



Bonneagar Iompair Éireann
Transport Infrastructure Ireland

TII Publications



Standard Construction Details - Series 000

May 2023

Standard Construction Details (SCDs) – Series 000

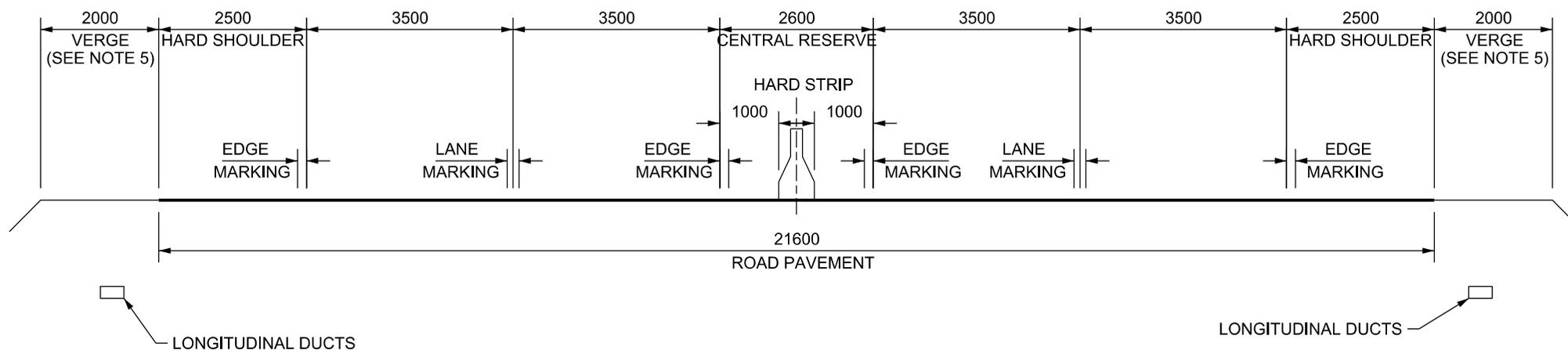
TII Publications contains Standard Construction Details (SCDs) for use on National Road schemes in Ireland. This composite document brings together all the Series 000 SCDs from TII Publications current at the date of this document's publication, into a single location for convenience.

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
CC-SCD-00051	Active Travel At-Grade Crossing of National Road, with Development of Central Island
CC-SCD-00052	Signage Details for Active Travel At-Grade Crossing of National Road
CC-SCD-00053	Termination of Active Travel Facility and Transition to Road with Hard Shoulder
CC-SCD-00054	Termination of Active Travel Facility and Transition to Road with Hard Strip

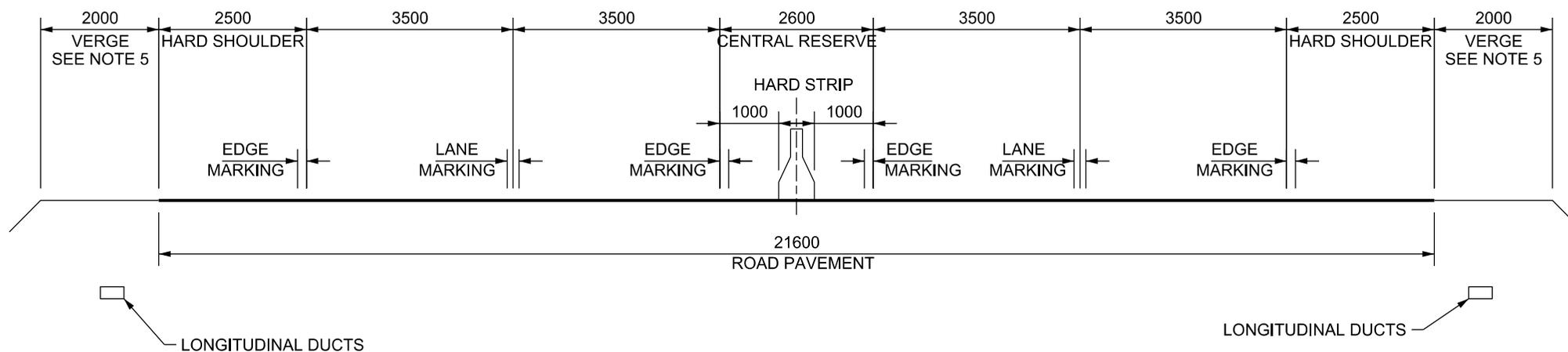


NOTES :-

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.

		PUBLICATION TITLE ROAD TYPE AND CROSS-SECTIONS: TYPE 1 DUAL CARRIAGEWAY			
	STREAM STANDARD CONSTRUCTION DETAILS (SCD)	HISTORICAL REFERENCE RCD/000/6	DOCUMENTATION SET STANDARDS	PUBLICATION DATE FEBRUARY 2017	PUBLICATION NUMBER ACTIVITY: CC STREAM: SCD DRAWING NUMBER: 00006

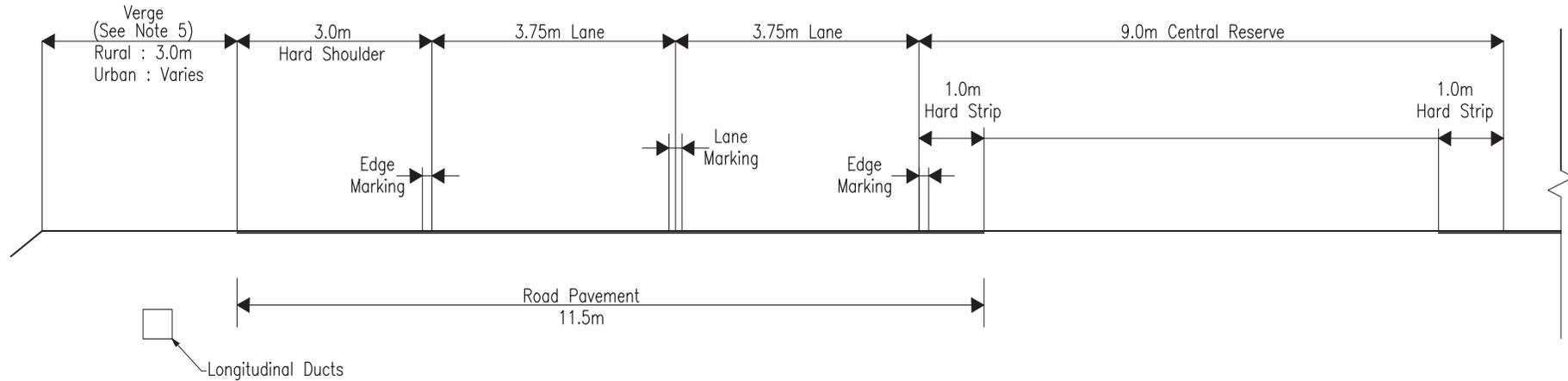


NOTES :-

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.

