



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

January 15, 2003

Jeff Mortensen, PE
Jeff Mortensen & Associates, Inc
6010-B Midway Park Blvd. NE
Albuquerque, NM 87109

Re: Ventura St. – Robb's Pl. to Holly Ave. Drainage Plan
Engineer's Stamp dated 12-6-02 (C20/D38)

Dear Mr. Mortensen,

Based upon the information provided in your submittal dated 12-6-02, the above referenced plan is approved for Work Order documents. Any minor comments I have can be addressed at DRC.

If you have any questions, you can contact me at 924-3986.

Sincerely,

Bradley L. Bingham, PE
Sr. Engineer, Planning Dept.
Development and Building Services

C: Lynn Mazur, AMAFCA
file

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/11/2002)

C-20/D38

PROJECT TITLE: Ventura Street NE – Rob's Place to Holly Ave ZONE ATLAS/DRNG. FILE #: ~~C20~~
 DRB #: 1001542 EPC #: 02EPC00131,2 WORK ORDER #: _____

LEGAL DESCRIPTION: Ventura Street NE – Public Street Right-of-Way
 CITY ADDRESS: Ventura Street NE Between Holly Ave NE and Rob's Place NE

ENGINEERING FIRM: Jeff Mortensen & Assoc., Inc. CONTACT: J. Graeme Means
 ADDRESS: 6010-B Midway Park Blvd. NE PHONE: (505) 345-4250
 CITY, STATE: Albuquerque, NM ZIP CODE: 87109

OWNER: Hoech Real Estate Corp. CONTACT: Don Hoech
 ADDRESS: 8300 Carmel Ave N.E., Suite 601 PHONE: (505) 821-4440
 CITY, STATE: Albuquerque, NM ZIP CODE: 87122

ARCHITECT: Contact Owner CONTACT: _____
 ADDRESS: _____ PHONE: _____
 CITY, STATE: _____ ZIP CODE: _____

SURVEYOR: Jeff Mortensen & Assoc, Inc. CONTACT: Charles G. Cala
 ADDRESS: 6010-B Midway Park Blvd. NE PHONE: (505) 345-4250
 CITY, STATE: Albuquerque, NM ZIP CODE: 87109

CONTRACTOR: Not Yet Selected CONTACT: _____
 ADDRESS: _____ PHONE: _____
 CITY, STATE: _____ ZIP CODE: _____

TYPE OF SUBMITTAL:

- ☒ DRAINAGE REPORT
☐ DRAINAGE PLAN
☐ CONCEPTUAL GRADING & DRAINAGE PLAN
☐ GRADING PLAN
☐ EROSION CONTROL PLAN
☐ ENGINEER'S CERTIFICATION (HYDROLOGY)
☐ CLOMR/LOMR
☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ ENGINEER'S CERTIFICATION (TCL)
☐ ENGINEER'S CERTIFICATION (DRB APPR. SITE PLAN)
☐ OTHER

