



Bonneagar Iompair Éireann
Transport Infrastructure Ireland

TII Publications



Standard Construction Details - Series 000

April 2017

Standard Construction Details (SCDs) – Series 000

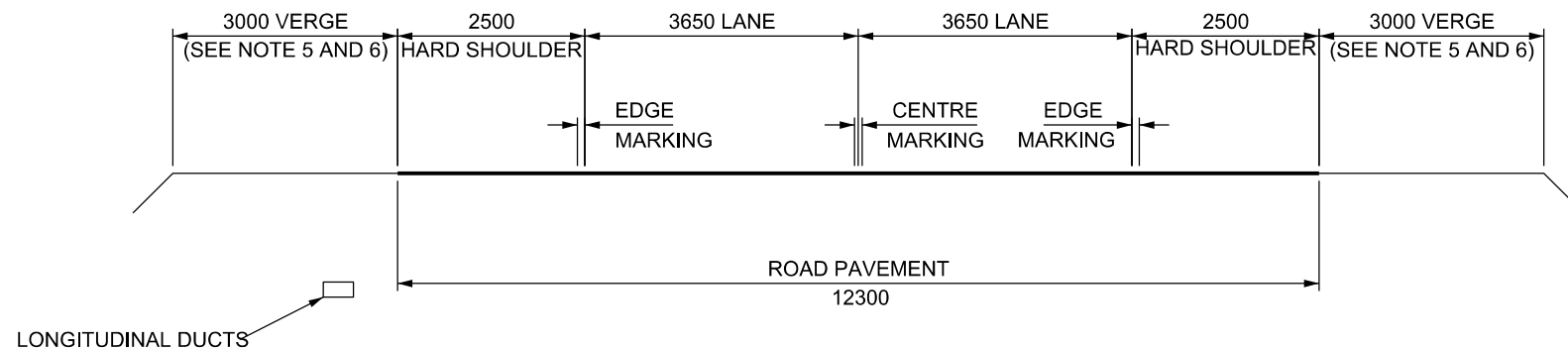
TII Publications contains Standard Construction Details (SCDs) for use on National Road schemes in Ireland. This composite document brings together all the Series 000 SCDs from TII Publications current at the date of this document's publication, into a single location for convenience.

Every effort has been made to keep this composite document updated and available from the TII Publications website (<http://www.tiipublications.ie/>). Please note that the SCD drawings available from the TII Publications website (individually linked below) are the controlled versions for all SCDs.

The SCDs contained in this document are as follows:

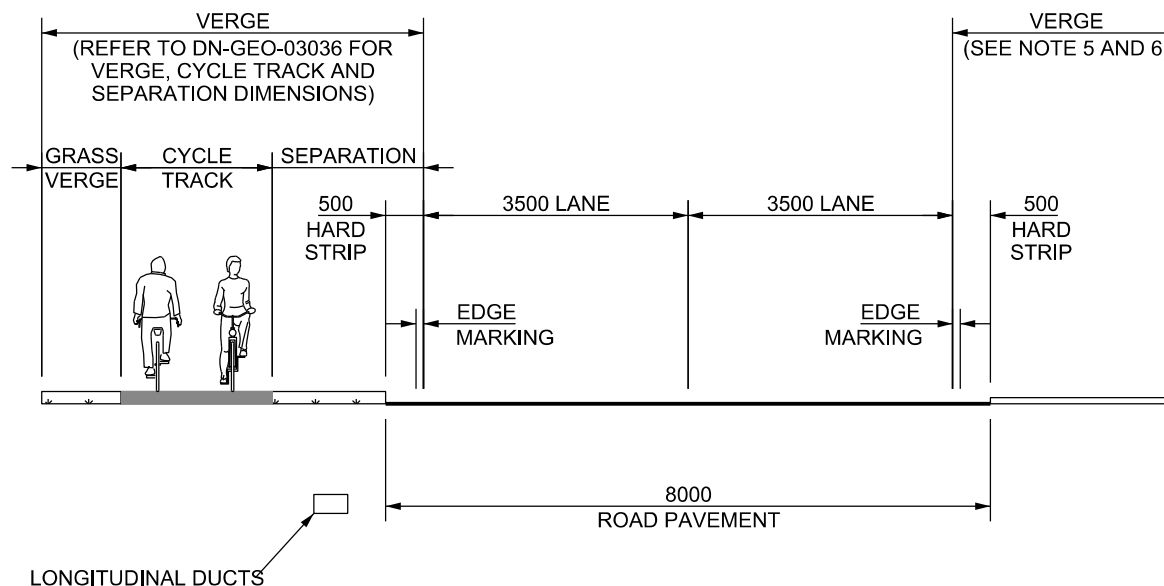
Series 000 Road Type and Cross-Section

CC-SCD-00001	Type 1 Single Carriageway
CC-SCD-00002	Type 2 Single Carriageway
CC-SCD-00003	Type 3 Single Carriageway
CC-SCD-00004	Type 3 Dual Carriageway
CC-SCD-00005	Type 2 Dual Carriageway
CC-SCD-00006	Type 1 Dual Carriageway
CC-SCD-00007	Standard Dual Carriageway and Motorway
CC-SCD-00008	Wide Dual Carriageway Motorway
CC-SCD-00009	Slip Roads, Interchange Links and Loops : 1 Lane
CC-SCD-00010	Slip Roads, Interchange Links and Loops : 2 Lane
CC-SCD-00011	Diverge Slip Roads Only 2 Lane
CC-SCD-00012	Cross Sections at Structures
CC-SCD-00013	Single Carriageway Urban Relief Road
CC-SCD-00014	Dual Carriageway Urban Relief Road
CC-SCD-00015	Dual Carriageway Urban 2 Lane
CC-SCD-00016	Dual Carriageway Urban 3 Lane



