



**NOTES (CONTINUED FOR OPTION A):**

4. DURING PLACEMENT, CONCAVE SLURRY SURFACE WITH A SHOVEL TO 1/2 INCH - 1 INCH DEPTH.
5. MINIMUM SPECIFIED SEPARATIONS MUST BE MAINTAINED UNTIL SLURRY HAS FULLY CURED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THE CONDUIT DOES NOT SHIFT HORIZONTALLY OR FLOAT VERTICALLY IN THE TRENCH DURING THE APPLICATION OF THE SLURRY. SPOT POUR ONE SACK SLURRY OVER CONDUIT AT 25 FOOT INTERVALS TO PREVENT CONDUIT FROM FLOATING.
6. CUTS SHALL BE STRAIGHT. EXISTING A.C. PAVEMENT WILL NOT REQUIRE SAW CUTTING WHEN USING ROCKWHEEL FOR EXCAVATION PROVIDED THAT A SMOOTH SURFACE IS PRODUCED.
7. TRENCH SHALL BE MILLED TO A DEPTH OF 4 INCHES A MINIMUM OF 18 INCHES WIDE OR 12 INCHES WIDER THAN TRENCH WIDTH, WHICHEVER IS GREATER, AND RESURFACED WITH 1/2 INCH TYPE III CLASS C2 ASPHALT.
8. WHEN PCC TRENCH RESURFACING IS DIRECTED BY CITY ENGINEER, SHOWN ON THE PLANS, OR REQUIRED FOR A PCC SURFACED STREET, FOR ASPHALT STREETS SEE SDG-107 (NOTE #3) AND FOR CONCRETE SURFACED STREETS SEE SDG-108.
9. SDG-117A SHALL BE USED FOR THE PLACEMENT OF ONE CONDUIT. FOR THE PLACEMENT OF TWO CONDUITS USE SDG-117B AND FOR PLACEMENT OF THREE OR MORE CONDUITS USE SDG-117C OR SDG-119.
10. ALLOW THREE HOURS MINIMUM FOR ONE SACK SLURRY TRENCH BACKFILL CURE TIME FOR TRENCHES PARALLEL TO THE STREET BEFORE OPENING TO TRAFFIC.
11. SLEEVE EXISTING CONDUITS AT CROSSING.
12. TOP OF CONDUIT SHALL BE 18 INCHES MINIMUM FROM TOP OF PAVEMENT OR 6 INCHES MINIMUM FROM BOTTOM OF PAVEMENT SECTION, WHICHEVER IS GREATER.
13. CLEARANCE SEPARATIONS BETWEEN DRY AND WET UTILITIES PER CALIFORNIA PUBLIC UTILITY CODE GENERAL ORDER 128 SHALL BE MAINTAINED.
14. ASPHALT OVERLAY THE ENTIRE LENGTH OF THE TRENCH INCLUDING THE INFLUENCE AREA AROUND THE PERIMETER OF THE EXCAVATION PER TABLE 1 IN SDG-105.
  - A. IF THE TRENCH OR EXCAVATION INFLUENCE AREA ENTERS A BICYCLE LANE, THE ENTIRE WIDTH OF THE BICYCLE SHALL BE ASPHALT OVERLAYED AND RESTRIPE FOR THE LENGTH OF THE TRENCH INCLUDING EXCAVATION INFLUENCE AREA. REPLACE IN KIND ANY EXISTING DELINEATORS.

SHEET 2 OF 6

REVISION	BY	APPROVED	DATE	CITY OF SAN DIEGO – STANDARD DRAWING  <b>NARROW TRENCH EXCAVATION AND PAVEMENT RESTORATION FOR ASPHALT CONCRETE SURFACE STREETS MINOR EXCAVATION OPTION A - ONE CONDUIT</b>	RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE
ORIGINAL		BAHMANIAN	0486		 COORDINATOR R.C.E. 81047 DATE
UPDATED	AA	J. NAGELVOORT	02/16		
UPDATED	LS	M. GIBSON	05/17		
REDRAFTED	CD	J. NAGELVOORT	09/18		
UPDATED	LS	J. NAGELVOORT	04/21		
UPDATED	RC	R. AMEN	01/24	DRAWING NUMBER	<b>SDG-117A</b>

