

Irish Water Leakage Reduction Plan for Kilkenny 2023

Outline Plan to Reduce Leakage & Facilitate Growth in Kilkenny
County Council

Water Main Rehab Program 2022-Present

- ▶ Fatima Place BYS - 400m + 85 services (complete Q1 2021)
- ▶ Jerpoint, Thomastown - 450m (complete Q3 2021)
- ▶ Knocktopher Village - 1,250m (complete Q2 2022)
- ▶ Michael St, Kilkenny BYS 250m + 25 services (complete Q2 2022)
- ▶ Carrickmourne, Thomastown - 3,250m (complete Q4 2022)
- ▶ Slieverue Village - 1,200m (complete Q3 2022)
- ▶ Knockanore Cross to Norelands WTP - 5,270m (in-progress)
- ▶ Dublin Rd, Thomastown - 1400m (in-progress)
- ▶ St. Fiacres Place BYS - 600m + 99 services (in-progress)



Construction of new HDPE water-main at Slieverue Village



Construction of new HDPE water-main at Carrickmourne, Thomastown



Typical existing Cast Iron Main condition versus new HDPE Main

Kilkenny - Mains Replacement Priority List 2023

Priority Rating	Title	Main	Main Length (m)	Diameter	Material
1	Bennettsbridge Regional WS - Rathduff - Ballyreddin South R700	Main	4,000	100	uPVC
2	Radestown WS - Radestown - Ring Rd	Trunk Main	1,400	375	AC
3	Mooncoin WS - Clogga Cross - Tubrid Res & Tubrid Res Downstream Main	Main	2000 & 400	125 & 150	AC
4	Goresbridge/Paulstown/Gowran WSZ - Duninga	Main	3,300	100	CI
5	Bennettsbridge Regional WS Bennettsbridge - Annamult	Main	4,000	100	uPVC
6	Mooncoin WS - Grannagh - Lickettstown Res	Main	3,300	150	uPVC
7	Radestown WS - Bonnettsrath Rd - Rath Ullord	Main	1,900	100	AC
8	Ballyragget WSZ - Rathduff	Main	720	75	HDPE
9	Bennettsbridge WSZ - Bishopslough	Main	1,300	100	uPVC
10	Bennettsbridge WSZ - Tullaherin	Main	1,700	100	uPVC

Kilkenny - Mains Replacement Priority List 2023

Priority Rating	Title	Main	Main Length (m)	Diameter	Material
11	Clonassy WSZ - Grange	Main	1,200	100	AC
12	Clonassy WSZ - Silversprings	Main	500	150	AC
13	Clonassy WSZ - Clonmore	Main	1,400	100	AC
14	Clonassy WSZ - Mooncoin Village	Main	1,000	100	AC
15	Gowran WSZ - WTP - Gowran Reservoir	Main	1,400	200	AC
16	Bennettsbridge WSZ - Tullaherin - Dungarvan	Main	1,700	100	uPVC
17	Callan WSZ - Collins Park	Main	440	75	CI
18	Thomastown WSZ - Oldcourt - Kilcross	Main	550	75	uPVC
19	Bennettsbridge WSZ - Stoneyford to Kells	Main	1,300	100	uPVC

2023 Projects recommended for construction by AP

Scheme Name	Project number	Length of planned mains/ BYS
Bennettsbridge Regional WS - Bennettsbridge - Annamult	26256502	2580
Leggetsrath Cottages BYS	26239257	210 & 22 BYS
Collins Park BYS	26244397	921 & 64 BYS
New park Lower BYS - Old Golf Links Road	26251372	679 & 101 BYS
Troyswood WSZ -Parnell St	TBC	270 & 98 BYS

2023 Projects recommended for Design Only by AP

Radestown WS - Radestown - Ring Rd	TBC	1400
Mooncoin WS - Clogga Cross - Tubrid Res & Tubrid Res Downstream Main (400m Shared Trench)	TBC	2400
Goresbridge/Paulstown/Gowran WSZ -Duninga	TBC	3300

Find and Fix Program

- ▶ The Find and Fix process continued through 2021
- ▶ Planned and structured program where find crews use network information to streamline efficiencies with finding leakage
- ▶ Improved network visibility from 50% in March of 2021 to 85% in December of 2022, resulting in improved information on high leakage areas
- ▶ In Q3 2022, rollout of a trial leak acoustic listening system. This entailed the installation of 500 smart listening devices into the water network in the Kilkenny City and Callan Town areas. The smart listening system has assisted in the locating of 22 leaks
- ▶ Reduced leakage within the Bennettsbridge, Goresbridge, Castlecomer, Thomastown, Inistioge, South Kilkenny, Piltown and Kilkenny City water supply zones.



Leak Repair in Annamult,
Bennettsbridge



Burst Main in Kilcross,
Inistioge

Pressure Management Program

- ▶ Two new pressure reducing valves (PRV's) were installed in Kilkenny City in 2021
- ▶ PRV's work by reducing pressures on an automatic basis, reducing network pressures at various times of the day
- ▶ PRV's have instant impacts on leakage rates and long term impacts on network burst frequencies
- ▶ Estimated 15% reduction in burst frequency
- ▶ Smaller scale PRV's installed at Kiltown Cross, Inistioge & Fiodh Mor, Ferrybank 2022



First Fix Program

- ▶ Cold calling resumed in 2022 after Covid-19 restrictions lifted
- ▶ New regional contractor commenced FF works in Q2 2022 on Customer-Side-Leaks
- ▶ Each Customer is entitled to one initial fix on the private side once consent is provided to Irish Water (IW)/Regional Contractor (RC) to undertake the repair, repair must be outside the footprint of the house
- ▶ Kilkenny County Council find, quantify and report Customer Side Leaks over to IW and the RC for action