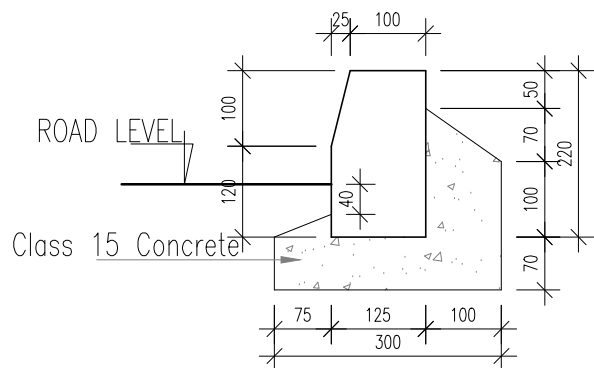
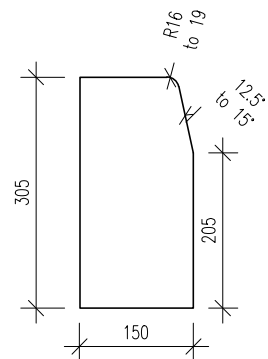
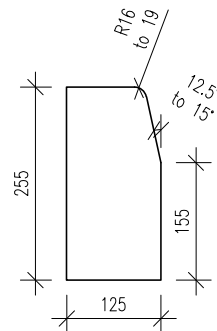