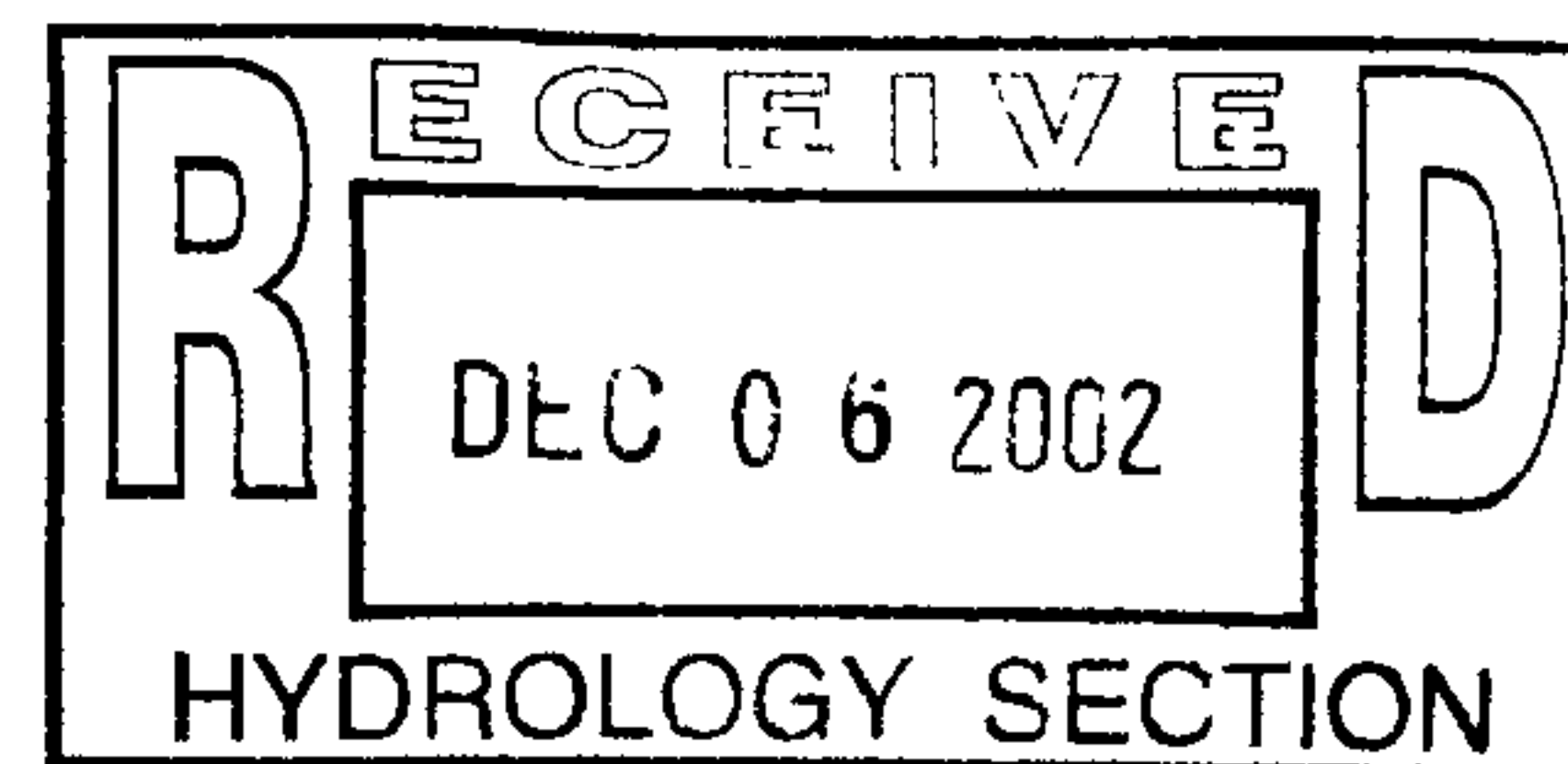
CHECK TYPE OF APPROVAL SOUGHT:

- ☐ SIA/FINANCIAL GUARANTEE RELEASE
☐ PRELIMINARY PLAT APPROVAL
☐ S. DEV. PLAN FOR SUB'D APPROVAL
☐ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
☐ SECTOR PLAN APPROVAL
☐ FINAL PLAT APPROVAL
☐ FOUNDATION PERMIT APPROVAL
☐ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY (PERM.)
☐ CERTIFICATE OF OCCUPANCY (TEMP.)
☐ GRADING PERMIT APPROVAL
☐ PAVING PERMIT APPROVAL
☒ WORK ORDER APPROVAL
☐ OTHER (SPECIFY)

Xc: Lynn Mazur @ AMAFCA

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ☐ YES
☒ NO
☐ COPY PROVIDED



DATE SUBMITTED: 12/05/2002 BY: J. Graeme Means, P.E.

