

- 1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST ADDITION
- 2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
- 3. <u>FOUNDATION:</u> WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
- 4. <u>BEDDING:</u> SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-1500mm).
- 5. <u>INITIAL BACKFILL:</u> SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING TO THE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
- 6. <u>MINIMUM COVER</u>: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

MINIMUM RECOMMENDED	COVER BASED ON VEHICLE	LOADING CONDITIONS

	SURFACE LIVE LOADING CONDITION		
PIPE DIAM.	H-25	HEAVY CONSTRUCTION (75T AXLE LAOD) *	
12" - 48"	12"	48"	
(300mm - 1200mm)	(305mm)	(1219mm)	
60"	24"	60"	
(1500mm)	(610mm)	(1524mm)	

* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER

ADVANCED DRAINAGE SYSTEMS, INC. ("ADS") HAS PREPARED THIS DETAIL BASED ON INFORMATION PROVIDED TO ADS. THIS DRAWING IS INTENDED TO DEPICT THE COMPONENTS AS REQUESTED. ADS HAS NOT PERFORMED ANY ENGINEERING OR DESIGN SERVICES FOR THIS PROJECT, NOR HAS ADS INDEPENDENTLY VERIFIED THE INFORMATION SUPPLIED. THE INSTALLATION DETAILS PROVIDED HEREIN ARE GENERAL RECOMMENDATIONS AND ARE NOT SPECIFIC FOR THIS PROJECT. THE DESIGN ENGINEER SHALL REVIEW THESE DETAILS PRIOR TO CONSTRUCTION. IT IS THE DESIGN ENGINEERS RESPONSIBILITY TO ENSURE THE DETAILS PROVIDED HEREIN MEETS OR EXCEEDS THE APPLICABLE NATIONAL, STATE, OR LOCAL REQUIREMENTS AND TO ENSURE THAT THE DETAILS PROVIDED HEREIN ARE ACCEPTABLE FOR THIS PROJECT.

RECOMMENDED MINIMUM SPACING

PIPE DIAM.	MIN. "X"	MIN. "S" +
12"	8"	12"
(300mm)	(203mm)	(305mm)
15"	8"	12"
(375mm)	(203mm)	(305mm)
18"	9"	12"
(450mm)	(229mm)	(305mm)
24"	10"	12"
(600mm)	(254mm)	(305mm)
30"	18"	15"
(750mm)	(457mm)	(381mm)
36"	18"	18"
(900mm)	(457mm)	(457mm)
42"	18"	21"
(1050mm)	(457mm)	(533mm)
48"	18"	24"
(1200mm)	(457mm)	(610mm)
60"	18"	30"
(1500mm)	(457mm)	(762mm)
	12" (300mm) 15" (375mm) 18" (450mm) 24" (600mm) 30" (750mm) 36" (900mm) 42" (1050mm) 48" (1200mm)	12" 8" (300mm) (203mm) 15" 8" (203mm) 18" 9" (450mm) (229mm) 24" 10" (600mm) (254mm) 30" 18" (750mm) (457mm) 36" 18" (900mm) (457mm) 42" 18" (1050mm) (457mm) 48" 18" (1200mm) (457mm) 60" 18"

MINIMUM SPACING ("S") MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER

4	INITIAL BACKFILL		04/02/20	
REV.	DESCRIPTION	BY	MM/DD/YY	CHK'D

PARALLEL PIPE INSTALLATION DETAIL

DRAWING NUMBER: STD-103



DRAIN 9N CKS

BATE 10/18/06

OKD 9N

SCALE NTS

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