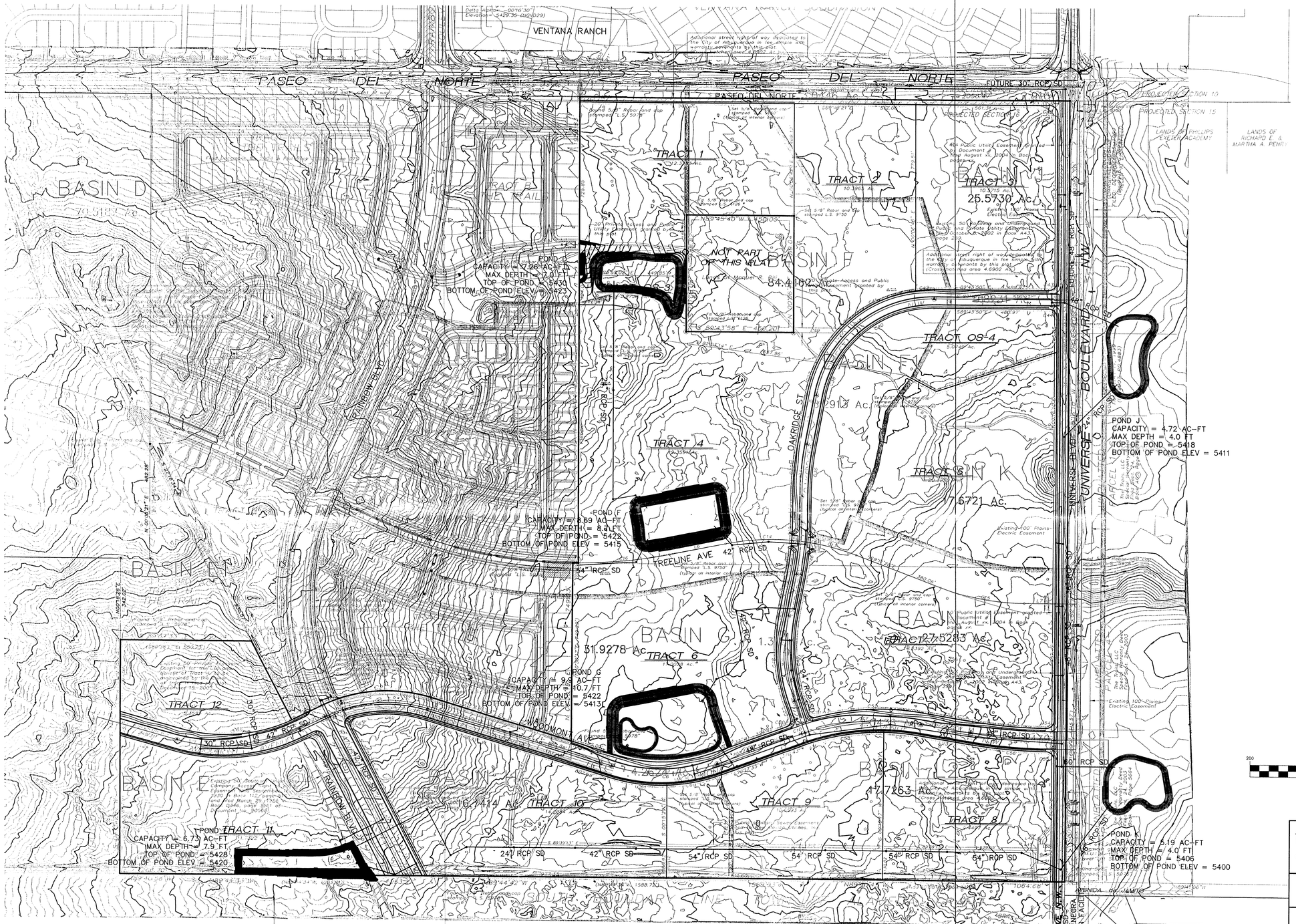

AS-BUILT INFORMATION

CONTRACTOR
WORK STAKED BY
WORK STAKING ACCEPTANCE BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE

MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS

ACS BRASS TABLET STAMPED "2-B10 1980"
Geographic Position (NAD 1927)
N.M. State Plane Coordinates (Central Zone)
X= 357,543.73 Y= 1,527,976.48
Ground-to-Grid Factor = 0.99966354
$\Delta\alpha$ = -00°16'30"
SLD 1929 Elevation = 5429.35

