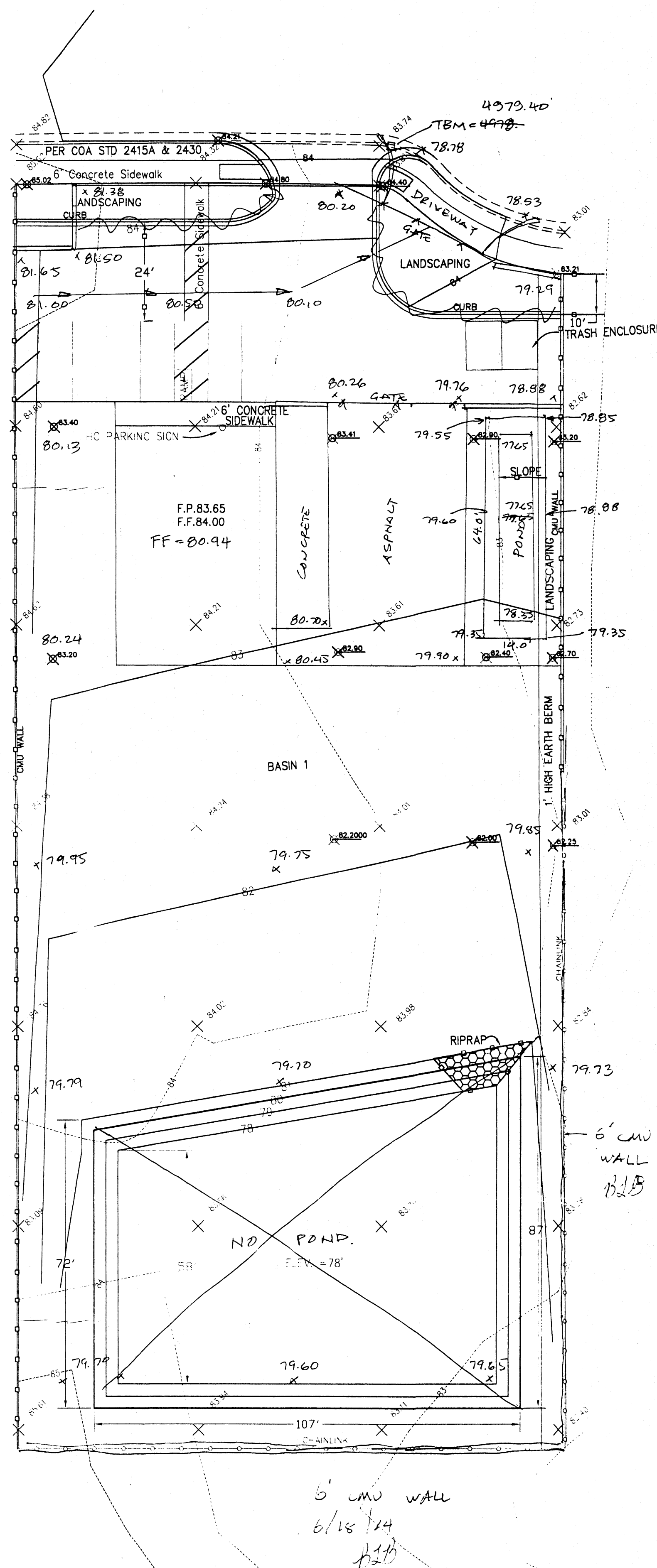




HYDROLOGY

START TIME=0.0 CODE 0 LINES 80
 *S COMPUTE 100 YR. HYDROGRAPHS FOR
 *S ZONE 1 PRECIP 6910.TXT - HYMO PER JAN 1997 DPM REVISIONS
 * AREA 42,499 SQ FT
 RAINFALL TYPE=-2 RAIN QUAR=0.0 RAIN ONE= 1.87
 RAIN SIX= 2.20 RAIN DAY=2.66 DT=0.0333

*S BASIN 1: EXISTING
 COMPUTE NM HYD ID=1 HYD NO= 101.1 DA=.0015 SQ MI
 PER A=100 PER B=0 PER C=0 PER D=0 TP=-.13
 RAIN=-1
 ID=1 CODE=10

*S BASIN 1: PROPOSED
 COMPUTE NM HYD ID=2 HYD=102.1 DA=0.0015
 PER A=15 PER B=0 PER C=52 PER D=33 TP=-.13
 RAIN=-1
 ID=2 CODE=10

PRINT HYD
 FINISH

START
 AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) -
 INPUT FILE = E:\Ahymo\6910.TXT
 *S COMPUTE 100 YR. HYDROGRAPHS FOR
 *S ZONE 1 PRECIP 6910.TXT - HYMO PER JAN 1997 DPM REVISIONS
 - VERSION: 1997.02a RUN DATE (MON/DAY/YR) =03/29/2007
 USER NO = AHYMO-I-9702a0100007G-SH

COMMAND	IDENTIFICATION	NO.	NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	TIME TO PEAK (HOURS)	CFS PER ACRE	PAGE = 1
RAINFALL	TYPE= 2								RAIN24= 2.660
*S BASIN 1: EXISTING		101.10	-	1	.00150	1.28	.035	.43919	1.532 1.328 PER IMP= .00
COMPUTE NM HYD									
*S BASIN 1: PROPOSED		102.10	-	2	.00150	3.03	.107	1.33183	1.499 3.157 PER IMP= 33.00
COMPUTE NM HYD									
FINISH									

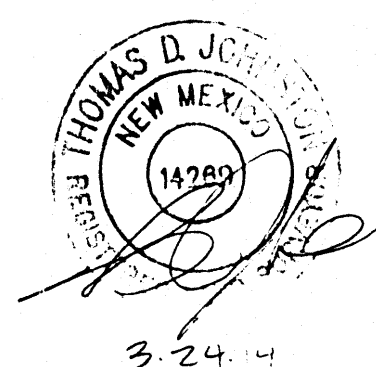
RETENTION VOLUME:
 10 DAY VOL=VOL₁₀₀+A_s*(P_{max}-P₁₀₀)/12
 =.107+.33*.96*.149/12
 =.146 ACF OR 6374 Cuft

CONTOUR	AREA	VOLUME
80	8350	14,616 CF (.33 Ac Ft.)
78	6266	
DEPTH	80.9'	

RED-LINE AS-BUILT PREPARED BY.

Wayjohn Surveying, Inc.
 330 Louisiana Blvd. NE
 Albuquerque, N.M. 87108-2062

AS-BUILT DATE: 3/17/2014
 ELEVATIONS BASED ON ACS MONUMENT
 9-M 11 (EL. 4957.54, NAVD 88 MSL)
 LOCATED AT THE NW CORNER OF
 HUSEMAN PLACE, SW AND COORS BLVD, SW.



DRAINAGE CERT W/ SURVEY WORK BY OTHERS
 12/28/01

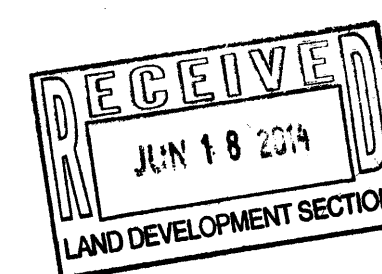
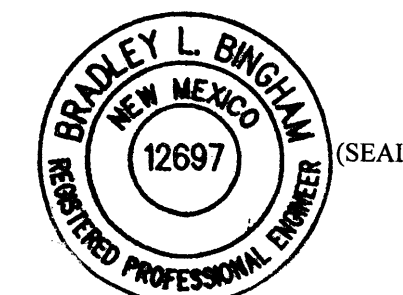
DRAINAGE CERTIFICATION

I, Bradley L. Bingham, NMPE 12697, OF THE FIRM Bingham Engineering, HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 5/09/07. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY NMPS 14269, OF THE FIRM Wavohn Surveying. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 3/26/14 AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR Certificate of Occupancy.

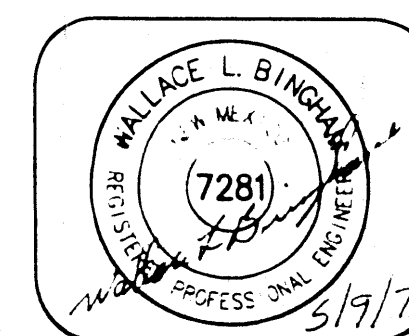
The site was modified somewhat from the original plan. The driveway was move further east and the pond was constructed north of the originally proposed location. Fully grouted CMU wall constructed along entire perimeter of property. Required volume = 6374 cu.ft. Pond volume provided = 4750 cu.ft. which handles the impervious portion of the site. The remaining volume generated in the southern, unpaved portion is retained in place and kept from leaving the site by the fully grouted CMU wall.

