

Required Elements of County Engineer's Report

14 What is the legal framework for this report?

This County Engineer's Report for establishment of a new Rhodes Lake Road East Corridor is submitted with supporting documentation to meet the requirements of RCW 36.81 for the establishment of county roads. The report documents the Pierce County Engineer's recommendation for a new corridor connecting 128th Street East and Falling Water Boulevard East. This would effectively create a continuous corridor between 198th Avenue East and SR 162, as directed by the County Council's Resolution.

15 What is the specific recommendation of the County Engineer?

The Pierce County Engineer recommends to the Pierce County Council that a new corridor be established, from approximately the eastern end of the 128th Street East bridge over the Puyallup River to the current western terminus of Falling Water Boulevard East, along the general alignment described in the SEPA Programmatic EIS and as further shown in Appendix A of this report. A portion of the roadway will be four-lanes and a portion will be two-lanes. The entire corridor will also include turn lanes at intersections and potentially a two-way left turn lane in areas with frequent driveways or cross streets. The roadway should be constructed to Major Arterial roadway standards. Construction of the road should occur as development on the Plateau necessitates and as funding allows.

16 What are the details of the recommended establishment?

RCW 36.81 provides certain specifications for the content of a County Engineer’s Report for establishment of a county road. In accordance with these requirements, the information below describes the statement of need, general course of the route, terminal points, length, right of way requirements, and a cost estimate of construction.

A. Statement of Need

The Pierce County Engineer states to the Pierce County Council that establishment of a new arterial road corridor in the vicinity of Rhodes Lake Road East from approximately the eastern end of the 128th Street East bridge over the Puyallup River to the current western terminus of Falling Water Boulevard East is a public need and necessity. The lack of this new corridor places an undue traffic and safety burden on existing county roadways in the vicinity. Establishment of this roadway will significantly improve flow and safety for vehicles and pedestrians.

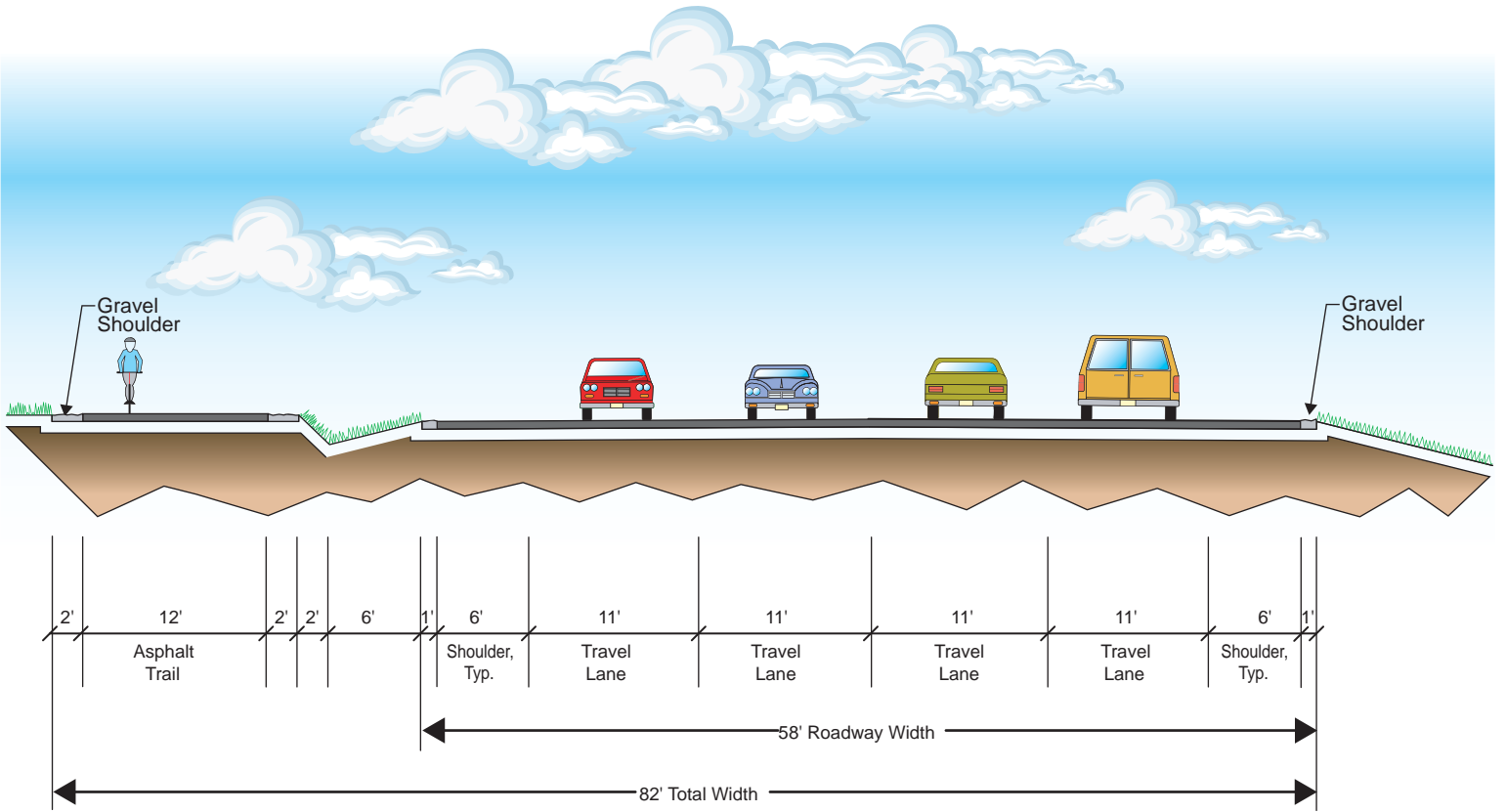
B. Route Location and Description of Course

