

EXHIBIT "A"
SCOPE OF SERVICES
KASOLD DRIVE – 15TH STREET TO CLINTON PARKWAY
PRE-DESIGN REPORT PHASE

The follow scope of services will be used to complete the Pre-Design Report phase:

1. Topographical/Boundary Survey – Bartlett & West will provide a design topographical/boundary survey. We will send a letter notifying all adjacent property owners of the survey. The survey will include collecting all topographical and utility information. The utility information will include exposing the waterline at several locations to assist with the identification of potential relocation. The boundaries of the survey are shown on the attached graphics. The boundary survey will include locating the existing section line, as well as property boundaries, if available. In addition, Bartlett & West will prepare a topographical base map that shows all topographical features, utilities, right-of-way, easements, and ownerships.
2. Geotechnical Report – Geosystems/Kleinfelder has been asked to provide 14 borings along the project length to a depth of 10 feet or to auger refusal. The borings will provide representative soil classifications at 2 feet, 6 feet, and 10 feet. The final documentation will include a simple letter, which will be accompanied by the boring logs.
3. Right-of-Way/Easement Research – Bartlett & West will use the adjacent subdivision plats to help recreate the existing right-of-way. In addition, First American Title will provide O&E reports to help determine the current ownerships and encumbrances. This information will be used to identify any additional right-of-way and/or easements that may be necessary for future improvements.
4. Utility Investigation – The utilities will be located as a part of the topographical survey. Bartlett & West will provide the topographical base map to the utility companies for their verification. Bartlett & West will meet with the City Utility Department to discuss the waterline. In addition, we will meet with Westar to discuss the overhead power and street lights. There is a possibility that we will need to meet with other utilities, such as the gas company. This will be determined after the utilities are located. Bartlett & West has included any necessary utility meetings in this scope of services. This task will identify and quantify any costs that will be incurred by either the City or the utility. In addition, this task will determine the necessary schedule to relocate utilities.
5. Public Information – Bartlett & West will conduct a Public Information meeting with local residents towards the end of the study phase. This will allow the majority of the engineering to occur prior to the public meeting. Therefore, we will be able to provide answers to the residents regarding how their properties will be affected.
6. City Staff Meetings – Bartlett & West has provided time to meet with the City Public Works staff as outlined in the attached Progress Meeting Schedule. The

City should invite any other City department representatives to this meeting, as they see appropriate. The meetings with the utility companies has been considered as a separate task under the task "Utility Investigation".

7. Concrete or Asphalt/Pavement Design – Bartlett & West will complete an analysis of concrete vs. asphalt pavements. Similar to the George Williams Way and O'Connell Road projects, our preliminary recommendations will include a fly ash treated subgrade, a bound drainable base, and edge drains. Our analysis will include issues such as life cycle costs, maintenance issues, and constructability issues.
8. Traffic Analysis – The City will provide Bartlett & West with traffic counts, turning movements, and accident reports for all intersections along the project. In addition, these counts and turning movements will include all legs of the intersections of Kasold Drive and 15th and 23rd Streets. Bartlett & West will analyze the traffic situations and provide recommendations regarding the required number of lanes along Kasold Drive, as well as turning movement requirements at all intersections. The turning movement analysis will include the critical areas around 15th Street and 23rd Street. The analysis will include how closing Scioto Drive may impact the other sideroads on the west side of Kasold Drive.
9. Typical Section/Profile - This task will begin by defining the vertical profile for the project. Bartlett & West will work with the City to determine acceptable grades and vertical curves. Following the profile analysis, we will perform an analysis that will result in determining the typical section. Bartlett & West will consider up to 4 typical sections, which will include divided and undivided sections with numerous sidewalk configurations. While the typical sections to be studied are not final as of yet, we will begin with the ideal section, which is considered to be 4 thru lanes, a center turn lane, a sidewalk on the east side, and a recreation path on the west side. After the analysis of this section, three other typical sections will be investigated to determine the most feasible typical section for the project. This analysis will include an evaluation of an appropriate material for the median if a divided section is chosen. In addition, we will determine the suitability of grades in relation to adjacent sideroads and driveways.
10. Storm Sewer Analysis – Bartlett & West will prepare a watershed map for all basins affecting the roadway. We will design a storm sewer system so that we may provide accurate construction costs for the proposed estimate.
11. Street Lighting – Bartlett & West will provide options for future street lighting. This task will include identifying the costs associated with the future street lighting.
12. Intersection Analysis/Traffic Signal Analysis – Depending on the lane configurations determined by the Traffic Analysis, there may need to be modifications to the intersections to the point where the signals at 15th Street, 22nd Street, and Clinton Parkway may need to be altered. We will sufficiently develop the design to a point where we can accurately identify the potential costs.
13. Construction Sequencing – Bartlett & West will provide a construction sequencing plan that will minimize the construction schedule. This task will identify key issues that will affect the construction costs.

