
INLAND NORTHWEST REGIONAL PAVEMENT CUT POLICY

Effective January 1, 2017

PURPOSE:

The purpose of this policy is to establish a uniform approach to pavement cuts and repair applicable to utilities and other contractors working in the public rights-of-way.

POLICIES:

The local agency shall establish a tiered system based on the date of construction or reconstruction of pavement and may also apply additional criteria for roadway condition. The policies applicable are as follows:

1. A pavement cut moratorium will be in effect for a period of three years for all new and reconstructed Tier 1 roadways.
2. The policies for Tiers 2-4 roadways is as follows:
 - a. Full Policy: Patches/paving shall extend the full width of an established travel lane. Pavement cuts shall be full depth and extend 2 feet (2'-0") beyond the nominal trench edge longitudinally and transversely. There shall be no gaps \leq four feet (4'-0") from curb or gutter.
 - b. Modified Policy: Patches paving shall extend beyond the wheel path to the middle of the travel lane. Pavement cuts shall be full depth and extend one foot (1'-0") beyond the nominal trench edge longitudinally and transversely.. There shall be no gaps \leq four feet (4'-0") from curb or gutter.
3. Tiers Based on Age of Pavement

	Tier 1	Tier 2	Tier 3	Tier 4
Arterial Streets:	<u>0 – 36 Months (3 years from date of substantial completion)</u>	3 – 5 Years	5-12 Years	> 12 years
Principal	Moratorium Policy	Full Policy	Full Policy	Modified Policy
Minor	Moratorium Policy	Full Policy	Modified Policy	Modified Policy
Neighborhood Collector	Moratorium Policy	Full Policy	Modified Policy	Modified Policy
Local Access Streets:				
Industrial/Commercial	Moratorium Policy	Modified Policy	Modified Policy	Modified Policy
Residential	Moratorium Policy	Modified policy	Modified Policy	Modified Policy

Note: It is the discretion of each jurisdiction to review the individual road segment ages to determine patch requirements on longitudinal installation over multiple roadway segments with variable ratings. In principle, each road 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 local agency.

Note: Each agency will provide date of last major reconstruct either electronically, on issued permits, or on the respective agency website.

DEFINITIONS

Agency Engineer: City or County Engineer, his/her designee (Engineers, Inspectors, Project Managers, Field Personnel) representing a Local Agency.

Assignee: The contractor who is taking out the permit.

Bell Hole: A hole dug to allow room for workmen to make a repair or connection in buried pipe, such as caulking bell-and-spigot pipe or welding steel pipe. A bell hole can also be used for the starting location of an underground bore, when using the directional boring equipment. In the broad sense, any hole other than a continuous trench opened for working on a buried facility

Compaction: Restoration and backfill of the Trench, Pothole, and Bell hole. Each shall be compacted in lifts using the industry standard equipment to tamp the backfill material to 95% density.

Full depth: Asphalt depth top to base of asphalt or thickness of asphalt

Gap: Distance between two asphalt patches

Keyhole: Core drilling in asphalt or concrete used when performing installation, maintenance, or repair work.

Length of Patch: For this document the length of all patches is the patch dimension parallel to the roadway.

Local Agency: The governing entity having jurisdiction of the area that the permittee has submitted an application to obstruct or conduct construction operations.

MUTCD: Manual on Uniform Traffic Control Devices: Traffic Control should be set up to warn and protect the workers and general public by avoiding the working area during construction. Traffic Control must meet or exceed the Washington State modifications to the MUTCD (see <http://mutcd.fhwa.dot.gov> section, Chapter 6G and 6H).

New Roadway: Any roadway that has had a designed 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. Local agencies and their contractors shall be considered permittees for application of this policy even though the respective agencies and/or their contractors may not take out permits.

Potholing: Potholing is the practice of digging a test hole to expose underground utilities to ascertain the horizontal and vertical location of the facility. The horizontal and vertical position of the exposed facility must be tied to a survey benchmark or permanent above grade feature. The position may be identified by GPS or traditional survey coordinates or by measuring the distance, with a tape measure, to permanent features in three horizontal directions. In addition, the vertical distance below grade should be obtained.

Project Completion: Date when the following has occurred: final permanent restoration of roadway is complete and approved by the inspector, and all as-built documentation has been submitted to the local agency. A fax transmittal confirmation ticket of 'as built' shall be considered confirmation.

Standard Specifications: Current version of the WSDOT Standard Specifications for Road, Bridge, and Municipal Construction, Supplemental Specifications and/or Drawings as attached by local agencies.

