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1 Transportation Access and Traffic Report

1.1 INTRODUCTION

Killarney Waste Disposal is situated in the townland of Aghacurreen, approximately 4.5km north of Killarney, and approximately 3.3km off the N22 Killarney – Tralee National Road.

Killarney Waste Disposal currently accepts a mixture of non-hazardous waste (16,500 tpa) and operates under a Waste Permit from Kerry County Council. It is proposed to increase the waste intake at the facility to 40,000 tpa. Most of the traffic to and from the site is along the local road between Ballyhar and the N22 junction at Cleeny, which is of mostly a good standard with relatively high traffic flows.

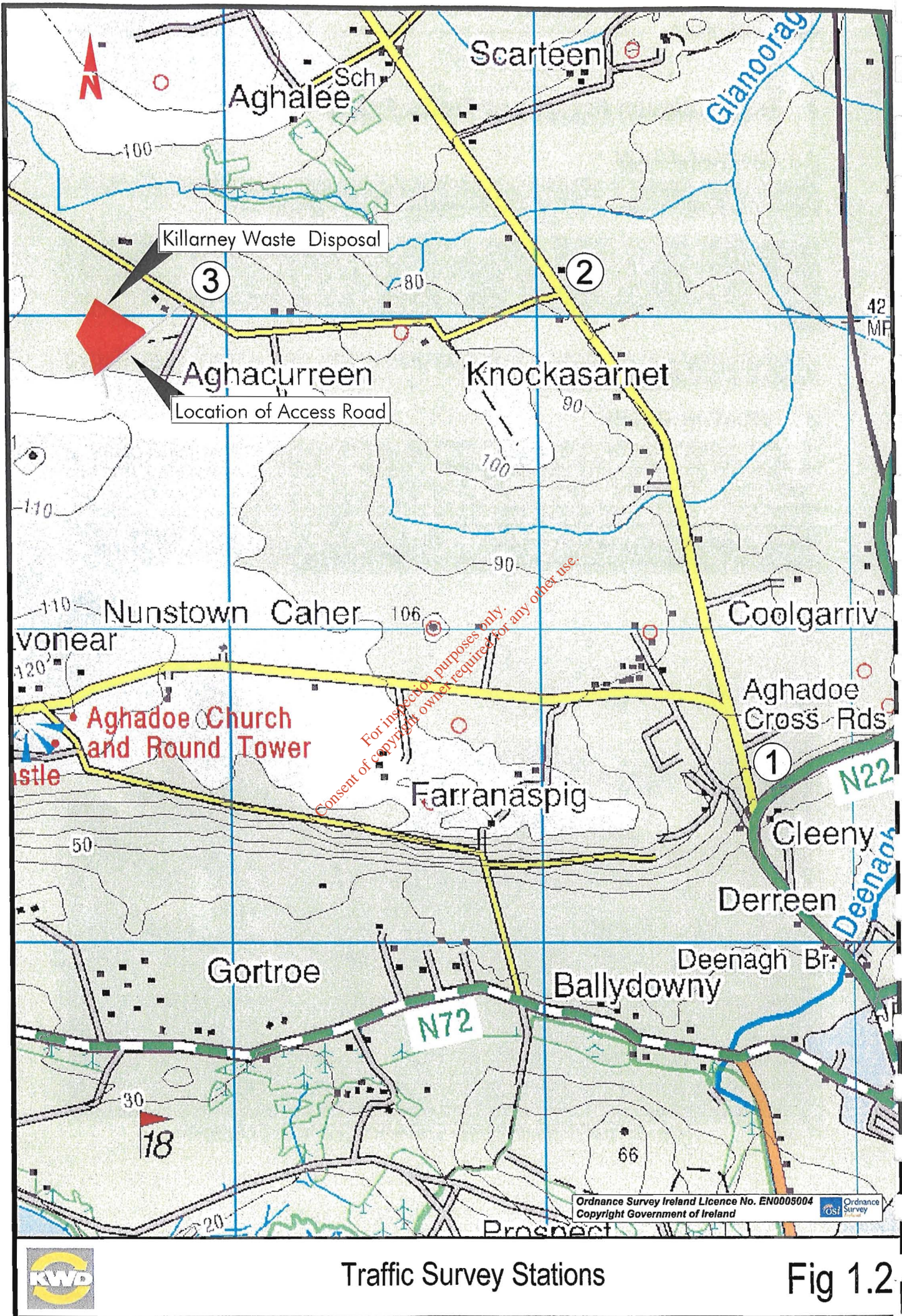
This report details the traffic impact of an increased level of waste intake at Killarney Waste Disposal Facility to 40,000 tonnes per annum.

