

CITY OF ALBUQUERQUE



June 4, 2008

Jeffrey L. Mulbery, P.E.
Bohannon Huston, Inc.
7500 Jefferson St NE
Albuquerque, NM 87109

Re: Sony Imageworks Grading and Drainage Plan
Engineer's Stamp dated 5-8-08 (R16/DA3006)

Dear Mr. Mulberry,

Based upon the information provided in your submittals received 5-9-08 and 6-4-08, the above referenced plan is approved for Building Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

Prior to Temporary or Permanent Certificate of Occupancy release:

- Engineer Certification per the DPM checklist will be required.
- Include the berm and the berm detail, received 6-4-08, on the certified plan.
- Per the AHYMO data submitted 6-4-08, the max water surface elevation for the pond in Basin 3 is 5298.75. Update this on the certified plan.

If you have any questions, you can contact me at 924-3695.

Sincerely,

Curtis A. Cherne, P.E.
Senior Engineer, Planning Dept.
Development and Building Services

Copy: file

DRAINAGE AND TRANSPORTATION INFORMATION SHEET
(Rev. 12/05)

PROJECT TITLE: Sony Imageworks @ Mesa del Sol ZONE MAP/DRG. FILE # R-16-Z/DA3006
DRB#: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: A Portion of Tract 22, Mesa del Sol, Innovation Park
CITY ADDRESS: _____

ENGINEERING FIRM: Bohannon Huston Inc. CONTACT: Jeff Mulbery
ADDRESS: 7500 Jefferson St. SE PHONE: (505) 798-7986
CITY, STATE: Albuquerque, NM ZIP CODE: 87109-4335

OWNER: Forest City Covington, N.M., LLC CONTACT: Many Barrera
ADDRESS: 801 University Blvd. SE, Suite 200 PHONE: 505-400-3021
CITY, STATE: Albuquerque, NM ZIP CODE: 87106

ARCHITECT: Decker/Perich/Sabatini CONTACT: Tim Veltkamp
ADDRESS: 7601 Jefferson NE PHONE: (505) 761-9700
CITY, STATE: Albuquerque, NM ZIP CODE: 87109

SURVEYOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

CONTRACTOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

TYPE OF SUBMITTAL:
☐ DRAINAGE REPORT
☐ DRAINAGE PLAN 1st SUBMITTAL
☒ DRAINAGE PLAN RESUBMITTAL
☐ CONCEPTUAL G & D PLAN
☒ GRADING PLAN
☐ EROSION CONTROL PLAN
☐ ENGINEER'S CERT (HYDROLOGY)
☐ CLOMR/LOMR
☐ TRAFFIC CIRCULATION LAYOUT
☐ ENGINEER/ARCHITECT CERT (TCL)
☐ ENGINEER/ARCHITECT CERT (DRB S.P.)
☐ ENGINEER/ARCHITECT CERT (AA)
☐ OTHER (SPECIFY) _____

CHECK TYPE OF APPROVAL SOUGHT:
☐ SIA/FINANCIAL GUARANTEE RELEASE
☐ PRELIMINARY PLAT APPROVAL
☐ S. DEV. PLAN FOR SUB'D APPROVAL
☐ S. DEV. 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 (ROUGH GRADING PERMIT)

WAS A PRE-DESIGN CONFERENCE ATTENDED:
☐ YES
☐ NO
☐ COPY PROVIDED

SUBMITTED BY: Jeff Mulbery/MB DATE: 5-09-08

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope to the proposed development define 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 subdivision containing more than ten (10) lots or constituting five (5) acres or more.

RECEIVED

JUN 6 4 2008

HYDROLOGY
SECTION

RECEIVED

MAY 09 2008

HYDROLOGY
SECTION


Courtyard I
7500 Jefferson St. NE
Albuquerque, NM
87109-4335

www.bhinc.com

voice: 505.823.1000
facsimile: 505.798.7988
toll free: 800.877.5332

June 3, 2008

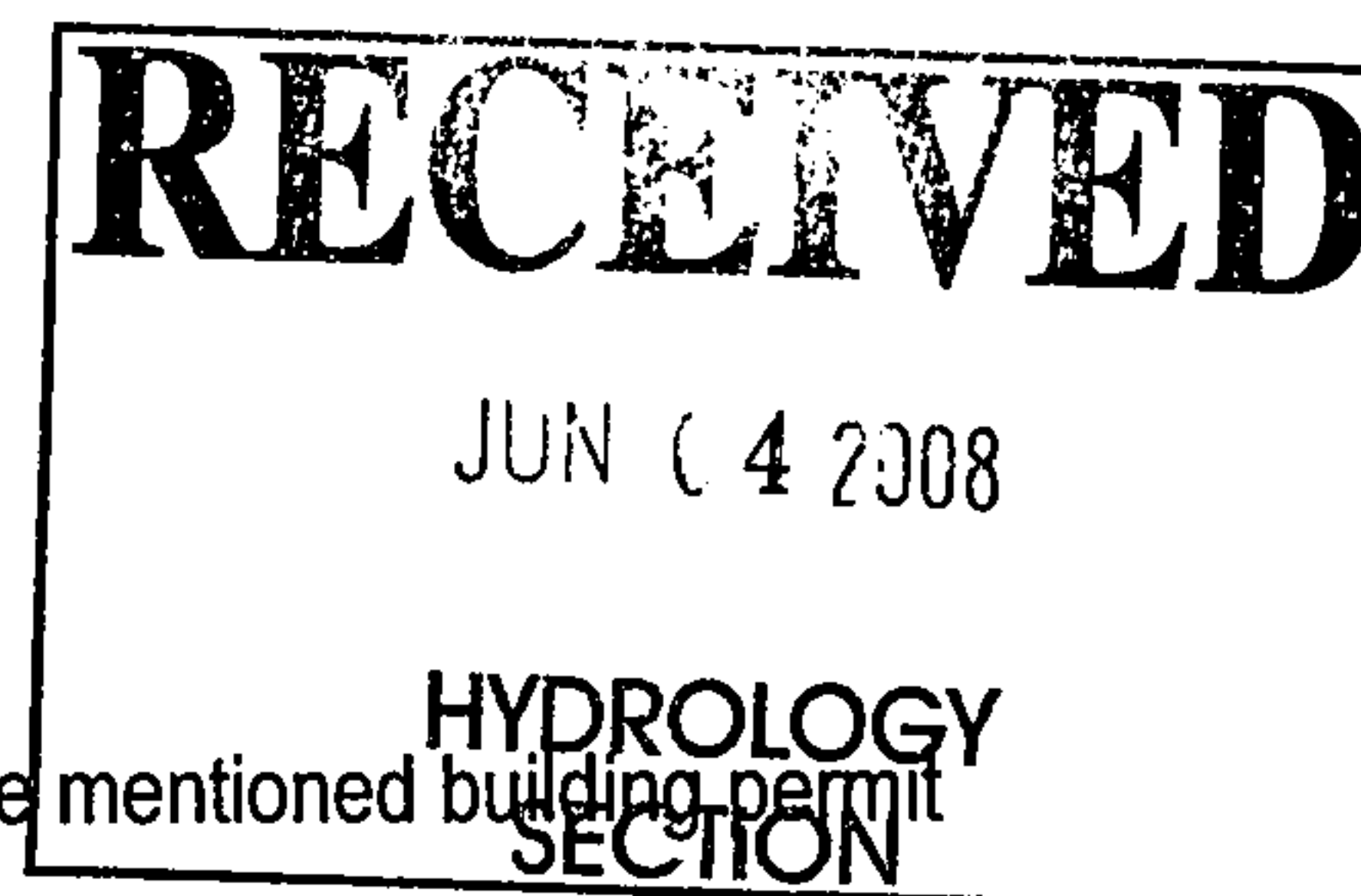
Curtis Cherne, P.E.
Planning Department
City of Albuquerque
P.O. Box 1293
Albuquerque, NM 87103

 C.O.

Re: Sony Imageworks Grading and Drainage
Plan Engineer's Stamp dated 5-8-08 (R16/DA3006)

Dear Curtis:

The purpose of this letter is to respond to comments we received to the above mentioned building permit submittal. We have addressed the comments as follows:



Comment 1:

'It is not clear how the pond in Basin 3 will function. The HWL is equal to the grate height at 98.50. The volume provided is 10, 540 cu. ft., which is less than the 100 yr-6hr storm produces. In addition, the pipe leaving the pond will carry 2.98 cfs and the basin produces 8.5 cfs. Therefore, it appears run-off will overtop the pond and the HWL is not 98.5 as stated. Show the extents of the WSE.HWL in the parking lot if that is your intention. Also, the 24-hour storm is required for ponds of this type. Provide a hydrograph for this pond.'

Response:

We have provided documentation with this letter that shows the inlet capacity as the pond fills. The attached AHYMO model demonstrates the 24hr rainfall hydrograph along with the HWL and peak discharge, elevation 98.75 and 2.82 cfs respectively. Therefore, the storm water does not overtop the top of pond at 99.00. Similarly, peak discharge from the basin is 8.5 cfs, but peak discharge from the pond is 2.82 cfs.

Comment 2:

'It appears that run-off from the northeast portion of the future parking area will leave the site. A berm may be required along the rear property line to prevent run-off from leaving the site.'

Response:

With this letter, we have provided a detail of the drainage control berm that we will issue to the contractor.

