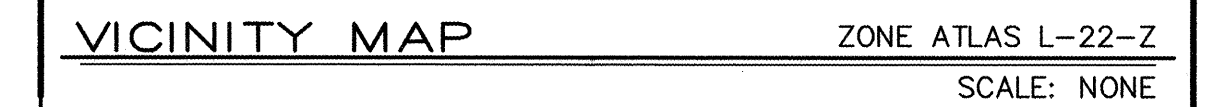


SCANNED BY
MESA REPRO



NOTICE TO CONTRACTORS

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF-WAY.
2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE #6.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
5. FIVE (5) WORKING DAYS PRIOR TO BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO CONSTRUCTION COORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONSTRUCTION COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION COORDINATION ENGINEER (788-2551) PRIOR TO OCCUPYING AN INTERSECTION. REFER TO SECTION 19 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS.
6. ALL WORK AFFECTING ARTERIAL ROADWAYS REQUIRES TWENTY-FOUR HOUR CONSTRUCTION.
7. ALL STREET STRIPING, ALTERED OR DESTROYED SHALL BE REPLACED WITH PLASTIC REFLECTORIZED PAVEMENT MARKING BY CONTRACTOR TO THE SAME LOCATION AS WAS EXISTING, OR AS INDICATED BY THIS PLAN SET.
8. CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE CITY SURVEYOR MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE CITY SURVEYOR AND SHALL NOTIFY THE CITY SURVEYOR AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT THE CITY SURVEYOR'S CONSENT. THIS SHALL BE DONE ONLY BY THE CITY SURVEYOR. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATIONS OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT TO COVER THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO SECTION 4.4 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS.
- CONTRACTOR SHALL RECORD DATA ON ALL UTILITY LINES AND ACCESSORIES AS REQUIRED BY THE CITY OF ALBUQUERQUE FOR THE PREPARATION OF "AS CONSTRUCTED" DRAWINGS. CONTRACTOR SHALL NOT COVER UTILITY LINES AND ACCESSORIES UNTIL ALL DATA HAVE BEEN RECORDED.
10. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY GRAFFITI FROM ALL EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.
11. CONTRACTOR SHALL COORDINATE WITH THE CITY OF ALBUQUERQUE WATER SYSTEMS DIVISION (857-8200) FIVE (5) WORKING DAYS IN ADVANCE OF ANY WORK THAT MAY AFFECT EXISTING PUBLIC WATER OR SEWER UTILITIES. EXISTING VALVES TO BE OPERATED BY CITY PERSONNEL ONLY. CONTRACTOR SHALL CONTACT THE WATER SYSTEMS DIVISION THREE (3) WORKING DAYS BEFORE ANY NEEDING VALVES TO BE OPENED OR CLOSED.
12. FOR STORM DRAIN CONSTRUCTION, RCP JOINTS SHALL NOT BE GROUTED PRIOR TO FINAL ACCEPTANCE. FINAL INSPECTION WILL DETERMINE JOINTS TO BE GROUTED FOR FINAL ACCEPTANCE BY CITY.

- | | | |
|-----------|-------------------------------------|---|
| | ☒ | ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING. |
| | ☒ | BACKFILL COMPACTION SHALL BE ACCORDING TO SPECIFIED STREET USE. |
| F | ☐ | TACK COAT REQUIREMENTS SHALL BE DETERMINED BY THE CITY ENGINEER. |
| | ☒ | SIDEWALK AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN IS CONSTRUCTED. |
| VS
CES | ☐ | IF CURB IS DERESSED FOR A DRIVEPAD, THE DRIVEPAD SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB AND GUTTER. |
| A. | ☒ | ALL STORM DRAINAGE FACILITIES SHALL BE COMPLETED PRIOR TO FINAL ACCEPTANCE. |

SHEET NO.	SHEET
1	TITLE SHEET
2-3	PLAT
4-6	GRADING AND DRAINAGE PLAN
7	MASTER PAVING PLAN
8-9	PAVING IMPROVEMENTS
10	MASTER UTILITY PLAN
11-13	UTILITY IMPROVEMENTS
14	STORM DRAIN IMPROVEMENTS
15-16	TRAFFIC CONTROL

APPROVED AS RECORD DRAWING
DESIGN REVIEW SECTION
CITY CONSTRUCTION ENGINEER
DATE: 6/24/04

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.

dmg D. MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P. O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9533

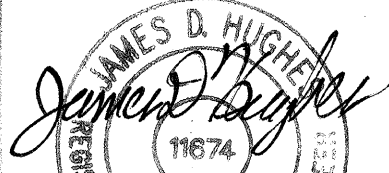
SURVEYOR'S CERTIFICATION

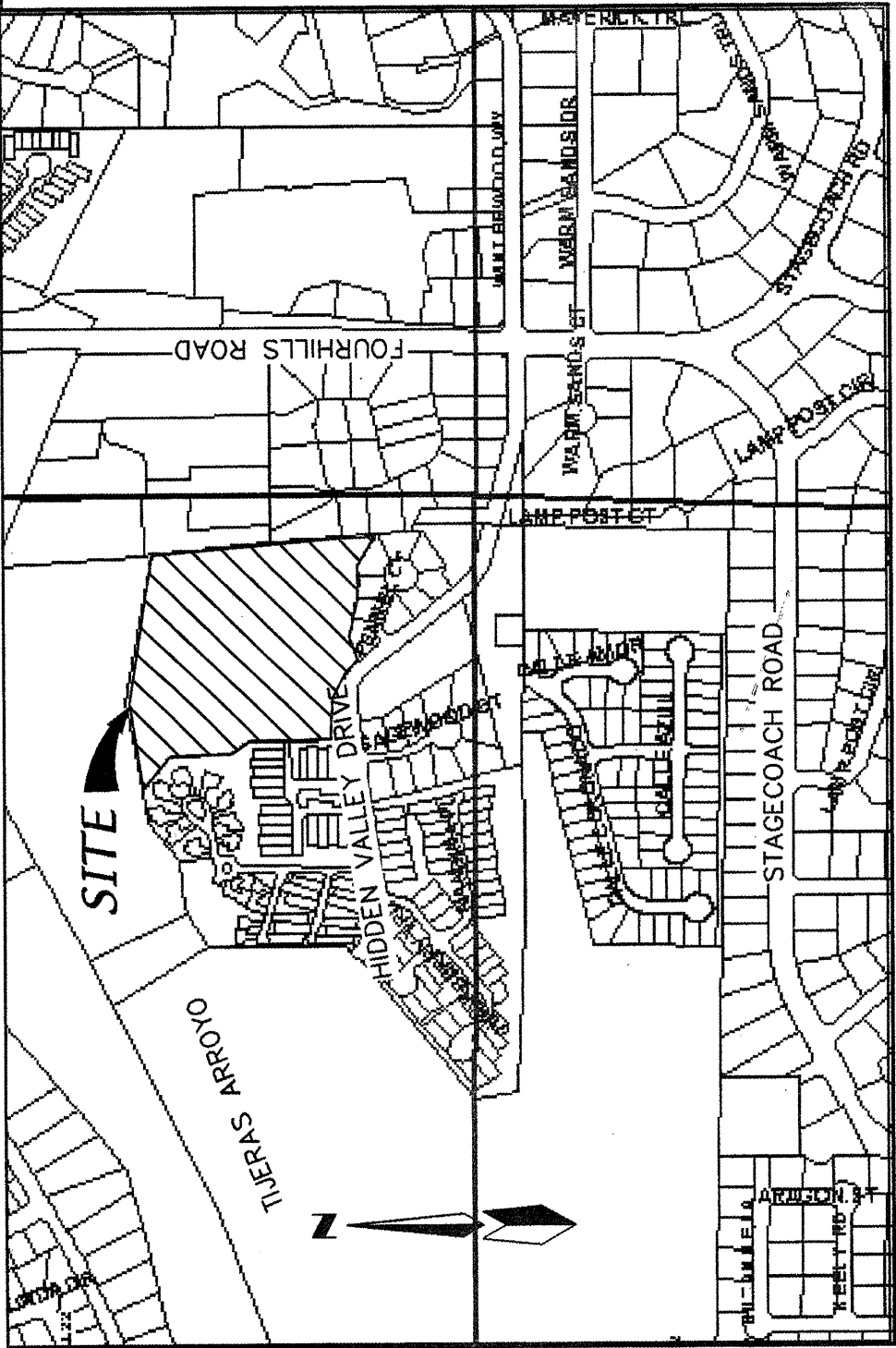
"I, Timothy Aldrich, a duly qualified Registered Professional Land Surveyor under the laws of the State of New Mexico, do hereby certify that the 'as-built' information shown on these drawings was obtained from field construction and 'as-built' surveys performed by me or under my supervision. The 'as-built' 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. Aldrich Land Surveying is not responsible for any of the design concepts, calculations, engineering, or intent of the record drawings.

Timothy Aldrich, SP 5 No 7719 Date

DRB NO.

1000313

REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE	
ENGINEERS STAMP & SIGNATURE			APPROVALS	ENGINEER	DATE	*****		
			DRC CHAIRMAN	<i>James D. Hughes</i>	2-12-02	APPROVED FOR CONSTRUCTION		
			TRANSPORTATION	<i>Mark D. Hughes</i>	2/12/02			
			WATER/WASTEWATER	<i>Robert Hughes</i>	2/12/02			
			HYDROLOGY	<i>Carl Hughes</i>	2-12-02			
			AMAFCA	<i>Lynn M. Mayes</i>	1-23-02			
			CONSTR. MNGMT.					
			CONSTR. COORD.	<i>James D. Hughes</i>	2-12-02	CITY ENGINEER DATE		
CITY PROJECT NO.			671981			SHEET OF 1 16		



LOCATION MAP
ZONE ATLAS L-22-Z
SCALE: NONE

SUBDIVISION DATA

Plat Case No's. Project # 1000313
Case #
Gross Acreage 10.9747 AC
Zone Atlas No. L-22-Z
No. of existing Tracts/Lots 1
No. of Tracts/Lots created 3 Tracts/53 Lots
No. of Tracts/Lots eliminated
Miles of full width streets created N/A
Area Private Street 1.5166 AC
Date of Survey August 1998
Utility Control Location System Log Number 980081815290465

FREE CONSENT AND DEDICATION:

The subdivision hereon described is with the free consent and in accordance with the desires of the undersigned owner(s) and/or proprietor(s) thereof and said owner(s) and/or proprietor(s) do hereby grant with warranty covenants all access, sanitary sewer, water, storm drain, utility and easements shown hereon including the right to construct, operate, inspect, and maintain facilities therein; and all public utility easements shown hereon for the common and joint use of gas, electrical power and communication services for buried distribution lines, conduits, and pipes for underground utilities where shown or indicated, and including the right of ingress and egress for construction and maintenance, and the right to trim interfering trees and shrubs (see note 10). Said owner(s) and/or proprietor(s) do hereby consent to all of the foregoing and do hereby certify that this subdivision is their free act and deed. Said owner(s) warrant that they hold among them complete and indefeasible title to the land subdivided.

VASA DEVELOPMENT CO. LTD.
BY:
ERIC YOUNGBERG, MANAGING PARTNER
OWNER'S ACKNOWLEDGMENT
DATE
STATE OF NEW MEXICO SS
COUNTY OF BERNALILLO

This instrument was acknowledged before me on _____
By Eric Youngberg, managing partner of VASA Development Co. LTD.
A New Mexico Limited partnership on behalf of said Partnership.

NOTARY PUBLIC
MY COMMISSION EXPIRES

DESCRIPTION

A tract of land situate within Section 27, Township 10 North, Range 4 East, New Mexico Principal Meridian, City of Albuquerque, Bernalillo County, New Mexico being the REMAINDER OF HIDDEN VALLEY as the same is shown and designated on said plat filed for record in the office of the County Clerk of Bernalillo County, New Mexico on September 13, 1974 in Volume D6, Folio 84 and being more particularly described as follows:

BEGINNING at the southwest corner of the herein described tract, said point being common with the southeast corner of TRACT P, HIDDEN VALLEY, PHASE 1 as the same is shown and designated on said plat filed for record in the office of the County Clerk of Bernalillo County, New Mexico on February 11, 1975 in Volume D6, Folio 120 and further being on the north right-of-way line of Hidden Valley Drive S.E. from whence the Albuquerque Control Survey Monument "S-M22" bears S 54°07'16" W, 1777.53 feet;

THENCE leaving said north right-of-way line N 02°23'41" W, 321.96 feet along a line common with the east line of said TRACT P and TRACT B, HIDDEN VALLEY, PHASE 1 as the same is shown and designated on said plat filed for record in the office of the County Clerk of Bernalillo County, New Mexico on February 11, 1975 in Volume D6, Folio 120 to a point;

THENCE continuing N 35°24'35" W, 70.13 feet to a point;

THENCE continuing N 01°18'26" W, 196.99 feet to a point

THENCE continuing N 51°46'42" W, 144.30 feet to the northwest corner, said point being common with the northeast corner of said TRACT B and further being on the south line of TRACT C-L, HIDDEN VALLEY, UNIT 2 as the same is shown and designated on said plat filed for record in the office of the County Clerk of Bernalillo County, New Mexico on February 11, 1975 in Volume D6, Folio 119;

THENCE N 78°07'47" E, 291.19 feet along a line common with the south line of said TRACT C-L to a point;

THENCE continuing S 79°39'54" E, 512.52 feet to the northeast corner, said point being on the west line of TRACT T-A-1-B, EXECUTIVE HILLS as the same is shown and designated on said plat filed for record in the office of the County Clerk of Bernalillo County, New Mexico on October 20, 1981 in Volume B19, Folio 57;

THENCE S 04°02'40" E, 737.93 feet along a line common with the west line of said TRACT 1-A-1-B and LOTS 6 THRU 8, EXECUTIVE HILLS as the same is shown and designated on said plat filed for record in the office of the County Clerk of Bernalillo County, New Mexico on January 12, 1989 in Volume C38, Folio 62 to the southeast corner, said point being common with the northeast corner of LOT 55-A, HIDDEN VALLEY, PHASE 2 as the same is shown and designated on said plat filed for record in the office of the County Clerk of Bernalillo County, New Mexico on October 22, 1975 in Volume D7, Folio 73;

THENCE N 61°38'03" W, 20.01 feet along a line common with the north line of said LOT 55-A to a point; said point being common with the northeast corner of LOT 56-A-1, HIDDEN VALLEY, PHASE 2 as the same is shown and designated on said plat filed for record in the office of the County Clerk of Bernalillo County, New Mexico on November 3, 1978 in Volume C14, Folio 43;

THENCE N 51°29'39" W, 100.09 feet along a line common with the north line of said LOT 56-A-1 to a point

THENCE continuing S 78°16'18" W, 37.88 feet to a point, said point being common with the north-east corner of LOT 57-A, HIDDEN VALLEY, PHASE 2 as the same is shown and designated on said plat filed for record in the office of the County Clerk of Bernalillo County, New Mexico on October 22, 1975 in Volume D7, Folio 73;

THENCE N 80°17'24" W, 212.87 feet along a line common with the north line of said PHASE 2, LOTS 57-A THRU 59-A to a point;

THENCE continuing S 51°43'29" W, 73.41 feet to a point on curve, said point being on said north right-of-way line of Hidden Valley Drive S.E.;

THENCE along said north right-of-way line 185.56 feet along a curve to the left, whose radius is 175.00 feet through a central angle of 60°45'11" and whose chord bears N 68°30'49" W, 176.99 feet to a point of tangency.

THENCE continuing S 81°06'35" W, 105.37 feet to the Point of Beginning and containing 10.9747 acres more or less.

LEGAL DESCRIPTION (SEE SHEET 2)

NOTES (SEE SHEET 2)

PURPOSE OF PLAT

- Subdivide a single Tract into 53 residential Lots and 3 Tracts
- Grant new easements as shown hereon
- To vacate easements as shown

SCANNED BY
MESA REPRO.
PLAT FOR
EL VALLADO SUBDIVISION
WITHIN
SECTION 27
TOWNSHIP 10 NORTH, RANGE 4 EAST, NMPM
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
OCTOBER, 2001

APPROVED AND ACCEPTED BY:

APPROVAL AND CONDITIONAL ACCEPTANCE as specified by the Albuquerque subdivision Ordinance, Chapter 14 Article 14 of the Revised Ordinances of Albuquerque, New Mexico, 1994.
Subdivision Case No. _____

Planning Director, City of Albuquerque, N.M.	Date
City Engineer, City of Albuquerque, N.M.	Date
Albuquerque Metropolitan Arroyo Flood Control Authority	Date
Transportation Development, City of Albuquerque, N.M.	Date
Utility Development Division, City of Albuquerque, N.M.	Date
Parks and Recreation	Date
City Surveyor, City of Albuquerque, N.M.	Date
Property Management, City of Albuquerque, N.M.	Date
PNM Gas	Date
PNM Electric	Date
Qwest Telecommunications	Date
Comcast Cable	Date

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 this plat and description were prepared by me or under my supervision, shows all easements as shown on the plat of record or made known to me by the owners and/or proprietors of the subdivision shown hereon, utility companies and other parties expressing an interest and meets the minimum requirements for monumentation and surveys of the Albuquerque Subdivision Ordinance, and further, meets the Minimum Standards for Land Surveying in the State of New Mexico, and is true and correct to the best of my knowledge and belief."

Timothy Aldrich P.S. No. 7719
Date

Dwg: PLAT COVER	Drawn: RDQ	Checked: ALS	Sheet
Scale: AS SHOWN	Date: 10/12/01	Job: A00036	1 of 4

PLAT FOR
EL VALLADO SUBDIVISION
WITHIN
SECTION 27
TOWNSHIP 10 NORTH, RANGE 4 EAST, NMPM
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
OCTOBER, 2001

- All street centerline monumentation shall be installed at all centerline p.c's, p.t's, angle points, and street intersections and shown thus ▲, will be marked by a four inch (4") aluminum cap stamped: "City of Albuquerque Centerline Monumentation" "Do Not Disturb" "PLS # 7719".
- A 10' private drainage easement (pde) is granted on some side lot lines and on rear lot lines where they abut the sideyard of the adjacent lot, to be maintained jointly by the adjoiners. The easements on lots 31 thru 37 are for the benefit of Tract B and the offside drainage area east of this development.
- Tract A and B are Open Space Tracts granted for the benefit of the Hidden Valley Homeowner's Association and to be maintained by same, except for drainage related maintenance that will remain with AMAT-CA.
- Tracts C is hereby conveyed in fee simple to the Hidden Valley Homeowners Association as Common Area for Private Street by this plat. A private access and private drainage easement is granted to each lot owner across Tract by this plat. Maintenance and operation of the private streets shall be the responsibility of Hidden Valley Homeowner's Association.
- Tract C is also a Private Water and Sanitary sewer line easement granted to the Hidden Valley Homeowner's Association by this plat and to be maintained by the same.
- All open space requirements are to be met on the lot with the dwelling, or total remaining open space requirements are to be met via a cash payment to the City of Albuquerque per the provisions of section 14-16-3-6 (a) (2).

NOTES

- Bearings are grid based on the New Mexico State Plane Coordinate System (Central Zone).
- Distances are ground distances.
- Bearings and distances in parenthesis are record.
- Basis of boundary are the following plats of record entitled:
PLAT FOR "HIDDEN VALLEY", (09-13-74, D6-84)
PLAT FOR "HIDDEN VALLEY, PHASE 1", (02-11-75, D6-120)
PLAT FOR "HIDDEN VALLEY, UNIT 2", (02-11-75, D6-119)
PLAT FOR "HIDDEN VALLEY, PHASE 2", (10-22-75, D7-73)
PLAT FOR "HIDDEN VALLEY, PHASE 2", (11-03-78, C14-43)
PLAT FOR "EXECUTIVE HILLS", (10-20-81, B19-57)
PLAT FOR "EXECUTIVE HILLS", (05-21-86, C30-112)
PLAT FOR "EXECUTIVE HILLS", (01-12-89, C38-62) all being records of Bernalillo County, New Mexico.
- Field Survey performed in March 18, 1994
- Benchmark for this plat is ACS control point "S-M22 Elev. 5594.518(NGVD 1929).
- Unless otherwise noted all corners are set 5/8" rebar with cap ALS LS 7719"
- UTILITY COUNCIL LOCATION SYSTEM LOG NO.: 980081815290465
(Effective Date: 08-04-98)
- Title Report: Policy No. 02980990 provided by First American Title Company
- PUBLIC UTILITY EASEMENTS shown on this plat are granted for the common and joint use of:
A. The PNM Electric Services Division for the installation, maintenance and service of overhead and underground electrical lines, transformers, poles and any other equipment, fixtures, structures and related facilities reasonably necessary to provide electrical services.
B. The PNM Gas Services Division for installation, maintenance and services of natural gas lines, valves and other equipment and facilities reasonably necessary to provide natural gas.
C. Qwest for installation, maintenance and service of all buried and aerial communication lines and other related equipment and facilities reasonably necessary to provide communication services, including but not limited to above ground pedestals and cables.
D. Comcast cable for 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 the free electric transformers and related easement, including sufficient working area space for electric transformers with the right and privilege to trim and remove trees, shrubs and bushes which interfere with the purposes set forth herein and remove trees, shrubs (above ground or subsurface) hot tub, concrete or wood pool deck, any 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 Electrical Safety Code caused by construction of pools, decking or any structures adjacent to within or near easements shown on this plat.

In approving this plat, the utility companies did not conduct a Title Search of the properties shown hereon. Consequently, the utility companies do not waive or release any easement or easement rights which may have been granted by prior plat, replat or other document and which are not shown on this plat. Easements for electric transformers/switchgears, as installed, shall extend ten feet (10') in front of transformer/switchgear doors and five feet (5') on each side.

City Project # 671981, Map # L-2, Sheet 2 of 16

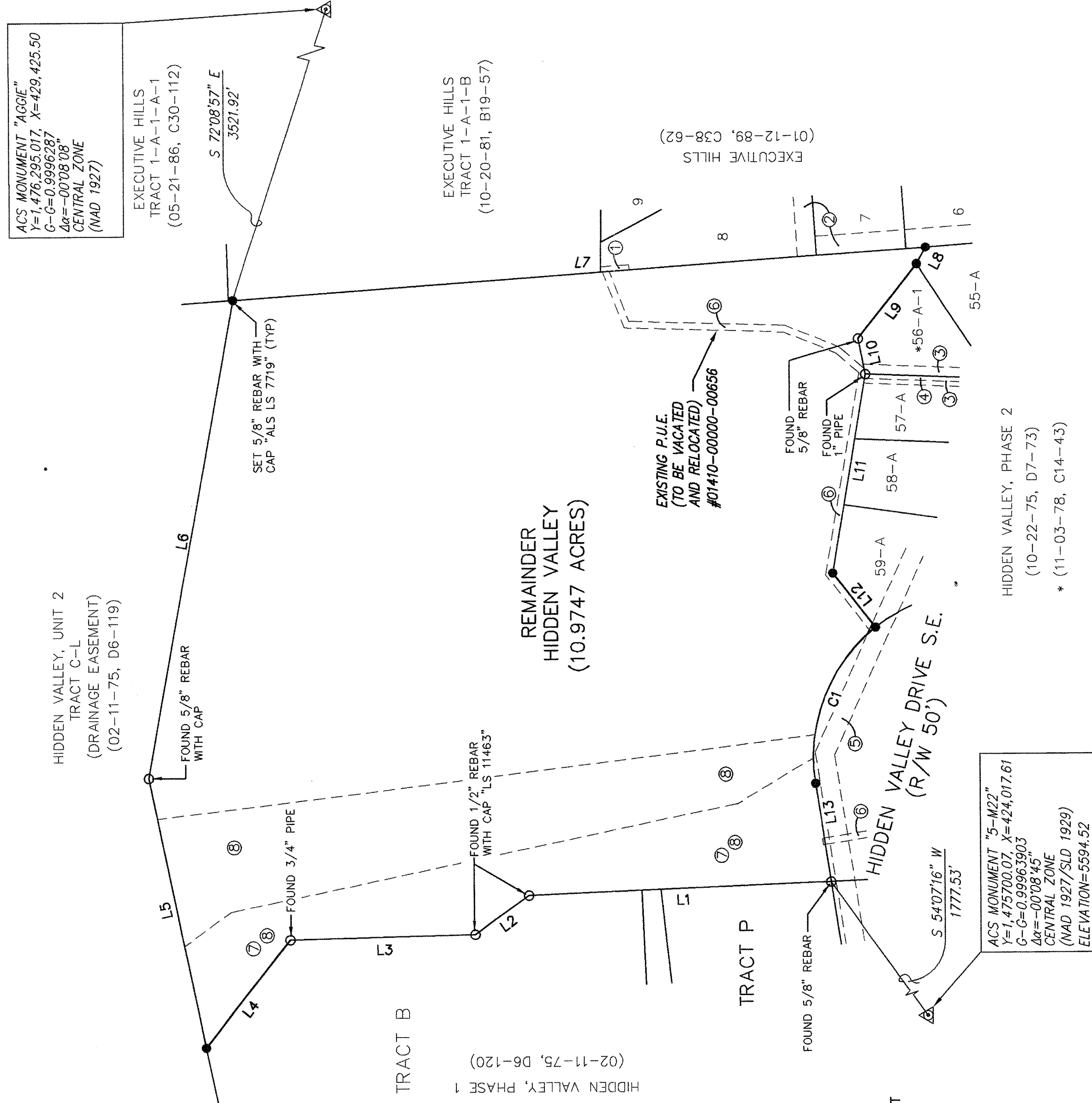
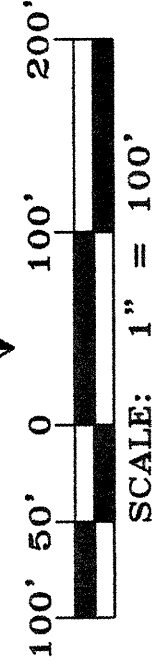
BOUNDARY CURVE DATA				
CURVE	LENGTH	DELTA	RADIUS	TANGENT
C1	185.56' (185.14')	60°45'11"	175.00'	102.58'
				176.99'

BOUNDARY LINE DATA		
LINE	DIRECTION	DISTANCE
L1	N02°23'41"W	321.96' (322.35')
L2	N35°24'35"W	70.13' (70.12')
L3	N35°48'59"W	196.99' (196.60')
L4	N01°18'26"W	144.30' (144.82')
L5	N51°46'42"W	291.19'
L6	N77°56'27"E	512.52' (512.60')
L7	S79°50'43"E	737.93' (737.93')
L8	S04°14'00"E	20.01' (20.00')
L9	N61°38'03"W	100.09' (100.09')
L10	N51°29'39"W	100.09' (100.09')
L11	S71°56'14"W	39.88' (39.80')
L12	N80°17'24"W	212.87' (213.00')
L13	S81°06'35"W	105.37' (105.37')

DATA SHOWN IN PARENTHESIS IS RECORD.

