

# SEVENTEENTH STREET NORTH

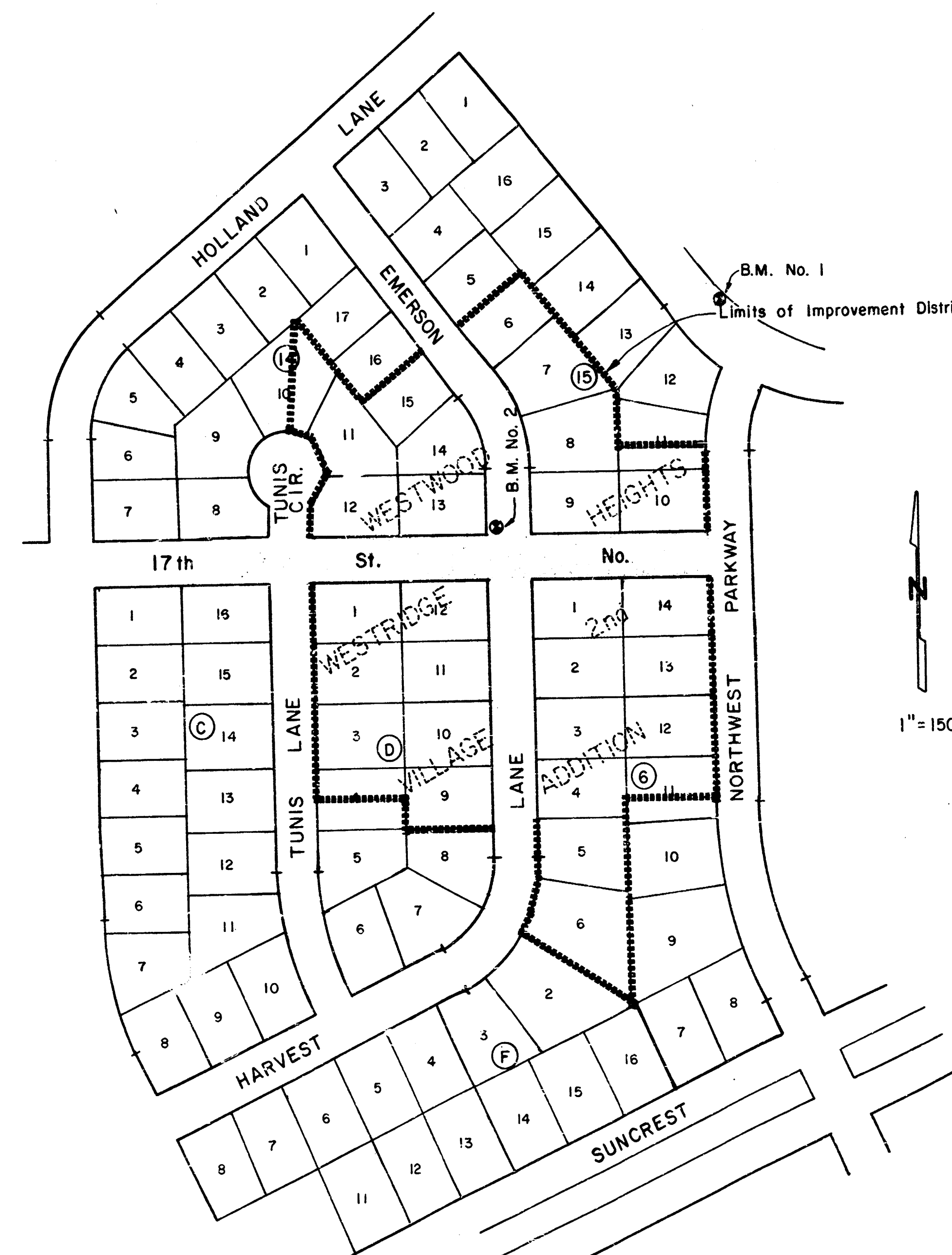
## WEST LINE TUNIS LANE TO WEST LINE NORTHWEST PARKWAY

PROJECT NO. 472-76-245-81663-000-000-001

CITY OF WICHITA, KANSAS  
M.E. LINDEBAK CITY ENGINEER

### NOTES

1. UTILITY SERVICE LINES, POLES, VALVE BOXES, METERS, AND ETCETERA ARE TO BE ADJUSTED AS NECESSARY BY OTHERS PRIOR TO CONSTRUCTION UNLESS THE PLANS SPECIFICALLY CALL FOR THEIR ADJUSTMENT BY THE CONTRACTOR OR UNLESS THE PLANS SPECIFICALLY IDENTIFY A UTILITY TO BE ADJUSTED BY ITS OWNER DURING CONSTRUCTION. EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.
2. RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE AND SITE LOCATION. LOCATIONS THAT, IN THE OPINION OF THE ENGINEER, WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED.
3. WIDENED GUTTER SECTION OF COMBINED CURB AND GUTTER AT INTERSECTIONS WILL NOT BE PAID FOR DIRECTLY, AND THIS COST SHALL BE CONSIDERED AS SUBSIDIARY TO THE OTHER CONTRACT PAY ITEMS OF WORK.
4. CONTRACTOR SHALL GIVE PROPERTY OWNERS ABUTTING THIS PROJECT, WHOSE YARDS WILL BE LOWER THAN THE NEW FINISHED GRADE ELEVATIONS AT THE RIGHT-OF-WAY LINE, AN OPPORTUNITY TO UTILIZE EXCESS EXCAVATED MATERIAL FROM THE PROJECT TO REGRADE THEIR YARDS TO DRAIN TO THE NEW PAVEMENT. CONTRACTOR WILL BE REQUIRED TO DUMP AND SPREAD THE EXCESS MATERIAL AS REQUESTED BY THE SPECIFICATIONS WHEN REQUESTED BY THE PROPERTY OWNER. THE CONTRACTOR SHALL ASCERTAIN THAT A DIRT ORDER FORM HAS BEEN PROPERLY EXECUTED BY THE PROPERTY OWNER BEFORE ANY SUCH EXCESS MATERIAL IS DELIVERED TO SUCH PROPERTIES.
5. 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.
6. 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 OR A LICENSED PROFESSIONAL ENGINEER IN ACCORDANCE WITH STATE LAWS.
7. 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.



