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SCANNED BY
PLANNING

PUBLIC IMPROVEMENT PLANS
FOR
ROADRUNNER ESTATES
PUBLIC WATERLINE
ALBUQUERQUE, NEW MEXICO

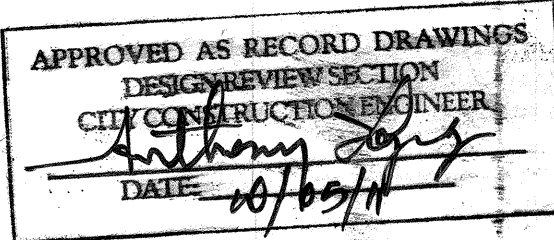
APRIL 2006

PREPARED FOR:
ROADRUNNER ESTATES
1817 CENTRAL N.W.
ALBUQUERQUE, NEW MEXICO 87104

PREPARED BY:
ISAACSON & ARFMAN, P.A.
128 MONROE ST. NE
ALBUQUERQUE, NM 87108

INDEX TO DRAWINGS

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1	COVER SHEET
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3	GRADING AND DRAINAGE PLAN
4	MASTER UTILITY PLAN
5	WATERLINE PLAN & PROFILE



CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

I, Scott M. McGee of the firm of Isaacson & Arfman, P.A., a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision and has been constructed in accordance with the plans and specifications approved by the City Engineer and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings. This Certification is based on site inspections by me or personnel under my direction and survey information provided by Preston E. Hall, NMPS number 10042.

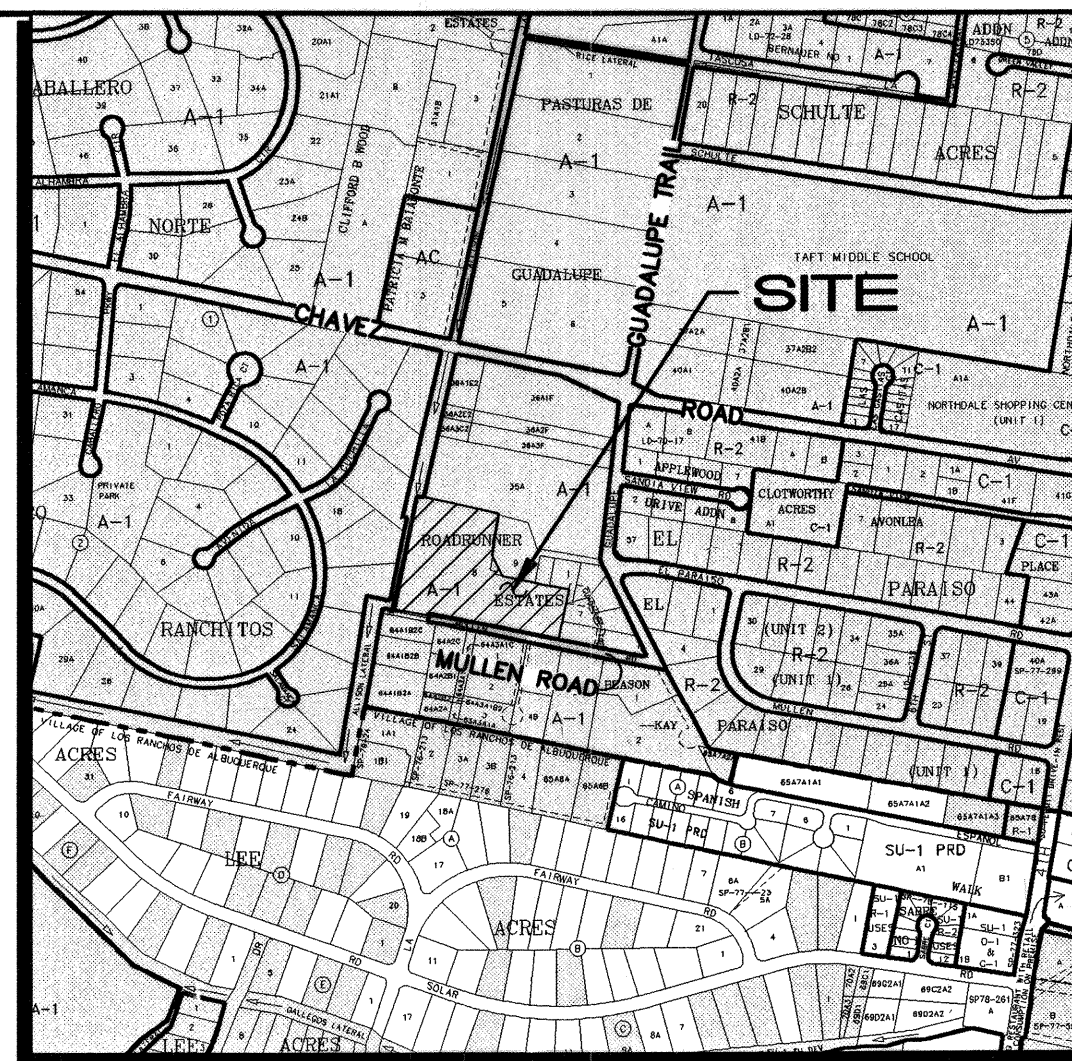
Scott M. McGee 04/06/07
Scott M. McGee NMPE No. 10519



SURVEYOR'S CERTIFICATION

I, PRESTON E. HALL, 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 SURVEYS PERFORMED BY ME OR UNDER MY SUPERVISION, AND THAT THIS "AS-BUILT" INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. HALL SURVEYING CO. IS NOT RESPONSIBLE FOR ANY OF THE DESIGN CONCEPTS, CALCULATIONS, ENGINEERING OR INTENT OF THE RECORD DRAWINGS.