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

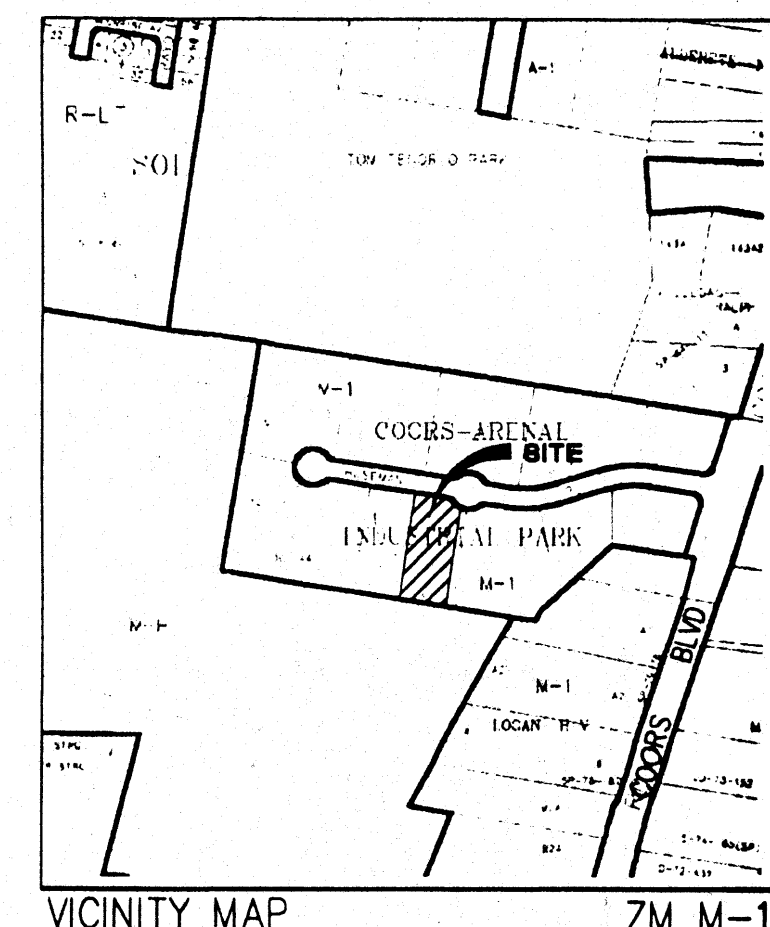
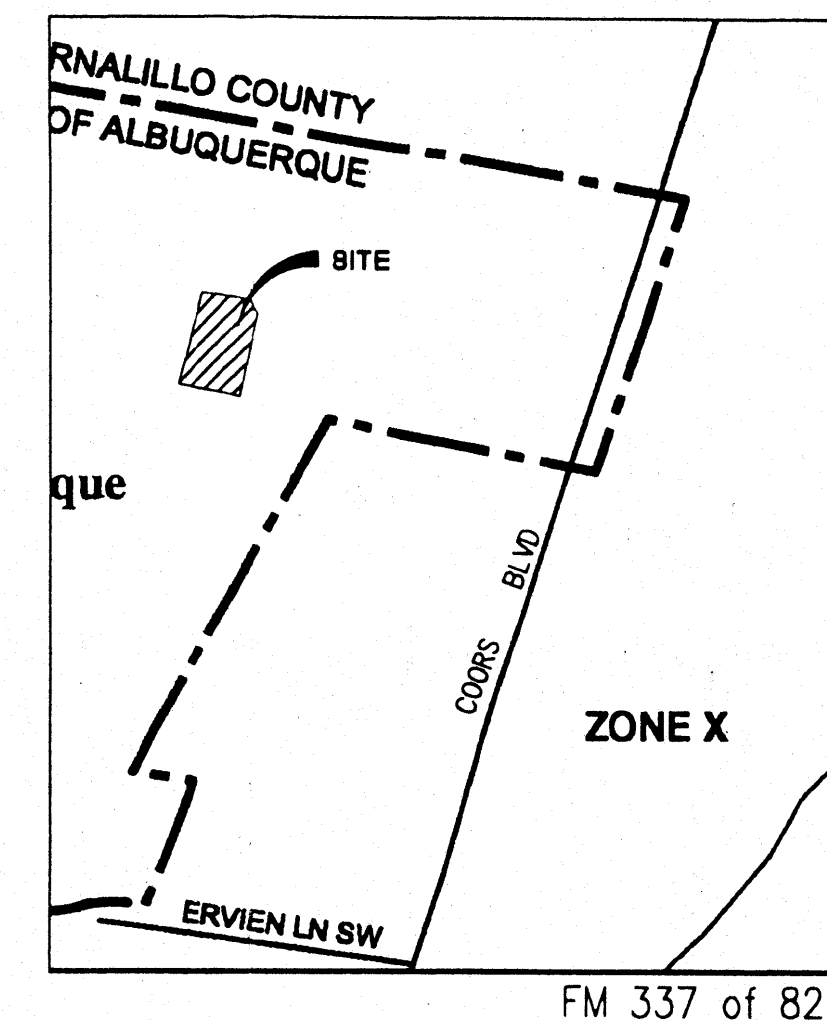
Bradley L. Bingham
 Bradley L. Bingham, NMPE 12697
 DATE 6/17/14



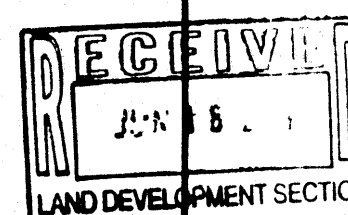
BINGHAM ENGINEERING
 6344 Belcher NE
 Albuquerque, New Mexico 87109
 505 797 4699

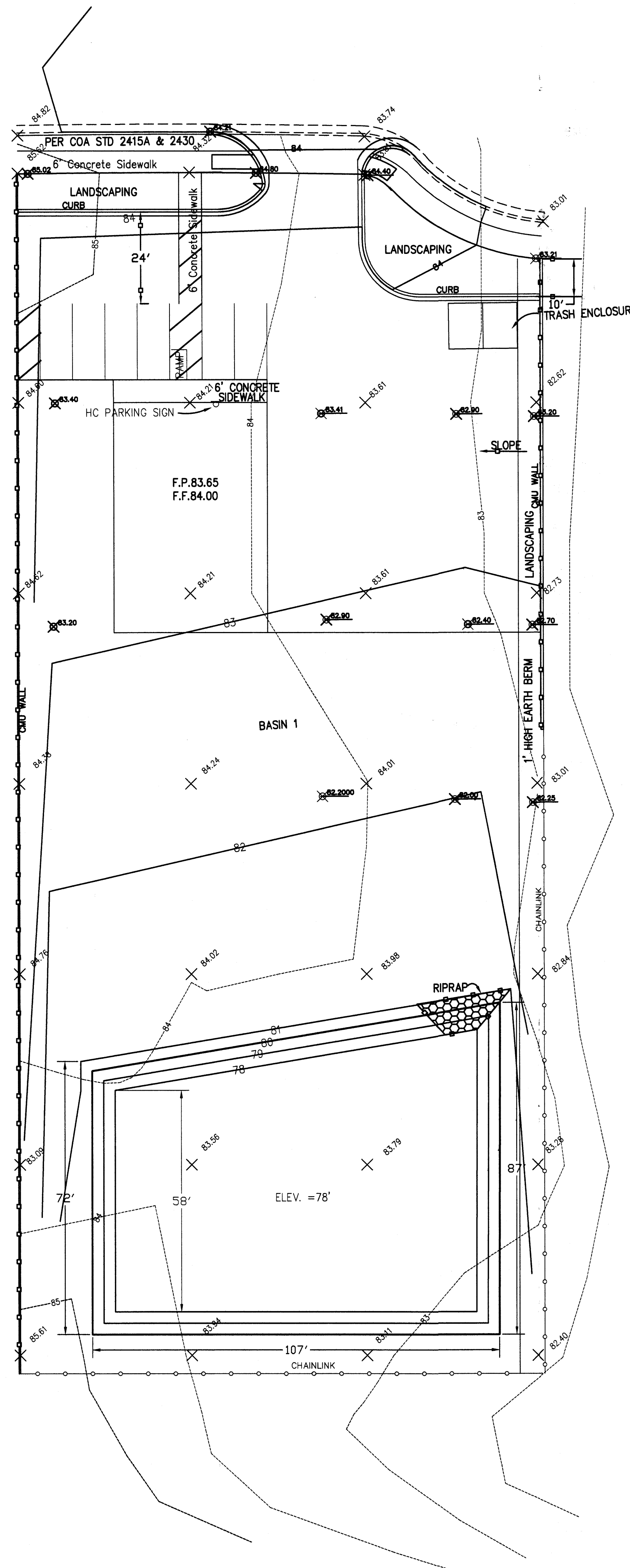


GRADING AND DRAINAGE PLAN
 PALOMINO ROOFING CO.
 6910 HUSEMAN DRIVE SW



LEGEND	
-69.83	EXISTING SPOT ELEVATION
-69.83	PROPOSED SPOT ELEVATION (GRID & TC)
-----	EXISTING CURB AND GUTTER
-----	EXISTING CONTOUR W/ INDEX ELEVATION
-----	PROPOSED CONTOUR W/ INDEX ELEVATION
---	FLOW ARROW
---	BASIN BOUNDARY





HYDROLOGY

START TIME=0.0 CODE 0 LINES 80
 *S COMPUTE 100 YR. HYDROGRAPHS FOR
 *S ZONE 1 PRECIP 6910.TXT - HYMO PER JAN 1997 DPM REVISIONS
 * AREA 42,499 SQ FT
 RAINFALL TYPE=-2 RAIN QUAR=0.0 RAIN ONE= 1.87
 RAIN SIX= 2.20 RAIN DAY=2.66 DT=0.0333

*S BASIN 1: EXISTING
 COMPUTE NM HYD ID=1 HYD NO= 101.1 DA=.0015 SQ MI
 PER A=100 PER B=0 PER C=0 PER D=0 TP=-.13
 RAIN=-1
 ID=1 CODE=10