- EASEMENTS**
- EXISTING 30' X 5' POWER & COMMUNICATIONS EASEMENT (03'-16'-82", BK. MISC. 916, PG. 916)
 - EXISTING 20' PUBLIC SANITARY SEWER EASEMENT (01'-12'-89, C38-62)
 - EXISTING 10' DRAINAGE & UTILITY EASEMENT (11'-03'-78, C14-43)
 - EXISTING 5' PNM & M.S.T.&T. EASEMENT (05'-17'-77, BK. MISC. 536, PGS. 398-399)
 - EXISTING 20' SANITARY SEWER EASEMENT (09-13-74, D6-84)
 - EXISTING 7' PNM & M.S.T.&T. EASEMENT (05-17-77, BK. MISC. 536, PGS. 398-399)
 - EXISTING C.O.A. DRAINAGE EASEMENT (08-22-78, BK. MISC. 632, PGS. 810-812)
 - EXISTING A.M.A.F.C.A. DRAINAGE EASEMENT (05-11-83, BK. MISC. 134, PGS. 688-686)

SCANNED BY
MESA REPRO



EL VALLADO SUBDIVISION

WITHIN

SECTION 27
TOWNSHIP 10 NORTH, RANGE 4 EAST, NMPM
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
OCTOBER, 2001

CURVE	RADIUS	LENGTH	DELTA	TANGENT	CHORD	BRG	CHORD
C1	175.00	185.56	60°45'11"	102.58	N68°30'49"W	176.99	176.99
C2	188.00	163.55	49°50'44"	87.36	N102°31'0"E	158.44	158.44
C3	188.00	27.58	87°42'1"	13.82	N18°44'22"W	27.56	27.56
C4	188.00	19.14	58°15'05"	104.75	N08°11'00"E	185.01	185.01
C5	17.00	58.18	28°59'36"	29.71	S08°41'45"E	57.59	57.59
C6	303.00	122.26	24°03'52"	64.58	N08°28'55"W	126.33	126.33
C7	300.00	60.41	11°52'13"	30.31	N12°44'43"W	60.31	60.31
C8	300.00	80.84	17°18'42"	43.97	S07°40'45"W	80.84	80.84
C9	300.00	80.84	15°55'45"	43.97	N08°07'33"W	80.84	80.84
C10	78.00	50.15	37°48'01"	28.03	N05°59'14"W	49.24	49.24
C11	78.00	50.15	37°48'01"	28.03	N05°59'14"W	49.24	49.24
C12	78.00	100.30	75°48'43"	58.06	N41°51'23"W	93.17	93.17
C13	301.00	128.44	11°11'05"	29.47	N01°32'21"E	128.43	128.43
C14	300.00	58.76	11°11'05"	29.47	N01°32'21"E	58.67	58.67
C15	75.00	73.01	55°46'13"	39.69	N101°17'47"E	70.16	70.16
C16	75.00	62.52	47°45'55"	33.21	N62°03'51"E	60.73	60.73
C17	75.00	135.53	103°32'08"	95.20	N34°10'45"E	117.83	117.83
C18	300.00	91.83	17°32'16"	46.28	S77°10'41"W	91.47	91.47
C19	25.00	22.14	50°44'12"	11.85	N89°05'16"E	21.42	21.42
C20	25.00	16.31	37°23'05"	8.46	N45°01'37"E	16.02	16.02
C21	25.00	38.45	88°07'17"	24.19	N70°23'43"E	34.77	34.77
C22	185.00	76.07	23°53'37"	38.58	N71°51'53"W	75.54	75.54
C23	165.00	67.57	23°57'48"	34.26	N14°36'11"E	67.10	67.10
C24	200.00	32.87	9°24'55"	16.47	N16°45'17"W	32.56	32.56
C25	200.00	12.95	57°02'22"	6.48	S18°47'33"E	12.85	12.85
C26	139.00	45.20	18°37'51"	22.60	S08°48'26"E	45.20	45.20
C27	139.00	45.20	18°37'51"	22.60	S08°48'26"E	45.20	45.20
C28	139.00	45.20	18°37'51"	22.60	S08°48'26"E	45.20	45.20
C29	281.00	45.05	91°11'07"	22.57	N05°48'47"W	45.00	45.00
C30	281.00	45.05	91°11'07"	22.57	N05°48'47"W	45.00	45.00
C31	281.00	45.05	91°11'07"	22.57	N05°48'47"W	45.00	45.00
C32	322.00	10.79	155°10"	5.39	S17°33'14"E	10.79	10.79
C33	322.00	45.27	80°31'17"	22.67	S12°34'01"E	45.23	45.23
C34	322.00	14.48	2°34'36"	7.24	S07°15'05"E	14.48	14.48
C35	322.00	37.06	6°35'41"	18.55	S03°40'45"E	37.04	37.04
C36	322.00	27.69	4°55'40"	13.86	S02°04'56"W	27.69	27.69
C37	25.00	36.75	84°14'09"	22.60	N37°34'19"W	33.53	33.53
C38	281.00	85.75	16°53'00"	43.19	N88°07'53"W	85.44	85.44
C39	323.00	47.07	82°11'01"	23.58	S87°33'44"W	47.03	47.03
C40	323.00	42.40	73°11'4"	21.23	N84°30'09"W	42.37	42.37
C41	323.00	6.07	1°04'38"	3.04	N80°21'3"W	6.07	6.07
C42	98.00	21.22	122°4'16"	10.65	N72°27'46"W	21.18	21.18
C43	25.00	11.58	26°33'01"	5.90	S80°32'09"E	11.49	11.49
C44	42.00	4.47	2°00'15"	0.23	S87°11'28"W	4.47	4.47
C45	42.00	36.91	49°56'54"	18.38	N68°49'52"W	36.47	36.47
C46	42.00	7.56	1°15'28"	3.69	N26°58'14"E	7.56	7.56
C47	42.00	7.56	1°15'28"	3.69	N26°58'14"E	7.56	7.56
C48	25.00	11.58	26°33'01"	5.90	S80°32'09"E	11.48	11.48
C49	98.00	21.22	122°4'16"	10.65	N72°27'46"W	21.18	21.18
C50	323.00	25.41	4°30'29"	12.71	N01°42'57"W	25.41	25.41
C51	323.00	37.84	6°40'36"	18.84	S06°19'17"W	37.66	37.66
C52	278.00	7.86	1°37'14"	3.93	S06°19'17"W	7.86	7.86
C53	278.00	45.22	9°19'08"	22.66	S00°51'06"W	45.13	45.13
C54	278.00	45.18	9°18'44"	22.64	S08°27'50"E	45.13	45.13
C55	278.00	21.68	4°29'08"	10.85	S15°21'16"E	21.68	21.68
C56	97.00	23.96	14°09'01"	12.04	N10°30'49"W	23.89	23.89
C57	97.00	21.52	12°42'49"	10.81	N02°55'06"E	21.48	21.48
C58	25.00	14.29	32°45'30"	7.35	S07°06'15"E	14.10	14.10
C59	42.00	11.87	16°11'33"	5.97	N15°31'4"W	11.83	11.83
C60	42.00	37.34	50°56'22"	20.01	N18°10'44"E	36.12	36.12
C61	42.00	15.70	21°25'08"	7.94	N54°21'29"E	15.61	15.61
C62	42.00	25.49	34°46'44"	13.15	N82°27'25"E	25.10	25.10

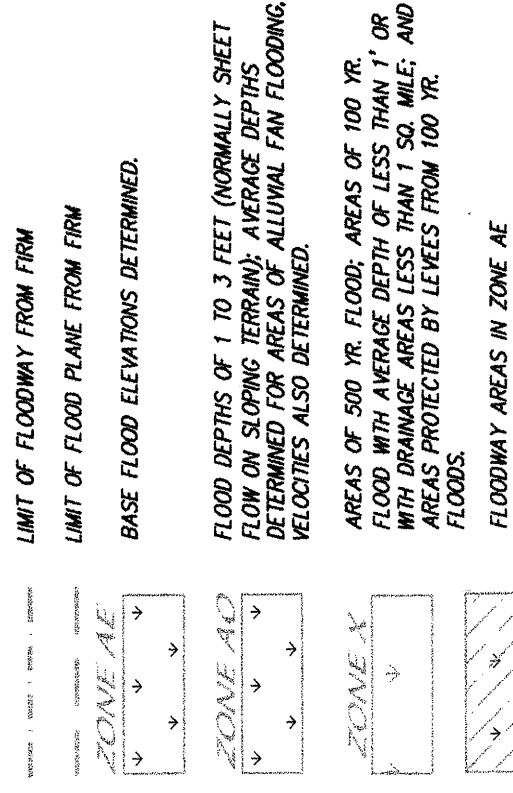
CURVE DATA CONTINUED ON SHEET 4.

Dwg: FPSHT3 Drawn: RDQ Date: 10/12/01 Checked: ALS Job: A00036 Sheet 3 of 4

EL VALLADO SUBDIVISION

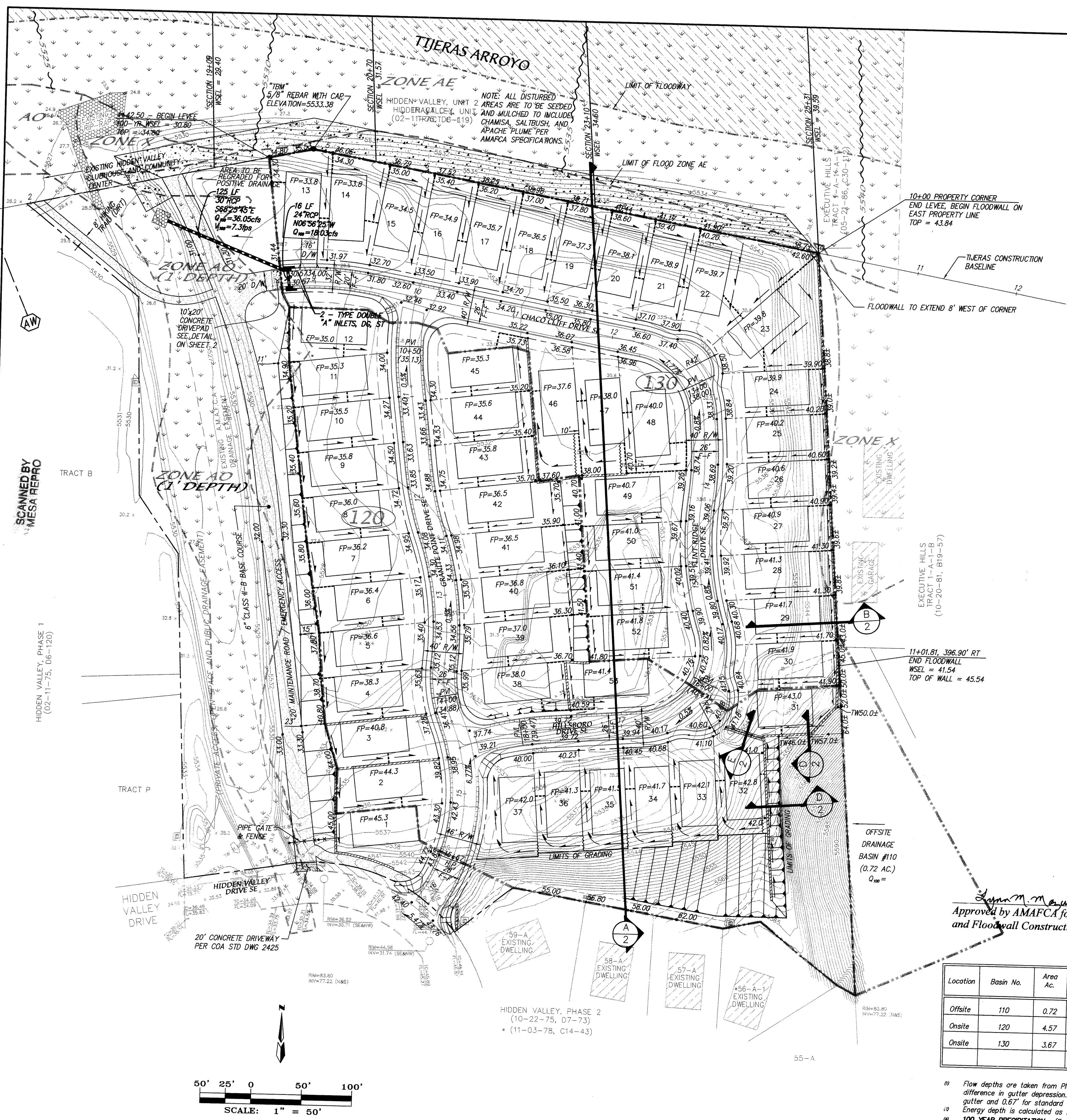
WITHIN

SECTION 27
TOWNSHIP 10 NORTH, RANGE 4 EAST, NMPM
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
OCTOBER, 2001



THE FLOOD HAZARD ZONES SHOWN HEREIN ARE BASED ON THE FLOOD INSURANCE RATE MAP FROM PANELS #00010087 & #00010088 EFFECTIVE SEPTEMBER 20, 1998.

CURVE TABLE						
CURVE	RADIUS	LENGTH	DELTA	TANGENT	CHORD	BRG
C63	25.00	10.02	22°57'31"	5.08	N88°22'02"E	9.95
C64	97.00	6.13	337'06"	3.08	N68°53'50"E	6.12
C65	97.00	25.80	15°14'26"	12.98	N78°19'36"E	25.73
C66	278.00	17.81	3°40'13"	8.91	S84°06'44"W	17.80
C67	278.00	25.52	5°15'36"	12.77	S79°38'51"W	25.51
C68	25.00	35.17	80°36'20"	21.20	S36°42'53"W	32.34
C69	21.00	77.39	21°00'53"	38.13	N05°55'09"E	76.96
C70	21.00	51.33	13°56'20"	25.79	N24°24'46"E	51.21
C71	25.00	27.66	63°22'58"	15.44	S00°19'33"E	26.27
C72	98.00	28.71	90°02'70"	14.46	S05°42'21"E	28.62
C73	98.00	28.71	90°02'70"	14.46	S05°42'21"E	28.62
C74	99.00	40.50	71°33'42"	20.28	N01°56'12"E	40.47
C75	99.00	28.72	16°37'13"	14.46	S05°42'21"E	28.62
C76	99.00	5.09	2°56'47"	2.55	S04°04'39"W	5.09
C77	321.00	45.05	8°02'25"	22.56	N05°41'52"W	45.01
C78	321.00	45.37	8°05'55"	22.72	N13°46'01"W	45.34
C79	282.00	41.56	8°26'40"	20.82	S14°17'29"E	41.53
C80	282.00	41.56	8°26'40"	20.82	S14°17'29"E	41.53
C81	282.00	41.56	8°26'40"	20.82	S14°17'29"E	41.53
C82	25.00	37.60	3°07'54"	18.93	S03°07'54"E	37.77
C83	25.00	43.47	88°37'54"	28.60	S00°31'08"W	38.20
C84	58.00	76.54	75°36'43"	45.00	N41°51'33"W	71.11
C85	283.00	25.94	4°15'08"	12.98	N04°30'20"E	25.93
C86	283.00	25.94	4°15'08"	12.98	N04°30'20"E	25.93
C87	318.00	24.86	4°26'37"	12.34	S04°54'36"W	24.86
C88	318.00	24.86	4°26'37"	12.34	S04°54'36"W	24.86
C89	318.00	24.86	4°26'37"	12.34	S04°54'36"W	24.86
C90	57.00	23.42	23°32'28"	11.88	N05°49'06"W	23.29
C91	57.00	79.58	79°59'41"	47.82	N45°36'58"E	73.27
C92	318.00	55.51	10°00'06"	27.83	S00°56'45"W	55.44
C93	318.00	101.86	33°20'47"	52.41	N87°19'33"E	100.42
C94	25.00	27.66	63°22'58"	15.44	S00°19'33"E	26.27
C95	175.00	39.50	12°38'12"	19.33	N24°08'20"E	38.63
C96	165.00	100.18	34°47'18"	51.69	N08°56'26"E	98.63
C97	200.00	45.41	13°00'31"	22.80	N14°57'29"W	45.31
C98	139.00	65.53	27°00'47"	33.39	N07°57'21"E	64.93
C99	281.00	118.02	24°03'52"	59.89	N08°28'53"W	117.16
C100	322.00	70.53	12°13'02"	35.41	N01°18'31"W	70.01
C101	322.00	67.76	11°31'21"	34.19	S01°18'31"E	64.89
C102	322.00	67.76	11°31'21"	34.19	S01°18'31"E	64.89
C103	42.00	78.17	103°58'14"	53.66	N41°51'33"W	66.13
C104	323.00	63.05	11°11'05"	31.63	N01°32'21"E	62.98
C105	278.00	119.94	24°43'14"	60.92	S00°13'43"E	119.02
C106	97.00	45.48	28°51'48"	23.17	N04°09'25"W	45.06
C107	42.00	90.41	12°19'18"	45.48	N81°10'53"E	73.94
C108	25.00	14.29	32°45'30"	7.35	S83°28'02"W	14.10
C109	278.00	17.81	3°40'13"	8.91	S84°06'44"W	17.80
C110	278.00	43.33	8°55'46"	21.71	S01°28'55"E	43.28
C111	21.00	128.72	34°57'13"	66.43	N13°53'19"E	126.73
C112	21.00	128.72	34°57'13"	66.43	N13°53'19"E	126.73
C113	99.00	33.81	19°34'01"	17.07	S04°13'25"E	33.65
C114	321.00	134.62	24°03'52"	68.42	N08°28'53"W	133.83
C115	282.00	56.78	11°37'13"	28.49	S17°44'31"E	56.68
C116	282.00	56.78	11°37'13"	28.49	S17°44'31"E	56.68
C117	282.00	56.78	11°37'13"	28.49	S17°44'31"E	56.68
C118	25.00	37.60	3°07'54"	18.93	S03°07'54"E	37.77
C119	25.00	103.00	32°33'38"	72.35	N41°51'33"W	103.00
C120	200.00	12.54	03°35'36"	6.22	N01°05'01"W	12.54
C121	321.00	45.05	8°02'25"	22.56	N05°41'52"E	45.01
C122	321.00	45.37	8°05'55"	22.72	N13°46'01"E	45.34
C123	282.00	41.56	8°26'40"	20.82	S14°17'29"E	41.53
C124	282.00	41.56	8°26'40"	20.82	S14°17'29"E	41.53
C125	282.00	41.56	8°26'40"	20.82	S14°17'29"E	41.53
C126	25.00	37.60	3°07'54"	18.93	S03°07'54"E	37.77
C127	25.00	43.47	88°37'54"	28.60	S00°31'08"W	43.47
C128	58.00	76.54	75°36'43"	45.00	N41°51'33"W	76.54
C129	283.00	25.94	4°15'08"	12.98	N04°30'20"E	25.94
C130	283.00	25.94	4°15'08"	12.98	N04°30'20"E	25.94
C131	318.00	24.86	4°26'37"	12.34	S04°54'36"W	24.86
C132	318.00	24.86	4°26'37"	12.34	S04°54'36"W	24.86
C133	318.00	24.86	4°26'37"	12.34	S04°54'36"W	24.86
C134	57.00	23.42	23°32'28"	11.88	N05°49'06"W	23.42
C135	57.00	79.58	79°59'41"	47.82	N45°36'58"E	79.58
C136	318.00	55.51	10°00'06"	27.83	S00°56'45"W	55.51
C137	318.00	101.86	33°20'47"	52.41	N87°19'33"E	101.86
C138	25.00	27.66	63°22'58"	15.44	S00°19'33"E	27.66
C139	175.00	39.50	12°38'12"	19.33	N24°08'20"E	39.50
C140	165.00	100.18	34°47'18"	51.69	N08°56'26"E	100.18
C141	200.00	45.41	13°00'31"	22.80	N14°57'29"W	45.41
C142	139.00	65.53	27°00'47"	33.39	N07°57'21"E	65.53
C143	281.00	118.02	24°03'52"	59.89	N08°28'53"W	118.02
C144	322.00	70.53	12°13'02"	35.41	N01°18'31"W	70.53
C145	322.00	67.76	11°31'21"	34.19	S01°18'31"E	67.76
C146	322.00	67.76	11°31'21"	34.19	S01°18'31"E	67.76
C147	42.00	78.17	103°58'14"	53.66	N41°51'33"W	78.17
C148	323.00	63.05	11°11'05"	31.63	N01°32'21"E	63.05
C149	278.00	119.94	24°43'14"	60.92	S00°13'43"E	119.94
C150	97.00	45.48	28°51'48"	23.17	N04°09'25"W	45.48
C151	42.00	90.41	12°19'18"	45.48	N81°10'53"E	90.41
C152	25.00	14.29	32°45'30"	7.35	S83°28'02"W	14.29
C153	278.00	17.81	3°40'13"	8.91	S84°06'44"W	17.81
C154	278.00	43.33	8°55'46"	21.71	S01°28'55"E	43.33
C155	21.00	128.72	34°57'13"	66.43	N13°53'19"E	128.72
C156	21.00	128.72	34°57'13"	66.43	N13°53'19"E	128.72
C157	99.00	33.81	19°34'01"	17.07	S04°13'25"E	33.81
C158	321.00	134.62	24°03'52"	68.42	N08°28'53"W	134.62
C159	282.00	56.78	11°37'13"	28.49	S17°44'31"E	56.78
C160	282.00	56.78	11°37'13"	28.49	S17°44'31"E	56.78
C161	282.00	56.78	11°37'13"	28.49	S17°44'31"E	56.78
C162	25.00	37.60	3°07'54"	18.93	S03°07'54"E	37.60
C163	25.00	43.47	88°37'54"	28.60	S00°31'08"W	43.47
C164	58.00	76.54	75°36'43"	45.00	N41°51'33"W	76.54
C165	283.00	25.94	4°15'08"	12.98	N04°30'20"E	25.94
C166	283.00	25.94	4°15'08"	12.98	N04°30'20"E	25.94
C167	318.00	24.86	4°26'37"	12.34	S04°54'36"W	24.86
C168	318.00	24.86	4°26'37"	12.34	S04°54'36"W	24.86
C169	318.00	24.86	4°26'37"	12.34	S04°54'36"W	24.86
C170	57.00	23.42	23°32'28"	11.88	N05°49'06"W	23.42
C171	57.00	79.58	79°59'41"	47.82	N45°36'58"E	79.58
C172	318.00	55.51	10°00'06"	27.83	S00°56'45"W	55.51
C173	318.00	101.86	33°20'47"	52.41	N87°19'33"E	101.86
C174	25.00	27.66	63°22'58"	15.44	S00°19'33"E	27.66
C175	175.00	39.50	12°38'12"	19.33	N24°08'20"E	39.50
C176	165.00	100.18	34°47'18"	51.69	N08°56'26"E	100.18
C177	200.00	45.41	13°00'31"	22.80	N14°57'29"W	45.41
C178	139.00	65.53	27°00'47"	33.39	N07°57'21"E	65.53
C179	281.00	118.02	24°03'52"	59.89	N08°28'53"W	118.02
C180	322.00	70.53	12°13'02"	35.41	N01°18'31"W	70.53
C181	322.00	67.76	11°31'21"	34.19	S01°18'31"E	67.76
C182	322.00	67.76	11°31'21"	34.19	S01°18'31"E	67.76
C183	42.00	78.17	103°58'14"	53.66	N41°51'33"W	78.17
C184	323.00	63.05	11°11'05"	31.63	N01°32'21"E	63.05
C185	278.00	119.94	24°43'14"	60.92	S00°13'43"E	119.94
C186	97.00	45.48	28°51'48"	23.17	N04°09'25"W	45.48
C187	42.00	90.41	12°19'18"	45.48	N81°10'53"E	90.41
C188	25.00	14.29	32°45'30"	7.35	S83°28'02"W	14.29
C189	278.00	17.81	3°40'13"	8.91	S84°06'44"W	17.81
C190	278.00	43.33	8°55'46"	21.71	S01°28'55"E	43.33
C191	21.00	128.72	34°57'13"	66.43	N13°53'19"E	128.72
C192	21.00	128.72	34°57'13"	66.43	N13°53'19"E	128.72
C193	99.00	33.81	19°34'01"	17.07	S04°13'25"E	33.81
C194	321.00	134.62	24°03'52"	68.42	N08°28'53"W	134.62
C195	282.00	56.78	11°37'13"	28.49	S17°44'31"E	56.78
C196	282.00	56.78	11°37'13"	28.49	S17°44'31"E	56.78
C197	282.00	56.78	11°37'13"	28.49	S17°44'31"E	56.78
C198	25.00	37.60	3°07'54"	18.93	S03°07'54"E	37.60
C199	25.00	43.47	88°37'54"	28.60	S00°31'08"W	43.47
C200	58.00	76.54	75°36'43"	45.00	N41°51'33"W	76.54
C201	283.00	25.94	4°15'08"	12.98	N04°30'20"E	25.94
C202	283.00	25.94	4°15'08"	12.98	N04°30'20"E	25.94
C203	318.00	24.86	4°26'37"	12.34	S04°54'36"W	24.86
C204	318.00	24.86	4°26'37"	12.34	S04°54'36"W	24.86
C205	318.00	24.86	4°26'37"	12.34	S04°54'36"W	24.86
C206	57.00	23.42	23°32'28"	11.88	N05°49'06"W	23.42
C207	57.00	79.58	79°59'41"	47.82	N45°36'58"E	79.58
C208	318.00	55.51	10°00'06"	27.83	S00°56'45"W	55.51
C209	318.00	101.86	33°20'47"	52.41	N87°19'33"E	101.86
C210	25.00	27.66	63°22'58"	15.44	S00°19'33"E	27.66
C211	175.00	39.50	12°38'12"	19.33	N24°08'20"E	39.50
C212	165.00	100.18	34°47'18"	51.69	N08°56'26"E	100.18
C213	200.00	45.41	13°00'31"	22.80	N14°57'29"W	45.41
C214	139.00	65.53	27°00'47"	33.39	N07°57'21"E	65.53
C215	281.00	118.02	24°03'52"	59.89	N08°28'53"W	118.02
C216	322.00	70.53	12°13'02"	35.41	N01°18'31"W	70.53
C217	322.00	67.76	11°31'21"	34.19	S01°18'31"E	67.76
C218	322.00					



