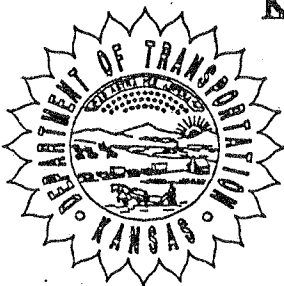


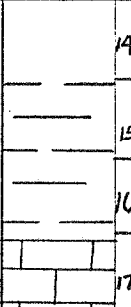
KANSAS DEPARTMENT OF TRANSPORTATION



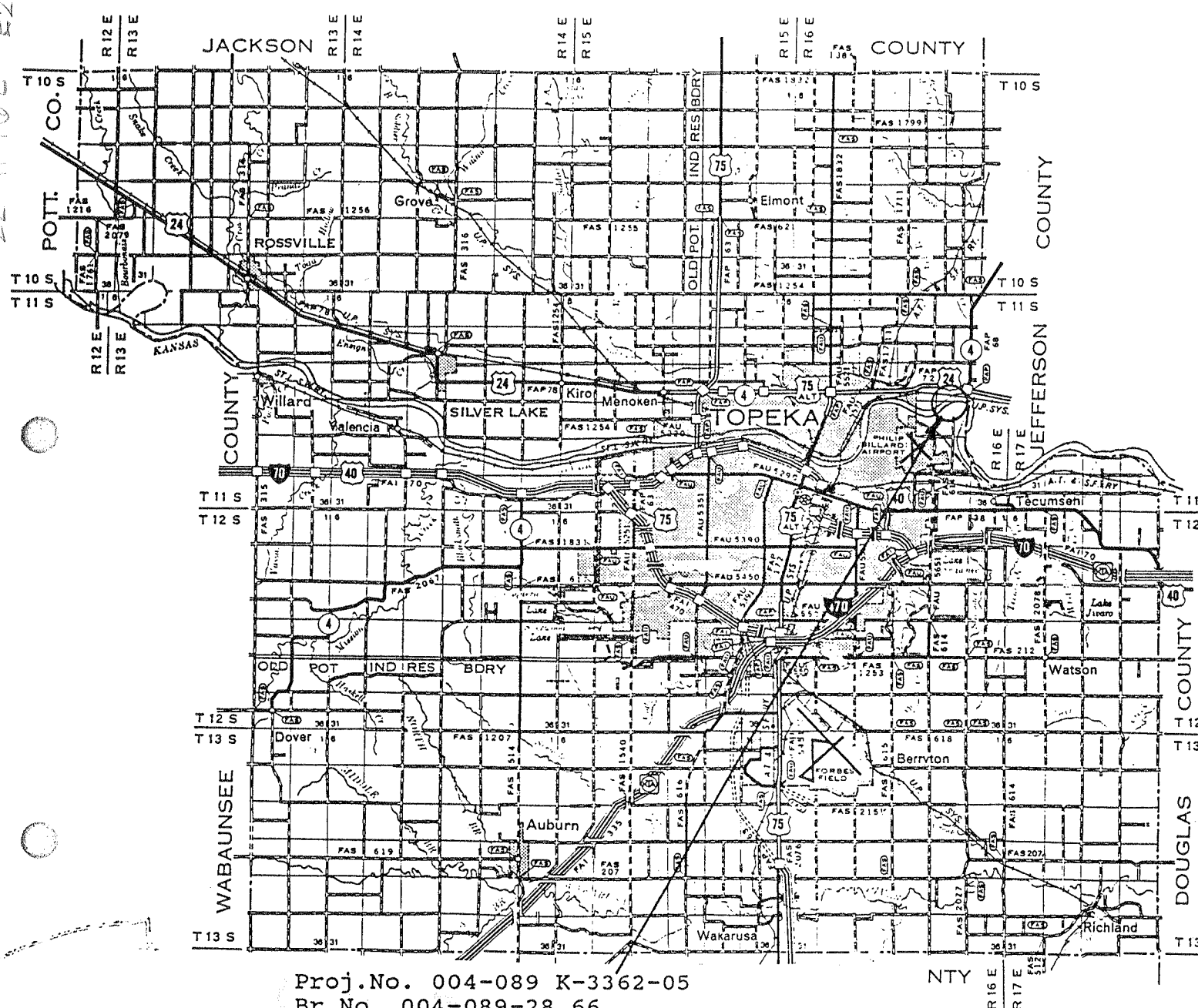
1. ROUTE-COUNTY NO. 004-089	7. SOUNDING NO. 1	12. SHEET 01 OF 05
2. BRIDGE STA. 637+48.25	8. PROJECT NO. K-3362-01	13. BRIDGE NO. 28.66
3. DESCRIPTION Oakland Expressway	14. HOLE STA. 671+12	15. DATE 3-20-93
4. GEOLOGIST Billinger	9. VERTICLE SCALE 1" = 10'	16. ELEVATION TOP OF HOLE 965.6
5. DRILLER Eudenkauf/Bergman	10. RIG B-61	17. ELEVATION TOP OF ROCK 961.9
6. GROUND WATER ELEV. 958.6	11. TOTAL DEPTH OF HOLE 84.3	