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope of the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based upon the following:

1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
3. **Drainage Report:** Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

2001.060.8

AHYMO PROGRAM (AHYMO_97) -

- Version: 1997.02c

RUN DATE (MON/DAY/YR) = 10/22/2002

START TIME (HR:MIN:SEC) = 08:39:03

USER NO.= AHYMO-I-9702c0100021U-SH

INPUT FILE = C:\PROGRA~1\AHYMO_97\200106~1.6\VENTURA.PPC

* Vineyard IV Pond with Ventura Street Modifications.
 * The modifications will route all offsite flows and some
 * of the onsite flows to the Ventura Street storm drain which
 * will have free discharge with the downstream NDB improvements
 * by AMAFCA by separate project.

* 100-year, 6-hour event

RAINFALL

TYPE=2 RAIN QUARTER=0.0

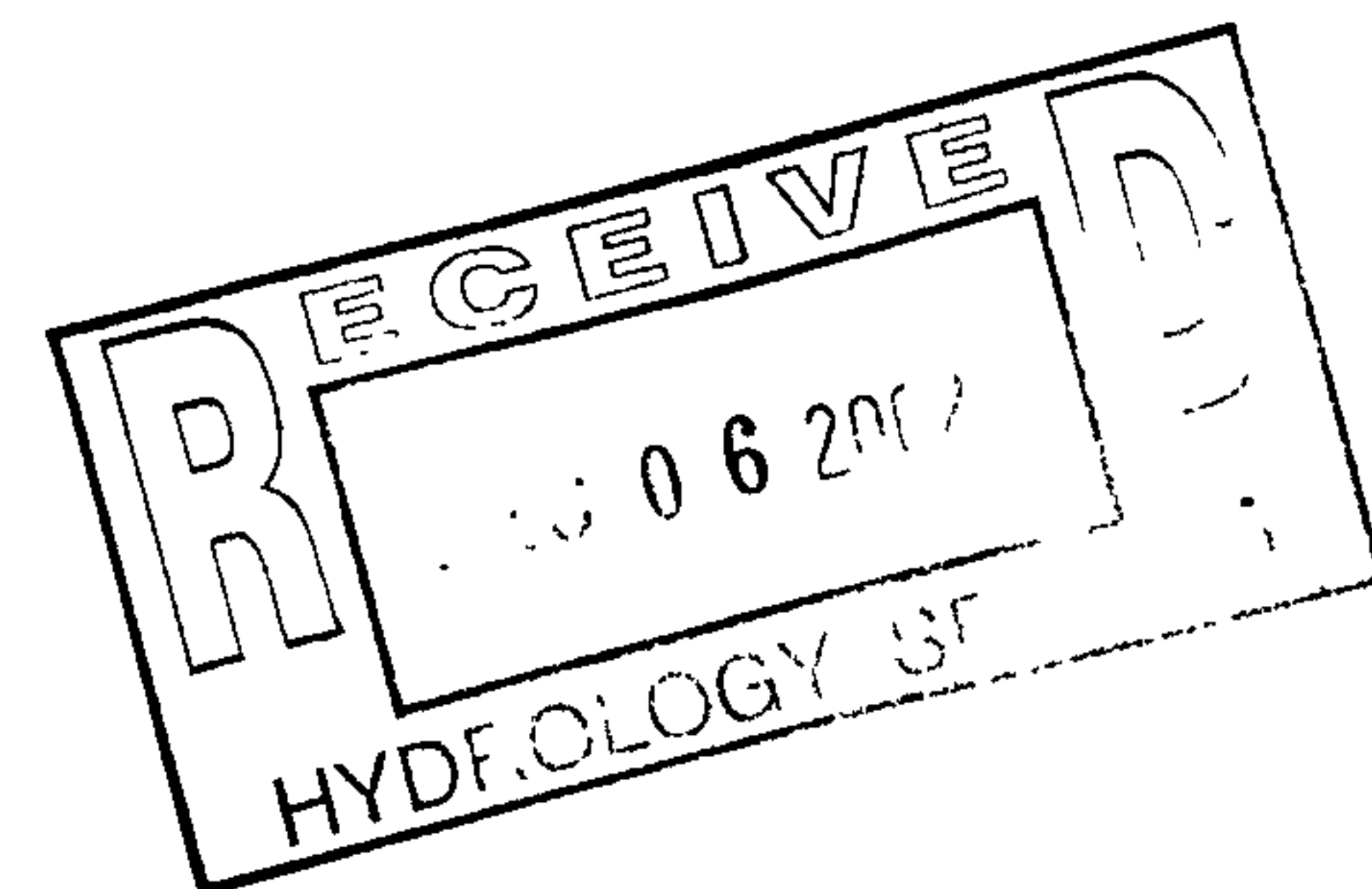
RAIN ONE=2.14IN RAIN SIX=2.60IN

RAIN DAY=3.03 IN DT=0.05

COMPUTED 24-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 HR.

