CITY OF WICHITA, KANSAS

# STREET IMPROVEMENTS

## (RIVERSIDE FOURTH ADDITION)

R.W. BRUGGEMAN: DIRECTOR OF ENGINEERING / CITY ENGINEER

JULY, 1981

PROJ. NO. 472-76-245-81047-000-000-001




BENEFIT DISTRICT

NOTE:

This project to be bid and constructed in accordance with all applicable City of Wichita specifications. Contractor shall supply and install all necessary and/or incidental material and furnish all labor necessary to make the drainage and street improvements function in accordance with the intent of the contract.

Type of Sub-grade Treatment shall be determined by the Field Engineer. Sub-grade Treatment may consist of Lime Treatment, Cement Treatment, Sub-grade Modification, or any combination of these.

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.

Contractor shall inspect the site and satisfy himself as to existing conditions and circumstances prior to submitting his bid.

PLANS PREPARED BY

DELAMATER, FREUND & ASSOCIATES, P.A.

ENGINEERS AND ARCHITECTS

WICHITA, KANSAS

WILMER FREUND LICENSED 4529 KANSAS PROFESSIONAL ENGINEER

B.M. 81.73 Std. Disc S.S. Conc. Wk. along N.S. Bridge on 55th St. across Big Slough

B.M. 84.56 NW "M" in Mueller on Fire Hydrant at NW Cor. of Mead & 53rd St. So.

Δ = 16°05'28" R. = 852.85 T. = 126.21 L. = 250.74 LC = 249.96

| CURVE DATA BASED ON ℄ RAD. Δ/2 = 8°02'44" | | | | | |
|---|---|---|---|---|---|
| STA. | ARC. | CHORD LENGTH 8' OFF ℄ CB | CHORD LENGTH 8' OFF ℄ CB | DEFLECTION | TOTAL DEFLECTION |
| 1+08.67 | —— | —— | —— | 0°00'00" | 0°00'00" |
| 1+25 | 16.33 | 16.84 | 15.82 | 0°31'26" | 0°31'26" |
| 1+50 | 25.00 | 25.78 | 24.22 | 0°48'08" | 1°19'34" |
| 1+75 | 25.00 | 25.78 | 24.22 | 0°48'08" | 2°07'41" |
| 2+00 | 25.00 | 25.78 | 24.22 | 0°48'08" | 2°55'49" |
| 2+25 | 25.00 | 25.78 | 24.22 | 0°48'08" | 3°43'57" |
| 2+50 | 25.00 | 25.78 | 24.22 | 0°48'08" | 4°32'04" |
| 2+65.99 | 15.99 | 16.49 | —— | 0°30'47" | 5°02'51" |
| 2+75 | 9.01 | 9.29 | 24.22 | 0°17'21" | 5°20'12" |
| 3+00 | 25.00 | 25.78 | 24.22 | 0°48'08" | 6°08'19" |
| 3+00.37 | 0.37 | 0.38 | —— | 0°00'43" | 6°09'02" |
| 3+25 | 24.63 | 25.40 | 24.22 | 0°47'25" | 6°56'27" |
| 3+36.86 | 11.86 | 12.23 | —— | 0°22'50" | 7°19'17" |
| 3+50 | 13.14 | 13.55 | 24.22 | 0°25'18" | 7°44'35" |
| 3+59.43 | 9.43 | 9.73 | 9.13 | 0°18'09" | 8°02'44" |

DEF./FT. = 1.925 MIN.

Sta. 3+41 Const.
Type 1-A Inlet Lt.
(W = 4'-2")
Install 24"x 45'-10"
Storm Sewer E.
See Sheet 4 & 6

WK. Gr. +0.70'
-0.3181 %
WK. Gr. +0.30'
+0.3223 %
-0.3418 %
WK. Gr. +0.30'
+0.3209 %

MONA
MEAD
70' R/W
40' F-F

Top Inlet El. 81.9
℄ El. 77.8

Top Inlet El. 81.9
℄ El. 77.0

Exist 30" San. Sewer

Match Existing
Begin Construction

Existing
A.C.
2'

M.H. Rim 83.00
G5.31

M.H. Rim 82.13
℄ G5.43

M.H. Rim 80.52
℄ G5.77

ROLL-TYPE
Curb & Gutter

Adjust Top of
Exist. M.H. to El. 82.8

Adjust Top of
Exist. M.H. to El. 83.1

Sta. 3+41 Const.
Type 1-A Inlet Rt.
(W = 4'-2")
Install 24"x57'-1"
Outflow Pipe E.
See Sheet 4 & 6

Sta. 3+41 Const.
Conc. Headwall 80' Rt.
with Automatic Flap Gate
See Sheet 4 & 6

P.V.I.
Elev. 81.90
No V.C.