The route would include two distinct sections, as described below:

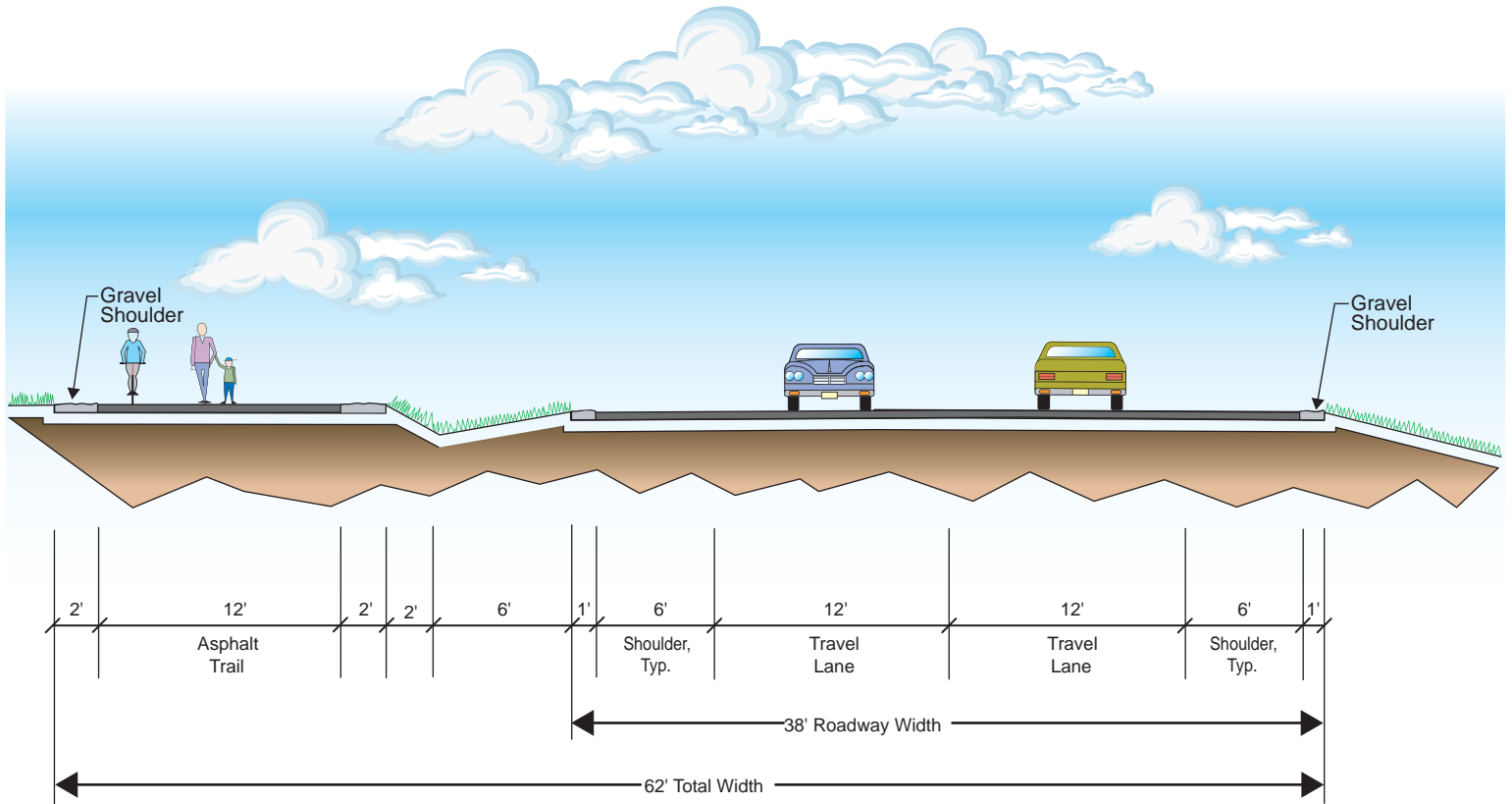
Section A: A new corridor with four through lanes plus turn lanes from 128th Street East to the intersection with the extension of Falling Water Boulevard and a future connector into the Cascadia development, approximately 1.13 miles.

