

WATER AND SANITARY SEWER GENERAL NOTES

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE CITY OF ADDISON STANDARDS AND SPECIFICATIONS.
2. ALL WATER MAINS SHALL BE PVC SDR-18 WATER PIPE (BLUE BRUTE WITH WIRE TRACERS). TRACER TO BE #12 INSULATED COPPER.
3. ALL WATER MAINS SHALL HAVE MINIMUM COVER BELOW FINISHED GRADES AS FOLLOWS: 6" & 8" - 48" OR AS REQUIRED TO CLEAR OTHER UTILITIES.
4. ALL SEWER MAINS SHALL BE PVC SDR-35 SANITARY SEWER PIPE.
5. ALL PIPE EMBEDMENT SHALL BE AS DETAILED ON THIS SHEET.
6. ALL TEES, CONNECTIONS, BENDS, DEAD-ENDS, FIRE HYDRANTS, ETC., SHALL BE SECURELY BLOCKED AGAINST TRENCH WALLS USING 2000 PSI CONCRETE.
7. ALL TRENCH BACKFILL FOR THESE UTILITIES SHALL BE COMPACTED AS REQUIRED BY CITY, BUT IN NO CASE SHALL THE TOP 12" BE COMPACTED TO LESS THAN 90% AASHTO DENSITY WITH THE REMAINDER OF THE DITCH BEING COMPACTED TO THAT OF ADJOINING SOIL CONDITIONS.
8. CONTRACTOR TO VERIFY LOCATION OF ALL UTILITIES PRIOR TO BEGINNING WORK AND SHALL PROTECT EXISTING IMPROVEMENTS DURING CONSTRUCTION.
9. THE CONTRACTOR SHALL INCLUDE IN HIS BID PRICE ALL COSTS OF UTILITY CONNECTIONS, TAP FEES AND THE TESTING OF NEW MAINS REQUIRED BY THE CITY OF ADDISON TO COMPLETE THE WORK WHETHER THESE SERVICES ARE PERFORMED BY THE CONTRACTOR OR BY OTHERS.

NOTE: BOUNDARY INFORMATION IS FROM A BOUNDARY SURVEY BY GEORAM CORP DATED FEBRUARY, 1984

AS-BUILT DATE: 6-20-88

WATER & SANI. SWR. PLAN
LIBERTY PLAZA

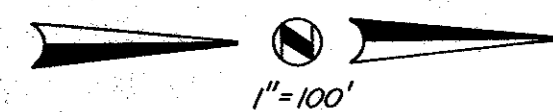
BROCKETTE DAVIS DRAKE, inc.
consulting engineers
Civil & Structural Engineering • Surveying
3535 Travis, Suite 100 • Dallas, Texas 75204 • (214) 522-9540

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO
JRD	JRD	6/84	1"=100'	JRD	CB4146T	12 of 16

- ▲ REVISED WATER LINE 4-09-85
- ▲ ADD F.H. 3-13-85
- ▲ REVISED LINE "B" 3-11-85
- ▲ ROUTE WATERLINE UNDER STORM SEWER 1-30-85

BM No. 1
Square cut on top of curb at the radius return of an island located near the northeast corner of Liberty Plaza I, approximately 639 feet north of the southeast property corner. Elevation 622.14

BM No. 2
Chisled square on the end of the curb radius located on the driveway on the north side of Keller Springs Road, approximately 500 feet west of Dallas Parkway. Elevation 626.24

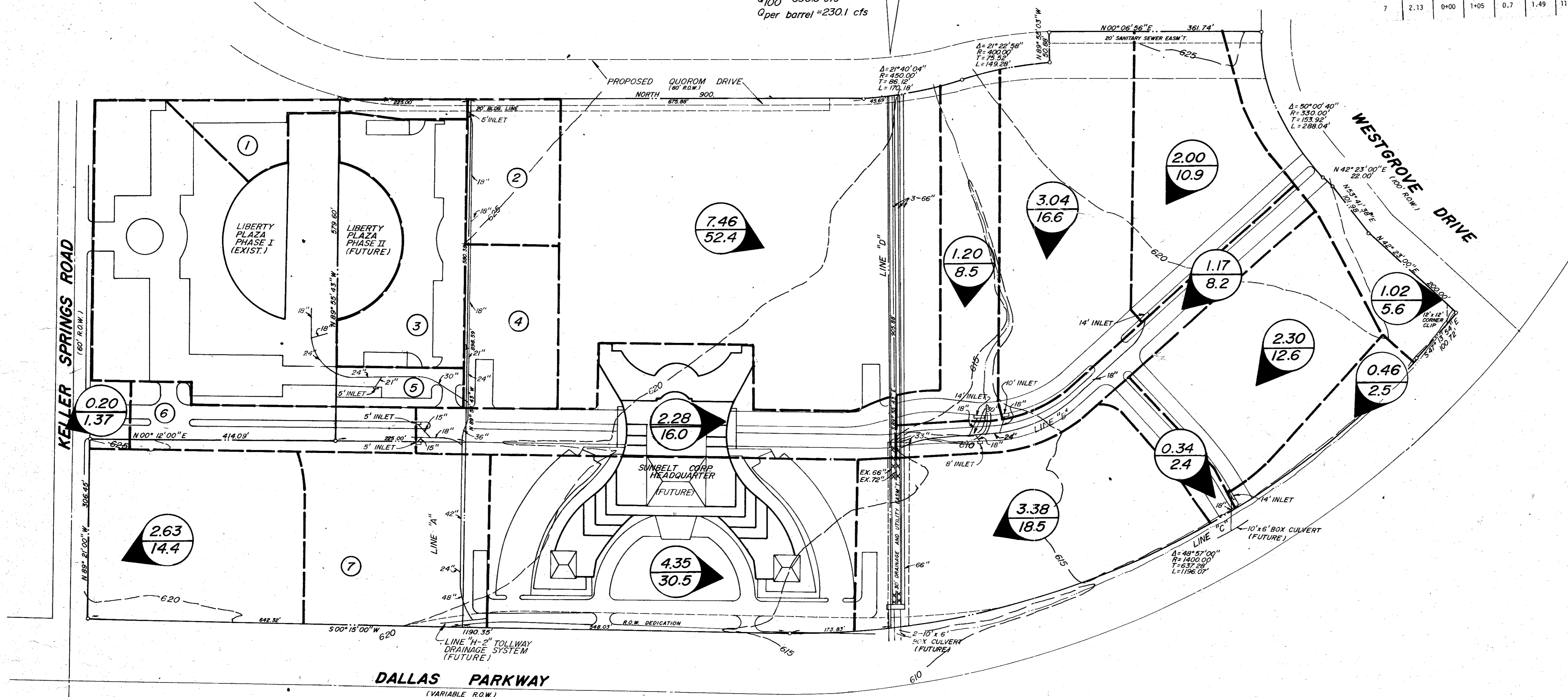


OFF-SITE DRAINAGE

AREA = 170 Acres
 TC = 22.7 MIN.
 I₁₀₀ = 5.8 IN./HR.
 C = 0.7
 Q = CIA
 Q₁₀₀ = 690.3 cfs
 Q per barrel = 230.1 cfs

LINE "A"

D.A. No.	Area (Ac)	From Sta.	To Sta.	C	CA	Inlet Q (cfs)	Acc. CA	Tc (Min)	I ₁₀₀ (In/HR)	Total Q (cfs)	Length (FT)	Pipe Size	Slope (%)	V (fps)	V _{2/26}	Remarks
1	1.01	6+11	8+60	0.9	0.91	7.0	0.91	10.0	7.8	7.0	249	18"	0.47	4.0	0.25	5' Rec. Inlet
2	0.85	4+58	6+11	0.9	0.77	6.0	1.68	11.0	7.7	13.0	153	18"	1.60	7.5	0.87	10" Stub-out
3	1.37	4+55	4+58	0.9	1.23	9.6	2.91	11.3	7.6	22.3	3	24"	0.95	7.2	0.80	5' Rec. Inlet
4	0.79	3+80	4+55	0.9	0.71	5.5	3.62	11.4	7.5	27.3	75	24"	1.40	8.6	1.15	Line "A-1"
5	6.74	3+62	3+80	0.9	6.07	47.3	9.69	11.4	7.5	72.8	18	36"	1.10	9.9	1.52	Discharge 36" RCP
5A		3+03	3+62	0.9			9.69	11.5	7.4	71.7	59	36"	1.02	9.5	1.40	Extend 36" - Slope Change
6	0.97	1+05	3+03	0.9	0.87	6.8	10.56	11.9	7.3	77.1	198	42"	0.50	7.4	0.85	Two 5' Curb Inlets
7	2.13	0+00	1+05	0.7	1.49	11.6	12.05	12.1	7.2	86.8	105	48"	0.50	8.1	1.02	24" STUB-OUT



DRAINAGE CRITERIA

XX
XX = AREA, ACRES
Q, cfs

Q = CIA
 C = 0.7 or 0.9
 I = 7.8 IN./HR.

BM No. 1
 Square cut on top of curb at the radius return of an island located near the northeast corner of Liberty Plaza I, approximately 639 feet north of the southeast property corner. Elevation 622.14

