12. REINSTATEMENT OF KERB AND CHANNELS, RAMPS AND VEHICLE CROSSINGS

12.1 Kerb and channel

Should any settlement, cracking or damage occur to a kerb or water channel it must be removed at least 1 metre beyond the extent of any excavation or damage and be replaced to within 5 mm of the original line and level. The finished surface must be smooth and all joints must be clean and tight. The concrete must have a strength of not less than a 20 MPa at 28 days.

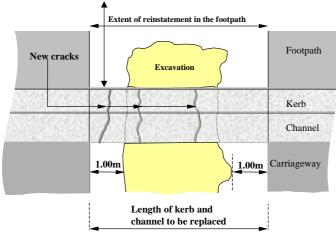


Figure 19 - Reinstatement of kerb or channel

12.2 Stormwater outlet in kerb

The stormwater outlet shall be formed flush with the face of the kerb and in the manner outlined in figure 20. Refer also to Section 7.4.9 'Stormwater pipes to kerb and channel'

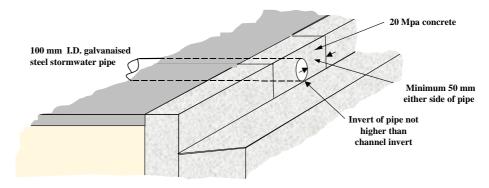


Figure 20 – Reinstatement of kerb at Stormwater outlet

12.3 Pedestrian ramps

Any affected pedestrian ramp is to be fully replaced with concrete to a minimum depth of 100 mm. The concrete must have a strength of not less than a 20 MPa at 28 days. The finished surface levels are to be within 2 mm of the adjoining footpath and channel levels and be evenly graded between. Gradients should normally be not steeper than 1 vertical in 8 horizontal. A drawing of a standard pedestrian ramp is shown in Appendix O.

Any tactile surfaces (knobbly tiles) are to be replaced strictly in the correct position and alignment in the ramp. If not sure please ask the Road Controller.

12.4 Residential kerb crossings

Should any settlement, cracking or damage occur to a residential kerb crossing it must be removed and be replaced for the full length of the crossing to within 5 mm of the original line and level. The reinstated crossing must contain a central D12 bar for the full length. The concrete must have a strength of not less than a 20 MPa at 28 days. The finished surface must be smooth and all joints must be clean and tight.

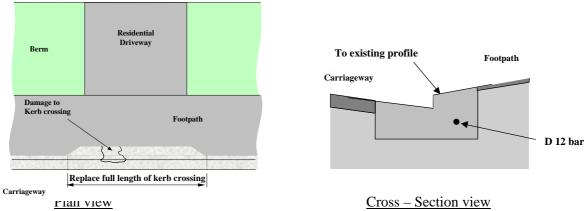
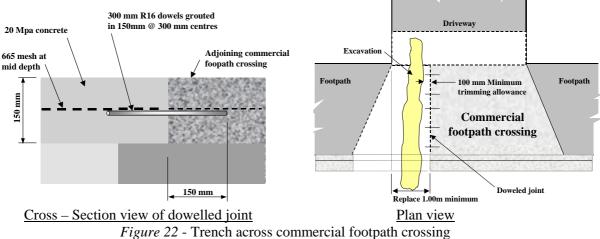


Figure 21 - Reinstatement of residential kerb crossing

12.5 Commercial footpath crossing

Commercial footpath crossings are concrete vehicle crossings which normally extend at least the full width of the footpath. They are built to provide off street vehicle access to commercial properties and to shared multi residential driveways (At least three household units). These are meant to be stronger to take the vehicle loads typical of those situations.

The requirements for reinstating concrete footpaths shall apply (Sections 13.1.7 & 13.3.4) except that 665 mesh must be used, and the minimum concrete depth increased to 150 mm. Any joints with the adjoining crossing must be doweled as indicated in figure 22. The concrete must have a strength of not less than a 20 MPa at 28 days.



Any trench along the full length of the crossing will require the full crossing to be replaced as shown in figure 23.

Fig 23 - Trench along commercial footpath crossing

