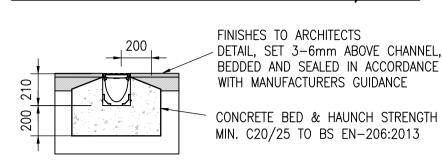
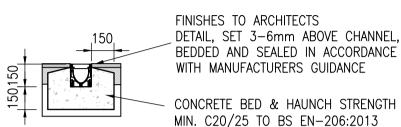


TYPICAL ACO MULTIDRAIN M150D 0.0J DETAIL WITH GRATING TO LOAD CLASS B125/C250.

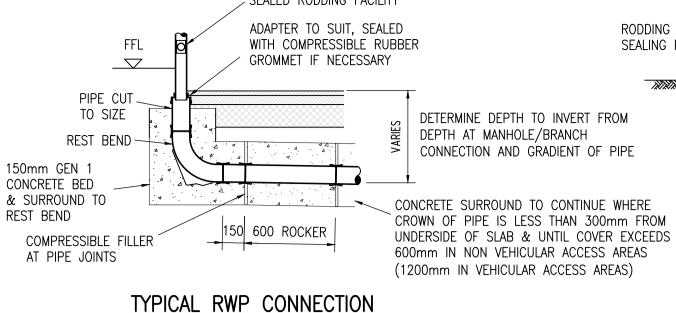


TYPICAL ACO MULTIDRAIN M150D 0.0J DETAIL WITH GRATING TO LOAD CLASS D400.

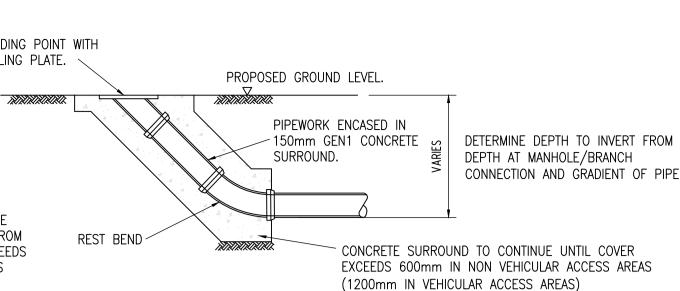


WITH GRATING TO LOAD CLASS B125/C250.

WITH COMPRESSIBLE RUBBER FFL GROMMET IF NECESSARY $\overline{}$ PIPE CUT TO SIZE DETERMINE DEPTH TO INVERT FROM DEPTH AT MANHOLE/BRANCH CONNECTION AND GRADIENT OF PIPE 150mm GEN 1 CONCRETE BED CONCRETE SURROUND TO CONTINUE WHERE & SURROUND CROWN OF PIPE IS LESS THAN 300mm FROM TO REST BEND 150 600 ROCKER UNDERSIDE OF SLAB & UNTIL COVER EXCEEDS COMPRESSIBLE FILLER 600mm IN NON VEHICULAR ACCESS AREAS AT PIPE JOINTS (1200mm IN VEHICULAR ACCESS AREAS)

