

The map is a plat map of a portion of the City of Fortuna, California. It shows various industrial and business zones. A large area is labeled 'SITE' with an arrow pointing to a specific location. The map includes labels for 'BUSINESS', 'SU-1 PLANNED INDUSTRIAL PARK', 'PARK', 'MERIDIAN', 'R-3', 'ATRISCO BUSINESS PARK', and 'SU-1 PLANNED INDUSTRIAL PARK'. The map also shows 'FORTUNA RD' and 'AIRPORT UNIT'. The map is divided into numerous lots, some of which are numbered. The map is titled 'PLAT MAP' and 'CITY OF FORTUNA, CALIFORNIA'.

GENERAL NOTES

NOTICE TO CONTRACTORS

- THE FOLLOWING NOTES ALSO APPLY WHEN CHECKED

- CAUTION:**
NOTE THAT ALL EXISTING UTILITIES MAY NOT BE SHOWN. ALL EXISTING SERVICE CONNECTIONS ARE NOT SHOWN. ANY EXISTING UTILITIES THAT ARE SHOWN ARE APPROXIMATE LOCATION ONLY. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL THE UTILITY OWNERS AND TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATIONS TO DETERMINE THE ACTUAL LOCATION OF UTILITIES AND OTHER IMPROVEMENTS.

REV	SHEETS	CITY ENGINEER	DATE	USER	DEPARTMENT	DATE	USER

ENGINEER'S STAMP & SIGNATURE	APPROVALS	ENGINEER	DATE	*****
 <i>James D. Hughes</i> 8-25-98	DRC CHAIRMAN	<i>William G. Calonge</i>	10-23-98	APPROVED FOR CONSTRUCTION <i>John R. Co. Jr.</i> 12/10/98 CITY ENGINEER DATE
	TRANSPORTATION	<i>W.D. Kane</i>	10-28-98	
	WATER/WASTEWATER	<i>R.W. Kane</i>	1-28-99	
	HYDROLOGY	<i>Ann Calonge</i>	10-2-98	
	CIP			
	CONSTR. MGMT.			
	BONAVILLE COUNTY	<i>William G. Calonge</i>	10-9-98	
CITY PROJECT NO.		5986.81		
		1 19		

SURVEYOR'S CERTIFICATION

"I, Timothy Aldrich, a duly qualified Registered Professional Land Surveyor under the laws of the State of New Mexico, do hereby certify that the 'as-built' information shown on these drawings was obtained from field construction and 'as-built' surveys performed by me or under my supervision, that the 'as-built' information shown on these drawings was added by me or under my supervision, and that this 'as-built' information is true and correct to the best of my knowledge and belief as a Registered Professional Land Surveyor. I have not been paid for my services by anyone other than the person who destroyed the originals of these design documents and calculations."

Timothy A. Griggs, S. No. 7719 Date 03-29-99

PLAT FOR
CEDAR RIDGE ESTATES
UNITS III & IV

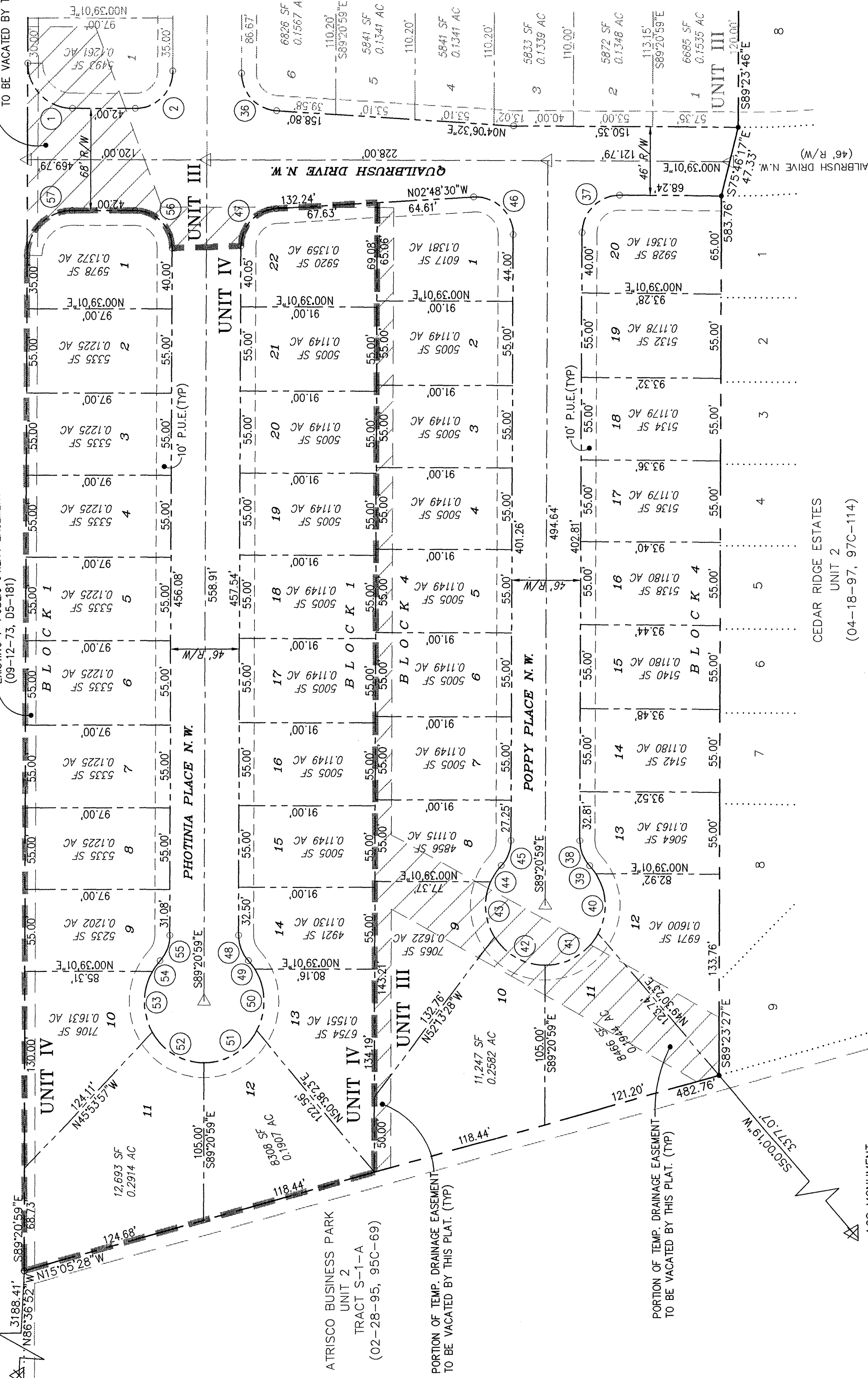
WITHIN THE
TOWN OF ATRISCO GRANT
PROJECTED SECTION 15
TOWNSHIP 10 NORTH, RANGE 2 EAST, NMPM
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
JANUARY, 1998

PORTION OF TEMP. DRAINAGE EASEMENT
TO BE VACATED BY THIS PLAT. (TYP)

FORTUNA ROAD N.W. (60' R/W)

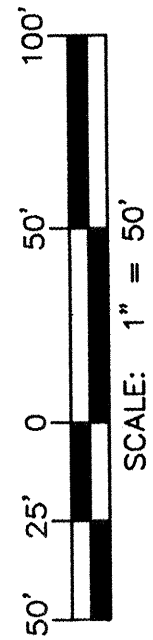
EXISTING 7' PUBLIC UTILITY EASEMENT
(09-12-73, D5-181)

ACS MONUMENT
"1"-19"
Y=149080.20
X=356653.93
G-G=0.99967495
Δα=-0°01'6.32"
CENTRAL ZONE
ELEVATION=5199.19
(NAD 1927/SLD 1929)



△ CENTERLINE MONUMENTATION
Centerline (in lieu of R/W monumentation)
to be installed at all centerline PC's, PT's,
angle points, and street intersections
as shown hereon, and will consist of a
four inch (4") aluminum alloy cap stamped:
CITY OF ALBUQUERQUE
CENTERLINE MONUMENT
DO NOT DISTURB
PLS #7719

ACS MONUMENT
"1"-19"
Y=1487056.22
X=357375.04
G-G=0.99967738
Δα=-0°01'6.27"
CENTRAL ZONE
ELEVATION=5142.79
(NAD 1927/SLD 1929)



dwg: 8006plt5 Drawn: DBC Checked: ALS Sheet 4 of 5
Scale: 1" = 50' Date: 05-01-98 Job: 98006

SURVEYOR'S NOTES

1. Bearings are grid based on the New Mexico State Plane Coordinate System (Central Zone).
2. Distances are ground distances.
3. Bearings and distances in parenthesis are record.
4. Basis of boundary are the following plats of record entitled:
"ATRISCO BUSINESS PARK, UNIT 2, TRACT S-1", (09-12-73, D5-181)
"ATRISCO BUSINESS PARK, TRACT S-2", (06-11-79, D9-139)
"CEDAR RIDGE ESTATES, UNIT 1", (04-04-95, 95C-122)
"CEDAR RIDGE ESTATES, UNIT 2", (04-18-97, 97C-114)
all being records of Bernalillo County, New Mexico.
5. Field Survey performed January, 1998.
6. UTILITY COUNCIL LOCATION SYSTEM LOG NO. 98012614300512
7. Title Report: None provided.
8. This property is apparently affected by reservations, restrictions and agreements contained within easements, documents and memorandums as listed within the above mentioned Title Report.

SETBACKS

Setbacks shall be per the R-1 zone:

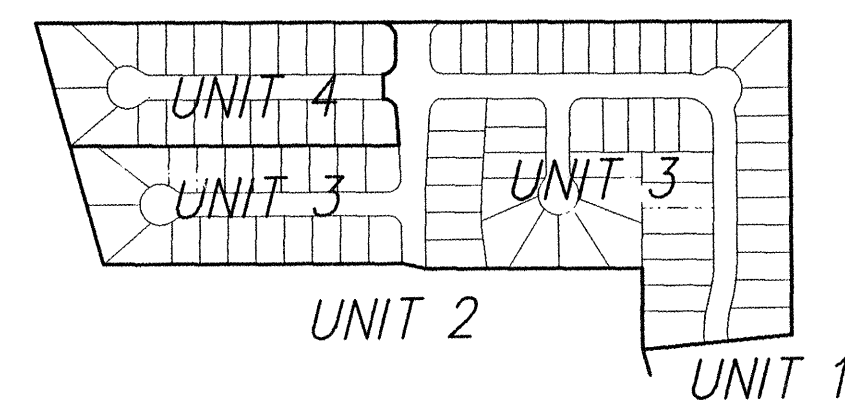
NOTES

1. A 10' Private Drainage Easement is centered on all common side lot lines and on rear lot lines where they adjoin the side yard of the adjacent lot.
2. OPEN SPACE to meet the R-1 Zoning requirement.
3. City of Albuquerque, CEDAR RIDGE ESTATES must be verified and coordinated with the Public Works Department, City of Albuquerque.
4. All of Unit 4 is designated by the Federal Emergency Management Administration (F.E.M.A.) as flood hazard zone 'AO' per the letter of map revision effective, Sept. 25, 1997 (case no. 97-06-1026p).

CURVE DATA

NO.	RADIUS	DELTA	LENGTH	CHORD BEARING & DISTANCE
1	30.00'	90° 00' 00"	47.12'	N 45° 39' 01"E 42.43'
2	25.00'	90° 00' 00"	39.27'	N 44° 20' 59"W 35.36'
3	98.00'	05° 36' 44"	09.60'	N 86° 32' 37"W 09.60'
4	98.00'	07° 34' 13"	12.95'	N 79° 57' 08"W 12.94'
5	25.00'	52° 25' 41"	22.88'	N 64° 56' 03"E 17.97'
6	40.00'	25° 22' 31"	32.00'	N 80° 18' 06"W 31.15'
7	40.00'	45° 51' 28"	39.00'	N 29° 27' 15"W 37.47'
8	40.00'	41° 13' 00"	28.71'	N 19° 04' 59"E 28.16'
9	25.00'	52° 25' 11"	22.88'	N 13° 28' 39"E 22.09'
10	98.00'	03° 06' 17"	05.31'	N 11° 11' 03"W 05.31'
11	98.00'	10° 04' 40"	17.24'	N 04° 35' 35"W 17.22'
12	323.00'	09° 03' 08"	39.76'	N 03° 58' 19"E 39.73'
13	184.90'	01° 03' 50"	03.43'	N 16° 02' 18"E 31.19'
14	300.00'	20° 20' 59"	83.65'	N 08° 30' 44"E 65.31'
15	300.00'	21° 24' 28"	77.68'	N 08° 30' 44"E 65.31'
16	230.90'	15° 39' 08"	63.08'	N 02° 59' 48"E 62.88'
17	230.90'	05° 45' 20"	23.19'	N 13° 42' 02"E 23.18'
18	277.00'	10° 18' 36"	28.15'	N 13° 42' 02"E 28.14'
19	52.00'	89° 47' 45"	49.84'	N 05° 36' 04"E 49.78'
20	25.00'	90° 12' 15"	81.50'	N 44° 27' 07"W 73.41'
21	25.00'	27° 57' 43"	39.36'	N 45° 32' 53"E 35.42'
22	25.00'	35° 31' 47"	12.20'	N 13° 32' 06"W 09.98'
23	40.00'	44° 08' 24"	22.83'	N 14° 09' 19"W 37.31'
24	40.00'	44° 08' 24"	30.79'	N 68° 23' 34"E 22.52'
25	40.00'	40° 44' 14"	30.63'	N 67° 28' 27"W 30.07'
26	40.00'	47° 30' 08"	33.16'	N 19° 05' 40"E 27.84'
27	25.00'	14° 54' 54"	06.51'	N 35° 23' 17"E 32.22'
28	25.00'	27° 29' 04"	11.99'	N 14° 11' 18"E 06.49'
29	25.00'	89° 47' 45"	39.18'	N 44° 27' 07"W 11.88'
30	25.00'	86° 32' 29"	37.79'	N 44° 27' 07"W 35.23'
31	25.00'	90° 00' 00"	18.50'	N 44° 20' 59"W 35.36'
32	40.00'	09° 38' 43"	18.50'	N 69° 27' 02"E 18.08'
33	40.00'	61° 00' 21"	42.59'	N 88° 23' 56"E 40.61'
34	40.00'	61° 44' 54"	43.11'	N 30° 13' 26"W 41.05'
35	40.00'	57° 51' 39"	40.39'	N 29° 34' 51"E 38.70'
36	40.00'	55° 50' 39"	38.99'	N 86° 25' 59"E 37.46'
37	40.00'	18° 41' 40"	13.05'	N 56° 17' 51"W 12.99'
38	40.00'	42° 23' 58"	18.50'	N 68° 09' 00"W 18.08'
39	25.00'	93° 27' 31"	40.78'	N 42° 05' 15"E 34.27'
40	25.00'	86° 32' 29"	18.50'	N 44° 20' 59"W 35.36'
41	25.00'	10° 10' 48"	07.11'	N 53° 20' 02"E 18.08'
42	25.00'	60° 34' 15"	42.29'	N 88° 42' 57"E 07.10'
43	40.00'	60° 34' 15"	43.04'	N 30° 10' 28"W 40.34'
44	40.00'	60° 00' 43"	41.90'	N 30° 39' 22"E 40.99'
45	40.00'	59° 50' 02"	41.77'	N 89° 25' 15"W 39.90'
46	40.00'	12° 23' 58"	08.76'	N 53° 13' 37"W 18.08'
47	25.00'	42° 23' 58"	18.50'	N 68° 09' 00"W 35.36'
48	25.00'	90° 00' 00"	39.27'	N 45° 39' 01"E 42.43'

PHASING SCHEMATIC



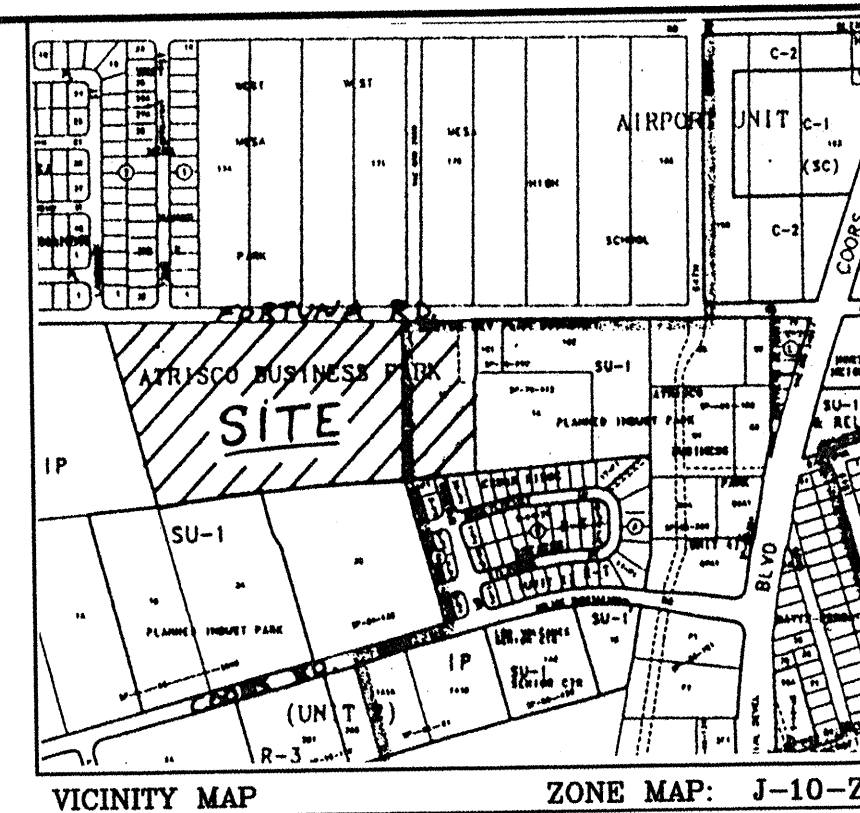
LEGEND

	NEW RETAINING WALL		PROPOSED STORM DRAIN LINE		EXISTING CONTOUR
	NEW GARDEN		UNIT BOUNDARY		EXISTING TOP OF CURB
	FINISHED PAD ELEVATION		CENTERLINE OF ROAD		EXISTING FLOWLINE
	MOUNTABLE CURB & GUTTER		EXISTING CURB AND GUTTER		EXISTING SPOT ELEVATION
	STANDARD 8" CURB & GUTTER		EXISTING SANITARY SEWER MANHOLE		EXISTING DROP INLET
	PROPOSED SPOT ELEVATION		EXISTING WATER VALVE		EXISTING SANITARY SEWER
	3:1 SLOPE		EXISTING WATERLINE		EXISTING STORM DRAIN
	LOT 20		EXISTING OVERHEAD ELECTRIC LINE		EXISTING EDGE OF PAVEMENT
	TRACT/LOT BOUNDARY		EXISTING OVERHEAD TELEPHONE LINE		TREE
	EASEMENTS		EXISTING POWER POLE		DRAINAGE BASIN BOUNDARY
	DIRECTION OF FLOW		EXISTING TELEPHONE PEDESTAL		DRAINAGE BASIN ID
	EXISTING ELEVATION AT BOUNDARY LINE		EXISTING FIRE HYDRANT		
	TEMPORARY FLOOD WALL		EXISTING STORM SEWER MANHOLE		

NOTES

- CONTRACTOR MUST OBTAIN A TOPSOIL DISTURBANCE PERMIT FROM THE ENVIRONMENTAL HEALTH DIVISION PRIOR TO CONSTRUCTION.
- PUBLIC WORKS CONSTRUCTION, LATEST EDITION SHALL GOVERN ALL WORK.
- THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE AND FEDERAL DUST CONTROL MEASURES AND REQUIREMENTS AND WILL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL NECESSARY APPLICATIONS AND APPROVALS.
- THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE LOTS INTO PUBLIC RIGHT-OF-WAY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AS PER DTL. THIS SHT. AND METTING THE SOIL TO KEEP IT FROM BLOWING.
- THE EARTHWORK CONTRACTOR SHALL STOCKPILE ENOUGH MATERIAL ADJACENT TO RETAINING WALL LOCATIONS TO BE UTILIZED FOR WALL BACKFILL.
- ALL STREET ELEVATIONS SHOWN ARE FINISHED FLOWLINE ELEVATIONS.

- TYPE DOUBLE A INLET DOUBLE GRATE SINGLE THROAT TC=02.42 INV.=92.2
- TYPE DOUBLE A INLET DOUBLE GRATE SINGLE THROAT TC=02.42 INV.=93.0
- TYPE DOUBLE A INLET DOUBLE GRATE DOUBLE THROAT TC=02.42 INV.=94.0
- TYPE DOUBLE A INLET DOUBLE GRATE DOUBLE THROAT TC=02.42 INV.=94.8

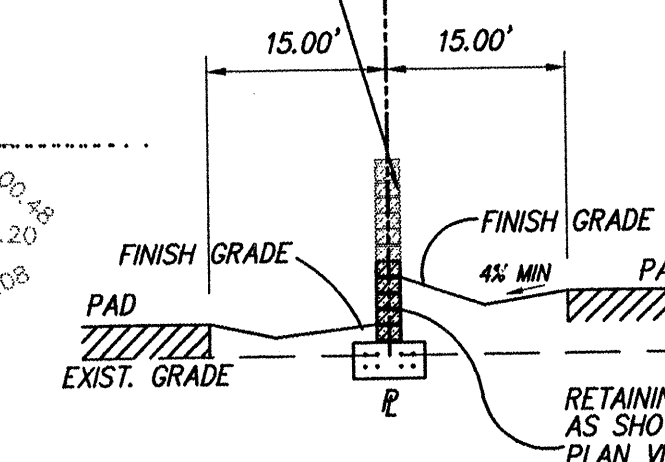


LEGAL DESCRIPTION

ALL OF LOT 4A CEDAR RIDGE ESTATES UNIT 2

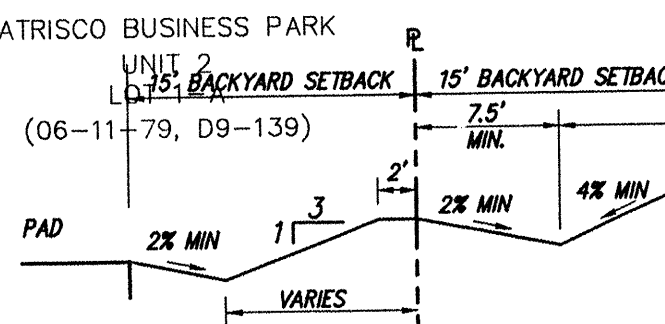
EXISTING ASPHALT DRIVEWAY TO BE REMOVED AND DISPOSED OF THIS PROJECT.

GARDEN WALL ON ALL REAR LOT LINES TO BE CONSTRUCTED BY OTHERS. NOT PART OF THIS PROJECT. WHERE GARDEN WALLS RETAIN 18" OR LESS, THEY ARE NOT SHOWN ON PLAN VIEW AND CONTRACTOR IS TO EXCAVATE FOR FOOTER AND BACK FILL IS TO BE PLACED ON HIGH SIDE LOT FORMING AN INTERIM BERM TO PREVENT CROSS LOT DRAINAGE. WALL IS NOT PART OF THIS PROJECT.



