WICHITA – SEDGWICK COUNTY
W-SC
METROPOLITAN AREA PLANNING DEPARTMENT
CITY HALL – TENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202
(316) 268-4561

April 18, 1983

Bill G. Yung Design
8225 E. 35th St. North
Wichita, Kansas 67226

Re: S/D 83-25 - Preliminary plat of Summerfield 2nd Addition

Dear Mr. Yung:

At the regular meeting of the Subdivision Committee of the Metropolitan Area Planning Commission, April 14, 1983, the above-captioned plat was considered. The action of the Committee was to approve the preliminary and authorize preparation of the final plat, subject to the following:

A. Easements of sufficient width shall be platted adjacent to the private street reserve to provide a total width of 50 feet.

B. The street name on the final plat shall be "Peppertree Circle."

C. The applicant shall guarantee construction of the private street to public street standards.

D. The applicant shall guarantee extension of sanitary sewer and City water to serve each lot.

E. It is recommended that the area south and west of the entry sign on Lot 2 be platted as a reserve rather than part of Lot 2. Entry signs are permitted only in accordance with Article 28.04.139 C.2 of the Zoning Ordinance.

F. An "easement for wall" should not be designated on the final plat as it is not being granted to the public. Restrictions can be placed on the property, as desired by the developer, to allow for this wall.

G. The applicant shall submit an avigational easement and restrictive covenant assuring that adequate construction methods will be used to minimize noise pollution within any habitable buildings built on subject property.

H. If improvements are guaranteed by petition, a notarized certificate listing the petitions shall be submitted to the Planning Department for recording.

I. Provisions shall be made for ownership and maintenance of the reserves. If a homeowners' association is to be responsible, the association shall be formed prior to recording the plat OR covenants shall be submitted for recording which state when the association will be formed and when the reserves will be deeded to it. The covenants shall also specify who is to own and maintain the reserves prior to the association taking over these responsibilities.

J. The applicant shall make satisfactory arrangements with K.G. and E. for removal of the existing overhead electric service line and construction of a new underground line.

K. The applicant shall install or guarantee the installation of all utilities and facilities which are applicable and described in Article 8 of the MAPC Subdivision Regulations.

L. Requirements for a final plat (see pages 20-25, Part 4, Article 5 of the MAPC Subdivision Regulations).

Enclosed herewith is the "marked" copy of the preliminary plat for your information and files.

If you should have any questions concerning this matter, please call.

Sincerely,

L.O.

Louise Olivarez
Senior Planner

LO:bh

cc: Mid-Kansas Engineering Consultants, 240 N. Rock Rd., Suite 130
Tallgrass Company, P.O. Box 4048, 67204
Mike Lindebak, City Engineering

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**********************************************
* HEC-2 WATER SURFACE PROFILES               *
*                                            *
* Version  4.6.0;  February 1991             *
*                                            *
* RUN DATE    03JAN92    TIME   14:21:09      *
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**********************************
* U.S. ARMY CORPS OF ENGINEERS   *
* HYDROLOGIC ENGINEERING CENTER  *
* 609 SECOND STREET, SUITE D     *
* DAVIS, CALIFORNIA 95616-4687   *
*          (916) 756-1104        *
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X     X  XXXXXXX   XXXXX             XXXXX
X     X  X        X     X           X     X
X     X  X        X                       X
XXXXXXX  XXXX     X         XXXXX    XXXXX
X     X  X        X                  X
X     X  X        X     X            X
X     X  XXXXXXX  XXXXX              XXXXXXX
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ENCROACHMENT ANALYSIS (FLOODWAY)

THIS RUN EXECUTED 03JAN92 14:21:09

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**************************************
 HEC-2 WATER SURFACE PROFILES

 Version  4.6.0;  February 1991
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T1      MIDDLE BRANCH OF GYPSUM CREEK                    WICHITA, KANSAS
T2      EXTENSION OF FIS NORTH OF 21ST STREET
T3      100-YEAR WATER SURFACE PROFILE                   P.E.C.  12/27/91

J1  ICHECK    INQ      NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

        0        2         0         0         0         0         0         0   1372.62         0

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

        1        0        -1         0         0         0         0         0         0         0


J3  VARIABLE CODES FOR SUMMARY PRINTOUT

    110       150       200

NC    0.050     0.050     0.055       0.1       0.3
ET                        9.4
QT        2      1243      1243
          SECTION 760' D/S OF 21ST ST TAKEN FROM FIS HEC2 OUTPUT
X1    19177        11     10200     10237         0         0         0         0         0         0
GR   1380.0      9700    1376.60     10000   1372.50     10125   1370.10     10200   1368.10     10233
GR   1367.3     10235    1370.10     10237   1371.80     10267   1374.20     10363   1377.20     10500
GR   1380.0     11000

NC                                    0.3       0.5
          SECTION 150' D/S OF 21ST ST TAKEN FROM FIS HEC2 OUTPUT
X1    19772        13     10280     10298       535       535       595         0         0         0
GR   1379.7     10000    1377.70     10100   1372.20     10150   1371.60     10200   1371.80     10230
GR   1371.4     10280    1367.30     10284   1367.30     10289   1367.30     10294   1370.10     10298
GR   1370.8     10330    1372.40     10400   1380.00     10675         0         0         0         0

NC                                    0.6       0.8
          SECTION D/S OF 4-9'x 6'x 65' R.C.B. AT 21ST ST
X1    19922        10       544       585       150       150       150
X3       10
GR   1377.5       300    1377.44       544   1367.24       545   1367.24       584   1377.44       585
GR   1377.4       621    1377.69       750   1378.92       650   1379.20       900   1379.40      1000

SC    4.012       0.2       3.0         0         6         9        55       8.1   1367.24   1367.24
          SECTION U/S OF 4-9'x 6'x 65' RCB. AT 21ST ST
X1    19987        10       544       585        65        65        65
X2        0         0         2
X3       10
BT       -8       300    1377.50         0       544   1377.44         0       585   1377.44         0
BT                621    1377.40         0       750   1377.69         0       650   1378.92         0
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BT              900   1379.20        0      1000   1379.40        0
GR  1377.5      300   1377.44      544   1367.24      545   1367.24      584   1377.44      585
GR  1377.4      621   1377.69      750   1378.92      850   1379.20      900   1379.40     1000
        SURVEYED SECTION BETWEEN 21ST ST RCB AND GOLF CART BRIDGE

X1   20022       25       524      588        35        35        35
X3      10                                                          1374.95   1374.95
GR  1380.4      290   1377.50      309   1377.10      350   1376.90      400   1376.60      429
GR  1375.0      450   1373.10      500   1372.90      524   1369.90      542   1367.60      558
GR  1369.6      570   1374.20      588   1374.30      600   1374.60      650   1375.00      675
GR  1374.6      700   1376.60      750   1378.60      800   1380.20      835   1380.70      859
GR  1379.9      883   1380.60      897   1379.90      925   1379.60      980   1379.79     1000

NC       0        0         0      0.3       0.5
        SECTION D/S OF GOLF CART BRIDGE
X1   20040       30     528.9    569.1        18        18        18
X3      10
GR  1380.4      290   1377.50      309   1377.10      350   1376.90      400   1376.60      429
GR  1375.0      450   1374.95    528.9   1372.95      529   1372.55      533   1371.25      537
GR  1369.8      541   1368.25      545   1367.65      549   1367.70      550   1368.35      553
GR  1370.3      557   1371.15      561   1372.45      565   1373.00      569   1374.95    569.1
GR  1375.0      675   1376.60      750   1378.60      800   1380.20      835   1380.70      859
GR  1379.9      883   1380.60      897   1379.90      925   1379.60      980   1379.79     1000
        D/S SIDE OF GOLF CART BRIDGE

X1   20045              528.9    569.1         5         5         5
X3      10

SB    1.25      1.5       2.6        0        28       1.0       180       1.1   1367.65   1367.65
        U/S SIDE OF GOLF CART BRIDGE
X1   20065              528.9    569.1        20        20        20
X2       0        0         1  1372.95   1374.95         0         0         0         0         0
X3      10
BT      -15      450   1375.00              528.9   1374.95                 529   1374.95
BT               533   1374.95                537   1374.95                 541   1374.95
BT               545   1374.95                549   1374.95                 550   1374.95
BT               553   1374.95                557   1374.95                 561   1374.95
BT               565   1374.95                569   1374.95               569.1   1374.95
        SECTION U/S OF GOLF CART BRIDGE

X1   20070       30     528.9    569.1         5         5         5
X3      10
GR  1380.4      290   1377.50      309   1377.10      350   1376.90      400   1376.60      429
GR  1375.0      450   1374.95    528.9   1372.95      529   1372.55      533   1371.25      537
GR  1369.8      541   1368.25      545   1367.65      549   1367.70      550   1368.35      553
GR  1370.3      557   1371.15      561   1372.45      565   1373.00      569   1374.95    569.1
GR  1375.0      675   1376.60      750   1378.60      800   1380.20      835   1380.70      859
GR  1379.9      883   1380.60      897   1379.90      925   1379.60      980   1379.79     1000
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NC	0	0	0	0.1	0.3					
	SECTION 170' NORTH OF 21ST ST									
X1	20125	35	500	634	55	35	55			
GR	1379.9	278	1376.40	300	1374.20	320	1373.60	350	1373.40	400
GR	1372.2	450	1372.50	500	1370.10	532	1369.10	537	1368.20	542
GR	1368.9	547	1369.80	548	1372.00	565	1371.00	558	1371.30	575
GR	1370.0	578	1371.30	586	1374.30	593	1374.60	600	1375.64	634
GR	1375.2	655	1375.10	665	1376.20	673	1376.20	700	1375.40	710
GR	1375.8	740	1376.30	770	1377.50	800	1379.10	825	1379.90	850
GR	1380.9	883	1382.80	925	1381.60	950	1380.80	985	1379.61	1000
	SECTION 270' NORTH OF 21ST ST									
X1	20225	29	500	650	100	100	100			
GR	1376.2	250	1377.10	275	1375.60	300	1374.50	320	1374.20	350
GR	1373.1	400	1373.20	447	1372.50	471	1374.00	500	1373.50	530
GR	1371.2	545	1370.30	553	1368.10	556	1370.70	558	1370.80	600
GR	1371.4	619	1374.90	633	1376.00	650	1375.22	688	1376.20	700
GR	1376.7	723	1376.90	750	1377.10	800	1378.60	850	1380.40	888
GR	1381.8	925	1381.20	950	1380.80	980	1380.00	1000		

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VCL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XHL	XHCH	XHR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*PROF 1

CCHV= .100 CEHV= .300
*SECNO 19177.000

19177.000	5.32	1372.62	.00	1372.62	1372.95	.33	.00	.09	1370.10
1243.0	311.4	728.0	203.6	99.2	133.8	63.5	.0	.0	1370.10
.00	3.14	5.44	3.20	.050	.055	.050	.000	1367.30	10121.34
.007727	0.	0.	0.	0	0	0	.00	178.46	10299.80

CCHV= .300 CEHV= .500
*SECNO 19772.000

3202 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 3.13

19772.000	6.75	1374.05	.00	.00	1374.09	.04	1.05	.09	1371.40
1243.0	450.2	246.0	546.8	315.3	107.6	370.7	7.2	3.6	1370.10
.10	1.43	2.29	1.48	.050	.055	.050	.000	1367.30	10133.23
.000790	535.	595.	595.	5	0	0	.00	369.55	10502.78

CCHV= .600 CEHV= .800
*SECNO 19922.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .31

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1377.44 ELREA= 1377.44

19922.000	6.96	1374.20	.00	.00	1374.51	.31	.21	.22	1377.44
1243.0	.0	1243.0	.0	.0	276.2	.0	9.0	4.3	1377.44
.11	.00	4.50	.00	.000	.055	.000	.000	1367.24	344.32
.003070	150.	150.	150.	2	0	0	.00	40.35	584.68

SPECIAL CULVERT

SC	CUNO	CUNV	ENTLC	COFQ	RDLEN	RISE	SPAN	CULVLN	CHRT	SCL	ELCHU	ELCHD
	4	.012	.20	3.00	.00	6.00	9.00	65.00	8	1	1367.24	1367.24

CHART 8 - BOX CULVERT WITH FLARED WINGWALLS; NO INLET TOP EDGE BEVEL
SCALE 1 - WINGWALLS FLARED 30 TO 75 DEGREES

*SECNO 19987.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

SPECIAL CULVERT OUTLET CONTROL
EGIC = 1372.606 EGOC = 1374.680 POWSE= 1374.199 ELTRD= 1377.400

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
1372.61	1374.68	.37	0.	1243.	4.252	216.0	1377.40	0.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1377.44 ELREA= 1377.44

