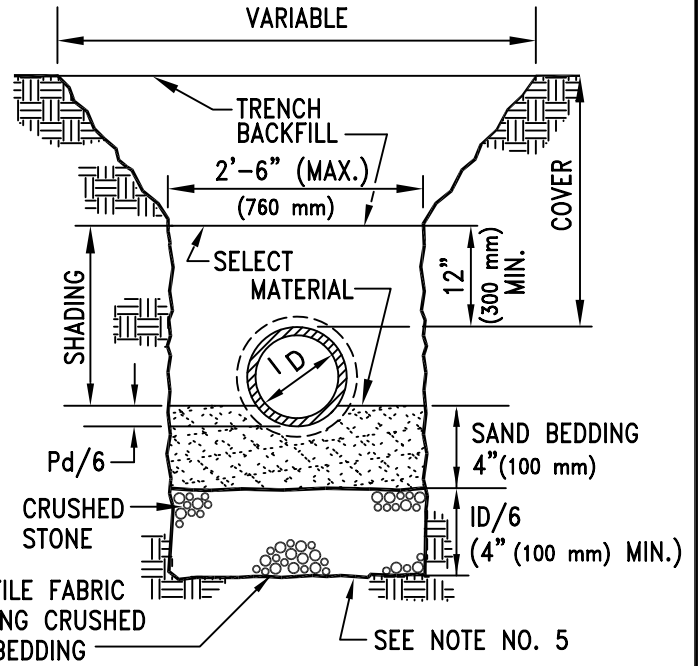
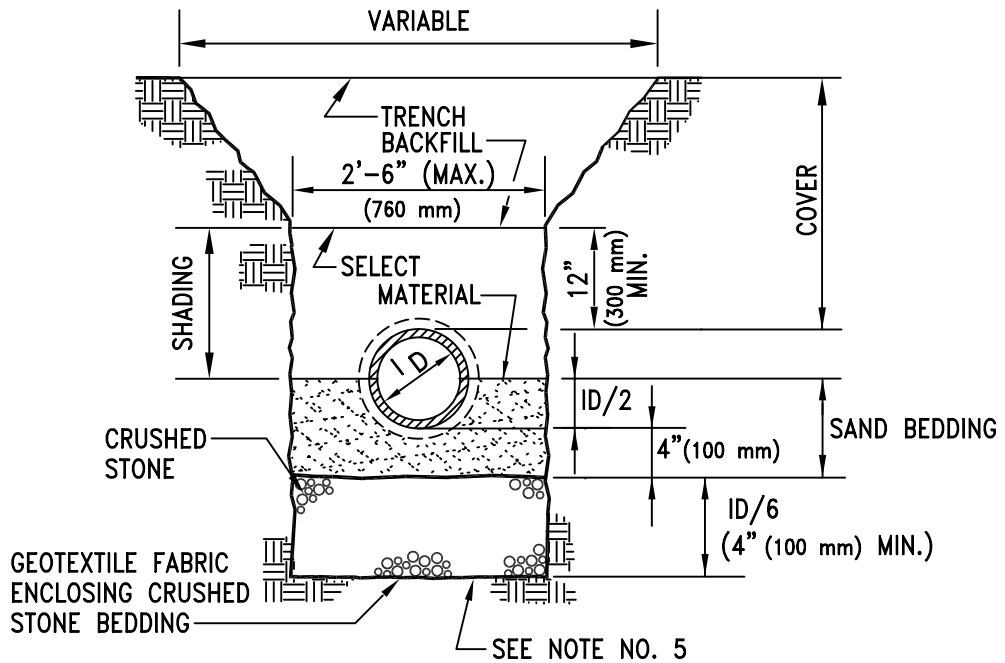