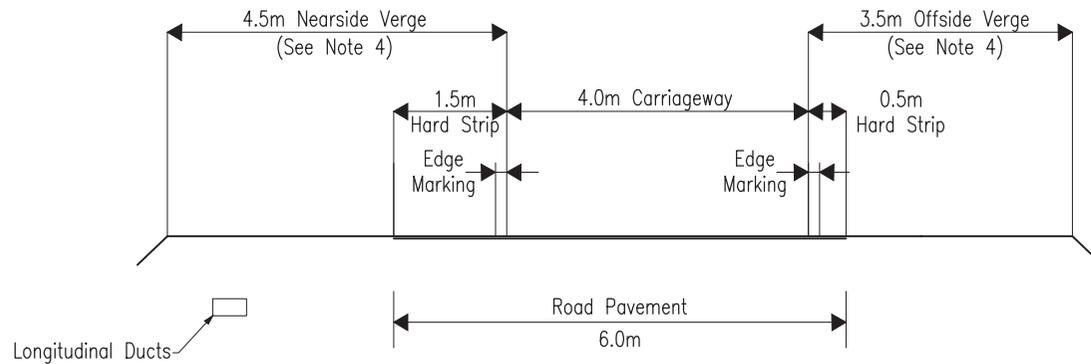
 <p>Bonneagar Iompair Éireann Transport Infrastructure Ireland</p>	 <p>Construction & Commissioning</p>	<p>PUBLICATION TITLE</p> <p>ROAD TYPE AND CROSS-SECTIONS: STANDARD DUAL CARRIAGEWAY MOTORWAY (D2M) & (D2UM)</p>								
	<p>STREAM</p> <p>STANDARD CONSTRUCTION DETAILS (SCD)</p>	<p>HISTORICAL REFERENCE</p> <p>RCD/000/7</p>	<p>DOCUMENTATION SET</p> <p>STANDARDS</p>	<p>PUBLICATION DATE</p> <p>FEBRUARY 2017</p>	<p>PUBLICATION NUMBER</p> <table border="1"> <tr> <td>ACTIVITY</td> <td>STREAM</td> <td>DRAWING NUMBER</td> </tr> <tr> <td>CC</td> <td>SCD</td> <td>00007</td> </tr> </table>	ACTIVITY	STREAM	DRAWING NUMBER	CC	SCD
ACTIVITY	STREAM	DRAWING NUMBER								
CC	SCD	00007								



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.

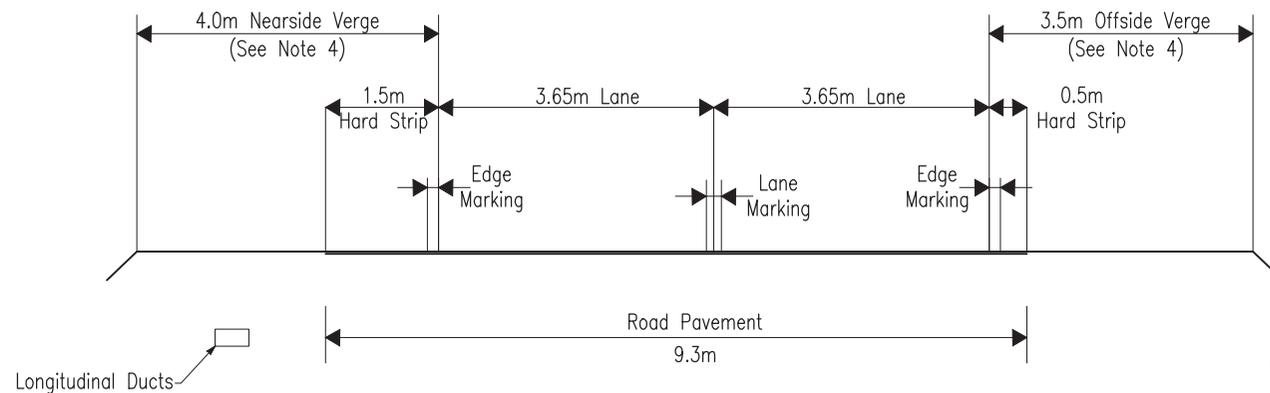
Scale 1:100



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.

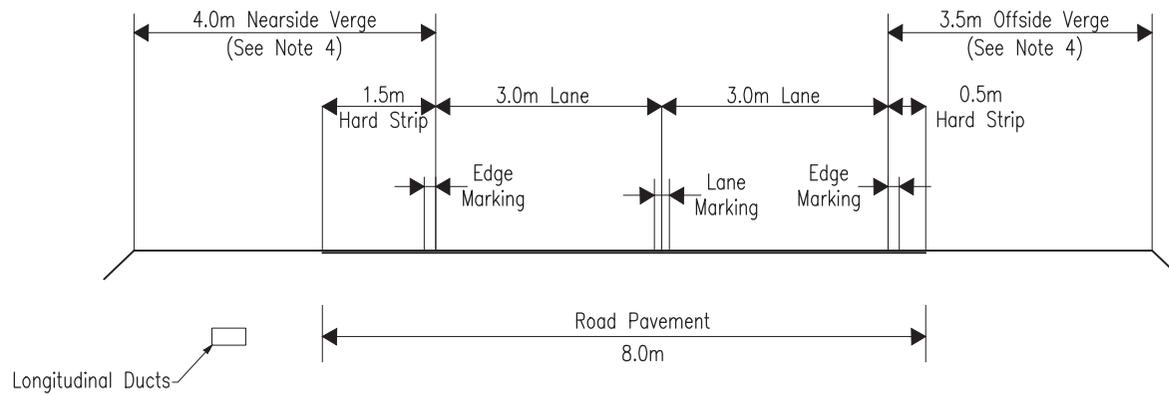
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Notes :-

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.

