



CITY OF TEMPE

ENGINEERING & TRANSPORTATION MAINTENANCE PAVEMENT RESTORATION POLICY



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PAVEMENT RESTORATION POLICY



These guidelines are presented to be incorporated into daily Standard Operating Procedures and into TEMPE Supplements to Maricopa Association of Governments (MAG).

In the event of any conflict, discrepancy or inconsistency among the plans submitted with the permit and this policy, the requirements of this policy, MAG Standard Details, Tempe Supplement to MAG and Standard Drawings shall govern.

1. GENERAL REQUIREMENTS - PERMITS

- 1.1. All contractors and public utility agencies must obtain a Right of Way (ROW) permit for any work performed within the public right-of-way of the City of Tempe. In order to preserve the original investment of the pavement and transportation network and reduce future maintenance problems these policies are implemented.
- 1.2. Pavement and surfacing replacement within Arizona Department of Transportation (ADOT) rights-of-way shall be constructed in accordance with their permits and/or specification requirements.
- 1.3. All special condition pavement restoration work related to this policy shall be completed within 180 calendar days of approval of permit.

2. PAVEMENT RESTORATION FEES

- 2.1. A pavement restoration fee is required in connection with any right-of-way permit to excavate, bore, trench or disturb street pavement for a period of seven (7) years after the city's acceptance of street construction (i.e. new pavement, pavement preservation or pavement reconstruction that extends the full width of the street) at the location of the proposed right-of-way permit.
- 2.2. The amount of the pavement restoration fee shall be as established per the city's fee schedule as listed in City of Tempe Code Section 29-19 Appendix A.

3. SPECIAL CONDITIONS FOR PAVEMENTS LESS THAN THREE (3) YEARS OLD AND THE RESPECTIVE REPAIR REQUIRED

- 3.1. For a period of three (3) years after the city's acceptance of street construction (i.e. new pavement, pavement preservation or pavement reconstruction that extends the full width of the street), all right-of-way permits to excavate, bore, trench or disturb street pavement **will not be allowed** except under the following exceptions:
 - 3.1.1. a verifiable emergency exists that endangers life or property. An emergency is defined as anything that results in the unplanned disruption of an essential utility service
 - 3.1.2. or an interruption or loss of essential utility service (electrical, gas, sewer, water or communications only).
 - 3.1.3. or a pavement cut is required by government regulation.
- 3.2. All street cuts that are granted an exception and thus permitted within three (3) years of construction, reconstruction, or pavement preservation shall require the final surface is to match the existing new surface (i.e. sealcoat, slurry seal, microseal, mill and overlay, etc).
 - 3.2.1. The width of the final surface match shall extend full width of all lanes impacted, including to the lip of gutter on outside lanes.

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- 3.2.2. The length shall extend a minimum distance of twenty-five (25) feet extending from the area of the cut in both directions longitudinally
- 3.2.3. The depth of the trench shall be a minimum of 2 inches per T-450 Note 1
- 3.2.4. All edges of the repair shall be crack sealed per T-450 Note 7
- 3.3. The requirement to match the existing surface of the street shall not apply to one pothole smaller than two feet by two feet within the limits of the new pavement section.
- 3.4. For multiple trench cuts, potholing, bore pits, recovery pits or other partial pavement installations located less than 300 feet apart; and/or totaling a cumulative sum of 100 feet in length or more, the entire surface area between all cuts shall be matched with new material.

