

LOCATION & DESCRIPTION

THE PROPOSED SITE IS 0.80 ACRES LOCATED NORTH OF ALEXANDRIA POINT PLACE AND WEST OF ELBANK BLVD. NE, AS SHOWN ON THE VICINITY MAP ON THIS SHEET. IT IS CURRENTLY UNDEVELOPED BUT WAS MASS GRADED WITH THIS PORTION OF QUINTESSANCE SUBDIVISION. ACCORDINGLY, VEGETATION ON THE SITE IS SPARSE.

THE SITE TO THE EAST IS DEVELOPED AS THE CARE STONE ASSISTED LIVING FACILITY. THE SITE TO THE WEST IS A DEVELOPED RESIDENTIAL LOT. NORTH OF THE SITE IS THE CUL-DE-SAC AT THE EAST END OF JARASH PLACE NE. JARASH PLACE IS COMPLETED WITH CURB AND GUTTER AND SIDEWALK.

SINCE THIS IS AN INFILL LOT IN A MASTER PLANNED SUBDIVISION WITH COMPLETED DEVELOPMENT ON ALL ADJOINING SITES, THERE IS NO IMPACT TO THE SITE FROM OFF-SITE DRAINAGE.

PURPOSE

THIS GRADING PLAN IS FOR THE PROPOSED SUBDIVISION OF THE SITE INTO 8 RESIDENTIAL TOWNHOUSE LOTS. THE FINAL CONSTRUCTION PLANS WILL BE REVIEWED BY DRC.

METHODOLOGY

THE HYDROLOGY FOR THIS PROJECT WAS ANALYZED USING THE QUICK CALCULATIONS OF THE JUNE 1987 RELEASE OF THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION 22.2. TABLES WITHIN THIS SECTION WAS USED TO ESTABLISH THE 6-HOUR PRECIPITATION, EXCESS PRECIPITATION, AND PEAK DISCHARGE.

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. TABLES WITHIN THIS SECTION WAS USED TO ESTABLISH THE 6-HOUR PRECIPITATION, EXCESS PRECIPITATION, AND PEAK DISCHARGE.

EXISTING DRAINAGE

THE SITE IS UNDEVELOPED AS DESCRIBED ABOVE IN "LOCATION AND DESCRIPTION". THE SITE WAS MASS GRADED WITH A GRADE BREAK DIVIDING THE SITE IN HALF ALONG THE EAST WEST AXIS. THE NORTHERN HALF DRAINS NORTH INTO JARASH PLACE VIA OPENINGS IN THE EXISTING CMU WALL. THE SOUTHERN HALF DRAINS SOUTH INTO ALEXANDRIA PLACE.