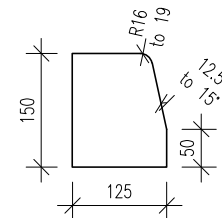
KERB HAUNCHING DETAIL



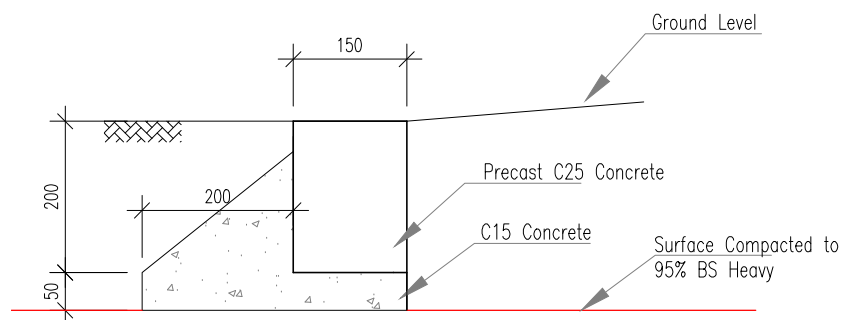
**HALF BATTERED KERB
Type HB1**



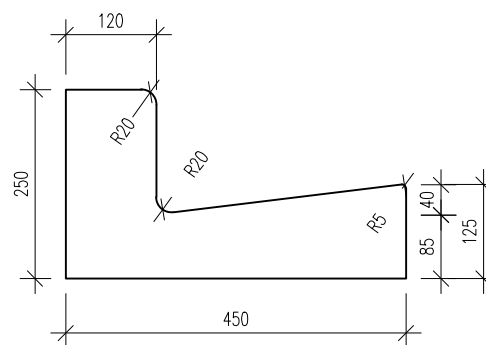
**HALF BATTERED KERB
Type HB2**



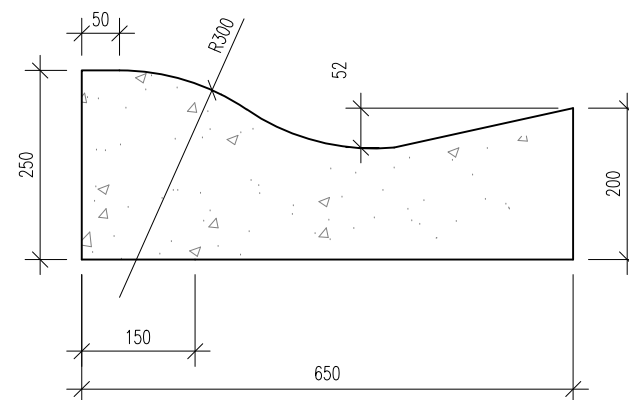
**HALF BATTERED KERB
Type HB3**



FLUSH KERB



CHANNEL KERB



ROLL KERB and GUTTER

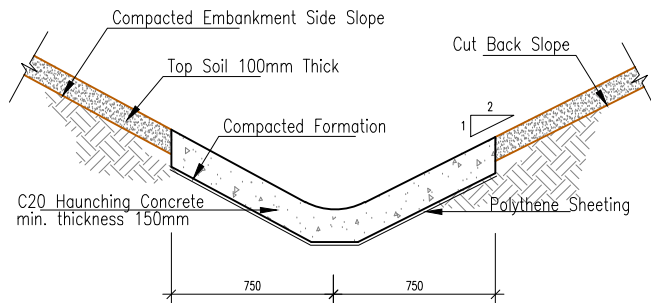
DRAINAGE KERBS

STANDARD DETAIL 1

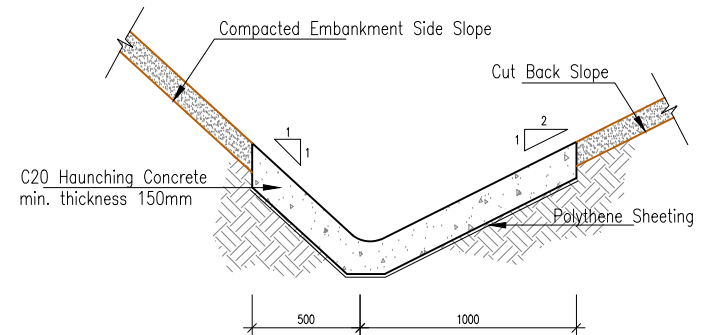
ROAD KERBS

Mega Design
Consulting Engineers
Project Managers

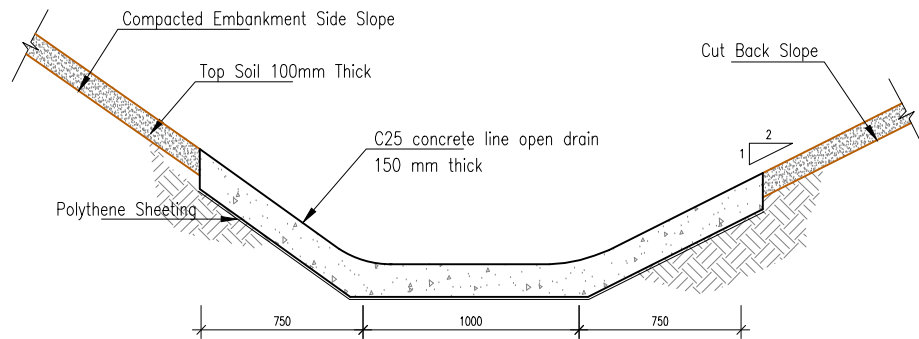
suez



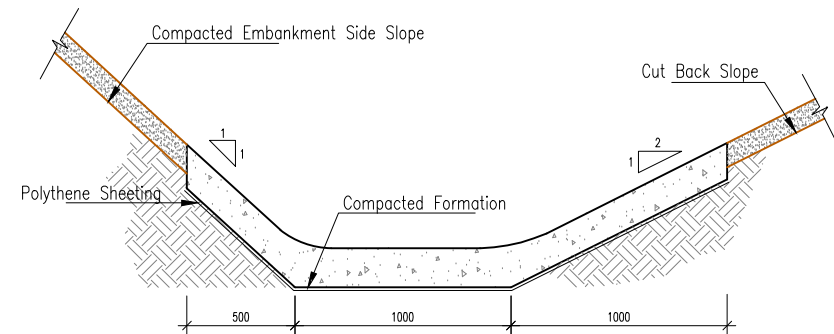
CONCRETE DRAIN - Type V1



CONCRETE DRAIN - Type V2



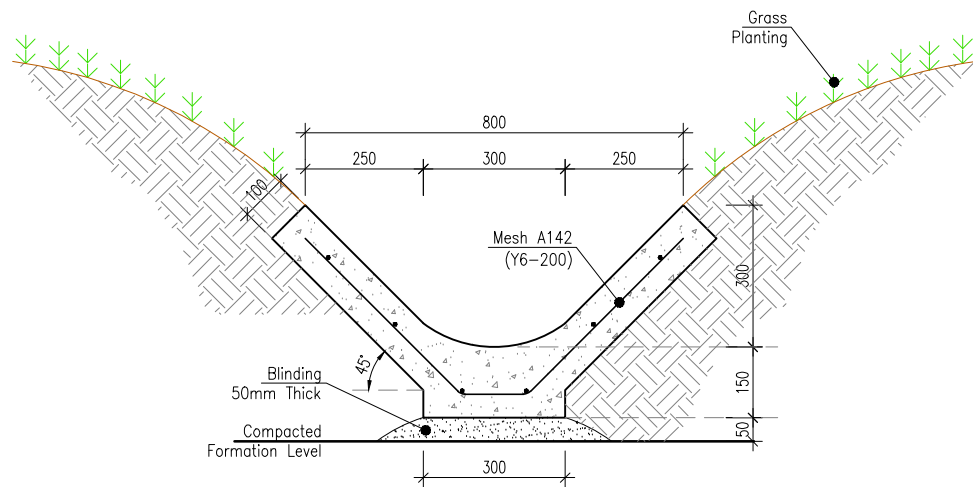
CONCRETE DRAIN - Type T1



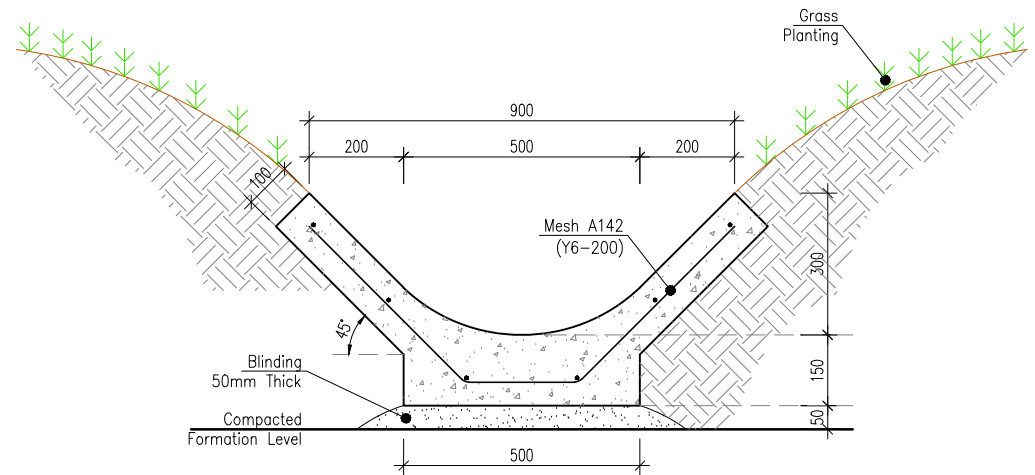
CONCRETE DRAIN - Type T2

STANDARD DETAIL 2

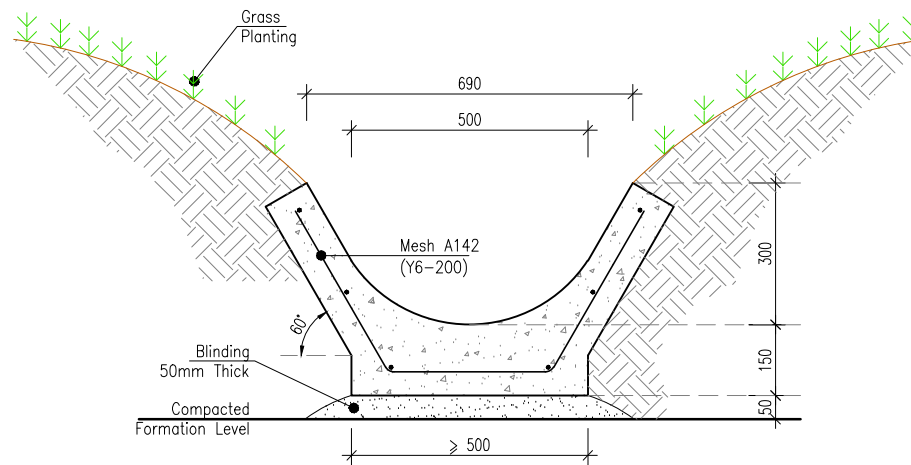
OPEN V-DRAINS



SECTION 1
(300mm wide at 45°)



SECTION 2
(500mm wide at 45°)



