
PAVEMENT CUT POLICY

City of Grants Pass Standards

December 17, 2008

INTRODUCTION

The City of Grants Pass is faced with the same challenges as many other municipalities throughout the country. Pavement cuts are a necessary operation and cannot be avoided. Utilities need to serve new customers and repair existing facilities. There is a common good for utilities to be placed in the Public Right of Way. All parties shall strive to reduce the burden to the taxpayer/ratepayer, and damage to all streets.

Studies conducted by multiple groups and organizations have determined that poorly restored pavement cuts may cause permanent structural and functional damage which increases maintenance costs, future rehabilitation costs and produce a rough ride. Increased costs and rough rides are a burden for the taxpayer/ratepayer.

As Exhibit A on page seven shows, the pavement beyond the edge of the trench may be weakened by sagging, which results from loss of lateral support. Heavy construction traffic also weakens the area adjacent to the trench. Studies have shown that the pavement life may be reduced by the pavement cuts. Poorly constructed patches tend not to last through the life of the existing street and fail prematurely when there is a lack of good construction techniques used when backfilling and compacting. This causes an additional burden to maintenance departments and taxpayers/ratepayers. A poorly constructed pavement cut usually requires repair before the street needs to be resurfaced, with problems typically appearing in the first two years. Studies also reveal that patch areas may require thicker overlays compared to the rest of the pavement in the area. This results in higher costs to the taxpayer/ratepayer.

EXECUTIVE SUMMARY

This document outlines the City of Grants Pass administrative policy regarding pavement cuts. It addresses excavation problems, construction requirements, warranties, and other related aspects. Any street will remain available to cut provided that all provisions within this policy are adhered to. The utility shall attempt to use other innovative ideas for servicing customers other than cutting into the public Right-of-Way, while not diminishing safety standards.

DEFINITIONS

Assignee: The contractor who is taking out the permit.

City Engineer: City Engineer or his/her designee

Length of Patch: For this document, the length of all patches is the patch dimension parallel to the street. This is also known as the longitudinal direction.

New Street: Any new street, or any street that has had a rehabilitation in the permitted excavation location that is less than or equal to three years.

Patch: Cut in the pavement as part of the current permitted job.

Permittees: The utility company or contractor who submits an application for a permit to obstruct and/or conduct construction operations in the public right-of-way. The City and their contractors shall be considered permittees for application of this policy even though the City and/or their contractors may not take out permits.

Project Completion: Date when the final permanent restoration of street is complete and approved by the inspector.

Standard Specifications: Most current version of the ODOT/APWA Standard Specifications, City of Grants Pass Specifications and/or Drawings.

Utility: Owner of a utility. May be either the City or privately operated entity.

Width of Patch: For this document, the width of all patches is the patch dimension perpendicular to the street. This is also known as the transverse direction.

CONSTRUCTION REQUIREMENTS

1. No patching material will be allowed within an existing patch if the new patch exceeds seventy percent or more of the existing patch. In this case, the entire existing patch must be replaced.
2. All patching materials and construction requirements shall conform to the City's Standards. Longitudinal cuts that extend through multiple tier classifications will require discussion with the City Engineer to determine appropriate patching approach. In principle, each street section will be patched according to the tier in which it is ranked.
3. All existing traffic control markings will be replaced as soon as possible after permanent paving is completed. Temporary markings for lane lines and stop lines shall be in place prior to the street opening for traffic. All remaining temporary striping will be completed within seven days of new pavement completion and shall be maintained by permittee until permanently restored. All traffic markings will be replaced per normal work practices.
4. Asphalt shall be removed and replaced at full depth to the limits shown in Exhibit B. The goal is that the tee section will not arbitrarily force patch into adjacent lanes, dependant on quality and care of trenching. The minimum length of the patch parallel to the street shall be per Exhibit B. If any part of the excavation, patch or damaged area intrudes into an adjacent lane, that lane shall also be replaced per the tiered chart. All new patch edges shall extend to the nearest edge of an existing patch. For new patches adjacent to any existing patch, all attempts will be made to install the utility at the existing patch line. When this is not feasible, no gap of 4 feet or less shall exist.
5. The permittee shall be allowed to make emergency repairs to a utility provided a more reasonable alternative does not exist. Every reasonable effort will be made to restore the street quickly. All requirements of this policy shall be adhered to.