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

FOR REVIEW ONLY
STEVE J. SALAZAR
NEW MEXICO
ME-21667
(16241)
PROFESSIONAL ENGINEER
DATE

NO.	DATE	REMARKS	BY
		REVISIONS	

WILSON & COMPANY, ENGINEERS & ARCHITECTS

DESIGNED BY	DMD	DATE DEC 04
DRAWN BY	DMD	DATE DEC 04
CHECKED BY	SJS	DATE DEC 04

WILSON & COMPANY
2600 THE AMERICAN ROAD S.E.
SUITE 100
RIO RANCHO, NEW MEXICO
87124
(505) 898-8021

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

THE TRAILS UNIT II
OVERALL POND GRADING PLAN

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No.	Zone Map No.	Sheet	Of
730084	C-9-Z	4	±44

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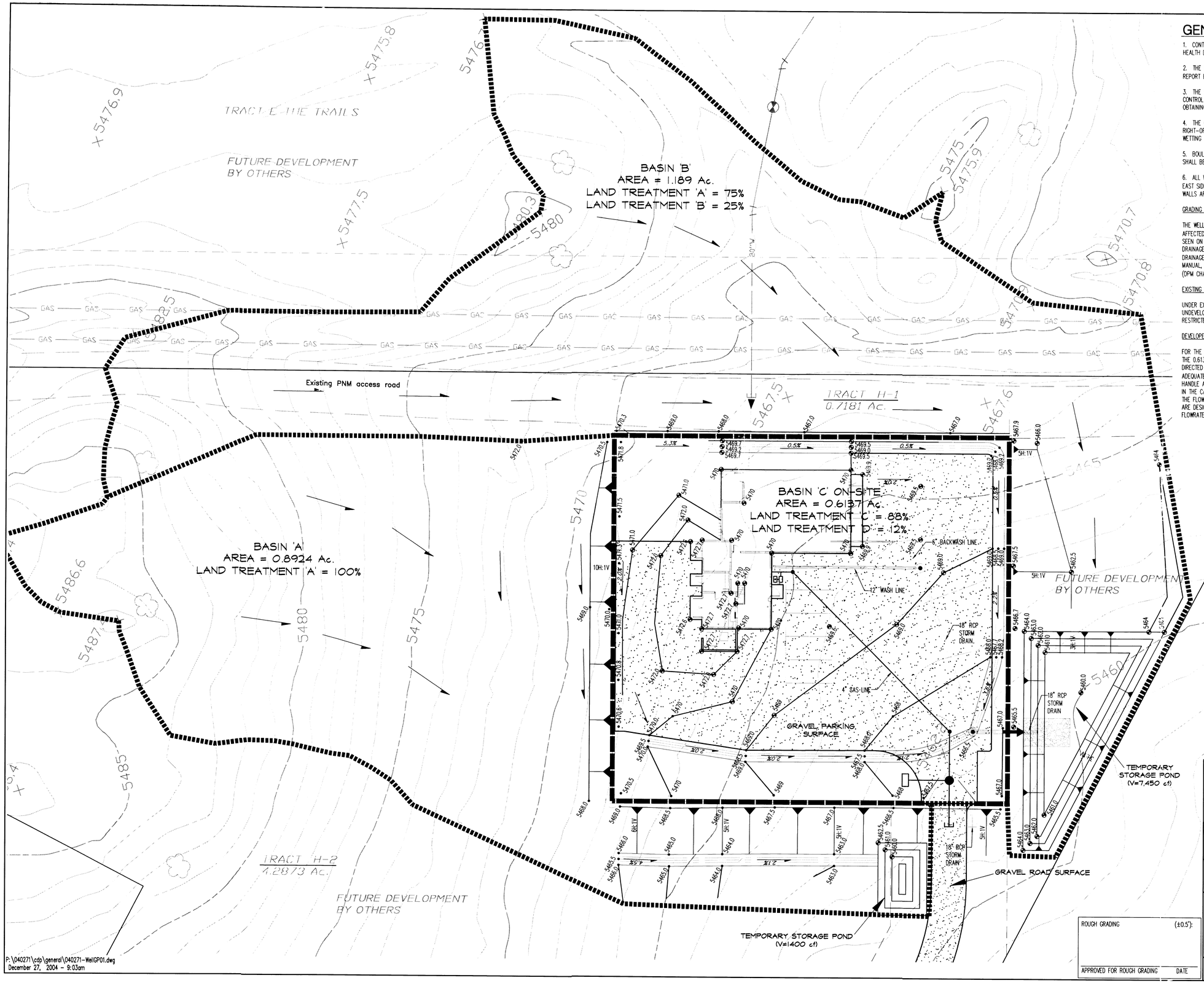

