

# CITY OF WICHITA, KANSAS

## MICHAEL E. LINDEBAK, P.E., CITY ENGINEER

# STREET IMPROVEMENTS

PINE GROVE AND BELLA VISTA - N.L. WOODBRIDGE 5TH ADDITION TO E.L.  
 LOT 1, BLOCK 1 AND E.L. LOT 34, BLOCK 2  
 BELLA VISTA CIRCLE - S.L. BELLA VISTA TO AND INCLUDING CUL-DE-SAC  
 SERVING LOTS 46 THROUGH 64 INCLUSIVE, BLOCK 2  
 BELLA VISTA COURT - S.L. BELLA VISTA CIRCLE TO AND INCLUDING  
 CUL-DE-SAC SERVING LOTS 34 THROUGH 45, BLOCK 2

## IN

## WOODBIDGE 5TH ADDITION

### CITY OF WICHITA PROJECT NO. 472-76-245-81701-000-000-001

#### INDEX OF SHEETS

1. TITLE SHEET
2. PLAT
3. TYPICAL 35' PAVEMENT DETAILS
4. TYPICAL 28' PAVEMENT DETAILS
- 5.-8. PLAN SHEETS
9. MISCELLANEOUS PAVING DETAILS
10. STANDARD DRIVE ENTRANCES
- 11.-16. CROSS SECTIONS

#### PROJECT SURVEY CONTROL

BENCH MARK: R.R. SPIKE IN E. FACE HACKBERRY ON W. SIDE 119TH STREET WEST, NW CORNER THIS ADDITION. ELEV. = 162.595

BENCH MARK: CHISELED "0" ON E. B.C. PINE GROVE AT CONC. JT. APPROX. 45' N. OF HEDGE ROW AT N. SIDE OF THIS ADDITION (STA. 19+10, 17.5' LT.). ELEV. = 165.55

#### EARTHWORK

EXCAVATION

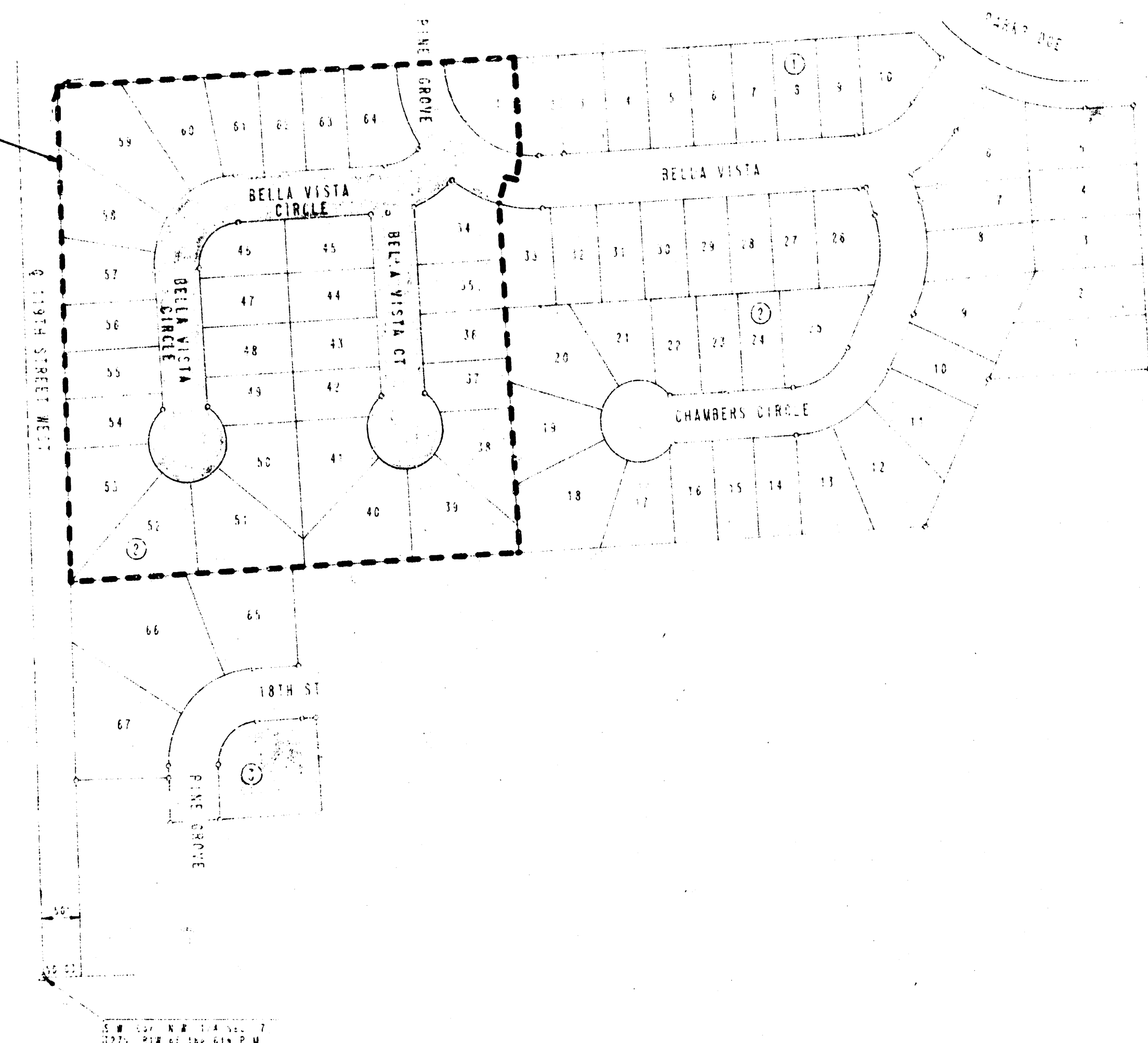
|            |               |
|------------|---------------|
| X-SECTIONS | 2318 CU. YDS. |
| 10X        | 232 CU. YDS.  |
| TOTAL      | 2550 CU. YDS. |

COMPACTED FILL

|            |            |
|------------|------------|
| X-SECTIONS | 5 CU. YDS. |
| 10X        | 1 CU. YDS. |
| TOTAL      | 6 CU. YDS. |

SUBGRADE MANIPULATION: 4495 SQ. YDS.

IMPROVEMENT DISTRICT  
BOUNDARY



#### GENERAL NOTES

UTILITY SERVICE LINES, POLES, VALVE BOXES, METERS, AND ETCETERA ARE TO BE ADJUSTED OR REMOVED AS NECESSARY BY OTHERS PRIOR TO OR DURING 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 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 PLAN LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.

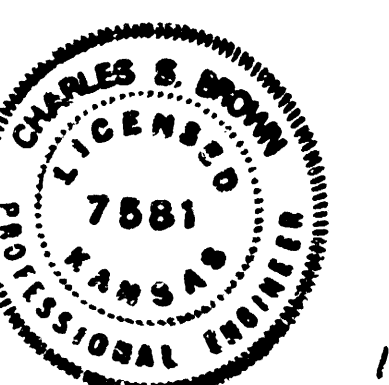
CONTRACTOR SHALL SATISFY HIMSELF OF SUB-SURFACE CONDITIONS PRIOR TO CONSTRUCTION.

LIMITS OF EARTHWORK SHALL MATCH EXISTING GROUND ELEVATIONS AT THE RIGHT-OF-WAY LINE UNLESS OTHERWISE NOTED ON THE PLANS WITH A NEW FINISHED GRADE ELEVATION. WHEN A NEW FINISHED GRADE ELEVATION IS SHOWN, THE EARTHWORK SHALL EXTEND ONE FOOT BEYOND THE RIGHT-OF-WAY LINE AND THEN SLOPED UP OR DOWN USING PERMISSIBLE SLOPES TO MATCH THE EXISTING GROUND SURFACE.

THE CONTRACTOR WILL BE PERMITTED TO BID ONLY ONE OF THE ALTERNATE TYPES OF SUBGRADE TREATMENT. THE TYPE BID BY THE SUCCESSFUL BIDDER WILL BE THE TYPE OF SUBGRADE TREATMENT USED TO CONSTRUCT THE PROJECT.

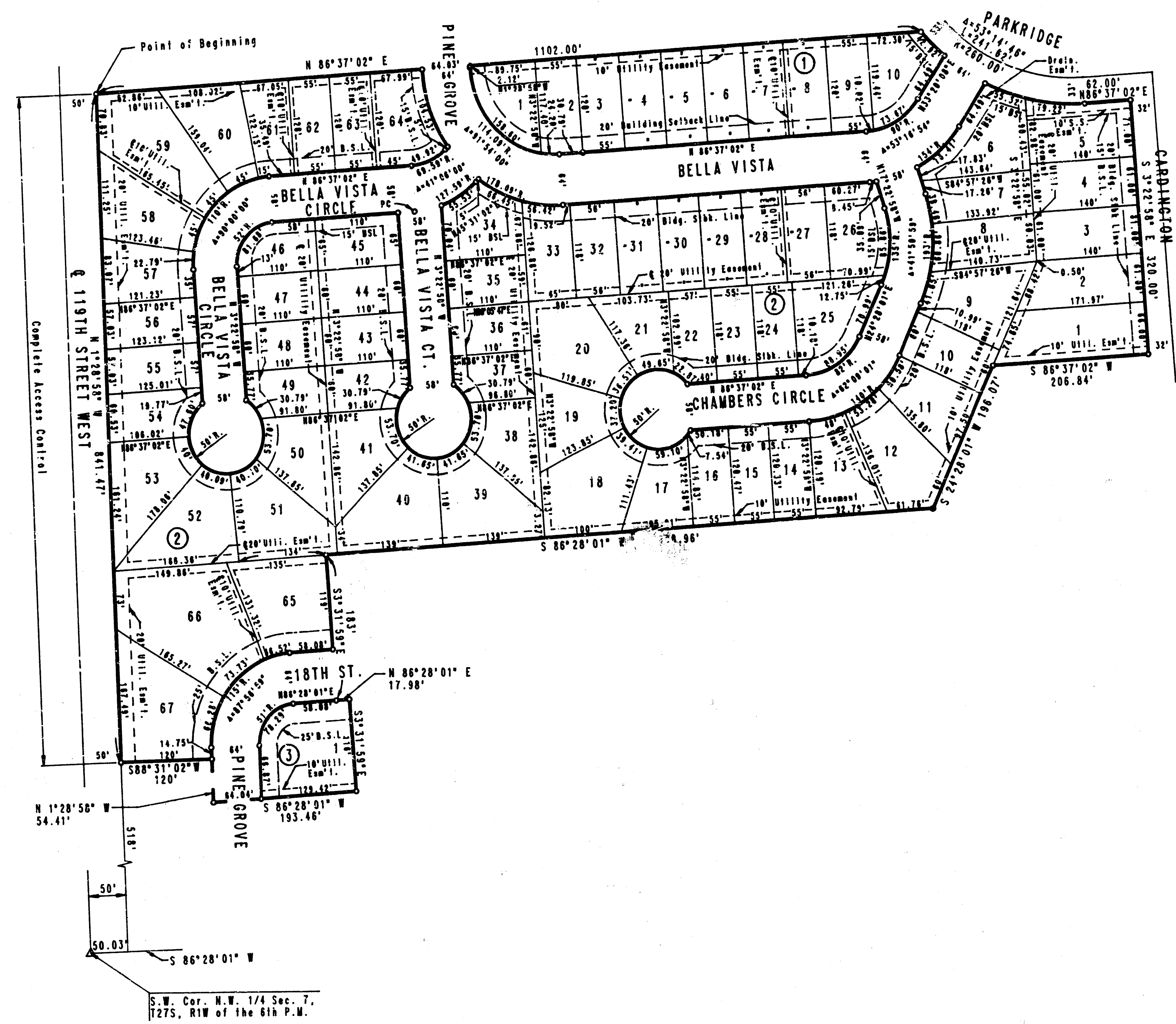
AUGUST, 1987

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



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AVAILABLE COPY

| PROJECT NO.              | SHEET NO. | TOTAL SHEETS |
|--------------------------|-----------|--------------|
| 472-76-245-87101-000-001 | 2         | 16           |



SCALE: 1" = 100'

○ = IRON SET

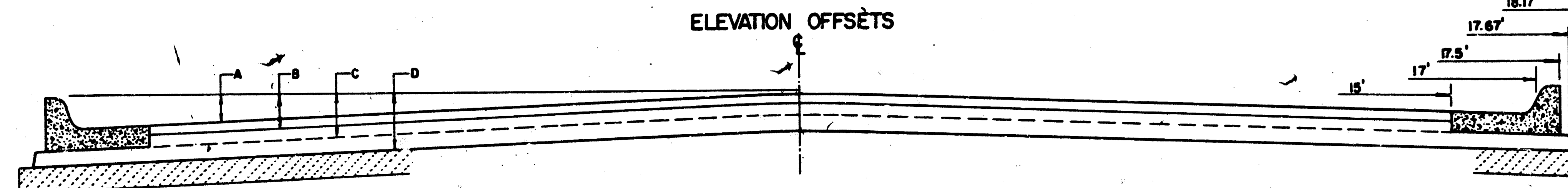
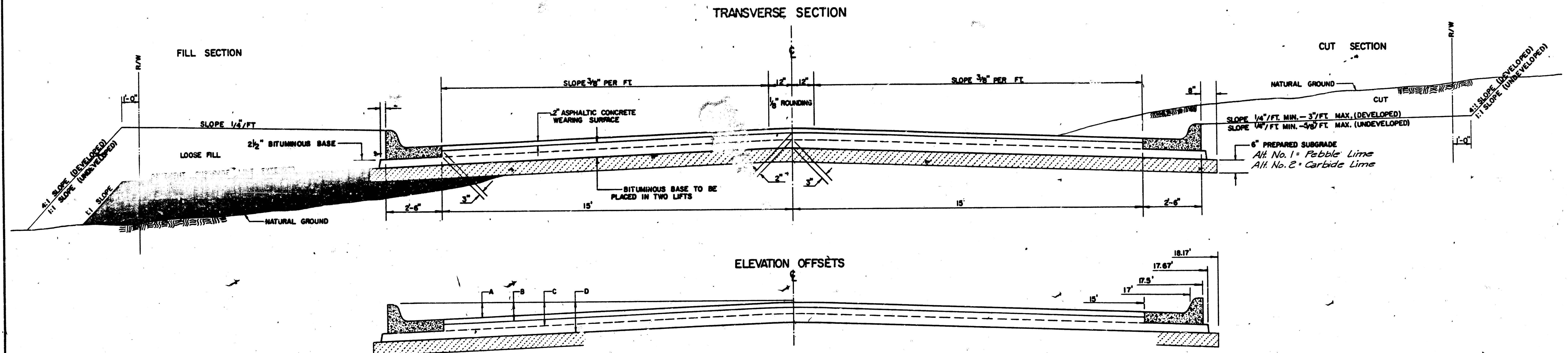
BENCH MARK - CHISELED "O" AT N.E. COR. OF HEADWALL,  
120 FEET WEST OF INTERSECTION 21ST ST.  
AND WAYNE ROAD  
ELEV. = 1351.065 M.S.L.

B.S.L. = BUILDING SETBACK LINE  
S.S. = SANITARY SEWER

|                                                                            |            |            |         |
|----------------------------------------------------------------------------|------------|------------|---------|
| <b>PLAT</b>                                                                |            |            |         |
| PROFESSIONAL ENGINEERING CONSULTANTS, P.A.<br>ENGINEERS<br>WICHITA, KANSAS |            |            |         |
| Designed by                                                                | Checked by | Date       | Job No. |
| DEP                                                                        |            | JULY, 1987 | 87156-1 |

