

(M-10)

SCALE:
1"=40'

ENGINEER'S CERTIFICATION

I, Fred C. Arfman, licensed under the laws of the State of New Mexico, do hereby certify that this project and its proposed retaining walls were designed in accordance with the standards and requirements shown herein as field verified by Aldrich Land Surveying on March 2, 1999, in accordance with the "New Mexico Engineering and Surveying Act", Section 61-23-1 through 61-23-32 NMSD (1978).

Retaining walls were required on the approved Final Grading Plan, dated May 28, 1998 and were constructed as a part of the Desert Flower Subdivision, Unit Three

Fred C. Arfman
Fred C. Arfman, NYPE No. 7322

7322
FRED C. ARFMAN
N.M.E.S. No. 7322
EXPIRATION DATE 12/31/00
DATE 7-26-99

ENGINEER'S CERTIFICATION

I, Fred C. Arfman, licensed under the laws of the State of New Mexico, do hereby certify that this project was constructed in substantial compliance with those grades and improvements shown herein as field verified by Aldrich Land Surveying on March 2, 1999, in accordance with the "New Mexico Engineering and Surveying Act", Section 61-23-1 through 61-23-32 NMSD (1978).

ENGINEER'S SEAL

DATE _____

State _____


86-82-50

FRED C. ARFMAN
STATE OF
7322
NEW MEXICO
REGISTERED PROFESSIONAL ENGINEER

LINE TABLE		
LINE	LENGTH	BEARING
L1	20.17	N 0°30'08" E
L2	25.38	S 18°52'09" W
L3	2.66	S 65°23'58" E
L4	46.04	S 87°53'35" E

- ## NOTES

1. LEGAL DESCRIPTION: A PORTION OF TRACT B2, DESERT FLOWER SUBDIVISION, filed March 11, 1998, Vol. 98C, Follo 68.
2. BENCHMARK: ACS MONUMENT "1-M10"
ELEV = 5079.88
3. ENGINEER: ISAACSON & ARFMAN, P.A.
128 Monroe Street NE, Albuquerque, NM
Attn: Fred Arfman
4. SURVEYOR: ALS, Inc.
P.O. Box 30701, Albuquerque, NM
Attn: Tim Aldrich
5. FLOOD HAZARD STATEMENT: No part of this development is affected nor contributed to flood and hazard area as determined by Panel No. (35001C03360-3371) of the September 20, 1996 Edition of the F.E.M.A. Maps.
6. SOILS: From the SCS Soil Survey of Bernalillo County site soils are identified as Blueprint Lomoy Fine Sands which are classified as hydrologic group "A" soils.

 **ISAACSON & ARFMAN, P.A.**
Consulting Engineering Associates
128 Monros Street N.E.
Albuquerque New Mexico

009GRD.DWGonw VIEW: 1 5/28/98

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: DESERT FLOWER SUBDIVISION--UNIT THREE
GRADING & DRAINAGE PLAN

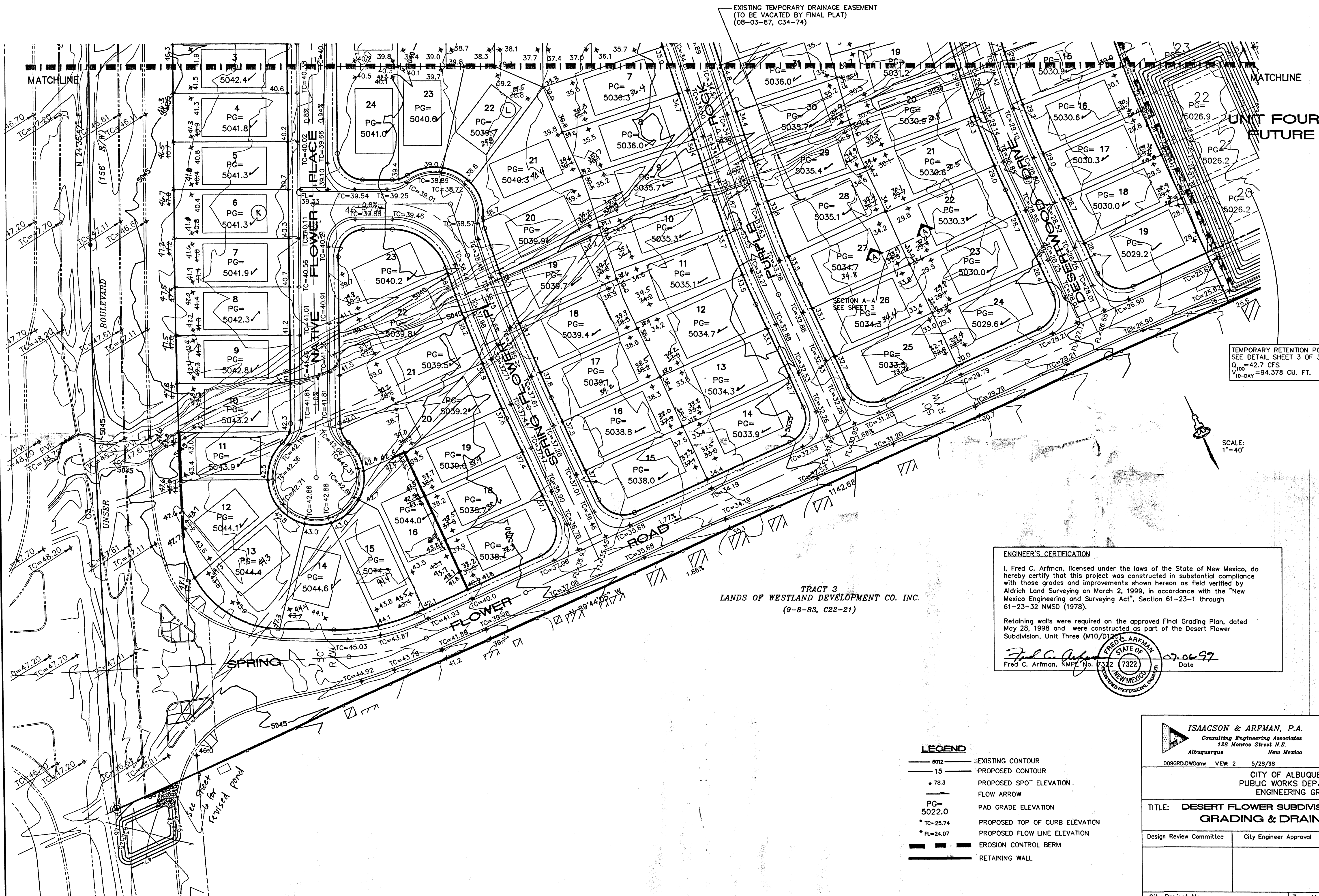
Design Review Committee	City Engineer Approval	date	Mo./Day/Yr.	Mo./Day/Yr.