Travel Lane: travel lanes shall be established based on striping, or where there is no striping, shall be twelve feet (12'-0") in width.

Width of Patch: For this document the width of all patches is the patch dimension perpendicular to the roadway.

GENERAL REQUIREMENTS

1. Patching:

- a. No patching material will be allowed within an existing patch if the new patch exceeds seventy percent or more (70%+) of the existing patch. The entire existing patch shall be replaced.
- b. The minimum length of the patch parallel to the road shall be six feet (6'-0"). If any part of the excavation, patch or damaged area intrudes into an adjacent lane, that lane shall also be replaced in accordance with the tiered chart.
- c. New patches adjacent to any existing patch shall be installed at the existing patch line. When this is not feasible, no gap of 4 feet or less shall exist.
- d. 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 utility will notify the agency to determine if cost sharing is an option to expand the pavement repair/replacement area.
- e. Only saw cutting or approved grinding device will be allowed. Only parallel and perpendicular pavement cuts will be allowed. No jagged, broken or rolled undermined edges.
 - i. Per agency approval, grind and overlay outside of the full depth asphalt removal limits may be allowed to achieve full patch limits.
 - ii. There may be times when a diamond shaped patch is the preferred method for the repair (i.e. man holes and valve boxes), since it will provide a smoother ride instead of a square patch.
- f. All pavement **overcuts** shall be sealed full depth, flush with the pavement surface. The contractor is required to use an approved sealing material. The area to be sealed must be clean and dry, and the material heated to melt into and fill the overcut (maximum length of cut is equal to depth of asphalt). If any holes remain after application, contractor is to repeat procedure. Contractor will clean the overcut to remove any debris which may obstruct the sealing process.
- g. 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 1/4 inch from the lower edge of a ten foot straightedge placed parallel to the centerline. Recognition and consideration will be made for existing roadway conditions. The Agency Engineer must approve corrective measures.

2. Keyholes. Can be used on moratorium streets, subject to agency approval.

- a. Keyholes should be kept to vertical as close as possible.
- b. Backfilling the keyhole should follow same method as open trenching, using crushed aggregate.
- c. Core reinstatement shall be per manufacture specifications.

3. Materials. All patching materials and construction requirements not addressed in this document shall conform to each Local Agency's Standards. Longitudinal cuts that extend through multiple tier classifications will require discussion with the local

agency to determine appropriate patching approach. In principle, each road section will be patched according to the tier in which it is ranked.

4. Traffic Control:
 - a. All existing traffic control markings will be replaced as soon as possible after permanent paving is completed.
 - b. Temporary markings for lane lines and stop lines shall be in place prior to the roadway opening for traffic.
 - c. All remaining temporary striping will be completed within seven days of new pavement completion and shall be maintained by permittee until permanently restored.
 - d. All traffic markings will be replaced per normal work practices. All temporary traffic control for the work zone shall conform to the MUTCD and Washington State modifications to the MUTCD. All traffic control is subject to the approval of the Agency Engineer or his/her designee
5. Emergency Repairs. The permittee shall be allowed to make emergency repairs provided a more reasonable alternative does not exist. Every reasonable effort will be made to restore the roadway quickly. Local agency will be notified of emergency repairs not later than the next business day.

SPECIFIC REQUIREMENTS

1. Chip sealed roads shall be rehabilitated according to construction requirements for asphalt roads per agency and tier level.
2. All existing pavement types shall be constructed at the existing depth of asphalt and crushed surfacing, in accordance with applicable Local Agency Standards (including any fabric or membranes); Replacement section of asphalt and crushed rock shall not be less than the minimum section specified in Local Agency's Design Standards.
3. All concrete road cuts shall be pre-approved before beginning work (except in the case of an emergency situation). Concrete roads shall require full panel replacement unless approved otherwise by local agency. All concrete joints shall require an approved tie bar and dowel retrofit. Depth of concrete replacement shall match the existing thickness, or shall be in accordance with Local Agency's Standards. Care shall be made not to undermine the existing panels. If the adjacent panels are disturbed or damaged, they also shall be replaced at the discretion of the Local Agency. All joints shall be sealed with an approved material.
4. Asphalt over concrete road 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 Local Agency. The asphalt portion of the cut shall be constructed according to the pavement cut policy.
5. All areas outside of the travel lanes that are affected by the work shall be restored to their original condition. All shoulders shall be restored to their original condition.

