#### TRENCH WIDTHS-RIGID PIPES

NORMAL PIPE DIAMETER (mm)	100	150	225	300	375	450	525	600	750	900	1050	1200	1350
TRENCH WIDTH MIN (mm) (W)	450	500	600	700	950	1050	1150	1250	1400	1950	2100	2300	2450
TRENCH WIDTH MAX (mm) (W)	650	700	800	900	1150	1250	1350	1450	1600	2150	2300	2500	2650

#### TRENCH WIDTHS-FLEXIBLE PIPES

NOMINAL PIPE DIAMETER (mm)	100	150	200	250	300
TRENCH WIDTH MIN (mm) (W)	450	450	600	700	700
TRENCH WIDTH MAX (mm) (W)	600	600	700	700	850

## DIMENSIONS-"bc"

NOMINAL PIPE DIAMETER (mm)	100-450 incl.	525-600 incl.	750	900	1050	1200
bc (mm)	100	150	200	225	250	300

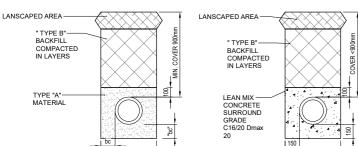
DIMENSION-"b"	PIPES UP TO AND INC.	PIPES GREATER THAN
DIMENSION- D	600mm DIA	600mm DIA
UNIFORM SOIL	100mm	200mm
ROCK	200mm	300mm

- TYPE "A" MATERIAL:
  BROKEN STONE OR GRAVEL, GRADING AS FOLLOWS:

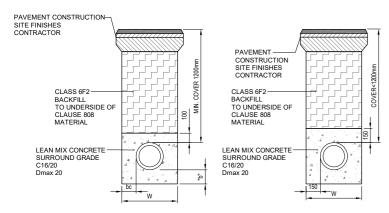
  1) RIGID PIPES PIPE DIAMETER UP TO AND INCLUDING 600mm
  SIEVE SIZE GREATER THAN 5mm AND LESS THAN 12mm
   PIPE DIAMETER GREATER THAN 500mm DIA
  GEVIF SIZE GREATER THAN 5mm AND LESS THAN 19mm - FIFE DIAMBLER GREATER THAN 500MM DIA
  SIEVE SIZE GREATER THAN 5mm AND LESS THAN 19mm
  2) FLEXIBLE PIPES: SIEVE SIZE GREATER THAN 5mm
  AND LESS THAN 10mm

## TYPE "B" MATERIAL SELECTED FILL UNIFORM READILY COMPACTABLE MATERIAL FREE FROM: CLAY LUMPS RETAINED ON 75mm

STONES RETAINED ON 25mm. SIEVE, TREE ROOTS,
VEGETABLE MATTER, BUILDING RUBBISH AND FROZEN SOIL



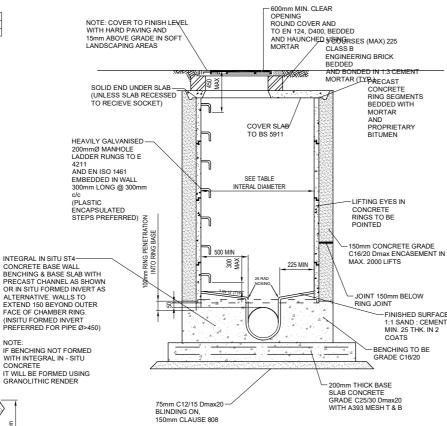
UNPAVED AREAS



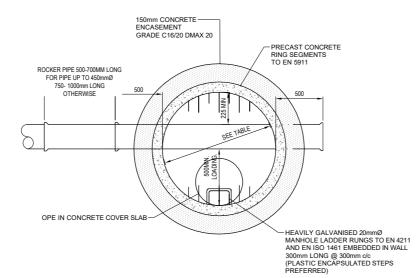
PAVED AREAS

## Pipe trench details

Scale - 1:20

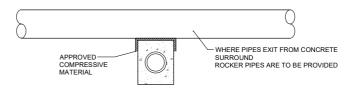


Typical precast concrete manhole (<3000mm deep, <525mm pipe)



## Typical straight through precast concrete manhole Scale - 1 : 20

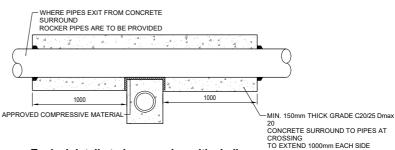
	CIRCULAR MANHO	OLES.	MA	TERIAL	RECTANGULA			
***************************************				EPTH	STRAIGHT THROUGH DIMENSIONS)			
OUTLET	INTERNAL	EXTERNAL	<3m	>3m	OUTLET		INTERNAL	
DIAMETER	DIMENSIONS	DIMENSIONS INCL			OUTLET	DEPTH	DIMENSION	
		CONC SURROUND			DIAMETER		s	
UP TO	1200mmØ RING	1680mm	RC & PCC	PCC	150≤ D ≤ 375	ALL	1200 x 910	
375mmØ					150≤ p ≤ 375	< 1.5M	1200 x 1135	
450mmØ	1350mmØ RING	1840mm	RC & PCC	PCC		> 1.5M	1200 x 1360	
525mmØ	1500mmØ RING	2010mm	RC & PCC	PCC	<b>—</b>	< 1.5M	1500 x 1660	
600mmØ	1500mmØ RING	2010mm	PCC	PCC	1	> 1.5M	1500 x 1885	
750mmØ	1500mmØ RING	2010mm	PCC	PCC		1.0111	1000 X 1000	
900mmØ	1800mmØ RING	2330mm	PCC	PCC	1			
1050mmØ	2100mmØ RING	2650mm	PCC	PCC	1			



## Typical detail at pipe crossing with adequate cover

<1200mm COVER IN PAVED AREAS <900mm COVER IN LANDSCAPED AREAS (FOR GAPS BETWEEN PIPES OF LESS THAN 300mm

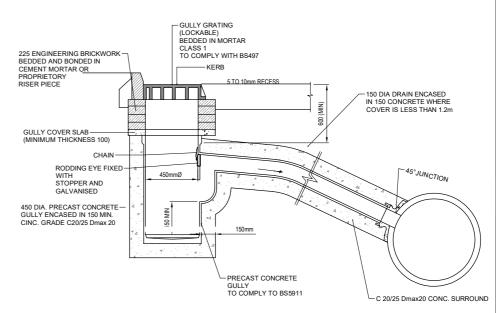
Scale - 1:20



# Typical detail at pipe crossing with shallow cover

<1200mm COVER IN PAVED AREAS <900mm COVER IN LANDSCAPED AREAS (FOR GAPS BETWEEN PIPES OF LESS THAN 300mm

Scale - 1:20



# Typical precast road gully

## GENERAL NOTES:

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
- DO NOT SCALE THIS DRAWING, ANY AMBIGUITIES, OMISSIONS AND ERRORS ON DRAWINGS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY. ALL DIMENSIONS MUST BE CHECKED / VERIFIED ON SITE.
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
- FOR GENERAL NOTES REFER TO DRAWING.



ISSUED FOR PRE-PLANNING

THE ROYAL OAK

PROPOSED CIVILS DETAILS SHEET 1 OF 3

Size: Date:			Drawn By:		Design	Designed By:		Checked By: BAJ	
A1		31/01/20		JC					
Scale: AS SH	IOWN		,	,,,		00		***	
Project No: Originator: Volume:			Level: Type:		Role:	Role: Category / N		umber: Rev:	

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