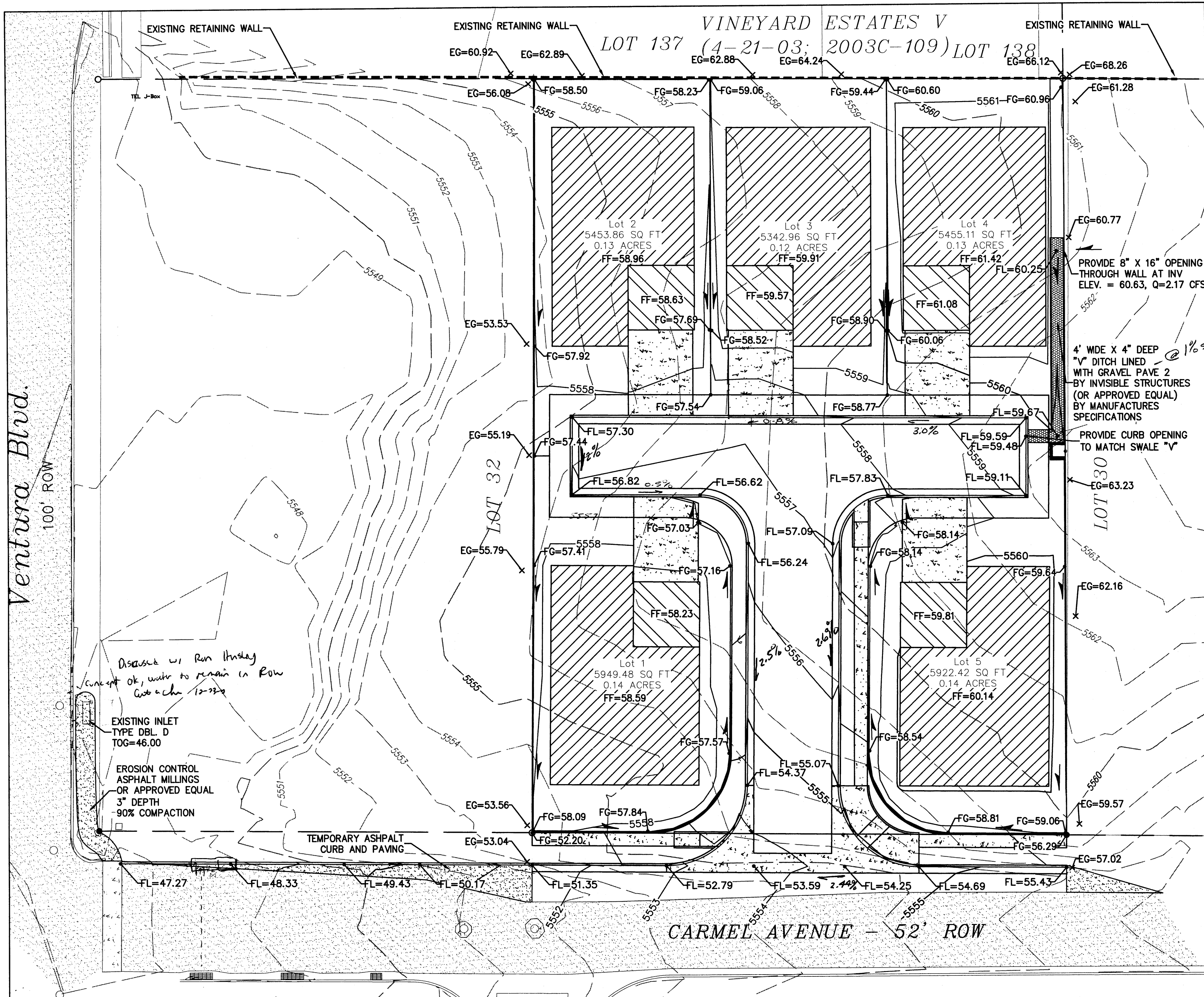
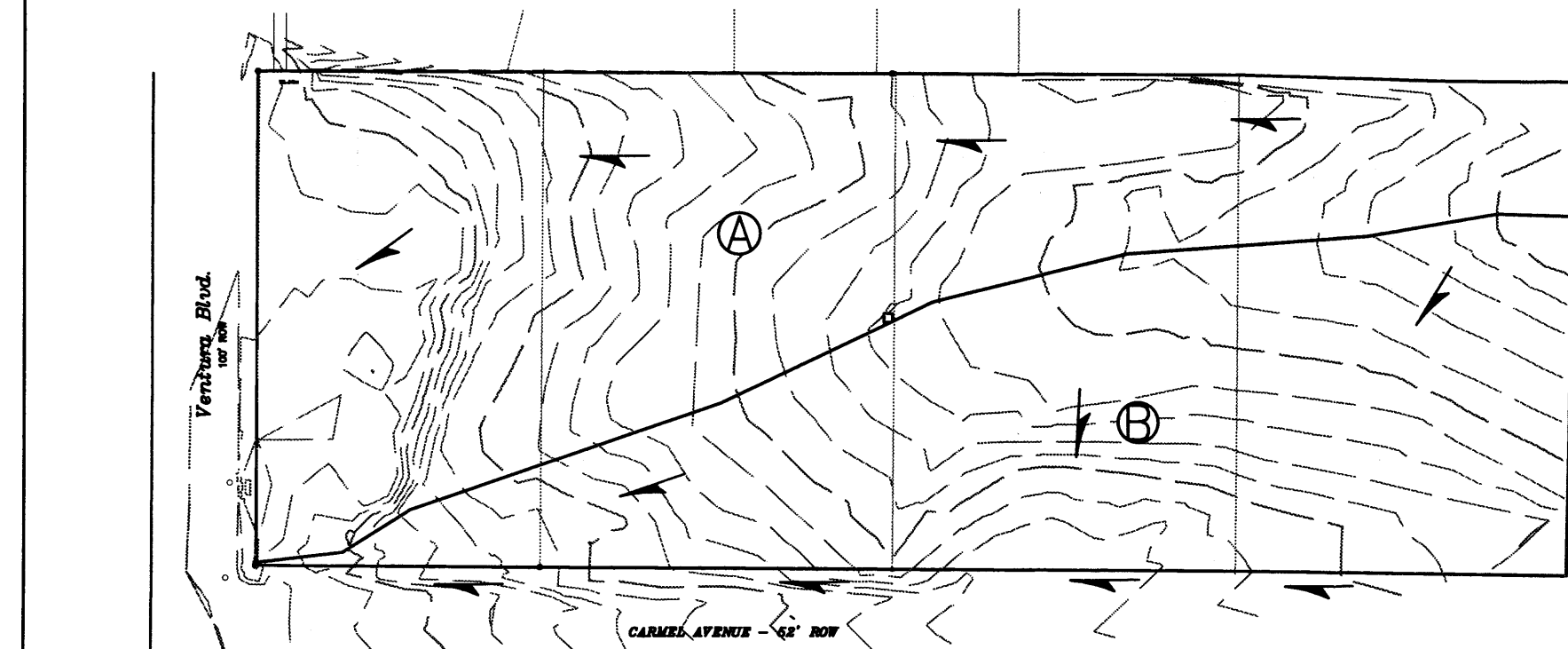


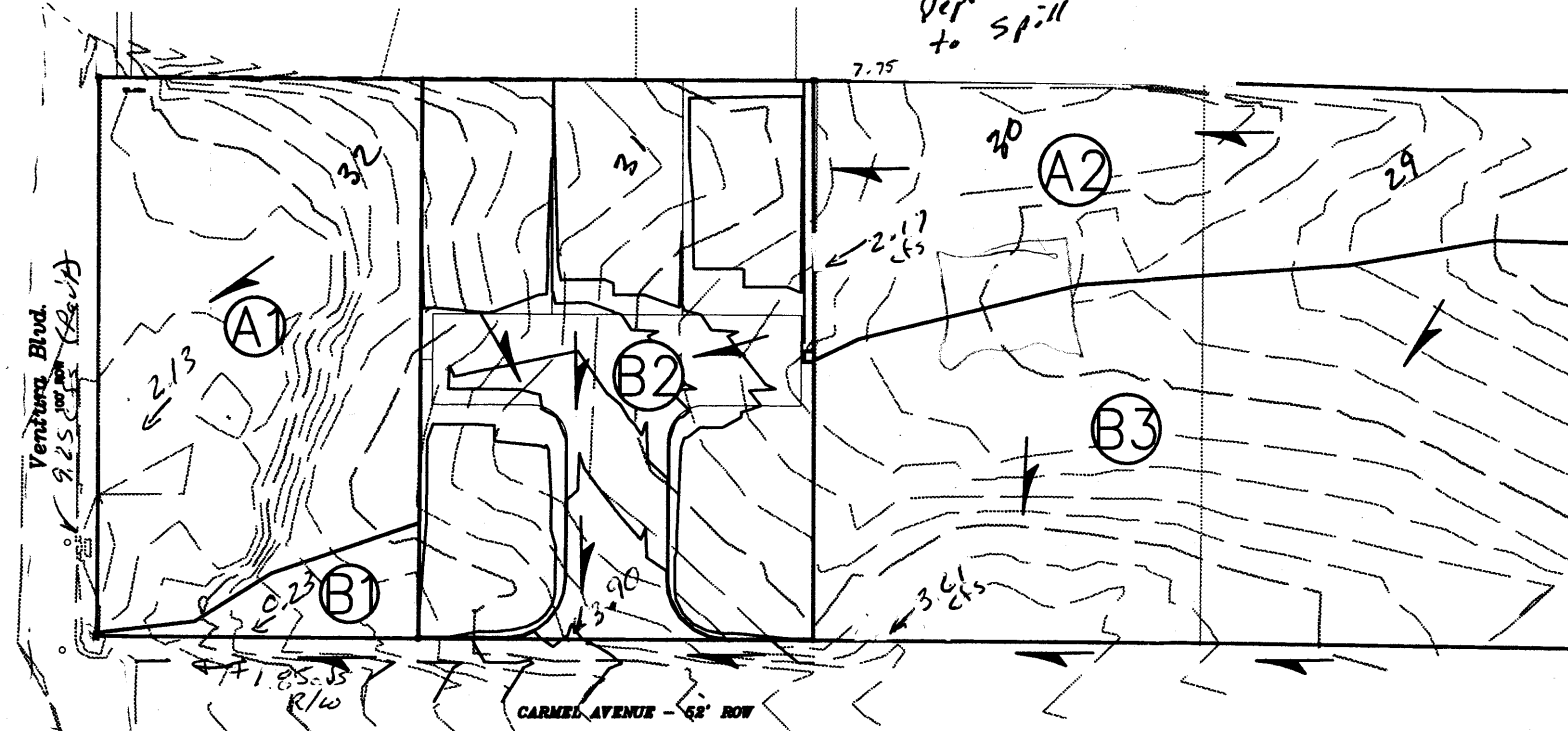
Ventura Blvd.



1 GRADING PLAN



2 EXISTING BASIN MAP



2 PROPOSED BASIN MAP



FIRM MAP NO. 35001C0141G

VICINITY MAP C-20-Z

LOCATION & DESCRIPTION

THE PROPOSED SITE IS 0.88 ACRES LOCATED ON THE NORTH SIDE OF CARMEL AVENUE EAST OF VENTURA BLVD. AS SEEN ON THE VICINITY MAP. THE SITE IS CURRENTLY UNDEVELOPED WITH A TYPICAL DEVELOPED ONE ACRE NORTH ALBUQUERQUE ACRES LOT TO THE EAST, UNDEVELOPED PROPERTY TO THE WEST AND HIGHER DENSITY WALLED COMMUNITIES TO THE SOUTH AND NORTH. THE PROPOSED DEVELOPMENT WILL BE FIVE (5) SINGLE FAMILY RESIDENTIAL LOTS ON A CUL-DE-SAC.

FLOODPLAIN STATUS

THIS PROJECT, AS SHOWN ON FEMA'S FLOOD INSURANCE RATE MAP 35001C0141 G, DATED APRIL 2, 2002 IS NOT WITHIN A DESIGNATED 100-YEAR FLOODPLAIN. AN EXHIBIT WITH THE SITE SHOWN ON THE FIRM PANEL IS INCLUDED ON THIS SHEET.

METHODOLOGY

THE HYDROLOGY FOR THIS PROJECT WAS ANALYZED USING AHYMO SOFTWARE.