Preston E. Hall 1009/11/06
PRESTON E. HALL, NMPS NO. 10042 DATE



E-14-Z

VICINITY MAP

1"=750'±

GENERAL NOTES

- 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 AMENDED WITH UPDATE NO. 7, INCLUDING AMENDMENT 1.
- ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE & VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH MINIMUM DELAY.
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, NM ONE CALL SYSTEMS, INC. @ 260-1990 FOR LOCATION OF EXISTING UTILITIES.
- CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN A MANNER WHICH WILL MINIMIZE INTERFERENCE WITH LOCAL TRAFFIC. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS AND ORDERS OF ANY PUBLIC BODY HAVING JURISDICTION FOR THE SAFETY OF PERSONS OR PROPERTY, AND TO PROTECT THEM FROM DAMAGE, INJURY, OR LOSS. CONTRACTOR SHALL ERECT AND MAINTAIN, AS REQUIRED BY THE CONDITIONS AND PROGRESS OF THE WORK, ALL NECESSARY SAFEGUARDS FOR SAFETY CONTINUOUSLY AND NOT LIMITED TO NORMAL WORKING HOURS, THROUGHOUT THE DURATION OF THE PROJECT. CONTRACTOR SHALL ADHERE TO SECTION 19 OF THE GENERAL CONDITIONS OF THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986, AS AMENDED WITH UPDATE NO. 7.
- THE CONTRACTOR AGREES THAT HE SHALL ASSUME THE SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD HARMLESS THE OWNER & ENGINEER FROM ANY AND ALL LIABILITY REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.
- TRAFFIC CONTROL: FIVE (5) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION THE CONTRACTOR SHALL SUBMIT TO THE CONSTRUCTION COORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONSTRUCTION COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (924-3400) PRIOR TO OCCUPYING AN INTERSECTION. SEE SECTION 19 OF THE SPECIFICATIONS. ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED WITH PLASTIC REFLECTORIZED PAVEMENT MARKINGS BY CONTRACTOR TO LOCATION AS EXISTING OR AS SHOWN IN THIS PLAN SET.
- WHEN ABUTTING EXISTING PAVEMENT TO NEW, SAWCUT EXISTING PAVEMENT TO A STRAIGHT EDGE AND AT A RIGHT ANGLE, OR AS APPROVED BY THE FIELD ENGINEER. REMOVAL OF BROKEN OR CRACKED PAVEMENT WILL ALSO BE REQUIRED.
- EXISTING CURB AND GUTTER NOT TO BE REMOVED UNDER THE CONTRACT WHICH IS DAMAGED OR DISPLACED BY THE CONTRACTOR SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
- ALL FINAL BACKFILL FOR TRENCHES SHALL BE COMPACTED TO A MINIMUM 90% MAXIMUM DENSITY PER ASTM D-1557 AND AS DIRECTED BY SECTION 701.14.2 AND STANDARD DRAWING NUMBER 2315.
- THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY OR PRIVATE ROADWAY EASEMENTS SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET OR INTO ANY PUBLIC DRAINAGE FACILITY.
- PROPOSED WATERLINE MATERIALS SHALL BE EITHER PVC PIPE MEETING AWWA C900 REQUIREMENTS (6"-12") OR DUCTILE IRON PIPE, THICKNESS CLASS 50 (6"-16").
- ALL SANITARY SEWER LINE STATIONING REFERS TO SANITARY SEWER CENTERLINE STATIONING.
- ALL FITTINGS ON WATERLINES SHALL HAVE RESTRAINED JOINTS AS NOTED ON THE PLANS.
- CONTRACTOR SHALL SUPPORT ALL EXISTING, UNDERGROUND UTILITY LINES WHICH BECOME EXPOSED DURING CONSTRUCTION. PAYMENT FOR SUPPORTING WORK SHALL BE INCIDENTAL TO WATER-LINE AND/OR SEWERLINE COSTS.
- CONTRACTOR SHALL ASSIST THE ENGINEER/INSPECTOR IN THE RECORDING OF DATA ON ALL UTILITY LINES AND ACCESSORIES AS REQUIRED BY THE CITY OF ALBUQUERQUE FOR THE PREPARATION OF RECORD DRAWINGS. CONTRACTOR SHALL NOT COVER UTILITY LINES AND ACCESSORIES UNTIL ALL DATA HAS BEEN RECORDED.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE ENGINEER MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE ENGINEER AND SHALL NOTIFY THE ENGINEER AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT 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 COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO SECTION 4.4 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS.
- PNM WILL PROVIDE AT NO COST TO THE CITY OR THE CONTRACTOR THE REQUIRED PERSONNEL FOR INSPECTION OR OBSERVATION OF THE WORK BY PNM WHILE THE CONTRACTOR IS EXPOSING PNM'S CABLES. HOWEVER, THE CONTRACTOR SHALL BE CHARGED THE TOTAL COST ASSOCIATED WITH REPAIRS TO ANY DAMAGED CABLES OR FOR ANY COST ASSOCIATED WITH SUPPORTING OR RELOCATING THE POLES AND CABLES DURING CONSTRUCTION.
- WARNING--EXISTING UTILITY LINE LOCATIONS ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. THE LOCATION OF ANY SUCH EXISTING LINES IS BASED UPON INFORMATION PROVIDED BY THE UTILITY COMPANY, THE OWNER, OR BY OTHERS, AND THE INFORMATION MAY BE INCOMPLETE OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UNDERGROUND UTILITY LINES, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY, AND PRESERVE ANY AND ALL EXISTING UTILITIES. THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES, IN PLANNING AND CONDUCTING EXCAVATION, WHETHER BY CALLING OR NOTIFYING THE UTILITIES, COMPLYING WITH "BLUE STAKES" PROCEDURES, OR OTHERWISE.
- ANY WORK OCCURRING WITHIN A FULLY DEVELOPED ARTERIAL ROADWAY REQUIRES 24 HR. CONSTRUCTION.
- ALL EXCAVATION, TRENCHING AND SHORING ACTIVITIES MUST BE ACCOMPLISHED IN ACCORDANCE WITH OSHA 29CFR 1926.650 SUBPART P.
- CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY AND ALL GRAFFITI FROM EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.
- THE WATER SYSTEMS DIVISION (857-8200) WILL BE NOTIFIED BY THE CONTRACTOR SEVEN (7) WORKING DAYS IN ADVANCE OF ANY WORK WHICH MAY AFFECT THE EXISTING PUBLIC WATER FACILITIES. REFER TO SECTION 18 OF THE STANDARD SPECIFICATIONS.
- ELECTRONIC MARKER DISKS (EMD) WILL BE PLACED ACCORDING TO SECTION 170 OF THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE #7.
- PRIVATE STREETS REQUIRE STREET NAME SIGNS, STOP SIGNS, AND ANY NECESSARY STRIPING.

