STREET IMPROVEMENTS
BRENTWOOD DRIVE
N.L. CLARK STREET TO S.L. MT. VERNON
PROJECT NO. 472-83100
OCA NO. 765595

GENERAL NOTES

Utility service lines, poles, valve boxes, meters, and et cetera 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

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

Cablevision	262-0661
Kansas Gas Service	383-8600
KG&E Electric	383-8600
Peoples Natural Gas Company	1-800-303-0357
Southwestern Bell Telephone Company	1-800-286-8313
City of Wichita Water Department	262-6000
City of Wichita Sewer Maintenance	262-6000

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 the 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.

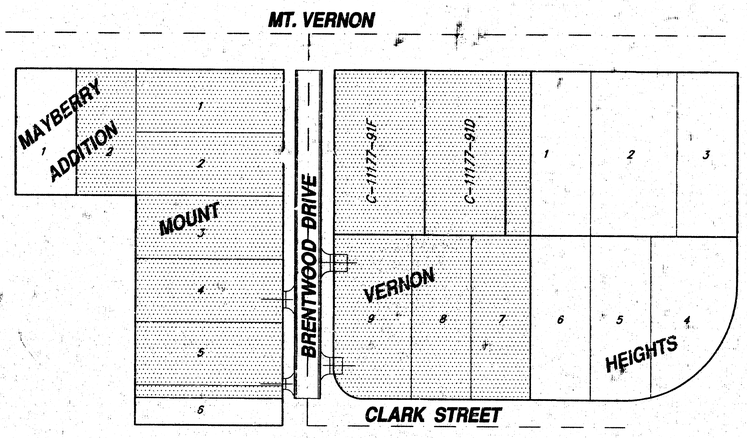
The Contractor shall give all property owners and/or tenants of developed property directly abutting the construction of this project a minimum of ten (10) days advance notice prior to start of construction.

This project includes a certain amount of roll type curb construction. Roll curbs shall be depressed through all driveway openings when such drives are constructed as a part of the project. No more than 4 drives 68 feet in width or equivalent combinations thereof, are to be constructed with this project.

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

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

Driveway widths and locations shown on the plan are tentative. Contractor will be required to obtain properly executed driveway request form signed by property owner or his authorized representative verifying such driveway widths and locations. Such forms shall be submitted to the Engineer for his review and approval.



IMPROVEMENT DISTRICT

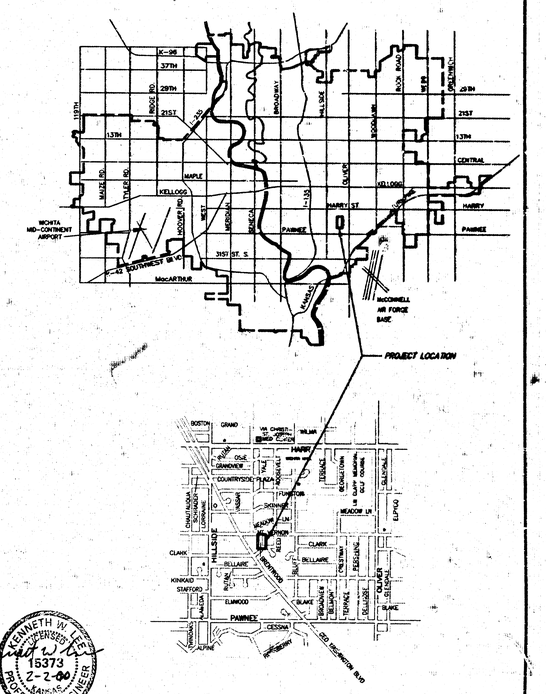
BENCH MARKS

BM #1 – C.O.W. B.M. @ the S.E. cor. of intersection. conc. base for school crossing light. Elev. 127.47

BM #2 – "□" cut top of curb @ S.E. corner Brentwood and Mt. Vernon Elev. 130.26

INDEX OF SHEETS

1. TITLE SHEET
2. 29' PAVEMENT DETAILS
3. VALLEY GUTTER DETAILS
4. BRENTWOOD PLAN SHEET
5. STANDARD ENTRANCE DETAILS
6. INCIDENTAL DRAINAGE
7. CROSS SECTIONS