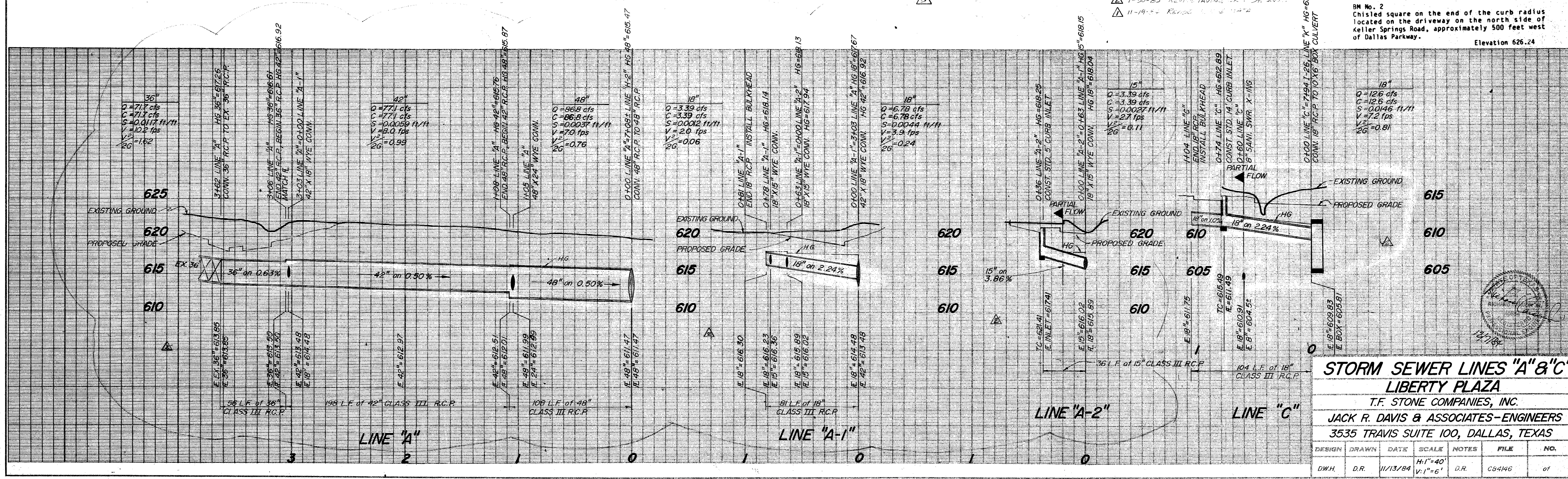
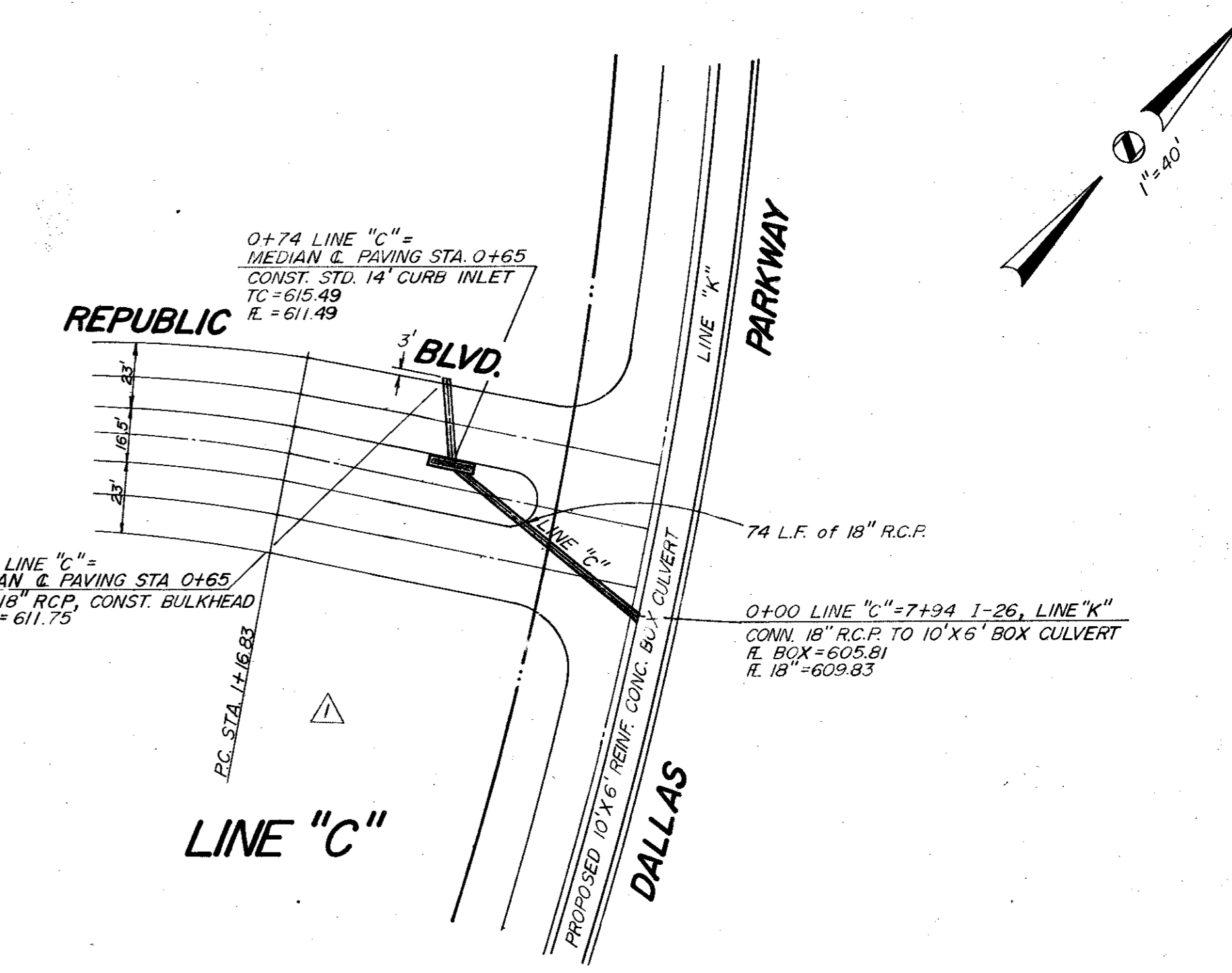
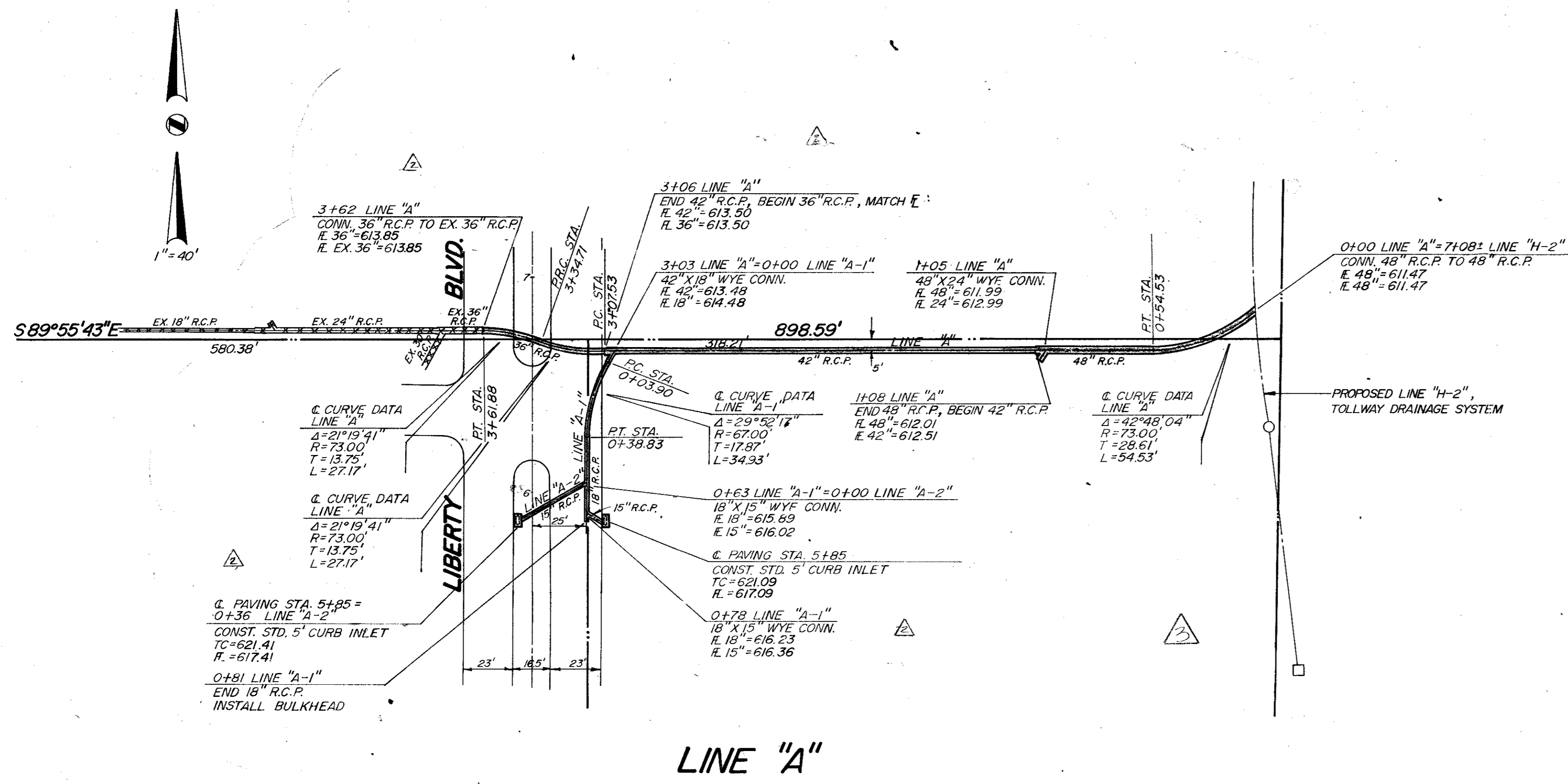
BM No. 2
 Chisled square on the end of the curb radius located on the driveway on the north side of Keller Springs Road, approximately 500 feet west of Dallas Parkway. Elevation 626.24

NOTE: BOUNDARY INFORMATION IS FROM A BOUNDARY SURVEY BY GEORAM CORP. DATED FEBRUARY, 1984.

DRAINAGE AREA MAP
LIBERTY PLAZA
 T.F. STONE COMPANIES, INC.
 JACK R. DAVIS & ASSOCIATES-ENGINEERS
 3535 TRAVIS SUITE 100, DALLAS, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
J.R.D.	J.R.D.	11/13/84	1"=100'	J.R.D.	CB4146T	of

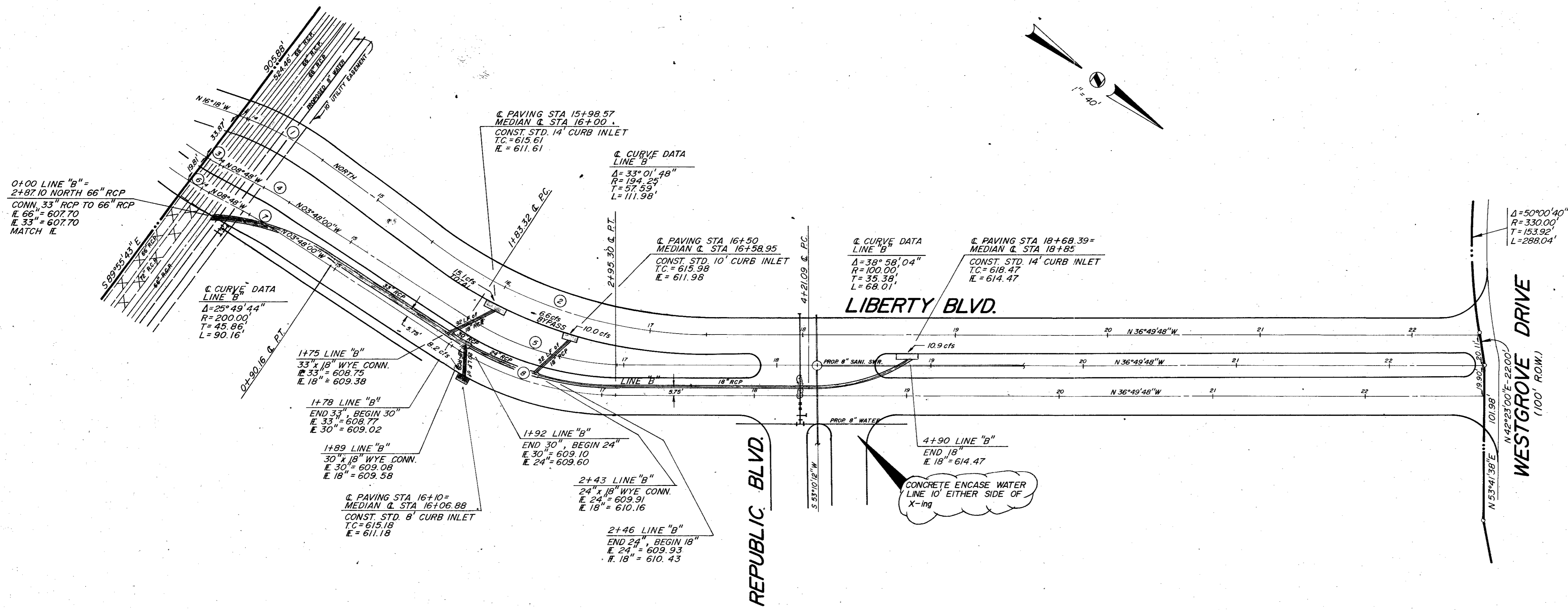
[Signature]
 12/7/84



- BM No. 1 Square cut on top of curb at the radius return of an island located near the northeast corner of Liberty Plaza I, approximately 639 feet north of the southeast property corner. Elevation 622.14
- BM No. 2 Chisted square on the end of the curb radius located on the driveway on the north side of Keller Springs Road, approximately 500 feet west of Dallas Parkway. Elevation 626.24
- 2-5-85 REVERSE GRADES LINE "A"
- 1-30-85 REVERSE GRADES LINE "A"
- 11-19-85 REVERSE GRADES LINE "A"

STORM SEWER LINES "A" & "C"
LIBERTY PLAZA
 T.F. STONE COMPANIES, INC.
 JACK R. DAVIS & ASSOCIATES-ENGINEERS
 3535 TRAVIS SUITE 100, DALLAS, TEXAS

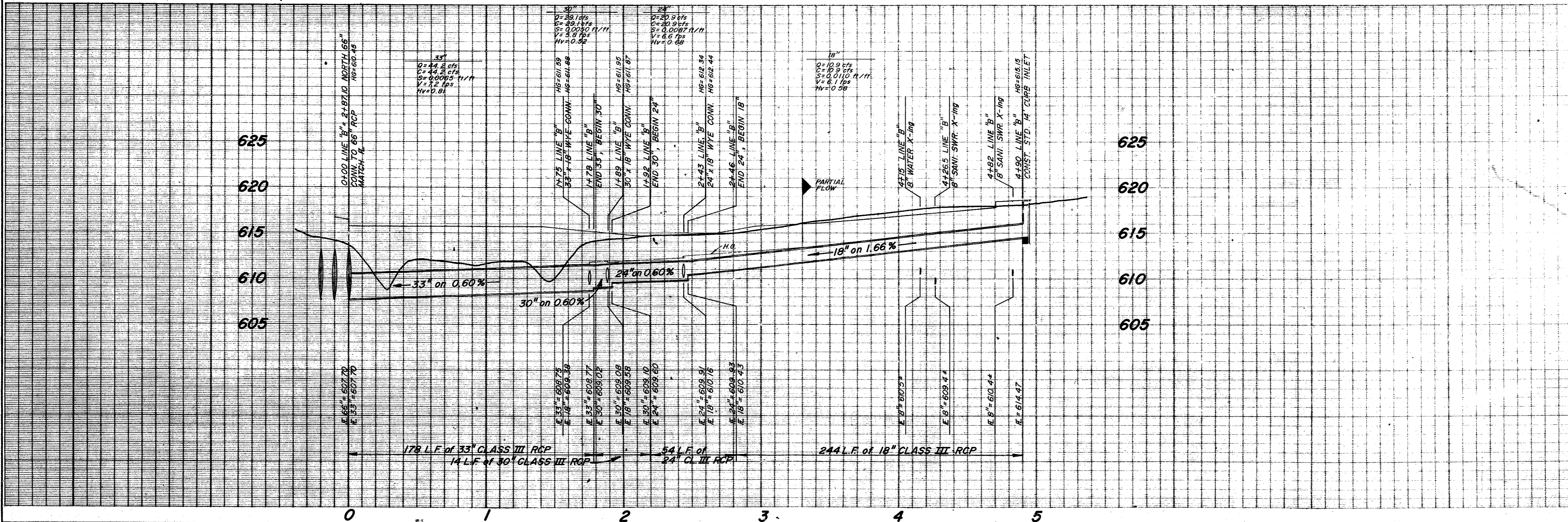
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
DWH	D.R.	11/13/84	H:1"=40' V:1"=6'	D.R.	C5446	of



