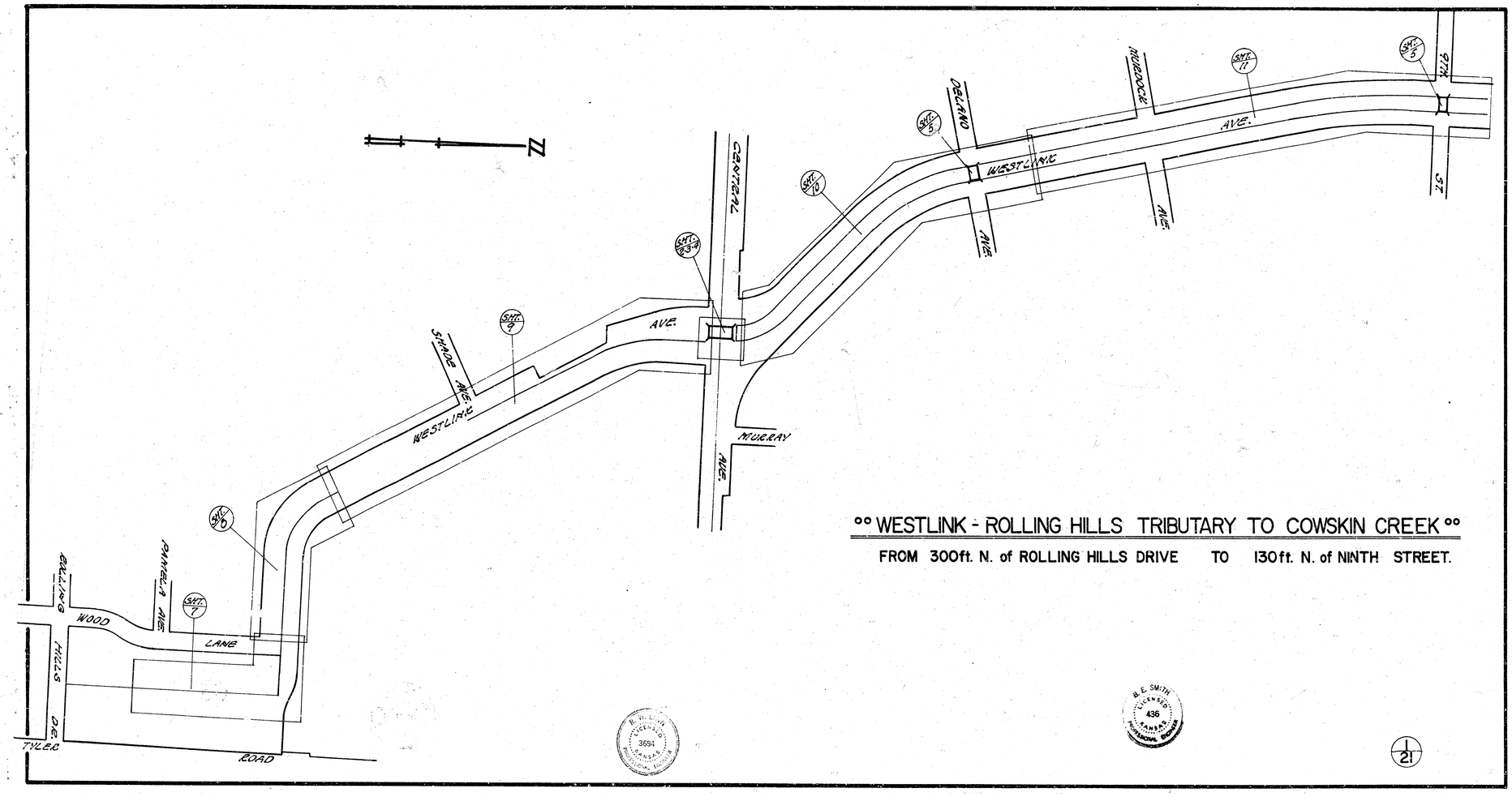
