CITY OF WICHITA, KANSAS

BOSTON STREET IMPROVEMENTS

E.L. BRECKENRIDGE TO THE W.L. WEBB ROAD

(QUAIL MEADOWS 5th ADDITION)

PROJECT NO. 472-76-245-80505 -000-000-001

BENCH MARKS

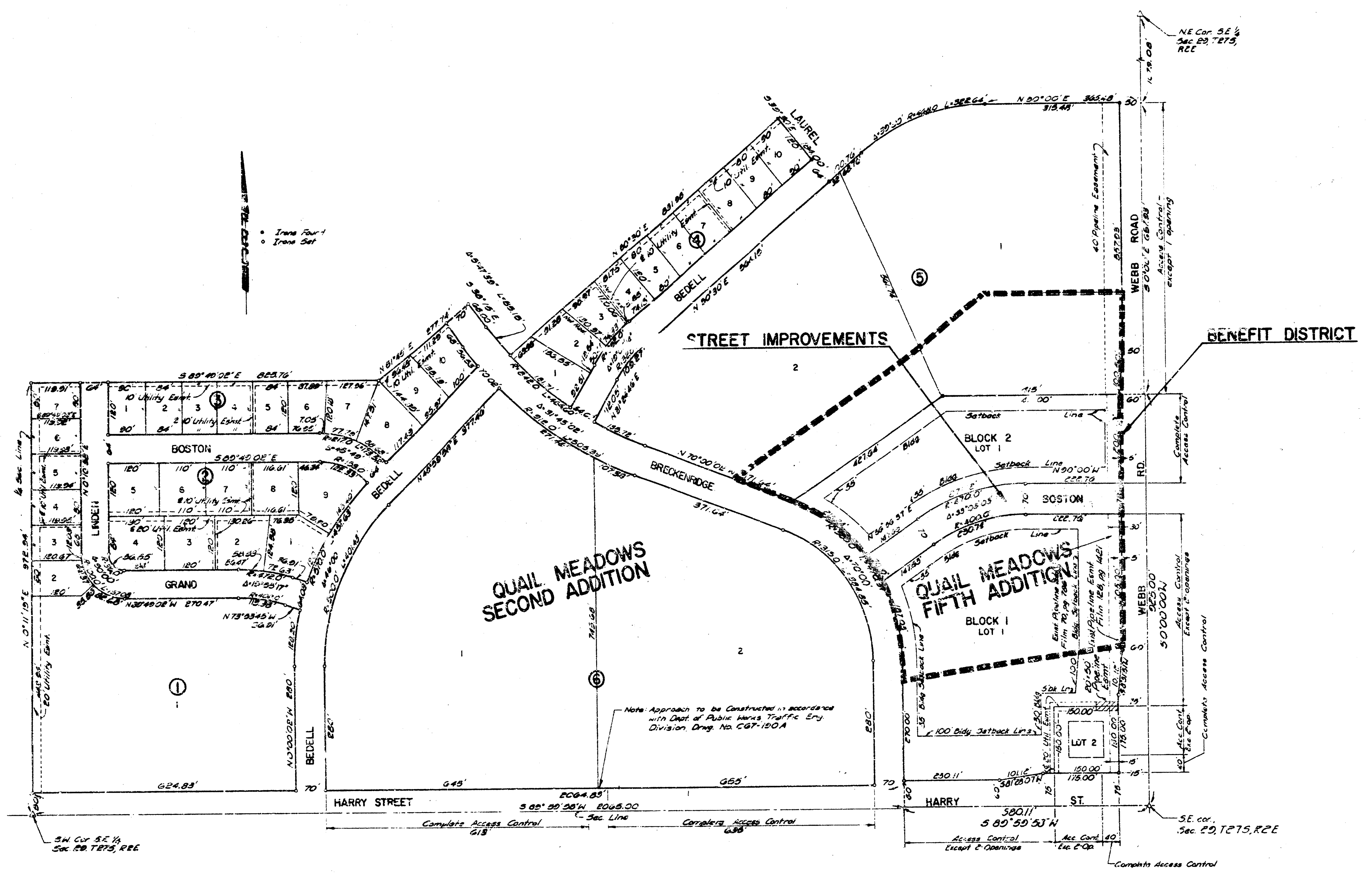
B.M. 1 Webb Rd. & Harry: C.O.W disc.
48' South & 46' West of
℄ Both. Elev. = 172.03

B.M. 2 R.R. Spike W. Face P.P. @
NW Corner Coventry Apartments.
Elev. = 178.45

B.M. 3 Chis "□" on T.C., N. of 2nd
Drive Entrance to Quail
Meadows Apts., 2nd Drive N.
of Harry Str. W. side Breckenridge.
Elev. = 175.59

INDEX OF SHEETS

1. Title Sheet
2. Typical Section
3. Miscellaneous Detail
4&5. Plan Sheets
6. Driveway Details
7-9. X-Sections


STREET IMPROVEMENTS
BENEFIT DISTRICT
LAUREL
BEDELL
BRECKENRIDGE
BOSTON
LINDEN
GRAND
QUAIL MEADOWS SECOND ADDITION
QUAIL MEADOWS FIFTH ADDITION
BLOCK 2 LOT 1
BLOCK 1 LOT 1
LOT 2
WEBB ROAD
HARRY STREET
HARRY ST
①
②
③
④
⑤
⑥

Note:
All excess excavated material from this project shall be wasted on site. No excess material shall be placed within street rights-of-way. The Contractor shall contact the Owner's Engineer @ 262-2691 for information pertaining to the disposition of waste material.

No more than 1-27 foot drive to be constructed as a part of this contract.

JULY, 1984

8168

No.	Revision	By	Date

CITY OF WICHITA, KANSAS

TITLE SHEET
BOSTON STREET IMPROVEMENTS

PROJ. NO. 472-76-245-80505-000-000-001

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

1/9

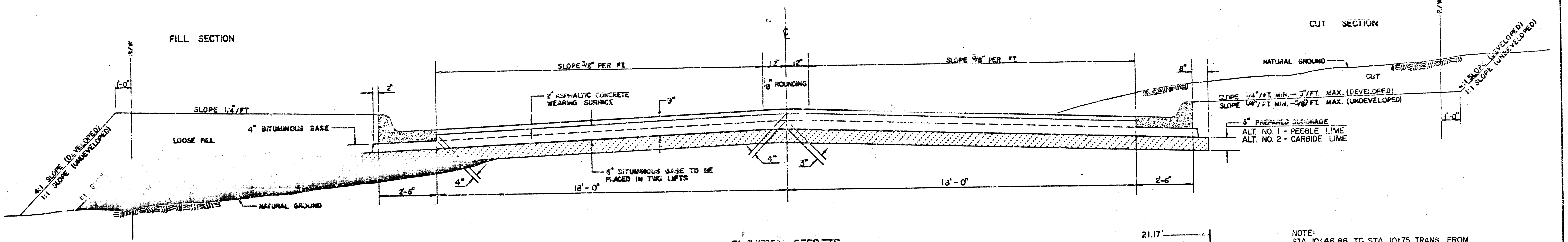
Designed by
Drawn by BS
Job No. 84263
Date June 1984
Sht. 1 of 9

FILMED FROM THE BEST

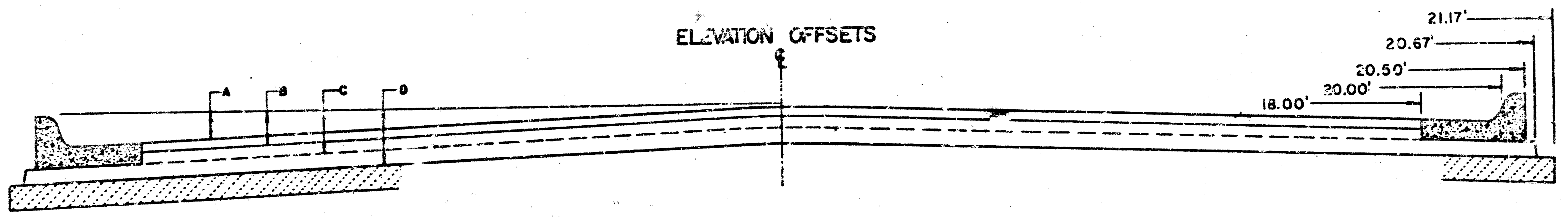
SHEET NO.	TOTAL SHEETS
2	9

TYPICAL 41' PAVEMENT DETAILS

TRANSVERSE SECTION


FILL SECTION
R/W
1'-0"
SLOPE 1/4"/FT
4:1 SLOPE (DEVELOPED)
1:1 SLOPE (UNDEVELOPED)
LOOSE FILL
4" BITUMINOUS BASE
2"
NATURAL GROUND
2'-6"
4"
18'-0"
SLOPE 3/8" PER FT
2" ASPHALTIC CONCRETE WEARING SURFACE
9"
6" BITUMINOUS BASE TO BE PLACED IN TWO LIFTS
℄
12"
12"
1/8" ROUNDING
4"
3"
SLOPE 3/8" PER FT
18'-0"
2'-6"
8"
CUT SECTION
NATURAL GROUND
CUT
R/W
SLOPE 1/4"/FT. MIN.- 3"/FT. MAX. (DEVELOPED)
SLOPE 1/4"/FT. MIN.- 5/8"/FT. MAX. (UNDEVELOPED)
6" PREPARED SUBGRADE
ALT. NO. 1 - PEBBLE LIME
ALT. NO. 2 - CARBIDE LIME
1'-0"
4:1 SLOPE (DEVELOPED)
1:1 SLOPE (UNDEVELOPED)

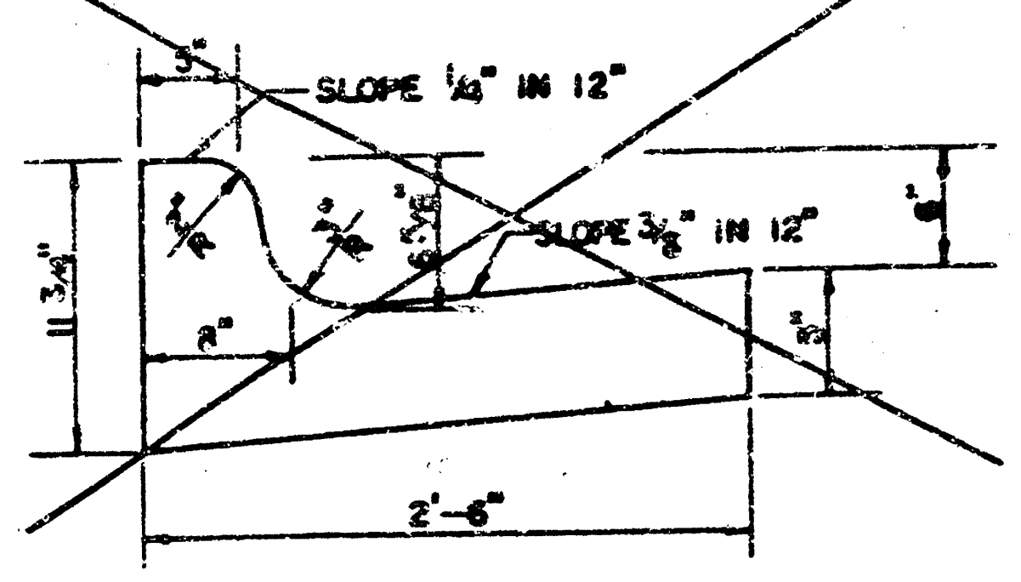
ELEVATION OFFSETS


℄
A
B
C
D
21.17'
20.67'
20.50'
20.00'
18.00'

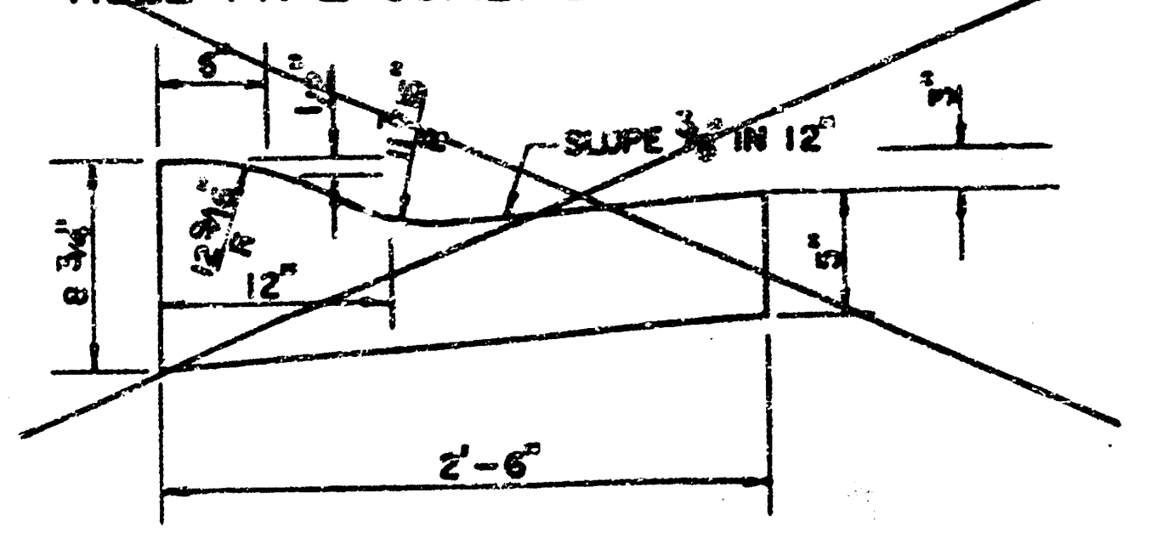
NOTE:
STA. 10+46.86 TO STA. 10+75 TRANS. FROM 3/16"/FT. X-SLOPE TO 3/8"/FT. X-SLOPE.
STA. 16+31.86 TO STA. 16+49.25 TRANS. FROM 3/8"/FT. X-SLOPE TO 3/16"/FT. X-SLOPE.