TYPE 1 BEDDING



TYPE 2 BEDDING



TYPE 3 BEDDING

ISSUED:		STANDARD DETAIL RIGID PIPE BEDDING FOR SANITARY SEWERS		DETAIL NO.
8/92				WWM 104
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PIPE COVER LIMITATION TABLE (MAXIMUM TRENCH WIDTH 30" (760 mm) AT TOP OF PIPE)					
PIPE SPECIFICATION			MIN.-MAX. COVER		
SIZE (ID)	MATERIAL	TYPE AND MIN. CLASS	TYPE 1	TYPE 2	TYPE 3
8" (200 mm)	V. C.	EXTRA STR.	4'-10' (1.2 m-3.0 m)	4'-26' (1.2 m-7.9 m)	4'-30' (1.2 m-9.1 m)
10" (250 mm)	V. C.	EXTRA STR.	4'-11' (1.2 m-3.4 m)	4'-30' (1.2 m-9.1 m)	4'-30' (1.2 m-9.1 m)
12" (300 mm)	V. C.	EXTRA STR.	4'-14' (1.2 m-4.3 m)	4'-30' (1.2 m-9.1 m)	4'-30' (1.2 m-9.1 m)
15" (375 mm)	V. C.	EXTRA STR.	4'-20' (1.2 m-6.1 m)	4'-30' (1.2 m-9.1 m)	4'-30' (1.2 m-9.1 m)
8"-16" (200 mm-400 mm)	D. I.	SEE NOTE #3	2'-17' (610 mm-5.2 m)	2'-24' (610 mm-7.3 m)	2'-30' (610 mm-9.1 m)

SIEVE ANALYSIS CHART					
CRUSHED STONE A.S.T.M. D-448, GR.67		SAND		SELECT MATERIAL	
NOM. SIZE	% PASSING	NOM. SIZE	% PASSING	NOM. SIZE	% PASSING
1" (25 mm)	100	1" (25 mm)	100	3" (75 mm)	100
3/4" (19 mm)	90-100	#4 (4.8 mm)	60-100	3/4" (19 mm)	60-100
3/8" (10 mm)	20-55	#200 (75 μm)	0-5-10	#8 (2.4 mm)	35-80
#4 (4.8 mm)	0-10	MAX. P.I.=5		#200 (75 μm)	0-25
#8 (2.4 mm)	0-5	MAX. L.L.=30		P.I. + MINUS #200 (75 μm)	< 25
MINIMUM RESISTIVITY 2000 ohm-cm					
ALL SIEVE ANALYSES SHALL BE CERTIFIED AND SUBMITTED TO PCWMD PRIOR TO STARTING CONSTRUCTION.					

- The resistivity shall be laboratory tested by ASHTO T 288 or ASTM G187-05 test method.
- Use of lime is not permitted in bedding material.
- Use of Recycled Asphalt Product (RAP) is not permitted in bedding material.

**NOTES:**

1. TRENCH BACKFILL SHALL CONFORM TO THE REQUIREMENTS OF SUBSECTION 508-2.07 OF THE PIMA COUNTY/CITY OF TUCSON STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS. COMPACTION OF THE BACKFILL SHALL CONFORM TO THE REQUIREMENTS OF SUBSECTION 508-3.04(A) UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIAL PROVISIONS.
2. SHADING SHALL BE CAREFULLY PLACED. MINIMUM DENSITY TO BE 95% OF THE DRY DENSITY DETERMINED IN ACCORDANCE WITH THE REQUIREMENTS OF THE APPLICABLE TEST METHODS OF THE ADOT MATERIALS TESTING MANUAL.
3. ALL DUCTILE IRON PIPE AND ALL PIPE 18" (450 mm) IN DIAMETER AND LARGER WILL REQUIRE SPECIAL APPROVAL OF THE DESIGN AND INSTALLATION BY PCWMD.
4. PCWMD RESERVES THE RIGHT TO ADJUST, ON AN INDIVIDUAL CASE BASIS, THE PIPE BEDDING REQUIREMENTS TO MEET UNEXPECTED FIELD/SOIL CONDITIONS.
5. UNDISTURBED EARTH OR SELECT MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY DETERMINED IN ACCORDANCE WITH THE REQUIREMENTS OF THE APPLICABLE TEST METHODS OF THE ADOT MATERIALS TESTING MANUAL.
6. CRUSHED STONE BEDDING SHALL NOT BE USED WITH DUCTILE IRON PIPE UNLESS APPROVED IN WRITING BY PCWMD.
7. NATIVE MATERIAL MEETING THE GRADATION OF SELECT MATERIAL MAY BE USED IN LIEU OF SELECT MATERIAL.

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