PRECIPITATION

THE 100-YR 6-HR DURATION STORM WAS USED AS THE DESIGN STORM FOR THIS ANALYSIS. THIS SITE IS WITHIN ZONE 3 AS IDENTIFIED IN THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION 22.2.

EXISTING DRAINAGE

THIS SITE HAS A NATURAL DRAINAGE COURSE TRaversing THE NORTH SIDE OF THE SITE CONVEYING SURFACE DRAINAGE FROM APPROXIMATELY ONE THIRD OF THE SITE AND PORTIONS OF THE TWO LOTS EAST OF THE SITE. THE NORTH ALBUQUERQUE ACRE LOT TO THE EAST IS ALREADY DEVELOPED WITH APPROXIMATELY TWO THIRDS OF IT DRAINING TO CARMEL AVE. AND THE REMAINDER DRAINING ONTO THIS PROPERTY. THIS OFFSITE BASIN IS IDENTIFIED ON THE DRAINAGE PLAN ON THIS SHEET AND IS 70% TYPE C AND 30% TYPE D LAND TREATMENTS. THE SOUTH HALF OF CARMEL AVE. HAS BEEN CONSTRUCTED ADJACENT TO THIS PROPERTY. THERE IS AN EXISTING BAR DITCH EAST AND WEST OF THE SITE ON THE NORTH SIDE OF CARMEL AVE. THAT CONVEYS FLOW FROM THE NORTH SIDE OF CARMEL AVE. TO AN EXISTING DROP INLET LOCATED ADJACENT TO VENTURA B.V.D

DEVELOPED CONDITION

THIS SITE WILL BE DEVELOPED WITH A SINGLE STREET INTERCEPTING ALL OF THE SITE RUNOFF AND THE OFFSITE BASIN. THE RUNOFF WILL FREE DISCHARGE INTO CARMEL AVENUE. CARMEL AVENUE WILL CONVEY FLOW ALONG A TEMPORARY ASPHALT CURB TO VENTURA BLVD. THERE IS AN EXISTING OPENING IN THE TEMPORARY CURB AT THE VALLEY GUTTER AT VENTURA BLVD. WITH AN APPROXIMATE 4' OPENING. THIS OPENING WILL BE USED TO INTERCEPT THE RUNOFF FROM CARMEL AVENUE EAST OF VENTURA. A TEMPORARY ASPHALT TRANSITION FROM THE EXISTING BAR DITCH EAST OF THE SITE WILL DIRECT FLOW AND BRING IT INTO THE GUTTER AND ASPHALT STREET. THE 0.95 CFS INCREASE, FOR THE 100-YEAR PEAK RUNOFF, DUE TO THIS DEVELOPMENT IS INSIGNIFICANT AND WILL HAVE MINIMAL IMPACT ON DOWNSTREAM FACILITIES.

HYDROLOGIC DATA - EXISTING

BASINS	AREA (acres)	LAND TREATMENT PERCENTAGES BY TYPE				YIELD (cfs/ac)	Q100 (cfs)	V100-24 (acft)
		A	B	C	D			
A	1.84	0	20	70	0	3.41	6.27	0.201
B	1.48	0	20	80	0	3.26	4.82	0.148
EXIST	3.32					3.34	11.09	0.350

HYDROLOGIC DATA - PROPOSED

BASINS	AREA (acres)	LAND TREATMENT PERCENTAGES BY TYPE				YIELD (cfs/ac)	Q100 (cfs)	V100-24 (acft)
		A	B	C	D			
A1	0.85	0	20	80	0	3.26	2.13	0.066
A2	0.61	0	20	80	20	3.58	2.17	0.072
B1	0.07	0	20	80	0	3.40	0.23	0.007
B2	0.88	0	10	20	70	4.41	3.90	0.147
B3	1.11	0	20	80	0	3.26	3.61	0.112
PROPOSED	3.32					3.63	12.05	0.403

LEGAL DESCRIPTION

(BEING A REPLAT OF LOT 31, BLOCK 3, UNIT 3, TRACT 2) WITHIN NORTH ALBUQUERQUE ACRES IN PROJECTED SECTION 17, TOWNSHIP 11 NORTH, RANGE 4 EAST ELENA GALLEGOS LAND GRANT NEW MEXICO PRINCIPAL MERIDIAN CITY OF ALBUQUERQUE BERNALILLO COUNTY, NEW MEXICO

LEGEND

- FLOW ARROW
- EL=11.28 PROPOSED ELEVATION
- 66.33 EXISTING ELEVATION
- GRADE BREAK
- 1996 EXISTING CONTOUR
- EXISTING CONTOUR
- PROPOSED EASEMENT
- PROPOSED GRADE

NOTES

THE ENGINEER HAS UNDERTAKEN LIMITED FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING 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 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. THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES IN PLANNING AND CONDUCTING EXCAVATION, WHETHER BY CALLING OR NOTIFYING THE UTILITIES, COMPLYING WITH "BLUE STAKES" PROCEDURES, OR OTHERWISE.

THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR.

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, ARE INTENDED FOR USE ON THIS PROJECT AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF GND ENGINEERING, LLC IN THE EVENT OF UNAUTHORIZED USE, THE USER ASSUMES ALL RESPONSIBILITY AND LIABILITY WHICH RESULTS.

GENERAL NOTES:

- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER THIS CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREIN, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION, UPDATE NO. 8.
- THE EROSION PROTECTION SPECIFIED ON THIS PLAN IS THE MINIMUM RECOMMENDED. THE OWNER IS ENCOURAGED TO INCORPORATE EROSION RESISTANT LANDSCAPING ON AREAS WHERE EROSION MAY OCCUR SUCH AS SLOPES AND SWALES. THE OWNER IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL FEATURES NECESSARY TO PRESERVE THE DESIGN INTENT OF THE GRADING PLAN.
- THE DRAINAGE INFRASTRUCTURE SHOWN ON THIS PLAN IS THE RESPONSIBILITY OF THE PROPERTY OWNER.
- ALL DISTURBED AREAS OUTSIDE THE BUILDING PAD MUST BE RESEED OR LANDSCAPED
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, (260-1990) FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS AND EXISTING PAVEMENT. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR SURVEYOR SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM OF DELAY.

EROSION CONTROL NOTES

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

AS BUILT INFORMATION			
CONTRACTOR	DATE	DATE	DATE
WORK	DATE	DATE	DATE
STAKED BY	DATE	DATE	DATE
FIELD ACCEPTANCE BY	DATE	DATE	DATE
REVISIONS	DATE	DATE	DATE
NO.	DATE	DATE	DATE
MICRO-FILM INFORMATION			
RECORDED BY	DATE	DATE	DATE
NO.	DATE	DATE	DATE
BENCH MARKS			
ACS BM 20-C18 ON WYOMING BOULEVARD NE TURN LEFT AND TRAVEL NORTH ON WYOMING BOULEVARD 1.0 MILES TO MODESTO AVENUE NE. THE BENCHMARK IS A 1 3/4" METALLIC DISK EXPOSED TO THE TOP OF THE WEST BACK OF CURB OF WYOMING BOULEVARD, NORTH OF THE APPROXIMATE CENTERLINE OF MODESTO AVENUE, 19.0 FEET NORTHWEST OF A STORM SEWER MANHOLE (ID, STAMPED "ACS BM 20-C18" 1989" X=1547745.03 Y=1547745.68 (NAD 83) ELEV=5393.48 (NAVD 1989)			
SURVEY INFORMATION			
FIELD NOTES	DATE	DATE	DATE
NO.	DATE	DATE	DATE
ENGINEER'S SEAL			
FOR E. HENSLEY NEW MEXICO 21860			
REVISIONS			
NO.	DATE	DATE	DATE
REH	DATE	DATE	DATE
REH	DATE	DATE	DATE
REH	DATE	DATE	DATE
DESIGNED BY REH			
DRAWN BY REH			
CHECKED BY REH			
CITY PROJECT No.			
ZONE MAP NO.			
SHEET			
OF			

C20-0069



VICINITY MAP C-20-Z

NOTES

THE PROPOSED SITE IS 0.88 ACRES LOCATED ON THE NORTH SIDE OF CARMEL AVENUE EAST OF VENTURA BLVD. AS SEEN ON THE VICINITY MAP. THE SITE IS CURRENTLY UNDEVELOPED WITH A TYPICAL DEVELOPED ONE ACRE NORTH ALBUQUERQUE ACRES LOT TO THE EAST, UNDEVELOPED PROPERTY TO THE WEST AND HIGHER DENSITY WALLED COMMUNITIES TO THE SOUTH AND NORTH. THE PROPOSED DEVELOPMENT WILL BE FIVE (5) SINGLE FAMILY RESIDENTIAL LOTS ON A CUL-DE-SAC.

FLOODPLAIN STATUS

THIS PROJECT, AS SHOWN ON FEMA'S FLOOD INSURANCE RATE MAP 35001C0141 G, DATED APRIL 2, 2002 IS NOT WITHIN A DESIGNATED 100-YEAR FLOODPLAIN. AN EXHIBIT WITH THE SITE SHOWN ON THE FIRM PANEL IS INCLUDED ON THIS SHEET.

METHODOLOGY

THE HYDROLOGY FOR THIS PROJECT WAS ANALYZED USING AHYMO SOFTWARE.

PRECIPITATION

— THE 100-YR 6-HR DURATION STORM WAS USED AS THE DESIGN STORM FOR THIS ANALYSIS. THIS SITE IS WITHIN ZONE 3 AS IDENTIFIED IN THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION 22.2.

EXISTING DRAINAGE

THIS SITE HAS A NATURAL DRAINAGE COURSE TRaversing THE NORTH SIDE OF THE SITE CONVEYING SURFACE DRAINAGE FROM APPROXIMATELY THE THIRD OF THE SITE AND PORTIONS OF THE TWO LOTS EAST OF THE SITE TO THE NORTH ALBUQUERQUE ACRE LOT TO THE EAST IS A DRAINAGE DEVELOPED WITH APPROXIMATELY TWO THIRDS OF IT DRAINING TO CARMEL AVE. AND THE REMAINDER DRAINING ON TO THIS PROPERTY. THE EFFECTS OF A DRAINAGE IDENTIFIED ON THE DRAINAGE PLAN ON THIS SHEET AND IS 70% TYPE C AND 30% TYPE D LAND TREATMENTS. THE SOUTH HALF OF CARMEL AVE. HAS BEEN CONSTRUCTED ADJACENT TO THIS PROPERTY. THERE IS AN EXISTING BAR DITCH EAST AND WEST OF THE SITE ON THE NORTH SIDE OF CARMEL AVE. THAT CONVEYS FLOW FROM THE NORTH SIDE OF CARMEL AVE. TO AN EXISTING DROP INLET LOCATED ADJACENT TO VENTURA B.V.O.

DEVELOPED CONDITION

THIS SITE WILL BE DEVELOPED WITH A SINGLE STREET INTERCEPTING ALL OF THE SITE RUNOFF AND THE OFFSITE BASIN. THE RUNOFF WILL FREE DISCHARGE INTO THE CARMEL AVENUE - CARMEL AVENUE WILL CONVEY THE FLOW ALONG A TEMPORARY ASPHALT CURB TO A PROPOSED INLET TO CARMEL C.V.C. A TEMPORARY ASPHALT TRANSITION FROM THE EXISTING BAR DITCH EAST OF THE SITE WILL DIRECT FLOW AND BRING IT INTO THE GUTTER AND ASPHALT STREET. THE 0.95 CFS INCREASE, FOR THE 100-YEAR PEAK RUNOFF, DUE TO THIS DEVELOPMENT IS INSIGNIFICANT AND WILL HAVE MINIMAL IMPACT ON DOWNSTREAM FACILITIES.

NOTES
THE ENGINEER HAS UNDERTAKEN LIMITED FIELD VERIFICATION OF THE EXISTING DEPTH, SIZE, AND TYPE OF EXISTING UNDERGROUND UTILITY LINES; MAKES NO REPRESENTATION PERTAINING THERETO AND ASSUMES NO LIABILITY OR LIABILITY THEREOF. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ALL EXISTING UTILITIES IN THE AREA OF WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, MARK, AND PROTECT ALL EXISTING UTILITIES. THE CONTRACTOR SHALL COMPLY WITH STATE AND LOCAL MUNICIPAL ORDINANCES, RULES AND REGULATIONS PERTAINING TO THE LOCATION, MARKING, AND PROTECTION OF EXISTING UTILITIES. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE PLANNING AND CONDUCTING EXCAVATION, WHETHER BY CALLING OR NOTIFYING THE UTILITIES, COMPLYING WITH "BLUE STAKES" PROCEDURES, OR OTHERWISE.

THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR.

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, ARE INTENDED FOR USE ON THIS PROJECT AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF GND ENGINEERING, LLC IN THE EVENT OF UNAUTHORIZED USE, THE USER ASSUMES ALL RESPONSIBILITY AND LIABILITY WHICH RESULTS.

GENERAL NOTES:

1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER THIS CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREIN, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION, UPDATE NO. 8.
2. THE EROSION PROTECTION SPECIFIED ON THIS PLAN IS THE MINIMUM RECOMMENDED. THE OWNER IS ENCOURAGED TO INCORPORATE EROSION RESISTANT LANDSCAPING ON AREAS WHERE EROSION MAY OCCUR SUCH AS SLOPES AND SWALES. THE OWNER IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL FEATURES NECESSARY TO PRESERVE THE DESIGN INTENT OF THE GRADING PLAN.
3. THE DRAINAGE INFRASTRUCTURE SHOWN ON THIS PLAN IS THE RESPONSIBILITY OF THE PROPERTY OWNER.
4. ALL DISTURBED AREAS OUTSIDE THE BUILDING PAD MUST BE RESEED OR LANDSCAPED
5. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, (260-1990) FOR LOCATION OF EXISTING UTILITIES.
6. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS AND EXISTING PAVEMENT. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR SURVEYOR SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM OF DELAY.

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.

BASINS	AREA (acres)	LAND TREATMENT PERCENTAGES BY TYPE				YIELD (cfs/ac)	Q ¹⁰⁰ (cfs)	V ¹⁰⁰ (ac-ft)
		A	B	C	D			
A	1.84	0	20	70	10	3.41	6.27	0.207
B	1.48	0	20	80	0	3.26	4.82	0.148
C	4.12	FROM PREVIOUS STUDIES				3.34	13.75	0.434
EXIST	7.44					3.31	24.84	0.784

BASINS	AREA (acres)	LAND TREATMENT PERCENTAGES BY TYPE				YIELD (cfs/ac)	Q100 (cfs)	V100- 100 (ac-ft)
		A	B	C	D			
A1	0.65	0	20	80	0	3.26	2.13	0.066
A2	0.61	0	20	60	20	3.58	2.17	0.072
B1	0.07	0	20	80	0	3.40	0.23	0.007
B2	0.88	0	10	20	70	4.41	3.90	0.147
B3	1.11	0	20	80	0	3.26	3.61	0.112
C	4.12	FROM PREVIOUS STUDIES				3.34	13.75	0.434
PROPOSED	7.44					3.47	25.79	0.837

LEGAL DESCRIPTION

IZZAT SUBDIVISION
(BEING A REPLAT OF LOT 31, BLOCK 3, UNIT 3, TRACT 2)
WITHIN NORTH ALBUQUERQUE ACRES
IN PROJECTED SECTION 17, TOWNSHIP 11 NORTH, RANGE 4 EAST
ELENA GALLEGOS LAND GRANT NEW MEXICO PRINCIPAL MERIDIAN
CITY OF ALBUQUERQUE BERNALILLO COUNTY, NEW MEXICO

LEGEND

-
- Diagram illustrating the cross-section of a proposed retaining wall and roadway. Key features and elevations are labeled:
- FLOW ARROW**: Indicated by a curved arrow pointing right.
 - EL=11.28**: PROPOSED ELEVATION (at the top of the wall).
 - 66.33**: EXISTING ELEVATION (at the top of the wall).
 - TF=11.28**: TOP OF FOOTING/TOP OF WALL ELEVATION.
 - TW=15.28**: TOP OF FOOTING/TOP OF WALL ELEVATION.
 - WATER BREAK**: Indicated by a wavy line across the wall.
 - PROPOSED RETAINING WALL**: Shown as a vertical structure with a water break.
 - EXISTING CONTOUR**: Shown as a horizontal line at elevation 4966.
 - EXISTING CONTOUR**: Shown as a horizontal line at elevation 4966.
 - PROPOSED EASEMENT**: Indicated by a horizontal line.
 - PROPOSED GRADE**: Indicated by a horizontal line at 4.00%.



PROPOSED BASIN MAP

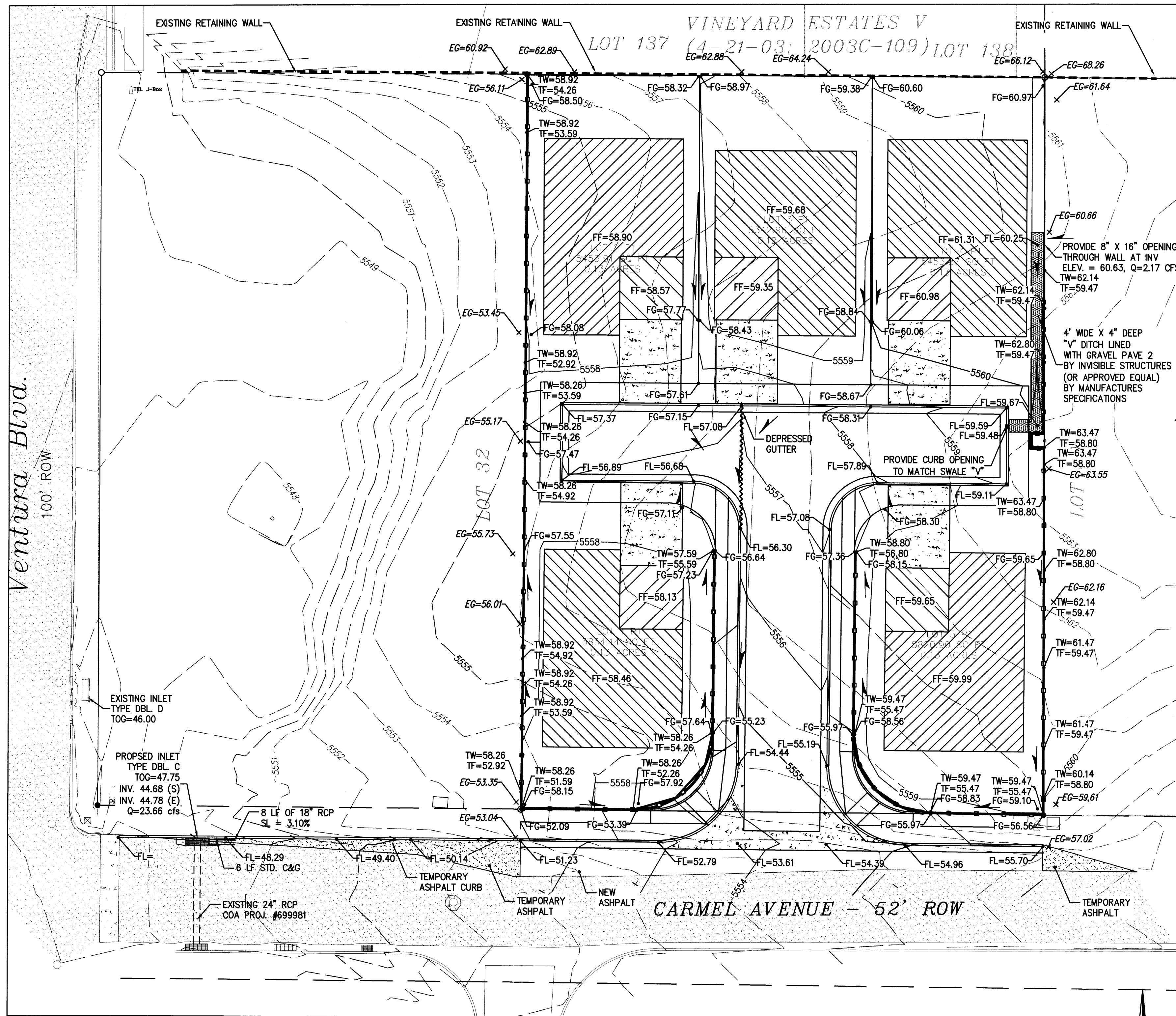
DRB No. 1009840

THE Group
300 Branding Iron Rd. SE
Rio Rancho, New Mexico 87124
Phone: (505) 514-0995

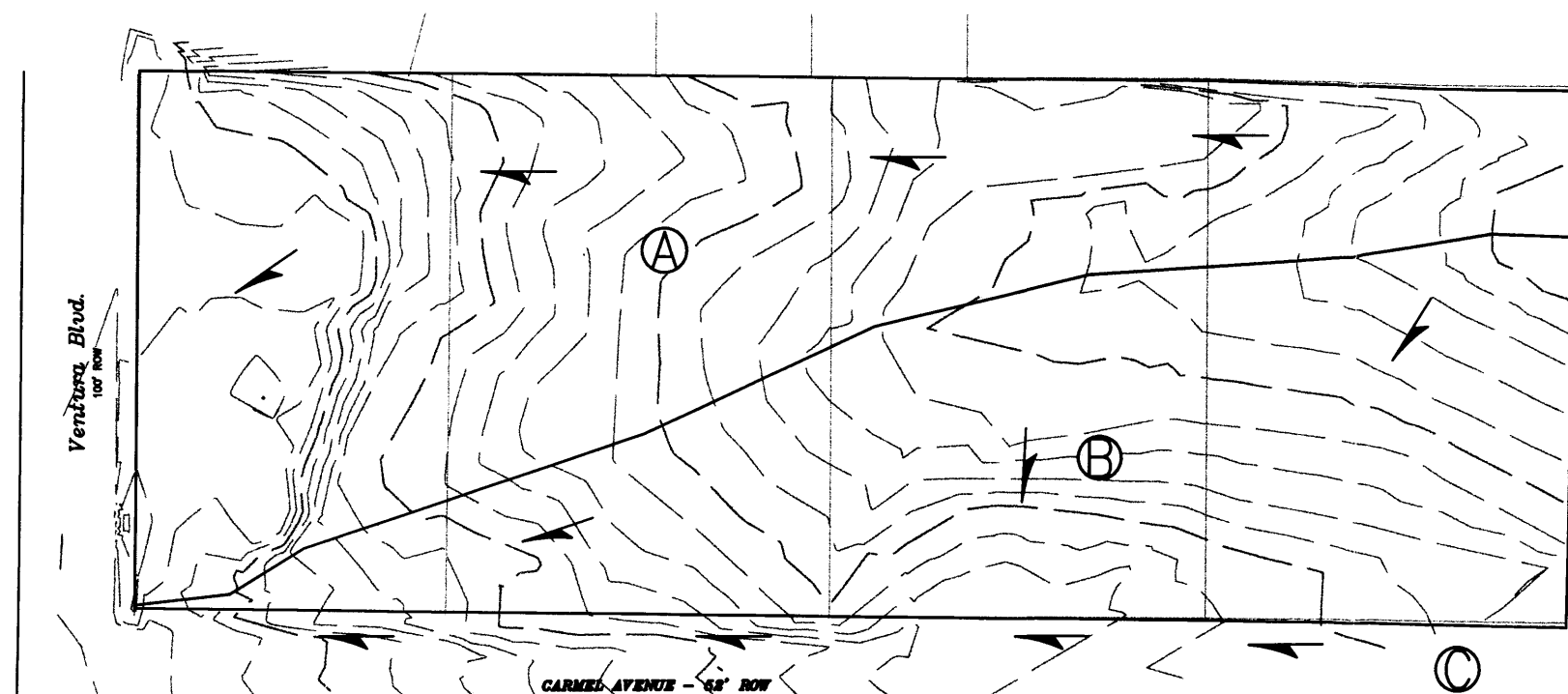
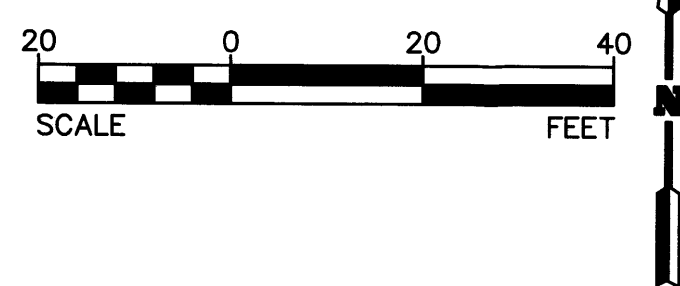
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