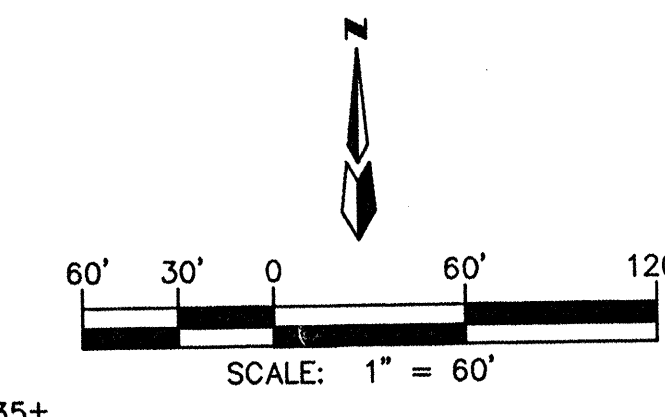
SECTION B-B

NTS



SECTION B-B

NTS



END CONSTRUCTION

MATCH EXIST GRADE

& ELEVATION

FL= 99.42±

TEMPORARY UNDEVELOPED SHEET FLOW

$Q_{100} \approx 1.38$ cfs
 $AREA = 0.99$ AC. $\approx$
 $V \approx 1.06$ fps
 $D \approx 0.26$ feet
 $S \approx 0.5\%$
 $n = 0.04$
 $A = 20$ D
 $P = 20$ D
 $R = D$
 $Q = \frac{1.38}{0.04} \approx 34.5$ cfs

PURPOSE

The purpose of this plan is to amend the previously approved Preliminary Plat, Infrastructure List and Grading Plan as most recently approved by the DRB on April 29, 1998. Changes include streets shifting and separation into four (4) phases (instead of three (3)).

MANAGEMENT PLAN

This development is in substantial compliance with the previously approved Drainage Report for Cedar Ridge Estates, Units 2 & 3, as prepared by Brasher & Lorenz, Inc., March 1996. The exception is that this Drainage Plan splits the previously approved Unit 3 into two (2) units, now Units 3 & 4. Unit 4 is the existing retention pond on the west half of 1996. The exception is that this Drainage Plan splits the previously approved report and all of Unit 4 is designated by the Federal Emergency Photinia Place. All off-site flows are directed to this pond in accordance with the previously approved report and all of Unit 4 is designated by the Federal Emergency Management Administration (FEMA) as Flood Hazard Zone AO per the letter of map revision effective (8/25/97) case # 97-06-1023P. Note that there are no changes to the offsite drainage and the Fortuna Rd storm sewer and the West Mesa Diversion will still be required prior to the development of Unit 4. Fortuna is shown here schematically only and is to be designed separately by others and approved by FEMA prior to development of Unit 4.

This 16.19 acre development will temporarily discharge its developed drainage into the two retention ponds along Fortuna Road. The area of drainage basin A is 7.56 acres, compared to the 9.10 acres of this development that was previously approved to drain to the inlets constructed on Rosebud Drive in Unit 1. The development density did not change from the previous report so by pro-rating the areas that flow from basin A into Unit 1 is 26.17 cfs versus the 31.50 cfs previously approved to drain through the Unit 1 storm sewer from the pond at the northeast corner of Unit 1. Basin B (8.63 acres) will ultimately flow to the future Fortuna Road storm sewer, which was previously approved to have a total of 211 cfs and will now have 216 cfs. This is not a significant increase and will not change the pipe size in Fortuna Road. Again from proration basin B will have 29.87 cfs which will be intercepted on-site in the two inlets in Quailbrush Drive.

The existing valley gutter on Fortuna Road does not meet vertical design criteria and must be re-constructed as this project builds the permanent concrete curb and gutter, valley gutter, and sidewalk along the south side of Fortuna Road. The existing sump can not be eliminated, but it is only 0.75' deep and has an emergency overflow path available in the existing Fortuna Road to the east. The inlet in Quailbrush will be set at the same elevation as those in Fortuna Road and all pads have 0.5' freeboard above the emergency existing Fortuna Road to the east. The inlet in Quailbrush will be set at the same elevation as those in Fortuna Road and all pads have 0.5' freeboard above the emergency existing Fortuna Road to the east. These inlets will temporarily drain to the existing pond at the northwest corner of this site where the previously required volume of 14.15 acre feet will now overflow elevation. These inlets will temporarily drain to the existing pond at the northwest corner of this site where the previously required volume of 14.15 acre feet will now overflow elevation. These inlets will have a capacity of 25.88 acre feet at elevation 5102.75, thus providing more than adequate storage. An additional temporary asphalt rundown occur at elevation 5098.34 and it will have a capacity of 25.88 acre feet at elevation 5102.75, thus providing more than adequate storage. A portion of the existing drainage easement there, and a 10' strip along the south side of the existing drainage easement are to be vacated with Unit 3.

STREET CAPACITIES

At 0.5% slope with standard curb & gutter the streets have a minimum capacity of 44 cfs which exceeds the 100 year flow from Basins A & B shown hereon 26.17 & 29.87 cfs. The following information is provided to support the location of the transition from mountable to standard curb and gutter. The mountable portion of both cul-de-sacs is 2.71 acres each, with $Q_{100} \approx 9.4$ cfs which has a flow depth of 0.33' at 0.5% and a velocity of 1.7 fps for a total energy depth of 0.37 feet.

Flow depths are taken from Plate 22.3 D-1 of the DPM and reduced by 3/4" for roll curb types to account for the difference in gutter depression. Allowable depths may not exceed curb height which is 0.33' for roll curb and gutter.

Total energy depth is calculated as flow depth plus energy head. Allowable depths are 0.18' above top of curb.

Capacity is measured by the weir equation at the lip of the gutter assuming an allowable ponding elevation equal to the lowest adjacent right-of-way elevation. The length of the double grate facing the street is 6.5' and the depth is 0.725' at the lip of the gutter. The sides are each 2' long (4' total) and the average depth is 0.892'. From the weir equation:

(Front) $Q_{cap} = 3.0 \times 6.5' \times 0.725'^3 = 12.04$ cfs
 (Sides) $Q_{cap} = 3.0 \times 4.0' \times 0.892'^3 = 10.11$ cfs
 (Total) $Q_{cap} = 12.04$ cfs + 10.11 cfs = 22.15 cfs (Double Grate Capacity)
 * Note: These depths assume standard 8" curb with the right-of-way 9' behind the curb and 0.18' above the top of curb.

FORTUNA ROAD SUMP INLETS #3, 4 & 5

The 100-year flow in Fortuna Road is not more than the full street capacity which is about 50 cfs at 0.6% slope, including flow of 10.95 cfs from the West Mesa Aquatic Center on the north side of Fortuna Road. Basin B will contribute 29.87 cfs at Quailbrush Road so the total 100 year flow is 79.87 cfs. There are four (4) sump inlets with a combined capacity of 88.60 cfs thus providing a safety factor that would allow 10% of the inlets to clog without exceeding the normal design criteria. For HGL calculations, each inlet is assumed to take one fourth of the 100-year flow (19.97 cfs each).

FORTUNA ROAD EMERGENCY OVERFLOW

The sump has a 40' wide emergency overflow spillway that is formed by the crest in Fortuna Road to the east. It is designed to handle the 100-year flow in the event that the storm sewer system failed completely. The depth of flow in the emergency overflow spillway is given by the broad crested weir equation as:

Emergency Overflow $Q = 216$ cfs $= 2.7 \times 40' \times (\text{depth})^{3/2}$
 $\text{depth} = 1.58'$

This depth is measured above the crest elevation of 02.50. The pads and temporary berm in the sump area are set 2.06' above the crest, thus allowing 0.50' for construction tolerances and freeboard.

POND VOLUMES

From page 4 of the original report the required pond volume is 14.13 ac. ft. for the pond on Unit 4.

Elevation (ft.)	Planimeter (sq. ft.)	Area (acres)	A1+A2+sq.r(A1*A2) (acres)	Volume (ac.ft.)	Volume Sum (ac.ft.)
91.00	66,210.00	1.52	0.00	0.00	0.00
98.34	"	2.37	5.78	14.15	14.15
102.75	129,167.00	2.97	6.61	25.88	25.88

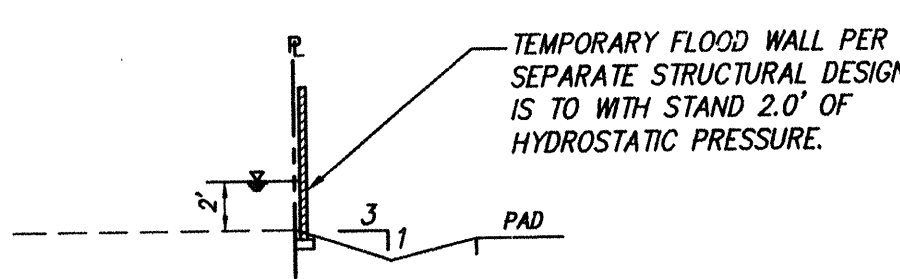
* - Interpolated area from closest two planimeter readings.
 $IA = (\text{Sq.ft. Area1}) * ((E1-E1)/(E2-E1)) * (\text{sq.r.}(Area2) - \text{sq.r.}(Area1))$
 where: E1, E2 = Closest two elevations with planimeter data
 EI = Elevation at which to interpolate area
 Area1, Area2 = Area computed for E1, E2, respectively
 IA = Interpolated area for EI

* Incremental volume computed by the Conic Method for Reservoir Volumes.
 $\text{Volume} = (1/3) * (\text{Area1} + \text{Area2} + \text{sq.r.}(\text{Area1} * \text{Area2}))$
 where: EL1, EL2 = Lower and upper elevations of the increment
 Area1, Area2 = Areas computed for EL1, EL2, respectively
 Volume = Incremental volume between EL1 and EL2

f:\cedar.rid\drainage.net

SECTION D-D

NTS



TEMPORARY FLOOD WALL PER SEPARATE STRUCTURAL DESIGN IS TO WITH STAND 2.0' OF HYDROSTATIC PRESSURE.

MARK GOODWIN & ASSOCIATES, P.A.
 CONSULTING ENGINEERS
 P.O. BOX 90606
 ALBUQUERQUE, NEW MEXICO 87199
 (505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
 PUBLIC WORKS DEPARTMENT
 ENGINEERING DEVELOPMENT GROUP
 TITLE: CEDAR RIDGE ESTATES - UNIT III & IV
 GRADING AND DRAINAGE PLAN
 ULTIMATE CONDITIONS

DESIGN REVIEW COMMITTEE CITY ENGINEER APPROVAL

LAST DESIGN UPDATE

MO./DAY/YR. MO./DAY/YR.

CITY PROJECT NO. 5986.81

ZONE MAP NO. J-10

CONTRACTOR	WORK	DATE	CONTRACTOR	WORK	DATE
INSPECTED BY	DATE	INSPECTED BY	DATE	INSPECTED BY	DATE
ACCEPTANCE BY	DATE	ACCEPTANCE BY	DATE	ACCEPTANCE BY	DATE
VERIFICATION BY	DATE	VERIFICATION BY	DATE	VERIFICATION BY	DATE
DRAWINGS BY	DATE	DRAWINGS BY	DATE	DRAWINGS BY	DATE
CHECKED BY	DATE	CHECKED BY	DATE	CHECKED BY	DATE
RECORDED BY	DATE	RECORDED BY	DATE	RECORDED BY	DATE
NO.		NO.		NO.	

