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Stage 1 Appropriate Assessment Screening Gowran Closed Landfill, Co. Kilkenny.

Gowran landfill is located c 300m to the northwest of Gowran, Co. Kilkenny. The site is accessed from the Rockfield road which runs along the north western boundary of the site.

The site occupies an area of approximately 0.4 hectares. The land slopes from the northeast toward the south west. The site is bound to the south by disused playing fields, to the west by scrub land, to the northwest by agricultural pasture and to the north by Rockfield Road. There is a sewer line running along the northeast site boundary. The northwest of the site is uneven and poorly draining ground with scrub vegetation and a tree-line along the northwest site boundary. In the south west of the site the ground is gravel paved and has been used as a parking and storage area by the council.

The site is bound to the south east by a disused playing fields. To the south west is a greenfield land parcel which has received planning permission for a residential development. Rockfield road runs along the northwest site boundary. The lands further to the northwest are agricultural pasture. There are four residential dwellings located immediately to the northeast of the site.

The site is accessed from Rockfield road which runs along the north western boundary of the site. The nearest houses lie within 20 m of the north eastern site boundary where the border between the property and site consists of a fence and wall and a treeline. The foul sewer servicing the residential development to the northeast of the site runs along the north eastern boundary of the site and connects into the foul sewer running along the Rockfield road. There are a number of manhole covers along the sewer line within the site.

The site was originally used as a quarry during the early to mid 1900's. From a period between the mid 1970's and the mid 1990's, the site was operated by the Council for the disposal of municipal and industrial waste from the surrounding areas.

AA Risk Screening Process

The Habitats Directive, which is implemented under the European Communities Birds and Natural Habitats) Regulations 2011 (S.I. No 477 of 2011) requires an “appropriate assessment” of the potential impacts any works may have on the conservation objectives of any Natura 2000 site. Article 6(3) of the Directive stipulates that *any plan or project not directly connected with or necessary to the management of a Natura 2000 site, but likely to have a significant effect thereon...shall be subject to appropriate assessment of its implications for the site in view of the site’s conservation objectives.*

Natura 2000 sites are those identified as sites of European Community importance and designated as such under the EU Habitats Directive (92/43/EC) (Special Area of Conservation) or the Birds Directive (Special Protection Areas).

Guidance documents issued by Department of Environment, Heritage and Local Government and the National Parks and Wildlife Services recommend that the assessment be completed in a series of Stages, which comprise:

Stage 1: Screening

The purpose of this Stage is to determine, on the basis of a preliminary assessment and objective criteria, whether a plan or project, alone and in combination with other plans or projects, could have significant effects on a Natura 2000 site in view of the site’s conservation objectives.

Stage 2: Appropriate Assessment

This Stage is required if the Stage 1 Screening exercise identifies that the project is likely to have a significant impacts on a Natura 2000 site.

Stage 3: Assessment of Alternative Solutions.

If Stage 2 determines that the project will have an adverse impact upon the integrity of a Natura 2000 site, despite the implementation of mitigation measures, it must be objectively concluded that no alternative solutions exist before the plan can proceed.

Stage 4: Compensatory Measures:

Where no alternative solutions are feasible and where adverse impacts remain but imperative reasons of overriding public interest require the implementation of a project an assessment of compensatory measures that will effectively offset the damage to the Natura site 2000 is required.

The AA screening is required as it is proposed to undertake some limited remedial measures. These measures include the redistribution of the capping layer to ensure a uniform 500mm layer of subsoil.

The fly tipped waste should either be incorporated into the waste body prior to capping of the landfill or removed off site for appropriate disposal. After the capping is completed a c100mm top soil layer should be placed and planted with grasses to stabilise the cover material.

Stage 1 Screening Methodology

The Stage 1 Screening was conducted in accordance with the guidance presented in the “Assessment of Plans and Projects significantly affecting Natura 2000 sites, Methodological Guidance on the provisions of Articles 6(3) and 6(4) of the Habitats Directive 92/43/EEC” (2001); The Department of Environment, Heritage and Local Government (2009, revised February 2010) Appropriate Assessment of Plans and Projects in Ireland and the National Parks and Wildlife Services (2010) Circular NPW 1/10 & PSSP 2/10 Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities.

The closest Natura 2000 site is the Barrow and River Nore Special Area of Conservation (SAC 002162) which is located c.5.5km east of the site (Appendix 1).

SACs are selected for the conservation and protection of habitats listed on Annex I and species (other than birds) listed on Annex II of the Habitats Directive, and their habitats. The habitats on Annex I require special conservation measures.

The remedial works are described in Section 5 of the Tier 3 report and an outline design Drawings is in Appendix 2.

The Council propose to incorporate the site into a Community Sports Play Area. It is proposed to construct an access road from the north end of the landfill area to a car park in the southwest section of the landfill. There would also be a walking/running path around the perimeter of the site which will extend into the former playing pitch area to the south. A storage building and running track will also be constructed on lands to the south of the landfill.