IZZAT SUBDIVISION
BEING A REPLAT OF LOT 31, BLOCK 3, UNIT 3,
GRADING & DRAINAGE PLAN

DESIGN REVIEW COMMITTEE		CITY ENGINEER APPROVAL		LAST DESIGN UPDATE	Mo./DAY/YR.	Mo./DAY/YR.
CITY PROJECT No.			ZONE MAP NO. C-20-Z	SHEET	OF	
				1		1

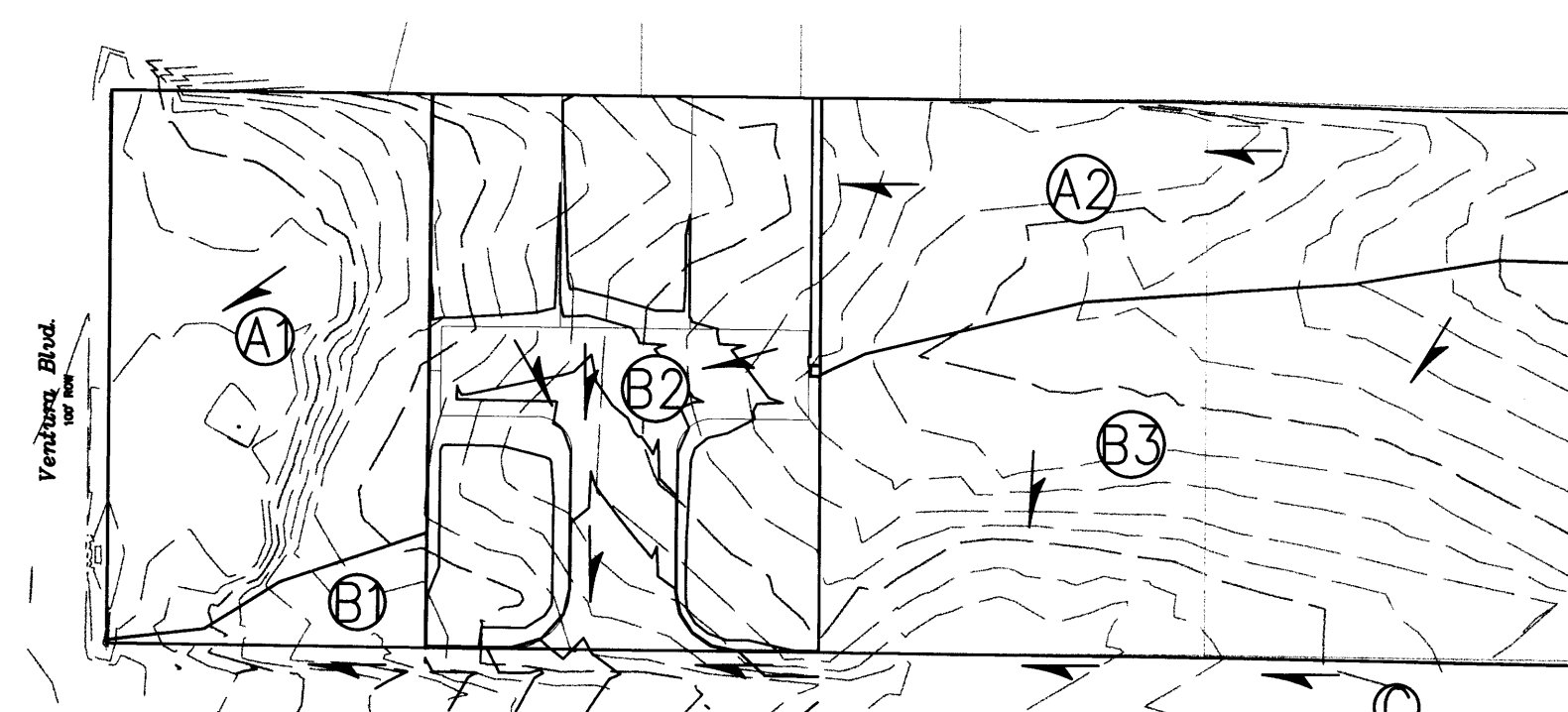


1 GRADING PLAN



2 EXISTING BASIN MAP

1"=80'

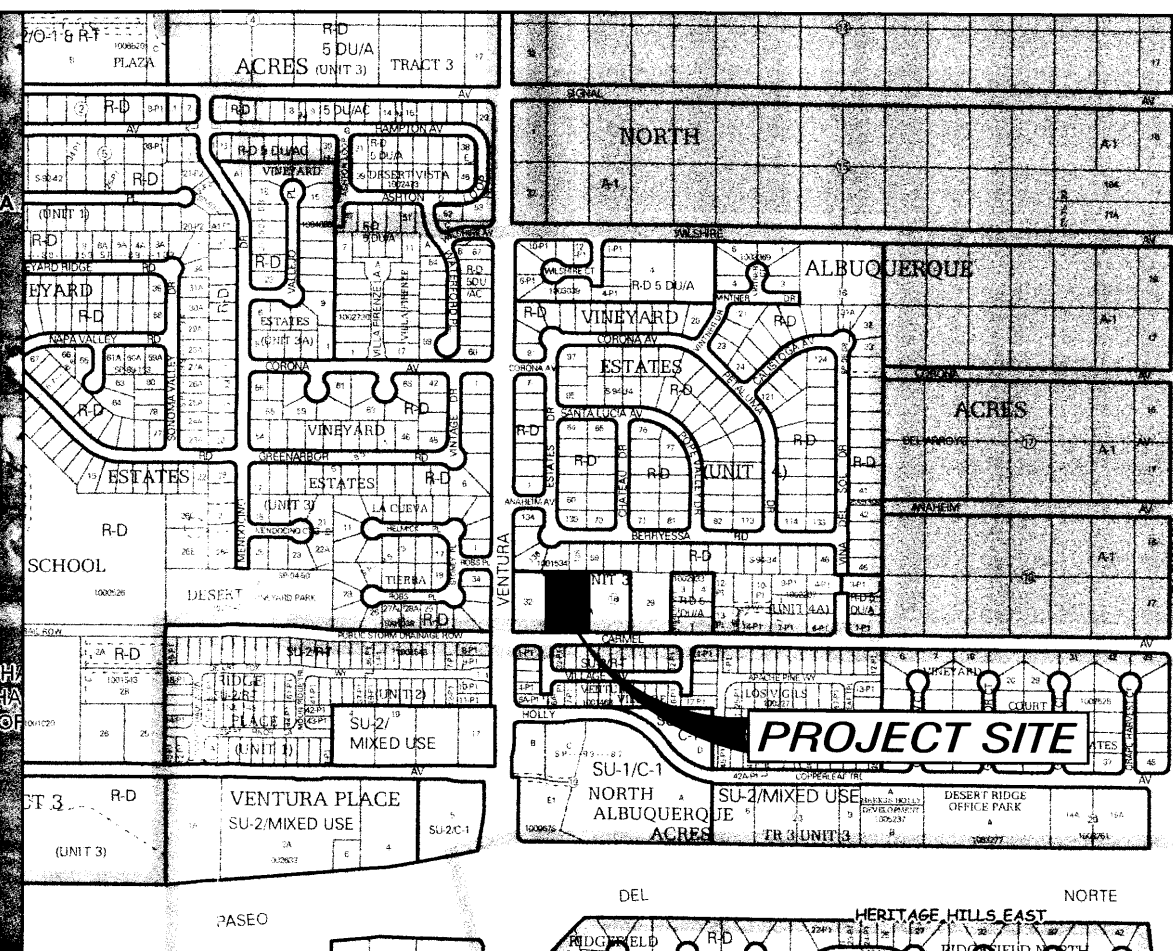


2 PROPOSED BASIN MAP

1"=80'



FIRM MAP NO. 35001C0141G



VICINITY MAP C-20-Z

LOCATION & DESCRIPTION

THE PROPOSED SITE IS 0.88 ACRES LOCATED ON THE NORTH SIDE OF CARMEL AVENUE EAST OF VENTURA BLVD. AS SEEN ON THE VICINITY MAP. THE SITE IS CURRENTLY UNDEVELOPED WITH A TYPICAL DEVELOPED ONE ACRE NORTH ALBUQUERQUE ACRES LOT TO THE EAST, UNDEVELOPED PROPERTY TO THE WEST AND HIGHER DENSITY WALLED COMMUNITIES TO THE SOUTH AND NORTH. THE PROPOSED DEVELOPMENT WILL BE FIVE (5) SINGLE FAMILY RESIDENTIAL LOTS ON A CUL-DE-SAC.

FLOODPLAIN STATUS

THIS PROJECT, AS SHOWN ON FEMA'S FLOOD INSURANCE RATE MAP 35001C0141 G, DATED APRIL 2, 2002 IS NOT WITHIN A DESIGNATED 100-YEAR FLOODPLAIN. AN EXHIBIT WITH THE SITE SHOWN ON THE FIRM PANEL IS INCLUDED ON THIS SHEET.

METHODOLOGY

THE HYDROLOGY FOR THIS PROJECT WAS ANALYZED USING AHYMO SOFTWARE.

PRECIPITATION

THE 100-YR 6-HR DURATION STORM WAS USED AS THE DESIGN STORM FOR THIS ANALYSIS. THIS SITE IS WITHIN ZONE 3 AS IDENTIFIED IN THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION 22.2.

EXISTING DRAINAGE

THIS SITE HAS A NATURAL DRAINAGE COURSE TRAVERSING THE NORTH SIDE OF THE SITE CONVEYING SURFACE DRAINAGE FROM APPROXIMATELY ONE THIRD OF THE SITE AND PORTIONS OF THE TWO LOTS EAST OF THE SITE. THE NORTH ALBUQUERQUE ACRE LOT TO THE EAST IS ALREADY DEVELOPED WITH APPROXIMATELY TWO THIRDS OF IT DRAINING TO CARMEL AVE. AND THE REMAINDER DRAINING ONTO THIS PROPERTY. THIS OFFSITE BASIN IS IDENTIFIED ON THE DRAINAGE PLAN ON THIS SHEET AND IS 70% TYPE C AND 30% TYPE D LAND TREATMENTS. THE SOUTH HALF OF CARMEL AVE. HAS BEEN CONSTRUCTED ADJACENT TO THIS PROPERTY. THERE IS AN EXISTING BAR DITCH EAST AND WEST OF THE SITE ON THE NORTH SIDE OF CARMEL AVE. THAT CONVEYS FLOW FROM THE NORTH SIDE OF CARMEL AVE. TO AN EXISTING DROP INLET LOCATED ADJACENT TO VENTURA B.V.D.

DEVELOPED CONDITION

THIS SITE WILL BE DEVELOPED WITH A SINGLE STREET INTERCEPTING ALL OF THE SITE RUNOFF AND THE OFFSITE BASIN. THE RUNOFF WILL FREE DISCHARGE INTO CARMEL AVENUE. CARMEL AVENUE WILL CONVEY FLOW ALONG A TEMPORARY ASPHALT CURB TO A PROPOSED INLET IN CARMEL AVE. A TEMPORARY ASPHALT TRANSITION FROM THE EXISTING BAR DITCH EAST OF THE SITE WILL DIRECT FLOW AND BRING IT INTO THE GUTTER AND ASPHALT STREET. THE 0.95 CFS INCREASE, FOR THE 100-YEAR PEAK RUNOFF, DUE TO THIS DEVELOPMENT IS INSIGNIFICANT AND WILL HAVE MINIMAL IMPACT ON DOWNSTREAM FACILITIES.

