

Memorandum

City of Lawrence

Public Works

TO: David L. Corliss, City Manager
FROM: Charles F. Soules, Director of Public Works
CC: Cynthia Boecker, Diane Stoddard, Jonathan Douglass, Shoeb Uddin, Mark Thiel
Date: June 3, 2009
RE: **Project No. PW0903, Kasold Drive, 23rd Street to 31st Street**

Project Background

November 2008	Voters passed 0.3% sales tax for infrastructure and equipment
June 27, 2009	Presented to City Commission, 2009 Street Maintenance Program and Sales Tax Projects
May 5, 2009	Received City Commission approval to begin negotiations for engineering services with Bartlett and West (B&W)

Project Description

Kasold Drive, from 31st Street to Clinton Parkway, is a failing arterial street carrying 15,000+ vehicles a day. This street section contains sidewalks, recreational path, stormsewer, and a water main all in good condition. We anticipate saving as much of these improvements as practical. The pavement will be replaced with 10" concrete and the sidewalk and recreational path will be connected around the curve to 31st Street to provide a continuous pedestrian and bike facility. The need for turn lanes and medians will be reviewed during the design process. Traffic control will probably be the most significant issue as several neighborhoods have only a single exit access onto Kasold.

Attached is some of the contractual work including:

1. Typical section with 11 feet lanes and landscaped median/center turn lane [Item1](#)
2. Horizontal layout [Item2](#)
3. Sight distance improvements at 24th Terrace [Item3](#)
4. Establish left turn lane at E. 1200 Road on Kasold curve [Item4](#)
5. Connect multiuse path and sidewalk around Kasold curve [Item5](#)

Project Schedule

Plans complete early 2010
Bid spring 2010
Construction spring 2010 - 2011

Contract Scope

This project does have KDOT funding so plans and specifications are significant. The scope of work includes:

Preliminary plans, field check plans, office check plans and final plans

Quantities are developed for all pay items

Traffic control

Utility coordination

Public meeting and commission presentation

Erosion control

Storm sewer design

Easement and right a way descriptions (if needed)

Construction Cost

This project as compared to Kasold from Bob Billings Parkway (BBP) to 22nd Street does not include the waterline replacement or retaining wall or multiuse path construction. However this project contains approximately 2000 linear feet (at 55 feet wide) of additional pavement, 1000 feet of multiuse path, 1500 feet of sidewalk, and approximately 1000 linear feet of additional storm sewer. This comparison provides a preliminary estimate of the Kasold, 23rd Street to 31st Street of approximately \$5.5 million.

Past design contract comparisons:

YEAR	PROJECT	DESIGN FEE	3%/YR INFLATION	LENGTH ADJUSTMENT	DESIGN FEE AS % OF CONSTRUCTION COST
	Kasold Drive (23 rd St. to 31 st St.) original proposal	Base fee		\$446,610.00 Single traffic plan	
2005	Kasold Drive (BBP to 22 nd St.)	432,000.00	\$483,000.00	\$645,000.00	7.8%
2007	George Williams Way (6 th St. to north curb line)	\$188,000.00	\$199,000.00	\$449,000.00	8.5%
2007	25 th Terrace (O'Connell Rd. to Franklin Rd.)	\$196,000.00	\$207,760.00	\$462,000.00	7.8%
2008	31 st Street (Haskell Ave. to O'Connell Rd.)	\$475,000.00	\$475,000.00	\$420,000.00	

Through discussion with Bartlett and West five items were identified that could reduce the design fees:

1. Preliminary phase scope – design workshop: This item was to meet with city staff, including Public Works, Utility Department, City Managers Office, KDOT and outside utility companies to set out the parameters of the project. The cost of this item was \$4,200.00. With current Public Works staff, we feel that the city can coordinate and bring all parties to an understanding of the project and this item can be deleted.
2. Geotechnical services – cost \$6,500.00: The direction on this item was to keep this to a minimum. The scope includes twenty borings to identify rock/groundwater or other unknown issues. If we do not provide this information to the contractor we could see higher bids as the contractor may speculate the conditions. This item is recommended to remain in the contract.
3. Right of way strip map and legal descriptions – cost \$13,000.00: We are not intending to need any additional right of way however as the project progresses we may need easements (permanent or temporary). Some of the right of way along the curve is county road easement and will require annexation and may require additional width. This item will be used only if necessary and includes up to 20 tracts. This item should remain in the contract.