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December 27, 2004 - 9:03am

GENERAL NOTES

1. CONTRACTOR MUST OBTAIN A TOPSOIL DISTURBANCE PERMIT FROM THE ENVIRONMENTAL HEALTH DIVISION PRIOR TO CONSTRUCTION.

2. THE CONTRACTOR IS TO REFER TO EARTHWORK SPECIFICATION AS NOTED IN THE SOILS REPORT BY VINYARD & ASSOCIATES DATED 10/2004 (V&A PROJECT #04-1-362).

3. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE, AND FEDERAL DUST CONTROL MEASURES & REQUIREMENTS AND WILL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL NECESSARY APPLICATIONS AND APPROVALS.

4. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE LOTS INTO PUBLIC RIGHT-OF-WAY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AND WETTING THE SOIL TO KEEP IT FROM BLOWING.

5. BOULDERS GREATER THAN 3 FEET IN DIAMETER EXCAVATED DURING GRADING ACTIVITIES SHALL BE STOCKPILED AND DISPOSED OF AT THE DISCRETION OF THE OWNER.

6. ALL WALLS SHOWN ARE TO BE PLACED ALONG PROPERTY LINE, EXCEPT FOR WALL ON EAST SIDE. THIS WALL IS APPROXIMATELY 26' WEST OF THE EASTERN PROPERTY LINE. WALLS ARE SHOWN OFFSET FOR VISUAL PURPOSES ONLY.

GRADING AND DRAINAGE PLAN

THE WELL SITE IS LOCATED ON A 0.7181 ACRE LOT WITH ONLY 0.6137 ACRES BEING AFFECTED. IT HAS TWO OFFSITE BASINS (SEE GRADING & DRAINAGE SHEET). AS CAN BE SEEN ON THE FEMA MAPPING EXHIBIT, THE SITE IS NOT SUSCEPTIBLE TO FLOODING. ALL DRAINAGE CALCULATIONS ARE DONE IN ACCORDANCE WITH THE BERNALILLO COUNTY DRAINAGE ORDINANCE (96-5) AND THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, CHAPTER 22.2. THE DESIGN STORM IS THE 100-YEAR 6-HOUR STORM IN ZONE 1 (DPM CHAPTER 22, FIGURE A-1).

EXISTING CONDITIONS

UNDER EXISTING CONDITIONS THE PROJECT SITE IS UNDEVELOPED AND SURROUNDED BY UNDEVELOPED LAND. SINCE FUTURE OFFSITE FLOWS COMING ONTO THE SITE WOULD BE RESTRICTED TO PREDEVELOPMENT LEVELS, ONLY THE EXISTING OFFSITE BASINS ARE USED.

