

**NC 86 / Martin Luther King Jr. Boulevard Corridor and Town-Wide  
Pedestrian Safety Evaluation Study**

**NC 86 / Martin Luther King Jr. Boulevard Corridor  
Budgetary Cost Estimate Summary**

April 23, 2007

<b>NC 86 / Martin Luther King Jr. Boulevard Corridor</b>	<b>\$6,600,000</b>
Work includes the items shown on the NC 86 / Martin Luther King Jr. Boulevard Corridor and Town-Wide Pedestrian Safety Evaluation Study dated February 2007 (See attached backup).	
<b>Project Total</b>	<b>\$6,600,000</b>

**POSSIBLE SHORT TERM / INTERMEDIATE PROJECTS**

**One Typical Intersection Improvement** **\$310,000**

The work involves the improvement of the intersection where the roadway is widened which is approximately 300' on each side of the intersection. The work includes: Roadway widening and overlay, sidewalk, curb & gutter, concrete island, earthwork, pedestrian signals, wheel chair ramps, signing, striping, erosion control, traffic control, construction surveying, mobilization. (It does not include any retaining walls)

**Mid – Block Crossing** **\$120,000**

Work includes: Refuge island, in-roadway lighting, wheel chair ramps, signing, striping, erosion control, traffic control, construction surveying, mobilization. (It does not include bus turnouts).

**Missing sidewalks (Outside Intersection Improvement Areas)**

Work includes: Approximately 5300 linear feet of sidewalk

**Bus Turnouts** **\$35,000**

Work includes: Pavement widening, curb & gutter, sidewalk, striping, small bus shelter, erosion control, traffic control, construction surveying, mobilization.

**Bicycle-safe grates**

Work includes: Adjustment of catch basin and replacement of grate

**Pedestrian Signals – One Intersection** **\$10,000**

Work includes: Installation of pedestrian signals

**NOTES:**

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2. The budgetary cost estimates are based on the conceptual design. The exact quantities will be determined during final design.
3. The budgetary cost estimates for the possible short/intermediate term projects could vary significantly from the costs shown depending on the size of the project constructed and for items such as: traffic control, earthwork, mobilization, retaining walls, landscaping, etc.
4. Lighting is not included in the estimate.
5. The budgetary cost estimate does not include design or construction administration costs.

# NC 86 / Martin Luther King Jr. Boulevard Corridor and Town-Wide Pedestrian Safety Evaluation Study

## Town Intersections Budgetary Cost Estimate Summary

April 23, 2007

<b>1. West Franklin Street at McDonald's</b>	<b>\$73,000</b>
Work includes: Signal, curb extensions, striping, signage, relocate bus stops, erosion control, traffic control, construction surveying, mobilization.	
<b>2. NC 54 at East Barbee Chapel Road</b>	<b>\$77,000</b>
Work includes: Pedestrian signals, refuge island, sidewalk, pavement removal, wheel chair ramps, signing, striping, erosion control, traffic control, construction surveying, mobilization.	
<b>3. NC 54 at Finley Golf Course Road / Burning Tree Drive</b>	<b>\$77,000</b>
Work includes: Pedestrian signals, refuge island, sidewalk, clear brush, wheel chair ramps, signing, striping, erosion control, traffic control, construction surveying, mobilization.	
<b>4. NC 54 at Meadowmont Lane</b>	<b>\$76,000</b>
Work includes: Pedestrian signals, refuge island, sidewalk, wheel chair ramps, signing, striping, erosion control, traffic control, construction surveying, mobilization.	
<b>5. Fordham Boulevard at Old Mason Farm Road</b>	<b>\$135,000</b>
Work includes: Pedestrian signals, refuge island, sidewalk, signing, striping, greenway, erosion control, traffic control, construction surveying, mobilization.	
<b>6. Fordham Boulevard at Manning Drive</b>	<b>\$571,000</b>
Work includes: Pedestrian signals, roadway widening, refuge island, sidewalk, wheel chair ramps, signing, striping, greenway, boardwalk with noise wall, clear brush, erosion control, traffic control, construction surveying, mobilization.	
<b>7. Fordham Boulevard at Willow Drive</b>	<b>\$38,000</b>
Work includes: Pedestrian signals, refuge island, sidewalk, signing, striping, erosion control, traffic control, construction surveying, mobilization.	
<b>8. Homestead Road at Weaver Dairy Extension</b>	<b>\$0</b>
No work planned at this time	
<b>9. US 15-501 South at Bennett Road</b>	<b>\$67,000</b>
Work includes: Pedestrian signals, refuge island, sidewalk, curb & gutter, wheel chair ramps, pavement removal, signing, striping, erosion control, traffic control, construction surveying, mobilization.	

