CITY OF
Albuquerque

May 15, 1998

Ronald Bohannan, P.E.
Tierra West, LLC
4421 McLeod Road NE, Suite D
Albuquerque, NM 87109

RE: TAYLOR RANCH SOCCER FIELD (E12-D13). GRADING AND DRAINAGE PLAN FOR PRELIMINARY & FINAL PLAT AND GRADING PERMIT APPROVAL. ENGINEER'S STAMP DATED APRIL 20, 1998.

Dear Mr. Bohannan:

Based on the information provided on your April 21, 1998 submittal, the above referenced project is approved for Grading Permit. Preliminary and Final Plats were approved by other action.

Please furnish the Parks Department a copy of this submittal for Final Approval.

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

Sincerely,

John P. Murray, P.E.
Hydrology

c: Parks Dept.
Andrew Garcia
File

E12/D13

857-8634

Ron McNary

5/22

3PM

DRAINAGE REPORT

for

Taylor Ranch Soccer Field

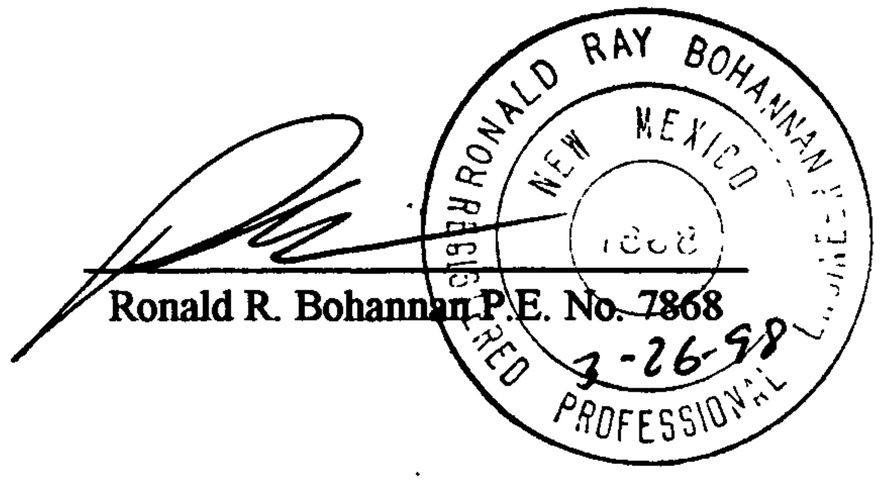
Prepared by

Tierra West, LLC
4421 McLeod Road NE, Suite D
Albuquerque, New Mexico 87109

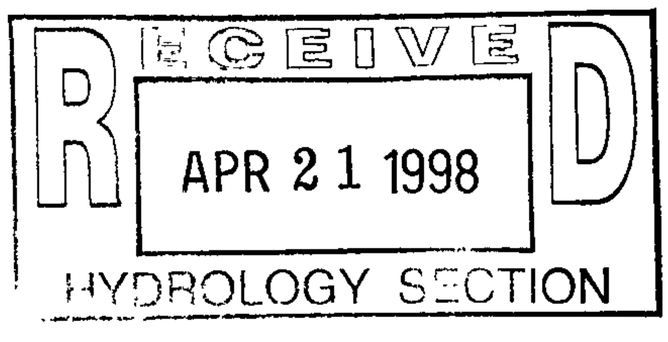
Prepared for

Argus Development Inc.
6400 Uptown Blvd, Suite 200-W
Albuquerque, New Mexico 87110

January 1998



Ronald R. Bohannan P.E. No. 7868



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No page numbers

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H29A1

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PRAIRIE RIDGE (UNIT 2)
PRAIRIE RIDGE (UNIT 6)
PRAIRIE RIDGE (UNIT 1)
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PRAIRIE RIDGE (UNIT 6)
HUNTERS RIDGE

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PRAIRIE RIDGE
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AT THE SITE
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SU-1
SU-1
SU-1
SU-1
A-1
A-1
A-1
A-1
A-1
A-1
A-1

SU FOR C-2 USES 15 ACRES MAX
C-1 USES 7.5 ACRES MAX
PRD 15 DU/ACRE
GRAZING 15 CATTLE MAX

TAYLOR RIDGE
COLONIA
PEGASUS
THE VILLAGE AT TAYLOR RIDGE
S-94-84
PLAZA

RD
RD-20
BLVD

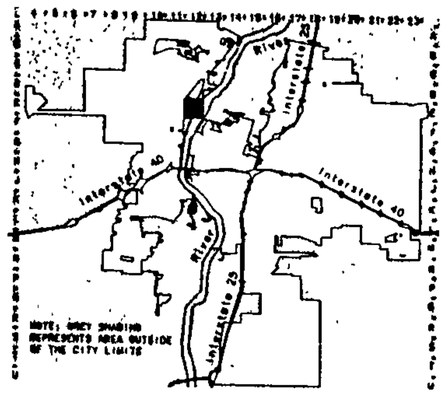
GRAPHIC SCALE IN FEET

250 0 500 1000

CITY OF Albuquerque

Albuquerque Geographic Information System
PLANNING DEPARTMENT

Map Amended through February 14, 1997



LEGAL DESCRIPTION

T11N
R2E
SEC 25

UNIFORM PROPERTY CODE

1-012-062

E-12-Z

Location

The site is a proposed City park that will contain several parking lots, a soccer field, and tennis courts. The site is located at the southeast corner of Montano Road and Taylor Ranch Drive on the west side of the City. The site is shown on the attached Zone Atlas Map E-12 and contains approximately 6.51 acres. The legal description is identified as Tracts A1, P1, P2, P3 Creighton Park at Taylor Ridge. The purpose of this report is to provide the drainage analysis and management plan for the park development.

