

**SUPPLEMENTAL AGREEMENT NO. 2
FOR PROFESSIONAL SERVICES
City of Olathe, Kansas**

This Supplemental Agreement made this _____ day of _____, 2019, by and between the City of Olathe, hereinafter referred to as the "City", and TranSystems Corporation, hereinafter referred to as the "Consultant".

WITNESSETH:

WHEREAS, the City and Consultant have previously entered into an Agreement, dated January 22, 2019 ("the Agreement"), for professional engineering services for the Ridgeview, 143rd to 151st, Improvements Project; PN 3-C-058-19 hereinafter referred to as the "Project"; and

WHEREAS, Paragraph B, Section II of the Agreement provides that Consultant will provide, with City's concurrence, services in addition to those listed in the Professional Services Agreement, when such services are requested or authorized in writing by the City.

WHEREAS, this Supplemental Agreement No. 2 between the parties heretofore is to provide additional engineering design services related to an increase in scope for the Project as outlined in **Exhibit A** of this Supplemental Agreement No. 2, attached hereto and incorporated herein by reference; and

WHEREAS, the City is desirous of entering into Supplemental Agreement No. 2 to pay the Consultant for additional services rendered to the City related to the Project; and

WHEREAS, the City is authorized and empowered to contract with the Consultant for the necessary additional professional services under the Agreement, and necessary funds for the payment of said services related to the Project are available and authorized under the Agreement.

NOW THEREFORE, the parties hereby agree as follows:

- A. The total fee for the aforementioned additional professional services provided pursuant to this Supplemental Agreement No. 2 is \$997,152.00, which raises the total fee for all services provided under the Agreement from \$211,075.00 to \$1,208,227.00.

IN ALL OTHER RESPECTS, the terms and conditions of the Agreement will remain in full force and effect, except as specifically modified by this Supplemental Agreement No. 2, including all policies of insurance which will cover the work authorized by this Supplemental Agreement No. 2.

IN WITNESS WHEREOF, the parties hereto have caused this Supplemental Agreement No. 2 to be executed as of the day and year first above written.

CITY OF OLATHE, KANSAS

By: _____
Michael E. Copeland, Mayor

ATTEST:

City Clerk

(Seal)

APPROVED AS TO FORM:

City Attorney/Deputy City Attorney/
Assistant City Attorney

TranSystems Corporation

By: Robert J. Miller
Robert J. Miller, P.E.
Vice President
2400 Pershing Road, Suite 400
Kansas City, MO 64108

Exhibit A
SUPPLEMENTAL No. 2
SCOPE OF SERVICES
RIDGEVIEW, 143RD TO 151ST IMPROVEMENTS PROJECT
P.N. 3-C-058-19

SCOPE OF SERVICES

The original agreement provided for a Concept Study to develop the recommended improvements to Ridgeview Road. The Concept Study concluded with direction to move forward with the preferred alternative generally consisting of one southbound and northbound lane along with a center Two Way Left Turn Lanes (TWLTL). The typical section also includes five-foot wide bike lanes on each side of the road and eight-foot wide sidepaths on each side of Ridgeview Road. Roundabouts are planned at the Ridgeview intersections with Sheridan Bridge Lane, and Frontier Lane. The project will also include the replacement of the waterline from approximately Sleepy Hollow Road to the existing roundabout at Sheridan Drive. The limits of the roadway improvements will extend from Garmin South Driveway/School Entrance northerly to the south approach of the Sheridan Drive roundabout.

This Supplemental Agreement No. 2 is for preliminary and final design services, supplemental design survey, right-of-way services, utility coordination, cost estimates, plan preparation, assistance with bidding the project, and engineering during construction assistance. Westwood will provide the supplemental surveying, legal descriptions, and tract maps. Kantex is part of the design team to assist with utilities locations.

Preliminary Design

Task 100 – Surveys

100 TranSystems will contract with Westwood for supplemental surveying services.

See attached scope of services for Westwood.

101 Site visit including topo verification.

102 Document existing conditions with photographs.

Task 200 – Roadway Design

200 Finalize Project Design Criteria

- 201 Develop Typical Sections. The typical sections will include the number of lanes, lane widths, pavement sections, sidepaths, and right-of-way.
- 202 Establish horizontal geometries for Ridgeview Road including centerline alignment, back of curb, and sidepaths.
- 203 Look at widening options for the south end of the project through the Garmin and School entrances. This would include median and curb types.
- 204 Establish horizontal geometries for subdivision streets including Garmin South Drive/School Entrance, Meadow Lane, Garmin North Drive, Sheridan Bridge Lane, Sleepy Hollow Drive, Wells Fargo Drive, Frontier Lane, Butterfield Place, Stagecoach Drive, Sunvale Terrace, Sunvale Drive, Oxford Place, Salem Lane, Cambridge Street, and Sheridan Street.
- 205 Refine horizontal layouts of the roundabouts at Sheridan Bridge Lane and Frontier Lane. Develop horizontal alignments for the inscribed circle diameter (ICD), the edge of the truck apron, the centerline of each approach to the ICD and curb return profiles for all four quadrants.
- 206 Establish horizontal alignment for 33 driveways (business, church, residential).
- 207 Develop profiles for Ridgeview Road, two roundabouts, subdivision streets listed above, and driveways. Evaluate Ridgeview profile using minimum grades of 0.8% and 1.0%. The Ridgeview Road existing profile will be utilized in widening areas except for possibly flat areas previously discussed.
- 208 Develop preliminary curb return profiles (33).
- 209 Preliminary sidewalk/sidepath ramp layouts (52). Assumes ramps are not needed at driveways. Spot elevations for the ramps will be included in the plans.
- 210 Evaluate intersection sight distance at all side streets.
- 211 Design cross slope transitions required to tie into side streets.
- 212 Develop proposed roadway templates and surface model.
- 213 Establish grading/slope limits.
- 214 Develop preliminary horizontal and vertical alignment for up to five permanent retaining walls. It is assumed the walls will be shorter than 30 inches.
- 215 Cut cross-sections at 25-foot intervals and at special locations.
- 216 Prepare preliminary plan sheets which are anticipated to include the following sheets:
 - a. Title Sheet (1)
 - b. General Notes (1)
 - c. Typical Section Sheets (3)
 - d. Roadway Plan Sheets, 1"=20' (24)
 - e. Profile Sheets 1"=20' (H), 1"=2' (V) (24)
 - f. Intersection Details, 1"=20' (15)

- g. Driveway Detail Sheets (3)
- h. Storm Sewer Profiles (8)
- i. Retaining Wall Layout Sheet (1)
- j. Street lighting, 1"=50' (4)
- k. Traffic Signal, 1"=20' (10)
- l. Traffic Signal Interconnect, 1"=50' (1)
- m. Water Line Sheets, 1"=20' (7)
- n. Pavement Marking and Signing, 1"=50' (41)
- o. Construction Sequencing, 1"=100' (8)
- p. Cross Sections (25 ft. increment) (60)

Total Estimated Number of Sheets = 211

- 217 Calculate preliminary quantities.
- 218 Develop opinion of probable cost.
- 219 Attend progress meetings with the City to review project issues and direction of the project. A total of three meetings are budgeted for the Preliminary Plan phase.
- 220 Review Field Check Plan submittal
- 221 Prepare and submit Field Check Plans and opinion of probable costs.
- 222 Attend pre-field check meeting and field check review meetings to discuss the plans and project. Prepare meeting minutes for each meeting.
- 223 Project administration/management. Project set up, invoices, coordination with project disciplines, project schedule, and project budget monitoring.

