# CITY OF WICHITA
# SEDGWICK COUNTY, KANSAS

## CONSTRUCTION PLANS FOR

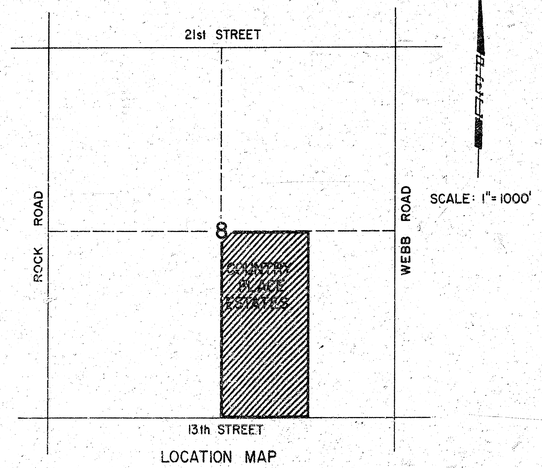
# STREET IMPROVEMENTS

## FOR PHASE I IN

# COUNTRY PLACE ESTATES

INDEX


SHEET NO. 1 TITLE SHEET
SHEET NO. 2 PAVEMENT DETAILS
SHEET NO. 3 GATEWOOD STREET


LOCATION MAP

SCALE: 1"= 1000'

## CITY PROJECT NO

## 472-76-245-80810-000-000-001


PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS


KENNETH D. EVERETT LICENSED 6759 PROFESSIONAL ENGINEER KANSAS

| No. | Revision | By | Date |
|---|---|---|---|
| | | | |

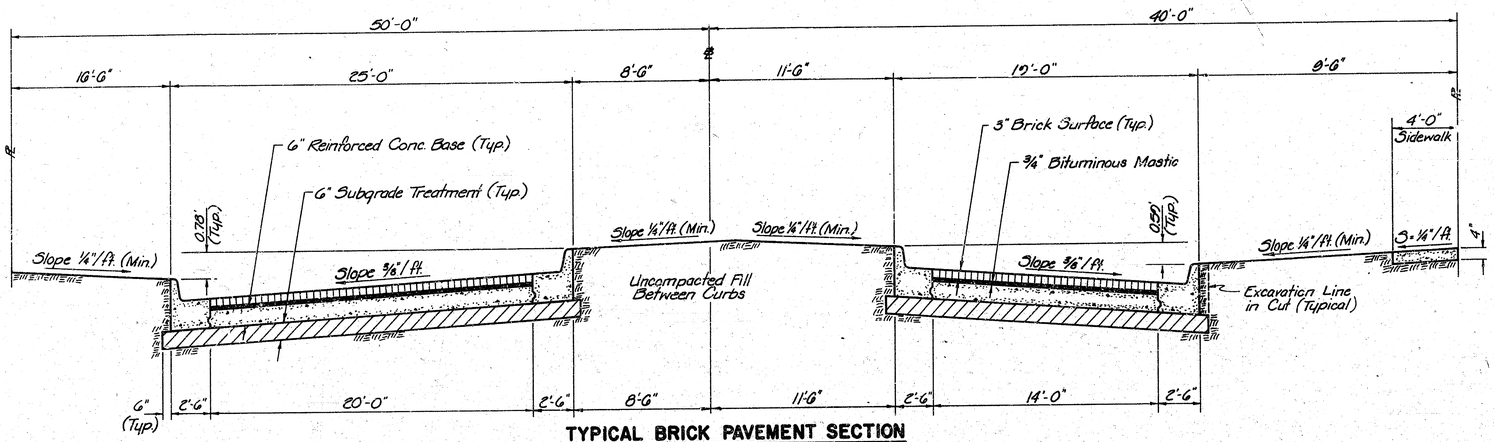
CITY OF WICHITA
TITLE SHEET
PHASE I
COUNTRY PLACE ESTATES STREET IMPROVEMENTS
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

| | | | |
|---|---|---|---|
| Designed by KE, DD | Job No. 77502 | Sht. 1 | 13 |
| Drawn by SG, BB | Date APRIL 1979 | | |

