

5 CONSULTATION PROCESS

In accordance with Section 18(1) of the Waste Management Licensing Regulations, 2004 (S.I. No. 395 of 1997) the EPA are required to submit copies of the EIS to a number of certain public authorities and bodies including the following:

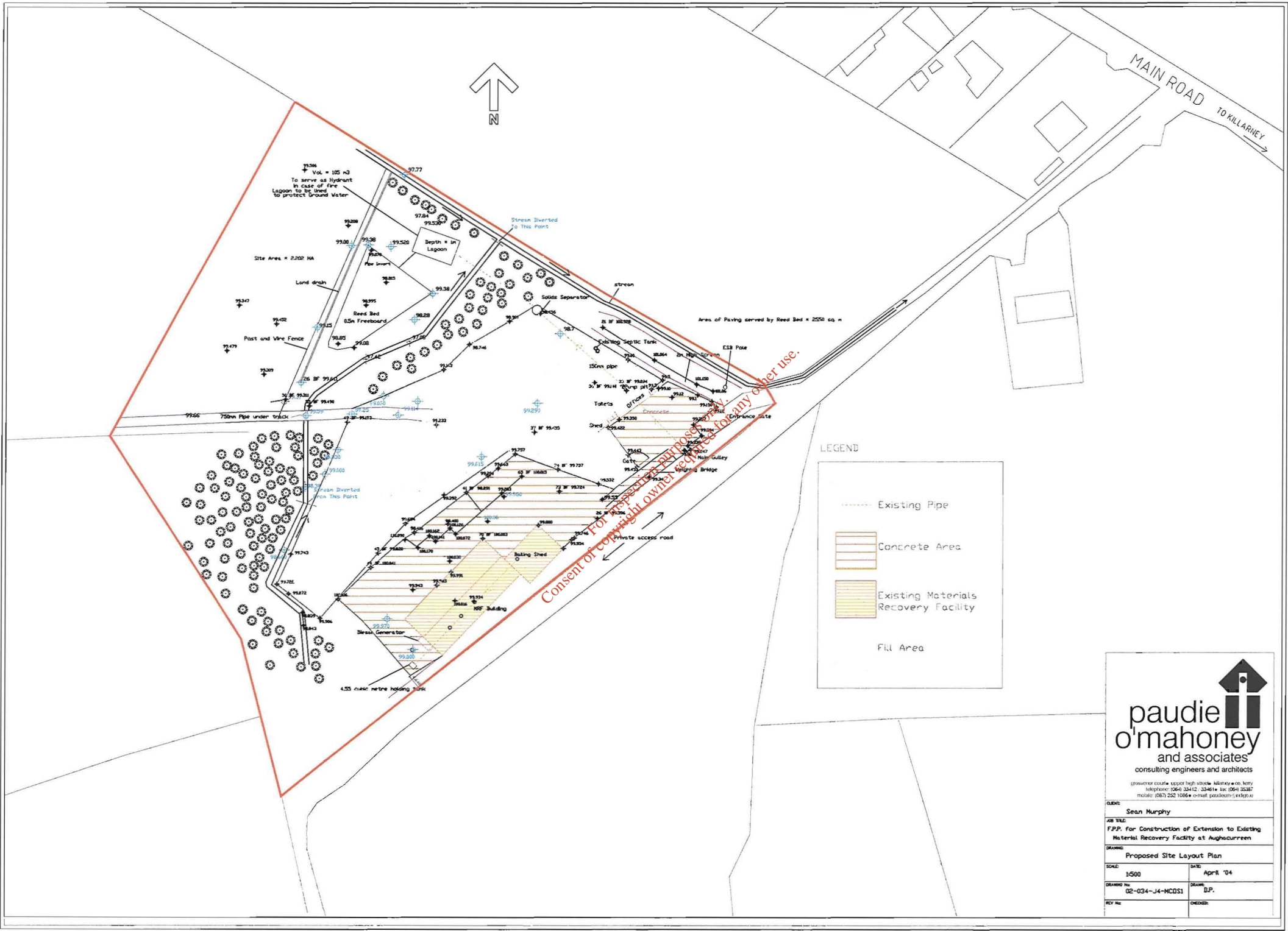
- An Taisce,
- Kerry County Council,
- Minister of the Environment, Heritage and Local Government,
- Minister for Communications, Marine and Natural Resources,
- The Central Fisheries Board,
- Southern Health Board,
- National Authority for Occupational Safety and Health,
- Fáilte Ireland,
- Teagasc.

In this regard, any persons wishing to make a written submission regarding the Waste Licence Application should write to the following address within a period of one month following the making available of documents for inspection:

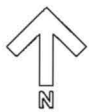
The Environmental Protection Agency
P.O. Box 3000,
Johnstown Castle Estate,
Co. Wexford

In accordance with Section 15 of the Waste Management (Licensing) Regulations, 2004 the Agency '*... shall not give notice of a proposed decision under section 42(2) of the Act before the expiry of a period of one month.....*'.

The Waste Management (Licensing) Regulations 2004 require that a notice with respect to the EIS be published in local/national newspapers and also that a notice be erected on site. The EIS and Waste Licence Application will also be available for inspection at the EPA.