A landfill gas interception trench 0.5m wide will be constructed around the southern and eastern sides of the landfill.

The ground conditions in the north of the site are currently poor with the ground heavily poached and water logged. This portion of the site is where the clay layer is generally thin (0.4-0.6m thick). An additional 0.6m of subsoil should be placed over the southern section of the site. While there is currently sufficient thickness of soil elsewhere this will need to be regraded and compacted to ensure a fall across the site of 1 in 40 (confirm) following the topographic gradient.

In the portion of the site proposed for road access, running /walking path and car parking clean granular fill will be required. This may need to be allowed to settle and will require compaction to form the road and car park base layer.

Four Gas Ventilation Wells should be installed in each quadrant of the body of the waste to allow passive ventilation of landfill gas once the capping is placed and compacted.

An LDPE liner should be placed above the clay layer outside the road and car park footprint. A 200mm pea gravel surface water drainage layer should be placed above this layer.

The drainage layer should be covered with a permeable membrane and a 150mm top soil layer should be placed above this and grass seed applied.

A surface water collection drain should be constructed along the west and north of the site. The trench will be excavated to 400mm below the base of the drainage layer and will be lined with a LDPE liner. The drain will be graded to fall to a low point where it will discharge to HPDE lined attenuation pond to be constructed in the northwest corner of the site. Surface water from the pond will be discharged to the Council storm sewer (confirm) along Rockfield Road.

The remedial works have the potential to generate dust emissions in the immediate vicinity of the site when the trenches are being excavated and the capping layers are being placed. The removal of the fly tipped waste is not expected to generate any significant emissions. The works will not result in emissions to surface or groundwater.

Given the distance from the Gowran former landfill site the proposed remedial works do not present any risk to the Barrow and River Nore SAC.