Task 300 – Traffic Design (Street Lighting, Traffic Signal, Fiber Interconnect, Pavement Markings, Signing, Construction Phasing)

- 300 Refine geometrics based on storage lengths of turn lanes.
- 301 Prepare lighting calculations.
- 302 Preliminary layout of conventional street lighting along Ridgeview. At this stage of design, only the light plan (layout) will be prepared. A photometric model of Ridgeview Road will be developed using city arterial standard luminaires to determine the mounting height and pole spacing needed to meet IES recommended light levels. Photometric analysis will utilize Visual lighting software. Quantities will be estimated for purposes of generating the preliminary cost estimate.
- 303 Prepare preliminary traffic signal modification (layout only during preliminary design) at the South Garmin Entrance/School Entrance.
- 304 Prepare preliminary fiber optic interconnect plans between 151st Street and South Garmin Entrance/School Entrance.

- 305 Prepare preliminary relocation plan for the City Fiber located on the east side of Ridgeview.
- 306 Preliminary layout of pavement markings.
- 307 Preliminary layout of signing.
- 308 Preliminary Construction Sequencing Design. It is assumed there will be no more than four main phases of construction for the project, with no more than two subsets to any phase.
- 309 Determine temporary access requirements during construction including maintaining thru access on Ridgeview during construction. Determine potential temporary pavement needs and construction limits.
- 310 Determine right of way needs associated with Construction Sequencing.
- 311 Evaluate drainage during construction needs.
- 312 Develop traffic control typical sections.
- 313 Site Visits (2)
- 314 Calculate preliminary plan quantities and prepare preliminary opinion of probable construction cost for traffic items.
- 315 Attend Field Check meeting to discuss the traffic plans and design.

Task 400 – Drainage Design

- 400 Prepare design criteria to include with Project Design Criteria.
- 401 Review as-built storm sewer drawings.
- 402 Site visit including storm sewer outlet if accessible.
- 403 Determine drainage areas.
- 404 Perform hydraulic analysis based on the 10 year spread criteria and 50 year storm for the pipe design.
- 405 Layout storm sewer inlet locations based on allowable pavement spread.
- 406 Develop storm structure and piping scheme.
- 407 Determine storm pipe size and hydraulic calculations.
- 408 Design outlet protection at I-35 ditch.
- 409 Prepare construction notes for plan sheets
- 410 Prepare pipe profile sheets
- 411 Prepare storm sewer calculation table for plans

Task 500 – Waterline Design

- 500 Kickoff meeting with City staff to discuss relocation limits and general phasing.
- 501 Prepare preliminary alignment plan of proposed waterline replacement. Profile will be developed after the horizontal alignment is approved.
- 502 Develop water main plan and profile sheets.

- 503 Develop water main plan and profile sheets for water main extensions to connect existing waterlines on Cambridge Street, Salem Lane, and Sunvale Drive to Ridgeview Road.
- 504
- 505 Develop water main connection detail and notes.
- 506 Develop waterline phasing.
- 507 Develop water main replacement detail sheets including temporary pavement restoration areas.

Task 600 – Utility Coordination

- 600 Contact utility companies and request existing facility maps.
- 601 Review existing utility location to concept design to look for potential conflicts.
- 602 Meet with individual utility companies to determine location, type, size, private easements, potential conflicts/resolutions, and potential pothole requirements. Assume ten meetings.
- 603 Coordinate and field measure pothole locations. Assume twenty holes maximum.
- 604 Review pothole data and coordinate with utilities.
- 605 Develop utility relocation plan.
- 606 Send “status” roadway improvement plans to utilities.
- 607 Meet with individual utility companies to discuss utility relocation plan, relocation schedule, easement needs, and estimated City’s portion of relocation cost, if any. Assume ten individual meetings.
- 608 Prepare for and attend two group utility meetings.
- 609 Update utility relocation plan.
- 610 Utility correspondence and coordination.
- 611 Coordinate staking of curb inlets, storm manholes, etc. to ensure utility relocations avoid proposed improvements.

Task 700 – Right of Way and Easements

- 700 Add existing right of way and ownership information to plans
- 701 Determine required right of way, permanent utility easements, and temporary construction easements.
- 702 Review title work and coordinate title work updates (assumes 60 tracts).
- 703 Review easements, permanent easements, and required right of way with the City.
- 704 Review tract maps and descriptions.
- 705 Coordinate with City’s appraiser.
- 706 Update plans based on field check review comments related to right of way and easements.

707 Review and submit descriptions and tract maps to the City.

708 Coordinate staking with Westwood for property owners.

Task 800 – Public Involvement

800 Prepare exhibits and attend one Public Information Meeting.

801 Prepare for and attend meetings with adjacent property owners or stakeholders as directed by the City. Ten meetings have been budgeted.

Final Design

Task 900 – Roadway Design

900 Address Field Check comments

901 Finalize roadway geometrics including driveways, sidewalk/sidepath ramps, splitter island details, alignments, and intersection details.

902 Update plans based on right of way acquisition and utility relocation. Updates are assumed to be minor.

903 Finalize surface model and cross sections.

904 Develop fencing plan.

905 Incorporate the appropriate standard City details.

906 Finalize list of bid items. Calculate and provide summary tables.

907 Prepare an opinion of probable construction cost.

908 Prepare Office Check (Final) Plans which are anticipated to include the following sheets:

- a. Title Sheet
- b. General Notes
- c. Typical Section Sheets
- d. Survey Reference Sheets
- e. Alignment Detail/Sheet Layout Sheet
- f. Recap of Quantities
- g. Roadway Plan Sheets, 1"=20'
- h. Profile Sheets 1"=20' (H), 1"=2' (V)
- i. Intersection Details, 1"=20'
- j. Driveway Detail Sheets
- k. Storm Sewer Profiles
- l. Standard Detail Sheets
- m. Retaining Wall Layout Sheet
- n. Fencing Plans
- o. Street lighting, 1"=50'

- p. Traffic Signal, 1"=20'
- q. Traffic Signal Fiber Interconnect, 1"=50'
- r. Pavement Markings, 1"=50'
- s. Water Line Sheets, 1"=20'
- t. Signing, 1"=50'
- u. Construction Sequencing, 1"=100'
- v. Erosion Control Sheets
- w. Drainage Area Map
- x. Drainage Calculations
- y. Cross Sections (25 ft. increment)

Total Estimated Number of Sheets = 350

- 909 Perform quality assurance and quality checking on the plans.
- 910 Prepare final plan submittal.
- 911 Attend meeting with City to discuss comments on the development of final plans.
- 912 Update City standard details and address plan comments.
- 913 Update quantities and opinion of probable construction cost.
- 914 Prepare Project Manual including specifications.
- 915 Submit Final Plans, Specifications, and Estimate.
- 916 Project administration/management. Assume three progress meetings with the City.
Budget and schedule management, invoice preparation, internal design team meetings.