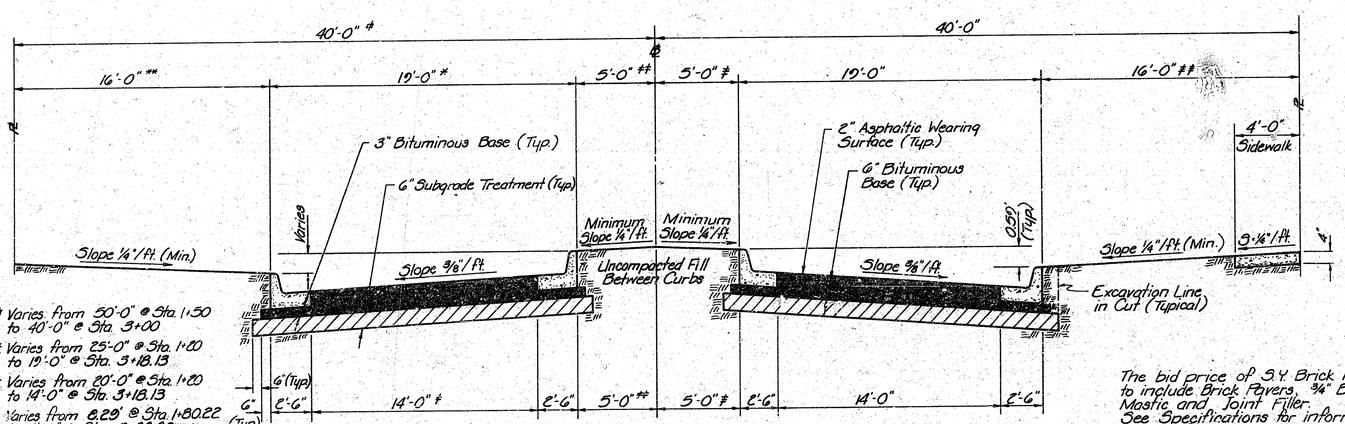
Add Trim Line

77502

| SHEET NO. | TOTAL SHEETS |
|---|---|
| 2 | 3 |

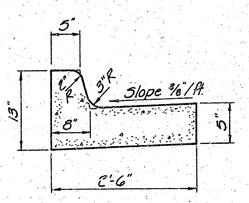



## TYPICAL BRICK PAVEMENT SECTION
STA. 0+50 to STA. 1+20

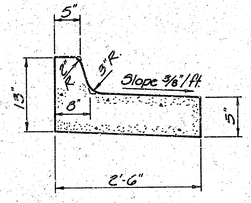



\# Varies from 50'-0" @ Sta. 1+50 to 40'-0" @ Sta. 3+00
* Varies from 25'-0" @ Sta. 1+00 to 19'-0" @ Sta. 3+18.13
\# Varies from 20'-0" @ Sta. 1+00 to 14'-0" @ Sta. 3+18.13
\## Varies from 8.29' @ Sta. 1+80.22 to 5'-0" @ Sta. 3+06.68
** Varies from 16'-6" @ Sta 1+31.87 to 16'-0" @ Sta. 3+18.13
\# Varies from 10.68' @ Sta. 1+80.41 to 5'-0" @ Sta. 3+12.41
\## Varies from 5'-0" @ Sta. 1+37.59 to 16'-0" @ Sta. 3+12.41

