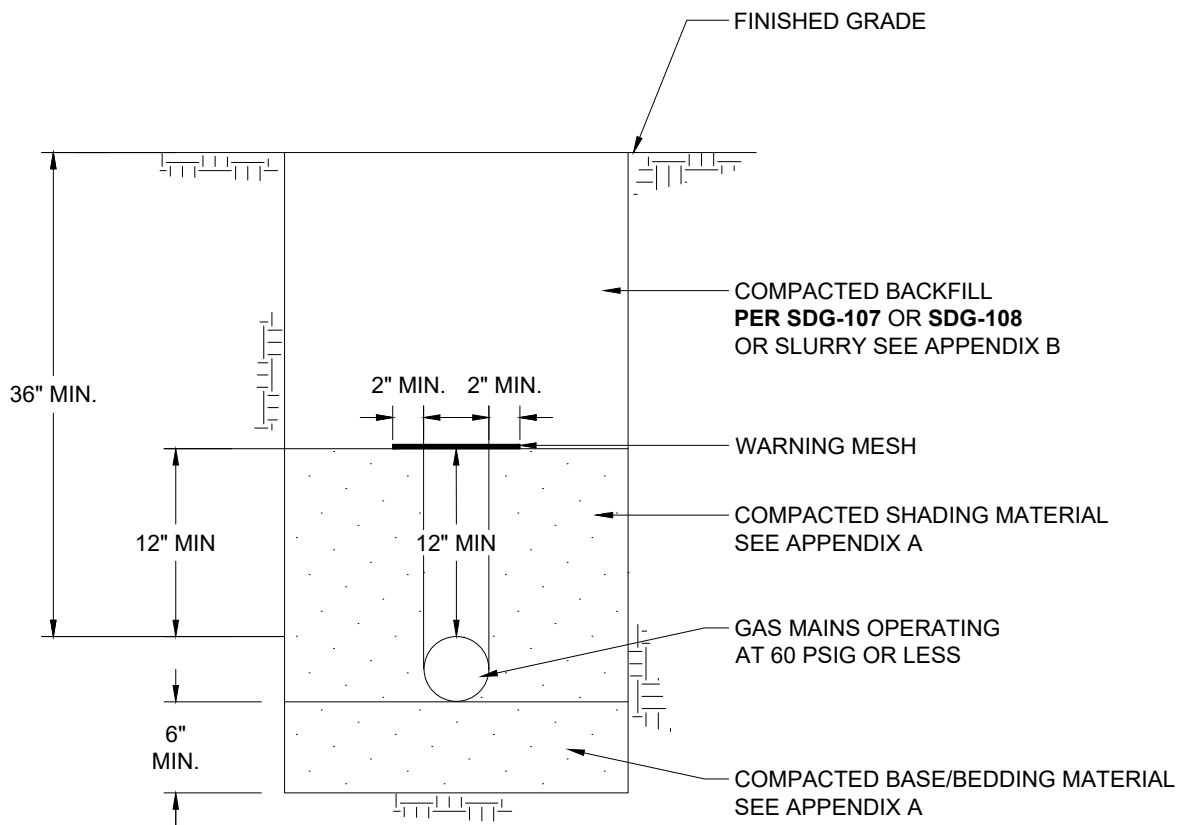


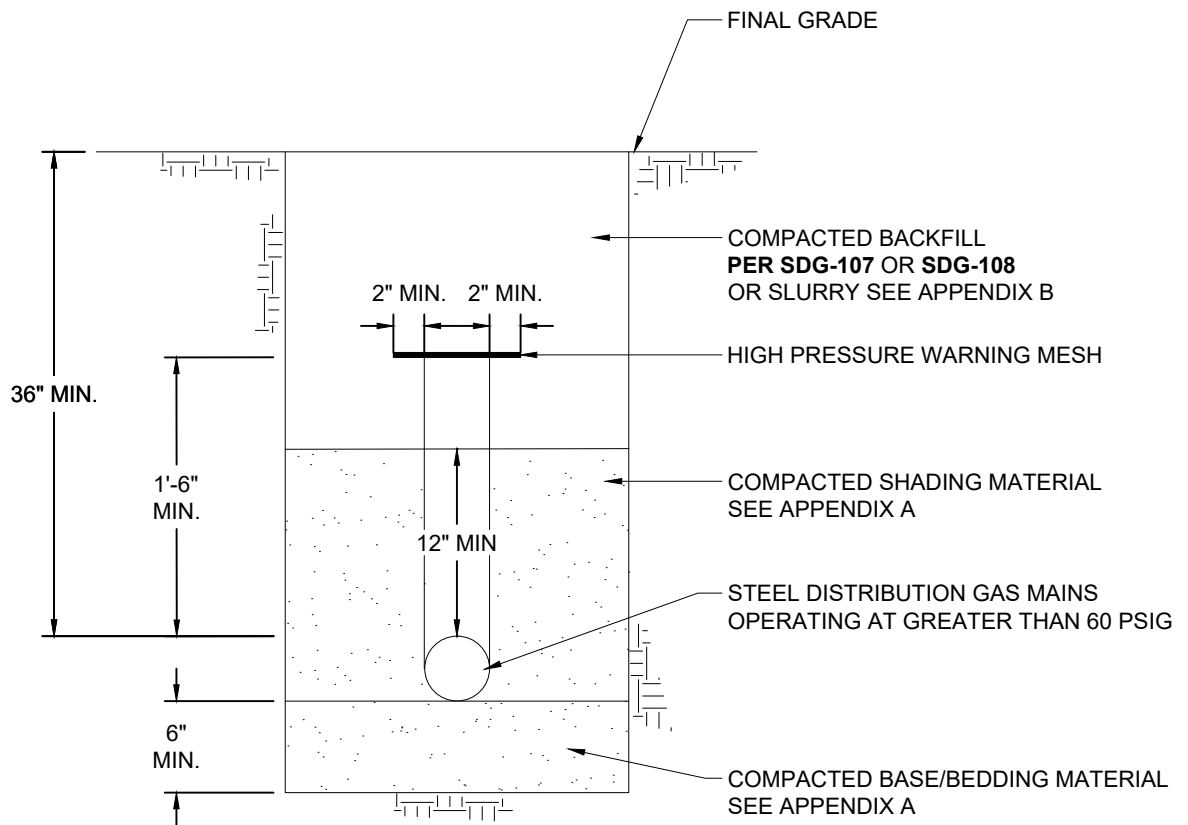
REVISION	BY	APPROVED	DATE	CITY OF SAN DIEGO – STANDARD DRAWING	RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE	
ORIGINAL	RC	R. AMEN	07/26		TRENCH DETAILS FOR GAS PIPELINES POLYETHYLENE (PE) PIPELINES 8-INCHES AND LESS STEEL PIPELINES 2-INCHES AND LESS IN DIAMETER OPERATING AT 60 PSIG OR LESS	 COORDINATOR R.C.E. 81047 DATE
				DRAWING NUMBER		SDM-132



