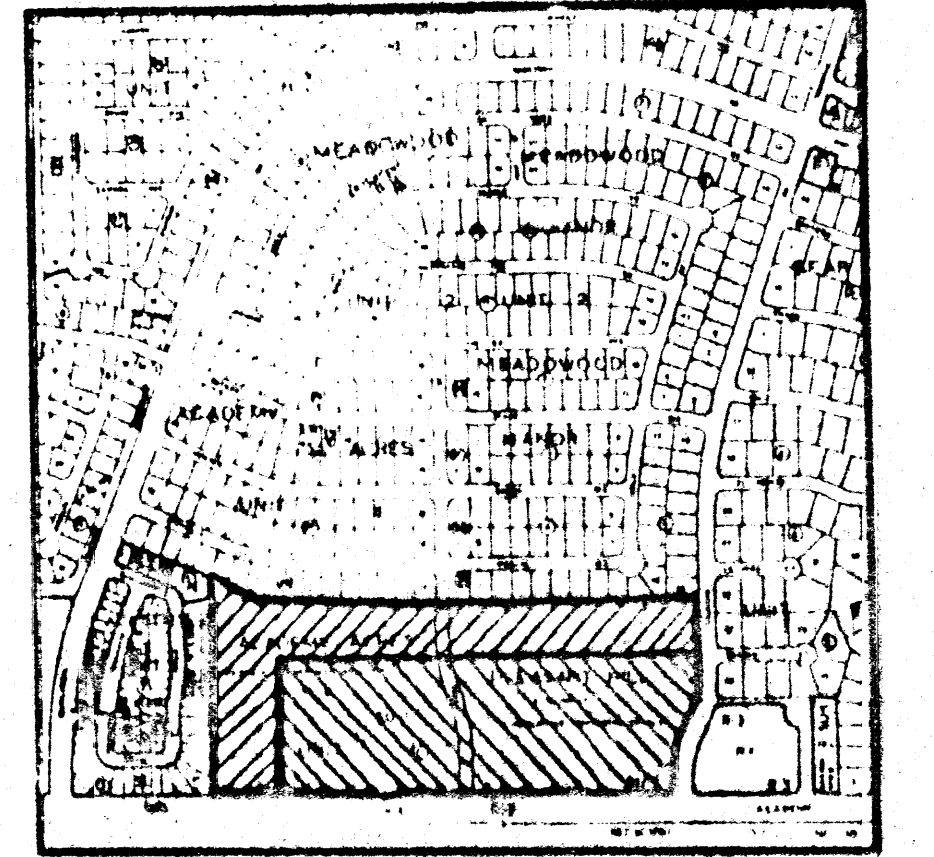
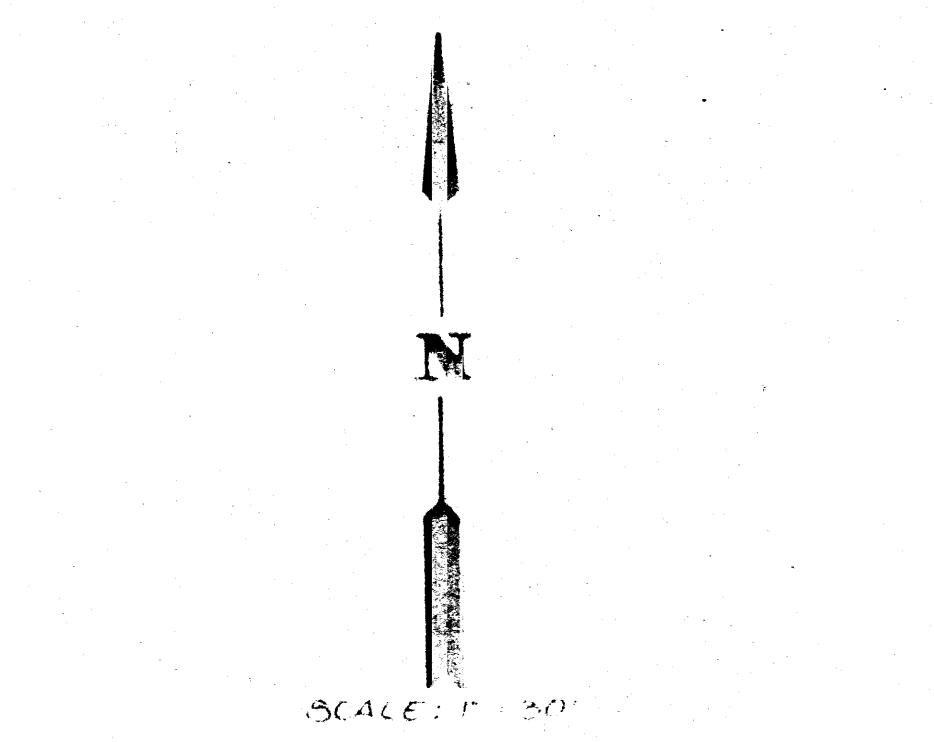
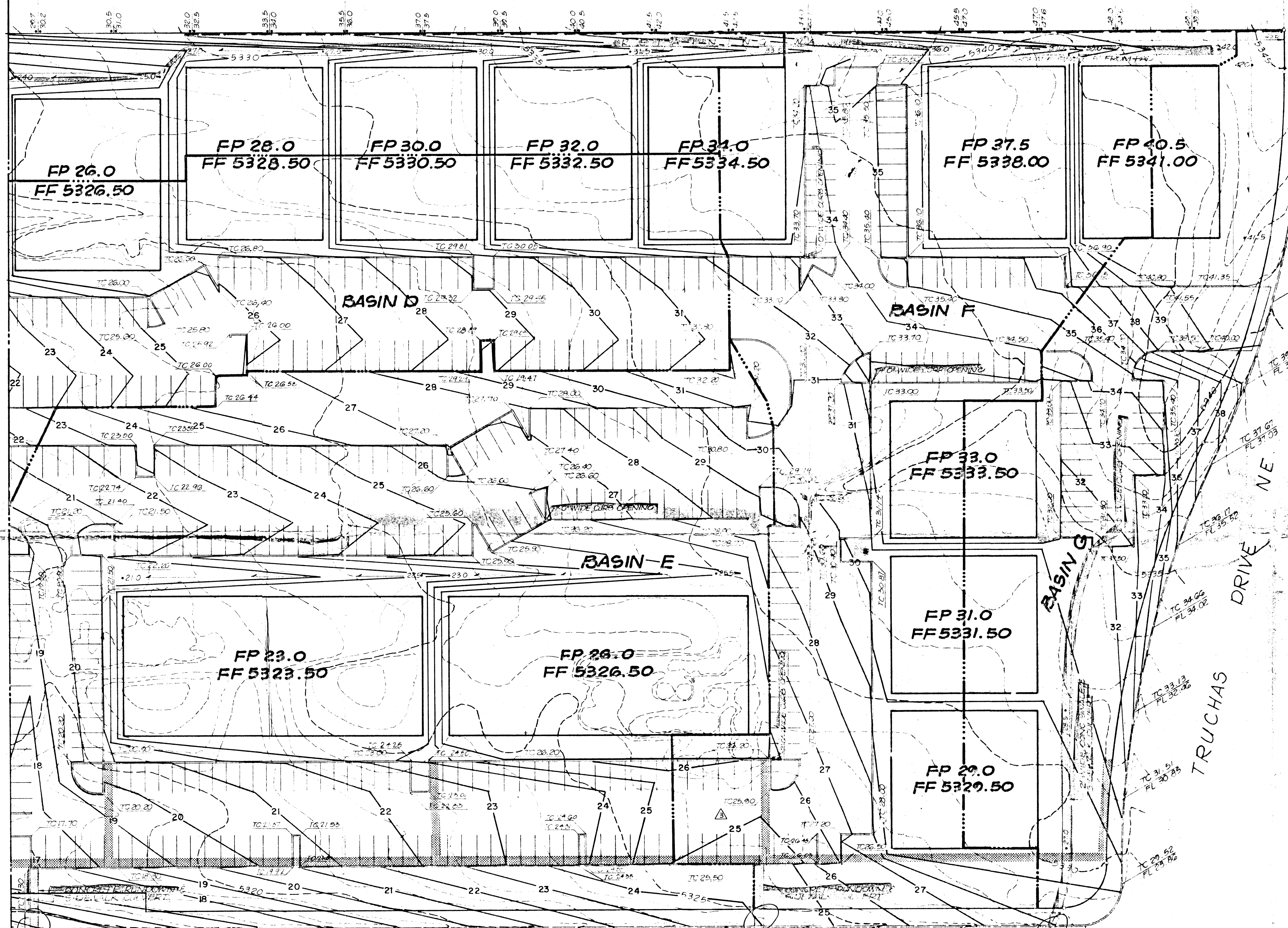
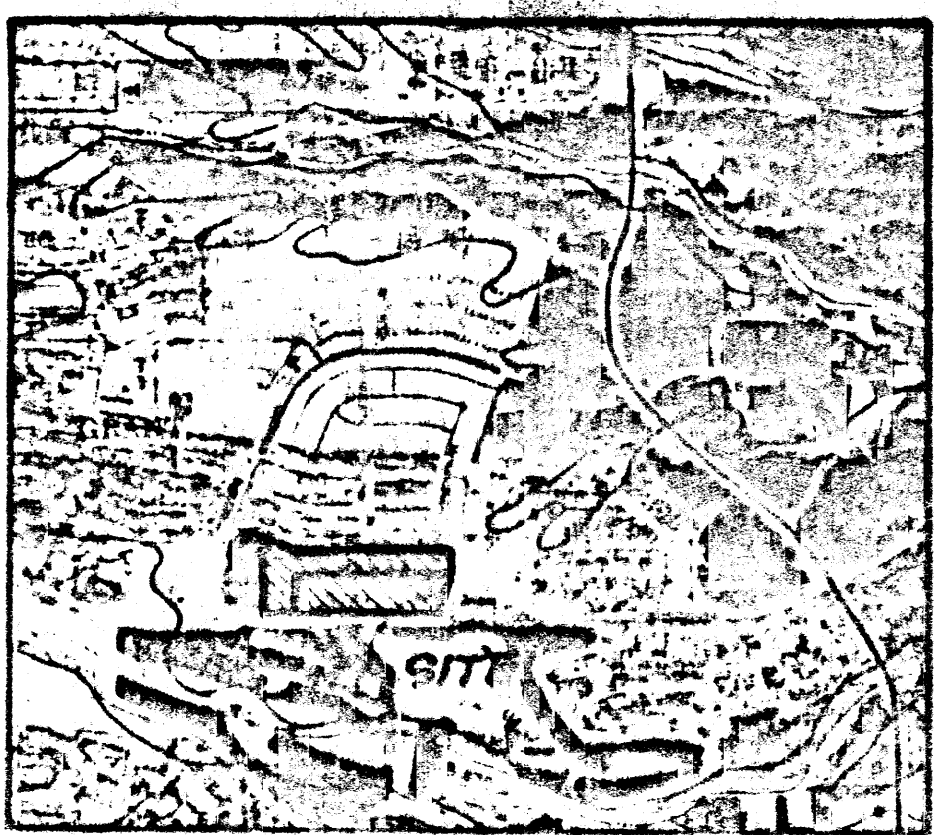


74 73 72 71 70 69 68 67 66 65 64 63 62 61 60 59 58

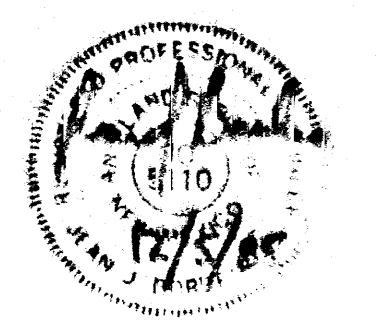


VICINITY MAP E10-19



FLOOD HAZARD MAP #17  
OCTOBER 14, 1983

AN ACS BRASS TABLE STAMPED "FMA, 1978," SET IN TOP OF A CONC. POST FLUSH WITH THE GROUND AT THE INTERSECTION OF ACADEMY RD. & TRUCHAS DR. NE THE STATION IS TO WEST OF E OF TRUCHAS IN THE WESTERLY MEDIAN, 13.6' SOUTH OF THE MEDIAN CURB  
ELEV. = 5328.52 FT  
TBM 12 F-18, 1973" ELEV. = 5294.86 FT