MAIN ROAD
TO KILLARNEY



75.206
Vol. = 105 m³
To serve as hydrant
in case of fire
Lagoon to be lined
to protect Ground Water

Site Area = 2,202 m²

Depth = 1m
Lagoon


Stream Diverted
to This Point

Area of Paving served by Reed Bed = 2,500 sq m

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LEGEND

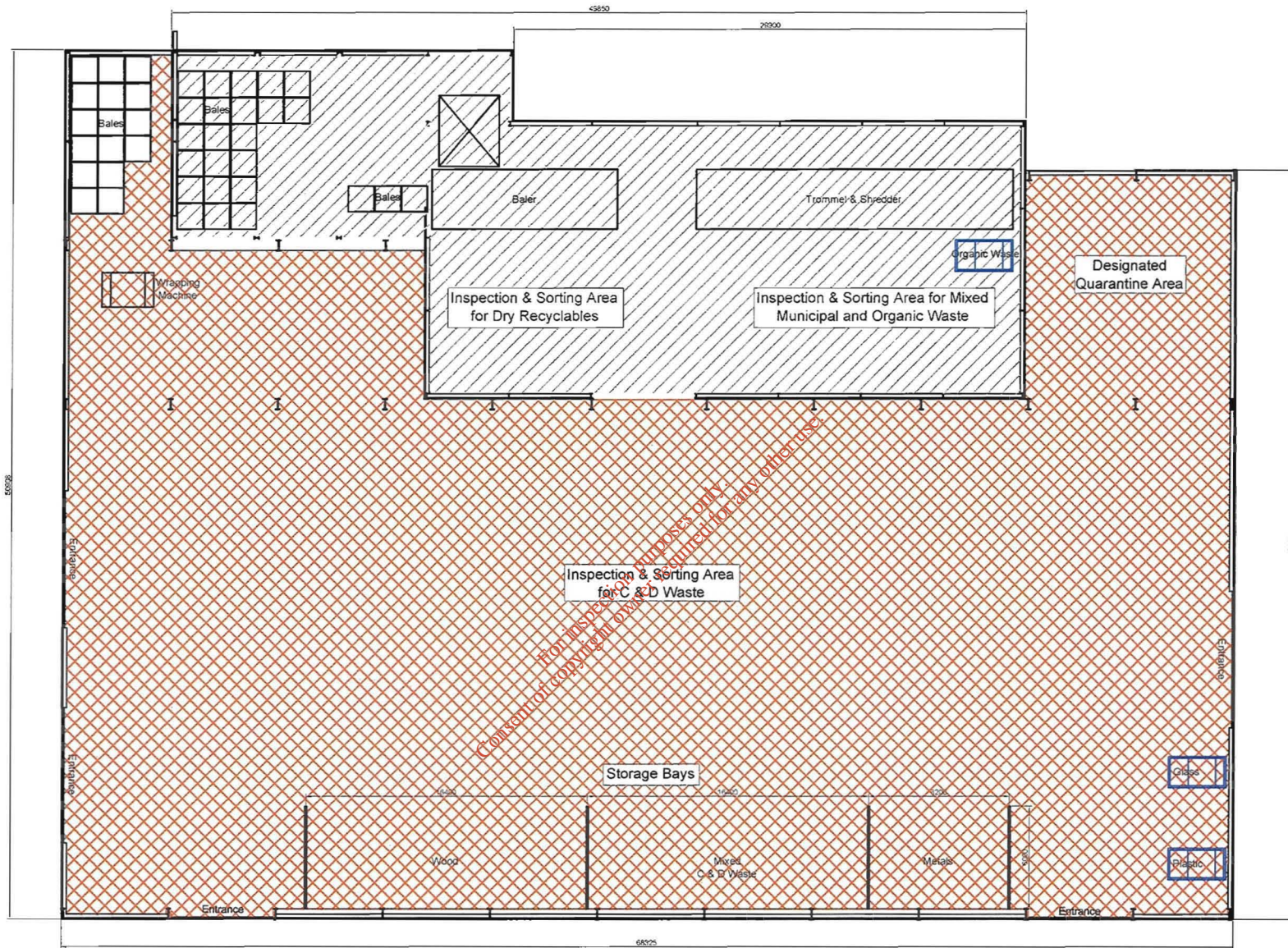
- Existing Pipe
- Concrete Area
- Existing Materials Recovery Facility
- Fill Area



**paudie
o'mahoney
and associates**
consulting engineers and architects

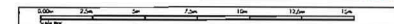
(provisional) 1004 Upperagh Street, Killarney, Co. Kerry
Telephone: (0646) 334412, 334414 Fax: (0646) 334417
Mobile: (087) 252 1086 e-mail: paul@paudio.ie

CLIENT: Sean Murphy	
JOB TITLE: F3/F4 For Construction of Extension to Existing Material Recovery Facility at Aughacurreen	
DRAWING: Proposed Site Layout Plan	
SCALE: 1:500	DATE: April '04
DRAWING No: 02-034-J4-MCDS1	DRAWN: D.P.
REV No:	CREATED:



Existing Building

Proposed Building



KWD RECYCLING

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 Aughacureen, Killamey, Co. Kerry.
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FD1	01/02/05	CS	Final Issue	W.M
No.	Date	By	Amendment/Issue	App.

Killamey Waste Disposal LTD.
Waste Licence Application

Title
 Typical Layout for Proposed MRF Building

Drawn by	C.N	Job No.	14GE0031
Checked by	S.A	File No.	14GE0031/000002
Approved by	W.M.	Org. No.	
Scale	1:250 @ A3	Rev	F01
Date	Sept 14		

6 ENVIRONMENTAL ASSESSMENT

HUMAN BEINGS

6.1 COMMUNITY EFFECTS

The existing facility is situated approximately 4.5 km northwest of Killarney in County Kerry. The site is 2.2 hectares in size and is located within a rural context. There are approximately 20 no. residences within 500m from the boundary of the facility (Drawing No. DG0001-02). Most of residences are located on a ribbon development on the nearby road from Knockasarnet to Aghalee. The primary landuse in the vicinity of the facility is agriculture. There are no schools, medical centres or churches within 500m of the proposed development. Most of the traffic to the existing facility is along the Local Road between Ballyhar and the N22 junction at Cleeny.

The value of houses in the vicinity are unlikely to be impacted upon as a result of the proposed development. There will not be an adverse impact on landuse as the proposed development will be included at the existing facility within the current area of 2.2 hectares.

The proposed development will have a positive impact on Killarney Town and the greater Region in that a greater recycling service will be provided and more waste will be diverted from landfill therefore reducing the negative impact on the environment.

The potential impacts associated with dust, odour, noise, traffic, groundwater and surface water are described in detail in this EIS and should not cause a significant impact if all the mitigation measures proposed are implemented.

Other potential impacts from the facility include such nuisances such as pests and litter. Control measures are currently in place at the existing facility and will be incorporated to include the proposed development once in operation.

6.2 TRAFFIC

Most of the traffic to the existing facility is along the Local Road between Ballyhar and the N22 junction at Cleeny. A traffic survey was carried out by RPS-MCOS Ltd. on Thursday 1st July 2004 which recorded that 126 vehicular movements on that day at the facility, 47% (59) of which were Heavy Commercial Vehicles (HCVs), over the twelve hour period (Figure 3.1). The 67 normal vehicle movements per day consist of staff vehicles, general public vehicles coming to the facility to make payments for bin charges and vehicle movements of people living in the 3 no. houses which use the same access road as the facility. The peak hour for HCVs alone was 11.00am to 12.00pm with 10 HCV movements.