	DISTANCE FROM CENTERLINE (LT. & RT.)													
	0	2	4	6	8	10	12	14	16	18	20	20.5	20.67	21.17
A: TOP OF CURBS TO TOP OF SURFACE LIFT	-.05	-.01	.05	.11	.18	.24	.30	.36	.43	.49	—	—	—	—
B: TOP OF CURBS TO TOP OF UPPER BASE LIFT	.11	.16	.22	.28	.34	.40	.47	.53	.59	.65	—	—	—	—
C: TOP OF CURBS TO TOP OF LOWER BASE LIFT	.44	.50	.57	.63	.69	.75	.82	.88	.94	1.00	1.07	1.08	1.09	—
D: TOP OF CURBS TO TOP OF SUBGRADE	.69	.74	.80	.86	.92	.98	1.05	1.11	1.17	1.23	1.30	1.31	1.32	1.33

COMBINED CURB & GUTTER


5"
SLOPE 1/4" IN 12"
11 3/4"
8"
SLOPE 3/8" IN 12"
2'-6"

ROLL TYPE COMBINED CURB & GUTTER


5"
SLOPE 3/8" IN 12"
8 3/4"
12"
2'-6"

GENERAL NOTES

1) THE ASPHALTIC CONCRETE PAVEMENT BETWEEN THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 9" ASPHALTIC CONCRETE (7" BITUMINOUS BASE).

2) THE BITUMINOUS BASE UNDER AND BEHIND THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 3" BITUMINOUS BASE.

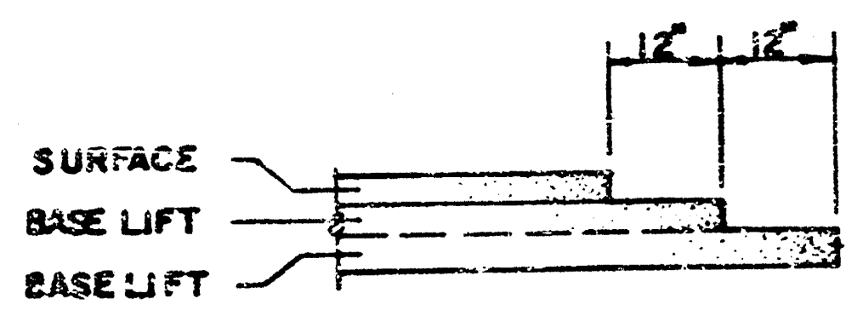
3) A TACK COAT OF EMULSIFIED ASPHALT (SC-1H OR CSS-1H) SHALL BE APPLIED AT AN APPROXIMATE RATE OF 0.05 GALLONS PER SQUARE YARD BETWEEN EACH LIFT OF ASPHALTIC MATERIAL.

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

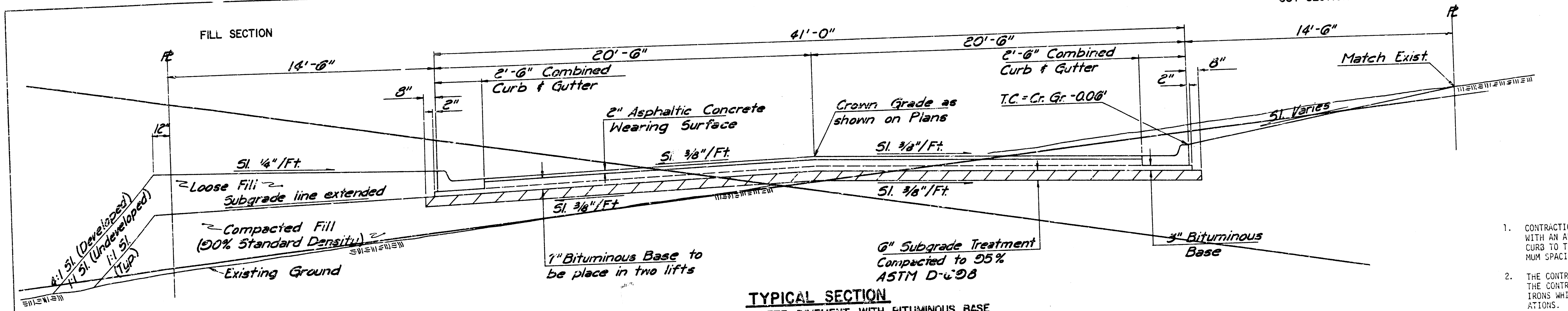

12"
12"
SURFACE
BASE LIFT
BASE LIFT

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 BID PRICE FOR SQUARE YARDS 9" ASPHALTIC CONCRETE (7" BITUMINOUS BASE).

9 INCH RESIDENTIAL ASPHALTIC CONCRETE
PAVEMENT WITH 7 INCH BITUMINOUS BASE
CITY OF WICHITA, KANSAS
PROJECT NUMBER
472-76-245-80505-000-000-001

2/9

SHEET NO.	TOTAL SHEETS
3	9


FILL SECTION
CUT SECTION
℞
14'-6"
20'-6"
41'-0"
20'-6"
14'-6"
2'-6" Combined Curb & Gutter
2'-6" Combined Curb & Gutter
8"
2"
12"
2" Asphaltic Concrete Wearing Surface
Crown Grade as shown on Plans
T.C.=Cr. Gr.-0.06'
Match Exist.
Sl. Varies
Sl. ¼"/Ft.
Sl. ⅜"/Ft.
Sl. ⅜"/Ft.
Sl. ⅜"/Ft.
Sl. ⅜"/Ft.
Loose Fill
Subgrade line extended
Compacted Fill (90% Standard Density)
Existing Ground
4:1 Sl. (Developed)
1:1 Sl. (Undeveloped)
1:1 Sl. (Typ.)
7" Bituminous Base to be place in two lifts
6" Subgrade Treatment Compacted to 95% ASTM D-698
3" Bituminous Base

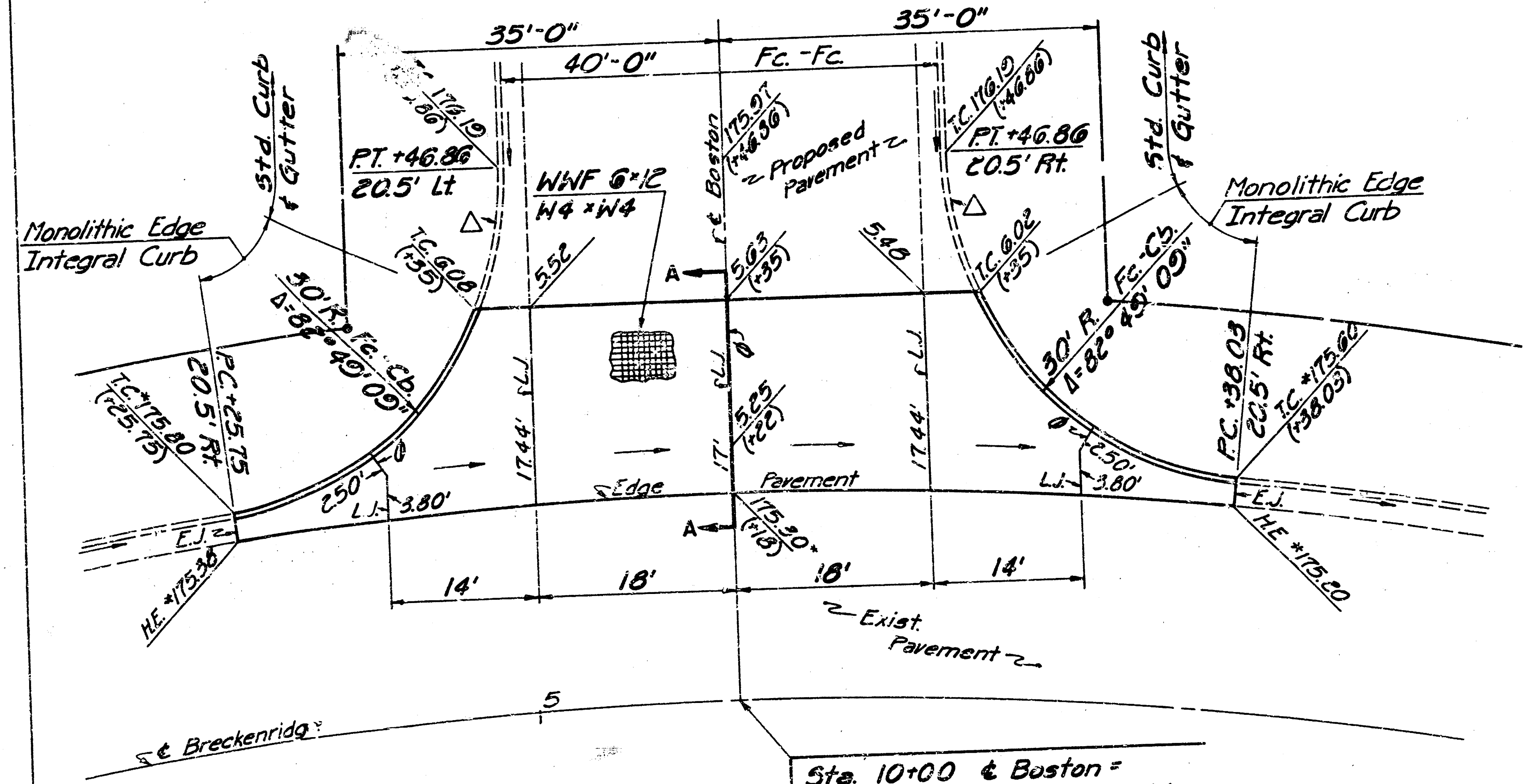
TYPICAL SECTION

41' ASPHALTIC CONCRETE PAVEMENT WITH BITUMINOUS BASE

Sta. 10+46.86 to Sta. 10+75 Trans. from 3/16"/Ft. X-Slope to 3/8"/Ft. X-Slope.
Sta. 16+31.86 to Sta. 16+49.25 Trans. from 3/8"/Ft X-Slope to 3/16"/Ft. X-Slope.

GENERAL NOTES

1. CONTRACTION JOINTS MAY BE CONSTRUCTED IN INTEGRAL CURB BY SAWING WITH AN APPROVED CONCRETE SAW. THE SAW SHALL EXTEND THROUGH THE CURB TO THE PAVEMENT. SAWED CONTRACTION JOINTS SHALL HAVE A MAXIMUM SPACING OF 10'.
2. 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 APPLICABLE STATE LAWS.
3. CONTRACTOR SHALL VERIFY DRIVE WIDTH AND LOCATION WITH PROPERTY OWNER PRIOR TO CONSTRUCTION OF DRIVE SHOWN AT STA. 13+29 LT.
4. ADEQUATE TRAFFIC CONTROL SHALL BE PROVIDED ON BRECKENRIDGE AND ON WEBB ROAD IN THE VICINITY OF BOSTON STREET DURING CONSTRUCTION.
5. THE 15" CMP TO BE INSTALLED AT STA. 16+79 SHALL BE 16 GAUGE (MINIMUM).

