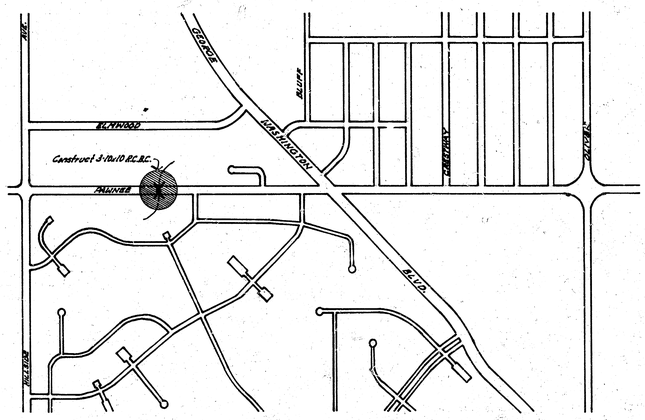

"LOCATION MAP"

N

B.M. = 110.36 R.R. Spike S.S. of R Pole on N.S. Pawnee @ Sta. 10+84 (Pawnee Ave.)

3-10x10 Reinf. Conc. Box Culvert.

In connection with paving PAWNEE Ave. - Hillside Avenue to Oliver Street.

City of Wichita, Kansas

B.E. Smith — City Engineer

Date: NOV. 1969 — Proj. No. C18-104

B. E. SMITH LICENSED 436 KANSAS PROFESSIONAL ENGINEER

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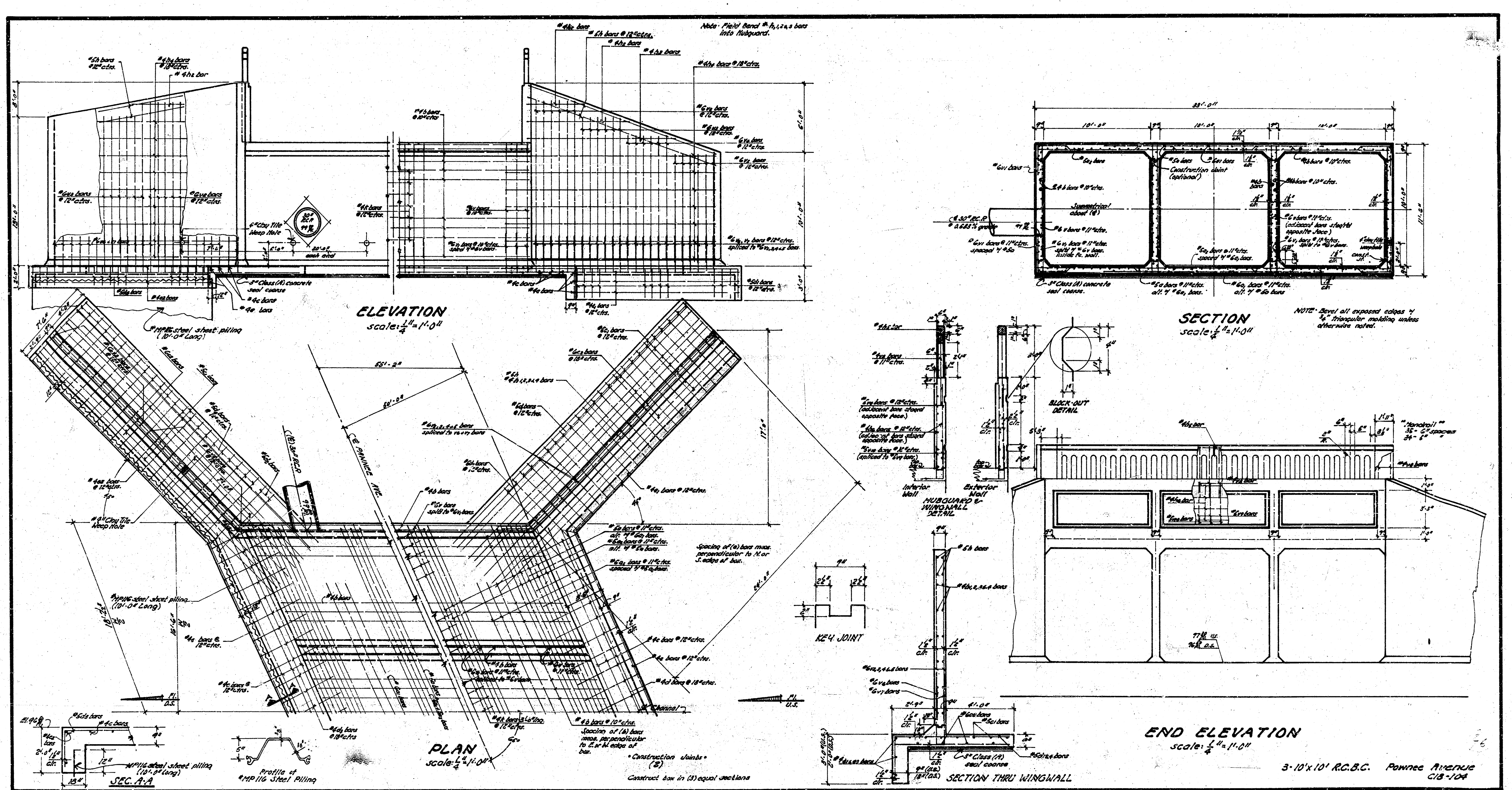

