



ATTACHMENT B.8:
IMPROVEMENT PROGRAMME

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Schedule A & C Improvement Programme as per D0052-01

Below is the Schedule A & C Improvement Programme as per D0052-01

Specified Improvement Programmes: (under Schedule A and C of WWDL)	SIP01: Installation of overflow holding tank. SIP02: Sewerage network upgrade. SIP03: SW002 to be discontinued. SIP04: SW003 to be discontinued. SIP05: SW004 to be discontinued. SIP06: SW005 to be discontinued. SIP07: SW006 to be discontinued. SIP08: SW007 to be discontinued. SIP09: SW008 to be discontinued. SIP10: SW009 to be discontinued.
Date for completion of Improvement Programme in the licence:	01/06/2016
Has the date for completion expired? (Enter N, N/A or Y)	Y
Status of works:	Work ongoing on-site
Irish Water's expected timeframe for completing the work	The Networks Upgrade Contract – January 2023. The Mallow WwTP Upgrade and new Bridge Street Pumping Station Contract - December 2023.

Mallow Sewerage Scheme Upgrade Project

The Mallow agglomeration (D0052-01) is currently served by a sewerage system which comprises mainly combined sewers in the Town Centre area, with separated foul and storm drainage in newer developments on the outskirts of the town. A number of streets in the town have separate surface water sewers which discharge to local streams or to the River Blackwater.

The existing sewer network in Mallow contains a number of Storm Water Overflows (SWOs) which frequently discharge untreated wastewater to the River Blackwater in the absence of any stormwater storage. The existing network is also insufficient to comply with Irish Water's design criterion for no flooding from the network in a 1:20 year return period storm event.

The WwTP has a current operational plant capacity of 10,500 p.e. The current design capacity of the WwTP is 18,000 p.e, however only 1 no. process stream is operational, thereby limiting the capacity of the plant. In its' current configuration and setup, the plant is organically overloaded and cannot cater for the existing loads (current collected load (peak week) ca. 14,648 p.e. (2021 AER)).

The agglomeration is currently in breach of Articles 3, 4(1), 5(1) and 12 of the Urban Wastewater Treatment Directive (UWWTD) (91/271/EEC) and as such is the subject of an infringement notice from the European Court of Justice (ECJ).

In April 2019, Irish Water applied to Cork County Council Planning Authority under Section 34 of the Planning and Development Act, 2000 (as amended) for the Mallow Sewerage Scheme Upgrade Project (Ref. Planning Register Number: 195078). A final grant of planning was obtained on the 13th January 2020, subject to 41 no. conditions.

The main objectives of the Mallow Sewerage Scheme Upgrade Project are to ensure compliance with the WWDL - Licence Register Number: D0052-01; issued by the EPA in accordance with the Waste Water Discharge (Authorisation) Regulations (S.I. No. 684 of 2007) on the 18th December 2012 (now S.I. No. 214 of 2020), and subsequent Technical Amendments A and B, and to ensure compliance with Irish Water's Water Services Strategic Plan (WSSP) which includes an objective to target capital investment to progressively achieve compliance with the UWWTD and the Water Framework Directive (WFD).

The Mallow Sewerage Scheme Upgrade Project, which consists of 2 no. contracts, namely the Networks Upgrade Contract and the Mallow WwTP Upgrade and new Bridge Street Pumping Station Contract, consists of the following:

- Removal of 8 no. existing SWOs as per D0052-01, and 1 no. unlicensed SWO at Quarterstown.
- Increase the capacity of the network to convey a 1:20 year return period storm for the 30-year design horizon without causing flooding.
- A new pumping station to replace the existing Bridge Street Pumping Station at Bearforest Lower.
- Provision of a stormwater storage tank (2,400m³) at the Bridge Street Pumping Station and interconnecting pipework and overflow to the River Blackwater (Overflow NGR 156636E, 097862N). The SWO at the new Pumping Station (*i.e.*, SW010 at NGR 156636E, 097862N) has been designed to operate to meet the definition of 'Storm Water Overflow' as per Regulation 3 of the Waste Water Discharge (Authorisation) Regulations, 2007 to 2020 and the criteria as set out in the DoEHLG 'Procedures and Criteria in Relation to Storm Water Overflows', 1995.
- Provision of additional forward pumping capacity to the WwTP. Forward flow to the WwTP from new Bridge St. Pumping station will be limited to 3 times Dry Weather Flow (DWF). Flows in excess of 3DWF will spill into the storm sump at the Pumping Station and will then be pumped to the new storm tank.
- Replacement sewers on the foul/combined sewer network in Mallow to provide for increased flows arising from elimination of SWOs on the network and to cater for future development growth in the agglomeration.
- New rising mains to connect this Pumping Station to the sewer network at Cois na hAbhainn, Ballyellis.
- An increase in treatment capacity at Mallow WwTP to 22,000 p.e.
- Upgrade of sludge import facilities at Mallow WwTP to provide for sludge import volumes in line with National Wastewater Sludge Management Plan.
- Provision for a standby power supply will be made at the Mallow WwTP to provide for continued operation of the wastewater treatment equipment in the event of an interruption in the power supply.
- Provision for a standby power supply will be made at Bridge Street Pumping station to provide for continued operation of the pumping equipment in the event of an interruption in the power supply.
- Works will also include new SCADA and telemetry systems to ensure full compliance and compatibility as per Irish Water Design Specifications.
- All flows will be monitored continuously and recorded with flowmeters at the upgraded WwTP.

The Networks Upgrade Contract commenced on site in April 2021 and works are ongoing with an estimated completion date of January 2023.

The Mallow WwTP Upgrade and new Bridge Street Pumping Station Contract commenced in May 2021 and works are ongoing with an estimated completion date of December 2023.