CHAPTER 4: COST ESTIMATE METHODOLOGY

LAND USE AND STREETSCAPE IMPROVEMENTS

Cost estimates for the recommended streetscape improvements in the US 50 Corridor are conceptual, planning-level estimates that are based on sample private development projects from other communities that contain these types of similar streetscape elements. These costs do not include location-specific land use development opportunities; they are solely streetscape costs along the corridor. It is assumed that public funds would be used to make the streetscape improvements, therefore costs were increased by 15 percent to account for prevailing wage requirements and contractor qualification procedures. A 20 percent contingency was also added to compensate for the planning level of detail. Below is a specific description of the methodology used for estimating costs of streetscape elements for each section of the US 50 corridor. Figure 4-1 includes more detailed information regarding the streetscape costs and can be found at the end of this chapter. A summary of the streetscape costs for each sub-section of the corridor is included in Figure 4-2.

Figure 4-2: Sub-Section Summary Project Costs

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Sub-Section	Streetscape Costs	Management Costs	Project Total
Stateline Road to I-275/SR 1	N/A	\$3,500,000	\$3,500,000
I-275/SR 1 to Argosy Parkway	\$700,000	\$3,000,000	\$3,700,000
Argosy Parkway to Walnut Street/Stadium Lane	\$40,000	\$1,000,000	\$1,040,000
Walnut Street/Stadium Lane to Front Street	\$500,000	\$500,000	\$1,000,000
Front Street to SR 48	\$50,000	\$600,000	\$650,000
SR 48 to Tanners Creek Road	\$200,000	\$2,000,000	\$2,200,000
Tanners Creek Road to Wilson Creek Road	\$700,000	\$3,000,000	\$3,700,000
Wilson Creek Road to SR 148	\$600,000	\$4,000,000	\$4,600,000
SR 148 to George Street	N/A	\$200,000	\$200,000
George Street to SR 350	N/A	\$500,000	\$500,000
SR 350 to SR 62	N/A	\$14,000,000*	\$14,000,000

^{*} Includes extensive drainage work to install curb

Sidewalks

Cost estimates for sidewalk construction were based on a cost of \$4 per square foot for installation of a four inch thick sidewalk, including the base. Proposed sidewalk square footage was estimated by measuring length with GIS software, and multiplying the length by an assumed width of eight feet, a typical sidewalk width.



The same methodology was applied to estimates for sidewalk widening in the Argosy Parkway to SR 48 section. In this case, however, the width used was six feet, to account for the widening of existing sidewalks from six feet (estimated existing width) to 12 feet.

Replacing Pavement with Treelawns

Since treelawns are proposed to replace portions of existing parking lots and driveways to be closed, a cost estimate was developed for demolition and disposal of asphalt, clean fill backfill and topsoil dress, and hydro-seeding with grass. This cost was estimated at \$4.50 per square foot. Total square footage of proposed replacement of pavement with treelawns was estimated by measuring the length of these areas with GIS software, and multiplying the length by an assumed width of 10 feet.

Tree Planting

Trees are recommended in center medians, along treelawns, and in some areas, sidewalk grates (see Exhibit 4-1). Costs can vary from \$400 to \$600 per tree depending on the type of the tree. In this case, the middle of this range, \$500, was used. The number of proposed trees was estimated by measuring the lengths of areas in which trees are to be planted with GIS software, and dividing the length by the distance between trees. Throughout most of the corridor, this distance is 35 feet.

Between Argosy Parkway and SR 48, this distance is 25 feet, recognizing the slower traffic and pedestrian scale of this area.

Ornamental Wall/Fence

This feature is only proposed between Argosy Parkway and SR 48 (see Exhibit 4-1). The proposed type of wall/fence combination is a three foot tall decorative metal fence (such as wrought iron) interspersed with sections of masonry wall with a limestone cap. Roughly 25 percent of this wall/fence is masonry, which costs approximately \$150 per linear foot. The remaining 75 percent would be ornamental metal fencing, which costs approximately \$85 per linear foot.

Exhibit 4-1: Tree Planting/ Ornamental Wall/Fence



Landscape Beds

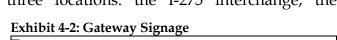
Landscape beds with flowers and shrubs are proposed at community gateways and key development nodes. The installation cost of a landscape bed is approximately \$8 per square foot. Square footages of planting beds at various locations were estimated as follows:



- Ohio/Indiana state line
- Regional gateway at intersection of US 50 and I-275: 6,000 square feet
- Intersections of Lorey Lane and Urban Way with US 50: 1,000 square feet each
- Local gateway at Lawrenceburg/Aurora boundary: 2,500 square feet

Gateway Signage

Gateway signage is proposed at three locations: the I-275 interchange, the Lawrenceburg/Aurora boundary and the Ohio/Indiana state line. A decorative ground-mounted sign with a masonry frame and base, roughly 11 feet wide and four feet tall, was estimated to cost between \$6,000 and \$8,000 (see Exhibit 4-2).





Raised Crosswalks

This feature was recommended only between Argosy Parkway and SR 48. The estimated cost of a raised, stamped concrete crosswalk is \$16 per square foot. Square footage was calculated by assuming a 55 foot length and a 12 foot width for each crosswalk.

Street Lamps

This feature, proposed only between Argosy Parkway and SR 48, was estimated to cost between \$3,500 and \$4,000 per street lamp, assuming a double-fixture, decorative design similar to the design illustrated below (see Exhibit 4-3). The cost estimates for this report used the average of this range, which is \$3,750.







ACCESS MANAGEMENT IMPROVEMENTS

The estimated project cost is a construction cost estimate for the recommended improvements. These costs were considered to be at a planning level, thus a 10 to 20 percent contingency was added to each cost along with an overall 20 percent contingency. The following are assumptions for the access management improvements only; the land use improvement cost assumptions were discussed previously in this chapter. Figure 4-3 provides the details of the cost estimate and can be found at the end of the chapter. A summary of the sub-section project costs is included in the Figure 4-2.