BM NO. 1
 SQUARE CUT ON TOP OF CURB AT THE RADIUS RETURN OF AN ISLAND
 LOCATED NEAR THE NORTHEAST CORNER OF LIBERTY PLAZA I,
 APPROXIMATELY 639 FEET NORTH OF THE SOUTHEAST PROPERTY
 CORNER.
 ELEV. 622.14

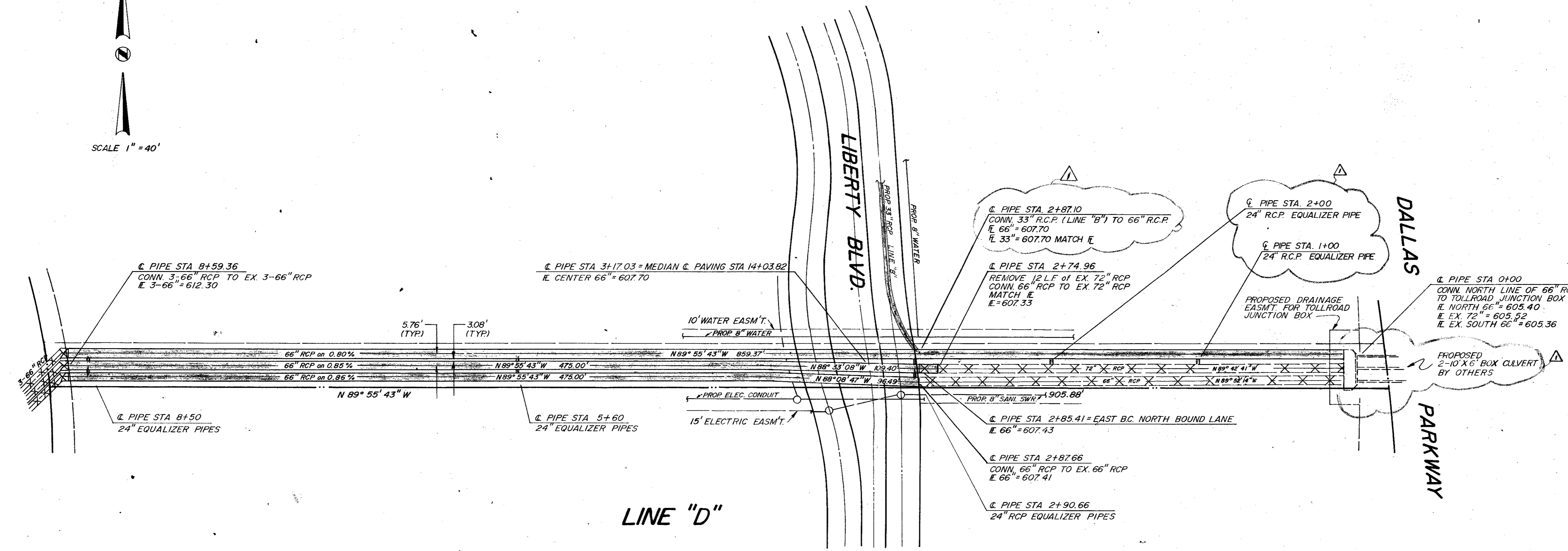
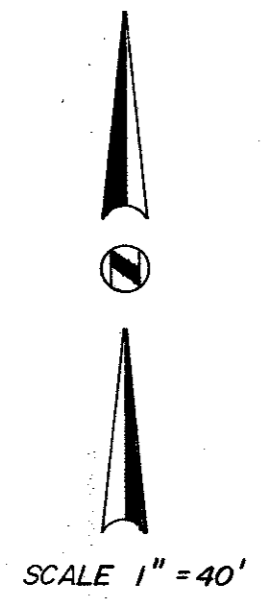
BM NO. 2
 CHISELED SQUARE ON THE END OF THE CURB RADIUS LOCATED ON THE
 DRIVEWAY ON THE NORTH SIDE OF KELLER SPRINGS ROAD, APPROXIMATELY
 500 FEET WEST OF DALLAS PARKWAY.
 ELEV. 626.24

BOUNDARY INFORMATION IS FROM A SURVEY
 BY GEOGRAM CORP. DATED FEB. 1984



STORM SEWER LINE "B"
LIBERTY PLAZA
 T.F. STONE COMPANIES, INC.
 JACK R. DAVIS & ASSOCIATES-ENGINEERS
 3535 TRAVIS SUITE 100, DALLAS, TEXAS

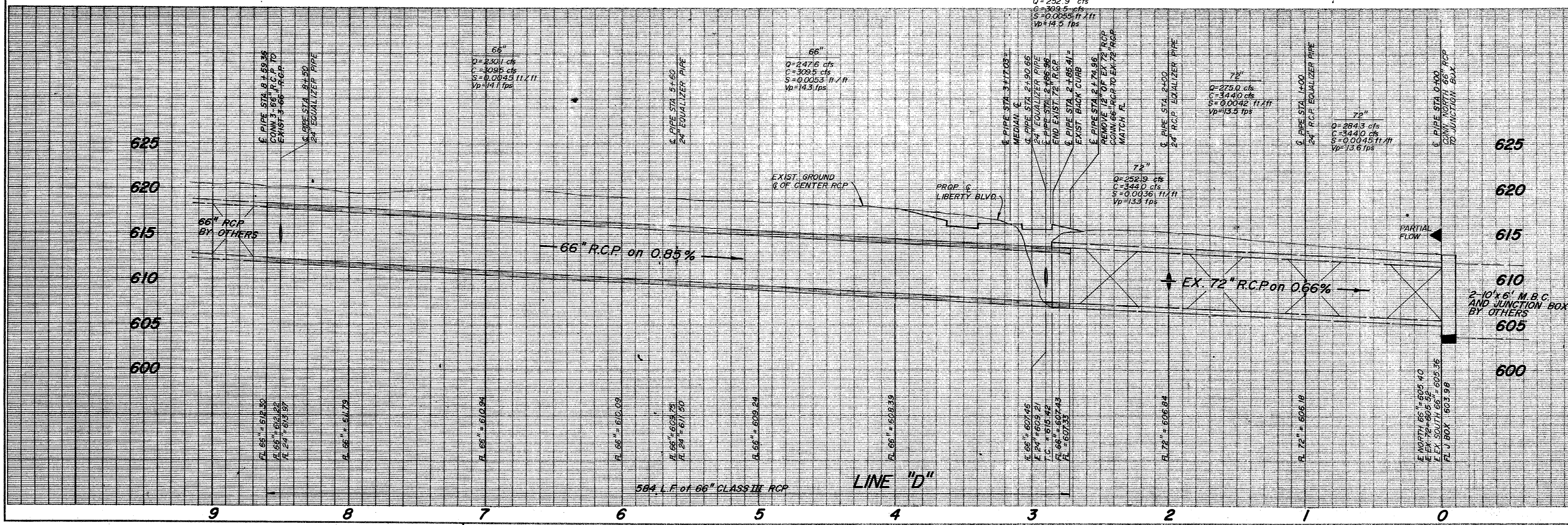
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
D.W.H.	JAR	1/85	H ¹ / _V = 40' V ¹ / _H = 6'	D.R.	C84146	of



LINE "D"

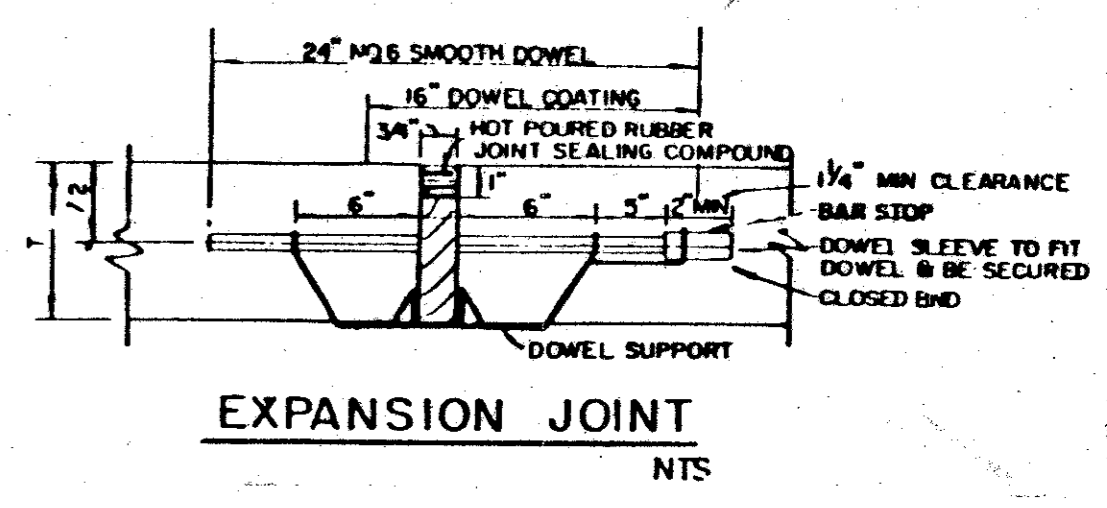
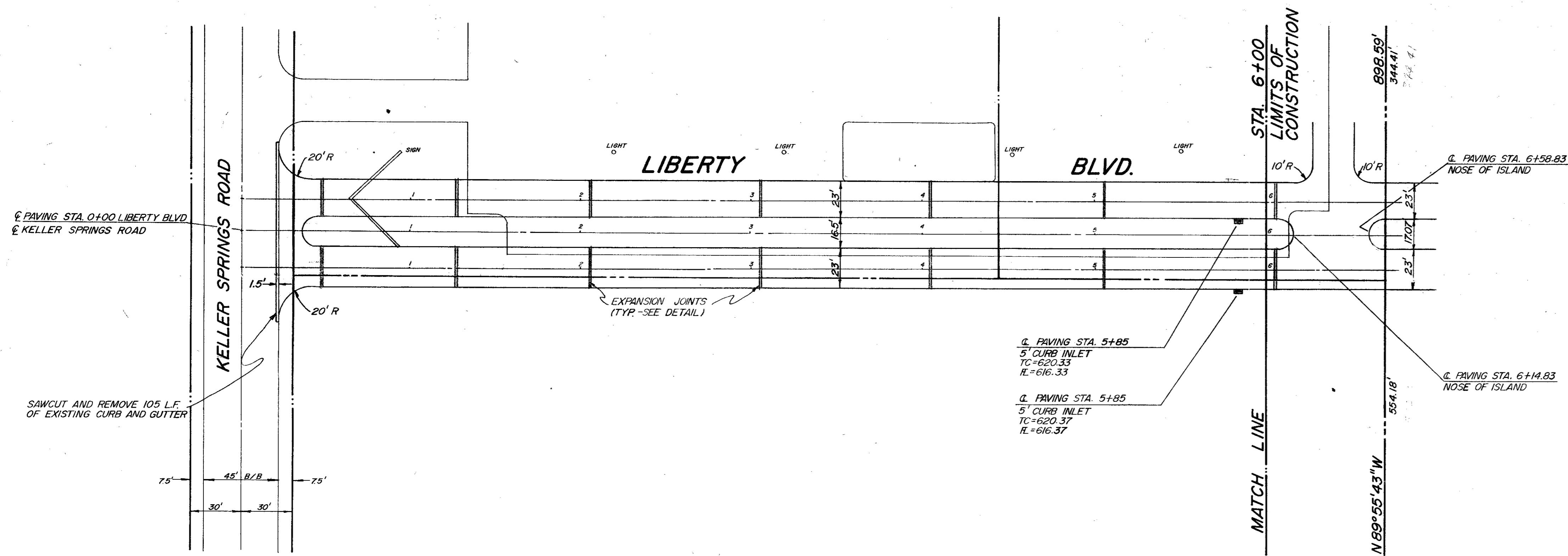
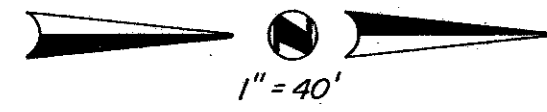
BM No. 1
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BM No. 2
Chisled square on the end of the curb radius located on the driveway on the north side of Keller Springs Road, approximately 500 feet west of Dallas Parkway. Elevation 626.24