4. Permitting – costs \$3,700.00: NPDES, Corps permit and DWR permit will be necessary. KDOT will provide environmental and historic review. Those permits need to be completed by the design engineer, as they will have the details necessary to obtain the permits. This item should remain in the scope.
5. Construction phase – cost \$11,000.00: This item includes answering questions about plans, attending construction meetings, reviewing shop drawings and completing as built set of plans. Public Works staff will complete tasks and this work can be removed from the scope of services.

Staff also discussed and will develop a website for this project. Staff has eliminated multiple intersection configurations at 31st and Kasold Drive as part of contract negotiations.

Finally this project is scheduled to be bid in early 2010. Typically a KDOT funded project takes up to twenty-seven months to complete design and review. After removal of the scope items discussed above, the revised base fee for services for this project is \$431,025.00. This scope includes a single traffic control plan that will leave one lane of traffic open in each direction during construction.

The project intends to save as much of the existing sidewalk and multiuse path as possible. Narrowing the driving lane widths but adding the turn lane (median) does not provide the contractor much room if two lanes of traffic are maintained. Preliminary discussions with a contractor indicated that more sidewalk and path may need to be removed in order to complete the road construction and construction costs may be higher.

Alternatively providing the contractor an option of closure of Kasold Drive may decrease construction costs and reduce the time required to complete the project. On the Kasold Drive, BBP to 22nd Street project the contractors estimated that the project could have been completed six months earlier and cost approximately \$1,000,000.00 less if the road could have been closed.

Bartlett & West has presented an alternate proposal that would develop two traffic control plans (closure and keeping two lanes open). The project could be bid with two alternate traffic control plans. The additional Engineering cost would be \$10,320.00. Prior to proceeding with a closure plan we would discuss this option with residents and commissioners. Obviously access to homes would be maintained.

Project Funding

Action Requested:

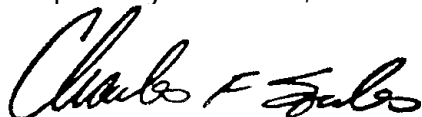
Authorize the City Manager to execute an engineering services agreement with B&W for Kasold Drive, from 23rd Street to 31st Street in the amount of \$431,025.00.

- OR -

Authorize the City Manager to executive an engineering services agreement with B&W for Kasold Drive, from 23rd Street to 31st Street including two traffic control plans in the amount of \$441,345.00.