6. Only saw cutting, jack hammering, or approved grinding device will be allowed. Only parallel and perpendicular pavement cuts will be allowed without prior approval of the City Engineer. No jagged, broken or undermined edges.
7. Bicycle/pedestrian/parking/travel lanes to be repaired per Exhibit B.
8. The City shall have the prerogative to encourage the permittee to contribute permittee's normal patching costs to accomplish paving or full depth replacement of the street. (This does not apply to work done within larger projects, i.e. sewer projects). The City should be notified of existing problems with the adjacent street to a proposed patch. Every effort will be made to leverage both permittee and City dollars for street improvements.
9. When 2 or more patches are created within a given job that measure 15 feet or less longitudinally or transversely they will be incorporated into a single patch. Anytime five or more patches are required within a 350-foot longitudinal area, the permittee will notify the City to determine if cost sharing is an option to expand the pavement repair/replacement area.
10. Potholing to find utilities shall be allowed. The use of innovative technologies, such as small-diameter vacuum excavation and non-destructive methods are encouraged. To be exempt from the gap and patching policy, cuts shall be a maximum of two square feet with no longitudinal joints in the wheel patch and shall be backfilled with controlled density or other approved fill from six inches above the utility to existing asphalt depth or 3 inches, whichever is greater. Round vs. square cuts are preferred.
11. Chip sealed streets shall be rehabilitated according to construction requirements for asphalt streets as outlined in this document.
12. All temporary traffic control for the work zone shall conform to the MUTCD. All traffic control is subject to the approval of the City Engineer or his/her designee (See temporary patching sections).
13. All pavement shall be constructed at the existing depth of asphalt or three inches, whichever is greater.
14. All concrete street cuts shall be pre-approved before beginning work (except in the case of an emergency situation). Concrete streets shall require full panel replacement unless approved otherwise by the City Engineer. All concrete joints shall require an approved tie bar and dowel retrofit. Depth of concrete replacement shall match the existing thickness. Care shall be made not to undermine the existing panels. If the existing panels are disturbed or damaged, they also shall be replaced at the discretion of the City Engineer. All joints shall be sealed with an approved material.
15. Asphalt over concrete street cuts – if known – shall be pre-approved before beginning work (except in the case of an emergency situation). Saw cutting or other approved practice for removal of the concrete shall be allowed at the discretion of City Engineer. The asphalt portion of the cut shall be constructed according to the pavement cut policy.

16. All areas outside of the street that are affected by the work shall be restored to their original condition. All shoulders shall be restored to their original condition
17. Valve and manhole repairs shall be exempt from the patching requirements of this policy. Valve and manhole patching requirements shall be per City Standards. All warranty and construction requirements shall be met.

SURFACE SMOOTHNESS REQUIREMENTS

The completed surface of all courses shall be of uniform texture: smooth, uniform as to crown and grade and free from defects. The completed surface of the wearing course shall not vary more than ¼ inch from the lower edge of a ten foot straightedge placed parallel to the centerline. Recognition and consideration will be made for existing street conditions. The City Engineer must approve corrective measures.

WARRANTY REQUIREMENTS

Pavement cuts on streets twelve years old or less shall have a warranty period of two years. All other streets shall have a warranty period of one year. The patch in the street shall be repaired as necessary until the warranty has passed. All warranties shall become void if rehabilitation work is performed to the street within the patching limits.

For street cuts performed by a Utility using its internal capability, that Utility or assignee will be responsible for repairs required during the warranty period.

All curb, sidewalks and structures that are affected by the excavation shall be included in this policy and have a warranty for two years.

WARRANTY PROVISIONS

All restoration work shall meet the following criteria and the end of the two-year warranty period:

- 1) Sunken pavement patches equal to or less than to one-quarter inch (Measured by a ten-foot straight edge).
- 2) Visual rating of patch = Patch is in good condition and is satisfactory. Ride quality is rated as low severity or better.
- 3) Construction joint = Nonfilled crack width is equal to or less than 3/8 of an inch or filled crack of any width (filler in satisfactory condition)
- 4) Good workmanship with little or no deterioration (To be determined by City Engineer).
- 5) Compaction requirements per City Standards.
- 6) No sunken or damaged curb and sidewalks in excavation work area (To be determined by City Engineer).

REPAIRS OF FAILED PAVEMENT CUTS

If emergency repairs are needed due to safety concerns, the permittee shall have twenty four hours in which to make such repairs from time of verbal notice by the City. For non-emergency repairs on arterial streets the permittee shall have forty-eight hours to make such temporary repairs. For non-emergency repairs on collector streets the permittee shall have seventy-two hours to make such temporary repairs. Residential streets, the permittee shall have up to seven days to make such temporary repairs. If these repairs are not accomplished within the specified timeframe, the work shall be privately contracted by the City or the City's maintenance crew shall perform the needed repairs.

The permittee will be assessed for all costs associated with the repairs. The costs shall be based on time and materials necessary to make the repairs. If repairs are made other than seam sealing to the warranted patch a new warranty will be implemented for the new patch.

The permittee shall have two days to notify their asphalt company for the needed permanent repairs. If the work is not done in a timely manner and following notification the work shall be privately contracted by the City or the City's maintenance crew will perform the needed repairs. The permittee shall be assessed the associated costs for the repairs.

TEMPORARY PATCHING

The temporary patch shall consist, at a minimum, of two inches of hot or cold-mix asphalt pavement over the required backfill material. Steel plates may be used but for a period not to exceed seventy-two hours. Alternatively, upon approval of the City Engineer, crushed surfacing top coarse may be used for local access streets but for a period not to exceed two weeks. When a temporary patch is required for more than two months on arterial or collector streets, concrete shall be used. The permittee shall maintain the temporary patch until the patch can be permanently restored.

During winter asphalt concrete paving plant closures or outside of allowable temperature specifications (see the City's standard specifications), the permittee shall install and maintain the temporary patch until it can construct a permanent patch. A temporary patch will be required if the street must be opened to traffic before a permanent patch can be made.

PERMITS

All work in the Public Right-of Way requires an Encroachment Permit. Permittee shall take out all permits and perform all work.

RESPONSIBLE PARTY

The permittee shall be responsible for all construction and warranty requirements for this policy. Utilities will provide identity for excavator/permittee as known to the City. The City will attempt to get permittee to correct warranty defects. If permittee is a subcontractor for utilities, the utilities will assume responsibility if permittee can not or will not make repairs.

WAIVERS AND EXEMPTIONS

It is understood that field conditions may warrant a waiver or an exemption from these regulations. Permittee may file for a waiver, and such waivers shall be at the discretion of the City Engineer or his/her designee.