4. SPECIAL CONDITIONS FOR PAVEMENTS GREATER THAN THREE (3) YEARS OLD AND LESS THAN SEVEN (7) YEARS OLD AND THE RESPECTIVE REPAIR REQUIRED

- 4.1. Street cuts permitted after three (3) years but less than seven (7) years of construction, reconstruction, or pavement preservation will be allowed **AND** shall require slurry seal **ONLY** if there is more than one pavement cut associated with the permit.
 - 4.1.1. If the street is greater than 36 feet wide, the width of the slurry seal shall extend full width of all lanes impacted, including to the lip of gutter on outside lanes. If the street is 36 feet wide or less, the entire width of the street shall be slurry sealed.
 - 4.1.2. The length of the slurry seal shall extend a minimum distance of twenty-five (25) feet extending from the area of the cut in both directions longitudinally
- 4.2. For multiple trench cuts, potholing, bore pits, recovery pits or other partial pavement installations located less than 300 feet apart; and/or totaling a cumulative sum of 100 feet in length or more, the entire area shall be slurry sealed.
 - 4.2.1. If the pavement cuts (bore pits, recovery pits, etc.) are 300 feet or more apart, the bore or tunneled distance will not be considered as part of the open trench; however, the two or more areas will have to be slurry sealed separately.
 - 4.2.2. If the pavement cuts (bore pits, recovery pits, etc.) are less than 300 feet apart, the distance between the cuts will be considered the same as a trench cut and the distance will be added to any trench cut distances. The entire length between all pavement cuts will be required to be slurry sealed.
- 4.3. The requirement to slurry seal the street shall not apply to one pothole smaller than two (2) square feet within the limits of the new pavement section.

5. PAVEMENTS GREATER THAN SEVEN (7) YEARS OLD AND THE RESPECTIVE REPAIR REQUIRED

- 5.1. Street cuts permitted after seven (7) years of construction, reconstruction, or pavement preservation will be allowed and shall require the restoration of the pavement area per City of Tempe detail T-450 **only** unless 5.2 applies.
- 5.2. If there are multiple pavement cuts (bore pits, recovery pits, potholes etc.) and they are less than 300 feet apart, the bore or tunneled distance between the cuts will be considered as part of the open trench and the slurry seal will be required between cuts per MAG 336.2.4.1 (G).
 - **Note: For pavements greater than seven (7) years old, the slurry seal requirement will be waived if:



- the pavement is in fair or poor condition per the latest pavement survey data
- or the location is scheduled for resurfacing within the five-year Capital Improvement Program.

6. POTHOLE REPAIR

- 6.1. Pothole repair shall be per MAG Standard Detail 212 – Type A Pavement Repair. No type B (keyhole method) pavement repairs will be allowed.
 - 6.1.1. All backfill shall be ½-sack CLSM per MAG Section 728
 - 6.1.2. Temporary asphalt concrete shall be a premium asphalt cold patch material (e.g. Aquaphalt, Patchmaster, etc).
 - 6.1.3. All final permanent asphalt repair shall be Hot Mix Asphalt (3/4-inch Hot Mix Asphalt per MAG Section 710, or approved equal)
- 6.2. Requirements to restore surrounding pavement shall not apply to one pothole -or- to pavements older than seven (7) years old.
- 6.3. All pavement shall be sawcut in connection with pothole repairs.
- 6.4. Minimum size is 3ft x 3ft (1ft buffer on all edges).
- 6.5. In the event three or more pothole repairs will be in a span of 25ft or less when measured in any direction, the Permit Holder shall make the pothole repairs one single asphalt patch that extends a minimum of 1ft around the outer edge of respective pothole repairs.

7. TRENCH; BORE/RECOVERY PIT REPAIR

- 7.1. Trench and bore/recovery pit repair shall be per City of Tempe detail T-450.
- 7.2. The finish surface must match the adjacent pavement layer (i.e. asphalt rubber, etc) per T-450 Note 1. In the event, asphalt rubber or other specified material is not available, the permit holder must submit a statement from asphalt vendor stating such and the reasoning for approval of different material installation by the City Engineer.
- 7.3. All diagonal repairs must be squared off, milled and paved per T-450 to lines that run parallel and perpendicular to centerline of street. (See examples of repair methods section)
- 7.4. The finished surfaces shall conform to the lines and grades that existed prior to construction. No deviation, variations, or irregularities exceeding one quarter (¼) inch in any direction when tested with 10-foot straightedge will be permitted in the finished work, nor will any depressions that will not drain properly. All defects shall be corrected by the contractor.
- 7.5. Final pavement surface restoration shall be per City of Tempe detail T-450 and the applicable sections of this policy.

