



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

June 20, 2001

Thomas B. Ponder, P.E.
Chavez-Grievess Consulting Engineers, Inc.
5639 Jefferson NE, Suite 1
Albuquerque, NM 87109

Attn: Arnell Friedt, E.I.

**RE: QWEST - ALBUQUERQUE NORTH (F14-D21). GRADING AND DRAINAGE
PLAN FOR BUILDING, FOUNDATION, GRADING, AND PAVING PERMIT
APPROVALS. ENGINEER'S STAMP DATED JUNE 8, 2001.**

Dear Mr Ponder:

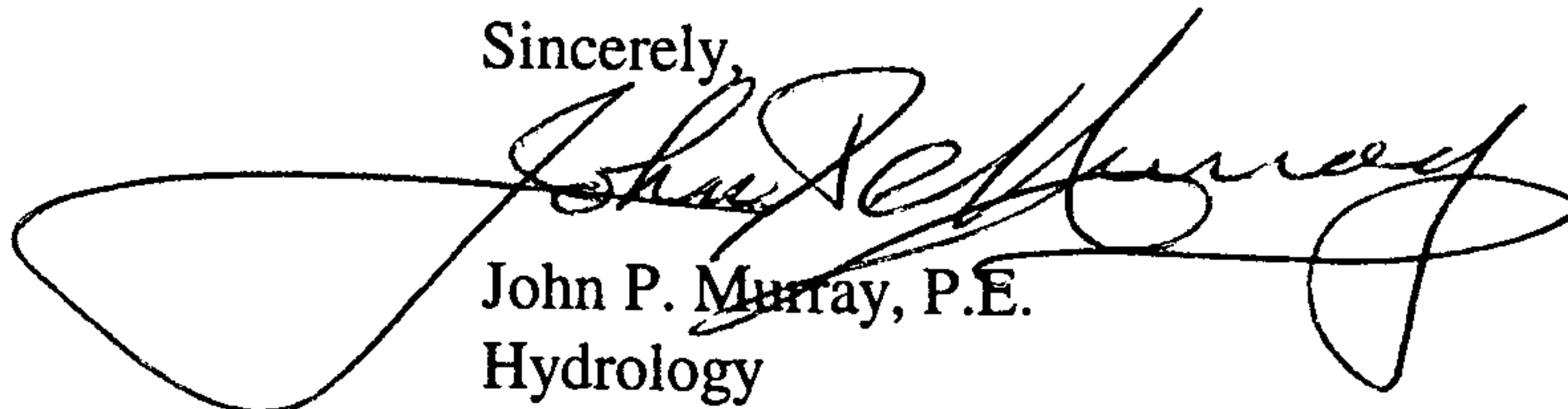
Based on the information provided on your June 11, 2001 resubmittal, the above referenced project is approved for the requested permits. Note that the Building Permit covers the others.

Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

Prior to Certificate of Occupancy approval, an Engineer's Certification per the DPM will be required.

If I can be of further assistance, please feel free to contact me at 924-3984.

Sincerely,



John P. Murray, P.E.
Hydrology

c: Terri Martin
✓ File

DRAINAGE INFORMATION SHEET

under D14/D4A

PROJECT TITLE: QWEST NORTH ZONE MAP/DRG. FILE #: F-14/D21
 DRB #: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: TRACT A LANDS OF MOUNTAIN STATES
 CITY ADDRESS: GRIGIOS & 4TH STREET

