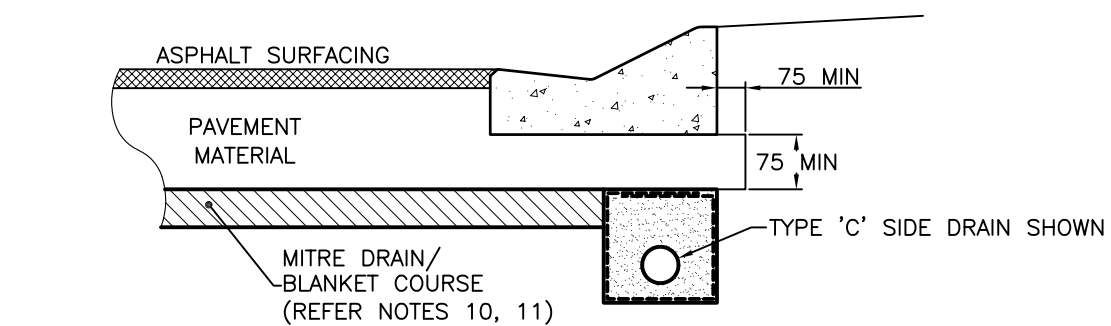
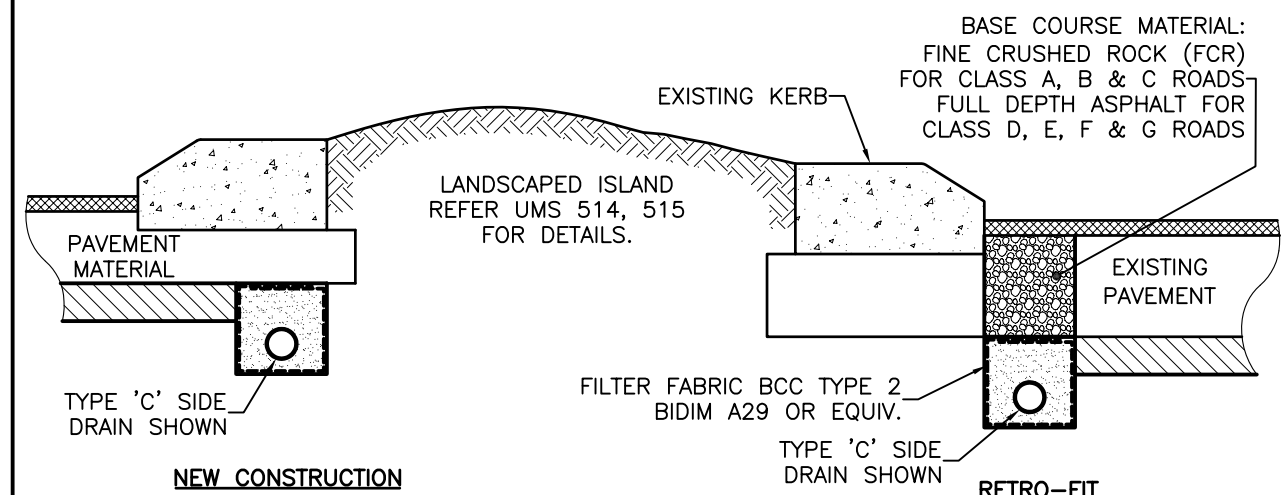


