

N. Shore Chelan Substation - Site Comparison

Feb. 22, 2017

	Washington Federal	Chelan Heights	Uhrich Orchard
Earthwork Costs	703,000	442,000	424,000
Substation Costs	3,403,000	3,403,000	3,403,000
Distribution Costs*	7,629,000	5,010,000	8,021,000
Transmission Costs	592,000	253,000	456,000
Total Costs	12,327,000	9,108,000	12,304,000

* Assumed change of Transmission Structures for Distribution under-build is required

Considerations:

Contingency: All work element contingency is 20%; except Transmission Construction, which is 30%

	Pro	Con	Variable	
Washington Federal	X		Proximity to Existing Housing	
		X	T&D Visual Impacts	
	X		Site Access - Developed roadway access	
	X		Underground Distribution	3.2 miles
	X		Overhead Distribution	1.7 miles
	X		Total Distribution	4.9 miles
Chelan Heights	X		Proximity to Existing Housing	
		X	T&D Visual Impacts	
	X		Site Access - 4,800 ft of orchard access road	
	X		Underground Distribution	0.9 miles
	X		Overhead Distribution	4.3 miles
	X		Total Distribution	5.3 miles
Uhrich Orchard	X		Proximity to Existing Housing	
		X	T&D Visual Impacts	
	X		Site Access - Adjacent to County Road	
	X		Underground Distribution	1.4 miles
	X		Overhead Distribution	6.9 miles
	X		Total Distribution	8.3 miles

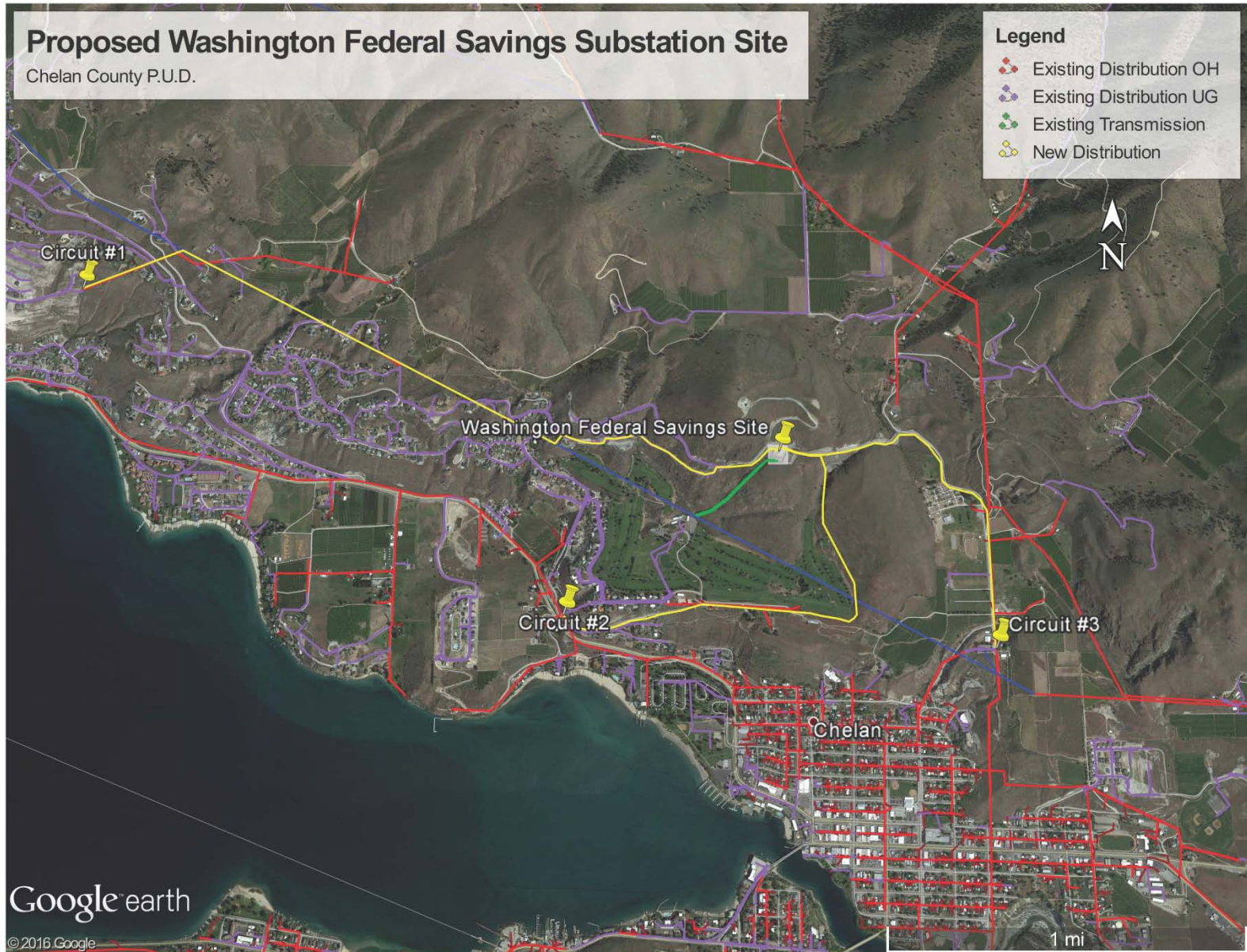
WASHINGTON FEDERAL SAVING SITE ESTIMATED COSTS