PRINT HYD

*S BASIN 1: PROPOSED
 COMPUTE NM HYD ID=2 HYD=102.1 DA=0.0015
 PER A=15 PER B=0 PER C=52 PER D=33 TP=-.13
 RAIN=-1
 ID=2 CODE=10

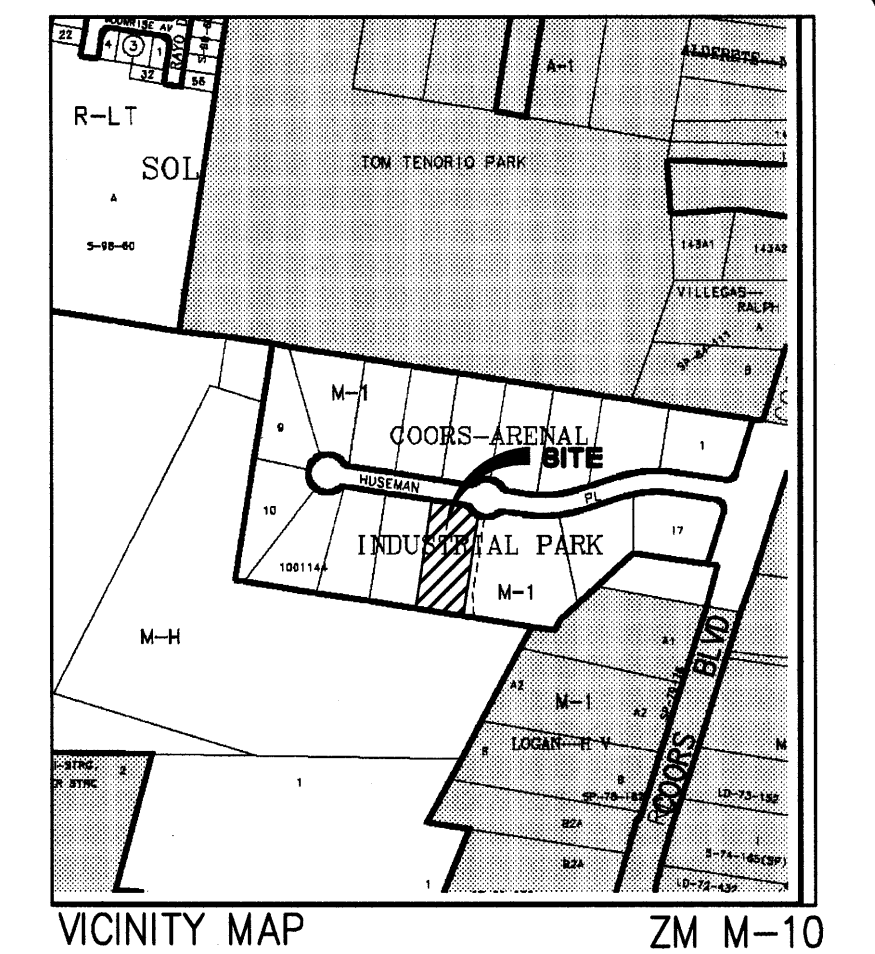
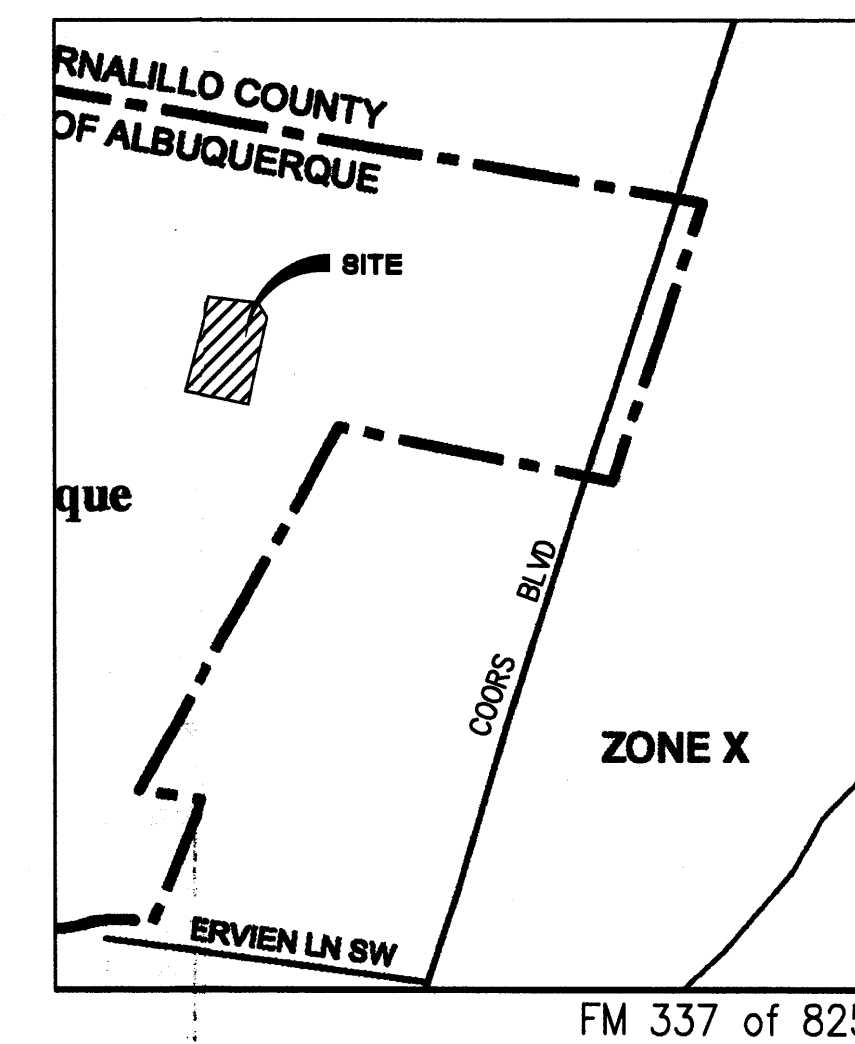
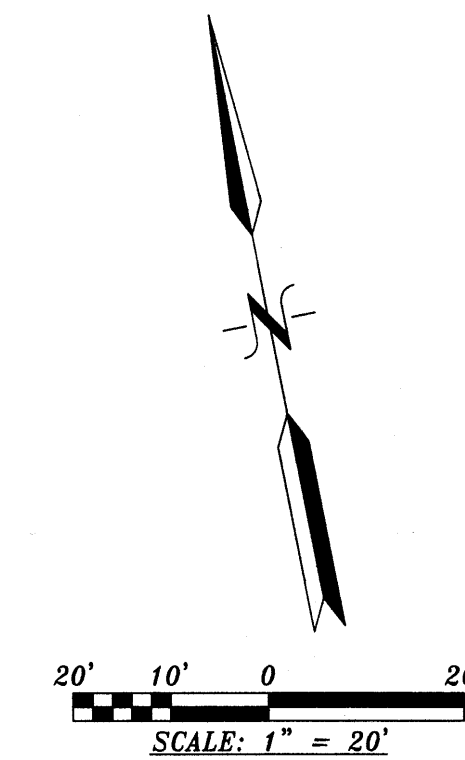
PRINT HYD

FINISH

START	TIME=	0.00
AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) -	VERSION: 1997.02a	RUN DATE (MON/DAY/YR) =03/29/2007
INPUT FILE = E:\ahymo\6910.TXT	USER NO.=	AHYMO-I-9702a0100007G-SH
*S COMPUTE 100 YR. HYDROGRAPHS FOR		
*S ZONE 1 PRECIP 6910.TXT - HYMO PER JAN 1997 DPM REVISIONS		
COMMAND IDENTIFICATION NO. NO. (SQ MI) AREA DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	TIME TO PEAK (HOURS)
RAINFALL TYPE= 2	NOTATION	PAGE = 1
	RAIN24= 2.660	
*S BASIN 1: EXISTING		
COMPUTE NM HYD	101.10 - 1 .00150 1.28 .035 .43919 1.532 1.328 PER IMP= .00	
*S BASIN 1: PROPOSED		
COMPUTE NM HYD	102.10 - 2 .00150 3.03 .107 1.33183 1.499 3.157 PER IMP= 33.00	
FINISH		

RETENTION VOLUME:
 10 DAY VOL.=VOL₁₀₀+A₁*(P_{max} - P₁₀₀)/12
 =0.107+.33*.96 *.149/12
 =0.146 AcFt OR 6374 CuFt

POND VOLUME:
 CONTOUR AREA VOLUME
 80 8350 14,616 CF (.33 Ac Ft.)
 78 6266
 DEPTH = 0.9'



PROJECT DESCRIPTION

THE SITE IS NOT IN A FLOOD PLAIN.

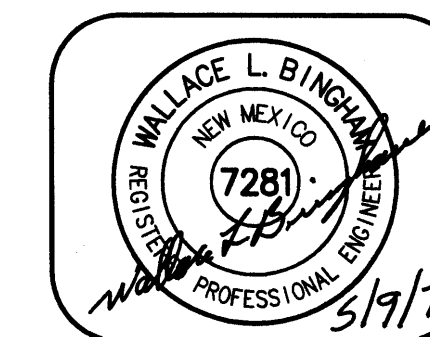
THE LOT WAS GRADED WHEN THE SUBDIVISION WAS DEVELOPED. THERE IS AN 6 FOOT RETAINING/PRIVACY WALL ON THE WEST PROPERTY LINE.

