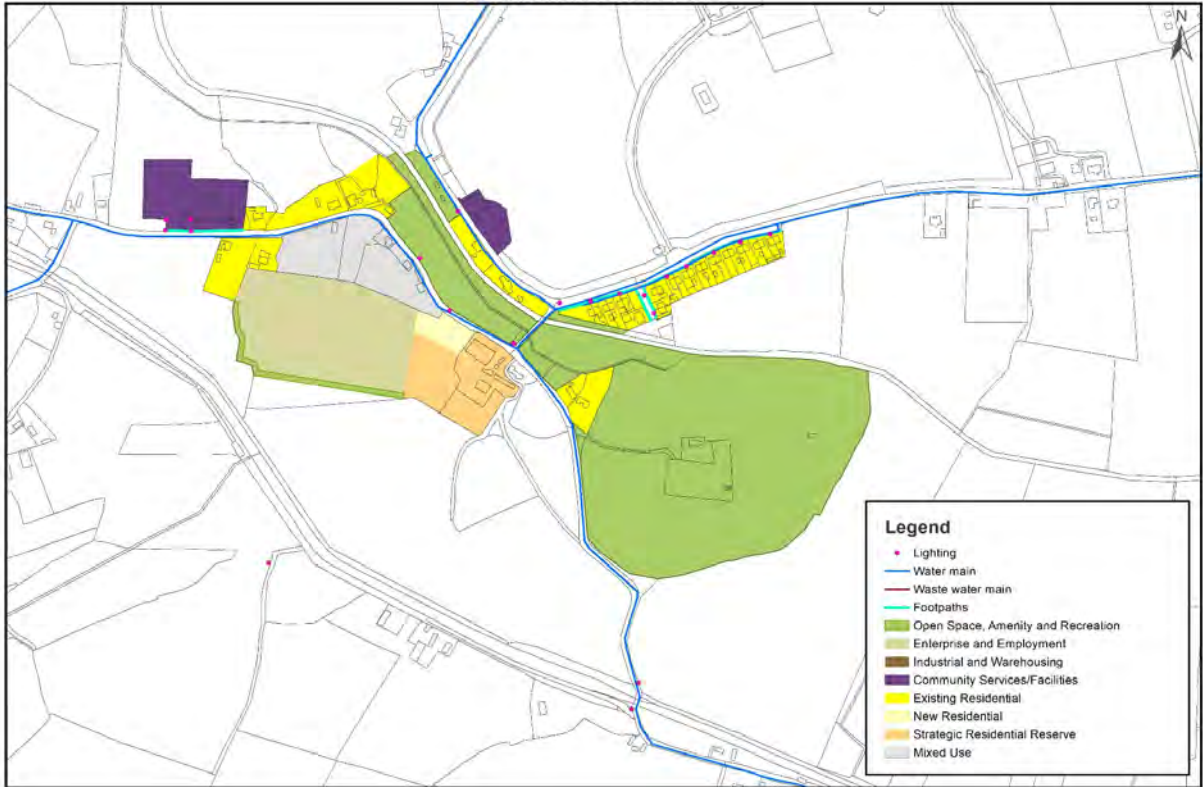
MUCKLAGH INFRASTRUCTURE



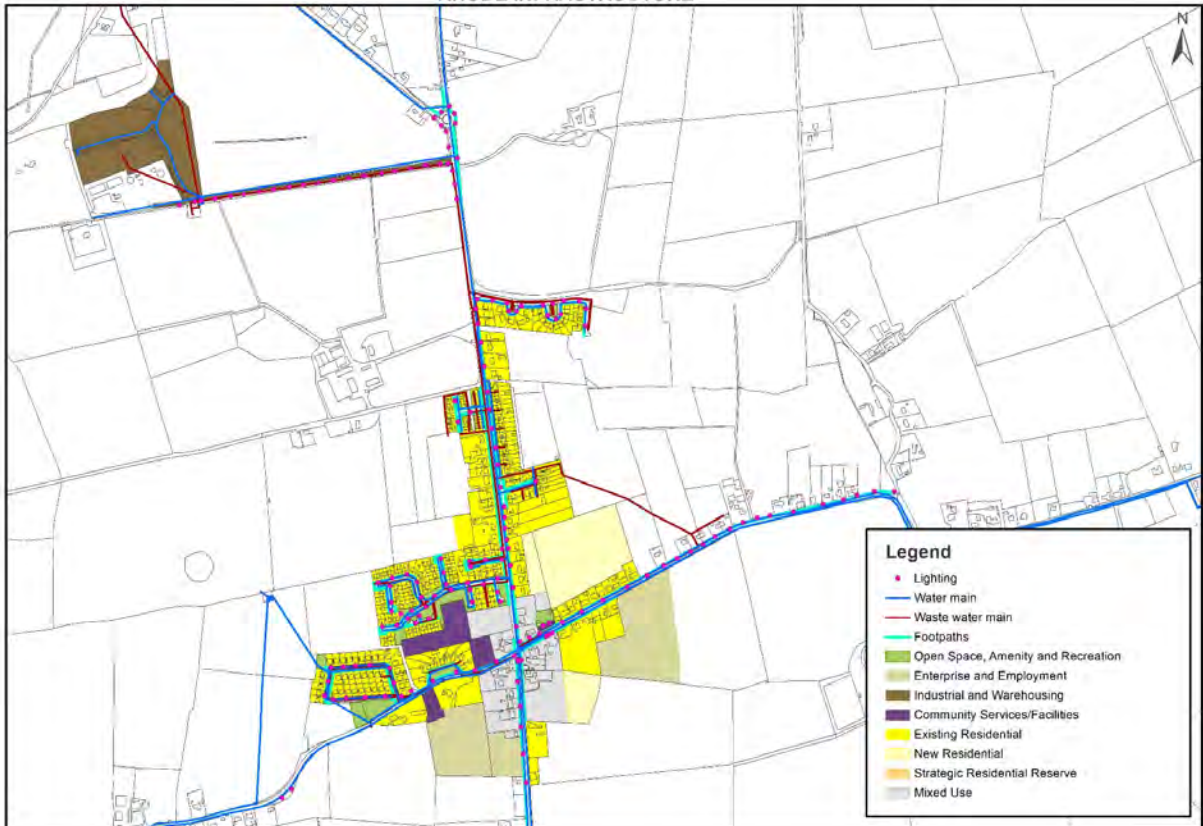
