

**SDR-35 x C900 BELL & BELL ADAPTERS**

SIZE	CATALOG NO.	OD	ID	L	CTN	QTY W/
4x4	337-040	4.80	4.215	4.86	4.25	10.0
6x6	337-060	6.90	6.275	6.96	6.32	11.13
8x8	337-080	9.05	8.400	9.13	8.45	12.50

**Duckett Creek Sanitary District**

SDR-35 x C900 BELL AND BELL 4" 6" & 8" ADAPTERS

BSM	KLA	MOOB	1-3-01	19C
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**PLASTIC SADDLE TEE OR WYE FITTING (SOLVENT WELD)**

WHEN CONNECTION TO A PLASTIC PIPE IS ALLOWED AND A CONNECTION IS LARGER THAN 6" IN DIAMETER, A SOLVENT WELD WYE OR TEE FITTING OF A SIMILAR MATERIAL MUST BE USED. (EXAMPLE: 10" x 6")

THIS IS ACCOMPLISHED BY CAREFULLY CUTTING A HOLE WITH A SAW IN THE MAIN AT THE REQUIRED LOCATION AFTER CUTTING AND SHAPING THE HOLE TO THE SIZE OF THE FITTING. THE FOLLOWING STEPS SHOULD BE TAKEN:

- CLEAN AND DRY BOTH INSIDE THE SADDLE WYE SURFACE AND PIPE SURFACE TO BE SOLVENT CEMENTED.
- APPLY A LIBERAL BEAD OF ONE-COMPONENT SOLVENT CEMENT TO THE INSIDE SURFACE OF THE SADDLE WYE AND TO THE EXTERIOR BEARING SURFACE TO THE PVC.
- WITHOUT DELAY Wipe the surfaces and strap down tightly. A bead of solvent should appear after the saddle has been strapped down tightly.
- USE A BAG OF PAPER TISSUE, WIFE HEAD AND ANY EXCESS SOLVENT CEMENT OFF PIPE AND SADDLE.
- ALLOW 30-60 MINUTES FOR SET-UP TIME BEFORE BACKFILLING. CURE TIME DEPENDS ON SIZE FIT OF MATERIALS BEING INSTALLED AND VARIOUS CLIMATIC CONDITIONS.
- DISCARD OLD SOLVENT IF IT BECOMES JELLED OR LUMPY.
- A CLEAN, DRY BEARING SURFACE IS REQUIRED AROUND THE COMPLETED CONNECTION BEFORE BACKFILLING. THE BEARING SURFACE SHOULD BE ONE OF THE FOLLOWING:
  - 1 TO 3 CMENT TO SAND MIX
  - THE-WAY CONCRETE
  - CESS APPROVED BEDDING FOR SANITARY SEWERS

**Duckett Creek Sanitary District**

3" & LARGER CONNECTION TO PLASTIC MAIN

BSM	KLA	MOOB	1-4-01	20A
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**INSERTA TEE THE USE OF AN INSERTA TEE REQUIRES DISTRICT APPROVAL.**

**INSTALLATION PROCEDURE:**

- CORE THE PROPER SIZE HOLE. SEE SIZE CHART.
- INSERT THE RUBBER SLEEVE (1) IN THE CORED HOLE WITH THE GOLD VERTICAL LINE ON THE RUBBER SLEEVE (2) FACING TO THE SIDE OF THE MAIN LINE. THE UPPER SEGMENT SHOULD BE ON TOP OF THE WALL, TOP AND THE LOWER SEGMENT (PVC, PROFILE WALL AND POLYETHYLENE PIPE ONLY) SHOULD BE ON THE INSIDE OF THE PIPE.
- APPLY THE INSERTA TEE SOLUTION SUPPLIED TO THE INSIDE OF THE RUBBER SLEEVE AND TO THE OUTSIDE OF THE PVC HUB ADAPTER. **CAUTION - DO NOT USE AN OIL BASED LUBRICANT.**
- PLACE THE PVC HUB ADAPTER (3) INTO THE RUBBER SLEEVE. MAKE SURE THAT THE RED VERTICAL LINE (4) ON THE PVC HUB ADAPTER IS IN LINE WITH THE GOLD VERTICAL LINE (5) ON THE RUBBER SLEEVE.
- PLACE THE 2x4 BOARD OVER THE TOP OF THE PVC HUB ADAPTER.
- THE RED HORIZONTAL LINE (6) AT THE TOP OF THE HUB ADAPTER IS A DEPTH MARK. THIS TELLS THE INSTALLER HOW FAR TO DRIVE THE ADAPTER INTO THE RUBBER SLEEVE. DRIVE THE PVC HUB ADAPTER INTO THE RUBBER SLEEVE TO WHERE THE HORIZONTAL RED LINE (6) ON THE PVC HUB ADAPTER (3) MEETS THE TOP OF THE RUBBER SLEEVE (5).
- PLACE THE STAINLESS STEEL BAND (7) AROUND THE TOP OF THE RUBBER SLEEVE AND TIGHTEN DOWN.
- INSTALL PIPE IN NORMAL MANNER.