THE EXISTING SLOPE OF THE SITE IS GENTLY WEST TO EAST. THE PROPOSED SLOPE WILL BE TOWARDS THE SOUTHEAST. THE POND IS DESIGNED TO BE SUNK INTO THE GROUND TO ADD TO THE SAFETY BY NOT HOLDING THE WATER BACK WITH AN ABOVE GROUND BERM. THIS IS EVEN MORE IMPORTANT IN SANDY SOIL AS IS THE SITE.

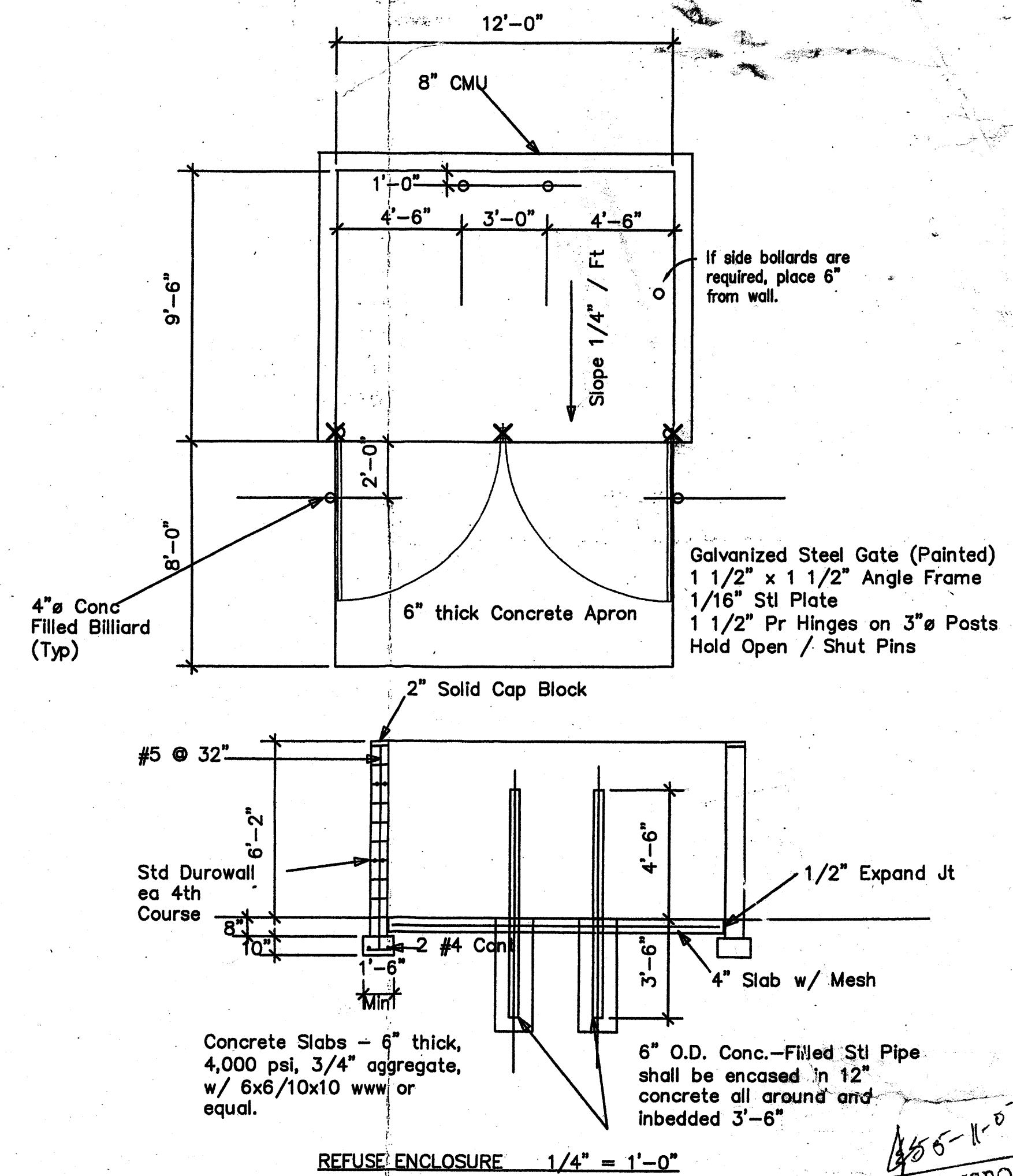
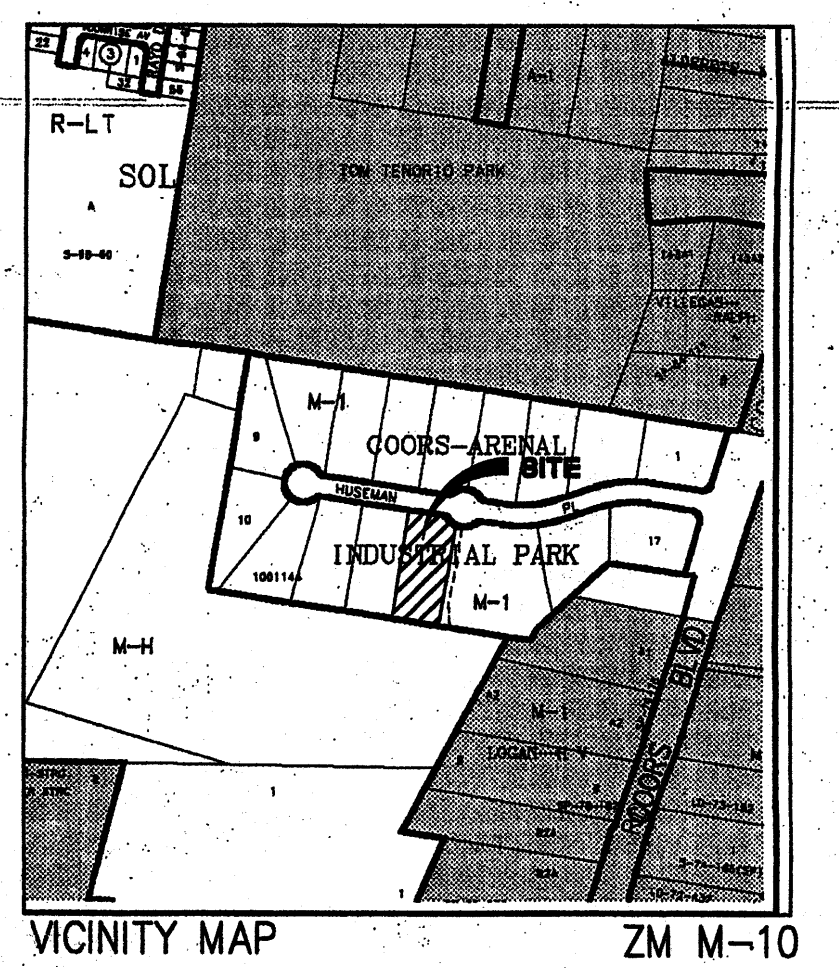
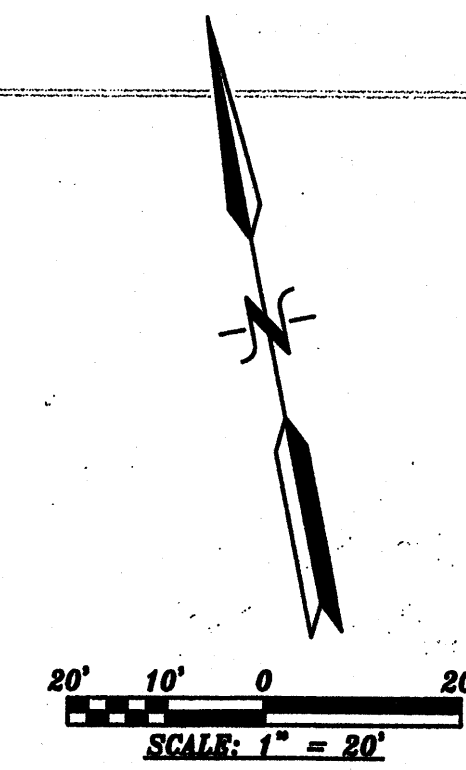
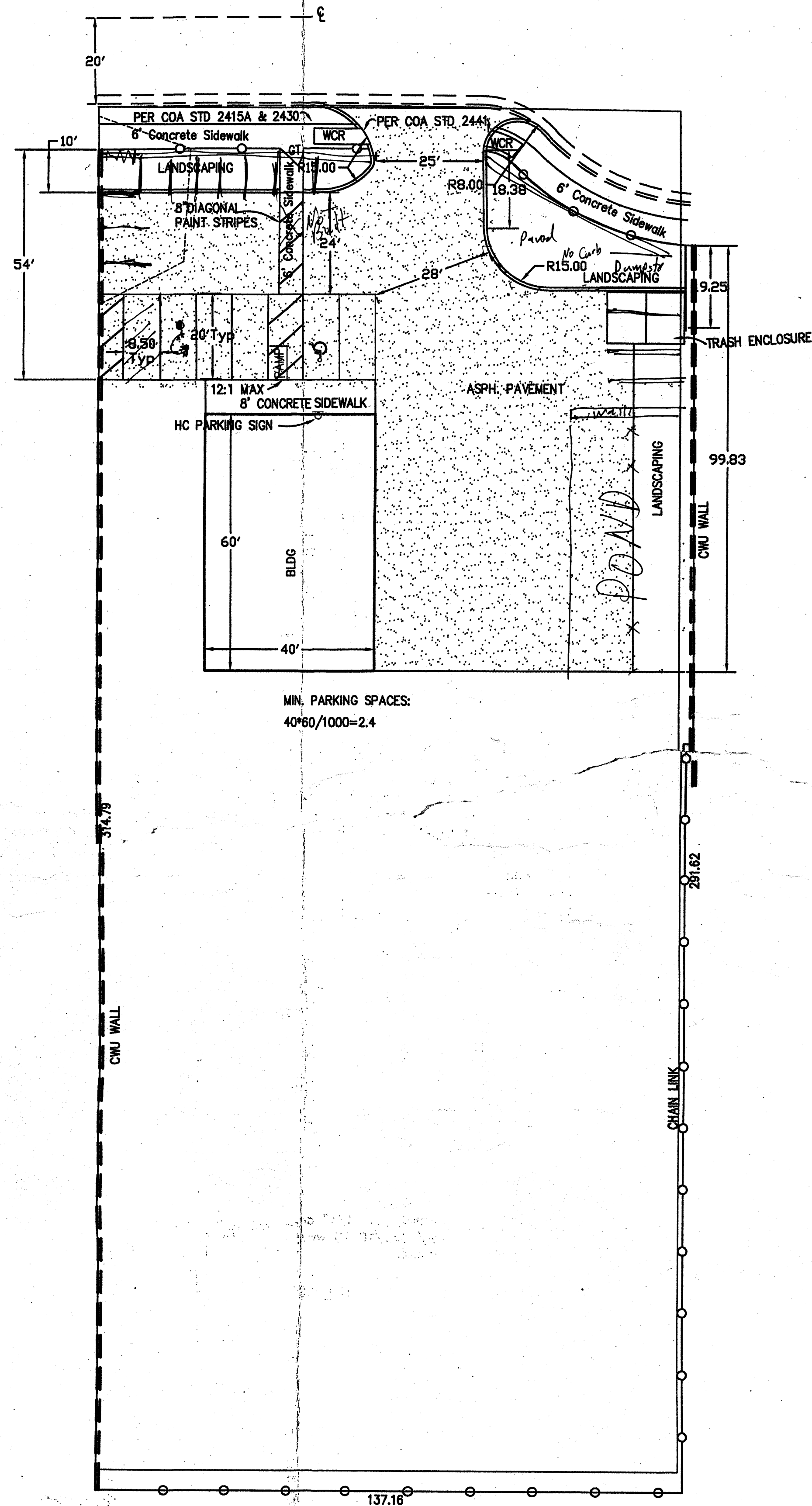
THE PROPOSED GRADING OF BASIN 1, THE SITE, IS PLANNED TO SLOPE TO THE SOUTHEAST WITH A 6' WIDE BERM AT THE EAST FENCE LINE.