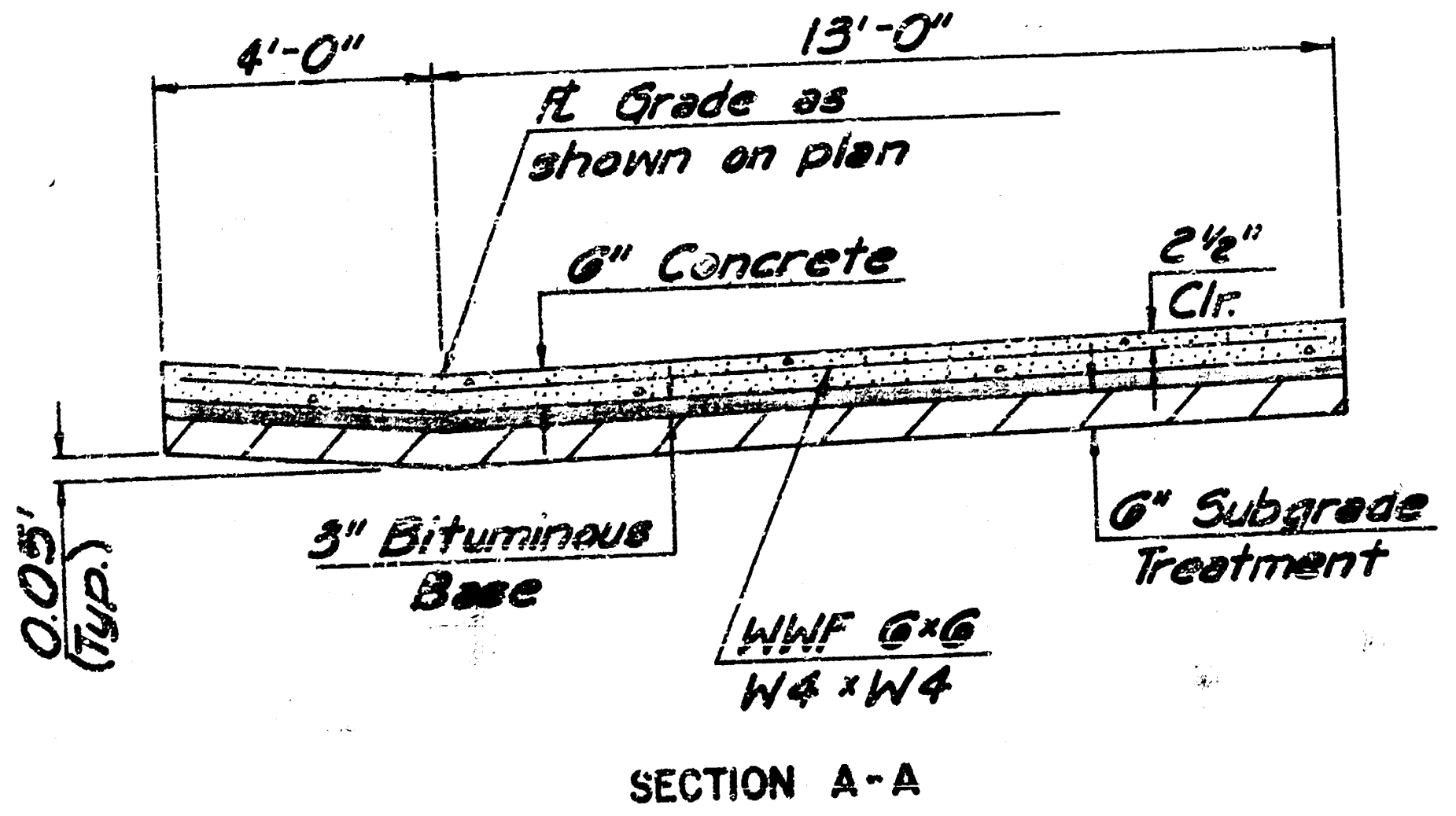

35'-0"
40'-0"
Fc.-Fc.
35'-0"
Std. Curb & Gutter
Std. Curb & Gutter
Monolithic Edge Integral Curb
Monolithic Edge Integral Curb
T.C. 176.19 (+46.86)
PT +46.86 20.5' Lt
PT +46.86 20.5' Rt.
T.C. 176.19 (+46.86)
WWF 6×12 W4×W4
℄ Boston
175.97 (+46.86)
Proposed Pavement
T.C. 6.08 (+35)
5.52
5.63 (+35)
5.48
T.C. 6.02 (+35)
30' R. Fc.-Cb. Δ=82°49'09"
30' R. Fc.-Cb. Δ=82°49'09"
A
A
L.J.
L.J.
L.J.
17.44'
17'
17.44'
5.25 (+22)
T.C.*175.80 (+25.75)
P.C.+25.75 20.5' Rt.
P.C.+38.03 20.5' Rt.
T.C.*175.60 (+38.03)
2.50'
3.80'
2.50'
3.80'
Edge
Pavement
175.30* (+18)
E.J.
E.J.
H.E.*175.38
H.E.*175.20
14'
18'
18'
14'
Exist. Pavement
5
℄ Breckenridge
Sta. 10+00 ℄ Boston = Sta. 4+81.89 ℄ Breckenridge

*Match Exist. Elevations

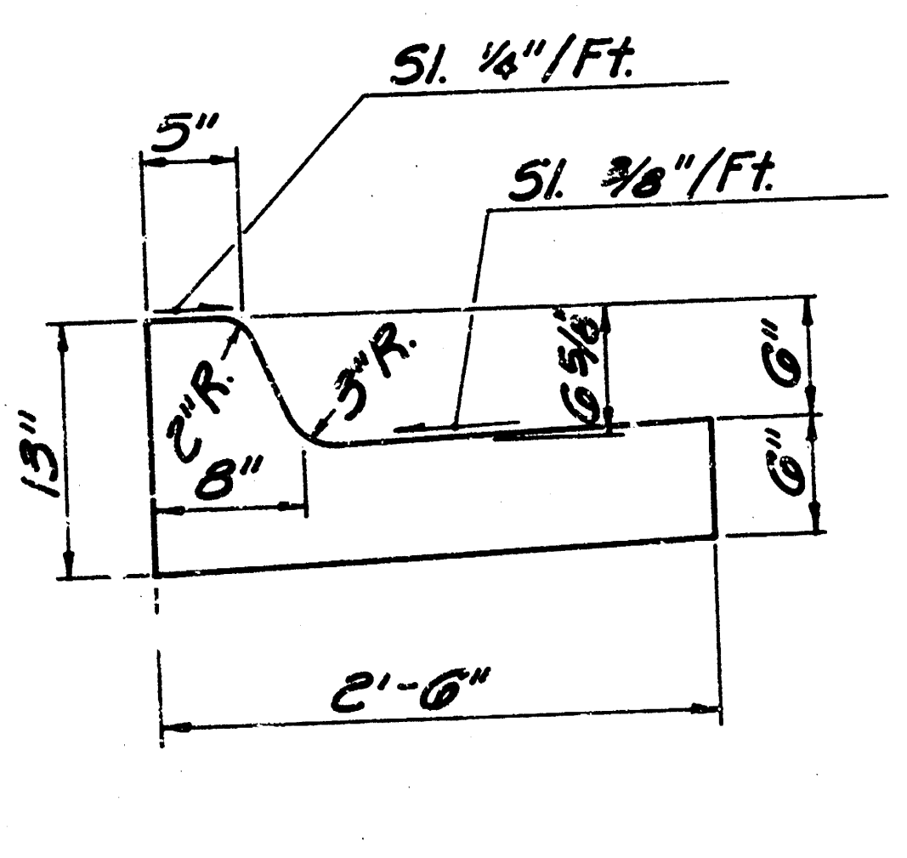
ǂ Omit tie bars

△ Sta. 10+35 to Sta. 10+46.86 Curb & Gutter Lt. & Rt. shall be paid for as Std. Combined Curb & Gutter.

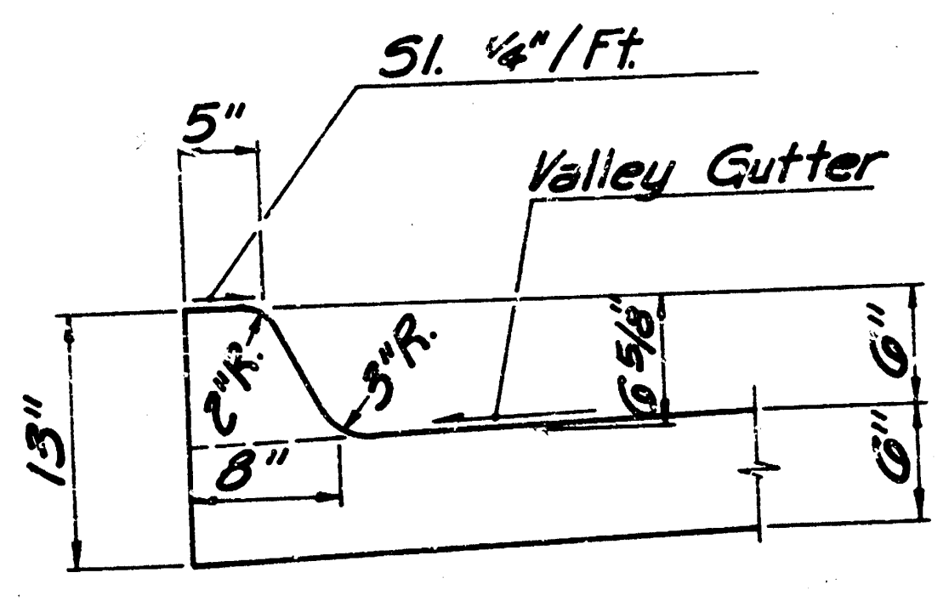
VALLEY GUTTER


4'-0"
13'-0"
℄ Grade as shown on plan
6" Concrete
2½" Clr.
0.05' (Typ.)
3" Bituminous Base
WWF 6×6 W4×W4
6" Subgrade Treatment

SECTION A-A

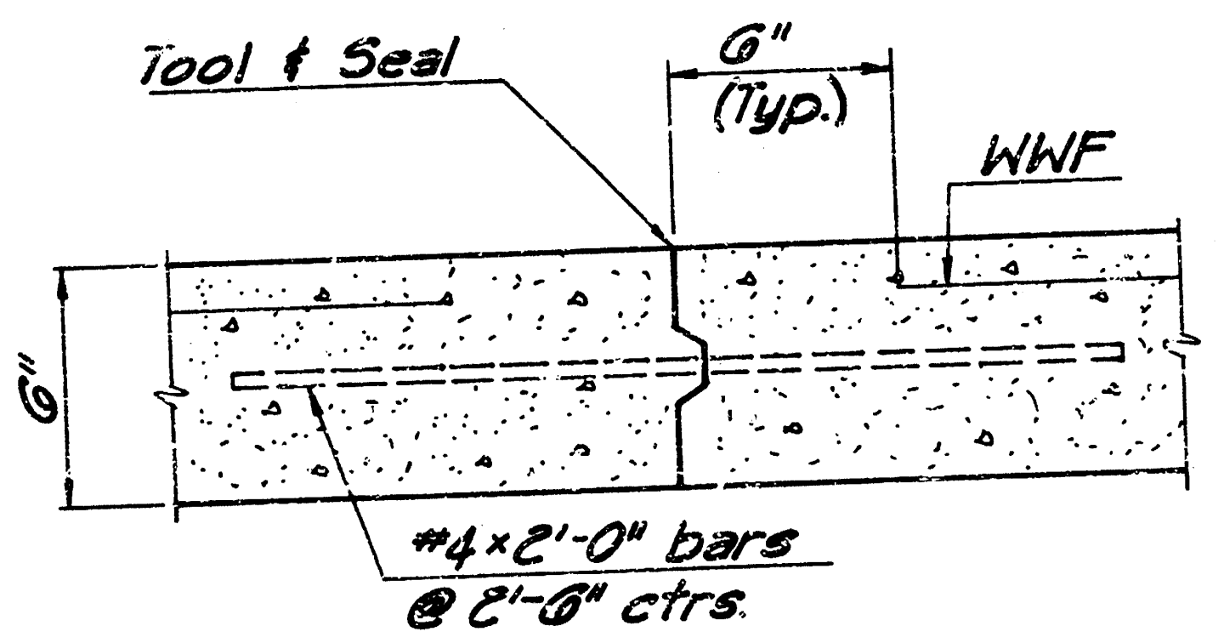

Sl. ¼"/Ft.
Sl. ⅜"/Ft.
5"
13"
2"R.
3"R.
8"
6⅝"
6"
6"
2'-6"