ELEVATION
scale: 1/4" = 1'-0"
PLAN
scale: 1/4" = 1'-0"
SEC. A-A
Profile of #MP116 Steel Piling
Construction Joints
Construct box in (3) equal sections
KEY JOINT
SECTION THRU WINGWALL
HUBGUARD & WINGWALL DETAIL
Interior Wall
Exterior Wall
BLOCK-OUT DETAIL
SECTION
scale: 1/4" = 1'-0"
NOTE: Bevel all exposed edges 3/4" triangular molding unless otherwise noted.
END ELEVATION
scale: 1/4" = 1'-0"
3-10'x10' R.C.B.C.
Pawnee Avenue
C18-104

BAR SCHEDULE

Bar	Size	Length	No.	Location	Shape	Spacing	Weight
a	#6	37'-1"	210	box		11"	8431.778
a1	#6	36'-2"	220	"		11"	11950.984
a2	#5	36'-2"	220	"		11"	8298.811
b	#4	36'-2"	546	box		10"	13191.008
c	#4	35'-6"	6	apron		12"	142.284
c1	#5	30'-0"	28	wingwall		12"	876.120
c2	#6	30'-0"	16	"		18"	720.960
d	#4	8'-1"	23	apron		18"	124.192
d1	#5	10'-0"	44	wingwall		12"	458.920
d2	#5	7'-3"	8	"		12"	60.484
d3	#4	7'-1"	23	apron		18"	108.828
d4	#5	9'-0"	46	wingwall		12"	431.802
e	#4	37'-4"	5	toewall		12"	124.693
e1	#4	21'-4"	6	wingwall		12"	85.504
e2	#4	22'-4"	4	"		12"	59.675
k	#4	3'-0"	225	box		12"	450.900
h	#5	26'-6"	16	wingwall		12"	442.232
h1	#4	8'-9"	4	"		-	23.380
h2	#4	15'-0"	8	"		-	80.160
h3	#4	21'-0"	4	"		-	56.112
h4	#4	25'-10"	32	wingwall		18"	552.213
h5	#4	17'-7"	4	handrail		-	46.983
h6	#4	7'-7"	40	hubguard		12"	202.626
v	#6	10'-0"	720	box		11"	10814.400
v1	#6	3'-2"	1200	"		11"	5707.660
v2	#6	13'-9"	80	wingwall		12"	1652.200
v3	#6	12'-0"	72	"		12"	1297.728
v4	#6	10'-8"	24	"		12"	384.513
v5	#6	9'-2"	24	"		12"	330.441
v6	#6	7'-7"	100	"		12"	1139.012
v7	#6	6'-6"	100	wingwall		12"	976.300
v8	#4	5'-0"	76	handrail		11"	253.840
v9	#5	5'-9"	144	hubguard		12"	863.604
v10	#5	4'-7"	144	"		12"	688.375

"GENERAL NOTES"

• **CLASS A-AE CONCRETE** • Shall be used throughout this project. All Reinforcing Steel shall conform to A.S.T.A Specifications.

• **EARTHWORK** • All earthwork shall be considered as "Common Excavation" except for the toewall. Toewall excavation shall be included in the "Lump Sum Bid."

• **BACKFILL** • Shall be compacted to the bottom of new pavement grade. All backfill & excavation to extend to (2') beyond sides of box & wingwalls.

• **WEEPHOLES** • Coarse aggregate shall be deposited behind each "weephole" to occupy a space extending (18") in all directions above weep hole flow-line. This work shall not be paid for directly, but shall be a part of the excavation work.

