

2000-3 Arapaho Road

Drainage, streetscape



Arapaho Rd Drainage Meeting 8-12-99

(Drainage Issues

Inlet not picking up water

water flowing across intersection

Hydroplaning / Braking @ intersection

Iceing in winter

Bird baths

Irrigation rearrange

Huitt Zollars: It appears that
cross slope is not adequate

3" vs 6" median nose - could that have
caused the problems?

Ed Bell will take shots

Next week for delivery -

Analyze elevations and then look at
solutions

HUITT-ZOLLARS

Huitt-Zollars, Inc. / 3131 McKinney Avenue / Suite 600 / LB 105 / Dallas, Texas 75204-2489 / 214/871-3311 / FAX 214/871-0757

July 26, 1999

Mr. Robert D. Weber
Ed Bell Construction
10605 Harry Hines
P.O. Box 540787
Dallas, TX 75354-0787

RE: Arapaho Road - Addison, Texas

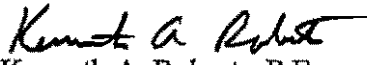
Dear Mr. Weber:

The Town of Addison has asked us to forward a copy of a videotape the Town made recently at the intersection of Arapaho Road and Quorum Drive. The tape shows drainage patterns along Arapaho Road that do not appear to reflect the pavement design. After you have reviewed the tape, please inform us and the Town of your proposed solutions to correct the problem.

Please feel free to call if you have any questions.

Sincerely,

HUITT-ZOLLARS, INC.


Kenneth A. Roberts, P.E.
Vice President

Attachment

Copy: Jim Pierce, P.E., Town of Addison

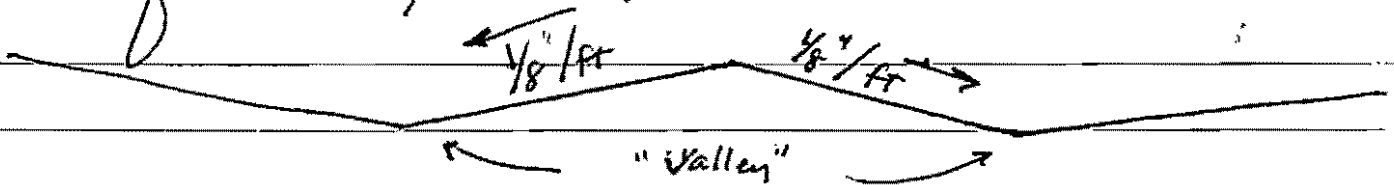
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Arapaho Rd

7-26-99

Rec'd call from Ken Roberts & Aubrey Adcock re the flow test tape I sent them.

They do not think the intersection was built as per plans. Plan sheet P-5, Sta 50+50 calls for $\frac{1}{8}$ " per foot cross slope, North and South thru the intersection with Quorum, that extends across Quorum

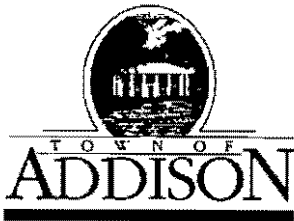


Exaggerated X section thru Arapaho @ Quorum, Looking East

Intersection may have to be rebuilt, as contractor's obligation is to build according to the plans

As-built of what was built is needed. H.Z. will send tape to Robt Weber with a letter requesting an as-built.

J.P.



LETTER OF TRANSMITTAL

Public Works / Engineering
16801 Westgrove • P.O. Box 144
Addison, Texas 75001
Telephone: (214) 450-2871 • Fax: (214) 931-6643

DATE 7-23-99 JOB NO.
ATTENTION
RE: Arapaho Rd

TO Ken Roberts
Heath Zollars

- GENTLEMAN: WE ARE SENDING YOU
[X] Attached
[] Under separate cover via ... the following items:
[] Shop Drawings [] Prints [] Plans [] Samples [] Specifications
[] Copy of letter [] Change order []

Table with 4 columns: COPIES, DATE, NO., DESCRIPTION. Row 1: 1, [], [], Video Tape of Flow Test Arapaho @ Quorum

- THESE ARE TRANSMITTED as checked below:
[] For approval [] Approved as submitted [] Resubmit ... copies for approval
[] For your use [] Approved as noted [] Submit ... copies for distribution
[] As requested [] Returned for corrections [] Return ... corrected prints
[] For review and comment []
[] FOR BIDS DUE ... 19 [] PRINTS RETURNED AFTER LOAN TO US

REMARKS Please view (copy if you like) and
Courier to Robert Weber @ Ed Bell
Thanks

COPY TO

SIGNED: Jim Peirce

If enclosures are not as noted, please notify us at once.

from 6-17-99 meeting
Notes

5. Road paving anticipated to be complete by June 25th with the remainder of the work anticipated to be completed by the end of August.
6. TXU has 2 poles remaining in sidewalk area on Quorum, N. of Arapahoe. Follow up req'd.
7. Attached is a letter from Huitt Zollars regarding their observation of an unusual drainage pattern. A solution needs to be worked out for this issue.
8. Has Sanitary Sewer Manhole been raised @ Colonnade property?
9. Carry forward items list attached.

cc Dave Wilde

J. J. J.

P.S. Bellards inspected by S. Strickland & J. J. J. this date, and approved.

