SERIES NG 1100
KERBS, FOOTWAYS AND PAVED AREAS

Contents

KERBS, FOOTWAYS AND PAVED AREAS

NG 1101 General

1 In order to obtain the most economical combination of kerb and pavement construction, the Contractor should choose the type or method of kerbing unless there are sound reasons for specifying the type. Wherever appropriate this should include the choice of placing the kerb either on the surface of, or adjoining the edge of pavements, particularly when used as a drainage detail for concrete pavements. It should also include the choice of laying in situ kerbs and edgings either in concrete or asphalt as there are small machines available for this purpose.

2 Care should be taken in preparing detailed drawings to ensure good drainage from the carriageway construction either through or under the kerb foundation.

3 Even if concrete pavement is not provided with expansion joints, adjacent in situ concrete edge details such as combined marginal strips and drainage channels should be provided with expansion joints if laid in winter, and these should coincide with any joints formed in adjacent slabs.

4 The construction adopted for footways will depend very much upon the availability of local materials and local conditions. The cheapest alternative should normally be used unless there is good reason to do otherwise. Where appropriate and to allow economy, the use of groups of permitted alternatives should be described in Appendix 11/1.

5 For footways which are known to be subjected to vehicle overrun the use of smaller and thicker paving flags laid on a thin layer of sand may be considered. Other alternatives would be concrete block paving, clay pavers, in situ concrete, or for flexible footways increased construction thickness and the use of denser surfacing materials.

6 Concrete block paving and clay pavers may be considered in certain low speed traffic situations, eg. service areas, and lay-bys, because of their resistance to oil spillage and to deformation due to wheel loads. The block or paver layout and other details should be described in Appendix 11/1 wherever possible and incorporate whole units immediately adjacent to the edge of a carriageway or hard strip and avoid trimming of units to less than one third of their surface area.

7 The construction adopted for cycle tracks should be one or more of those given for footways and paved areas.

NG 1103 Freestanding In Situ Concrete Kerbs, Channels and Edge Details

1 Experience suggests that for the in situ construction of relatively high drainage channels by slip-forming or extrusion techniques, the use of crushed or partially crushed aggregate will ensure a more consistent and stable profile. Uncrushed aggregate may be used for surface water channels of 400 mm or less in height where past experience in the use of a particular aggregate, or the result of trials, demonstrate that a satisfactory profile can be achieved.

2 The precise level of concrete workability will depend on the type of construction plant used, for example:

extrusion auger (small kerbs)

ram compaction (small kerbs, kerbs, channels)

slip-form (kerbs, channels).

NG 1109 Grass/Concrete Paving

1 Grass/concrete paving may be considered for parking areas, hard standings and accesses.

2 In situ reinforced grass/concrete paving may be advantageous where heavy goods vehicles or vehicles with high point loadings are anticipated or where poor ground may result in differential settlement between panels.

3 Details of paving systems should be described in Appendix 11/1.

NG SAMPLE APPENDIX 11/1: KERBS, FOOTWAYS AND PAVED AREAS

[Note to compiler: This should include:]

1 Dimensions and type designations of precast concrete kerbs, channels, edgings and quadrants *[1101.1]*

2 Dimensions of precast concrete kerbs to be bonded to the pavement surface *[1101.2]*

3 Details of kerb joints at bridge expansion joints designed by the Overseeing Organisation *[1101.3]*.

4 Dimensions of in situ asphalt kerbing [see MCHW 3 (HCD) Drg Nos B9 and B10] or in situ concrete kerbing *[1102.2, 1103.1]*.

5 Concrete curing requirements if different from Clause 1027 *[1103.3]*.

6 Type designation and thickness of precast concrete flags *[1104.1]*

7 Details of required bond for flags *[1104.2]*.

8 Whether alternative bed for flags, less than 450 mm x 450 mm, is permitted *[1104.2]*

9 Details of flexible surfacing materials to be used *[1105.1]*.

10 Required thickness of surfacing and sub-base *[1105, 1106, 1109.7, 1109.8]* [or where appropriate the groups of permitted alternative materials.]

11 Requirements for laying and curing in situ concrete *[1106.1, 1109.2]*.

12 Required finish and grade of in situ concrete *[1106.1, 1109.2]*.

13 Requirements for shapes, dimensions and colours of precast concrete paving blocks *[1107.1]*.

14 Requirements for shapes, dimensions and colours of clay pavers *[1108.1]*.

15 Block or paver layout details *[1107.3, 1108.3, 1109.6]*.

16 Requirements for grass/concrete paving *[1109.1]*.

17 Requirements for perforations in in situ grass/concrete paving *[1109.3]*.

18 Requirements for shapes, dimensions and colours of precast grass/concrete panels *[1109.4]*.

19 Required thickness of sand bed for grass/concrete panels *[1109.8]*.

20 Requirements for fill material to perforations of grass/concrete paving *[1109.9]*.

21 Requirements for grass seed mix to grass/concrete paving *[1109.9]*.