

GENERAL NOTES

Utility service lines, poles, valve boxes, meters, and all other 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.

A saw cut of at least one-half the depth of existing surface courses or one-fourth the depth of existing total pavement thickness shall be provided at locations where proposed construction abuts an existing surface course or pavement for which partial removal of that surface or pavement is required, except when such saw cuts are within three (3) feet of an existing joint the limits of removal shall be extended to the existing joint. Such saw cuts will not be paid for directly and this cost shall be considered as subsidiary to the removal of the surface or pavement.

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.

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 permitting regulations. Any material buried or stockpiled beyond approved of Engineers construction limits would require additional archeological investigations unless buried in a previously approved borrow location.

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.

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. Special care shall be made to protect all trees on the east side of Bullinger. Grade R/W to match these trees.

Contractor will be required to provide a minimum advance notice of twenty-four (24) hours to utility companies prior to starting any excavation as follows:

Kansas One-Call	687-2470
Cablevision	262-4270 or 263-2061
K.G.B.C. Gas	383-8650
K.G.B.C. Electric	383-8600
Peoples Natural Gas Company	942-8350 or 263-8161
Southwestern Bell Telephone Company	1-571-2611
City of Wichita Water Department	268-4908
City of Wichita Sewer Maintenance	268-4071

The Contractor must notify the following in case of an emergency:

Mailboxes within the limits of the project shall be removed and replaced by the Contractor as approved by the Engineer. Contractor will be required to make satisfactory provisions for mail delivery to properties affected by this project during its construction.

The Contractor shall adjust Water Valve Boxes and Fire Hydrants as directed by the Engineer at this price bid for said adjustments. 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 give all property owners and/or tenants of developed property directly abutting the construction of this project a minimum of ten (10) days advance notice prior to start of construction.

This project includes a certain amount of "T" type curb construction. Roll curbs shall be depressed through all driveway openings when such drives are constructed as a part of the project.

All entrance and cross road pipes within 10' limits shall be removed by the Contractor unless otherwise noted on the plans. Removal of such pipes shall conform to the "open" section of the Standard Specifications.

Removal of existing concrete parking lot pavements, asphalt parking lot pavements, asphalt driveway pavements and/or asphalt sidewalk pavements will be paid for as square feet of walk and drive removed.

Properties within the project limits may have underground sprinkler systems in public right-of-way which conflict with new construction. Contractor will be required to remove such improvements should they not be removed by their owner at the time of construction of the project. The Contractor will be required to salvage all sprinkler heads and/or valves and give such material to their owner. Portions of underground sprinkler systems not in conflict with new construction shall be protected from damage and shall remain in place. All work in connection with underground sprinkler systems shall be considered as subsidiary to the contract pay items for work.

Interurban traffic generated outside the project area is not to be carried through construction. Local business or apartment traffic generated within the project area is to be carried through construction as further promulgated by project special provisions.

All areas disturbed by construction shall be restored in accordance with City of Wichita Administrative Regulation AR-78.

