

# CITY OF ALBUQUERQUE



October 31, 2007

David Soule, P.E.  
Rio Grande Engineering  
2105 Golf Course Rd. SE Ste B  
Albuquerque, NM 87124

**Re: Kim Brooks Office Building, 4471 Irving Blvd.,  
Approval of Permanent Certificate of Occupancy (C.O.)  
Engineer's Stamp dated 08/13/06 (B-13/D020)  
Certification dated 10/15/07**

Based upon the information provided in your submittal received 10/31/07, the above referenced certification is approved for release of Permanent Certificate of Occupancy by Hydrology.

P.O. Box 1293

If you have any questions, you can contact me at 924-3982.

Albuquerque

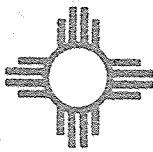
Sincerely,

New Mexico 87103

Timothy Sims  
Plan Checker  
Development and Building Services

[www.cabq.gov](http://www.cabq.gov)

C: CO Clerk – Katrina Sigala  
File



**Rio Grande  
Engineering  
Land Development and Civil Engineering Services**

October 30, 2007

Mr. Bradley Bingham  
Senior Engineer  
Hydrology Section  
City of Albuquerque

**RE: Kim Brooks Office Building  
Tract C1B1A1- Lands of Irving Partners  
B13/D20**

Dear Mr. Bingham:

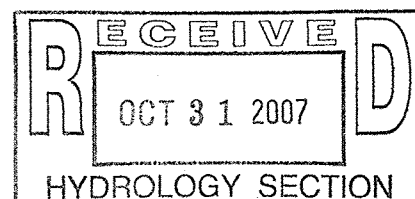
The purpose of this letter is to respond to your verbal comments regarding the drainage certification. The original grading plan showed a .25 acre portion of the property draining .42 cfs directly to the Calabacillas arroyo which closely matched the historical rate of .38 cfs. Due to an oversight on the building roof a 3600 sf portion draining to the back. Due to this additional .23 cfs discharge, we have constructed three small retention ponds within the rear landscaping to hold reduce the peak. The rear courtyard wall has several turned blocks which are elevated several inches from the grade. The combination of the two measures will reduce the peak flow and volume to less than shown within the approved drainage report. Therefore we request final certificate of occupancy base upon the drainage certification dated 10/15/07

Should you have any questions regarding this matter, please do not hesitate to call me.

Sincerely,

David Soule, PE

Enclosures



## Weighted E Method

### Existing Basins

Basin	Area (sf)	Area (acres)	Treatment A		Treatment B		Treatment C		Treatment D		100-Year		
			%	(acres)	%	(acres)	%	(acres)	%	(acres)	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs
A	11020.68	0.253	79%	0.19987	5%	0.013	6%	0.01518	5%	0.013	0.539	0.011	0.38
B	27490.72	0.631	79%	0.498569	5%	0.032	6%	0.03787	5%	0.032	0.539	0.028	0.95
Total	38511.40	0.884		0.698439		0.044		0.05305		0.044		0.040	1.34

### Proposed Developed Basins

Basin	Area (sf)	Area (acres)	Treatment A		Treatment B		Treatment C		Treatment D		100-Year, 6-hr.			10-day Volume (ac-ft)
			%	(acres)	%	(acres)	%	(acres)	%	(acres)	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	
A	4220.68	0.097	100%	0.0968935	0%	0.000	0%	0	5%	0.005	0.539	0.004	0.15	0.000
A-1	6800.00	0.156	0%	0	50%	0.078	0%	0	50%	0.078	1.320	0.017	0.50	0.028
B	27486.36	0.631	0%	0	8%	0.050	11%	0.06941	81%	0.511	1.758	0.092	2.54	0.161
ALLOWABLE	38511.40	0.884	0%	0	15%	0.133	0%	0	85%	0.751	1.775	0.131	3.55	0.231
Ttl proposed	38507.04	0.884	0%	0.0968935	17%	0.129	15%	0.06941	68%	0.594	1.547	0.114	3.18	0.193