At present, 82% of normal vehicle traffic enters the landfill from the Knockasarnet side with the remaining 18% entering from the Barleymount side. These proportions remain approximately constant when HCVs only are considered.

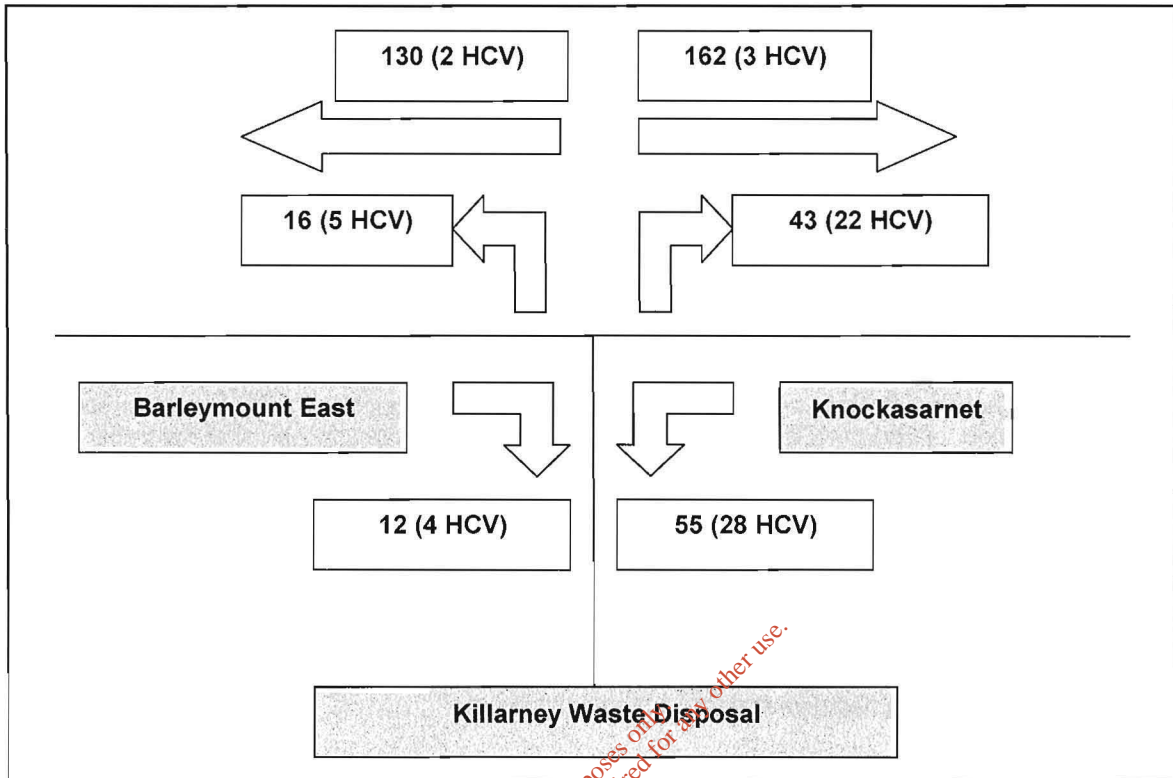


Figure 6.1: Station 3: Local Road/Access Road junction at Aghacurreen

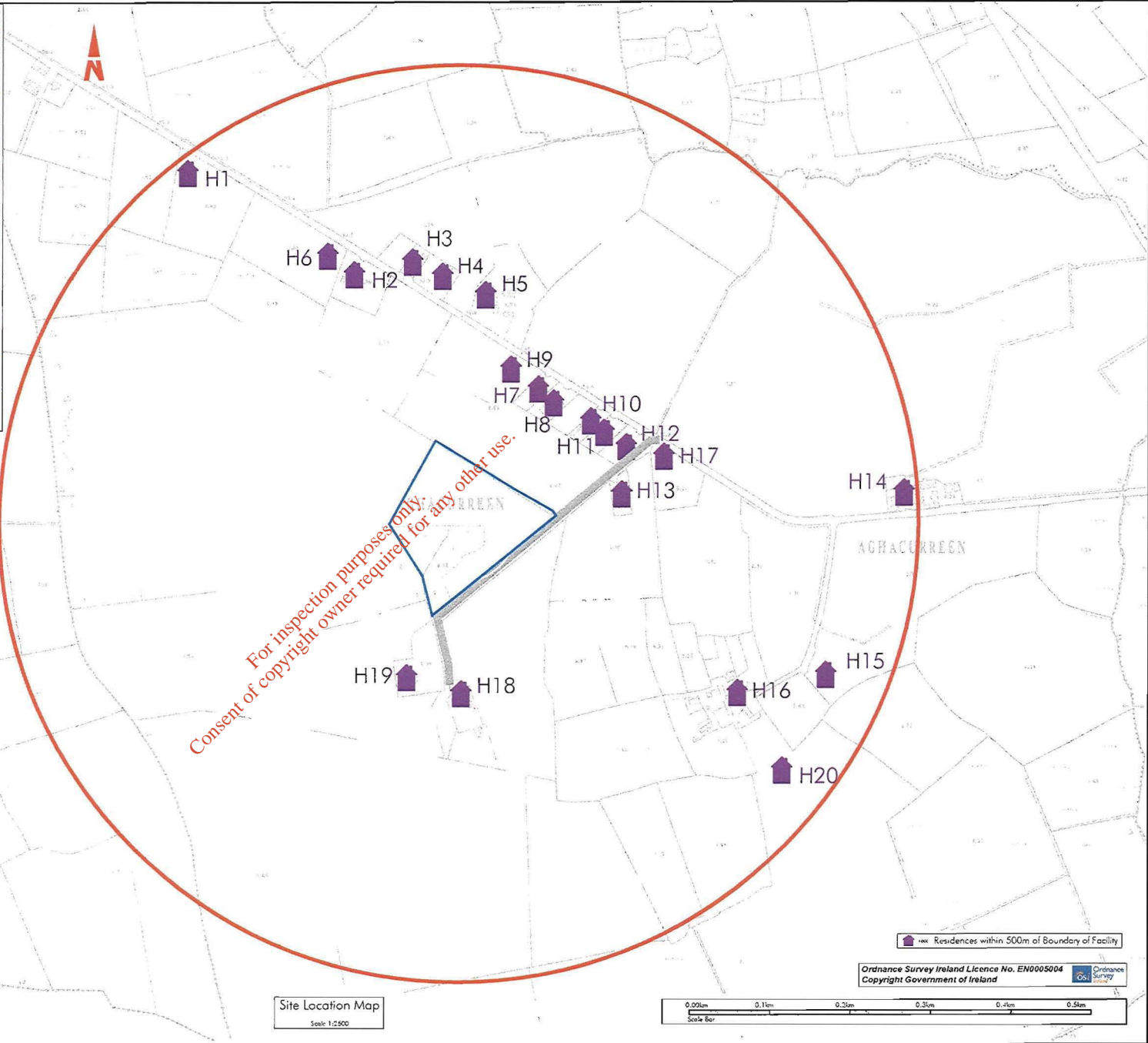
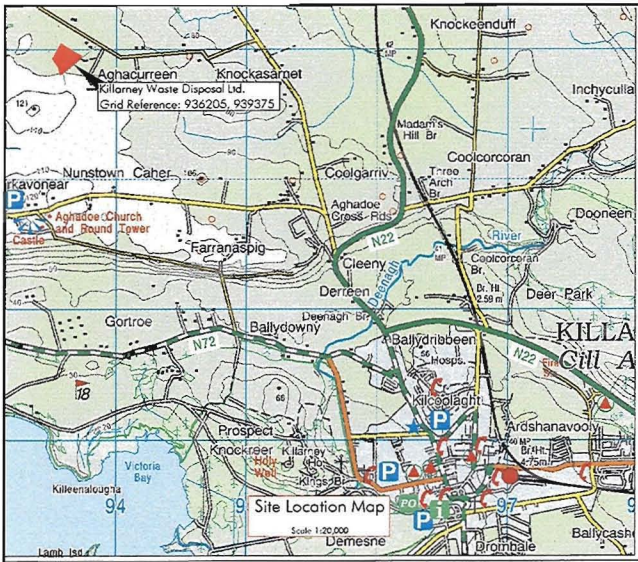
It is assumed that the number of normal vehicle movements will increase by 5% per annum to 71 movements per day. Based on the number of HCV movements recorded in the survey, it is predicted that, in the worst case scenario, the proposed increase to 40,000 tpa will result in 143 HCV movements per day. However, the actual future HCV movement daily figure is expected to be considerably less than this as a result of the KWD's current waste collection system operating more efficiently with an increase in the numbers of customers and collection routes which can be achieved at an increased maximum annual tonnage of 40,000 tpa.

