



## MULTNOMAH COUNTY OREGON

### LAND USE AND TRANSPORTATION PROGRAM

1600 SE 190<sup>TH</sup> Avenue Portland, OR 97233

PH: 503-988-3043 FAX: 503-988-3389

[http://www.co.multnomah.or.us/dbcs/LUT/land\\_use](http://www.co.multnomah.or.us/dbcs/LUT/land_use)

## FLOODPLAIN DEVELOPMENT PERMIT

CASE FILE: T1-05-032

August 19, 2005

**Request:** Oregon Department of Transportation has requested a Flood Development Permit to Remove Gravel Bed Load Materials from Multnomah Creek in three segments near Multnomah Falls Lodge. In addition, they are requesting to relocate existing riprap on a temporary basis to gain access to Multnomah Creek for the project. In addition, several pieces of fallen riprap will be removed from the stream channel. Development is to occur on land located within the 100-year flood boundary as identified on Flood Insurance Rate (FIRM) Maps published by the Federal Emergency Management Agency.

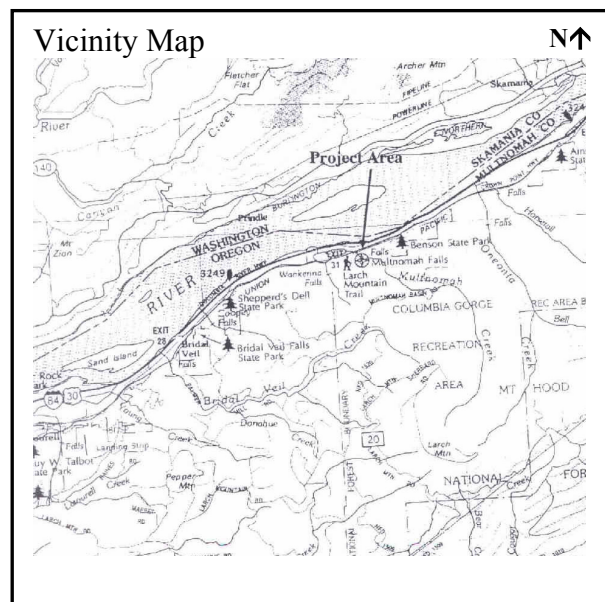
**Location:** Multnomah Falls/E. Columbia River Highway  
TL 100, Sec 7, T 1N, R 6E, W.M.  
Tax Account #R94607-0050

**Applicant:** Bill Barnhart

**Owner:** ODOT  
999 NW Frontage Road, Suite 250  
Troutdale, OR 97060

**Tributary:** Multnomah Creek

**FIRM Map:** Panel #410179 0300A, dated 6/15/82



### ORDINANCE REQUIREMENTS:

Applicable standards for this permit can be found within Chapter 29.600 et seq., Flood Hazard Regulations of the Multnomah County Building and Specialty Codes, copies of which are available at our offices.

### MODIFICATIONS AND LIMITATIONS:

This permit is based on written narrative(s), plan(s) and materials provided by the applicant (attached). No development shall occur under this permit other than that which is specified within these documents. It shall be the responsibility of the property owner to comply with these documents and the limitations described herein.

### **On-Going Restrictions:**

1. All work within Sections 2\_07\_04, 3\_07\_04 & 4\_07\_04 (Longitudinal Profile – Multnomah Creek) shall comply with Cross Section 2 or Cross Section 4 as shown in Appendix B (Attached). All work shall occur as described in the narrative statements with only a Spider Hoe within the stream channel. Only the materials in the gravel bars shall be removed. Only Isolated Excavation shall occur as specified in the narrative statements found in Appendix D.
2. No filling and/or storage of earth materials are permitted within the stream channel or flood plain of Multnomah Creek. Disposal of excavated materials shall be at the ODOT Maintenance facility in Cascade Locks. If the fill materials are to be disposed of elsewhere, ODOT shall contact the appropriate jurisdiction before placement to ensure compliance with applicable land use laws.
3. The elevation of the three bars after excavation of accumulated gravel shall be 0.2 ft above the channel bottom as measured along the thalweg. Within 30 days of completion of the excavation work during each episode authorized for removal, ODOT shall provide documentation to the Land Use Planning Division that has been completed and stamped by a licensed surveyor of the depth of gravel removal and its compliance with this permit.
4. If any cultural resources are uncovered or discovered during the dredging project, all construction activity shall cease immediately and ODOT shall contact Multnomah County Land Use Planning, SHPO and the US Forest Service immediately.
5. This Flood Development permit covers these three maintenance projects, as described above, from August 19, 2005 through December 31, 2010. No other work is authorized. A new permit will be required for maintenance gravel removal in these 3 areas after that date.