EXCEPTIONS:

1. Valve and manhole repairs shall be exempt from the patching requirements of this policy. Valve and manhole patching requirements shall be per each Local Agency's Standards. All warranty and construction requirements shall be met. No longitudinal construction joints shall be allowed in the wheel path.
2. Potholing to find utilities shall be allowed. To be exempt from the gap and patching policy, cuts shall be a maximum of two-feet square (2'-0") with no longitudinal joints in the wheel path and shall be backfilled with controlled density or other approved fill from six inches above the utility to six inches below bottom of asphalt. Round vs. square cuts are preferred.

NEW DEVELOPMENT

The moratorium policy will be explained both as to costs and to construction practices by the Local Agencies as part of the permitting/zoning process for new construction or major remodeling projects. Individual permittees/utilities will not be responsible for this function. Individual permittees/utilities will be responsible for doing the work and the costs associated with the moratorium policy as they open roadways for work. Cost recovery from developers will be calculated and coordinated by permittee/utility.

WARRANTY REQUIREMENTS

1. Pavement cuts on roadways ten years old or less will have a warranty period of five years. The patch in the roadway shall be repaired as necessary until the warranty has passed.
2. All other roadways shall require a minimum three-year warranty period. All warranties shall become void if rehabilitation work is performed to the road within the patching limits.
3. For road cuts performed by a Utility using its internal capability, that Utility or assignee will be responsible for repairs required during the warranty period.
4. All curb, sidewalks and structures that are affected by the excavation shall be included in this policy and have a warranty for five years.
5. All warranty work requires that an agency inspector be on site. The permittee shall be required to coordinate inspection with the appropriate department within the Agency.
6. The following defects identified by the local agency engineer shall be covered by warranty:
 - a. Sunken pavement patches greater than or equal to one-quarter inch (Measured by a ten-foot straight edge).
 - b. Failure to meet agency visual rating standard for patching and joints to medium or high).
 - c. Poor workmanship.
 - d. Inadequate compaction per Agency standard.
 - e. Sunken or damaged curb and sidewalks in excavation work area.
 - f. Sunken or damaged drywells and catch basins in excavation work area.

7. Notice of Repairs.
 - a. 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 Local Agency.
 - b. For non-emergency repairs on arterial roads the permittee shall have forty-eight hours to make such temporary repairs.
 - c. Residential streets, the permittee shall have up to seven days to make such temporary repairs.

The local agency may provide for repairs not completed within the specified timeframe and permittee will be assessed all costs associated with the repairs. The costs shall be based on actual costs or the average bid items for comparable projects for the year preceding, plus ten percent overhead fees. 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 of the needed permanent repairs. If the work is not done in a timely manner and following notification the work shall be privately contracted or Local Agency maintenance crews will perform the needed repairs. The permittee shall be assessed the associated fees for the repairs. All utility cut construction shall follow the construction and warranty requirements per local agencies standards.

TEMPORARY PATCHING

1. During winter asphalt concrete paving plant closures or outside of temperature specifications (see section 5-04 of the WSDOT/APWA Standard specification). The permittee shall install and maintain a temporary patch until it can construct a permanent patch. A temporary patch will be required if the road must be opened to traffic before a permanent patch can be made.
2. The temporary patch shall consist of four inches of crushed surfacing or current local agency standards, and two inches of cold-mix asphalt pavement, or upon approval of the Agency Engineer, crushed surfacing top coarse and/or steel plates may be used. On arterials, when a temporary patch is required for more than two months, Portland Cement Concrete shall be used to construct the temporary patch if weather permits (Contact Local Agency for mix design requirements). The permittee shall maintain the temporary patch until the patch has been permanently restored.

PERMITS

1. All work in the 'Public Right-of Way' requires a permit issued by the local agency. Permittee shall take out all permits and perform all work.
2. The permittee shall fax or send a letter to the appropriate Local Agency permit center designating their assignees. The permittee will be required to submit a construction and traffic control plans required by local agencies when applying for a permit. If the Agency Engineer determines that abuse of obligations are prevalent, future construction permits shall not be issued until the permittee has fulfilled all obligations to existing permits. Written notification by Local Agency will be sent prior to this action.
3. The permittee shall provide a detailed "As-built" record of the pavement cut after construction is completed. The permittee shall provide details indicating existing pavement section, new pavement section and any unusual conditions at the location of the constructed utility. The location shall include the name of the road the work is being performed on and the name of

the closest intersections in each direction. Distance measurements shall be from intersecting streets. This information will be provided to the Local Agency's Permit department for a permanent record. This information shall be returned no later than seven days after the completion of the permitted project by mail, fax, or other electronic means by either permittee or patching contractor. The intent of this process is to record small patching details. Larger projects shall be reviewed and approved prior to construction.

