



Appendix: 2: Specifications & Standards

“Road and hard surface construction and completion standards”

Transportation,

ROAD AND HARD SURFACE CONSTRUCTION AND COMPLETION STANDARDS

Transportation Department

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ROADS, FOOTPATHS and CIRCULATION SYSTEMS

1. The roads and footpaths shall be taken in charge in conjunction with water mains, sewers and open spaces. No road or footpath will be taken in charge unless all underground infrastructures is inspected and passed i.e. all utility services inspected, tested, passed and fully operational for all the existing and future dwellings in the area. (**Reason:** to ensure that the lifespan of the road is not reduced by subsequent road openings to rectify services).

2. The roads and footpaths shall be constructed in accordance with Section 2 of “**Recommendations for Site Development Works for Housing Areas**” (, with the exception of:
 - Section 2.24 (Surface Dressing) as surface dressing will not be accepted as a surfacing layer in Housing Estates and the following
 - Increased standard for **Service Roads and Distributor Roads** Section

	Service Roads	DoEHLG Recommendation	FCC Requirements
1	Base course macadam depth	40mm	75mm
2	Wearing course depth	25mm	60mm
	Combined (1) and (2)	80mm	135mm

Distributor Roads	NRA Specification & FCC Requirements
Capping Layer	200mm – 500mm based on CBR Test
<i>Sub-base macadam depth</i>	200mm
Base course macadam depth	55mm
<i>Hot rolled Asphalt wearing course</i>	45mm

(Available from Government Publications Sale Office, Sun Alliance House, Molesworth Street, Dublin 2 – Tel: 01 – 6613111)

3. All pavement joints shall be properly designed, constructed and sealed with an approved bitumen, or alternative flexible seal.
4. Road and footpath construction shall address and include for the needs of vulnerable and disabled road users. There shall be no steps in footpath construction. The Design and construction shall satisfy the requirements set out in the “**Traffic Management Guidelines**” **Department of Environment, Department of Transport & DTO**. (Available from Government Publications Sale Office, Sun Alliance House, Molesworth Street, Dublin 2 – Tel: 01 – 6613111)
5. Cycle facilities shall be provided for in accordance with **the “Provision of cycle facilities National manual for Urban Areas”** Department of Environment, DTO. (Available from Government Publications Sale Office, Sun Alliance House, Molesworth Street, Dublin 2 – Tel: 01 – 6613111)
6. Road Marking and Signing shall comply with the “**Traffic Signs Manual**” Department of Environment. (Available from Government Publications Sale Office, Sun Alliance House, Molesworth Street, Dublin 2 – Tel: 01 – 6613111)
7. All road markings shall be the permanent road markings as specified in the Dept of Environment manual “**Dept of Environment manual on, Guidelines and Tender Documentation for Road marking Materials**” (pink book); The Local Authority reserves the right to withhold an agreed sum of money to test the road markings after the prescribed time.
8. Timber post and rail fencing shall comply with the requirements set out in **IS435 (Parts 1-3)** or equivalent specification. Other roadside boundaries shall

be provided in accordance with the principal of forgiving roadsides. (Reason: to reduce injuries in the event of a collision with the roadside boundary).

9. Boundary walls, Screen walls, Garden walls etc. shall be fit for their purpose and should be designed by a Chartered Engineer who holds professional indemnity insurance, to the requirements of I.S. 325: parts 1 and 2 or E.U. equivalent. The design shall take account of the particular position in which the walls are to be built and the appropriate wind loading for that position. In general walls constructed from 100mm. block on the edge or 225mm cavity block will not be acceptable. Particular attention must be paid to expansion joints and control joints in free standing walls. In general expansion joints in 2 meter high screen walls and wall cappings will occur at spacing not exceeding 5.5 meters

10. A Post-Construction **Road User Audit**, (i.e. audit taking into consideration Road Safety and Accessibility of Vulnerable and Disabled Road Users) shall be submitted as part of the taking in charge process. This audit shall be carried out by a professionally qualified independent person who holds professional indemnity insurance up to £500,000 for the purpose of signing such forms in accordance with **Fingal County Councils 'Access Audit Brief'**. The purpose of the audit is to ensure that the scheme is designed in accordance with the council's policy for walking, cycling and mobility/sensory impaired road users along with private and public transport road users.

11. All manhole covers and frames in public property shall comply with Standard **I.S. /EN 124:1994 and Loading Class D400 or equivalent** specification. The manhole covers shall be constructed/fixed in situ, using an approved bitumen or alternative flexible fixing system, compatible with the flexible nature of the road materials. This is to ensure that future manhole cover problems

12. All ironwork in the hard pavement network shall be constructed using an approved bitumen flexible fixing system compatible with the flexible nature of the road materials.
13. All road gully ratings shall be of an approved lockable type to **Standard I.S. /EN 124:1994 and Loading or equivalent specification.**
14. A condition survey of the pavement, footpaths, cycle ways and road crossings with the list of defects having been identified and certification by a qualified competent person that lists of remedial measures as agreed with Fingal County Council Transportation Department have been carried out should accompany the taking in charge application.
- 15. Falling Weight Deflectometer (FWD) Tests** to determine the strength of sub-grade and permanent layers for roads showing major signs of deterioration together with certification that the list of remedial works as agreed with Fingal County Council, Transportation Department have been carried out, may form part of the taking in charge procedure.
16. Fingal County Council may require the carrying out of core tests in conjunction with the FWD tests or as an alternative. Type of tests required shall be agreed in advance of the taking in charge process and completed at the developer's expense.
17. Drainage systems shall in as far as possible in accordance with the principle of **Sustainable Urban Drainage Systems** SUDS. The future maintenance and management systems shall be taken into account when considering the design and a copy of the as constructed system along with the maintenance and management programme shall be submitted to Fingal County Council.

18. **CCTV Survey/Manhole Survey.** A CCTV survey/manhole survey of the collection systems will be submitted to the Council prior to lodging an application form for taking in charge. The survey shall be completed at the Developers expense. The sewers to be surveyed shall be thoroughly cleaned out first. The CCTV Survey shall be carried out using a camera, which is capable of measuring distances from one manhole to another. The CCTV Survey report shall conform to the standards set out in the WRC Manual on Sewer Condition Classification. The report shall include a summary of any defects in the systems. Any defects in the systems shall be corrected by the Developer at his own expense, prior to taking in charge. High-resolution photographs and quality VHS recordings shall supplement the printed report. (Note; this condition may be included in water services standard, and there is no need to provide duplicate results for the transportation department).
19. A drainage layout plan of as-constructed sewers shall be submitted on diskette, prepared to SUS25 format, showing a detailed survey of each manhole, sewer structure and a digitised layout of the as-constructed housing estate. The manhole survey and digitised layout (DXF Format) of the estate shall be prepared to national grid co-ordinates. (Note; this condition may be included in water services standard, and there is no need to provide duplicate results for the transportation department).
20. **Open Spaces,** The developer may be requested as part of the taking in charge process, to dig trial holes at his own expense at specific locations chosen by the local authority to confirm that there is no unauthorised disposal of waste on the site.