



CITY OF COEUR D'ALENE PAVEMENT CUT POLICY

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 City has established 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 three feet (3'-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 three feet (3'-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

Street Classification	Tier 1	Tier 2	Tier 3	Tier 4
	0 – 3 Years	3 – 5 Years	5-12 Years	> 12 years
Principal Arterial	Moratorium Policy	Full Policy	Full Policy	Modified Policy
Minor Arterial	Moratorium Policy	Full Policy	Modified Policy	Modified Policy
Collector	Moratorium Policy	Full Policy	Modified Policy	Modified Policy
Industrial	Moratorium Policy	Modified Policy	Modified Policy	Modified Policy
Local/Residential	Moratorium Policy	Modified policy	Modified Policy	Modified Policy

Notes:

1. It is the discretion of the City Engineer 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.
2. Any deviation from the Tier Policy will require approval in advance by the City Engineer.
3. The City will provide the date of the last major surface rehabilitation either electronically or on issued permits.
4. This policy was modified from Avista Utility's "Inland Northwest Regional Pavement Cut Policy."

DEFINITIONS

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.

City Engineer: City Engineer, Streets & Engineering Director, or designee (Engineers, Inspectors, Project Managers, Field Personnel) representing the City of Coeur d'Alene.

Compaction: Restoration and backfill of the Trench, Pothole, and Bell hole. Subgrade and base rock shall be compacted in lifts using the industry standard equipment to achieve 95% of the Modified Proctor (ASTM-D1557). Asphalt compaction shall conform to the ISPWC, current edition.

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

Gap: Distance between two asphalt patches.

ISPWC: The Idaho Standards for Public Works Construction, current edition.

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 centerline of the roadway.

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 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.

Potholing: Potholing is the practice of digging a small test hole to expose underground utilities to verify 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.

Standard Specifications: Current version of the Idaho Standards for Public Works Construction (ISPWC), Supplemental Specifications, and/or City of Coeur d'Alene Standards.

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 centerline of the roadway.

GENERAL REQUIREMENTS

1. Patching:

- a. Patching that extends into existing patches require the removal and replacement of the existing patch unless approved by the City Engineer.
- b. The minimum length of the patch parallel to the centerline of 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 four feet or less shall remain.
- d. Patches located within 50 feet of each other shall be incorporated into a single patch. Anytime significant patching occurs, the contractor shall notify the City to determine if cost sharing is an option to expand the pavement repair/replacement area.
- e. For areas that contain four patches within 200 feet, the areas shall be consolidated into one patch or the area chip sealed when the roadway contains a chip seal no older than five years.
- f. For longitudinal patches that exceed 55% of the width of the street, the asphalt shall be replaced for the entire street width.
- g. All asphalt damaged from construction equipment or work activities shall be cut out and replaced in accordance with this policy.
- h. 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. manholes and valve boxes), since it will provide a smoother ride instead of a square patch.

- i. A Tack Coat of asphalt (see Specifications for Joint Adhesive and Crack Sealant) shall be applied to all paved surfaces on which any course of hot mix asphalt is to be placed or abutted. Tack coat shall be uniformly applied on a clean surface to cover the existing pavement with a thin film of residual asphalt free of streaks and bare spots at a rate between 0.02 and 0.08 gallons per square yard.
 - j. All pavement **cuts** shall be sealed full depth, flush with the pavement surface. The contractor is required to use an approved crack sealant material as defined in Specifications for Joint Adhesive and Crack Sealant section. The maximum length of overcut is equal to the depth of asphalt. Crack Sealant shall be applied according to manufacturer's recommendations. If any holes remain after application, the contractor shall repeat the procedure.
 - k. A joint adhesive shall be used on all transverse and longitudinal joints of all lifts of asphalt that are not hot lapped or as designated by the City Engineer. The contractor is required to use an approved joint adhesive option as defined in the Specifications for Joint Adhesive and Crack Sealant section. It is important to ensure that the wearing course joint is sealed completely and can visually be seen upon inspection. Joint Sealant shall be applied according to manufacturer's recommendations or according to industry standard, where applicable.
 - l. 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 City Engineer must approve corrective measures.
- 2. Keyholes. Keyholes are considered temporary and must be replaced with a permanent patch.
 - 3. Materials. All patching materials and construction requirements not addressed in this document shall conform to City Standards. Hand patching materials may utilize a 3/8" aggregate HMA with non-elastic recovery (ER) oil. Longitudinal cuts that extend through multiple tier classifications will require discussion with the Streets Department to determine appropriate patching approach. In principle, each road section will be patched according to the tier

in which it is ranked. Any variances to the specifications shall be requested in writing prior to the work.

4. Traffic Control:
 - a. All existing traffic control markings shall be replaced as soon as possible after permanent paving is complete.
 - 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 and accepted by the City.
 - d. All traffic markings will be replaced per normal work practices.
 - e. All temporary traffic control for the work zone shall conform to the MUTCD.
 - f. All traffic control is subject to the approval of the City Engineer.
5. Emergency Repairs. The permittee shall be allowed to make emergency repairs provided a more reasonable alternative does not exist. Every reasonable effort shall be made to restore the roadway quickly. The City shall 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 tier level.
2. All existing pavement types shall be constructed at the existing depth of asphalt and crushed surfacing, in accordance with City Standards (including any fabric or membranes); Replacement section of asphalt and crushed rock shall not be less than the minimum section specified in the City Standard Drawings M-11 and M-31.
3. All concrete road cuts shall be pre-approved before beginning work (except in the case of an emergency situations). Concrete roads shall require full panel replacement unless approved otherwise by the City Engineer. All concrete joints shall require an approved tie bar and dowel retrofit. The depth of concrete replacement shall match the existing thickness. Care shall be made not to undermine the existing panels. If the adjacent panels are disturbed or damaged, they also shall be replaced. 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 City Engineer. 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.
6. Allowable work hours are from 7:00 am to 7:00 pm unless approved by the City.
7. The contractor shall notify adjacent property owners of any disruptions in service and/or access or any other inconveniences.
8. An Encroachment Permit must be obtained from the City prior to work in the Right-of-Way. All requirements of the encroachment permit must be met including insurance, licensure, and bonding.
9. Gravel street and alley repairs must be 4” minimum of compacted gravel meeting the requirements of ISPWC Section 802 and City standard drawings.

