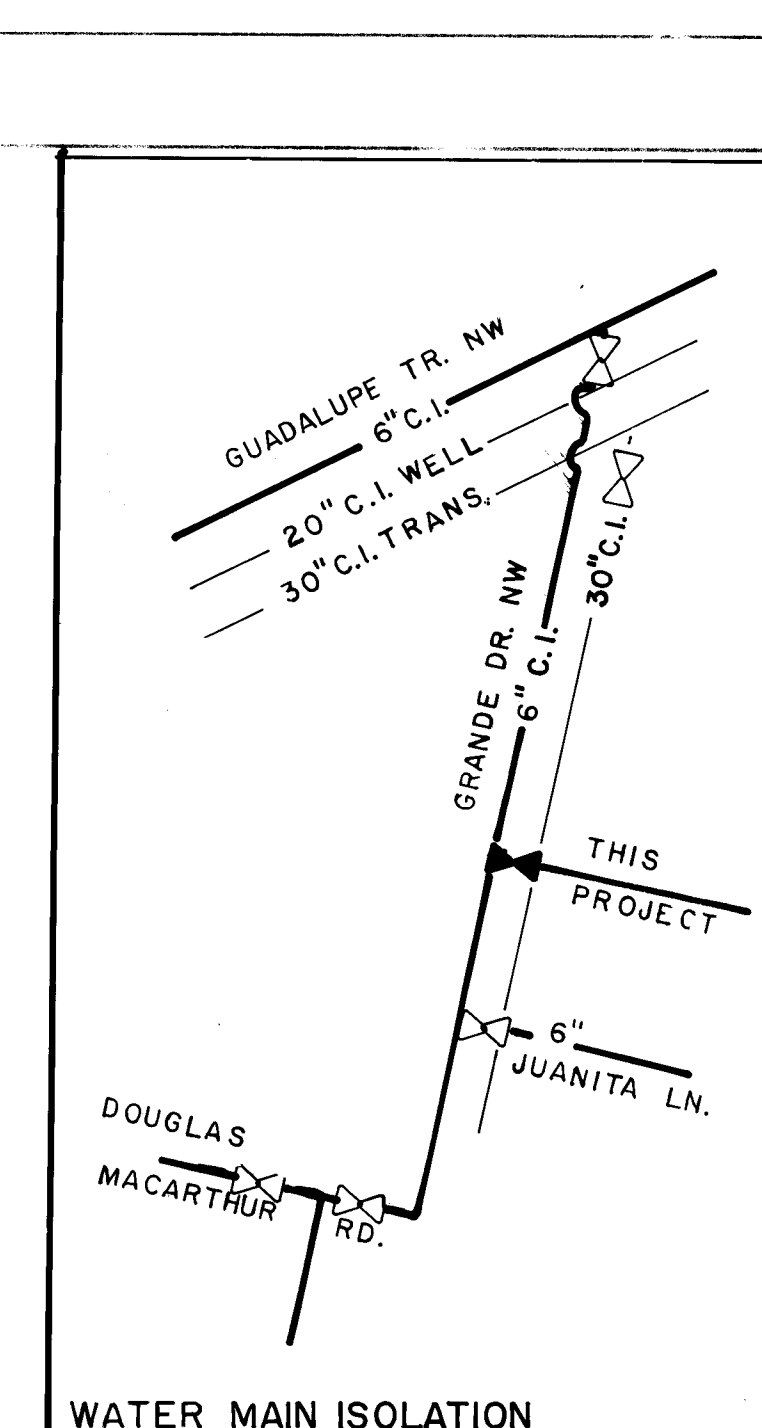








✧ — ELECTRONIC MARKER DISKS

Symbol shows approximate location of Electronic Marker Disks to be placed by the contractor. See SECTION 131 of the Standard Technical Specifications, Public Works Contract No. 85-1 for disk and placement details.

REFERENCES:  
The following listed documents are  
sources of information for utility  
locations shown on these drawings.