DT = .050000 HOURS END TIME = 24.000000 HOURS

.0000	.0041	.0084	.0128	.0173	.0220	.0269
.0319	.0372	.0427	.0484	.0543	.0606	.0672
.0741	.0814	.0892	.0975	.1063	.1159	.1263
.1353	.1453	.1742	.2424	.3597	.5412	.8026
1.1599	1.4418	1.5691	1.6754	1.7685	1.8518	1.9272
1.9960	2.0591	2.1173	2.1709	2.2204	2.2663	2.2773
2.2875	2.2971	2.3061	2.3146	2.3226	2.3303	2.3377
2.3447	2.3515	2.3580	2.3643	2.3704	2.3763	2.3820
2.3875	2.3929	2.3982	2.4033	2.4083	2.4132	2.4179
2.4226	2.4271	2.4316	2.4360	2.4403	2.4445	2.4486
2.4526	2.4566	2.4605	2.4644	2.4682	2.4719	2.4755
2.4792	2.4827	2.4862	2.4897	2.4931	2.4964	2.4998
2.5030	2.5063	2.5094	2.5126	2.5157	2.5188	2.5218
2.5248	2.5278	2.5307	2.5336	2.5365	2.5393	2.5421
2.5449	2.5477	2.5504	2.5531	2.5558	2.5584	2.5610
2.5636	2.5662	2.5688	2.5713	2.5738	2.5763	2.5787
2.5812	2.5836	2.5860	2.5884	2.5907	2.5931	2.5954
2.5977	2.6000	2.6019	2.6037	2.6055	2.6074	2.6092
2.6110	2.6128	2.6146	2.6165	2.6182	2.6200	2.6218
2.6236	2.6254	2.6271	2.6289	2.6306	2.6324	2.6341
2.6359	2.6376	2.6393	2.6410	2.6427	2.6444	2.6461
2.6478	2.6495	2.6512	2.6529	2.6545	2.6562	2.6579
2.6595	2.6612	2.6628	2.6644	2.6661	2.6677	2.6693
2.6709	2.6726	2.6742	2.6758	2.6774	2.6790	2.6805
2.6821	2.6837	2.6853	2.6868	2.6884	2.6900	2.6915
2.6931	2.6946	2.6962	2.6977	2.6992	2.7007	2.7023
2.7038	2.7053	2.7068	2.7083	2.7098	2.7113	2.7128
2.7143	2.7158	2.7172	2.7187	2.7202	2.7216	2.7231
2.7246	2.7260	2.7275	2.7289	2.7303	2.7318	2.7332
2.7346	2.7361	2.7375	2.7389	2.7403	2.7417	2.7431
2.7445	2.7459	2.7473	2.7487	2.7501	2.7515	2.7529
2.7542	2.7556	2.7570	2.7584	2.7597	2.7611	2.7624
2.7638	2.7651	2.7665	2.7678	2.7691	2.7705	2.7718
2.7731	2.7745	2.7758	2.7771	2.7784	2.7797	2.7810
2.7823	2.7836	2.7849	2.7862	2.7875	2.7888	2.7901
2.7914	2.7926	2.7939	2.7952	2.7965	2.7977	2.7990
2.8002	2.8015	2.8028	2.8040	2.8053	2.8065	2.8077
2.8090	2.8102	2.8114	2.8127	2.8139	2.8151	2.8164
2.8176	2.8188	2.8200	2.8212	2.8224	2.8236	2.8248
2.8260	2.8272	2.8284	2.8296	2.8308	2.8320	2.8332
2.8343	2.8355	2.8367	2.8379	2.8390	2.8402	2.8414