LEGEND	
78.93	EXISTING SPOT ELEVATION
78.9	PROPOSED SPOT ELEVATION (GRID & TO)
---	EXISTING CURB AND GUTTER
60-0	EXISTING CONTOUR W/ INDEX ELEVATION
71	PROPOSED CONTOUR W/ INDEX ELEVATION
---	FLOW ARROW
---	BASIN BOUNDARY

BINGHAM ENGINEERING
 6344 Belcher NE
 Albuquerque, New Mexico 87109
 505 787 4899



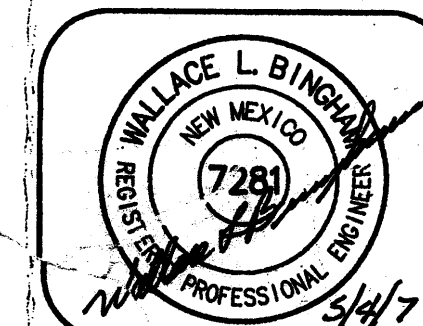
GRADING AND DRAINAGE PLAN
 PALOMINO ROOFING CO.
 6910 HUSEMAN DRIVE



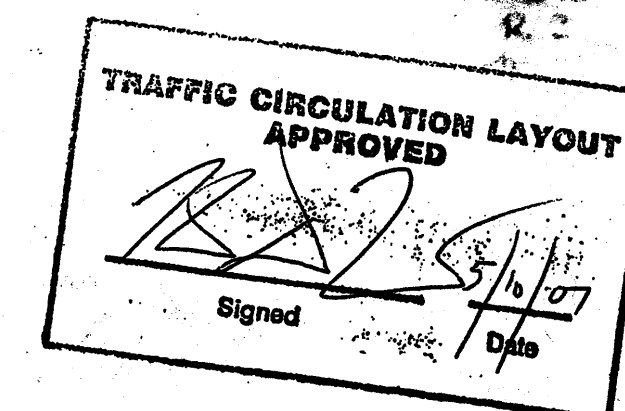
I, Bradley L Bingham of the Bingham Engineering certify that this project is in substantial compliance with the design intent of the TCL. I further certify that I have personally visited the site on 10:30:13.