### Equations:

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

$$\text{Volume} = \text{Weighted D} * \text{Total Area}$$

$$\text{Flow} = Q_a * A_a + Q_b * A_b + Q_c * A_c + Q_d * A_d$$

Where for 100-year, 6-hour storm

$$E_a = 0.44$$

$$E_b = 0.67$$

$$E_c = 0.99$$

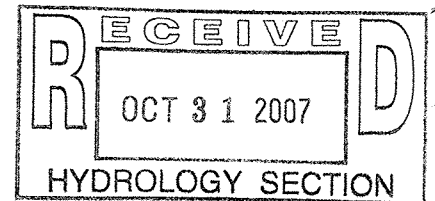
$$E_d = 1.97$$

$$Q_a = 1.29$$

$$Q_b = 2.03$$

$$Q_c = 2.87$$

$$Q_d = 4.37$$

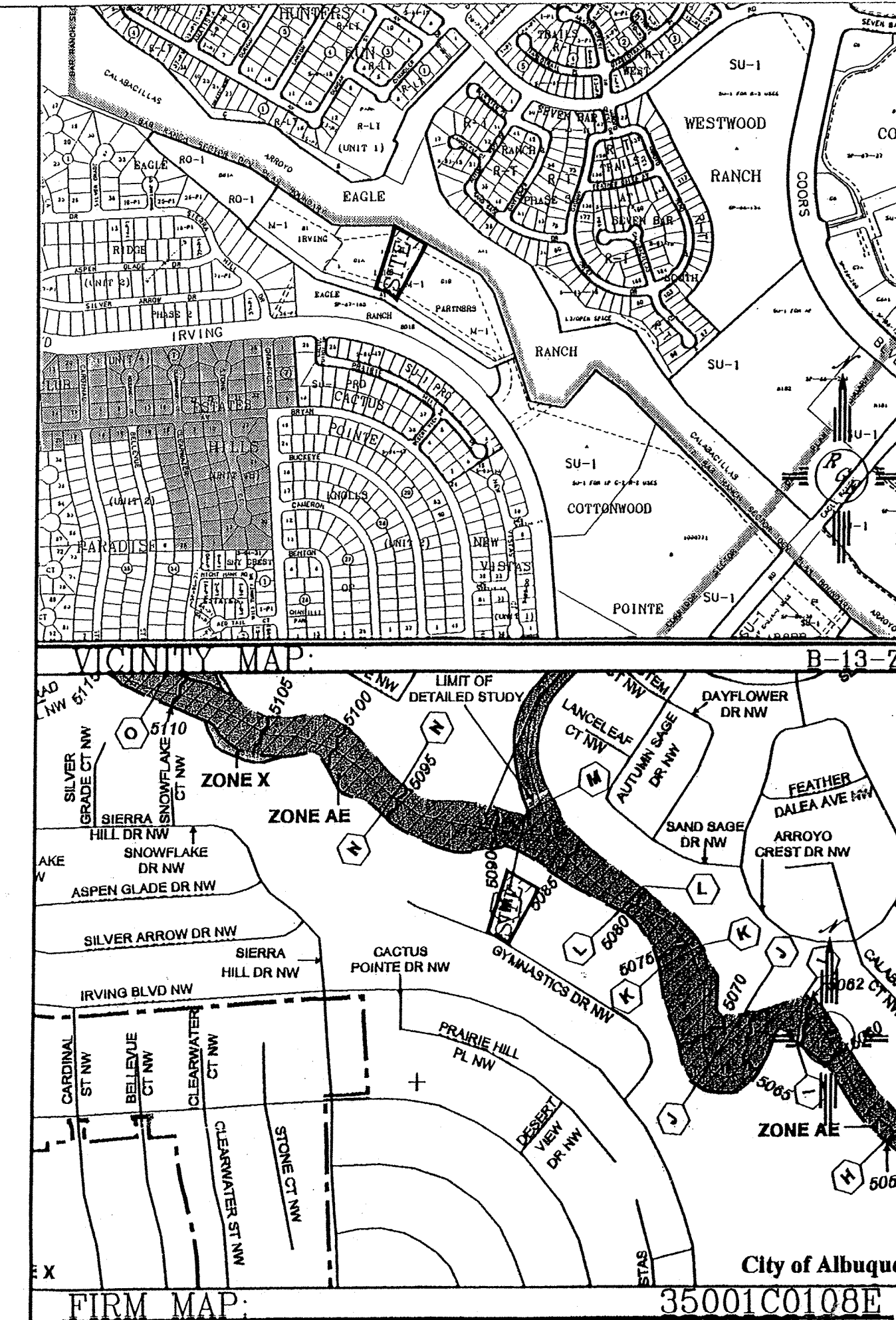


# EROSION CONTROL NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL (CITY) ACCEPTANCE OF ANY PROJECT.

## EASEMENT LEGEND

- 32' PRIVATE ACCESS, DRAINAGE AND UTILITY EASEMENT (FILED: 06/20/86 PAGE 157)
- (VARIES) DRAINAGE EASEMENT (FILED: 12/28/78, BK. D9 PAGE 47)
- (VARIES) A.M.A.F.C.A. DRAINAGE EASEMENT (FILED: 08/05/03, BK. C3 PAGE 236)



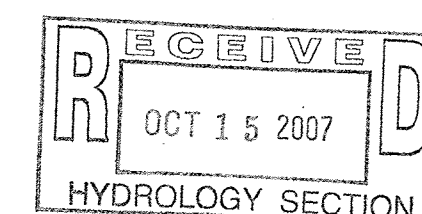
FIRM MAP: 35001C0108E

LEGAL DESCRIPTION:  
TRACT C-1-B-1-A-1 OF THE IRVING LAND PARTNERS

- NOTES:
1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
  2. ALL CURB AND GUTTER TO BE STANDARD PER COA STD DWG #2415A-AS NOTE
  3. ALL PADS SHALL BE BUILT PER FOOTPRINT SHOWN.