2.8425	2.8437	2.8449	2.8460	2.8472	2.8483	2.8495
2.8506	2.8518	2.8529	2.8540	2.8552	2.8563	2.8574
2.8586	2.8597	2.8608	2.8619	2.8630	2.8642	2.8653
2.8664	2.8675	2.8686	2.8697	2.8708	2.8719	2.8730
2.8741	2.8752	2.8763	2.8774	2.8785	2.8796	2.8806
2.8817	2.8828	2.8839	2.8849	2.8860	2.8871	2.8882
2.8892	2.8903	2.8913	2.8924	2.8935	2.8945	2.8956
2.8966	2.8977	2.8987	2.8998	2.9008	2.9018	2.9029
2.9039	2.9050	2.9060	2.9070	2.9080	2.9091	2.9101
2.9111	2.9121	2.9132	2.9142	2.9152	2.9162	2.9172
2.9182	2.9192	2.9202	2.9212	2.9222	2.9232	2.9242
2.9252	2.9262	2.9272	2.9282	2.9292	2.9302	2.9312
2.9322	2.9331	2.9341	2.9351	2.9361	2.9371	2.9380
2.9390	2.9400	2.9409	2.9419	2.9429	2.9438	2.9448
2.9458	2.9467	2.9477	2.9486	2.9496	2.9505	2.9515
2.9524	2.9534	2.9543	2.9553	2.9562	2.9571	2.9581
2.9590	2.9599	2.9609	2.9618	2.9627	2.9637	2.9646
2.9655	2.9664	2.9674	2.9683	2.9692	2.9701	2.9710
2.9720	2.9729	2.9738	2.9747	2.9756	2.9765	2.9774
2.9783	2.9792	2.9801	2.9810	2.9819	2.9828	2.9837
2.9846	2.9855	2.9864	2.9873	2.9882	2.9890	2.9899
2.9908	2.9917	2.9926	2.9935	2.9943	2.9952	2.9961
2.9970	2.9978	2.9987	2.9996	3.0004	3.0013	3.0022
3.0030	3.0038	3.0046	3.0054	3.0062	3.0070	3.0078



3.0090 3.009 3.0108 3.0116 3.0125 3.0133 3.0142
 3.0150 3.0158 3.0167 3.0175 3.0184 3.0192 3.0200
 3.0209 3.0217 3.0225 3.0234 3.0242 3.0250 3.0259
 3.0267 3.0275 3.0284 3.0292 3.0300

2007.060.8

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* Subdivision Basin Vine-2
 COMPUTE NM HYD ID=16 HYD NO=922.3 AREA=0.0415 SQ MI
 PER A=0 PER B=30 PER C=30 PER D=40
 TP=-0.133333 HR MASS RAIN=-1

K = .072666HR TP = .133333HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
 UNIT PEAK = 65.521 CFS UNIT VOLUME = .9989 B = 526.28 P60 = 2.1400
 AREA = .016600 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

K = .121314HR TP = .133333HR K/TP RATIO = .909858 SHAPE CONSTANT, N = 3.892621
 UNIT PEAK = 64.979 CFS UNIT VOLUME = 1.001 B = 347.95 P60 = 2.1400
 AREA = .024900 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

