

City of Mason Western Row Road Improvement



V. **Project Scope**

Western Row Road is currently a two and three lane road with auxiliary lanes to serve the various subdivisions and developments along the corridor. The scope of this project will be to widen Western Row to a consistent four to five lane typical section with curb and gutter, medians where applicable, sidewalk and bike path. Lighting will be included to match the Mason Montgomery Road lighting. The project will tie into the widened section of pavement in front of the Christian Village on the west end of the corridor and continue approximately 7,500 feet east to Tylersville Road. The bike path will continue to the west and tie into the proposed bike path with the Western Row / Snider intersection project.

LJB has included an if authorized lump sum fee for a traffic study as requested. The traffic study will be used to calculate the future traffic demands of Western Row Road. Historical data, growth estimates for the LensCrafters facility, and vacant parcels will be factored into the long-range estimates for traffic volumes. A conceptual traffic control plan will be developed using results from capacity analysis of the critical nodes on the Western Row corridor.

Turning movement count data for the AM and PM peak periods will be collected to establish peak traffic volumes and to determine directional distribution. The directional distribution information will be critical when evaluating alternate lane configurations especially if they are imbalanced (2 through lanes vs. 1 opposing lane).

A maximum of 3 conceptual alternatives will be prepared of the Western Row Road corridor showing alternate intersection configurations, lane configurations, and median locations. The concept plan may consider short and long-term construction scenarios that will take advantage of the vacant parcels and the natural beauty of the oak trees.

A summary of findings and conclusions in a letter format will be prepared of the various corridor improvements for City review and comment.

There are two culverts within the project limits. These culverts will be widened to accommodate the proposed typical section. Hydraulic analysis of these two culverts is not included in the scope of this project.

Several subdivisions exist along this section of Western Row. These subdivisions have existing bike paths, landscaping mounds and detention ponds. Also, a row of mature oak trees are located along the southern side of Western Row Road at the east end of the project. The intent of the proposed widening project is to minimize the impact on existing landscape mounds and to salvage the mature oak trees. This will require close coordination during the preliminary design phase so that alignments can be chosen to achieve these goals. Measures such as the installation of retaining walls may be necessary to minimize the impact to these existing features.

The following outlines LJB's process for insuring a successful project:

- Hold a kickoff meeting with the City to confirm scope, project objectives, and schedule.
- Assist city with notifying property owners of field survey.
- Collect all available as-built data and perform courthouse research
- Perform Field Survey
- Establish existing right of way
- Create conceptual laning plan and typical sections

- Submit Preliminary plans
- · Finalize alignment, profile, and typical sections
- Conduct a utility coordination meeting
- Proceed with plan development and set construction limits
- Prepare Preliminary R/W plan
- Meet with City and R/W specialist to review R/W plan
- Make any adjustments to R/W plan and finalize takes
- Prepare R/W appraisals and title reports
- Continue final design concurrently with R/W acquisition tasks, submit Phase B plans for review
- LJB to use Michael Morehead as a subcontractor to prepare appraisals
- Begin negotiations immediately once appraisals and title reports are completed
- Coordinate negotiation process feedback with any final adjustments to plans
- Finalize mylars for submission
- Complete negotiations

VI. Project Schedule

LJB Inc. is committed to providing a thorough and quality project. An essential part to making this project a success is meeting the City's schedule. The timeline that is included in this proposal is aggressive but attainable. Monthly progress meetings will be held throughout the design phase to insure the project is staying on schedule.

Below is a tentative schedule for this project. This schedule assumes notice to proceed on or before December 15, 2003.

Schedule:

Assuming authorization to proceed by December 15, 2003:

Milestone:	Date:				
Authorization to proceed	December 15, 2003				
Notify residents of survey					
Complete field survey	January 7, 2004				
Approval of conceptual laning plan	January 23, 2004				
Preliminary Plan Approval	January 30, 2004				
Approval of Prelim. R/W Plans	February 20, 2004				
Completion of R/W Plans & Documents	March 19, 2004				
Final Plan Approval	April 16, 2004				
Completion of Appraisals & Title Reports	April 30, 2004				
	May 14, 2003				
Address Final Revisons and Submit Mylars	May 28, 2004				
Complete negotiations and closings	July 30, 2004				

II. Design Fee

Coordination	\$6,372
Field Survey	\$25,050
Preliminary Design	\$18,028
Final Design	\$107,130
TOTAL ROADWAY DESIGN	\$156,580
Right of Way and Easements	\$77,532
As-builts	\$5,952
Sub-Consultant Fees	\$43,200
TOTAL BASE FEE	\$283,264