Task 1000 - Traffic Items (Street Lighting, Traffic Signal, Fiber Interconnect, Pavement Markings, Signing, Construction Phasing, Work Zone Traffic Control)

1000 Address Field Check comments

1001 Finalize Lighting Design

- a. Prepare voltage drop calculations and submit for review
- b. Finalize electrical service
- c. Finalize lighting plans (lighting layout, wiring diagrams, quantities, standard details)

1002 Finalize traffic signal design.

- a. Address Field Check comments
- b. Finalize electrical service.
- c. Prepare final plans including layout, wiring, quantities, and standard detail sheets.
- d. Calculate quantities.

- I003 Finalize traffic signal interconnect design.
 - a. Address Field Check comments
 - b. Prepare final plans including layout, quantities, wiring diagram, and standard detail sheets.
 - c. Calculate quantities.
- I004 Finalize pavement marking design.
 - a. Address Field Check comments.
 - b. Prepare plans including layout sheets, quantities table, cross walk details, line spacing, etc.
 - c. Calculate quantities.
- I005 Finalize City Fiber relocation.
 - a. Address Field Check comments.
 - b. Prepare final plans.
 - c. Coordinate with City selected contractor to perform the relocation prior to construction. It is assumed the work will be completed during utility relocations.
- I006 Signing design. Sign layout will be included on the pavement marking sheets.
 - a. Address Field Check comments.
 - b. Prepare final plans including layout sheets, quantities table, sign mounting details, etc...
 - c. Calculate quantities.
- I007 Final construction sequencing and work zone traffic control design.
 - a. Address Field Check comments.
 - b. Plan sheets (construction sequencing and general notes)
 - c. Plan sheets (traffic control typical sections for up to 4 phases)
 - d. Plan sheets (detailed work zone traffic control plans for up to 4 phases)
 - e. Plan sheets (temporary traffic signal for Ridgeview and the South Garmin Entrance/School Entrance)
 - f. Ridgeview Road Detour Plan sheet
 - g. Standard Detail sheets
 - h. Calculate quantities
- I008 Site Visits (three)
- I009 Project traffic administration (including up to three meetings with the City)
- I010 Prepare an opinion of probable construction cost for traffic items.
- I011 Perform quality assurance and quality checking on the traffic plans.
- I012 Attend final review meeting.
- I013 Address comments and submit Final Plans.

Task I 100 – Drainage Design and Permitting

- I 100 Address Field Check comments related to drainage.
- I 101 Finalize drainage plan sheets and storm profile sheets.
- I 102 Prepare drainage detail sheets including standard City details.
- I 103 Develop erosion and sediment control plans by phase (up to four phases).
- I 104 Finalize erosion and sediment control plan sheets including standard City details.
- I 105 Attend meeting with City staff to review erosion and sediment control plans.
- I 106 Address City comments and finalize plans.
- I 107 Calculate quantities.
- I 108 Prepare National Pollution Discharge Elimination System (NPDES) Notice of Intent for General Permit application.
- I 109 Prepare City Land Disturbance Permit.
- I 110 Prepare Storm Water Pollution Prevention Plan (SWPPP).

Task I 200 – Waterline Design

- I 200 Address Field Check comments.
- I 201 Final waterline design including service lines and meters to be relocated, replaced, or reused. Service line connection points will be identified.
- I 202 Finalize irrigation for each of the roundabouts.
- I 203 Final plan sheets.
- I 204 Calculate quantities and update opinion of probable construction cost.
- I 205 Perform quality assurance and quality checking on the waterline plans.
- I 206 Address comments on Final Plans.

Task I 300 – Utility Coordination

- I 300 Assist City with contacting utilities and coordinating utility relocations.
- I 301 Minor revisions to plans to accommodate utility relocation.
- I 302 Review utility relocation plans provided by the utilities to the City for permitting.
- I 303 Final Coordination meeting with utilities.
- I 304 Coordinate staking of curb inlets, storm manholes, etc. to ensure utility relocations avoid proposed improvements.

Task I 400 – Bid Services

- I 400 Update status of utilities report.
- I 401 Answer contractor questions or provide clarification during the bidding process.
- I 402 Review contractor bids and assist City in bid award recommendations.
- I 403 Assist City in preparation of Contract Documents for execution.
- I 404 Prepare sign and seal engineer's opinion of probable cost.

Task I500 – Construction Services

I500 Prepare exhibits and attend one Public Information Meeting with the contractor. Final plans will also be available as exhibit.

I501 Prepare for and attend Preconstruction Meeting. Assume City will lead the meeting. Provide up to four full size and six half-size sets of plans along with ten Project Manuals.

I502 Be available to respond to questions during construction. Assume 16-month construction schedule.

I503 Review construction material submittals including concrete mix design for curb and gutter and sidewalk, curing compound, expansion joint material, AB-3, detectable warnings, asphalt mix design, aggregate, erosion control, storm sewer pipe, and water line pipe.

I504 Review shop drawings for curb inlets and manholes. Assume 36 structures.

I505 Review traffic signal, lighting and fiber interconnect shop drawings.

I506 Attend construction progress meetings as requested by the City. Assume 32 (2 meetings per month, 16 months of construction) meetings.

I507 Attend and participate in final project walk through.

I508 Prepare record drawing based on information provided to TranSystems. Prepare and submit pdf of record drawings.

