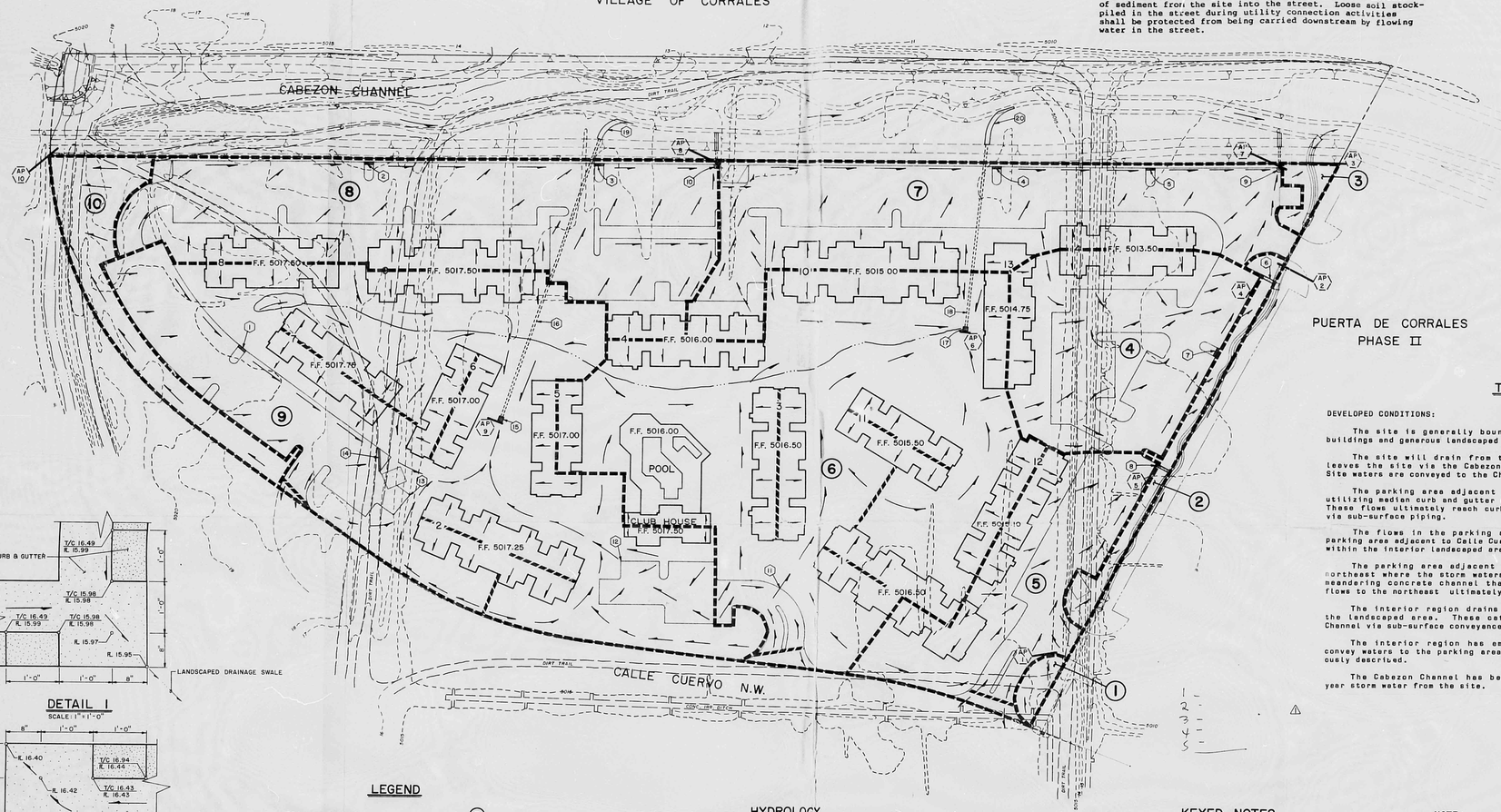
PUBLIC WORKS/HYDROLOGY

2 OF 9

A14/D4

VILLAGE OF CORRALES



EROSION CONTROL

The site will be fully developed immediately. Erosion problems generated by phased development will not, therefore, be a problem.

Construction Phase: The contractor shall exercise reasonable care during construction to prevent the movement of sediment from the site into the street. Loose soil stockpiled in the street during utility connection activities shall be protected from being carried downstream by flowing water in the street.

N

SCALE: 1" = 50'

PUERTA DE CORRALES
PHASE II

TEXT

DEVELOPED CONDITIONS:

The site is generally bounded by parking areas with multi-storied buildings and generous landscaped areas in the interior region.

The site will drain from the west to east. The developed runoff leaves the site via the Cabezon Channel, which drains to the southeast. Site waters are conveyed to the Channel as follows.

The parking area adjacent to the Channel drains to the southeast, utilizing median curb and gutter on the low side along with curb culverts. These flows ultimately reach curb drains that convey them to the Channel via sub-surface piping.

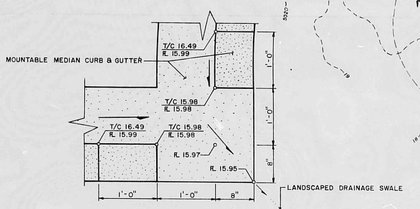
The flows in the parking areas adjacent to the clubhouse and the parking area adjacent to Calle Cuervo are directed to a catch basin located within the interior landscaped areas.

The parking area adjacent to the southeast boundary drains to the northeast where the storm waters are conveyed via concrete troughs to a meandering concrete channel that parallels the boundary. This Channel flows to the northeast ultimately discharging into the Cabezon Channel.

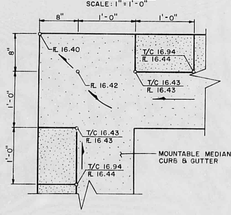
The interior region drains to two (2) catch basins, located within the landscaped area. These catch basins direct waters to the Cabezon Channel via sub-surface conveyance.

The interior region has emergency overflow spillways that would convey waters to the parking areas, where they would be handled as previously described.

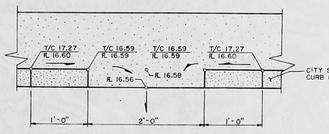
The Cabezon Channel has been designed to convey all of the 100-year storm water from the site.



DETAIL 1
SCALE: 1" = 1'-0"



DETAIL 2
SCALE: 1" = 1'-0"



DETAIL 3
SCALE: 1" = 1'-0"

LEGEND

- DRAINAGE BASINS (7)
- DRAINAGE BASIN BOUNDARY
- DRAINAGE DIVIDE
- DIRECTION OF FLOW
- EXISTING CONTOURS
- CURB CULVERTS
- CURB DRAINS
- CONCRETE RUNDOWNS
- CATCH BASINS
- WATER SCAPE CHANNEL INVERT
- ANALYSIS POINT (AP 7)

HYDROLOGY

AP #	DA AC	H FT	S FT/FT	L FT	T_c MIN	SOIL TYPE	% IMP	CN	C	P_2 IN	P_{10} IN	P_{100} IN	I_2 IN/HR	I_{10} IN/HR	I_{100} IN/HR	V_2 FT^3	V_{10} FT^3	V_{100} FT^3	Q_2 CFS	Q_{10} CFS	Q_{100} CFS
1	0.05					A	60	81	.49	1.0	1.4	2.2	2.15	3.01	4.73	18.1	54.5	136	0.1	0.1	0.1
2	0.17					A										61.7	185.1	463	0.2	0.3	0.4
3	0.09					A										32.7	98.0	245	0.1	0.1	0.2
4	0.83					A										301.3	903.9	2,260	0.9	1.2	1.9
5	0.70					A										254.1	762.3	1,906	0.7	1.0	1.6
6	2.65					A										961.8	2,886	7,215	2.7	3.9	6.1
7	1.29					A										468.3	1,404.9	3,512	1.4	1.9	3.0
8	1.46					A										530	1,590	3,975	1.5	2.2	3.4
9	2.77					A										1,005.5	3,016.7	7,540	2.9	4.0	6.4
10	0.31					A										112.5	337.6	844	0.3	0.5	0.7
TOTAL	10.32															3,746	11,239	28,096	10.8	15.2	23.8

KEYED NOTES

1. Curb culvert; inv. in 17.45, inv. out 17.40
2. Curb culvert; inv. in 16.09, inv. out 16.04
3. Curb culvert; inv. in 14.94, inv. out 14.89
4. Curb culvert; inv. in 12.93, inv. out 12.88
5. Curb culvert; inv. in 12.17, inv. out 12.12
6. 2' concrete rundown; inv. in 12.70, inv. out 9.00
7. Curb culvert; inv. in 12.67, inv. out 12.62
8. 2' concrete rundown; inv. in 13.30, inv. out 10.07
9. Curb drain; inv. in 11.50, inv. out 8.88
10. Curb drain; inv. in 14.32, inv. out 11.97
11. Curb opening; See Detail 3
12. Curb opening; See Detail 2
13. Curb opening; See Detail 1
14. Alley gutter
15. Catch basin; Rim El. 15.08, inv. 12.33
16. 24" RCP @ S = 0.003
17. Catch basin; Rim El. 13.50, inv. 10.50
18. 24" RCP @ S = 0.0025
19. 4' conc. rundown, inv. in 11.47, inv. out 10.87
20. 4' conc. rundown, inv. in 10.05, inv. out 9.81

NOTE:
FOR OFF - SITE AND EXISTING CONDITIONS, SEE SHEETS 1 & 2.