POLLAGH/LEMANAGHAN INFRASTRUCTURE



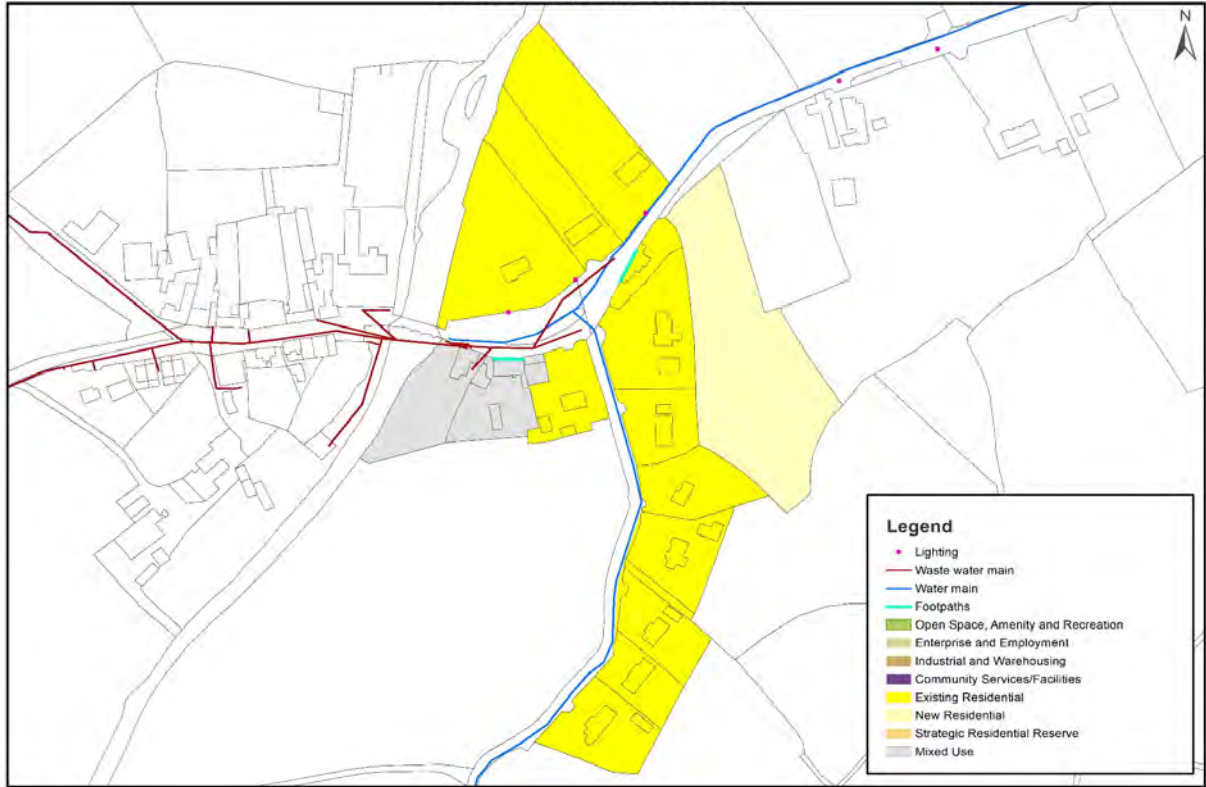
RAHAN INFRASTRUCTURE



