

CONSTRUCTION PLANS FOR

KELLER SPRINGS, DOOLEY ROAD IMPROVEMENTS

MAYOR : Honorable JERRY REDDING

CITY MANAGER:
RON WHITEHEAD

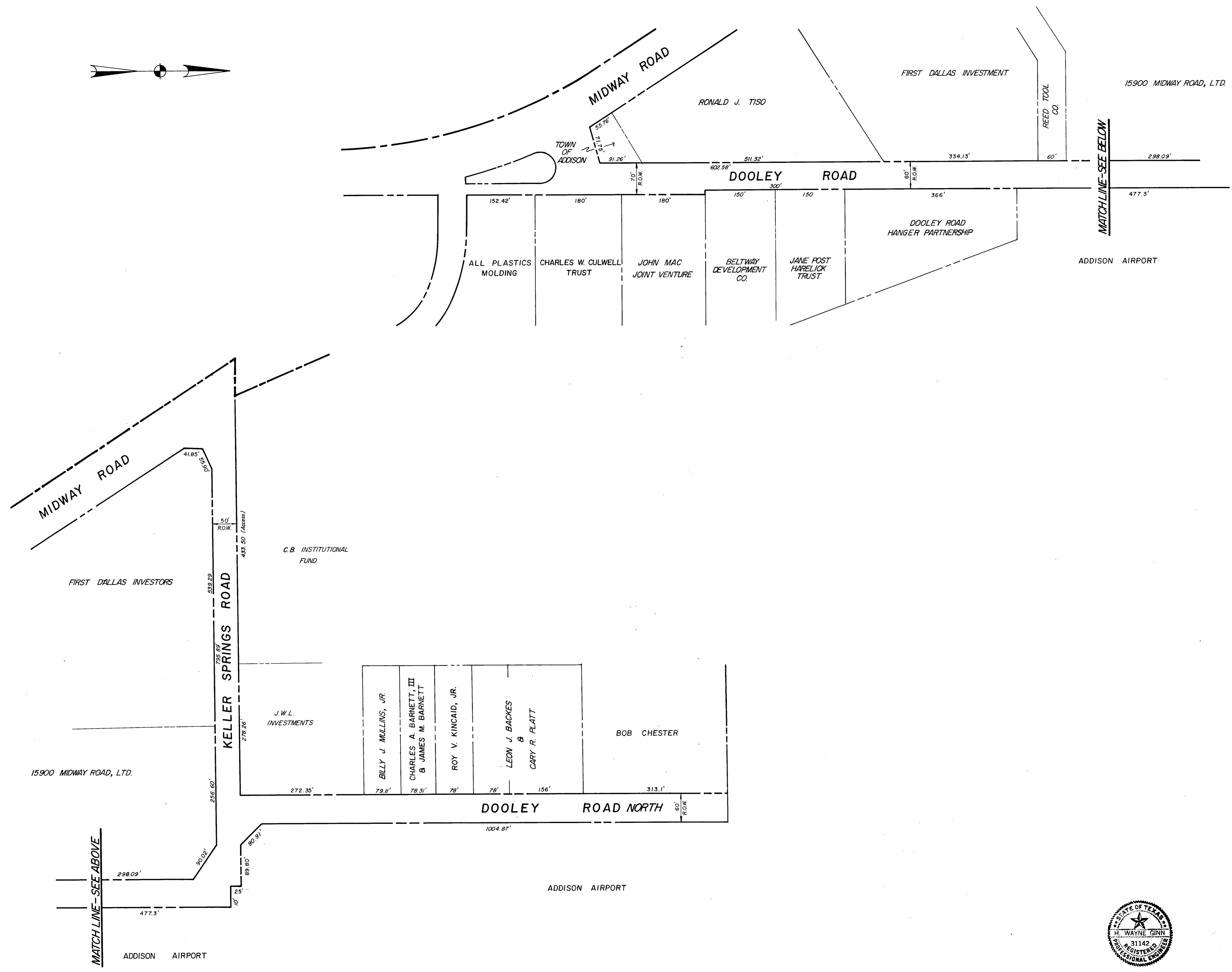
COUNCIL MEMBERS:
GREG COLE Mayor pro tem
BOBBY HATFIELD
RICHARD RODER
LYNN SPRULL
JOHN NOFLAN

Approved by: Jerry Redding Date: _____
Jerry Redding, Mayor of Addison

GINN, INC.
Consulting Engineers Dallas, Texas
JUNE 1986



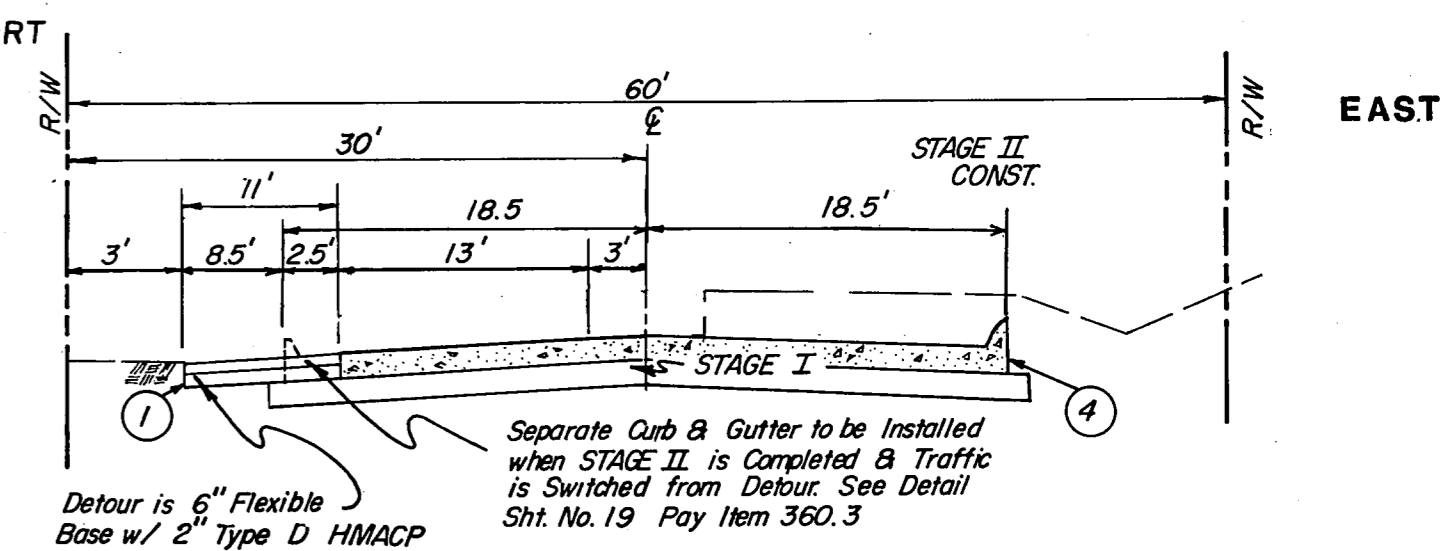
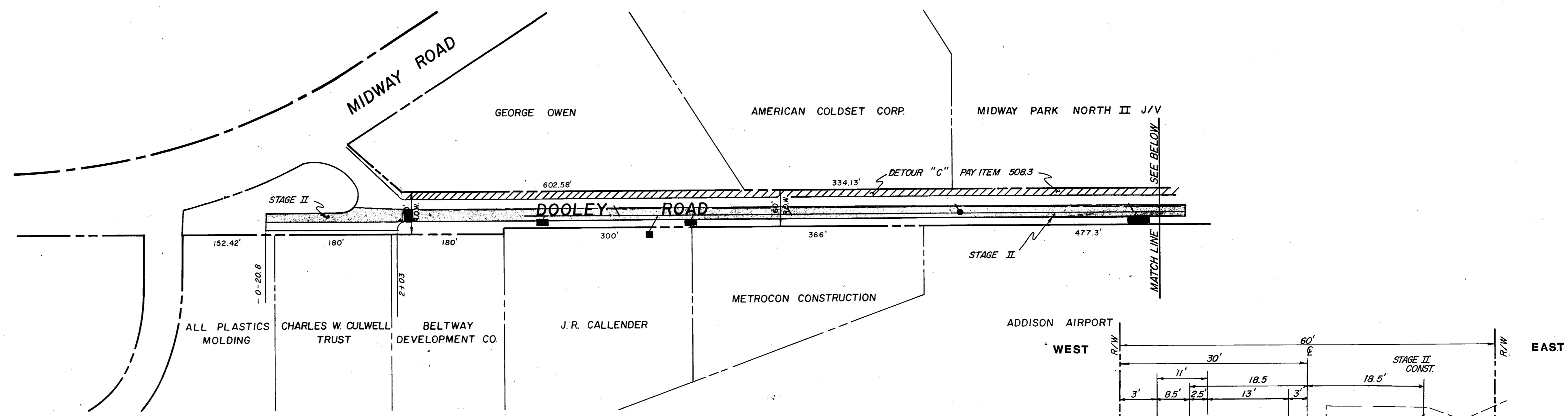
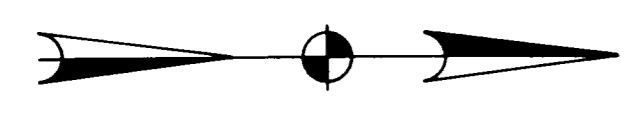
FF-23



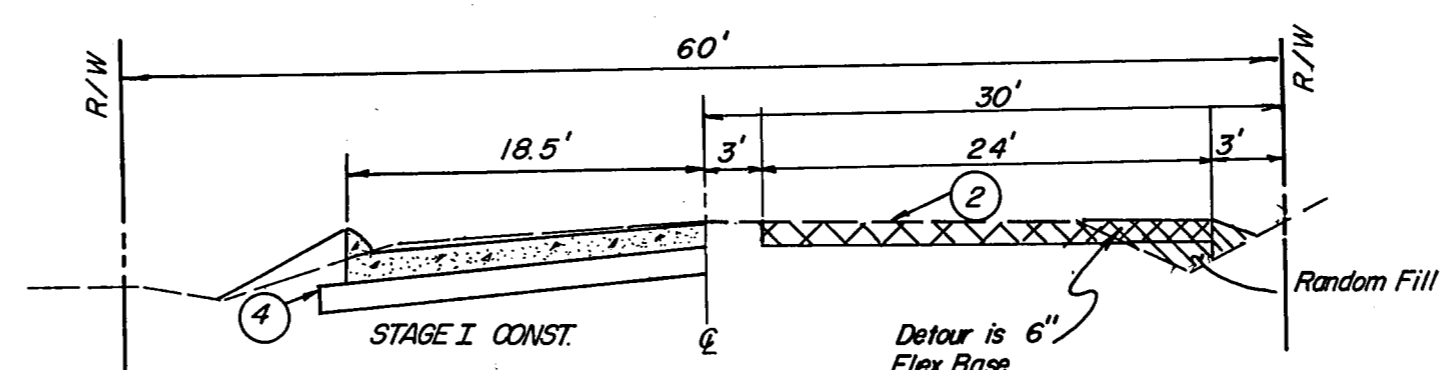
NOTE: OWNERSHIP OF PROPERTIES SHOWN TAKEN FROM TOWN OF ADDISON PLAT MAPS AS OF DECEMBER, 1985. CHANGES IN OWNERSHIP ARE NOT REFLECTED ON THESE DRAWINGS.



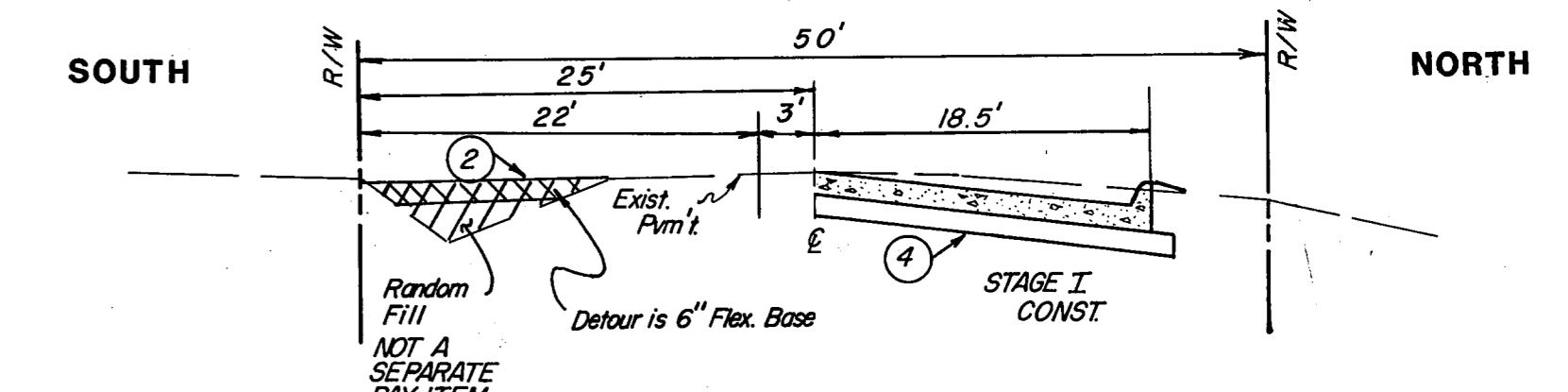
Updated Properties Owners & Added Frontages		RLO	8/20/86
No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
KELLER SPRINGS/DOOLEY RD. IMPROVEMENTS			
R.O.W. MAP			
GINN, INC.			
Consulting Engineers Dallas, Texas			
Designed - JCK	Drawn - RLO	Date - JUNE, 1986	Job No. - 263
Approved - HWG	Checked - JCK	Scale - 1" = 100'	Sheet 2 OF 30



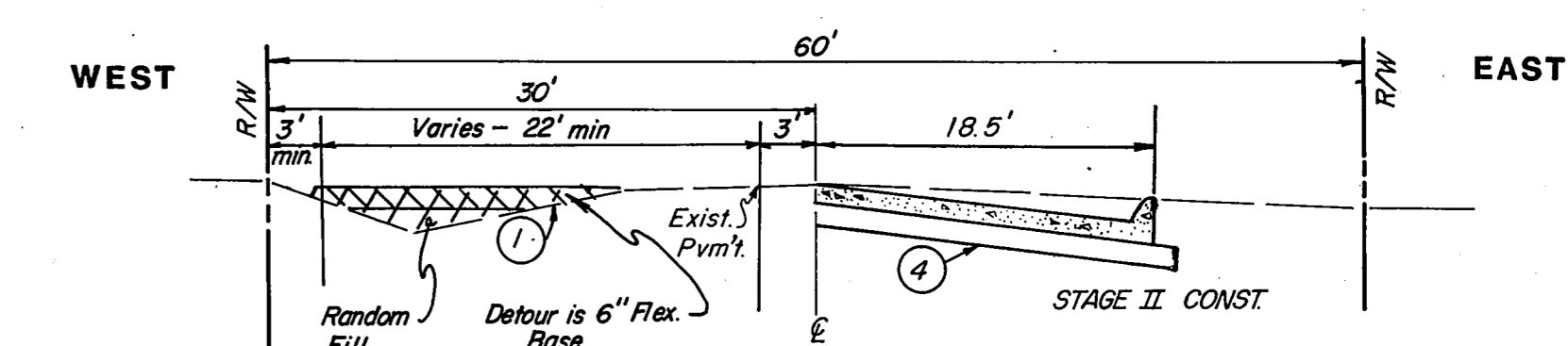
DETOUR "A" (STAGE II)
N.T.S. Dooley Rd. North PAY ITEM 508.1