BENCH MARK REFERENCE:
⚠ N.M.S.H.D. BRASS CAP "N.M. 448 - N12" ELEV. 5023.41
LOCATED 60' WEST OF ℄ COORS ROAD N.W. APPROX. 550' SOUTH OF INTERSECTION WITH CORRALES ROAD N.W. (S.R. No. 528)

NO.	REVISIONS	BY	DATE
⚠	Add Bench Mark Reference; Change Text	m.s.	11-12-85

PUERTA DE CORRALES
PHASE II
DRAINAGE PLAN
INTRACT SUMMARY

RECEIVED
NOV 14 1985
HYDROLOGY SECTION

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CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque New Mexico 87114

Designed	Drawn	Checked	Sheet
TG	m.s.		3 of 3
Job No 500804	Date SEPT., 1985		

11-12-85

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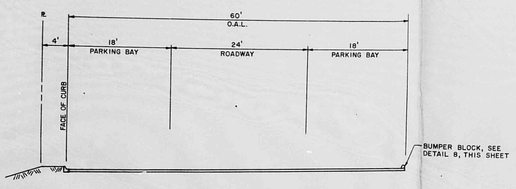
The photographic process used meets the Basic Microfilm Standards of the National Micrographics Association (MS125-1977)

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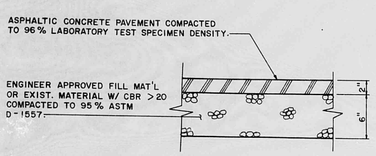
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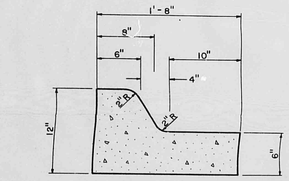
D 24 C 20 B 16 A 12 CITY OF ALBUQERQUE C D



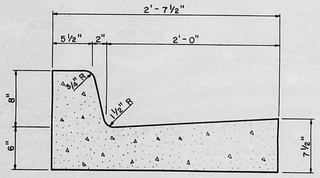
DETAIL 1 PARKING & ROADWAY SECTION
NO SCALE



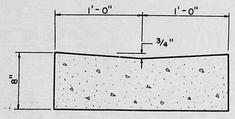
DETAIL 2 PAVEMENT SECTION
SCALE: 1½" = 1'-0"



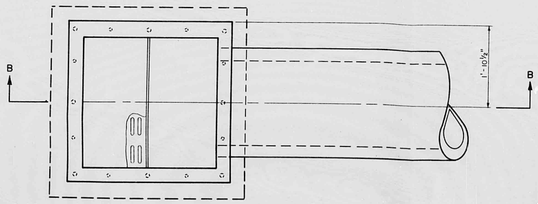
DETAIL 3 MOUNTABLE MEDIAN CURB & GUTTER
SCALE: 1½" = 1'-0"



DETAIL 4 STANDARD CURB & GUTTER
SCALE: 1½" = 1'-0"

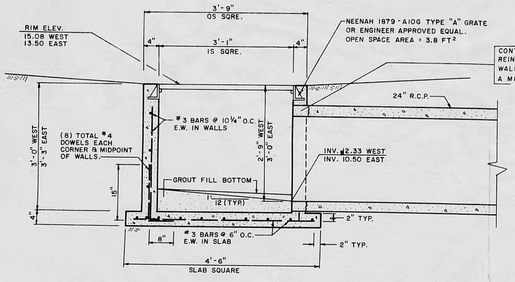


DETAIL 5 ALLEY GUTTER
SCALE: 1½" = 1'-0"



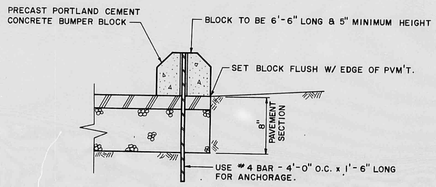
PLAN

DETAIL 6 CATCH BASIN (2 REQ'D.)
SCALE: ¾" = 1'-0"

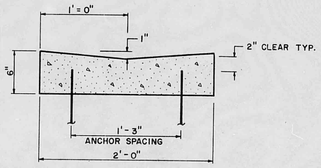


(B 15) SECTION

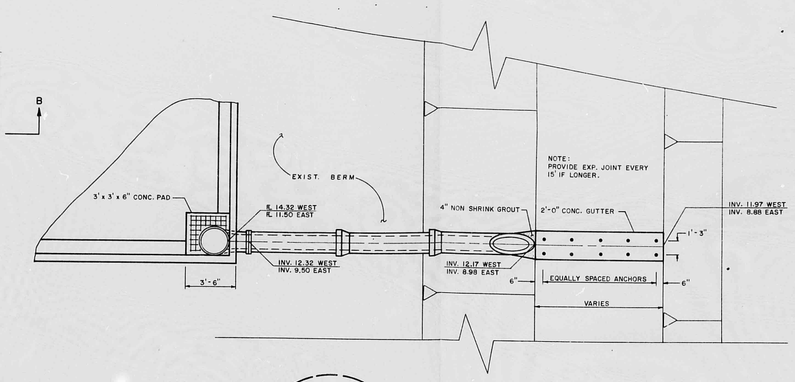
DETAIL 6 CATCH BASIN (2 REQ'D.)
SCALE: ¾" = 1'-0"

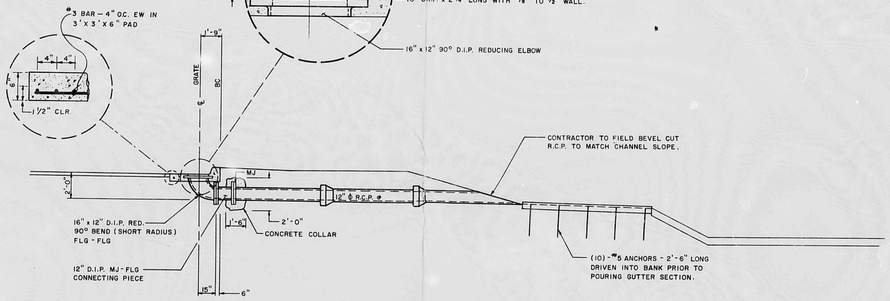


DETAIL 8 PRECAST BUMPER BLOCK
SCALE: 1½" = 1'-0"

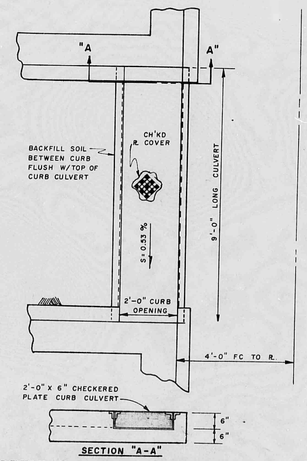


DETAIL 9 CONCRETE GUTTER
SCALE: 1½" = 1'-0"

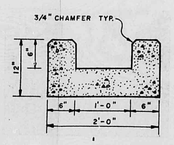




DETAIL 7 CURB DRAIN (2 REQ'D)
SCALE: ¼" = 1'-0"



DETAIL 11 CURB CULVERT DETAIL
SCALE: ½" = 1'-0"



DETAIL 10 RUNDOWN TROUGH
SCALE: 1" = 1'-0"

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PHASE I
DRAINAGE & PAVING DETAILS

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CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114

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Job No: 500804	Date: AUGUST, 1985		of 19

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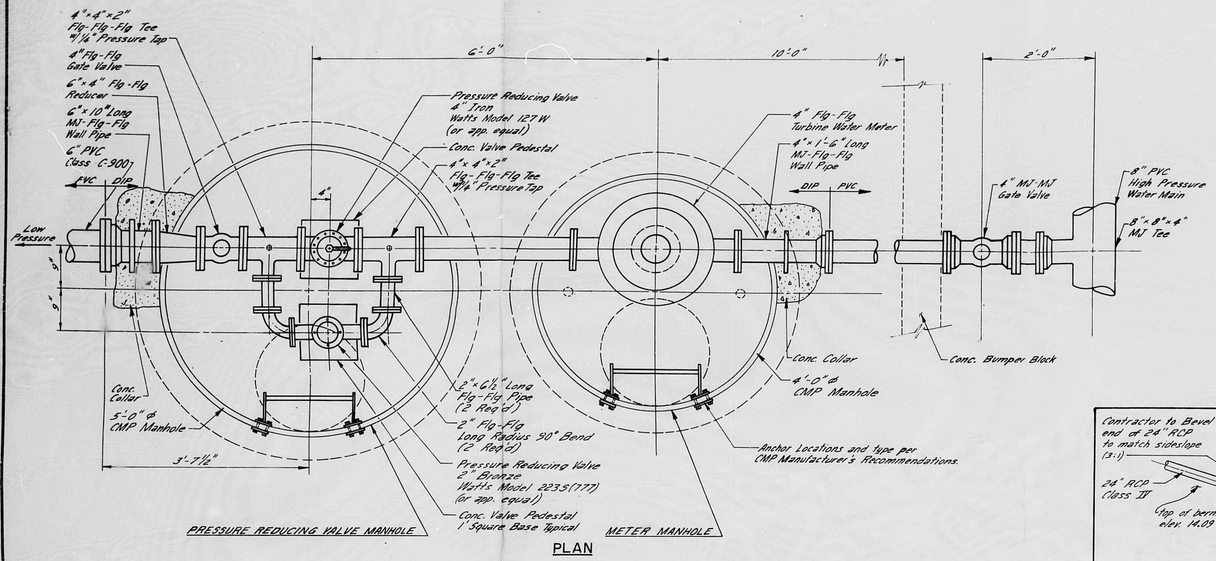
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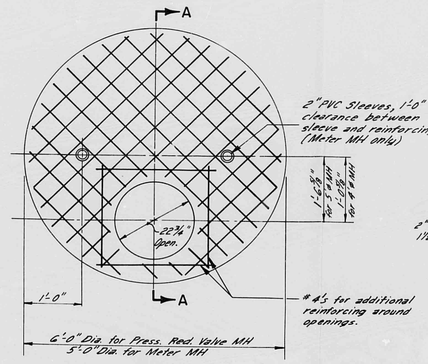
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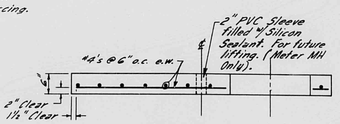
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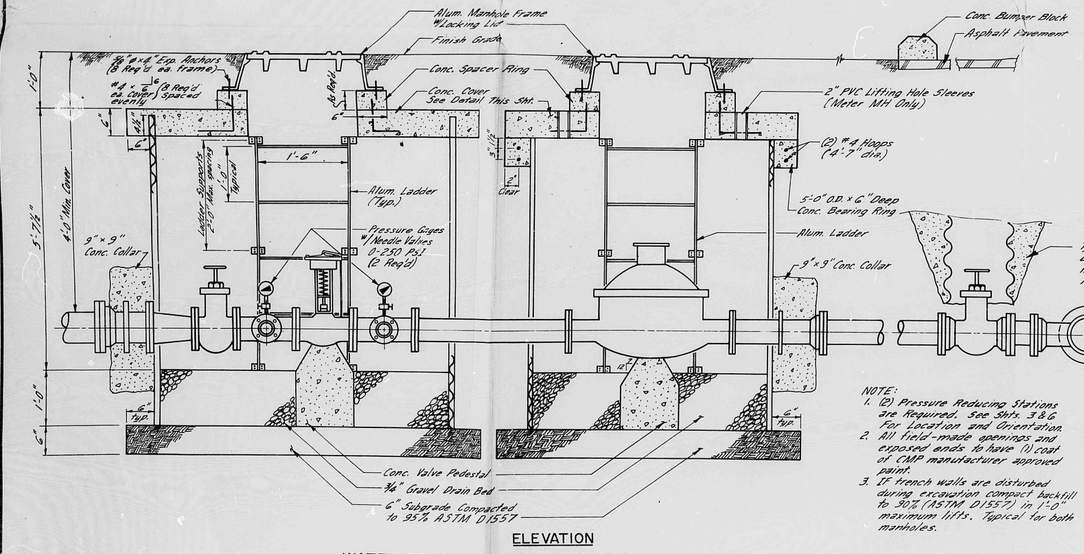
PLAN