BIT TYPE & NO.	GEOLOGIC NAME	STRATIGRAPHIC COLUMN	DEPTH	ELEVATION	CLASSIFICATION OF MATERIALS DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION	STANDARD PENETRATION OR CASING DRIVE	
							BLOWS	ELEV.
			0°	965.6				
	DuBois Limestone		6.4	960	Weathered shale Limestone and limy shale			
	Tuner Creek shale		8'	957.5	shale, brown	435.1		957.0
	Sheldon Ls.		10.5	955.1	Limestone, light gray			
	Jones Point Shale		14.4	950	shale, gray	5.88		952.6
	Curzon Limestone		23°	942.6	Limestone, gray, massive impure upper 20 feet oolitic lower 10 feet	831.7		950.4
	Jones Point Shale		24.2	941.9	shale, gray,	416.5		945.1
	Hartford Limestone		29.2	940	Limestone, gray, unit bedded, dense.	3.4		941.9
			31°	934.6		140.8		939.4
			35°	930	shale, sandy	584.7		936.1
			40.7	924.9	Sandstone, shaly, gray	14.9		933.8
			44.5	920	shale, sandy, sandstone lenses.	53.4		928.7
			49°	916.6	Sandstone, gray	140.3		926.1
						58.2		923.7
						78.2		920.4
						13.5		916.9
						39.7		912.1
						88.8		906.2
						54.8		900.7
						73.2		896.2

1. ROUTE-COUNTY NO. 009-089	7. SOUNDING NO. 1	12. SHEET 02 OF 05
2. BRIDGE STA. 637+48.25	8. PROJECT NO. K-3362-01	13. BRIDGE NO. 28.66
3. DESCRIPTION Oakland Express way		14. HOLE STA. 671+12
4. GEOLOGIST Billinger	9. VERTICLE SCALE 1" = 10'	15. DATE 3-20-93
5. DRILLER Eidenkauf/Bergman	10. RIG B-61	16. ELEVATION TOP OF HOLE 965.6
6. GROUND WATER ELEV. 958.6	11. TOTAL DEPTH OF HOLE 843	17. ELEVATION TOP OF ROCK 961.9

BIT TYPE & NO.	GEOLOGIC NAME	STRATIGRAPHIC COLUMN	DEPTH	ELEVATION	CLASSIFICATION OF MATERIALS DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION	STANDARD PENETRATION OR CASING DRIVE	
							BLOWS	ELEV.
Diamond	Calhoun shale		14		Shale, silty to clayey dark gray			
			15	890		98.7	891.8	
			16	798		885.8	24.8	888.5
			17	843		881.3	380.6	885.0
	Ermine Creek Ls.				Limestone, hard, wavy bedded, gray	698.3		882.4

22-1-16 E2 E2

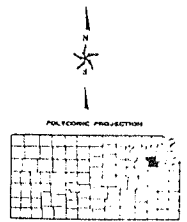


Proj.No. 004-089 K-3362-05
Br.No. 004-089-28.66
Oakland Expressway over the Kansas River
Sta.637+48.25
Shawnee County

LEGEND

- ROADS AND ROADWAY FEATURES**
- PRIMITIVE ROAD
 - UNIMPROVED ROAD
 - GRADED AND DRAINED ROAD
 - SOIL SURFACED ROAD
 - GRAVEL OR STONE ROAD
 - NOT GRADED OR DRAINED
 - GRAVEL OR STONE ROAD
 - GRADED AND DRAINED
 - GRAVEL OR STONE ROAD WITH STABILIZED SURFACE
 - BITUMINOUS ROAD-LOW TYPE
 - PAVED ROAD
 - DIVIDED HIGHWAY
 - HIGHWAY WITH FULL CONTROL OF ACCESS AND INTERCHANGE

- ROAD SYSTEM DESIGNATION**
- FEDERAL-AID INTERSTATE HIGHWAY SYSTEM
 - FEDERAL-AID PRIMARY HIGHWAY SYSTEM
 - FEDERAL-AID SECONDARY HIGHWAY SYSTEM
 - INTERSTATE NUMBERED HIGHWAY
 - U S NUMBERED HIGHWAY
 - STATE HIGHWAY SYSTEM OR STATE NUMBERED HIGHWAY
 - END OF DESIGNATED SYSTEM OR MARKED ROUTE



FA SYSTEM REVISED TO MAR. 15 1968

GENERAL HIGHWAY MAP
SHAWNEE COUNTY
KANSAS

PREPARED BY THE
KANSAS DEPARTMENT OF TRANSPORTATION
BUREAU OF TRANSPORTATION PLANNING
IN COOPERATION WITH THE
U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