Arapahoe Rd

6-1-99

Telcom with Ken Roberts:

Arap, Heading East - @ Quorum
Subell lumped ^{some} water.

Water Splits @ RH turn Lane
and goes across the Circle
and splits again

3" curb on nose

If they deducted 6" from nose
guide -

Core grades in median @ 50' intervals
& end of noses.

Top curb on nose & dropped 6"
the road would be too low

1% cross slope - carries
across Quorum.

Should be a hump for Quorum
drivers

Ken will write us a letter regarding
this situation

HUITT-ZOLLARS

Huitt-Zollars, Inc. / 3131 McKinney Avenue / Suite 600 / LB 105 / Dallas, Texas 75204-2489 / 214/871-3311 / FAX 214/871-0757

June 1, 1999

Mr. Jim Pierce, P.E.
Town of Addison
Public Works Department
P.O. Box 144
Addison, TX 75001

Re: Arapaho Road

Dear Mr. Pierce:

I made a site visit to the Arapaho Road project site on Friday, May 28, 1999 to look at the progress of the construction and observed an irregular drainage pattern at the southwest corner of Arapaho Road and Quorum Drive. As we have discussed, on a previous occasion and this morning, you expressed concern that the inlet at paving station 51+47 was not picking up the water draining to the east along the south curb of Arapaho Road before crossing the Quorum Drive intersection. On Friday, I observed the same scenario.


As you stated this morning, on Friday the phone company had pumped water out of a trench or manhole and it was draining along the gutter in question. The amount of water running down the street was just enough to delineate the drainage pattern and highlight the problem. The water was draining along the south gutter and the pavement joint between the east bound right thru lane and the right turn lane with an apparent high and dry spot in the right turn lane. As the water neared the inlet at paving station 51+47, it began to drain in a northeasterly direction towards the center of the circle in the Arapaho Road / Quorum Drive intersection. When the water reached the outer edge of the brick pavers, the water split and drained to the north and east around the brick circle. The easterly flow eventually crossed the intersection and rejoined the south gutter. The northerly flow crossed the centerline of Arapaho Road and continued around the circle in a northeasterly direction. I have enclosed a copy of Paving Sheet P-5 with the drainage patterns that I observed marked in blue.

Arapaho Road was designed with a 1/8" per foot cross slope in this area. Water should not be draining away from the curb and certainly not across the ridgeline at the centerline of Arapaho Road. In this area the water should be draining along the south curb and across the Quorum Drive intersection in the valley gutter. Based on my observations, it appears the intersection is built too flat. Further investigation by the Contractor regarding "As Built" elevations on the pavement should be initiated. After the investigation, alternative solutions can be evaluated.

Please feel free to call if you have any questions.

Sincerely,

HUITT-ZOLLARS, INC.


Kenneth A. Roberts, P.E.
Vice President

Attachment

cc Pat Rivera 6-17-99

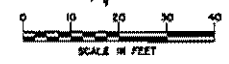
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COORDINATE CONSTRUCTION WITH D.A.R.T. CONTRACTOR