APPROVAL	4-17-06
VILLAGE OF LOS RANCHOS	DATE
VILLAGE OF LOS RANCHOS S-05-04	
ISAACSON & ARFMAN, F.A. Consulting Engineering Associates 128 Monroe Street N.E. Albuquerque, New Mexico 87108 Ph. 505-268-8828 Fax. 505-268-2632 1481CVR.DWGthor 04.04.06	

REV.	SHEETS	CITY ENGINEER	DATE	USER	DEPARTMENT	DATE	USER	DEPARTMENT	DATE
ENGINEERS STAMP & SIGNATURE									
APPROVALS		ENGINEER		DATE		*****			
DRC Chairman		[Signature]		5-18-06		APPROVED FOR CONSTRUCTION			
Transportation		[Signature]		5-24-06					
Water/Wastewater		[Signature]		5-24-06					
Hydrology		[Signature]		5-24-06					
Constr. Mngmt.		[Signature]		5-24-06					
Constr. Coord.		[Signature]		5-24-06					
City Project No.						775581			
						Sheet 1 of 5			

PURPOSE OF CORRECTION IS TO CHANGE THE
DIMENSIONS ALONG THE NORTH LINE OF
LOT 11 & LOT 12.

APPROVED AND ACCEPTED BY:

12-14-05	Date
11/11/06	Date
2-15-06	Date
1-11-06	Date
2-24-06	Date
5/24/06	Date

William J. Walsh
Albuquerque Bernalillo County Utility Authority
Date 12/14/05

EASEMENTS: (continued)

Public utility easements shown on this plat are not exclusive and are dedicated for the common and joint use of the utilities designated on this plat, their successors and assigns, and for the use of any other public utilities whose use of said easements is deemed to be in the public interest by the Village of Los Ranchos de Albuquerque.

The subdivision is with the free consent and in accordance with the desire of the owner of the land; The public rights-of-way and other public areas shown on the plat are dedicated to the Village (if the subdivision is within the Village boundaries) or to another appropriate governmental entity as specified on the plat; and The easements as shown on the plat are granted for the specified purpose, showing to whom they are granted and any conditions associated therewith.

SURVEYOR'S CERTIFICATION

I, Preston E. Hall, New Mexico Registered Professional Surveyor No. 19,0042, do hereby certify that this plat was prepared by me or under my supervision, complies with the minimum standards for surveying in the State of New Mexico, and is true and correct to the best of my knowledge and belief.

W. H. Hall
Preston E. Hall 12/1/05



HALL SURVEYING CO.

12805 MENAUL BLVD. N.E.
ALBUQUERQUE, NEW MEXICO 87112

PHONE: (505) 292-6727

CLIENT DR. JAMES R. SHIVELEY

DRAWINGS\B-7056\B-7056.DWG

15065

"CORRECTION" PLAT OF
 LOTS 9A, 10, 11, 12, 13 & 14,
 ROADRUNNER ESTATES
 (BEING A REPLAT OF LOTS 8&9)
 VILLAGE OF LOS RANCHOS DE ALBUQUERQUE
 BERNALILLO COUNTY, NEW MEXICO
 DECEMBER 2005

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Page: 2 of 2
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ACSM "14-E14"
NEW MEXICO STATE PLANE GRID COORDINATES
(CENTRAL ZONE) X=378705.95, Y=1,512308.83
G-G=0.99967884
ELEVATION=4979.83 (NAVD88)
DELTA ALPHA=-0°14'01"

GUADALUPE TRAIL N.W.

