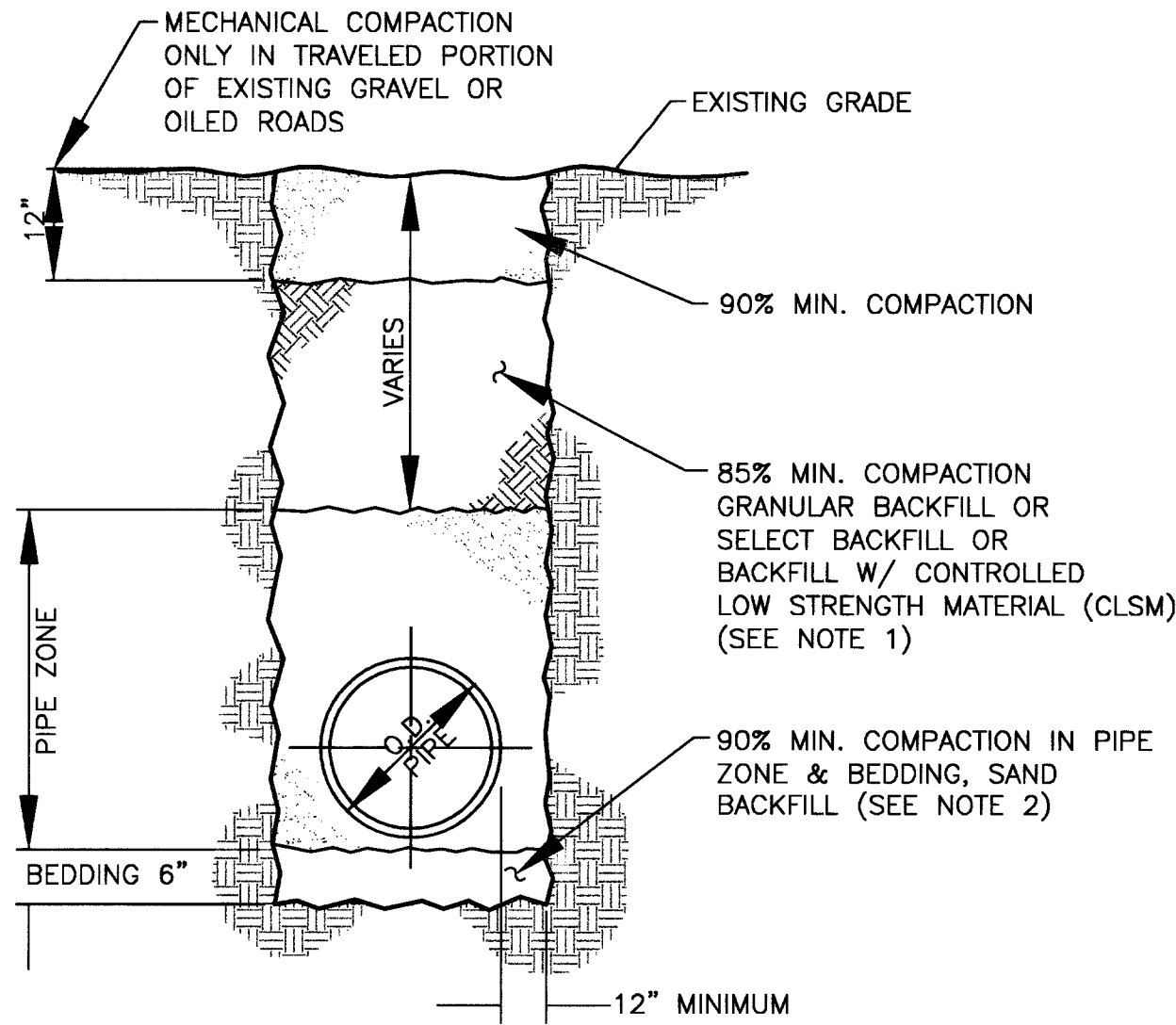