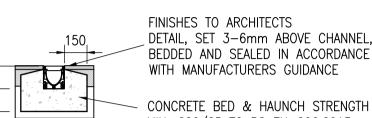


PERMEABLE SURFACE - BLOCK

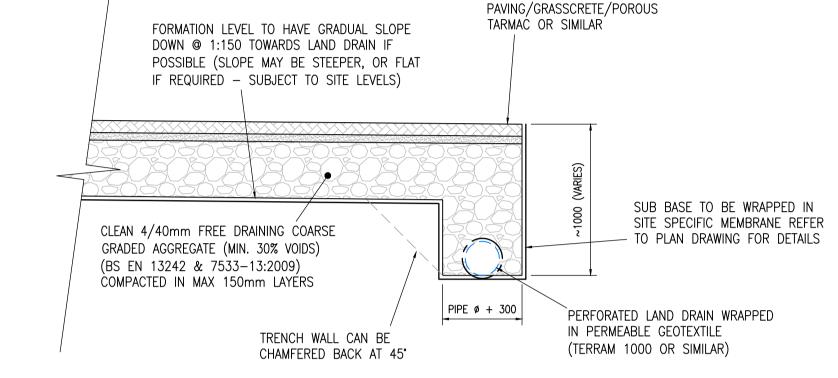


EXTERNAL RODDING EYE DETAIL

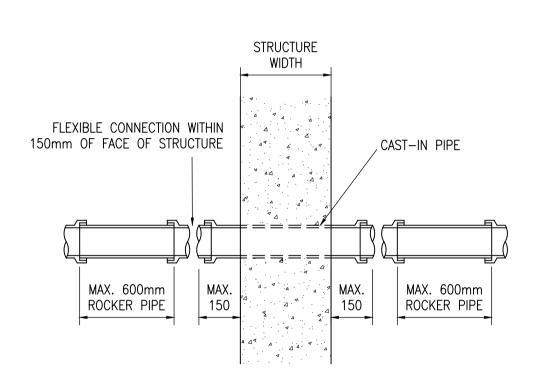
TYPICAL SS/SVP CONNECTION



TYPICAL ACO MULTIDRAIN M100PPD 0.0J DETAIL



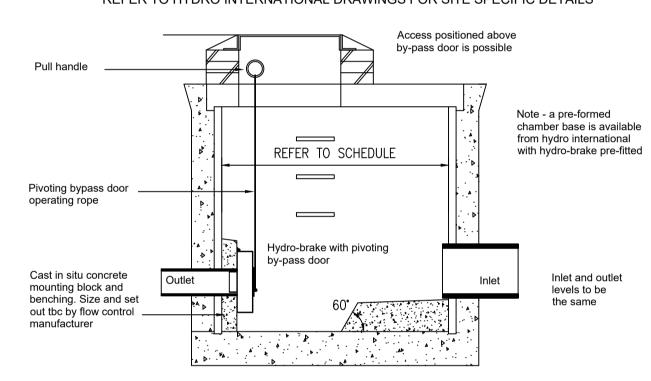
TYPICAL CAR PARK LAND DRAIN DETAIL



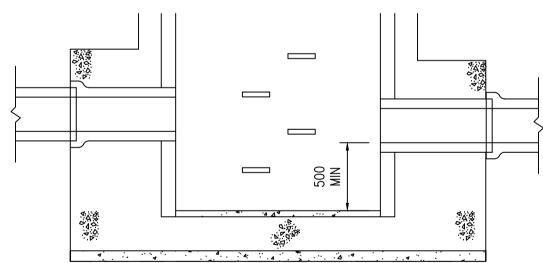
PLAN SHOWING PIPE PENETRATION THROUGH STRUCTURE (ROCKER OPTION)

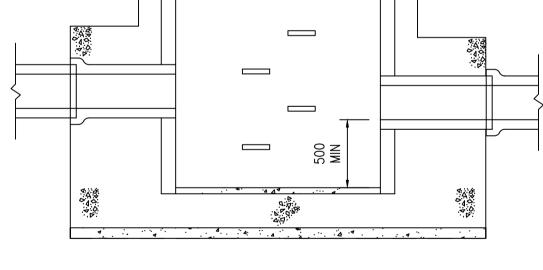
TYPICAL HYDROBRAKE MANHOLE DETAIL

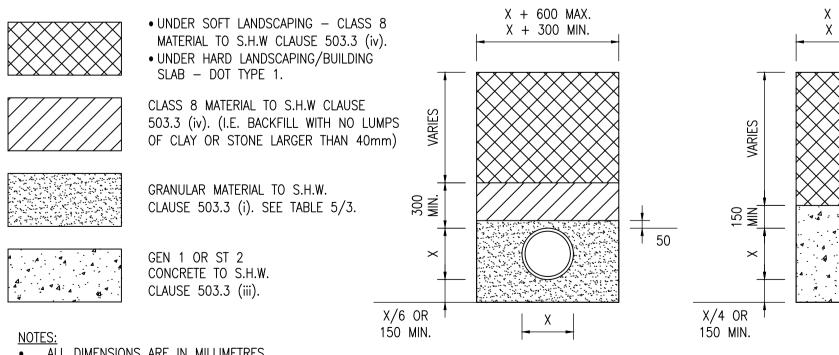
REFER TO HYDRO INTERNATIONAL DRAWINGS FOR SITE SPECIFIC DETAILS



TYPICAL CATCHPIT MANHOLE DETAIL

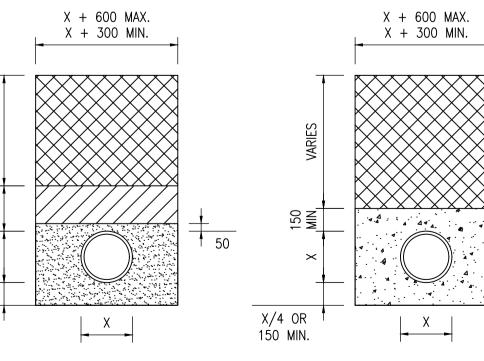






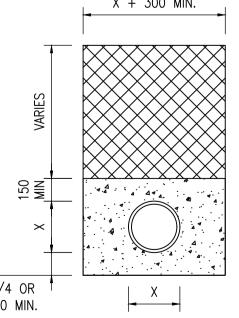
• ALL DIMENSIONS ARE IN MILLIMETRES.

- DIMENSION X IS THE EXTERNAL PIPE DIAMETER. • THE MIN/MAX WIDTH OF TRENCH APPLIES ON & BELOW A LINE 300mm ABOVE THE TOP OF THE PIPE. ABOVE THE 300mm LINE TRENCH BACKFILL MATERIAL SHALL BE AS DESCRIBED IN CLAUSE 505 OF S.H.W.
- CONCRETE SURROUND MAY EXTEND TO SIDES OF TRENCH OR BE OF MINIMUM WIDTH TO PROVIDE
- 150mm COVER AT EACH SIDE OF THE PIPE. • UNTIL THERE IS 300mm COVER OVER CROWN OF PIPE, COMPACT GRANULAR & BACKFILL MATERIAL BY HAND IN 100mm THICK LAYERS.



