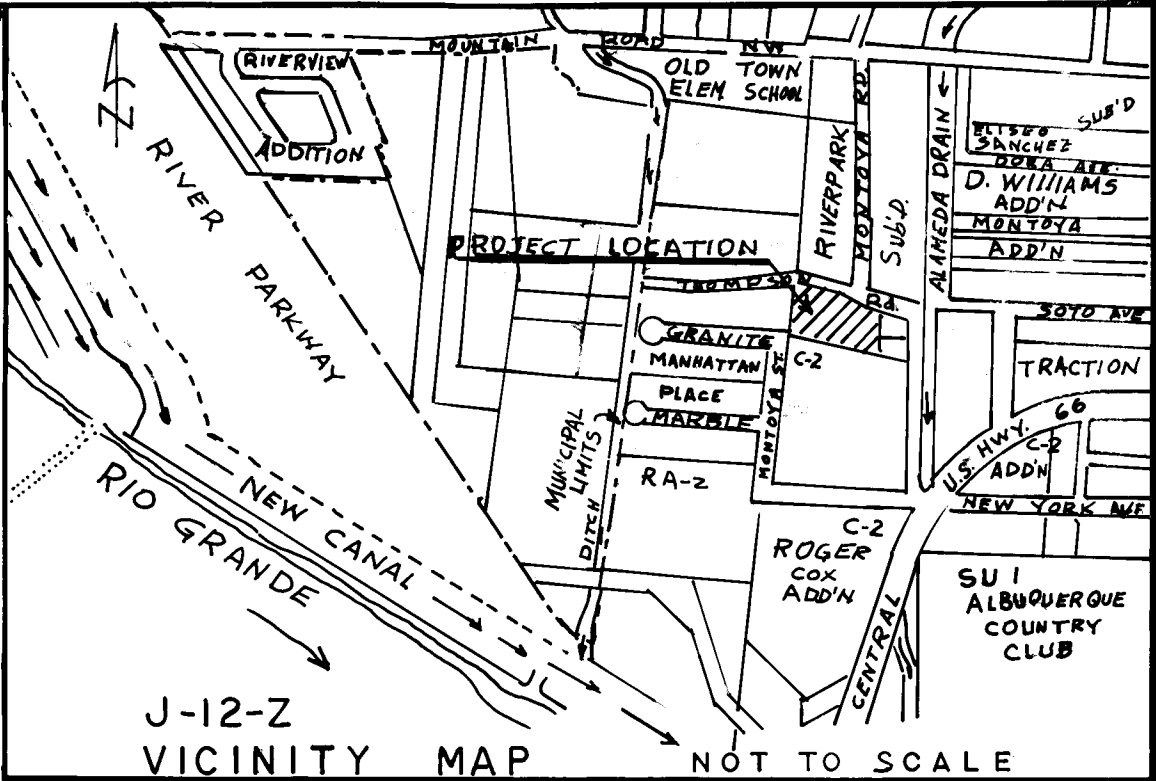


MADRID - ZAMORA REPLAT

ALBUQUERQUE, NEW MEXICO

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	SUBDIVISION PLAT
3	SEWER-WATER-STORM DRAIN-CG-SW PLAN
4	SEWER AND WATER PLAN AND PROFILE
5	CURB-GUTTER-SW-PAVING -SD PLAN AND PROFILE
6	DRAINAGE PLAN



GENERAL NOTES

- NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION-1979 EDITION WILL BE REFERRED TO HEREON AS THE "STANDARD SPECIFICATION"
- 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 "STANDARD SPECIFICATION" AND THE CONTRACT DOCUMENTS FOR PUBLIC WORKS CONTRACT NO. 84-3.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, T65-1234, FOR LOCATION OF EXISTING UTILITIES.
- 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 OR SURVEYOR SO THAT THE CONFLICT CAN BE RESOLVED WITH MINIMUM AMOUNT OF DELAY.

