

RFB #17-0034

**ADDENDUM NO. 1**

**Sedgwick County Project: 628-5-1671; Bridge on 39<sup>th</sup> St. South  
between 327<sup>th</sup> & 343<sup>rd</sup> Streets West (B467)**


**The items contained herein now become a part of the referenced plans and specifications. Please read the following items and acknowledge receipt of this addendum on the Proposal Page Number P-1. NOTE: THIS ADDENDUM MUST BE ACKNOWLEDGED TO CONSTITUTE A VALID BID.**

***SPECS:***

Replace SOP-1 to 2 with SOP-1R to 2R.  
(Added item for Class II Excavation and changed Slope Protection unit to Sq. Yds.)

***PLANS:***

Replace Sheet 15 with sheet 15R.

By:   
David C. Spears, P.E.  
Director/County Engineer

**Date: March 29, 2017**

SCHEDULE OF PRICES

**PROJECT: 628-5-1671; Bridge 39th St. South between 327th & 343rd Streets West (B467)**

**TYPE OF WORK: RCSH Bridge, Grading, Surfacing (Asphalt), Guardrail, Seeding, Pavement Marking**

Bidding Item	Approx. Quantity	Unit	Unit Price	Amount
Contractor Construction Staking	1	LS		
Field Office	1	Each		
Foundation Stabilization (Set Price)	1	Cu. Yd.	40.00	
Mobilization	1	LS		
Removal of Existing Structures	1	LS		
Maintenance & Restoration of Haul Roads (Set Price)	1	LS	8,000.00	
Clearing and Grubbing	1	LS		
Common Excavation	2,747	Cu. Yd.		
Rock Excavation	222	Cu. Yd.		
Compaction of Earthwork (Type B)(MR-90)	342	Cu. Yd.		
Compaction of Earthwork (Type AA)(MR-5-5)	206	Cu. Yd.		
Water (Grading)(Set Price)	1	Mgal	35.00	
Entrance Pipe (24")(RCP)	53	Lin. Ft.		
End Section (24")(RC)	2	Each		
Guardrail, Steel Plate	100	Lin. Ft.		
Guardrail End Terminal (SRT)	4	Each		
Signing Object Marker (Type 3)	4	Each		
Class I Excavation	118	Cu. Yd.		
Class II Excavation	49	Cu. Yd.		
Concrete (Grade 4.0)(AE)	99	Cu. Yd.		
Concrete (Grade 4.0)(AE)(SA)	538	Cu. Yd.		
Reinforcing Steel (Grade 60)(Epoxy Coated)	161,230	Lbs.		
Reinforcing Steel (Grade 60)	4,170	Lbs.		
Bridge Backwall Protection System	46	Sq. Yd.		
Abutment Strip Drain	40	Sq. Yd.		
Slope Protection (Riprap Stone)	523	Sq. Yd.		
Piles (Steel)(HP12x53)	1,637	Lin. Ft.		
Test Piles (Special)(HP12x53)	162	Lin. Ft.		
Pile Driving Analyzer (PDA)	3	Each		
Bridge Deck Grooving	714	Sq. Yds.		
Concrete Pavement (10" Uniform)(AE)(BR APP)	107	Sq. Yds.		
6" HMA-Commercial Grade (Class A)	94	Sq. Yds.		
7" HMA-Commercial Grade (Class A)	1,235	Sq. Yds.		
Aggregate Base (Special)(6")	1,235	Sq. Yds.		
Aggregate Ditch Lining (6")	74	Tons		

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Bidding Item	Approx. Quantity	Unit	Unit Price	Amount
Water (Aggregate Base)(Set Price)	1	Mgal	35.00	
Mailbox Installation (Set Price)	1	Each	140.00	
Pavement Marking Paint (Yellow)(4")	1,046	Lin. Ft.		
Pavement Marking Paint (White)(4")	751	Lin. Ft.		
Temporary Seeding	1	LS		
Seeding	1	LS		
Temporary Berm (Set Price)	1	Lin. Ft.	35.00	
Silt Fence	1,361	Lin. Ft.		
Biodegradable Log (9")	56	Lin. Ft.		
Temporary Ditch Check (Rock)	9	Cu. Yd.		
Sediment Removal (Set Price)	1	Cu. Yd.		
SWPPP Design	1	LS		
Water (Erosion Control)(Set Price)	1	Mgal	35.00	
Traffic Control	1	LS		
<b>Grand Total</b>				

In Words: \_\_\_\_\_

DOLLARS

\_\_\_\_\_  
Company or Firm Name

\_\_\_\_\_  
BY

\_\_\_\_\_  
TITLE

Plot 4  
 Longest Span Length = 56'  
 Total No. of Spans = 4  
 Roadway Width = 36'  
 Skew and Direction = 0  
 HL-93 Rating Type = Corral

