

## **Standard Environmental Management Measures To be adhered to as integrals parts of the overall project**

### **Mammal crossing and fencing**

Mammal underpass to be provided at the existing 'at grade' crossing location to consist of a minimum 600mm pipe extending under both the old and the new carriageways. Mammal resistant fencing as per CC/SCD/00319 to be installed along the route, as required. An additional Pre-Construction Mammal Survey will be undertaken in line with best practice TII Guidelines.

### **Invasive species management**

All proposed works to comply with the NRA guidelines on the Management of Noxious Weeds and Non-Native Invasive Plant Species on National Road Schemes (Revision 1, December 2010 – [www.nra.ie/Environment/EnvironmentalConstructionGuidelines/](http://www.nra.ie/Environment/EnvironmentalConstructionGuidelines/)).

### **Landscaping**

New boundary treatment to east of Gaynors bends between the proposed new road and the coastal agricultural fields to be backplanted with thick native hedges, suitable to a coastal environment.

### **Geological Heritage**

Geological Society of Ireland (GSI) to be informed of rock cuttings exposed as part of the works. Opportunities for interpretation of any features of geological heritage interest uncovered as part of the proposal to be explored in consultation with GSI.

### **Archaeology**

Archaeological test excavations to be carried out in greenfield areas in advance of construction.

### **Oil spill risk management**

Re-fuelling will be restricted to allocated re-fuelling areas with oil spill containers / kits provided. Waste oils and fluids generated during the construction phase will be collected in leak-proof containers and removed from the site for proper disposal.

All spills from fuels or hydraulic fluids will be cleaned up immediately and any contaminated soil will be removed from the site and disposed of through a licensed contractor. Each machine driver will be equipped with and trained to use an oil spill kit. Any indication of an oil spill encountered during the works should be reported to the Project Engineer.

### **Water quality protection**

Surface waters generated or passing through the site to be managed in accordance with the '*Control of Water Pollution from Construction Sites – Guidance for Consultants and Contractors*' published by CIRIA (2001) and NRA Guidelines (2006).

### **Construction management**

Construction will be undertaken in accordance with the TII Guidelines for the Treatment of Air Quality during the Planning and Construction of National Road Schemes.

According to the TII Guidelines for the Treatment of Noise and Vibration in National Road Schemes, in order to ensure that there is no potential for vibration damage during construction, it is recommended that vibration from road construction activities be limited to the values set out in Table 5. These limits will as a minimum, be adhered to during the construction of the proposed project.

<b>Allowable vibration velocity (Peak Particle Velocity) at the closest part of any sensitive property to the source of vibration, as a frequency of</b>		
Less than 10Hz	10 to 50Hz	50 to 100Hz (and above)
8mm/s	12.5mm/s	20mm/s

**Allowable vibration during road construction in order to minimise the risk of building damage**