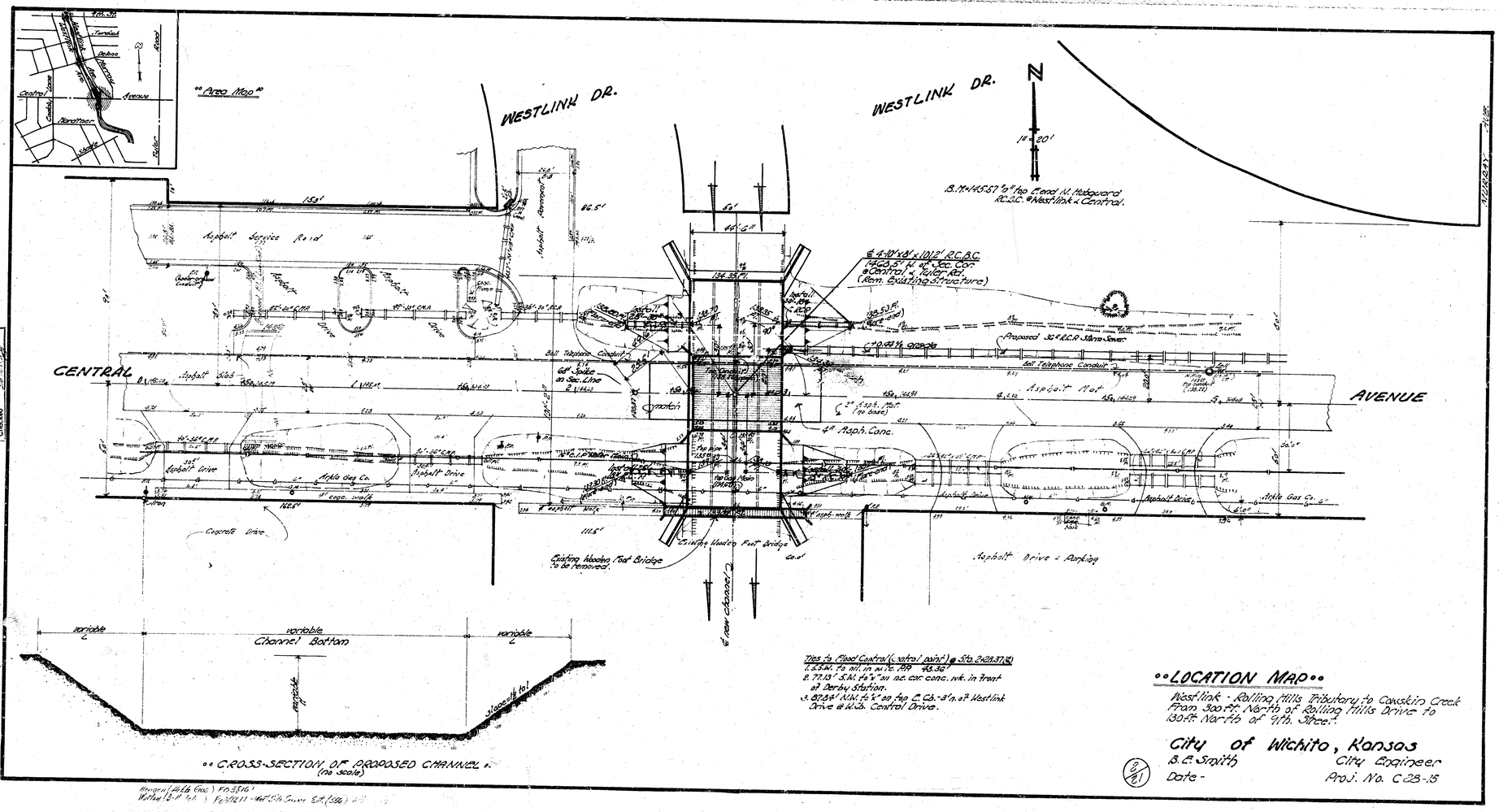