Deliverables

- Concept cost estimates
- Field Check Plans
- Field Check Opinion of Probable Construction Cost
- Legal Descriptions and Tract Maps
- Final Plans
- Project Manual
- Final pdf of plans and Project Manual
- Final Opinion of Probable Construction Cost
- Signed and sealed Engineers Opinion of Probable Construction Cost

Schedule

- Assumed Notice to Proceed (NTP) – October 2, 2019
- Field Check Plans – January 6, 2019
- Legal descriptions and tract maps – February 12, 2020
- Pre-final Plans – August 14, 2020

- Final Plans and Project Manual – October 31, 2020
- Bid Letting – January 2021
- Construction - 2021

Assumptions

- No irrigation design or plans (new or relocated) for adjacent properties are included in this scope of work. Assumes property owner will be compensated for this type of impact as part of the easement acquisition process.
- No design for any utility relocation is included in this scope of work other than the water line and City owned fiber optic line.
- No sanitary sewer impacts are anticipated and therefore no design services are included.
- Assume any fence relocation will be of the same type and location as currently exists.
- Neighborhood entrance signs relocation or replacement will be part of the right-of-way acquisition process.
- Design of temporary shooflies at roundabout locations are not included in the scope of services. It is assumed they are not needed for maintenance of traffic.
- The modified traffic signal design will include design elements (radar detection, LED street name signs, emergency vehicle detection, etc.) that are consistent with the existing signal design.
- There are no ITS elements associated with the project.
- No overhead signing is included on the project.
- No special sign mounting or footing designs are included on the project.
- Work zone traffic control components consist of the configuration of conventional traffic control devices. Items such as non-standard street/highway signage, timings for temporary signals, etc., are not included in our scope of services and fee. If additional work zone traffic control components are required, the exact scope will be specified and a supplement will be negotiated at that time.
- No property pins will be set as part of the rights-of-way and easement acquisitions.

Supuplemental No. 2

PN 3-C-058-19 Ridgeview, 143rd to 151st Improvements Project

9/24/2019

		TranSystems	Civil Eng Mgr	E-IV	E-III	E-II	E-I	T-V	T-IV	T-III	T-II	Labor Totals
		2019	\$ 255.00	\$ 230.00	\$ 165.00	\$ 135.00	\$ 103.00	\$ 180.00	\$ 130.00	\$ 106.00	\$ 84.00	
PRELIMINARY DESIGN												
Task 100 - Surveys												
100	Westwood coordination		4		4							\$ 1,680.00
101	Site visit including topo verification		0		0		0					\$ -
102	Document existing conditions with photographs						4					\$ 412.00
	Survey Subtotal		4		4		4					\$ 2,092.00
Task 200 - Roadway Design												
200	Finalize Project Design Criteria		4		6							\$ 2,010.00
201	Develop Typical Sections		2		4							\$ 1,170.00
202	Establish horizontal geometries for Ridgeview Road including centerline alignment, back of curb, and sidepaths		4		40		24					\$ 10,092.00
203	Look at widening options for the south end of project through the Garmin and school entrances.		2		12							\$ 2,490.00
204	Establish horizontal geometries for subdivision streets (15)		2		4		30					\$ 4,260.00
205	Refine horizontal layouts of the roundabouts at Sheridan Bridge Lane, Frontier Lane, and Sunvale Drive		2	26	4		13					\$ 8,489.00
206	Establish horizontal alignment for 33 driveways (business, church, residential)		0		0		0					\$ -
207	Develop profiles for Ridgeview Road, three roundabouts, subdivision streets and driveways		2		68		58					\$ 17,704.00
208	Develop preliminary curb return profiles (33)		2		24		56					\$ 10,238.00
209	Preliminary sidewalk/sidepath ramp layouts (52). Assume ramps are not needed at driveways.		2		8		150					\$ 17,280.00
210	Evaluate intersection sight distance at all side streets.		2		16		30					\$ 6,240.00
211	Develop cross slope transitions required to tie into side streets		2		24		8					\$ 5,294.00
212	Develop proposed roadway templates and surface model.		4		40		40					\$ 11,740.00
213	Establish grading/slope limits		2		4		8					\$ 1,994.00
214	Develop preliminary horizontal and vertical alignment for up to five permanent retaining walls		6		20		16					\$ 6,478.00
215	Cut cross-sections at 25-foot intervals and at special locations.		2		4		8		16			\$ 4,074.00
216	Prepare preliminary plan sheets		4		16		20			80		\$ 14,200.00
217	Calculate preliminary quantities		2		16		36					\$ 6,858.00
218	Develop opinion of probable cost		4		4		4					\$ 2,092.00
219	Attend progress meetings (3 are budgeted)		9		9		9					\$ 4,707.00
220	Review Field Check Plan submittal		8		8					4		\$ 3,784.00
221	Prepare and submit Field Check Plans and opinion of probable costs				2		2			2		\$ 748.00
222	Attend pre-file check and field check review meetings.		10		12		8					\$ 5,354.00
223	Project administration/management		24									\$ 6,120.00
	Roadway Design Subtotal		101	26	345	0	520	0	16	86	0	\$ 153,416.00
Task 300 - Traffic Design												
300	Refine geometrics based on storage lengths of turn lanes			6			24					\$ 3,852.00
301	Prepare lighting calculations			4			24					\$ 3,392.00
302	Preliminary layout of conventional street lighting along Ridgeview			8			28			32		\$ 8,116.00
303	Prepare preliminary traffic signal modification (layout only) at the South Garmin Entrance/School Entrance			8			24			24		\$ 6,856.00
304	Prepare preliminary fiber optic interconnect plans between 151st Street and South Garmin Entrance/School Entrance			4			12			8		\$ 3,004.00
305	Prepare preliminary relocation plan for the City Fiber located on the east side of Ridgeview			4			16			12		\$ 3,840.00
306	Preliminary layout of pavement markings			8			32			12		\$ 6,408.00
307	Preliminary layout of signing			10			36			16		\$ 7,704.00
308	Preliminary Construction Sequencing Design (4 phases, 2 subsets)			16			40			40		\$ 12,040.00
309	Determine temporary access requirements during construction, temporary pavement needs, and slope limits				16							\$ 2,640.00
310	Determine right of way needs associated with Construction				8		8					\$ 2,144.00
311	Evaluate drainage during construction needs			16			16					\$ 4,288.00
312	Develop traffic control typical sections			4			24			16		\$ 5,088.00
313	Site Visits (2)			4			8			8		\$ 2,592.00
314	Calculate preliminary plan quantities and prepare preliminary			6			20			12		\$ 4,712.00
315	Attend Field Check meeting to discuss the traffic plans and design			4			4					\$ 1,332.00
	Traffic Design Subtotal		0	86	40	0	316	0	0	180	0	\$ 78,008.00
Phase 400 - Drainage Design												
400	Prepare stormwater design criteria		0		0							\$ -
401	Review as-built storm sewer drawings		0		0							\$ -
402	Site visit including storm sewer outlet if accessible				0		0					\$ -
403	Determine drainage areas						2			4		\$ 630.00
404	Perform hydraulic analysis for the 10 and 100 year storm events		2		16		16					\$ 4,798.00
405	Layout storm sewer inlet locations based on allowable pavement spread		2		16		40					\$ 7,270.00
406	Develop storm structure and piping scheme		2		12		40					\$ 6,610.00
407	Determine storm pipe size and hydraulic calculations		2		20		40					\$ 7,930.00
408	Deign outlet protection at I-35 ditch		2		2		4					\$ 1,252.00
409	Prepare construction notes for plan sheets		2		8		8			24		\$ 5,198.00
410	Prepare pipe profile sheets		2		16		16			48		\$ 9,886.00
411	Prepare storm sewer calculation table for plans				4					4		\$ 1,084.00
	Drainage Design Subtotal		14	0	94	0	166	0	0	80	0	\$ 44,658.00
Phase 500 - Waterline Design												
500	Kickoff meeting with City staff							4				\$ 720.00
501	Prepare preliminary alignment plan. Profile developed after horizontal alignment is approved.			0		0		0				\$ -
502	Develop water main plan and profile sheets			4		124		24				\$ 21,980.00
503	Develop water main plan and profile sheets for water main extensions to connect existing waterline on Cambridge Street, Salem Lane, and Sunvale Drive to Ridgeview Road.					16						\$ 2,160.00
504	Develop irrigation concept for the two roundabouts					8		16				\$ 3,960.00
505	Develop water main connection detail and notes			4		80		30				\$ 17,120.00
506	Develop waterline phasing					8		8				\$ 3,272.00
507	Develop water main replacement detail sheets											\$ 752.00
	Waterline Design Subtotal		0	8	0	236	0	82	0	0	0	\$ 49,964.00
Phase 600 - Utility Coordination												
600	Contact utility companies and request existing facility maps		2									\$ 510.00
601	Review existing utility location to concept design to look for potential conflicts		2		2							\$ 840.00

