STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	87 N–0359–01	2006	14	61

GENERAL NOTES

DESIGN: HS20–44 AASHTO SPECIFICATIONS 1996 EDITION AND APPROPRIATE INTERIM SPECIFICATIONS. DESIGN METHOD: LOAD FACTOR DESIGN.

UNIT STRESSES:

CONCRETE GRADE 4.0 (AE) (SW)	f'c	= 4,000 psi
	fc	= 1,760 psi
CONCRETE GRADE 4.0 (AE)	f'c	= 4,000 psi
	fc	= 1,760 psi
REINFORCING STEEL (GRADE 60)	fs	= 24,000 psi
	fy	= 60,000 psi

CHANNEL IMPROVEMENT AND EXCAVATION: THE CONTRACTOR SHALL EXCAVATE THE CHANNEL AND COMPLETE THE EMBANKMENTS IN THE VICINITY OF THE NEW BRIDGE AS SHOWN ON THE BRIDGE EXCAVATION SHEET, PRIOR TO THE DRIVING OF PILES.

BRIDGE EXCAVATION: ELEVATION 1268.50 SHALL DESIGNATE THE EXCAVATION BOUNDARY PLANE OF CLASS I AND CLASS II EXCAVATION; CLASS I ABOVE THE THE PLANE AND CLASS II BELOW. SEE BRIDGE EXCAVATION SHEET FOR LIMITS OF PAY EXCAVATION.

SOUNDINGS: THE SOUNDINGS SHOWN ON THESE PLANS ARE TAKEN FROM NOTES OBTAINED IN THE FIELD AND REPRESENT THE BEST INFORMATION AVAILABLE TO THE CITY OF WICHITA.

PIER BACKFILL: THE BACKFILL OF PIERS SHALL BE PLACED IN SUCH A MANNER AS TO PREVENT MOVEMENT OF THE WEBWALLS. SEE NOTE ON PIER DETAIL SHEET.

PILES: ALL PILING SHALL BE DRIVEN TO PENETRATE OR BEAR UPON THE HARD SHALE. DRIVING SHALL STOP WHEN, IN THE OPINION OF THE ENGINEER, ADDITIONAL DRIVING MAY DAMAGE THE PILING.

ALL PILING SHALL BE DRIVEN TO THE ALLOWABLE BEARING VALUE: 70.0 TONS.

WHEN USING THE THE PILE DRIVING FORMULA IN THE KDOT STD. SPECIFICATIONS, THE CONTRACTOR SHALL NOT DRIVE THE PILE TO MORE THAN 105.0 TONS.

AT ANY LOCATION WHERE PROBLEMS ARE EXPERIENCED, PILE DAMAGE IS SUSPECTED, OR APPARENT REFUSAL OCCURS SIGNIFICANTLY ABOVE THE DESIGN PILE TIP ELEVATION, THE ENGINEER MAY REQUEST THAT THE PILE DRIVING ANALYZER (PDA) EQUIPMENT BE USED.

CONCRETE: ALL SUPERSTRUCTURE CONCRETE SHALL BE BID AS GRADE 4.0 (AE) (SW). ALL SUBSTRUCTURE CONCRETE SHALL BE BID AS GRADE 4.0 (AE). BEVEL ALL EXPOSED EDGES WITH A 3/4" TRIANGULAR MOLDING EXCEPT AS OTHERWISE NOTED ON THE PLANS.

CONSTRUCTION JOINTS: CONSTRUCTION JOINTS THAT ARE SHOWN ARE OPTIONAL WITH THE CONTRACTOR BUT IF USED, SHALL BE MADE ONLY AT THE LOCATIONS SHOWN ON THE PLANS OR AS APPROVED BY THE ENGINEER.

REINFORCING STEEL: ALL DIMENSIONS RELATIVE TO THE PLACING OF REINFORCING STEEL ARE TO THE CENTERLINE OF BARS UNLESS OTHERWISE NOTED. ALL DIMENSIONS SHOWN IN THE BENDING DIAGRAMS ARE OUT TO OUT OF BARS UNLESS OTHERWISE NOTED. ALL REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A615, GRADE 60.

EPOXY COATING: ALL REINFORCING BARS DESIGNATED "EPOXY COATED" SHALL BE COATED WITH EPOXY AS SET FORTH IN THE SPECIAL PROVISIONS. BAR SUPPORTS SHALL BE COATED.