STORM SEWER LINE "D"
LIBERTY PLAZA
 T.F. STONE COMPANIES, INC.
 JACK R. DAVIS & ASSOCIATES-ENGINEERS
 3535 TRAVIS SUITE 100, DALLAS, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
D.H.	JAR	11/13/84	H-1"=40' V-1"=6'	D.R.	C64146	of

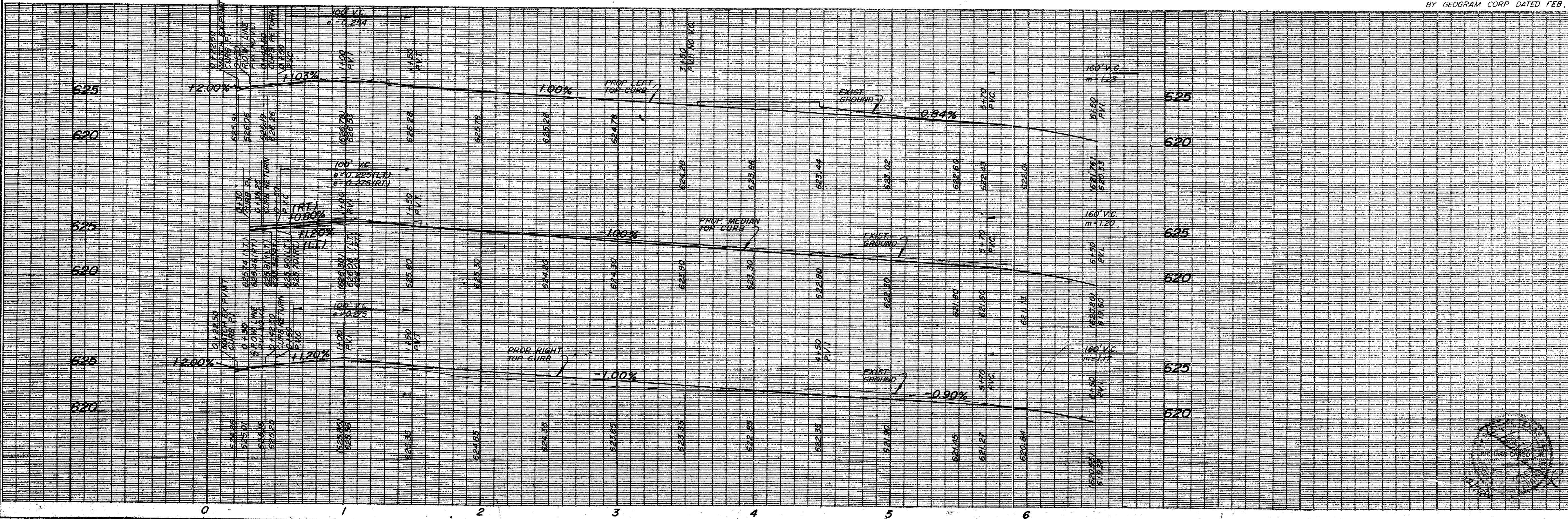


NOTE: FROM C. PAVING STA. 6+58.83 TO 6+68.83 TRANSITION MEDIAN WIDTH FROM 16.5' TO 17.07'

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Elevation 622.14

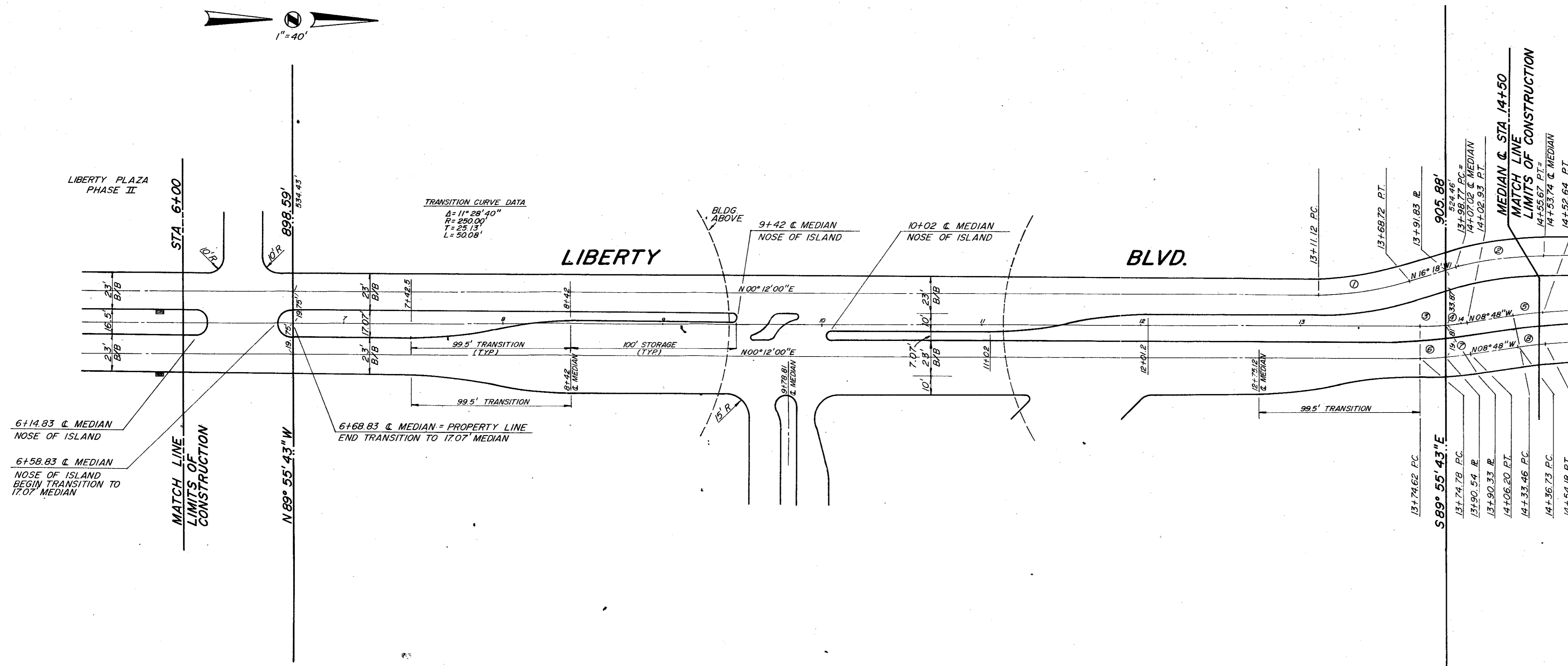
BM No. 2
Chisled square on the end of the curb radius located on the driveway on the north side of Keller Springs Road, approximately 500 feet west of Dallas Parkway.
Elevation 626.24

BOUNDARY INFORMATION IS FROM A SURVEY BY GEOGRAM CORP DATED FEB, 1984



LIBERTY BOULEVARD
LIBERTY PLAZA
T.F. STONE COMPANIES, INC.
JACK R. DAVIS & ASSOCIATES-ENGINEERS
3535 TRAVIS SUITE 100, DALLAS, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
JRD	REH	JAN 85	H 1" = 40' V 1" = 6'	JRD	C84146	c



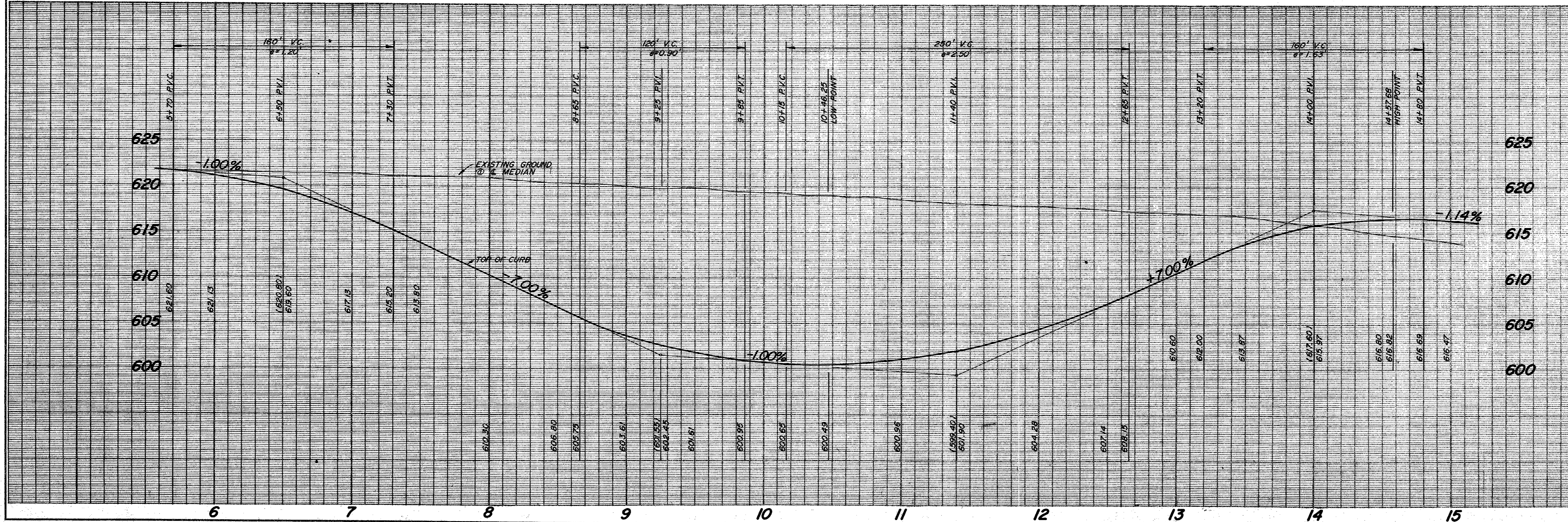
TRANSITION CURVE DATA
 $\Delta = 11^\circ 28' 40''$
 $R = 250.00'$
 $T = 23.13'$
 $L = 50.08'$

CURVE DATA				
NO.	Δ	R	T	L
1	$16^\circ 30' 00''$	200.00'	29.00'	57.60'
2	$16^\circ 18' 00''$	200.00'	28.64'	56.90'
3	$04^\circ 59' 42''$	180.25'	7.86'	15.71'
4	$04^\circ 00' 18''$	180.25'	6.30'	12.60'
5	$05^\circ 00' 00''$	219.75'	9.59'	19.18'
6	$04^\circ 30' 49''$	200.00'	7.88'	15.76'
7	$04^\circ 29' 11''$	200.00'	7.83'	15.66'
8	$05^\circ 00' 00''$	200.00'	8.73'	17.45'

BM NO. 1
 SQUARE CUT ON TOP OF CURB AT THE RADIUS RETURN OF AN ISLAND LOCATED NEAR THE NORTHEAST CORNER OF LIBERTY PLAZA 1, APPROXIMATELY 639 FEET NORTH OF THE SOUTHEAST PROPERTY CORNER.
 ELEV. 622.14

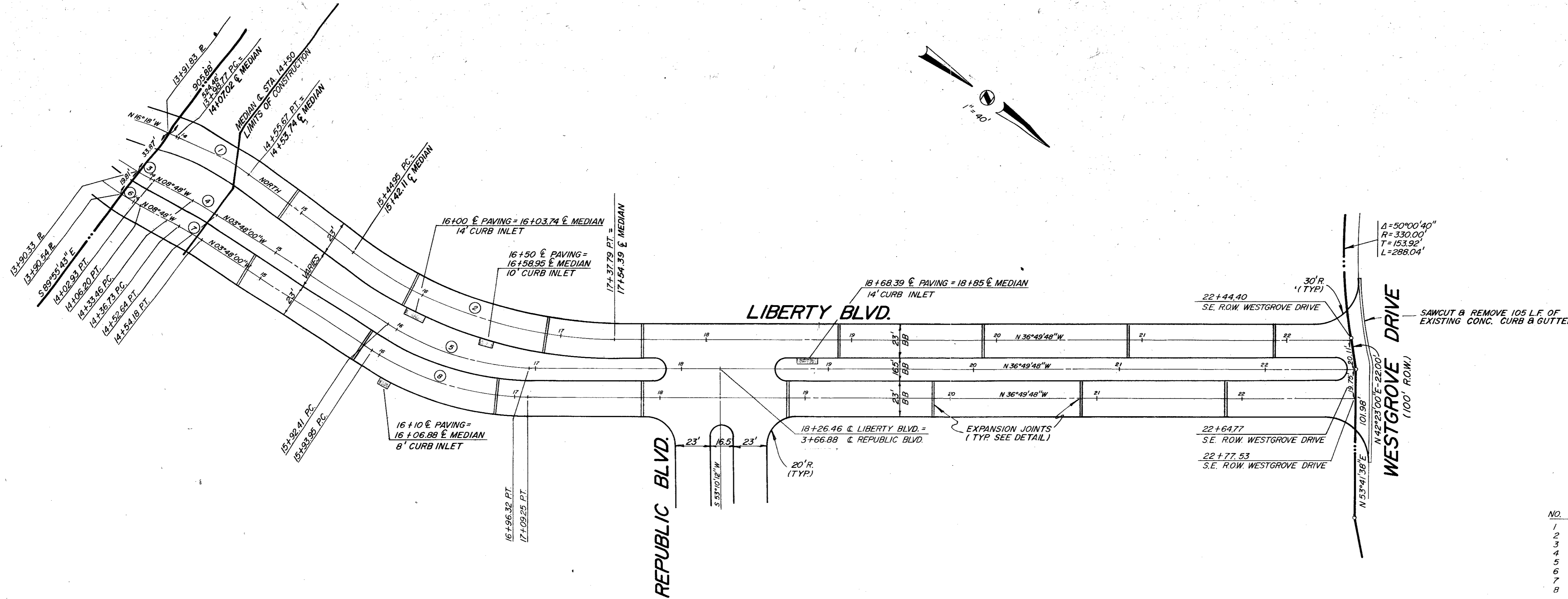
BM NO. 2
 CHISEL SQUARE ON THE END OF THE CURB RADIUS LOCATED ON THE DRIVEWAY ON THE NORTH SIDE OF KELLER SPRINGS ROAD, APPROXIMATELY 500 FEET WEST OF DALLAS PARKWAY.
 ELEV. 626.24