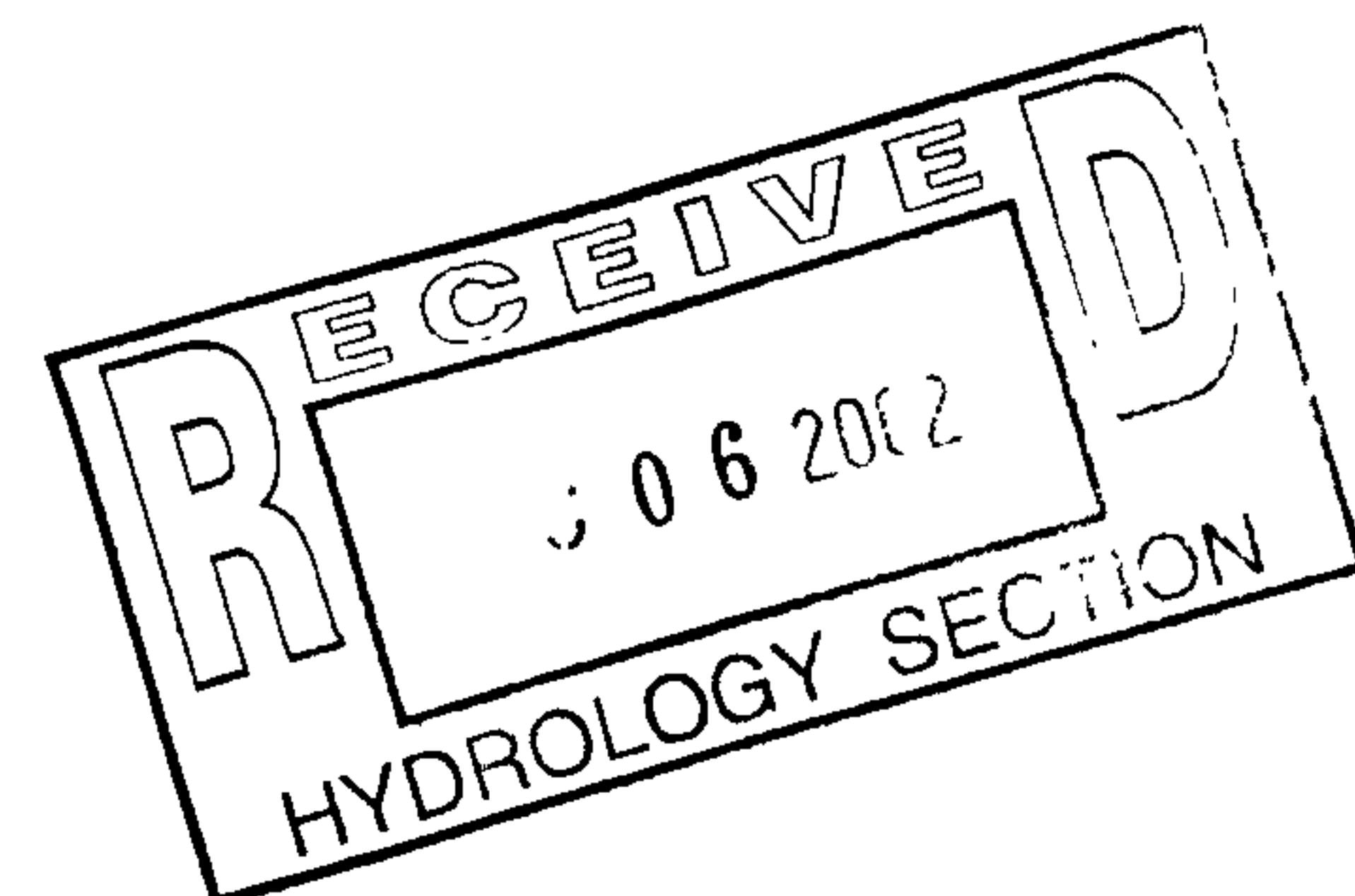
*

*S ROUTE 922.3 THRU POND AS 923.99
 ROUTE RESERVOIR ID=18 HYD NO=923.99 INFLOW=16 CODE=10
 OUT(CFS) STORAGE(AC-FT) ELEV(FT)