19987.000	7.36	1374.60	.00	.00	1374.88	.28	.37	.00	1377.44
1243.0	.0	1243.0	.0	.0	292.4	.0	9.4	4.4	1377.44
.11	.00	4.25	.00	.000	.055	.000	.000	1367.24	544.28
.002591	65.	65.	65.	2	0	0	.00	40.44	584.72

*SECNO 20022.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1374.95 ELREA= 1374.95

20022.000	7.10	1374.70	.00	.00	1375.01	.31	.11	.02	1372.90
1243.0	.0	1243.0	.0	.0	278.1	.0	9.7	4.4	1374.20
.11	.00	4.47	.00	.000	.055	.000	.000	1367.60	524.00
.003951	35.	35.	35.	0	0	0	.00	64.00	588.00

CCHV= .300 CEHV= .500
*SECNO 20040.000

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, XRATIO = .53

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1374.95 ELREA= 1374.95

20040.000	6.88	1374.53	.00	.00	1375.44	.91	.12	.30	1374.95
1243.0	.0	1243.0	.0	.0	162.7	.0	3.7	4.4	1374.95
.12	.00	7.64	.00	.000	.055	.000	.000	1367.65	528.52
.014315	18.	18.	18.	2	0	0	.00	40.18	568.08

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOSL	XLCH	XLOSR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 20045.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1374.95 ELREA= 1374.95

20045.000	7.03	1374.68	.00	.00	1375.52	.84	.07	.02	1374.95
1243.0	.0	1243.0	.0	.0	168.7	.0	9.8	4.4	1374.95
.12	.00	7.37	.00	.000	.055	.000	.000	1367.65	528.91
.012791	5.	5.	5.	2	0	0	.00	40.17	569.09

SPECIAL BRIDGE

SB XX	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
1.25	1.30	2.60	.00	28.00	1.00	180.00	1.10	1367.65	1367.65

*SECNO 20065.000
PRESSURE AND WEIR FLOW, Weir Submergence Based on TRAPEZOIDAL Shape

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD	WEIRLN
1375.79	1375.59	.11	140.	1103.	180.	174.	1372.95	1374.95	119.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1374.95 ELREA= 1374.95

20065.000	7.08	1374.73	.00	.00	1375.55	.82	.03	.00	1374.95
1243.0	.0	1243.0	.0	.0	170.7	.0	9.8	4.4	1374.95
.12	.00	7.28	.00	.000	.055	.000	.000	1367.65	528.91
.012333	20.	20.	20.	4	0	2	.00	40.18	569.09

*SECNO 20070.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1374.95 ELREA= 1374.95

20070.000	7.20	1374.85	.00	.00	1375.63	.78	.05	.01	1374.95
1243.0	.0	1243.0	.0	.0	175.4	.0	9.9	4.4	1374.95
.12	.00	7.09	.00	.000	.055	.000	.000	1367.65	528.91
.011357	5.	5.	5.	2	0	0	.00	40.19	569.09

SECNO	DEPTH	CWSEL	CRIWS	WSELK	ES	AV	AL	OLOSS	L-BANK ELEV
Q	ALOB	QCH	QROB	ALOB	QCH	PROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	ISTA
SLOPE	XLOSL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	CNDST

CCHV= .100 CEHV= .300
*SECNO 20125.000

3265 DIVIDED FLOW

3301 AV CHANGED MORE THAN AVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 5.12

20125.000	7.54	1375.74	.00	.00	1375.77	.02	.07	.08	1372.50
1243.0	600.3	636.7	6.0	496.4	486.0	19.3	10.6	4.7	1375.64
.13	1.21	1.21	.31	.050	.055	.050	.000	1368.20	305.56
.000433	55.	55.	55.	2	0	0	.00	392.69	733.83

*SECNO 20225.000

20225.000	7.69	1375.79	.00	.00	1375.82	.03	.03	.00	1374.00
1243.0	504.1	736.9	.0	423.4	529.4	.0	12.9	5.6	1376.00
.15	1.16	1.40	.00	.050	.055	.000	.000	1368.10	296.65
.000494	100.	100.	100.	2	0	0	.00	349.88	946.74

T1 MIDDLE BRANCH OF GYPSUM CREEK WICHITA, KANSAS
T2 EXTENSION OF FIS NORTH OF 21ST STREET
T3 100-YEAR WATER SURFACE PROFILE W/ 1-FT ENCROACHMENT P.E.D. 12/27/91

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0	3	0	0	0	0	0	0	1378.62	0

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLIC	IBW	CHNIM	ITRACE
	150	0	-1	0	0	0	0	0	0	0

SECNO	DEPTH	QWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	KLOB	KCH	KROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	IDCNT	CORAR	TOPWID	ENDST

*PROF 2

CCHV= .100 CEHV= .300
*SECNO 19177.000
2800 NAT Q1= 141.31 WSEL= 1372.62 ENC Q1= 141.31 WSEL= 1373.52 RATIO= .0000
NAT Q1= 266. RATIOS LOB, CH, ROB= .3279 .4508 .2213 WSEL= 1373.52

3470 ENCROACHMENT STATIONS= 10189.1 10237.0 TYPE= 4 TARGET= .469

19177.000	5.32	1372.62	.00	1372.62	1373.58	.96	.00	.00	1370.10
1243.0	152.3	1080.7	.0	25.6	133.8	.0	.0	.0	1370.10
.00	6.33	8.07	.00	.050	.055	.000	.000	1367.30	10189.07
.018547	0.	0.	0.	0	0	0	.00	47.93	10237.00

CCHV= .300 CEHV= .500
*SECNO 19772.000
2800 NAT Q1= 442.17 WSEL= 1374.05 ENC Q1= 442.17 WSEL= 1374.95 RATIO= .0000
NAT Q1= 735. RATIOS LOB, CH, ROB= .3837 .1503 .4660 WSEL= 1374.95

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 4.55

3470 ENCROACHMENT STATIONS= 10216.4 10361.0 TYPE= 4 TARGET= .359

19772.000	7.70	1375.00	.00	1374.05	1375.07	.07	1.22	.27	1371.40
1243.0	383.5	308.6	550.9	214.4	124.9	265.2	5.1	1.3	1370.10
.08	1.79	2.47	2.08	.050	.055	.050	.000	1367.30	10216.41
.000757	535.	595.	595.	4	0	0	.00	144.63	10361.04

CCHV= .600 CEHV= .800
*SECNO 19922.000
2800 NAT Q1= 224.32 WSEL= 1374.20 ENC Q1= 269.63 WSEL= 1375.10 RATIO= -.2020
NAT Q1= 670. RATIOS LOB, CH, ROB= .0000 1.0000 .0000 WSEL= 1375.10

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .60

3470 ENCROACHMENT STATIONS= 544.0 595.0 TYPE= 4 TARGET= .000

SECNO	DEPTH	OWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	BETA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CONVR	TOPWID	ENDST

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1377.44 ELREA= 1377.44

19922.000	7.90	1373.14	.00	1374.20	1375.39	.34	.15	.14	1377.44
1243.0	.0	1243.0	.0	.0	314.3	.0	5.5	1.5	1377.44
.09	.00	3.95	.00	.000	.055	.000	.000	1367.24	544.23
.002050	150.	150.	150.	3	0	0	.00	40.55	584.77

SPECIAL CULVERT

SC	CUNO	CUNV	ENTLC	COFQ	RDLEN	RISE	SPAN	CULVLN	CHRT	SCL	ELCHU	ELCHD
	4	.012	.20	3.00	.00	6.00	9.00	65.00	8	1	1367.24	1367.24

CHART 8 - BOX CULVERT WITH FLARED WINGWALLS; NO INLET TOP EDGE BEVEL
SCALE 1 - WINGWALLS FLARED 30 TO 75 DEGREES

*SECNO 19987.000

SPECIAL CULVERT OUTLET CONTROL
EGIC = 1372.606 EGOC = 1375.824 PCWSE= 1375.143 ELTRD= 1377.400

2800 NAT Q1= 244.20 WSEL= 1374.60 ENC Q1= 890.87 WSEL= 1375.50 RATIO= -.1899
NAT Q1= 291. RATIOS LOB, CH, ROB= .0000 1.0000 .0000 WSEL= 1375.50
SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
1372.61	1375.82	.44	0.	1243.	3.730	216.0	1377.40	0.

3470 ENCROACHMENT STATIONS= 544.0 585.0 TYPE= 4 TARGET= .000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1377.44 ELREA= 1377.44

19987.000	8.37	1375.61	.00	1374.60	1375.82	.22	.44	.00	1377.44
1243.0	.0	1243.0	.0	.0	333.2	.0	7.1	1.6	1377.44
.09	.00	3.73	.00	.000	.055	.000	.000	1367.24	544.18
.001760	65.	65.	65.	3	0	0	.00	40.64	584.82

*SECNO 20022.000
2800 NAT Q1= 197.76 WSEL= 1374.70 ENC Q1= 871.11 WSEL= 1375.60 RATIO= -.3709
NAT Q1= 375. RATIOS LOB, CH, ROB= .1772 .7228 .1000 WSEL= 1375.60

3470 ENCROACHMENT STATIONS= 524.0 588.0 TYPE= 4 TARGET= .377

20022.000	8.03	1375.69	.00	1374.70	1375.90	.21	.37	.01	1378.00
1243.0	.0	1243.0	.0	.0	341.7	.0	7.4	1.7	1374.20
.10	.00	3.64	.00	.000	.055	.000	.000	1367.60	524.00
.002165	35.	25.	35.	2	0	0	.00	64.00	583.00

SECNO	DEPTH	WSEL	CRIWS	WSELK	EG	IW	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	BETA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IPC	ICONT	CORAR	TOPWID	ENDST

CCHV= .300 CEHV= .500
*SECND 20040.000
2800 NAT Q1= 103.89 WSEL= 1374.33 ENC Q1= 143.29 WSEL= 1375.43 RATIO= -.3733
NAT Q1= 159. RATIOS LOB, CH, ROB= .0464 .9035 .0561 WSEL= 1375.43

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .55

3470 ENCROACHMENT STATIONS= 528.9 569.1 TYPE= 4 TARGET= .097

20040.000	7.92	1375.57	.00	1374.33	1376.15	.57	.08	.18	1374.95
1243.0	.0	1243.0	.0	.0	204.6	.0	7.5	1.7	1374.93
.10	.00	6.07	.00	.000	.055	.000	.000	1367.65	528.90
.007082	18.	18.	18.	2	0	0	.00	40.20	569.10

*SECND 20045.000
2800 NAT Q1= 109.91 WSEL= 1374.68 ENC Q1= 150.63 WSEL= 1375.58 RATIO= -.3705
NAT Q1= 176. RATIOS LOB, CH, ROB= .0593 .8575 .0832 WSEL= 1375.56

3470 ENCROACHMENT STATIONS= 528.9 569.1 TYPE= 4 TARGET= .142

20045.000	7.97	1375.62	.00	1374.68	1376.18	.56	.04	.00	1374.95
1243.0	.0	1243.0	.0	.0	206.1	.0	7.5	1.7	1374.95
.10	.00	6.03	.00	.000	.055	.000	.000	1367.65	528.90
.006930	5.	5.	5.	1	0	0	.00	40.20	569.10

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.50	2.60	.00	28.00	1.00	180.00	1.10	1367.65	1367.65

*SECND 20065.000 STATION=
6870 D.S. ENERGY OF 1376.18 IS HIGHER THAN COMPUTED ENERGY OF 1376.13
2800 NAT Q1= 111.93 WSEL= 1374.73 ENC Q1= 153.21 WSEL= 1375.63 RATIO= -.3689
NAT Q1= 162. RATIOS LOB, CH, ROB= .0659 .8414 .0928 WSEL= 1375.63
WATER EL=CHANGE FROM NATURAL PROFILES-BRIDGE

3470 ENCROACHMENT STATIONS= 528.9 569.1 TYPE= 4 TARGET= .159

20065.000	8.02	1375.67	.00	1374.73	1376.22	.55	.14	.00	1374.95
1243.0	.0	1243.0	.0	.0	208.6	.0	7.5	1.7	1374.93
.10	.00	5.96	.00	.000	.055	.000	.000	1367.65	528.90
.006686	20.	20.	20.	0	0	2	.00	40.20	569.10

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	AV	HL	GLOBS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	BETA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	CRDST

*SECNO 20070.000
2800 NAT Q1= 116.64 WSEL= 1374.85 ENC Q1= 138.95 WSEL= 1375.75 RATIO= -.2688
NAT Q1= 197. RATIOS LOB, CH, ROB= .0800 .8062 .1138 WSEL= 1375.75