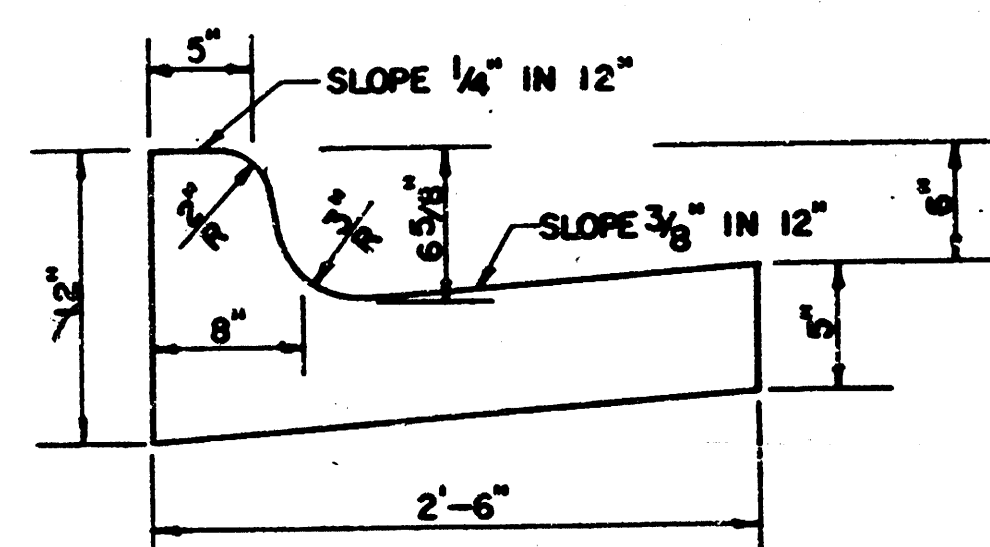
# TYPICAL 35' PAVEMENT DETAILS

3  
16

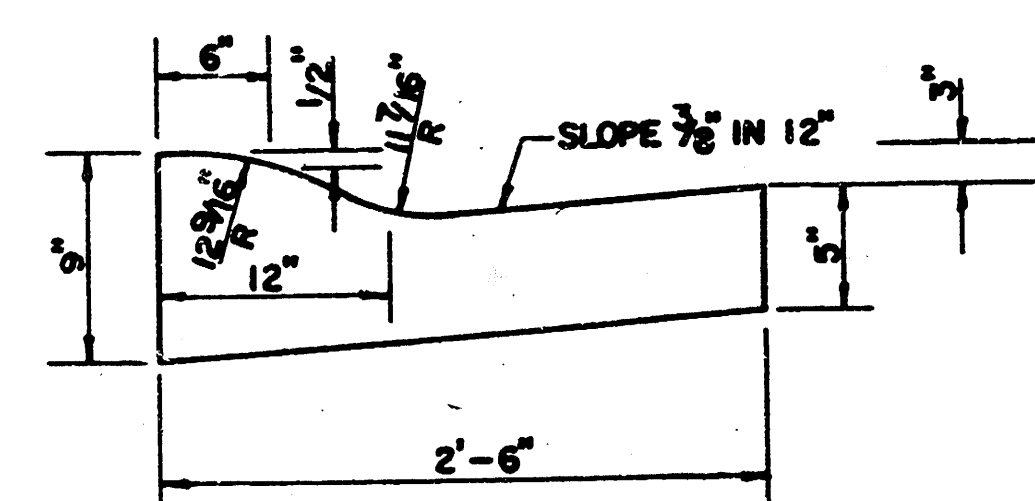


|                                           | DISTANCE FROM CENTERLINE (LT. & RT.)' |      |      |      |      |      |      |      |      |      |       |        |        |
|-------------------------------------------|---------------------------------------|------|------|------|------|------|------|------|------|------|-------|--------|--------|
|                                           | 0'                                    | 2'   | 4'   | 6'   | 8.5' | 10'  | 12'  | 14'  | 15'  | 17'  | 17.5' | 17.67' | 18.17' |
| A: TOP OF CURBS TO TOP OF SURFACE LIFT    | 0.04                                  | 0.08 | 0.14 | 0.21 | 0.29 | 0.33 | 0.39 | 0.46 | 0.49 | —    | —     | —      | —      |
| B: TOP OF CURBS TO TOP OF UPPER BASE LIFT | 0.21                                  | 0.25 | 0.31 | 0.37 | 0.45 | 0.50 | 0.56 | 0.62 | 0.65 | —    | —     | —      | —      |
| C: TOP OF CURBS TO TOP OF LOWER BASE LIFT | 0.37                                  | 0.43 | 0.50 | 0.57 | 0.67 | 0.72 | 0.79 | 0.87 | 0.90 | 0.98 | 1.00  | 1.00   | —      |
| D: TOP OF CURBS TO TOP OF SUBGRADE        | 0.62                                  | 0.67 | 0.74 | 0.81 | 0.90 | 0.95 | 1.02 | 1.08 | 1.12 | 1.19 | 1.21  | 1.21   | 1.23   |

## COMBINED CURB & GUTTER



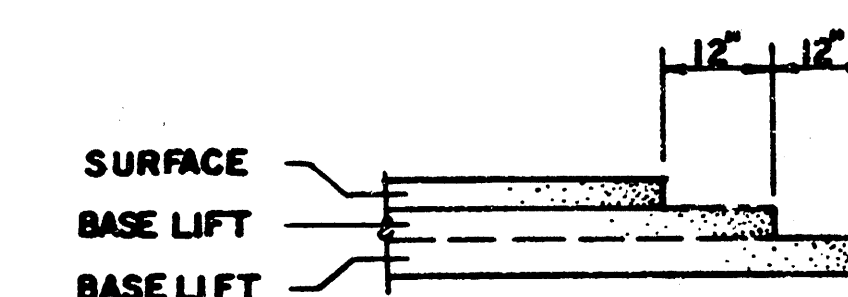
## ROLL TYPE COMBINED CURB & GUTTER



## 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

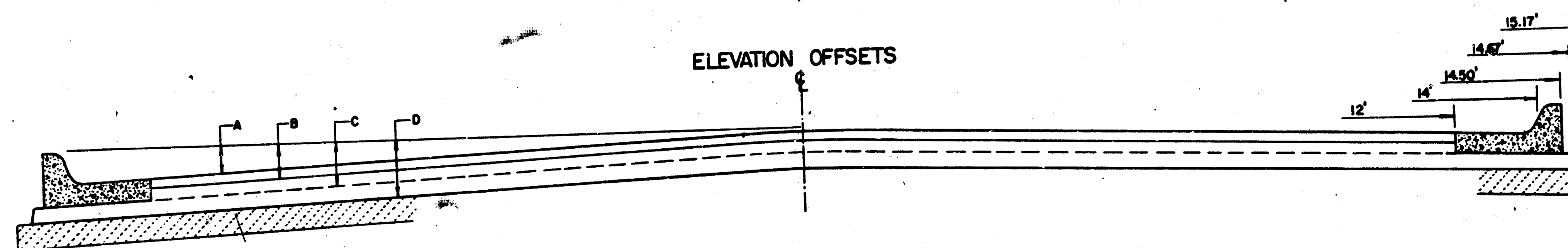
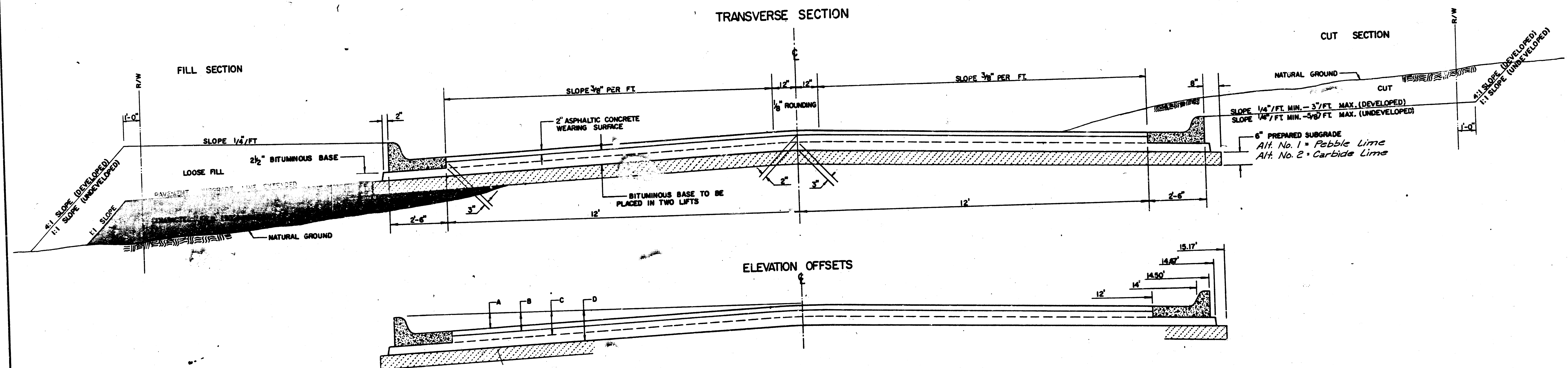


TRANSVERSE CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN FLEXIBLE BASE PAVEMENTS AT LOCATIONS WHERE PAVEMENT JOINTS EXISTING FLEXIBLE BASE PAVEMENT AS SHOWN BY THE DETAIL. ALL COSTS ASSOCIATED WITH THE CONSTRUCTION OF THE TRANSVERSE JOINT SHALL BE INCLUDED IN THE BID PRICE FOR SQUARE YARDS 7" ASPHALTIC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

7 INCH RESIDENTIAL ASPHALTIC CONCRETE  
PAVEMENT WITH 5 INCH BITUMINOUS BASE  
CITY OF WICHITA, KANSAS  
PROJECT NUMBER  
472-76-245-81701-000-000-001

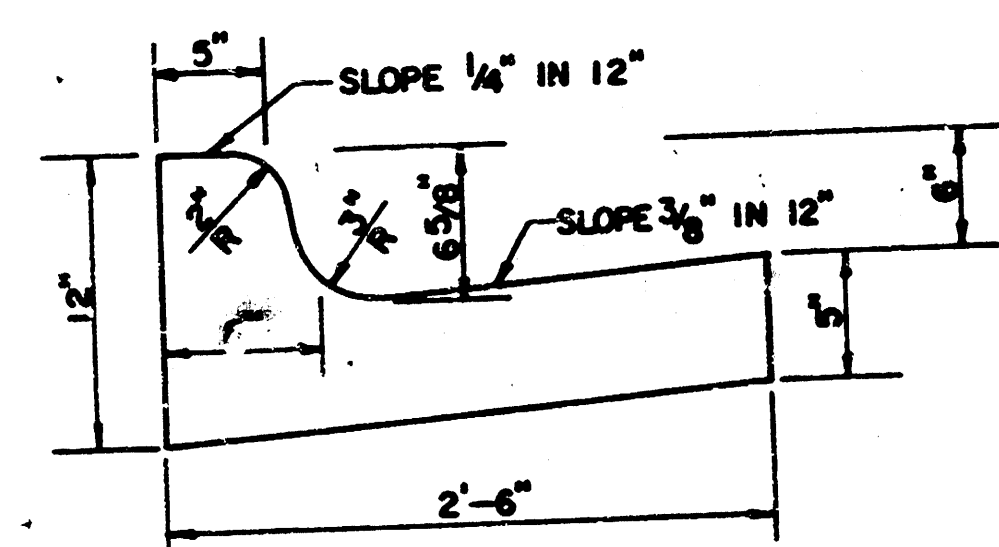
# TYPICAL 29' PAVEMENT DETAILS

4  
16

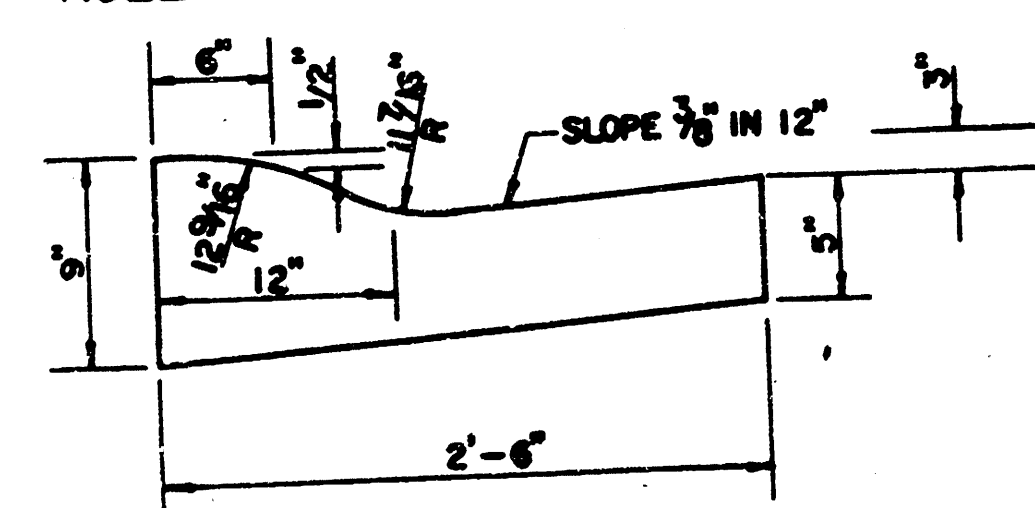


|                                           | DISTANCE FROM CENTERLINE (LT. & RT.) |      |      |      |      |      |      |      |      |       |        |        |
|-------------------------------------------|--------------------------------------|------|------|------|------|------|------|------|------|-------|--------|--------|
|                                           | 0'                                   | 2'   | 4'   | 6'   | 7'   | 8'   | 10'  | 12'  | 14'  | 14.5' | 14.67' | 15.17' |
| 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 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 | 0.66 | 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   |

COMBINED CURB & GUTTER



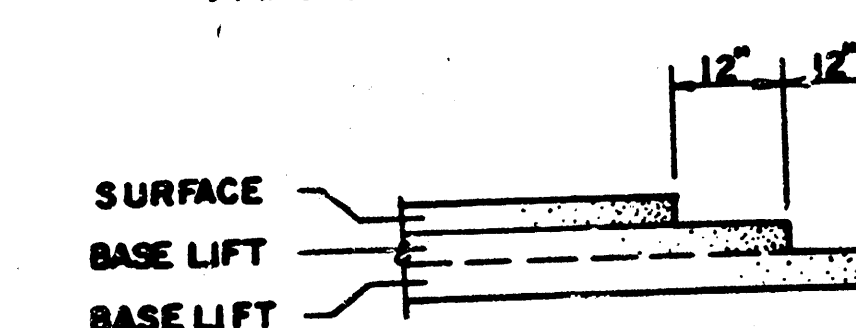
ROLL TYPE COMBINED CURB & GUTTER



## GENERAL NOTES

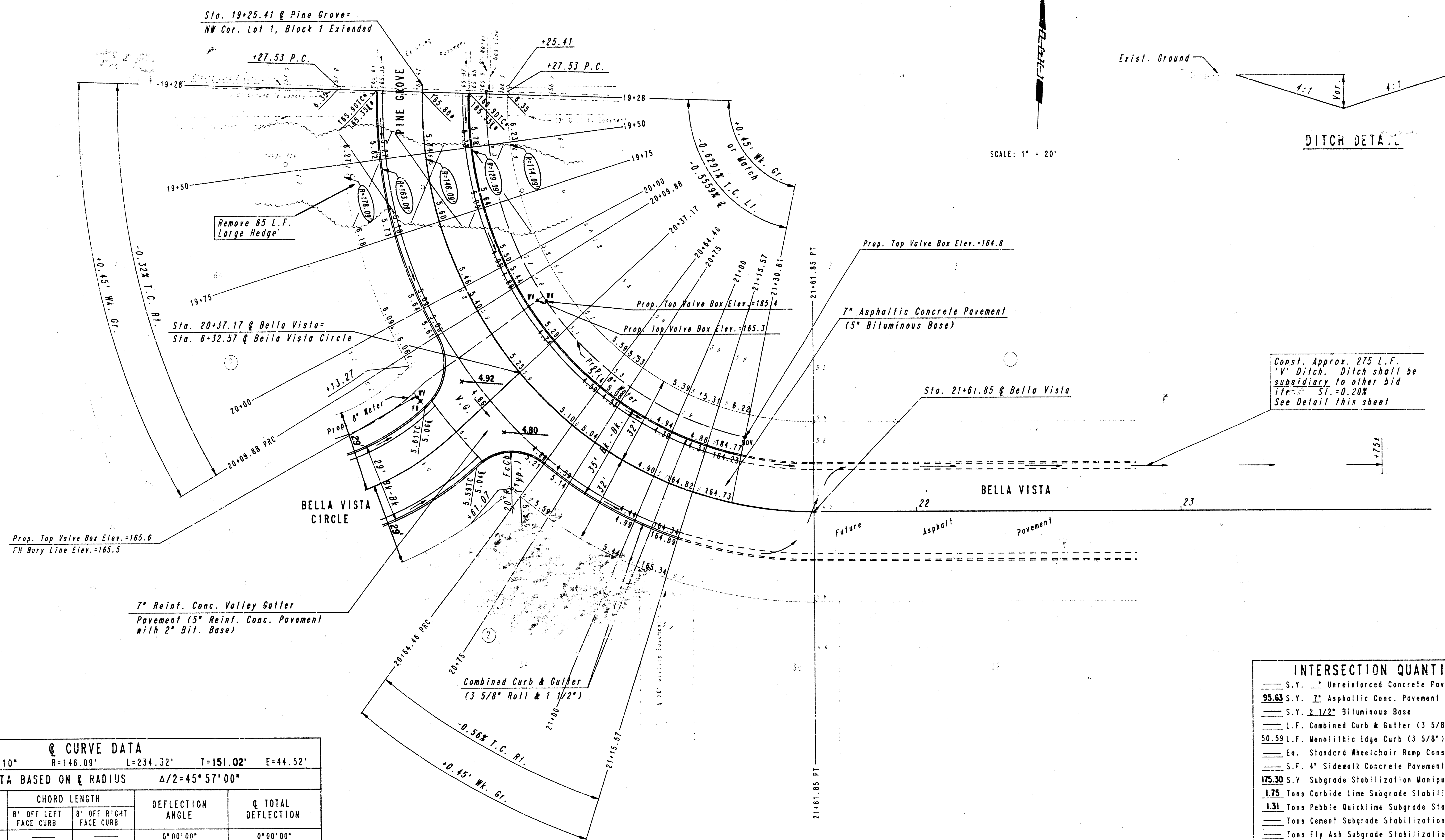
- 1) THE ASPHALTIC CONCRETE PAVEMENT BETWEEN THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 7" ASPHALTIC CONCRETE (5" BITUMINOUS BASE).
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- 5) CONSTRUCTION JOINTS IN EACH LIFT SHALL BE STAGGERED A MINIMUM DISTANCE OF ONE (1) FOOT FROM 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 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 7" ASPHALTIC CONCRETE (5" BITUMINOUS BASE).

