

ATTACHMENT F3 – SURFACE WATER MONITORING AND SAMPLING

As required by the existing waste licence, surface water sampling at the existing recovery facility is currently undertaken on a weekly basis at monitoring location W4, immediately downstream of the dedicated settlement pond which treats only waters emanating from waste recovery activities at the North Quarry. Testing of key chemical parameters is undertaken on collected samples on a weekly basis, while testing of other chemical parameters is undertaken on either a bi-annual or annual basis (depending on the parameter). Further detail on surface water quality and testing is presented in Section 6 of the Environmental Impact Statement which accompanies this waste licence review application.

Occasional sampling and testing is / will also be undertaken on samples taken from any temporary surface water features which may either be created or form naturally at low points within the North and West quarries as they are being backfilled.

As required by the existing effluent discharge licence issued by Fingal County Council (Ref. WPW/F/075), surface water sampling and testing is also undertaken at monitoring location W1, immediately downstream and east of the settlement lagoons which serve the central infrastructure area and upstream of the off-site discharge to the Ballystrahan Stream, a tributary stream of the Ward River. These and other established surface water monitoring locations at the Huntstown facility are shown on Drawing F3-1.

The principle objective of surface water monitoring is to assess water quality and to confirm there is no contamination associated with waste recovery activities on-site. Surface waters will be monitored for the duration of the quarry backfilling and restoration activities and will also continue for a short duration thereafter, as may be required by the facility closure and aftercare plan.

The proposed surface water monitoring locations are identified in Table F3-1 below.

Table F3-1
Surface Water Monitoring Points

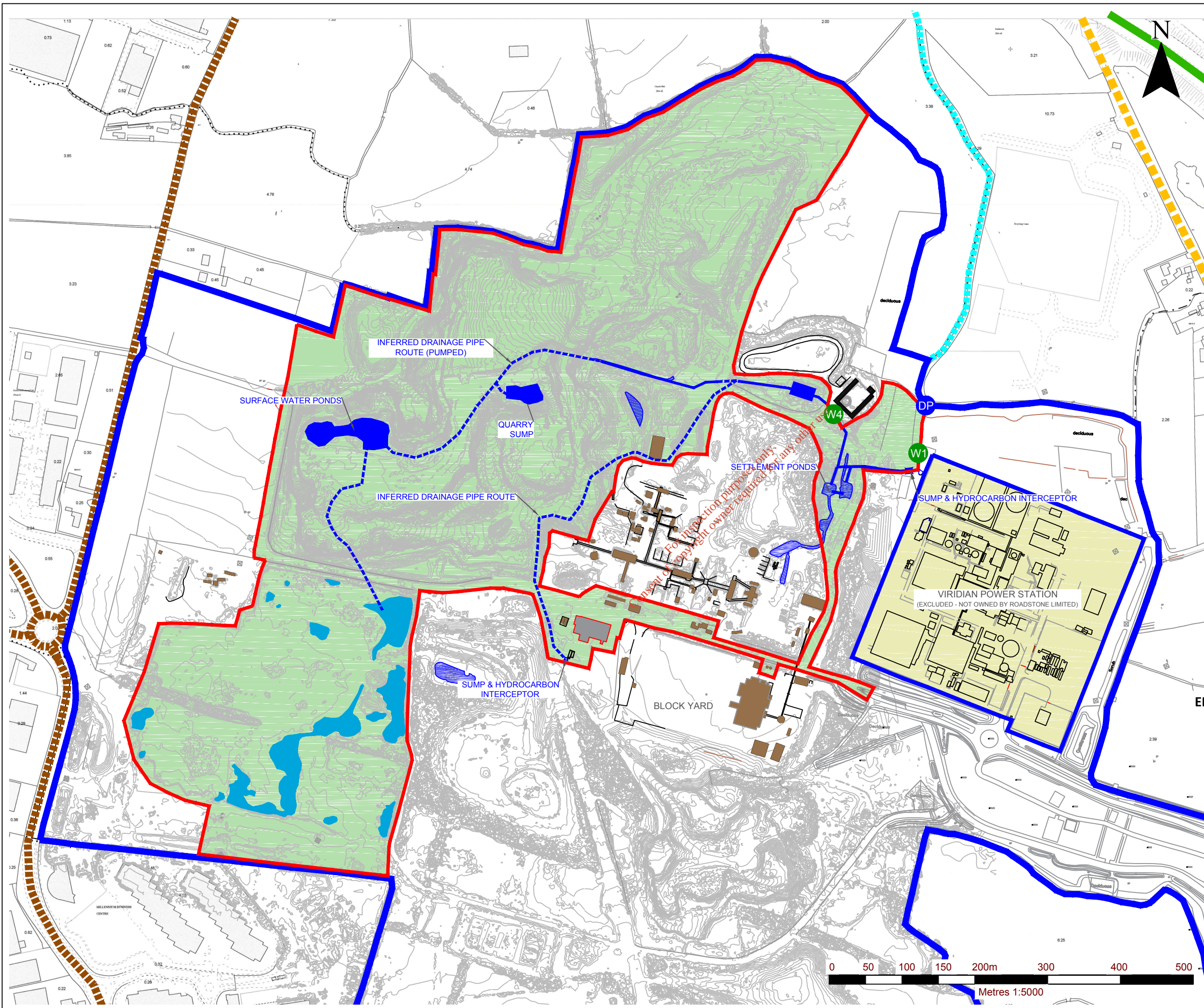
Monitoring Reference No.	Parameter	Monitoring Frequency	Location (Grid Co-ordinates) ¹	Accessibility of Sampling Points
W1	Note 2	Monthly	711193E 741771N	Easy – at side of haul road
W4	Note 3	Daily (<i>Flow, Visual</i>) Weekly (<i>Temp, pH, BOD, SS, NH₃, OrthoP</i>) Quarterly (<i>Metals, TDS</i>) Biannually (<i>DRO, PRO</i>)	711077E 741825N	Easy – at top of quarry void