ENGINEER'S SEAL
 1574
 1574
 1574

REMARKS

DESIGN

DATE 02/98

DATE 02/98

DATE 02/98

DATE 02/98

DATE 02/98

DATE 02/98

DATE 02/98

DATE 02/98

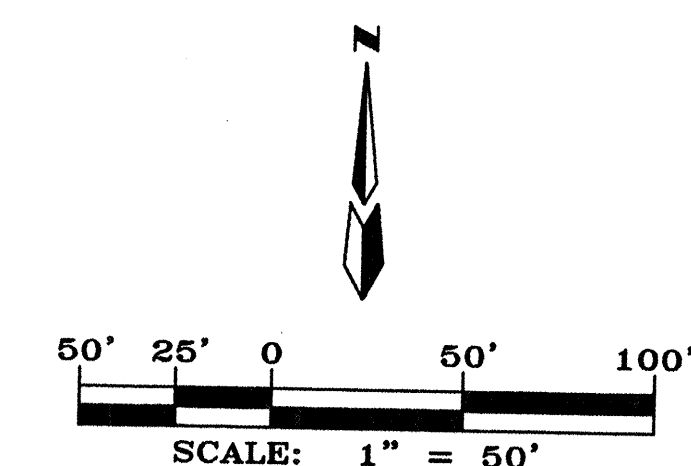
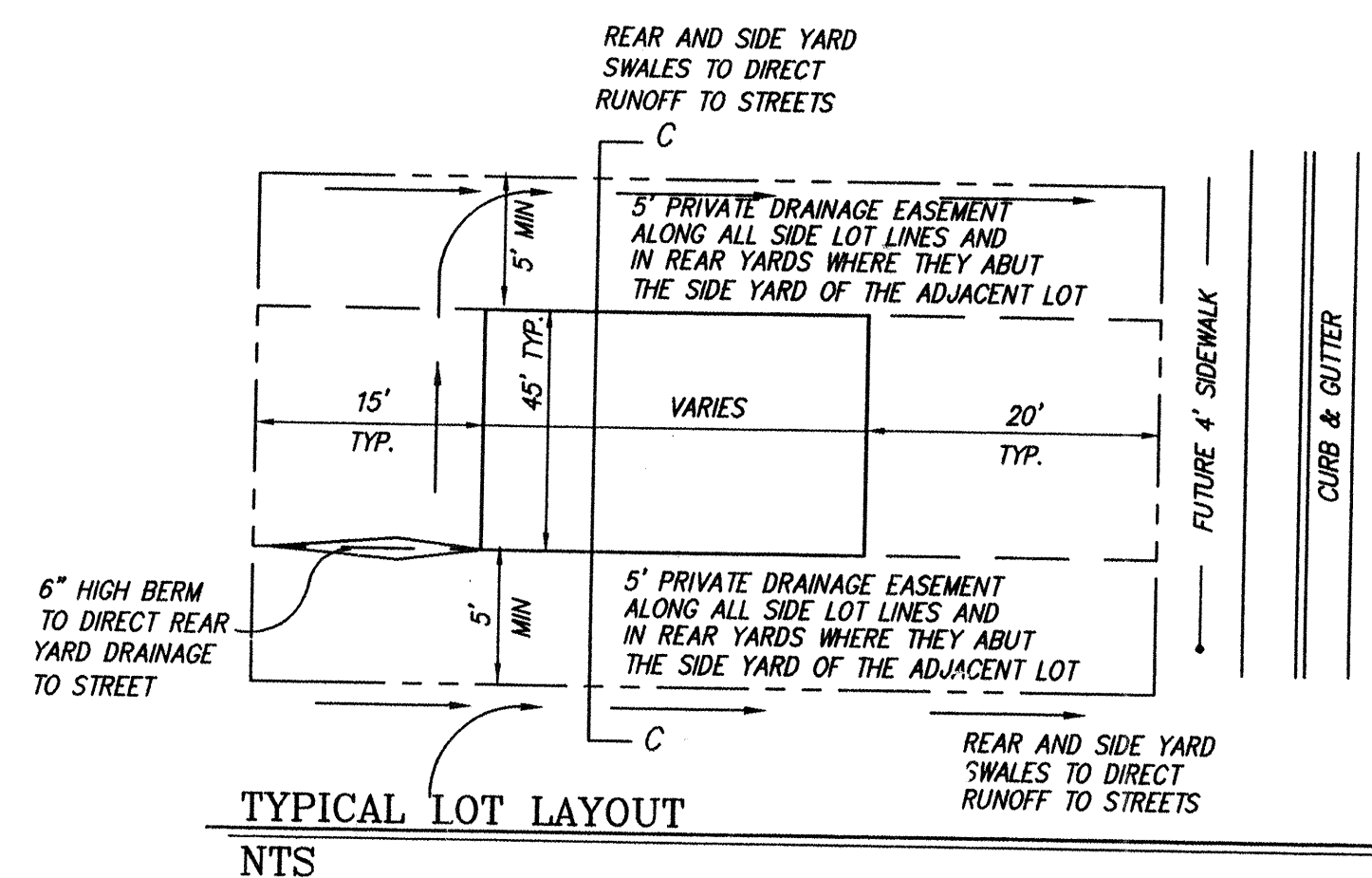
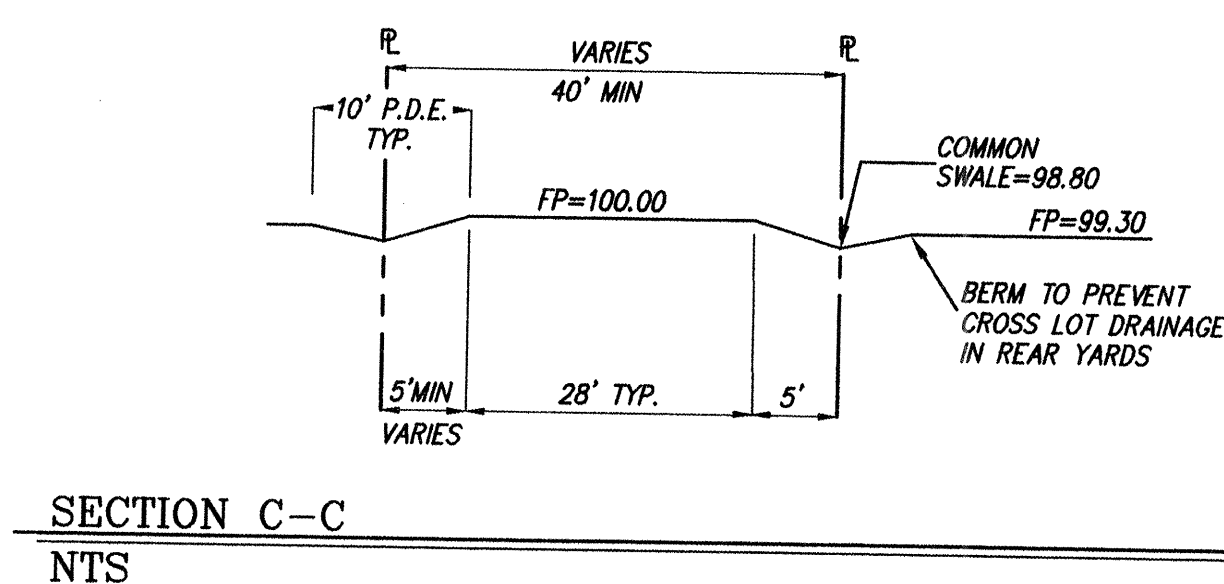
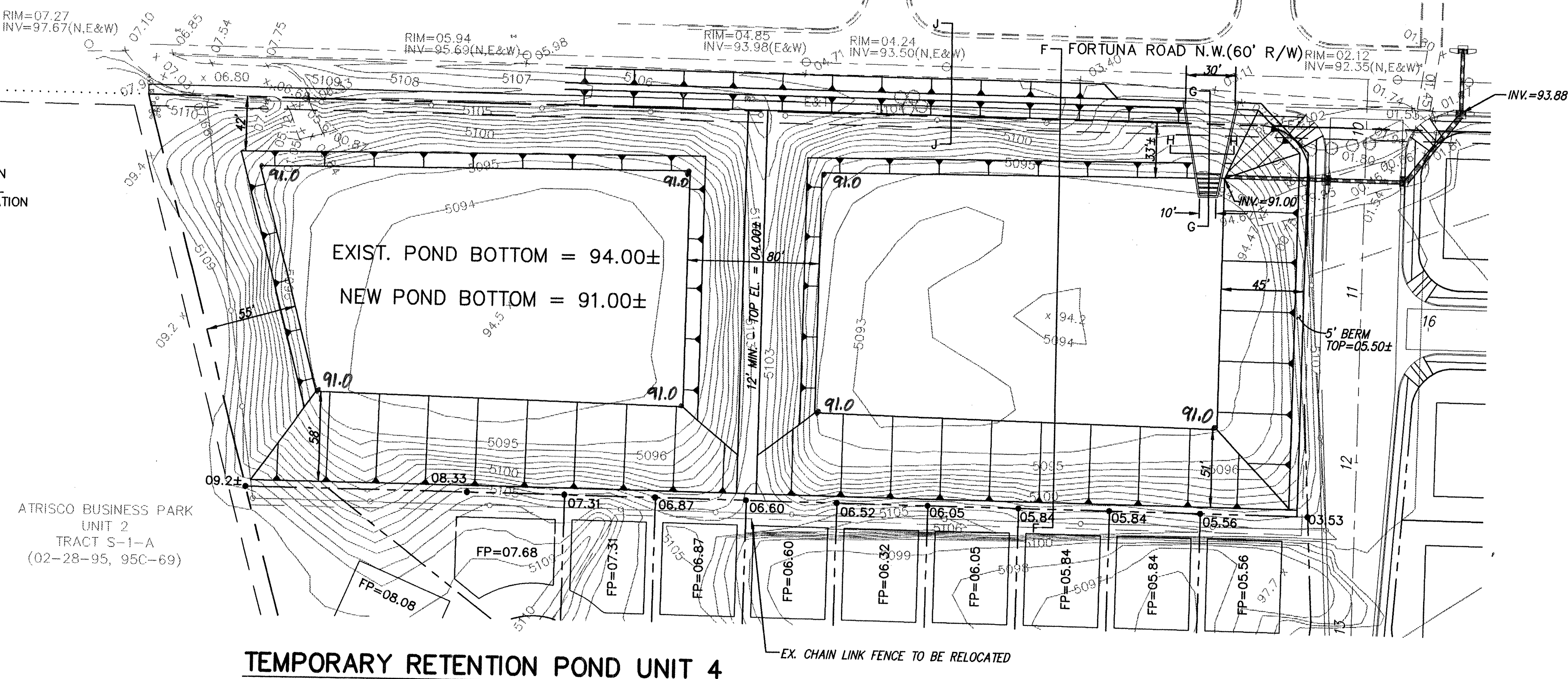
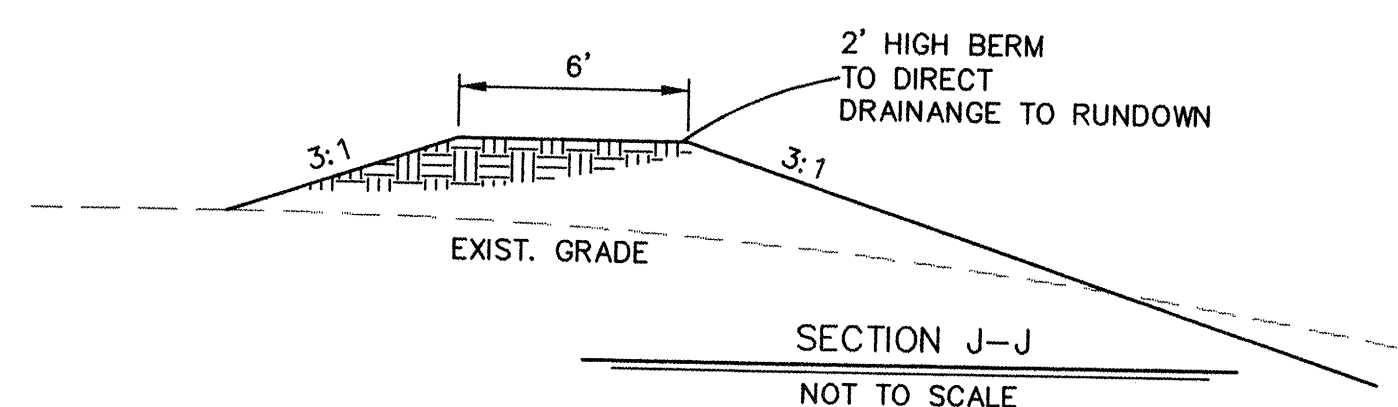
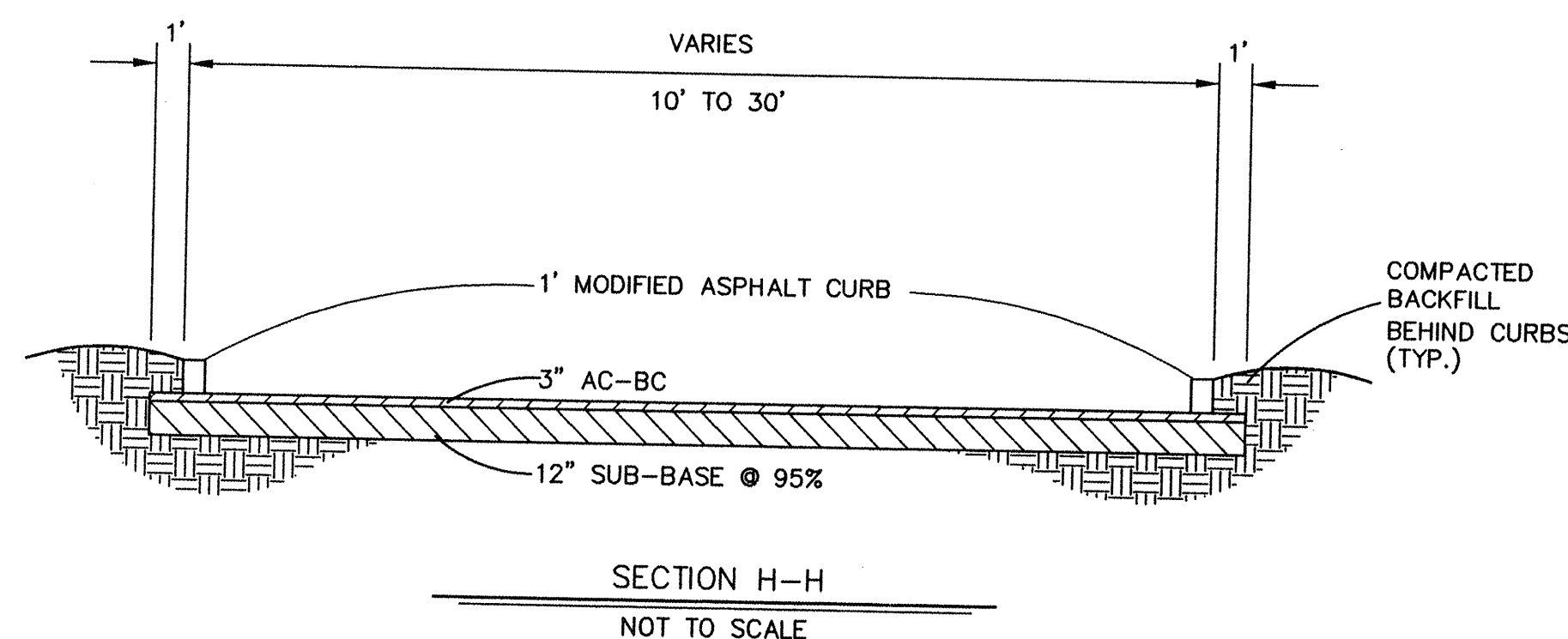
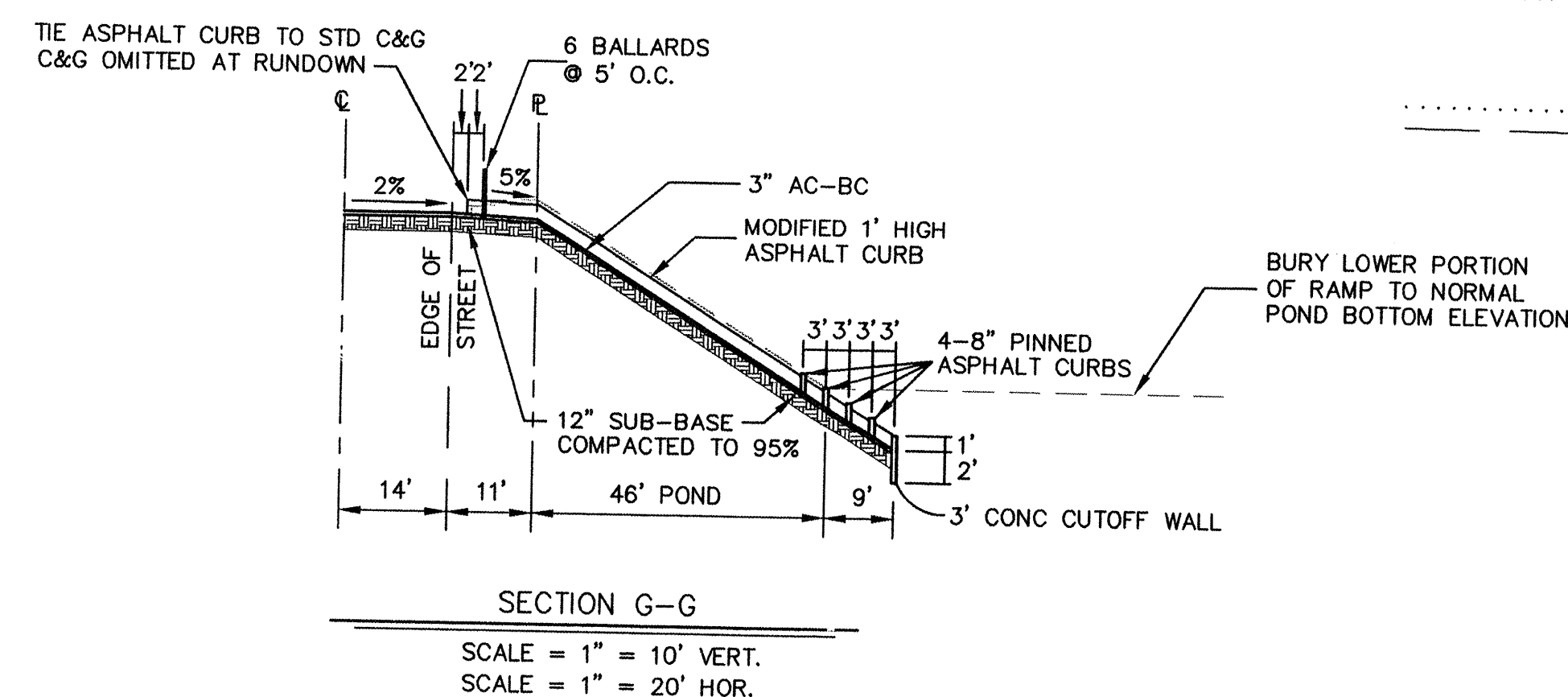
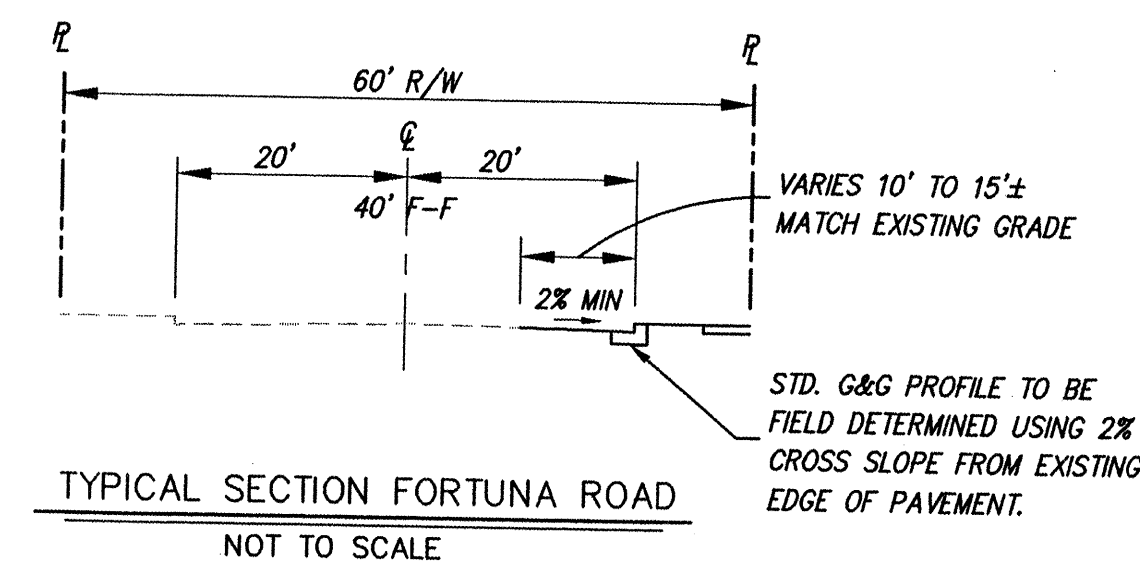
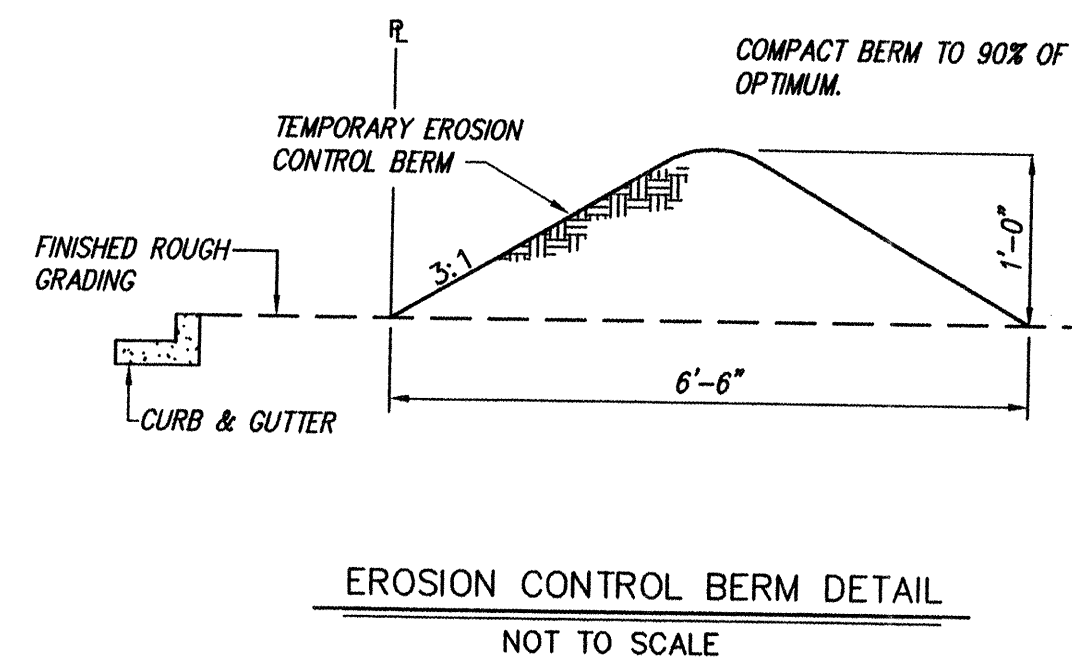
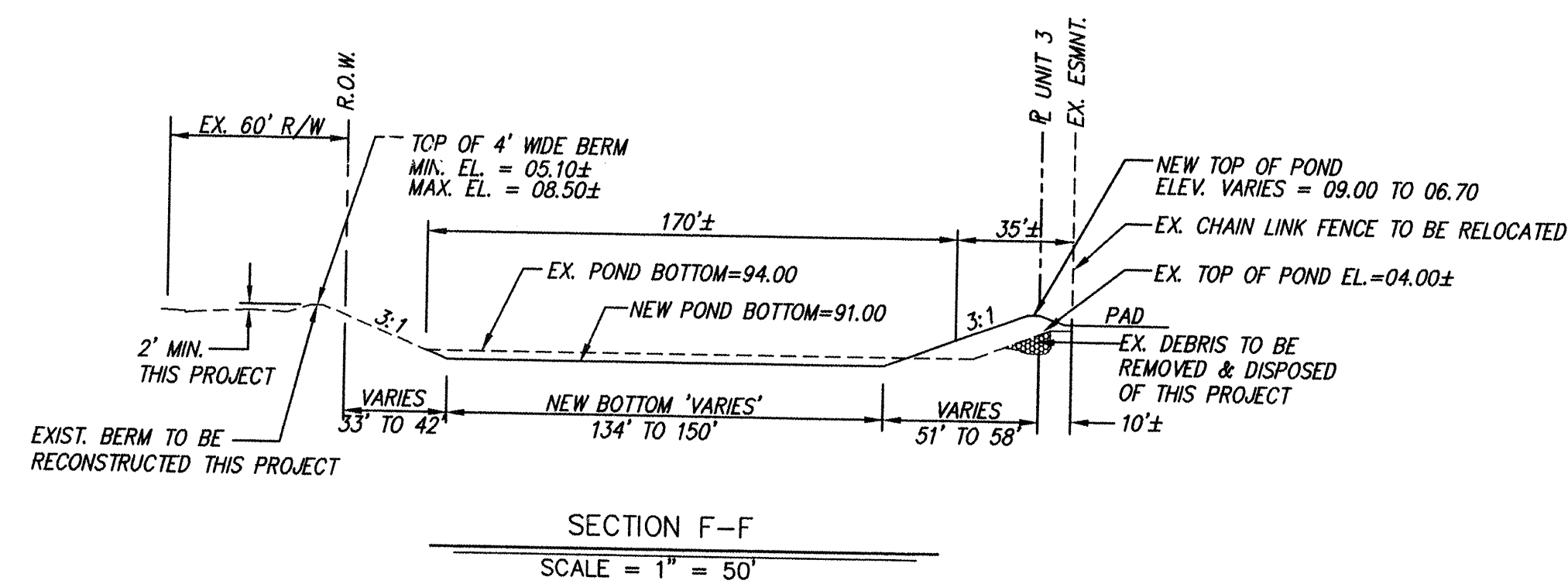
DATE 02/98

DATE 02/98

DATE 02/98

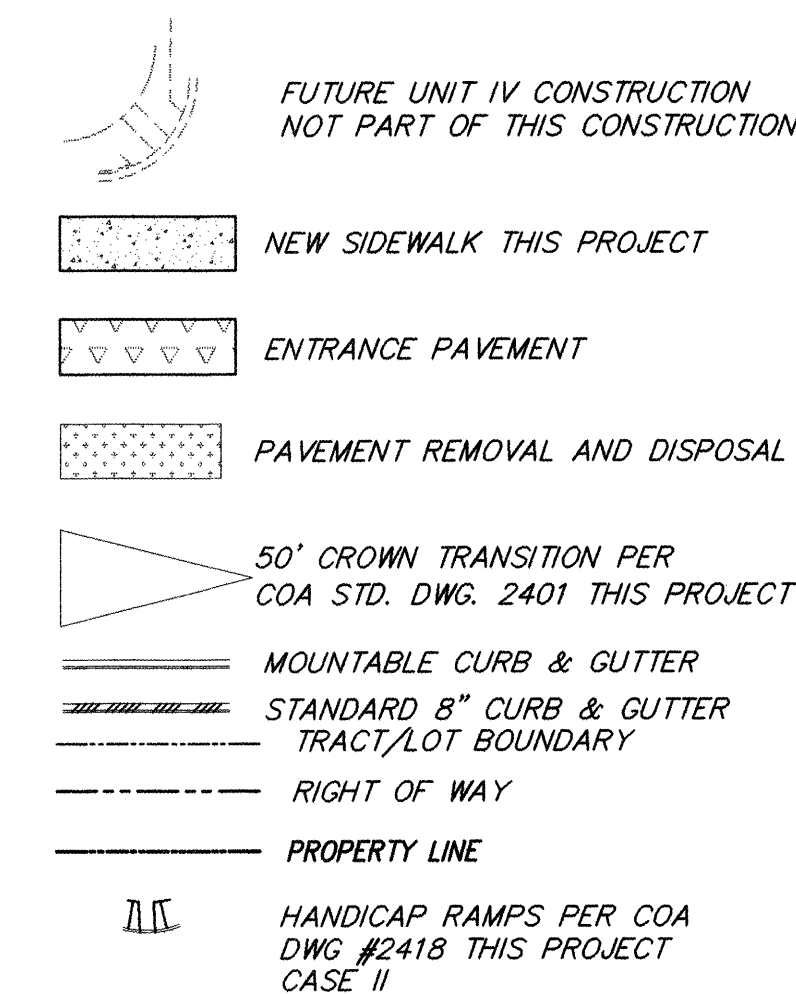
Approved @ DRB

For Unit 3 Private Grading Only. Not for Infrastructure Construction.

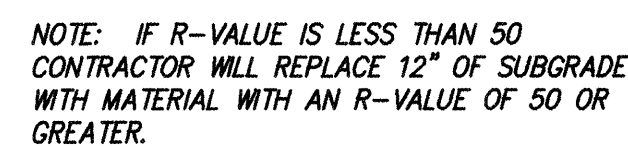
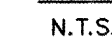


APPROVED FOR ROUGH GRADING 1± DATE

dmg MARK GOODWIN & ASSOCIATES, P.A. CONSULTING ENGINEERS P.O. BOX 90606 ALBUQUERQUE, NEW MEXICO 87199 (505) 828-2200	
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP	
TITLE: CEDAR RIDGE ESTATES - UNIT III & IV TEMPORARY FACILITIES PLAN	
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL
NO. DATE	NO. DATE
REMARKS	REVISIONS
DESIGNED BY	DATE
DRAWN BY	DATE
CHECKED BY	DATE
APPROVED @ DRB	
CITY PROJECT NO.	ZONE MAP NO.
5986.81	J-10
SHEET	OF
5X	19

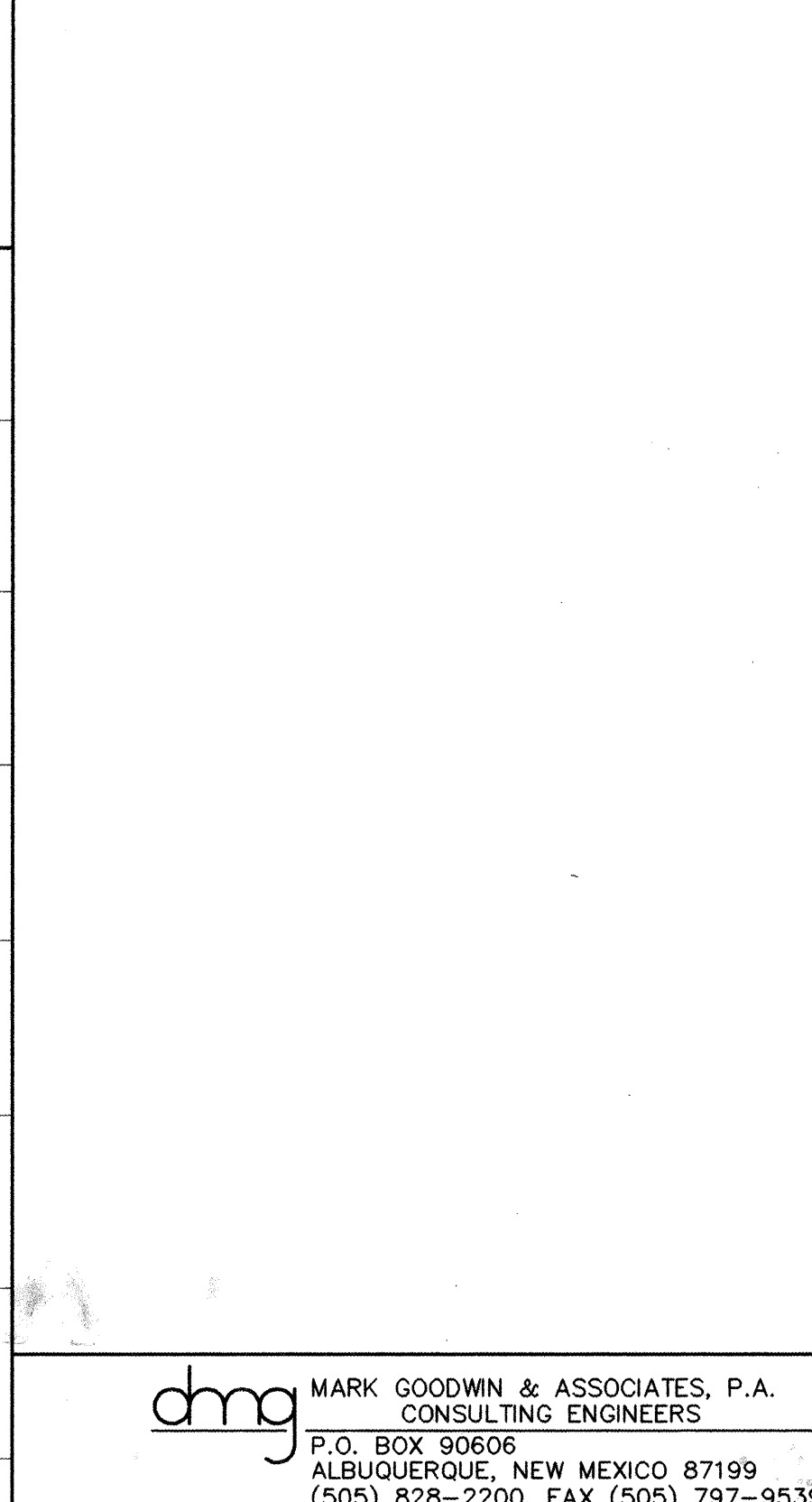
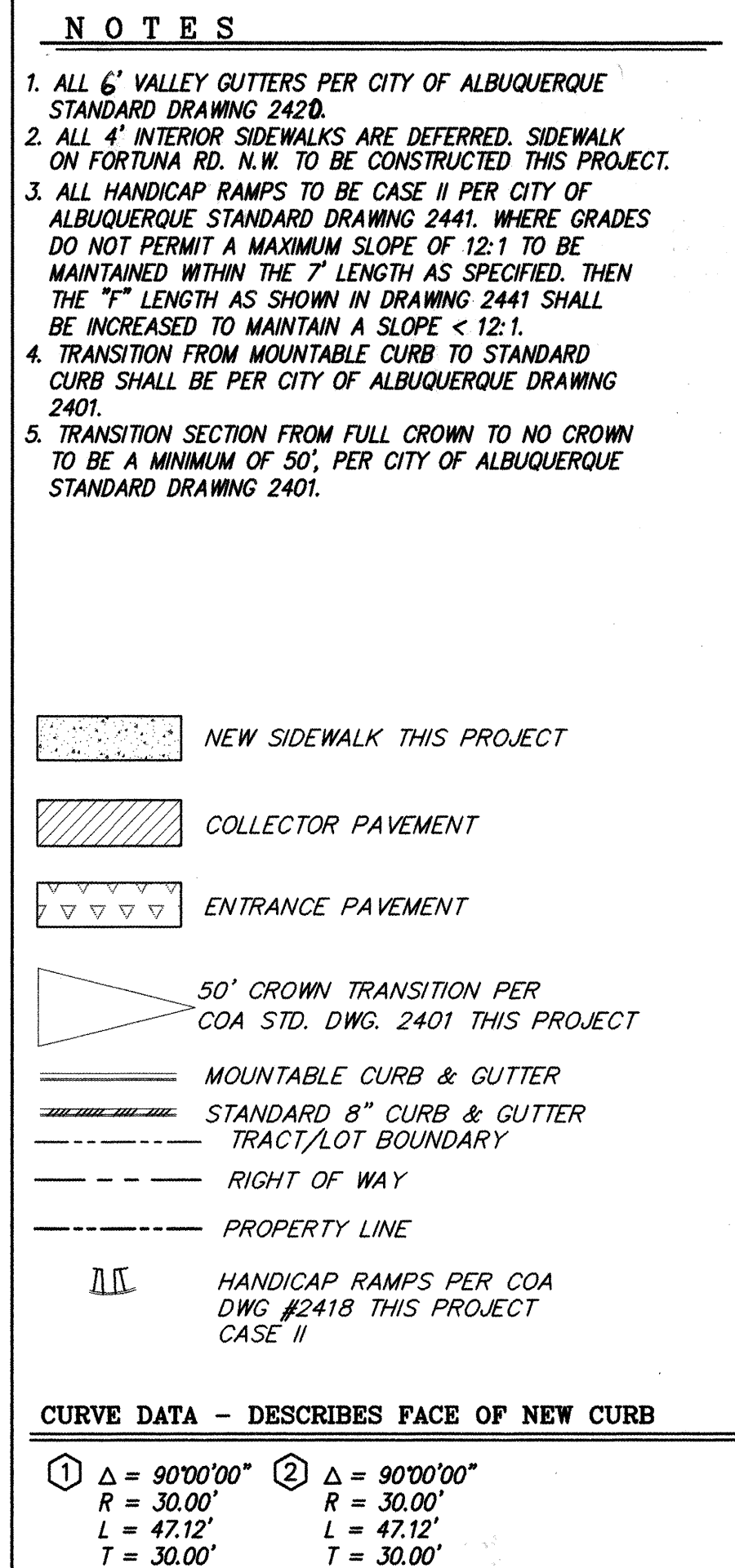


1. ALL 6' VALLEY GUTTERS PER CITY OF ALBUQUERQUE STANDARD DRAWING 2420.
2. ALL 4' INTERIOR SIDEWALKS ARE DEFERRED.
3. ALL HANDICAP RAMPS TO BE CASE 1 PER CITY OF ALBUQUERQUE STANDARD DRAWING 2441. WHERE GRADES DO NOT PERMIT A MAXIMUM SLOPE OF 12:1 TO BE MAINTAINED WITHIN THE 7' LENGTH AS SPECIFIED, THEN THE 7' LENGTH AS SHOWN IN DRAWING 2441 SHALL MUST BE INCREASED TO MAINTAIN A SLOPE < 12:1.
4. TRISTOP FROM MOUNTABLE CURB TO STANDARD CURB SHALL BE PER CITY OF ALBUQUERQUE DRAWING 2401.
5. TRANSITION SECTION FROM FULL GROWN TO NO GROWN TO BE A MINIMUM OF 50'; PER CITY OF ALBUQUERQUE STANDARD DRAWING 2401.