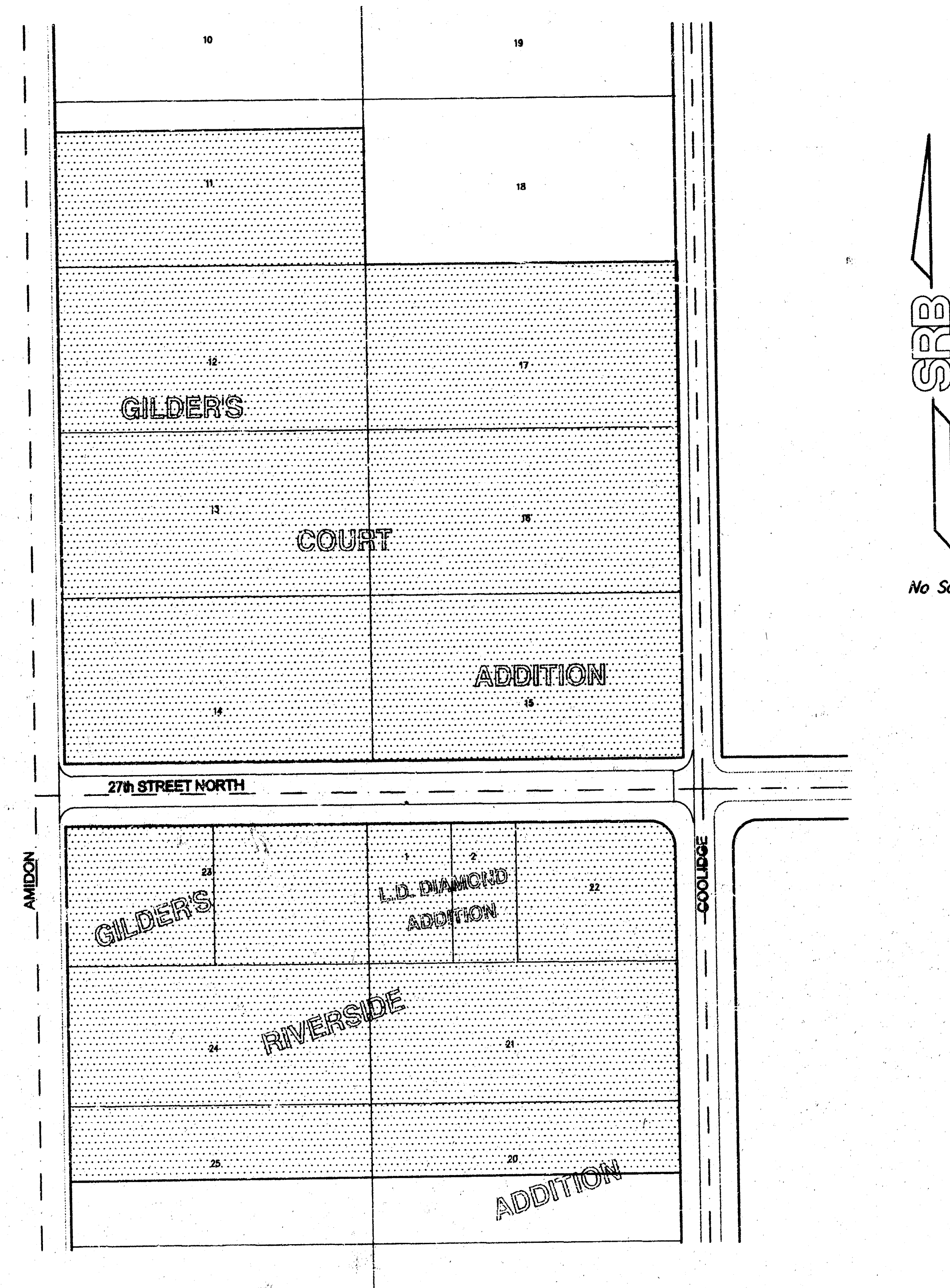
STREET IMPROVEMENTS

27th STREET NORTH

W. L. AMIDON TO E.L. COOLIDGE

PROJECT NO. 472-82888

INDEX CODE 764670



IMPROVEMENT DISTRICT

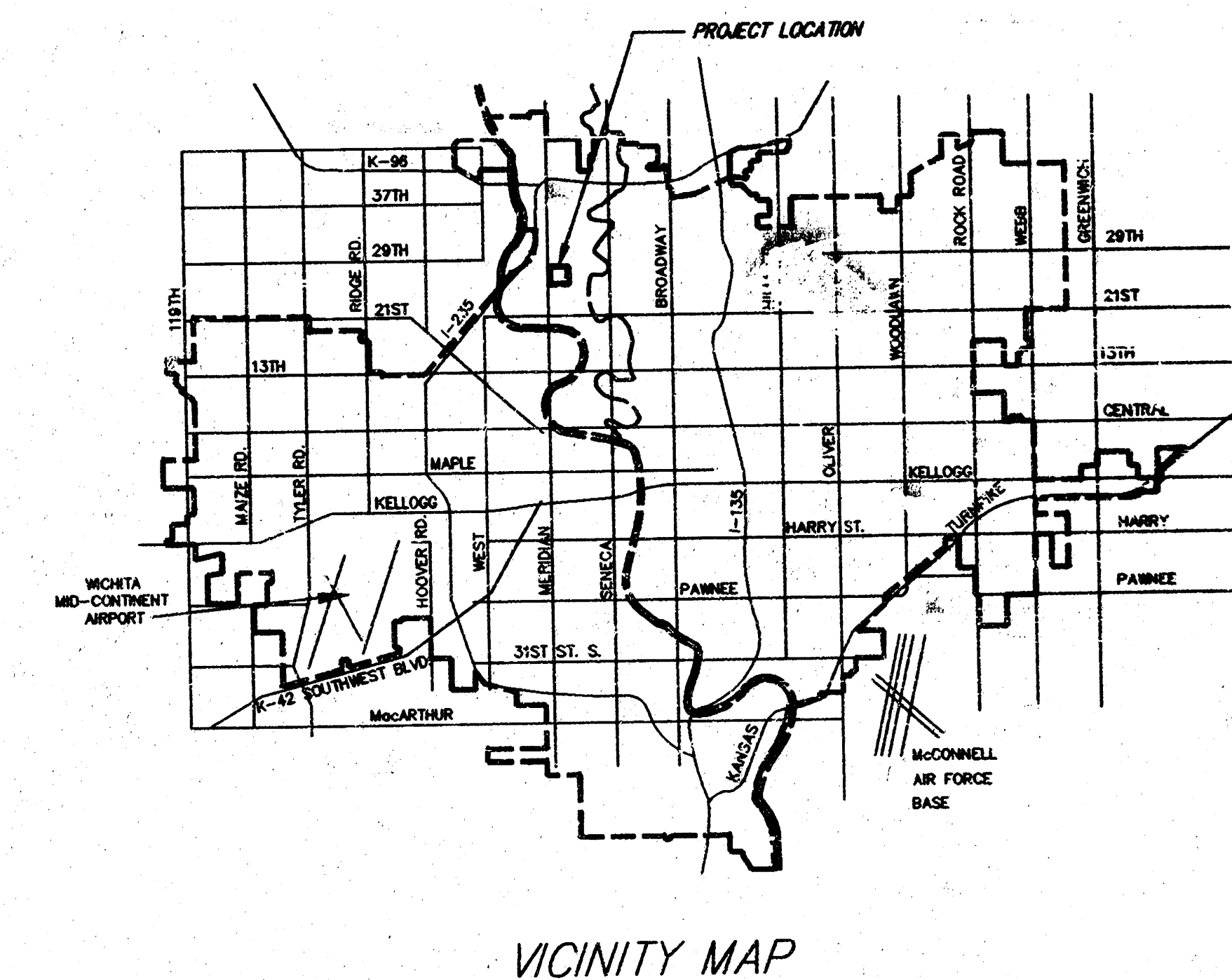
CITY OF WICHITA, KANSAS
MICHAEL E. LINDEBACK, P.E. - CITY ENGINEER

BENCH MARKS

- BM #1 - C.O.W. B.M. 36' West & 6' South of CL Meridian
 Elev. 127.23
- BM #2 - " " T.C. North side Meridian 160' East CL Bullinger & 25th
 Elev. 128.51

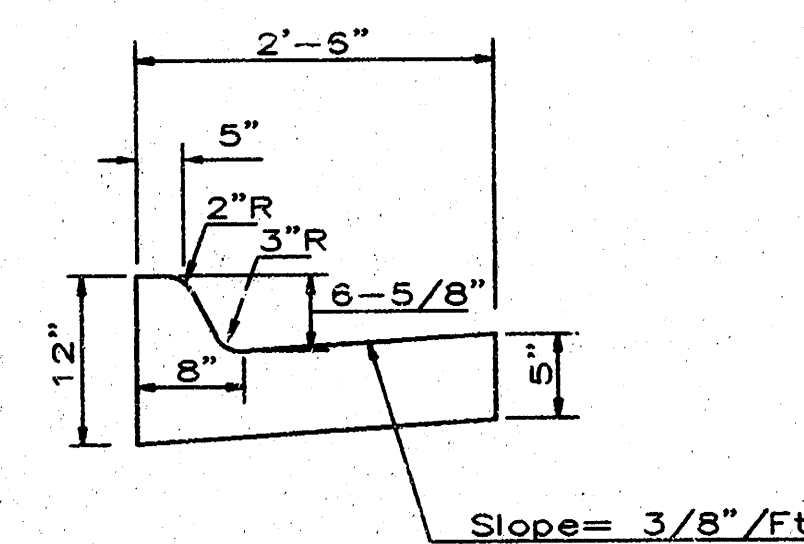
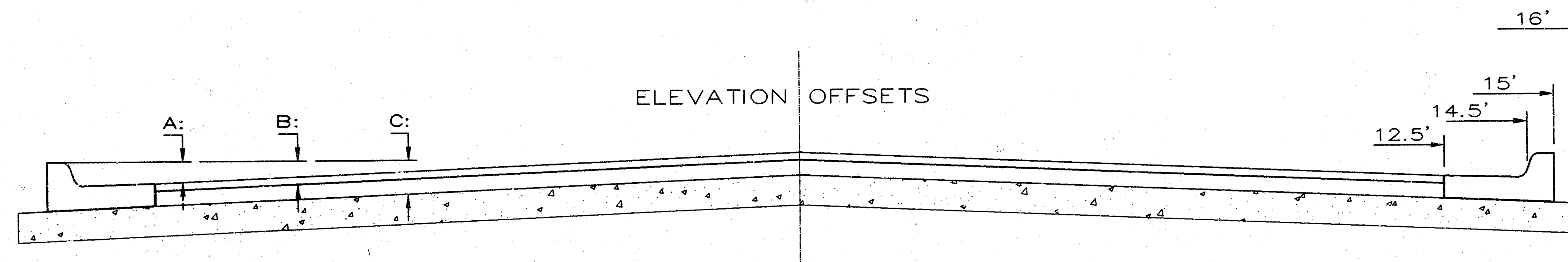
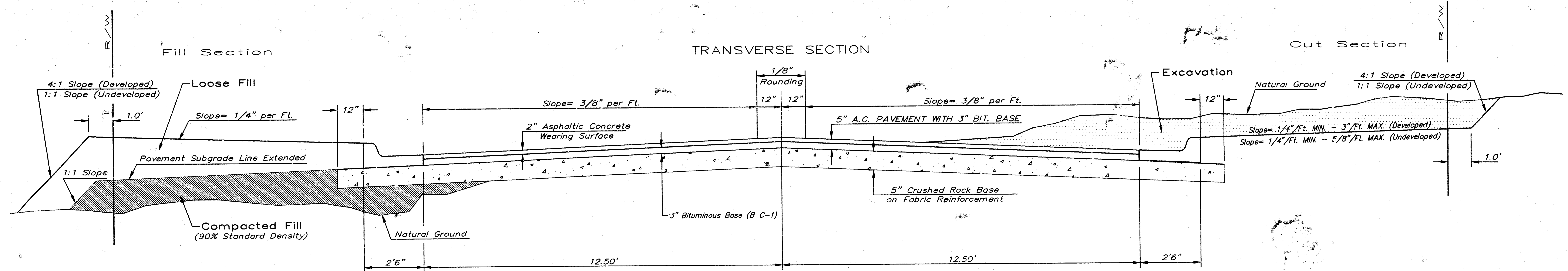
INDEX OF SHEETS