**Duckett Creek Sanitary District**

INSERTA TEE DETAILS AND SPECIFICATIONS

BSM	KLA	MOOB	1-4-01	20B
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**ROLL-IN (FOR EXISTING CLAY OR CONCRETE PIPE)**

NOTES:

- WHEN A CONNECTION IS ALLOWED LARGER THAN 6" DIAMETER A SADDLE MAY BE USED IF THE I.D. OF THE CONNECTION PIPE IS NOT GREATER THAN ONE HALF (1/2) OF THE I.D. OF THE MAIN SEWER. (EXAMPLE: 14" x 10")
- IF THE I.D. OF THE CONNECTION PIPE IS GREATER THAN ONE HALF (1/2) OF THE I.D. OF THE MAIN SEWER THE WYE OR TEE MUST BE "ROLLED IN". (EXAMPLE: 15" x 8")
- THIS IS ACCOMPLISHED BY BREAKING AWAY AND REMOVING ONE SECTION OF PIPE, THE TOP HALF OF THE BELL ON THE PIPE LINE ADJACENT TO THE GAP IS CAREFULLY BROKEN OFF. THE TOP HALF OF THE BELL ON THE MAIN REPLACEMENT SECTION (WITH A "WYE" FITTING IS ALSO BROKEN OFF. THE REPLACEMENT PIPE IS THEN PLACED IN THE LINE GAP WITH THE SEAM POINTED IN THE WRING DIRECTION. THE BROKEN BELLS ON THE REPLACEMENT AND ADJACENT PIPE WARE IF POSSIBLE FOR THE REPLACEMENT SECTION TO FIT INTO THE SEAM LINE WITHOUT DISTURBING THE ADJACENT PIPE SECTION. THE REPLACEMENT SECTION IS THEN REINSTALLED TO THE DESIRED POSITION AND THE BROKEN BELLS ARE ENCASED WITH A 4" CLASS "X" CONCRETE ENCASEMENT.
- I.D. OF MAIN SEWER SHALL NOT BE DECREASED BY A ROLL-IN CONNECTION.

**Duckett Creek Sanitary District**

BSM	KLA	MOOB	1-5-01	21
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**SUPPORT OF CARRIER PIPE OR FORCE MAIN IN CASING**

APPROVED CLOSURES ON 1/8" BEND

CLASS "X" CONCRETE ENCASEMENT 6" MIN.

PIPE TO BE 6" IN DIAMETER

WILL REQUIRE SMOOTH TRANSITION REDUCER AT EACH END IF LINE SIZE IS LESS THAN 4"

ALL PIPE TO BE DUCTILE IRON PIPE

1800' MAXIMUM SPACING

**Duckett Creek Sanitary District**

FORCE MAIN CLEANOUT (6" DIA. & SMALLER)

BSM	KLA	MOOB	1-5-01	22
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**BORING DETAIL**

NOTES:

- INSIDE DIAMETER OF CASING PIPE TO BE MINIMUM OF 4" GREATER THAN COUPLING DIAMETER OF CARRIER PIPE.
- ENCASEMENTS TO BE INSTALLED UNDER THE ROAD BY MEANS OF JACKING IT THROUGH, OR BY DRILLING A HOLE THAT WILL RECEIVE THE CASING WITH A SLEEVE FIT.
- THE OUTSIDE DIAMETER OF THE CASING SHALL NOT BE LESS THAN, NOR MORE THAN ONE INCH GREATER THAN THE BORED HOLE.
- THE ANNULAR SPACE BETWEEN THE CASING PIPE AND THE BORED HOLE SHALL BE FILLED WITH GROUT.

