

Base Values, to inflate for current year values please use rates from <http://www.bls.gov/cpi> .

### Secondary Rural - Aggre. Surface

Item	Unit	UNIT COST	Units Lane Mile	Avg. Cst Lane Mi.
<b>Temporary Safety Items</b>				
Traffic Barrier service Concrete	LF	\$10.00	1.35	\$13.50
Flagger Service	HR	\$10.78	503.04	\$5,422.77
Channelizing Devices	DAY	\$0.79	1314.9	\$1,038.77
Arrow Board, Message Board Composite	HR	\$6.23	0	\$0.00
Truck Mounted Attenuator	HR	\$15.94	0	\$0.00
Subtotal:				\$6,475.04

<b>Grading (Excavation) Costs</b>				
Clearing and Grubbing (Composit figure)	ACRE	\$5,821.62	2.06	\$11,992.54
Regular Excavation	CY	\$11.40	4693	\$53,500.20
Subtotal:				\$65,492.74

<b>Drainage Items</b>				
Misc. Concrete	CY	\$923.71	2.48	\$2,290.80
15" Pipe	LF	\$22.02	134.16	\$2,954.20
18" Pipe	LF	\$51.44	88.59	\$4,557.07
36" Pipe	LF	\$89.64	25.7	\$2,303.75
48" Pipe	LF	\$106.67	5.64	\$601.62
Drop Inlets (DI-1, DI-3B DI-7)	EA	\$2,137.06	0	\$0.00
Eros. Control Stone	TON	\$71.30	44.07	\$3,142.19
Paved Ditch	LF	\$35.05	0	\$0.00
Subtotal:				\$15,849.63

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<b>Pavement Items</b>				
Blotted Seal Coat Ty. D	SY	\$4.11	0	\$0.00
Cement Stabilized Aggre #21A	Ton	\$21.72	0	\$0.00
Aggr. No. 21B	Ton	\$22.11	2653.2	\$58,662.25
Asphalt Ty. SM-12.5	Ton	\$37.75	0	\$0.00
Asphalt Ty. IM-19.0	Ton	\$35.60	0	\$0.00
Asphalt Ty. BM-25.0	Ton	\$52.45	0	\$0.00
Concrete	SY		0	\$0.00
Underdrain UD-2, UD-4	LF	\$5.44	0	\$0.00
Pavement Markings (Composite)	LF	\$1.03	0	\$0.00
Raised Pavement Markers (Composite)	EA	\$40.68	0	\$0.00
Subtotal:				\$58,662.25

<b>Shoulders and Median</b>				
Concrete Entrances (Composite 6" & 7")	SY	\$44.10	0	\$0.00
Concrete Curb and Gutter CG-6	LF	\$13.16	0	\$0.00
Concrete Curb	LF	\$11.67	0	\$0.00
Entrance Gutter	SY	\$48.41	0	\$0.00
Right Of Way Monuments	EA	\$84.75	2.63	\$222.89
Guardrail (Composite)	LF	\$13.70	468.15	\$6,413.66
Guardrail Terminals	EA	\$1,821.11	1.92	\$3,496.53
Median Barrier Walls	LF	\$60.28	0	\$0.00
Sound Barrier	SF	\$20.81	0	\$0.00
Fence (Composite)	LF	\$4.31	1567.74	\$6,756.96
Fence Line Braces	LF	\$282.17	3.42	\$965.02
Fence Corner Braces	LF	\$282.62	2.89	\$816.77
Subtotal:				\$18,671.83

<b>Roadside Development</b>				
Seeding (Composite)	LBS	\$13.23	387.9	\$5,131.92
Erosion Control Mulch	SY	\$0.61	0	\$0.00
Temp. Erosion Control (Composite)	LF	\$2.82	5280	\$14,889.60
Siltation Control Excavation	CY	\$17.67	897.6	\$15,860.59
Planting (Composite)	EA	\$76.55	0	\$0.00
Watering	UNIT	\$71.80	0	\$0.00
Subtotal:				\$35,882.11

Base Values, to inflate for current year values please use rates from <http://www.bls.gov/cpi> .