APPROVED FOR ROUGH GRADING ± 1'  
*Robert M. ...*  
CITY HYDROLOGIST

APPROVED FOR DRAINAGE HYDROLOGY SECTION  
DATE 1/5/86

*Robert M. ...*  
SIGNATURE TITLE  
ADVISE DRAINAGE INSPECTOR WHEN GRADING EXECUTED

NO	DATE	REMARKS	BY
1	1-21-86	Changed contours	MK
REVISIONS			

Q100 = 11.5 cfs  
Q10 = 7.5 cfs  
Single 2'-0" sidewalk culvert

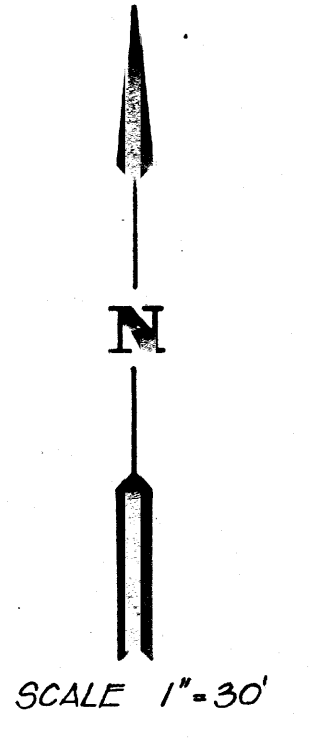
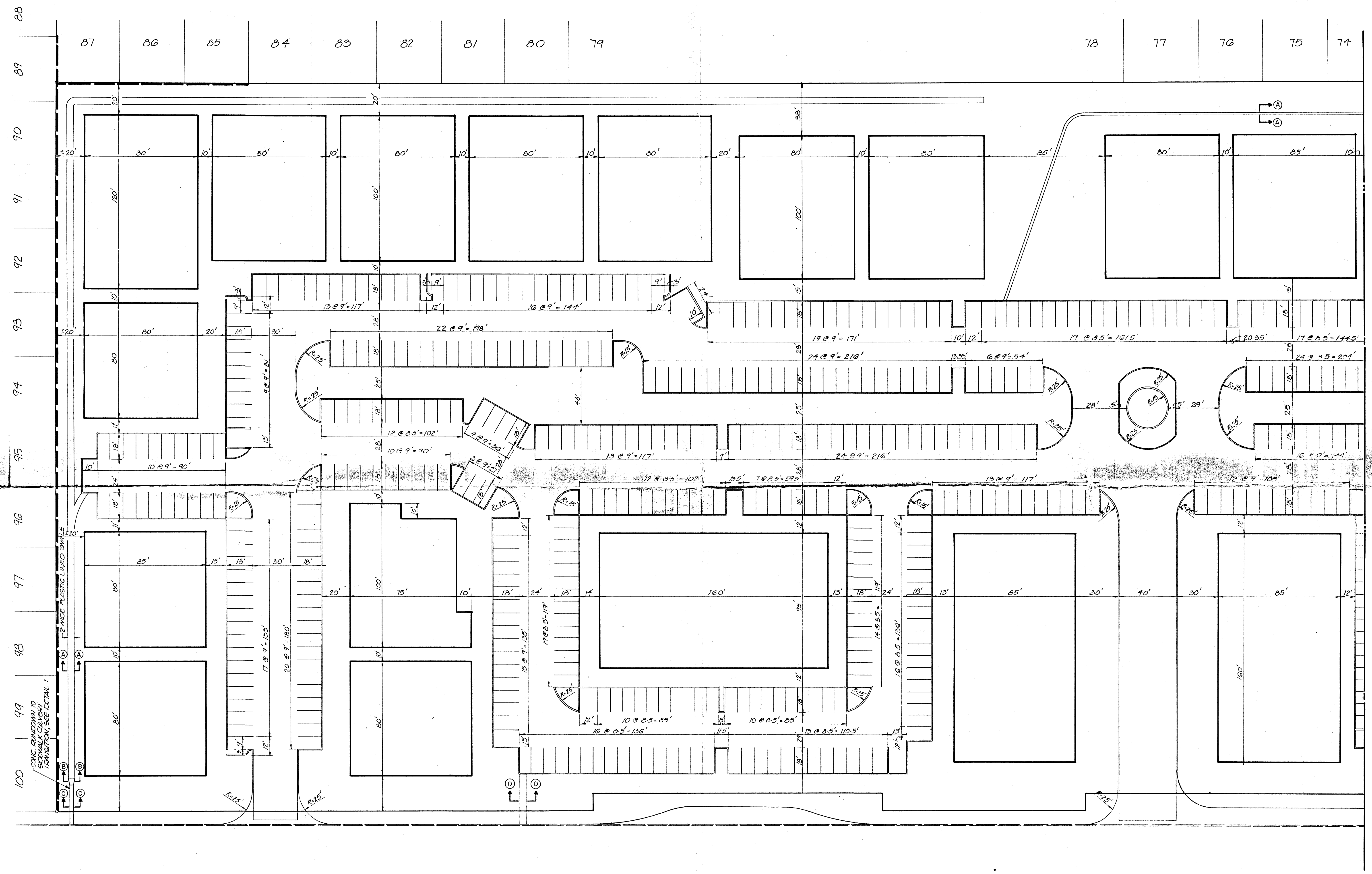
Q100 = 7.2 cfs  
Q10 = 4.8 cfs  
single 2'-0" sidewalk culvert

Q100 = 3.2 cfs  
Q10 = 2.1 cfs  
dbl 1'-9" sidewalk culvert

ACADEMY ROAD NE

TRUCHAS DRIVE NE

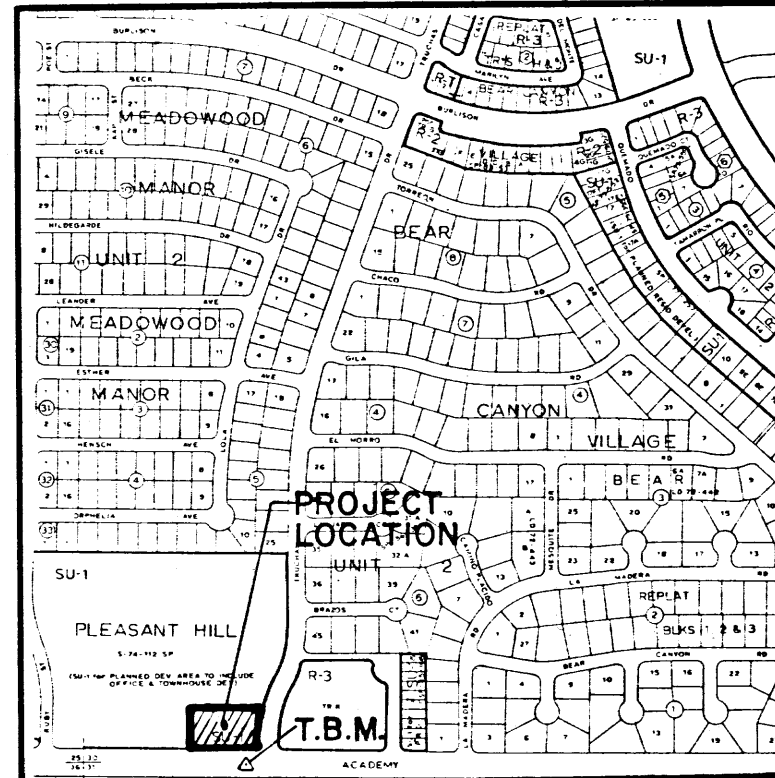




APPROVED FOR DRAINAGE  
 DATE 5/5/80  
 SIGNATURE [Signature]  
 TITLE Hydrology  
 ADVISE DRAINAGE INSPECTOR WHEN GRADING EXECUTED

REPAIR  
 JAN 22 1986  
 HYDROLOGY SECTION

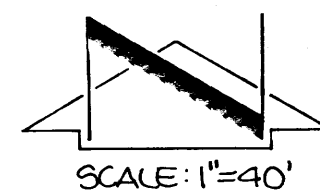




VICINITY MAP E - 19  
SCALE: 1" = 800'

**PROJECT BENCHMARK = T.B.M.**  
AN ACS BRASS TABLET STAMPED "1-F10A, 1078", SET IN TOP OF A CONC. POST FLUSH WITH THE GROUND AT THE INTERSECTION OF ACADEMY RD + TRUCHAS DR. N.E. THE STATION IS 70' WEST OF C. OF TRUCHAS IN THE WESTERLY MEDIAN, ± 3.6' SOUTH OF THE MEDIAN CURB. ELEVATION: 5328.52 ft. (M.S.L.D.)

**LEGAL DESCRIPTION**  
TRACT A, ACADEMY ACRES  
ALBUQUERQUE, NEW MEXICO



- LEGEND**
- ▲ EXISTING SPOT ELEVATION
  - ◆ PROPOSED SPOT ELEVATION
  - - - - - 10' EXISTING CONTOUR
  - TC TOP OF CURB
  - FL FLOW LINE
  - T.W. TOP OF WALL
  - — — — — EXISTING SWALE
  - — — — — PROPOSED SWALE
  - — — — — PROPOSED SILT FENCE
  - ▲▲▲▲▲ PROPOSED SLOPE
  - + AS BUILT ELEVATION

**CERTIFICATION**  
Review of the as-built survey data provided by David C. Clausen, PS #6547, the sedimentation ponds appear to have been built in substantial compliance with the approved design. The silt fence has been installed approximately as shown. Swales have been regraded, as shown, to maintain those swales due to routine sedimentation.

Jeffrey G. Mortensen  
REGISTERED PROFESSIONAL ENGINEER  
NEW MEXICO  
8547  
Date: 06-01-88

6/14/88 - Field inspection by R. Green & C. Montoya  
Silt fence not properly buried at bottom which allows runoff to flow under fence. Must be properly embedded prior to acceptance.  
Roger Green

GRADING AND DRAINAGE PLAN PREPARED UNDER THE SUPERVISION OF  
Jeffrey G. Mortensen  
REGISTERED PROFESSIONAL ENGINEER  
NEW MEXICO  
8547  
08-07-87

TOPOGRAPHIC SURVEY PROVIDED BY OTHERS AND PROVIDED BY OWNER. ITS ADEQUACY IS HEREBY DISCLAIMED AS IT RELATES TO THIS DRAWING.

**EROSION CONTROL PLAN**

The following items concerning the Academy Office Park Erosion Control Plan are contained hereon:

1. Vicinity Map
2. Erosion Plan
3. Calculations

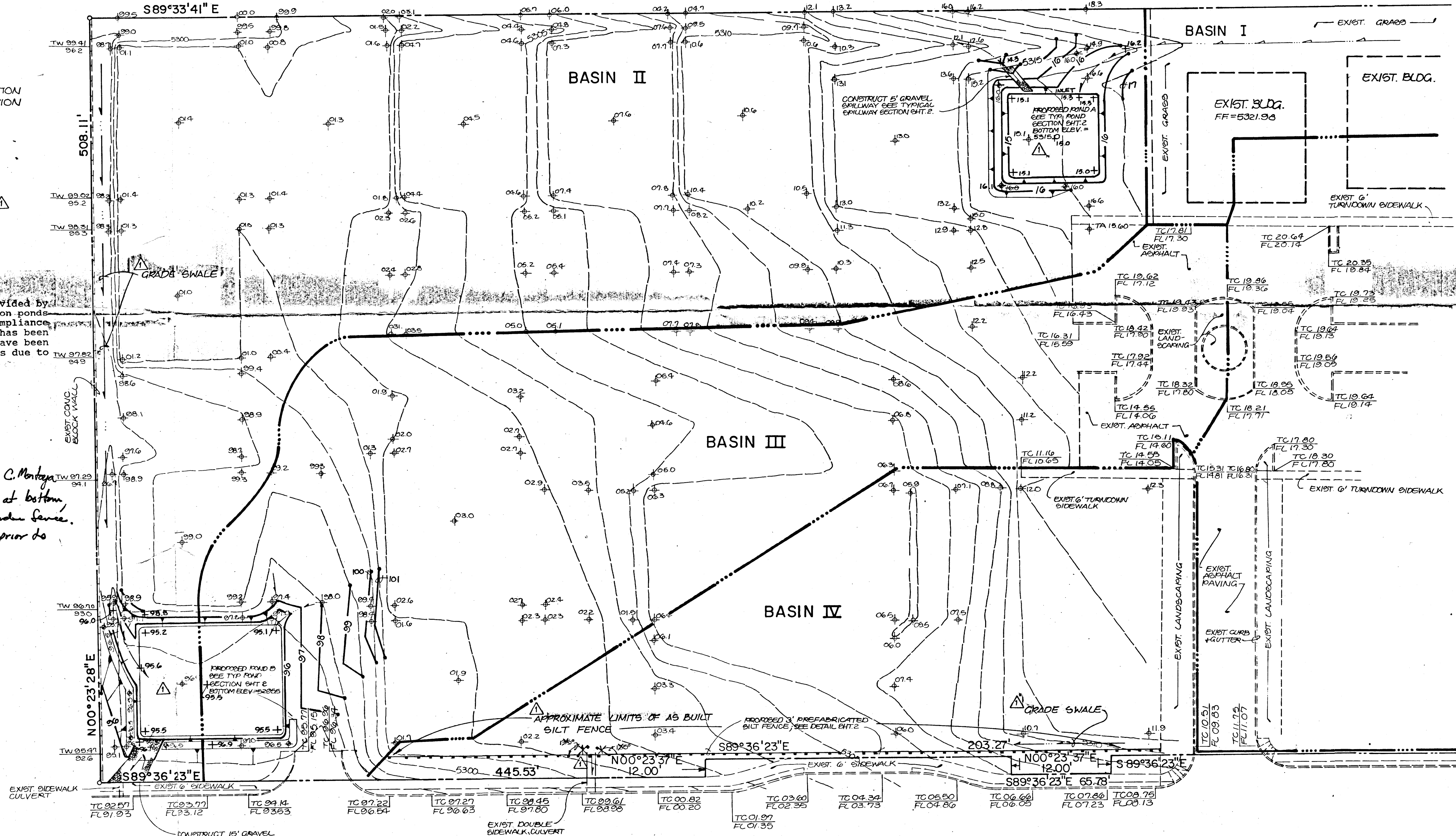
The proposed improvements, as shown by the Vicinity Map, are located at the northwest corner of the intersection of Academy Road N.E. and Truchas Drive N.E. At present, the site is partially developed with asphalt paving, landscaping and two buildings. Presently, an erosion problem has developed on the site due to the partial development. The purpose of this plan is to provide temporary erosion control until the site is fully developed.