HYDROLOGIC DATA - EXISTING

BASINS	AREA (acres)	LAND TREATMENT PERCENTAGES BY TYPE				YIELD (cfs/acre)	Q ₁₀₀ (cfs)	V ₁₀₀₋₂₄ (acft)
		A	B	C	D			
A	1.84	0	20	70	10	3.41	6.27	0.201
B	1.48	0	20	80	0	3.26	4.82	0.149
C	4.12	FROM PREVIOUS STUDIES				3.34	13.75	0.434
EXIST	7.44					3.31	24.84	0.784

HYDROLOGIC DATA - PROPOSED

BASINS	AREA (acres)	LAND TREATMENT PERCENTAGES BY TYPE				YIELD (cfs/acre)	Q ₁₀₀ (cfs)	V ₁₀₀₋₂₄ (acft)
		A	B	C	D			
A1	0.65	0	20	80	0	3.26	2.13	0.066
A2	0.61	0	20	60	20	3.58	2.17	0.072
B1	0.07	0	20	80	0	3.40	0.23	0.007
B2	0.88	0	10	20	70	4.41	3.90	0.147
B3	1.11	0	20	80	0	3.26	3.61	0.112
C	4.12	FROM PREVIOUS STUDIES				3.34	13.75	0.434
PROPOSED	7.44					3.47	25.79	0.837

LEGAL DESCRIPTION

(BEING A REPLAT OF LOT 31, BLOCK 3, UNIT 3, TRACT 2)
WITHIN NORTH ALBUQUERQUE ACRES
IN PROJECTED SECTION 17, TOWNSHIP 11 NORTH, RANGE 4 EAST
ELENIA GALLEGOS LAND GRANT NEW MEXICO PRINCIPAL MERIDIAN
CITY OF ALBUQUERQUE BERNALILLO COUNTY, NEW MEXICO

LEGEND

- FLOW ARROW
- EL=11.28 PROPOSED ELEVATION
- 66.33 EXISTING ELEVATION
- TF=11.28 TW=15.28 TOP OF FOOTING/TOP OF WALL ELEVATION
- WATER BREAK
- PROPOSED RETAINING WALL
- EXISTING CONTOUR
- EXISTING CONTOUR
- PROPOSED EASEMENT
- PROPOSED GRADE

NOTES

THE ENGINEER HAS UNDERTAKEN LIMITED FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING 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 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. THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS PERTAINING TO THE LOCATION OF THESE LINES AND FACES IN THE PLANNING AND CONDUCTING EXCAVATION, WHETHER BY CALLING OR NOTIFYING THE UTILITIES, COMPLYING WITH "BLUE STAKES" PROCEDURES, OR OTHERWISE.

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GENERAL NOTES:

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- THE EROSION PROTECTION SPECIFIED ON THIS PLAN IS THE MINIMUM RECOMMENDED. THE OWNER IS ENCOURAGED TO INCORPORATE EROSION RESISTANT LANDSCAPING ON AREAS WHERE EROSION MAY OCCUR SUCH AS SLOPES AND SWALES. THE OWNER IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL FEATURES NECESSARY TO PRESERVE THE DESIGN INTENT OF THE GRADING PLAN.
- THE DRAINAGE INFRASTRUCTURE SHOWN ON THIS PLAN IS THE RESPONSIBILITY OF THE PROPERTY OWNER.
- ALL DISTURBED AREAS OUTSIDE THE BUILDING PAD MUST BE RESEED OR LANDSCAPED.
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, (260-1990) FOR LOCATION OF EXISTING UTILITIES.
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EROSION CONTROL NOTES

- CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
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AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DATE	CONTRACTOR	DATE	NO.	DATE	NO.	DATE
INSPECTOR'S	DATE	INSPECTOR'S	DATE	NO.	DATE	NO.	DATE
PERFORMANCE BY	DATE	PERFORMANCE BY	DATE	NO.	DATE	NO.	DATE
VERIFICATION BY	DATE	VERIFICATION BY	DATE	NO.	DATE	NO.	DATE
DESIGNED BY	DATE	DESIGNED BY	DATE	NO.	DATE	NO.	DATE
DRAWN BY	DATE	DRAWN BY	DATE	NO.	DATE	NO.	DATE
CHECKED BY	DATE	CHECKED BY	DATE	NO.	DATE	NO.	DATE
RECORDED BY	DATE	RECORDED BY	DATE	NO.	DATE	NO.	DATE
NO.		NO.		NO.		NO.	

RECEIVED

FEB 11 2014

THE Group

300 Branding Road SE

Rio Rancho, New Mexico 87124

Phone: (505) 514-0995

CITY OF ALBUQUERQUE

PUBLIC WORKS DEPARTMENT

ENGINEERING DEVELOPMENT GROUP

IZZAT SUBDIVISION

BEING A REPLAT OF LOT 31, BLOCK 3, UNIT 3, TRACT 2, NAA

GRADING & DRAINAGE PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	Mo./DAY/YR.	Mo./DAY/YR.

DRB No.

1009840

CITY PROJECT No.

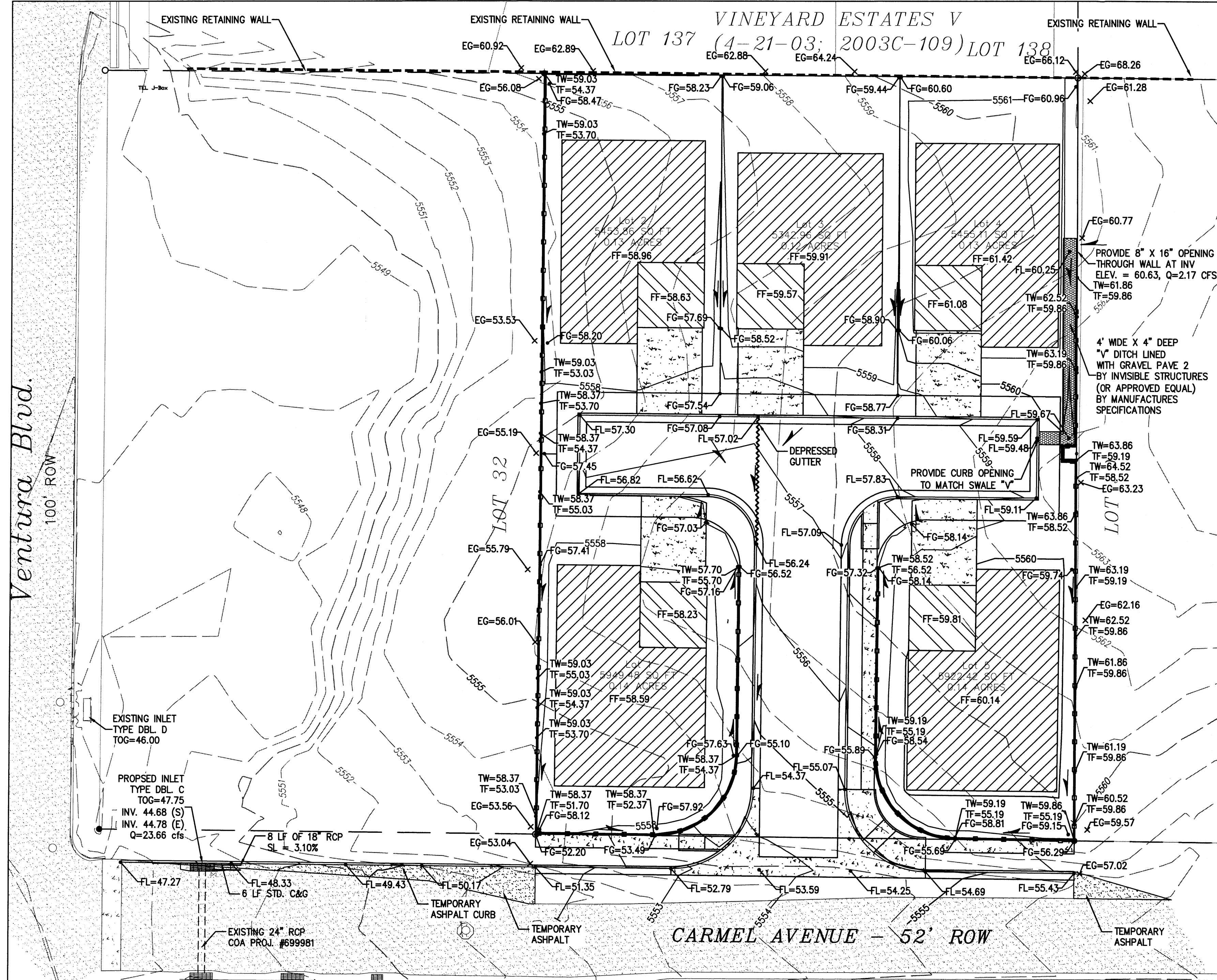
ZONE MAP NO.

C-20-Z

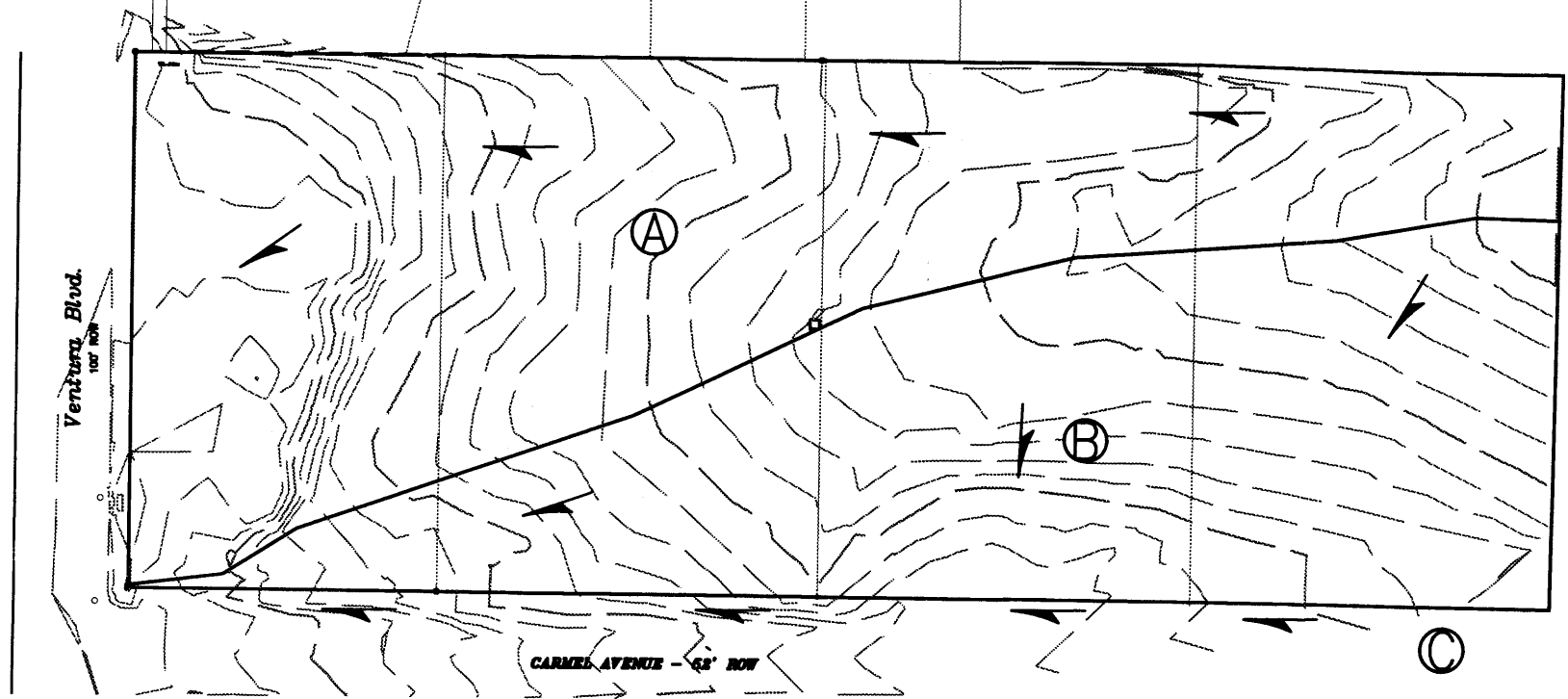
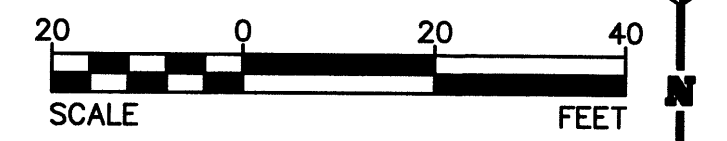
SHEET

