

## NOTES:

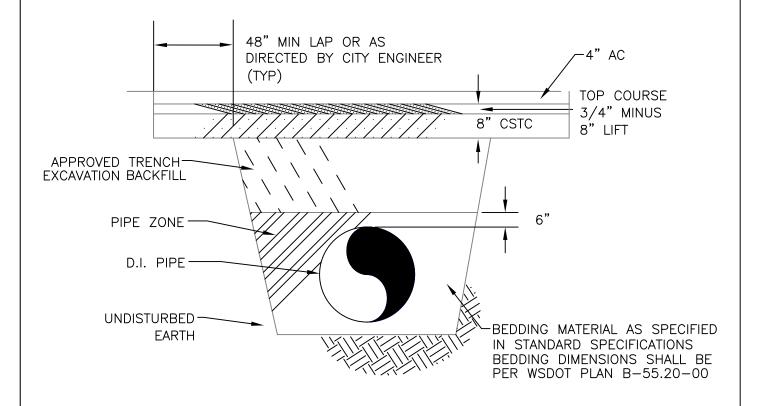
- 1. MAXIMUM WIDTH OF TRENCH AT TOP OF PIPE \*30 INCHES FOR PIPE UP TO AND INCLUDING 15" NOMINAL DIAMETER. 1.5 I.D. PLUS 18 INCHES FOR PIPE LARGER THAN 18" NOMINAL DIAMETER.
- 2. IN PAVED AREAS USE CRUSHED ROCK BACKFILL:

  \*FULL DEPTH OF TRENCH BELOW PAVEMENT SECTION WHERE SEWER MAIN

  CROSSES PERPENDICULAR TO THE TRAVELED LANE OR DRIVEWAY.

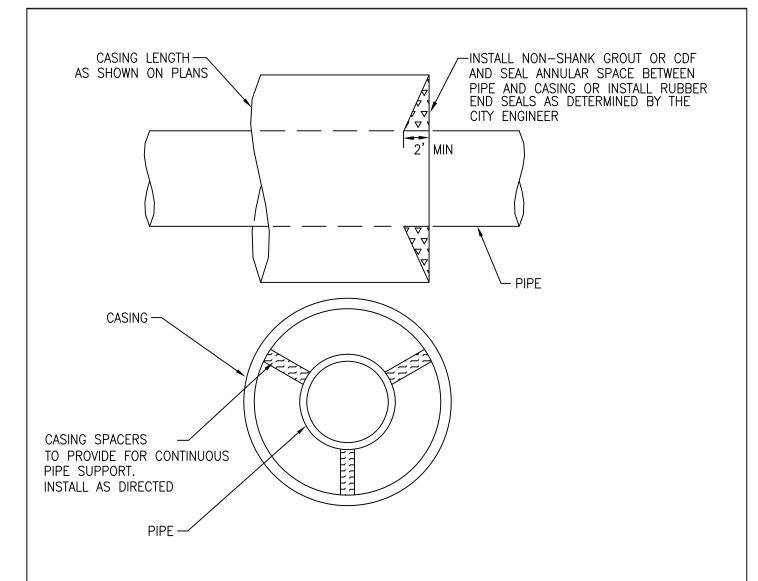
  \*TOP FOUR FEET BELOW PAVEMENT SECTION WHERE SEWER MAIN RUNS PARALLEL

  TO THE TRAVELED LANE
- 3. TRENCH BACKFILL BELOW TOP FOUR FEET SHALL CONFORM TO WSDOT STANDARD SPECIFICATIONS (SELECT BANK RUN), OR MATERIAL TO BE APPROVED BY CITY ENGINEER.



## **NOTES:**

1. BACKFILL FOR TRENCHES TRANSVERSE TO THE ROADWAY SHALL BE 3/4" MINUS CRUSHED SURFACING TOP COURSE OR CONTROL DENSITY FILL (CDF).
2. BACKFILL FOR TRENCHES LONGITUDINAL TO THE ROADWAY SHALL BE IMPORTED BACKFILL CONFORMING TO THE WSDOT SPECIFICATIONS IN EFFECT AT THE TIME OF CONSTRUCTION. THE USE OF NATIVE BACKFILL MUST BE SPECIFICALLY APPROVED BY THE CITY ENGINEER.



