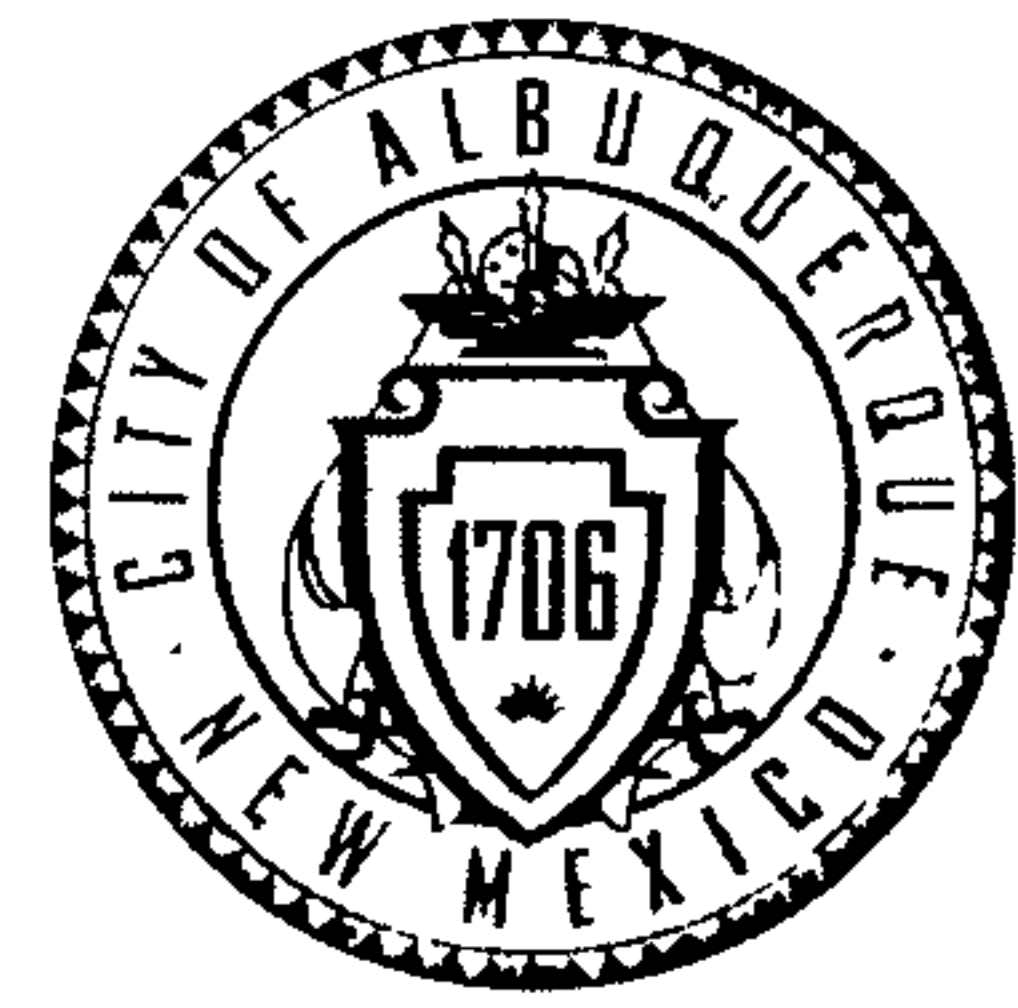


CITY OF ALBUQUERQUE

Planning Department
Suzanne Lubar, Director



Mayor Richard J. Berry

September 7, 2016

David Soule, P.E.
Rio Grande Engineering
PO Box 93924
Albuquerque, New Mexico 87199

**RE: Valero Residence
Lot 4 Block 5 Unit 22 SAD 228
6308 Papagayo NW
Grading and Drainage Plan
Engineers Stamp Date 8/9/16 (D10D003V4)**

Dear Mr. Soule,

PO Box 1293

Based upon the information provided in your submittal received 8/12/16, this plan is approved for Grading Permit and Building Permit.

Albuquerque

Please inform the builder to attach a copy of this approved plan to the construction sets in the permitting process prior to sign-off by Hydrology. Also, notify the owner/contractor that a separate permit for the fence is required.

New Mexico 87103

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist of this plan will be required.

