



GENERAL UTILITY REMOVAL & RESTORATION GUIDELINES

AS OF 6/13/2014

STANDARDS

- A. Referenced Standards:** Design and construction standards for pavements shall comply with the requirements of the following standards:
1. IDOT, Standard Specifications for Road and Bridge Construction, latest edition. <http://www.dot.il.gov/desenv/stdspecs12.html>
 2. AASHTO, American Association of State Highway and Transportation Officials, latest edition. <http://www.transportation.org/>
 3. City of Peoria General Utility Removal & Restoration Guidelines revised edition 6/2014. Public Works Engineering Department.
 4. City of Peoria Municode Ordinances. In case of conflict between standards, the City of Peoria General Utility Removal & Restoration Guidelines takes priority over other standards.
<https://library.municode.com/index.aspx?clientId=10183>
 5. All lane and sidewalk closures shall comply with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD) mutcd.fhwa.dot.gov and Pedestrian Facilities in Public Right-Of-Way (PROWAG). <http://www.access-board.gov/guidelines-and-standards/streets-sidewalks/public-rights-of-way/proposed-rights-of-way-guidelines>

Types of Patching

Refer to IDOT, Standard Specifications for Road and Bridge Construction.

The type of patching required shall depend upon the existing pavement:

Type A patches shall apply to pavements that have existing aggregate base and bituminous surface.

Type B patches shall apply to pavements that have existing concrete base and bituminous surface, brick base and bituminous surface or bituminous base and bituminous surface.

Type C patches shall apply to existing pavements that have existing brick surface or concrete surface. Reinforcement will be required where the existing pavement is presently reinforced.

Type D patches shall apply to existing pavements that have existing brick surface that the City has designated to be preserved.

Removal Limits

The limits of the pavement repair shall be saw cut in a rectangular pattern to a depth of no less than 3 inches (75mm). Type A patches shall be a minimum of 3 feet in width. Type B patches shall be a minimum of 5 feet in width. For Type A, B and C patches the new pavement shall be shouldered one-foot minimum on either side of the trench on undisturbed ground.

Whenever a series of Type A or Type B patches are made in such a manner so as to leave less than 5 feet of undisturbed bituminous surface between adjacent patches, it shall be required that the bituminous surface between the patches be removed and the entire area resurfaced.

Type C pavements not in good condition shall be repaired in accordance with typical detail shown for Type C patching. Type C pavements in good condition will require full panel replacement. Whenever a pavement patch is less than 6 feet from the pavement edge, contraction joint, crack, etc., the pavement patch shall be enlarged to meet the edge or joint and beyond to include any crack and the entire excavated area paved as one patch. The limits of pavement removal on Type D patching shall be in such a manner that whole bricks will be used in the replacement and that the replaced brick course extends 1' beyond the limits of the concrete base course.

Note: All pavement joints are required to be located outside wheel lanes.

Note: One foot minimum coverage around any manhole (or any utility) for isolation is required on any type of pavement.

Tack Coat Requirement

Tack coat is required on all vertical edges and P.C.C. base course surfaces (not required on flowable subgrade). A tack or bond coat should be applied between each course. The surface must be cleaned of all dust, dirt, or other loose material before the bond coat is applied. If emulsion is used, it should be diluted with equal parts of water.

Refer to ASHTO and the IDOT, Standard Specifications for Road and Bridge Construction, latest edition for approved material and application.

Prime Coat Requirement

Revise Note 1 of Article 406.02 of the Standard Specifications to read:

“Note 1. The bituminous material used for prime coat shall be one of the types listed in the following table.

When emulsified asphalts are used, any dilution with water shall be performed by the emulsion producer. The emulsified asphalt shall be thoroughly agitated within 24 hours of application and show no separation of water and emulsion.

Application	Bituminous Material Types
Prime Coat on Brick, Concrete, or HMA Bases	SS-1, SS-1h, SS-1hP, SS-1vh, CSS-1, CSS-1h, CSS-1hP, HFE-90, RC-70
Prime Coat on Aggregate Bases	MC-30, PEP”

Add the following to Article 406.03 of the Standard Specifications:

“(i) Regenerative Air Vacuum Sweeper.....1101.19”

Revise Article 406.05(b) of the Standard Specifications to read:

“(b) Prime Coat: The bituminous material shall be prepared according to Article 403.05 and applied according to Article 403.10. The use of RC-70 shall be limited to air temperatures less than 60 °F (15 °C).”