Install Type IV
Rip-Rap
See Sheet 4

3-20' DRIVES

INTERSECTION QUANTITIES

| | |
|---|---|
| —— S.Y. —— " Concrete Pavement | |
| 120.18 S.Y. 8 " Asphaltic Conc. Pavement ( 6 " Bituminous Base) | |
| —— S.Y. —— " Bituminous Base | |
| —— L.F. Combined Curb & Gutter | |
| 42.25 L.F. Integral Curb | |
| —— S.Y. 4" Walk Ramp | |
| —— S.Y. 4" Walk | |
| 76.1 C.Y. Excavation | |
| 18.5 C.Y. Compacted Fill | |
| —— Lbs. Reinforcing Steel | |
| 217.75 S.Y. Manipulation | |
| —— Tons Bituminous Cement | |
| 20.33 S.Y. V.C. 5 " Concrete & 3 " Asphaltic Concrete Base | |

DEPARTMENT OF ENGINEERING
R.W. BRUGGEMAN: DIR. OF ENGINEERING-CITY ENGINEER

RIVERSIDE FOURTH ADDITION

**MEAD**

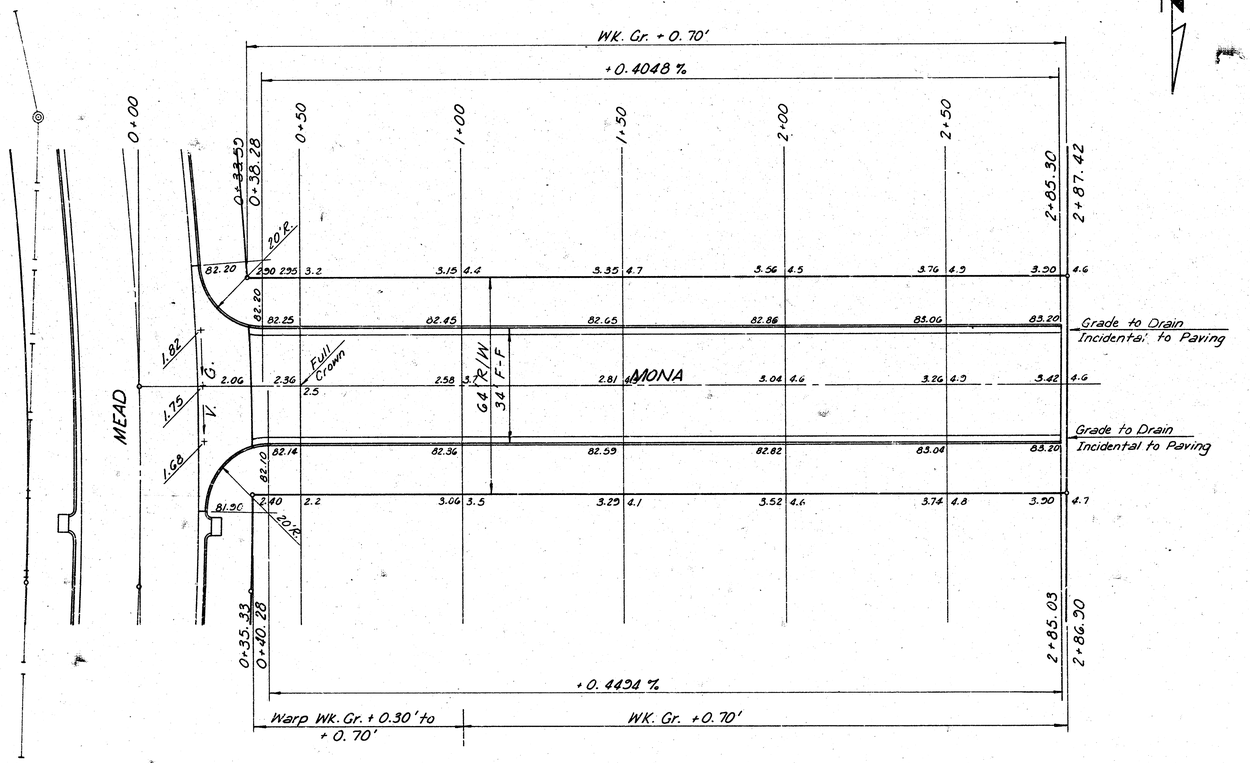
S.L. LOT 4 BLK. 7 TO N.L. LOT 3 BLK. 6

CITY OF WICHITA PROJ. NO. 472-76-245-80147-000-000-001

DELAMATER, FREUND & ASSOCIATES, P.A.
ENGINEERS & ARCHITECTS
WICHITA, KANSAS

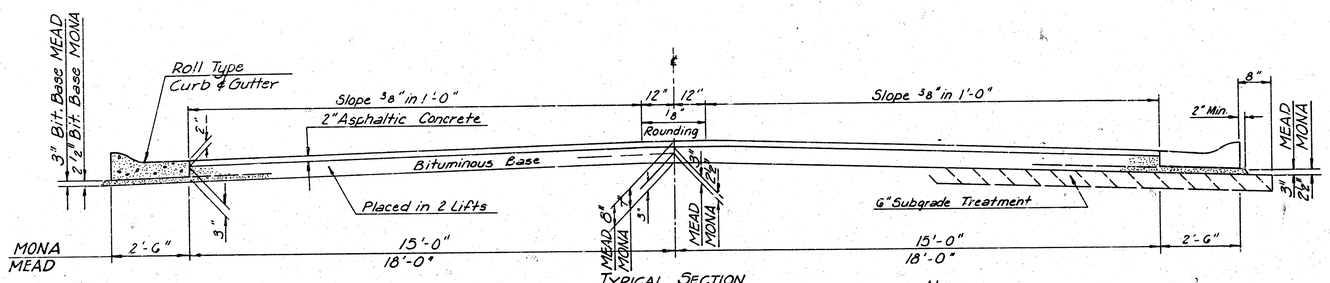
SCALE 1"= 20' | DATE July, 1981 | DWG. NO. 89-LP-2

APP. CKD. TR. DR. DES. PCOT. SURV.




| | |
|---|---|
| DEPARTMENT OF ENGINEERING | |