**PAVEMENT CUT POLICY
EXHIBIT B**

Street Designation	Tier 1 ≤ 3 Years	Tier 2 > 3 Years ≤ 5 Years	Tier 3 > 5 Years ≤ 12 Years	Tier 4 > 12 Years
Arterial Streets	Inclusive Policy Exhibit B1	Full Policy Exhibit B1	Full Policy Exhibit B1	Modified Policy Exhibit B1
Collector and Local Collector Streets	Inclusive Policy Exhibit B2	Full Policy Exhibit B2	Modified Policy Exhibit B2	Trench Only City Standard
Local Access Streets	Inclusive Policy Exhibit B3	Modified Policy Exhibit B3	Modified Policy Exhibit B3	Trench Only City Standard

EXHIBIT B NOTES

Inclusive Policy – Half street or full street replacement for longitudinal cuts in new streets.

Full Policy – Policy w/paving to established/dedicated lane lines. Cut full depth 2 feet beyond excavation. No gaps ≤ 4’ from curb or gutter.

Modified Policy – If no striping for lane line, lane is equal to 12’, can patch to middle of lane lines, cannot leave any gap ≤ 4’ from curb or gutter. Cut 1’ beyond excavation.

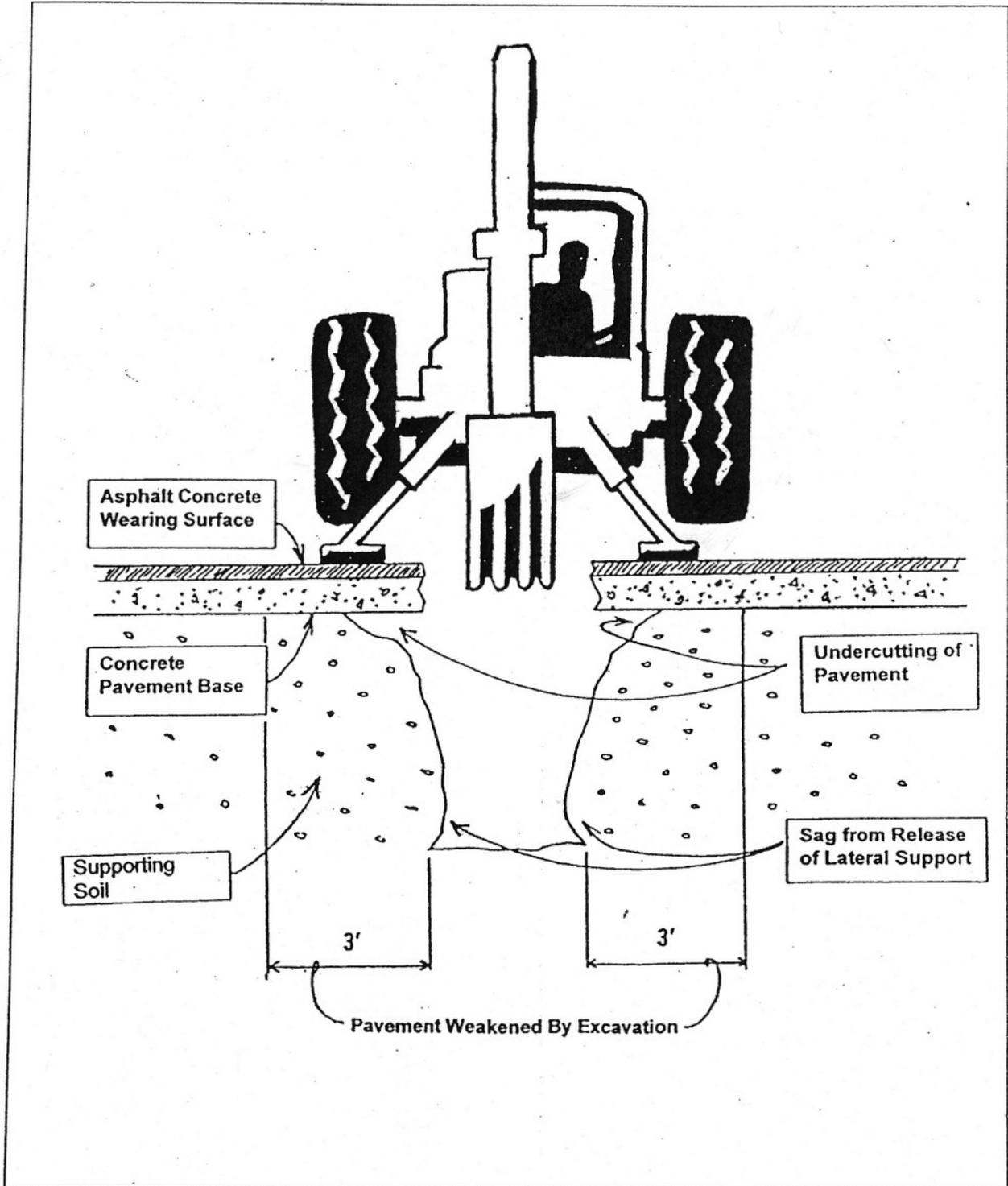
Trench Only – Restore street per standard drawing 101-A. No longitudinal joints in the wheel path.

Note: It is the responsibility of the City to review the individual street segment ages to determine patch requirements on longitudinal installation over multiple street segments with variable tier classifications. In principle, each street section will be patched according to the tier in which it is ranked.

