

CITY OF WICHITA, KANSAS  
MICHAEL E. LINDEBAK, P.E., CITY ENGINEER  
STREET IMPROVEMENTS

## INDEX OF SHEETS

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- 5.-6. PAVING PLANS - BELLWOOD
7. PAVING PLAN - BELLWOOD COURT
8. VALLEY GUTTER DETAILS
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IN  
STERLING FARMS - PHASE 5A  
CITY OF WICHITA PROJECT NO. 472-76-245-82103-000-000-001  
INDEX NO. 761718

### GENERAL NOTES

UNDERGROUND UTILITY SERVICE LINES AND OVERHEAD UTILITY POLE LINES ARE TO BE ADJUSTED NECESSARY BY OTHERS PRIOR TO CONSTRUCTION UNLESS THE PLANS SPECIFICALLY CALL FOR THEIR ADJUSTMENT BY THE CONTRACTOR. EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION AVAILABLE TO THE DESIGNER. 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 IN THE RIGHT-OF-WAY WHICH IS NOT WITH PROPOSED CONSTRUCTION.

TREES AND SHRUBS IN PUBLIC RIGHT-OF-WAY WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE ENGINEER'S APPROVAL. TREES AND SHRUBS WHICH ARE NOT IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE SAVED AND PROTECTED FROM DAMAGE.

RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR AND APPROVED AS NOTED BELOW

ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOOD PLAIN WOULD REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT. ANY MATERIAL DUMPED IN WATERS OF THE UNITED STATES OR WETLANDS IS SUBJECT TO U.S. CORPS OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS WOULD REQUIRE ADDITIONAL ARCHEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED BORROW LOCATION.

CONTRACTOR SHALL SATISFY HIMSELF OF SUBSURFACE CONDITIONS PRIOR TO CONSTRUCTION.

TEMPORARY SURFACING MATERIAL (ROCK, ASPHALT, ETC.) MAY HAVE BEEN PLACED WITHIN STREET RIGHTS-OF-WAY FOR HAUL ROWS AND TEMPORARY ACCESS. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS TO DETERMINE EXTENT, IF ANY, OF SUCH SURFACING. CONTRACTOR SHALL REMOVE SAID TEMPORARY SURFACING IN THE SAME MANNER AS NOTED ABOVE FOR RUBBLE. THIS REMOVAL SHALL BE SUBSIDIARY TO "EXCAVATION".

CONTRACTOR SHALL PROVIDE A MINIMUM FORTY- EIGHT (48) HOUR ADVANCE NOTICE, (EXCLUDING WEEKENDS AND HOLIDAYS) PRIOR TO BEGINNING ANY EXCAVATION, TO KANSAS ONE-CALL SYSTEM, A UTILITY LOCATION SERVICE AT (316) 687-7470 TO REQUEST THE FOLLOWING UTILITY COMPANIES TO LOCATE ALL EXISTING LINES WITHIN THE PROJECT AREA: K.G. & GAS, K.G. & ELECTRIC, SOUTHWESTERN BELL TELEPHONE, MULTIMEDIA CABLEVISION, CITY OF WICHITA SEWER MAINTENANCE AND CITY OF WICHITA WATER DEPARTMENT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR WILL 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 IN ACCORDANCE WITH STATE LAWS.

THE WATER DEPARTMENT SHALL FIELD LOCATE WATER VALVES ONE TIME DURING CONSTRUCTION WHEN REQUESTED BY THE CONTRACTOR. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PRESERVE SUCH FIELD LOCATIONS DURING THE CONSTRUCTION PROCESS. WATER VALVES, WATER VALVE BOXES OR FIRE HYDRANTS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE.

THE CONTRACTOR SHALL ADJUST WATER VALVE BOXES AS DIRECTED BY THE ENGINEER.  
THIS WORK TO BE SUBSIDIARY TO OTHER BID ITEMS.

THIS PROJECT DOES NOT INCLUDE ANY PROVISIONS FOR CONSTRUCTION OF DRIVEWAYS

THIS PROJECT INCLUDES ALTERNATE PAYMENT TYPES. THE CONTRACTOR SHALL BID ALL ALTERNATE 1 AND ALTERNATE 2 BID ITEMS AND THE CITY ENGINEER SHALL THEN SPECIFY WHICH PAYMENT TYPE IS TO BE USED FOR THIS PROJECT. THE ALTERNATE SELECTED BY THE CITY ENGINEER SHALL BE USED FOR THE ENTIRE PROJECT. CROSS SECTIONS AND EARTHWORK QUANTITIES CONTAINED HEREIN REFLECT ALTERNATE 1 CONFIGURATION. ANY DIFFERENCE IN EARTHWORK BETWEEN THE TWO ALTERNATES SHALL BE SUBSIDIARY TO SUBGRADE MANIPULATION.

PROJECT SURVEY CONTROL

BENCH MARK: CHISELED "D" CENTER FACE CURB INLET NE CORNER OF  
KEITH STREET AND BELLWOOD. ELEV. = 165.87

BENCH MARK: CHISELED "D" WEST TOP OF CURB BELLWOOD 12' ± SOUTH  
OF P.C. LOT 11, BLOCK 5. ELEV. = 166.05

IMPROVEMENT DISTRICT  
BOUNDARY

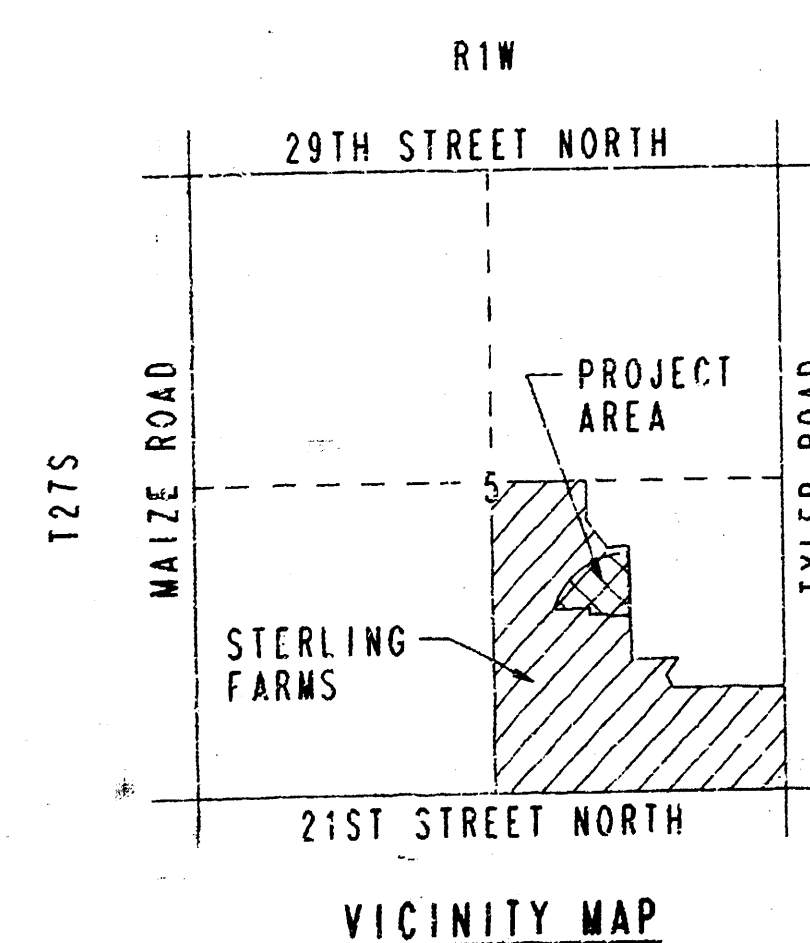
### STREET IMPROVEMENTS

SCALE: 1" = 200'

## EARTHWORK

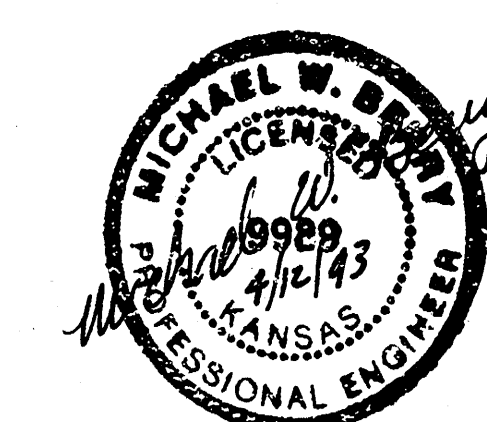
EXCAVATION 398\* CU. YDS.  
COMPACTED FILL 223\* CU. YDS.  
BORROW EXCAVATION (CONTRACTOR FURNISHED) 508\* CU. YDS

\* THESE QUANTITIES COMPUTED USING BASE  
BID - ALTERNATE 1 CONFIGURATION.



APRIL, 1993

PLANS PREPARED BY  
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.  
ENGINEERS  
WICHITA, KANSAS

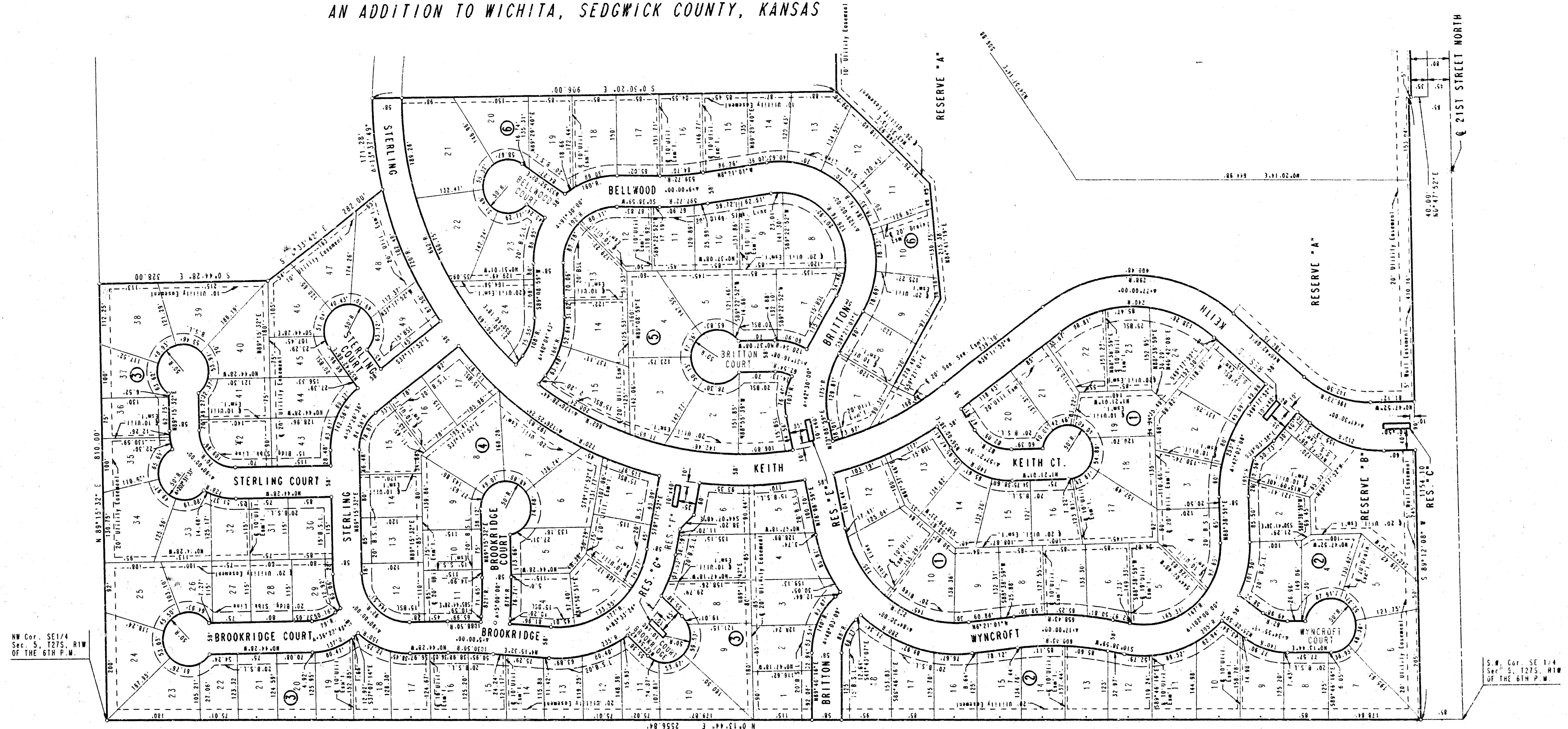


DRAWING NAME: 32-93134 TITLE  
LOCATION: D4 #1138  
CENTER COORDINATES:  
ROTATION ANGLE:  
DATE LAST WORKED ON: APR.01, 1993

# STERLING FARMS

AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS

| PROJECT NO.              | SHEET NO. | TOTAL SHEETS |
|--------------------------|-----------|--------------|
| 472-78-245-82103-000-001 | 2         | 12           |



| PLAN     | DATE |
|----------|------|
| DESIGNED |      |
| CHECKED  |      |
| BY       |      |
| DATE     |      |

DRAWING MADE BY 32-9134 PLAT  
LOCALITY MAP AT 1:25,000  
ROTATION COORDINATES  
DATE LAST WORKED ON:  
DRAFTER DUNN

SCALE: 1"=100'

B.M. - CITY STANDARD B.M. DISC 38" WEST AND 90" SOUTH  
OF THE CENTERLINE INTERSECTION OF 21ST STREET  
AND TYLER ROAD.  
ELEV. +169.95 CITY DATUM  
ELEV. +1357.55 M.S.L.