| R.W. BRUGGEMAN: DIR. OF ENGINEERING-CITY ENGINEER | |
| RIVERSIDE FOURTH ADDITION | |
| **MONA** | |
| W.L. LOT 1 BLK. 6 TO W.L. MEAD | |
| CITY OF WICHITA PROJ. NO. 472-76-245-81047-000-000-001 | |
| DELAMATER, FREUND & ASSOCIATES, P.A. ENGINEERS & ARCHITECTS WICHITA, KANSAS | |
| SCALE 1" = 20' | DATE July, 1981 |
| DWG. NO. 89-LP-3 | |

SURV. | PLAT. | DES. | DR. | TR. | CKD. | APP.




TYPICAL SECTION

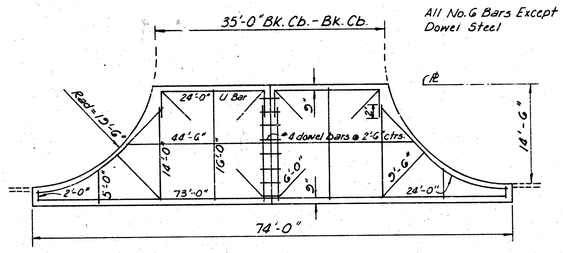
The A.C. Pavement between the combined curb and gutter shall be paid as Sq. Yds. 8" (MEAD) 7" (MONA) A.C. Pavement (6" (MEAD) & 5" (MONA) Bituminous Base)

The Bituminous Base under the combined curb and gutter shall be paid as Sq. Yds. 3" (MEAD) & 2½" (MONA) Bituminous Base.

NOTE:

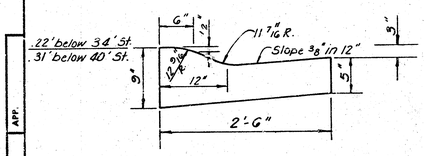
A tack coat of emulsified asphalt (SS-1H) shall be applied at an approximate rate 0.05 gallons per sq. yd. between lifts of asphalt materials when ordered by the engineer. Tack coat will not be paid for directly but shall be considered as subsidiary to price bid for asphalt pavement.