<b>Stormwater Management</b>				
Stormwater Management Excavation	CY	\$4.90	0	\$0.00

<b>Signals and Signs</b>				
Sign Panels	SF	\$24.80	54.75	\$1,357.80
Sign Posts (Composite wood and steel)	LF	\$17.24	96	\$1,655.04
Intersection Signalization (Composite)	EA	\$0.00	0	\$0.00
Overhead Signing (Composite)	EA		0	\$0.00
Roadway Lighting (Composite)	EA		0	\$0.00
Traffic Management Systems	EA		0	\$0.00
Subtotal:				\$3,012.84

<b>Utilities (Water and Sewer)</b>				
Water Service Lines (Composite)	LF	\$20.61	0	\$0.00
Water Mains (Composite)	LF	\$37.47	0	\$0.00
Sewer Pipe (Composite)	LF	\$61.39	0	\$0.00
Subtotal:				\$0.00
Total:				\$204,046.44
add Surveying:				\$3,540.46
add Mobilization:				\$20,569.02

Estimated Cost per Lane Mile --

**GRAND TOTAL: \$228,155.92**

Base Values, to inflate for current year values please use rates from <http://www.bls.gov/cpi> .

## Secondary Rural - Surface Treated

Item	Unit	UNIT COST	Units Lane Mile	Avg. Cst Lane Mi.
<b>Temporary Safety Items</b>				
Traffic Barrier service Concrete	LF	\$10.00	1.35	\$13.50
Flagger Service	HR	\$10.78	503.04	\$5,422.77
Channelizing Devices	DAY	\$0.79	1314.9	\$1,038.77
Arrow Board, Message Board Composite	HR	\$6.23	0	\$0.00
Truck Mounted Attenuator	HR	\$15.94	0	\$0.00
Subtotal:				\$6,475.04

<b>Grading (Excavation) Costs</b>				
Clearing and Grubbing (Composit figure)	ACRE	\$5,821.62	2.06	\$11,992.54
Regular Excavation	CY	\$11.40	4693	\$53,500.20
Subtotal:				\$65,492.74

<b>Drainage Items</b>				
Misc. Concrete	CY	\$923.71	2.48	\$2,290.80
15" Pipe	LF	\$22.02	134.16	\$2,954.20
18" Pipe	LF	\$51.44	88.59	\$4,557.07
36" Pipe	LF	\$89.64	25.7	\$2,303.75
48" Pipe	LF	\$106.67	5.64	\$601.62
Drop Inlets (DI-1, DI-3B DI-7)	EA	\$2,137.06	0	\$0.00
Eros. Control Stone	TON	\$71.30	44.07	\$3,142.19
Paved Ditch	LF	\$35.05	0	\$0.00
Subtotal:				\$15,849.63

Base Values, to inflate for current year values please use rates from <http://www.bls.gov/cpi> .

## Secondary Rural - Surface Treated

Item	Unit	UNIT COST	Units Lane Mile	Avg. Cst Lane Mi.
<b>Pavement Items</b>				
Blotted Seal Coat Ty. D	SY	\$4.11	6454	\$26,525.94
Cement Stabilized Aggre #21A	Ton	\$21.72	0	\$0.00
Aggr. No. 21B	Ton	\$22.11	2653.2	\$58,662.25
Asphalt Ty. SM-12.5	Ton	\$37.75	0	\$0.00
Asphalt Ty. IM-19.0	Ton	\$35.60	0	\$0.00
Asphalt Ty. BM-25.0	Ton	\$52.45	0	\$0.00
Concrete	SY		0	\$0.00
Underdrain UD-2, UD-4	LF	\$5.44	0	\$0.00
Pavement Markings (Composite)	LF	\$1.03	0	\$0.00
Raised Pavement Markers (Composite)	EA	\$40.68	0	\$0.00
			Subtotal:	\$85,188.19
<b>Shoulders and Median</b>				
Concrete Entrances (Composite 6" & 7")	SY	\$44.10	0	\$0.00
Concrete Curb and Gutter CG-6	LF	\$13.16	0	\$0.00
Concrete Curb	LF	\$11.67	0	\$0.00
Entrance Gutter	SY	\$48.41	0	\$0.00
Right Of Way Monuments	EA	\$84.75	2.63	\$222.89
Guardrail (Composite)	LF	\$13.70	468.15	\$6,413.66
Guardrail Terminals	EA	\$1,821.11	1.92	\$3,496.53
Median Barrier Walls	LF	\$60.28	0	\$0.00
Sound Barrier	SF	\$20.81	0	\$0.00
Fence (Composite)	LF	\$4.31	1567.74	\$6,756.96
Fence Line Braces	LF	\$282.17	3.42	\$965.02
Fence Corner Braces	LF	\$282.62	2.89	\$816.77
			Subtotal:	\$18,671.83
<b>Roadside Development</b>				
Seeding (Composite)	LBS	\$13.23	387.9	\$5,131.92
Erosion Control Mulch	SY	\$0.61	0	\$0.00
Temp. Erosion Control (Composite)	LF	\$2.82	5280	\$14,889.60
Siltation Control Excavation	CY	\$17.67	897.6	\$15,860.59
Planting (Composite)	EA	\$76.55	0	\$0.00
Watering	UNIT	\$71.80	0	\$0.00
			Subtotal:	\$35,882.11