BINGHAM ENGINEERING
6344 Belcher NE
Albuquerque, New Mexico 87109
505 787 4699

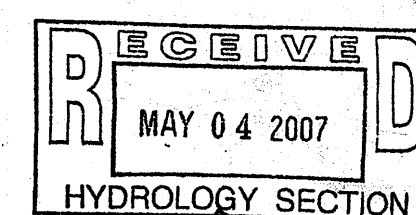


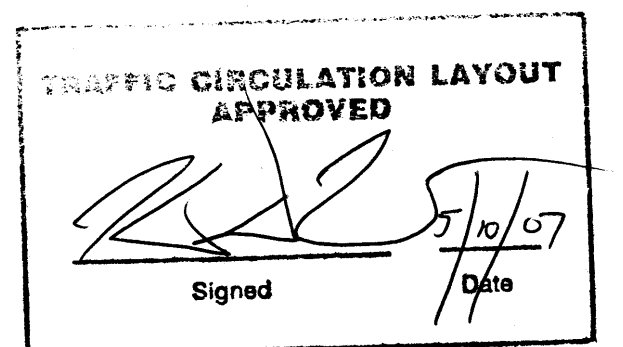
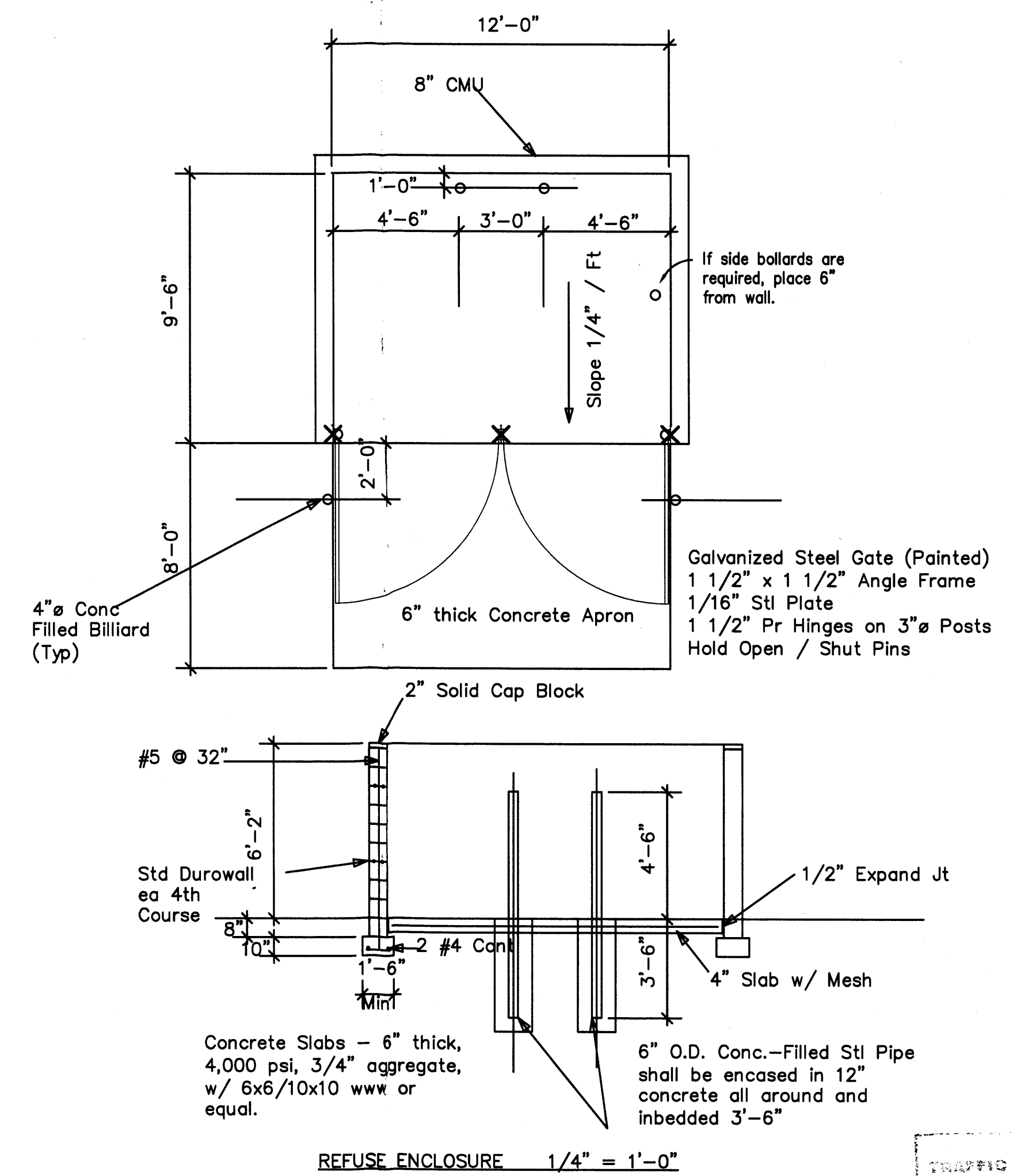
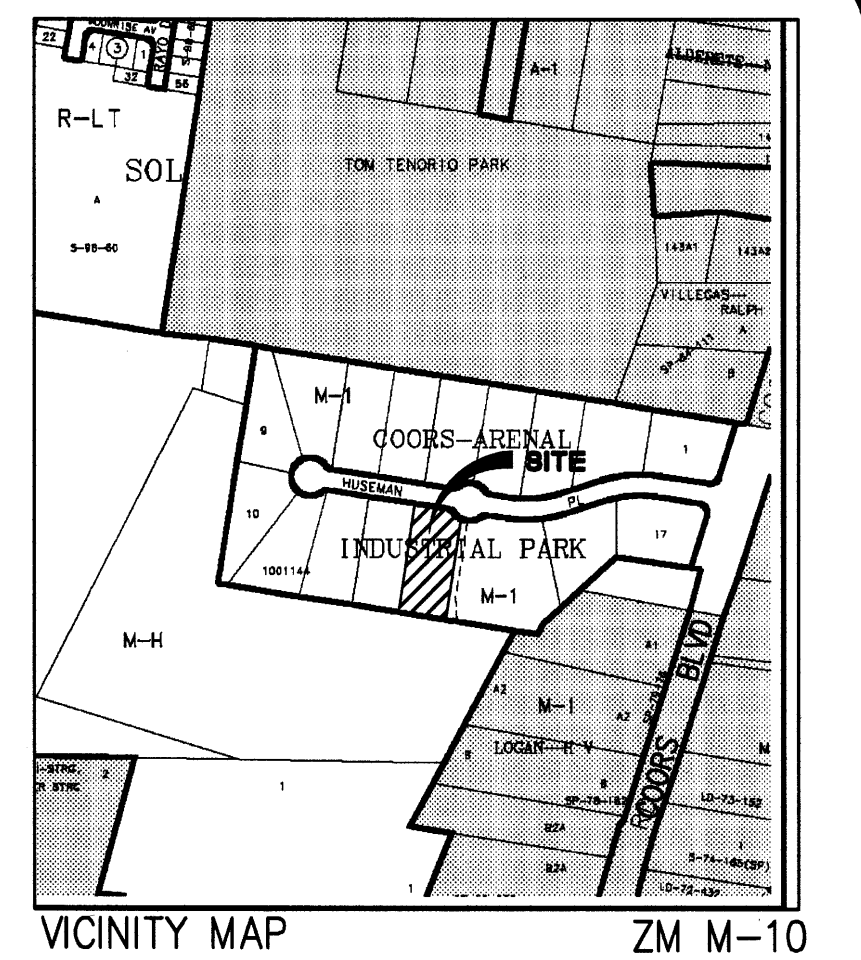
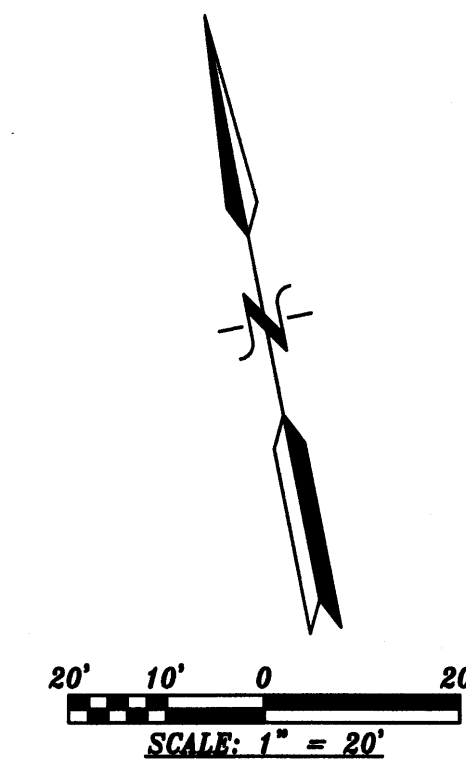
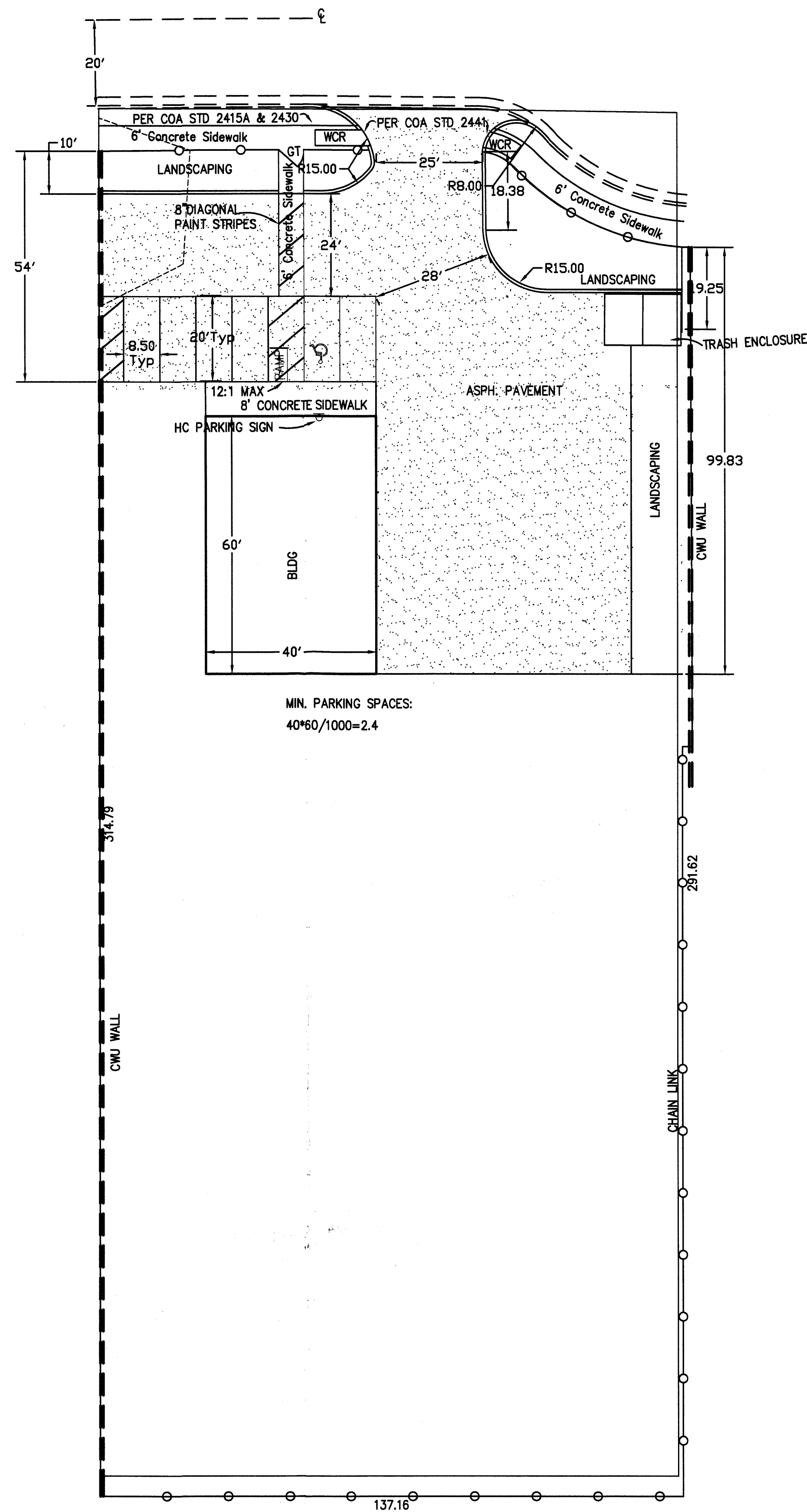
TRAFFIC CONTROL LAYOUT PLAN
PALOMINO ROOFING
6910 HUSEMAN DRIVE SW