TRENCH SECTION

SHEET 2 OF 6

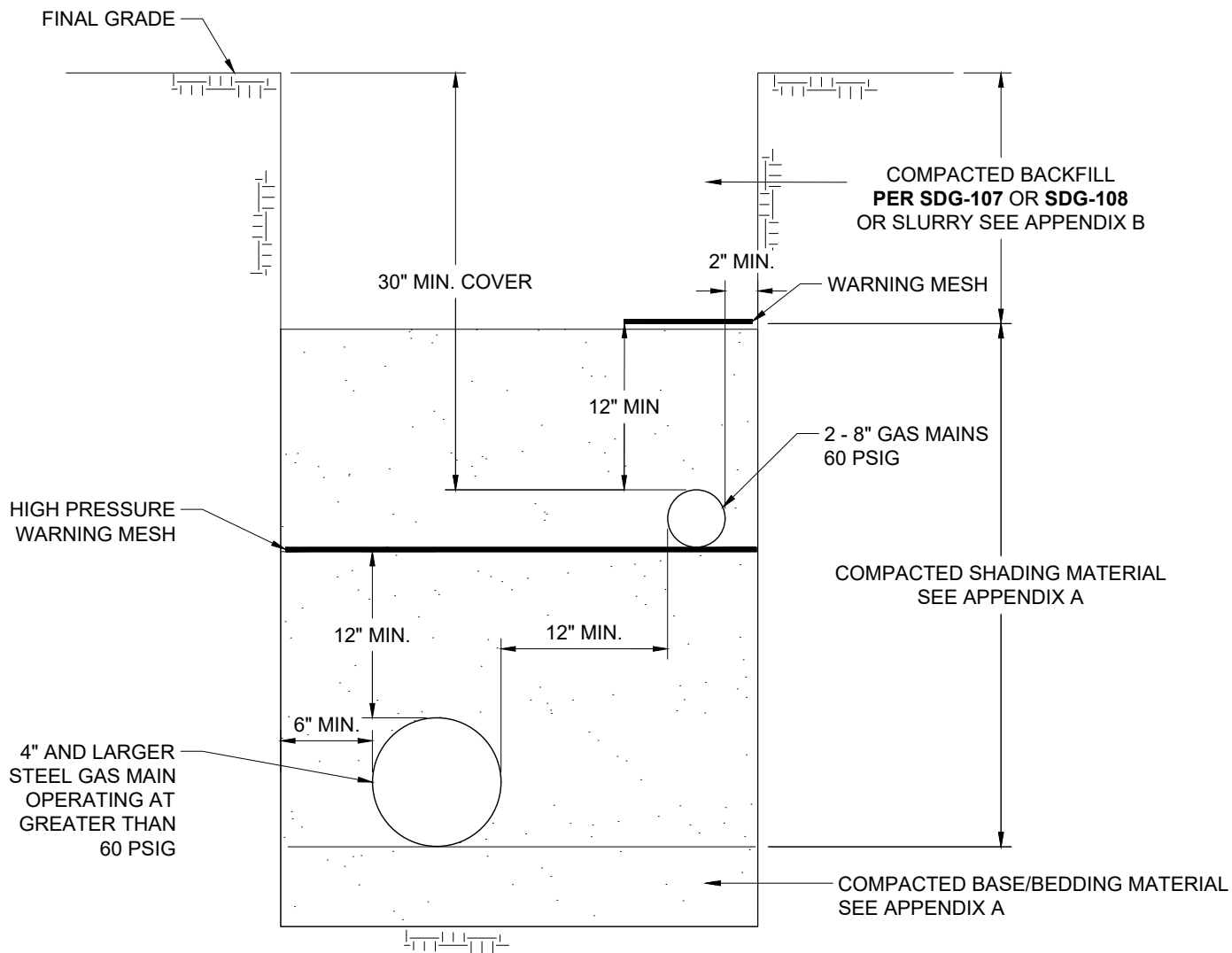
REVISION	BY	APPROVED	DATE	CITY OF SAN DIEGO – STANDARD DRAWING	RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE
ORIGINAL	RC	R. AMEN	07/26		
				TRENCH DETAILS FOR GAS PIPELINES STEEL DISTRIBUTION MAINS 3-INCHES AND LARGER IN DIAMETER OPERATING AT 60 PSIG OR LESS	<i>Alaine James</i> 7/1/2026 COORDINATOR R.C.E. 81047 DATE
				DRAWING NUMBER	SDM-132



TRENCH SECTION

SHEET 3 OF 6

REVISION	BY	APPROVED	DATE	CITY OF SAN DIEGO – STANDARD DRAWING	RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE
ORIGINAL	RC	R. AMEN	07/26		
				TRENCH DETAILS FOR GAS PIPELINES STEEL DISTRIBUTION MAIN OPERATING AT GREATER THAN 60 PSIG	<i>Alaine James</i> 7/1/2026 COORDINATOR R.C.E. 81047 DATE
				DRAWING NUMBER	SDM-132



TRENCH SECTION

SHEET 4 OF 6

REVISION	BY	APPROVED	DATE	CITY OF SAN DIEGO – STANDARD DRAWING	RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE
ORIGINAL	RC	R. AMEN	07/26		
				TRENCH DETAILS FOR GAS PIPELINES TRENCHES WITH TWO DISTRIBUTION MAINS	<i>Alaine James</i> 7/1/2026 COORDINATOR R.C.E. 81047 DATE
				DRAWING NUMBER	SDM-132

APPENDIX A

SDG&E SAND REQUIREMENTS - BASE/BEDDING AND SHADING MATERIALS

PROPERTY	TEST METHOD	REQUIREMENTS
SAND EQUIVALENT	CALIFORNIA TEST 217 OR ASTM D2419	≥ 20
DURABILITY INDEX	CALIFORNIA TEST 229	≥ 35
PH VALUE	CALIFORNIA TEST 643	CASE-BY-CASE EVALUATION BY THE COMPANY, WITH A MINIMUM VALUE OF 6.0
ELECTRICAL RESISTIVITY (OHM-CM)	CALIFORNIA TEST 643	CASE-BY-CASE EVALUATION BY THE COMPANY, WITH A MINIMUM VALUE OF 4,500 OHM-CM
ORGANIC IMPURITIES	ASTM C40	MUST NOT BE DARKER THAN THE PLATE #3 WHEN COMPARED TO STANDARD GARDNER COLOR SERIES
SIEVE SIZE	ASTM C136 SIZE (INCH)	TOTAL PERCENTAGE OF MATERIAL PASSING BY WEIGHT (%)
	1/2 (0.500)	100
	#4 (0.187)	91-100
	#8 (0.0937)	72-100
	#16 (0.0469)	50-100
	#30 (0.0232)	30-90
	#50 (0.0117)	12-46
	#100 (0.0059)	1-26
	#200 (0.0029)	0-16
COMPACTION TEST	ASTM D1557	RELATIVE COMPACTION OF 95% OR GREATER