HALL SURVEYING CO

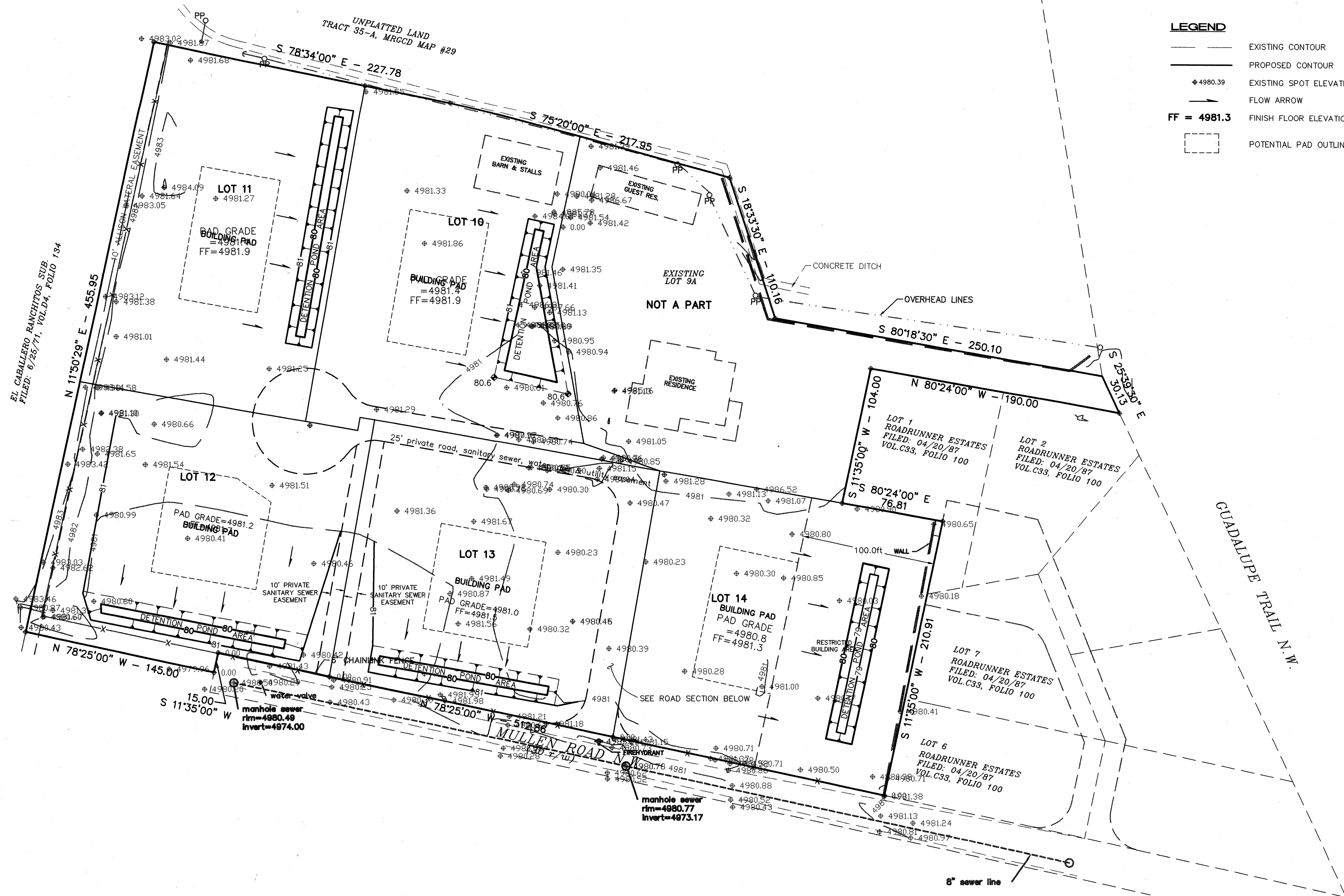
DRAWN PRESTON	DATE 09/07/05	12805 MENAUL BLVD. ALB., NM 87112
APPROVED	DATE	PH.:505-292-6727 FAX:505-292-6728
SCALE 1" = 50'	SHEET 1 OF 1	PROJECT NO. LS-2829

NOTE: SET REBAR/CAP AT ALL CORNERS UNLESS OTHERWISE INDICATED.
1) 25' PRIVATE ROAD EASEMENT USED FOR NET ACREAGE ONLY.

1) 25' PRIVATE ROAD EASEMENT USED FOR NET ACREAGE ONLY.

77558

SHEET 2 OF 5



LEGAL DESCRIPTION: LOTS 10-14, ROADRUNNER ESTATES

AREA: 5.017 ACRES

ZONING: A-1

FLOODPLAIN DESIGNATION: FEMA FIRM PANEL 119 INDICATES THIS SITE WITHIN ZONE X WHICH IS A 500-YEAR FLOOD AREA, OR AREA OF 100-YEAR FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT, OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE, AND AREAS PROTECTED BY LEVEES FROM 100-YEAR FLOOD.

EXISTING CONDITIONS: THIS SITE WAS USED AS A HORSE TRAINING AND BOARDING FACILITY. IT HAD PREVIOUSLY BEEN IRRIGATED FARMLAND WITH FAIRLY FLAT SLOPES CONDUCTIVE TO FLOOD-IRRIGATION. SEVERAL BARN AND A GARAGE ARE ON SITE ALONG WITH STALLS AND VARIOUS FENCING.

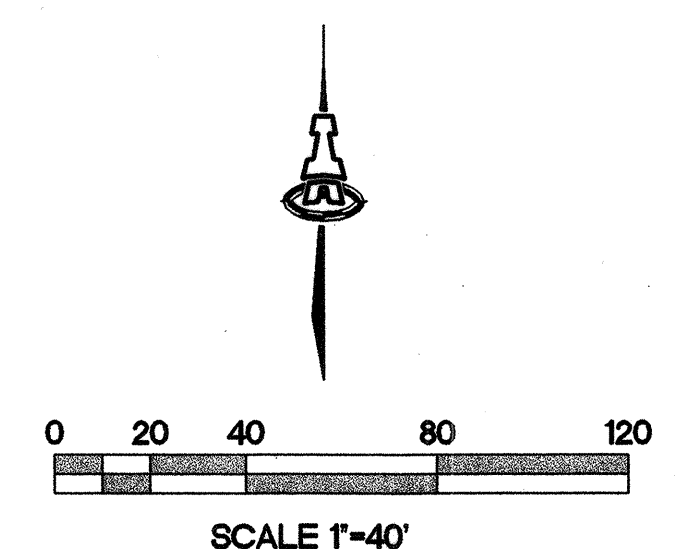
EXISTING HYDROLOGY: ZONE 2
LAND TREATMENT IS 96% A AND 4% D.
 $Q_w = (4.829)(1.56) + (1.188)(4.70) = 8.4$ CFS