Note: Any deviation from the Tier Policy will require approval in advance by the City Engineer.

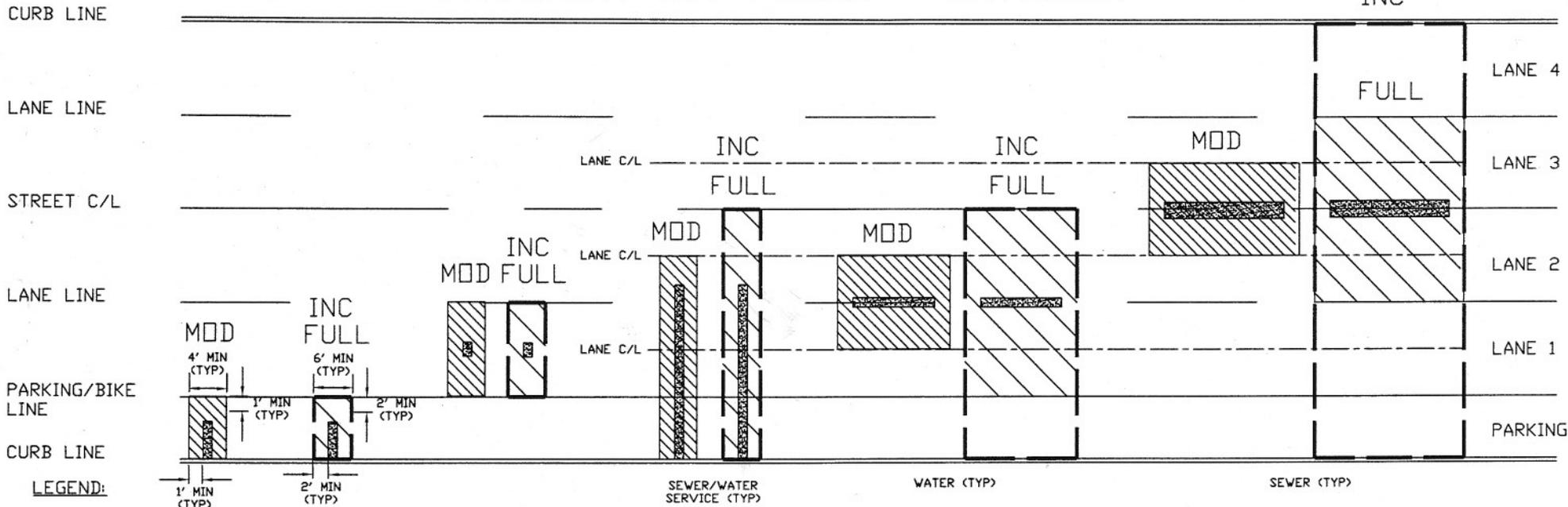
Note: The City will provide the date of construction or major rehabilitation for age determination.

TYPICAL TRENCH EXCAVATION
EXHIBIT A



PAVEMENT CUT POLICY - ARTERIAL

INC



LEGEND:

- MOD** MODIFIED POLICY EXAMPLE.
- FULL** FULL POLICY EXAMPLE
- INC** INCLUSIVE POLICY EXAMPLE

TRENCH LIMITS AT TOP OF PAVEMENT

INCLUSIVE POLICY - UP TO 3 YEARS
WHEN PAVEMENT IS 3 YEARS OLD OR LESS, A PAVEMENT PATCH IS REQ'D TO THESE LIMITS. NO JOINTS OR REDUCTION IN AREA ARE ALLOWED. PAVEMENT REPLACEMENT IS REQ'D TO THE NEXT ADJACENT CURB, PARKING OR LANE LINE WHENEVER A TRENCH OR DISTURBANCE OF ASPHALT OR SUPPORT MATERIAL EXTENDS BEYOND SUCH LINE.

FULL POLICY - 4 TO 12 YEARS
WHEN PAVEMENT IS 4 TO 12 YEARS OLD, PAVEMENT PATCH IS REQ'D TO THESE LIMITS. NO JOINTS OR REDUCTION IN AREA ARE ALLOWED. PAVEMENT REPLACEMENT IS REQ'D TO THE NEXT ADJACENT CURB, PARKING OR LANE LINE WHENEVER A TRENCH OR DISTURBANCE OF ASPHALT OR SUPPORT MATERIAL EXTENDS BEYOND SUCH LINE.