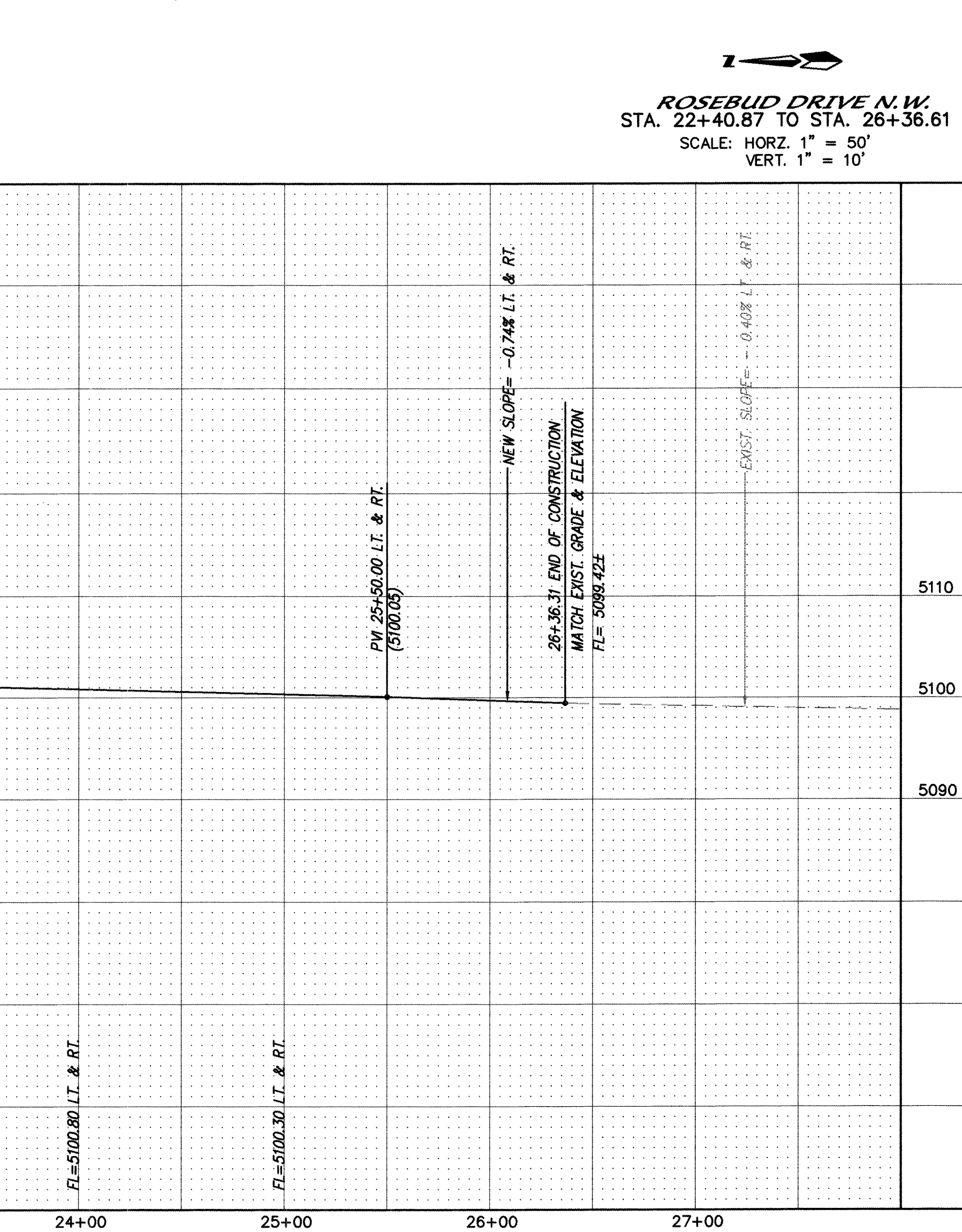
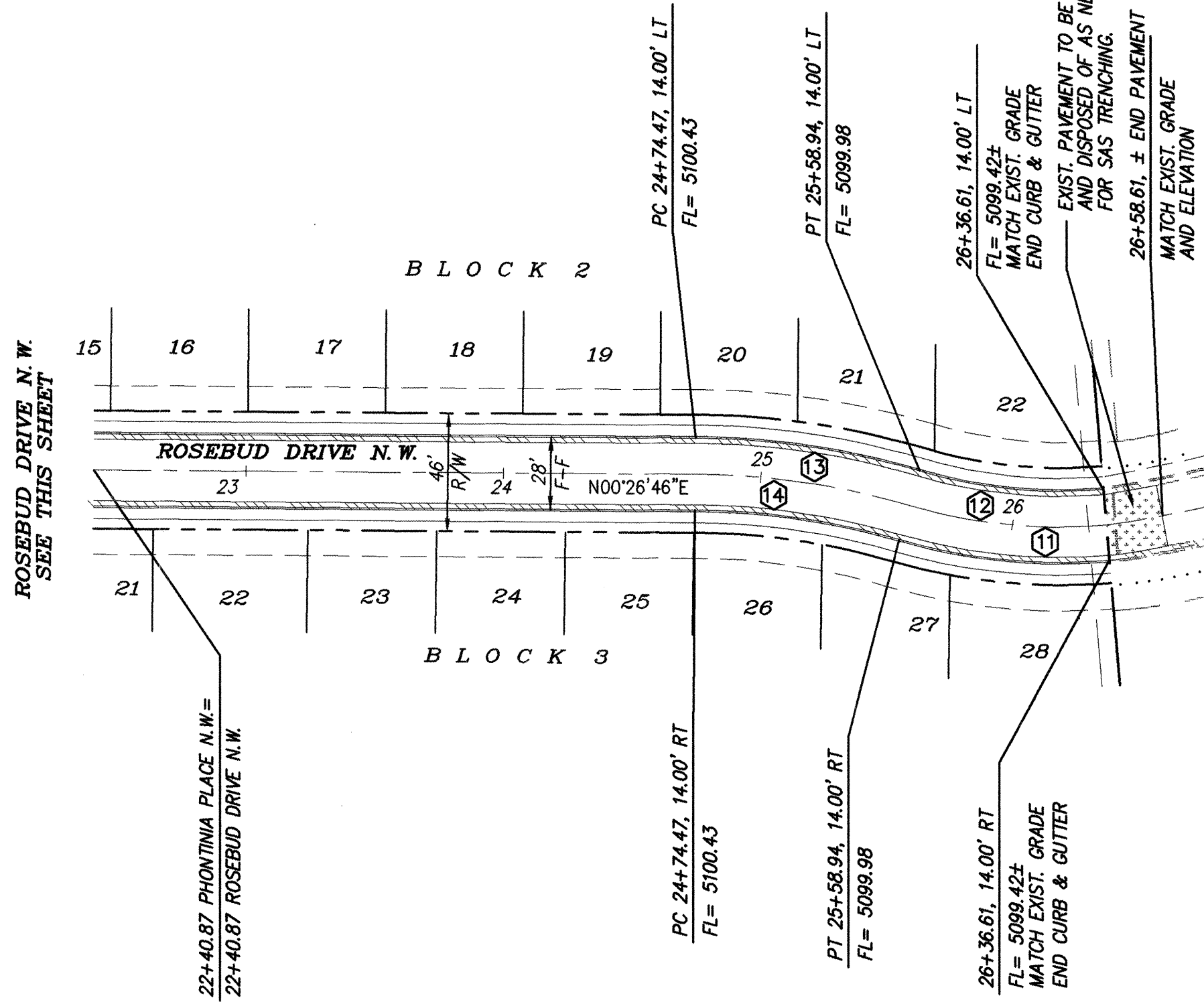
N.T.S. (PER CITY STD. DWG. 2405)

[illegible]



	CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT		
TITLE:	<i>CEDAR RIDGE ESTATES PAVING IMPROVEMENT</i>		
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	
APPROVED FOR THE OCT 23 1998 DESIGN REVIEW COMMITTEE			

[illegible]



-
- PAVEMENT REMOVAL AND DISPOSAL
- 50' CROWN TRANSITION PER
COA STD. DWG. 2401 THIS PROJECT
- MOUNTABLE CURB & GUTTER
- STANDARD 8" CURB & GUTTER
- TRACT/LOT BOUNDARY
- RIGHT OF WAY
- PROPERTY LINE
- HANDICAP RAMPS PER COA
DWG. #2418 THIS PROJECT
CASE II
- EXISTING CURB & GUTTER

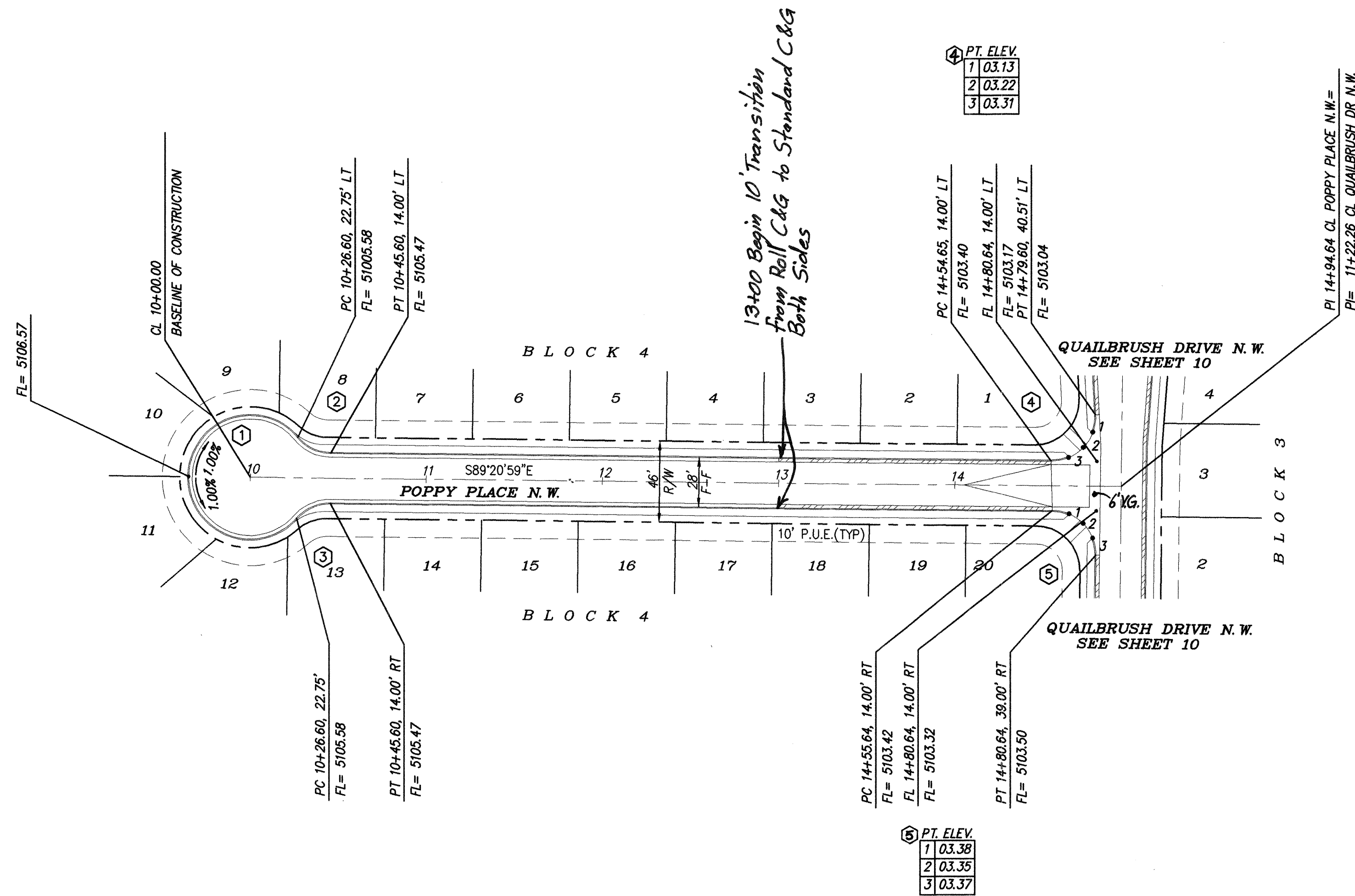
CURVE DATA - DESCRIBES FACE OF CURB

① $\Delta = 90^{\circ}00'00''$ $R = 25.00'0"$ $L = 39.27'$ $T = 25.00'$	② $\Delta = 86^{\circ}32'22''$ $R = 25.00'$ $L = 37.76'$ $T = 23.53'$	③ $\Delta = 89^{\circ}47'3"$ $R = 25.00'$ $L = 39.18'$ $T = 24.91'$
④ $\Delta = 90^{\circ}12'23''$ $R = 25.00'$ $L = 39.36'$ $T = 25.09'$	⑤ $\Delta = 130^{\circ}8'45''$ $R = 89.00'$ $L = 20.42'$ $T = 10.26'$	⑥ $\Delta = 59^{\circ}16'06''$ $R = 25.00'$ $L = 23.86'$ $T = 14.22'$
⑦ $\Delta = 182^{\circ}01'14''$ $R = 35.00'$ $L = 128.89'$ $T = \sqrt{A}$	⑧ $\Delta = 89^{\circ}47'41''$ $R = 61.00'$ $L = 95.60'$ $T = 60.78'$	⑨ $\Delta = 59^{\circ}16'06''$ $R = 25.00'$ $L = 25.86'$ $T = 14.22'$
⑩ $\Delta = 130^{\circ}48'55''$ $R = 89.00'$ $L = 20.42'$ $T = 10.26'$	⑪ $\Delta = 217^{\circ}24'28''$ $R = 221.90'$ $L = 82.91'$ $T = 41.94'$	⑫ $\Delta = 217^{\circ}24'4"$ $R = 193.90'$ $L = 72.45'$ $T = 36.65'$
⑬ $\Delta = 167^{\circ}59'59''$ $R = 286.00'$ $L = 80.53'$ $T = 40.53'$	⑭ $\Delta = 167^{\circ}56''$ $R = 314.00'$ $L = 88.41'$ $T = 44.50'$	

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 CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT	
TITLE: <i>CEDAR RIDGE ESTAT</i> <i>PHOTONIA PLACE PAVING</i>	
DESIGN REVIEW COMMITTEE 	CITY ENGINEER APPROVAL 

[illegible]



NOTES

1. ALL 6' VALLEY GUTTERS PER CITY OF ALBUQUERQUE STANDARD DRAWING 242D.
2. ALL 4' INTERIOR SIDEWALKS ARE DEFERRED.
3. ALL HANDICAP RAMPS TO BE CASE II PER CITY OF ALBUQUERQUE STANDARD DRAWING 2441. WHERE GRADES DO NOT PERMIT A MAXIMUM SLOPE OF 12:1 TO BE MAINTAINED WITHIN THE 7' LENGTH AS SPECIFIED, THEN THE "F" LENGTH AS SHOWN IN DRAWING 2441 SHALL MUST BE INCREASED TO MAINTAIN A SLOPE < 12:1.
4. TRANSITION FROM MOUNTABLE CURB TO STANDARD CURB SHALL BE PER CITY OF ALBUQUERQUE STANDARD DRAWING 2401.
5. TRANSITION SECTION FROM FULL CROWN TO NO CROWN TO BE A MINIMUM OF 50', PER CITY OF ALBUQUERQUE STANDARD DRAWING 2401.

ENTRANCE PAVEMENT

50' CROWN TRANSITION PER COA STD. DWG. 2401 THIS PROJECT

MOUNTABLE CURB & GUTTER

STANDARD 8" CURB & GUTTER

TRACT/LOT BOUNDARY

RIGHT OF WAY

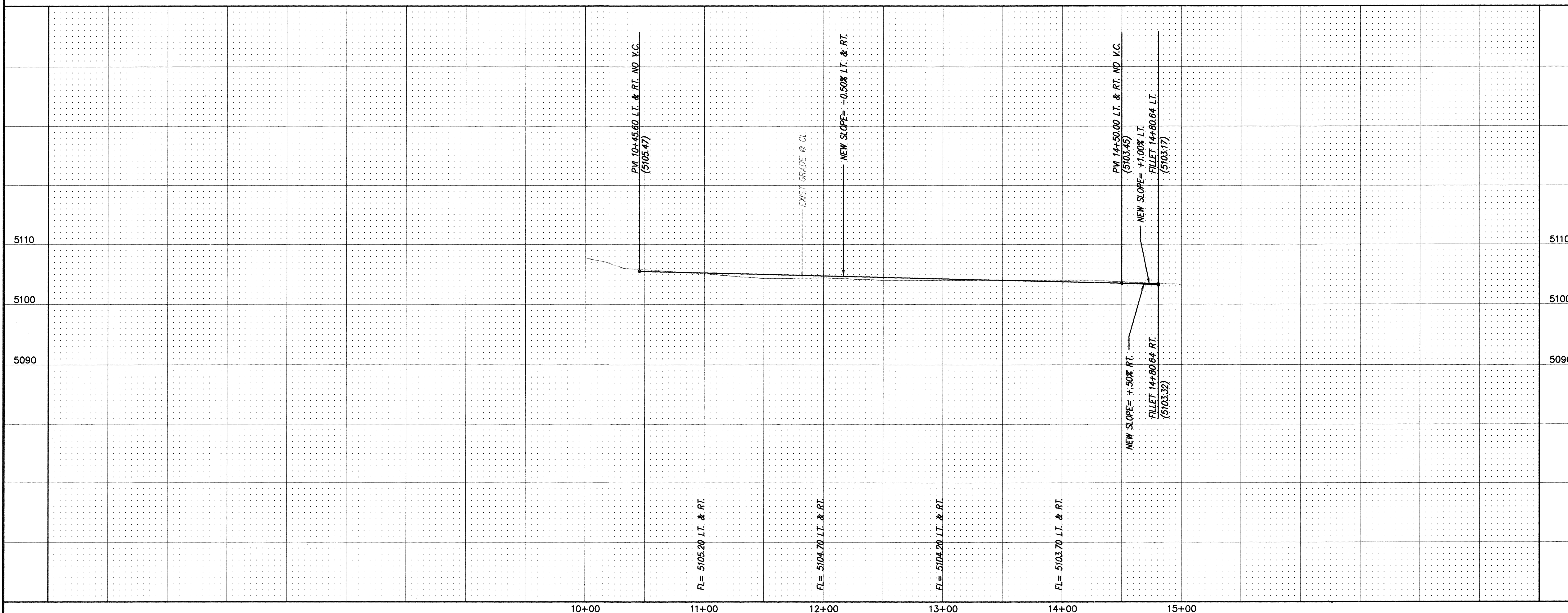
PROPERTY LINE

HANDICAP RAMPS PER COA DWG. #2418 THIS PROJECT CASE II

CURVE DATA - DESCRIBES FACE OF CURB

① Δ = 278°54'57"	② Δ = 49°27'28"	③ Δ = 49°27'28"
R = 35.00'	R = 25.00'	R = 25.00'
L = 170.38'	L = 21.58'	L = 21.58'
T = N/A	T = 11.51'	T = 11.51'
④ Δ = 93°27'39"	⑤ Δ = 90°00'00"	
R = 25.00'	R = 25.00'	
L = 40.78'	L = 39.27'	
T = 26.56'	T = 25.00'	

POPPY PLACE NW
STA. 10+00.00 TO STA. 14+80.64
SCALE: HORZ. 1" = 50'
VERT. 1" = 10'



