

CHELAN COUNTY

DEPARTMENT OF PUBLIC WORKS 316 WASHINGTON STREET SUITE 402 WENATCHEE, WASHINGTON 98801 TELEPHONE 509/667-6415

JOLENE GOSSELIN-CAMPBELL, P.E. DIRECTOR/COUNTY ENGINEER

Road Cut Repair Standards and Requirements

The following requirements are for underground utility excavation, backfill, road restoration and protection of the public.

NO work shall be performed within the county road right-of-way without FIRST obtaining a permit.

Prior to ANY excavation work, it will be the responsibility of the contractor to contact the Washington Utilities Coordinating Council (Call Before You Dig) at 1-800-424-5555 and call for locates. The call must be placed at a minimum of two business days before you dig.

When utilities need to cross a county road, boring is required. Only when boring cannot be physically accomplished, will an open cut be considered.

Asphalt pavement shall not be cut for at least five (5) years following new paving and three (3) years following fresh chip seal. All utility installations required during the moratorium shall only be accomplished by jacking, boring or augering the pipe or cable under the roadway. In the case of an emergency, a variance <u>may</u> be granted by the County Engineer. If the variance is granted, full or ½ road overlays <u>will</u> be required.

The Permittee shall use special care to protect existing survey monuments and control points. It is the obligation of the Permittee to notify the County Engineer of the possibility of disturbance or destruction by work performed.

The County Engineer will require auxiliary points with reference to such markers be established.

If any markers or reference points are disturbed or damaged, the Permittee shall have them reset, at the Permittee's cost, by a registered Land Surveyor.

Standard cast iron monument cases will be required. The Permittee shall bear the cost of installation, by their surveyor, of such cases in a manner satisfactory to the County Engineer.

The Permittee shall provide proper signing, barricades, flashing lights, or other methods to warn the public of open trenches, obstructions, or other impediments to public travel. Signing shall conform to the Manual on Uniform Traffic Control Devices (MUTCD).

The Permittee shall keep all traveled ways clear of obstructions and equipment not directly connected with the project or operation.

No equipment, except equipment with rubber tires, shall be permitted to operate on any road. Damage to any road will be repaired by the Permittee, at their own expense, to restore the road to the original condition.

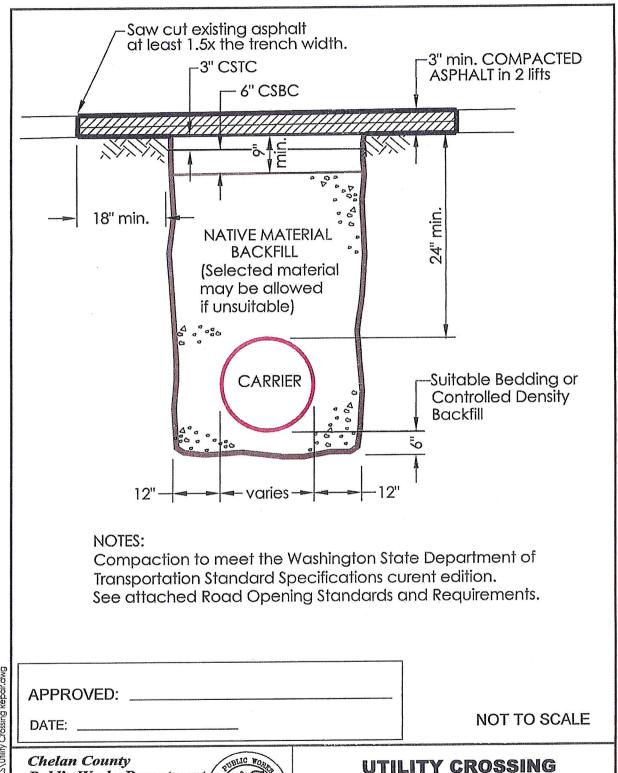
The Permittee shall protect all existing facilities, using whatever methods are necessary, subject to the County Engineer's approval.

The following specifications shall be used for all road crossings:

- 1. All cuts in asphalt concrete pavement shall be made by sawing. No jackhammers or asphalt cutting wheels shall be allowed, unless otherwise approved by the County Engineer.
- 2. Asphalt cutting wheels may be used <u>only</u> on BST pavement. When asphalt cutting wheels are used, the cutter shall cut completely through the asphaltic surfacing.
- 3. Asphalt roadways shall be restored with a minimum surface thickness of three (3) inches of HMA (WSDOT mix design approved) asphalt or to match the thickness of the existing material, whichever is greater.
- 4. Untreated road surface (crushed rock, gravel or oil-mat surfaces) shall be resurfaced like material, but at a minimum, two (2) inches of crushed rock or other approved material.
- 5. Restoration shall be full trench width that has been cut back 1-1/2 the width of the trench (see detail) on all adjoining sides to expose the existing base. The asphalt may be hand spread and machine rolled. The asphalt will be compacted to 95% proctor minimum.
- 6. Restoration for longitudinal patches more than one hundred (100) feet in length shall be full lane width for the entire length of the trench. A self-contained asphalt paving machine with an activated screed or strike-off assembly, capable of spreading and finishing courses of asphalt material shall be used. Prior to paving the lane, the existing asphalt shall be removed by cold planning (grinding) the asphalt down a minimum of two (2) inches or to the surface of the base, whichever is less.
- 7. Any cut less than three (3) feet from the edge of the pavement will require the removal and restoration of that portion of pavement between the edge of the roadway and the cut.
- 8. The contractor shall not proceed with pavement removal until it has been demonstrated that the method to be used to break and remove the pavement will not damage the existing utilities or pavement that is to remain in place.
- 9. Excavation of material beyond the vertical plane of the cut (undercutting) shall not be allowed. If such undercutting occurs, it may be necessary to remove the affected pavement. Controlled density backfill (CDF) of minor undercut areas may be permitted.