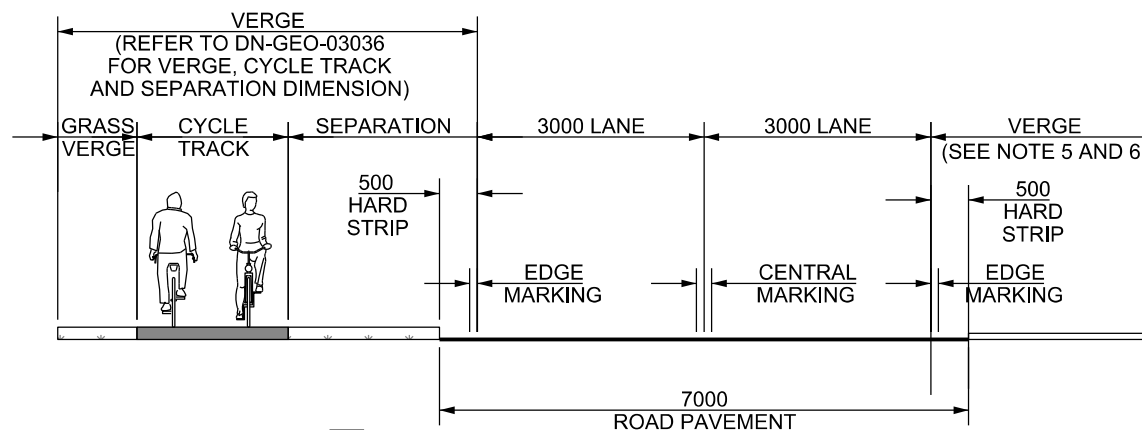
NOTES :-

1. ALL DIMENSIONS ARE IN METRES.
2. SEE DN-GEO-03036 FOR DIMENSIONS OF CROSS-SECTION ELEMENTS.
3. FOR DETAILS OF ROAD MARKINGS SEE THE TRAFFIC SIGNS MANUAL.
4. FOR LANE WIDTHS OF CLIMBING LANE SECTIONS ON TYPE 1 'SINGLE' CARRIAGEWAY SEE DN-GEO-03031.
5. THE VERGE WIDTH SHOULD BE INCREASED AS REQUIRED TO ACCOMMODATE THE FEATURES AND SERVICES CONTAINED THEREIN.
6. THE VERGE WIDTH SHOULD BE INCREASED AS NECESSARY TO ACCOMMODATE PEDESTRIAN/CYCLIST FACILITIES AS REQUIRED.
7. WHERE REQUIRED, LONGITUDINAL DUCTS ARE TO BE PROVIDED WITHIN A VERGE; REFER TO DN-ITS-03029 FOR GUIDANCE ON THE PROVISION OF LONGITUDINAL COMMUNICATION DUCTS. REFER TO CC-SPW-00500 AND CC-SPW-01500 FOR FURTHER DETAILS ON DUCT SPECIFICATION.



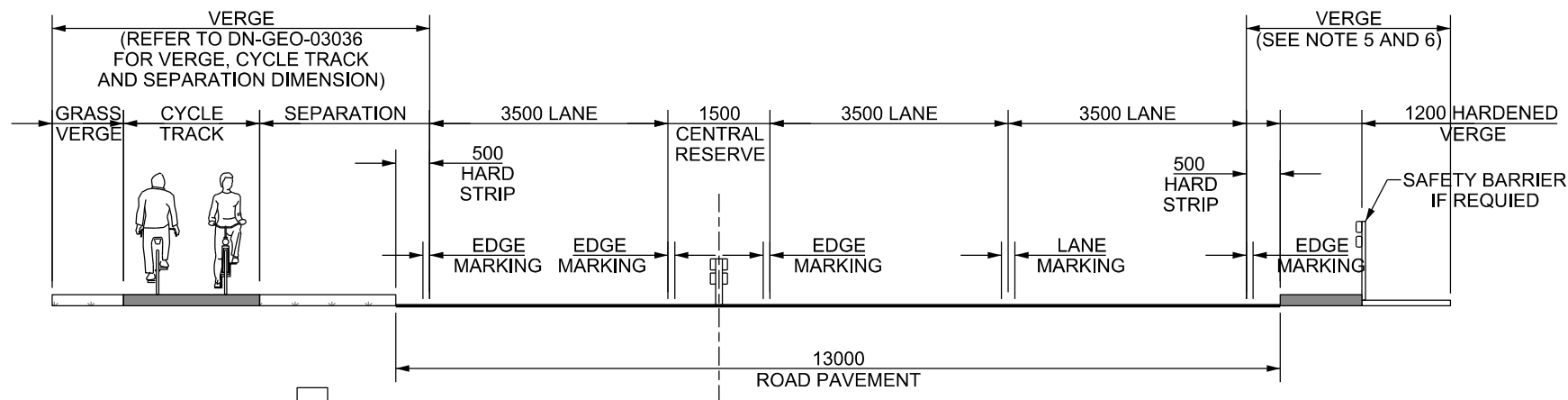
NOTES :-

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. SEE DN-GEO-03036 FOR DIMENSIONS OF CROSS-SECTION ELEMENTS.
3. FOR DETAILS OF ROAD MARKINGS SEE THE TRAFFIC SIGNS MANUAL.
4. FOR LANE WIDTHS OF CLIMBING LANE SECTIONS ON TYPE 2 SINGLE CARRIAGEWAY SEE DN-GEO-03031.
5. THE VERGE WIDTH SHOULD BE INCREASED AS REQUIRED TO ACCOMMODATE THE FEATURES AND SERVICES CONTAINED THEREIN.
6. THE VERGE WIDTH SHOULD BE INCREASED AS NECESSARY TO ACCOMMODATE MANDATORY PEDESTRIAN/CYCLIST FACILITIES.
7. TWO WAY CYCLE FACILITIES SHOULD BE PROVIDED ON ONE SIDE OF THE ROAD UNLESS SITE SPECIFIC CONDITIONS REQUIRE FACILITIES ON BOTH SIDES.
8. WHERE REQUIRED, LONGITUDINAL DUCTS ARE TO BE PROVIDED WITHIN A VERGE; REFER TO DN-ITS-03029 FOR GUIDANCE ON THE PROVISION OF LONGITUDINAL COMMUNICATION DUCTS. REFER TO CC-SPW-00500 AND CC-SPW-01500 FOR FURTHER DETAILS ON DUCT SPECIFICATION.