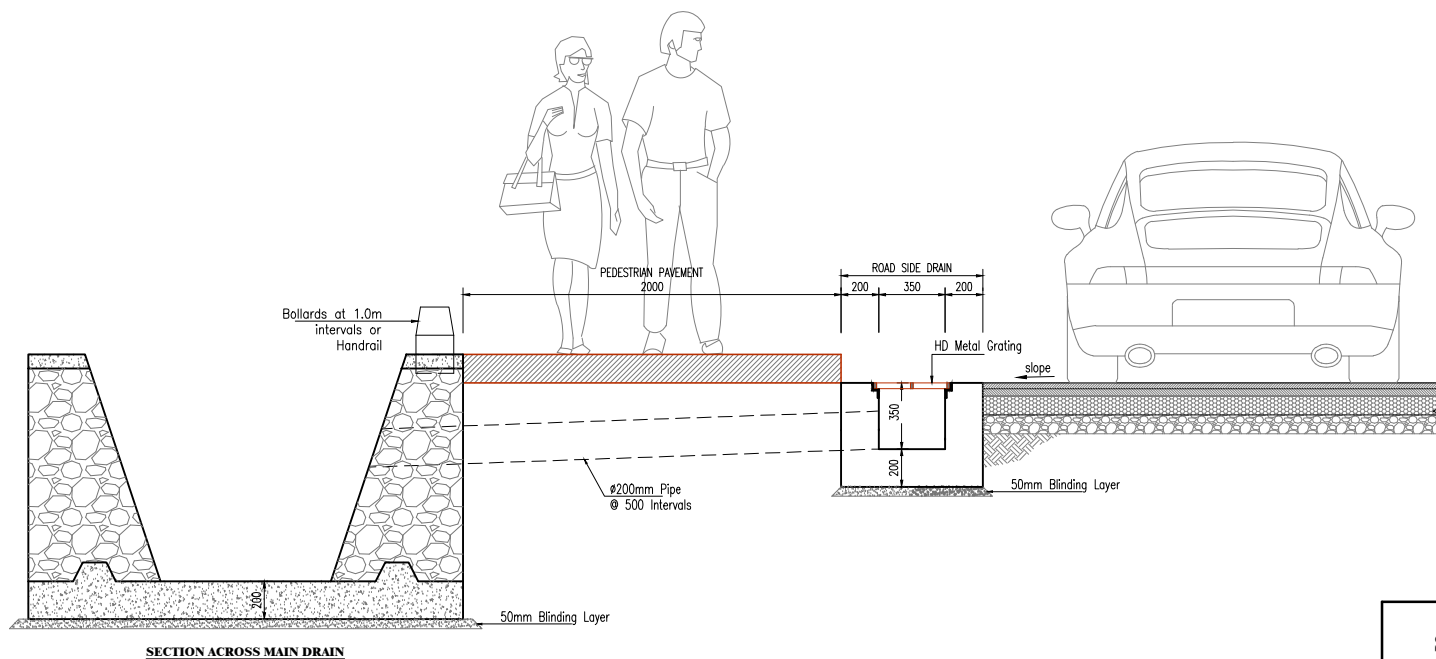
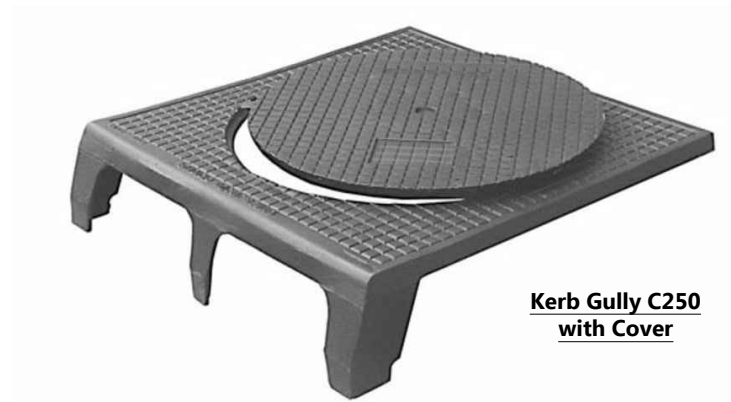
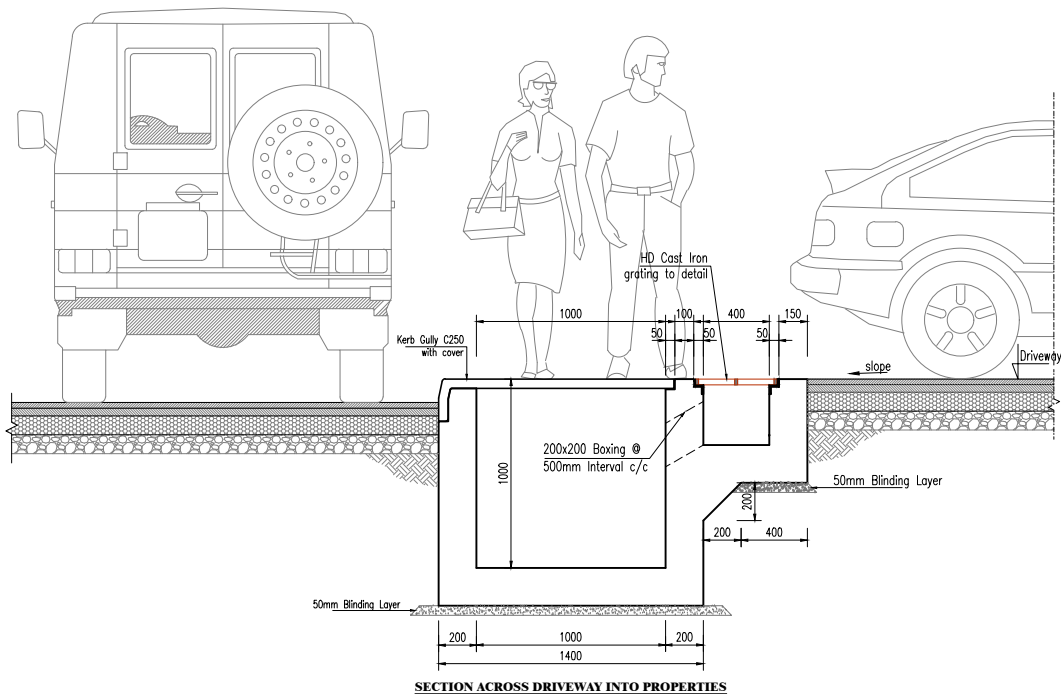
SECTION 3
(500mm wide at 60°)

