



THE CITY OF SAN DIEGO

MEMORANDUM

DATE: May 12, 2017

TO: Distribution

FROM: Marnell Gibson, City Engineer, Public Works Department

SUBJECT: New Standard Drawing for Micro Trench Backfill and Updated Standard Drawing for Narrow Trench Resurfacing

This memo is to announce the following new and updated drawings for trench backfill and trench resurfacing:

1. SDG-165 Micro Trench Backfill for Dry Utilities (NEW)
2. SDG-117 Narrow Trench Resurfacing for Asphalt Concrete Surface Streets (UPDATED)

The standard drawing SDG-165 applies to new dry utilities installation using the micro trenching method of construction as described in the attached SDG-165. The standard drawing SDG-117 is an updated drawing, and replaces the existing standard drawing in the Standard Drawings for Public Works Construction 2016 Edition.

Effective **July 3, 2017**, the installation of micro trench and narrow trench resurfacing for asphalt concrete surface streets shall comply with the attached standard drawings. All new projects within the public or City maintained ROW or at City owned properties will be required to implement the standard drawings. All contract documents must reflect compliance with the new and updated drawings.

Implementation:

1. **Private Projects Submitted to Development Services:**
 - a. Projects submitted on or after July 3, 2017 shall comply with the new and updated drawings.
 - b. Projects currently in review and have not had permits issued by July 3, 2017 shall comply with the new and updated drawings.
 - c. Projects with permits issued on or before July 3, 2017 shall be allowed to comply with the previous standards.

2. **City Projects:**

- a. Projects that have final design signed and stamped by the Deputy City Engineer, and have advertised prior to July 3, 2017 shall be allowed to comply with the previous standards.

The attached standard drawings are also located in the following City website for updates to the 2016 Standard Drawings. This site includes other updates to standard drawings for inclusion in contract documents by referencing these drawings on plans, specifications or other contract documents. Any modification to the 2016 Standard Drawings and approved drawings located in the following City website shall be placed on plans where needed.

<https://www.sandiego.gov/publicworks/edocref/standarddraw/updates2016>

Please notify your Project Managers, designers, consultants, and maintenance crews of the new standards. If you have any question or need additional information, contact Catherine Dungca at 619-533-3778.