4. Each Local Agency may provide permittee to contribute normal patching costs to local agencies to accomplish paving or full depth replacement of the roadway. (This does not apply to work done within sewer projects).
5. The Local Agency should be notified of existing problems with the adjacent roadway to a proposed patch. Every effort will be made to leverage both utility and agency dollars for street improvements.

RESPONSIBLE PARTY

The permittee shall be responsible for all construction and warranty requirements of this policy. Utilities will provide identity of excavator/permittee as known to local agencies. Local agencies 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/will not make repairs.

COMPLIANCE

Failure to comply with any part of this policy may result in denial of future permits.

After 3 notices of noncompliance, the Agency shall send a notice to comply within 10 working days or all future permits may be denied until the problems have been corrected.

A meeting shall be arranged with the appropriate Agency and a plan of action to prevent future noncompliance shall be presented before issuance of any new permits.

An appeal can be applied for in writing to the appropriate Agency.

Noncompliance Activities include:

1. Failure to take out a permit.
2. Failure to maintain temporary patches.
3. Failure to make permanent repairs.
4. Failure to make emergency repairs.
5. Failure to make warranty repairs.
6. Failure to send back As-Built information.
7. Failure to inform agency of asphalt completion date.
8. Failure to follow traffic control measures, as required.

EXEMPTIONS FOR MORATORIUM ROADWAYS

It is understood that field conditions may warrant a waiver or an exemption from these regulations. Developers, Contractors or Owners may appeal for a waiver of the moratorium to allow for excavation into a street that meets the criteria for the moratorium tier.

The appeal process completion in NO WAY obligates the affected Agency Engineer to allow such an excavation, and any such decisions are at the Agency Engineer's discretion.

- Submit a letter of intent to the affected Agency Engineer outlining their proposed project and the impact of the project.
- Establish that all alternative avenues have been investigated and fail to meet the needs of the project.
- Acknowledge the requirements of restoration of the area affected, and that there will be required special inspection, the cost of which shall be borne by the applicant of the waiver.
- Propose a meeting with the Agency Engineer to discuss the project.
- Establish a timeline of the project through completion.

POLICY REVIEW

The local agencies will host a meeting with each other and other interested stakeholders at the end of each construction season for the purpose of reviewing the effectiveness of the policy for the completed construction season and suggested improvements for future construction seasons.

REFERENCES

- “Trench Restoration Requirements”. City of Bellevue
“Utility Trench Cut Restoration Specifications”. Metropolitan Transportation Commission (January 1997)
“Asphalted Pavement Warranties”. Wisconsin Department of Transportation (June 2001)
“Impact of Utility Cuts on Pavement Performance”. City of Seattle
“Managing Utility Cuts” APWA (August 1997)
“Gas Industry’s Use of Public Right-of-Way” A.G.A. White Paper (September 1998)
“Pavement Cut and Repair Standards Manual” DPW&T City of Dallas (October 2003)

PARTICIPATING JURISDICTIONS

Spokane County
City of Spokane
City of Spokane Valley
City of Airway Heights
City of Cheney
City of Medical Lake
City of Deer Park
City of Millwood
City of Liberty Lake

City of Spokane Resources

Side sewer card info link can be reached at: www.spokanewastewater.org
City of Spokane Engineering web site: www.spokanecity.org
City of Spokane GIS maps: <http://www.spokanegis.org/citymap2/default.htm>

SUGGESTED SPECIFICATIONS FOR JOINT SEALING

Option 1 - Joint Adhesive

Joint adhesive material shall conform to the following requirements:

Test Specification

Cone Penetration, 77°F (25°C) (ASTM D 5329) 60 - 100
Flow, 140°F (60°C) (ASTM D 5329) 5 mm maximum
Resilience, 77°F (25°C) (ASTM D 5329) 30% minimum
Ductility, 77°F (25°C) (ASTM D 113) 30 cm minimum
Ductility, 39.2°F (2°C) (ASTM D 113) 30 cm minimum
Adhesion, 77°F (25°C) (ASTM D 5329) 500% minimum
Softening Point (ASTM D 36) 170°F (77°C) minimum
Asphalt Compatibility (ASTM D 5329) Pass

Installation: Install according to manufacturer specifications.