STANDARD DETAIL 3

OPEN U-DRAINS

Mega Design
Consulting Engineers
Project Managers

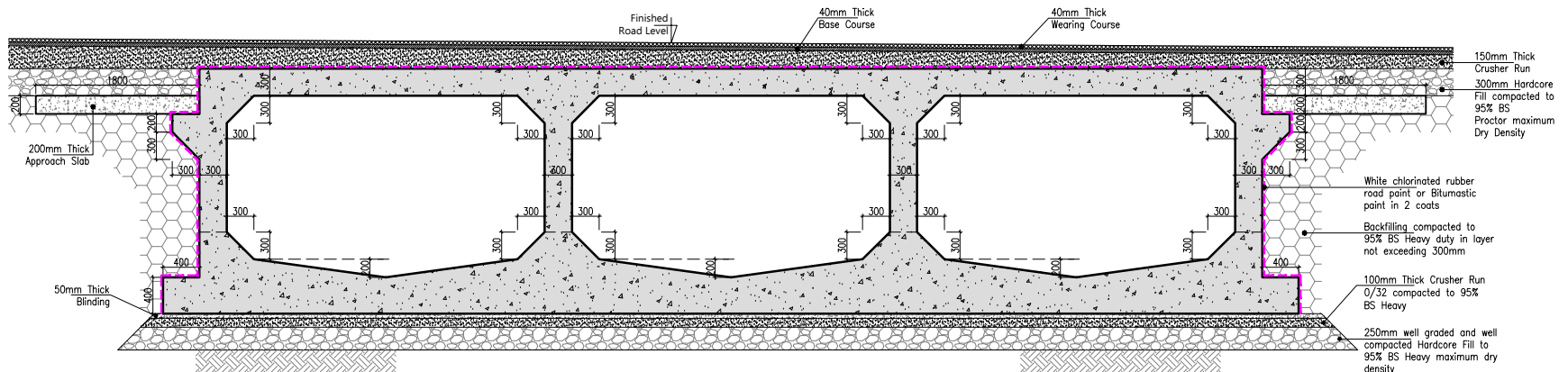
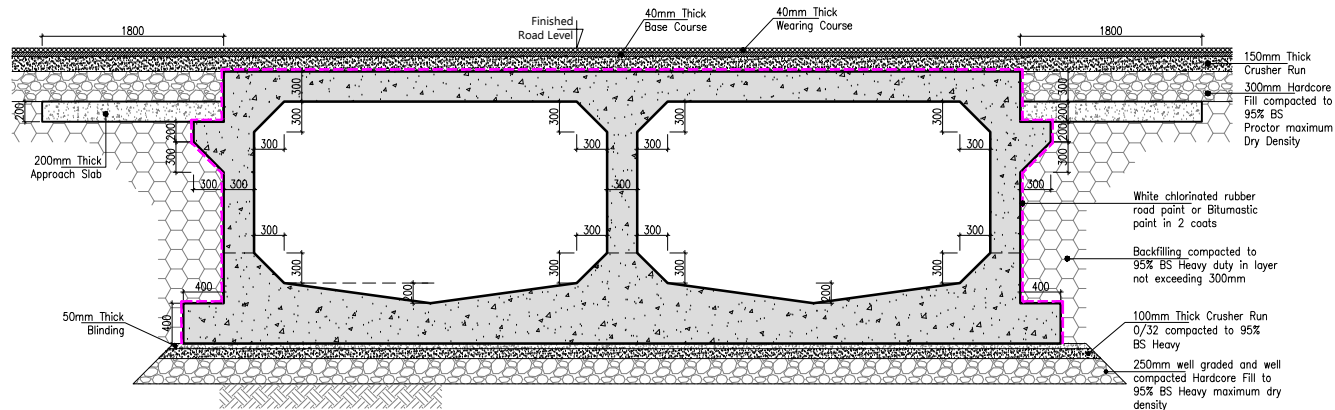
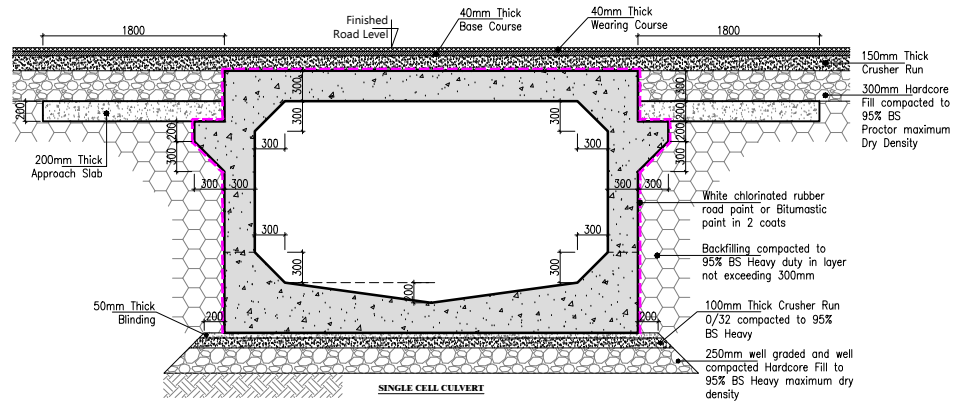
suez



