

Exhibit A

MISSOULA COUNTY CHIP SEAL PROJECT COST ESTIMATE
Stonehaven, Lorraine Drive, and Terrace Drive
FY 22

Prepared by: Brian Hensel

Date: April 1, 2021

Scope: .Apply full width chip seal. Does not include striping, communication with homeowners, pre-sweeping, dust control, hauling chips to Miller Creek gravel pit, and sweeping chips.

Project area:	Length (ft)	Width (ft)	Area (sq ft)	Area (SY)
Stonehaven	1321	25	33,025	3,669.44
Lorraine Drive	2882	26	74,932	8,325.78
Lorraine Drive cul-de-sac			3,825	425.00
Terrace Drive	3065	23	70,495	7,832.78
Terrace Drive cul-de-sac			5,531	614.56
Total			187,808	20,867.56

Chip Seal

Materials

1.) Oil (CRS-2P)

Area to apply oil (SY)	Application Rate (gals/sy)	Quantity (tons)	Cost/ton	Cost
20,868	0.35	29.80	\$ 434.00	\$ 12,932.71

2.) Chips

Area to apply 3/8" chips (SY)	Application Rate (lbs/sy)	Quantity (tons)	Cost/ton	Cost
20,868	25	261	\$ 31.00	\$ 8,086.18

Subtotal \$ 21,018.89

Contractor Cost

1.) Shipping Oil/Demurrage	\$ 600/25 ton + \$500/day	\$ 1,100.00
2.) Towing	\$60/hour	\$ -

Subtotal \$ 1,100.00

Labor & Equipment by Street Division

Equipment/personnel	No. of Units	Rate/hr	Hours	Cost
Distributor	1	\$ 188.30	10	\$ 1,883.00
Chipper	1	\$ 215.92	10	\$ 2,159.20
Rubber Tire Rollers	2	\$ 98.18	10	\$ 1,963.60
Tandem Dump Trucks	7	\$ 87.44	10	\$ 6,120.80
Water Truck	1	\$ 100.85	10	\$ 1,008.50
Loader	1	\$ 91.36	10	\$ 913.60
Pick-ups	2	\$ 19.30	10	\$ 386.00
Laborers (T.C., fabric)*	4	\$ 43.30	10	\$ 1,732.00
Superintendent	1	\$ 60.00	5	\$ 300.00
Deputy Director	1	\$ 70.00	2	\$ 140.00
Subtotal				\$ 16,606.70

Overhead Charge at 18% on labor/equipment **\$ 2,989.21**

NOTES:

- 1.) "T.C., fabric"-includes labor for traffic control and placing fabric over sumps and manholes
- 2.) "Rate" column includes equipment cost plus operators at \$ 43.3/hr, excluding pick-ups.

MATERIALS COST	\$ 21,018.89
CONTRACTOR COST	\$ 1,100.00
LABOR/EQUIPMENT COST + O.H.	\$ 19,595.91
TOTAL	\$ 41,714.79

Missoula County PW: Stonehaven, Terrace Dr., Lorraine Dr.

MISSOULA COUNTY CHIP SEAL PROJECT COST ESTIMATE
Spurgin Road from Clements to end, including cul-de-sac, exclude trail
FY 22

Prepared by: Brian Hensel

Date: April 1, 2021

Scope: Apply full width chip seal from to south edge of asphalt to pedestrian/bike lane including cul-de-sac. Does not include striping, communication with homeowners, pre-sweeping, dust control, hauling chips to baseball field parking lot, and sweeping chips.

Project area:	Length (ft)	Width (ft)	Area (sq ft)	Area (SY)
Clements to Humble Road (exclude trail)	2376	22	52,272	5,808.00
Humble Rd to cul-de-sac (end)	2488	23	57,224	6,358.22
Cul-de-sac			4,597	510.78
		Total	114,093	12,677.00

Chip Seal

Materials

1.) Oil (CRS-2P)

Area to apply oil (SY)	Application Rate (gals/sy)	Quantity (tons)	Cost/ton	Cost
12,677	0.35	18.10	\$ 434.00	\$ 7,856.60

2.) Chips

Area to apply 3/8" chips (SY)	Application Rate (lbs/sy)	Quantity (tons)	Cost/ton	Cost
12,677	25	158	\$ 31.00	\$ 4,912.34

Subtotal \$ 12,768.93

Contractor Cost

1.) Shipping Oil/Demurrage	\$ 600/25 ton + \$500/day	\$ 1,100.00
2.) Towing	\$60/hour	\$ -

Subtotal \$ 1,100.00

Labor & Equipment by Street Division

Equipment/personnel	No. of Units	Rate/hr	Hours	Cost
Distributor	1	\$ 188.30	9	\$ 1,694.70
Chipper	1	\$ 215.92	9	\$ 1,943.28
Rubber Tire Rollers	2	\$ 98.18	9	\$ 1,767.24
Tandem Dump Trucks	7	\$ 87.44	9	\$ 5,508.72
Water Truck	1	\$ 100.85	9	\$ 907.65
Loader	1	\$ 91.36	9	\$ 822.24
Pick-ups	2	\$ 19.30	9	\$ 347.40
Laborers (T.C., fabric)*	4	\$ 43.30	9	\$ 1,558.80
Superintendent	1	\$ 60.00	4	\$ 240.00
Deputy Director	1	\$ 70.00	2	\$ 140.00
		Subtotal		\$ 14,930.03

Overhead Charge at 18% on labor/equipment **\$ 2,687.41**

NOTES:

- 1.) "T.C., fabric*" includes labor for traffic control and placing fabric over sumps and manholes
- 2.) "Rate" column includes equipment cost plus operators at \$ 43.3/hr, excluding pick-ups.

MATERIALS COST	\$ 12,768.93
CONTRACTOR COST	\$ 1,100.00
LABOR/EQUIPMENT COST + O.H.	\$ 17,617.44
TOTAL	\$ 31,486.37

Missoula County PW: Spurgin Road- Clements to end