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2. 30' PAVEMENT SECTION
- 3-4. PLAN
5. STANDARD ENTRANCE DETAILS
- 6-7. CROSS SECTIONS

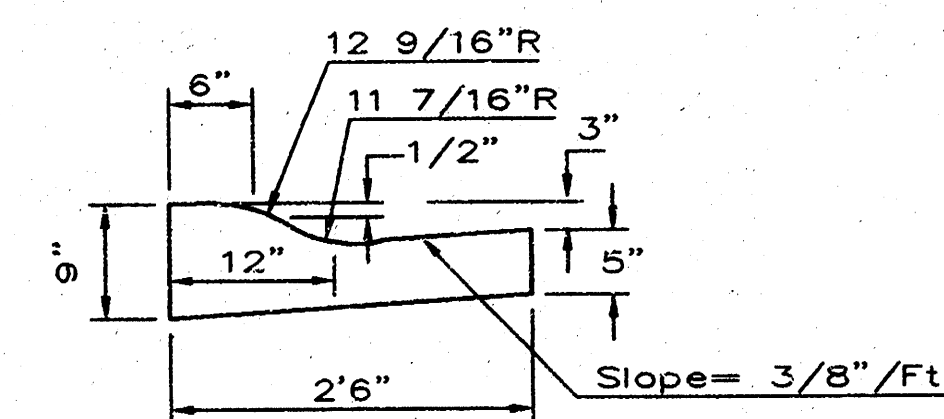


SRB 924 NORTH MAIN 316-244-8008
 WICHITA, KANSAS 67203 FAX 264-4621
SAVOY, RUGGLES & BOHM, P.A.
 ENGINEERING & SURVEYING

TYPICAL 30' B-B PAVEMENT DETAILS

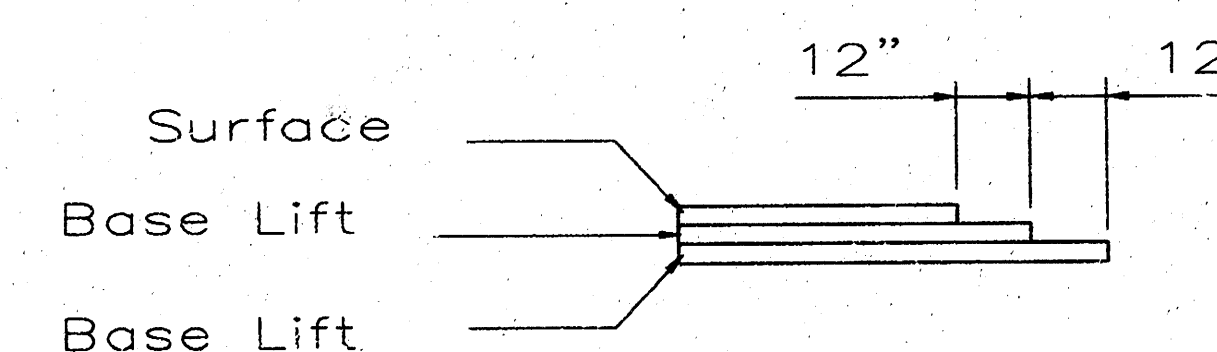


COMBINED CURB & GUTTER



COMBINED ROLL TYPE CURB & GUTTER

	DISTANCE FROM CENTERLINE (LT. & RT.)											
	0'	2'	4'	6'	7'	8'	10'	12'	12.5'	14.5'	15'	16'
A: Top of Curbs to Top of Surface Lift	0.11	0.16	0.22	0.28	0.31	0.34	0.41	0.47	0.49	—	—	—
B: Top of Curbs to Top of Upper Base Lift	0.28	0.32	0.38	0.45	0.47	0.49	0.57	0.63	0.66	—	—	—
C: Top of Curbs to Top of C.R. Subgrade	0.53	0.57	0.63	0.70	0.74	0.77	0.81	0.88	0.90	0.97	0.98	1.01



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 (3" BITUMINOUS BASE).

General Notes

FABRIC BASE REINFORCEMENT SHALL BE B X 1100 GEOGRID AS MANUFACTURED BY TENSAR CORPORATION OR APPROVED EQUAL. FABRIC BASE REINFORCEMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. CRUSHED ROCK SHALL BE UNIFORMLY GRADED FROM 1-1/2" MAXIMUM SIZE TO NOT MORE THAN 10% PASSING A NO. 200 SIEVE. ROCK QUALITY SHALL BE THE SAME AS SPECIFIED FOR COARSE AGGREGATE FOR CONCRETE MIXES.

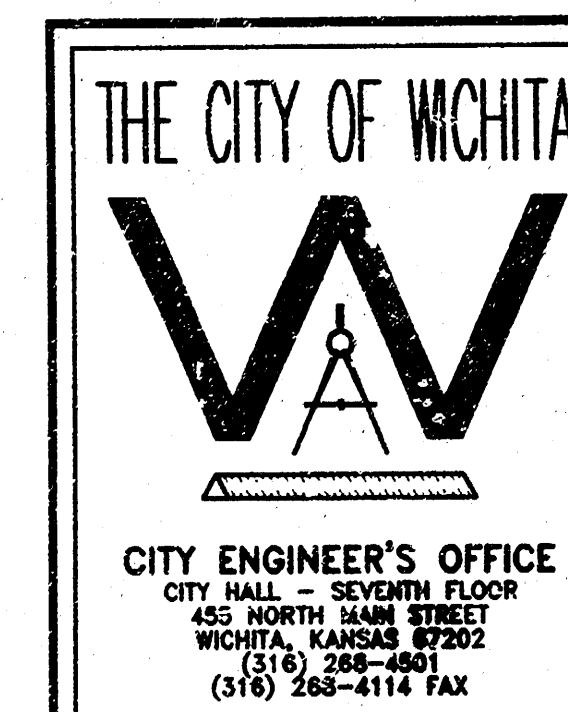
ROCK BASE IS TO BE COMPACTED AND SMOOTHED WITH A STEEL FACED ROLLER PRIOR TO PLACEMENT OF ASPHALT. TACK COAT WILL NOT BE APPLIED TO ROCK BASE.

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.

THE ASPHALTIC CONCRETE PAVEMENT BETWEEN THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 5" ASPHALTIC CONCRETE (3" BITUMINOUS BASE).