RECEIVED
JUL 06 1999

City-Project NO. SECTION
5739.83

Zone Map No.
M-10

Sheet **1** Of **3**



EXISTING TEMPORARY DRAINAGE EASEMENT
(TO BE VACATED BY FINAL PLAT)
(08-03-87, C34-74)

MATCHLINE
UNIT FOUR
FUTURE
MATCHLINE

TEMPORARY RETENTION POND
SEE DETAIL SHEET 3 OF 3
Q = 42.7 CFS
100' DAY = 94,378 CU. FT.

SCALE:
1"=40'

TRACT 3
LANDS OF WESTLAND DEVELOPMENT CO. INC.
(8-8-83, C22-21)

ENGINEER'S CERTIFICATION
I, Fred C. Arfman, licensed under the laws of the State of New Mexico, do hereby certify that this project was constructed in substantial compliance with those grades and improvements shown hereon as field verified by Aldrich Land Surveying on March 2, 1999, in accordance with the "New Mexico Engineering and Surveying Act", Section 61-23-1 through 61-23-32 NMSD (1978).
Retaining walls were required on the approved Final Grading Plan, dated May 28, 1998 and were constructed as part of the Desert Flower Subdivision, Unit Three (M10/D12).
Fred C. Arfman
Fred C. Arfman, NMPE No. 7322 Date 07.06.99

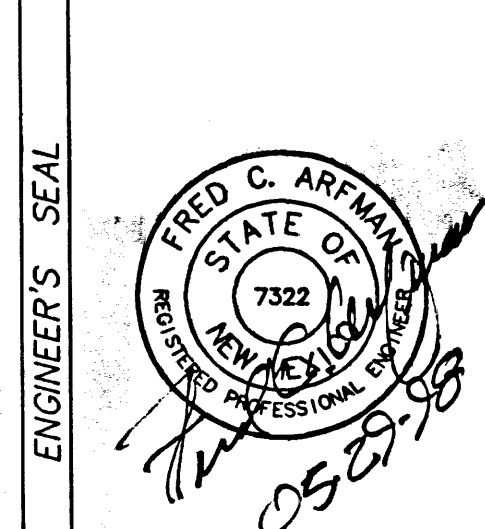
- LEGEND**
- 5012 EXISTING CONTOUR
 - 15 PROPOSED CONTOUR
 - 78.3 PROPOSED SPOT ELEVATION
 - FLOW ARROW FLOW ARROW
 - PG= 5022.0 PAD GRADE ELEVATION
 - * TC=25.74 PROPOSED TOP OF CURB ELEVATION
 - * FL=24.07 PROPOSED FLOW LINE ELEVATION
 - EROSION CONTROL BERM
 - RETAINING WALL

ISAACSON & ARFMAN, P.A. Consulting Engineering Associates 128 Monroe Street N.E. Albuquerque New Mexico	
DESIGN REVIEW COMMITTEE	
CITY ENGINEER APPROVAL	
TITLE: DESERT FLOWER SUBDIVISION--UNIT THREE GRADING & DRAINAGE PLAN	
City Project No. 5739.83	Zone Map No. M-10
Sheet 2	Of 3