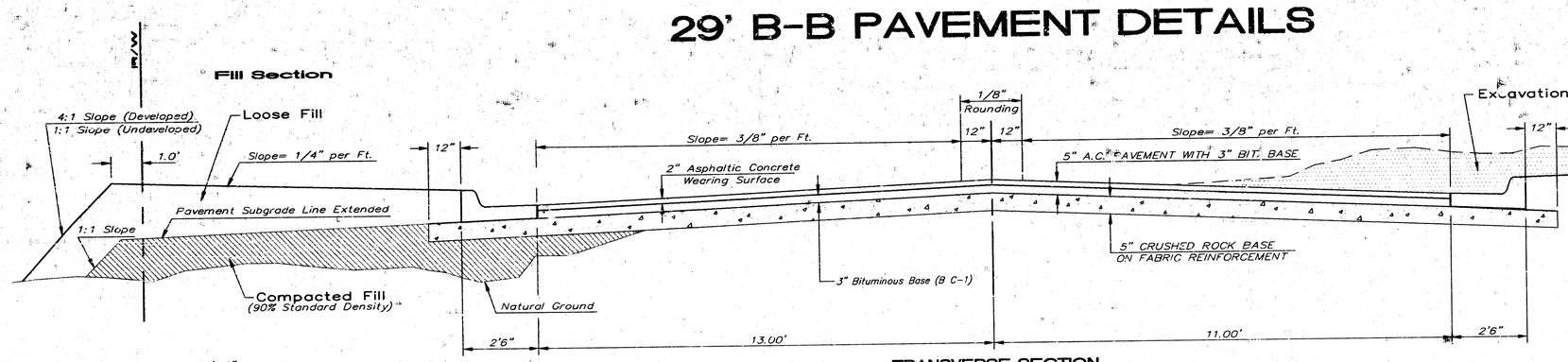
VICINITY MAP

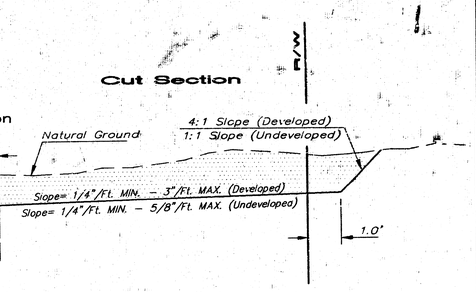
KENNETH W. [illegible]
15373
2-2-00
KANSAS
PROFESSIONAL ENGINEER

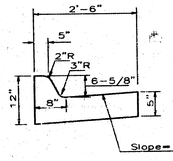
CITY OF WICHITA, KANSAS
MICHAEL E. LINDEBAK, P.E. - CITY ENGINEER

SRB 924 NORTH MAIN WICHITA, KANSAS 67203 316-264-8009 FAX 264-4621
SAVOY, RUGGLES & BOEHM, P.A.
ENGINEERING & SURVEYING

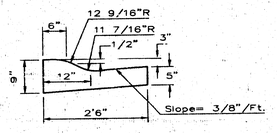
29' B-B PAVEMENT DETAILS





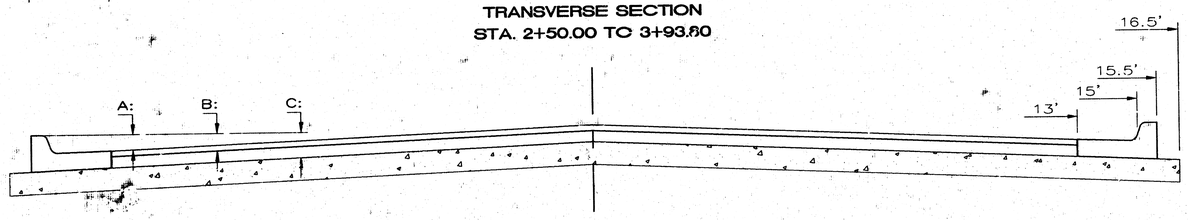


COMBINED CURB & GUTTER



COMBINED ROLL TYPE CURB & GUTTER

TRANSVERSE SECTION
STA. 2+50.00 TO 3+93.80



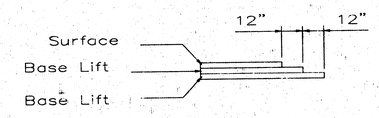
ELEVATION OFFSETS

	DISTANCE FROM CENTERLINE (LT. & RT.)										
	0'	2'	4'	6'	7.5'	10'	12'	13'	15'	15.5'	16.5'
A: Top of Curbs to Top of Surface Lift	0.10	0.14	0.21	0.27	0.32	0.39	0.46	0.49	–	–	–
B: Top of Curbs to Top of Upper Base Lift	0.27	0.31	0.37	0.44	0.48	0.56	0.62	0.65	–	–	–
C: Top of Curbs to Top of C.R. Subgrade	0.52	0.56	0.62	0.69	0.73	0.81	0.87	0.90	0.97	0.98	1.01

CRUSHED ROCK GRADATION REQUIREMENTS:
Percent of Aggregate Retained

1 1/2"	0
3/4"	15-60
#4	40-80
#40	74-92
#200	88-96

Rock Quality Shall Be The Same As Specified For Coarse Aggregate For Asphalt Concrete Mixes.



TRANSVERSE CONSTRUCTION JOINTS

Transverse construction joints shall be constructed in flexible base pavements at locations where pavement joins existing flexible base pavement as shown by the detail. All costs associated with the construction of the transverse joint shall be included in the bid price for Square Yards 5" ASPHALTIC CONCRETE (3" BITUMINOUS BASE).

SUBGRADE ALTERNATES

1. ALTERNATE NO. 1 – 5" CRUSHED ROCK BASE ON FABRIC REINFORCEMENT
2. ALTERNATE NO. 2 – 5" RECYCLED ASPHALT PAVEMENT BASE ON FABRIC REINFORCEMENT

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.