**30' PAVEMENT
5" ASPHALTIC CONCRETE
W/ CRUSHED ROCK BASE**

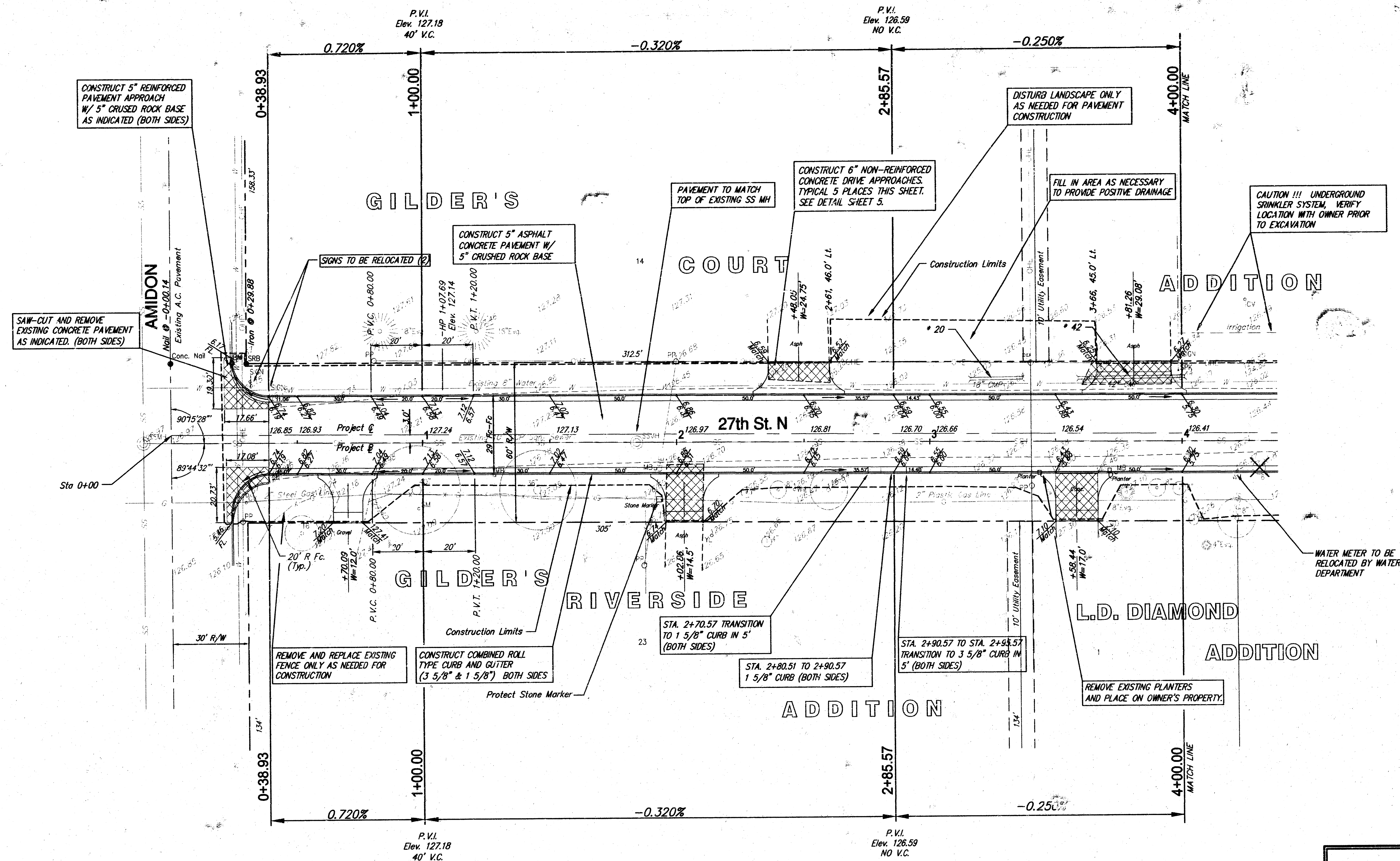
M. E. LINDEBAK P.E. - CITY ENGINEER

PROJECT NUMBER
472-82888

INDEX CODE
764670

DATE
MAR 96

SHEET 2 OF 7



SRB
SCALE 1" = 20'
IRON = •

VALVE BOX ADJUSTMENTS			
STATION	EXISTING ELEV.	ADJUSTED ELEV.	
0+30 20.5' LT.	126.72	126.45	
0+39 20.0' LT.	127.30	126.84	

NOTE: Contractor is responsible for all removal / relocation unless noted otherwise on the plan sheet. All removal / relocation shall be incidental to the Bid Item for Site Clearing / Restoration.

- *XX' = Remove XX L.F. Pipe
- [Hatched Box] = Drive to be removed
- [X] = Tree to be Removed

NOTE: ROLL-TYPE CURB TO BE CONSTRUCTED ON PAVEMENT DEPICTED ON THIS SHEET

STREET IMPROVEMENTS
27th Street North
WICHITA, KANSAS

SRB

924 NORTH MAIN
WICHITA, KANSAS 67203
<http://www.feat.com/~srb>

316-264-8008
FAX: 264-4621
E-mail: art@feat.com

SAVOY, RUGGLES & BOHM, P. A.
ENGINEERING & SURVEYING

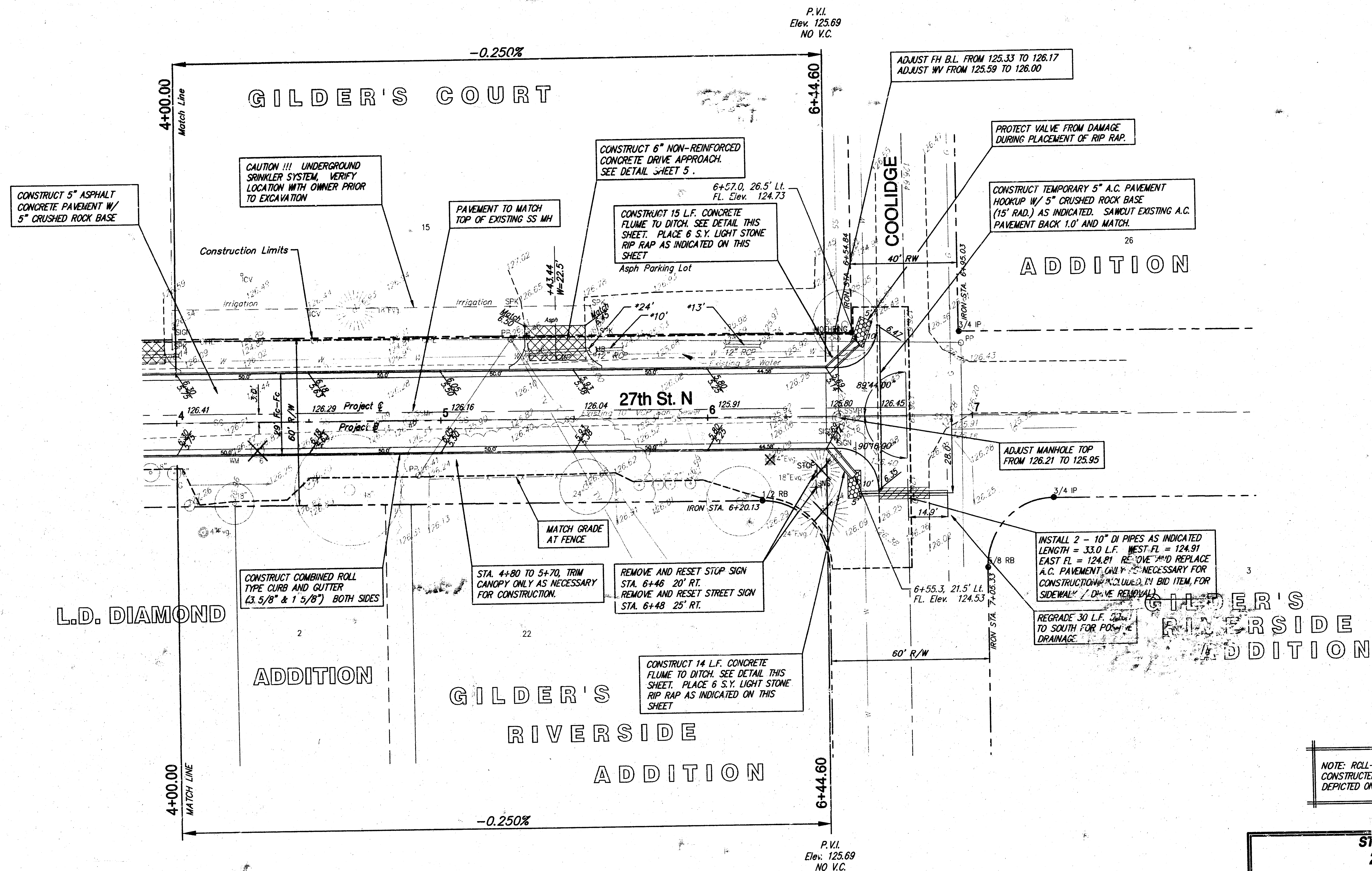
PROJECT NUMBER
472-82888 (764670)