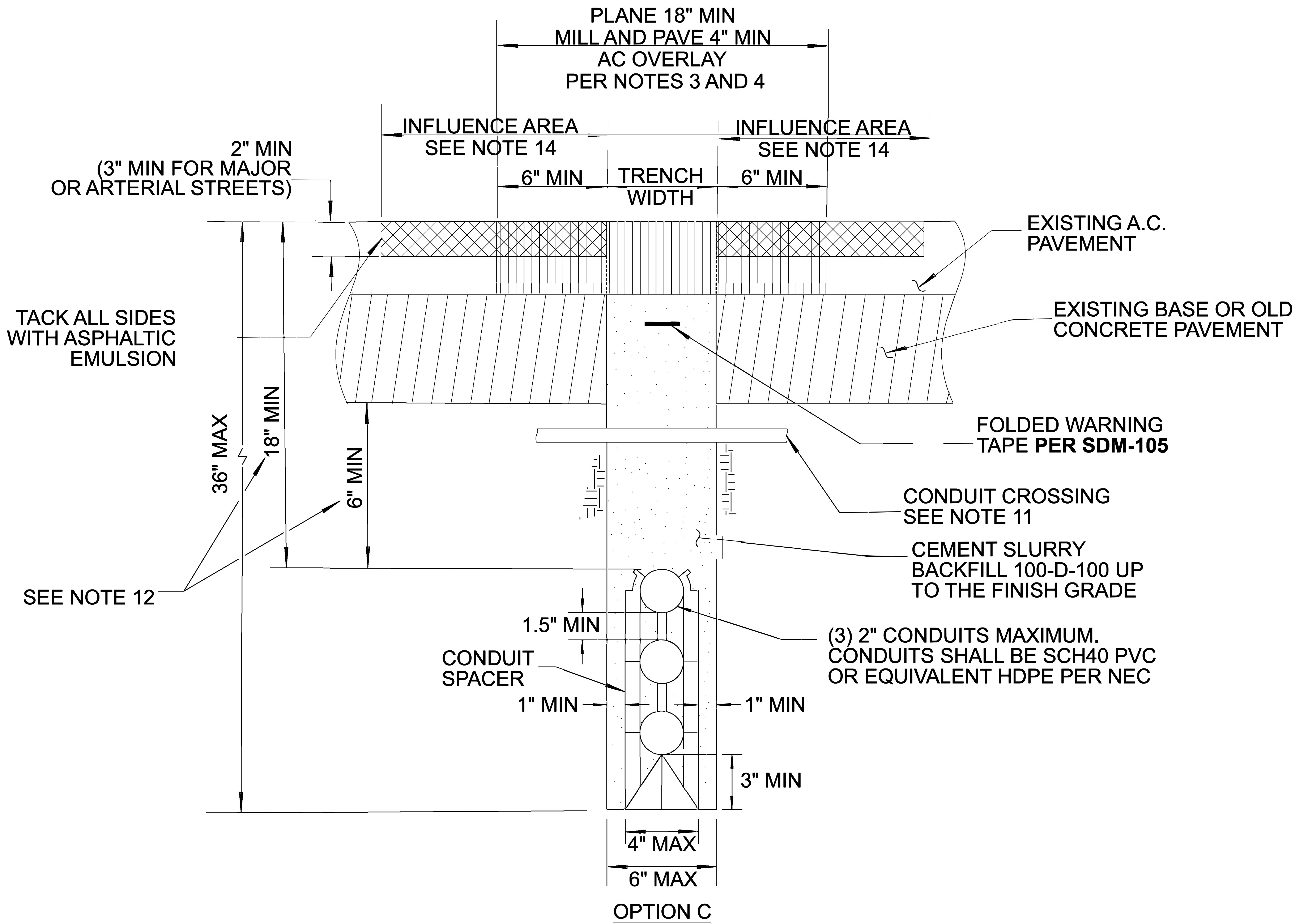


**NOTES (CONTINUED FOR OPTION B):**

4. DURING PLACEMENT, CONCAVE SLURRY SURFACE WITH A SHOVEL TO 1/2 INCH - 1 INCH DEPTH.
5. MINIMUM SPECIFIED SEPARATIONS MUST BE MAINTAINED UNTIL SLURRY HAS FULLY CURED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THE CONDUIT DOES NOT SHIFT HORIZONTALLY OR FLOAT VERTICALLY IN THE TRENCH DURING THE APPLICATION OF THE SLURRY. SPOT POUR ONE SACK SLURRY OVER CONDUIT AT 25 FOOT INTERVALS TO PREVENT CONDUIT FROM FLOATING.
6. CUTS SHALL BE STRAIGHT. EXISTING A.C. PAVEMENT WILL NOT REQUIRE SAW CUTTING WHEN USING ROCKWHEEL FOR EXCAVATION PROVIDED THAT A SMOOTH SURFACE IS PRODUCED.
7. TRENCH SHALL BE MILLED TO A DEPTH OF 4 INCHES AND A MINIMUM OF 18 INCHES WIDE OR 12 INCHES WIDER THAN TRENCH WIDTH, WHICHEVER IS GREATER, AND RESURFACED WITH 1/2 INCH TYPE III CLASS C2 ASPHALT.
8. WHEN PCC PAVEMENT RESTORATION IS DIRECTED BY CITY ENGINEER, SHOWN ON THE PLANS, OR REQUIRED FOR A PCC SURFACED STREET, FOR ASPHALT STREETS SEE SDG-107 (NOTE #3) AND FOR CONCRETE SURFACED STREETS SEE SDG-108.
9. SDG-117A SHALL BE USED FOR THE PLACEMENT OF ONE CONDUIT. FOR THE PLACEMENT OF TWO CONDUITS USE SDG-117B AND FOR PLACEMENT OF THREE OR MORE CONDUITS USE SDG-117C OR SDG-119.