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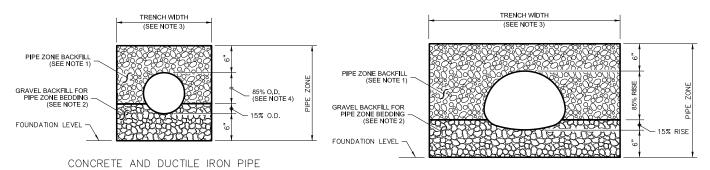
- 1. COMPLY WITH ALL REGULATORY REQUIREMENTS OF JURISDICTIONAL AUTHORITY.
- 2. CASING SPACERS CAN BE RANGER II OR EQUAL, AS DETERMINED BY THE CITY ENGINEER.
- 3. SLEEVE DIAMETER SHALL BE TWICE THE CARRIER PIPE DIAMETER, UNLESS DETERMINED OTHERWISE BY THE CITY ENGINEER.
- 4. A MINIMUM OF 2 SPACERS PER JOINT SHALL BE REQUIRED.
- 5. SPACERS SHALL BE PLACED A MAXIMUM OF 2 FEET FROM EACH JOINT.
- 6. SPACERS SHALL BE PLACED EVENLY ALONG THE CARRIER PIPE SUCH THAT EACH SPACER SUPPORTS THE SAME UNIT WEIGHT OF THE CARRIER PIPE, BUT IN NO CIRCUMSTANCE SHALL THE SPACING BE BE MORE THAN 8 FEET.
- 7. FOR STREAM CROSSINGS, A 2-INCH GALVANIZED VENT IS REQUIRED AT THE HIGH END OF THE CASING.
  THE VENT OPENING SHALL BE 3 FEET ABOVE GRADE AND HAVE AN INSECT SCREEN WELDED TO THE END.
  THE VENT PIPE SHALL BE SECURED TO A POST OR OTHER SUPPORT AS REQUIRED BY THE CITY ENGINEER.



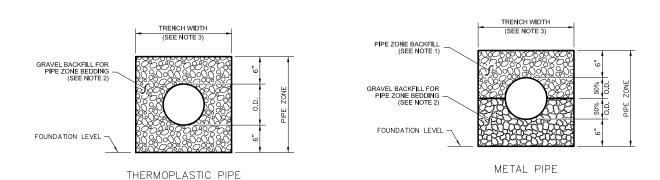
CITY OF POULSBO DEPARTMENT OF PUBLIC WORKS

Pipe Casing

Detail 6-04
Approval Date:
July 1, 2008



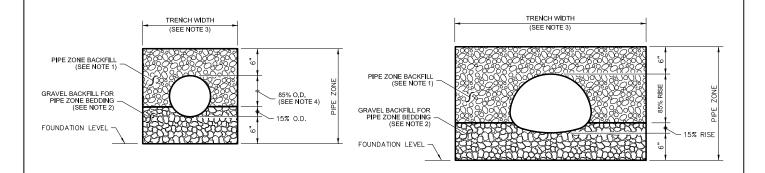
PIPE ARCHES

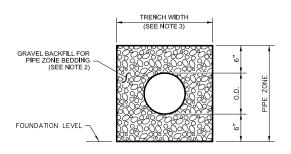


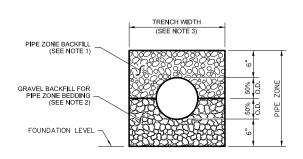
CLEARANCE BETWEEN PIPES FOR MULTIPLE INSTALLATIONS			
PIPE	SIZE	MINIMUM DISTANCE BETWEEN BARRELS	
CIRCULAR PIPE (DIAMETER)	12" to 24"	12"	
	30" to 96"	DIAM. /2	
	102" to 180"	48"	
PIPE ARCH (SPAN) METAL ONLY	18" to 36"	12"	
	43" to 142"	SPAN /3	
	148" to 200"	48"	

## NOTES

- 1. See WSDOT Standard Specifications Section 7-08.3(3) for Pipe Zone Backfill.
- 2. See WSDOT Standard Specifications Section 9-03.12(3) for Gravel Backfill for Pipe Zone Bedding.
- 3. See WSDOT Standard Specifications Section 2-09.4 for Measurement of Trench Width.







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