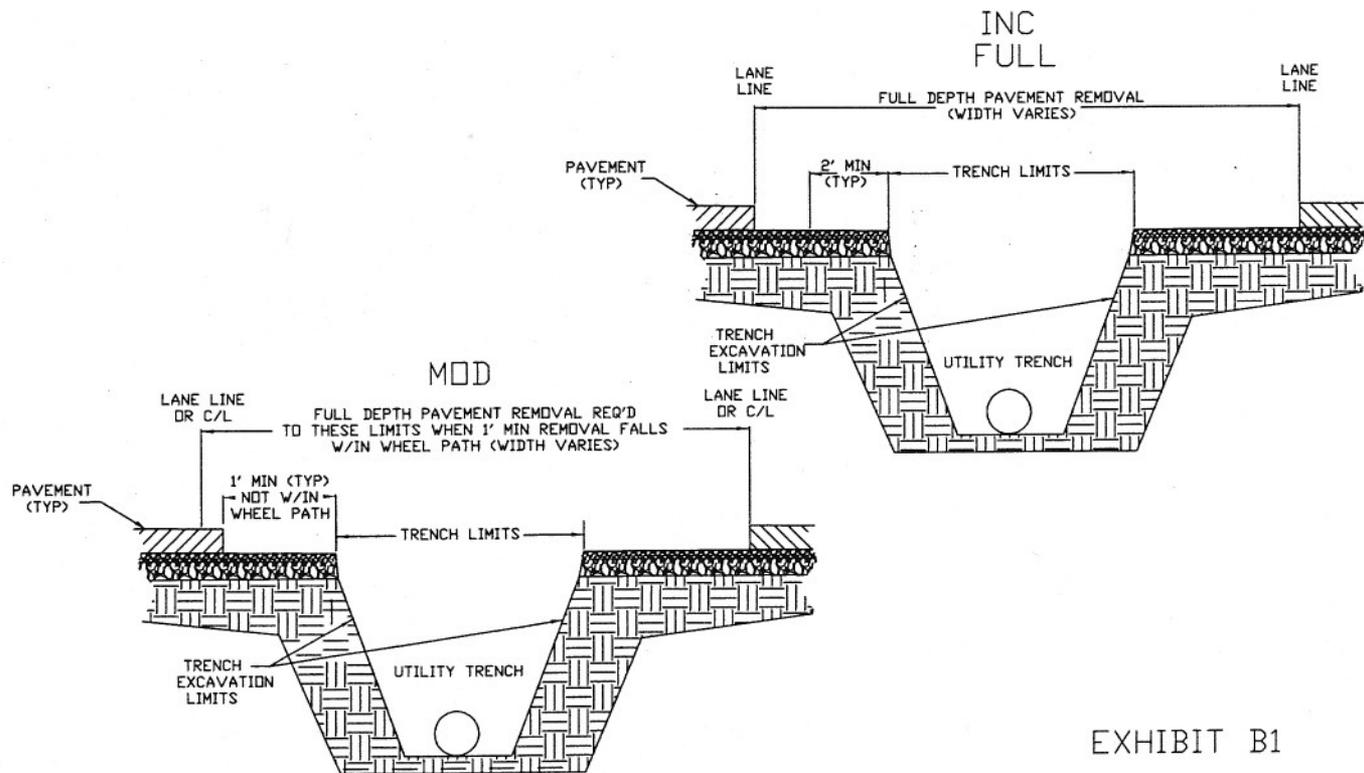
MODIFIED POLICY - 12+ YEARS
WHEN PAVEMENT IS GREATER THAN 12 YEARS OLD, PAVEMENT PATCH IS REQ'D TO THESE LIMITS. NO JOINTS OR REDUCTION IN AREA ARE ALLOWED. PAVEMENT REPLACEMENT IS REQ'D TO LANE LINE OR LANE C/L WHENEVER A TRENCH OR DISTURBANCE OF ASPHALT OR SUPPORT MATERIAL EXTENDS INTO WHEEL PATH.

NOTE:

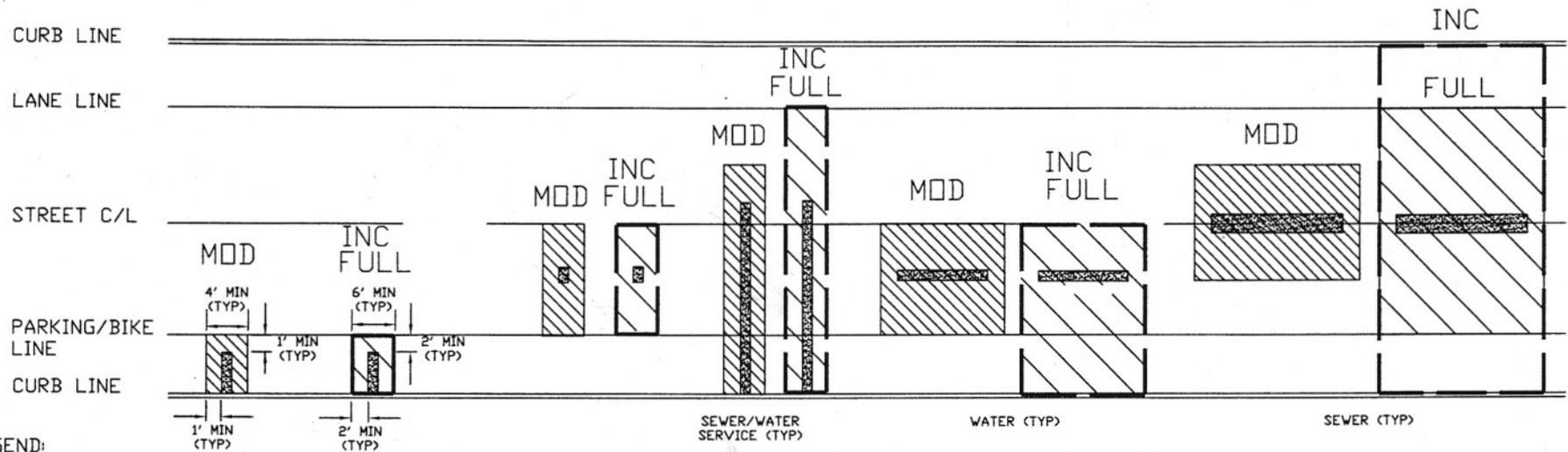
1. FULL-DEPTH PAVEMENT PATCH JOINTS SHALL BE SEALED.
2. ALL CUTS SHALL BE PERPENDICULAR TO DIRECTION OF TRAVEL.