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

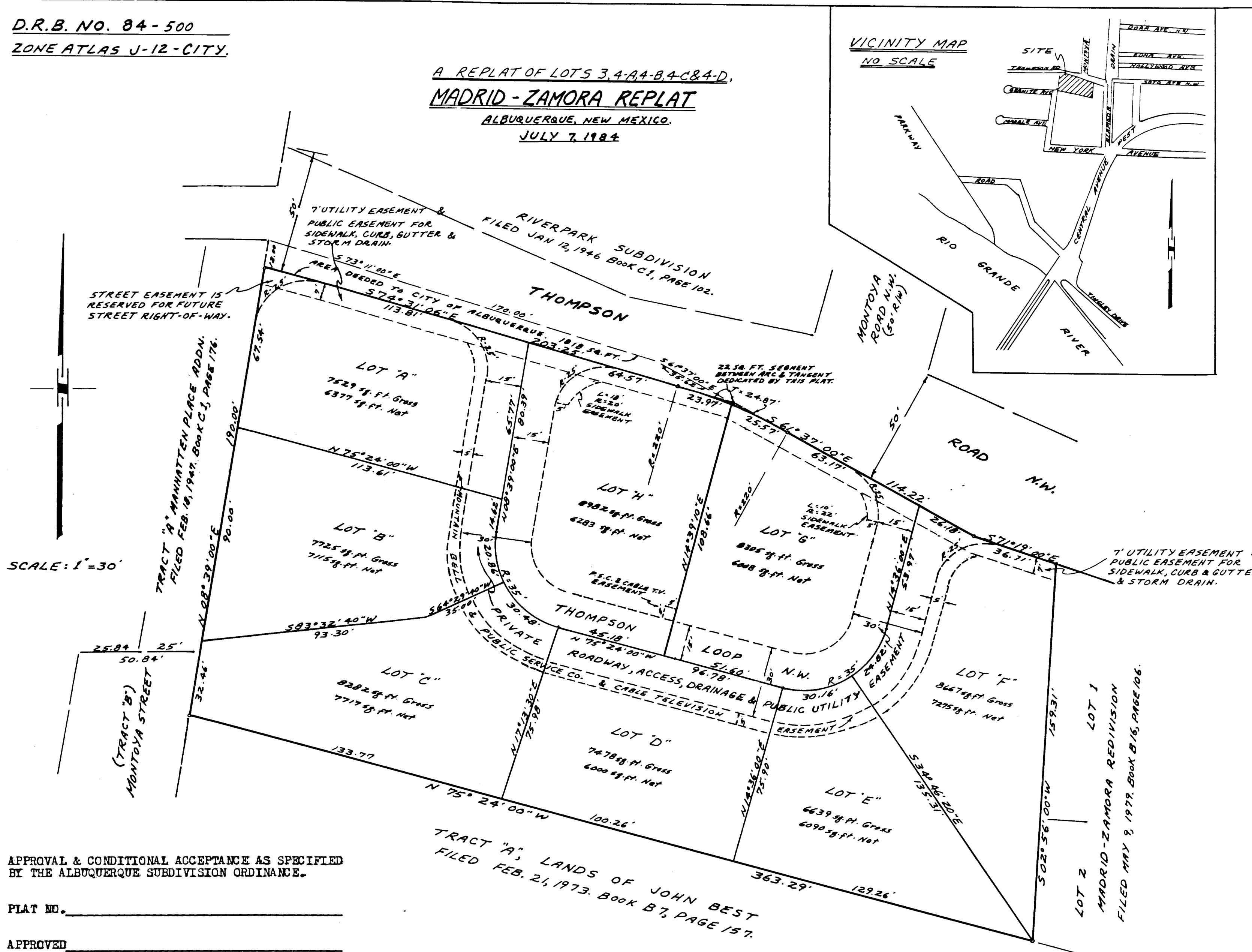
12-18-85

12-18-85

REV	SHEETS	CITY ENGINEER	DATE	USER	DEPT.	DATE	USER	DEPT.	DATE
4									
APPROVAL OF REVISIONS									

RAUL A. RIVERA PELS 1693 RIVERA ENGINEERING 2624 VALENCIA DR. N.E. ALBUQUERQUE, NM 87110	APPROVED FOR CONSTRUCTION PROJECT NUMBER 2280 SHEET 1 OF 6
---------------------------------------------------------------------------------------------------	---------------------------------------------------------------------

A REPLAT OF LOTS 3, 4-A, 4-B, 4-C & 4-D,
MADRID-ZAMORA REPLAT
ALBUQUERQUE, NEW MEXICO.
JULY 7, 1984



APPROVAL & CONDITIONAL ACCEPTANCE AS SPECIFIED
BY THE ALBUQUERQUE SUBDIVISION ORDINANCE.

PLAT NO. _____

APPROVED _____

PLANNING DIRECTOR: ALBUQUERQUE, NEW MEXICO.

Di. C. C. C. 10-30-84
CITY SURVEYOR DATE

CITY ENGINEER DATE

A.M.A.P.C.A. DATE

Robert J. J. J. 2-12-85
TRAFFIC ENGINEER DATE

Jon E. Ent... 2-12-85
WATER RESOURCES DEPT. DATE

Mart... 2-12-85
PARKS & RECREATION DEPT. DATE

Robert... 8/1/84
PROPERTY MANAGEMENT DATE

NOTES:

- Bearings and distances are referred to the above mentioned Madrid-Zamora Redivision.
- No field work was done on this replat.
- City of Albuquerque Water and Sanitary Sewer Service to Lots "A" thru "F" must be verified and coordinated with the Water Resources Department, City of Albuquerque.
- The owners of each of these properties are responsible for maintenance of the private access easements within their lot.

A certain parcel of land situate within Section 13, Township 10 North, Range 2 East of the New Mexico Principal Meridian, and being identified as Lot Three (3) of the Madrid-Zamora Redivision, Albuquerque, New Mexico, as the same is shown and designated on the plat thereof, filed in the office of the County Clerk of Bernalillo County, New Mexico on May 9, 1979; Together with Lots Four-A (4-A), Four-B (4-B), Four-C (4-C) and Four-D (4-D) of the Replat of Lot 4, Madrid-Zamora Redivision, Albuquerque, New Mexico, as the same are shown and designated on the Replat thereof, filed in the office of the County Clerk of Bernalillo County, New Mexico, on November 6, 1979; Excepting the Northerly Portion of said Lots 4-A, 4-B and 4-C containing 1818 square feet, which was deeded to the City of Albuquerque, New Mexico, and recorded in Deed Book 181-A, Pages 756 & 757, on April 7, 1983. Containing a net total of 63,607 square feet, or 1.4602 acres, more or less.

Replatted, as shown hereon, and now comprising Lots "A" thru "F", inclusive, of the Replat of Lots 3, 4-A, 4-B, 4-C & 4-D, MADRID-ZAMORA REPLAT, Albuquerque, New Mexico, is with the free consent of and in accordance with the wishes and desires of the undersigned owners and proprietors thereof.

STATE OF NEW MEXICO }
COUNTY OF BERNALILLO } SS
On this 1 day of August, 1984, the foregoing instrument was acknowledged before me.