△
Curtis Cherne, P.E.
City of Albuquerque
June 4, 2008
Page 2

Comment 3:

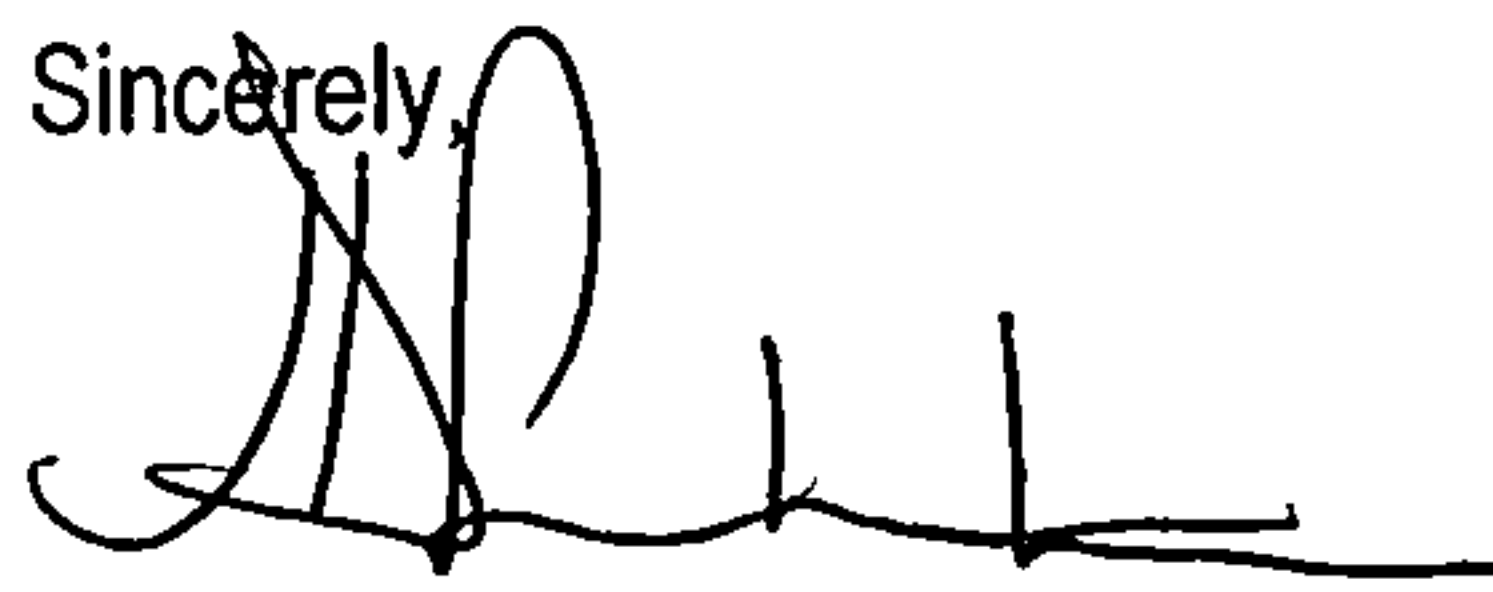
'A manhole is shown on the studios lot where the 36" line comes in from this site. The as-built plan from the studios show a manhole was not constructed. Call out a Tee if that was built and provide an invert. '

Response:

We intend to document this change with the drainage certification for the studios.

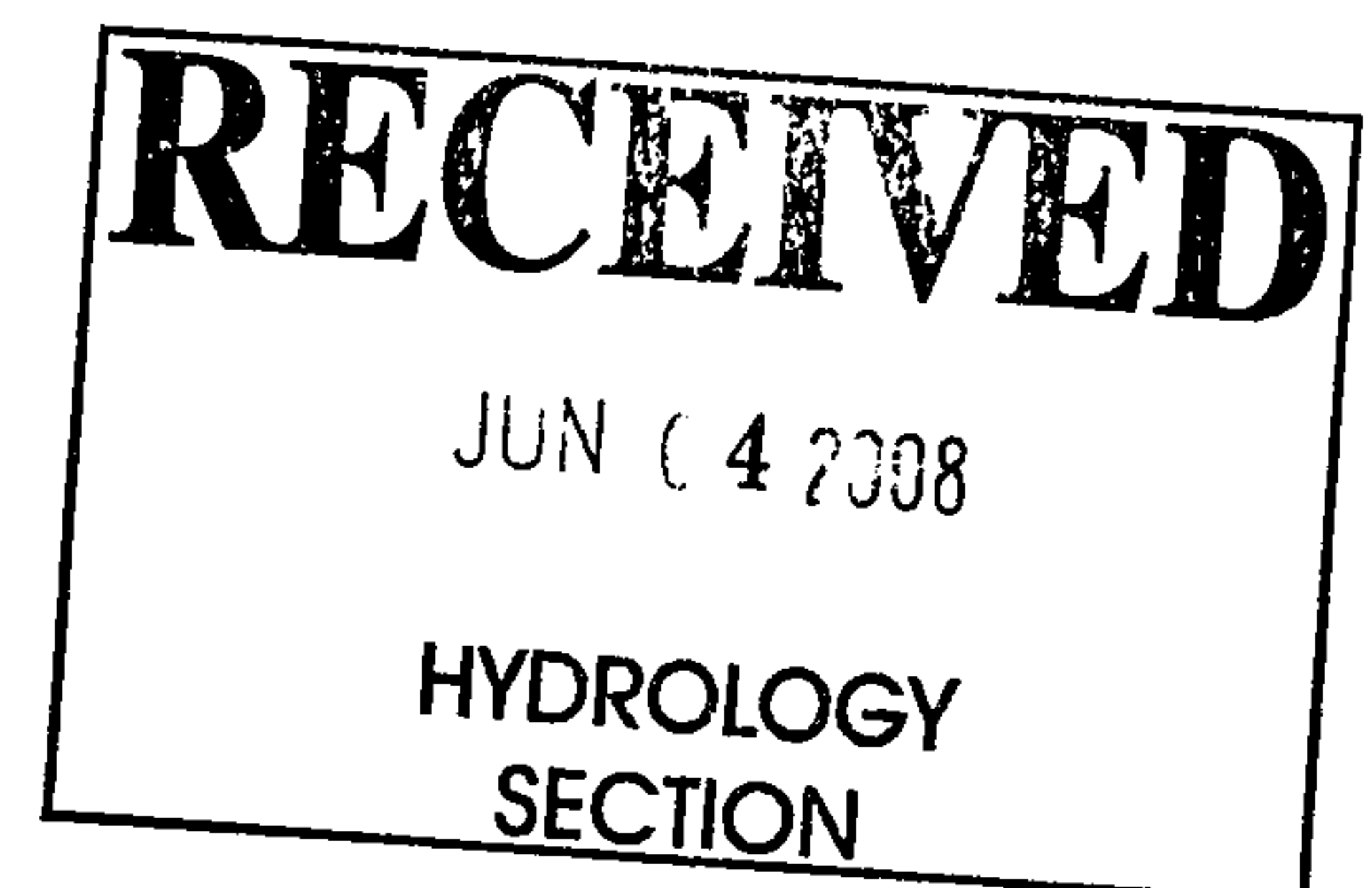
Please let us know if you find these responses sufficient. Thank you.

