

Bob Broche  
980-860

OWNER'S CERTIFICATE

STATE OF TEXAS  
COUNTY OF DALLAS

WHEREAS, Belt Line-Marsh, Ltd. is the owner of two tracts of land situated in the D. Myers Survey, Abstract No. 923, and in the T.L. Chenoweth Survey, Abstract No. 273, in the City of Addison, Dallas County, Texas, and being more particularly described as follows:

TRACT 1

BEGINNING at a point in the East line of Marsh Lane (60' R.O.W.), said point also being in the Southwest line of the St. Louis and Southwestern Railway (100' R.O.W.);

THENCE S 27°47'59" E along the said Southwest line of Railway, a distance 971.00 feet to a cedar fence post for corner;

THENCE in a Southeasterly direction, along the said Southwest line of Railway the following: S 77°56'58" E a distance of 109.5 feet, S 79°26'58" E a distance of 109.00 feet, S 81°18'58" E a distance of 100.00 feet, S 83°04'58" E a distance of 100.00 feet, S 85°17'58" E a distance of 100.00 feet, S 87°21'58" E a distance of 100.00 feet, S 89°12'58" E a distance of 98.6 feet to an iron stake found for corner, said point being in the West line of Texas Power and Light Co. 100' R.O.W. and the Southwest line of said Railway;

THENCE S 0°04'38" W along the said West line of Texas Power and Light Co. R.O.W., a distance of 1093.95 feet to an iron pipe found for corner in the North line of Belt Line Road (100' R.O.W.); said point also being the beginning of a curve to the right, having a central angle of 18°20'21" and a radius of 1860.0 feet, and whose tangent bears S 71°45'08" W;

THENCE along the said North line of Belt Line Road, around said curve in a Southwesterly direction, a distance of 595.35 feet to end of curve;

THENCE N 89°54'31" W along said North line of Belt Line Road, a distance of 1034.79 feet to a point for corner;

THENCE N 44°35'11" W a distance of 43.13 feet to a point for corner in the aforementioned East line of Marsh Lane;

THENCE N 0°02'48" W along the said East line of Marsh Lane, a distance of 1456.30 feet to the PLACE OF BEGINNING and containing 49.031 acres of land, more or less.

TRACT 2

BEGINNING at a point in the West line of Marsh Lane (60' R.O.W.), said point also being in the Southwest line of the St. Louis and Southwestern Railway (100' R.O.W.);

THENCE S 0°02'48" E along the said West line of Marsh Lane, a distance of 1456.30 feet to a point for corner;

THENCE S 44°49'43" W a distance of 42.17 feet to a point for corner in the North line of Belt Line Road (100' R.O.W.);

THENCE N 89°49'34" W along the said North line of Belt Line Road, a distance of 518.54 feet to a point for corner;

THENCE N 0°06'34" W a distance of 200.00 feet to a point said point being the beginning of a curve to the right, having a radius of 1273.24 feet and a central angle of 32°00';

THENCE around said curve in a Northeasterly direction, and arc distance of 711.11 feet to end of curve;

THENCE N 31°53'26" E a distance of 369.31 feet to a point, said point being the beginning of a curve to the left having a radius of 1273.24 feet and a central angle of 14°56'45";

THENCE around said curve, in a Northeasterly direction, an arc distance of 332.13 feet, to end of said curve, said point being in the aforementioned Southwest line of the St. Louis and Southwestern Railway;

THENCE S 77°46'36" E along the said Southwest line of Railway, a distance of 26.39 feet to the PLACE OF BEGINNING and containing 12.540 acres of land, more or less.

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS: THAT, Belt Line-Marsh, Ltd., being the Owner does hereby adopt this plat designating the hereinabove described property as Belt Line-Marsh Business Park, an addition to the City of Addison, Dallas County, Texas, and do hereby dedicate to the public use forever the streets and alleys shown thereon. The easements shown thereon are hereby reserved for the purpose as indicated. The utility and fire lane easements shall be open to the public fire and police units, garbage and rubbish collection agencies and all public and private utilities for each particular use. The maintenance of paving on the utility and fire lane easements is the responsibility of the property owner. No buildings, fences, trees, shrubs, or other improvements or growths shall be constructed, reconstructed or placed upon, over or across the utility easements as shown. Said utility easements being hereby reserved for the mutual use and accommodation of all public utilities using or desiring to use same.

All and any public utility shall have the right to remove and keep or all or parts of any buildings, fences, trees, shrubs or other improvements or growths which in any way endanger or interfere with the construction, maintenance or efficiency of its respective system on the utility easements and all public utilities shall at all times have the full right of ingress and egress to and from and upon the said utility easements for the purpose of constructing, reconstructing, inspecting, patrolling, maintaining and adding to or removing all or parts of its respective system without the necessity at any time of procuring the permission of anyone. A public utility shall have the right of ingress and egress to private property for the purpose of reading meters and any maintenance and service required or ordinarily performed by that utility.

This plat approved subject to all platting ordinances, rules, regulations and resolutions of the City of Addison, Texas.

WITNESS MY HAND this the \_\_\_\_\_ day of \_\_\_\_\_, 1978.

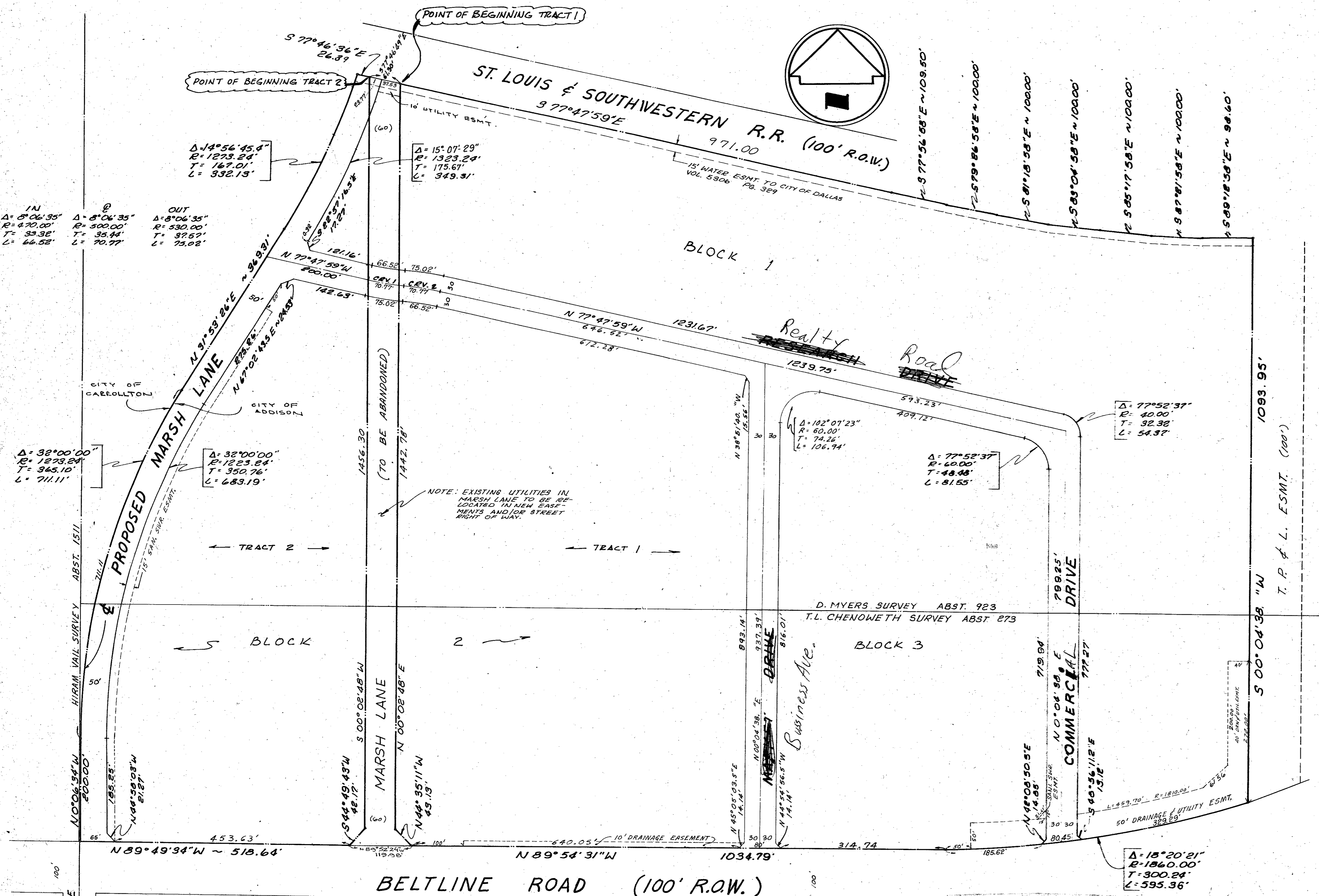
Belt Line-Marsh, Ltd.  
by Dal-Mac Development Company, Inc.,  
General Partner  
by Jack I. McJunkin, President

STATE OF TEXAS  
COUNTY OF DALLAS

Before me, the undersigned authority, a Notary Public in and for said County and State on this day personally appeared Jack I. McJunkin, known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purpose and consideration therein expressed and in the capacity therein stated.

GIVEN under my hand and seal of office, this the \_\_\_\_\_ day of \_\_\_\_\_, 1978.

VOL. 78155 PG.0001  
Notary Public in and for Dallas County, Texas



KNOW ALL MEN BY THESE PRESENTS: THAT I, JACK R. DAVIS, do hereby certify that I prepared this plat from an actual and accurate survey of the land and that the corner monuments shown thereon were properly placed under my personal supervision, in accordance with the platting rules and regulations of the City Plan Commission of the City of Addison, Texas.

Jack R. Davis, P.E.

STATE OF TEXAS  
COUNTY OF DALLAS

Before me, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Jack R. Davis, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and considerations therein expressed, and in the capacity therein stated.

GIVEN under my hand and seal of office, this the \_\_\_\_\_ day of \_\_\_\_\_, 1978.

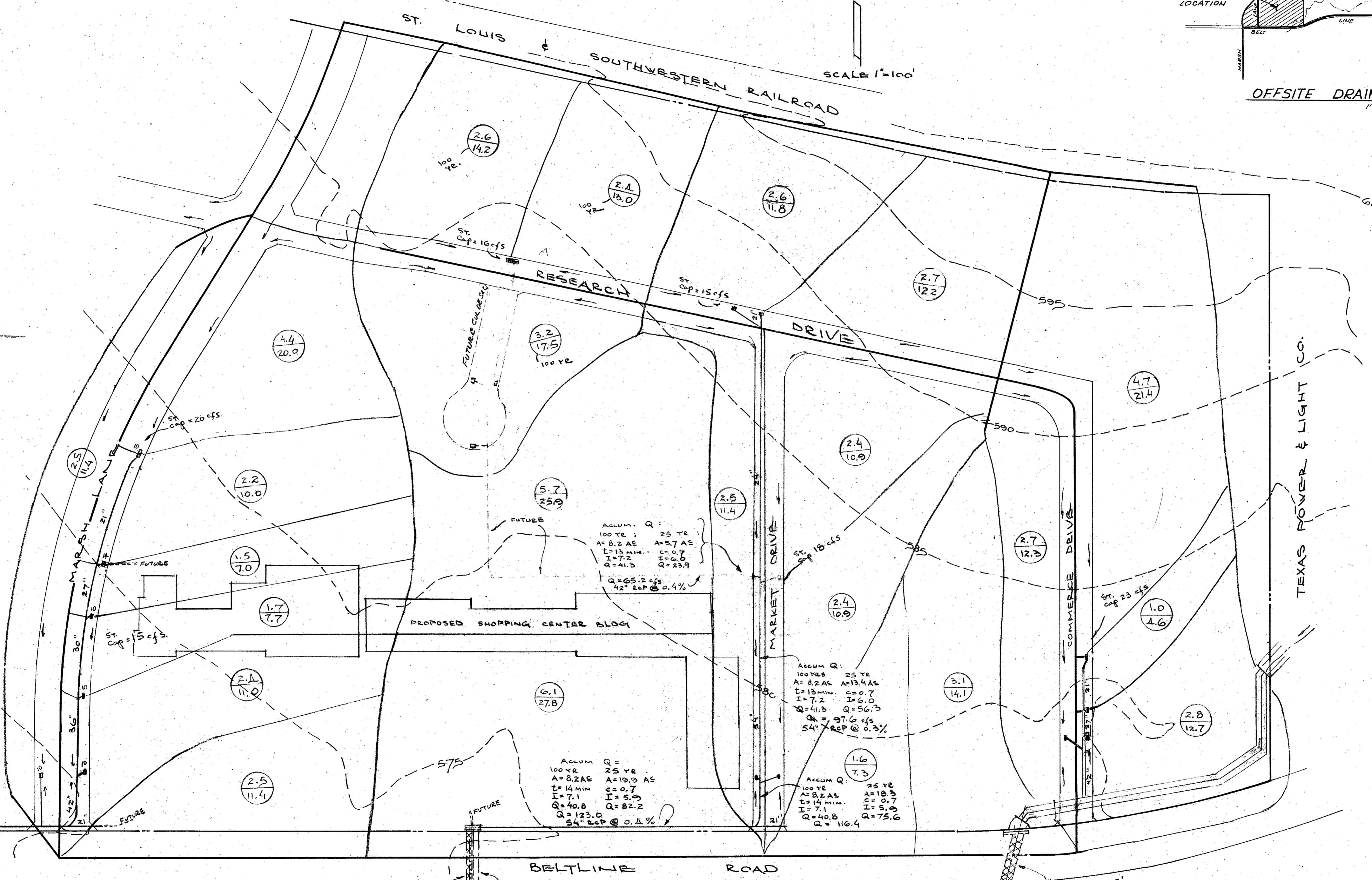
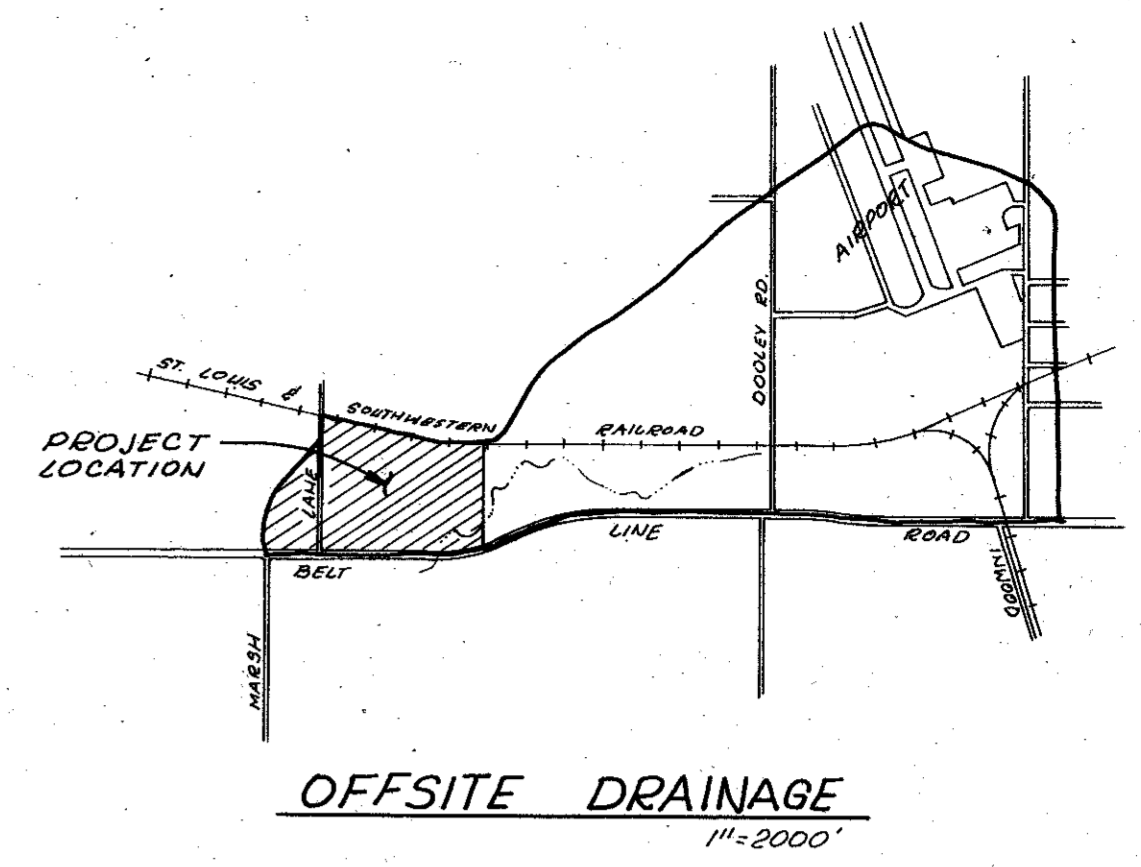
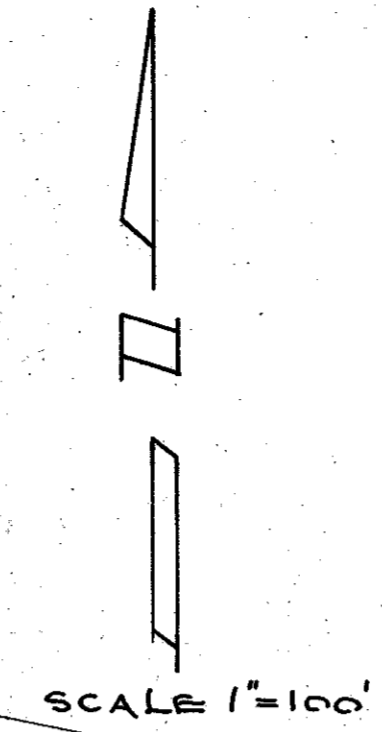
Notary Public in and for Dallas County, Texas

**FINAL PLAT**  
**BELTLINE-MARSH BUSINESS PARK**  
D. MYERS SURVEY - ABSTRACT 923  
T.C. CHENOWETH SURVEY - ABSTRACT 273  
ADDISON, DALLAS COUNTY, TEXAS  
DAL-MAC DEVELOPMENT COMPANY  
100 E. SPRING VALLEY RD.  
RICHARDSON, TEXAS 75080  
BY  
MAYES & BROCKETTE, INC.  
2902 CARLISLE ST.  
DALLAS, TEXAS 75204  
SCALE: 1" = 100'  
APRIL, 1978

25 YE: C=0.7 L=10 MIN. I=6.5  
 Q = 4.55 cfs/AE

100 YE: C=0.7 L=10 MIN. I=7.8  
 Q = 5.46 cfs/AE

2.6 AREA (IN ACRES)  
 11.8 RUNOFF (CFS) 25 YE FREQ.  
 UNLESS NOTED OTHERWISE.



**CHANNEL**  
 A = 382 AE CAVG = 0.7  
 T.O.C.  
 2700' GUTTER FLOW @ 1.0% = 18 MIN.  
 1000' OVERLAND FLOW @ 0.8% = 35 MIN.  
 3500' IMPROV. CHANNEL @ 0.8% = 30 MIN.  
 TOTAL 83 MIN. SAY 1 HR 20 MIN.  
 I<sub>25</sub> = 2.8 I<sub>100</sub> = 3.5  
 Q<sub>25</sub> = 382(.7)2.8 = 750 cfs  
 Q<sub>100</sub> = 936 cfs

**CULVERT:**  
 Q<sub>100</sub> = 936 + 52 ON SITE = 988 cfs

LINE CHANNEL W/ CONC. FOR 25 YRS:  
  
 $Q = (84.21) 75.625 (1.698) 0.0707 = 770$  cfs  
 USE 2-10' X 4.5' BOX CULVERTS.  
 $Q = (99.07) 45 (1.7768) 0.0707 = 560$  cfs  
 $V = 988/50 = 11.0$  FPS.