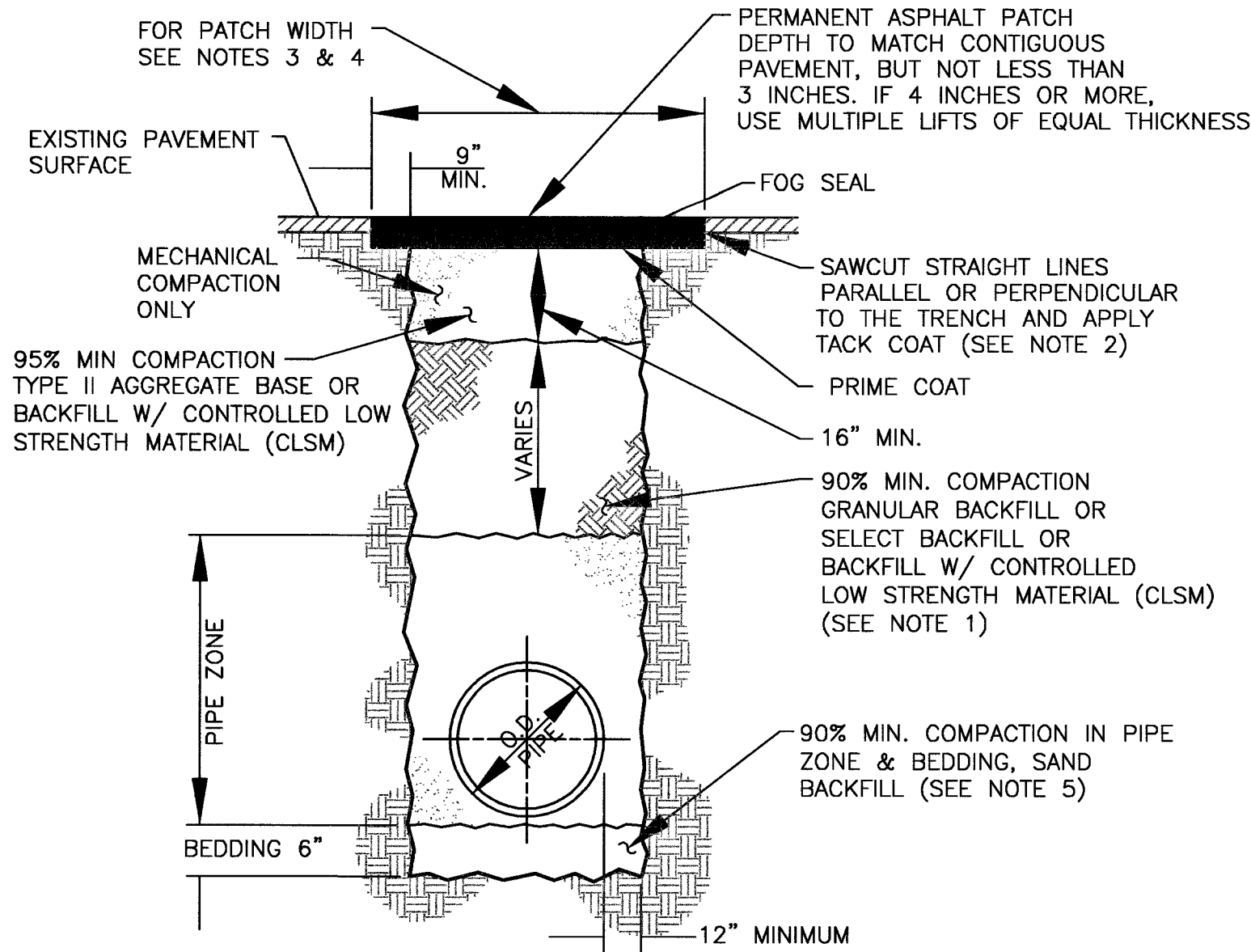