### LEGEND

UT = Underground Telephone  
UE = Underground Electric  
SS = Sanitary Sewer  
SWS = Storm Water Sewer  
CATV = Cable Television  
G = Gas  
T.S.B. = Telephone Splice Box  
WV = Water Valve  
FH = Fire Hydrant

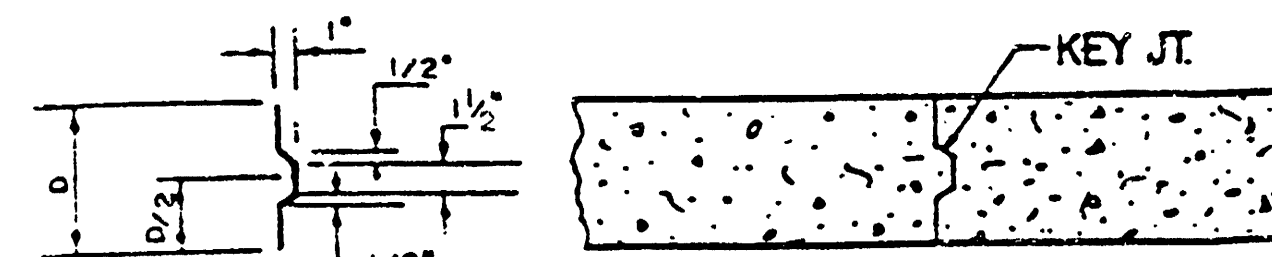
### INDEX

| Sheet No. | Description              |
|-----------|--------------------------|
| 1         | Cover Sheet              |
| 2         | Standard Drive Entrances |
| 3         | Pavement Standards       |
| 4         | 17th Street Plan         |
| 5-6       | Cross Sections           |

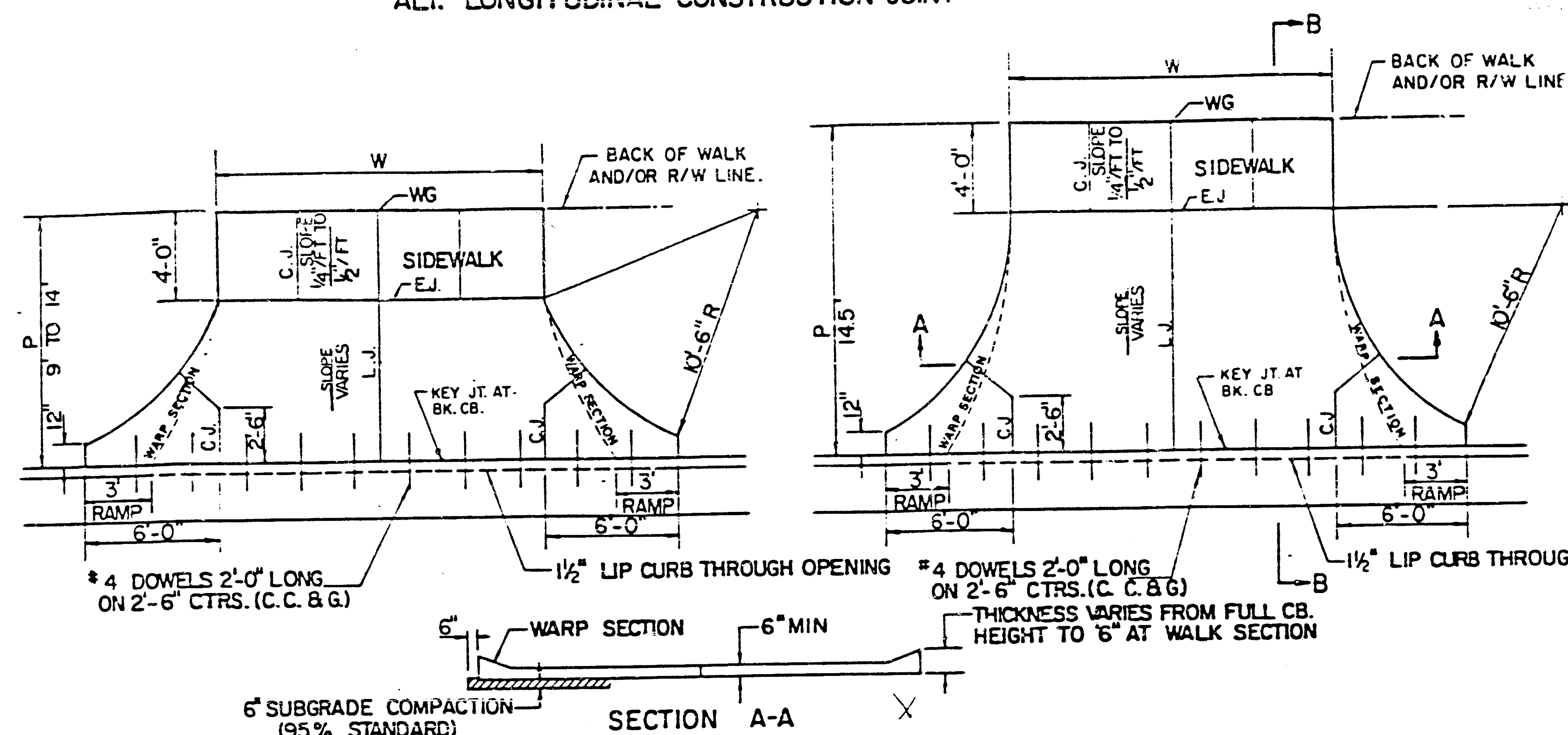
### Benchmarks:

B.M. No. 1 - "a" on North Curb of N.W. Parkway  
near West Line Lot 29, Blk. 11  
Westwood Heights Addn. Elev. = 154.82  
B.M. No. 2 - "a" on Top West Curb Emerson  
North Side 17th. Elev. = 154.76