BOUNDARY INFORMATION IS FROM A SURVEY BY GEORAM CORP. DATED FEB. 1984



LIBERTY BOULEVARD
LIBERTY PLAZA
 T.F. STONE COMPANIES, INC.
 JACK R. DAVIS & ASSOCIATES-ENGINEERS
 3535 TRAVIS, SUITE 100, DALLAS, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
D.H.	J.A.R.	2/85	H-1"=40' V-1"=6'	FG.	C84146T	of



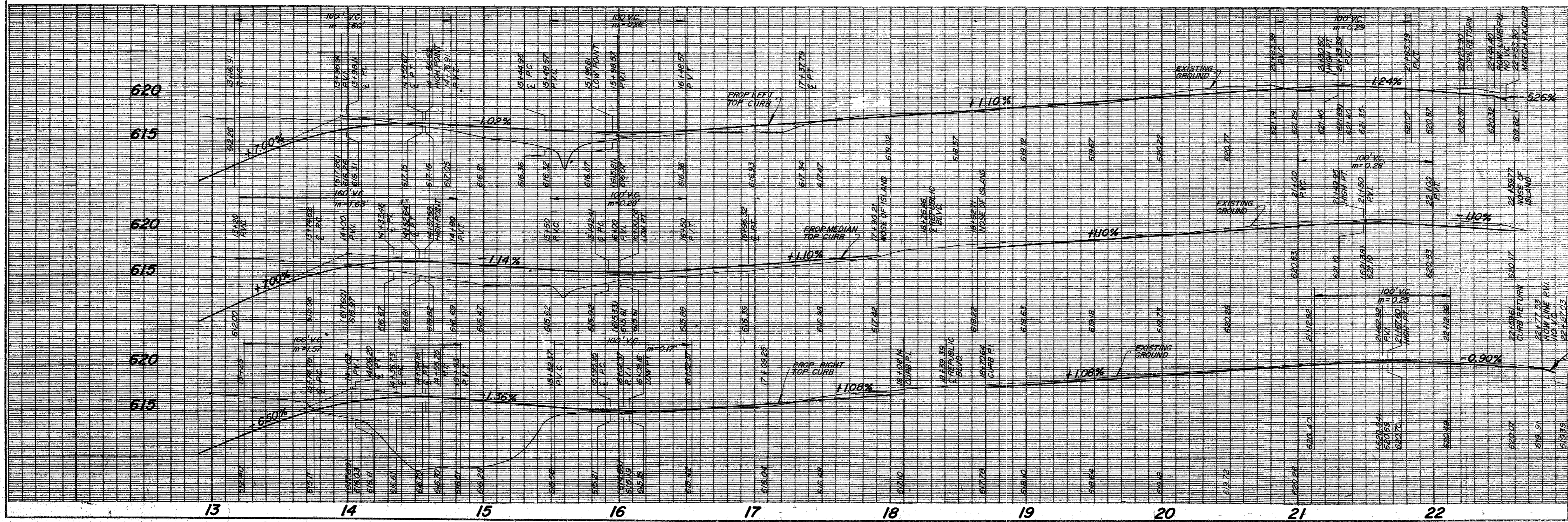
"CURVE DATA"

NO.	Δ	R	T	L
1	16°18'00"	200.00'	28.64'	56.90'
2	36°45'48"	300.00'	99.88'	192.84'
3	04°00'18"	180.25'	6.30'	12.60'
4	05°00'00"	219.75'	9.59'	19.18'
5	33°01'48"	180.25'	53.44'	103.91'
6	04°29'11"	200.00'	7.83'	15.66'
7	05°00'00"	200.00'	8.73'	17.45'
8	33°01'48"	200.00'	59.30'	115.30'

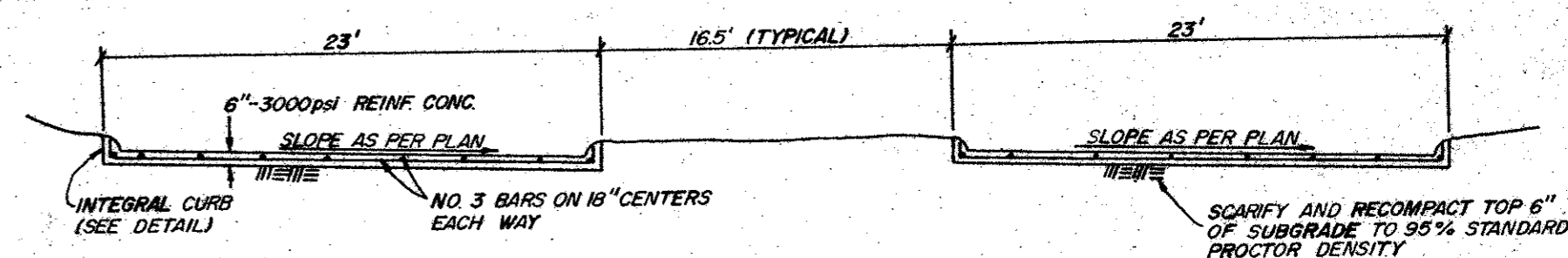
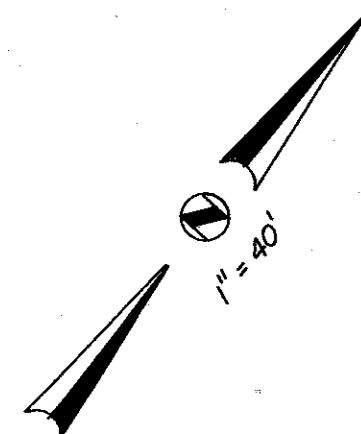
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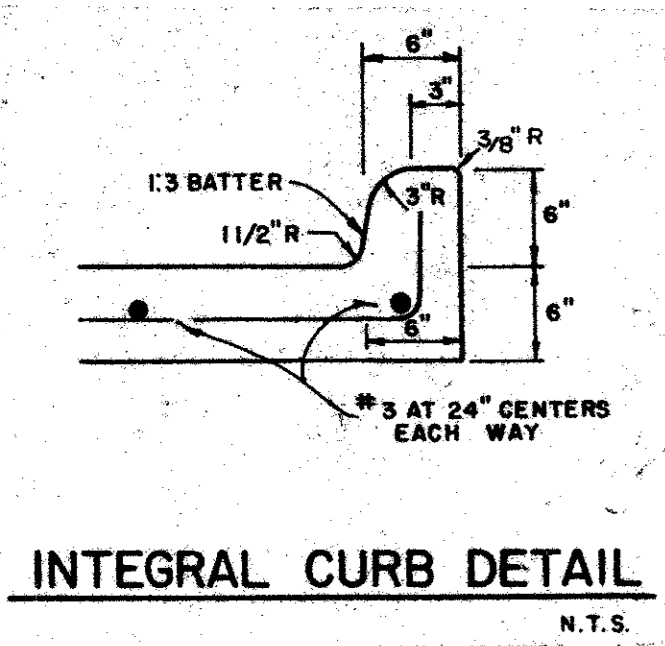
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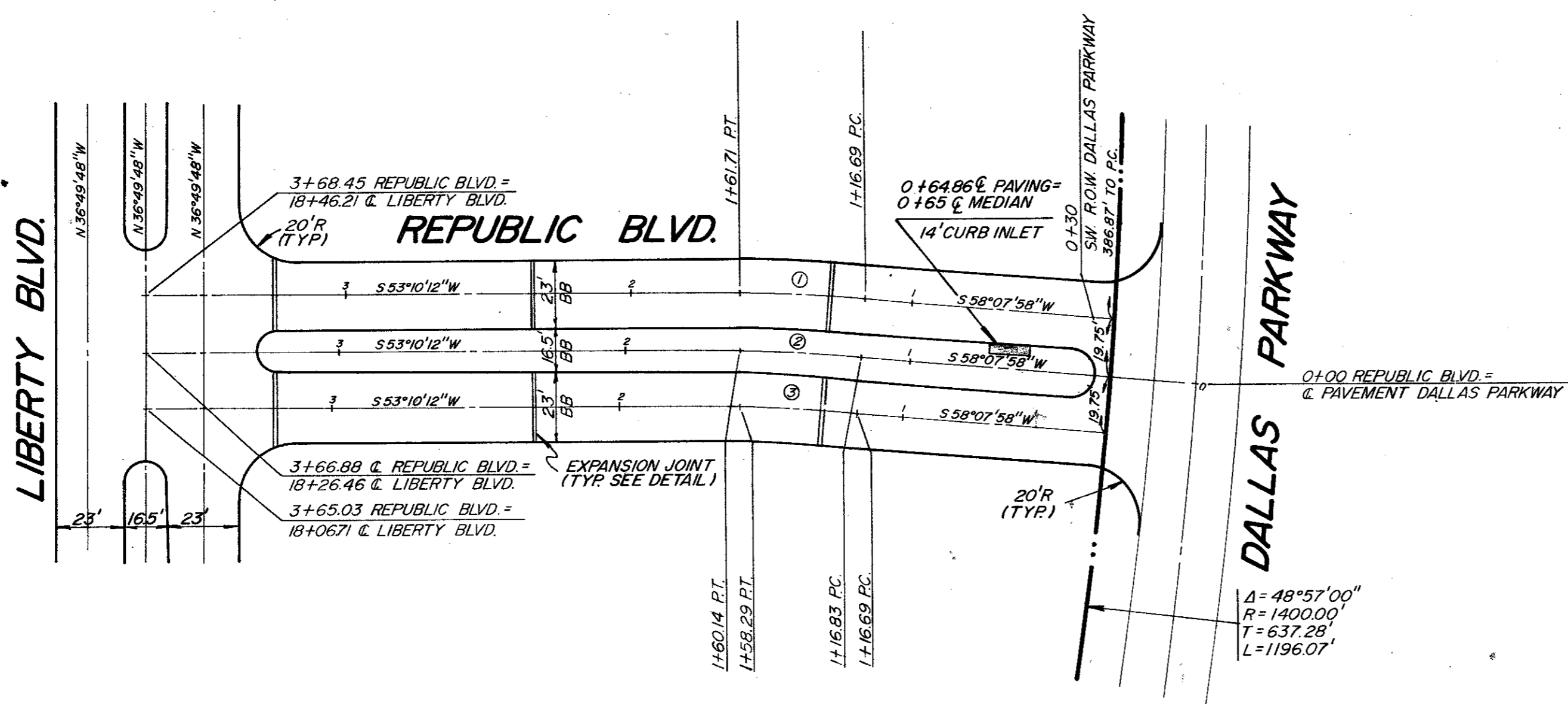
LIBERTY BLVD.						
LIBERTY PLAZA						
T.F. STONE COMPANIES, INC.						
JACK R. DAVIS & ASSOCIATES-ENGINEERS						
3535 TRAVIS SUITE 100, DALLAS, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
T.B.	RE.H.	JAN, 85	H:1"=40' V:1"=6'		C84146	of



TYPICAL PAVEMENT SECTION
N.T.S.



INTEGRAL CURB DETAIL
N.T.S.



