

Board of County Councilors Inquiry Response – (PW2015-4)

Inquiry: **Yacolt Mountain Quarry** - Reduce speeds for trucks to 35 mph, increase radius of southbound Kelly Road at Lucia Falls Road intersection, change routing of trucks to/from quarry, Lewisville Hwy/Gabriel Road improvements, mud dirt and dust on travel routes, overweight vehicles, eliminate flushing downstream on Brickie Creek, and well and PUD water impacts.

Inquiry Date: February 2015

Councilor: David Madore

Public Works Staff Review

Responding Staff: Heath Henderson, Public Works Director/County Engineer
Carolyn Heniges, Transportation Division Manager/Traffic Engineer

Response Date: April 20, 2015

Background/Facts

Speed Limits

- The current adopted speed limit in the vicinity of Yacolt Mountain Quarry is governed under the Washington’s Model Traffic Ordinance WAC308-330-423 which references RCW46.61.400 for the Basic Rule and maximum speed limits. This regulation states that, *“No person shall drive a vehicle on a highway at a speed greater than is reasonable and prudent under the conditions.”* The average travel speed on Gabriel Road is 38 mph for trucks and 44 mph for automobiles. The average travel speed on Kelly Road is 42 mph for trucks and 51 mph for automobiles. This tells us the trucks are adjusting their driving habits and reducing their speeds for the conditions, including longer stopping distances required due to the additional weight. [Note: All county code related to speed limits specifically adopted by Clark County [outside of new design standards] has been repealed in lieu of the adoption [by reference] of the Washington Model Traffic Ordinance.]
- The Basic Rule is typical and appropriate for the rural environment where the Average Daily Traffic (ADT) is lower and the roadways, in many cases, are very costly to bring up to today’s standard. Many of these roadways have existed for decades and began as farm to market roadways before formal transportation systems were developed and the standards of roadways were ‘designed’ to engineering standards. Kelly Road’s geometry, both vertical and horizontal, has been reviewed for advisory signing, and appropriate warning signs have been installed per the MUTCD (Manual on Uniform Traffic Devices).
- Reduction of speed only for trucks causes safety issues when there is not a second lane for trucks to use and get out of the way of faster moving vehicles. It has been shown that drivers of automobiles will begin to take chances and will pass in non-passing zones, where gaps in traffic are not adequate, stopping sight distance is not provided or the geometry of the roadway is not safe for passing.

Intersection Improvements – Gabriel/SR503

- To meet the hearing’s examiner conditions/concerns, there was a developer’s agreement to reconstruct the intersection of SR503 and Gabriel Road. A deviation [from the design standard] was subsequently approved by and for WSDOT to allow the sight distance to be slightly reduced at that intersection (see attachment from WSDOT). In addition, there was initially a provision in the Hearing Examiner’s Final Decision to add a northbound right turn lane on SR503 (at WSDOT’s request) that was later removed from the conditions, as it was determined that it was not needed for safety. Sight distance at Gabriel and SR503 intersection remained a requirement. Easements and ROW (right-of-way) were acquired by Clark County, and the project was built. County staff measured sight distance at this intersection and both northbound and southbound met the required design standard.
- A covenant was placed on the quarry parcel requiring the operator to direct trucking in/out of Kelly Road and Lucia Falls Road and eastbound only on Gabriel Road until such time as the SR503/Gabriel Road

project was constructed. The covenant states, *“This covenant shall remain in effect until the Gabriel Road/SR503 intersection improvements are completed and accepted by WSDOT; if the improvements are completed and accepted by WSDOT, this covenant will terminate on the date of WSDOT acceptance.”* [the project has been accepted by WSDOT] A sign had been placed at the exit of the quarry directing traffic in/out via Kelly Rd in accordance with the covenant, but that sign is now removed from Kelly Road.