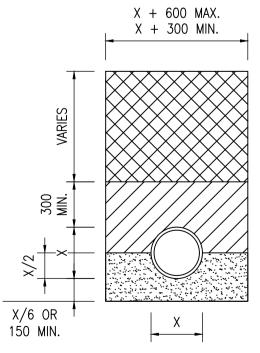
CLASS S BEDDING DETAIL (uPVC/FLEXIBLE PIPES)

FOR USE WHEN COVER TO SOFFIT OF PIPE IS GREATER THAN 600mm IN NON-TRAFFICKED AREAS AND GREATER THAN 1200mm IN AREAS WITH VEHICULAR ACCESS.



CLASS Z BEDDING DETAIL (ALL PIPES)

FOR USE WHEN COVER TO SOFFIT OF PIPE IS LESS THAN 600mm IN NON-TRAFFICKED AREAS AND LESS THAN 1200mm IN AREAS WITH VEHICULAR ACCESS. MIN. 18mm COMPRESSIBLE BOARD AT ALL PIPE JOINTS

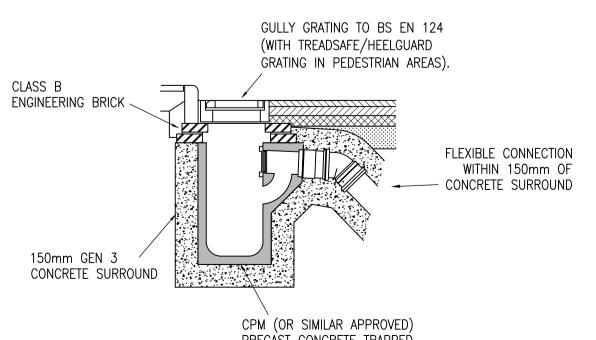


CLASS B BEDDING DETAIL (CLAY/CONCRETE ONLY) FOR USE WHEN COVER TO SOFFIT OF

PIPE IS GREATER THAN 600mm IN NON-TRAFFICKED AREAS AND GREATER THAN 1200mm IN AREAS WITH VEHICULAR ACCESS.

CLASS S/B GRANULAR BEDDING MATERIAL - S.H.W 503 (i) TABLE 5/3 [BS EN 13242] -						
NOMINAL PIPE DIAMETER (mm)	SINGLE SIZED COARSE AGGREGATE (mm)	GRADED COARSE AGGREGAT (mm)				
NOT EXCEEDING 140	4/10	-				
XCEEDING 140 BUT NOT EXCEEDING 400	4/10, 6/10 OR 10/20	2/14 OR 4/20				
EXCEEDING 400	4/10, 6/14, 10/20 OR 20/40	2/14, 4/20 OR 4/40				

CLASS Z COMPRESSIB	CLASS Z COMPRESSIBLE FILLER BOARD DETAILS						
NOMINAL PIPE DIAMETER (mm)	THICKNESS OF COMPRESSIBLE FILLER (mm)						
LESS THAN 450	18						
450 – 1200	36						
GREATER THAN 1200	54						



PRECAST CONCRETE TRAPPED GULLY POT WITH 150 DIA. OUTLET AND RODDING FACILITY

TYPICAL PRECAST CONCRETE ROAD GULLY DETAIL

Р3	17.05.2024	ISSUED FOR STAGE 4 APPROVAL	OJ	MH
P2	26.07.2023	ISSUED FOR PLANNING APPROVAL.	M.H	C.J.H
P1	23.06.2023	ISSUED FOR APPROVAL.	M.H	C.J.H
Rev	Date	Comment	Ву	Check
Sta	tus Code S4	Drawing Status STAGE APPROV	ΊΔΙ	
		01710271111107	<i>/</i> \L	
Т	his drawing m	y only be used for construction/manufacture if status is CONSTR		

Consulting Structural/Civil Engineers ☐ London 20 Britton Street, London, EC1M 5TX tel: 020 7490 4353 fax: 020 7490 4354 e-mail: info@furnesspartnership.com ■ Bradford The Paper Hall, Anne Gate, Bradford, BD1 4EQ tel: 01274 392092 e-mail: mail@furnesspartnership.com

CLEATOR MOOR ACTIVITY CENTRE

PROPOSED SURFACE WATER DRAINAGE DETAILS SHEET 2 OF 2

FP Job No.		Drav	wn	Date		Checked		Scale @ A1		
L2763			M.H	JUN	۱ '23		C.J.I	Н		N/A
PROJECT OPERATOR		ZONE / VOLUME	LEVEL / LOCATION	FILE TYF	Έ	ROLE	SHEE	ET No.	Rev.	
L2763	FL	JR	XX	XX	DR		D	09	32	P3