Peshastin Ditch

Cost Estimate for the 36 inch pipe for estimated 5,900 feet from the existing pipe to the Liberty Ditch takeouts.

Reclamation
J. Peterson
July 2007

The pipe was assumed to be 36 inch Hancor type pipe similar to the pipe used just upstream of this section.
The trench was assumed to be 6 feet deep and 6 feet wide.
The upper 2 feet of the trench was assumed to be 10 feet wide creating a safety bench.
It was assumed that the pipe would be bedded on 6 inches of gravel and the gravel would extend to the mid point of the pipe.
It was assumed that the backfill would be compacted to a depth of 1 foot over the pipe (about 1/2 of the backfill).
It was assumed that some outside backfill material would need to be imported to the trench.
It was assumed that there would be 20 turnouts in the 5,900 foot length.
It was assumed that the turnout pipe would connect to the existing turnout boxes.
It was assumed there would be a riser every 500 feet.
One concrete box structure is included in the estimate.

Item	Quanity	Unit Cost	Estimate
36 inch Pipe	5,900 ft	$37	$218,300
Excavation	9,440 yds	$15	$141,600
Bedding	1,475 yds	$38	$56,050
Backfill	6,490 yds	$14	$90,860
Compacting Backfill	3,245 yds	$9	$29,205
Furnish additional Backfill	1,600 yds	$15	$24,000
Concrete Box	8 yds	$1,000	$8,000
Risers in pipe	10 ea	$1,000	$10,000
Tees for turnouts	20 ea	$1,000	$20,000
Road Crossing	1 ea	$5,000	$5,000
Total Estimate			**$603,015**

Peshastin Ditch

Cost Estimate for the 10 inch pipe for estimated 4,000 feet from the Liberty Ditch takeout area to the downstream spill.

Reclamation
J. Peterson
July 2007

The pipe was assumed to be 10 inch PVC class 125 type pipe.
The trench was assumed to be 3 feet deep and 3 feet wide.
It was assumed that the pipe would be bedded on 4 inches of gravel and the gravel would extend to the mid point of the pipe.
It was assumed that the backfill would be compacted to a depth of 1 foot over the pipe.
It was assumed that some outside backfill material would need to be imported to the trench.
It was assumed that there would be 10 turnouts in the 4,000 foot length.
It was assumed that the turnout pipe would connect to the existing turnout boxes.
One concrete box structure is included in the estimate.

Item	Quanity	Unit Cost	Estimate
10 inch Pipe	4,000 ft	$2.70	$10,800
Excavation	1,320 yds	$15	$19,800
Bedding	280 yds	$38	$10,640
Backfill	800 yds	$14	$11,200
Compacting Backfill	400 yds	$9	$3,600
Furnish additional Backfill	400 yds	$15	$6,000
Concrete Box	6 yds	$1,000	$6,000
Tees for turnouts	10 ea	$500	$5,000
Road Crossings	ls		$5,000
Gate Valves	2 ea	$1,500	$3,000
Pressure Relief Valve	1 ea	$2,000	$2,000
Total Estimate			**$78,040**