

ORINATION FORM

Date: Aug 10, 2011

Originator: Gordon Wheeler

Contact Information: 414-4366

Specification Title: Jack And Bore

Specification Section, Article, or Subarticle Number: 556-2

Why does the existing language need to be changed? To reflect current materials and update Industry Standards.

Summary of the changes: See below

Are these changes applicable to all Department jobs? If not, what are the restrictions? Yes

Will these changes result in an increase or decrease in project costs? If yes, what is the estimated change in costs? No

With who have you discussed these changes? Tom Bane

What other offices will be impacted by these changes? Drainage Office

Are changes needed to the PPM, Design Standards, SDG, CPAM or other manual? No

Is a Design Bulletin, Construction Memo, or Estimates Bulletin needed? No

Contact the State Specifications Office for assistance in completing this form.
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ANANTH PRASAD, P.E.
SECRETARY

M E M O R A N D U M

DATE: September 26, 2011
TO: Specification Review Distribution List
FROM: Rudy Powell, Jr., P.E., State Specifications Engineer
SUBJECT: Proposed Specification: **5560200 Jack and Bore.**

In accordance with Specification Development Procedures, we are sending you a copy of a proposed specification change.

This change was proposed by Gordon Wheeler of the State Utilities Office to update the language for consistency with current industry standards.

Please share this proposal with others within your responsibility. Review comments are due within four weeks and should be sent to Mail Station 75 or to my attention via e-mail at SP965RP or rudy.powell@dot.state.fl.us . Comments received after **October 24, 2011**, may not be considered. Your input is encouraged.

RP/dt
Attachment

JACK AND BORE.
(REV 8-18-11)

SUBARTICLE 556-2 (Page 702) Table 556-2.2 is deleted and the following substituted:

Table- 556-2.2 Material Standards Acceptable for J&B and MT Installations		
Material Type	Non-Pressure	Pressure
Ductile Iron (DI)	AWWA- C150/C151 ASTM- A 716	AWWA- C150/C151
Fiberglass Reinforced Polymer Mortar (FRPM)	ASTM- D- 3262	ASTM- D- 3517 AWWA- C950
Polymer Concrete (PC)	DIN- 54815-1 & 2	N/A
Prestressed Concrete Cylinder Pipe (PCCP)	N/A	AWWA- C301
Reinforced Concrete Cylinder Pipe (RCCP)	N/A	ASTM- C 361
Reinforced Concrete Pipe (RCP)	ASTM C 76	ASTM- C 361 AWWA- C300/C302
Steel	ASTM- A 139 Grade- B ⁽¹⁾ API- 2B ⁽²⁾	AWWA- C200 API- 2B ⁽²⁾
Polyvinyl Chloride (PVC)	ASTM- D- 1785	N/A <i>ASTM D 1785</i>
Acrylonitrile Butadiene Styrene (ABS)	ASTM- D- 1527	N/A <i>ASTM D 1527</i>
Reinforced Thermosetting Resin Pipe (RTRP)	ASTM- D- 2296 OR -or ASTM- D 2997	N/A <i>ASTM D 2996 or ASTM D 2997</i>
⁽¹⁾ No hydrostatic test required		
⁽²⁾ Dimensional tolerances only		

SUBARTICLE 556-2.1 (Pages 702 and 703) is deleted and the following substituted:

556-2.1 Steel Pipe Casing and Welds: In addition to meeting or exceeding the conditions contained in Tables 556-2.1 and Table 556-2.2, meet the following requirements:

(a) The size of the steel casing must be at least 6 inches larger than the largest outside diameter of the carrier.

(b) The casing pipe must be straight seam pipe, *spiral seam pipe*, or seamless pipe.

(c) All steel pipe may be bare inside and out, with the manufacturer's recommended minimum nominal wall thicknesses to meet the greater of either installation, loading or carrier requirements.

(d) All steel casing pipe must be square cut and have dead-even lengths which are compatible with the J&B equipment.

Use steel pipe casings and welds meeting or exceeding the thickness requirements to achieve the service life requirements noted in the Department Drainage Manual Chapter 6. For

purposes of determining service life, ensure that casings installed under roadways meet or exceed cross drain requirements and casings under driveways meet or exceed side drain pipe requirements. For purposes of material classification, consider steel pipe casing structural plate steel pipe. Ensure that steel pipe casing of insufficient length achieves the required length through fully welded joints. Ensure that joints are air-tight and continuous over the entire circumference of the pipe with a bead equal to or exceeding the minimum of either that required to meet the thickness criteria of the pipe wall for jacking and loading or service life. A qualified welder must perform all welding.

Table 556-2.2 Material Standards Acceptable for J&B and MT Installations		
Material Type	Non-Pressure	Pressure
Ductile Iron (DI)	AWWA C150/C151 ASTM A716, A747	AWWA C150/C151
Fiberglass Reinforced Polymer Mortar (FRPM)	ASTM D 3262	ASTM D 3517 AWWA C950
Polymer Concrete (PC)	DIN 54815-1 & 2	N/A
Prestressed Concrete Cylinder Pipe (PCCP)	N/A	AWWA C300 <u>AWWA C301</u>
Reinforced Concrete Cylinder Pipe (RCCP)	N/A	ASTM C361
Reinforced Concrete Pipe (RCP)	ASTM C 76	ASTM C361 AWWA C300/C302
Steel	ASTM A139 Grade B ⁽¹⁾ API 2B ⁽²⁾	AWWA C200 API 2B ⁽²⁾
Polyvinyl Chloride (PVC)	ASTM D 1785	N/A <u>ASTM D 1785</u>
Polyethylene (PE)	ASTM D 2447 ASTM D 2513 FOR GAS ≥ 3 Inches	N/A
Polybutylene (PB)	ASTM D 2662	N/A
Cellulose Acetate Butyrate (CAB)	ASTM D 1503	N/A
Acrylonitrile Butadiene Styrene (ABS)	ASTM D 1527	N/A <u>ASTM D 1527</u>
Reinforced Thermosetting Resin Pipe (RTRP)	ASTM D 2296 2996 OR ASTM D2997	N/A <u>ASTM D 2996 OR</u> <u>ASTM D2997</u>
⁽¹⁾ No hydrostatic test required ⁽²⁾ Dimensional tolerances only		

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- (a) The size of the steel casing must be at least 6 inches larger than the largest outside diameter of the carrier.
- (b) The casing pipe must be straight seam pipe, spiral seam pipe, or seamless pipe.
- (c) All steel pipe may be bare inside and out, with the manufacturer's recommended minimum nominal wall thicknesses to meet the greater of either installation, loading or carrier requirements.
- (d) All steel casing pipe must be square cut and have dead-even lengths which are compatible with the J&B equipment.

Use steel pipe casings and welds meeting or exceeding the thickness requirements to achieve the service life requirements noted in the Department Drainage Manual Chapter 6. For purposes of determining service life, ensure that casings installed under roadways meet or exceed cross drain requirements and casings under driveways

meet or exceed side drain pipe requirements. For purposes of material classification, consider steel pipe casing structural plate steel pipe. Ensure that steel pipe casing of insufficient length achieves the required length through fully welded joints. Ensure that joints are air-tight and continuous over the entire circumference of the pipe with a bead equal to or exceeding the minimum of either that required to meet the thickness criteria of the pipe wall for jacking and loading or service life. A qualified welder must perform all welding.