EXISTING CONDITIONS
THIS 11 ACRE SITE IS CURRENTLY UNDEVELOPED AND DOES NOT PRODUCE SURFACE WATER RUNOFF. IT IS PROTECTED FROM THE TIJERAS ARROYO BY A LEVEE ON THE NORTH BOUNDARY AND FROM AN AMAFCA MAINTAINED EARTH LINED CHANNEL (100' x 450' CFS) ON THE WEST ALSO BY A LEVEE. THE TWO LEVEES (3' TO 10' HIGH) PREVENT ON-SITE SURFACE DRAINAGE FROM LEAVING THE SITE. IN ADDITION TO THE AMAFCA CHANNEL RUNNING THROUGH THE WEST SIDE OF THE SITE THERE IS A SMALL EXISTING OFFSITE DRAINAGE AREA AT THE SOUTH EAST CORNER WHICH DRAINS INTO THIS SITE.

DRAINAGE MANAGEMENT PLAN
FREE DISCHARGE TO THE TIJERAS ARROYO IS ANTICIPATED. THE EXISTING FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE STUDY (FIS) INDICATES 100 YR. FLOWS OF 13,600 CFS, BUT SEPARATE STUDIES INDICATE FUTURE 100 YR. FLOWS IN THE TIJERAS ARROYO OF ABOUT 22,600 CFS (FROM TIJERAS ARROYO DRAINAGE MANAGEMENT PLAN (DMP), PHASE I, AUGUST 1987, BY LEEDSHILL HERKENHOFF, INC.). THE FIS IDENTIFIES 500 YR. FLOWS OF ABOUT 28,000 CFS AND THE PROFILES IN THAT REPORT SHOW AN APPROXIMATE INCREASE IN WATER SURFACE ELEVATION OF ABOUT 1.5' FROM THE 100 YR. TO THE 500 YR. ELEVATIONS. GENERALLY SPEAKING THE REQUIRED FREEBOARD FOR LEVEES IS 3' ABOVE THE 100 YR. STORM, BUT HERE ONE ADDITIONAL FOOT WILL BE PROVIDED. SO, THE TOP OF THE LEVEE IS SET 4' ABOVE THE 100 YR. WATER SURFACE ELEVATION FROM THE FIS WHICH IS ALSO ABOUT 3' ABOVE THE WSEL THAT MAY RESULT IF THE FUTURE 100 YR. FLOWS ARE INCREASED TO 22,600 CFS. A SCOUR WALL OF SOIL CEMENT WILL BE CONSTRUCTED ADJACENT TO THE TIJERAS ARROYO TO PREVENT LATERAL MIGRATION OF THE ARROYO INTO THIS DEVELOPMENT.

A SEPARATE STUDY DONE BY AYRES ASSOCIATES FOR AMAFCA DATED JULY 1998, USED A 100 YR. FLOW OF 18,065 CFS IN A NEW HEC-RAS HYDRAULIC MODEL AND CAME UP WITH SOME 100 YR. WATER SURFACE ELEVATIONS THAT ARE ABOUT 1.0' LOWER IN PLACES THAN THE ELEVATIONS IN THE CURRENT EFFECTIVE FIS. "THE LONG TERM EROSION ANALYSIS IN THE STUDY PREDICTED AS MUCH AS 2.8' OF DEPOSITION IN THIS REACH" (SEC 6.1) AND RECOMMENDS 3' OF FREEBOARD. BY ADDING 4' FREEBOARD TO THE FIS ELEVATION THIS DEVELOPMENT WILL MEET AND/OR EXCEED THE REQUIREMENTS OF THE AYRES REPORT. "SUMMING THE RESULTS FROM THE LONG-TERM AND SINGLE EVENT ANALYSIS INDICATES 3.3 TO 4.8 FEET OF POTENTIAL CHANNEL SCOUR FOR THE HIDDEN VALLEY SUBDIVISION AND THE UNDEVELOPED LAND" (PAGE 6.4). FOLLOWING THE RECOMMENDATIONS OF THE AYRES REPORT THE NORTH SIDE OF THIS SUBDIVISION WILL BE PROTECTED BY A SCOUR WALL OF SOIL CEMENT FROM A HEIGHT OF 4' ABOVE THE 100 YR. WATER SURFACE ELEVATION TO A DEPTH 5' BELOW THE INVERT OF THE TIJERAS ARROYO.

THE EXISTING AMAFCA CHANNEL ON THE WEST SIDE WILL REMAIN AS IS. THE CURRENTLY MAPPED FLOODPLAIN ENDOCHORES INTO SOME OF THE LOTS AND MAY BE REVERSED BY A LETTER OF MAP REVISION (LOMR) TO REFLECT THE EXISTING AMAFCA CHANNEL. THE MINOR OFFSITE FLOWS WILL BE RECEIVED BY PRIVATE DRAINAGE ON THE INDIVIDUAL LOTS IN THE NORTH EAST CORNER AND CONVEYED BY SURFACE DRAINAGE IN THE INTERNAL PRIVATE STREETS AND DISCHARGED INTO THE AMAFCA CHANNEL AT THE NORTH WEST CORNER OF THE SITE. A COMBINATION OF ROLL AND STANDARD CURB AND GUTTER WILL BE USED ON THE INTERNAL STREETS AS NECESSARY TO KEEP THE NORMAL DEPTH OF THE 100 YR. FLOW BELOW THE TOP OF CURB AND THE ENERGY GRADE LINE WITHIN THE PRIVATE ROADWAY TRACT AND OUT OF THE INDIVIDUAL PRIVATE LOTS.

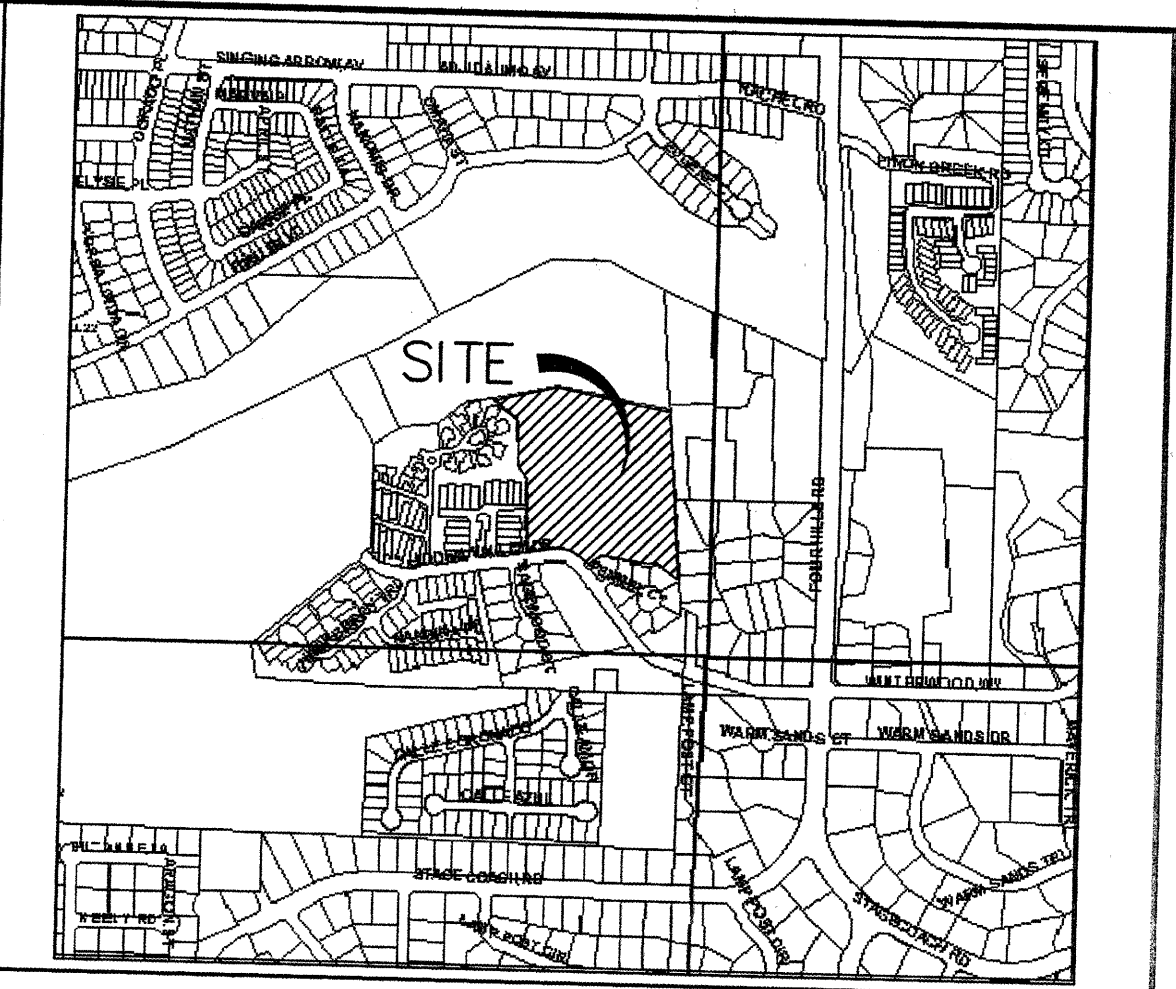
SUMP INLET CAPACITY
CAPACITY IS MEASURED BY THE WEIR EQUATION AT THE LIP OF GUTTER ASSUMING AN ALLOWABLE PONDING ELEVATION EQUAL TO THE LOWEST ADJACENT RIGHT-OF-WAY ELEVATION. THE LENGTH OF THE DOUBLE GRATE FACING THE STREET IS 6.5'± AND THE DEPTH IS 0.725'± AT THE LIP OF THE GUTTER. THE SIDES ARE EACH 2' LONG (4' TOTAL) AND THE AVERAGE DEPTH IS 0.892'± FROM THE WEIR EQUATION:
 $(Front) Q_{w0} = 3.0 \times 6.5' \times 0.725^{1.5} = 12.04 \text{ cfs}$
 $(Sides) Q_{w0} = 3.0 \times 4.0' \times 0.892^{1.5} = 10.11 \text{ cfs}$
 $(Total) Q_{w0} = 6.02 \text{ cfs} + 10.11 \text{ cfs} = 22.15 \text{ cfs}$

* NOTE:
THESE DEPTHS ASSUME STANDARD 8" CURB WITH THE RIGHT-OF-WAY 9' BEHIND THE CURB AND 0.18' ABOVE THE TOP OF THE CURB.
THE 100-YEAR FLOW TO THE SUMP INLETS IS 36.05 cfs. TWO INLETS HAVE A CAPACITY OF 44.30 cfs THUS PROVIDING A SAFETY FACTOR THAT WOULD ALLOW 19% OF THE INLET TO CLOG WITHOUT EXCEEDING THE NORMAL DESIGN CRITERIA.

SUMMARY OF HYDROLOGY

100 Year Flow (cfs) ^{a)}		Curb Type/Slope	Flow Depth ft. ^{b)}	Velocity f/s	Energy Depth ft. ^{c)}
Increment	Cumm.				
2.73	--	N/A	--	--	--
18.48	21.21	Std/0.5%	0.61'	2.5	0.71'
14.84		Roll/1.77%	0.32'	3.2	0.48'
	36.05	Std/1.77%	0.49'	4.5	0.80'

^{a)} 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 heights which are 0.33' for roll curb and gutter and 0.67' for standard curb and gutter.
^{b)} Energy depth is calculated as flow depth plus energy head. Allowable depths are 0.20' above the top of curb.
^{c)} 100 YEAR PRECIPITATION (From Figures D, E and F, and Eq. 28 of DPM 22.2) $P_{100} = 2.07"$, $P_{30} = 2.60"$, $P_{10} = 3.25"$.



VICINITY MAP ZONE MAP: L-22-Z

TBM (TEMPORARY BENCHMARK)

ACS BENCHMARK
STATION IS LOCATED 8.7 MI. SE OF DOWNTOWN ALBUQUERQUE ON THE EAST SIDE OF THE MUNICIPAL LIMITS LINE IN THE FOUR HILLS SUBDIVISION AREA.
STATION IS 600 FT. EAST OF THE MUNICIPAL LIMITS LINE, 77.9' SE OF POWER POLE #3537, AND 186.0' NW OF POWER POLE #60.
STATION IS STANDARD ACS BRASS DISK SET IN A CONCRETE MONUMENT IN GROUND. STATION IS STAMPED "5-M22,1975ACS".
ELEVATION = 5594.518 (SLD 1929)

LEGAL DESCRIPTION

A TRACT OF LAND SITUATE WITHIN SECTION 27, TOWNSHIP 10 NORTH, RANGE 4 EAST, NEW MEXICO PRINCIPAL MERIDIAN, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO BEING THE REMAINDER OF HIDDEN VALLEY AS THE SAME IS SHOWN AND DESIGNATED ON SAID PLAT FILED FOR RECORD IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON SEPTEMBER 13, 1974 IN VOLUME D6, FOLIO 84 AND CONTAINING 10.9747 ACRES MORE OR LESS.

LEGEND

- AX - CROSS SECTION FROM FEMA'S FLOOD INSURANCE RATE STUDY
- ZONE AE - BASE FLOOD ELEVATIONS DETERMINED.
- ZONE AO - FLOOD DEPTHS OF 1 TO 3 FEET (NORMALLY SHEET FLOW ON SLOPING TERRAIN); AVERAGE DEPTHS DETERMINED FOR AREAS OF ALLUVIAL FAN FLOODING, VELOCITIES ALSO DETERMINED.
- ZONE X - AREAS OF 500 YR. FLOOD; AREAS OF 100 YR. FLOOD WITH AVERAGE DEPTH OF LESS THAN 1' OR WITH DRAINAGE AREAS LESS THAN 1 SQ. MILE; AND AREAS PROTECTED BY LEVEES FROM 100 YR. FLOODS.
- 55.35 - EXISTING CONTOUR
- 38.55 - EXISTING CURB
- 38.55 - EXISTING SPOTS
- 38.55 - EXISTING TOP OF CURB
- 38.55 - EXISTING FLOWLINE
- 38.55 - NEW RIGHT-OF-WAY
- 38.55 - NEW PADS
- 38.55 - NEW LOT LINES
- 38.55 - NEW RETAINING WALL
- 38.55 - NEW GARDEN WALL
- 38.55 - SOIL CEMENT EROSION PROTECTION
- 38.55 - LIMIT OF FLOODWAY FROM FIRM
- 38.55 - LIMIT OF FLOOD PLANE FROM FIRM
- 38.55 - WATER SURFACE CONTOURS FROM FIRM
- 38.55 - CROSS SECTION LINE & WATER SURFACE ELEVATION AYRES ASSOC. 1999
- 130 - BASIN IDENTIFICATION NUMBER
- 130 - WATER BLOCK DRAINAGE BASIN
- 130 - NEW MOUNTABLE CURB & GUTTER
- 130 - NEW STANDARD CURB & GUTTER
- 130 - LIMITS OF GRADING
- 130 - LIMITS OF FLOODWAY FROM FIRM
- 130 - LIMIT OF FLOOD PLANE FROM FIRM
- 130 - WATER SURFACE CONTOURS FROM FIRM
- 130 - CROSS SECTION LINE & WATER SURFACE ELEVATION AYRES ASSOC. 1999

THE FLOOD HAZARD ZONES SHOWN HEREON ARE BASED ON THE FLOOD INSURANCE RATE MAP, FIRM, PANELS #35001C0367 & 35001C0386 EFFECTIVE SEPTEMBER 20, 1996.

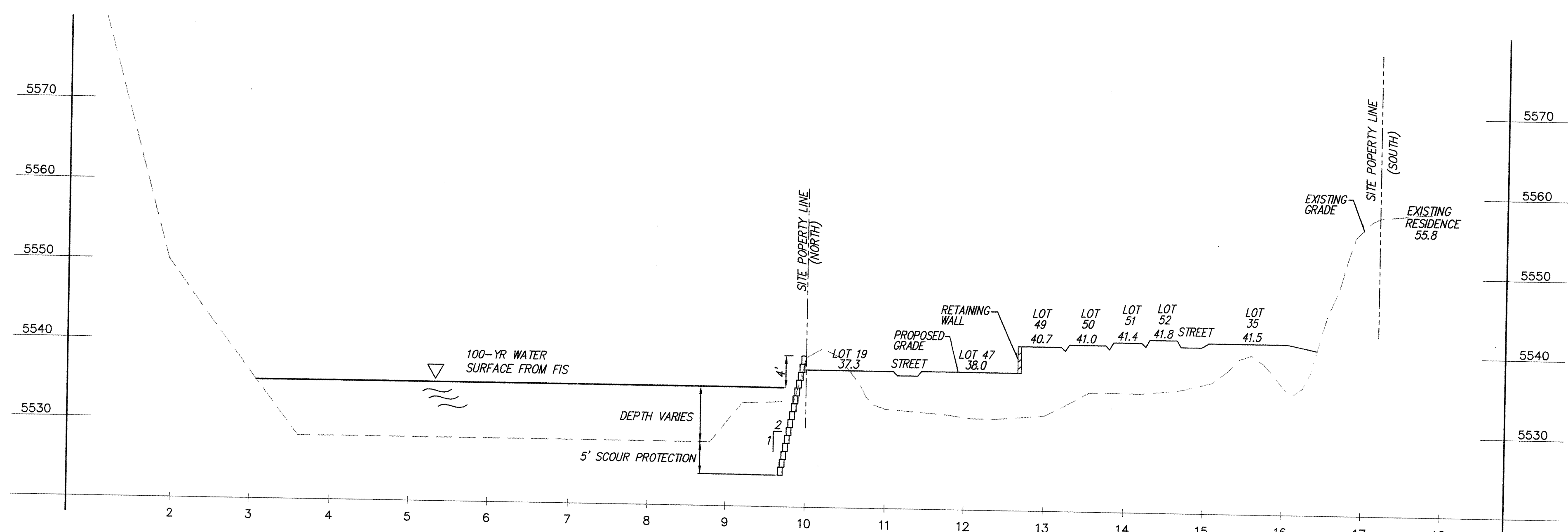
EL VALLADO SUBDIVISION

GRADING & DRAINAGE PLAN

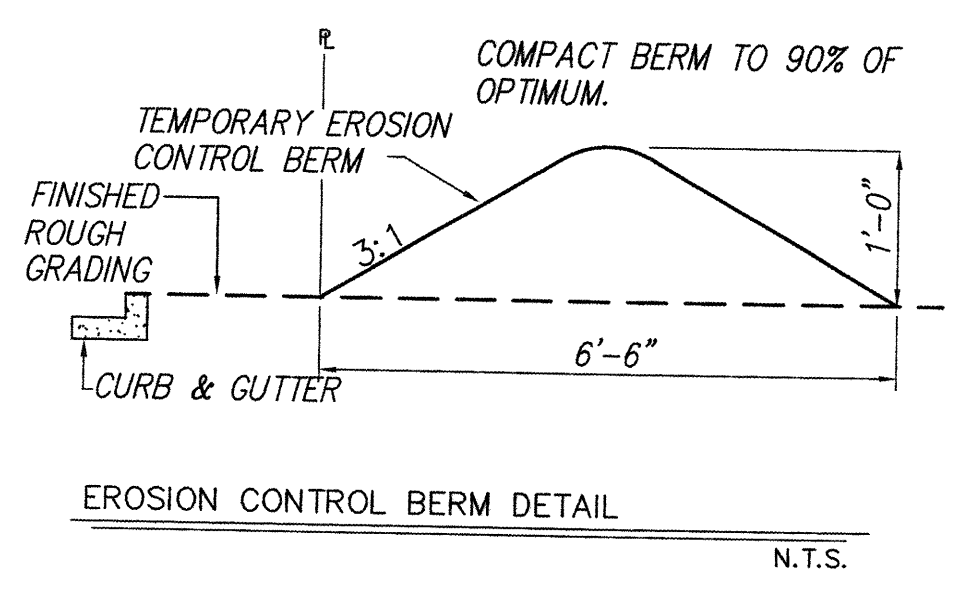
MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505)828-2200, FAX (505)797-9539

Designed: JDH Drawn: STAFF Checked: DMG
Scale: 1" = 50' Date: 01-18-01 Job: A00036 Sheet 4 of 16