Existing Drainage Conditions

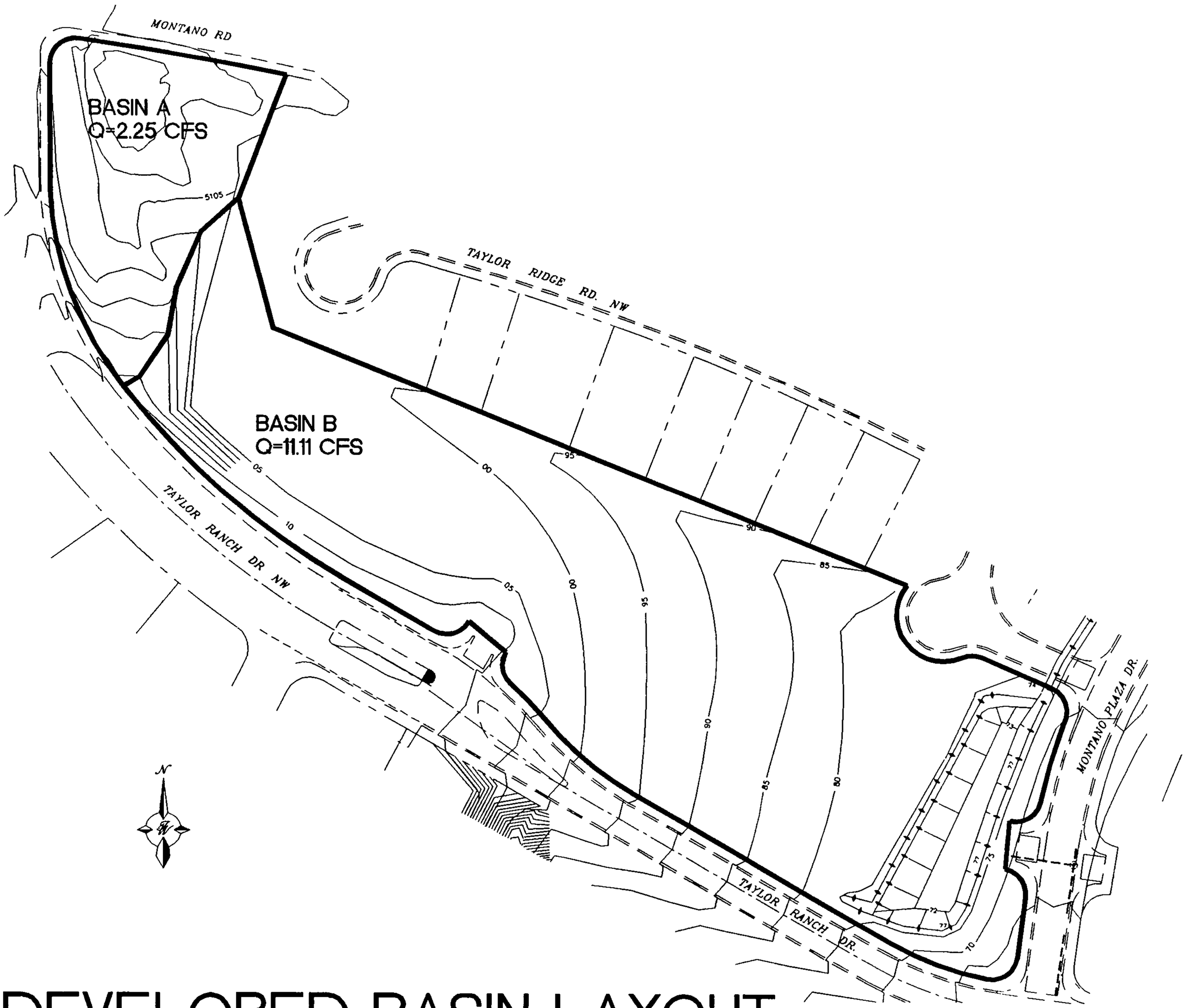
The site is currently undeveloped and contains two existing undeveloped basins on the site. Shown on Map 1 is the undeveloped basin layout and the two basins have been labeled A and B. Existing Basin A has an undeveloped runoff flow of 2.25 cfs and sheet flows north towards Montano Rd. Basin B has an undeveloped runoff flow of 11.11 cfs and sheet flows east to Montano Plaza Drive. There is an existing desilting located on the east side of the site. The undeveloped flows from Basin B sheet flow to the desilting pond and a pipe conveys the flows into an existing storm sewer in Montano Plaza Drive.

There are no offsite flows entering the site. Flows from the east, west and south are captured by the adjacent streets. Flows from the north are intercepted by an existing subdivision and routed away from the site.

FIRM Map and Soil Conditions

The site is located on FIRM Map section 35001C0114 D as shown on the attached excerpt. The map shows the site does not lie within any 100 year flood plains.

