32EW5604-00-044-2

FIGURE 4.19

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Discharge pipework to soakaway

Open channel ref. CH01
Top width=2.90m
Base width=0.50m
Depth=0.40m
Ditch bank slope 1 in 3

Proposed soakaway

1200mm internal diameter manhole with isolation penstock

Pond 1
Storage Volume=2452m3
Maximum water depth=1.00m+0.50m freeboard
Assumed TWL=94.5m OD (subject to confirmation upon final detailed design)

Open channel ref. CH02
Top width=2.90m
Base width=0.50m
Depth=0.40m
Ditch bank slope 1 in 3

Flat laying infiltration swale along northern mound toe.
Swale size is subject to confirmation following percolation tests on site to determine permissible infiltration rate.

Open channel ref. CH03
Top width=2.90m
Base width=0.50m
Depth=0.40m
Ditch bank slope 1 in 3

Open channel ref. CH07
Top width=3.45m
Base width=0.45m
Depth=0.50m
Ditch bank slope 1 in 3

Open channel ref. CH08
Top width=4.45m
Base width=0.55m
Depth=0.65m
Ditch bank slope 1 in 3

Open channel ref. CH09
Top width=3.50m
Base width=0.50m
Depth=0.50m
Ditch bank slope 1 in 3

Open channel ref. CH11
Top wicth=2.90m
Base width=0.50m
Depth=0.40m
Ditch bank slope 1 in 3

Outfall to Morell River
Bank level=80.80m OD
Pipe invert level=80.20m OD
(levels subject to confirmation)

225mm dia. discharge pipework to Morell River

Approximate extent of existing rock armour

Open channel ref. CH04
Top width=3.03m
Base width=0.40m
Depth=0.43m
Ditch bank slope 1 in 3

Open channel ref. CH19
Top width=1.6m
Base width=0.40m
Depth=0.25m
Ditch bank slope 1 in 3

Open channel ref. CH20
Top width=2.25m
Base width=0.45m
Depth=0.3m
Ditch bank slope 1 in 3

Open channel ref. CH05
Top width=3.20m
Base width=0.50m
Depth=0.45m
Ditch bank slope 1 in 3

Road/car park drainage which includes:
- road gullies
- oil/silt interceptors
- underground pipework

Open channel ref. CH06
Top width=2.20m
Base width=0.45m
Depth=0.30m
Ditch bank slope 1 in 3

Open channel ref. CH10
Top width=3.20m
Base width=0.50m
Depth=0.46m
Ditch bank slope 1 in 3

Open channel ref. CH13
Top width=4.70m
Base width=0.50m
Depth=0.70m
Ditch bank slope 1 in 3

Open channels ref. CH14 & CH15,
Top width=2.30m
Base width=0.50m
Depth=0.30m
Ditch bank slope 1 in 3

Road drainage/car park drainage which includes:
- road gullies
- oil/silt interceptors
- underground pipework

Manhole with penstock to allow isolation of flows from gas and leachate infrastructure compound in the event of contamination

1200mm internal diameter manhole with isolation penstock

Auto sampling / monitoring point

Pond 3
Volume=2777m3
Overall water depth=1.60m+0.5m freeboard.
GL=84.80m OD
TWL=84.30m OD
BWL=82.70m OD
Pond invert level=82.30m OD

Open channel ref. CH17
Top width=2.60m
Base width=0.50m
Depth=0.35m
Ditch bank slope 1 in 3

Open channel ref. CH12
Top width=2.60m
Base width=0.50m
Depth=0.35m
Ditch bank slope 1 in 3

Culvert connecting two ponds (refer to note 5)

Pond 2
Volume=13235m3
Overall water depth=1.60m+0.5m freeboard.
GL=85.00m OD
TWL=84.50m OD
BWL=82.90m OD
Pond Invert Level=82.50m OD

Open channel ref. CH18
Top width=3.20m
Base width=0.50m
Depth=0.45m
Ditch bank slope 1 in 3

Kerdiffstown House
Pool
Chapel
FB
QUARRY
Palmerstown House Estate and Golf Course
Lake
Church (in ruins)
Kerdiffstown Road
Morell River
Canal Feeder Stream
Spring
Maudlings Interchange
Roseborough

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N

0 50 100 150 200 m
SCALE 1 : 2000

KEY:

- Licence boundary
- Approximate extent of existing rock armour
- Proposed storage pond
- Proposed ditch/open channel
- Proposed infiltration swale/trench
- Proposed underground pipework
- Proposed manhole / chamber
- Proposed outfall
- Direction of flows
- Proposed soakaway
- Surface water emission point
- Ground emission point
- Existing Copse (mature trees)
- GL — Ground Level
- TWL — Top Water Level
- BWL — Bottom Water Level

NOTES:

1. All levels are to metres OD (Malin Head) unless stated otherwise.
2. All dimensions are in millimetres unless stated otherwise.
3. This drawing should be read in conjunction with the Surface Water Management Plan.
4. The size and shape of the proposed soakaway is to be confirmed during detailed design phase.
5. The size and general arrangement of culvert between Pond 2 and Pond 3 is to be confirmed during detailed design phase.
6. For section details refer to Drawings 32EW5604-00-045 and 32EW5604-00-046. (In Surface Water Management Plan).
7. Drainage from upgraded road will tie into the existing road.

Rev	Rev. Date	Purpose of revision	Drawn	Checkd	Rev'd	Appr'd
2	07/08/2017	EIAR SUBMISSION	AR	CD	CD	RR
1	30/06/2017	EIAR SUBMISSION	KMA	CD	CD	RR
0	14/12/2016	EIS SUBMISSION	VT	PHC	AHK	RR

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Client: Kildare County Council, Comhairle Contae Chill Dara

Project: KERDIFFSTOWN LANDFILL REMEDIATION PROJECT

Drawing title: FIGURE 4.19
SURFACE WATER MANAGEMENT
FOR THE PROPOSED PROJECT
OUTLINE DRAINAGE LAYOUT

Drawing status: EIAR SUBMISSION

Scale	1:2000 @A1	DETAILS SHOWN ARE NOT FOR CONSTRUCTION PURPOSES HENCE DRAWING SHOULD NOT BE SCALED
Jacobs No.	32EW5604	
Client no.	6286	

Drawing number: 32EW5604-00-044
Rev: 2

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