FALSEWORK: FALSEWORK SHALL BE LEFT IN PLACE FOR THE ENTIRE UNIT UNTIL 15 DAYS AFTER THE LAST CONCRETE POUR FOR THE UNIT OR LONGER AS DIRECTED BY THE ENGINEER. IF LONG SPAN STEEL BEAMS ARE USED FOR FALSEWORK, THE CONTRACTOR SHALL SUBMIT FALSEWORK DRAWINGS AND CALCULATIONS FOR APPROVAL.

FALSEWORK PLANS: A LICENSED PROFESSIONAL ENGINEER SHALL DESIGN THE FALSEWORK DETAILS. DETAILS SHALL BEAR THE SEAL OF A LICENSED PROFESSIONAL ENGINEER. SEE THE BRIDGE DESIGN MANUAL, SECTION 5.1 "REVIEW AND APPROVAL OF FALSEWORK PLANS", FOR A COMPLETE LISTING OF ITEMS TO BE INCLUDED ON THE FALSEWORK PLAN. SUBMIT 3 SETS OF DETAILS IN COMPLIANCE WITH KDOT SPECIFICATIONS TO THE FIELD ENGINEER FOR REVIEW.

TRAFFIC BARRIER RAIL: CONSTRUCTION JOINTS IN THE RAIL ARE NOT PERMITTED EXCEPT AS SHOWN. BUILD THE BARRIER RAILS AFTER THE FALSEWORK IS STRUCK.

CAMBER: CAMBER SHALL BE PROVIDED AS SHOWN ON THE CAMBER DIAGRAM UNLESS THE CONTRACTOR USES LONG SPAN STEEL BEAM FALSEWORK (CONCRETE DEAD LOAD DEFLECTION GREATER THAN 1/4") OR TIMBER FALSEWORK WITH GREATER THAN 12'–0" CLEAR SPAN, IN WHICH CASE THE CONTRACTOR SHALL SUBMIT FALSEWORK PLANS WHICH SHOW THE ADDITIONAL REQUIRED CAMBER.

CONCRETE PLACING SEQUENCE: THE SEQUENCE OF PLACING CONCRETE IN THE SLAB SHALL BE AS SHOWN ON THE PLANS, OR THE CONTRACTOR SHALL SUBMIT AN ALTERNATE PLACING SEQUENCE FOR REVIEW. THE ALTERNATE PLACING SEQUENCE SHALL BE GIVEN TO THE ENGINEER AT THE PRECONSTRUCTION CONFERENCE. THE ALTERNATE PLACING SEQUENCE SHALL INCLUDE THE PROPOSED RATE OF CONCRETE PLACEMENT IN CUBIC YARDS PER HOUR, THE PLANT CAPACITY, A DESCRIPTION OF THE EQUIPMENT USED IN PLACING THE CONCRETE, PROPOSED ADMIXTURES, AND THE QUANTITY OF CONCRETE IN EACH PLACING SEGMENT. ANY ADDITIONAL COSTS FOR THE CONTRACTOR'S ALTERNATE PLAN OF PLACING CONCRETE, INCLUDING ADMIXTURES, SHALL BE AT THE CONTRACTOR'S EXPENSE AND SHALL BE CONSIDERED SUBSIDIARY TO THE BID ITEM, "CONCRETE GRADE 4.0 (AE) (SW)". APPROVAL OF THE CONTRACTOR'S ALTERNATE SEQUENCE IS REQUIRED PRIOR TO THE PLACEMENT OF CONCRETE IN THE DECK.

CONSTRUCTION LOADS: ONLY FOOT TRAFFIC IS PERMITTED ON THE NEW DECK DURING THE SEVEN DAY CURING PERIOD. WORK TO PLACE REINFORCING STEEL OR FORMS FOR THE BRIDGE RAIL IS ALLOWED 3 DAYS AFTER THE CONCRETE IS PLACED PROVIDED THE CURING IS MAINTAINED ON ANY EXPOSED DECK BY KEEPING IT WET DURING THE SEVEN DAY CURING PERIOD. LIGHT TRUCK TRAFFIC (GROSS VEHICLE WEIGHT LESS THAN 5 TONS) IS ALLOWED ON THE DECK 15 DAYS AFTER THE POUR IS COMPLETED. LEGAL LOADS ARE PERMITTED 21 DAYS AFTER THE CONCRETE IS PLACED. WITH ENGINEER APPROVAL, HEAVY STATIONARY LOADS MAY BE ALLOWED ON THE BRIDGE DECK 21 DAYS AFTER THE DECK POUR IS COMPLETED. WITH ENGINEER APPROVAL, VEHICLE LOADS GREATER THAN LEGAL LOADS MAY BE ALLOWED ON THE BRIDGE DECK 28 DAYS AFTER THE DECK POUR IS COMPLETED. SEE KDOT SPECIFICATIONS.