The Plan shows 1) existing contours at 1'0" intervals, 2) proposed grades indicated by spot elevations and contours at 1'0" intervals, 3) the limit and character of the existing improvements, and 4) the limit and character of all proposed improvements. As shown by this plan, the proposed improvements consist of the construction of a silt fence and two ponds. A silt fence is proposed along the south side of Basin 4 to control the erosion within this basin. On the northeast side of the site, Pond A is proposed to collect the runoff from Basin 1. As shown in the calculations, Pond A has been designed to hold 1,770 cf of runoff which is greater than the 10-year runoff volume of 1,300 cf for Basin 1. Also, a spillway has been designed to allow 5.9 cfs to discharge from Pond A which is greater than the 100-year discharge of (3.2 cfs) of Basin 1. The spillway will discharge into the existing swale which runs along the north side of the site. At the southwest corner of the site, Pond B is proposed to collect the runoff from Basin 2 and Basin 3. As shown in the calculations, Pond B has been designed to hold 3,680 cf of runoff which is greater than the combined 10-year runoff volume of 2,300 cf for Basins 2 and 3. A spillway has also been designed to allow 17.6 cfs to discharge from Pond B which is greater than the combined 100-year discharge (17.5 cfs) of Basins 1, 2, and 3. Runoff discharging from Pond B will be directed to the existing sidewalk culvert at the southwest corner of the site and discharge into Academy Road N.E. as before.

The Calculations which appear hereon analyze both the existing and developed conditions for the 100-year and 10-year, 6-hour rainfall event. The Rational Method has been used to quantify the peak rate of discharge and the SCS Method has been used to quantify the volume of runoff. Both Methods have been used in accordance with the City of Albuquerque Development Process Manual, Volume II, and the Mayor's Emergency Rule adopted January 14, 1986. Pond volumes were determined using the Average End Over Area Method, and discharge from the spillways were determined using the Weir Equation.

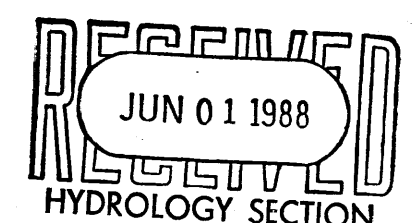
**CONSTRUCTION NOTES:**

1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 765-1234, FOR LOCATION OF EXISTING UTILITIES.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
4. ALL CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.
5. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.

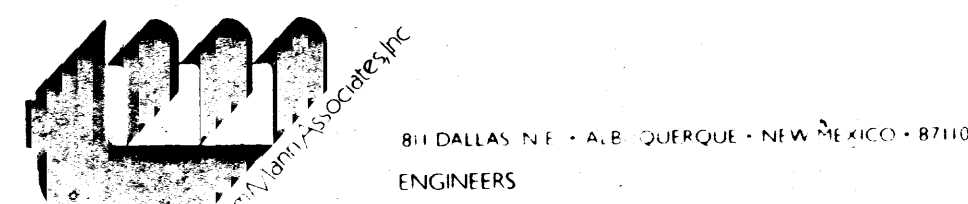


**EROSION CONTROL MEASURES**

1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AT THE PROPERTY LINES AND WETTING THE SOIL TO KEEP IT FROM BLOWING.
2. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
3. THE CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" PRIOR TO BEGINNING CONSTRUCTION.



ACADEMY ROAD N.E.  
EROSION CONTROL PLAN  
ACADEMY OFFICE PARK



DESIGN BY	P.M.L.	No.	Date	By	Revision	JOB NO.	870951
DRAWN BY	R.A.R.	▲	06-01-88	J.G.M.	ENGINEER'S CERTIFICATION	DATE	07/87
APPROVED BY	J.G.M.					SHEET	1 OF 2



**CALCULATIONS**

**Ground Cover Information**

From SCS Bernalillo County Soil Survey,  
 Plate 21: ETC - Embudo - Tijeras Complex  
 Hydrologic Soil Group: B  
 Existing Pervious CN = 70 (DPM Plate 22.2 C-2  
 Pasture or Range Land: fair condition)  
 Developed Pervious CN = 61 (DPM Plate 22.2 C-2  
 Open Spaces: Good condition)

**Time of Concentration/Time to Peak**

$T_c = 0.0078 L^{0.77} / S^{0.385}$  (Kirpich Equation)

$T_p = T_c = 10$  min.

**Point Rainfall**

100 yr:  $P_6 = 2.35$  in. (DPM Plate 22.2 D-1)  
 10 yr:  $P_6 = 1.54$  in. (DPM Plate 22.2 D-1)

**Rational Method**

Discharge:  $Q = C i A$

where C varies  
 $i = P_6 (6.84) T_c^{-0.51} = 4.97$  in/hr  
 $P_6 = 2.35$  in (DPM Plate 22.2 D-1)  
 $T_c = 10$  min (minimum)  
 $A =$  area, acres

**SCS Method**

Volume:  $V = 3630 (DRO) A$

Where DRO = Direct runoff in inches  
 $A =$  area, acres

**Basin 1 Developed Condition**

Atotal = 47,050 sf = 1.08 Ac  
 Roof area = 25,000 sf (0.53)  
 Landscaped area = 22,050 sf (0.47)  
 $C = 0.59$  (Weighted average per Emergency Rule, 1/14/86)  
 $Q_{100} = C i A = 0.59(4.97)1.08 = 3.2$  cfs  
 $Q_{10} = 0.657 Q_{100} = 2.1$  cfs  
 $A_{imp} = 25,000$  sf; % impervious = 53 %  
 Composite CN = 81 (DPM Plate 22.2 C-3)  
 $DRO_{100} = 0.84$  in (DPM Plate 22.2 C-4)  
 $DRO_{10} = 0.33$  in (DPM Plate 22.2 C-4)  
 $V_{100} = 3630 (DRO_{100}) A = 3,300$  cf  
 $V_{10} = 3630 (DRO_{10}) A = 1,300$  cf

**Basin 2 Existing Condition**

Atotal = 178,710 sf = 4.12 Ac  
 Roof area = 1,950 sf (0.01)  
 Paved area = 1,770 sf (0.01)  
 Dirt area = 171,660 sf (0.96)  
 Landscaped area = 3,330 sf (0.02)  
 $C = 0.41$  (Weighted average per Emergency Rule, 1/14/86)  
 $Q_{100} = C i A = 0.41(4.97)4.12 = 8.4$  cfs  
 $Q_{10} = 0.657 Q_{100} = 5.5$  cfs  
 $A_{imp} = 3,720$  sf; % impervious = 2 %  
 Composite CN = 70 (DPM Plate 22.2 C-3)  
 $DRO_{100} = 0.39$  in (DPM Plate 22.2 C-4)  
 $DRO_{10} = 0.09$  in (DPM Plate 22.2 C-4)  
 $V_{100} = 3630 (DRO_{100}) A = 5,830$  cf  
 $V_{10} = 3630 (DRO_{10}) A = 1,350$  cf

**Basin 3 Existing Condition**

Atotal = 126,050 sf = 2.89 Ac  
 Paved area = 2,350 sf (0.02)  
 Dirt area = 122,480 sf (0.97)  
 Landscaped area = 1,220 sf (0.01)  
 $C = 0.41$  (Weighted average per Emergency Rule, 1/14/86)  
 $Q_{100} = C i A = 0.41(4.97)2.89 = 5.9$  cfs  
 $Q_{10} = 0.657 Q_{100} = 3.9$  cfs  
 $A_{imp} = 2,350$  sf; % impervious = 2 %  
 Composite CN = 70 (DPM Plate 22.2 C-3)  
 $DRO_{100} = 0.39$  in (DPM Plate 22.2 C-4)  
 $DRO_{10} = 0.09$  in (DPM Plate 22.2 C-4)  
 $V_{100} = 3630 (DRO_{100}) A = 4,090$  cf  
 $V_{10} = 3630 (DRO_{10}) A = 950$  cf

**Basin 4 Existing Condition**

Atotal = 75,220 sf = 1.73 Ac  
 Paved area = 630 sf (0.01)  
 Dirt area = 70,490 sf (0.94)  
 Landscaped area = 4,100 sf (0.05)  
 $C = 0.40$  (Weighted average per Emergency Rule, 1/14/86)  
 $Q_{100} = C i A = 0.40(4.97)1.73 = 3.4$  cfs  
 $Q_{10} = 0.657 Q_{100} = 2.2$  cfs  
 $A_{imp} = 630$  sf; % impervious = 1 %  
 Composite CN = 70 (DPM Plate 22.2 C-3)  
 $DRO_{100} = 0.39$  in (DPM Plate 22.2 C-4)  
 $DRO_{10} = 0.09$  in (DPM Plate 22.2 C-4)  
 $V_{100} = 3630 (DRO_{100}) A = 2,450$  cf  
 $V_{10} = 3630 (DRO_{10}) A = 565$  cf

**Ponds**

$V_{pond} = 1/2(A)(top\ elev. - bottom\ elev.)(top\ elev. + bottom\ elev.)$

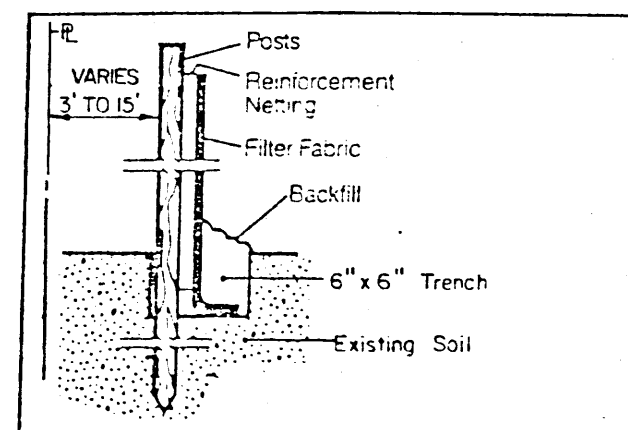
Spillway discharge,  $Q = 3.33 L H^{3/2}$

Where L = width of spillway in feet  
 H = head in feet

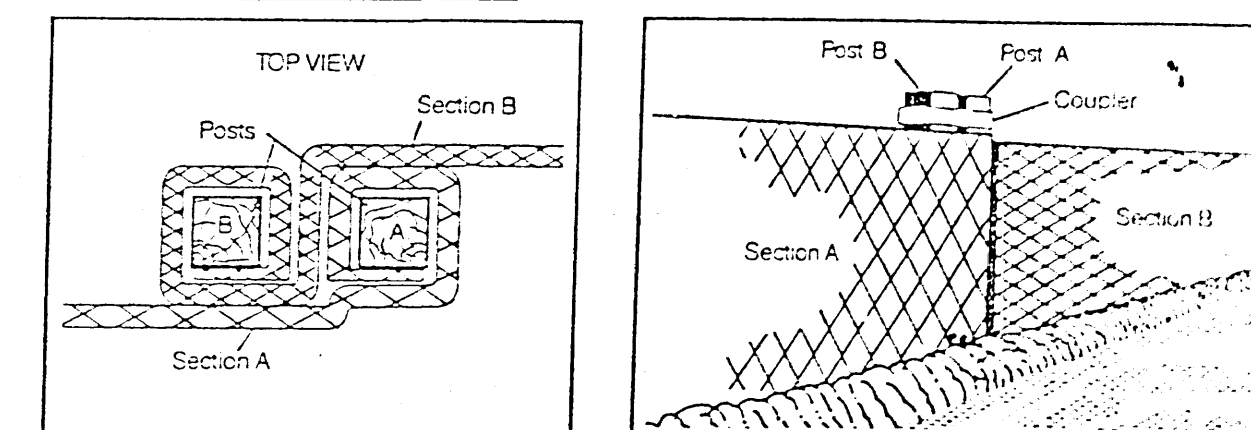
- Pond A (Basin 1)  
 $V_{pond\ A} = 1/2(64 \times 59 + 60 \times 55)(16.0 - 15.5) = 1,770$  cf  
 $V_{pond\ A} > Basin\ 1\ V_{10} = 1,300$  cf  
 $Q_{spillway} = 3.33(5)0.5^{3/2} = 5.9$  cfs  
 $Q_{spillway} > Basin\ 1\ Q_{100} = 3.2$  cfs
- Pond B  
 $V_{pond\ B} = 1/2(100 \times 77 + 96 \times 73)(96.0 - 95.5) = 3,680$  cf  
 $V_{pond\ B} > (Basin\ 2 + Basin\ 3) V_{10} = 2,300$  cf