Curb

A Type 6 curb (6 foot curb) would be installed the entire length of the project. Dives and or entrances would be saw cut as needed. At this point in the project development process, it is a good assumption that the entire curb would need replacement. This assumption may change as the project is designed in more detail.

Right-in/Right-out Islands

Right-in/right-out traffic islands shall be constructed as shown, which would consist of 42.33 square yards of 6 foot wide concrete.

Service Roads

Two-way and or one-way service roads would be constructed using 6 feet of aggregate base, 4 feet of asphalt concrete base and 3 feet of asphalt concrete. Proposed lane widths would be 12 feet minimum.

Excavation

A quantity of excavation would be needed for the removal of flexible pavement in the proposed median area and where driveways are noted as removed.

Embankment Material for Median

Embankment material would be needed for the placement of suitable material in the landscaped median area and behind the proposed curb along the edge of pavement as needed.

Drainage

Currently, a ditch system is utilized to carry water run-off on many sections of US 50. A drainage system would be needed if curb is installed. This can be a costly improvement. The benefits and costs of constructing a curb the entire length of US 50 would need to be further investigated, particularly in Section 4 from SR 350 to SR 62. This drainage system should include catch basins spaced at every 250 feet, manholes spaced at 500 feet and an average of 30 inch concrete pipe connecting the drainage system and outletting to an approved outfall.



Signage

Signing, including post installations for such signs as "One Way", "Stop" and "No Left Turn" should be installed as shown on the plans.

Raised Median

A 10 foot wide raised concrete median referred to as the landscaped median should be constructed where two-way left turn lanes presently exist. The cost for the concrete median would consist of pavement excavation, a 6 foot concrete curb, embankment material, 3 feet of topsoil, seeding and mulching. This number does not assume landscaping; only the topsoil and base that landscaping would require.



Figure 4-1: Streetscape Costs

		New Sidewalk	Widen Sidewalk	Treelawn to replace pavement	Trees in Medi	an	Trees, Treelawn/sidewa	lk grates	Flower Beds	Signs	Ornamental Fence/Wall	Street lamps	Stamped concrete crosswalks	TOTAL
	Unit	Square feet	Square feet	Square feet	Lineal Feet, Tree Portion of Median	Trees	Lineal Feet, Treelawn or widened sidewalk	Trees	Square feet	Sign	Lineal feet	Lamp	Square feet	
Corridor Section	Cost per unit	\$4	\$4	\$4.50	n/a	\$500	n/a	\$500	\$8	\$6,000	\$101.25	\$3,750	\$16	
275-Argosy Parkway	Total Units	59296	0	12820	4463	128	7257	207	8000	1	0	0	0	
275-Aigosy Laikway	Total Cost	\$327,314	\$0	\$79,612	n/a	\$87,985	n/a	\$143,067	\$88,320	\$8,280	\$0	\$0		\$734,578
Argosy-Walnut	Total Units	6,864	0	0	0	0	n/a	0	0	0	0	0	0	
Argosy-wantut	Total Cost	\$37,889	\$0	\$0	n/a	\$0	n/a	\$0	\$0	\$0	\$0	\$0	\$0	\$37,889
Walnut to Front	Total Units	0	10,650	0	735	29	1775	71	0	0	1117	29	660	
Wantut to Fiorit	Total Cost	\$0	\$58,788	\$0	n/a	\$20,286	n/a	\$48,990	\$0	\$0	\$156,073	\$152,145	\$14,573	\$450,855
Front to SR 48	Total Units	0	0	0	0	0	n/a	0	0	0	0	0	1,980	
1101tt to 3K 48	Total Cost	\$0	\$0	\$0	n/a	\$0	n/a	\$0	\$0	\$0	\$0	\$0	\$43,718	\$43,718
SR 48 to Tanners Creek	Total Units	21,848	0	5,570	0	0	3,482	99	0	0	0	0	0	
SK 40 to Tailliers Creek	Total Cost	\$120,601	\$0	\$34,590	n/a	\$0		\$68,645	\$0	\$0	\$0	\$0	\$0	\$223,836
Tanner's Creek to Wilson Creek	Total Units	65,960	0	8,610	4,531	129	8,864	253	2,500	2	0	0	0	
Tailler's Creek to Wilson Creek	Total Cost	\$364,099	\$0	\$53,468	n/a	\$89,325		\$174,747	\$27,600	\$16,560	\$0	\$0	\$0	\$725,800
Wilson Creek to SR 148	Total Units	43,016	0	33,140	2,935	84	5,641	161	0	0	0	0	0	
WILDON CIECK to SIX 140	Total Cost	\$237,448	\$0	\$205,799	n/a	\$57,861		\$111,208	\$0	\$0	\$0	\$0	\$0	\$612,317

