PLANS FOR A

REINFORCED CONCRETE BOX CULVERT ON GATEWOOD STREET IN AUTUMN CHASE PROJECT NO.

468·76·245·81728·000·000·001

CITY OF WICHITA, KANSAS

MICHAEL E. LINDEBAK, CITY ENGINEER

JULY 1987

GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR OR A LICENSED PROFESSIONAL ENGINEER IN ACCORDANCE WITH STATE LAWS.

2. EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS UTILITY COMPANIES AND IS EITHER FROM COMPANY RECORD DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT OF WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.

NOTE: NOTIFY THE FOLLOWING COMPANIES PRIOR TO ANY EXCAVATION:

CABLEVISION	262-0661
KPL GAS SERVICE	263-7511
KANSAS GAS & ELECTRIC	264-1141
ARKLA GAS COMPANY	942-9350
BELL TELEPHONE COMPANY	1-316-571-2115

3. HANDRAILS ARE TO BE CONSTRUCTED BY OTHERS.

4. ALL EXCAVATED MATERIAL SHALL BE PLACED AROUND AND ON TOP OF THE COMPLETED BOX, COMPACTED TO 90% DENSITY.

5. THE EXISTING 24" CMP SHALL BE DISPOSED OF AS DIRECTED BY THE ENGINEER.

6. EXCAVATION, SITE PREPARATION, GRADING, RE-GRADING, COMPACTION AND RE-SHAPING OF THE SITE SHALL BE SUBSIDIARY TO THIS PROJECT.

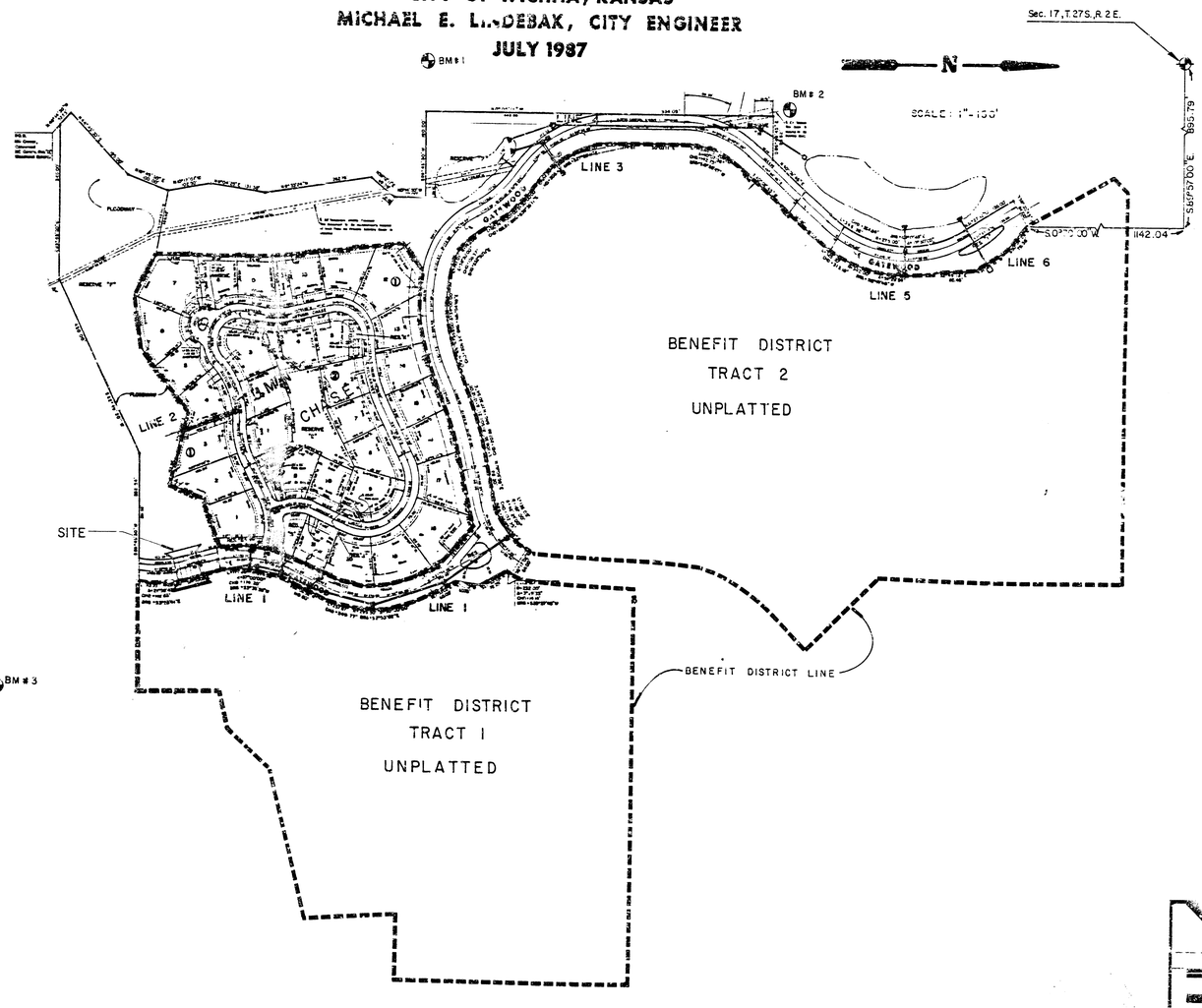
7. WATER SURFACE ELEVATIONS SHOWN ARE AT THE LEVELS ON THE DATE OF SURVEY AND MAY HAVE OR WILL CHANGE BY THE DATE OF CONSTRUCTION. COSTS OF PUMPING OR OTHERWISE DEALING WITH LAKE WATER AS NECESSARY IS CONSIDERED SUBSIDIARY TO THIS WORK.