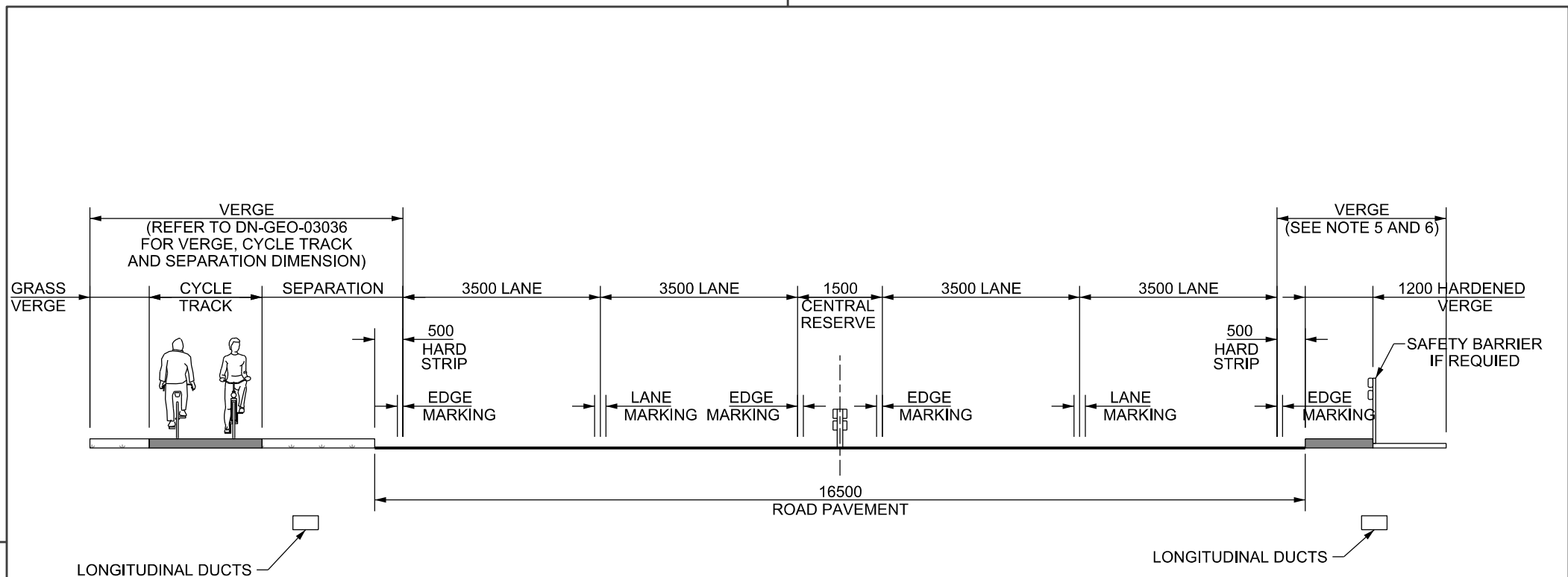
NOTES :-

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. SEE DN-GEO-03036 FOR DIMENSIONS OF CROSS-SECTION ELEMENTS.
3. FOR DETAILS OF ROAD MARKINGS SEE THE TRAFFIC SIGNS MANUAL.
4. FOR LANE WIDTHS OF CLIMBING LANE SECTIONS ON TYPE 2 SINGLE CARRIAGEWAY SEE DN-GEO-03031.
5. THE VERGE WIDTH SHOULD BE INCREASED AS REQUIRED TO ACCOMMODATE THE FEATURES AND SERVICES CONTAINED THEREIN.
6. THE VERGE WIDTH SHOULD BE INCREASED AS NECESSARY TO ACCOMMODATE MANDATORY PEDESTRIAN/CYCLIST FACILITIES.
7. TWO WAY CYCLE FACILITIES SHOULD BE PROVIDED ON ONE SIDE OF THE ROAD UNLESS SITE SPECIFIC CONDITIONS REQUIRE FACILITIES ON BOTH SIDES.
8. WHERE REQUIRED, LONGITUDINAL DUCTS ARE TO BE PROVIDED WITHIN A VERGE; REFER TO DN-ITS-03029 FOR GUIDANCE ON THE PROVISION OF LONGITUDINAL COMMUNICATION DUCTS. REFER TO CC-SPW-00500 AND CC-SPW-01500 FOR FURTHER DETAILS ON DUCT SPECIFICATION.



NOTES :-

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. SEE DN-GEO-03036 FOR DIMENSIONS OF CROSS-SECTION ELEMENTS.
3. FOR DETAILS OF ROAD MARKINGS SEE THE TRAFFIC SIGNS MANUAL.
4. THE VERGE WIDTH SHOULD BE INCREASED AS REQUIRED TO ACCOMMODATE THE FEATURES AND SERVICES CONTAINED THEREIN.
5. THE VERGE WIDTH SHOULD BE INCREASED AS NECESSARY TO ACCOMMODATE MANDATORY CYCLE FACILITIES IN ACCORDANCE WITH DN-GEO-03036.
6. TWO WAY CYCLE FACILITIES SHOULD BE PROVIDED ON ONE SIDE OF THE ROAD UNLESS SITE SPECIFIC CONDITIONS REQUIRE FACILITIES ON BOTH SIDES.
7. LONGITUDINAL DUCTS ARE TO BE PROVIDED WITHIN EACH VERGE; REFER TO DN-ITS-03029 FOR THE MINIMUM REQUIREMENTS FOR PROVISIONS OF LONGITUDINAL COMMUNICATIONS DUCTS. REFER TO CC-SPW-00500 AND CC-SPW-01500 FOR FURTHER DETAILS ON DUCT SPECIFICATIONS.