<b>10. US 15-501 South at Market Street</b>	<b>\$63,000</b>
Work includes: Pedestrian signals, refuge island, sidewalk, wheel chair ramps, signing, striping, erosion control, traffic control, construction surveying, mobilization.	
<b>11. Erwin Road at Weaver Dairy Road</b>	<b>\$81,000</b>
Work includes: Pedestrian signals, sidewalk, wheel chair ramps, signing, striping, erosion control, traffic control, construction surveying, mobilization.	
<b>12. East Franklin Street at Couch Street</b>	<b>\$116,000</b>
Work includes: Refuge island, in-roadway lighting, wheel chair ramps, concrete island, signing, striping, erosion control, traffic control, construction surveying, mobilization.	
<b>13. East Franklin Street at Elizabeth Street</b>	<b>\$134,000</b>
Work includes: Refuge island, in-roadway lighting, sidewalk, wheel chair ramps, concrete island, signing, striping, clear brush, relocate bus stops, driveway relocation, erosion control, traffic control, construction surveying, mobilization.	
<b>14. Fordham Boulevard at Erwin Street (Superstreet Intersection)</b>	<b>\$133,000</b>
Work includes: Sidewalk, pedestrian barrier, striping, erosion control, traffic control, construction surveying, mobilization.	
<b>15. NC 54 Bypass east of Greensboro Street</b>	<b>\$122,000</b>
Work includes: Refuge island, in-roadway lighting, sidewalk, wheel chair ramps, signing, striping, erosion control, traffic control, construction surveying, mobilization.	
<b>Total</b>	<b>\$1,763,000</b>

**NOTES:**

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## NC 86 / Martin Luther King Jr. Boulevard Corridor and Town-Wide Pedestrian Safety Evaluation Study

### Unit Cost Estimate Summary

Item	Unit	Price/Unit	Quantity Total	Cost
Pavement Overlay	tons	\$105.00	6,200	\$651,000.00
Pavement Widening at Intersections	tons	\$105.00	2,900	\$304,500.00
5' Wide Sidewalk	s.y.	\$35.00	7600	\$266,000.00
5" Monolithic Concrete Island	s.y.	\$75.00	10,480	\$786,000.00
2'-6" Curb and Gutter	l.f.	\$25.00	6,680	\$167,000.00
Wheel Chair Ramps	ea.	\$1,300.00	55	\$71,500.00
Bus Turnouts	ea.	\$20,000	18	\$360,000.00
Retaining Wall (ave 2.5' high, stone veneer)	l.f.	\$160.00	6,250	\$1,000,000.00
Earthwork	c.y.	\$12.00	10500	\$126,000.00
Adjust Catch Basins	ea.	\$1,000.00	36	\$36,000.00
18" Reinforced Concrete Pipe	l.f.	\$35.00	700	\$24,500.00
Catch Basin	ea.	\$2,500	14	\$35,000.00
4" Thermoplastic Pavement Markings (120 mils)	l.f.	\$2.00	21400	\$42,800.00
24" Thermoplastic Pavement Markings	l.f.	\$5.00	4000	\$20,000.00
Thermoplastic Symbols	ea.	\$100.00	130	\$13,000.00
Raised Pavement Markers	ea.	\$5.00	360	\$1,800.00
Pedestrian Signals (per intersection)	ea.	\$9,000.00	9	\$81,000.00
In-Roadway Lighting	ea.	\$45,000.00	4	\$180,000.00
Remove Curb and Gutter	l.f.	\$5.00	6,680	\$33,400.00
Remove Sidewalk	l.f.	\$5.00	6,680	\$33,400.00
Construction Surveying	l.s.	\$50,000.00	1	\$50,000.00
Erosion Control	l.s.	\$30,000.00	1	\$30,000.00
Traffic Control	l.s.	\$75,000	1	\$75,000.00
Trees Along Corridor (50' on average)	ea.	\$700.00	470	\$329,000.00
6' Lawn Strip Between Sidewalk & Curb	s.f.	\$1.25	82000	\$102,500.00
				\$0.00
				\$0.00
<b>SubTotal 1</b>				<b>\$4,819,000.00</b>
Utility Contingency (5% for adjustments, etc.)	%			\$241,000.00
Contingency -- 25%	%			\$1,205,000.00
<b>SubTotal 2</b>				<b>\$6,265,000.00</b>
Mobilization -- 5%	%			\$313,000.00
<b>Total</b>				<b>\$6,578,000.00</b>

