

ADS, Inc. Drainage Handbook Specifications ♦ 1-6

N-12® WT IB PIPE (PER AASHTO) SPECIFICATION

Scope
This specification describes 4- through 60-inch (100 to 1500 mm) N-12 WT IB pipe (per AASHTO) for use in gravity-flow land drainage applications.

Pipe Requirements
N-12 WT IB pipe (per AASHTO) shall have a smooth interior and annular exterior corrugations.

- 4- through 10-inch (100 to 250 mm) pipe shall meet AASHTO M252, Type S.
- 12- through 60-inch (300 to 1500 mm) pipe shall meet AASHTO M294, Type S or ASTM F2306.
- Manning's "n" value for use in design shall be 0.012.

Joint Performance
Pipe shall be joined using a bell & spigot joint meeting the requirements of AASHTO M252, AASHTO M294, or ASTM F2306. The joint shall be watertight according to the requirements of ASTM D3212. Gaskets shall meet the requirements of ASTM F477. Gaskets shall be installed by the pipe manufacturer and covered with a removable, protective wrap to ensure the gasket is free from debris. A joint lubricant available from the manufacturer shall be used on the gasket and bell during assembly. 12- through 60-inch (300 to 1500 mm) diameters shall have an exterior bell wrap installed by the manufacturer.

Fittings
Fittings shall conform to AASHTO M252, AASHTO M294, or ASTM F2306. Bell and spigot connections shall utilize a welded bell and valley or saddle gasket meeting the watertight joint performance requirements of AASHTO M252, AASHTO M294, or ASTM F2306.

Field Pipe and Joint Performance
To assure watertightness, field performance verification may be accomplished by testing in accordance with ASTM F2487. Appropriate safety precautions must be used when field-testing any pipe material. Contact the manufacturer for recommended leakage rates.

Material Properties
Material for pipe and fitting production shall be high-density polyethylene conforming with the minimum requirements of cell classification 424420C for 4- through 10-inch (100 to 250 mm) diameters, and 435400C for 12- through 60-inch (300 to 1500 mm) diameters, as defined and described in the latest version of ASTM D3350, except that carbon black content should not exceed 4%. The 12- through 60-inch (300 to 1500 mm) pipe material shall comply with the notched constant ligament-stress (NCLS) test as specified in Sections 9.5 and 5.1 of AASHTO M294 and ASTM F2306 respectively.

Installation
Installation shall be in accordance with ASTM D2321 and ADS recommended installation guidelines, with the exception that minimum cover in trafficked areas for 4- through 48-inch (100 to 1200 mm) diameters shall be one foot (0.3 m) and for 60-inch (1500 mm) diameter the minimum cover shall be 2 ft. (0.6 m) in single run applications. Backfill for minimum cover situations shall consist of Class 1 (compacted), Class 2 (minimum 90% SPD) or Class 3 (minimum 95%) material. Maximum fill heights depend on embedment material and compaction level; please refer to Technical Note 2.01. Contact your local ADS representative or visit our website at www.adspipe.com for a copy of the latest installation guidelines.

Build America, Buy America (BABA)
N-12 WT IB pipe (per AASHTO), manufactured in accordance with AASHTO M252, AASHTO M294 or ASTM F2306, complies with the requirements in the Build America, Buy America (BABA) Act.