- (1) Brick, Concrete or HMA Bases. The base shall be cleaned of all dust, debris and any substance that will prevent the prime coat from adhering to the base. Cleaning shall be accomplished by sweeping to remove all large particles and air blasting to remove dust. As an alternate to air blasting, vacuum sweeping may be used to accomplish the dust removal. Vacuum sweeping shall be accomplished with a regenerative air vacuum sweeper. The base shall be free of standing water at the time of application. The prime coat shall be applied uniformly and at a rate that will provide a residual asphalt rate on the prepared surface as specified in the following table.

Type of Surface to be Primed	Residual Asphalt Rate lb/sq ft (kg/sq m)
Milled HMA, Aged Non-Milled HMA, Milled Concrete, Non-Milled Concrete & Tined Concrete	0.05 (0.244)
Fog Coat between HMA Lifts, IL-4.75 & Brick	0.025 (0.122)

The bituminous material for the prime coat shall be placed one lane at a time. The primed lane shall remain closed until the prime coat is fully cured and does not pickup under traffic. When placing prime coat through an intersection where it is not possible to keep the lane closed, the prime coat may be covered immediately following its application with fine aggregate mechanically spread at a uniform rate of 2 to 4 lb/sq yd (1 to 2 kg/sq m).

- (2) Aggregate Bases. The prime coat shall be applied uniformly and at a rate that will provide a residual asphalt rate on the prepared surface of 0.25 lb/sq ft ± 0.01 (1.21 kg/sq m ± 0.05).

The prime coat shall be permitted to cure until the penetration has been approved by the Engineer, but at no time shall the curing period be less than 24 hours for MC-30 or four hours for PEP. Pools of prime occurring in the depressions shall be broomed or squeegeed over the surrounding surface the same day the prime coat is applied.

The base shall be primed 1/2 width at a time. The prime coat on the second half/width shall not be applied until the prime coat on the first half/width has cured so that it will not pick up under traffic.

The residual asphalt binder rate will be verified a minimum of once per type of surface to be primed as specified herein for which at least 2,000 tons of HMA will be placed. The test will be according to the "Determination of Residual Asphalt in Prime and Tack Coat Materials" test procedure.

Prime coat shall be fully cured prior to placement of HMA to prevent pickup by haul trucks or paving equipment. If pickup occurs, paving shall cease in order to provide additional cure time.

Prime coat shall be placed no more than five days in advance of the placement of HMA. If after five days loss of prime coat is evident prior to covering with HMA, additional prime coat shall be placed as determined by the Engineer at no additional cost to the Department."

Breaking through pavement - City of Peoria Ordinance Sec. 26-150.

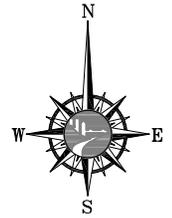
- (a) Heavy duty pavement breakers may be prohibited by the director when the use endangers existing substructures or other property.
- (b) Saw cutting of street or sidewalk surfaces shall be required by the director when the nature of the work or the condition of the street warrants. The depth of the cut shall not be less than one inch in depth; however, depths greater than one inch may be required by the director when circumstances warrant. Saw cutting may be required by the director outside of the limits of the excavation over cave-outs, overbreaks and small floating sections.
- (c) Approved cutting of bituminous pavement surface ahead of excavations shall be required by the director to confine pavement damage to the limits of the trench.
- (d) Sections of sidewalk shall be removed to the nearest score line or joint.
- (e) Unstable pavement shall be removed over cave-outs and overbreaks and the subgrade shall be treated as the main trench.
- (f) Pavement edges shall be trimmed to a vertical face and neatly aligned with the centerline of the trench.
- (g) Cutouts outside of the trench lines must be normal or parallel to the trench line.
- (h) Boring or other methods to prevent cutting of new pavement may be required by the director.
- (i) Permittee shall not be required to repair pavement damage existing prior to excavation unless his cut results in small floating sections that may be unstable, in which case permittee shall remove and pave the area. (*Code 1957, § 36-57*)

Excavations barred in new street improvements - City of Peoria Ordinance Sec. 26-132.