$Q_{spillway} = 3.33(15)0.5^{3/2} = 17.6$  cfs  
 $Q_{spillway} > (Basin\ 1 + Basin\ 2 + Basin\ 3) Q_{100} = 17.5$  cfs

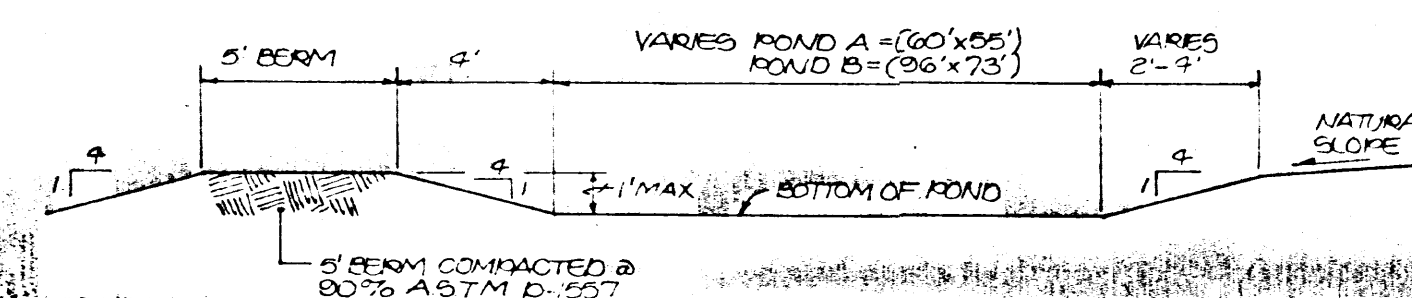
**TOE-IN METHOD**



**JOINING SECTIONS**



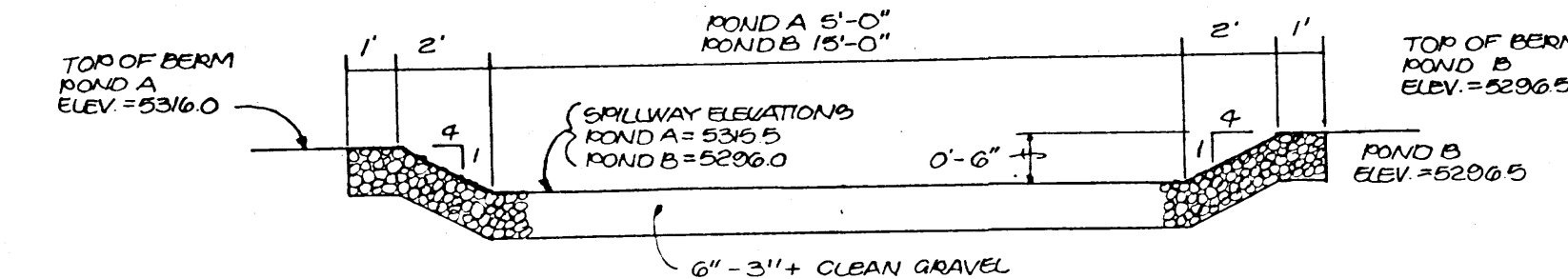
**PREFABRICATED SILT FENCE DETAIL**



**TYPICAL POND SECTION**

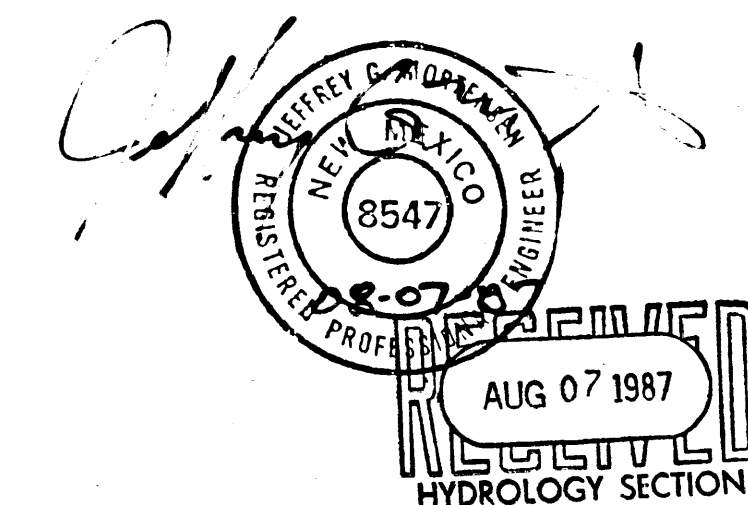
SCALE: 1" = 5'-0"

NOTE: POND BOTTOM WIDTHS GIVEN ABOVE ARE EAST TO WEST x NORTH TO SOUTH



**TYPICAL SPILLWAY SECTION**

SCALE: H = 1" = 4'-0"  
 V = 1" = 2'-0"



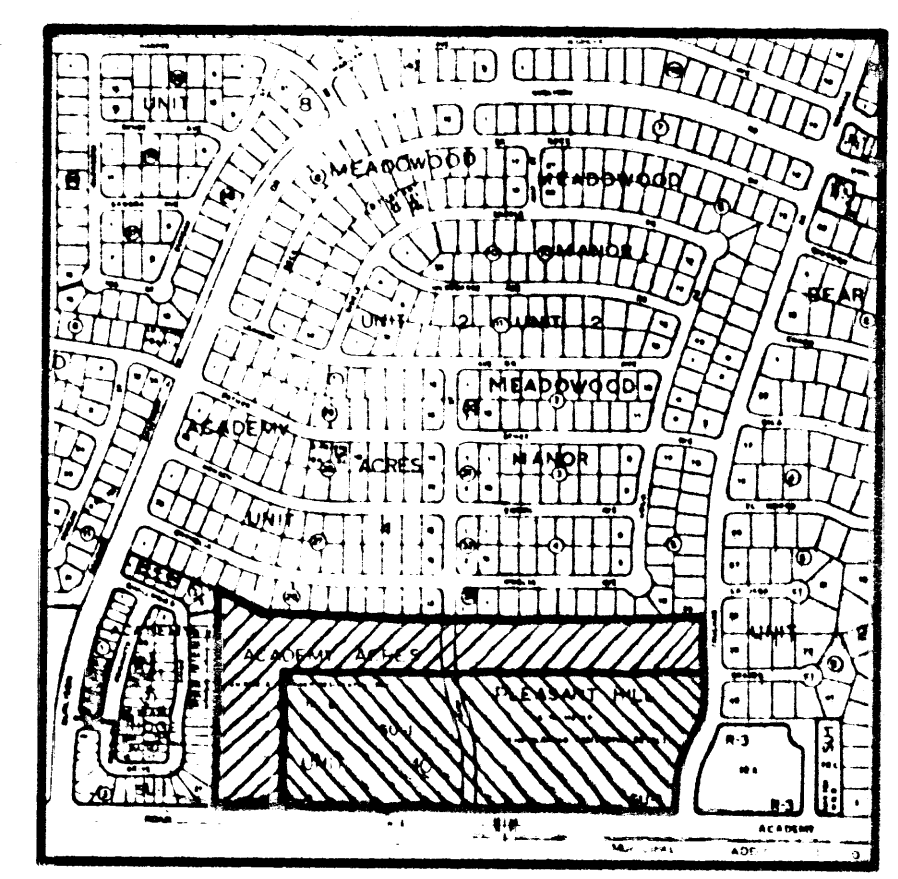
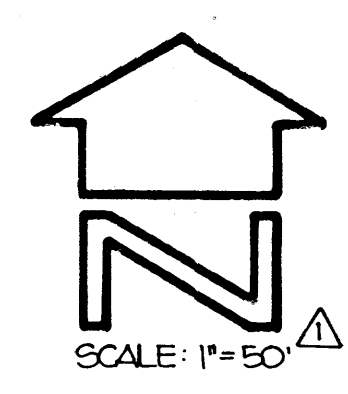
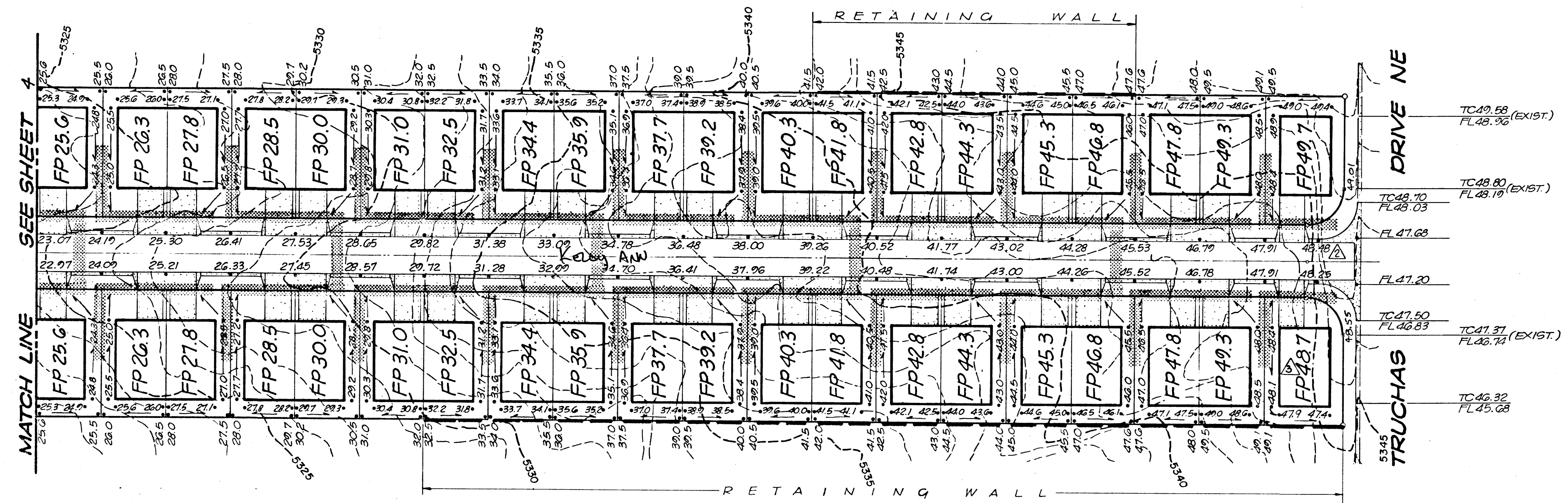
**EROSION CONTROL PLAN  
 ACADEMY OFFICE PARK**

DESIGN BY	P.M.L.	No.	Date	By	Revision	JOB NO.	870951
DRAWN BY	R.A.R.					DATE	07/87
APPROVED BY	J.G.M.					SHEET	2 OF 2









VICINITY MAP E18-19

MATCH LINE SEE SHEET 4

SURVEY INFORMATION		BENCH MARKS		AS-BUILT INFORMATION	
NO.	FIELD NOTES	NO.	DESCRIPTION	CONTRACTOR	DATE
			AN ACS BRASS TABLET STAMPED '1/10A, 1978', SET IN TOP OF A CONC. POST FLUSH WITH THE GROUND, AT THE INTERSECTION OF ACADEMY RD. & TRUCHAS DR. N.E. THE STATION IS TO WEST OF E. OF TRUCHAS IN THE WESTERLY MEDIAN, ± 13.0' SOUTH OF THE MEDIAN CURB.		
			TBM #2 F.18, 1973" ELEV.= 5294.86		

ENGINEER'S SEAL	
	DESIGNED BY _____ DATE _____ DRAWN BY _____ DATE _____ CHECKED BY _____ DATE _____

NO.	DATE	REVISIONS
1	9-25-86	Changed lot elevations
2	1-21-86	Added spot elevations
3	1-21-86	Added scale

APPROVED FOR ROUGH GRADING ± 1'  
*Col. A.M.S. 12-13-85*  
 CITY-HYDROLOGIST DATE

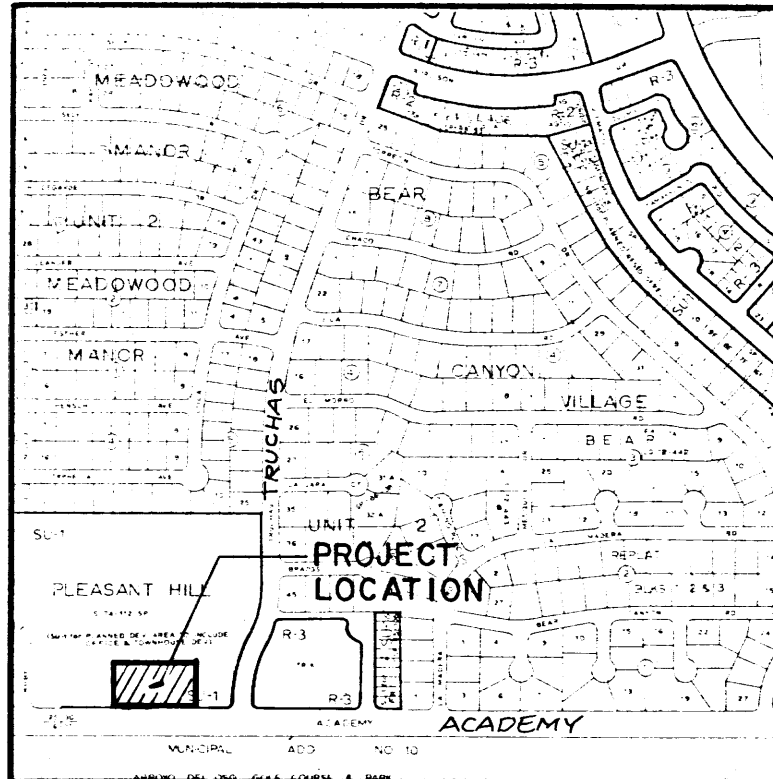
CITY OF ALBUQUERQUE  
 MUNICIPAL DEVELOPMENT DEPARTMENT  
 ENGINEERING DIVISION

TITLE: **GRADING PLAN** MAY 22 1986

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			City Engineer		
A.C.E.-Design			Hydrology SECTION		
A.C.E.-Hydrology			Traffic		
			Water		

DRAWING NO. \_\_\_\_\_ MAP NO. **E 18-19** SHEET **5** OF \_\_\_\_\_





VICINITY MAP  
SCALE: 1" = 800'

**PROJECT BENCHMARK**

AN ACS BRASS TABLE STAMPED "1-F19A-1978", SET IN TOP OF A CONC. POST FLUSH WITH THE GROUND AT THE INTERSECTION OF ACADEMY RD. & TRUCHAS DR. N.E. THE STATION IS 70' WEST OF 1/2 OF TRUCHAS IN THE WESTERLY MEDIAN, 13.6' SOUTH OF THE MEDIAN CURB. ELEVATION: 5328.52 FT. (M.S.L.D.)