DESIGN	DRAWN	UTILITY	REVIEW	DATE	REVISED
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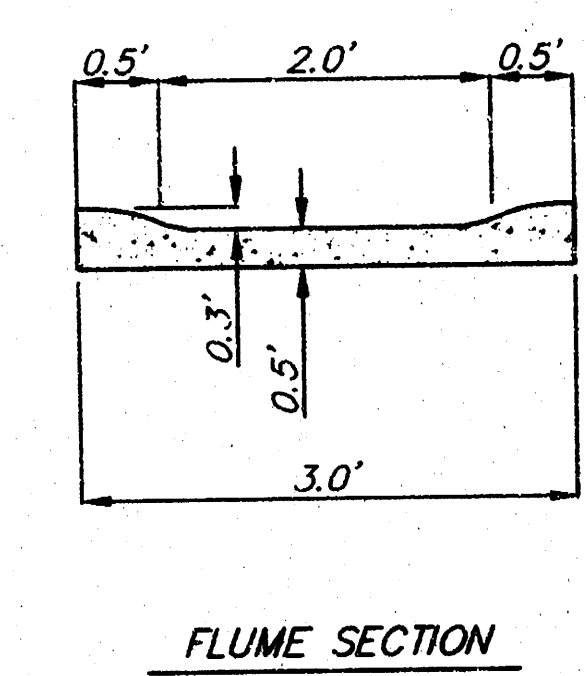
DATE
1999

SHEET
3

OF
7



SRB
SCALE 1" = 20'



VALVE BOX ADJUSTMENTS		
STATION	EXISTING ELEV.	ADJUSTED ELEV.
6+60, 23' LT.	125.30	126.10
6+60, 33' LT.	125.56	126.56

⊗ = Tree to be Removed

NOTE: Contractor is responsible for all removal / relocation unless noted otherwise on the plan sheet. All removal / relocation shall be incidental to the Bid Item for Site Clearing / Restoration.

