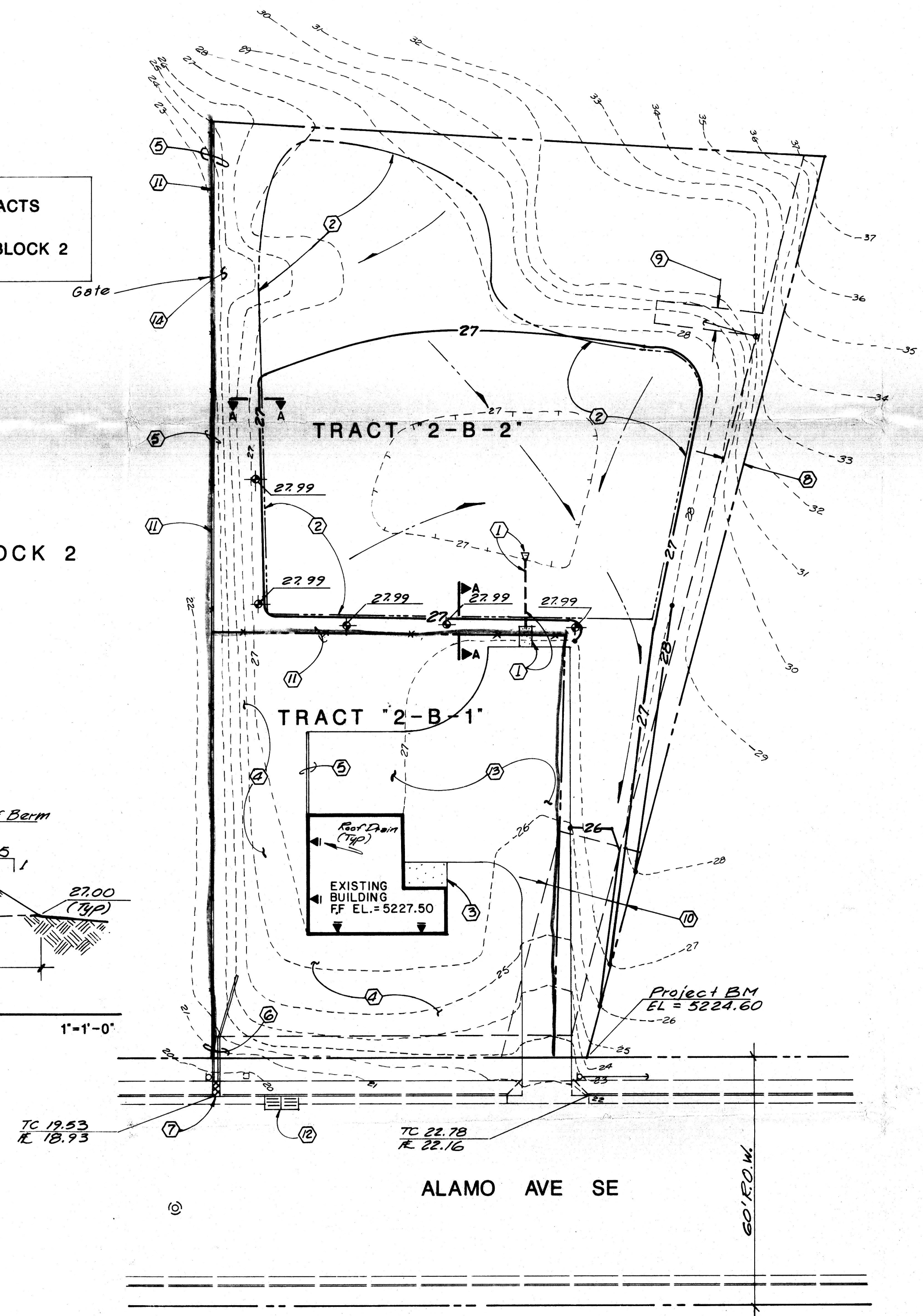
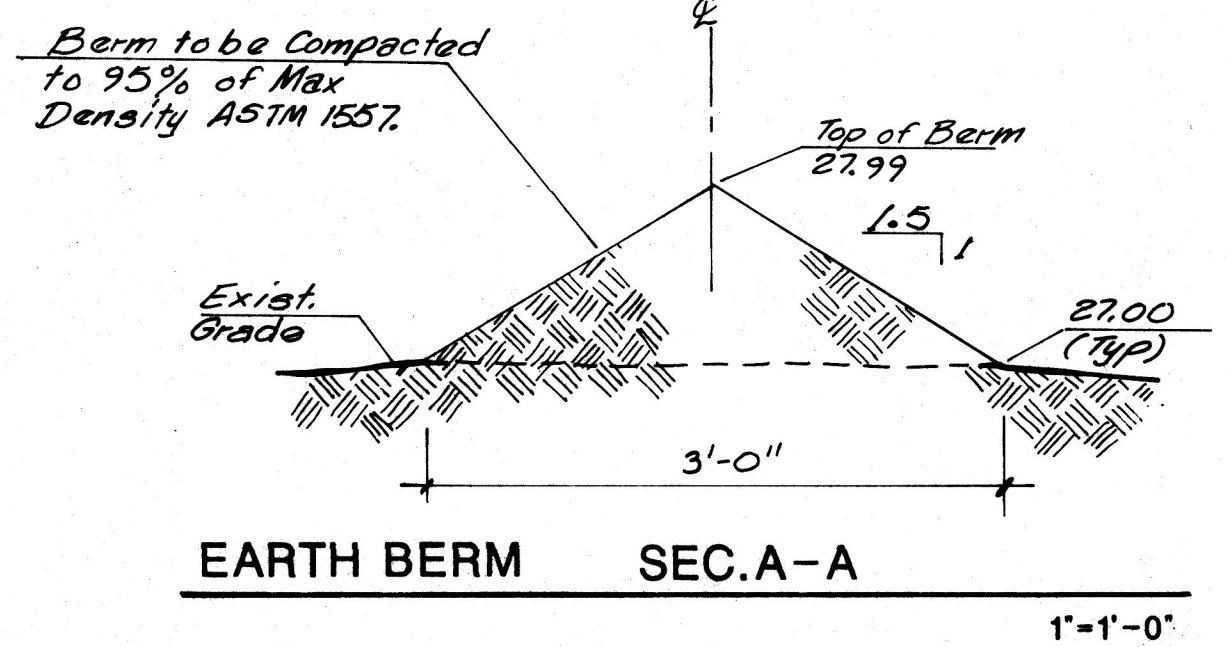
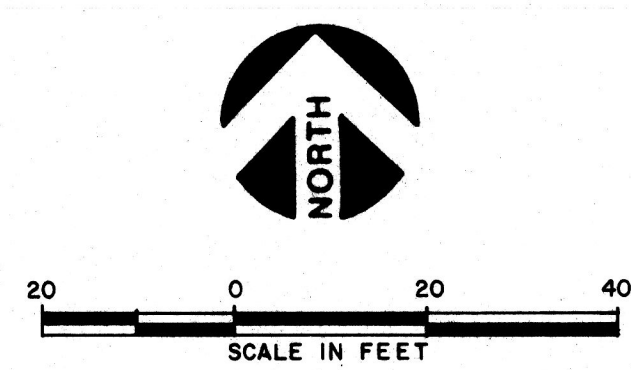