STANDARD CURB & GUTTER DETAIL

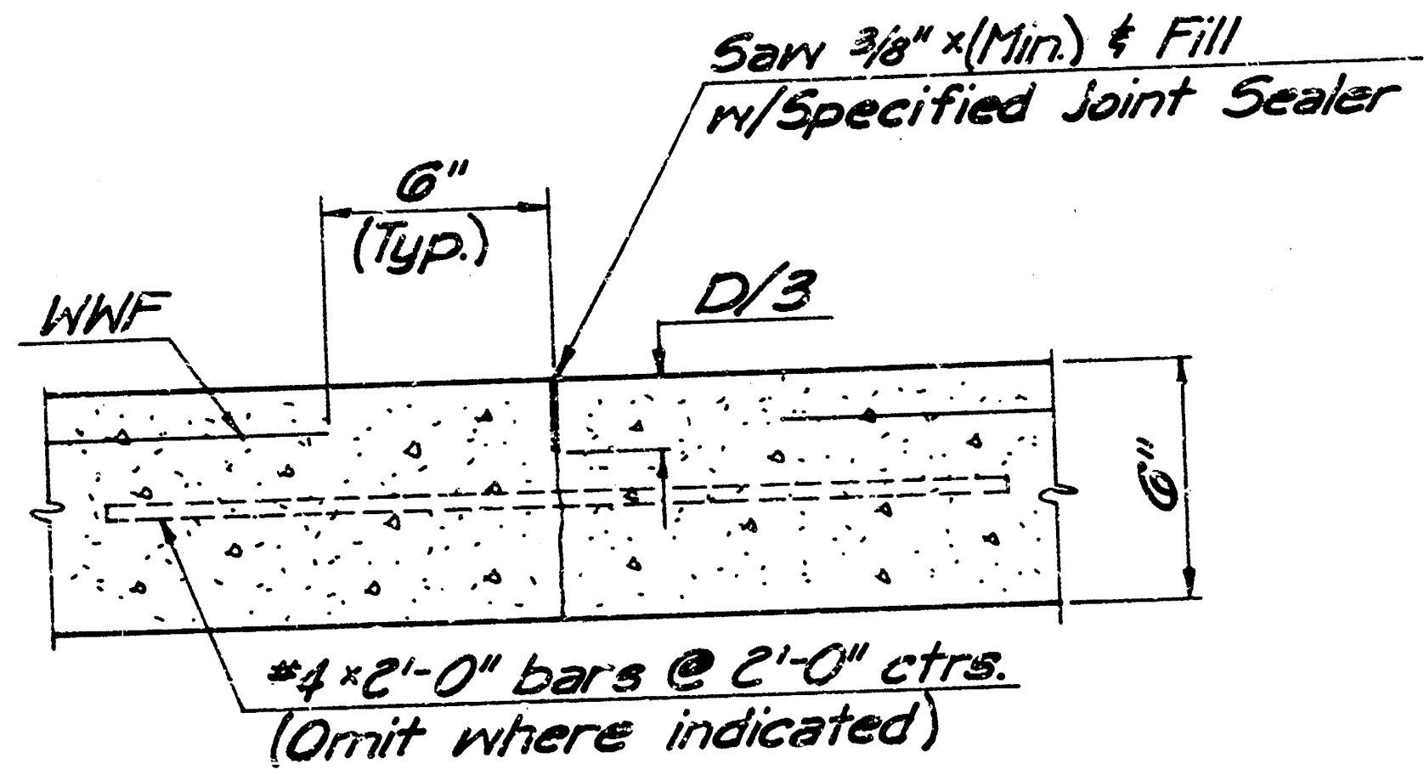

Sl. ¼"/Ft.
5"
Valley Gutter
13"
2"R.
3"R.
8"
6⅝"
6"
6"

STANDARD INTEGRAL CURB DETAIL

(Monolithic Edge)


Tool & Seal
6" (Typ.)
WWF
6"
#4×2'-0" bars @ 2'-6" ctrs.

CONSTRUCTION JOINT


Saw ⅜"×(Min.) & Fill w/Specified Joint Sealer
WWF
6" (Typ.)
D/3
6"
#4×2'-0" bars @ 2'-0" ctrs.
(Omit where indicated)

LONGITUDINAL JOINT (L.J.)(SAWN)

VALLEY GUTTER JOINT DETAILS

CITY OF WICHITA, KANSAS

MISCELLANEOUS DETAILS

STREET IMPROVEMENTS

PROJ. NO. 472-76-245-80505-000-000-001

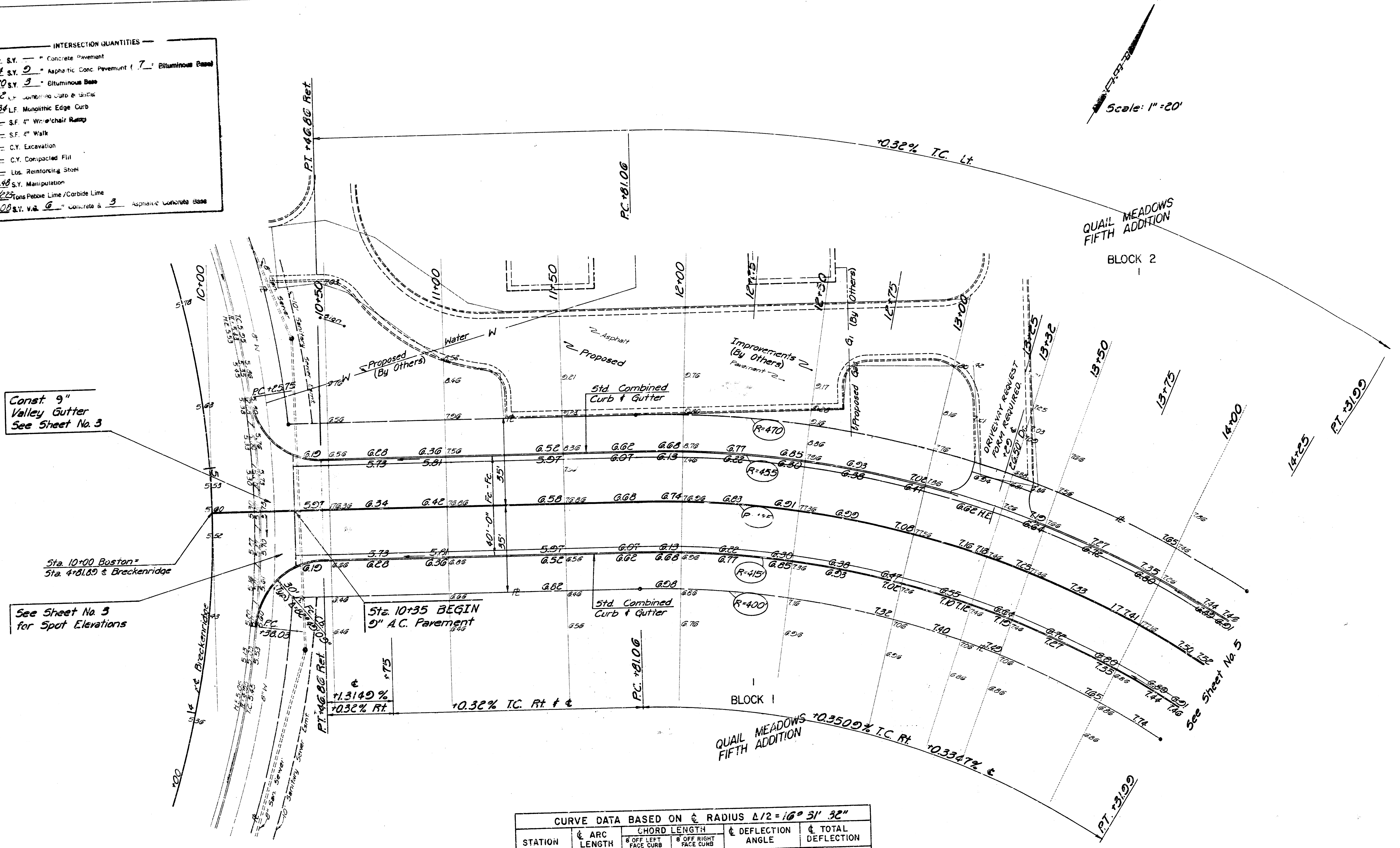
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS
3/9

Designed by		Checked by	
Drawn by	BS	Date July, 1984	Job No. 84263

SHEET NO.	TOTAL SHEETS
4	9

INTERSECTION QUANTITIES

___ S.Y. ___" Concrete Pavement
47.44 S.Y. 9" Asphaltic Conc. Pavement (7" Bituminous Base)
9.20 S.Y. 3" Bituminous Base
24.82 L.F. Combined Curb & Gutter
62.34 L.F. Monolithic Edge Curb
___ S.F. 4" Wheelchair Ramp
___ S.F. 4" Walk
___ C.Y. Excavation
___ C.Y. Compacted Fill
___ Lbs. Reinforcing Steel
185.48 S.Y. Manipulation
1.85/2.23 Tons Pebble Lime /Carbide Lime
118.08 S.Y. V.G. 6" Concrete & 3 Asphaltic Concrete Base


Scale: 1" = 20'
+0.32% T.C. Lt
PT. +46.66 Ret.
P.C. +81.06
QUAIL MEADOWS FIFTH ADDITION
BLOCK 2
BLOCK 1
10+00
10+50
11+00
11+50
12+00
12+25
12+50
12+75
13+00
13+25
13+32
13+50
13+75
14+00
14+25
PT. +31.99
PC +25.75
Proposed Water (By Others)
Asphalt
Proposed
Improvements (By Others)
Pavement
Std. Combined Curb & Gutter
R=470
R=455
R=415'
R=400'
40'-0" Fc-Fc
35'
35'
6.62 H.E.
DRIVEWAY REQUEST FORM REQUIRED. +29 ℄ 26.50' Dr.
Const. 9" Valley Gutter See Sheet No. 3
Sta. 10+00 Boston = Sta. 4+81.89 ℄ Breckenridge
See Sheet No. 3 for Spot Elevations
Sta. 10+35 BEGIN 9" A.C. Pavement
PC +38.03
℄ +1.3149 %
+0.32% Rt.
+0.32% T.C. Rt & ℄
+0.3509% T.C. Rt
+0.3347% ℄
See Sheet No. 5
℄ Breckenridge
8" San. Sewer
10" Sanitary Sewer

▨ Curb & Gutter Removal

CURVE DATA BASED ON ℄ RADIUS Δ/2 = 16° 31' 32"					
STATION	℄ ARC LENGTH	CHORD LENGTH 8' OFF LEFT FACE CURB	CHORD LENGTH 8' OFF RIGHT FACE CURB	℄ DEFLECTION ANGLE	℄ TOTAL DEFLECTION
11+81.06	—	—	—	0° 00' 00"	0° 00' 00"
12+00	18.94	20.16'	17.72'	1° 14' 50"	1° 14' 50"
12+25	25.00	26.61'	23.39'	1° 38' 47"	2° 53' 38"
12+50	"	"	"	" " "	4° 32' 25"
12+75	"	"	"	" " "	6° 11' 12"
13+00	"	"	"	" " "	7° 49' 59"
13+25	"	"	"	" " "	9° 28' 46"
13+50	"	"	"	" " "	11° 07' 33"
13+75	"	"	"	" " "	12° 46' 20"
14+00	"	"	"	" " "	14° 25' 08"
14+25	25.00'	26.61'	23.39'	1° 38' 47"	16° 03' 55"
14+31.99	6.99'	7.44'	6.54'	0° 27' 37"	16° 31' 32"

℄ Curve Data
Δ = 33° 03' 03"
D = 13° 10' 17"
R = 435.00'
T = 129.06'
L = 250.93'
E = 18.74'

UTILITIES

Water	City of Wichita
San. Sewer	City of Wichita
Gas,	Gas Service Co.