Option 2 – Adhesive Joint Tape

Joint adhesive joint tape shall conform to the following requirements:

Test Specification

Softening Point, 225° F (107) min.
Flexibility 90 degree Bend, 1” (25mm) mandrel (ASTM D311), Pass at 30° F (-34° C)
Cone Penetration 77° F (25° C) (ASTM 5329), 50 max
Elongation 77° F (25° C), 1,000% min
Opening to traffic time, immediate

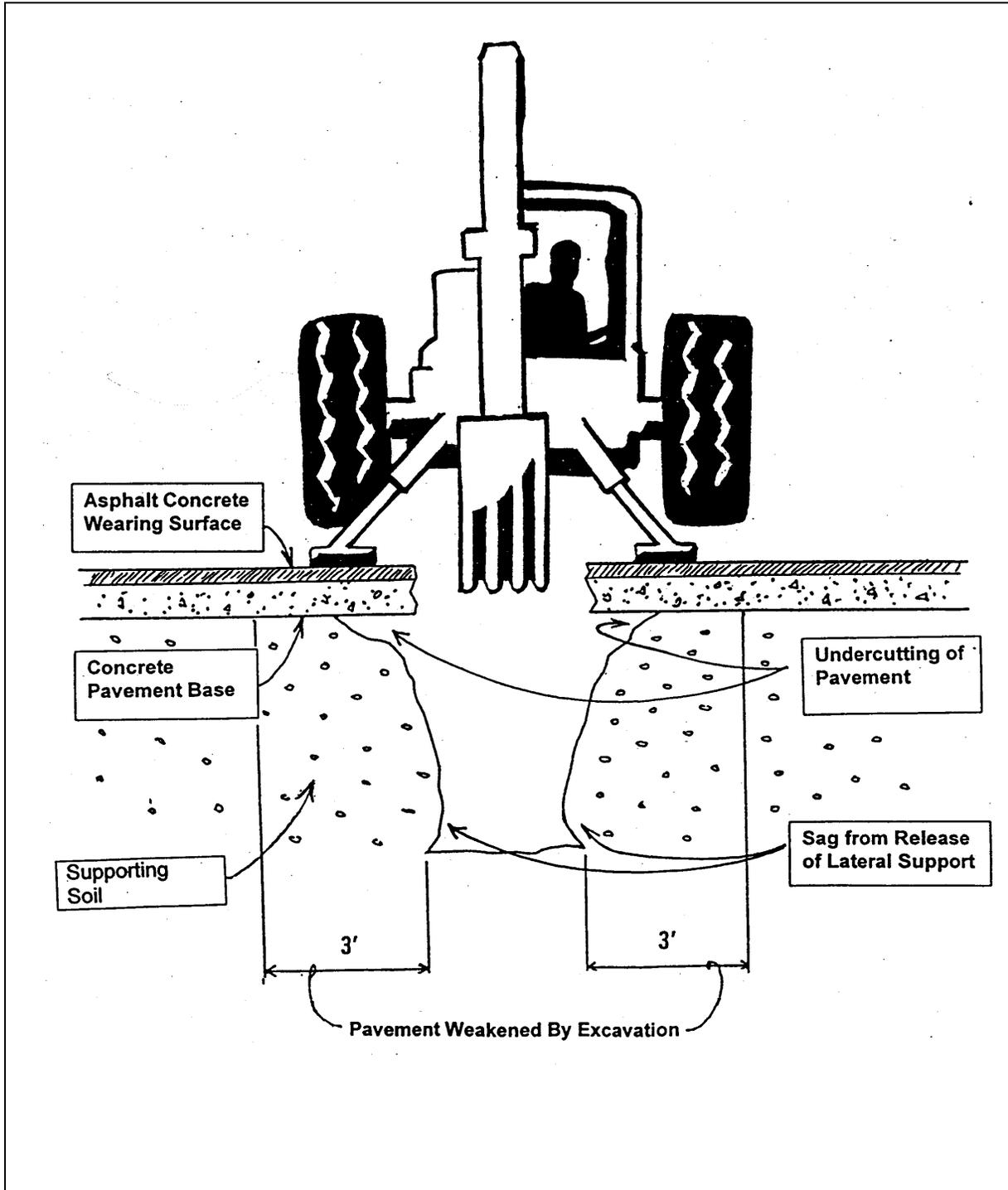
Installation: Install according to manufacturer specifications.