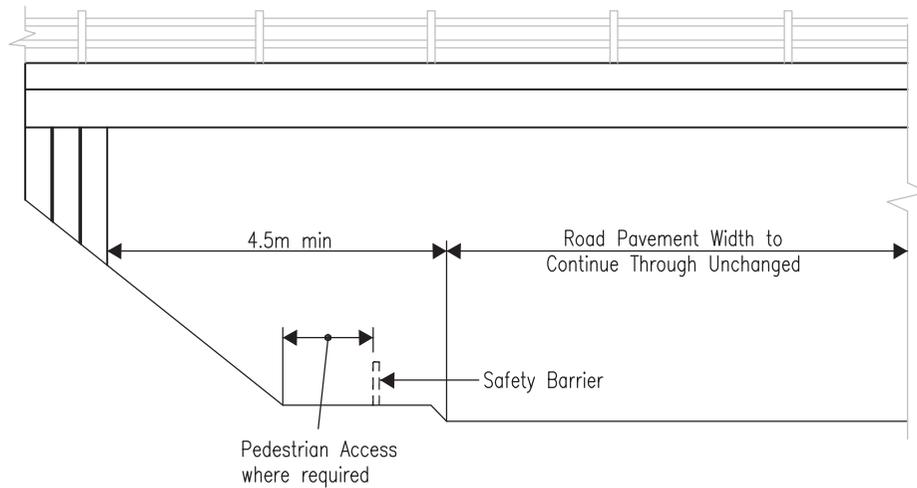
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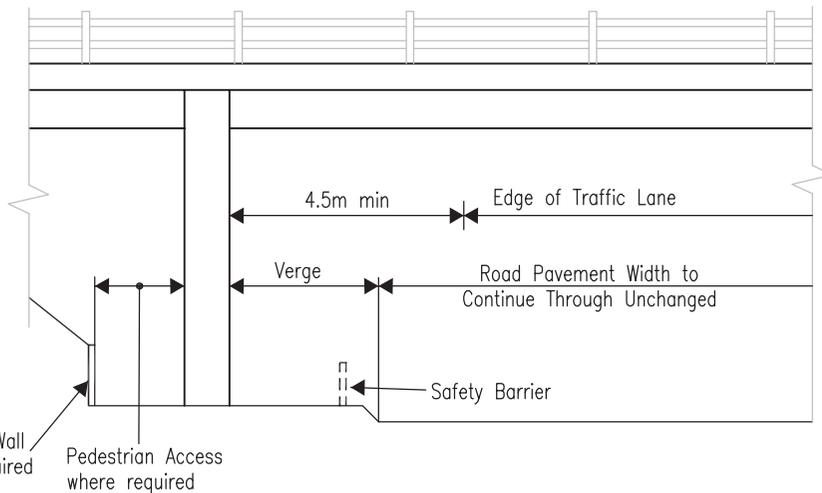
Notes :-

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.