PAVING GENERAL NOTES

1. All materials and workmanship shall conform to the City of Addison Standards and Specifications.
2. All fill shall be compacted to 95% Proctor Density in a maximum of six (6) inch lifts.
3. It will be the responsibility of the Contractor to protect all utilities in the construction of this project. All manholes, cleanouts, valve boxes, fire hydrants, etc., must be adjusted to proper line and grade by the Contractor prior to and after the placing of permanent paving. Utilities must be maintained to proper line and grade during construction of the paving of this development.
4. Strip top 3 inches of topsoil and reuse material outside paved area.
5. Utility information is based upon field measurements, and the best available records. Field data is limited to that which is visible and can be measured. This does not preclude the existence of other underground items. Record information is based upon data collected from both public and private sources. The completeness and/or accuracy of these records cannot be guaranteed, except insofar as they can be verified by the field measurements.
6. Expansion joints shall be placed as shown on the plans.
7. Contractor shall saw-cut joints into hardened concrete as soon as surface will not be torn, or otherwise damaged by cutting action. Saw joints shall be spaced with a minimum spacing of 10' and a maximum spacing of 20'.

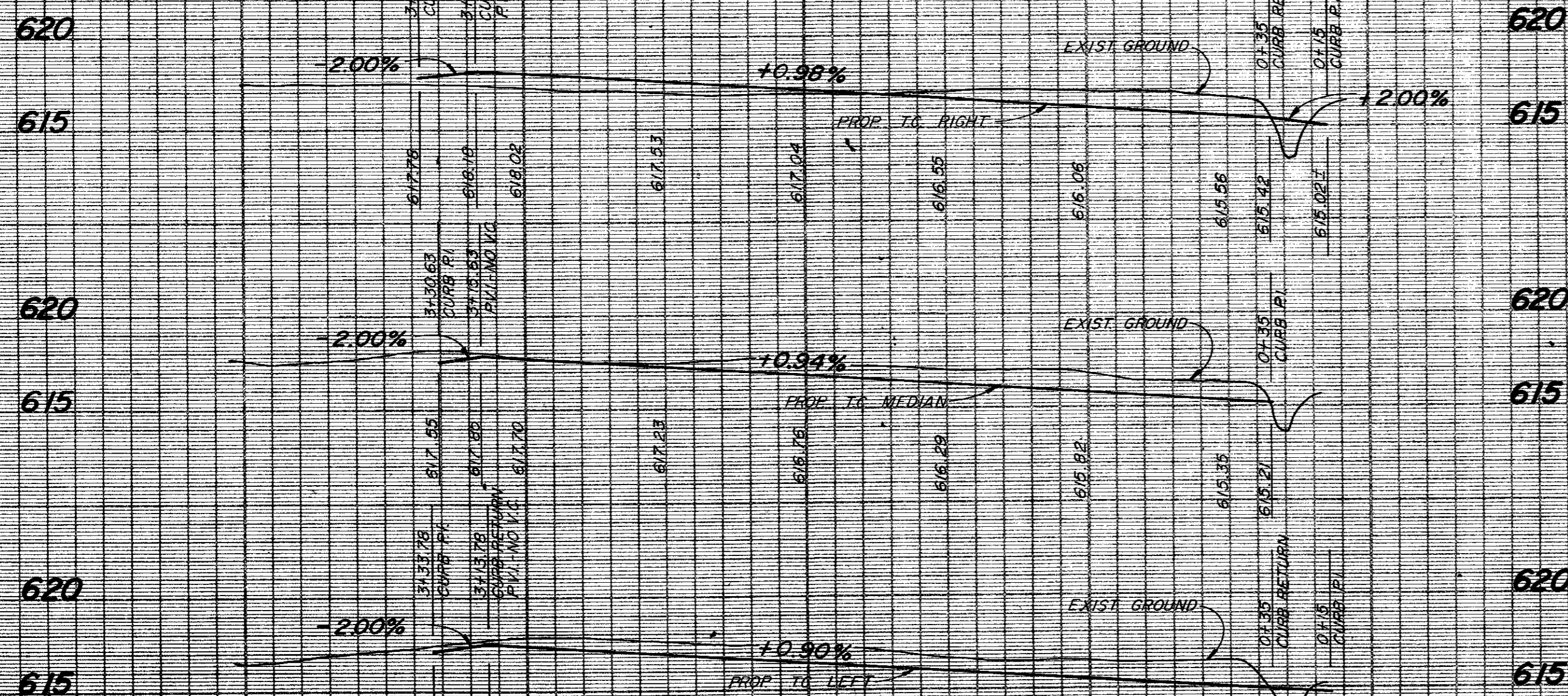
CURVE DATA

NO.	Δ	R	T	L
1	04°57'46"	519.75'	22.52'	45.02'
2	04°57'46"	500.00'	21.67'	43.31'
3	04°57'46"	480.25'	20.81'	41.60'

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SQUARE CUT ON TOP OF CURB AT THE RADIUS RETURN OF AN ISLAND LOCATED NEAR THE NORTHEAST CORNER OF LIBERTY PLAZA 1, APPROXIMATELY 639 FEET NORTH OF THE SOUTHEAST PROPERTY CORNER.
ELEV. 622.14

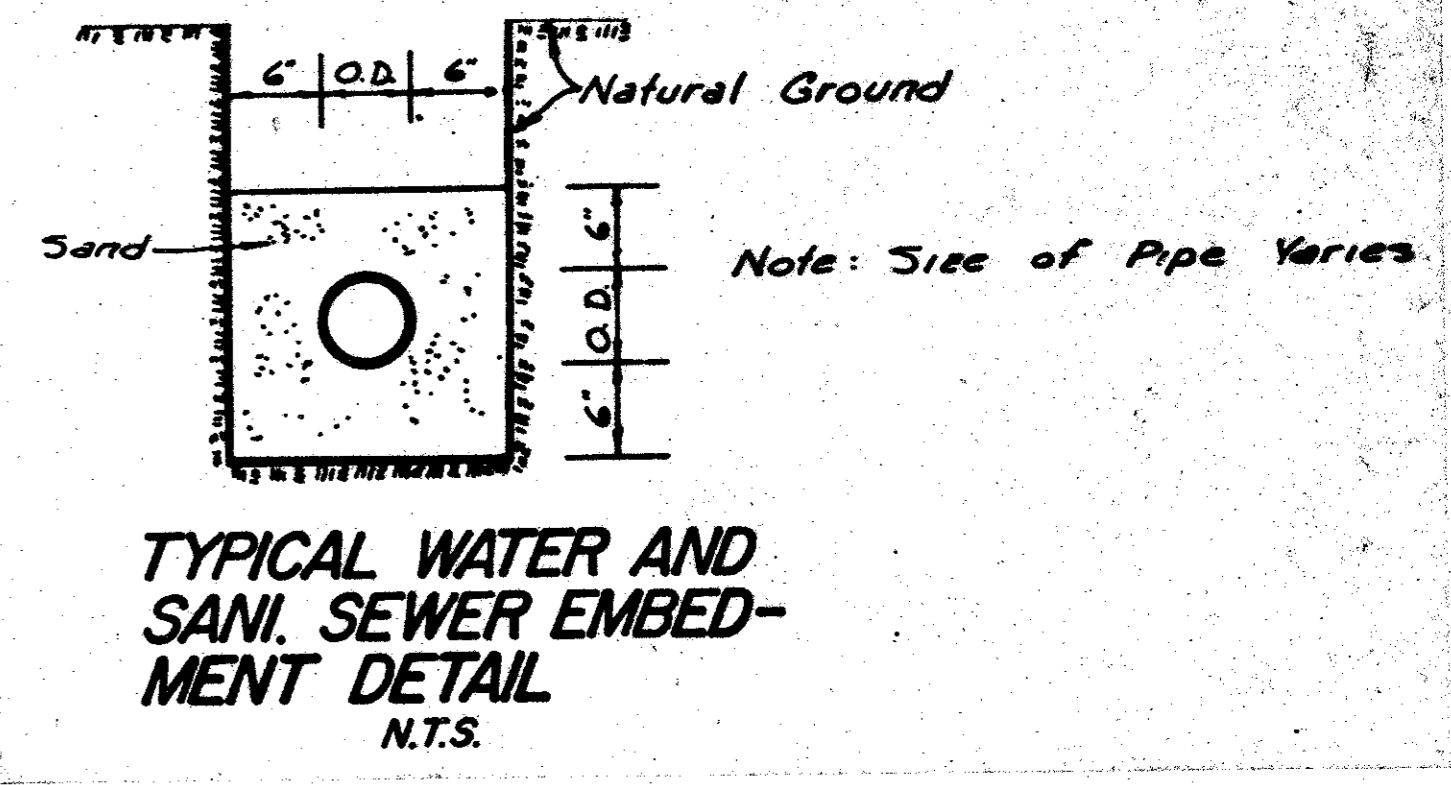
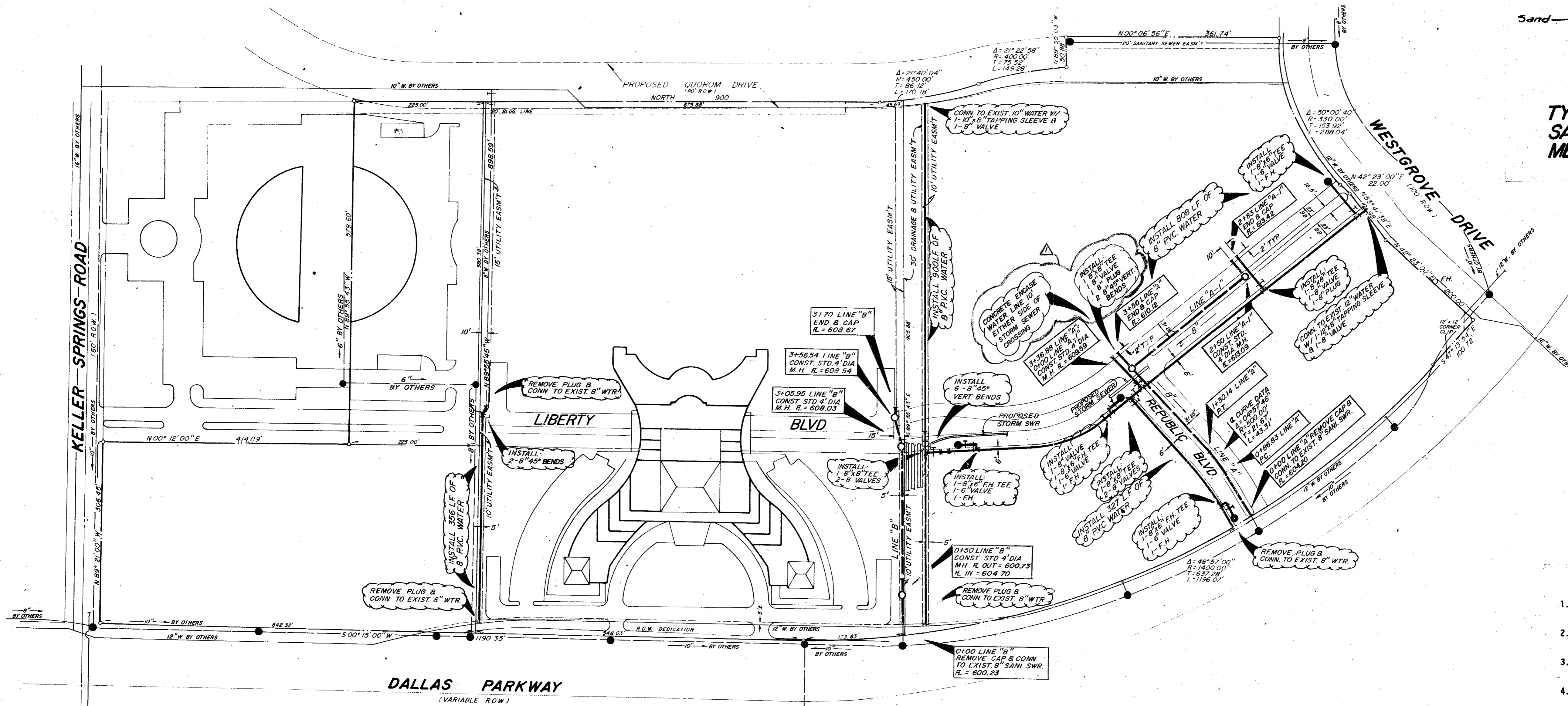
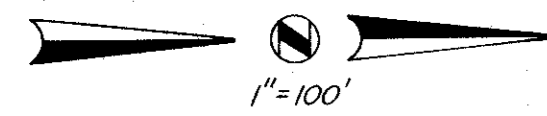
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REPUBLIC BLVD.
LIBERTY PLAZA
T.F. STONE COMPANIES, INC.
JACK R. DAVIS & ASSOCIATES-ENGINEERS
3535 TRAVIS SUITE 100, DALLAS, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
D.H.	D.M.	JAN. 85	H ¹ / _V = 40' V ¹ / _H = 6'	J.R.D.	C84146	of



- WATER AND SANITARY SEWER GENERAL NOTES
1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE CITY OF ADDISON STANDARDS AND SPECIFICATIONS.
 2. ALL WATER MAINS SHALL BE PVC SDR-18 WATER PIPE (BLUE BRUTE WITH WIRE TRACERS). TRACER TO BE #12 INSULATED COPPER.
 3. ALL WATER MAINS SHALL HAVE MINIMUM COVER BELOW FINISHED GRADES AS FOLLOWS: 6" & 8" - 48" OR AS REQUIRED TO CLEAR OTHER UTILITIES.
 4. ALL SEWER MAINS SHALL BE PVC SDR-35 SANITARY SEWER PIPE.
 5. ALL PIPE EMBEDMENT SHALL BE AS DETAILED ON THIS SHEET.
 6. ALL TEES, CONNECTIONS, BENDS, DEAD-ENDS, FIRE HYDRANTS, ETC., SHALL BE SECURELY BLOCKED AGAINST TRENCH WALLS USING 2000 PSI CONCRETE.
 7. ALL TRENCH BACKFILL FOR THESE UTILITIES SHALL BE COMPACTED AS REQUIRED BY CITY, BUT IN NO CASE SHALL THE TOP 12" BE COMPACTED TO LESS THAN 90% AASHO DENSITY WITH THE REMAINDER OF THE DITCH BEING COMPACTED TO THAT OF ADJOINING SOIL CONDITIONS.
 8. CONTRACTOR TO VERIFY LOCATION OF ALL UTILITIES PRIOR TO BEGINNING WORK AND SHALL PROTECT EXISTING IMPROVEMENTS DURING CONSTRUCTION.
 9. THE CONTRACTOR SHALL INCLUDE IN HIS BID PRICE ALL COSTS OF UTILITY CONNECTIONS, TAP FEES AND THE TESTING OF NEW MAINS REQUIRED BY THE CITY OF ADDISON TO COMPLETE THE WORK WHETHER THESE SERVICES ARE PERFORMED BY THE CONTRACTOR OR BY OTHERS.