**LEGAL DESCRIPTION**  
TRACT A, ACADEMY ACRES  
ALBUQUERQUE, NEW MEXICO

**T.B.M.**

TOP OF CURB ELEVATION LOCATED AT THE N.E. CORNER OF THE PLANTER LOCATED NEAR THE N.W. CORNER OF BUILDING # 6759 AS SHOWN ON THE DRAWING BELOW.  
ELEVATION: 5321.42 FT. (M.S.L.D.)

**LEGEND**

- ⊕ EXISTING SPOT ELEVATION
- ⊕ PROPOSED SPOT ELEVATION
- PROPOSED FLOW LINE
- PROPOSED CONCRETE
- 23 PROPOSED CONTOUR LINE
- EXISTING BASIN BOUNDARY LINE
- TC TOP OF CURB
- FL FLOW LINE

**DRAINAGE PLAN**

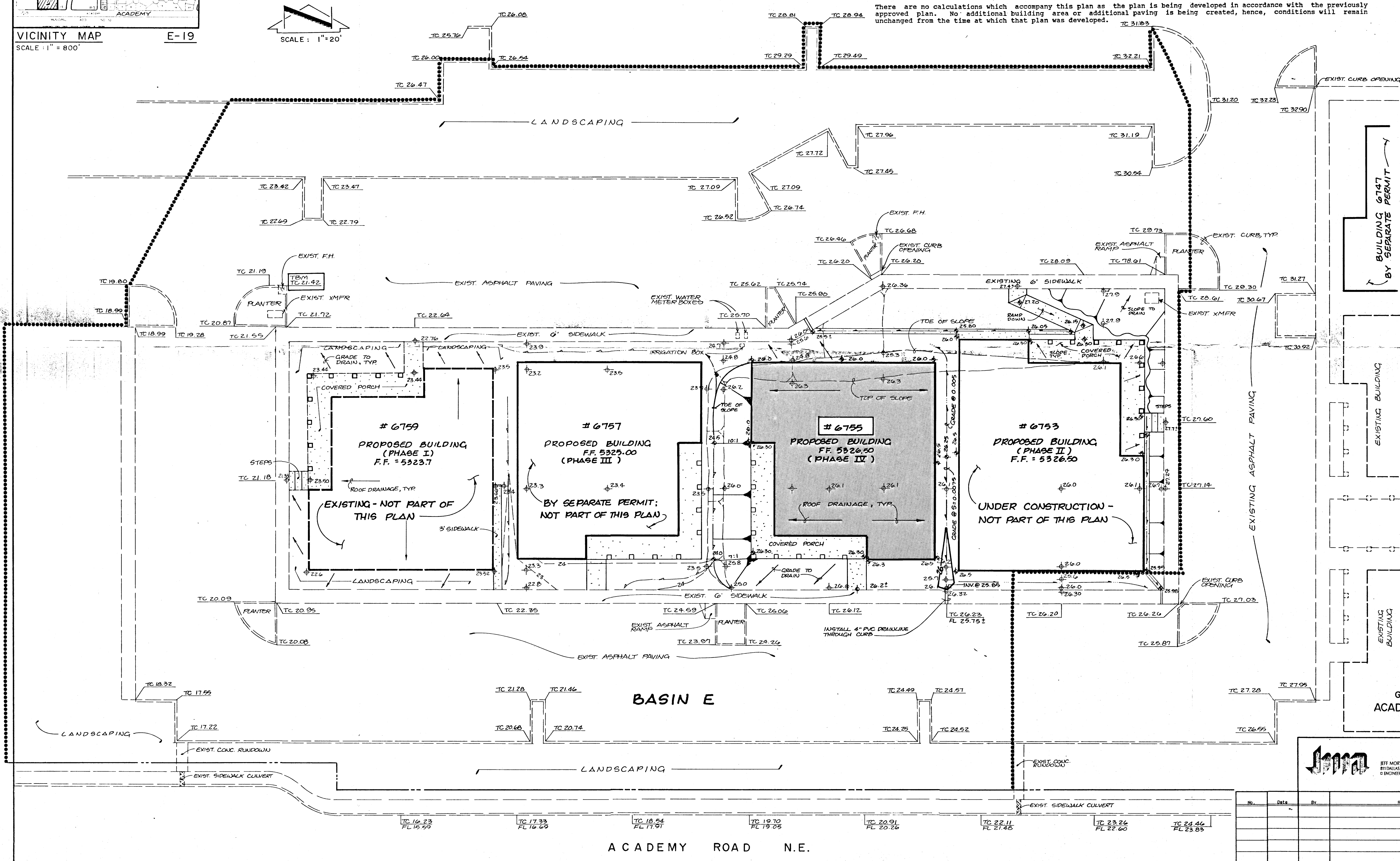
The following items concerning the Academy Office Park - Basin E, Building No. 6755 Drainage Plan are contained herein:

1. Vicinity Map
2. Grading Plan

As shown by the Vicinity Map, the site is located on the north side of Academy Road N.E., just west of the intersection with Truchas Drive N.E. This is an already developed site in the sense that the private infrastructure in the vicinity of the proposed building addition is complete. The adjacent sites to the north and east have been developed, predominantly residential. The Arroyo Del Oso Golf Course lies to the south of the site. Existing buildings and building sites lie immediately adjacent to the proposed improvements.

As shown by this plan, it is proposed to construct four buildings in a sequential fashion. This plan addresses that building which is to be constructed last. The building designation is 6755. All four buildings lie within Basin E as shown on the Master Grading and Drainage Plan prepared by DMJM (File E19-D17) and which was approved for rough grading on 12-13-85. This plan is in keeping with the previously approved plan with the exception that the original plan called for the construction of two large rectangular buildings. These are being replaced with four smaller buildings with approximately the same overall size. These buildings are being constructed one at a time with separate plans generated for each building permit. The proposed improvements will be constructed in accordance with the concept established by the previously approved drainage plan by DMJM. This plan calls for the discharge of runoff from the building sites onto the adjacent asphalt paving. This paving is in place as well as the concrete rundowns and sidewalk culverts into Academy Road N.E.

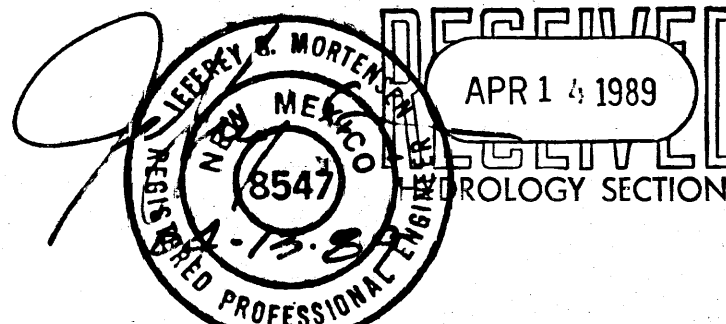
There are no calculations which accompany this plan as the plan is being developed in accordance with the previously approved plan. No additional building area or additional paving is being created, hence, conditions will remain unchanged from the time at which that plan was developed.



BUILDING 6747  
BY SEPARATE PERMIT

EXISTING BUILDING

EXISTING BUILDING

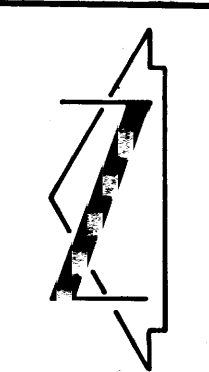


GRADING AND DRAINAGE PLAN  
ACADEMY OFFICE PARK - BASIN E  
BUILDING # 6755

DESIGN BY	J.G.M.
DRAWN BY	S.G.H.
APPROVED BY	J.G.M.
JOB NO.	870956
DATE	04/89
SHEET	1

ACADEMY ROAD N.E.





**PROJECT BENCHMARK**

AN ACS BRASS TABLET STAMPED "1-F19A-1978", SET IN TOP OF A CONC. POST FLUSH WITH THE GROUND AT THE INTERSECTION OF ACADEMY RD. & TRUCHAS DR. N.E. THE STATION IS TO WEST OF E. OF TRUCHAS IN THE WESTERLY MEDIAN, ± 13.6' SOUTH OF THE MEDIAN CURB. ELEVATION = 5332.52 FT. (M.S.L.D.)

**LEGAL DESCRIPTION**

TRACT A, ACADEMY ACRES ALBUQUERQUE, NEW MEXICO

**T.B.M.**

TOP OF CURB ELEVATION LOCATED AT THE S.E. CORNER OF THE PLANTER LOCATED NEAR THE N.E. CORNER OF BUILDING # 6747 AS SHOWN ON THE DRAWING BELOW. ELEVATION = 5334.64 FT. (M.S.L.D.)

**LEGEND**

- +— EXISTING SPOT ELEVATION
- +— PROPOSED SPOT ELEVATION
- +— PROPOSED FLOW LINE
- +— PROPOSED CONCRETE
- +— PROPOSED CONTOUR LINE
- +— EXISTING BASIN BOUNDARY LINE
- TC TOP OF CURB
- FL FLOW LINE

**DRAINAGE PLAN**

The following items concerning the Academy Office Park - Building No. 6747 Drainage Plan are contained hereon:  
1. Vicinity Map  
2. Grading Plan

As shown by the Vicinity Map, the site is located on the north side of Academy Road N.E., just west of the intersection with Truchas Drive N.E. This is an already developed site in the sense that the private infrastructure in the vicinity of the proposed building addition is complete. The adjacent sites to the north and east have been developed, predominantly residential. The Arroyo Del Oso Golf Course lies to the south of the site. Existing buildings and building sites lie immediately adjacent to the proposed improvements.

As shown by this plan, it is proposed to construct Buildings #6747. This plan addresses the construction of the final building of three at the southeast corner of the site. This building lies partly within Basin G and partly within Basin F as shown on the Master Grading and Drainage Plan prepared by DMJM (File E19-D17) and which was approved for rough grading on 12-13-85. This plan is in keeping with the previously approved plan. The proposed improvements will be for the discharge of runoff from the building sites onto the adjacent asphalt paving. This paving is in place as well as the concrete rundowns and sidewalk culverts into Academy Road N.E.

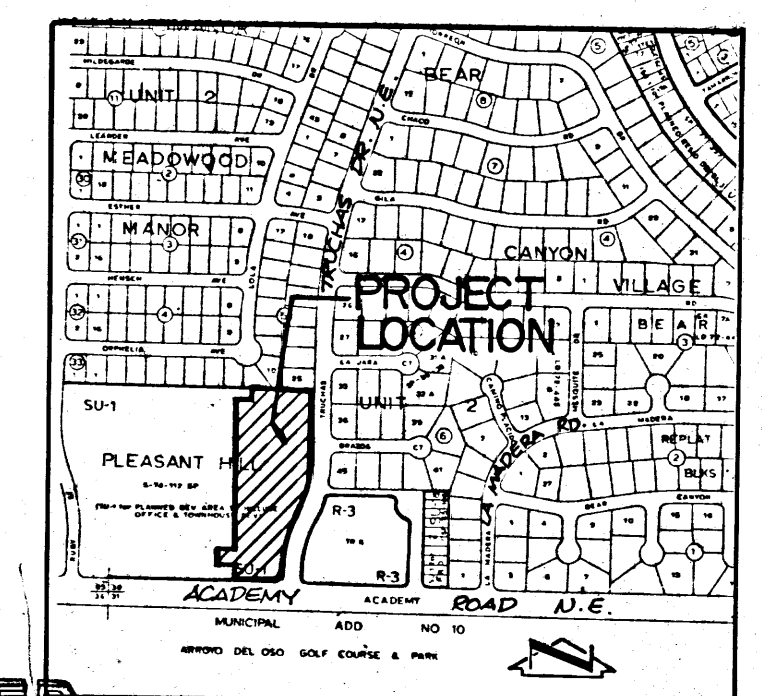
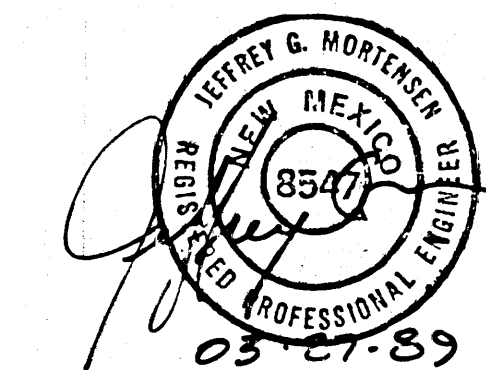
There are no calculations which accompany this plan as the plan is being developed in accordance with the previously approved plan. No additional building area or additional paving is being created, hence, conditions will remain unchanged from the time at which that plan was developed.