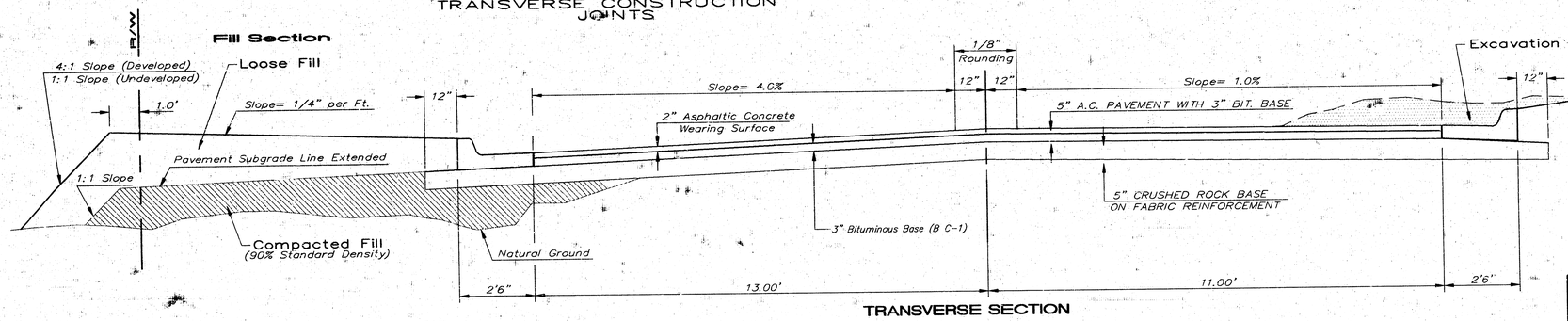
ROCK BASE IS TO BE COMPACTED AND SMOOTHED WITH A STEEL FACED ROLLER PROIR TO PLACEMENT OF ASPHALT. TACK COAT WILL NOT BE APPLIED TO ROCK BASE.

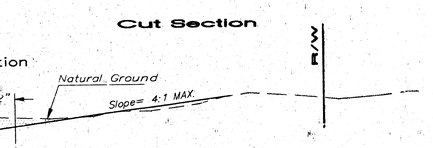
A TACK COAT OF EMULSIFIED ASPHALT (SC-1H OR CSS-1H) SHALL BE APPLIED AT AN APPROXIMATE RATE OF 0.05 GALLONS PER SQUARE YARD BETWEEN EACH LIFT OF ASPHALTIC MATERIAL.

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.)





TRANSVERSE SECTION
STA. 0+30.30 TO 2+50.00

	DISTANCE FROM CENTERLINE (LT.)										DISTANCE FROM CENTERLINE (RT.)									
	16.5'	15.5'	15'	13'	12'	10'	8'	6'	4'	2'	0'	2'	4'	6'	8'	10'	12'	13'	13.5'	14.5'
A: Top of Curbs to Top of Surface Lift	–	–	–	0.45	0.41	0.33	0.25	0.17	0.09	0.01	-0.06	-0.05	-0.03	-0.01	0.01	0.03	0.05	–	–	–
B: Top of Curbs to Top of Upper Base Lift	–	–	–	0.62	0.58	0.50	0.42	0.34	0.26	0.18	0.11	0.12	0.14	0.16	0.18	0.20	0.22	–	–	–
C: Top of Curbs to Top of C.R. Subgrade	1.04	1.00	0.98	0.87	0.83	0.75	0.67	0.59	0.51	0.43	0.36	0.37	0.39	0.41	0.43	0.45	0.47	0.48	0.49	0.50

NOTE: ALL DISTANCES REFERENCED TO WEST CURB

TYPICAL 29' PAVEMENT DETAILS
5" PAVEMENT W/ CRUSHED ROCK BASE
WICHITA, KANSAS

SRB
924 NORTH MAIN
WICHITA, KANSAS 67203
http://www.srb1.com
316-264-8008
FAX 264-4621
E-mail: srb@srb1.com
SAVOY, RUGGLES & BOHM, P.A.
ENGINEERING & SURVEYING

PROJECT NUMBER
472-83100

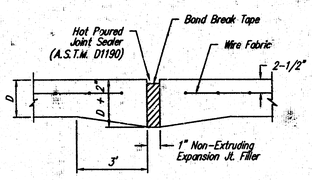
DESIGN	DRAWN	UTILITY	REVIEW	DATE	REVISED
KWL	KWL			Jan. 31, 2000	

SHEET FILE: 29ft. Pavement Details (Rock Base)

SRB JOB NO. 1457

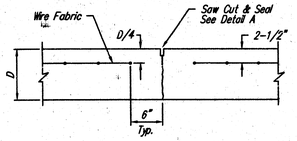
SHEET 2 OF 7

VALLEY GUTTER JOINT PLANS

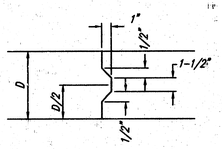


EXPANSION JOINT

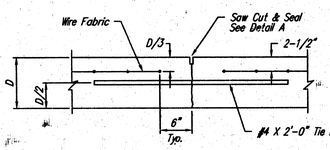
NOTE: Extra Thickness to be Subsidiary to Price of Square Yards Pavement



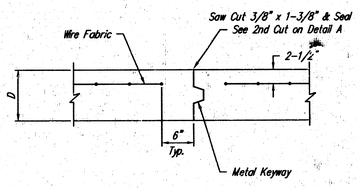
CONTRACTION JOINT DETAIL (C.J.)