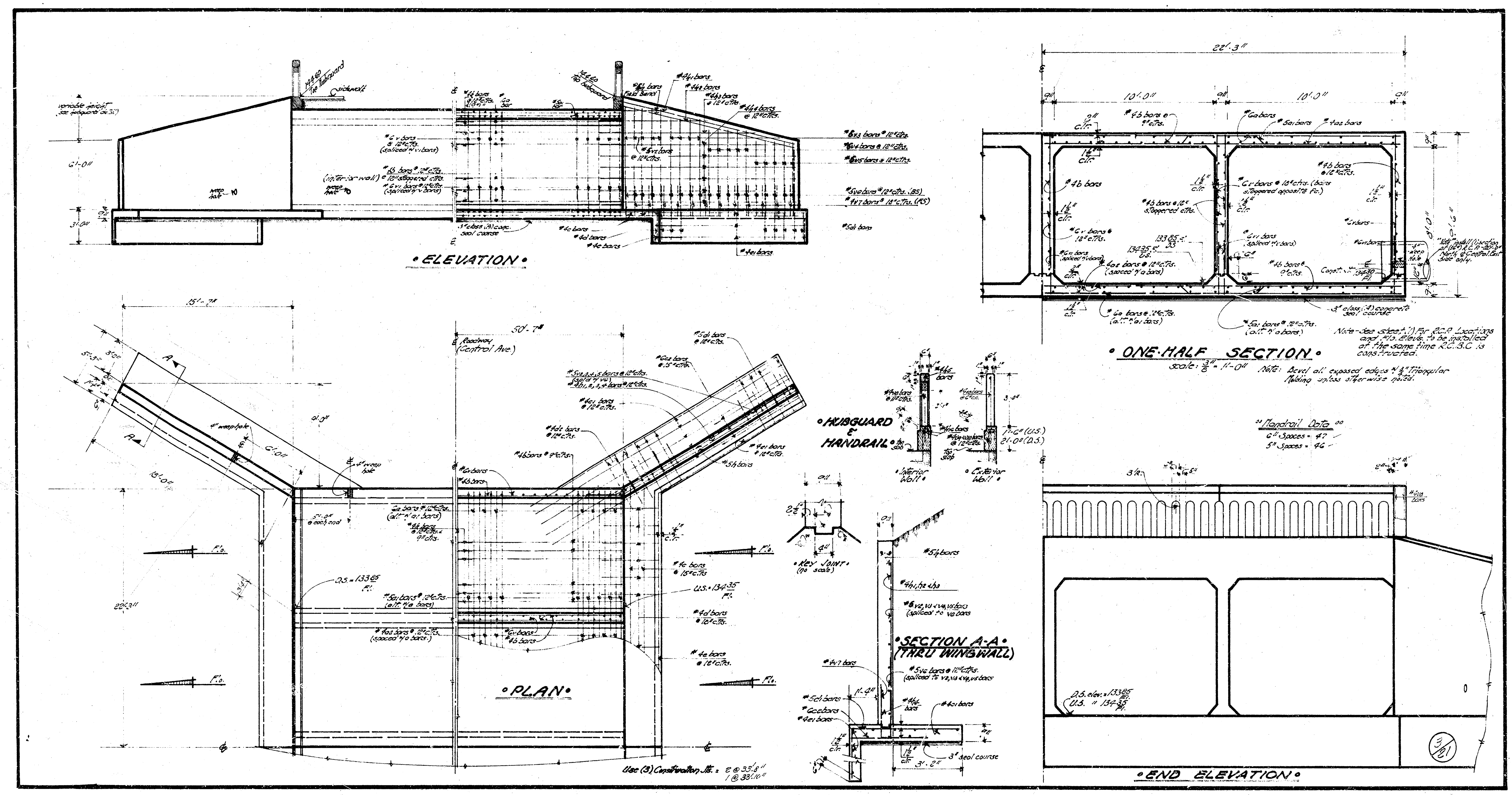
°° WESTLINK - ROLLING HILLS TRIBUTARY TO COWSKIN CREEK °°