**CONSTRUCTION NOTES:**

1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 765-1234, FOR LOCATION OF EXISTING UTILITIES.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL CONDUITS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
4. ALL CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.
5. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES, MAKES NO REPRESENTATION OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INQUIRE ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES IN PLANNING AND CONDUCTING EXCAVATION. THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.

**EROSION CONTROL MEASURES**

1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BEAMS AT THE PROPERTY LINES AND WETTING THE SOIL TO KEEP IT FROM BLOWING.
2. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
3. THE CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" PRIOR TO BEGINNING CONSTRUCTION.

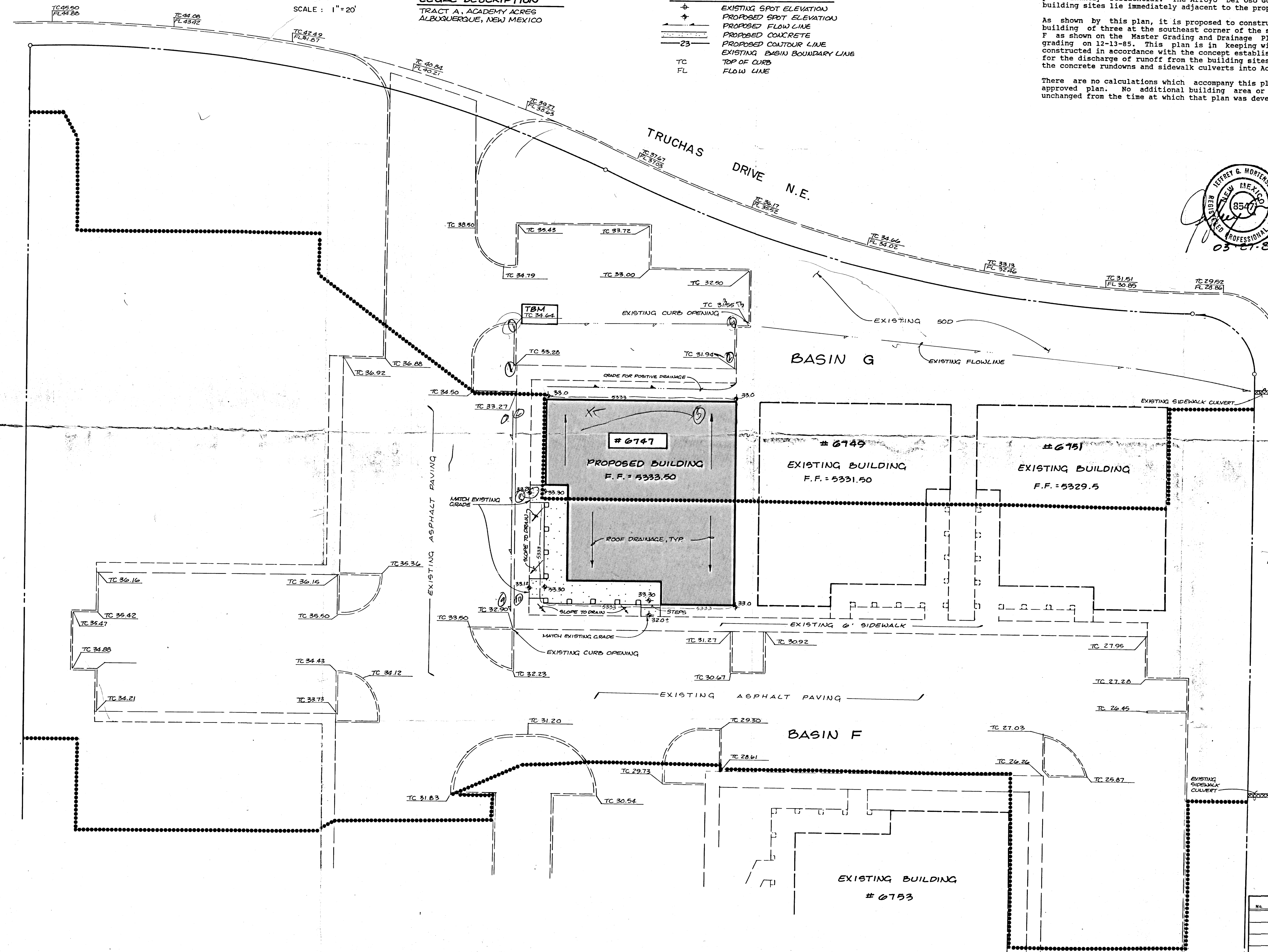


**GRADING AND DRAINAGE PLAN**  
ACADEMY OFFICE PARK - BASINS G & F  
BUILDING # 6747

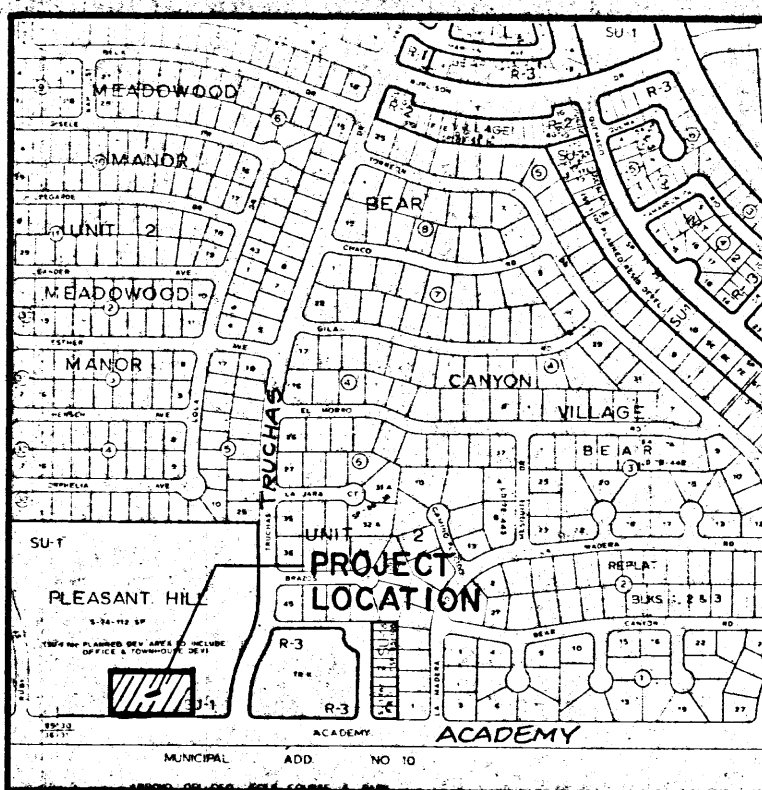
DESIGN BY J.G.M.  
DRAWN BY S.G.H.  
APPROVED BY J.G.M.

No.	Date	By	Revision

JOB NO. 870954  
DATE 03/89  
SHEET OF







**PROJECT BENCHMARK**  
 AN ACS BRASS TABLET STAMPED "1-F19A-1978", SET IN TOP OF A CONC. POST FLUSH WITH THE GROUND AT THE INTERSECTION OF ACADEMY RD. & TRUCHAS DR. N.E. THE STATION IS 70' WEST OF E OF TRUCHAS IN THE WESTERLY MEDIAN, ± 13.6' SOUTH OF THE MEDIAN CURB. ELEVATION: 5328.52 FT. (M.S.L.D.)

**LEGAL DESCRIPTION**  
 TRACT A, ACADEMY ACRES, ALBUQUERQUE, NEW MEXICO

**T.B.M.**  
 TOP OF CURB ELEVATION LOCATED AT THE N.E. CORNER OF THE PLANTER LOCATED NEAR THE N.W. CORNER OF BUILDING # 6759 AS SHOWN ON THE DRAWING BELOW.  
 ELEVATION: 5321.42 FT. (M.S.L.D.)

**LEGEND**

- ◆ EXISTING SPOT ELEVATION
- ◆ PROPOSED SPOT ELEVATION
- PROPOSED FLOW LINE
- PROPOSED CONCRETE
- PROPOSED CONTOUR LINE
- EXISTING BASIN BOUNDARY LINE
- TC TOP OF CURB
- FL FLOW LINE

**DRAINAGE PLAN**

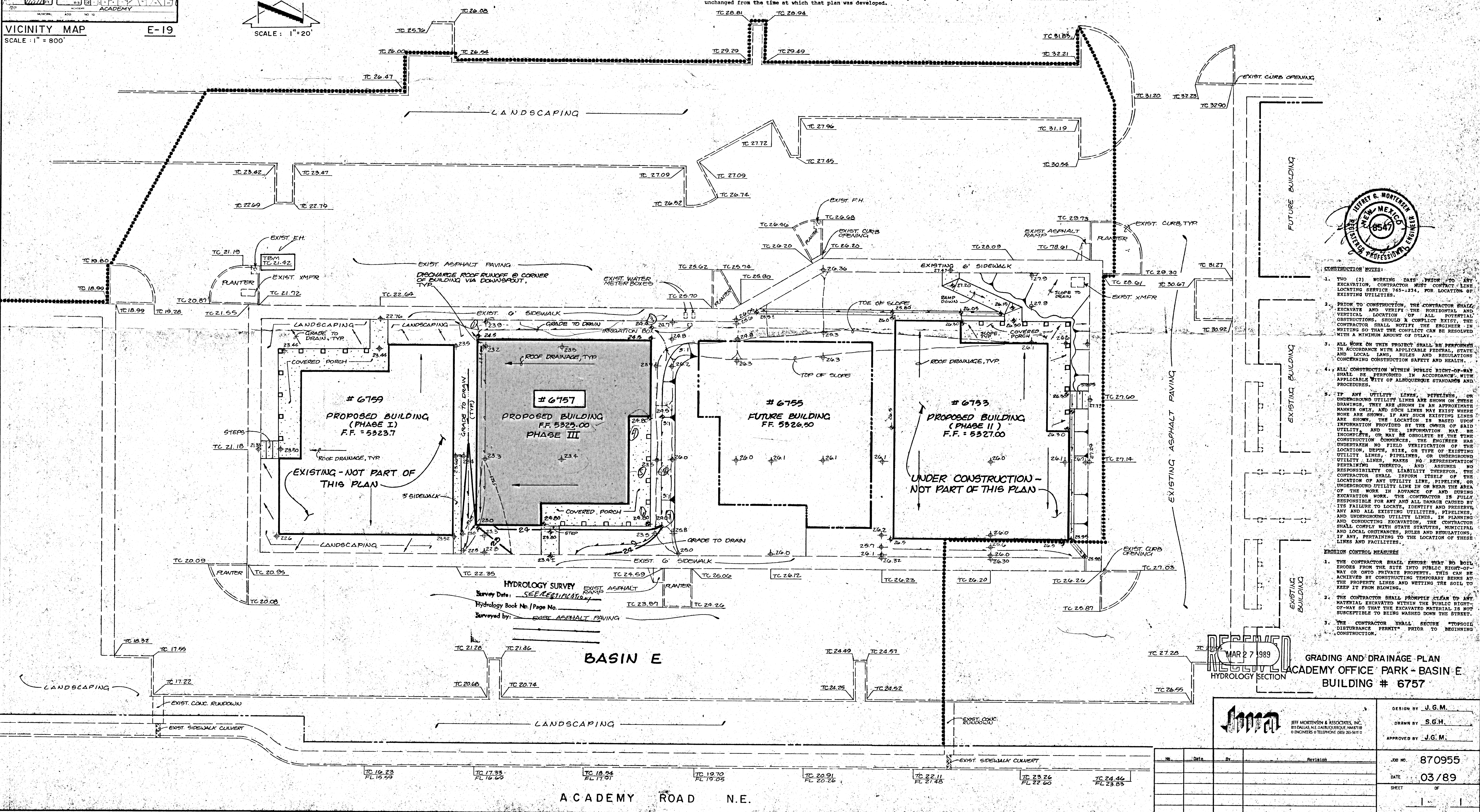
The following items concerning the Academy Office Park - Basin E, Building No. 6757 Drainage Plan are contained hereon:

- Vicinity Map
- Grading Plan

As shown by the Vicinity Map, the site is located on the north side of Academy Road N.E., just west of the intersection with Truchas Drive N.E. This is an already developed site in the sense that the private infrastructure in the vicinity of the proposed building addition is complete. The adjacent sites to the north and east have been developed, predominantly residential. The Arroyo Del Oso Golf Course lies to the south of the site. Existing buildings and building sites lie immediately adjacent to the proposed improvements.