CITY OF WICHITA, KANSAS

BOSTON

STA. 10+00 TO STA. 14+31.99

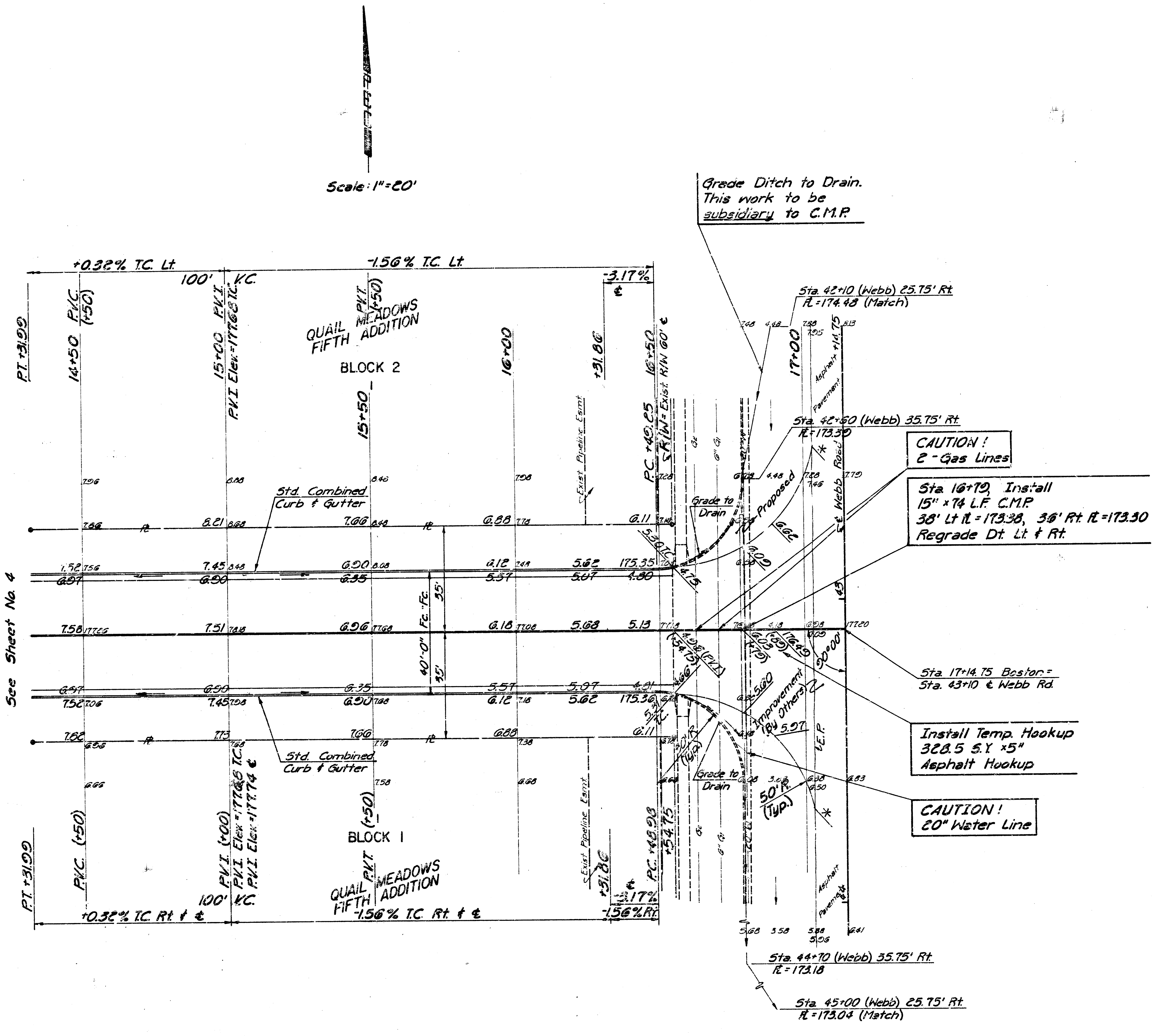
PROJ. NO. 472-76-245-80505-000-000-001

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

4/9

Designed by	BB, BER	Checked by	
Drawn by	BS	Date July, 1984	Job No 84263

SHEET NO.	TOTAL SHEETS
5	9


Scale: 1"=20'
+0.32% T.C. Lt
-1.56% T.C. Lt
-3.17%
100' V.C.
P.T. +31.99
14+50 P.V.C. (+50)
15+00 P.V.I. P.V.I. Elev.=177.68 T.C.
15+50
P.V.T. (+50)
16+00
+31.86
16+50
P.C. +40.25
R/W = Exist. R/W 60' ℄
17+00
QUAIL MEADOWS FIFTH ADDITION
BLOCK 2
BLOCK 1
Std. Combined Curb & Gutter
Exist. Pipeline Esmt.
40'-0" Fc.-Fc.
See Sheet No. 4
P.V.C. (+50)
P.V.I. (+00) P.V.I. Elev.=177.86 T.C. P.V.I. Elev.=177.74 ℄
P.C. +48.98 +54.75
+0.32% T.C. Rt & ℄
1.56% T.C. Rt & ℄
-3.17% -1.56% Rt.
Grade to Drain
Proposed
Improvement (By Others)
50' R. (Typ.)
℄ Webb Road
Asphalt Pavement
E.P.
90°00'

Grade Ditch to Drain.
This work to be
subsidiary to C.M.P.

Sta. 42+10 (Webb) 25.75' Rt
FL = 174.48 (Match)

Sta. 42+60 (Webb) 35.75' Rt
FL = 173.30

CAUTION!
2 - Gas Lines

Sta. 16+79, Install
15" x 74 L.F. C.M.P.
38' Lt FL = 173.38, 36' Rt FL = 173.30
Regrade Dt. Lt & Rt.

Sta. 17+14.75 Boston =
Sta. 43+10 ℄ Webb Rd.

Install Temp. Hookup
328.5 S.Y. x5"
Asphalt Hookup

CAUTION!
20" Water Line

Sta. 44+70 (Webb) 35.75' Rt
FL = 173.18

Sta. 45+00 (Webb) 25.75' Rt
FL = 173.04 (Match)

NOTE: 15" CMP MAY BE 16 GAUGE. 15" RCP MAY BE SUBSTITUTED FOR 15" CMP AT CONTRACTOR'S OPTION.

* Match Exist.

UTILITIES

Water	City of Wichita
San. Sewer	City of Wichita
Gas$_1$	Gas Service Co.
Gas$_2$	Cities Service

CITY OF WICHITA, KANSAS

BOSTON

STA. 14+31.99 TO STA. 17+14.75

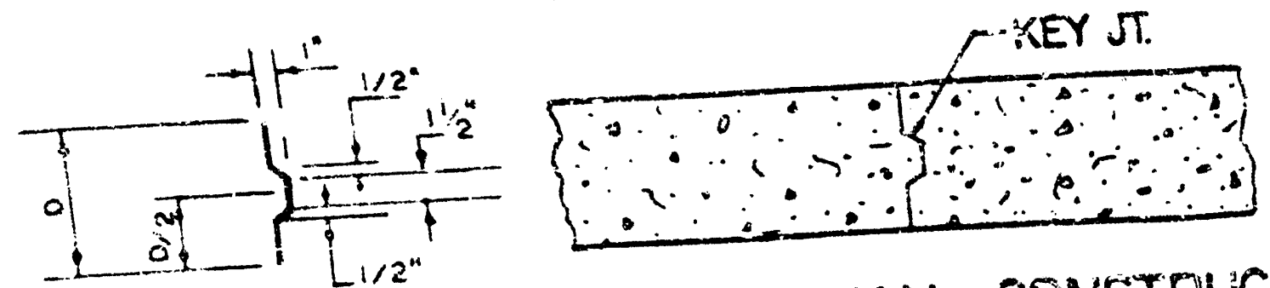
PROJ. NO. 472-76-245-80505-000-000-001

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

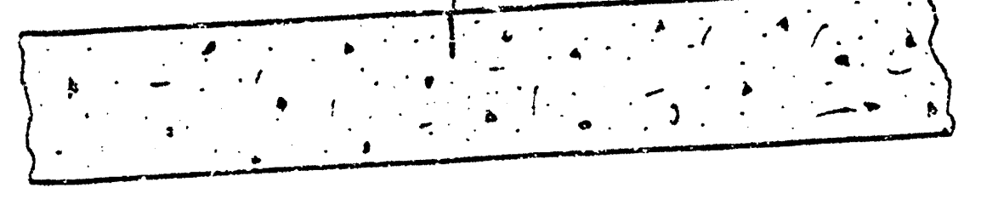
5/9

Designed by	BB, BER	Checked by	
Drawn by	BS	Date July, 1984	Job No. 84263

SHEET NO.	TOTAL SHEETS
6	9

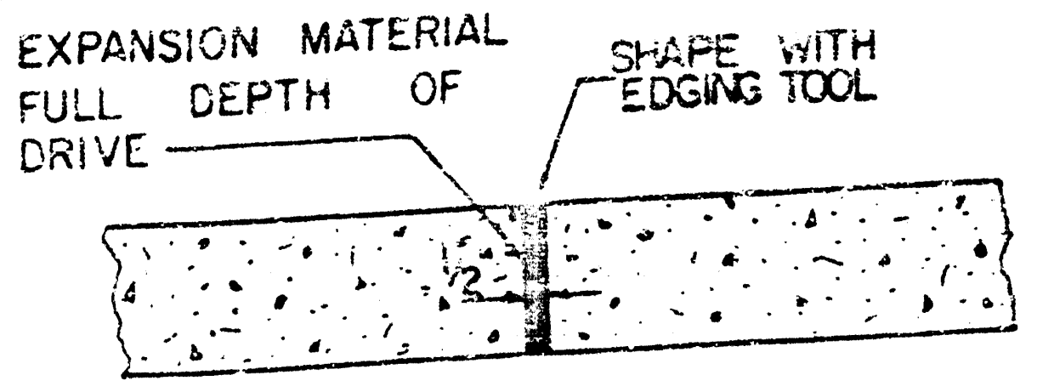

KEY JT.
1/2"
1 1/2"
D
D/2
1/2"

