



LAYING CONDITION	BEDDING	HAUNCHING	INITIAL BACKFILL	REMAINING BACKFILL
1	CONCRETE ENCASEMENT	(SEE CITY STANDARD DETAIL)		
2	CRA #68	CRA #68	CRA #68	#21A AGGREGATE
3	CRA #68	CRA #68	CRA #68	LM (85% NO LOAD - 95% LIVE LOAD)
4	CRA #68	CRA #68	SLM (95%)	LM (85% NO LOAD - 95% LIVE LOAD)
5*	SH (95%)	(REFER TO LAYING CONDITION 6 OR 7)		
6*	CRA #68	CRA #68	SLM (95%)	LM (85% NO LOAD - 95% LIVE LOAD)
7*	CRA #68	CRA #68	SLM (95%)	#21A AGGREGATE

\* CLAY CUTOFF DAMS ARE REQUIRED EVERY 400' OR AS DIRECTED BY THE CITY UTILITY INSPECTOR. CUTOFF DAM MUST BE FULL TRENCH DEPTH AND MINIMUM 2 FEET THICK.

**PIPE TRENCH APPLICATIONS:**

DUCTILE IRON WATER PIPE	LAYING CONDITION 6
DUCTILE IRON WATER PIPE IN EXISTING PAVEMENT	LAYING CONDITION 7
DUCTILE IRON WATER PIPE WITH ROCK UNDERCUT	LAYING CONDITION 5
DUCTILE IRON SEWER PIPE	LAYING CONDITION 4
DUCTILE IRON SEWER PIPE IN EXISTING PAVEMENT	LAYING CONDITION 2
PVC SEWER PIPE	LAYING CONDITION 3
PVC SEWER PIPE IN EXISTING PAVEMENT	LAYING CONDITION 2

**NOTES:**

- A) COMPACTION SHOWN IN PARENTHESES SHALL BE DETERMINED BY ASTM D 698
- B) MINIMUM SPECIFICATION: TRENCHES UNDER PAVEMENTS, SIDEWALKS, ROADS, & BUILDINGS SHALL BE COMPACTED TO 95% DENSITY AS DETERMINED BY ASTM D 698, 6 INCH MAXIMUM LIFTS.
- C) IF NOT SPECIFIED OTHERWISE, MINIMUM COMPACTION SHALL BE BY ROLLING WITH EARTH-MOVING EQUIPMENT.
- D) CRA SHALL BE VIBRATED USING A PLATE VIBRATOR OR SIMILAR EQUIPMENT TO REDUCE VOIDS AND LIMIT SETTLEMENT.

**DESIGNATION**

**DESCRIPTION OF BACKFILL MATERIALS**

CRA	COARSE AGGREGATE: VDOT SIZE AS SHOWN IN PARENTHESES
SLM	SELECT LOCAL MATERIAL: FREE OF DEBRIS, ROOTS, FROZEN MATERIALS, ORGANIC MATTER, STONES GREATER THAN 1" DIAMETER. UNIFIED SOILS CLASSIFICATION: ML/CL/MH/CH
LM	LOCAL MATERIALS: FREE OF STONES GREATER THAN 5" DIAMETER AND FOREIGN MATERIALS.
SH	WHERE USED AS BEDDING FOR ROCK UNDERCUT, USE MATERIAL WITH SOME PLASTIC TENDENCIES SUCH TO SEAL ROCK FISSURES, SUCH AS SHALE-CLAY MIX.

NOT TO SCALE

**REVISIONS**

NO.	DATE	DESCRIPTION	INIT.
1.	7/01/04	2004 D&CSM UPDATE	SDC
2.	2/22/06	VDEQ REVIEW COMMENTS	DHG
3.	6/07/16	MOD. FOR POLYWRAP	DHG

**PIPE TRENCH DETAIL**

DWG. NO.

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