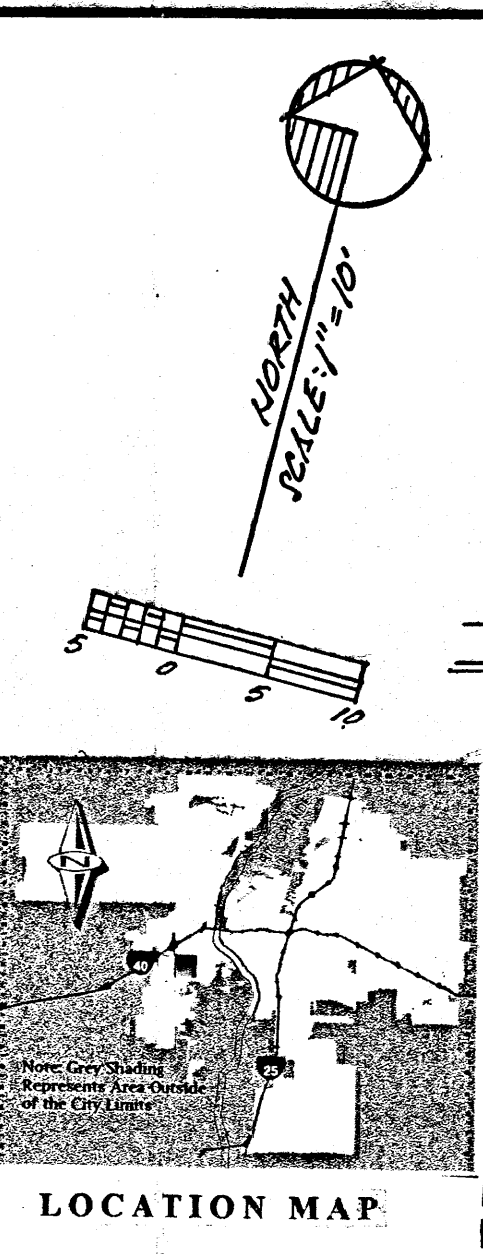
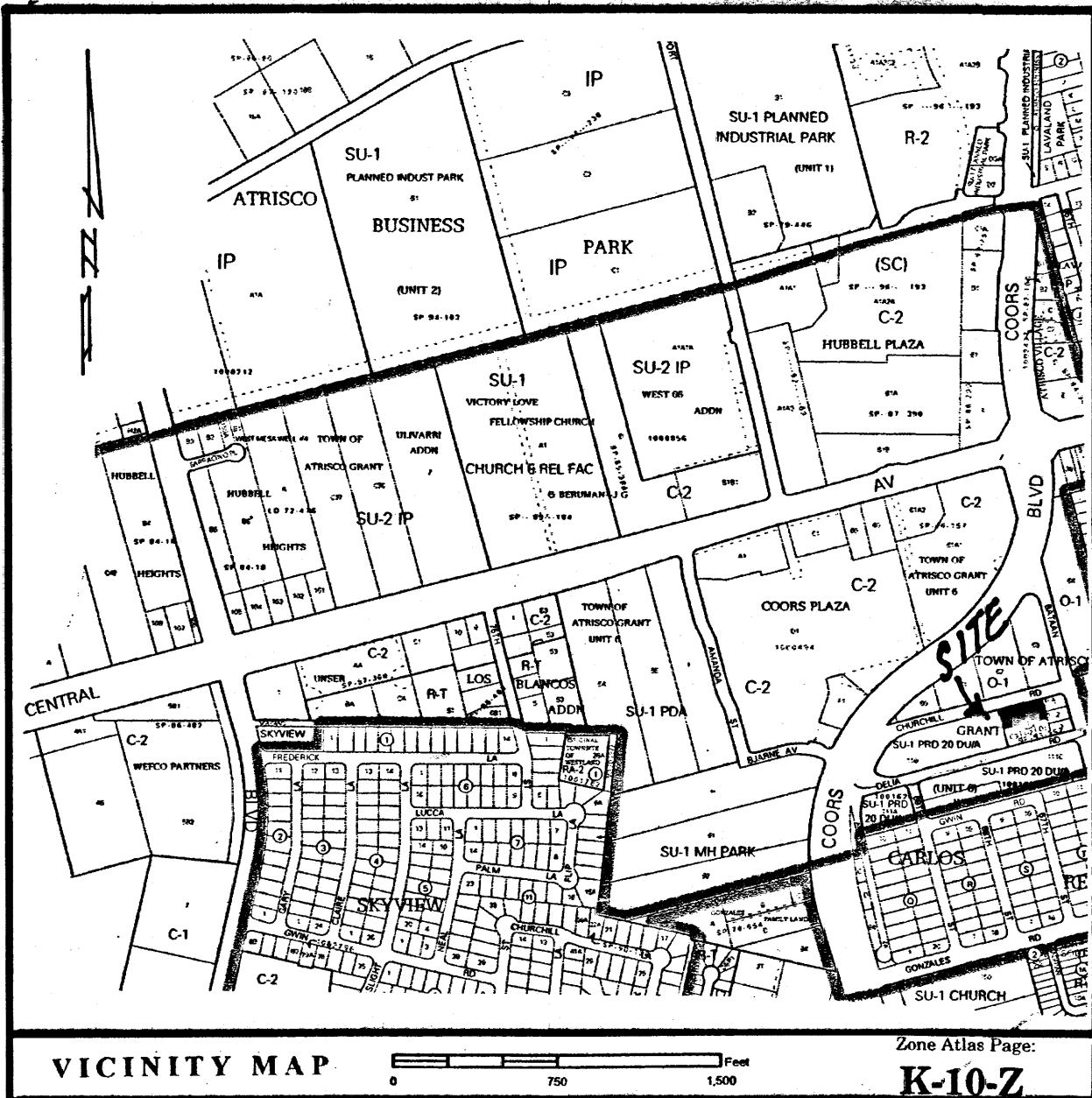