ALT. LONGITUDINAL CONSTRUCTION JOINT

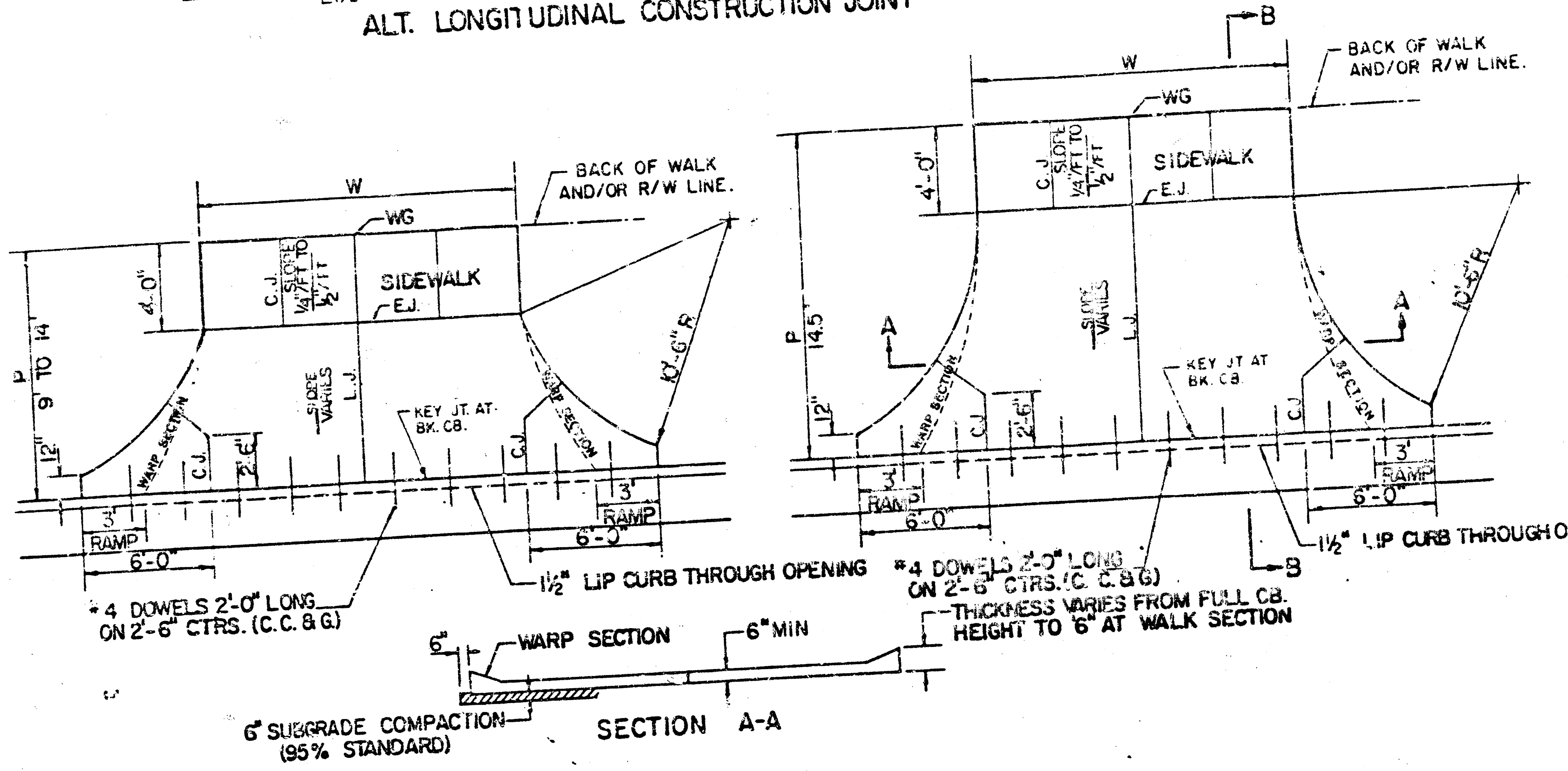

2" DEPTH KNIFE CUT
SHAPE W/"VEE" TOOL

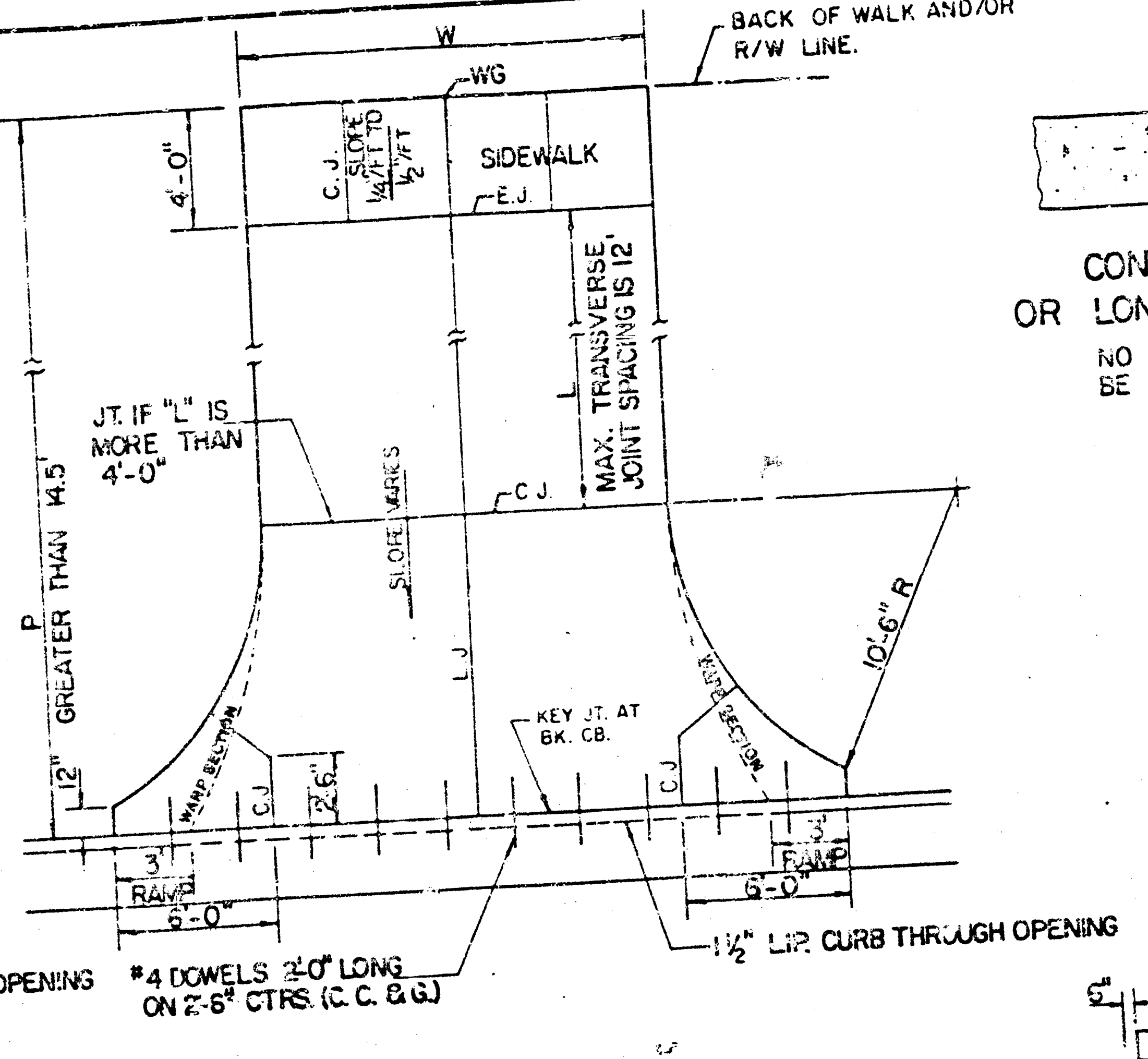
CONTRACTION JOINT (C.J.)
OR LONGITUDINAL JOINT (L.J.)

NO SAWN JOINTS WILL
BE ALLOWED.


EXPANSION MATERIAL
FULL DEPTH OF
DRIVE
SHAPE WITH
EDGING TOOL
1/2

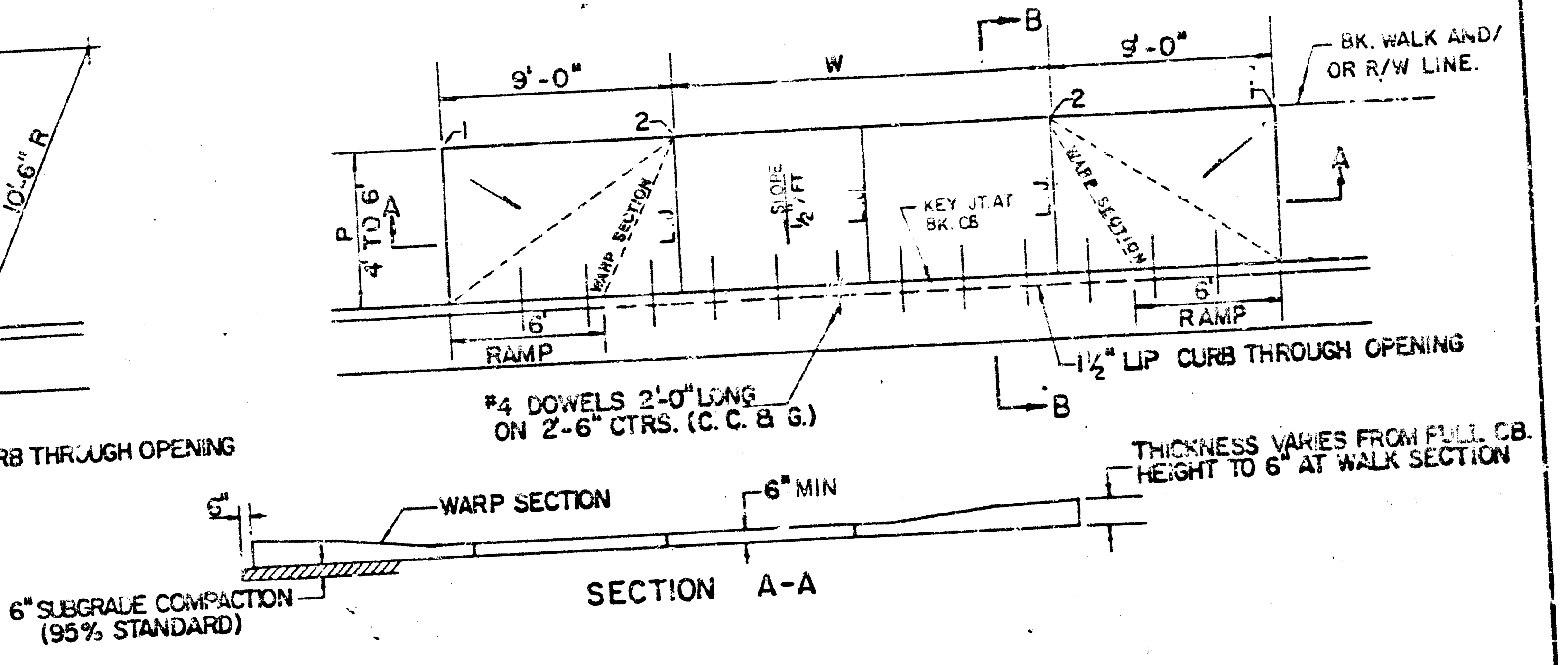
EXPANSION JOINT (E.J.)


W
WG
BACK OF WALK
AND/OR R/W LINE.
SIDEWALK
E.J.
C.J.
SLOPE 1/4"/FT TO 1/2"/FT
SLOPE VARIES
L.J.
4'-0"
P
9' TO 14'
12"
WARP SECTION
KEY JT. AT
BK. CB.
10'-6" R
3'
RAMP
6'-0"
#4 DOWELS 2'-0" LONG
ON 2'-6" CTRS. (C.C. & G.)
1 1/2" LIP CURB THROUGH OPENING
B
P
14.5'
A
4'-6" R
#4 DOWELS 2'-0" LONG
ON 2'-6" CTRS.(C.C. & G)
1 1/2" LIP CURB THROUGH OPENING
THICKNESS VARIES FROM FULL CB.
HEIGHT TO 6" AT WALK SECTION
6"
WARP SECTION
6" MIN
6" SUBGRADE COMPACTION
(95% STANDARD)
SECTION A-A


W
WG
BACK OF WALK AND/OR
R/W LINE.
SIDEWALK
E.J.
C.J.
SLOPE 1/4"/FT TO 1/2"/FT
4'-0"
JT. IF "L" IS
MORE THAN
4'-0"
P
GREATER THAN 14.5'
12"
SLOPE VARIES
L.J.
MAX. TRANSVERSE JOINT SPACING IS 12'
WARP SECTION
KEY JT. AT
BK. CB.
10'-6" R
3'
RAMP
6'-0"
#4 DOWELS 2'-0" LONG
ON 2'-6" CTRS. (C.C. & G.)
1 1/2" LIP CURB THROUGH OPENING

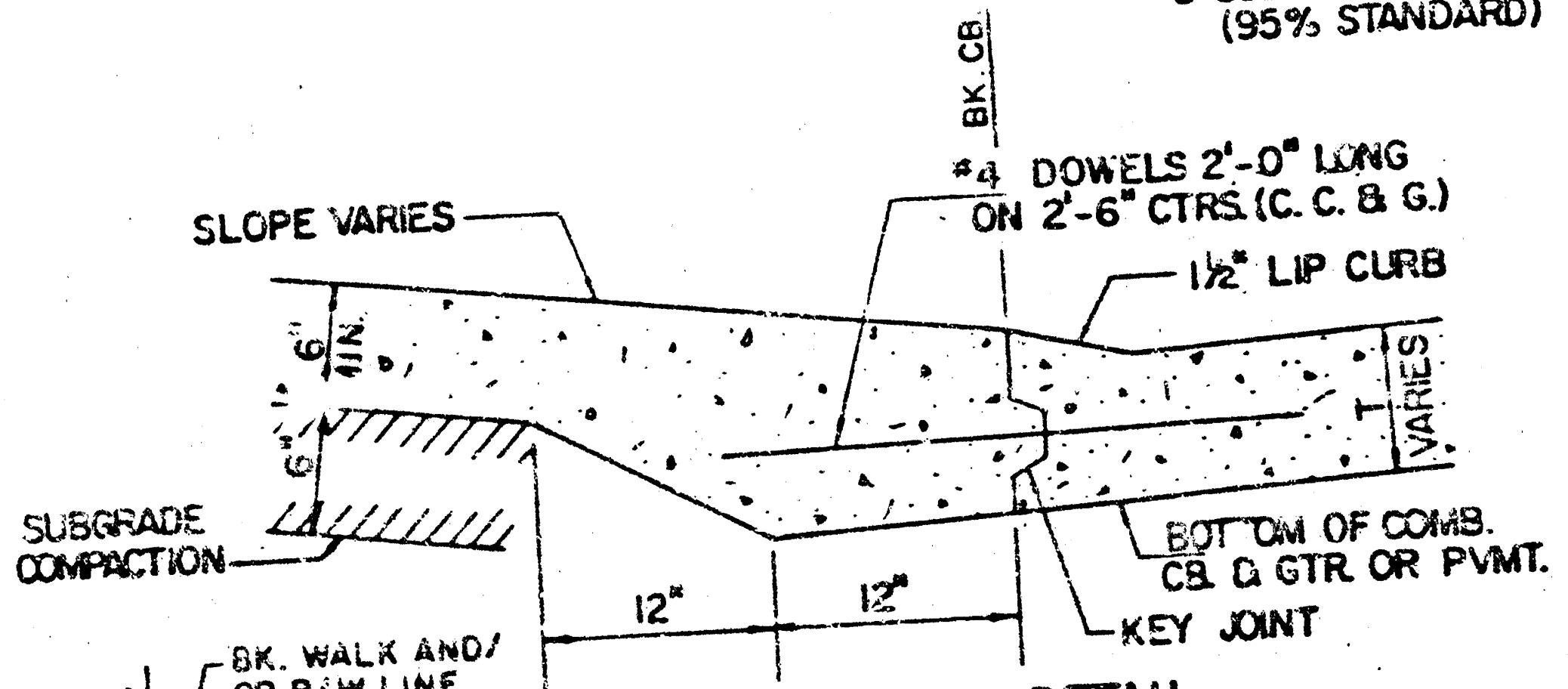
PARKING WIDTH "P"	9'	10'	11'	12'	13'	14.5'	20'	25'	30'	35'	40'	45'	50'
ABSOLUTE MAX. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB	0.35'	0.35'	0.40'	0.45'	0.60'	0.60'	1.35'	1.85'	2.35'	2.85'	3.35'	3.85'	4.35'
OPTIMUM MAX. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB	0.35'	0.35'	0.40'	0.45'	0.60'	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	-.19'	-.16'	-.13'	-.10'	-.06'	0.00	0.00	0.15'	0.25	0.35'	0.45	0.55'	0.65

RADIUS RAMP DRIVES (P= 9.0' & GREATER)


9'-0"
W
9'-0"
B
BK. WALK AND/
OR R/W LINE.
1
2
P
4' TO 6.5'
A
SLOPE 1/4"/FT
WARP SECTION
KEY JT. AT
BK. CB.
6'
RAMP
1 1/2" LIP CURB THROUGH OPENING
#4 DOWELS 2'-0" LONG
ON 2'-6" CTRS. (C.C. & G.)
B
6"
WARP SECTION
6" MIN
THICKNESS VARIES FROM FULL CB.
HEIGHT TO 6" AT WALK SECTION
6" SUBGRADE COMPACTION
(95% STANDARD)
SECTION A-A