Supuplemental No. 2
PN 3-C-058-19 Ridgeview, 143rd to 151st Improvements Project

9/24/2019

602	Meet with individual utility companies to determine location, type, size, private easement, potential conflicts/resolutions (up to 10 meetings)	4	12	16						\$	4,648.00
603	Coordinate and field measure pothole locations (20 holes max)			20				20		\$	4,180.00
604	Review pothole data		2	6						\$	948.00
605	Develop utility relocation plan	4	16	32				12		\$	8,228.00
606	Send "status" roadway improvement plans to utilities			2				2		\$	418.00
607	Meet with individual utility companies to discuss utility relocation plan, relocation schedule, easement needs, and estimated City's portion of relocation cost. (10 meetings)	4	12	16						\$	4,648.00
608	Prepare for and attend two group utility meetings	8	8	12						\$	4,596.00
609	Update utility relocation plan		8	24				16		\$	5,488.00
610	Utility correspondence and coordination	6	8	8						\$	3,674.00
611	Coordinate staking of curb inlets, storm manholes, etc. to ensure utility relocations avoid proposed improvements.	2	4	4				4		\$	2,006.00
	Utility Coordination Subtotal	32	0	72	0	140	0	0	54	0	\$ 40,184.00
Phase 700 - Right of Way and Easements											
700	Add existing right of way and ownership information to plans		6					18		\$	2,898.00
701	Determine required right of way, permanent utility easements, and temporary construction easements	4	6	4				6		\$	3,058.00
702	Review title work and coordinate title work updates (assumes 60 tracts)		8	4						\$	1,732.00
703	Review easements, permanent easements, and required right of way with the City.	4	4							\$	1,680.00
704	Review tract maps and descriptions	4	16	16						\$	5,308.00
705	Coordinate with City's appraiser	4								\$	1,020.00
706	Update plans based on field check review comments related to right of way and easements	4	16	24				24		\$	8,676.00
707	Coordinate staking with Westwood for property owners		8	12				6		\$	3,192.00
	Right of Way and Easements Subtotal	20	0	64	0	60	0	0	54	0	\$ 27,564.00
Phase 800 - Public Involvement											
800	Prepare exhibits and attend one Public Information Meeting	8	16	16				16		\$	8,024.00
801	Prepare for and attend meetings with adjacent property owners or stakeholders as directed by the City (10 meetings)	20	20	16						\$	10,048.00
	Public Involvement Subtotal	28	0	36	0	32	0	0	16	0	\$ 18,072.00
	Preliminary Design Subtotal	199	120	655	236	1238	82	16	470	0	\$ 413,958.00
FINAL DESIGN											
Phase 900 - Roadway Design											
900	Address Field Check comments	4	8	16				24		\$	6,532.00
901	Finalize roadway geometrics including driveways, sidewalk/sidepath ramps, splitter island details, alignments, and intersection details	16	80	80						\$	25,520.00
902	Update plans based on right of way acquisition and utility relocation	2	12	12				12		\$	4,998.00
903	Finalize surface model and cross sections		16	8						\$	3,464.00
904	Develop fencing plan		4	4				12		\$	2,344.00
905	Incorporate the appropriate standard City details		6					16		\$	2,686.00
906	Finalize list of bid items. Calculate and provide summary tables	2	4	8				8		\$	2,842.00
907	Prepare opinion of probable construction cost	2	4							\$	1,170.00
908	Prepare Office Check (Final) Plans	4	16	16				180		\$	24,388.00
909	Perform quality assurance and quality checking on the plans	8	8							\$	3,880.00
910	Prepare final plan submittal		4					4		\$	1,084.00
911	Attend meeting with City to discuss comments on the development of final plans	4	4							\$	1,680.00
912	Update City standard details and address plan comments		4	4				8		\$	1,920.00
913	Update quantities and opinion of probable construction cost	2	2							\$	840.00
914	Prepare Project Manual including specifications	8	48	8						\$	10,784.00
915	Submit Final Plans, Specifications, and Estimate	2						4		\$	934.00
916	Project administration/management	40								\$	10,200.00
	Roadway Design Subtotal	94	8	212	0	156	0	0	268	0	\$ 105,266.00
Phase 1000 - Traffic Design											
1000	Address Field Check comments		2	8				4		\$	1,708.00
1001	Finalize Lighting Design										
a	Prepare voltage drop calculations		2	16						\$	2,108.00
b	Finalize electrical service		6	8						\$	2,204.00
c	Finalize lighting plans	20		80				80		\$	21,320.00
1002	Finalize traffic signal design										
a	Address Field Check comments		2	8				4		\$	1,708.00
b	Finalize electrical service		4	4						\$	1,332.00
c	Prepare final plans		16	32				28		\$	9,944.00
d	Calculate quantities		4	12						\$	2,156.00
1003	Finalize Traffic signal interconnect design										
a	Address Field Check comments		2	4				4		\$	1,296.00
b	Prepare final plans		8	24				16		\$	6,008.00
c	Calculate quantities		2	8				8		\$	2,132.00
1004	Finalize Pavement Marking design										
a	Address Field Check comments		2	8				6		\$	1,920.00
b	Prepare plans		12	32				40		\$	10,296.00
c	Calculate quantities		4	12				8		\$	3,004.00
1005	Finalize City Fiber Relocation										
a	Address Field Check comments		2	4				4		\$	1,296.00
b	Prepare final plans		12	32				24		\$	8,600.00
c	Coordinate with city selected contractor to perform the relocation prior to construction.		8	24						\$	4,312.00
1006	Signing Design										
a	Address Field Check comments		2	8				6		\$	1,920.00
b	Prepare final plans		16	36				40		\$	11,628.00
c	Calculate quantities		6	16				12		\$	4,300.00
1007	Final Construction Sequencing and Work Zone Traffic Control										
a	Address Field Check comments		6	16				12		\$	4,300.00
b	Plan sheets (construction sequencing and general notes)		8	24				24		\$	6,856.00
c	Plan sheets (traffic control typical section for up to 4 phases)		12	40				40		\$	11,120.00
d	Plan sheets (detailed work zone traffic control plans for up to 4 phases)		40	240				240		\$	59,360.00
e	Plan sheets (temporary traffic signal for Ridgeview and the South Garmin Entrance/School Entrance)		8	16				12		\$	4,760.00
f	Ridgeview Road Detour Plan sheet		6	24				12		\$	5,124.00
g	Standard Detail sheets			4				8		\$	1,260.00
h	Calculate quantities		4	40				60		\$	11,400.00
1008	Site Visits (three)		4	12				8		\$	3,004.00
1009	Project traffic administration (incl. up to three meetings with the City)		24	8						\$	6,344.00
1010	Prepare opinion of probable construction cost for traffic items		8	16						\$	3,488.00