STANDARD DETAIL 4
TYPICAL DRAIN SECTIONS

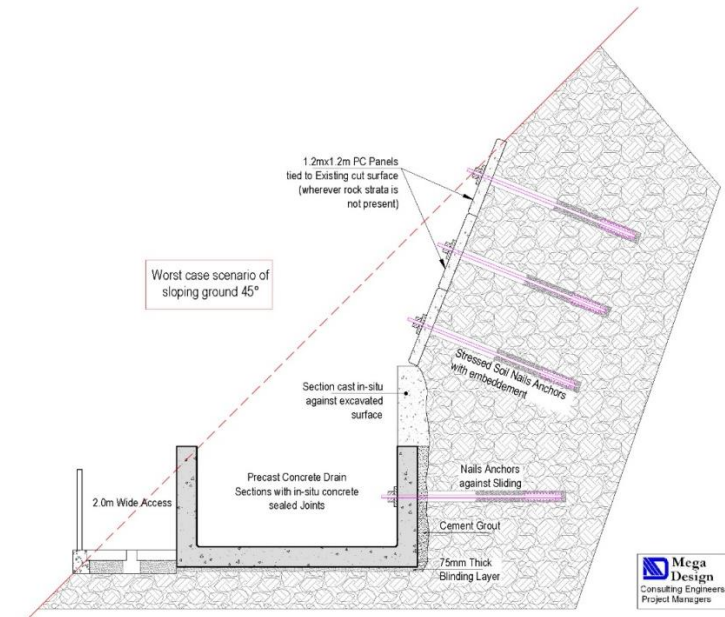
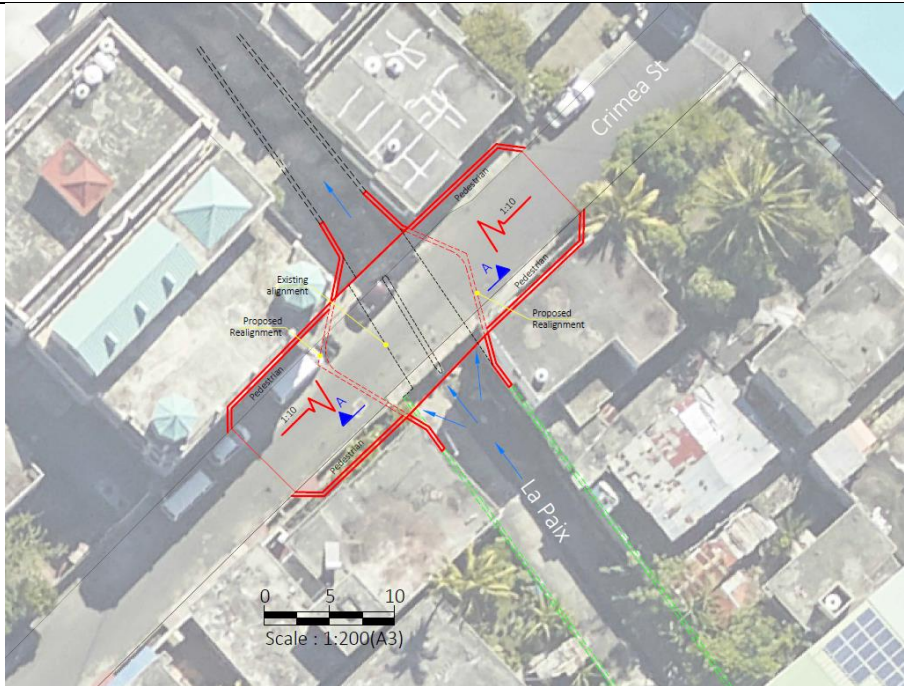
Mega Design
Consulting Engineers
Project Managers



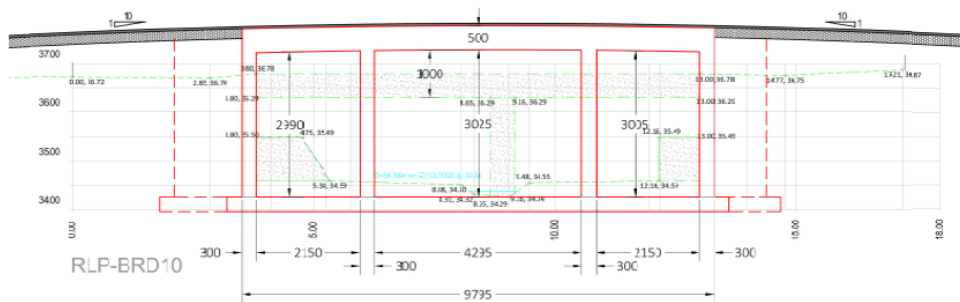


STANDARD DETAIL 6

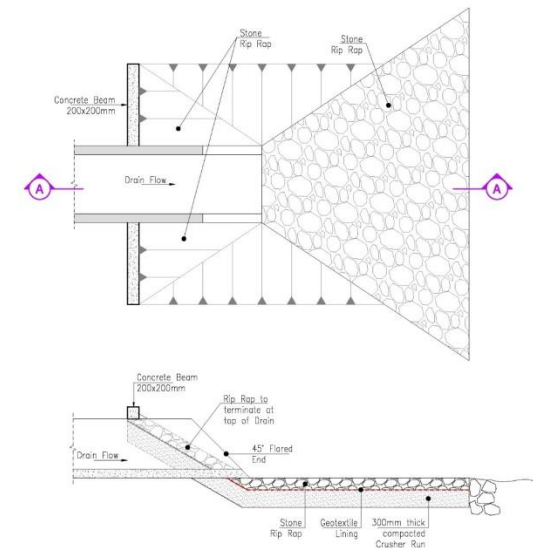
CULVERT DETAILS



Drain Section Along Steep Slopes



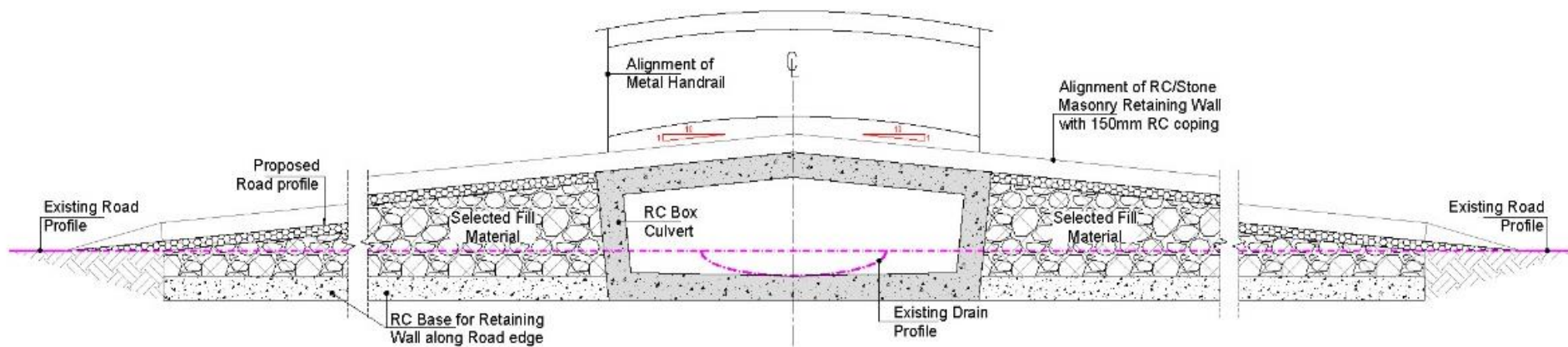
Culvert Widening within constricted Built-up Area