3470 ENCROACHMENT STATIONS= 528.9 569.1 TYPE= 4 TARGET= .194
20070.000 8.06 1375.71 .00 1374.85 1376.25 .54 .83 .00 1374.95
1243.0 .0 1243.0 .0 .0 209.9 .0 7.6 1.7 1374.75
.10 .00 3.92 .00 .000 .055 .000 .000 1367.85 565.90
.006556 5. 5. 5. 1 0 0 .00 40.80 569.10

CCHV= .100 CEHV= .300
*SECNO 20125.000
2800 NAT Q1= 597.18 WSEL= 1375.74 ENC Q1= 597.18 WSEL= 1376.64 RATIO= .0000
NAT Q1= 942. RATIOS LOB, CH, ROB= .4951 .4699 .0350 WSEL= 1376.64

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 3.45

3470 ENCROACHMENT STATIONS= 451.3 634.0 TYPE= 4 TARGET= .366
20125.000 8.14 1376.34 .00 1375.74 1376.38 .04 .07 .05 1372.30
1243.0 321.8 921.2 .0 193.9 564.6 .0 8.3 1.9 1375.64
.11 1.66 1.63 .00 .050 .055 .000 .000 1368.20 451.33
.000550 55. 55. 55. 2 0 0 .00 182.67 634.00

*SECNO 20225.000
2800 NAT Q1= 559.16 WSEL= 1375.79 ENC Q1= 559.16 WSEL= 1376.63 RATIO= .0000
NAT Q1= 881. RATIOS LOB, CH, ROB= .4501 .5428 .0071 WSEL= 1375.89

3470 ENCROACHMENT STATIONS= 465.5 650.0 TYPE= 4 TARGET= .365
20225.000 8.30 1376.40 .00 1375.79 1376.44 .05 .06 .00 1374.00
1243.0 173.3 1069.7 .0 112.0 618.7 .0 10.0 3.3 1375.00
.12 1.55 1.73 .00 .050 .055 .000 .000 1368.10 465.46
.000636 100. 100. 100. 1 0 0 .00 184.54 650.00

THIS RUN EXECUTED 03JAN92 14:21:14

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HEC-2 WATER SURFACE PROFILES

Version 4.6.0; February 1991
****

NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

100-YEAR WATER SURFACE P

SUMMARY PRINTOUT TABLE 110

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	19177.000	1372.62	.00	1372.95	176.46	311.42	728.02	203.56	.00	.00	10200.00	10237.00	.00
	19177.000	1372.62	.00	1373.53	47.93	182.33	1080.67	.00	.47	10189.07	10200.00	10237.00	10237.00
*	19772.000	1374.05	.00	1374.09	369.55	450.20	845.56	546.64	.00	.00	10280.00	10298.00	.00
*	19772.000	1375.00	.96	1375.07	144.63	383.53	308.56	550.89	.40	10216.41	10280.00	10298.00	10361.04
*	19922.000	1374.20	.00	1374.51	40.36	.00	1243.00	.00	.00	.00	544.00	585.00	.00
*	19922.000	1375.14	.94	1375.39	40.55	.00	1243.00	.00	.00	544.00	544.00	585.00	585.00
	19987.000	1374.60	.00	1374.88	40.44	.00	1243.00	.00	.00	.00	544.00	585.00	.00
	19987.000	1375.61	1.01	1375.82	40.64	.00	1243.00	.00	.00	544.00	544.00	585.00	585.00
	20022.000	1374.70	.00	1375.01	64.00	.00	1243.00	.00	.00	.00	524.00	588.00	.00
	20022.000	1375.69	.99	1375.90	64.00	.00	1243.00	.00	.18	524.00	524.00	588.00	588.00
*	20040.000	1374.53	.00	1375.44	40.15	.00	1243.00	.00	.00	.00	528.90	569.10	.00
*	20040.000	1375.57	1.04	1376.15	40.20	.00	1243.00	.00	.10	528.90	528.90	569.10	569.10
	20045.000	1374.68	.00	1375.52	40.17	.00	1243.00	.00	.00	.00	528.90	569.10	.00
	20045.000	1375.62	.94	1376.18	40.20	.00	1243.00	.00	.14	528.90	528.90	569.10	569.10
	20065.000	1374.73	.00	1375.55	40.18	.00	1243.00	.00	.00	.00	528.90	569.10	.00
	20065.000	1375.67	.94	1376.22	40.20	.00	1243.00	.00	.16	528.90	528.90	569.10	569.10
	20070.000	1374.85	.00	1375.63	40.19	.00	1243.00	.00	.00	.00	528.90	569.10	.00
	20070.000	1375.71	.87	1376.26	40.20	.00	1243.00	.00	.15	528.90	528.90	569.10	569.10
*	20125.000	1375.74	.00	1375.77	392.69	680.34	636.69	5.98	.00	.00	590.00	634.00	.00
*	20125.000	1376.34	.60	1376.38	182.67	321.84	921.15	.00	.27	431.33	590.00	634.00	634.00
	20225.000	1375.79	.00	1375.82	349.85	504.14	738.88	.00	.00	.00	590.00	650.00	.00
	20225.000	1376.40	.61	1376.44	184.54	173.30	1063.39	.00	.36	485.46	590.00	650.00	650.00

100-YEAR WATER SURFACE P

SUMMARY PRINTOUT TABLE 150

	SECNO	XLOB	ELTRD	ELLC	ELMIN	Q	CWSEL	CRITWS	EG	10*KS	VCH	AREA	.01K
	19177.000	.00	.00	.00	1367.30	1243.00	1373.62	.00	1373.35	77.37	5.44	296.61	141.31
	19177.000	.00	.00	.00	1367.30	1243.00	1373.62	.00	1373.53	185.47	3.07	159.48	91.27
*	19772.000	595.00	.00	.00	1367.30	1243.00	1374.05	.00	1374.03	7.90	2.23	793.32	442.17
*	19772.000	595.00	.00	.00	1367.30	1243.00	1375.00	.00	1375.07	7.57	3.47	604.44	451.71
*	19922.000	150.00	.00	.00	1367.24	1243.00	1374.20	.00	1374.51	30.70	4.50	276.17	224.38
*	19922.000	150.00	.00	.00	1367.24	1243.00	1375.14	.00	1375.39	20.90	3.95	314.32	271.66
	19987.000	65.00	1377.40	.00	1367.24	1243.00	1374.60	.00	1374.88	25.91	4.25	292.37	244.20
	19987.000	65.00	1377.40	.00	1367.24	1243.00	1375.51	.00	1375.32	17.60	3.73	333.21	296.28
	20022.000	35.00	.00	.00	1367.60	1243.00	1374.70	.00	1375.01	33.51	4.47	278.13	197.76
	20022.000	35.00	.00	.00	1367.60	1243.00	1375.69	.00	1375.90	21.65	3.64	341.74	267.15
*	20040.000	18.00	.00	.00	1367.65	1243.00	1374.53	.00	1375.44	143.15	7.64	162.70	103.89
*	20040.000	18.00	.00	.00	1367.65	1243.00	1375.57	.00	1376.15	70.82	6.07	204.65	147.71
	20045.000	5.00	.00	.00	1367.65	1243.00	1374.68	.00	1375.52	127.91	7.37	168.74	109.91
	20045.000	5.00	.00	.00	1367.65	1243.00	1375.62	.00	1376.18	69.30	6.03	206.11	149.32
	20065.000	20.00	1374.95	1372.95	1367.65	1243.00	1374.73	.00	1375.55	123.33	7.26	170.75	111.93
	20065.000	20.00	999999.00	.00	1367.65	1243.00	1375.67	.00	1376.22	66.85	5.96	208.55	152.02
	20070.000	5.00	.00	.00	1367.65	1243.00	1374.85	.00	1375.63	113.57	7.09	175.38	116.64
	20070.000	5.00	.00	.00	1367.65	1243.00	1375.71	.00	1376.26	65.56	5.92	209.50	153.51
*	20125.000	55.00	.00	.00	1368.20	1243.00	1375.74	.00	1375.77	4.53	1.31	959.60	597.18
*	20125.000	55.00	.00	.00	1368.20	1243.00	1376.34	.00	1376.38	5.50	1.53	758.53	529.94
	20225.000	100.00	.00	.00	1368.10	1243.00	1375.79	.00	1375.82	4.94	1.40	962.73	559.16
	20225.000	100.00	.00	.00	1368.10	1243.00	1376.40	.00	1376.44	6.36	1.73	730.79	492.91

100-YEAR WATER SURFACE P

SUMMARY PRINTOUT TABLE 150

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	19177.000	1243.00	1372.62	.00	.00	.00	178.46	.00
	19177.000	1243.00	1372.62	.00	.00	.00	47.93	.00
*	19772.000	1243.00	1374.05	.00	1.43	.00	369.55	595.00
*	19772.000	1243.00	1373.00	.96	2.38	.96	144.63	595.00
*	19922.000	1243.00	1374.20	.00	-.13	.00	40.36	150.00
*	19922.000	1243.00	1373.14	.94	-.14	.94	40.55	150.00
	19987.000	1243.00	1374.60	.00	.40	.00	40.44	65.00
	19987.000	1243.00	1375.61	1.01	.47	1.01	40.64	65.00
	20022.000	1243.00	1374.70	.00	.10	.00	64.00	35.00
	20022.000	1243.00	1375.69	.99	-.09	.99	64.00	35.00
*	20040.000	1243.00	1374.53	.00	-.18	.00	40.16	18.00
*	20040.000	1243.00	1375.57	1.04	-.12	1.04	40.20	18.00
	20045.000	1243.00	1374.68	.00	.15	.00	40.17	5.00
	20045.000	1243.00	1375.62	.94	.05	.94	40.20	5.00
	20065.000	1243.00	1374.73	.00	.05	.00	40.18	20.00
	20065.000	1243.00	1375.67	.94	.05	.94	40.20	20.00
	20070.000	1243.00	1374.85	.00	.11	.00	40.19	5.00
	20070.000	1243.00	1375.71	.87	.04	.87	40.20	5.00
*	20125.000	1243.00	1375.74	.00	.90	.00	398.89	55.00
*	20125.000	1243.00	1376.34	.60	.63	.60	182.67	55.00
	20225.000	1243.00	1375.79	.00	-.05	.00	349.88	100.00
	20225.000	1243.00	1376.40	.61	.06	.61	184.54	100.00

SUMMARY OF ERRORS AND SPECIAL NOTES

WARNING SECNO= 19772.000 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 19772.000 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 19922.000 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 19922.000 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 20040.000 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 20040.000 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 20125.000 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 20125.000 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

FLOODWAY DATA, 100-YEAR WATER SURFACE P
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
19177.000	48.	159.	7.8	1372.6	1372.6	.0
19772.000	145.	604.	2.1	1375.0	1374.0	1.0
19922.000	41.	314.	4.0	1375.1	1374.2	.9
19987.000	41.	333.	3.7	1375.6	1374.6	1.0
20022.000	64.	342.	3.6	1373.7	1374.7	1.0
20040.000	40.	205.	6.1	1375.5	1374.5	1.0
20045.000	40.	206.	6.0	1375.6	1374.7	.9
20055.000	40.	209.	6.0	1375.6	1374.7	.9
20070.000	40.	210.	5.9	1375.7	1374.8	.9
20125.000	183.	759.	1.6	1376.3	1375.7	.6
20225.000	183.	731.	1.7	1376.4	1375.8	.6

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**********************************************
* HEC-2 WATER SURFACE PROFILES               *
*                                            *
* Version  4.6.0;  February 1991             *
*                                            *
* RUN DATE   03JAN92   TIME   14:39:26       *
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**********************************************
* U.S. ARMY CORPS OF ENGINEERS
* HYDROLOGIC ENGINEERING CENTER
* 609 SECOND STREET, SUITE D
* DAVIS, CALIFORNIA 95616-4687
*         (916) 756-1104
**********************************************
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X    X  XXXXXXX   XXXXX            XXXXX
X    X  X        X    X          X     X
X    X  X        X                     X
XXXXXXX  XXXX    X         XXXXX   XXXXX
X    X  X        X                 X
X    X  X        X    X            X
X    X  XXXXXXX   XXXXX            XXXXXXX
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10-, 50-, 100-, & 500-YR FLOODPLAIN

THIS RUN EXECUTED 03JAN92 14:39:27

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**************************************
 HEC-2 WATER SURFACE PROFILES

 Version  4.6.0;  February 1991
**************************************


T1      MIDDLE BRANCH OF GYPSUM CREEK                    WICHITA, KANSAS
T2      EXTENSION OF FIS NORTH OF 21ST STREET
T3      10-YEAR WATER SURFACE PROFILE                    P.E.C.  12/27/91