FLOODPLAIN STATUS

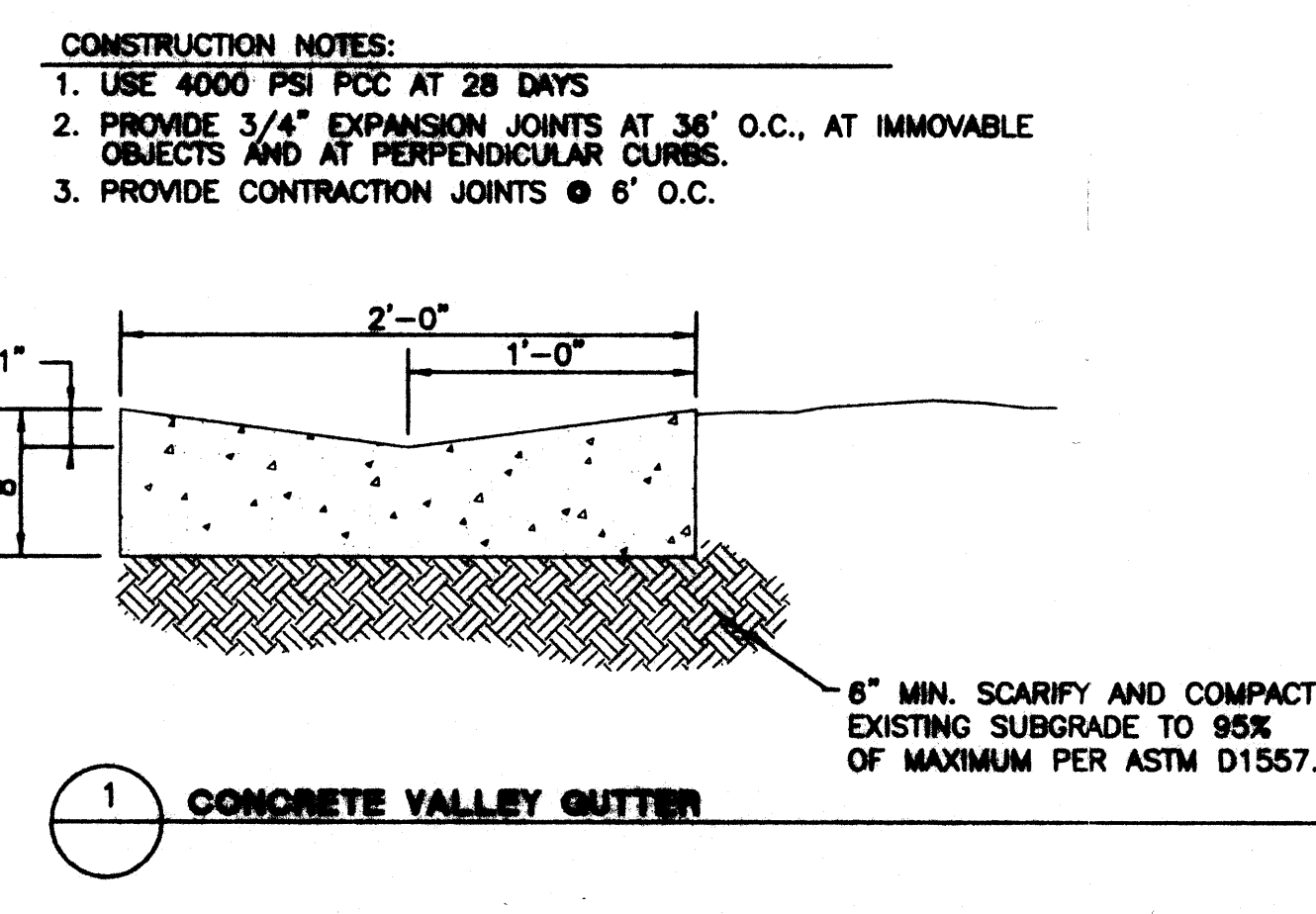
AS SHOWN ON FIRM PANEL 35001C0328, SEPTEMBER 1986. THE SITE IS NOT WITHIN OR ADJACENT TO ANY IDENTIFIED FLOODPLAIN.

DEVELOPED CONDITION

THE PROPOSED DEVELOPMENT WILL DIVIDE THE SITE INTO FOUR DISTINCT BASINS. THE REAR YARDS OF THE WESTERN ROW OF HOUSES (LOTS 1 THROUGH 6) DISCHARGE TO THE NORTH (BASIN A) OR TO THE SOUTH (BASIN B) VIA THE PROPOSED CONCRETE SWALE AND SIDEWALK CULVERT INTO THE DEVELOPED STREETS. THE ROOF AREA OF ALL HOUSES AS WELL AS THE REMAINDER OF THE SITE DRAINS TO DISCHARGE TO THE NORTH (BASIN C) AND TO THE SOUTH (BASIN D) TO DISCHARGE INTO THE ADJACENT DEVELOPED STREETS. BASIN C WILL DISCHARGE THROUGH A SIDEWALK CULVERT AT THE NORTH END OF ALEXANDRIA POINT PLACE INTO JARASH PLACE. BASIN D WILL DISCHARGE WITHIN ALEXANDRIA POINT PLACE TO THE SOUTH INTO ALEXANDRIA ROAD. BOTH ALEXANDRIA ROAD AND JARASH PLACE DISCHARGE TOWARD THE WEST INTO IRBID ROAD WHERE THE MASTER PLANNED STORM DRAIN SYSTEM BEGINS.