7 INCH RESIDENTIAL ASPHALTIC CONCRETE  
PAVEMENT WITH 5 INCH BITUMINOUS BASE  
CITY OF WICHITA, KANSAS  
PROJECT NUMBER  
472-76-245-81701-000-000-001  
4/16



| Q CURVE DATA                                                   |              |                       |                        |                  |                    |
|----------------------------------------------------------------|--------------|-----------------------|------------------------|------------------|--------------------|
| Δ=91°54'00" D=39°13'10" R=146.09' L=234.32' T=151.02' E=44.52' |              |                       |                        |                  |                    |
| CURVE DATA BASED ON Q RADIUS Δ/2=45°57'00"                     |              |                       |                        |                  |                    |
| Q STATION                                                      | Q ARC LENGTH | CHORD LENGTH          |                        | DEFLECTION ANGLE | Q TOTAL DEFLECTION |
|                                                                |              | 8' OFF LEFT FACE CURB | 8' OFF RIGHT FACE CURB |                  |                    |
| 19+27.53                                                       |              |                       |                        | 0°00'00"         | 0°00'00"           |
| 19+50                                                          | 22.47'       | 18.61'                | 26.29'                 | 4°24'23"         | 4°24'23"           |
| 19+75                                                          | 25.00'       | 20.70'                | 29.24'                 | 4°54'09"         | 9°18'32"           |
| 20+00                                                          | 25.00'       | 20.70'                | 29.24'                 | 4°54'09"         | 14°12'41"          |
| 20+09.98                                                       | 9.88'        | 8.19'                 | 11.57'                 | 1°56'15"         | 16°08'56"          |
| 20+37.17                                                       | 27.29'       | 22.59'                | 63.55'                 | 5°21'05"         | 21°30'01"          |
| 20+64.46                                                       | 27.29'       | 22.59'                | 63.55'                 | 5°21'05"         | 26°51'06"          |
| 20+75                                                          | 10.54'       | 8.73'                 | 12.34'                 | 2°04'01"         | 28°55'07"          |
| 21+00                                                          | 25.00'       | 20.70'                | 29.24'                 | 4°54'09"         | 33°49'16"          |
| 21+15.57                                                       | 15.57'       | 12.90'                | 18.23'                 | 3°03'12"         | 36°52'28"          |
| 21+30.61                                                       | 15.04'       | 12.46'                | 17.61'                 | 2°56'58"         | 39°49'26"          |
| 21+61.85                                                       | 31.24'       | 25.84'                | 36.52'                 | 6°07'34"         | 45°57'00"          |

Defl. / ft. = 11.765961 min.

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

| INTERSECTION QUANTITIES |                                                      |
|-------------------------|------------------------------------------------------|
| — S.Y. —                | Unreinforced Concrete Pavement                       |
| 95.63 S.Y.              | 2" Asphaltic Conc. Pavement (5" Bituminous Base)     |
| — S.Y. —                | 2 1/2" Bituminous Base                               |
| — L.F. —                | Combined Curb & Gutter (3 5/8" & 1 1/2")             |
| 50.59 L.F.              | Monolithic Edge Curb (3 5/8")                        |
| — Ea. —                 | Standard Wheelchair Ramp Construction                |
| — S.F. —                | 4" Sidewalk Concrete Pavement                        |
| 175.30 S.Y.             | Subgrade Stabilization Manipulation                  |
| 1.75 Tons               | Carbide Lime Subgrade Stabilization                  |
| 1.31 Tons               | Pebble Quicklime Subgrade Stabilization              |
| — Tons —                | Cement Subgrade Stabilization                        |
| — Tons —                | Fly Ash Subgrade Stabilization                       |
| — Tons —                | Preheater Fines Subgrade Stabilization               |
| 74.78 S.Y.              | Reinf. V.G. 5" Concrete & 2" Asphaltic Concrete Base |

**PINE GROVE**  
STA. 19+27.53 TO STA. 21+61.85

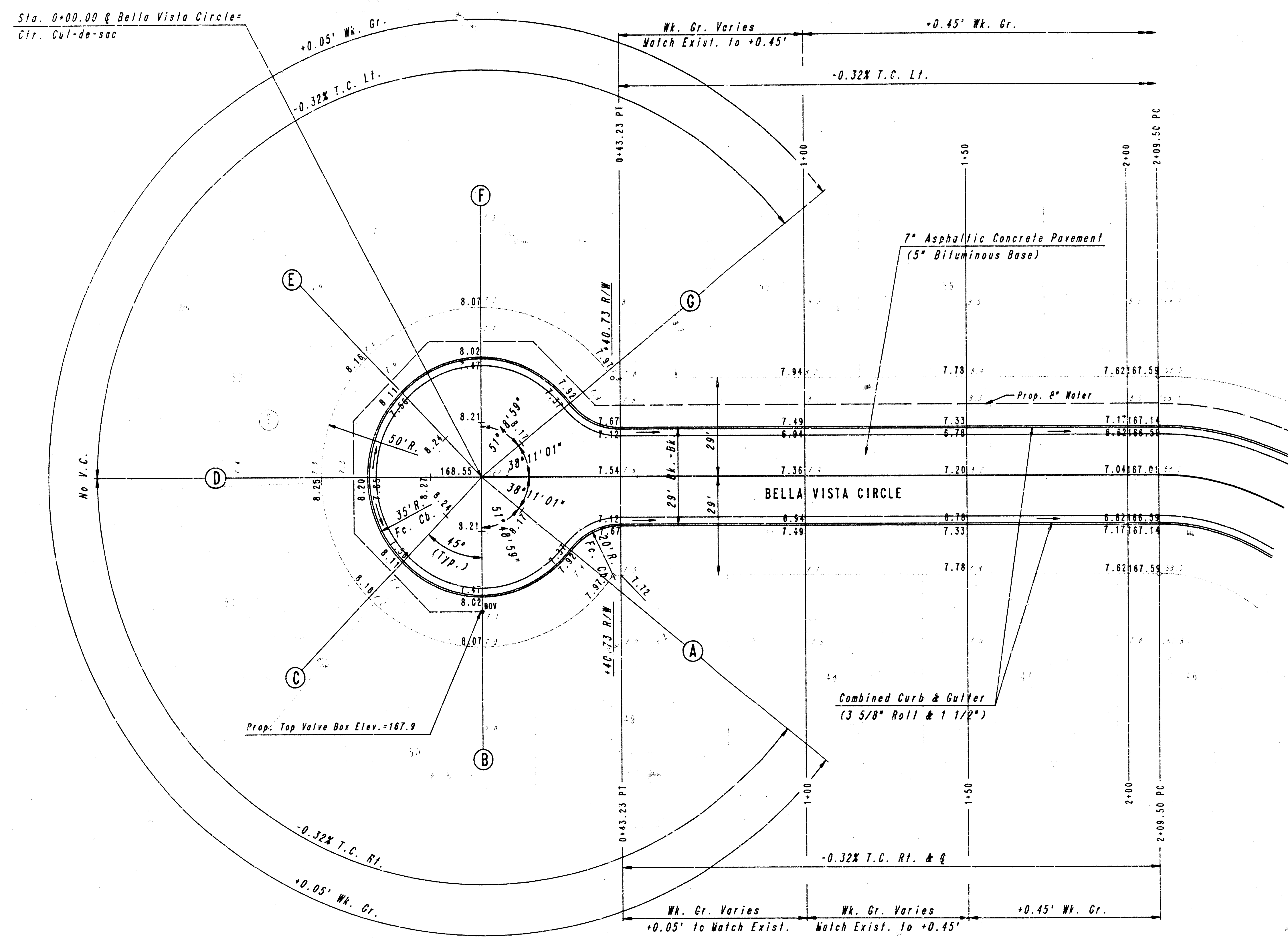
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.  
ENGINEERS  
WICHITA, KANSAS

|             |          |            |            |
|-------------|----------|------------|------------|
| Designed by | CSB, GDD | Checked by |            |
| Drawn by    | DEP      | Date       | JULY, 1987 |
|             |          | Job No.    | 87156-1    |

**FILMED FROM THE BEST AVAILABLE COPY**

|                              |           |
|------------------------------|-----------|
| PROJECT NO.                  | SHEET NO. |
| 472-76-245-81701-000-000-001 | 6         |

SCALE: 1" = 20'



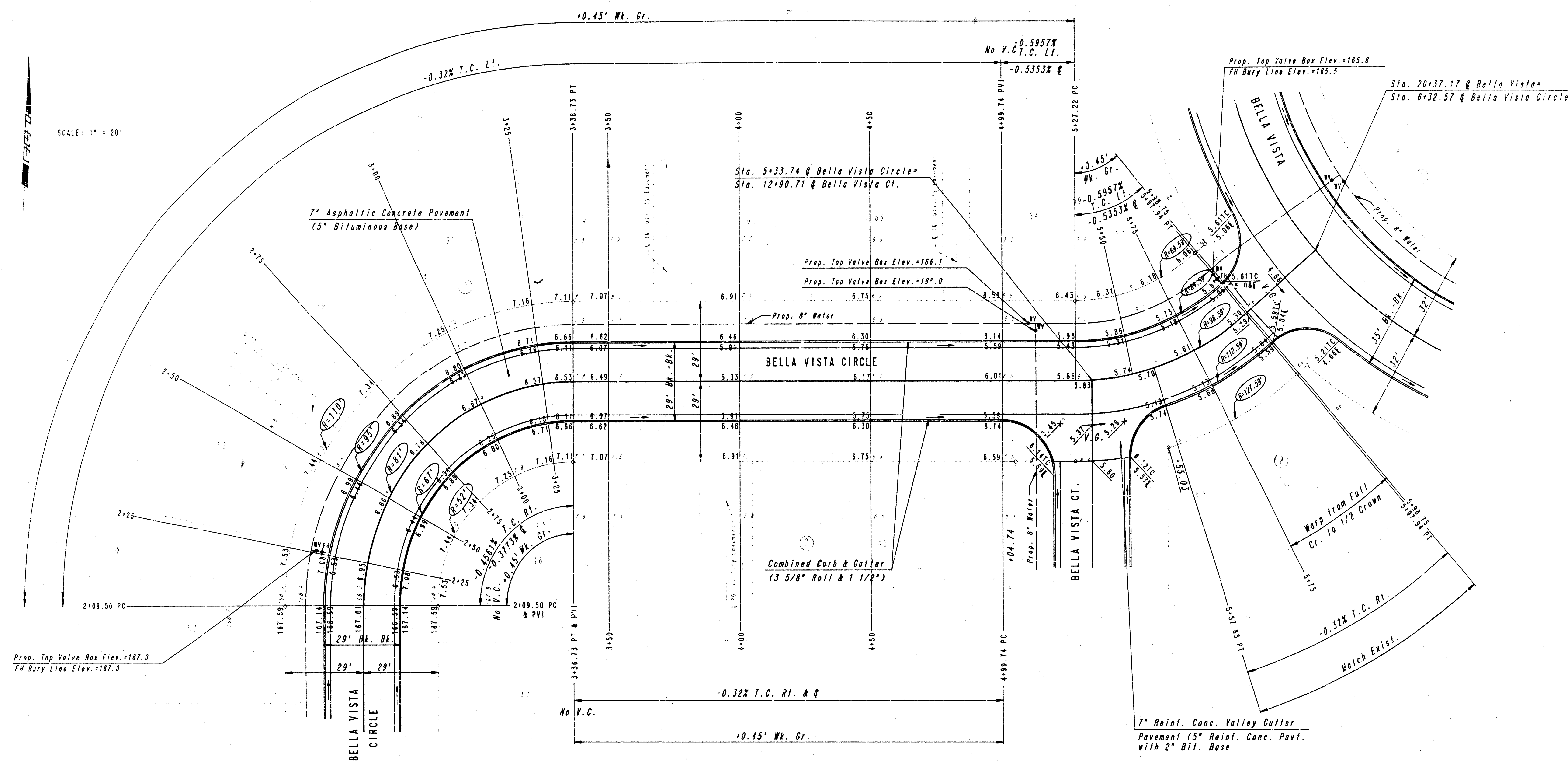
NOTE: THIS STREET TO BE CONSTRUCTED WITH ROLL-TYPE CURB. TOP OF CURB ELEVATIONS GIVEN ARE FOR FULL HEIGHT CURB.

BELLA VISTA CIRCLE  
STA. 0+00.00 TO STA. 2+09.50

|                                            |          |            |                            |
|--------------------------------------------|----------|------------|----------------------------|
| PROFESSIONAL ENGINEERING CONSULTANTS, P.A. |          |            |                            |
| ENGINEERS<br>WICHITA, KANSAS               |          |            |                            |
| Designed by                                | CSB, GDD | Checked by |                            |
| Drawn by                                   | DEP      | Date       | JULY, 1987 Job No. 87156-1 |

6/16

|                              |           |              |
|------------------------------|-----------|--------------|
| PROJECT NO.                  | SHEET NO. | TOTAL SHEETS |
| 472-76-245-81707-000-000-001 | 7         | 16           |



| Q CURVE DATA                                               |              |                       |                        |                    |           |
|------------------------------------------------------------|--------------|-----------------------|------------------------|--------------------|-----------|
| Δ=41°06'00" D=58°06'55" R=98.59' L=70.72' T=36.96' E=6.70' |              |                       |                        |                    |           |
| CURVE DATA BASED ON Q RADIUS                               |              |                       | Δ/2=22°33'00"          |                    |           |
| Q STATION                                                  | Q ARC LENGTH | CHORD LENGTH          | DEFLECTION ANGLE       | Q TOTAL DEFLECTION |           |
|                                                            |              | 8' OFF LEFT FACE CURB | 8' OFF RIGHT FACE CURB |                    |           |
| 5+27.22                                                    |              |                       |                        | 0°00'00"           | 0°00'00"  |
| 5+33.74                                                    | 6.52'        | 5.06'                 |                        | 1°53'41"           | 1°53'41"  |
| 5+50                                                       | 16.26'       | 12.62'                |                        | 4°43'30"           | 6°37'11"  |
| 5+57.83                                                    | 7.83'        | 6.08'                 | 37.29'                 | 2°18'31"           | 8°53'42"  |
| 5+75                                                       | 17.17'       | 13.32'                | 20.97'                 | 4°59'21"           | 13°53'03" |
| 5+97.94                                                    | 22.94'       | 17.78'                | 28.00'                 | 6°39'57"           | 20°33'00" |

Defl./Tl.=17.434955 min.

| Q CURVE DATA                                                 |              |                       |                        |                    |           |
|--------------------------------------------------------------|--------------|-----------------------|------------------------|--------------------|-----------|
| Δ=90°00'00" D=70°44'08" R=81.00' L=127.23' T=81.00' E=33.55' |              |                       |                        |                    |           |
| CURVE DATA BASED ON Q RADIUS                                 |              |                       | Δ/2=45°00'00"          |                    |           |
| Q STATION                                                    | Q ARC LENGTH | CHORD LENGTH          | DEFLECTION ANGLE       | Q TOTAL DEFLECTION |           |
|                                                              |              | 8' OFF LEFT FACE CURB | 8' OFF RIGHT FACE CURB |                    |           |
| 2+09.50                                                      |              |                       |                        | 0°00'00"           | 0°00'00"  |
| 2+25                                                         | 15.50'       | 19.88'                | 11.27'                 | 5°28'56"           | 5°28'56"  |
| 2+50                                                         | 25.00'       | 31.67'                | 18.14'                 | 8°50'32"           | 14°19'28" |
| 2+75                                                         | 25.00'       | 31.67'                | 18.14'                 | 8°50'32"           | 23°10'00" |
| 3+00                                                         | 25.00'       | 31.67'                | 18.14'                 | 8°50'32"           | 32°00'32" |
| 3+25                                                         | 25.00'       | 31.67'                | 18.14'                 | 8°50'32"           | 40°51'04" |
| 3+50                                                         | 11.73'       | 14.90'                | 8.54'                  | 4°08'56"           | 45°00'00" |

Defl./Tl.=21.221410 min.

| INTERSECTION QUANTITIES |                                                           |
|-------------------------|-----------------------------------------------------------|
| 79.95                   | S.Y. 2" Asphaltic Conc. Pavement (5" Bituminous Base)     |
| 51.25                   | L.F. Monolithic Edge Curb (3 5/8")                        |
| 161.36                  | S.Y. Subgrade Stabilization Manipulation                  |
| 1.61                    | Tons Pebble Quicklime Subgrade Stabilization              |
| 77.78                   | S.Y. Reinf. V.G. 5" Concrete & 2" Asphaltic Concrete Base |

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

BELLA VISTA CIRCLE  
STA. 2+09.50 TO STA. 5+98.75

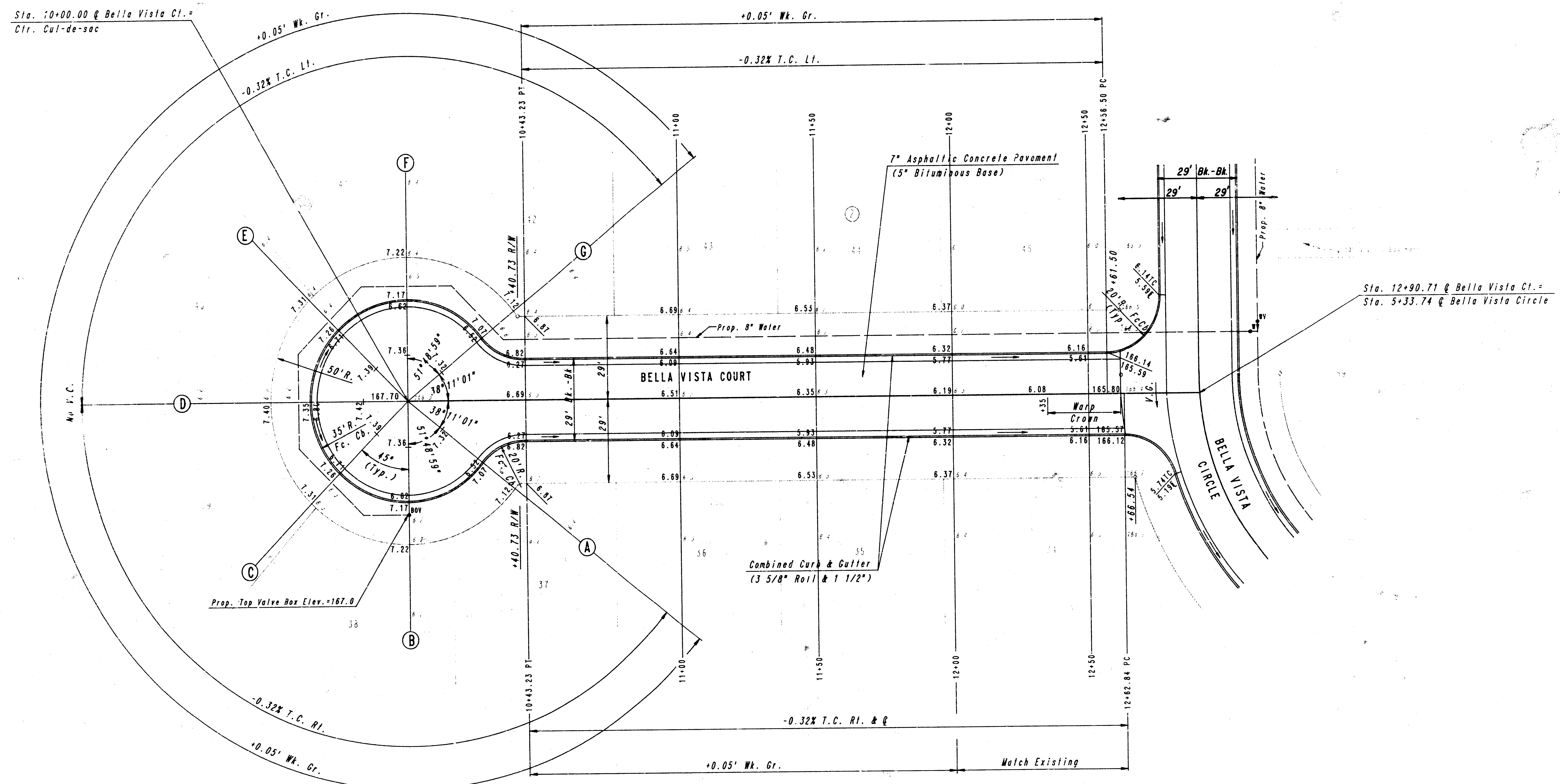
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.  
WICHITA, KANSAS

|             |          |            |            |
|-------------|----------|------------|------------|
| Designed by | CSB, GDD | Checked by |            |
| Drawn by    | DEP      | Date       | JULY, 1987 |