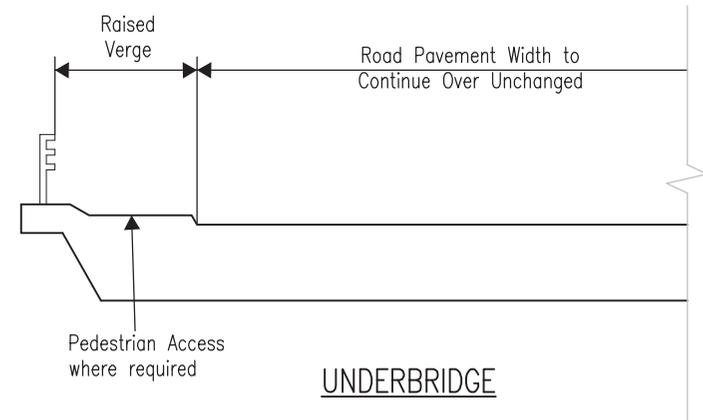
Scale 1:100



OVERBRIDGE WITH ABUTMENT
AT BACK OF VERGE



OVERBRIDGE WITH PIER
AT BACK OF VERGE



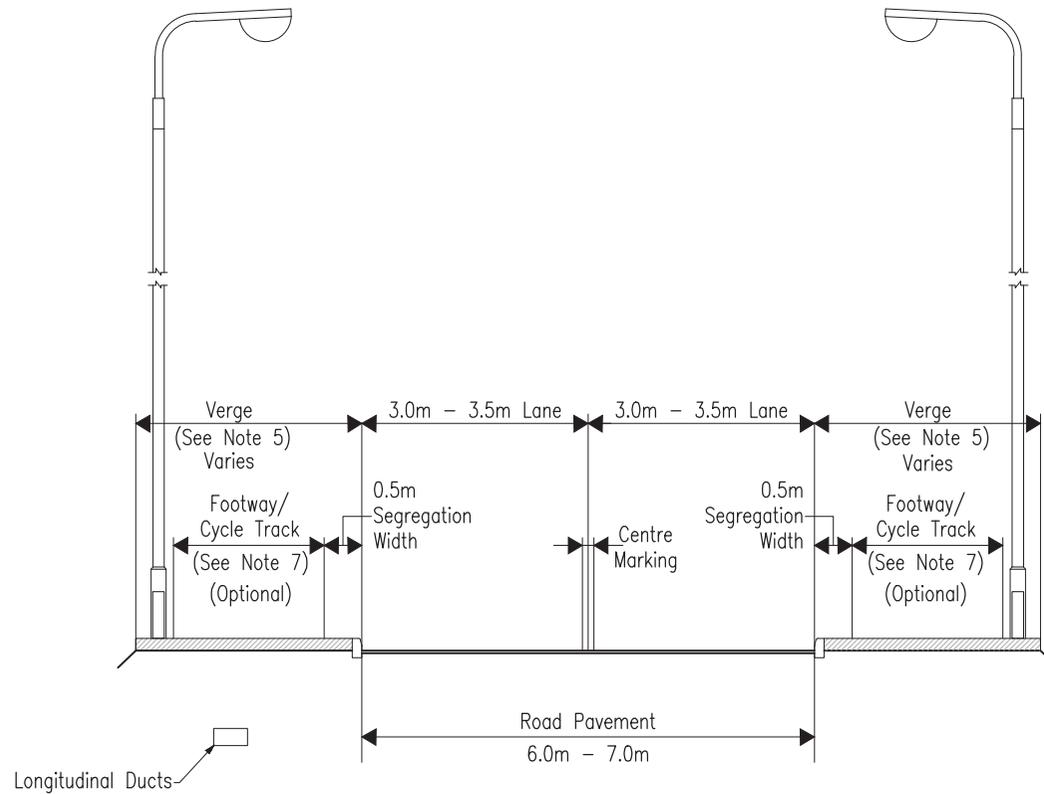
UNDERBRIDGE

Notes :-

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

Scale 1:100

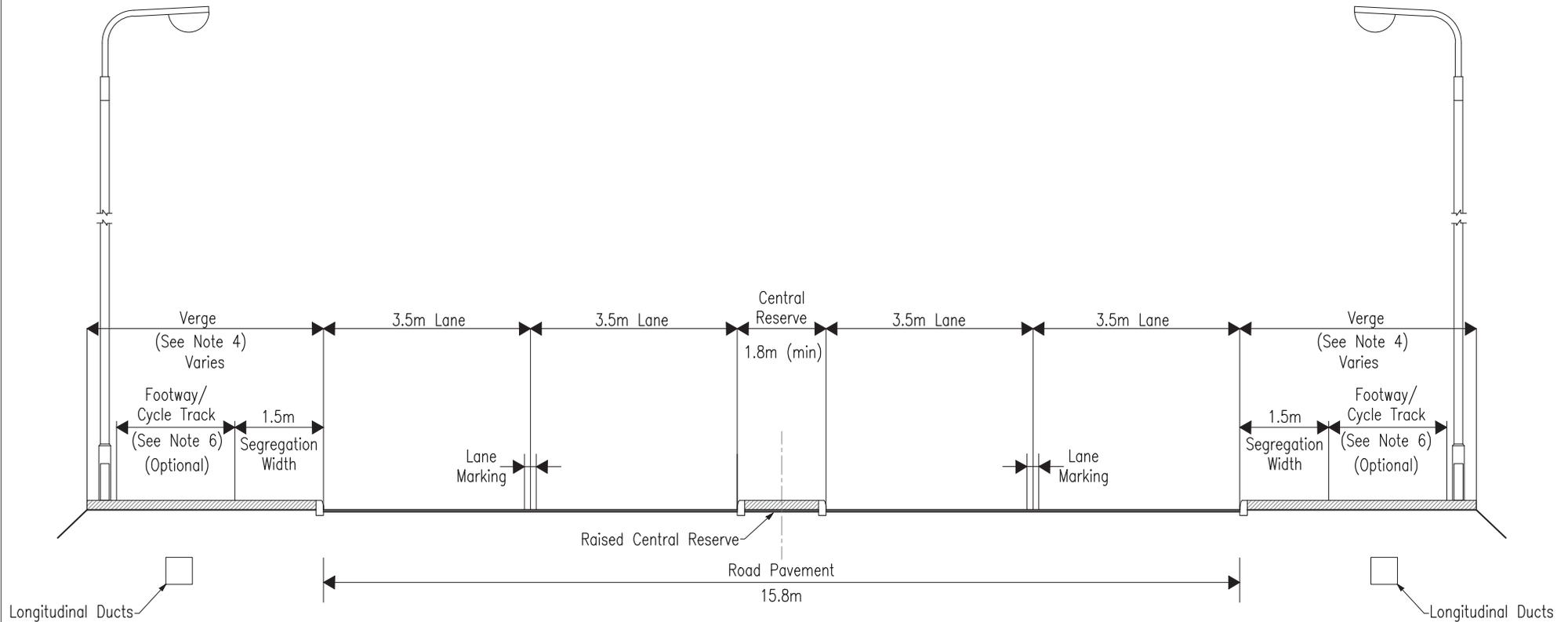
TII PUBLICATION NUMBER: CC-SCD-00012



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.

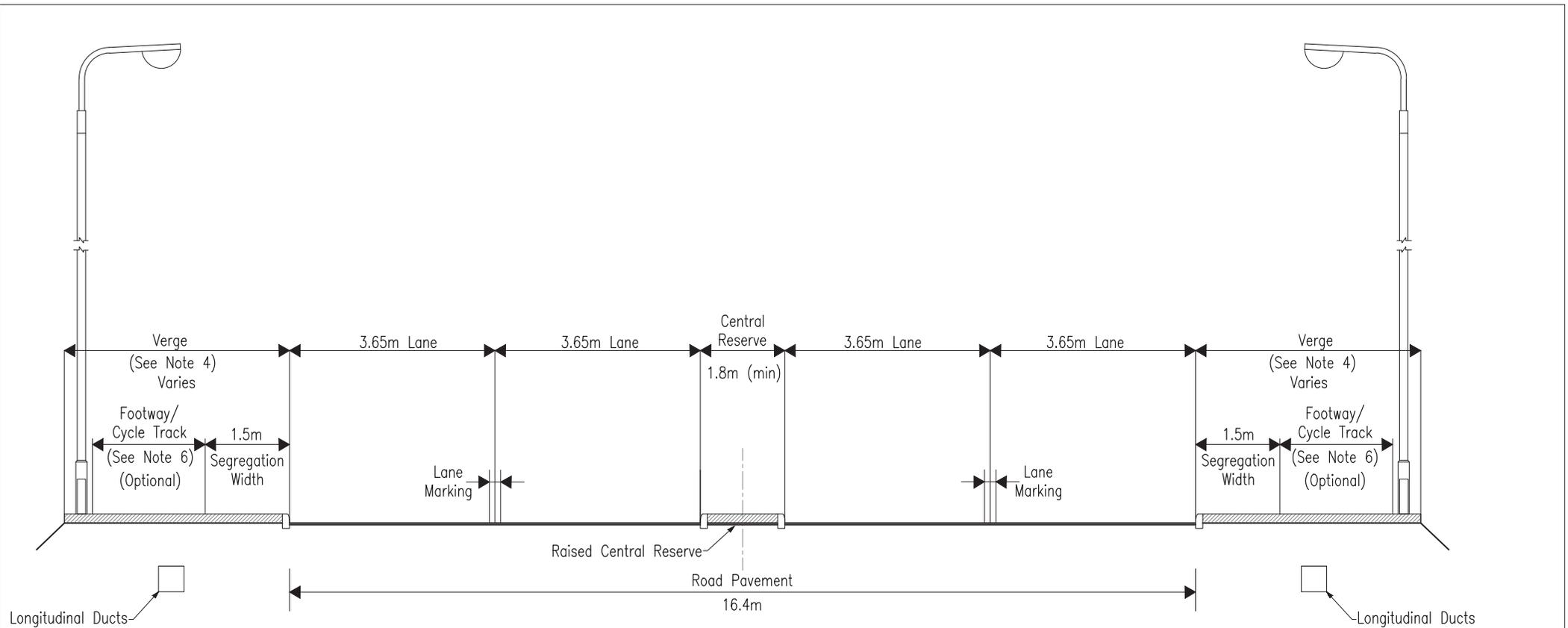
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Notes :-