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

        0         2         0         0         0         0         0         0   1372.22         0

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

        1         0        -1         0         0         0         0         0         0         0


J3  VARIABLE CODES FOR SUMMARY PRINTOUT

    150

NC    0.050     0.050     0.055       0.1       0.3
QT        4       738      1087      1243      1594
          SECTION 760' D/S OF 21ST ST TAKEN FROM FIS HEC2 OUTPUT
X1    15177        11     10200     10237         0         0         0         0         0         0
GR   1380.0      9700   1376.60     10000   1372.50     10125   1370.10     10200   1368.10     10233
GR   1367.3     10235   1370.10     10237   1371.80     10267   1374.20     10363   1377.20     10500
GR   1380.0     11000

NC                                    0.3       0.5
          SECTION 150' D/S OF 21ST ST TAKEN FROM FIS HEC2 OUTPUT
X1    19772        13     10280     10298       535       595       595         0         0         0
GR   1379.7     10000   1377.70     10100   1372.20     10150   1371.60     10200   1371.80     10230
GR   1371.4     10280   1367.30     10284   1367.30     10289   1367.30     10294   1370.10     10298
GR   1370.8     10330   1372.40     10400   1380.00     10675         0         0         0         0

NC                                    0.6       0.3
          SECTION D/S OF 4-9'x 6'x 65' R.C.B. AT 21ST ST
X1    19922        10       544       585       150       150       150
X3       10
GR   1377.5       300   1377.44       544   1367.24       845   1367.24       584   1377.44       585
GR   1377.4       621   1377.69       750   1378.92       850   1379.20       900   1379.40      1000

SC    4.012       0.2       3.0         0         5         9        65       8.1   1367.24   1367.24
          SECTION U/S OF 4-9'x 6'x 65' RCB. AT 21ST ST
X1    19987        10       544       585        65        65        65
X2        0         0         2
X3       10
BT       -8       300   1377.50         0       544   1377.44         0       585   1377.44         0
BT                621   1377.40         0       750   1377.69         0       850   1378.92         0
BT                900   1379.20         0      1000   1379.40         0
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GR  1377.5      300   1377.44      544   1367.24      545   1367.24      584   1377.44      595
GR  1377.4      621   1377.69      750   1378.93      850   1379.20      900   1379.40     1000
      SURVEYED SECTION BETWEEN 21ST ST ROB AND GOLF CART BRIDGE

X1  20022        25       524      588        35        35        35
X3     10                                                          1374.95   1374.95
GR  1380.4      290   1377.50      309   1377.10      350   1376.90      400   1376.60      429
GR  1375.0      450   1373.10      500   1372.90      524   1369.90      542   1367.60      558
GR  1369.6      570   1374.20      588   1374.30      600   1374.60      650   1375.00      675
GR  1374.6      700   1375.60      750   1376.60      800   1380.20      835   1380.70      859
GR  1379.9      883   1380.60      897   1379.90      925   1379.60      980   1379.79     1000

NC      0        0         0      0.3       0.3
      SECTION D/S OF GOLF CART BRIDGE
X1  20040       30     528.9    569.1        18        18        18
X3     10
GR  1380.4      290   1377.50      309   1377.10      350   1376.90      400   1376.60      429
GR  1375.0      450   1374.95    528.9   1372.95      529   1372.55      533   1371.25      537
GR  1369.8      541   1368.25      545   1367.65      549   1367.70      550   1368.35      553
GR  1370.3      557   1371.15      561   1372.45      565   1373.00      569   1374.95    569.1
GR  1375.0      675   1376.60      750   1378.60      800   1380.20      835   1380.70      859
GR  1379.9      883   1380.60      897   1379.90      925   1379.60      980   1379.79     1000
      D/S SIDE OF GOLF CART BRIDGE

X1  20045             528.9    569.1         5         5         5
X3     10

SB   1.25      1.5       2.6        0        28       1.0       180       1.1   1367.65   1367.65
      U/S SIDE OF GOLF CART BRIDGE
X1  20065             528.9    569.1        20        20        20
X2      0        0         1  1372.95   1374.95         0         0         0         0         0
X3     10
BT    -15      450   1375.00             528.9   1374.95                 529   1374.95
BT             533   1374.95               537   1374.95                 541   1374.95
BT             545   1374.95               549   1374.95                 550   1374.95
BT             553   1374.95               557   1374.95                 561   1374.95
BT             565   1374.95               569   1374.95               569.1   1374.95
      SECTION U/S OF GOLF CART BRIDGE

X1  20070       30     528.9    569.1         5         5         5
X3     10
GR  1380.4      290   1377.50      309   1377.10      350   1376.90      400   1376.60      429
GR  1375.0      450   1374.95    528.9   1372.95      529   1372.55      533   1371.25      537
GR  1369.8      541   1368.25      545   1367.65      549   1367.70      550   1368.35      553
GR  1370.3      557   1371.15      561   1372.45      565   1373.00      569   1374.95    569.1
GR  1375.0      675   1376.60      750   1378.60      800   1380.20      835   1380.70      859
GR  1379.9      883   1380.60      897   1379.90      925   1379.60      980   1379.79     1000

NC      0        0         0      0.1       0.3
      SECTION 170' NORTH OF 21ST ST
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X1	20125	35	500	634	55	55	55			
GR	1379.9	278	1376.40	300	1374.30	320	1373.60	350	1373.40	400
GR	1372.2	480	1372.50	500	1370.10	532	1369.10	537	1368.20	542
GR	1368.9	547	1369.60	548	1372.00	563	1371.00	568	1371.30	575
GR	1370.0	578	1371.30	585	1374.30	593	1374.60	600	1373.64	634
GR	1375.2	655	1375.10	665	1376.20	673	1376.50	700	1375.40	710
GR	1375.6	740	1376.30	770	1377.50	800	1379.10	825	1379.90	850
GR	1380.9	863	1382.60	925	1381.60	950	1380.80	965	1379.61	1000

SECTION 270' NORTH OF 218T ST

X1	20225	29	500	650	100	100	100			
GR	1378.2	250	1377.10	275	1375.60	300	1374.50	320	1374.20	350
GR	1373.1	400	1373.20	447	1372.50	471	1374.00	500	1373.50	530
GR	1371.2	545	1370.30	553	1368.10	556	1370.70	558	1370.80	600
GR	1371.4	619	1374.90	633	1376.00	650	1376.22	688	1376.20	700
GR	1376.7	723	1376.90	750	1377.10	800	1378.60	850	1380.40	888
GR	1381.8	925	1381.20	950	1380.80	980	1380.00	1000		

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IOC	ICONT	CORAR	TOPWID	ENDST

*PROF 1

CCHV= .100 CEHV= .300
*SECNO 19177.000

19177.000	4.92	1372.22	.00	1372.22	1372.42	.20	.00	.00	1370.10
738.0	154.8	485.9	97.3	70.2	119.0	41.6	.0	.0	1370.10
.00	2.20	4.08	2.34	.050	.055	.050	.000	1367.30	10133.75
.005094	0.	0.	0.	0	0	0	.00	150.05	10283.80

CCHV= .300 CEHV= .500
*SECNO 19772.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.61

19772.000	6.04	1373.34	.00	.00	1373.37	.03	.90	.05	1371.40
738.0	235.4	193.8	308.7	214.1	94.9	241.9	5.1	3.1	1370.10
.11	1.10	2.04	1.28	.050	.055	.050	.000	1367.30	10139.64
.000746	535.	595.	595.	4	0	0	.00	319.10	10458.74

CCHV= .600 CEHV= .800
*SECNO 19922.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLSA= 1377.44 ELREA= 1377.44

19922.000	6.23	1373.47	.00	.00	1373.61	.14	.13	.08	1377.44
738.0	.0	738.0	.0	.0	246.8	.0	6.5	3.7	1377.44
.13	.00	2.99	.00	.000	.055	.000	.000	1367.24	544.39
.001517	150.	150.	150.	2	0	0	.00	40.22	584.61

SPECIAL CULVERT

SC	CUNO	CUNV	ENTLC	COFQ	RDLEN	RISE	SPAN	CULVLN	CHRT	SCL	ELCHU	ELCHD
	4	.012	.20	3.00	.00	6.00	9.00	65.00	8	1	1367.24	1367.24

CHART 8 - BOX CULVERT WITH FLARED WINGWALLS; NO INLET TOP EDGE BEVEL
SCALE 1 - WINGWALLS FLARED 30 TO 75 DEGREES

*SECNO 19987.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	NL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IBC	ICONT	CORAR	TOPWID	ENDST

SPECIAL CULVERT OUTLET CONTROL
EGIC = 1370.989 EGOC = 1373.710 PCWSE= 1373.470 ELTRD= 1377.400

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
1370.99	1373.71	.10	0.	738.	2.940	216.0	1377.40	0.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1377.44 ELREA= 1377.44

19987.000	6.34	1373.58	.00	.00	1373.71	.13	.10	.00	1377.44
738.0	.0	738.0	.0	.0	251.0	.0	6.9	3.7	1377.44
.13	.00	2.94	.00	.000	.055	.000	.000	1367.24	544.38
.001441	65.	65.	65.	2	0	0	.00	40.24	584.62

*SECNO 20022.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .65

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1374.83 ELREA= 1374.83

20022.000	6.04	1373.64	.00	.00	1373.83	.19	.07	.05	1372.90
738.0	.0	738.0	.0	.0	210.5	.0	7.1	3.8	1374.20
.14	.00	3.51	.00	.000	.055	.000	.000	1367.60	524.00
.003359	35.	35.	35.	1	0	0	.00	61.73	585.78

CCHV= .300 CEHV= .500
*SECNO 20040.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .53

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1374.95 ELREA= 1374.95

20040.000	5.91	1373.56	.00	.00	1374.11	.55	.10	.13	1374.95
738.0	.0	738.0	.0	.0	183.6	.0	7.1	3.6	1374.95
.14	.00	5.96	.00	.000	.055	.300	.000	1367.65	528.97
.011820	18.	18.	18.	2	0	0	.00	40.06	569.03

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	ISTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 20045.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1374.95 ELREA= 1374.95

20045.000	6.01	1373.66	.00	.00	1374.16	.52	.05	.01	1374.95
738.0	.0	738.0	.0	.0	127.8	.0	7.2	3.8	1374.95
.14	.00	5.77	.00	.000	.055	.000	.000	1367.65	528.96
.010696	5.	5.	5.	2	0	0	.00	40.07	569.03

SPECIAL BRIDGE

SB XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
1.25	1.50	2.60	.00	28.00	1.00	180.00	1.10	1367.65	1367.65

*SECNO 20065.000
CLASS A LOW FLOW

3420 BRIDGE W.S.= 1373.65 BRIDGE VELOCITY= 3.66 CALCULATED CHANNEL AREA= 201.

EGPRS	EGLWC	H3	QWEIR	QLOW	BAREA	TRAPEZOID AREA	ELLC	ELTRD	WEIRLN
1374.05	1374.22	.06	0.	738.	180.	174.	1372.95	1374.95	0.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1374.95 ELREA= 1374.95

20065.000	6.07	1373.72	.00	.00	1374.22	.50	.04	.00	1374.95
738.0	.0	738.0	.0	.0	130.1	.0	7.2	3.8	1374.95
.14	.00	5.67	.00	.000	.055	.000	.000	1367.65	528.96
.010124	20.	20.	20.	0	0	0	.00	40.06	569.04

*SECNO 20070.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1374.95 ELREA= 1374.95

20070.000	6.15	1373.80	.00	.00	1374.27	.48	.05	.01	1374.95
738.0	.0	738.0	.0	.0	133.3	.0	7.2	3.8	1374.95
.14	.00	5.54	.00	.000	.055	.000	.000	1367.65	528.96
.009389	5.	5.	5.	2	0	0	.00	40.08	569.04

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	QLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

CCHV= .100 CEHV= .300
*SECNO 20125.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 3.86

20125.000	6.18	1374.38	.00	.00	1374.41	.03	.09	.04	1372.30
738.0	237.1	500.9	.0	238.3	327.5	.0	7.7	4.0	1375.64
.15	.99	1.53	.00	.050	.055	.000	.000	1368.20	318.40
.000531	55.	55.	55.	2	0	0	.00	276.38	394.77

*SECNO 20225.000

20225.000	6.35	1374.45	.00	.00	1374.48	.03	.08	.00	1374.00
736.0	186.3	551.7	.0	177.4	345.6	.0	8.9	4.7	1376.00
.17	1.05	1.60	.00	.050	.055	.000	.000	1368.10	383.02
.000985	100.	100.	100.	2	0	0	.00	306.18	631.20