State wage and contractor	15%
requirements	15 /0
Contingency	20%



Figure 4-3: Cost Estimates

ess ID Map Sheet Access Type Intersecting Street Name	TYPE 6 CURB (FT) Note: 1	6"CONCRETE TRAFFIC ISLAND (SY YD) Note: 2	SERVICE ROAD (TWO-WAY)	ADWAY SERVICE ROAD (ONE-WAY)	EXCAVATION (CU YD)	EMBANKMENT (CU YD) Note:	CATCH BASIN	DRAINAGE MANHOLE		NO LEFT TURN	TRAFFIC C	ONTROL ONE WAY	GROUND			DE LANDSCAPEI	TOPSOIL	
# Access Type Intersecting Street Name	(FT)	TRAFFIC ISLAND (SY YD)	ROAD (TWO-WAY)	ROAD				MANHOLE		NO LEET TUDN	STOP SIGN	ONE WAY					TOPSOIL	
TION 1		A.V.C.	Note: 3	Note: 3	Note: 4	5	(EACH) Note: 6	(EACH) Note: 7	PIPE (FT) Note: 8	SIGN (SQ FT) Note: 9	(SQ FT) Note: 10	SIGN (SQ FT) Note: 11	MOUNTED SUPPORT (FT) Note: 12	TYPE 6 CURB (MEDIAN) (FT) Note: 13	EXCAVATION (CU YD) Note: 4	EMBANKMENT (CU YD) Note: 5	FURNISHED AND PLACED (CU YD) Note: 14	SEEDING A MULCHIN (SQ YD) Note: 15
CTION 1																		<u> </u>
Stateline Road to I-275/SR 1	Total Length (miles) = 2	2																
12 1 Driveway					21													
4 1 Driveway 9 1 Driveway					22 19													
10 1 Driveway			300															
17 2 Driveway			100		15													
OTAL OTAL	21120	0	400	0	77	0	86	44	25344	0	0	0	0	0	0	0	0	0
AND TOTAL	21120	0	400	0	77	0	86	44	25344	0	0	0	0	0	0	0	0	0
ST PER ITEM	\$13	\$55	\$160	\$80	\$7	\$5	\$3,000	\$3,500	\$85	\$12	\$12	\$12	\$6	\$13	\$7	\$5	\$35	\$1
TAL COST	\$274,560	\$0	\$64,000	\$0	\$537	\$0	\$259,440	\$154,840	\$2,154,240	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
				39,097				\$2,568,520			\$()				\$0		
	E	STIMATE CONS												\$2	2,907,617			
		CONTINGENO	`	,											581,523			
		Road to I-27	5/SR 1 T	OTAL CC	OST									\$3	,489,140			
	Total Length (miles) = :	1.4			44													
22A 3 Driveway - Walgreens 22 3 Driveway - Walgreens					44 28													
23 3 Driveway					27													
24 3 Driveway 25 3 Driveway - Shell & Subway		ļ!			64 27													
26 3 Driveway - Sheh & Subway 26 3 Driveway - Ande Chevrolet		[2/					2.25			12	+				
27 3 Driveway			450		29						10.5							
28 3,4 Unsignalized Intersection Walnut Street 29 4 Driveway - Tire Center	400		150		26						12.5		24					
30 4 Driveway - Discount Store					25													
31 4 Driveway - Tire Center 32 4 Driveway - Whiskey Cold Beer		 			32					2.25			12					
33 4 Driveway - Wilskey Cold Beer 33 4 Driveway - Wishing Well Motel	- 				12					2.23			12					
34 4 Driveway - Wishing Well Motel					32													
35 4 Driveway - Wishing Well Motel 36 4 Driveway - Quality Inn		ļ!								2.25 2.25			12 12					
37 4 Driveway - Marathon Gas Station		1								2.25			12					
38 4 Driveway - Truck Stop					66					2.25			40					
39 4 Driveway - M&M Automotive 40 4 Unsignalized Intersection Faith Way - Median Break	1000		430							2.25	6.25		12 12					
41 4 Driveway - Site redevelopment					24													
42 4 Driveway - Chrysler 43 4 Driveway - Mixed small retail		<u> </u>		1						2.25 2.25			12 12		1		1	+
45 4 Unsignalized Intersection Unnamed - Median Break										2.20	6.25		12					
46 4 Unsignalized Intersection McClure Way - Median Break					25						6.25		12					
48 5 Driveway - Ford Dealership 49 5 Driveway - Ford Dealership	500		100		25 33									14784	2053	2738	684	8213
AND TOTAL	16684	0	680	0	494	0	69	35	20021	18	31	0	156	14784	2053	2738	684	8213
ST PER ITEM	\$13	\$55	\$160	\$80	\$7	\$5	\$3,000	\$3,500	\$85	\$12	\$12	\$12	\$6	\$13	\$7	\$5	\$35	\$1
TAL COST	\$216,892	\$0	\$108,800	\$0	\$3,457	\$0	\$206,208	\$123,788	\$1,701,768	\$216	\$375	\$0	\$936	\$192,192	\$14,373	\$13,689	\$23,956	\$8,213
			\$3	29,149				\$2,031,764			\$1, 5	527				\$252,423		
															(14.000			
	ES	STIMATE CONS	TRUCTION (COST										D 2	,614,863			
	Е	STIMATE CONS													2,614,863 522.973			
		CONTINGENCE to Argosy P	CY COST (20%	(0)	OST									\$	522,973 ,137,836			