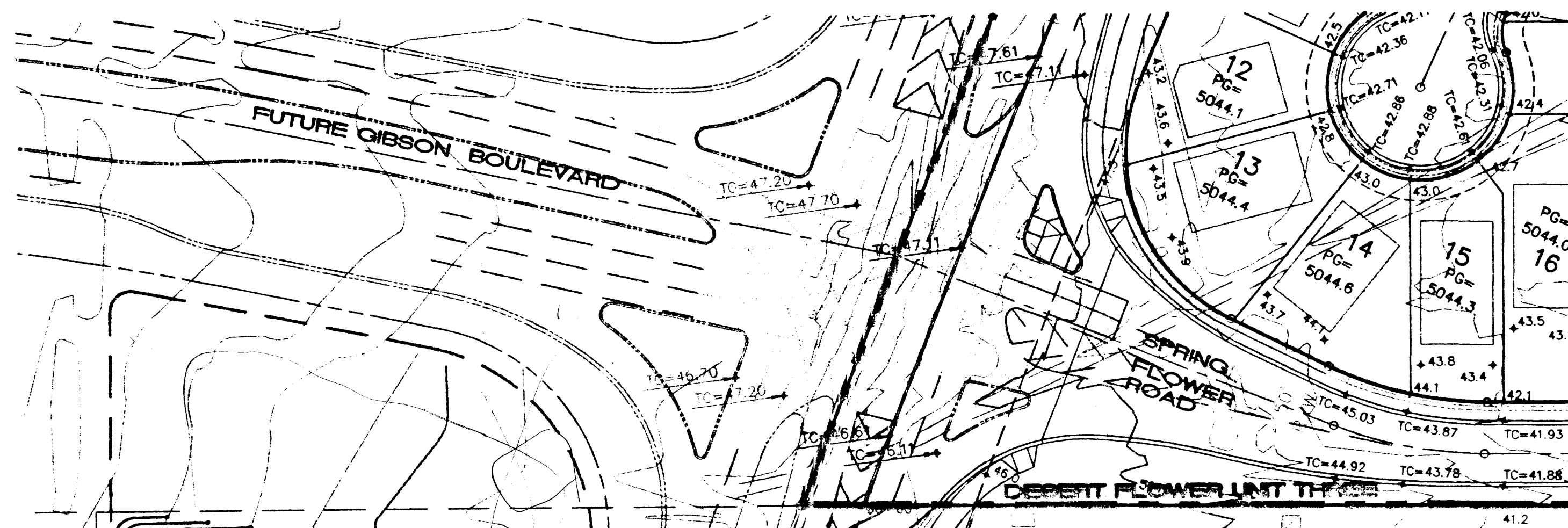
AS-BUILT INFORMATION	
CONTRACTOR	DATE
WORK STARTED BY	DATE
FIELD ACCEPTANCE BY	DATE
REVISIONS BY	DATE
CORRECTED BY	DATE
MICRO-FILM INFORMATION	
RECORDED BY	DATE
NO.	

BENCH MARKS	
ACS MONUMENT "1-M10" LOCATED AT THE SOUTHEAST CORNER OF SAGE RD. & UNSER BLVD.	DATE
ELEV. = 5079.88	DATE
TBM: RIM OF SOUTHWESTERLY MANHOLE AT SAPPHIRE ST. & UNSER BLVD.	DATE
ELEV. = 5035.84	DATE

SURVEY INFORMATION	
FIELD NOTES	DATE
1 ALS	5/98



ENGINEER'S SEAL	
BY	DATE
REVISIONS	DATE
DESIGN	DATE
DATE	5/98
DRAWN BY	DATE
CHECKED BY	DATE



TEMPORARY
DETENTION
POND

UNSER BOULEVARD

3:1 MAX SIDESLOPES

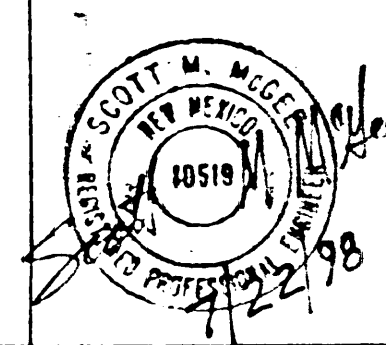
TYPE 'B'
RIPRAP
TYP.