**SUPPORT OF CARRIER PIPE OR FORCE MAIN IN CASING**

SECTION A-A'

**Duckett Creek Sanitary District**

ROADWAY BORING DETAIL

BSM	KLA	MOOB	1-5-01	23
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**DUCKETT CREEK SANITARY DISTRICT**

TYPICAL CREEK CROSSING

NOTES:

- GRouted RIP-RAP IS REQUIRED AT ALL CREEK CROSSINGS WHERE THE EMBANKMENTS CROSSED ARE STEEPER THAN 1 VERTICAL TO 2 HORIZONTAL. BARD SLOPE, AND ALSO WHERE THERE IS 2 FEET OR LESS COVER OVER THE TOP OF THE SEWER MAIN.
- PLACE RIP-RAP ON LOWER 3/4 OF SLOPE. GRADE UPPER 1/4 OF SLOPE AT 1 VERTICAL TO 2 HORIZONTAL. SLOPE FOR 500' OR 1 VERTICAL TO 2.5 HORIZONTAL. SLOPE FOR SEED AND STRAW.
- RIP-RAP TO BE MID 3' GRAVATION. MINIMUM 12" THICK. GROUTED WITH 8 SACK MIX SAND-CEMENT SLURRY. BROWN FINISH.
- INCORPORATE A 3 FEET DEEP TOE WALL ON EMBANKMENT'S UPPER EDGE OF RIP-RAP.
- TOP SURFACE OF RIP-RAP SHOULD NOT BE HIGHER THAN ADJACENT GROUND SURFACE.
- IF PIPE HAS LESS THAN 12" COVER, A FISHED CHANNEL MAY BE REQUIRED.
- DUCTILE IRON PIPE IS REQUIRED WITHIN THE CREEK LIMITS.

BSM	KLA	MOOB	1-8-01	24
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**METAL FRAME AND COVER TYPE CLEANOUT**

**ADJUSTABLE HEAD TYPE CLEANOUT**

**Duckett Creek Sanitary District**

TYPICAL SEWER LATERAL CLEANOUT DETAILS

BSM	KLA	MOOB	1-8-01	25
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**Duckett Creek Sanitary District**

TYPICAL SANITARY SEWER LATERAL PROFILE

NOTE: DIFFERENCE IN DEPTH INCREASES WITH PIPE SIZE

BSM	KLA	MOOB	1-9-01	26
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**Duckett Creek Sanitary District**

SANITARY SEWER LATERAL RISER DETAIL

NOTE: PROVIDE DCSD TYPICAL SCHEDULED BEDDING TO SUPPORT LATERAL WITHIN LINE OF ACTUAL EXCAVATION

BSM	KLA	MOOB	1-9-01	27
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**Duckett Creek Sanitary District**

LOW PRESSURE SEWER MAIN CONNECTION AT MANHOLE

NOTE: INVERT-BOTTOM SHALL BE WORKED TO PROVIDE POSITIVE DRAINAGE THROUGH MANHOLE

BSM	KLA	MOOB	1-9-01	28
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**Duckett Creek Sanitary District**

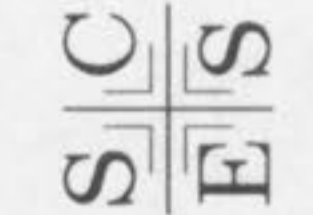
THRUST BLOCK DETAIL AND SIZE SCHEDULE

MANHOLE SIZE	A x B	A x B	A x B	A x B
24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"
30"	30" x 30"	30" x 30"	30" x 30"	30" x 30"
36"	36" x 36"	36" x 36"	36" x 36"	36" x 36"
42"	42" x 42"	42" x 42"	42" x 42"	42" x 42"

BSM	KLA	MOOB	1-9-01	29
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HIDDEN CREEK  
SANITARY DETAILS 2

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