TYPICAL TRENCH DETAIL UNPAVED AREAS

NOTES:

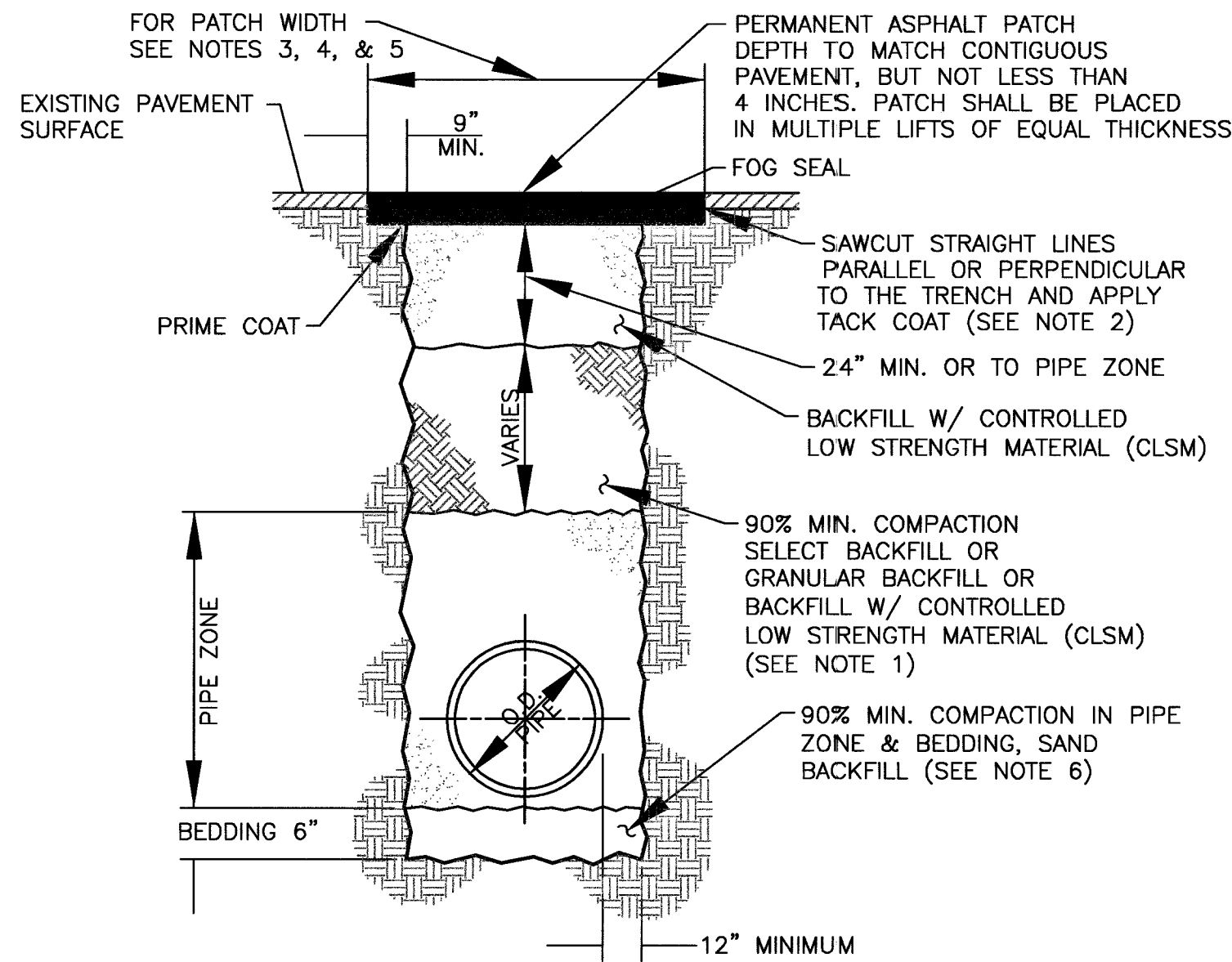
- 1. NO STONES OR LUMPS GREATER THAN 3" PERMITTED IN TRENCH.
- 2. TRENCH WIDTH, BEDDING, AND PIPE ZONE REQUIREMENTS FOR UTILITY INSTALLATIONS SHALL CONFORM TO THE RESPECTIVE AGENCY REQUIREMENTS. CRUSHED ROCK SHALL NOT BE USED IN PIPE ZONE UNLESS SPECIFICALLY PRE-APPROVED BY THE GOVERNING AGENCY.



PAVED AREAS (STREETS WITH 60' OR LESS R/W)

NOTES:

- 1. NO STONES OR LUMPS GREATER THAN 3" PERMITTED IN TRENCH.
- 2. IF SAWCUT IS WITHIN THREE FEET OF EDGE OF EXISTING ASPHALT CONCRETE SURFACE OR OTHER PATCH, REMOVE EXISTING PAVEMENT TO THAT EDGE AND REPLACE ENTIRE SECTION.
- 3. PATCHES SHALL BE WIDTH (4 FEET MINIMUM) SUFFICIENT TO ACCOMODATE MECHANICAL PLACEMENT, ROLLING AND COMPACTION PER UNIFORM STANDARD SECTION 401.03.11. SAWCUTS SHALL NOT BE PLACED IN THE WHEEL PATH AREA.
- 4. FOR CONDUIT TRENCHES 6 INCHES WIDE OR LESS WITHIN 2 FEET OF THE CURB, PATCHES SHALL EXTEND A MINIMUM OF 4 FEET FROM LIP OF GUTTER AND PAVEMENT SHALL BE REMOVED TO CURB AND GUTTER WIDTH SHALL BE SUFFICIENT TO ACCOMODATE MECHANICAL PLACEMENT, ROLLING AND COMPACTION PER UNIFORM STANDARD SPECIFICATION SECTION 401.03.11. SAWCUT SHALL NOT BE PLACED IN THE WHEEL PATH AREA.
- 5. TRENCH WIDTH, BEDDING, AND PIPE ZONE REQUIREMENTS FOR UTILITY INSTALLATIONS SHALL CONFORM TO THE RESPECTIVE AGENCY REQUIREMENTS. CRUSHED ROCK SHALL NOT BE USED IN PIPE ZONE UNLESS SPECIALLY PRE-APPROVED BY THE GOVERNING AGENCY.