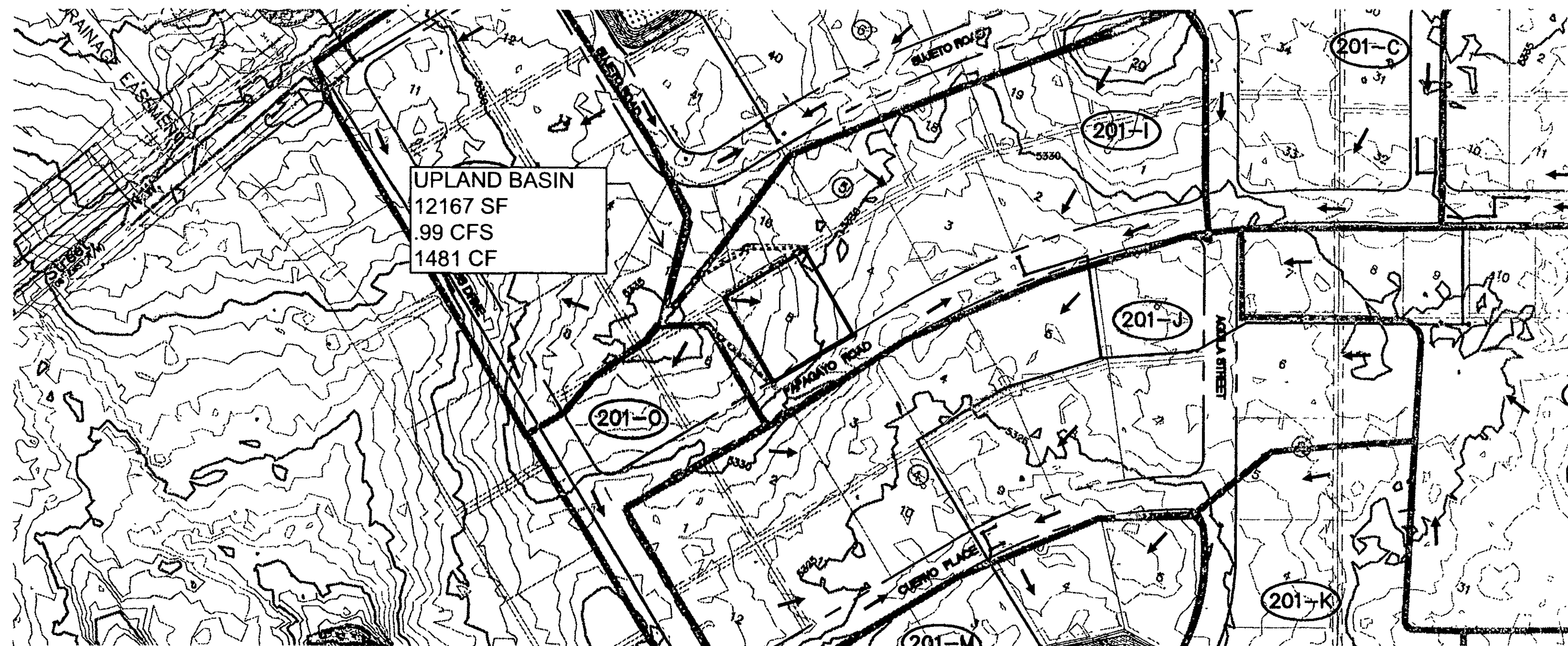
www.cabq.gov

If you have any questions, please contact me at 924-3986 or Rudy Rael at 924-3977.