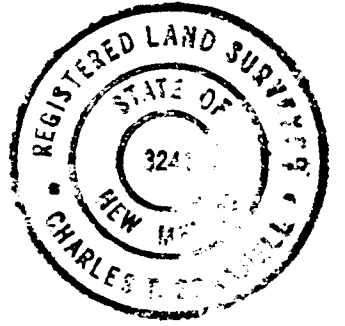
My commission expires 7 March 1987 *Mike Urinto*
NOTARY PUBLIC

STATE OF NEW MEXICO }
COUNTY OF BERNALILLO } SS

On this day of December, 1984 the foregoing instrument was acknowledged before me by Charles T. Scannell.

My commission expires 1-22-87 *Charles T. Scannell*
NOTARY PUBLIC

I, Charles T. Scannell, New Mexico Registered Land Surveyor No. 3244, do hereby certify that the plat shown hereon was made by me, or under my direct supervision, and the same is true and correct to the best of my belief and knowledge, and meets the minimum requirements for monuments and surveys of the Albuquerque Subdivision Ordinance, and shows all easements of record.



Charles T. Scannell
CHARLES T. SCANNELL

CHARLES TIM SCANNELL
2108 AJARITO RD. S.W.
ALBUQUERQUE, NEW MEXICO.
877-3558 87105
AUGUST 1, 1984.

- UTILITY EASEMENTS: Utility easements on the plat are granted for the common and joint use and benefit of:
- The City of Albuquerque for installation, service and maintenance of water and sewer lines, valves, pumps and/or other related equipment and facilities reasonably necessary to deliver potable water to the residents of the subdivision and provide a liquid waste disposal system in accordance with the plans and procedures of the City of Albuquerque,
 - The Gas Company of New Mexico for installation of natural gas lines, valves and other equipment and facilities reasonably necessary to provide natural gas to the residents of the subdivision;
 - Mountain Bell for the installation, service and maintenance of all telephone lines, switching equipment and other related equipment and facilities reasonably necessary to provide telephone service to the residents of the subdivision;
 - Albuquerque Cable Television, Inc., for the purpose of installation, service and maintenance of such lines or cable as is reasonably necessary to provide Cable TV service to the residents of the subdivision;

DRAINAGE EASEMENTS: The City of Albuquerque and AMAPCA are hereby granted drainage easements for the benefit of all owners of the subdivision or indicated on the Plat for the passage, containment or diversion of the surface waters; and between individual property owners as indicated on the Plat by reference or notation, AS APPLICABLE.

Storm sewer drain inlets maintenance will be done by all individual property owners.

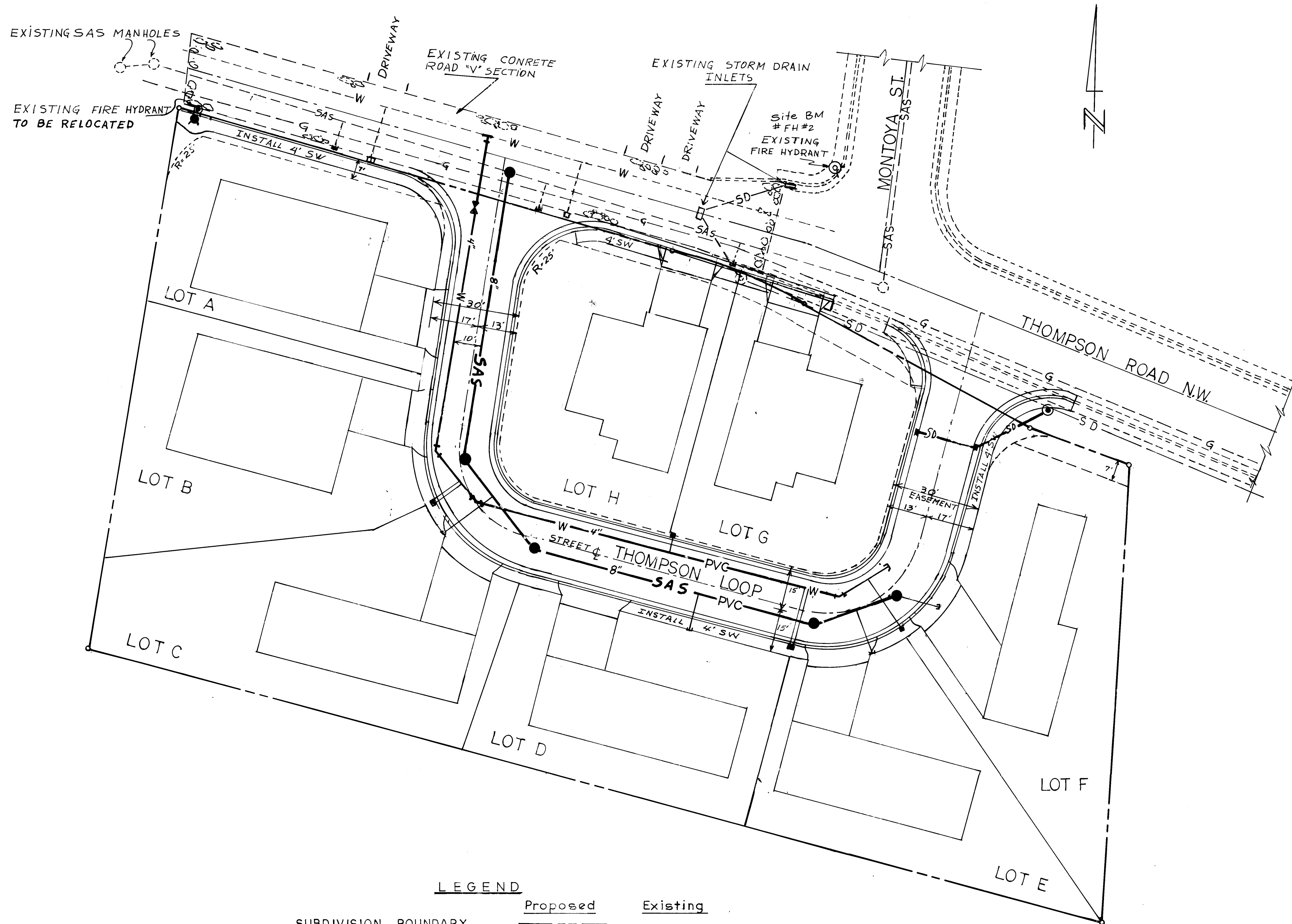
ACCESS EASEMENTS: The City of Albuquerque is hereby granted access easements over and across Thompson Loop for the purpose of allowing its various operating departments to provide service to the residents of the subdivision in the same manner as to and to the same extent as though the referenced Thompson Loop were a dedicated public street. "Operating departments" as referred to above shall include, but shall not be limited to, the departments of the City providing the following services:

- a) Police protection
- b) Fire protection
- c) Water resources
- d) Solid refuse and liquid disposal
- e) Traffic engineering and control

All owners of the subdivision are granted the right to access their property over and across the referenced Thompson Loop.

Within Thompson Loop, the City of Albuquerque shall have the exclusive right to place underground utility lines within six (6) feet of the centerline of a water or sewer line except for perpendicular crossings or where written approval has been obtained from the City of Albuquerque.

1 2 3 4 5 6 7 8 9 10 11 12
2 6 2 2 8 0 0 2 8 6



LEGEND

	Proposed	Existing
SUBDIVISION BOUNDARY	---	---
SANITARY SEWER LINE	SAS	SAS
SANITARY SEWER MANHOLE	●	○
SAS SERVICE CONNECTION	—●—	—○—
STORM DRAIN LINE	SD	SD
STORM DRAIN MANHOLE	⊙	⊙
STORM DRAIN INLETS	⌒	⌒
WATER LINE	W	W
GATE VALVE	⌒X⌒	⌒X⌒
FIRE HYDRANT	⊙	⊙
WATER SERVICE CONNECTION	—●—	—○—
BENDS	⌒	⌒
CAPS AND PLUGS	⌒	⌒
CURB AND GUTTER	=====	=====
SIDEWALKS	4" SW	24" SW

SCALE
1" = 20'

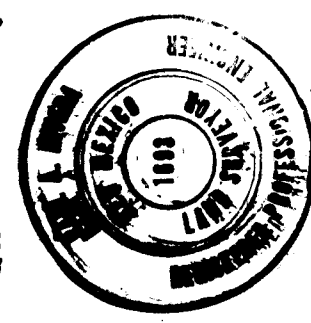
CITY ENGINEER DATE

SITE BM #FH-2
EL. 4953.22

Top of the most S.W. belt of the existing Fire Hydrant at the NW corner of intersection of Thompson Road & Montoya St. Belt ± 6" above sidewalk