MOEHRING & ASSOCIATES  
CONSULTING ENGINEERS  
WICHITA

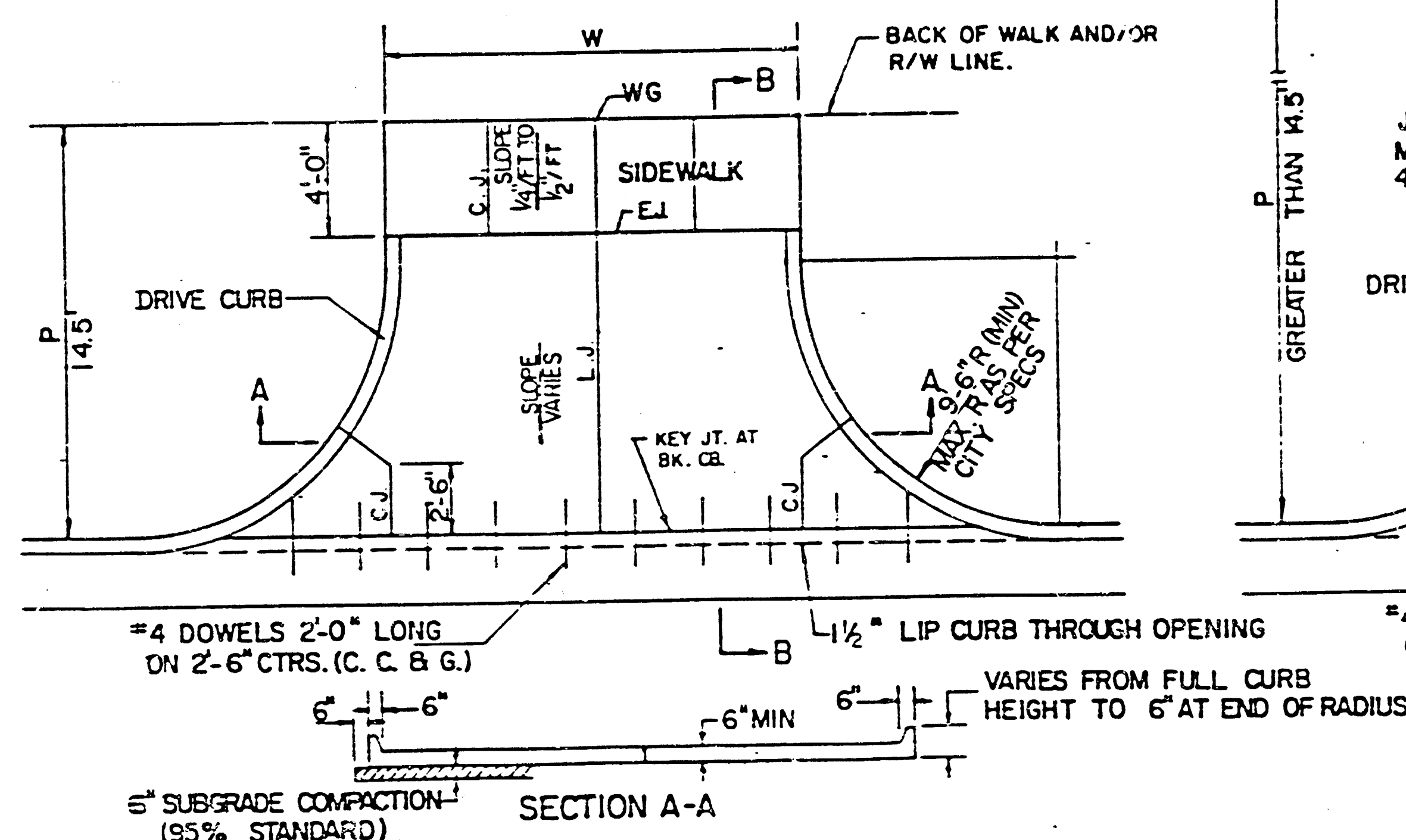


ALT. LONGITUDINAL CONSTRUCTION JOINT



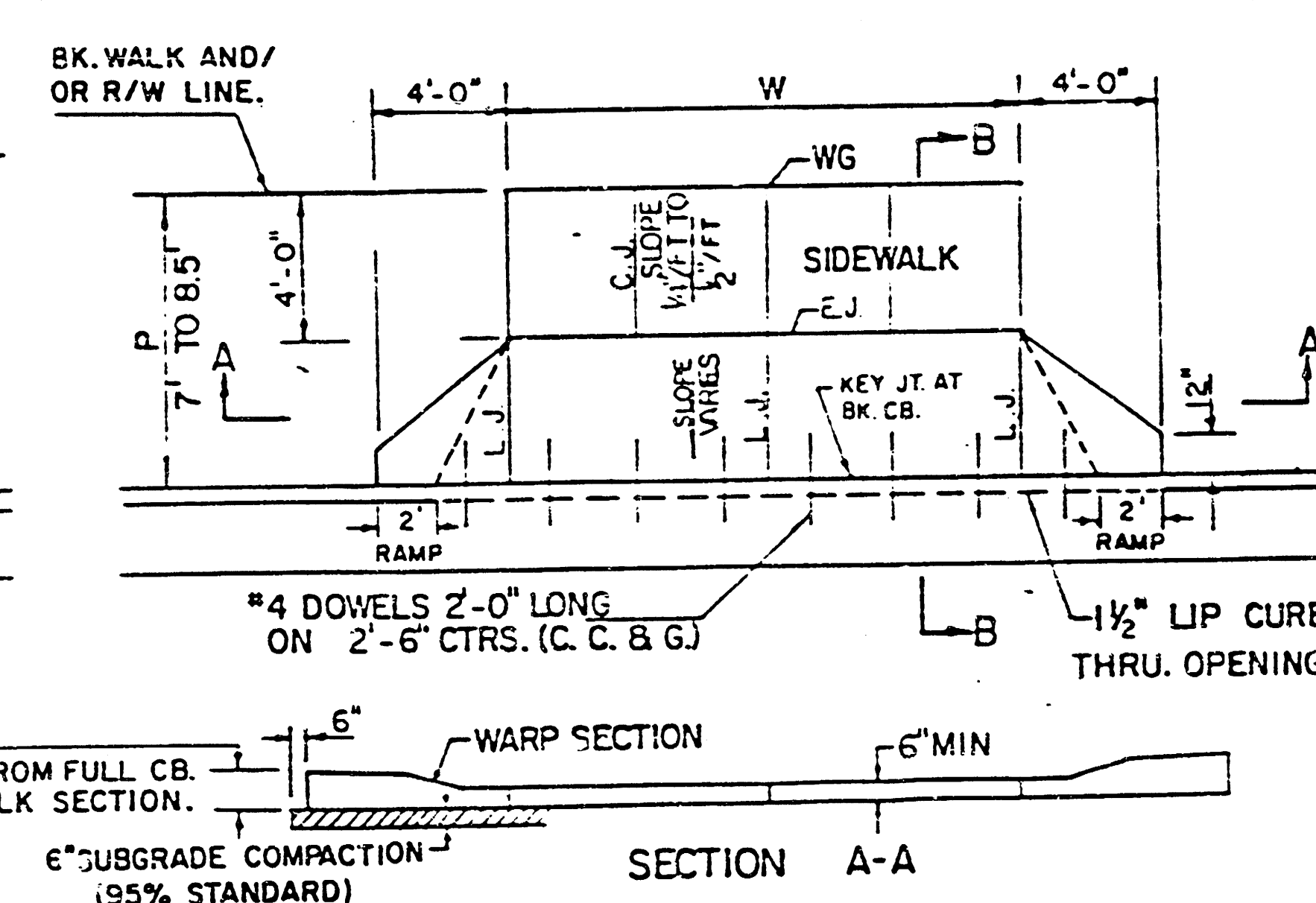
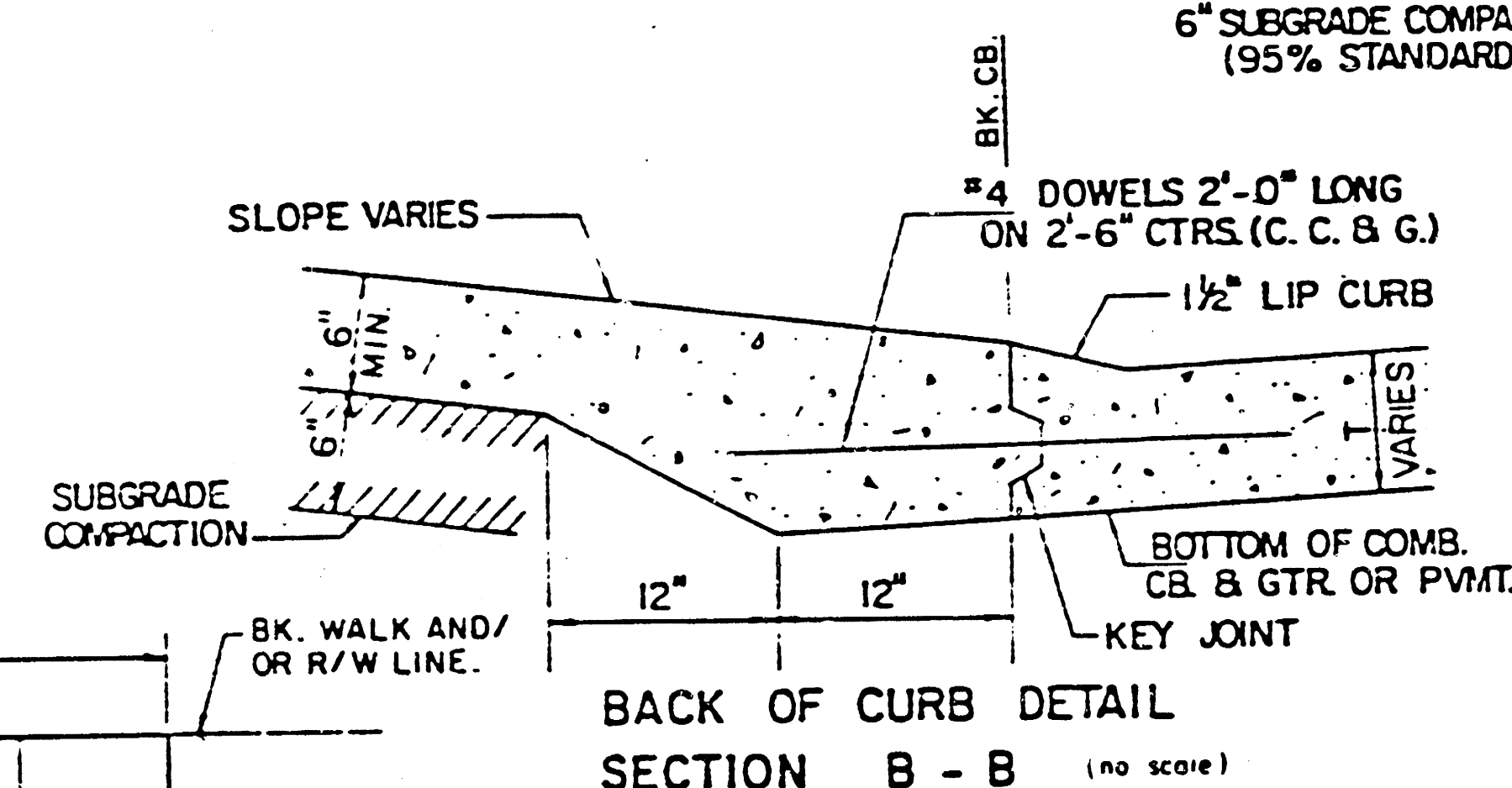
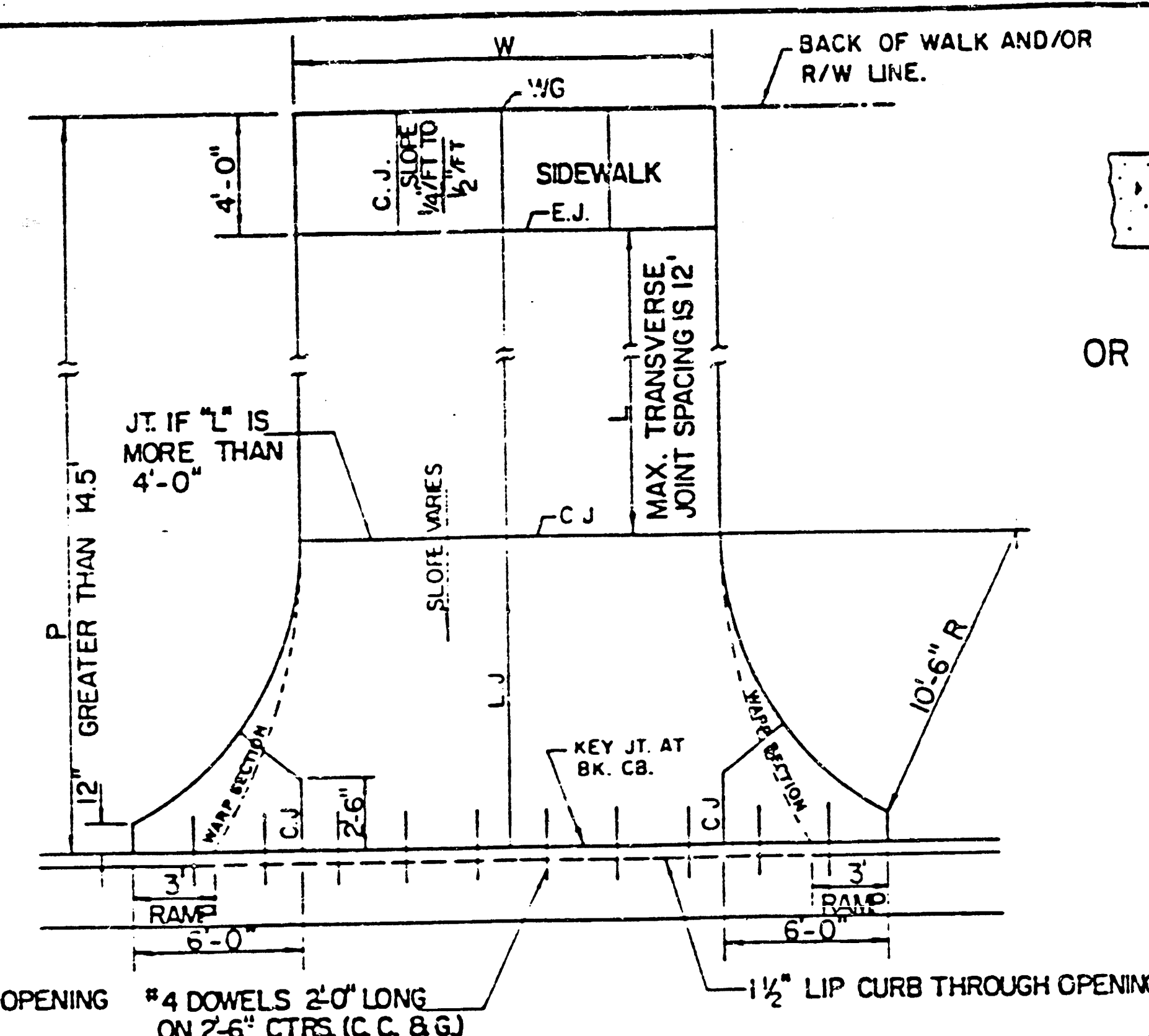
| PARKING WIDTH "P"                                               | 9'   | 10'  | 11'  | 12'  | 13'  | 14.5' | 20'  | 25'  | 30'  | 35'  | 40'  | 45'  | 50'  |
|-----------------------------------------------------------------|------|------|------|------|------|-------|------|------|------|------|------|------|------|
| ABSOLUTE MAX. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB | 0.35 | 0.35 | 0.40 | 0.45 | 0.60 | 0.90  | 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 | -1.9 | -1.6 | -1.3 | -1.0 | -0.6 | 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 |

