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**AGENDA COVER MEMO**

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DATE: April 12, 2006

TO: Lane County Board of Commissioners

DEPT.: Public Works Department

PRESENTED BY: Sonny Chickering – County Engineer

AGENDA ITEM TITLE: Work Session/Discussion – Administrative procedures for the establishment of “quiet zones” at County Road-Railroad grade crossings.

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I. MOTION

None is suggested.

II. ISSUE OR PROBLEM

The Board requested that staff return with information related to implementation of a procedure to facilitate the establishment of a “quiet zone” designation at County Road-Rail crossings where there is public support.

III. DISCUSSION

A. Background

Previously, staff sought direction from the Board on whether or not the County should implement policies or procedures to establish “quiet zones” on County roads. The Board supported facilitating the public’s interest in the establishment of quiet zones at highway-rail crossings, however, the Board indicated there were no County funds available for such a program and that County expenses for providing the service should be recovered at the expense of the requesting individual or interested parties.

B. Analysis

Public Works staff has prepared estimates of the costs associated with the establishment of a quiet zone. The paragraphs that follow provide information on County costs and railroad expenses for the establishment of a quiet zone on a per crossing basis.

Engineering Division staff costs per crossing are estimated to be \$15,000 to \$17,500. This is the sum of the Traffic Engineering, Field Engineering, and

Design costs which follow. Traffic Engineering costs of \$5,000 are estimated for staff time to complete Federal Railroad Administration (FRA) and Oregon Department of Transportation (ODOT) Rail applications including preparation of drawings that must accompany the applications. Field Engineering costs of \$2,500 are expected for a survey of the crossing area. Design cost for a straightforward minimal design are estimated in the range of \$7,500 to \$10,000 for a County Force project or double that for a contracted construction project. Design costs could double or triple if the project is controversial or alternative designs are required. There could be other costs that are not included in this estimate for example, staff costs associated with acquiring additional right-of-way if needed for the improvements.

Staff conducted a field review of County crossings on the Union Pacific mainline to determine likely Supplemental Safety Measures (SSM) applicable to these locations to qualify them for quiet zone designations. From the field review there were two alternatives that appeared best to satisfy FRA requirements and met our desire not to decrease safety at the crossing to below the current threshold value with horns. The two alternatives are: installation of quadrant gates (in most cases this would involve the installation of a second set of gates to supplement the existing set of gates) or the installation of a raised median island on the approaches to the crossing to make it difficult for vehicles to go around the gate. The least expensive alternative is to install raised median islands however; these islands are generally used when there are no existing intersections or driveways within 100' of the crossing on each approach. If driveways were present then the raised islands would restrict vehicles from entering or exiting the roadway to access adjacent property. An example of when a raised island wouldn't be the least expensive alternative is when the existing gates are too close to the roadway to facilitate the extra width needed for the islands and the existing gates would have to be relocated. Union Pacific Railroad cost estimates for gate installations or relocations start at \$200,000 and you would need to include the additional costs to widen the road and crossing. In that case, upgrading from a two-quadrant gate to a four-quadrant gate would be less expensive.

Road construction costs for raised median islands are estimated to be \$35,000 to \$55,000 on the roadway approaches to a crossing. Assuming that these crossing improvements could be made within existing road right-of-way so there wouldn't be additional right-of-way costs.

Union Pacific staff indicated that they would want a check for \$20,000 in advance to provide a preliminary design and cost estimate for a given crossing. In addition Union Pacific's cost estimate for track work is \$2,000 per foot. Widening a crossing for a raised median will likely require adding additional concrete panels at the crossing. The standard width for the concrete panels is 10 feet therefore the cost is approximately \$20,000.

Union Pacific's cost estimate for work involving gate equipment starts at \$200,000. This would be an approximate cost for relocating existing gates

when widening of a crossing is necessary to facilitate a raised median island or when upgrading from two-quadrant gates to four-quadrant gates. An estimated cost for a new installation of SSM with four-quadrant gates is \$516,000.

These costs excluded additional right-of-way costs, if needed for a project. Also excluded are County Counsel, Risk Management and other administrative costs associated with the review and processing of agreements. However, these costs are thought to be relatively small compared to the costs for construction of SSM. Risk Management provided a cost estimate of \$50 for an hour of review and County Counsel felt that it would be difficult to give a good estimate since dealing with private parties can add a host of additional issues.

### C. Alternatives/Options

In the procedure that follows cash deposits and/or contractual agreements between Lane County and the applicant(s) requesting the establishment of a quiet zone would be required.

Procedure:

- Receive a call from the public or applicant(s) requesting the establishment of a quiet zone.
- Explain the process and costs. Indicate that the applicant(s) would bear all costs associated with the establishment of a quiet zone. Since it is unlikely that an individual could afford to do this, applicant(s) will need neighborhood support, formation of Local Improvement District or some way to raise significant financial resources before continuing.
- If the applicant(s) choose to pursue, then obtain a \$10,000 deposit and/or enter into a contract with Lane County to cover staff costs associated with completing applications, conducting a survey, and design costs.
- Also, Union Pacific Railroad Company has indicated that they would require a check for \$20,000 to provide a preliminary design and cost estimate for railroad improvements.
- After preliminary designs by County and railroad, provide applicant(s) with cost estimates for County and railroad costs for the project.
- Prior to submitting FRA & ODOT Rail applications, the applicant(s) and Lane County would enter into a contractual agreement to cover all construction costs.
- After receiving a \$5,000 payment, Lane County would complete and submit FRA & ODOT Rail applications.
- After approval by FRA and issuance of a Final Order by ODOT Rail, the County and railroad would construct crossing improvements. The railroad and County may desire progress payment be made by applicant(s).
- Upon completion and final acceptance by FRA & ODOT Rail, County would submit final billing to applicant(s).