TRANSVERSE CUT

LONGITUDINAL CUT



PAVEMENT CUT POLICY - COLLECTORS AND LOCAL COLLECTORS



LEGEND:

- MOD MODIFIED POLICY EXAMPLE.
- FULL FULL POLICY EXAMPLE
- INC INCLUSIVE POLICY EXAMPLE

 TRENCH LIMITS AT TOP OF PAVEMENT

 **INCLUSIVE POLICY - UP TO 3 YEARS**
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 **FULL POLICY - 4 TO 5 YEARS**
 WHEN PAVEMENT IS 4 TO 5 YEARS OLD, PAVEMENT PATCH IS REQ'D TO THESE LIMITS. NO JOINTS OR REDUCTION IN AREA ARE ALLOWED. PAVEMENT REPLACEMENT IS REQ'D TO THE NEXT ADJACENT CURB, PARKING OR LANE LINE WHENEVER A TRENCH OR DISTURBANCE OF ASPHALT OR SUPPORT MATERIAL EXTENDS BEYOND SUCH LINE.

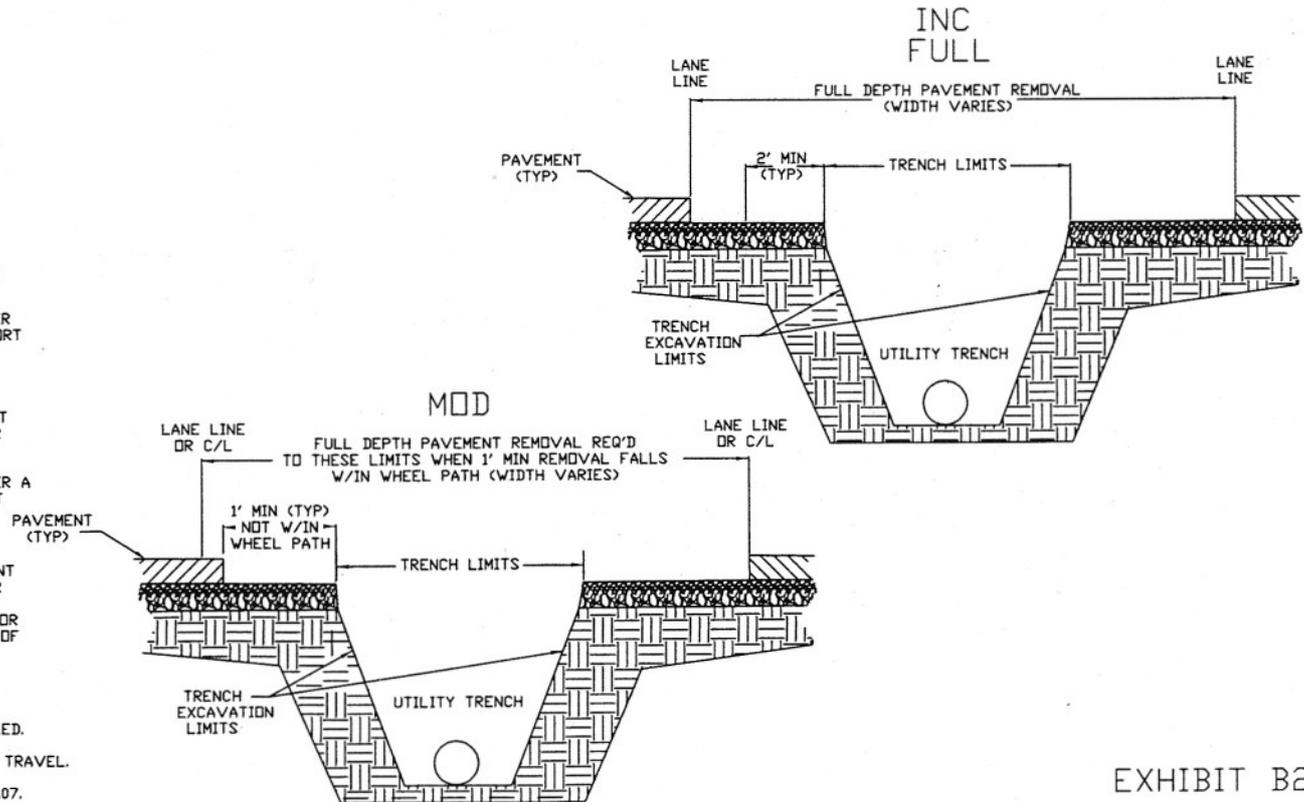
 **MODIFIED POLICY - 6 TO 12 YEARS**
 WHEN PAVEMENT IS 6 TO 12 YEARS OLD, PAVEMENT PATCH IS REQ'D TO THESE LIMITS. NO JOINTS OR REDUCTION IN AREA ARE ALLOWED. PAVEMENT REPLACEMENT IS REQ'D TO LANE LINE OR LANE C/L WHENEVER A TRENCH OR DISTURBANCE OF ASPHALT OR SUPPORT MATERIAL EXTENDS INTO WHEEL PATH.