SECTION A-A

MANHOLE COVER DETAILS

SCALE: 3/4" = 1'-0"

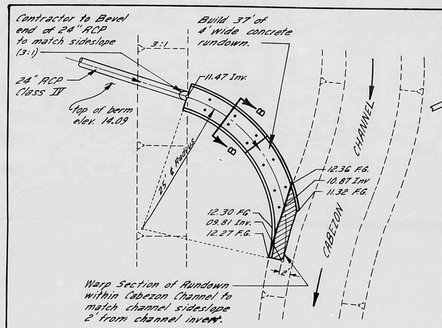


ELEVATION

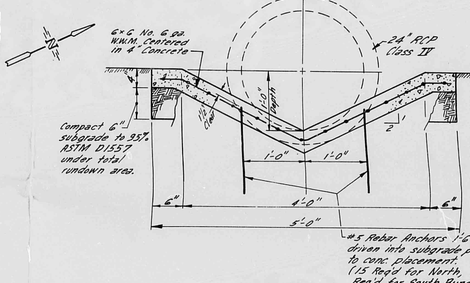
WATER PRESSURE REDUCING STATION DETAILS

SCALE: 1"=1'-0"

NOTE:
1. (2) Pressure Reducing Stations are Required. See Shts. 3 & 6 for Location and Orientation.
2. All field-made openings and exposed ends to have (1) coat of CMP manufacturer approved paint.
3. If trench walls are disturbed during excavation compact backfill to 95% (ASTM D1557) in 1'-0" maximum lifts. Typical for both manholes.



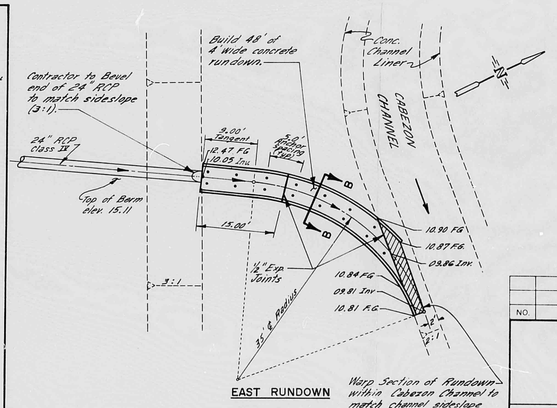
WEST RUNDOWN



SECTION B-B

NO SCALE

Capacity ?



EAST RUNDOWN

STORM DRAIN DISCHARGE DETAILS

SCALE: 1"=10'

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PHASE I
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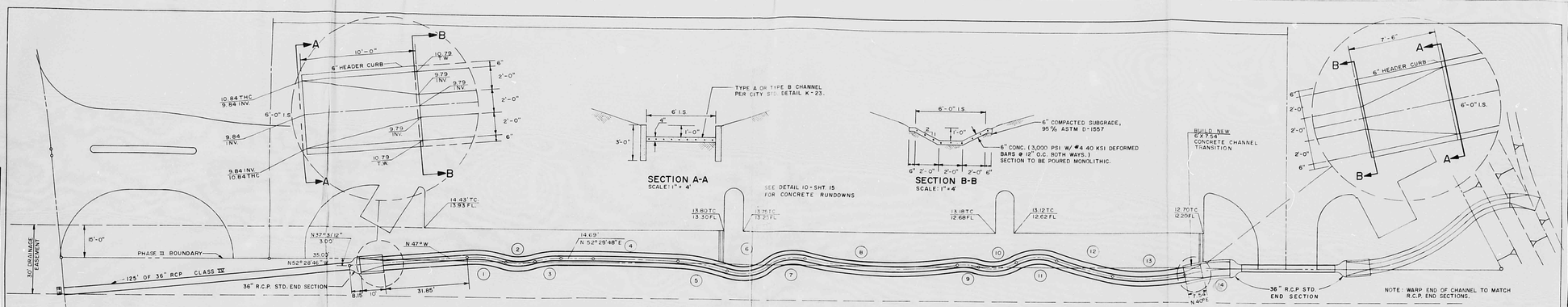
CITY OF ALBUQUERQUE

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PLAN

	DATE
SURVEYED	
PLOTTED	
ALIGNMENT CHECKED	
AT 10' WAY CHECKED	
NOTE BOOK	
NO.	

BY

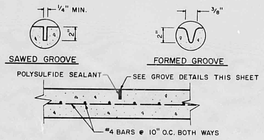


SECTION A-A
SCALE: 1" = 4'

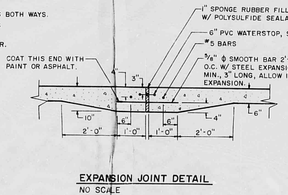
SECTION B-B
SCALE: 1" = 4'

SEE DETAIL 10-SHT. 15 FOR CONCRETE RUNDOWNS

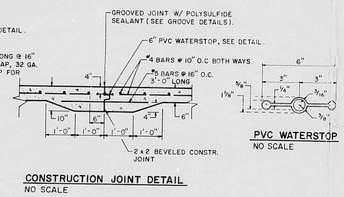
NOTES:
- PLACE CONTRACTION JOINTS ON 12'-6" CENTERS BOTH WAYS.
- PLACE EXPANSION JOINTS ON 100'-0" CENTERS USING PVC BULB TYPE WATERSTOP.
- ALL EXPOSED EDGES SHALL HAVE A 1" CHAMFER.



CONTRACTION JOINT DETAIL
NO SCALE



EXPANSION JOINT DETAIL
NO SCALE

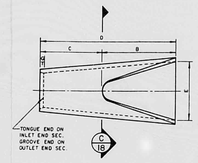


CONSTRUCTION JOINT DETAIL
NO SCALE

PVC WATERSTOP
NO SCALE

CURVE DATA

(1)	40.00'	23°35'33"	16.47'	8.35'	16.35'	N58°47'47"E
(2)	20.00'	36°13'30"	12.64'	6.51'	12.44'	N52°28'48"E
(3)	35.00'	18°06'45"	11.06'	5.58'	11.02'	N43°25'25"E
(4)	800.00'	2°34'43"	36.00'	18.00'	36.00'	N56°46'09"E
(5)	75.00'	16°15'00"	21.27'	10.71'	21.20'	N63°11'01"E
(6)	20.00'	54°17'27"	18.95'	10.26'	18.25'	N45°50'13"E
(7)	20.00'	48°43'26"	17.01'	9.06'	16.50'	N41°22'46"E
(8)	170.00'	22°07'44"	65.66'	33.24'	65.25'	N54°40'39"E
(9)	20.00'	26°44'29"	9.33'	4.75'	9.25'	N56°59'01"E
(10)	20.00'	48°43'26"	17.01'	9.06'	16.50'	N45°59'27"E
(11)	20.00'	50°46'36"	17.72'	9.49'	17.15'	N47°01'53"E
(12)	160.00'	35°48'36"	24.77'	12.41'	24.75'	N67°58'00"E
(13)	78.00'	73°32'06"	32.04'	16.25'	31.81'	N51°46'03"E
(14)	64.00'	12°28'48"	13.94'	7.00'	13.91'	N46°14'24"E