T1 MIDDLE BRANCH OF GYPSUM CREEK WICHITA, KANSAS
T2 EXTENSION OF FIS NORTH OF 21ST STREET
T3 50-YEAR WATER SURFACE PROFILE P.E.D. 12/27/91

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0	3	0	0	0	0	0	0	1372.46	0

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IPW	CHWIN	ITRACE
	2	0	-1	0	0	0	0	0	0	0

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	KV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	BSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*PROF 2

CCHV= .100 CEHV= .300
*SECNO 19177.000

19177.000	5.18	1372.48	.00	1372.48	1372.79	.31	.00	.00	1370.10
1087.0	283.8	666.1	167.0	88.5	128.7	55.1	.0	.0	1370.10
.00	2.87	5.18	3.03	.050	.055	.050	.000	1367.30	10125.63
.007389	0.	0.	0.	0	0	0	.00	168.57	10294.20

CCHV= .300 CEHV= .500
*SECNO 19772.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 3.08

19772.000	6.55	1373.85	.00	.00	1373.89	.04	1.02	.08	1371.40
1087.0	384.3	230.9	471.9	285.9	104.1	332.1	6.5	3.4	1370.10
.10	1.34	2.22	1.42	.050	.055	.050	.000	1367.30	10135.00
.000777	535.	595.	595.	5	0	0	.00	355.65	10490.65

CCHV= .600 CEHV= .800
*SECNO 19922.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .55

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1377.44 ELREA= 1377.44

19922.000	6.76	1374.00	.00	.00	1374.26	.26	.19	.17	1377.44
1087.0	.0	1087.0	.0	.0	268.2	.0	8.2	4.1	1377.44
.11	.00	4.05	.00	.000	.055	.000	.000	1367.24	544.34
.002564	150.	150.	150.	2	0	0	.00	40.33	584.66

SPECIAL CULVERT

SC	CUNO	CUNV	ENTLC	COFQ	RDLEN	RISE	SPAN	CULVLN	CHRT	SCL	ELCHU	ELCHD
	4	.012	.20	3.00	.00	6.00	9.00	65.00	8	1	1367.24	1367.24

CHART 8 - BOX CULVERT WITH FLARED WINGWALLS; NO INLET TOP EDGE BEVEL
SCALE 1 - WINGWALLS FLARED 30 TO 75 DEGREES

*SECNO 19987.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

SPECIAL CULVERT OUTLET CONTROL
EGIC = 1372.132 EGOC = 1374.522 PCWSE= 1374.002 ELTRD= 1377.400

SPECIAL CULVERT

EGIC	EGOC	A4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
1372.13	1374.52	.27	0.	1087.	3.885	816.0	1377.40	0.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1377.44 ELREA= 1377.44

19987.000	7.05	1374.29	.00	.00	1374.52	.23	.37	.00	1377.44
1087.0	.0	1087.0	.0	.0	279.8	.0	8.7	4.2	1377.44
.12	.00	3.89	.00	.000	.055	.000	.000	1367.84	544.31
.002259	65.	65.	65.	2	0	0	.00	40.38	584.69

*SECNO 20022.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1374.95 ELREA= 1374.95

20022.000	6.78	1374.38	.00	.00	1374.66	.28	.10	.03	1372.90
1087.0	.0	1087.0	.0	.0	257.2	.0	8.9	4.2	1374.20
.12	.00	4.23	.00	.000	.055	.000	.000	1367.60	524.00
.003920	35.	35.	35.	0	0	0	.00	64.00	588.00

CCHV= .300 CEHV= .500
*SECNO 20040.000

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .53

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1374.95 ELREA= 1374.95

20040.000	6.59	1374.24	.00	.00	1375.04	.80	.12	.26	1374.95
1087.0	.0	1087.0	.0	.0	151.0	.0	9.0	4.2	1374.95
.12	.00	7.20	.00	.000	.055	.000	.000	1367.65	528.94
.013788	18.	18.	18.	2	0	0	.00	40.13	559.06

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IBC	ICONT	CORAR	TOPWID	ENDST

*SECNO 20045.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1374.95 ELREA= 1374.95

20045.000	6.73	1374.38	.00	.00	1375.12	.75	.07	.02	1374.95
1087.0	.0	1087.0	.0	.0	156.5	.0	9.0	4.2	1374.95
.12	.00	6.85	.00	.000	.055	.000	.000	1367.65	528.93
.012347	5.	5.	5.	2	0	0	.00	40.14	569.07

SPECIAL BRIDGE

SB	XK	XKOR	CDFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.30	2.60	.00	28.00	1.00	180.00	1.10	1367.65	1367.65

*SECNO 20065.000
PRESSURE AND WEIR FLOW, Weir Submergence Based on TRAPEZOIDAL Shape

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD	WEIRLN
1375.22	1375.18	.09	30.	1055.	160.	174.	1372.95	1374.95	119.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1374.95 ELREA= 1374.95

20065.000	6.60	1374.45	.00	.00	1375.18	.72	.05	.00	1374.95
1087.0	.0	1087.0	.0	.0	155.4	.0	9.0	4.3	1374.95
.12	.00	6.82	.00	.000	.055	.000	.000	1367.65	528.93
.011660	20.	20.	20.	3	0	2	.00	40.15	569.07

*SECNO 20070.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1374.95 ELREA= 1374.95

20070.000	6.91	1374.56	.00	.00	1375.24	.68	.06	.01	1374.95
1087.0	.0	1087.0	.0	.0	163.9	.0	9.1	4.3	1374.95
.12	.00	6.63	.00	.000	.055	.000	.000	1367.65	528.92
.010698	5.	5.	5.	2	0	0	.00	40.15	569.08

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	QLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

CCHV= .100 CEHV= .300
*SECNO 20125.000

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 4.67

20125.000	7.16	1375.36	.00	.00	1375.38	.03	.07	.07	1372.50
1087.0	495.5	590.9	.6	420.8	434.3	2.9	9.7	4.5	1375.64
.13	1.10	1.36	.20	.050	.055	.050	.000	1368.20	309.48
.000491	55.	55.	55.	2	0	0	.00	334.60	666.87

*SECNO 20225.000

20225.000	7.31	1375.41	.00	.00	1375.44	.03	.05	.00	1374.00
1087.0	404.4	682.6	.0	357.3	474.6	.0	11.6	5.3	1376.00
.15	1.13	1.44	.00	.050	.055	.000	.000	1368.10	303.49
.000575	100.	100.	100.	2	0	0	.00	337.37	640.85

T1 MIDDLE BRANCH OF GYPSUM CREEK WICHITA, KANSAS
T2 EXTENSION OF FIS NORTH OF 21ST STREET
T3 100-YEAR WATER SURFACE PROFILE P.E.C. 12/27/91

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0	4	0	0	0	0	0	0	1372.62	0

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	3	0	0	0	0	0	0	0	0	0

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	FV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	#IT	ELMIN	DSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IBC	ICONT	CORAR	TOPWID	ENDST

#PROF 3

CCHV= .100 CEHV= .300
#SECNO 19177.000

19177.000	5.32	1372.62	.00	1372.62	1372.35	.33	.00	.00	1370.10
1243.0	311.4	728.0	203.6	99.2	133.6	63.5	.0	.0	1370.10
.00	3.14	5.44	3.20	.050	.055	.050	.000	1367.30	10121.34
.007737	0.	0.	0.	0	0	0	.00	178.46	10299.80

CCHV= .300 CEHV= .500
#SECNO 19772.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.13

19772.000	6.75	1374.05	.00	.00	1374.03	.04	1.05	.09	1371.40
1243.0	450.2	246.0	546.8	315.3	107.6	370.7	7.2	3.6	1370.10
.10	1.43	2.29	1.48	.050	.055	.030	.000	1367.30	10133.23
.000790	535.	595.	595.	5	0	0	.00	365.55	10502.78

CCHV= .600 CEHV= .800
#SECNO 19922.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .51

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1377.44 ELREA= 1377.44

19922.000	6.96	1374.20	.00	.00	1374.51	.31	.21	.22	1377.44
1243.0	.0	1243.0	.0	.0	276.2	.0	9.0	4.3	1377.44
.11	.00	4.50	.00	.000	.055	.000	.000	1367.24	544.32
.003070	150.	150.	150.	2	0	0	.00	40.36	584.68

SPECIAL CULVERT

SC	CUNO	CUNV	ENTLC	COFQ	RDLEN	RISE	SPAN	CULVLN	CHRT	SCL	ELCHU	ELCHD
	4	.012	.20	3.00	.00	6.00	9.00	55.00	3	1	1367.24	1367.24

CHART 3 - BOX CULVERT WITH FLARED WINGWALLS; NO INLET TOP EDGE BEVEL
SCALE 1 - WINGWALLS FLARED 30 TO 75 DEGREES

#SECNO 19967.000

.

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	XLOB	XCH	AREA	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

SPECIAL CULVERT OUTLET CONTROL
EGIC = 1372.606 EGOC = 1374.880 TOWSE= 1374.199 ELTRD= 1377.400

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
1372.61	1374.88	.37	0.	1243.	4.252	216.0	1377.40	0.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1377.44 ELREA= 1377.44

19987.000	7.36	1374.60	.00	.00	1374.68	.28	.37	.00	1377.44
1243.0	.0	1243.0	.0	.0	292.4	.0	9.4	4.4	1377.44
.11	.00	4.25	.00	.000	.035	.000	.000	1367.24	544.28
.002591	65.	65.	65.	2	0	0	.00	40.44	584.72

*SECNO 20022.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1374.95 ELREA= 1374.95

20022.000	7.10	1374.70	.00	.00	1375.01	.31	.11	.02	1372.90
1243.0	.0	1243.0	.0	.0	276.1	.0	9.7	4.4	1374.20
.11	.00	4.47	.00	.000	.035	.000	.000	1367.60	524.00
.003951	35.	35.	35.	0	0	0	.00	64.00	588.00

CCHV= .300 CEHV= .500
*SECNO 20040.000

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .53

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1374.95 ELREA= 1374.95

20040.000	6.88	1374.53	.00	.00	1375.44	.91	.12	.30	1374.95
1243.0	.0	1243.0	.0	.0	182.7	.0	9.7	4.4	1374.95
.12	.00	7.64	.00	.000	.035	.000	.000	1367.65	526.32
.014315	18.	18.	18.	2	0	0	.00	-0.15	585.08

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TKA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XAL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IBC	ICONT	CORAR	TOPWID	ENDST

*SECNO 20045.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1374.95 ELREA= 1374.95

20045.000	7.03	1374.68	.00	.00	1375.52	.84	.07	.02	1374.95
1243.0	.0	1243.0	.0	.0	168.7	.0	9.8	4.4	1374.95
.12	.00	7.37	.00	.000	.055	.000	.000	1367.85	528.91
.012791	5.	5.	5.	2	0	0	.00	40.17	559.09

SPECIAL BRIDGE

SB XK	XKOR	COFQ	ADLEN	BWC	BWP	PAREA	SS	ELCHU	ELCHD
1.25	1.50	2.60	.00	28.00	1.00	160.00	1.10	1367.85	1367.85

*SECNO 20065.000
PRESSURE AND WEIR FLOW, Weir Submergence Based on TRAPEZOIDAL Shape

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD	WEIRLN
1375.79	1375.59	.11	140.	1103.	160.	174.	1372.35	1374.05	119.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1374.95 ELREA= 1374.95

20065.000	7.08	1374.73	.00	.00	1375.55	.82	.03	.00	1374.95
1243.0	.0	1243.0	.0	.0	170.7	.0	9.8	4.4	1374.95
.12	.00	7.28	.00	.000	.055	.000	.000	1367.85	528.91
.012333	20.	20.	20.	4	0	2	.00	40.18	559.09

*SECNO 20070.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1374.95 ELREA= 1374.95

20070.000	7.20	1374.85	.00	.00	1375.63	.78	.06	.01	1374.95
1243.0	.0	1243.0	.0	.0	175.4	.0	9.9	4.4	1374.95
.12	.00	7.09	.00	.000	.055	.000	.000	1367.85	528.91
.011357	5.	5.	5.	2	0	0	.00	40.19	559.09

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	NL	QLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

CCSV= .100 CEHV= .300
*SECNO 20125.000

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 5.12

20125.000	7.54	1375.74	.00	.00	1375.77	.02	.07	.08	1372.30
1243.0	600.3	636.7	6.0	495.4	485.0	19.3	10.6	4.7	1375.64
.13	1.21	1.31	.31	.050	.055	.050	.000	1368.20	305.96
.000433	55.	55.	55.	2	0	0	.00	392.69	735.83