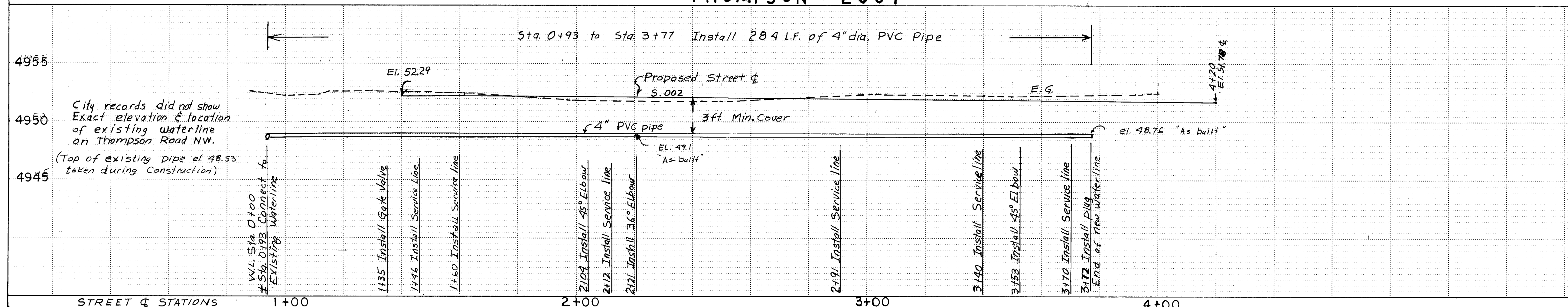
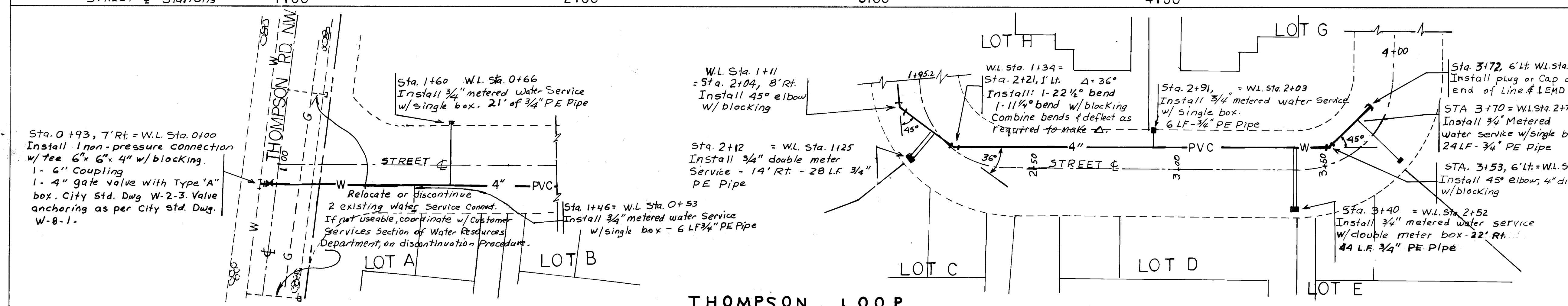
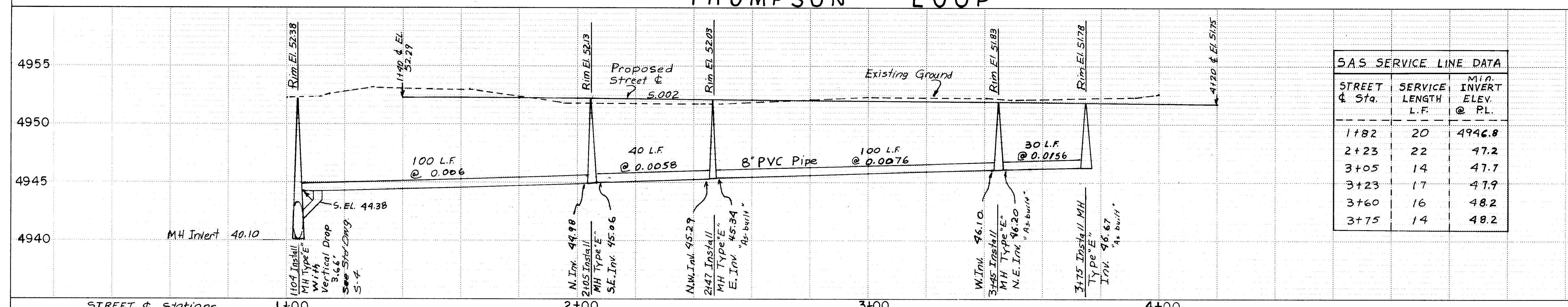
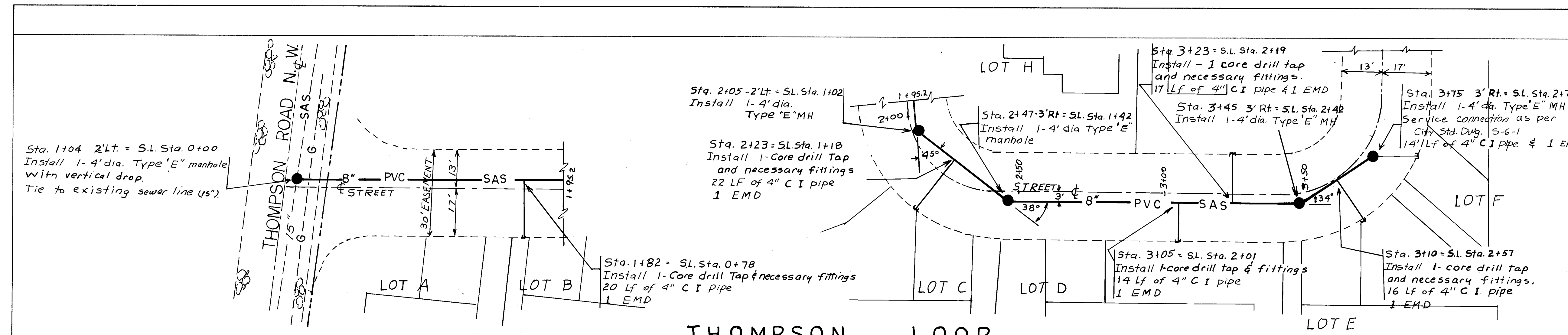
ENGINEER'S SEAL		SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
RAUL A RIVERA PELS 1693		FIELD NOTES				CONTRACTOR <i>Pride Construction Inc.</i>	
<i>Raul A Rivera</i>						WORKED BY <i>R.A. Rivera</i> DATE <i>8/85</i>	
		NO.		DATE		INSPECTORS	
		BY				DATE	
						ACCEPTANCE BY	
						DATE	
						DRAWINGS	
						CHECKED BY <i>R.A. Rivera</i> DATE <i>12/85</i>	
						<i>MICRO-FILM INFORMATION</i>	
						RECORDED BY	
						DATE	
						NO	

ENGINEER'S SEAL
RAUL A RIVERA PELS 1693
Raul A. Rivera



1	2	3	4	5	6	7	8	9	10	11	12
2	6	2	2	8	C	C	3	E	C		

CITY OF ALBUQUERQUE MUNICIPAL DEVELOPMENT DEPARTMENT ENGINEERING DIVISION					
TITLE: MADRID-ZAMORA REPLAT SEWER-WATER-STORM DRAIN-C6 AND SW PLAN					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>R. Rivera</i>	2/20/85	Liquid Waste	<i>R. Rivera</i>	2/20/85
A.C.E. - Design	<i>R. Rivera</i>	2/20/85	Traffic	<i>R. Rivera</i>	2/20/85
Hydrology	<i>R. Rivera</i>	2/20/85	Water	<i>R. Rivera</i>	2/20/85
DRAWING NO.	2280	MAP NO.	J-12-Z	SHEET	3 OF 6



NOTES

- Street centerline is parallel and 2' inside (east, north & west looking along increasing stations) from the 30' easement centerline.
- Waterline construction shall comply with the City of Albuquerque Contract Documents for Public Works Contract 843 & the New Mexico "Standard Specifications".
- All type "E" manholes shall be installed as per City Standard Drawing S-2-3.
- All sewer service connections shall be installed as per City Standard Drawing S-8-4.
- Water & sanitary sewer lines shall be installed per supplemental General Conditions Section 18.1, Policy on the Proximity of Water and Sewer Lines, New Mexico "Standard Specifications".
- All waterlines shall have a minimum of 3'6" bury from top of curb.
- Streets shall be graded to finished grade $\pm 1.0'$ prior to installation of utilities.
- Electronic marker disks (EMD) shall be installed at all bends, caps, tees, and all service connections as specified in Section 13.1, Supplemental Technical Specs.
- Concrete blocking shall be installed per City Standard Drawing W-22.
- All water metered service connections shall be installed as per City Standard Drawing W-10-3, meter box location as per drawing W-14-1 and water meter box as per drawing W-16.

