

### SOB-35 x C900 BELL & BELL ADAPTERS

SIZE	CATALOG NO.	OD	OD	ID	ID	L	CTN	CTN
		4x4	6x6	8x8	10.0	10.0	1	4
4x4	337-040	4.80	4.215	4.86	4.25	10.0	1	4
6x6	337-060	6.90	6.275	6.96	6.32	11.13	1	8
8x8	337-080	8.05	8.400	8.13	8.45	12.50	1	15

Duckett Creek Sanitary District  
SOB-35 x C900 BELL AND BELL 4" & 6" ADAPTERS  
Sheet No. BSM 1-3-01, Detail No. 19C

### 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: 15" x 8")

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 SOLVENT TO A LIGHT, HEAVY COAT OF ONE-STEP SOLVENT CEMENT TO THE INNER SURFACE OF THE SADDLE WYE AND TO THE EXTERIOR SURFACE OF THE PIPE.
- WITHOUT DELAY, MATE THE SURFACES AND STRAP DOWN TIGHTLY. A BEAD OF SOLVENT SHOULD APPEAR AFTER THE SADDLE HAS BEEN STRAPPED DOWN TIGHTLY.
- USING A RAG OR PAPER TOWEL, Wipe BEAD 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 COLD DAMP CONDITIONS.
- DISCARD OLD SOLVENT IF IT BECOMES JELLED OR LUMPY.
- A CLEAN, DRY BEADING MATERIAL IS REQUIRED AROUND THE COMPLETED CONNECTION BEFORE BACKFILLING. THE BEADING MATERIAL SHOULD BE ONE OF THE FOLLOWING:
  - 1 TO 3 CEMENT TO SAND MIX
  - "MIX" CONCRETE
  - SOIL APPROVED BEDDING FOR SANITARY SEWERS

Duckett Creek Sanitary District  
8" & LARGER CONNECTION TO PLASTIC MAIN  
Sheet No. BSM 1-4-01, Detail No. 20A

### INSERTA TEE

THE USE OF AN INSERTA TEE REQUIRES STRICT ATTENTION.

#### INSTALLATION PROCEDURE

- CORR. THE PROPER SIZE HOLE. HUB SIZE: 4" 6" 8" 10" 12" 15"  
RUBBER SLEEVE: 4" 6" 8" 10" 12" 15"
- BOURNE THE RUBBER SLEEVE (1) IN THE CORRED HOLE WITH THE GOLD VERTICAL LINE ON THE RUBBER SLEEVE. (2) TACING TO THE END OF THE MAIN LINE. THE UPPER SEGMENT SHOULD BE ON TOP OF THE WALL OR THE 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 (1) INTO THE RUBBER SLEEVE. MAKE SURE THAT THE RED VERTICAL LINE (2) ON THE PVC HUB ADAPTER IS IN LINE WITH THE GOLD VERTICAL LINE (3) ON THE RUBBER SLEEVE.
- PLACE THE 2x4 BOARD INTO THE TOP OF THE PVC HUB ADAPTER.
- THE RED HORIZONTAL LINE (4) AT THE TOP OF THE HUB ADAPTER IS A DEPTH MARK THAT 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 (4) ON THE PVC HUB ADAPTER MEETS THE TOP OF THE RUBBER SLEEVE (3).
- PLACE THE STAINLESS STEEL BAND (5) AROUND THE TOP OF THE RUBBER SLEEVE AND TIGHTEN DOWN.
- INSTALL PIPE IN NORMAL MANNER.

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INSERTA TEE DETAILS AND SPECIFICATIONS  
Sheet No. BSM 1-4-01, Detail No. 20B

### 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) THE I.D. OF THE MAIN SEWER. (EXAMPLE: 24" x 10")
- IF THE I.D. OF THE CONNECTION PIPE IS GREATER THAN ONE HALF (1/2) 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 BEING ADJACENT TO THE GAP IS CAREFULLY BROKEN OFF. THE TOP HALF OF THE BELL ON THE MAIN REPLACEMENT SECTION (WITH A "TEE" WYE) FITTING IS ALSO BROKEN OFF. THE REPLACEMENT PIPE IS THEN PLACED IN THE LINE GAP WITH THE GASKET POINTS IN THE WYING DIRECTION. THE BROKEN BELLS ON THE REPLACEMENT AND ADJOINING PIPE MAKE IT POSSIBLE FOR THE REPLACEMENT SECTION TO FIT INTO THE SEWER LINE WITHOUT DISTURBING THE ADJOINING PIPE SECTIONS. THE REPLACEMENT SECTION IS THEN INSTALLED TO THE DESIRED POSITION AND THE BROKEN BELLS ARE ENCASED WITH A 4" CLASS "A" CONCRETE ENCASUREMENT.
- I.D. OF MAIN SEWER SHALL NOT BE DECREASED BY A ROLL-IN CONNECTION.