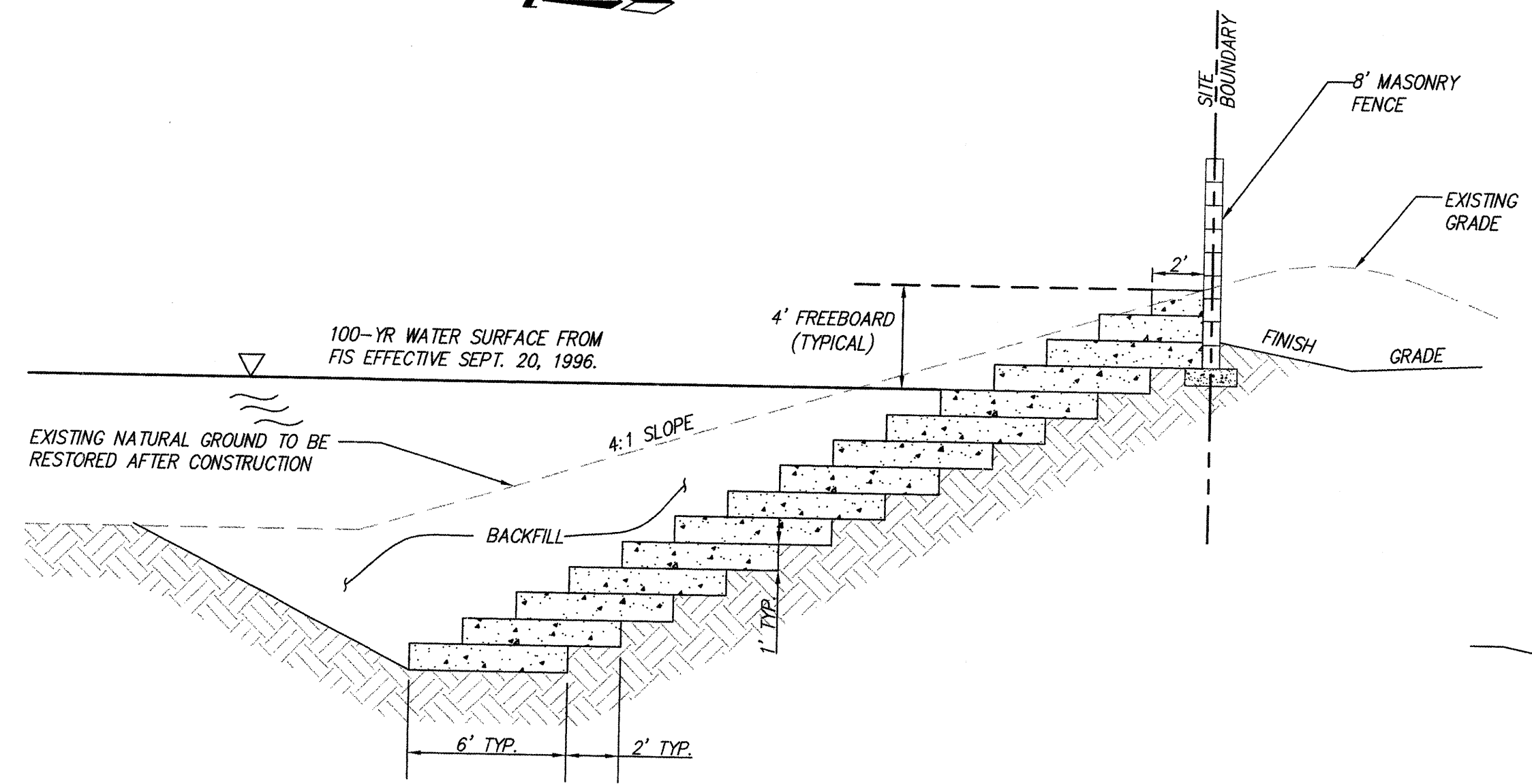
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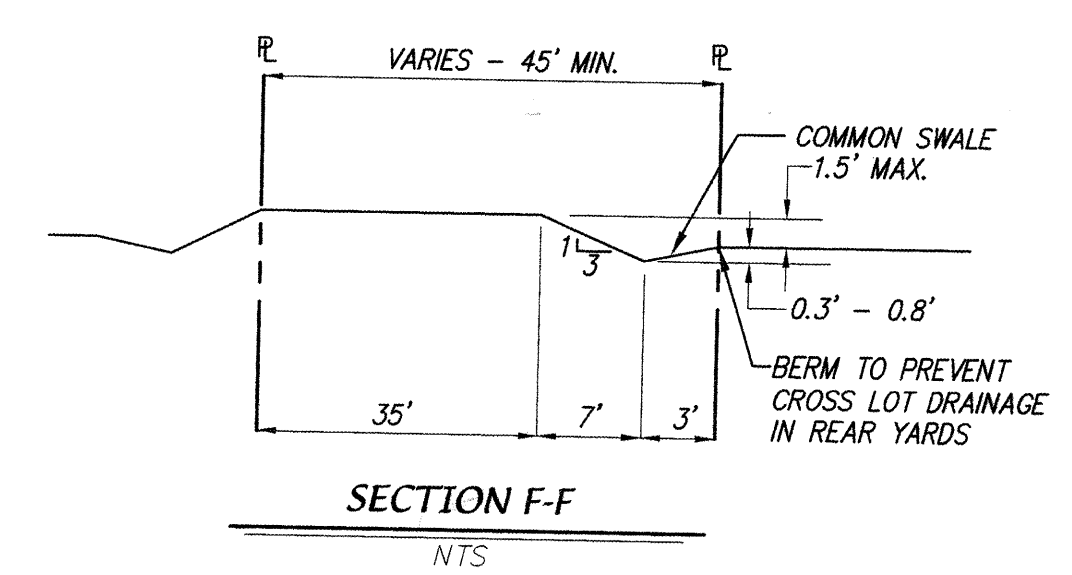
SECTION A
SCALE: HORIZ. 1" = 100'
VERT. 1" = 10'



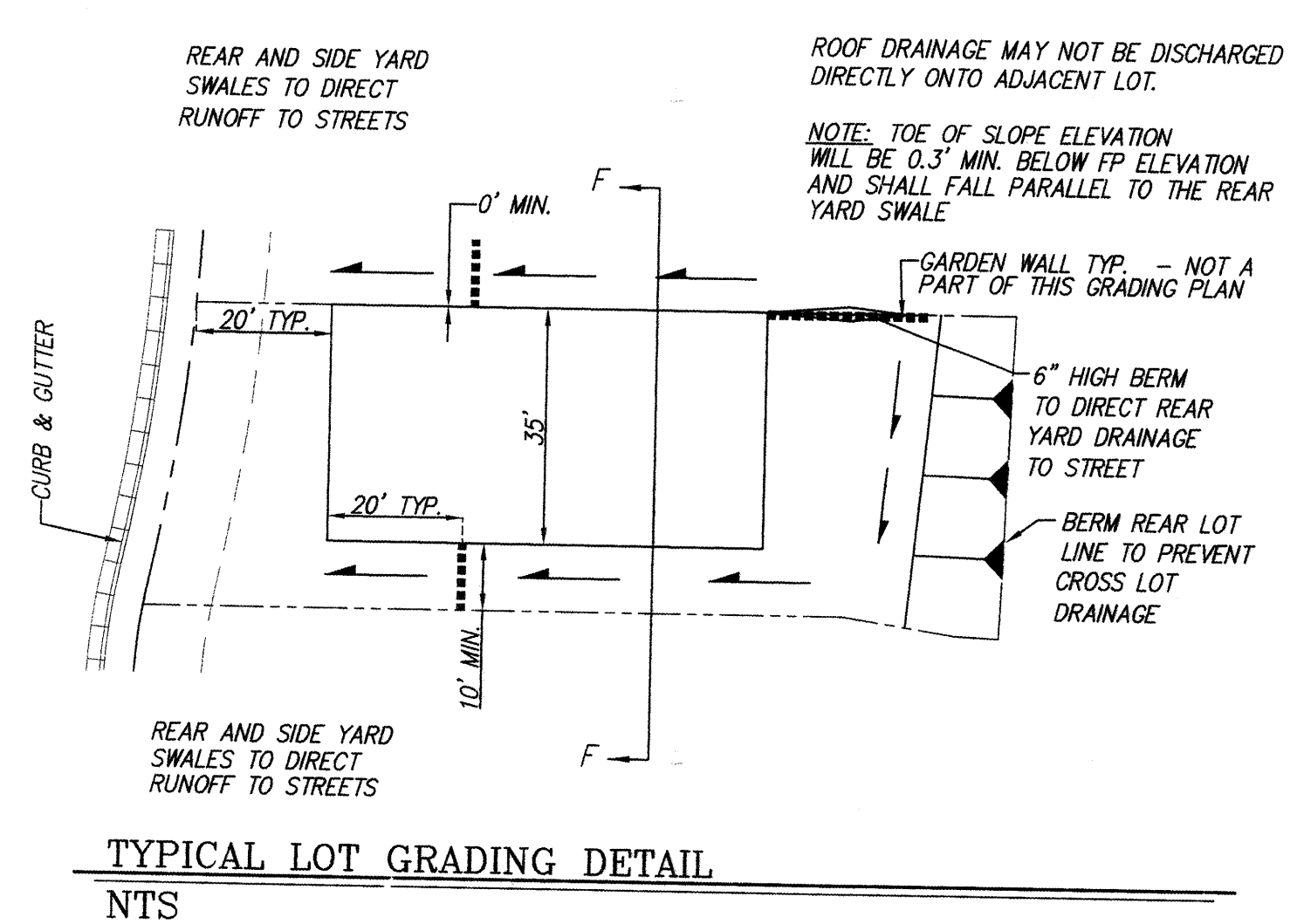
- EROSION CONTROL NOTES**
1. CONTRACTOR MUST OBTAIN A TOPSOIL DISTURBANCE PERMIT FROM THE ENVIRONMENTAL HEALTH DIVISION PRIOR TO CONSTRUCTION.
 2. CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION LATEST EDITION, SHALL GOVERN ALL WORK.
 3. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE AND FEDERAL DUST CONTROL MEASURES AND REQUIREMENTS, AND SHALL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL NECESSARY APPLICATIONS AND APPROVALS.
 4. 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 DETAIL, THIS SHEET AND BY WETTING THE SOIL TO KEEP IT FROM BLOWING. CONTRACTOR IS RESPONSIBLE FOR CLEANING UP ANY SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
 5. THE EARTHWORK CONTRACTOR SHALL STOCKPILE ENOUGH MATERIAL ADJACENT TO RETAINING WALL LOCATIONS TO BE UTILIZED FOR WALL BACKFILL.
 6. ALL STREET ELEVATIONS SHOWN ARE FINISHED FLOW LINE ELEVATIONS.
 7. TWO WORKING DAY PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM 260-1990 FOR LOCATION OF EXISTING UTILITIES.
 8. WATERS OF THE UNITED STATES ARE LOCATED BETWEEN THE TWO BANKS OF THE MAIN ARROYO WHICH IS APPROXIMATELY AT THE LIMITS OF THE FLOODWAY. NO CONSTRUCTION ACTIVITY IS PLANNED WITHIN THE WATERS OF THE UNITED STATES AND THE CONTRACTOR IS TO KEEP ALL EQUIPMENT OUT OF THE WATERS OF THE UNITED STATES.



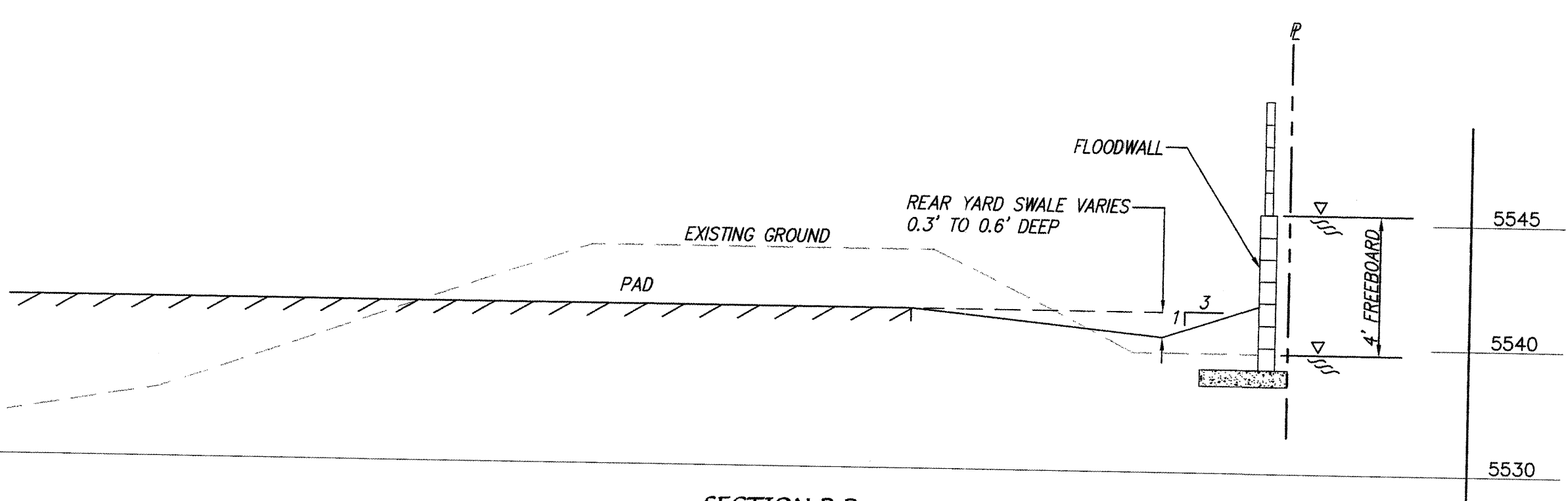
SECTION C-C
SCALE: 1" = 5'



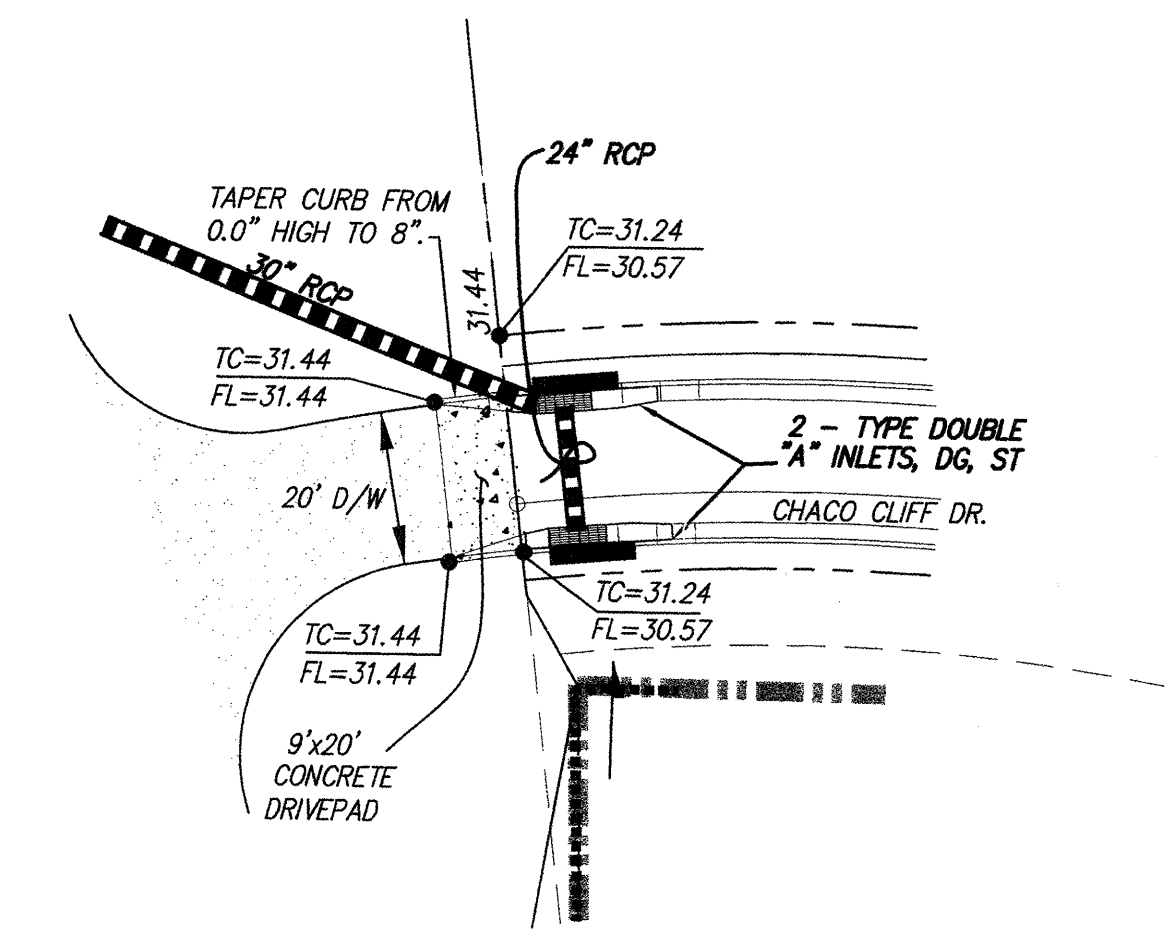
SECTION F-F
NTS



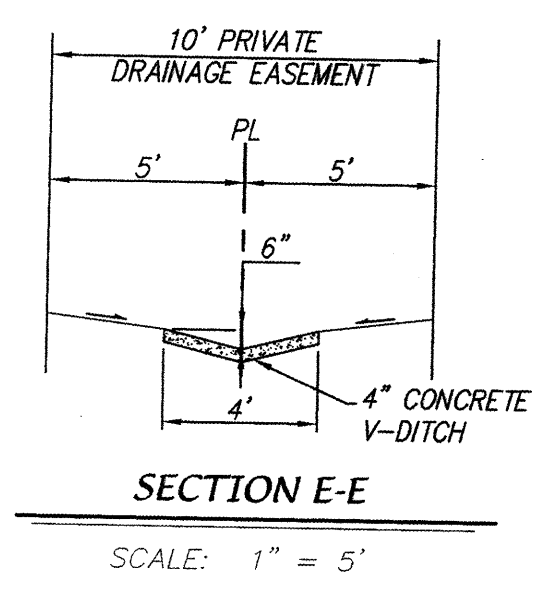
TYPICAL LOT GRADING DETAIL
NTS



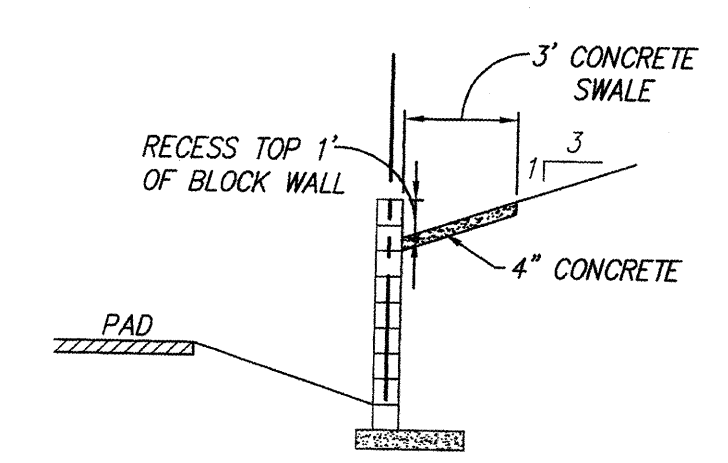
SECTION B-B
SCALE: 1" = 5'



DRIVEPAD DETAIL
NTS



SECTION E-E
SCALE: 1" = 5'



SECTION D-D
CONCRETE SWALE DETAIL
SCALE: 1" = 5'

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**CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP**

TITLE: **EL VALLADO SUBDIVISION
GRADING & DRAINAGE PLAN DETAILS**

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
CITY PROJECT NO. 671981		ZONE MAP NO. L-22	SHEET 5 OF 16

DESIGNED BY **JDH** DATE **04/01**
DRAWN BY **NHM** DATE **04/01**
CHECKED BY **DMG** DATE **04/01**

A0036HVA/0036GD50-2/07-17-01 RDQ NHM
This sheet for Information ONLY per separate DRB approval.

NOTES

AS BUILT INFORMATION

CONTRACTOR	DATE
WORK	DATE
REVISIONS	DATE
ACCEPTANCE BY	DATE
VERIFICATION BY	DATE
CORRECTED BY	DATE
RECORDED BY	DATE

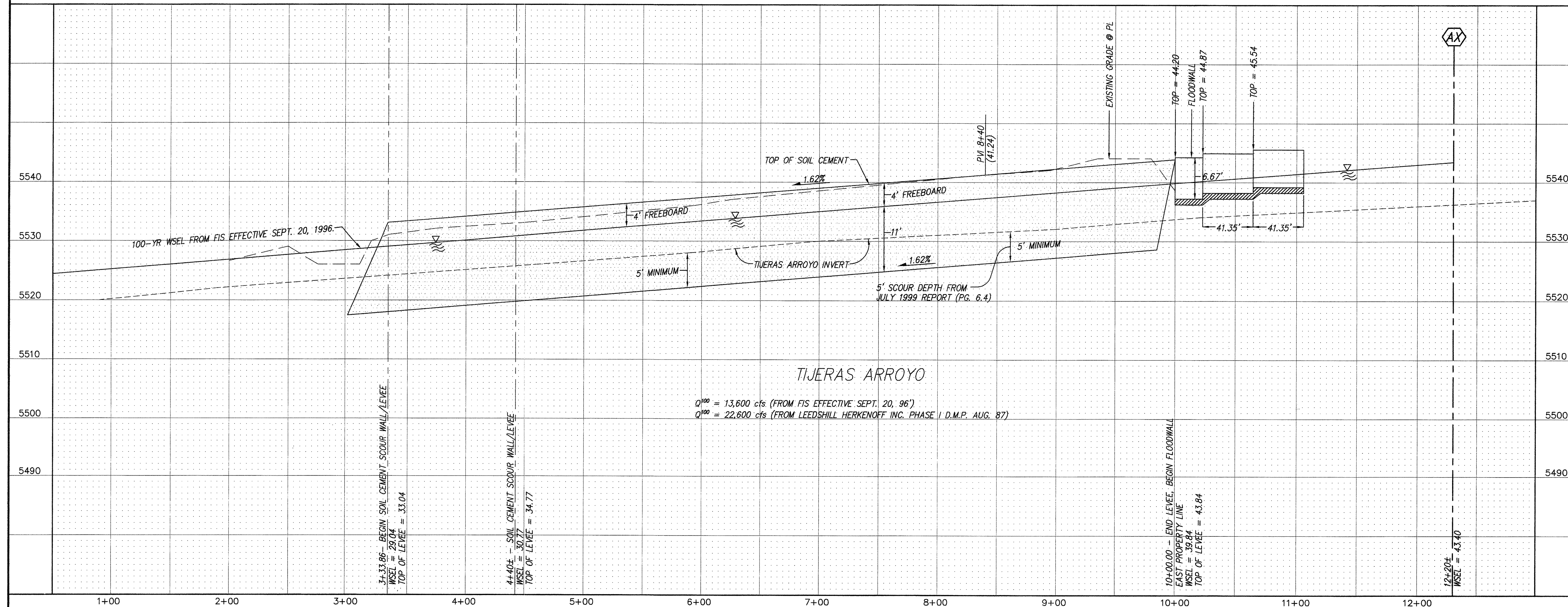
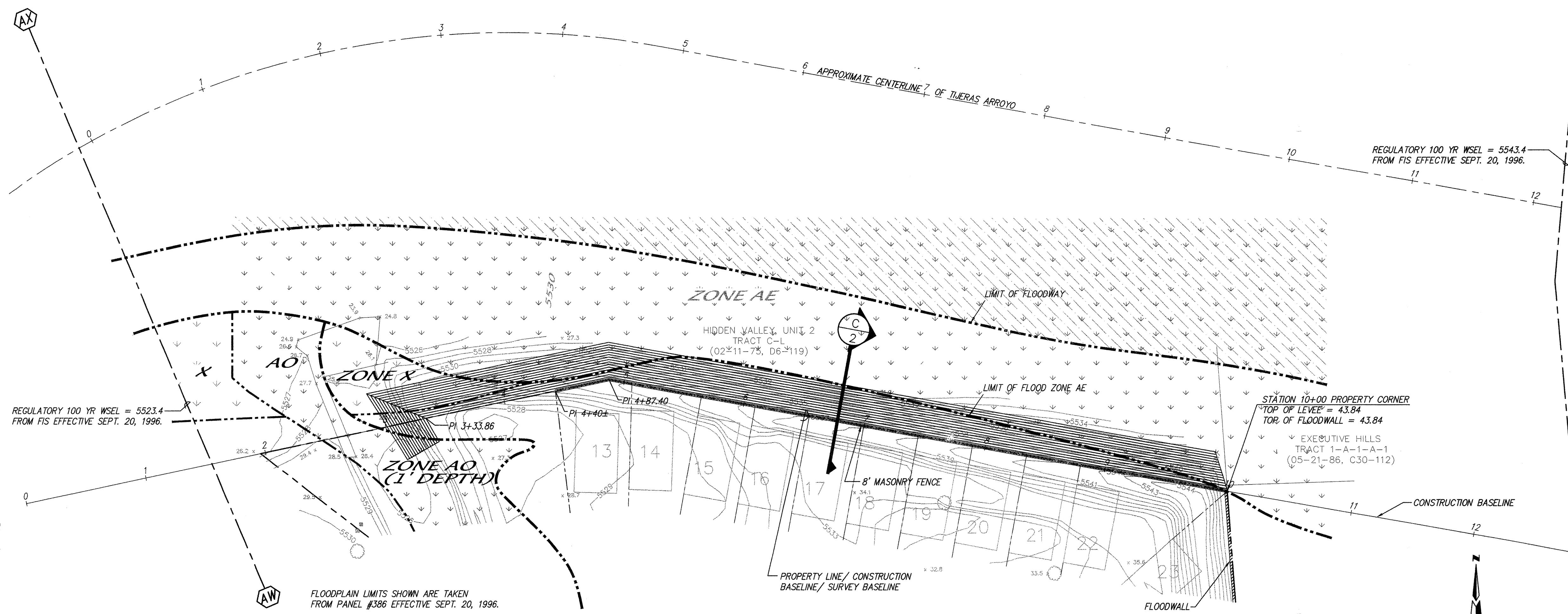
ENGINEER'S SEAL
REGISTERED PROFESSIONAL ENGINEER
NEW MEXICO
7-17-01

SURVEY INFORMATION

NO.	DATE	BY

FIELD NOTES

STATION "S-M22" IS LOCATED 8.7 MI. SE OF DOWNTOWN ALBUQUERQUE, NEW MEXICO. THE EAST SIDE OF THE MUNICIPAL LIMITS LINE IN THE FOUR HILLS SUBDIVISION AREA. STATION IS 800' EAST OF THE MUNICIPAL LINE, 77.9' SE OF POWER POLE #337, AND 188' NW OF POWER POLE #40. STATION IS A STANDARD ACS BRASS DISK SET IN CONCRETE MONUMENT IN THE GROUND. STATION IN STAMPED "S-M22 1975/ACS" X = 424,017.61 Y = 1,475,700.07 ELEV. = 5594.518



NOTES

EXISTING CONDITIONS

THIS 11 ACRE SITE IS CURRENTLY UNDEVELOPED AND DOES NOT PRODUCE SURFACE WATER RUNOFF. IT IS PROTECTED FROM THE TUCUENS ARROYO BY A LEVEE ON THE NORTH BOUNDARY AND FROM AN AMAFCA MAINTAINED EARTH LINED CHANNEL ($Q^{100} = 450$ CFS) ON THE WEST ALSO BY A LEVEE. THE TWO LEVEES (3' TO 10' HIGH) PREVENT ONSITE SURFACE DRAINAGE FROM LEAVING THE SITE. IN ADDITION TO THE AMAFCA CHANNEL RUNNING THROUGH THE WEST SIDE OF THE SITE THERE IS A SMALL EXISTING OFFSITE DRAINAGE AREA AT THE SOUTH EAST CORNER WHICH DRAINS INTO THIS SITE.