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DATE	ACCS	BM	NO.	BY	RAUL A. RIVERA	PELS 1693
Pride Construction	8/85	10-J-12	Located on west side of Central Ave. in 2600 block, in front of "Casa Grande Motel". An "X" chiseled on a bannet belt of a fire hydrant EL 4956.300				
INSPECTOR	DATE						
APPROVED BY	DATE						
RECORDED BY	DATE						
NO.							

DESIGNED BY RAR

DRAWN BY RAR

CHECKED BY RAR

DATE 10-84

DATE 10-84

DATE 2-85

REVISIONS

DESIGN

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

TITLE: MADRID ZAMORA REPLAT
SEWER AND WATER PLAN AND PROFILE

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	C. J. Chappell	7/20/85	Liquid Waste	R. Poma	7/20/85
A.C.E. - Design	M. O. Olan	2/26/85	Traffic	NA DWH	2/26/85
Hydrology	N.A.B. R.R.	2/26/85	Water	R. Poma	2/26/85

DRAWING NO. 2280

MAP NO. J-12-Z

SHEET 4 OF 6

SCALE 1"=20'

26

22

8

0

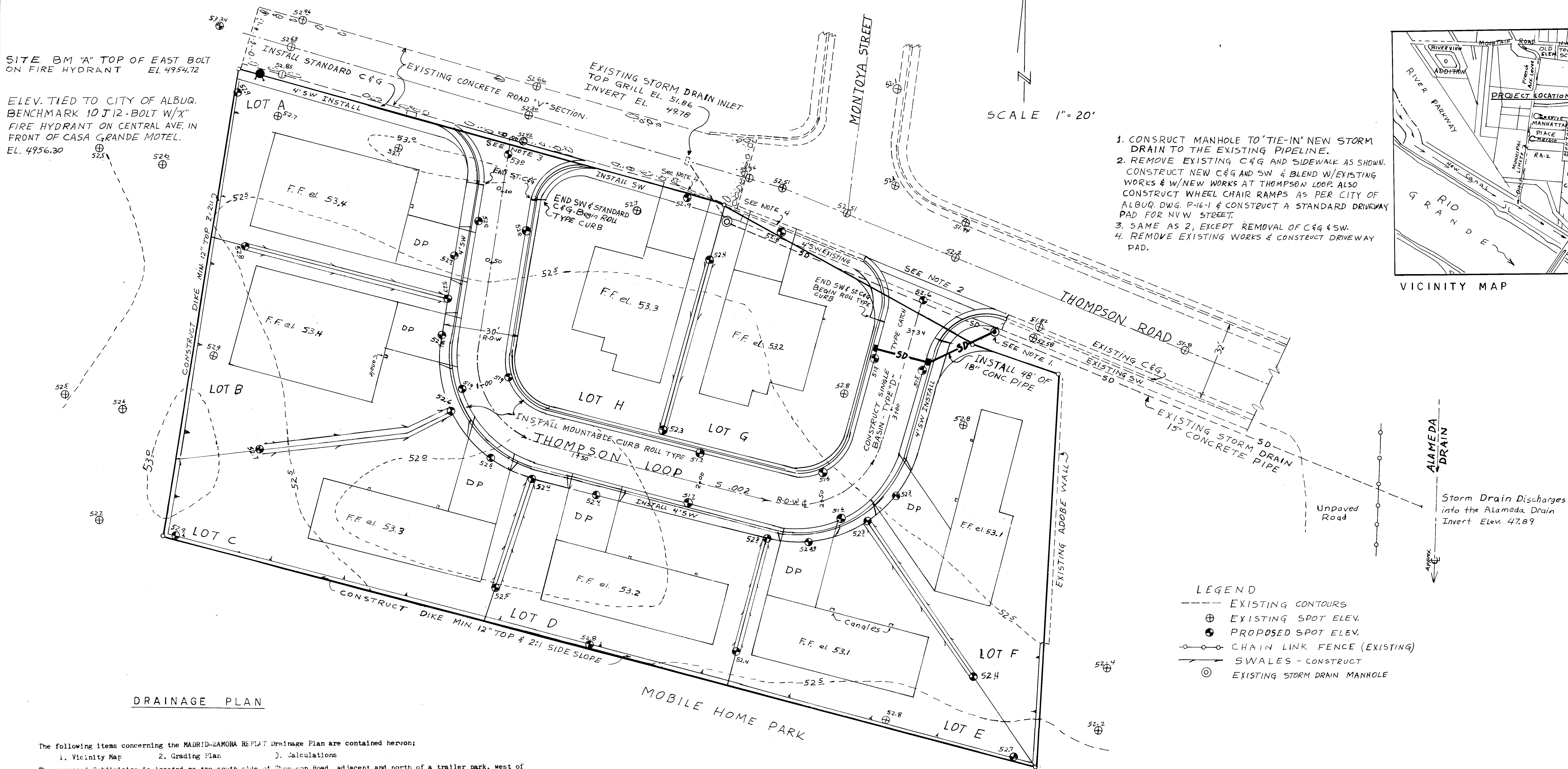
4

5

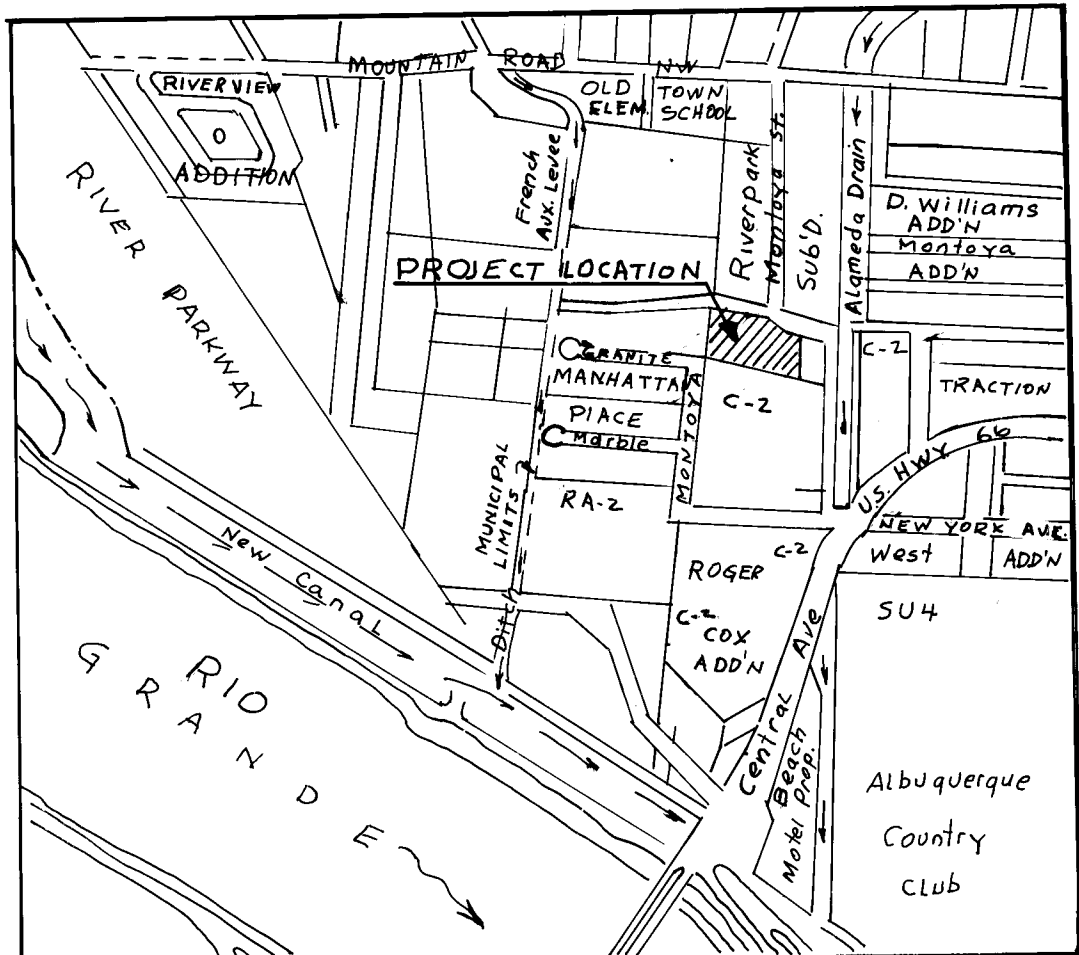
SITE BM "A" TOP OF EAST BOLT ON FIRE HYDRANT EL. 4954.72

ELEV. TIED TO CITY OF ALBUQ. BENCHMARK 10 J12-BOLT W/"X" FIRE HYDRANT ON CENTRAL AVE. IN FRONT OF CASA GRANDE MOTEL. EL. 4956.30

ELEV. TIED TO CITY OF ALBUQ. BENCHMARK 10 J12-BOLT W/"X" FIRE HYDRANT ON CENTRAL AVE. IN FRONT OF CASA GRANDE MOTEL. EL. 4956.30



1. CONSTRUCT MANHOLE TO "TIE-IN" NEW STORM DRAIN TO THE EXISTING PIPELINE.