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.

WARRANTY REQUIREMENTS

1. All roadways shall require a minimum three-year warranty period. The patch in the roadway shall be repaired as necessary until the warranty has passed. All warranties shall become void if road rehabilitation work is performed within the patching limits.

2. 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.
3. All curb, sidewalks, and structures that are affected by the excavation shall be included in this policy and have a warranty for three years.
4. All warranty work requires that a City inspector be on site. The permittee shall be required to coordinate the inspection.
5. The following defects identified by the City Engineer shall be covered by warranty:
 - a. Sunken or raised pavement patches greater than or equal to one-quarter inch (Measured using a ten-foot straight edge).
 - b. Failure to meet visual rating standard for patching and joints.
 - c. Poor workmanship.
 - d. Inadequate compaction.
 - e. Sunken, raised, or damaged curb and sidewalks in excavation work area.
 - f. Sunken, raised, or damaged drywells, manholes, valve cans, catch basins, or other utilities in excavation work area.
6. 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 City.
 - b. For non-emergency repairs on arterial roads the permittee shall have forty-eight hours to make such temporary repairs.
 - c. For non-emergency repairs on residential streets, the permittee shall have up to seven days to make such temporary repairs unless it is deemed a safety issue by the City.

The City 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 prices 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 completed in a timely manner and following notification, the work shall be privately contracted or City maintenance crews will perform the needed repairs. The permittee shall pay the associated fees for the repairs.

TEMPORARY PATCHING

1. During winter asphalt plant closures or outside of temperature specifications (see ISPWC section 810.3.9), 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, and two inches of cold-mix asphalt pavement, or upon approval of the City 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. The permittee shall maintain the temporary patch until the permanent patch has been installed.
3. If steel plates are used, they shall be recessed to grade or provided with asphalt or rubberized transitions.

PERMITS

1. All work in the public Right-of Way requires an encroachment permit.
2. The permittee will be required to submit construction and traffic control plans when applying for a permit. If the City determines that abuse of obligations are prevalent, future construction permits shall not be issued until the permittee has fulfilled all obligations to existing permits.
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 City’s Public Works Inspectors for a permanent record. This information shall be returned no later than seven days after the completion of the permitted project by mail or by electronic means from either the permittee or the patching contractor. The intent of this process is to record small patching details. Larger projects must be reviewed and approved prior to construction.
4. The City should be notified of existing problems with the adjacent roadway to a proposed patch. Every effort will be made to leverage both public and private funds for street improvements.

RESPONSIBLE PARTY

The permittee shall be responsible for all construction and warranty requirements of this policy. Utilities shall provide the identity of the subcontractor performing the work if not self-performed. If permittee is a subcontractor for utilities, the utilities will assume responsibility if permittee cannot/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 City 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 City 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.

Noncompliance Activities include:

1. Failure to secure 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 submit 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 City to allow such an excavation, and any such decisions are at the City Engineer's discretion.

The applicant shall:

- Submit a letter of intent to the City 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 City to discuss the project.
- Provide a schedule of the project through completion.

RESOURCES

Streets & Engineering web site: <https://www.cdaid.org/streets>

Standard Drawings: <https://www.cdaid.org/1089/departments/streets/engineering/engineering-standard-drawings>

SPECIFICATIONS FOR JOINT ADHESIVE AND CRACK SEALANT

Joint Adhesive – Hot Applied – Option 1

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.

Joint Adhesive - CSS1/Sand – Option 3

A heavy application of tack coat (0.16 gallons per square yard) shall be applied to all vertical faces of the joints. Care shall be taken to ensure that enough tack coat has been applied to seal the joint once the patch is complete. A clean sand may be needed to blot the adhesive while patching to ensure that the tack coat does not track off site. It should be evident that the joint is sealed to the agency inspection staff. If the joint opens up, the contractor shall seal the joint with an approved crack sealant.

For roadways open to traffic, the application of joint adhesive, tack coat, and crack sealant shall be limited to surfaces that will be paved during the same working shift. The spreading equipment shall be equipped with a thermometer to indicate the temperature of the tack coat material. Equipment shall not operate on the joints until the adhesive has cured. If the Contractor's operation damages the joint adhesive, it shall be repaired prior to placement of the HMA.

The Tack Coat shall be an un-diluted CSS-1 emulsified asphalt. The tack coat shall have sufficient temperature such that it may be applied uniformly at the specified rate of application and shall not exceed the maximum temperature recommended by the manufacturer.

Crack Sealant – Hot Poured – Option 1

Hot poured crack sealant shall be rubberized and premium grade. Pre-approved products include: Crafcro Roadsaver 546, Crafcro Roadsaver 539 or approved equal. Crack sealant product shall be installed according to manufacturer's specifications and with the appropriate equipment.

Crack Sealant – Pourable – Option 2

Pourable crack sealant shall be rubberized and suitable for asphalt and concrete pavements. Pre-approved products include: Lastek33 or equivalent. Crack sealant product shall be installed according to manufacturer's specifications and with the appropriate equipment.

Construction Requirements

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 the manufacturer's 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.