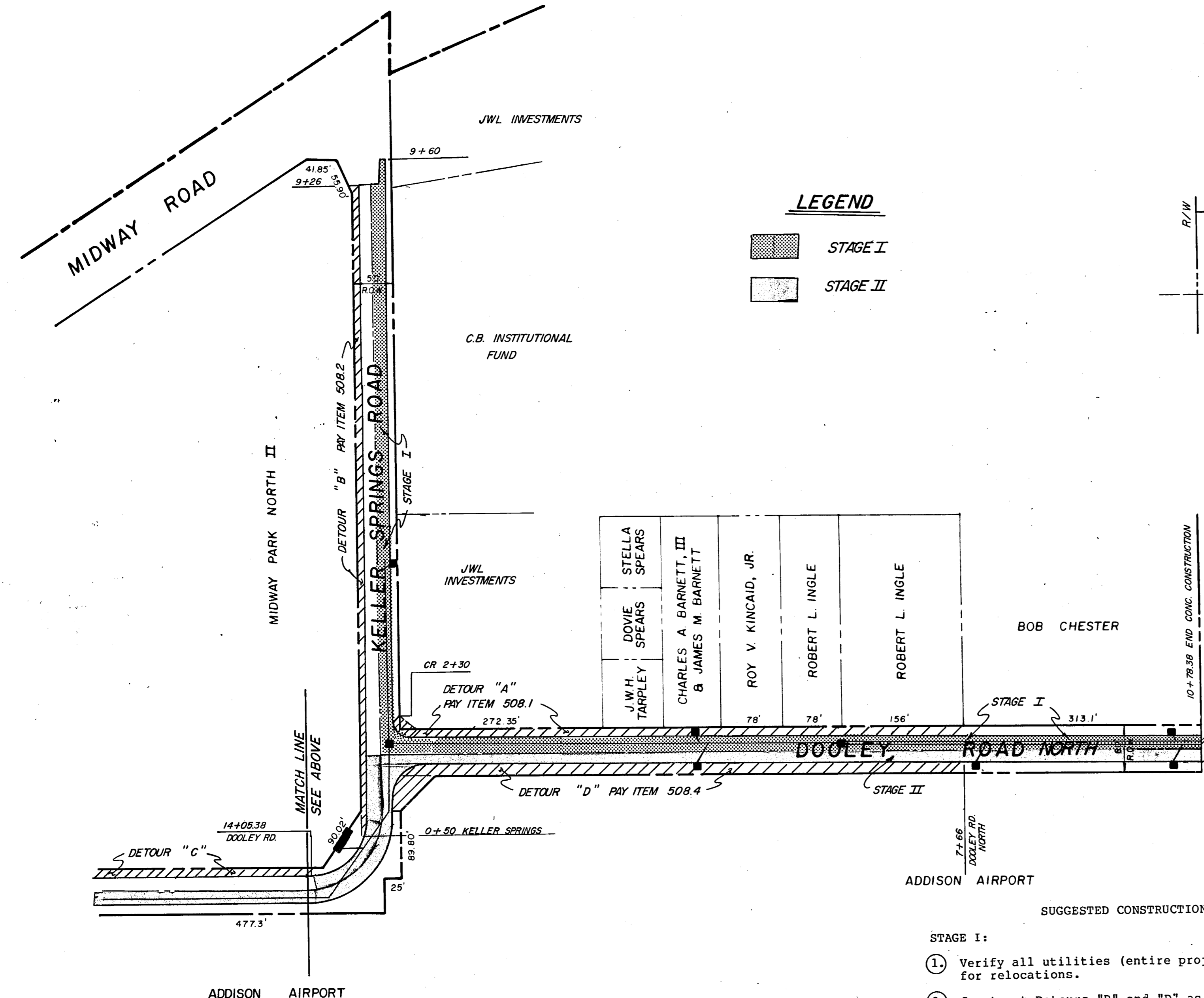
DETOUR "D" (STAGE I)
N.T.S. Dooley Road North PAY ITEM 508.4



DETOUR "B" (STAGE I)
N.T.S. Keller Springs Rd. PAY ITEM 508.2



DETOUR "C" (STAGE II)
N.T.S. Dooley Rd. PAY ITEM 508.3



LEGEND

STAGE I

STAGE II

- (3.) (cont'd.) Construct (North) storm sewer system Keller Springs Road from center line Dooley Road North to end.
- (4.) Construct concrete pavement (north) half Keller Springs Road (18.5' - b.c.) and (west) half Dooley Road North (18.5' - b.c.), with the exception of the curb and gutter section from Sta. 0+18.5 to Sta. 7+66, which will be constructed during Stage III (with the abandonment of Detour "A" and the construction of the inlet at Sta. 2+79.55).

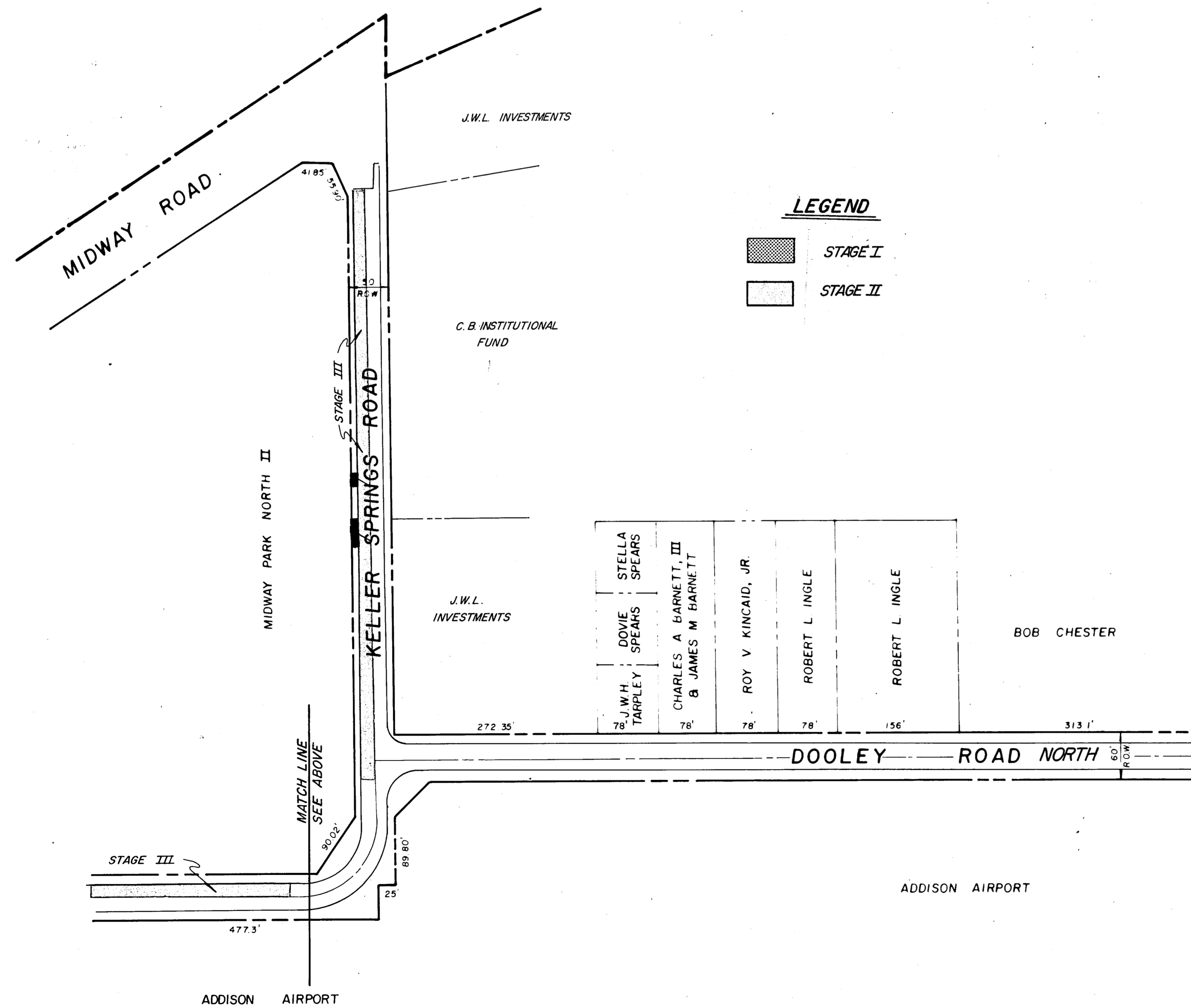
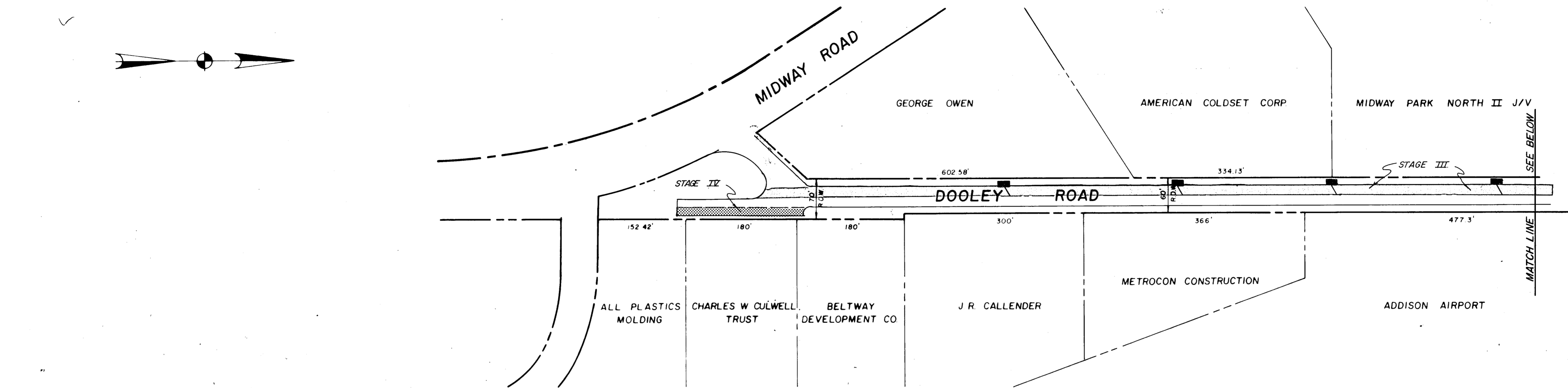
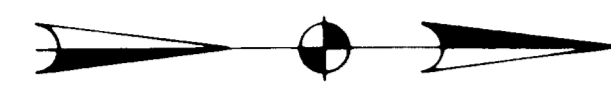
- STAGE II:**
- Construct Detours "C" and "A" as shown above.
 - Switch two-way traffic onto Detours "C" and "A" and switch westbound traffic onto new concrete pavement Keller Springs Road, maintaining eastbound traffic on Detour "B". Also abandon and remove Detour "D".
 - Complete (east) storm sewer Dooley Road North; construct entire storm sewer system Dooley Road paving Sta. 14+05 to Sta. 15+00 and Keller Springs paving Sta. 0+37.54 to Sta. 1+82. Construct (east) storm sewer system Dooley Road.
 - Complete concrete pavement (east) half Dooley Road North (18.5' - b.c.), construct complete (37' - b.b.) concrete pavement Dooley Road Sta. 14+05.38 to Sta. 15+00 and Keller Springs road Sta. 0+37.54 to Sta. 1+82. Construct concrete pavement (east) half Dooley Road (18.5' - b.c.) Sta. 2+03 to Sta. 14+05.38 and (west) half Dooley Road Sta. 0-20.8 to Sta. 2+03.

- SUGGESTED CONSTRUCTION SEQUENCE**
- STAGE I:**
- Verify all utilities (entire project), arrange for relocations.
 - Construct Detours "B" and "D" as shown above.
 - Switch two-way traffic onto Detours "B" and "D"; construct (west) storm sewer system Dooley Road North, with the exception of the inlet at Sta. 2+79.55, which will be constructed during Stage III (with the abandonment of Detour "A" and the construction of the curb and gutter section).

STAGES I & II



No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
KELLER SPRINGS/DOOLEY RD. IMPROVEMENTS			
CONSTRUCTION SEQUENCE			
GINN, INC. Consulting Engineers Dallas, Texas			
Designed - JCK	Drawn - RLO	Date - JUNE, 1986	Job No. - 263
Approved - HWG	Checked - JCK	Scale - 1" = 100'	Sheet 3 of 30



LEGEND

- STAGE I
- STAGE II

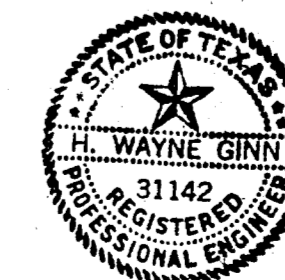
STAGE III:

1. Switch northbound traffic (one-way) onto new concrete pavement Dooley Road and maintain westbound traffic (one-way) on concrete pavement Keller Springs Road. Open Dooley Road North to two-way traffic.
2. Remove all temporary detours; construct curb and gutter section and inlet at Sta. 2+79.55 (west) Dooley Road North as mentioned in Stage I. Also construct asphalt transition Dooley Road North Sta. 10+78.38 to Sta. 11+20.
3. Complete (south) storm sewer Keller Springs Road and (west) storm sewer Dooley Road.
4. Complete concrete pavement (south) half Keller Springs Road (18.5' - b.c.) and (west) half Dooley Road (18.5' - b.c.) from Midway Road to Sta. 14+05.38.

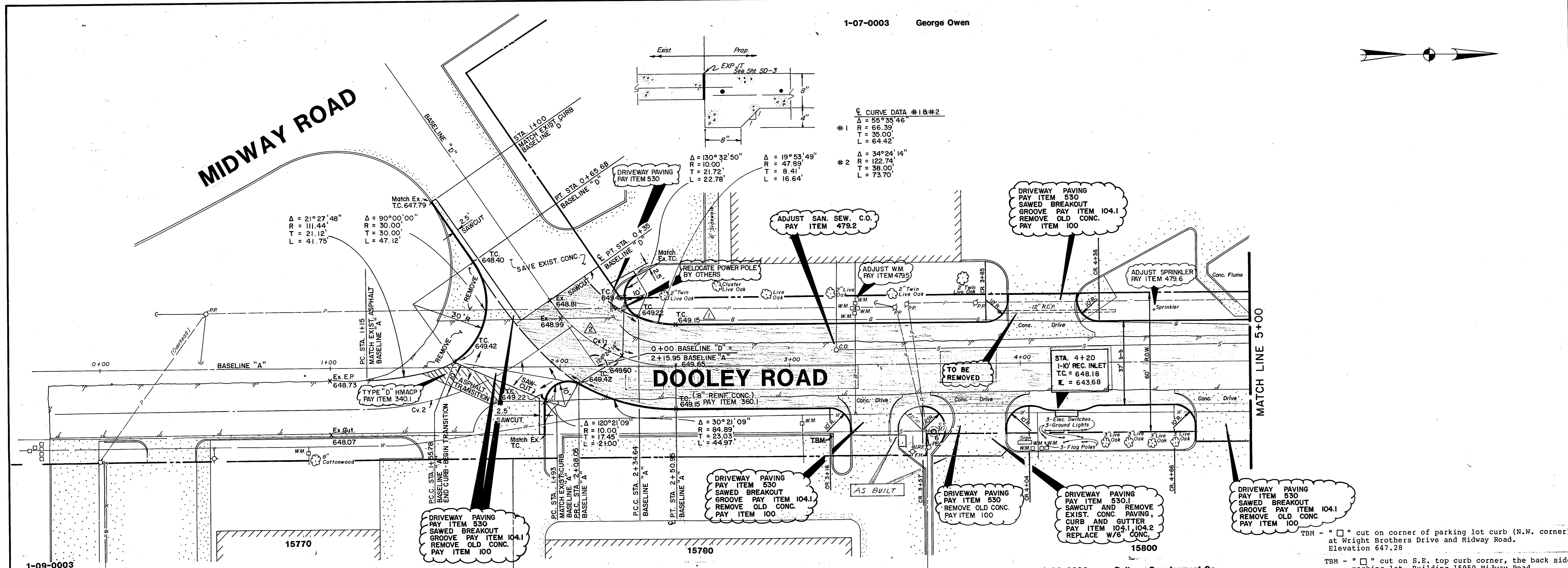
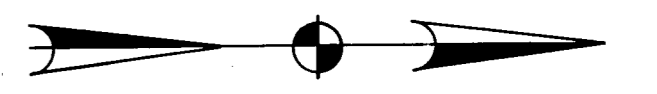
STAGE IV:

