



REPORT ON PROPOSED

CRIB WALLING TREATMENT OF ESKER WITHIN M3
MOTORWAY LANDTAKE ADJACENT RATH LUGH

FOR

DEPARTMENT OF THE ENVIRONMENT, HERITAGE AND
LOCAL GOVERNMENT

BY

NATIONAL ROADS AUTHORITY

12 MARCH 2008

CRIB WALLING TREATMENT OF ESKER WITHIN M3 MOTORWAY LANDTAKE ADJACENT RATH LUGH

The proposed crib walling treatment of the esker within the M3 Motorway adjacent Rath Lugh is illustrated and described in the attached drawings – dwg 1-3.

Drawing 1

This drawing shows in plan the location of the motorway and the proposed crib wall treatment in relation to the area of the Temporary Preservation Order (TPO) including the monument itself and the buffer zone. The TPO buffer zone surrounding the monument adjoins but does not extend into the Lands Made Available for the motorway.

Section A-A shows the location of the proposed crib walling adjacent the motorway south bound carriageway in relation to the Lands Made Available line, the CPO line and the extent of the area of the TPO.

The original ground level in comparison to the proposed limit of excavation is also shown. The excavation is planned in two phases:

- Phase 1 preparatory excavation is shown in yellow.
- Phase 2 crib wall extent of excavation is labelled.

A detail of a typical section through the proposed crib walling is also shown.

Drawing 2

In addition to the plan this drawing shows a shaded relief model of the detailed topographic survey of the monument and surrounding area, as carried out by Archaeological Consultancy Services Ltd.

Section B-B shows the original ground level and the extent of excavation proposed in the area of the motorway closest to the monument.

Crib walling is not required as the extent of excavation is minimal.

Drawing 3

This drawing shows Section A-A of the motorway with completed crib walling.

Two examples of crib walling in use elsewhere in Ireland are provided –one with and one without mature planting.

Monitoring

The above proposed works will be monitored by the National Roads Authority's site monitoring team with independent advice from Dr Eric R. Farrell.

The above proposed works will also be monitored by a qualified archaeologist.

Permacrib Construction Method Statement

This Method Statement should be read in conjunction with Drawing Nos. 1-3.

PLANT: Tracked excavator, plate compactor.

LABOUR: Site Supervisor, Machine Operator, Installers, Archaeological Monitor.

- Crib Walling is required over an approximately 40 m length ranging in height from approximately 1.0m to 5.0m
- Excavation will be limited to lengths of approx 10m and temporary excavation slope will be approximately 60 degrees to the horizontal.
- Excavation for concrete foundation to crib walling to be carried out as indicated on drawing. Concrete will be poured immediately.
- A continuous drain will be provided at the rear of the wall.
- The wall shall be built up in layers consisting of timber headers (parallel to road) and stretchers (perpendicular to road) three rows at a time. The third and sixth courses will be nailed.
- These will be then infilled with granular material in layers of 200mm to 300mm thick.
- Both infill and backfill will be brought up at the same time. Backfill material will be compacted as the wall height increases.
- On completion of the Permacrib wall, a row of stretchers will be laid flat along the top of the wall at the front and nailed in place.
- Grow-bags will be installed as specified in accordance with requirements of a Landscaping Plan for the surface and surrounding areas.