It will be necessary to improve the local road where possible between the junction at Knockasarnet and the Aghacurreen junction with the access road to the facility to enable it to carry the increased number of HCV's.

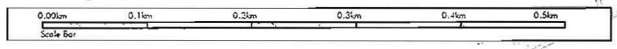
Condition No. 14 of the current Planning Permission for the development granted by Kerry County Council on 23rd November 2004 requires that prior to the commencement of development, the developer shall pay a contribution of €37,575 to Kerry County Council (Planning Authority) in respect of public infrastructure and facilities benefiting the proposed development, as a special contribution within the meaning of Section 48 (2) (C) of the Planning and Development Act, 2000 towards the cost of implementation of the following schedule of works:-

Proposed Infrastructure and Facilities

1. Overlay of junction accessing the development from Local Road L7037 (Junction 3).
2. Widening and strengthening of junction of Local Road L7037 with Local Road L2019 (Junction 2) to allow for adequate HGV turning circles.
3. Overlay of junction of Local Road L7037 with Local Road 2019 (Junction 2).
4. Overlay of segments of Local Road L7037 (between Junctions 2 and 3) to facilitate additional HGV traffic.



Site Location Map
Scale: 1:2500



Residences within 500m of Boundary of Facility

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F02	070505	Final Issue	W.M
PD1	170904	Final Issue	W.M
No.	Date	Amendment / Issue	App.

Killarney Waste Disposal LTD.
Waste Licence Application

Title
Proximity to Residences within 500m of Boundary of Facility

Drawn by	C.N	Job No	MGE0031
Checked by	S.A	File No	MGE0031CG0001
Approved by	W.M	Dwg. No	
Scale	1:2500 @ A1	DWG001-02	F02
Date	Jun. 04		

In addition some minor mitigation measures are proposed which include hedge cutting, provision of a lay-by and warning sign at two junctions.

6.3 AIR QUALITY

Construction activities may generate quantities of dust, particularly in drier weather conditions. Construction vehicles transporting materials to and from the site could generate dust and cause environmental nuisance.

There will be no direct air emission from the proposed extension. Fugitive dust will be produced from activities on site and traffic movements. Odours can be a potential nuisance from facilities that store waste and arise mainly from the uncontrolled anaerobic biodegradation of waste. Road traffic generated by the facility will also have an impact on air quality due to exhaust emissions.

The following mitigation measures are produced during the construction phase:

- Site roads will be regularly cleaned and maintained as appropriate;
- Site roads should be watered during dry and/or windy conditions;
- Site stockpiling of materials shall be designed and laid out to minimise exposure to wind.

The emission of pollutants from road traffic can be controlled by either reducing the number of road users or by controlling the flow of traffic. For the majority of vehicle-generated pollutants, emissions rise as speed drops. Emissions are also higher under stop-start conditions when compared with steady speed driving. The free flow of traffic in the vicinity of the proposed extension is essential in order to minimise the generation of traffic related pollutants. The proposed remediation measures will assist with the free-flow of traffic in the area.

To reduce odour emissions the following mitigation measures are proposed:

- The site layout should be maximised so as to keep any outdoor operation as far as possible from the nearest sensitive receptors;
- All work surfaces and floors should be cleaned regularly to maintain a suitable standard to prevent the build up of anaerobic bacteria;
- Residence time for waste should be kept to a minimum.
- All areas where there is a potential for the generation of odour should be covered.
- In the event that an odour nuisance is being caused by the facility masking agents or counteractants can be used.