Accum. Q:  
 100 YE: A=8.2 AE A=13.4 AS  
 I=13 MIN. C=0.7 I=6.0  
 Q=41.3 Q=23.9  
 Q=65.2 cfs  
 42" RCP @ 0.4%

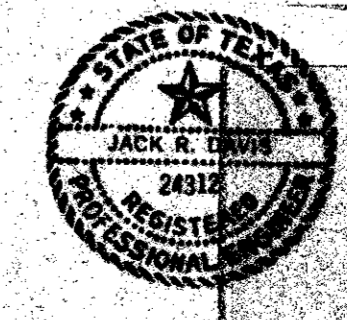
Accum. Q:  
 100 YRS: A=8.2 AE A=13.4 AS  
 I=13 MIN. C=0.7 I=6.0  
 Q=41.3 Q=23.9  
 Q=97.6 cfs  
 54" RCP @ 0.3%

Accum. Q:  
 100 YRS: A=8.2 AE A=13.4 AS  
 I=14 MIN. C=0.7 I=5.9  
 Q=40.8 Q=82.2  
 Q=123.0  
 54" RCP @ 0.4%

Accum. Q:  
 100 YE: A=8.2 AE A=13.4 AS  
 I=14 MIN. C=0.7 I=5.9  
 Q=40.8 Q=82.2  
 Q=123.0  
 54" RCP @ 0.4%

EXIST. 42" RCP @ 1.42% Cap = 110 cfs  
 PROP. 42" RCP @ 0.5% Cap = 70 cfs

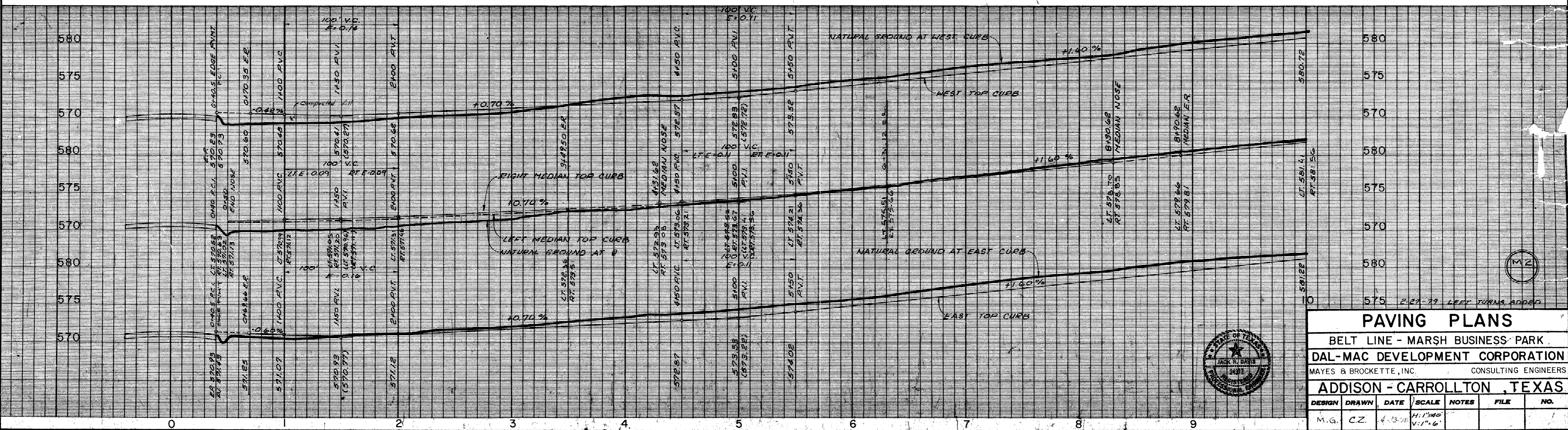
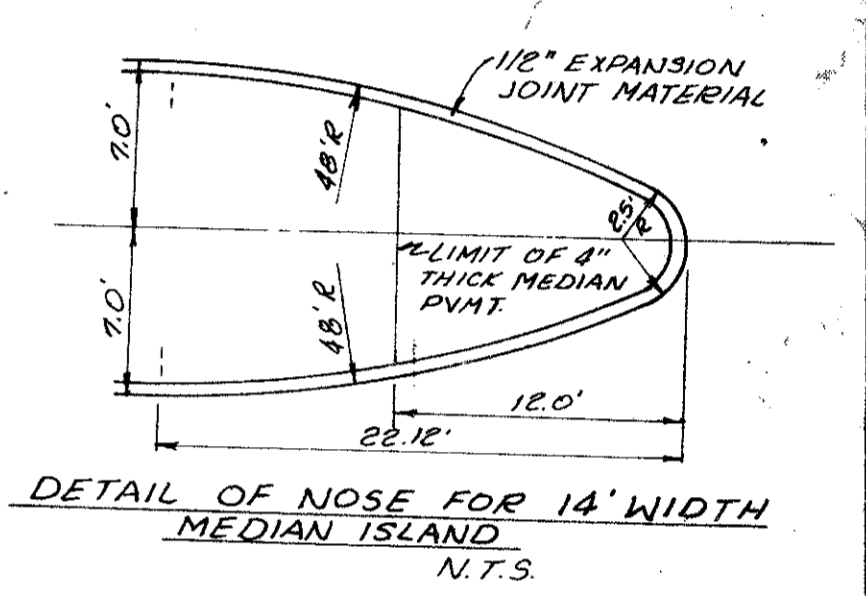
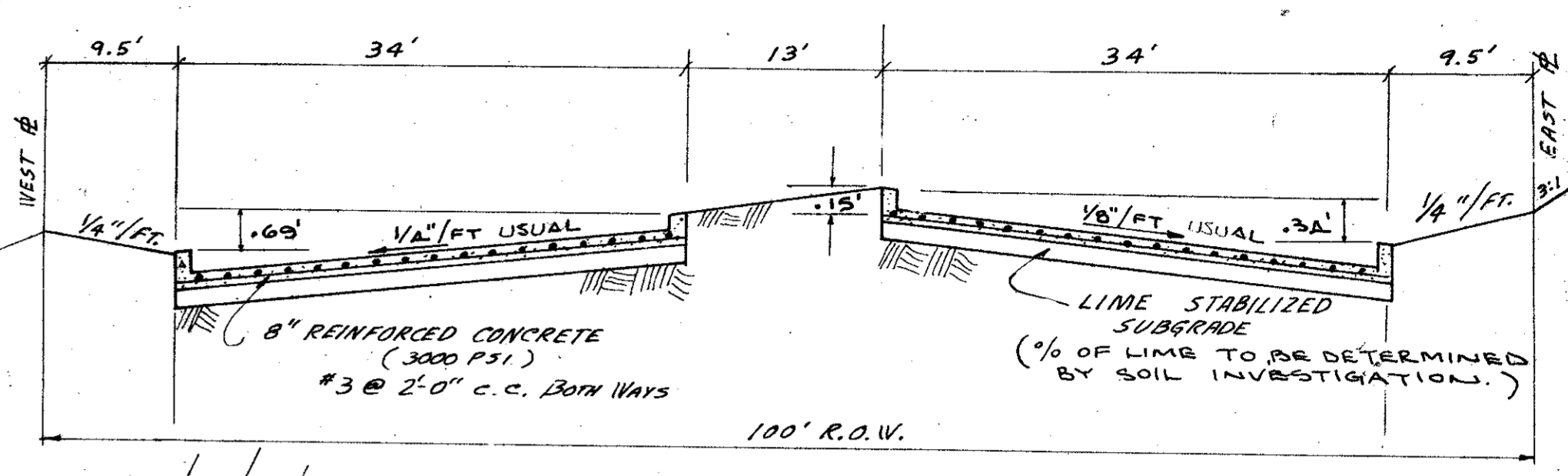
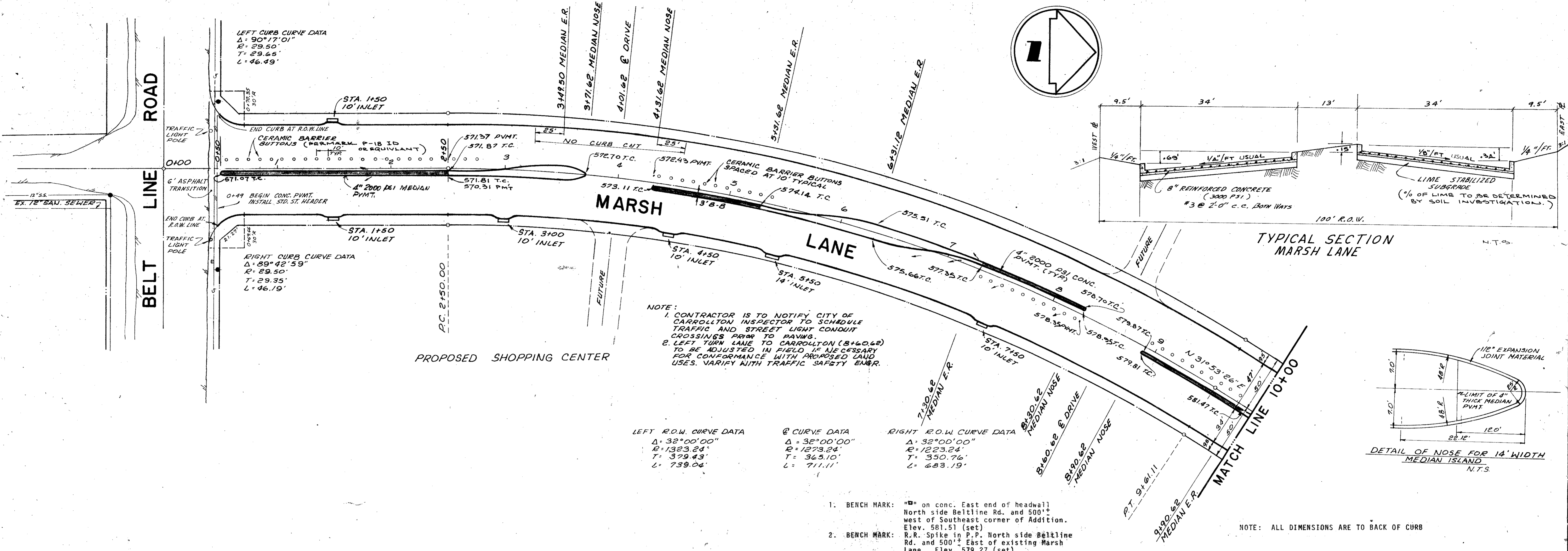
ENS. 2-8.5' X 8.5' Cap w/H/D = 1.0 = 1105 cfs.



**DRAINAGE AREA MAP**

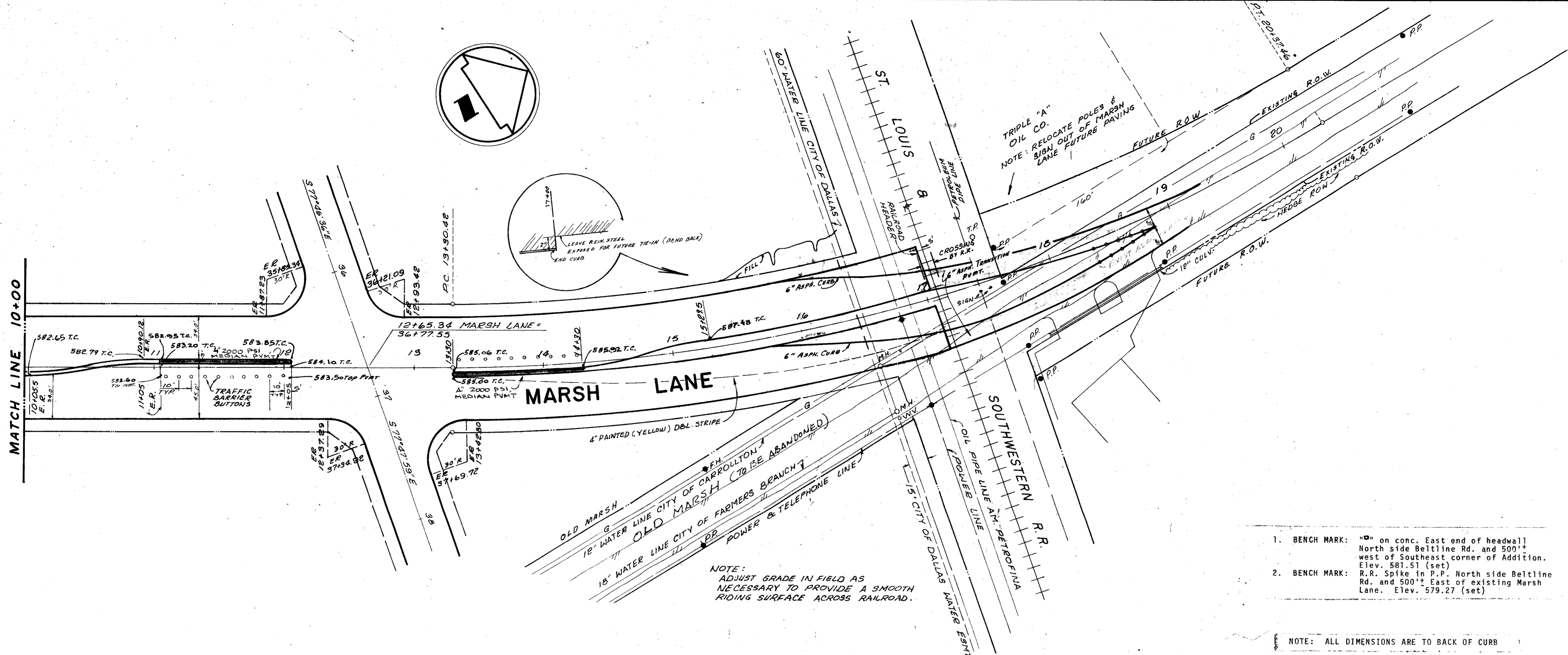
CIVIL STRUCTURAL  
**MAYES & BROCKETTE, INC.**  
 CONSULTING ENGINEERS  
 2802 CARLISLE  
 DALLAS, TEXAS 75204

DESIGN BY: MCG JOB NO. 57787 DATE 4-12-78  
 DRAWN BY: MCG SCALE: 1"=100' APPROVED BY: SHEET OF



PAVING PLANS						
BELT LINE - MARSH BUSINESS PARK						
DAL-MAC DEVELOPMENT CORPORATION						
MAYES & BROCKETTE, INC. CONSULTING ENGINEERS						
ADDISON - CARROLLTON, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
M.G.	C.Z.	4/3/78	1/4" = 1'-0"	V.17.6		

6/14/78 REV. MEDIAN  
 7/7/78 REV. MED. ELEV.  
 238-5461 C7781

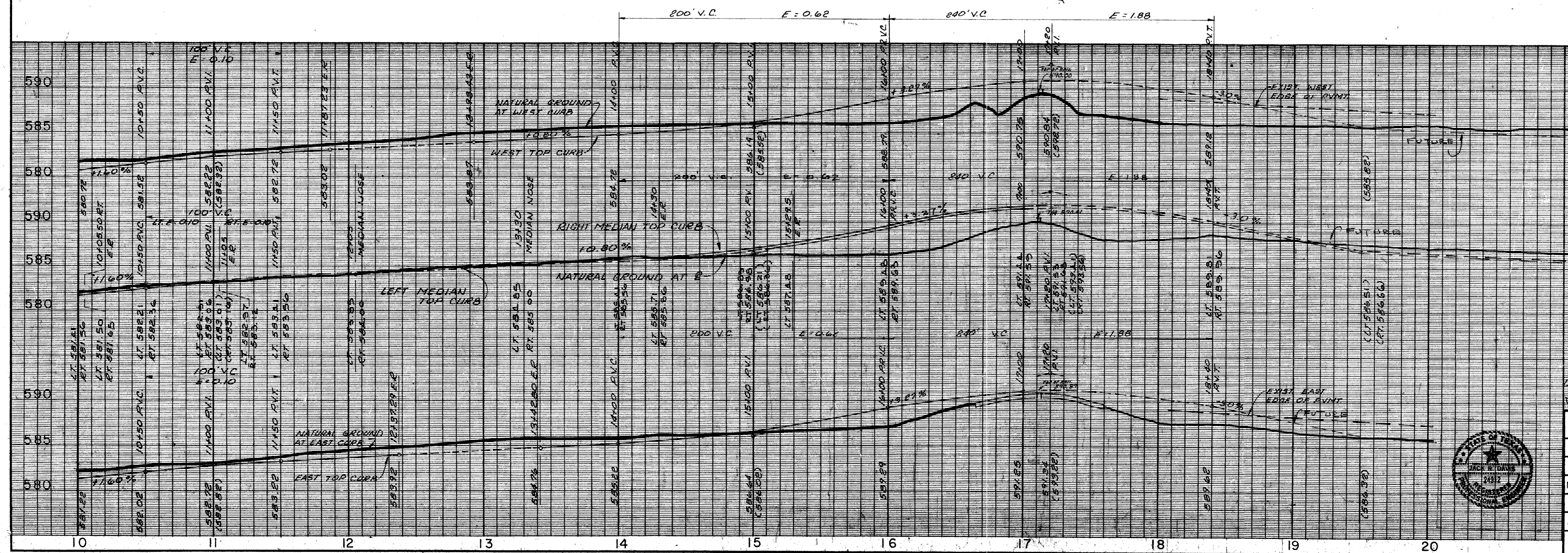


TRIPLE "A" OIL CO.  
NOTE: RELOCATE POLES & SIGN OUT OF MARSH LANE FUTURE PAVING

NOTE:  
ADJUST GRADE IN FIELD AS NECESSARY TO PROVIDE A SMOOTH RIDING SURFACE ACROSS RAILROAD.

1. BENCH MARK: "B" on conc. East end of headwall North side Beltline Rd. and 500'± west of Southeast corner of Addition. Elev. 581.51 (set)
2. BENCH MARK: R.R. Spike in P.P. North side Beltline Rd. and 500'± East of existing Marsh Lane. Elev. 579.27 (set)

NOTE: ALL DIMENSIONS ARE TO BACK OF CURB



LEFT THURS ADDED 4/27/79  
PROFILE REVISED 4/5/78

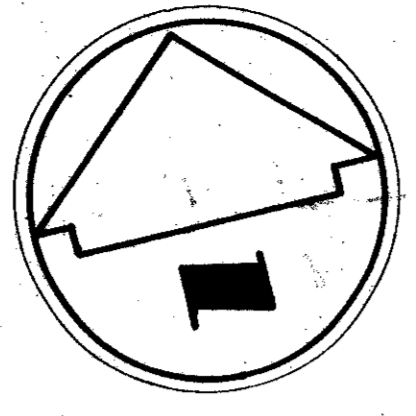
PAVING PLANS

DAL-MAC DEVELOPMENT CORPORATION  
MAYES & BROCKETTE, INC. CONSULTING ENGINEERS

ADDISON-CARROLLTON, TEXAS

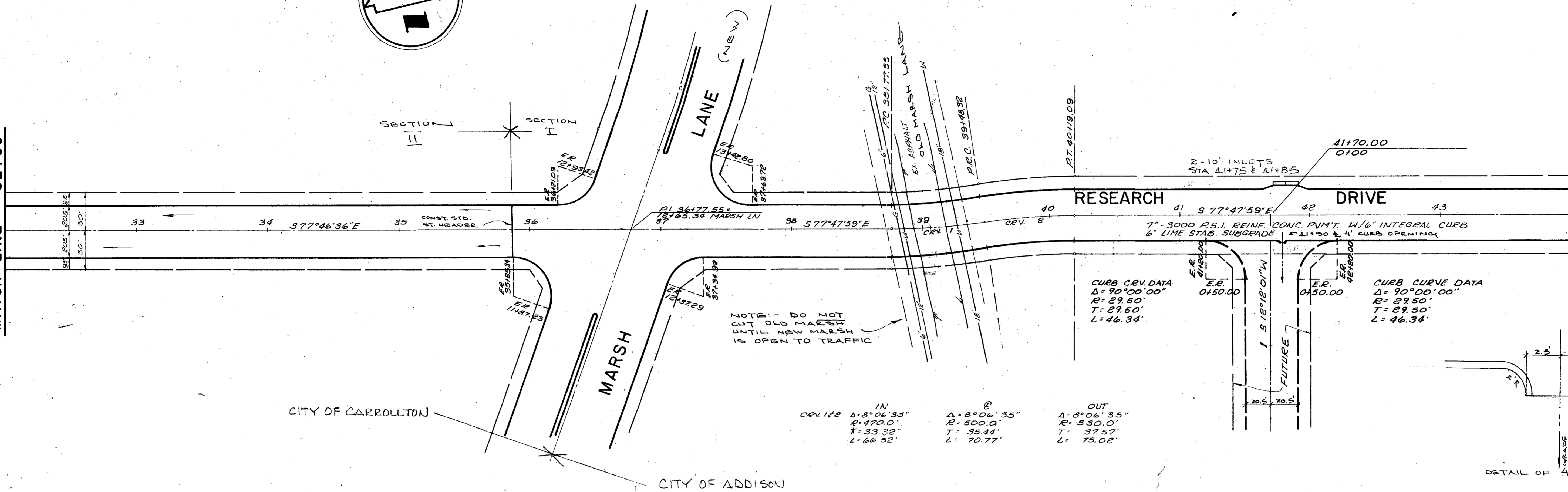
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
			1"=40'			





STA. 30+67.61 @ MATCH SHEET 32+00  
= MATCH LINE

MATCH LINE 44+00



CITY OF CARROLLTON

CITY OF ADDISON

IN  
CURVE  
 $\Delta = 8^{\circ}06'35''$   
 $R = 470.0'$   
 $T = 33.32'$   
 $L = 66.62'$