CROSS SLOPE TRANSITION NORTH & SOUTH

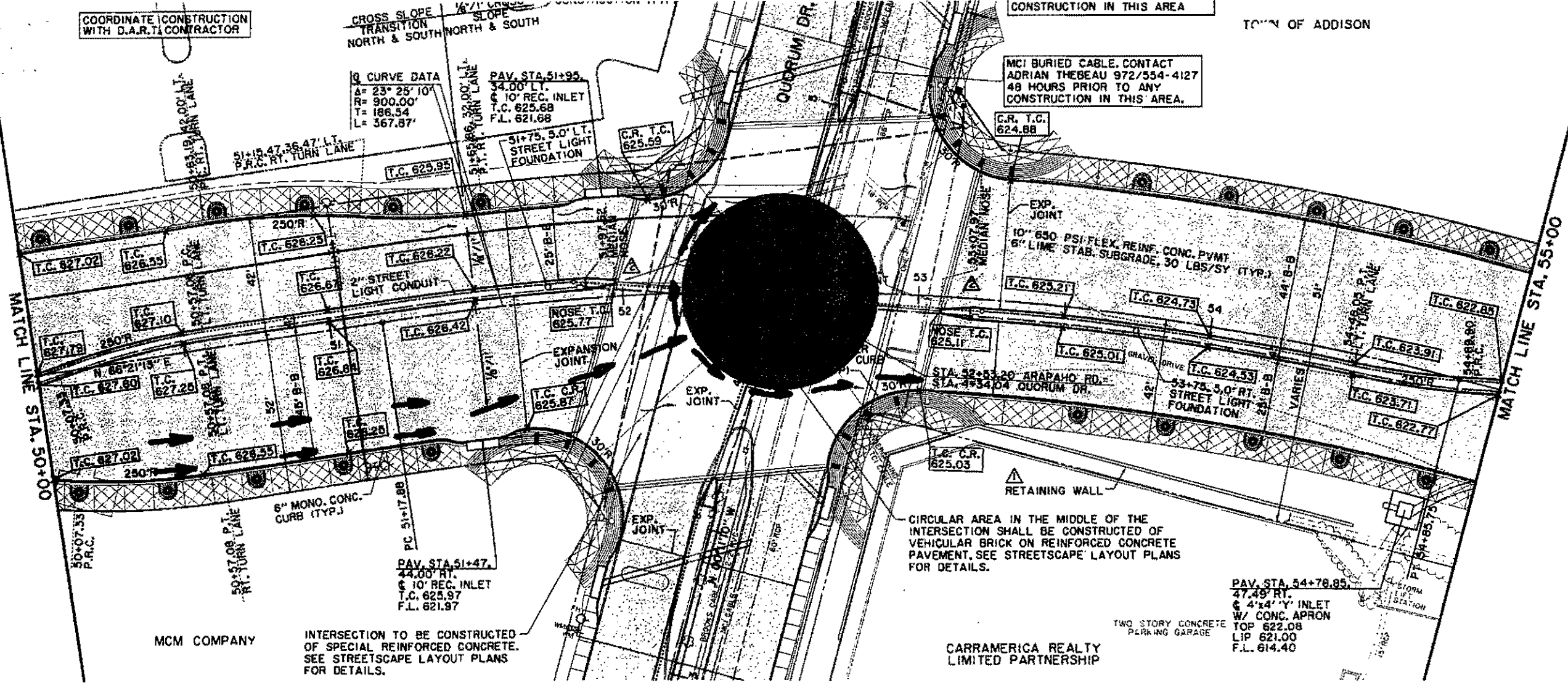
TOWN OF ADDISON

MCI BURIED CABLE CONTACT ADRIAN THEBEAU 972/554-4127 48 HOURS PRIOR TO ANY CONSTRUCTION IN THIS AREA.



SEE STREETSCAPE PLANS FOR SIDEWALK, LANDSCAPING, IRRIGATION, LIGHTING AND PAVEMENT ENHANCEMENT DETAILS.

NOTE: EXISTING FILL MATERIAL TO DEPTHS OF 4-6 FEET, FROM APPROXIMATELY PAVING STATION 53+00 TO 56+00, CONSISTING OF BROKEN LIMESTONE AND MISCELLANEOUS DEBRIS SHALL BE EXCAVATED, REMOVED AND DISPOSED OF AND REPLACED WITH ON-SITE SOILS COMPACTED IN LIFTS AS DESCRIBED IN THE SPECIFICATIONS.