PAVED AREAS (STREETS GREATER THAN 60' R/W)

NOTES:

- 1. NO STONES OR LUMPS GREATER THAN 3" PERMITTED IN TRENCH.
- 2. IF SAWCUT IS WITHIN THREE FEET OF EDGE OF EXISTING ASPHALT CONCRETE SURFACE OR OTHER PATCH, REMOVE EXISTING PAVEMENT TO THAT EDGE AND REPLACE ENTIRE SECTION.
- 3. TRANSVERSE PATCHES SHALL BE WIDTH (4 FEET MINIMUM) SUFFICIENT TO ACCOMODATE MECHANICAL PLACEMENT. ROLLING AND COMPACTION PER UNIFORM STANDARD SECTION 401.03.11.
- 4. LONGITUDINAL PATCHES SHALL BE ONE TRAVEL LANE IN WIDTH; SAWCUTS ARE TO BE MADE AT THE EDGE OF THE TRAVEL LANE.
- 5. FOR CONDUIT TRENCHES 6 INCHES WIDE OR LESS WITHIN 2 FEET OF THE CURB, PATCHES SHALL EXTEND A MINIMUM OF 4 FEET FROM LIP OF GUTTER AND PAVEMENT SHALL BE REMOVED TO CURB AND GUTTER WIDTH SHALL BE SUFFICIENT TO ACCOMODATE MECHANICAL PLACEMENT, ROLLING AND COMPACTION PER UNIFORM STANDARD SPECIFICATION SECTION 401.03.11. SAWCUT SHALL NOT BE PLACED IN THE WHEEL PATH AREA.
- 6. TRENCH WIDTH, BEDDING, AND PIPE ZONE REQUIREMENTS FOR UTILITY INSTALLATIONS SHALL CONFORM TO THE RESPECTIVE AGENCY REQUIREMENTS. CRUSHED ROCK SHALL NOT BE USED IN PIPE ZONE UNLESS SPECIALLY PRE-APPROVED BY THE GOVERNING AGENCY.

RTC DEFINITIONS FOR TRENCH DETAILS:

TAKEN FROM RTC SPECIFICATIONS SECTIONS 207 AND 208

SELECTED BACKFILL:

SELECTED BACKFILL SHALL BE OF A QUALITY ACCEPTABLE TO THE ENGINEER AND MAY CONSIST OF SUITABLE MATERIAL FROM EXCAVATION. IT SHALL BE FREE FROM SOD, FROZEN EARTH, ORGANIC MATERIALS, RUBBISH, OR DEBRIS. THE BACKFILL MATERIAL SHALL HAVE A SUFFICIENT AMOUNT OF FINE MATERIAL TO FILL THE VOIDS BETWEEN THE COARSER AGGREGATE. IN ADDITION THERETO, THE MATERIAL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

SIEVE SIZES	PERCENTAGE OF WEIGHT PASSING
6"	100
3"	80-100
No. 4	35-100

PERCENTAGE BY WEIGHT PASSING No. 200 SIEVE	PLASTICITY INDEX MAXIMUM
0-10.0	15
10.1-20.0	12
20.1-50.0	10
50.1-80.0	8
80.1-100.0	6

GRANULAR BACKFILL:

GRANULAR BACKFILL SHALL CONSIST OF NATURAL SAND OR A MIXTURE OF SAND WITH GRAVEL. BROKEN PORTLAND CEMENT CONCRETE AND BITUMINOUS TYPE PAVEMENT WILL BE PERMITTED, SUBJECT TO THE GRADATION LIMITS SPECIFIED HEREIN. THE GRANULAR BACKFILL MATERIAL SHALL HAVE A SUFFICIENT AMOUNT OF FINE MATERIAL TO FILL THE VOIDS BETWEEN THE COARSER AGGREGATE. IN ADDITION THERETO, THE MATERIAL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