8. LANE MARKINGS

- 8.1. All lane markings impacted by pavement restoration shall be replaced per Maricopa County Pavement Marking Manual.
 - 8.1.1. Obliteration – All pavement to be slurry sealed must have lane markings removed via water blasting prior to slurry seal.
 - 8.1.2. Raised Pavement Markings – All raised pavement markers must be removed prior to placement of and newly required surface.



9. DETECTOR LOOPS

- 9.1. Detector loops located with the pavement restoration limits shall be placed per City of Tempe Standard Detail T-575.

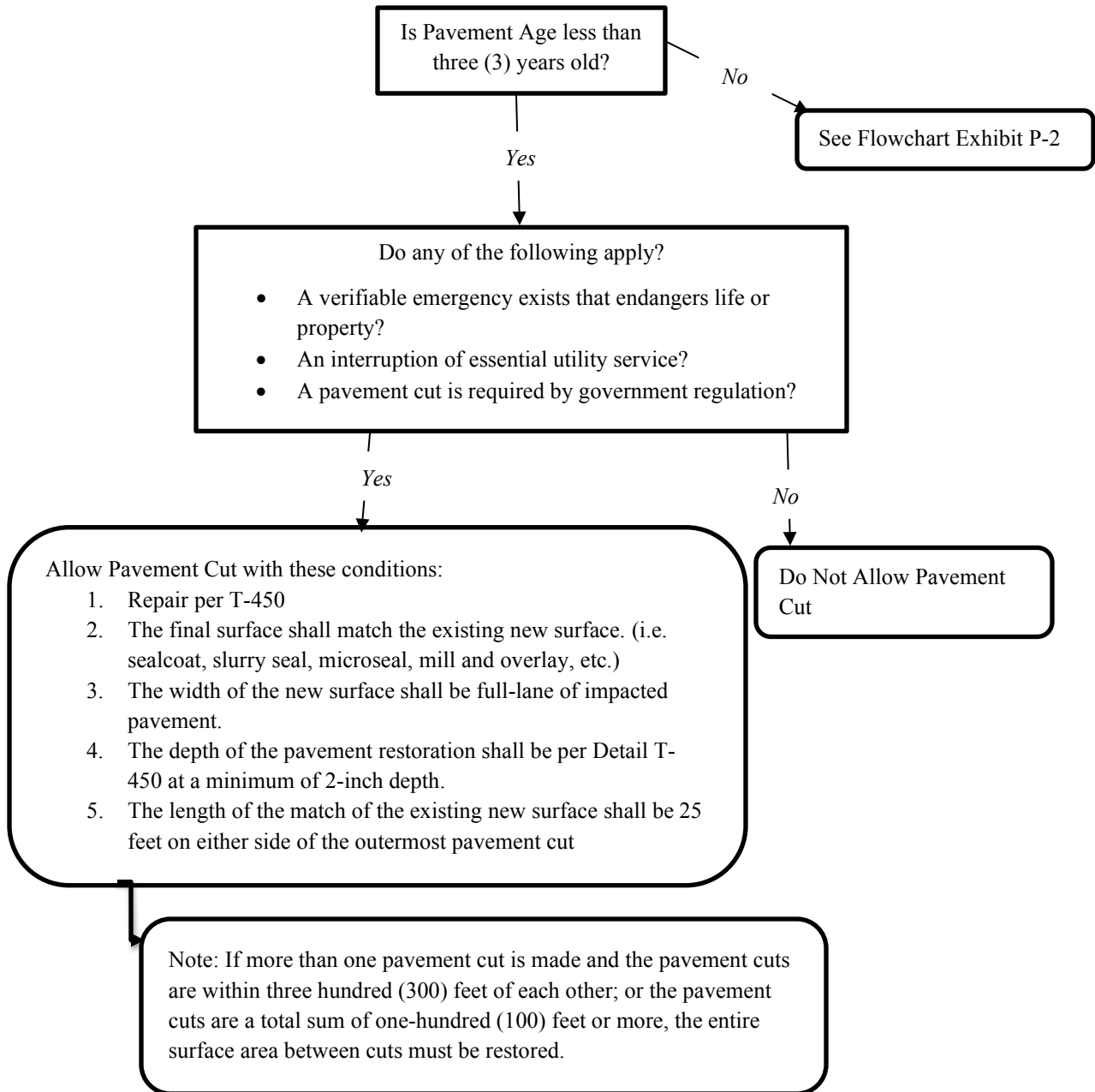
10. AMERICAN DISABILITY ACT (ADA) AND CONCRETE REPAIR REQUIREMENTS

- 10.1. All Portland cement concrete sidewalks, sidewalk ramps, curb & gutter, valley gutters and alley entrances in connection with any right-of-way permit to excavate, bore, trench or disturb concrete, the concrete shall be replaced per the following
 - 10.1.1. Sidewalks – All sidewalks must be replaced to the nearest dummy joint. No dowels required.
 - 10.1.2. ADA Sidewalk Ramps and Apron – If the concrete disturbance impacts sidewalk ramp and/or apron the area must be sawcut at the nearest joint and the new concrete shall be doweled in.
 - 10.1.3. Driveway or Alley Entrance - If the concrete disturbance impacts a driveway or alley entrance the area must be sawcut at the nearest joint and the new concrete shall be doweled in.
 - 10.1.4. Curb and Gutter – All curb and gutter must be sawcut and replaced at the nearest joint.
 - 10.1.5. Valley Gutter – All valley gutters must be sawcut and replaced at the nearest joint.
- 10.2. All Sidewalk Ramps must have a receiving ramp on the opposite facing corner(s).
 - 10.2.1. In the event there is no receiving ramp, the corner being impacted must have a receiving ramp installed at the utility owner's expense.
 - 10.2.2. In the event there is a receiving ramp already present, the receiving ramp will not be required to be updated to the latest standard, unless construction activities impact the receiving ramp.
- 10.3. All Sidewalk Ramps, Alley Entrances and Driveways that will result in the complete removal of said ramp, alley entrance or driveway must be replaced per the latest applicable MAG or City of Tempe Standard Detail.