EROSION CONTROL MEASURES

THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT OF STORM RUNOFF DURING CONSTRUCTION. HE SHALL ENSURE THAT THE FOLLOWING MEASURES ARE TAKEN:

- ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY CONSTRUCTION OF BERMS, DIKES, SWALES, PONDS, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUNOFF FROM LEAVING THE SUBJECT SITE AND ENTERING ADJACENT PROPERTIES.
- ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUNOFF FROM THE SUBJECT SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER PUBLIC STREET RIGHT-OF-WAYS.
- THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY AND ALL SEDIMENT FROM PUBLIC STREETS THAT HAS BEEN ERODED FROM THE SUBJECT SITE AND DEPOSITED THEREON.

CONSTRUCTION NOTES

- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE AT 260-1990 FOR THE ACTUAL FIELD LOCATION OF THE EXISTING SURFACE OF SUB-SURFACE UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM OF DELAY.
- ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- ALL CONSTRUCTION WITHIN PUBLIC STREET RIGHT-OF-WAY(S) SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE/BERNALILLO COUNTY STANDARDS AND PROCEDURES.

LEGEND

TOP OF CURB ELEVATION = $TC = 80.42$
CURB FLOWLINE ELEVATION = $FL = 79.00$
EXISTING SPOT ELEVATION = $ES = 83.2$
EXISTING CONTOUR ELEVATION = $EC = 80.78$
PROPOSED SPOT ELEVATION = $PS = 80.85$
PROPOSED CONTOUR ELEVATION = $PC = 81.14$
PROPOSED OR EXISTING CONCRETE SURFACE = CS
EXISTING FENCE LINE = FL

A.1 PRECIPITATION ZONES

Bernalillo County's four precipitation zones are indicated in TABLE A-1 and on FIGURE A-1.

ZONE	LOCATION
1	West of the Rio Grande
2	Between the Rio Grande and San Mateo
3	Between San Mateo and Eubank, North of Interstate 40, and between San Mateo and the East boundary of Range 4 East, South of Interstate 40
4	East of Eubank, North of Interstate 40, and East of the East boundary of Range 4 East, South of Interstate 40

TABLE A-4. LAND TREATMENTS

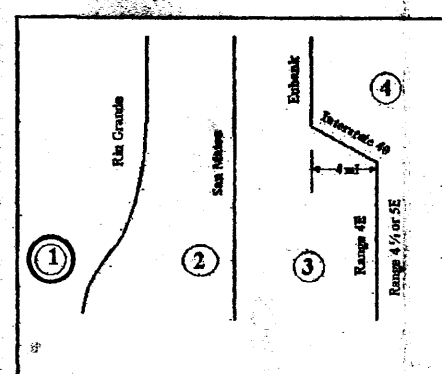
Treatment	Land Condition
A	Soil uncompacted by human activity with 0 to 10 percent slopes. Native grasses, weeds and shrubs in typical densities with minimal disturbance to grading, groundcover and infiltration capacity. Croplands.
B	Irrigated lawns, parks and golf courses with 0 to 10 percent slopes. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes greater than 10 percent and less than 20 percent.
C	Soil uncompacted by human activity. Minimal vegetation. Unpaved parking, roads, trails. Most vacant lots. Gravel or rock on plastic (desert landscaping). Irrigated lawns and parks with slopes greater than 10 percent. Native grasses, weeds, and shrubs, and soil uncompacted by human activity with slopes at 20 percent or greater. Native grass, weed and shrub areas with clay or clay loam soils and other soils of very low permeability as classified by SCS Hydrologic Soil Group D.
D	Impervious areas, pavement and roofs.