Intersection Improvements – Kelly/Lucia Falls

- The hearings examiner, when approving the operation of the quarry, conditioned the operator to provide proof that the intersection at Kelly Road and Lucia Falls Road were adequate for westbound to northbound and southbound to westbound truck turning specifically. CTS, the engineering firm working for the operator, turned in a turning diagram for trucks turning to and from the east (from the wrong direction). The County’s truck turning analysis shows that the intersection is not adequate for truck turning and trucks cannot stay in their own lane of travel. Trucks are crossing over into the oncoming lane of travel, which was a specific concern of the hearing’s examiner. County traffic engineers have observed this behavior in the field.
- Accident data (objective comparison data) overlaid on the county roadway system for Kelly Road or the intersection of Kelly Road and Lucia Falls Road does not prioritize high enough in order to qualify for transportation safety funding. The accident rate is 0.56 and we only consider intersections for mitigation if the rating is more than 1.0 and if there is an appropriate mitigation available to remedy the predominant accident types. [Note that when prioritizing projects for funding, we only use reported accidents – that way we compare “apples to apples” and use a standardized process to prioritize use of public funding. Using unreported accidents at this location would make the comparison “apple to oranges”, so using that process is not appropriate for objective county-wide prioritization for safety projects.]

Commercial Vehicles – Dust, debris and overweight issues

- The Sheriff’s department representative responsible for commercial enforcement does not report an issue with speeding, overweight vehicles or tarping/covering loads (dust/debris from trucks) that is out of the ordinary for Clark County Roads.

Public Works Staff Recommendation

What we **recommend doing** or have already done:

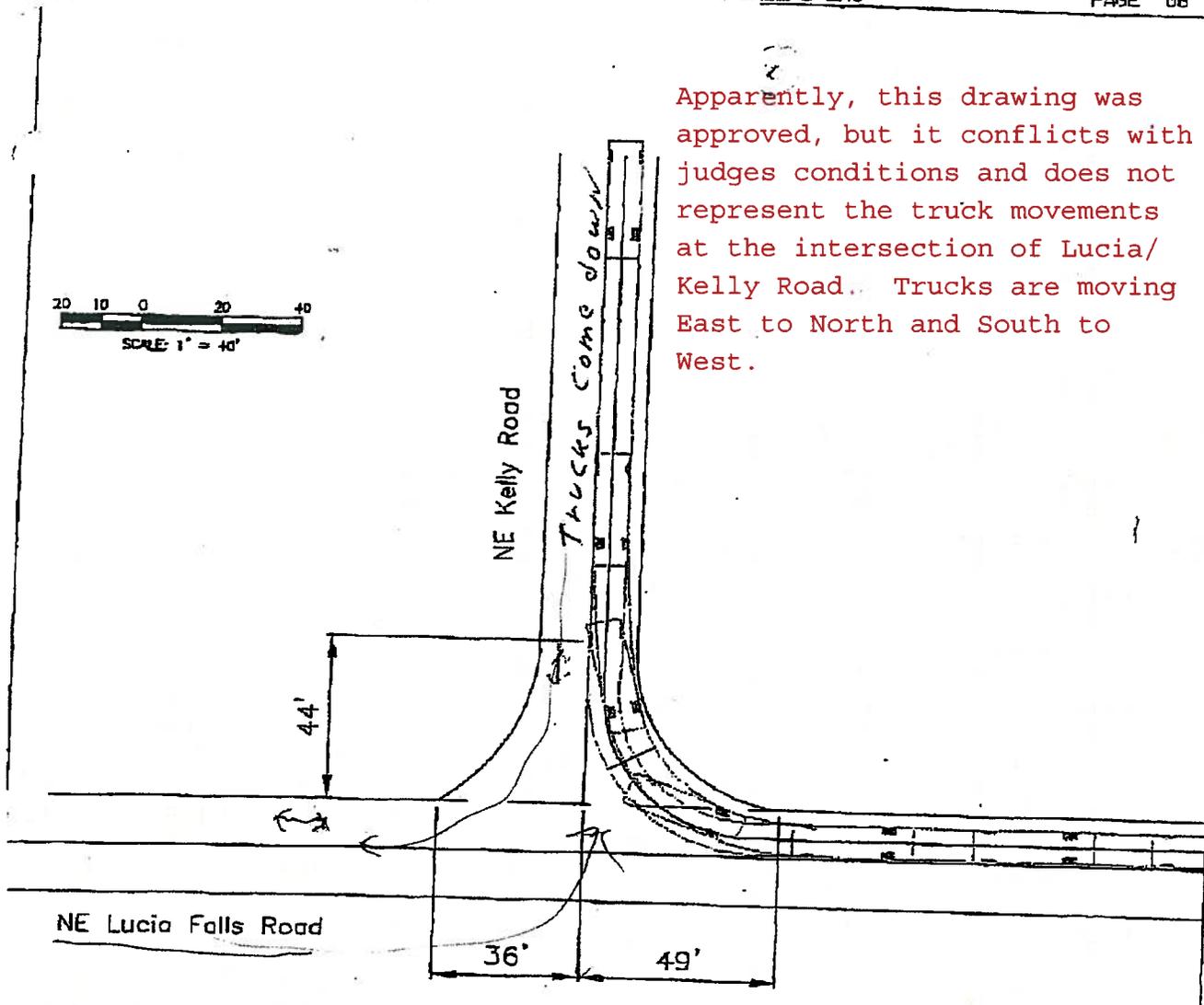
- Remove the sign at the exit of the pit that requires certain routing of trucks in/out of the pit (done).
- Restripe intersection of Kelly/Gabriel (weather permitting) to align turning movements and allow trucks to go either direction. (see attached sketch)
- Clear vegetation at Gabriel/SR503 to improve stopping & intersection sight distance (a request has been submitted to operations).
- Notify Operator that they are out of compliance with one of the conditional use permit conditions. Discuss improvements to the intersection of Kelly & Lucia Falls roads with the Operator.
- Install “trucks entering highway” sign on westbound Lucia Falls Road, just east of the intersection with Kelly Road.
- Continue to review accident data annually and rank against county-wide needs to consider for funding safety improvements.