DISCHARGE	STORAGE	ELEVATION
0	0	39
2.89	0.685	40
39.90	1.44	41
48.68	2.26	42
131.85	3.17	43
142.75	3.66	43.5

LEGEND

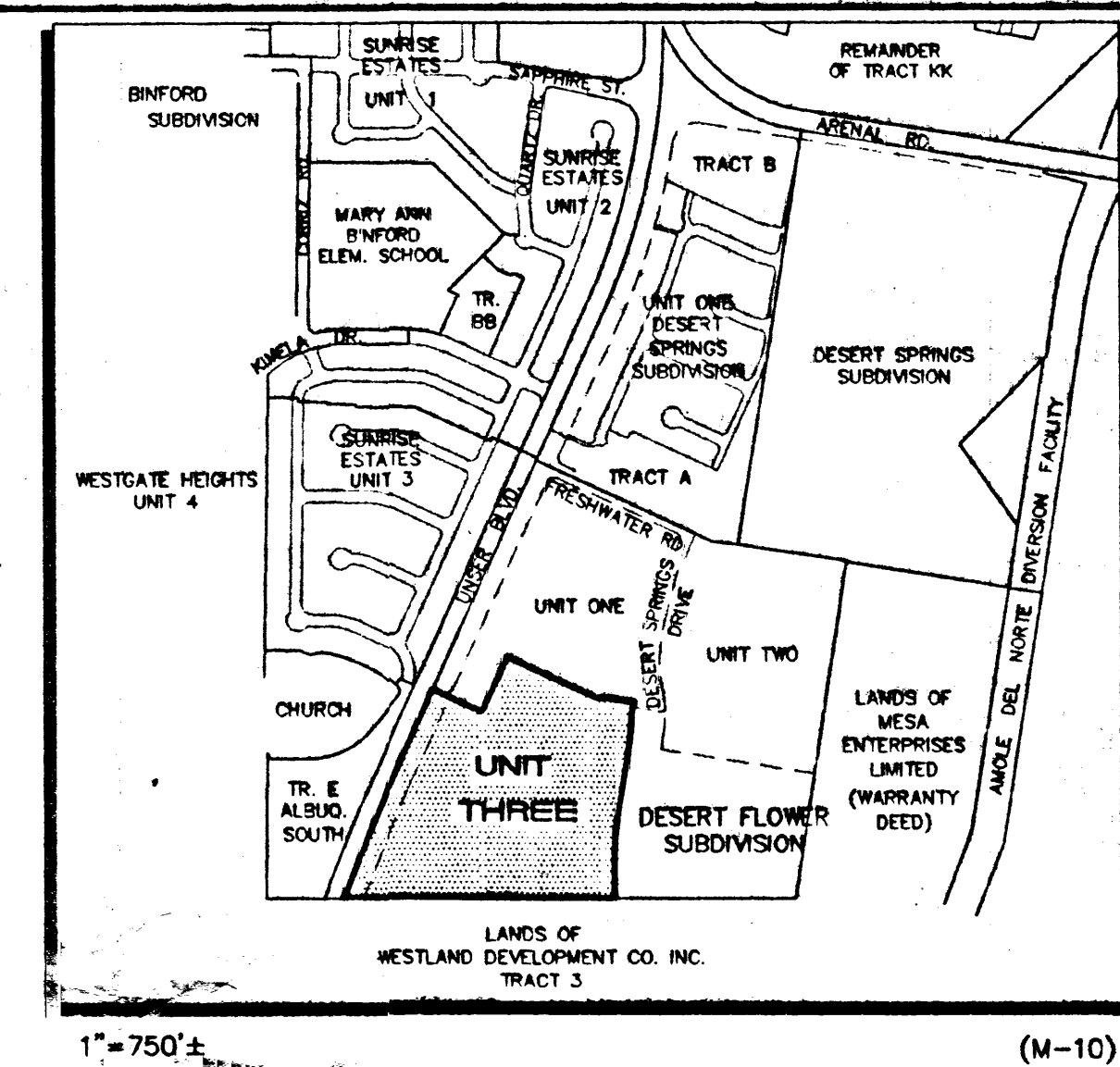
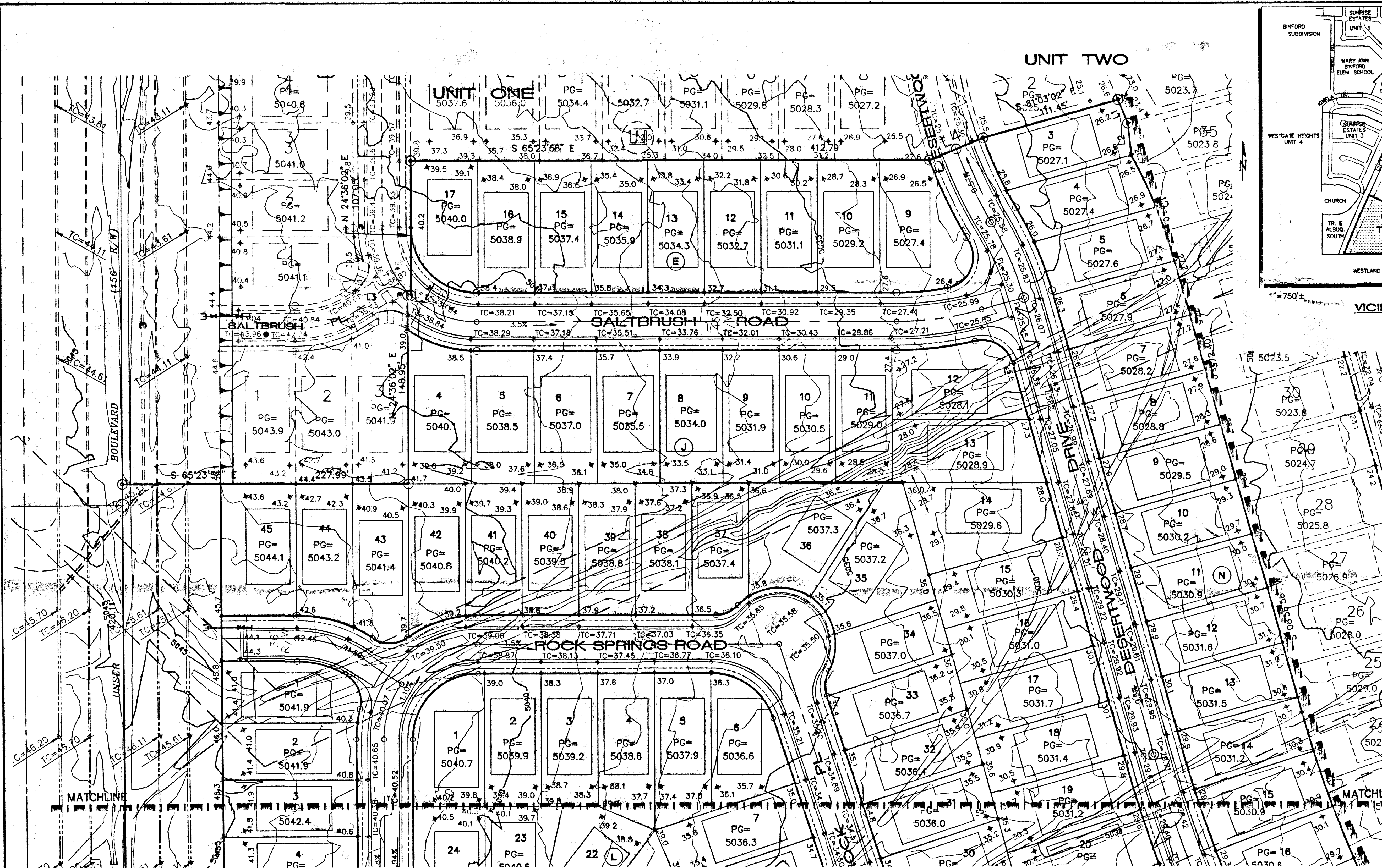
- RIGHT-OF-WAY LINE
- PHASE LINE
- FUTURE POND LIMITS
- EXISTING CONTOUR
- PROPOSED CONTOUR