SUMMARY OF QUANTITIES

Location	Excavation		Concrete		Reinforcing Steel		†Piles	†Test Piles	Pile	Bridge	Abutment	Slope	Bridge
	Class I	Class II	(Grade 4.0)	(Grade 4.0)	(Grade 60)	(Grade 60)	(Steel)	(Special)(Steel)	Driving	Backwall	Strip	Protection	Deck
	Cu. Yds.	Cu. Yds.	(AE)(SA)	(AE)	(Epoxy Coated)	(Grade 60)	HP Beams	HP Beams	Analyzer	Prot. System	Drain	(Riprap Stone)	Grooving
Abutment No. 1	58.6		**		**		186.8	56.7	1	23.0	20.0	258.5	
Pier No. 1		16.1 Δ		32.9		1,390	432.0						
Pier No. 2		16.1 Δ		32.9		1,390	388.8	53.2	1				
Pier No. 3		16.1 Δ		32.9		1,390	462.0						
Abutment No. 1	58.6		**		**		166.8	51.7	1	23.0	20.0	264.0	
Substr. Total	117.2	48.3 Δ		98.7		4,170	1,636.4	161.6	3	46.0	40.0	522.5	
Superstr. Total			537.8		161,230								713.3
Total	118	49 Δ	538	99	161,230	4,170	†1,637	†162	3	46	40	523	714

\*\* Quantities are included in the Superstructure Total Quantity

† Summary of Piling

Abutment No. 1	4 @ 46.7 ft.	1 @ 56.7 ft.
Pier No. 1	10 @ 43.2 ft.	
Pier No. 2	9 @ 43.2 ft.	1 @ 53.2 ft.
Pier No. 3	10 @ 46.2 ft.	
Abutment No. 2	4 @ 41.7 ft.	1 @ 51.7 ft.

CONTRACTOR CONSTRUCTION STAKING: Contractor Construction Staking for clear span bridges requires two independent surveys. See KDOT Specifications.

\*NOTE: Use only 12 x 53 Steel HP Beam Piles in the abutments and piers. Cast Steel Pile Points are Subsidiary to Piling.

GENERAL NOTES

EXISTING STRUCTURE: Plans of the existing structure are on file and available for inspection by qualified bidders at the Sedgwick County Public Works building, 1144 South Seneca, Wichita, KS 67213.

EMBANKMENT: Complete the embankment at the abutments as shown on the Bridge Excavation sheet prior to driving the abutment piling.

BRIDGE EXCAVATION: Elevation 1331.86 shall designate the Excavation Boundary Plane of Class I and Class II Excavation; Class I above the plane, Class II below the plane. See the Bridge Excavation sheet for the limits of pay excavation.

BACKFILL COMPACTION: Compact backfill at the abutments.

PILING: Drive all piling to penetrate or bear upon the Wellington Shale. Drive all piling to at or below the required elevation shown. Driving shall stop when in the opinion of the Engineer additional driving may damage the piling. Drive all piling to the Pile Driving Formula Load of:

Abutment No. 1 & 2	62	Tons (Strength I)
Pier No. 1, 2, & 3	82	Tons (Strength I)

As a minimum drive each pile to the load and penetration, but in no case shall the pile be driven to more than 110% of Pile Driving Formula Driving Load. At any location where problems are experienced, pile damage is suspected, or the Pile Driving Formula Load occurs significantly above the design pile tip elevation, the Engineer may request that the Pile Driving Analyzer (PDA) equipment be used.

TEST PILE SPECIAL: Drive the test pile special at the locations directed by the Engineer/Geologist or as shown on the Plans. Use Pile Driving Analyzer (PDA) equipment and methods compliant with KDOT Specifications. The test piling shall remain in place as permanent piling. Drive the test pile special piling to the resistance value of the Strength I load divided by Phi shown on the plans.

PILING SPLICE LOCATION: Integral pile splice locations and weld testing criteria for Abutments "1" & "2" and Piers "1", "2", & "3" will follow the "Standard Pile Details" Sheet (BR110).

CORRAL RAIL: Build the corral rail after the falsework is struck.

ABUTMENT STRIP DRAIN: See the General Notes on the "Abutment Strip Drain" sheet.

BRIDGE BACKWALL PROTECTION SYSTEM: See the General Notes on the "Abutment Strip Drain" sheet.

REMOVAL OF EXISTING STRUCTURE: Removal of existing structure is included in the bid item, "Removal of Existing Structures", Lump Sum. All materials removed from the existing structure shall become the property of the Contractor. The clean concrete rubble from the existing structure may be used for slope protection. Remove any remaining material from the site.

SLOPE PROTECTION (Riprap Stone): Place Slope Protection (Riprap Stone) to the limits and thicknesses shown on the plans or as directed by the Engineer. Use Light 18" Series as described in Division 1114 placed to the limits shown on the plans.

DRIP LINE PROTECTION: Place a 10 foot wide mat of Geotextile under the rock/rubble embankment on the berm and berm slopes and centered on the drip lines of the stub. Cost for this item is subsidiary to the bid item, "Slope Protection (Riprap Stone)".