- EARTHWORK COSTS – \$703,000
- SUBSTATION COSTS – \$3,403,000
- DISTRIBUTION COSTS* – \$7,629,000
- TRANSMISSION COSTS – \$592,000
- TOTAL COSTS - \$12,327,000

* Circuit 1 and Circuit 4 are estimated as a double-circuit (follow the same route)

WASHINGTON FEDERAL SAVING SITE DISTRIBUTION

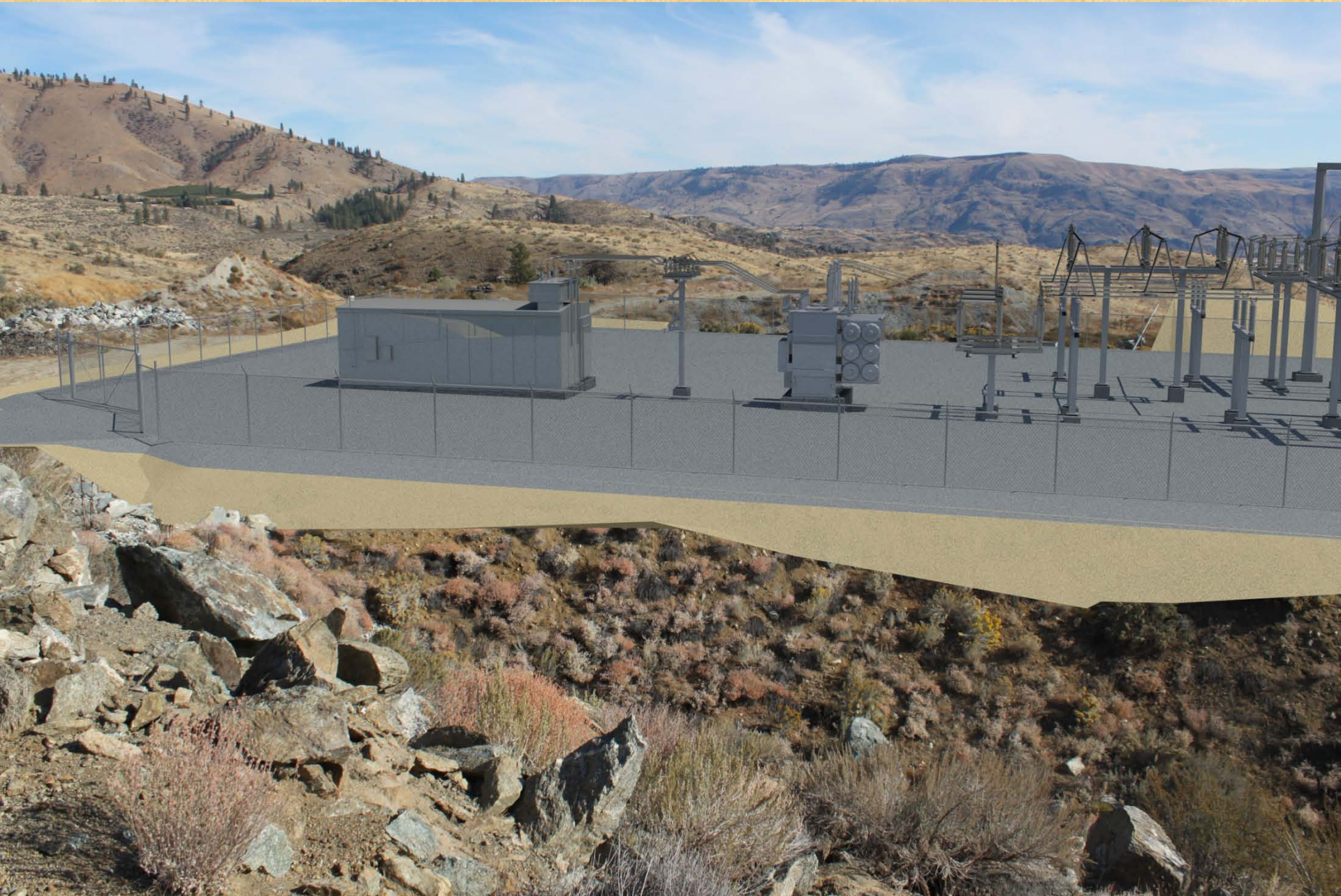


WASHINGTON FEDERAL SAVING SITE TRANSMISSION LINE- BEFORE



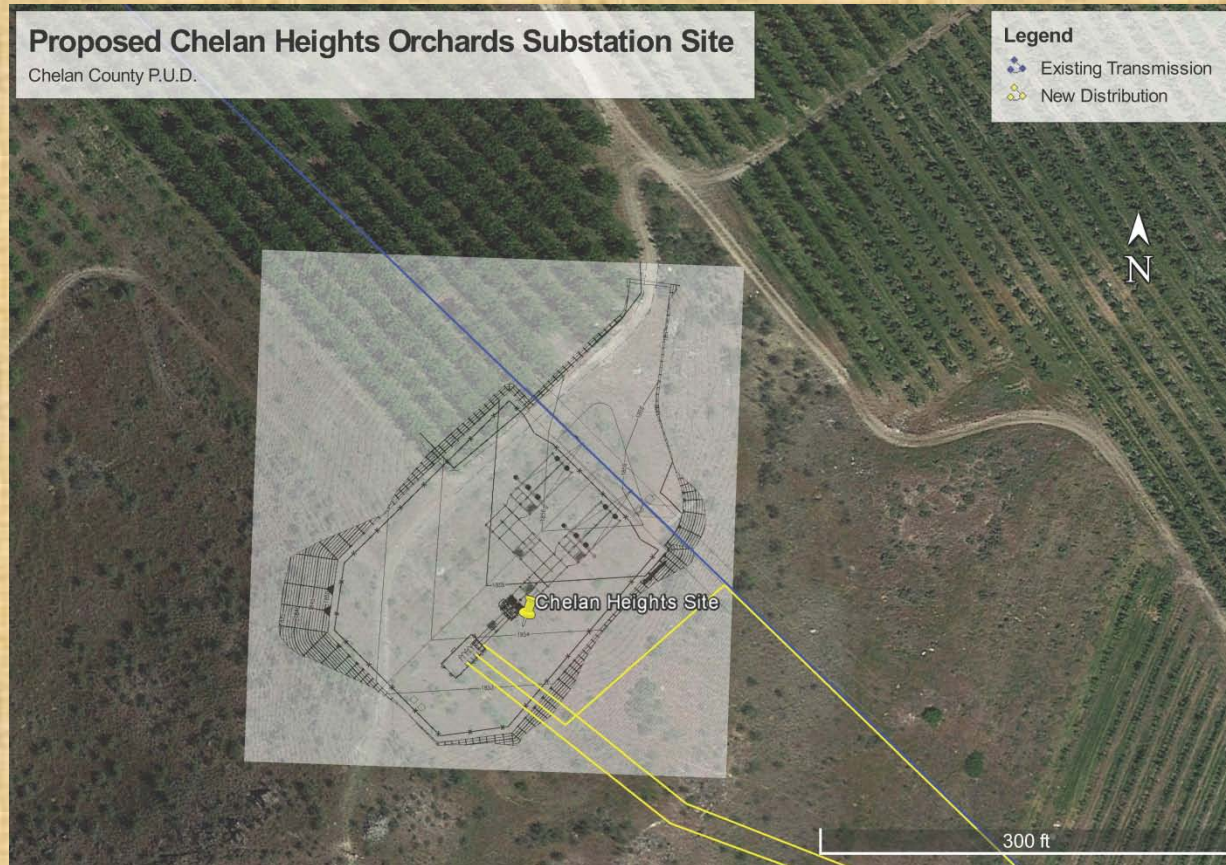
WASHINGTON FEDERAL SAVING SITE TRANSMISSION LINE- AFTER