PARKING WIDTH "P"	4'	4.5'	5'	5.5'	6'	6.5'
DIST. OF PT. "1" 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.	-.26'	-.24'	-.22'	-.20'	-.18'	-.16'

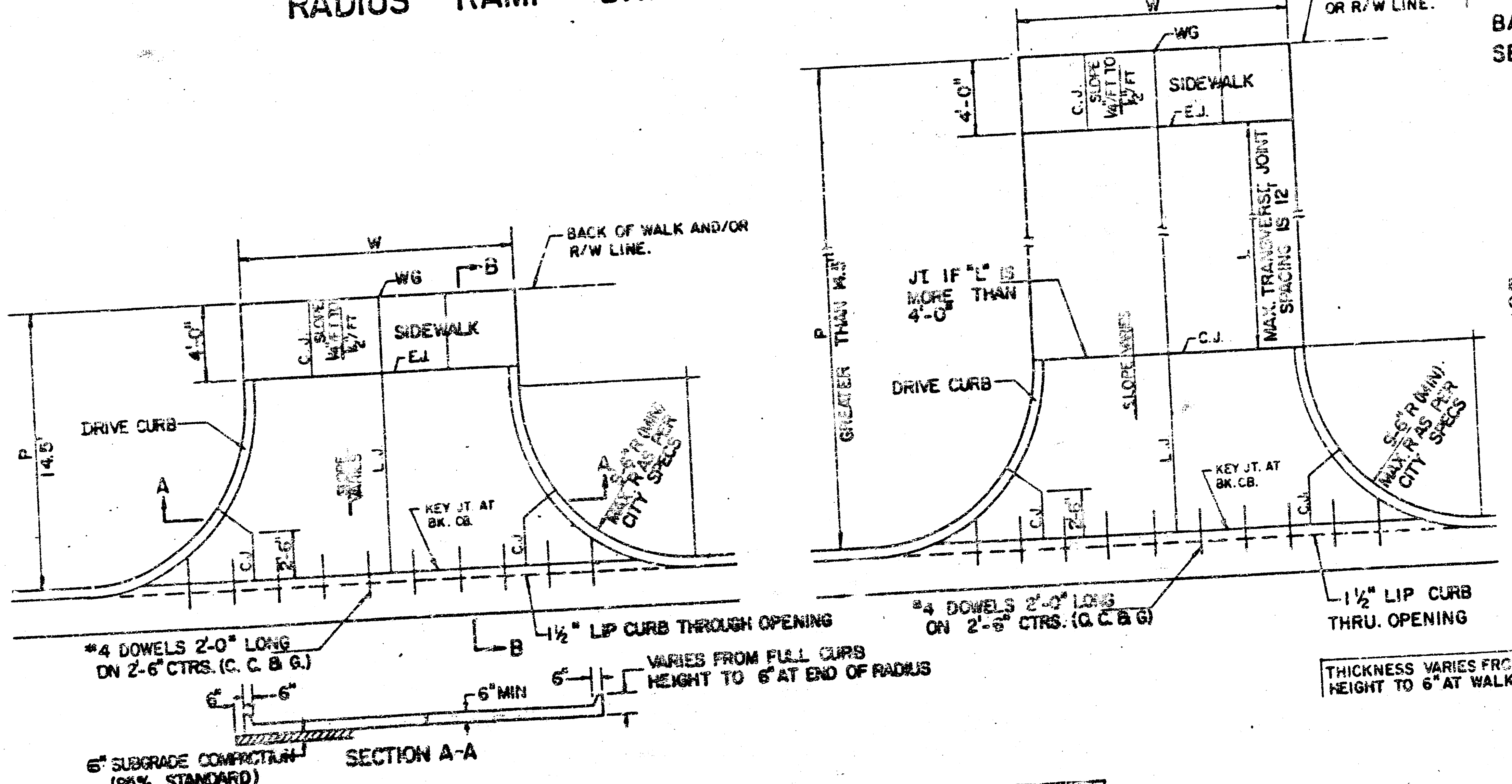
FULL RAMP DRIVE (P=4.0' TO 6.5')


BK. CB
#4 DOWELS 2'-0" LONG
ON 2'-6" CTRS. (C.C. & G.)
1 1/2" LIP CURB
SLOPE VARIES
6" MIN.
6"
VARIES
SUBGRADE
COMPACTION
BOTTOM OF COMB.
CB. & GTR. OR PVMT.
KEY JOINT
12"
12"

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

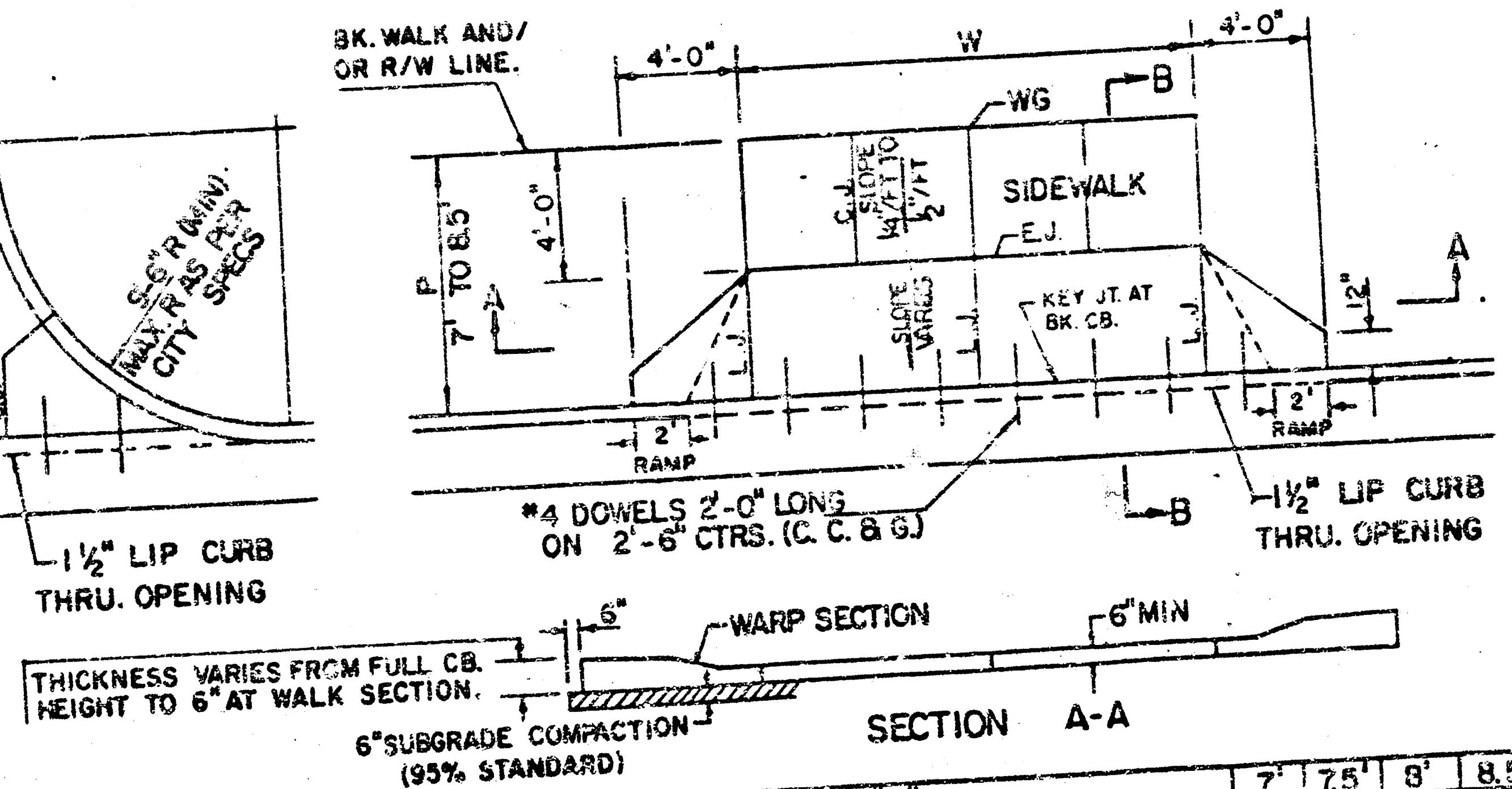
GENERAL NOTES

1. DRIVEWAY CONSTRUCTION DETAILED 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 "W" DIMENSION OF 24' OR LESS. TWO LONGITUDINAL JOINTS SHALL BE CONSTRUCTED WITH EQUAL SPACINGS NOT TO EXCEED 10' FOR DRIVES WITH A "W" 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 6"x12" W4-W4 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 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.


W
WG
B
BACK OF WALK AND/OR
R/W LINE.
SIDEWALK
E.J.
C.J.
SLOPE 1/4"/FT TO 1/2"/FT
4'-0"
P
14.5'
DRIVE CURB
A
SLOPE VARIES
L.J.
KEY JT. AT
BK. CB.
5'-6" R (MIN) MAX. AS PER CITY SPECS
#4 DOWELS 2'-0" LONG
ON 2'-6" CTRS. (C. C. & G.)
B
1 1/2" LIP CURB THROUGH OPENING
P
GREATER THAN 14.5'
JT. IF "L" IS
MORE THAN
4'-0"
MAX. TRANSVERSE JOINT SPACING IS 12'
#4 DOWELS 2'-0" LONG
ON 2'-6" CTRS. (C.C. & G.)
1 1/2" LIP CURB
THRU. OPENING
6"
6"
6" MIN
VARIES FROM FULL CURB
HEIGHT TO 6" AT END OF RADIUS
6" SUBGRADE COMPACTION
(95% STANDARD)
SECTION A-A

PARKING WIDTH "P"	14.5'	20'	25'	30'	35'	40'	45'	50'
ABSOLUTE MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.60'	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)


BK. WALK AND/
OR R/W LINE.
4'-0"
W
4'-0"
WG
B
SIDEWALK
E.J.
SLOPE 1/4"/FT TO 1/2"/FT
SLOPE VARIES
P
7' TO 8.5'
4'-0"
12"
A
KEY JT. AT
BK. CB.
2'
RAMP
#4 DOWELS 2'-0" LONG
ON 2'-6" CTRS. (C.C. & G.)
B
1 1/2" LIP CURB
THRU. OPENING
6"
WARP SECTION
6" MIN
THICKNESS VARIES FROM FULL CB.
HEIGHT TO 6" AT WALK SECTION.
6" SUBGRADE COMPACTION
(95% STANDARD)
SECTION A-A

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')

SCALE: 1"=5'