Base Values, to inflate for current year values please use rates from <http://www.bls.gov/cpi> .

### Secondary Rural - Surface Treated

Item	Unit	UNIT COST	Units Lane Mile	Avg. Cst Lane Mi.
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#### Stormwater Management

Stormwater Management Excavation	CY	\$4.90	0	\$0.00
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#### Signals and Signs

Sign Panels	SF	\$24.80	54.75	\$1,357.80
Sign Posts (Composite wood and steel)	LF	\$17.24	96	\$1,655.04
Intersection Signalization (Composite)	EA	\$0.00	0	\$0.00
Overhead Signing (Composite)	EA		0	\$0.00
Roadway Lighting (Composite)	EA		0	\$0.00
Traffic Management Systems	EA		0	\$0.00

Subtotal: \$3,012.84

#### Utilities (Water and Sewer)

Water Service Lines (Composite)	LF	\$20.61	0	\$0.00
Water Mains (Composite)	LF	\$37.47	0	\$0.00
Sewer Pipe (Composite)	LF	\$61.39	0	\$0.00

Subtotal: \$0.00

Total: \$230,572.38

add Surveying: \$3,805.72

add Mobilization: \$22,578.36

Estimated Cost per Lane Mile --

**GRAND TOTAL: \$256,956.46**

Base Values, to inflate for current year values please use rates from <http://www.bls.gov/cpi> .

## Secondary Rural - Asphalt Paved

Item	Unit	UNIT COST	Units Lane Mile	Avg. Cst Lane Mi.
<b>Temporary Safety Items</b>				
Traffic Barrier service Concrete	LF	\$10.00	1.35	\$13.50
Flagger Service	HR	\$10.78	503.04	\$5,422.77
Channelizing Devices	DAY	\$0.79	1314.9	\$1,038.77
Arrow Board, Message Board	HR	\$6.23	0	\$0.00
Truck Mounted Attenuator	HR	\$15.94	0	\$0.00
Subtotal:				\$6,475.04

<b>Grading (Excavation) Costs</b>				
Clearing and Grubbing (Composit figure)	ACRE	\$5,821.62	2.06	\$11,992.54
Regular Excavation	CY	\$11.40	4693	\$53,500.20
Subtotal:				\$65,492.74

<b>Drainage Items</b>				
Misc. Concrete	CY	\$923.71	2.48	\$2,290.80
15" Pipe	LF	\$22.02	134.16	\$2,954.20
18" Pipe	LF	\$51.44	88.59	\$4,557.07
36" Pipe	LF	\$89.64	25.7	\$2,303.75
48" Pipe	LF	\$106.67	5.64	\$601.62
Drop Inlets (DI-1, DI-3B DI-7)	EA	\$2,137.06	0	\$0.00
Eros. Control Stone	TON	\$71.30	44.07	\$3,142.19
Paved Ditch	LF	\$35.05	0	\$0.00
Subtotal:				\$15,849.63

Base Values, to inflate for current year values please use rates from <http://www.bls.gov/cpi> .

## Secondary Rural - Asphalt Paved

Item	Unit	UNIT COST	Units Lane Mile	Avg. Cst Lane Mi.
<b>Pavement Items</b>				
Blotted Seal Coat Ty. D	SY	\$12.86	0	\$0.00
Cement Stabilized Aggre #21A	Ton	\$21.72	0	\$0.00
Aggr. No. 21B	Ton	\$22.11	2653.2	\$58,662.25
Asphalt Ty. SM-12.5	Ton	\$37.75	1161.6	\$43,850.40
Asphalt Ty. IM-19.0	Ton	\$35.60	0	\$0.00
Asphalt Ty. BM-25.0	Ton	\$52.45	0	\$0.00
Concrete	SY		0	\$0.00
Underdrain (Composite)	LF	\$5.44	0	\$0.00
Pavement Markings (Composite)	LF	\$1.03	5280	\$5,438.40
Raised Pavement Markers (Composite)	EA	\$40.68	0	\$0.00
			Subtotal:	\$107,951.05

