

3.11 CORE HOLE CUTTING AND REPLACEMENT**A. Cutting Core:**

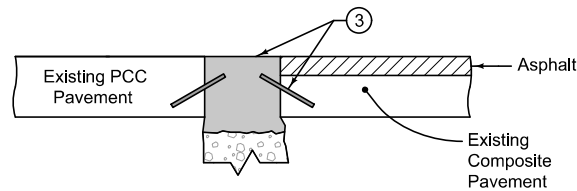
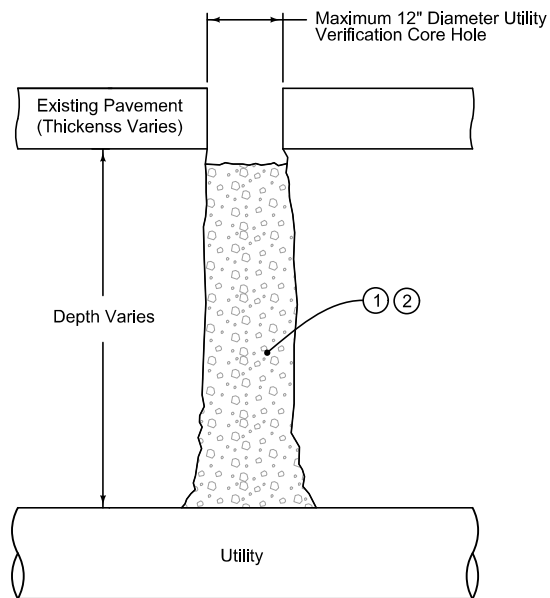
1. Place a temporary mark on the pavement core and adjacent pavement if the core is to be reinstalled. Maximum diameter is 12 inches.
2. Utilize a diamond bit with the vertical alignment of core hole saw perpendicular to the horizon. Include a center core hole or another mechanism to extract the core without damage.
3. Cut the full depth of the existing pavement. Protect core from damage if it is expected to be re-used.
4. Vacuum or hydro excavate to expose the buried infrastructure. Maintain vertical sides.

B. Backfill: Place backfill using suitable native soil compacted to 95% Standard Proctor Density according to Section 3010, granular material compacted to 65% Relative Density, CLSM, or foamed cellular concrete to the elevation required in Figure 7040.107.

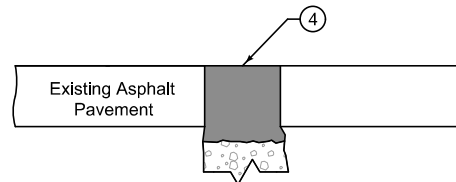
C. Pavement Core Replacement: Comply with Figure 7040.107 and the following.

1. If allowed by the Jurisdiction, replace pavement core utilizing waterproof bonding material. Mix and place bonding material according to the manufacturer's recommendations to fill the annular space around the core and the original slab. Ensure reinstalled core is in its original orientation and is flush and level with the adjacent pavement. Remove excess bonding material.
2. For PCC pavement install rebar pins and place low slump concrete to match elevation of existing pavement.
3. For asphalt pavements, use standard traffic surface, 1/2 inch mix, and PG 58-28S binder. Maximum lift thickness is 2 inches. If allowed by the Engineer, replace core with low slump concrete or pre-mixed high performance cold mix generally meeting the asphalt mixture noted above. Match elevation of existing pavement.

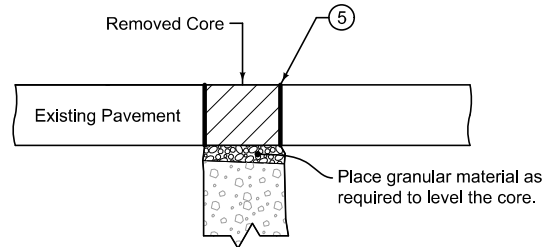
END OF SECTION



PCC CORE HOLE REPAIR



ASPHALT CORE HOLE REPAIR



CORE REPLACEMENT
(Reinstatement of Removed Core)

For pedestrian ramps damaged by subsurface utility exploration (SUE) core holes, replace the entire ramp according to Section 7030. For pavements damaged by SUE core holes, provide patches according to Figures 7040.101 or 7040.103. If allowed by the Engineer, repair core holes as shown.

- ① Fill vacuum excavated SUE hole with CLSM to an elevation within 2 inches of the bottom of the pavement.
- ② When allowed by the Engineer, fill utility verification hole with Class 1 bedding stone, pea gravel, or suitable native materials. Place backfill materials in 4 inch maximum lifts and compact each lift.
- ③ For PCC core hole repairs, drill four, 5 inch long, 5/8 inch diameter holes into the sides of the core hole at a 30 to 45 degree angle. Grout four 8 inch long #4 reinforcing bars into holes. Fill core holes with low slump concrete, tamp to remove air voids, screed level with existing pavement and texture to match existing pavement.
- ④ For asphalt core hole repairs, place asphalt mixture in 2 inch lifts and compact. If allowed by the Engineer, replace core with low slump concrete as noted above or pre-mixed high performance cold mix generally meeting the asphalt mixture specified. Match elevation of existing pavement.
- ⑤ When allowed by the Engineer, the removed core may be replaced back in the core hole. If the removed core is intact, stable, and free of fractures, replace core back in hole and fill annular space with approved bonding material.

	REVISION
	New 2021 Edition
	7040.107
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SUDAS Standard Specifications

**UTILITY CORE
HOLE REPAIR**