BENCH MARKS

B.M. #1 Spk. Step in Corner Fence Post 660.00 Feet E. & 40.00 Feet S. of Cor. Section
Elev. = 176.09

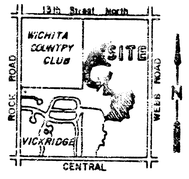
B.M. #2 Spk. Step in Corner Fence Post S.E. Corner Lot 4, Blk 1, Woodcrest Addition
Elev. = 179.74

B.M. #3 60 "D" Nail in West Root of 20" Elm Tree 50' N. & 10' W. of Northeast Corner Minneha School Lot
Elev. = 176.09



INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	PLAN
3-4	DETAILS
5	FINAL PLAT



LOCATION MAP

AUTUMN CHASE

RCBC ON GATEWOOD

F.B.N.

E.C.G., K.S.M.

D.S.

MID-KANSAS ENGINEERING CONSULTANTS PA
3500 NORTH ROCK ROAD
BUILDING #800
WICHITA, KANSAS 67226
682-6564

Sheet 1 of 5

AUTUMN CHASE
REIN. CONCRETE BOX CULVERT
PROJ.NO.468762.15-81728-000-000-001

Surveyed Water Surface El.=159.5± (4-28-87)
Normal Water Surface El.=161.00
100 YR. Design Water Surface El.=164.42

RESERVE "F"

Existing Lake

PROPOSE EDGE OF WATER
Install 82 S.Y. Light Stone Rip-Rap

℄ 5-10'x 4' RCB's ℄ St. Sta. 1+12.86 (Gatewood)

PROPOSED EDGE OF WATER

Existing Lake

AUTUMN

RESERVE "B"

AUTUM CHASE

RES. "A"

CHASE

Prop 4" Sidewalk
Prop 12" Wtr.
Prop 8" San Swr.
5' Wall Esmt
Prop 4" Sidewalk
Esmt 20
Util
Prop 12" Wtr.
Prop 8" San Swr.