					RO	ADWAY				DRAINAGE			TRAFFIC (CONTROL			10 FT WI	DE LANDSCAPEI	O MEDIAN	
Access ID Map She # #	et Access Type	Intersecting Street Name	TYPE 6 CURB (FT) Note: 1	6"CONCRETE TRAFFIC ISLAND (SY YD) Note: 2	SERVICE ROAD (TWO-WAY) Note: 3	SERVICE ROAD (ONE-WAY) Note: 3	EXCAVATION (CU YD) Note: 4	EMBANKMENT (CU YD) Note: 5	CATCH BASIN (EACH) Note: 6	MANHOLE (EACH) Note: 7	PIPE (FT) Note: 8	NO LEFT TURN SIGN (SQ FT) Note: 9	STOP SIGN (SQ FT) Note: 10	ONE WAY SIGN (SQ FT) Note: 11	GROUND MOUNTED SUPPORT (FT) Note: 12	TYPE 6 CURB (MEDIAN) (FT) Note: 13	(CU YD)	EMBANKMENT (CU YD) Note: 5	TOPSOIL FURNISHED AND PLACED (CU YD) Note: 14	SEEDING ANI MULCHING (SQ YD) Note: 15
SECTION 2								'												
	Argosy Parkway to Walnut Street/ Sta	dium Lane	Total Length (miles) =	0.6																
51 5 54 5	Driveway Driveway			42.33			8					2.25			12					
56 5	Unsignalized Intersection	Third Street		126.99								2.20								
GRAND TOTAL			6336	169	0	0	8	0	27	15	7603	2	0	0	12	0	0	0	0	0
COST PER ITEM			\$13	\$55	\$160	\$80	\$7	\$5	\$3,000	\$3,500	\$85	\$12	\$12	\$12	\$6	\$13	\$7	\$5	\$35	\$1
TOTAL COST			\$82,368	\$9,313	\$0	\$0	\$54	\$0	\$82,032	\$51,352	\$646,272	\$27	\$0	\$0	\$72	\$0	\$0	\$0	\$0	\$0
					\$9	91,735				\$779,656			\$9	99				\$0		
			F	ESTIMATE CONS	TRUCTION (COST										\$	871,490			
				CONTINGEN	CY COST (20%	%)										\$	174,298			
		Argos	y Parkway to		•	•	TOTAL CO	ST									,045,788			
	Walnut Street/ Stadium Lane to Fro		Total Length (miles) =		,															
58 5	Driveway - A1 Auto			1	1		32													
59 5	Driveway - KFC Driveway - KFC						13					2.25			12					
60 5 61 B 5	Driveways - Boat Shop and Service											2.25			12	1			1	
61 5	Driveway - Alley						9													
62 5 63 5	Driveway - Bill's Service Car Repair Driveway - KFC						21					2.25			12				-	
64 5	Driveway - Bill's Service Car Repair					300						2,20			12					
65 5	Driveway - Fehrman Realty Driveway - Glass Pro						33													
66 5 67 5	Driveway - Glass Fro Driveway - Fehrman Realty						21 50									1			1	
68 5,6	Driveway - Glass Pro						28													
69 5,6 70 5,6	Unsignalized Intersection Driveway	Water Street	400									2.25 2.25	6.25	3.00	36 12				-	
71 6	Driveway - Whisky's Driveway			42.33								2.25								
72 6 GRAND TOTAL	Driveway		2618	42	0	300	17 224	0	12	7	3141	14	6	6	84	0	0	0	0	0
COST PER ITEM			\$13	\$55	\$160	\$80	\$7	\$5	\$3,000	\$3,500	\$85	\$12	\$12	\$12	\$6	\$13	\$7	\$5	\$35	\$1
								·												
TOTAL COST			\$34,029	\$2,328	\$0	\$24,000	\$1,567	\$0	\$37,411	\$25,323	\$266,995	\$162	\$75	\$72	\$504	\$0	\$0	\$0	\$0	\$0
					\$6	61,924				\$329,730			\$8	13				\$0		
			F	ESTIMATE CONS	STRUCTION O	COST										\$	392,467			
				CONTINGEN	CY COST (20%	/o)											\$78,493			
		Wal	nut Street/ Sta	adium Lane	to Front 9	Street TO	TAL COST									\$4	470,960			
	Front Street to SR 48		Total Length (miles) =	0.32																
74 6 76 6	Unsignalized Intersection Driveway	Park Street		42.33			9							3.00	12					
77 6	Unsignalized Intersection	Shipping Street					17	22					6.25		12				<u> </u>	
	Unsignalized Intersection	Unnamed	2270		^	0	11	60	1.		4055				24		2	2		_
GRAND TOTAL COST PER ITEM			3379 \$13	\$55	0 \$160	\$80	37 \$7	\$5	16 \$3,000	9 \$3,500	4055 \$85	0 \$12	6 \$12	3 \$12	24 \$6	0 \$13	9 \$7	\$5	9 \$35	0 \$1
TOTAL COST			\$43,930	\$2,328	\$0	\$0	\$258	\$111	\$46,550	\$30,654	\$344,678	\$0	\$75	\$36	\$144	\$13	\$0	\$0	\$0	\$0
					\$4	46,627				\$421,883			\$2	55				\$0		
			, I	ESTIMATE CONS												\$	468,765			
				LOTINITIE COINS	TRUCTION	2001														
				COMERICAN	CV COOT (200	//											±02 7E2			
			Г 1	CONTINGEN	•	•											\$93,753 ECO E10			
				Street to SR ND TOTAL	48 TOTA	AL COST										\$	\$93,753 562,518 ,079,267			