Job No. 47136-1

| PROJECT NO.                  | SHEET NO. | TOTAL SHEETS |
|------------------------------|-----------|--------------|
| 472-76-245-61701-C10-000-001 | 8         | 16           |

SCALE: 1" = 20'

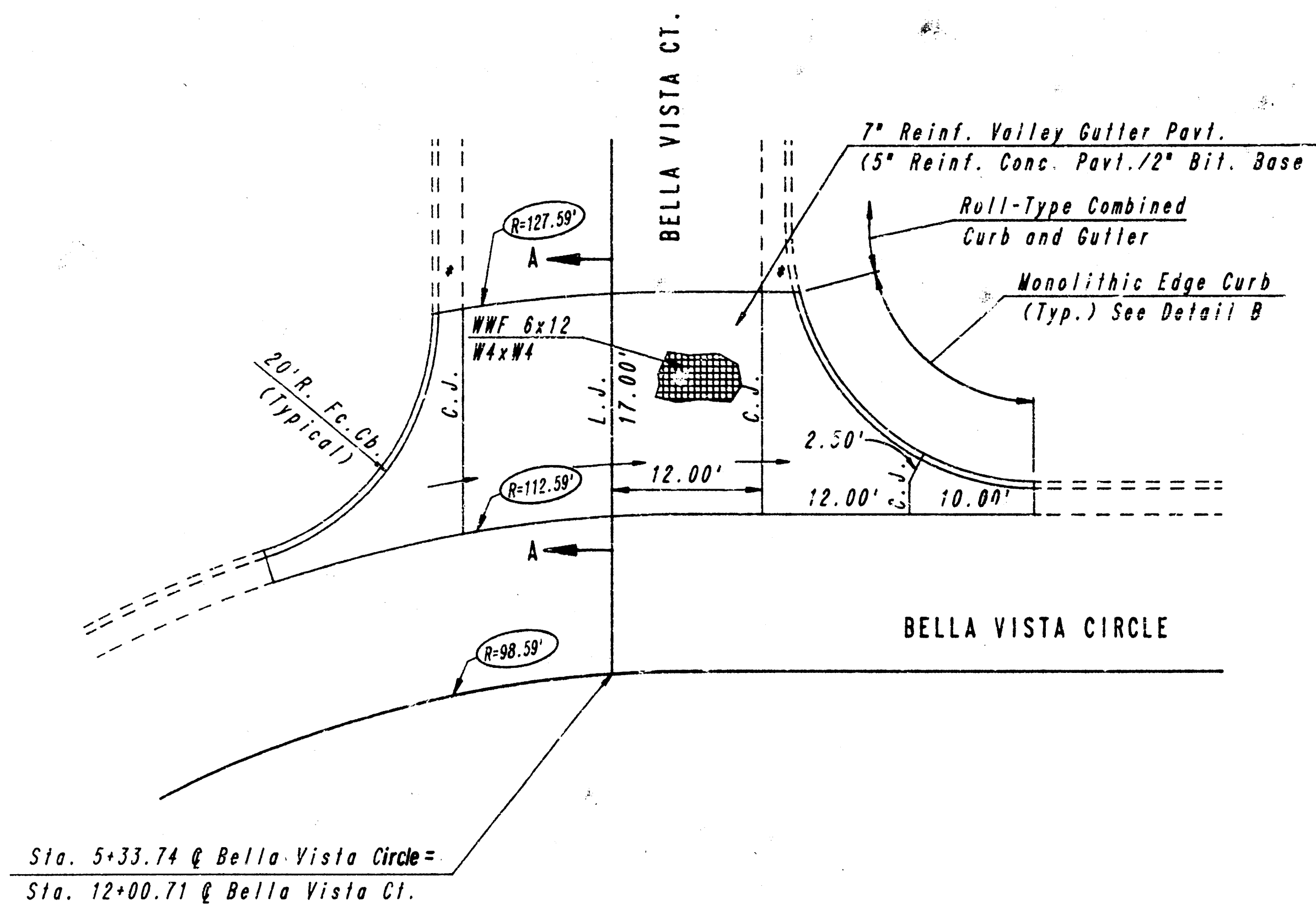


NOTE: THIS STREET TO BE CONSTRUCTED WITH ROLL-TYPE CURB. TOP OF CURB ELEVATIONS GIVEN ARE FOR FULL HEIGHT CURB.

**BELLA VISTA COURT**  
STA. 10+00.00 TO STA. 12+90.71

|                                                                                                   |          |            |                            |
|---------------------------------------------------------------------------------------------------|----------|------------|----------------------------|
| <b>PROFESSIONAL ENGINEERING CONSULTANTS, P.A.</b><br><small>ENGINEERS<br/>WICHITA, KANSAS</small> |          |            |                            |
| Designed by                                                                                       | CSB, GDD | Checked by | 8/16                       |
| Drawn by                                                                                          | dep      | Date       | JULY, 1987 Job No. 87156-1 |

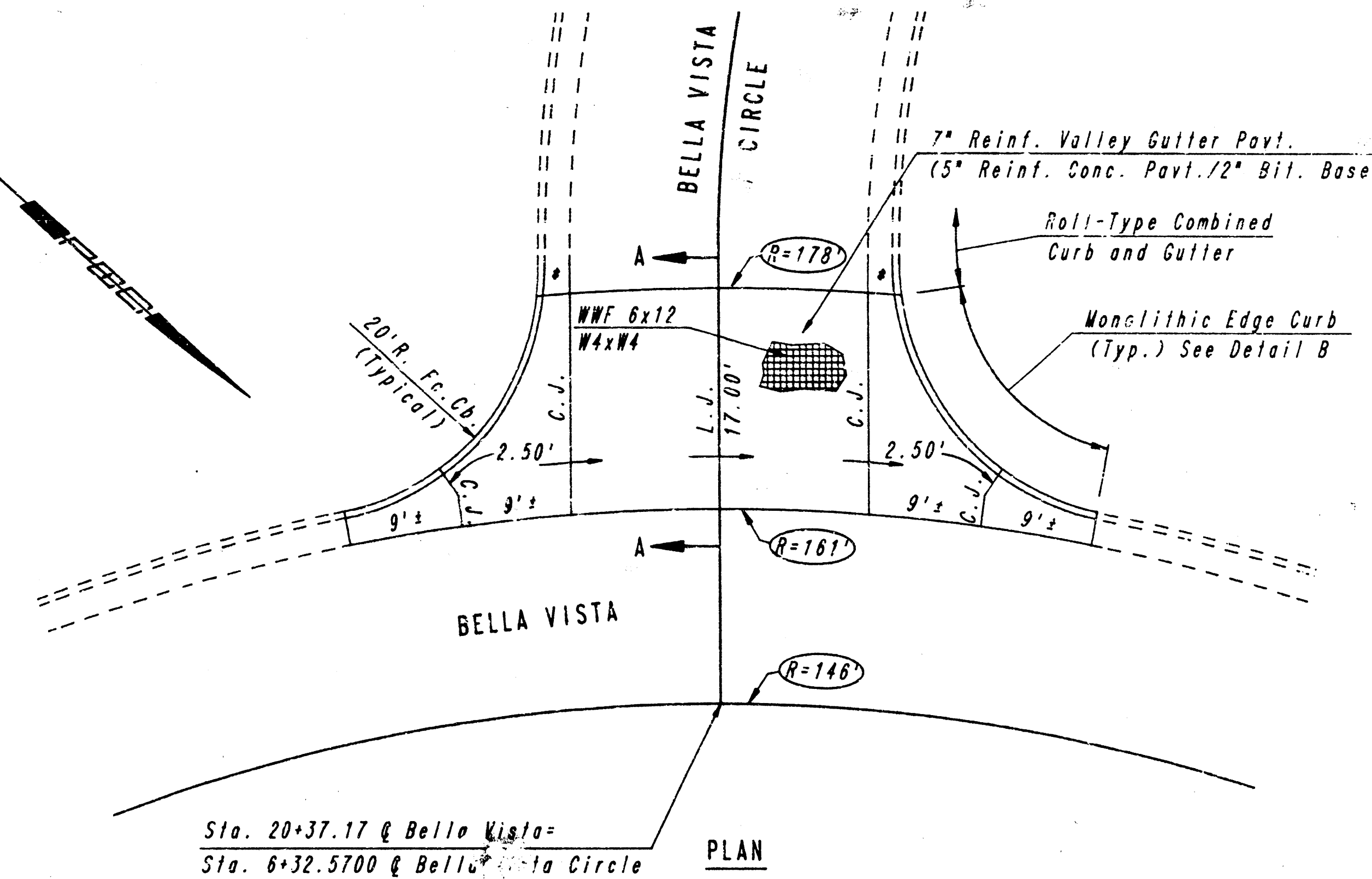
| PROJECT NO.                  | SHEET NO. | TOTAL SHEETS |
|------------------------------|-----------|--------------|
| 472-75-245-8*701-000-000-001 | 9         | 16           |



PLAN

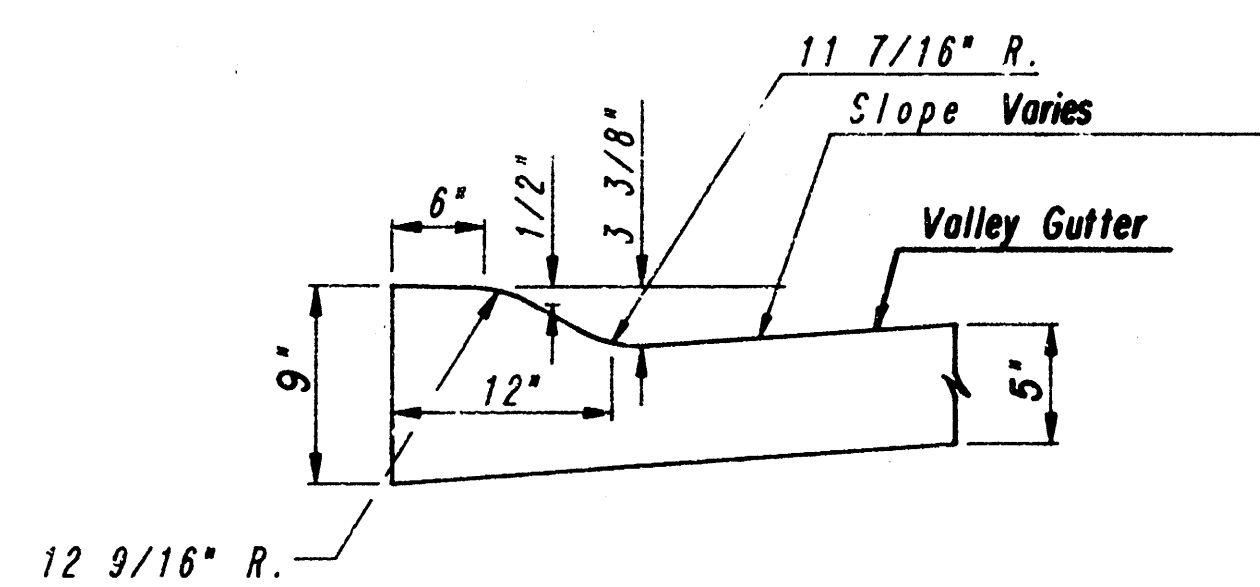
### REINFORCED VALLEY GUTTER

\* TO BE POURED MONOLITHICALLY WITH ADJACENT COMBINED CURB AND GUTTER. SUBSIDIARY TO UNIT PRICE BID PER L.T.N. FT. FOR COMBINED CURB AND GUTTER (3 5/8" & 1 1/2").