TABLE A-9. PEAK DISCHARGE (cfs/acre)

Zone	A	B	C	D
1	1.29 (0.00, 0.24)	2.03 (0.33, 0.76)	2.87 (0.47, 1.49)	4.37 (1.69, 2.87)
2	1.56 (0.00, 0.38)	2.28 (0.08, 0.95)	3.14 (0.60, 1.71)	4.70 (1.86, 3.14)
3	1.87 (0.00, 0.58)	2.60 (0.21, 1.19)	3.45 (0.78, 2.00)	5.02 (2.04, 3.39)
4	2.20 (0.05, 0.87)	3.52 (0.38, 1.45)	4.73 (1.00, 2.26)	6.35 (2.17, 3.57)

TABLE A-10. PEAK INTENSITY (IN/HR AT 1-HR DURATION)

Zone	Intensity
1	4.70 (1.84, 3.14)
2	5.05 (2.04, 3.41)
3	5.61 (2.21, 3.65)
4	6.35 (2.34, 3.81)



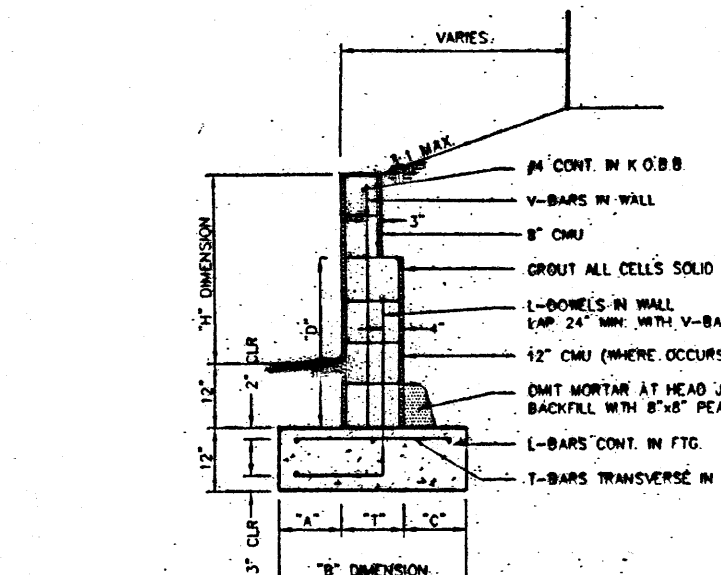
GENERAL NOTES

- NO FERTILIZER BOUNDARY CORNERS HAVE BEEN FIELD ESTABLISHED PER THIS SURVEY OF THE SUBJECT PROPERTY.
- NO SEARCH HAS BEEN MADE FOR EASEMENTS OF RECORD OTHER THAN SHOWN HEREON.