				ROA	ADWAY				DRAINAGE			TRAFFIC (CONTROL			10 FT WI	DE LANDSCAPEI) MEDIAN	
Access ID Map Shee	t Access Type Intersecting Street Name	TYPE 6 CURB (FT) Note: 1	6"CONCRETE TRAFFIC ISLAND (SY YD) Note: 2		SERVICE ROAD (ONE-WAY) Note: 3	EXCAVATION (CU YD) Note: 4	EMBANKMENT (CU YD) Note: 5	CATCH BASIN (EACH) Note: 6	MANHOLE (EACH) Note: 7	PIPE (FT) Note: 8	NO LEFT TURN SIGN (SQ FT) Note: 9	STOP SIGN (SQ FT) Note: 10	ONE WAY SIGN (SQ FT) Note: 11	GROUND MOUNTED SUPPORT (FT) Note: 12	TYPE 6 CURB (MEDIAN) (FT) Note: 13	(CU YD)	EMBANKMENT (CU YD) Note: 5	TOPSOIL FURNISHED AND PLACED (CU YD) Note: 14	SEEDING AND MULCHING (SQ YD) Note: 15
SECTION 3																			
5201101(5	SR 48 to Tanners Creek Road	Total Length (miles) =	1.03																
81 6	Driveway					21													
82 6	Driveway Driveway - Water Treatment Plant					22						6.25		12					
83 6 84 6	Driveway - Water Treatment Flant Driveway - Kroger		42								2.25	6.25		12 12					
85 6	Driveway Driveway				20	16													
86 6 87 6	Driveway				20	14													
89 6 90 6	Unsignalized Intersection Doughty Road Driveway	200		40								6.25		12					
91 6	Driveway - K&K Mini Mart, Jones	200		40	200								3.00	12					
93 6 100 6,7	Driveway - Real Estate Services Driveway - Car Wash	200 250		40 70		9													
101 7	Driveway - Small Retail	230		70															
102 7 103 7	Driveway - Skyline Driveway - Classic Car Wash	400		80		22													
104 7	Driveway					22 7													
106 7	Unsignalized Intersection County Road 5	42427	42	220	220	444	0	Fa	26	4.4550		6.25		12	0	0	0	0	0
GRAND TOTAL COST PER ITEM		12127 \$13	\$55	230 \$160	\$80	111 \$7	0 \$5	\$3,000	\$3,500	14552 \$85	\$12	19 \$12	3 \$12	60 \$6	\$13	0 \$7	0 \$5	9 \$35	0 \$1
TOTAL COST		\$157,648	\$2,328	\$36,800	\$17,600	\$780	\$0	\$151,522		\$1,236,934	\$27	\$225	\$36	\$360	\$0	\$0	\$0	\$0	\$0
												\$6	•						
				\$ 21	15,156				\$1,480,343			⊅ 0•	40				\$0		
		E	STIMATE CONST	TRUCTION C	OST										\$1	,696,147			
			CONTINGENC	CV COST (20%)	`										\$	339,229			
		SR 48 to Ta	anners Creel			OST										,035,376			
	Tanners Creek Road to Wilson Creek Road	Total Length (miles) =		1110111111											1				
109 7	Driveway - Art Deco Residence	Total Length (Illies) =	1.11								2.25			12					
110 7,8	Driveway - Golden Corral										2.25			12					
112 8 113 8	Driveway - Pizza Hut Driveway - Garden Center					16					2.25			12					
113 8	Driveway - Garden Center Driveway - Garden Center	200		30		14													
115 8 116 8	Driveway - Papa John Unsignalized Intersection Shurlite - Median Opening	200		30		14						6.25		12					
116 8 117 8	Unsignalized Intersection Shurlite - Median Opening Driveway - Open land	300		50		21						6.25		12					
118 8 119 8	Driveway - Speedway Driveway - Speedway	100 100				20 20	20 20												
119 8 120 8	Driveway - Abandoned building	300		40		20	20				2.25			12					
121 8 122 8	Driveway - Abandoned building Driveway - Auto Zone					24					2.25			12					
122 8 123 8	Driveway - Auto Zone Driveway - Frish's					19					2.23			12					
124 8 125 8	Driveway - Frish's Unsignalized Intersection Florence Drive - Median	1000		140		36						12.50		24					
126 8	Driveway - Pro Outdoors	250		40		29						12.50		24					
127 8 128 8	Driveway - Movie Gallery Driveway - Art's Rental	300		40		21 17													
129 8	Driveway - US Bank	100		40		20	20												
130 8 131 8	Driveway - US Bank Driveway - Beers Auto Sales	100				20 12	20												
132 8	Driveway - Small Retail	900			900								3.00	12					
133 8 134 8	Driveway - Beers Auto Sales Driveway - Beers Auto Sales	 				37	 		 		2.25			12				<u> </u>	
135 8	Driveway - Advance Auto Parts					16													
138 8 140 8	Driveway - Do it Best Hardware Driveway - Indiana Monument	200		40		25	+				-		3.00	12		1	-	1	+
141 8	Driveway - Modular home					20									11700	1/20	0171	E40	/E10
142 8 GRAND TOTAL	Driveway - Long John Silvers	15772	0	410	900	27 427	80	65	34	18926	14	19	6	132	11722 11722	1628 1628	2171 2171	543 543	6512 6512
COST PER ITEM		\$13	\$55	\$160	\$80	\$7	\$5	\$3,000	\$3,500	\$85	\$12	\$12	\$12	\$6	\$13	\$7	\$5	\$35	\$1
TOTAL COST		\$205,031	\$0	\$65,600	\$72,000	\$2,987	\$400	\$195,259	\$117,401	\$1,608,703	\$162	\$225	\$72	\$792	\$152,381	\$11,396	\$10,853	\$18,993	\$6,512
				\$34	16,017				\$1,921,364			\$1,2	251				\$200,135		
		E	STIMATE CONST									,			\$2	2,468,768			
	Ton	ners Creek Ro	CONTINGENC	` '	<i>'</i>	TAL COST										493,754 ,962,521			
	Wilson Creek Road to SR 148	Total Length (miles) =		II CICCK I	toud 10	THE COUL									Ψ2,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
144 9	Unsignalized Intersection Hillcrest Drive - Median	Gardines)										6.25		12					
145 9	Driveway - Insurance					11					2.25								
146 9 147 9	Driveway - Insurance Driveway - Dairy Queen	200		70			+				2.25 2.25			12 12		 	1		+
148 9	Driveway - Glass shop					61													
149 9 150 9	Driveway - Ashcroft / Auto body Driveway - Far East	+ +				9	+				2.25			12		 	1		+
151 9	Driveway - Far East					45					2.25			12					
153 9 154 9	Driveway - Riverside Car Sales Driveway - Riverside Car Sales	+ + +				15					2.25			12		1	1	1	+
			l l								•		•	•		•		•	