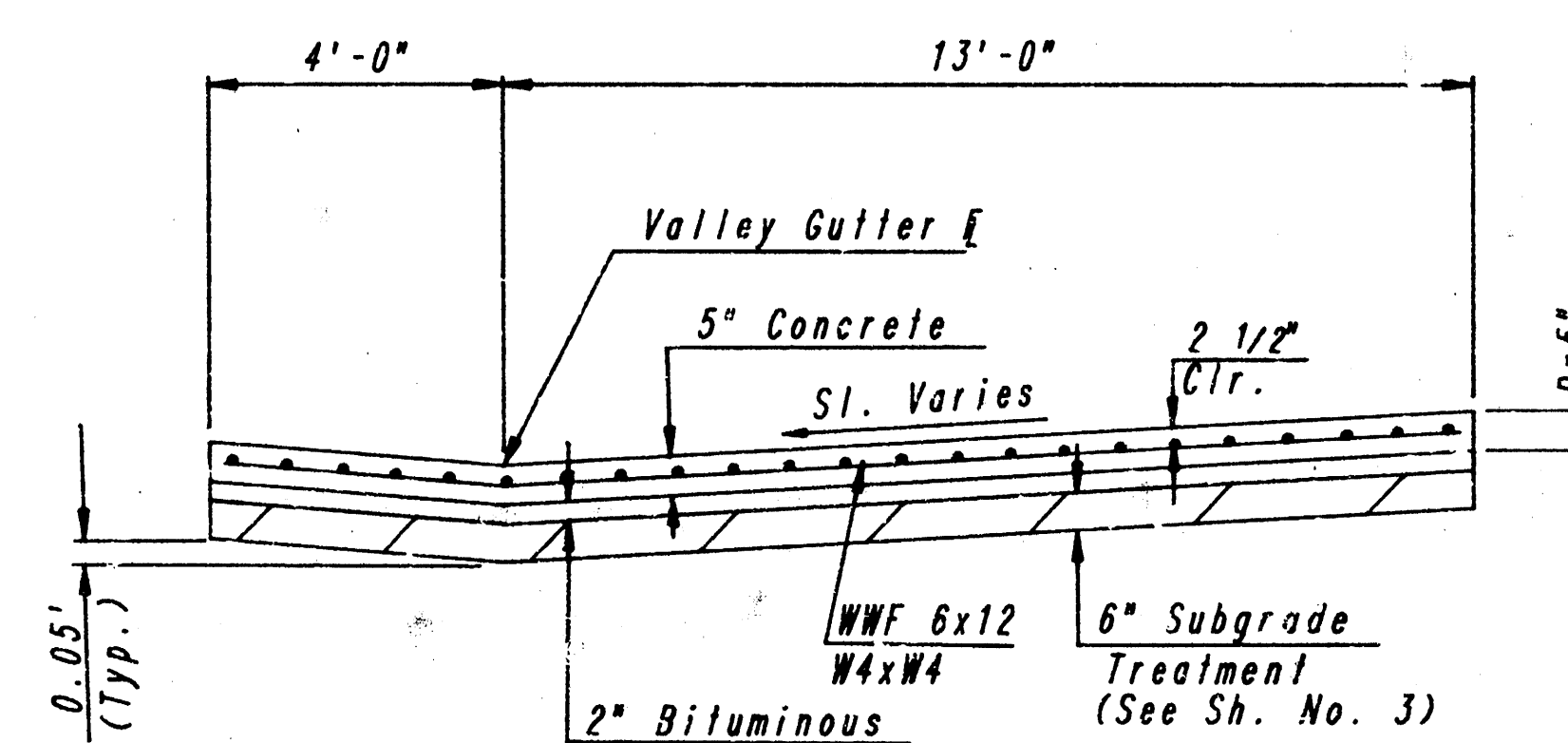


PLAN

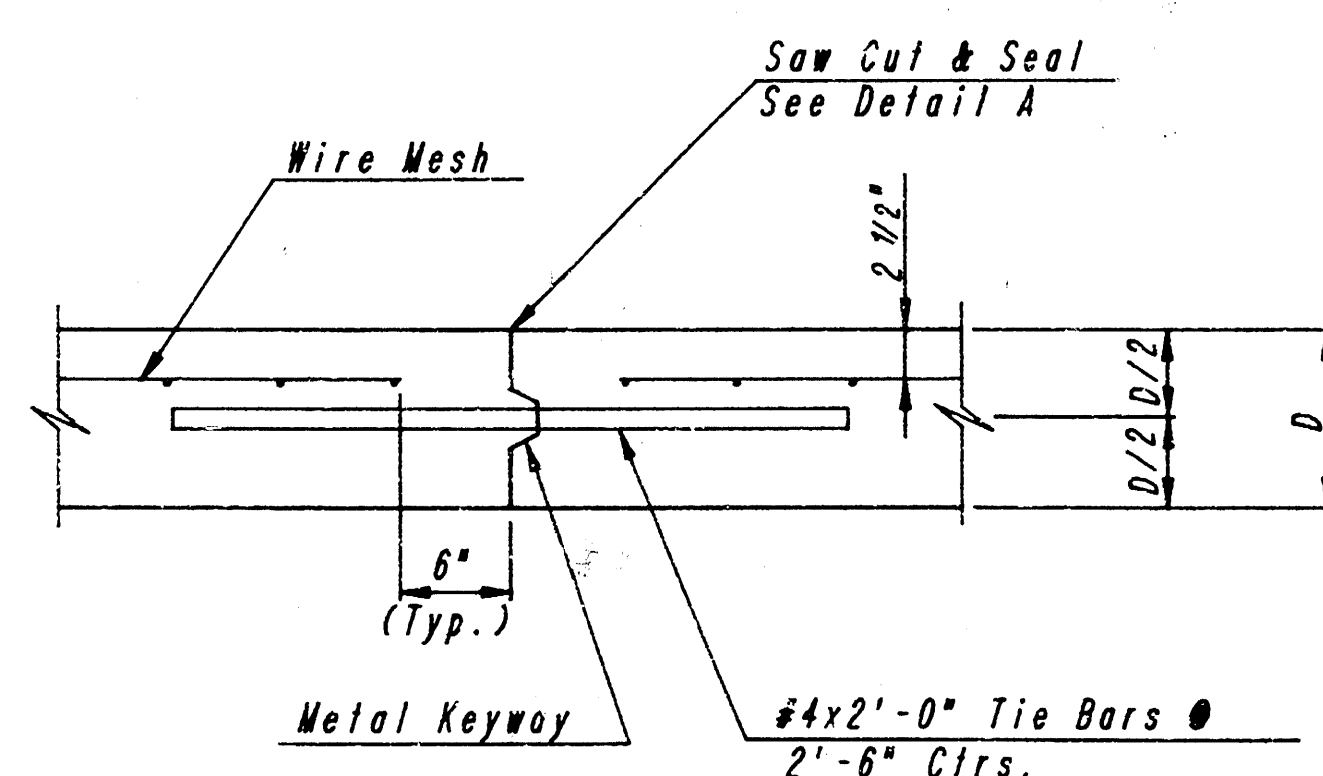
### REINFORCED VALLEY GUTTER



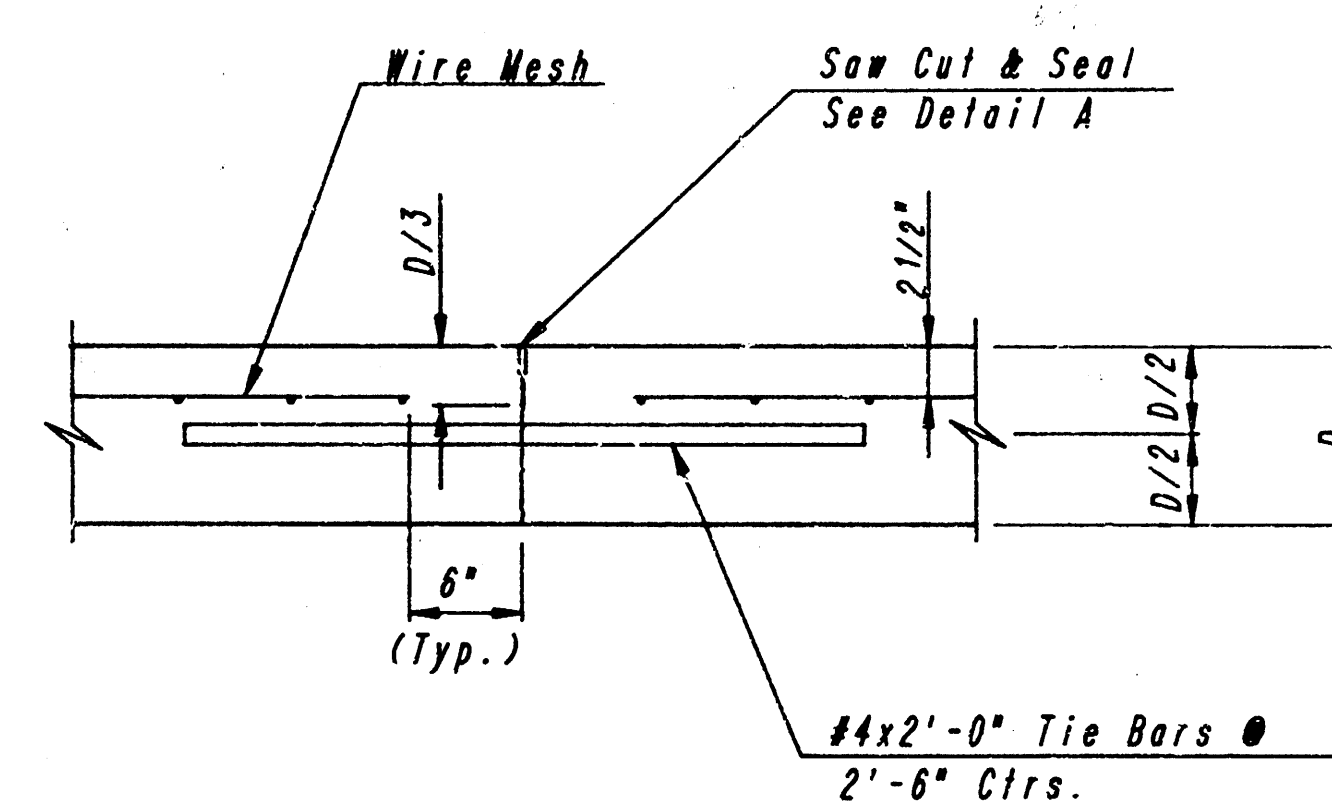
DETAIL B



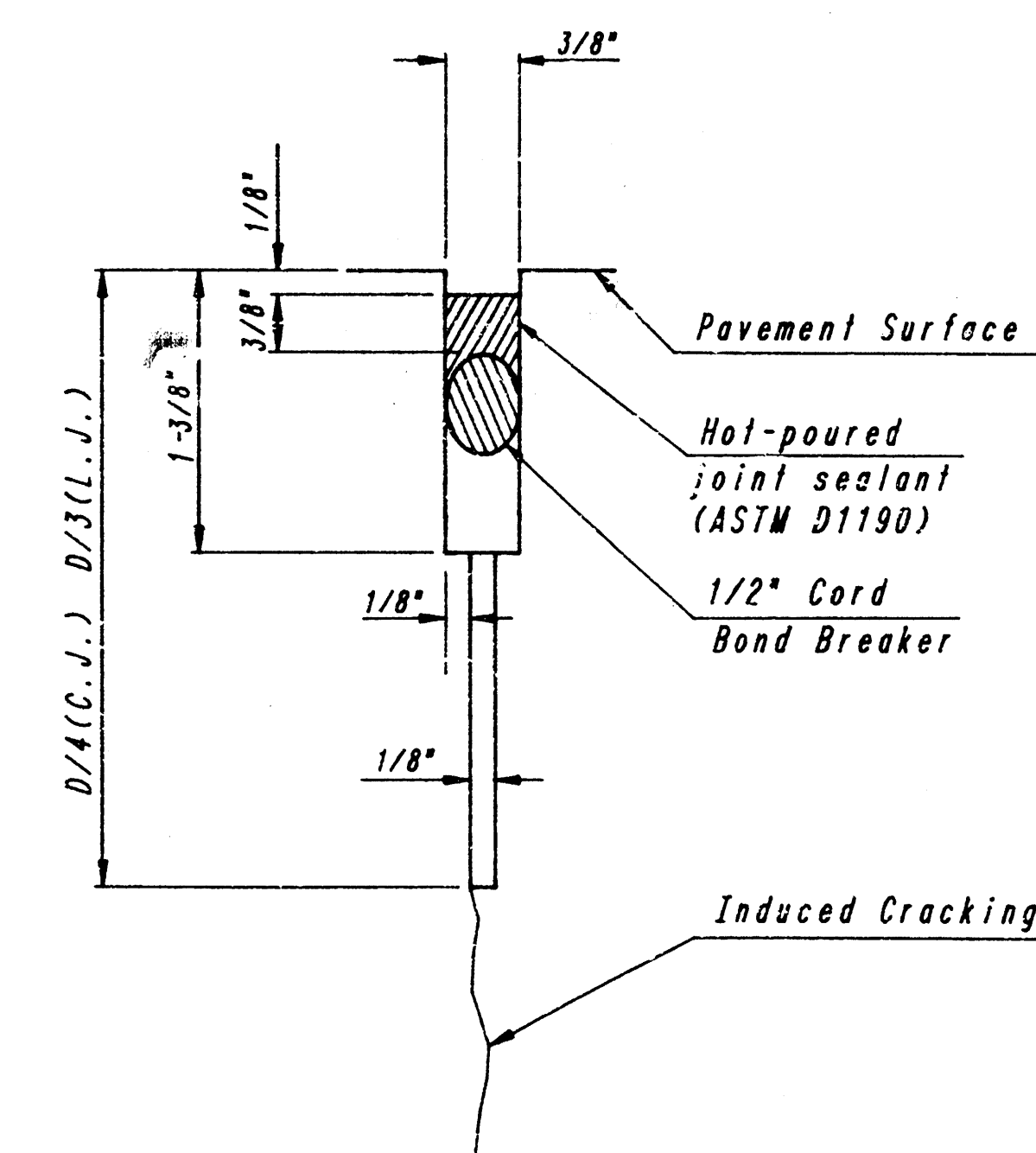
SECTION A-A



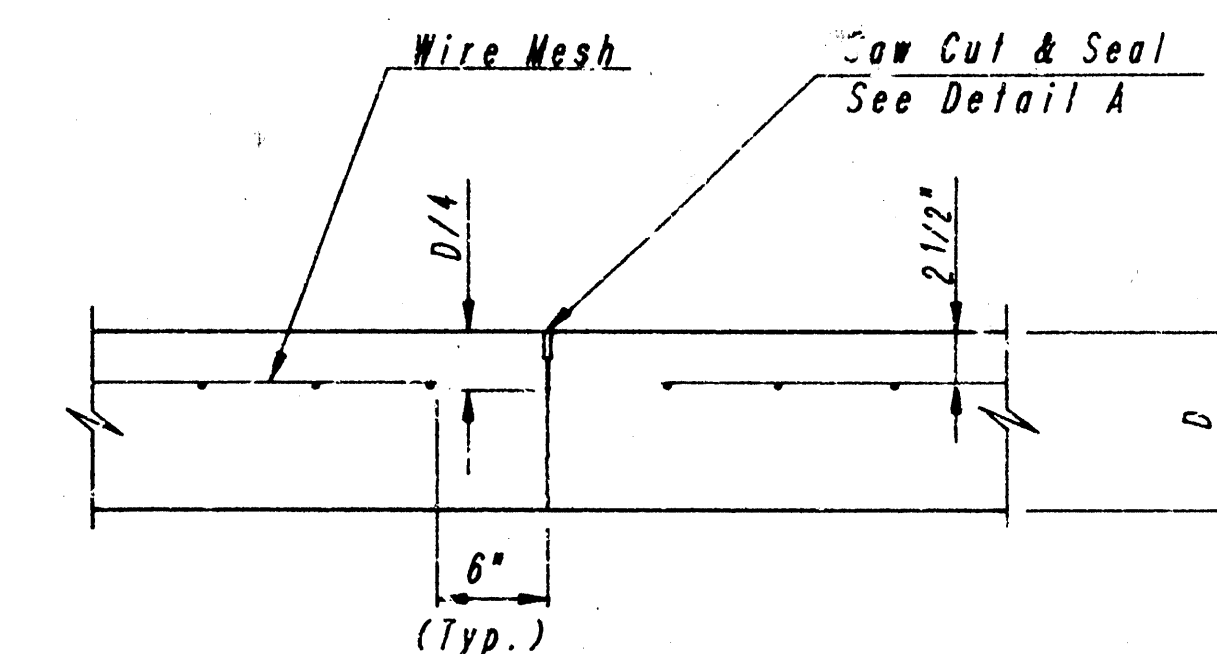
LONGITUDINAL CONSTRUCTION JOINT DETAIL  
REINFORCED PAVEMENT  
(TRANSVERSE SECTION)  
(ALTERNATE L.J.)



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



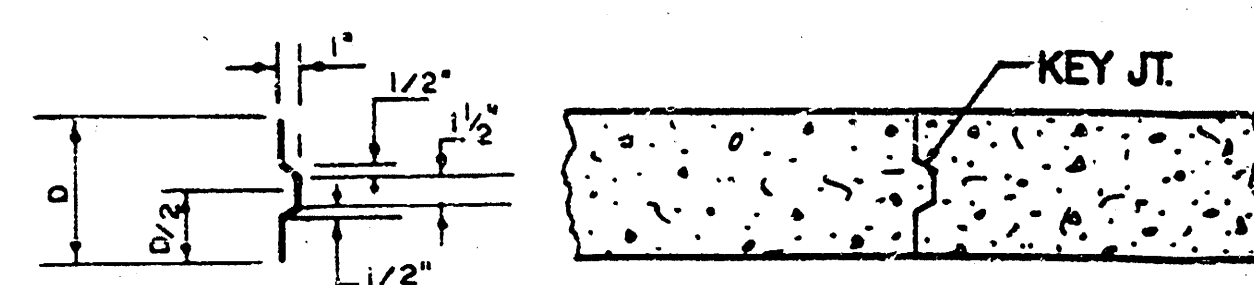
DETAIL A



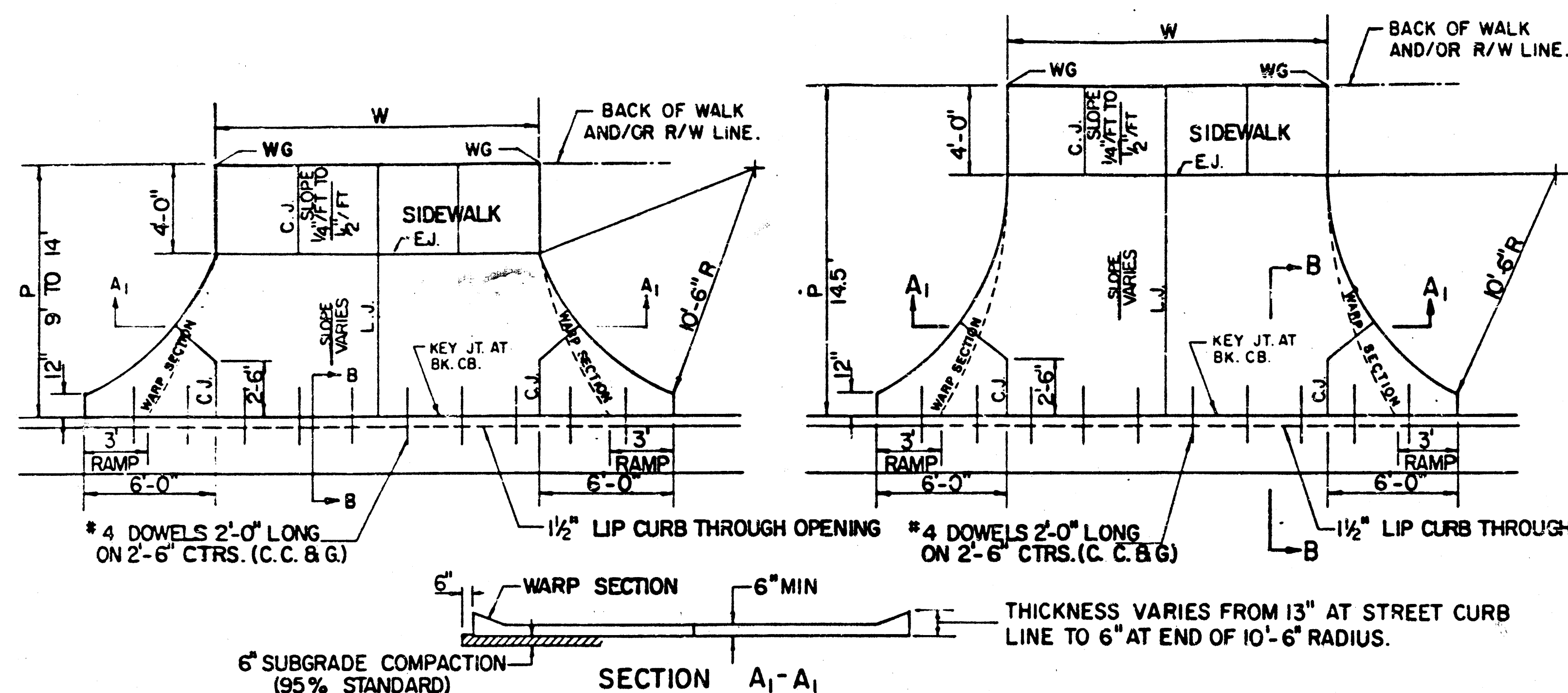
CONTRACTION JOINT DETAIL  
REINFORCED PAVEMENT  
(C.J.)