## TYPICAL ASPHALTIC PAVEMENT SECTION
STA. 1+20 to STA. 5+65

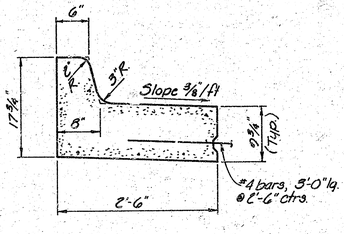



STANDARD SLOPE




REVERSE SLOPE

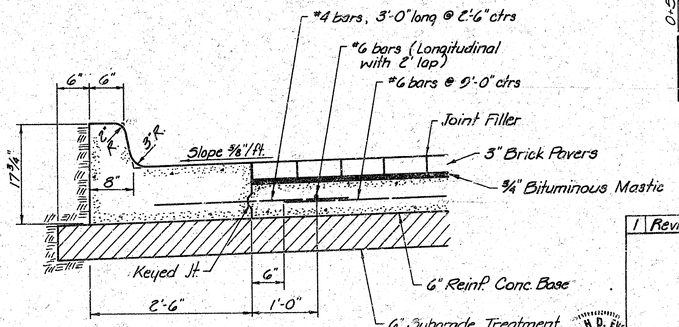
## COMBINED CURB & GUTTER




REVERSE SLOPE

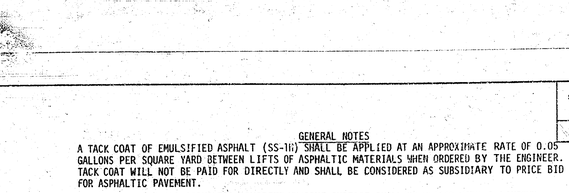
## NON STANDARD COMBINED CURB & GUTTER

The bid price of S.Y. Brick Pavement to include Brick Pavers, ¾" Bituminous Mastic and Joint Filler. See Specifications for information on laying of brick.

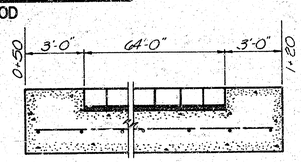



STANDARD SLOPE

The long axis of the brick to be placed transversly to the centerline of the roadway.




## TEMPORARY PAVEMENT END DETAIL
STA. 5+65 GATEWOOD




## BRICK PANEL DETAIL

The concrete at the ends of the brick panels and optional joint to be incidental to the cost of the 6" Reinforced Concrete Base.

### GENERAL NOTES

A TACK COAT OF EMULSIFIED ASPHALT (SS-1h) SHALL BE APPLIED AT AN APPROXIMATE RATE OF 0.05 GALLONS PER SQUARE YARD BETWEEN LIFTS OF ASPHALTIC MATERIALS WHEN ORDERED BY THE ENGINEER. TACK COAT WILL NOT BE PAID FOR DIRECTLY AND SHALL BE CONSIDERED AS SUBSIDIARY TO PRICE BID FOR ASPHALTIC PAVEMENT.

BITUMINOUS BASE AND ASPHALTIC CONCRETE WEARING SURFACE SHALL BE PLACED WITH A LAYDOWN MACHINE HAVING AUTOMATIC ELECTRONIC CONTROLS FOR CROWN AND GRADE. CONSTRUCTION JOINTS IN EACH LIFT SHALL BE STAGGERED A MINIMUM DISTANCE OF 1 FOOT WITH JOINTS IN PRECEDING LIFTS AND SUCH THAT A JOINT WILL BE CONSTRUCTED ON THE PAVEMENT CENTERLINE IN THE TOP LIFT.

THE A.C. PAVEMENT BETWEEN COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS 8" A.C. PAVEMENT (6" BITUMINOUS BASE). THE BITUMINOUS BASE UNDER THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS 3" BITUMINOUS BASE.

### BRICK PAVING SPECIFICATIONS

MATERIALS:

A) BRICK: ALL BRICK ARE TO BE OF UNIFORM DESIGN, DIMENSIONS AND APPEARANCE AND ARE TO HAVE PREVIOUSLY BEEN USED IN A LOCAL ROADWAY PAVEMENT WHERE THEY PROVIDED SATISFACTORY SERVICE UNTIL SUCH TIME AS THEIR REMOVAL. BRICK ARE TO HAVE NOMINAL DIMENSIONS OF 3"x4"x8-3/4". BRICK OF OTHER PROPORTIONS WILL REQUIRE THE ADVANCE WRITTEN APPROVAL OF THE ENGINEER IF THEY ARE TO BE USED AND ALL APPROPRIATE ADJUSTMENTS TO OTHER PLAN DETAILS WILL BE MADE AT NO COST TO THE CITY. EACH BRICK IS TO BE INSPECTED TO INSURE THAT IT IS NOT CRACKED, EXCESSIVELY CHIPPED OR OF NONUNIFORM PROPORTIONS. THE ENGINEER RESERVES THE RIGHT TO REJECT ANY BRICK FOR ANY REASON AT ANY TIME PRIOR TO ACCEPTANCE OF THE COMPLETED PAVEMENT