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2. The estimate assumes the entire project is constructed at one time. If the project is split into smaller construction projects the unit prices and mobilization could vary significantly
3. Lighting is not included in the estimate.
4. The estimate is based on keeping the existing back to back curb dimension.

## NC 86 / Martin Luther King Jr. Boulevard Corridor and Town-Wide Pedestrian Safety Evaluation Study

### Preliminary Estimate for One Intersection on Martin Luther King Jr. Blvd.

Item	Unit	Price/Unit	Quantity Total	Cost
Pavement Overlay	tons	\$105.00	300	\$31,500.00
Pavement Widening at Intersections	tons	\$105.00	420	\$44,100.00
5' Wide Sidewalk	s.y.	\$35.00	670	\$23,450.00
5" Monolithic Concrete Island	s.y.	\$75.00	490	\$36,750.00
2'-6" Curb and Gutter	l.f.	\$25.00	600	\$15,000.00
Wheel Chair Ramps	ea.	\$1,300.00	8	\$10,400.00
Bus Turnouts	ea.	\$20,000		\$0.00
Retaining Wall (ave 2.5' high, stone veneer)	l.f.	\$160.00		\$0.00
Earthwork	c.y.	\$12.00	1500	\$18,000.00
Adjust Catch Basins	ea.	\$1,000.00		\$0.00
18" Reinforced Concrete Pipe	l.f.	\$35.00	50	\$1,750.00
Catch Basin	ea.	\$2,500	2	\$5,000.00
4" Thermoplastic Pavement Markings (120 mils)	l.f.	\$2.00		\$0.00
24" Thermoplastic Pavement Markings	l.f.	\$5.00	560	\$2,800.00
Thermoplastic Symbols	ea.	\$100.00	12	\$1,200.00
Raised Pavement Markers	ea.	\$5.00		\$0.00
Pedestrian Signals (per intersection)	ea.	\$9,000.00	1	\$9,000.00
In-Roadway Lighting	ea.	\$45,000.00		\$0.00
Remove Curb and Gutter	l.f.	\$5.00	600	\$3,000.00
Remove Sidewalk	l.f.	\$5.00	600	\$3,000.00
Construction Surveying	l.s.	\$50,000.00	1	\$50,000.00
Erosion Control	l.s.	\$2,500.00	1	\$2,500.00
Traffic Control	l.s.	\$10,000	1	\$10,000.00
Trees Along Corridor (50' on average)	ea.	\$700.00	0	\$0.00
6' Lawn Strip Between Sidewalk & Curb	s.f.	\$1.25	3600	\$4,500.00
				\$0.00
				\$0.00
<b>SubTotal 1</b>				<b>\$227,000.00</b>
Utility Contingency (5% for adjustments, etc.)	%			\$11,000.00
Contingency -- 25%	%			\$57,000.00
<b>SubTotal 2</b>				<b>\$295,000.00</b>
Mobilization -- 5%	%			\$15,000.00
<b>Total</b>				<b>\$310,000.00</b>

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