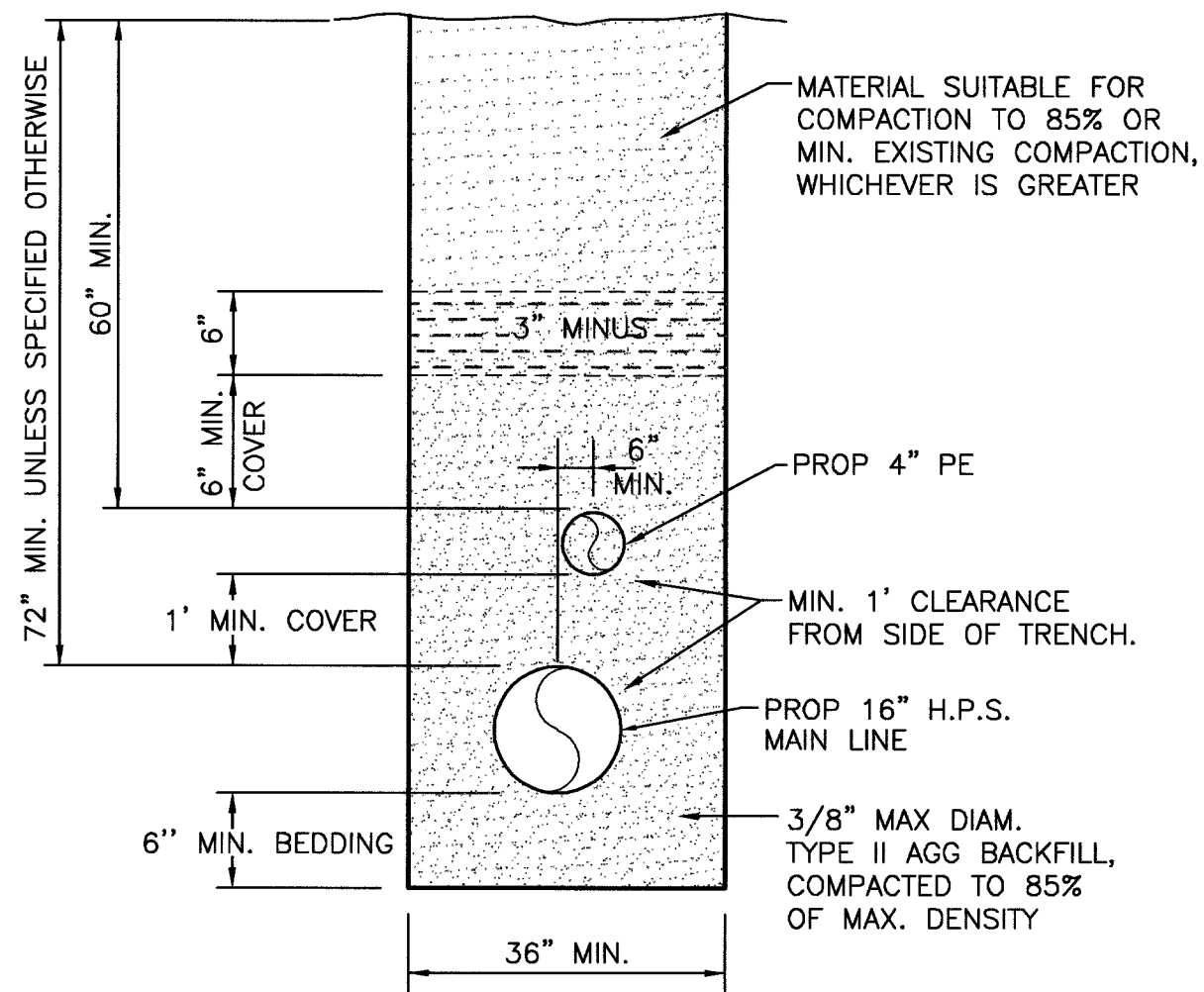
SIEVE SIZES	PERCENTAGE OF WEIGHT PASSING
3"	100
No. 4	35-100
No. 16	25-100
No. 200	5-15

CONTROLLED LOW STRENGTH MATERIAL (CLSM):