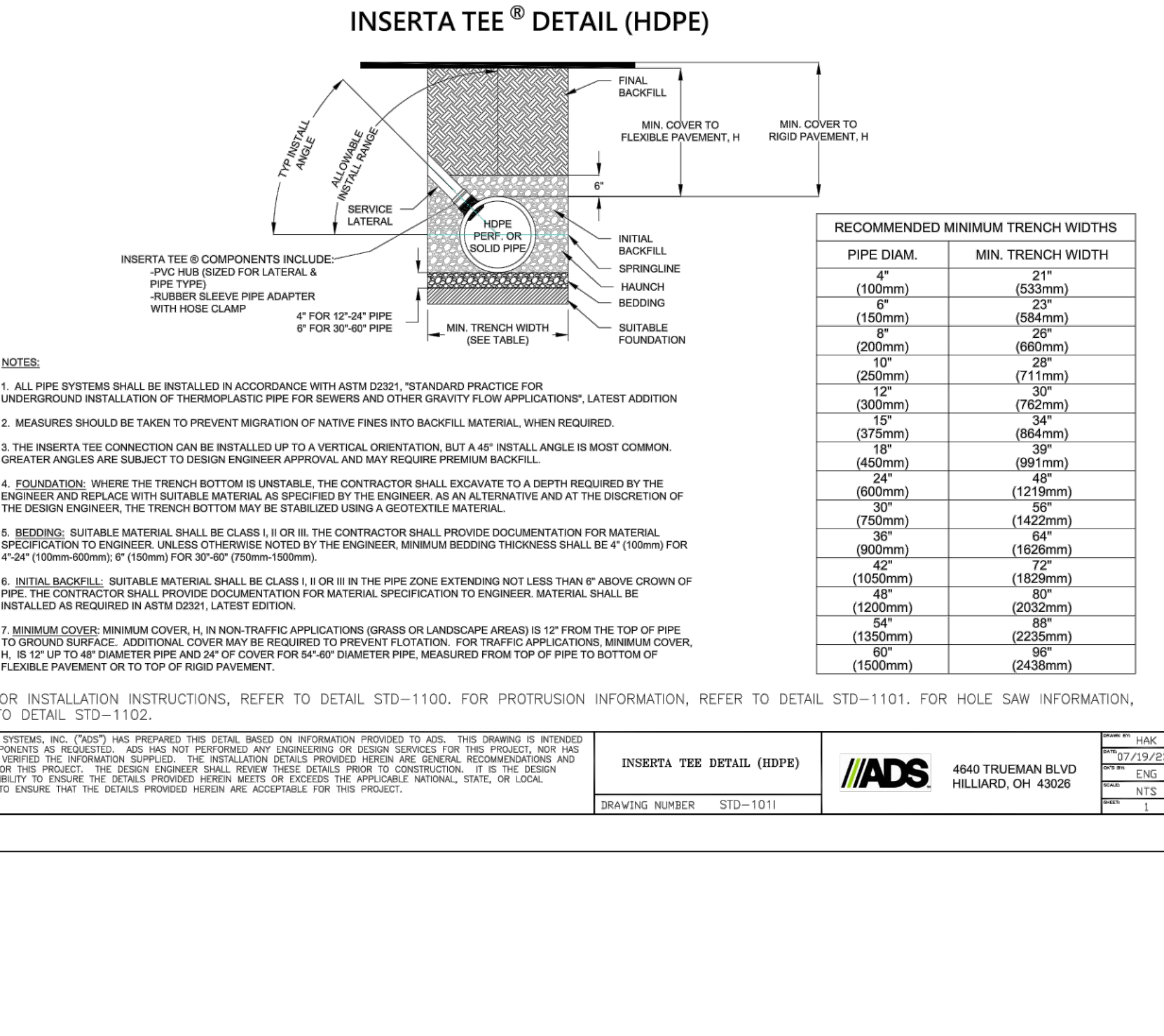
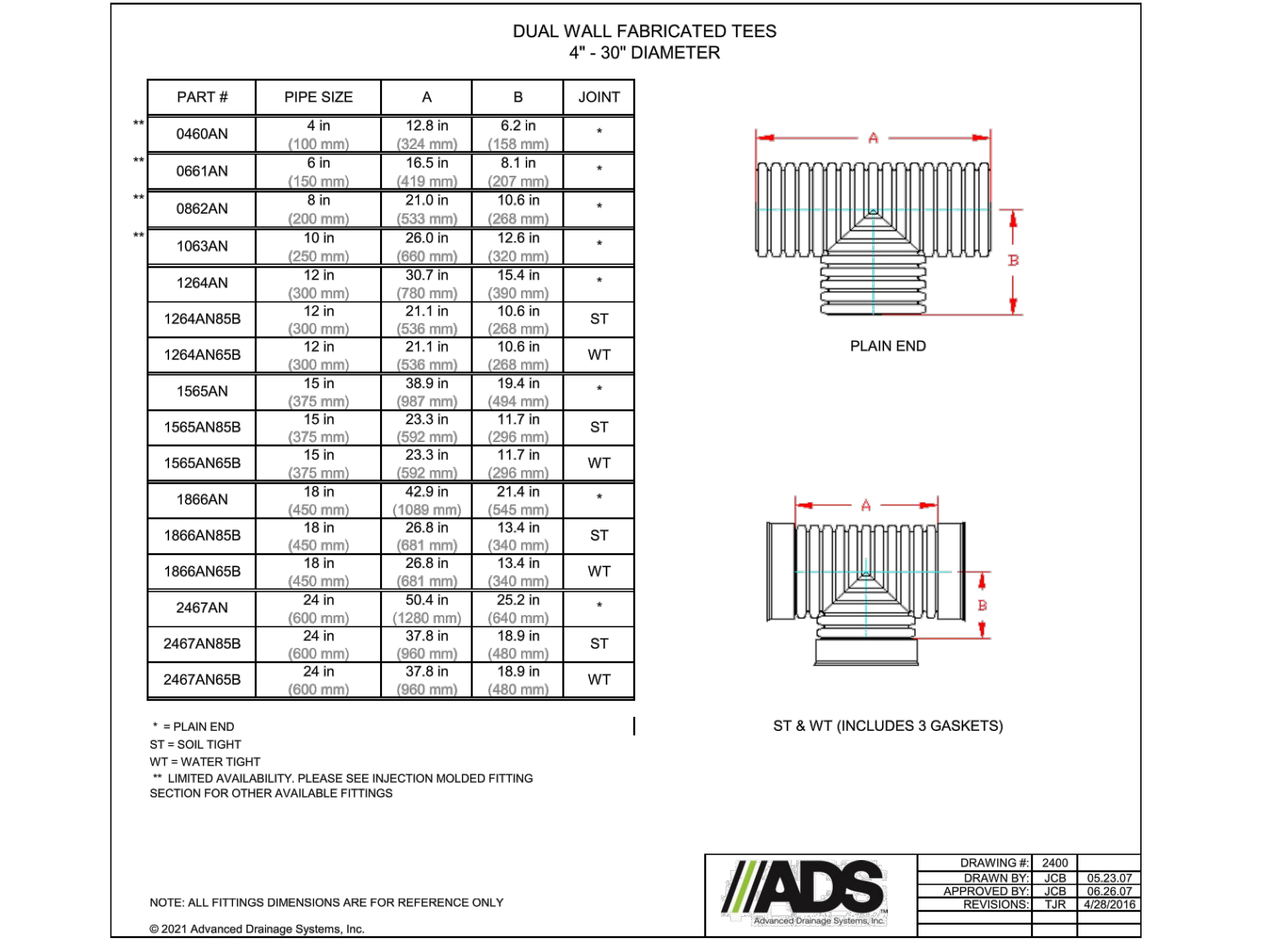