B) BITUMINOUS MASTIC: MIXTURE OF LIQUID ASPHALT AND SAND, 92% SAND, 8% LIQUID ASPHALT.
   1) LIQUID ASPHALT: AASHO DESIGNATION NO. M-82-70, ASTM D2027-76, MC-70 or MC-250.
   2) SAND: ASTM C136, 100% PASSING #4 SIEVE, 15-35% PASSING #10 SIEVE, 30-55% PASSING #40 SIEVE, 20-40% PASSING #80 SIEVE, 0-5% PASSING #200 SIEVE.

C) ASPHALT FILLER: AASHO DESIGNATION NO. M-18-42 TYPE B, ASTM D241-43, TYPE B.

INSTALLATION:

A) BEDDING COURSE:
   1) BITUMINOUS MASTIC: SPREAD ON SURFACE OF CONCRETE BASE 3/4" THICK AND STRUCK OFF WITH DOUBLE TEMPLATE.
   2) FIRST TEMPLATE: SET SLIGHTLY ABOVE FINISH GRADE. AFTER STRIKING OFF, ROLL WITH LONG HANDLED HAND ROLLER. CORRECT ALL SURFACE IRREGULARITIES.
   3) SPREAD THIN LAYER OF MASTIC WITH SECOND TEMPLATE.

B) PLACING BRICK:
   1) BRICK: LAID IN ACCORDANCE WITH RUNNING BOND, OR AS OTHERWISE SPECIFIED.
   2) BRICK LAYERS: STAND ON BRICK ALREADY LAID, BEING CAREFUL NOT TO DISTURB BEDDING COURSE.
   3) BRICK: LAID IN STRAIGHT COURSES, CLOSELY TOUCHING EACH OTHER.
   4) BRICK: INSPECTED AND OBJECTIONABLE BRICK REMOVED AND REPLACED WITH GOOD ONES AFTER LAYING.

C) ROLLING BRICK:
   1) BRICK: BROUGHT TO FIRM BEARING AND TRUE SURFACE BY ROLLING, WITH 3 TO 5 TON TANDEM ROLLER.
   2) AFTER ROLLING, SURFACE SHALL NOT VARY MORE THAN 1/4" IN 10 FEET.
   3) REPLACE ANY BRICK DAMAGED BY ROLLING.

D) FILLING JOINTS:
   1) A 35% CALCIUM CHLORIDE SOLUTION CONTAINING 1% STARCH: SPRAYED ON SURFACE THROUGH A FINE NOZZLE VERTICALLY OVER SURFACE TO ASSURE EASY REMOVAL OF SURPLUS FILLER WHICH CAN BE REHEATED AND REUSED.
   2) AFTER SURFACE OF BRICK HAS BEEN WETTED DOWN, FILL JOINTS WITH A MIXTURE THAT SHALL BE A UNIFORM 450° WHEN APPLIED TO BRICK SURFACE. THE FILLER, AT THE REQUIRED TEMPERATURE, SHALL BE POURED OR FLUSHED INTO THE JOINTS SO AS TO PENETRATE FULLY TO THE BOTTOM OF THE JOINT WITH A SURPLUS RETAINED ON THE BRICK SURFACE. AFTER THE JOINTS HAVE BEEN FILLED AND THE BITUMINOUS FILLER HAS COOLED SUFFICIENTLY, THE SURPLUS MATERIAL ON THE SURFACE SHALL BE CUT OFF BY MEANS OF A FLAT-BLADED TOOL, AND REMOVED FROM THE SURFACE OF THE PAVEMENT. THE REMOVAL SHALL BE SUCH THAT THERE WILL BE NO TENDENCY TO PULL OR LOOSEN THE FILLER IN THE JOINTS. ANY JOINTS FOUND UNFILLED WHEN THE SURPLUS MATERIAL HAS BEEN REMOVED SHALL BE REFILLED BY MEANS OF HAND POURING POTS.

| | | | |
|---|---|---|---|
| 1 | Revised Brick Pavement Section | TEB | 8/14/79 |