<b>Shoulders and Median</b>				
Concrete Entrances (Composite 6" & 7")	SY	\$ 44.10	0	\$0.00
Concrete Curb and Gutter CG-6	LF	\$ 13.16	0	\$0.00
Concrete Curb	LF	\$ 11.67	0	\$0.00
Entrance Gutter	SY	\$ 48.41	0	\$0.00
Right Of Way Monuments	EA	\$ 84.75	2.63	\$222.89
Guardrail (Composite)	LF	\$ 13.70	468.15	\$6,413.66
Guardrail Terminals	EA	\$ 1,821.11	1.92	\$3,496.53
Median Barrier Walls	LF	\$ 60.28	0	\$0.00
Sound Barrier	SF	\$ 20.81	0	\$0.00
Fence (Composite)	LF	\$ 4.31	1567.74	\$6,756.96
Fence Line Braces	EA	\$ 282.17	3.42	\$965.02
Fence Corner Braces	EA	\$ 282.62	2.89	\$816.77
			Subtotal:	\$18,671.83

Base Values, to inflate for current year values please use rates from <http://www.bls.gov/cpi> .

## Secondary Rural - Asphalt Paved

Item	Unit	UNIT COST	Units Lane Mile	Avg. Cst Lane Mi.
<b>Roadside Development</b>				
Seeding (Composite)	LBS	\$13.23	387.9	\$5,131.92
Erosion Control Mulch	SY	\$0.61	0	\$0.00
Temp. Erosion Control (Composite)	LF	\$2.82	5280	\$14,889.60
Siltation Control Excavation	CY	\$17.67	897.6	\$15,860.59
Planting (Composite)	EA	\$76.55	0	\$0.00
Watering	UNIT	\$71.80	0	\$0.00
Subtotal:				\$35,882.11

<b>Stormwater Management</b>				
Stormwater Management Excavation	CY		0	\$0.00

<b>Signals and Signs</b>				
Sign Panels	SF	\$24.80	54.75	\$1,357.80
Sign Posts (Composite wood and steel)	LF	\$17.24	96	\$1,655.04
Intersection Signalization (Composite)	EA		0	\$0.00
Overhead Signing (Composite)	EA		0	\$0.00
Roadway Lighting (Composite)	EA		0	\$0.00
Traffic Management Systems	EA		0	\$0.00
Subtotal:				\$3,012.84

<b>Utilities (Water and Sewer)</b>				
Water Service Lines (Composite)	LF	\$20.61	0	\$0.00
Water Mains (Composite)	LF	\$37.47	0	\$0.00
Sewer Pipe (Composite)	LF	\$61.39	0	\$0.00
Subtotal:				\$0.00
Total:				\$253,335.24
add Surveying:				\$4,033.35
add Mobilization:				\$24,302.64

Estimated Cost per Lane Mile --

**GRAND TOTAL:           \$281,671.24**

Base Values, to inflate for current year values please use rates from <http://www.bls.gov/cpi> .

## Secondary Urban - Asphalt Paved

Item	Unit	UNIT COST	Units Lane Mile	Avg. Cst Lane Mi.
<b>Temporary Safety Items</b>				
Traffic Barrier service Concrete	LF	\$10.00	383.73	\$3,837.30
Flagger Service	HR	\$10.78	1324.72	\$14,280.48
Channelizing Devices	DAY	\$0.79	13348.44	\$10,545.27
Arrow Board, Message Board	HR	\$6.23	647.9	\$4,036.42
Truck Mounted Attenuator	HR	\$15.94	0	\$0.00
Subtotal:				\$32,699.47

<b>Grading (Excavation) Costs</b>				
Clearing and Grubbing (Composit figure)	ACRE	\$5,821.62	1.636	\$9,524.17
Regular Excavation	CY	\$11.40	1099	\$12,528.60
Subtotal:				\$22,052.77

<b>Drainage Items</b>				
Misc. Concrete	CY	\$923.71	8.48	\$7,833.06
15" Pipe	LF	\$22.02	589.57	\$12,982.33
18" Pipe	LF	\$51.44	265.23	\$13,643.43
36" Pipe	LF	\$89.64	141.25	\$12,661.65
48" Pipe	LF	\$106.67	100.27	\$10,695.80
Drop Inlets (DI-1, DI-3B DI-7)	EA	\$2,137.06	7.42	\$15,856.99
Eros. Control Stone	TON	\$71.30	41.52	\$2,960.38
Paved Ditch	LF	\$35.05	11.62	\$407.28
Subtotal:				\$77,040.92

Base Values, to inflate for current year values please use rates from <http://www.bls.gov/cpi> .