							ROA	ADWAY				DRAINAGE			TRAFFIC (CONTROL			10 FT WII	DE LANDSCAPEI) MEDIAN	
Access ID #	Map :	Sheet #	Access Type	Intersecting Street Name	TYPE 6 CURB (FT) Note: 1	6"CONCRETE TRAFFIC ISLAND (SY YD) Note: 2	SERVICE ROAD (TWO-WAY) Note: 3	SERVICE ROAD (ONE-WAY) Note: 3	EXCAVATION (CU YD) Note: 4	EMBANKMENT (CU YD) Note: 5	CATCH BASIN (EACH) Note: 6	MANHOLE (EACH) Note: 7	PIPE (FT) Note: 8	NO LEFT TURN SIGN (SQ FT) Note: 9	STOP SIGN (SQ FT) Note: 10	ONE WAY SIGN (SQ FT) Note: 11	GROUND MOUNTED SUPPORT (FT) Note: 12	TYPE 6 CURB (MEDIAN) (FT) Note: 13	(CU YD)	EMBANKMENT (CU YD) Note: 5	TOPSOIL FURNISHED AND PLACED (CU YD) Note: 14	SEEDING AND MULCHING (SQ YD) Note: 15
455		0	O: All A : C 1		1									2.25			10					
155	9	,	Driveway - All American Carwash Driveway - American Rental						97					2.25			12	1				
156 157	9		Driveway - American Kentai Driveway - Besslers Restaurant						86 106									1				
158		9	Driveway - Dessiers Restaurant Driveway - Victory crafts						73													 '
159	,	_	Unsignalized Intersection	Boat Ramp - Median Opening					73						12.5		24					
161		/	Driveway - Riverside sales	boat Kamp - Wedian Opening					16						12.3		24	1				
162	-		Driveway - Poor House Liquior						22													
163	-	9	Driveway - Riverside sales	+		+			20	+		+						+			1	
164	-	9	Driveway - house	+		+			5	+		+						+			1	
165	-	9	Driveway - Red Dog		100	+			20	20		+						+			1	
166	-	9	Driveway - Carpet World		100									2.25			12					
167	9		Driveway - Red Dog Gas Station		100				20	20				2.25			12					
168	9		Driveway - Trade Winds Marine						26													
169A			Help U Sell											2.25			12					
169	g	9	Driveway - residential											2.25			12					
170	ç	9	Driveway - Locksmith		400		60		15													
171	ç	9	Driveway - residential											2.25			12					
172	ç	9	Driveway - Small Retail, Subway						79													
173	Ġ	9	Driveway - residential											2.25			12					
174	Ģ	9	Driveway - BP											2.25			12					
175	ç	9	Driveway - BP						28													
176	ç		Driveway - Family Dollar											2.25			12					
177	ç		Driveway - residential											2.25			12					
178	ç	9	Driveway - Family Dollar						17													
179	ç	9	Driveway - Walgreens											2.25			12					
180	ç		Driveway - Walgreens																			
181	ç		Driveway - Family Dollar		200		30		139					2.25			12					
182	٥	9	Driveway - Swifty Gas						15			1						1				ļ
183	<u> </u>								56			1						1				
184	٥		Driveway - Swifty Gas						18													
GRAND					21592	0	160	0	855	40	88	45	25910	38	19	0	240	0	0	0	0	0
COST PE	R ITE	M			\$13	\$55	\$160	\$80	\$7	\$5	\$3,000	\$3,500	\$85	\$12	\$12	\$12	\$6	\$13	\$7	\$5	\$35	\$1
TOTAL	COST	Γ			\$280,696	\$0	\$25,600	\$0	\$5,985	\$200	\$265,104	\$158,144	\$2,202,384	\$459	\$225	\$0	\$1,440	\$0	\$0	\$0	\$0	\$0
							\$31	12,481				\$2,625,632			\$2,3	124				\$0		
					ī	ESTIMATE CONS						, _, = _ , 00 _			+-)			\$2	,940,237	7.0		
					-																	
					Wilson Cr	CONTINGENO eek Road to	,	,	OST										588,047 528,284			
					VVIISUII CI	eek Roau to	JK 140 I	OTALC	001									φυ,	340,404			



							RO	ADWAY				DRAINAGE			TRAFFIC (CONTROL			10 FT WII	DE LANDSCAPEI	O MEDIAN	
Access ID #	Map SI #	heet	Access Type	Intersecting Street Name	TYPE 6 CURB (FT) Note: 1	6"CONCRETE TRAFFIC ISLAND (SY YD) Note: 2	SERVICE ROAD (TWO-WAY) Note: 3	SERVICE ROAD (ONE-WAY) Note: 3	EXCAVATION (CU YD) Note: 4	EMBANKMENT (CU YD) Note: 5	CATCH BASIN (EACH) Note: 6	MANHOLE (EACH) Note: 7	PIPE (FT) Note: 8	NO LEFT TURN SIGN (SQ FT) Note: 9	STOP SIGN (SQ FT) Note: 10	ONE WAY SIGN (SQ FT) Note: 11	GROUND MOUNTED SUPPORT (FT) Note: 12	TYPE 6 CURB (MEDIAN) (FT) Note: 13	(CU YD)	EMBANKMENT (CU YD) Note: 5	TOPSOIL FURNISHED AND PLACED (CU YD) Note: 14	SEEDING AND MULCHING (SQ YD) Note: 15
			SR 148 to George Street		Total Length (miles) =	0.1																
186	9,10		signalized Intersection	Harrison Street					13													
187	9,10		veway						17													
188 189	9,10		veway						13 13					1								
190	10		veway						29													
TOTAL					1056	0	0	0	86	0	6	4	1267	0	0	0	0	0	0	0	0	0
GRAND T	OTAL				1056	0	0	0	86	0	6	4	1267	0	0	0	0	0	0	0	0	0
COST PER	RITEM	[\$13	\$55	\$160	\$80	\$7	\$5	\$3,000	\$3,500	\$85	\$12	\$12	\$12	\$6	\$13	\$7	\$5	\$35	\$1
TOTAL C	COST				\$13,728	\$0	\$0	\$0	\$599	\$0	\$18,672	\$14,392	\$107,712	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		\$14,327 \$140,776													\$	0				\$0		
			\$14,327 \$140,776 ESTIMATE CONSTRUCTION COST															S [*]	155,103			
																			31,021			
					SR 148	to George S		,	 Т										186,123			
			George Street to SR 350		Total Length (miles) =		iicci 101	AL COU										Lψ	100,123			
193	10	Deix	veway	T		I			17													
193	10		veway						34													
196	10		veway						8													
197	10		veway						12													
198 200	10 10		veway						18 21					1								
GRAND T			veway		3168	0	0	0	111	0	15	8	3802	0	0	0	0	0	0	0	0	0
COST PER					\$13	\$55	\$160	\$80	\$7	\$5	\$3,000	\$3,500	\$85	\$12	\$12	\$12	\$6	\$13	\$7	\$5	\$35	\$1
TOTAL C					\$41,184	\$0	\$0	\$0	\$774	\$0	\$44,016	\$29,176	\$323,136	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
							\$4	1,958			. ,	\$396,328	,,,,,,,,		\$	0				\$0		
						COTIMATE CONC						ψοσο γοΞ ο			Ψ			<u> </u>	438,286	Ψ0		
					r	ESTIMATE CONS																
					Coorea	CONTINGENO			т										87,657			
						Street to SR													25,943			
					GRAN	ND TOTAL	SECTION	13 COST										\$9.	238,248			