Sincerely,



Justin Smith, E.I.
Community Development and Planning

JS/cc
Enclosures



0299-

185

TG99.C
INV93.30

TY



18. INSTALL DRAINAGE CONTROL BERM 1' ABOVE FINISHED GRADE, PER DETAIL SHEET 1.1



6801 Jefferson NE
Suite 100
Albuquerque, NM 87109

505 761-9700
fax 761-4222
dps@dpsabq.com

C100
Grading and
Drainage Plan

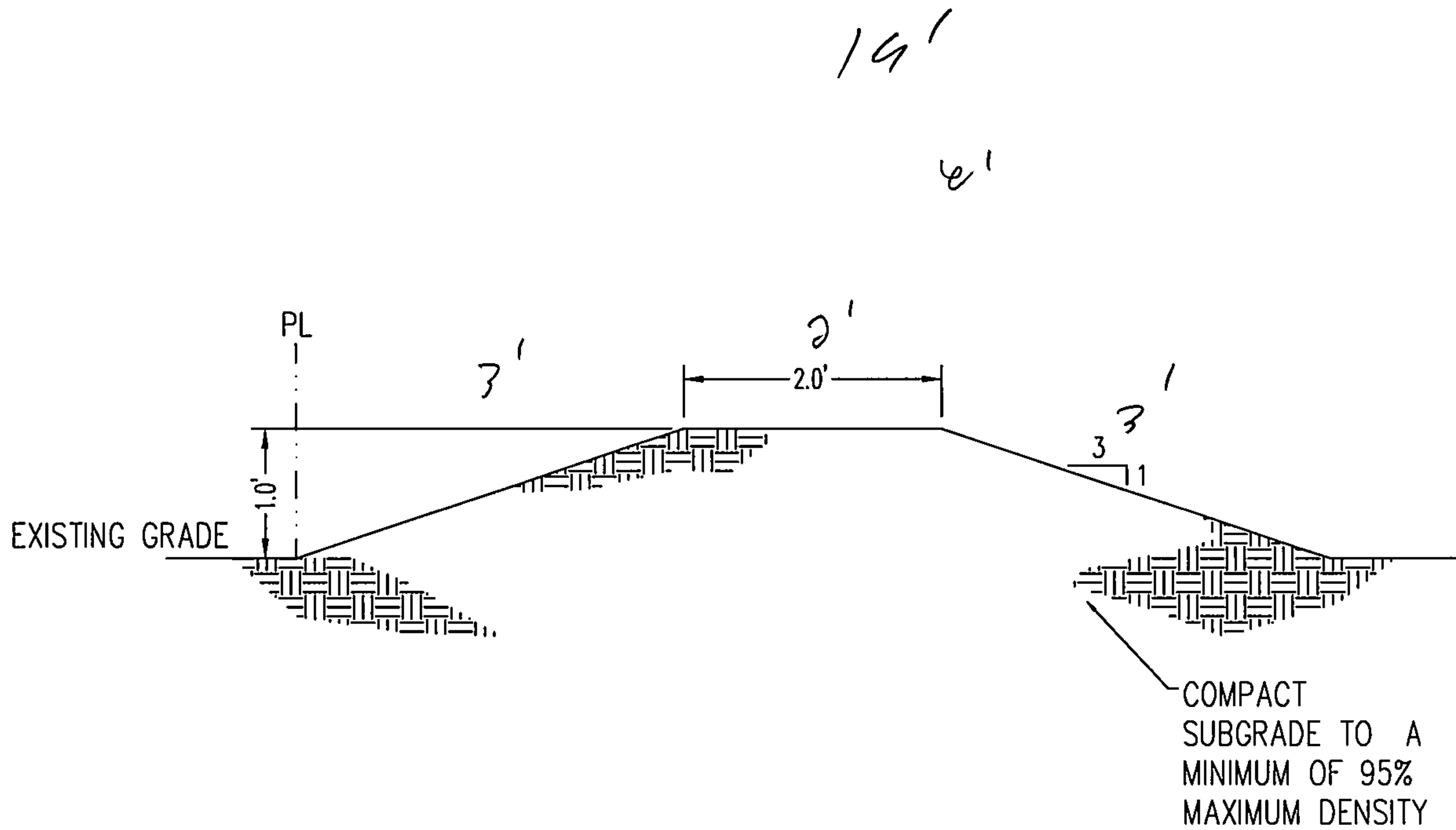
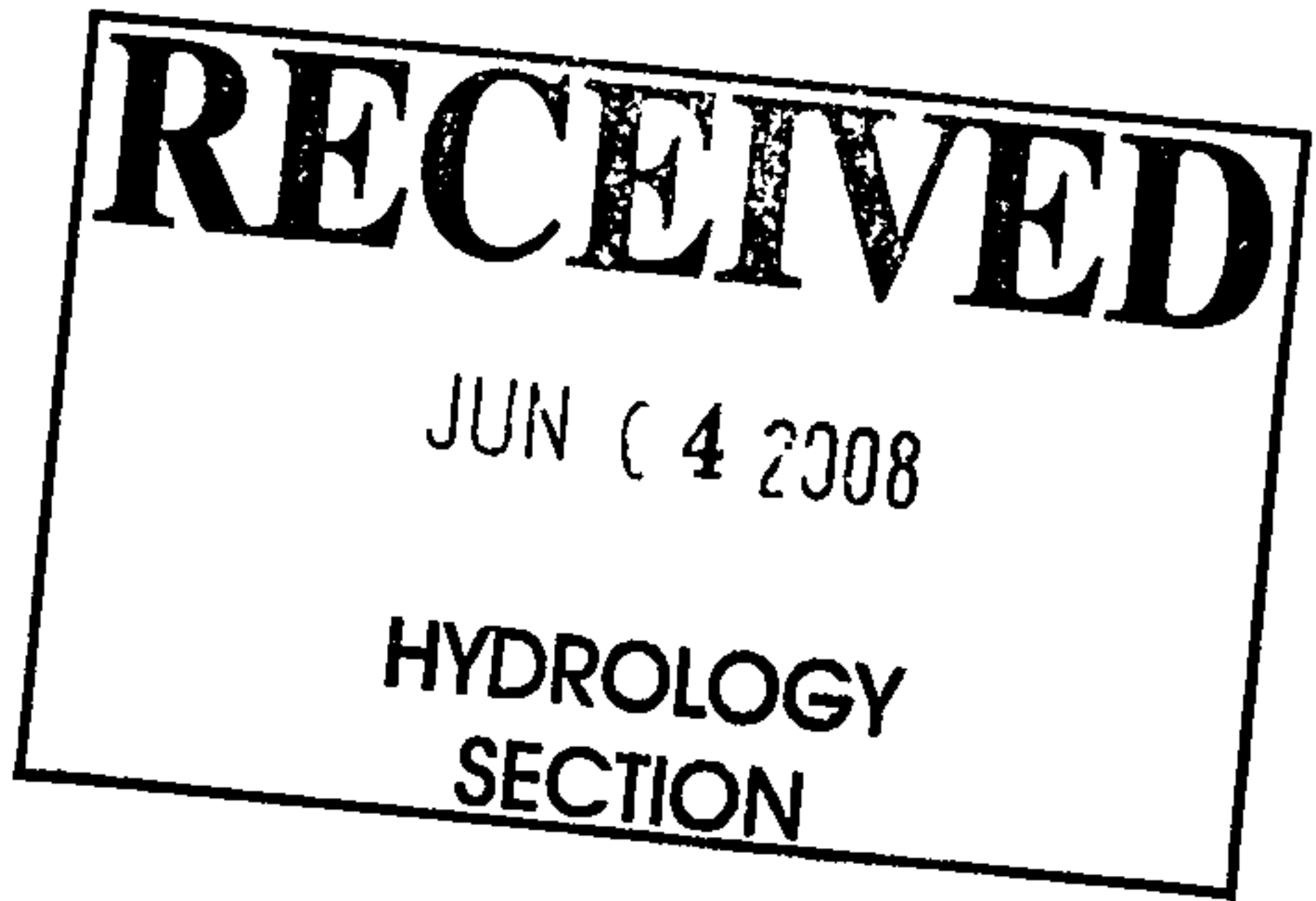
Add Drainage Control Berm

Sony Imageworks-Shell
@Mesa del Sol
5640 University Blvd SE
Albuquerque, NM 87119

DRAWN BY	JDS	SCALE	1"=30'
REVIEWED BY	JLM	1	OF
DATE ISSUED	06/04/08		
PROJECT NO.	080321		

1.0

1 OF 2



Dekker/Perich/Sabatini

6801 Jefferson NE
Suite 100
Albuquerque, NM 87109

architecture
interiors
planning
engineering
505 761-9700
fax 761-4222
dps@dpsabq.com

C100 Grading and Drainage Plan		Add Drainage Control Berm	
Sony Imageworks-Shell @Mesa del Sol 5640 University Blvd SE Albuquerque, NM 87119		DRAWN BY	JDS
		REVIEWED BY	JLM
		DATE ISSUED	06/04/08
		PROJECT NO.	080321
		SCALE	NTS
		1.1	
		2 OF 2	

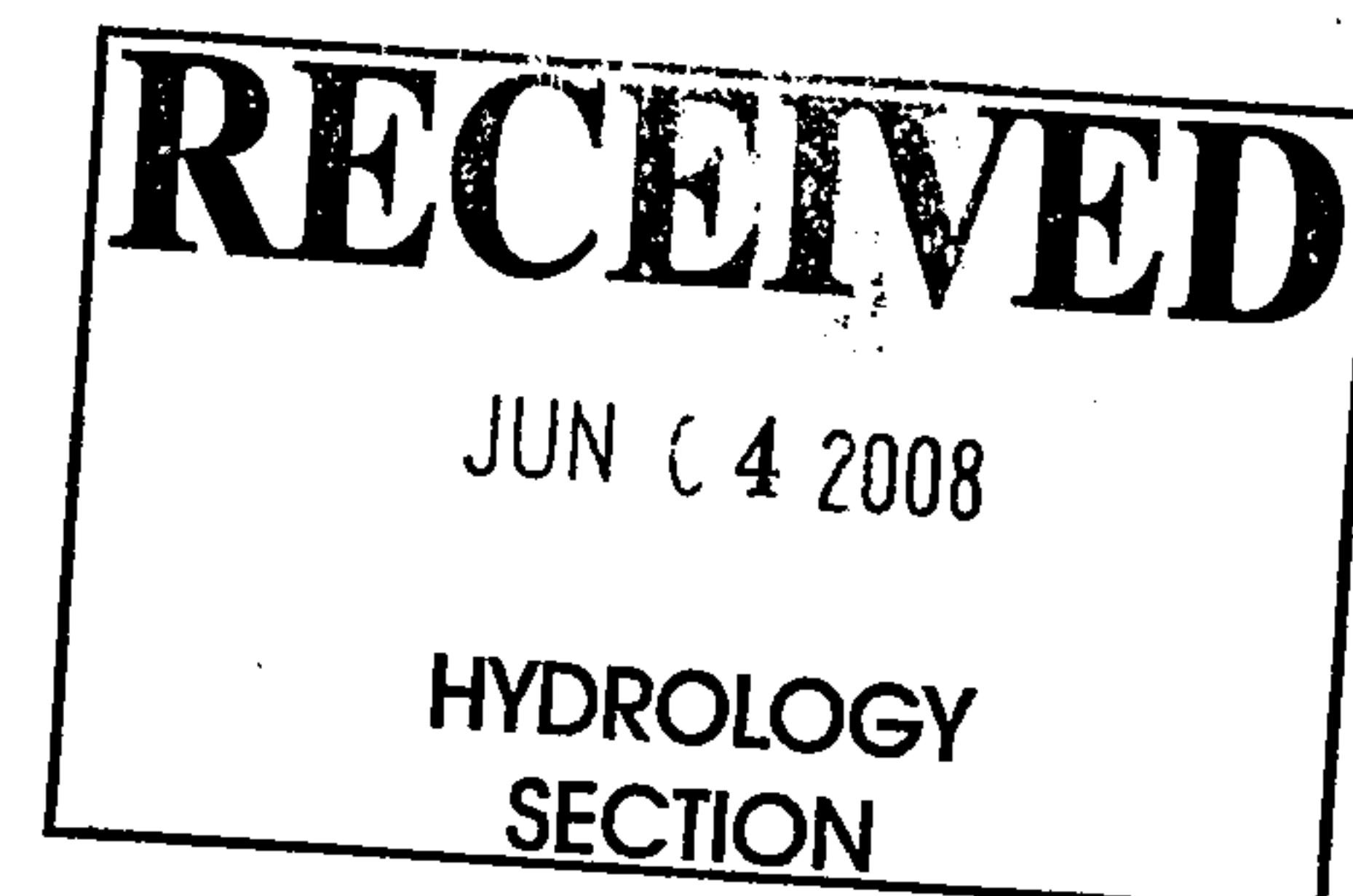
Single D inlet, in sump condition:

Open Area (for orifice calc in sq. 3.93

Length of Weir (feet): 8.40

Head (ft)	Head (in)	Weir Q	Orifice Q	Control Q
0.083	1	0.54	5.46	0.54
0.167	2	1.53	7.73	1.53
0.25	3	2.81	9.46	2.81
0.333	4	4.33	10.93	4.33
0.417	5	6.05	12.22	6.05
0.5	6	7.96	13.39	7.96
0.583	7	10.02	14.46	10.02
0.667	8	12.25	15.46	12.25
0.75	9	14.62	16.39	14.62
0.833	10	17.12	17.28	17.12
0.917	11	19.75	18.12	18.12
1	12	22.50	18.93	18.93

This sheet is used to justify outflow for the Ahymo
storage-discharge table.