2. REMOVE EXISTING C&G AND SIDEWALK AS SHOWN. CONSTRUCT NEW C&G AND SW & BLEND W/EXISTING WORKS & W/NEW WORKS AT THOMPSON LOOP. ALSO CONSTRUCT WHEEL CHAIR RAMPS AS PER CITY OF ALBUQ. DWG. P-16-1 & CONSTRUCT A STANDARD DRIVEWAY PAD FOR NVW STREET.
3. SAME AS 2, EXCEPT REMOVAL OF C&G & SW.
4. REMOVE EXISTING WORKS & CONSTRUCT DRIVEWAY PAD.



VICINITY MAP J 12 Z

Storm Drain Discharges into the Alameda Drain Invert Elev. 47.89

- LEGEND
- EXISTING CONTOURS
 - ⊕ EXISTING SPOT ELEV.
 - ⊙ PROPOSED SPOT ELEV.
 - CHAIN LINK FENCE (EXISTING)
 - SWALES - CONSTRUCT
 - ⊙ EXISTING STORM DRAIN MANHOLE

DRAINAGE PLAN

The following items concerning the MADRID-ZAMORA REPLAT Drainage Plan are contained hereon:

1. Vicinity Map
2. Grading Plan
3. Calculations

The proposed Subdivision is located on the south side of Thompson Road, adjacent and north of a trailer park, west of the Alameda Drain. The Subdivision will include 8 lots (A thru H) and a private street to be named Thompson Loop, which will serve 6 of the lots. The street will have a 30 foot R.O.W. and will include a mountable curb, roll type, on both sides, and a 4 foot wide sidewalk on the west, south and east sides. The street will have the standard crown at centerline and will slope toward the 2 storm sewer inlets to be constructed at the northeast end of the street.