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

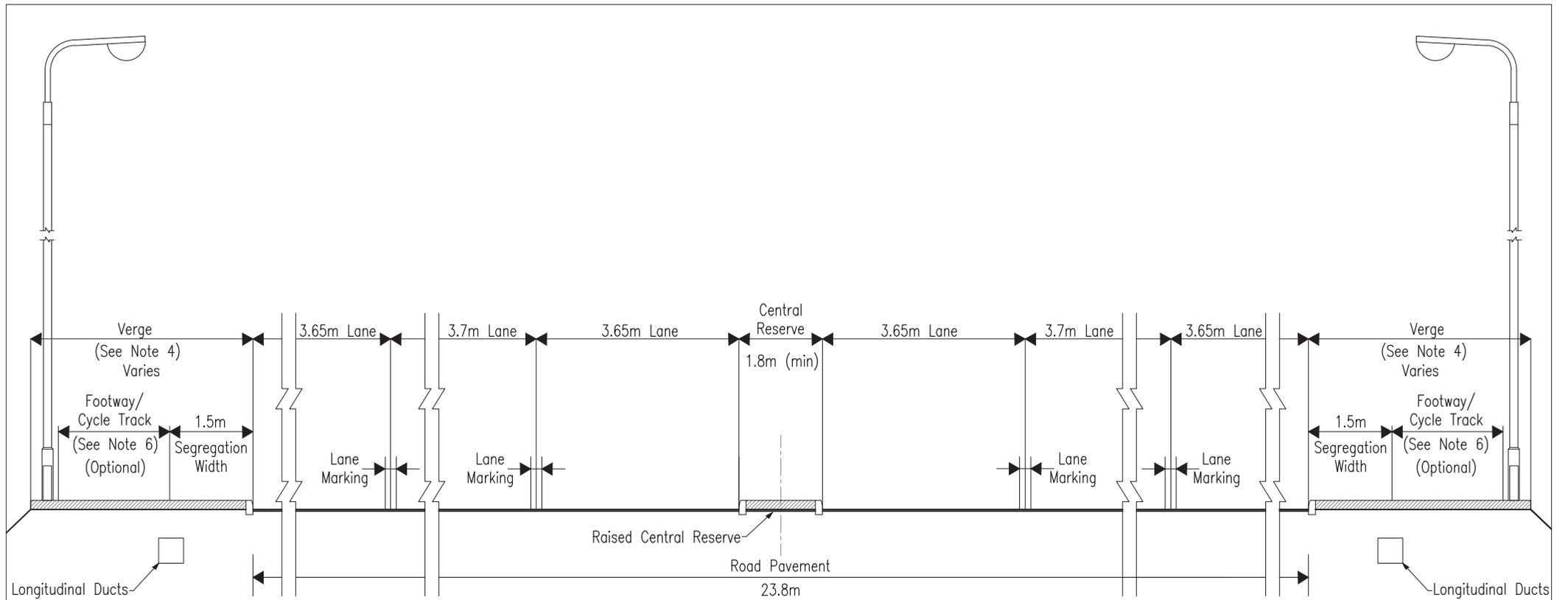


Notes :-

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



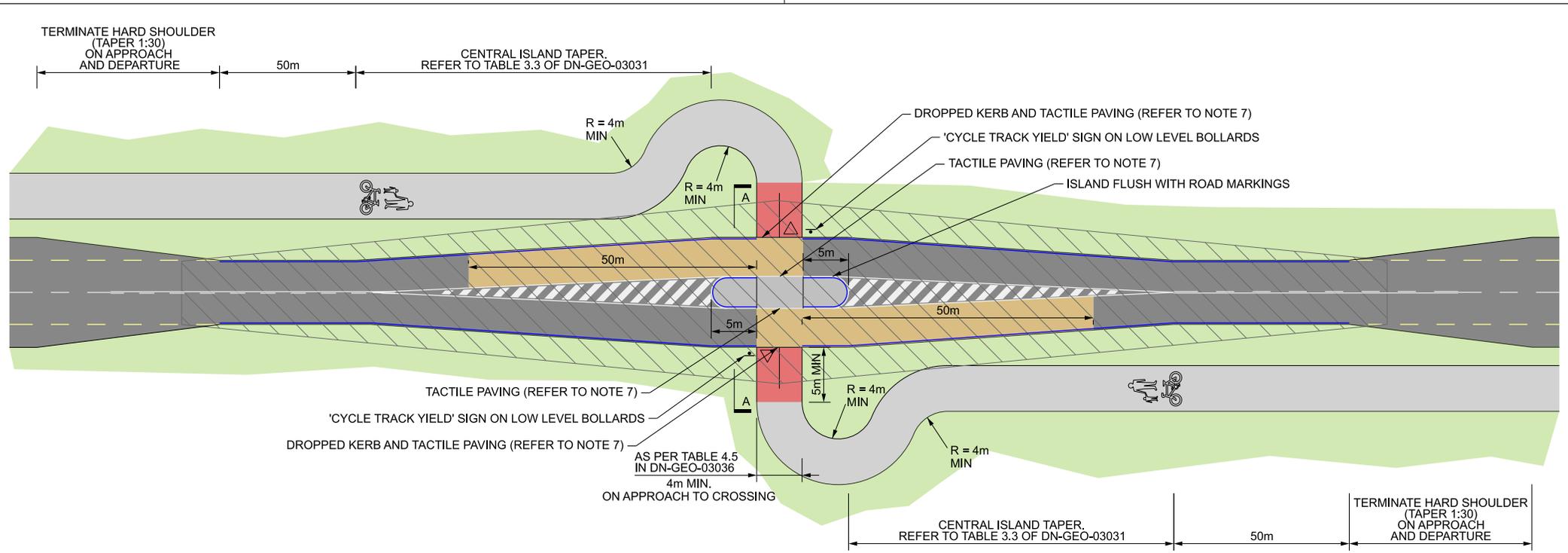
Notes :-

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

	ROAD CONSTRUCTION DETAILS	ROAD TYPE AND CROSS-SECTION	P2	10/13	DUAL CARRIAGEWAY URBAN 3 LANE	Drawing No.
			P1	09/11		RCD/
			Issue	Date		000/16

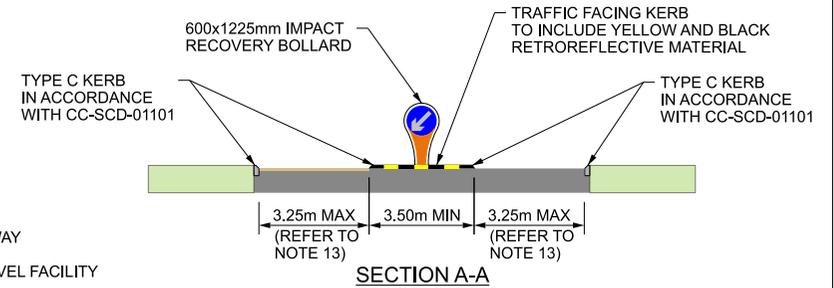


NOTES:

1. DRAWING NOT TO SCALE.
2. THIS DETAIL IS ONLY FOR APPLICATION ON NATIONAL ROADS WITH A SPEED LIMIT NOT EXCEEDING 80 km/h, AADT LESS THAN 10,000 AND MAXIMUM PEAK HOUR VOLUMES LESS THAN 1,400 vph (TWO-WAY).
3. ON TYPE 2 AND TYPE 3 SINGLE CARRIAGEWAYS, THE 0.5m HARD STRIP SHALL BE TERMINATED 50m IN ADVANCE OF THE DEVELOPMENT OF THE CENTRAL ISLAND.
4. FOR FURTHER DETAIL ON JUNCTION VISIBILITY REQUIREMENTS REFER TO SECTION 7 OF DN-GEO-03060.
5. LANDSCAPING SHALL NOT COMPROMISE VISIBILITY SIGHTLINES OR SAFETY AND SHALL BE LOW MAINTENANCE GRASS.
6. DRAINAGE REQUIREMENTS ARE UNIQUE TO EACH SITE AND SHALL BE PROVIDED IN ACCORDANCE WITH TII DRAINAGE STANDARD DN-DGN-03022.
7. DROPPED KERB AND TACTILE PAVING SHALL BE IN ACCORDANCE WITH CC-SCD-05124 AND CC-SCD-05136.
8. FOR DETAILS ON ROAD MARKINGS REFER TO TRAFFIC SIGNS MANUAL.
9. LIGHTING SHALL BE PROVIDED FOR CROSSING IN ACCORDANCE WITH TII LIGHTING STANDARD DN-LHT-03038.
10. JUG HANDLE IS NOT REQUIRED IF ACTIVE TRAVEL FACILITY IS FURTHER AWAY FROM CARRIAGEWAY AND CAN BE TURNED PERPENDICULARLY TO THE ROAD.
11. PAVEMENT SURFACE SHALL BE IN ACCORDANCE WITH DN-PAV-03023, DN-PAV-03074 & CC-SPW-00900. THE MINIMUM PSV OF CHIPPINGS SHALL BE BASED ON SITE CATEGORY K OF TABLE 3.1 IN DN-PAV-03023.
12. TRAFFIC SIGNS SHALL BE IN ACCORDANCE WITH CC-SCD-00052 AND TRAFFIC SIGNS MANUAL.
13. ON TYPE 1 AND 2 SINGLE CARRIAGEWAYS, ANY NARROWING OF THE LANE WIDTH SHOULD BE APPLIED OVER THE LENGTH OF THE CENTRAL ISLAND TAPER. ON TYPE 3 SINGLE CARRIAGEWAY, A 3m LANE WIDTH SHALL BE MAINTAINED THROUGH THE CROSSING.