SHEET 5 OF 6

REVISION	BY	APPROVED	DATE	CITY OF SAN DIEGO – STANDARD DRAWING	RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE
ORIGINAL	RC	R. AMEN	07/26		
				TRENCH DETAILS FOR GAS PIPELINES APPENDIX A BEDDING / SHADING MATERIALS	<i>Alaine James</i> 7/1/2026 COORDINATOR R.C.E. 81047 DATE
					DRAWING NUMBER SDM-132

APPENDIX B

SLURRY COMPOSITION AND DEFINITIONS:

ZERO SACK (SAND) SLURRY - A MIXTURE OF SAND AND WATER WITH NO CEMENT ADDED. SAND COMPOSITION FOLLOWS APPENDIX A TABLE.

1-SACK SLURRY - A MIXTURE OF SAND AND CEMENT WITH THE RATIO OF 1 SACK OF CEMENT (STANDARD 94 LB BAG) TO 1 CUBIC YARD OF SAND AS CALLED OUT IN APPENDIX A OR IF REQUIRED BY PERMITTING AGENCY SAND SPECIFICATION LISTED IN THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK). TABLE 201-1.1.2 AND TABLE 201-1.3.2

2-SACK SLURRY - NOT TYPICALLY USED IN GAS TRENCHING APPLICATIONS MAY BE USED WHEN CREATING AN ENCASEMENT WITH MULTIPLE UTILITY PACKAGES. A MIXTURE OF SAND AND CEMENT WITH THE RATIO OF 2 SACKS OF CEMENT (STANDARD 94LB BAG) TO 1 CUBIC YARD OF SAND AS CALLED OUT IN APPENDIX A OR IF REQUIRED BY PERMITTING AGENCY SAND SPECIFICATION LISTED IN THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK). TABLE 201-1.1.2 AND TABLE 201-1.3.2

SDG&E RESERVES THE RIGHT TO USE SLURRY AS A MEANS OF BACKFILL IN THE FOLLOWING SCENARIOS:

1. WHEN THERE ARE UNSTABLE SOIL CONDITIONS WITHIN RIGHT OF WAY THAT WOULD NOT ALLOW FOR COMPACTION TO BE ACHIEVED (1-SACK OR 2-SACK).
2. TRENCHLESS EXCAVATION OF GAS SERVICE LINES UNDER CURB AND GUTTER/SIDEWALK SLURRY TO BE USED TO ACHIEVE COMPACTION AND FILL ANY VOIDS THAT WERE CREATED BY BORING SERVICE LATERAL (1-SACK)
3. IN THE EVENT OF A GAS EMERGENCY SLURRY MAY BE USED TO BE ABLE TO SECURE THE TRENCH.
4. IN THE EVENT OF EXCESSIVE GROUNDWATER THAT WOULD CAUSE FAILURE OF BACKFILL, 1-SACK SLURRY MAY BE USED TO ACHIEVE COMPACTION.
5. ZERO SACK MAY BE USED FOR BEDDING AND SHADING MATERIAL AROUND GAS MAINS.
6. DURING BACKFILL OF DEEP EXCAVATION USE OF SLURRY MAY BE SAFER AND MORE PRACTICAL, IT IS NOT RECOMMENDED TO USE COMPACTING DEVICES IN DEEP EXCAVATIONS WITH HYDRAULIC SHORING, IF CLASS II BASE WOULD REQUIRE THE CONTINUAL ADJUSTMENT OF SHORING SHIELDS AND PLYWOOD USE 1-SACK SLURRY.
7. ON STREETS CLASSIFIED AS PRINCIPAL ARTERIAL WITH HEAVY TRAFFIC CONDITIONS 1-SACK SLURRY MAY BE USED.
8. WHEN WORKING SPACE IS LIMITED SUCH AS NARROW ALLEYS SLURRY MAY BE MORE PRACTICAL.

SHEET 6 OF 6

REVISION	BY	APPROVED	DATE	CITY OF SAN DIEGO – STANDARD DRAWING	RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE
ORIGINAL	RC	R. AMEN	07/26		
				TRENCH DETAILS FOR GAS PIPELINES APPENDIX B SLURRY BACKFILL SCENARIOS	<i>Alaine James</i> 7/1/2026 COORDINATOR R.C.E. 81047 DATE
					DRAWING NUMBER SDM-132