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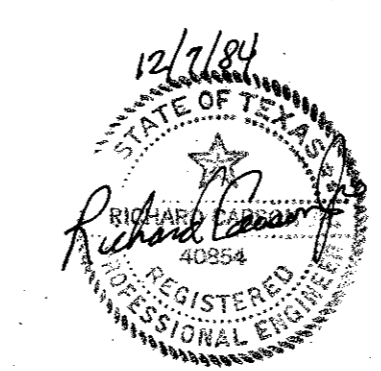
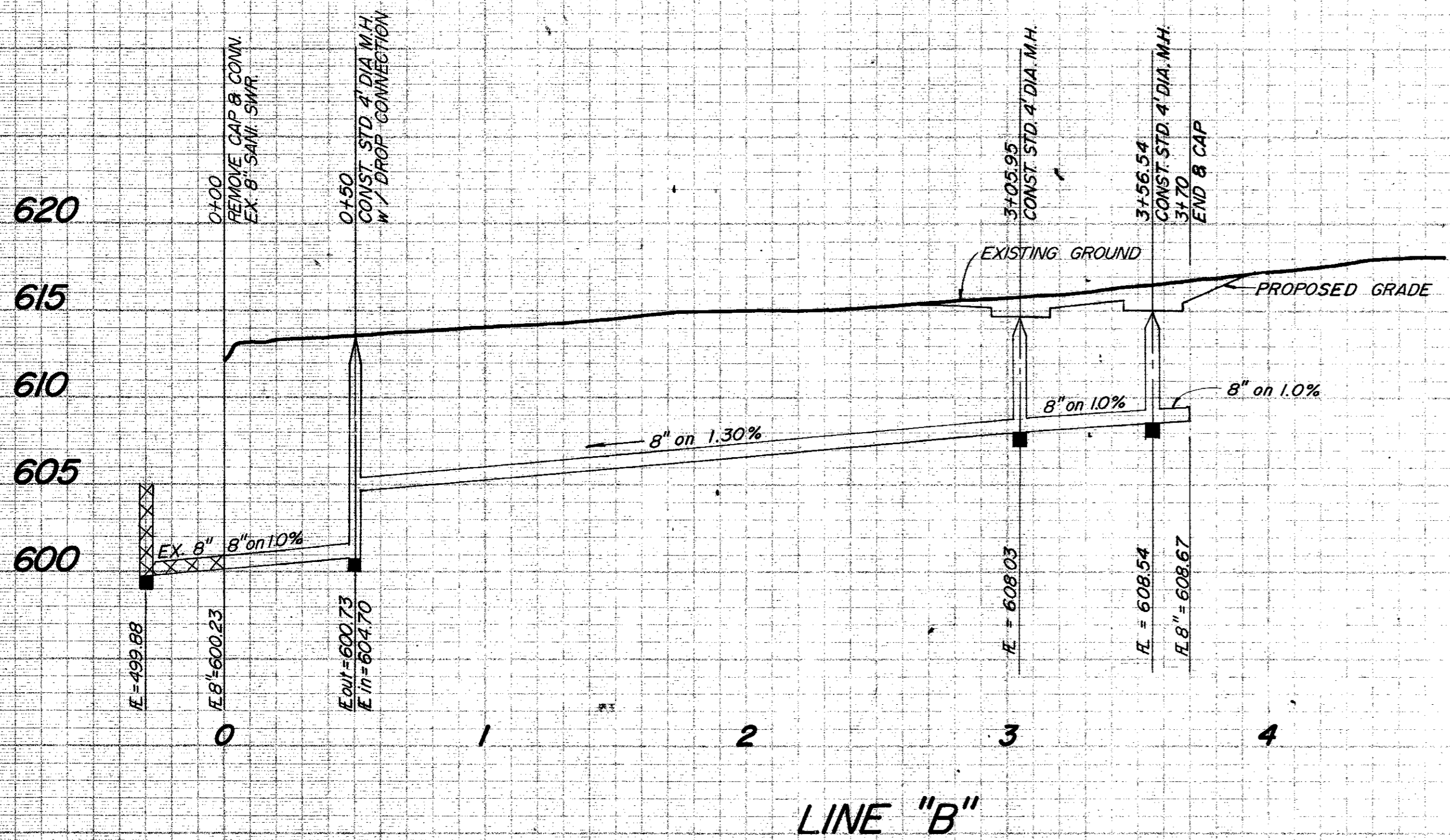
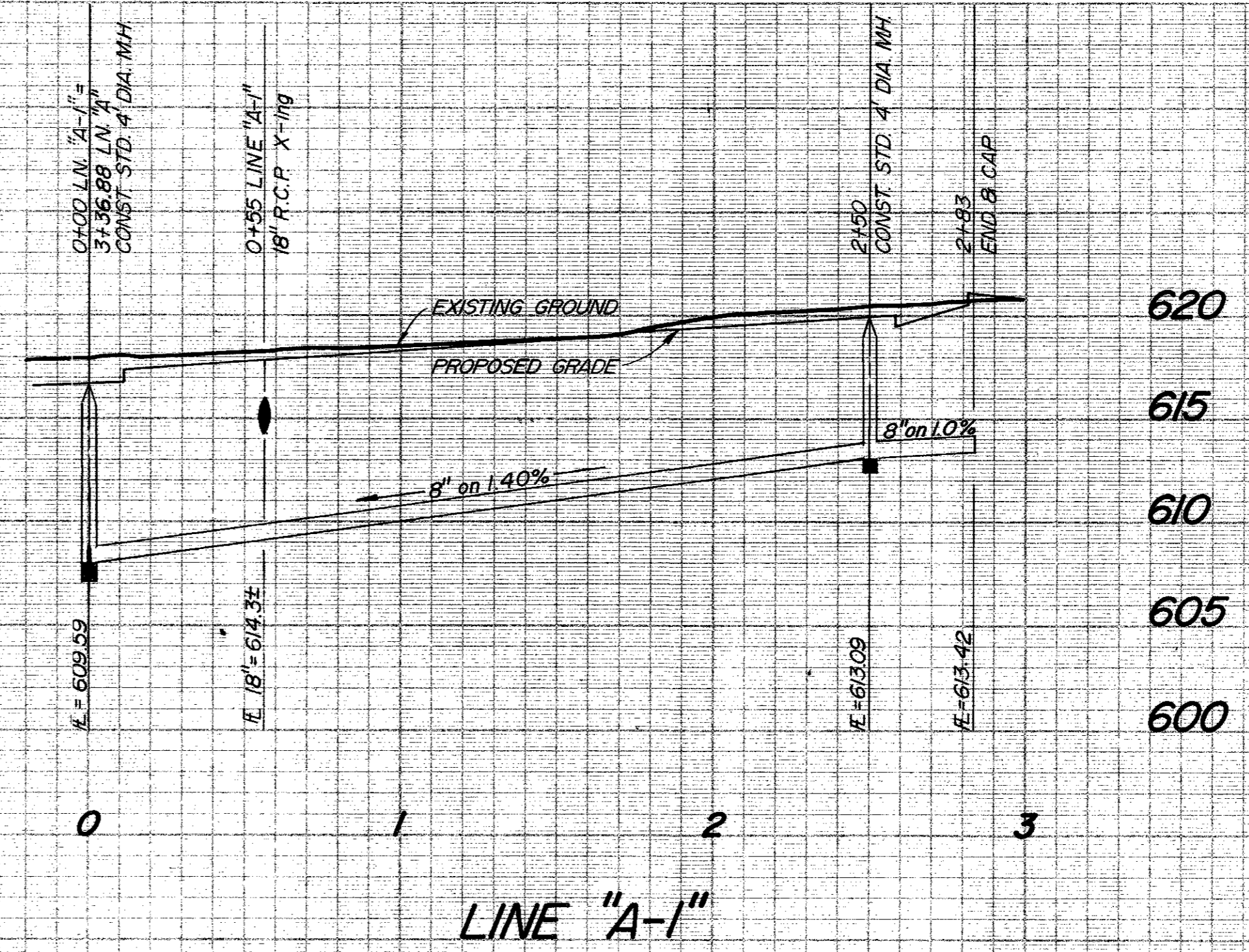
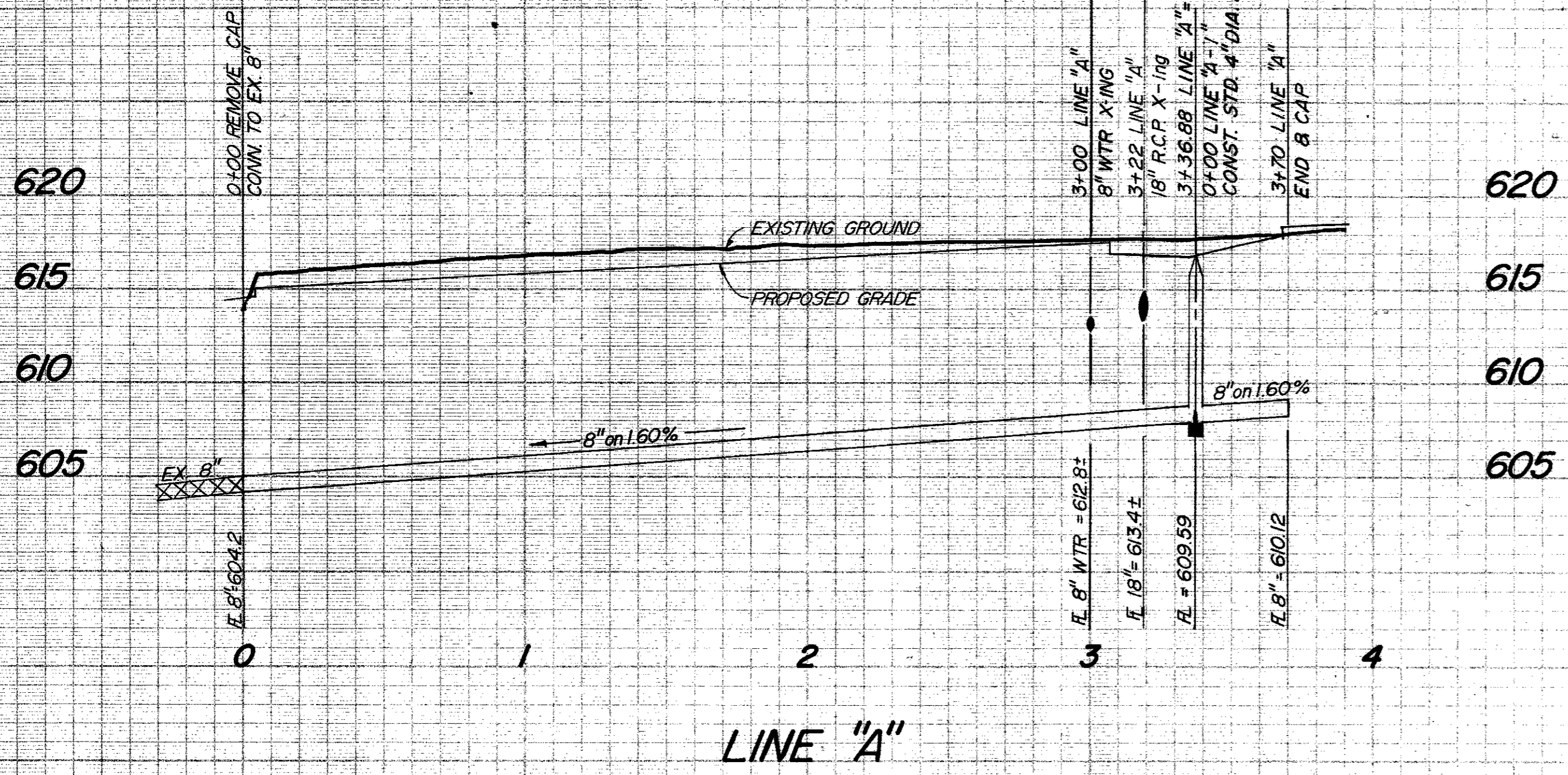
BM No. 2
Chisled square on the end of the curb radius located on the driveway on the north side of Keller Springs Road, approximately 500 feet west of Dallas Parkway. Elevation 626.24