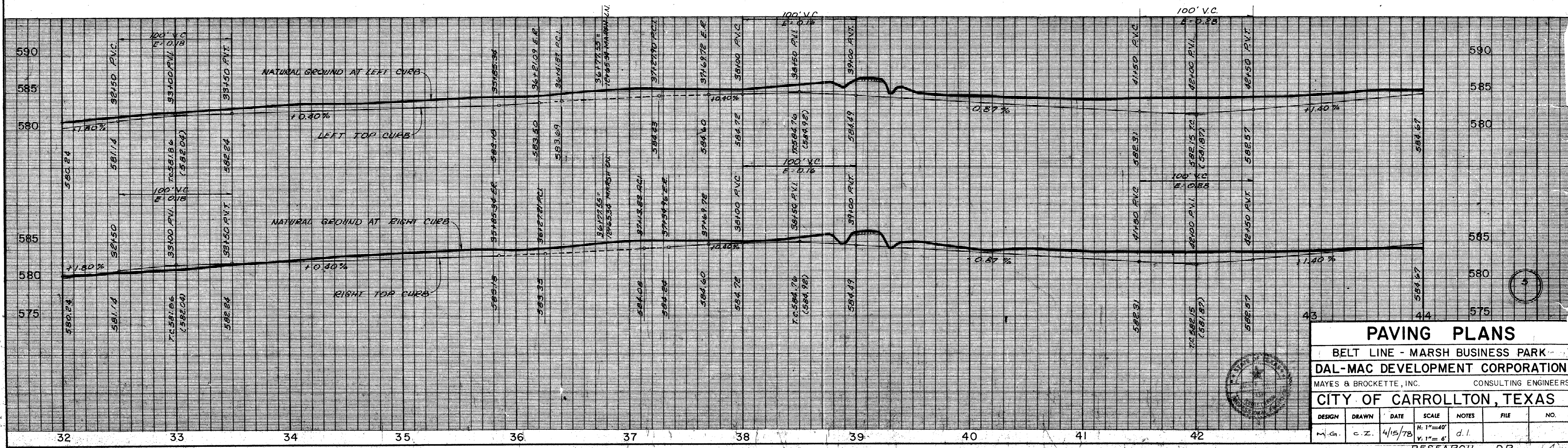
OUT  
CURVE  
 $\Delta = 8^{\circ}06'35''$   
 $R = 530.0'$   
 $T = 37.57'$   
 $L = 75.02'$

CURB CURVE DATA  
 $\Delta = 90^{\circ}00'00''$   
 $R = 29.50'$   
 $T = 29.50'$   
 $L = 46.34'$

CURB CURVE DATA  
 $\Delta = 90^{\circ}00'00''$   
 $R = 29.50'$   
 $T = 29.50'$   
 $L = 46.34'$

- BENCH MARK: "B" on conc. East end of headwall North side Beltline Rd. and 500'+ west of Southeast corner of Addition. Elev. 581.51 (set)
- BENCH MARK: R.R. Spike in P. 2. North side Beltline Rd. and 500'+ East of existing Marsh Lane. Elev. 579.27 (set)

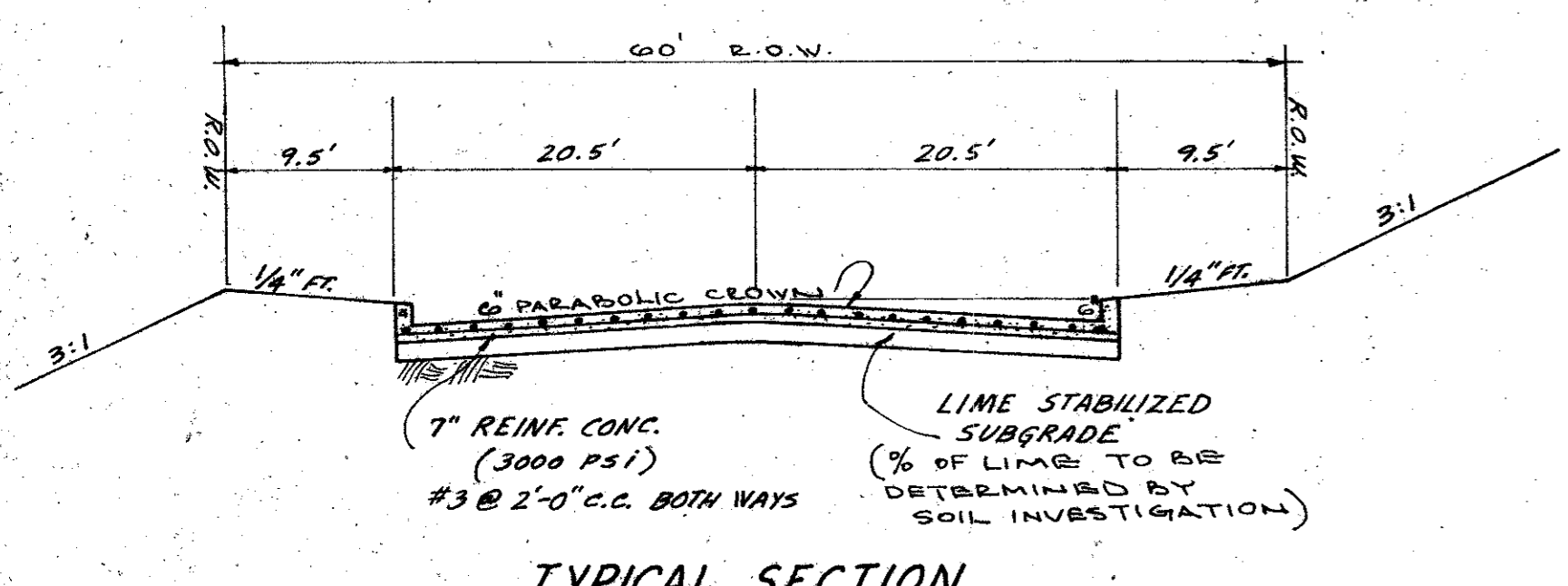
NOTE: ALL DIMENSIONS ARE TO BACK OF CURB



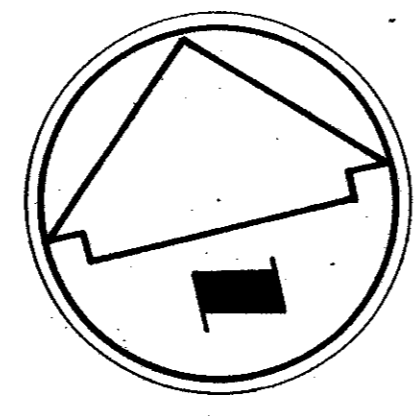
PAVING PLANS						
BELT LINE - MARSH BUSINESS PARK						
DAL-MAC DEVELOPMENT CORPORATION						
MAYES & BROCKETTE, INC. CONSULTING ENGINEERS						
CITY OF CARROLLTON, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
M.G.	C.Z.	4/15/78	H: 1"=40' V: 1"=5'	d.l.		

RESEARCH DR. 4

c-1787



TYPICAL SECTION  
N.T.S.



MATCH LINE 44+00

MATCH LINE 54+00

ROW CURVE DATA  
 $\Delta = 77^\circ 52' 37''$   
 $R = 40.00'$   
 $T = 32.92'$   
 $L = 54.37'$

CURB CURVE DATA  
 $\Delta = 77^\circ 52' 37''$   
 $R = 30.50'$   
 $T = 24.64'$   
 $L = 41.46'$

CURB CURVE DATA  
 $\Delta = 77^\circ 52' 37''$   
 $R = 29.50'$   
 $T = 23.84'$   
 $L = 40.10'$

ROW CURVE DATA  
 $\Delta = 102^\circ 07' 23''$   
 $R = 60.00'$   
 $T = 74.86'$   
 $L = 106.94'$

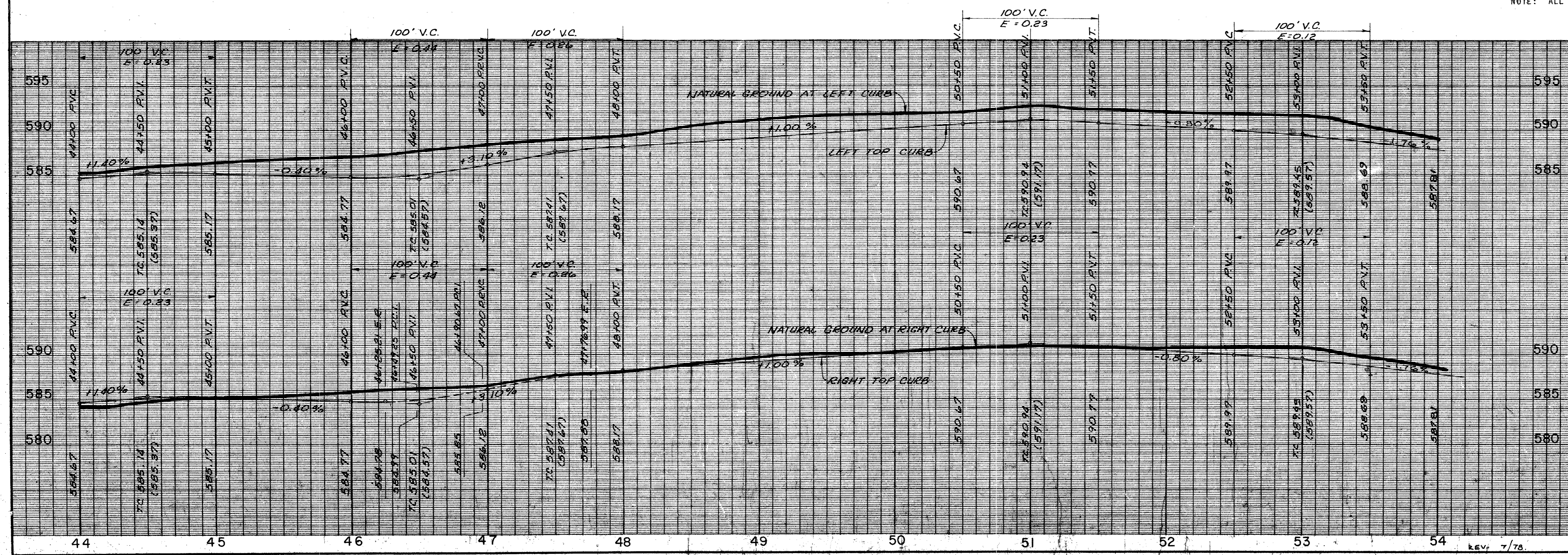
CURB CURVE DATA  
 $\Delta = 102^\circ 07' 23''$   
 $R = 49.50'$   
 $T = 86.01'$   
 $L = 123.87'$

ROW CURVE DATA  
 $\Delta = 77^\circ 52' 37''$   
 $R = 40.00'$   
 $T = 43.48'$   
 $L = 81.55'$

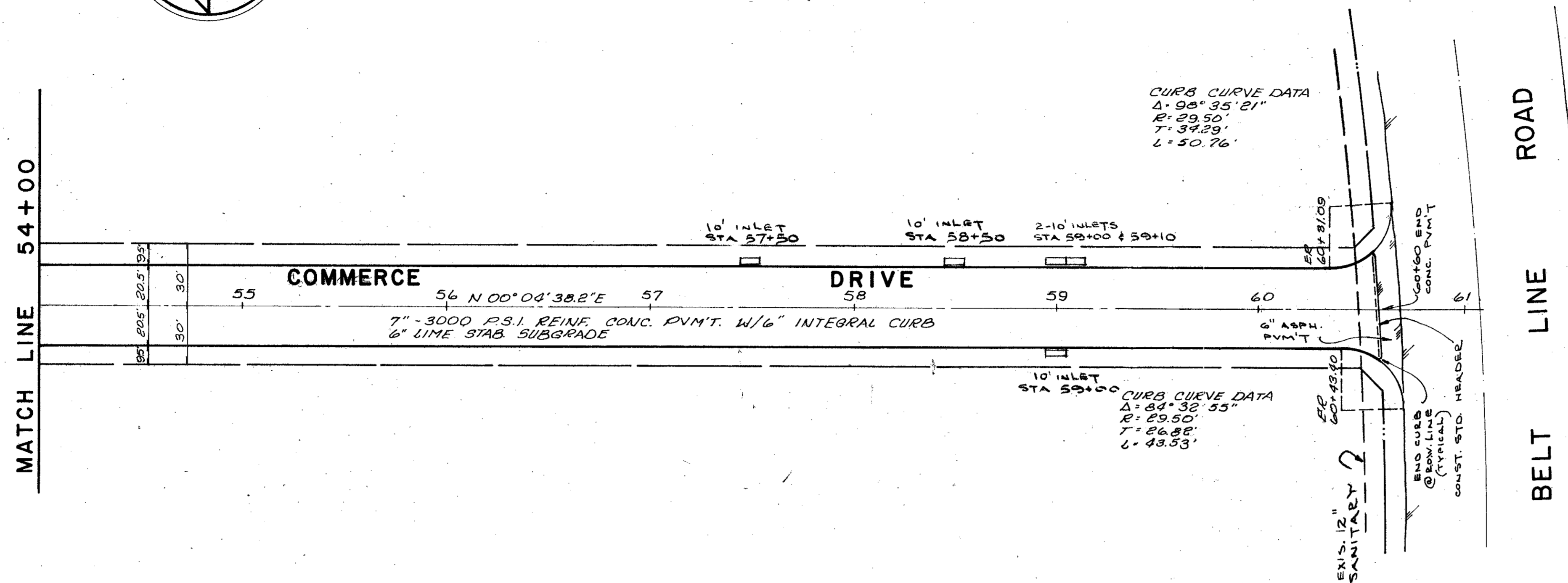
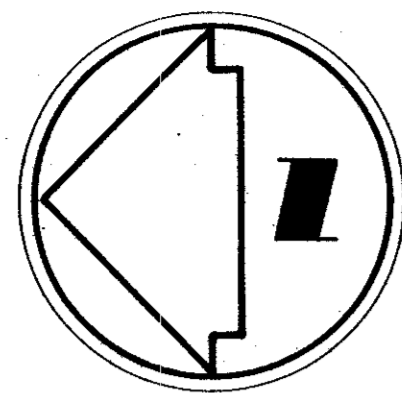
CURB CURVE DATA  
 $\Delta = 77^\circ 52' 37''$   
 $R = 49.50'$   
 $T = 36.46'$   
 $L = 94.27'$

- BENCH MARK: "BM" on conc. East end of headwall North side Beltline Rd. and 500'± west of Southeast corner of Addition. Elev. 581.51 (set)
- BENCH MARK: R.R. Spike in P.P. North side Beltline Rd. and 500'± East of existing Marsh Lane. Elev. 579.27 (set)

NOTE: ALL DIMENSIONS ARE TO BACK OF CURB



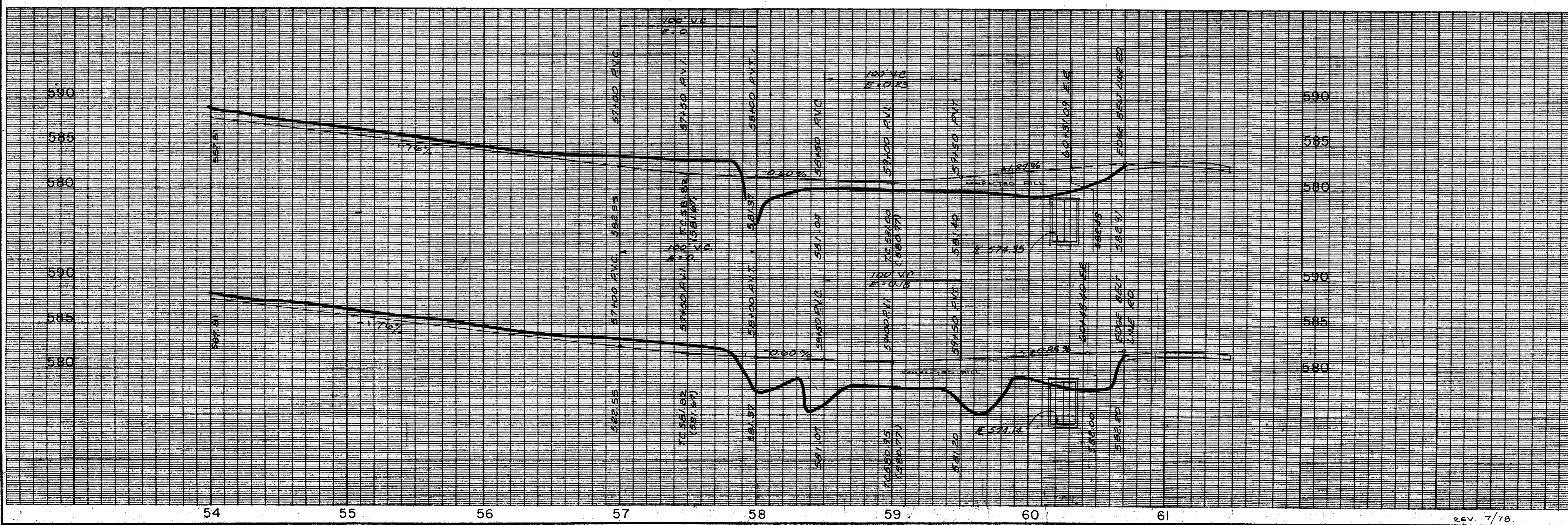
PAVING PLANS						
DAL-MAC DEVELOPMENT CORPORATION						
MAYES & BROCKETTE, INC.			CONSULTING ENGINEERS			
CITY OF ADDISON, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
M.G.	C.Z.	4-15-78	H: 1"=40' V: 1"=6'	W.P.		
REV: 7/78						



- GENERAL NOTES
1. All dimensions are to back of curb unless otherwise noted.
  2. All streets shall be paved with 7 & 8 inch, 3000 psi, reinforced concrete (as per detail).
  3. Curb radius shall be 29.5 feet at street intersections and 9.5 feet for driveway turnouts.
  4. No trees shall be cut except upon the specific authority of the Engineer.
  5. All debris, stumps, rubbish, etc. shall be removed from the site.
  6. Topsoil containing organic matter shall be removed from areas designated for paving. Topsoil and all excess excavation shall be spread evenly at locations on the site as directed by the Engineer.
  7. Contractor shall verify all locations of existing utilities prior to the start of construction.
  8. All materials and construction shall conform to City of Addison specifications and details.
  9. Barrier-free curbs at street intersections will not be required.
  10. Limits of lime stabilized subgrade to be determined by soil analysis furnished by owner. Subgrade conditions with P.I. of 15 or less will not require lime.

1. BENCH MARK: "BM" on conc. East end of headwall North side Beltline Rd. and 500'± west of Southeast corner of Addition. Elev. 581.51 (set)
2. BENCH MARK: R.R. Spike in P.P. North side Beltline Rd. and 500'± East of existing Marsh Lane. Elev. 579.27 (set)

(NOTE: ALL DIMENSIONS ARE TO BACK OF CURB)



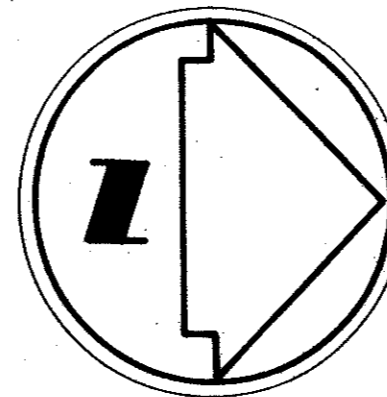
**PAVING PLANS**

**DAL-MAC DEVELOPMENT CORPORATION**  
MAYES & BROCKETTE, INC. CONSULTING ENGINEERS

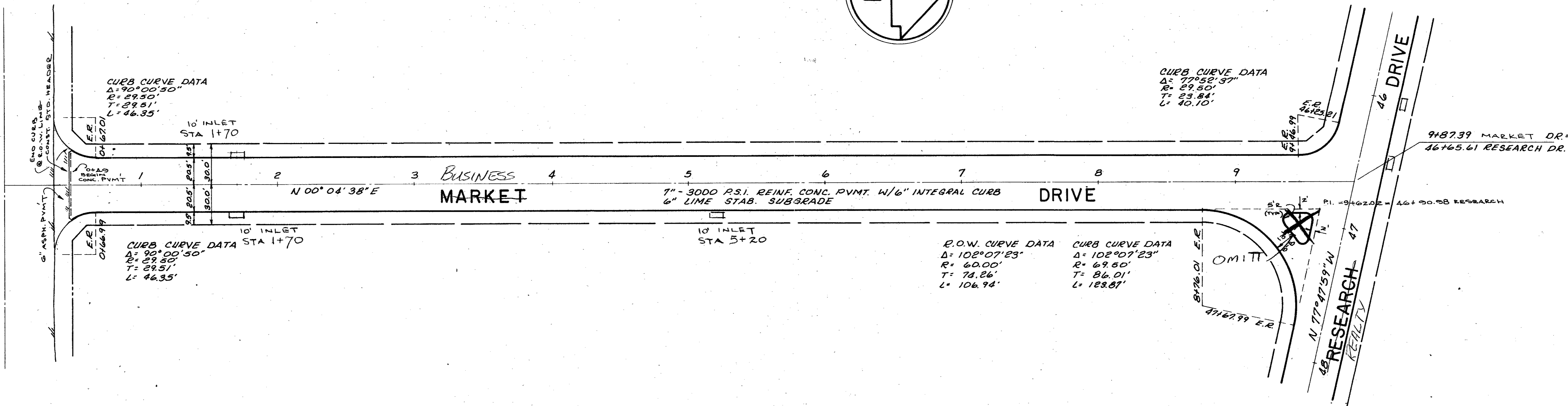
**CITY OF ADDISON, TEXAS**

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
M.G.	C.Z.	4-15-73	H: 1"=40' V: 1"=10'			

REV. 7/78.