The effects of construction on air quality will not be significant following the implementation of the mitigation measures. The creation of an enclosed shed and a hard surface road in place of the current surface has the potential to reduce local dust levels. As long as the traffic remains free flowing, the predicted increase in traffic volumes should not have an adverse effect on local air quality. The result of the baseline air quality survey show that air quality in the vicinity of Killarney Waste Disposal Ltd. is typical rural air quality and can be categorised as Zone D in relation to the EU Air Framework Directive and EPA Air Quality Zones.

6.4 NOISE & VIBRATIONS

Biospheric Engineering Ltd undertook a study to assess the potential impact of the noise aspects from the Killarney Waste Disposal facility. A full copy of this report is attached in Volume III, Appendix D of this EIS.

Noise monitoring was carried out at three locations (one at the facility and two at the nearest noise sensitive locations). Drawing No DG0001-05 provides details on the locations of these monitoring points.

The noise levels at the noise sensitive location are determined by the road traffic noise on local road rather than any noise arising from the licensed activities and so the licensed activity complies with EPA guidance for licenced activities during the day time. The generator and site activity noise can exceed the night-time limit on the eastern site perimeter. Mitigation is required if the site is to operate outside the hours 08:00 to 22:00 hrs.

Noise levels are below the NRA guideline values for traffic noise and the projected increase in traffic levels as a result of the proposed extension will not significantly increase traffic noise levels.

Noise levels due to on site activities at the site boundary do not exceed EPA guidance values for daytime operation. The generator and site activity noise can exceed the night-time limit on the eastern site perimeter. Mitigation is required if the site is to operate outside the hours 08:00 to 22:00 hrs.

The three significant noise sources on site that contribute to off-site noise levels are:

1. The Generator
2. Loading and Unloading Activities in the yard
3. Timber Shredding

These latter two of these noise sources will be enclosed by the new extension to the building and so will reduce as part of the proposed extension.

With regard to the generator, it is currently located in an acoustic enclosure but unfortunately is located very close to the site boundary (and the monitoring point).

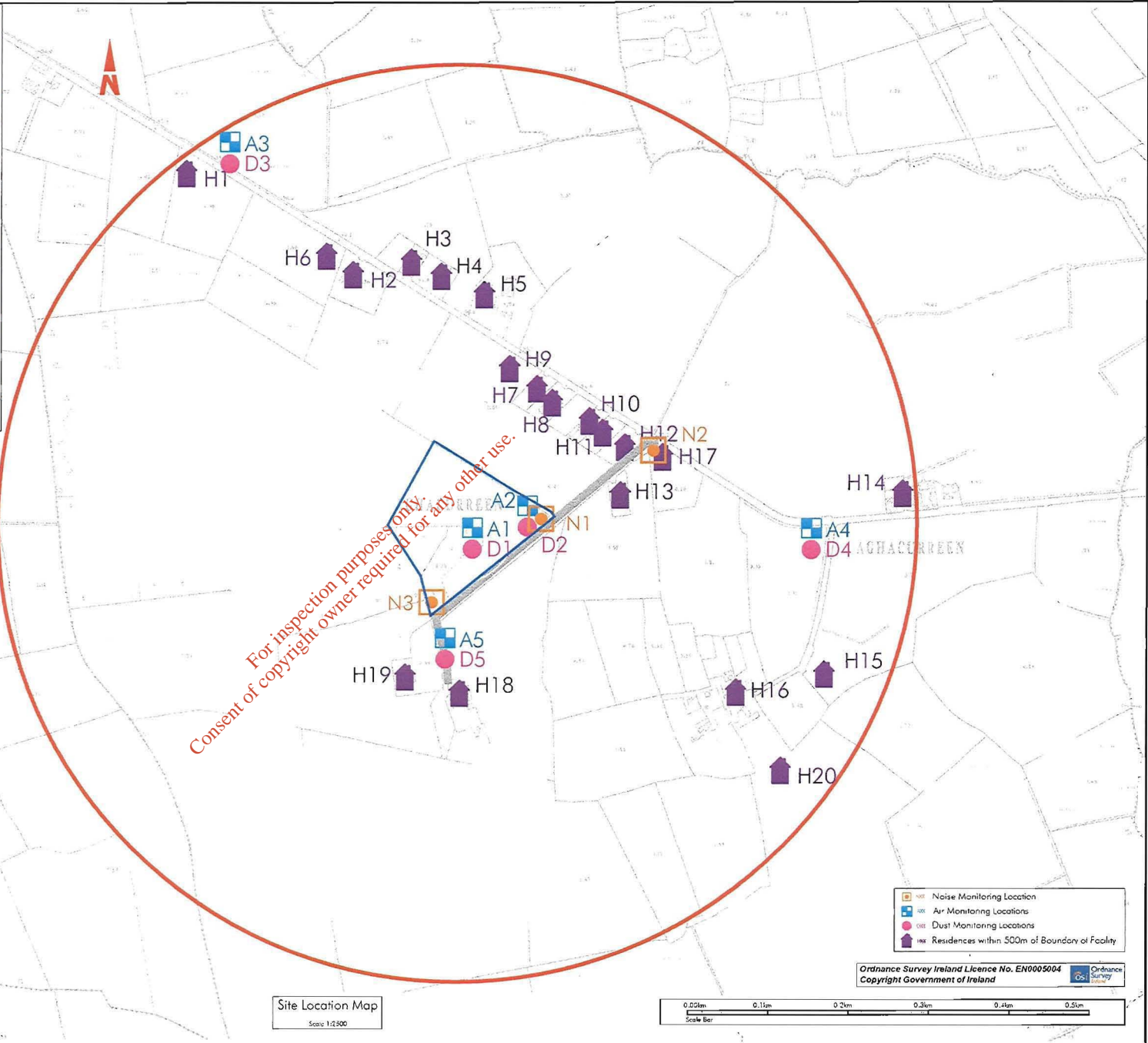
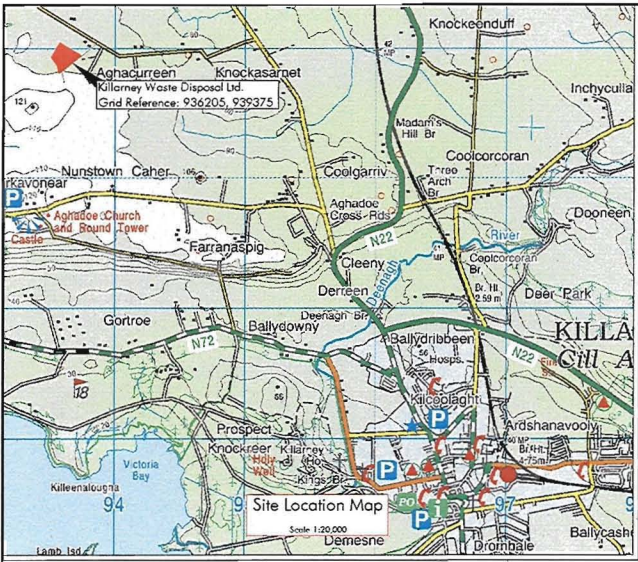
It is recommended that the generator be enclosed in an open enclosure (no roof required) on the south-western corner of the existing building. This enclosure should comprise of two walls to a height of 300mm above the top of the exhaust pipe and enclosing the generator at a distance of not less than 1 metre to allow access for maintenance etc. The entrance to the enclosure can be open provided the walls overlap.