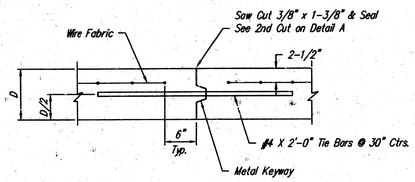
KEYWAY DETAIL



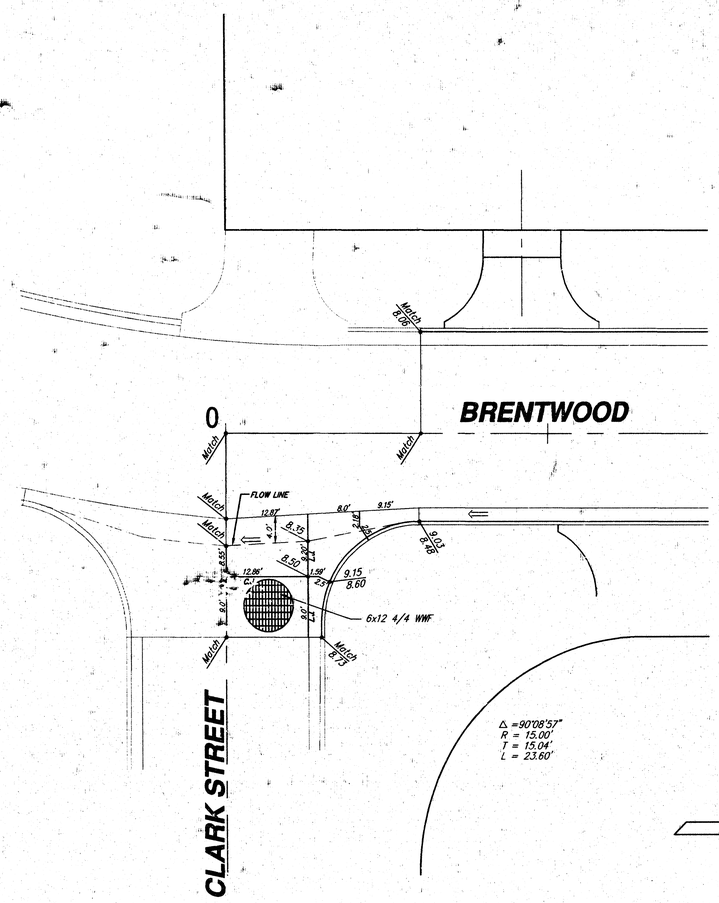
LONGITUDINAL JOINT DETAIL (L.J.)



OPTIONAL CONTRACTION JOINT

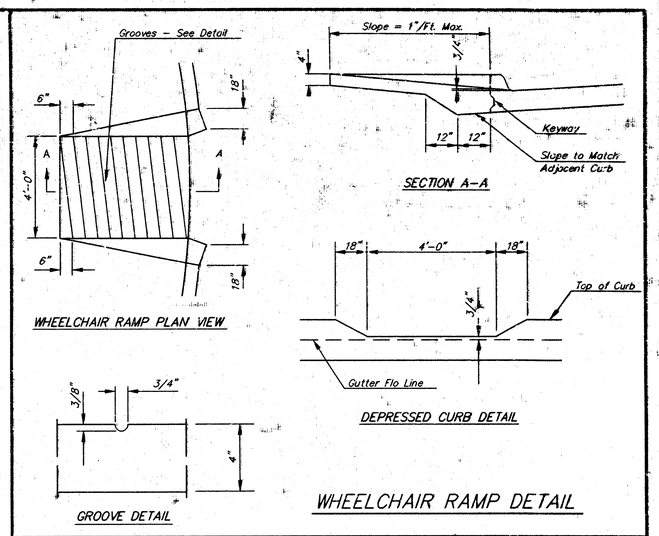


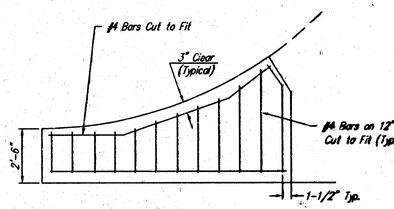
OPTIONAL LONGITUDINAL JOINT DETAIL (L.J.)