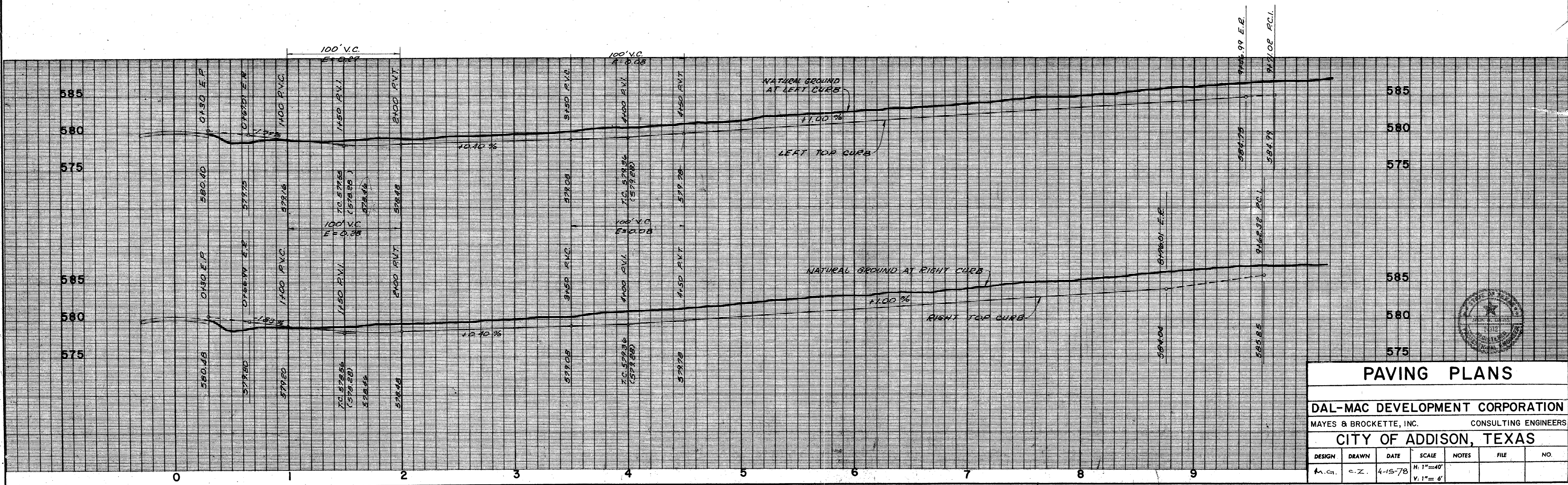


BELT LINE ROAD



- BENCH MARK: " " on conc. East end of headwall North side Belt Line Rd. and 500' west of Southeast corner of Addition; Elev. 581.51 (set)
- BENCH MARK: R.R. Spike in P.P. North side Belt Line Rd. and 500' East of existing Marsh Lane; Elev. 579.27 (set)

NOTE: ALL DIMENSIONS ARE TO BACK OF CURB.



**PAVING PLANS**

**DAL-MAC DEVELOPMENT CORPORATION**  
MAYES & BROCKETTE, INC. CONSULTING ENGINEERS

**CITY OF ADDISON, TEXAS**

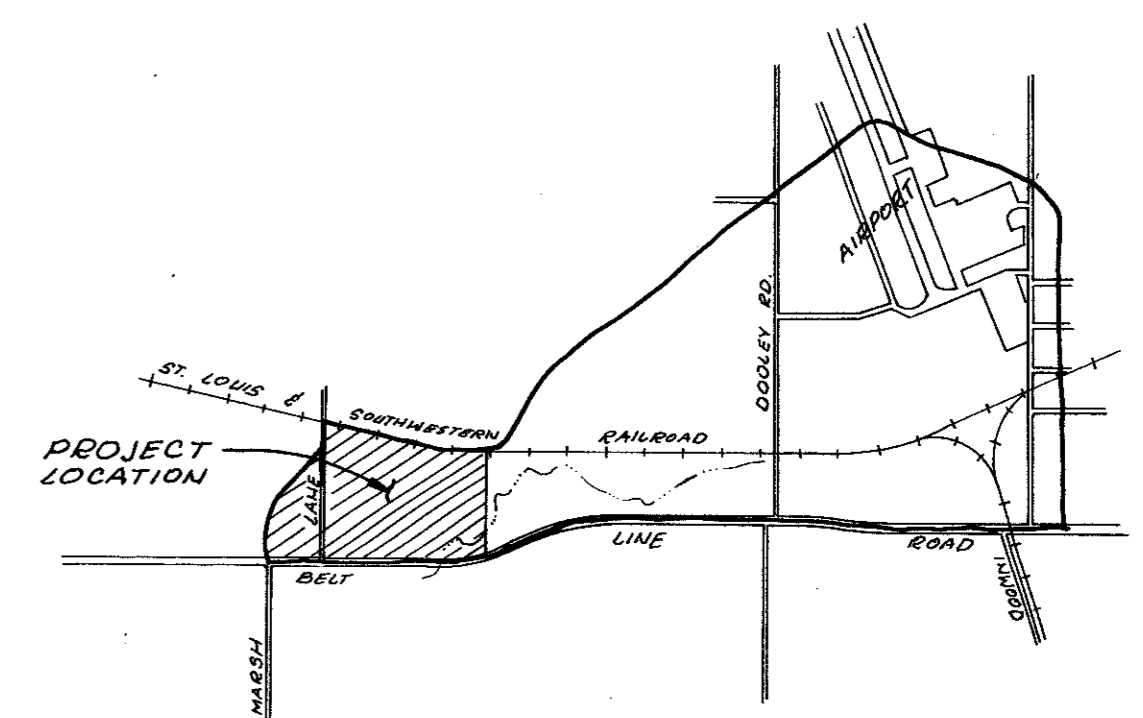
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
M.G.	E.Z.	4-15-78	H: 1"=40' V: 1"= 6'			



25 YE: c=0.7 L=10 MIN. I=6.5  
 Q = 4.55 cfs/AE

100 YE: c=0.7 L=10 MIN. I=7.8  
 Q = 5.40 cfs/AE

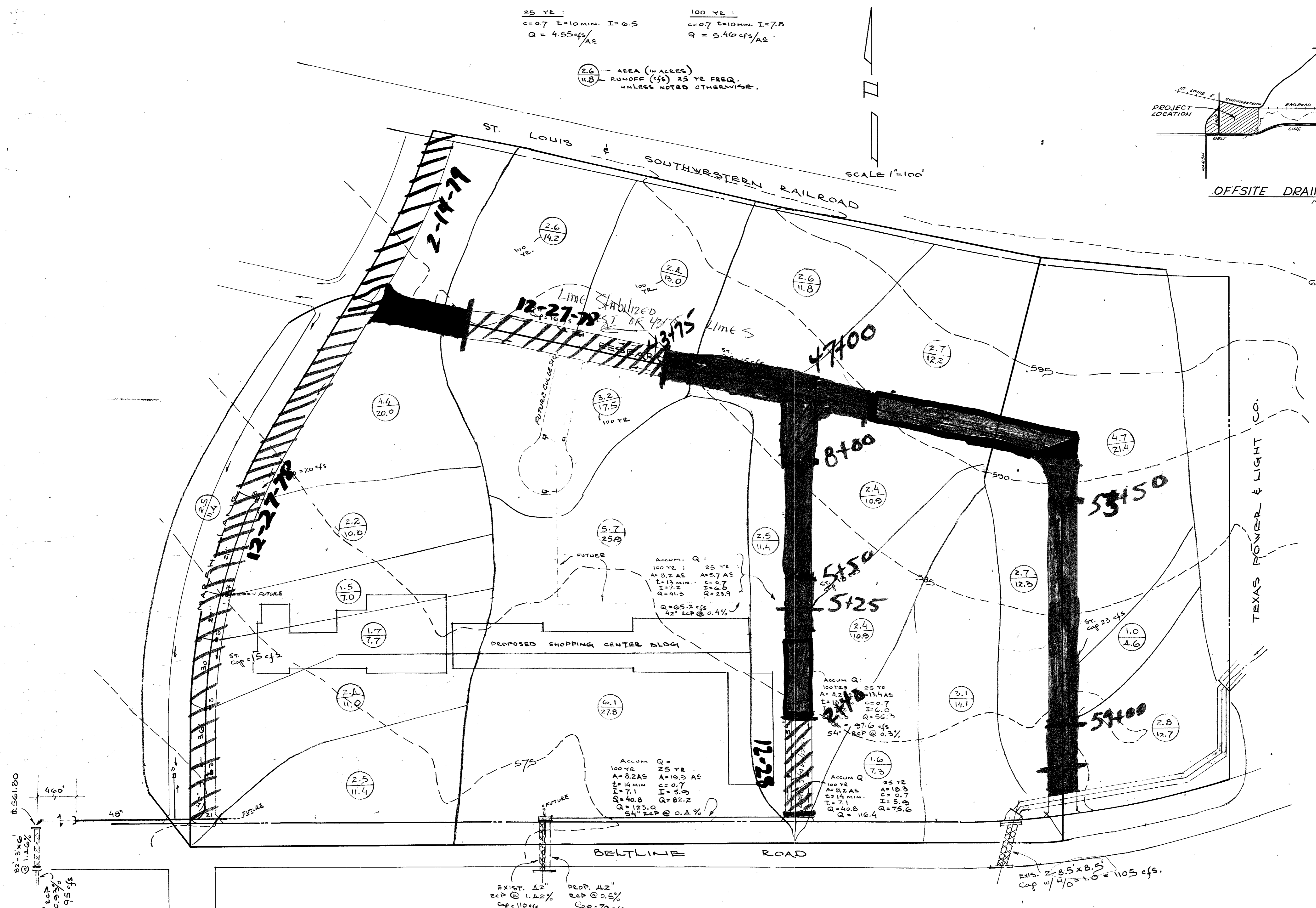
2.6 AREA (IN ACRES)  
 11.8 RUNOFF (CFS) 25 YE FREQ.  
 UNLESS NOTED OTHERWISE.



OFFSITE DRAINAGE 1"=200'

[Hatched] = No. I stabilization Area  
 [Solid Black] = No. II stabilization (Recontouring Area)  
 [White] = has not been stabilized  
 [Dotted] = will not get stabilized

L.H.LACY

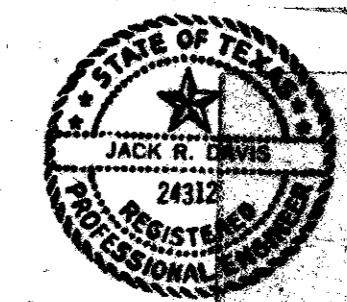


CHANNEL  
 A = 382 AE CAVG = 0.7  
 T.O.C.  
 2700' GUTTER FLOW @ 1.0% = 18 MIN.  
 1000' OVERLAND FLOW @ 0.8% = 35 MIN.  
 3500' IMPROV. CHANNEL @ 0.8% = 30 MIN.  
 TOTAL 83 MIN. SAY 1 HR 20 MIN.  
 I<sub>25</sub> = 2.8 I<sub>100</sub> = 3.5  
 Q<sub>25</sub> = 382(.7) 2.8 = 750 cfs  
 Q<sub>100</sub> = 936 cfs

CULVERT:  
 Q<sub>100</sub> = 936 + 52 ON SITE = 988 cfs.

LINE CHANNEL W/ CONC. FOR 25 YES:  
  
 Q = (84.0) 75.625 (1.60A) 0.0707 = 770 cfs

USE 2-10" X 4.5 BOX CULVERTS.  
 Q = (99.07) 45 (1.760) 0.0707 = 560 cfs  
 V = 988/90 = 11.0 FPS.



DRAINAGE AREA MAP

CIVIL STRUCTURAL

**MAYES & BROCKETTE, INC.**  
 CONSULTING ENGINEERS

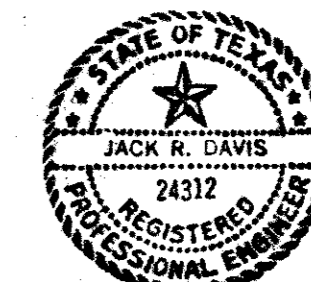
2802 CARLISLE  
 DALLAS, TEXAS 75204

DESIGN BY MCI JOB NO. 97787 DATE 4-13-78  
 DRAWN BY MCI SCALE 1"=100' APPROVED BY SHEET OF

GENERAL NOTES FOR WATER AND SEWER

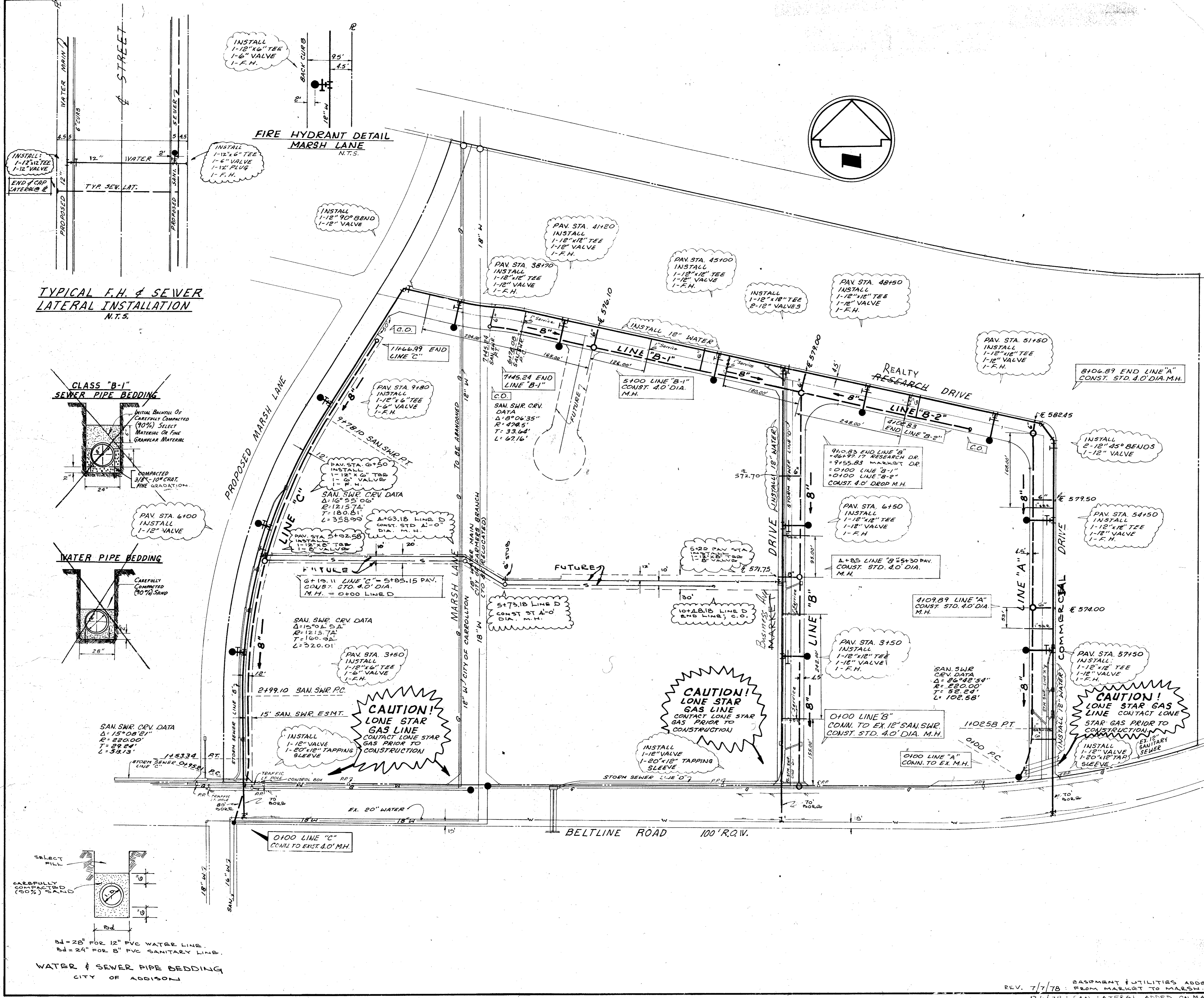
- All sanitary sewer lines shall be vitrified clay tile with Class C embedment or PVC pipe SDR 35 as per ASTM 3033 & 3034 Class B-1 embedment.
- Provide a water stop at sanitary manhole.
- All water mains shall be ductile iron poly (C.I. 50) wrap pipe, or PVC SDR 18 (blue brute with wire tracers).
- All water mains shall have minimum cover below finished grades or deeper if required to clear other utilities, as follows:  
12" - 5' cover  
8" - 4' cover
- All fire hydrants shall be Mueller Centurion.
- All gate valves shall be Mueller or approved equal.
- Streamer nozzles on fire hydrants shall be 18" above the top of curb, or finished grade, and shall face the centerline of the street. Fire hydrants shall usually be located 3 feet, but not less than 2 feet, or more than 5 feet behind the curb.
- Water main installations shall conform to the minimum requirements of the Texas State Department of Health rules and regulations covering plans and specifications for Public Waterworks Projects.
- Bedding for water lines shall be sand 6" below pipe to top of pipe.
- All construction within easements and rights of way belonging to the City of Addison and/or any construction for which the City must assume maintenance responsibility shall conform to the City of Addison standard specifications for construction.
- All Fire Hydrants, Manhole Castings, and Cleanouts shall be adjusted to final paving grades by Utility Contractor.

- BENCH MARK: "BM" on conc. East end of headwall North side Beltline Rd. and 500' West of Southeast corner of Addition. Elev. 581.51 (set)
- BENCH MARK: R.R. Spike in P.P. North side Beltline Rd. and 500' East of existing Marsh Lane. Elev. 579.27 (set)



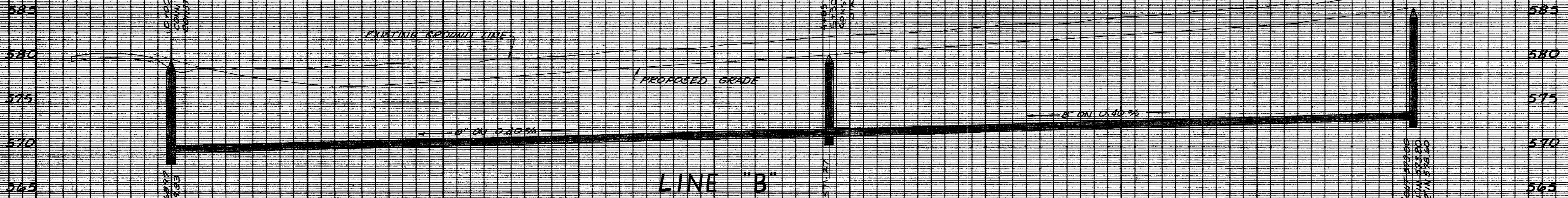
AS BUILT

WATER AND SANITARY SEWER						
DAL-MAC DEVELOPMENT CORPORATION						
MAYES & BROCKETTE, INC.			CONSULTING ENGINEERS			
CITY OF ADDISON, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
M.G.	C.Z.	4-15-78	1"=100'	B.J.	C 7787	



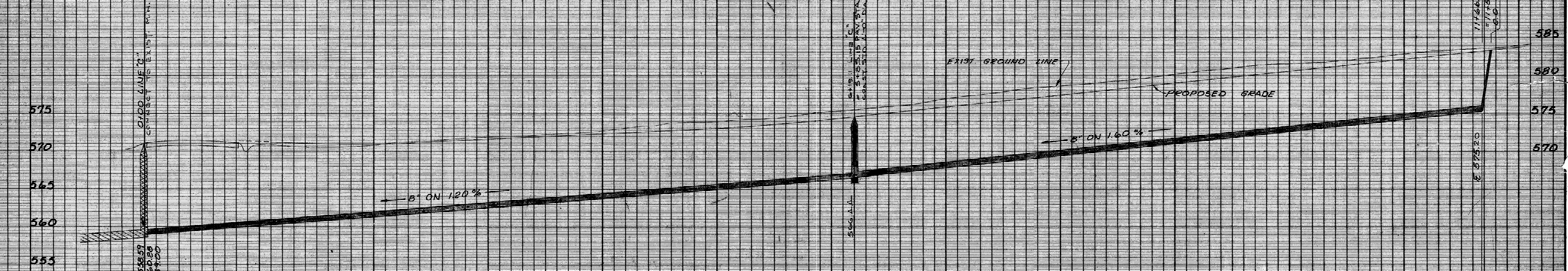
REVISIONS:  
REV. 7/7/78: BASEMENT UTILITIES ADDED FROM MARKET TO MARSH.  
8/1/78: SAN. LATERAL ADDED ON MARKET.