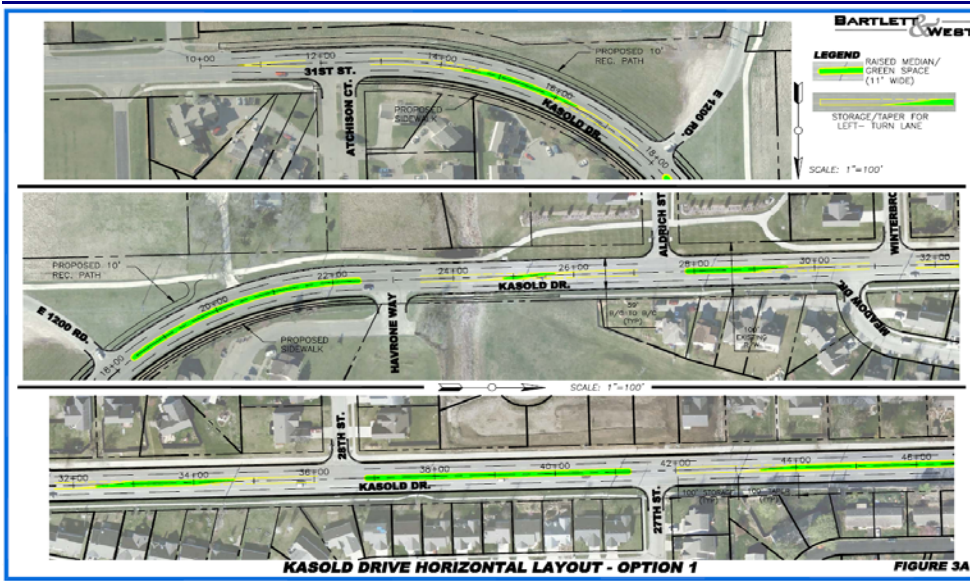
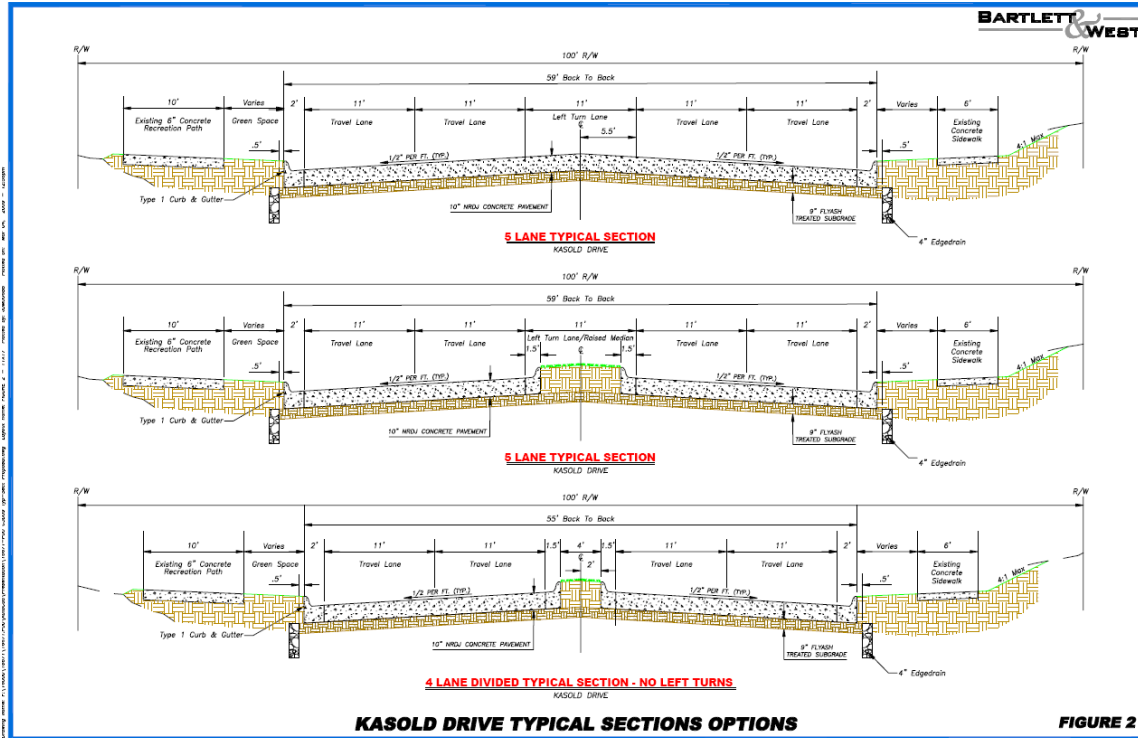
Please let me know if there are any questions.