The site contains one soil type from the Soil Conservation Service Soil Survey of Bernalillo County. The Bluepoint-Kokan association has rapid permeability, slow runoff and



UNDEVELOPED BASIN LAYOUT

MAP 1

106°41'15"
35°09

DESERT SAND PLACE
STREET
VISTA CIELO AVENUE
STREET
SIERRA VISTA
MONTANO VISTA
VISTA VALLE AVENUE
MONTANO POINTE COURT
POINTE MESA LA COURT
ROAD
MONTANO ROAD
LACHINA STREET
ZONE AE
(EL 5115)
LIMIT OF DETAILED STUDY
ZONE A
Mariposa Detention Facility
ROAD
RANCH
COPPICE DRIVE
DUSTY TRAIL COURT
LARIAT AVENUE
PERIWINKLE COURT
CHADWICK ROAD
DRIVE
HABERSHAW ROAD
TALLSMAN
STOCKBRIDGE AVENUE
MEDFORD COURT
OOD
IE TO
D CHANNEL
MARIAH COURT
MARIAH CHAMISA COURT
ROAD
TAYLOR
ROAD
MONTANO PLAZA DRIVE
ROAD
ARTURO
STREET
AVENIDA CHIQUITA
DEBORAH AVENUE
AVENIDA
MIRAGE DR
COURT
CACTUS FLOWER
SITE
25
CAMBRIA
COLLEGE
DRIVE
DRIVE
CABRILLO CIRCLE
ALBERTA LANE
LAS
DRIVE
TIOGA
VISTA
PLACE
DRIVE
TRAMPASWAY
CANADA VISTA
COLONIA
ZONE X
CALLE ALEGRE
MARIPOSA
CALLE SERENA
VALLE
BOULEVARD
CITY OF ALBUQUERQUE
BERNALILLO COUNTY
DRIVE
LUZ
ROAD
MILL ROAD
MILL ROAD
COORS
ZONE X
BERNALILLO COUNTY
NINCORPORATED AREAS
350001

FIRM MAP 35001C0114 D

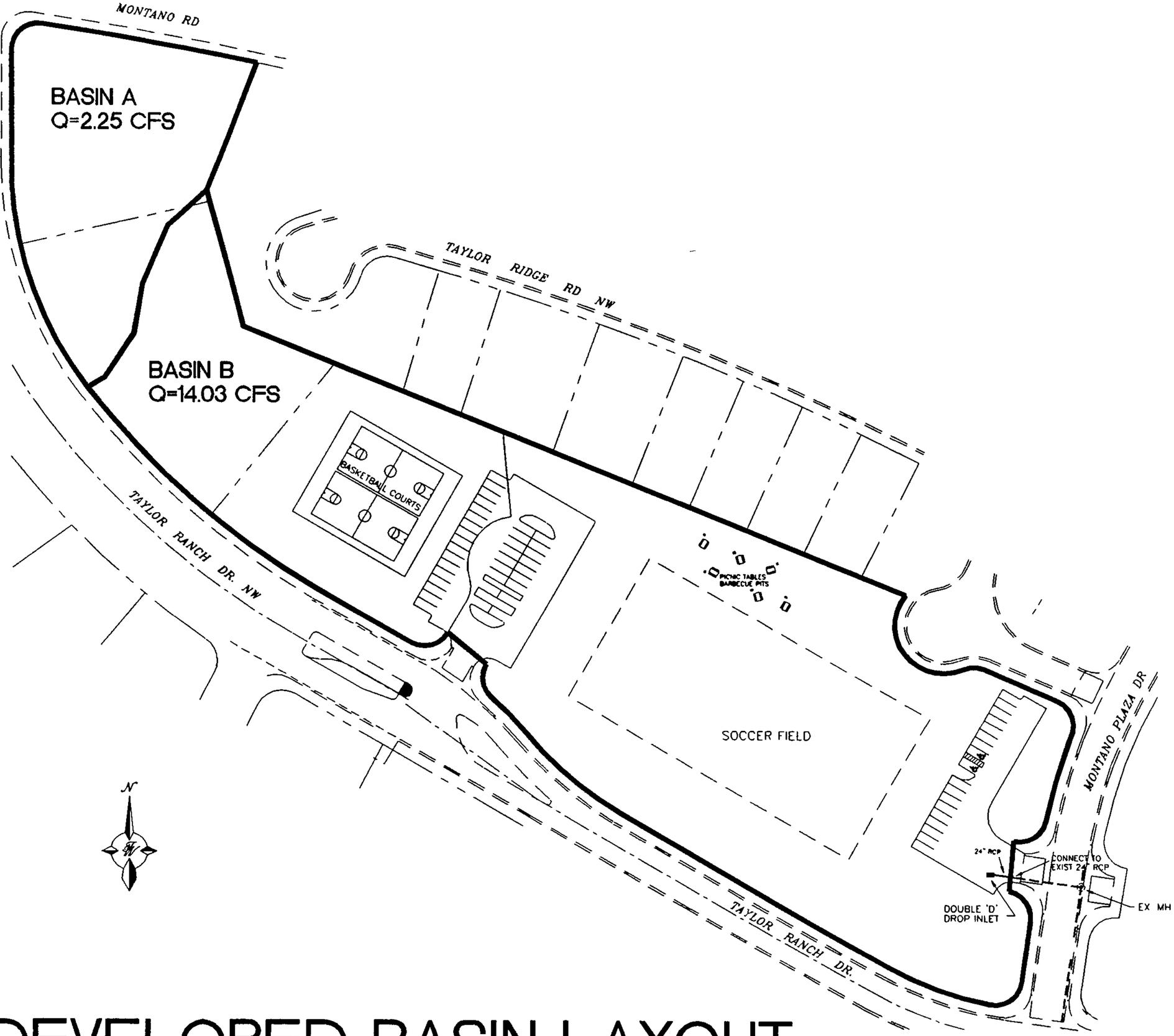
the hazard of water erosion is moderate to severe.