**Issued by:**

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Signed: Lisa Estrin, Planner  
For: Karen Shilling - Planning Director

Date: Friday, August 19, 2005

### **Exhibits**

1. Narrative Addressing Flood Hazard Regulations
2. Appendix A Maps
3. Appendix B Stream Profiles and Planned Excavations
4. Appendix C Project Narrative, Map and Plan Information
5. Appendix D Removal-Fill and 404 Permit Application
6. Appendix E Biological Assessment
7. Appendix F Biological Opinion
8. Target Elevations

## **Code Compliance Notes:**

### **29.602 Areas Affected**

- (A) The provisions of MCC 29.600 - 29.611 shall apply to all areas within the 100-year flood boundary as identified on the Flood Boundary and Floodway Maps and the Flood Insurance Rate Maps as published by the Federal Emergency Management Agency (FEMA) and any watercourse as defined by MCC 29.601.
  - (1) These maps may be periodically revised or modified by FEMA in accordance with prescribed procedures pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (P.L. 92-234). In order to employ the best available information and maintain compliance with Federal Flood Insurance Program regulations, Multnomah County shall utilize any such revisions or modifications upon their effective date.
  - (2) On the Multnomah County Zoning Map, all areas depicted as being Flood Fringe (FF), Floodway (FW) or Flood Hazard (FH) with this ordinance are repealed from requiring a Flood Hazard Permit.

Staff: ODOT is proposing to excavate gravel materials from 3 bars within Multnomah Creek. Multnomah Creek has had its channel reviewed by FEMA and a portion is designated at Zone A on the Community Panel Map 41079 0300A. In addition, the creek qualifies as a watercourse as defined under MCC 29.601. Multnomah County's Flood Hazard Ordinance is applicable to this site.

### **29.603 Permits**

- (B) Alterations, modifications or relocations to any watercourse as defined in MCC 29.601 are subject to a Flood Hazard permit and the Watercourse Relocation requirements of MCC 29.609.

**Staff:** Applicant is proposing to excavate gravel materials from three locations within the banks of Multnomah Creek for flood control purposes. The three gravel excavation projects are located under the Historic Highway Bridge, under the Pedestrian Bridge and west of the pedestrian tunnel. MCC 29.601 defines *Alteration* as to modify, change or make different. The proposed gravel excavation will increase the carrying capacity of the stream channel in the three locations and qualifies as an alteration subject to MCC 29.609.

### **29.605 Application Information Required**

An application for development subject to a Floodplain Development Permit shall include the following:

- (A) A map showing the property line locations, the boundaries of the 100 year floodplain on the parcel, roads, and driveways, existing structures, watercourses and the location of the proposed development(s), topographic elevations for the proposed development and areas of grading or filling required for the project.

Staff: A site plan showing the isolated excavation locations within Multnomah Creek has been supplied by the applicant.

- (B) Detailed construction drawings showing compliance with the development standards specified in MCC 29.606. A licensed engineer or architect shall stamp the plans and include a statement that the plans meet the requirements of MCC 29.606.

Staff: The standards under MCC 29.606 are development standards for structures and are not applicable to this project.

- (C) An elevation certificate signed by a Registered Professional Land Surveyor, Engineer or

Architect. The certificate shall be accompanied by a plan of the property which shows the location and elevation of a benchmark on the property.

Staff: The applicant has supplied existing stream profiles and cross-sections. These plans have been stamped by registered professional engineer from the US Forest Service, Allen Morrisette.

- (D) A written narrative specifying building materials and methods that will be utilized to comply with the requirements of the Floodplain Permit.

Staff: Applicant has submitted in narrative statements specifying how the excavation work will be done.

- (E) Evidence that the applicant has obtained, when necessary, prior approval from those Federal, State and/or local governmental agencies with jurisdiction over the proposed development.

Staff: Applicant has applied for the necessary State and Federal permits.

### **29.609 Watercourse Relocation and Alteration**

Prior to approving any relocation, encroachment or alteration of a watercourse, the Land Use Planning Division shall provide mailed notice of the proposal to adjoining communities and to the Department of Land Conservation and Development Floodplain Coordinator. Copies of such notice shall also be provided to the Federal Insurance Administration.

Staff: Notice was mailed to FEMA and DLCD on 8/19/05.