14. Preliminary Cost Estimate – After the previous tasks are completed, Bartlett & West will provide a cost estimate for each of the 4 alternatives studied that will include construction items broken down in a bid item list. In addition, this estimate will include costs for right-of-way/easements and utility relocations.
15. Project Scheduling – Bartlett & West will prepare a detailed schedule to complete design plans and construction.
16. Pre-Design Report – Bartlett & West will compile our findings in a bound document that will detail the options considered and the final option selected. This will include drawings and exhibits as supporting documentation. In addition, the document will include a Design Criteria Memo that will control the elements of the design for the Construction Document phase. The final report will be delivered as 10 hard copies and in a PDF file format.
17. City Commission Presentation – Bartlett & West will present the pre-design report to the City Commissioners at a regularly scheduled City Commission meeting.

This proposed scope of services for the Pre-Design Report will require meetings between Bartlett & West and the City staff throughout this phase as outlined in Task 6. These meetings are included in our Project Progress Meeting Schedule. In addition, these tasks essentially replace the Preliminary Design Phase (Field Check) that's outlined in the standard City agreement for Engineering Services.

The Construction Documents phase will be the completion of final plans based on the Pre-Design Report phase providing the preliminary plans. These tasks will be practically identical to the Final Design Phase (Office Check) tasks outlined in the City's standard agreement for Engineering Services. In addition, we will include bidding phase services at that time. We will negotiate the construction documents and bidding services at the completion of the pre-design phase.