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TASK	NO. UNITS	BASE	UNIT HOURS	TOTAL HOURS		Hourly Rates		Task	
TASK	UNIIS	UNIT	HOURS	HOURS	\$58	Engineer \$78	Principal \$105	Fee	
Coordination					Per	cent Involven	nent		
Kickoff Meeting	1	each	8	- 8		50%	50%	\$732	
Utility Coordination (Public & Private)	4	each	4	16		100%		\$1,248	
Monthly Progress Meetings	6	each	8	48		50%	50%	\$4,392	
Sub-Total		-	l		-				\$6,372
Field Survey Set Control (State Plane Coordinates)								\$3,600	
Topographic Survey								\$12,000	
Locate Property Monumentation		1						\$3,600	
Establish Benchmarks & Ref. Pnts			-				-	\$2,400	
Culvert Surveys & Sketches								\$1,200	
Office Time								\$2,250	
Sub-Total									\$25,050
Phase A - Preliminary Design									
Field Review Survey	2	site visit	. 8	16	50%	50%		\$1,088	
Preliminary Alignments	1	each	24	24	50%	50%		\$1,632	
Traffic Impact Study	1	lump						\$5,600	
Typical Sections	1	sheets	12	12	50%	50%		\$816	
Preliminary Submittal	1	lump	120 8	120	50%	50% 50%	E00/	\$8,160	
Preliminary Submittal Sub-Total		mtg	0	В		50%	50%	\$732	\$18,028
Phase B - Final Design		-							φ1σ,028
Title Sheet	1	sheets	8	8	80%	20%		\$496	
Typical Section	1	sheets	16	16	50%	50%		\$1,088	
General Notes	2	sheets	12	24	20%	80%		\$1,776	
Maintenance of Traffic	7	sheets	24	168	40%	60%		\$11,760	
Quantities	1	each	24	24	20%	80%		\$1,776	
Plan and Profile	15	sheets	24	360	70%	30%		\$23,040	
Cross Sections	300	each	1	300	80%	20%		\$18,600	
Drainage Details	3	sheets	20	60	20%	80%		\$4,440	
Culvert Details	2	each	40	80	20%	80%		\$5,920	
Intersection Details	6	each	16	96	30%	70%		\$6,912	
Traffic Control	7	sheets	18	126	60%	40%		\$8,316	
Signal Modifications	2	each	56	112	40%	40%	20%	\$8,445	
Coordination for Mason Montgomery Signal	1	each	12	12		70%	30%	\$1,033	
Lighting	1	lump	130	130	40%	60%		\$9,100	
Driveways	12	each	4	48	70%	30%		\$3,072	
Cost Estimates	1	each	8	8	-	100%		\$624	
Final Submittal	1	mtg	88	8		50%	50%	\$732	2122 122
Sub-Total									\$107,130
Total Roadway Design									\$156,580
Right of Way and Easements									
Courthouse Research	1	lump	16	16	-	100%		\$1,248	
Design Review by R/W Acq. Specialist	1	lump	24	24		50%	50%	\$2,196	-
Right of Way Plan Sheets	15	sheets	20	300	50%	50%		\$20,400	
Dedication Plat or Survey Record	25	each	10	250	40%	60%		\$17,500	
Lath Staking & pinning of R/W	25	each	2.5	62.5			per hour	\$7,500	
Negotiations	25	each	10	250			per hour	\$21,250	
Closings	25	each	3.5	87.5		\$85	per hour	\$7,438	
Sub-Total					ļi				\$77,532
As-builts		t	0.1	0.1		,,,,,,			
Collection of Data	1	lump	24	24	F00/	100%		\$1,872	
Preparation of As-built drawings Sub-Total	1	lump	60	60	50%	50%		\$4,080	\$5.050
								-	\$5,952
ub-consultant fee Geotechnical	1	lump							EE 700
Appraisals	25	each		\$1,500	each			- i	\$5,700 \$37,500
Appraisais		Gault		ψ1,000	J2011	+			φ31,50U
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-Authorized Not to Exceed Services		-							
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Public Meeting Exhibits (1 boards)	_ 1	each	16	16	50%	50%	Feet		\$1,088
Public Input Meetings (2)	Ž	mtg	-84	18 8		50%	50%		\$1,464
Retaining Walls(per location 50' length)	2	each	30	60	50%	50%			\$1,080 \$1,484 \$4,080
		-				Inspector	Engineer		
re-Bid & Post Design Services						\$60	\$78		
					Perc	ent Involvem			
Meeting, Review and Answer Comments									
Meeting, Review and Answer Comments Recommendations									
Meeting, Review and Answer Comments	20	weeks	40	800		90%	10%		\$49,440
Meeting, Review and Answer Comments Recommendations Construction Administration	20	weeks	40	800		90%	10%		\$49 ,4 40