### MISCELLANEOUS PAVING DETAILS

| PROFESSIONAL ENGINEERING CONSULTANTS, P.A.<br>ENGINEERS<br>WICHITA, KANSAS |     |            |            |
|----------------------------------------------------------------------------|-----|------------|------------|
| Designed by                                                                | CSD | Checked by |            |
| Drawn by                                                                   | DEP | Date       | JULY, 1987 |
|                                                                            |     | Job No.    | 8715E-1    |

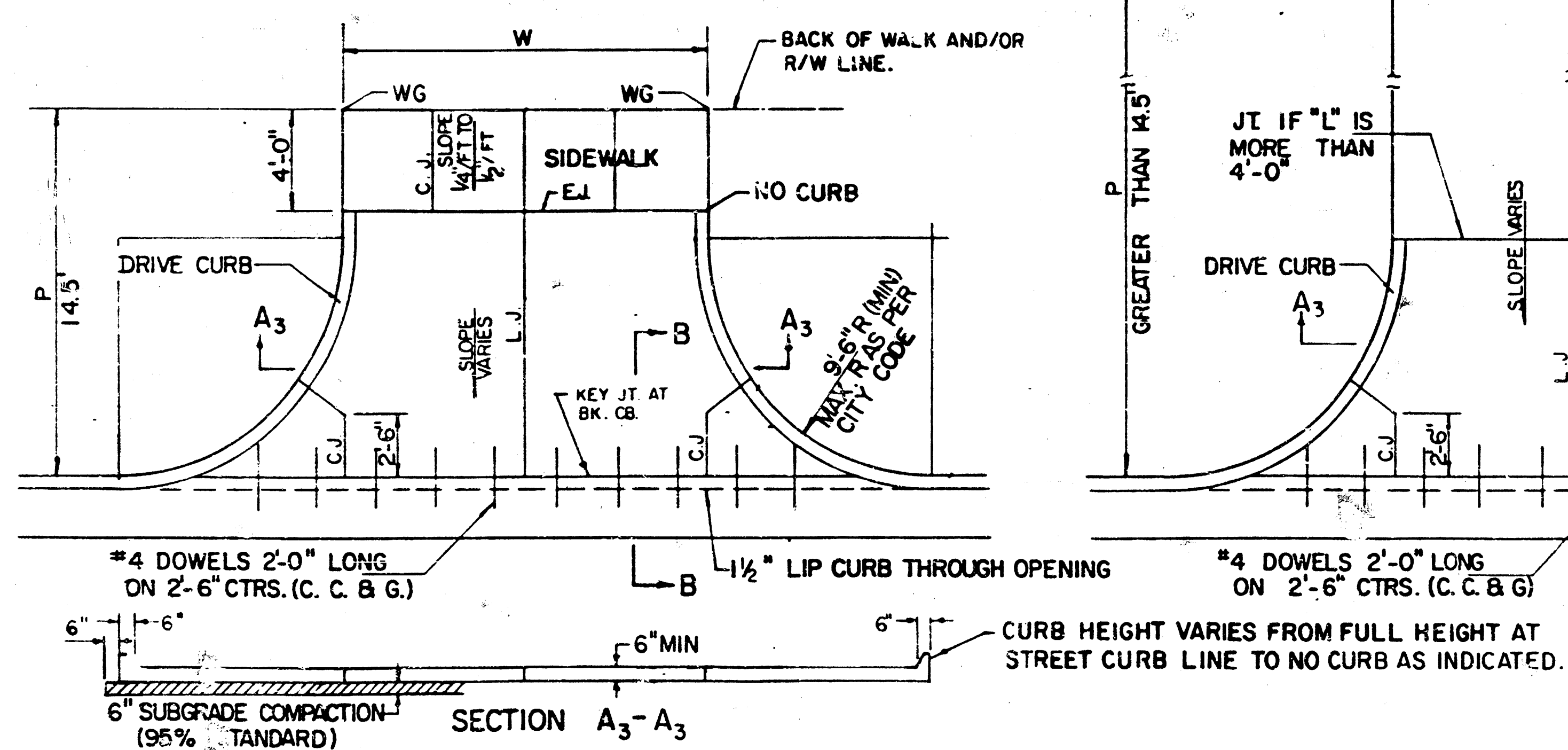


ALT. LONGITUDINAL CONSTRUCTION JOINT



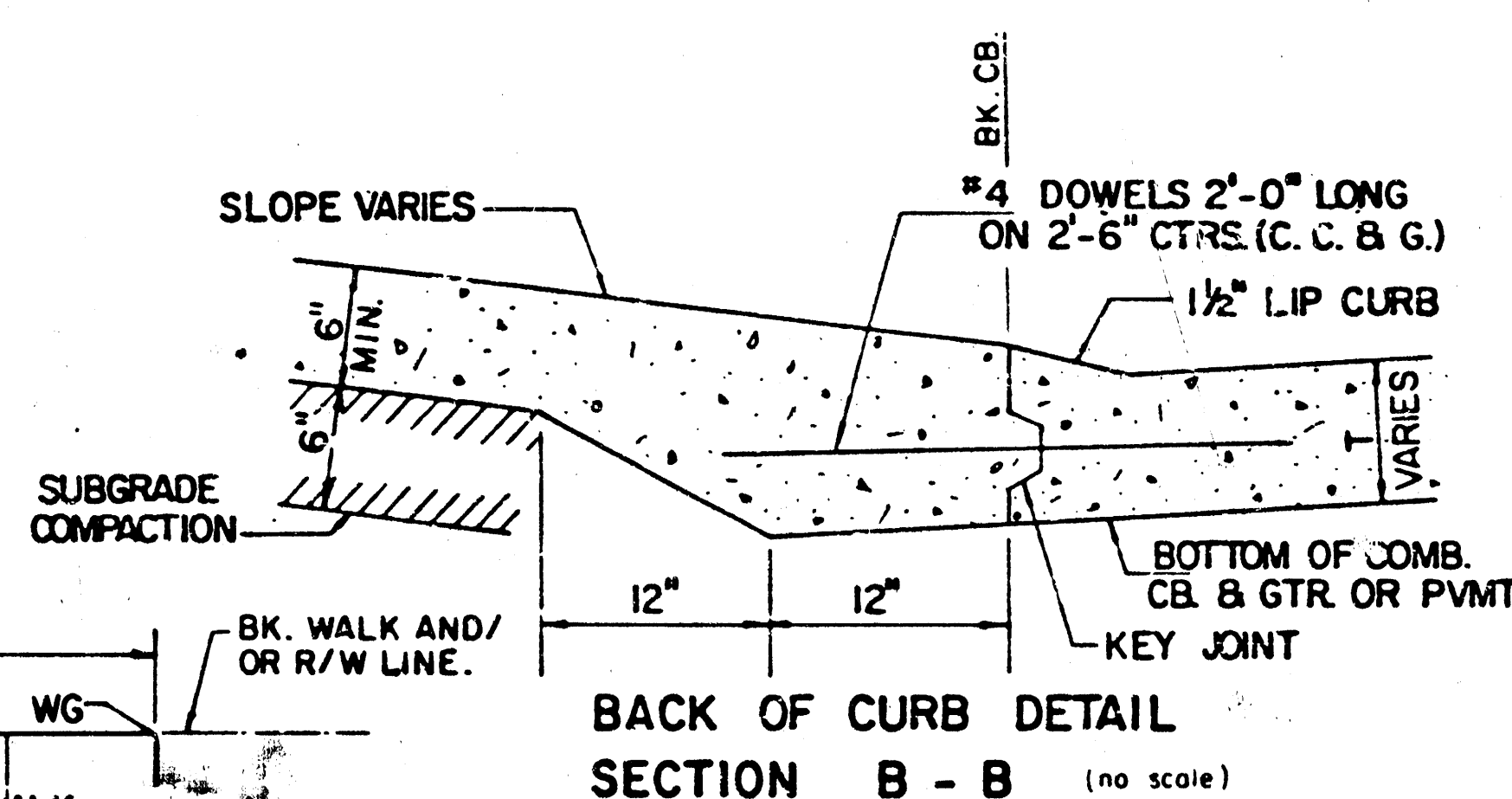
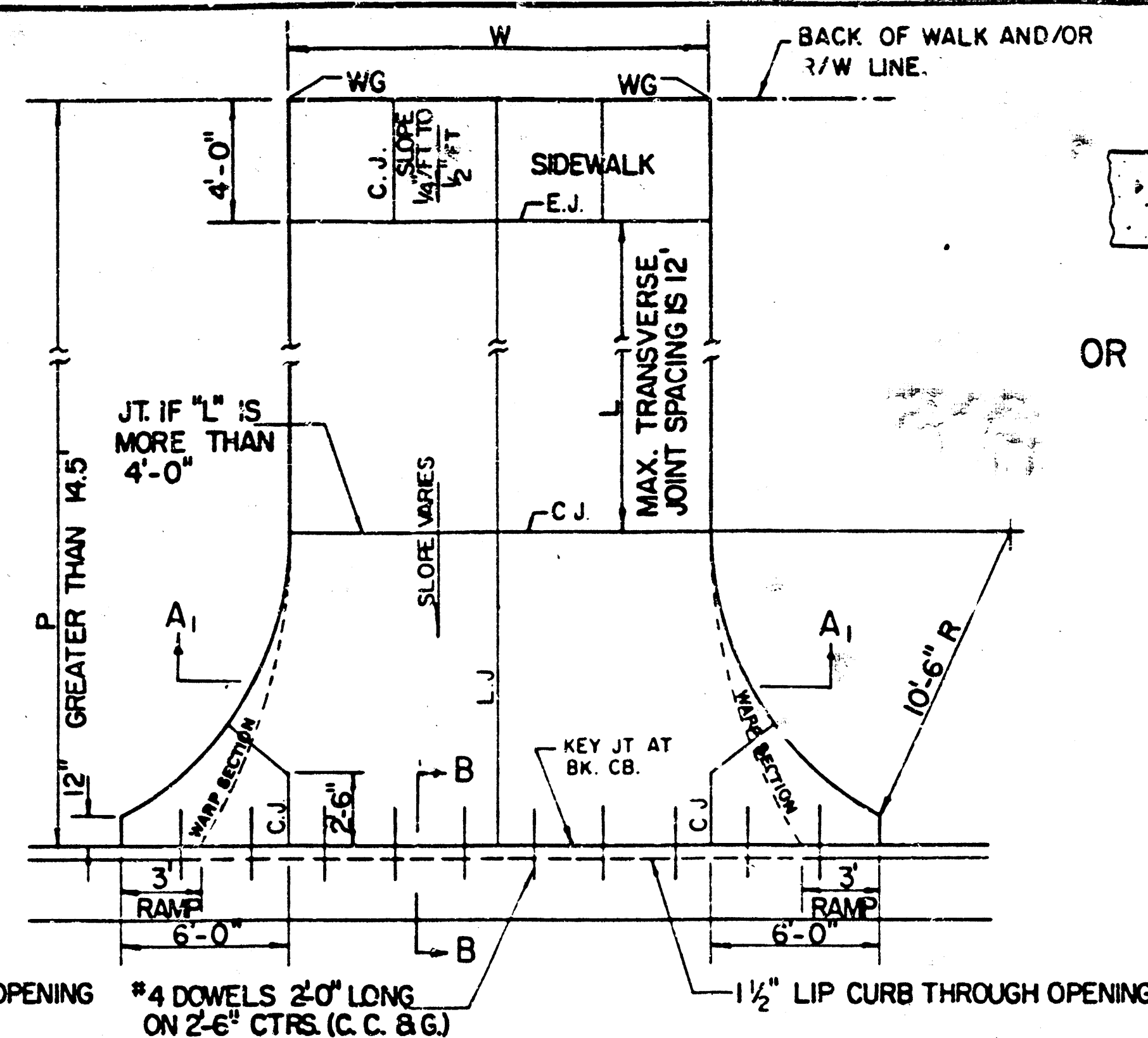
| PARKING WIDTH "P"                                               | 9'     | 10'    | 11'    | 12'    | 13'    | 14.5' | 20'   | 25'   | 30'   | 35'   | 40'   | 45'   | 50'   |
|-----------------------------------------------------------------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| ABSOLUTE MAX. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB | 0.35'  | 0.35'  | 0.40'  | 0.45'  | 0.60'  | 0.80' | 1.35' | 1.85' | 2.35' | 2.85' | 3.35' | 3.85' | 4.35' |
| OPTIMUM MAX. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB  | 0.35'  | 0.35'  | 0.40'  | 0.45'  | 0.60'  | 0.70' | 1.04' | 1.30' | 1.56' | 1.82' | 2.08' | 2.34' | 2.60' |
| OPTIMUM MIN. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB  | 0.19'  | 0.21'  | 0.23'  | 0.25'  | 0.27'  | 0.30' | 0.42' | 0.52' | 0.62' | 0.72' | 0.82' | 0.92' | 1.02' |
| ABSOLUTE MIN. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB | -0.19' | -0.16' | -0.13' | -0.10' | -0.06' | 0.00' | 0.00' | 0.15' | 0.25' | 0.35' | 0.45' | 0.55' | 0.65' |

RADIUS RAMP DRIVES (P = 9.0' & GREATER)

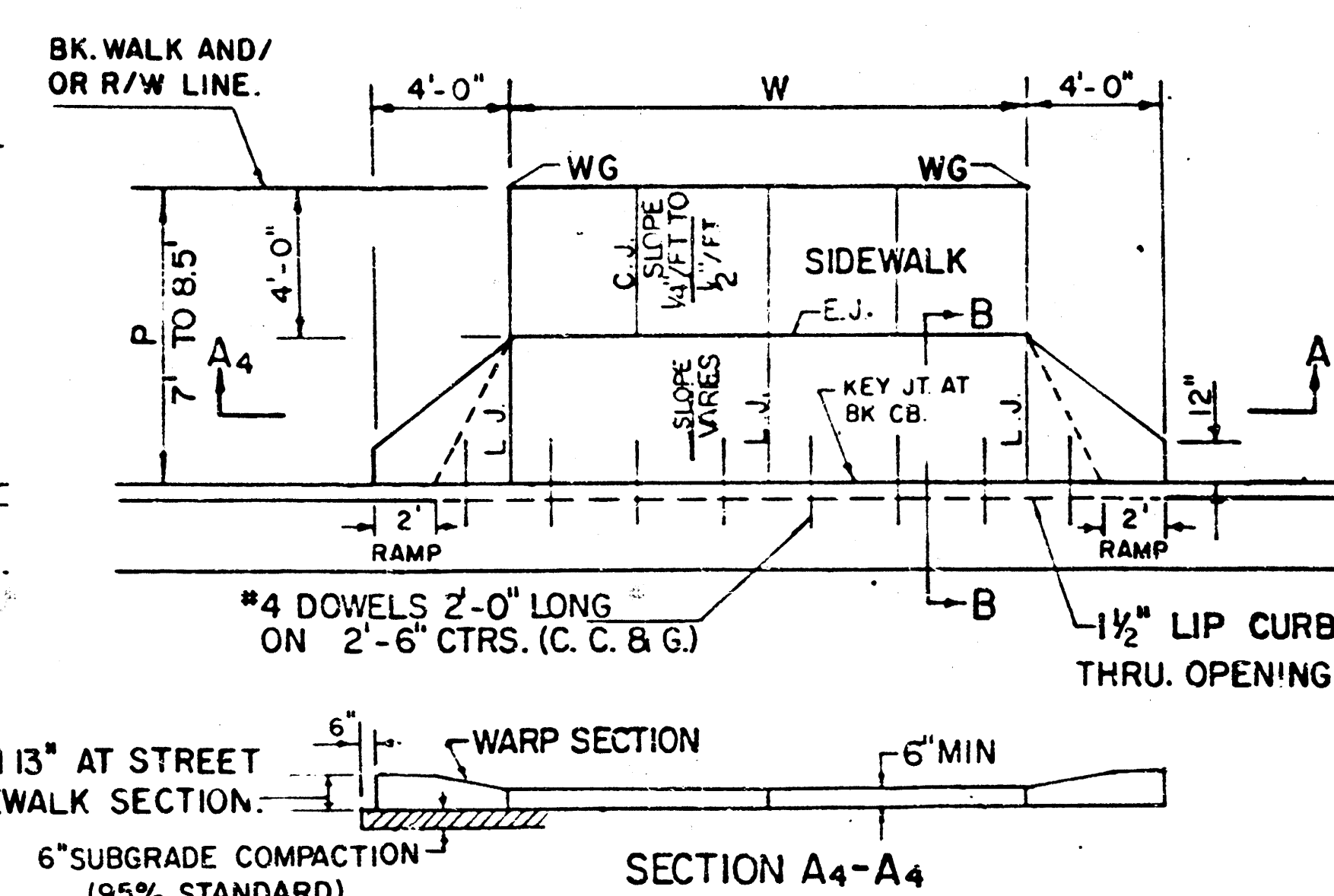


| PARKING WIDTH "P"                                     | 14.5' | 20'   | 25'   | 30'   | 35'   | 40'   | 45'   | 50'   |
|-------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| ABSOLUTE MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB. | 0.80' | 1.35' | 1.85' | 2.35' | 2.85' | 3.35' | 3.85' | 4.35' |
| OPTIMUM MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.  | 0.70' | 1.04' | 1.30' | 1.56' | 1.82' | 2.08' | 2.34' | 2.60' |
| OPTIMUM MIN. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.  | 0.30' | 0.42' | 0.52' | 0.62' | 0.72' | 0.82' | 0.92' | 1.02' |
| ABSOLUTE MIN. DIST. OF PT. "WG" ABOVE TOP OF FULL CB. | 0.00' | 0.00' | 0.15' | 0.25' | 0.35' | 0.45' | 0.55' | 0.65' |

FULL RADIUS DRIVES (P = 14.5' & GREATER)