Bituminous base and asphaltic concrete wearing surface shall be placed with a layout machine having automatic controls for crown and grade. Construction joints in each lift shall be staggered a minimum distance of 1' with joints in preceding lifts and placed such that a joint will be constructed on the center-line in the top lift.

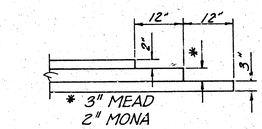



| No. 6 # Bars | | | |
|---|---|---|---|
| 2 | 24'-0" | U | Bars |
| 6 | 6'-0" | — | " |
| 1 | 44'-6" | — | " |
| 1 | 73'-0" | — | " |
| 2 | 2'-0" | — | " |
| 2 | 5'-0" | — | " |
| 2 | 3'-6" | — | " |
| 2 | 24'-0" | — | " |
| 4 | 14'-0" | — | " |
| 2 | 16'-0" | — | Bars |
| 370.5 lin. ft. | | | |

CONCRETE VALLEY GUTTER
(5" Conc. & 3" Bit. Base)

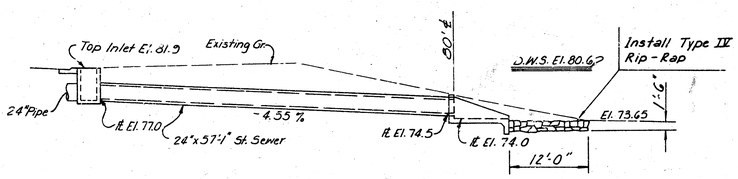



ROLL TYPE CURB & GUTTER




TRANSVERSE CONST. JOINT

Transverse construction joints shall be constructed in flexible base pavement at locations where pavement temporarily ends to facilitate future pavement construction as shown by detail. The cost of constructing the transverse construction joints shall not be measured or paid for directly but shall be included in the bid price for square yards of asphaltic concrete pavement.



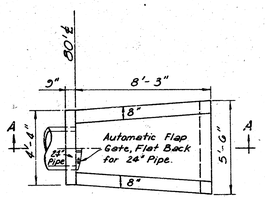

DETAIL OF OUTFLOW PIPE

NOTE: See Sheet 6 for profile and station grades for 24" Storm Sewer. See Sheet 2 for plan.

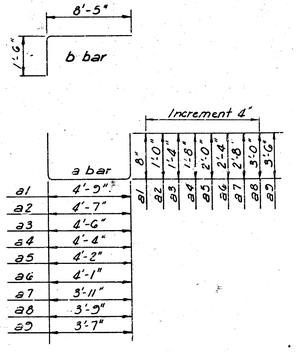
TABLE OF QUANTITIES

| BAR | NUMBER | LENGTH | SHAPE | WEIGHT |
|---|---|---|---|---|
| a1 | 1 | 6'-1" | | 4.06 |
| a2 | 1 | 6'-1" | | 4.40 |
| a3 | 1 | 7'-2" | | 4.79 |
| a4 | 1 | 7'-8" | | 5.12 |
| a5 | 1 | 8'-2" | | 5.45 |
| a6 | 1 | 8'-9" | | 5.85 |
| a7 | 1 | 9'-3" | | 6.18 |
| a8 | 1 | 9'-9 | | 6.51 |
| a9 | 1 | 10'-7" | | 7.07 |
| b | 6 | 9'-11" | — | 39.75 |
| c | 1 | 5'-3" | — | 3.51 |
| d | 2 | 9'-0" | — | 12.02 |
| e | 1 | 4'-0" | — | 2.67 |
| f | 2 | 5'-0" | — | 6.68 |
| Total Rebar, Lbs. | | | | 114.06 |
| Concrete, C.Y. | | | | 2.23 |

All Rebar to be # 4




SECTION A-A




HEADWALL FOR 24" PIPE

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RIVERSIDE FOURTH ADDITION

# TYPICAL SECTION & DRAINAGE DETAILS

CITY OF WICHITA PROJ. NO. 472-76-245-81047-000-000-001

DELAMATER, FREUND & ASSOCIATES, P.A.
ENGINEERS & ARCHITECTS
WICHITA, KANSAS

SCALE — DATE July, 1981 DWG. NO. 89-LP-4

APP. CKD. TR. DR. DES. PLOT. SURV.