This sheet is used to show pipe capacity with and without 6" of head over the grate elevation.

Manning's Eqn: $Q = 1.49/n \times AR^{2/3} \times S^{1/2}$

Pipe Dia	12 inches
A	0.7854 sq. ft
WP	3.1416 ft.
R	0.25 ft.
Slope	0.7000%
n	0.013

Q= 2.989

V= 3.81

Note: do not modify these cells

Customize for your exact head . . .

Analysis of water entrance into end of pipe by orifice equation

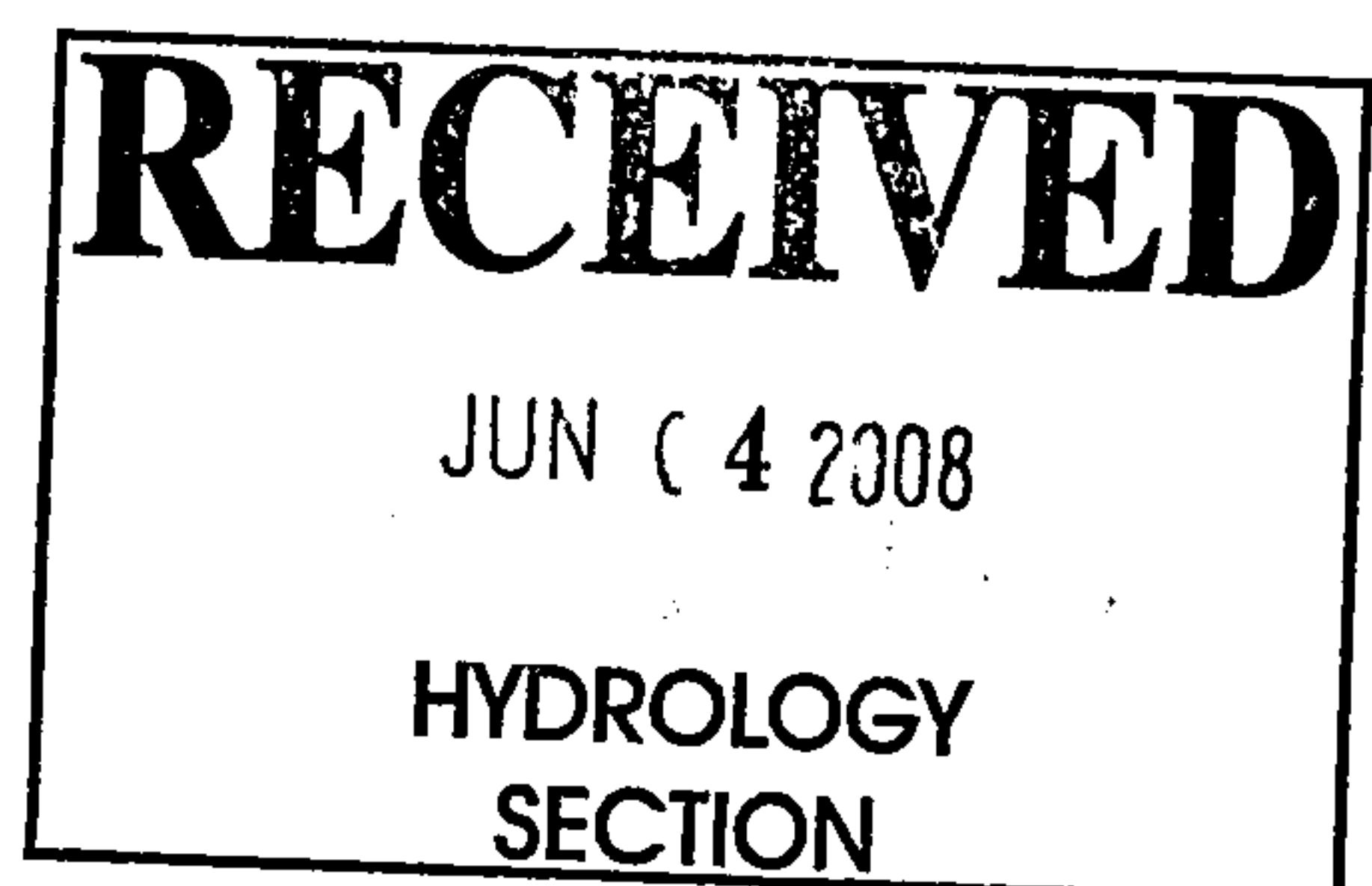
Orrifice Eqn: $Q = .62 \cdot A \cdot (2gH)^{.5}$

Head	3.48 feet -- to middle of pipe
A	0.7854 sq. ft

Q= 7.290 (for Ahymo)

Weir still dominates

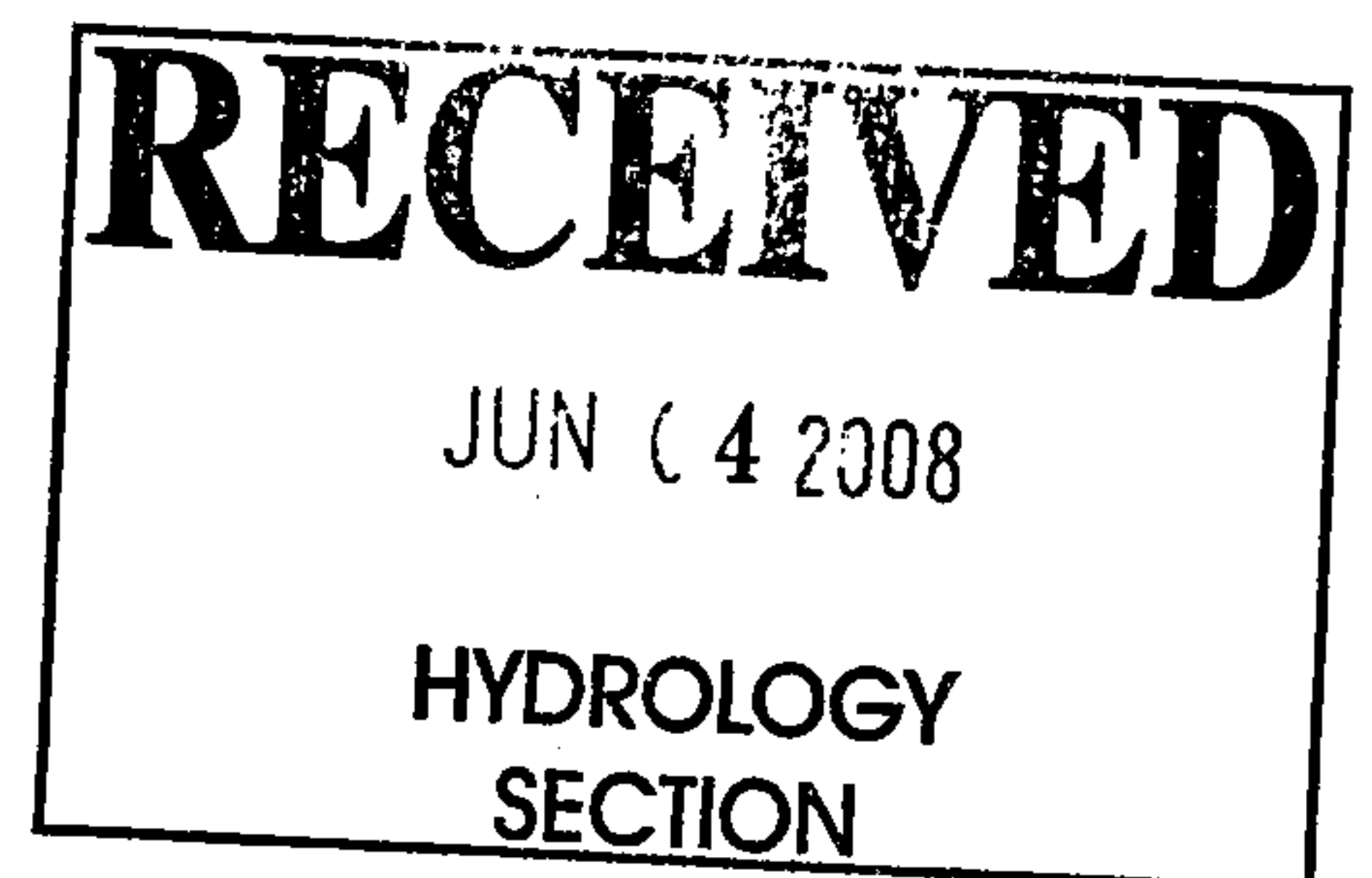
Note: do not modify these cells



Pond Volume Calculation - Average End Area Method

Basin: 3

ELEV. (FT)	AREA (SQ.FT)	AVG. AREA (SQ.FT)	HEIGHT (FT)	VOLUME (CF)	VOLUME (CF)	VOLUME (AC-FT)
97	3839.7				0	
		4014.45	0.33	1324.768		
97.33	4189.2				1324.768	0.030412
		4367.2	0.33	1441.176		
97.66	4545.2				2765.944	0.063497
		4726.45	0.34	1606.993		
98	4907.7				4372.938	0.100389
		5089.75	0.33	1679.617		
98.33	5271.8				6052.555	0.138948
		5398.95	0.17	917.8215		
98.5	5526.1				6970.377	0.160018
		5728.55	0.083	475.4696		
98.583	5931				7445.846	0.170933
		5981.2	0.084	502.4208		
98.667	6031.4				7948.267	0.182467
		6082.1	0.083	504.8143		
98.75	6132.8				8453.081	0.194056
		6183.9	0.083	513.2637		
98.833	6235				8966.345	0.205839
		6286.5	0.084	528.066		
98.917	6338				9494.411	0.217962
		6389.95	0.083	530.3658		
99	6441.9				10024.78	0.230137



AHYMO PROGRAM (AHYMO_97) -

- Version: 1997.02c

RUN DATE (MON/DAY/YR) = 06/02/2008

START TIME (HR:MIN:SEC) = 16:13:03

USER NO.= AHYMO-S-9702c1BohanHu-AH

INPUT FILE = rp1.hym

*S AHYMO FILE FOR SONY IMAGEWORKS DRAINAGE

*S DEVELOPED CONDITIONS, 24HR, 100YR.