DESERT FLOWER SUBDIVISION
TEMPORARY DETENTION POND



ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque New Mexico

009EXH6.DWGems 07/21/98



VICINITY MAP

SCALE: 1"=40'

CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	86.83	373.00	131°18'23"
C2	137.36	906.26	08°41'03"
C3	526.81	7717.46	03°54'40"

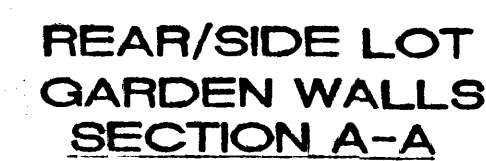
LINE TABLE		
LINE	LENGTH	Bearing
L1	20.17	N 01°30'08" E
L2	25.36	S 10°20'09" W
L3	2.66	S 82°11'59" E
L4	46.04	S 87°53'35" E

- LEGEND**
- EXISTING CONTOUR
 - PROPOSED CONTOUR
 - PROPOSED SPOT ELEVATION
 - FLOW ARROW
 - PAD GRADE ELEVATION
 - PROPOSED TOP OF CURB ELEVATION
 - PROPOSED FLOW LINE ELEVATION
 - EROSION CONTROL BERM
 - RETAINING WALL

- NOTES**
- LEGAL DESCRIPTION: A PORTION OF TRACT B2, DESERT FLOWER SUBDIVISION, filed March 11, 1998, Vol. 98C, Folio 66.
 - BENCHMARK: ACS MONUMENT "1-M10" LOCATED AT THE SOUTHEAST CORNER OF SAGE RD. & UNSER BLVD. ELEV = 5079.88
 - ENGINEER: ISAACSON & ARFMAN, P.A. 128 Monroe Street NE, Albuquerque, NM Attn: Fred Arfman
 - SURVEYOR: ALS, Inc. P.O. Box 20701, Albuquerque, NM Attn: Tim Aldrich
 - FLOOD HAZARD STATEMENT: No part of this development is affected nor contributes to a flood hazard area as determined by Panel No. (35001C03360-3371) of the September 20, 1996 Edition of the F.E.M.A. Maps.
 - SOILS: From the SCS Soil Survey of Bernalillo County all soils are identified as Bluepoint Lomay Fine Sands which are classified as hydrologic group "A" soils.

ISAACSON & ARFMAN, P.A. Consulting Engineering Associates 128 Monroe Street N.E. Albuquerque, New Mexico 08090.DWG Date: 5/28/98	
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP	
TITLE: DESERT FLOWER SUBDIVISION-UNIT THREE GRADING & DRAINAGE PLAN	
Design Review Committee	City Engineer Approval
City Project No. 5739.83	Zone Map No. M-10
Sheet 1	Of 3

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DATE	ACCS MONUMENT "1-M10" LOCATED AT THE SOUTHEAST CORNER OF SAGE RD. & UNSER BLVD.	DATE	FIELD NOTES	DATE	SEAL	DATE
WORK STATIONED BY	DATE			1	5/98		
FIELD ACCEPTANCE BY	DATE						
FIELD CORRECTION BY	DATE						
RECORDING BY	DATE						
MICRO-FILM INFORMATION		REVISIONS		DESIGN		DATE	
DATE		NO.	DATE	BY	DATE	DATE	DATE
			5/98		5/98	5/98	5/98



1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO THE PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING EROSION CONTROL BERMS (AS DETAILED BELOW) AS SHOWN ON THE PLAN AND WETTING THE SOIL TO KEEP IT FROM BLOWING.
2. THE CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" FROM THE CITY ENVIRONMENTAL HEALTH DEPARTMENT PRIOR TO BEGINNING CONSTRUCTION. AN EXCAVATION PERMIT IS REQUIRED FOR ALL WORK WITHIN PUBLIC RIGHT-OF-WAY.
3. SEE GRADING NOTES.