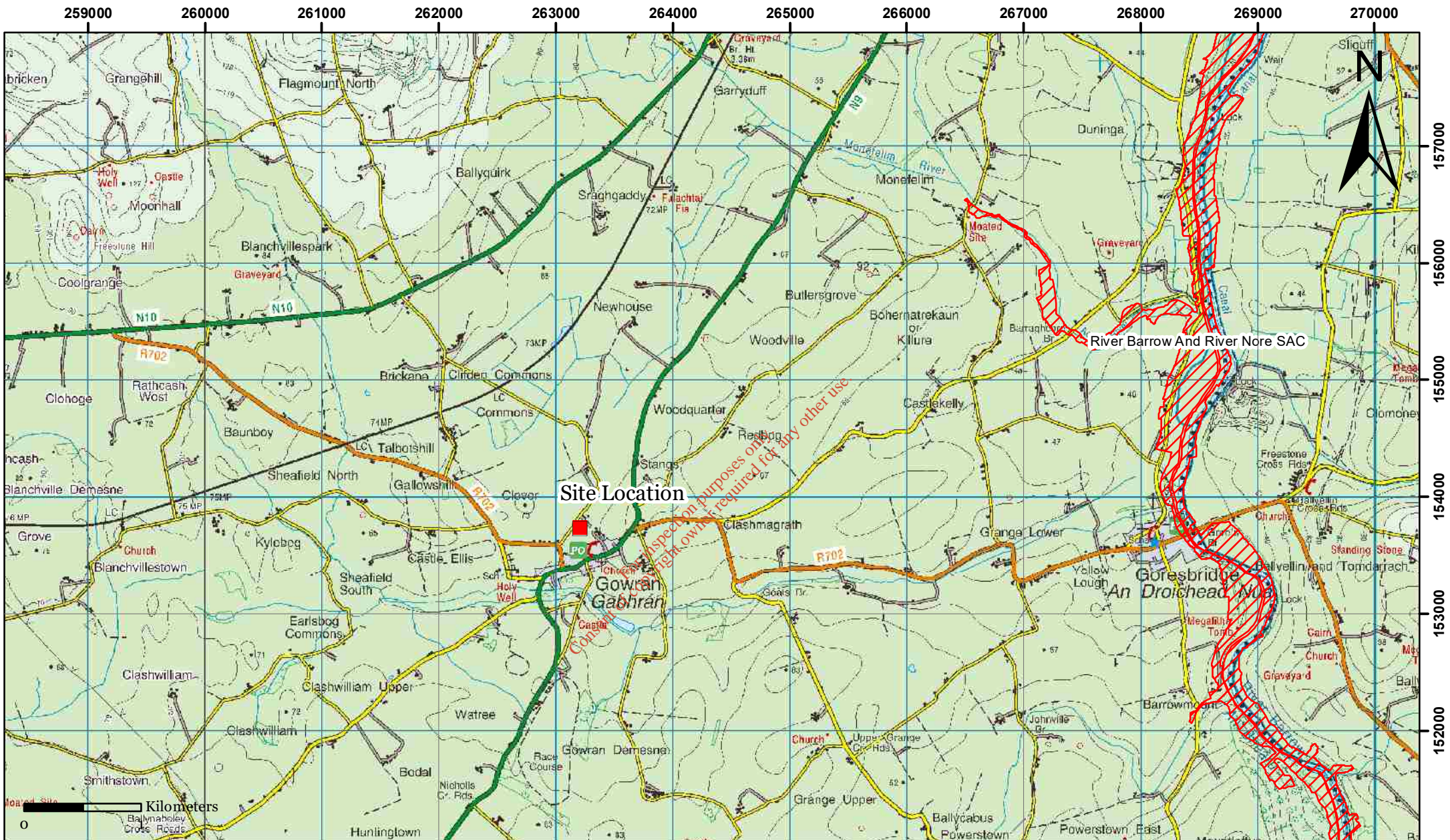
Stage 1 Conclusion

As the remedial measures will not impact on the SAC a Stage 2 Appropriate Assessment is not required.

APPENDIX 1

Natural 2000 Sites Location

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TITLE
 NPWS



Details:
 Site Location
 River Barrow And River Nore SAC

Figure 6.1

APPENDIX 2

Remedial Design Drawings

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BH2
 63.66
 63.19

BH3
 64.30
 63.98

TP8
 65.36
 64.77

TP12
 65.45
 65.10

TP11
 65.16
 64.71

GW2
 66.12
 65.83

GW1
 66.78
 66.44

BH1A
 66.02
 65.72

BH1
 65.94
 65.60

Surface Water Attenuation Pond

Connection to storm sewer

Surface Water Collection Drain

50m

Landfill Gas Interception Trench

Gas Ventilation Pipe

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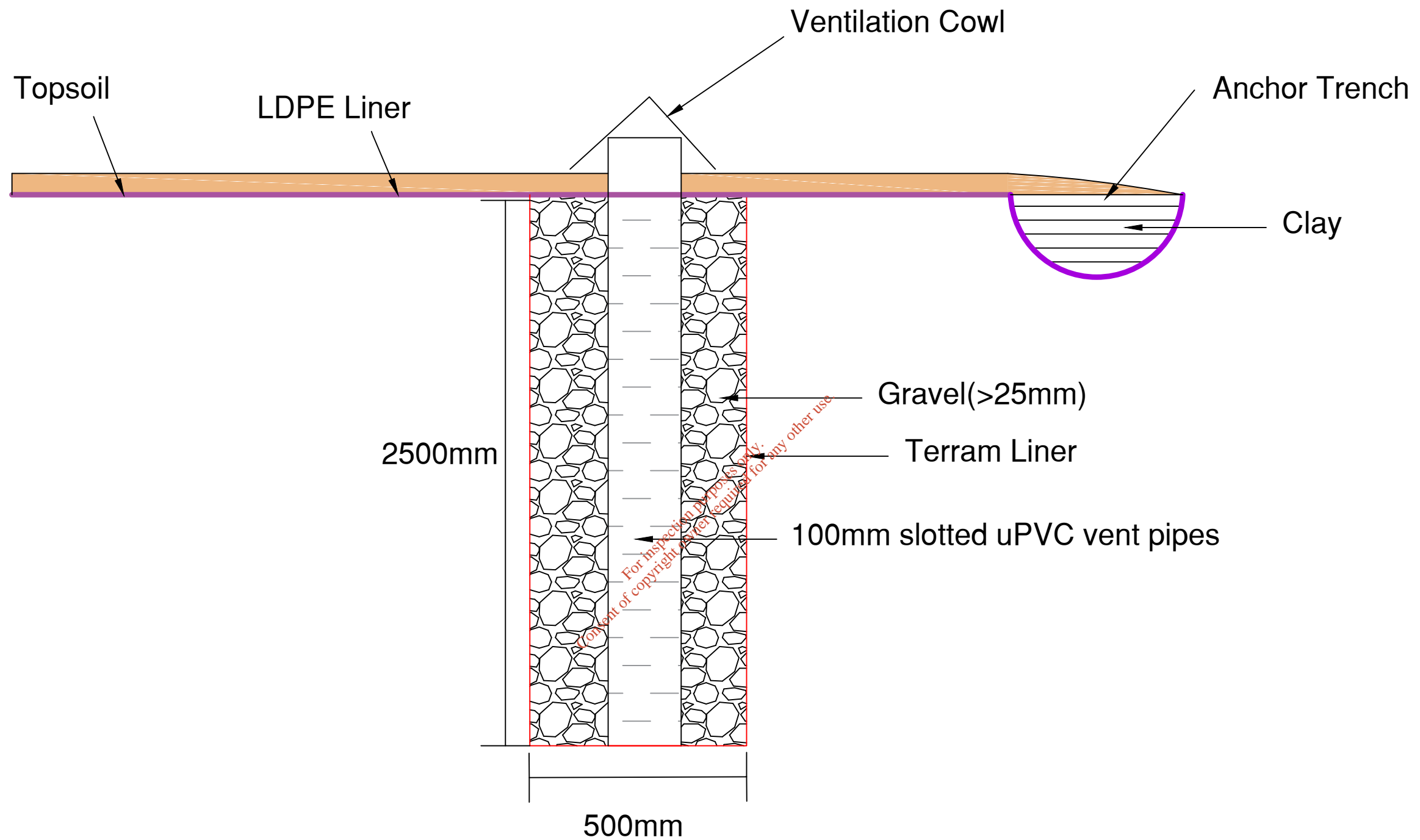
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FIGURE No.
 5.1