1. Construct concrete pavement and drainage improvements (east) half Dooley Road Sta. 0+20.8 to Sta. 2+03.

STAGES III & IV

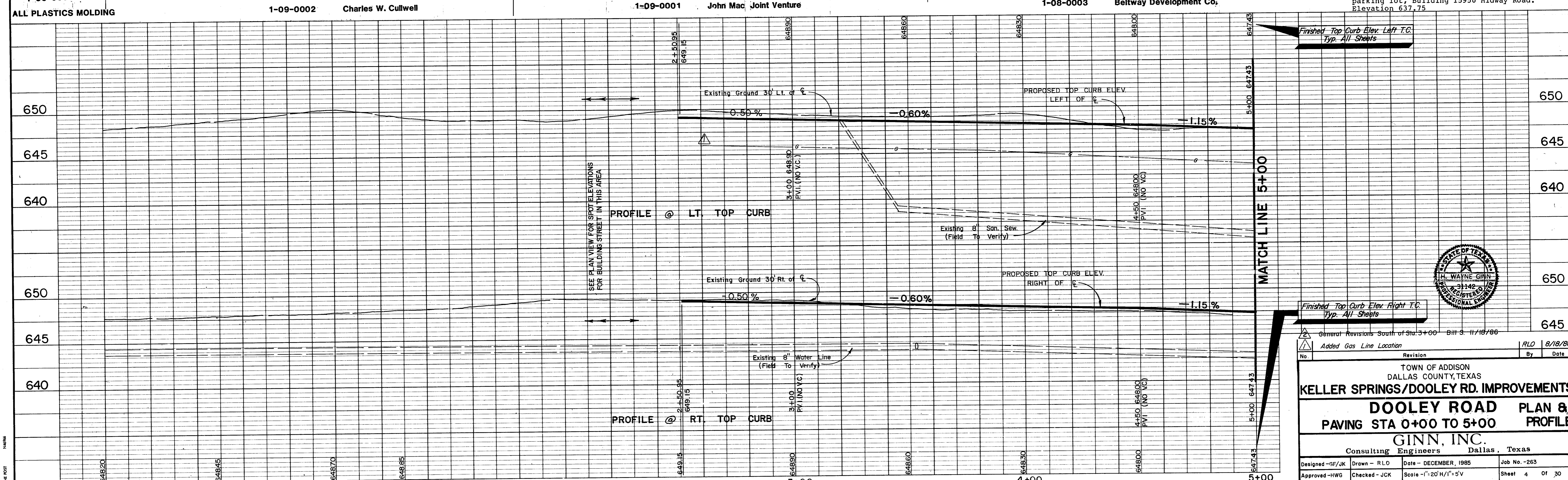


No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
KELLER SPRINGS/DOOLEY RD. IMPROVEMENTS			
CONSTRUCTION SEQUENCE			
GINN, INC. Consulting Engineers Dallas, Texas			
Designed - JCK	Drawn - RLO	Date - JUNE, 1986	Job No. - 263
Approved - HWG	Checked - JCK	Scale - 1" = 100'	Sheet 3a Of 30



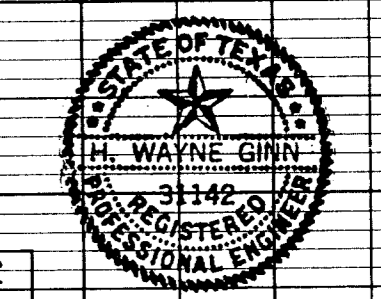
¢ CURVE DATA #18#2

#1	Δ = 55° 35' 46"
	R = 66.39
	T = 35.00
	L = 64.42'
#2	Δ = 34° 24' 14"
	R = 122.74'
	T = 58.00'
	L = 73.70'



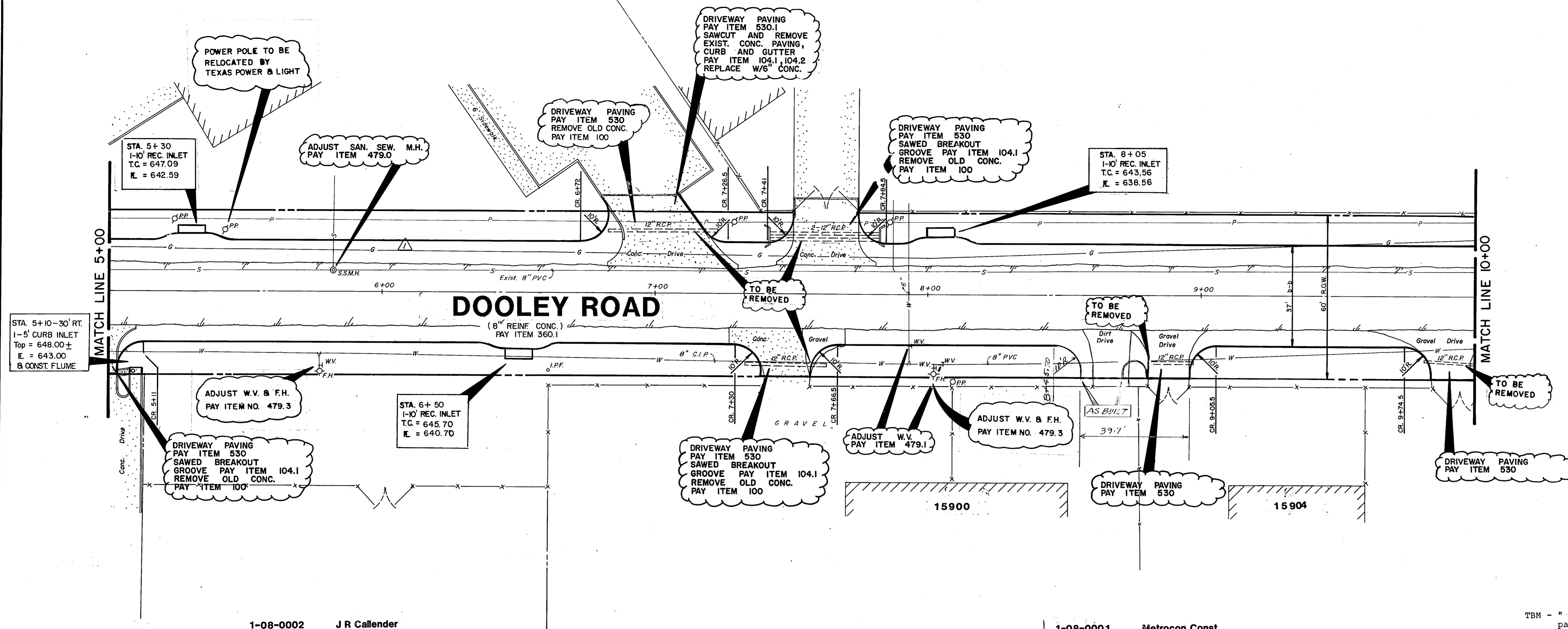
TBM - "□" cut on corner of parking lot curb (N.W. corner) at Wright Brothers Drive and Midway Road. Elevation 647.28

TBM - "□" cut on S.E. top curb corner, the back side parking lot, Building 15950 Midway Road. Elevation 637.75

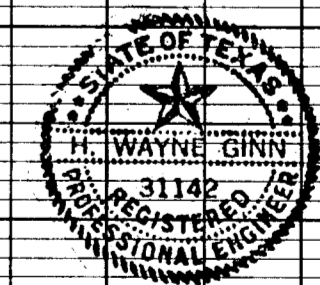
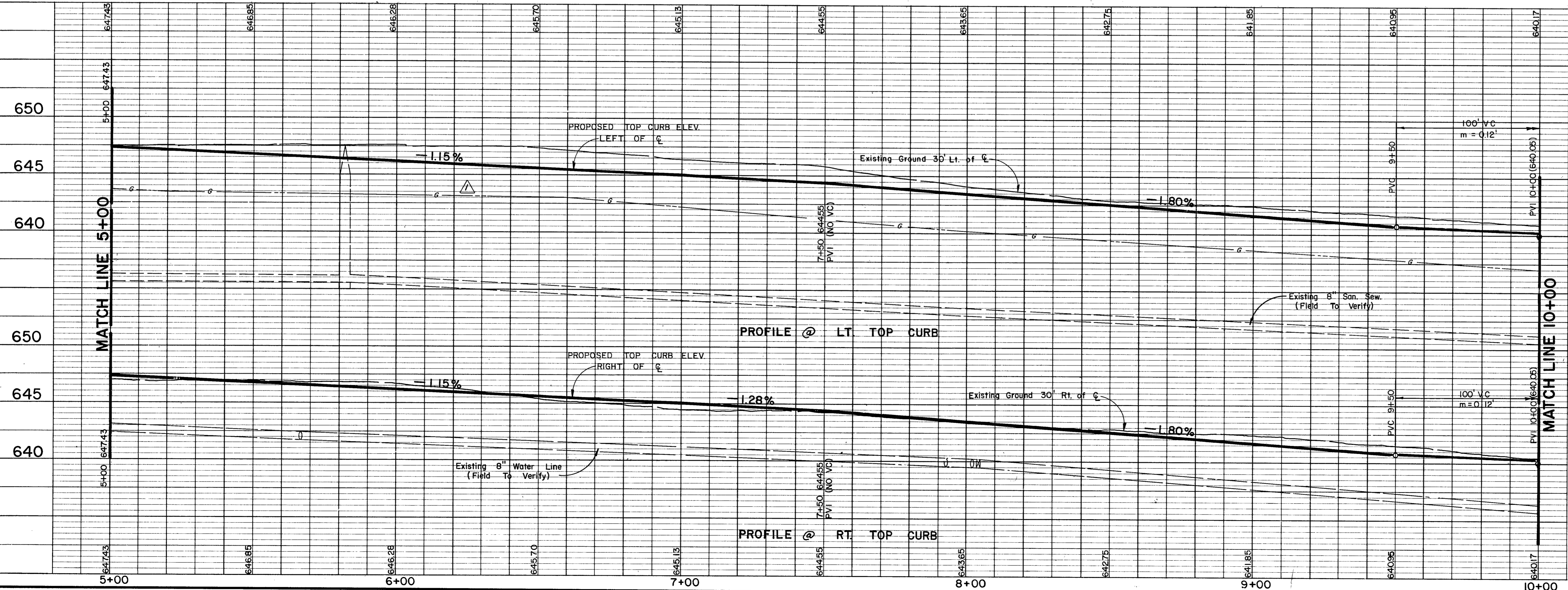


Town of Addison, Dallas County, Texas		
KELLER SPRINGS/DOOLEY RD. IMPROVEMENTS		
DOOLEY ROAD PLAN & PAVING STA 0+00 TO 5+00		PROFILE
GINN, INC.		
Consulting Engineers Dallas, Texas		
Designed - GF/JK	Drawn - RLO	Date - DECEMBER, 1985
Approved - HWG	Checked - JCK	Scale - 1"=20'H/1"=5'V
		Job No. - 263
		Sheet 4 of 30

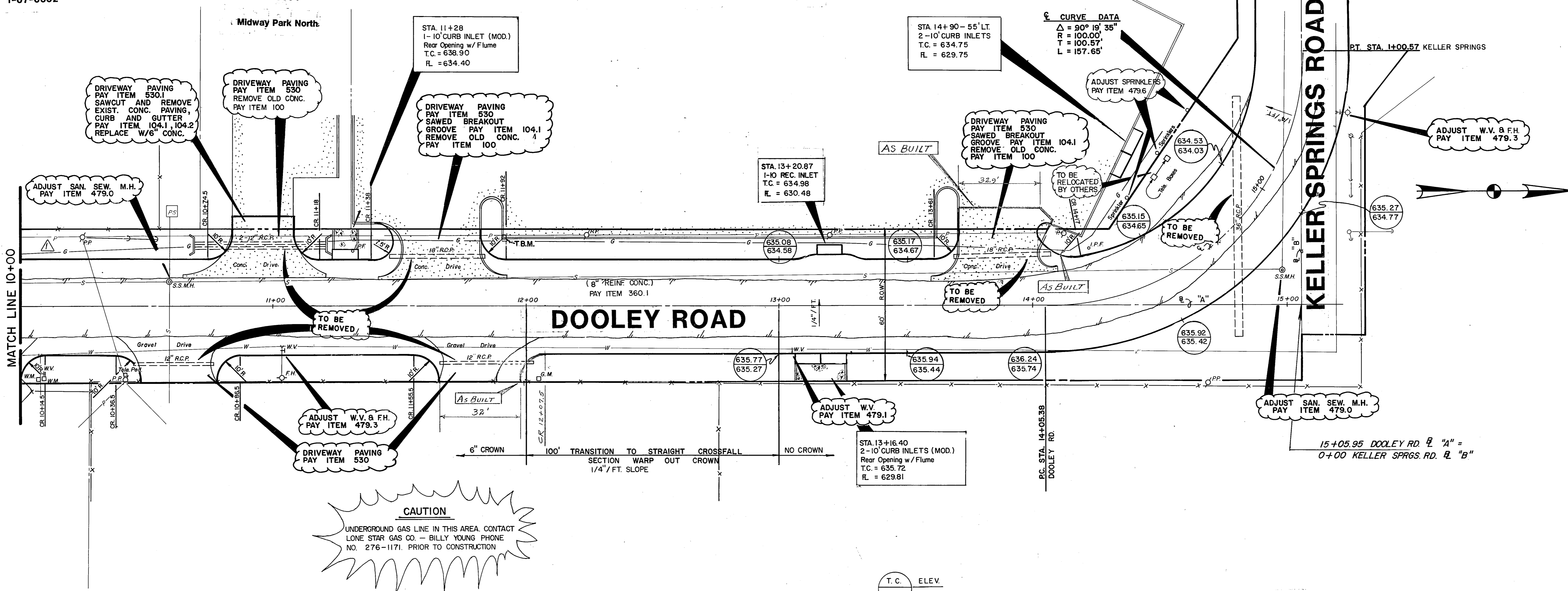
TITLE BLOCK



TBM - " " cut on S.E. top curb corner, the back side parking lot, Building 15950 Midway Road. Elevation 637.75