3

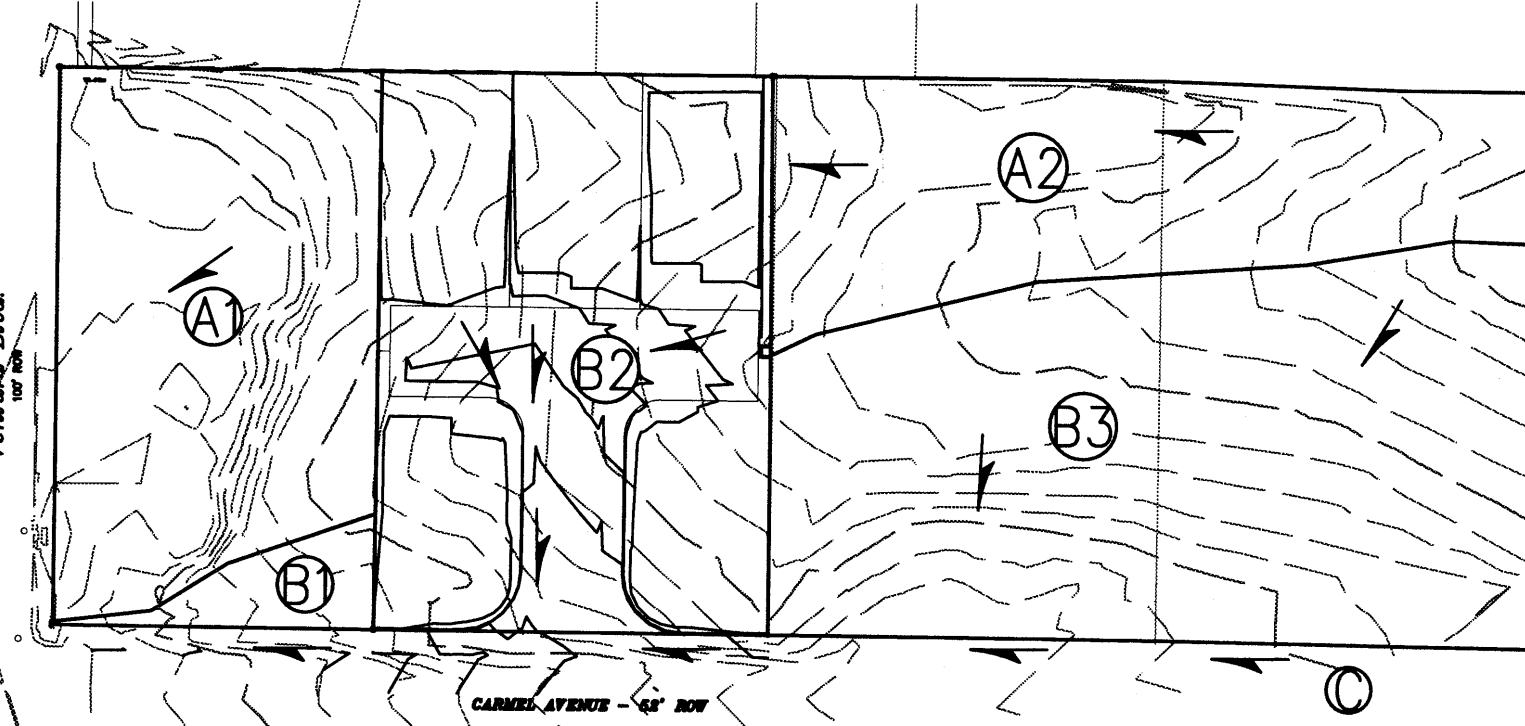
OF



1 GRADING PLAN
1"=20'



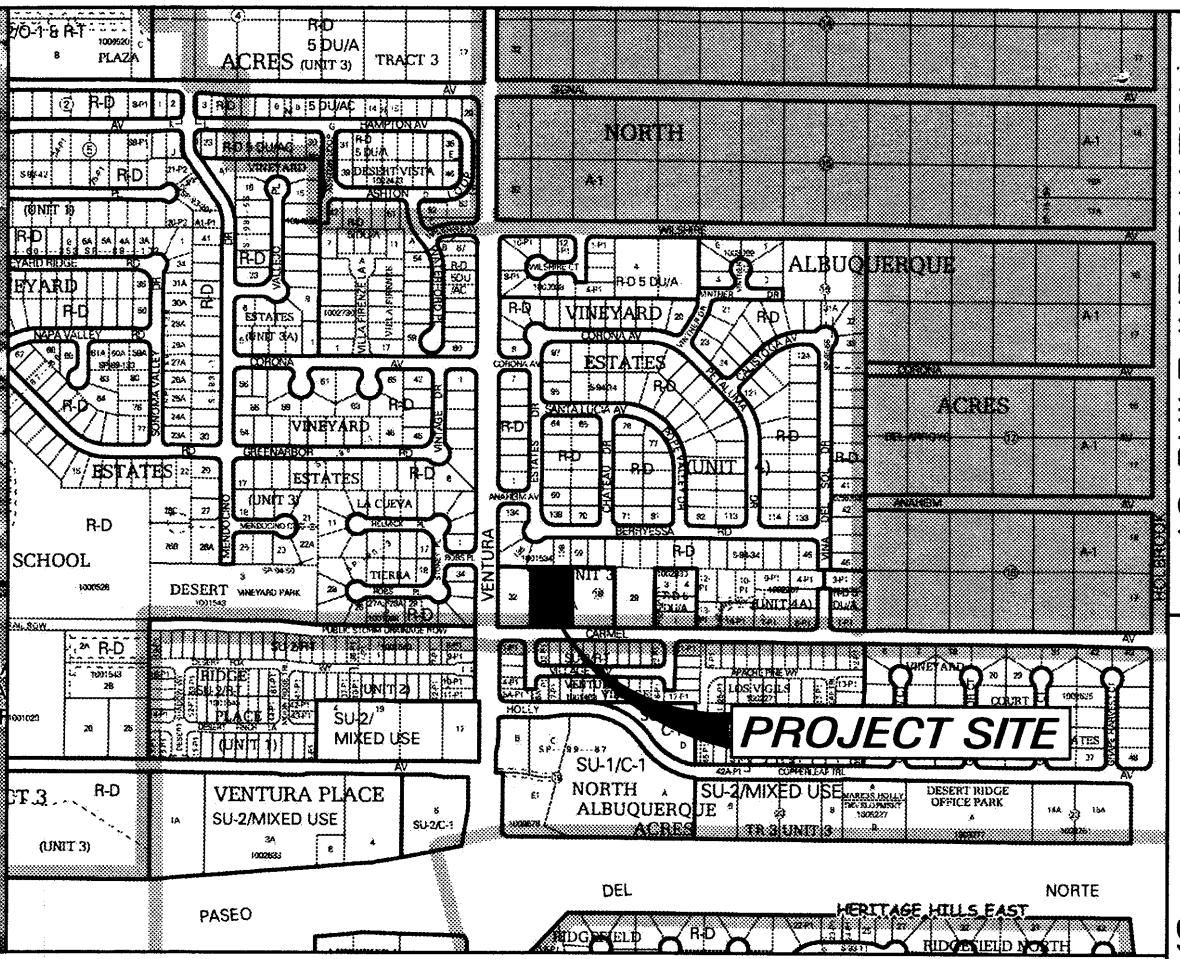
2 EXISTING BASIN MAP
1"=80'



2 PROPOSED BASIN MAP
1"=80'



FIRM MAP NO. 35001C0141G



VICINITY MAP C-20-Z

LOCATION & DESCRIPTION
THE PROPOSED SITE IS 0.88 ACRES LOCATED ON THE NORTH SIDE OF CARMEL AVENUE EAST OF VENTURA BLVD. AS SEEN ON THE VICINITY MAP. THE SITE IS CURRENTLY UNDEVELOPED WITH A TYPICAL DEVELOPED ONE ACRE NORTH ALBUQUERQUE ACRES LOT TO THE EAST, UNDEVELOPED PROPERTY TO THE WEST AND HIGHER DENSITY WALLED COMMUNITIES TO THE SOUTH AND NORTH. THE PROPOSED DEVELOPMENT WILL BE FIVE (5) SINGLE FAMILY RESIDENTIAL LOTS ON A CUL-DE-SAC.

FLOODPLAIN STATUS
THIS PROJECT, AS SHOWN ON FEMA'S FLOOD INSURANCE RATE MAP 35001C0141 G, DATED APRIL 2, 2002 IS NOT WITHIN A DESIGNATED 100-YEAR FLOODPLAIN. AN EXHIBIT WITH THE SITE SHOWN ON THE FIRM PANEL IS INCLUDED ON THIS SHEET.

METHODOLOGY
THE HYDROLOGY FOR THIS PROJECT WAS ANALYZED USING AHYMO SOFTWARE.

PRECIPITATION
THE 100-YR 6-HR DURATION STORM WAS USED AS THE DESIGN STORM FOR THIS ANALYSIS. THIS SITE IS WITHIN ZONE 3 AS IDENTIFIED IN THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION 22.2.

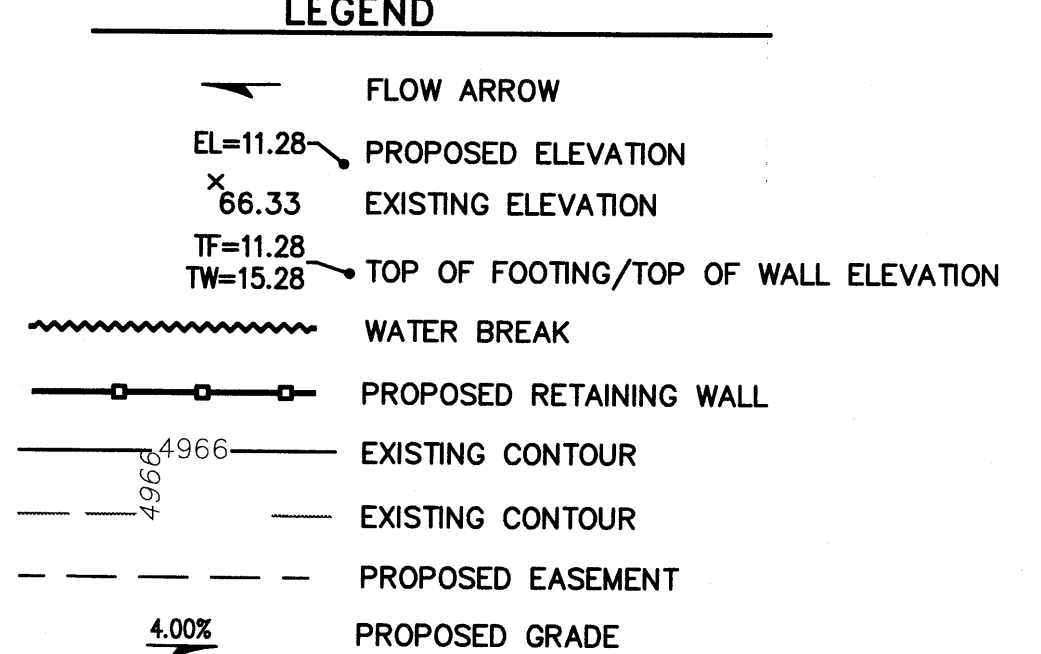
EXISTING DRAINAGE
THIS SITE HAS A NATURAL DRAINAGE COURSE TRaversing THE NORTH SIDE OF THE SITE CONVEYING SURFACE DRAINAGE FROM APPROXIMATELY ONE THIRD OF THE SITE AND PORTIONS OF THE TWO LOTS EAST OF THE SITE. THE NORTH ALBUQUERQUE ACRE LOT TO THE EAST IS ALREADY DEVELOPED WITH APPROXIMATELY TWO THIRDS OF IT DRAINING TO CARMEL AVE. AND THE REMAINDER DRAINING ONTO THIS PROPERTY. THIS OFFSITE BASIN IS IDENTIFIED ON THE DRAINAGE PLAN ON THIS SHEET AND IS 70% TYPE C AND 30% TYPE D LAND TREATMENTS. THE SOUTH HALF OF CARMEL AVE. HAS BEEN CONSTRUCTED ADJACENT TO THIS PROPERTY. THERE IS AN EXISTING BAR DITCH EAST AND WEST OF THE SITE ON THE NORTH SIDE OF CARMEL AVE. THAT CONVEYS FLOW FROM THE NORTH SIDE OF CARMEL AVE. TO AN EXISTING DROP INLET LOCATED ADJACENT TO VENTURA B.VD.

DEVELOPED CONDITION
THIS SITE WILL BE DEVELOPED WITH A SINGLE STREET INTERCEPTING ALL OF THE SITE RUNOFF AND THE OFFSITE BASIN. THE RUNOFF WILL FREE DISCHARGE INTO CARMEL AVENUE. CARMEL AVENUE WILL CONVEY FLOW ALONG A TEMPORARY ASPHALT CURB TO A PROPOSED INLET IN CARMEL AVE. A TEMPORARY ASPHALT TRANSITION FROM THE EXISTING BAR DITCH EAST OF THE SITE WILL DIRECT FLOW AND BRING IT INTO THE GUTTER AND ASPHALT STREET. THE 0.95 CFS INCREASE, FOR THE 100-YEAR PEAK RUNOFF, DUE TO THIS DEVELOPMENT IS INSIGNIFICANT AND WILL HAVE MINIMAL IMPACT ON DOWNSTREAM FACILITIES.