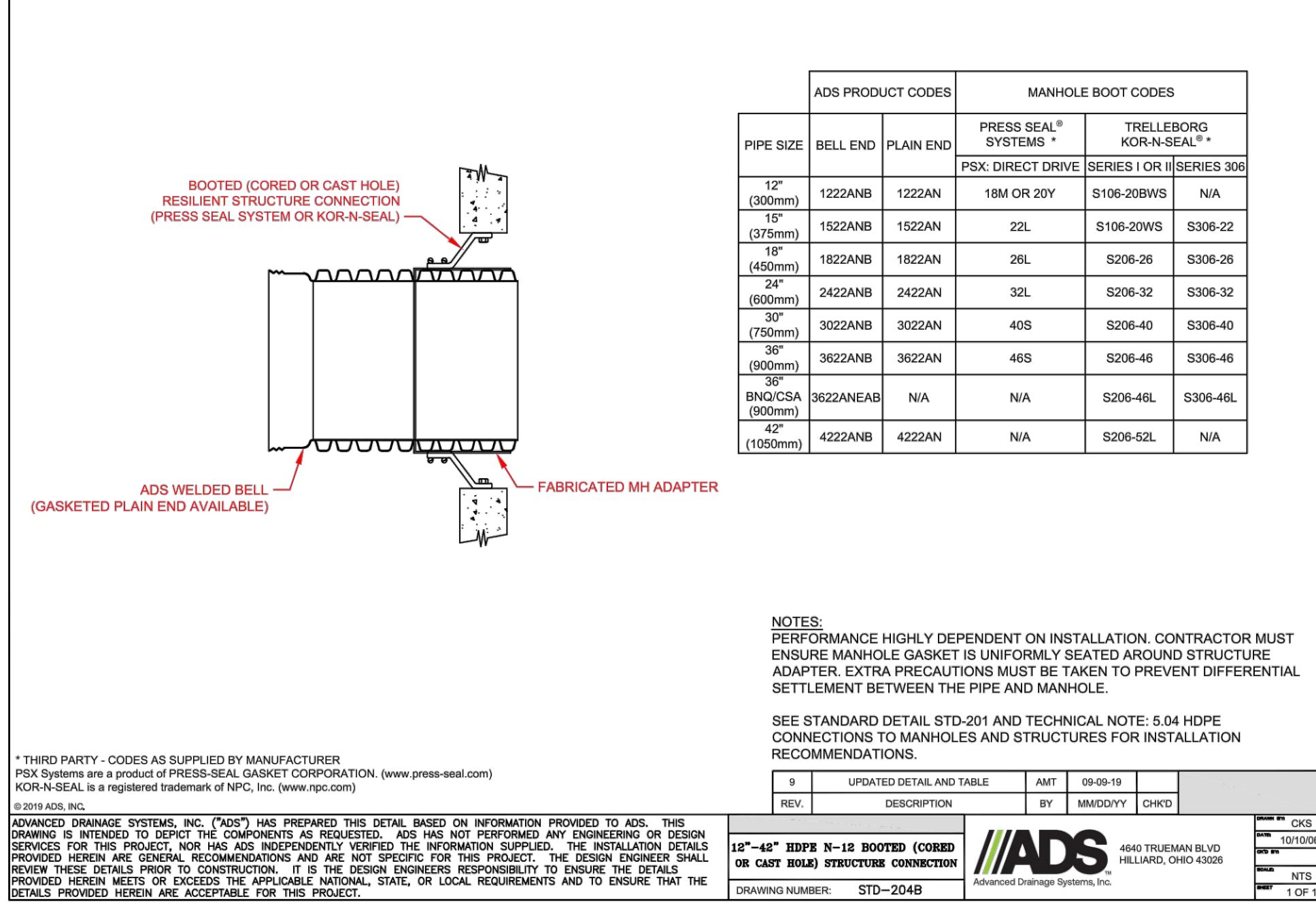
Pipe Dimensions

