



THE CITY OF SAN DIEGO

M E M O R A N D U M

DATE: April 30, 2021  
TO: Distribution  
FROM: James Nagelvoort, City Engineer  
SUBJECT: Updated Standard Drawing SDG-117 Narrow Trench Resurfacing for Asphalt Concrete Surface Streets

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In response to the increased need for the installation of multiple conduits, the Standard Drawing SDG-117 for Narrow Trench Resurfacing for Asphalt Concrete Surface Streets (SDG-117) has been updated to allow the installation of more than one conduit in a narrow trench. As shown on attached updated SDG-117, the following options can be used for narrow trench resurfacing:

1. Option A for one conduit
2. Option B for two conduits
3. Option C for three conduits (for conduits stacked vertically with spacers)

Additional requirements on the location of the trench and clearance separations between utilities have been added to SDG-117. This drawing is also posted in the City's website, [Updates Approved for Use - 2018 Standard Drawings | Engineering & Capital Projects | City of San Diego Official Website](#).

Please notify your project managers, construction managers, designers, consultants, and maintenance and operation crews of the new updated standard. If you need additional information, please contact Luis Schaar at 858-627-3220 or [lschaar@san Diego.gov](mailto:lschaar@san Diego.gov).



James Nagelvoort, P.E.  
City Engineer

Attachment: SDG-117 Narrow Trench Resurfacing for Concrete Surface Streets

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

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. 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

SHEET 2 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 RESURFACING FOR                      ASPHALT CONCRETE SURFACE STREETS                      OPTION A - ONE CONDUIT</b>
UPDATED	AA	J. NAGELVOORT	02/16	04/30/21	
UPDATED	LS	M. GIBSON	05/17	DATE	
REDRAFTED	CD	J. NAGELVOORT	09/18	DRAWING NUMBER	
UPDATED	LS	J. NAGELVOORT	04/21		





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

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. 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

SHEET 4 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 RESURFACING FOR                      ASPHALT CONCRETE SURFACE STREETS                      OPTION B - TWO CONDUITS</b>
UPDATED	AA	J. NAGELVOORT	02/16	04/30/21	
UPDATED	LS	M. GIBSON	05/17	DATE	
REDRAFTED	CD	J. NAGELVOORT	09/18	DRAWING NUMBER	
UPDATED	LS	J. NAGELVOORT	04/21		



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

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.

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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 RESURFACING FOR ASPHALT CONCRETE SURFACE STREETS OPTION C - THREE CONDUITS</b>
UPDATED	AA	J. NAGELVOORT	02/16		
UPDATED	LS	M. GIBSON	05/17		
REDRAFTED	CD	J. NAGELVOORT	0918		
UPDATED	LS	J. NAGELVOORT	0421		
					DRAWING NUMBER <b>SDG-117C</b>