B.M. - CHIS. "O" AT S.W. CORNER TOP HEADWALL RCBC  
WEST OF KEITH.  
ELEV. +161.28 CITY DATUM  
ELEV. +1348.46 M.S.L.

STERLING FARMS - PHASE 5A

PLAT

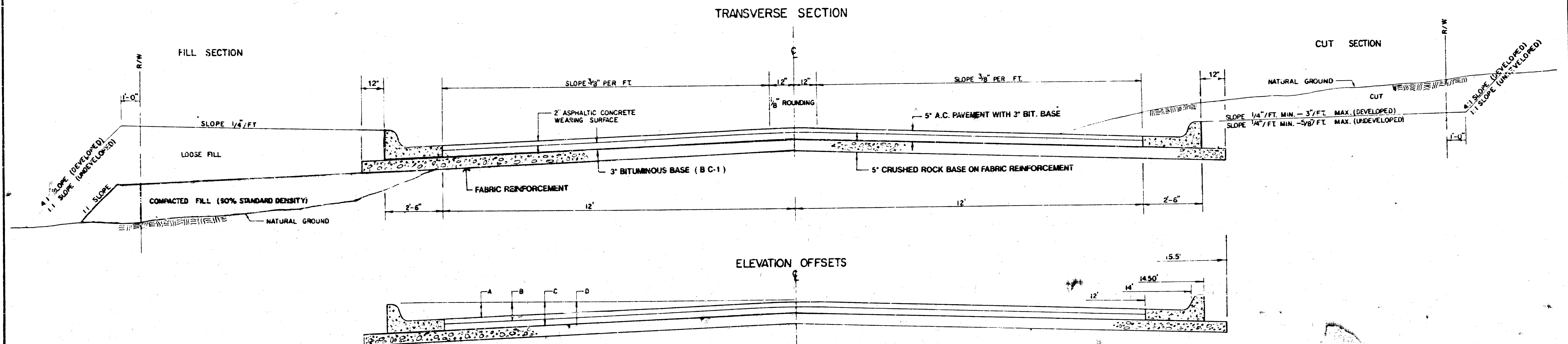
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

ENGINEERS  
WICHITA, KANSAS

|                 |               |
|-----------------|---------------|
| Designed by     | Checked by    |
| DLP             |               |
| Date APR., 1993 | Job No. 93134 |

# TYPICAL 29' PAVEMENT DETAILS

3  
12

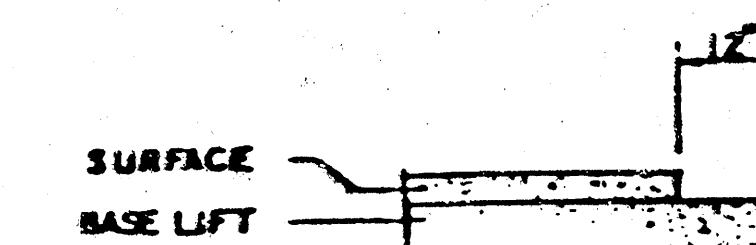


ELEVATION OFFSETS

|                                        | DISTANCE FROM CENTERLINE (LT. & RT.) |      |      |      |      |      |      |      |      |      |     |
|----------------------------------------|--------------------------------------|------|------|------|------|------|------|------|------|------|-----|
|                                        | 0'                                   | 2'   | 4'   | 6'   | 8'   | 10'  | 12'  | 14'  | 16'  | 18'  | 20' |
| A. TOP OF CURBS TO TOP OF SURFACE LIFT | 0.13                                 | 0.18 | 0.24 | 0.30 | 0.33 | 0.36 | 0.43 | 0.49 | —    | —    | —   |
| B. TOP OF CURBS TO TOP OF BASE LIFT    | 0.30                                 | 0.35 | 0.41 | 0.47 | 0.50 | 0.53 | 0.60 | 0.66 | —    | —    | —   |
| C. TOP OF CURBS TO TOP OF ROCK BASE    | 0.35                                 | 0.50 | 0.66 | 0.72 | 0.75 | 0.78 | 0.85 | 0.91 | 0.98 | 1.00 | —   |
| D. TOP OF CURBS TO TOP OF SUBGRADE     | —                                    | —    | —    | —    | —    | —    | —    | —    | —    | —    | —   |

FABRIC BASE REINFORCEMENT SHALL BE 6X1100 BY TEMSAR CORP. OR LBG201 BY TEMAX CORPORATION OR APPROVED EQUAL. FABRIC BASE REINFORCEMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. CRUSHED ROCK SHALL BE UNIFORMITY GRADED FROM 1/2" TO 3/4" MAXIMUM SIZE TO NOT MORE THAN 10% PASSING 200-SIEVE. ROCK QUALITY SHALL BE THE SAME AS SPECIFIED FOR COARSE AGGREGATE FOR CONCRETE MIXES.

## TRANSVERSE CONSTRUCTION JOINTS



TRANSVERSE CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN FLEXIBLE BASE PAVEMENTS AT LOCATIONS WHERE PAVEMENT JOINTS EXISTING FLEXIBLE BASE PAVEMENT AS SHOWN BY THE DETAIL. ALL COSTS ASSOCIATED WITH THE CONSTRUCTION OF THE TRANSVERSE JOINT SHALL BE INCLUDED IN THE BID PRICE FOR SQUARE YARDS 5" ASPHALTIC CONCRETE PAVEMENT (3" BITUMINOUS BASE).

## GENERAL NOTES

ROCK BASE IS TO BE COMPACTED AND SMOOTHED WITH A STEEL FACED ROLLER PRIOR TO PLACEMENT OF ASPHALT. TACK COAT WILL NOT BE APPLIED TO ROCK BASE.

A TACK COAT OF EMULSIFIED ASPHALT (SC-1H OR CSS-1H) SHALL BE APPLIED AT AN APPROXIMATE RATE OF 0.05 GALLONS PER SQUARE YARD BETWEEN EACH LIFT OF ASPHALTIC MATERIAL.

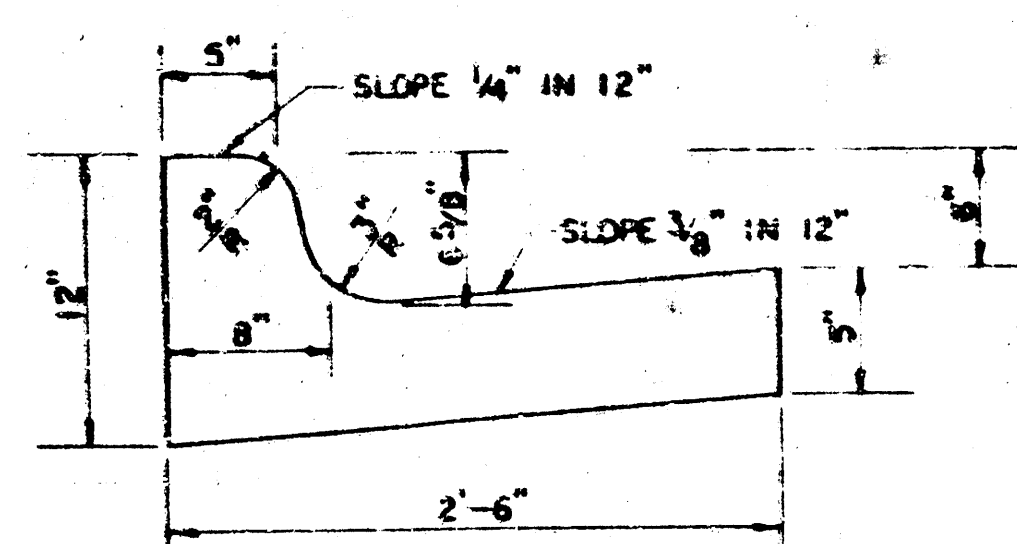
BITUMINOUS BASE AND ASPHALTIC CONCRETE WEARING SURFACE SHALL BE PLACED WITH A LAYDOWN MACHINE HAVING AUTOMATIC CONTROLS FOR LINE AND GRADE.

CONSTRUCTION JOINTS IN EACH LIFT SHALL BE STAGGERED A MINIMUM DISTANCE OF ONE (1) FOOT FROM JOINTS IN PRECEDING LIFTS AND PLACED SO THAT A JOINT WILL BE CONSTRUCTED ON THE CENTERLINE OF THE TOP LIFT.

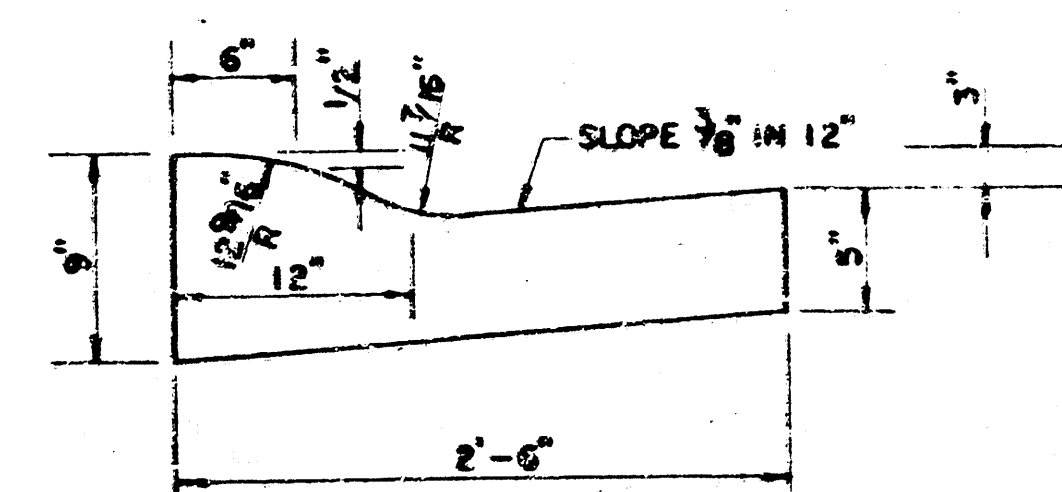
## BASE BID - ALTERNATE 1

5" RESIDENTIAL ASPHALTIC CONCRETE PAVEMENT WITH CRUSHED ROCK BASE ON FABRIC REINFORCEMENT

## COMBINED CURB & GUTTER



## ROLL TYPE COMBINED CURB & GUTTER



## CRUSHED ROCK GRADATION REQUIREMENTS

PERCENT OF AGGREGATE RETAINED

|        |       |
|--------|-------|
| 2-1/2" | 0     |
| 3/4"   | 20-50 |
| 44     | 50-90 |
| 440    | 80-94 |
| 4200   | 90-98 |

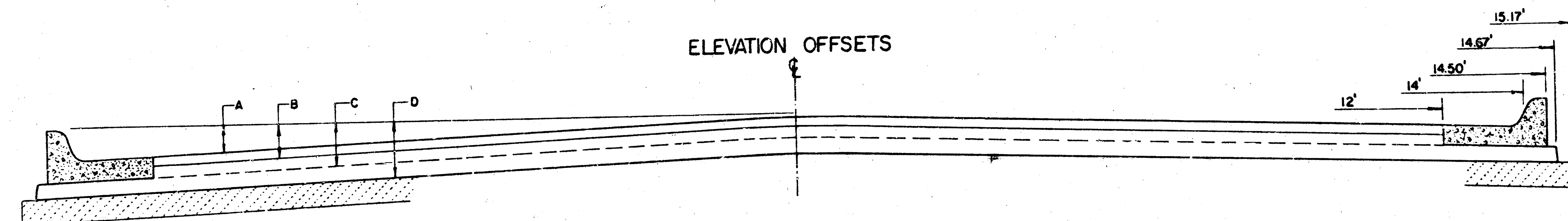
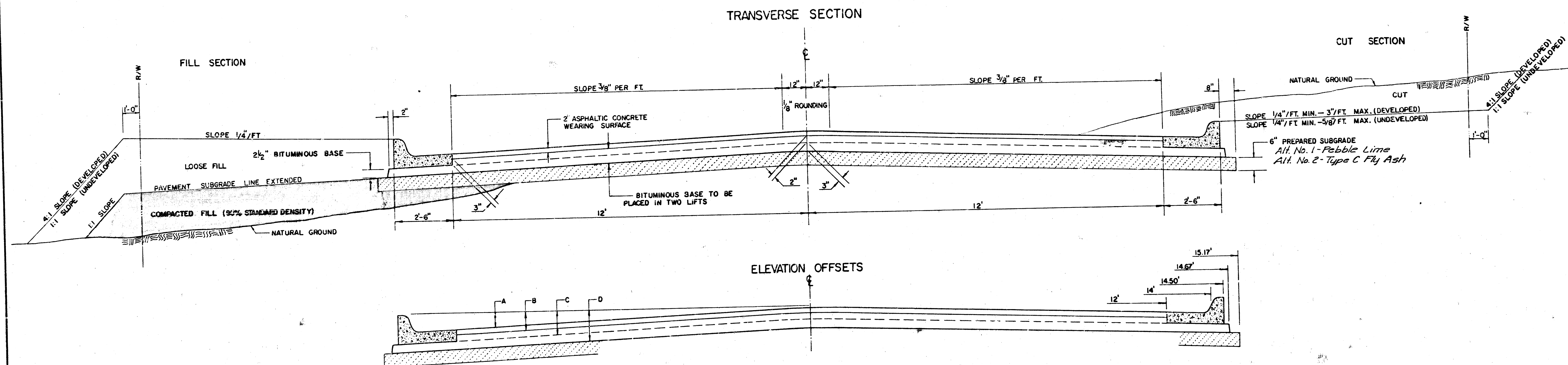
ROCK QUALITY SHALL CONFORM TO THE REQUIREMENTS SPECIFIED BY THE MDT 1990 EDITION STANDARD SPECIFICATION SUBSECTION 1102 FOR DURABILITY CLASS 1.