ROUTE WATERLINE UNDER STORM SEWER 1-30-85

WATER & SANI. SWR PLAN
LIBERTY PLAZA

JACK R. DAVIS & associates, inc.
consulting civil engineers & surveyors
2902 Carlisle Street Dallas, Texas 75204

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO
J.R.D.	J.R.D.	6/84	1"=100'	J.R.D.	C	84146T

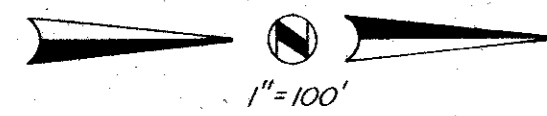


BM No. 1
Square cut on top of curb at the radius return of an island located near the northeast corner of Liberty Plaza I, approximately 639 feet north of the southeast property corner.
Elevation 622.14

BM No. 2
Chisled square on the end of the curb radius located on the driveway on the north side of Keller Springs Road, approximately 500 feet west of Dallas Parkway.
Elevation 626.24

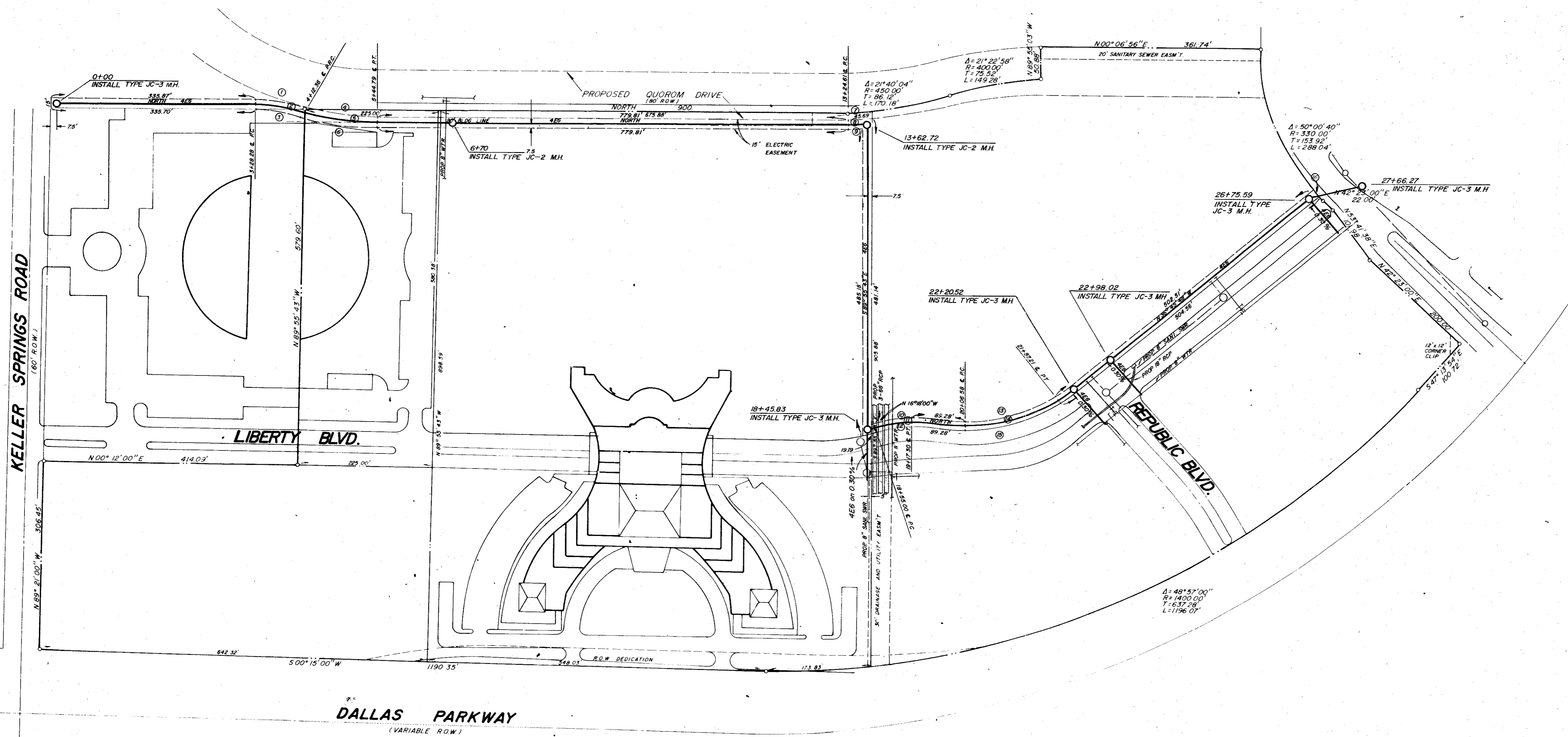
SANITARY SEWER PROFILES
LIBERTY PLAZA
JACK R. DAVIS & ASSOCIATES-ENGINEERS
3535 TRAVIS SUITE 100, DALLAS, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
	DJR		H:V = 40' V:1" = 6"	DR	CB4146	of



CURVE DATA

Curve No.	R	T	L	
1	16°03'31"	307.50'	43.38'	86.18'
2	16°03'31"	300.00'	42.32'	84.08'
3	16°03'31"	292.50'	41.26'	81.98'
4	16°03'31"	465.00'	65.59'	130.33'
5	16°03'31"	472.50'	66.65'	132.43'
6	16°03'31"	480.00'	67.71'	134.53'
7	04°23'54"	594.46'	22.83'	45.64'
8	03°37'37"	601.96'	19.06'	38.11'
9	02°52'31"	609.46'	15.30'	30.58'
10	16°05'08"	226.50'	32.01'	63.59'
11	16°19'00"	219.00'	31.26'	62.30'
12	16°18'00"	211.50'	30.29'	60.17'
13	36°49'48"	273.50'	91.06'	175.91'
14	36°49'48"	281.00'	93.56'	180.63'
15	36°49'48"	288.50'	96.06'	185.45'
16	02°37'44"	330.00'	7.57'	15.14'

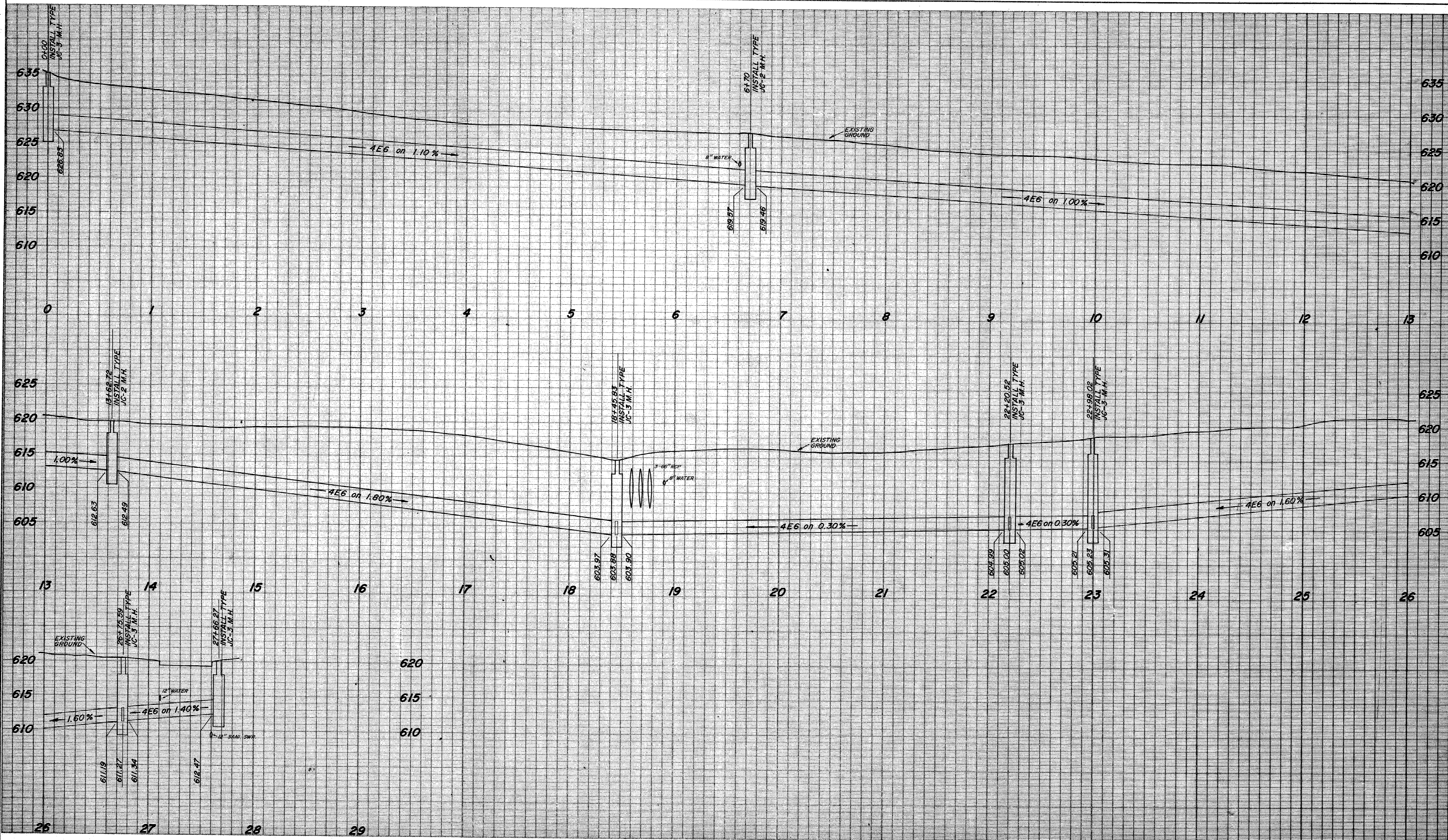


BM NO. 1
 SQUARE CUT ON TOP OF CURB AT THE RADIUS RETURN OF AN ISLAND
 LOCATED NEAR THE NORTHEAST CORNER OF LIBERTY PLAZA,
 APPROXIMATELY 639 FEET NORTH OF THE SOUTHEAST PROPERTY
 CORNER.
 ELEV. 622.14

BM NO. 2
 CHISEL SQUARE ON THE END OF THE CURB RADIUS LOCATED ON THE
 DRIVEWAY ON THE NORTH SIDE OF KELLER SPRINGS ROAD, APPROXIMATELY
 500 FEET WEST OF DALLAS PARKWAY.
 ELEV. 626.24

NOTE: BOUNDARY INFORMATION IS FROM
 A BOUNDARY SURVEY BY GEOGRAM CORP
 DATED FEBRUARY, 1984.

ELECTRIC CONDUIT					
LIBERTY PLAZA					
consulting civil engineers & surveyors 2902 Carlisle Street Dallas, Texas 75204					
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE NO
JRD	JRD	6/84	1"=100'	JRD	C 84196T



BM NO. 1
 SQUARE CUT ON TOP OF CURB AT THE RADIUS RETURN OF AN ISLAND
 LOCATED NEAR THE NORTHEAST CORNER OF LIBERTY PLAZA
 APPROXIMATELY 639 FEET NORTH OF THE SOUTHEAST PROPERTY
 CORNER.
 ELEV. 622.14

BM NO. 2
 CHISELED SQUARE ON THE END OF THE CURB RADIUS LOCATED ON THE
 DRIVEWAY ON THE NORTH SIDE OF KELLER SPRINGS ROAD, APPROXIMATELY
 500 FEET WEST OF DALLAS PARKWAY.
 ELEV. 626.24

ELECT. CONDUIT PROFILES						
LIBERTY PLAZA						
ADDISON, TEXAS						
JACK R. DAVIS & ASSOC.						
3535 TRAVIS, SUITE 100, DALLAS, TX.						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
JR	JR	2/85	H: 1" = 40' V: 1" = 6'	FG	C.84146T	