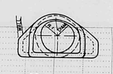


PLAN

DIAM	WALL	S OR T	HEIGHT	SLOPE	A	B	C	D	E	DIAM +1"
30	3-1/2	S	2:90	3:1	1'-0"	4'-6	1'-7 3/4	6'-1 3/4	5'-0	31
36	4	S-1/2	4:00	3:1	1'-3"	5'-3	2'-10 3/4	8'-1 3/4	6'-0	37



ELEVATION



C 18 SECTION

FLARED END SECTIONS FOR REINFORCED CONCRETE CULVERT PIPE

PROFILE

	DATE
SURVEYED	
PLOTTED	
ALIGNMENT CHECKED	
GRADE CHECKED	
NOTE BOOK	
NO.	
STRUCTURE NOTATIONS CHKD	

BY

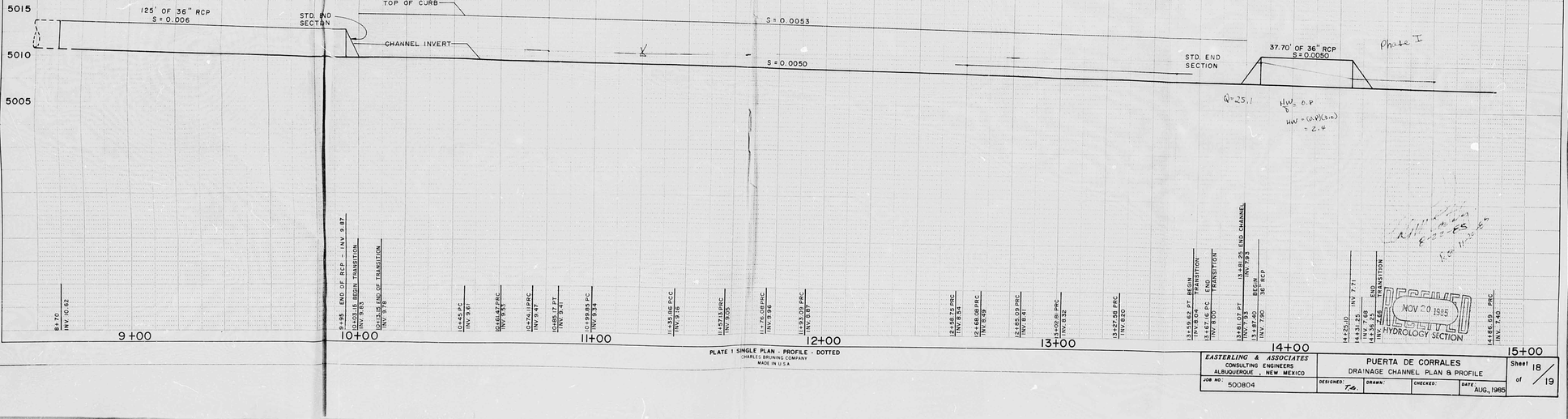


PLATE I SINGLE PLAN - PROFILE - DOTTED
CHARLES BRUNING COMPANY
MADE IN U.S.A.

EASTERLING & ASSOCIATES CONSULTING ENGINEERS ALBUQUERQUE, NEW MEXICO	PUERTA DE CORRALES DRAINAGE CHANNEL PLAN & PROFILE		Sheet 18 of 19
JOB NO: 500804	DESIGNED: T.E.	DRAWN:	CHECKED:
	DATE: AUG., 1985		

RECEIVED
NOV 20 1985
HYDROLOGY SECTION

CITY OF ALBUQUERQUE
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R# 23 DATE 3-13-02 OP

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DIRECTOR

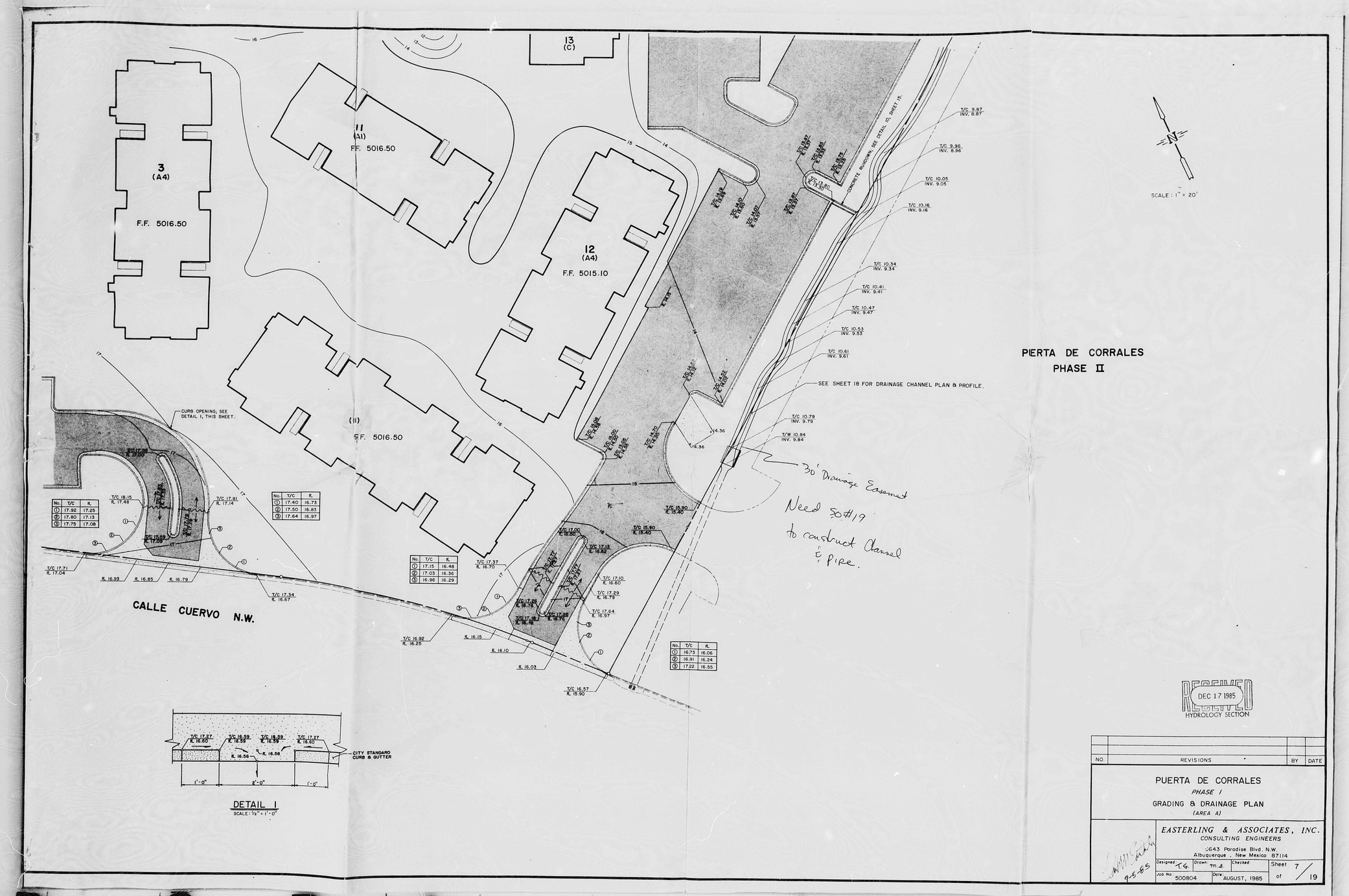
NOTARY PUBLIC
OFFICIAL SEAL
Roberta Duran
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires 07/27/02

D 24 C 20 B 16 A 12 | CITY OF ALBUQUERQUE C D

PUBLIC WORKS/HYDROLOGY

3 OF 9

A14/D4



PIERTA DE CORRALES
PHASE II

PLAN SHOT TWICE
ONCE ON LIGHT
ONCE ON DARK

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NO.	REVISIONS	BY	DATE

PUERTA DE CORRALES
PHASE I
GRADING & DRAINAGE PLAN
(AREA A)

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
3643 Paradise Blvd. N.W.
Albuquerque , New Mexico 87114