REVISED 1-3-92 JKB

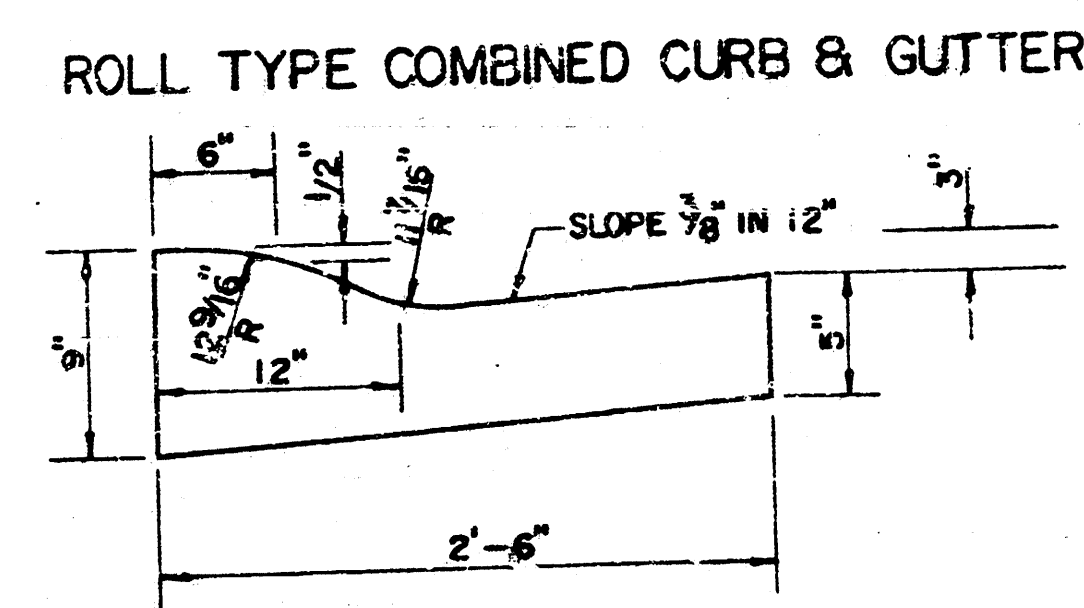
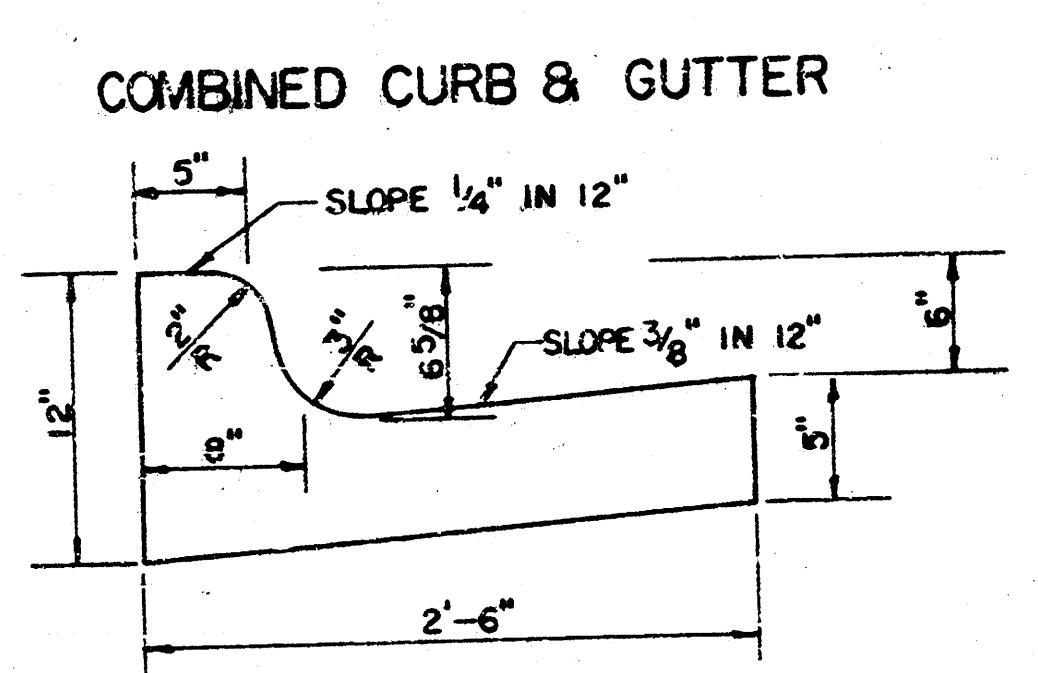
C.O.W. Proj. No. 472 76 235 82103 000 000 001

10 1 5 3

# TYPICAL 29' PAVEMENT DETAILS



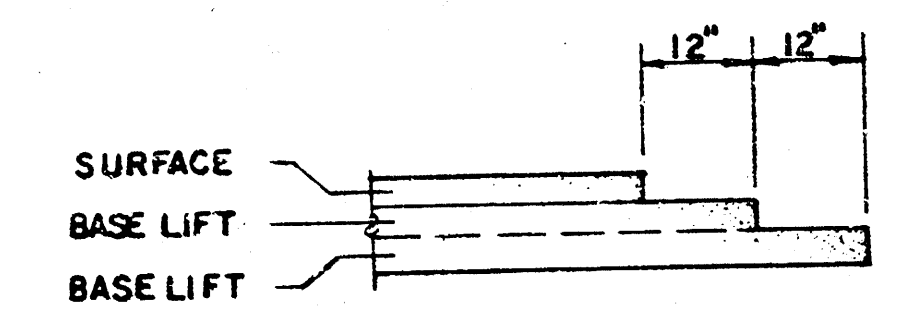
|                                           | DISTANCE FROM CENTERLINE (LT. & RT.) |      |      |      |      |      |      |      |      |       |        |        |  |
|-------------------------------------------|--------------------------------------|------|------|------|------|------|------|------|------|-------|--------|--------|--|
|                                           | 0'                                   | 2'   | 3'   | 6'   | 7'   | 8'   | 10'  | 12'  | 14'  | 14.5' | 14.67' | 15.17' |  |
| A: TOP OF CURBS TO TOP OF SURFACE LIFT    | 0.13                                 | 0.16 | 0.24 | 0.30 | 0.33 | 0.36 | 0.43 | 0.49 | —    | —     | —      | —      |  |
| B: TOP OF CURBS TO TOP OF UPPER BASE LIFT | 0.30                                 | 0.35 | 0.41 | 0.47 | 0.50 | 0.53 | 0.60 | 0.66 | —    | —     | —      | —      |  |
| C: TOP OF CURBS TO TOP OF LOWER BASE LIFT | 0.47                                 | 0.52 | 0.60 | 0.68 | 0.71 | 0.75 | 0.83 | 0.90 | 0.98 | 1.00  | 1.01   | —      |  |
| D: TOP OF CURBS TO TOP OF SUBGRADE        | 0.72                                 | 0.77 | 0.84 | 0.91 | 0.94 | 0.98 | 1.05 | 1.12 | 1.19 | 1.21  | 1.21   | 1.23   |  |



## GENERAL NOTES

- 1) THE ASPHALTIC CONCRETE PAVEMENT BETWEEN THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 7" ASPHALTIC CONCRETE (5" BITUMINOUS BASE).
- 2) THE BITUMINOUS BASE UNDER AND BEHIND THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 2 1/2" BITUMINOUS BASE.
- 3) A TACK COAT OF EMULSIFIED ASPHALT (SC-1H OR CSS-1H) SHALL BE APPLIED AT AN APPROXIMATE RATE OF 0.05 GALLONS PER SQUARE YARD BETWEEN EACH LIFT OF ASPHALTIC MATERIAL.
- 4) BITUMINOUS BASE AND ASPHALTIC CONCRETE WEARING SURFACE SHALL BE PLACED WITH A LAYDOWN MACHINE HAVING AUTOMATIC CONTROLS FOR LINE AND GRADE.
- 5) CONSTRUCTION JOINTS IN EACH LIFT SHALL BE STAGGERED A MINIMUM DISTANCE OF ONE (1) FOOT FROM JOINTS IN PRECEDING LIFTS AND PLACED SO THAT A JOINT WILL BE CONSTRUCTED ON THE CENTERLINE OF THE TOP LIFT.
- 6) CONTRACTOR TO BID ONLY ONE SUBGRADE TREATMENT ALTERNATE WHEN ALTERNATES ARE PROVIDED IN THE PROPOSAL AND CONTRACT. THE ALTERNATE CHOSEN BY THE SUCCESSFUL BIDDER SHALL BE USED IN CONSTRUCTING THIS PROJECT.

## TRANSVERSE CONSTRUCTION JOINTS



TRANSVERSE CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN FLEXIBLE BASE PAVEMENTS AT LOCATIONS WHERE PAVEMENT JOINS EXISTING FLEXIBLE BASE PAVEMENT AS SHOWN BY THE DETAIL. ALL COSTS ASSOCIATED WITH THE CONSTRUCTION OF THE TRANSVERSE JOINT SHALL BE INCLUDED IN THE \$10 PRICE FOR SQUARE YARDS 7" ASPHALTIC CONCRETE (5" BITUMINOUS BASE).

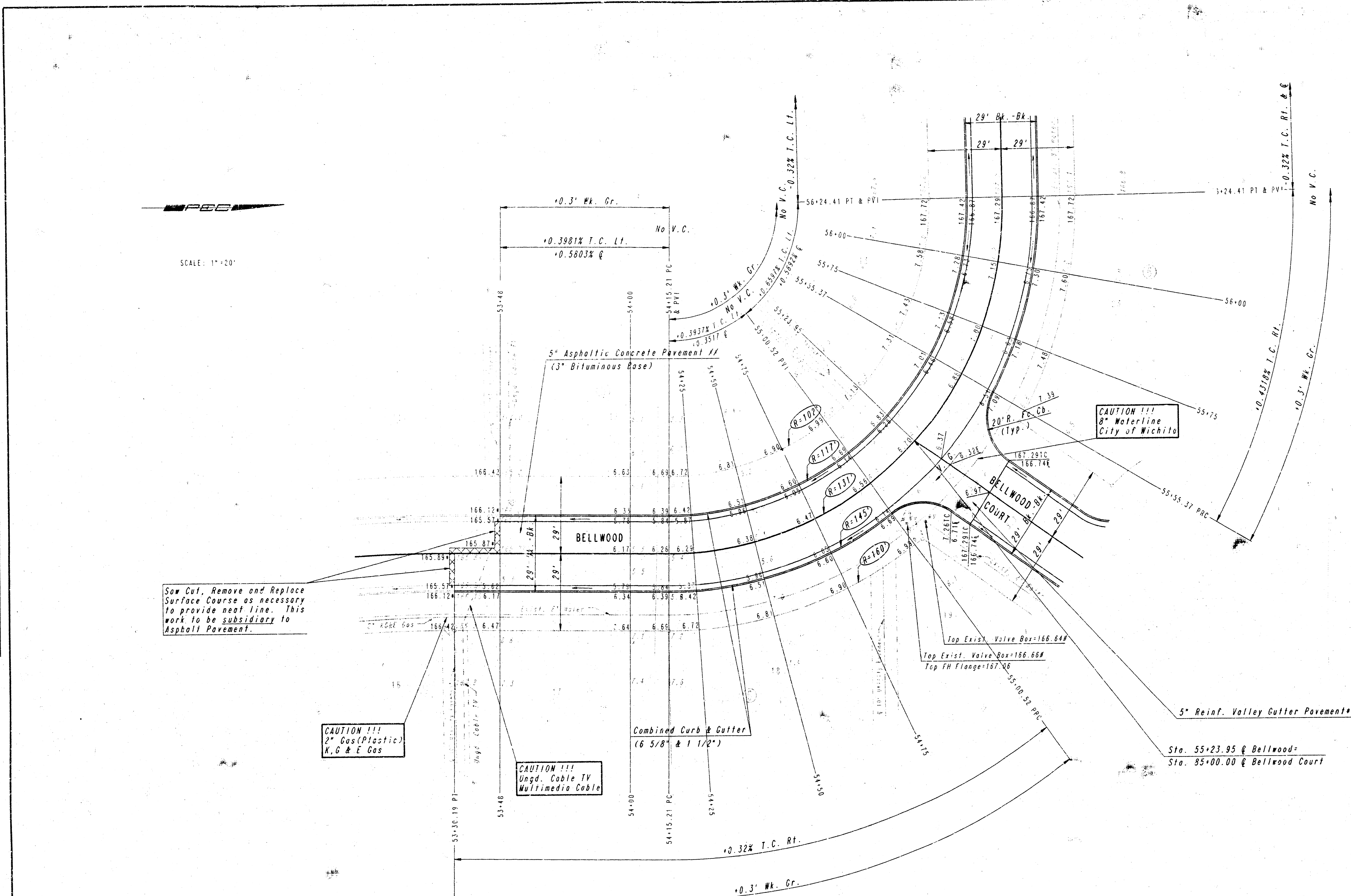
**BASE BID - ALTERNATE 2**  
**7 INCH RESIDENTIAL ASPHALTIC CONCRETE PAVEMENT WITH 5 INCH BITUMINOUS BASE**  
**CITY OF WICHITA, KANSAS**  
 PROJECT NUMBER  
 472 76 245 82103 000 000 001

|                          |           |              |
|--------------------------|-----------|--------------|
| PROJECT NO.              | SHEET NO. | TOTAL SHEETS |
| 472-76-245-82103-000-001 | 5         | 12           |

| WATER VALVE BOX ELEVATIONS |         |           |                    |                    |
|----------------------------|---------|-----------|--------------------|--------------------|
| STREET                     | STATION | OFFSET    | EXISTING ELEVATION | PROPOSED ELEVATION |
| BELLWOOD                   | 55+02   | 21' RT.   | 166.66             | 166.3              |
| BELLWOOD                   | 55+07   | 24.5' RT. | 166.64             | 167.2              |

|           |          |            |         |
|-----------|----------|------------|---------|
| PLAN      | SURVEYED | BY         | DATE    |
| NOTE BOOK | ALIGNED  | CHECKED    |         |
|           | NO.      | RT. OF WAY | CHECKED |