ENGINEERING FIRM: CHAVEZ-GRIGIOS
 ADDRESS: 5639 JEFFERSON ST NW
 CITY, STATE: ALB NM

CONTACT: ARNELL FRIEDT
 PHONE: 344-4080
 ZIP CODE: 87109

OWNER: QWEST
 ADDRESS: _____
 CITY, STATE: _____

CONTACT: _____
 PHONE: _____
 ZIP CODE: _____

ARCHITECT: _____
 ADDRESS: _____
 CITY, STATE: _____

CONTACT: _____
 PHONE: _____
 ZIP CODE: _____

SURVEYOR: _____
 ADDRESS: _____
 CITY, STATE: _____

CONTACT: _____
 PHONE: _____
 ZIP CODE: _____

CONTRACTOR: _____
 ADDRESS: _____
 CITY, STATE: _____

CONTACT: _____
 PHONE: _____
 ZIP CODE: _____

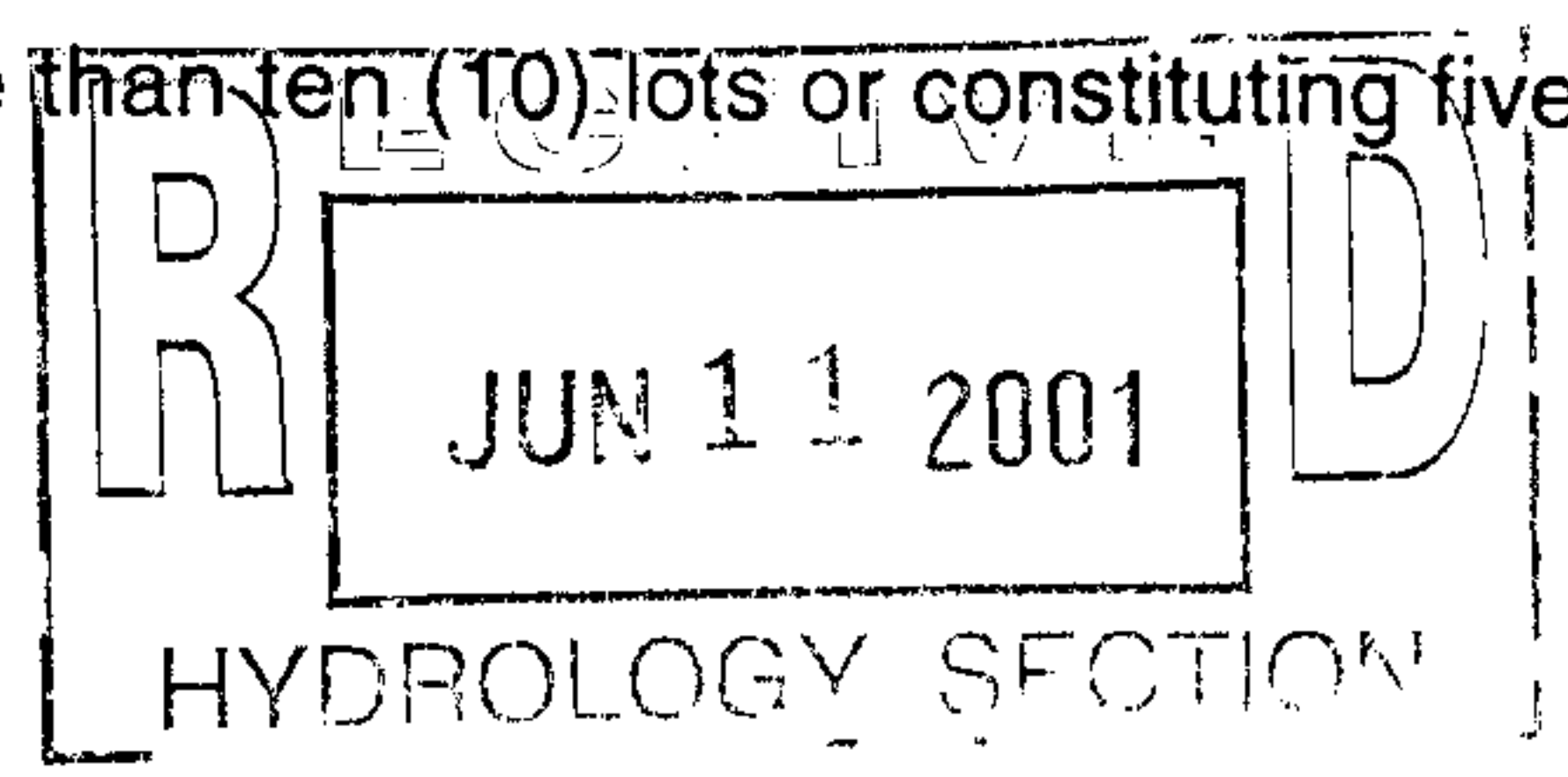
- TYPE OF SUBMITTAL:**
- ☐ DRAINAGE REPORT
 - ☒ DRAINAGE PLAN
 - ☐ CONCEPTUAL GRADING & DRAINAGE PLAN
 - ☐ GRADING PLAN
 - ☐ EROSION CONTROL PLAN
 - ☐ ENGINEER'S CERTIFICATION
 - ☐ CLOMR/LOMR
 - ☐ OTHER
- WAS A PRE-DESIGN CONFERENCE ATTENDED:**
- ☒ YES
 - ☒ NO
 - ☐ COPY PROVIDED

- 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 APPROVAL
 - ☒ GRADING PERMIT APPROVAL
 - ☒ PAVING PERMIT APPROVAL
 - ☐ WORK ORDER APPROVAL
 - ☐ OTHER (SPECIFY)

DATE SUBMITTED: 6/11/01 BY: James Kelley

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 on 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.