Construction Requirements

Section 5-04.3 is supplemented with the following:

The Contractor shall install Joint Adhesive to all joints of wearing course lifts that are not hot lapped or as designated by the Engineer. Equipment used for performing the joint adhesive application shall be maintained in satisfactory working condition at all times. Prior to the application of the joint adhesive the face of the joint shall be thoroughly dry and free from any loose material, dust, or other debris that would inhibit adhesion. Heating and pumping of joint adhesive shall be in accordance with manufacture recommendations. Application of the joint adhesive shall be in a continuous, 1/8 inch thick band over the entire vertical face of the joint. Joint adhesive shall be applied concurrent with HMA placement and application shall be limited to the surfaces that will be paved during the same working shift.

TYPICAL TRENCH EXCAVATION
EXHIBIT A



PATCH TO BE COMPLETED AFTER JOINT USE TRANSFER & POLE REMOVED

ASPHALT AND CONCRETE PAVEMENT REPAIR

Permittee Name: _____

Job Address: _____ (if no house number, please list hundred-block) Coordinates: _____ Street
 (Example: 15N 24W) Alley

Project/Task #: _____ RC / Area: _____

Date Cut: _____ Crew: _____

PO/Job #: _____ City/County Permit #: _____

Unusual Conditions/Special Instructions: _____

Tier#: (Please circle)	1	2	3	4
Policy: (Please circle)	Moritorium	Full	Modified	Trench

<u>Condition of Cut</u> (Circle any that apply)	<u>Type of Work</u>	<u>Type of Repair</u>	<u>Existing Road Condition</u>	<u>Overcut Sealant</u> (Approved List)
6" Gravel (required)	Gas	Asphalt	Depth of Asphalt _____	Dow Corning - 890-SL Self Leveling
Cold Mix	Electric	Concrete	Depth of Gravel _____	Silicone Joint Sealant
Winter Mix	Water	Sub Base Type _____		Sonneborn - Sonolastic SL1 One-Compound Elastomeric, Self Leveling
Sawcut	CATV			Polyurethane Sealant
Grind	Communications			
	Sewer			
	Other _____			

Asphalt

Width Length

_____ x _____

_____ x _____

_____ x _____

_____ x _____

Concrete

Width Length

_____ x _____

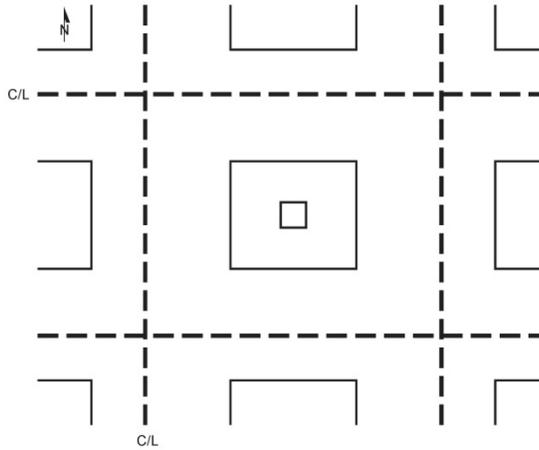
_____ x _____

striping (linear foot) _____

Date Sent for Repair: _____

Date Completed: _____

Patching Co. Signoff: _____
 (patching company to fax to local agency at completion)



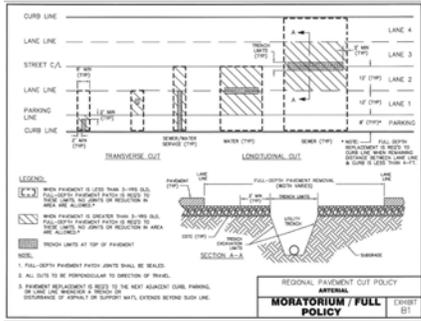
DISCLAIMER

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Fax Completed Form to the Appropriate Jurisdiction

N-2600 (01-12)

**EXHIBIT B1 - MORATORIUM/FULL POLICY - ARTERIAL
 “EMERGENCY ONLY FOR MORATORIUM OR PRIOR APPROVAL”**



**EXHIBIT B2 - MORATORIUM/FULL POLICY – RESIDENTIAL /LOCAL ACCESS
 “EMERGENCY ONLY FOR MORATORIUM OR PRIOR APPROVAL”**

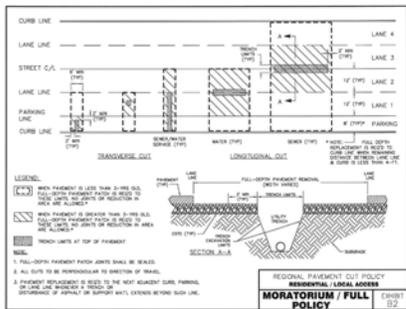


EXHIBIT B3 - MORATORIUM/FULL POLICY – INTERSECTIONS
“EMERGENCY ONLY FOR MORATORIUM OR PRIOR APPROVAL”