Designed	T.G.	Drawn	m.s.	Checked	Sheet	7
Job No	500804	Date	AUGUST, 1985		of	19

R# 23 DATE 3-13-86 OCR

CITY OF ALBUQUERQUE

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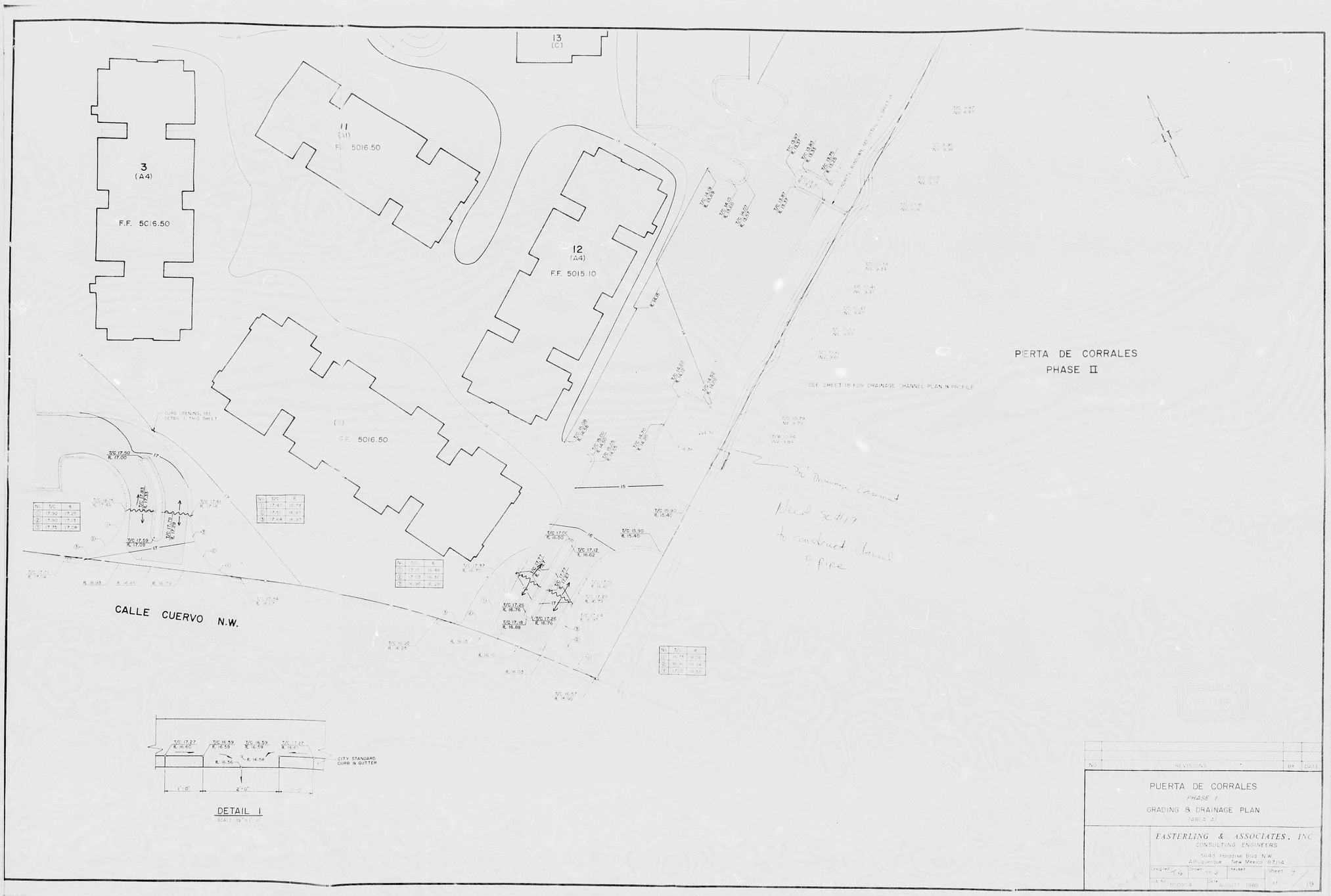
DIRECTOR

NOTARY PUBLIC

OFFICIAL SEAL
Roberta Duran
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires 07/02/86

D 24 C 20 B 16 A 12

CITY OF ALBUQUERQUE C D



NO.	REVISIONS	BY	DATE

PUERTA DE CORRALES
PHASE I
GRADING & DRAINAGE PLAN
(AREA A)

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque New Mexico 87114

Designed	T.G.	Drawn		Checked		Sheet	7
Job No.	82004	Date	August 1985			of	19

PLAN SHOT TWICE
ONCE ON LIGHT
ONCE ON DARK

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11/5/92
DIRECTOR

Roberta Duran
NOTARY PUBLIC

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Roberta Duran
NOTARY PUBLIC
STATE OF NEW MEXICO
07/02/92 /mm

D24 C20 B16 A12 | CITY OF ALBUQERQUE C D

VILLAGE OF CORRALES

CABEZON CHANNEL

INV. 9.86

SEE RUNDOWN DETAIL, SHEET 17.

INV. 11.97

INV. 12.17

CURB DRAIN, SEE DETAIL 7, SHEET 15.

CURB CULVERT; SEE DETAIL 11, SHEET 15

INV. 10.05

CURB CULVERT, SEE DETAIL 11, SHEET 15.

CURB DRAIN, SEE DETAIL 7, SHEET 15

INV. 8.88

INV. 8.98

INV. 7.26

INV. 7.23

INV. 7.40

INV. 7.66

INV. 7.68

INV. 7.70

INV. 7.91

INV. 7.93

CURB CULVERT, SEE DETAIL 11, SHEET 15.

LAUNDRY

10
(B1)
F.F. 5015.00

14
(A2)
F.F. 5013.50

13
(C)
F.F. 5014.25

F.F. 5016.00
4
(A4)

3
(A4)
F.F. 5016.50

11
(A1)
F.F. 5016.50

12
(A4)
F.F. 5015.10

CATCH BASIN
RIM EL. 13.50
INV. 10.50

24" R.C.P. INV. = 5.0 C.0025

SEE DETAIL 6, SHEET 15.

CONCRETE RUNDOWN, SEE DETAIL 10, SHEET 15

CURB CULVERT, SEE DETAIL 11, SHEET 15

CONCRETE RUNDOWN, SEE DETAIL 10, SHEET 15

INV. 10.01

30' Drainage Easement

Need 50#19 to Build Channel

SCALE: 1" = 20'

SEE SHEET 18 FOR DRAINAGE CHANNEL PLAN & PROFILE

PUERTA DE CORRALES
PHASE II

RECEIVED
DEC 17 1985
HYDROLOGY SECTION

NO.	REVISIONS	BY	DATE

PUERTA DE CORRALES
PHASE I
GRADING & DRAINAGE PLAN
(AREA B)

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque , New Mexico 87114

Designed: TS	Drawn: ym &	Checked:	Sheet 8
Job No: 500804	Date: AUGUST, 1985		of 19

PLAN SHOT TWICE
ONCE ON LIGHT
ONCE ON DARK

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DIRECTOR

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Roberta Duran
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires 07/01/86

D 24 C 20 B 16 A 12

CITY OF ALBUQUERQUE C D

VILLAGE OF CORRALES

CABEZON CHANNEL

CURB DRAIN, SEE DETAIL 7, SHEET 15

CURB CULVERT, SEE DETAIL 11, SHEET 15

CURB CULVERT, SEE DETAIL 11, SHEET 15

CURB CULVERT, SEE DETAIL 11, SHEET 15

SEE DETAIL 6, SHEET 15

SEE PRINT WARM SPRINGS CHANNEL PLAN & PROFILE

SEE SHEET 14 FOR DRAINAGE CHANNEL PLAN & PROFILE

T/C 14.82 FL 14.32 · T/C 14.67 FL 14.17 · T/C 14.92 FL 14.42 · T/C 14.79 FL 14.29 · T/C 14.75 FL 14.25

T/C 15.09 FL 14.59 · T/C 14.88 FL 14.38 · T/C 15.05 FL 14.55 · T/C 14.73 FL 14.23 · T/C 14.73 FL 14.23

T/C 15.15 FL 14.65 · T/C 14.93 FL 14.43 · T/C 15.11 FL 14.61 · T/C 14.82 FL 14.32

T/C 15.22 FL 14.72 · T/C 15.30 FL 14.80 · T/C 15.26 FL 14.76

T/C 15.44 FL 14.94 · T/C 15.29 FL 14.79 · T/C 15.38 FL 14.88

T/C 14.18 FL 13.68 · T/C 14.14 FL 13.64 · T/C 14.25 FL 13.75 · T/C 14.21 FL 13.71

T/C 13.43 FL 12.93 · T/C 13.38 FL 12.88 · T/C 13.58 FL 13.01 · T/C 13.46 FL 12.96 · T/C 13.41 FL 12.91 · T/C 13.38 FL 12.88 · T/C 13.49 FL 12.99

T/C 12.67 FL 12.17 · T/C 12.62 FL 12.12 · T/C 12.75 FL 12.25 · T/C 12.70 FL 12.20 · T/C 13.08 FL 12.58 · T/C 12.66 FL 12.16 · T/C 12.25 FL 11.75

T/C 12.75 FL 12.25 · T/C 12.80 FL 12.30 · T/C 12.82 FL 12.32

T/C 14.01 FL 13.51 · T/C 13.86 FL 13.36 · T/C 13.49 FL 12.99 · T/C 13.30 FL 12.80 · T/C 13.20 FL 12.70 · T/C 13.24 FL 12.74

T/C 13.83 FL 13.33 · T/C 13.60 FL 13.10 · T/C 13.95 FL 13.45 · T/C 14.13 FL 13.63 · T/C 13.49 FL 12.99 · T/C 13.55 FL 13.05

T/C 14.42 FL 13.92 · T/C 14.24 FL 13.74 · T/C 14.01 FL 13.51 · T/C 13.83 FL 13.33

T/C 14.48 FL 13.98 · T/C 14.30 FL 13.80 · T/C 13.93 FL 13.43 · T/C 13.87 FL 13.37 · T/C 14.05 FL 13.55

10 (A1) F.F. 5015.00

LAUNDRY

13 (C) F.F. 5014.25

14 (A2) F.F. 5013.50

F.F. 5016.00 4 (A4)

3 (A4) F.F. 5016.50

11 (A1) F.F. 5016.50

12 (A2) F.F. 5015.10

30' Drainage Easement

Need SC#19 to Build Channel

PUERTA DE CORRALES
PHASE II

NO.	REVISIONS	BY	DATE

PUERTA DE CORRALES
PHASE
GRADING & DRAINAGE PLAN

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5053 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114

Designed T.S. | Drawn | Checked | Sheet 8 of 19
Job No. | Date | Scale 1" = 50'

PLAN SHOT TWICE
ONCE ON LIGHT
ONCE ON DARK

CITY OF ALBUQUERQUE
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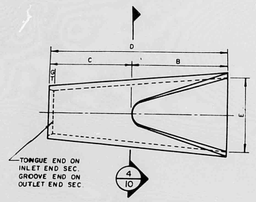
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Roberta Duran
NOTARY PUBLIC
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CITY OF ALBUQUERQUE C D