No significant noise generating activity takes place prior to 08:00 hrs and with the mitigation measures proposed for night time working the facility can be considered to be in compliance with the likely licence conditions.

NATURAL ENVIRONMENT

6.5 GROUNDWATER

Reference to the Geological Survey of Ireland (GSI) Sheet 21 "Geology of Kerry-Cork" indicates that the bedrock underlying the site is black shale and sandstone of Upper Carboniferous (Namurian) age.

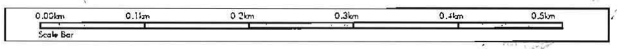


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- Noise Monitoring Location
- Air Monitoring Locations
- Dust Monitoring Locations
- Residences within 500m of Boundary of Facility

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Site Location Map
Scale 1:2,500



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F02	07/01/05	CD	Final Issue	W/M
F01	17/09/04	CD	Final Issue	W/M
No.	Date	CD	Amendment / Issue	App.

Killarney Waste Disposal LTD.
Waste Licence Application

**Monitoring Locations
Dust, Air & Noise**

Drawn by	C.N.	Job No	MGE0031
Created by	S.A.	File No	MGE0031/DG0001
Approved by	W.M.	Org No	Rev
Scale	1:2500 @ A1	DG0001-05	F02
Date	Jun '04		

Depth to bedrock is variable and is reported to reach up to 30 metres, however elsewhere bedrock outcrops locally or is within 1m of the surface. No outcrops were evident on the site.

GSI Quaternary maps record Devonian Sandstone dominated Till (boulder clay) at the site location. The thickness of the subsoil deposits in the area can reach up to 30m in places while elsewhere the subsoil is absent (at outcrop) or less than a metre.

The GSI has classified the shale and sandstone bedrock underlying the site as a locally important aquifer which is moderately productive only in local zones. Such rocks generally have a low permeability with groundwater concentrated in fractures. They are capable of yielding enough water to supply a well for a house or small farm (0.2-0.5 l/s) and may yield more in good fracture zones. Groundwater vulnerability for the area according to the GSI Vulnerability Map would be variable ranging from moderate to low (in areas where there are substantial subsoil deposits of low permeability) to high and extreme where overburden is thin or absent.

Regular monitoring and control measures at the facility during construction and operation will ensure the protection of groundwater.

The following control measures are proposed:

The processing of the mixed municipal waste produces an effluent. The effluent is stored in the holding tank and transported to Killarney WWTP for treatment. The new processing building will have a similar effluent collection system.

A stormwater treatment system is proposed on site. An interceptor for oil and solids separation is currently in operation on site and it is proposed to direct stormwater runoff from the interceptor to a lagoon and then to a reed bed which will discharge the treated stormwater to a percolation area. The solids from the interceptor will be cleaned out when required and the sludge sent to a licenced treatment facility.

A septic tank is being used for sewage treatment. It is proposed to install a Puraflo System to increase the treatment efficiency.

6.5 SURFACE WATER

The KWD Ltd. site is located on a drain which flows to one of the headwater tributaries of the Glanooragh River c. 0.5km downstream of the facility. The drain, though moderately or slightly polluted c.200m upstream of the facility, is seriously polluted at the point where it enters the site. At the time of this assessment, the drain was receiving effluent as it flowed through the site and remained seriously polluted at the downstream end of the site. The drain has no significant aquatic habitat value in the immediate vicinity of the site. However, the lowest c.450 m of the drain has some potential value as salmonid nursery habitat. At the point where it joins the Glanooragh River the drain is moderately polluted; no fish were recorded at this location.

The Glanooragh River was assessed for c.4km downstream of the drain confluence. The river is moderately polluted at all sites assessed. The biological assessment contains no evidence of an impact on the river from the Aghacureen Drain. Moderately polluted conditions and good populations of juvenile brown trout were recorded immediately upstream and downstream of the confluence with the drain. Juvenile salmon at very low densities were recorded 1km and 4km downstream of the drain confluence. Salmonid habitat is generally of a modest quality due to the low diversity of flow and the generally heavily silted substrate. None of the channel assessed was classified as good or better as adult or spawning habitat. Good salmonid nursery habitat comprised 26% of the channel assessed. The most significant habitat consisted of c.900m of

good nursery habitat in Sections 3, 4, 7 & 12, and c.1km of fair – good spawning habitat in Sections 4 & 9. It is notable that approximately half of the fair – good spawning habitat is in Section 4, and most good nursery habitat is in Sections 3 & 4, which are immediately downstream of the confluence with the Aghacureen Drain.

The principal potential impacts of the proposed development on aquatic invertebrate fauna, flora, fish and habitats in the absence of mitigation are as follows:

1. Pollution of the stream with suspended solids due to runoff of soil from construction areas
2. Pollution of the stream, during construction phase, with other substances such as fuels, lubricants, waste concrete, waste water from site toilet and wash facilities, etc.
3. Pollution by effluent from the waste processing area and ancillary structures and facilities
4. Pollution by surface water draining from non process area of the site e.g. car parking, roofs, access roads, paths etc.
5. Pollution by effluent from toilet, wash facilities, canteen etc.