DRAWING NAME: 32-0113, BELLWOOD 1  
LOCATION: DL #1126  
CENTER COORDINATES:  
EASTING: 121415  
NORTHING: 121415  
DATE LAST CHECKED ON:



See CUL. Remove and Replace Surface Course as necessary to provide neat line. This work to be subsidiary to Asphalt Pavement.

CAUTION !!!  
2" Gas (Plastic)  
K, G & E Gas

CAUTION !!!  
Unkd. Cable IV  
Multimedia Cable

CAUTION !!!  
8" Waterline  
City of Wichita

| Q CURVE DATA                 |              |                  |            |              |             |              |                  |                    |  |
|------------------------------|--------------|------------------|------------|--------------|-------------|--------------|------------------|--------------------|--|
| CURVE DATA BASED ON Q RADIUS |              |                  |            |              |             |              |                  |                    |  |
| Q STATION                    | Q ARC LENGTH | FACE CURB LENGTH | RIGHT CURB | CHORD LENGTH | 8' OFF LEFT | 8' OFF RIGHT | DEFLECTION ANGLE | Q TOTAL DEFLECTION |  |
| 54+13.21                     | 9.79'        | 8.75'            | 10.84'     | 8.14'        | 11.45'      | 2'08'28"     | 0°00'00"         | 0°00'00"           |  |
| 54+25                        | 25.00'       | 22.33'           | 27.67'     | 20.77'       | 29.15'      | 5°28'02"     | 2°08'28"         | 2°08'28"           |  |
| 54+50                        | 25.00'       | 22.33'           | 27.67'     | 20.77'       | 29.15'      | 5°28'02"     | 7°36'30"         | 7°36'30"           |  |
| 54+75                        | 25.00'       | 22.33'           | 27.67'     | 20.77'       | 29.15'      | 5°28'02"     | 13°04'32"        | 13°04'32"          |  |
| 55+00.52                     | 25.52'       | 22.79'           | 28.25'     | 21.20'       | 29.76'      | 5°34'52"     | 18°39'23"        | 18°39'23"          |  |
| 55+23.95                     | 23.43'       | 20.93'           | —          | 19.42'       | —           | 5°07'26"     | 23°46'49"        | 23°46'49"          |  |
| 55+55.37                     | 31.42'       | 28.05'           | —          | 28.08'       | —           | 6°52'16"     | 30°39'06"        | 30°39'06"          |  |
| 55+75                        | 19.63'       | 17.53'           | 21.73'     | 18.32'       | 22.91'      | 4°17'54"     | 34°56'40"        | 34°56'40"          |  |
| 56+00                        | 25.00'       | 22.33'           | 27.67'     | 20.77'       | 29.15'      | 5°28'02"     | 40°24'42"        | 40°24'42"          |  |
| 56+24.41                     | 24.41'       | 21.80'           | 27.02'     | 20.28'       | 28.47'      | 5°20'18"     | 45°45'00"        | 45°45'00"          |  |
| TOTAL                        | 208.20'      | 186.85'          | 170.55'    | —            | —           | —            | —                | —                  |  |

| INTERSECTION QUANTITIES |                                               |
|-------------------------|-----------------------------------------------|
| BELLWOOD/BELLWOOD COURT |                                               |
| 78.49 S.Y.              | 5" Asphaltic Concrete Pavement (3" Bit. Base) |
| 96.13 S.Y.              | 7" Reinforced Valley Gutter Pavement          |
| 53.38 L.F.              | Monolithic Edge Curb (6 5/8")                 |
| 179.33 S.Y.             | 5" Crushed Rock Base                          |

- \* ADJUST WATER VALVE BOXES AS SHOWN IN TABLE ABOVE
- \* WATCH EXISTING
- \*\* 7" REINF. VALLEY GUTTER PAVEMENT (5" REINF. CONC. PAVT. W/ 2" BIT. BASE) FOR ALTERNATE 2 PAVEMENT.
- /// 7" ASPHALTIC CONCRETE PAVEMENT (5" BIT. BASE) FOR ALTERNATE 2 PAVEMENT

STERLING FARMS - PHASE 5A

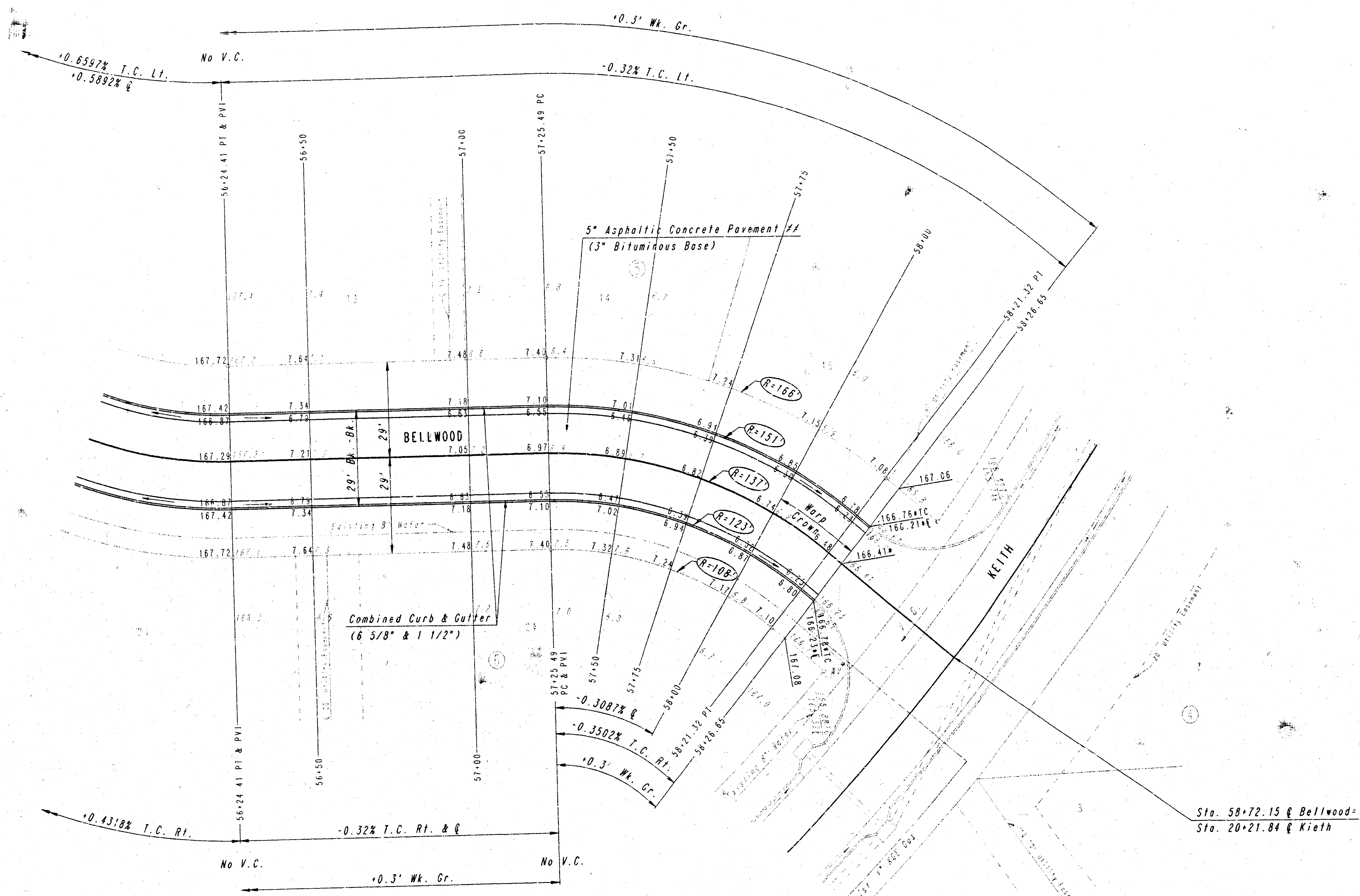
**BELLWOOD**  
STA. 53+30.19 TO STA. 56+24.41

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

Designed by: NWB, GDD  
Checked by: DEF  
Date: APR 1993  
Job No: 93134

| PROJECT NO.                  | SHEET NO. | TOTAL SHEETS |
|------------------------------|-----------|--------------|
| 472-76-245-82103-000-000-001 | 6         | 12           |

SCALE: 1"=20'



Sta. 58+72.15 @ Bellwood  
Sta. 20+21.84 @ Keith

| Q CURVE DATA                 |              |                  |            |                       |                        |                  |          |                    |  |
|------------------------------|--------------|------------------|------------|-----------------------|------------------------|------------------|----------|--------------------|--|
| A=40°04'43"                  |              | D=41°49'18"      |            | R=137.20'             |                        | L=95.83'         |          | T=49.97'           |  |
| E=8.83'                      |              | Δ/2=20°02'21.5"  |            |                       |                        |                  |          |                    |  |
| CURVE DATA BASED ON Q RADIUS |              |                  |            |                       |                        |                  |          |                    |  |
| Q STATION                    | Q ARC LENGTH | FACE CURB LENGTH |            | CHORD LENGTH          |                        | DEFLECTION ANGLE |          | Q TOTAL DEFLECTION |  |
|                              |              | LEFT CURB        | RIGHT CURB | B' OFF LEFT FACE CURB | B' OFF RIGHT FACE CURB |                  |          |                    |  |
| 57+25.49                     |              |                  |            |                       |                        | 0°00'00"         |          | 0°00'00"           |  |
| 57+50                        | 24.51'       | 27.02'           | 22.00'     | 28.41'                | 20.55'                 | 5°07'31"         | 5°07'31" | 5°07'31"           |  |
| 57+75                        | 25.00'       | 27.55'           | 22.45'     | 28.97'                | 20.95'                 | 5°13'40"         | 5°13'40" | 10°21'11"          |  |
| 58+00                        | 25.00'       | 27.55'           | 22.45'     | 28.97'                | 20.95'                 | 5°13'40"         | 5°13'40" | 15°34'52"          |  |
| 58+21.32                     | 21.32'       | 23.51'           | 19.14'     | 24.72'                | 17.88'                 | 4°27'30"         | 4°27'30" | 20°02'21.5"        |  |
| TOTAL                        | 95.83'       | 105.63'          | 86.04'     |                       |                        |                  |          |                    |  |
| Defl./PI = 12.546784 min.    |              |                  |            |                       |                        |                  |          |                    |  |

Defl./ft. = 12.546784 min.