PROPOSED PROJECT SCHEDULE PROGRESS MEETING DATES

Date & Time	Meeting	Issues to be Discussed	Required Participants	
			City of Lawrence	Bartlett & West
June 16, 2004	Kickoff	Review Pre-design Report Scope	Chuck Soules	Joe Caldwell
10:30 AM		Finalize Schedule	Terese Gorman	Brian Clennan
		Discuss Study Phase Issues	Chad Voigt	Brian Armstrong
		Compile Traffic Count Data	David Woosley	Keith Warta
			George Blevins	
			Linda Finger	
Note: Topographical Survey/Geotechnical Investigation will be completed between June 7, 2004 and June 25, 2004				
July 2, 2004	Survey/Right-of-Way	Present Topo Base Map	Chuck Soules	Joe Caldwell
10:30 AM	Utility Investigation	Present Geotechnical Report	Terese Gorman	Brian Clennan
	Traffic Analysis	Present Right-of-Way/Easement	David Woosley	Jeff Jones
		Present Utility Investigation	George Blevins	
		Present Traffic Analysis		
July 30, 2004	Horizontal/Vertical Issues	Review Hor./Vertical Alignments	Chuck Soules	Joe Caldwell
10:30 AM	Pavement Design	Present Pavement Design	Terese Gorman	Brian Clennan
	Typical Sections	Discuss Potential Typical Sections	David Woosley	Brian Armstrong
Aug. 27, 2004	Storm Sewer Analysis	Present Storm Sewer Layouts	Chuck Soules	Joe Caldwell
10:30 AM	Traffic Signals/Lighting	Discuss Intersection Geometry Issues	Terese Gorman	Brian Clennan
	Construction Sequencing	Provide Traffic Signal Solutions	Chad Voigt	Brian Armstrong
		Present Street Lighting Options	David Woosley	Jeff Jones
		Determine Construction Sequencing		
Sept. 17, 2004	Pre-Design Report	Present Pre-Design Report	Chuck Soules	Joe Caldwell
10:30 AM		Discuss Cost Estimates	Terese Gorman	Brian Clennan
		Discuss Schedule	Chad Voigt	Brian Armstrong
			David Woosley	Jeff Jones
Sept 28, 2004	Pre-Design Presentation	Present Pre-Design Report	Chuck Soules	Joe Caldwell
6:30 PM		to Commissioners	Terese Gorman	Brian Clennan
				Brian Armstrong
				Keith Warta
Oct 1, 2004	Design Phase Kickoff	Final Comments from Pre-Design	Chuck Soules	Joe Caldwell
10:30 AM	Meeting	Finalize Schedule	Terese Gorman	Brian Clennan
				Jeff Jones
Oct 15, 2004	Right-of-Way/ Easements	Present Proposed Right-of-Way/ Permanent/Temporary Easements	Chuck Soules	Joe Caldwell
10:30 AM			Terese Gorman	Brian Clennan
			Scott Wagner	Jeff Jones
Note: Right-of-Way Descriptions, Exhibits, & Strip Map to be Submitted on October 29, 2004				
Nov 19, 2004	Intersection Details	Present Intersection Details	Chuck Soules	Joe Caldwell
10:30 AM			Terese Gorman	Brian Clennan
			David Woosley	Jeff Jones
Dec 17, 2004	Pvmt Marking/Signing	Present Pvmt Marking/Signing Plans	Chuck Soules	Joe Caldwell
10:30 AM	Traffic Signals	Present Traffic Signal Plans	Terese Gorman	Brian Clennan
			David Woosley	Brian Armstrong
Jan 14, 2005	Final Plan Submittal	Present Final Plans	Chuck Soules	Joe Caldwell
10:30 AM			Terese Gorman	Brian Clennan
				Jeff Jones
Jan 28, 2005	Final Plan Review	Review City Comments	Chuck Soules	Joe Caldwell
10:30 AM			Terese Gorman	Brian Clennan
			Chad Voigt	Jeff Jones
			David Woosley	Brian Armstrong
Note: Final Plan Submittal will be on Friday, February 11, 2005, allowing for a bid date of Tuesday, March 8, 2005				

**Kasold Drive Improvements
Pre-Design Report Phase**

EXHIBIT "B"

FEE SCHEDULE

1. Direct Payroll

A. Pre-Design Report (Preliminary Design Phase - Field Check)

	Task	Position/Title	Hourly Rate	Estimated Hours	Total
	1	PM - Engineer V	32.75	24	786.00
		Surveyor VI	31.00	24	744.00
		Surveyor IV	23.50	160	3,760.00
		Surveyor IV (OT)	35.25	40	1,410.00
		Survey Tech IV	16.00	160	2,560.00
		Survey Tech IV (OT)	24.00	40	960.00
		Engineering Tech IV	17.60	60	1,056.00
		Administrator I	17.00	4	68.00
	2	PM - Engineer V	32.75	4	131.00
		Surveyor IV	23.50	4	94.00
		Survey Tech IV	16.00	4	64.00
	3	PM - Engineer V	32.75	4	131.00
		Surveyor VI	31.00	40	1,240.00
		Surveyor IV	23.50	4	94.00
		Survey Tech IV	16.00	4	64.00
		Engineering Tech IV	17.60	12	211.20
	4	PM - Engineer V	32.75	20	655.00
		PE - Project Engineer III	25.50	20	510.00
		Engineering Tech IV	17.60	12	211.20
	5	PIC - Engineer VIII	52.80	4	211.20
		PM - Engineer V	32.75	12	393.00
		PE - Engineer V	32.75	4	131.00
		PE - Engineer III	25.50	4	102.00
		Engineering Tech IV	17.60	16	281.60
		Administrator I	17.00	4	68.00
	6	PM - Engineer V	32.75	32	1,048.00
		PE - Engineer V	32.75	32	1,048.00
		PE - Engineer III	25.50	32	816.00
		Engineering Tech IV	17.60	32	563.20
	7	PIC - Engineer VIII	52.80	8	422.40
		PM - Engineer V	32.75	4	131.00