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11. FLOWCHART (P-1). PAVEMENTS LESS THAN THREE (3) YEARS OLD

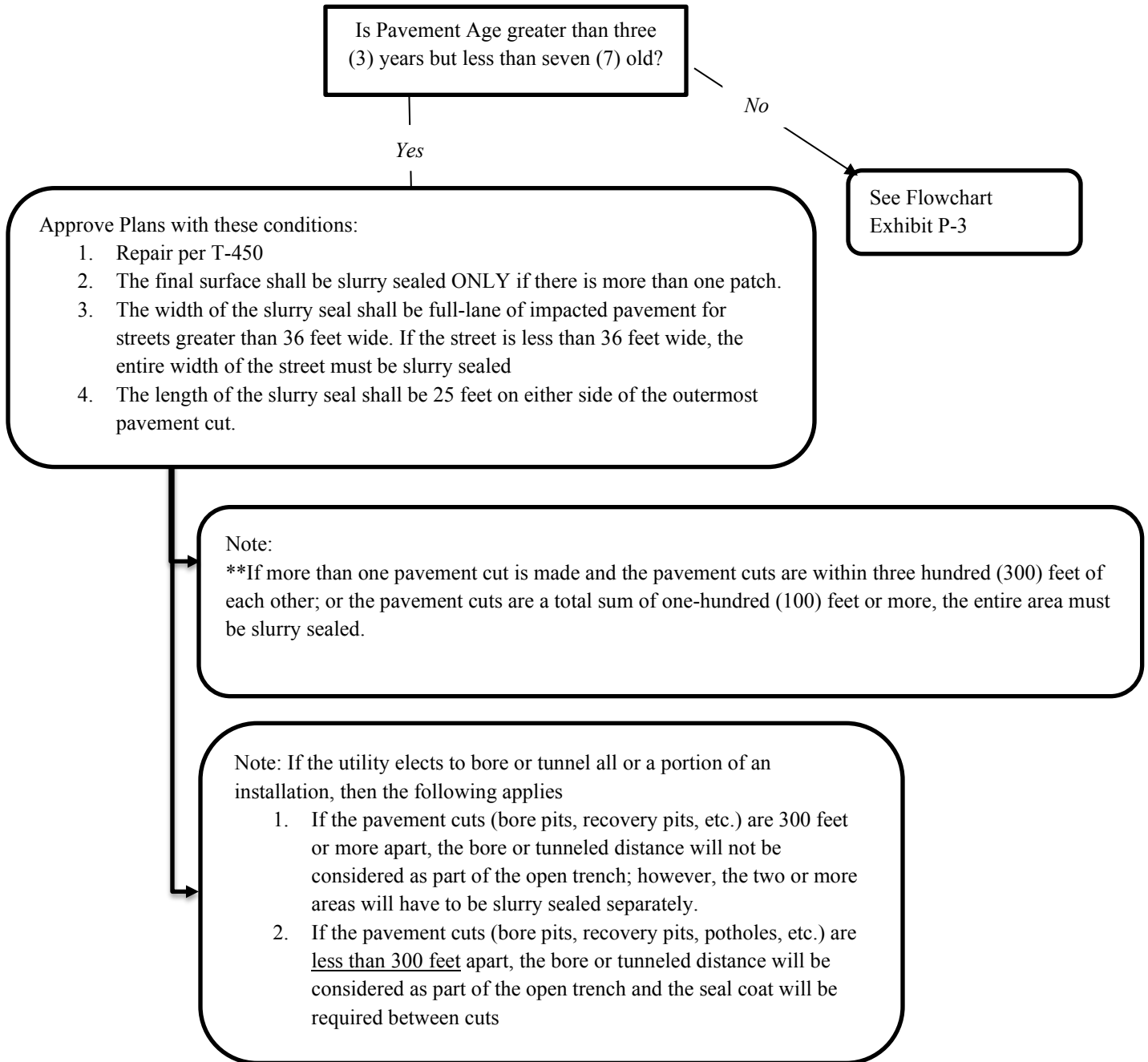


Pavement Restoration Fee

- 1) Surcharge for cutting new or resurfaced pavement less than 3 years old.
 - a) Opening less than 9 square feet of trench = \$1,332.79
 - b) Trench over 9 square feet = \$3,331.85 for every 50 square feet of trench or fraction thereof
- 2) Surcharge for cutting new or resurfaced pavement more than 3 years old but less than 7 years old.
 - a) Opening less than 9 square feet of trench = \$666.45
 - b) Trench over 9 square feet = \$1,666.01 for every 50 square feet of trench or fraction thereof
- 3) Seal coat = \$1.40 sq yd