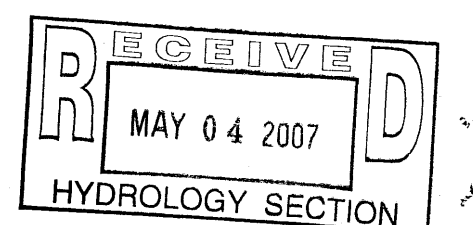
TRANSPORTATION APPROVED

Public In on these plan only and not p Separate DRC/Per and Work Order n

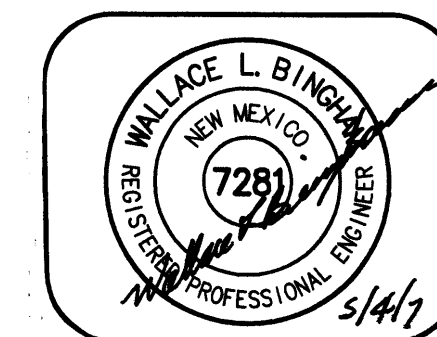




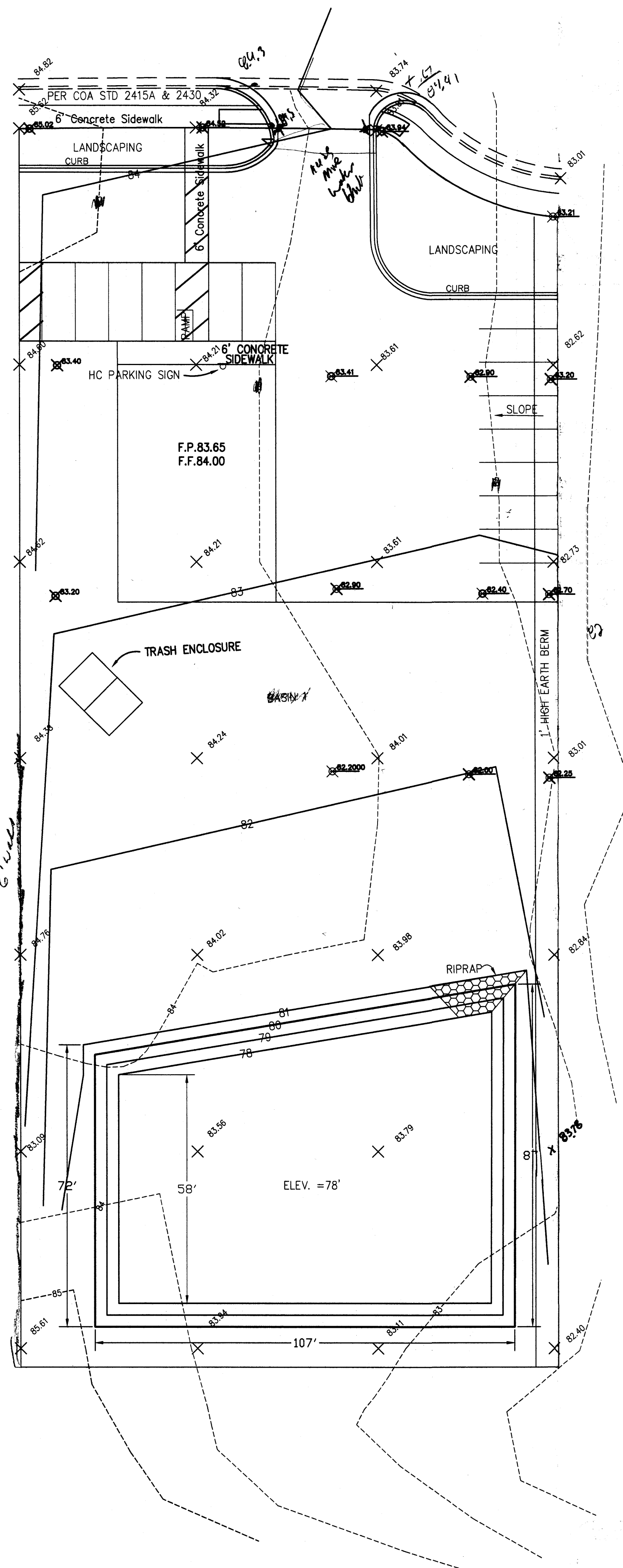
Public Infrastructure shown on these plans for information only and not part of approval. Separate DRC/Permit approval and Work Order required.



BINGHAM ENGINEERING
6344 Belcher NE
Albuquerque, New Mexico 87109
505 797 4899



TRAFFIC CONTROL LAYOUT PLAN
PALOMINO ROOFING CO.
6910 HUSEMAN DRIVE SW



HYDROLOGY

START TIME=0.0 CODE 0 LINES 80
 *S COMPUTE 100 YR. HYDROGRAPHS FOR
 *S ZONE 1 PRECIP 6910.TXT - HYMO PER JAN 1997 DPM REVISIONS
 * AREA 42,499 SQ FT
 RAINFALL TYPE=-2 RAIN QUAR=0.0 RAIN ONE= 1.87
 RAIN SIX= 2.20 RAIN DAY=2.66 DT=0.0333

*S BASIN 1: EXISTING
 COMPUTE NM HYD ID=1 HYD NO= 101.1 DA=.0015 SQ MI
 PER A=100 PER B=0 PER C=0 PER D=0 TP=-.13
 RAIN=-1
 ID=1 CODE=10
 PRINT HYD
 *S BASIN 1: PROPOSED
 COMPUTE NM HYD ID=2 HYD=102.1 DA=0.0015
 PER A=15 PER B=0 PER C=52 PER D=33 TP=-.13
 RAIN=-1
 ID=2 CODE=10 67 33
 PRINT HYD
 FINISH

START AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) -
 INPUT FILE = E:\ahymo\6910.TXT
 *S COMPUTE 100 YR. HYDROGRAPHS FOR
 *S ZONE 1 PRECIP 6910.TXT - HYMO PER JAN 1997 DPM REVISIONS
 COMMAND HYDROGRAPH FROM TO AREA PEAK RUNOFF TIME TO CFS PAGE = 1
 IDENTIFICATION NO. NO. (SQ MI) DISCHARGE (CFS) VOLUME (AC-FT) (INCHES) (HOURS) ACRE NOTATION
 RAINFALL TYPE= 2 RAIN24= 2.660
 *S BASIN 1: EXISTING
 COMPUTE NM HYD 101.10 - 1 .00150 1.28 .035 .43919 1.532 1.328 PER IMP= .00
 *S BASIN 1: PROPOSED
 COMPUTE NM HYD 102.10 - 2 .00150 3.03 .107 1.33183 1.499 3.157 PER IMP= 33.00
 FINISH