*SECNO 20225.000

20225.000	7.69	1375.79	.00	.00	1375.82	.03	.05	.00	1374.00
1243.0	504.1	738.9	.0	433.4	589.4	.0	12.9	5.6	1376.00
.15	1.16	1.40	.00	.050	.055	.000	.000	1368.10	296.85
.000494	100.	100.	100.	2	0	0	.00	349.68	646.74

PROFILE FOR STREAM 100-YEAR WATER SURFACE P

PLOTTED POINTS (BY PRIORITY) E-ENERGY,W-WATER SURFACE,I-INVERT,C-CRITICAL W.S.,L-LEFT BANK,R-RIGHT BANK,M-LOWER END STA

ELEVATION SECNO	1367. CUMDIS	1369.	1371.	1373.	1375.	1377.	1379.	1381.	1383.	1385.
19177.00	0. I	. L .	W E.	.	.	.	.	.	.	.
	10. I	. L .	W E.	.	.	.	.	.	.	.
	20. I	. RL .	W E.	.	.	.	.	.	.	.
	30. I	. RL .	W E.	.	.	.	.	.	.	.
	40. I	. RL .	W E.	.	.	.	.	.	.	.
	50. I	. RL .	W E.	.	.	.	.	.	.	.
	60. I	. RL .	WE.	.	.	.	.	.	.	.
	70. I	. RL .	WE.	.	.	.	.	.	.	.
	80. I	. RL .	WE.	.	.	.	.	.	.	.
	90. I	. RL .	WE.	.	.	.	.	.	.	.
	100. I	. RL .	W E	.	.	.	.	.	.	.
	110. I	. R L .	W E	.	.	.	.	.	.	.
	120. I	. R L .	W E	.	.	.	.	.	.	.
	130. I	. R L .	W E	.	.	.	.	.	.	.
	140. I	. R L .	WE	.	.	.	.	.	.	.
	150. I	. R L .	WE	.	.	.	.	.	.	.
	160. I	. R L .	WE	.	.	.	.	.	.	.
	170. I	. R L .	WE	.	.	.	.	.	.	.
	180. I	. R L .	WE	.	.	.	.	.	.	.
	190. I	. R L .	WE	.	.	.	.	.	.	.
	200. I	. R L .	WE	.	.	.	.	.	.	.
	210. I	. R L .	W.E	.	.	.	.	.	.	.
	220. I	. R L .	WE	.	.	.	.	.	.	.
	230. I	. R L .	WE	.	.	.	.	.	.	.
	240. I	. R L .	WE	.	.	.	.	.	.	.
	250. I	. R L .	WE	.	.	.	.	.	.	.
	260. I	. R L .	WE	.	.	.	.	.	.	.
	270. I	. R L .	WE	.	.	.	.	.	.	.
	280. I	. R L .	WE	.	.	.	.	.	.	.
	290. I	. R L .	WE	.	.	.	.	.	.	.
	300. I	. R L .	WE	.	.	.	.	.	.	.
	310. I	. R L .	.WE	.	.	.	.	.	.	.
	320. I	. R L .	.WE	.	.	.	.	.	.	.
	330. I	. R L .	.WE	.	.	.	.	.	.	.
	340. I	. R L .	.WE	.	.	.	.	.	.	.
	350. I	. R L .	.WE	.	.	.	.	.	.	.
	360. I	. R L .	.WE	.	.	.	.	.	.	.
	370. I	. R L .	.WE	.	.	.	.	.	.	.
	380. I	. R L .	.WE	.	.	.	.	.	.	.
	390. I	. R L.	. E	.	.	.	.	.	.	.
	400. I	. R L.	. E	.	.	.	.	.	.	.
	410. I	. R L.	. E	.	.	.	.	.	.	.
	420. I	. R L.	. WE	.	.	.	.	.	.	.
	430. I	. R L.	. WE	.	.	.	.	.	.	.
	440. I	. R L.	. WE	.	.	.	.	.	.	.
	450. I	. R L.	. WE	.	.	.	.	.	.	.
	460. I	. R L.	. WE	.	.	.	.	.	.	.
	470. I	. R L.	. E	.	.	.	.	.	.	.
	480. I	. R L	. E	.	.	.	.	.	.	.
	490. I	. R L	. E	.	.	.	.	.	.	.
	500. I	. R L	. E	.	.	.	.	.	.	.
	510. I	. R L	. E	.	.	.	.	.	.	.
	520. I	. R L	. WE	.	.	.	.	.	.	.

	540.	I	.	R	L	.	WE	.	.	.	N	.	.	.	.
	550.	I	.	R	L	.	WE	.	.	.	N	.	.	.	.
	560.	I	.	R	L	.	E	.	.	.	N	.	.	.	.
	570.	I	.	R	.L	.	E	.	.	.	N	.	.	.	.
	580.	I	.	R	.L	.	E	.	.	.	N	.	.	.	.
	590.	I	.	R	.L	.	E	.	.	.	N	.	.	.	.
19772.00	600.	I	.	R	.L	.	E	.	.	.	N	.	.	.	.

PROFILE FOR STREAM 100-YEAR WATER SURFACE P

PLOTTED POINTS (BY PRIORITY) E-ENERGY,W-WATER SURFACE,I-INVERT,C-CRITICAL W.S.,L-LEFT BANK,R-RIGHT BANK,M-LOWER END STA

ELEVATION SECNO	1367. CUMDIS	1369.	1371.	1373.	1375.	1377.	1379.	1381.	1383.	1385.
	610. I	.	R . L	.	E	.	.	. M	.	.
	620. I	.	R.	L .	WE	.	.	.M	.	.
	630. I	.	. R	L .	WE	.	.	M	.	.
	640. I	.	. R	L.	WE	.	.	M.	.	.
	650. I	.	.	R .L	WE	.	.	M.	.	.
	660. I	.	.	R.	LWE	.	.	M .	.	.
	670. I	.	.	.R	WE	.	.	M .	.	.
	680. I	.	.	.	WE L	.	.	M .	.	.
	690. I	.	.	.	W E	L.	.	M .	.	.
	700. I	.	.	.	WE	R.L	.	M .	.	.
	710. I	.	.	.	WE	.R L	.	M .	.	.
	720. I	.	.	.	WE	. RL	.	M .	.	.
	730. I	.	.	.	WE	. RL	.	M .	.	.
	740. I	.	.	.	WE	.	L.	M .	.	.
19922.00	750. I	.	.	.	WE	.	.L	.	.	.
	760. I	.	.	.	W E	.	.L	.	.	.
	770. I	.	.	.	W E	.	.L	.	.	.
	780. I	.	.	.	WE	.	.L	.	.	.
	790. I	.	.	.	WE	.	.L	.	.	.
	800. I	.	.	.	W E	.	.L	.	.	.
19987.00	810. I	.	.	.	WE	.	.L	.	.	.
	820. CI	.	.	.	WE	. LR	.	M .	.	.
	830. CI	.	.	.	WLE.	R	.	M .	.	.
	840. C I	.	.	. L	W E.		.	.M	.	.
20022.00	850. C I	.	.	L .	R W E.		.	. M	.	.
	860. C I	.	.	.	L W E		.	. M	.	.
20040.00	870. C I	.	.	.	W L.E		.	. M	.	.
20045.00	880. C I	.	.	.	W L.E		.	. M	.	.
20065.00	890. C I	.	.	.	W L. E		.	. M	.	.
20070.00	900. C I	.	.	.	WL. E		.	. M	.	.
	910. C I	.	.	.	L W. E		.	. M	.	.
	920. C I	.	.	.	L W E		.	. M	.	.
	930. C I	.	.	. L	W E		.	. M	.	.
	940. C I	.	.	L	.WE		.	. M	.	.
20125.00	950. C I	.	. L	.	. RE		.	. M	.	.
	960. C I	.	. L	.	. RE		.	.M	.	.
	970. C I	.	. L	.	. RE		.	M	.	.
	980. C I	.	. L.		. E		.	M	.	.
	990. C I	.	. L.		. E		.	M.	.	.
	1000. C I	.	. L		. E		.	M .	.	.
	1010. C I	.	. .L		. E		.	M .	.	.
	1020. C I	.	. . L		. E		.	M .	.	.
	1030. C I	.	. . L		. E		.	M .	.	.
	1040. C I	.	. . L		. ER		.	M .	.	.
20225.00	1050. C I	.	. . L		. ER		.	M .	.	.

T1 MIDDLE BRANCH OF GYPSUM CREEK WICHITA, KANSAS
T2 EXTENSION OF FIS NORTH OF 21ST STREET
T3 500-YEAR WATER SURFACE PROFILE P.E.C. 12/27/91

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0	5	0	0	0	0	0	0	1372.96	0

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	150	0	-1	0	0	0	0	0	0	0

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTH	ELMIN	SSTA
SLOPE	XLOSL	XLCH	XLOSR	ITRIAL	IDC	ICONT	CORAR	TOPWID	SNDST

#PROF 4

CCHV= .100 CEHV= .300
*SECNO 19177.000

19177.000	5.66	1372.96	.00	1372.96	1373.32	.35	.00	.00	1370.10
1594.0	456.3	840.0	297.7	127.7	146.4	87.2	.0	.0	1370.10
.00	3.57	5.74	3.41	.050	.055	.050	.000	1367.30	10110.98
.007635	0.	0.	0.	0	0	0	.00	202.42	10313.40

CCHV= .300 CEHV= .500
*SECNO 19772.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 3.06

19772.000	7.13	1374.43	.00	.00	1374.48	.05	1.07	.09	1371.40
1594.0	597.0	277.6	719.4	372.8	114.6	454.6	8.6	3.6	1370.10
.09	1.60	2.42	1.58	.050	.055	.050	.000	1367.30	10129.71
.000817	535.	595.	595.	5	0	0	.00	397.26	10526.98

CCHV= .600 CEHV= .800
*SECNO 19922.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .44

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1377.44 ELREA= 1377.44

19922.000	7.35	1374.59	.00	.00	1375.05	.46	.24	.33	1377.44
1594.0	.0	1594.0	.0	.0	291.8	.0	10.7	4.7	1377.44
.10	.00	5.46	.00	.000	.055	.000	.000	1367.24	544.28
.004285	150.	150.	150.	2	0	0	.00	40.44	584.72

SPECIAL CULVERT

SC	CUNO	CUNV	ENTLC	COFQ	RDLEN	RISE	SPAN	CULVLN	CHRT	SCL	ELCHU	ELCHD
	4	.012	.20	3.00	.00	6.00	9.00	65.00	8	1	1367.24	1367.24

CHART 8 - BOX CULVERT WITH FLARED WINGWALLS; NO INLET TOP EDGE BEVEL
SCALE 1 - WINGWALLS FLARED 30 TO 75 DEGREES

*SECNO 19987.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	GLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOSL	XLOH	XLOSR	ITRIAL	IDC	ICONT	CONAR	TOPWID	ENDST

SPECIAL CULVERT OUTLET CONTROL
EGIC = 1373.611 EGOC = 1375.707 PCWSE= 1374.586 ELTRD= 1377.400

SPECIAL CULVERT

EGIC	EGOC	HA	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
1373.61	1375.71	.66	0.	1094.	4.953	216.0	1377.40	0.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1377.44 ELREA= 1377.44

19987.000	8.09	1375.33	.00	.00	1375.71	.38	.66	.00	1377.44
1594.0	.0	1594.0	.0	.0	321.8	.0	11.1	4.7	1377.44
.10	.00	4.95	.00	.000	.055	.000	.000	1367.24	544.21
.003207	65.	65.	65.	2	0	0	.00	40.59	584.79

*SECNO 20022.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.50

20022.000	8.22	1375.82	.00	.00	1375.94	.12	.07	.16	1372.90
1594.0	300.9	1094.9	198.2	161.3	350.4	158.1	11.5	4.9	1374.20
.11	1.87	3.12	1.25	.050	.055	.050	.000	1367.60	435.13
.001419	35.	35.	35.	2	0	0	.00	291.58	730.71

CCHV= .300 CEHV= .500
*SECNO 20040.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .44

20040.000	8.01	1375.66	.00	.00	1376.19	.53	.05	.21	1374.95
1594.0	112.2	1323.3	158.6	57.6	208.4	83.8	11.7	5.0	1374.95
.11	1.95	6.35	1.89	.050	.055	.050	.000	1367.65	441.23
.007286	18.	18.	18.	2	0	0	.00	265.08	706.31

*SECNO 20045.000

20045.000	8.19	1375.84	.00	.00	1376.26	.42	.03	.03	1374.95
1594.0	145.0	1241.4	207.6	72.7	215.2	107.5	11.8	5.0	1374.95
.11	1.99	5.77	1.92	.050	.055	.050	.000	1367.65	439.00
.005758	5.	5.	5.	4	0	0	.00	275.28	714.29