						RO	ADWAY				DRAINAGE			TRAFFIC (CONTROL			10 FT WII	DE LANDSCAPEI	MEDIAN	
Access II	Map Sheet #	Access Type	Intersecting Street Name	TYPE 6 CURB (FT) Note: 1	6"CONCRETE TRAFFIC ISLAND (SY YD) Note: 2	SERVICE ROAD (TWO-WAY) Note: 3	SERVICE ROAD (ONE-WAY) Note: 3	EXCAVATION (CU YD) Note: 4	EMBANKMENT (CU YD) Note: 5	CATCH BASIN (EACH) Note: 6	MANHOLE (EACH) Note: 7	PIPE (FT) Note: 8	NO LEFT TURN SIGN (SQ FT) Note: 9	STOP SIGN (SQ FT) Note: 10	ONE WAY SIGN (SQ FT) Note: 11	GROUND MOUNTED SUPPORT (FT) Note: 12	TYPE 6 CURB (MEDIAN) (FT) Note: 13	(CU YD)	EMBANKMENT (CU YD) Note: 5	TOPSOIL FURNISHED AND PLACED (CU YD) Note: 14	SEEDING AND MULCHING (SQ YD) Note: 15
SECTIO	N 4																				
		SR 350 to SR 62		Total Length (miles) =	8.4																
202	10	Unsignalized Intersection	Exporting Street		42								2.25			12					
203	10	Unsignalized Intersection	Unnamed		42								2.25			12					
205	11	Unsignalized Intersection	Indiana Avenue		42								2.25			12					
207	11,12	Unsignalized Intersection	Lower Dillsboro Road		42								2.25			12					
208	12	Driveway		100				20	20				2.25			12					
209	12	Driveway		100				20	20				2.25			12					
219	13	Driveway																			
240	13	Driveway				440		8													
270	14	Driveway				140		40													
325	17	Driveway						13													
331	17	Driveway						12 20													
335 339	17 17	Driveway Driveway						17													
343	17	Driveway						12													
347	17	Driveway						27			-										
348	17	Driveway						27													
349	17	Driveway						24			1										
350	17,18	Driveway						16													
351	18	Unsignalized Intersection	Sharon Drive					16													
352	18	Driveway						24													
390	19	Driveway						24													
GRAND	TOTAL			88904	169	140	0	281	40	358	180	106685	14	0	0	72	0	0	0	0	0
	R ITEM			\$13	\$55	\$160	\$80	\$7	\$5	\$3,000	\$3,500	\$85	\$12	\$12	\$12	\$6	\$13	\$7	\$5	\$35	\$1
TOTAL				\$1,155,752	\$9,313	\$22,400	\$0	\$1,964	\$200	\$1,072,848		\$9,068,208	\$162	\$0	\$0	\$432	\$0	\$0	\$0	\$0	\$0
IOIAL	CO31			φ1,133,732	ψ9,313	\$22,400	φ0	φ1,90 1	\$200	\$1,072,040	\$029,320	₩9,000,200	φ102	φυ	φυ	ψ 1 32	φυ	φυ	φυ	ψÜ	φυ
						\$1,1	189,628				\$10,770,384	<u> </u>		\$5	94				\$0		
				E	STIMATE CONS	TRUCTION C	COST										\$1 1	1,960,606			
					CONTINGEN	CY COST (20%	(o)										\$2	,392,121			
			Sl	R 350 to SR 62			•	L COST										,352,728			