As shown by this plan, it is proposed to construct four buildings in a sequential fashion. This plan addresses that building which is to be constructed third. The building designation is 6757. All four buildings lie within Basin E as shown on the Master Grading and Drainage Plan prepared by DMJM (7114 238-017) and which was approved for rough grading on 12-13-85. This plan is in keeping with the previously approved plan with the exception that the original plan called for the construction of two large rectangular buildings. These are being replaced with four smaller buildings with approximately the same overall site. These buildings will be constructed one at a time, therefore, separate plans will be generated for each building permit. The proposed improvements will be constructed in accordance with the concept established by the previously approved drainage plan by DMJM. This plan calls for the discharge of runoff from the building sites onto the adjacent asphalt paving. This paving is in place as well as the concrete runoffs and sidewalk culverts into Academy Road N.E.

There are no calculations which accompany this plan as the plan is being developed in accordance with the previously approved plan. No additional building area or additional paving is being created, hence, conditions will remain unchanged from the time at which that plan was developed.



- CONSTRUCTION NOTES:**
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 765-1234, FOR LOCATION OF EXISTING UTILITIES.
  - PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
  - ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
  - ALL CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.
  - IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES, MAKES NO REPRESENTATION PERTAINING THEREOF, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.

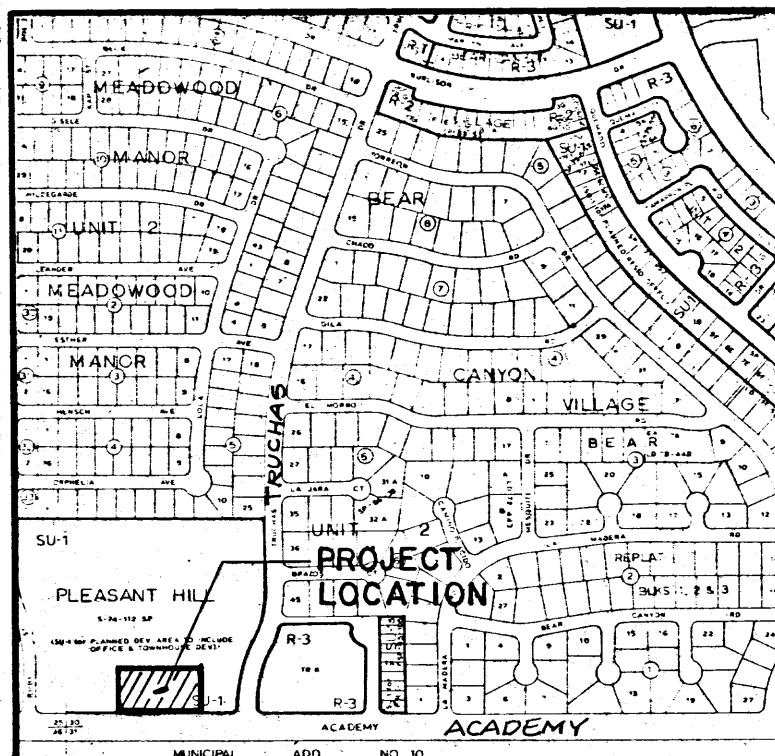
- EROSION CONTROL MEASURES**
- THE CONTRACTOR SHALL INSURE THAT NO SOIL PRODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BARRIERS AT THE PROPERTY LINES AND NETTING THE SOIL TO KEEP IT FROM BLOWING.
  - THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
  - THE CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" PRIOR TO BEGINNING CONSTRUCTION.

MAR 27 1989  
 GRADING AND DRAINAGE PLAN  
 ACADEMY OFFICE PARK - BASIN E  
 BUILDING # 6757  
 HYDROLOGY SECTION

DESIGN BY	J.G.M.
DRAWN BY	S.G.H.
APPROVED BY	J.G.M.
JOB NO.	870955
DATE	03/89
SHEET	OF

ACADEMY ROAD N.E.





**PROJECT BENCHMARK**  
 AN ACS BRASS TABLET STAMPED "I-1919-1978", SET IN TOP OF A CONC. POST FLUSH WITH THE GROUND AT THE INTERSECTION OF ACADEMY RD & TRUCHAS DR. N.E. THE STATION IS 70' WEST OF E OF TRUCHAS IN THE WESTERLY MEDIAN, ± 13.6' SOUTH OF THE MEDIAN CURB. ELEVATION: 5328.52 FT. (M.S.L.D.)

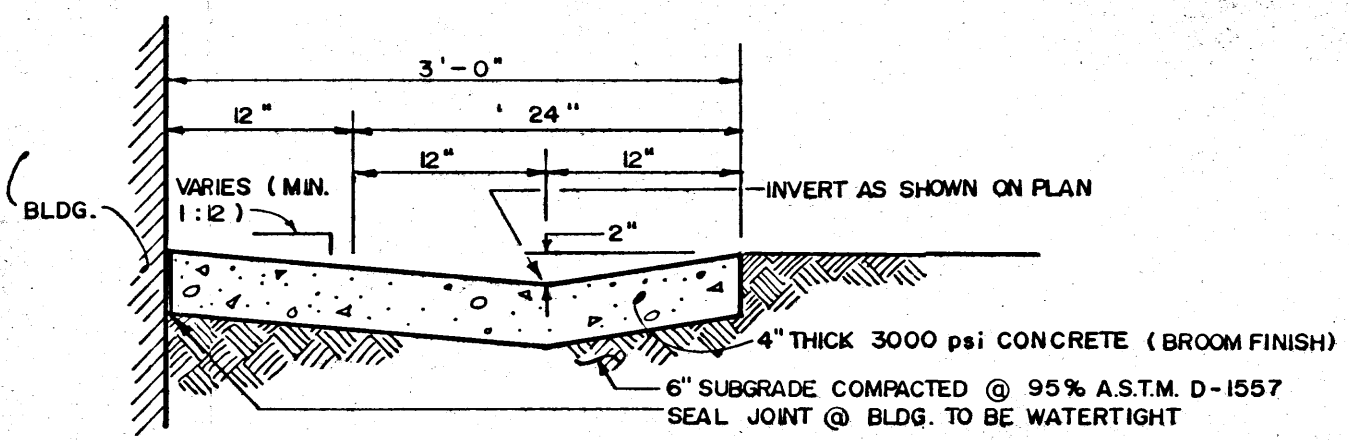
**LEGAL DESCRIPTION**  
 TRACT A, ACADEMY ACRES ALBUQUERQUE, NEW MEXICO

**T.B.M.**

TOP OF CURB ELEVATION LOCATED AT THE N.E. CORNER OF THE PLANTER LOCATED NEAR THE N.W. CORNER OF BUILDING # 6759 AS SHOWN ON THE DRAWING BELOW. ELEVATION = 5321.42 FT. (M.S.L.D.)

**LEGEND**

- ⊕ EXISTING SPOT ELEVATION
- ⊕ PROPOSED SPOT ELEVATION
- PROPOSED FLOW LINE
- PROPOSED CONCRETE
- 23- PROPOSED CONTOUR LINE
- ..... EXISTING BASIN BOUNDARY LINE
- TC TOP OF CURB
- FL FLOW LINE
- PROPOSED SIDE SLOPE



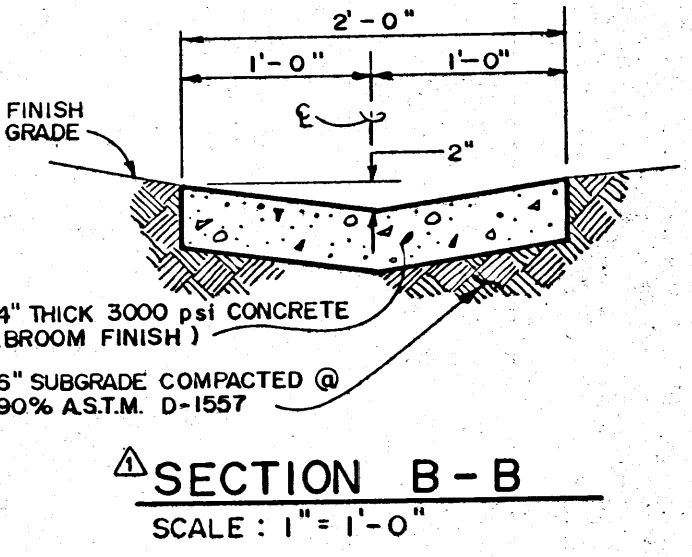
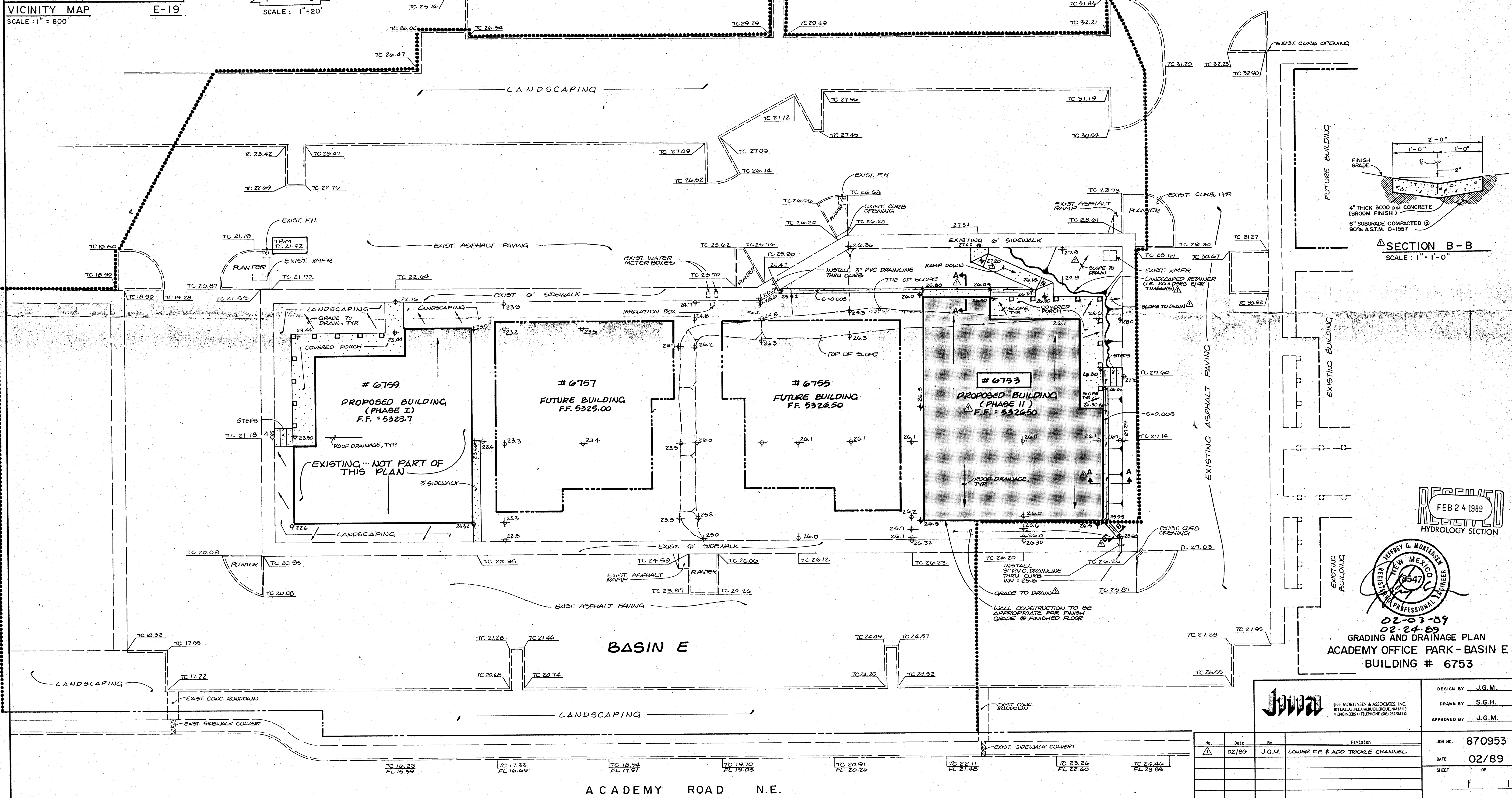
**SECTION A-A**  
 SCALE: 1" = 1'-0"

The following items concerning the Academy Office Park - Basin E, Building No. 6753 Drainage Plan are contained herein:  
 1. Vicinity Map  
 2. Grading Plan

As shown by the Vicinity Map, the site is located on the north side of Academy Road N.E., just west of the intersection with Truchas Drive N.E. This is an already developed site in the sense that the private infrastructure in the vicinity of the proposed building addition is complete. The adjacent sites to the north and east have been developed, predominantly residential. The Arroyo Del Oso Golf Course lies to the south of the site. Existing buildings and building sites lie immediately adjacent to the proposed improvements.