On Site Drainage Management Plan

The developed park has two proposed developed basins. Basin A with a flow of 2.25 consists of the northern part of the site. No improvements are planned for this portion at this time and it will continue to flow north towards Montano Road. Basin B with a developed discharge of 14.03 will flow east to Montano Plaza Drive. The site will be graded so this basin will convey the developed flow to the southeast and an existing storm sewer in Montano Plaza Drive. The discharge will sheet flow to a swale on the north side of the site. The swale will flow southeast to a new park parking lot at the east side of the site where a double 'D' drop inlet in the parking lot will collect all of the developed flows.

The area was analyzed under E12/D8 prepared by Isaacson & Arfman, P.A in 1994. The previous report assumed undeveloped conditions for Tracts P1, P2, and P3, while Tract A1 was analyzed using developed conditions. An existing drainage easement covers all of Tract A-1. The purpose of the easement was to control the runoff from the undeveloped site. With the replatting of the four lots into one lot we are requesting removing the drainage easement from Tract A-1.

The report allows the flows from the four tracts to be collected in the storm drain and conveyed to a central detention facility to the east. A 24" RCP stub from the existing 24" storm sewer in Montano Plaza Drive extends into the site at the east driveway. The new drop inlet in the park parking lot will convey a total developed discharge of 14.03 cfs to the existing stub and then to the storm sewer in Montano Plaza Drive. Per the report and checking the capacity from the as-builts, the storm sewer has capacity for 17.5 cfs from the site. The site will discharge 14.03 cfs which is less than the allowable discharge of 17.5 cfs. The storm



DEVELOPED BASIN LAYOUT

MAP 2

sewer in Montano Plaza Drive drains south to Taylor Ranch Drive where the flows are carried east to the pond. In the case of an event larger than the 100 year storm the flows from the site will overflow through the east driveway acting as an emergency spillway and into Taylor Ranch Drive.

Summary

We are proposing to develop a new City park which has two proposed developed basins. Basin A with a runoff rate of 2.25 cfs, will not be developed at this time and will continue its existing drainage patterns. The on-site developed Basin B will have a runoff rate of 14.03 cfs. This basin will sheet flow to a swale on the north side of the site and be conveyed east to the parking lot on the east side of the lot. A double 'D' inlet in the parking lot will capture the developed flow and convey the flow to a new 24" RCP pipe. The new pipe will connect to an existing 24" stub from the storm sewer in Montano Plaza Drive. The developed runoff rate of 14.03 cfs is less than the allowable discharge of 17.5 cfs from the approved report and the capacity of the storm drain.

Further, we are requesting the drainage easement to be removed from the replat. All of the improvements, other than grading for the conveyance of the storm water, are in existence and therefore the site does not require an infrastructure list.

Runoff Calculations

RUNOFF CALCULATIONS

The site is @ Zone 1

LAND TREATMENT

Proposed
B = 77%
D = 23 %

Existing
B = 100%

DEPTH (INCHES) @ 100-YEAR STORM

P_{60} = 1.87 inches

P_{360} = 2.20 inches

P_{1440} = 2.66 inches

DEPTH (INCHES) @ 10-YEAR STORM

P_{60} = 1.87 x 0.667
= 1.25 inches

P_{360} = 1.47

P_{1440} = 1.77

See the summary output from AHYMO calculations.

Also see the following summary tables.

DRAINAGE BASINS

Existing

BASIN	AREA (SF)	AREA (AC)	AREA (MI^2)
A	47623.88	1.0933	0.001708
B	236002.57	5.4179	0.008465

Proposed

BASIN	AREA (SF)	AREA (AC)	AREA (MI^2)
A	47623.88	1.0933	0.001708
B	236002.57	5.4179	0.008465
N. Parking Area	19958.95	0.4582	0.000716

RUNOFF CALCULATION RESULTS

Existing

BASIN	Q-100 CFS	Q-10 CFS	V-100 AC-FT	V-10 AC-FT
A	2.25	0.84	0.061	0.020
B	11.11	4.16	0.302	0.101

Proposed

BASIN	Q-100 CFS	Q-10 CFS	V-100 AC-FT	V-10 AC-FT
A	2.84	1.37	0.088	0.042
B	14.03	6.77	0.436	0.206
N. Parking Area	2.02	1.34	0.075	0.047

Storm Sewer

STORM DRAIN INLET
EFFECTIVE AREA ASSUMING A 50% CLOGGING FACTOR

DOUBLE 'D':

Area at the grate:

L = 76.75" - 14 (1/2" $_{\text{middle bars}}$) - 6" $_{\text{center piece}}$
= 63.75"
= 5.3125'

W = 25.5" - 13 (1/2 $_{\text{middle bars}}$)
= 19"
= 1.583'

Area = 1.583' x 5.3125'
= 8.410 ft^2

Effective Area = 8.410 - .5 (8.410)
= 4.205 ft^2

DROP INLET
HEAD CAPACITY

Orifice Equation:

$$Q = CA\sqrt{2gH}$$

Head Capacity of Grate:

Q = Flow (cfs)
C = 0.60
A = Area of drop inlet grate (ft^2)
g = 32.2
H = Height of water above drop inlet (ft)

$$H = \frac{\left(\frac{Q}{C*A}\right)^2}{2g}$$

$$H = \frac{\left(\frac{14.03}{0.6*6.80}\right)^2}{2*32.2}$$

H = 0.18 feet
Allowable depth = 0.71 feet
Required depth = 0.18 feet

0.18 feet < 0.71 feet

Head Capacity of Pipe:

A = Area of pipe (ft^2)
H = Height of water above center of pipe (ft)

$$H = \frac{\left(\frac{Q}{C*A}\right)^2}{2g}$$

$$H = \frac{\left(\frac{14.03}{0.6*3.14}\right)^2}{2*32.2}$$

H = 0.86 ft
Allowable depth = 4.0 feet
Required depth = 0.86 ft + 1 ft (half of pipe) = 1.86 ft

1.86 ft < 4.00 feet

Emergency Spillway

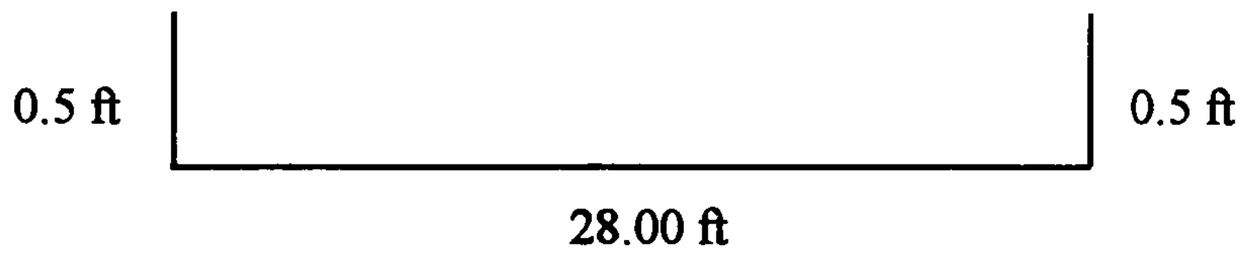
Weir Equation:

$$Q = CLH^{3/2}$$

Q= Flow (cfs)
C = 2.95
H = 0.5 ft
L = 28 ft

$$Q = 2.95 * 28 * (0.5)^{3/2}$$

Q = 29.20 cfs
29.20 cfs > 14.03 cfs



Pond
Calculations

VOLUME CALCULATIONS

DETENTION POND

Ab - Bottom Of The Pond Surface Area
At - Top Of The Pond Surface Area
D - Water Depth
Dt - Total Pond Depth
C - Change In Surface Area / Water Depth

Volume = Ab * D + 0.5 * C * D^2

C = (At - Ab) / Dt

Ab =	13.59
At =	3,594.07
Dt =	0.71
C =	5042.93

ACTUAL ELEV.	DEPTH (FT)	VOLUME (AC-FT)	Q (CFS)
65.52	0	0	0.0000
69.52	4	0.0012	26.2002
69.62	4.1	0.0019	26.6333
69.72	4.2	0.0036	27.0595
69.82	4.3	0.0066	27.4790
69.92	4.4	0.0106	27.8922
70.02	4.5	0.0159	28.2995
70.12	4.6	0.0223	28.7009
70.22	4.7	0.0298	29.0968
70.23	4.71	0.0306	29.1361

<u>Orifice Equation</u>
Q = CA SQRT(2gH)