NOTE: SAME OWNER FOR TRACTS
"2-B-1" & "2-B-2" / LOT "1-C-3", BLOCK 2

LOT "1-C-3", BLOCK 2



GRADING AND DRAINAGE PLAN



LOCATION AND DESCRIPTION:
THE SITE IS LOCATED AT 2327 ALAMO AVE. SE WITHIN THE AIRPORT INDUSTRIAL PARK SUBDIVISION IN ALBUQUERQUE, NEW MEXICO. THE SITE, CONTAINING APPROXIMATELY 0.620 ACRES, IS PRESENTLY PARTIALLY DEVELOPED. EXISTING SLOPES ARE FROM THE NORTH TO THE SOUTH WITH AN AVERAGE SLOPE OF 4 PERCENT. THE SITE IS NOT LOCATED WITHIN A FLOOD PLAIN.

EXISTING CONDITIONS:
PRESENTLY, RUNOFF FROM THE SITE DISCHARGES AT A CONTROLLED RATE ONTO ALAMO AVE. THE RUNOFF IS THEN INTERCEPTED APPROXIMATELY 100 YARDS DOWN STREAM WHERE THERE IS AN EXISTING CATCH BASIN. PRESENTLY, THERE IS AN EXISTING DETENTION POND AT THE NORTH END OF THE SITE. THIS POND WITH AN APPROXIMATE VOLUME OF 100 CUBIC FEET DRAINS THRU A 4" PVC LINE. OFF-SITE RUNOFF ENTERS THE SITE DUE TO EXISTING ELEVATIONS FROM THE UNDEVELOPED PROPERTY TO THE EAST. IT IS FELT THAT WHEN THE PROPERTY TO THE EAST IS DEVELOPED THIS CONDITION WILL BE CORRECTED.

PROPOSED CONDITIONS:
PROPOSED DEVELOPMENT OF THE SITE INCLUDES NEW PAVED PARKING LOT OF 9,750 SQUARE FEET TO BE CONSTRUCTED IN THE FUTURE. THE CONSTRUCTION BERM AND ELIMINATING THE PRESENT POND AND RELATED CONSTRUCTION. IT IS FELT THAT WITH THE CONSTRUCTION OF THE 60" RCP WHICH ACCEPTS RUNOFF FROM THIS SITE, THE POND IS NO LONGER REQUIRED. FURTHERMORE, OTHER CONSTRUCTION WITHIN THE SUBDIVISION HAS FREE DISCHARGE TO ALAMO AVE.

EXISTING FLOWS FROM THE PROPERTY TO THE EAST WILL BE ALLOWED TO DRAIN ONTO TRACT 2-B-1. THIS FLOW WILL DRAIN TO THE DRAINAGE EASEMENT AND THEN DISCHARGING THRU THE EXISTING DRIVE PAD ONTO ALAMO AVE.

A PORTION OF RUNOFF WILL FLOW FROM TRACT 2-B-2 TO LOT 1-C-3, BLOCK 2 AND FROM TRACT 2-B-2 TO TRACT 2-B-1. THESE FLOWS, WITH OTHER SUB-PROPERTY FLOWS, AND A "BLANKET" DRAINAGE, BASEMENT WILL BE PROVIDED BY REDEVELOPMENT.

CALCULATIONS: (BASED ON CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, VOLUME II)

CALCULATIONS:
Area = 0.620 acres
I = 2.2 in./hr. Plate 22.2 D-2
6-hour, 100-year rainfall = 2.3 in. Plate 22.2 D-1
I = (2.2)(2.3) = 5.06 in./hr.