S=1.716%
S=0.900%
S=1.659%
S=1.056%
S=0.400%
S=0.400%

LINE 1-A
LINE 1-B
LINE 1-C
LINE 1

24" RCP
30" RCP
36" RCP
RCP
24" RCP
18" RCP
24" RCP

19.67
19.67
19.17
19.17

97°11'54"
80°54'15"
80°48'07"
90°00'00"
90°00'00"
37°57'32"

GATEWOOD

F.F.
R/W
5'
30'
27'

Install One Joint of 36" R.C.P. With Masonry Plug. Cost Incidental to The Project

Sta. 1+07.6 Line 1
Const. Std. Type 1 A Curb Inlet
W=6'-4", L=6'-4"
Top El.=167.50
St. Sta. 2+52.14 (Gatewood)

Sta. 1+19.3 Line 1
Const. Std. Type 1 A Curb Inlet
W=6'-4", L=11'-4"
Top El.=167.48
St. Sta. 2+64.63 (Gatewood)

Sta. 2+08.6 Line 1
Const. Std. Type 1 A Curb Inlet
W=5'-4", L=6'-4"
Top El.=168.25
St. Sta. 3+90.60 (Gatewood)

Sta. 2+78.2 Line 1
Const. Std. Type 1 A Curb Inlet
W=5'-4", L=8'-4"
Top El.=168.49
St. Sta. 4+30.00 (Gatewood)

SCALE 1"=20' HORIZ
1"= 5' VERT

Surveyed Water Surface El.=160.5± (4-28-87)
Normal Water Surface El.=162.00
100 YR. Design Water Surface El.=167.20

UNPLATTED

PLAN - LINE 1

PROFILE - LINE 1

Sta. 0+00 Const. Conc. Apron
Sta. 0+10.1 Const. 5-10'x 4' RCB's w. Wing Walls
℄ Gatewood (St. Sta. 1+12.86)
Sta. 0+47.6 Const. Conc. Soil Saver
Sta. 0+77 ℄
Sta. 0+00 Line 1 Entering Proposed 5-10'x 4' RCBC
Sta. 1+07.6 Line 1 Const. Std. Type 1 A Curb Inlet W=6'-4", L=6'-4" Top El.=167.50 St. Sta. 2+52.14 (Gatewood)
Sta. 1+19.3 Line 1 Const. Std. Type 1 A Curb Inlet W=6'-4", L=11'-4" Top El.=167.48 St. Sta. 2+64.63 (Gatewood)
Sta. 2+08.6 Line 1 Const. Std. Type 1 A Curb Inlet W=5'-4", L=6'-4" Top El.=168.25 St. Sta. 3+90.60 (Gatewood)
Sta. 2+78.2 Line 1 Const. Std. Type 1 A Curb Inlet W=5'-4", L=8'-4" Top El.=168.49 St. Sta. 4+30.00 (Gatewood)

100 Yr. Design Water Surface Elev.=164.43
Normal Water Surface Elev.=160.00
Surveyed Water Surface (4-28-87) Elev.=159.5±
Exist. Ground
Exist. 24" CMP
Prop 12" Wtr. Top=157.40
Prop 8" San Swr. Ft=154.00
Install 82 S.Y. Light Stone Rip Rap
10.1 L.F. Conc. Apron
57.5 L.F. 5-10'x4' RCB's @ 0.35%
9.4 L.F. Conc. Soil Saver

100 Yr. Design Water Surface Elev.=167.20
Normal Water Surface Elev.=162.00
Surveyed Water Surface (4-28-87) Elev.=160.5±

Contractor to place compacted fill (90% density) around and on top of pipe as per Detail, 8ft. Cost of fill subsidiary to Project.

Proposed Top of Curb
Existing Ground

Prop 8" San Swr.
107.6 L.F. of 36" RCP @ 0.24%
11.7 L.F. of 36" RCP @ 0.36%
89.5 L.F. of 30" RCP @ 0.36%
68.4 L.F. 27" RCP @ 0.36%