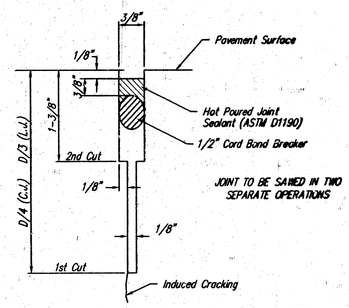
SCALE 1" = 10'

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





WING REINFORCING DETAIL



SAW JOINT DETAIL

BRENTWOOD STREET IMPROVEMENTS

VALLEY GUTTER AND JOINT DETAILS

WICHITA, KANSAS

SRB
924 NORTH MAIN
WICHITA, KANSAS 67203
http://www.feist.com/~srb
316-264-8008
FAX 264-4621
E-mail: srb@feist.com

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

PROJECT NUMBER
472-83100

DESIGN	DRAWN	UTILITY	REVIEW	DATE	REVISED
K.W.L.	J.R.A.	-	-	Jan. 31, 2000	-

SRB JOB 14707
SHEET 3 OF 7
DWG TITLE Valley Gutter Detail

SRB

SCALE 1" = 20'
IRON = ●

+2.352% | +0.600% | +0.500% | −0.900% | −1.600%

P.V.I. Elev. 130.25 50' V.C. | P.V.I. Elev. 130.85 NO V.C. | P.V.I. Elev. 131.10 50' V.C. | P.V.I. Elev. 130.20 NO V.C.

0+30.26 | 1+00 | 2+00 | 2+50 | 3+50 | 3+93.74

STA. 2+00 TO STA. 2+50, TRANSITION FROM MODIFIED PAVEMENT SECTION TO NORMAL PAVEMENT SECTION

CONSTRUCT 5" ASPHALT CONCRETE PAVEMENT W/ 5" CRUSHED ROCK BASE ON FABRIC REINFORCEMENT

INCIDENTAL DRAINAGE, SEE SHEET 6

TRIM OR REMOVE SHRUB AS NECESSARY TO CONSTRUCT STORM SEWER.

REMOVE A.C. PAVEMENT AS INDICATED. REPLACE WITH 5" A.C. PAVEMENT W/ 5" CRUSHED ROCK BASE.

MOUNT VERNON HEIGHTS

BRENTWOOD DRIVE

MT. VERNON ROAD

CLARK STREET

89°52'18"

90°7'42"

STA. 3+93.74 END NORMAL PAVEMENT SECTION. SEE SHEET 2.

REMOVE NORTH HALF OF EXISTING CONC. VALLEY GUTTER. CONSTRUCT 6" REINFORCED CONCRETE VALLEY GUTTER. SEE GUTTER DETAIL SHEET 3.

PROTECT TREES FROM DAMAGE DURING STREET CONSTRUCTION

CONSTRUCT 6" NON-REINFORCED CONCRETE DRIVE APPROACHES. TYPICAL 4 PLACES THIS SHEET. SEE DETAIL SHEET 5

TRIM OR REMOVE SHRUB AS NECESSARY TO CONSTRUCT STORM SEWER.

CONSTRUCT STANDARD ROLL-TYPE COMBINED CURB AND GUTTER (3 5/8") and (1 1/2")

C-1177-91F

STA. 3+50 TRANSITION CURB TO MATCH EXISTING.

TRANSITION FROM ROLL TYPE TO FULL HEIGHT CURB & GUTTER IN 5'. (BOTH SIDES)

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

+2.423% | +0.600% | −0.320% | −0.900% | −0.524%

P.V.I. Elev. 130.72 50' V.C. | P.V.I. Elev. 131.32 NO V.C. | P.V.I. Elev. 131.16 NO V.C. | P.V.I. Elev. 130.26 NO V.C.

0+30.26 | 1+00.00 | 2+00 | 2+50 | 3+50 | 3+93.80

A.C. Pavement Removal

Concrete Pavement Removal

NOTE: ALL TREE AND SHRUB REMOVAL SHALL BE INCIDENTAL TO THE BID ITEM FOR SITE CLEARING AND RESTORATION.

STREET IMPROVEMENTS
BRENTWOOD DRIVE
WICHITA, KANSAS

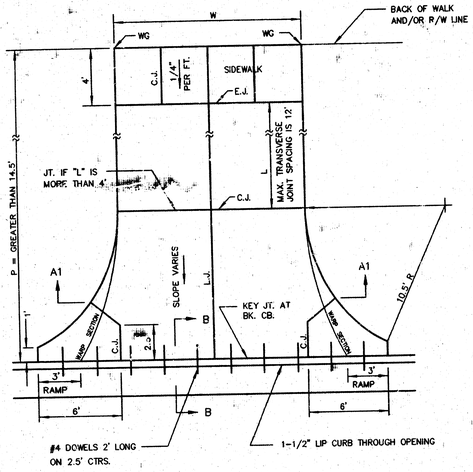
SRB
924 NORTH MAIN
WICHITA, KANSAS 67203
316-264-8008
FAX 264-4621
http://www.srb1.com
E-mail: srb@srb1.com