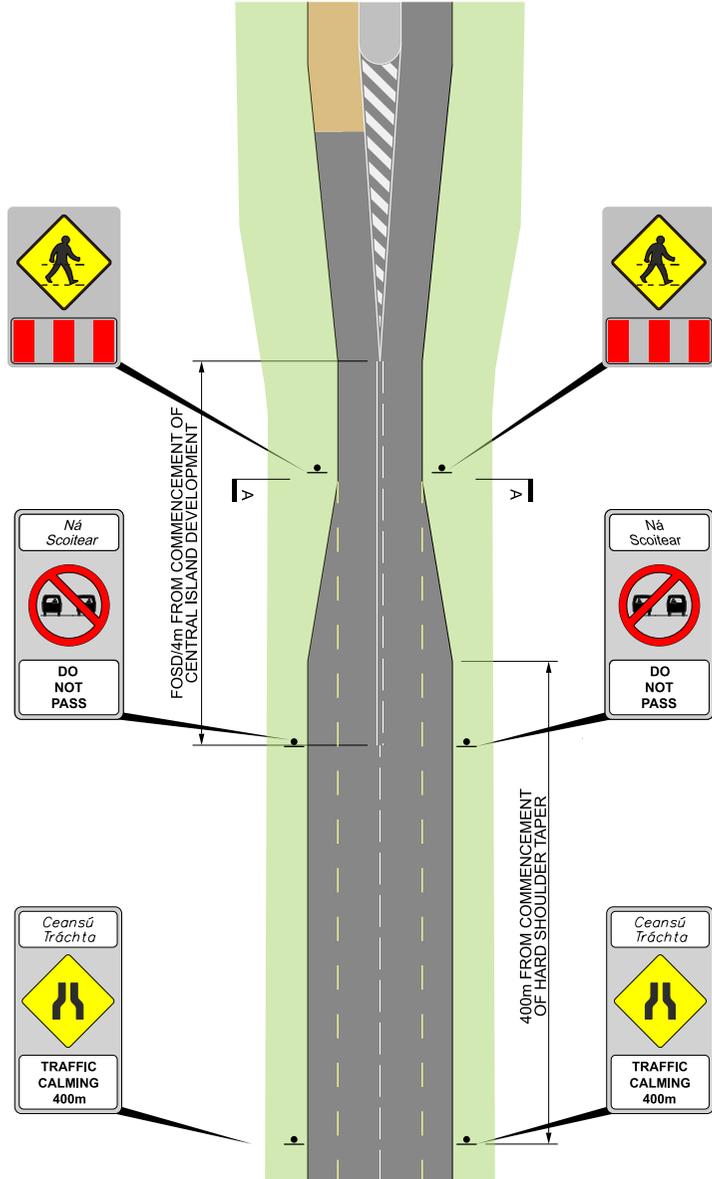
LEGEND:

- CARRIAGEWAY
- ACTIVE TRAVEL FACILITY
- 45 DEGREE SPLAYED KERB IN THIS LOCATION
- GRASS / LOW LEVEL PLANTING (REFER TO NOTE 5)
- VISIBILITY ENVELOPE (REFER TO NOTE 4)
- BUFF COLOUR SURFACE (REFER TO NOTE 11)
- RED COLOUR SURFACE



<p>Bonneagar Iompair Éireann Transport Infrastructure Ireland</p>	<p>ACTIVITY</p> <p>Construction & Commissioning</p>	<p>PUBLICATION TITLE</p> <p>ACTIVE TRAVEL AT-GRADE CROSSING OF NATIONAL ROAD, WITH DEVELOPMENT OF CENTRAL ISLAND</p>			
	<p>STREAM</p> <p>STANDARD CONSTRUCTION DETAILS (SCD)</p>	<p>HISTORICAL REFERENCE</p> <p>N/A</p>	<p>DOCUMENTATION SET</p> <p>STANDARDS</p>	<p>PUBLICATION DATE</p> <p>May 2023</p>	<p>PUBLICATION NUMBER</p> <p>CC SCD 00051</p>