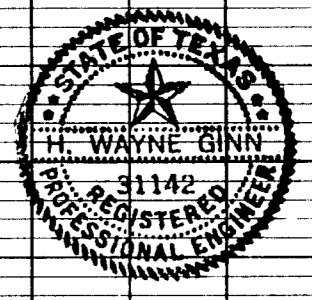
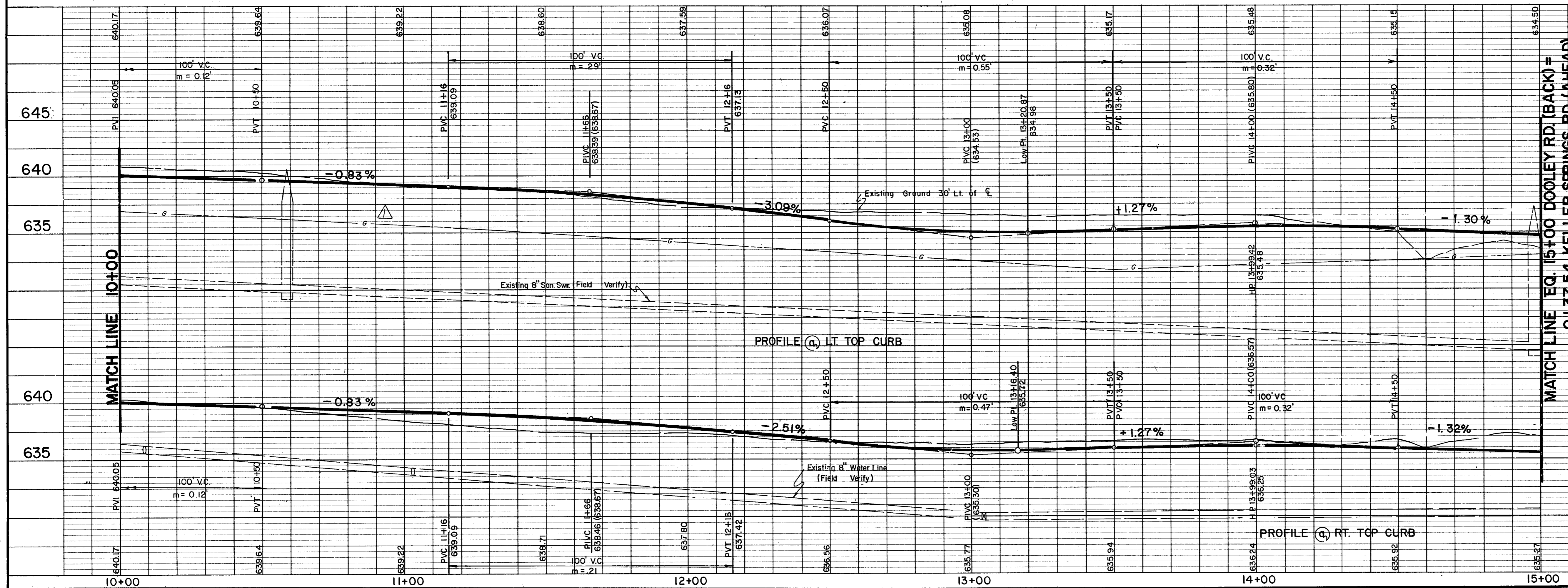
Added Exist. Gas Line Location		RLO	8/18/86
No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
KELLER SPRINGS/DOOLEY RD. IMPROVEMENTS			
DOOLEY ROAD		PLAN & PROFILE	
PAVING STA 5+00 TO 10+00		GINN, INC.	
Consulting Engineers Dallas, Texas			
Designed - GF/JK	Drawn - RLO	Date - DECEMBER, 1985	Job No. - 263
Approved - HWG	Checked - JCK	Scale - 1"=20'H/1"=5'V	Sheet 5 of 30



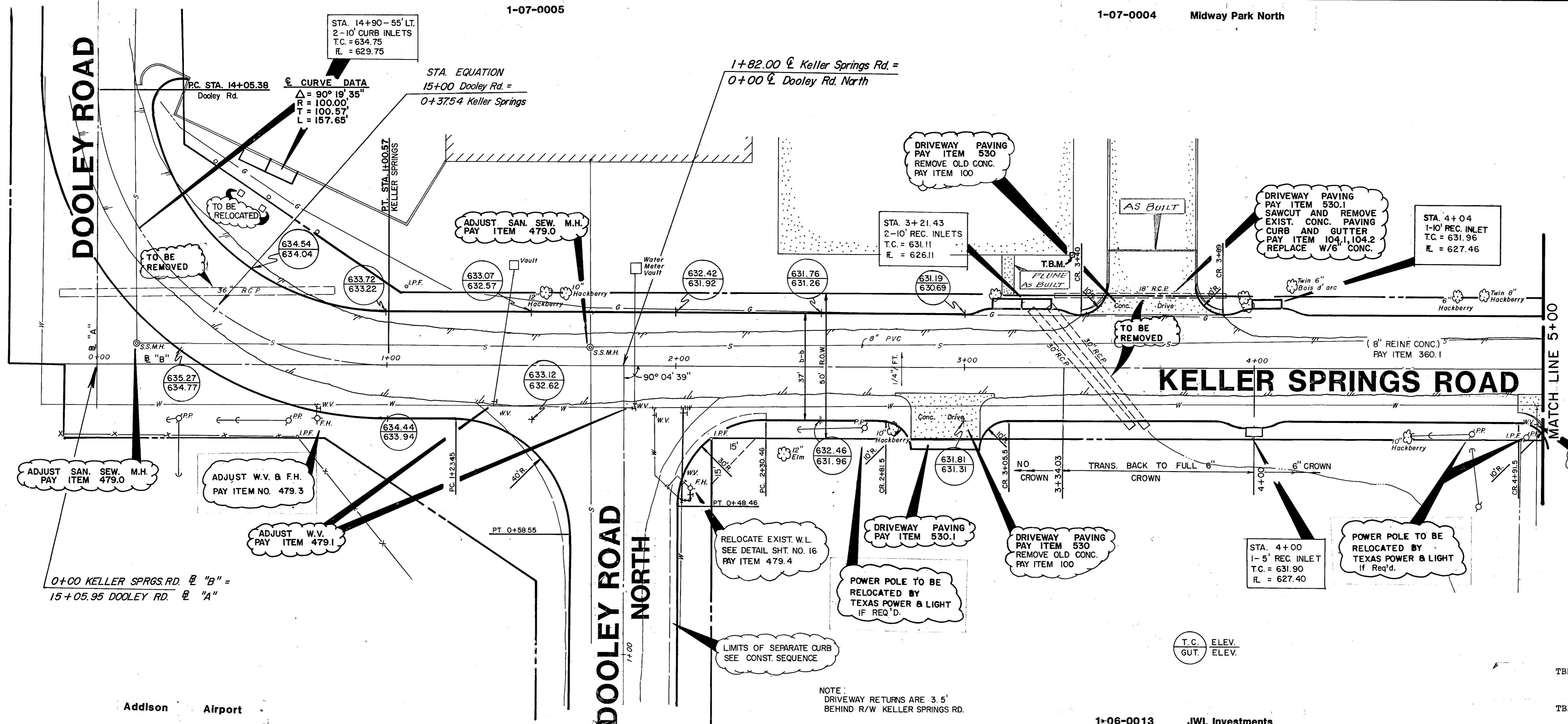
CAUTION
 UNDERGROUND GAS LINE IN THIS AREA. CONTACT LONE STAR GAS CO. - BILLY YOUNG PHONE NO. 276-1171. PRIOR TO CONSTRUCTION

T.C. ELEV.
 GUTT. ELEV.

TBM - "□" cut on S.E. top curb corner, the back side parking lot, Building 15950 Midway Road. Elevation 637.75



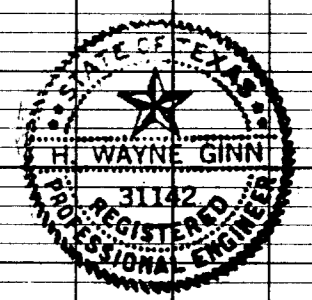
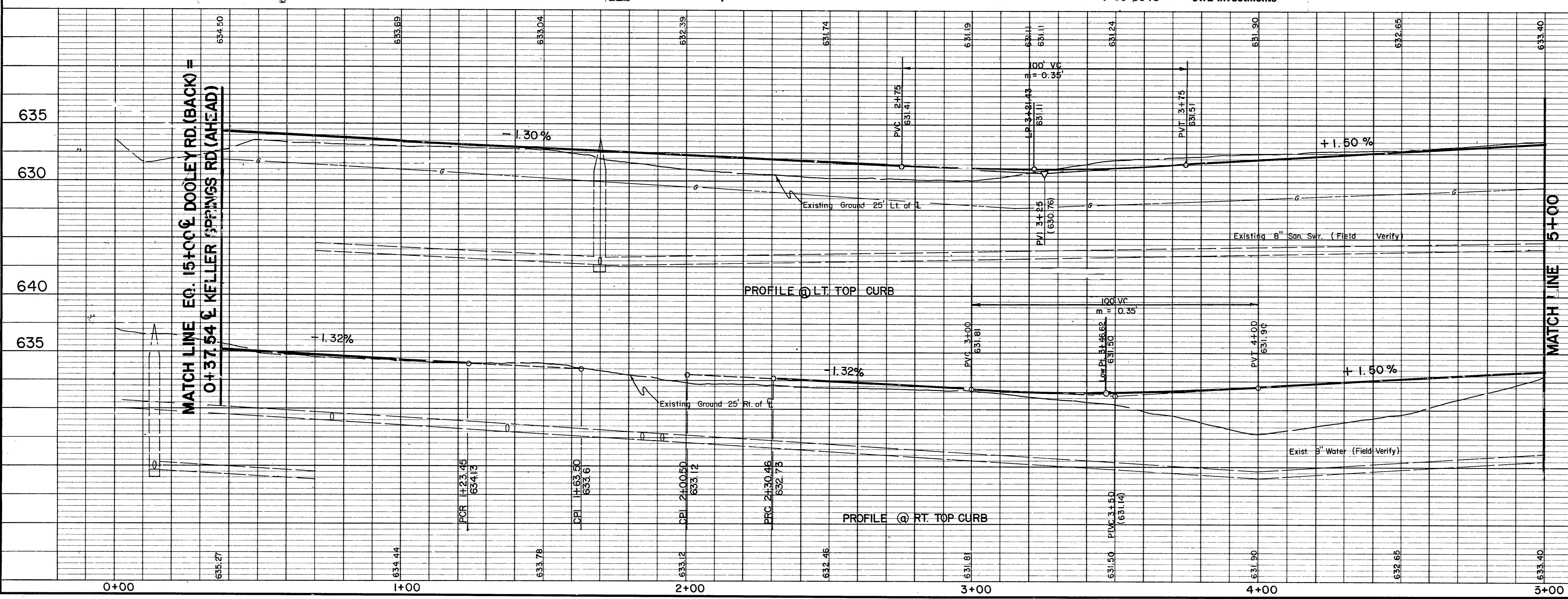
Added Exist. Gas Line Location		RLO 8/18/96
No.	Revision	By Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS		
KELLER SPRINGS/DOOLEY RD. IMPROVEMENTS		
DOOLEY ROAD PLAN & PAVING STA. 10+00 TO 15+00 PROFILE		
GINN, INC. Consulting Engineers Dallas, Texas		
Designed - GJ/JK	Drawn - RLO	Date - DECEMBER 1995 Job No. - 263
Approved - HWG	Checked - JCK	Scale - 1" = 20' H/1" = 5' V Sheet 6 of 30



TBM - " " cut on N.W. top curb, corner of parking lot, Building 15950 Midway Road. Elevation 634.57

TBM - " " cut on S.W. top curb, corner of parking lot, 4125 Keller Springs Road ± 60' west of Midway Place sign. Elevation 634.62

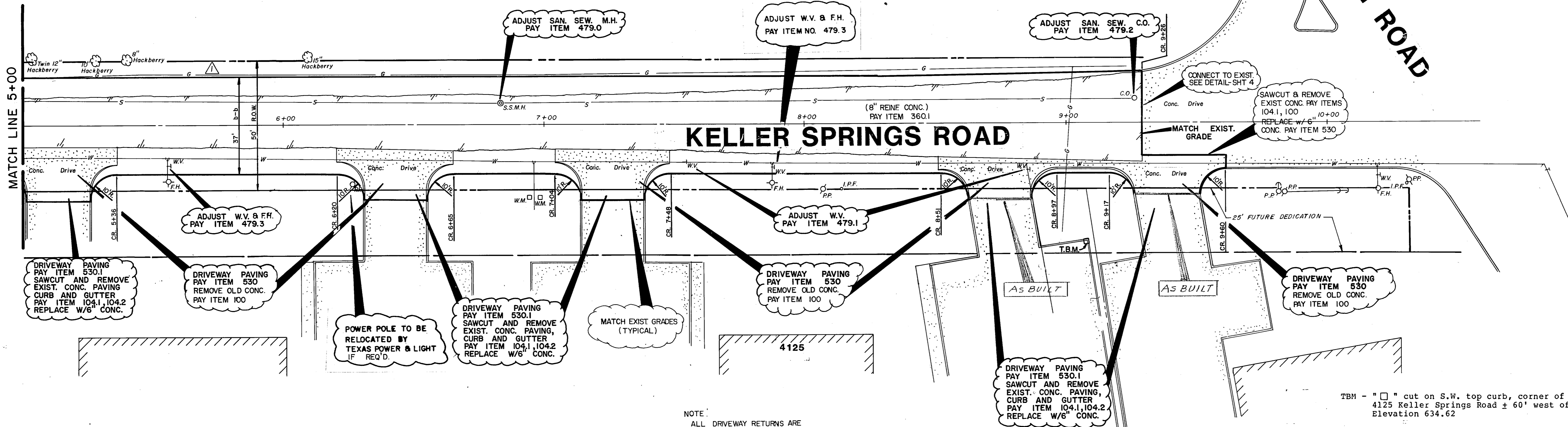
NOTE: DRIVEWAY RETURNS ARE 3.5' BEHIND R/W KELLER SPRINGS RD.



Added Exist. Gas Line Location		RLO	8/18/86
No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
KELLER SPRINGS/DOOLEY RD. IMPROVEMENTS			
KELLER SPRINGS ROAD PLAN			
PAVING 0+37.54 TO 5+00 & PROFILE			
GINN, INC.			
Consulting Engineers Dallas, Texas			
Designed - GF/JR	Drawn - RLO	Date - DECEMBER, 1985	Job No. - 263
Approved - HWG	Checked - JCK	Scale - 1"=20'H/1"=5'V	Sheet 7 of 30

MIDWAY ROAD

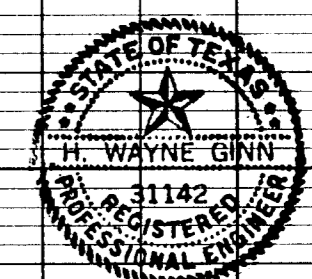
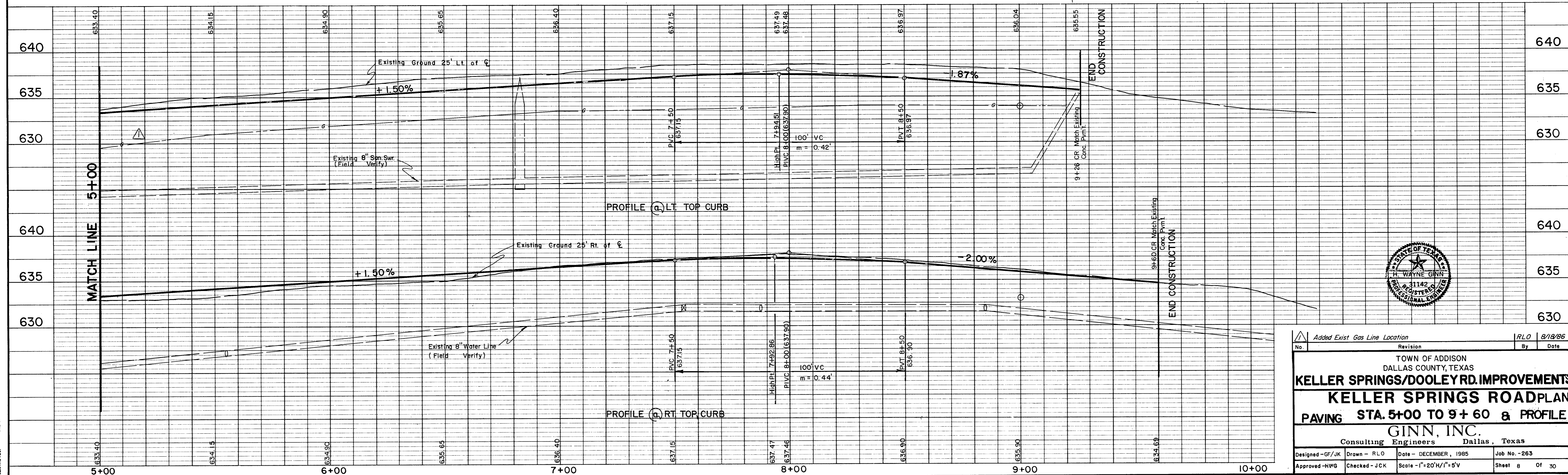
KELLER SPRINGS ROAD