Since the site is located in the valley, the land is relatively flat, with small depressions and mounds throughout. In general, it slopes toward the south and west to a low area located at the southwest portion of the project area. There are several trees, in the area, most of which will be removed. The land to the west is relatively flat and generally slopes to the west away from the project area. On the north, Thompson Road intercepts runoff that originates on the lots north of the site and runoff conveyed by Montoya Street. Calculations indicate that the existing concrete "v" shaped section, storm sewer inlet, standard street section and the planned standard curb, gutter and sidewalk to tie with the existing curb, gutter and sidewalk along the south side of Thompson Road, will carry the expected 100 year storm runoff from lands north of the site. On the east, an existing residence has an adobe wall along the lot line, which extends 110 feet from the northeast corner of the Subdivision. The rest of the land on the east side, about 50 feet, is very undulating with pockets and humps and in general does drain to the west. The land on the south has a mobile home park. The general slope of valley lands is to the south as evidenced by the flow of the Rio Grande and the Alameda Drain and also as shown by spot elevations from the City contour map, and therefore runoff from the south does not drain into the site. This project 1. does not lie in a flood hazard area, 2. is not adjacent to a natural or artificial water course and 3. does not have drainage easements on the property.

The site will be graded such that the runoff will drain toward the planned private street, Thompson Loop. Roof top drainage will drop from canopies to be located toward Thompson Loop and will flow into the street. Backyards and other yard areas will be graded so that they flow to the street in shallow swales along the lot lines. All the runoff will accumulate in the street and flow toward the storm sewer inlets at the northeast end of the street. The two storm sewer inlets will be connected by 18 inch pipe and are located at the lowest part of the street. The runoff will be conveyed from the inlets to the existing storm sewer pipeline located along the south side of Thompson Road. There a manhole will be constructed to connect the new line with the existing line.

The Grading Plan shows: 1. existing contours at 0.5 foot intervals, 2. proposed grades indicated by spot elevations, 3. swales, 4. continuity between proposed and existing elevations, 5. that sidewalks are adjacent to the curb, 6. that all runoff will be conveyed by Thompson Loop and 7. that erosion will not result from upland runoff or the proposed construction activities.

CALCULATIONS

Area of Subdivision = 1.46 Acres
Impervious Area = 0.73 Acres
Pervious Area = 0.73 Acres
SCS Soils Group = B (Agua Silty Clay Loam Ag)
C = 0.58 (From Plate 22.2 C-1)
C = 0.34 (From Plate 22.2 C-1) Undeveloped
Gha Vol. = 2.2" (From Plate 22.2 D-1)
I = 2.16 (From Plate 22.2 D-2) Tc = 10 min.
 $i = 2.2 \times 2.16 = 4.75$
Developed Runoff = $Q = 0.58 \times 4.75 \times 1.46 = 4.02$ c.f.s.
Undeveloped Runoff = $Q = 0.34 \times 4.75 \times 1.46 = 2.36$ c.f.s.
Runoff from area north of concrete Section of Thompson Road: A = 0.95 Acres 20% Impervious
C = 0.43 (Houses small in relation to lots & no driveways)
 $i = 4.75$
 $Q = 0.43 \times 4.75 \times 0.95 = 1.94$ c.f.s.

HYDRAULICS - PIPELINES -

$Q_{100} = 5.96$ c.f.s. D=15" A=1.23' L=188'
 $V = 4.88$ f.p.s. Kp=.0232 Ke=0.5
 $H_p = K_p \cdot L \cdot V^2/g = 1.59'$
 $H_e = K_e \cdot V^2/g = 0.18'$
Total Head Loss = 1.77'
W.S. EL. @ New manhole = 50.28

$Q_{100} = 4.02$ c.f.s. D=18" A=1.77' L=48'
 $V = 2.27$ f.p.s. Kp=.0182 Ke=0.5
 $H_p = 0.07'$ $H_e = 0.04'$ Total H=0.11'
W.S. EL. @ Project Inlets = 50.39

$Q_{100} = 1.94$ c.f.s. 118' of 15" & 30' of 18"
 $V_{15} = 1.58$ f.p.s. $V_{18} = 1.10$ f.p.s.
 $H_p = 0.11'$ $H_e = 0.02'$ $H_p + H_e = 0$
Total H = 0.14'
W.S. @ Existing Inlet = 50.42

- STREETS -

"V" concrete Section
 $Q = 196$ c.f.s. S=.0033 F/ft
 $n = .013$ Z=.02 Z=.03
F.D. = 3" A=2.6' r=.125
 $V = (1.486 \div n) S^{1/2} r^{2/3} = 1.64$ f.p.s.
 $Q = 4.26$ c.f.s. (Exceed Q_{100})

Thompson Loop
W=2' 12" Z=.021
 $Q_{100} = 4.02$ c.f.s. S=.002 n=.016
F.D. = 4" A=2.5' WP=12.1 r=.021
 $V = 1.45$ f.p.s.
 $Q = 3.63$ c.f.s. on each side of street
 $Q_{Total} = 7.26$ c.f.s. (Exceeds Q_{100})



RIVERA ENGINEERING
2624 VALENCIA DR. N.E.
ALBUQUERQUE, N M 87110

Raul A. Rivera 9/18/84
RAUL A RIVERA P.E.-LS.NO 1693 DATE

TITLE: MADRID-ZAMORA REPLAT	
SCALE: 1" = 20'	APPROVED BY:
DATE: 9-84	DRAWN BY: RAR
DRAINAGE PLAN	
SHEET 6 OF 6	DRAWING NUMBER: 2280