ELEV (FT)	STORAGE (AC-FT)
18	0
19	.21
20	.46
21	.74
22	1.05
23	1.41
24	1.82
24.9	2.21

$$V_{ACTUAL} = 2.21 \text{ AC-FT}$$

1. ALL TRASH, DEBRIS, & SURFACE VEGETATION SHALL BE CLEARED AND LEGALLY DISPOSED OFFSITE.
2. ALL SUBGRADE AND FILL SHALL BE COMPACTED TO A MINIMUM OF 90% ASTM D-1557.
3. EXCAVATION IS UNCLASSIFIED AND INCLUDES EXCAVATION TO SUBGRADE ELEVATIONS INDICATED, REGARDLESS OF CHARACTER OF MATERIALS ENCOUNTERED.
4. CONFORM TO ELEVATIONS AND DIMENSIONS SHOWN ON PLANS WITHIN A TOLERANCE OF 0.3% FEET.
5. SCARIFY AND COMPACT SUBGRADE FOR FILLS. PLACE FILL MATERIALS IN LAYERS NOT MORE THAN 8" IN LOOSE DEPTH. MOISTEN AS NECESSARY TO PROVIDE OPTIMUM MOISTURE (+/-) CONTENT.
6. UNIFORMLY GRADE AREAS WITHIN LIMITS OF GRADING AS SHOWN ON PLAN. SMOOTH FINISHED SURFACE WITHIN SPECIFIED TOLERANCE. COMPACT WITH UNIFORM SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE INDICATED.
7. MAXIMUM SLOPES SHALL BE 3:1; MINIMUM SLOPES SHALL BE 1%.
8. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM, 260-1990, FOR LOCATION OF EXISTING UTILITIES.
9. 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. THEREFORE, IT MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS CONDUCTED ONLY A PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE COMPLETE. THEREFORE, MAKES NO REPRESENTATION PERTAINING THEREIN. THE ENGINEER DOES NOT ASSUME NO RESPONSIBILITY OR LIABILITY THEREFORE. 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. BY INITIATING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH ALL STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
10. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT ERODED AND WASHED DOWN THE STREET.
11. OWNER WILL PROVIDE SOIL TESTING AND INSPECTION SERVICES DURING EARTHWORK OPERATIONS. ALLOW TESTING SERVICE TO INSPECT AND APPROVE COMPACT SUBGRADES AND FILL LAYERS BEFORE FURTHER CONSTRUCTION WORK IS DONE. SHALL COMPACTION TESTS INDICATE INADEQUATE DENSITY, CONTRACTOR SHALL PROVIDE ADDITIONAL COMPACTION AND TESTING AT NO ADDITIONAL EXPENSE.
12. OWNER HAS ESTABLISHED SUBDIVISION BOUNDARY CORNERS. CONTRACTOR SHALL PROVIDE ALL OTHER CONSTRUCTION STAKING INCLUDING TRACT CORNERS. CONTRACTOR SHALL LOCATE AND PRESERVE ALL BOUNDARY CORNERS AND REPLACE ANY LOST OR DISTURBED CORNERS.
13. ISAACSON & ARFMAN, P.A. (THE ENGINEER) HAS PREPARED THIS GRADING PLAN TO ESTABLISH FINAL SURFACE GRADES FOR BOTH THE PROPOSED INDIVIDUAL RESIDENTIAL LOTS AND THE PUBLIC RIGHTS-OF-WAY.
14. THE EARTHWORK CONTRACTOR (CONTRACTOR) IS REQUIRED TO REVIEW THE FOLLOWING: GEOTECHNICAL INVESTIGATION FOR UNSER BOULEVARD ADJACENT TO HAEGELIN TRACT F, PREPARED FOR BOKAY CONSTRUCTION, INC., MAY 1, 1997, AND GEOTECHNICAL INVESTIGATION FOR HAEGELIN TRACT F, PREPARED FOR CURB, INC., MARCH 17, 1997. COPIES OF THIS DOCUMENT MAY BE REVIEWED AT THE OFFICE OF ISAACSON & ARFMAN, P.A., 128 MONROE STREET NE, ALBUQUERQUE, NEW MEXICO, 87102. (505) 243-8928. THE EARTHWORK CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND REVIEWING ALL OF ALL RECOMMENDATIONS CONTAINED IN THESE STUDIES.

SURVEY INFORMATION		BENCH MARKS	AS-BUILT INFORMATION	
FIELD NOTES	CONTRACTOR		WORK STARTED BY	DATE
1 ALS	5/96	ACS MONUMENT "11-M10" LOCATED AT THE SOUTHEAST CORNER OF SAGE RD. & UNSER BLVD.	WORK COMPLETED BY	DATE
		ELEV. = 5079.88	FIELD REVISIONS BY	DATE
			CORRECTED BY	DATE
		TBM: RIM OF SOUTHWESTERLY MANHOLE AT SAPHIRE ST. & UNSER BLVD.	MICRO-FILM INFORMATION	
		ELEV. = 5035.94	RECORDED BY	DATE
			NO.	