PROPOSED CONDITIONS: FIVE RESIDENTIAL LOTS ARE PROPOSED AND WILL BE ACCESSED BY A PRIVATE ACCESS ROAD AS SHOWN. NO EARTHWORK IS PROPOSED WITH THIS GRADING PLAN. POTENTIAL PAD LOCATIONS ARE SHOWN ALONG WITH POSSIBLE STORMWATER DETENTION AREAS. AS EACH LOT IS DEVELOPED, THE INCREASED RUNOFF VOLUME WILL BE REQUIRED TO BE DETAINED ON SITE AND WILL NOT ADVERSELY AFFECT ANY ADJUTING LOTS. THIS CAN BE EASILY ACCOMPLISHED WITH DEPRESSED YARD AREAS WITHIN EACH LOT.

PROPOSED HYDROLOGY: FOR A 1.0 ACRE LOT, WITH ASSUMED LANDSCAPING AND IMPERVIOUS AREAS AS FOLLOWS, THE FOLLOWING RUNOFF VOLUMES WILL BE REQUIRED TO BE DETAINED ON SITE.

IMPERVIOUS AREAS (SF)	RUNOFF VOLUME DETENTION (CF)
10,000	2,500
15,000	3,000

THIS IS BASED ON DPM SECTION 22.2 TABLE 8. "EXCESS PRECIPITATION." VOLUMES ARE COMPUTED BASED ON RUNOFF INCREASES FOR THE IMPERVIOUS AREA AND USES A 50/50 SPLIT BETWEEN B AND C LAND TREATMENTS FOR THE BALANCE OF THE LOT.