9/24/2019

Labor Summary	<i>Civil Eng. Mgr</i>	\$	104,040
	<i>E-IV</i>	\$	105,800
	<i>E-III</i>	\$	194,205
	<i>E-II</i>	\$	45,360
	<i>E-I</i>	\$	252,762
	<i>T-V</i>	\$	24,840
	<i>T-IV</i>	\$	2,080
	<i>T-III</i>	\$	167,904
	<i>T-II</i>	\$	-
	Total Labor	\$	896,991
<i>Printing/Transportation</i>		\$	3,900
<i>Westwood</i>		\$	76,570
<i>Kantex</i>		\$	19,691
	Total Expenses	\$	100,161
	Total Fee	\$	997,152



A PROPOSAL FOR
TRANSYSTEMS

S. Ridgeview Road Improvements – Phase II
Olathe, Johnson County, KS

AUGUST 07, 2019
Better people. Better results.

Prepared For:
TranSystems

Prepared By:

Westwood

August 09, 2019

Bob Miller, PE
TranSystems
2400 Pershing Road, Suite 400
Kansas City, MO 64108

Re: South Ridgeview Road Improvements – Phase II
Westwood Project 0023807.00

Bob,

Thank you for inviting Westwood to propose survey services in support of TranSystems South Ridgeview Road Improvements – Phase II, located in Olathe, KS. Westwood respectfully submits the following response to the recently received request for proposal.

SUMMARY

TranSystems is seeking a proposal to include survey control, additional topographic survey, additional utility locations, additional existing storm and additional sanitary sewer locations, engineering base mapping, property research, right of way determinations, existing easement determinations. The project location is in Section 1, Township 14 South, Range 23 East, Section 6, Township 14 South, Range 24 East and Section 31, Township 13 South, Range 24 East in Olathe, Kansas

PROPOSED SCOPE OF WORK

1. SURVEY CONTROL

Westwood will utilize fast-static GPS methods or the MoDOT VRS in order to add more site control at the South end of the existing project. Monumentation shall be placed at locations, so as not to be disturbed as practical. Great care will be taken to establish the monuments in public right-of-way areas near the proposed intersection. Monuments will consist of 1/2 inch x 24 inch rebar with a plastic control point cap set over the top of the rebar. Control will be referenced to OPUS solutions and existing NGS monumentation, if applicable. A least squares adjustment and statistical accuracies will be determined for the control network. Coordinate system to be Kansas State Plane NSRS(2011) North Zone in US Survey Feet.

2. TOPOGRAPHIC/CROSSING & UTILITY UPDATE FEATURES

Westwood field crews will locate certain topographic/crossing & utility features such as roads tie in locations, fences/gates, power lines, wells and irrigation, building outlines, dense tree outlines, underground utilities not previously located in Phase 1, from requested one-call and as-built mapping, if applicable.

For power lines, the first pole on either side of the crossing will be located along with the attachment points and shots at mid-span on the conductor and shield wires. Reflectorless total stations will be used to collect this information and weather conditions at the time of the field collection will be recorded along with the date and time.

For underground utilities, a KANSAS One Call will be made to request that any utilities that fall with the survey limits (see figure 1). Flagging and paint marks will be requested for identification and location by Westwood survey crews. Utility locator site meetings may be needed for identification and location by Westwood survey crews. Utility locator site meetings may be required and mapping of the approximate line placement may need to be provided to the utility companies in order for markings to be provided in the field. Westwood survey crews will identify and annotate the underground utilities to the best extent possible from ground markers, manholes, pole tags, vent pipes, water meters & valves, utility boxes, storm and sanitary sewer structures and lines crossing through the project. Westwood will assume 5 field trips for pothole locations as needed for TranSystems and their design.

Westwood may utilize a DJI Phantom 4 Pro Quad Copter drone or Airborne LiDAR from a fixed wing aircraft to collect aerial imagery the area as outlined in the KMZ file provided by TranSystems on July 15, 2019 and the survey limits (See Figure 1). Westwood has already reviewed the site for FAA clearance. Our plan would be to fly this project at a time when the area would have minimal aircraft, vehicle and pedestrian traffic. A total of 6 to 18 aerial targets will be located by Westwood depending on the type of imagery acquiring procedure utilized at Westwood's discretion.

Westwood will be converting the coordinates, drawings, surfaces and imagery to ground (U.S. Survey Feet) using the combined adjustment factor (CAF) assigned for Phase 1 of this project.

All the collected information will be drafted into the project CAD drawing and the project map will be delivered to the client to aid in design purposes.

Perform necessary field checks for data accuracy.

3. BOUNDARY SURVEY

3.1. Research

Westwood will research at the local county and state levels for items such as plats, recorded surveys, section corner reports, GLO notes, and road highway records. Westwood will procure an estimated 60 Ownership and Encumbrance reports not more than 9 months old that show current ownership, liens, mortgages, existing easements and any other encumbrances upon the property. Copy of last deed or record will be provided as well.