REVISIONS			
NO.	DATE	REMARKS	BY
DESIGN			
DESIGNED BY	MJC	DATE	5/98
DRAWN BY	ANW	DATE	5/98
CHECKED BY	FCA	DATE	5/98

 **ISAACSON & ARFMAN, P.A.**
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque New Mexico

930GRDU2.CWGnw VIEW: 3 5/28/98

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: DESERT FLOWER SUBDIVISION--UNIT THREE
GRADING & DRAINAGE DETAILS

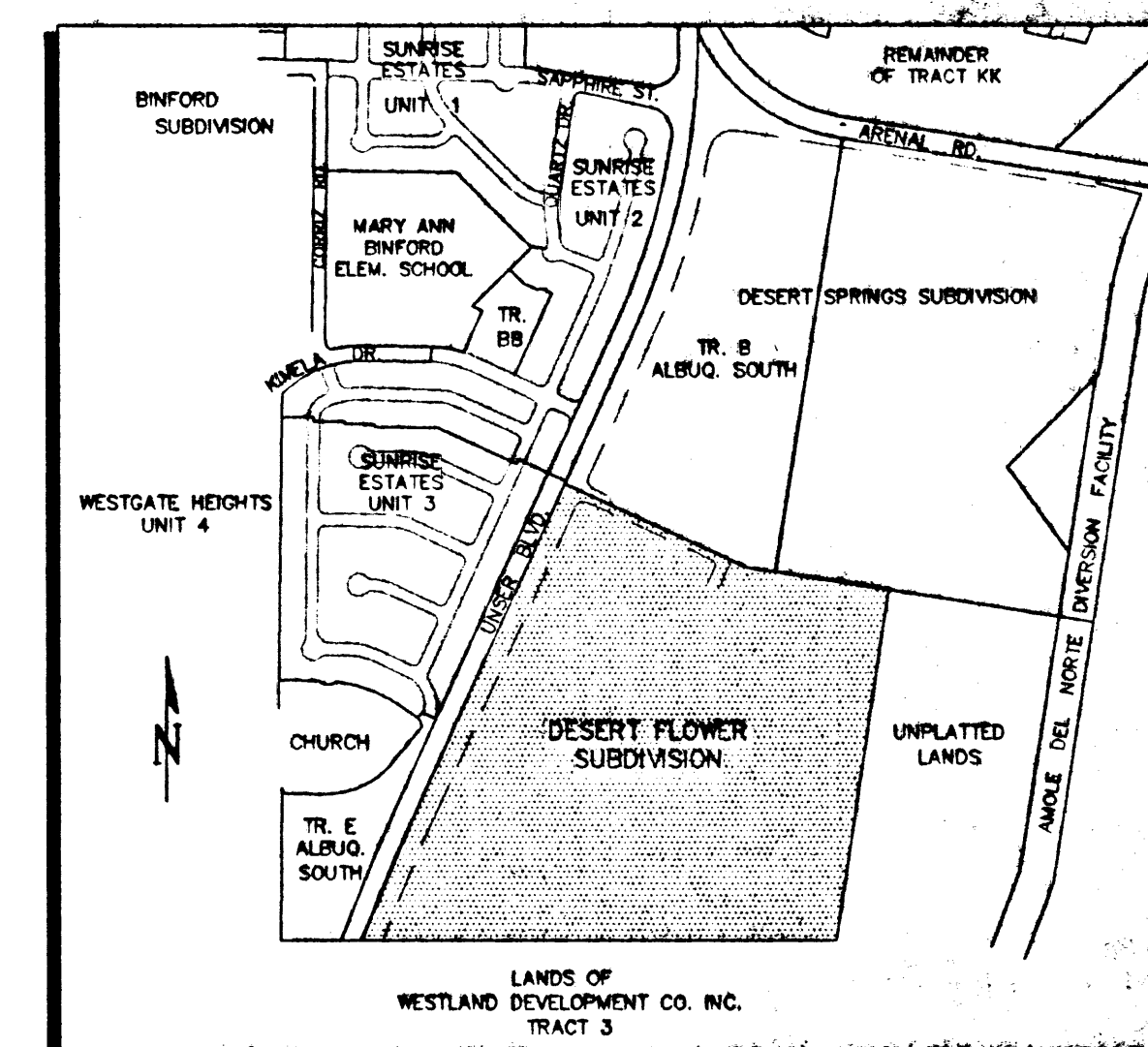
Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No.	Zone Mcp No.	Sheet	Of
5739.83	M-10	3	3

MASTER DRAINAGE PLAN FOR DESERT FLOWER SUBDIVISION UNITS ONE THROUGH FIVE

CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO

APRIL 1997



1"=750'

VICINITY MAP

(M-10)

LEGEND

- UNIT BOUNDARY
- PROPERTY LINE
- EXISTING CONTOUR
- PROPOSED DRAINAGE BASIN
- DRAINAGE BASIN BOUNDARY
- FLOW ARROW
- WATER BLOCK
- PROPOSED INLET
- PROPOSED STORM DRAIN MH
- PROPOSED STORM DRAIN
- FUTURE STORM DRAIN

ONSITE MASTER DRAINAGE PLAN

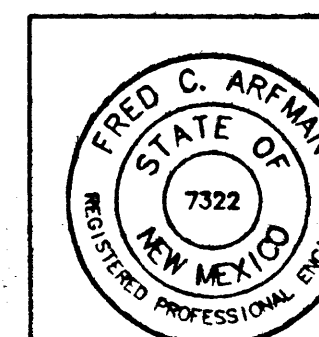


TEMPORARY RETENTION POND
Q100 = 42.7 CFS
V10-DAY = 94,378 CU FT

TRACT 3
LANDS OF
WESTLAND DEVELOPMENT CO. INC.
(9-8-83, C22-21)