HYDROLOGIC DATA - EXISTING							
BASINS	AREA (acres)	LAND TREATMENT PERCENTAGES BY TYPE				YIELD (cfs/acre)	Q ₁₀₀ (cfs)
		A	B	C	D		
A	1.84	0	20	70	10	3.41	6.27
B	1.48	0	20	80	0	3.28	4.82
C	4.12	FROM PREVIOUS STUDIES				3.34	13.75
EXIST	7.44					3.31	24.84

HYDROLOGIC DATA - PROPOSED							
BASINS	AREA (acres)	LAND TREATMENT PERCENTAGES BY TYPE				YIELD (cfs/acre)	Q ₁₀₀ (cfs)
		A	B	C	D		
A1	0.65	0	20	80	0	3.26	2.13
A2	0.61	0	20	80	20	3.58	2.17
B1	0.07	0	20	80	0	3.40	0.23
B2	0.88	0	10	20	70	4.41	3.90
B3	1.11	0	20	80	0	3.26	3.61
C	4.12	FROM PREVIOUS STUDIES				3.34	13.75
PROPOSED	7.44					3.47	25.79

LEGAL DESCRIPTION
BEING A REPLAT OF LOT 31, BLOCK 3, UNIT 3, TRACT 2)
WITHIN NORTH ALBUQUERQUE ACRES
IN PROJECTED SECTION 17, TOWNSHIP 11 NORTH, RANGE 4 EAST
ELBA GALLEGO LAND GRANT NEW MEXICO PRINCIPAL MERIDIAN
CITY OF ALBUQUERQUE BERNALILLO COUNTY, NEW MEXICO



NOTES
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3. THE DRAINAGE INFRASTRUCTURE SHOWN ON THIS PLAN IS THE RESPONSIBILITY OF THE PROPERTY OWNER.
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THE Group
300 Branding Iron Rd. SE
Rio Rancho, New Mexico 87124
Phone: (505) 514-0995

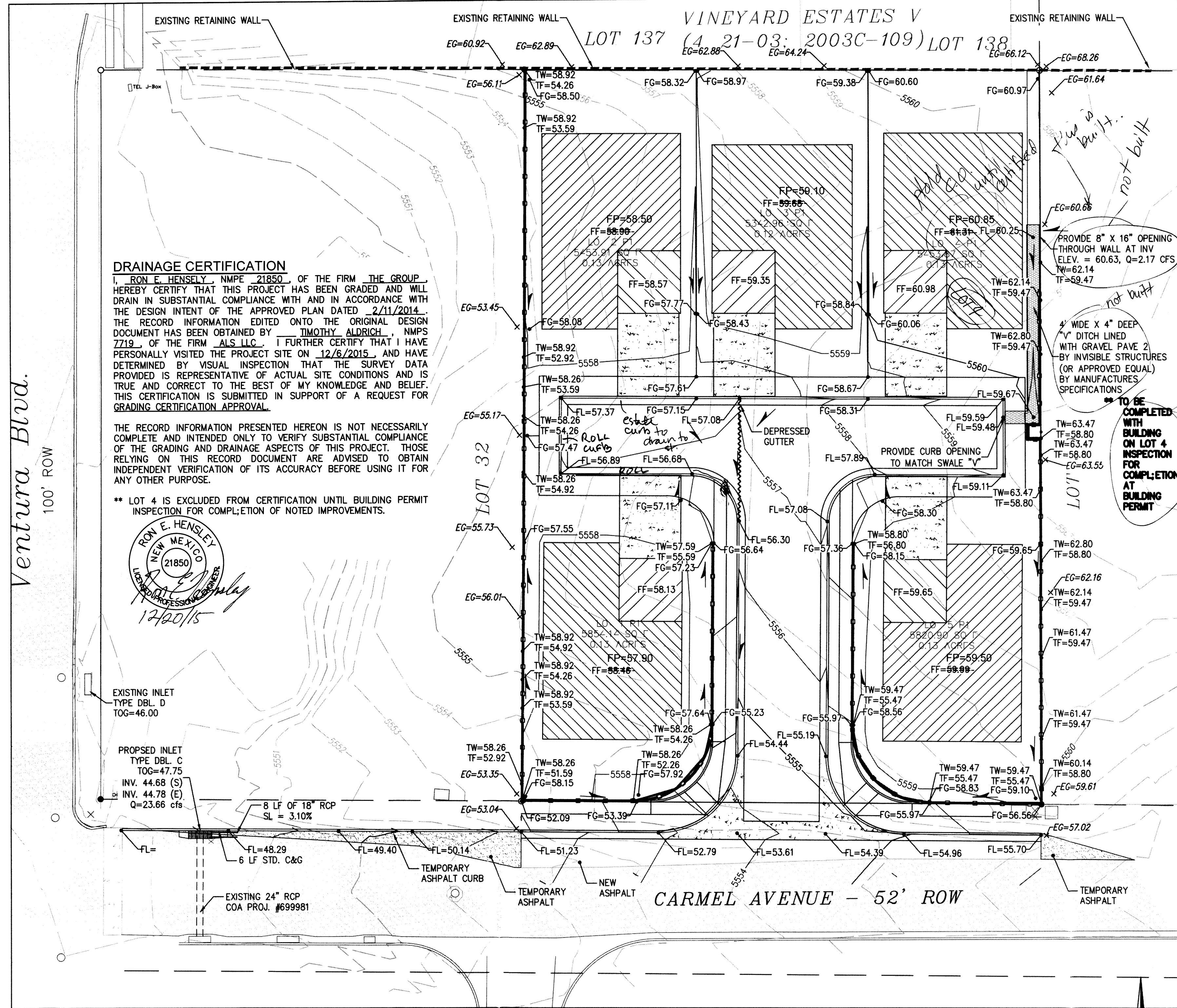
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

IZZAT SUBDIVISION
BEING A REPLAT OF LOT 31, BLOCK 3, UNIT 3, TRACT 2, NAA
GRADING & DRAINAGE PLAN

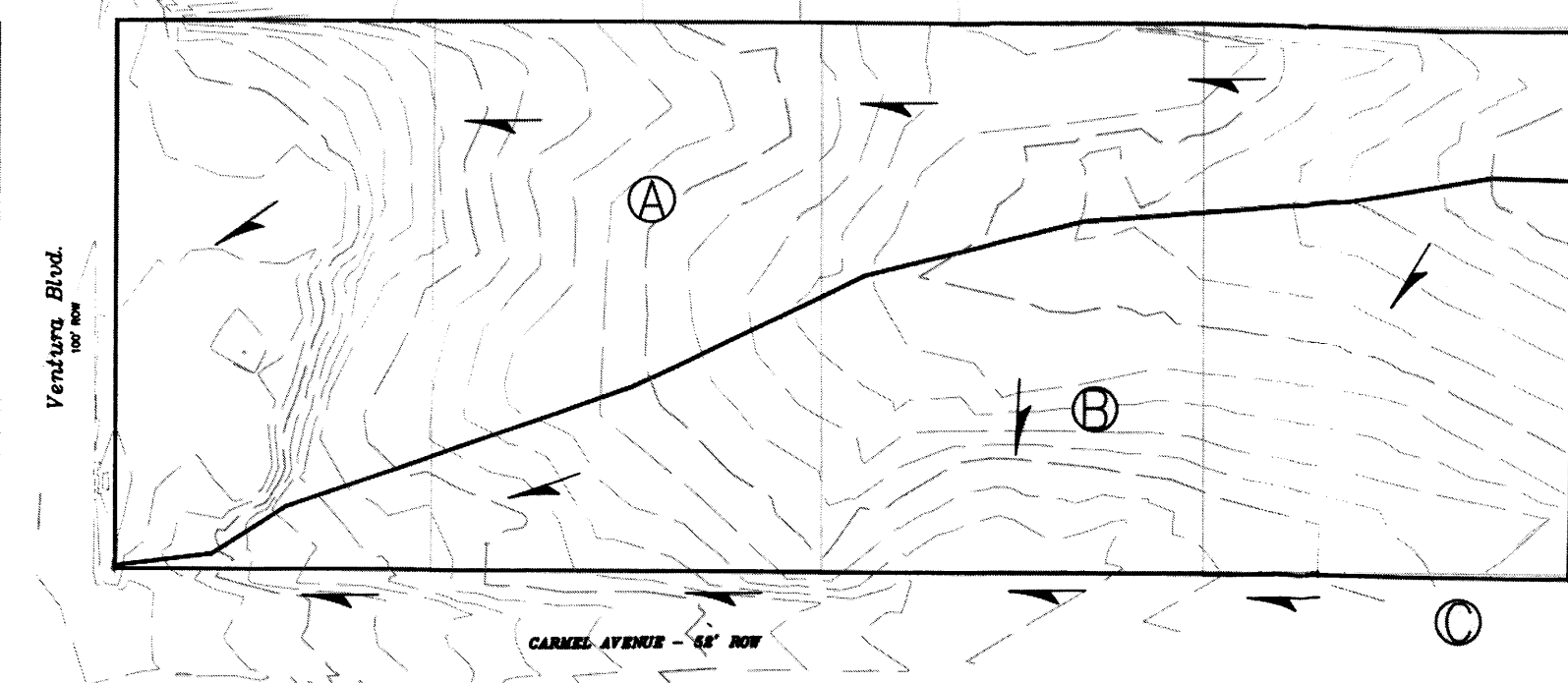
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	Mo./DAY/YR.	Mo./DAY/YR.

DESIGNED BY	REH	DATE	JAN. 2014
DRAWN BY	REH	DATE	JAN. 2014
CHECKED BY	REH	DATE	JAN. 2014

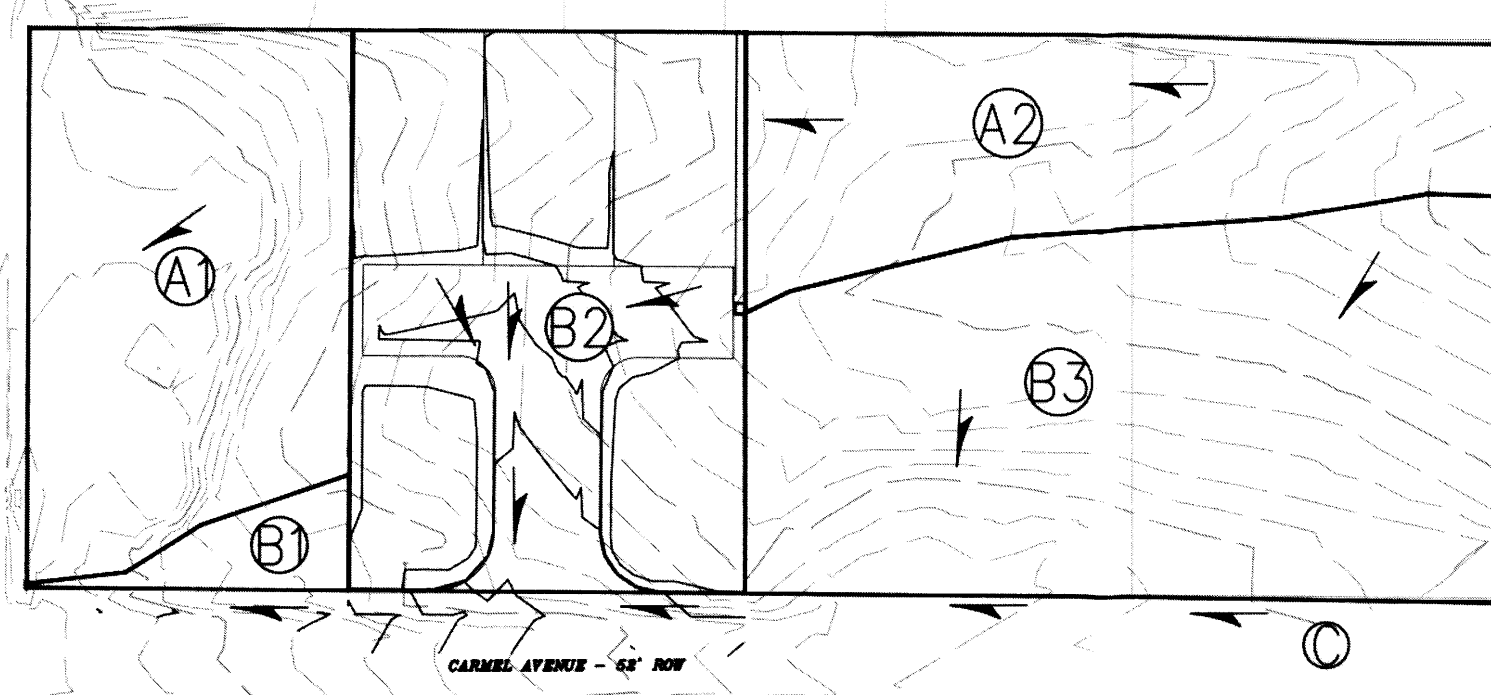
DRB No.	CITY PROJECT No.	ZONE MAP No.	SHEET	OF
1009840		C-20-Z	1	1