DRAINAGE MANAGEMENT PLAN

FREE DISCHARGE TO THE TIJERAS ARROYO IS ANTICIPATED; THE EXISTING FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE STUDY (FIS) INDICATES 100 YR. FLOWS OF 13,600 GFS, BUT SEPARATE STUDIES INDICATE FLOOD 100 YR. FLOWS IN THE TIJERAS ARROYO OF ABOUT 22,600 GFS (FROM TIJERAS ARROYO DRAINAGE MANAGEMENT PLAN FLOW PHASE 1, AUGUST 1987, BY LEEDSHILL HERGENROTHER, INC.). THIS IDENTIFIES SOME FLOWS OF ABOUT 28,000 GFS AND THE PROFILES IN THIS REPORT SHOW AN APPROXIMATE INCREASE IN WATER SURFACE ELEVATION OF ABOUT 1.5' FROM THE 100 YR. TO THE 500 YR. ELEVATIONS. GENERALLY SPEAKING THE REQUIRED FREEBOARD FOR LEVEES IS 3' ABOVE THE 100 YR. STORM, BUT HERE ONE ADDITIONAL FOOT WILL BE PROVIDED, SO, THE TOP OF THE LEVEE IS SET 4' ABOVE THE 100 YR. WATER SURFACE ELEVATION FROM THE FIS WHICH IS ALSO ABOUT 3' ABOVE THE WSEL THAT MAY RESULT IF THE FUTURE 100 YR. FLOWS ARE INCREASED TO 22,600 GFS. A SCOUR WALL OF SOIL CEMENT WILL BE CONSTRUCTED ADJACENT TO THE TIJERAS ARROYO TO PREVENT LATERAL MIGRATION OF THE ARROYO INTO THIS DEVELOPMENT.

A SEPARATE STUDY DONE BY AYRES ASSOCIATES FOR AMAFCA DATED JULY 1999, USED A 100 YR. FLOW OF 18,063 CFS IN A NEW HEC-RAS HYDRAULIC MODEL AND CAME UP WITH SOME 100 YR WATER-SURFACE ELEVATIONS THAT ARE ABOUT 1.0' LOWER IN PLACES THAN THE ELEVATIONS IN THE CURRENT EFFECTIVE FIS. THE LONG TERM EROSION ANALYSIS IN THE STUDY PREDICTED AS MUCH AS 2.8' OF DEPOSITION IN THIS REACH" (SEC 6.1) AND RECOMMENDS 3' OF FREEBOARD. BY ADDING 4' FREEBOARD TO THE FIS ELEVATION THIS DEVELOPMENT WILL MEET AND/OR EXCEED THE REQUIREMENTS OF THE AYRES REPORT. "SUMMING THE RESULTS FROM THE LONG-TERM AND SINGLE EVENT ANALYSIS INDICATES 3.3 TO 4.8 FEET OF POTENTIAL CHANNEL SCOUR FOR THE HIDDEN VALLEY SUBDIVISION AND THE UNDEVELOPED LAND" (PAGE 6.4). FOLLOWING THE RECOMMENDATIONS OF THE AYRES REPORT THE NORTH SIDE OF THIS SUBDIVISION WILL BE PROTECTED BY A SCOUR WALL OF SOIL CEMENT FROM A HEIGHT OF 4' ABOVE THE 100 YR. WATER SURFACE ELEVATION

TO A DEPTH 3' BELOW THE INVERT OF THE INTERIOR ARROYO. THE EXISTING GRADE OF THE LOT TO BE SAVED WILL REMAIN AS IS. THE CURRENTLY MAPPED FLOODPLAIN ENCLOSED INTO THE LOT OF THE LOTS AND MAY BE REVISED BY A LETTER OF MAP REVISION (LOMR) TO REFLECT THE EXISTING AMAFCA CHANNEL.

THE MINOR OFFSITE FLOWS WILL BE RECEIVED BY PRIVATE DRAINAGE ON THE INDIVIDUAL LOTS IN THE NORTH EAST CORNER AND CONVEYED BY SURFACE DRAINAGE IN THE INTERNAL PRIVATE STREETS AND DISCHARGED INTO THE AMAFCA CHANNEL AT THE NORTH WEST CORNER. A MINOR DRAINAGE STANDARD SHALL BE MAINTAINED. THE GUTTER WILL BE USED ON THE INTERNAL STREETS AS NECESSARY TO KEEP THE NORMAL DEPTH OF THE 100 YR. FLOW BELOW THE TOP OF CURB AND THE ENERGY GRADE LINE WITHIN THE PRIVATE ROADWAY TRACT AND OUT OF THE INDIVIDUAL PRIVATE LOTS.

LEGEND

AX ——— CROSS SECTION FROM FEMA'S
FLOOD INSURANCE RATE STUDY.

===== FLOOD ZONE BOUNDARY

ZONE AE

BASE FLOOD ELEVATIONS DETERMINED.

ZONE AO



ZONE X

LESS THAN 1' OR WITH DRAINAGE AREA
LESS THAN 1 SQ. MILE; AND AREAS
PROTECTED BY LEVEES FROM 100 YR.
FLOODS.

FLOODWAY AREAS IN ZONE AE

8' MASONRY FENCE

XXXXXXXXXXXXXXXXXXXX



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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: *HIDDEN VALLEY
PLAN AND PROFILE PLAN*

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	DATE
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CITY PROJECT NO. 671981

ZONE MAP NO.

SHEET 6 OF 16

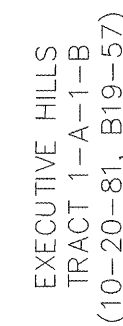
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WORK INSTALLED BY	<u>AIS</u>	DATE	
INSPECTOR'S ACCEPTANCE BY		DATE	
FIELD VERIFICATION BY	<u>AIS</u>	DATE	
DRAWINGS CORRECTED BY	<u>AIS</u>	DATE	<u>8/2/00</u>
MICRO-FILM INFORMATION		DATE	
RECORDED BY			
<u>Microfilm Inspector :</u> <u>E. Shanks</u>			

SURVEY INFORMATION		BENCH MARKS
FIELD NOTES		
NO.	BY DATE	
		STATION "5-M22" IS LOCATED 8.7 MI. SE OF DOWNTOWN ALBUQ. ON THE EAST SIDE OF THE MUNICIPAL LIMITS LINE IN THE FOUR HILLS SUBDIVISION AREA. STATION IS 600' EAST OF THE MUNICIPAL LINE, 77.9' SE OF POWER POLE #5337, AND 186' NW OF POWER POLE #60.
		STATION IS A STANDARD AISI BRASS DISK SET IN CONCRETE MONUMENT IN THE GROUND. STATION IS STAMPED "5-M22,1975ACS"
		X = 424,017.61 Y = 1,475,700.07 ELEV. = 5894.518

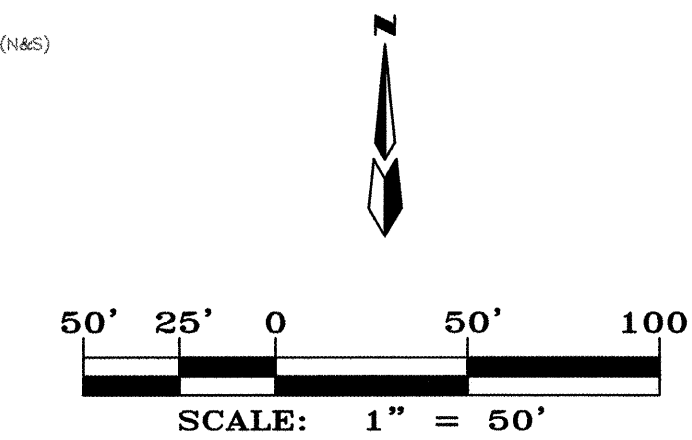
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A0036HVA/0036PP-1/04-23-01/ACH NHM

This sheet for information only per seprate DRB aproval.

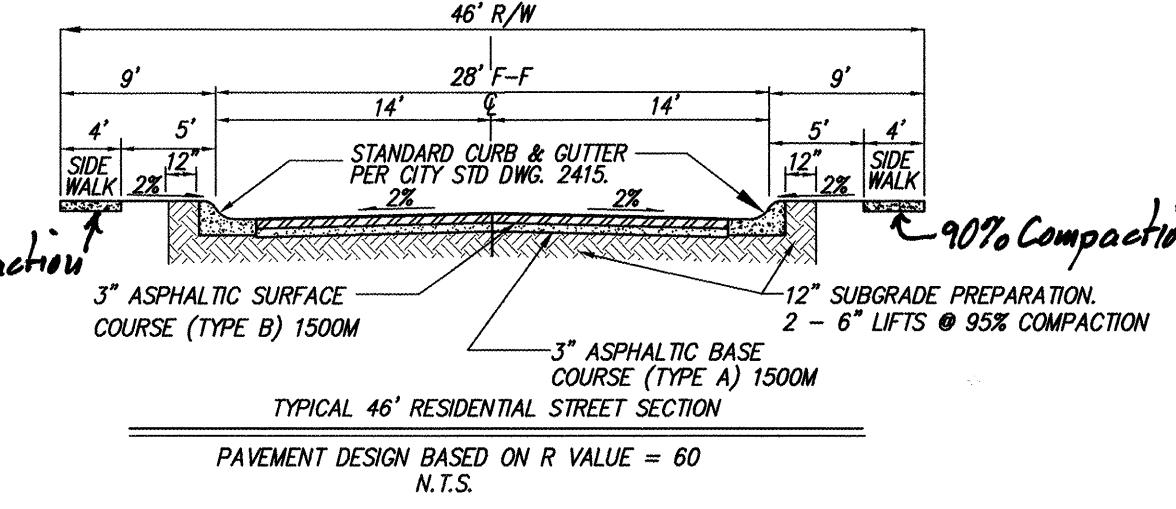
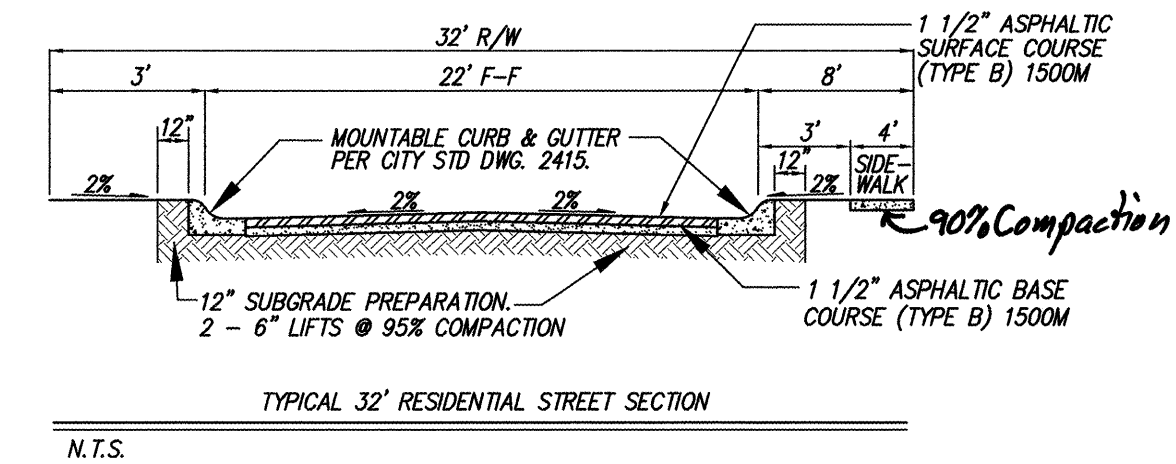
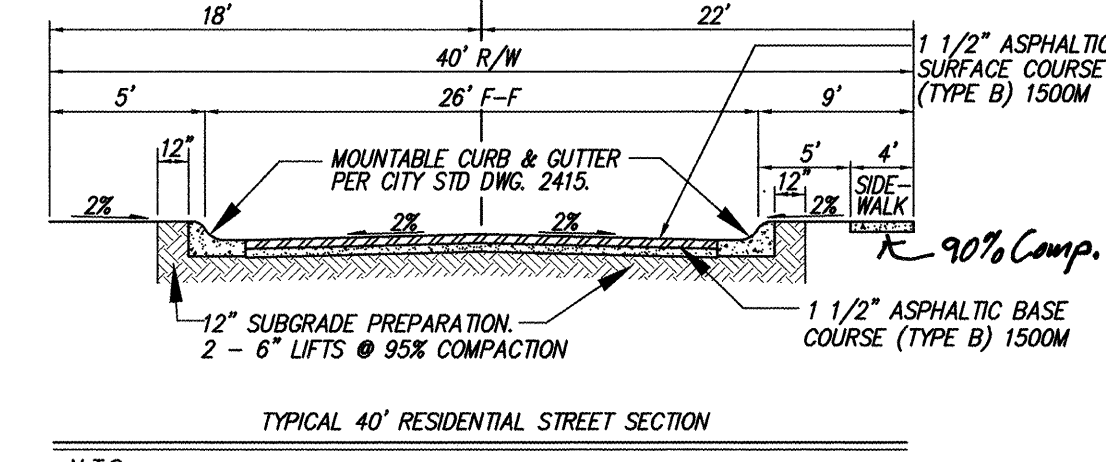


~PRIVATE~



A0036HVA/0036M-PAV/09-12-01/ACH NHM

1. ALL 6" VALLEY GUTTERS PER CITY OF ALBUQUERQUE STANDARD DRAWING 2420.
2. ALL 4" VALLEY GUTTERS PER CITY OF ALBUQUERQUE STANDARD DRAWING 2421
3. ALL 4" INTERIOR SIDEWALKS ARE DEFERRED (I.E., NO SIDEWALKS THIS PROJECT).
4. TRANSITION SECTION FROM FULL CROWN TO NO GROWN TO BE A MINIMUM OF 50 FEET.
5. TRANSITION FROM ROLL CURB TO STANDARD CURB SHALL BE PER CITY OF ALBUQUERQUE STANDARD DRAWING 2418, UNLESS OTHERWISE SPECIFIED.
6. 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 WITH THE 7' LENGTH REQUIRED, THEN THE 7' LENGTH AS SHOWN IN DRAWING 2441 MUST BE MAINTAINED TO MAINTAIN A SLOPE OF 12:1.
7. TRANSITION SECTION FROM FULL CROWN TO NO GROWN TO BE A MINIMUM OF 50' AND TRANSITION SECTIONS FROM FULL CROWN TO HALF CROWN TO BE A MINIMUM OF 25' PER CITY OF ALBUQUERQUE STANDARD DRAWING 2401.



NOTE: RESIDENTIAL STREET SECTION PER C.O.A. STD. DWG 2405.

EXISTING CURB

EXISTING TOP OF CURB
EXISTING FLOWLINE

NEW RIGHT-OF-WAY

NEW LOT LINES

SOIL CEMENT EROSION PROTECTION

NEW MOUNTABLE CURB & GUTTER

NEW STANDARD CURB & GUTTER

6" GRAVEL MAINTENANCE ROAD THIS PROJECT

8" DIRT HIKING TRAIL THIS PROJECT

2" ASPHALT TRAIL THIS PROJECT
PER COA STD DWG 2405

50' CROWN TO NO CROWN TRANSITION
PER COA STD DWG 2401

dmg MARK GOODWIN & ASSOCIATES, P.A.
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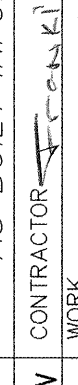


CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

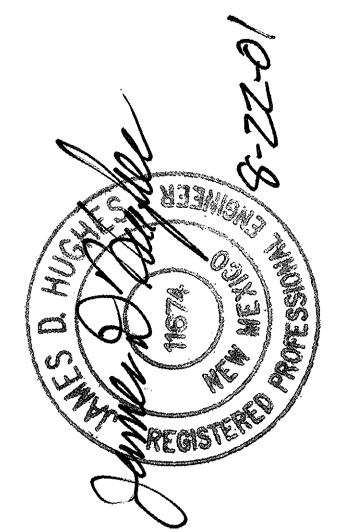
FILE: **EL VALLADO SUBDIVISION
MASTER PRIVATE PAVING PLAN**

[illegible]

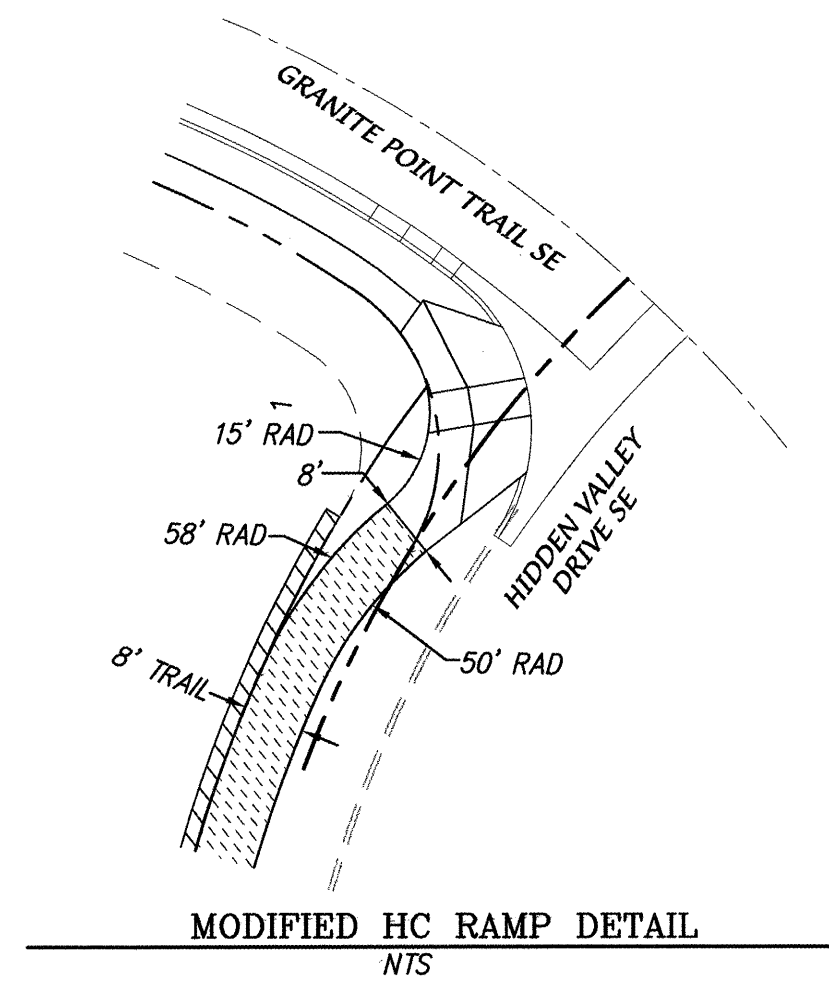
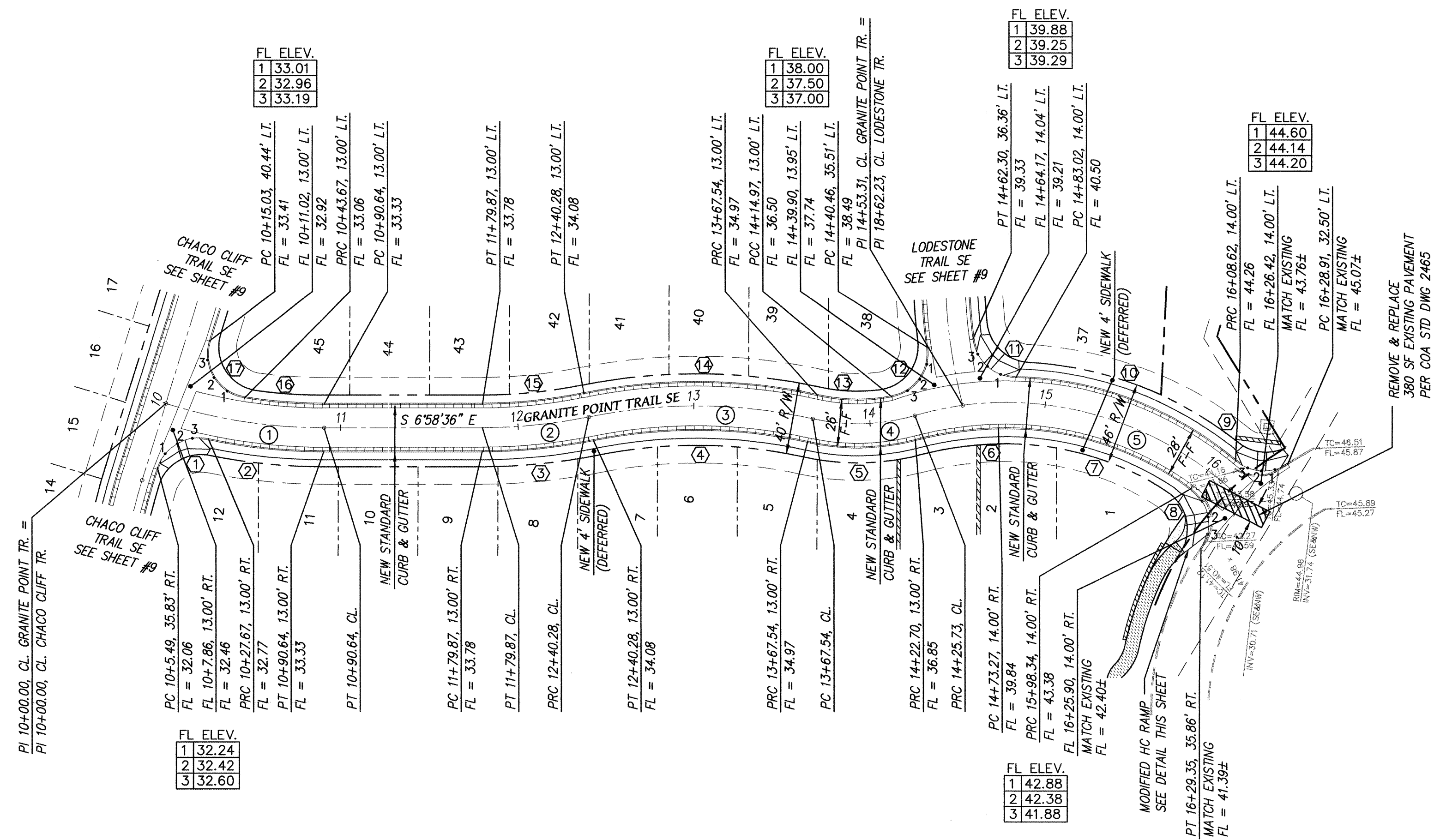
CITY PROJECT NO. 671981	ZONE MAP NO. L-22	SHEET 7	OF 16
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ENGINEER'S SEAL	SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
	NO.	FIELD NOTES BY DATE		STATION "S-M22" IS LOCATED 8.7 MI. SE OF DOWNTOWN ALBUQ. ON THE EAST SIDE OF THE MUNICIPAL LINES LINE IN THE FOUR HILLS SUBDIVISION AREA. STATION IS 600' EAST OF THE MUNICIPAL LINE. 77.9' SE OF POWER POLE #5337, AND 186' NW OF POWER POLE #601. STATION IS A STANDARD ACS BRASS DISK SET IN CONCRETE MONUMENT IN THE GROUND. STATION IS STAMPED "S-M22, 1975ACS" X = 424,017.61 Y = 1,475,700.07 (NAD 1927) ELEV. = 5594.518 (NGVD 1959)	CONTRACTOR WORK BY INSPECTOR'S ACCEPTANCE BY DRAWINGS VERIFICATION BY CORRECTED BY	DATE DATE DATE DATE DATE
						