0	1.16	44
3	1.70	45
10	2.28	46
19	2.91	47
24	3.60	48
29	4.33	49
33	5.13	50

* * * * *

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	44.00	1.160	.00
.50	.00	44.00	1.160	.00
1.00	.76	44.01	1.163	.02
1.50	100.03	45.80	2.164	8.60
2.00	18.69	47.56	3.294	21.78
2.50	3.05	46.81	2.793	17.33
3.00	1.11	46.04	2.307	10.39
3.50	.63	45.51	1.997	6.58
4.00	.49	45.17	1.801	4.21
4.50	.45	44.96	1.678	2.88
5.00	.45	44.79	1.588	2.38
5.50	.46	44.66	1.517	1.98
6.00	.49	44.56	1.461	1.67
6.50	.40	44.47	1.415	1.42
7.00	.38	44.40	1.377	1.20
7.50	.36	44.34	1.346	1.03
8.00	.35	44.30	1.321	.89
8.50	.34	44.26	1.301	.78
9.00	.33	44.23	1.284	.69
9.50	.32	44.21	1.271	.62
10.00	.31	44.18	1.260	.55
10.50	.30	44.17	1.251	.50
11.00	.30	44.15	1.243	.46
11.50	.29	44.14	1.237	.43
12.00	.28	44.13	1.231	.40
12.50	.28	44.12	1.227	.37
13.00	.27	44.12	1.223	.35
13.50	.26	44.11	1.220	.33
14.00	.26	44.11	1.217	.32
14.50	.25	44.10	1.215	.30
15.00	.24	44.10	1.213	.29
15.50	.24	44.09	1.211	.28
16.00	.24	44.09	1.209	.27
16.50	.23	44.09	1.208	.26
17.00	.23	44.09	1.206	.26
17.50	.22	44.08	1.205	.25
18.00	.21	44.08	1.204	.24
18.50	.21	44.08	1.203	.24
19.00	.21	44.08	1.202	.23
19.50	.20	44.08	1.201	.23
20.00	.20	44.07	1.200	.22
20.50	.20	44.07	1.199	.22



22.00	.19	44.07	1.197	.20
22.50	.18	44.07	1.196	.20
23.00	.18	44.07	1.196	.20
23.50	.18	44.06	1.195	.19
24.00	.18	44.06	1.194	.19
24.50	.01	44.05	1.189	.16
25.00	.00	44.04	1.184	.13
25.50	.00	44.03	1.179	.10
26.00	.00	44.03	1.175	.08
26.50	.00	44.02	1.172	.07
27.00	.00	44.02	1.169	.05
27.50	.00	44.01	1.167	.04

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
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28.00	.00	44.01	1.166	.03
28.50	.00	44.01	1.165	.03
29.00	.00	44.01	1.164	.02
29.50	.00	44.01	1.163	.02

PEAK DISCHARGE = 21.838 CFS - PEAK OCCURS AT HOUR 1.95

MAXIMUM WATER SURFACE ELEVATION = 47.568

MAXIMUM STORAGE = 3.3016 AC-FT INCREMENTAL TIME= .050000HRS

*

PRINT HYD ID=18 CODE=1

HYDROGRAPH FROM AREA 923.99

RUNOFF VOLUME = 1.76696 INCHES = 3.9108 ACRE-FEET

PEAK DISCHARGE RATE = 21.84 CFS AT 1.950 HOURS BASIN AREA = .0415 SQ. MI.

*

FINISH

NORMAL PROGRAM FINISH

END TIME (HR:MIN:SEC) = 08:39:03