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IBC	ICONT	COSAR	TOPWID	ENDST

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	SWP	SAREA	SS	ELCHU	ELCHD
	1.25	1.50	2.60	.00	28.00	1.00	160.00	1.10	1367.65	1367.65

*SECNO 20065.000
PRESSURE AND WEIR FLOW, Weir Submergence Based on TRAPEZOIDAL Shape

ZOPRS	EGLWC	H3	QWEIR	QFR	AREA	TRAPEZOID AREA	ELLC	ELTRD	WEIRLN
1377.67	1376.29	.03	604.	977.	180.	174.	1372.95	1374.95	113.
20065.000	8.66	1376.31	.00	.00	1376.53	.22	.27	.00	1374.95
1594.0	224.5	1036.9	332.7	117.3	234.5	162.6	12.0	5.2	1374.95
.11	1.91	4.42	1.82	.050	.055	.050	.000	1367.65	432.71
.003019	20.	20.	20.	2	0	2	.00	304.03	736.74

*SECNO 20070.000
20070.000	8.68	1376.33	.00	.00	1376.54	.21	.01	.00	1374.93
1594.0	226.9	1030.4	336.7	118.9	235.2	163.7	12.1	5.2	1374.93
.11	1.91	4.38	1.81	.050	.055	.050	.000	1367.65	432.49
.002952	5.	5.	5.	0	0	0	.00	305.05	737.54

CCHV= .100 CEHV= .300
*SECNO 20125.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 3.12

20125.000	8.38	1376.58	.00	.00	1376.60	.02	.04	.02	1372.50
1594.0	789.0	753.9	51.1	660.4	596.8	104.7	12.3	5.7	1375.64
.12	1.19	1.26	.49	.050	.055	.050	.000	1368.20	298.88
.000304	55.	55.	55.	2	0	0	.00	478.10	776.97

*SECNO 20225.000
20225.000	8.51	1376.61	.00	.00	1376.64	.02	.03	.00	1374.00
1594.0	713.5	871.6	8.9	605.9	652.3	27.7	16.3	6.7	1376.00
.14	1.18	1.34	.32	.050	.055	.050	.000	1366.10	283.16
.000353	100.	100.	100.	2	0	0	.00	435.73	718.28

THIS RUN EXECUTED 03JAN92 14:39:38

****
HEC-2 WATER SURFACE PROFILES

Version 4.6.0; February 1991
****

NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

10-YEAR WATER SURFACE PR

SUMMARY PRINTOUT TABLE 150

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
	19177.000	.00	.00	.00	1367.30	738.00	1372.22	.00	1372.42	50.94	4.08	230.69	103.40
	19177.000	.00	.00	.00	1367.30	1087.00	1372.48	.00	1372.79	73.89	5.18	272.31	126.45
	19177.000	.00	.00	.00	1367.30	1243.00	1372.62	.00	1372.85	77.37	5.44	296.61	141.31
	19177.000	.00	.00	.00	1367.30	1594.00	1372.96	.00	1373.32	76.35	5.74	361.35	182.42
*	19772.000	595.00	.00	.00	1367.30	738.00	1373.34	.00	1373.37	7.46	2.04	550.87	270.26
*	19772.000	595.00	.00	.00	1367.30	1087.00	1373.85	.00	1373.89	7.77	2.22	723.09	389.90
*	19772.000	595.00	.00	.00	1367.30	1243.00	1374.05	.00	1374.09	7.90	2.29	793.52	442.17
*	19772.000	595.00	.00	.00	1367.30	1594.00	1374.43	.00	1374.48	8.17	2.42	941.93	557.73
	19922.000	150.00	.00	.00	1367.24	738.00	1373.47	.00	1373.61	15.17	2.99	246.78	189.47
*	19922.000	150.00	.00	.00	1367.24	1087.00	1374.00	.00	1374.25	25.64	4.05	268.18	214.68
*	19922.000	150.00	.00	.00	1367.24	1243.00	1374.20	.00	1374.51	30.70	4.50	276.17	224.32
*	19922.000	150.00	.00	.00	1367.24	1594.00	1374.59	.00	1375.05	42.85	5.46	291.81	243.52
	19987.000	65.00	1377.40	.00	1367.24	738.00	1373.53	.00	1373.71	14.41	2.94	251.05	194.43
	19987.000	65.00	1377.40	.00	1367.24	1087.00	1374.29	.00	1374.52	22.59	3.89	279.76	228.65
	19987.000	65.00	1377.40	.00	1367.24	1243.00	1374.60	.00	1374.88	25.91	4.25	292.37	244.20
	19987.000	65.00	1377.40	.00	1367.24	1594.00	1375.33	.00	1375.71	32.07	4.95	321.80	281.46
*	20022.000	35.00	.00	.00	1367.60	738.00	1373.64	.00	1373.83	33.59	3.51	210.54	127.34
	20022.000	35.00	.00	.00	1367.60	1087.00	1374.38	.00	1374.66	39.20	4.23	257.24	173.62
	20022.000	35.00	.00	.00	1367.60	1243.00	1374.70	.00	1375.01	39.51	4.47	278.13	197.76
*	20022.000	35.00	.00	.00	1367.60	1594.00	1375.82	.00	1375.94	14.19	3.12	569.86	423.11
*	20040.000	18.00	.00	.00	1367.65	738.00	1373.56	.00	1374.11	118.20	5.36	123.82	67.68
*	20040.000	18.00	.00	.00	1367.65	1087.00	1374.24	.00	1375.04	137.38	7.20	151.03	92.57
*	20040.000	18.00	.00	.00	1367.65	1243.00	1374.53	.00	1375.44	146.15	7.84	162.70	103.89
*	20040.000	18.00	.00	.00	1367.65	1594.00	1375.56	.00	1376.19	72.86	6.35	249.86	186.75
	20045.000	5.00	.00	.00	1367.65	738.00	1373.66	.00	1374.13	106.66	5.77	127.83	71.36
	20045.000	5.00	.00	.00	1367.65	1087.00	1374.38	.00	1375.12	123.47	6.93	156.50	97.82
	20045.000	5.00	.00	.00	1367.65	1243.00	1374.66	.00	1375.52	127.51	7.37	168.74	109.91
	20045.000	5.00	.00	.00	1367.65	1594.00	1375.24	.00	1376.26	57.58	5.77	295.60	210.07

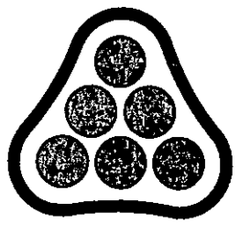
	SECNO	XLOC	ELTRD	ELLC	ELMIN	Q	CWSEL	ORIWS	EG	10*KS	VCH	AREA	.01K
	20065.000	20.00	1374.95	1372.95	1367.65	738.00	1373.72	.00	1374.22	101.24	5.67	130.09	73.35
	20065.000	20.00	1374.95	1372.95	1367.65	1087.00	1374.45	.00	1375.18	116.60	6.82	159.42	100.67
	20065.000	20.00	1374.95	1372.95	1367.65	1243.00	1374.73	.00	1375.55	123.33	7.38	170.75	111.93
	20065.000	20.00	1374.95	1372.95	1367.65	1594.00	1376.31	.00	1376.83	30.19	4.42	534.58	290.11
	20070.000	5.00	.00	.00	1367.65	738.00	1373.80	.00	1374.27	98.89	5.54	133.25	75.16
	20070.000	5.00	.00	.00	1367.65	1087.00	1374.56	.00	1375.24	106.98	6.63	163.92	105.09
	20070.000	5.00	.00	.00	1367.65	1243.00	1374.85	.00	1375.63	113.57	7.09	175.58	116.64
	20070.000	5.00	.00	.00	1367.65	1594.00	1376.33	.00	1376.84	29.52	4.38	539.79	293.36
*	20125.000	55.00	.00	.00	1368.20	738.00	1374.36	.00	1374.41	6.31	1.52	565.73	293.88
*	20125.000	55.00	.00	.00	1368.20	1087.00	1375.35	.00	1375.38	4.91	1.36	858.01	490.76
*	20125.000	55.00	.00	.00	1368.20	1243.00	1375.74	.00	1375.77	4.33	1.31	999.60	597.18
*	20125.000	55.00	.00	.00	1368.20	1594.00	1376.58	.00	1376.60	3.04	1.25	1361.95	913.93
	20225.000	100.00	.00	.00	1368.10	738.00	1374.45	.00	1374.46	9.65	1.60	522.96	235.13
	20225.000	100.00	.00	.00	1368.10	1087.00	1375.41	.00	1375.44	5.75	1.44	831.52	453.26
	20225.000	100.00	.00	.00	1368.10	1243.00	1375.79	.00	1375.82	4.94	1.40	982.73	559.16
	20225.000	100.00	.00	.00	1368.10	1594.00	1376.61	.00	1376.64	3.53	1.34	1385.88	848.55

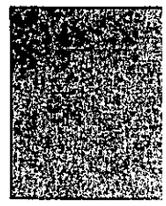
10-YEAR WATER SURFACE PR

SUMMARY PRINTOUT TABLE 150

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	19177.000	738.00	1372.82	.00	.00	.00	160.05	.00
	19177.000	1087.00	1372.48	.26	.00	.00	168.57	.00
	19177.000	1243.00	1372.62	.14	.00	.00	178.46	.00
	19177.000	1594.00	1372.96	.24	.00	.00	202.42	.00
*	19772.000	738.00	1373.34	.00	1.12	.00	319.10	595.00
*	19772.000	1087.00	1373.85	.31	1.37	.00	355.65	595.00
*	19772.000	1243.00	1374.05	.19	1.43	.00	369.35	595.00
*	19772.000	1594.00	1374.43	.39	1.47	.00	397.26	595.00
	19922.000	738.00	1373.47	.00	.13	.00	40.22	150.00
*	19922.000	1087.00	1374.00	.53	.13	.00	40.33	150.00
*	19922.000	1243.00	1374.20	.20	.13	.00	40.36	150.00
*	19922.000	1594.00	1374.59	.39	.15	.00	40.44	150.00
	19987.000	738.00	1373.58	.00	.11	.00	40.24	65.00
	19987.000	1087.00	1374.29	.71	.29	.00	40.38	65.00
	19987.000	1243.00	1374.60	.31	.40	.00	40.44	65.00
	19987.000	1594.00	1375.33	.73	.74	.00	40.59	65.00
*	20022.000	738.00	1373.64	.00	.06	.00	61.78	35.00
	20022.000	1087.00	1374.38	.74	.09	.00	64.00	35.00
	20022.000	1243.00	1374.70	.32	.10	.00	64.00	35.00
*	20022.000	1594.00	1375.82	1.11	.49	.00	291.38	35.00
*	20040.000	738.00	1373.56	.00	-.08	.00	40.06	18.00
*	20040.000	1087.00	1374.24	.68	-.14	.00	40.13	18.00
*	20040.000	1243.00	1374.53	.29	-.16	.00	40.16	18.00
*	20040.000	1594.00	1375.66	1.13	-.16	.00	265.08	18.00
	20045.000	738.00	1373.66	.00	.10	.00	40.07	5.00
	20045.000	1087.00	1374.38	.71	.14	.00	40.14	5.00
	20045.000	1243.00	1374.66	.30	.15	.00	40.17	5.00
	20045.000	1594.00	1375.84	1.16	.18	.00	275.28	5.00
	20065.000	738.00	1373.72	.00	.06	.00	40.06	20.00
	20065.000	1087.00	1374.45	.74	.08	.00	40.15	20.00
	20065.000	1243.00	1374.73	.28	.05	.00	40.18	20.00
	20065.000	1594.00	1376.31	1.58	.47	.00	304.03	20.00
	20070.000	738.00	1373.80	.00	.08	.00	40.08	5.00
	20070.000	1087.00	1374.55	.75	.11	.00	40.15	5.00
	20070.000	1243.00	1374.85	.29	.11	.00	40.19	5.00
	20070.000	1594.00	1376.33	1.49	.02	.00	305.05	5.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
*	20125.000	738.00	1374.38	.00	.58	.00	276.36	55.00
*	20125.000	1087.00	1375.36	.98	.80	.00	334.60	55.00
*	20125.000	1243.00	1375.74	.39	.90	.00	392.69	55.00
*	20125.000	1594.00	1375.58	.84	.25	.00	478.10	55.00
	20225.000	738.00	1374.45	.00	.07	.00	306.18	100.00
	20225.000	1087.00	1375.41	.96	.05	.00	337.37	100.00
	20225.000	1243.00	1375.79	.38	.05	.00	345.68	100.00
	20225.000	1594.00	1375.61	.82	.03	.00	435.73	100.00





January 9, 1992

Ritchie Associates
8100 E. 22nd St North
Building 1000
Wichita, KS 67226

Attention: Mr. Jack Ritchie, CEO

Reference: Summerfield II
Survey & Drainage Study
PEC File No. 36-91656-2051

Dear Mr. Ritchie:

This letter shall serve as our report on drainage at the proposed Summerfield II area located at the northeast corner of 21st St. and Tallgrass, Wichita, Kansas.