*S

*S FILE: B3.txt

*S REVISED: 04/23/08

*S

* ASSUMPTIONS:

* 1. USED LAND TREATMENTS USED IN GRADING AND DRAINAGE PLAN

* 3. PRECIPITATION CALCULATED PER DPM FOR ZONE 2

*S

* RAINFALL FOR MESA DEL SOL BASINS PER DPM TABLE A-2 AND A-3

* 100YR

RAINFALL

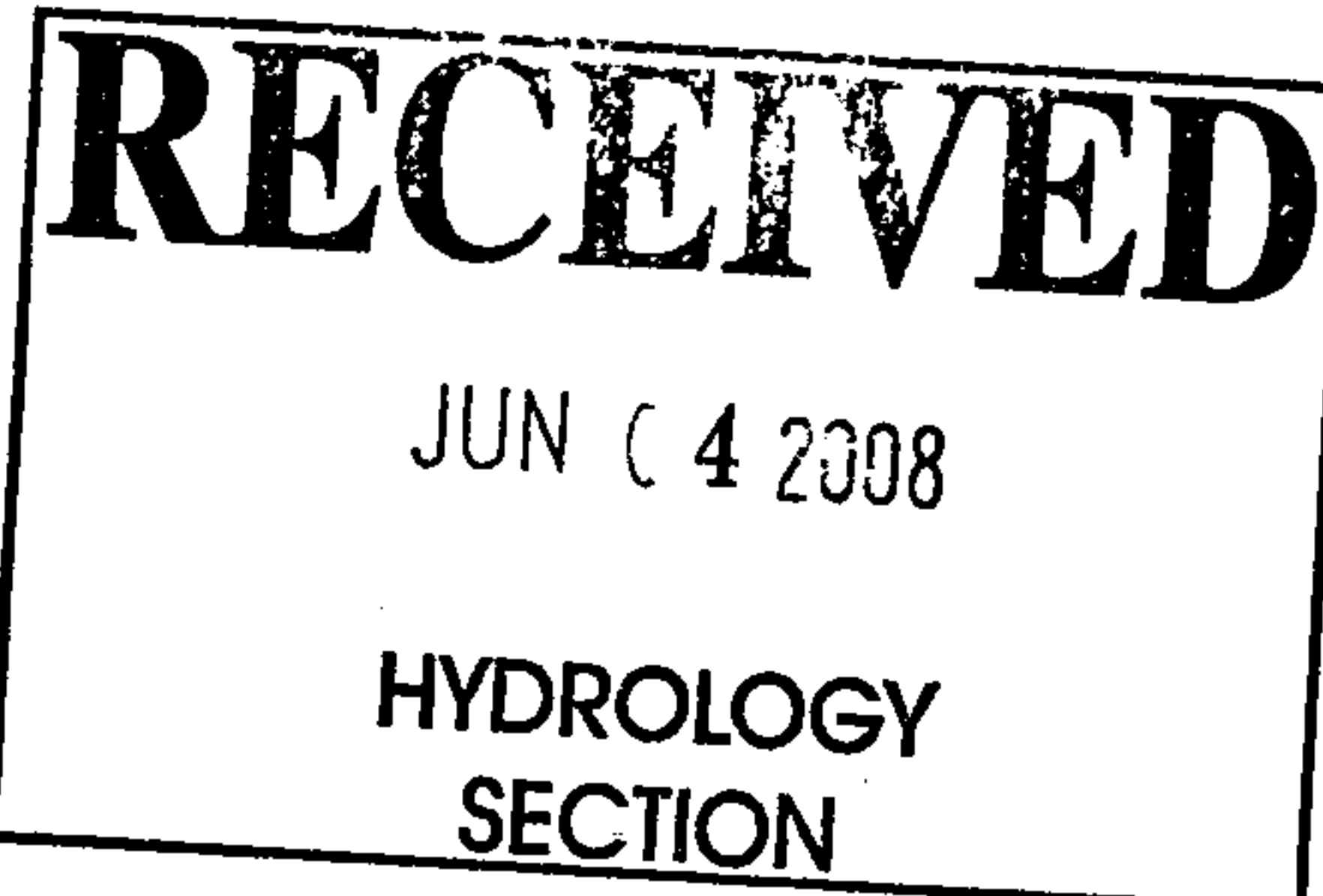
TYPE=2 RAIN QUARTER=0.0 RAIN ONE=2.01

RAIN SIX=2.35 RAIN DAY=2.75 DT=.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	.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	2.3517	2.3534	2.3551	2.3569	2.3586
2.3602	2.3619	2.3636	2.3653	2.3669	2.3686	2.3703
2.3719	2.3736	2.3752	2.3768	2.3785	2.3801	2.3817
2.3833	2.3849	2.3865	2.3881	2.3897	2.3913	2.3929
2.3944	2.3960	2.3976	2.3991	2.4007	2.4022	2.4038
2.4053	2.4068	2.4084	2.4099	2.4114	2.4129	2.4144
2.4159	2.4174	2.4189	2.4204	2.4219	2.4234	2.4248
2.4263	2.4278	2.4292	2.4307	2.4322	2.4336	2.4350
2.4365	2.4379	2.4394	2.4408	2.4422	2.4436	2.4450
2.4464	2.4478	2.4493	2.4506	2.4520	2.4534	2.4548
2.4562	2.4576	2.4589	2.4603	2.4617	2.4630	2.4644
2.4658	2.4671	2.4685	2.4698	2.4711	2.4725	2.4738
2.4751	2.4765	2.4778	2.4791	2.4804	2.4817	2.4830
2.4843	2.4856	2.4869	2.4882	2.4895	2.4908	2.4921
2.4934	2.4946	2.4959	2.4972	2.4984	2.4997	2.5010
2.5022	2.5035	2.5047	2.5060	2.5072	2.5085	2.5097
2.5109	2.5122	2.5134	2.5146	2.5158	2.5170	2.5183
2.5195	2.5207	2.5219	2.5231	2.5243	2.5255	2.5267
2.5279	2.5291	2.5303	2.5314	2.5326	2.5338	2.5350
2.5361	2.5373	2.5385	2.5396	2.5408	2.5420	2.5431
2.5443	2.5454	2.5466	2.5477	2.5488	2.5500	2.5511
2.5523	2.5534	2.5545	2.5556	2.5568	2.5579	2.5590
2.5601	2.5612	2.5623	2.5635	2.5646	2.5657	2.5668
2.5679	2.5690	2.5701	2.5711	2.5722	2.5733	2.5744
2.5755	2.5766	2.5776	2.5787	2.5798	2.5809	2.5819
2.5830	2.5841	2.5851	2.5862	2.5872	2.5883	2.5893
2.5904	2.5914	2.5925	2.5935	2.5946	2.5956	2.5966
2.5977	2.5987	2.5997	2.6008	2.6018	2.6028	2.6038
2.6049	2.6059	2.6069	2.6079	2.6089	2.6099	2.6109
2.6119	2.6129	2.6139	2.6149	2.6159	2.6169	2.6179
2.6189	2.6199	2.6209	2.6219	2.6229	2.6238	2.6248
2.6258	2.6268	2.6278	2.6287	2.6297	2.6307	2.6316
2.6326	2.6336	2.6345	2.6355	2.6364	2.6374	2.6384
2.6393	2.6403	2.6412	2.6421	2.6431	2.6440	2.6450
2.6459	2.6469	2.6478	2.6487	2.6497	2.6506	2.6515
2.6524	2.6534	2.6543	2.6552	2.6561	2.6571	2.6580