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ROADRUNNER ESTATES

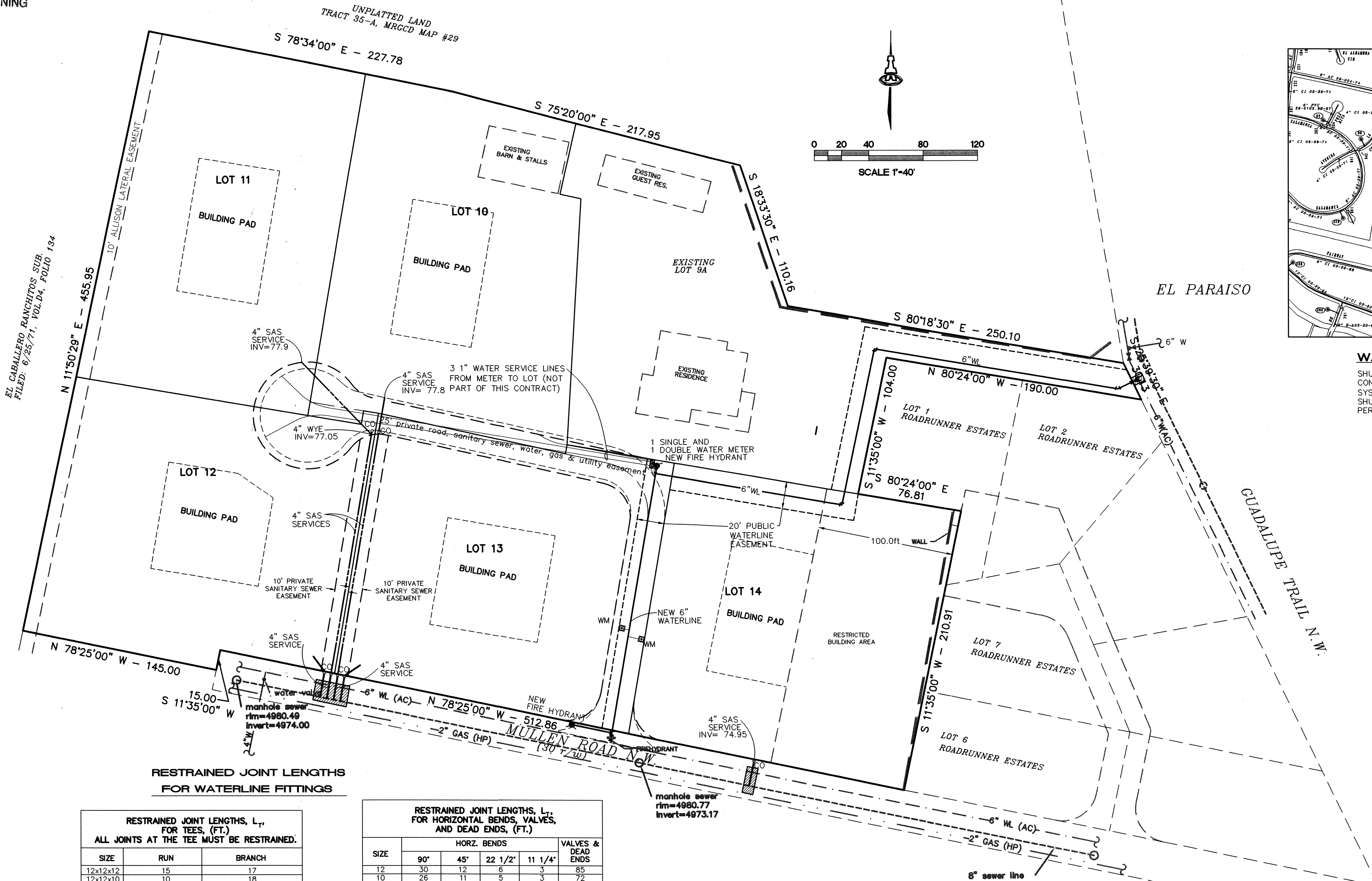
GRADING AND DRAINAGE PLAN

Checked By	Drawn By	No.	Revision	PAGE
SMM	thor			81 OF
Date	Job Number			
1481				

FOR INFORMATION ONLY

#775581

SHEET 3 of 5



RESTRAINED JOINT LENGTHS
FOR WATERLINE FITTINGS

RESTRAINED JOINT LENGTHS, L _T , FOR TEES, (FT.) ALL JOINTS AT THE TEE MUST BE RESTRAINED.		
SIZE	RUN	BRANCH
12x12x12	15	17
12x12x10	10	18
12x12x8	6	19
12x12x6	3	19
12x12x4	1	19
10x10x10	12	18
10x10x8	8	15
10x10x6	4	16
10x10x4	2	4
8x8x8	9	20
8x8x6	5	17
8x8x4	2	15
6x6x6	6	20
6x6x4	2	20

THIS TABLE IS BASED UPON THE FOLLOWING CRITERIA:

DEPTH OF BURY 3.0 FT. MINIMUM
FACTOR OF SAFETY 1.25
MATERIAL PVC PIPE
SOIL TYPE: GM/SM - SILTY GRAVELS AND SILTY SANDS,
GRAVEL-SAND-SILT MIXTURES.
TEST PRESSURE 150 PSI
TRENCH TYPE 4: PIPE BEDDED IN SAND, GRAVEL OR CRUSHED
STONE TO DEPTH OF 1/8 PIPE DIAMETER, 4 INCH
MINIMUM; BACKFILL COMPACTED TO TOP OF PIPE.

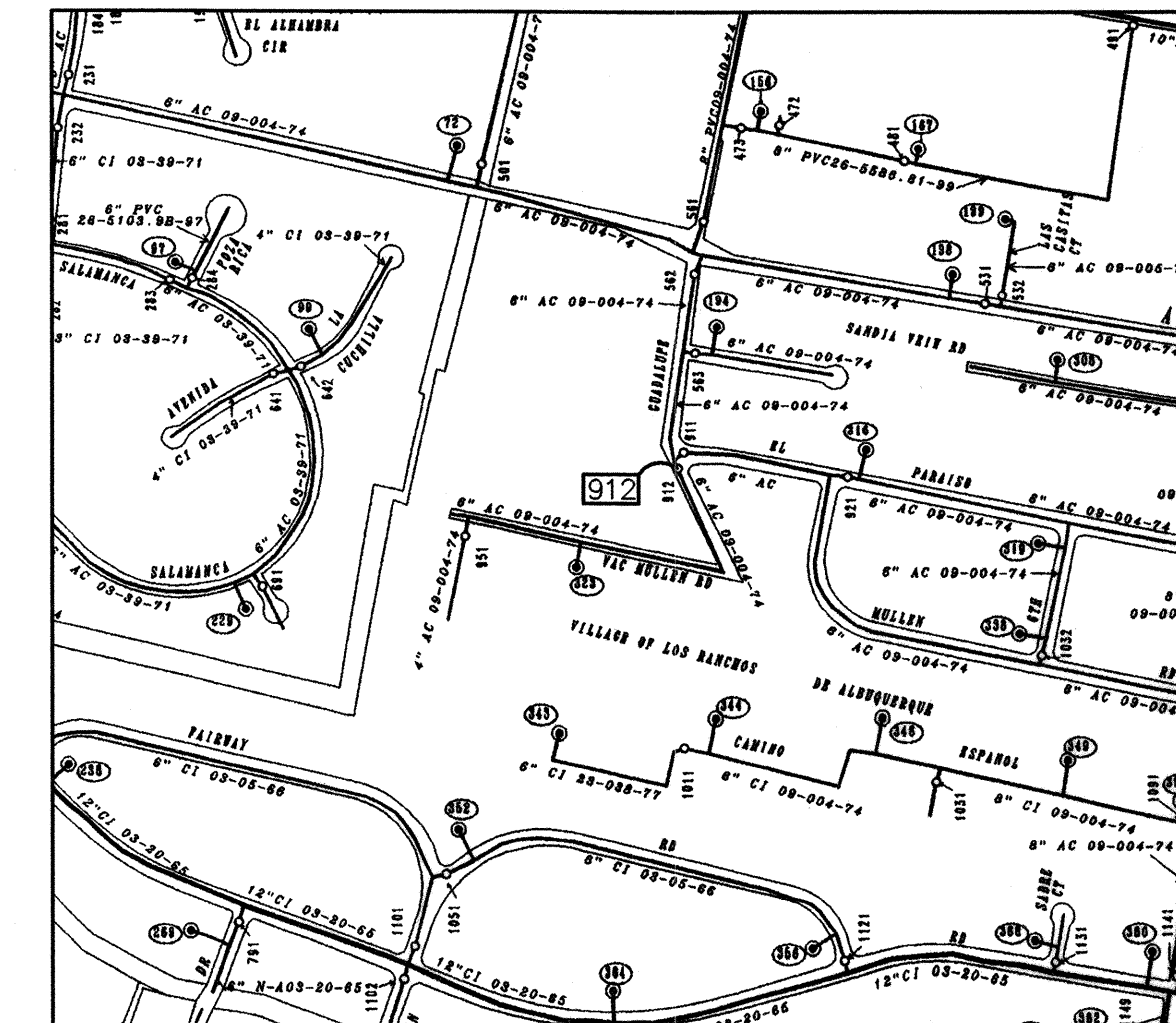
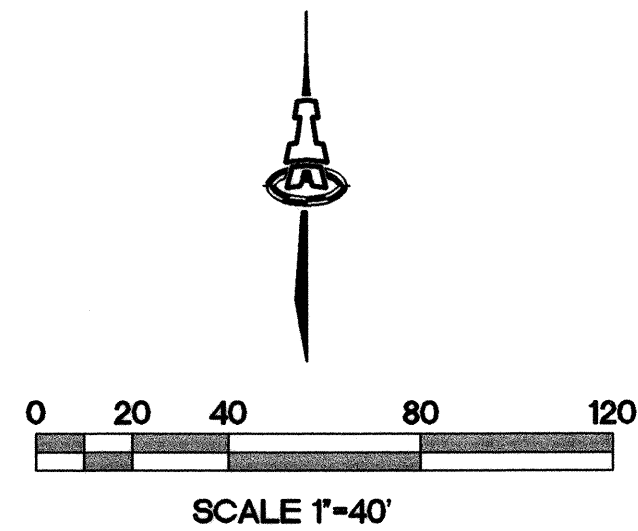
DIFFERENT CRITERIA, E.G., DUCTILE IRON PIPE, GREATER DEPTH OF BURY,
ETC., WILL REQUIRE DIFFERENT RESTRAINED LENGTHS. THESE MUST BE
CALCULATED BY A QUALIFIED PROFESSIONAL ENGINEER AND APPROVED
BY THE PUBLIC WORKS DEPARTMENT.