STREET IMPROVEMENTS
27th Street North
WICHITA, KANSAS

SRB
 924 NORTH MAIN
 WICHITA, KANSAS 67203
 http://www.srb.com/~srb

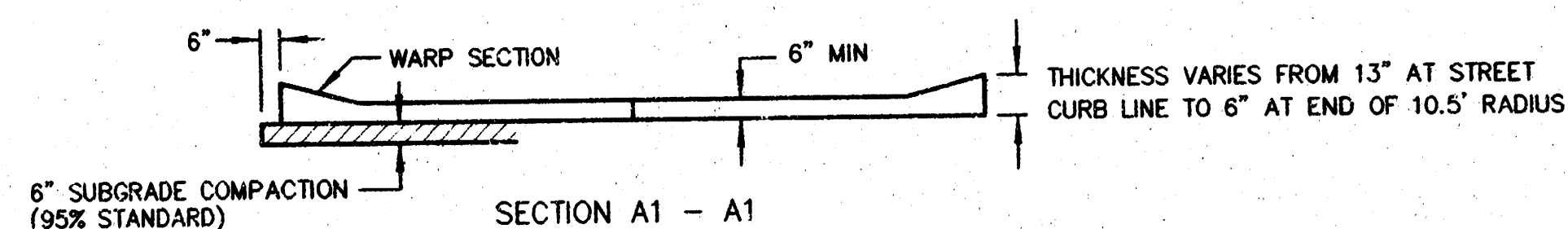
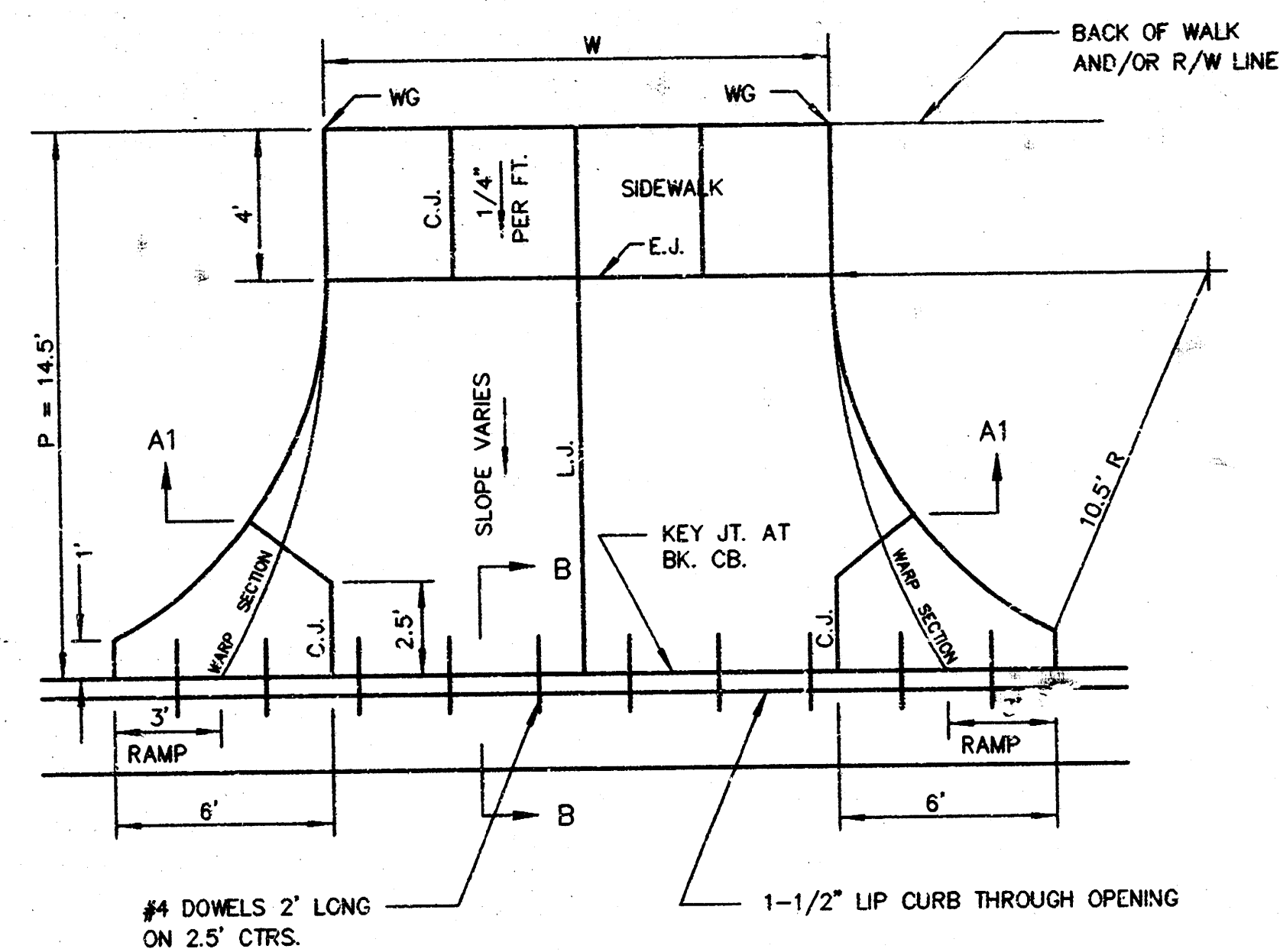
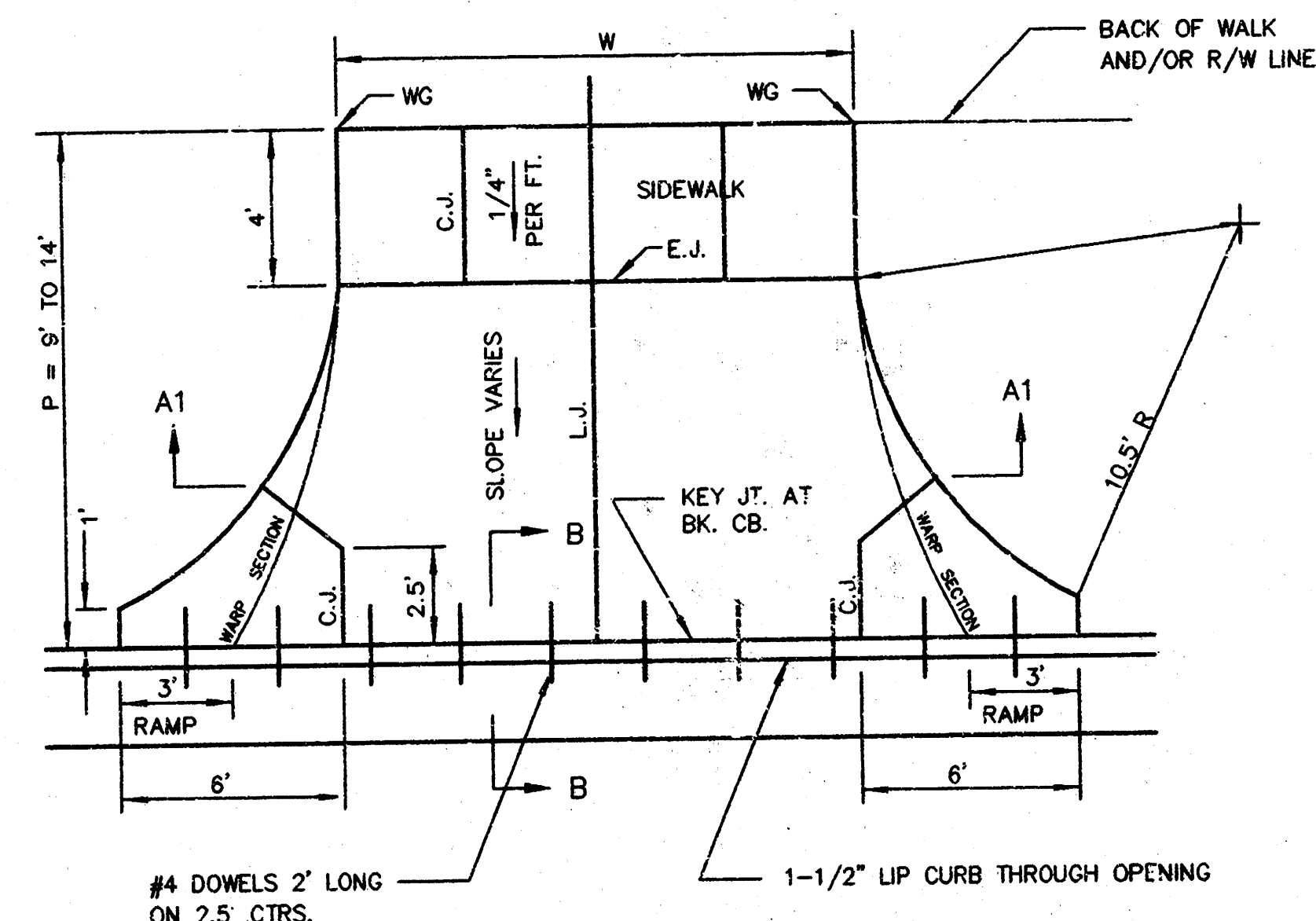
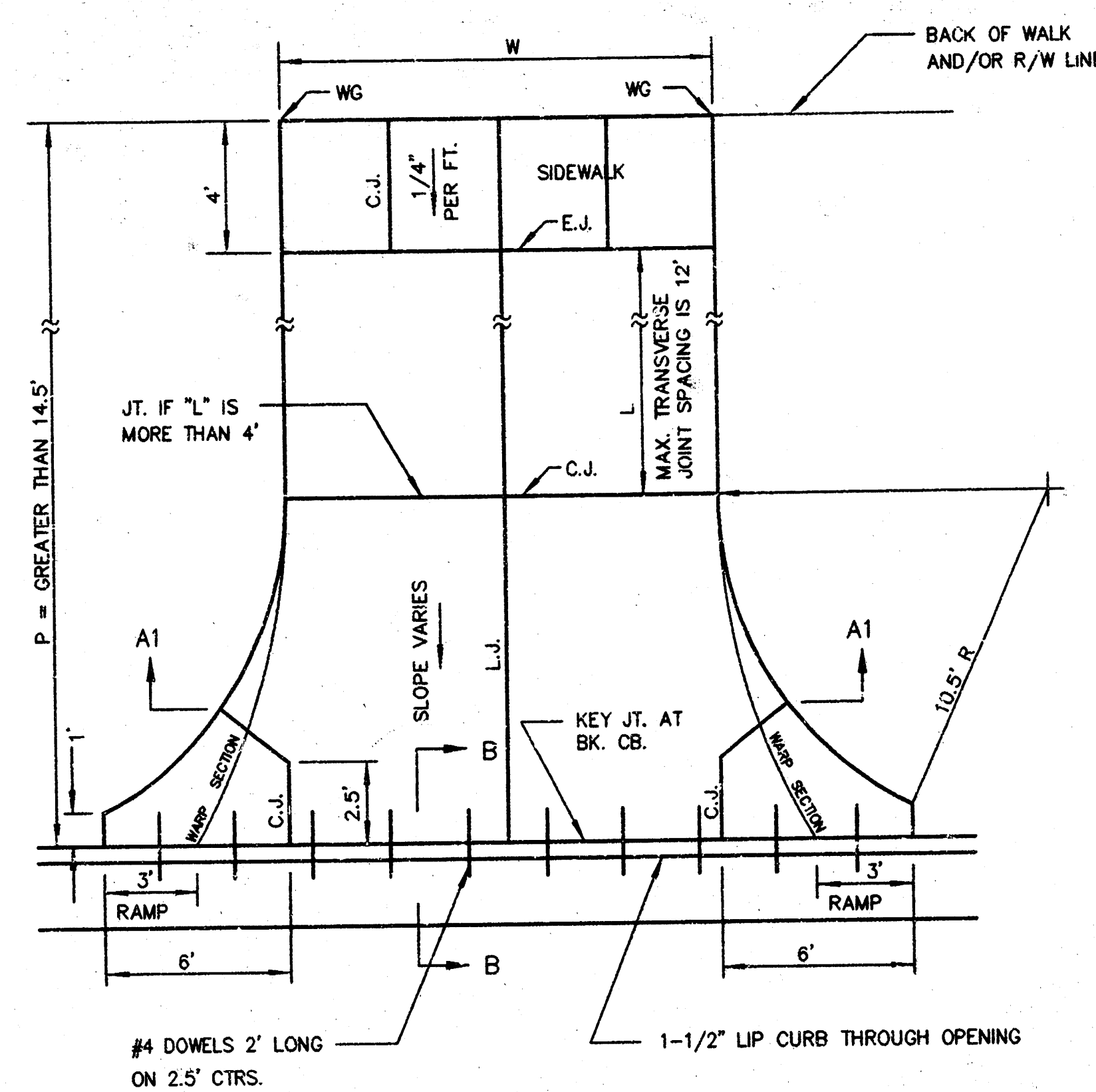
316-264-6008
 FAX 264-4621
 E-mail: srb@srb.com