1.2 ROAD NETWORK

The local Aghalee to Cleeny Road varies in width from over 7m near the N22 junction at Cleeny, to approximately 5m further north towards Aghalee. A school is located approximately 2.7km from Cleeny along this road. The majority of traffic travelling to the site is from the south, taking a left turn off the Cleeny – Aghalee road at Knockasarnet, onto the local road towards Aghacurreen. This road is mostly of good standard and varies in width from 4.0 – 4.5m. Traffic turns left onto the access road to the site at Aghacurreen as shown in Figure 1.2. The access road is approximately 3.0m in width. A local access road junction is located immediately to the left of the site entrance.



Figure 1.1 Local road junction with access road to Killarney Waste Disposal



Traffic Survey Stations

Fig 1.2

1.3 TRAFFIC SURVEYS – BASELINE TRAFFIC

A traffic survey was carried out by RPS-MCOS at the existing site entrance with the following objectives:

- To determine the existing traffic flows on the regional road adjacent to the site
- To determine the traffic patterns at the entrance to the site
- To enable an overall assessment to be made of the impact of the estimated traffic generated by the Materials Recovery Facility (MRF) on the existing road network

The traffic survey was carried out on Thursday 1st July 2004 and consisted of a 12 hour survey (7.00 a.m. to 7.00 p.m.) at the 3 junctions as shown in Figure 1.2. The facility operating hours are from 7.00am to 8.00pm, Monday to Saturday inclusive.

Figures 1.2, 1.3 and 1.4 show the results of the survey carried out at the three survey stations in diagrammatical form. The percentage Heavy Commercial Vehicles (HCV's) recorded on each site is also shown.

On the day of the traffic survey there were 126 vehicular movements at the Killarney Waste Disposal facility, 47% (59) of which were HCV movements, over the twelve hour period.