Pipe O.D.	4	6	8	10	12	15	18	24	30	36	42	48	60
100	150	200	250	300	375	450	600	750	900	1050	1200	1500	
122	175	231	290	368	457	559	711	914	1087	1219	1372	1702	

*Pipe O.D. values are provided for reference purposes only; values stated for 12 through 60-inch are ± 1 inch. Contact a sales representative for exact values.

© ADS, Inc., August 2023

BOOTED (CORED OR CAST HOLE) RESILIENT STRUCTURE CONNECTION
12"-42" HDPE N-12 W/F FABRICATED MH ADAPTER



DATE	REVISIONS	BY
7/30/24	Update Ex. Conditions & internal sidewalks	JSH
8/16/24	ADDENDUM #2	JSH

HARRIS GRAY, LLC
ENGINEERS - SURVEYORS - PLANNERS
CERTIFICATE OF AUTHORIZATION NO. PE006540
804 THIRD AVENUE - WEST POINT, GEORGIA 31839
PHONE: (706) 645-3885

WHITESVILLE ROAD SOCCER COMPLEX
TROUP COUNTY, LAGRANGE GA.
CONSTRUCTION DETAILS 9

DATE: _____
DRAWN BY: HG
CHKD BY: JSH
FILE NAME: DETAILS
JOB NO.: GA230155

GEORGIA REGISTERED PROFESSIONAL ENGINEER
10/06/2023
JOHN SCOTT HARRIS