		PE - Engineer V	32.75	8	262.00
		PE - Engineer III	25.50	32	816.00
		Engineering Tech IV	17.60	4	70.40
	8	PM -Engineer V	32.75	4	131.00
		PE - Engineer V	32.75	16	524.00
		PE - Engineer III	25.50	48	1,224.00
		Engineering Tech IV	17.60	16	281.60
	9	PM -Engineer V	32.75	40	1,310.00
		PE - Engineer V	32.75	120	3,930.00
		PE - Engineer III	25.50	140	3,570.00
		Engineering Tech IV	17.60	200	3,520.00
	10	PM -Engineer V	32.75	12	393.00
		PE - Engineer III	25.50	60	1,530.00
		Engineering Tech IV	17.60	40	704.00
	11	PM -Engineer V	32.75	4	131.00
		Engineering Tech VII	26.50	24	636.00
		Engineering Tech IV	17.60	16	281.60
	12	PM -Engineer V	32.75	4	131.00
		PE - Engineer V	32.75	12	393.00
		PE - Engineer III	25.50	16	408.00
		Engineering Tech IV	17.60	16	281.60
	13	PM -Engineer V	32.75	4	131.00
		PE - Engineer V	32.75	4	131.00
		PE - Engineer III	25.50	4	102.00
		Engineering Tech IV	17.60	16	281.60
	14	PM -Engineer V	32.75	2	65.50
		PE - Engineer III	25.50	24	612.00
		Engineering Tech IV	17.60	24	422.40
	15	PM -Engineer V	32.75	4	131.00
		PE - Engineer III	25.50	4	102.00
		Engineering Tech IV	17.60	4	70.40
	16	PM -Engineer V	32.75	8	262.00
		PE - Engineer III	25.50	24	612.00
		Engineering Tech IV	17.60	24	422.40
		Administrator I	17.00	16	272.00
	17	PIC - Engineer VIII	52.80	8	422.40
		PM -Engineer V	32.75	16	524.00
		PE - Engineer V	32.75	8	262.00
		PE - Engineer III	25.50	8	204.00
		Engineering Tech IV	17.60	16	281.60
Subtotal for Pre-Design Report Phase					\$45,804.30
2. General Overhead (Subtotal Direct Payroll X 2.00)					\$91,608.60

3. Direct Expenses

Surveying

	Item	Rate	Quantity	Total
	GPS Equipment	\$25.00/hour	80	2,000.00
	Total Station	\$10.00/hour	120	1,200.00
	O&E Reports	\$125.00/each	55	6,875.00
	CAD	\$8.50/hour	72	612.00
	Inkjet Plots	\$3.00/sheet	25	75.00
	Mileage	\$0.45/mile	2000	900.00
	Misc. Flagging, Iron Pins, PK nails, Lathe, Hubs, etc.			150.00

Design

	Item	Rate	Quantity	Total
	Geotechnical Consultant	4,700.00	1	4,700.00
	CAD	\$8.50/hour	436	3,706.00
	Postage	LS	LS	100.00
	Mileage	\$0.365/mile	300	109.50
	Copies	\$0.15/sheet	1000	150.00
	Inkjet Plots	\$3.00/sheet	250	750.00

Subtotal of Reimbursables

\$21,327.50

GRAND TOTAL(Direct Payroll+General Overhead+Direct Expenses)

\$158,740.40