The recommended mitigation measures are as follows:

- i. Rigorous measures should be implemented to minimise suspended solids and other pollutants entering surface waters during the construction.
- ii. To prevent damage to spawning and early juvenile fish, activities with a high risk of suspended solids pollution to surface waters should not be carried out between the end of September and the end of April without prior consultation with the South Western Regional Fisheries Board.
- iii. All waste delivery, storage and processing areas should be fully roofed against rain, bunded to contain any accidental spillages, and drained on an impervious surface to a holding tank for tankering to a waste treatment facility. As leachate may arise from deliveries particularly of municipal wastes, delivery trucks should drive across the weighbridge and unload the waste into a housed delivery area which drains to the effluent storage tank.
- iv. Any underground effluent storage tanks should be double-skinned (that is, have an inner and outer skin) and have an interstitial monitoring device with automatic alarms. All USTs should be provided with overflow prevention. Any above ground fuel or effluent storage tanks should comply with current regulations and be bunded.
- v. A drainage system should be installed in the non-process area of the site which can be sealed off to contain a major spillage, and oil interceptors of suitable size should be placed on all discharges to surface waters. An interceptor for oil and solids separation is currently in operation; the interceptor is 13.5m³ capacity to provide average 2 days retention time (Information supplied by RPS-MCOS). It is also proposed to direct surface drainage via a lagoon to a constructed wetland and then to a percolation area; the lagoon, constructed wetland and percolation area are currently under construction (Information supplied by RPS-MCOS).
- vi. A treatment system for effluent from toilet, wash facilities, canteen etc should be installed following the guidelines contained in the EPA wastewater treatment manual – “Treatment systems for small communities, businesses, leisure centres and hotels”. A septic tank is in use on site and a Puraflo system is proposed, which will be designed to cater for 12 people at 180l per person per day. This equates to a discharge quantity of 2.16 cubic metres per day to be treated by the system (Information supplied by RPS-MCOS).

6.6 TERRESTRIAL FLORA & FAUNA

The site supports typical communities and species for the heavy soils of north Kerry and west Limerick. It has none of the diversity associated with the lakes and hills of Killarney and as far as is known, no rare species either of plant or animal.

The area is not included by any ecological designation (pNHA, cSAC or SPA) and has no features that make this likely in future. It does not support habitats or species with special listing in the EU Habitats Directive or birds included in Annex I of the Birds Directive. Most of the bird species have general protection under the Wildlife Act 1976.

A general enlargement of the facility and improvement of the stormwater treatment system will have very limited impacts on the existing ecology of the area. The creation of a small reed bed and percolation area will tend to diversify the invertebrate fauna as they are replacing existing intensive grassland. The increase in building and paved area will occupy the hard stand already created and not cover current habitat.

Neither impact can be regarded as significant on a regional scale. Even locally the changes in plant and animal life will scarcely be noticed because of the persistence of large areas of the present habitats outside the site boundaries.

Water quality will be improved in the medium term by the proposed arrangements though there may be additional suspended matter released during construction. This has probably largely occurred with the placement of hard core and stream alterations done recently.

The trees along the SE and NE boundaries will be maintained and augmented by planting of willows and other native species within the site. Alder is already widespread in the area.

6.7 ARCHAEOLOGY & CULTURAL HERITAGE

There are no recorded archaeological sites, i.e. SMR sites, within a 500m boundary of the site. There are 6 no. recorded archaeological sites within 1km boundary of the site in the surrounding townlands (2 no. Fulachta Fiadh, 3 no. Enclosures and a Ringfort).

There are no records of archaeological stray finds within the National Museum of Ireland's (NMI) stray finds archive for the Aughacureen townland. A late Bronze Age hoard was recovered from the neighbouring townland of Knockasarnet.

No structures or items of architectural heritage are situated within the proposed extension area. Ruins of 19th century cottages are located on a nearby farmstead.

Monitoring and supervision by an archaeologist will ensure that any archaeological soils, features, finds and deposits and all further features, finds and deposits that may be disturbed below the ground surface will be identified, excavated and recorded.

6.8 LANDSCAPE

Due to the partially enclosed nature of the site, the orientation of existing development and the nature of the landscape within the study area, views of the proposed development are restricted to a number of key locations. A series of mitigation and compensatory measures based upon the

analysis of the site context, the site in its current state, and the proposed site layout are proposed.

The proposed development does not pose a threat to any identified unique or special features, or elements found in the landscape; or compete directly with areas of unique sensitivity the landscape impact is considered neutral. The short term negative visual impact of the facility will diminish as the augmented hedgerows and proposed landscape mitigation measures are implemented and established.

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7 INTERACTION OF EFFECTS

Specialist sub-consultants investigated the potential impacts of the proposed development at Killarney Waste Disposal. This section presents the significance of potential impacts following the implementation of mitigation measures.

The structure used for assessing the significance of impacts of the development is based on the following classification structure as shown in Table 7.1 taken from the 'EPA Guidelines on the information to be contained in Environmental Impact Statements' (EPA, 2002).

Table 7.2 summarises the environmental impacts, outlines measures that will be used in their amelioration and highlight the significance of residual effects i.e. the impact remaining after mitigation.

Table 7.1: EPA Classification Criteria

Impact	Description
Quality	
Negative	A change which reduces the quality of the environment
Positive	A change which improves the quality of the environment
Neutral	A change which does not affect the quality of the environment
Duration	
Temporary	Impact lasting for one year or less
Short-term	Impact lasting one to seven years
Medium-term	Impact lasting seven to twenty years
Long-term	Impact lasting twenty to fifty years
Permanent	Impact lasting over fifty years
Significance	
Imperceptible	An impact capable of measurement but without noticeable consequences
Slight	An impact which causes changes in the character of the environment which are not significant or profound
Moderate	An impact that alters the character of the environment in a manner that is consistent with existing and emerging trends
Significant	An impact which by its magnitude, duration or intensity alters an important aspect of the environment
Profound	An impact which obliterates sensitive characteristics
Types	
Cumulative	The addition of many small impacts to create one larger, more significant, impact
"Do Nothing"	The environment as it would be in the future should no development of any kind be carried out
Indeterminable	When the full consequences of a change in the environment cannot be described
Irreversible	When the character, distinctiveness, diversity or reproductive capacity of the environment is permanently lost
Residual	The degree of environmental damage that will occur after the proposed mitigation measures have taken effect
Synergistic	Where the resultant impact is of greater significance than the sum of its constituents
"Worst case"	The impacts arising from a development in the case where mitigation measures substantially fail.