SURFACE TYPE	"C" VALUE	A (ACRES)	"C"X A	COMPOSITE "C"=CXA/A
Streets, Drives, Walks	0.95	0.076	0.072	
Roofs	0.90	0.018	0.016	
Lawns & Landscaping	0.25	0.085	0.021	
Undeveloped	0.40	0.441	0.176	
TOTAL		0.620	0.285	0.460
Q(100) = (0.460)(5.06)(0.620) = 1.443 cfs				
Q(10) = (0.657)(1.443) = 0.948 cfs				
CN = 73 Plate 22.2 C-2				
Direct Runoff = 0.50 in. Plate 22.2 C-4				
V(100) = (0.50)(0.620)(43560)/12 = 1,125 cu. ft.				
V(10) = (0.657)(1,125) = 739 cu. ft.				

SURFACE TYPE	"C" VALUE	A (ACRES)	"C"X A	COMPOSITE "C"=CXA/A
Streets, Drives, Walks	0.95	0.300	0.285	
Roofs	0.90	0.018	0.016	
Lawns & Landscaping	0.25	0.085	0.021	
Undeveloped	0.40	0.217	0.087	
TOTAL		0.620	0.409	0.660
Q(100) = (0.660)(5.06)(0.620) = 2.071 cfs				
Q(10) = (0.657)(2.071) = 1.361 cfs				
CN = 82 Plate 22.2 C-3				
Direct Runoff = 0.85 in. Plate 22.2 C-4				
V(100) = (0.85)(0.62)(43560)/12 = 1,913 cu. ft.				
V(10) = (0.657)(1,913) = 1,257 cu. ft.				

EXISTING OFF-SITE CONDITIONS WHICH FLOW ONTO TRACTS 2-B-1 AND 2-B-2

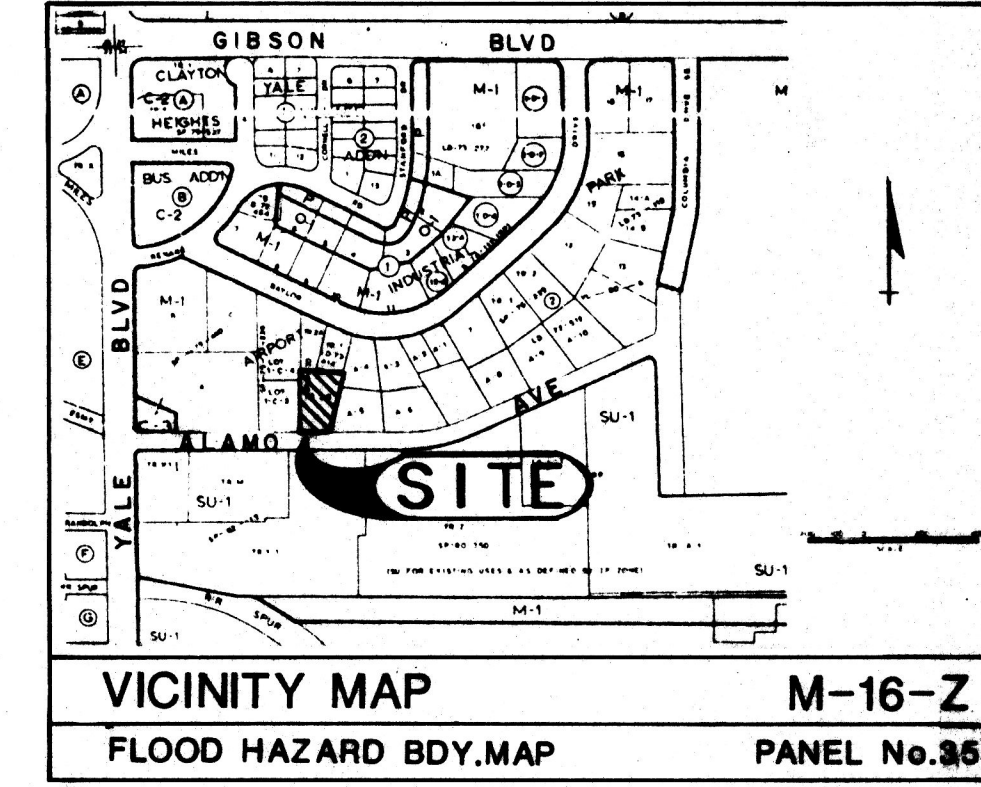
SURFACE TYPE	"C" VALUE	A (ACRES)	"C"X A	COMPOSITE "C"=CXA/A
Streets, Drives, Walks	0.95	0.000	0.000	
Roofs	0.90	0.000	0.000	
Lawns & Landscaping	0.25	0.1010	0.0404	
Undeveloped	0.40	0.1010	0.0404	0.4
TOTAL		0.1010	0.0404	0.4
Q(100) = (0.4)(5.06)(0.1010) = 0.2044 cfs				
Q(10) = (0.657)(0.2044) = 0.1343 cfs				
CN = 68 Plate 22.2 C-2				
Direct Runoff = 0.4 in. Plate 22.2 C-4				
V(100) = (0.4)(0.1010)(43560)/12 = 146.65 cu. ft.				
V(10) = (0.657)(146.65) = 96.35 cu. ft.				