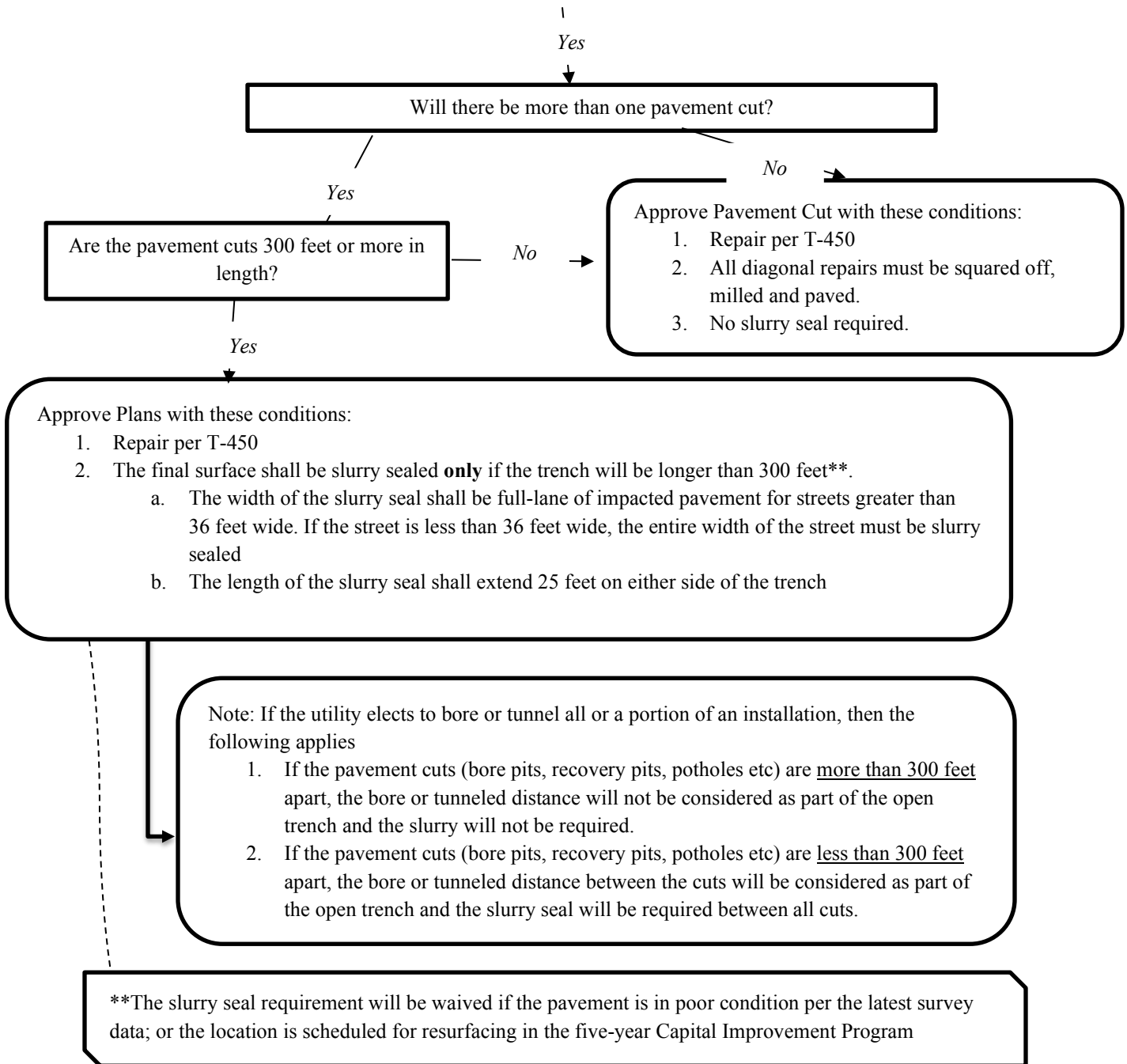
12. FLOWCHART (P-2). PAVEMENTS BETWEEN THREE (3) YEARS AND SEVEN (7) YEARS OLD



13. FLOWCHART (P-3). PAVEMENTS GREATER THAN SEVEN (7) YEARS OLD

- Is Pavement Age greater than seven (7) years old?**
- Pavement Restoration Fee
- 1) Surcharge for cutting new or resurfaced pavement more than 3 years old but less than 7 years old.
 - a) Opening less than 9 square feet of trench = \$1,332.79
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