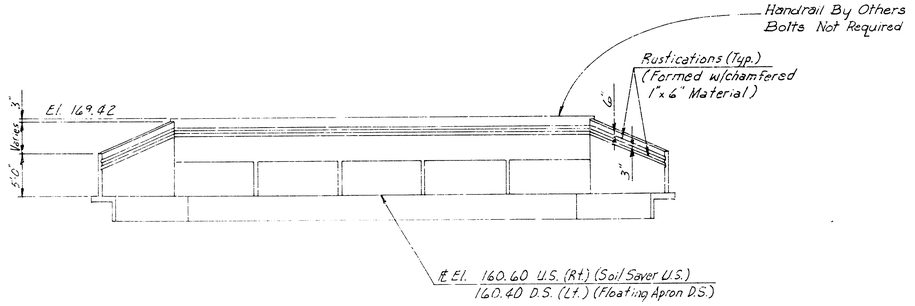
FE Out=160.40
FE In=160.85 (36")
FE Out=160.60
FE In=160.90 (36")
FE In=162.00
FE Out=161.11 (36")
FE In=161.21 (36")
FE Out=161.15 (30")
FE In=161.65 (30")
FE In=161.92
FE Out=161.97 (30")
FE In=162.22 (27")
FE In=162.47 (24")
FE Out=162.47 (27")
FE In=162.72 (24")
FE In=162.97 (15") Line 1C

Line 1A
Line 1B

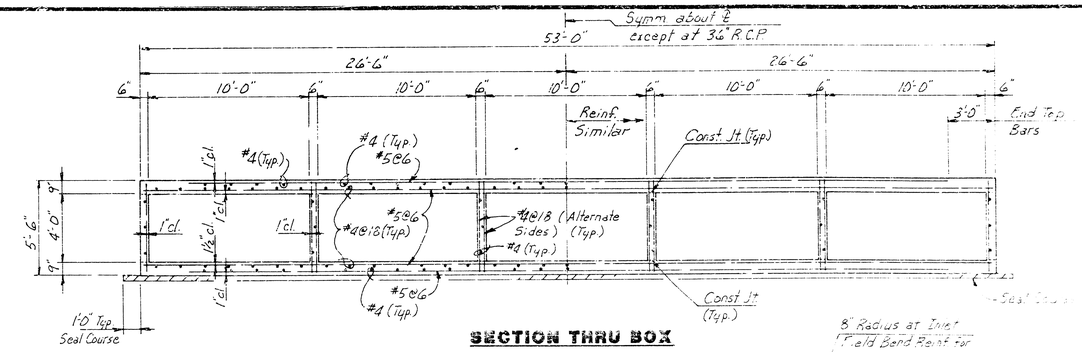
170
165
160
155
150
0
1
0
1
2
3

M.K.E.C.