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20 10 0 20
1" = 20'

LEGEND

- GRAVEL SURFACE
- FUTURE PROPERTY BOUNDARY
- BASIN BOUNDARY
- 91.62 •91.62 — PROPOSED SPOT ELEVATIONS
- × 92.46 — EXISTING SPOT ELEVATIONS
- 5470 — EXISTING CONTOUR W/ INDEX ELEVATION
- FLOW ARROW
- PROPOSED RETAINING WALL
- PROPOSED GARDEN WALL, CONCRETE FILLED TO 1-FOOT DEPTH
- PROPOSED SLOPE
- WALL DRAIN

ROUGH GRADING	(±0.5'):
APPROVED FOR ROUGH GRADING	DATE

Bohannan ▲ Huston INC.
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

No.	Date	REMARKS	By
		REVISIONS	
		DESIGN	

Designed By: RVH DATE: 12/16/04
Drawn By: LSM DATE: 12/16/04
Checked By: RVH DATE: 12/16/04

ENGINEER'S SEAL
RICHARD V. HALL
NEW MEXICO
7918
REGISTERED PROFESSIONAL ENGINEER
Dec 27 04

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

BENCH MARKS

ACS BRASS TABLET STAMPED "UNION 1969"	
Geographic Position (NAD 1927)	
N.M. State Plane Coordinates (Central Zone)	
X= 353,409.02 Y= 1,523,440.96	
Ground-to-Grid Factor = 0.99966044	
$\Delta\alpha$ = -00°16'58"	
(NGVD29-Trig) Elevation = 5522.0	

AS-BUILT INFORMATION

	DATE
CONTRACTOR	
WORK STAKED BY	
INSPECTED FOR ACCEPTANCE BY	
FIELD INFORMATION BY	
DRAWINGS CORRECTED BY	

MICROFILM INFORMATION

	DATE
RECORDED BY	
NO.	

NEW MEXICO UTILITIES, INC.
WELL NO. 9

GRADING AND DRAINAGE PLAN

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No.	Zone Map No.	Sheet	Of
	C-9-Z	1	2

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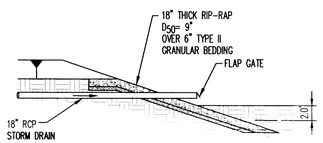
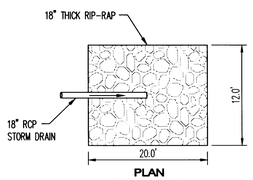
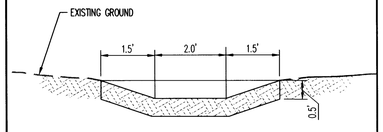


SECTION A-A
RIP-RAP MAT
NOT TO SCALE



PLAN
RIP-RAP MAT
NOT TO SCALE



SECTION B-B
EARTHEN SWALE
NOT TO SCALE

POND VOLUME USING AVERAGE END METHOD

ELEVATION	AREA (ft)	INCREMENTAL VOLUME (ft3)	CUMULATIVE VOLUME (ft3)
5460.00	0.0		
5461.00	1279	639	639
5462.00	1893	1586	2225
5463.00	2594	2243	4468
5464.00	3372	2983	7451

HYDROLOGY PER CHAPTER 22.2 OF THE DEVELOPMENT PROCESS MANUAL

Depth of Precipitation for 6-hr and 24-hr 100-yr Storms in Zone 1

P_{360} (inches)= 2.20 P_{1440} (inches)= 2.66

Peak Discharge and Excess Precipitation for Zone 1 (Tables A-9, A-8)

Land Treatment	CFS/Acre	E- Excess Precipitation (6-hr)						
A	1.29	0.44						
B	2.03	0.67						
C	2.87	0.99						
D	4.37	1.97						
		Areas of Land Treatments (%)						
BASIN	Total Area (Ac.)	A	B	C	D	Flowrate[1] (cfs)	6-hr Volume[2] (cu. Ft.)	24-hr Volume[3] (cu. ft.)
'A' OFF-SITE	0.8924	100	0.0	0.0	0.0	1.15	1424	1424
'B' OFF-SITE	1.189	75	25	0.0	0.0	1.75	2148	2148
'C' ON-SITE	0.6137	0.0	0.0	88	12	1.87	2544	2666
					Total=	4.77	6116	6238