Drain Outlet and Apron

Standard Details 7- Culverts within built up areas, Drains along Steep Slopes and Drain Outlet

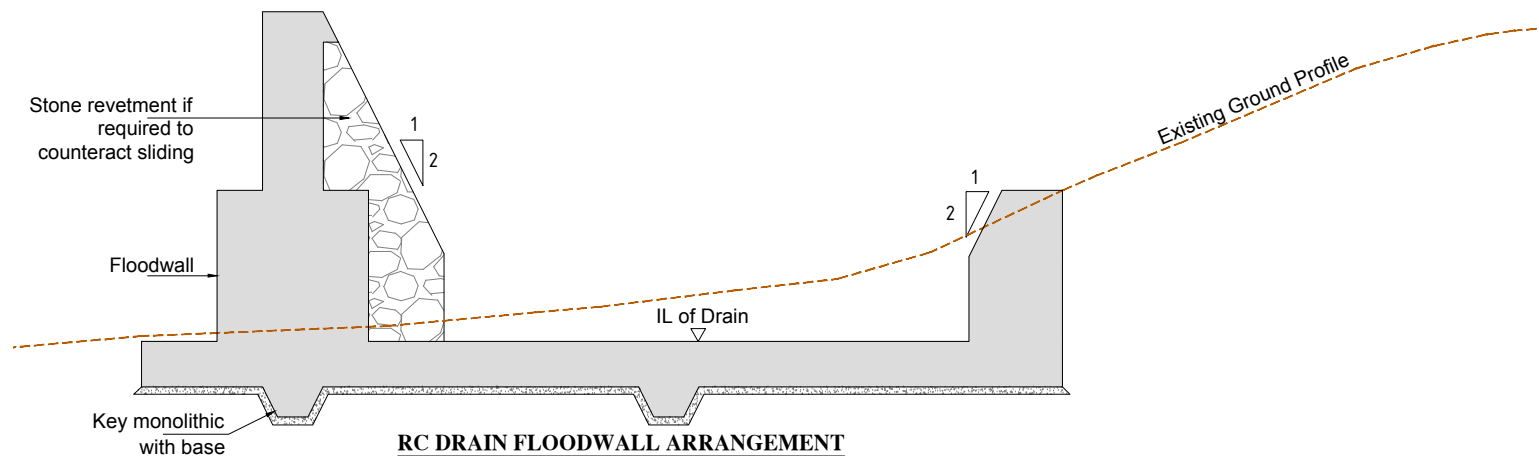
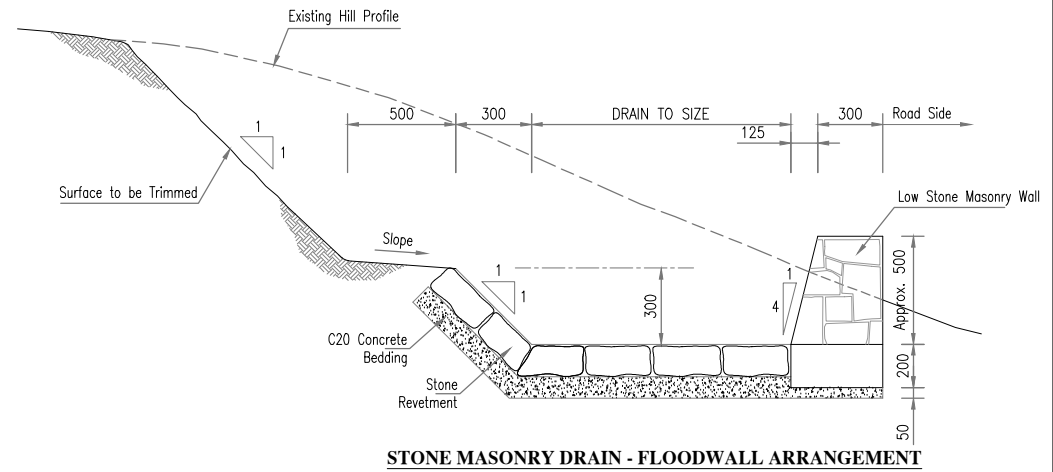
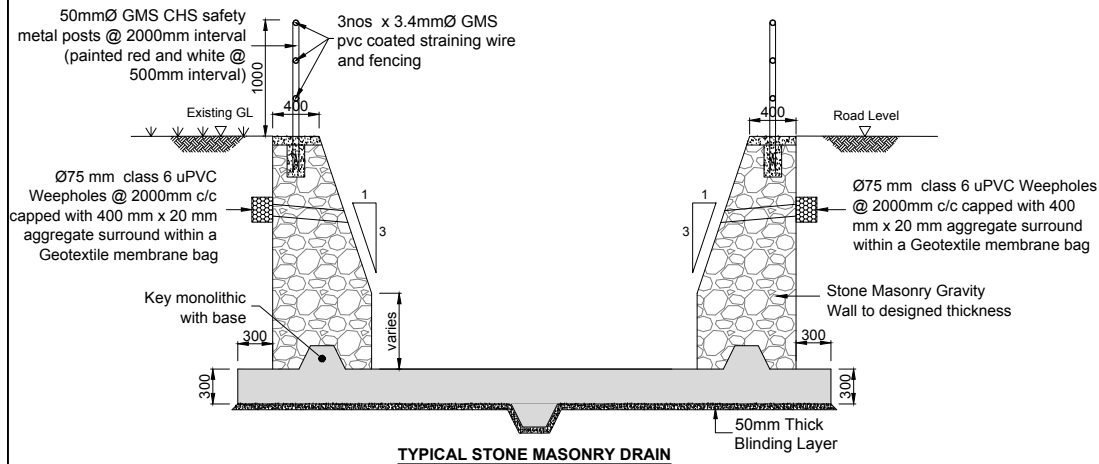