				RO	ADWAY				DRAINAGE	I		TRAFFIC	CONTROL			10 FT WI	DE LANDSCAPEL) MEDIAN	
Access ID Map Sheet Access Type	Intersecting Street Name	TYPE 6 CURB (FT) Note: 1	6"CONCRETE TRAFFIC ISLAND (SY YD) Note: 2	SERVICE ROAD (TWO-WAY) Note: 3	SERVICE ROAD (ONE-WAY) Note: 3	EXCAVATION (CU YD) Note: 4	EMBANKMENT (CU YD) Note: 5	CATCH BASIN (EACH) Note: 6	MANHOLE (EACH) Note: 7	PIPE (FT) Note: 8	NO LEFT TURN SIGN (SQ FT) Note: 9	STOP SIGN (SQ FT) Note: 10	ONE WAY SIGN (SQ FT) Note: 11	GROUND MOUNTED SUPPORT (FT) Note: 12	TYPE 6 CURB (MEDIAN) (FT) Note: 13	(CU YD)	EMBANKMENT (CU YD) Note: 5	TOPSOIL FURNISHED AND PLACED (CU YD) Note: 14	SEEDING AND MULCHING (SQ YD) Note: 15
							PROJECT SU	JMMARI	ES										
		TYPE 6 CURB (FT) Note: 1	6"CONCRETE TRAFFIC ISLAND (SY YD) Note: 2	SERVICE ROAD (TWO-WAY) Note: 3	SERVICE ROAD (ONE-WAY) Note: 3	EXCAVATION (CU YD) Note: 4	EMBANKMENT (CU YD) Note: 5	CATCH BASIN (EACH) Note: 6	MANHOLE (EACH) Note: 7	PIPE (FT) Note: 8	NO LEFT TURN SIGN (SQ FT) Note: 9	STOP SIGN (SQ FT) Note: 10	ONE WAY SIGN (SQ FT) Note: 11	GROUND MOUNTED SUPPORT (FT) Note: 12	TYPE 6 CURB (MEDIAN) (FT) Note: 13	EXCAVATION (CU YD) Note: 4	EMBANKMENT (CU YD) Note: 5	TOPSOIL FURNISHED AND PLACED (CU YD) Note: 14	SEEDING AND MULCHING (SQ YD) Note: 15
SECTION 1	TOTAL QUANTITY	16684	0	680	0	494	0	69	35	20021	18	31	0	156	14784	2053	2738	684	8213
\$6,626,976	TOTAL COST	\$216,892	\$0	\$108,800	\$0	\$3,457	\$0	\$206,208	\$123,788	\$1,701,768	\$216	\$375	\$0	\$936	\$192,192	\$14,373	\$13,689	\$23,956	\$8,213
				\$3	29,149				\$2,031,764			\$1,	527				\$252,423		
SECTION 2	TOTAL QUANTITY	3379	42	0	0	37	22	16	9	4055	0	6	3	24	0	0	0	0	0
\$2,079,267	TOTAL COST	\$43,930	\$2,328	\$0	\$0	\$258	\$111	\$46,550	\$30,654	\$344,678	\$0	\$75	\$36	\$144	\$0	\$0	\$0	\$0	\$0
				\$4	16,627				\$421,883			\$2	55				\$0	_	
SECTION 3	TOTAL QUANTITY	3168	0	0	0	111	0	15	8	3802	0	0	0	0	0	0	0	0	0
\$9,238,248	TOTAL COST	\$41,184	\$0	\$0	\$0	\$774	\$0	\$44,016	\$29,176	\$323,136	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
				\$4	11,958				\$396,328			\$	0				\$0		
SECTION 4	TOTAL QUANTITY	88904	169	140	0	281	40	358	180	106685	14	0	0	72	0	0	0	0	0
\$14,352,728	TOTAL COST	\$1,155,752	\$9,313	\$22,400	\$0	\$1,964	\$200	\$1,072,848	\$629,328	\$9,068,208	\$162	\$0	\$0	\$432	\$0	\$0	\$0	\$0	\$0
				\$1,	189,628				\$10,770,384			\$5	94				\$0		
				\$1,6	607,363				\$13,620,35	9		\$2,	376				\$252,423		
GRAND TOTA	ıL	112,135	212	820	0	922	62	457	232	134,562	32	38	3	252	14,784	2,053	2,738	684	8,213
GRAND TOTAL C	COST	\$1,457,758	\$11,641	\$131,200	\$0	\$6,453	\$311	\$1,369,622	\$812,946	\$11,437,790	\$378	\$450	\$36	\$1,512	\$192,192	\$14,373	\$13,689	\$23,956	\$8,213
			ND TOTAL CO	NSTRUCTION	ON COST											2,297,219		, ,	
			RIGHT OF													525,000			
			ENGINEER'													,875,666			
		PROJEC	CT TOTAL		·	Т										5,197,885			

NOTES:

- 1) TYPE 6 CURB SHALL BE INSTALLED ON BOTH SIDES OF THE ROADWAY. ENTRANCES/DRIVES WILL BE SAWCUT WHERE NEEDED
- 2) FOR THE RIGHT-IN RIGHT OUT A 6" CONCRETE TRAFFIC ISLAND WILL USED AND INCLUDES 42.33 SQUARE YARDS OF ITEM 609, 6" CONCRETE TRAFFIC ISLAND.
- 3) SERVICE ROAD: INCLUDES THE FOLLOWING PAVEMENT BUILD-UP FOR A 12' LANE; 3" OF ITEM 448 ASPHALT CONCRETE, 4" OF ITEM 301 ASPHALT CONCRETE BASE AND 6" OF ITEM 304 AGGREGATE BASE. TWO-WAY ROADWAY IS FOR 24 FEET OF PAVEMENT AND ONE-WAY IS FOR 12 FEET OF PAVEMENT.
- 4) EXCAVATION SHALL INCLUDE THE REMOVAL OF ALL PAVEMENT INCLUDING BUT NOT LIMITED TO DRIVEWAYS, ASPHALT CONCRETE AND NATURAL SOILS.
- 5) EMBANKMENT SHALL INCLUDE THE REPLACING OF SUITABLE MATERIAL IN THE MEDIAN AND BEHIND THE CURB LINE.
- 6) CATCH BASIN SHALL INCLUDE CATCH BASIN NO. 3 ALONG THE CURB LINE EVERY 250 FEET ON BOTH SIDES OF THE ROADWAY.
- 7) MANHOLE SHALL INCLUDE MANHOLE NO. 3 PLACED DOWN THE CENTER OF ROADWAY EVERY 500 FEET.

- 9) NO LEFT TURN SIGN SHALL INCLUDE 30 INCH R3-2, ACCORDING TO ODOT, AND PLACED AT A 6 FOOT HEIGHT ABOVE THE GROUND
- 10) STOP SIGN SHALL INCLUDE FABRICATION OF 30' X 30" STOP SIGN AND INSTALLATION
- 11) ONE WAY SIGN SHALL INCLUDE FABRICATION OF A 36" X 12" ONE WAY SIGN AND INSTALLATION
- 12) GROUND MOUNTED SUPPORT: INCLUDES 12 FOOT YIELDING POST AS NEEDED.
- 13) TYPE 6 CURB (MEDIAN): INCLUDES TYPE 6 CURB INSTALLED IN THE CENTER OF THE ROADWAY FOR THE PURPOSED OF CREATING A LANDSCAPED MEDIAN
- 14) TOPSOIL FURNISHED AND PLACED: INCLUDES FURNISHING AND PLACING 3^{\shortparallel} OF TOPSOIL IN THE LANDSCAPED MEDIAN AREA.
- 15) SEEDING AND MULCHING: INCLUDES PREPARING AND INSTALLING SEEDING AND OR MULCHING IN THE LANDSCAPED MEDIAN AREA