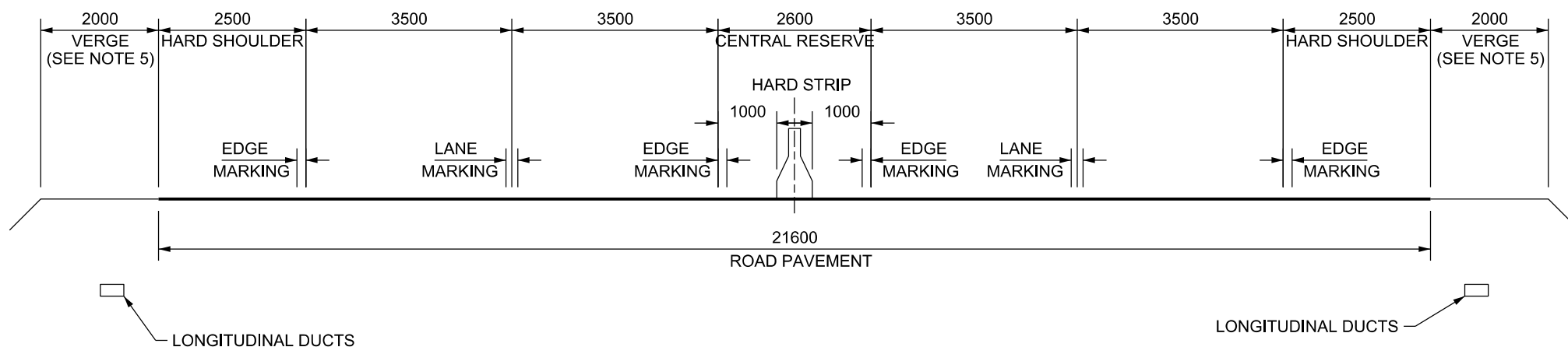
LONGITUDINAL DUCTS

LONGITUDINAL DUCTS

EXAMPLE 1:
EMERGENCY
EGRESS ROUTE

NOTES :-

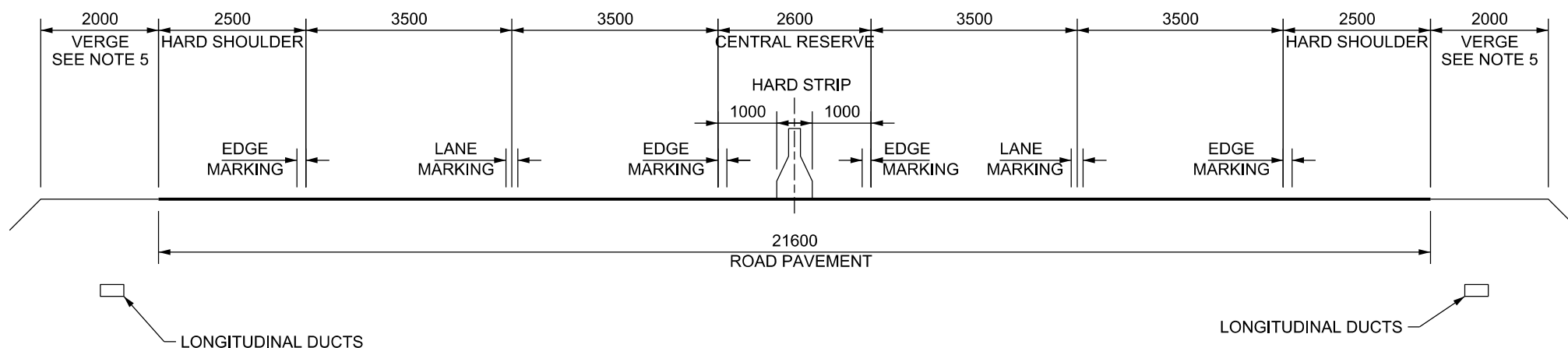
1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. SEE DN-GEO-03036 FOR DIMENSIONS OF CROSS-SECTION ELEMENTS.
3. FOR DETAILS OF ROAD MARKINGS SEE THE TRAFFIC SIGNS MANUAL.
4. THE VERGE WIDTH SHOULD BE INCREASED AS REQUIRED TO ACCOMMODATE THE FEATURES AND SERVICES CONTAINED THEREIN.
5. THE VERGE WIDTH SHOULD BE INCREASED AS NECESSARY TO ACCOMMODATE MANDATORY PEDESTRIAN/CYCLIST FACILITIES IN ACCORDANCE WITH DN-GEO-03036.
6. TWO WAY CYCLE FACILITIES SHOULD BE PROVIDED ON ONE SIDE OF THE ROAD UNLESS SITE SPECIFIC CONDITIONS REQUIRE FACILITIES ON BOTH SIDES.
7. LONGITUDINAL DUCTS ARE TO BE PROVIDED WITHIN EACH VERGE; REFER TO DN-ITS-03029 FOR THE MINIMUM REQUIREMENTS FOR PROVISIONS OF LONGITUDINAL COMMUNICATIONS DUCTS. REFER TO CC-SPW-00500 AND CC-SPW-01500 FOR FURTHER DETAILS ON DUCT SPECIFICATIONS.



NOTES :-

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. SEE DN-GEO-03036 FOR DIMENSIONS OF CROSS-SECTION ELEMENTS.
3. FOR DETAILS OF ROAD MARKINGS SEE THE TRAFFIC SIGNS MANUAL.
4. WIDTH OF CENTRAL RESERVE FOR A TYPE 1 DUAL CARRIAGEWAY IS DETERMINED BY THE TYPE OF SAFETY FENCE OR BARRIER. REFER TO DN-REQ-03034.
5. THE VERGE WIDTH SHOULD BE INCREASED AS REQUIRED TO ACCOMMODATE THE FEATURES AND SERVICES CONTAINED THEREIN.

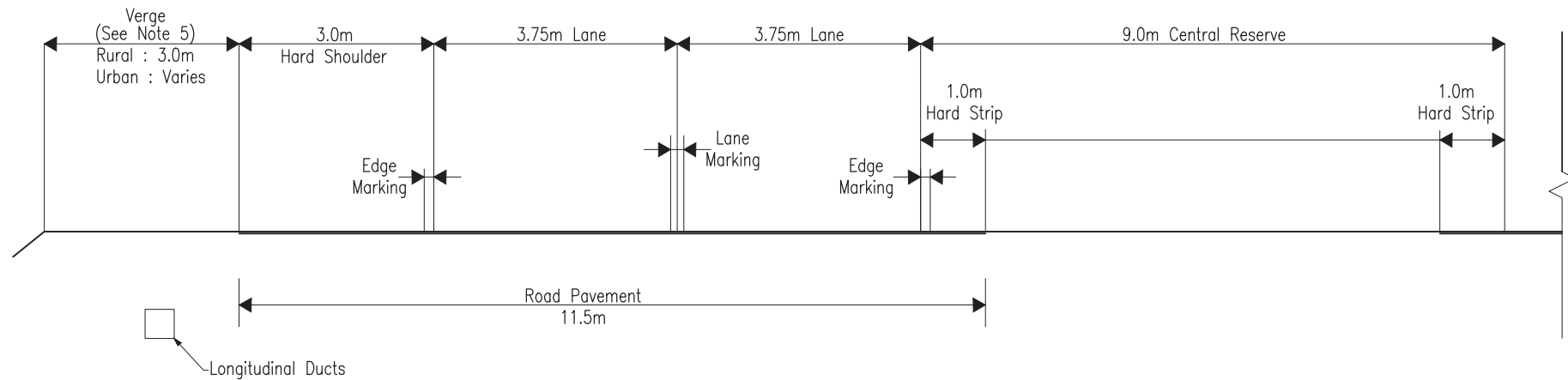
6. LONGITUDINAL DUCTS ARE TO BE PROVIDED WITH IN EACH VERGE, REFER TO DN-ITS-03029 FOR THE MINIMUM REQUIREMENTS FOR PROVISION OF LONGITUDINAL COMMUNICATION DUCTS. REFER TO CC-SPW-00500 AND CC-SPW-01500 FOR FURTHER DETAILS ON DUCT SPECIFICATION.
7. WHERE THE TRAFFIC ASSESMENT INDICATES MORE THAN TWO LANES ARE REQUIRED IN EACH DIRECTION, ANY ADDITIONAL LANES SHALL BE 3.5M IN WIDTH. DETAILS OF VERGES, HARD SHOULDERS AND THE CENTRAL RESERVE SHALL BE THE SAME AS FOR 2 LANES IN EACH DIRECTION.



NOTES :-

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. SEE DN-GEO-03036 FOR DIMENSIONS OF CROSS-SECTION ELEMENTS.
3. FOR DETAILS OF ROAD MARKINGS SEE THE TRAFFIC SIGNS MANUAL.
4. WIDTH OF CENTRAL RESERVE FOR A DUAL CARRIAGEWAY MOTORWAY IS DETERMINED BY THE TYPE OF SAFETY FENCE OR BARRIER. REFER TO DN-REQ-03034.
5. THE VERGE WIDTH SHOULD BE INCREASED AS REQUIRED TO ACCOMMODATE THE FEATURES AND SERVICES CONTAINED THEREIN.