RESTRAINED JOINT LENGTHS, L _T , FOR HORIZONTAL BENDS, VALVES, AND DEAD ENDS, (FT.)						
SIZE	HORZ. BENDS					VALVES & DEAD ENDS
	90°	45°	22 1/2°	11 1/4°		
12	30	12	6	3	85	
10	26	11	5	3	72	
8	22	9	4	2	60	
6	17	7	3	2	46	
4	12	5	2	1	32	

RESTRAINED JOINT LENGTHS, L _T , FOR REDUCERS, (FT.) MINIMUM UNOBSTRUCTED, STRAIGHT-RUN LENGTH: RESTRAIN EITHER LARGE PIPE, OR SMALL PIPE.					
SIZE	LARGE SIDE	SMALL SIDE	SIZE	LARGE SIDE	SMALL SIDE
12x10	25	30	10x6	44	73
12x8	45	68	10x4	58	141
12x6	62	121	8x6	25	33
12x4	74	213	8x4	43	83
10x8	24	30	6x4	24	35

NOTES:

- ALL MECHANICAL JOINTS SHALL BE RESTRAINED AT THE FITTING.
- THE CONTRACTOR SHALL PROVIDE A MINIMUM PIPE LENGTH OF 20 LF
FROM ALL MECHANICAL JOINTS. ALL PIPE JOINTS WITHIN 20 LF OF
A MECHANICAL JOINT SHALL BE RESTRAINED AT THE CONTRACTOR'S
EXPENSE.
- THE CONTRACTOR SHALL RESTRAIN ALL PIPE JOINTS IN THE
SPECIFIED DISTANCE LISTED IN THE TABLE ON THIS SHEET.
- THE CONTRACTOR SHALL RESTRAIN ALL FIRE HYDRANT JOINTS FROM
THE TEE ON THE MAIN TO THE FIRE HYDRANT FLANGE.



WATER SHUT-OFF PLAN

SHUT-OFF VALVES TO PROVIDE NON-PRESSURE CONNECTION. THE CONTRACTOR SHALL CONTACT WATER SYSTEMS DIVISION (857-8200) 7 WORKING DAYS PRIOR TO SHUT-OFF OR TURN-ON AT VALVES. ONLY CITY PERSONNEL ARE ALLOWED TO OPERATE VALVES.

LEGEND

- 6" W. - EXISTING PUBLIC WATERLINE
- EXISTING SAS WITH MANHOLE
- EXISTING GAS MAIN
- EXISTING FIRE HYDRANT
- PROPOSED SINGLE WATER METER & BOX
- PROPOSED GATE VALVE W/ VALVE BOX
- PROPOSED FIRE HYDRANT
- PROPOSED WATER LINE W/ FITTING
- PAVEMENT REMOVAL & REPLACEMENT

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CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP	
TITLE: ROAD RUNNER ESTATES MASTER UTILITY PLAN	
Design Review Committee	City Engineer Approval
APPROVED	DESIGNED
City Project No. 775581	Zone Map No. E-14-Z
Sheet 4	Of 5

SCANNED BY
PLANNING

STA 1+00.00, 205.00' LT
4-4" SANITARY SEWER SERVICES
PER COA STD DWG #2125
INVERT AT R/W LINE = 4974.88
REMOVE & REPLACE 20 SY
ASPHALT PAVING PER COA STD
DWG #2465

STA 1+05.00, 0.00' LT
3/4" LT
6"x6" TEE
30 LF 6" WL
NEW 4" BURY FIRE
HYDRANT
FL ELEV= 4981.6

STA 0+94.62
E OF MULLEN RD
STA 1+04.05, 0.00' LT
REMOVE EXISTING PUBLIC
FIRE HYDRANT
6" GATE VALVE
W/ VALVE BOX
START NEW 6" WL

STA 0+86.21, 105.86' RT
4" SANITARY SEWER SERVICE PER
COA STD DWG #2125
REMOVE & REPLACE 10 SY
ASPHALT PAVING PER COA STD
DWG #2465
INVERT AT R/W LINE = 4974.95

