

Materials Inventory of the Belle Chasse Water Distribution System

- I. The Belle Chasse distribution system started service in 1949 and has no lead house service lines between mains and meters.
- II. Materials list for Water Mains:

Pipe:

- (1) Asbestos – cement pipe is Transite conforming to AWWA specifications C400-65.
- (2) Cast iron pipe is ductile cast iron type conforming to ANSI A21.51.
 - A) Pipe with crewed on flange ends is Class 3 thickness
 - B) Pipe with lock joint ends is Class 1 thickness
 - C) Flange ends are 125 pound standard drilled conforming to ANSI A21.10
- (3) PVC pipe for water mains is unplasticized polyvinyl chloride pipe manufactured and factory tested in accordance with AWWA C-900 (Dr-18) for 12" and smaller AWWA C905 (DR-25) for 14" pipe and larger.
 - A) All PVC is made from clean, virgin, approved class 12454-B PVC. Compound conforming to ASTM resin specifications D178.
 - B) Rubber gaskets conform to ASTM D-1869 and E-477.
- (4) Plastic pressure pipe conforms to ASTM specifications 1785, schedule 40, PVC-1 with solvent welded joints
- (5) HDPE PE3408 with minimum cell classification of PE-334434C, high density polyethylene pipe

Fittings:

- (1) All fittings are cast iron when used with asbestos cement pipe, PVC C-900 or C-905 pipe and ductile cast iron pipe. Schedule 40 plastic pressure pipe has schedule 40 or Schedule 80 solvent welded.
 - A) Cast iron fittings are ductile iron in accordance with ANSI/AWWA C153/A21.53 or ANSI/AWWA C110/A21.10. Fittings have cement mortar lining and seal coating, where applicable, in accordance with ANSI/AWWA C104/A21.4.
 - B) Mechanical joint type end conforms to ANSI A21.11
 - C) Flange type end conforms to ANSI A21.10
 - D) Push on type conforms to AWWA specifications C-153.

Fire hydrants:

- (1) Hydrants are UL listed and FM approved conforming to AWWA standard C-502. Hydrants are traffic model break away type.

Valves:

- (1) Valves are cast iron on AWWA C509 resilient wedge gate valves UL 262/FM-1120/1130 or AWWA double disc gate valves meeting the requirements of AWWA C-500.

Butterfly Valves:

- (1) Valves are rubber sealed tight closing type and meet requirements for water application of AWWA specifications C504, Class 150B and full class 150 underground service.

Tapping Sleeves: two types

- (1) Ductile iron mechanical joint tapping sleeve Chemical and physical properties of the ductile iron are in accordance with ANSI/AWWA C110/A21.10-10.82
- (2) Stainless steel = 304L stainless steel, carbon steel, or ductile iron outlet flange which meets all applicable requirements of ANSI B16.1, Class 125 and in accordance with MSS-SP60. Certified to ANSI/NSF61.

Check valves:

- (1) Cast iron body, bronze mounted valves meeting AWWA C-508. With stainless steel hinge pin.

Full circle clamps:

- (1) Full seal stainless steel repair camps are all stainless, 18-8 type 304 stainless steel band, 18-8 type 304 stainless steel side bars. Gridded virgin SBR gasket ASTM D2000. Styrene Butadene Rubber (SBR) compounded for water service. Material for house services.

III.

Corporation Valves:

- (1) Valves constructed of heavy brass components conforming to 85-5-5-5 ASTM B62 brass manufactured and tested to ANSI/AWWA C800-89 standard.

Service Saddles:

- 1) Bronze service saddles-manufactured and tested in accordance with all applicable parts of ANSI/AWWA C800-NSF61 certified. Nitrile o-ring sealed between saddle and water main. It is used on cast iron, ductile iron, steel, AC pipe and AWWA ODC900 PVC pipe
- 2) Nylon Coated Ductile Iron Service Saddles – meets all applicable parts of ANSI/AWWA C800 NSF 61 certified. Has ASTM A345 ductile iron body with Nylon 11 (10-12 mil) coating. Nitrile o-ring gasket. Some have stainless steel strap. Some have bronze straps. No alloy steel straps used.
- 3) Stainless Steel Saddles – 18-8 type 304 stainless steel bolts and nuts. 18-8 type 304 stainless steel band. Buna-N ASTM D2000 rubber o-ring or tapered gasket.

Curb stops and Meter Valves:

- 1) All curb stops must conform to AWWA standard C800-89 (ASTM B-62-UNS No C83600-85-5-5-5) Heavy cast bronze body, EPDM o-ring in stem, molded Buna=N rubber seats and spherical fluorocarbon coated ball.

Tubing:

- 1) PE-polyethylene pipe is high performance high molecular weight, high density conforming to ANSI/AWWA C901. Pipe is the type PE 3408 with minimum cell classification of PE 334434C. Minimum pressure class of 125 PSI with a maximum SDR of 13.5. Installation of stainless steel inserts in PE tubing require at all compression couplings.
- 2) Copper = copper tubing is of $\frac{3}{4}$ " or 1" size and conforms to Federal Specifications WW-T-799 Type K.