10. ALLOW THREE HOURS MINIMUM FOR ONE SACK SLURRY TRENCH BACKFILL CURE TIME FOR TRENCHES PARALLEL TO THE STREET BEFORE OPENING TO TRAFFIC.
11. SLEEVE EXISTING CONDUITS AT CROSSING.
12. TOP OF CONDUIT SHALL BE 18 INCHES MINIMUM FROM TOP OF PAVEMENT OR 6 INCHES MINIMUM FROM BOTTOM OF PAVEMENT SECTION, WHICHEVER IS GREATER.
13. CLEARANCE SEPARATIONS BETWEEN DRY AND WET UTILITIES PER CALIFORNIA PUBLIC UTILITY CODE GENERAL ORDER 128 SHALL BE MAINTAINED.
14. ASPHALT OVERLAY THE ENTIRE LENGTH OF THE TRENCH INCLUDING THE INFLUENCE AREA AROUND THE PERIMETER OF THE EXCAVATION PER TABLE 1 IN SDG-105.
  - A. IF THE TRENCH OR EXCAVATION INFLUENCE AREA ENTERS A BICYCLE LANE, THE ENTIRE WIDTH OF THE BICYCLE SHALL BE ASPHALT OVERLAYED AND RESTRIPE FOR THE LENGTH OF THE TRENCH INCLUDING EXCAVATION INFLUENCE AREA. REPLACE IN KIND ANY EXISTING DELINEATORS.

SHEET 4 OF 6

REVISION	BY	APPROVED	DATE	CITY OF SAN DIEGO – STANDARD DRAWING  <b>NARROW TRENCH EXCAVATION AND PAVEMENT RESTORATION FOR ASPHALT CONCRETE SURFACE STREETS MINOR EXCAVATION OPTION B - TWO CONDUITS</b>	RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE
ORIGINAL		BAHMANIAN	0486		 COORDINATOR R.C.E. 81047 DATE
UPDATED	AA	J. NAGELVOORT	02/16		
UPDATED	LS	M. GIBSON	05/17		
REDRAFTED	CD	J. NAGELVOORT	09/18		
UPDATED	LS	J. NAGELVOORT	04/21		
UPDATED	RC	R. AMEN	01/24	DRAWING NUMBER	<b>SDG-117B</b>