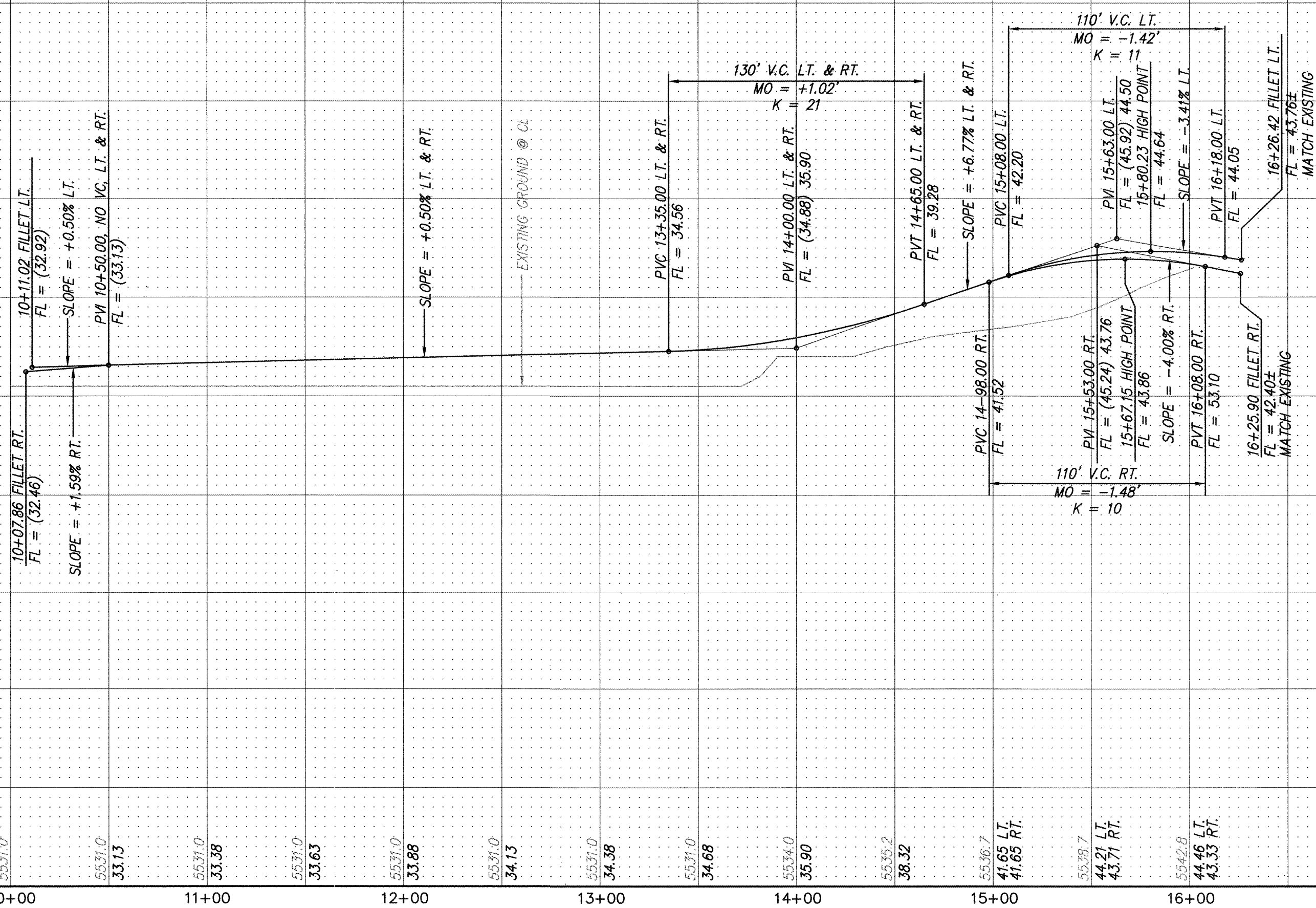
ENGINEER'S SEAL



	NO.	DATE	REMARKS	BY
<i>REVIEWS</i>				
<i>DESIGN</i>				
DESIGNED BY	<i>JDH</i>	DATE	<i>07/01</i>	
DRAWN BY	<i>ACh</i>	DATE	<i>07/01</i>	
CHECKED BY	<i>DMG</i>	DATE	<i>07/01</i>	



GRANITE POINT TR. S.E.
STA. 10+00.00 TO STA. 16+16.86
SCALE: HORZ. 1" = 50'
VERT. 1" = 10'



⑤ $\Delta = 58^{\circ}15'05''$
 $R = 188.00'$
 $L = 191.14'$
 $T = 104.75'$

~PRIVATE~

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

TITLE: ***EL VALLADO SUBDIVISION
GRANITE POINT TR.
PRIVATE PAVING IMPROVEMENTS***



CITY ENGINEER APPROVAL
APPROVED
FEB 25 2002
CITY ENGINEER

CITY PROJECT NO.

ZONE MAP NO

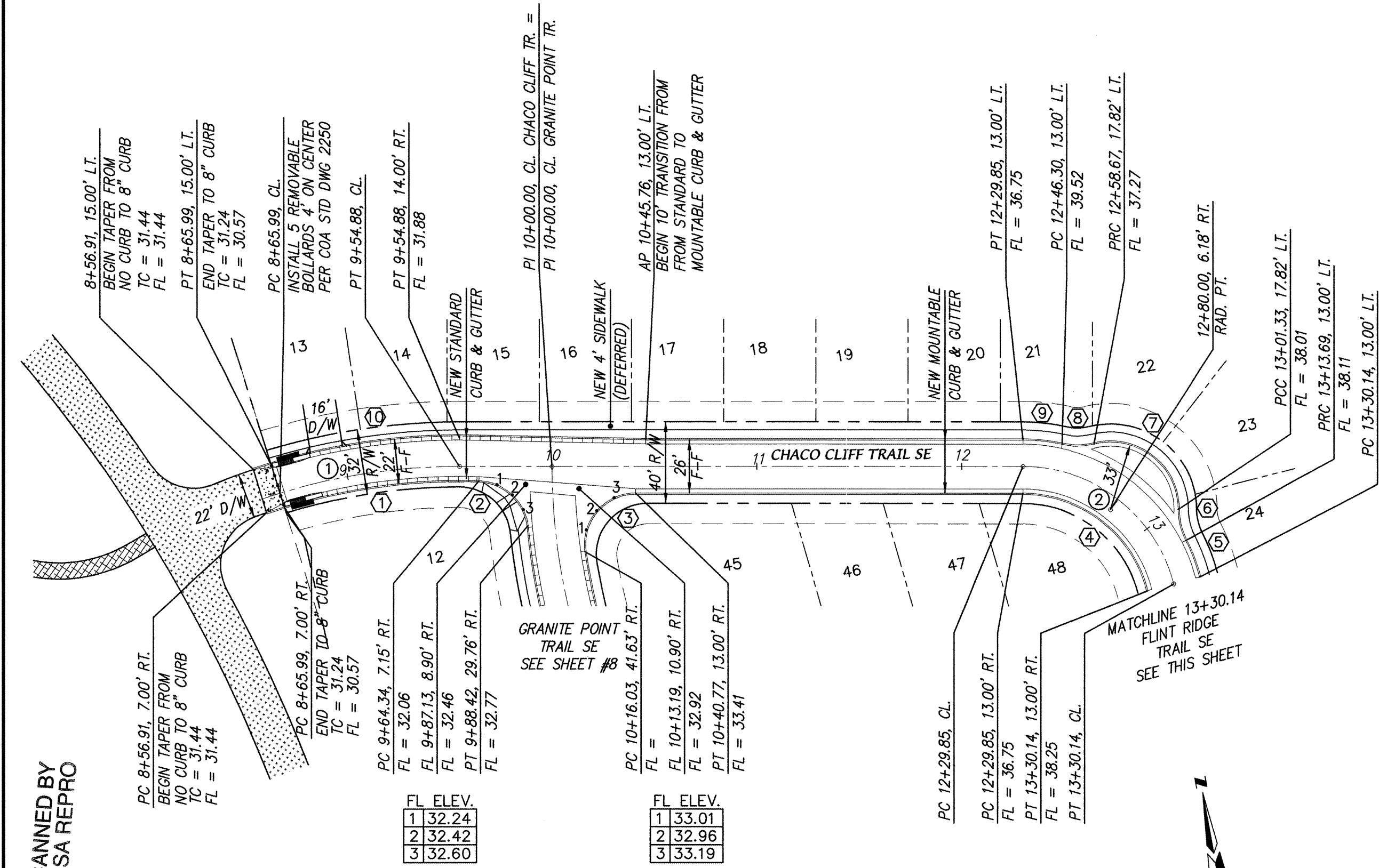
SHEET OF

A0036HVA/0036PP-2A/09-12-01/NHM

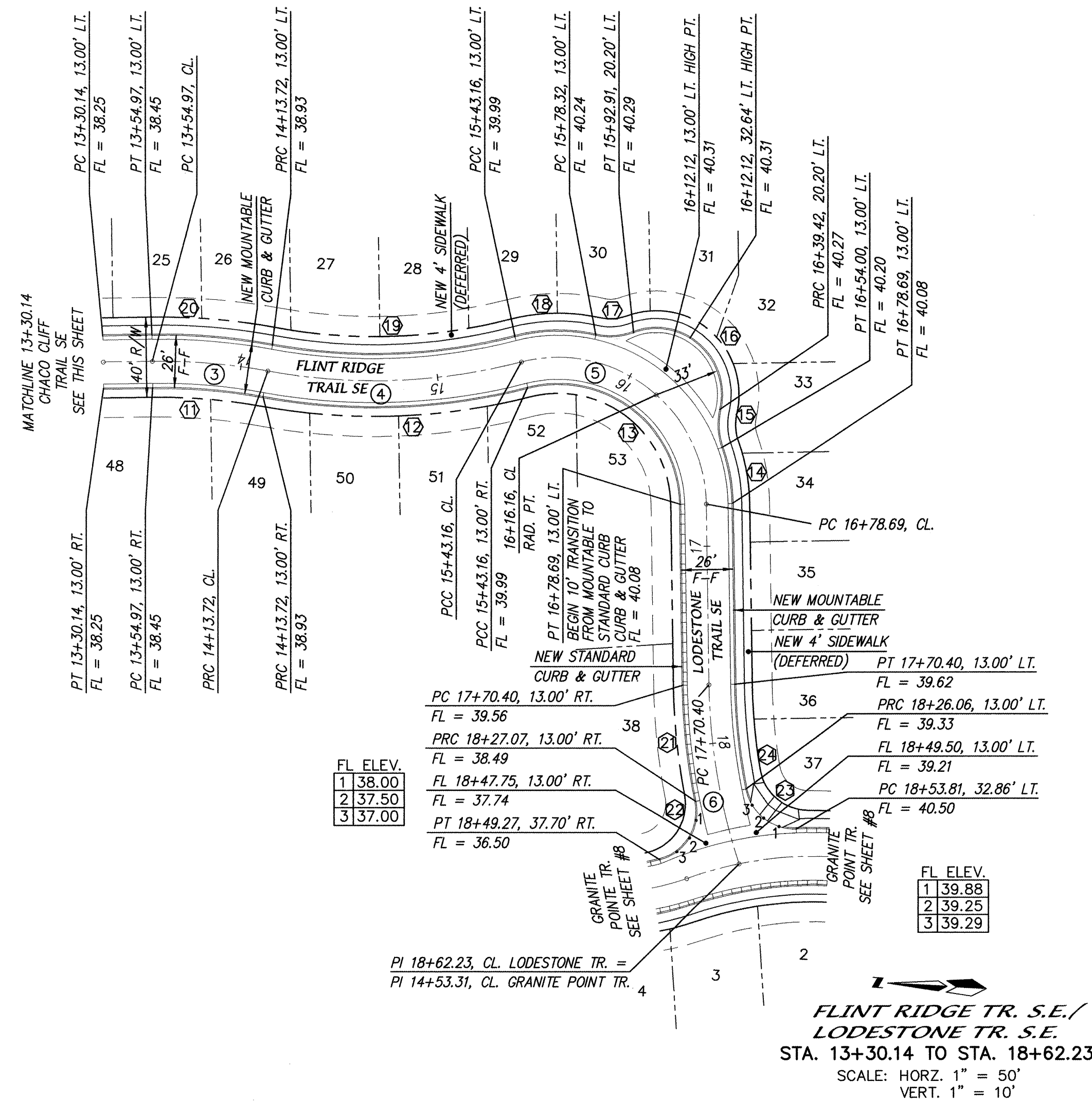
671981 #

L-22

8



CHACO CLIFF TR. S.E.
STA. 8+65.99 TO STA. 13+30.14
 SCALE: HORZ. 1" = 50'
 VERT. 1" = 10'



FLINT RIDGE TR. S.E./
LODESTONE TR. S.E.
STA. 13+30.14 TO STA. 18+62.23
SCALE: HORZ. 1" = 50'
VERT. 1" = 10'

NOTES

1. ALL STATIONING IS CENTERLINE STATIONING.

CHACO CLIFF TR.
CURVE DATA - DESCRIBES FACE OF CURB

① $\Delta = 18^{\circ}42'24''$ $R = 295.00'$ $L = 96.32'$ $T = 48.59'$	② $\Delta = 82^{\circ}42'06''$ $R = 25.00'$ $L = 36.09'$ $T = 22.00'$
③ $\Delta = 98^{\circ}20'22''$ $R = 25.00'$ $L = 42.91'$ $T = 28.93'$	④ $\Delta = 75^{\circ}36'43''$ $R = 63.00'$ $L = 83.14'$ $T = 48.88'$
⑤ $\Delta = 12^{\circ}24'16''$ $R = 89.00'$ $L = 19.27'$ $T = 9.67'$	⑥ $\Delta = 26^{\circ}33'01''$ $R = 34.00'$ $L = 15.76'$ $T = 8.02'$
⑦ $\Delta = 103^{\circ}54'14''$ $R = 33.00'$ $L = 59.84'$ $T = 42.16'$	⑧ $\Delta = 26^{\circ}33'01''$ $R = 34.00'$ $L = 15.76'$ $T = 8.02'$
⑨ $\Delta = 12^{\circ}24'16''$ $R = 89.00'$ $L = 19.27'$ $T = 9.67'$	⑩ $\Delta = 11^{\circ}11'05''$ $R = 314.00'$ $L = 61.30'$ $T = 30.75'$
⑪ $\Delta = 11^{\circ}11'05''$ $R = 288.00'$ $L = 56.22'$ $T = 28.20'$	⑫ $\Delta = 24^{\circ}43'14''$ $R = 313.00'$ $L = 135.04'$ $T = 68.59'$
⑬ $\Delta = 103^{\circ}32'08''$ $R = 62.00'$ $L = 112.04'$ $T = 78.70'$	⑭ $\Delta = 18^{\circ}51'32''$ $R = 88.00'$ $L = 28.87'$ $T = 14.61'$
⑮ $\Delta = 32^{\circ}45'30''$ $R = 34.00'$ $L = 19.44'$ $T = 9.99'$	⑯ Δ $R = 33.00'$ $L = 71.03'$ $T = 61.20'$
⑰ $\Delta = 32^{\circ}45'30''$ $R = 34.00'$ $L = 19.44'$ $T = 9.99'$	⑰ $\Delta = 26^{\circ}51'49''$ $R = 99.00'$ $L = 47.209'48''$ $T = 21.02'$
⑱ $\Delta = 24^{\circ}43'14''$ $R = 287.00'$ $L = 123.83'$ $T = 62.89'$	⑳ $\Delta = 11^{\circ}11'05''$ $R = 314.00'$ $L = 61.30'$ $T = 30.75'$
㉑ $\Delta = 10^{\circ}49'22''$ $R = 51.300'$ $L = 59.12'$ $T = 29.65'$	㉒ $\Delta = 87^{\circ}12'13''$ $R = 25.00'$ $L = 38.05'$ $T = 23.81'$
㉓ $\Delta = 80^{\circ}47'49''$ $R = 25.00'$ $L = 35.25'$ $T = 21.28'$	㉔ $\Delta = 10^{\circ}37'50''$ $R = 287.00'$ $L = 53.25'$ $T = 26.70'$

CURVE DATA - DESCRIBES CENTERLINE

- ① $\Delta = 16^{\circ}55'17''$
 $R = 301.00'$
 $L = 88.90'$
 $T = 44.77'$
- ② $\Delta = 75^{\circ}36'43''$
 $R = 76.00'$
 $L = 100.30'$
 $T = 58.95'$
- ③ $\Delta = 111^{\circ}1'05''$
 $R = 301.00'$
 $L = 58.76'$
 $T = 29.47'$
- ④ $\Delta = 24^{\circ}43'14''$
 $R = 300.00'$
 $L = 129.44'$
 $T = 65.74'$
- ⑤ $\Delta = 103^{\circ}32'08''$
 $R = 75.00'$
 $L = 135.53'$
 $T = 95.20'$
- ⑥ $\Delta = 17^{\circ}32'16''$
 $R = 300.00'$
 $L = 91.83'$
 $T = 46.28'$



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CONSULTING ENGINEERS
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ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

TITLE: ***EL VALLADO SUBDIVISION
CHACO CLIFF TR. & FLINT RIDGE TR. & LODESTONE TR.
PRIVATE PAVING IMPROVEMENTS***

DESIGN REVIEW COMMITTEE
APPROVED
FEB 12 2002

APPROVED
FEB 25 2002
CITY ENGINEER

CITY PROJECT NO.

ZONE MAP NO.

SHEET	OF
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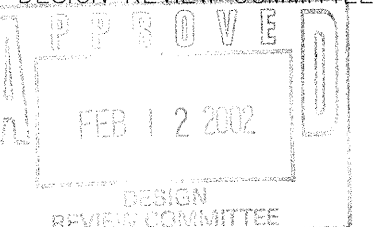
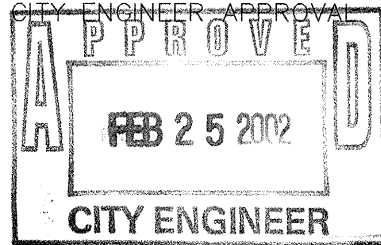
50' 25' 0 50' 100'

SCALE: 1" = 50'

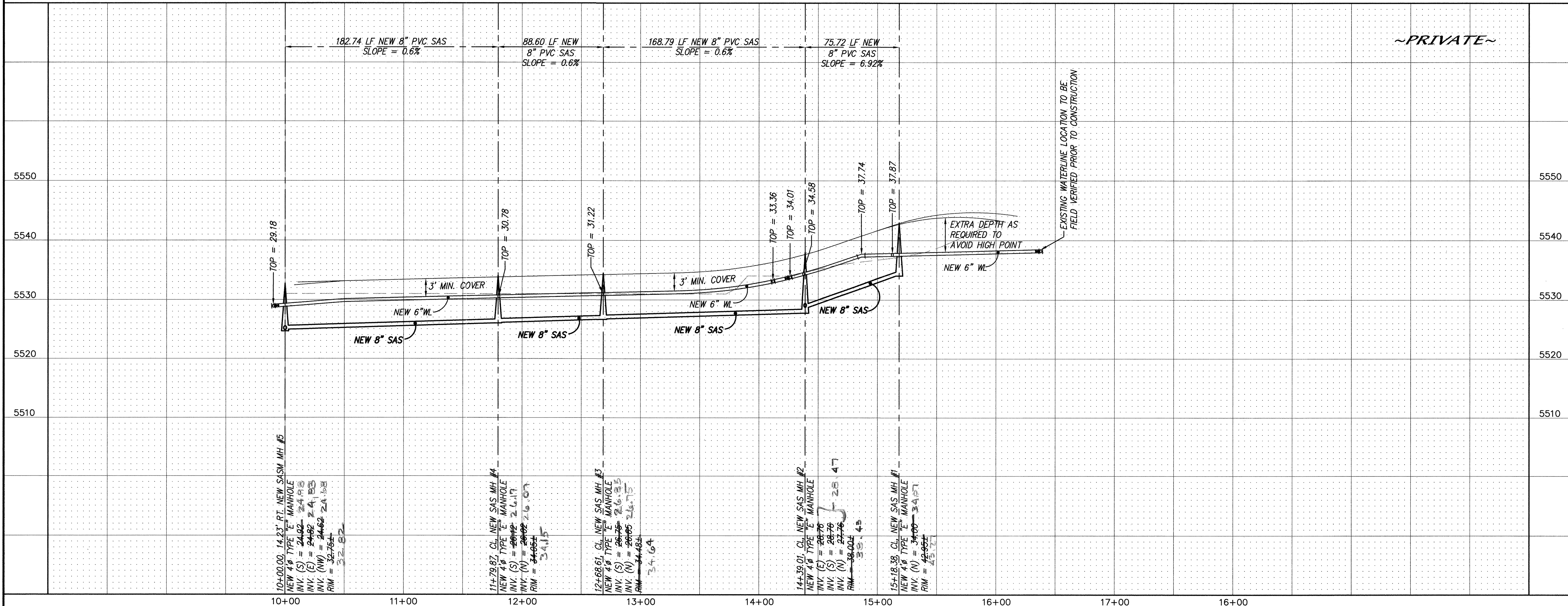
A0036HVA/0036M-UTIL/09-18-01/NHM

1. CONTRACTOR WILL CONTACT WATER SYSTEMS AT 857-8200 3 DAYS PRIOR TO NECESSARY SHUT-OFF.
2. VALVES SHALL ONLY BE OPERATED BY CITY WATER EMPLOYEES.
3. TURN VALVE OFF IN INTERSECTION OF Hidden Valley Drive & Nest Street West of this development (King Arthur Ct.)