\* WATCH EXISTING  
\*\* 7" ASPHALTIC CONCRETE PAVEMENT (5" B.T. BASE) FOR ALTERNATE 2 PAVEMENT

STERLING FARMS - PHASE 5A

**BELLWOOD**  
STA. 56+24.41 TO STA. 58+72.15

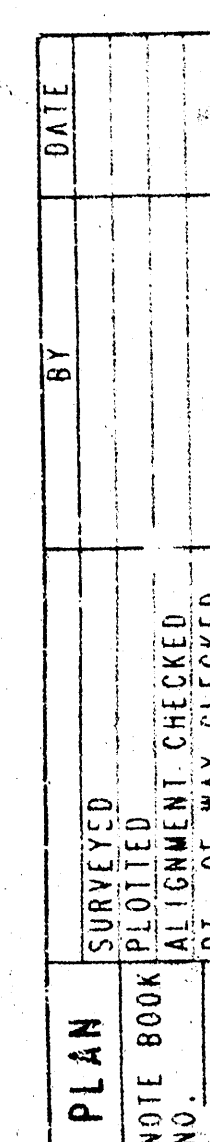
**PROFESSIONAL ENGINEERING CONSULTANTS, P.A.**  
ENGINEERS  
WICHITA, KANSAS

|             |          |            |            |
|-------------|----------|------------|------------|
| Designed by | W.B. GDD | Checked by |            |
| Drawn by    | DEP      | Date       | APR., 1995 |
|             |          | Job No.    | 93134      |

| PLAN              | SURVEYED | BY | DATE |
|-------------------|----------|----|------|
| NOTE BOOK PLOTTED |          |    |      |
| NO.               |          |    |      |
| ALIGNED           |          |    |      |
| CHECKED           |          |    |      |
| DATE              |          |    |      |

DRAWING NAME: 32-93134 BELLWOOD 2  
LOCATION: 04 41127  
SCALE: 1"=20'  
DATE LAST WORKED ON:  
DWAIN JUNE

| WATER VALVE BOX ELEVATIONS |         |        |                    |                    |
|----------------------------|---------|--------|--------------------|--------------------|
| STREET                     | STATION | OFFSET | EXISTING ELEVATION | PROPOSED ELEVATION |
| REILWOOD COURT             | 86+22.5 | 0' 11" | 167.45             | 167.7              |



DRAWING NAME: 30-93134 BELLWOOD CT  
LOCATION: D4 #1139  
CENTER COORDINATES:  
ROTATION ANGLE:  
DATE LAST WORKED ON:  
DRAWN: DUNN

NOTE: THIS STREET TO BE CONSTRUCTED WITH  
ROLL-TYPE CURB. TOP OF CURB ELEVATIONS  
GIVEN ARE FOR FULL HEIGHT CURB.

# ADJUST WATER VALVE BOXES AS SHOWN  
IN TABLE ABOVE

# 5' TRANSITION FROM HOMOLITHIC EDGE CURB (6 5/8")  
TO COMBINED CURB AND GUTTER (3 5/8" ROLL & 1 1/2")  
TO BE BID AND PAID FOR AS "COMBINED CURB AND GUTTER"  
(3 5/8" ROLL & 1 1/2").

# 7" ASPHALTIC CONCRETE PAVEMENT (5" BIT. BASE)  
FOR ALTERNATE 2 PAVEMENT

STERLING FARMS - PHASE 5A  
BELLWOOD COURT  
TA. 85+00.00 TO STA. 86+2

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

|             |          |            |            |
|-------------|----------|------------|------------|
| Designed by | WWB, GDD | Checked by |            |
| Drawing by  | DEP      | Date       | APR., 1993 |
|             |          | Job No.    | 93134      |

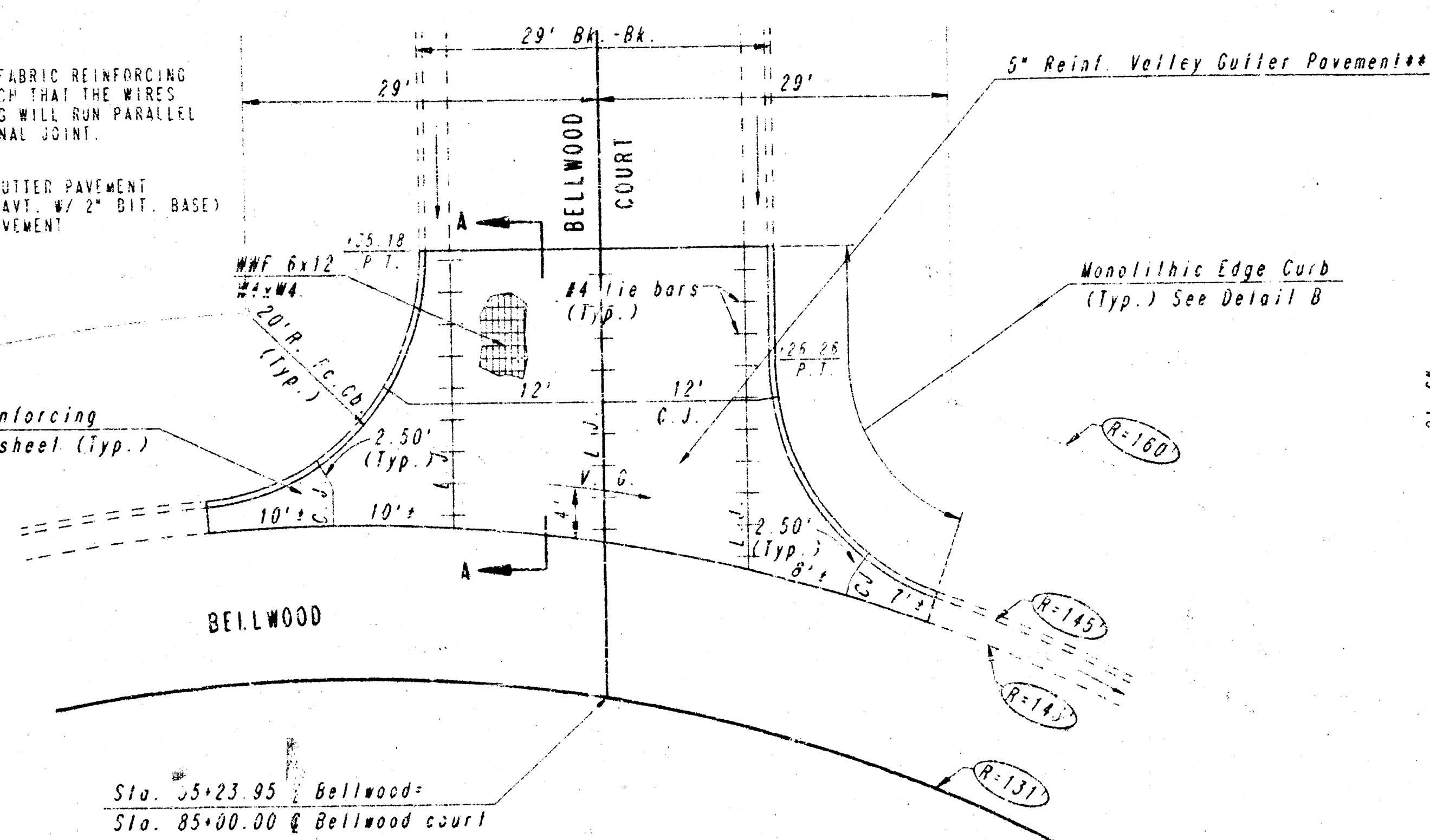
| PROJECT NO.                  | SHEET NO. | TOTAL SHEETS |
|------------------------------|-----------|--------------|
| 472-76-245-82103-000-000-001 | 8         | 12           |

6"x12" W4x4 WIRE FABRIC REINFORCING SHALL BE PLACED SUCH THAT THE WIRES WITH THE 6" SPACING WILL RUN PARALLEL WITH THE LONGITUDINAL JOINT.

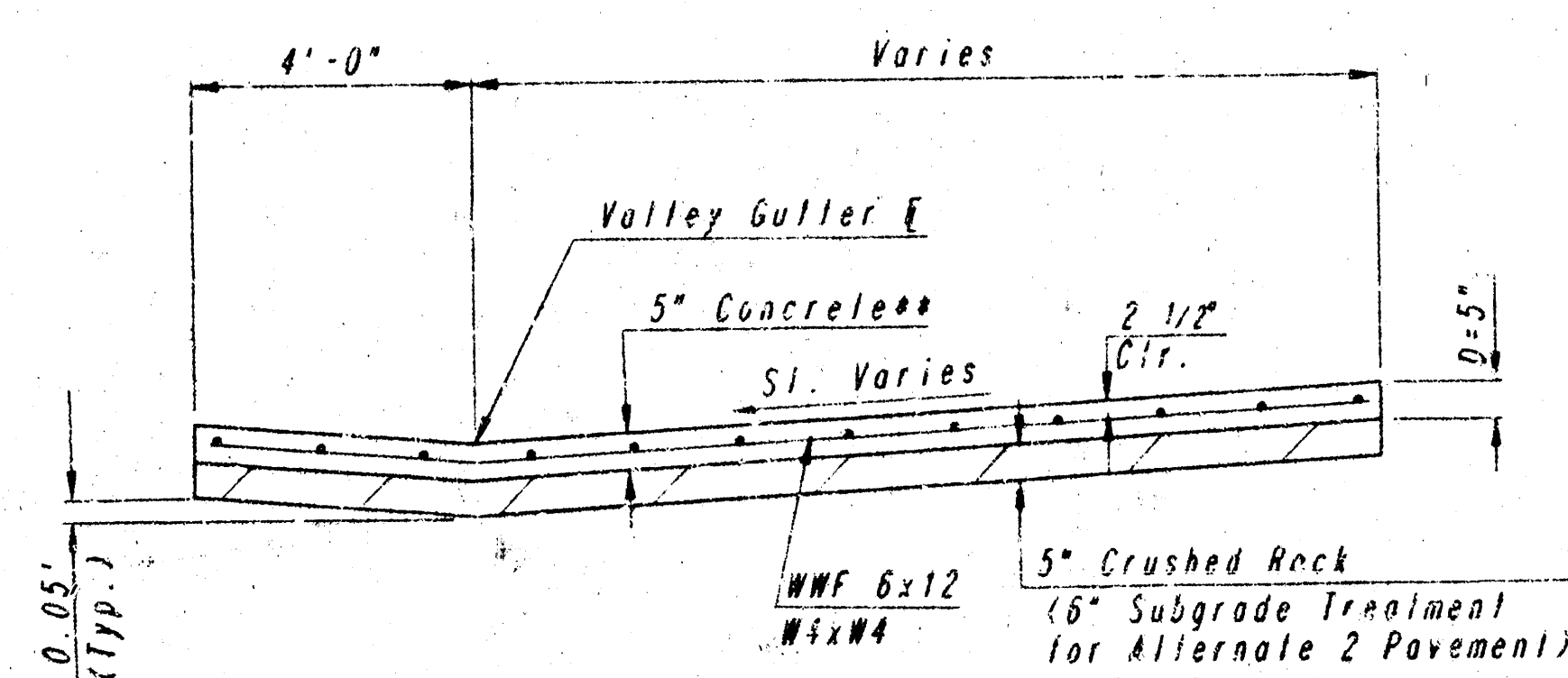
\*\* 7" REINF. VALLEY GUTTER PAVEMENT (5" REINF. CONC. PAVT. W/ 2" DIT. BASE) FOR ALTERNATE 2 PAVEMENT

See Wing Reinforcing Detail this sheet (typ.)

SCALE: 1" = 10'