D. Recommendations

The above procedure would facilitate the public's interest in the establishment of quiet zones without significant financial impacts to Lane County. However, some staff resources would have to be redirected to accomplish the work. In most cases the impact is expected to be minor.

V. IMPLEMENTATION/FOLLOW-UP

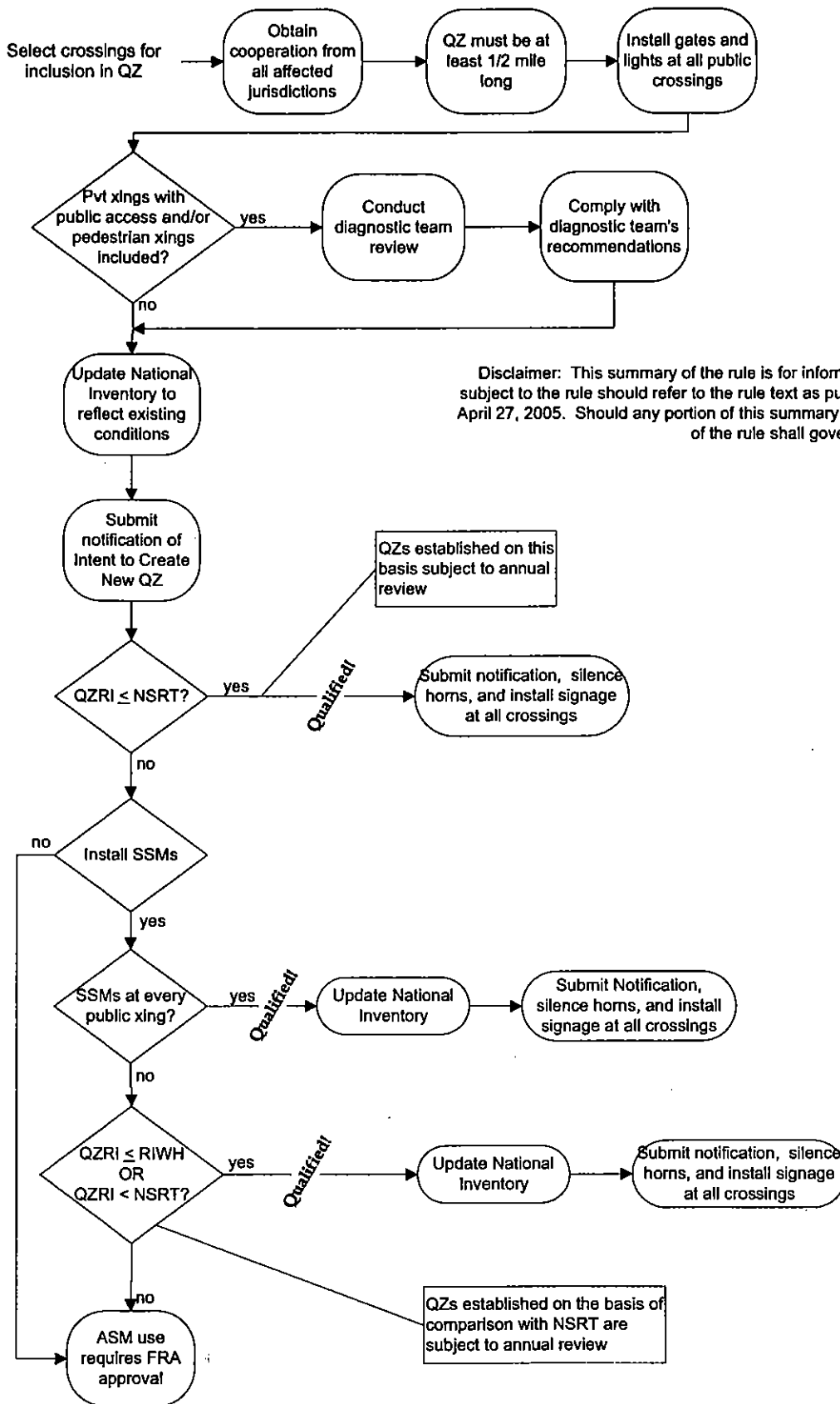
Dependant upon the Board's direction, staff will follow-up as needed.

VI. ATTACHMENTS

(A) FRA New Quiet Zone Flow Chart

# Attachment "A"

## Federal Railroad Administration's Procedure for Creating a New Quiet Zone using Supplemental Safety Measures



Disclaimer: This summary of the rule is for informational purposes only. Entities subject to the rule should refer to the rule text as published in the Federal Register on April 27, 2005. Should any portion of this summary conflict with the rule, the language of the rule shall govern.