1. Flowrate = (CFS/Acre) * Area
2. 6-hr Volume=weighted E * $(A_A+A_B+A_C+A_D)$ /12 in/ft. * (43560 sq.ft./acre) (Eq. a-6, page 22-14 DPM)
3. 24-hr Volume=(weighted E * $(A_A+A_B+A_C+A_D)$)+A_D*(P_{1440}−P_{360})/12 in/ft * (43560 sq.ft./acre) (Eq. a-7, page 22-14 DPM)

1 GRADING REQUIREMENTS FOR LANDSCAPE IMPROVEMENTS WITHIN ROCK OUTCROPS

ROCK OUTCROPS EXIST ON THIS SITE. THE CONTRACTOR SHALL GRADE THE SITE TO THE FINISHED GRADES AND ELEVATIONS SHOWN ON THIS PLAN. INCLUDED IN THE SITE GRADING IS ALL ROCK EXCAVATION NECESSARY FOR SITE GRADING, FOUNDATIONS, STRUCTURES, UTILITY AND LANDSCAPE IMPROVEMENTS. ALL AREAS RECEIVING LANDSCAPE IMPROVEMENTS SHALL BE FREE OF ROCK AND HAVE A MAXIMUM DENSITY OF 80% FOR A MINIMUM DEPTH OF 24 INCHES. SHRUBS SHALL REQUIRE A MINIMUM DEPTH OF 36" OVER A 5' DIAMETER AREA. TREES SHALL REQUIRE A 5' MINIMUM DEPTH OVER A 10' x 10' AREA. THE USE OF SPOIL MATERIAL FROM OTHER PORTIONS OF THE SITE IS ACCEPTABLE, SUBJECT TO COA SPECIFICATIONS. SEE LANDSCAPE PLANS FOR SOIL AMENDMENTS ASSOCIATED WITH LANDSCAPING AND PLANTING IMPROVEMENTS.

I CERTIFY THAT THE SITE EXISTING TOPOGRAPHY WAS BASED ON A PHYSICAL SURVEY OF THE PROPERTY AND THAT THE SITE HAS NOT BEEN DISTURBED EXCEPT FOR AN AREA APPROXIMATELY 150 FEET ON A SIDE CENTERED ON THE WELL HEAD. THAT AREA WAS MADE LEVEL DURING THE WELL DRILLING PROJECT.

JAMES C. THOMTE

ROUGH GRADING (±0.5'):

APPROVED FOR ROUGH GRADING DATE

LEGEND

- GRAVEL SURFACE
- FUTURE PROPERTY BOUNDARY
- BASIN BOUNDARY
- 91.62 •91.62 — PROPOSED SPOT ELEVATIONS
- × 92.46 — EXISTING SPOT ELEVATIONS
- 5470 — EXISTING CONTOUR W/ INDEX ELEVATION
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- PROPOSED RETAINING WALL
- PROPOSED GARDEN WALL, CONCRETE FILLED TO 1-FOOT DEPTH
- PROPOSED SLOPE
- WALL DRAIN

AS-BUILT INFORMATION

CONTRACTOR — DATE
STAKED BY — DATE
INSPECTOR'S ACCEPTANCE BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE

MICROFILM INFORMATION

RECORDED BY — DATE
NO.

BENCH MARKS

ACS BRASS TABLET STAMPED "UNION 1969"
Geographic Position (NAD 1927)
N.M. State Plane Coordinates (Central Zone)
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SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

RICHARD V. WALL — NEW MEXICO — 10178 — REGISTERED PROFESSIONAL ENGINEER

Dec 27, 04

No.	Date	REMARKS	By
		REVISIONS	
		DESIGN	

Designed By: RVH DATE:12/16/04
Drawn By: LSM DATE:12/16/04
Checked By: RVH DATE:12/16/04

Bohannan ▲ Huston INC

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

ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

NEW MEXICO UTILITIES, INC. WELL NO. 9

GRADING AND DRAINAGE DETAILS

Design Review Committee | City Engineer Approval | Last Design Update | Mo./Day/Yr. | Mo./Day/Yr.

City Project No. | Zone Map No. C-9-Z | Sheet 2 Of 2

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December 27, 2004 - 9:03am