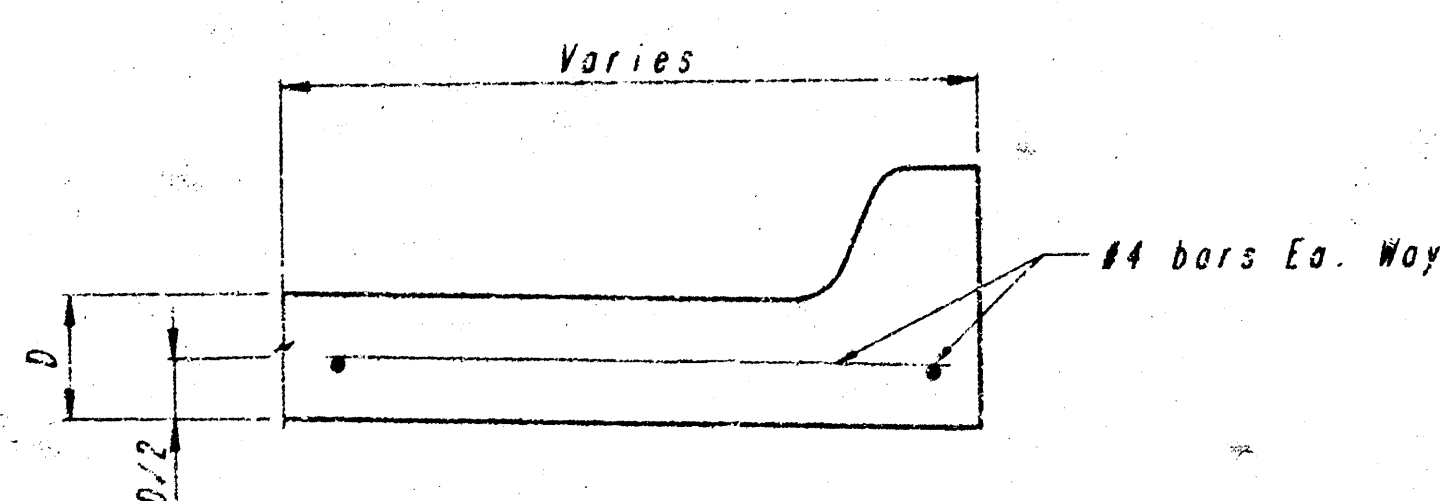


PLAN  
REINFORCED VALLEY GUTTER

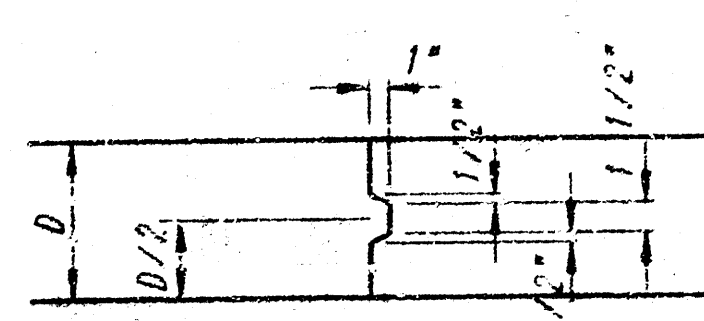


SECTION A-A

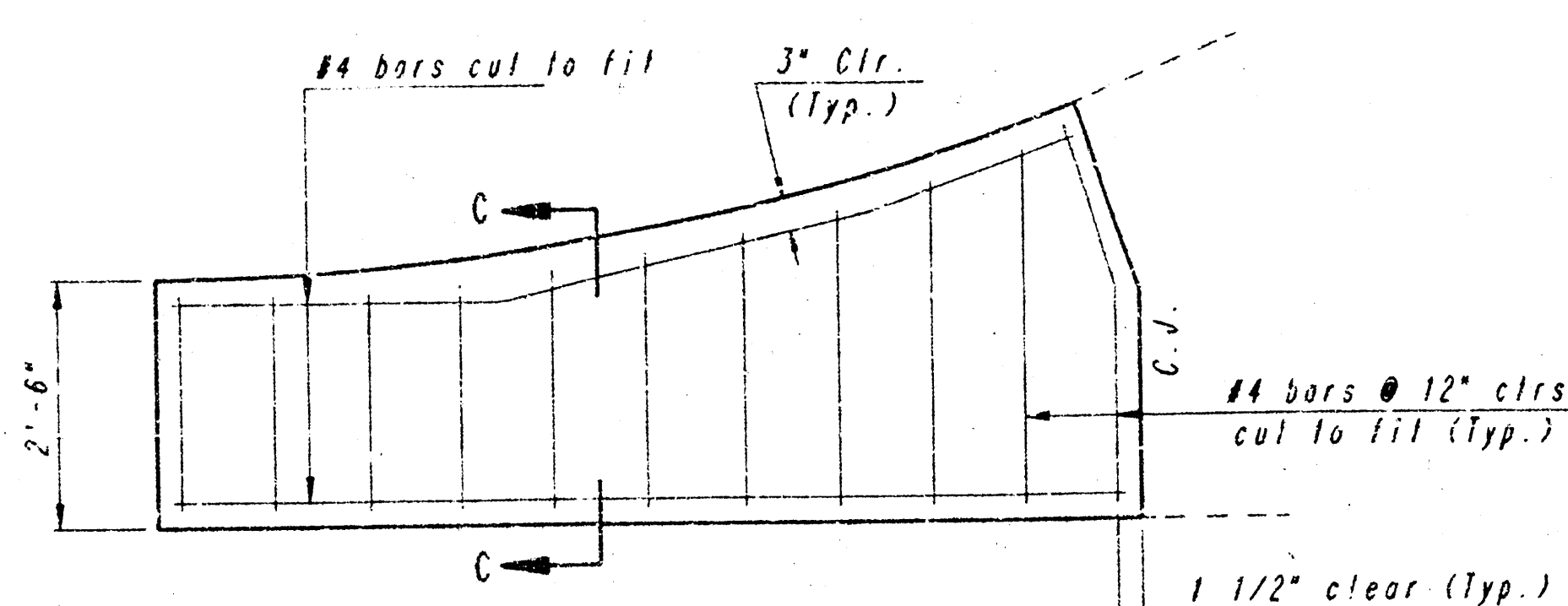
NOTE: OMIT REINFORCING MESH AT ALL JOINTS  
NOTE: ALL CONCRETE VALLEY GUTTER REINFORCEMENT SHALL BE ADEQUATELY SUPPORTED BY BAR CHAIRS IN THE REQUIRED POSITION UNLESS APPROVED OTHERWISE BY THE ENGINEER



SECTION C-C

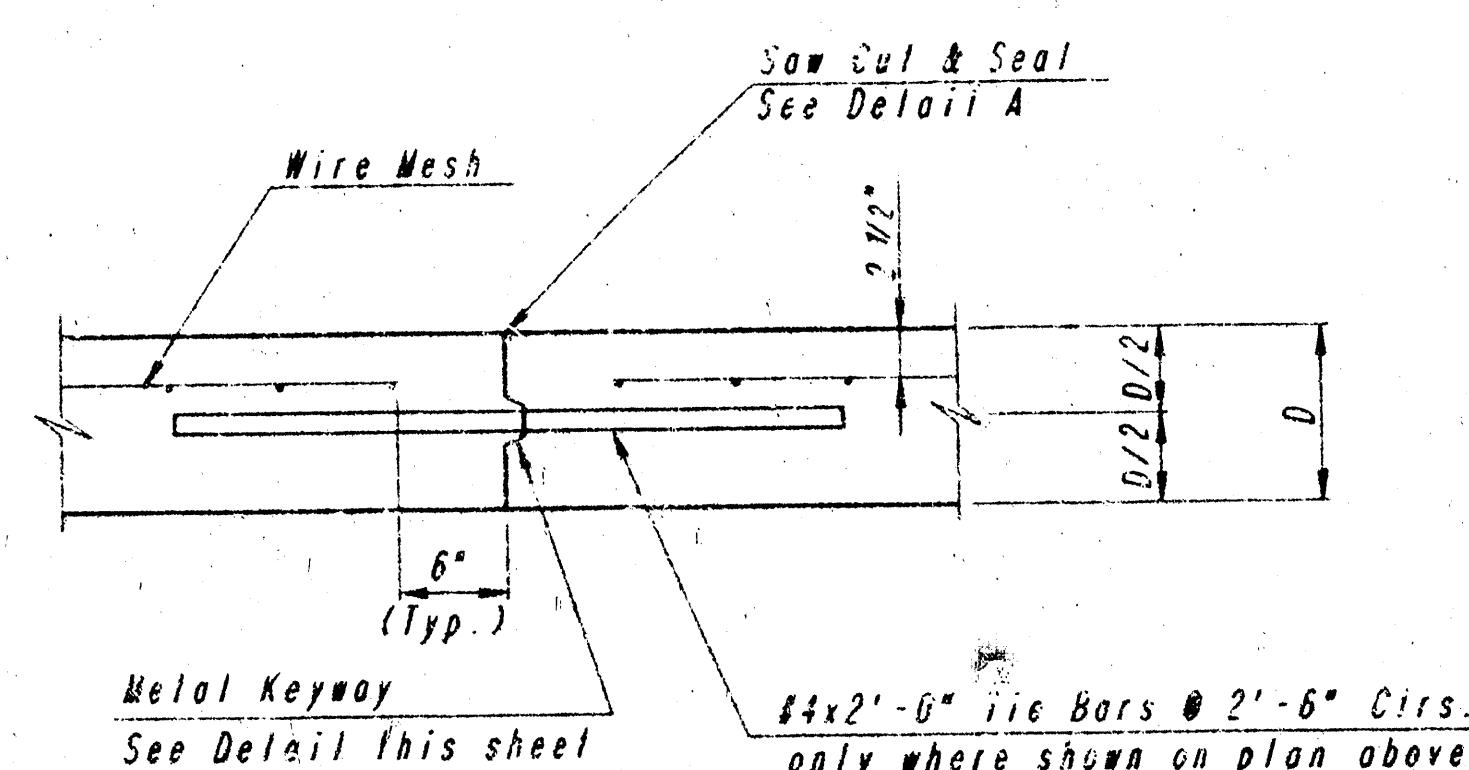


KEYWAY DETAIL

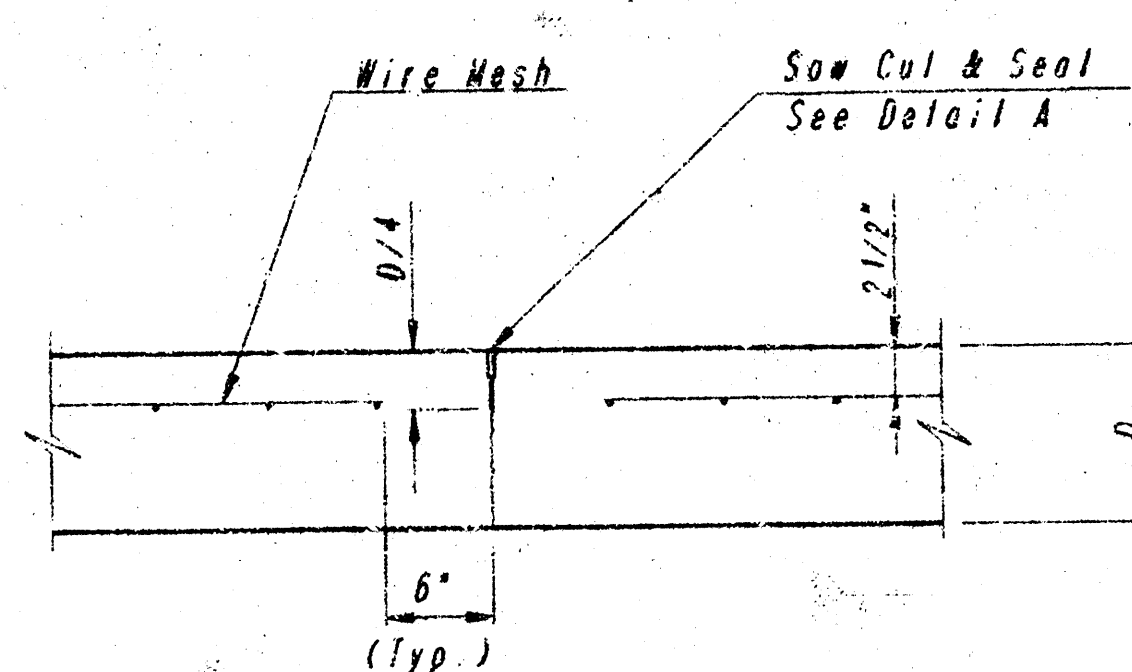


WING REINFORCING DETAIL

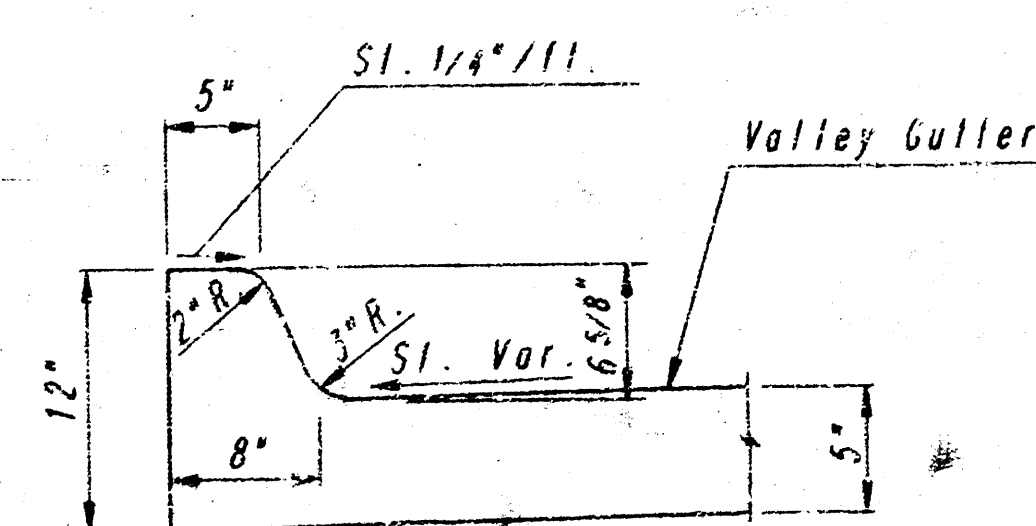
NOTE: OMIT WIRE FABRIC REINFORCING IN THIS SECTION



