

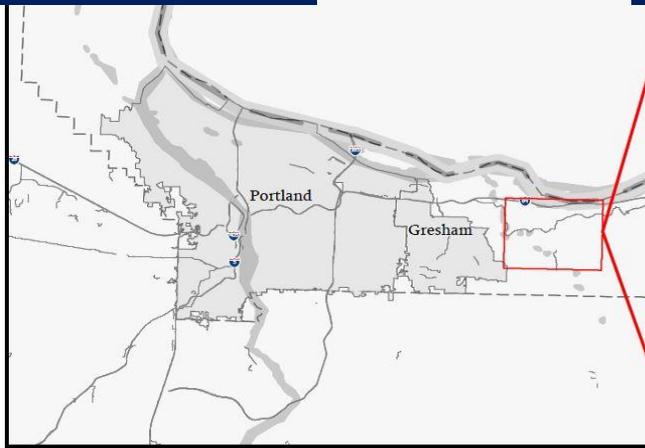
# 157R: Sandy River Tributary Culverts of Local Concern

Culvert Reconstruction

Rural Multnomah County



## OVERVIEW MAP



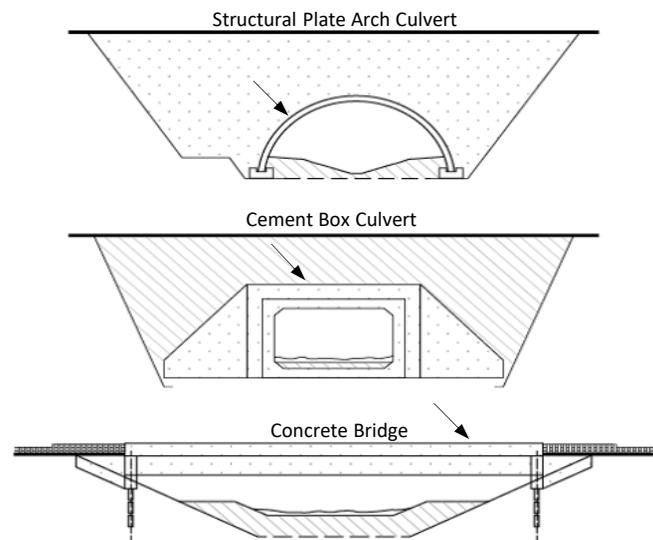
## DETAIL MAP



## PROJECT OVERVIEW

Replace culverts identified as of local concern within the watershed of the Sandy River tributaries to improve fish passage for endangered fish and other aquatic species. This project includes replacing the following culverts: SE Northway Road Culvert (#5555\*), SE Pounder Road Culverts (#5607\*, 5615, 5611, and #5614), SE Christensen Road Culvert (#5338), SE Howard Road Culverts (#5441 and #5443), E Bell Road Culvert (#5003), SE Smith Road Culvert (#5626), SE Hurlburt Road Culverts (#5471, #5455\*, and #5454), E Knieriem Road Culvert (#5040), SE Kimbley Road Culvert (#5463), SE Wilson Road Culvert (#5658), SE Kerslake Road Culverts (#5480 and #5479), SE Nielson Road Culvert (#5167), SE Gordon Creek Road Culvert (#5386), and SE Littlepage Road Culverts (#5491 and #5493\*). \* indicates that culvert is a 5-year regional priority for reconstruction.

## POTENTIAL CULVERT CROSS-SECTIONS



## PROJECT AREA EMERGENCY MANAGEMENT CONSIDERATIONS

- Landslide
- Earthquake
- Wildfire Risk
- Floodplain

## COST (DRAFT)



Engineering	\$	2,072,000
Construction	\$	4,143,000
Right-of-Way	\$	414,000
Miscellaneous*	\$	2,393,000
<b>Total</b>	<b>\$</b>	<b>9,030,000</b>

\*Miscellaneous includes any necessary environmental permitting, wetland mitigation, hazmat, and a 30% contingency. Note: Cost estimates are based on preferred alternatives and in 2019 dollars.

## SCORE