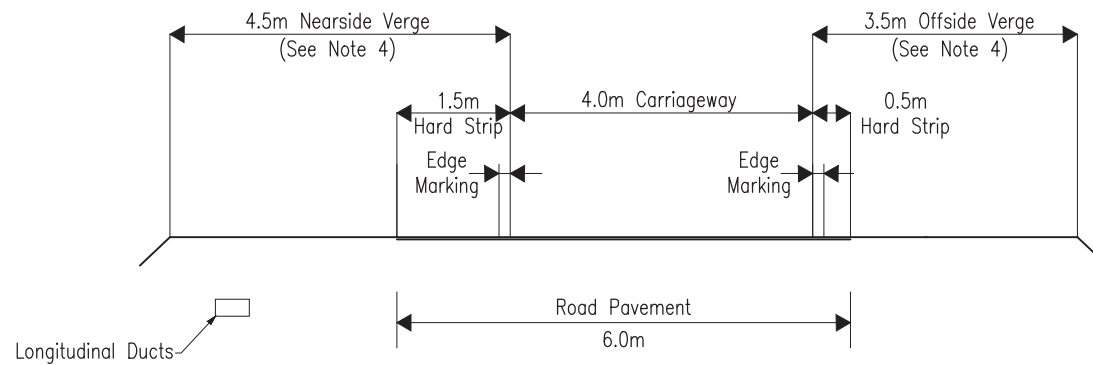
6. LONGITUDINAL DUCTS ARE TO BE PROVIDED WITH IN EACH VERGE, REFER TO DN-ITS-03029 FOR THE MINIMUM REQUIREMENTS FOR PROVISION OF LONGITUDINAL COMMUNICATION DUCTS. REFER TO CC-SPW-00500 AND CC-SPW-01500 FOR FURTHER DETAILS ON DUCT SPECIFICATION.
7. WHERE THE TRAFFIC ASSESMENT INDICATES MORE THAN TWO LANES ARE REQUIRED IN EACH DIRECTION, ANY ADDITIONAL LANES SHALL BE 3.5M IN WIDTH. DETAILS OF VERGES, HARD SHOULDERS AND THE CENTRAL RESERVE SHALL BE THE SAME AS FOR 2 LANES IN EACH DIRECTION.



Notes :-

1. All dimensions are in metres.
2. See NRA TD27 for dimensions of cross-section elements.
3. For details of road markings see the Traffic Signs Manual.
4. 6m Median provided where extra lane may be required in the future.
5. The verge width should be increased as required to accommodate the features and services contained therein.
6. Longitudinal ducts are to be provided within each verge; refer to NRA TA 77 for the minimum requirements for provision of longitudinal communication ducts. Refer to Series 500 and 1500 of the NRA MCDRW for further details on duct specification.

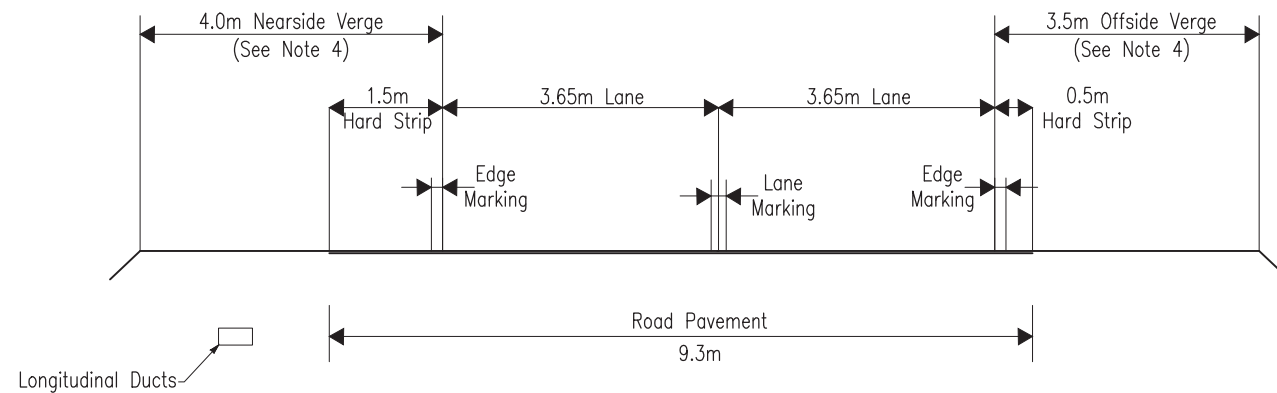
Scale 1:100



Notes :-

1. All dimensions are in metres.
2. See NRA TD27 for dimensions of cross-section elements.
3. For details of road markings see the Traffic Signs Manual.
4. The verge width should be increased as required to accommodate the features and services contained therein.
5. Where required, longitudinal ducts are to be provided within a verge; refer to NRA TA 77 for guidance on the provision of longitudinal communication ducts. Refer to Series 500 and 1500 of the NRA MCDRW for further details on duct specification.

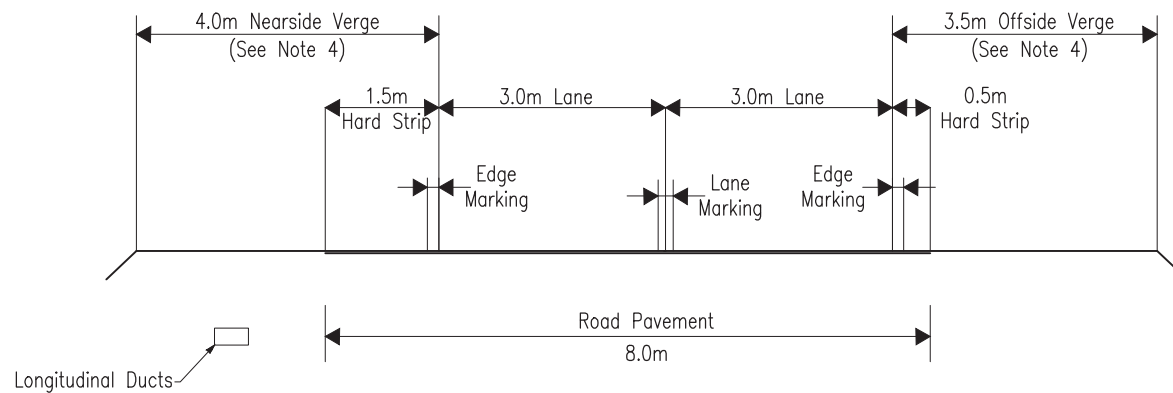
Scale 1:100



Notes :-

1. All dimensions are in metres.
2. See NRA TD27 for dimensions of cross-section elements.
3. For details of road markings see the Traffic Signs Manual.
4. The verge width should be increased as required to accommodate the features and services contained therein.
5. Where required, longitudinal ducts are to be provided within a verge; refer to NRA TA 77 for guidance on the provision of longitudinal communication ducts. Refer to Series 500 and 1500 of the NRA MCDRW for further details on duct specification.