Table 7.2: Summary of Potential Environmental Effects.

	CATEGORY	POTENTIAL ENVIRONMENTAL EFFECTS	QUALITY OF POTENTIAL IMPACT	DURATION OF POTENTIAL IMPACT	MITIGATION MEASURES	SIGNIFICANCE OF RESIDUAL IMPACT
NATURAL ENVIRONMENT	TERRESTRIAL ECOLOGY					
	<i>Flora & Fauna</i>	Destruction/Loss of habitats	Negative	Long-term	Native trees will be planted as part of landscaping.	No impact
	WATER QUALITY					
	<i>Surface water/ Groundwater</i>	Risk of Contamination	Negative	Short-term- Medium-term	Stormwater treatment system Oil and solids separator will be emptied when required to licenced facility Collection & treatment of effluent Control measures during construction Spill control procedure Regular monitoring.	Slight
	LANDSCAPE	Visual Impact on local Community	Negative	Short-term to Medium-term	Suitable Landscaping Measures	No impact
	ARCHAEOLOGY	Disturbance of Archaeological Finds	Negative	Long-term	Archaeologist to supervise works.	No impact
HUMAN BEINGS	COMMUNITY & MATERIAL ASSETS	Decrease in property value	Negative	Medium-term		No impact
		Recycling Service	Positive	Short-term		
		Spread of Litter	Negative	Short term	Control measures in place.	No impact
		Pest infestation	Negative	Short term	Control measures in place.	No impact
		Reduction in residential quality	Negative	Short-term	See all categories above	
	NOISE & VIBRATION	On-site machinery, activities & traffic movements	Negative	Short-term	Mitigation measures not required for day-time operation as below guidance levels	No impact
	TRAFFIC	Increase in traffic to and from the facility	Negative	Medium-term	<ul style="list-style-type: none"> • Resurfacing works at two junctions • Warning signs • Hedge cutting • Layby 	Slight to moderate

	CATEGORY	POTENTIAL ENVIRONMENTAL EFFECTS	QUALITY OF POTENTIAL IMPACT	DURATION OF POTENTIAL IMPACT	MITIGATION MEASURES	SIGNIFICANCE OF RESIDUAL IMPACT
HUMAN BEINGS	AIR	Dust and Air Emissions	Negative	Short term	<p>Site roads will be regularly cleaned and maintained as appropriate;</p> <p>Site roads should be watered during dry and/or windy conditions;</p> <p>Site stockpiling of materials shall be designed and laid out to minimise exposure to wind.</p> <p>Regular monitoring</p>	Slight to Moderate depending on weather conditions
		Generation of odours	Negative	Short term	<p>The site layout should be maximised so as to keep any outdoor operation as far as possible from the nearest sensitive receptors;</p> <p>All work surfaces and floors should be cleaned regularly to maintain a suitable standard to prevent the build up of anaerobic bacteria;</p> <p>Residence time for waste should be kept to a minimum.</p> <p>All areas where there is a potential for the generation of odour should be covered.</p> <p>In the event that an odour nuisance is being caused by the facility masking agents or counteractants can be used.</p>	Slight

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Table 7.3 illustrates the direct impacts of the project that may result in relevant interactions between receptors associated with the development. A receptor is defined as a factor of the natural or man made environment such as water, air or a plant that is potentially affected by an impact.

Table 7.3: Summary of Potential Interactions Resulting from the Facility.

RECEPTOR	POTENTIAL EFFECT	IMPACTED RECEPTOR	POTENTIAL IMPACT
NATURAL ENVIRONMENT			
<i>Terrestrial Flora and Fauna</i>	Loss of habitat/species	Human Beings	Reduced recreational amenity
<i>Water Quality</i>	Contamination of waters	Flora & Fauna	Loss of habitat ¹
		Human Beings	Reduced recreational amenity & residential quality
<i>Landscape</i>	Negative visual impact	Human Beings	Reduced recreational amenity & residential quality
<i>Archaeology</i>	Disturbance of archaeological finds	Human Beings	Impact on cultural heritage
HUMAN BEINGS			
<i>Community & Material Assets</i>	N/A		
<i>Traffic</i>	Increase in traffic	Human Beings	Reduced recreational amenity & residential quality
		Flora & Fauna	Loss of species ¹
<i>Air</i>	Increase in dust/odour emissions	Human Beings	Reduced recreational amenity & residential quality
		Flora & Fauna	Loss of species ¹
<i>Noise</i>	Increase in noise	Human Beings	Reduced recreational amenity & residential quality
		Flora & Fauna	Loss of species ¹

REFERENCES

EPA (2002); "Guidelines on the information to be contained in Environmental Impact Statements"; Environmental Protection Agency.

¹ In turn results in reduced recreational amenity due to the minimisation of natural environment i.e. human beings are secondary impacted receptors

8 CONCLUSION

Killarney Waste Disposal propose to increase the waste intake at the facility to 40,000 tonnes per annum and provide an extension to the existing facility to incorporate a new processing building.

The Waste Management Plan for the Limerick/Clare/Kerry Region (2000) recommended an integrated approach to waste management involving new recycling initiatives, biological and thermal treatment of wastes and finally landfill of residual waste. This Plan identified the total municipal waste arising in the Region by 2014 will be approximately 381,710 tonnes/annum. Future expansions for Material Recovery Facilities are necessary to achieve the recycling target of 37.1% which has been set for municipal waste in the Limerick/Clare/Kerry Region. The Waste Management Plan for the Limerick/Clare/Kerry/ Region is currently under review.

An alternative to the current proposed development is to carry on with the operations at the existing site at the current annual intake ('Do Nothing' Scenario). With waste quantities increasing waste generated within the Region will have to be sent directly to landfill due to the lack of additional waste sorting and recycling infrastructure in the Region which would mean that the recycling targets would not be achieved and a negative impact on the environment would result.

As potential effects have been examined and mitigation measures advised to eliminate any potential serious environmental risks it can be concluded that the proposed development to Killarney Waste Disposal's Materials Recovery Facility will not have an adverse impact on the environment or local community. Therefore, it is recommended that this development should proceed, provided recommended mitigation measures are implemented.

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