## Secondary Urban - Asphalt Paved

Item	Unit	UNIT COST	Units Lane Mile	Avg. Cst Lane Mi.
<b>Pavement Items</b>				
Blotted Seal Coat Ty. D	SY	\$12.86	0	\$0.00
Cement Stabilized Aggre #21A	Ton	\$21.72	0	\$0.00
Aggr. No. 21B	Ton	\$22.11	5306.4	\$117,324.50
Asphalt Ty. SM-12.5	Ton	\$37.75	1161.6	\$43,850.40
Asphalt Ty. IM-19.0	Ton	\$35.60	0	\$0.00
Asphalt Ty. BM-25.0	Ton	\$52.45	0	\$0.00
Concrete	SY		0	\$0.00
Underdrain (Composite)	LF	\$5.44	0	\$0.00
Pavement Markings (Composite)	LF	\$1.03	5280	\$5,438.40
Raised Pavement Markers (Composite)	EA	\$40.68	132	\$5,369.76

Subtotal: \$171,983.06

<b>Shoulders and Median</b>				
Concrete Entrances (Composite 6" & 7")	SY	\$44.10	60	\$2,646.00
Concrete Curb and Gutter CG-6	LF	\$13.16	4128	\$54,324.48
Concrete Curb	LF	\$11.67	0	\$0.00
Entrance Gutter	SY	\$48.41	0	\$0.00
Right Of Way Monuments	EA	\$84.75	15.81	\$1,339.90
Guardrail (Composite)	LF	\$13.70	134.4	\$1,841.28
Guardrail Terminals	EA	\$1,821.11	0.96	\$1,748.27
Median Barrier Walls	LF	\$60.28	0	\$0.00
Sound Barrier	SF	\$20.81	0	\$0.00
Fence (Composite)	LF	\$4.31	0	\$0.00
Fence Line Braces	EA	\$282.17	0	\$0.00
Fence Corner Braces	EA	\$282.62	0	\$0.00

Subtotal: \$61,899.92

<b>Roadside Development</b>				
Seeding (Composite)	LBS	\$13.23	54.5	\$721.04
Erosion Control Mulch	SY	\$0.61	0	\$0.00
Temp. Erosion Control (Composite)	LF	\$2.82	5280	\$14,889.60
Siltation Control Excavation	CY	\$17.67	897.6	\$15,860.59
Planting (Composite)	EA	\$76.55	0	\$0.00
Watering	UNIT	\$71.80	0	\$0.00

Subtotal: \$31,471.23

Base Values, to inflate for current year values please use rates from <http://www.bls.gov/cpi> .

### Secondary Urban - Asphalt Paved

Item	Unit	UNIT COST	Units Lane Mile	Avg. Cst Lane Mi.
<b>Stormwater Management</b>				
Stormwater Management Excavation	CY	\$4.90		\$0.00

<b>Signals and Signs</b>				
Sign Panels	SF	\$24.80	411	\$10,192.80
Sign Posts (Composite wood and steel)	LF	\$17.24	324	\$5,585.76
Intersection Signalization (Composite)	EA	\$17,925.45	0.125	\$2,240.68
Overhead Signing (Composite)	EA		0	\$0.00
Roadway Lighting (Composite)	EA	\$7,443.14	4	\$29,772.56
Traffic Management Systems	EA		0	\$0.00
Subtotal:				\$47,791.80

<b>Utilities (Water and Sewer)</b>				
Water Service Lines (Composite)	LF	\$20.61	95.55	\$1,969.29
Water Mains (Composite)	LF	\$37.47	601.33	\$22,531.84
Sewer Pipe (Composite)	LF	\$61.39	345.83	\$21,230.50
Subtotal:				\$45,731.62
Total:				\$490,670.79
add Surveying:				\$6,406.71
add Mobilization:				\$42,280.81

Estimated Cost per Lane Mile --

**GRAND TOTAL: \$539,358.31**