AHYMO PROGRAM (AHYMO 97) - - Version: 1997.02c
 RUN DATE (MON/DAY/YR) = 06/06/2001
 START TIME (HR:MIN:SEC) = 09:19:50 USER NO.= AHYMO-I3Chavez-Grieves-C
 INPUT FILE = G:\B01\162\CALC'S\ahymo.in

*S 100-YEAR, 6-HOUR STORM
 *S QWEST NORTH 5/9/00
 START 0.00
 LOCATION ALBUQUERQUE
 Soil infiltration values (LAND FACTORS) for this location are not available.
 The following default values were used.
 Land Treatment Initial Abstr.(in) Unif. Infilt.(in/hour)
 A 0.65 1.67
 B 0.50 1.25
 C 0.35 0.83
 D 0.10 0.04

RAINFALL TYPE=1 RAIN QUARTER=0 RAIN ONE=2.01
 RAIN SIX=2.35 RAIN DAY=2.75 DT=0.05

COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 HR.
 DT = .050000 HOURS END TIME = 6.000000 HOURS
 .0000 .0024 .0049 .0075 .0102 .0130 .0158
 .0188 .0219 .0252 .0286 .0321 .0358 .0397
 .0439 .0482 .0529 .0578 .0631 .0689 .0751
 .0836 .0930 .1201 .1842 .2944 .4649 .7103
 1.0460 1.3107 1.4303 1.5302 1.6176 1.6959 1.7667
 1.8313 1.8906 1.9452 1.9955 2.0421 2.0851 2.0946
 2.1034 2.1115 2.1191 2.1262 2.1330 2.1394 2.1455
 2.1513 2.1569 2.1622 2.1673 2.1723 2.1771 2.1817
 2.1862 2.1905 2.1948 2.1989 2.2028 2.2067 2.2105
 2.2142 2.2178 2.2213 2.2248 2.2282 2.2315 2.2347
 2.2379 2.2410 2.2440 2.2470 2.2500 2.2529 2.2557
 2.2585 2.2613 2.2640 2.2666 2.2693 2.2719 2.2744
 2.2769 2.2794 2.2818 2.2842 2.2866 2.2889 2.2913
 2.2935 2.2958 2.2980 2.3002 2.3024 2.3046 2.3067
 2.3088 2.3109 2.3129 2.3150 2.3170 2.3190 2.3209
 2.3229 2.3248 2.3267 2.3286 2.3305 2.3323 2.3342
 2.3360 2.3378 2.3396 2.3414 2.3431 2.3449 2.3466
 2.3483 2.3500

*S COMPUTE PROPOSED BASIN A
 COMPUTE NM HYD ID=1 HYD=PROP_A DA=.001125 SQ MI
 PER A=0 PER B=29.5 PER C=20.3 PER D=50.2
 TP=.1333 RAINFALL=-1

7.106420 K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N =
 UNIT PEAK = 2.2297 CFS UNIT VOLUME = .9941 B = 526.28 P60 = 2.0100
 AREA = .000565 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

3.867071 K = .122043HR TP = .133300HR K/TP RATIO = .915551 SHAPE CONSTANT, N =
 UNIT PEAK = 1.4551 CFS UNIT VOLUME = .9927 B = 346.21 P60 = 2.0100
 AREA = .000560 SQ MI IA = .43886 INCHES INF = 1.07880 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