C =	0.6
Diameter (in	24
Area (ft^2)=	3.141593
g =	32.2
H (Ft) =	Depth of water above center of orifice
Q (CFS)=	Flow

```
**********************************************************************
*                   TAYLOR RANCH SOCCER FIELD                        *
**********************************************************************
*          100-YEAR, 24-HR STORM  (PONDING CALCULATIONS)             *
**********************************************************************
START                TIME=0.0
*
* ROUTE 1
*
* BASIN B
*
RAINFALL             TYPE=2 RAIN QUARTER=0.0 IN
                     RAIN ONE=1.87 IN RAIN SIX=2.20 IN
                     RAIN DAY=2.66 IN DT=0.03333 HR
COMPUTE NM HYD       ID=1 HYD NO=101.B AREA=0.008465 SQ MI
                     PER A=0.00 PER B=77.00 PER C=0.00 PER D=23.00
                     TP=-0.1333 HR MASS RAINFALL=-1
* BASIN 1 PONDING
*
ROUTE RESERVOIR      ID=2 HYD NO=501.1 INFLOW ID=1 CODE=24
                     OUTFLOW(CFS)      STORAGE(AC-FT)  ELEVATION(FT)
                        0.0000            0.0000          65.52
                       26.2002            0.0012          69.52
                       26.6333            0.0019          69.62
                       27.0595            0.0036          69.72
                       27.4790            0.0066          69.82
                       27.8922            0.0106          69.92
                       28.2995            0.0159          70.02
                       28.7009            0.0223          70.12
                       29.0968            0.0298          70.22
                       29.1361            0.0306          70.23
*
*
FINISH
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    AHYMO PROGRAM (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
         RUN DATE (MON/DAY/YR) = 01/22/1998
         START TIME (HR:MIN:SEC) = 07:37:55     USER NO.= R_BOHANN.I01
         INPUT FILE = A:POND.DAT

**************************************************************************
*                   TAYLOR RANCH SOCCER FIELD                            *
**************************************************************************
*          100-YEAR, 24-HR STORM  (PONDING CALCULATIONS)                 *
**************************************************************************
START                TIME=0.0
*
* ROUTE 1
*
* BASIN B
*
RAINFALL             TYPE=2 RAIN QUARTER=0.0 IN
                     RAIN ONE=1.87 IN RAIN SIX=2.20 IN
     RAIN DAY=2.66 IN DT=0.03333 HR

 COMPUTED 24-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 HR.
 DT =    .033330 HOURS       END TIME =    19.964670 HOURS
    .0000   .0016   .0033   .0050   .0067   .0085   .0103
    .0122   .0141   .0160   .0180   .0201   .0222   .0243
    .0266   .0289   .0312   .0337   .0362   .0388   .0415
    .0443   .0472   .0502   .0534   .0567   .0601   .0637
    .0675   .0715   .0758   .0809   .0865   .0924   .1050
    .1334   .1771   .2398   .3254   .4379   .5814   .7600
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   1.5600  1.6061  1.6493  1.6900  1.7284  1.7646  1.7989
   1.8314  1.8623  1.8915  1.9193  1.9456  1.9518  1.9576
   1.9630  1.9682  1.9732  1.9780  1.9825  1.9869  1.9912
   1.9953  1.9993  2.0031  2.0068  2.0104  2.0140  2.0174
   2.0207  2.0240  2.0272  2.0303  2.0333  2.0363  2.0392
   2.0420  2.0448  2.0475  2.0502  2.0528  2.0554  2.0580
   2.0605  2.0629  2.0653  2.0677  2.0700  2.0723  2.0746
   2.0768  2.0790  2.0812  2.0833  2.0855  2.0875  2.0896
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   2.1051  2.1070  2.1088  2.1106  2.1124  2.1141  2.1159
   2.1176  2.1193  2.1210  2.1227  2.1244  2.1260  2.1276
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   2.1401  2.1416  2.1431  2.1446  2.1460  2.1475  2.1489
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   2.2293  2.2305  2.2318  2.2330  2.2342  2.2354  2.2367
   2.2379  2.2391  2.2403  2.2415  2.2428  2.2440  2.2452
   2.2464  2.2476  2.2488  2.2500  2.2512  2.2524  2.2536
   2.2547  2.2559  2.2571  2.2583  2.2595  2.2606  2.2618
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   2.2791  2.2802  2.2813  2.2825  2.2836  2.2847  2.2858
   2.2870  2.2881  2.2892  2.2903  2.2914  2.2925  2.2936
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2.3248	2.3258	2.3269	2.3279	2.3290	2.3300	2.3310
2.3321	2.3331	2.3341	2.3352	2.3362	2.3372	2.3382
2.3392	2.3403	2.3413	2.3423	2.3433	2.3443	2.3453
2.3463	2.3473	2.3483	2.3493	2.3503	2.3513	2.3523
2.3533	2.3543	2.3553	2.3563	2.3573	2.3583	2.3593
2.3603	2.3612	2.3622	2.3632	2.3642	2.3651	2.3661
2.3671	2.3681	2.3690	2.3700	2.3710	2.3719	2.3729
2.3738	2.3748	2.3758	2.3767	2.3777	2.3786	2.3796
2.3805	2.3815	2.3824	2.3834	2.3843	2.3852	2.3862
2.3871	2.3881	2.3890	2.3899	2.3909	2.3918	2.3927
2.3936	2.3946	2.3955	2.3964	2.3973	2.3983	2.3992
2.4001	2.4010	2.4019	2.4028	2.4038	2.4047	2.4056
2.4065	2.4074	2.4083	2.4092	2.4101	2.4110	2.4119
2.4128	2.4137	2.4146	2.4155	2.4164	2.4173	2.4181
2.4190	2.4199	2.4208	2.4217	2.4226	2.4234	2.4243
2.4252	2.4261	2.4270	2.4278	2.4287	2.4296	2.4304
2.4313	2.4322	2.4331	2.4339	2.4348	2.4356	2.4365
2.4374	2.4382	2.4391	2.4399	2.4408	2.4416	2.4425
2.4434	2.4442	2.4450	2.4459	2.4467	2.4476	2.4484
2.4493	2.4501	2.4510	2.4518	2.4526	2.4535	2.4543
2.4551	2.4560	2.4568	2.4576	2.4585	2.4593	2.4601
2.4609	2.4618	2.4626	2.4634	2.4642	2.4651	2.4659
2.4667	2.4675	2.4683	2.4691	2.4700	2.4708	2.4716
2.4724	2.4732	2.4740	2.4748	2.4756	2.4764	2.4772
2.4780	2.4788	2.4796	2.4804	2.4812	2.4820	2.4828
2.4836	2.4844	2.4852	2.4860	2.4868	2.4876	2.4884
2.4892	2.4899	2.4907	2.4915	2.4923	2.4931	2.4939
2.4946	2.4954	2.4962	2.4970	2.4978	2.4985	2.4993
2.5001	2.5008	2.5016	2.5024	2.5032	2.5039	2.5047
2.5055	2.5062	2.5070	2.5078	2.5085	2.5093	2.5100
2.5108	2.5116	2.5123	2.5131	2.5138	2.5146	2.5153
2.5161	2.5168	2.5176	2.5183	2.5191	2.5198	2.5206
2.5213	2.5221	2.5228	2.5236	2.5243	2.5250	2.5258
2.5265	2.5273	2.5280	2.5287	2.5295	2.5302	2.5309
2.5317	2.5324	2.5331	2.5339	2.5346	2.5353	2.5361
2.5368	2.5375	2.5382	2.5390	2.5397	2.5404	2.5411
2.5418	2.5426	2.5433	2.5440	2.5447	2.5454	2.5462
2.5469	2.5476	2.5483	2.5490	2.5497	2.5504	2.5511
2.5518	2.5526	2.5533	2.5540	2.5547	2.5554	2.5561
2.5568	2.5575	2.5582	2.5589	2.5596	2.5603	2.5610
2.5617	2.5624	2.5631	2.5638	2.5645	2.5652	2.5659
2.5665	2.5672	2.5679	2.5686	2.5693	2.5700	2.5707
2.5714	2.5721	2.5727	2.5734	2.5741	2.5748	2.5755
2.5761	2.5768	2.5775	2.5782	2.5789	2.5795	2.5802
2.5809	2.5816	2.5822	2.5829	2.5836		

COMPUTE NM HYD ID=1 HYD NO=101.B AREA=0.008465 SQ MI
PER A=0.00 PER B=77.00 PER C=0.00 PER D=23.00
TP=-0.1333 HR MASS RAINFALL=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 7.6867 CFS UNIT VOLUME = .9978 B = 526.28 P60 = 1.8700
AREA = .001947 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

K = .130992HR TP = .133300HR K/TP RATIO = .982685 SHAPE CONSTANT, N = 3.593448
UNIT PEAK = 15.994 CFS UNIT VOLUME = .9995 B = 327.09 P60 = 1.8700
AREA = .006518 SQ MI IA = .50000 INCHES INF = 1.25000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

* BASIN 1 PONDING
*
ROUTE RESERVOIR ID=2 HYD NO=501.1 INFLOW ID=1 CODE=24

OUTFLOW(CFS)	STORAGE(AC-FT)	ELEVATION(FT)
0.0000	0.0000	65.52
26.2002	0.0012	69.52
26.6333	0.0019	69.62
27.0595	0.0036	69.72
27.4790	0.0066	69.82
27.8922	0.0106	69.92
28.2995	0.0159	70.02
28.7009	0.0223	70.12
29.0968	0.0298	70.22
29.1361	0.0306	70.23

* * * * * * * * * * * * * * * * * *

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	65.52	.000	.00
.80	.00	65.52	.000	.00
1.60	10.48	67.12	.000	10.51
2.40	.50	65.60	.000	.50
3.20	.08	65.53	.000	.08
4.00	.03	65.52	.000	.03
4.80	.03	65.52	.000	.03
5.60	.04	65.53	.000	.04
6.40	.05	65.53	.000	.05
7.20	.05	65.53	.000	.05
8.00	.04	65.53	.000	.04
8.80	.04	65.53	.000	.04
9.60	.04	65.53	.000	.04
10.40	.04	65.53	.000	.04
11.20	.04	65.53	.000	.04
12.00	.04	65.53	.000	.04
12.80	.03	65.53	.000	.03
13.60	.03	65.52	.000	.03
14.40	.03	65.52	.000	.03
15.20	.03	65.52	.000	.03
16.00	.03	65.52	.000	.03
16.80	.03	65.52	.000	.03
17.60	.03	65.52	.000	.03
18.40	.03	65.52	.000	.03
19.20	.03	65.52	.000	.03

PEAK DISCHARGE = 13.871 CFS - PEAK OCCURS AT HOUR 1.50
MAXIMUM WATER SURFACE ELEVATION = 67.638
MAXIMUM STORAGE = .0006 AC-FT INCREMENTAL TIME= .033330HRS

*
*
FINISH

NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 07:37:56

AHYMO
Runoff Input
and
Summary Output
for
Proposed and Existing
Drainage Basins