- ① AS-built (Record drawing) Jun 12, 1979 Rev. Aug 31, 1979 North Valley Sewer System, EDA Pr. 08-1-2880. STA 18 00 to STA 33 00. This drawing shows the horizontal location of the 36" SAS line and the 6" water line. Gordon Herkenhoff & Assoc.
- ② AS-built 10/9/81, Lands of A.M. Padilla, R. 1449, which gives the top of pipe elevations for the 36" and 6" water lines, along the Juanita Lane intersection with Grande Dr. Thomas Mann & Assoc.
- ③ Albuquerque City Water Line Sectional F-14S & Sewer Sectional F-14S
- ④ Invert of 36" SAS at MH 509 by spirit level.

Note: A distance discrepancy is apparent between MH 431 and 509.  
Measured distance- 606'  
GH Plan - 596.75'  
GH Profile - 584.38'  
City Sec. - 580'

MH 430 was [REDACTED] located in the field.

Place an external drop at existing 6" diameter MH. Place the upper invert at an elevation which is below the roof the 6' section. Place the lower invert 4" below the top of existing shelf, and cut a flow channel for the new line. Core bore all holes in the existing MH.

Shore or otherwise support the existing 6" water line and valve to provide continued service during MH construction. Provide additional permanent blocking or support as needed when the construction is backfilled.

Tunnel under the existing 30" water main, providing support as required to prevent disruption of the 30" main.

Curve the 8" sewer main to a radius of 275' or greater to place the line in the alignment as shown. Curve the pipe by first seating the joint, then bend the pipe uniformly over its length.

Refer To Standard Drawings:

- S-1 Manhole Type "C"  
S-2 Manhole Type "E"  
S-3 Concrete MH Cover, Type "C"  
S-4 Vertical Drop at MH  
S-5 Manhole Frame and Cover  
S-6 Service Line & Conc. Block  
details for MH  
S-8 Riser Details, Flexible Pipe  
Main  
S-12 Sewer Line Dead-end Marker  
S-9 Service Line Details



CAMINO RAEL  
LOTS 1, 2, 3, & 4

[illegible]

NOTES

Horizontal and vertical locations of existing utilities as shown on the drawings are approximate as determined by surface check and available as-built information. At the time of excavation, if significant differences are found, notify the Engineer.

WATER LINE

6"x6"x6" TEE. Fit into existing 6" C. I. main. A. Bend TEE, place 6" D. I. pipe with 22½" fittings sufficient to place the new 6" line over the top of the existing 30" Main. Provide thrust blocking or use restrained joints. At the location where the lines cross, place a ¾" thick elastic polyethylene pipe, 14" long. Also place the 6" line to provide at least 3" clearance between pipe outer surfaces. After crossing the 30" main, lower the 6" line to the prescribed depth with bends or joint deflection as necessary to obtain the depth. Place TEE (6"x6"x6") for fire hydrant and reducer (6"x4") for continuation of 4" PVC line. To place the fire hydrant leg, remove the existing wood meter box and meter as required, replacing these items to be clear of the fire hydrant as installed.

Refer to Standard Drawings:

- #-1 Waterline Connection Details
- #-3 Valve Box Type "E"
- #-4 Ring & Cover for Valve Box
- #-7 Plastic Pipe Trench Terminology
- #-8 Water Valve Anchorage
- #-10 Metered Service Line Installation.
- #-15 Typical Meter Box Installations
- #-16 Wood Meter Box Plan and Section
- #-19 Heavyweight Meter Box Cover and Lid
- #-20 Fire Hydrant Installation
- #-22 Concrete Blocking Design