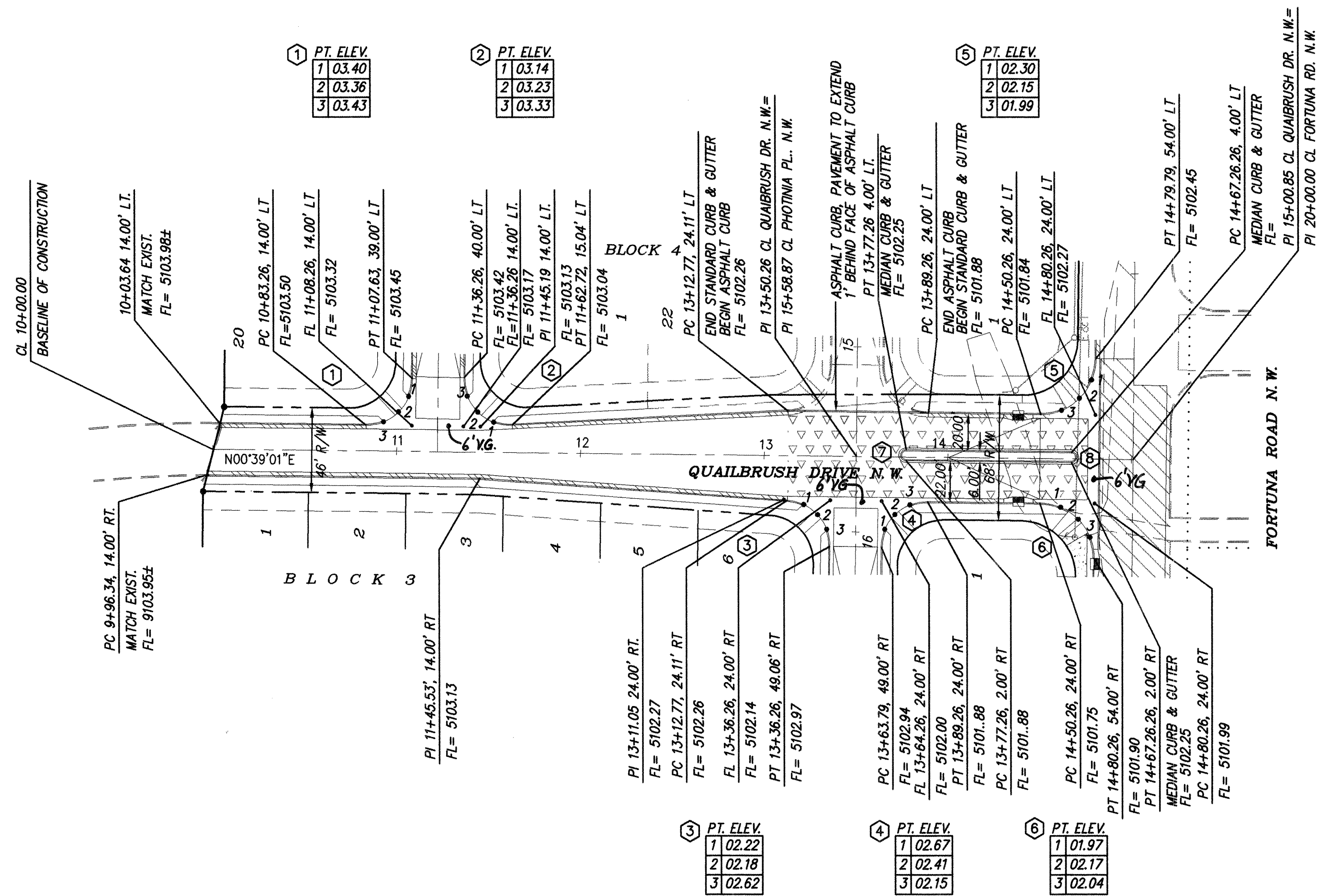
dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: **CEDAR RIDGE ESTATES-UNIT III**
POPPY PLACE-PAVING IMPROVEMENTS

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
OCT 23 1998			
DESIGN REVIEW COMMITTEE			

CITY PROJECT NO. **5986.81** ZONE MAP NO. **J-10** SHEET **9** OF **19**



QUAILBRUSH DRIVE NW
STA. 10+00.00 TO STA. 14+80.64
SCALE: HORZ. 1" = 50'
VERT. 1" = 10'

NOTES

- ALL 6' VALLEY GUTTERS PER CITY OF ALBUQUERQUE STANDARD DRAWING 2420.
- ALL 4' INTERIOR SIDEWALKS ARE DEFERRED.
- ALL HANDICAP RAMPS TO BE CASE II PER CITY OF ALBUQUERQUE STANDARD DRAWING 2441. WHERE GRADES DO NOT PERMIT A MAXIMUM SLOPE OF 12:1 TO BE MAINTAINED WITHIN THE 7' LENGTH AS SPECIFIED, THEN THE "F" LENGTH AS SHOWN IN DRAWING 2441 SHALL BE INCREASED TO MAINTAIN A SLOPE < 12:1.
- TRANSITION FROM MOUNTABLE CURB TO STANDARD CURB SHALL BE PER CITY OF ALBUQUERQUE DRAWING 2401.
- TRANSITION SECTION FROM FULL CROWN TO NO CROWN TO BE A MINIMUM OF 50' PER CITY OF ALBUQUERQUE STANDARD DRAWING 2401.



FUTURE UNIT IV CONSTRUCTION
NOT PART OF THIS CONSTRUCTION

NEW SIDEWALK THIS PROJECT

ENTRANCE PAVEMENT

50' CROWN TRANSITION PER
COA STD. DWG. 2401 THIS PROJECT

MOUNTABLE CURB & GUTTER

STANDARD 8" CURB & GUTTER

TRACT/LOT BOUNDARY

RIGHT OF WAY

PROPERTY LINE

HANDICAP RAMPS PER COA
DWG. #2418 THIS PROJECT
CASE II

CURVE DATA - DESCRIBES FACE OF CURB

- | | | |
|---|---|---|
| ① Δ = 90°00'00"
R = 25.00'
L = 39.27'
T = 25.00' | ② Δ = 93°27'39"
R = 25.00'
L = 40.78'
T = 26.56' | ③ Δ = 86°32'22"
R = 25.00'
L = 37.76'
T = 23.53' |
| ④ Δ = 90°00'00"
R = 25.00'
L = 39.27'
T = 25.00' | ⑤ Δ = 89°59'33"
R = 30.00'
L = 47.12'
T = 30.00' | ⑥ Δ = 89°59'33"
R = 30.00'
L = 47.12'
T = 30.00' |
| ⑦ Δ = 180°00'00"
R = 3.00'
L = 9.42'
T = N/A | ⑧ Δ = 180°00'00"
R = 3.00'
L = 9.42'
T = N/A | |



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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: **CEDAR RIDGE ESTATES-UNIT III
QUAILBRUSH DRIVE-PAVING IMPROVEMENTS**



CITY ENGINEER APPROVAL

LAST DESIGN UPDATE

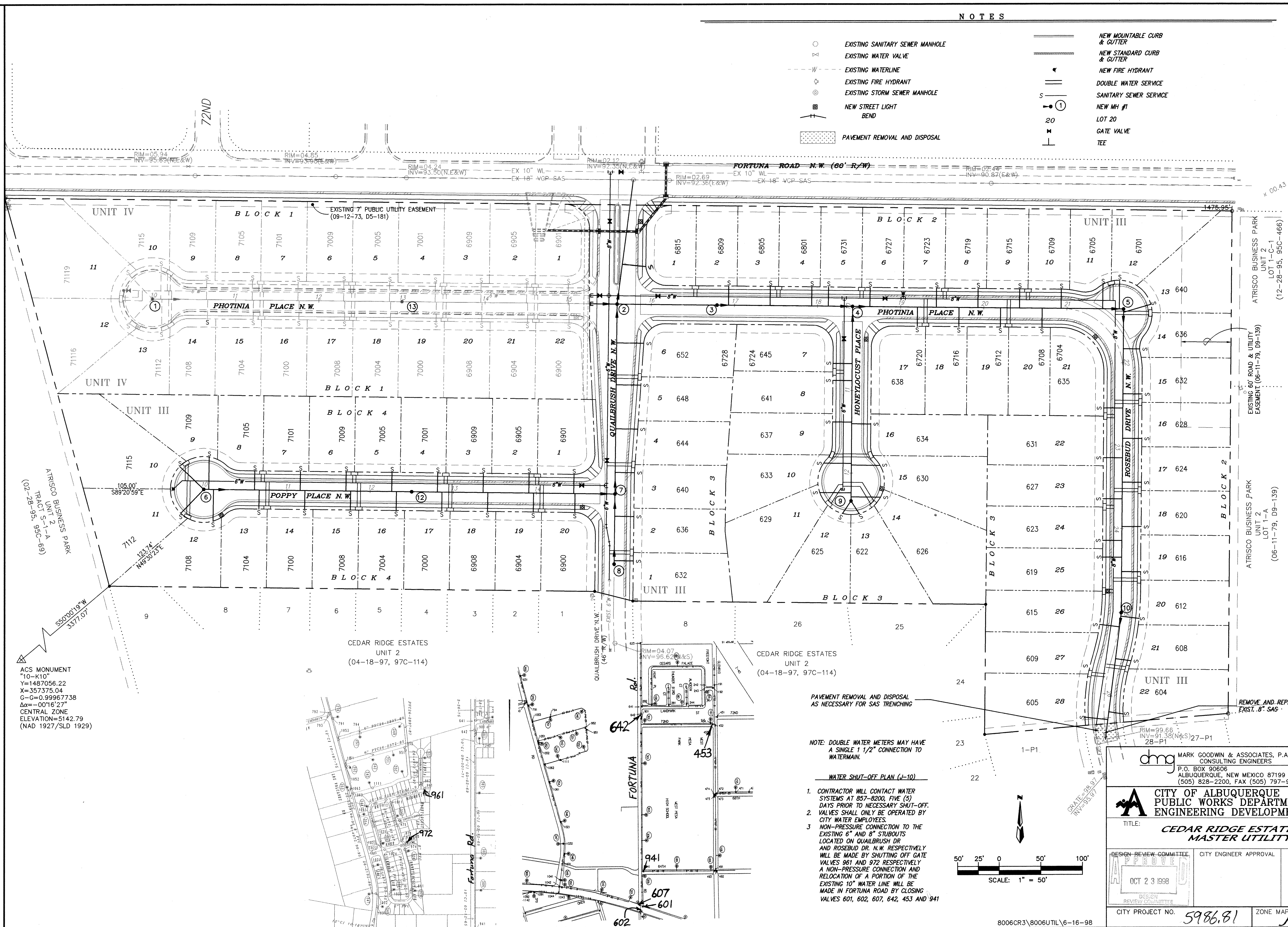
MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO.

5986.81

ZONE MAP NO.

SHEET 10 OF 19



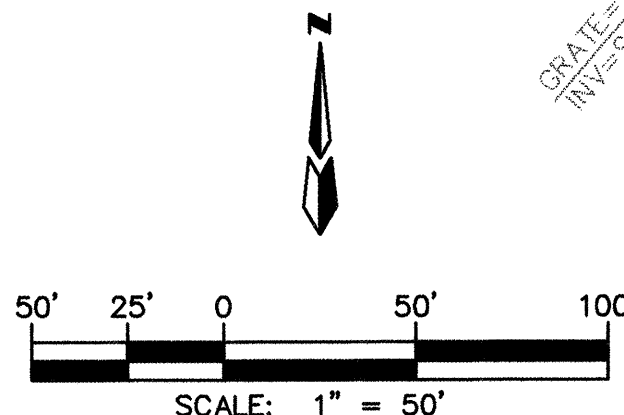
NOTES

- EXISTING SANITARY SEWER MANHOLE
- EXISTING WATER VALVE
- EXISTING WATERLINE
- EXISTING FIRE HYDRANT
- EXISTING STORM SEWER MANHOLE
- NEW STREET LIGHT
- BEND
- PAVEMENT REMOVAL AND DISPOSAL
- NEW MOUNTABLE CURB & GUTTER
- NEW STANDARD CURB & GUTTER
- NEW FIRE HYDRANT
- DOUBLE WATER SERVICE
- SANITARY SEWER SERVICE
- NEW MH #1
- LOT 20
- GATE VALVE
- TEE

NOTE: DOUBLE WATER METERS MAY HAVE A SINGLE 1 1/2" CONNECTION TO WATERMAIN.

WATER SHUT-OFF PLAN (J-10)

- CONTRACTOR WILL CONTACT WATER SYSTEMS AT 857-8200, FIVE (5) DAYS PRIOR TO NECESSARY SHUT-OFF.
- VALVES SHALL ONLY BE OPERATED BY CITY WATER EMPLOYEES.
- NON-PRESSURE CONNECTION TO THE EXISTING 6" AND 8" STUBOUTS LOCATED ON QUALBRUSH DR. AND ROSEBUD DR. N.W. RESPECTIVELY WILL BE MADE BY SHUTTING OFF GATE VALVES 961 AND 972 RESPECTIVELY. A NON-PRESSURE CONNECTION AND RELOCATION OF A PORTION OF THE EXISTING 10" WATER LINE WILL BE MADE IN FORTUNA ROAD BY CLOSING VALVES 601, 602, 607, 642, 453 AND 941.



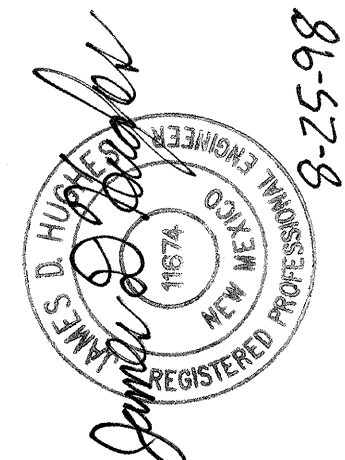
MARK GOODWIN & ASSOCIATES, P.A.
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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

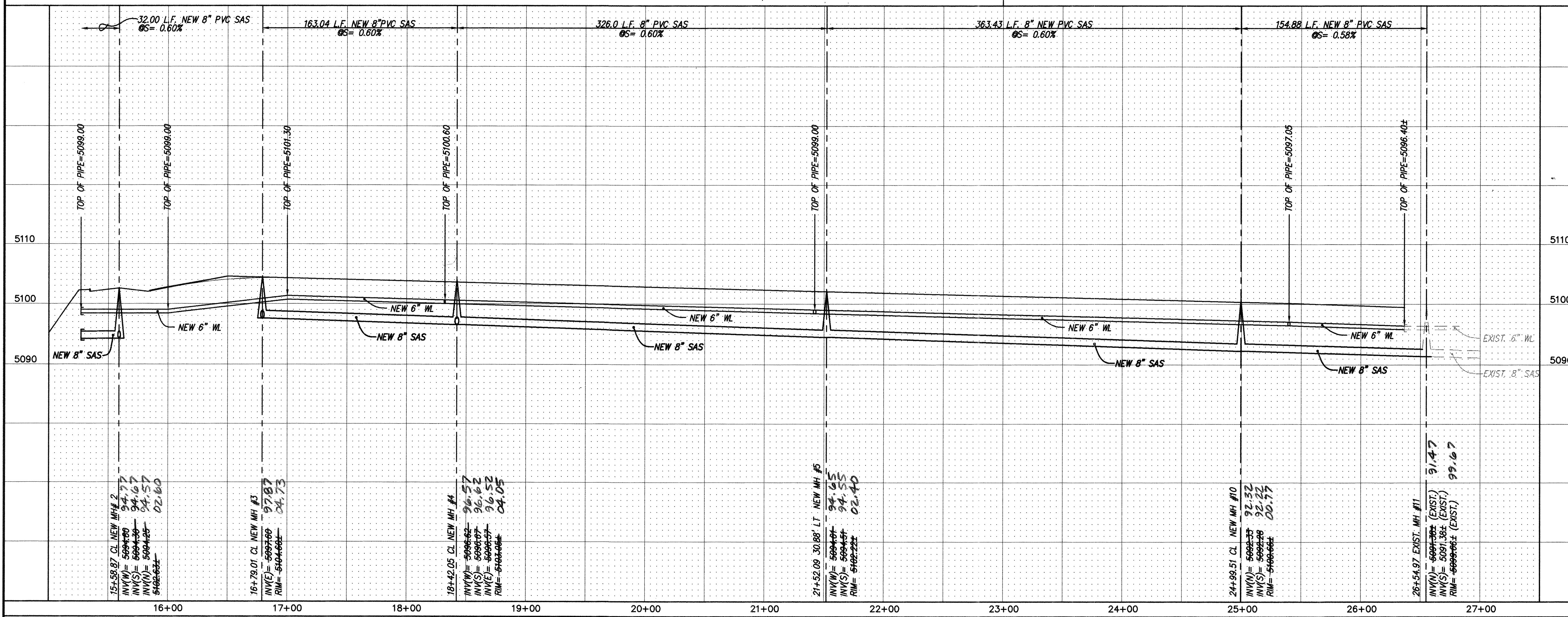
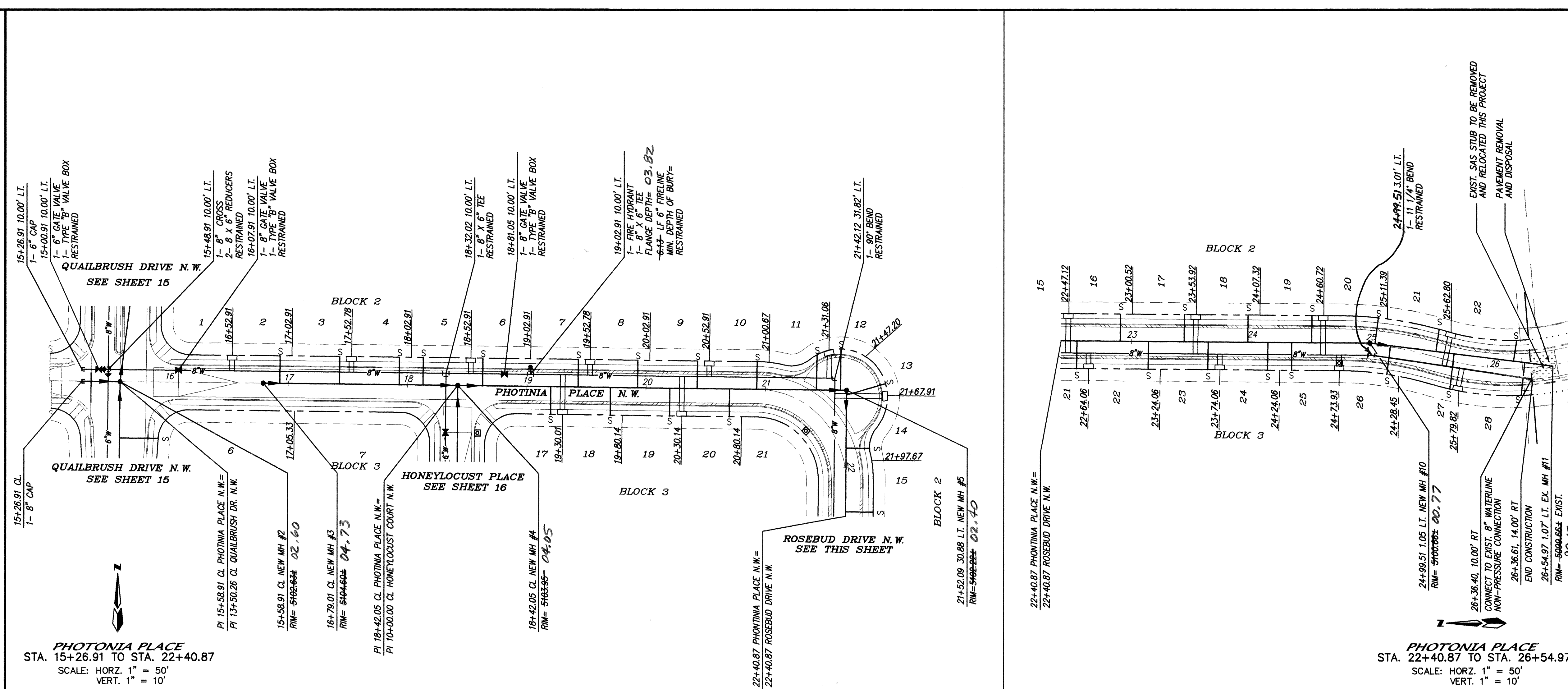
TITLE: CEDAR RIDGE ESTATES-UNIT III MASTER UTILITY PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
APPROVED			
OCT 23 1998			
DESIGN REVIEW COMMITTEE			
CITY PROJECT NO. 5986.81	ZONE MAP NO. J-10	SHEET 12	OF 19

AS BUILT INFORMATION				BENCH MARKS				SURVEY INFORMATION				ENGINEER'S SEAL			
CONTRACTOR	DATE	MECH	DATE	ACCS MONUMENT	FIELD NOTES	NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE
ALC, INC.	11-11-97	MECH	11-11-97	"10-K10"											
STATIONED BY	DATE	DATE	DATE	Y=1487056.22											
ACCEPTANCE BY	DATE	DATE	DATE	X=357375.04											
FIELD	DATE	DATE	DATE	G-G=0.99967738											
ADJUSTMENT BY	DATE	DATE	DATE	Δα=-00°16'27"											
CORRECTED BY	DATE	DATE	DATE	ELEVATION=5142.79											
MICRO-FILM INFORMATION	DATE	DATE	DATE	CENTRAL ZONE											
RECORDED BY	DATE	DATE	DATE	ELEVATION=5142.79											
NO.	DATE	DATE	DATE	(NAD 1927/SLD 1929)											



REVISIONS	DATE	BY
DESIGN	8-98	FSM, KJS
REVISIONS	8-98	DWG
DESIGN	8-98	DWG



NOTES

- PAVEMENT REMOVAL AND DISPOSAL
- EXISTING SANITARY SEWER MANHOLE
- EXISTING WATER VALVE
- EXISTING WATERLINE
- EXISTING FIRE HYDRANT
- EXISTING STORM SEWER MANHOLE
- NEW MOUNTABLE CURB & GUTTER
- NEW STANDARD CURB & GUTTER
- NEW FIRE HYDRANT
- DOUBLE WATER SERVICE
- SANITARY SEWER SERVICE
- NEW MH #1
- LOT 20
- GATE VALVE
- TEE
- BEND
- STREET LIGHT

BLOCK	LOT	STATION AT PL	INV. ELEV. AT PL	LENGTH AT PL
2	2	16+92.91	5099.43	23.00'
2	3	17+42.78	5099.18	23.00'
2	4	17+92.91	5098.93	23.00'
2	5	18+12.91	5098.68	23.00'
2	6	18+62.91	5098.58	23.00'
2	7	19+42.78	5098.18	23.00'
2	8	19+92.91	5097.93	23.00'
2	9	20+42.91	5097.68	23.00'
2	10	20+92.91	5097.43	23.00'
2	11	21+26.61	5097.60	29.30'
2	12	21+35.81	5097.60	34.42'
2	13	21+62.73	5097.55	34.20'
2	14	21+89.94	5097.10	19.78'
2	15	22+37.12	5096.73	23.00'
2	16	22+90.52	5096.46	23.00'
2	17	23+43.92	5096.19	23.00'
2	18	23+97.32	5095.92	23.00'
2	19	24+50.72	5095.65	23.00'
2	20	25+04.12	5095.38	22.07'
2	21	25+57.52	5095.12	18.79'
2	22	26+10.92	5094.86	17.42'
3	17	19+20.01	5098.30	23.00'
3	18	19+70.14	5098.05	23.00'
3	19	20+20.14	5097.80	23.00'
3	20	20+70.14	5097.55	23.00'
3	21	22+44.06	5096.73	23.00'
3	22	23+14.06	5096.46	23.00'
3	23	23+64.06	5096.19	23.00'
3	24	24+14.06	5095.92	23.00'
3	25	24+64.06	5095.65	23.00'
3	26	25+17.48	5095.38	23.99'
3	27	25+73.40	5095.12	29.74'
3	28	26+27.61	5094.86	27.65'

RESTRAINED JOINT LENGTH FOR BENDS, VALVES, DEAD ENDS (FT.)

PIPE SIZE	90°	45°	22.5°	11.25°	VALVE
6"	17'	7'	-	-	46'
8"	22'	9'	4'	2'	60'

RESTRAINED JOINT LENGTH FOR TEES (FT.)

PIPE SIZE	RUN	BRANCH
8"x8"x8"	9'	20'
8"x8"x6"	5'	17'

RESTRAINED JOINT LENGTH FOR TEES (FT.)

PIPE SIZE	RUN	BRANCH
8"x8"x8"	13'	3'
8"x8"x6"	7'	5'

RESTRAINED JOINT LENGTH FOR REDUCERS (FT.)