LEGEND

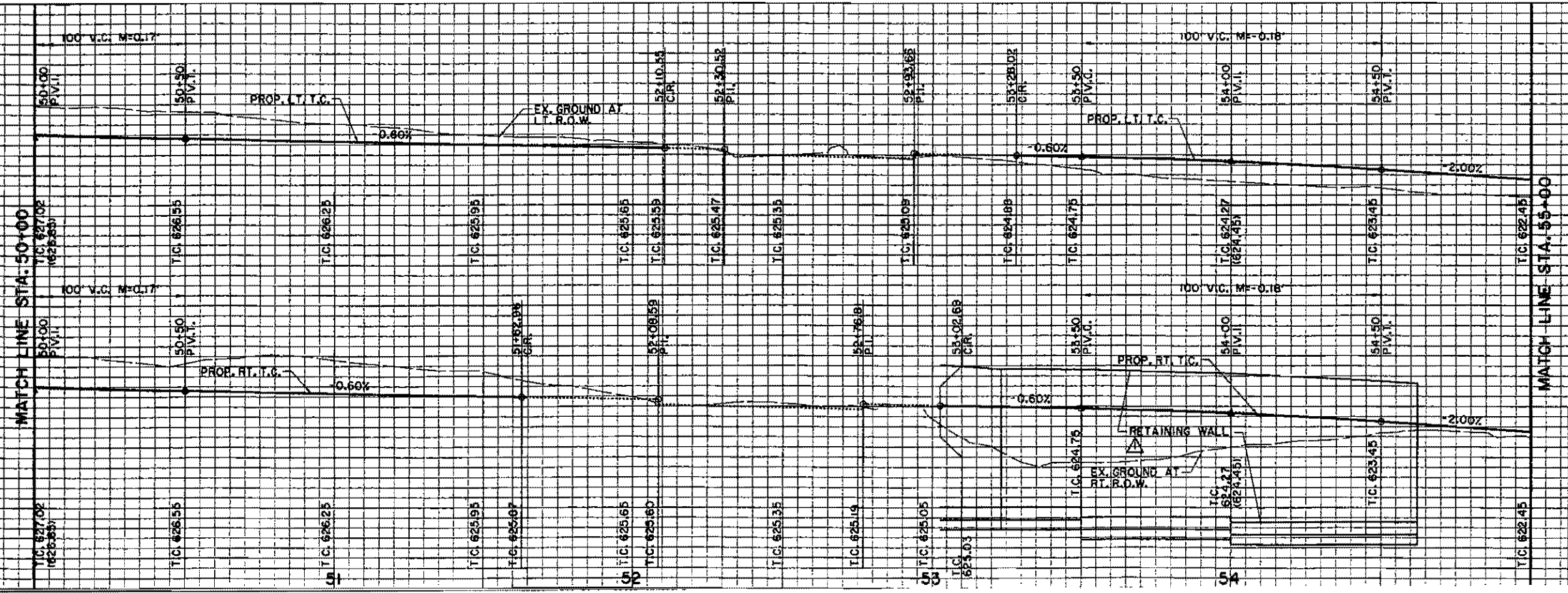
ELECTRIC — E —	WATER — W —
○ LIGHT POLE	FK ○ FIRE HYDRANT
□ POWER POLE	WM ○ METER
— GUY WIRE	T WATER VALVE
TELEPHONE — T —	MISC.
● TELEPHONE MANHOLE	48" RCP R.C.P. REMOVAL
□ TELEPHONE PEDESTAL	— CHAIN LINK FENCE
TS TELEPHONE SIGN	— WOOD FENCE
— GAS	— EXISTING ASPHALT
GM GAS METER	— EXISTING DIRT OR GRAVEL
OS GAS SIGN	— EX. CONCRETE
LAND USE	— TREE/TREE LINE
RR RAILROAD SIGN	— EXISTING CURB
△ SIGN	— PROP. CURB
SURVEY	— EX. PROPERTY LINE
IR FOUND IRON ROD	— PROP. CENTERLINE
TEMP BENCHMARK	— PROP. R.O.W.
WASTEWATER — WW —	— PROP. INLET
WM WASTEWATER MANHOLE	PVMT TOP OF PAVEMENT
CO CLEANOUT	T.C. TOP OF CURB
	C.R. CURB RETURN

MCM COMPANY INTERSECTION TO BE CONSTRUCTED OF SPECIAL REINFORCED CONCRETE. SEE STREETSCAPE LAYOUT PLANS FOR DETAILS.

CIRCULAR AREA IN THE MIDDLE OF THE INTERSECTION SHALL BE CONSTRUCTED OF VEHICULAR BRICK ON REINFORCED CONCRETE PAVEMENT. SEE STREETSCAPE LAYOUT PLANS FOR DETAILS.

CARRAMERICA REALTY LIMITED PARTNERSHIP

PAV. STA. 54+78.85
47.48' RT.
4'x4' V' INLET
W/ CONC. APRON
TOP 622.08
LIP 621.00
F.L. 614.40



BENCHMARKS:
630 USC & GS E-921 DISK IN BRICK WALL OF OLD ADDISON SCHOOL HOUSE (MAGIC TIME MACHINE RESTAURANT) ON SOUTH WALL, 4' EAST OF CENTER OF THE ENTRANCE, 4.7' ABOVE THE GROUND. ELEV. 650.61
625 "I" ON SOUTHEAST CORNER OF CONCRETE WALK AT FRONT ENTRANCE TO 4803 ARAPAHO ROAD. ELEV. 630.61

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY KENNETH A. ROBERTS, P.E. 55446 ON OCTOBER 24, 1997

REVISION 17/8/98
ADDENDUM #4, 12/2/97

10-24-97

PAVING PLAN & PROFILE
STA. 50+00 TO STA. 55+00
ARAPAHO ROAD
ADDISON ROAD TO DALLAS NORTH TOLLWAY
TOWN OF ADDISON, TEXAS
Hull-Zollars, Inc./Consulting Engineers
Dallas, Fort Worth, Houston, Phoenix, Austin

DESIGN	DRAWN	APPR.	SCALE	DATE	PROJECT NO.	NO.
HZI	HZI	KAR	H _v 1"=20' V _v 1"=6'	OCT 97	1772-01	P-5