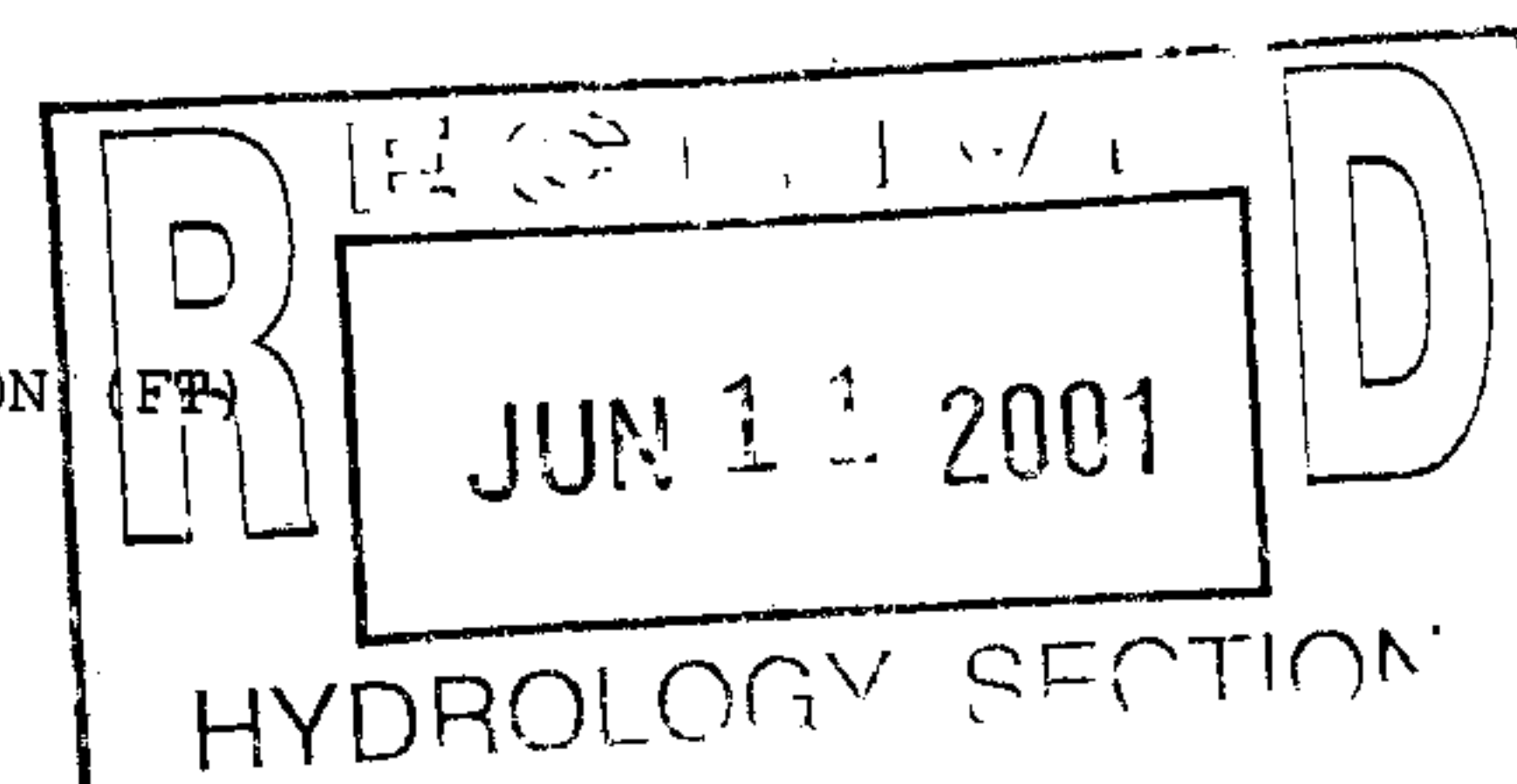
PRINT HYD ID=1 CODE=1

HYDROGRAPH FROM AREA PROP_A

RUNOFF VOLUME = 1.51357 INCHES = .0908 ACRE-FEET
 PEAK DISCHARGE RATE = 2.62 CFS AT 1.500 HOURS BASIN AREA = .0011 SQ. MI.

*S ROUTE PROP A THROUGH POND
 ROUTE RESERVOIR ID=40 HYD=POND INFLOW ID=1 CODE=10
 OUTFLOW (CFS) STORAGE (AC FT) ELEVATION (FT)
 0.0 0.0 69.0
 1.07 0.177 70.0

* * * * *



ALBUQUERQUE NORTH

STANDPIPE DIA (in) 6	HOLES/ ROW 4.00	WATER DEPTH	HEAD					Q (cfs)					Q TOTAL (cfs)
			ROW 1	ROW 2	ROW 3	WEIR	ORIFICE	ROW 1	ROW 2	ROW 3	WEIR	ORIFICE	
		0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SPACE ABOVE TOP ORIFICE TO WEIR (in) 4	ROW 1 SIZE 2.00	1.0	0.92	0.83	0.83	0.50	0.50	0.40	0.00	0.00	1.67	0.67	1.07
		2.0	1.92	1.83	1.83	1.50	1.50	0.58	0.00	0.00	8.66	1.16	1.74
	ROW 2 SIZE 0.00	3.0	2.92	2.83	2.83	2.50	2.50	0.72	0.00	0.00	18.63	1.49	2.21
		4.0	3.92	3.83	3.83	3.50	3.50	0.83	0.00	0.00	30.86	1.77	2.60
PIPE HEIGHT (in) (ABOVE GROUND) 6	ROW 3 SIZE 0.00	5.0	4.92	4.83	4.83	4.50	4.50	0.93	0.00	0.00	44.98	2.01	2.94
		6.0	5.92	5.83	5.83	5.50	5.50	1.02	0.00	0.00	60.78	2.22	3.24
	HOLE SPACE 0.00	7.0	6.92	6.83	6.83	6.50	6.50	1.11	0.00	0.00	78.09	2.41	3.52
PIPE HEIGHT (ft) (ABOVE GROUND) 0.50	# OF ROWS 1.00	8.0	7.92	7.83	7.83	7.50	7.50	1.18	0.00	0.00	96.79	2.59	3.77
		9.0	8.92	8.83	8.83	8.50	8.50	1.25	0.00	0.00	116.78	2.76	4.01
		10.0	9.92	9.83	9.83	9.50	9.50	1.32	0.00	0.00	137.98	2.91	4.24