NOTE:

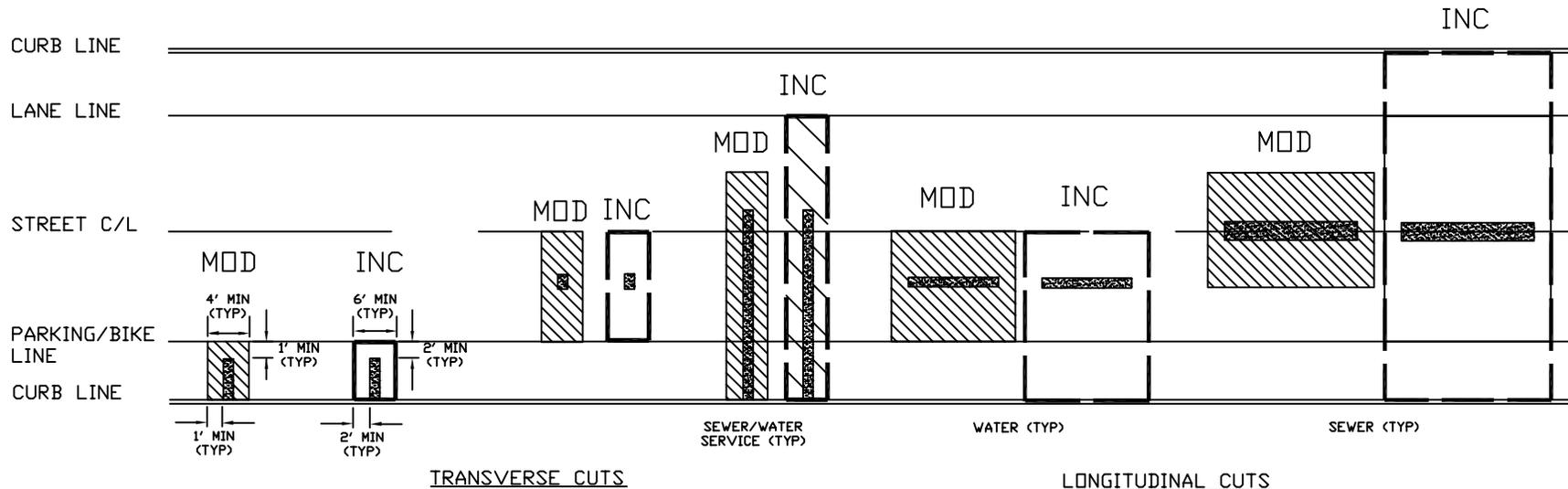
1. FULL-DEPTH PAVEMENT PATCH JOINTS SHALL BE SEALED.
2. ALL CUTS SHALL BE PERPENDICULAR TO DIRECTION OF TRAVEL.
3. FOR STREETS OVER 12 YEARS OLD REFER TO GPSD #107.

TRANSVERSE CUTS

LONGITUDINAL CUTS



PAVEMENT CUT POLICY - LOCAL ACCESS STREETS



LEGEND:

INC INCLUSIVE POLICY EXAMPLE

MOD MODIFIED POLICY EXAMPLE.