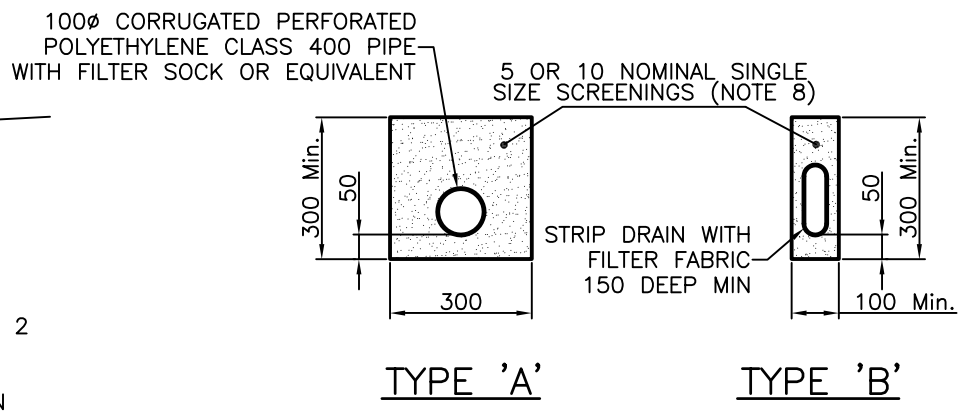
**TYPICAL SECTION WITH  
EXISTING K&C**



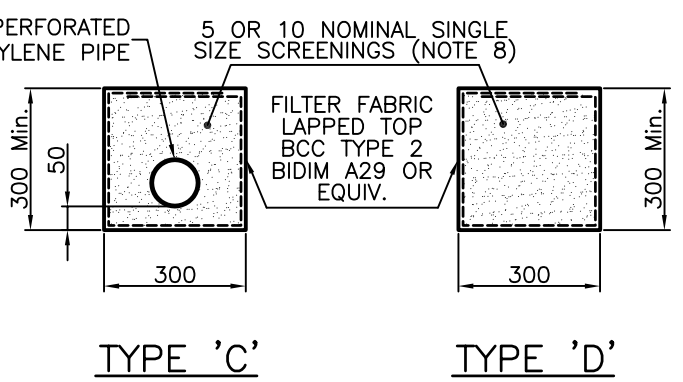
**TYPICAL SECTION WITH  
NEW ROAD CONSTRUCTION**



**TREATMENT AT MEDIANS**

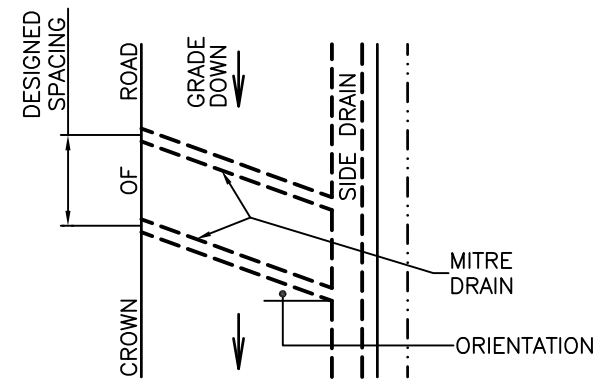


**TYPES OF SIDE DRAINS**



**TYPES OF SIDE DRAINS**

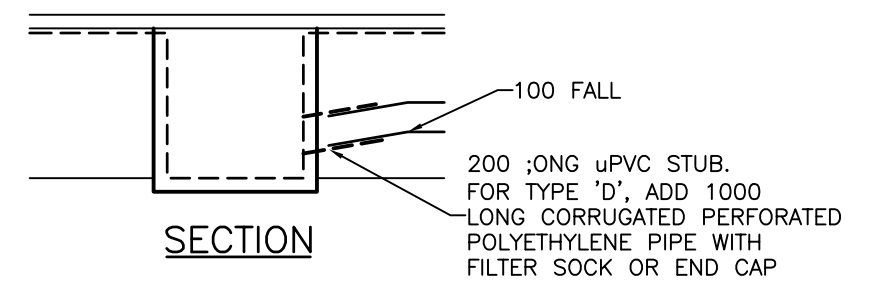
(REFER NOTE 12)



**MITRE DRAIN LAYOUT**

SCREENINGS OR COMPACTED BCC CLASS 1  
CRUSHED ROCK OR EQUIVALENT, APPROVED  
FREE DRAINING NON PLASTIC MATERIAL.  
PERMEABILITY IN ACCORDANCE WITH AS1289.6.7.1  
TO BE 0.01-10mm/s.