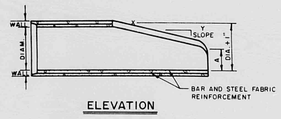
PUBLIC WORKS/HYDROLOGY 7 OF 9

A14/D4



PLAN

DIAM	WALL	A OR T	WEIGHT	SLOPE	A	B	C	D	E	CRATE x.Y'
12	2	1-1/2	330	3 : 1	4"	2'-0	4'-0 7/8	6'-0 7/8	2'-0	13
15	2-1/4	2	740	3 : 1	6"	2'-3	5'-10	8'-1	2'-6	16
18	2-1/2	2-1/2	990	3 : 1	9"	2'-3	5'-10	8'-1	3'-0	19
21	2-3/4	2-1/4	1280	3 : 1	9"	2'-11	7'-2	8'-11	3'-6	22
24	3	2-1/2	1520	3 : 1	9"-1'0"	3'-7 1/2	8'-7	9'-11 1/2	4'-0	25
27	3-1/4	2-1/2	1930	3 : 1	10-1/2"	4'-0	9'-11 1/2	9'-11 1/2	4'-6	28
30	3-1/2	3	2180	3 : 1	1'-0"	4'-6	11'-3/4	9'-11 3/4	5'-0	31
33	3-3/4	3-1/4	3150	3 : 1	1'-1 1/2	4'-10 1/2	9'-3 1/4	9'-11 3/4	5'-6	34
36	4	3-1/2	4100	3 : 1	1'-3"	5'-3	2'-11 3/4	9 3/4	6'-0	37
42	4-1/2	3-3/4	5580	3 : 1	1'-9"	5'-3	2'-11	8'-2	6'-6	43
48	5	4-1/4	6550	3 : 1	2'-0"	6'-0	2'-2	8'-2	7'-0	49
54	5-1/2	4-3/4	8040	24 : 1	2'-3"	5'-3	2'-14	8'-4	7'-6	55
60	6	5	8750	2 : 1	2'-6"	5'-0	3'-3	8'-5	8'-0	61
66	6-1/2	5-1/2	10630	2 : 1	2'-9"	6'-6	1'-9	8'-3	8'-6	67
72	7	6	12320	2 : 1	2'-10"	6'-6	1'-9	8'-3	9'-1	73
78	7-1/2	6-1/2	14430	2 : 1	3'-0"	6'-6	1'-9	8'-3	9'-6	79
84	8	7	16350	2 : 1	3'-3"	6'-6	1'-9	8'-3	10'-1	85

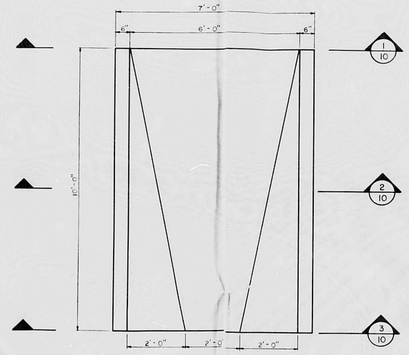


ELEVATION

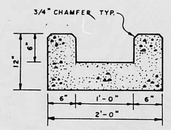


4/10 SECTION

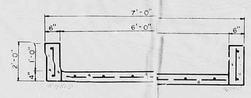
FLARED END SECTIONS FOR
REINFORCED CONCRETE CULVERT PIPE



PLAN



CONCRETE RUNDOWN DETAIL
SCALE : 1" = 1'-0"



1/10 SECTION

2/10 SECTION

3/10 SECTION

TYPICAL TRANSITION DETAIL
SCALE : 1/2" = 1'-0"



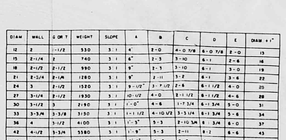
TYPICAL CHANNEL SECTION
NO SCALE

EXPANSION JOINT DETAIL
NO SCALE

PVC WATERSTOP
NO SCALE



CONSTRUCTION JOINT DETAIL
NO SCALE



CONTRACTION JOINT DETAIL
NO SCALE

NOTES:
PLACE CONTRACTION JOINTS ON 12'-6" CENTERS BOTH WAYS.
PLACE EXPANSION JOINTS ON 100'-0" CENTERS USING PVC BULB TYPE WATERSTOP.
ALL EXPOSED EDGES SHALL HAVE A 1" CHAMFER.
ALL REBAR SHALL HAVE 1½" CLEAR ALL AROUND.
ALL CONCRETE SHALL BE 3000 PSI @ 28 DAYS.
ALL STEEL SHALL BE MIN. 40 KSI DEFORMED BARS.

AS BUILT INFORMATION
CONTRACTOR
STAKED BY
INSPECTORS
AS BUILT CHANGES BY
FIELD VERIFICATION BY
DRAWINGS BY
CHECKED BY
MICRO-FILM INFORMATION
RECORDED BY
NO

BENCH MARKS

SURVEY INFORMATION
FIELD NOTES
BY
DATE
NO.

ENGINEER'S SEAL
1-6-86

NO.	DATE	REMARKS
		BY
		REVISIONS
		DESIGN
		DESIGNED BY T.A. DATE 1-6-86
		DRAWN BY M.S. DATE 1-6-86
		CHECKED BY DATE

RECEIVED
MAY 15 1986
HYDROLOGY SECTION

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

TITLE: PUERTA DE CORRALES
DRAINAGE CHANNEL - DETAILS

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

DRAWING NO. | MAP NO. | SHEET 6 OF 6

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R# 23 DATE 5-13-86 BY

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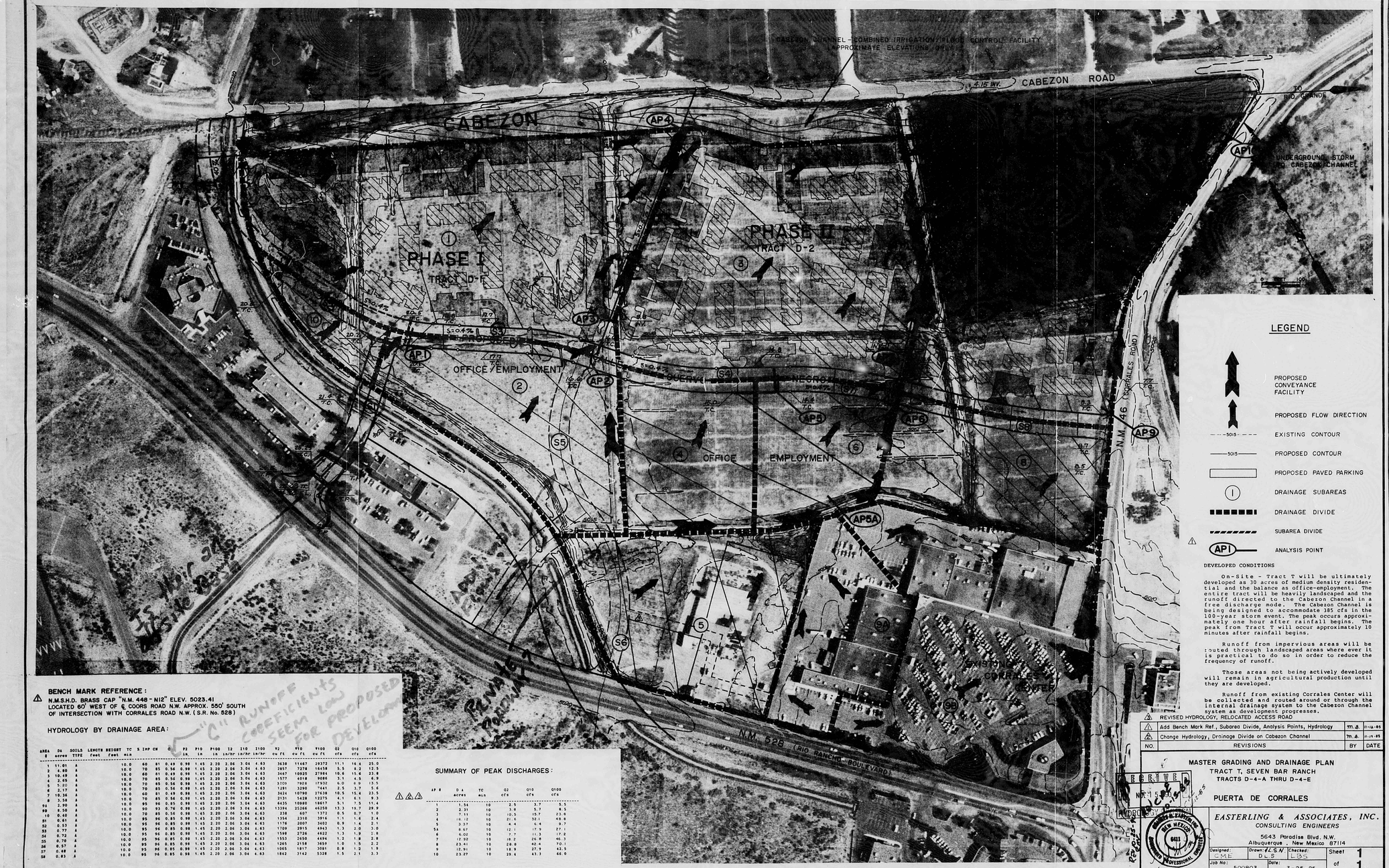
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DIRECTOR

NOTARY PUBLIC

OFFICIAL SEAL
Roberta Duran
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires 07/07/87

D 24 C 20 B 16 A 12 | CITY OF ALBUQUERQUE C D



"C" RUNOFF COEFFICIENTS SEEM LOW FOR PROPOSED DEVELOPMENT

BENCH MARK REFERENCE:

⚠ N.M.S.H.D. BRASS CAP "N.M. 448 - NI2" ELEV. 5023.41
LOCATED 60' WEST OF ℄ COORS ROAD N.W. APPROX. 550' SOUTH OF INTERSECTION WITH CORRALES ROAD N.W. (S.R. No. 528)

HYDROLOGY BY DRAINAGE AREA:

AREA #	DA acres	SOILS TYPE	LENGTH feet	HEIGHT feet	TC min	S IMP CN	C	P2 in.	P10 in.	P100 in.	I2 in/hr	I10 in/hr	I100 in/hr	Y2 cu ft	Y10 cu ft	Y100 cu ft	Q2 cfs	Q10 cfs	Q100 cfs
1	11.01	A			10.0	60	81	0.49	0.98	1.45	2.20	2.06	3.04	4.63	3638	11457	20372	11.1	16.6	25.0
2	4.08	A			10.0	70	85	0.56	0.98	1.45	2.20	2.06	3.04	4.63	2857	7278	12458	5.5	8.2	12.5
3	10.49	A			10.0	60	81	0.49	0.98	1.45	2.20	2.06	3.04	4.63	3467	10923	27944	10.6	15.8	23.8
4	2.65	A			10.0	70	85	0.56	0.98	1.45	2.20	2.06	3.04	4.63	1577	4018	9086	3.1	4.5	6.9
5	5.20	A			10.0	70	85	0.56	0.98	1.45	2.20	2.06	3.04	4.63	3109	7924	17920	6.0	8.9	13.5
6	2.17	A			10.0	70	85	0.56	0.98	1.45	2.20	2.06	3.04	4.63	1291	3290	7441	2.5	3.7	5.6
7	10.36	A			10.0	60	81	0.49	0.98	1.45	2.20	2.06	3.04	4.63	3424	10798	27638	10.5	15.6	23.5
8	3.58	A			10.0	70	85	0.56	0.98	1.45	2.20	2.06	3.04	4.63	2131	5431	12275	4.1	6.1	9.3
9A	2.90	A			10.0	95	96	0.85	0.98	1.45	2.20	2.06	3.04	4.63	6435	10980	18617	5.1	7.5	11.4
9B	9.50	A			10.0	95	93	0.76	0.98	1.45	2.20	2.06	3.04	4.63	15384	25268	42852	13.3	19.7	29.9
10	0.40	A			10.0	70	85	0.56	0.98	1.45	2.20	2.06	3.04	4.63	238	607	1372	0.5	0.7	1.0
51	0.81	A			10.0	95	96	0.85	0.98	1.45	2.20	2.06	3.04	4.63	1354	2310	3916	1.1	1.6	2.4
52	0.53	A			10.0	95	96	0.85	0.98	1.45	2.20	2.06	3.04	4.63	1176	2007	3402	0.9	1.4	2.1
53	0.92	A			10.0	95	96	0.85	0.98	1.45	2.20	2.06	3.04	4.63	1709	2915	4943	1.3	2.0	3.0
54	1.72	A			10.0	95	96	0.85	0.98	1.45	2.20	2.06	3.04	4.63	1598	2726	4622	1.3	1.9	2.8
55	0.78	A			10.0	95	96	0.85	0.98	1.45	2.20	2.06	3.04	4.63	1553	2650	4494	1.2	1.8	2.8
56	0.59	A			10.0	95	96	0.85	0.98	1.45	2.20	2.06	3.04	4.63	1265	2158	3659	1.0	1.5	2.2
57	0.48	A			10.0	95	96	0.85	0.98	1.45	2.20	2.06	3.04	4.63	1065	1817	3081	0.8	1.2	1.9
58	0.83	A			10.0	95	96	0.85	0.98	1.45	2.20	2.06	3.04	4.63	1842	3142	5328	1.5	2.1	3.3

SUMMARY OF PEAK DISCHARGES:

⚠⚠⚠ AP #	DA acres	TC min	Q2 cfs	Q10 cfs	Q100 cfs
1	1.34	10	2.5	3.7	5.5
2	2.31	10	3.8	5.7	8.5
3	7.11	10	10.5	15.7	23.8
4	16.12	10	21.6	32.1	48.8
5	3.37	10	4.4	6.4	9.7
5A	8.67	10	12.1	17.9	27.1
6	6.02	10	7.7	11.3	17.2
7	17.92	10	18.2	26.8	40.3
8	23.41	10	28.8	42.4	70.1
9	12.36	10	18.8	27.9	42.5
10	23.27	10	29.5	43.3	66.0

LEGEND

- PROPOSED CONVEYANCE FACILITY
- PROPOSED FLOW DIRECTION
- 5015 — EXISTING CONTOUR
- 5015 — PROPOSED CONTOUR
- PROPOSED PAVED PARKING
- (1) DRAINAGE SUBAREAS
- DRAINAGE DIVIDE
- SUBAREA DIVIDE
- ⚠ (API) ANALYSIS POINT

DEVELOPED CONDITIONS

On-Site - Tract T will be ultimately developed as 30 acres of medium density residential and the balance as office-employment. The entire tract will be heavily landscaped and the runoff directed to the Cabezon Channel in a free discharge mode. The Cabezon Channel is being designed to accommodate 385 cfs in the 100-year storm event. The peak occurs approximately one hour after rainfall begins. The peak from Tract T will occur approximately 10 minutes after rainfall begins.

Runoff from impervious areas will be routed through landscaped areas where ever it is practical to do so in order to reduce the frequency of runoff.

Those areas not being actively developed will remain in agricultural production until they are developed.

Runoff from existing Corrales Center will be collected and routed around or through the internal drainage system to the Cabezon Channel system as development progresses.

NO.	REVISIONS	BY	DATE
⚠	REVISED HYDROLOGY, RELOCATED ACCESS ROAD		
⚠	Add Bench Mark Ref., Subarea Divide, Analysis Points, Hydrology	TM.B.	9-19-85
⚠	Change Hydrology, Drainage Divide on Cabezon Channel	TM.B.	9-19-85

MASTER GRADING AND DRAINAGE PLAN
TRACT T, SEVEN BAR RANCH
TRACTS D-4-A THRU D-4-E

PUERTA DE CORRALES

RECEIVED
NOV 15 1985
HYDROLOGY SECTION

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114

Designed:	Drawn:	Checked:	Sheet
EME	DLS	LDS	1 of 1
Job No: 500803	Date: 3-25-85		

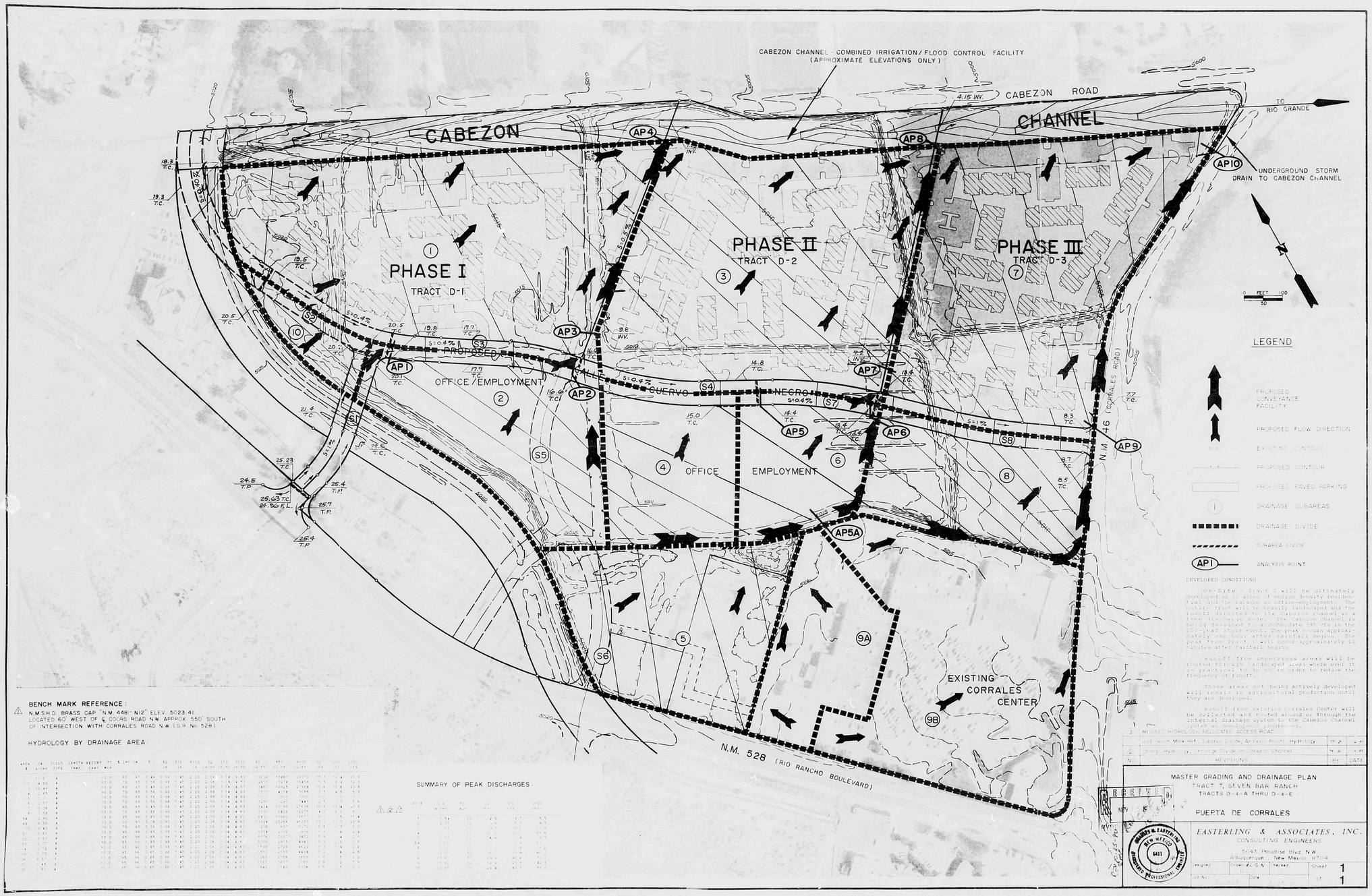
PLAN SHOT TWICE
ONCE ON LIGHT
ONCE ON DARK