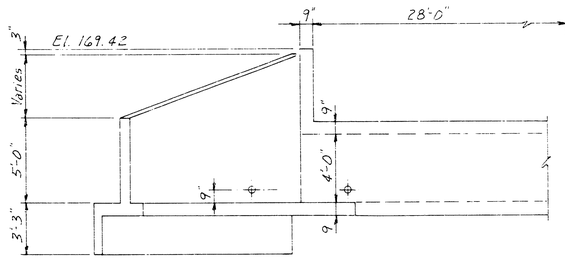
5/5

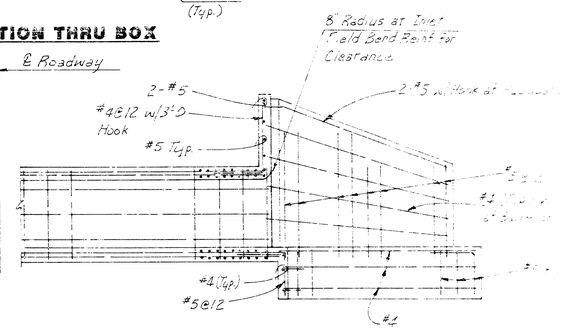


END ELEVATION

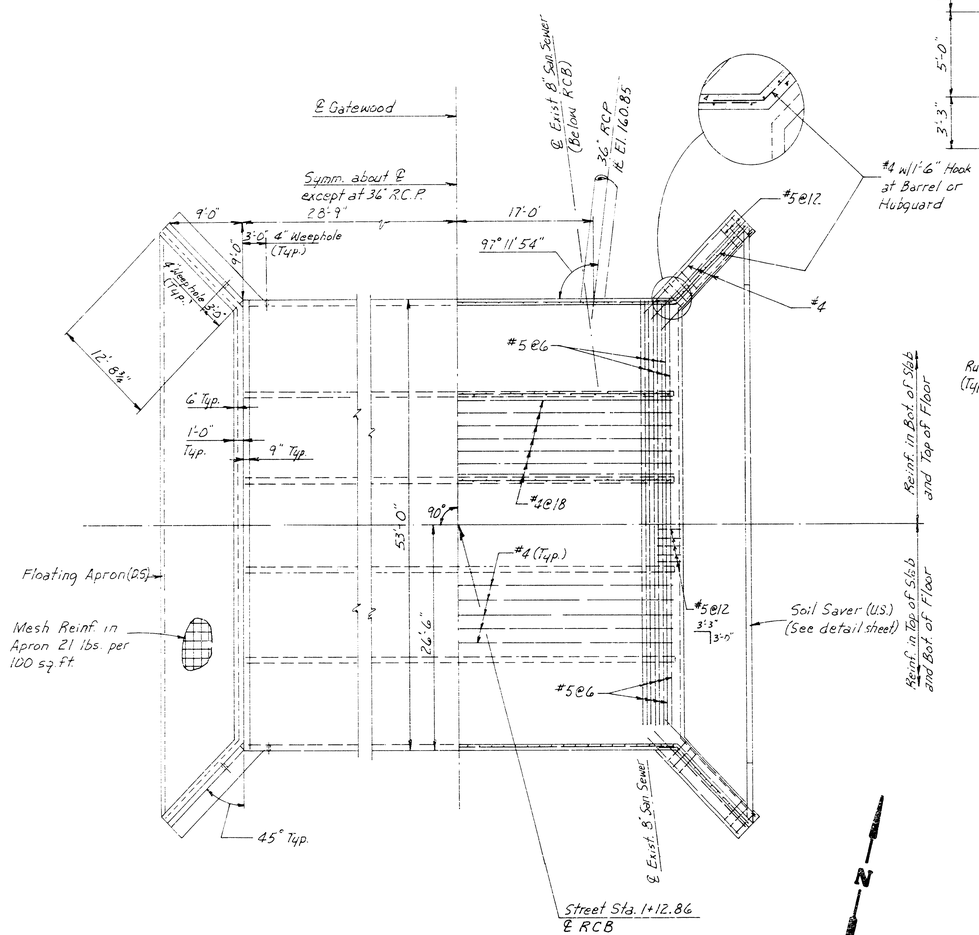


SECTION THRU BOX

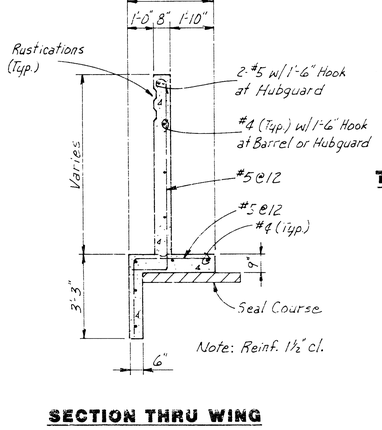




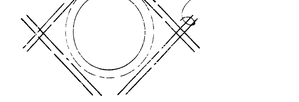
ELEVATION AND SECTION



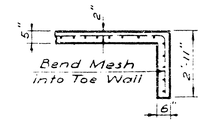
PLAN AND SECTION



SECTION THRU WING



REINF. AT PIPE THRU REINF. CONC. BOX



SECTION THRU APRON

LOADING: H20-44 AASHTO Specifications, Edition of 1984
UNIT STRESSES: fc = 4,000 psi, fs = 24,000 psi (Gr. 60)
The concrete mix specified for the City of Wichita concrete Pavement shall be used throughout. Bevel all exposed edges with a 3/4" triangular moulding, unless otherwise noted. The contractor shall adjust the concrete water content to attain a minimum 28-day strength of 4,000 psi.

Coarse Aggregate shall be deposited behind each weephole to occupy a space extending 15" in all directions above the weephole flowline. This work shall not be paid for directly, but shall be considered as part of the excavation work.

Construction joints shall be formed only at locations shown or as approved by the Engineer.

A Seal Course, of 3" of concrete shall be constructed under the entire floor slab and wing footings. No reinforcing steel shall be placed until the Seal Course has gained sufficient strength to permit working upon it without injury. This item shall not be paid directly but be considered subsidiary to other items.