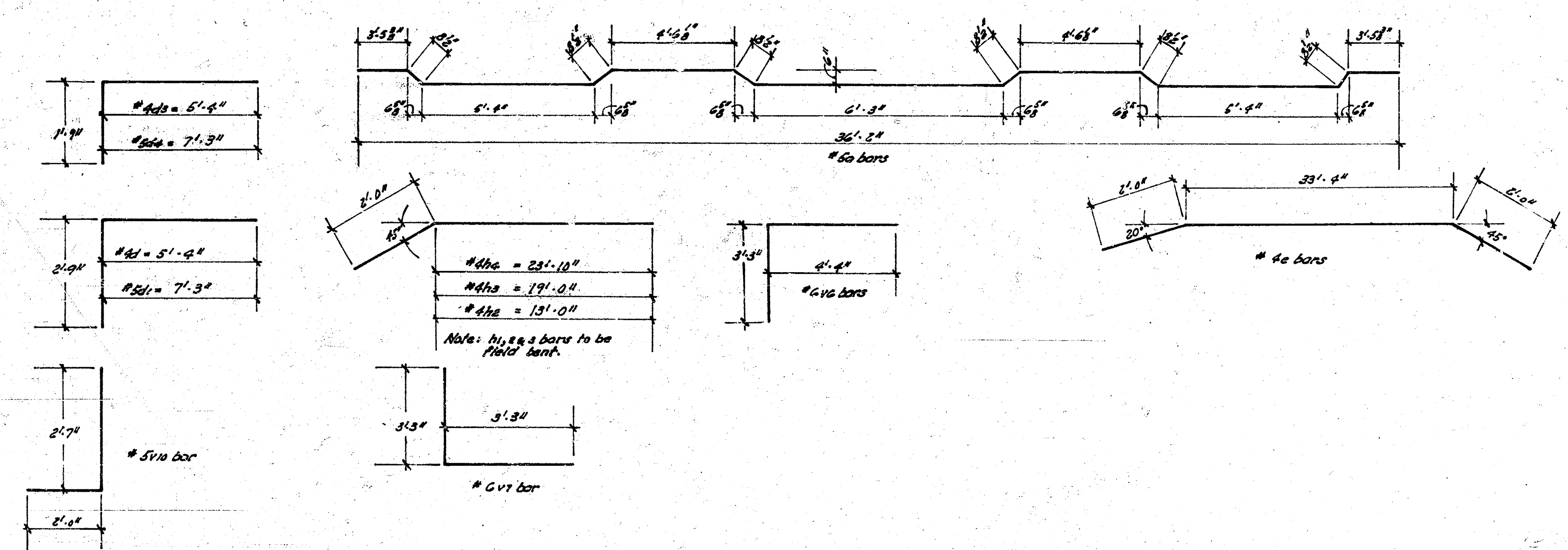
• **SEAL COURSE** • A seal course consisting of (3") class-A-concrete shall be constructed only where specified on the plans or by the Engineer. No reinforcement shall be placed until the seal course has gained sufficient strength to permit working upon it without injury.

• **BIDDING OF CULVERT** • The Culvert shall be bid as a "Lump Sum Bid" except for the following items: Clearing R/W, S.Y. Conc. Rip-Rap, C.Y. Common Excavation, C.Y. Compacted Fill, C.Y. Loose Fill, C.Y. Class (A) Conc., Piling & L.F. 30" R.C.P. Quantities shown in the BILL of Materials or items included in the LUMP SUM Bid of Culvert are for information only. The Contractor must satisfy himself to the quantities & the Engineer assumes no responsibility for their accuracy. The Contractor will have full responsibility for providing all materials shown on the detailed plans necessary to complete this project.

BILL OF MATERIALS

	ITEM		Quant.	Unit	
	Class A-AE Concrete	447.00	429.62	C.Y.	Lump Sum Bid Items
	Reinforcing Steel		71,030.0	Lbs.	Lump Sum Bid Items
	Concrete Handrail		72.2	L.F.	Lump Sum Bid Items
	Hand Excavation		10.42	C.Y.	Lump Sum Bid Items
	#MP 116 Stl. Sheet Piling	812.3	815.0	S.F.	Bid Items
	Conc. Rip-Rap	1768.4	2780.0	S.Y.	Bid Items
	Common Excavation	7475.6	8322.0	C.Y.	Bid Items
	Compacted Fill	[illegible]	4486.0	C.Y.	Bid Items
	Loose Fill	5884.9	6476.0	C.Y.	Bid Items
	Class (A) Concrete		41.72	C.Y.	Bid Items
*	Asphalt Mat Rem.		468.0	S.Y.	Bid Items
	30" R.C.P.	4	4	L.F.	Bid Items
*	Existing Structure Rem.	1	1	ea.	Bid Items
	Clearing Right-of-Way		-	-	Bid Items

(*) CLEARING R/W - Clearing R/W item will include the following: Tree rem., fnc. rem., exist'g structure rem., asph. surf. rem. or any other obstruction hindering the construction of this proj.