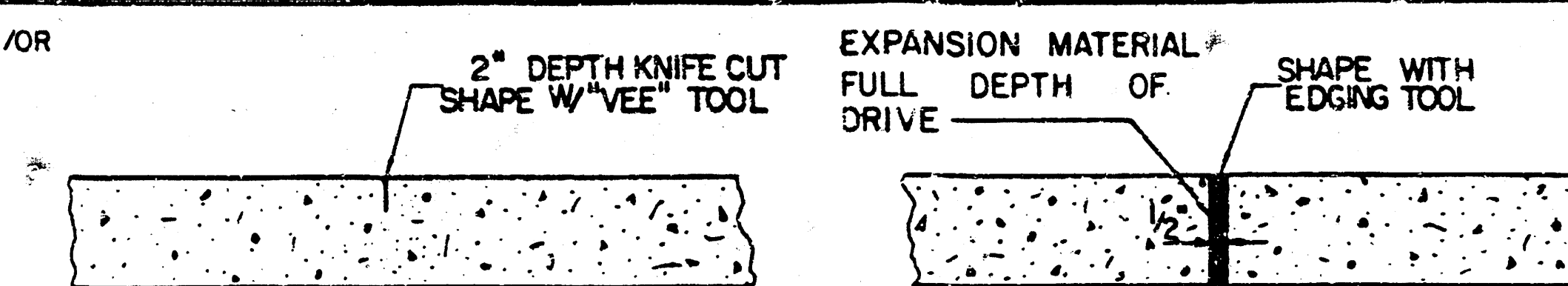


BACK OF CURB DETAIL SECTION B - B (no scale)



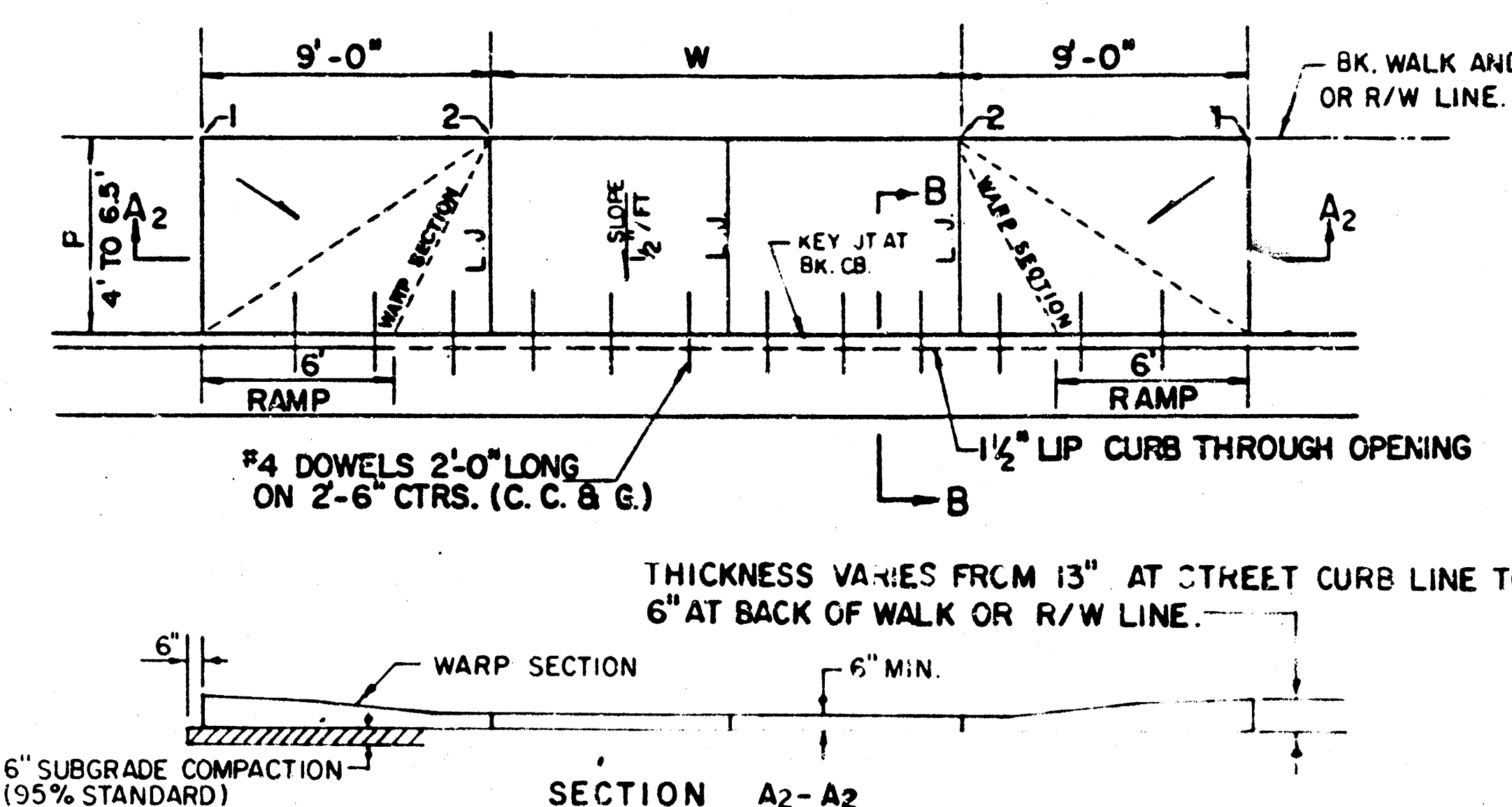
| PARKING WIDTH "P"                                     | 7'     | 7.5'   | 8'     | 8.5'   |
|-------------------------------------------------------|--------|--------|--------|--------|
| ABSOLUTE MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB. | 0.00'  | 0.10'  | 0.20'  | 0.30'  |
| OPTIMUM MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.  | 0.00'  | 0.10'  | 0.20'  | 0.30'  |
| OPTIMUM MIN. DIST. OF PT. "WG" BELOW TOP OF FULL CB.  | -0.15' | -0.16' | -0.17' | -0.17' |
| ABSOLUTE MAX. DIST. OF PT. "WG" BELOW TOP OF FULL CB. | -0.25' | -0.20' | -0.20' | -0.20' |

FULL RAMP DRIVE (P = 7.0' TO 8.5')



CONTRACTION JOINT (C.J.) OR LONGITUDINAL JOINT (L.J.)  
N° SAWN JOINTS WILL BE ALLOWED.

EXPANSION JOINT (E.J.)



| PARKING WIDTH "P"                      | 4'     | 4.5'   | 5'     | 5.5'   | 6'     | 6.5'   |
|----------------------------------------|--------|--------|--------|--------|--------|--------|
| DIST. OF PT. "I" ABOVE TOP OF FULL CB. | 0.08'  | 0.09'  | 0.10'  | 0.12'  | 0.13'  | 0.14'  |
| DIST. OF PT. "2" BELOW TOP OF FULL CB. | -0.26' | -0.24' | -0.22' | -0.20' | -0.18' | -0.16' |

FULL RAMP DRIVE (P = 4.0' TO 6.5')

#### GENERAL NOTES

- DRIVEWAY CONSTRUCTION DETAILED ON SHEET 15 IS FOR USE WITH FULL HEIGHT STREET CURBS AND IN AREAS WITHOUT FULL WALK CONSTRUCTION IN THE PARKING. SEE OTHER DETAIL SHEETS FOR DRIVEWAY CONSTRUCTION WITH ROLL CURB AND/OR FULL WALK.
- ONE LONGITUDINAL JOINT SHALL BE CONSTRUCTED ALONG THE CENTERLINE OF DRIVES HAVING A "W" DIMENSION OF 24' OR MORE. LONGITUDINAL JOINTS SHALL BE CONSTRUCTED WITH EQUAL SPACINGS NOT TO EXCEED 40' FOR PARKINGS WITH A "W" DIMENSION GREATER THAN 24'.
- DRIVEWAY WIDTH DENOTED AS "W" ON THE DETAIL DRAWING SHALL BE A MINIMUM OF 10' AND A MAXIMUM OF 30'. THE MAXIMUM OPENING FOR PARKING TYPE DRIVES WITH CURBS THROUGH THE RADIUS SHALL NOT EXCEED 30' AT THE STREET CURB LINE.
- CONTRACTION JOINT SPACING IN THE DRIVEWAY WALK SECTION SHALL BE A MINIMUM OF 3' AND A MAXIMUM OF 6' AND ARE TO BE EQUALLY SPACED WITHIN THIS RANGE. WALK SECTION SHALL BE CONSTRUCTED TO THE SAME THICKNESS AS THE DRIVEWAY.
- DOWEL BARS SHALL BE OMITTED FROM THE KEYED CONSTRUCTION JOINT ALONG THE BACK OF THE STREET CURB LINE WHEN DRIVEWAYS ARE CONSTRUCTED IN CONJUNCTION WITH NEW CONCRETE PAVEMENT CONSTRUCTION.
- ADDITIONAL THICKNESS OF DRIVE AS INDICATED IN THE DRAWINGS WILL NOT BE PAID FOR DIRECTLY AND THIS COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE DRIVEWAY CONSTRUCTION.
- ONE HALF INCH EXPANSION JOINTS SHALL BE INSTALLED WHEREVER DRIVE CONSTRUCTION ABUTS SIDEWALK. ONE HALF INCH EXPANSION JOINTS SHALL ALSO BE INSTALLED ALONG THE PROPERTY LINE AND/OR BACK OF WALK LINE WHEN DRIVE CONSTRUCTION ALONG THIS LINE ABUTS CONCRETE PARKING LOTS OR CONCRETE DRIVE EXTENSION.
- ALL DRIVEWAYS SHALL BE A MINIMUM OF 6" IN THICKNESS AND SHALL BE WITHOUT REINFORCEMENT. DRIVEWAYS MAY BE CONSTRUCTED THICKER THAN 6" AND THEY MAY BE REINFORCED WITH 6"x12" W-WA WELDED WIRE FABRIC WHEN PROPERLY AUTHORIZED BY THE PROPERTY OWNER WITH THE ENGINEER'S CONCURRENCE.
- OPTIMUM DRIVEWAY ELEVATIONS SHOWN IN THE TABLES ARE TO BE USED WHEREVER POSSIBLE. ABSOLUTE MAXIMUM AND MINIMUM ELEVATIONS ARE TO BE USED ONLY WHEN THESE VALUES WILL PERMIT NEW CONSTRUCTION TO MATCH EXISTING DRIVES OR PARKING LOTS. VALUES SHOWN IN THE TABLES ARE BASED ON A FULL CURB HEIGHT ELEVATION OF 0.55' ABOVE THE GUTTER FLOW LINE AND MUST BE ADJUSTED ACCORDINGLY FOR OTHER CURB HEIGHTS. VALUES SHOWN IN THE TABLES WITH MINUS SIGNS INDICATE ELEVATIONS BELOW TOP OF FULL HEIGHT CURB.

REVISED OCTOBER 1985

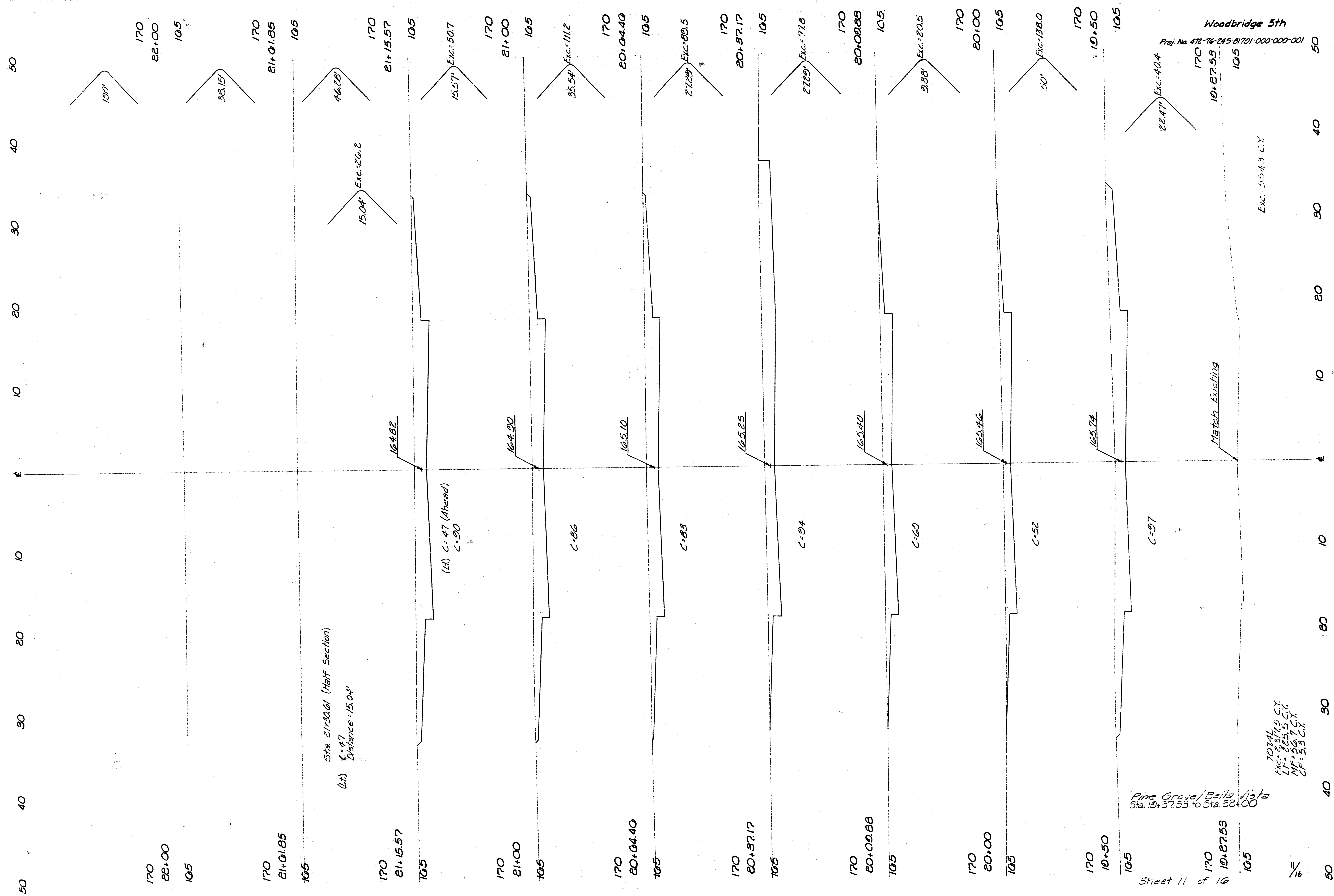
SCALE: 1" = 5'