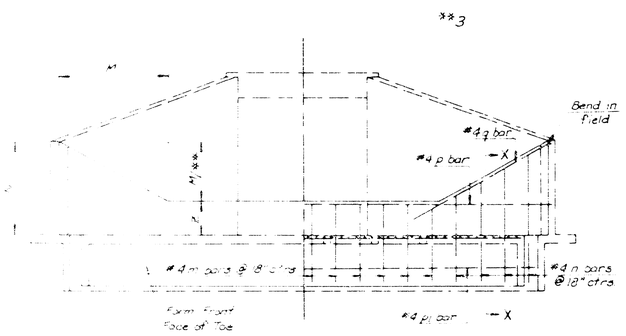
The steel reinforcing and bar supports shall be supplied in accordance with the "Manual of Standard Practice" of the Concrete Reinforcing Steel Institute. The shop drawings for all reinforcing steel shall be submitted to the Engineer for examination prior to fabrication.

REINFORCED CONCRETE BOX CULVERT

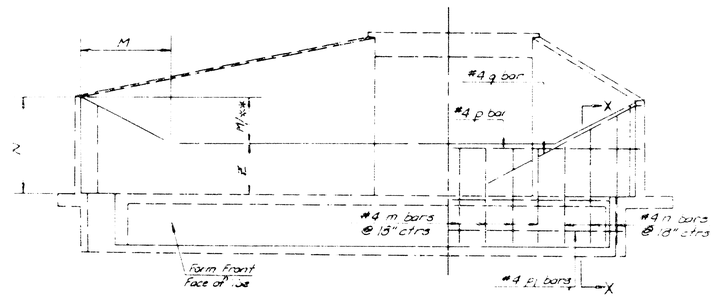
AUTUMN CHASE
R.C.B. DETAILS
PROJECT NO
468-73-245-81728 -000-000-00

Designed	FBN
Detailed	ECG, KSM
Checked	D.S
Date	JULY, 1987
Sheet	3 of 5

MID-KANSAS ENGINEERING CONSULTANTS PA
3500 NORTH ROCK ROAD
BUILDING #800
WICHITA, KANSAS 67226
682-6501



ELEVATION AND SECTION



ELEVATION AND SECTION



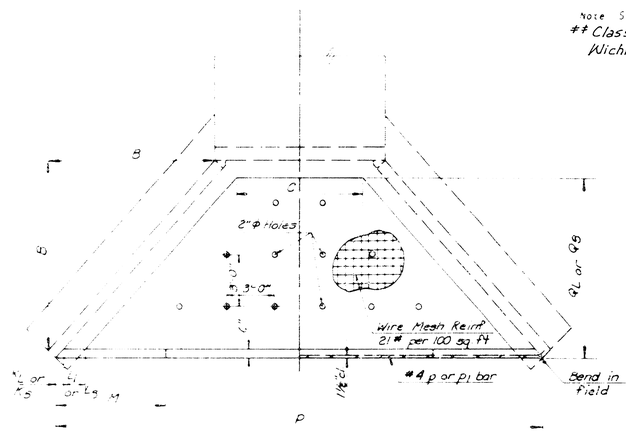
SECTION X-X

GENERAL NOTES

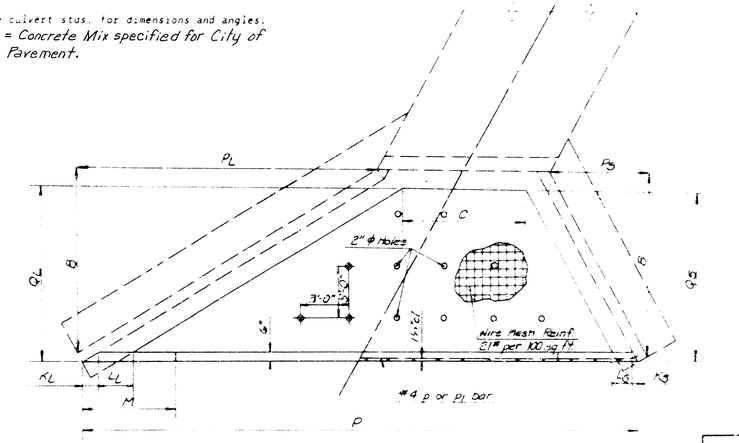
CONCRETE Class A Concrete shall be used throughout.##
All exposed edges shall be finished with an edging tool
REINFORCING: All dimensions are to ℄ of bar. Wire reinforcing mesh shall be electrirally welded and shall be composed of No. W 1.4 wire at 4" centers each way. ~~Weight of reinforcing mesh shall be classified as pounds of reinforcing steel.~~