The new corridor begins at the eastern end of the existing bridge over the Puyallup River on 128th Street East/ McCutcheon Road. The new corridor would become the through street, with McCutcheon becoming the cross street. The new corridor would curve to the south, rising on an embankment to gain elevation before reaching the eastern wall of the Puyallup River Valley. The roadway would then transition to a “side-hill” cut into the eastern wall of the valley. It would continue south until enough elevation is gained to allow a curve to the west to reach the top of the plateau. The roadway would continue westerly to a future intersection with the intersection of Falling Water Boulevard.

Typical Roadway Sections



4-Lane Roadway (Section A of New Corridor)



2-Lane Roadway (Section B of New Corridor)

Section B: A new corridor with two through lanes plus turn lanes the current terminus of Falling Water Boulevard to the intersection with the Section A Corridor, approximately 0.93 miles.

The new corridor will begin at the current western terminus of Falling Water Boulevard and continue to the southwest to the intersection with the Section A corridor. It is assumed that the Section A corridor would become the through street, with a future westerly extension of Falling Water Boulevard becoming the cross street.

C. Preliminary Centerline Description of Alignment

Commencing at the Southwest corner of Section 07, Township 19 North, Range 05 East, W.M. in Pierce County, Washington, thence North $77^{\circ} 29' 09''$ East a distance of 913.68 feet to the east side of the 128th Street E bridge crossing the Puyallup River and the true point of beginning, thence North $77^{\circ} 29' 17''$ East a distance of 80.59 feet to the beginning of a curve to the right; thence southeasterly along said curve, of radius 730 feet, length of 1,203.67 feet, and delta $94^{\circ} 28' 22''$, thence South $8^{\circ} 02' 21''$ East a distance of 1,170.35 feet to a curve to the left; thence northeasterly along said curve, of radius 1,100.00 feet, length 1,607.95 feet, and delta $83^{\circ} 45' 12''$, thence North $88^{\circ} 12' 27''$ East a distance of 1385.64 feet to a curve to the right; thence southeasterly along said curve, of radius 730 feet, length 663.92 feet, and delta $52^{\circ} 06' 33''$ to a point, said point being the assumed Plateau Intersection centerline, thence North $50^{\circ} 18' 59''$ East a distance of 4,482.96 feet to the beginning of a curve to the right; thence northeasterly along said curve, of radius 1,000 feet, length 746.28 feet, and delta $42^{\circ} 45' 31''$, thence South $86^{\circ} 55' 29''$ East a distance of 399.12 feet to the beginning of a curve to the left; thence northeasterly along said curve with a radius of 930 feet and delta $51^{\circ} 50' 20''$ to intersect the west right of way line of Falling Water Boulevard East, said intersection being the terminus of the centerline description.

D. Right-of-Way Width

The proposed minimum right-of-way width for establishment of this road is as follows:

- Section A: (4-lane section) 100-foot minimum
- Section B: (2-lane section) 80-foot minimum

Due to the steep topography, additional right-of-way and/or slope easements will be required for much of the route. The extent of this additional right-of-way will be determined in future engineering design phases.

E. Variability of Roadway Centerline Description

The roadway centerline description provides an approximation of the new corridor location. The specific alignment is subject to change based on additional engineering to meet design intent.

F. Construction Cost

The Pierce County Engineer has estimated the cost of constructing this new roadway from the eastern end of the Puyallup River Bridge on 128th Street East to the connection to Falling Water Boulevard East, including right of way/easement acquisition to be between \$59 million and \$78 million in 2008 dollars. A summary of the estimated project cost of the new corridor by segment is found in Appendix B.

Though not a part of the corridor establishment process, additional lanes will also be needed on the existing portion of 128th Street East and on the existing bridge over the Puyallup River. Appendix B also contains the estimated cost of the “full corridor” from SR 162 to the connection to Falling Water Boulevard East. This cost is estimated to be between \$69 million and \$91 million in 2008 dollars.