3.2. Field Work

Westwood survey field crews will locate additional monumentation within the project area in order to support the drafting of deeded and platted property lines (lot and block) and road right-of-way for the proposed project. Monumentation will include lot and block monuments of the existing platted properties or monuments called for in the existing deeds. All field work will be under the direct supervision of a Kansas Licensed Surveyor.

3.3. Drafting

Westwood staff will draft up the section lines, property lines (lot and block), road right-of-ways, planimetrics from both additional aerial and additional ground survey and merge with the existing surface and models from Phase I.

4. PARCEL PLACEMENT

Westwood survey staff will draft up individual land owner parcels being affected by the proposed improvements from existing record surveys, recorded plats and/or deeds and Ownership and Encumbrance reports. Information show will be to the Land Acquisition Checklist for Consultant projects provided by the City of Olathe. (See Exhibit "D").

5. EASEMENT PREPARATION AND EXHIBIT PREPARATION

Westwood will prepare permanent easements exhibits w/ descriptions and temporary construction exhibits w/ descriptions for acquisition. Actual easement document to be prepared by others.

6. EASEMENT STAKING

Westwood set lathe only at the proposed Permanent and Temporary easement locations for land owner and city viewing as well as utility company viewing, as established by TranSystems on a one-time only basis or viewing. Any additional staking will be billed on Westwood's 2019 Hourly Rate Schedule.

7. CENTERLINE PROPOSED ROAD LOCATION

Westwood will set the proposed locations of all proposed centerline road with stationing for utility relocations purposes.

8. STORM STRUCTURE STAKING FOR UTILITY RELOCATION

Westwood will set 4 stakes per structure at the following locations:

- a. 2 stakes at the front of the structure at proposed back of curb.
- b. 2 stakes at each corner of the back of structure.

9. DELIVERY ITEMS

- 9.1. Survey control report.
- 9.2. Survey Topographic base drawing (3D) and TIN model in DWG, DXF or XML format depicting control, topographic planimetric features and utilities.
- 9.3. Survey Boundary base drawing (2D) in DWG, DXF or XML format depicting section lines, section corners, road right-of-way lines, and individual land owner parcels.
- 9.4. Information and mapping obtained from the Kansas One Call, Johnson County Public Works and the city of Olathe.
- 9.5. ASCII point files, pdf field notes, structure invert information, tin triangle lines, contours, existing right of way drawing, aerial imagery, section corner tie notes, horizontal and vertical control recovery ties.

10. SCHEDULE

Additional Topographic Mapping	Within 3 weeks of NTP
Boundary Survey/Parcel Drafting	Based on Reciept of Reports
Easement Descriptions & Exhibits	TBD
Easement Staking & Storm Structure Staking	TBD

FEE SCHEDULE

Office Mapping (CADD)	\$	5,200.00	
Storm Sewer Structure Staking (Estimated 70)	\$	8,500.00	
Project Management, QAQC, PLS Calculations	\$	2,450.00	
Proposed Easement & Description Preparation	\$	14,800.00	
Title Work Procurement and Updates (60)	\$	21,200.00	
Proposed Easement & Centerline Road Staking	\$	11,100.00	
TOTAL LUMP SUM FEE	\$	76,570.00	

11. FEE ASSUMPTION

1. This proposal is subject to the terms and conditions of the Continuous Services Subcontract Agreement between TranSystems and Westwood Professional Services, dated January 24, 2018.
2. Work will be billed on a monthly progress basis.
3. Overall project is based on information provided by TranSystems on July 15, 2019.
4. Fee based upon minimal weather delays.
5. Westwood estimates that 5 trips will be made to located buried utilities un-covered by others. Additional trips will be billed hourly at Westwood's 2019 Rates.
6. Proposed Easement and Permanent Takings to be staked one-time only for viewing.
7. Centerline will be staked at 100 foot intervals with mag nails in pavement and proposed road stationing based upon TranSystems design centerlines.
8. Storm sewer structure staking will be a one-time only basis for utility company relocation viewing purposes only. Stakes will not be for construction purposes.
9. All other work requested and not included in the proposed scope of this proposal will be billed based on our 2019 hourly rate schedule.

We hope the forgoing proposal and fee schedule is sufficiently adequate in detail for your record. Please let us know if additional information is required and thank you for your consideration.