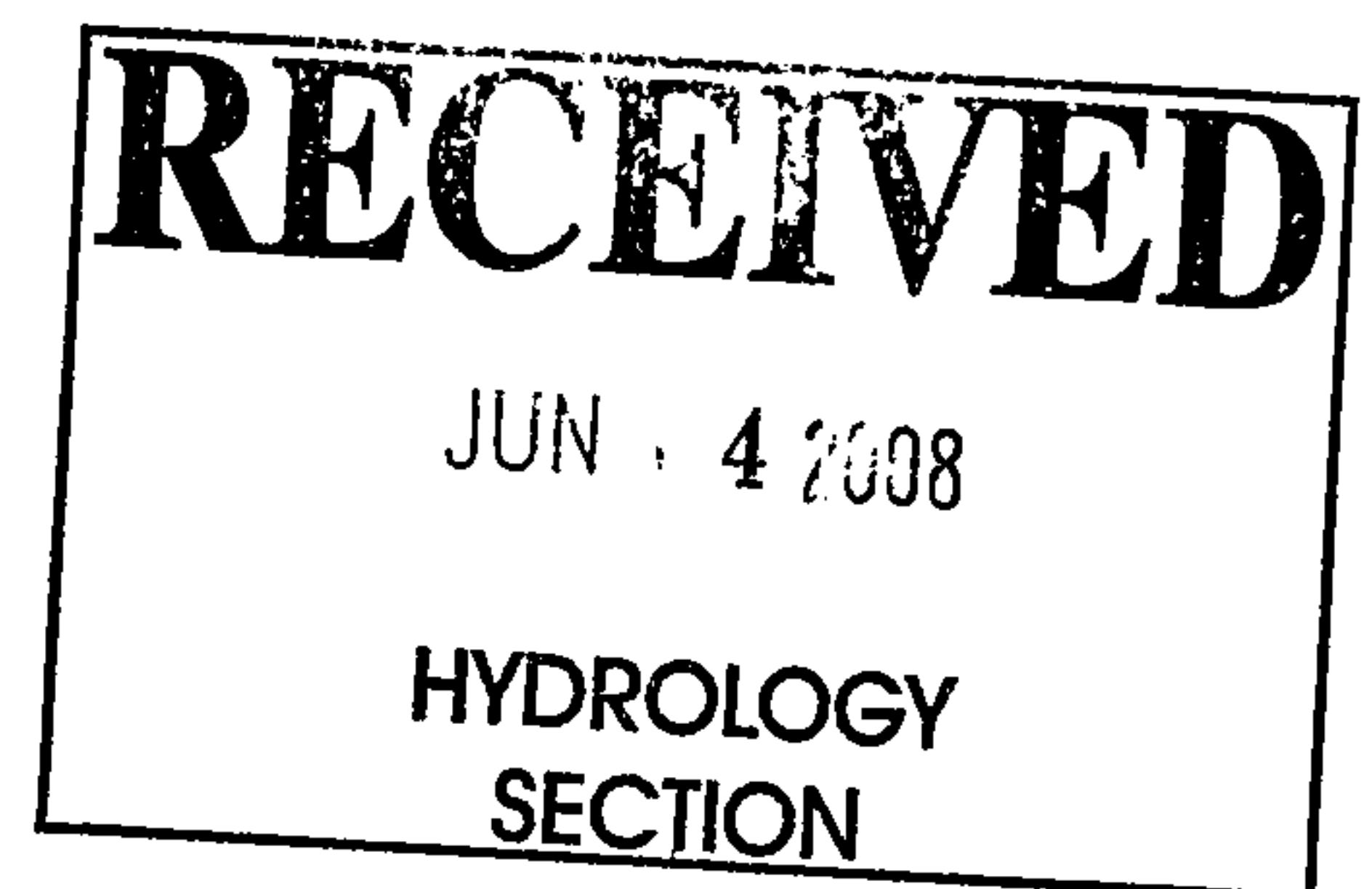
0.005	0.1389	5298.333
0.006	0.1600	5298.500
0.540	0.1709	5298.583
1.530	0.1824	5298.667
2.810	0.1940	5298.750
4.330	0.2058	5298.833
6.050	0.2180	5298.917
7.023	0.2301	5299.000

* * * * *

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5296.67	-.030	.00
.50	.00	5297.00	.000	.00
1.00	.00	5297.00	.000	.00
1.50	8.52	5297.96	.096	.00
2.00	2.00	5298.72	.190	2.39
2.50	.26	5298.58	.170	.51
3.00	.09	5298.53	.163	.18
3.50	.06	5298.51	.161	.08
4.00	.05	5298.51	.161	.05
4.50	.04	5298.51	.161	.05
5.00	.05	5298.51	.161	.05
5.50	.05	5298.51	.161	.05
6.00	.06	5298.51	.161	.05
6.50	.06	5298.51	.161	.06
7.00	.05	5298.51	.161	.06
7.50	.05	5298.51	.161	.05
8.00	.05	5298.51	.161	.05
8.50	.05	5298.51	.161	.05
9.00	.05	5298.51	.161	.05
9.50	.05	5298.51	.161	.05
10.00	.05	5298.51	.161	.05
10.50	.04	5298.51	.161	.04
11.00	.04	5298.51	.161	.04
11.50	.04	5298.51	.161	.04
12.00	.04	5298.51	.161	.04
12.50	.04	5298.51	.161	.04
13.00	.04	5298.51	.161	.04
13.50	.04	5298.50	.161	.04
14.00	.04	5298.50	.161	.04
14.50	.04	5298.50	.161	.04
15.00	.04	5298.50	.161	.04
15.50	.03	5298.50	.161	.03
16.00	.03	5298.50	.161	.03
16.50	.03	5298.50	.161	.03
17.00	.03	5298.50	.161	.03
17.50	.03	5298.50	.161	.03
18.00	.03	5298.50	.161	.03
18.50	.03	5298.50	.161	.03
19.00	.03	5298.50	.161	.03
19.50	.03	5298.50	.160	.03
20.00	.03	5298.50	.160	.03
20.50	.03	5298.50	.160	.03
21.00	.03	5298.50	.160	.03
21.50	.03	5298.50	.160	.03
22.00	.03	5298.50	.160	.03
22.50	.03	5298.50	.160	.03
23.00	.03	5298.50	.160	.03
23.50	.03	5298.50	.160	.03
24.00	.03	5298.50	.160	.03
24.50	.00	5298.50	.160	.01
25.00	.00	5298.50	.160	.01
25.50	.00	5298.50	.160	.01
26.00	.00	5298.49	.159	.01
26.50	.00	5298.49	.159	.01
27.00	.00	5298.49	.159	.01
27.50	.00	5298.49	.159	.01

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
28.00	.00	5298.49	.158	.01
28.50	.00	5298.48	.158	.01
29.00	.00	5298.48	.158	.01
29.50	.00	5298.48	.158	.01

PEAK DISCHARGE = 2.818 CFS - PEAK OCCURS AT HOUR 1.85



2.6589 2.6598 2.6607 2.6616 2.6625 2.6634 2.6644
2.6653 2.6662 2.6671 2.6680 2.6689 2.6698 2.6707
2.6715 2.6724 2.6733 2.6742 2.6751 2.6760 2.6769
2.6778 2.6786 2.6795 2.6804 2.6813 2.6821 2.6830
2.6839 2.6848 2.6856 2.6865 2.6874 2.6882 2.6891
2.6900 2.6908 2.6917 2.6925 2.6934 2.6942 2.6951
2.6959 2.6968 2.6976 2.6985 2.6993 2.7002 2.7010
2.7019 2.7027 2.7035 2.7044 2.7052 2.7061 2.7069
2.7077 2.7085 2.7094 2.7102 2.7110 2.7119 2.7127
2.7135 2.7143 2.7151 2.7160 2.7168 2.7176 2.7184
2.7192 2.7200 2.7209 2.7217 2.7225 2.7233 2.7241
2.7249 2.7257 2.7265 2.7273 2.7281 2.7289 2.7297
2.7305 2.7313 2.7321 2.7329 2.7337 2.7344 2.7352
2.7360 2.7368 2.7376 2.7384 2.7392 2.7399 2.7407
2.7415 2.7423 2.7431 2.7438 2.7446 2.7454 2.7462
2.7469 2.7477 2.7485 2.7492 2.7500

*S DRAINAGE BASIN 3
COMPUTE NM HYD ID=1 HYD NO=B3 AREA=0.00308 SQ MI
PER A=0 PER B=8 PER C=8 PER D=84 on plan 15 3/4 B 05 1/2 D
TP=0.133 HR MASS RAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 10.237 CFS UNIT VOLUME = .9981 B = 526.28 P60 = 2.0100
AREA = .002587 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

K = .119497HR TP = .133000HR K/TP RATIO = .898476 SHAPE CONSTANT, N = 3.944947
UNIT PEAK = 1.3023 CFS UNIT VOLUME = .9906 B = 351.48 P60 = 2.0100
AREA = .000493 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

PRINT HYD ID=1 CODE=10

HYDROGRAPH FROM AREA B3

TIME	TIME	FLOW	TIME	FLOW	TIME	FLOW	TIME	FLOW
HRS	FLOW	CFS	HRS	CFS	HRS	CFS	HRS	CFS
20.000	.000	.0	5.000	.0	10.000	.0	15.000	.0
20.500	.500	.0	5.500	.1	10.500	.0	15.500	.0
21.000	1.000	.0	6.000	.1	11.000	.0	16.000	.0
21.500	1.500	8.5	6.500	.1	11.500	.0	16.500	.0
22.000	2.000	2.0	7.000	.1	12.000	.0	17.000	.0
22.500	2.500	.3	7.500	.1	12.500	.0	17.500	.0
23.000	3.000	.1	8.000	.1	13.000	.0	18.000	.0
23.500	3.500	.1	8.500	.0	13.500	.0	18.500	.0
24.000	4.000	.0	9.000	.0	14.000	.0	19.000	.0
24.500	4.500	.0	9.500	.0	14.500	.0	19.500	.0

RUNOFF VOLUME = 2.26417 INCHES = .3719 ACRE-FEET
PEAK DISCHARGE RATE = 8.52 CFS AT 1.500 HOURS BASIN AREA = .0031 SQ. MI.