CITY OF ALBUQUERQUE
THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

R# 23 DATE 3-13-02 OP KP

CITY OF ALBUQUERQUE
This microimage is certified to be a complete and accurate copy of the original as it appears in the files of the Public Works Department and was created in the normal course of business.
The photographic process used meets the Basic Microfilm Standards of the National Micrographics Association (MS116-1977)
DIRECTOR
NOTARY PUBLIC
OFFICIAL SEAL
Roberta Duran
NOTARY PUBLIC
STATE OF NEW MEXICO

D 24 C 20 B 16 A 12 CITY OF ALBUQUERQUE C D



BENCH MARK REFERENCE:

⚠ N.M.S.H.D. BRASS CAP "N.M. 448 - N12" ELEV. 5023.41
LOCATED 60' WEST OF ℄ COORS ROAD N.W. APPROX. 550' SOUTH OF INTERSECTION WITH CORRALES ROAD N.W. (S.R. No. 528)

HYDROLOGY BY DRAINAGE AREA

SUMMARY OF PEAK DISCHARGES

DEVELOPED CONDITIONS

On-Site - Tract T will be ultimately developed as 10 acres of medium density residential and the balance as office/employment. The entire tract will be heavily landscaped and the runoff directed to the Cabezon Channel in a level landscape swale. The Cabezon Channel is being designed to accommodate 185 cfs in the 100 year storm event. The goal, upon approval, is safely one hour after rainfall begins. The peak from Tract T will occur approximately 10 minutes after rainfall begins.

Runoff from impervious areas will be routed through landscaped areas where ever it is practical to do so in order to reduce the frequency of runoff.

Those areas not being actively developed will remain in agricultural production until they are developed.

Runoff from existing Corrales Center will be collected and routed around or through the internal drainage system to the Cabezon Channel system as shown on the plan.

NO.	REVISIONS	BY	DATE
1	Add North Main ref. Subarea Divide, Analysis Points, Hydrology	TP &	4-82
2	Show Hydrology, Change Divide on Cabezon Channel	TP &	4-82

REVISED HYDROLOGY, RELOCATED ACCESS ROAD

MASTER GRADING AND DRAINAGE PLAN
TRACT T, SEVEN BAR RANCH
TRACTS D-4-A THRU D-4-E

PUERTA DE CORRALES

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5645 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114

Original	Drawn by E.S.N.	Checked	Sheet	1
Job No.	Date		of	1

CHARLES H. EASTERLING — NEW MEXICO — 6411 — REGISTERED PROFESSIONAL ENGINEER

PLAN SHOT TWICE
ONCE ON LIGHT
ONCE ON DARK

CITY OF ALBUQUERQUE
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R# 22 DATE 3/3/82 OP

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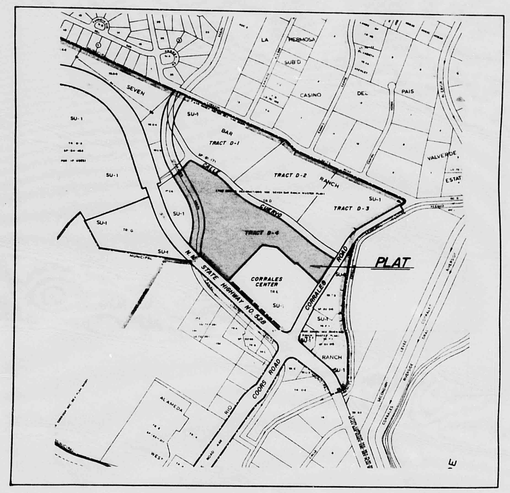
Chris T. Ashley 3/3/82
DIRECTOR

Roberta Duran
NOTARY PUBLIC

OFFICIAL SEAL
Roberta Duran
07/03/82

D24 C20 B16 A12 CITY OF ALBUQERQUE C D

rec'd 12-6-90



VICINITY MAP
N. T. S.

GENERAL NOTES

1. Bearings are grid based upon the New Mexico State Plane Coordinate System, Central Zone (NAD 27) and rotated to grid at the New Mexico State Highway Commission Monument "NM-448-N12".
2. Distances are ground.
3. Distances along curved lines are arc lengths.
4. Delta Alpha at "NM-448-N12" = +00° 13' 46"
   Combined ground to grid factor = 0.99967595
5. Zone Atlas Page A-14.
6. U.C.L.S. Log Number 901115111460128
7. Subject Property lies within projected Section 5, Township 11 North, Range 3 East, New Mexico Principal Meridian.
8. All corners are a 5/8" rebar and survcap stamped "HUGG L.S. 5823" or "HUGG L.S. 9750" unless otherwise indicated.
9. Portions of Tracts D-4-B, D-4-C, D-4-D and D-4-E are subject to the Federal Emergency Management Agency Map dated August, 1983, Panel 2 of 50 as further described and updated by Drainage plan filed with the City of Albuquerque Engineers Office dated June 30, 1986.

DISCLOSURE STATEMENT

The purpose of this replat is to divide the existing Tract D-4 into five (5) tracts and to create the Access and Drainage Easements as shown hereon.

PRELIMINARY

TREASURERS CERTIFICATION

I, Patrick Padilla, County Treasurer of Bernalilllo County, New Mexico hereby certify that the taxes are current and paid in full on the property(s) shown hereon which is/are further identified by the Uniform Property Code (UPC) number as:

_____ _____

_____ _____

_____
Bernalillo County Treasurer Date

APPROVALS

Dale Snyder 11.30.90
Public Service Company of New Mexico Date

_____
Gas Company of New Mexico Date

_____
U.S. West Communications Date

_____
New Mexico Utilities, Inc. Date

Note: These properties are within the New Mexico Utilities, Inc. (NMU, Inc.) franchise area. Water and Sanitary Sewer System capabilities are based on NMU, Inc. facilities, not the City of Albuquerque.

PUBLIC UTILITY EASEMENTS

PUBLIC UTILITY EASEMENTS shown on this plat are ten (10) feet wide and are granted for the common and joint use of :

A. The Public Service Company of New Mexico for installation, maintenance, and service of overhead and underground electrical lines, transformers, and other equipment and related facilities reasonably necessary to provide electrical service.

B. Mountain Bell for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide communication services, including but not limited to ground pedestals and closures.

C. Jones Intercable for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide Cable TV service.

Included, is the right to build, rebuild, construct, reconstruct, locate, relocate, change, remove, modify, renew, operate, and maintain facilities for the purposes described above, together with free access to, from, and over said easements, including sufficient working area space for electric transformers, with the right and privilege to trim and remove trees, shrubs or bushes which interfere with the purposes set forth herein. No building, sign, pool (aboveground or subsurface), hot tub, concrete or wood pool decking, or other structure shall be erected or constructed on said easements, nor shall any well be drilled or operated thereon. Property owners shall be solely responsible for correcting any violations of National Electric Safety Code by construction of pools, decking, or any structures adjacent to or near easements shown on this plat.

TRACTS D-4-A THRU D-4-E
SEVEN-BAR RANCH

(BEING A REPLAT OF TRACT D-4, SEVEN BAR RANCH AND A VACATED PORTION OF THE CORRALES MAIN CANAL)

CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO

NOVEMBER , 1990

RECEIVED
DEC 12 1990
HYDROLOGY DIVISION

APPROVALS

_____
Traffic Engineer, City of Albuquerque Public Works Department Date

_____
Chief City Surveyor, City of Albuquerque Public Works Department Date

_____
Utility Development Division, City of Albuquerque Public Works Department Date

_____
Albuquerque Metropolitan Arroyo Flood Control Authority Date

_____
City Engineer, City of Albuquerque Public Works Department Date

_____
Property Management, City of Albuquerque Date

_____
Parks and Recreation Department, City of Albuquerque Date

APPROVAL as specified by the Albuquerque Subdivision Ordinance.

_____
Chairman, Albuquerque/Bernalillo County Development Review Board Date

SURVEYORS CERTIFICATION

I, Russ P. Hugg, New Mexico Professional Surveyor Number 9750, hereby certify that this plat of survey was prepared from field notes of an actual ground survey performed by me or under my supervision; that it meets the Standards for Land Surveys in New Mexico as adopted by the New Mexico State Board of Registration for Professional Engineers and Professional Surveyors; that it meets the minimum requirements for surveys and monumentation of the Albuquerque Subdivision Ordinance; that it shows all easements of record; and that it is true and correct to the best of my knowledge and belief.

Russ P. Hugg
NMPS No. 9750
November 15, 1990

PROFESSIONAL SURVEYOR STATE OF No. 9750 NEW MEXICO RUSS P. HUGG

SHEET 1 OF 4

Hugg Surveying inc.
4100 Southern Blvd., S.E., Suite 180-C Rio Rancho,New Mexico 87124 Phone (505) 892 3800

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R# 23 DATE 3-13-02 OP E.P.

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DIRECTOR

NOTARY PUBLIC

OFFICIAL SEAL
Roberta Duran
NOTARY PUBLIC
STATE OF NEW MEXICO
07/27/02

C B A

C20 B16 A12

CITY OF ALBUQUERQUE