ACTIVE TRAVEL AT-GRADE CROSSING



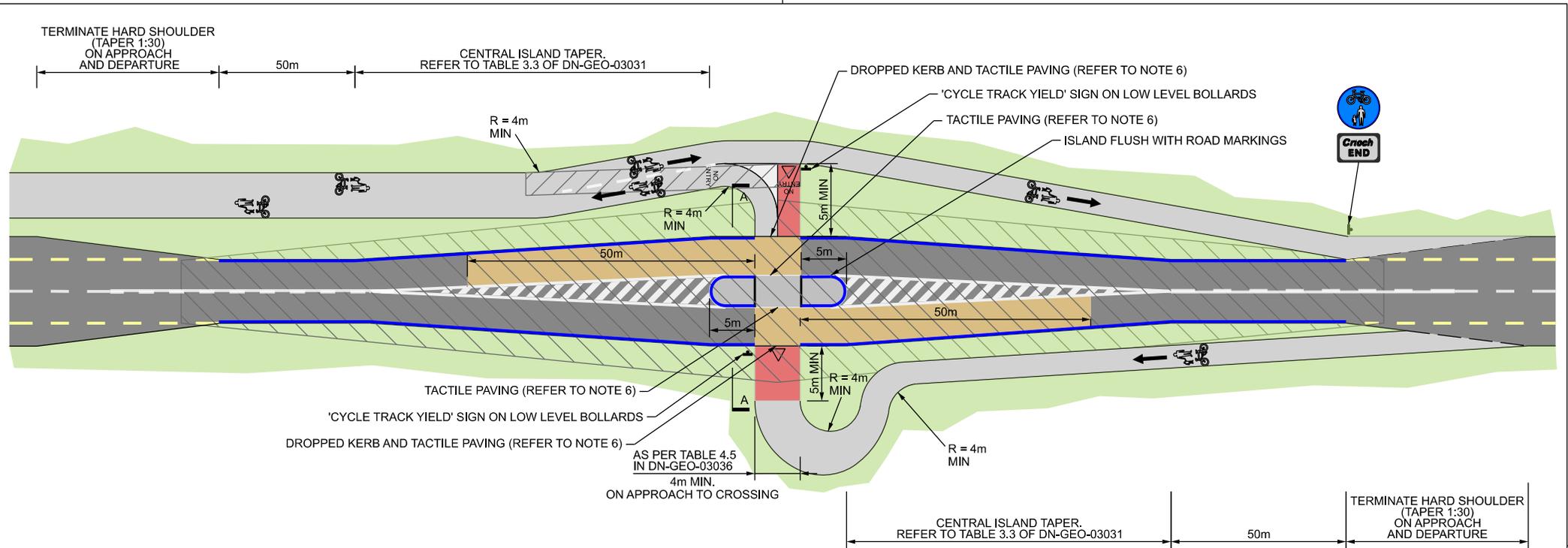
SECTION A-A

NOTES:

1. FOR ROAD MARKING DETAILS REFER TO TRAFFIC SIGN MANUAL, CHAPTER 7.
2. FOR DESIGN OF SIGNS REFER TO TRAFFIC SIGN MANUAL CHAPTER 6, CC-SCD-05117, CC-SCD-05118.
3. LANDSCAPING SHALL NOT COMPROMISE VISIBILITY SIGHTLINES OR SAFETY AND SHALL BE LOW MAINTENANCE GRASS.
4. DETAIL TO BE READ IN CONJUNCTION WITH CC-SCD-00051, CC-SCD-00053 AND CC-SCD-00054.
5. DRAWING NOT TO SCALE.

LEGEND:

-  CARRIAGEWAY
-  GRASS / LOW LEVEL PLANTING (REFER TO NOTE 3)

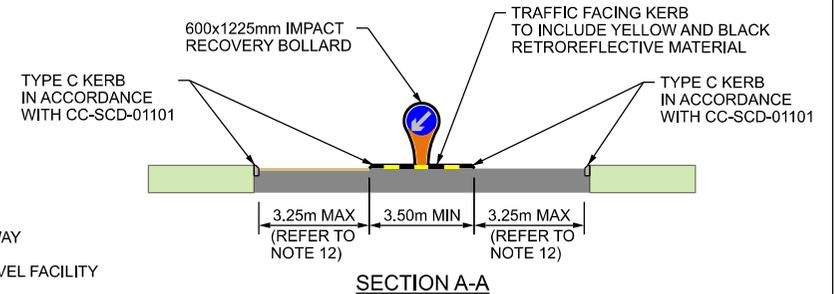


NOTES:

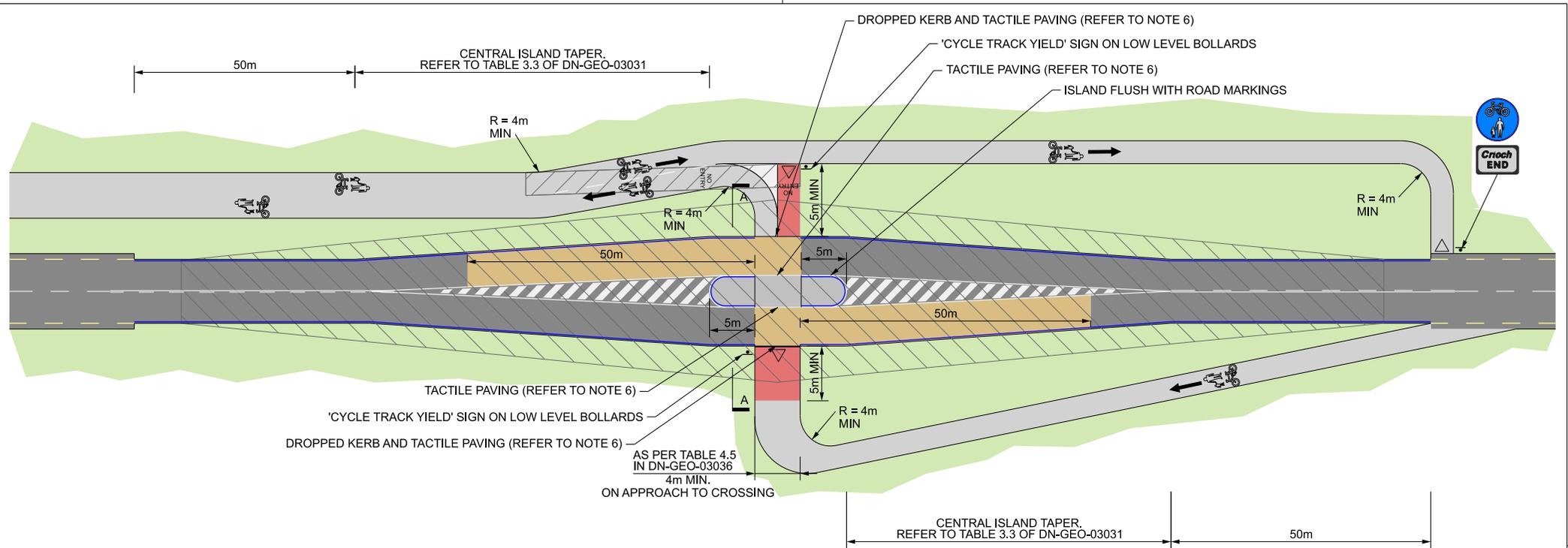
- DRAWING NOT TO SCALE.
- THIS DETAIL IS ONLY FOR APPLICATION ON TYPE 1 SINGLE CARRIAGEWAY NATIONAL ROADS WITH A SPEED LIMIT NOT EXCEEDING 80 km/h, AADT LESS THAN 10,000 AND MAXIMUM PEAK HOUR VOLUMES LESS THAN 1,400 vph (TWO-WAY).
- FOR FURTHER DETAIL ON JUNCTION VISIBILITY REQUIREMENTS REFER TO SECTION 7 OF DN-GEO-03060.
- LANDSCAPING SHALL NOT COMPROMISE VISIBILITY SIGHTLINES OR SAFETY AND SHALL BE LOW MAINTENANCE GRASS.
- DRAINAGE REQUIREMENTS ARE UNIQUE TO EACH SITE AND SHALL BE PROVIDED IN ACCORDANCE WITH TII DRAINAGE STANDARD DN-DGN-03022.
- DROPPED KERB AND TACTILE PAVING SHALL BE IN ACCORDANCE WITH CC-SCD-05124 AND CC-SCD-05136.
- FOR DETAILS ON ROAD MARKINGS REFER TO TRAFFIC SIGNS MANUAL.
- LIGHTING SHALL BE PROVIDED FOR CROSSING IN ACCORDANCE WITH TII LIGHTING STANDARD DN-LHT-03038.
- JUG HANDLE IS NOT REQUIRED IF ACTIVE TRAVEL FACILITY IS FURTHER AWAY FROM CARRIAGEWAY AND CAN BE TURNED PERPENDICULARLY TO THE ROAD.
- PAVEMENT SURFACE SHALL BE IN ACCORDANCE WITH DN-PAV-03023, DN-PAV-03074 & CC-SPW-00900. THE MINIMUM PSV OF CHIPPINGS SHALL BE BASED ON SITE CATEGORY K OF TABLE 3.1 IN DN-PAV-03023.
- TRAFFIC SIGNS SHALL BE IN ACCORDANCE WITH CC-SCD-00052 AND TRAFFIC SIGNS MANUAL.
- ON TYPE 1 SINGLE CARRIAGEWAY, ANY NARROWING OF THE LANE WIDTH SHOULD BE APPLIED OVER THE LENGTH OF THE CENTRAL ISLAND TAPER.
- THE TAPER FOR THE TRANSITION TO / FROM THE HARD SHOULDER SHALL BE 1:5 OR FLATTER.