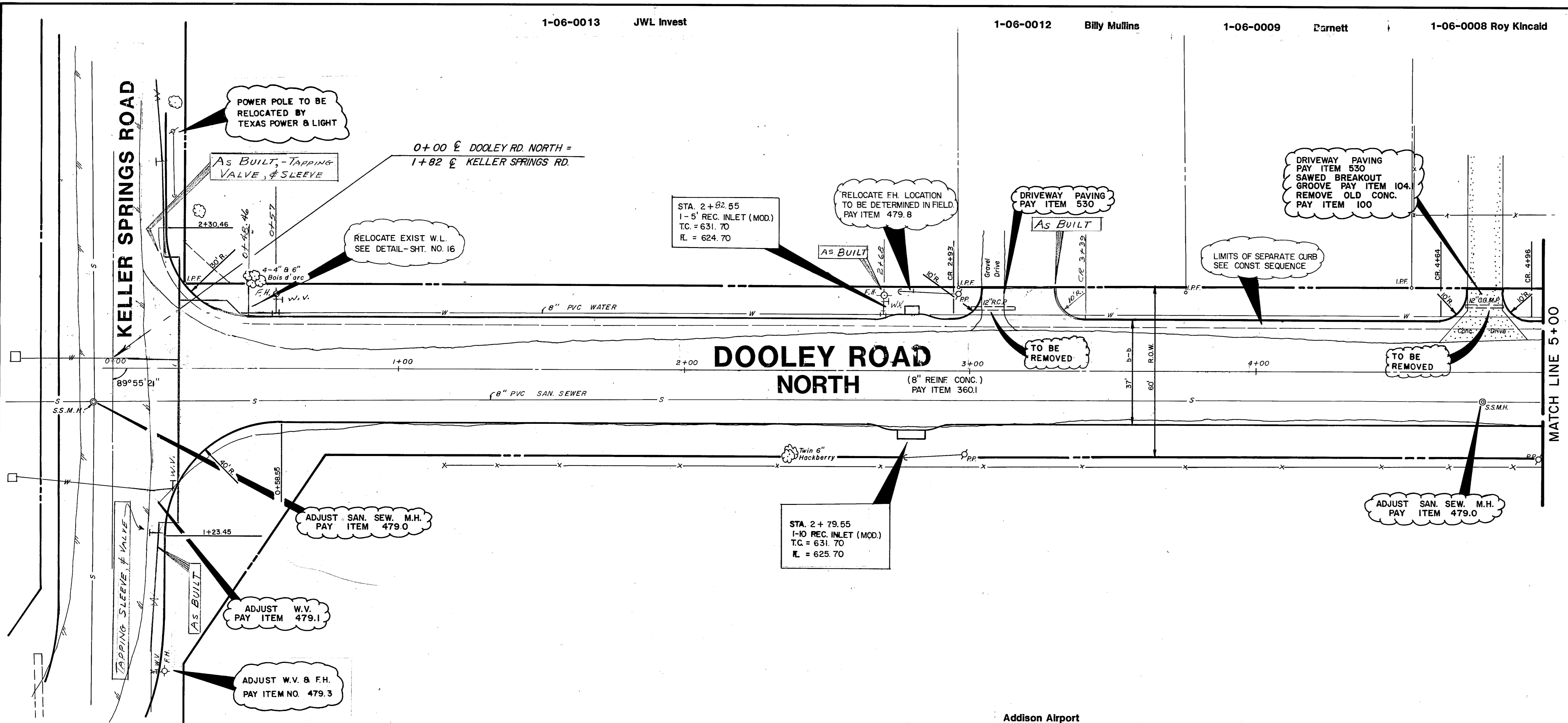
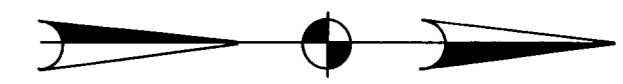
1-06-0022 C.B. institutional Fund VII

NOTE: ALL DRIVEWAY RETURNS ARE MIN. 3.5' BEHIND R/W

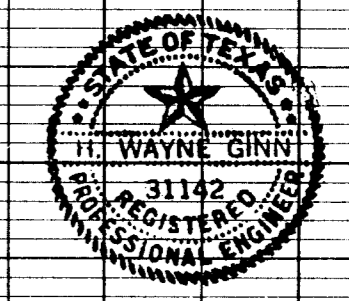
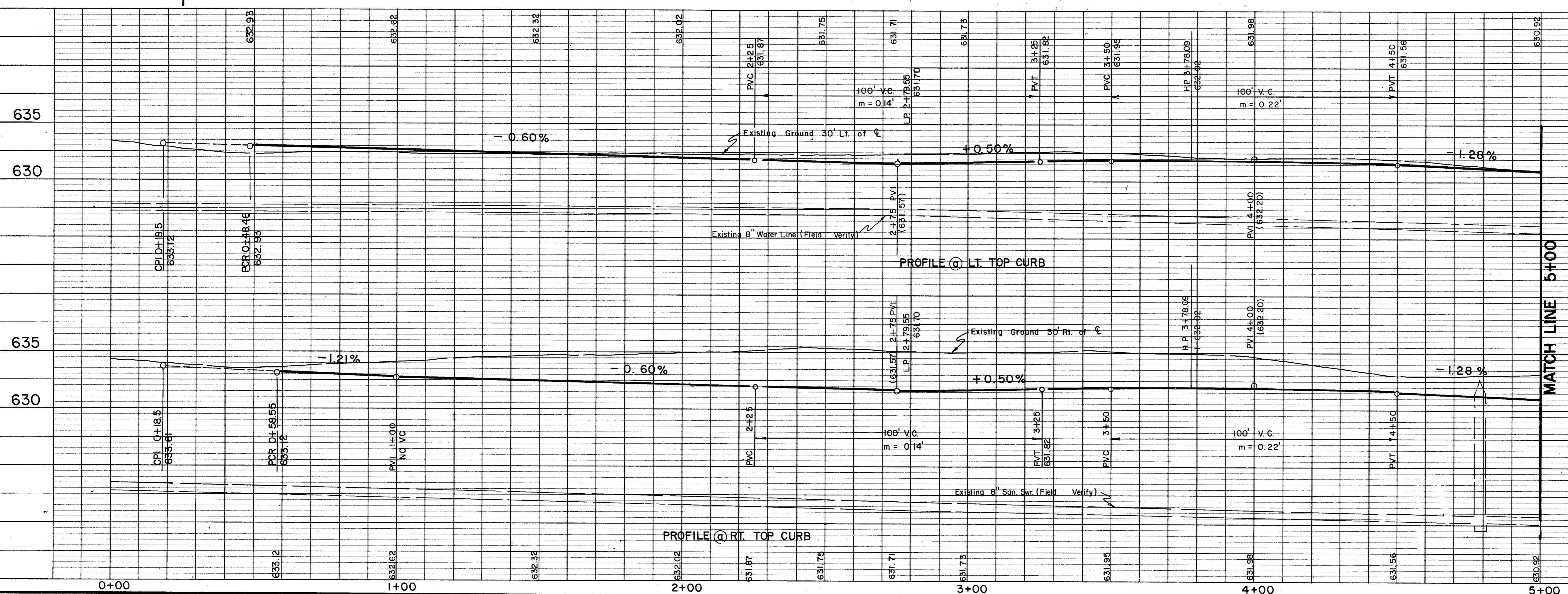
1-06-0035 JWJ Investments



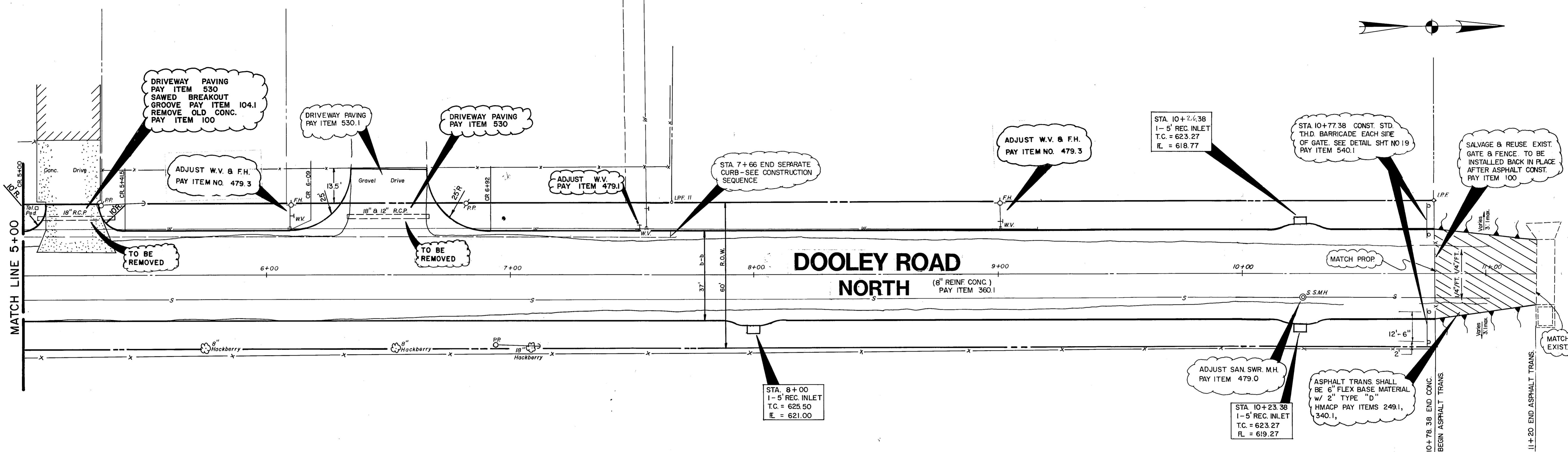
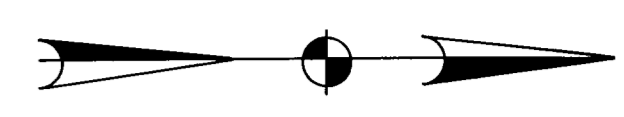
Added Exist. Gas Line Location		RLO	8/18/86
No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
KELLER SPRINGS/DOOLEY RD. IMPROVEMENTS			
KELLER SPRINGS ROAD PLAN			
PAVING STA. 5+00 TO 9+60 & PROFILE			
GINN, INC.			
Consulting Engineers Dallas, Texas			
Designed - GF/JK	Drawn - RLO	Date - DECEMBER, 1985	Job No. - 263
Approved - HWG	Checked - JCK	Scale - 1"=20'H/1"=5'V	Sheet 8 of 30



TBM - "□" cut on N.W. top curb, corner of parking lot, Building 15950 Midway Road, Elevation 634.57

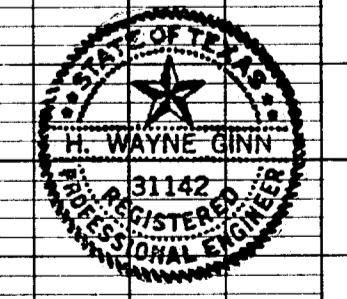
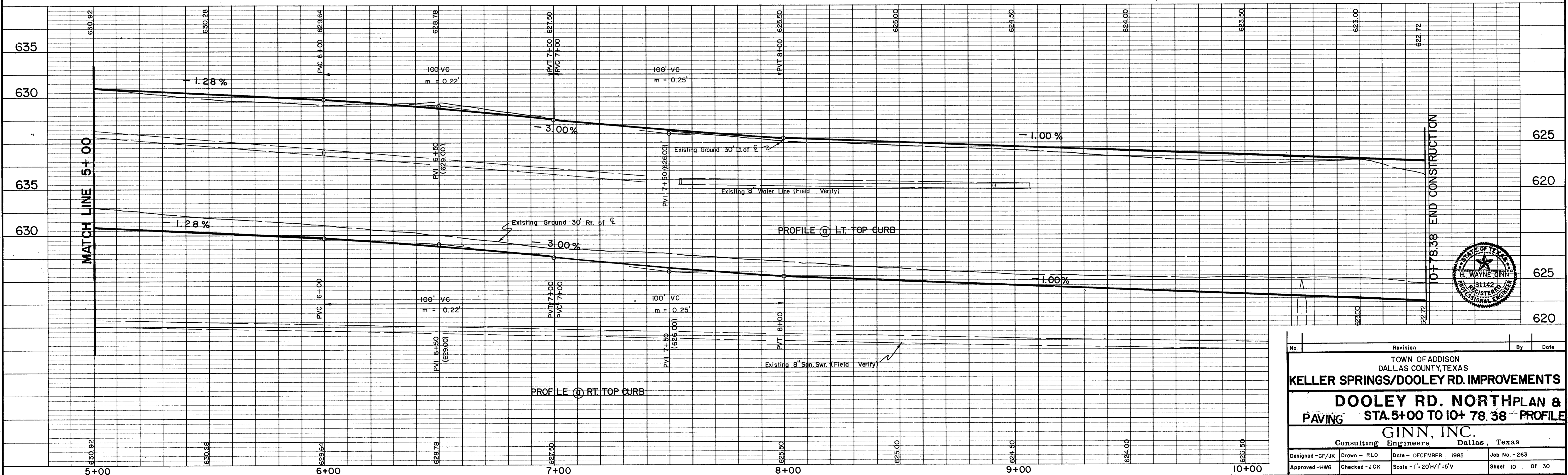


No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
KELLER SPRINGS/DOOLEY RD. IMPROVEMENTS			
DOOLEY RD. NORTH PLAN & PAVING STA. 0+00 TO 5+00 PROFILE			
GINN, INC.			
Consulting Engineers Dallas, Texas			
Designed - GF/JK	Drawn - RLO	Date - DECEMBER, 1985	Job No. - 263
Approved - HWG	Checked - JCK	Scale - 1" = 20' H/W 1" = 5' V	Sheet 9 of 30



TBM - " " cut on N.W. top curb, corner of parking lot, Building 15950 Midway Road. Elevation 634.57