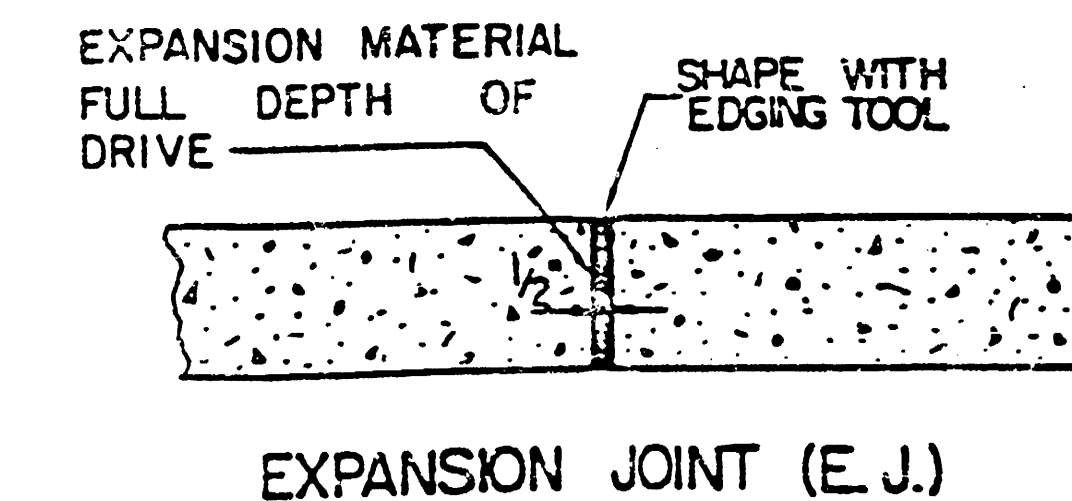
FULL RADIUS DRIVES (P=14.5' & GREATER)