FLOWS FROM TRACT 2-B-2 TO LOT 1-C-3, BLOCK 2

SURFACE TYPE	"C" VALUE	A (ACRES)	"C"X A	COMPOSITE "C"=CXA/A
Streets, Drives, Walks	0.95	0.000	0.000	
Roofs	0.90	0.000	0.000	
Lawns & Landscaping	0.25	0.0367	0.0147	
Undeveloped	0.40	0.0367	0.0147	0.4
TOTAL		0.0367	0.0147	0.4
Q(100) = (0.4)(5.06)(0.0367) = 0.0743 cfs				
Q(10) = (0.657)(0.0743) = 0.0488 cfs				
CN = 68 Plate 22.2 C-2				
Direct Runoff = 0.4 in. Plate 22.2 C-4				
V(100) = (0.0367)(0.4)(43560)/12 = 53.29 cu. ft.				
V(10) = (0.657)(53.29) = 35.01 cu. ft.				

FLOWS FROM TRACT 2-B-2 TO TRACT 2-B-1

SURFACE TYPE	"C" VALUE	A (ACRES)	"C"X A	COMPOSITE "C"=CXA/A
Streets, Drives, Walks	0.95	0.000	0.000	
Roofs	0.90	0.000	0.000	
Lawns & Landscaping	0.25	0.0161	0.0064	
Undeveloped	0.40	0.0161	0.0064	0.4
TOTAL		0.0161	0.0064	0.4
Q(100) = (0.4)(5.06)(0.0161) = 0.0326 cfs				
Q(10) = (0.657)(0.0326) = 0.0214 cfs				
CN = 68 Plate 22.2 C-2				
Direct Runoff = 0.4 in. Plate 22.2 C-4				
V(100) = (0.4)(0.0161)(43560)/12 = 23.38 cu. ft.				
V(10) = (0.657)(23.38) = 15.36 cu. ft.				



LEGAL DESCRIPTION
TRACTS "2-B-1" & "2-B-2", BLOCK 2, AIRPORT INDUSTRIAL PARK

BENCHMARK ACS & PROJECT
THE STATION IS A STANDARD 3 1/4" ALUMINUM TABLET STAMPED "ACS, 1-M 16, 1984" LOCATED IN THE INTERSECTION OF YALE BLVD & GIBSON BLVD. N.E. ELEVATION = 5189.847

PROJECT BM IS A BRASS CAP STAMPED "MST&T" LOCATED AT THE SOUTHEAST PROPERTY CORNER ELEVATION = 5224.60

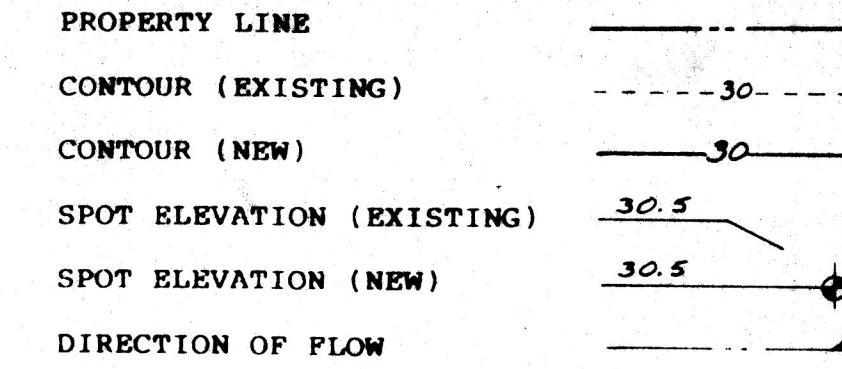
SURVEY DATA

TOPOGRAPHIC DATA PROVIDED BY V.E.HALL, N.M.P.S. NO.3241 ALBUQUERQUE, N.M.

KEYED NOTES

- REMOVE EXISTING CONC. & 4" PVC.
- FUTURE ASPHALTIC PARKING LIMITS APPROX. ONLY (N.T.C.BY OTHERS.)
- EXISTING CONCRETE.
- EXISTING LANDSCAPING.
- EXISTING 6" HEADER CURB.
- EXISTING CONCRETE RUNDOWN.
- EXISTING SIDEWALK CULVERT.
- EXISTING 5' PUBLIC UTILITY EASEMENT.
- EXISTING 5'X30' ANCHOR EASEMENT.
- EXISTING 20' PRIVATE ACCESS & DRAINAGE EASEMENT.
- EXISTING CHAIN LINK FENCE ON PROPERTY LINE.
- EXISTING CATCH BASIN.
- EXISTING ASPHALTIC PAVING.
- EXISTING DIRT DRIVE.

LEGEND:



MOUNTAIN BELL PROPERTY
ON
ALAMO AVE.S.E.

JOB NO.:
DATE: Aug 88
DRAWN: J
CHECKED: RGS
REVISED:

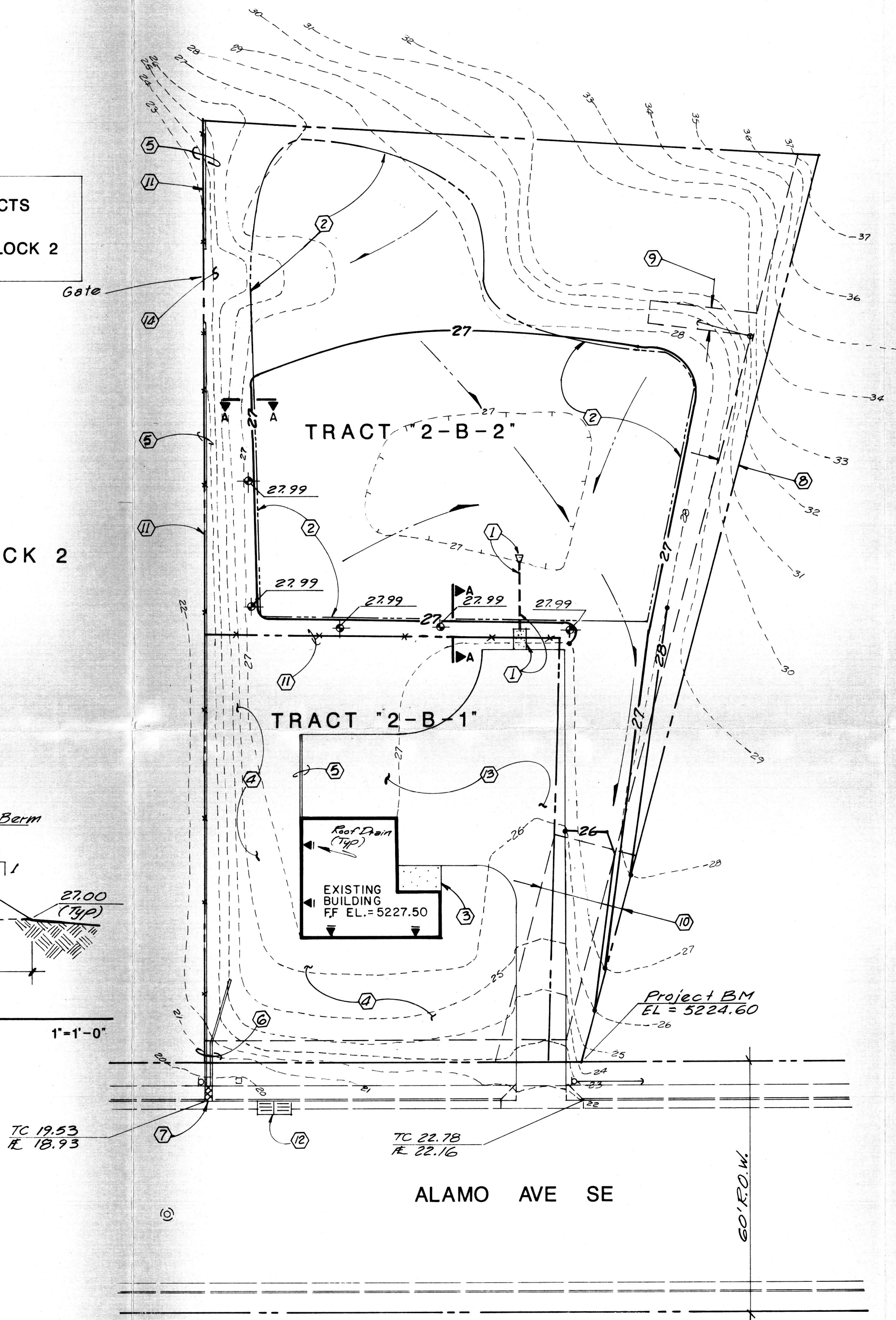
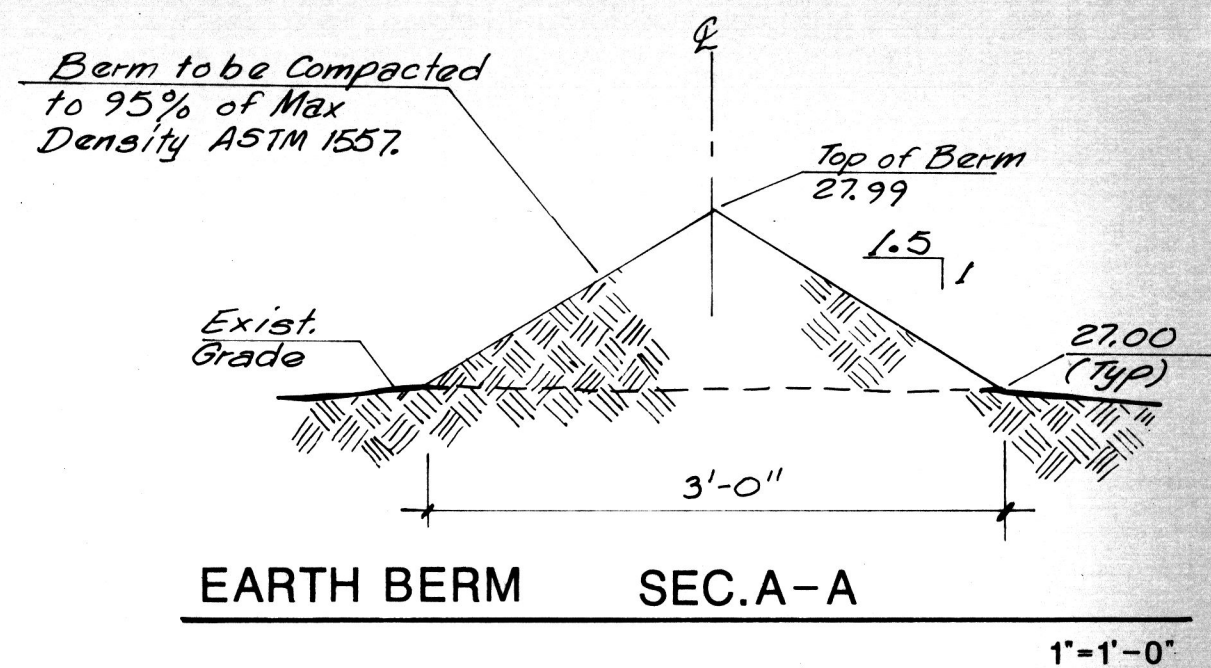
GRADING & DRAINAGE PLAN