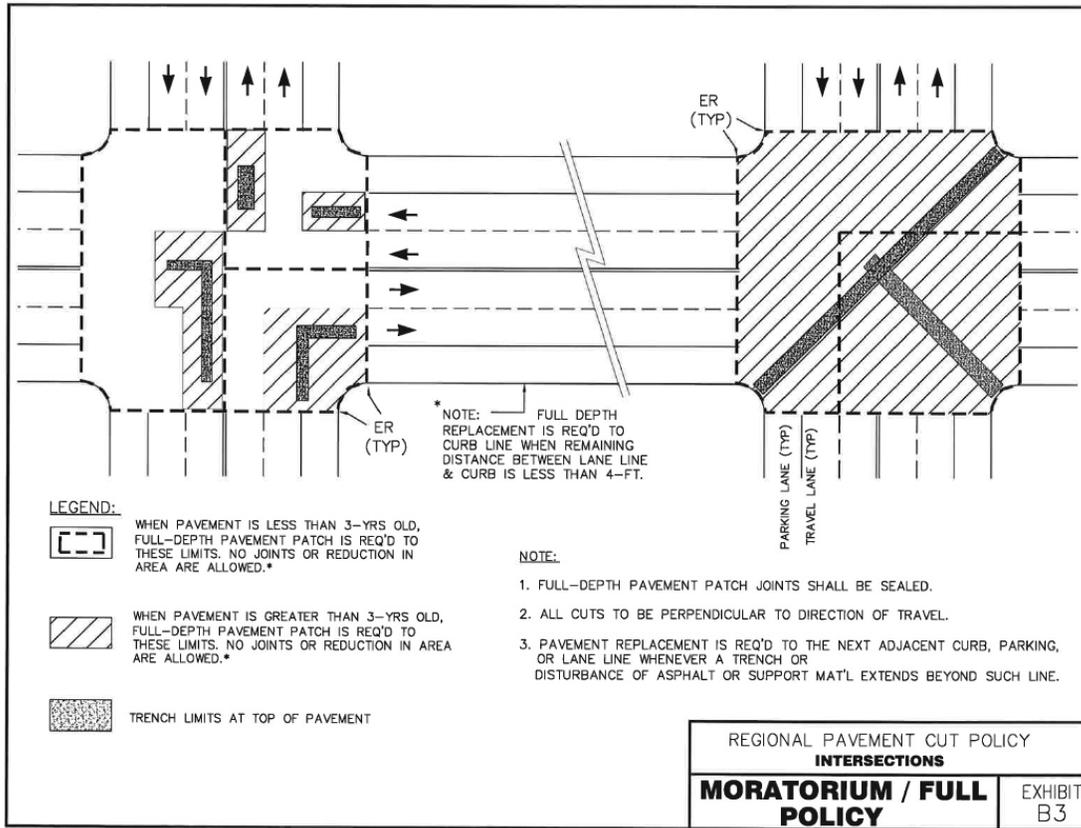
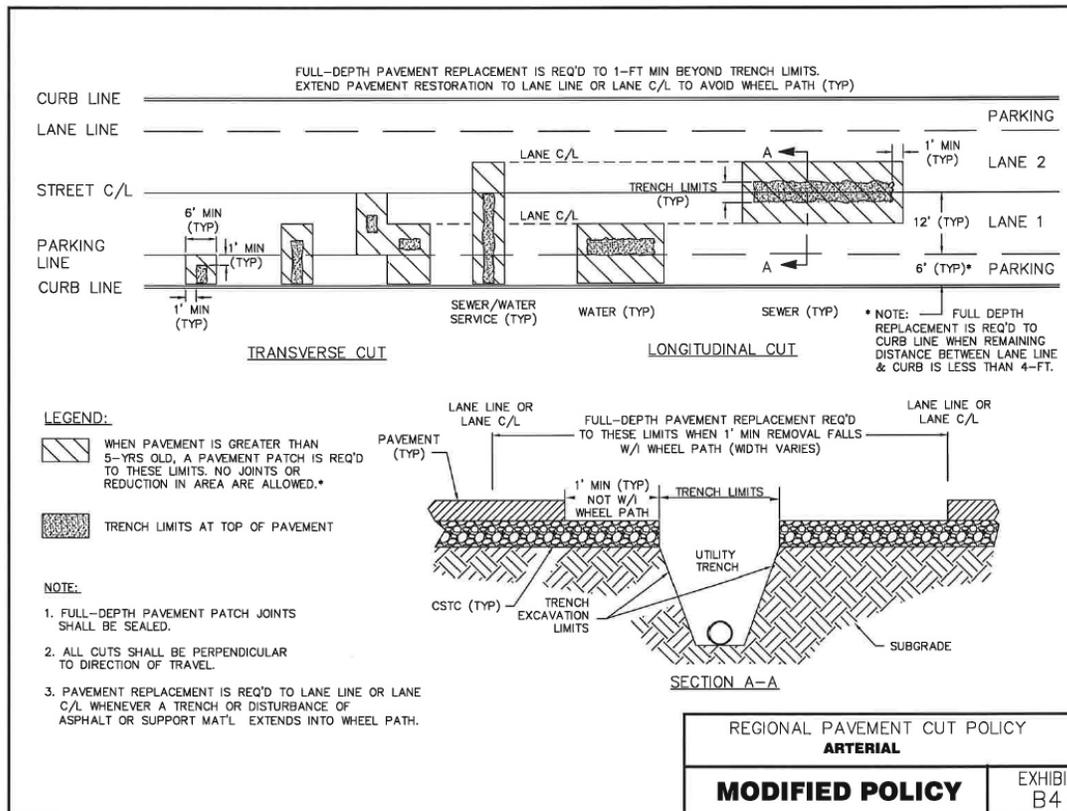
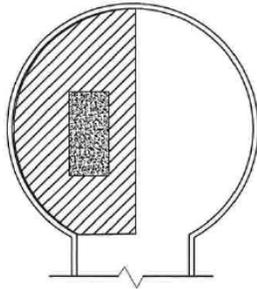