LINE "B"

917 LF 8" V.C.T. SAN. SWR PIPE CLASS "C" EMBEDMENT  
 ALT. 916 LF 8" PVC SAN SWR PIPE SDR 35 AS PER  
 ASTM 3033 OR 3034 CLASS "B-1" EMBEDMENT



LINE "C"

1167 LF 8" V.C.T. SAN. SWR PIPE CLASS "C" EMBEDMENT  
 ALT. 1167 LF 8" PVC SAN SWR PIPE SDR 35 AS PER  
 ASTM 3033 OR 3034 CLASS "B-1" EMBEDMENT

- BENCH MARK: "B" on conc. East end of headwall North side Bellline Rd. and 500' west of Southeast corner of Addition. Elev. 581.51 (set)
- BENCH MARK: R.R. Spike in P.P. North side Bellline Rd. and 500' East of existing Marsh Lane. Elev. 579.27 (set)

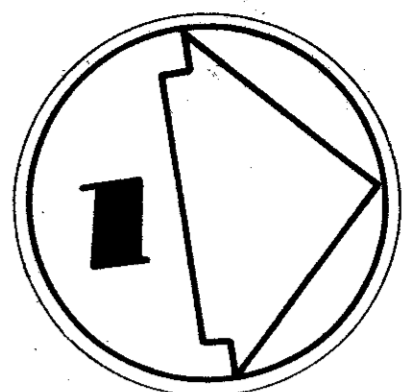
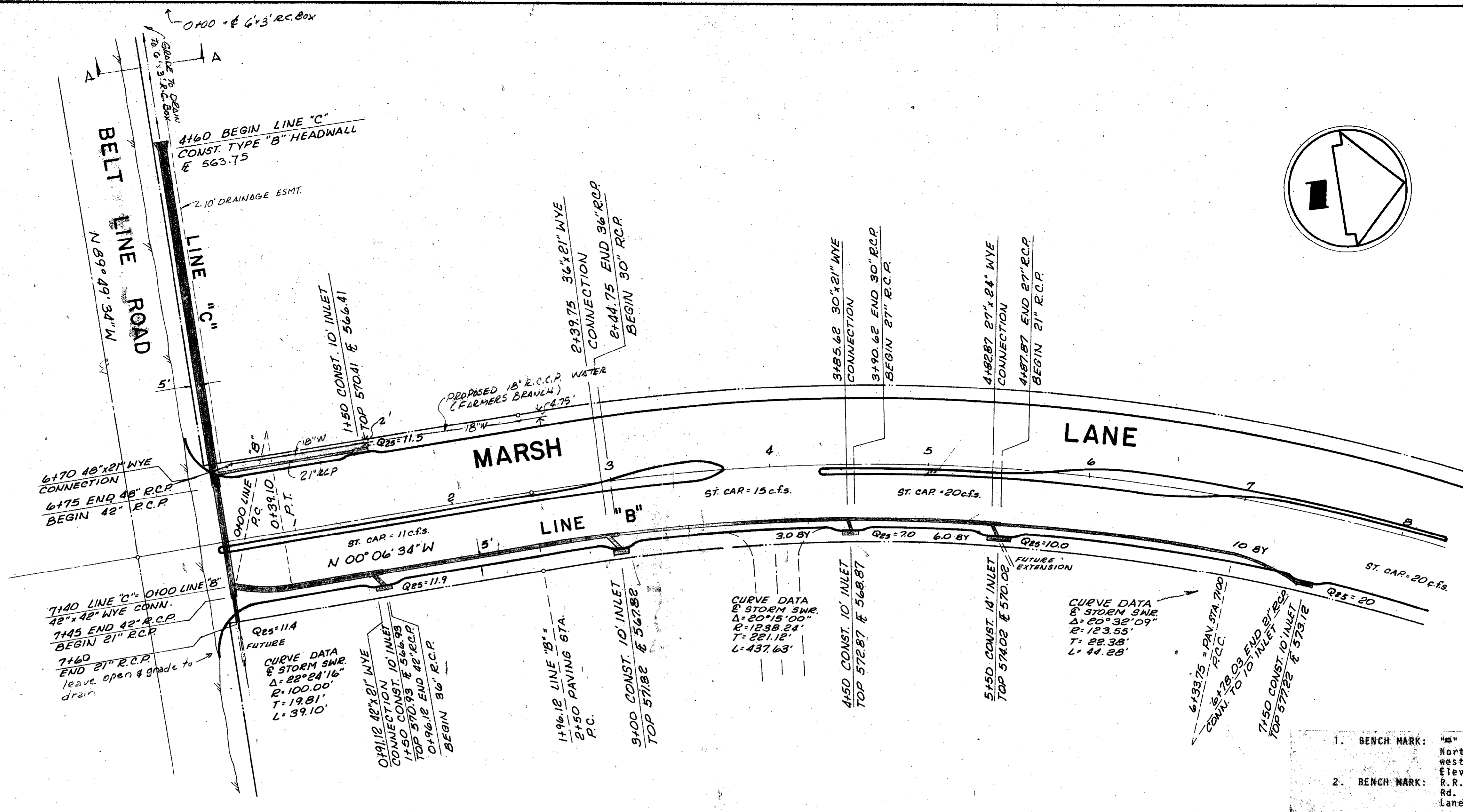
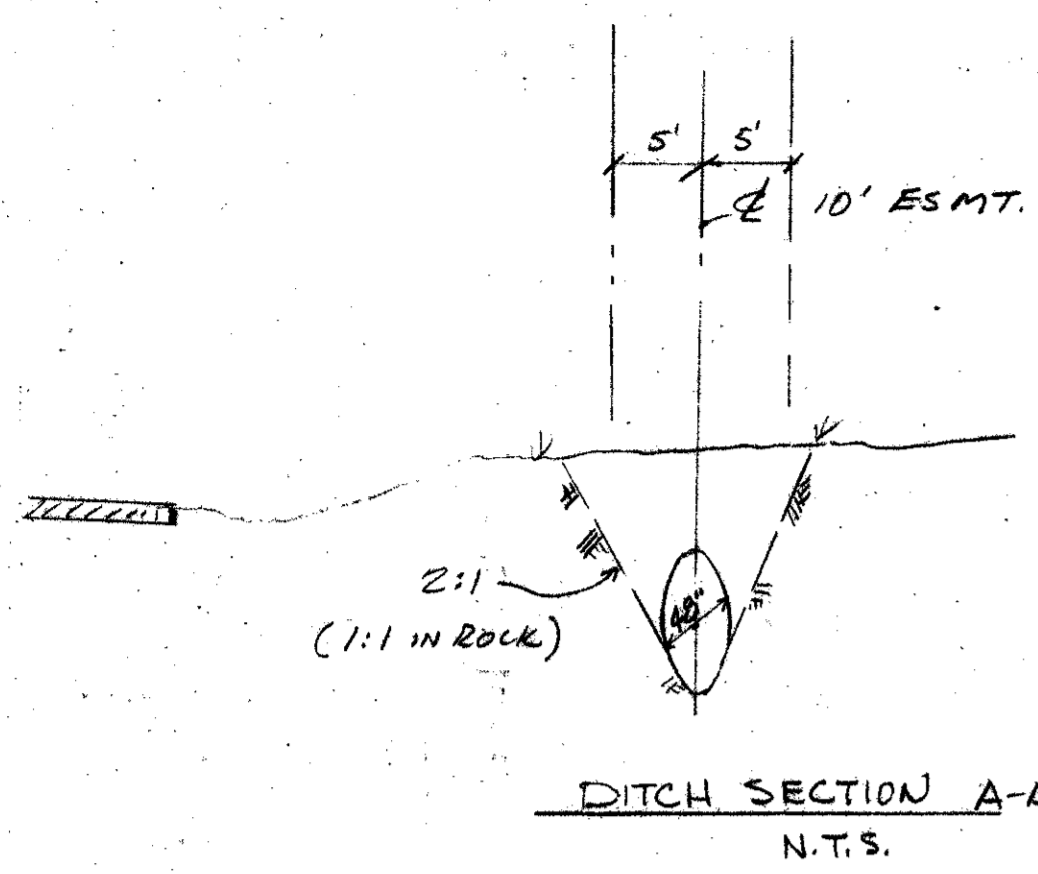
**SANITARY SEWER**

**DAL-MAC DEVELOPMENT CORPORATION**  
 MAYES & BROCKETTE, INC. CONSULTING ENGINEERS

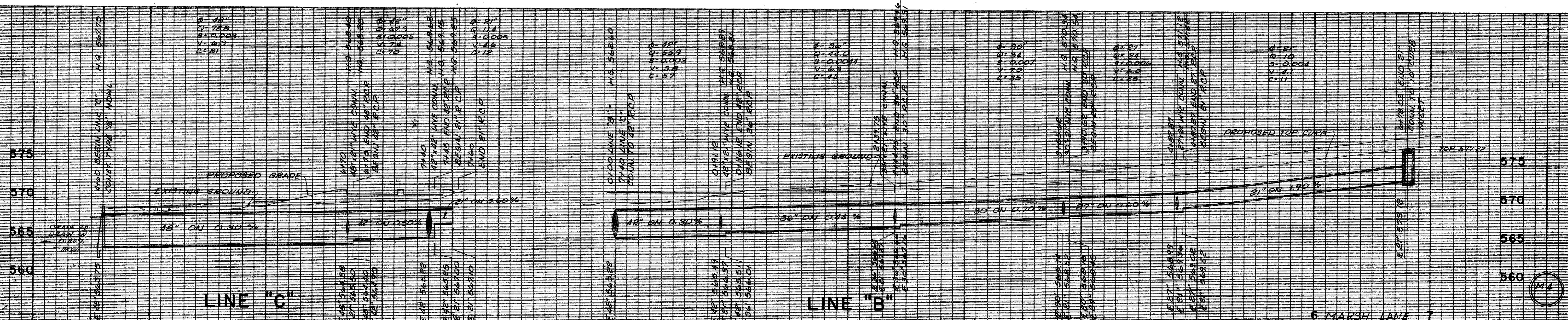
**CITY OF ADDISON, TEXAS**

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
MG	CZ	4/17/78	H: 1"=40' V: 1"=6'			

REV. 7/7/78 MH IN LINE C MOVED.



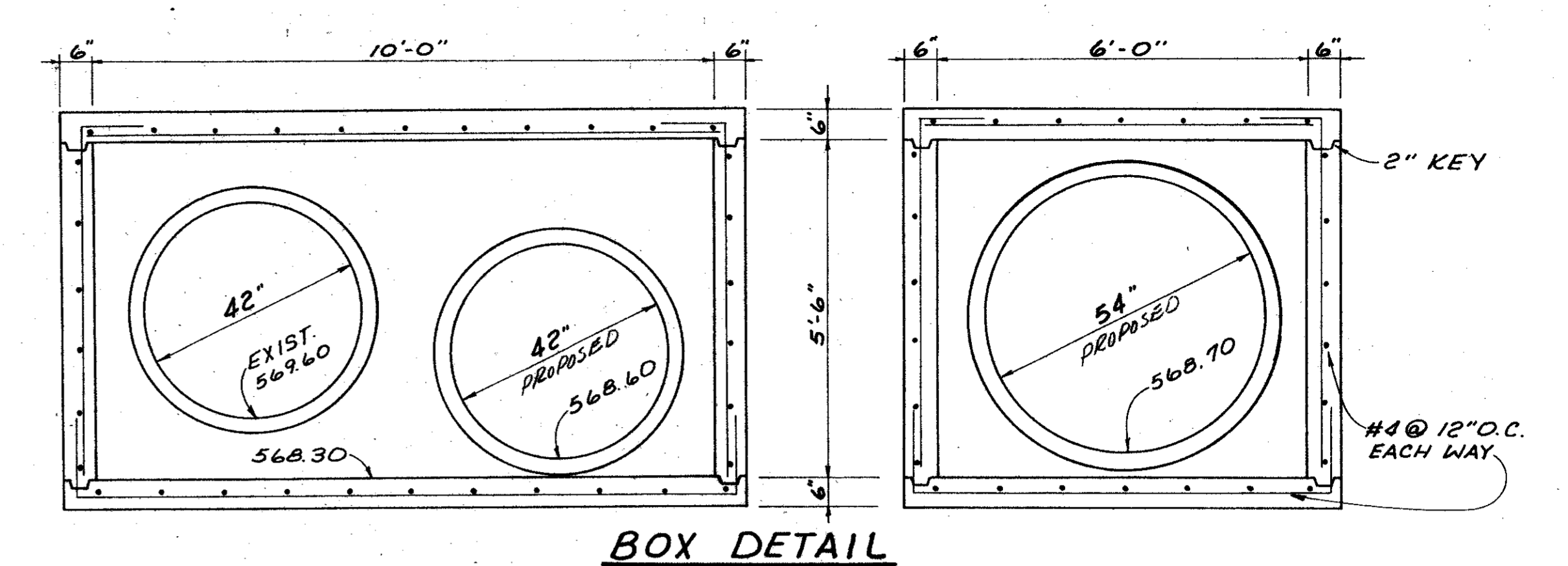
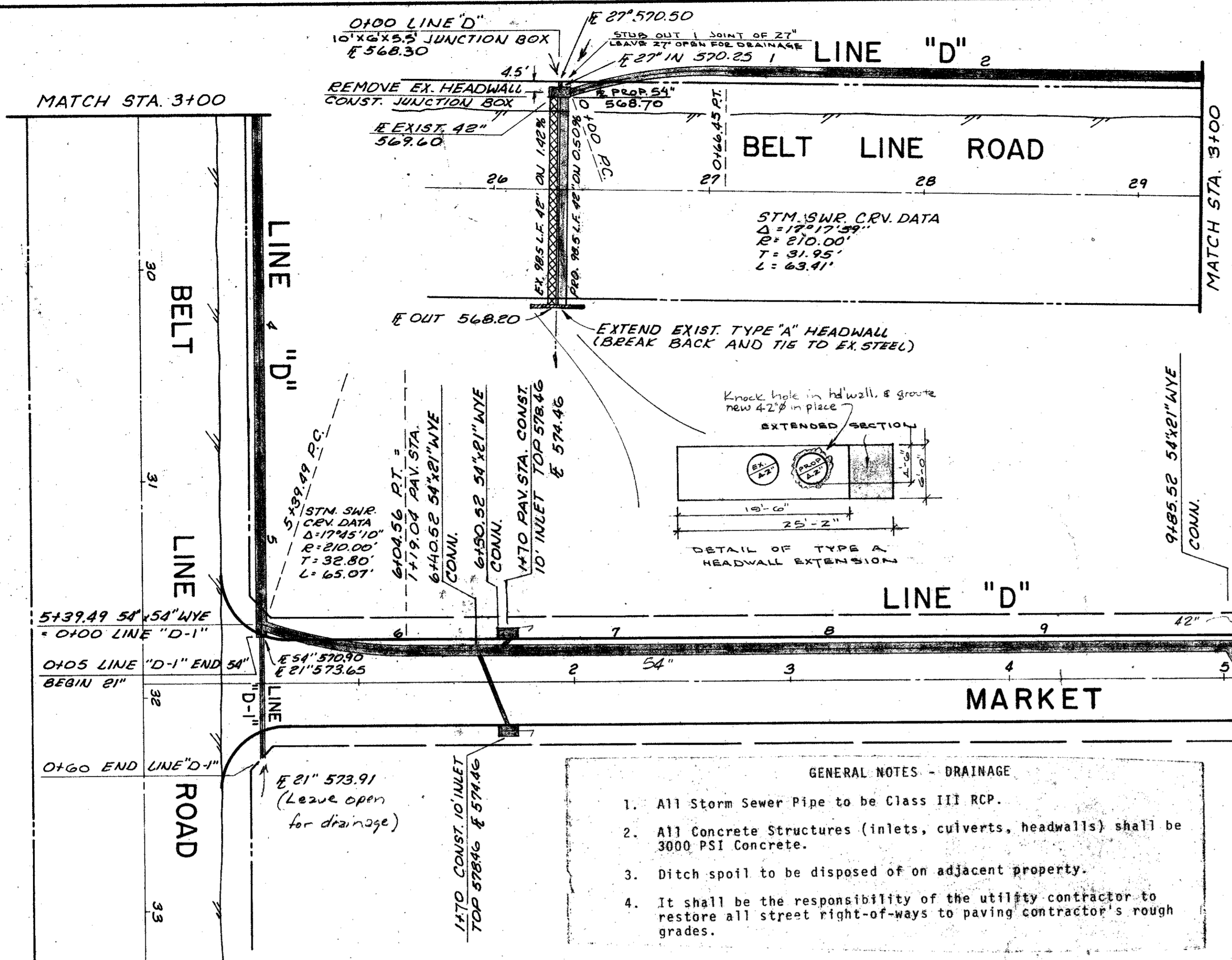
- BENCH MARK: "BM" on conc. East end of headwall North side Beltline Rd. and 500' west of Southeast corner of Addition. Elev. 581.51 (set)
- BENCH MARK: R.R. Spike in P.P. North side Beltline Rd. and 500' East of existing Marsh Lane. Elev. 579.27 (set)



**STORM SEWER**  
BELT LINE - MARSH BUSINESS PARK  
DAL-MAC DEVELOPMENT CORPORATION  
MAYES & BROCKETTE, INC. CONSULTING ENGINEERS  
ADDISON - CARROLLTON, TEXAS

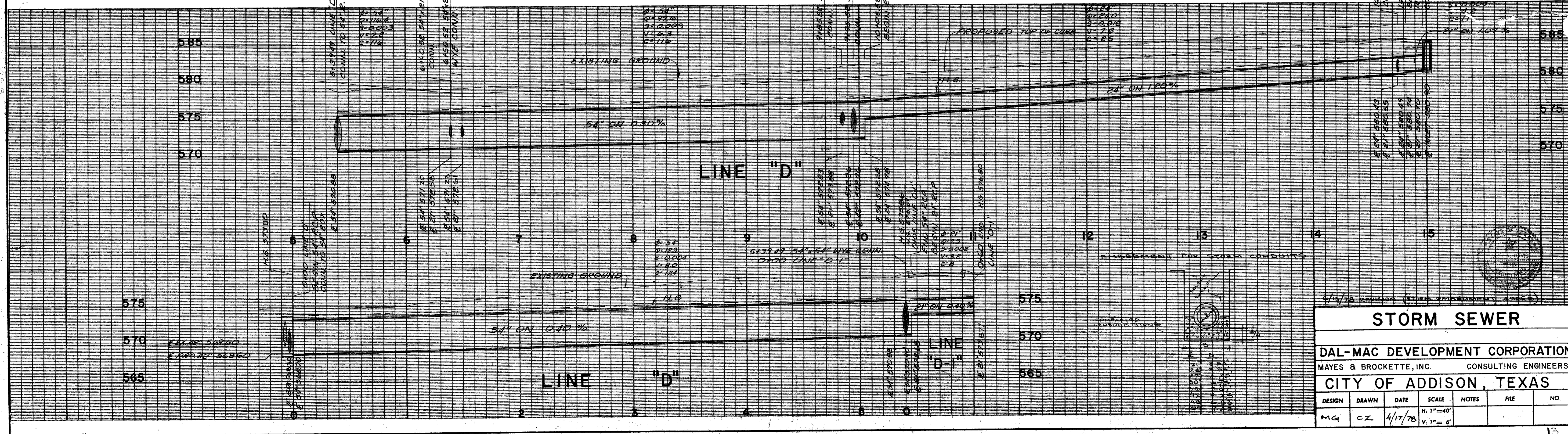
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
MG	CZ	4/1/88	H. 1"=40' V. 1"=6'			

6/1/88 REV SEWER, MEDIAN.



- GENERAL NOTES - DRAINAGE**
- All Storm Sewer Pipe to be Class III RCP.
  - All Concrete Structures (inlets, culverts, headwalls) shall be 3000 PSI Concrete.
  - Ditch spoil to be disposed of on adjacent property.
  - It shall be the responsibility of the utility contractor to restore all street right-of-ways to paving contractor's rough grades.