Note 1 : ITM Co-ordinates

Note 2 : Surface water test parameters include Temperature, pH, Dissolved Oxygen, Chemical Oxygen Demand, Suspended Solids, Mineral Oil, Detergents, Ammonia (as N) Ammonium (as N), Phosphate (as P) and Sulphates (as SO₄)

Note 3 : Surface water test parameters include Temperature, pH, Dissolved Oxygen, Suspended Solids, Ammonia (as N), Orthophosphate (as P), Dissolved Metals (Cd, Cu, Fe, Pb, Mg, Mn, Ni and Zn), Total Dissolved Solids, Total Petroleum Hydrocarbons, Diesel Range Organics and Petrol Range Organics

0180.00152.0.FIG_F3-1.Surface Water Monitoring Locations.dwg



NOTES
 1. EXTRACT FROM 1:2,500 ORDNANCE SURVEY DIGITAL SHEET NO'S. 3062-A, 3062-B, 3062-C, 3062-D, 3063-A, 3063-C, 3130-A & 3130-B.
 2. ORDNANCE SURVEY IRELAND LICENCE NO. SU 0000716 (C) ORDNANCE SURVEY & GOVERNMENT OF IRELAND

LEGEND

- ROADSTONE LIMITED LAND INTEREST (c. 200.3 ha)
- APPLICATION AREA (c. 48.65 ha)
- N2 DUAL CARRIAGEWAY
- NORTH ROAD (R135)
- LOCAL ROAD
- BALLYSTRAHAN STREAM
- SURFACE WATER MONITORING LOCATIONS
- DISCHARGE POINT
- EPHEMERAL PONDS IN WEST QUARRY

EMISSION	EASTING	NORTHING
DP	711204	741838
W1	711193	741771
W4	711077	741825

SLR global environmental solutions

SLR CONSULTING IRELAND
 7 DUNDUM BUSINESS PARK
 WINDY ARBOUR
 DUBLIN 14
 T: +353-1-2964667
 F: +353-1-2964676
 www.slrconsulting.com

ROADSTONE LIMITED
 WASTE LICENCE REVIEW APPLICATION
HUNTSTOWN WASTE RECOVERY FACILITY
 NORTH ROAD, FINGLAS, DUBLIN 11
SURFACE WATER MONITORING LOCATIONS

DRAWING F3-1

Scale: 1:5,000 @ A3
 Date: SEPTEMBER 2016