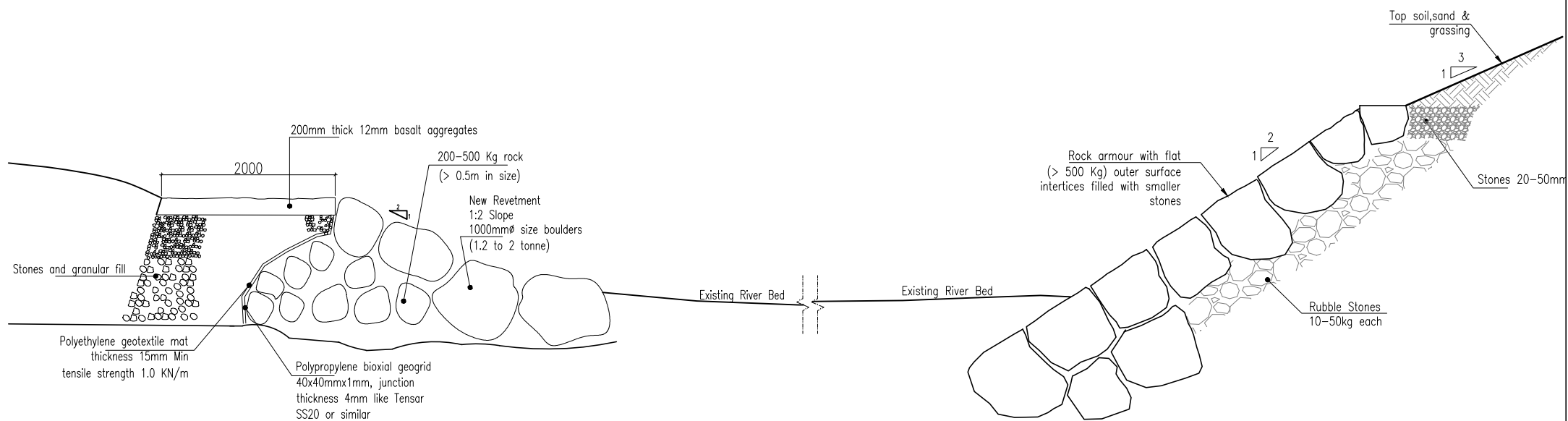


Elavated Box Culvert over Shallow Drain



Trash Combs upstream of Bridges and Culverts





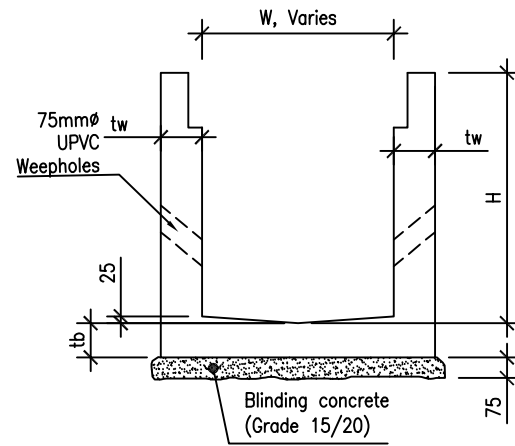
ROCK ARMOUR TO CONTAIN BANK EROSION

ROCK REVETMENT TO CONTAIN RIVER BANK EROSION

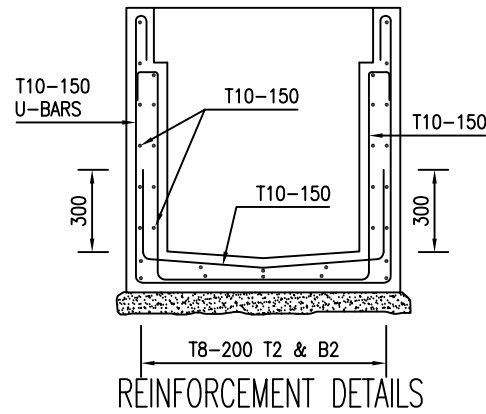
STANDARD DETAIL 10

**RIVER BANK EROSION
CONTROL**

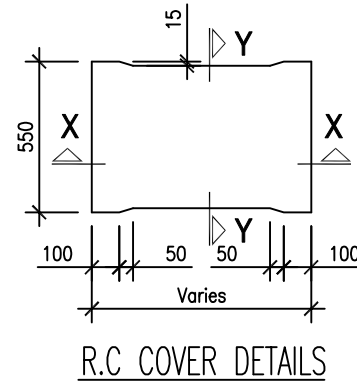




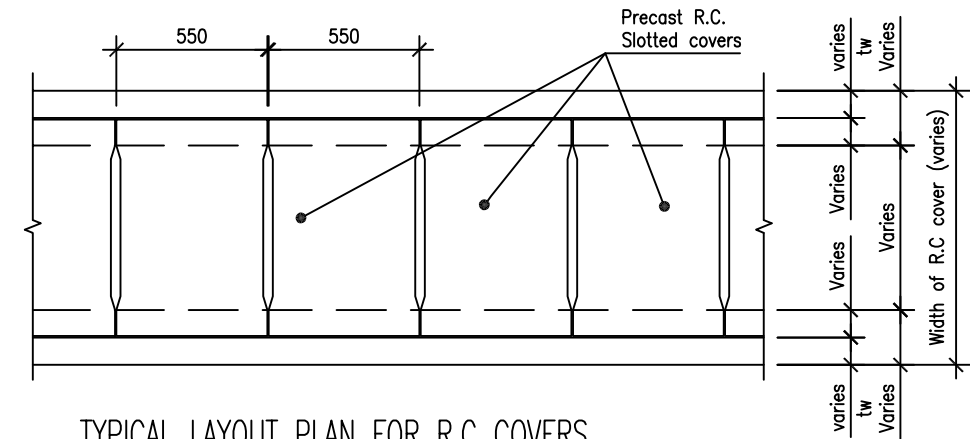
TYPICAL DETAILS
UNDER ROADS & FOOTPATHS



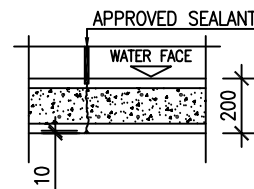
REINFORCEMENT DETAILS



R.C COVER DETAILS



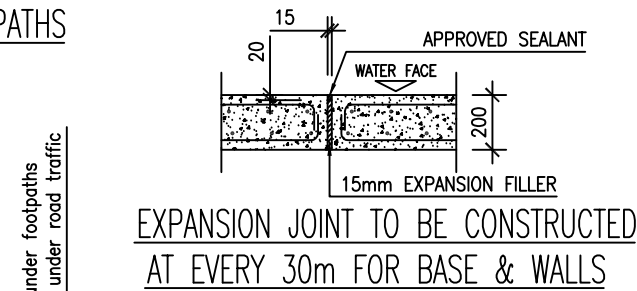
TYPICAL LAYOUT PLAN FOR R.C COVERS
FOR R.C DRAINS 300mm, 500mm & 700mm WIDE