## LEGEND

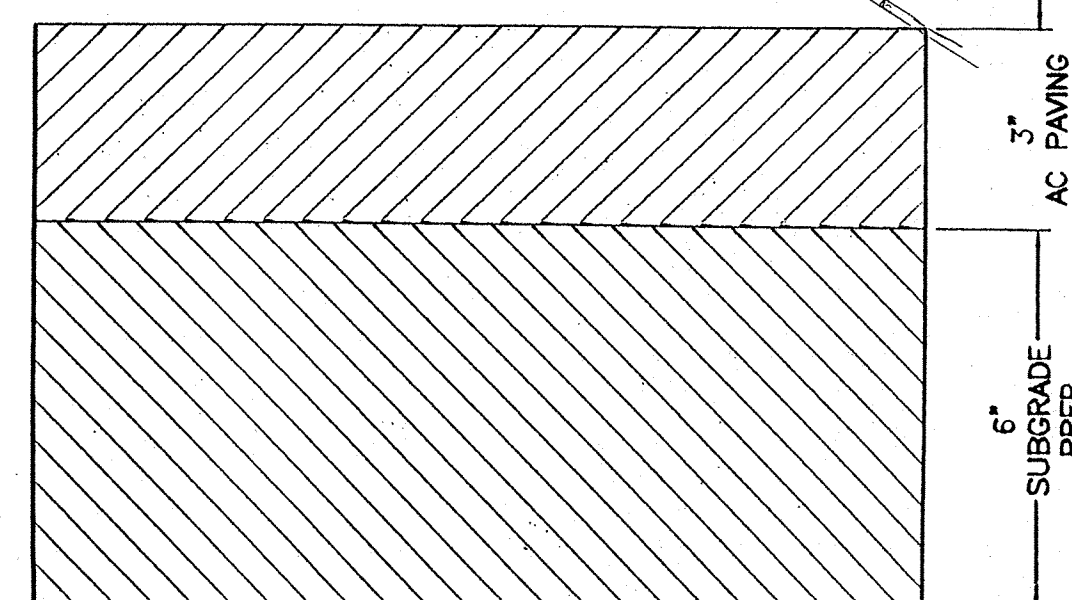
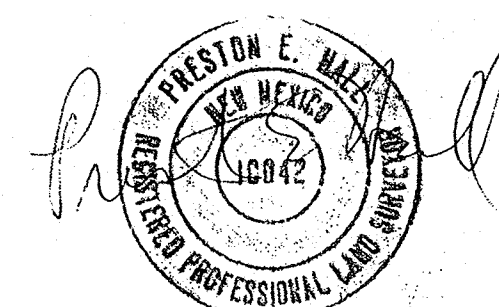
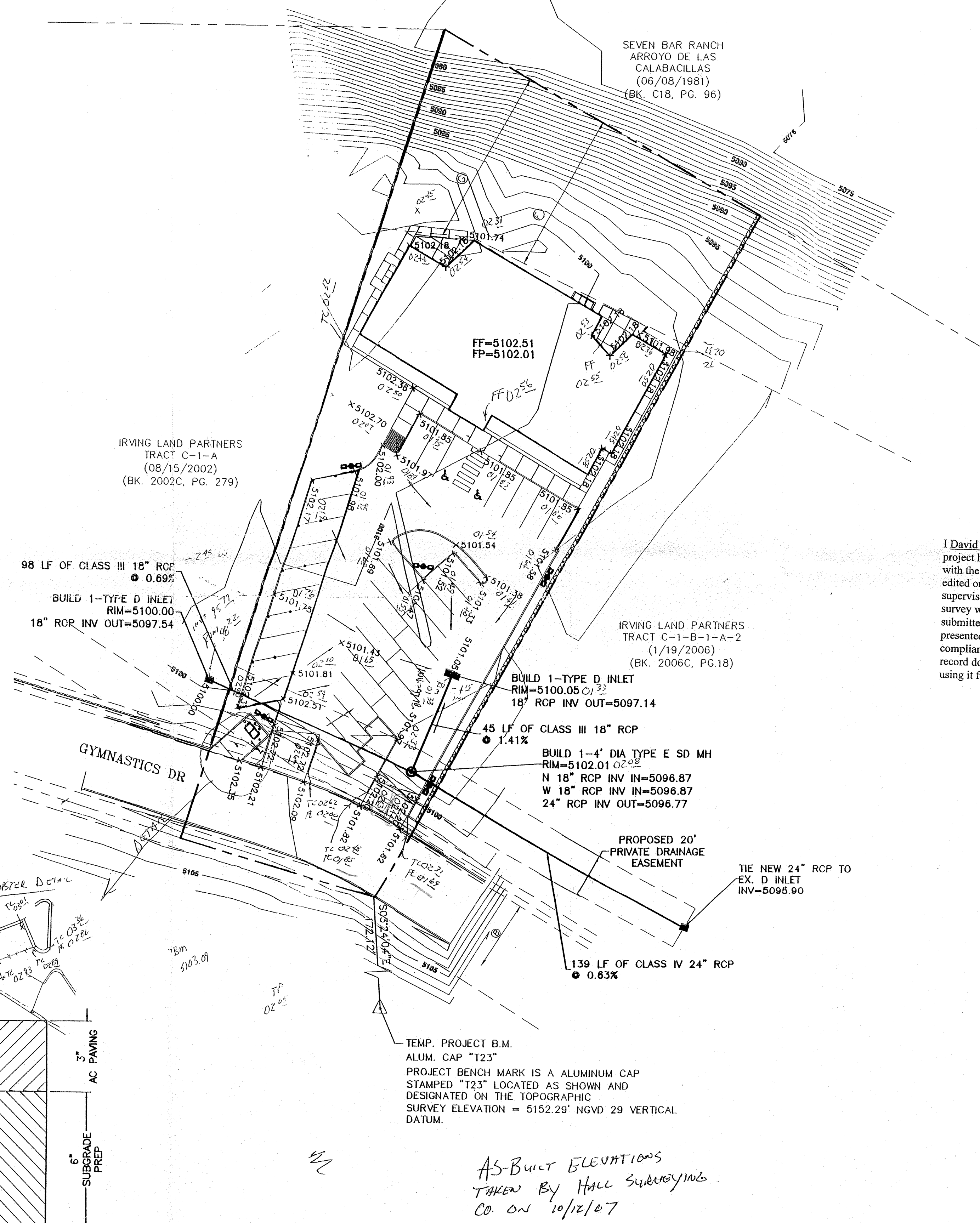
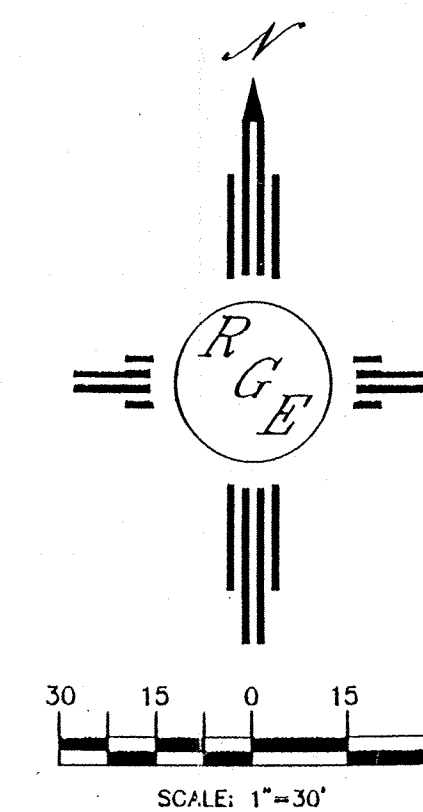
- EXISTING CURB & GUTTER
- PROPOSED CURB & GUTTER
- BOUNDARY LINE
- EASEMENT
- PROPOSED SIDEWALK
- PROPOSED PERIMETER WALL
- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- PROPOSED CONTOUR
- PROPOSED INDEX CONTOUR
- FLOW ARROW
- SLOPE TIE
- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- CENTERLINE
- WATER BLOCK



ROUGH GRADING APPROVAL DATE

ENGINEER'S SEAL	KIM BROOK'S OFFICE BUILDING GRADING AND DRAINAGE PLAN	DRAWN BY WCVJ
DAVID SOULE NEW MEXICO 14522 REGISTERED PROFESSIONAL ENGINEER		DATE 7-05-06
DAVID SOULE P.E. #14522	Rio Grande Engineering 2150 GOLF COURSE RD SE SUITE B RIO RANCHO, NM 87124 (505) 872-0999	2632-GRB-6-23-06X
		SHEET # C-2
		JOB # 2632

EXISTING UTILITIES ARE NOT SHOWN. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES & OTHER IMPROVEMENTS.



PAVING SECTION  
NTS-FOR BIDDING ONLY  
SEE SOILS REPORT FOR SECTION