At the present time, the detailed City of Wichita Flood Insurance Study (FIS) prepared by Greenhorne and O'Mara, dated January 18, 1983, terminates at the south side of 21st St. for the tributary in question, the Middle Branch of Gypsum Creek.

PEC has extended the study approximately 300' north of 21st Street utilizing the Corps of Engineers computer program HEC-2. Our study actually commences approximately 760' south of 21st Street and utilizes existing HEC-2 cross-sections, discharges, roughness factors, etc. to 21st Street. New field cross-sections were obtained by Allied Laboratories north of 21st Street and are included in the HEC-2 model. Also the reinforced concrete box culvert under 21st Street and the golf cart bridge just north of 21st were included in our HEC-2 model.

The results of this study indicate the 100-year base flood elevations to be approximately 187.3' just north of 21st Street and 188.4' near the north line of the proposed Summerfield II project. It appears that a portion of Lots 4, 5 and 6 of Bill Yung's preliminary layout would be included in the floodplain. None of these lots, however would be included in the floodway.

303 S. TOPEKA
WICHITA, KANSAS 67202
(316) 262-2691
FAX (316) 262-3003

With copy of this letter, I am sending a copy of our calculations to Chris Breitenstein of the City Engineering Department for his review and his interpretation concerning fill in the floodplain, permits, map amendments, etc. which may be required.

If you have any questions, please advise.

Very truly yours,

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

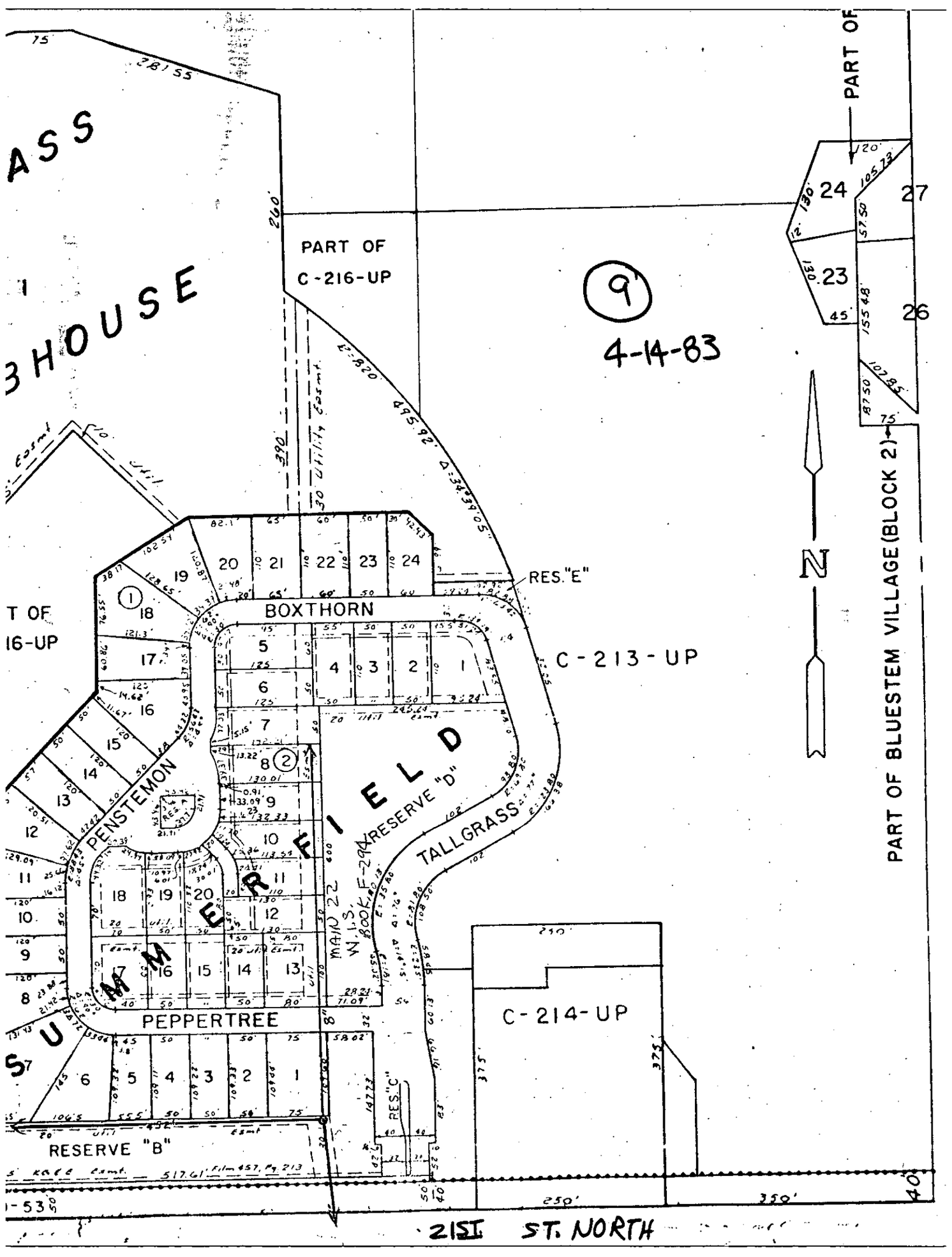
Charles S. Brown

Charles S. Brown, P.E.
Manager
Land Development Division

CSB/cas

Encl. As noted

cc: Chris Breitenstein
Bill Yung


PART OF
C-216-UP
9
4-14-83
PART OF BLUESTEM VILLAGE (BLOCK 2)
N
BOXTHORN
RES. "E"
C-213-UP
SUMMERFIELD
MAP 22 W.I.S. BOOK F-294
PENSTEMON
TALLGRASS
RESERVE "D"
PEPPERTREE
C-214-UP
RES. "C"
RESERVE "B"
517.61' Film 457, Pg 213
21ST ST. NORTH

SUBDIVISION COMMITTEE
METROPOLITAN AREA PLANNING COMMISSION

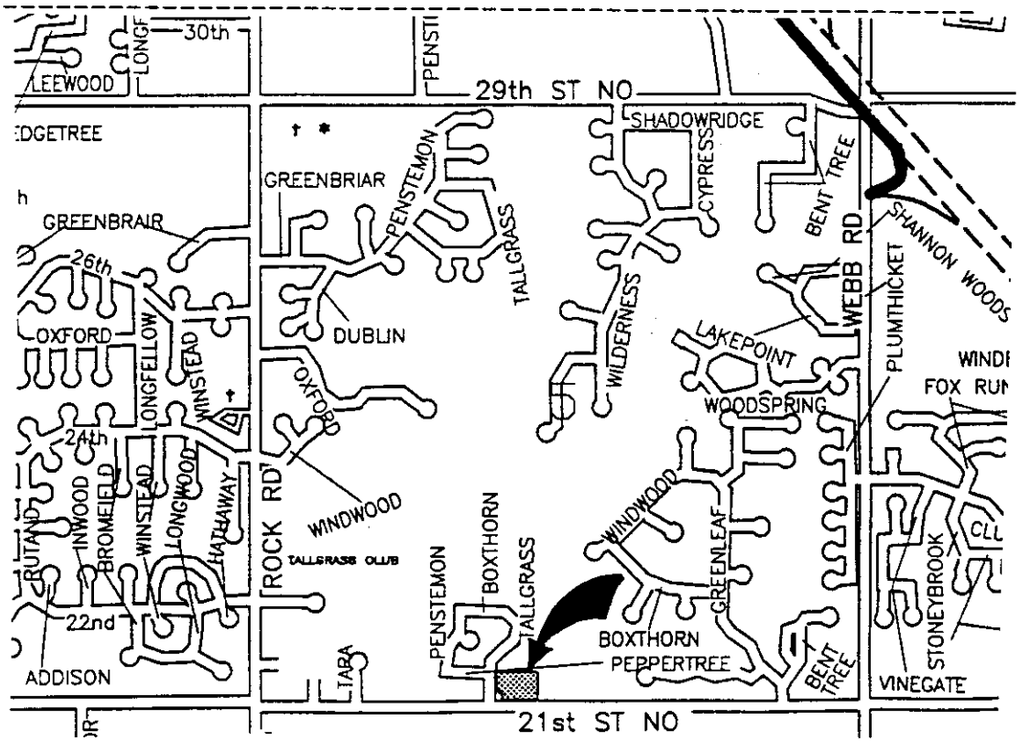
AGENDA ITEM NO. 4

August 6, 1992

STAFF REPORT
(Final Plat)

CASE NUMBER:	**S/D 92-33 - SUMMERFIELD SECOND ADDITION**
OWNER/APPLICANT:	Sterling House of Wichita, L.P.
SURVEYOR/ENGINEER:	Mid-Kansas Engineering Consultants, Inc.
LOCATION:	North of 21st Street North and East of Rock Road
SITE SIZE:	1.95 Acres
NUMBER OF LOTS	
Residential:	1
Office:	
Commercial:	
Industrial:	
Total:	1
MINIMUM LOT AREA:	1.95 acres
CURRENT ZONING:	"AA" One-Family (DP-96)

VICINITY MAP:



NOTE:A plat also named the Summerfield Second Addition was submitted in 1983 for approximately the same area included in this present plat. Because of the lack of activity on that original plat, the file was closed in 1990. This site is within the Tallgrass Community Unit Plat, DP-96 and corresponds to parcel 12a. An administrative adjustment has been approved for this parcel to allow for a 26-unit housing development for the elderly.

STAFF COMMENTS:

A. City water appears to be available to this site either from a line in 21st Street North or from a line in Tallgrass along the west line of the plat. However, sanitary sewer is not directly available and shall be guaranteed for extension to the site.

B. The applicant shall guarantee any drainage improvements required by the platting of this property.

C. Since this site is intended to have complete access control to 21st Street North, the applicant shall guarantee the closure of the driveway from the site to 21st Street.

D. If improvements are guaranteed by petition, a notarized certificate listing the petitions shall be submitted to the Planning Department for recording.

E. As indicated by the CUP, DP-96, this lot (parcel) was intended to have complete access control to 21st Street North, with access being provided from the adjacent residential street, Tallgrass. Therefore, on the final plat tracing the face of the plat shall indicate complete access control to 21st Street North across this plat's south line. The plattor's text shall also be amended to indicate the dedication of complete access control.

F. On the final plat tracing Tallgrass (street) adjacent to the west line of this plat shall be indicated. The dedication of right-of-way for 21st Street North by separate instrument shall also be indicated with the appropriate recording information depicted.

G. Based on the title binder for this site, ownership of this property is with Ritchie Development Corporation while the plat indicates ownership by Sterling House of Wichita. Prior to this plat being released for recording, the applicant shall provide proof that the site's ownership is vested in the indicated signatory.

H. The title binder is also indicating mortgages on this site by First National Bank and possibly Prairie State Bank. Unless proof is provided that neither bank holds a mortgage on this site, both Banks will need to sign (consent to) the plat.

I. The applicant shall submit an avigational easement covering all

of subject plat and a restrictive covenant assuring that adequate construction methods will be used to minimize the effects of noise pollution in the habitable structures constructed on subject property.

J. On the final plat tracing, the MAPC signature block shall be amended to indicate Christopher J. Goebel as chairman.

K. Based on the configuration of this plat, it appears that a gap is being created between the southwest corner of the plat and Tallgrass and 21st Streets. The applicant's agent should be prepared to indicate if such a section of unplatted property is being created and if so why. If a gap is being created and is in the same ownership as this plat, it should be included in the plat.

L. The applicant shall install or guarantee the installation of all utilities and facilities which are applicable and described in Article 8 of the MAPC Subdivision Regulations.

M. The applicant's engineer is advised that the Register of Deeds is requiring the name(s) of the notary public, who acknowledges the signatures on this plat, to be printed beneath the notary's signature.

N. Perimeter closure computations shall be submitted with the final plat tracing. Section 5-101(c).

O. Recording of the plat within 30 days after approval by the City Council.

P. The representative from City Engineering should be prepared to comment on the status of the applicant's drainage plan.

NOTE: This plat has been submitted in final form only.