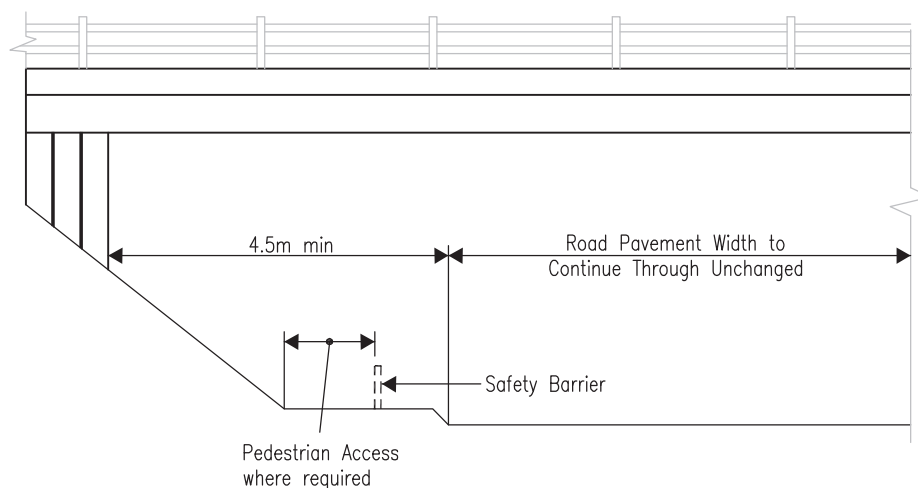
Scale 1:100



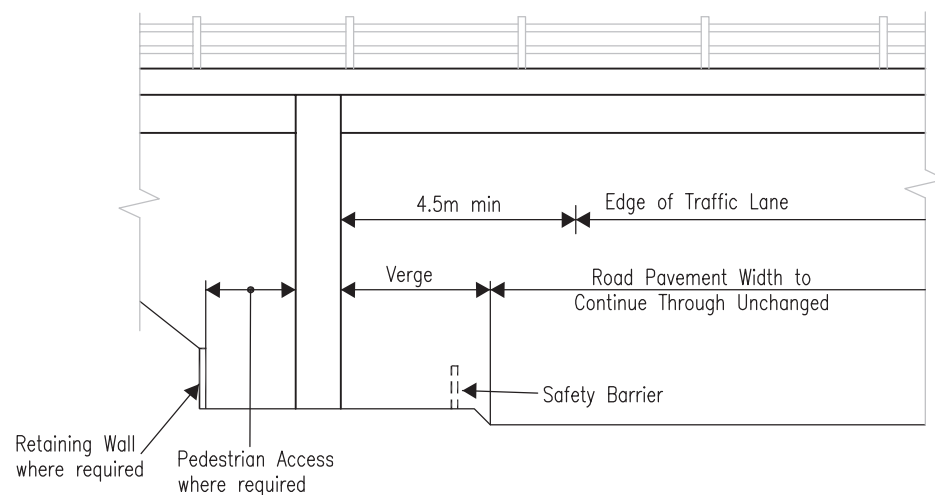
Notes :-

1. All dimensions are in metres.
2. See NRA TD27 for dimensions of cross-section elements.
3. For details of road markings see the Traffic Signs Manual.
4. The verge width should be increased as required to accommodate the features and services contained therein.
5. Where required, longitudinal ducts are to be provided within a verge; refer to NRA TA 77 for guidance on the provision of longitudinal communication ducts. Refer to Series 500 and 1500 of the NRA MCDRW for further details on duct specification.