```
**********************************************************************
*                    TAYLOR RANCH SOCCER FIELD                       *
**********************************************************************
*       100-YEAR, 6-HR STORM  (UNDER EXISTING CONDITIONS)            *
**********************************************************************
*
START                TIME=0.0
*
* BASIN A
*
RAINFALL             TYPE=1 RAIN QUARTER=0.0 IN
                     RAIN ONE=1.87 IN RAIN SIX=2.20 IN
                     RAIN DAY=2.66 IN DT=0.02253 HR
COMPUTE NM HYD       ID=1 HYD NO=100.A AREA=0.001708 SQ MI
                     PER A=0.00 PER B=100.00 PER C=0.00 PER D=.00
                     TP=-0.1333 HR MASS RAINFALL=-1
PRINT HYD            ID=1 CODE=1
*
* BASIN B
*
COMPUTE NM HYD       ID=1 HYD NO=100.B AREA=0.008465 SQ MI
                     PER A=0.00 PER B=100.00 PER C=0.00 PER D=.00
                     TP=-0.1333 HR MASS RAINFALL=-1
PRINT HYD            ID=1 CODE=1
*
*
**********************************************************************
*        10-YEAR, 6-HR STORM  (UNDER EXISTING CONDITIONS)            *
**********************************************************************
*
START                TIME=0.0
*
* BASIN A
*
RAINFALL             TYPE=1 RAIN QUARTER=0.0 IN
                     RAIN ONE=1.25 IN RAIN SIX=1.47 IN
                     RAIN DAY=1.77 IN DT=0.02253 HR
COMPUTE NM HYD       ID=1 HYD NO=110.A AREA=0.001708 SQ MI
                     PER A=0.00 PER B=100.00 PER C=0.00 PER D=0.00
                     TP=-0.1333 HR MASS RAINFALL=-1
PRINT HYD            ID=1 CODE=1
*
* BASIN B
*
COMPUTE NM HYD       ID=1 HYD NO=110.B AREA=0.008465 SQ MI
                     PER A=0.00 PER B=100.00 PER C=0.00 PER D=0.00
                     TP=-0.1333 HR MASS RAINFALL=-1
PRINT HYD            ID=1 CODE=1
*
*
FINISH
```

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994 RUN DATE (MON/DAY/YR) =12/23/1997

INPUT FILE = A:E.DAT USER NO.= R_BOHANN.I01

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	NOTATION	
START										TIME=	.00
RAINFALL TYPE= 1										RAIN6=	2.200
COMPUTE NM HYD	100.A	-	1	.00171	2.25	.061	.66800	1.532	2.057	PER IMP=	.00
COMPUTE NM HYD	100.B	-	1	.00847	11.11	.302	.66800	1.532	2.051	PER IMP=	.00
START										TIME=	.00
RAINFALL TYPE= 1										RAIN6=	1.470
COMPUTE NM HYD	110.A	-	1	.00171	.84	.020	.22418	1.532	.770	PER IMP=	.00
COMPUTE NM HYD	110.B	-	1	.00847	4.16	.101	.22418	1.532	.768	PER IMP=	.00
FINISH											