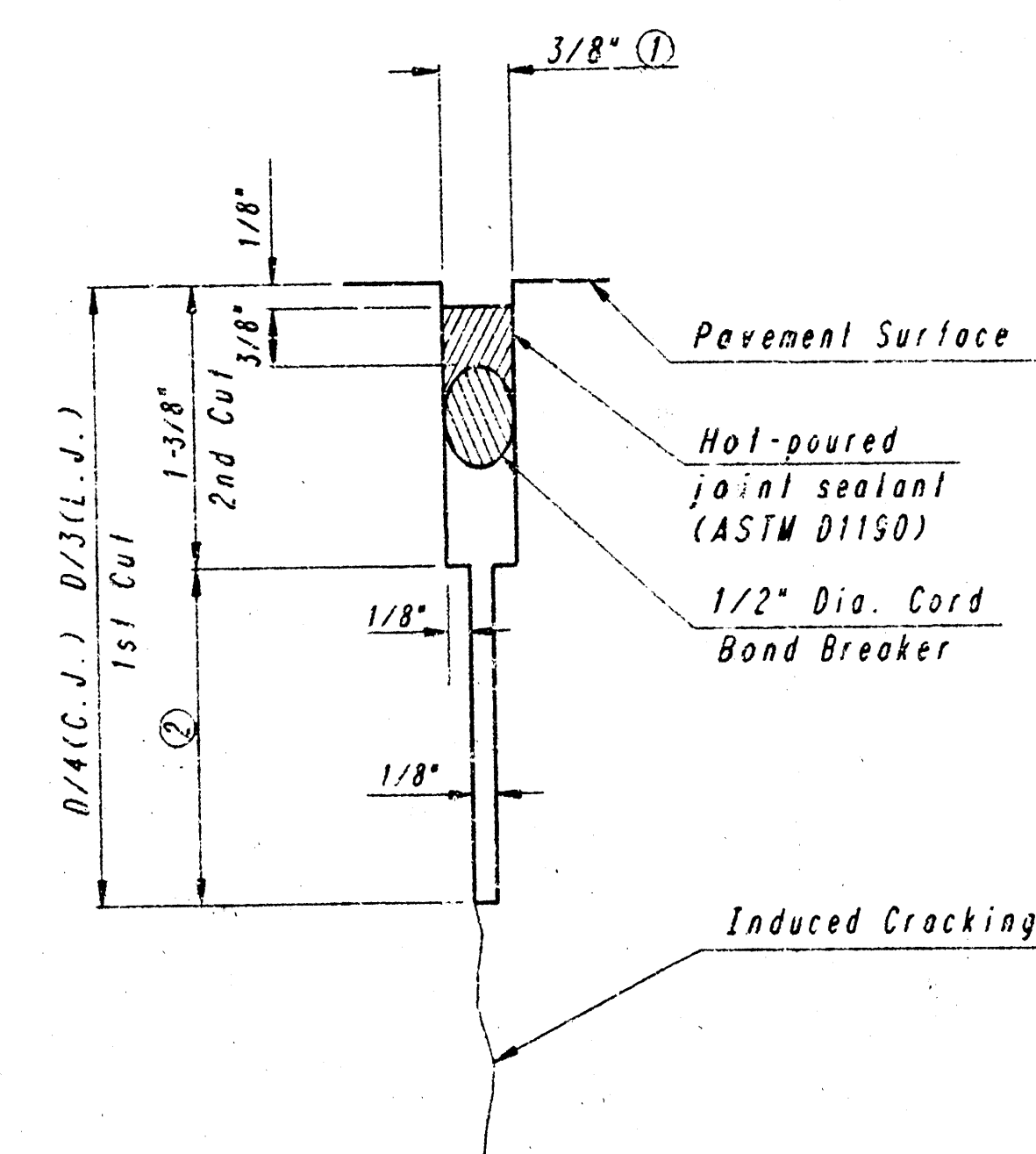
LONGITUDINAL CONSTRUCTION JOINT DETAIL  
REINFORCED PAVEMENT  
(TRANSVERSE SECTION)  
(ALTERNATE L.J.)



CONTRACTION JOINT DETAIL  
REINFORCED PAVEMENT  
(C.J.)

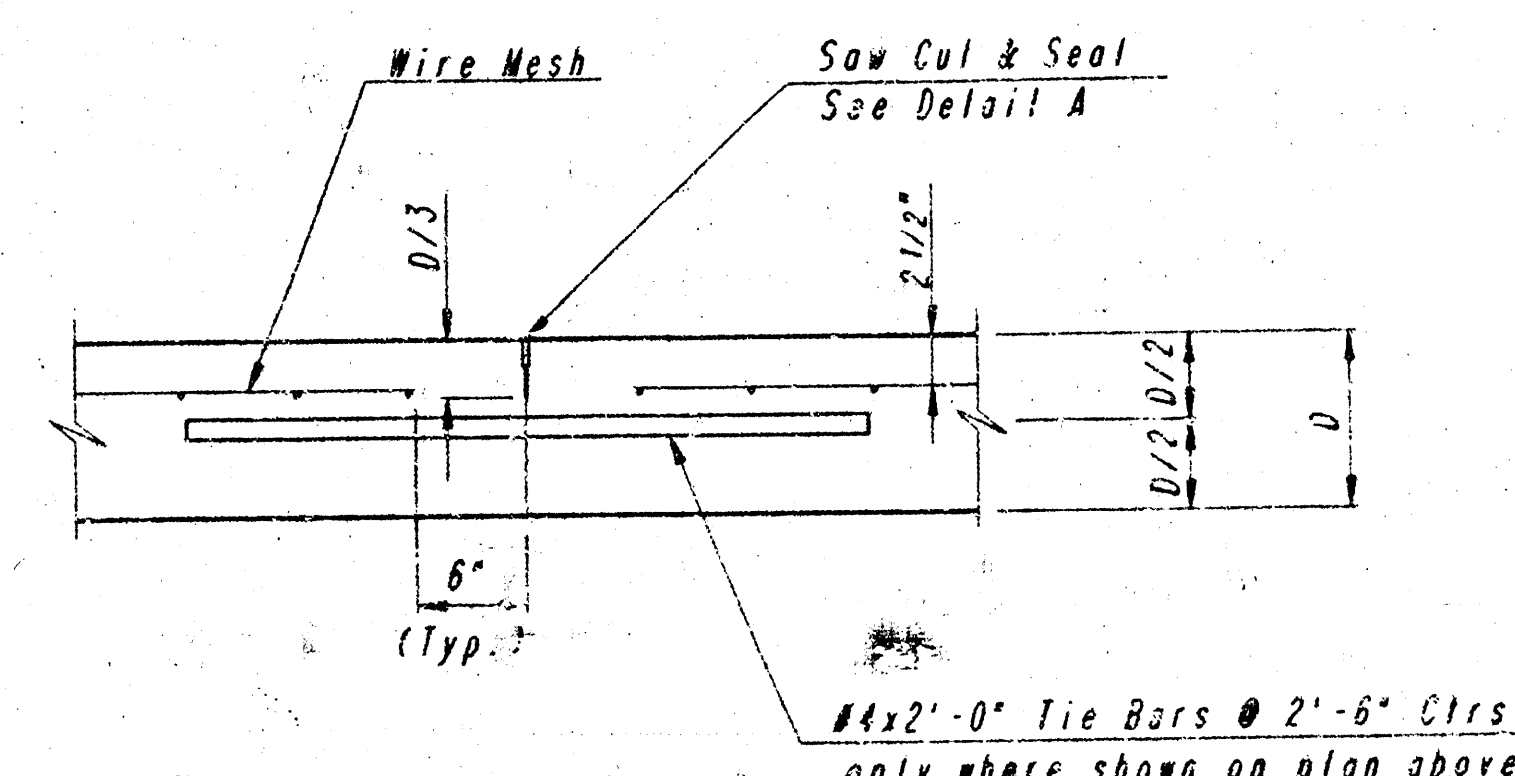


DETAIL B



DETAIL A

- ① To be accomplished in 2 cuts for Longitudinal Joints & Contraction Joints. Initial cut to be 1/8" wide.
- ② Eliminate bottom of cut when metal keyway is used as part of Longitudinal or Transverse Construction Joint and at Doweled Construction Joint Locations.



LONGITUDINAL JOINT DETAIL  
REINFORCED PAVEMENT  
(TRANSVERSE SECTION)  
(L.J.)