- BENCH MARK: " " on conc. East end of headwall North side Belt Line Rd. and 500'± West of Southeast corner of Addition. Elev. 581.51 (set)
- BENCH MARK: R.R. Spike in P.P. North side Belt Line Rd. and 500'± East of existing Marsh Lane. Elev. 579.27 (set)



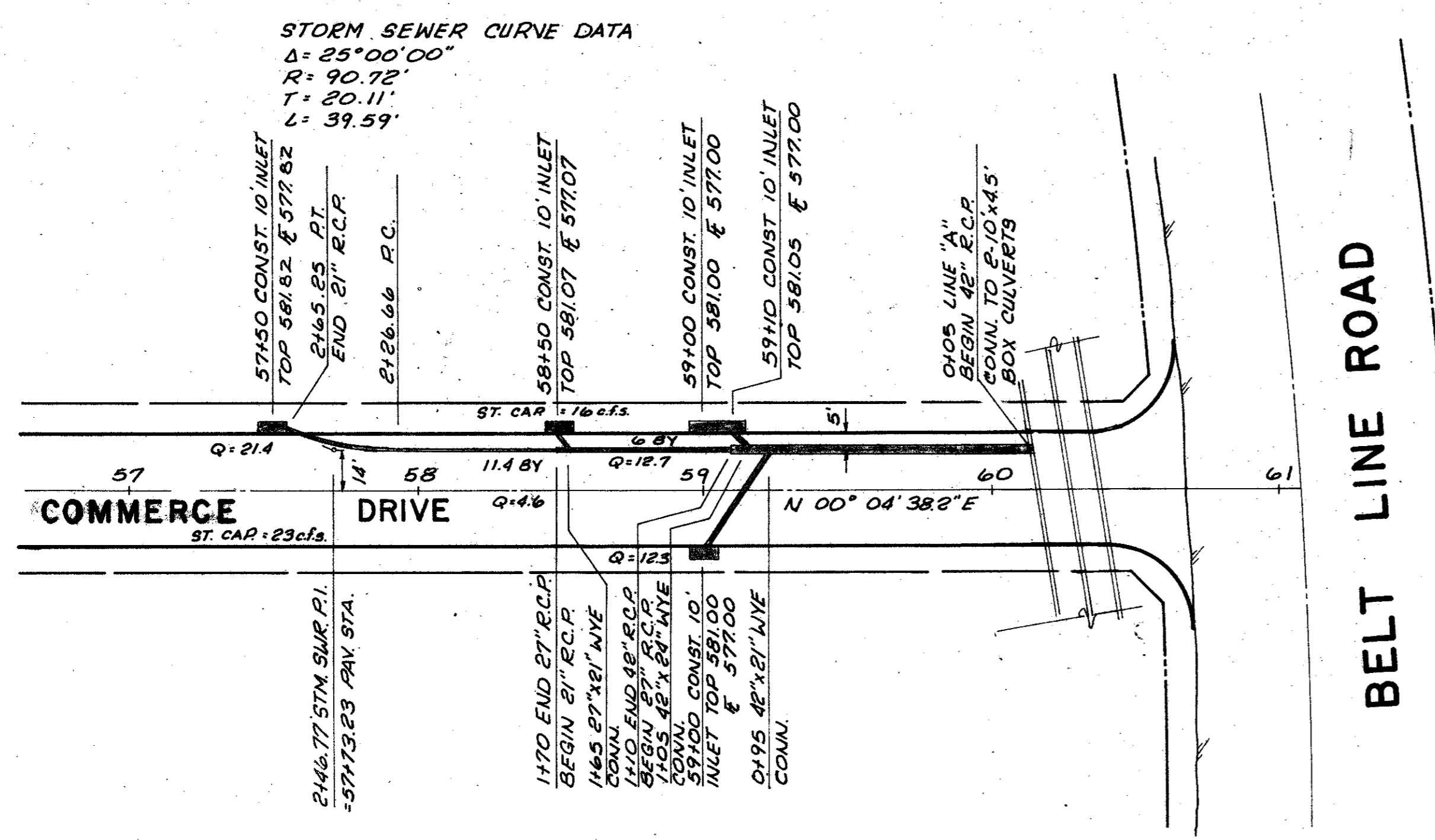
9/13/78 REVISION (STORM EMPLOYMENT ADDED)

**STORM SEWER**

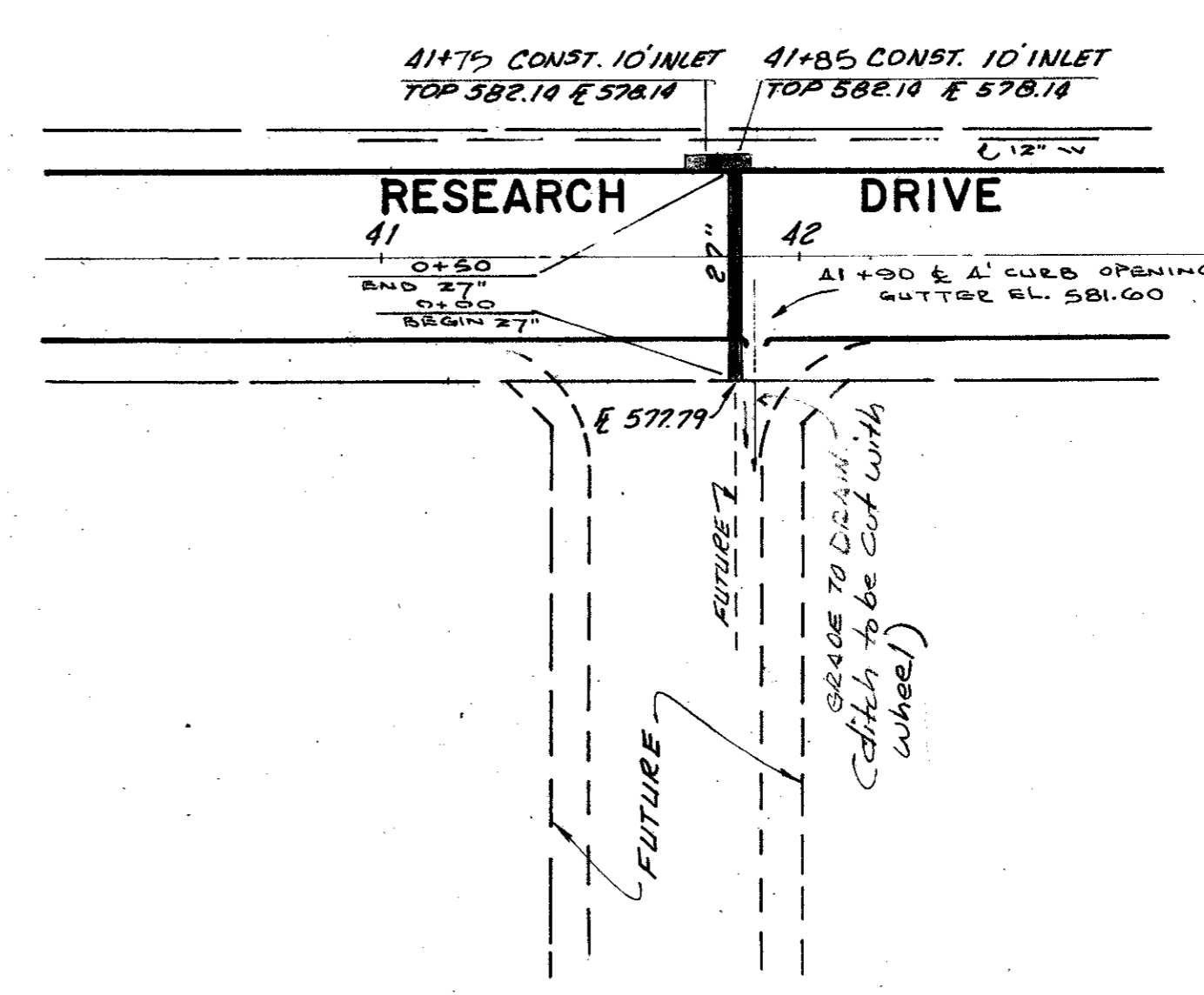
**DAL-MAC DEVELOPMENT CORPORATION**  
MAYES & BROCKETTE, INC. CONSULTING ENGINEERS

**CITY OF ADDISON, TEXAS**

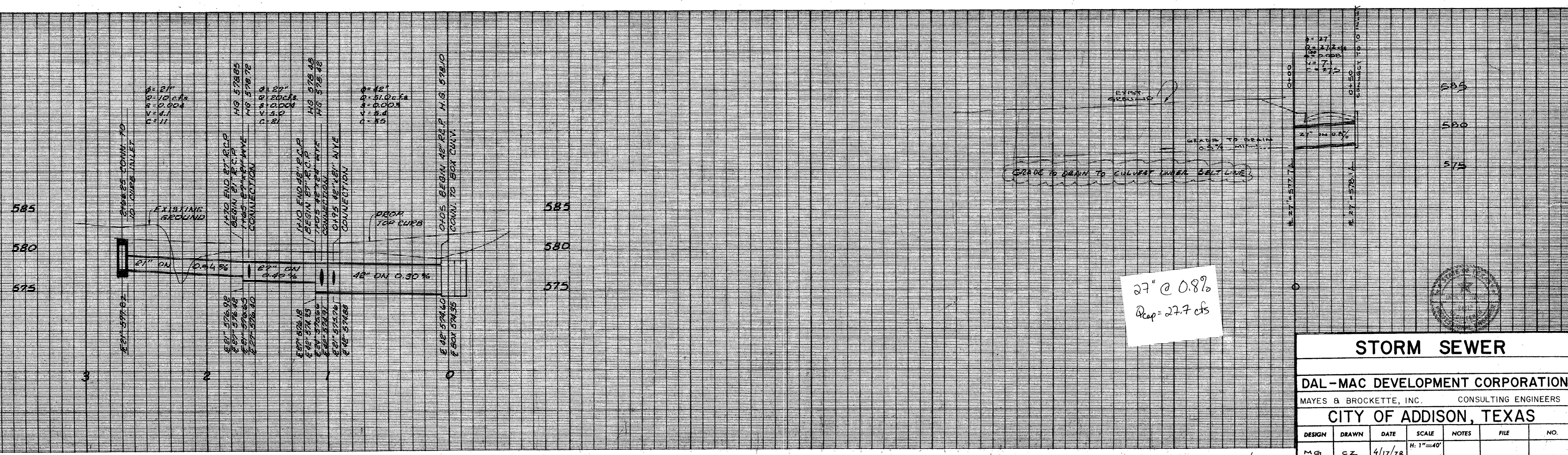
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
MG	CZ	4/17/78	H. 1"=40' V. 1"=6'			



LINE "A"

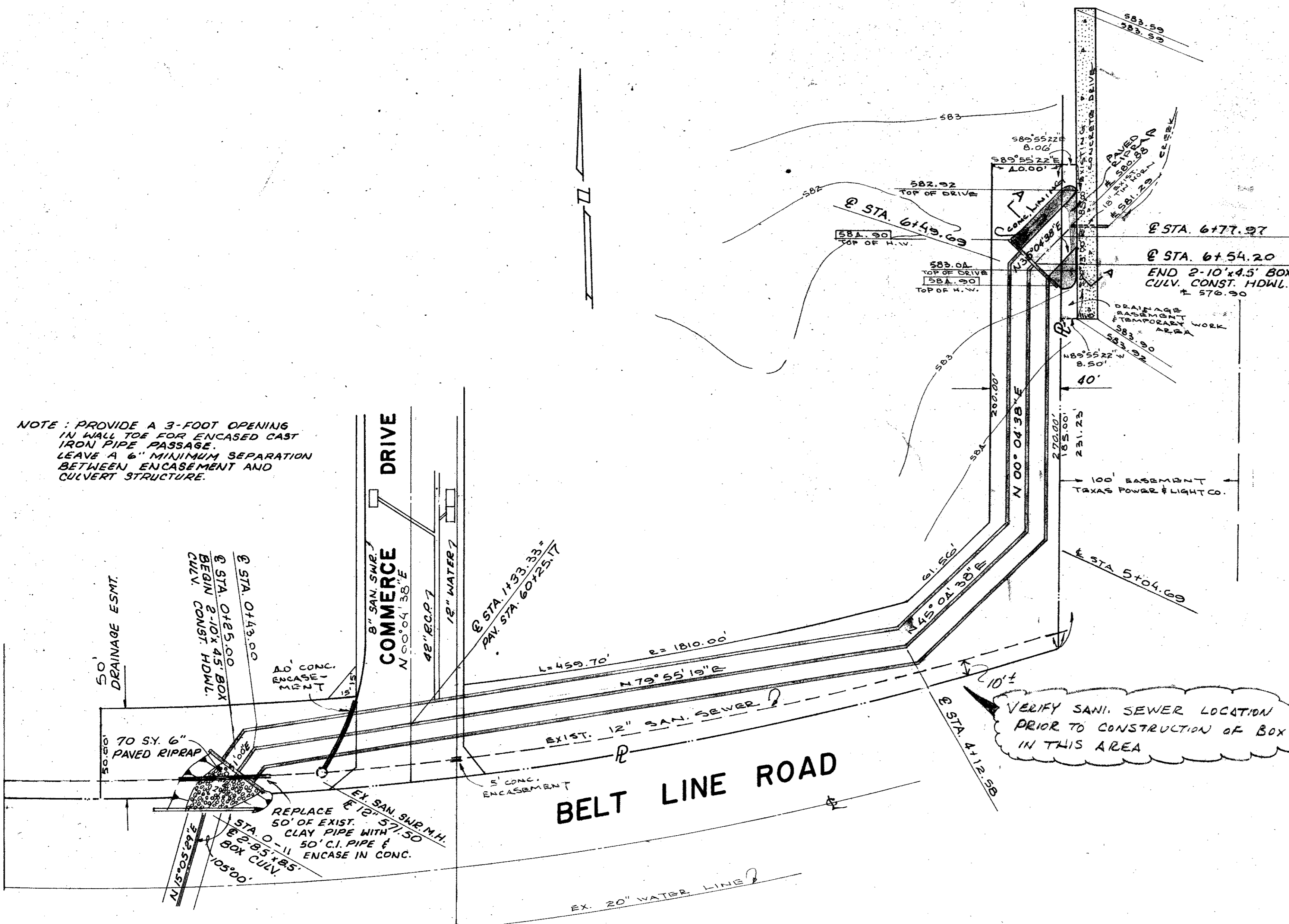


- BENCH MARK: "B" on conc. East end of Headwall North side Beltline Rd. and 500' west of Southeast corner of Addition. Elev. 581.51 (set).
- BENCH MARK: R.R. Spike in P.P. North side Beltline Rd. and 500' East of existing Marsh Lane. Elev. 579.27 (set)



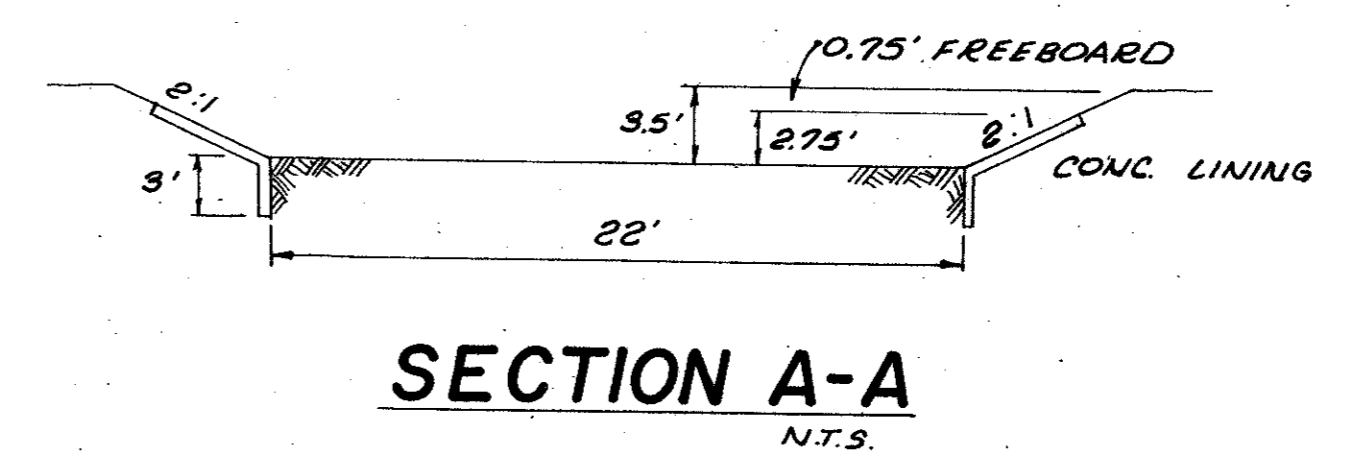
**STORM SEWER**

DAL-MAC DEVELOPMENT CORPORATION  
 MAYES & BROCKETTE, INC. CONSULTING ENGINEERS  
 CITY OF ADDISON, TEXAS



**CHANNEL**  
 A = 382 AC.  
 $1/25 = 2.8$   $1/100 = 3.5$   
 $C_{AVG} = 0.7$   
 $Q_{25} = 750$  C.F.S.  $Q_{100} = 936$  C.F.S.  
 LINE WITH CONC. FOR 25 YRS.  
 $S = 0.005$   $N = 0.0175$   
 $Q = 1.486 / 0.0175 (75.625)(1.694)(0.0707)$   
 $= 770$  C.F.S.  
 T.O.C. : 2700' GUTTER FLOW AT 1.0% = 18 MIN.  
 $N = 0.0175$   
 1000' OVERLAND FLOW AT 0.8% = 35 MIN.  
 3500' IMPROVED CHAN. AT 0.8% = 30 MIN.  
 $N = 0.04$  83 MIN.

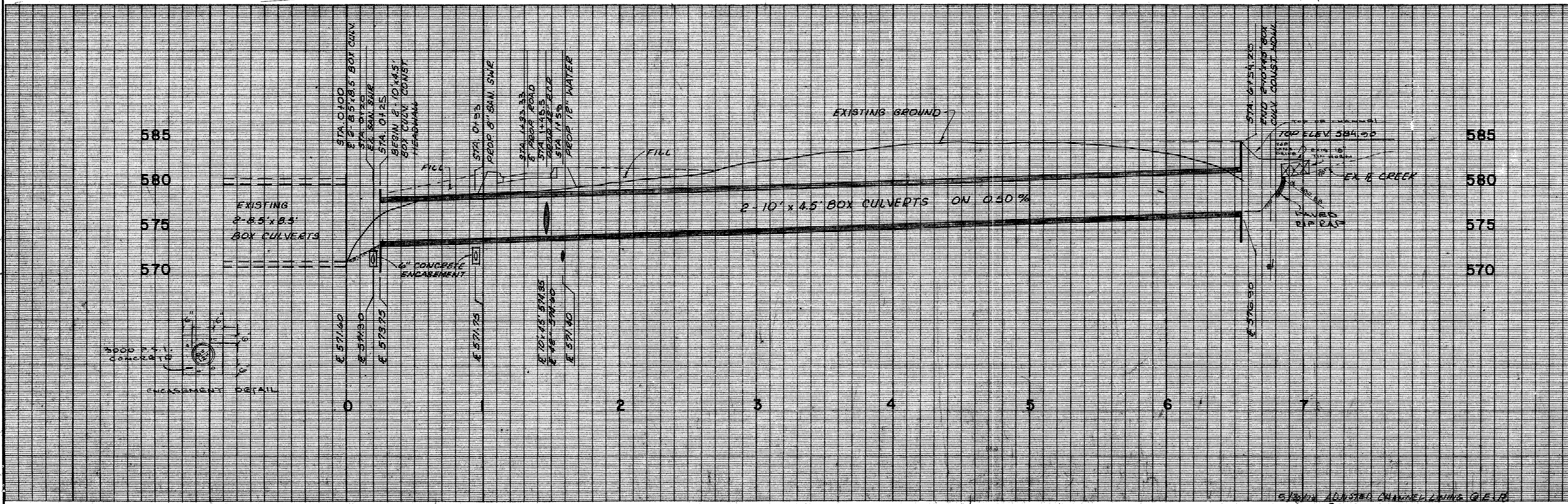
**CULVERT**  
 A = 382 AC.  
 $1/100 = 3.5$   
 $Q_{100} = 936 + 52$  (ON SITE) = 988  
 $Q = 1.486 / 0.015 (45)(1.7769)(0.0707)$   
 $= 560$  C.F.S.  
 USE 2-10'x4.5' BOXES  
 $V = 988 / 90$   
 $= 11$  F.P.S.  
 HW/D = 1.8  
 HEADWALL = 8.0 FT



1. BENCH MARK: " on conc. East end of headwall North side Beltline Rd. and 500' west of Southeast corner of Addition. Elev. 581.51 (set)
2. BENCH MARK: R.R. Spike 1/4 P.P. North side Beltline Rd. and 500' East of existing Marsh Lane. Elev. 579.27 (set)

**NOTE: PROVIDE A 3-FOOT OPENING IN WALL TOP FOR ENCASED CAST IRON PIPE PASSAGE. LEAVE A 6" MINIMUM SEPARATION BETWEEN ENCASEMENT AND CULVERT STRUCTURE.**

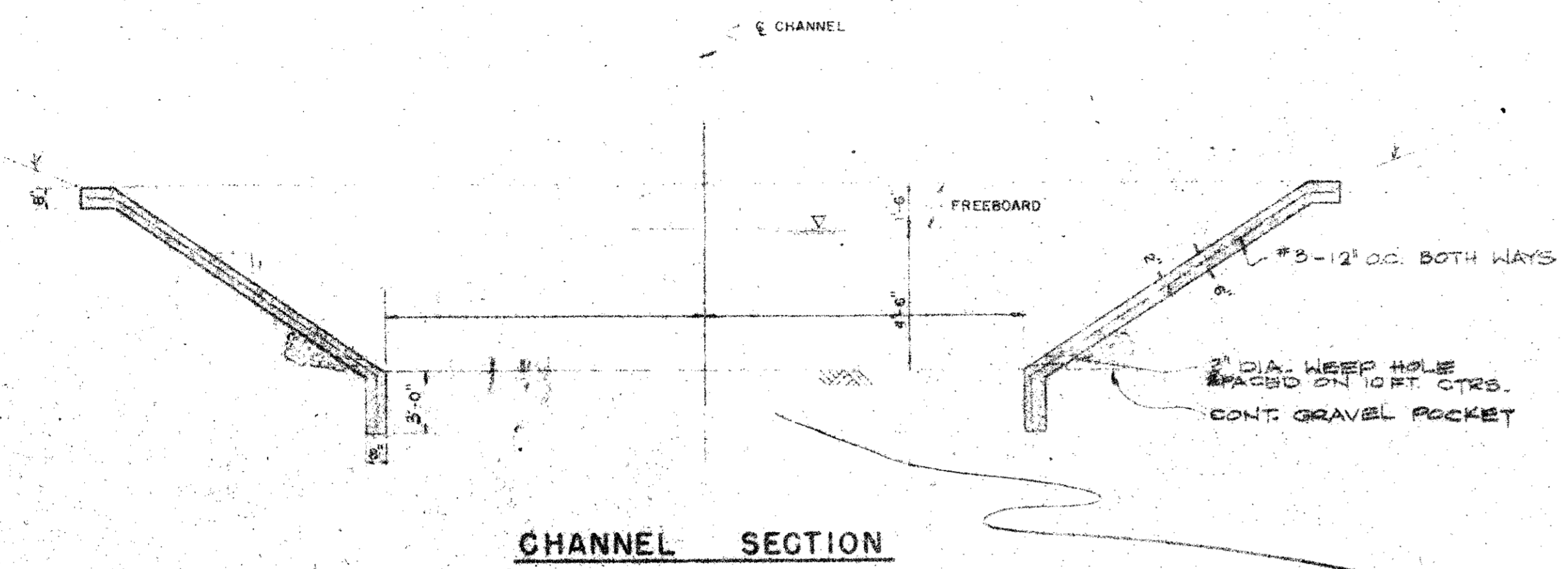
50' DRAINAGE ESMT.  
 TO SY. 6" PAVED RIPRAP  
 @ STA. 0149.00  
 @ STA. 0185.00  
 BEGIN 2-10'x4.5' BOX CULV. CONST. HDWL.  
 40' CONC. ENCASEMENT  
 12" WATER  
 48" R.C.P. 7  
 8" SANI. SWE. N  
 @ STA. 1139.33  
 P.V. STA. 60725/17  
 EX. SANI. SWE. N.H.  
 @ STA. 1125.50  
 REPLACE 50' OF EXIST. CLAY PIPE WITH 50' C.I. PIPE & ENCASE IN CONC.  
 @ STA. 0112.58  
 @ STA. 0103.00  
 EX. 20" WATER LINE