CONSTRUCTION STAKING: CONSTRUCTION STAKING FOR CLEAR SPAN BRIDGES REQUIRES TWO INDEPENDENT SURVEYS. SEE KDOT SPECIFICATIONS.

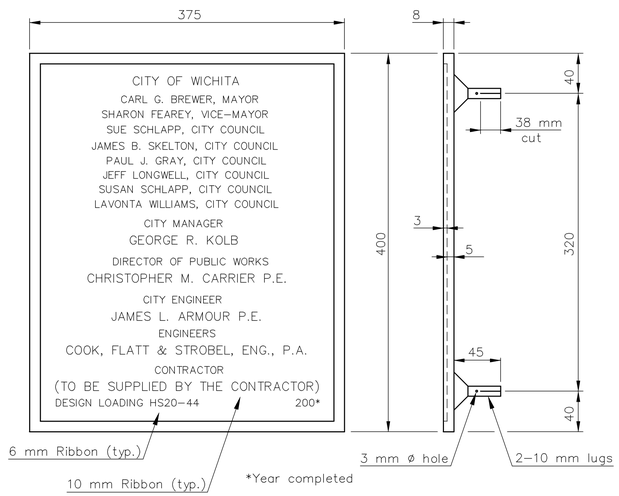
ABUTMENT STRIP DRAIN: SEE GENERAL NOTES ON THE "ABUTMENT STRIP DRAIN" SHEET.

BRIDGE BACKWALL PROTECTION SYSTEM: SEE THE GENERAL NOTES ON THE "ABUTMENT STRIP DRAIN SHEET".

ARTICULATING CONCRETE BLOCK MAT: SEE THE GENERAL NOTES ON THE "ARTICULATING CONCRETE BLOCK LAYOUT" SHEET.

BRIDGE DRAINS: SEE THE NOTES ON THE "MISCELLANEOUS SUPERSTRUCTURE DETAILS" SHEET.

HANDRAIL: SEE THE GENERAL NOTES ON THE "PEDESTRIAN RAIL DETAILS" SHEET.



BRIDGE PLAQUE DETAILS

One bronze plaque shall be furnished and placed in the handrail post at the N.E. corner of the bridge as shown on the Construction Layout. Plaque shall conform to applicable requirements of sub–section 1625 of the KDOT Standard Specifications. Recess plaque flush with face of concrete. The Contractor shall furnish a "rendering" for proof reading and approval before casting. The furnishing and installation of the plaque shall be paid for as Bridge Plaque (non–participating) Lump Sum.

SUMMARY OF QUANTITIES

Items / Location	Excavation Class I Cu. Yds.	Excavation Class II Cu. Yds.	Concrete Grade 4.0 (AE) Cu. Yds.	Concrete Grade 4.0 (AE)(SW) Cu. Yds.	Reinforcing Steel (Grade 60) Epoxy Coated Lbs.	Reinforcing Steel (Grade 60) Lbs.	*Steel Pile Lin. Ft.	Abutment Strip Drain Sq. Yds.	Bridge Backwall Protection System Sq. Yds.	Articulating Concrete Block Mat Sq. Yds.	Bridge Drains Each	Handrail (Metal)(22") Lin. Ft.	Handrail (Metal)(54") Lin. Ft.
Abutment No. 1	92						410	32.7	40.4				
Pier No. 1	5	65	72.4			2,865	560						
Pier No. 2	5	65	72.4			2,865	560						
Abutment No. 2	93						410	32.7	40.4				
Total Substructure	195	130	144.8			5,730	1,940	65.4	80.8	1,356			
Total Superstructure				732.8	159,190						20	323.0	323.0
Grand Total	195	130	144.8	732.8	159,190	5,730	**1,940	65.4	80.8	1,356	20	323.0	323.0

**Includes: 20 @ 41' & 28 @ 40'

* Note: Only Steel Piles HP12X53 shall be used on this structure.

For Quantities for Sheet Piling & Cap, See Sheet No. 29.

PROJECT NO. 87 N–0359–01

GENERAL NOTES AND QUANTITIES

HILLSIDE ST. BRIDGE OVER GYPSUM CREEK

STA. 35+05.75 CITY OF WICHITA

Cook, Flatt & Strobel ENGINEERS, P.A.

DESIGNED	RSC	SCALE	
DETAILED	DEG	DATE	
QUANTITIES		SHEET	OF

J:\2004PROJ\04559\DWGS\NOTES 1"=10'