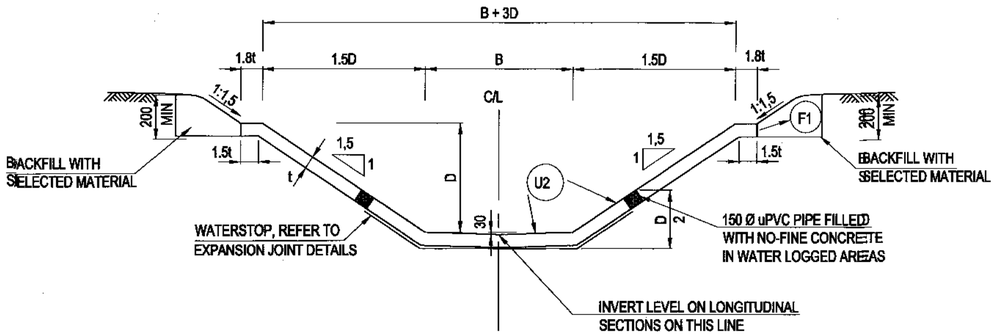
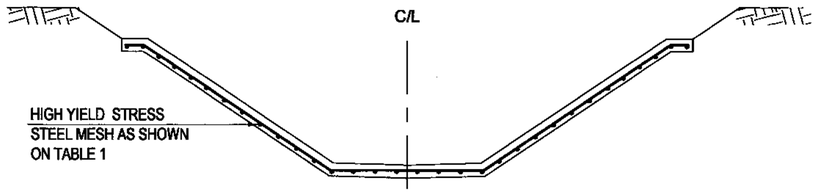


TYPICAL SECTION THROUGH CONCRETE CANAL

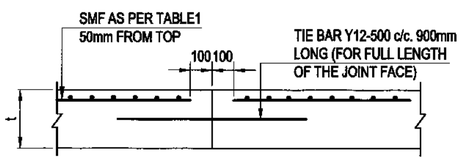
(4500mm UNIT LENGTHS)

SCALE: 1 : 20



CONCRETE CANAL (REINFORCEMENT)

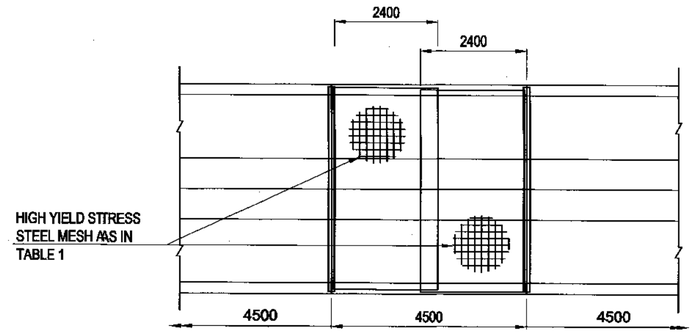
N.T.S.



CONSTRUCTION JOINT IN CANAL

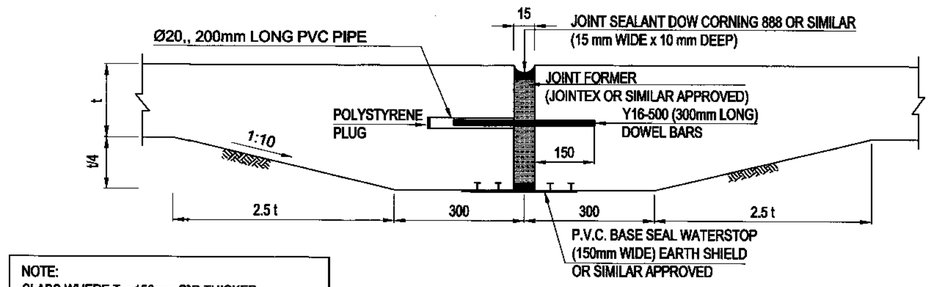
(BETWEEN PANELS)

N.T.S.



TYPICAL PLACING OF STEEL MESH

SCALE 1:100



NOTE:
SLABS WHERE T = 150mm OR THICKER
NO THICKENING IS REQUIRED

EXPANSION JOINT IN CANALS (DETAIL 1)

(EVERY 5TH PANEL)

SCALE: 1 : 10

TABLE 1

TABLE OF CANAL / CULVERT COMBINATION FOR 1:1,5 SIDE SLOPES (SEE NOTE 7)

CULVERT	ADJOINING CANAL								
N/SPAN x HEIGHT	BASE(B)	DEPTH(D)	L	t	B+3D	1,5D	1,5t	1,8t	k
2/900 x 600	900	600	3000	100	2700	900	150	180	200
2/1200 x 900	1100	800	3600	100	3500	1200	150	180	200
2/1500 x 1200	1350	1000	4200	125	4350	1500	190	225	250
2/1800 x 1200	1700	1200	4800	150	5300	1800	225	270	300
3/1500 x 1500	2000	1400	5400	150	6200	2100	225	270	350
3/1800 x 1800	2300	1600	6000	150	7100	2400	225	270	400

CANAL AND IN - AND OUTLETS
HIGH TENSILE STEEL MESH
SMF \ 193 5,6 mm 200 x 200 mm
SMF \ 193 5,6 mm 200 x 200 mm
SMF \ 245 6,3 mm 200 x 200 mm
SMF \ 311 7,1 mm 200 x 200 mm
SMF \ 311 7,1 mm 200 x 200 mm
SMF \ 311 7,1 mm 200 x 200 mm

NOTES :

1. ALL CANALS, TRANSITIONS AND JUNCTIONS AS SHOWN ON THIS PLAN TO BE CAST USING CLASS 30/19 CONCRETE.
2. CANALS ARE CAST IN ALTERNATE SECTIONS OF 4500 mm, WITH AN EXPANSION JOINT AT EVERY FIFTH JOINT (22.5M).
3. THE TYPE OF SURFACE FINISH ARE SHOWN AS FOLLOWS: F1,U2.
   F - FORMED SURFACES
   U - UNFORMED SURFACES
4. INVERT LEVELS AND HYDRAULIC INFORMATION TO BE PROVIDED ON THE LONGITUDINAL SECTION OF THE CANAL.
5. CONCRETE TO BE CAST AGAINST TRIMMED EXCAVATIONS. ONLY THE VERTICAL SECTION ON THE OUTSIDE TOP EDGE OF THE CANALS MUST BE FORMED.
6. THE LAYOUT OF STEEL MESH REINFORCEMENT IN IN- AND OUTLETS IS SHOWN ON 8.7.3 SHEET 3 OF 3.
7. ANY OTHER CANAL / CULVERT COMBINATIONS COULD BE EMPLOYED BY THE DESIGN ENGINEER
8. IF SPACE IS LIMITED, CANAL SIDE SLOPES MAY BE STEEPENED TO 1:1.
9. THE NECESSARY SAFETY PRECAUTIONS NEED TO BE IMPLEMENTED IN URBAN CONTEXTS WHERE PEDESTRIANS ARE EXPOSED.

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No.	DATE	VERSION / REVISION	APPROVED
V1	SEPT 2014	ORIGINAL VERSION	

SANRAL TYPICAL DRAWINGS

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APPROVED

DATE: 2015/06/26

TYPICAL DRAWINGS - DRAINAGE

TRAPEZOIDAL CONCRETE CANALS
DETAILS 1
SHEET 1 OF 3

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