What we **do not recommend** doing:

- Lower speed limits where basic rule prevails and speed study indicates vehicles are adjusting to conditions appropriately.
- Improve Gabriel at SR503.

Public Works (Traffic Engineer) Authority: As outlined in [Clark County Code Ch 10.02](#), Traffic Code and by reference [WAC 308.330](#), Washington Model Traffic Ordinance, and RCW 48.47 Closing highways and restricting traffic.

Apparently, this drawing was approved, but it conflicts with judges conditions and does not represent the truck movements at the intersection of Lucia/Kelly Road. Trucks are moving East to North and South to West.



Plan

cts ENGINEERS, INC. <small>400 NW 21st Terrace Portland, OR 97208-3800 (503) 251-0712</small>	YACOLT QUARRY CLARK COUNTY, WASHINGTON	JOB NO. OR00.032.T02
	SU Vehicle Turning at NE Kelly Road and NE Lucia Falls Road	DATE 6/17/2002
		SHEET NO. FIGURE

LEGEND

- WHEEL TRACK
- VEHICLE BODY OUTLINE
- 1 FT. CLEARANCE OUTLINE



<p>LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE AND MAY BE INCOMPLETE</p>		<p>TRANSPORTATION FORWARD</p>	<p>PUBLIC WORKS CONSTRUCTION & MAINTENANCE DIVISION</p>	<p>ENGINEERING AND DESIGN SECTION</p>	<p>TURNING ANALYSIS TRUCK AND TRANSFER SB KELLY RD TO WB LUCIA FALLS RD</p>	<p>DATE 2/25/15</p> <hr/> <p>CP</p>
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LEGEND

- WHEEL TRACK
- VEHICLE BODY OUTLINE
- - - 1 FT. CLEARANCE OUTLINE



LOCATIONS OF MIRRORS UTILIZED ARE APPROXIMATE AND MAY BE INCOMPLETE



TRANSPORTATION
PROGRAM

PUBLIC WORKS
CONSTRUCTION & MAINTENANCE DIVISION

ENGINEERING AND DESIGN SECTION

TURNING ANALYSIS
TRUCK AND TRANSFER
EB LUCIA FALLS RD TO NB KELLY RD

DATE 2/25/15
OF

Proposed Striping

Kelly Road

Gabriel Road

NEW SKIP STRIPING

REMOVE OLD STRIPING

NEW DBL YELLOW

4.0

15.0

15.0

R80.0