*S
*
*
*

ROUTE RESERVOIR	ID=21 HYD=POND	INFLOW ID=1	CODE=10
OUTFLOW	STORAGE	ELEV	
(CFS)	(AC-FT)	(FT)	
	0.001	0.0000	5297.000
	0.002	0.0304	5297.333
	0.003	0.0635	5297.667
	0.004	0.1004	5298.000

RECEIVED

JUN 4 2008

HYDROLOGY
SECTION

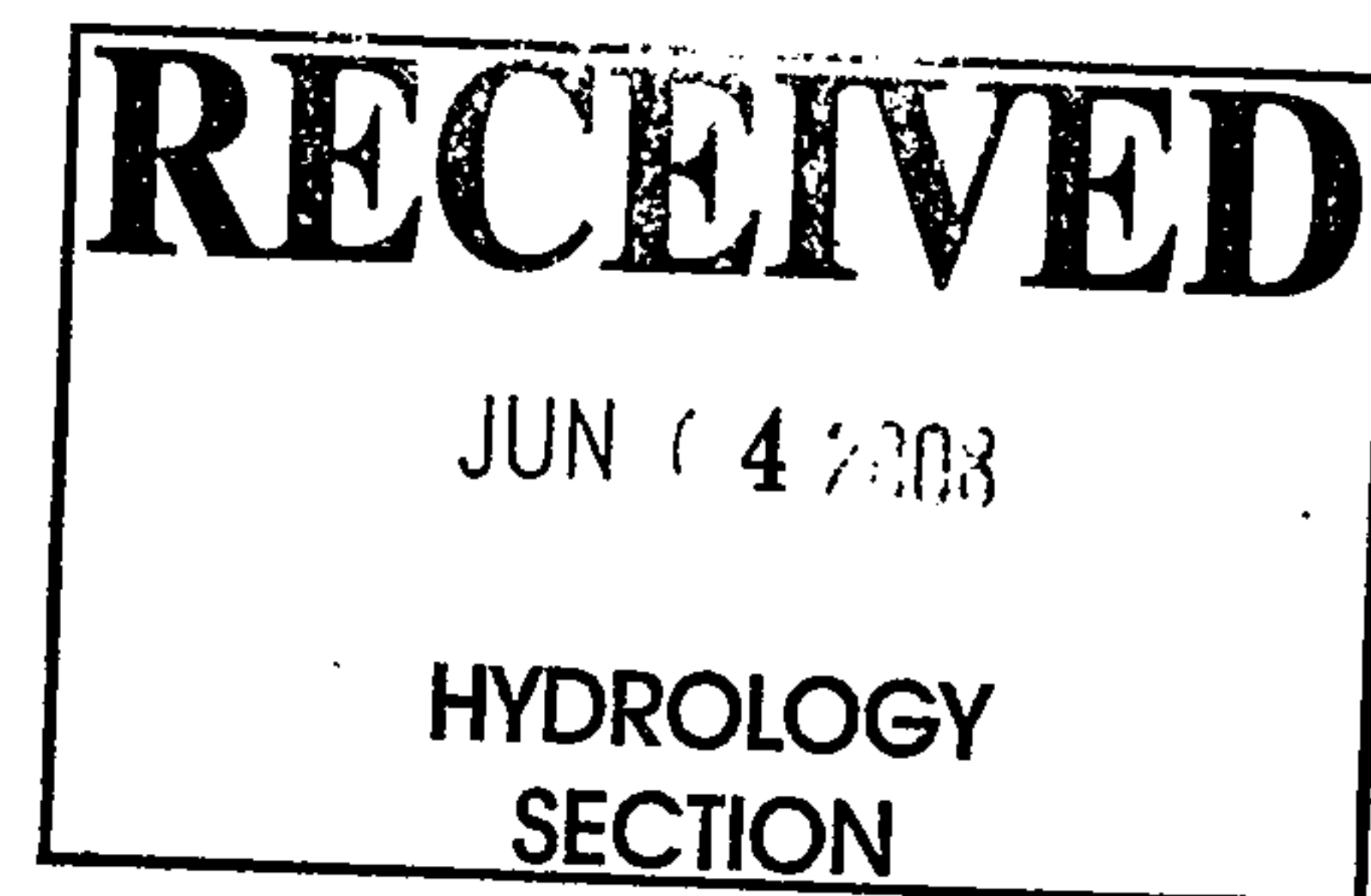
MAXIMUM WATER SURFACE ELEVATION = 5298.750
MAXIMUM STORAGE = .1941 AC-FT INCREMENTAL TIME= .050000HRS

*
*
FINISH

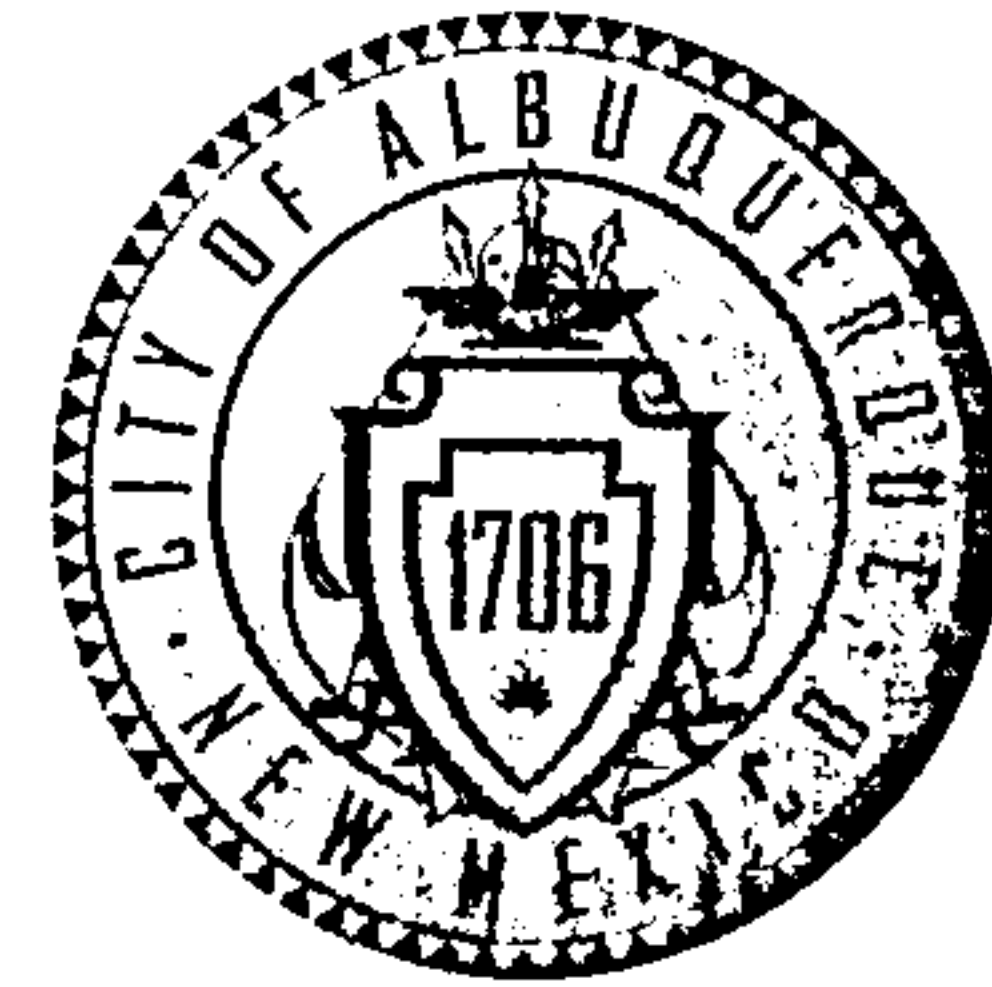
= 8455 ft³

NORMAL PROGRAM FINISH

END TIME (HR:MIN:SEC) = 16:13:03



CITY OF ALBUQUERQUE



May 16, 2008

Jeffrey L. Mulbery, P.E.
Bohannon Huston, Inc.
7500 Jefferson St NE
Albuquerque, NM 87109

Re: Sony Imageworks Grading and Drainage Plan

Engineer's Stamp dated 5-8-08 (R16/DA3006)

Dear Mr. Mulberry,

Based upon the information provided in your submittal received 5-9-08, the above referenced plan cannot be approved for Building Permit until the following comments are addressed:

- It is not clear how the pond in Basin 3 will function. The HWL is equal to the grate height at 98.50. The volume provided is 10540 cu. ft., which is less than the 100 yr-6hr storm produces. In addition, the pipe leaving the pond will carry 2.98 cfs and the basin produces 8.5 cfs. Therefore, it appears runoff will overtop the pond and the HWL is not 98.5 as stated. Show the extents of the WSE/HWL in the parking lot if that is your intention. Also, the 24-hour storm is required for ponds of this type. Provide a hydrograph for the pond.
- It appears that runoff from the northeast portion of the future parking area will leave the site. A berm may be required along the rear property line to prevent runoff from leaving this site.
- A manhole is shown on the studios lot where the 36" line comes in from this site. The as-built plan from the studios show a manhole was not constructed. Call out a Tee if that was built and provide an invert.

For future reference, including the Schott facility, Foundation Permit and Rough Grading Permit approvals do not approve building storm drainage facilities, paving, curb and gutter, etc. Foundation Permit approves to pour the foundation at the specified finished floor elevation, only. Rough Grading Permit approves moving dirt to a "rough" grade. Storm drain facilities can be built with Grading Permit and Building Permit approvals.

If you have any questions, you can contact me at 924-3695.

Sincerely,

Curtis A. Cherne, P.E.

Senior Engineer, Planning Dept.