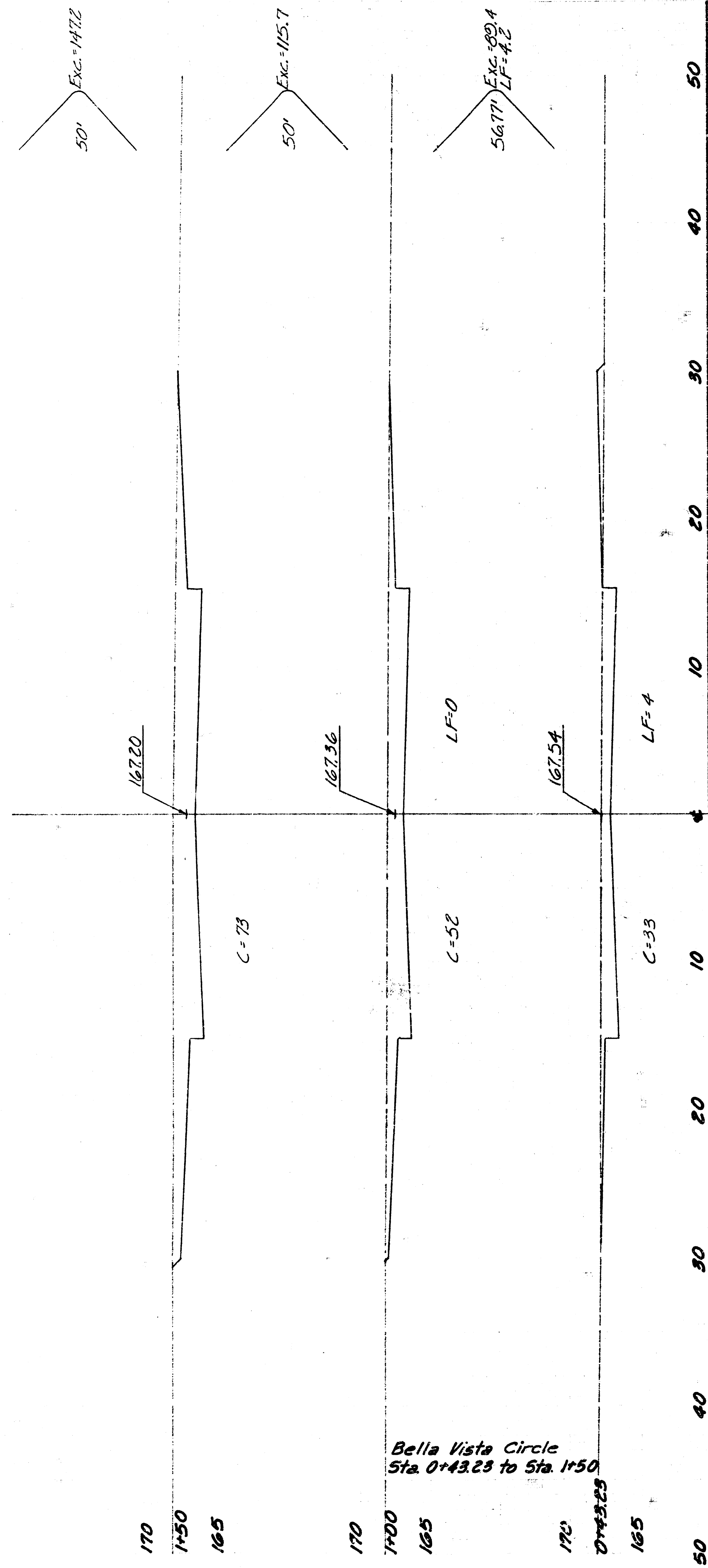
#### STANDARD DRIVE ENTRANCES

##### FULL HEIGHT CURB

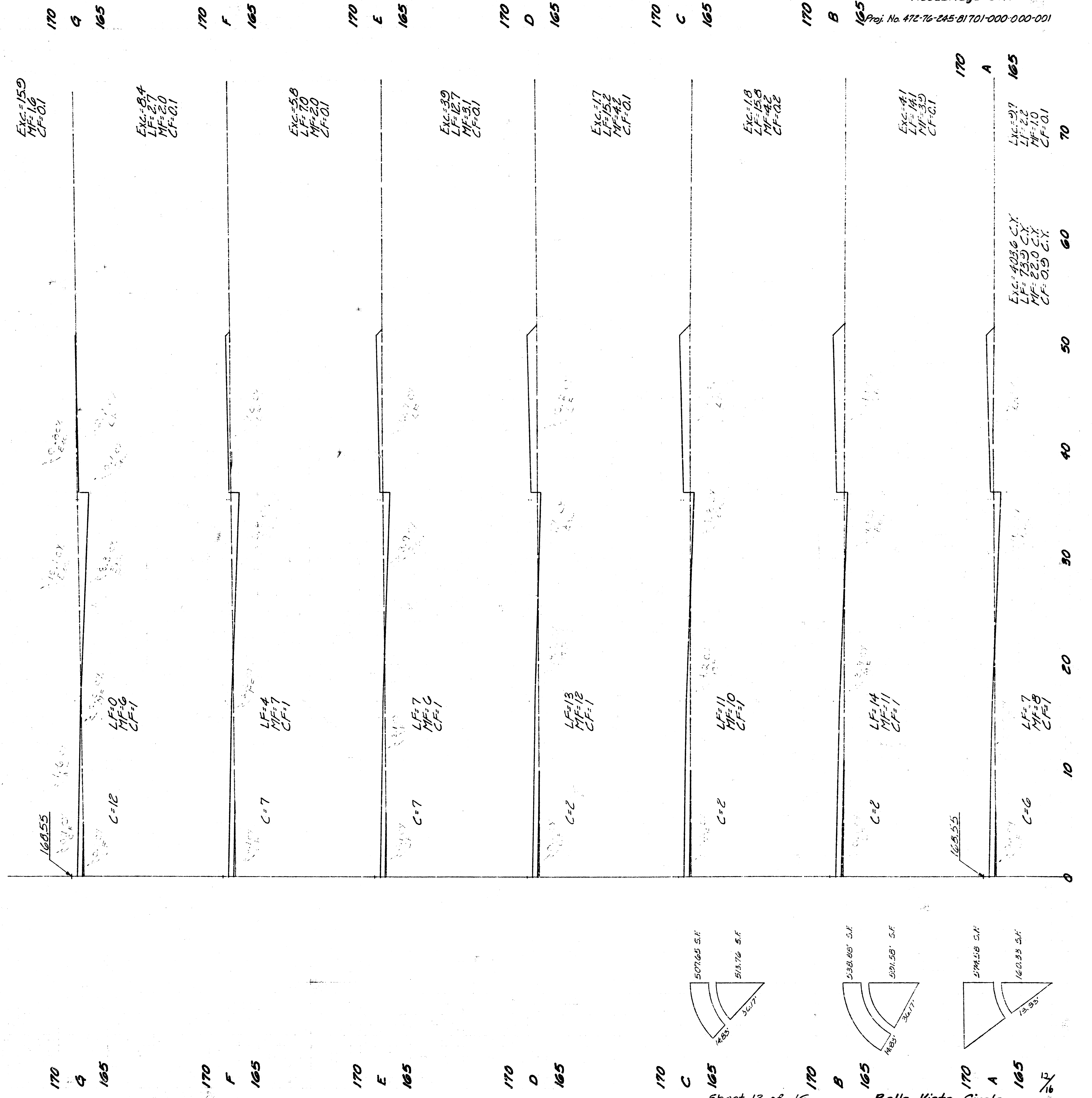
CITY OF WICHITA, KANSAS

PROJECT NUMBER  
472-76-245-81707-000-000-001

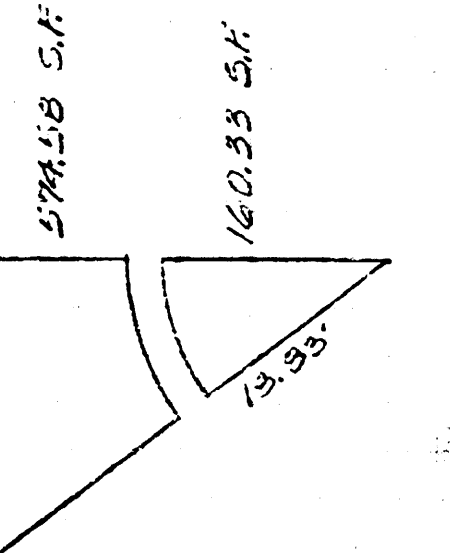
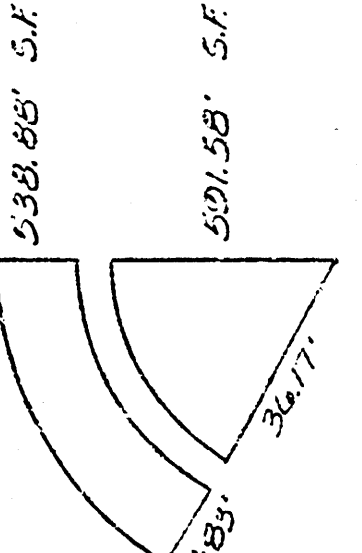
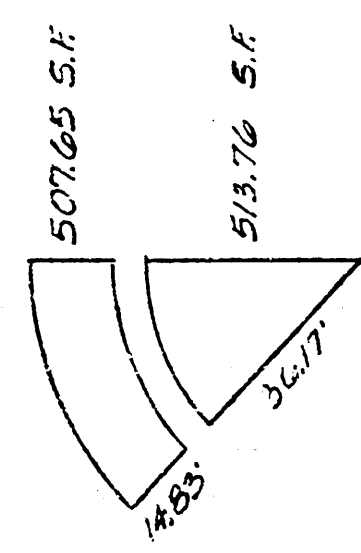




Bella Vista Circle  
Sta. 0+43.23 to Sta. 1+50

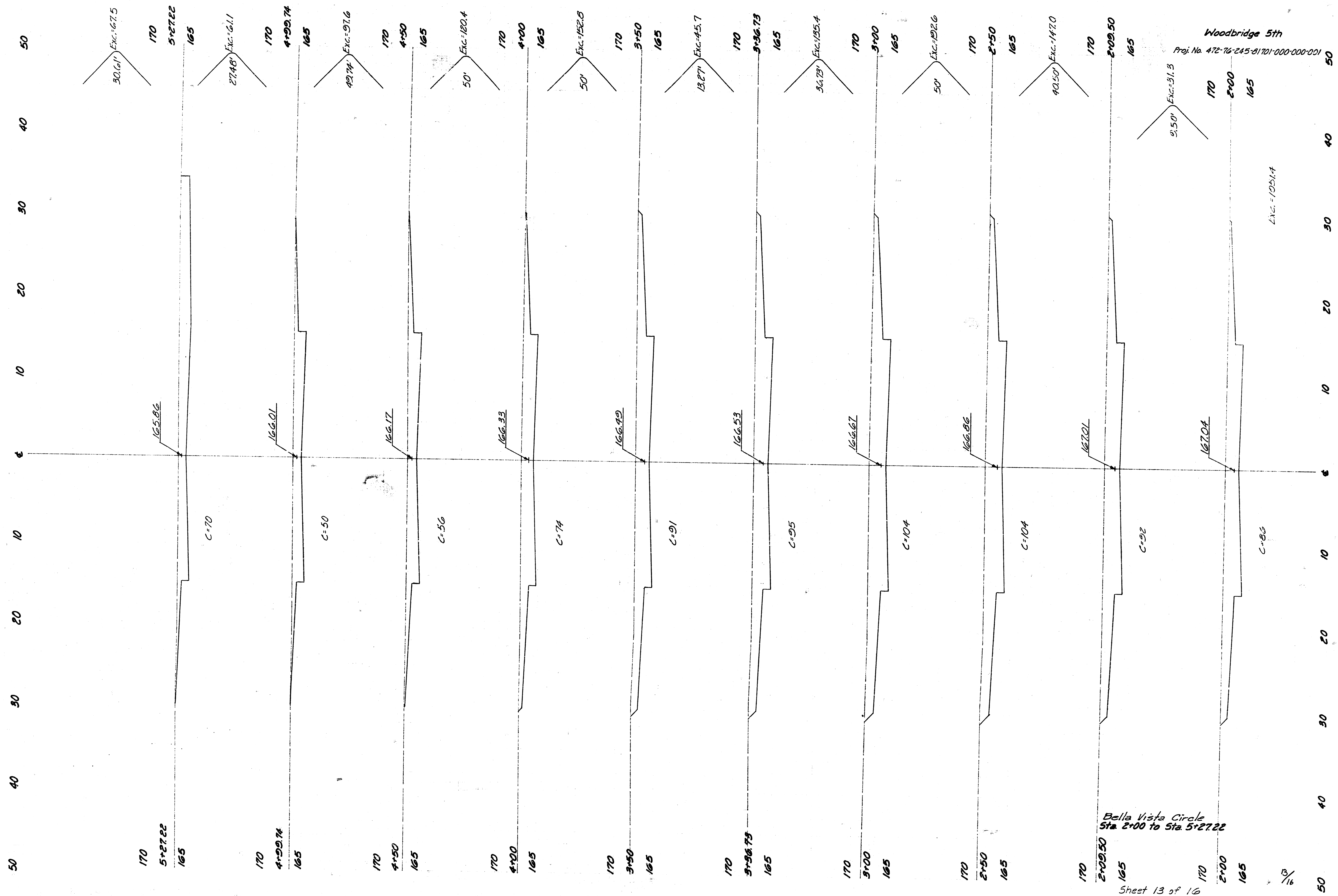


Woodbridge 5th  
Proj. No. 472-76-245-B1701-000-000-001



Sheet 12 of 16

Bella Vista Circle



Woodbridge 5th  
 Proj. No. 472-76-245-81701-000-000-001

Bella Vista Circle  
 Sta 2+00 to Sta 5+27.22

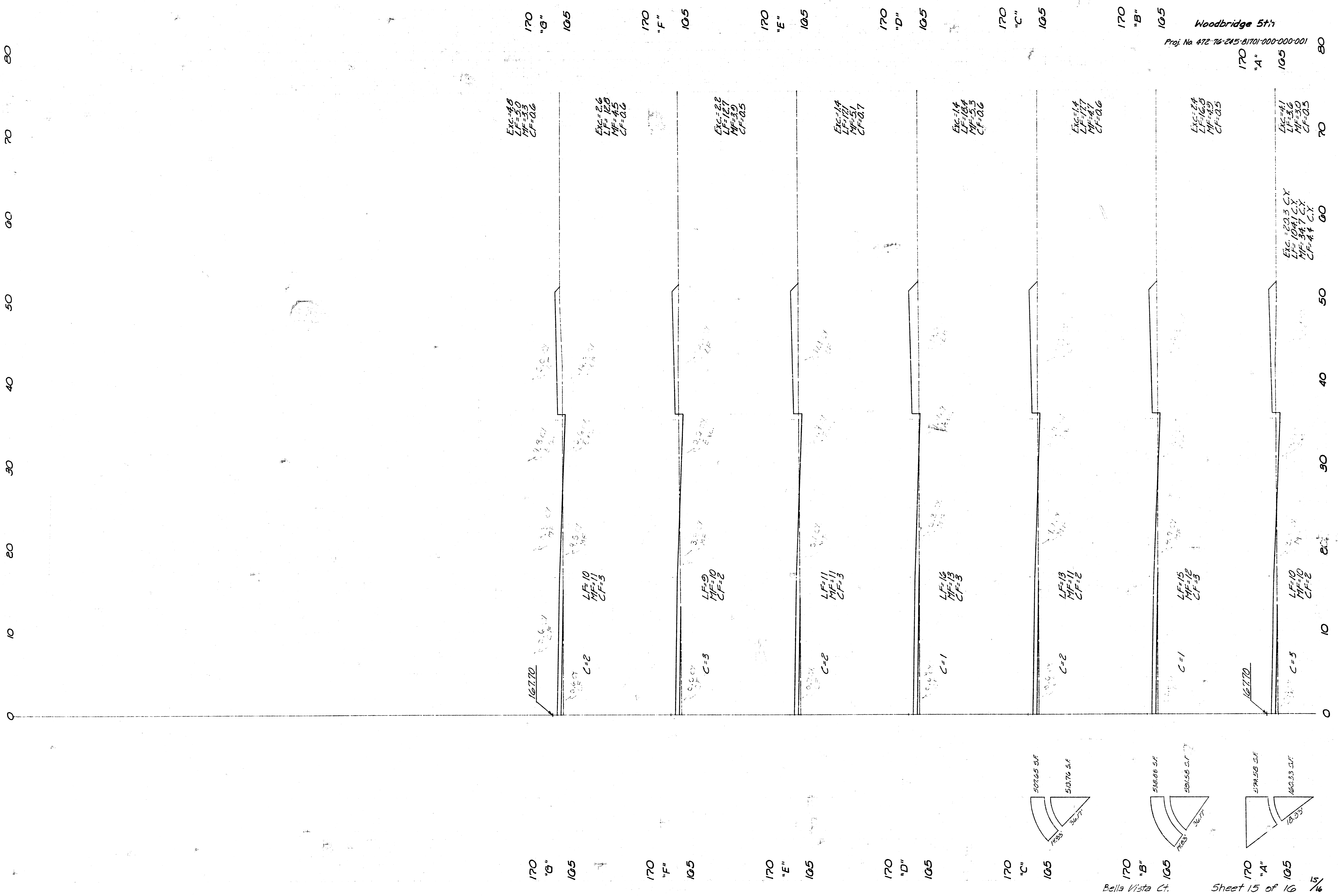
Sheet 13 of 16

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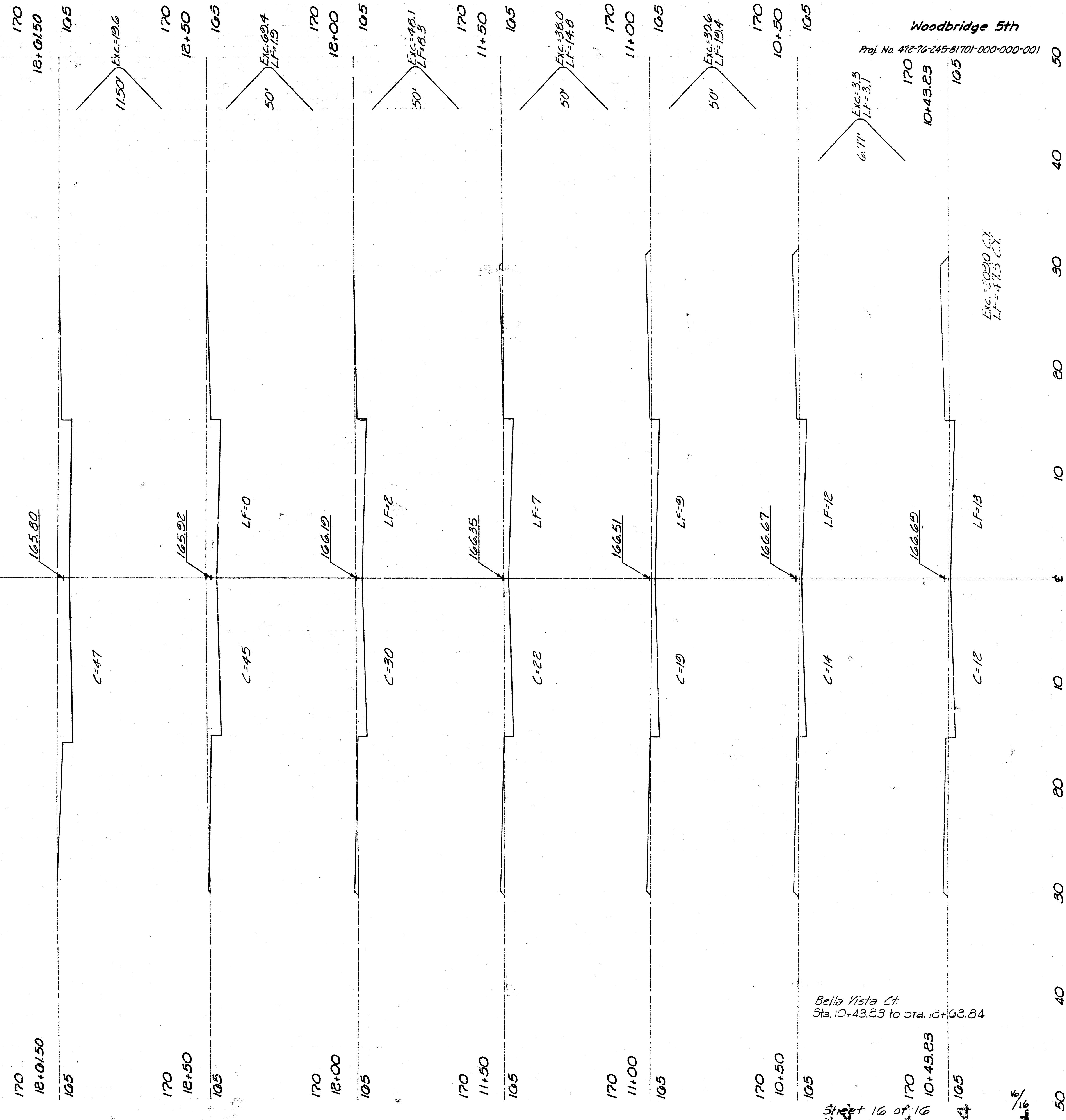


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50 40 30 20 10 0 10 20 30 40 50



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