- (A) No relocation, encroachment or alteration of a watercourse shall be permitted unless a detailed hydraulic analysis, certified by a Registered Professional Engineer, is provided which demonstrates that:

- (1) The flood carrying capacity for the altered or relocated portion of the watercourse will be maintained;

ODOT states: The flood carrying capacity of Multnomah Creek will be improved as a result of the removal of bed load material. The goal is to keep the system maintained well enough to pass at least a 50-year event. Trigger elevations (i.e., the elevation of the stream bed indicating that dredging is necessary) were calculated for a 50 year event. The proposed action consists of excavating accumulated gravel from two gravel bars down to the new target elevation (0.2 feet above the thalweg). See Appendix A (plans), B (cross sections of creek) and C (project narrative). Based on 2004 channel conditions, the depth of excavation would be approximately 3.5 feet at each of the three gravel bars. Excavation will occur only within the exposed portions of the gravel bars, with a spider hoe to minimize in-stream impacts. There will be no excavation in the wetted channel with the exception of the removal of 5 or 6 pieces of riprap/masonry wall that has fallen into the thalweg of the creek.

Staff: The flood carrying capacity will be increased by the removal of approximately 3.5 feet of bedload material from the 2 gravel bar areas. Criterion met.

- (2) The area subject to inundation by the base flood discharge will not be increased;

ODOT States: The area subject to flooding includes the pedestrian pathway, Historic Columbia River Highway, Multnomah Falls Lodge, and a visitor's parking lot. The reduction in stream bedload will increase the carrying capacity of the creek and decrease the probability that the creek will overtop its banks and flood the surrounding area.

Staff: By removing gravel materials from the stream channel the area on inundation should be

reduced or returned to its previous levels due to increased stream carrying capacity in this location.

(3) The alteration or relocation will cause no measurable increase in base flood levels.

ODOT states: No measurable increase in base flood levels will occur. Water passed downstream from the project area will be absorbed into Benson Lake and surrounding wetlands located on the Columbia River floodplain.

Staff: Base flood levels should be held consist to previous levels or decreased due to additional carrying capacity in the streambed. Criterion met.



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## GRADING AND EROSION CONTROL PERMIT

**CASE FILE: T1-05-032**

**August 19, 2005**

**Request:** Grading and Erosion Control Permit application for removal of bed load material from Multnomah Creek. The three gravel excavation projects are for the area under the Historic Highway Bridge, under the Pedestrian Bridge and west of the pedestrian tunnel within Multnomah Creek. Materials from the three gravel bars shall be excavated along with 5 or 6 pieces of riprap that has fallen into the stream channel. Excavation of the three gravel bars in the stream channel will be by a Spider Hoe. The riprap will be removed from the channel from the bank by a track hoe or if possible with the Spider Hoe. The elevation of the three bars after excavation of accumulated gravel shall be 0.2 ft above the channel bottom as measured along the thalweg.

**Location:** Multnomah Falls/E. Columbia River Highway  
TL 100, Sec 7, T 1N, R 6E, W.M.  
Tax Account #R94607-0050

**Applicant:** Bill Barnhart

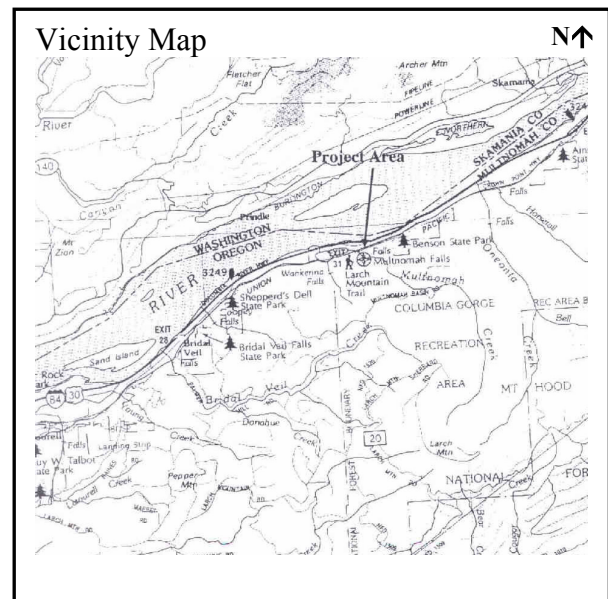
**Owner:** ODOT  
999 NW Frontage Road, Suite 250  
Troutdale, OR 97060

### ORDINANCE REQUIREMENTS:

Applicable standards for this permit can be found in Chapter 29.300 et seq., Grading and Erosion Control Code of the Multnomah County Building and Specialty Codes, copies of which are available at our office.