Station	DA	Q 50	I 50	c	tc
30+00	2530 A	3600 cfs	2.80	0.50	75 min

PI 28+46.736
Δ = 47°00'
D = 45°10'
R = 125.92'
T = 54.75'
L = 103.29'

PI 31+37.68
Δ = 28°00'
D = 36°00'
R = 159.16'
T = 39.60'
L = 77.78'

1260' E & 50' N of SW Cor. Sec. 35

PC 28+12.00
Sta. Equation
28+12.00 Back =
28+12.00 Ahead

PT 29+10.90

PC 30+38.00

PT 31+75.78

Begin Riprap E 96.37

PC 28+46.61 E 96.37

PT 29+11.90 E 96.47

End Riprap E 97.54

PC 30+38.00 E 97.54

PT 31+75.78 E 97.97

Sheet Piling Toe-Wall

Proposed 3-10'X10' RCBC

Proposed Drainage R/W Line

Shape To Meet Existing Channel

Existing Channel

Loose Fill Existing Channel

Compacted Fill Existing Channel

Proposed N. Line Pawnee

Existing N. Line Pawnee

S. Line Pawnee

Drive

Fence

Bldg.

Pond

Pine

Lilac

Hackberry

Walnut

Flowering Tree

Elm

Mulberry

Russian Olive

F.B. GRILLOT
C 11177-88B

F.B. GRILLOT
C 11177-88C

W.M. TRINKLE
C 11177-88E

NOTE TO FIELD ENGINEER-
Cross-section New Channel before & after. Channel excavation, Pilot Excavation & Compacted Fill quantities will be based on these cross-sections.

NOTE: Culvert Contractor to remove existing Road Culvert. Compacted backfill to be made to bottom of new pavement & walk grade across Pawnee (Typ. 6 ft.). Field Engr. to cross-section before & after Fill is made.

Note: All excavated material in new channel change to be used in filling old channel. Contractor may use pneumatic roller-type compaction of (2') max. lifts in Loose Fill Areas; sheep-foot type roller to be used thru Compacted Fill Area as per City Specs.

FCBM:
Brass Cap NE Cor.
3-8'X8' RCBC
Dry Cr. at Pawnee
MSL Elev. 1299.91
City Datum 112.91

160 X 8.0
85 X 2.82
170 Y 34.5
160 X 36.5
86.420 X 44
38.5 X 50
32.5 X 30
16,914.1 / 1 / 1983.9 SY

TYPICAL SECTION (Downstream)

TYPICAL SECTION (Upstream)

DETAIL OF ROCK TOE WALL

Natural Ground at ℄ Proposed Chan.

Design Water Surface

Rt. & Lt. Bank - Proposed Chan.

C.Rt. & Lt. Bank - Proposed Channel

Design ℄ s=0.00101

Design ℄ s=0.00537

10" Gas

10" Gas

18" Water (Approx. Location & Depth)

NOTE: S.4 Conc. Rip-Rap in downstream area to be determined by the amount of material furnished by "OTHERS" Contractor to place material furnished by "OTHERS"

RIP-RAP - To be of broken concrete with max. size stone of (150) pounds, average size (30) to (80) pounds, not more than (20%) by weight consisting of pieces weighing less than (10) pounds. Mortar, depth of the thickness of bed, shall not be less than ½ the length.

No. of Creek bed

Deep Red Clay

Sand Clay, Gravel

Sand Clay, Gravel, Water

Gravel, Water

CORE SAMPLE
@ Toe wall of R.C.B.C.

CITY-COUNTY FLOOD CONTROL OFFICE
PLAN AND PROFILE
PROPOSED 3-10'X10' RCBC
DRY CREEK AT PAWNEE
SEC. 2 T-28-S R-1-E

SCALE: 1" = 20' HORIZONTAL
1" = 5' VERTICAL
DATE: NOV. 1960
DRAWN: WCJ
Revised: Dec. 28-62

FLOOD CONTROL SUPERINTENDENT

28+00 29+00 30+00 31+00 32+00

Sidney Plan Exc Chandler