- (a) Whenever the city council enacts an ordinance or resolution providing for the paving or resurfacing of any street, the director shall promptly mail a written notice thereof to each person owning any sewer, main, conduit, or other utility in or under such street informing such person of the city council's action and advising such person that no excavation permit shall be issued for openings, cuts, or excavations in such street for a period of five years after the date of completion of such project, except as hereinafter provided. The director's notice shall also notify each person that applications for excavation permits, for work to be done prior to such paving or resurfacing, shall be submitted promptly in order that the work authorized by the excavation permit may be completed not later than 90 days from the date of mailing the required written notice. Within the 90 days each person receiving notice as prescribed in this section shall perform such excavation work, subject to the provisions of this section, as may be necessary to install or repair sewers, mains, conduits, or other utility installations.
- (b) During the five-year period no excavation permit shall be issued to open, cut, or excavate in the street unless permission to do so is obtained and a fee for an excavation permit is paid as hereinafter provided. (*Code 1957, § 36-54.1*)

Prowag Standards

All contractors working on the Public Right-Of-Way shall be familiar with the latest Proposed Accessibility Guidelines for Pedestrian Facilities in Public Right-Of-Way (PROWAG) standards. The latest PROWAG standards are available at <http://www.access-board.gov/guidelines-and-standards/streets-sidewalks/public-rights-of-way/proposed-rights-of-way-guidelines>



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DRAWING TITLE:
R.O.W. Standard Drawing Example Pavement Patch for Utility Cuts

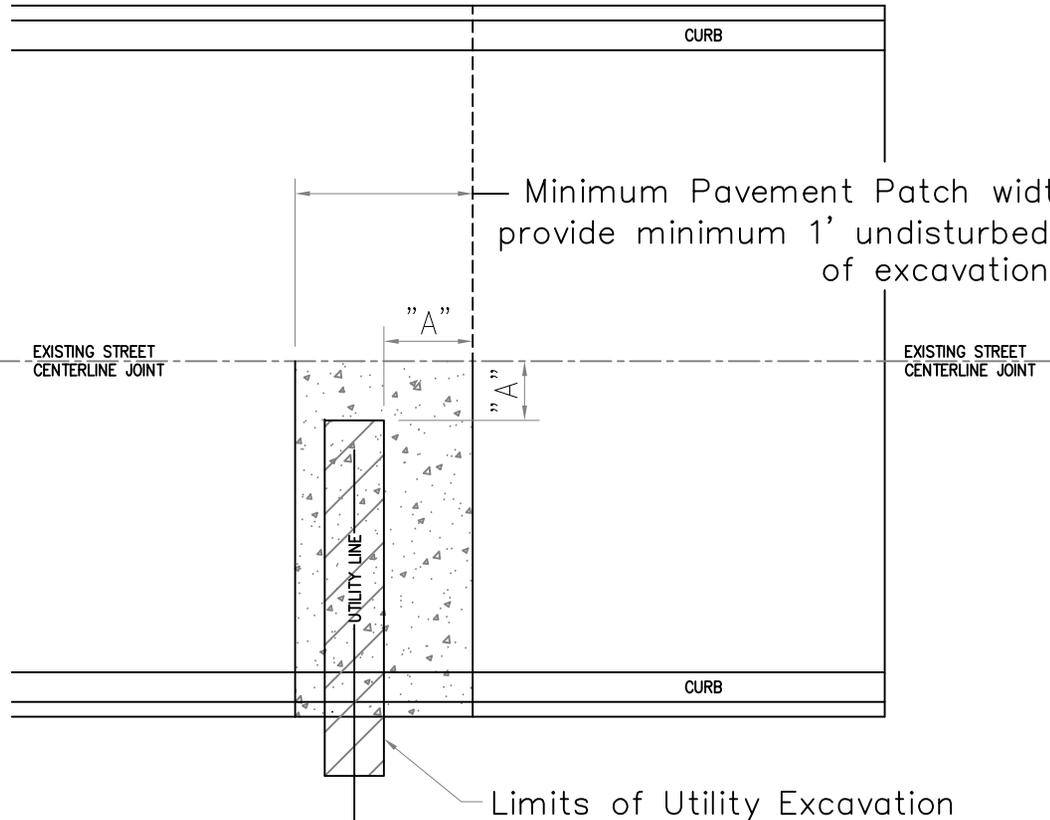
PREPARATION DATE:
 6-2-2014

REVISIONS:

DRAWN: BRW
 CHECKED: JRC
 APPROVED: SDR

CAD FILE:
 Patch Standards for Jim.DWG
 EXTERNAL REF. FILES:

SHEET



Notes:

1. If "A" is less than 6 feet, replace pavement to closest existing joints or crack that spans entire panel width.
 (Typical for all sides of pavement)

Patch Plan View

Right of Way Standard Drawing Example of Pavement Patch for Utility Cuts



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DRAWING TITLE:
R.O.W. Standard Drawing Example Bituminous Street Utility Cut - Alt

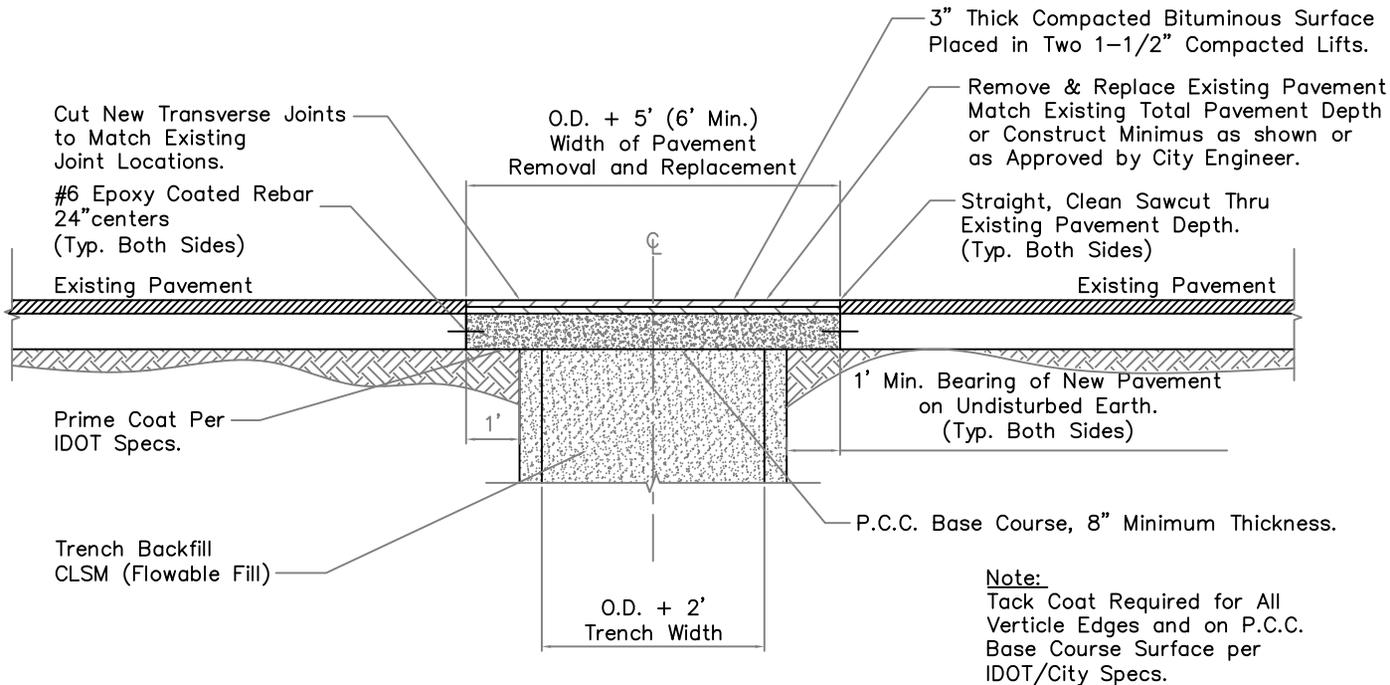
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Detail

Right of Way Standard Drawing
Example of Asphalted Concrete Street Utility Cut - Alternate