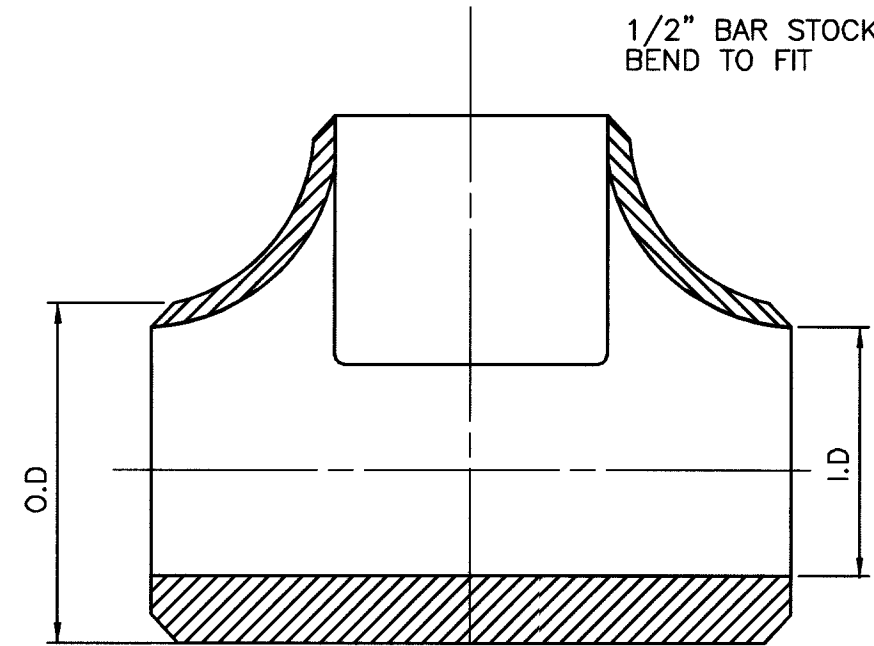
CLSM (FLOWABLE FILL) SHALL CONSIST OF A LOW-STRENGTH, SELF-LEVELING CONCRETE MATERIAL COMPOSED OF VARIOUS COMBINATIONS OF CEMENT, FLY ASH, AGGREGATE, WATER, AND CHEMICAL ADMIXTURES. IT SHALL HAVE A DESIGN COMPRESSIVE STRENGTH AT AN AGE OF 28 DAYS WITHIN THE RANGES REQUIRED IN THE TABLE BELOW FOR THE SPECIFIED CLASS:

CLASS I (50 TO 150PSI (345 kPa TO 1.03 MPa)): SPECIFIED WHERE THE MAXIMUM STRENGTH IS OF PRIMARY CONCERN DUE TO THE DESIRE TO HAVE MATERIAL THAT CAN BE EXCAVATED IN THE FUTURE WITH RELATIVE EASE.

SEE RTC SPECIFICATIONS SECTION 208 - TRENCH EXCAVATION AND BACKFILL FOR ADDITIONAL DETAILS AND/OR REQUIREMENTS



16" STL, 4" PE JOINT TRENCH



STEEL REDUCING TEE

BRANCH NOMINAL ID	2-6	10-12
NUMBER OF GUIDE BARS	1	3



70383

UNIT NO.	UNIT TYPE	INSTL. PROPOSED	RET. COMPLETED	INSTL.	RET.

AS-BUILT DRAWING-PRESSURE TEST DATA

PIPE DIA.	TEST MEDIUM	TEST METHOD
PIPE LENGTH	☐ AIR	☐ GAUGE
PIPE TYPE	☐ NITROGEN	☐ CHART
MIN. DURATION	☐ WATER	
	☐ SOAP	
TEST PRES. (PSIG)	START	END
TIME		
DATE		
PERFORMED BY		

NO.	DESCRIPTION	BY	DATE	APPVD.

AS-BUILT RECD. IN ENGINEERING	DATE
ATLAS POSTED BY	DATE
INDEX POSTED BY	DATE

INSPECTOR	SUPPLY ISOLATION AREA
FOREMAN	SUP-51
	31

PERMIT INFORMATION
TAX DISTRICT: 02-125, 02-200
CLARK COUNTY, CITY OF LAS VEGAS
PBS
FILE NAME 1515G-15

W.R. No. 18854
18852
X579 Y558, X579 Y560
X579 Y562, X579 Y564
X579 Y566
Location LAS VEGAS, NV

Engineer/Technician JODI JORJORIAN	Phone (702) 263-7275
Project Manager CRAIG SISCO	Phone (702) 365-2174
Project Contact NATHAN WHITE	Phone (702) 365-2349
Sheet No. 15 of 16	Scale 1" = 40'
Dwn. By JMA	Chkd. By JEU
Appvd. By JEU	

SI-CC GRAND CANYON DRIVE
16" STL 720# EXTENSION
DETAIL SHEET 1

REVISED

ISSUED FOR CONSTRUCTION
05/10/04