CHAVEZ / CONSULTING ENGINEERS, INC.
4600 MONTGOMERY N.E.,
BUILDING C, # 101
ALBUQUERQUE, NEW MEXICO 87109
(505) 881-7378

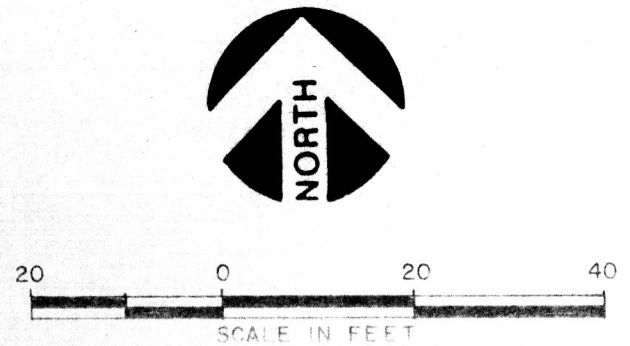
SHEET
C 1

NOTE: SAME OWNER FOR TRACTS
"2-B-1" & "2-B-2" / LOT "1-C-3", BLOCK 2

LOT "1-C-3", BLOCK 2



GRADING AND DRAINAGE PLAN



DRAINAGE PLAN
MOUNTAIN BELL ON ALAMO AVE. S.E.
AUGUST 26, 1988

LOCATION AND DESCRIPTION:
THE SITE IS LOCATED AT 2327 ALAMO AVE. SE WITHIN THE AIRPORT INDUSTRIAL PARK SUBDIVISION IN ALBUQUERQUE, NEW MEXICO. THE SITE, CONTAINING APPROXIMATELY 0.620 ACRES, IS PRESENTLY PARTIALLY DEVELOPED. EXISTING SLOPES ARE FROM THE NORTH TO THE SOUTH WITH AN AVERAGE SLOPE OF 4 PERCENT. THE SITE IS NOT LOCATED WITHIN A FLOOD PLAIN.

EXISTING CONDITIONS:
PRESENTLY, RUNOFF FROM THE SITE DISCHARGES AT A CONTROLLED RATE ONTO ALAMO AVE. THE RUNOFF IS THEN INTERCEPTED APPROXIMATELY 100 YARDS DOWN STREAM WHERE THERE IS AN EXISTING CATCH BASIN. PRESENTLY, THERE IS AN EXISTING DETENTION POND AT THE NORTH END OF THE SITE. THIS POND WITH AN APPROXIMATE VOLUME OF 100 CUBIC FEET DRAINS THRU A 4" PVC LINE. OFF-SITE RUNOFF ENTERS THE SITE DUE TO EXISTING ELEVATIONS FROM THE UNDEVELOPED PROPERTY TO THE EAST. IT IS FELT THAT WHEN THE PROPERTY TO THE EAST IS DEVELOPED THIS CONDITION WILL BE CORRECTED.

PROPOSED CONDITIONS:
PROPOSED DEVELOPMENT OF THE SITE INCLUDES NEW PAVED PARKING LOT OF 9,750 SQUARE FEET TO BE CONSTRUCTED IN THE FUTURE. THE CONSTRUCTION BERM AND ELIMINATING THE PRESENT POND AND RELATED CONSTRUCTION. IT IS FELT THAT WITH THE CONSTRUCTION OF THE 60" RCP WHICH ACCEPTS RUNOFF FROM THIS SITE, THE POND IS NO LONGER REQUIRED. FURTHERMORE, OTHER CONSTRUCTION WITHIN THE SUBDIVISION HAS FREE DISCHARGE TO ALAMO AVE.

EXISTING FLOWS FROM THE PROPERTY TO THE EAST WILL BE ALLOWED TO DRAIN ONTO TRACT 2-B-1. THIS FLOW WILL DRAIN TO THE DRAINAGE EASEMENT AND THEN DISCHARGING THRU THE EXISTING DRIVE PAD ONTO ALAMO AVE.

A PORTION OF RUNOFF WILL FLOW FROM TRACT 2-B-3 TO LOT 1-C-3, BLOCK 2 AND FROM TRACT 2-B-2 TO TRACT 2-B-1. THESE FLOWS WILL CROSS THE PROPERTY LINES AND A "BLANKET DRAINAGE EASEMENT" WILL BE PROVIDED BY REPLAT.

CALCULATIONS: (BASED ON CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, VOLUME II)

CALCULATIONS:
Area = 0.620 acres
I = 2.2 in./hr. Plate 22.2 D-2
6-hour, 100-year rainfall = 2.3 in. Plate 22.2 D-1
I = (2.2)(2.3) = 5.06 in./hr.

EXISTING ON-SITE CONDITIONS:

SURFACE TYPE	"C" VALUE	A (ACRES)	"C"X A	COMPOSITE "C"=CXA/A
Streets, Drives, Walks	0.95	0.076	0.072	
Roofs	0.90	0.018	0.016	
Lawns & Landscaping	0.25	0.085	0.021	
Undeveloped	0.40	0.441	0.176	
TOTAL		0.620	0.285	0.460

Q(100) = (0.460)(5.06)(0.620) = 1.443 cfs
Q(10) = (0.657)(1.443) = 0.948 cfs
CN = 73 Plate 22.2 C-2
Direct Runoff = 0.50 in. Plate 22.2 C-4
V(100) = (0.50)(0.620)(43560)/12 = 1,125 cu. ft.
V(10) = (0.657)(1,125) = 739 cu. ft.