26 24160386

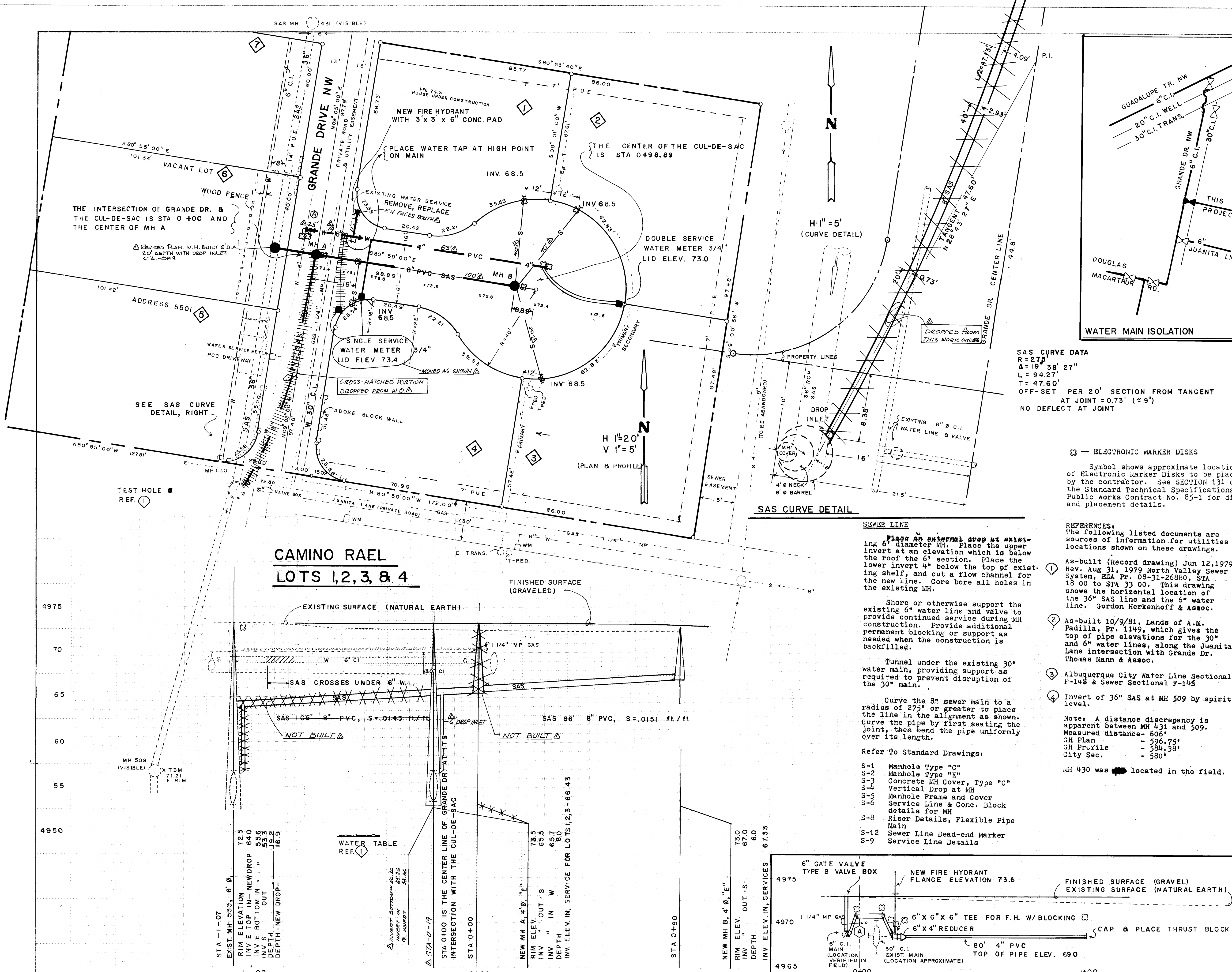
CITY OF ALBUQUERQUE  
MUNICIPAL DEVELOPMENT DEPARTMENT  
ENGINEERING DIVISION

TITLE: WATER MAIN & SEWER MAIN EXT., WITH SERVICES

| APPROVALS                | ENGINEER          | DATE           | APPROVALS    | ENGINEER                | DATE           |
|--------------------------|-------------------|----------------|--------------|-------------------------|----------------|
| City Engineer            | <i>C.D. Hyatt</i> | <i>5/21/85</i> | Liquid Waste | <i>William G. Patel</i> | <i>6/24/85</i> |
| ACE Design               | <i>N. L. L...</i> | <i>8/8/85</i>  | Traffic      | NA DWH                  | 6/24/85        |
| <del>ACE</del> Hydrology | <i>N.A. S.S.</i>  | <i>6/26/85</i> | Water        | <i>William G. Patel</i> | <i>6/24/85</i> |