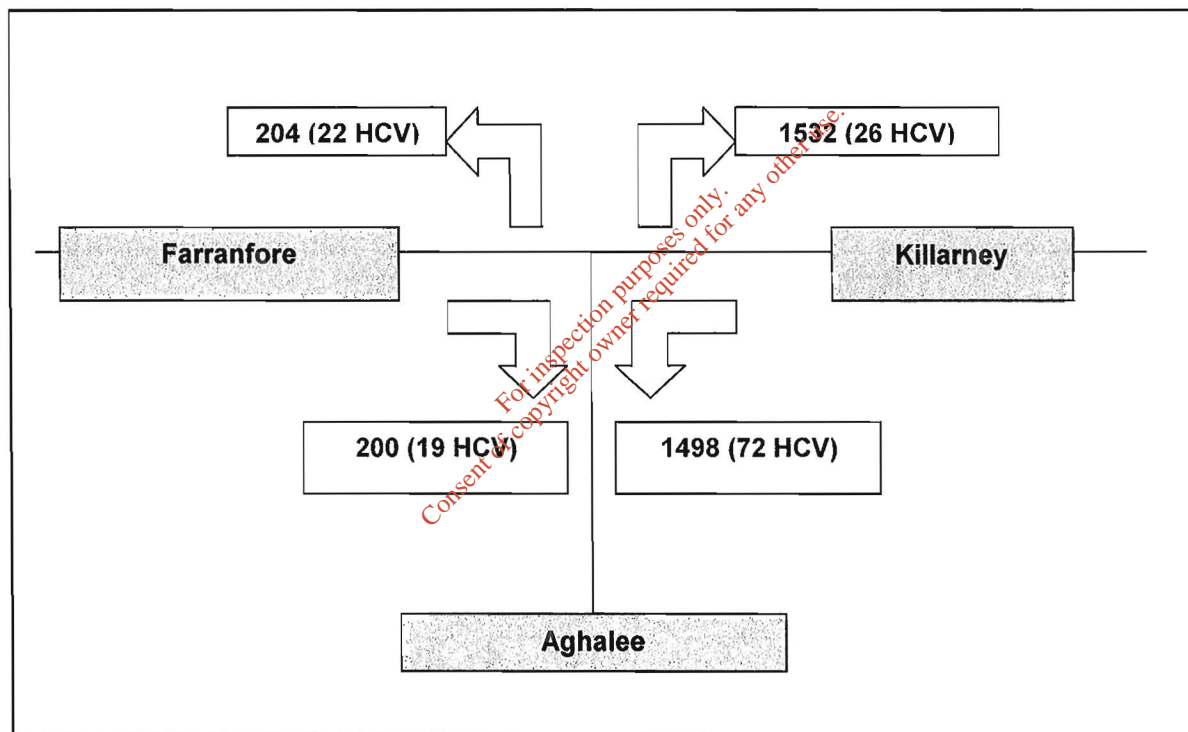


Figure 1.2 Station 1: N22 junction at Cleeny

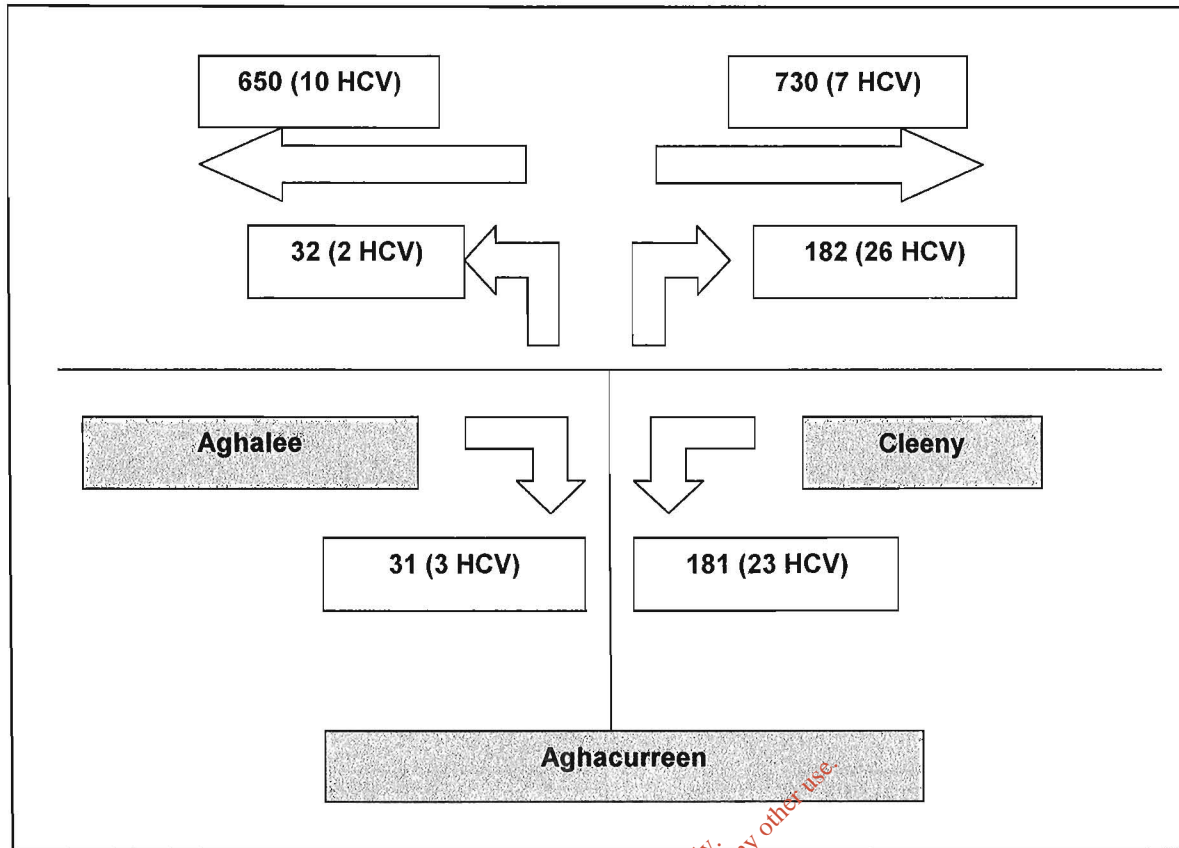


Figure 1.3 Station 2: Aghacurreen / Aghalee-Cleeny road junction at Knockasarnet

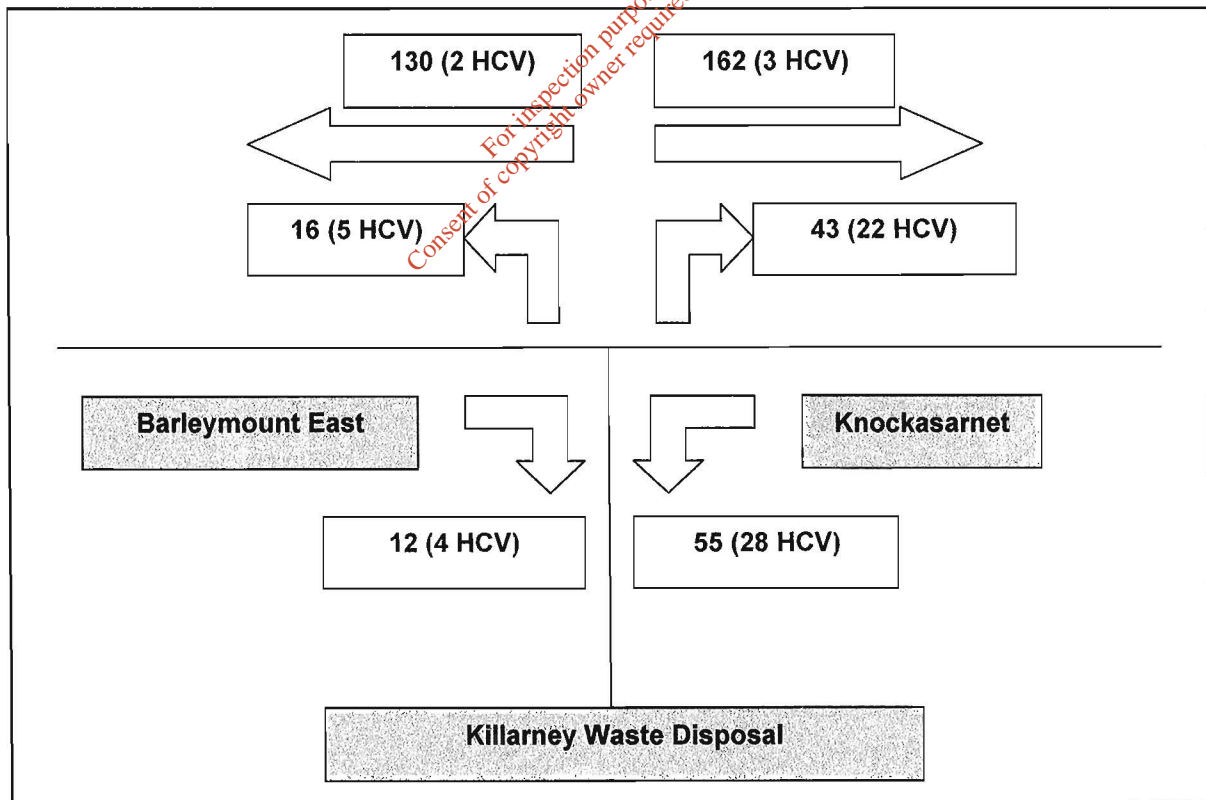


Figure 1.4 Station 3: Local Road/Access Road junction at Aghacurreen

1.4 TRIP DISTRIBUTION

At present, 82% of normal vehicle traffic enters the facility from the Knockasarnet side with the remaining 18% entering from the Barleymount side. These proportions remain approximately constant when HCVs only are considered. In the assessment of future traffic assignment for the current users of the facility, it is assumed that these proportions remain unchanged. This assumes that waste will continue to come broadly from the same sources over the operating period of the facility.

A 5% growth rate per annum is presumed for non MRF traffic along the Cleeny to Ballyhar Road.

1.5 TRAFFIC GENERATION

The maximum tonnage allowed at the Killarney Waste Disposal facility at present is 16,500 tonnes per annum (tpa). It is now proposed to increase this to 40,000 tpa.