When holes in the apron are warranted by drainage conditions, they shall be constructed as directed by the Engineer.

Note See appropriate culvert stds. for dimensions and angles.
Class A Concrete = Concrete Mix specified for City of Wichita Concrete Pavement.



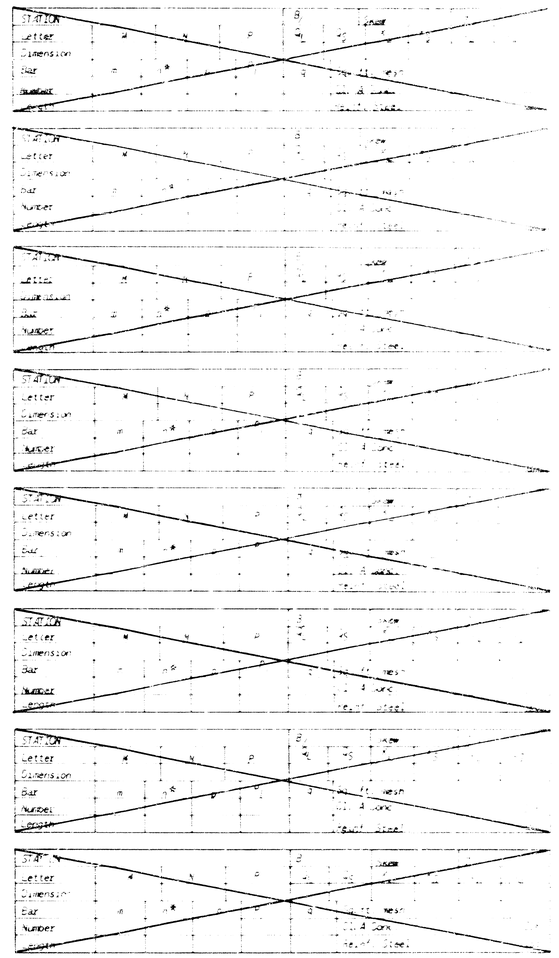
PLAN



PLAN – SKEW

NOTE: ALL REINFORCING BARS ARE NO. 4 BARS

STATION 1+12.86 Rt.				B = 9'-0"				
Letter								
Dimension	10'-9¼"	5'-0"	70'-0⅝"	8'-5⅝"	8'-5⅝"	0'-6"	0'-6"	1'-5"



Quantities include apron and soil saver quantities

* n bars are variable increase or decrease by increments of 1" for B = 9'-0" and 4" for B = 9'-6" Cut 2 each length.

LIST OF SOIL SAVERS

Station	Culvert Size	Side	E
1+12.86	5-10x4	Rt.	1'-4⅞"

DEPARTMENT OF TRANSPORTATION — STATE OF KANSAS

SOIL SAVER FOR R.C. CULVERTS

STD NO 520.1

4/5

C-2 3-27-A

FINAL PLAT OF
AUTUMN CHASE
AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS

Scale: 1" = 60'

LOT NO	BLOCK	MINIMUM REC. ELEV.
1	1	168.0
2	1	169.0
3	1	170.0
4	1	172.0
5	1	171.0
6	1	172.0
7	1	172.0
8	1	173.0
9	1	174.0
10	1	177.0
11	1	177.0
12	1	178.0

RESERVE "E" DETAIL

RESERVE "C" DETAIL

RESERVE "A" DETAIL

RESERVE "G" DETAIL

RESERVE "I" DETAIL

RESERVE "B" DETAIL

RESTRICTIVE COVENANT Book 11 Page 11

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