**NOTES (OPTION C):**

1. NEW TRENCH LOCATION SHALL BE 36 INCHES MINIMUM AND 72 INCHES MAXIMUM FROM LIP OF GUTTER, AND AT LEAST 36 INCHES CLEAR FROM ANY CITY UNDERGROUND FACILITIES.
  - A. THE CONTRACTOR SHALL CONTACT THE ENGINEER TO INSPECT AND APPROVE THE TRAFFIC CONTROL PLAN PRIOR TO START OF EXCAVATION IN A BICYCLE LANE. ENSURE ADEQUATE PROVISIONS HAVE BEEN INCLUDED FOR BICYCLE TRAFFIC INCLUDING BICYCLE DETOURS, IF APPLICABLE.
  - B. WHEN THE TRENCH AND/OR INFLUENCE AREA IS LOCATED WITHIN THE BICYCLE LANE, THE CONTRACTOR MUST PAVE THE FULL WIDTH OF THE BICYCLE LANE TO THE FACE OF CURB (I.E. GRIND AND OVERLAY) WITHIN SEVEN (7) CALENDAR DAYS OF AFTER THE INITIAL EXCAVATION. AT NO TIME SHALL A PARALLEL CUT OR SEAM EXIST IN THE BICYCLE LANE AS A FINAL RESTORATION.
  - C. THE CONTRACTOR SHALL PERFORM TRENCHING IN THE BICYCLE LANE IN ROAD SEGMENTS NOT TO EXCEED 500 LINEAR FEET PER SEGMENT. THE CONTRACTOR SHALL FULLY COMPLETE THE WORK ON EACH SEGMENT PRIOR TO STARTING THE NEXT SEGMENT.
2. CEMENT SLURRY BACKFILL SHALL BE THOROUGHLY CONSOLIDATED, HAVE A MAXIMUM SLUMP OF 4 INCHES. FLY ASH MEETING THE REQUIREMENTS OF 201-1.2.5.3 MAY BE ADDED (NOT AS A SUBSTITUTE) TO THE MINIMUM CEMENT REQUIREMENTS. SLURRY COMBINED GRADING SHALL MEET REQUIREMENTS OF 201-1.3.2 (A) GRADING D.

SEE ADDITIONAL NOTES ON SHEET 6

SHEET 5 OF 6

REVISION	BY	APPROVED	DATE	CITY OF SAN DIEGO – STANDARD DRAWING	RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE	
ORIGINAL		BAHMANIAN	0486		<b>NARROW TRENCH EXCAVATION AND PAVEMENT RESTORATION FOR ASPHALT CONCRETE SURFACE STREETS MINOR EXCAVATION OPTION C - THREE CONDUITS</b>	<i>Alaine James</i> 01/10/2024
UPDATED	AA	J. NAGELVOORT	02/16	COORDINATOR		R.C.E. 81047
UPDATED	LS	M. GIBSON	05/17	DATE		
REDRAFTED	CD	J. NAGELVOORT	09/18	DRAWING		<b>SDG-117C</b>
UPDATED	LS	J. NAGELVOORT	04/21	NUMBER		
UPDATED	RC	R. AMEN	01/24			