MASTERPLAN

THE QUINTESSANCE DRAINAGE MASTERPLAN (02/03) INCLUDED THIS SITE WITHIN TWO DEVELOPED DRAINAGE BASINS - BASIN 1803 INCLUDED THE NORTH HALF OF THIS SITE WHILE BASIN 1804 INCLUDED THE SOUTH HALF OF THE SITE. THE MASTERPLAN ASSUMED LAND TREATMENT PERCENTAGES OF 25% TYPE B, 25% TYPE C, AND 50% TYPE D SOIL. THE PROPOSED DEVELOPMENT WILL DISCHARGE 0.3 CFS IN EXCESS OF THAT ANTICIPATED BY THE MASTERPLAN. DUE TO THE VERY SMALL BASIN SIZES ON THE PROPOSED SITE, THE INCREASED DISCHARGE WILL HAVE NO NEGATIVE EFFECT OF DOWNSTREAM FACILITIES.



LEGAL DESCRIPTION

LOT 30, TRACT 3, BLOCK 20, UNIT 2 NORTH ALBUQUERQUE ACRES

BENCHMARK

COA MONUMENT "12-021" HAVING A VERTICAL ELEVATION OF 5724.14

GENERAL NOTES:

- ALL ROOFS SHALL DRAIN TO THE STREET.
- ALL CURB AND GUTTER SHALL BE COA STD CURB AND GUTTER.
- STOP SIGNS SHALL BE PLACED AT ALL SITE EXITS.

KEYED NOTES:

- 24" SIDEWALK CULVERT PER COA STD DWG 2238.
- 48" CONC SIDEWALK PER COA STD DWG 2430 (6PPEST TYPE).
- CROWN TRANSITION
- NEW SITE CMU RETAINING WALL - EARTH TONE COLORED BLOCK DESIGN BY OTHERS.
- EXISTING CMU RETAINING WALL TO REMAIN.
- 2' WIDE CONCRETE VALLEY GUTTER.
- CONC VALLEY GUTTER AND PRIVATE ENTRANCE PER COA STD DWG 2420.
- CONC VALLEY GUTTER PER COA STD DWG 2481.
- PROVIDE 1 CMU UNIT TURNED TO PROVIDE DRAINAGE AT FLOWLINE ELEVATION.

100-YEAR HYDROLOGIC CALCULATIONS

BASIN ID	AREA (acre)	LAND TREATMENT				WEIGHTED E (in)	V (6-hr)	V (24-hr)	Q (cfs)
		A	B	C	D				
		(X)	(X)	(X)	(X)				
EXISTING CONDITIONS									
BASIN A	0.0486	100.00	0.00	0.00	0.00	0.0031	135	0.18	
BASIN B	0.0470	100.00	0.00	0.00	0.00	0.0031	135	0.10	
BASIN C	0.3619	100.00	0.00	0.00	0.00	0.0241	1,051	1.00	
BASIN D	0.3841	100.00	0.00	0.00	0.00	0.0253	1,087	1.00	
TOTAL	0.8196					0.0555	2,398	3.18	
PROPOSED CONDITIONS									
BASIN A	0.0486	0.00	50.00	50.00	0.00	1.27	0.0048	215	0.19
BASIN B	0.0470	0.00	50.00	50.00	0.00	1.27	0.0050	217	0.10
BASIN C	0.3619	0.00	15.00	15.00	70.00	2.23	0.0672	2,988	1.00
BASIN D	0.3841	0.00	15.00	15.00	70.00	2.23	0.0678	2,994	1.00
TOTAL	0.8196					0.1403	6,308	3.19	
PROPOSED CONDITIONS									
EXCESS PRECIP.	0.80	1.08	1.46	2.64	EI (in)				
PEAK DISCHARGE	2.20	2.92	3.73	5.25	Qpl (cfs)				
$WEIGHTED E (in) = (EA)(XA) + (EB)(XB) + (EC)(XC) + (ED)(XD)$									
$V6-hr (acre-ft) = (WEIGHTED E)(AREA)/12$									
$V10day (acre-ft) = V6-hr + (AD)(P10DAY - P6-HR)/12$									
$Q (cfs) = (QPA)(XA) + (QPB)(XB) + (QPC)(XC) + (QPD)(XD)$									
ZONE = 4 $P6-hr (in) = 2.90$ $P24-hr (in) = 3.90$ $P10-day (in) = 5.00$									

ALEXANDRIA POINT SUBDIVISION

GRADING AND DRAINAGE PLAN

NORTH ALBUQUERQUE ACRES, ALBUQUERQUE, NEW MEXICO

RECEIVED
DEC 11 2001

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REVISION DATE DESCRIPTION

FILE NAME: GRADING 11.20.01