

ENGINEER'S ANNUAL REPORT FOR YEAR 1943.

TO THE JOINT BOARD,
INTER COUNTY RIVER IMPROVEMENT COMMISSION,
KING AND PIERCE COUNTIES, WASHINGTON.

GENTLEMEN:

Herewith is a resume of activities of the Inter-County River Improvement covering the year 1943.

The Inter County River Improvement has during the past year passed thru a most difficult period. At the outset of the year it was evident that all work to be undertaken during the year would be governed by the funds made available by Pierce County alone, since King County would not participate by contributing the \$50,000 which was their proportional share in accordance with the existing contract.

The Pierce County share of the budget amounted to \$20,000 and upon this limited budget the years work was planned. Due to legal litigation pending between the two counties and the probable expense incurred thereby and also the fact that for a period of nine or ten years no floods of great magnitude had occurred, it was considered expedient to conserve all possible available funds for the late months of the year during which time floods are most likely to occur. Bearing in mind an eventuality of this nature we conserved all possible funds to use if flood damages should occur. Fortunately we passed thru the early winter months with exceptionally low water in the rivers and it then appeared we were reasonably safe from abnormal flood damages after which we undertook during the last half of December the very necessary work along the lower course of the river from Puyallup to Tacoma.

During previous years considerable riprap rock had been placed along the toe of the concrete revetment thruout this portion of the river . This was placed at various points where , at that time it appeared to be the danger areas. The rock so placed has for the most part proven quite satisfactory and for this reason it was considered wise to continue this type of maintenance. It is also necessary to bear in mind that the strengthening of the revetment at the toe will not obviate the necessity of a higher levee on the right bank to prevent overflow during flood period. The revetment should also be carried up to sufficient height to provide a safe freeboard during flood periods.

The reinforcing by the use of riprap at the toe of the revetment will not prevent the overflow and consequent damage should we again experience a flood such as that of 1933-34, when 3,775 lineal feet of levee and dike were destroyed by the flood over-topping the banks on the right or north side of the river.

When these flood damages were repaired the damaged dikes were raised to a height to prevent future over-topping, however there remain long stretches of dike that at this time should be raised to prevent over-topping in the future.

The attached financial statement serves to indicate the disbursement of funds for the year 1943. Also tables showing quarry operation and the locations of maintenance and quantities of rock used.

ROCK RIPRAP PLACED IN YEAR 1943

Left Bank	Station 254	Groin	4,596 c.y.
Right Bank	North Puyallup Bridge	Blanket	128 "
Right Bank	Station 255 plus 00	"	322 "
Right Bank	Station 143	"	20 "
Right Bank	Station 230 to 239	"	88 "
Right Bank	Station 250 to 252	"	1,080 "
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			6,234 "

QUARRY OPERATION
OCTOBER - NOVEMBER
1943

Inter County River Improvement

	Oct.	Nov.
Miscel. Supplies	\$151.72	\$ 23.98
Exploders, Powder		51.32
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Total Cash Expended	151.72	75.30
Equipment Rental	150.00	150.00
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	\$ 301.72	225.30

Puyallup River Improvement

	Oct.	Nov.
Supervision	\$117.50	\$117.50
Shovel Runner	316.63	332.87
" Oiler	239.60	220.75
Mis. Labor	491.41	450.49
Mis. Supplies	13.95	
Watchman	129.98	129.75
Shovel, Gas-Oil	53.77	63.00
Compressors Gas-Oil	4.51	33.80
ICRI Ford Flat Truck	4.13	6.50
Miscel. Gas used	.13	4.39
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	1,371.61	1,359.05
Shovel Rental	400.00	400.00
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	\$ 1,771.61	1,759.05

QUARRY COST BALANCE

	PREVIOUS MOS.	OCT	NOV.	TO DATE
Inter County River Improvement	\$4,326.22	301.72	225.30	\$4,853.24
Puyallup River Improvement	10,759.75	1,771.61	1,759.05	14,290.41
Total Quarry Expenditures	\$ 15,085.97	\$ 2,073.33	\$ 1,984.35	\$ 19,143.65

ROCK TAKEN TO DECEMBER 1st, 1943

	PREVIOUS MOS.	OCT.	NOV.	TO DATE
Inter County River Improvement	3,110 c.y.	...	1,108	4,218 c.y.
Puyallup River Improvement	10,356	2,940	2,576	15,872 c.y.
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	13,466	2,940	3,684	20,090 c.y.

Rock sold to individuals 422 c.y. not included in above.

QUARRY OPERATION
DECEMBER 1943

Inter County River Improvement	Puyallup River Improvement
Labor \$430.23	Supervision.....\$117.50
Ind. Ins. & Bureau. 9.69	Shovel Runner..... 373.47
Exploders..... 36.26	" Oiler..... 120.42
Powder..... 47.12	Miscellaneous Supplies..... 8.60
Steel..... 82.28	Quarry Labor..... 246.16
	Caterpillar Rental & Driver..... 127.41
	Quarry Watchman..... 130.47
	Repairs to Compressor..... 4.58
	Shovel Gas-Oil..... 73.07
	Compressor Gas-Oil..... 59.16
	I C R I Ford Truck Gas Oil..... 3.25
	Miscellaneous Gas used..... .13
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Total Cash Expended 605.58	1264.22
Equipment Rental	
150.00 - 4.58 <u>145.42</u>	Shovel Rental..... <u>400.00</u>
Total cost for month 751.00	1664.22

QUARRY COST BALANCE

	Previous months	December	To Date December 31.
Inter County River Improvement	\$4,853.24	\$751.00	\$5,604.24
Puyallup River Improvement	<u>14,290.41</u>	<u>1664.22</u>	<u>15,954.63</u>
	\$ 19,143.65	\$ 2415.22	\$ 21,558.87