Addison Airport

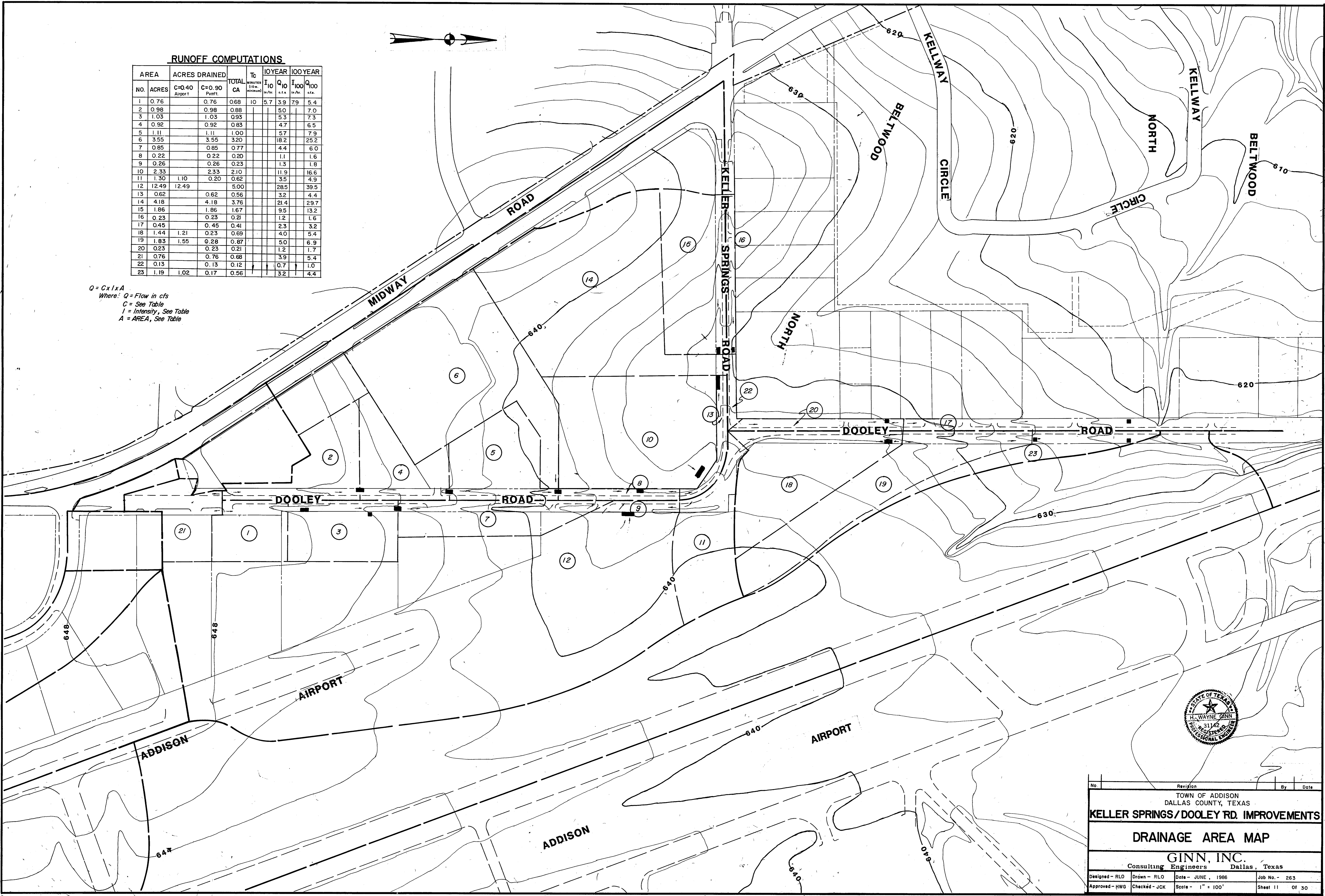
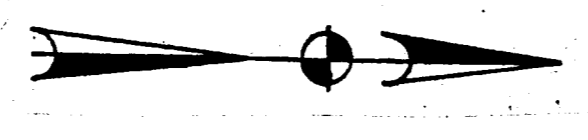


No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS KELLER SPRINGS/DOOLEY RD. IMPROVEMENTS DOOLEY RD. NORTH PLAN & PAVING STA. 5+00 TO 10+78.38 PROFILE GINN, INC. Consulting Engineers Dallas, Texas			
Designed - GF/JK	Drawn - RLO	Date - DECEMBER 1985	Job No. - 263
Approved - HWG	Checked - JCK	Scale - 1" = 20'H / 1" = 5'V	Sheet 10 of 30

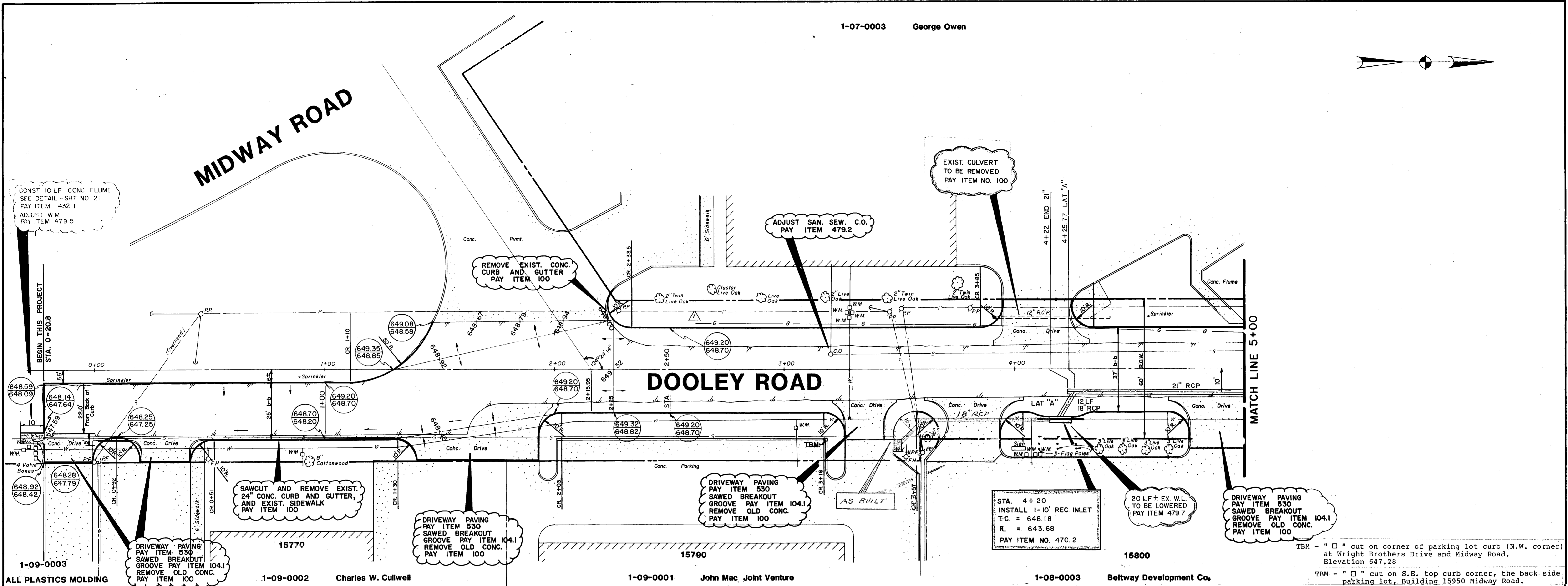
RUNOFF COMPUTATIONS

NO.	AREA ACRES	ACRES DRAINED		TOTAL CA	Tc MINUTES (10-min. max.)	10 YEAR				100 YEAR			
		C=0.40 Airport	C=0.90 Paved			I	Q	I	Q	I	Q		
1	0.76		0.76	0.68	10	5.7	3.9	7.9	5.4				
2	0.98		0.98	0.88			5.0		7.0				
3	1.03		1.03	0.93			5.3		7.3				
4	0.92		0.92	0.83			4.7		6.5				
5	1.11		1.11	1.00			5.7		7.9				
6	3.55		3.55	3.20			18.2		25.2				
7	0.85		0.85	0.77			4.4		6.0				
8	0.22		0.22	0.20			1.1		1.6				
9	0.26		0.26	0.23			1.3		1.8				
10	2.33		2.33	2.10			11.9		16.6				
11	1.30	1.10	0.20	0.62			3.5		4.9				
12	12.49	12.49		5.00			28.5		39.5				
13	0.62		0.62	0.56			3.2		4.4				
14	4.18		4.18	3.76			21.4		29.7				
15	1.86		1.86	1.67			9.5		13.2				
16	0.23		0.23	0.21			1.2		1.6				
17	0.45		0.45	0.41			2.3		3.2				
18	1.44	1.21	0.23	0.69			4.0		5.4				
19	1.83	1.55	0.28	0.87			5.0		6.9				
20	0.23		0.23	0.21			1.2		1.7				
21	0.76		0.76	0.68			3.9		5.4				
22	0.13		0.13	0.12			0.7		1.0				
23	1.19	1.02	0.17	0.56			3.2		4.4				

Q = C x I x A
 Where: Q = Flow in cfs
 C = See Table
 I = Intensity, See Table
 A = AREA, See Table

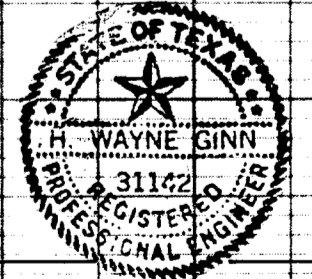
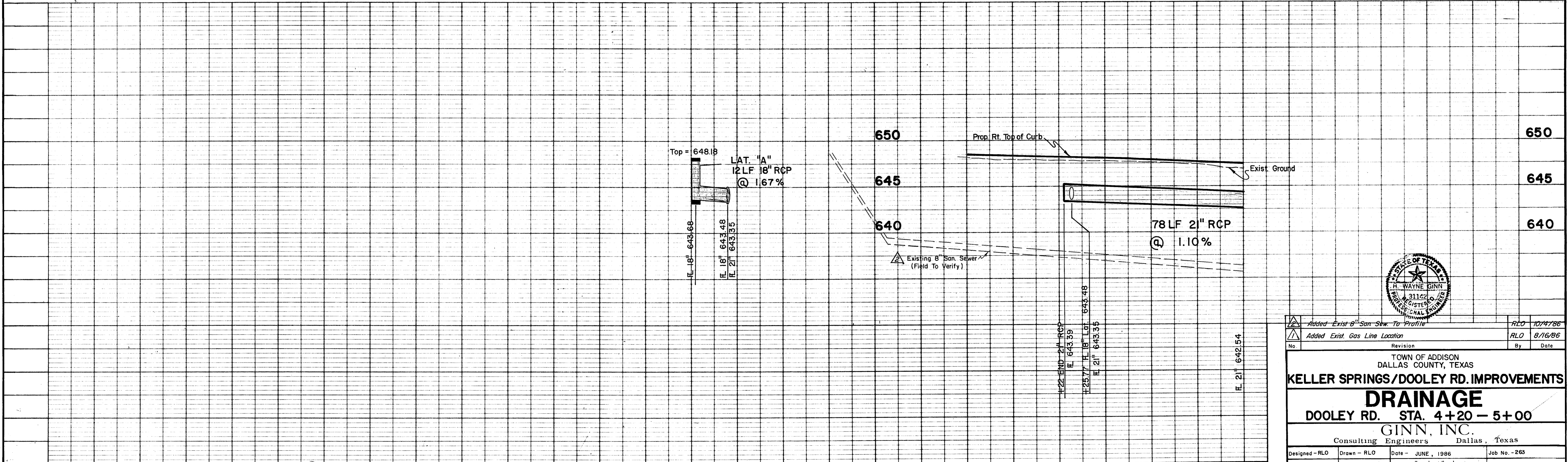


No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
KELLER SPRINGS / DOOLEY RD. IMPROVEMENTS			
DRAINAGE AREA MAP			
GINN, INC. Consulting Engineers Dallas, Texas			
Designed - RLO	Drawn - RLO	Date - JUNE, 1986	Job No. - 263
Approved - HWG	Checked - JCK	Scale - 1" = 100'	Sheet 11 of 30

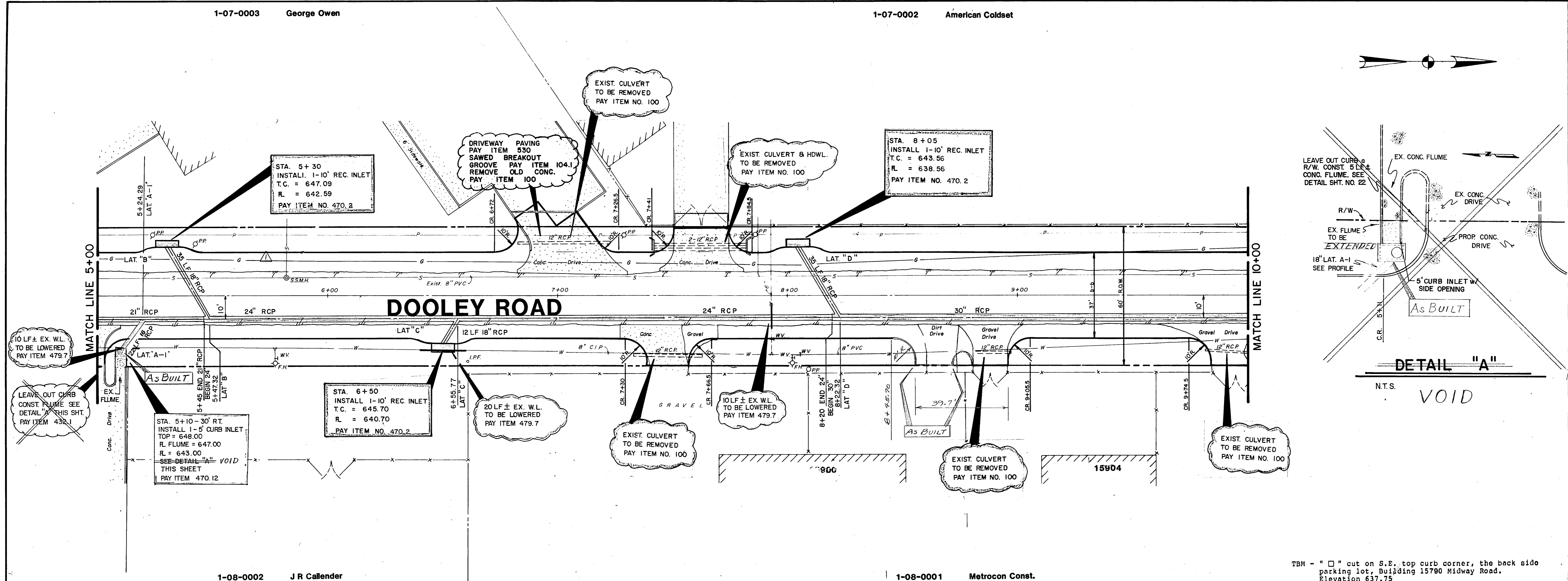


1-09-0003 ALL PLASTICS MOLDING
 1-09-0002 Charles W. Cullwell
 1-09-0001 John Mac. Joint Venture
 1-08-0003 Beltway Development Co.