FROM 300ft. N. of ROLLING HILLS DRIVE TO 130ft. N. of NINTH STREET.

R. E. WILLIS LICENSED 3694 KANSAS PROFESSIONAL ENGINEER

R. E. SMITH LICENSED 436 KANSAS PROFESSIONAL ENGINEER


"Area Map"
WESTLINK DR.
WESTLINK DR.
N
1" = 20'
B.M.=1455.7 ½" top Cap'd W.I. Ridgeard R.C.S.C. @ Westlink & Central.
CENTRAL
AVENUE
Asphalt Service Road
Asphalt Drive
Asphalt Drive & Parking
Asphalt Mat.
4" Asph. Conc.
Bell Telephone Conduit
Proposed 30" R.C.P. Storm Sewer
Existing Wooden Foot Bridge to be removed.
Existing Wooden Foot Bridge
6 new channels
Concrete Drive
Arkla Gas Co.
Tie to Flood Control (Natural axis) @ Sta. 2+28.37 (S)
1. 5.3' N. to all in an RC. Pin 43.36'
2. 77.13' S.W. to "x" on nc. cor. conc. wk. in front of Derby Station.
3. 87.84' N.W. to ½" ao. top C. Cb. -3'n. of Westlink Drive & W.S. Control Drive.
variable
Channel Bottom
variable
variable
3 horiz. to 1 vert.
•• CROSS-SECTION OF PROPOSED CHANNEL ••
(no scale)
•• LOCATION MAP ••
Westlink - Rolling Hills Tributary to Cowskin Creek From 300 Ft. North of Rolling Hills Drive to 130 Ft. North of 9th. Street.
City of Wichita, Kansas
B. E. Smith City Engineer
Date - Proj. No. C-28-15
Survey
Plan
Job
Checked
Bk.



• ELEVATION •
• PLAN •
• HUBGUARD & HANDRAIL •
• KEY JOINT • (no scale)
• SECTION A-A • (THRU WINGWALL)
• ONE-HALF SECTION •
scale: 3/8" = 1'-0"
Note: Bevel all exposed edges w/ 3/4" Triangular Molding unless otherwise noted.
Note - See sheet (1) for R.C.P. Locations and Flo. Elevs. to be installed at the same time R.C.B.C is constructed.
"Note" install (1) section of (36") R.C.P. -20'-0" North & Central East Side only.
"Handrail Data"
6" Spaces = 47
5" Spaces = 46
• END ELEVATION •
D.S. elev. = 133.85 Fl.
U.S. " 134.35 Fl.
Use (3) Construction Jts. = 2 @ 33'-8" 1 @ 33'-10"
℄ Roadway (Central Ave.)
50'-7"
22'-3"
10'-0"
3/21

BAR SCHEDULE

BAR	SIZE	LENGTH	No.	LOCATION	SHAPE	SPACING	WEIGHT
a	#6	22'-0"	406	Box		12"	13,349.772
a1	#5	22'-0"	406	"		12"	9,210.520
a2	#5	22'-0"	404	"		12"	5,937.180
b	#6	33'-6"	628	"		10"-12"	13,303.872
c	#4	22'-0"	8	Apron		"	117.326
c1	#4	26'-0"	80	Wingwall		"	367.360
c2	#6	26'-0"	12	"		15"	460.584
d	#6	11'-7"	52	Apron		10"	603.448
d1	#5	11'-7"	64	Wingwall		12"	556.220
d2	#6	5'-0"	12	"		10"	90.084
e	#6	23'-7"	12	Apron		12"	199.494
e1	#6	19'-0"	12	Wingwall		12"	160.596
f	#5	20'-3"	12	"		-	253.969
h1	#4	7'-0"	4	"		-	18.396
h2	#4	11'-6"	4	"		-	30.208
h3	#6	16'-9"	4	"		-	64.764
h4	#6	20'-9"	24	"		12"	332.664
h5	#4	10'-0"	3	Handrail		-	56.112
h6	#4	21'-6"	16	Flasboard		-	112.224
k	#6	31'-0"	428	Box		9"& 12"	837.712
l	#5	31'-0"	678	"		12"-18"	8,146.848
l1	#6	31'-0"	678	"		12"-18"	3,855.888
l2	#5	6'-0"	20	Wingwall		12"	166.880
l3	#5	11'-0"	16	"		12"	116.016
l4	#5	6'-0"	20	"		12"	125.520
l5	#5	5'-0"	16	"		12"	83.472
l6	#5	21'-6"	72	"		12"	337.932
l7	#5	6'-0"	48	"		12"	376.512
l8	#4	5'-0"	168	Handrail		12"	292.320
l9	#4	21'-8"	46	Ridgepost		12"	143.335
l10	#4	5'-2"	46	"		12"	158.762
						Total	53,278.331