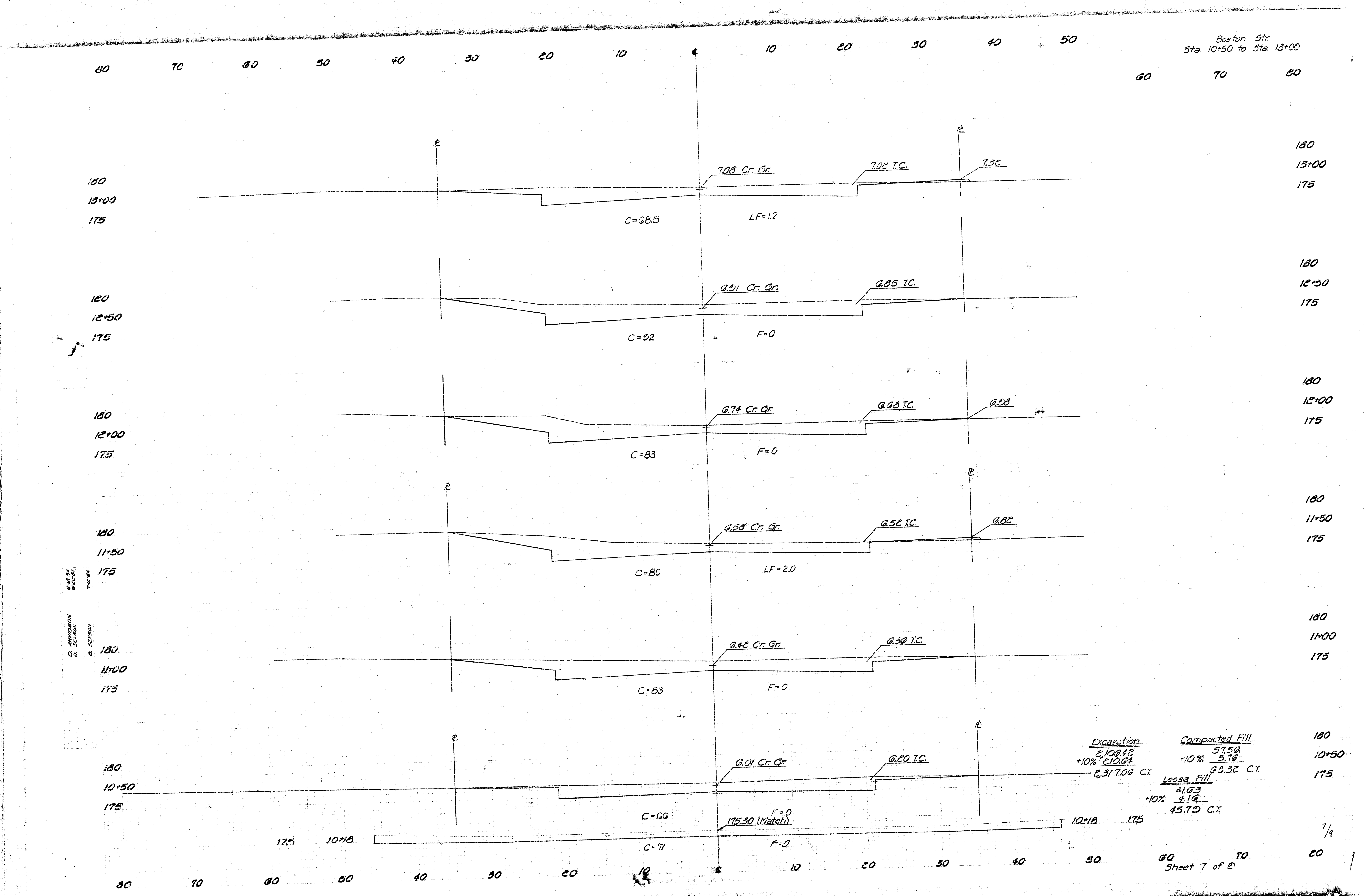
STANDARD DRIVE ENTRANCES
FULL HEIGHT CURB
CITY OF WICHITA, KANSAS

6/9

PROJECT NUMBER
472-76-245-80505-000-000-001

FILMED FROM THE BEST

Boston Str.
Sta. 10+50 to Sta. 13+00



80
70
60
50
40
30
20
10
℄
10
20
30
40
50
60
70
80
℄
7.08 Cr. Gr.
7.02 T.C.
7.36
180
13+00
175
C=68.5
LF=1.2
6.91 Cr. Gr.
6.85 T.C.
180
12+50
175
C=92
F=0
6.74 Cr. Gr
6.68 T.C.
6.98
180
12+00
175
C=83
F=0
6.58 Cr. Gr.
6.52 T.C.
6.82
180
11+50
175
C=80
LF=2.0
6.42 Cr. Gr.
6.36 T.C.
180
11+00
175
C=83
F=0
6.01 Cr. Gr.
6.20 T.C.
180
10+50
175
C=66
F=0
175.30 (Match)
175
10+18
C=71
F=0
D. ARVIDSON
B. SEXSON
B. SEXSON
6-18-84
6-22-84
7-12-84

Excavation
2,106.42
+10% 210.64
2,317.06 C.Y.

Compacted Fill
57.56
+10% 5.76
63.32 C.Y.

Loose Fill
41.63
+10% 4.16
45.79 C.Y.

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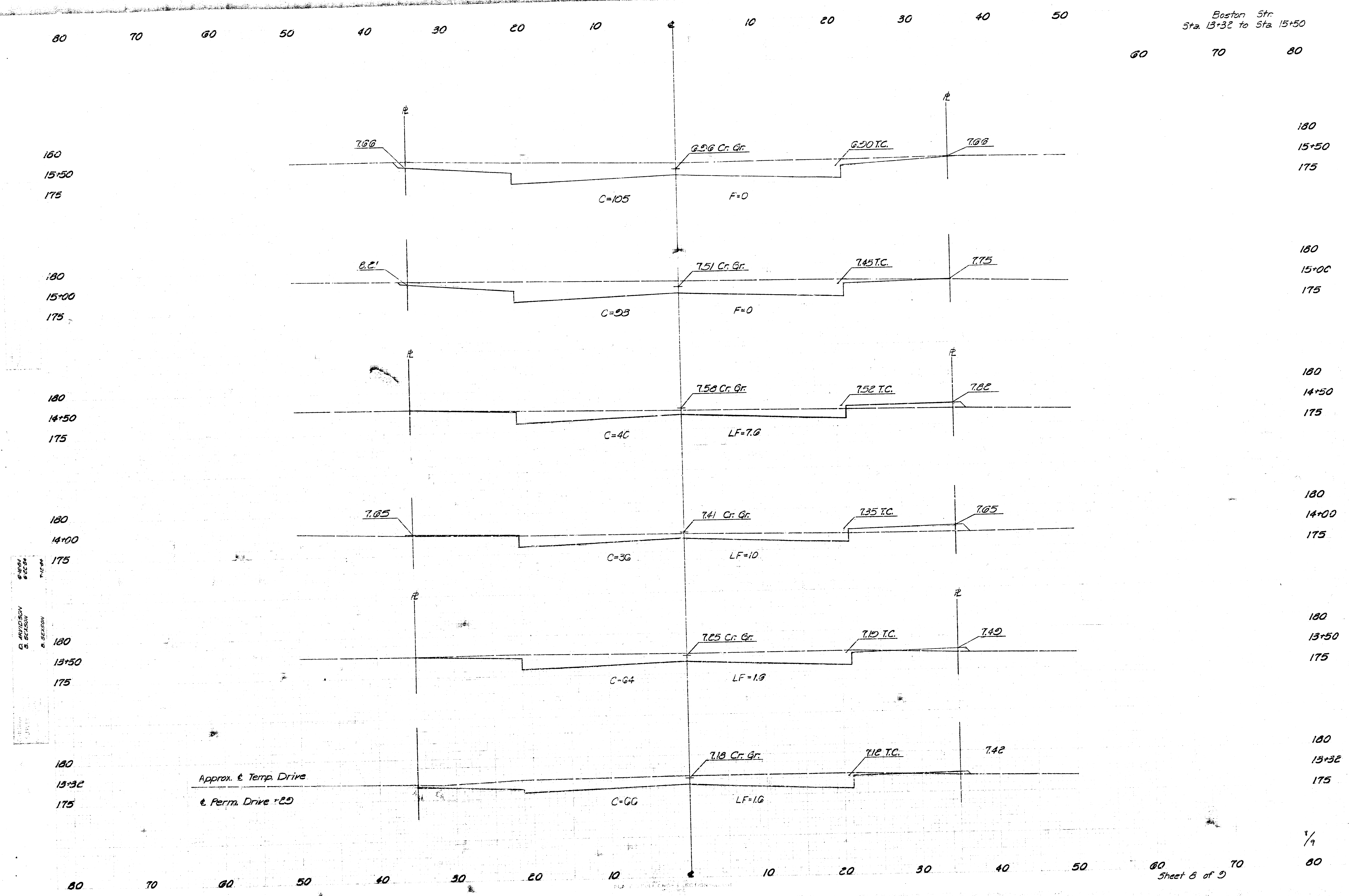
Sheet 7 of 9

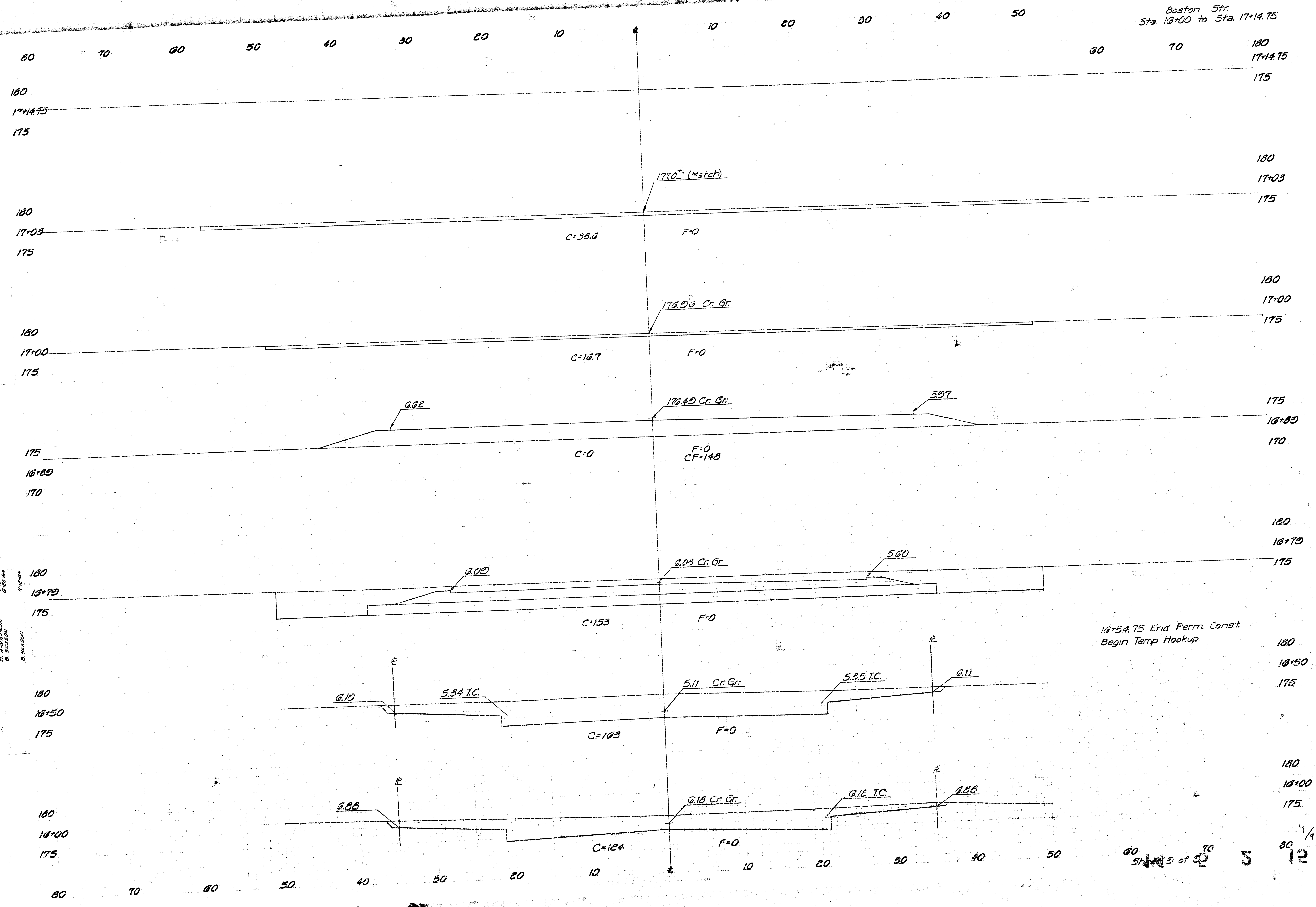
FILMED FROM THE BEST


80
70
60
50
40
30
20
10
℄
10
20
30
40
50
60
70
80
℞
7.66
6.96 Cr. Gr.
6.90 T.C.
7.66
C=105
F=0
180
15+50
175
8.21'
7.51 Cr. Gr.
7.45 T.C.
7.75
C=93
F=0
180
15+00
175
7.58 Cr. Gr.
7.52 T.C.
7.82
C=40
LF=7.6
180
14+50
175
7.65
7.41 Cr. Gr.
7.35 T.C.
7.65
C=36
LF=10
180
14+00
175
7.25 Cr. Gr.
7.19 T.C.
7.49
C-64
LF=1.9
180
13+50
175
Approx. ℄ Temp. Drive
℄ Perm. Drive +29
7.18 Cr. Gr.
7.12 T.C.
7.42
C=66
LF=1.6
180
13+32
175
D. ARVIDSON 6-18-84
B. SEXSON 6-22-84
B. SEXSON 7-12-84

Boston Str.
Sta. 13+32 to Sta. 15+50

Sheet 8 of 9

Boston Str.
Sta. 16+00 to Sta. 17+14.75



17+14.75
180
175
177.0± (Match)
17+03
C=38.6
F=0
176.96 Cr. Gr.
17+00
C=16.7
F=0
6.62
176.49 Cr. Gr.
5.97
16+89
170
C=0
F=0
CF=148
6.09
6.03 Cr. Gr.
5.60
16+79
C=153
F=0
16+54.75 End Perm. Const.
Begin Temp Hookup
℄
6.10
5.34 T.C.
5.11 Cr. Gr.
5.35 T.C.
6.11
16+50
C=163
F=0
6.88
6.18 Cr. Gr.
6.12 T.C.
6.88
16+00
C=124
F=0
10
20
30
40
50
60
70
80

C. ARVIDSON 6-18-84
B. SEXSON 6-22-84
B. SEXSON 7-12-84

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Sheet 9 of 12

5 12