PROPOSED ON-SITE CONDITIONS:

SURFACE TYPE	"C" VALUE	A (ACRES)	"C"X A	COMPOSITE "C"=CXA/A
Streets, Drives, Walks	0.95	0.300	0.285	
Roofs	0.90	0.018	0.016	
Lawns & Landscaping	0.25	0.085	0.021	
Undeveloped	0.40	0.217	0.087	
TOTAL		0.620	0.409	0.660

Q(100) = (0.660)(5.06)(0.620) = 2.071 cfs
Q(10) = (0.657)(2.071) = 1.361 cfs
CN = 82 Plate 22.2 C-3
Direct Runoff = 0.85 in. Plate 22.2 C-4
V(100) = (0.85)(0.62)(43560)/12 = 1,913 cu. ft.
V(10) = (0.657)(1,913) = 1,257 cu. ft.

EXISTING OFF-SITE CONDITIONS WHICH FLOW ONTO TRACTS 2-B-1 AND 2-B-2

Area = 0.1010 acres

SURFACE TYPE	"C" VALUE	A (ACRES)	"C"X A	COMPOSITE "C"=CXA/A
Streets, Drives, Walks	0.95			
Roofs	0.90			
Lawns & Landscaping	0.25			
Undeveloped	0.40	0.1010	0.0404	0.4
TOTAL		0.1010	0.0404	0.4

Q(100) = (0.4)(5.06)(0.1010) = 0.2044 cfs
Q(10) = (0.657)(0.2044) = 0.1343 cfs
CN = 68 Plate 22.2 C-2
Direct Runoff = 0.4 in. Plate 22.2 C-4
V(100) = (0.4)(0.1010)(43560)/12 = 146.65 cu. ft.
V(10) = (0.657)(146.65) = 96.35 cu. ft.

FLOWS FROM TRACT 2-B-2 TO LOT 1-C-3, BLOCK 2

Area = 0.0367 acres

SURFACE TYPE	"C" VALUE	A (ACRES)	"C"X A	COMPOSITE "C"=CXA/A
Streets, Drives, Walks	0.95			
Roofs	0.90			
Lawns & Landscaping	0.25			
Undeveloped	0.40	0.0367	0.0147	0.4
TOTAL		0.0367	0.0147	0.4

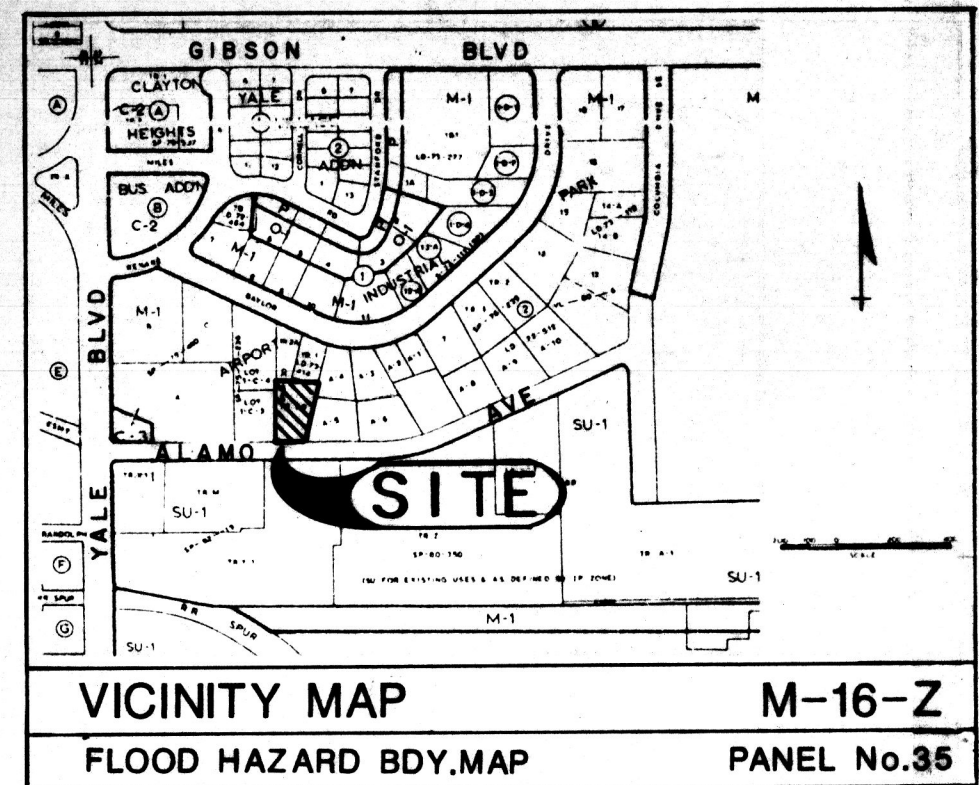
Q(100) = (0.4)(5.06)(0.0367) = 0.0743 cfs
Q(10) = (0.657)(0.0743) = 0.0488 cfs
CN = 68 Plate 22.2 C-3
Direct Runoff = 0.4 in. Plate 22.2 C-4
V(100) = (0.0367)(0.4)(43560)/12 = 53.29 cu. ft.
V(10) = (0.657)(53.29) = 35.01 cu. ft.