Development and Building Services

Albuquerque - Making History 1706-2006

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

DRAINAGE AND TRANSPORTATION INFORMATION SHEET
(Rev. 12/05)

PROJECT TITLE: Sony Imageworks @ Mesa del Sol ZONE MAP/DRG. FILE # R-16-Z/DA3006
DRB#: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: A Portion of Tract 22, Mesa del Sol, Innovation Park
CITY ADDRESS: _____

ENGINEERING FIRM: Bohannon Huston Inc. CONTACT: Jeff Mulbery
ADDRESS: 7500 Jefferson St. SE PHONE: (505) 798-7986
CITY, STATE: Albuquerque, NM ZIP CODE: 87109-4335

OWNER: Forest City Covington, N.M., LLC CONTACT: Many Barrera
ADDRESS: 801 University Blvd. SE, Suite 200 PHONE: 505-400-3021
CITY, STATE: Albuquerque, NM ZIP CODE: 87106

ARCHITECT: Decker/Perich/Sabatini CONTACT: Tim Veltkamp
ADDRESS: 7601 Jefferson NE PHONE: (505) 761-9700
CITY, STATE: Albuquerque, NM ZIP CODE: 87109

SURVEYOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

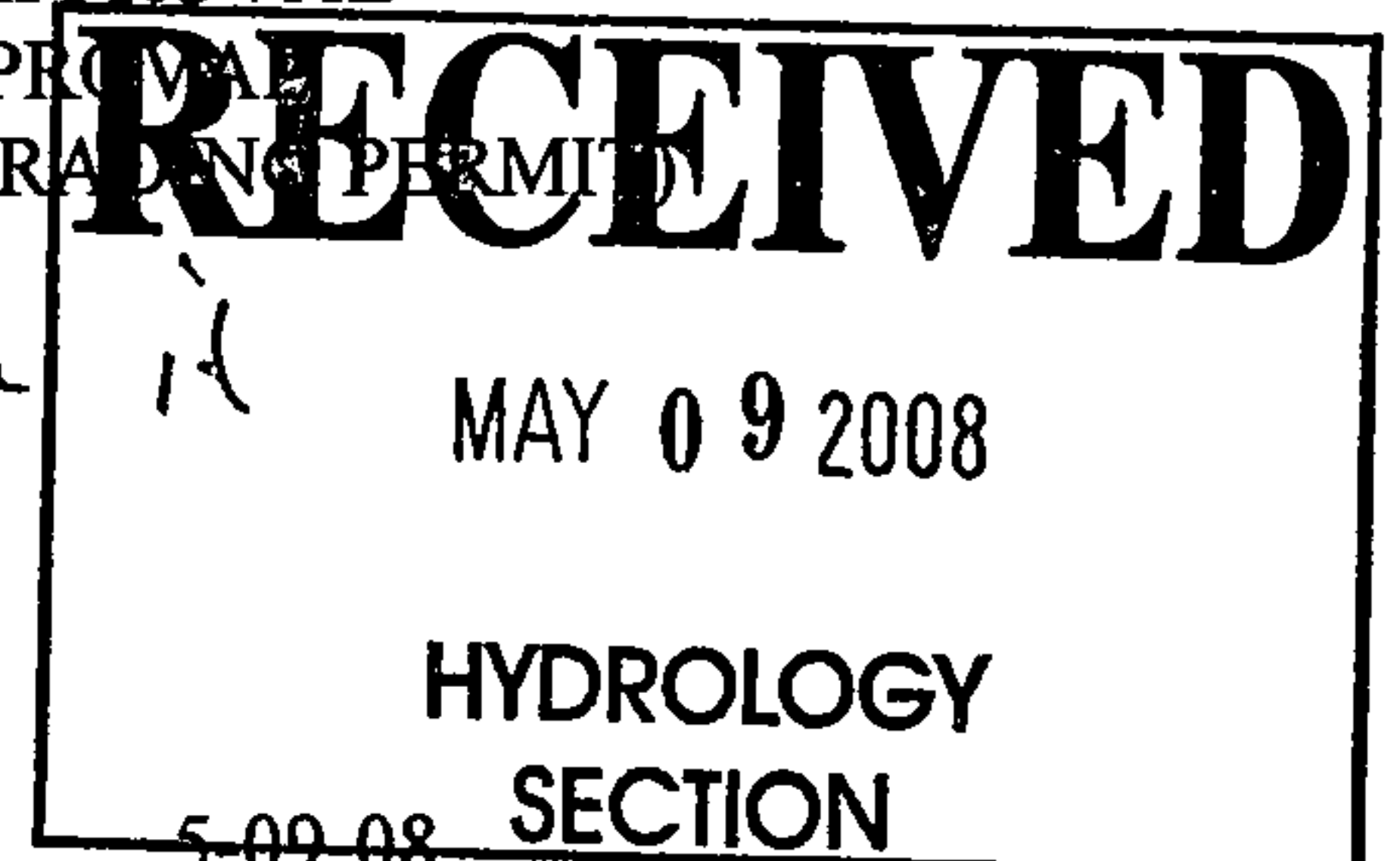
CONTRACTOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

TYPE OF SUBMITTAL:
☐ DRAINAGE REPORT
☐ DRAINAGE PLAN 1st SUBMITTAL
☒ DRAINAGE PLAN RESUBMITTAL
☐ CONCEPTUAL G & D PLAN
☒ GRADING PLAN
☐ EROSION CONTROL PLAN
☐ ENGINEER'S CERT (HYDROLOGY)
☐ CLOMR/LOMR
☐ TRAFFIC CIRCULATION LAYOUT
☐ ENGINEER/ARCHITECT CERT (TCL)
☐ ENGINEER/ARCHITECT CERT (DRB S.P.)
☐ ENGINEER/ARCHITECT CERT (AA)
☐ OTHER (SPECIFY) _____

CHECK TYPE OF APPROVAL SOUGHT:
☐ SIA/FINANCIAL GUARANTEE RELEASE
☐ PRELIMINARY PLAT APPROVAL
☐ S. DEV. PLAN FOR SUB'D APPROVAL
☐ S. DEV. 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 (ROUGH GRADING PERMIT)

WAS A PRE-DESIGN CONFERENCE ATTENDED:
☐ YES
☐ NO
☐ COPY PROVIDED

SUBMITTED BY: Jeff Mulbery/MB DATE: 5-09-08



Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope to the proposed development define 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 subdivision containing more than ten (10) lots or constituting five (5) acres or more.

CITY OF ALBUQUERQUE



February 8, 2008

Jeffrey L. Mulberry, P.E.
Bohannon Huston, Inc.
7500 Jefferson St. NE
Albuquerque, NM 87109

**RE: Sony Imageworks @ Mesa del Sol Grading Plan
Engineer's Stamp dated 2-4-08 (R16/DA3006)**

Dear Mr. Mulberry,

Based upon the information provided in your submittal received 2-4-08, the above referenced plan is approved for Site Development for Building Permit action by the DRB, Foundation Permit, and Rough Grading Permit.

P.O. Box 1293

This project requires a National Pollutant Discharge Elimination System (NPDES) permit. You are required to send a copy of your SWPPP on a CD to the following address:

Albuquerque

Department of Municipal Development, Storm Drainage Division, P.O. Box 1293, One Civic Plaza, Rm. 301, Albuquerque, NM 87103

New Mexico 87103

The land treatments in this submittal do not agree with the land treatments in the Drainage Area 3 Drainage Management Plan, stamp date 7-24-07. This may have an impact on pond volumes.

www.cabq.gov

If you have any questions, you can contact me at 924-3695.

Sincerely,

Curtis A. Cherne, P.E.
Senior Engineer, Hydrology
Development and Building Services
Planning Department

C: file
B. Bingham

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(Rev. 12/05)

R-16/DA3006

PROJECT TITLE: Sony Imageworks @ Mesa del Sol

ZONE MAP/DRG. FILE # R-16-Z

DRB#: _____ EPC#: _____

WORK ORDER#: _____

LEGAL DESCRIPTION: A Portion of Tract 22, Mesa del Sol, Innovation Park

CITY ADDRESS: _____

ENGINEERING FIRM: Bohannon Huston Inc.

ADDRESS: 7500 Jefferson St. SE NE

CITY, STATE: Albuquerque, NM

CONTACT: Jeff Mulbery

PHONE: (505) 798-7986

ZIP CODE: 87109-4335

OWNER: Forest City Covington, N.M., LLC

ADDRESS: 801 University Blvd. SE, Suite 200

CITY, STATE: Albuquerque, NM

CONTACT: Many Barrera

PHONE: 505-400-3021

ZIP CODE: 87106

ARCHITECT: Decker/Perich/Sabatini

ADDRESS: 7601 Jefferson NE

CITY, STATE: Albuquerque, NM

CONTACT: Tim Veltkamp

PHONE: (505) 761-9700

ZIP CODE: 87109

SURVEYOR: _____

ADDRESS: _____

CITY, STATE: _____

CONTACT: _____

PHONE: _____

ZIP CODE: _____

CONTRACTOR: _____

ADDRESS: _____

CITY, STATE: _____

CONTACT: _____

PHONE: _____

ZIP CODE: _____

TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
☒ DRAINAGE PLAN 1st SUBMITTAL
☐ DRAINAGE PLAN RESUBMITTAL
☒ CONCEPTUAL G & D PLAN
☐ GRADING PLAN
☐ EROSION CONTROL PLAN
☐ ENGINEER'S CERT (HYDROLOGY)
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☐ TRAFFIC CIRCULATION LAYOUT
☐ ENGINEER/ARCHITECT CERT (TCL)
☐ ENGINEER/ARCHITECT CERT (DRB S.P.)
☐ ENGINEER/ARCHITECT CERT (AA)
☐ OTHER (SPECIFY) _____

CHECK TYPE OF APPROVAL SOUGHT:

- ☐ SIA/FINANCIAL GUARANTEE RELEASE
☐ PRELIMINARY PLAT APPROVAL
☐ S. DEV. PLAN FOR SUB'D APPROVAL
☒ S. DEV. 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 (ROUGH GRADING PERMIT) _____

WAS A PRE-DESIGN CONFERENCE ATTENDED:

☐ YES

☐ NO

☐ COPY PROVIDED

SUBMITTED BY: Jeff Mulbery

DATE: 2-04-08

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope to the proposed development define 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.
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