**LEGEND**



**SIDE DRAIN OUTLET  
(SINGLE GULLY ONLY)**

**NOTES**

1. THE SIDE DRAIN DEPTH TO BE A MIN. OF 300mm BELOW THE SUBGRADE. PROVIDE A MIN. 300 COVER TO PIPE.
2. SIDE DRAINS SHALL OUTLET TO A GULLY, PREFERABLY, OR STORMWATER PIPE.
3. 100Ø CORRUGATED POLYETHYLENE (PE) PIPE AND FITTINGS TO BE CLASS 400 TO AS 2439.
4. USE STANDARD FITTINGS FOR ALL CONNECTIONS INCLUDING THE JOINING OF LENGTHS OF CORRUGATED PIPE.
5. DRAINAGE PIPES TO BE LAID TO A MINIMUM GRADE OF 1 IN 250 FOR PIPE DRAINS AND TO A MINIMUM GRADE OF 1 IN 100 FOR SCREENING ONLY DRAINS.
6. SCREENING SURROUND AND THE BACKFILL PAVEMENT MATERIAL MUST BE ADEQUATELY COMPACTED TO PROVIDE FLEXIBLE PIPE SUPPORT AS REQUIRED IN ACCORDANCE WITH AS 2566.
7. SUPPLY AND INSTALL PANEL DRAINS, IF USED, TO THE MANUFACTURERS SPECIFICATIONS.
8. GRADING OF SINGLE SIZE SCREENING MATERIALS.
 

A.S. SIEVE SIZE(mm)	%PASSING (% BY WEIGHT)	
	5mm NOMINAL SIZE	10mm NOMINAL SIZE
13.2	-	100
9.50	-	85-100
6.70	100	-
4.75	85-100	0-20
2.36	0-40	0-5
0.075	0-2	0-2
9. UNLESS APPROVED OTHERWISE BY THE ENGINEERING OFFICER DEVELOPMENT AND REGULATORY SERVICES, PROVIDE SIDE DRAINS ON BOTH SIDES OF THE ROAD UNDER THE KERB AND CHANNEL.
10. MITRE DRAINS (SIMILAR CONSTRUCTION TO SIDE DRAINS) ARE REQUIRED ACROSS THE ROAD TO INTERCEPT SEEPAGE THAT DOES NOT FLOW DIRECTLY TO THE SIDE DRAIN.
11. WHERE SEEPAGE APPEARS IN THE CENTRE OF THE PAVEMENT, PROVIDE 75 THICK FULL WIDTH BLANKET COURSE (SCREENINGS OR CLASS 1 CRUSHED ROCK) TO INTERCEPT SEEPAGE AND DRAIN TO THE ADJACENT SIDE DRAINS. PROVIDE BCC TYPE 3 GEOTEXTILE FABRIC AT THE SUBGRADE/BLANKET COURSE INTERFACE. BLANKET COURSE IS GENERALLY REQUIRED UNDERNEATH FULL DEPTH ASPHALT PAVEMENTS TO AVOID BLOCKAGE OF SEEPAGE FLOW.
12. SUB SURFACE DRAINAGE REQUIREMENTS (INCLUDING TYPE, LOCATION, SPACING AND ORIENTATION) MUST BE DETERMINED BY A SUITABLY QUALIFIED REGISTERED PROFESSIONAL ENGINEER.
13. DIMENSIONS IN MILLIMETRES (UNO).

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
B	Heading Correction Made (Types of Side Drains), Existing K&C and Median Treatment Modified.	DJL 12/04	BH 14/02/05	PC 03/03/05
A	ORIGINAL ISSUE	April '01	May '01	June '01

DESIGN AUTHORIZED FOR ISSUE B. BALL SIGNATURE ON ORIGINAL DATED 29/6/01	DESIGN	STD DWG GROUP	DATE	April '01
MANAGER ASSET SUPPORT - R.P.E.O. 3 8 5 2	DRAWN	CITY DESIGN	DATE	April '01
DESIGN APPROVED	CHECKED	M. STEER	DATE	May '01
B. HANSEN SIGNATURE ON ORIGINAL DATED 27/6/01	DRAWING FILENAME	FILENAME		
PRINCIPAL ASSET OFFICER ROADS & DRAINAGE	ASSOCIATED PLANS	SUPERSEDES WS 17-1		



**BRISBANE CITY COUNCIL - URBAN MANAGEMENT DIVISION**

**SIDE DRAINS AND  
MITRE DRAINS**

SCALE: NOT TO SCALE

DWG No. **UMS 261**

ORIGINAL SIZE: A3 REVISION: B