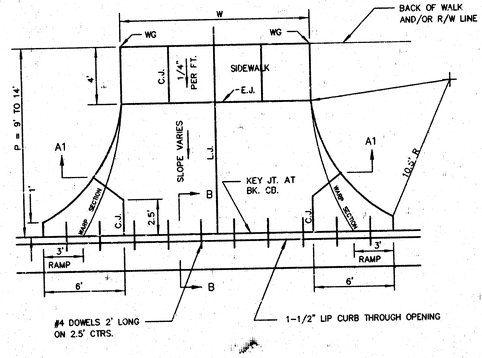
SAVOY, RUGGLES & BOHM, P.A.
ENGINEERING & SURVEYING

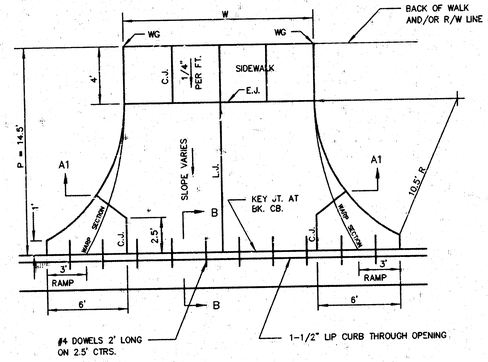
PROJECT NUMBER 472-83100

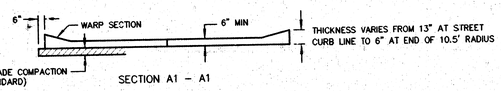
DESIGN	DRAWN	UTILITY	REVIEW	DATE	REVISED
K.W.L.	J.R.A.	-		Jan. 31, 2000	-

SRB JOB 11757 | SHEET 4 | OF 7 SHEETS PLAN





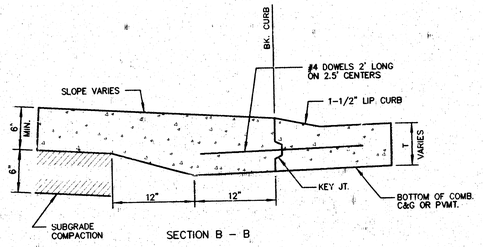




SECTION A1 – A1

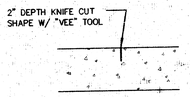
PARKING WIDTH "P"	9'	10'	11'	12'	13'	14.5'	20'	25'	30'	35'	40'	45'	50'
ABSOLUTE MAX. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB	0.27'	0.27'	0.32'	0.37'	0.52'	0.80'	1.35'	1.85'	2.35'	2.85'	3.35'	3.85'	4.35'
OPTIMUM MAX. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB	0.27'	0.27'	0.32'	0.37'	0.52'	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	–.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)



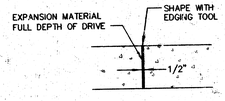
SECTION B – B

BACK OF CURB DETAIL



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

NO SAWN JOINTS WILL BE ALLOWED



EXPANSION JOINT (E.J.)

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 THE 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 MST BE ADJUSTED ACCORDINGLY FOR OTHER CURB HEIGHTS. VALUES SHOWN IN THE TABLES WITH MINUS SIGNS INDICATE ELEVATIONS BELOW TOP OF FULL HEIGHT CURB.

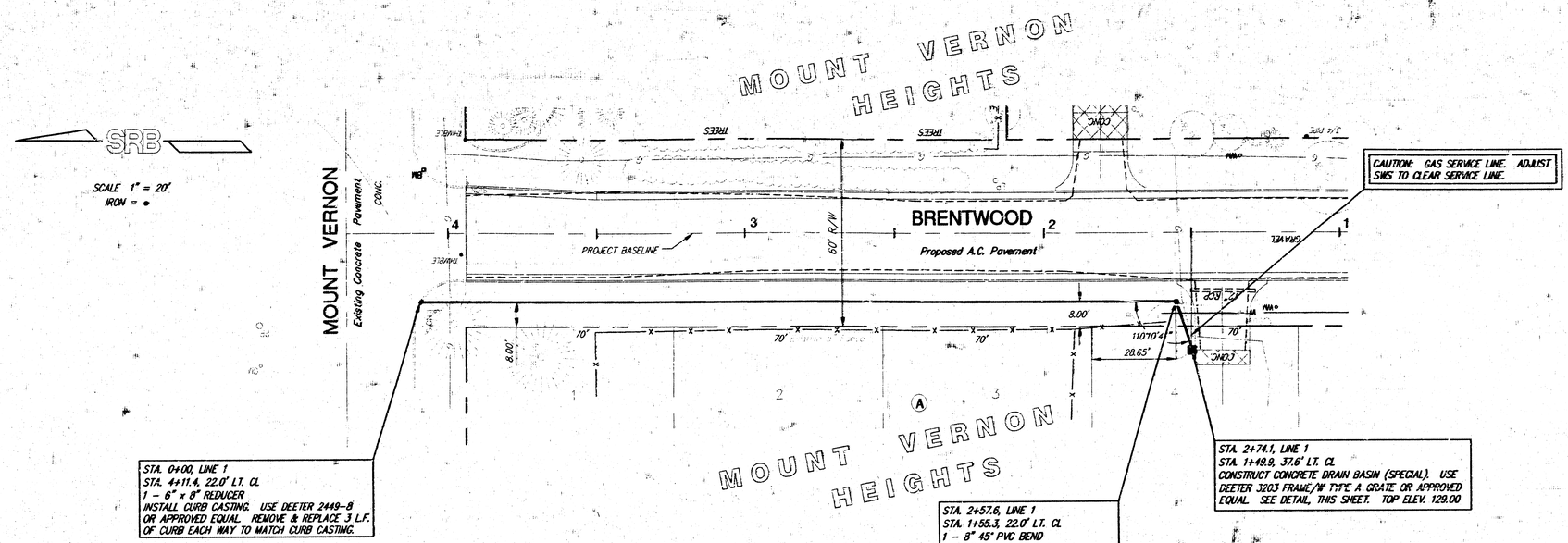
STANDARD DRIVE ENTRANCES CITY OF WICHITA