TEMPORARY RETENTION POND
Q100 = 58.8 CFS
V10-DAY = 128,972 CU FT

SCALE:
1"=100'

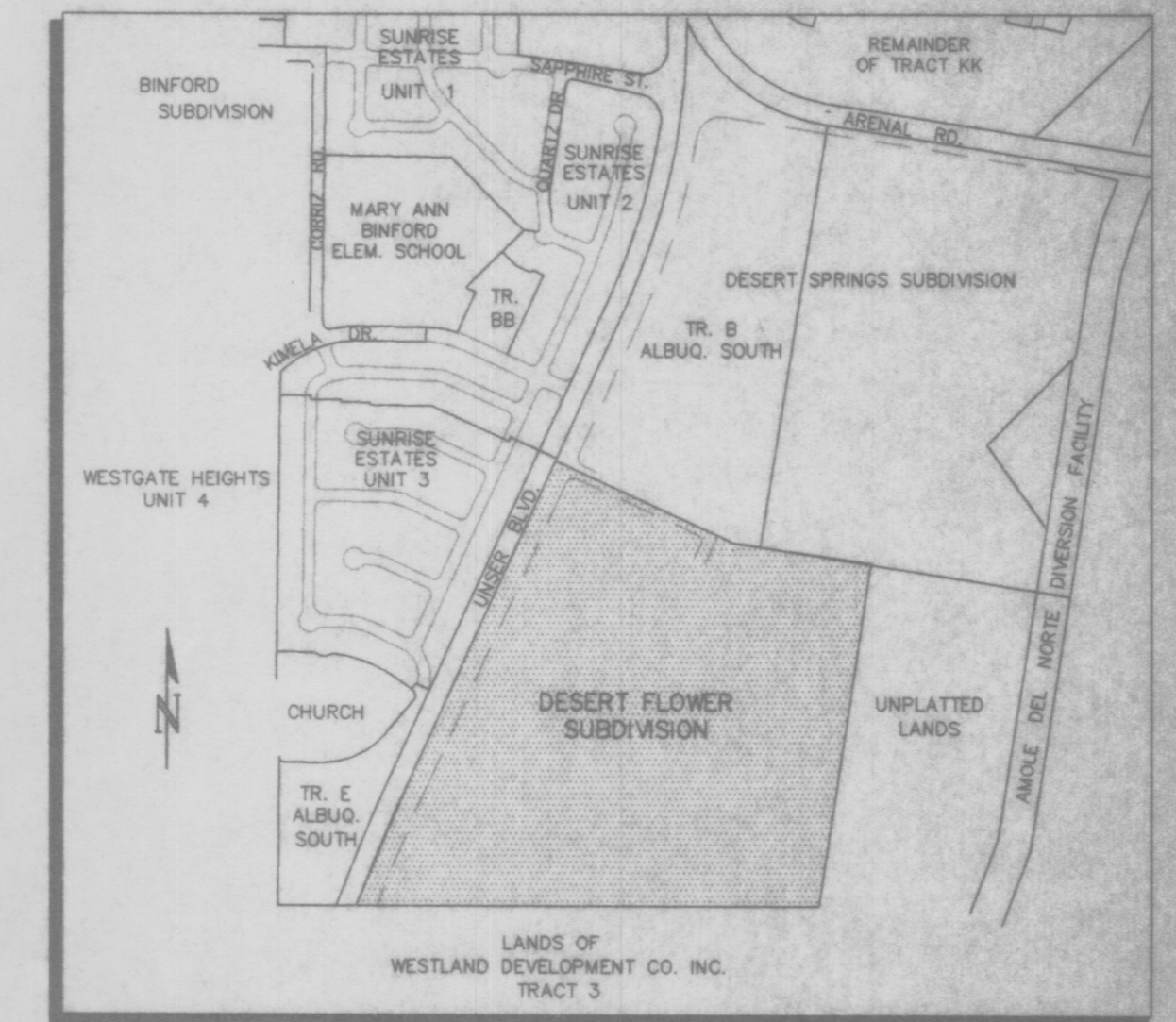


ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
120 Monroe Street, N.E.
Albuquerque, New Mexico

930WSDP3.DWG Date: 6/4/98

FIGURE 1

MASTER DRAINAGE PLAN
FOR
DESERT FLOWER SUBDIVISION
UNITS ONE THROUGH FIVE
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
APRIL 1997



1"=750'±
VICINITY MAP (M-10)

LEGEND

- UNIT BOUNDARY
- PROPERTY LINE
- EXISTING CONTOUR
- PROPOSED DRAINAGE BASIN
- DRAINAGE BASIN BOUNDARY
- FLOW ARROW
- WATER BLOCK
- PROPOSED INLET
- PROPOSED STORM DRAIN MH
- PROPOSED STORM DRAIN
- FUTURE STORM DRAIN

ONSITE MASTER DRAINAGE PLAN



ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
120 Monroe Street N.E.
Albuquerque, New Mexico

930MSDP3.DWG 6/4/98

FIGURE 1