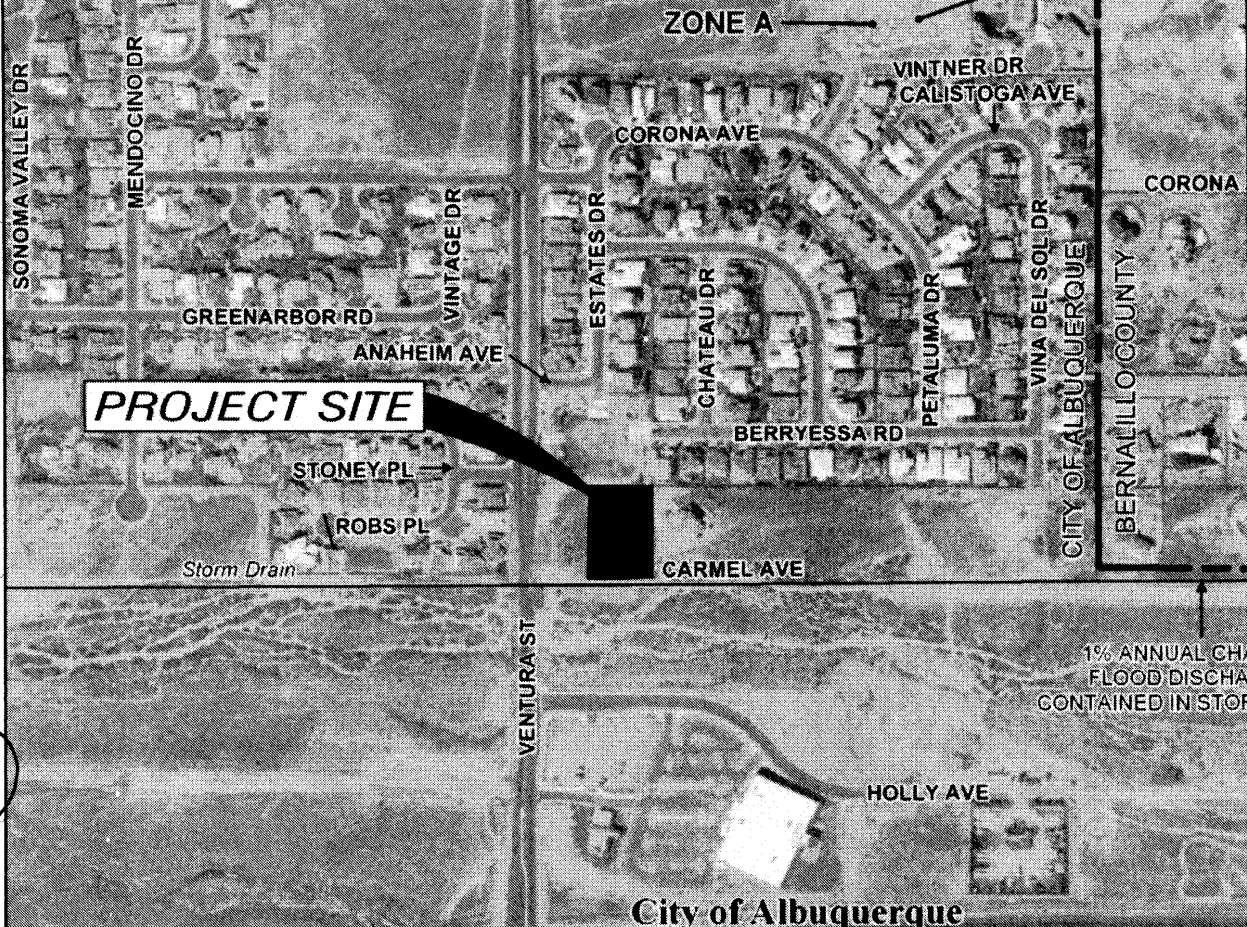
1 GRADING PLAN
1"=20'



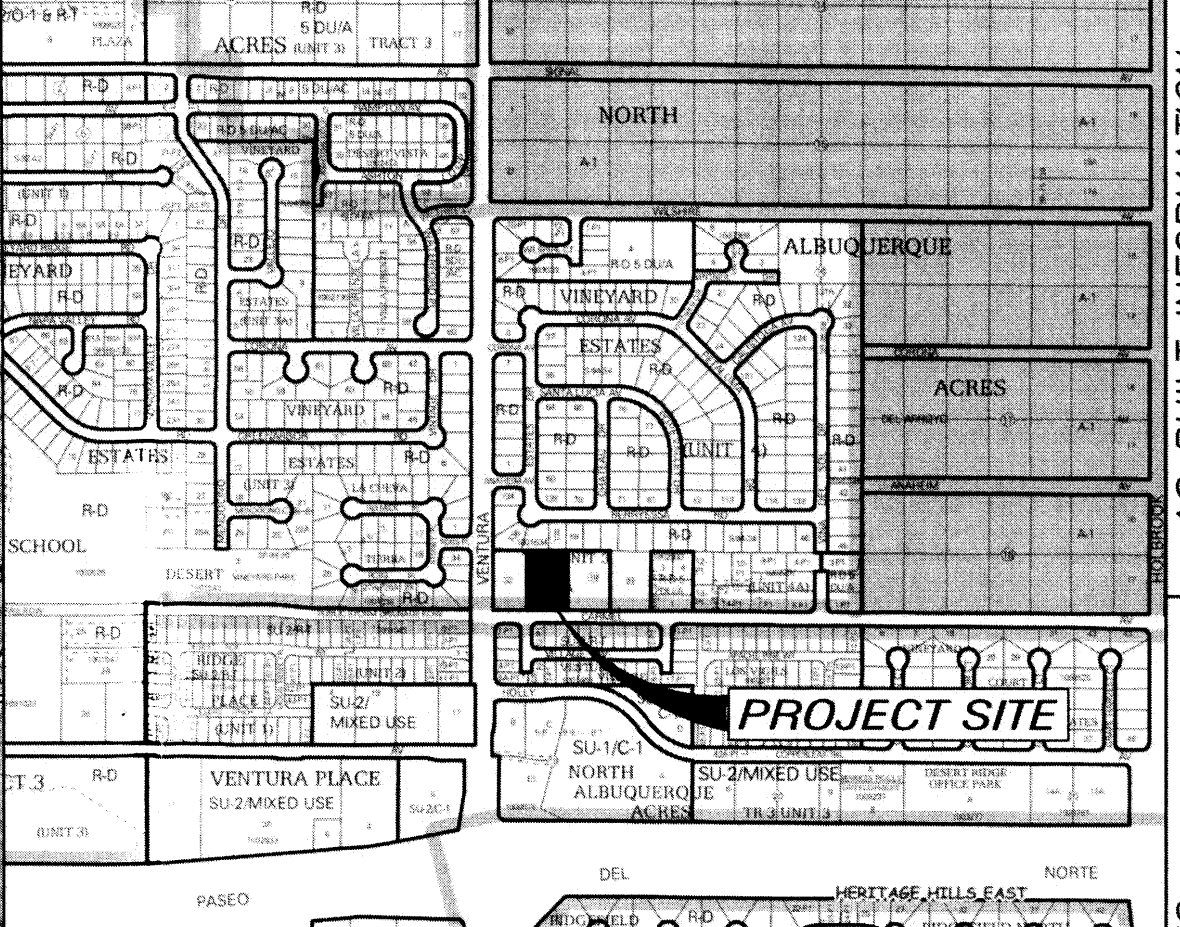
2 EXISTING BASIN MAP
1"=80'



2 PROPOSED BASIN MAP
1"=80'



FIRM MAP NO. 35001C0141G



VICINITY MAP C-20-Z

LOCATION & DESCRIPTION

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METHODOLOGY

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PRECIPITATION

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EXISTING DRAINAGE

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DEVELOPED CONDITION

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HYDROLOGIC DATA - EXISTING

BASINS	AREA (acres)	LAND TREATMENT PERCENTAGES BY TYPE				YIELD (cfs/acre)	Q100 (cfs)	V100-24 (acft)
		A	B	C	D			
A	1.84	0	20	80	10	3.41	6.22	0.201
B	1.48	0	20	80	0	3.26	4.82	0.149
C	4.12	FROM PREVIOUS STUDIES				3.34	13.75	0.434
EXIST	7.44					3.31	24.84	0.784

HYDROLOGIC DATA - PROPOSED

BASINS	AREA (acres)	LAND TREATMENT PERCENTAGES BY TYPE				YIELD (cfs/acre)	Q100 (cfs)	V100-24 (acft)
		A	B	C	D			
A1	0.65	0	20	80	0	3.26	2.13	0.066
A2	0.61	0	20	80	20	3.58	2.17	0.072
B1	0.07	0	20	80	0	3.40	0.23	0.007
B2	0.88	0	10	20	70	4.41	3.90	0.147
B3	1.11	0	20	80	0	3.26	3.61	0.112
C	4.12	FROM PREVIOUS STUDIES				3.34	13.75	0.434
PROPOSED	7.44					3.47	25.79	0.837

LEGAL DESCRIPTION

IZZAT SUBDIVISION
(BEING A REPLAT OF LOT 31, BLOCK 3, UNIT 3, TRACT 2)
WITHIN NORTH ALBUQUERQUE ACRES
IN PROJECTED SECTION 17, TOWNSHIP 11 NORTH, RANGE 4 EAST
ELENA GALLEGOS LAND GRANT NEW MEXICO PRINCIPAL MERIDIAN
CITY OF ALBUQUERQUE BERNALILLO COUNTY, NEW MEXICO

LEGEND

- FLOW ARROW
- EL=11.28 PROPOSED ELEVATION
- 66.33 EXISTING ELEVATION
- TF=11.28 TW=15.28 TOP OF FOOTING/TOP OF WALL ELEVATION
- WATER BREAK
- PROPOSED RETAINING WALL
- EXISTING CONTOUR
- EXISTING CONTOUR
- PROPOSED EASEMENT
- PROPOSED GRADE

NOTES

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AS BUILT INFORMATION			
CONTRACTOR	DATE	WORK	DATE
STAKED BY	DATE	FIELD	DATE
ACCEPTANCE BY	DATE	DRAWINGS	DATE
MICRO-FILM INFORMATION		RECORDED BY	
DATE		NO.	
RECORD NO.			
ELEV=5593.48 (NAD 1983)			
BENCH MARKS			
*AS BM 20-C18 ON WYOMING BOULEVARD NE TURN LEFT AND TRAVEL NORTH ON WYOMING BOULEVARD 1.0 MILES TO MODESTO AVENUE NE. THE BENCHMARK IS A 1 3/4" METALLIC DISK EMBEDDED TO THE TOP OF THE BACK OF CURB OF WYOMING BOULEVARD, NORTH OF THE APPROXIMATE CENTERLINE OF MODESTO AVENUE, 190 FEET NORTHWEST OF A STORM SEWER MANHOLE (NAD 83)			
X=1547745.03 Y=1547745.68 (NAD 83)			
ELEV=5593.48 (NAD 1983)			
SURVEY INFORMATION			
NO.	DATE	BY	REMARKS
DESIGNED BY REH			
DRAWN BY REH			
CHECKED BY REH			
DATE JAN. 2014			
DATE FEB. 2014			
DATE FEB. 2014			
REVISIONS			
DESIGN			
NO. DATE			
DESIGNED BY REH			
DRAWN BY REH			
CHECKED BY REH			
DATE JAN. 2014			
DATE FEB. 2014			
DATE FEB. 2014			
REMARKS			
DESIGN			
NO. DATE			
DESIGNED BY REH			
DRAWN BY REH			
CHECKED BY REH			
DATE JAN. 2014			
DATE FEB. 2014			
DATE FEB. 2014			
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