SRB
924 NORTH MAIN
WICHITA, KANSAS 67203
http://www.srb1.com
316-264-8008
FAX 264-4621
E-mail: srb@srb1.com
SAVOY, RUGGLES & BOHM, P.A.
ENGINEERING & SURVEYING

PROJECT NUMBER
472–83100

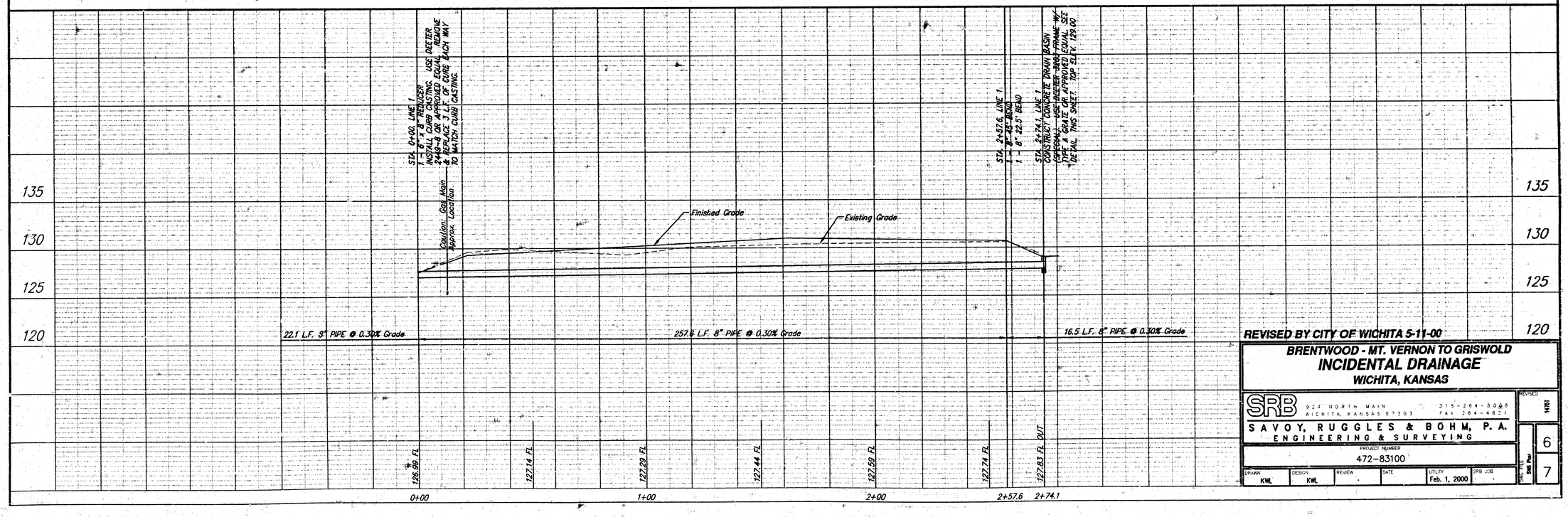
DESIGN	DRAWN	UTILITY	REVIEW	DATE	REVISED
K.W.L.	JRA	.		Jan. 31, 2000	.

SHEET 5 OF 7



CONCRETE DRAIN BASIN DETAIL

CONTACT ADVANCED DRAINAGE SYSTEMS (ADS) AT (614) 852-0687
TO ORDER COMPONENTS FOR STORM SEWER CONSTRUCTION.