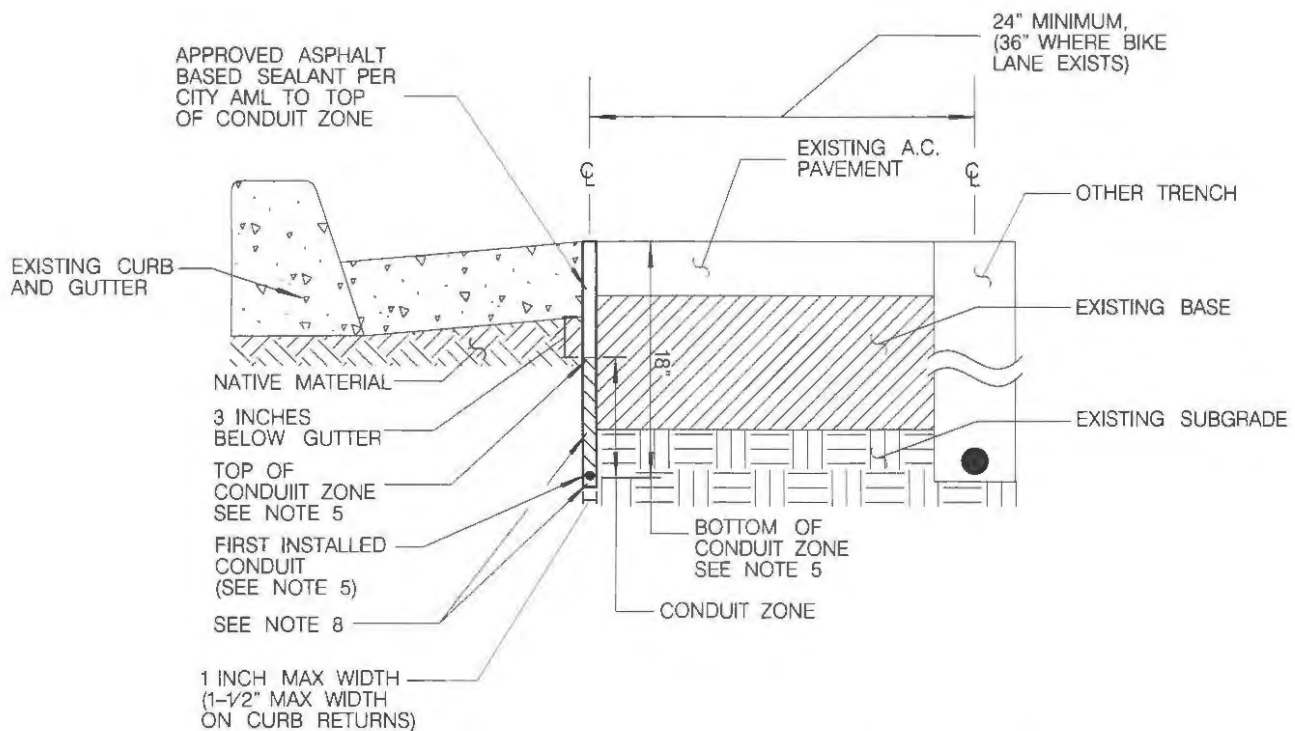


Marnell Gibson, P.E., City Engineer

Attachments: SDG-165 Micro Trench Backfill for Dry Utilities
 SDG-117 Narrow Trench Resurfacing for Asphalt Concrete Surface
 Streets

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Deputy City Engineers



LEGEND ON PLANS:

—MTC— MICRO-TRENCH CONDUIT (MTC)

NOTES:

1. PAVEMENT CUTS SHALL BE STRAIGHT AND CLEAN. SPALLS AND POTHOLES WITHIN 12 INCHES OF THE MICRO-TRENCH SHALL BE REPAIRED PRIOR TO TRENCHING TO FACILITATE STRAIGHT PAVEMENT CUTS.
2. INSTALL 1 INCH WIDE (FOLDED) WARNING/IDENTIFICATION TAPE PER SDM-105.
3. TRENCH LOCATION SHALL BE AT EDGE OF CURB AND GUTTER. NO MICRO-TRENCHES ALONG MEDIAN CURBS SHALL BE ALLOWED. THE LOCATION OF MICRO-TRENCH IN RELATION TO THE CURB SHALL NOT DEVIATE ALONG ITS ALIGNMENT UNLESS OTHERWISE APPROVED BY THE CITY.
4. WHERE THERE IS NO EXPOSED OR VISIBLE CONCRETE GUTTER, THE NEW CONDUIT SHALL BE INSTALLED IN A NARROW TRENCH PER SDG-117.
5. FIRST INSTALLED CONDUIT SHALL BE PLACED AT A DEPTH OF 18 INCHES WITHIN THE CONDUIT ZONE. THE CONDUIT ZONE SHALL BE 3 INCHES FROM BOTTOM OF GUTTER THROUGH 18 INCHES FROM LIP OF GUTTER. ADDITIONAL CONDUIT(S) SHALL BE INSTALLED WITHIN CONDUIT ZONE, UNLESS OTHERWISE APPROVED BY THE CITY.
6. ONLY ONE MICRO-TRENCH PER SIDE OF THE STREET IS ALLOWED. IF A MICRO-TRENCH EXISTS AND NO ADDITIONAL CONDUIT CAN BE INSTALLED IN THE SAME TRENCH, THE NEW CONDUIT SHALL BE INSTALLED IN NARROW TRENCH PER SDG-117.
7. AT STREET INTERSECTIONS, CONDUIT SHALL BE INSTALLED IN NARROW TRENCH PER SDG-117 WITH PAVEMENT RESURFACING AND ANY OTHER REQUIREMENTS PER CITY REGULATIONS, OR USE TUNNELING PER CITY STANDARDS.
8. BACKFILL/BEDDING BELOW ASPHALT BASED SEALANT SHALL BE DRY SAND (SE 50 OR BETTER). ONCE PLACED, SAND SHALL BE THOROUGHLY CONSOLIDATED BY FLOODING.