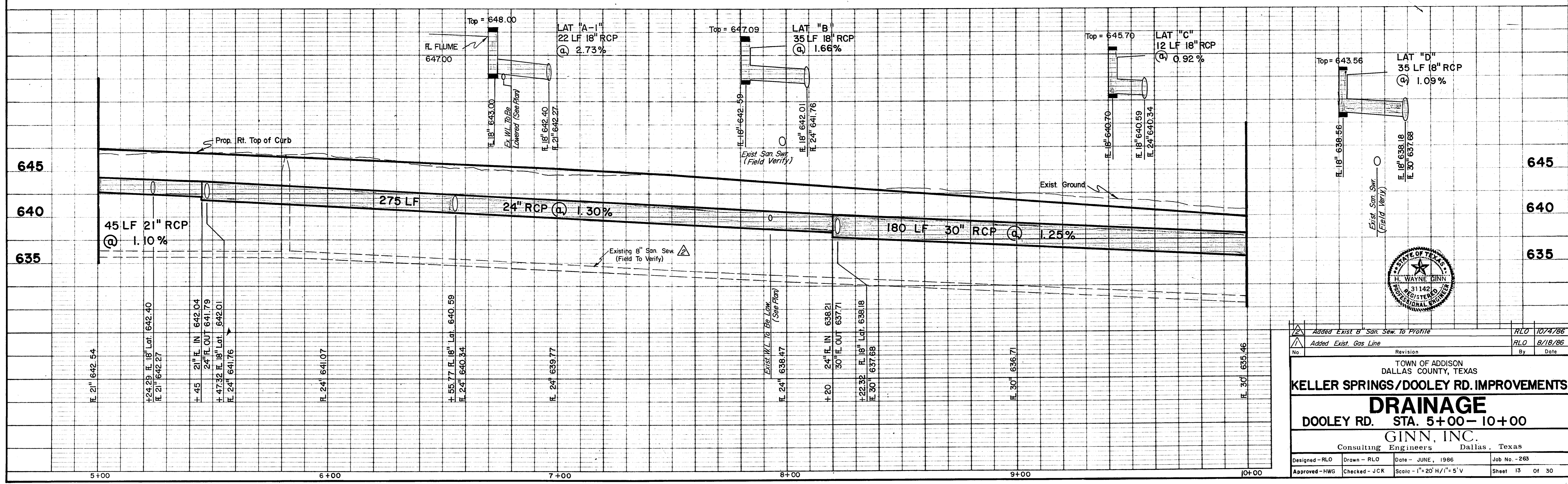
TBM - "□" cut on corner of parking lot curb (N.W. corner) at Wright Brothers Drive and Midway Road. Elevation 647.28
 TBM - "□" cut on S.E. top curb corner, the back side parking lot, Building 15950 Midway Road. Elevation 637.75



Added - Exist 6" San Sew. To Profile	RLO	10/17/86
Added - Exist. Gas Line Location	RLO	8/16/86
No. Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS		
KELLER SPRINGS/DOOLEY RD. IMPROVEMENTS		
DRAINAGE		
DOOLEY RD. STA. 4+20 - 5+00		
GINN, INC. Consulting Engineers Dallas, Texas		
Designed - RLO	Drawn - RLO	Date - JUNE, 1986
Approved - HWG	Checked - JCK	Scale - 1" = 20' H/1" = 5' V
		Job No. - 263
		Sheet 12 Of 30

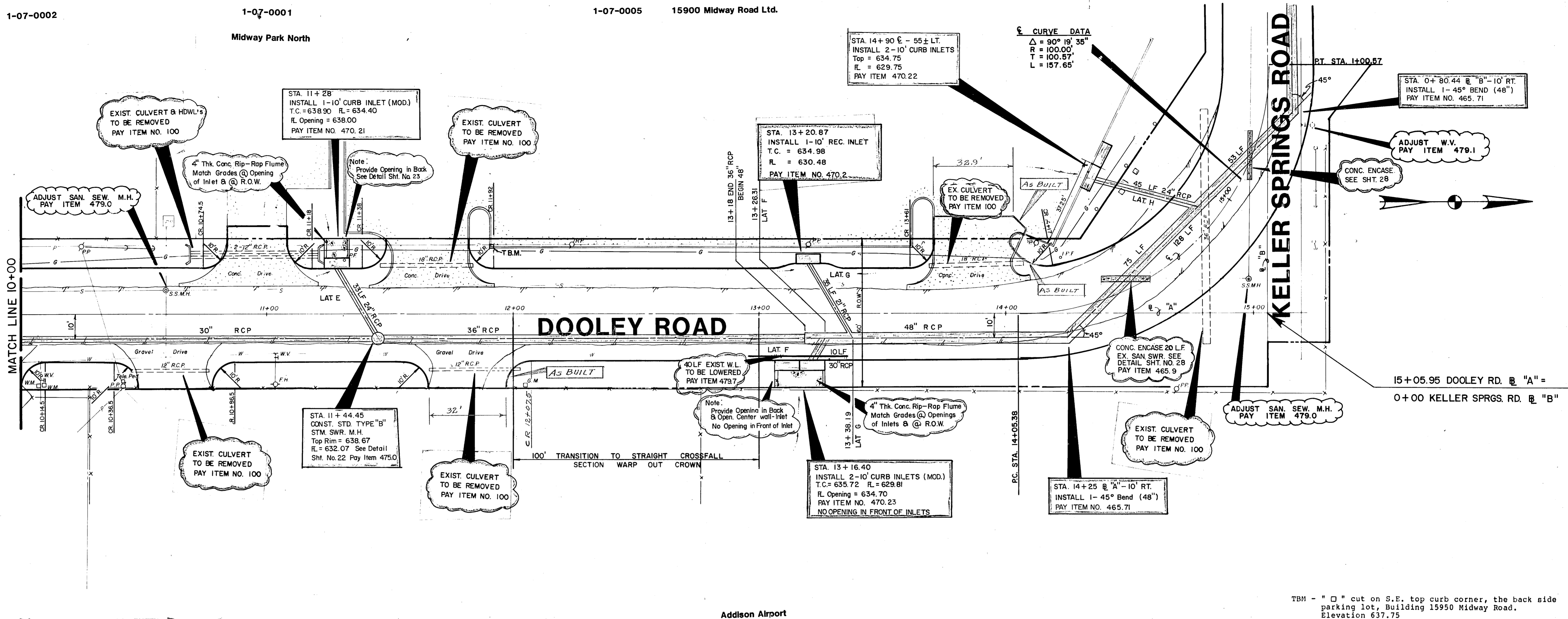


TBM - " " cut on S.E. top curb corner, the back side parking lot, Building 15790 Midway Road. Elevation 637.75



Added Exist. San. Sew. to Profile	RLO	10/7/86
Added Exist. Gas Line	RLO	8/18/86
Revision		
By Date		
TOWN OF ADDISON DALLAS COUNTY, TEXAS		
KELLER SPRINGS/DOOLEY RD. IMPROVEMENTS		
DRAINAGE		
DOOLEY RD. STA. 5+00-10+00		
GINN, INC.		
Consulting Engineers Dallas, Texas		
Designed - RLO	Drawn - RLO	Date - JUNE, 1986
Approved - HWG	Checked - JCK	Scale - 1" = 20' H/1" = 5' V
Job No. - 263		Sheet 13 Of 30

Midway Park North



CURVE DATA
 $\Delta = 90^\circ 18' 35''$
 $R = 100.00'$
 $T = 100.67'$
 $L = 157.65'$

STA. 14+90 \pm 55 \pm LT.
 INSTALL 2-10' CURB INLETS
 Top = 634.75
 R.L. = 629.75
 PAY ITEM 470.22

STA. 11+28
 INSTALL 1-10' CURB INLET (MOD.)
 T.C. = 638.90 R.L. = 634.40
 R.L. Opening = 638.00
 PAY ITEM NO. 470.21

STA. 13+20.87
 INSTALL 1-10' REC. INLET
 T.C. = 634.98
 R.L. = 630.48
 PAY ITEM NO. 470.2

STA. 0+80.44 @ "B"-10' RT.
 INSTALL 1-45° BEND (48")
 PAY ITEM NO. 465.71

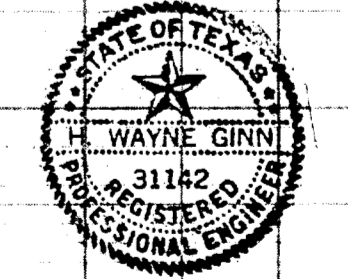
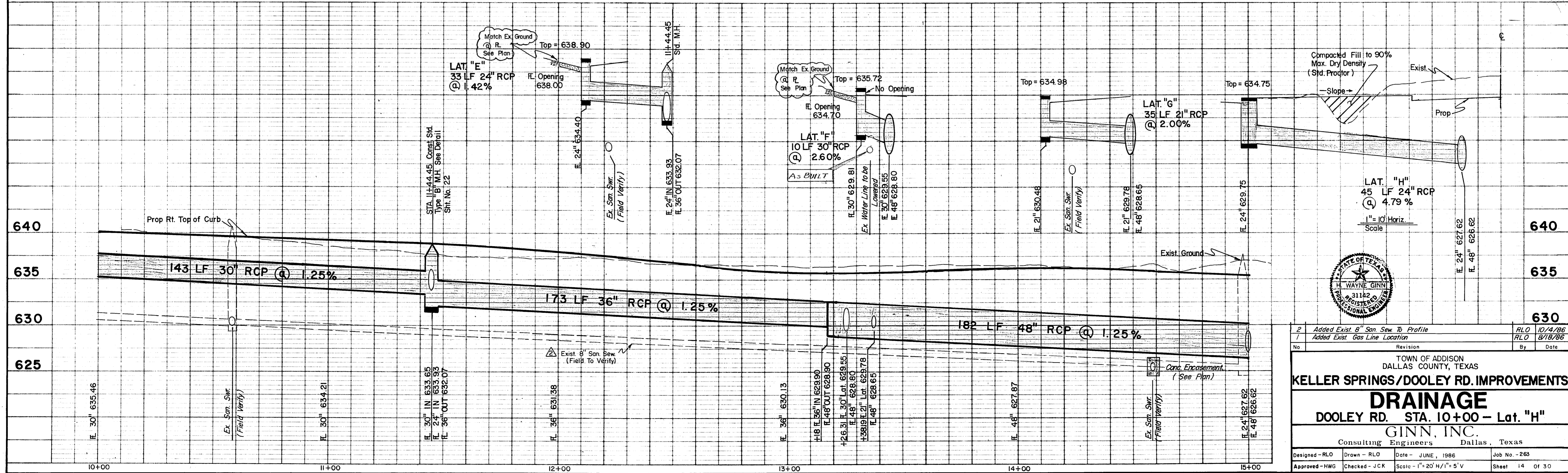
STA. 11+44.45
 CONST. STD. TYPE "B"
 STM. SWR. M.H.
 Top Rim = 638.67
 R.L. = 632.07 See Detail
 Sht. No. 22 Pay Item 475.0

STA. 13+16.40
 INSTALL 2-10' CURB INLETS (MOD.)
 T.C. = 635.72 R.L. = 629.81
 R.L. Opening = 634.70
 PAY ITEM NO. 470.23
 NO OPENING IN FRONT OF INLETS

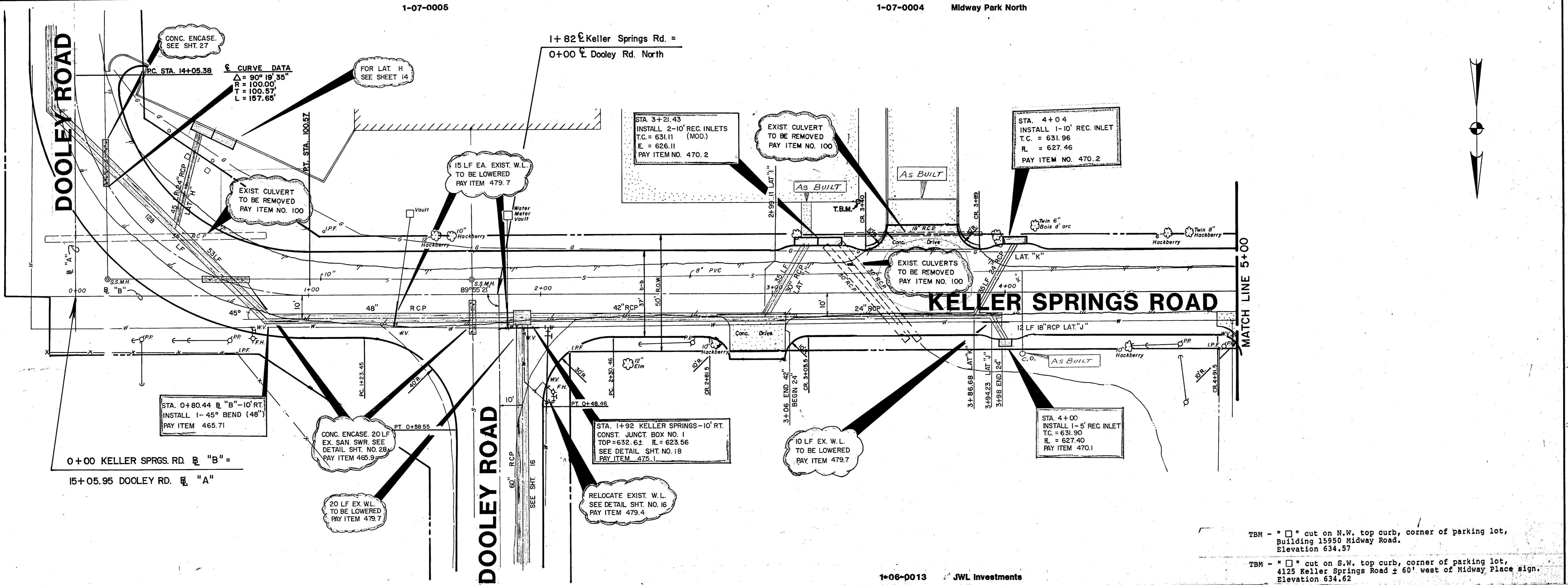
STA. 14+25 @ "A"-10' RT.
 INSTALL 1-45° BEND (48")
 PAY ITEM NO. 465.71

Addison Airport

TBM - "□" cut on S.E. top curb corner, the back side parking lot, Building 15950 Midway Road. Elevation 637.75



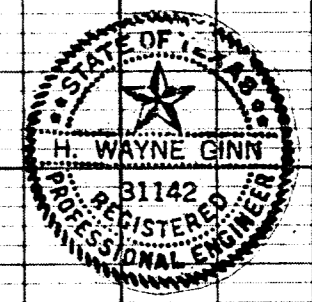
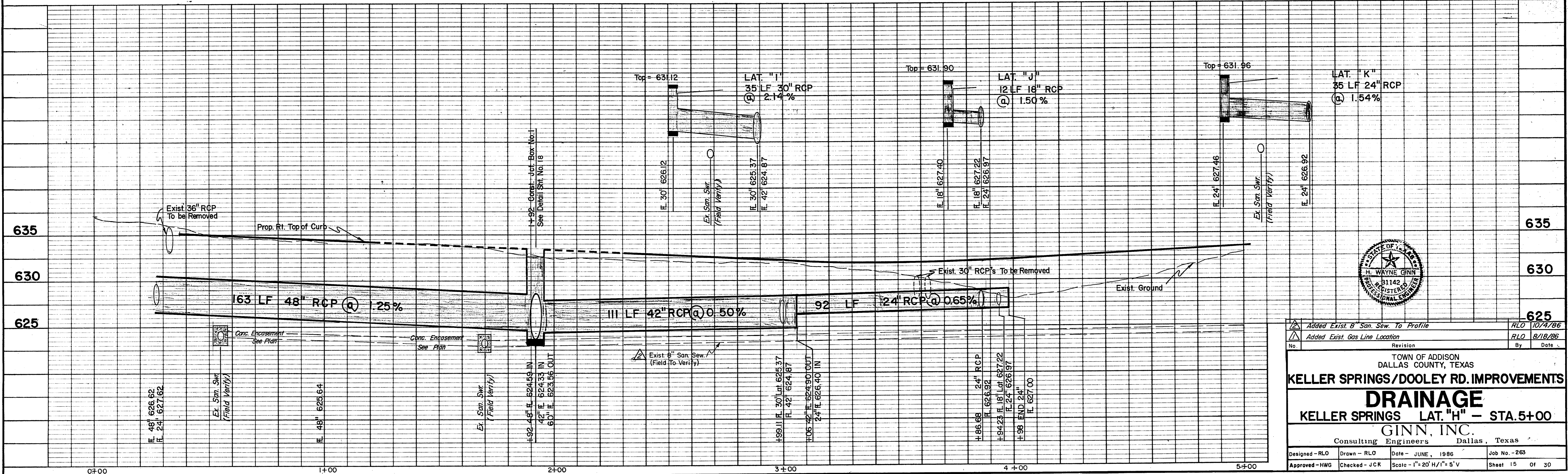
2	Added Exist. 8" San Sew. To Profile	RLO	10/4/86
7	Added Exist. Gas Line Location	RLO	8/18/86
No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
KELLER SPRINGS/DOOLEY RD. IMPROVEMENTS			
DRAINAGE			
DOOLEY RD. STA. 10+00 - Lat. "H"			
GINN, INC.			
Consulting Engineers Dallas, Texas			
Designed - RLO	Drawn - RLO	Date - JUNE, 1986	Job No. - 263
Approved - HWG	Checked - JCK	Scale - 1" = 20' H / 1" = 5' V	Sheet 14 OF 30