```
**********************************************************************
*                    TAYLOR RANCH SOCCER FIELD                       *
**********************************************************************
*       100-YEAR, 6-HR STORM  (UNDER PROPOSED CONDITIONS)            *
**********************************************************************
*
START                TIME=0.0
*
* BASIN A
*
RAINFALL             TYPE=1 RAIN QUARTER=0.0 IN
                     RAIN ONE=1.87 IN RAIN SIX=2.20 IN
                     RAIN DAY=2.66 IN DT=0.02253 HR
COMPUTE NM HYD       ID=1 HYD NO=100.A AREA=0.001708 SQ MI
                     PER A=0.00 PER B=100.00 PER C=0.00 PER D=0.00
                     TP=-0.1333 HR MASS RAINFALL=-1
PRINT HYD            ID=1 CODE=1
*
* BASIN B
*
COMPUTE NM HYD       ID=1 HYD NO=100.B AREA=0.008465 SQ MI
                     PER A=0.00 PER B=77.00 PER C=0.00 PER D=23.00
                     TP=-0.1333 HR MASS RAINFALL=-1
PRINT HYD            ID=1 CODE=1
*
* PARKING LOT
*
COMPUTE NM HYD       ID=1 HYD NO=100.P AREA=0.0007159 SQ MI
                     PER A=0.00 PER B=0.00 PER C=0.00 PER D=100.00
                     TP=-0.1333 HR MASS RAINFALL=-1
PRINT HYD            ID=1 CODE=1
*
*
**********************************************************************
*       10-YEAR, 6-HR STORM  (UNDER PROPOSED CONDITIONS)             *
**********************************************************************
*
START                TIME=0.0
*
  BASIN A
*
RAINFALL             TYPE=1 RAIN QUARTER=0.0 IN
                     RAIN ONE=1.25 IN RAIN SIX=1.47 IN
                     RAIN DAY=1.77 IN DT=0.02253 HR
COMPUTE NM HYD       ID=1 HYD NO=110.A AREA=0.001708 SQ MI
                     PER A=0.00 PER B=100.00 PER C=0.00 PER D=0.00
                     TP=-0.1333 HR MASS RAINFALL=-1
PRINT HYD            ID=1 CODE=1
*
  BASIN B
*
COMPUTE NM HYD       ID=1 HYD NO=110.B AREA=0.008465 SQ MI
                     PER A=0.00 PER B=77.00 PER C=0.00 PER D=23.00
                     TP=-0.1333 HR MASS RAINFALL=-1
PRINT HYD            ID=1 CODE=1
*
  PARKING LOT
*
COMPUTE NM HYD       ID=1 HYD NO=110.P AREA=0.0007159 SQ MI
                     PER A=0.00 PER B=0.00 PER C=0.00 PER D=100.00
```

```
                    TP=-0.1333 HR MASS RAINFALL=-1
PRINT HYD           ID=1 CODE=1
*
*
FINISH
```

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994 RUN DATE (MON/DAY/YR) =01/22/1998

INPUT FILE = A:P.DAT USER NO.= R_BOHANN.101

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	NOTATION
START										TIME= .00
RAINFALL TYPE= 1										RAIN6= 2.200
COMPUTE NM HYD	100.A	-	1	.00171	2.25	.061	.66800	1.532	2.057	PER IMP= .00
COMPUTE NM HYD	100.B	-	1	.00847	14.03	.436	.96641	1.510	2.589	PER IMP= 23.00
COMPUTE NM HYD	100.P	-	1	.00072	2.02	.075	1.96541	1.510	4.415	PER IMP= 100.00
START										TIME= .00
RAINFALL TYPE= 1										RAIN6= 1.470
COMPUTE NM HYD	110.A	-	1	.00171	.84	.020	.22418	1.532	.770	PER IMP= .00
COMPUTE NM HYD	110.B	-	1	.00847	6.77	.206	.45728	1.510	1.249	PER IMP= 23.00
COMPUTE NM HYD	110.P	-	1	.00072	1.34	.047	1.23766	1.510	2.924	PER IMP= 100.00
FINISH										