NAME	NUMBER	DESCRIPTION	NUMBER	DESCRIPTION
		TC=38.15 FL=38.54		
		EXISTING TOP OF CURB		
		EXISTING TOP OF CURB		
		EXISTING FLOWLINE		
		-----EX. WL-----		EXISTING WATERLINE
		-----EX. SAS-----		EXISTING SAS
		-----		NEW RIGHT-OF-WAY
		-----		NEW LOT LINES
		=====		NEW RETAINING WALL
		-----		NEW GARDEN WALL
				NEW SOIL CEMENT EROSION PROTECTION
		=====		NEW MOUNTABLE CURB & GUTTER
		=====		NEW STANDARD CURB & GUTTER
		-----6"WL-----		NEW WATERLINE
		-----8"SAS-----		NEW SAS
				NEW FIRE HYDRANT
				NEW GATE VALVE
				NEW WATER TEE
		•		NEW SAS MH
				NEW WATER METERS
				NEW SAS SERVICES
		(2200)		ADDRESS

 MARK GOODWIN & ASSOCIATES, P.A. CONSULTING ENGINEERS P.O. BOX 90606 ALBUQUERQUE, NEW MEXICO 87199 (505) 828-2200, FAX (505) 797-9539		DATE	NO.	DESIGNED BY	DRAWN BY	CHECKED BY												
 CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT																		
TITLE: <i>EL VALLADO SUBDIVISION</i> <i>MASTER PRIVATE UTILITY PLAN</i>																		
DESIGN REVIEW COMMITTEE 		CITY ENGINEER APPROVAL 		LAST DESIGN UPDATE <table border="1"> <thead> <tr> <th>MO./DAY/YR.</th> <th>MO./DAY/YR.</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>			MO./DAY/YR.	MO./DAY/YR.										
MO./DAY/YR.	MO./DAY/YR.																	
CITY PROJECT NO. 671981		ZONE MAP NO. L-22		SHEET 10 OF 16														

SCANNED BY
MESA REPRO



GRANITE POINT TR. S.E.
STA. 10+00.00 TO STA. 16+16.86
SCALE: HORZ. 1" = 50'
VERT. 1" = 10'

NOTES

1. ALL STATIONING IS CENTERLINE STATIONING.

SANITARY SEWER SERVICES

LOT	STATION AT PUE	INV. ELEV. AT PUE	LENGTH AT PUE
1	15+24.91	37.4	33.49'
2	14+69.86	34.2	28.99'
3	14+18.50	31.4	36.26'
4	13+82.95	30.6	39.33'
5	13+38.49	30.4	32.07'
6	12+88.08	30.2	30.43'
7	12+37.86	30.0	33.14'
8	11+96.83	29.8	33.46'
9	11+53.62	29.5	32.05'
10	11+08.62	29.3	31.99'
11	10+66.20	29.0	31.03'
12	10+48.02	28.7	28.85'
38	13+84.64	30.9	20.36'
39	13+37.70	30.7	27.60'
40	12+96.42	30.3	29.81'
41	12+55.04	29.9	27.82'
42	12+07.76	29.7	26.00'
43	11+60.12	29.5	27.96'
44	11+15.12	29.3	28.00'
45	10+30.28	29.0	30.28'

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

PIPE SIZE	90°	45°	22.5°	11.25°	VALVE
6"	17'	7'	3'	2'	46'
10"	26'	11'	5'	3'	72'

LENGTH OF RESTRAINED PIPE ON EACH SIDE OF THE BEND. RESTRAIN BRANCH AT FITTING ONLY MINIMUM ATTACHED PIPE LENGTH, RUN SIDE OF TEE: 10.00 FEET.

RESTRAINED JOINT LENGTHS FOR REDUCERS (FT.)

PIPE SIZE	LARGE SIDE	SMALL SIDE
10" X 6"	44'	-

RESTRAINED JOINT LENGTH FOR TEES (FT.)

PIPE SIZE	RUN	BRANCH
10"x6"	6'	1'
6"x6"	10'	2'

dmg MARK GOODWIN & ASSOCIATES, P.A.
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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: EL VALLADO SUBDIVISION
GRANITE POINT TR.
PRIVATE UTILITY IMPROVEMENTS

DESIGN REVIEW COMMITTEE FEB 1 2 2002	CITY ENGINEER APPROVAL FEB 2 5 2002
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CITY PROJECT NO. 671981 #
ZONE MAP NO. L-22
SHEET 11 OF 16

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL			
CONTRACTOR: FERNANDEZ		STATION "5-M22" IS LOCATED 8.7 MI. SE OF DOWNTOWN ALBUQ. ON THE EAST SIDE OF THE MUNICIPAL LIMITS LINE IN THE FOUR HILLS SUBDIVISION AREA. STATION IS 600' EAST OF THE MUNICIPAL LINE, 77.9' SE OF POWER POLE #537, AND 186' NW OF POWER POLE #60. STATION IS A STANDARD ACS BRASS DISK SET IN CONCRETE MONUMENT IN THE GROUND. STATION IN STAMPED "5-M22.975ACS" X = 424,017.61 Y = 1,475,700.07 (NAD 1927) ELEV. = 5594.518 (NGVD 1929)		FIELD NOTES		REMARKS		DESIGN	
WORKED BY: ALS	DATE: 02	NO.	BY	NO.	DATE	NO.	DATE		
INSPECTOR'S ACCEPTANCE BY: ALS	DATE: 02								
VERIFICATION BY: ALS	DATE: 02								
FORWARDED BY: ALS	DATE: 02								
MICRO-FILM INFORMATION		REVISIONS		DESIGNED BY: JDH		DATE: 07/01			
RECORDED BY:		DRAWN BY: ACH		DATE: 07/01		DATE: 07/01			
NO.		CHECKED BY: DMG		DATE: 07/01		DATE: 07/01			

NOTES			
1. ALL STATIONING IS CENTERLINE STATIONING.			
SANITARY SEWER SERVICES			
LOT	STATION AT PUE	INV. ELEV. AT PUE	LENGTH AT PUE
13	9+00.68	26.4	26.61'
14	9+18.76	26.9	29.60'
15	9+58.81	27.7	32.00'
16	10+03.81	28.5	32.00'
17	10+48.81	28.9	32.00'
18	10+93.81	29.7	32.00'
19	11+38.81	30.5	32.00'
20	11+83.81	31.3	32.00'
21	12+28.81	32.1	32.00'
22	12+59.44	32.9	31.15'
23	12+96.96	33.3	33.37'
24	13+09.23	33.5	32.24'
25	13+45.35	33.8	34.83'
26	13+87.01	34.2	33.04'
27	14+31.65	34.6	26.06'
28	14+82.15	34.9	23.85'
29	15+32.93	35.3	29.26'
30	15+68.63	35.7	33.75'
31	15+98.16	35.8	34.39'
32 *	16+26.43	36.2	35.45'
33	16+53.33	36.1	25.98'
34	16+88.19	35.4	32.00'
35	17+33.19	35.2	32.00'
36	17+79.12	35.0	32.11'
37	18+17.15	34.8	35.25'
46	11+30.17	30.7	28.00'
47	11+74.92	31.6	28.00'
48	12+21.74	31.9	28.00'
49	13+98.39	34.2	27.90'
50	14+47.26	34.6	35.23'
51	14+88.26	35.0	35.80'
52	15+29.86	35.4	30.13'
53	15+93.67	35.8	30.08'

* Install SAS SVC Into MH per COA DWG 2118

RESTRAINED JOINT LENGTH FOR BENDS, VALVES, DEAD ENDS (FT.)					
PIPE SIZE	90°	45°	22.5°	11.25°	VALVE
6"	17'	7'	3'	2'	46'
10"	26'	11'	5'	3'	72'

LENGTH OF RESTRAINED PIPE ON EACH SIDE OF THE BEND. RESTRAIN BRANCH AT FITTING ONLY MINIMUM ATTACHED PIPE LENGTH, RUN SIDE OF TEE: 10.00 FEET.

RESTRAINED JOINT LENGTHS FOR REDUCERS (FT.)		
PIPE SIZE	LARGE SIDE	SMALL SIDE
6" X 6"	44'	-

RESTRAINED JOINT LENGTH FOR TEES (FT.)		
PIPE SIZE	RUN	BRANCH
6"x6"	10'	2'

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**CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT**

TITLE: **EL VALLADO SUBDIVISION
CHACO CLIFF TR. & FLINT RIDGE TR. & LODESTONE TR.
PRIVATE UTILITY IMPROVEMENTS**

DESIGN REVIEW COMMITTEE	ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
APPROVED FEB 1 2 2002	APPROVED FEB 25 2002 CITY ENGINEER		
DESIGN REVIEW COMMITTEE	LAST DESIGN UPDATE		

CITY PROJECT NO. **671981** #

ZONE MAP NO.

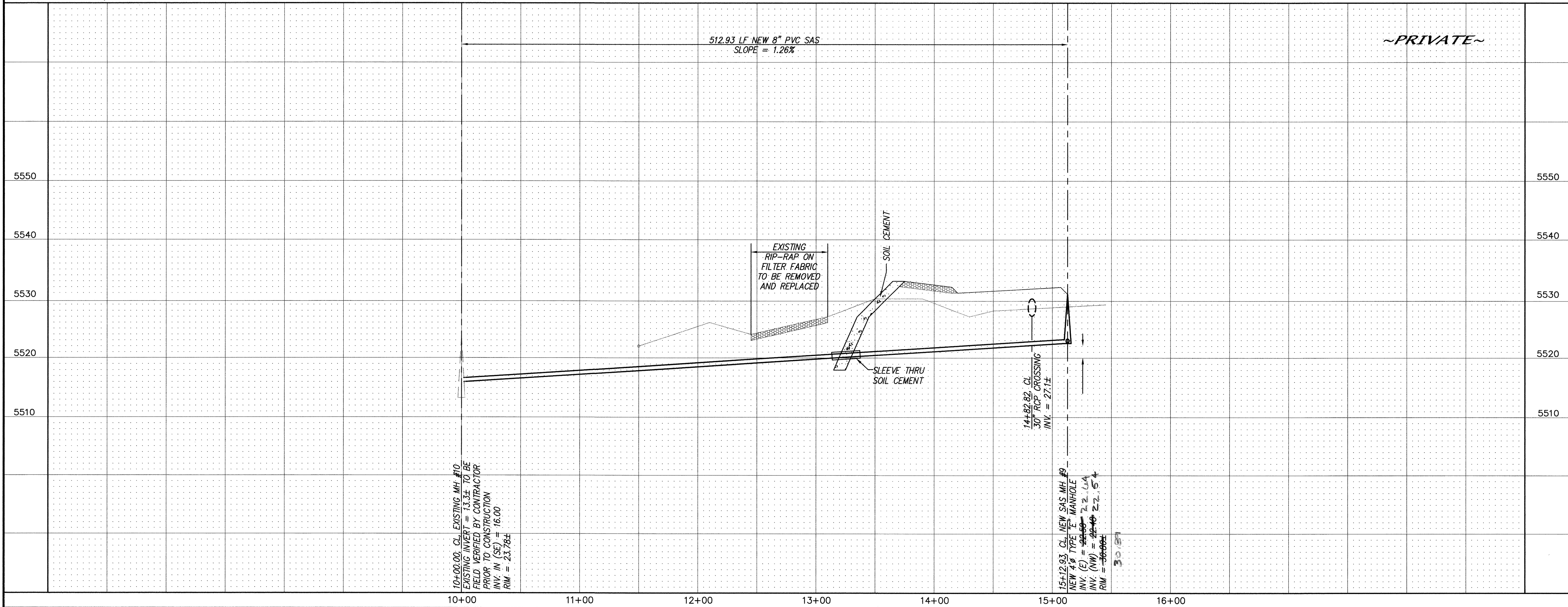
SHEET

OF **12**

L-22

12

SCANNED BY
MESA REPRO



OFFSITE SANITARY SEWER
STA. 10+00.00 TO STA. 15+12.93
SCALE: HORIZ. 1" = 50'
VERT. 1" = 10'

NOTES

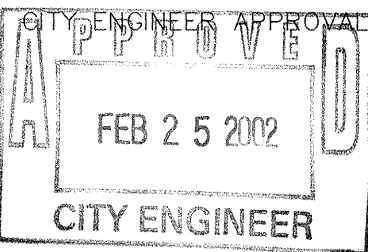
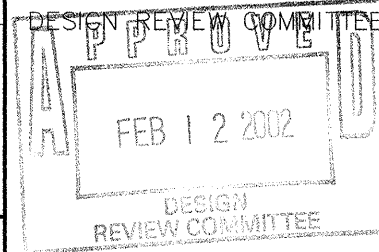
1. STATIONING IS BASED UPON THE CENTERLINE OF THE 8" SANITARY SEWER LINE.

dmg MARK GOODWIN & ASSOCIATES, P.A.
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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: **EL VALLADO SUBDIVISION
OFFSITE SANITARY SEWER
PRIVATE UTILITY IMPROVEMENTS**



CITY PROJECT NO.
671981

ZONE MAP NO.
L-22

SHEET OF
13 16

SURVEY INFORMATION			BENCH MARKS			AS BUILT INFORMATION		
FIELD NOTES								
NO.	BY	DATE				CONTRACTOR	WORKED BY	DATE
						FRANKLIN'S	ALS	02
							INSPECTOR'S	DATE
							RECEIPTANCE BY	DATE
							VERIFICATION BY	DATE
							DRAWN BY	DATE
							CHECKED BY	DATE
							MICRO-FILM INFORMATION	
							RECORDED BY	DATE
							NO.	

STATION "5-M22" IS LOCATED 8.7 MI. SE OF DOWNTOWN ALBUQ. ON THE EAST SIDE OF THE MUNICIPAL LIMITS LINE IN THE FOUR HILLS SUBDIVISION AREA. STATION IS 600' EAST OF THE MUNICIPAL LINE, 77.9' SE OF POWER POLE #E37, AND 166' NW OF POWER POLE #60. STATION IS A STANDARD ACS BRASS DISK SET IN CONCRETE MONUMENT IN THE GROUND. STATION IN STAMPED "5-M22, 1975ACS". X = 424,017.61 Y = 1,475,700.07 (NAD 1927) ELEV. = 5594.518 (NGVD 1929)
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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 SEPERATE 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 TRAVELED 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.

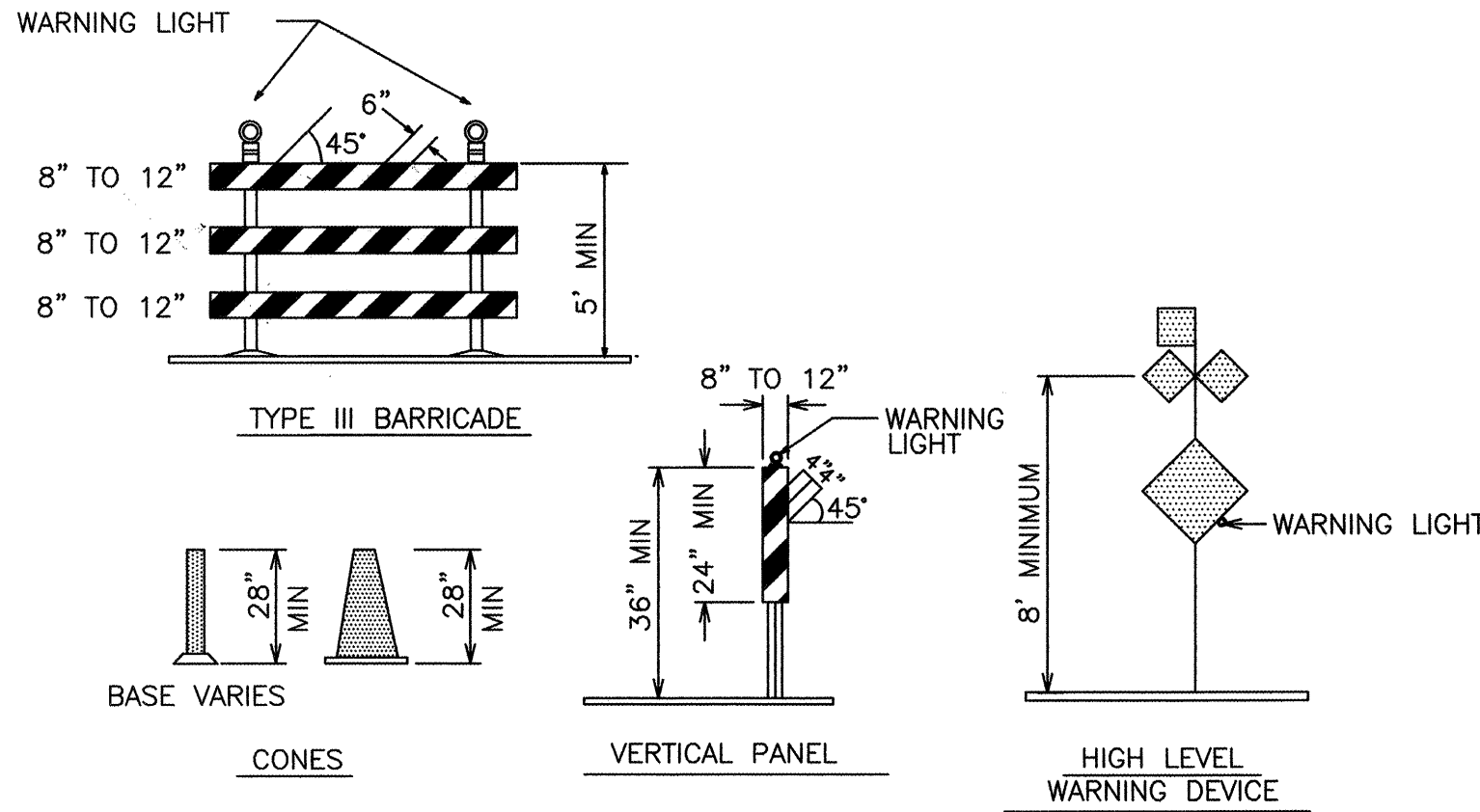
21. EXCAVATIONS SHALL BE PLATED, TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING OF TRAFFIC. A MINIMUM OF 11 FEET SHALL BE PROVIDED FOR TRAFFIC IN ANY GIVEN DIRECTION. CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS.
22. CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE FOLLOWING:
- STANDARDS AND REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
 - THE CITY OF ALBUQUERQUE TRAFFIC CODE, LATEST EDITION.
 - 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 IT'S 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.



- LEGEND**
- WORK AREA
 - BARRICADE - TYPE I, TYPE II, OR BARREL
 - BARRICADE - TYPE III
 - VERTICAL PANEL
 - 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 STREET LIMIT OF THE STREET
 - TAPER LENGTH - SEE CHART BELOW
- THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET.

TAPER REQUIREMENT

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

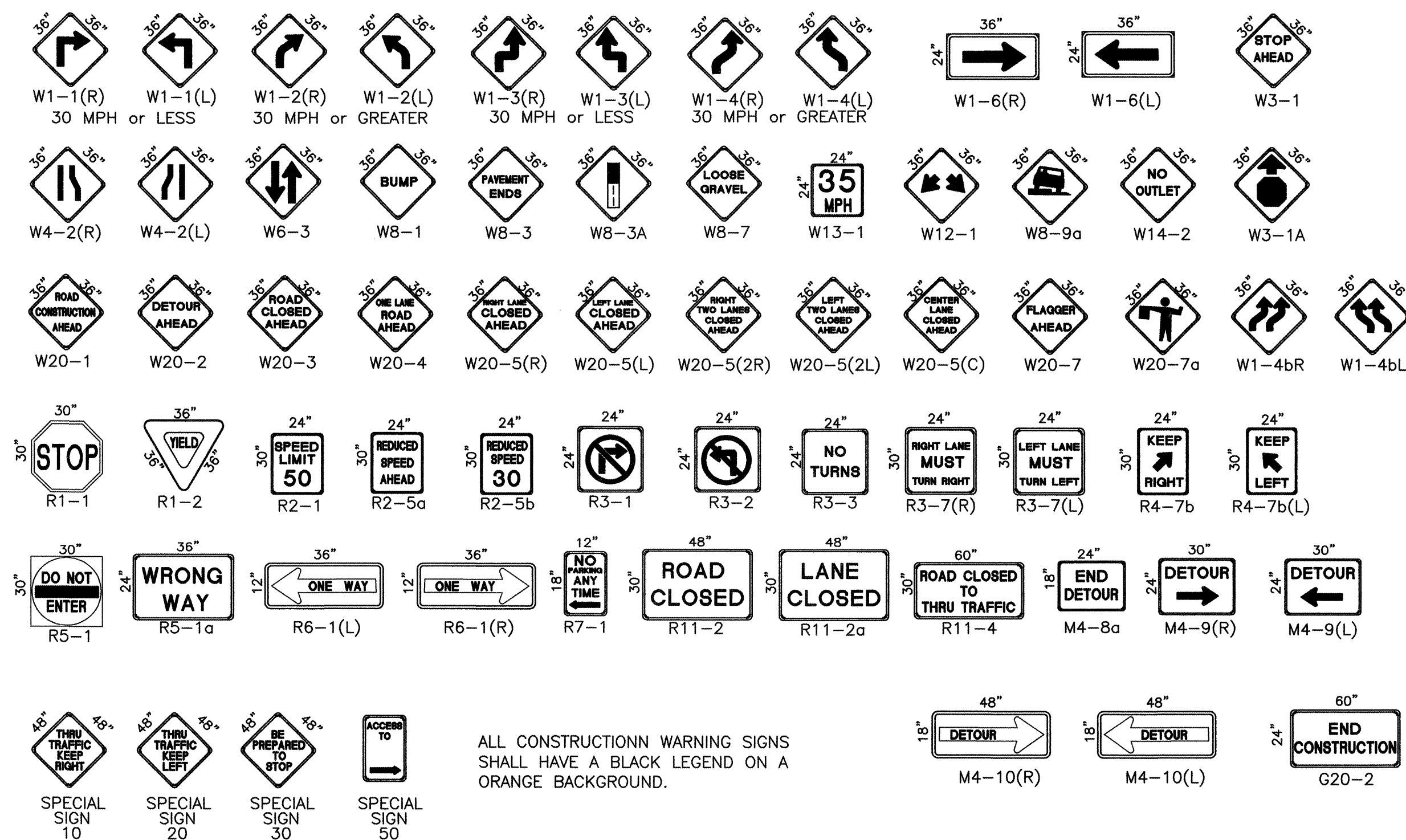
TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPER:	
MERGING TAPER	L MINIMUM
SHIFTING TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/2 L MINIMUM
TWO-WAY TRAFFIC TAPER	100 FEET MAXIMUM
DOWNSTREAM TAPERS	100 FEET PER LANE

TAPER LENGTH COMPUTATION

SPEED LIMIT	
40 MPH OR LESS	$L = \frac{WS^2}{60}$
40 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				BENCH MARKS				SURVEY INFORMATION				ENGINEER'S SEAL			
CONTRACTOR	DATE	BY	DATE	NO.	BY	DATE	NO.	BY	DATE	NO.	BY	DATE	NO.	BY	DATE
INSPECTOR'S	DATE	BY	DATE												
VERIFICATION BY	DATE	BY	DATE												
CONNECTION BY	DATE	BY	DATE												
MICRO-FILM INFORMATION				RECORDED BY				NO.				DATE			