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ENGINEERING & SURVEYING

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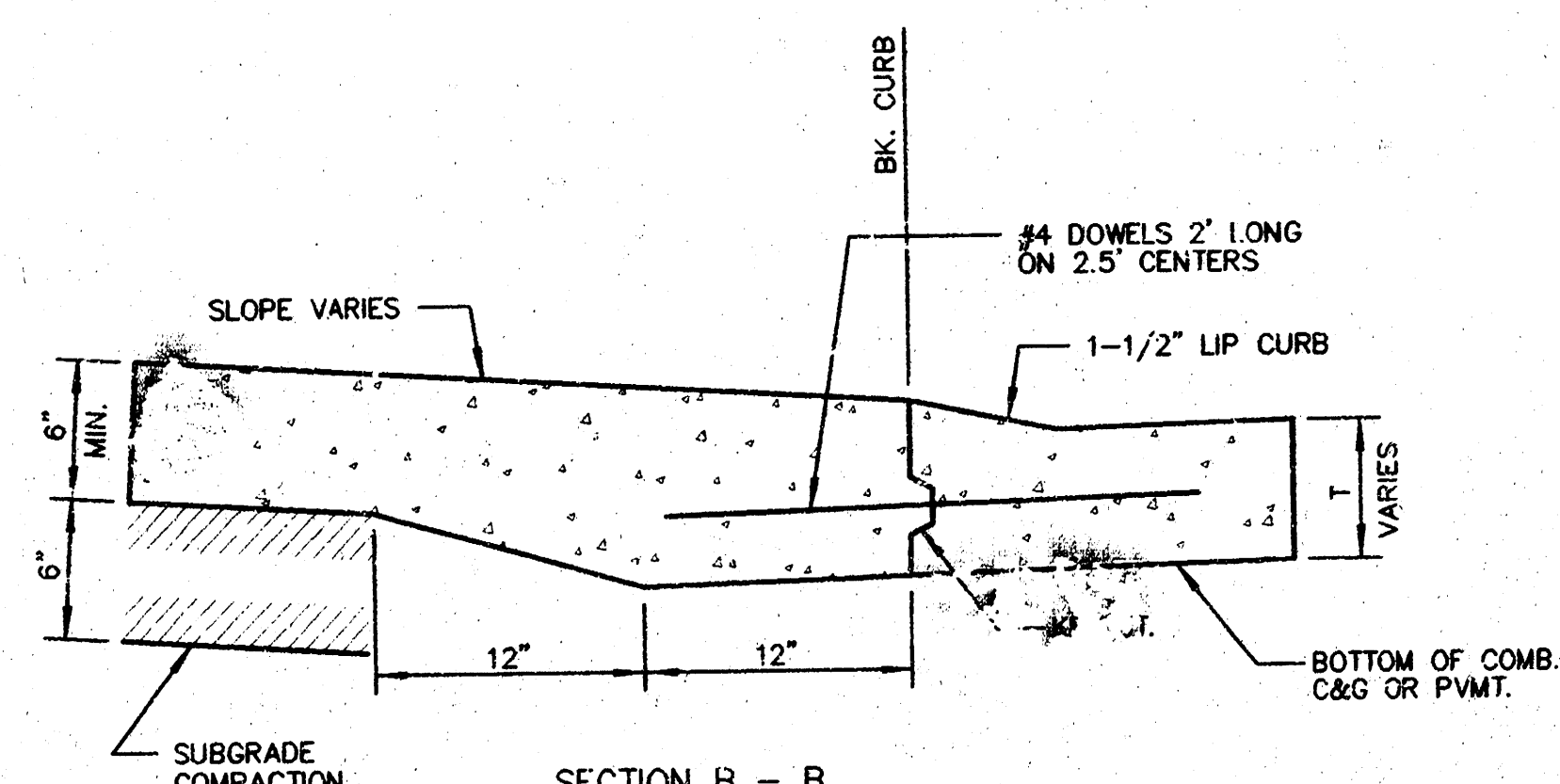
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SHEET
4
 OF
7

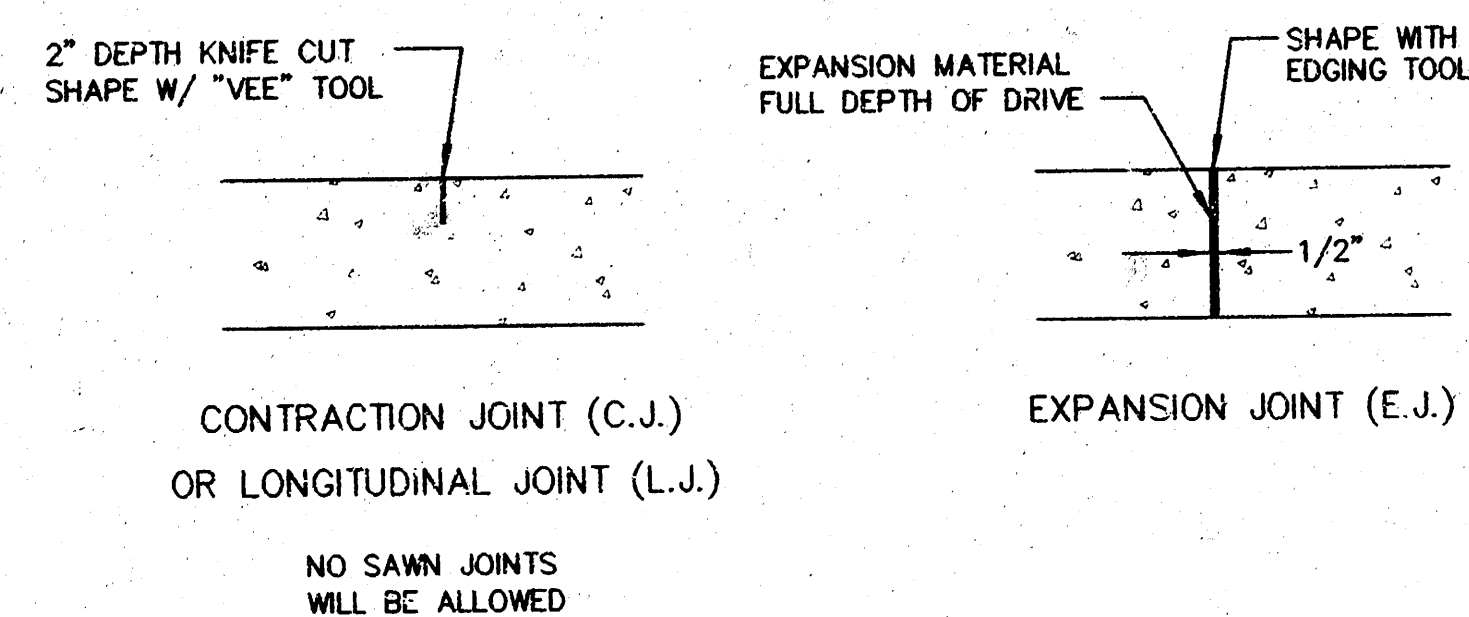


PARKING WIDTH "P"	9'	10'	11'	12'	13'	14.5'	20'	25'	30'	35'	40'	45'	50'
ABSOLUTE MAX. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB	0.27'	0.27'	0.32'	0.37'	0.52'	0.80'	1.35'	1.85'	2.35'	2.85'	3.35'	3.85'	4.35'
OPTIMUM MAX. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB	0.27'	0.27'	0.32'	0.37'	0.52'	0.62'	0.96'	1.22'	1.48'	1.74'	2.00'	2.26'	2.52'
OPTIMUM MIN. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB	0.19'	0.21'	0.23'	0.25'	0.30'	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)



BACK OF CURB DETAIL



GENERAL NOTES

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'.