BILL OF MATERIALS (PER CHANNEL CHANGE)

ITEM	QUAN	UNIT
COMMON EXCAVATION	41,130	C.Y.
COMPACTED FILL	380	"
EMBANKMENT & LOOSE FILL	1250	C.Y.

Bid Items

Note: All Excavated Material From New Channel To be used for filling existing creek & making necessary embankments as new channel. Contractor may use pneumatic rail-type compactor of max (60) lbs. "Stamp-Jet" type compactor to be used in all compacted fills under proposed pavements. All fills to be under supervision of Engineer.

BILL OF MATERIALS (PER CULVERT AVERAGE)

ITEM	QUAN	UNIT
CLASS AA.B CONCRETE	4,913.	CU.YD.
REINFORCING STEEL	53,230	LBS.
CONCRETE HANDRAIL	59.0	L.F.
HAND EXCAVATION	6.6	C.Y.
ASPHALT RAIN	230	S.Y.
ASPHALT	30.0	TONS
COMMON EXCAVATION	1273	C.Y.
COMPACTED FILL	760	C.Y.
CLASS (A) CONCRETE	48.17	C.Y.
WOODEN FOOT BRIDGE REM.	1	EA.
EXISTING STRUCTURE REM.	1	EA.
36" RCA	36	L.F.
18" "	95	"

Lump Sum Bid - Culvert

Bid Items

○○ GENERAL NOTES ○○

○ CLASS AA.B CONCRETE ○ SHALL BE USED THROUGHOUT THIS PROJECT. ALL REINFORCING STEEL SHALL CONFORM TO A.S.T.M. SPECIFICATIONS.

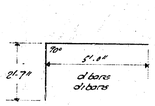
○ EARTH NOTE ○ ALL EXCAVATION SHALL BE CONSIDERED AS "COMMON EXCAVATION" EXCEPT FOR THE TRENCH. TRENCH EXCAVATION SHALL BE INCLUDED IN "LUMP SUM BID".

○ BACKFILL ○ SHALL BE COMPACTED TO THE BOTTOM OF NEW PAVEMENT GRADE. ALL BACKFILL & EXCAVATION TO BE FROM 1'-0" (2') BEYOND SIDES OF BOX WINGWALLS.

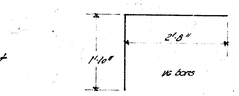
○ INSPECTION ○ CONCRETE FOOTINGS SHALL BE DEPOSITED AGAINST UNDISTURBED EARTH WHENEVER POSSIBLE. FORMS SHALL BE USED WHERE NECESSARY. ALL DIRECTIONS ABOVE MUST HAVE BEEN FOLLOWED. THIS WORK SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED A PART OF THE EXCAVATION WORK.

○ 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 REINFORCING SHALL BE PLACED UNTIL THE SEAL COURSE HAS GAINED SUFFICIENT STRENGTH TO REMAIN WORKING CLEAR IF WATER IS REQUIRED.