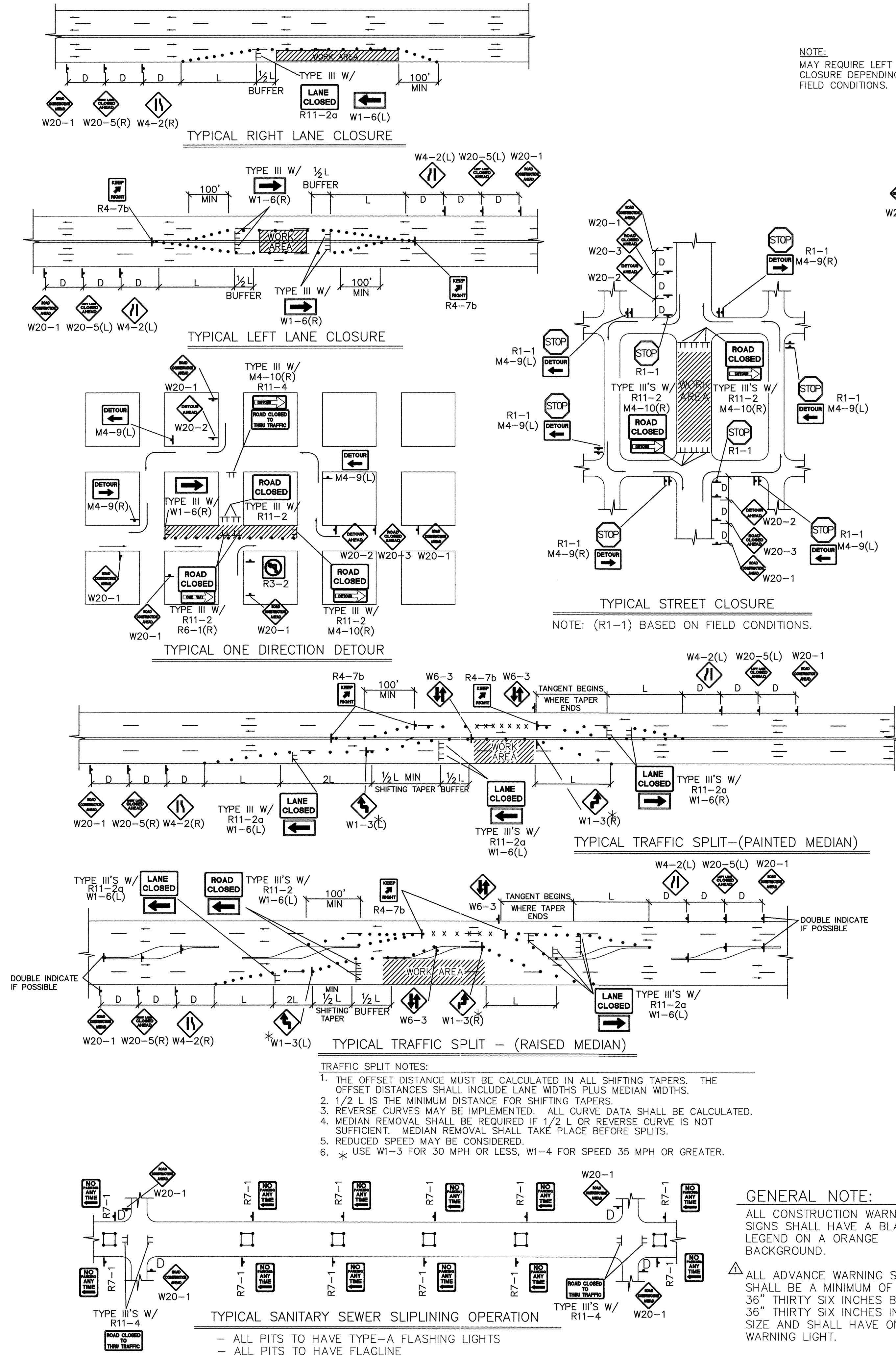
C.O.A. STANDARD

DESIGNED BY BOHANNAN HUSTON

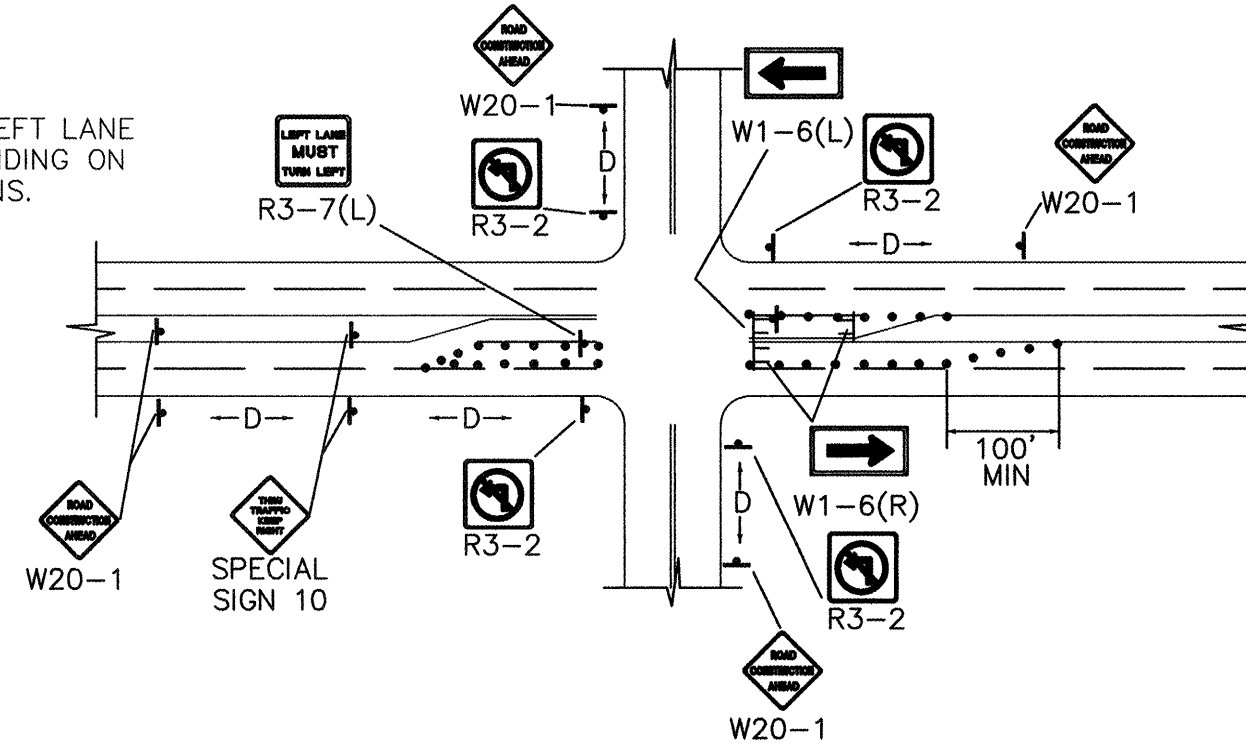
DRAWN BY BOHANNAN HUSTON

CHECKED BY BOHANNAN HUSTON

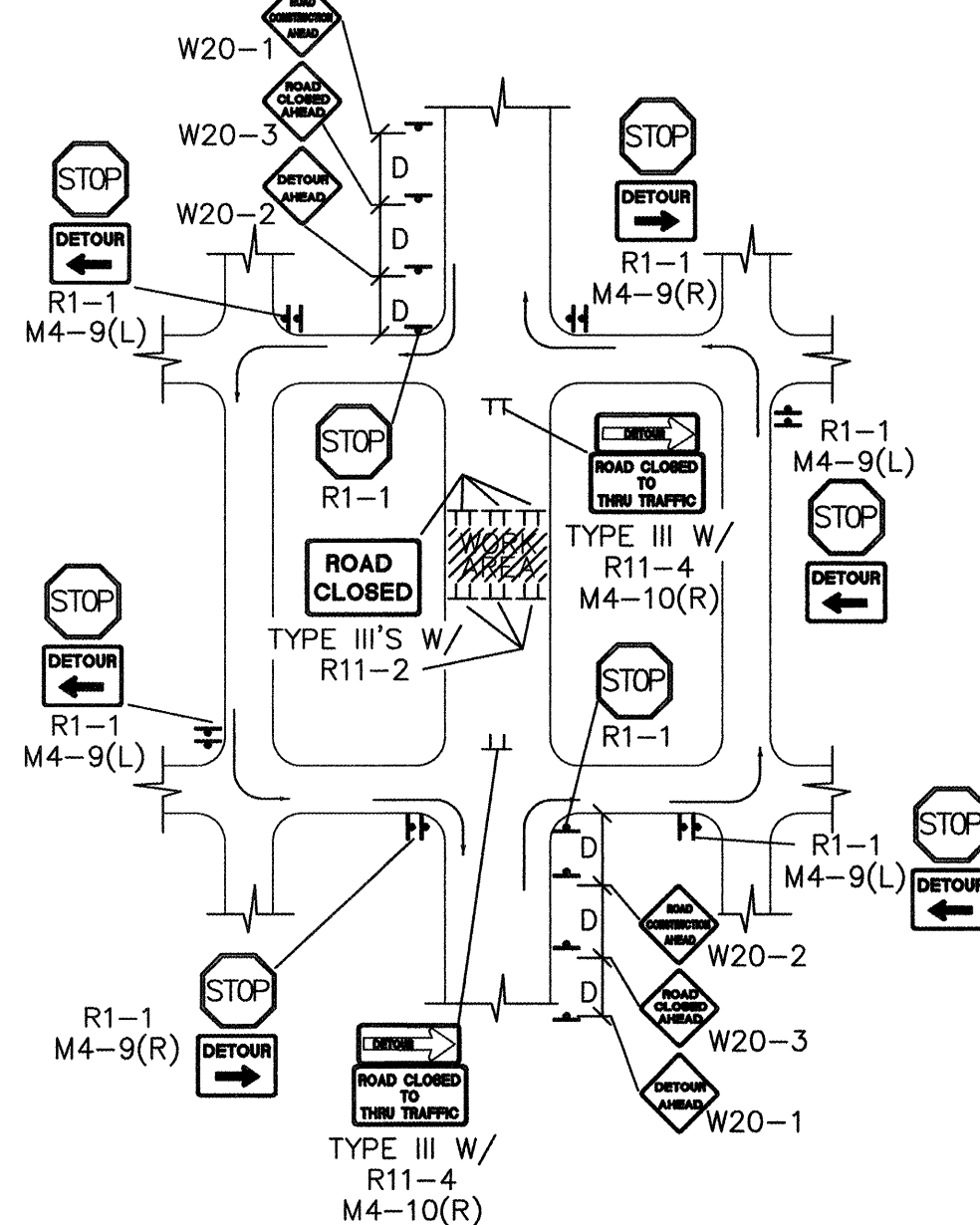
CITY OF ALBUQUERQUE		PUBLIC WORKS DEPARTMENT		ENGINEERING DEVELOPMENT GROUP	
TITLE: EL VALLADO SUBDIVISION					
DESIGN REVIEW COMMITTEE		CITY ENGINEER APPROVAL		LAST DESIGN UPDATE	
C.O.A. STANDARD		C.O.A. STANDARD		MO./DAY/YR.	
CITY PROJECT NO. 671981		ZONE MAP NO. L-22		SHEET 15 OF 16	



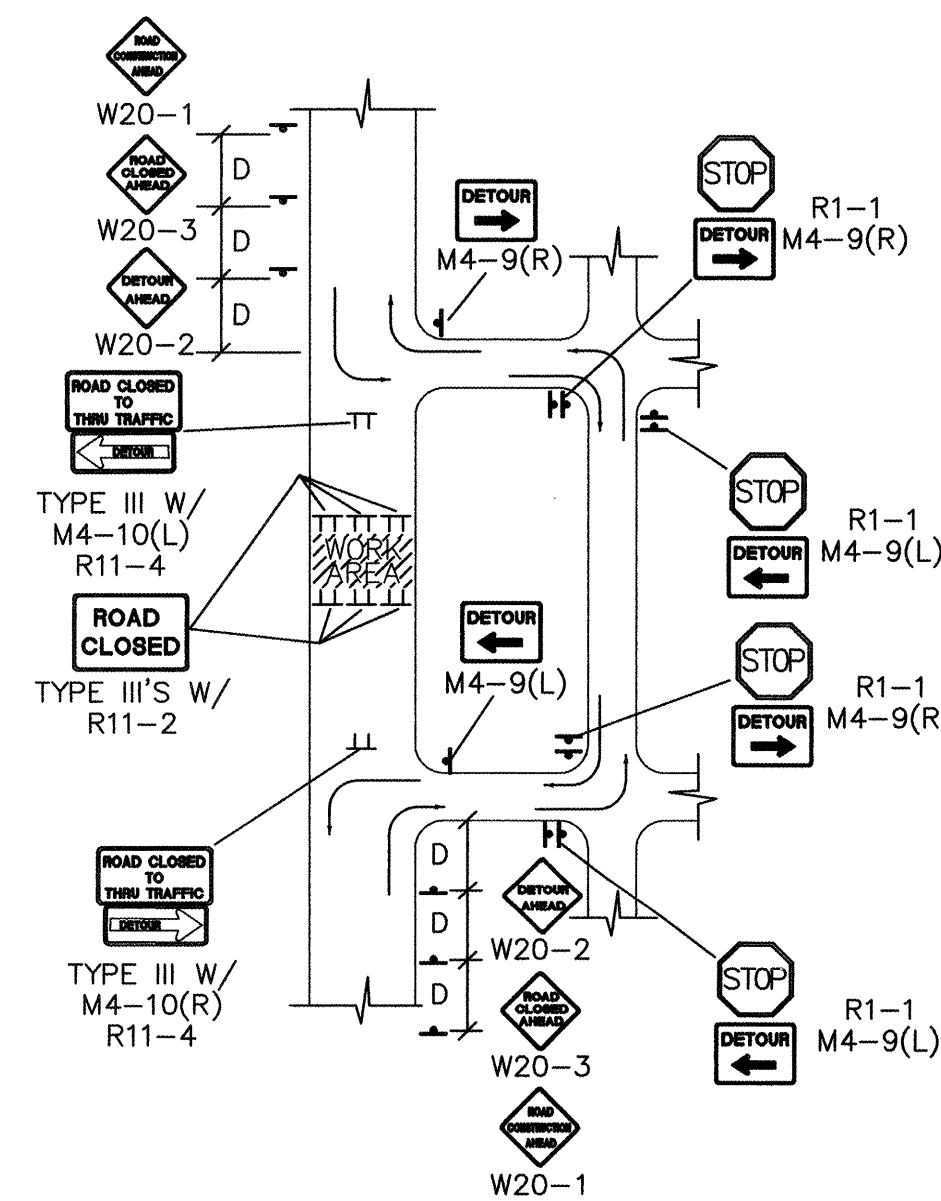
NOTE:
MAY REQUIRE LEFT LANE CLOSURE DEPENDING ON FIELD CONDITIONS.



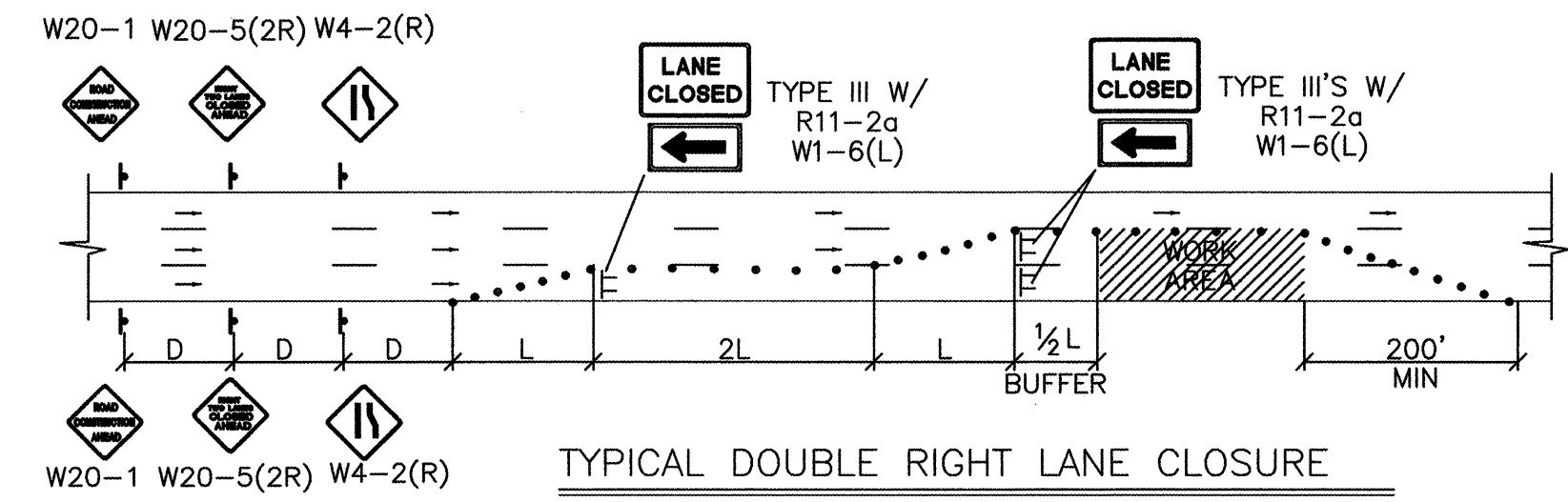
TYPICAL LANE CLOSURE AT INTERSECTION
NOTE: DEPENDING ON WORK ZONE LOCATION.



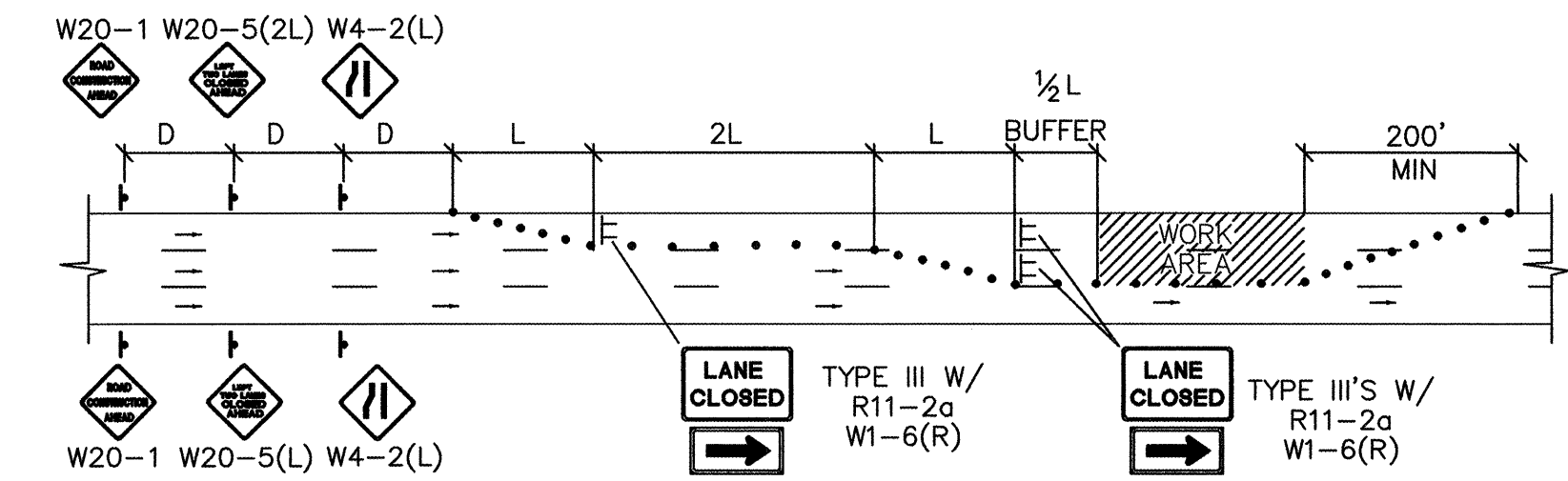
TYPICAL MID-BLOCK CLOSURE
NOTE: (R1-1) BASED ON FIELD CONDITIONS.



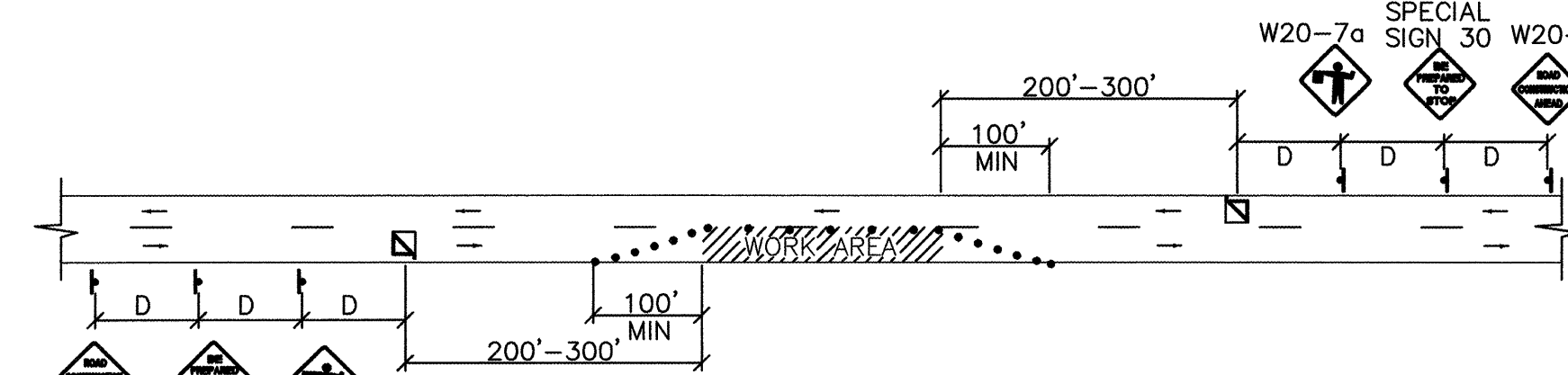
TYPICAL STREET CLOSURE
NOTE: (R1-1) BASED ON FIELD CONDITIONS.



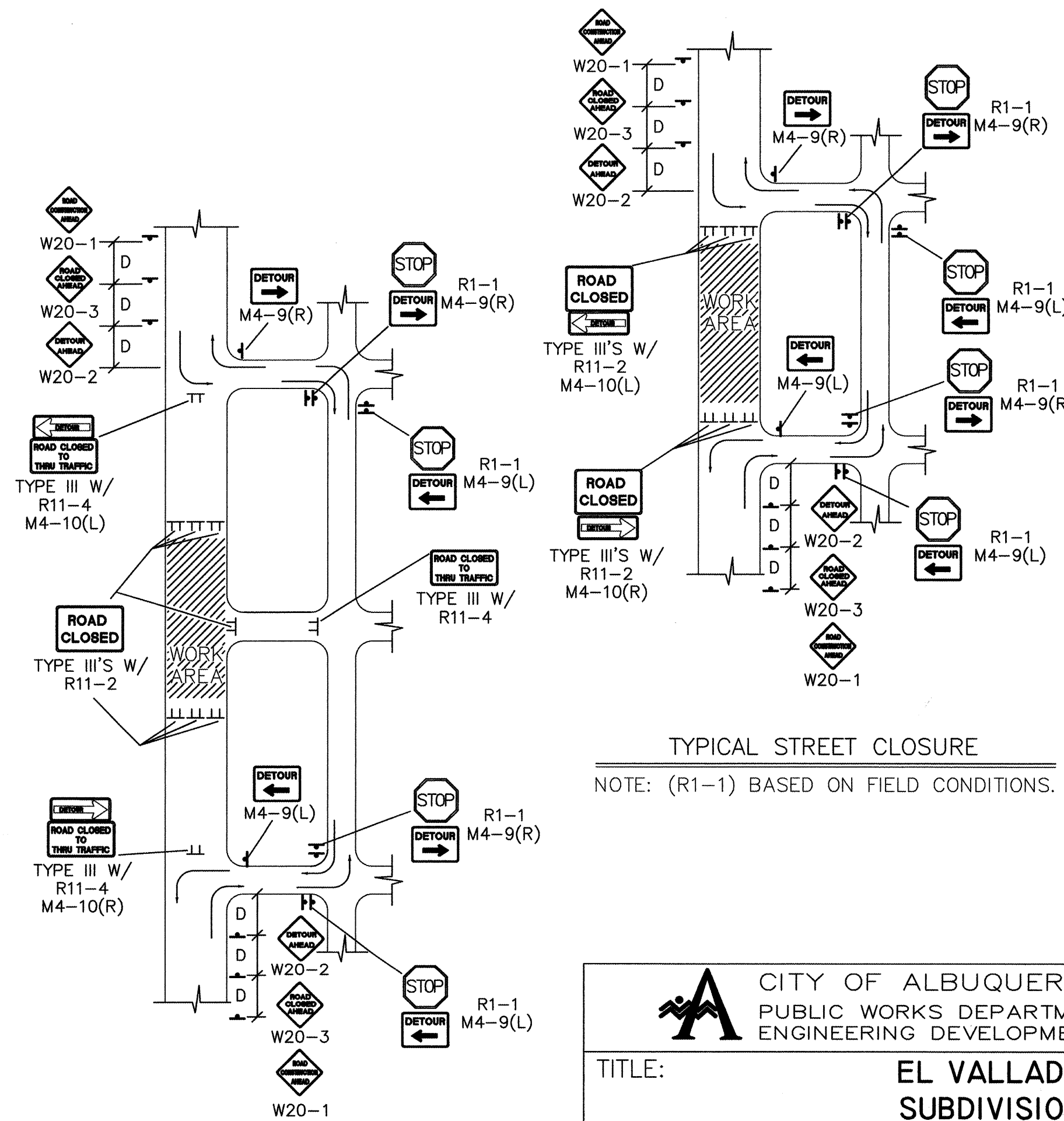
TYPICAL DOUBLE RIGHT LANE CLOSURE



TYPICAL DOUBLE LEFT LANE CLOSURE



TYPICAL FLAGGING OPERATION



TYPICAL STREET CLOSURE
NOTE: (R1-1) BASED ON FIELD CONDITIONS.

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP	
TITLE: EL VALLADO SUBDIVISION	
DESIGN REVIEW COMMITTEE C.O.A. STANDARD	CITY ENGINEER APPROVAL C.O.A. STANDARD
CITY PROJECT NO. 671981	ZONE MAP NO. L-22
SHEET 16	
OF 16	

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR CEAS KLINS	DATE 07/07	SHOWN BY AK	DATE 07/07	FIELD NOTES BY AK	DATE 07/07	REVISIONS BY AK	DATE 07/07
MICRO-FILM INFORMATION		RECORDED BY NO		DESIGNED BY BOHANNAN HUSTON		DATE 5-97	
				DRAWN BY BOHANNAN HUSTON		DATE 5-97	
				CHECKED BY BOHANNAN HUSTON		DATE 5-97	

C.O.A. STANDARD