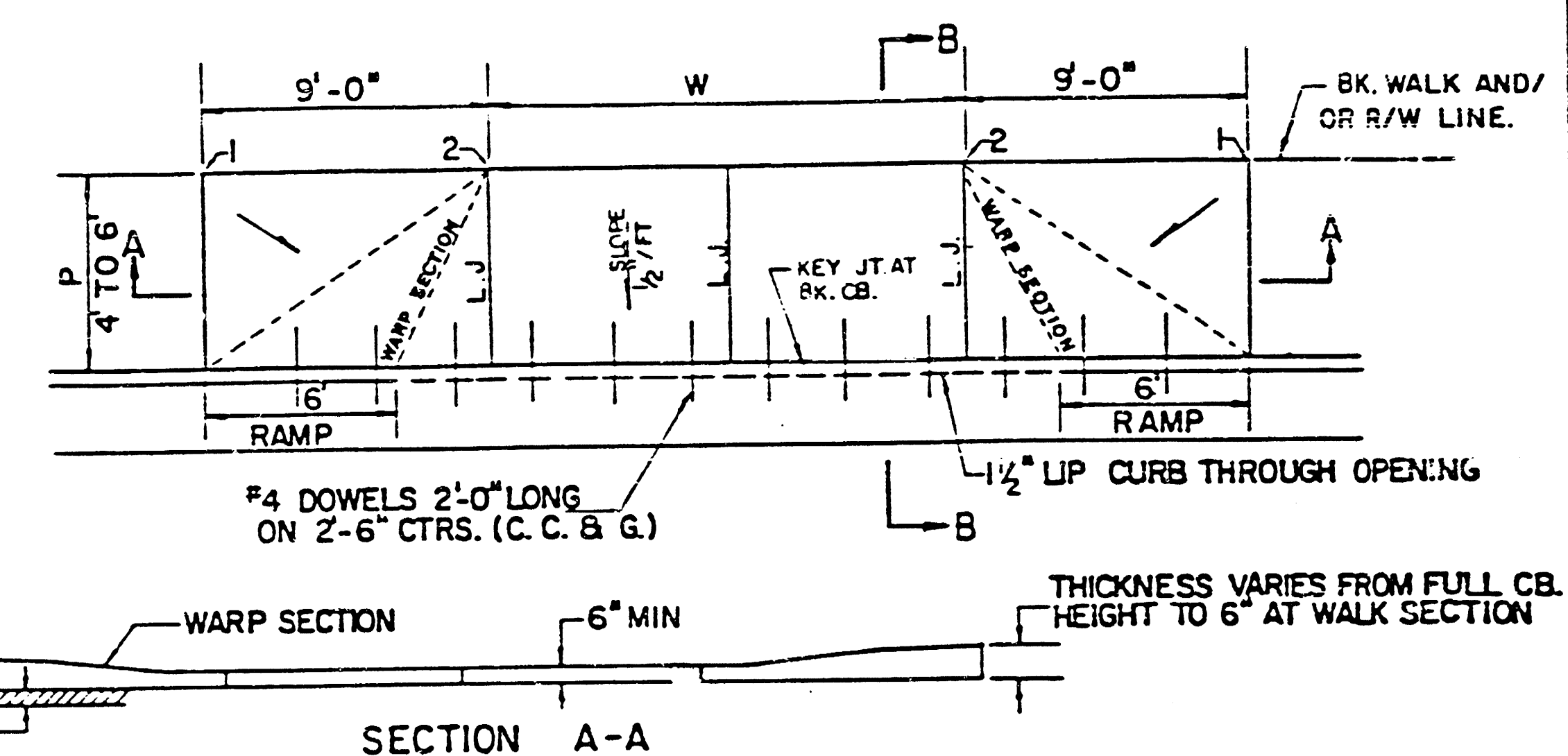
| PARKING WIDTH "P"                                     | 7'   | 7.5' | 8'   | 8.5' |
|-------------------------------------------------------|------|------|------|------|
| ABSOLUTE MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB. | 0.00 | 0.10 | 0.20 | 0.30 |
| OPTIMUM MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.  | 0.00 | 0.10 | 0.20 | 0.30 |
| OPTIMUM MIN. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.  | 0.15 | 0.16 | 0.17 | 0.17 |
| ABSOLUTE MAX. DIST. OF PT. "WG" BELOW TOP OF FULL CB. | -25' | -20' | -20' | -20' |

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

CONTRACTION JOINT (C.J.)  
OR LONGITUDINAL JOINT (L.J.)  
NO SAWN JOINTS WILL  
BE ALLOWED.



EXPANSION JOINT (E.J.)



| PARKING WIDTH "P"                      | 4'    | 4.5'  | 5'    | 5.5'  | 6'    | 6.5'  |
|----------------------------------------|-------|-------|-------|-------|-------|-------|
| DIST. OF PT. "T" 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. | -2.26 | -2.24 | -2.22 | -2.20 | -1.18 | -1.16 |