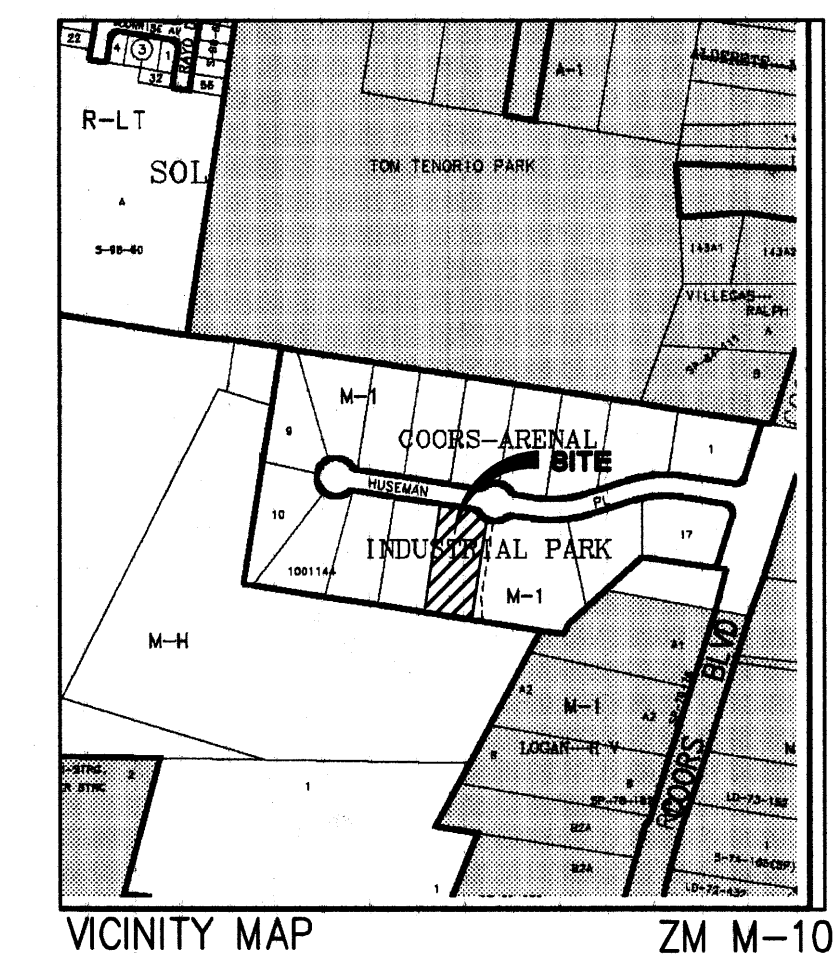
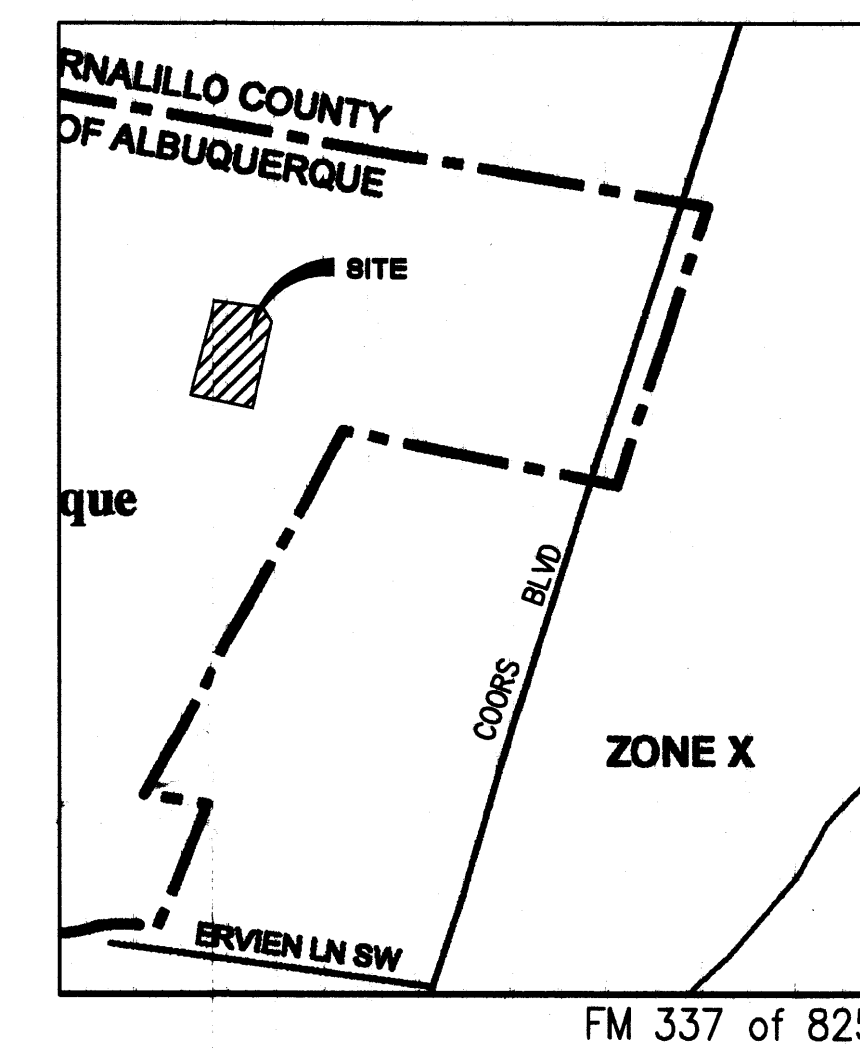
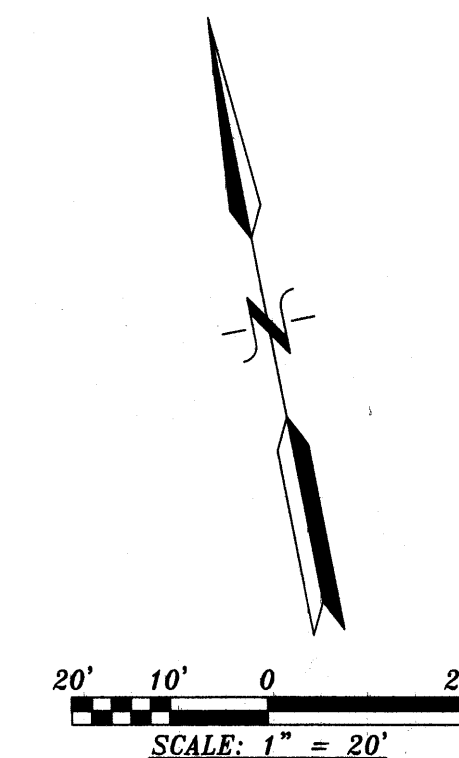
RETENTION VOLUME:
 10 DAY VOL=VOL_{max}+A₀*(P_{max}-P_{min})/12
 =0.107+.33*.96*1.49/12
 =0.146 AcFt OR 6374 CuFt

POND VOLUME:
 CONTOUR AREA VOLUME
 80 8350 14,616 CF (.33 Ac Ft.)
 78 6266
 DEPTH = 0.9'

7704
 A=7704 ft²
 15400 ft²

10 day storm 6-in
 307u 220in
 1674.652 232in

$V_{10} = V_{100} + A_D \times \frac{(P_{10} - P_{100})}{12}$
 $= 107 + 317 \times \frac{(3.67 - 2.20)}{12}$
 $= 146 \text{ ac ft} = 6352 \text{ ft}^3$



PROJECT DESCRIPTION

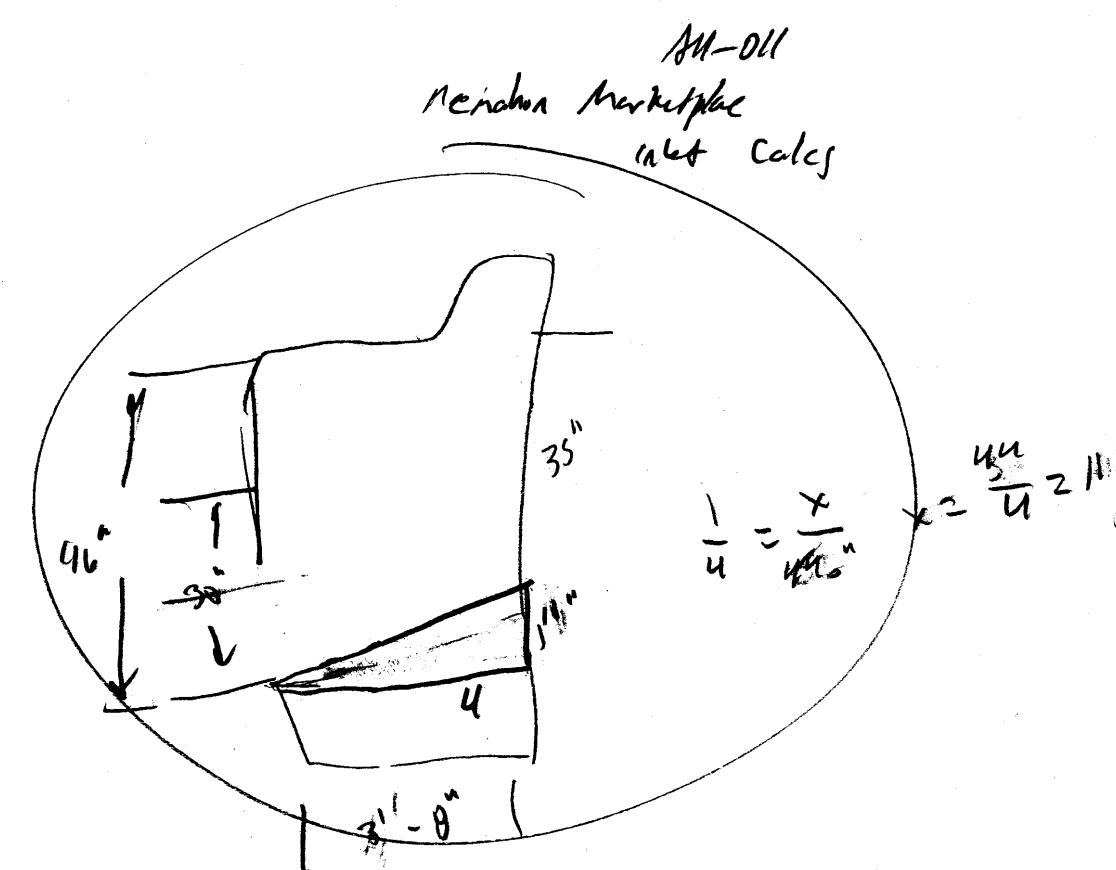
THE SITE IS NOT IN A FLOOD PLAIN.

THE LOT WAS GRADED WHEN THE SUBDIVISION WAS DEVELOPED. THERE IS AN 6 FOOT RETAINING/PRIVACY WALL ON THE WEST PROPERTY LINE.

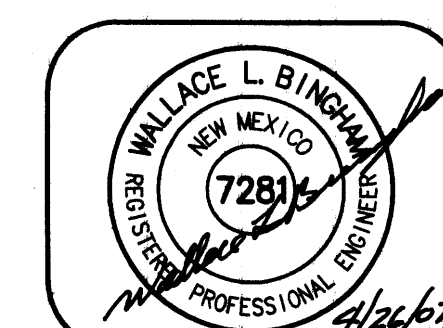
THE EXISTING SLOPE OF THE SITE IS GENTLY WEST TO EAST. THE PROPOSED SLOPE WILL BE TOWARDS THE SOUTHEAST. THE POND IS DESIGNED TO BE SUNK INTO THE GROUND TO ADD TO THE SAFETY BY NOT HOLDING THE WATER BACK WITH AN ABOVE GROUND BERM. THIS IS EVEN MORE IMPORTANT IN SANDY SOIL AS IS THE SITE.

THE PROPOSED GRADING OF BASIN 1, THE SITE, IS PLANNED TO SLOPE TO THE SOUTHEAST WITH A 6' WIDE BERM AT THE EAST FENCE LINE.

LEGEND	
7704.0	EXISTING SPOT ELEVATION
83.0	PROPOSED SPOT ELEVATION (GRID & TC)
=====	EXISTING CURB AND GUTTER
---	EXISTING CONTOUR W/ INDEX ELEVATION
---	PROPOSED CONTOUR W/ INDEX ELEVATION
---	FLOW ARROW
---	BASIN BOUNDARY



BINGHAM ENGINEERING
 6344 Balboa NE
 Albuquerque, New Mexico 87109
 505 797 4699



GRADING AND DRAINAGE PLAN
 PALOMINO ROOFING CO.
 6910 HUSEMAN DRIVE