**NOTES (CONTINUED FOR OPTION C):**

3. BALL DROP TEST PER ASTM D6024 SHALL BE PERFORMED ON SLURRY AND ACHIEVE A MAXIMUM INDENTATION DIAMETER OF 3 INCHES PRIOR TO PLACEMENT OF ASPHALT CONCRETE. SLURRY PLACED IN NARROW TRENCHES WHERE BALL DROP TEST CANNOT BE PERFORMED SHALL BE CURED A MINIMUM OF 48 HOURS PRIOR TO PLACEMENT OF ASPHALT CONCRETE. PERMANENT RESURFACING SHALL BE COMPLETED IN NO MORE THAN 7 DAYS AFTER PLACEMENT OF CEMENT SLURRY.
4. DURING PLACEMENT, CONCAVE SLURRY SURFACE WITH A SHOVEL TO 1/2 INCH - 1 INCH DEPTH.
5. MINIMUM SPECIFIED SEPARATIONS MUST BE MAINTAINED UNTIL SLURRY HAS FULLY CURED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THE CONDUIT DOES NOT SHIFT HORIZONTALLY OR FLOAT VERTICALLY IN THE TRENCH DURING THE APPLICATION OF THE SLURRY. SPOT POUR ONE SACK SLURRY OVER CONDUIT AT 25 FOOT INTERVALS TO PREVENT CONDUIT FROM FLOATING.
6. CUTS SHALL BE STRAIGHT. EXISTING A.C. PAVEMENT WILL NOT REQUIRE SAW CUTTING WHEN USING ROCKWHEEL FOR EXCAVATION PROVIDED THAT A SMOOTH SURFACE IS PRODUCED.
7. TRENCH SHALL BE MILLED TO A DEPTH OF 4 INCHES AND A MINIMUM OF 18 INCHES WIDE OR 12 INCHES WIDER THAN TRENCH WIDTH, WHICHEVER IS GREATER, AND RESURFACED WITH 1/2 INCH TYPE III CLASS C2 ASPHALT.
8. WHEN PCC TRENCH RESURFACING IS DIRECTED BY CITY ENGINEER, SHOWN ON THE PLANS, OR REQUIRED FOR A PCC SURFACED STREET, FOR ASPHALT STREETS **SEE SDG-107** (NOTE #3) AND FOR CONCRETE SURFACED STREETS **SEE SDG-108**.
9. FOR PLACEMENT OF ADDITIONAL CONDUITS THAT EXCEED THE MAXIMUM ALLOWABLE TRENCH DIMENSIONS IN **SDG-117C** USE **SDG-119**.
10. ALLOW THREE HOURS MINIMUM FOR ONE SACK SLURRY TRENCH BACKFILL CURE TIME FOR TRENCHES PARALLEL TO THE STREET BEFORE OPENING TO TRAFFIC.
11. SLEEVE EXISTING CONDUITS AT CROSSING.
12. TOP OF CONDUIT SHALL BE 18" MINIMUM FROM TOP OF PAVEMENT OR 6" MINIMUM FROM BOTTOM OF PAVEMENT SECTION, WHICHEVER IS GREATER.
13. CONDUIT DUCT SPACERS SHALL BE USED TO MAINTAIN A 3 INCH MINIMUM SEPARATION FROM THE BOTTOM OF THE TRENCH AND 1 INCH SEPARATIONS FROM THE SIDES OF THE TRENCH TO INSURE SLURRY ENCAPSULATION OF THE CONDUIT PACKAGE.
14. SPACERS SHALL BE PLACED EVERY 6 FEET ON CENTER ALONG THE ALIGNMENT OF THE CONDUIT.
15. CLEARANCE SEPARATIONS BETWEEN DRY AND WET UTILITIES PER CALIFORNIA PUBLIC UTILITY CODE GENERAL ORDER 128 SHALL BE MAINTAINED.
16. ASPHALT OVERLAY THE ENTIRE LENGTH OF THE TRENCH INCLUDING THE INFLUENCE AREA AROUND THE PERIMETER OF THE EXCAVATION PER TABLE 1 IN SDG-105.
  - A. IF THE TRENCH OR EXCAVATION INFLUENCE AREA ENTERS A BICYCLE LANE, THE ENTIRE WIDTH OF THE BICYCLE SHALL BE ASPHALT OVERLAYED AND RESTRIPEDED FOR THE LENGTH OF THE TRENCH INCLUDING EXCAVATION INFLUENCE AREA. REPLACE IN KIND ANY EXISTING DELINEATORS.

SHEET 6 OF 6

REVISION	BY	APPROVED	DATE	CITY OF SAN DIEGO – STANDARD DRAWING  <b>NARROW TRENCH EXCAVATION AND PAVEMENT RESTORATION FOR ASPHALT CONCRETE SURFACE STREETS MINOR EXCAVATION OPTION C - THREE CONDUITS</b>	RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE
ORIGINAL		BAHMANIAN	0486		 COORDINATOR R.C.E. 81047 DATE 01/10/2024
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