RETAINING WALL CONSTRUCTION NOTES

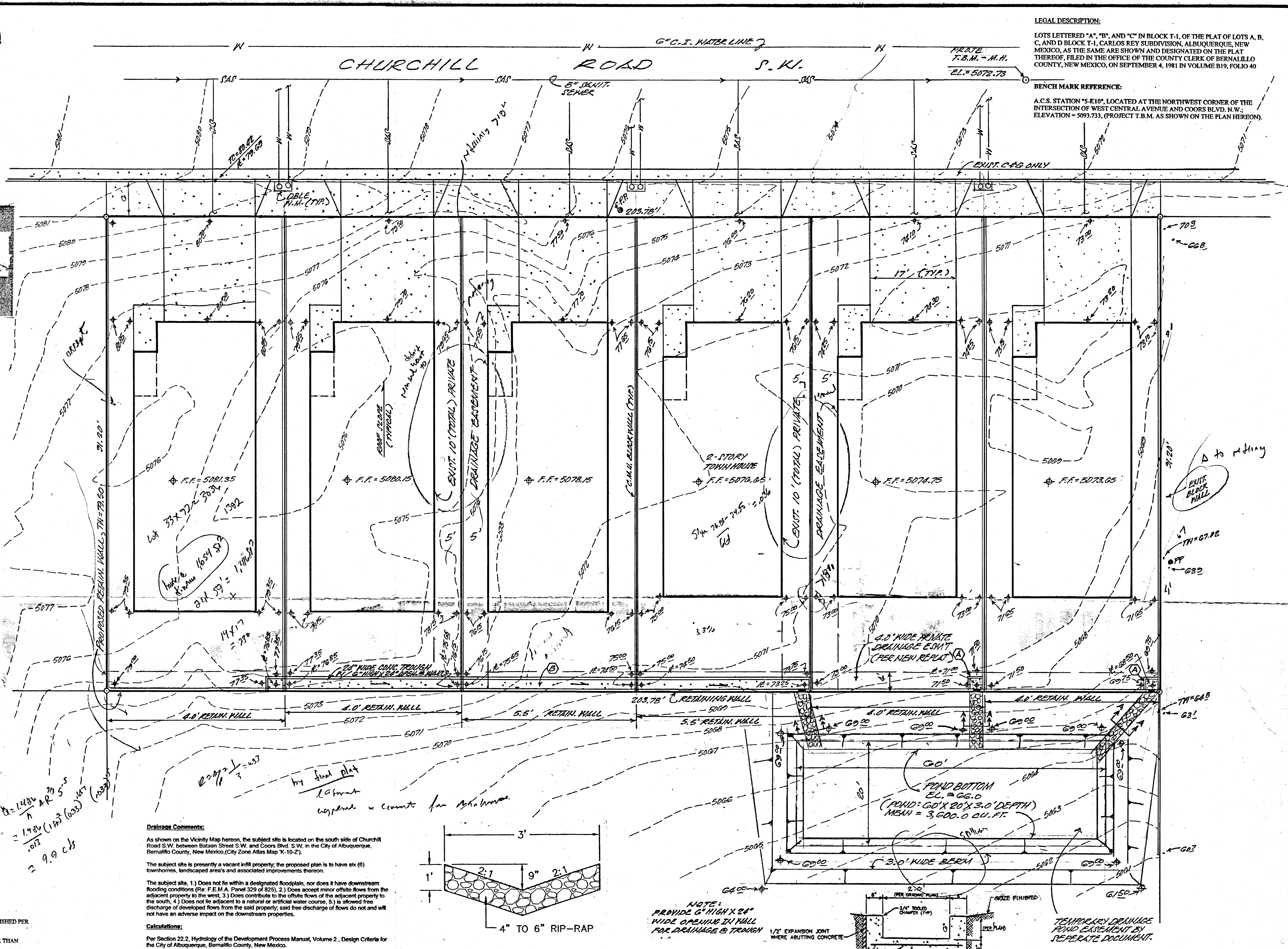
- ALL SUBGRADE AND BACKFILL SHALL BE COMPACTED TO 95% M.D. BACKFILL MATERIAL WITH A CONSPICUOUS CONTENT OF ORGANIC MATTER AND/OR CLAY IS NOT ALLOWED.
- ALL CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI.
- ALL REINFORCING SHALL BE DEFINED BARS WITH A MINIMUM TENSILE STRENGTH OF 60,000 PSI (GRADE 60).
- ALL WORK SHALL COMPLY WITH THE PROVISIONS OF THE UNIFORM BUILDING CODE AND ITS APPLICABLE STANDARDS.
- IF PLASTER IS BUILT WITH WALL, THE 6" CMU MAY BE CENTERED ON THE 12" CMU BELOW PROVIDED THAT THE VERTICAL REINFORCING IN THE 6" CMU IS AS DIMENSIONED. PLASTER SHALL BE 12" BY 16" WITH ONE #5 VERTICAL BAR IN EACH CELL.

DIMENSION	DIMENSION	DIMENSION	DIMENSION	DIMENSION	DIMENSION	DIMENSION	DIMENSION	DIMENSION	DIMENSION
3'-4" TO 6'-0"	1'-2"	12"	1'-10"	4'-0"	#5 @ 16" O.C.	#5 @ 16" O.C.	#4 @ 48" O.C.	#4 @ 48" O.C.	#4 @ 48" O.C.
2'-0" TO 3'-4"	12"	12"	12"	3'-0"	#5 @ 16" O.C.	#4 @ 48" O.C.	#4 @ 48" O.C.	#4 @ 48" O.C.	#4 @ 48" O.C.
0 TO 2'-0"	6"	6"	12"	2'-6"	#5 @ 16" O.C.	#4 @ 48" O.C.	#4 @ 48" O.C.	#4 @ 48" O.C.	#4 @ 48" O.C.



RETAINING WALL WITH 31 MAX. UPPER SLOPE

Notes: Drain holes should be installed at the base of the wall to allow for drainage.