Respectfully Submitted,

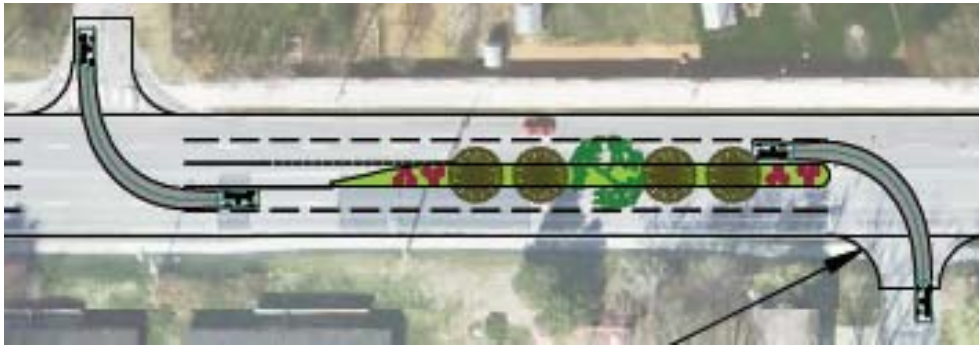
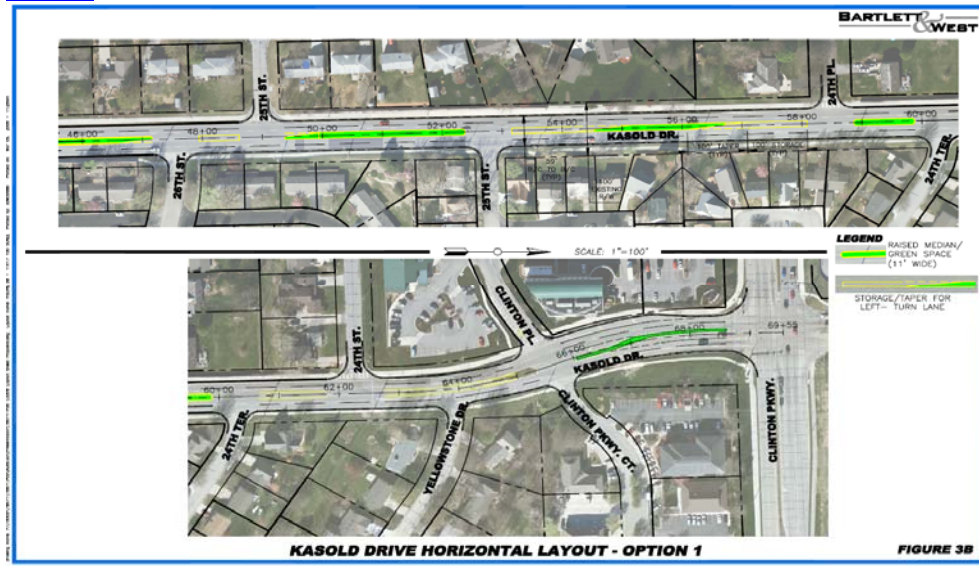


