

Attachment 3.3

MUL Duration

The site investigation surveys are provisionally scheduled to take place from Q4 2026 to Q1 2027. However, to account for contingency in sourcing appropriate contractors to carry out all SI works, potential weather down-time, unforeseen issues with scheduling or sequencing, a total duration of 24 months is being sought for this MUL. All activities are temporary in nature and essential to inform the design and environmental assessment of the proposed outfall system. The site investigation surveys will be undertaken in line with best practice measures to minimise environmental disturbance, including the use of Marine Mammal Observers (MMOs), soft-start procedures for acoustic equipment, and timing of surveys to avoid sensitive ecological periods where necessary (please see attachment 4.3 and Attachment 4.4 for more on this).

Final fieldwork and survey schedules are subject to weather and marine conditions, as well as seasonal constraints and temporal restrictions. Full details of the estimated duration of each element of the proposed Maritime Usage are provided in Table 3.3.1 below.

Table 3.3.1 Indicative site investigation surveys and estimated duration.

Survey Type	Coverage / Location Focus	Max Quantity / Spacing	Worst-Case Equipment and Justification	Vessel Operations (length, width, duration)
Geophysical Surveys				
Sub-bottom profiling	Corridor extending 50–100m either side of the indicative pipeline route, including diffuser zone and trenchless construction exit area	25–50 m line spacing	Towed boomer/sparker system from survey vessel. Required to map sediment layers and bedrock depth for trenchless construction technique feasibility and diffuser siting.	Length: 10–15m, Width: 3–4m; 3 - 5 days total
Magnetometer	Corridor extending 50–100m either side of the indicative pipeline route and diffuser zone (UXO check, seabed obstructions)	25 m line spacing	Marine magnetometer (e.g., Geometrics G-882). Detects ferrous objects that may interfere with trenching or diffuser installation.	Length: 10–15m, Width: 3–4m; 3 - 5 days total
Side Scan Sonar	Corridor extending 50–100m either side of the indicative pipeline route and diffuser zone, especially nearshore and outlet areas	Dual-frequency, full coverage	Edgetech 4200 or Klein 3000 side scan sonar. Maps seabed features, habitats, and potential obstructions for routing and diffuser design.	Length: 10–15m, Width: 3–4m; 3 - 5 days total
Geotechnical Surveys				

Survey Type	Coverage / Location Focus	Max Quantity / Spacing	Worst-Case Equipment and Justification	Vessel Operations (length, width, duration)
Boreholes	1 at landfall (trenchless construction entry), 1 near trenchless construction exit/diffuser, others positioned at 100m centres	Up to 20 total (including contingency for repositioning / redrills to overcome obstructions)	Jack-up barge with soil and rotary drilling rig equipment (e.g., Dando 2000 / Commachio 3000 / GeoborS Drilling rig). Needed to confirm stratigraphy and trenchless construction technique feasibility; barge ensures safe access offshore.	Length: 20–30m, Width: 10–15m; 24hrs – 36hrs per borehole (24 hr working assumed) – up to 30 days total
CPTs (Overwater and Intertidal)	At landfall, at 200m centres along route, and diffuser zone	Up to 10 total	CPT rig on jack-up barge or floating platform (e.g., ROSON). Provides in-situ soil strength for trenchless construction pullback and trench stability.	Length: 15–25m, Width: 8–10m; 0.5 - 1 day per CPT – up to 10 days total
Vibrocores	Distributed along route, with focus on diffuser zone and sediment variability	Up to 15 total	OSIL Vibrocorer deployed from floating vessel. continuous sediment sampling for classification and environmental assessment.	Length: 10–15m, Width: 3–4m; 0.5 - 1 day per vibrocore – up to 15 days total
Seabed Sediment Sampling	Nearshore, mid-route, and diffuser zone	Up to 20 total	Van Veen or Day grab sampler from vessel. Environmental and chemical analysis; supports MARA's ecological impact review.	Length: 10–15m, Width: 3–4m; Up to 4 days total
Trial Pits (Intertidal)	Cregg beach landfall area, spaced across beach width	Up to 4 total	Mini-excavator or hand-dug pits. Confirms constructability of trenchless construction entry pit or trench; low-impact equipment for sensitive zone.	Land-based mini-excavator; 1 day per pit, up to 4 days total
Dynamic Sampling and Probing (Intertidal)	Cregg beach landfall area, spaced across beach width	Up to 4 total	Tracked mini rig (Terrier or similar) to characterise ground conditions with <i>in situ</i> testing	Mini boring rig with probing attachment 0.5 day per position, up to 2 days total