CITY OF WICHITA

# PAVEMENT DETAILS

PHASE I
COUNTRY PLACE ESTATES STREET IMPROVEMENTS


PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS


N. D. EVANS LICENSED 6759 KANSAS PROFESSIONAL ENGINEER

| Designed by | KE, DD | Checked by | |
|---|---|---|---|
| Drawn by | SG, TB | Date APRIL 1979 | Job No. 77502 |

Sheet No 2 of 3

Face of Curb Data
P.I. 33.0' Lt. Sta. 1+50 ℄
P.I. 23.5' Lt. Sta. 3+00
Δ = 3°37'26"
D = 10°00'00"
R = 572.96'
L = 36.24'
T = 18.13'

Face of Curb Data
P.I. 5.5' Lt. Sta. 3+00
Δ = 1°20'12"
D = 10°00'00"
R = 572.96'
L = 13.36'
T = 6.68'

**TEMP. DITCH DETAIL**

Scale: 1" = 20'

# COUNTRY PLACE ESTATES

Const. Temporary Intersection as shown (5" Bituminous Base with 6" Subgrade Treatment)

Existing Asphalt Surfacing

50'

No Sidewalk Left

-1.10% Gr.

+0.50' Prop. Line Grade

Spare Trees

Iron

8" x 96 LF San. Sewer Street Crossing (By Others)

20' x 30' Lt. Easement

Grade Temp. Ditch to Drain Approx. 135' to the North Slope = -0.15% See Detail Above

Sta. 0+00 ℄ 13th Street

℄ 13th STREET

6" Asphalt Overlay

Spare Tree

Utility Easement

GATEWOOD

Crown 9.49' R. 120' Rt. +80.0

Utility Easement

5.5' R.

3' Rt.

Sta. 5+65 END Street Const. & Sidewalk Rt. See Sheet No. 2

Future San. Sewer

Sta. 0+50 BEGIN Street Construction & Sidewalk Rt. See Sheet No. 2

6" x 44 LF San. Sewer Street Crossing (By Others)

Future San Sewer

Future Manhole (Typ.)

Sta. 5+25 Const. 48' Conc. Drive Rt.

San. Sewer

Future San. Sewer

2 Private Streets by Others 2

48'-0" B-B

Asphalt Street Lane by Others

50'

-1.10% Gr.

+0.30' Wk. Grade

+0.30' to +0.50' Wk. Grade

+0.50' Wk. Grade

+50

+00

Face of Curb Data
P.I. 30' Rt. Sta. 1+50 ℄
P.I. 5.5' Rt. Sta. 3+00 ℄
P.I. 23.5' Rt. Sta. 3+00
Δ = 2°28'53"
D = 10°00'00"
R = 572.96'
L = 24.81'
T = 12.41'

Note: Grub all trees within right-of-way, except those indicated to be spared.

All alignment data is to the Face of the Curb.

CIRCUMFERENCE MEASUREMENTS ON ALL TREES.

PAVING CONTRACTOR TO COORDINATE TREE REMOVAL WITH SAN. SEWER CONTRACTOR.

BM 1 - R.R. Spike on NW Fc. PP 31' S. SW of NW Cor. 13th St. & Gatewood Elev. = 178.87

BM 2 RR Spike in Power Pole 1295' ± W. 25' N. ℄ 13th St. & Gatewood Elev. = 178.69

| No. | Revision | By | Date |
|---|---|---|---|
| 2 | Move Alignment East at 13th Street | TEB | 8/14/79 |
| 1 | Relocated North S.S. street crossing | R.J. | 6/22/79 |

KENNETH D. EVERETT — LICENSED — 6759 — STATE OF KANSAS — PROFESSIONAL ENGINEER

CITY OF WICHITA

## GATEWOOD STREET

PHASE I

COUNTRY PLACE ESTATES STREET IMPROVEMENTS

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

ENGINEERS

WICHITA, KANSAS

| | | | |
|---|---|---|---|
| Designed by KE, DD | Job No. 77502 | Sht. 3 | 3/3 |
| Drawn by SG, BB | Date APRIL 1979 | | |