Charles F. Soules, P.E.
Director of Public Works

Item1

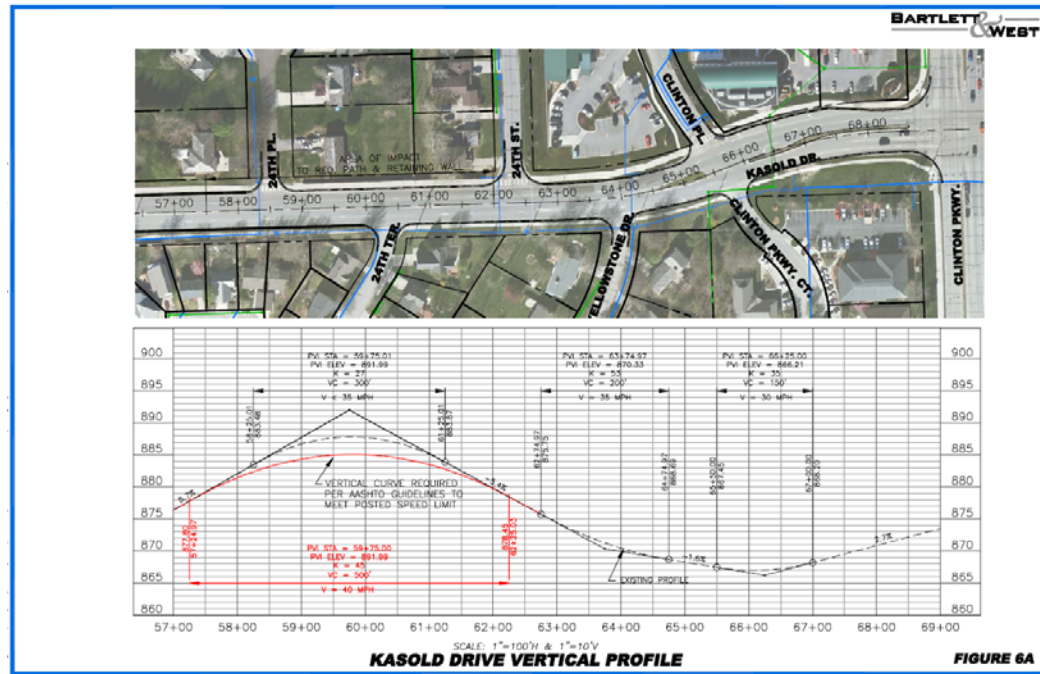


Item2



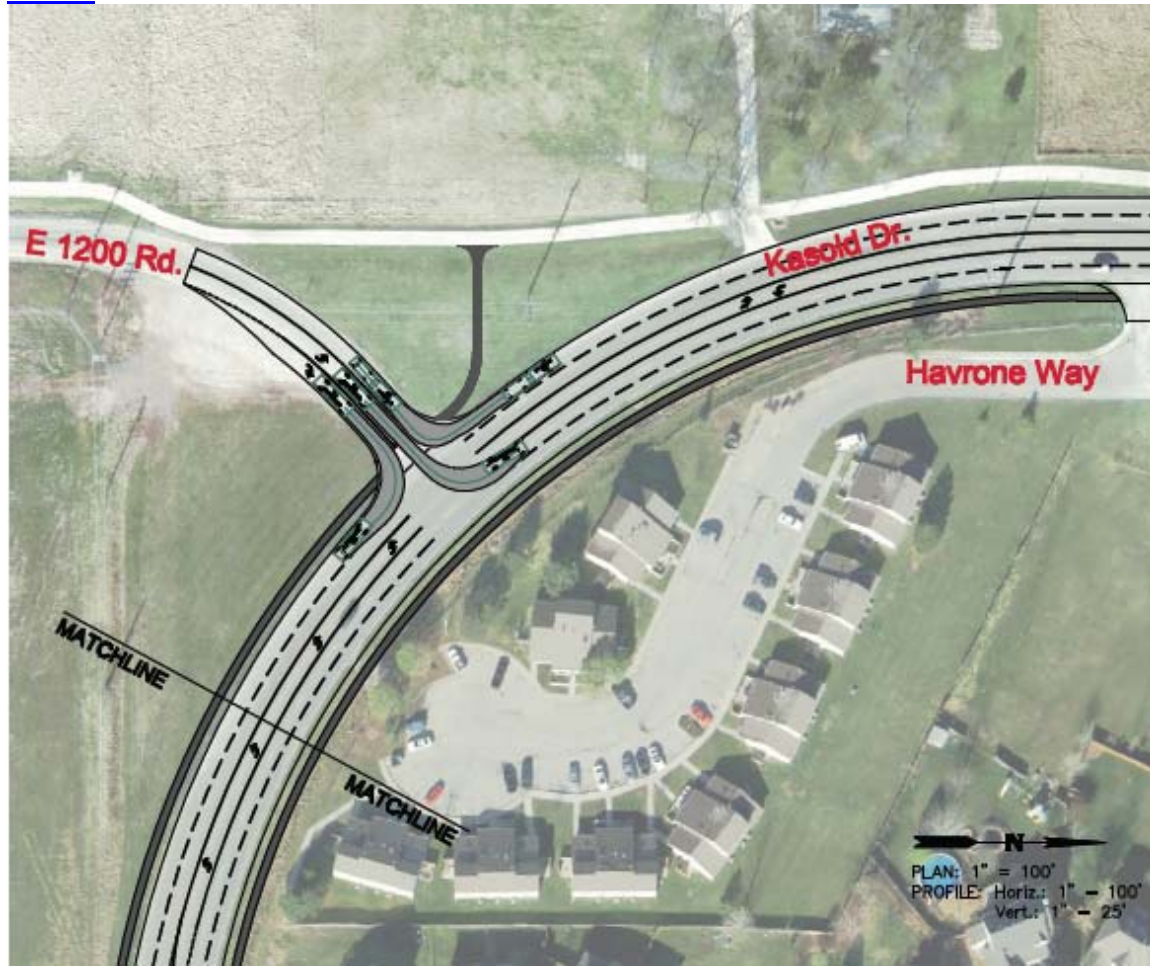
POSSIBLE HORIZONTAL LAYOUT

Item3



IMPROVE SIGHT DISTANCE AT 24TH TERRACE

Item4



ESTABLISH LEFT TURN LANE ON KASOLD @ INTERSECTION OF E1200 RD
INSTALL CONDUIT FOR FUTURE SIGNALIZATION

Item5



CONNECT MULTIUSE PATH AND SIDEWALK AROUND KASOLD CURVE