DRAWING NAME: 32-93134 VAL GUT DTL  
LOCATION: DA 1988  
DATE: 10/1/88  
DATE LAST WORKED ON:  
DRAWN BY: DUNE

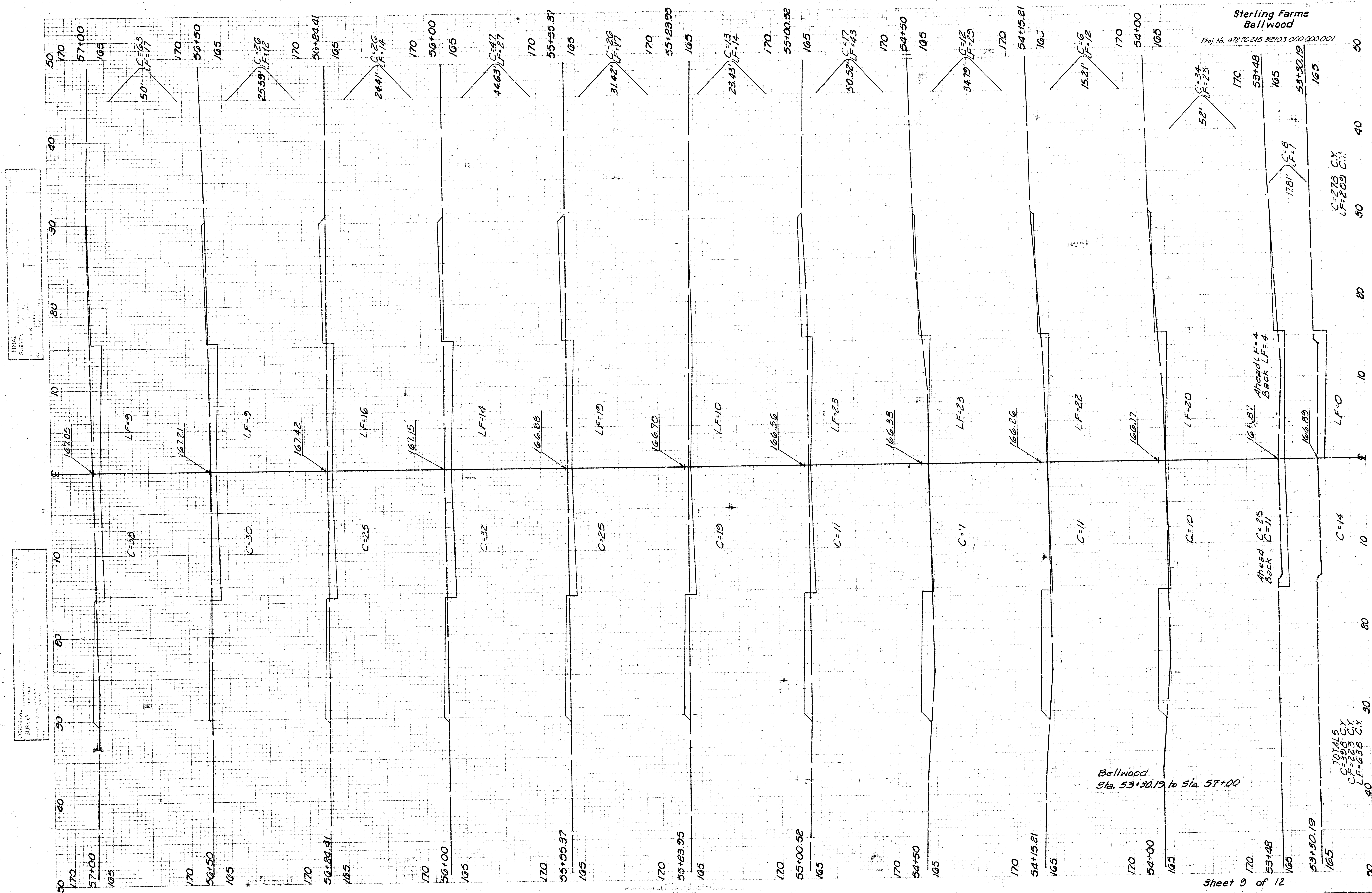
STERLING FARMS - PHASE 5A

## VALLEY GUTTER DETAILS

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

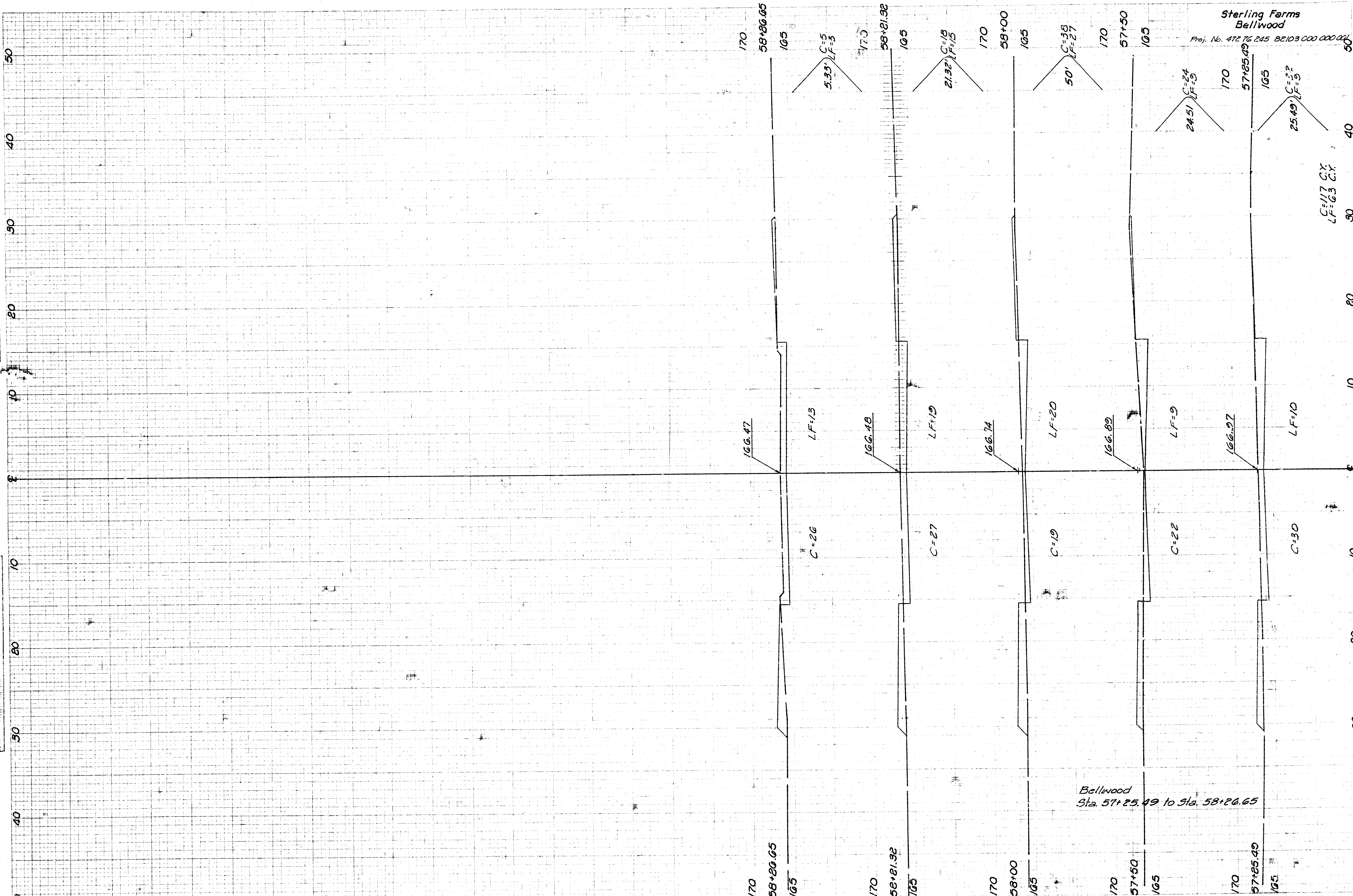
ENGINEERS  
WICHITA, KANSAS

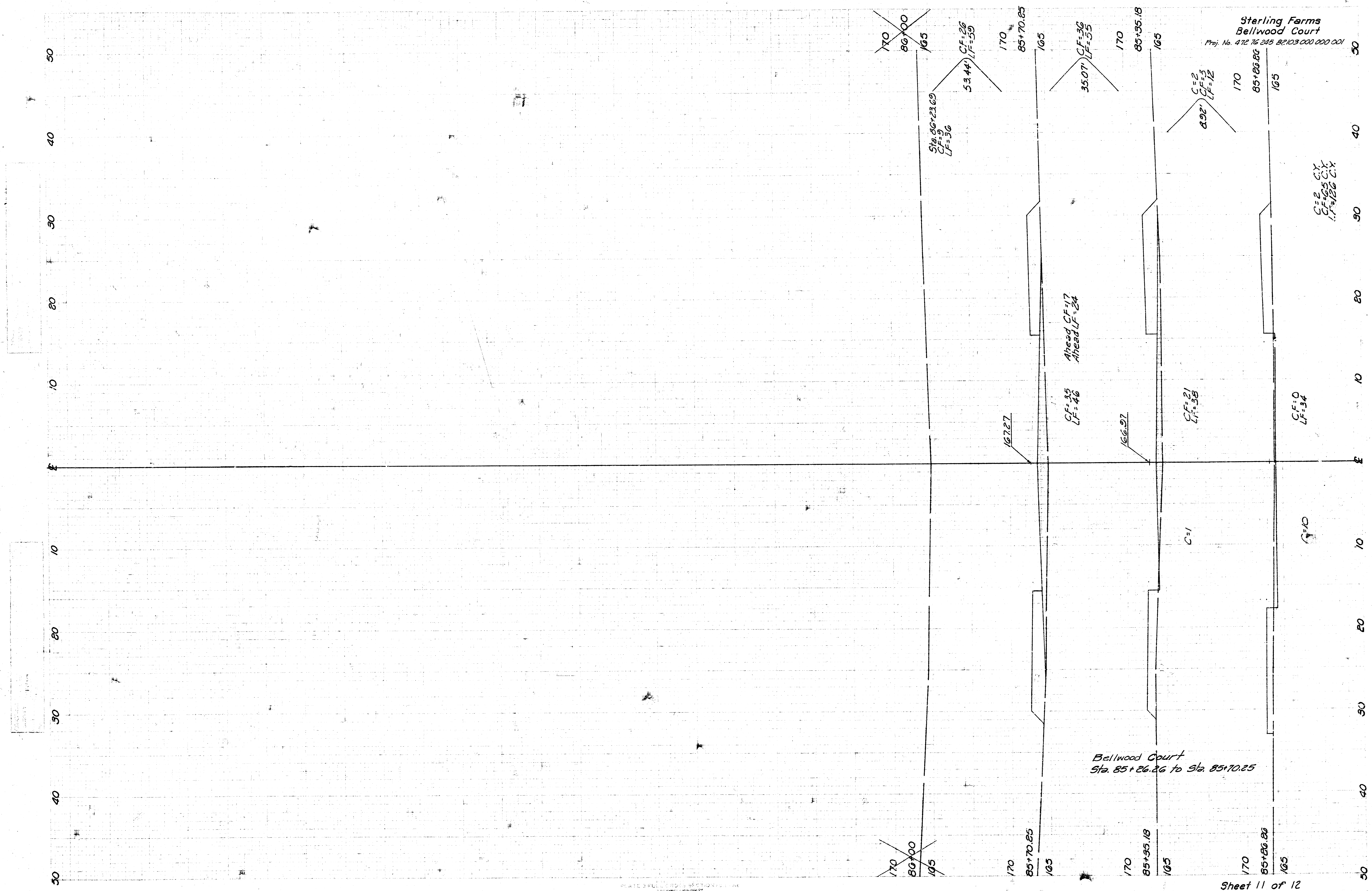
Designed by: MNB, GDD  
Checked by: GEP  
Date: APR. 1993  
Job No.: 93134



FINAL  
SURVEY  
STATION  
DATE: 10/10/1977  
BY: [Signature]

ORIGINAL  
SURVEY  
STATION  
DATE: 10/10/1977  
BY: [Signature]





Sterling Farms  
Bellwood Court  
Proj. No. 212 16 245 22103 000 000 001

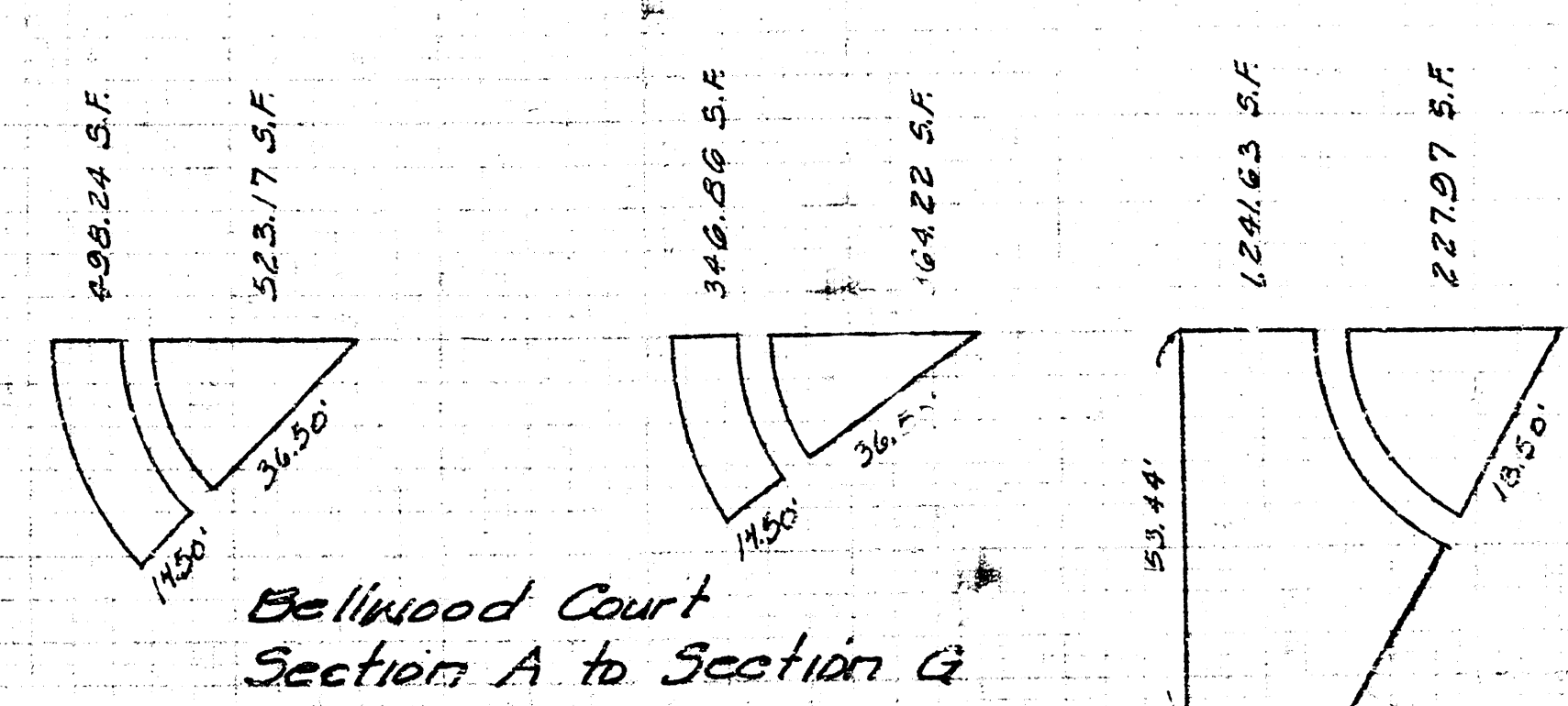
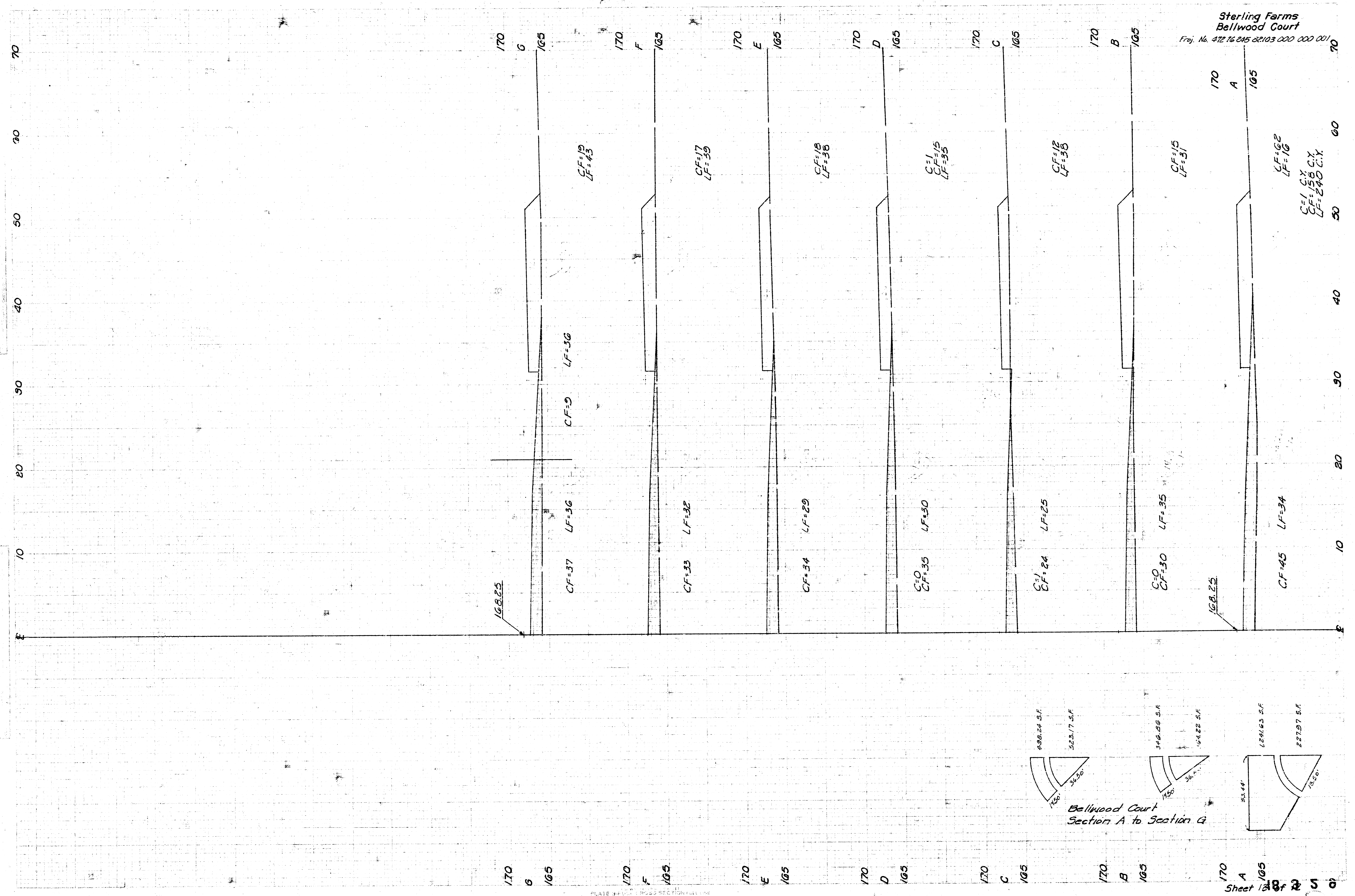


PLATE 3-1-1 168.25 SECTION FULL LINE  
No. 10011 (Printed 1957)  
NOTES: 1. 168.25

Sheet 128 of 250