Sincerely,

Abiel Carrillo, P.E.
Principal Engineer, Hydrology
Planning Department

RR/AC
C: File



RECEIVED
JUN 2 2015
LAND DEVELOPMENT SECTION

RECEIVED
AUG 12 2016
LAND DEVELOPMENT SECTION

UPLAND BASIN
16,270 SF
1.32 CFS
19602 SF

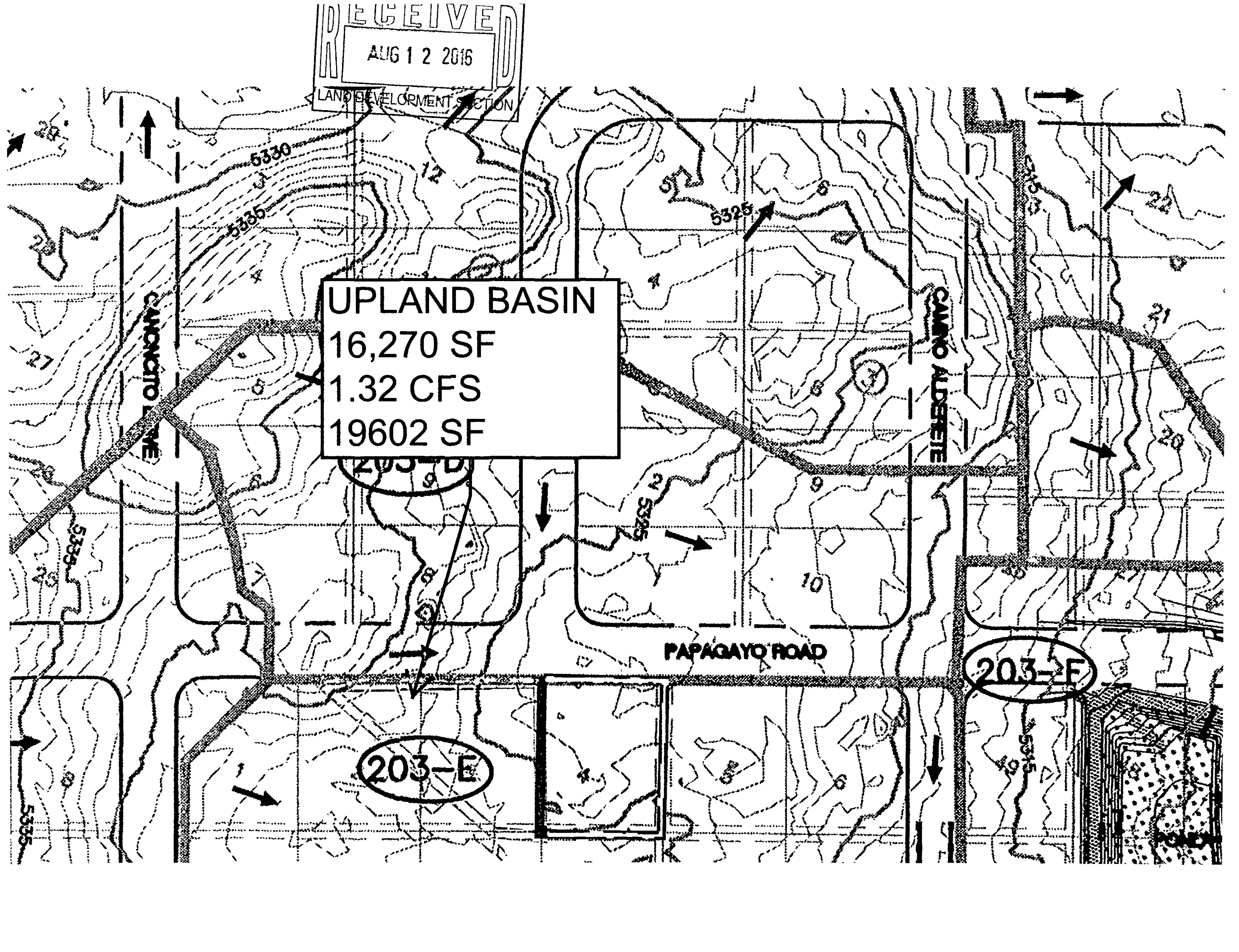
CAMINO ALDETE

CAMINO ALDETE

PAPAGAYO ROAD

203-E

203-E



Weighted E Method

											100-Year, 6-hr.		
Basin	Area (sf)	Area (acres)	Treatment A		Treatment B		Treatment C		Treatment D		Weighted (ac-ft)	Volume (ac-ft)	Flow cfs
			%	(acres)	%	(acres)	%	(acres)	%	(acres)			
NATIVE	15477.00	0.355	80%	0.284	10%	0.036	10%	0.0355	0%	0.000	0.518	0.015	0.54
ALLOWED	15477.00	0.355	0%	0	10%	0.036	40%	0.1421	50%	0.178	1.448	0.043	1.26
PROPOSED	15477.00	0.355	0%	0	24%	0.085	40%	0.1421	36%	0.128	1.266	0.037	1.14
INCREASE												0.022	
total													
UPLAND	16270.00	0.374	0%	0	10%	0.037	40%	0.1494	50%	0.187	1.448	0.045	1.32

Equations:

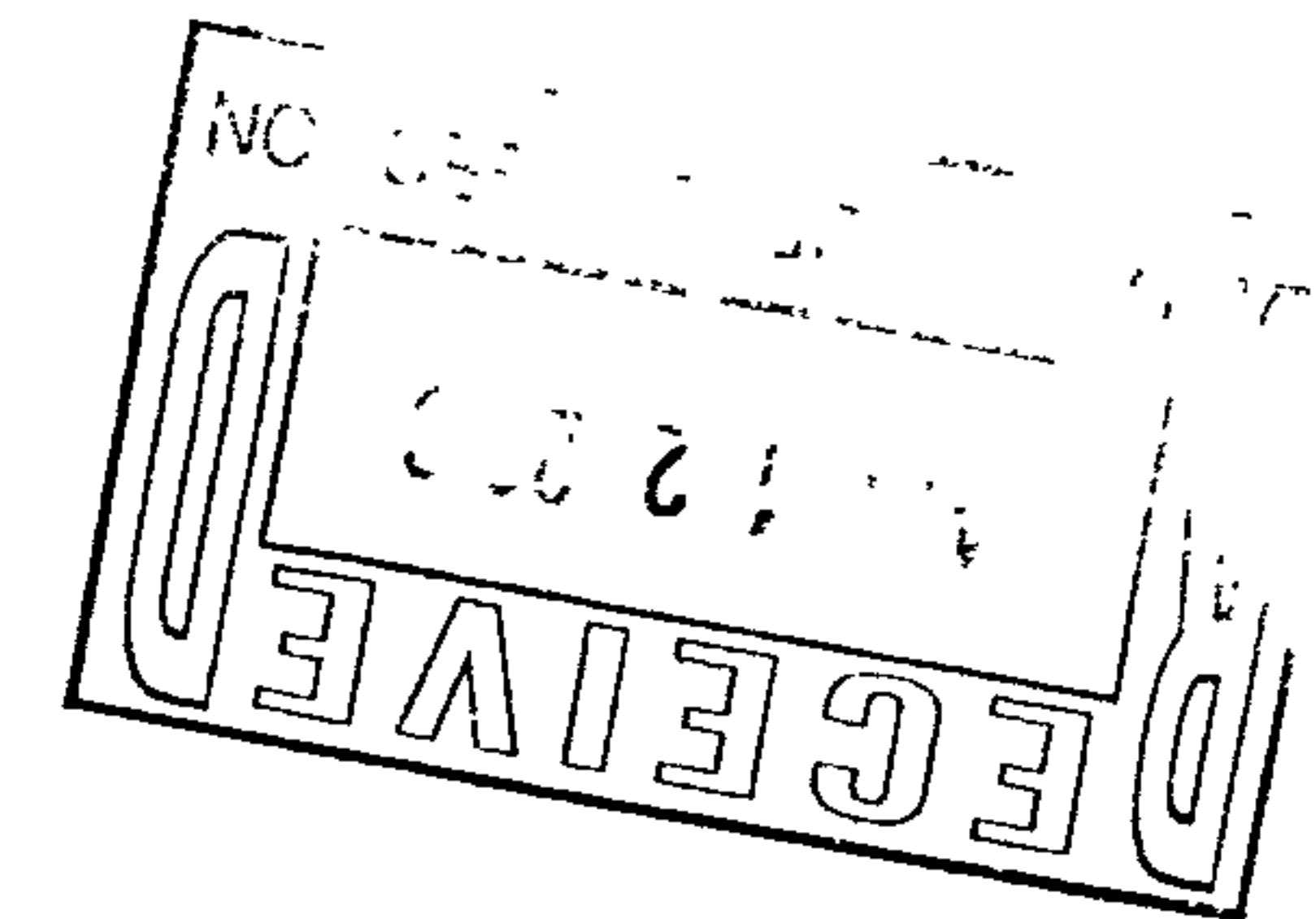
Weighted E = $E_a \cdot A_a + E_b \cdot A_b + E_c \cdot A_c + E_d \cdot A_d / (\text{Total Area})$

Volume = Weighted D * Total Area

Flow = $Q_a \cdot A_a + Q_b \cdot A_b + Q_c \cdot A_c + Q_d \cdot A_d$

Where for 100-year, 6-hour storm zone 1

Ea= 0.44	Qa= 1.29
Eb= 0.67	Qb= 2.03
Ec= 0.99	Qc= 2.87
Ed= 1.97	Qd= 4.37



ONSITE Conditions

FIRST FLUSH WATER QUALITY VOL

	REQUIRED (CF)	PROVIDED (CF)
WATER QUALITY	158	1325

Narrative

This site is within the SAD 228 Master Drainage plan boundaries. The site is to maintain existing patterns and drain to the the adjacent property per the master drainage plan. We are ponding the water harvest volume generated by the site we are allowing the upland flow to pass thru the site. This plan has a shallow water harvest pond in excess of the drainage regulations. This plan is in conformance to the masterplan