5' RT.
STA 3+02.83, 0.00' LT
6"x6" TEE
6" GATE VALVE & VALVE BOX
(NORTH)
4' BURY FIRE HYDRANT (NORTH)
FL ELEV= 4981.6
2 BOLLARDS PER DETAIL AT RIGHT

STA 7+42.29, 0.00' RT
6" 22.5' BEND
6" 11.25' BEND

STA 5+60.80, 0.00' LT
90° BEND

STA 4+41.79, 0.00' LT
6" 90° BEND

- NOTES:
- BOLLARDS TO BE 4" DIA. BY 5' LONG STEEL PIPE (2' BURIED IN CONCRETE) PAINTED SAFETY YELLOW. LOCATE 2' FROM EDGE OF PAVING.
 - THE CONSTRUCTION OF 3-1" SERVICE LINES, FROM THE MAIN TO THE METER BOXES, AND THE 2 METER BOXES SHOWN ARE ALL PART OF THIS WORK ORDER.

FIRE HYDRANT DETAIL
1"=10'

STA 7+59.08, 0.00' RT
6"x6" TEE
TRANSITION COUPLING
NON-PRESSURE CONNECTION
END NEW 6" WL
REMOVE & REPLACE 10 SY
ASPHALT PAVING PER COA STD
DWG #2465

STA 7+58.00, 0.00' RT
6" GATE VALVE
W/ VALVE BOX

SCALES:
1"=40' HOR.
1"=10' VERT.

Elevation Datum: NAVD88

EXISTING
ELEVATION TYP.

EXISTING
GRADE
WATERLINE

NEW 6" PUBLIC
WATERLINE
(PVC C900)

3'6" COVER, TYP.

1+04.05
6" GATE VALVE
TP= 78.7

1+05.00
6" TEE
TP= 78.7

3+02.83
6"x6" TEE
6" GATE VALVE &
FIRE HYDRANT
TP= 77.8

4+41.79
6" 90° BEND
TP= 77.9

5+60.80
6" 90° BEND
TP= 78.1

7+42.29
6" 22.5' BEND
6" 11.25' BEND
TP= 78.6

7+58.00
6" GATE VALVE
TP= 78.9

7+59.08
EXISTING 6" WL
6"x6" TEE
TP= 78.9

1+00

2+00

3+00

4+00

5+00

6+00

7+00

GENERAL NOTES

- CONSTRUCT SAS SERVICES PER COA STD DWG #2125.
- CONSTRUCT ALL SINGLE & DOUBLE WATER SERVICES PER COA STD DWG #2361, #2362, & #2363.
- SEE SHEET #4 FOR WATER SHUT-OFF PLAN.
- SEE SHEET #4 FOR RESTRAINED JOINT LENGTHS FOR WATER LINE FITTINGS.
- CONSTRUCT FIRE HYDRANTS PER DESIGNATED DEPTHS & LENGTHS PER COA STD DWG #2340.
- SEE COA STD DWG #2328 FOR VALVE RING & COVER DETAIL.
- INSTALL WATERLINE AS SHOWN FROM STA 1+20.00 TO STA 2+40.00 BY DEFLECTING JOINTS.

WATER SERVICE TABLE

STA	OFFSET	TYPE	LOT
1+80.00	8' RIGHT	SINGLE	14
1+85.00	14' LEFT	SINGLE	13
3+02.80	0' LEFT	DOUBLE	10/11
3+02.80	0' LEFT	SINGLE	12

NOTES:

- ALL WATER METER BOX COVERS SHALL BE HEAVY DUTY PLATE RATED FOR TRAFFIC.
- ALL NEW WATER METER SETS SHALL INCLUDE DUAL-CHECK BACKFLOW PREVENTER PER COA SPECIFICATION SECTION 802.

AS-BUILT INFORMATION

CONTRACTOR: SUNDANCE MECHANICAL
STAMPED BY: HALL SURVEYING CO. DATE: 3/06
INSPECTOR'S: VERIFICATION BY: I B A DATE: 10/06
FIELD: VERIFICATION BY: HALL SURVEYING CO. DATE: 3/06
CORRECTED: BY: HALL SURVEYING CO. DATE: 3/06
MICRO-FILM INFORMATION
RECORDED BY: DATE:
NO.

BENCH MARKS

ACS MONUMENT "14-E14"
A 3/4" ALUMINUM CAP PROJECTING 0.25" ABOVE THE GROUND AND IS STAMPED "14-E14, 1991" AND IS LOCATED IN THE NORTHEAST QUADRANT OF THE INTERSECTION OF RIO GRANDE BLVD. N.W. AND CHAVEZ ROAD N.W.
X=378705.95, Y=1512308.83
ELEVATION=4979.83 (NAVD88)

SURVEY INFORMATION

FIELD NOTES
1. HALL SURVEYING 07/05

ENGINEER'S SEAL

SCOTT M. MCGEE
NEW MEXICO
10519
11/19/06

REVISIONS
DESIGN
NO. DATE REMARKS BY

DESIGNED BY: SMM DATE: 12/05
DRAWN BY: thor DATE: 12/05
CHECKED BY: SMM DATE: 12/05

ISAACSON & ARFMAN, P.A.
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Albuquerque, New Mexico 87108
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1481UTL1.DWGdlp 04.07.06

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: ROAD RUNNER ESTATES WATERLINE PLAN & PROFILE

Design Review Committee City Engineer Approval
APPROVED
DESIGN REVIEW COMMITTEE CITY ENGINEER

City Project No. 775581 Zone Map No. E-14-Z

Sheet 5 of 5