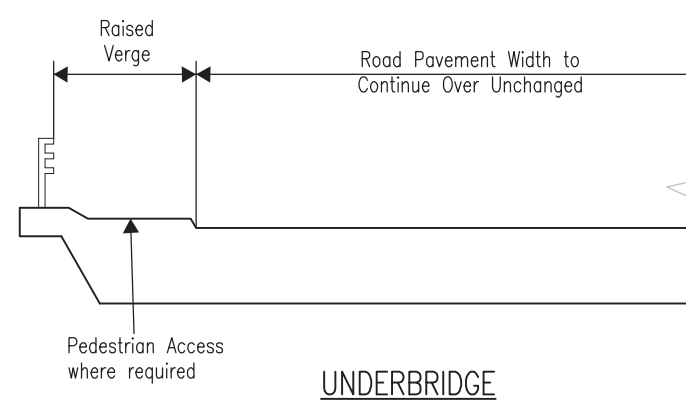
Scale 1:100



OVERBRIDGE WITH ABUTMENT
AT BACK OF VERGE



OVERBRIDGE WITH PIER
AT BACK OF VERGE



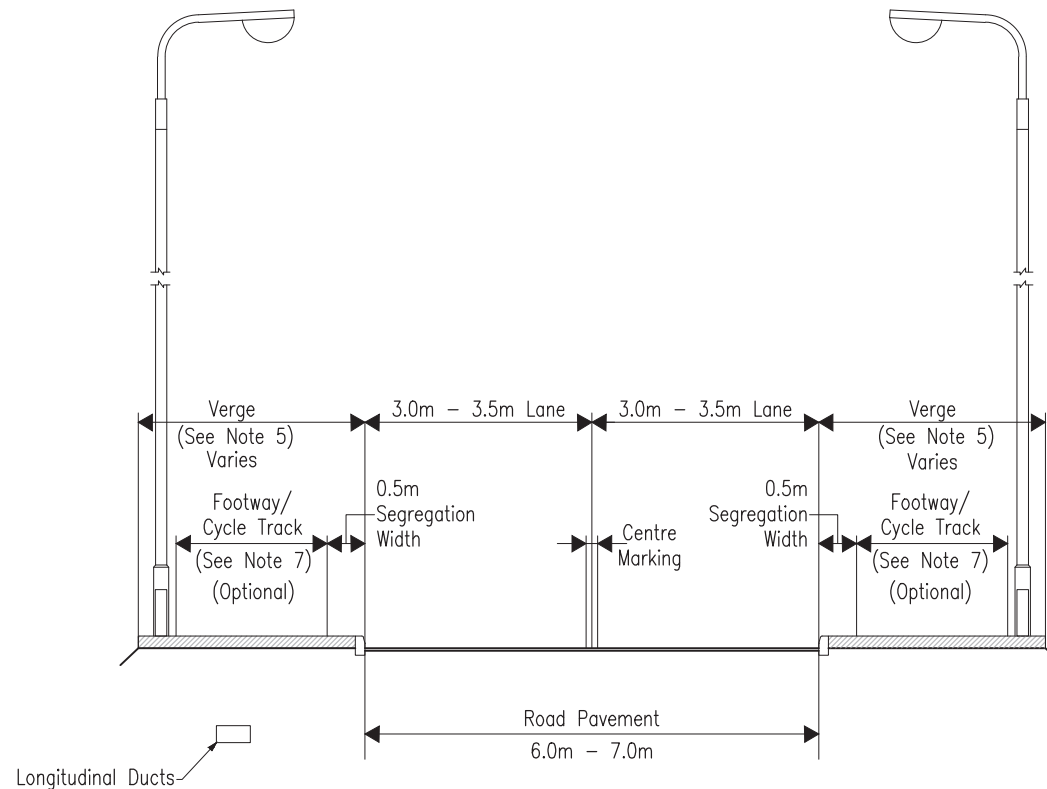
UNDERBRIDGE

Notes :-

1. All dimensions are in metres
2. See NRA TD27 for dimensions of cross-section elements

Scale 1:100

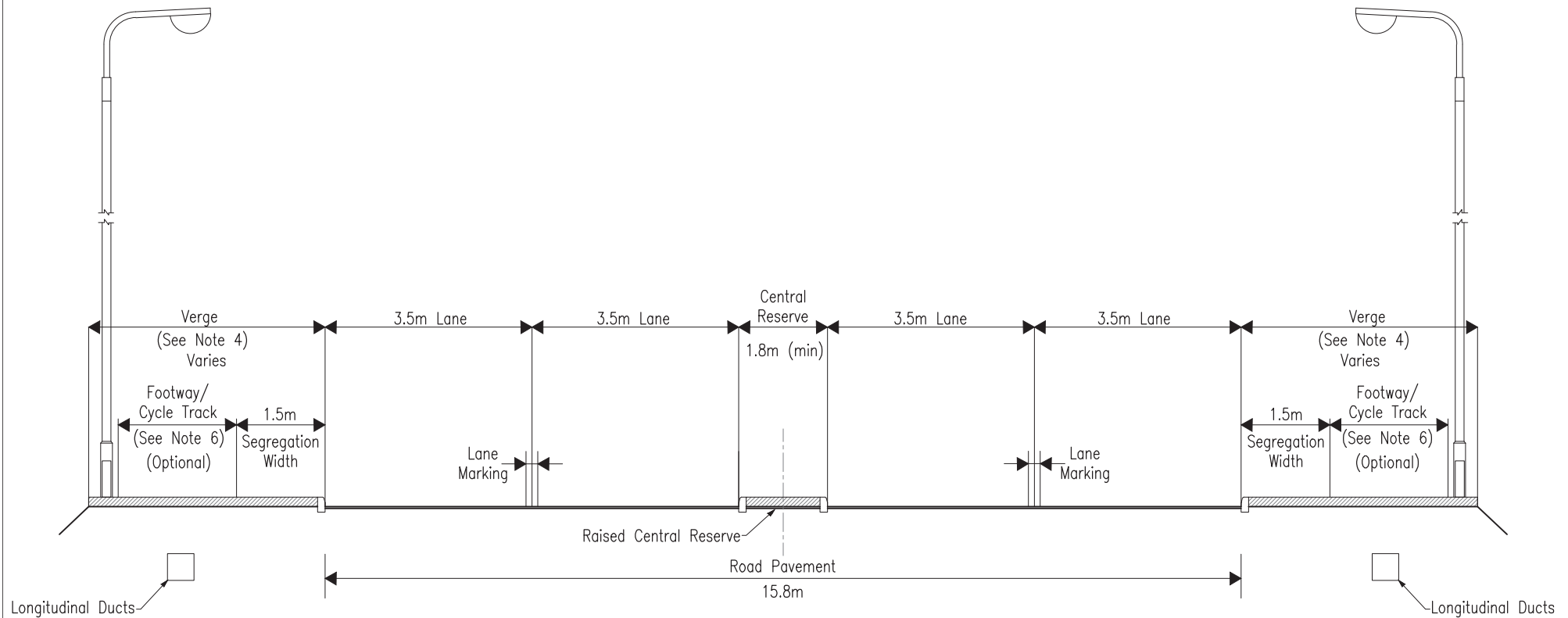
TII PUBLICATION NUMBER: CC-SCD-00012



Notes :—

1. All dimensions are in metres.
2. See NRA TD27 for dimensions of cross-section elements.
3. For details of road markings see the Traffic Signs Manual.
4. For lane widths of climbing lanes on single carriageway urban distributor roads see NRA TD9.
5. The verge width should be increased as required to accommodate the features and services contained therein.
6. Table 6/1 of TD9 does not apply to urban roads.
7. Footpath/ Cycle Track width as per table 1 of NRA TD 27.
8. Where required, longitudinal ducts are to be provided within a verge; refer to NRA TA 77 for guidance on the provision of longitudinal communication ducts. Refer to Series 500 and 1500 of the NRA MCDRW for further details on duct specification.