Rock Taken to December 31, 1943

	Previous Months	December	To Date
Inter County River Improvement	4,218 c.y.	2,016 c.y.	6,234 c.y.
Puyallup River Improvement	<u>15,872</u> "	<u>1,924</u> "	<u>17,796</u> "
	20,090	3,940	24,030

FINANCIAL STATEMENT
 INTER COUNTY RIVER IMPROVEMENT
 October 31, 1943

ITEM	EXPENDITURES PREVIOUS MOS.	EXPENDITURES OCTOBER	EXPENDITURES TO DATE OCT. 31
Office Expense	\$ 1,081.59	\$ 127.16	\$ 1,208.75
Law Suit	732.50	1,000.00	1,732.50
Engineering	3,037.24	329.73	3,366.97
Maintenance & Operation (Automotive)	430.71	4.16	434.87
Maintenance & Repair	14.84		14.84
Haul Rock to River	4,086.31		4,086.31
Channel Cross Sec. & Survey	804.36		804.36
Place Rock	508.51		508.51
River Patrol	92.83		92.83
Channel Clearing	1,252.89	226.62	1,479.51
ICRI Janitor	227.97		227.97
Rock Quarry	3,303.72	151.72	3,455.44
So. Face Development	843.07		843.07
U. S. G. S. Geological Survey	168.26		168.26
Stock Acct. Gas-Oil	22.91	- 9.75	13.16
	<u>\$ 16,607.71</u>	<u>\$ 1,829.64</u>	<u>\$18,437.35</u>
	<u>Pierce County</u>	<u>King County</u>	<u>Total</u>
Budget 1943	\$20,500.00	None	\$20,500.00
Expended Previous Months	<u>16,607.71</u>		<u>16,607.71</u>
Balance October 1st	3,892.29		3,892.29
Expended in October	<u>1,829.64</u>		<u>1,829.64</u>
Balance November 1st	\$ 2,062.65		\$ 2,062.65

Respectfully submitted,

Reginald H. Thomson
 Supervising Engineer

FINANCIAL STATEMENT
 INTER COUNTY RIVER IMPROVEMENT
 November 30
 1943

ITEM	EXPENDITURES PREVIOUS MOS.	EXPENDITURES NOVEMBER	EXPENDITURES TO DATE NOV. 30th
Office Expense	\$1,208.75	\$ 135.63	\$1,344.38
Law Suit	1,732.50		1,732.50
Engineering	3,366.97	334.71	3,701.68
Maintenance & Operation (Automotive)	434.87	28.79	463.66
Maintenance & Repair(Stationery)	14.84	81.29	96.13
Haul Rock to River	4,086.31	1,656.14	5,742.45
Channel Cross Sec. & Survey	804.36		804.36
Place Rock	508.51	400.22	908.73
River Patrol	92.83		92.83
Channel Clearing	1,479.51		1,479.51
ICRI Janitor	227.97	17.50	245.47
Rock Quarry	3,455.44	75.30	3,530.74
So. Face Development	843.07		843.07
U.S.G.S. Survey	168.26		168.26
Stock Acct. Gas-Oil	13.16	13.20	26.36
	<u>18,437.35</u>	<u>2,742.78</u>	<u>21,180.13</u>
	<u>Pierce County</u>	<u>King County</u>	<u>Total</u>
Budget 1943	\$20,500.00	None	\$20,500.00
Expended Previous Months	18,437.35		18,437.35
Balance November 1st	<u>2,062.65</u>		<u>2,062.65</u>
Resolution # 1520	<u>10,000.00</u>		<u>10,000.00</u>
	<u>12,062.65</u>		<u>12,062.65</u>
Expended in November	<u>2,742.78</u>		<u>2,742.78</u>
Balance December 1st	\$ 9,319.87		\$ 9,319.87

FINANCIAL STATEMENT
 INTER COUNTY RIVER IMPROVEMENT
 December 31, 1943

ITEM	EXPENDITURES PREVIOUS MOS.	EXPENDITURES DECEMBER	EXPENDITURES TO DATE DEC. 31-43
Office Expense	\$1,344.38	\$ 119.53	\$ 1,463.91
Law Suit	1,732.50		1,732.50
Engineering	3,701.68	344.38	4,046.06
Maintenance & Operation (Automotive)	463.66	12.13	475.79
Maintenance & Repair (Stationary)	96.13	14.42	110.55
Haul Rock to River	5,742.45	3,166.86	8,909.31
Channel Cross Sec. & Survey	804.36		804.36
Place Rock	908.73	482.01	1,390.74
River Patrol	92.83		92.83
Channel Clearing	1,479.51		1,479.51
ICRI Janitor	245.47	35.00	280.47
Rock Quarry	3,530.74	678.75	4,209.49
So. Face Development	843.07		843.07
U. S. G. S.	168.26	95.86	264.12
Stock Acct. Gas-Oil	26.36	22.63	48.99
	<u>21,180.13</u>	<u>4,971.57</u>	<u>26,151.70</u>

	Pierce County	King County	Total
Budget 1943	\$20,500.00	None	\$20,500.00
Resolution # 1520	<u>10,000.00</u>		<u>10,000.00</u>
	30,500.00		30,500.00
Expended to Date Dec. 31- 1943	<u>26,151.70</u>		<u>26,151.70</u>
Balance December 31, 1943	\$4,348.30		\$4,348.30

Respectfully submitted,

R. H. Thomson Consulting Engineer
 InterCounty River Improvement