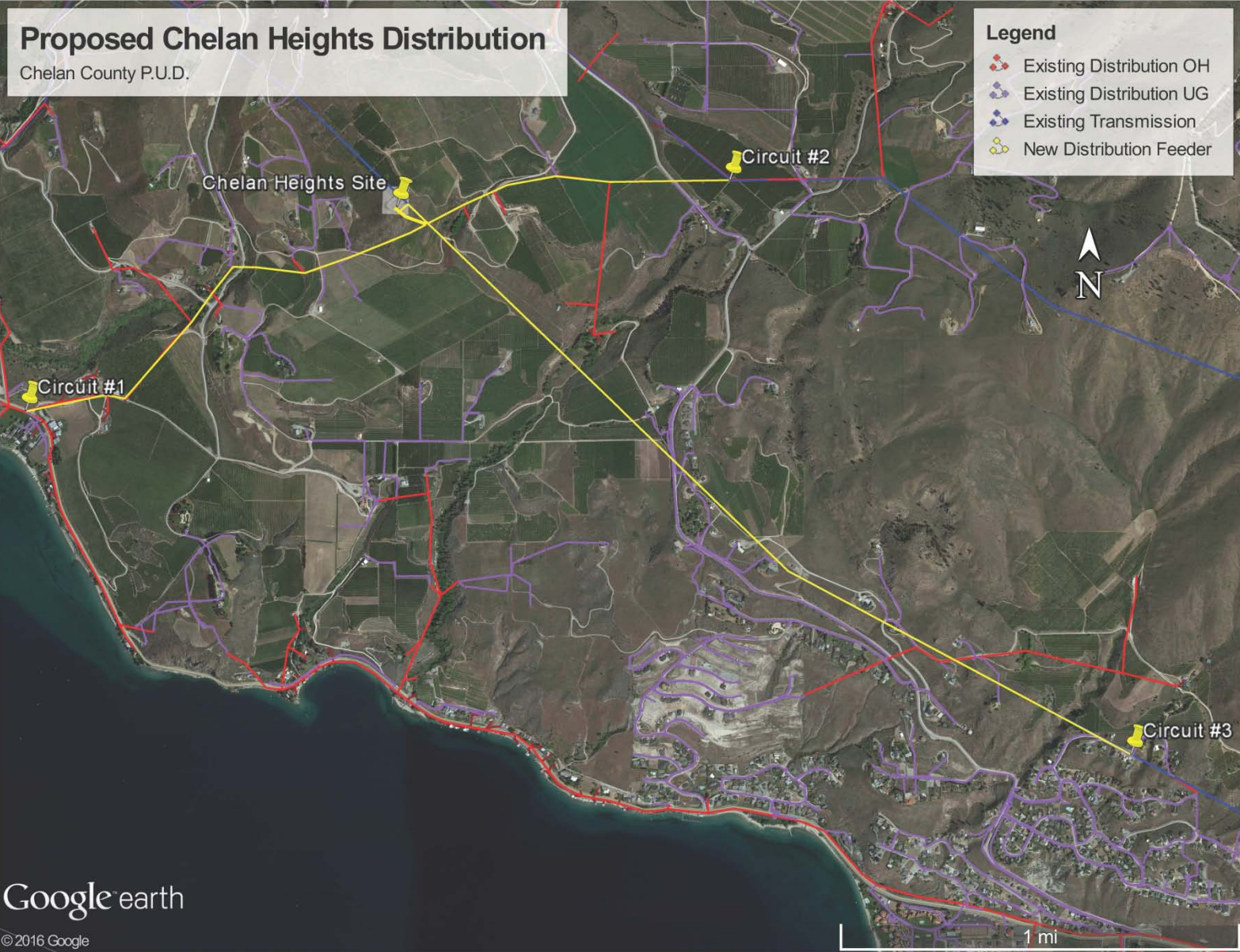
CHELAN HEIGHTS SITE ESTIMATED COSTS

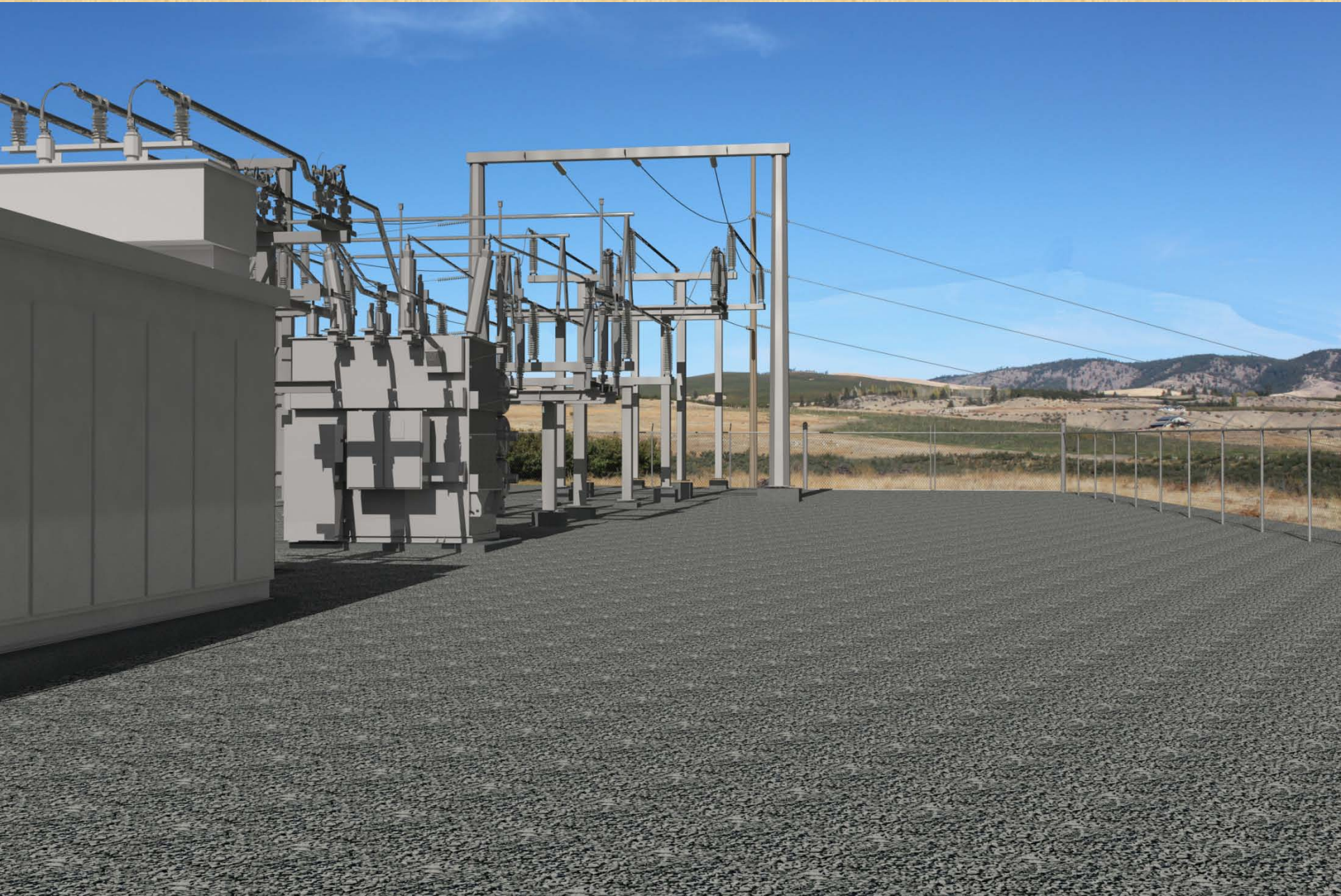


- EARTHWORK COSTS – \$442,000
- SUBSTATION COSTS – \$3,403,000
- DISTRIBUTION COSTS* – \$5,010,000
- TRANSMISSION COSTS – \$253,000
- TOTAL COSTS - \$9,108,000

* Circuit 3 and Circuit 4 are estimated as a double-circuit (follow the same route)

CHELAN HEIGHTS SITE DISTRIBUTION





UHRICH ORCHARD SITE ESTIMATED COSTS



- EARTHWORK COSTS – \$424,000
- SUBSTATION COSTS – \$3,403,000
- DISTRIBUTION COSTS* – \$8,021,000
- TRANSMISSION COSTS – \$456,000
- TOTAL COSTS - \$12,304,000

* Circuit 3 and Circuit 4 are estimated as a double-circuit (follow the same route)

UHRICH ORCHARD SITE DISTRIBUTION