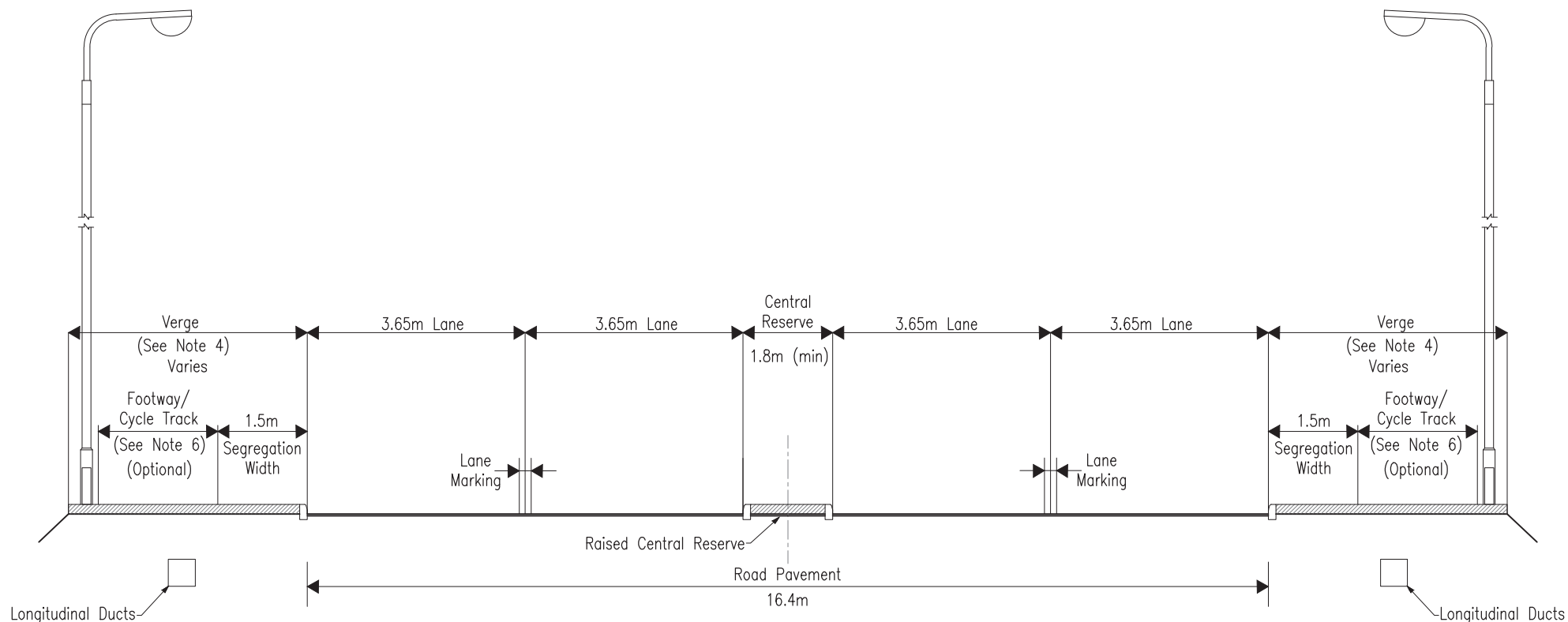
Scale 1:100



Notes :-

1. All dimensions are in metres.
2. See NRA TD27 for dimensions of cross-section elements.
3. For details of road markings see the Traffic Signs Manual.
4. The verge width should be increased as required to accommodate the features and services contained therein, including any footway / cycle track requirements.
5. Table 6/1 of TD9 does not apply to urban roads.
6. Footpath/ Cycle Track width as per table 1 of NRA TD 27.
7. Longitudinal ducts are to be provided within each verge; refer to NRA TA 77 for the minimum requirements for provision of longitudinal communication ducts. Refer to Series 500 and 1500 of the NRA MCDRW for further details on duct specification.

Scale 1:100

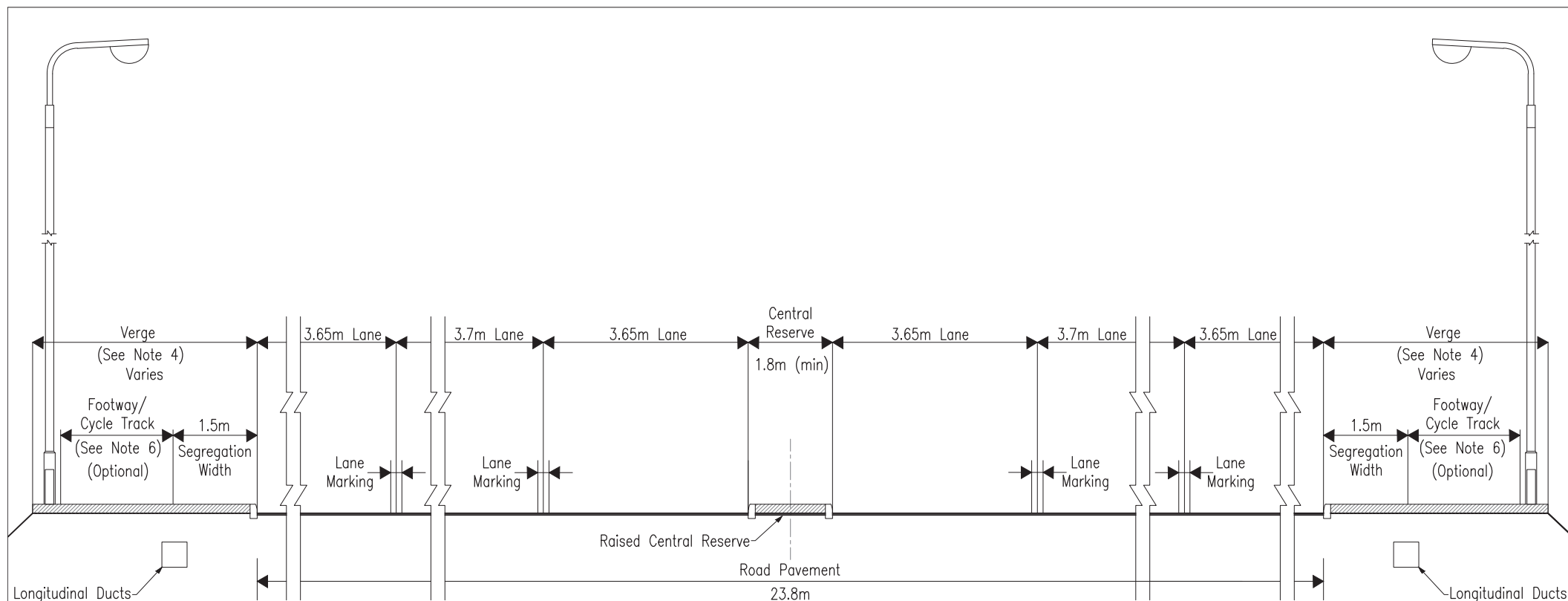


Notes :-

1. All dimensions are in metres.
2. See NRA TD27 for dimensions of cross-section elements.
3. For details of road markings see the Traffic Signs Manual.
4. The verge width should be increased as required to accommodate the features and services contained therein, including any footway / cycle track requirements.
5. Table 6/1 of TD9 does not apply to urban roads.
6. Footpath/ Cycle Track width as per table 1 of NRA TD 27.
7. Longitudinal ducts are to be provided within each verge; refer to NRA TA 77 for the minimum requirements for provision of longitudinal communication ducts. Refer to Series 500 and 1500 of the NRA MCDRW for further details on duct specification.

TII PUBLICATION NUMBER: CC-SCD-00015

Scale 1:100



Notes :-

1. All dimensions are in metres.
2. See NRA TD27 for dimensions of cross-section elements.
3. For details of road markings see the Traffic Signs Manual.
4. The verge width should be increased as required to accommodate the features and services contained therein, including any footway / cycle track requirements.
5. Table 6/1 of TD9 does not apply to urban roads.
6. Footpath/ Cycle Track width as per table 1 of NRA TD 27.
7. Longitudinal ducts are to be provided within each verge; refer to NRA TA 77 for the minimum requirements for provision of longitudinal communication ducts. Refer to Series 500 and 1500 of the NRA MCDRW for further details on duct specification.

Scale 1:100

TII PUBLICATION NUMBER: CC-SCD-00016



Ionad Ghnó Gheata na Páirce,
Stráid Gheata na Páirce,
Baile Átha Cliath 8, D08 DK10, Éire



www.tii.ie



+353 (01) 646 3600



Parkgate Business Centre,
Parkgate Street,
Dublin 8, D08 DK10, Ireland



info@tii.ie



+353 (01) 646 3601