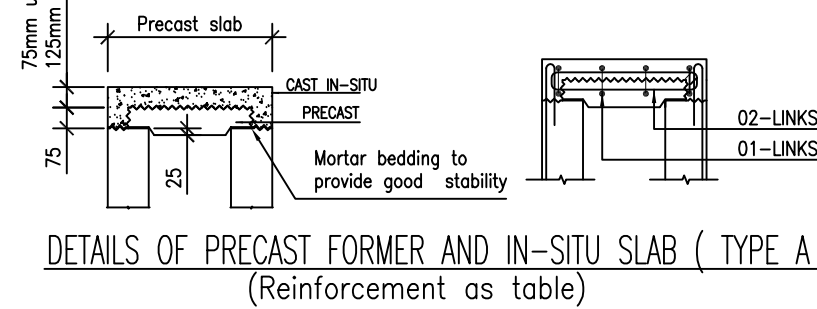
TYPICAL CONSTRUCTION JOINT

TABLE OF DIMENSIONS FOR R.C DRAINS

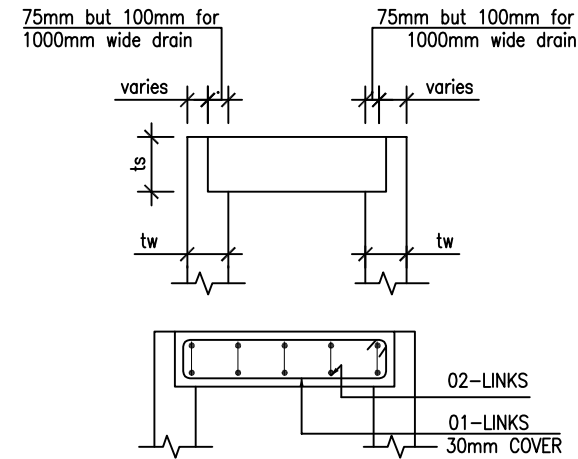
H	W	tw	tb	H	tw
300 - 700	300	150	150	GREATER THAN 1000	175
300 - 700	500	150	150	GREATER THAN 1000	200
300 - 700	700	175	175	GREATER THAN 1000	200
300 - 700	1000	200	200	GREATER THAN 1000	200



EXPANSION JOINT TO BE CONSTRUCTED
AT EVERY 30m FOR BASE & WALLS

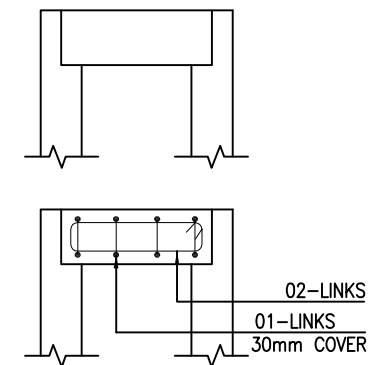


DETAILS OF PRECAST FORMER AND IN-SITU SLAB (TYPE A)
(Reinforcement as table)

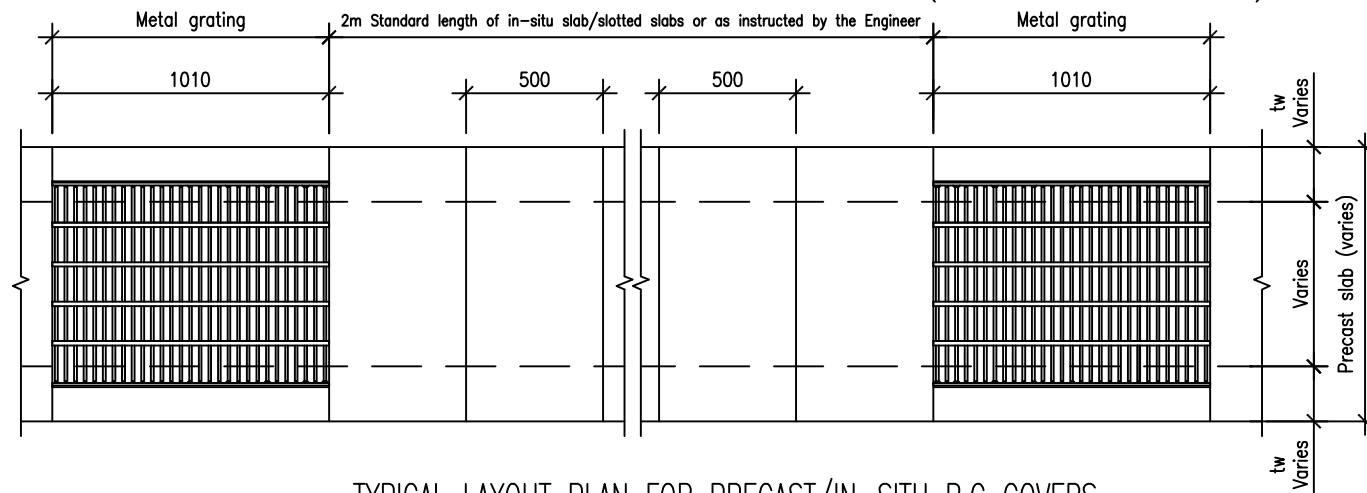


SECTION X-X

DETAILS FOR R.C COVERS (TYPE B)



SECTION Y-Y



TYPICAL LAYOUT PLAN FOR PRECAST/IN-SITU R.C COVERS
FOR R.C DRAIN 300mm, 500mm, 700mm, & 1000mm wide

TABLE OF DIMENSIONS FOR R.C COVERS

DRAIN WIDTH	tw	PRECAST SLAB TYPE A	WIDTH OF COVER TYPE B	ts	REINFORCEMENT
300	150	600	450	200	T12 at 175c/c (B1) T8 at 150c/c (B2 & T2)
500	150	800	650	200	T12 at 150c/c (B1) T8 at 150c/c (B2 & T2)
700	175	1050	850	200	T12 at 125c/c (B1) T8 at 150c/c (B2 & T2)
1000	200	1400	1200	200	T12 at 100c/c (B1) T8 at 150c/c (B2 & T2)

For drains under footpaths, all dimensions to be the same except 'ts' to be 150mm.

Notes:

- Concrete to be grade 30/20.
- Reinforcement to be high yield deformed to BS 4449.
- Cover to reinforcement to be 30mm.
- All dimensions are in millimetres.
- Top cover to reinforcement for slab to be 40mm
- Weepholes every 4.0m on both sides Height to be determined on site