At present there are 67 normal vehicle movements per day and 59 HCVs movements per day at the facility. Normal traffic movements consist of staff vehicles, general public vehicles coming to and from the facility to pay bin charges etc. and vehicle movements of people living in 3 no. houses which use the same access road as the facility. 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.

1.6 TRAFFIC IMPACT

1.6.1 Daily movements

From the count data, the number of daily vehicular movements generated by the facility at present is 126 including 59 HCV movements per day.

1.6.2 Peak hour

The busiest hour of the day for MRF traffic was 4.00pm to 5.00pm, with 17 vehicle movements, including 7 HCV movements, which is approximately 12% of the total HCV movements of the day. Traffic movements relating to the facility are busiest during the hours of 9am to 1pm and 3pm to 5pm. Outside these hours, traffic movements are significantly lower.

The peak hour for HCVs alone was 11.00am to 12.00pm with 10 HCV movements. With the increase to 40,000 tpa, the peak flow in the worst case scenario of HCVs is estimated to be 17 HCV movements per hour (12% of 143), or one every three and a half minutes. Peak HCV flow not related to the facility occurs between 9.00am and 10.00 am, with 2 HCV movements occurring in this time.

1.6.3 Junctions

1.6.3.1 Junction at access road to site (Junction 3)

Improvements will be required at this junction in order to achieve the required sightlines. The design speed of the local road at this junction is taken to be 70Kph. The required sight distance in both directions for traffic coming onto this road is 90m. For traffic coming from the facility, branches of a garden tree inside the wall of the house at the left hand side of the junction obstruct the 90m sightline as shown in Figure 1.5. The sightline on the right hand side of the junction is obstructed by the presence of a hedge on the right hand side of the junction as shown in Figure 1.6. Two ESB/Eircom poles are also located in the hedge but their impact on the 90m sightline is negligible.



Figure 1.5 Junction at access road to site, looking left



Figure 1.6 Junction at access road to site, looking right

1.6.3.2 Ballyhar-Cleeny Road / Aghacurreen Road Junction (Junction 2)

Some minor junction improvements will be required at this junction for traffic coming from Aghacurreen. The design speed of the Ballyhar-Cleeny Road is taken to be 85Kph. The required sight distance in both directions for traffic coming onto this road is 120m. A person is shown standing 120m from the junction on both sides is shown in Figure 1.7 and Figure 1.8. The 120m sightline on the right hand side of the junction is achieved, but roadside grass will need to be removed to provide a 120m unobstructed sightline on the left hand side of the junction.



Figure 1.7 Ballyhar-Cleeny Road/Aghacurreen Road Junction, looking left



Figure 1.8 Ballyhar-Cleeny Road / Aghacurreen Road Junction, looking right

1.6.3.3 N22 junction at Cleeny (Junction 1)

The local road from Ballyhar has a sufficient sightline for traffic coming onto the N22 looking left. Overgrown grass and scrub on the verge of the N22 will need to be cleared in order to optimise the sightline in the right hand direction as shown in Figure 1.9.