LEGAL DESCRIPTION

LOTS LETTERED "A", "B", AND "C" IN BLOCK T-1, OF THE PLAT OF LOTS A, B, C, AND D BLOCK T-1, CARLOS REY SUBDIVISION, ALBUQUERQUE, NEW MEXICO, AS THE SAME ARE SHOWN AND DESIGNATED ON THE PLAT THEREOF, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO, ON SEPTEMBER 4, 1981 IN VOLUME B19, FOLIO 40

BENCHMARK REFERENCE

A.C.S. STATION "5-K10" LOCATED AT THE NORTHWEST CORNER OF THE INTERSECTION OF WEST CENTRAL AVENUE AND COORS BLVD. N.W. ELEVATION = 5093.733, (PROJECT T.B.M. AS SHOWN ON THE PLAN HEREON).

Drainage Comments:

As shown on the Vicinity Map hereon, the subject site is located on the south side of Churchill Road S.W. between Bataan Street S.W. and Coors Blvd. S.W. in the City of Albuquerque, Bernalillo County, New Mexico, (City Zone Atlas Map K-10-Z).

The subject site is presently a vacant lot. The proposed plan is to have six (6) townhomes, landscaped area and associated improvements thereon.

The subject site, 1) Does not lie within a designated floodplain, nor does it have downstream flooding conditions (Rat. F.E.M.A. Panel 329 of 825); 2) Does not accept minor offsite flows from the adjacent property to the west; 3) Does not contribute to the offsite flows of the adjacent property to the south; 4) Does not lie adjacent to a natural or artificial water course; 5) Is allowed free discharge of developed flows from the said property, said free discharge of flows do not and will not have an adverse impact on the downstream properties.

Calculations:

Per Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria for the City of Albuquerque, Bernalillo County, New Mexico.

Site Area: 0.43 acre

Precipitation Zone: One (1)

Peak Intensity: In./Hr. at T = Twelve (12) minutes, 100-Yr. - 6 Hr. = 4.70

Land Treatment Method for Calculation of "Q" - Tables A-8 & A-9.

Land Treatment Factors, Table A-4.

Precipitation: 360 = 2.20 in.

1440 = 2.66 in.

10 DAY = 3.67 in.

EXISTING EXCESS PRECIPITATION:

TREATMENT A 0.44 in.

TREATMENT B 0.07 in.

TREATMENT C 0.99 in.

TREATMENT D 1.97 in.

EXISTING CONDITIONS:

TREATMENT A 0.00 ac.

TREATMENT B 0.00 ac.

TREATMENT C 0.43 ac.

TREATMENT D 0.00 ac.

PEAK DISCHARGE:

1.29 cfs/ac.

2.03 cfs/ac.

2.87 cfs/ac.

4.37 cfs/ac.

PROPOSED CONDITIONS:

AREA

0.00 ac.

0.05 ac.

0.20 ac.

0.23 ac.

EXISTING EXCESS PRECIPITATION:

Weighted E = $(0.44) \times (0.00) + (0.07) \times (0.00) + (0.99) \times (0.43) + (1.97) \times (0.00) = 0.43$

V100-360 = $(0.99) \times (0.43) \times 12 = 0.035411 \text{ ac-ft} = 1,545.3 \text{ cf}$

EXISTING PEAK DISCHARGE:

Q100 = $(1.29) \times (0.00) + (2.03) \times (0.00) + (2.87) \times (0.43) + (4.37) \times (0.00) = 1.23$

PROPOSED EXCESS PRECIPITATION:

Weighted E = $(0.44) \times (0.00) + (0.07) \times (0.00) + (0.99) \times (0.20) + (1.97) \times (0.23) = 0.43$

V100-360 = $(1.51) \times (0.43) \times 12 = 0.05411 \text{ ac-ft} = 2,357.0 \text{ cf}$

V100-1440 = $(0.05) \times (0.23) \times (2.66 - 2.20) \times 12 = 0.05882 \text{ ac-ft} = 2,562.2 \text{ cf}$

V100-10day = $(0.05) \times (0.23) \times (3.67 - 2.20) \times 12 = 0.07818 \text{ ac-ft} = 3,405.5 \text{ cf}$

PROPOSED PEAK DISCHARGE:

Q100 = $(1.29) \times (0.00) + (2.03) \times (0.00) + (2.87) \times (0.20) + (4.37) \times (0.23) = 1.58$

INCREASE = 0.35 CFS

NOTE: PROVIDE 6" HIGH X 24" WIDE OPENING IN WALL FOR DRAINAGE & TROUGH

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GRADING PLAN

A PROPOSED PLAN FOR CHURCHILL TOWNHOMES CHURCHILL ROAD S.W. ALBUQUERQUE, NEW MEXICO NOVEMBER, 2006