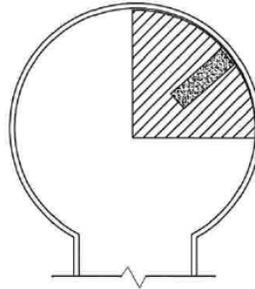
EXHIBIT B4 - MODIFIED POLICY - ARTERIAL
“EMERGENCY ONLY FOR MORATORIUM OR PRIOR APPROVAL”



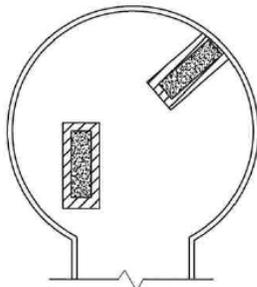
**EXHIBIT B6 - MODIFIED POLICY – CUL-DE-SAC
 “EMERGENCY ONLY FOR MORATORIUM OR PRIOR APPROVAL”**



WHEN PAVEMENT IS 3 YEARS OLD OR LESS, A MORATORIUM PAVEMENT PATCH IS REQ'D TO THESE LIMITS. IF ANY PART OF THE PATCH EXTRUDES INTO ANOTHER HALF OF THE CUL-DE-SAC, THAT ADDITIONAL HALF SHALL BE REPLACED.



WHEN PAVEMENT IS GREATER THAN 3 YEARS TO 12 YEARS OLD, A MODIFIED PAVEMENT PATCH IS REQ'D TO THESE LIMITS. IF ANY PART OF THE PATCH EXTRUDES INTO ANOTHER ONE QUARTER OF THE CUL-DE-SAC, THAT ADDITIONAL ONE QUARTER SHALL BE REPLACED.



WHEN PAVEMENT IS GREATER THAN 12 YEARS OLD, A MODIFIED PAVEMENT PATCH IS REQ'D TO THESE LIMITS. PATCH MAY BE LOCATED ANYWHERE IN THE CUL-DE-SAC.



NOTE:

1. ALL OVER CUTS AND FULL-DEPTH PAVEMENT PATCH JOINTS SHALL BE SEALED.
2. ALL CUTS SHALL BE PERPENDICULAR TO DIRECTION OF TRAVEL.
3. FULL DEPTH PAVEMENT REMOVAL SHALL BE 1' BEYOND TRENCH LIMITS, 2' IN MORATORIUM SITUATION.

REGIONAL PAVEMENT CUT POLICY
 RESIDENTIAL / CUL-DE-SAC

MODIFIED POLICY

EXHIBIT
 B6

EXHIBIT B7 – MODIFIED POLICY – ALLEY
“EMERGENCY ONLY FOR MORATORIUM OR PRIOR APPROVAL”