 TRENCH LIMITS AT TOP OF PAVEMENT

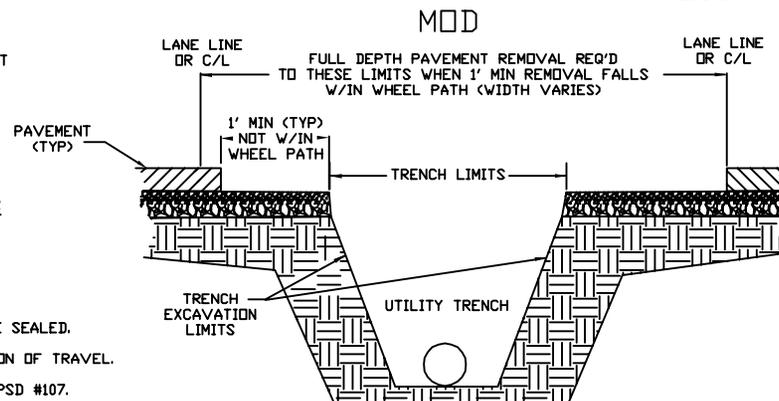
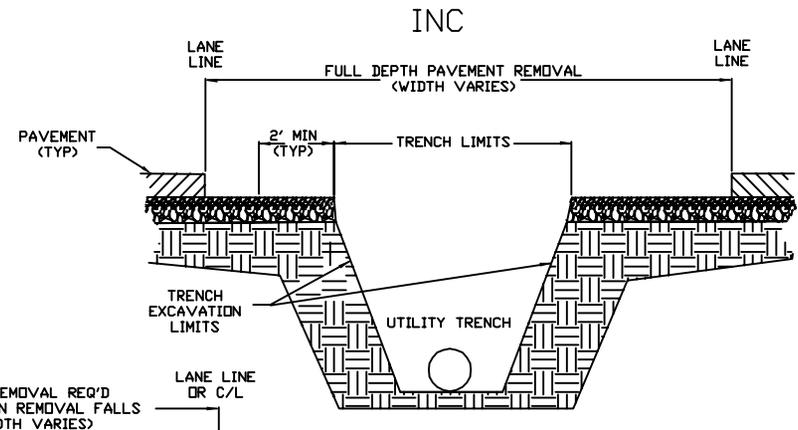
 INCLUSIVE POLICY - UP TO 3 YEARS
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 MODIFIED POLICY - 4 TO 12 YEARS
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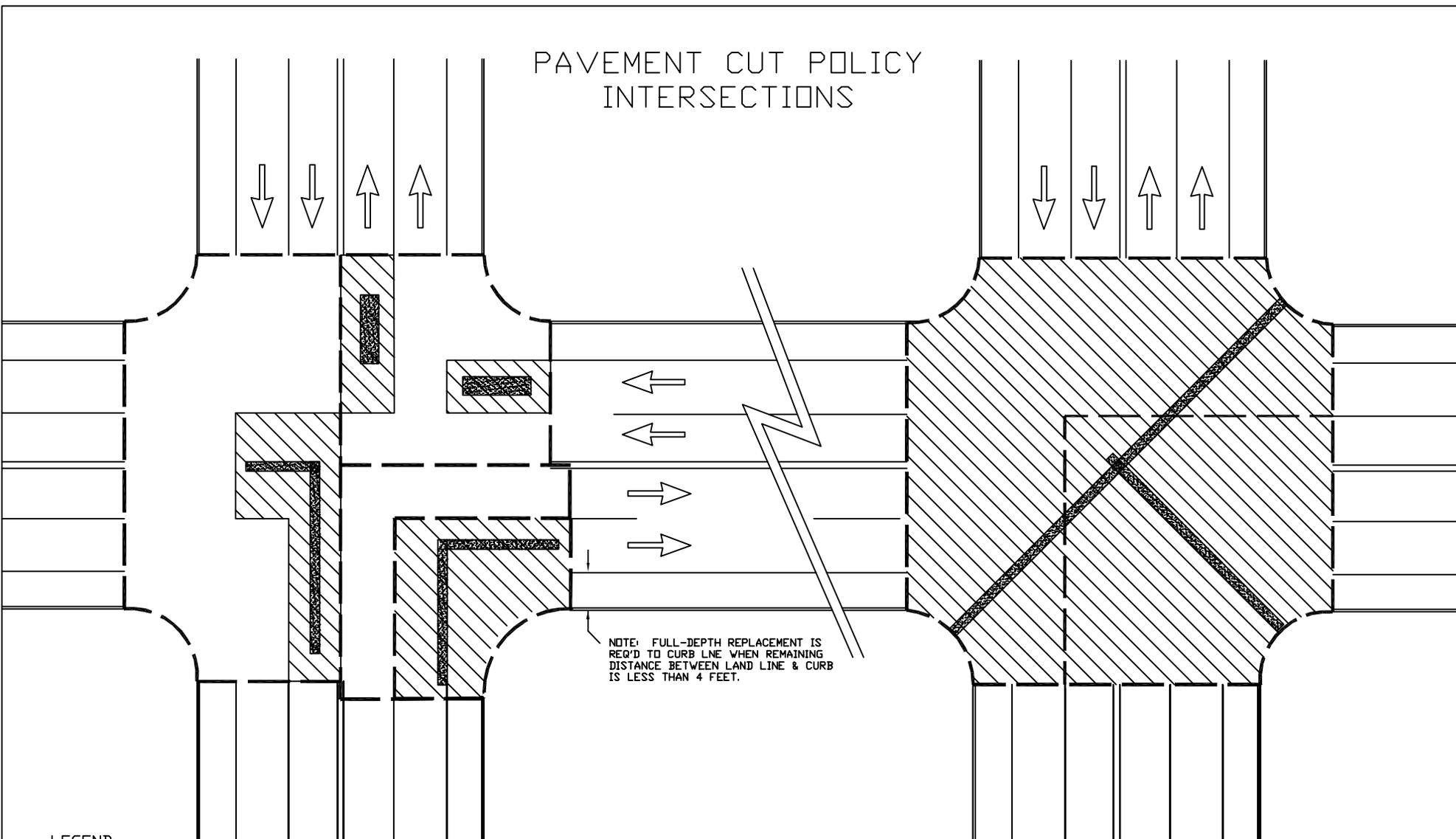
NOTE:

1. FULL-DEPTH PAVEMENT PATCH JOINTS SHALL BE SEALED.
2. ALL CUTS SHALL BE PERPENDICULAR TO DIRECTION OF TRAVEL.
3. FOR STREETS OVER 12 YEARS OLD REFER TO GPSD #107.

LONGITUDINAL CUTS



PAVEMENT CUT POLICY INTERSECTIONS



NOTE: FULL-DEPTH REPLACEMENT IS REQ'D TO CURB LINE WHEN REMAINING DISTANCE BETWEEN LAND LINE & CURB IS LESS THAN 4 FEET.

LEGEND:

 TRENCH LIMITS AT TOP OF PAVEMENT

 **INCLUSIVE POLICY - UP TO 3 YEARS**
WHEN PAVEMENT IS 3 YEARS OLD OR LESS, A PAVEMENT PATCH IS REQ'D TO THESE LIMITS. NO JOINTS OR REDUCTION IN AREA ARE ALLOWED.

 **FULL POLICY - OVER 3 YEARS**
WHEN PAVEMENT IS GREATER THAN 3-YRS OLD, PAVEMENT PATCH IS REQ'D TO THESE LIMITS. *NO JOINTS OR REDUCTION IN AREA ARE ALLOWED.

NOTE:

1. FULL-DEPTH PAVEMENT PATCH JOINTS SHALL BE SEALED.
2. ALL CUTS SHALL BE PERPNDICULAR TO DIRECTION OF TRAVEL.
3. REPLACEMENT IS REQ'D TO THE NEXT ADJACENT CURB, PARKING, OR LANE LINE WHENEVER A TRENCH OR DISTURBANCE OF ASPHALT OR SUPPRT MATERIAL EXTENDS BEYOND SUCH LINE.