CONCRETE: Superstructure concrete is bid as Concrete (Grade 4.0)(AE)(SA). Substructure concrete is bid as Concrete (Grade 4.0)(AE). If desired, the Contractor may use Concrete (Grade 4.0) in the footings and in the abutments below the construction joint. Bevel all exposed edges of all concrete with a ¼ triangular molding, except where noted on the plans. Construction joints are optional, but if used, place only at locations shown, or at locations approved by the Engineer.

REINFORCING STEEL: All reinforcing steel dimensions are to the centerline of bars unless otherwise noted. All reinforcing steel, except the spiral bars, shall conform to the requirements of ASTM A615, Grade 60. Spiral bars may meet the requirements of either ASTM A615 (Gr. 40 or 60) or A82, and are included in the bid item "Reinforcing Steel (Gr. 60)".

Where non-coated bars come in contact with epoxy coated bars, they need not be coated.

CAMBER: Provide camber as shown on the Camber Diagram unless the Contractor uses either long span steel beam falsework (concrete dead load deflection greater than ¼ inch) or timber falsework with greater than 12'-0" clear span. If either case exists, submit falsework plans that show the additional required camber.

FALSEWORK INSPECTION: This project has falsework plan requirements which are considered "Category 2" by KDOT specifications. If falsework deficiencies or variations from the approved and sealed plans are found, the falsework design Engineer of Record will provide written approval of the changes. If for the convenience of the Contractor the falsework becomes "Category 1" by the use of non-typical supports; then the inspection and review requirement of "Category 1" will be fully enforced, but at no cost to the County. "Category 2" falsework inspection is not paid for directly, but is subsidiary to other bid items.

FALSEWORK: Leave the falsework in place for the entire unit until 15 days after the last concrete pour for the unit or longer as directed by the Engineer.

DEMOLITION PLANS: This is a Category A Demolition. Submit detailed Demolition Plans to the Field Engineer per KDOT Specifications. No Demolition work will begin without approved Demolition Plans. A Licensed Professional Engineer is not required.

COUNTY	STATE	PROJECT NUMBER	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
SEDGWICK	KANSAS	B467	2017	15R	50

Revised Plans

INDEX OF BRIDGE DRAWINGS

Sheet No.	Drawing
15	General Notes and Quantities
16	Contour Map
17	Construction Layout
18	Engineering Geology
19	Abutments Details
20	Abutments Strip Drain
21	Pier Details
22-24	Superstructure Details
25	27" Corral Rail Details
26	Bill of Reinforcing Steel & Bending Diagrams
27	Bridge Project Marker
Standards	
28	Bridge Excavation
29	Standard Pile Details
30	Supports and Spacers for Reinforcing Steel

DESIGN DATA

DESIGN SPECIFICATIONS: AASHTO Specifications, 7th Edition and latest Interim Specifications. Load and Resistance Factor Design.

CONSTRUCTION SPECIFICATIONS: Shall be in accordance with the Kansas Department of Transportation (KDOT) Standard Specifications for Road and Bridge Construction 2015 Edition and Special Provisions.

DESIGN LOADING: HL-93

Design Dead Load includes an allowance of 15 psf for a future wearing surface.

UNIT STRESSES:  
 Concrete (Grade 4.0) f'c = 4 ksi  
 Concrete (Grade 4.0)(AE) f'c = 4 ksi  
 Concrete (Grade 4.0)(AE)(SA) f'c = 4 ksi  
 Reinforcing Steel (Grade 60) fy = 60 ksi  
 Steel Pile ty = 50 ksi

LRFD DESIGN PILE LOAD:	Strength I	Service I	Phi
Design Loading (Tons/Pile)			
Abutment 1 & 2	62	43	0.65
Piers 1, 2, & 3	82	58	0.65

TRAFFIC DATA - (B467)	
AADT (2016)	1,170
AADT (2036)	1,415
D	50%
T	2%
V	55 mph

LFD & LRF RATING FACTORS		
Rating Level	Inventory	Operating
Truck		
HS-20 (36T)	1.39	2.32
Type HET (110T)		1.46
2002 LFD Rating, 17th Edition AASHTO		
HL-93 Loading	1.21	1.56
2011 Manual for Bridge Evaluation		

IN-CHANNEL CONSTRUCTION ACTIVITIES: The Contractor shall restrict the in-channel construction activities during general spawning dates, March 1 through May 31 due to Arkansas Darter habitat.

Δ 3/23/2017 Added Class II Excavation

STR. NO. 628-5-1671 Sta. 16+83.60

GENERAL NOTES AND QUANTITIES

Proj. No. B467	SEDGWICK Co.
SHEET NO. 15	SCALE NONE
DESIGNED	POE DETAILED
DESIGN CK.	POE DETAIL CK.
APP'D	POE QUANTITIES
CADD	POE
CADD CK.	POE