### MODIFICATIONS AND LIMITATIONS:

This permit is based on written narrative(s) and plan(s) provided by the applicant (attached). No development shall occur under this permit other than that which is specified within these documents. It shall be the responsibility of the property owner to comply with these documents and the limitations described herein.



### **On-going restrictions:**

1. This Grading and Erosion Control permit covers these three maintenance projects, as described above, from August 19, 2005 through December 31, 2010. No other work is authorized. A new Grading and Erosion Control permit will be required for maintenance gravel removal in these 3 areas after that date.  
[MCC 29.305(A)(2)(c)]
2. There shall be no excavation within the wetted channel. The wetted channel is that portion of the channel currently covered or saturated by water. The only work within the wetted channel authorized is the placement of sediment controls by hand, if needed. Erosion and sediment controls may include straw bales, erosion control matting, floating silt curtains, staked silt fencing, or other controls, depending on site-specific conditions.  
[MCC 29.305(A)(2)(e)& (h)]
3. No mechanical equipment other than the Spider Hoe shall be utilized within the stream channel. Prior to and on a daily basis the Spider Hoe shall be inspected for leaks. If any signs of leakage on the equipment are found, it shall not be utilized for the grading operation until repaired. No temporary repairs of the leakage are allowed (i.e. duct tape). If any evidence of leakage of petroleum products is seen within the stream channel or adjacent, the Spider Hoe shall be immediately be taken from service until repaired. All mechanical equipment shall be stored at least 100 feet from the stream channel.  
[MCC 29.305(A)(2)(n)]
4. Any riparian tree removal (no matter the size) shall be replaced as described in the narrative statements for the Grading and Erosion Control permit. All vegetation removed shall be replaced at a ratio of 2:1, with an appropriate native species. All other vegetation shall be trimmed at the ground surface. No grubbing will be permitted.  
[MCC 29.305(A)(2)(e)]
5. Excavated materials shall be taken to ODOT's Maintenance Facility in Cascade Locks or an appropriate disposal site that has obtained all federal, state and local permits, as required. All excavated materials shall be removed the same day as excavated. No temporary storage of excavated earth materials is allowed overnight or longer. If material is not to be immediately placed in a vehicle to be removed, it shall be placed at least 100 feet from the stream channel and shall be protected by adequate erosion control measures for the materials. [MCC 29.305(A)(2)(l)& (m)]

### **Prior to any land disturbing activities:**

6. **Before initiating work, the ODOT shall post the attached erosion control permit notice in locations along the property that are clearly visible from the road. This notice is to remain posted until such time as the grading work is completed.** In the event this notice is lost, destroyed, or otherwise removed prior to completion of the grading work, the property owner shall immediately contact the Land Use Planning Office to obtain a suitable replacement.
7. Prior to removal of bed load material from Multnomah Creek or any other ground disturbing activities, the following steps shall be taken:
  - (a) Boundaries of the clearing limits associated with the site access and staging shall be flagged to prevent ground disturbance of critical riparian vegetation, wetlands and other

- sensitive sites beyond the flagged boundary.
- (b) A supply of erosion control materials (e.g., silt fence and straw bales) is on hand to respond to sediment emergencies. Sterile straw or hay bales will be used when available to prevent introduction of weeds.
  - (c) All temporary erosion controls (e.g., straw bales, silt fences) are in place and appropriately installed downslope of project activities within the riparian area. Effective erosion control measures will be in place at all times during work, and will remain and be maintained until such time that permanent erosion control measures are effective.
- [MCC 29.305(A)(2)(b)]

**Follow-up requirements after grading:**

- 8. All exposed or disturbed areas will need to be stabilized to prevent erosion.
  - (1) Areas of bare soil within 150 feet of waterways, wetlands, or other sensitive areas will need to be stabilized by native seeding, mulching, and placement of erosion control blankets and mats within seven days of exposure.
  - (2) All other areas must be stabilized within 14 days of exposure.
  - (3) Seeding outside of the growing season will not be considered adequate for permanent stabilization.

[MCC 29.305(A)(2)(b) & (d)]

**Issued by:**

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Signed: Lisa Estrin, Planner  
For: Karen Schilling - Planning Director  
Date: Friday, August 19, 2005

**Exhibits**

- 1. Narrative Statement addressing Grading and Erosion Control Code
- 2. Appendix A Maps
- 3. Appendix B Stream Profiles and Planned Excavations
- 4. Appendix C Location of Existing and Planned Sanitary Drainfields and Drywells
- 5. Appendix D Narrative, Map and Plan Information
- 6. Appendix E Biological Assessment
- 7. Appendix F Biological Opinion