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.

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.

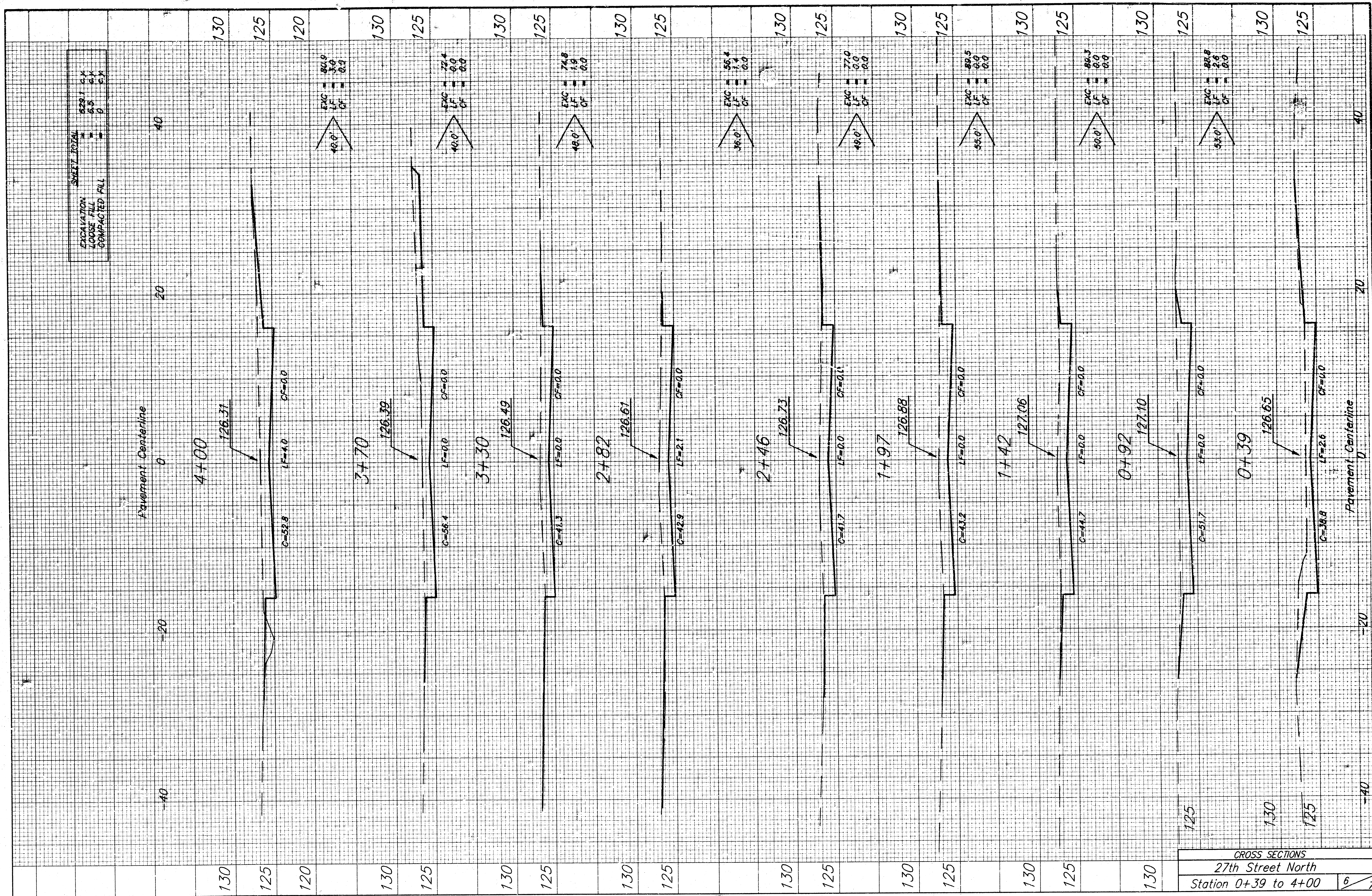
ONE HALF INCH EXPANSION JOINTS SHALL BE INSTALLED WHEREVER DRIVE CONSTRUCTION ABUTS SIDEWALK. ONE HALF INCH EXPANSION JOINTS SHALL ALSO BE INSTALLED ALONG THE PROPERTY LINE AND/OR BACK OF WALK LINE WHEN DRIVE CONSTRUCTION ALONG THIS LINE ABUTS CONCRETE PARKING LOTS OR CONCRETE DRIVE EXTENSION.

ALL DRIVEWAYS SHALL BE A MINIMUM OF 6" IN THICKNESS AND SHALL BE WITHOUT REINFORCEMENT. DRIVEWAYS MAY BE CONSTRUCTED THICKER THAN 6" AND MAY BE REINFORCED WITH 6"x12" W4-W4 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.

STANDARD DRIVE ENTRANCES FULL HEIGHT CURB

SRB		924 NORTH MAIN WICHITA, KANSAS 67203 http://www.felst.com/~srb		316-264-8008 FAX 264-4821 E-mail: srbs@felst.com	
SAVOY, RUGGLES & BOHM, P.A. ENGINEERING & SURVEYING					
PROJECT NUMBER					
DESIGN	DRAWN	UTILITY	REVIEW	DATE	REVISED
	JRA			Feb. 22, 1999	
					11871
					5
					7



CROSS SECTIONS
27th Street North
Station 0+39 to 4+00
6/7

CROSS SECTIONS
27th Street North
Station 4+30 to 6+64

Pavement Centerline

20

40

Exc = 63.8
LF = 3.5
OF = 0.0

Exc = 107.1
LF = 5.1
OF = 0.0

Exc = 92.7
LF = 6.6
OF = 0.0

Exc = 108.6
LF = 3.8
OF = 0.0

Exc = 79.8
LF = 1.7
OF = 0.0

Exc = 41.8
LF = 2.5
OF = 0.0

Exc = 20.6
LF = 1.8
OF = 0.0

Exc = 15.5
LF = 2.4
OF = 0.0

EXCAVATION
LOOSE FILL
COMPACTED FILL
SHEET TOTAL

Pavement Centerline

20

40

4+30

126.24

C=82.1

LF=2.3

OF=0.0

C=51.6

LF=3.2

OF=0.0

4+80

126.11

C=51.4

LF=3.9

OF=0.0

5+30

125.99

C=59.2

LF=0.0

OF=0.0

5+83

125.85

C=48.5

LF=2.3

OF=0.0

6+23

125.75

C=59.0

LF=4.0

OF=0.0

6+44

125.84

(End of Regular Pavement Section)

6+64

126.21

C=50.7

LF=0.0

OF=0.0

-20

-40

-20

-40