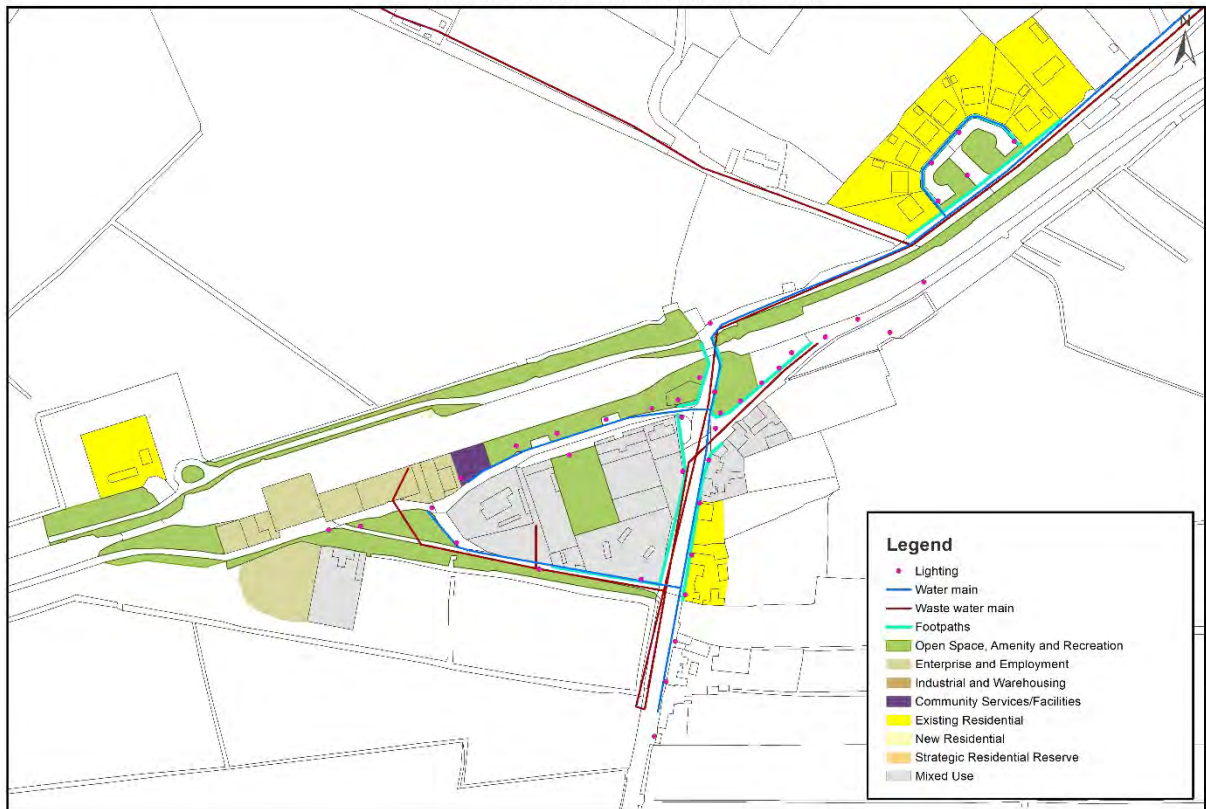
RHODE INFRASTRUCTURE



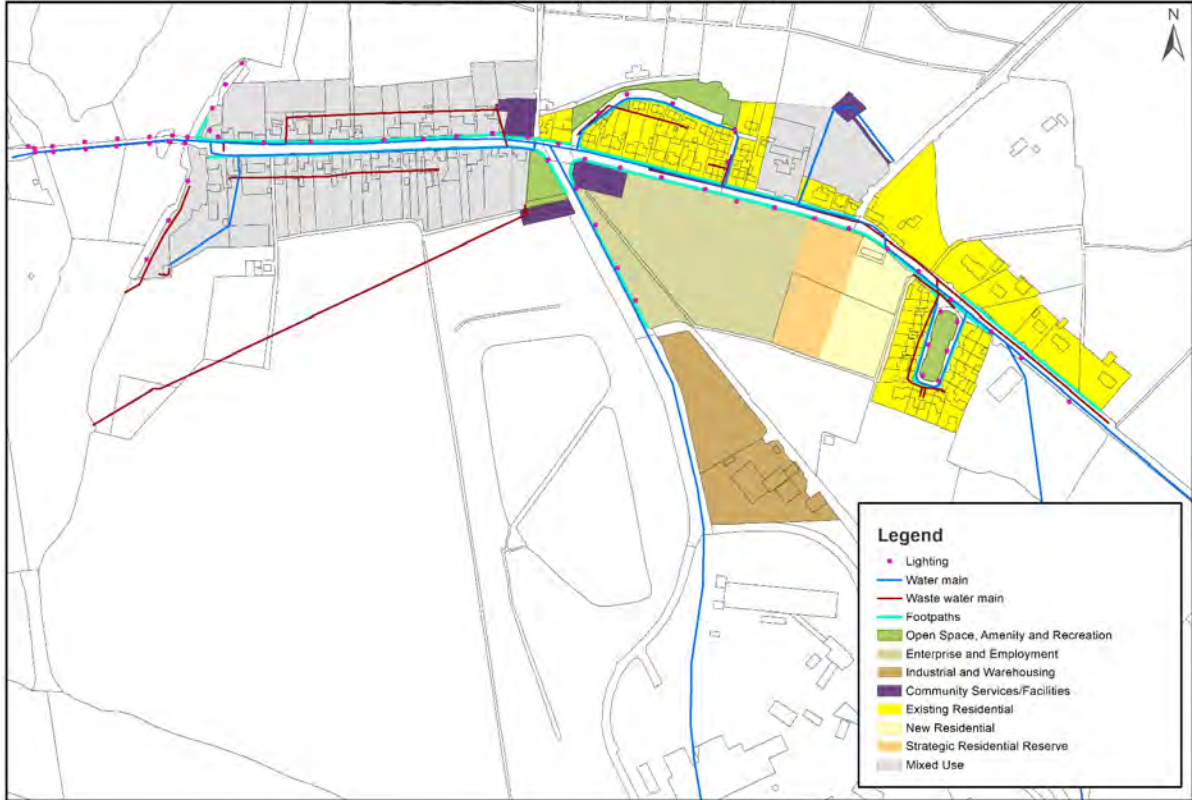
RIVERSTOWN INFRASTRUCTURE



SHANNON HARBOUR INFRASTRUCTURE



SHANNONBRIDGE INFRASTRUCTURE



SHINRONE INFRASTRUCTURE