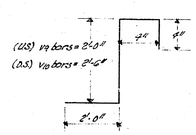
○ BIDDING OF CULVERT ○ THE CULVERT SHALL BE BID AS A "LUMP SUM" BID EXCEPT FOR THE FOLLOWING ITEMS: CY COMMON EXCAVATION, CY COMPACTED FILL, CLASS (A) CONC., SY ASPH. REM., TONS ASPH., WOODEN FOOT BRIDGE REM. & RELOCATED EXIST'G BRIDGE STRUCTURE REM. THE QUANTITIES SHOWN IN THE "BILL OF MATERIALS" OF ITEMS WHICH ARE INCLUDED IN THE "LUMP SUM BID" OF THE CULVERT ARE FOR "PAYMENT" PURPOSES ONLY. THE CONTRACTOR MUST SATISFY HIMSELF TO THE QUANTITIES AND THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. THE CONTRACTOR WILL HAVE THE FULL RESPONSIBILITY FOR PROVIDING ALL MATERIALS SHOWN ON THE DETAILED PLANS NECCESSARY TO COMPLETE THIS PROJECT.

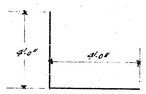




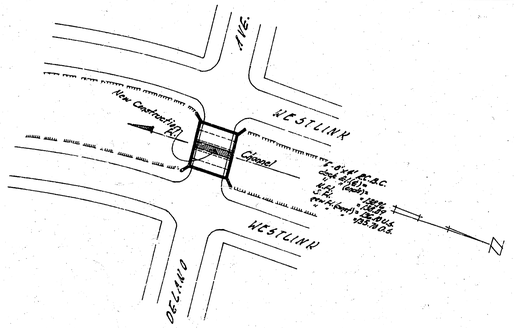


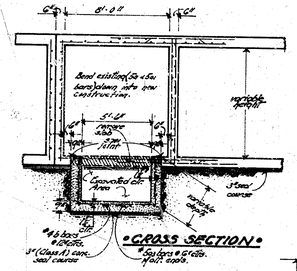




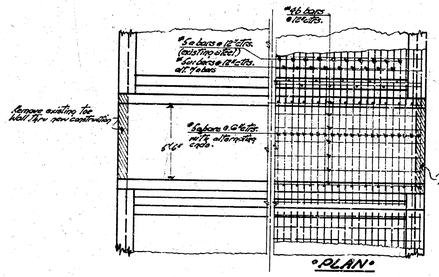


○○ BEND DIAGRAM ○○

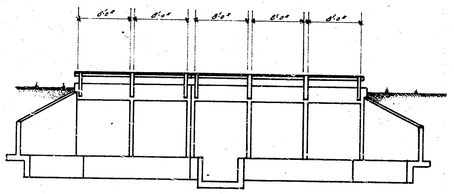




"CROSS SECTION"

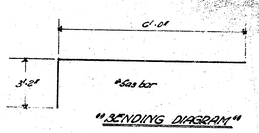


"PLAN"



"END ELEVATION"

Note: Saw jt. to be used on radius at all existing end bridges and it to be cut & kept damp 24 hrs. prior construction.
Bridges over 75' to be used as R.C.B.C. omitting all Central Wall Stub. Detail as shown to be used for both of same location.

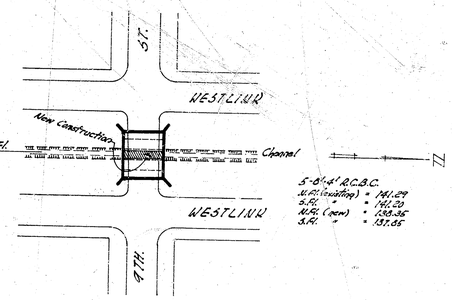


"BENDING DIAGRAM"

"BAR SCHEDULE"

Bar	Size	Length	No.	Location	Shape	Spacing	Weight
a	#5	9'-0"	168	-	L	6"	1568.861
b	#5	39'-9"	86	-	——	12"	670.313
						Total =	2239.174

29.67 C.Y. Class A-AE Concrete	Lump Sum (included in culvert bid)
2240 Lbs. Reinforcing Steel	
5.13 C.Y. Class (A) Concrete	Bid Item
62.44 C.Y. Bond Excavation	Lump Sum " " " "
164.0 Lf. Saw Joint	Bid Item
70.68 Sy. Concrete Rem.	



"RE-CONSTRUCTION OF EXISTING R.C.B.C"
at the following Locations: Delano & Westlink Drive
" " " Ninth " " "

E/81