PIPE SIZE	LARGE SIDE	SMALL SIDE
8"x6"	25'	33'

REVISIONS

NO.	DATE	REMARKS
1		DESIGN
2		REVISIONS
3		REVISIONS

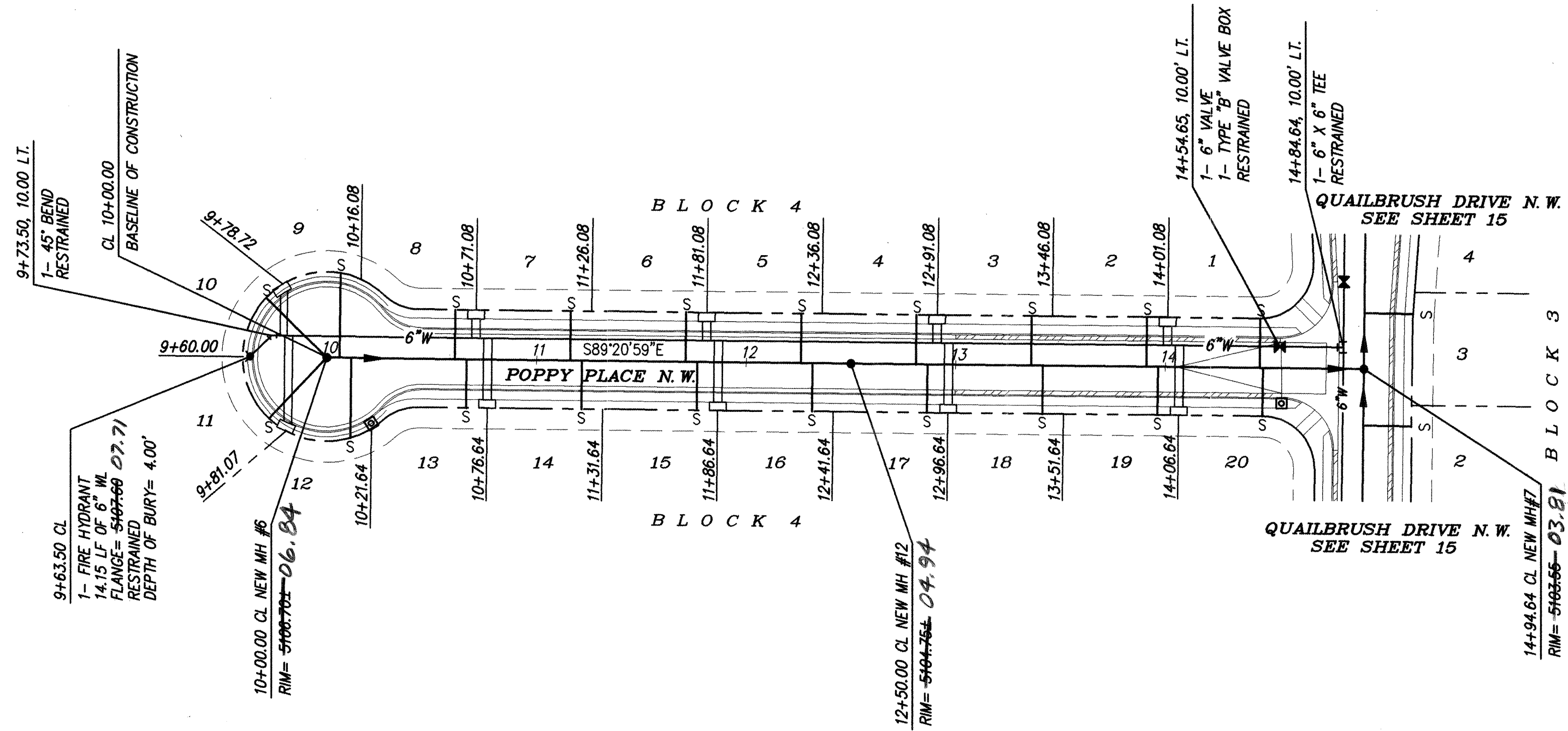
APPROVED

OCT 23 1998

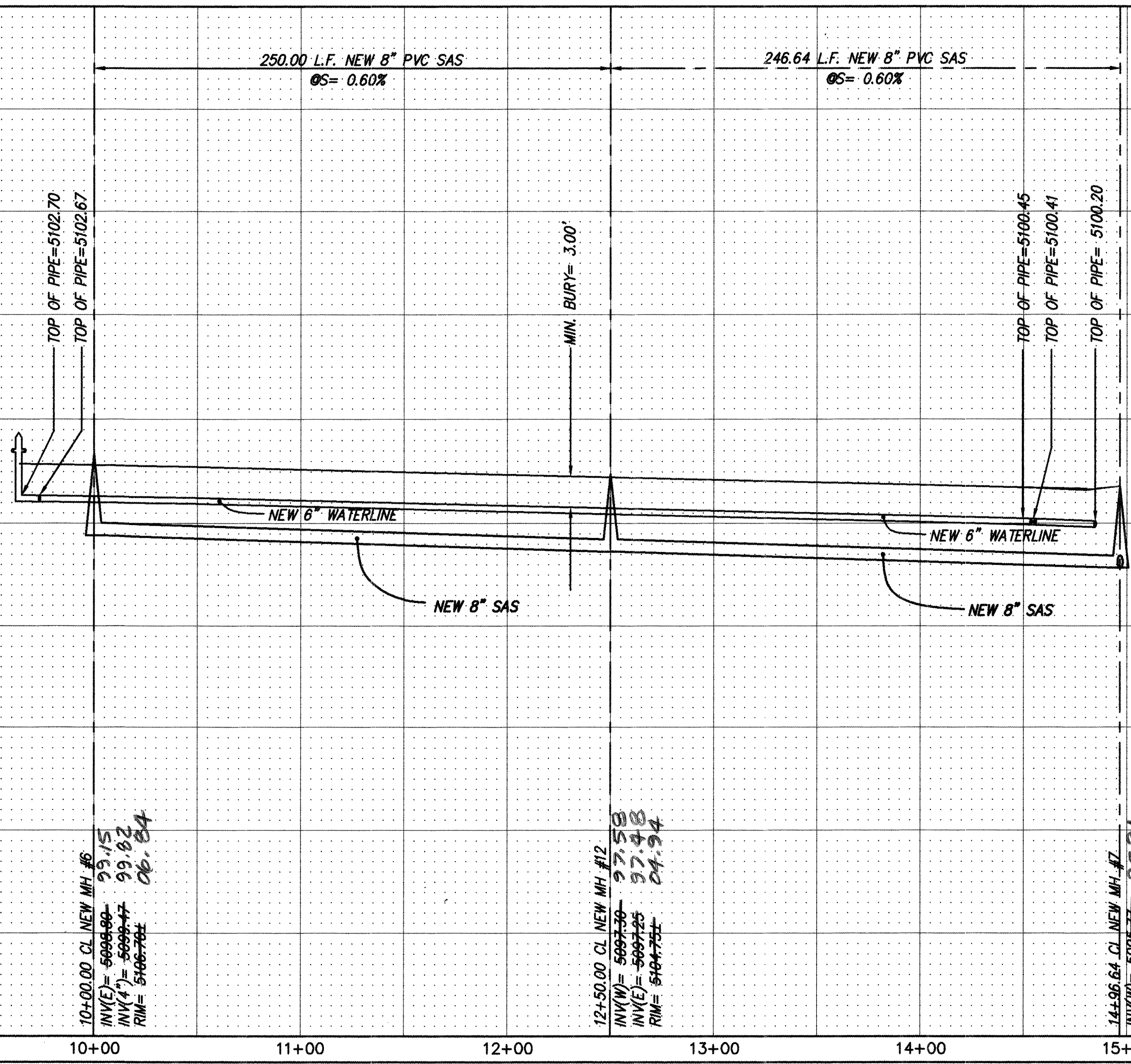
CITY PROJECT NO. 5986.81

ZONE MAP NO. J-10

SHEET 13 OF 19



POPPI PLACE NW
STA. 9+63.50 TO STA. 14+94.64
SCALE: HORIZ. 1" = 50'
VERT. 1" = 10'



NOTES

- EXISTING SANITARY SEWER MANHOLE
- EXISTING WATER VALVE
- EXISTING WATERLINE
- EXISTING FIRE HYDRANT
- EXISTING STORM SEWER MANHOLE
- NEW MOUNTABLE CURB & GUTTER
- NEW STANDARD CURB & GUTTER
- NEW FIRE HYDRANT
- DOUBLE WATER SERVICE
- SANITARY SEWER SERVICE
- NEW MH
- LOT 20
- GATE VALVE
- TEE
- BEND
- STREET LIGHT

SANITARY SEWER SERVICES

BLOCK	LOT	STATION AT PL	INV. ELEV. AT PL	LENGTH AT PL
4	1	14+45.08	5098.17	23.00'
4	2	13+91.08	5098.54	23.00'
4	3	13+36.08	5098.82	23.00'
4	4	12+81.08	5098.75	23.00'
4	5	12+26.08	5099.03	23.00'
4	6	11+71.08	5099.30	23.00'
4	7	11+16.08	5099.58	23.00'
4	8	10+61.08	5099.85	23.00'
4	9	10+06.08	5100.15	23.00'
4	10	10+29.21	5100.27	23.00'
4	11	10+27.28	5100.27	23.00'
4	12	10+11.64	5101.15	23.00'
4	13	10+66.64	5100.85	23.00'
4	14	11+21.64	5100.58	23.00'
4	15	11+76.64	5100.30	23.00'
4	16	12+31.64	5100.03	23.00'
4	17	12+86.64	5099.75	23.00'
4	18	13+41.64	5099.82	23.00'
4	19	13+96.64	5099.54	23.00'
4	20	14+46.64	5099.17	23.00'

RESTRAINED JOINT LENGTH FOR BENDS, VALVES, DEAD ENDS (FT.)

PIPE SIZE	90°	45°	22.5°	11.25°	VALVE
6"	17'	7'	-	-	46'
8"	22'	9'	4'	2'	60'
10"	26'	11'	5'	3'	72'

RESTRAINED JOINT LENGTH FOR TEES (FT.) MINIMUM RUN LENGTH

PIPE SIZE	RUN	BRANCH
10"x10"x8"	8'	15'
8"x8"x8"	9'	20'
8"x8"x6"	5'	17'

RESTRAINED JOINT LENGTH FOR TEES (FT.) MINIMUM BRANCH LENGTH

PIPE SIZE	RUN	BRANCH
10"x10"x8"	10'	4'
8"x8"x8"	13'	3'
8"x8"x6"	7'	5'

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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: CEDAR RIDGE ESTATES UNIT III
POPPI PLACE-UTILITY IMPROVEMENTS

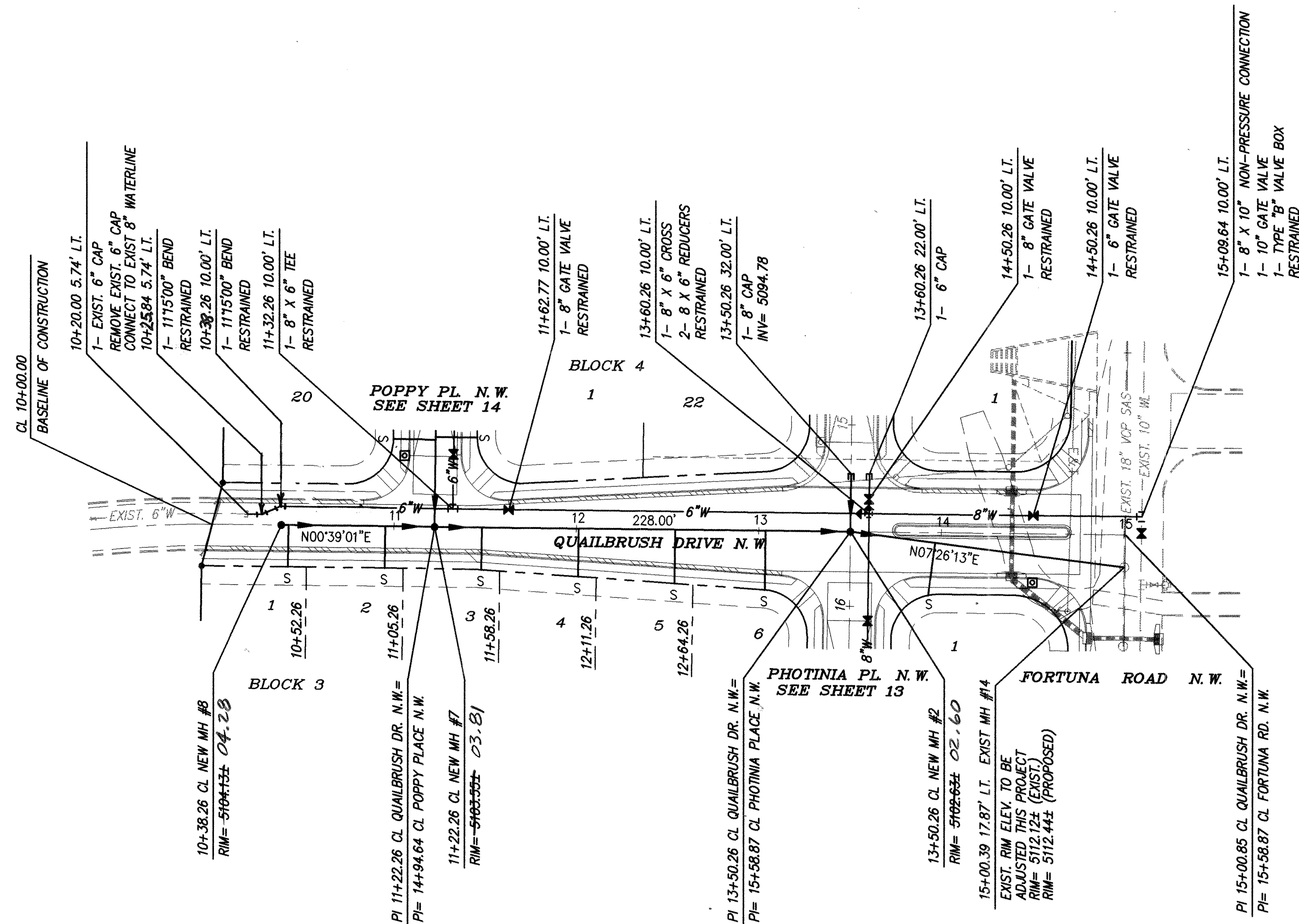
DESIGN REVIEW COMMITTEE CITY ENGINEER APPROVAL

APPROVED
OCT 23 1998
DESIGN REVIEW COMMITTEE

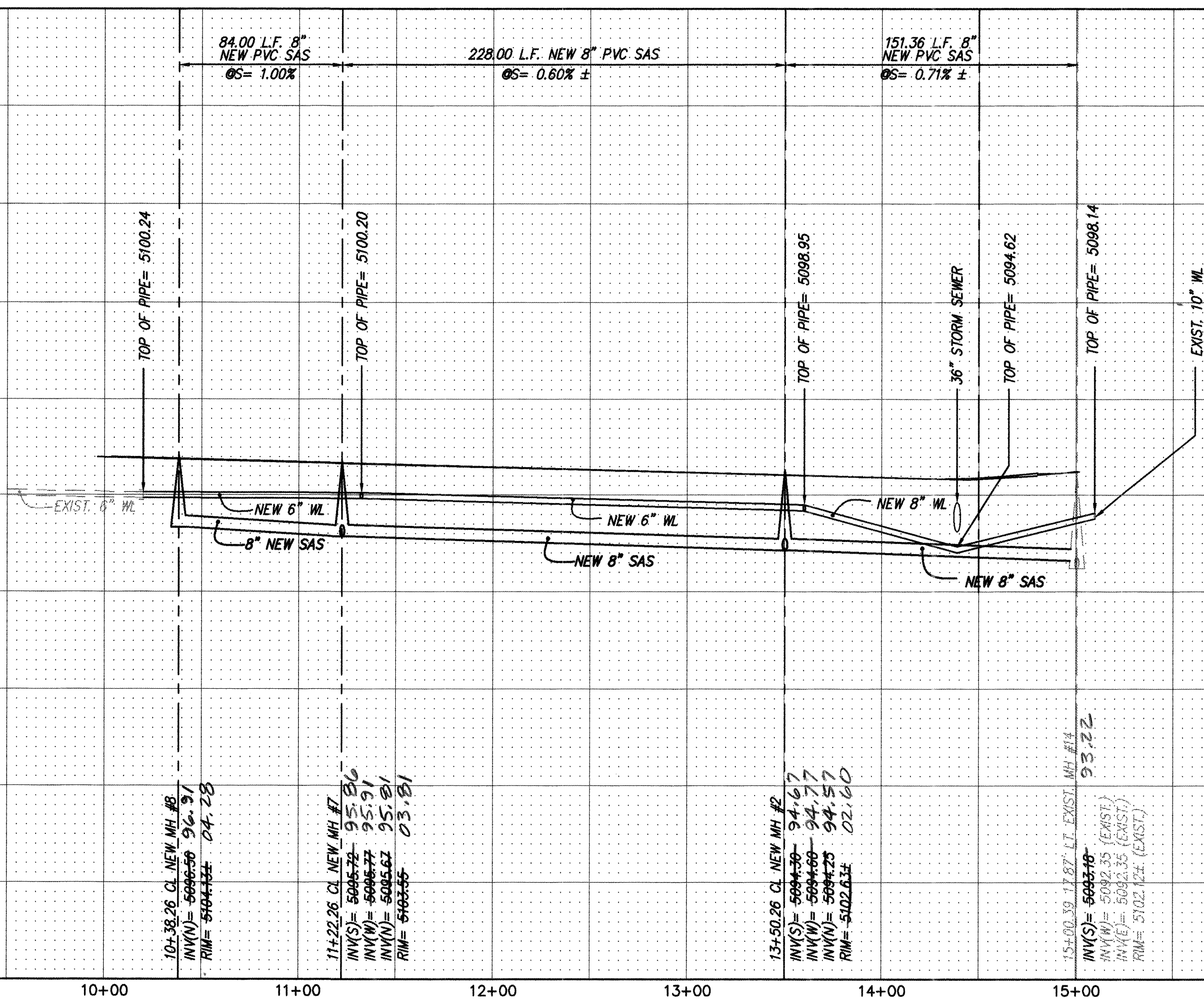
CITY PROJECT NO. 5986.81

ZONE MAP NO. J-10

SHEET 14 OF 19



QUAILBRUSH DRIVE N.W.
STA. 10+00.00 TO STA. 15+09.64
SCALE: HORIZ. 1" = 50'
VERT. 1" = 10'



NOTES

1. ALL STATIONING IS CENTERLINE STATIONING.

- EXISTING SANITARY SEWER MANHOLE
- EXISTING WATER VALVE
- EXISTING WATERLINE
- EXISTING FIRE HYDRANT
- EXISTING STORM SEWER MANHOLE
- NEW MOUNTABLE CURB & GUTTER
- NEW STANDARD CURB & GUTTER
- NEW FIRE HYDRANT
- DOUBLE WATER SERVICE
- SANITARY SEWER SERVICE
- NEW MH #1
- LOT 20
- GATE VALVE
- TEE
- BEND
- STREET LIGHT

SANITARY SEWER SERVICES

BLOCK	LOT	STATION AT PL	INV. ELEV. AT PL	LENGTH AT PL
2	1	13+93.26	5097.20	29.18'
3	1	10+42.26	5099.51	23.00'
3	2	10+95.26	5099.23	23.00'
3	3	11+48.26	5098.94	23.18'
3	4	12+01.26	5098.66	26.38'
3	5	12+54.26	5098.38	29.56'
3	6	13+03.76	5097.97	32.58'

RESTRAINED JOINT LENGTH FOR BENDS, VALVES, DEAD ENDS (FT.)

PIPE SIZE	90°	45°	22.5°	11.25°	VALVE
6"	17'	7'	-	2'	46'
8"	22'	9'	4'	2'	60'
10"	26'	11'	5'	3'	72'

RESTRAINED JOINT LENGTH FOR TEES (FT.) MINIMUM RUN LENGTH

PIPE SIZE	RUN	BRANCH
10"x10"x8"	8'	15'
8"x8"x8"	9'	20'
8"x8"x6"	5'	17'

RESTRAINED JOINT LENGTH FOR TEES (FT.) MINIMUM BRANCH LENGTH

PIPE SIZE	RUN	BRANCH
10"x10"x8"	10'	4'
8"x8"x8"	13'	3'
8"x8"x6"	7'	5'

RESTRAINED JOINT LENGTH FOR REDUCERS (FT.) MINIMUM UNOBSTRUCTED, STRAIGHT-RUN LENGTH

PIPE SIZE	LARGE SIDE	SMALL SIDE
8"x6"	25'	33'

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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