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

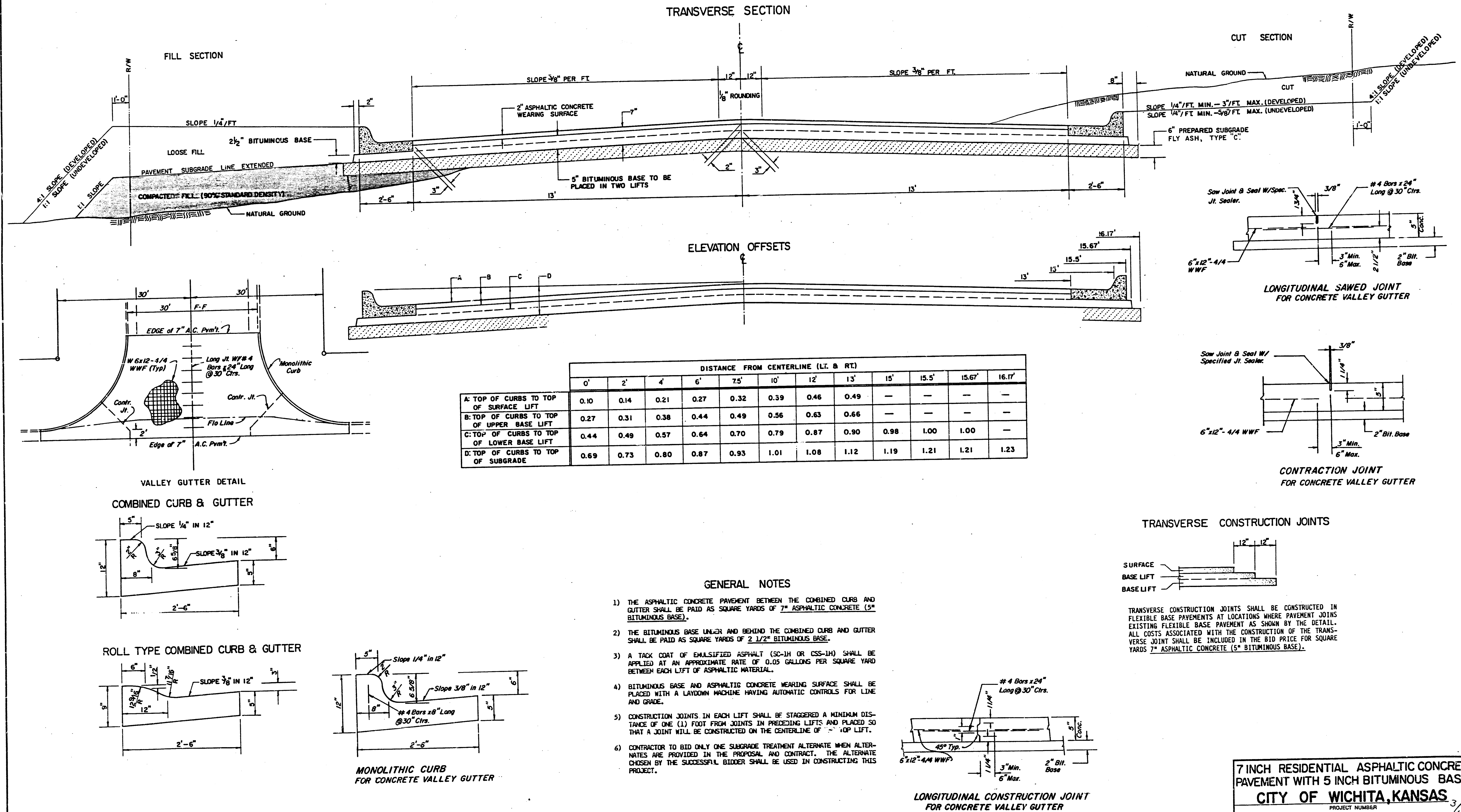
#### GENERAL NOTES

1. DRIVEWAY CONSTRUCTION DETAIL ON THIS SHEET 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.
2. ONE LONGITUDINAL JOINT SHALL BE CONSTRUCTED ALONG THE CENTERLINE OF DRIVES HAVING A "P" DIMENSION OF 24' OR LESS. TWO LONGITUDINAL JOINTS SHALL BE CONSTRUCTED WITH EQUAL SPACINGS NOT TO EXCEED 10' FOR DRIVES WITH A "P" DIMENSION GREATER THAN 24'.
3. DRIVEWAY WIDTH DENOTED AS "W" ON THE DETAIL DRAWINGS SHALL BE A MINIMUM OF 10' AND A MAXIMUM OF 30'. THE MAXIMUM OPENING FOR RADIUS TYPE DRIVES WITH CURBS THROUGH THE RADIUS SHALL NOT EXCEED 52' AT THE STREET CURB LINE.
4. CONSTRUCTION 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.
5. 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.
6. 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.
7. 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.
8. 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 #4-12" W-44 WELDED WIRE FABRIC WHEN PROPERLY AUTHORIZED BY THE PROPERTY OWNER WITH THE ENGINEER'S CONCURRENCE.
9. OPTIMUM DRIVEWAY ELEVATIONS SHOWN IN THE TABLES ARE TO BE USED WHENEVER 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.

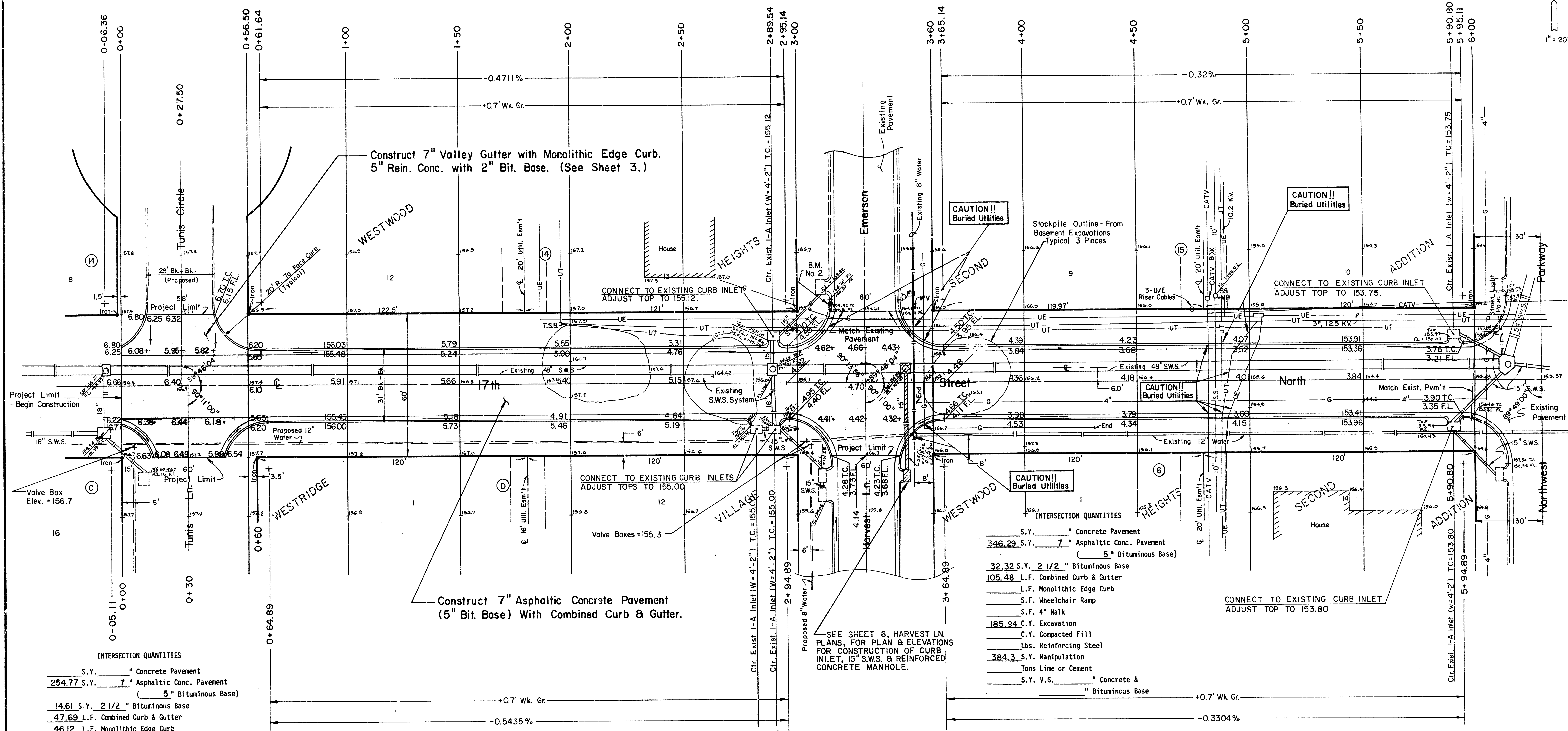
SCALE: 1"=5'

STANDARD DRIVE ENTRANCES  
FULL HEIGHT CURB  
CITY OF WICHITA, KANSAS

# TYPICAL 3' PAVEMENT DETAILS



NOTE:  
STA. 2+89.6, 6.0' Left C.  
Adjust Top Existing MH To 154.93



INTERSECTION QUANTITIES

|        |                                                       |
|--------|-------------------------------------------------------|
| S.Y.   | Concrete Pavement                                     |
| 254.77 | S.Y. 7" Asphaltic Conc. Pavement (5" Bituminous Base) |
| 14.61  | S.Y. 2 1/2" Bituminous Base                           |
| 47.69  | L.F. Combined Curb & Gutter                           |
| 46.12  | L.F. Monolithic Edge Curb                             |
|        | S.F. Wheelchair Ramp                                  |
|        | S.F. 4" Walk                                          |
| 164.26 | C.Y. Excavation                                       |
|        | C.Y. Compacted Fill                                   |
|        | Lbs. Reinforcing Steel                                |
| 356.64 | S.Y. Manipulation                                     |
|        | Tons Lime or Cement                                   |
| 81.4   | S.Y. V.G. 5" Concrete & 2" Bituminous Base            |

NOTE: EARTHWORK VOLUMES DO NOT INCLUDE MATERIAL IN THE 3 STOCKPILES SHOWN ABOVE. CONTRACTOR MAY, AT HIS OPTION, SPREAD AND LEVEL THE STOCKPILES AND REQUEST NEW CROSS SECTIONS BE TAKEN FOR COMPUTATION OF ADDITIONAL EARTHWORK VOLUME. ALL COSTS FOR SPREADING AND LEVELING STOCKPILES, SHALL BE INCLUDED IN THE PRICE BID FOR EARTHWORK EXCAVATION.