REVISION	BY	APPROVED	DATE
ORIGINAL	HY	M. GIBSON	05/17

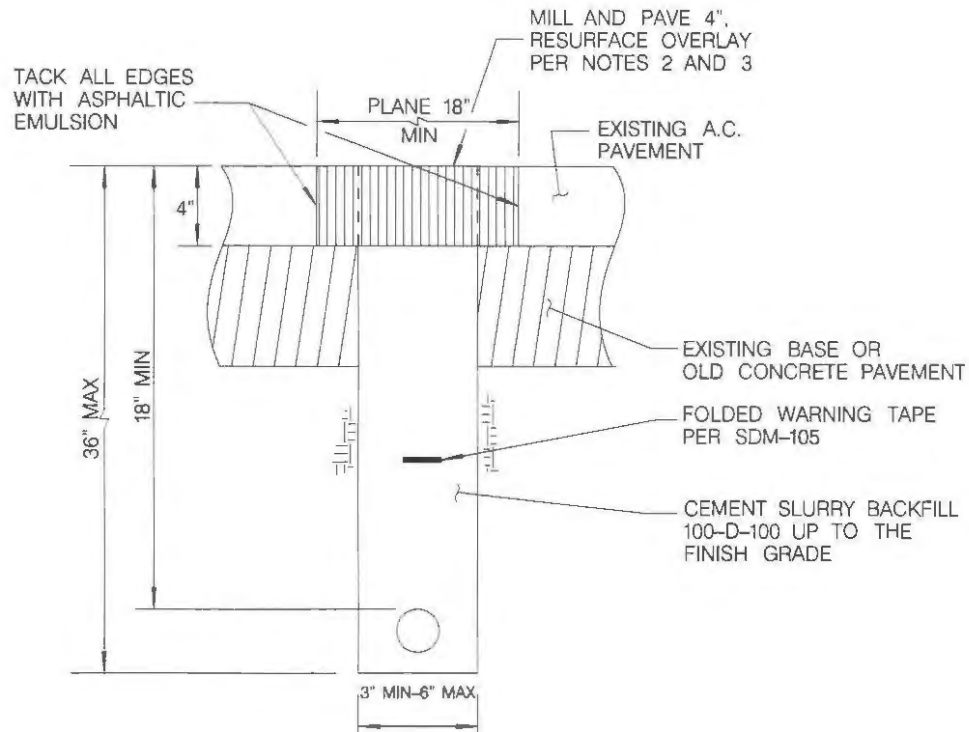
CITY OF SAN DIEGO - STANDARD DRAWING

MICRO-TRENCH BACKFILL FOR DRY UTILITIES

RECOMMENDED BY THE CITY OF SAN DIEGO
STANDARDS COMMITTEE

Chungpa 5/10/17
COORDINATOR R.C.E. 56523 DATE

DRAWING
NUMBER **SDG-165**



NOTES:

1. 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.
2. BALL DROP TEST PER ASTM D6024 SHALL BE PERFORMED ON SLURRY AND ACHIEVE A MAXIMUM INDENTATION DIAMETER OF 3" 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.
3. DURING PLACEMENT, CONCAVE SLURRY SURFACE WITH A SHOVEL TO 1/2" - 1" DEPTH.
4. CUTS SHALL BE STRAIGHT. EXISTING A.C. PAVEMENT WILL NOT REQUIRE SAWCUTTING WHEN USING ROCKWHEEL FOR EXCAVATION PROVIDED THAT A SMOOTH SURFACE IS PRODUCED.
5. TRENCH SHALL BE MILLED TO A DEPTH OF 4" AND A MINIMUM OF 18" WIDE OR 12" WIDER THAN TRENCH WIDTH, WHICHEVER IS GREATER, AND RESURFACED WITH 1/2" TYPE III CLASS C2 ASPHALT.
6. 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 PCC SURFACED STREETS SEE SDG-108.
7. FOR DRY UTILITIES (ELECTRICAL, COMMUNICATION, GAS, ETC.) SEE SDG-119.
8. 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. NO NARROW TRENCH IN BIKE LANES.

REVISION	BY	APPROVED	DATE	CITY OF SAN DIEGO - STANDARD DRAWING		RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE	
ORIGINAL		BAHMANIAN	04/86	NARROW TRENCH RESURFACING FOR ASPHALT CONCRETE SURFACE STREETS		<i>Chung</i>	5/10/17
UPDATED	KA	J. NAGELVOORT	04/13				
UPDATED	KA	J. NAGELVOORT	01/14			COORDINATOR	R.C.E. 56523
UPDATED	AA	J. NAGELVOORT	02/16			DRAWING	SDG-117
UPDATED	LS	M. GIBSON	05/17				
						NUMBER	