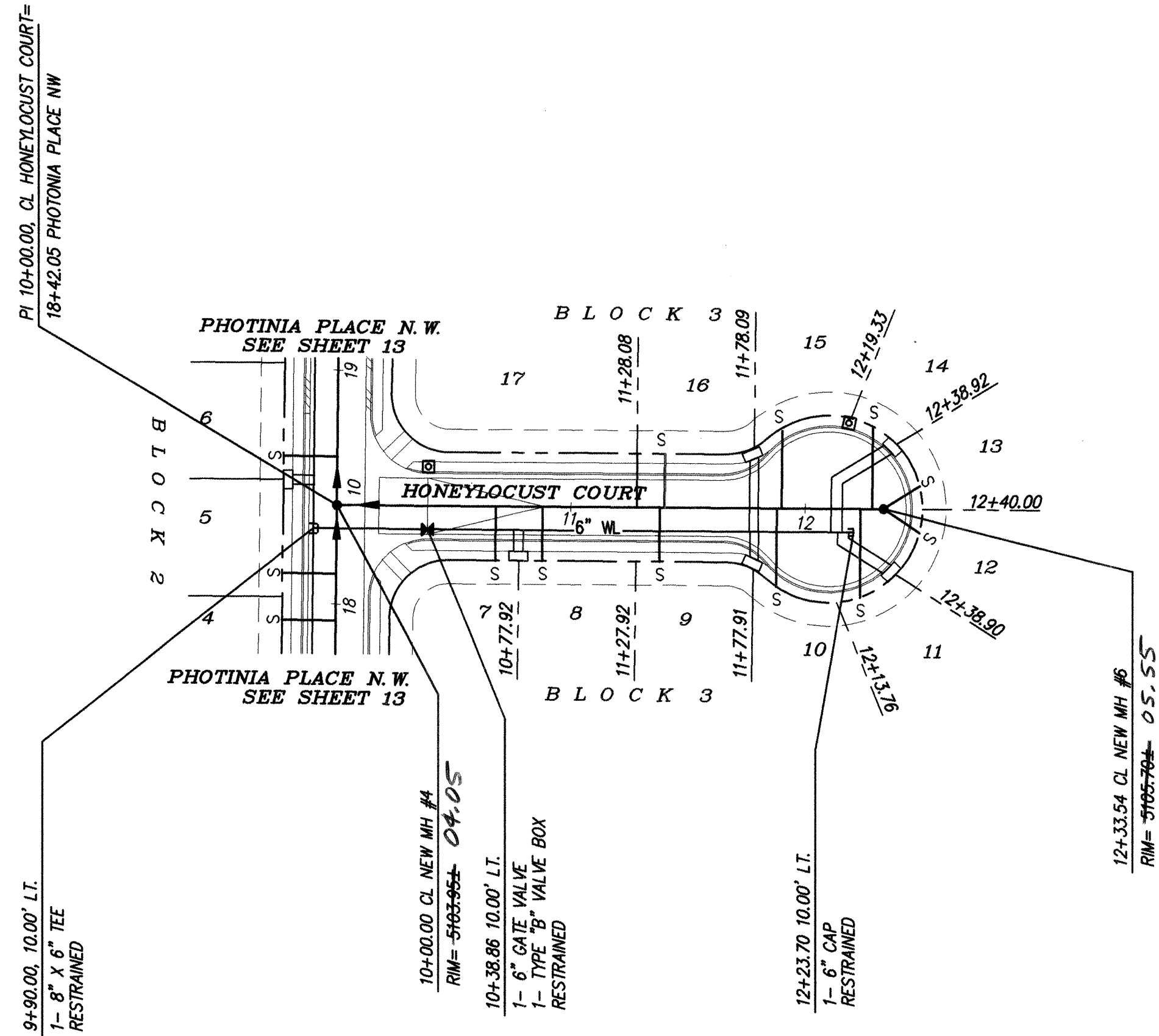
TITLE: CEDAR RIDGE ESTATES-UNIT III
QUAILBRUSH DRIVE-UTILITY IMPROVEMENTS



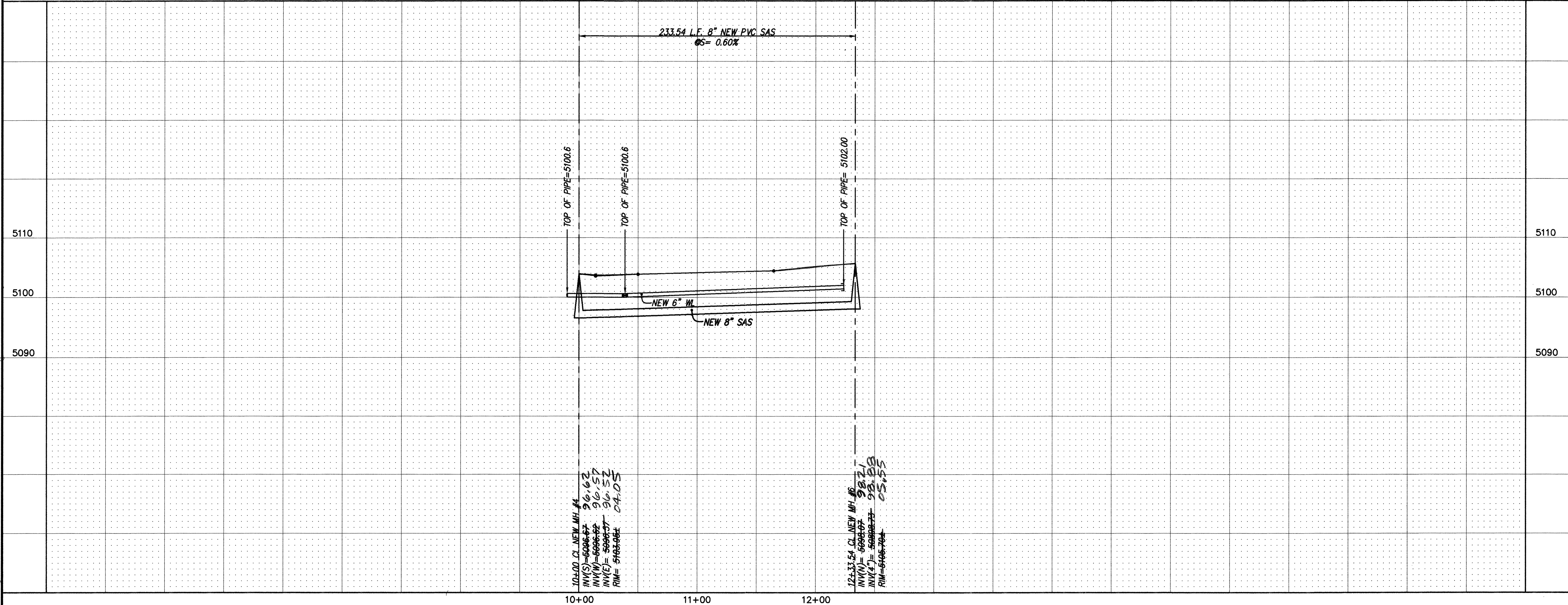
CITY ENGINEER APPROVAL

LAST DESIGN UPDATE

CITY PROJECT NO. 5986.81 ZONE MAP NO. J-10 SHEET 15 OF 19



HONEYLOCUST COURT NW
STA. 10+00.00 TO STA. 12+33.54
SCALE: HORIZ. 1" = 50'
VERT. 1" = 10'



NOTES

- EXISTING SANITARY SEWER MANHOLE
- EXISTING WATER VALVE
- EXISTING WATERLINE
- EXISTING FIRE HYDRANT
- EXISTING STORM SEWER MANHOLE
- NEW MOUNTABLE CURB & GUTTER
- NEW STANDARD CURB & GUTTER
- NEW FIRE HYDRANT
- DOUBLE WATER SERVICE
- SANITARY SEWER SERVICE
- NEW MH #1
- LOT 20
- GATE VALVE
- TEE
- BEND
- STREET LIGHT

SANITARY SEWER SERVICES				
BLOCK	LOT	STATION AT PL	INV. ELEV. AT PL	LENGTH AT PL
3	7	10+67.92	5099.08	22.96'
3	8	10+87.92	5099.13	23.00'
3	9	11+37.92	5099.33	23.00'
3	10	11+87.91	5099.53	33.20'
3	11	12+23.70	5099.73	37.65'
3	12	12+30.00	5099.13	18.35'
3	13	12+50.00	5099.13	18.35'
3	14	12+19.33	5099.73	35.46'
3	15	11+90.09	5099.53	33.35'
3	16	11+40.09	5099.33	23.00'

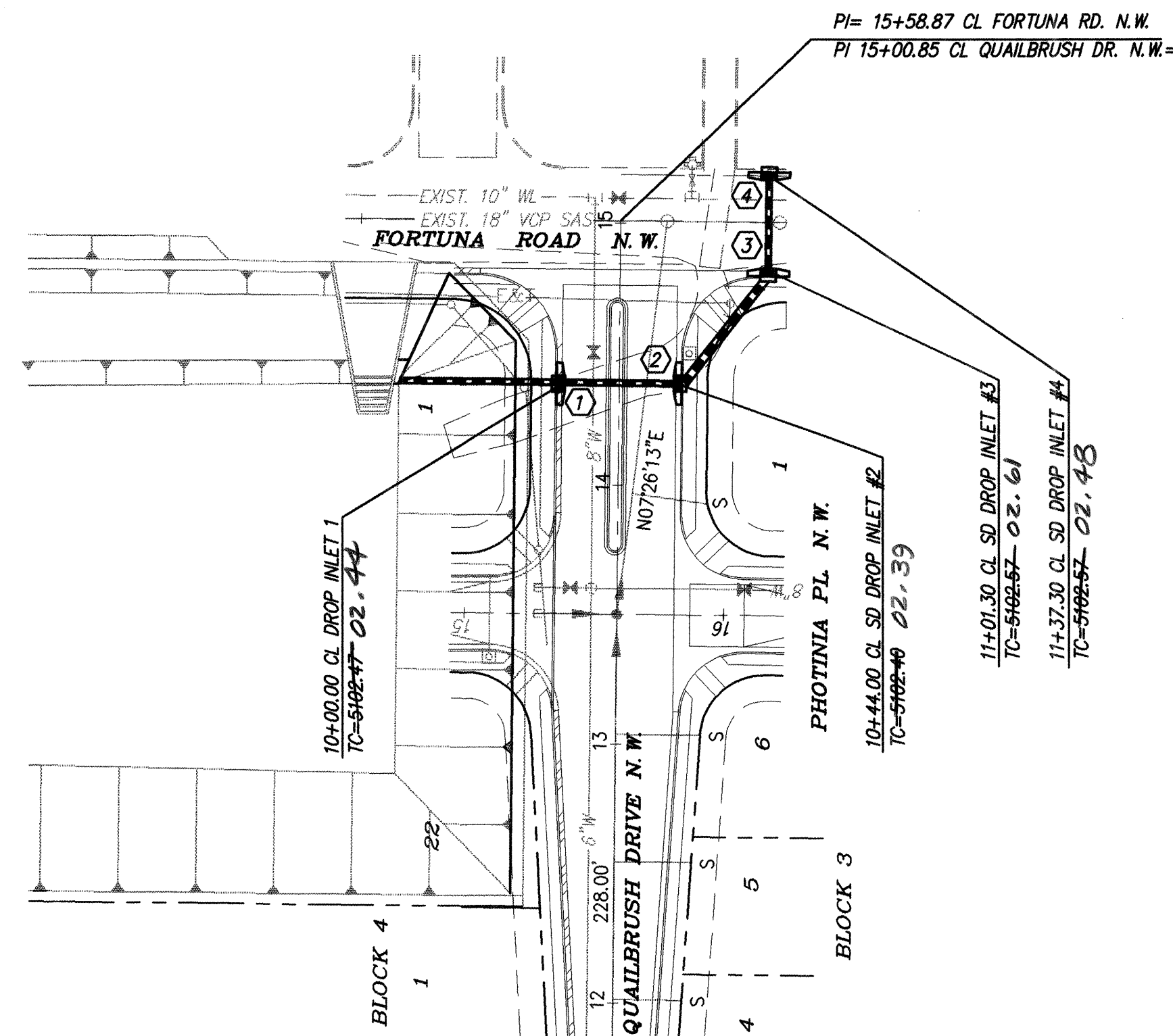
RESTRAINED JOINT LENGTH FOR BENDS, VALVES, DEAD ENDS (FT.)					
PIPE SIZE	90°	45°	22.5°	11.25°	VALVE
6"	17'	7'	-	-	46'
8"	22'	9'	4'	2'	60'

RESTRAINED JOINT LENGTH FOR TEES (FT.)		
MINIMUM RUN LENGTH		
PIPE SIZE	RUN	BRANCH
8"x8"x6"	5'	17'

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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP
TITLE: CEDAR RIDGE ESTATES-UNIT III
HONEYLOCUST COURT-UTILITY IMPROVEMENTS

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.
OCT 23 1998				



QUAILBRUSH DRIVE NW
STA. 9+60.50 TO STA. 11+37.30
SCALE: HORZ. 1" = 50'
VERT. 1" = 10'

100 YR. WSEL= 5098.34

60.50 L.F. NEW 48" RCP CL-III QS= 3.30% Q _{max} = 79.88cfs V _{max} = 6.35fps	48.00 L.F. NEW 36" RCP CL-III QS= 1.00% Q _{max} = 59.91cfs V _{max} = 8.51fps	57.30 L.F. NEW 30" RCP CL-III QS= 0.87% Q _{max} = 39.94cfs V _{max} = 8.11fps	36 L.F. NEW 24" RCP CL-III QS= 1.00% Q _{max} = 19.97cfs V _{max} = 6.35fps
10+00.00 CL SD NEW INLET #1 1-TYPE DOUBLE A INLET DOUBLE GRADE SINGLE THROAT INVERT= 5082.40 TC=5082.47 02.44	10+44.00 CL SD NEW INLET #2 1-TYPE DOUBLE A INLET DOUBLE GRADE SINGLE THROAT INVERT= 5082.40 TC=5082.40 02.39	11+01.30 CL SD NEW INLET #3 1-TYPE DOUBLE A INLET DOUBLE GRADE SINGLE THROAT INVERT= 5082.51 TC=5082.51 02.61	11+37.30 CL SD NEW INLET #4 1-TYPE DOUBLE A INLET DOUBLE GRADE SINGLE THROAT INVERT= 5082.48 TC=5082.48 02.48

NOTES

- TYPE DOUBLE A INLET DOUBLE GRADE SINGLE THROAT
- TYPE DOUBLE A INLET DOUBLE GRADE SINGLE THROAT
- TYPE DOUBLE A INLET DOUBLE GRADE DOUBLE THROAT
- TYPE DOUBLE A INLET DOUBLE GRADE DOUBLE THROAT

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	SUPARAZ MECH	ACS MONUMENT	"10-K10"	FIELD NOTES	NO.	BY	DATE
WORK	STARTED BY	Y=1487056.22	DATE	NO.	BY	DATE	DATE
FIELD	ACCEPTANCE BY	X=357375.04	DATE	NO.	BY	DATE	DATE
DRAWINGS	BY	G=0.99667738	DATE	NO.	BY	DATE	DATE
CORRECTED BY	ALZ INC	DATE	DATE	NO.	BY	DATE	DATE
RECORDED BY	MICRO-FILM INFORMATION	CENTRAL ZONE	ELEVATION=5142.79	NO.	BY	DATE	DATE
NO.	NO.	NO.	NO.	NO.	BY	DATE	DATE
NO.	NO.	NO.	NO.	NO.	BY	DATE	DATE

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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP
TITLE: CEDAR RIDGE ESTATES-UNIT III
STORM DRAINAGE IMPROVEMENTS

DESIGN REVIEW COMMITTEE
APPROVED
OCT 23 2000
DESIGN REVIEW COMMITTEE

CITY ENGINEER APPROVAL
LAST DESIGN UPDATE

MO./DAY/YR.
MO./DAY/YR.

CITY PROJECT NO. 5986.81

ZONE MAP NO. J-10

SHEET OF 17 19

CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

1. CONTRACTOR MUST OBTAIN FROM CONSTRUCTION COORDINATION AN EXCAVATION/BARRICADING PERMIT BEFORE ENGAGING IN ANY CONSTRUCTION, MAINTENANCE OR REPAIR WORK IN ANY OF THE CITY OF ALBUQUERQUE'S RIGHTS-OF-WAY. EMERGENCY WORK THAT WOULD PRESERVE LIFE OR PROPERTY IS EXCLUDED WITH THE UNDERSTANDING, THAT A PERMIT SHALL BE OBTAINED WITHIN 24 TO 48 HOURS.

2. CONTRACTOR SHALL AT THE TIME OF PERMIT REQUEST, SUBMIT FOR APPROVAL BY CONSTRUCTION COORDINATION, A TRAFFIC CONTROL PLAN DETAILING ALL EXISTING TOPOGRAPHY SUCH AS LANE WIDTHS, DRIVEWAYS, AND BUSINESS/RESIDENTIAL ACCESSES. THE TRAFFIC CONTROL PLAN SHALL INCLUDE ALL PHASES OF WORK AND SCHEDULES INVOLVED IN THE CONSTRUCTION PROJECT. ANY SEPARATE PHASES OF A CONSTRUCTION PROJECT SHALL BE GIVEN AN INDIVIDUAL PERMIT EACH. BLANKET PERMITS WILL NOT BE ISSUED.

3. THESE TYPICAL TRAFFIC CONTROL PLANS DO NOT REFLECT THE EXISTING TOPOGRAPHY SUCH AS DRIVEWAYS, LANE WIDTHS, AND BUSINESS/RESIDENTIAL ACCESSES. EVERY LOCATION THAT REQUIRES CONSTRUCTION TRAFFIC CONTROL SHALL HAVE A DETAILED TRAFFIC CONTROL PLAN SHOWING ALL EXISTING TOPOGRAPHY.

4. CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY CONSTRUCTION COORDINATION.

5. CONSTRUCTION COORDINATION SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY TRAFFIC CONTROL CHANGES NEEDED BY CONTRACTOR, THAT WERE NOT PREVIOUSLY APPROVED. THESE TRAFFIC CONTROL CHANGES SHALL BE REQUESTED IN WRITING ACCOMPANIED WITH A TRAFFIC CONTROL PLAN REFLECTING SUCH CHANGES.

6. ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL, SERVICE AND MAINTAIN ALL TRAFFIC CONTROL DEVICES. TRAFFIC CONTROL DEVICES SHALL NOT BE REMOVED OR ALTERED IN ANY WAY WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION, PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.

7. THE CONSTRUCTION TRAFFIC CONTROL INITIAL SET-UP SHALL BE BY AN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED WORKSITE TRAFFIC SUPERVISOR. THE MAINTENANCE AND SERVICING SHALL ALSO BE DONE BY AN ATSSA CERTIFIED WORKSITE TRAFFIC SUPERVISOR OR EQUIVALENT.

8. CONTRACTOR IS RESPONSIBLE TO MAINTAIN AND SERVICE ALL TRAFFIC CONTROL DEVICES 24 HOURS A DAY, 7 DAYS A WEEK THROUGHOUT LENGTH OF PROJECT. CONTRACTOR IS RESPONSIBLE THAT ALL TRAFFIC CONTROL DEVICES COMPLY WITH THE MUTCD, LATEST EDITION.

9. ALL ADVANCE WARNING SIGNS SHALL BE DOUBLE INDICATED WHENEVER THERE ARE MULTI-LANE TRAFFIC IN ANY ONE GIVEN DIRECTION AND THERE IS SUFFICIENT MEDIAN SPACE.

10. ALL BARRICADES IN ALL TAPERS AND TANGENTS SHALL BE PLACED APART, A DISTANCE MEASURED IN FEET, EQUAL TO THAT OF THE POSTED SPEED LIMIT. NO EXCEPTIONS UNLESS APPROVED BY CONSTRUCTION COORDINATION PER MUTCD SECTION 6A-4.

11. ALL WORK IN ARTERIAL ROADWAYS SHALL BE ON A CONTINUOUS 24-HOUR PER DAY BASIS UNTIL COMPLETED.

12. CONTRACTOR IS RESPONSIBLE TO PROVIDE CONSTRUCTION COORDINATION, A WEEKLY LOG OF DAILY INSPECTIONS OF BARRICADE AND MAINTENANCE SCHEDULES ON PROJECTS THAT ARE OVER ONE WEEK DURATION.

13. EQUIPMENT OR MATERIALS SHALL NOT BE STORED WITHIN 15 FEET OF A TRAVELLED TRAFFIC LANE DURING NON-WORKING HOURS WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION.

14. CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELIZING PEDESTRIAN TRAFFIC AROUND AND THROUGH THE CONSTRUCTION AREA.

15. CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND RESPONSIBLE FOR ALL TEMPORARY STRIPING.

16. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES, BUSINESSES AND/OR RESIDENTS AT ALL TIMES.

17. CONTRACTOR SHALL PROVIDE ACCESS SIGNS FOR BUSINESSES LOCATED WITHIN THE CONSTRUCTION AREA UNDER THE SUPERVISION OF CONSTRUCTION COORDINATION. EACH ACCESS SIGN SHALL HAVE 5 INCH, WHITE OPAQUE LETTERING ON BLUE REFLECTORIZED BACKGROUND. ACCESS SIGNS SHALL BE CONSIDERED INCIDENTAL TO THE BID AND NOT PART OF THE CONTRACT UNLESS OTHERWISE STATED. NO MORE THAN 3 BUSINESSES SHALL BE LISTED ON A ACCESS SIGN. SHOPPING CENTERS AND MALLS SHALL BE LISTED AS SUCH.

18. ALL ADVANCE WARNING SIGNS SHALL MEET THE MINIMUM REFLECTIVE INTENSITY REQUIREMENTS SET FORTH BY THE CITY OF ALBUQUERQUE. CONSTRUCTION COORDINATION SHALL DETERMINE ALL REQUIREMENTS AND APPROVE OR DISAPPROVE ANY ADVANCE WARNING SIGN PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.

19. 48 HOURS PRIOR TO OCCUPYING OR CLOSING OF A RIGHT-OF-WAY, CONTRACTOR SHALL NOTIFY: POLICE, FIRE DEPARTMENT, SCHOOLS, HOSPITALS, TRANSIT AUTHORITY, BUSINESSES AND/OR RESIDENTS THAT WILL BE AFFECTED BY THE CONSTRUCTION.

20. ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY CONSTRUCTION COORDINATION.

21. EXCAVATIONS SHALL BE PLATED, TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING OF TRAFFIC. A MINIMUM OF 11 FEET SHALL BE PROVIDED FOR TRAFFIC IN ANY GIVEN DIRECTION. CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS.

22. CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE FOLLOWING:
1. STANDARDS AND REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
2. THE CITY OF ALBUQUERQUE TRAFFIC CODE, LATEST EDITION.
3. SECTION 19 OF THE CITY OF ALBUQUERQUE'S STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION, AS WELL AS OTHER SECTIONS.

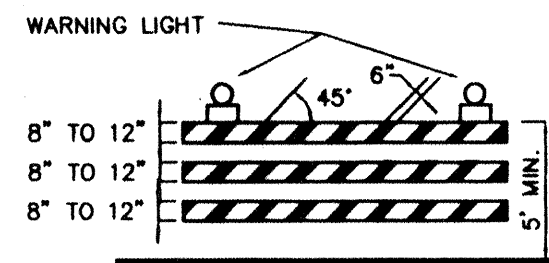
23. FAILURE TO COMPLY WITH ANY OF THE ABOVE MENTIONED, WILL BE ADEQUATE CAUSE TO CEASE ALL WORK ON ANY CONSTRUCTION PROJECT. WORK WILL NOT RESUME UNTIL ALL REQUIREMENTS ARE ADDRESSED AND APPROVED BY CONSTRUCTION COORDINATION.

24. ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN NEW-CLEAN CONDITION. WASHING OF EQUIPMENT IS INCIDENTAL TO ITS PLACEMENT AND MAINTENANCE.

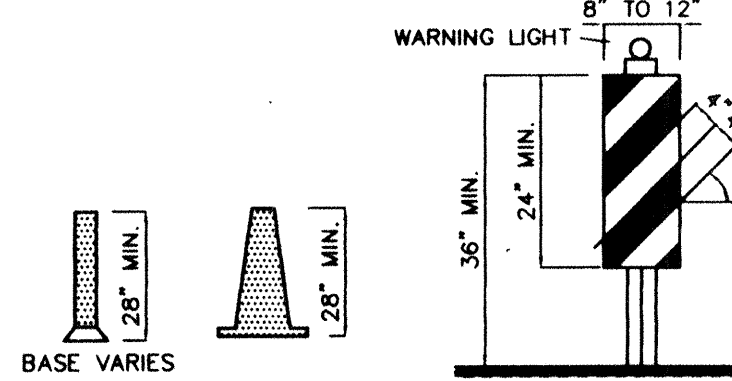
25. TRAFFIC CONTROL STANDARDS APPLY ONLY WHERE THE CONSTRUCTION TRAFFIC CONTROL PLANS ARE NOT SPECIFIC.

26. ADVANCE WARNING SIGNS SHALL BE 36"x36" MIN. WITH SUPER ENGINEERING GRADE SHEETING OR BETTER. MOUNTING HEIGHT AT TOP OF SIGN SHALL BE THE SAME AS FOR A 48" SIGN AS INDICATED IN THE M.U.T.C.D.

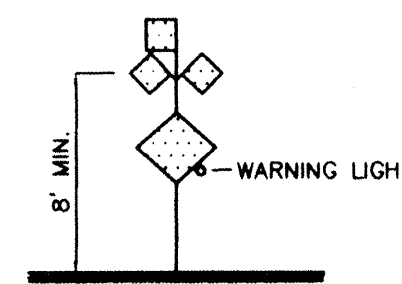
27. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORKSITE. ALL GRAFFITI SHALL BE PROMPTLY REMOVED FROM ALL EQUIPMENT, BOTH PERMANENT AND TEMPORARY.