TITLE
 Remediation Design Drawing

SCALE
 NTS

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FIGURE No.

5.2

TITLE

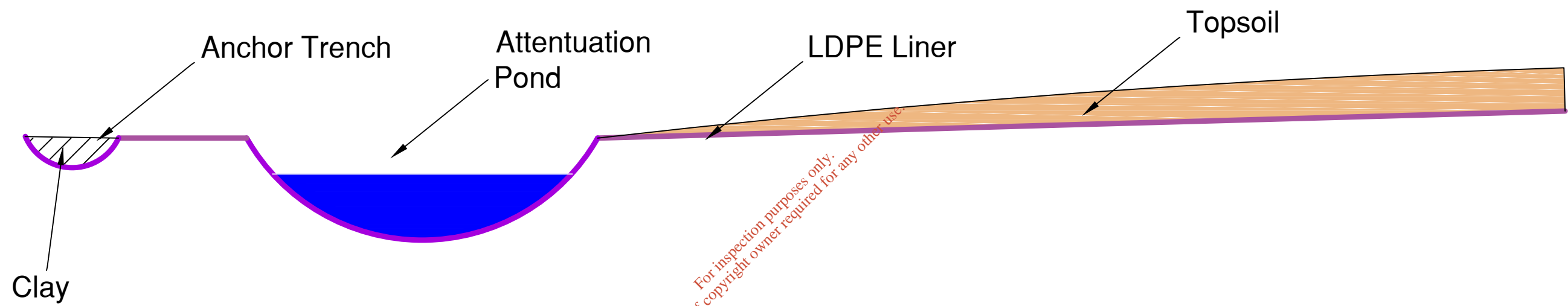
Landfill Gas Collection Trench Detail

SCALE

NTS

REV.

A



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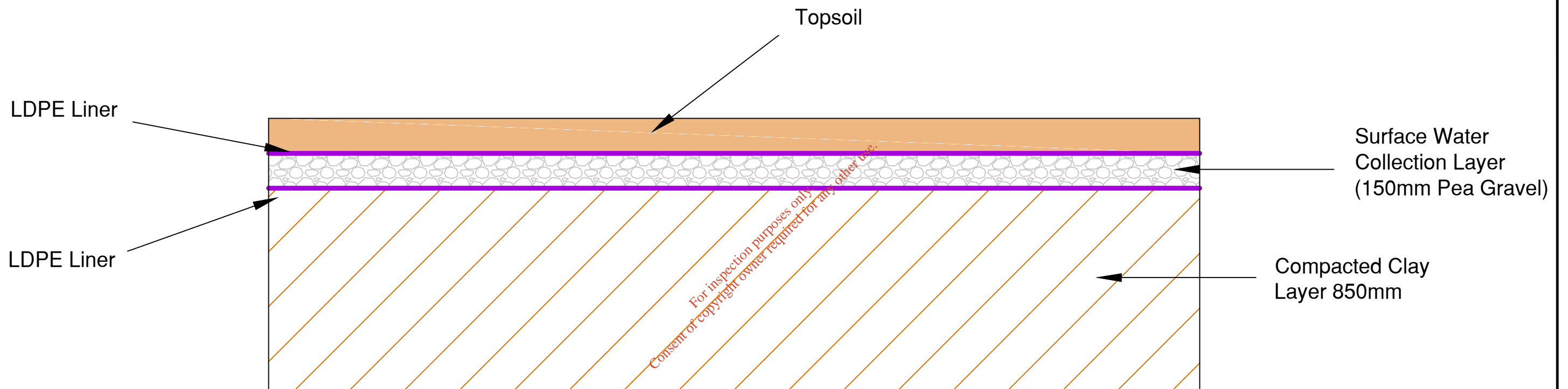
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FIGURE No.
 5.3

TITLE
 Surface Water Collection Drain

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TITLE

Landfill Capping Detail

FIGURE No.

5.4

SCALE

NTS

REV.

A