- 10. The CDF shall be per the Washington State Department of Transportation (WSDOT) Standard Specification 2-09.3(1)E.
- 11. Restoration of any cut adjacent to any county maintained structure (e.g. bulkhead, retaining walls, crib walls, gabion walls, bridge footings, etc.) shall be performed under direct supervision by Chelan County Public Works.
- 12. When backfill or restoration is accomplished by the contractor without County approval or control, the contractor shall guarantee the integrity of the completed work for a period of two (2) years from the date of final acceptance. If failure or severe deterioration occurs the County will make the necessary repairs at the expense of the contractor. If it can be shown to the satisfaction of the County Engineer that the failure or severe deterioration was substantially caused by factors beyond the control of the contractor, this guarantee shall not apply.
- 13. Suitable backfill material: At the start of the job, the Chelan County Public Works Department will determine whether the original material is suitable for backfill. Select material for backfill may be required. All material used for backfill shall be free from large or frozen lumps, wood, or other extraneous matter. The backfill shall be compacted to 95% of the maximum density determined by the WSDOT Standard Specifications. Water settling backfill shall not be allowed. Backfill of minimal (as determined by the County) undercutting may be permitted when CDF is used.
- 14. A minimum of eight (8) inches, consisting of three (3) inches of crushed surfacing top course (CSTC) and six (6) inches of crushed surfacing base course (CSBC), of compacted crushed aggregate or a depth equal to the existing crushed surfacing, whichever is greater, shall be placed under the surface patch of repair. Crushed surfacing shall conform to the WSDOT Standard Specification Section 9.03.9.
 - It shall be the responsibility of the contractor to add or remove water from the backfill to bring the material as nearly as practicable to optimum moisture prior to compaction.
 - If there is any disagreement in regards to compaction, the County Engineer may order testing of the backfill. All testing of the backfill shall be at the expense of the contractor.
- 15. Interim patches: If temporary patches are required to maintain traffic, the contractor shall install and maintain a two (2) inch patch of asphalt (HMA) material over two (2) inches of crushed rock, or optionally, a three (3) inch thick patch of asphalt (HMA) material.
- 16. Responsibility for interim or temporary patches: When temporary asphalt patches are allowed, they must be compacted flush with the adjoining permanent pavement, and must be maintained in good condition until a permanent patch is placed. Any settlement of the backfill under the patch is the responsibility of the contractor until the permanent repair is completed. When notified of a backfill or temporary patch needing repairs, the

- contractor must take corrective action within 24 hours. By agreement, this work can be done by Chelan County Public Works Department forces, at the contactor's expense.
- 17. Asphalt pavement surface mix: Asphalt mix for permanent road restoration shall be HMA per WSDOT Standard Specifications.
- 18. Surface smoothness: The completed surface of all courses shall be of uniform texture, smooth surface crown and grade in accordance with WSDOT Standard Specifications Section 5-04.3(13).



OPEN CUT REPAIR STANDARD

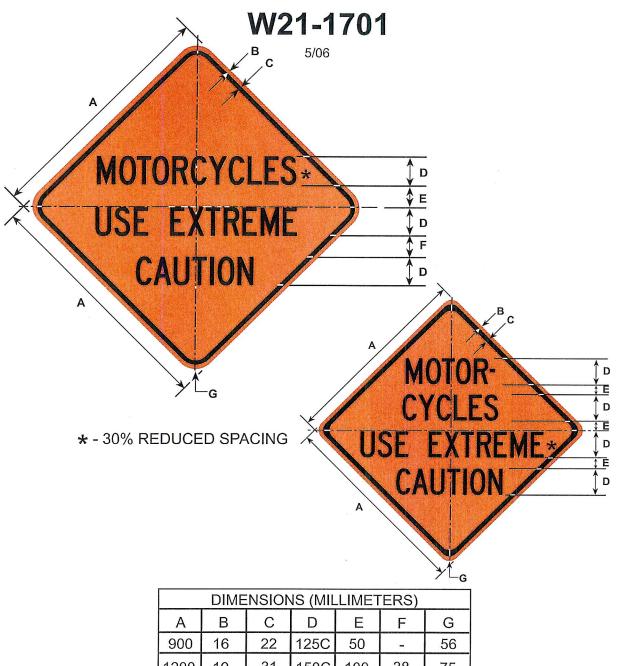
Sheet 1 of 1

PLOT DATE: 4/9/2009

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Public Works Department 316 Washington Street, Suite 402 Wenatchee, Washington, 98801

Phone: (509) 667-6415 Website: www.co.chelan.wa.us



DIMENSIONS (MILLIMETERS)									
Α	В	С	D	Е	F	G			
900	16	22	125C	50	-	56			
1200	19	31	150C	100	38	75			

DIMENSIONS (INCHES)									
Α	В	С	D	Е	F	G			
36	5/8	7/8	5C	2	-	2 1/4			
48	3/4	1 1/4	6C	2 1/4	3 3/8	3			

COLORS

LEGEND—BLACK (NON-REFL) BACKGROUND—ORANGE (REFL)