REVISED BY CITY OF WICHITA 5-11-00

BRENTWOOD - MT. VERNON TO GRISWOLD
INCIDENTAL DRAINAGE
WICHITA, KANSAS

SRB
924 NORTH MAIN
WICHITA, KANSAS 67203
315-264-5088
FAX 264-4821
SAVOY, RUGGLES & BOHM, P.A.
ENGINEERING & SURVEYING

PROJECT NUMBER 472-83100

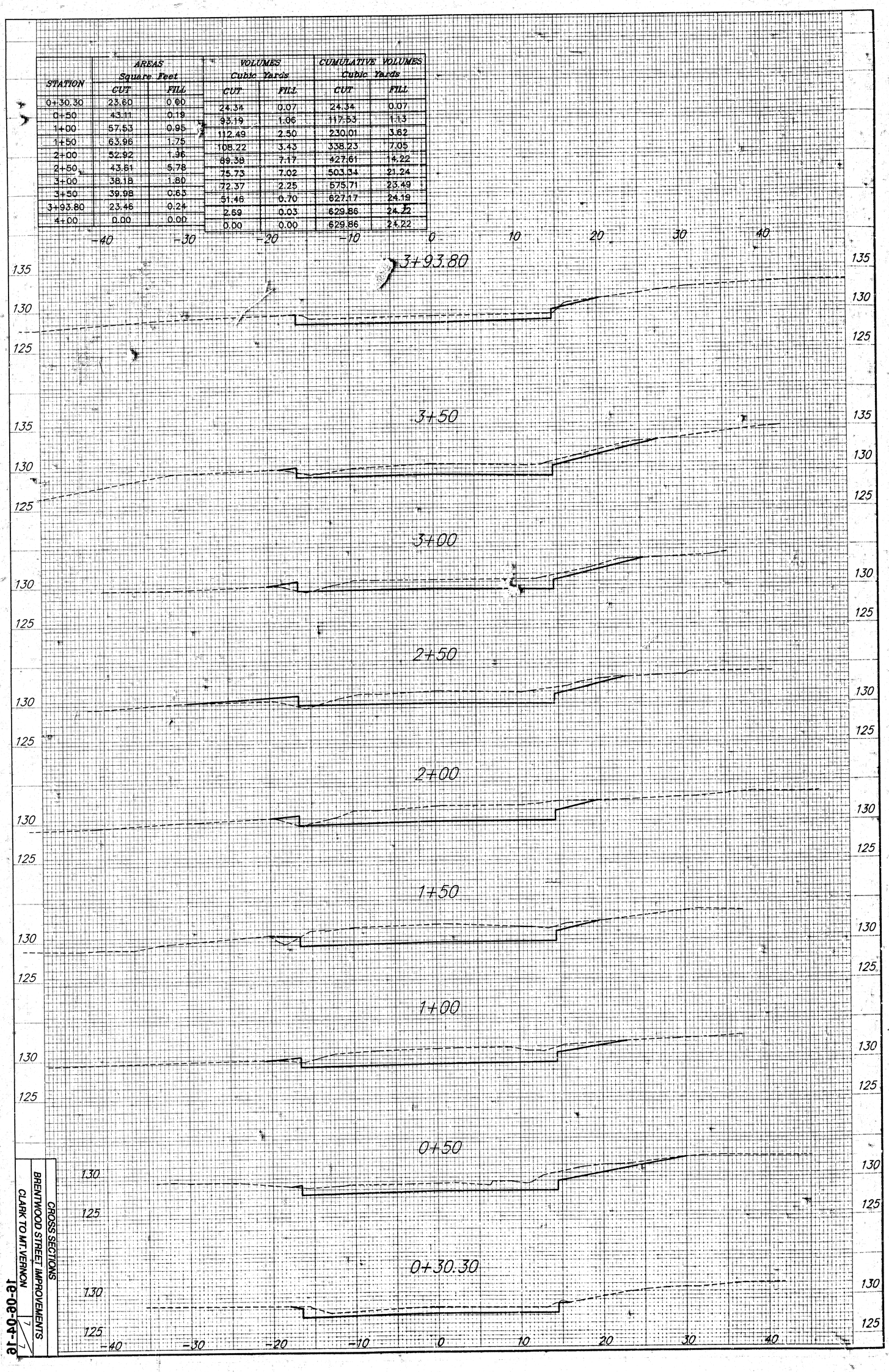
DRAWN	DESIGN	REVIEW	DATE	UTILITY	SRB JOB
KWL	KWL			Feb. 1, 2000	

REVISED 14161

PRINT FILE 3366 Plan

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7

STATION	AREAS Square Feet CUT	AREAS Square Feet FILL	VOLUMES Cubic Yards CUT	VOLUMES Cubic Yards FILL	CUMULATIVE VOLUMES Cubic Yards CUT	CUMULATIVE VOLUMES Cubic Yards FILL
0+30.30	23.60	0.00				
			24.34	0.07	24.34	0.07
0+50	43.11	0.19				
			93.19	1.06	117.53	1.13
1+00	57.53	0.95				
			112.49	2.50	230.01	3.62
1+50	63.96	1.75				
			108.22	3.43	338.23	7.05
2+00	52.92	1.36				
			89.38	7.17	427.61	14.22
2+50	43.61	5.78				
			75.73	7.02	503.34	21.24
3+00	38.18	1.80				
			72.37	2.25	575.71	23.49
3+50	39.98	0.63				
			51.46	0.70	627.17	24.19
3+93.80	23.46	0.24				
			2.69	0.03	629.86	24.22
4+00	0.00	0.00				
			0.00	0.00	629.86	24.22



CROSS SECTIONS
BRENTWOOD STREET IMPROVEMENTS
CLARK TO MT. VERNON
7
7

01-20-00-01