BOX CULVERT DETAIL							
DAL-MAC DEVELOPMENT CORPORATION							
MAYES & BROCKETTE, INC.				CONSULTING ENGINEERS			
CITY OF ADDISON, TEXAS							
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.	
M.G.	C.Z.	4/17/78	H: 1"=40'			15	
			V: 1"=6'			67787	

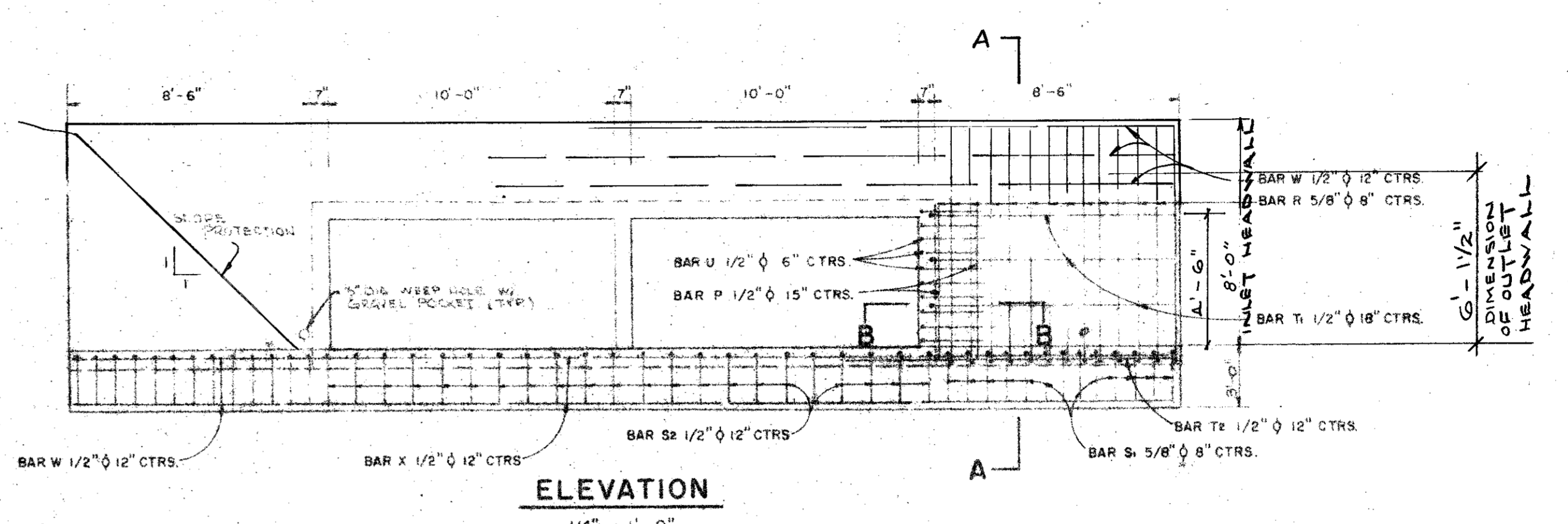
6/15/78 ADJUSTED CHANNEL LINING TO E.P.D.  
 REVISIONS.  
 6/25/78 REVISED BEARINGS.  
 6/25/78 " RIPRAP AT T.P.L. EASEMENT.



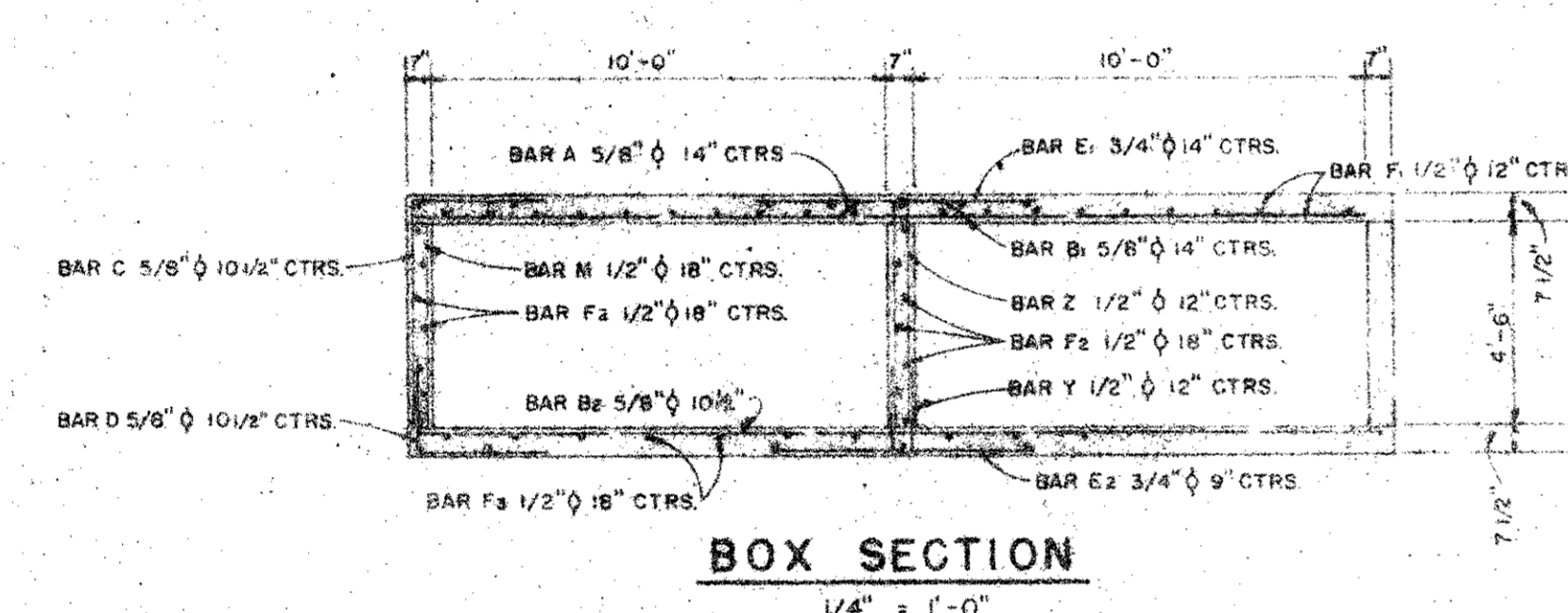


CHANNEL SECTION

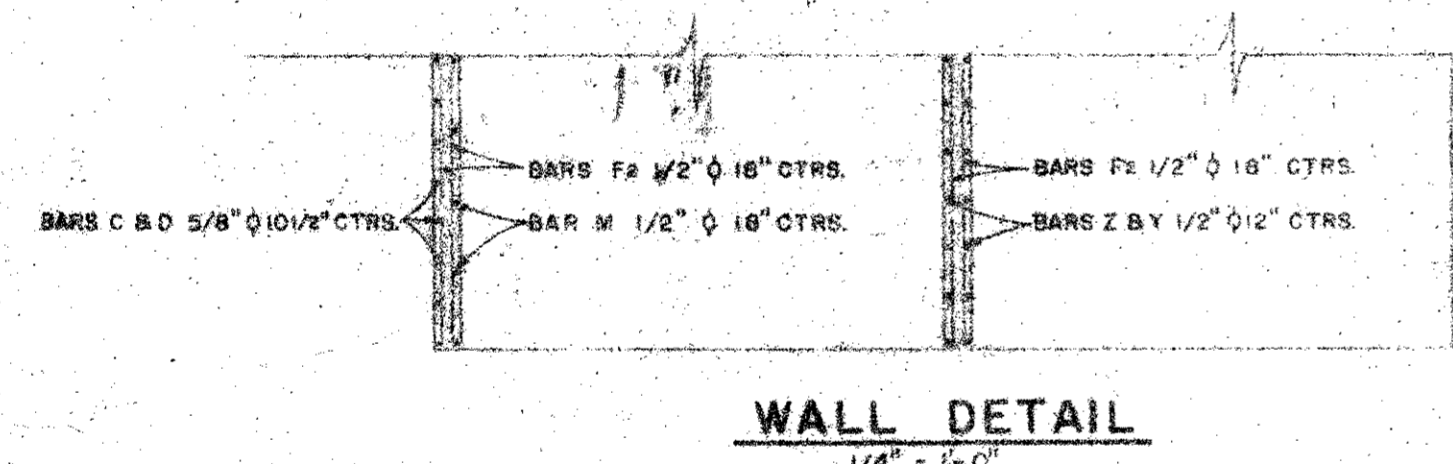
SEE DIMENSIONS DETAIL ON PLAN SHEET.