Figure 1.9 N22 junction at Cleeny, looking right

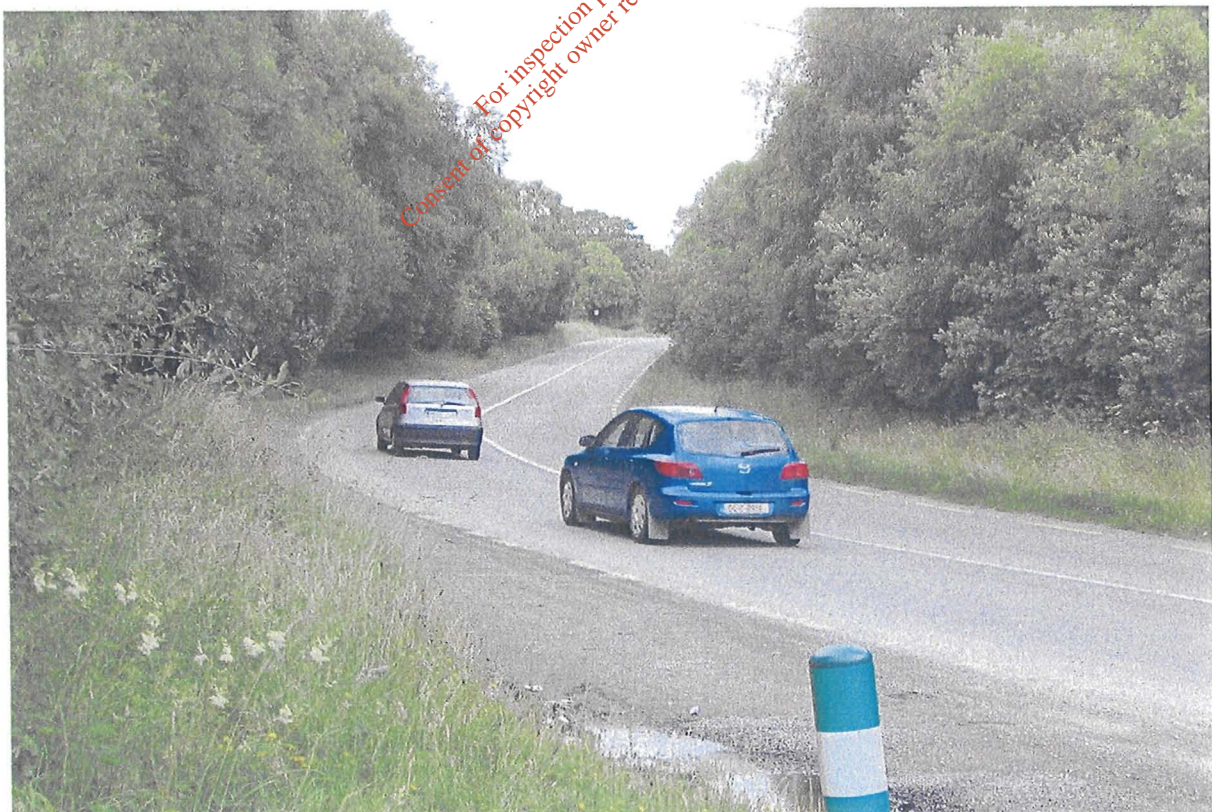


Figure 1.10 N22 junction at Cleeny, looking left

1.6.3.4 Conclusion

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. Remedial works comprising hedge cutting and scrub removal will also have to be carried out at the N22 junction at Cleeny and at the junction of the facility access road at Aghacurreen to improve the junction sightlines.

1.7 ROAD SAFETY

Accident records for the years 1992 to 2002 were examined for the local Aghalee to Cleeny Road, the local Knockasarnet to Aghacurreen road and the N22 National Road in the vicinity of the junction at Cleeny.

Date	Townland	Minor	Serious	Fatality
22/5/93	Knockasarnet	√		
29/8/93	Knockasarnet	√		
5/6/93	Knockasarnet	√		
21/7/94	Coolgarriv	√		
15/10/94	Sheens		√	
24/7/94	Cleeny N22	√		
6/10/94	Coolgarriv N22	√		
12/11/94	Cleeny N22		√	
8/11/95	Aghaleemor			√
3/3/96	Cleeny		√	
17/6/96	N22	√		
4/9/96	Cleeny/Derrean N22	√		
30/6/97	Cleeny N22			
24/7/98	Cleeny N22			
23/6/99	Derrean N22	√		
5/8/00	N22			√
30/7/01	Cleeny N22	√		
1/1/02	Knockasarnet	√		
	Total	13	3	2

Table 1.1 Accident Records 1992 - 2002

The additional turning movements and high HCV content at the entrance to the landfill need to be considered from a road safety viewpoint.

There were no accidents at the facility entrance during this period.

2 Mitigation Measures

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.

In addition, the following minor mitigation measures are also proposed:

- Two warning signs should be placed both at Junctions 2 and 3 to warn drivers of the HCV movements ahead.
- Overgrown grass and scrub on the verge of the N22 at the Cleeny junction will need to be cleared by Kerry County Council in order to optimise the sightline on the right hand side for traffic coming onto the N22.
- A lay-by should be provided between Junctions 2 and 3 (Figure 1.2).
- The tree and hedge to the left side and right side of Junction 3 should be trimmed by Kerry County Council to improve sightlines (Figures 1.5 and 1.6).