LEGEND:

- CARRIAGEWAY
- ACTIVE TRAVEL FACILITY
- 45 DEGREE SPLAYED KERB IN THIS LOCATION
- GRASS / LOW LEVEL PLANTING (REFER TO NOTE 4)
- VISIBILITY ENVELOPE (REFER TO NOTE 3)
- BUFF COLOUR SURFACE (REFER TO NOTE 10)
- RED COLOUR SURFACE



<p>TII Bonneagar Iompair Éireann Transport Infrastructure Ireland</p>	<p>ACTIVITY</p> <p>Construction & Commissioning</p>	<p>PUBLICATION TITLE</p> <p>TERMINATION OF ACTIVE TRAVEL FACILITY AND TRANSITION TO ROAD WITH HARD SHOULDER</p>			
	<p>STREAM</p> <p>STANDARD CONSTRUCTION DETAILS (SCD)</p>	<p>HISTORICAL REFERENCE</p> <p>N/A</p>	<p>DOCUMENTATION SET</p> <p>STANDARDS</p>	<p>PUBLICATION DATE</p> <p>May 2023</p>	<p>PUBLICATION NUMBER</p> <p>CC SCD 00053</p>

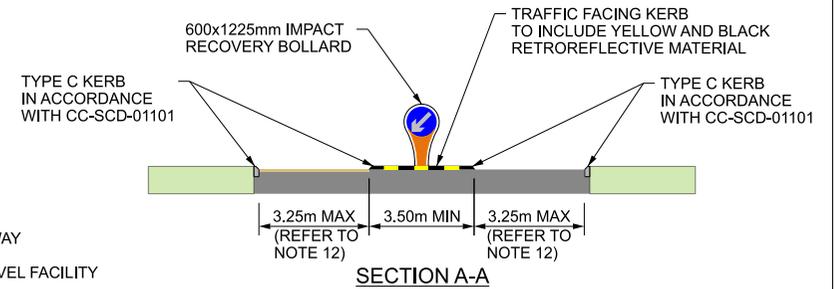


NOTES:

- DRAWING NOT TO SCALE.
- THIS DETAIL IS ONLY FOR APPLICATION ON TYPE 2 & TYPE 3 SINGLE CARRIAGEWAY NATIONAL ROADS WITH A SPEED LIMIT NOT EXCEEDING 80 km/h, AADT LESS THAN 10,000 AND MAXIMUM PEAK HOUR VOLUMES LESS THAN 1,400 vph (TWO-WAY).
- FOR FURTHER DETAIL ON JUNCTION VISIBILITY REQUIREMENTS REFER TO SECTION 7 OF DN-GEO-03060.
- LANDSCAPING SHALL NOT COMPROMISE VISIBILITY SIGHTLINES OR SAFETY AND SHALL BE LOW MAINTENANCE GRASS.
- DRAINAGE REQUIREMENTS ARE UNIQUE TO EACH SITE AND SHALL BE PROVIDED IN ACCORDANCE WITH TII DRAINAGE STANDARD DN-DGN-03022.
- DROPPED KERB AND TACTILE PAVING SHALL BE IN ACCORDANCE WITH CC-SCD-05124 AND CC-SCD-05136.
- FOR DETAILS ON ROAD MARKINGS REFER TO TRAFFIC SIGNS MANUAL.
- LIGHTING SHALL BE PROVIDED FOR CROSSING IN ACCORDANCE WITH TII LIGHTING STANDARD DN-LHT-03038.
- JUG HANDLE IS NOT REQUIRED IF ACTIVE TRAVEL FACILITY IS FURTHER AWAY FROM CARRIAGEWAY AND CAN BE TURNED PERPENDICULARLY TO THE ROAD.
- PAVEMENT SURFACE SHALL BE IN ACCORDANCE WITH DN-PAV-03023, DN-PAV-03074 & CC-SPW-00900. THE MINIMUM PSV OF CHIPPINGS SHALL BE BASED ON SITE CATEGORY K OF TABLE 3.1 IN DN-PAV-03023.
- TRAFFIC SIGNS SHALL BE IN ACCORDANCE WITH CC-SCD-00052 AND TRAFFIC SIGNS MANUAL.
- ON TYPE 2 SINGLE CARRIAGEWAYS, ANY NARROWING OF THE LANE WIDTH SHOULD BE APPLIED OVER THE LENGTH OF THE CENTRAL ISLAND. ON TYPE 3 SINGLE CARRIAGEWAYS, A 3m LANE WIDTH SHALL BE MAINTAINED THROUGH THE CROSSING.
- THE TAPER FOR THE TRANSITION FROM ON-ROAD SHALL BE 1:5 OR FLATTER.

LEGEND:

- CARRIAGEWAY
- ACTIVE TRAVEL FACILITY
- 45 DEGREE SPLAYED KERB IN THIS LOCATION
- GRASS / LOW LEVEL PLANTING (REFER TO NOTE 4)
- VISIBILITY ENVELOPE (REFER TO NOTE 3)
- BUFF COLOUR SURFACE (REFER TO NOTE 10)
- RED COLOUR SURFACE



<p>Bonneagar Iompair Éireann Transport Infrastructure Ireland</p>	ACTIVITY	PUBLICATION TITLE			
	<p>Construction & Commissioning</p>	TERMINATION OF ACTIVE TRAVEL FACILITY AND TRANSITION TO ROAD WITH HARD STRIP			
STREAM	STANDARD CONSTRUCTION DETAILS (SCD)	HISTORICAL REFERENCE	DOCUMENTATION SET	PUBLICATION DATE	PUBLICATION NUMBER
		N/A	STANDARDS	May 2023	CC SCD 00054



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