Duckett Creek Sanitary District  
Sheet No. BSM 1-5-01, Detail No. 21

### FOREL MAIN CLEANOUT (6" DIA. & SMALLER)

APPROVED CLOSURES ON 1/2" BEND

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

ALL PIPE TO BE DUCTILE IRON PIPE

1800' MAXIMUM SPACING

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Sheet No. BSM 1-5-01, Detail No. 22

### BORING DETAIL

NOTES:

- INSIDE DIAMETER OF CASING PIPE TO BE MINIMUM OF 4" GREATER THAN COUPLING DIAMETER OF CARRIER PIPE.
- ENCASUREMENTS TO BE INSTALLED UNDER THE ROAD BY MEANS OF JACKING IT THROUGH OR BY DIGGING A HOLE THAT WILL RECEIVE THE CASING WITH A DRILL BIT.
- 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  
Sheet No. BSM 1-5-01, Detail No. 23

### TYPICAL CREEK CROSSING

NOTES:

- GRADED RFP-RAP IS REQUIRED AT ALL CREEK CROSSINGS WHERE THE EMBANKMENTS CROSSED ARE STEEPER THAN 1 VERTICAL TO 2 HORIZONTAL RATIO SLOPE, AND ALSO WHERE THERE IS 3 FEET OR LESS COVER OVER THE TOP OF THE SEWER MAIN.
- PLACE RFP-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.
- RFP-RAP TO BE "NO. 3" GRAVATION, MINIMUM 12" THICK, GRADED WITH 8 SACK MIX, SAND-CEMENT SLURRY, BROOM FINISH.
- INCORPORATE A 3 FEET DEEP TOE WALL ON EMBANKMENT'S UPPER EDGE OF RFP-RAP.
- TOP SURFACE OF RFP-RAP SHOULD NOT BE HIGHER THAN ADJACENT GROUND SURFACE.
- IF PIPE HAS LESS THAN 12" COVER, A PAVED CHANNEL MAY BE REQUIRED.
- DUCTILE IRON PIPE IS REQUIRED WITHIN THE CREEK LIMITS.

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Sheet No. BSM 1-8-01, Detail No. 24

### METAL FRAME AND COVER TYPE CLEANOUT

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Sheet No. BSM 1-8-01, Detail No. 25

### TYPICAL SANITARY SEWER LATERAL PROFILE

NOTE: DIFFERENCE IN DEPTH INCREASES WITH PIPE SIZE

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Sheet No. BSM 1-9-01, Detail No. 26

### SANITARY SEWER LATERAL RISER DETAIL

PROVIDE DCSO TYPICAL GRANULAR BEDDING TO SUPPORT LATERAL, WITHIN LINE OF ACTUAL EXCAVATION

Duckett Creek Sanitary District  
Sheet No. BSM 1-9-01, Detail No. 27

### LOW PRESSURE SEWER MAIN CONNECTION AT MANHOLE

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

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Sheet No. BSM 1-9-01, Detail No. 28

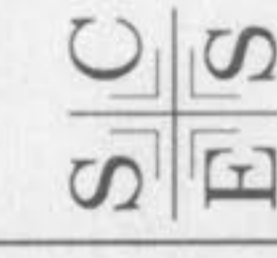
### THRUST BLOCK DETAIL AND SIZE SCHEDULE

MAN SIZE	A x B	A	B	A x B	A	B	A x B	A	B
24"	24"	24"	24"	24"	24"	24"	24"	24"	24"
4"	1' x 1'	1' x 1'	1' x 1'	1' x 1'	1' x 1'	1' x 1'	1' x 1'	1' x 1'	1' x 1'
6"	1' x 1'	1.5' x 1'	2' x 1'	2' x 1'	1.5' x 1'	1.5' x 1'	2' x 1'	2' x 1'	2' x 1'

Duckett Creek Sanitary District  
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IMPROVEMENT PLANS  
PEACEFUL VALLEY  
SANITARY DETAILS 2

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