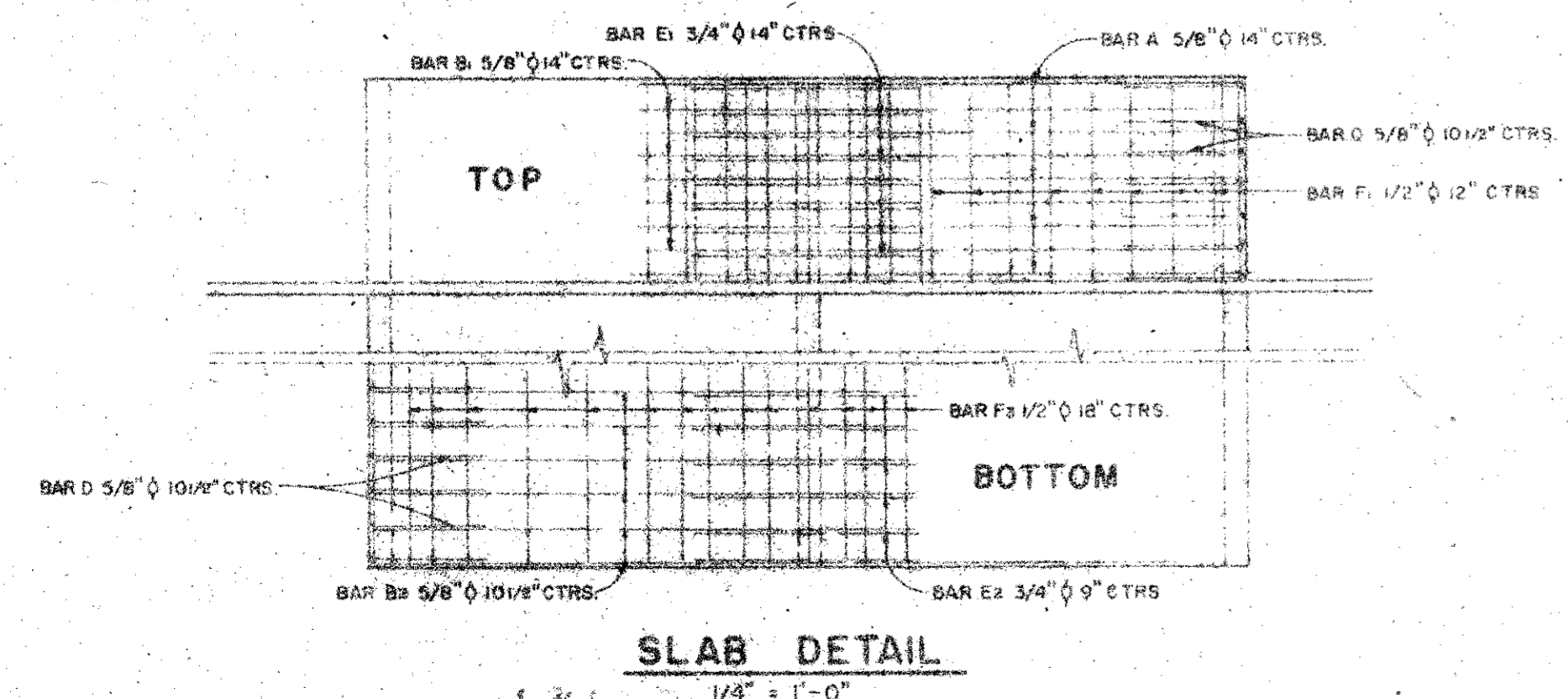
ELEVATION



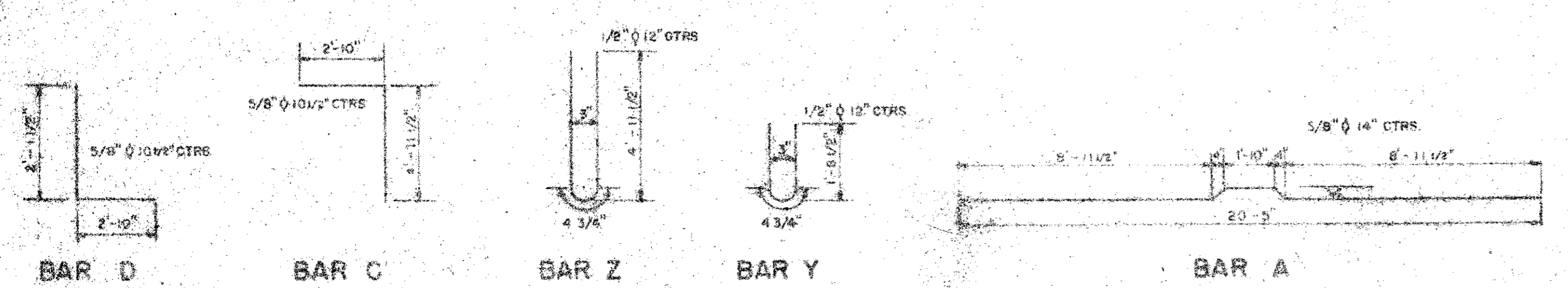
BOX SECTION



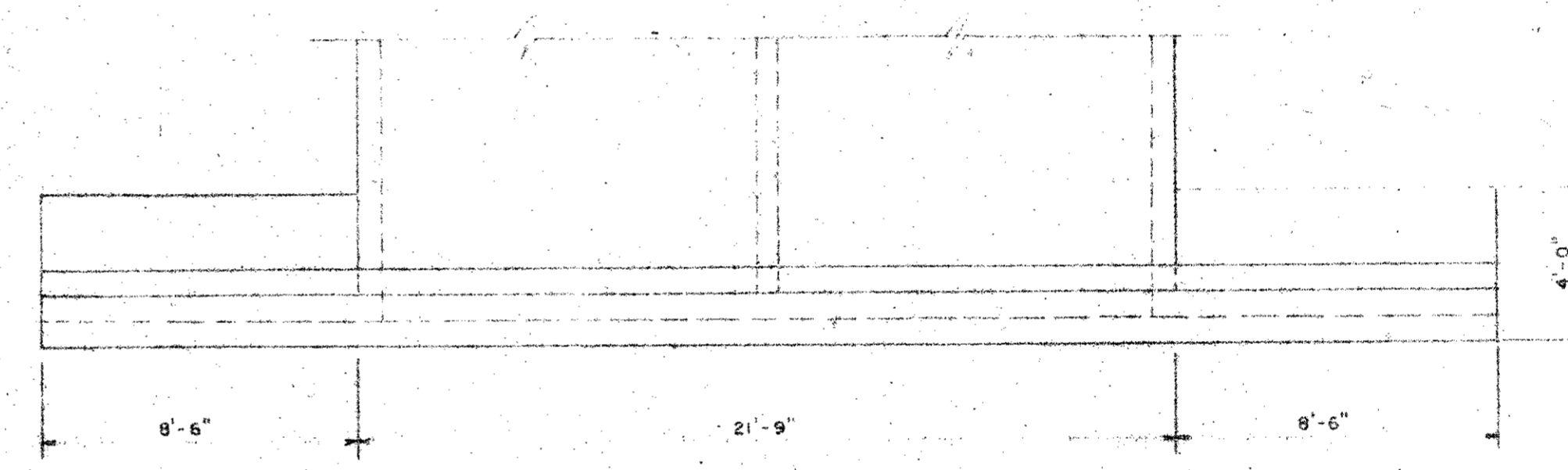
WALL DETAIL



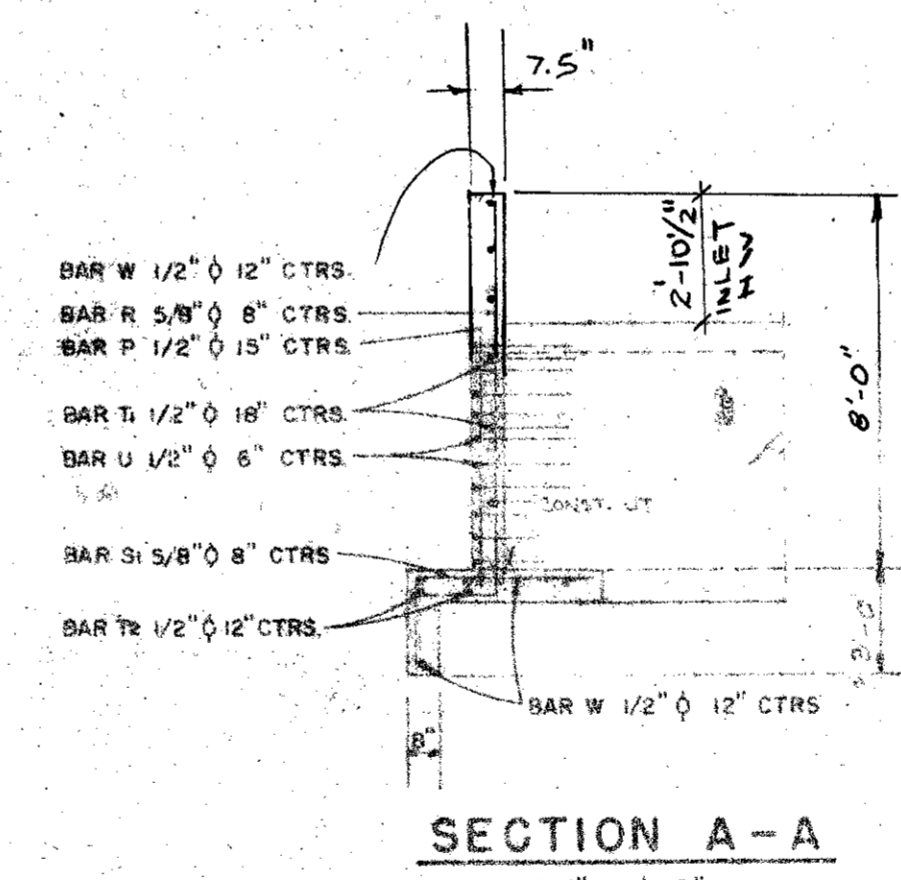
SLAB DETAIL



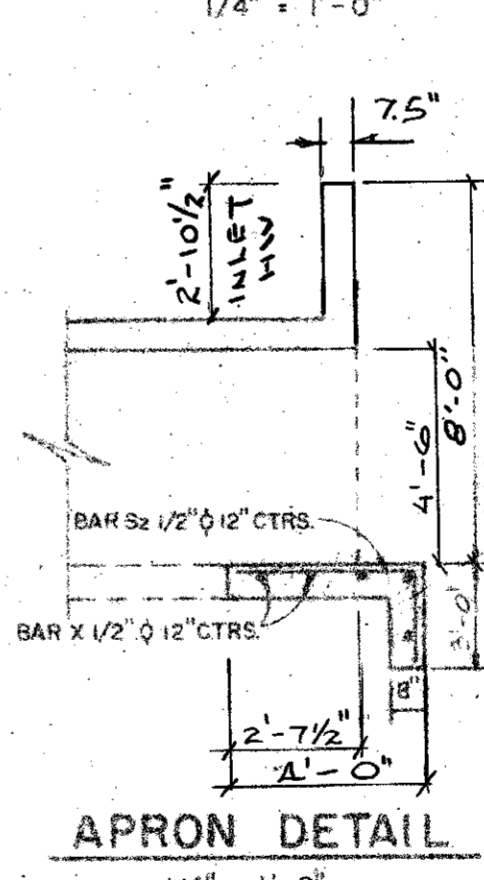
BOX CULVERT DETAILS



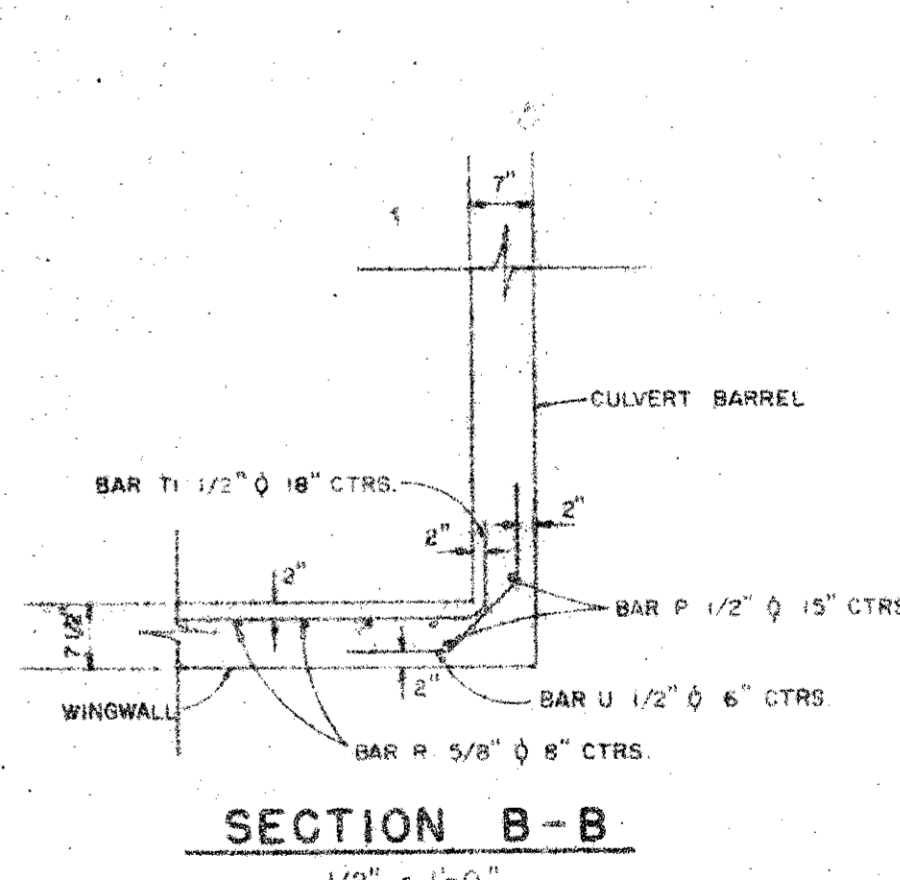
PLAN VIEW



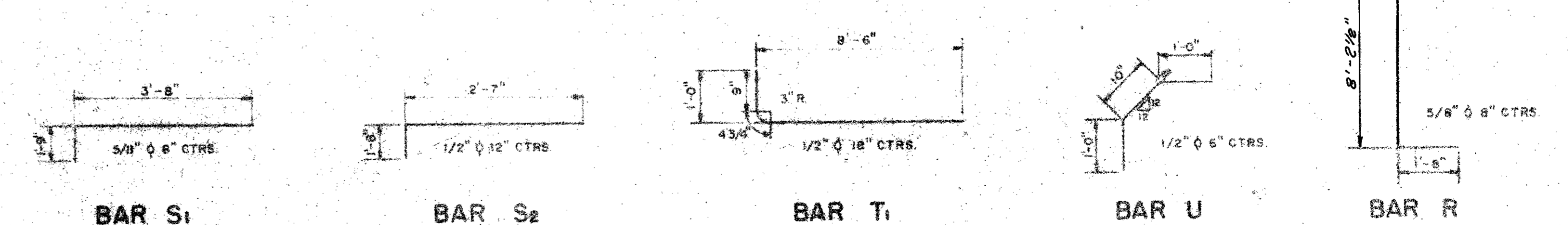
SECTION A-A



APRON DETAIL

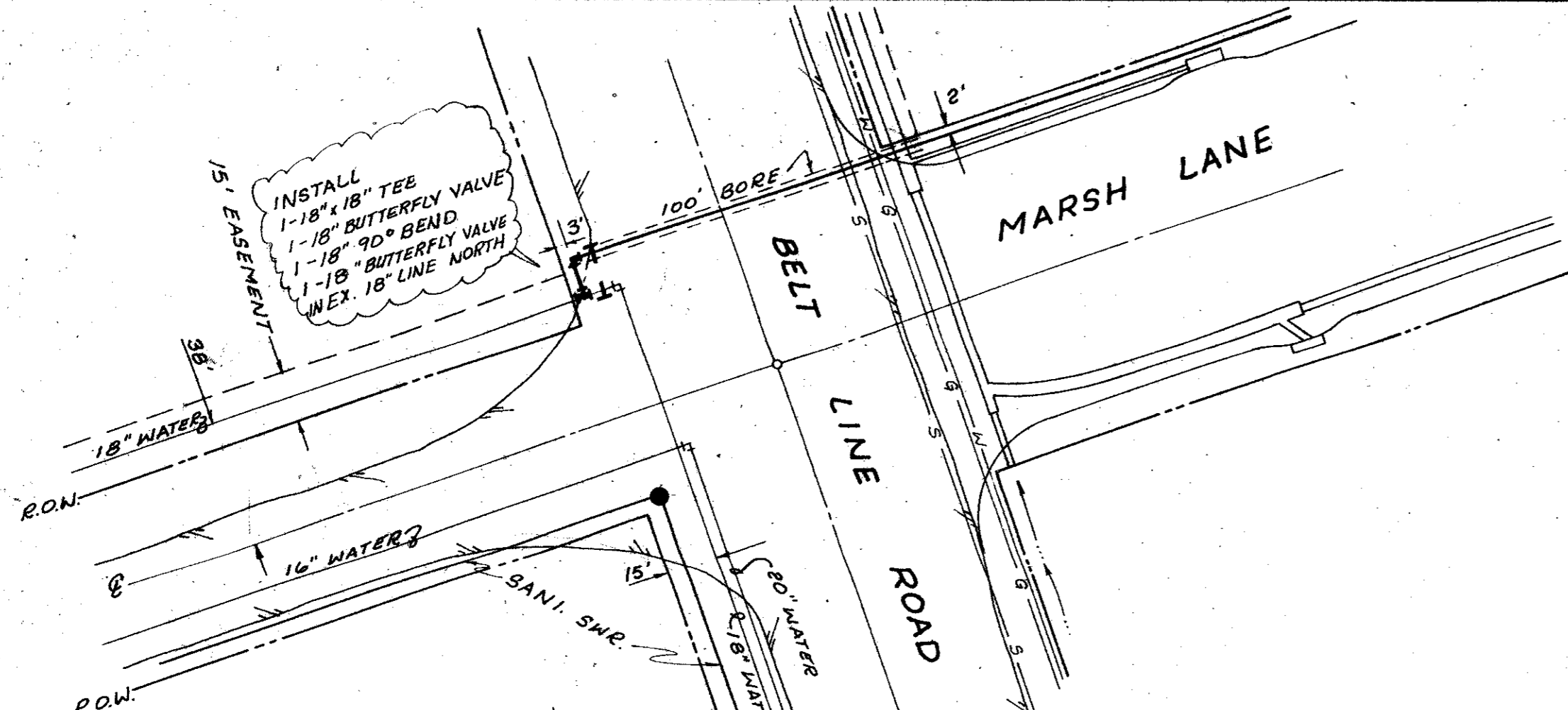


SECTION B-B

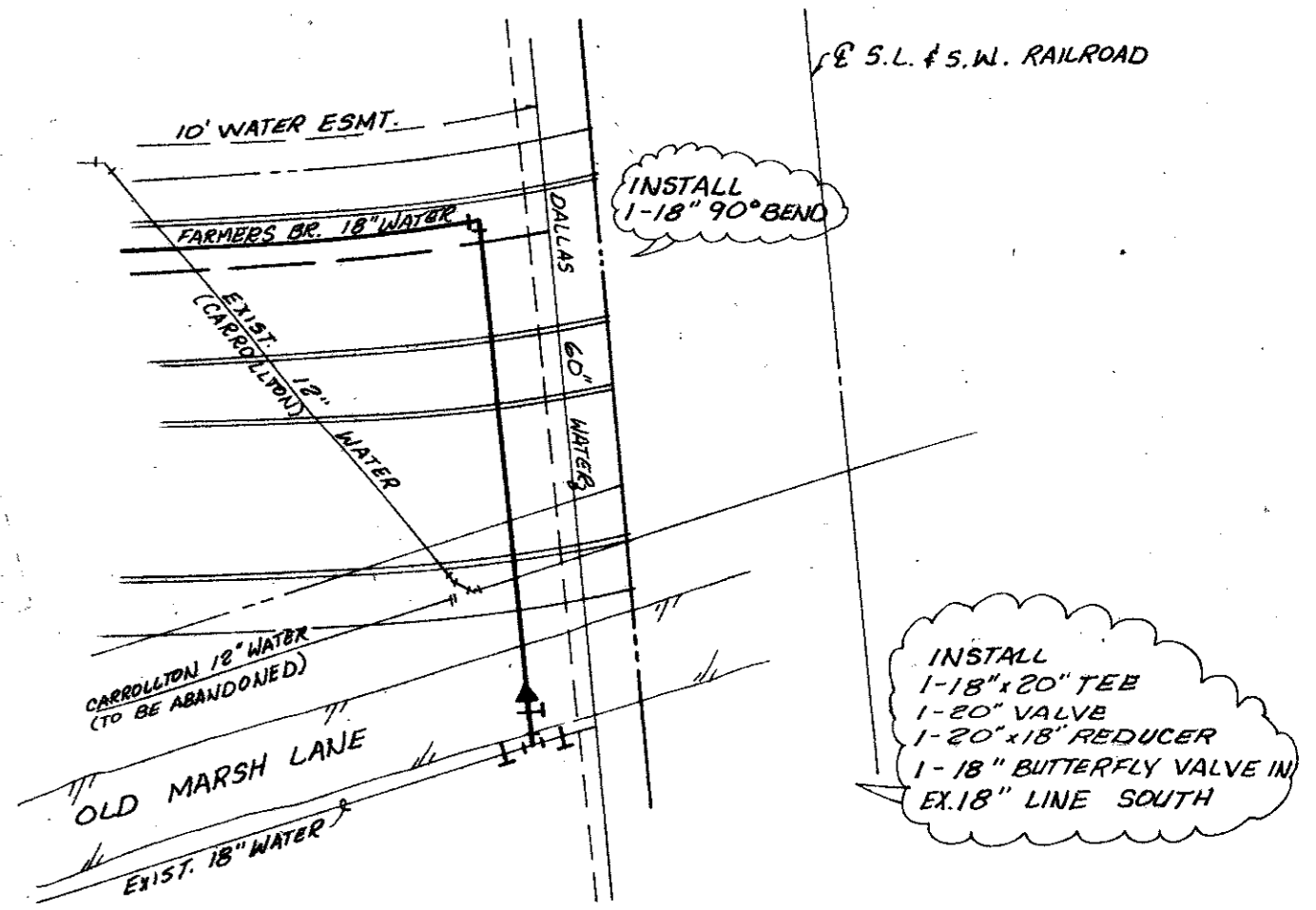
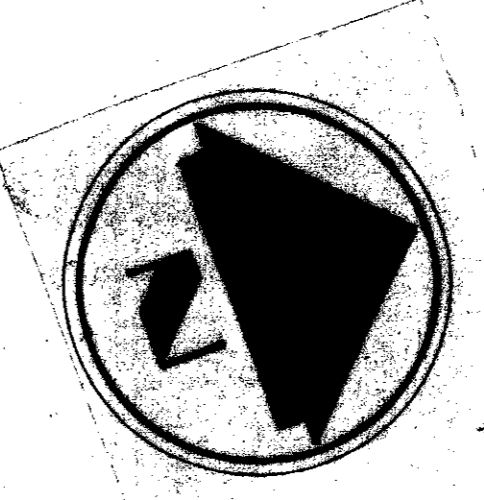


INLET HEADWALL DETAILS

DRAINAGE DETAILS			
MAYES, BROCKETTE & GUNALL, INC. CONSULTING ENGINEERS DALLAS, TEXAS			
DRAWN	J.D.	SCALE	AS NOTED
ENGINEER	M.B.D., INC.	SHEET	OF 2
APPROVED			
APPROVER			

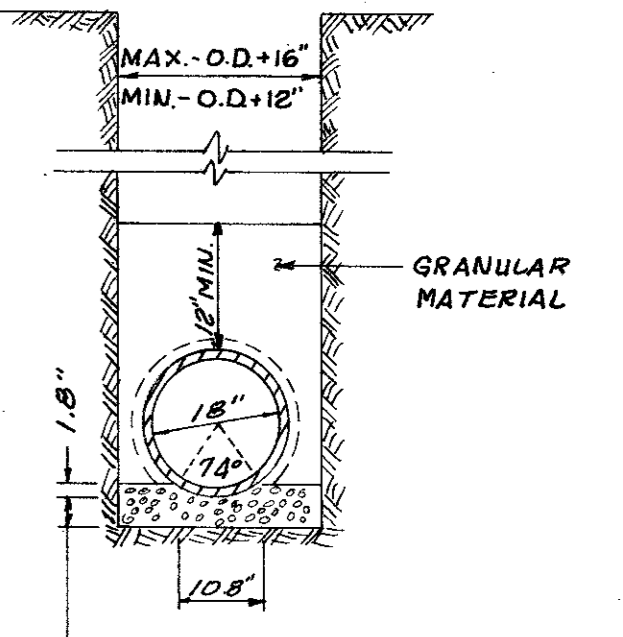


NOTE:  
 1) CONTRACTOR IS TO PLACE TEMP BLOCKING & TEST NEW 18" LINE NORTH PRIOR TO MAKING TIE-IN TO EXIST. MAIN.  
 2) CONNECTION OF PROPOSED 18" R.C.C.P. TO EXIST. 18" R.C.C.P. IN BELT LINE ROAD IS NOT TO BE CONSTRUCTED PRIOR TO AUTHORIZATION FROM THE CITY OF FARMERS BRANCH. A PRE-CONSTRUCTION MEETING WITH THE CITY IS REQUIRED.  
 3) 18" MAIN IS TO HAVE A MINIMUM COVER OF 5.0 FEET.



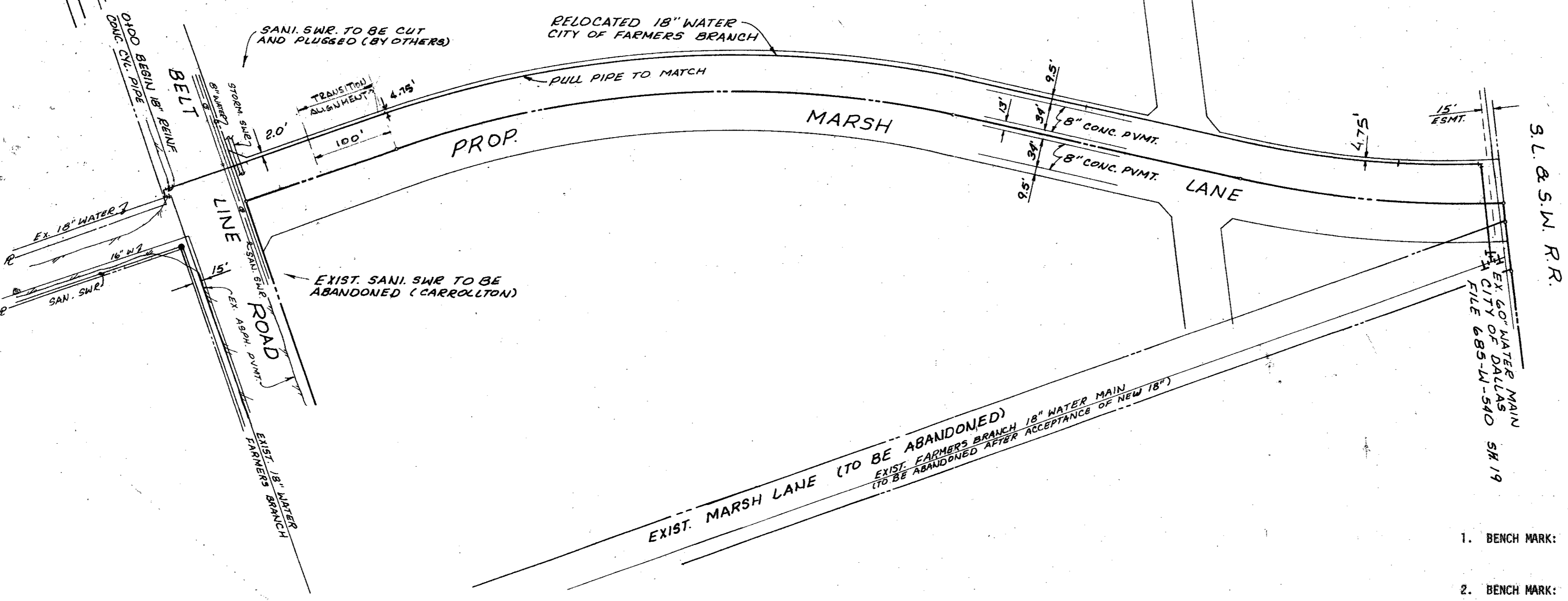
INTERSECTION DETAIL  
 SCALE: 1" = 40'

NOTE: MARSH LANE TO BE OPEN CUT. CONTRACTOR TO MAINTAIN TRAFFIC.

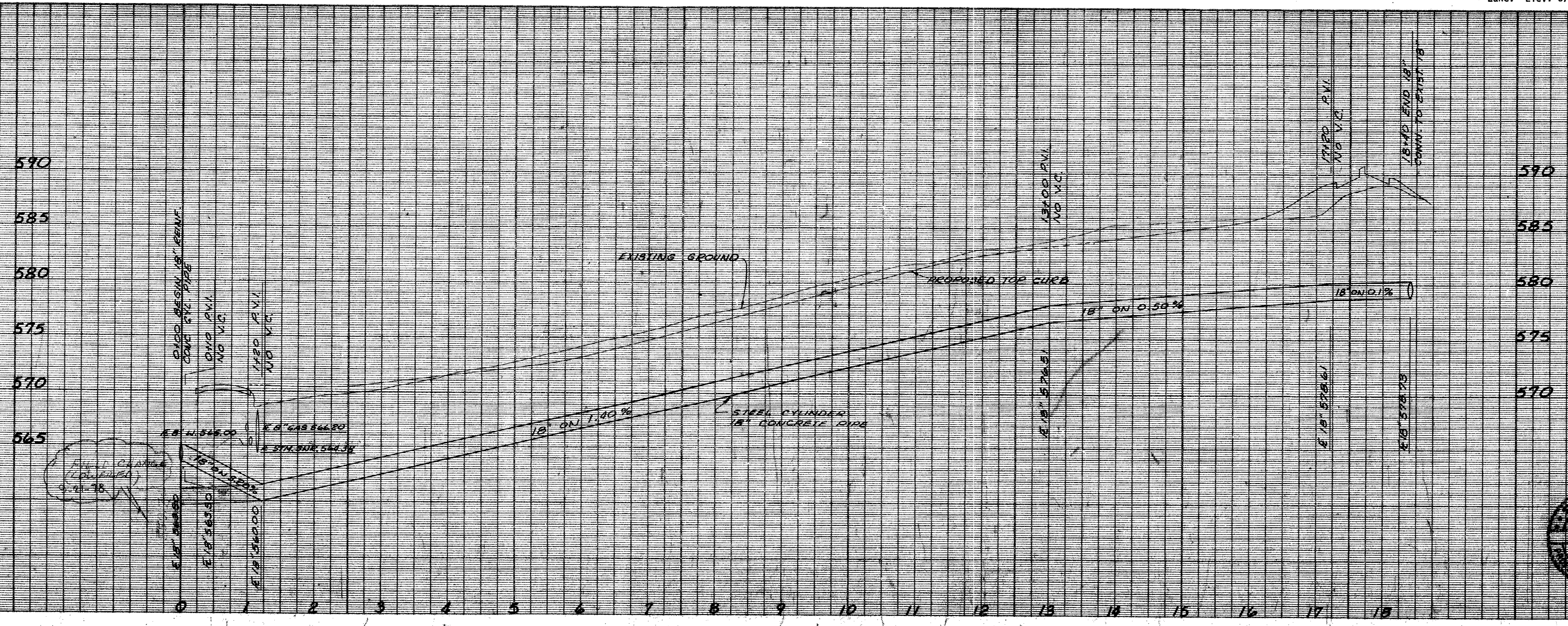


3" MIN., AT LEAST 1" UNDER BELLS, WASHED AND SCREENED GRAVEL 1/4" TO 1/2" GRADING.

EMBEDMENT TYPICAL  
 N.T.S.



- BENCH MARK: 4" on conc. East end of headwall North side Belt Line Rd. and 500'± west of Southeast corner of Addition. Elev. 581.51 (set)
- BENCH MARK: R.R. Spike in P.P. North side Belt Line Rd. and 500'± East of existing Marsh Lane. Elev. 579.27 (set)



REVISIONS:  
 2-22-78 ADDED NOTE ABOUT 18" WATER CONNECTION  
 3-25-78 REVISED PROFILE & CONNECTIONS  
 3-6-79 REVISED PROFILES & CONNECTIONS

**RELOCATION OF 18" WATER MAIN**  
 REDLIFE MALL, QUINES PARK  
**DAL-MAC DEVELOPMENT CORPORATION**  
 MAYES & BROCKETTE, INC. CONSULTING ENGINEERS  
**CITY OF FARMERS BRANCH, TEXAS**

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
MG	CZ	4/30/78	H: 1"=100' V: 1"=6'			