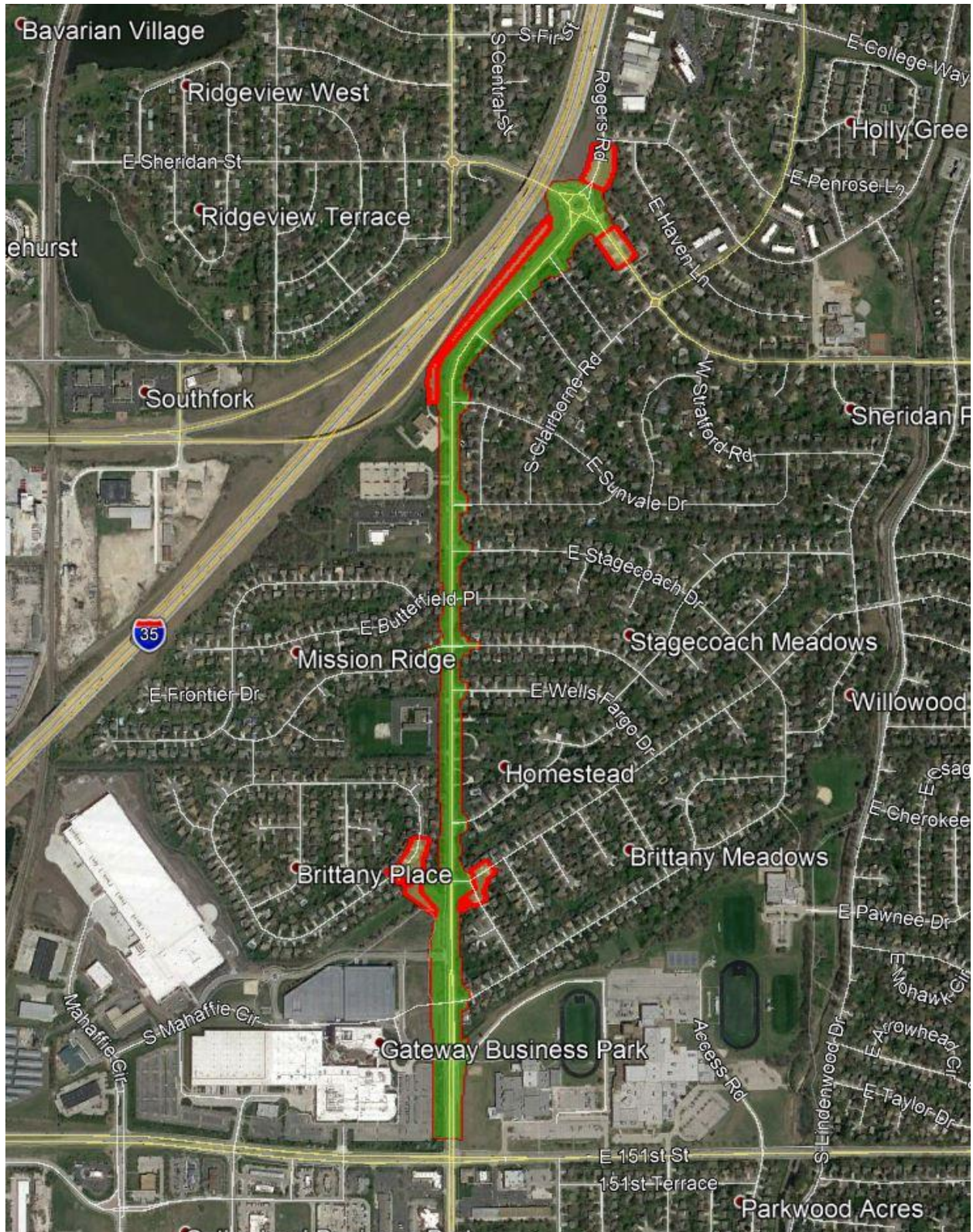
Sincerely,

WESTWOOD PROFESSIONAL SERVICES



Kirk R. Baldwin, PLS
Survey Project Manager

FIGURE 1 – SURVEY LIMITS



DATE: Sunday, September 15, 2019

CUSTOMER CONTACT: Robert Miller - 816-329-8751
Rimiller@transystems.com

ADDRESS: Ridgeview - 151st to 143rd



TYPE OF WORK: Perform (20~) (10) core drilled & (10) potholes in grass on Ridgeview rd.
*Kantex to supply all equipment, traffic control, personel to complete this work

THIS IS AN ESTIMATED COST ONLY. CUSTOMER WILL BE INVOICED FOR ACTUAL TIME AND MATERIALS.

GENERAL	HR	OT	QTY	TOTAL	MATERIALS	\$ PER	QTY	TOTAL
AIR VACUUM EXCAVATION UNIT	\$ 138.00		50	\$ 6,900.00	15g XOThrm Weld Shot (ign stick/sleeve)	\$ 5.97	0	\$ -
HYDRO EXCAVATION UNIT	\$ 160.00		0	\$ -	Brushes	\$ 2.05	0	\$ -
LEVEL 1 OR 2 VAC TECHNICIAN	\$ 48.00		65	\$ 3,120.00	Blasting Grit (Black Beauty med grit)	\$ 25.00	0	\$ -
		\$ 72.00	20	\$ 1,440.00	Sanding Discs	\$ 2.10	0	\$ -
LEVEL 3 VAC TECHNICIAN	\$ 78.00		40	\$ 3,120.00	DENSO 7125 50 ml	\$ 22.00	0	\$ -
		\$ 117.00	10	\$ 1,170.00	DENSO 7125 825 ml	\$ 75.55	0	\$ -
GPS TECHNICIAN	\$ 80.00		0	\$ -	DENSO 7200 50 ml	\$ 19.54	0	\$ -
		\$ 120.00	0	\$ -	DENSO 7200 400 ml	\$ 43.24	0	\$ -
SUPERVISOR DESIGNATING TECHNICIAN	\$ 84.00		0	\$ -	Viscotag Patch	\$ 10.73	0	\$ -
		\$ 126.00	0	\$ -	4" Wax Tape & Wax Paste per foot	\$ 4.25	0	\$ -
PROJECT MANAGER	\$ 105.00		0	\$ -	Stealth II W/50' Lead	\$ 166.00	0	\$ -
		\$ 158.00	0	\$ -	Hepa Filter Cartridge	\$ 280.00	0	\$ -
PROJECT COORDINATOR	\$ 87.00			\$ -	Royston Mastic	\$ 57.70	0	\$ -
		\$ 130.00	0	\$ -	Asbestos Charge per site	\$ 75.00	0	\$ -
ADMINISTRATIVE/ONE CALL	\$ 41.00		1	\$ 41.00	T3 Test Station	\$ 47.20	0	\$ -
DAILY RATES	RATE		QTY	TOTAL	#2 HMWPE per foot	\$ 1.70	0	\$ -
PER DIEM (per person)	\$ 166.00	*****	0	\$ -	#4 HMWPE per foot	\$ 1.13	0	\$ -
DESIGNTING, UTILITY, RECOAT TRK	\$ 150.00	*****	5	\$ 750.00	#6 HMWPE per foot	\$ 0.75	0	\$ -
FLATBED ONE TON	\$ 175.00	*****	0	\$ -	#8 THHN per foot	\$ 0.55	0	\$ -
PIN BRAZER UNIT	\$ 150.00	*****	0	\$ -	#10 THHN per foot	\$ 0.34	0	\$ -
Traffic Control	\$ 275.00	*****	4	\$ 1,100.00	#12 THHN per foot	\$ 0.24	0	\$ -
Ride on Trencher W/Trailer	\$ 300.00	*****	0	\$ -	#14 RHW per foot	\$ 0.24	0	\$ -
Back fill/Flo-Fill	\$ 125.00	*****	5	\$ 625.00	#10/#12 Pin Braze	\$ 15.63	0	\$ -
HAMMERHEAD (2.5 INCH)	\$ 100.00	*****	0	\$ -	Cold Patch (asphalt patch)	\$ 25.00	0	\$ -
GENERATOR & Core Machine	\$ 90.00	*****	3	\$ 270.00	Quickcrete Concrete	\$ 10.50	10	\$ 105.00
OTHER	RATE		QTY	TOTAL	ESTIMATED TOTAL: \$ 19,691.00			
PAVEMENT CORES		*****						
< THAN OR = TO 8" COMPLETED	\$ 105.00	*****	10	\$ 1,050.00				
> THAN 12" COMPLETED	\$ 175.00	*****	0	\$ -				
4 WHEELER/HOURLY	\$ 20.00	*****	0	\$ -				
4X4 SIDE BY SIDE/HOURLY	\$ 28.00	*****	0	\$ -				



The rates and prices quoted herein presume that Kantex Standard Credit Terms shall apply to this project. Billings shall be rendered no less often than monthly, and are due NET 30 days from the date of the billing. No retention shall be applied to or deducted from any progress or final billing, unless specifically agreed to at the beginning of work. Per published rate schedule, "interest will accrue at 1.5% monthly on all past due accounts."

The Gold Shovel Standard is a first-of-its kind excavation safety program designed to reduce dig-ins and protect the underground gas and electric system. With safety as its highest priority, the Gold Shovel Standard Certification process was developed to ensure that hired contractors are vetted annually and adhere to the safest excavation standards. For more information, visit goldshovelstandard.com.