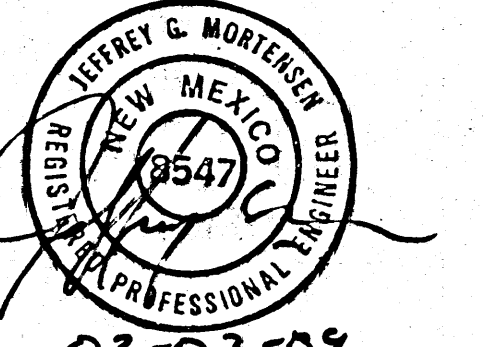
As shown by this plan, it is proposed to construct four buildings in a sequential fashion. This plan addresses that building which is to be constructed second. The building designation is 6753. All four buildings lie within Basin E as shown on the Master Grading and Drainage Plan prepared by DNJM (File E19-D17) and which was approved for rough grading on 12-13-85. This plan is in keeping with the previously approved plan with the exception that the original plan called for the construction of two large rectangular buildings. These are being replaced with four smaller buildings with approximately the same overall size. These buildings will be constructed one at a time, therefore, separate plans will be generated for each building permit. The proposed improvements will be constructed in accordance with the concept established by the previously approved drainage plan by DNJM. This plan calls for the discharge of runoff from the building sites onto the adjacent asphalt paving. This paving is in place as well as the concrete roundowns and sidewalk culverts into Academy Road N.E.

There are no calculations which accompany this plan as the plan is being developed in accordance with the previously approved plan. No additional building area or additional paving is being created, hence, conditions will remain unchanged from the time at which that plan was developed.



**SECTION B-B**  
 SCALE: 1" = 1'-0"

RECEIVED  
 FEB 24 1989  
 HYDROLOGY SECTION



02-03-89  
 02-24-89  
 GRADING AND DRAINAGE PLAN  
 ACADEMY OFFICE PARK - BASIN E  
 BUILDING # 6753



JEFF MORTENSEN & ASSOCIATES, INC.  
 8110 BULLIS N.E. ALBUQUERQUE, N.M. 87119  
 ENGINEERS & ARCHITECTS (SINCE 1960) 365-8411

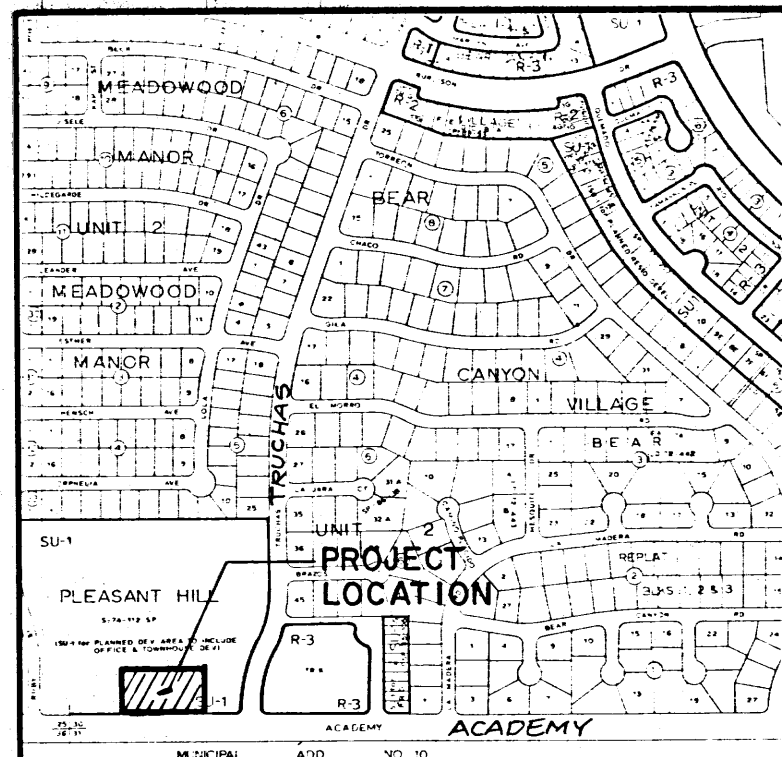
DESIGN BY J.G.M.  
 DRAWN BY S.G.H.  
 APPROVED BY J.G.M.

No.	Date	By	Revision
1	02/89	J.G.M.	LOWER F.F. & ADD TRICKLE CHANNEL

JOB NO. 870953  
 DATE 02/89  
 SHEET 1 OF 1

ACADEMY ROAD N.E.





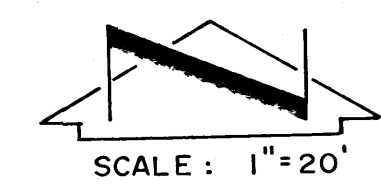
VICINITY MAP E-19  
SCALE: 1" = 800'

**PROJECT BENCHMARK**  
AN ACS BRASS TABLET STAMPED "1-F19A-1978", SET IN TOP OF A CONC. POST FLUSH WITH THE GROUND AT THE INTERSECTION OF ACADEMY RD. & TRUCHAS DR. N.E. THE STATION IS 70' WEST OF C OF TRUCHAS IN THE WESTERLY MEDIAN, 13.6' SOUTH OF THE MEDIAN CURB. ELEVATION: 5328.62 FT. (M.S.L.D.)

**LEGAL DESCRIPTION**  
TRACT A, ACADEMY ACRES ALBUQUERQUE, NEW MEXICO

**T.B.M.**  
TOP OF CURB ELEVATION LOCATED AT THE N.E. CORNER OF THE PLANTER LOCATED NEAR THE N.W. CORNER OF BUILDING # 6759 AS SHOWN ON THE DRAWING BELOW.  
ELEVATION: 5321.42 FT. (M.S.L.D.)

**LEGEND**  
 - Existing Spot Elevation  
 - Proposed Spot Elevation  
 - Proposed Flow Line  
 - Proposed Concrete  
 - Proposed Contour Line  
 - Existing Basin Boundary Line  
 - TC: Top of Curb  
 - FL: Flow Line



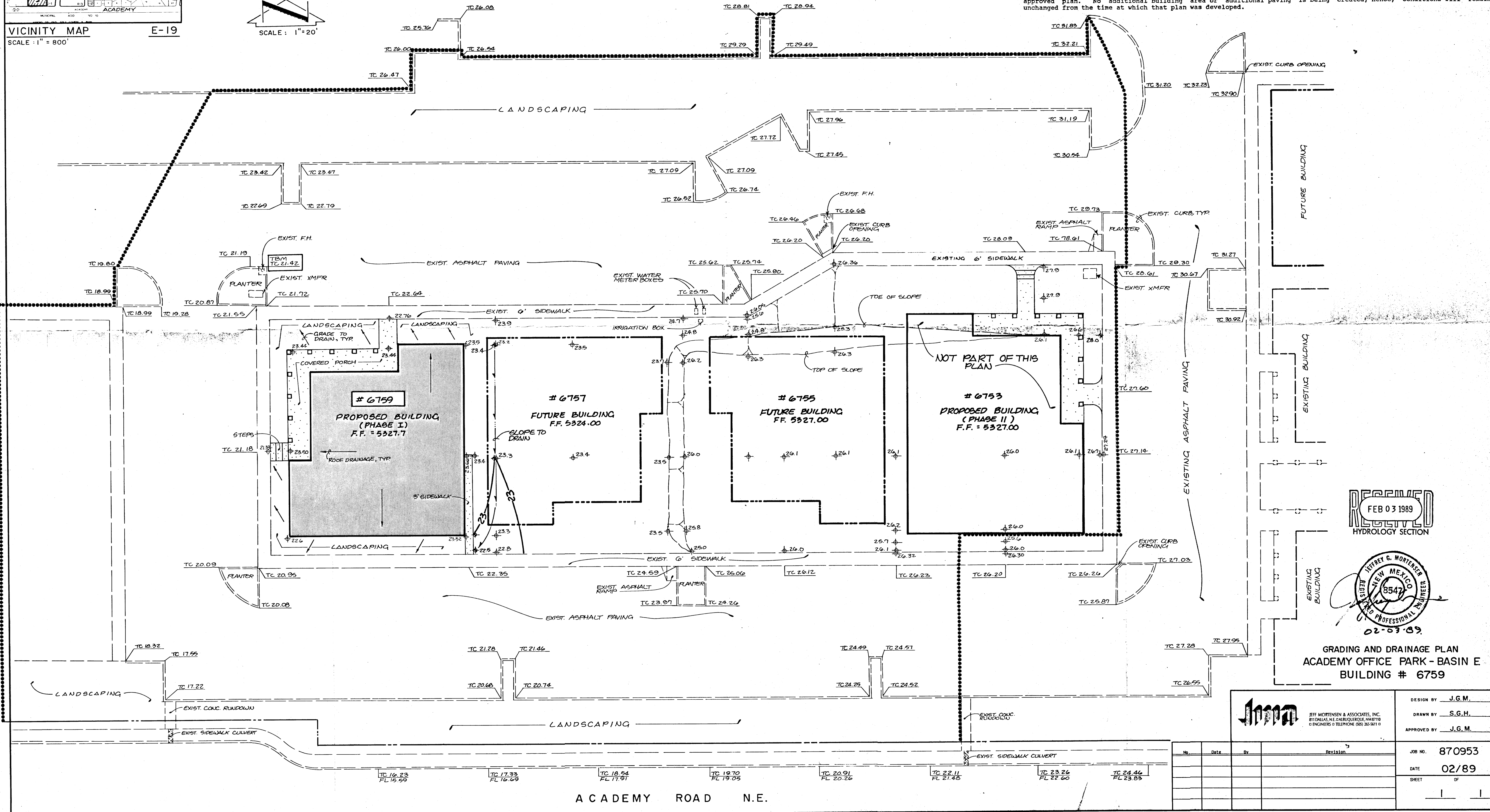
SCALE: 1" = 20'

**DRAINAGE PLAN**  
The following items concerning the Academy Office Park - Basin E, Building No. 6759 Drainage Plan are contained hereon:  
1. Vicinity Map  
2. Grading Plan

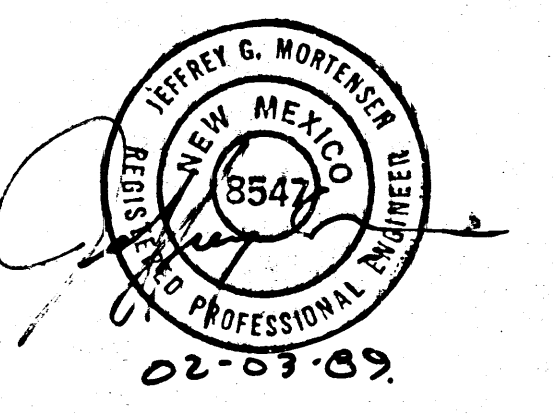
As shown by the Vicinity Map, the site is located on the north side of Academy Road N.E., just west of the intersection with Truchas Drive N.E. This is an already developed site in the sense that the private infrastructure in the vicinity of the proposed building addition is complete. The adjacent sites to the north and east have been developed, predominantly residential. The Arroyo Del Oso Golf Course lies to the south of the site. Existing buildings and building sites lie immediately adjacent to the proposed improvements.

As shown by this plan, it is proposed to construct four buildings in a sequential fashion. This plan addresses that building which is to be constructed first. The building designation is 6759. All four buildings lie within Basin E as shown on the Master Grading and Drainage Plan prepared by DMJM (File E19-D17) and which was approved for rough grading on 12-13-85. This plan is in keeping with the previously approved plan with the exception that the original plan called for the construction of two large rectangular buildings. These are being replaced with four smaller buildings with approximately the same overall size. These buildings will be constructed one at a time, therefore, separate plans will be generated for each building permit. The proposed improvements will be constructed in accordance with the concept established by the previously approved drainage plan by DMJM. This plan calls for the discharge of runoff from the building sites onto the adjacent asphalt paving. This paving is in place as well as the concrete rundowns and sidewalk culverts into Academy Road N.E.

There are no calculations which accompany this plan as the plan is being developed in accordance with the previously approved plan. No additional building area or additional paving is being created, hence, conditions will remain unchanged from the time at which that plan was developed.



RECEIVED  
FEB 03 1989  
HYDROLOGY SECTION



GRADING AND DRAINAGE PLAN  
ACADEMY OFFICE PARK - BASIN E  
BUILDING # 6759



JEFF MORTENSEN & ASSOCIATES, INC.  
8700 ALASKA N.W. SUITE 1000 DENVER, CO 80218  
ENGINEERS & ARCHITECTS TELEPHONE (303) 265-5611

DESIGN BY J.G.M.  
DRAWN BY S.G.H.  
APPROVED BY J.G.M.

JOB NO. 870953  
DATE 02/89  
SHEET 1 OF 1

No.	Date	By	Revision

ACADEMY ROAD N.E.