FLOWS FROM TRACT 2-B-2 TO TRACT 2-B-1

Area = 0.0161 acres

SURFACE TYPE	"C" VALUE	A (ACRES)	"C"X A	COMPOSITE "C"=CXA/A
Streets, Drives, Walks	0.95			
Roofs	0.90			
Lawns & Landscaping	0.25			
Undeveloped	0.40	0.0161	0.0064	0.4
TOTAL		0.0161	0.0064	0.4

Q(100) = (0.4)(5.06)(0.0161) = 0.0326 cfs
Q(10) = (0.657)(0.0326) = 0.0214 cfs
CN = 68 Plate 22.2 C-2
Direct Runoff = 0.4 in. Plate 22.2 C-4
V(100) = (0.4)(0.0161)(43560)/12 = 23.38 cu. ft.
V(10) = (0.657)(23.38) = 15.36 cu. ft.



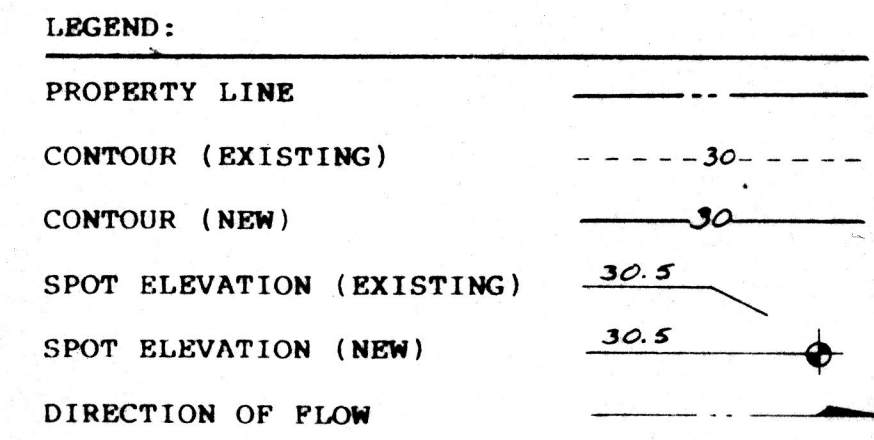
LEGAL DESCRIPTION
TRACTS "2-B-1" & "2-B-2", BLOCK 2,
AIRPORT INDUSTRIAL PARK

BENCHMARK ACS & PROJECT
THE STATION IS A STANDARD 3 1/4" ALUMINUM TABLET STAMPED "ACS,1-M 16, 1984" LOCATED IN THE INTERSECTION OF VALE BLVD. & GIBSON BLVD. N.E. ELEVATION = 5189.847

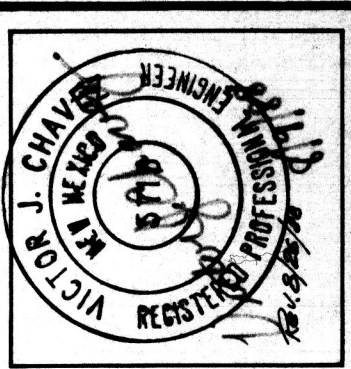
PROJECT BM IS A BRASS CAP STAMPED "MST&T" LOCATED AT THE SOUTHEAST PROPERTY CORNER ELEVATION = 5224.60

SURVEY DATA
TOPOGRAPHIC DATA PROVIDED BY V.E.HALL, N.M.P.S. NO.3241 ALBUQUERQUE, N.M.

- KEYED NOTES
- REMOVE EXISTING CONC. & 4" PVC.
 - FUTURE ASPHALTIC PARKING LIMITS APPROX. ONLY (N.T.C.BY OTHERS.)
 - EXISTING CONCRETE.
 - EXISTING LANDSCAPING.
 - EXISTING 6" HEADER CURB.
 - EXISTING CONCRETE RUNDOWN.
 - EXISTING SIDEWALK CULVERT.
 - EXISTING 5' PUBLIC UTILITY EASEMENT.
 - EXISTING 5'X30' ANCHOR EASEMENT.
 - EXISTING 20' PRIVATE ACCESS & DRAINAGE EASEMENT.
 - EXISTING CHAIN LINK FENCE ON PROPERTY LINE.
 - EXISTING CATCH BASIN.
 - EXISTING ASPHALTIC PAVING.
 - EXISTING DIRT DRIVE.



RECEIVED
SEP 01 1988
HYDROLOGY SECTION

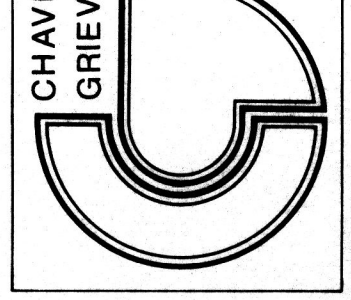


MOUNTAIN BELL PROPERTY
ON
ALAMO AVE.S.E.

JOB NO.:
DATE: Aug 88
DRAWN: J
CHECKED: RGP
REVISED:

SHEET TITLE:
GRADING & DRAINAGE PLAN

CHAVEZ / CONSULTING ENGINEERS, INC.
4600 MONTGOMERY N.E.,
BUILDING C, #101
ALBUQUERQUE, NEW MEXICO 87109
(505) 861-7376



SHEET
C 1
1 OF 1