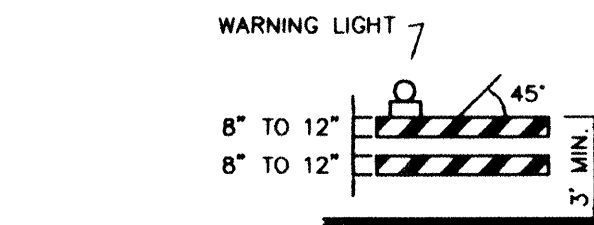
TYPE III BARRICADE



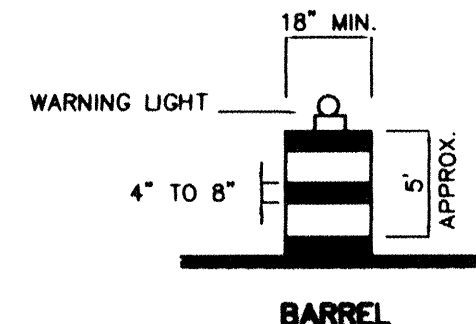
VERTICAL PANEL



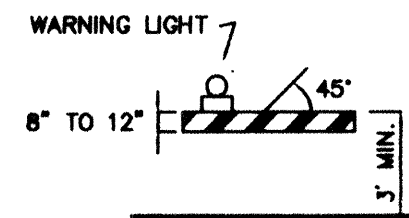
HIGH LEVEL WARNING DEVICE



TYPE II BARRICADE



BARREL



TYPE I BARRICADE

TRAFFIC CONTROL ELEMENTS

LEGEND

	WORK AREA
	BARRICADE - TYPE I, TYPE II, OR BARREL
	BARRICADE - TYPE III
	WARNING SIGN
	DISTANCE BETWEEN SIGNS - A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET
	FLAGMAN POSITION
	SPACING BETWEEN BARRICADES- A DISTANCE MEASURED IN FEET EQUAL TO THE SPEED LIMIT OF THE STREET
	TAPER LENGTH - SEE CHART BELOW
THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET.	

TAPER REQUIREMENTS

SPEED LIMIT (MPH)	TAPER LENGTH (L) (FEET)			MINIMUM NUMBER OF DEVICES FOR TAPER	MAXIMUM DEVICE SPACING IN FEET	
	10' LANE	11' LANE	12' LANE		ALONG TAPER	AFTER TAPER
20	70	75	80	5	20	20
25	105	115	125	6	25	25
30	150	165	180	7	30	30
35	205	225	245	8	35	35
40	270	295	320	9	40	40
45	450	495	540	13	45	45
50	500	550	600	13	50	50
55	550	605	660	13	55	55

RECOMMENDED SIGN SPACING(D) FOR ADVANCE WARNING SIGN SERIES

SPEED MILES PER HOUR	MINIMUM DISTANCE IN FEET BETWEEN SIGNS	FROM LAST SIGN TO TAPER
0-20	10 X SPEED LIMIT	10 X SPEED LIMIT
25-30	10 X SPEED LIMIT	10 X SPEED LIMIT
30-35	10 X SPEED LIMIT	10 X SPEED LIMIT
40-45	10 X SPEED LIMIT	10 X SPEED LIMIT
50-60	10 X SPEED LIMIT	10 X SPEED LIMIT

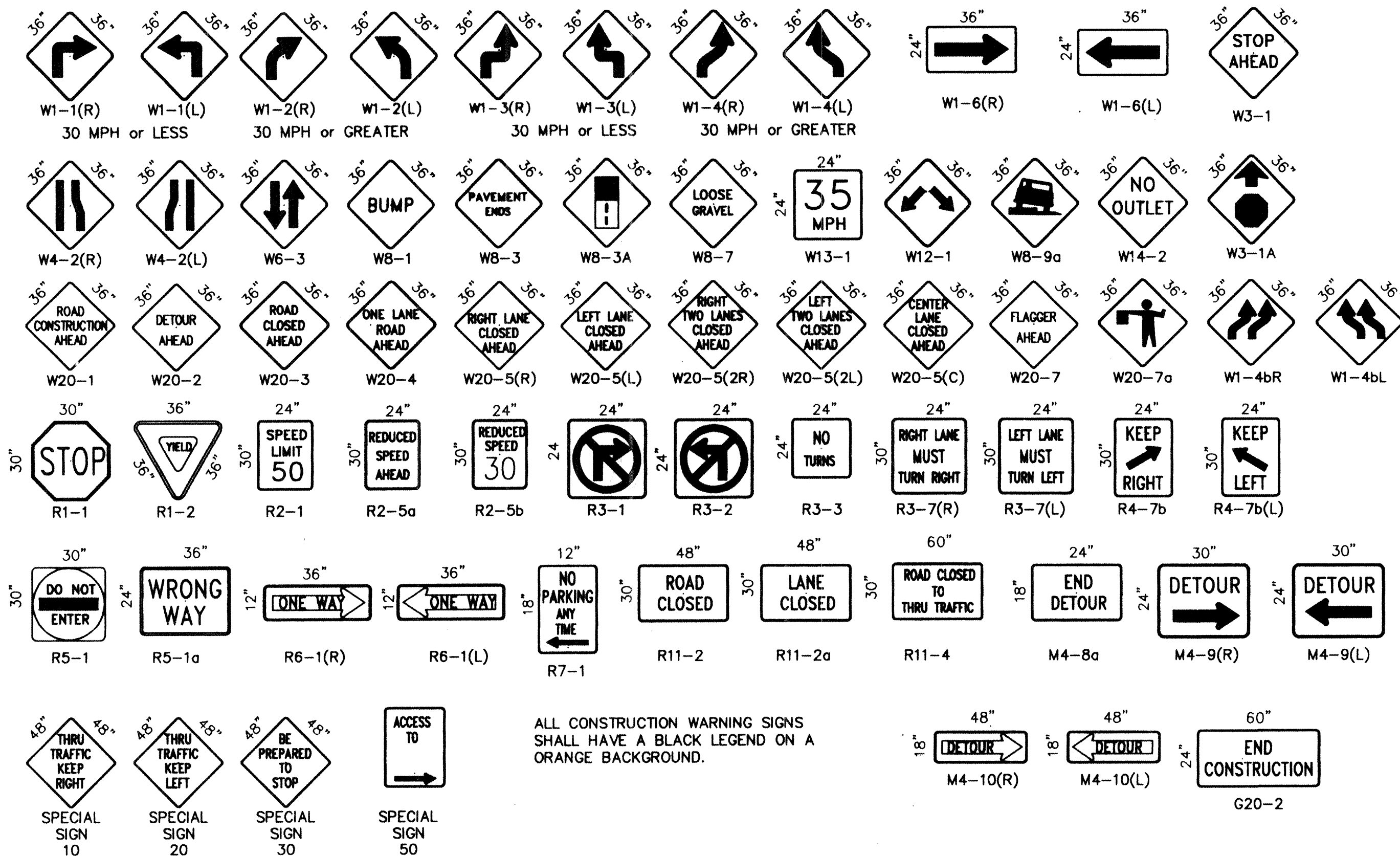
TAPER CRITERIA

TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPER:	
MERGING TAPER	L MINIMUM
SHIFTING TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/2 L MINIMUM
TWO-WAY TRAFFIC TAPER	100 FEET MAXIMUM
DOWNSTREAM TAPERS	100 FEET PER LANE

TAPER LENGTH COMPUTATION

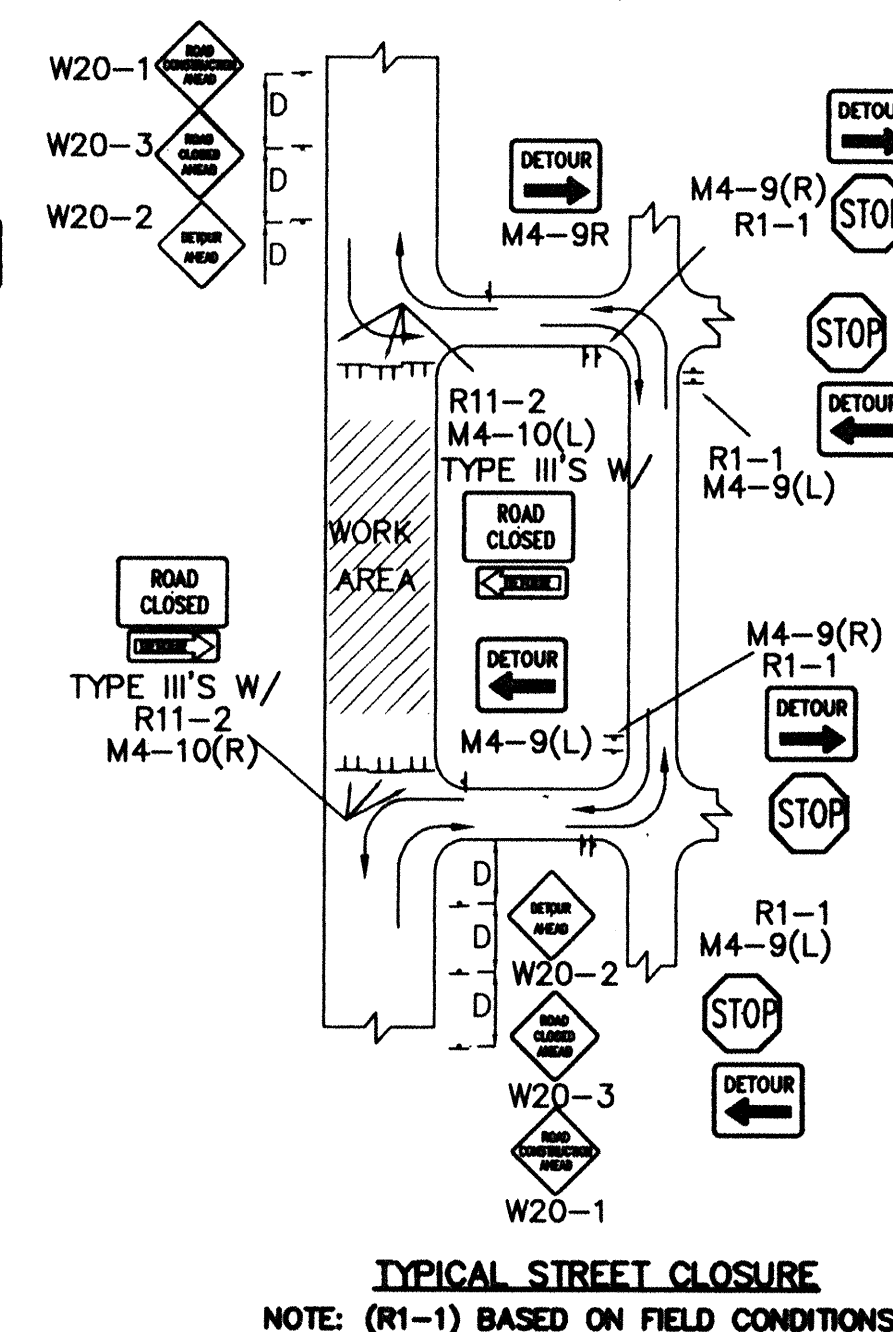
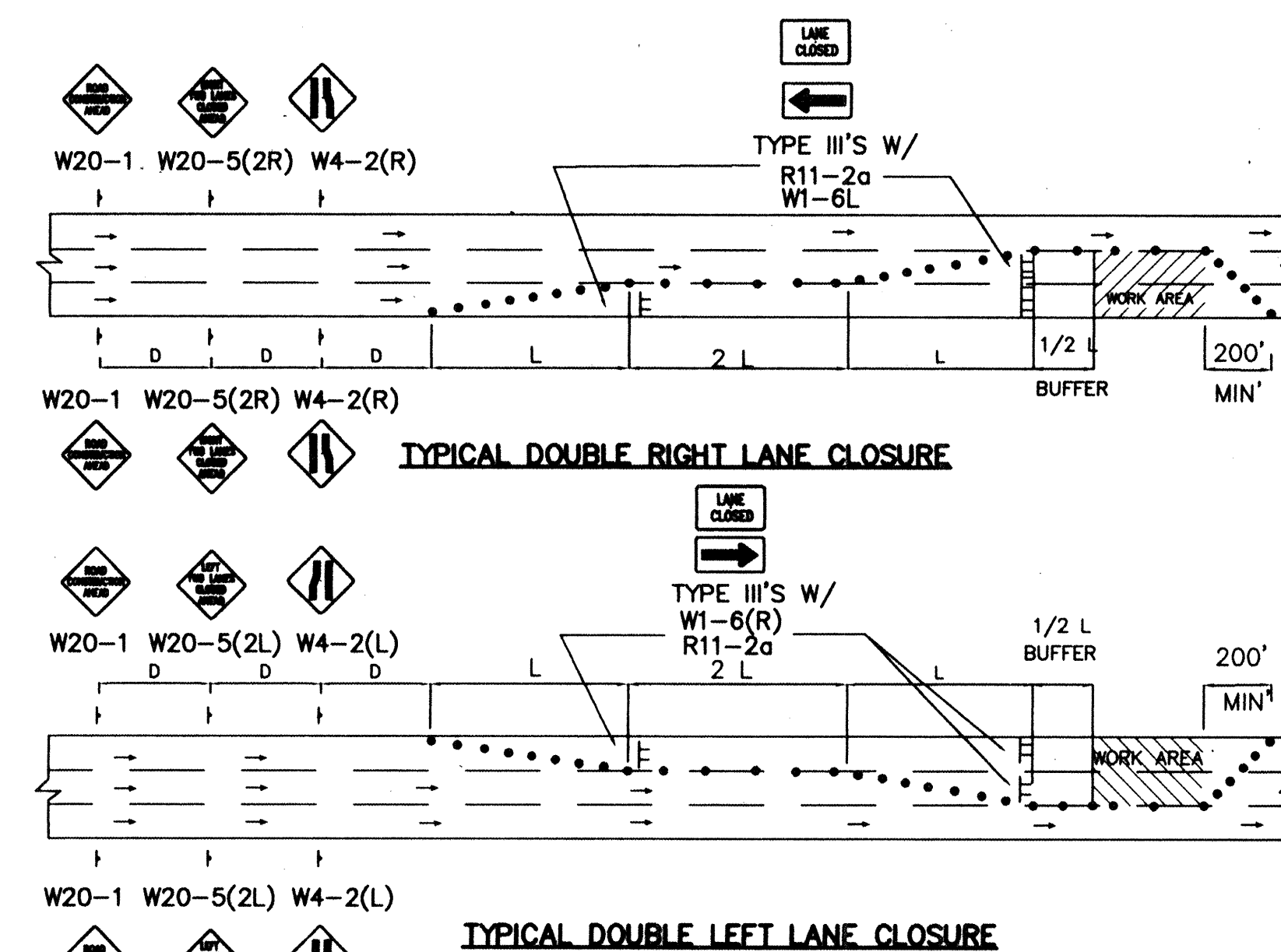
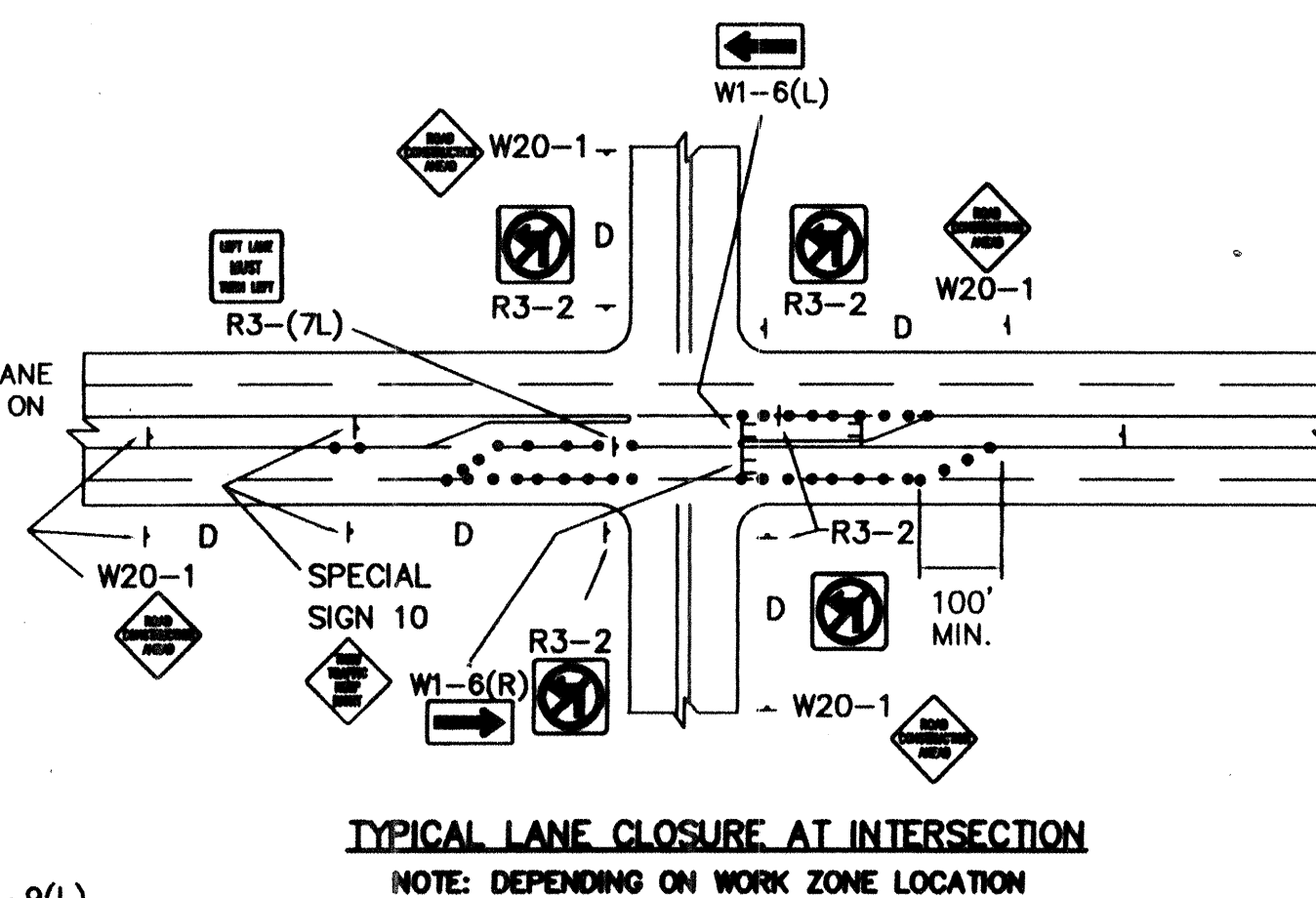
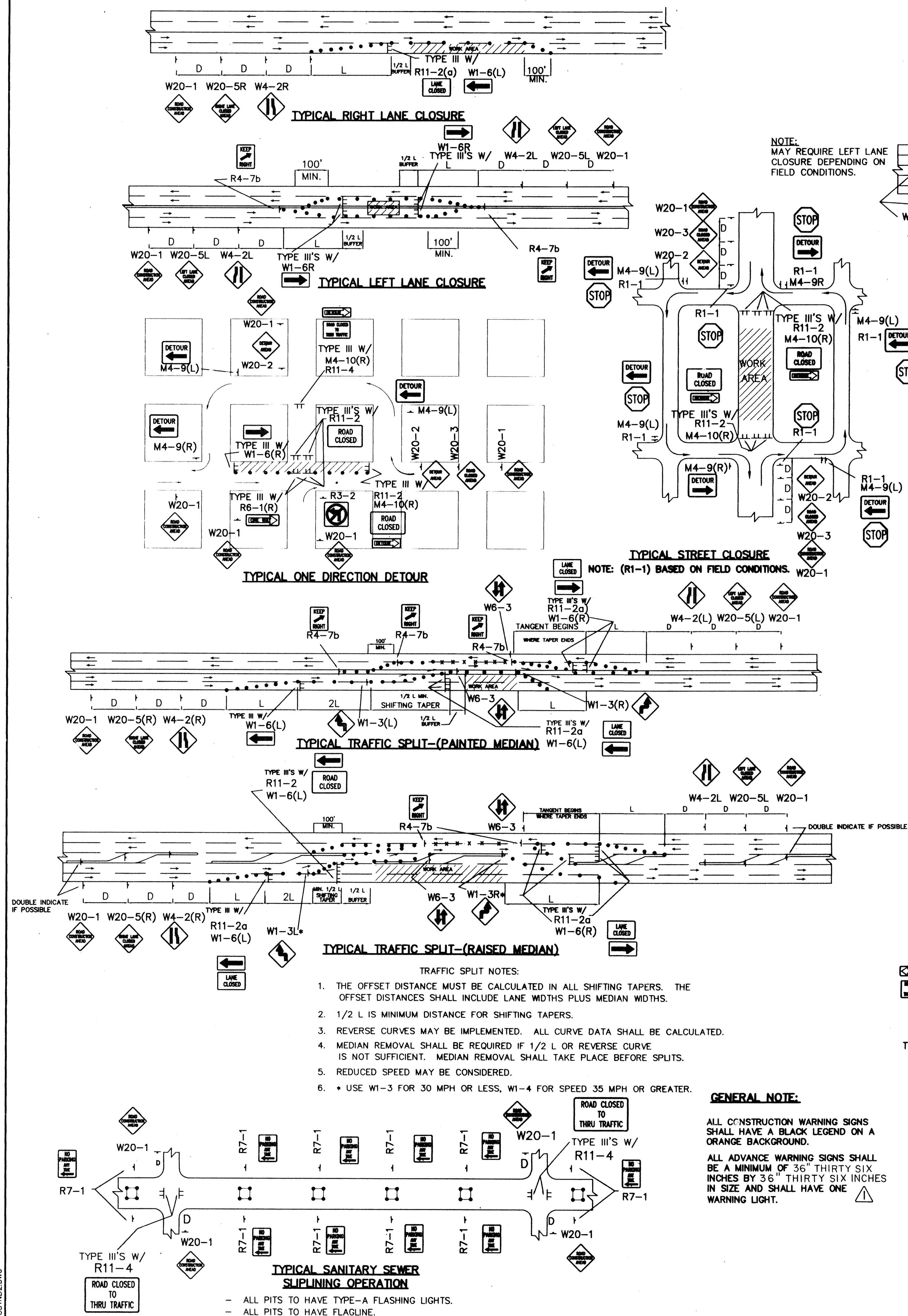
SPEED LIMIT	
40 MPH OR LESS	$L = \frac{WS^2}{60}$
45 MPH OR GREATER	$L = W \times S$
L = TAPER LENGTH W = WIDTH OF OFFSET IN FEET S = POSTED SPEED OR OFF-PEAK 85-PERCENTILE SPEED IN MPH	

SIGN FACE DETAILS



ALL CONSTRUCTION WARNING SIGNS SHALL HAVE A BLACK LEGEND ON A ORANGE BACKGROUND.

AS BUILT INFORMATION	CONTRACTOR: SUNSHINE WESH DATE: 9/9	INSPECTOR'S NAME: AL-S, INC DATE: 9/9	VERIFICATION BY: AL-S, INC DATE: 9/9	CORRECTED BY: AL-S, INC DATE: 9/9	MICRO-FILM INFORMATION	RECORDED BY: NO DATE: NO	
BENCH MARKS							
SURVEY INFORMATION	FIELD NOTES	DATE					
ENGINEER'S SEAL							
J.D.L.	J.D.L.	J.D.L.	J.D.L.	BY	REVISIONS	DESIGN	
9/25/97	ADD NOTE NO. 27	9/24/97	REVISED NOTE NO. 26	9/24/97	REVISED NOTE NO. 19	9/24/97	REVISED NOTE NO. 11
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP				TITLE: SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS			
DESIGN REVIEW COMMITTEE		CITY ENGINEER APPROVAL		LAST UPDATE			
COA Standard				MO./DAY/YR			
PROJECT NO. 5986.81		MAP NO. J-10		SHEET 18 OF 19			

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