|             |      |         |      |       |   |    |   |
|-------------|------|---------|------|-------|---|----|---|
| DRAWING NO. | 2416 | MAP NO. | F-14 | SHEET | 3 | OF | 3 |
|-------------|------|---------|------|-------|---|----|---|





NEW SEWER MAIN PROFILE

NEW WATER LINE PROFILE

SAS CURVE DATA  
R=275'  
Δ=19° 38' 27"  
L=94.27'  
T=47.60'  
OFF-SET PER 20' SECTION FROM TANGENT AT JOINT = 0.73' (± 9")  
NO DEFLECT AT JOINT

— ELECTRONIC MARKER DISKS  
Symbol shows approximate location of Electronic Marker Disks to be placed by the contractor. See SECTION 131 of the Standard Technical Specifications, Public Works Contract No. 85-1 for disk and placement details.

REFERENCES:  
The following listed documents are sources of information for utilities locations shown on these drawings.

1 As-built (Record drawing) Jun 12, 1979 Rev. Aug 31, 1979 North Valley Sewer System, EDA Pr. 08-31-26880, STA 18 00 to STA 33 00. This drawing shows the horizontal location of the 36" SAS line and the 6" water line. Gordon Herkenhoff & Assoc.

2 As-built 10/9/81, Lands of A.M. Padilla, Pr. 1149, which gives the top of pipe elevations for the 30" and 6" water lines, along the Juanita Lane intersection with Grande Dr. Thomas Mann & Assoc.

3 Albuquerque City Water Line Sectional F-14S & Sewer Sectional F-14S

4 Invert of 36" SAS at MH 509 by spirit level.  
Note: A distance discrepancy is apparent between MH 431 and 509. Measured distance - 606'.  
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- S-6 Service Line & Conc. Block Details for MH
- S-8 Riser Details, Flexible Pipe Main
- S-12 Sewer Line Dead-end Marker
- S-9 Service Line Details

**AS BUILT INFORMATION**

CONTRACT NO. **2416**

DATE **6/26/85**

ENGINEER **W. R. KORTUM**

CHECKED BY **W. R. KORTUM**

**FIELD NOTES**

DATE **6/26/85**

BY **M. KORTUM**

NO. **1**

**ENGINEER'S SEAL**

W. R. KORTUM  
Professional Engineer  
No. 6519  
State of New Mexico

**REVISIONS**

| NO. | DATE    | REVISION |
|-----|---------|----------|
| 1   | 6/26/85 | DESIGN   |

**DESIGNED BY** MARVIN R. KORTUM  
**DRAWN BY** MARVIN R. KORTUM  
**CHECKED BY**

**CITY OF ALBUQUERQUE**  
**MUNICIPAL DEVELOPMENT DEPARTMENT**  
**ENGINEERING DIVISION**

**TITLE: WATER MAIN & SEWER MAIN EXT., WITH SERVICES**  
**CAMINO RAE, LOTS 1, 2, 3, & 4**

**APPROVALS**

| ENGINEER      | DATE    | APPROVALS    | ENGINEER         | DATE    |
|---------------|---------|--------------|------------------|---------|
| City Engineer | 6/26/85 | Liquid Waste | William G. Bader | 6/26/85 |
| ACE Design    | 6/26/85 | Traffic      | W.A.D.W.H.       | 6/26/85 |
| Hydrology     | 6/26/85 | Water        | William G. Bader | 6/26/85 |

**DRAWING NO.** 2416  
**MAP NO.** F-14  
**SHEET** 3 OF 3