INTERSECTION QUANTITIES

|        |                                                       |
|--------|-------------------------------------------------------|
| S.Y.   | Concrete Pavement                                     |
| 346.29 | S.Y. 7" Asphaltic Conc. Pavement (5" Bituminous Base) |
| 32.32  | S.Y. 2 1/2" Bituminous Base                           |
| 105.48 | L.F. Combined Curb & Gutter                           |
|        | L.F. Monolithic Edge Curb                             |
|        | S.F. Wheelchair Ramp                                  |
|        | S.F. 4" Walk                                          |
| 185.34 | C.Y. Excavation                                       |
|        | C.Y. Compacted Fill                                   |
|        | Lbs. Reinforcing Steel                                |
| 384.3  | S.Y. Manipulation                                     |
|        | Tons Lime or Cement                                   |
|        | S.Y. V.G. 5" Concrete & 2" Bituminous Base            |

EXCAVATION  
X-Section 2131.60 Cu. Yds.  
10% 213.16 Cu. Yds.  
Total 2344.76 Cu. Yds.

2,417.7 Sq. Yds. Manipulation

17TH STREET NORTH  
From The West Line Of Tunis Lane To  
The West Line Of Northwest Parkway.  
Project No.  
472-76-245-81663-000-000-001.  
City of Wichita, Ks.

MOEHRING & ASSOCIATES  
CONSULTING ENGINEERS  
WICHITA

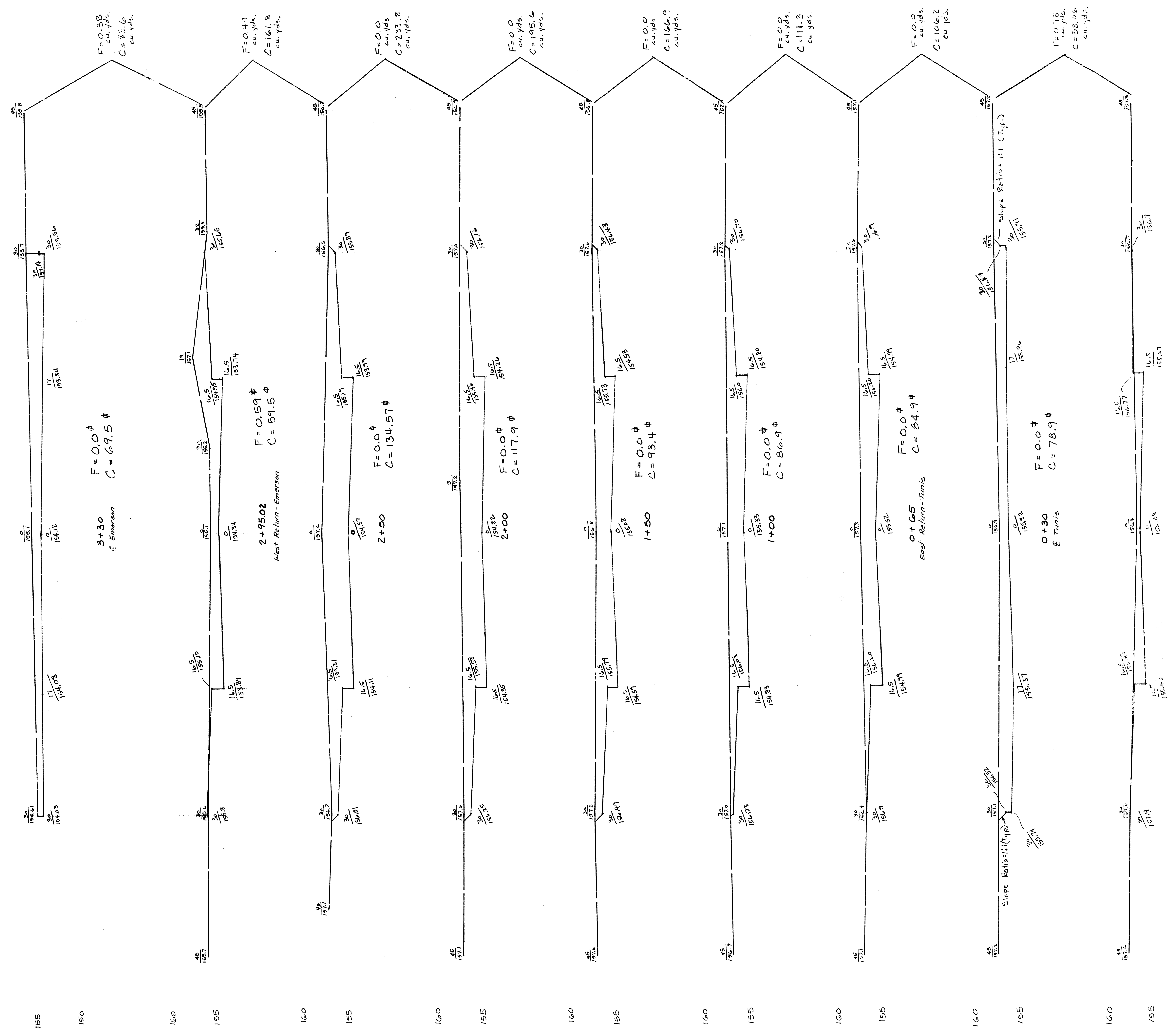
45

R/L 30

30

R/L 30

45



EARTHWORK THIS SHEET  
EXCAVATION - 1,117.3 cu. yds.  
FILL - 1,225.14 yds.