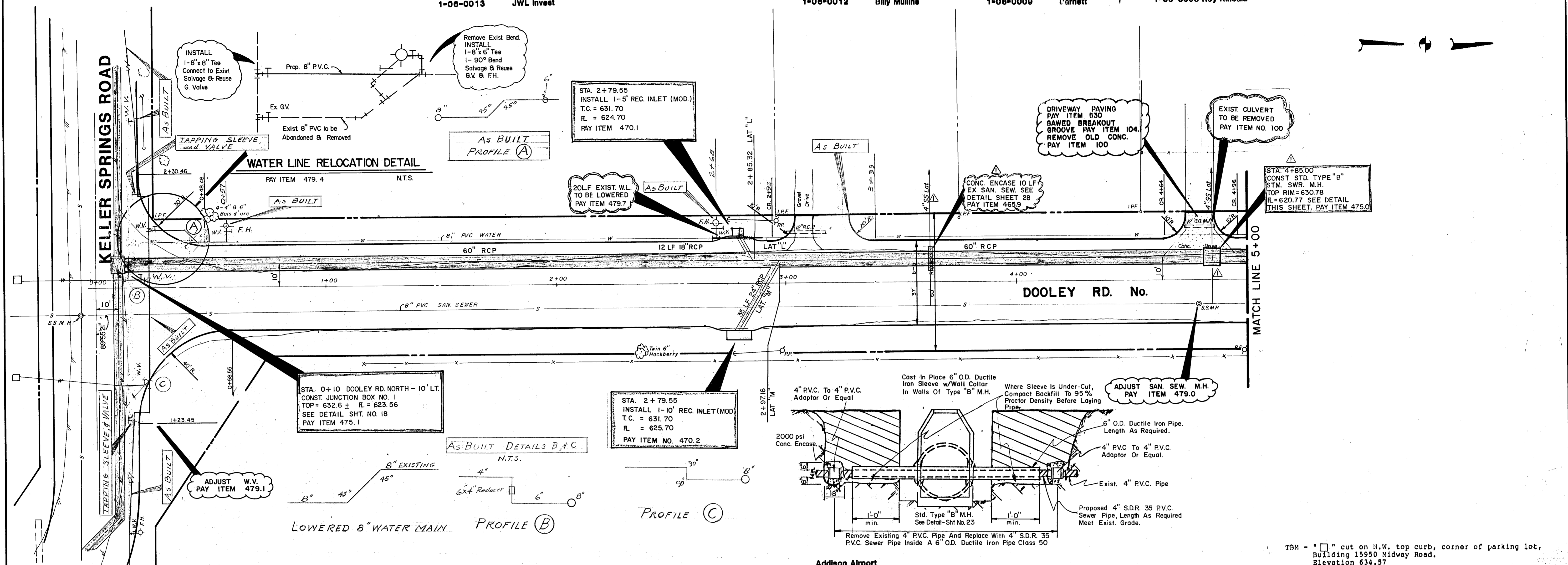
TBM - " " cut on N.W. top curb, corner of parking lot, Building 15950 Midway Road. Elevation 634.57

TBM - " " cut on S.W. top curb, corner of parking lot, 4125 Keller Springs Road ± 60' west of Midway Place sign. Elevation 634.62

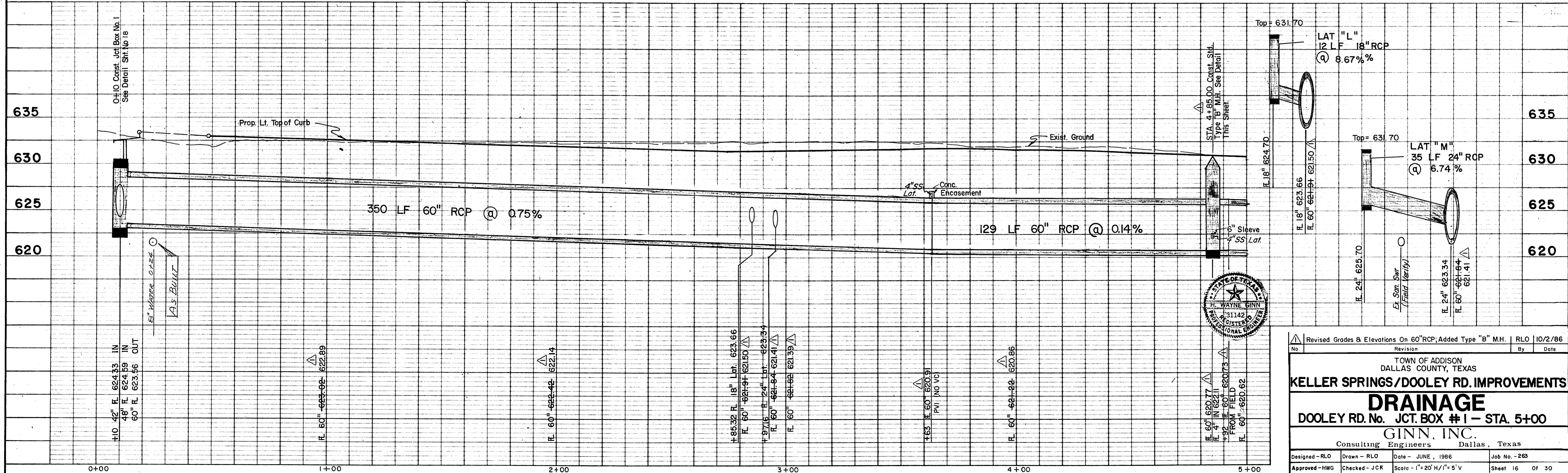
1-06-0013 JWL Investments



Added Exist. B' San Sew. To Profile		RLO 10/4/86
Added Exist. Gas Line Location		RLO 8/18/86
No.	Revision	By Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS KELLER SPRINGS/DOOLEY RD. IMPROVEMENTS DRAINAGE KELLER SPRINGS LAT. "H" - STA. 5+00 GINN, INC. Consulting Engineers Dallas, Texas		
Designed - RLO	Drawn - RLO	Date - JUNE, 1986
Approved - HWG	Checked - JCK	Scale - 1" = 20' H / 1" = 5' V
		Job No. - 263
		Sheet 15 of 30



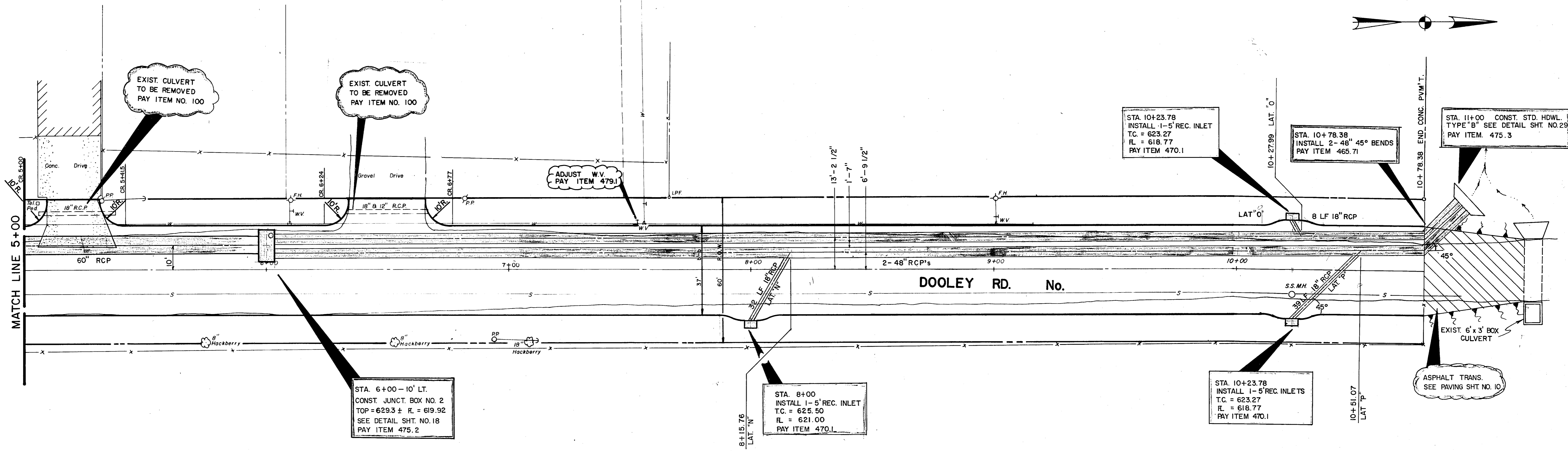
TBM - " " cut on N.W. top curb, corner of parking lot, Building 15950 Midway Road. Elevation 634.57



Revised Grades & Elevations On 60" RCP; Added Type "B" M.H. RLO 10/2/86

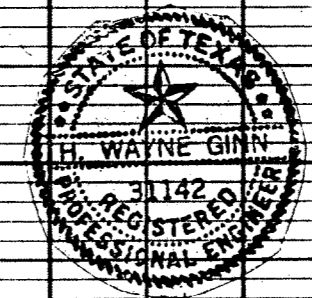
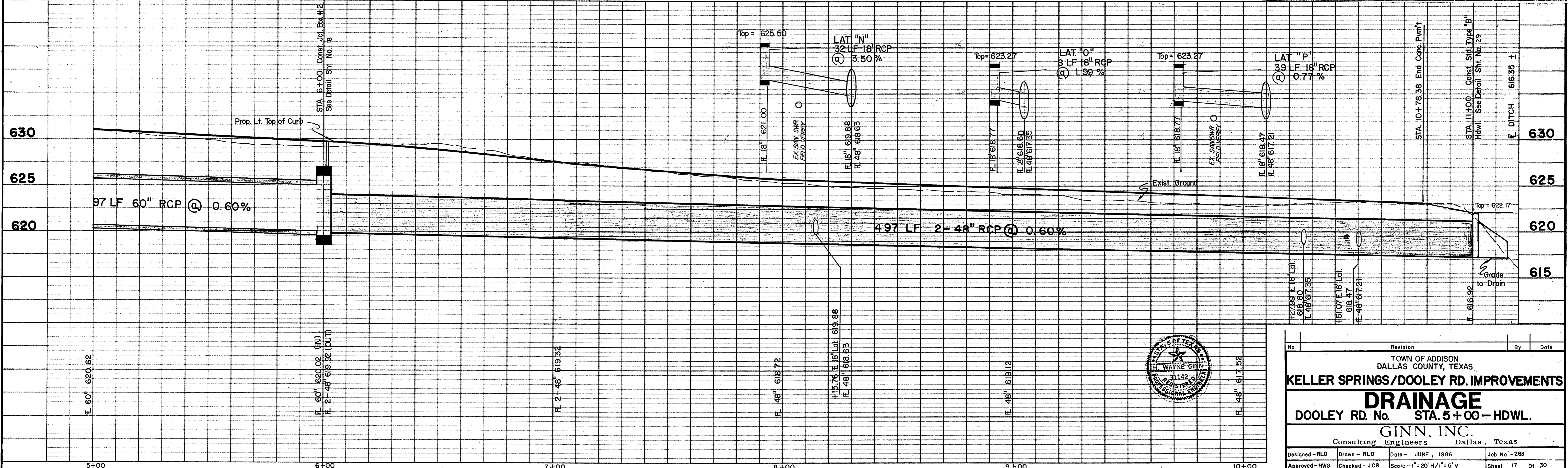
TOWN OF ADDISON
 DALLAS COUNTY, TEXAS
KELLER SPRINGS/DOOLEY RD. IMPROVEMENTS
DRAINAGE
 DOOLEY RD. No. JCT. BOX #1 - STA. 5+00
 GINN, INC.
 Consulting Engineers Dallas, Texas

Designed - RLO Drawn - RLO Date - JUNE, 1986 Job No. - 265
 Approved - HWG Checked - JCK Scale - 1" = 20' H/1" = 5' V Sheet 16 OF 30

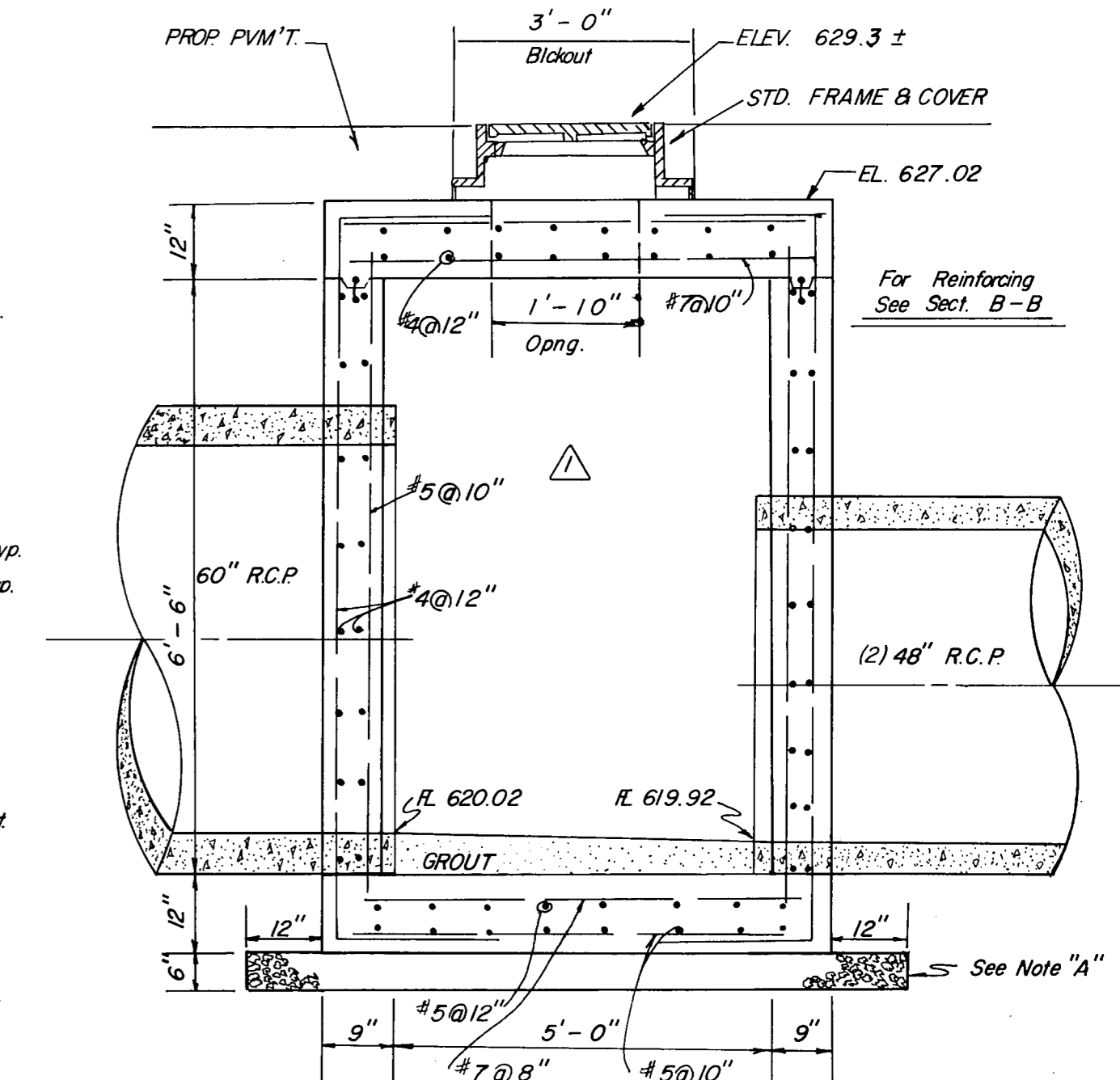
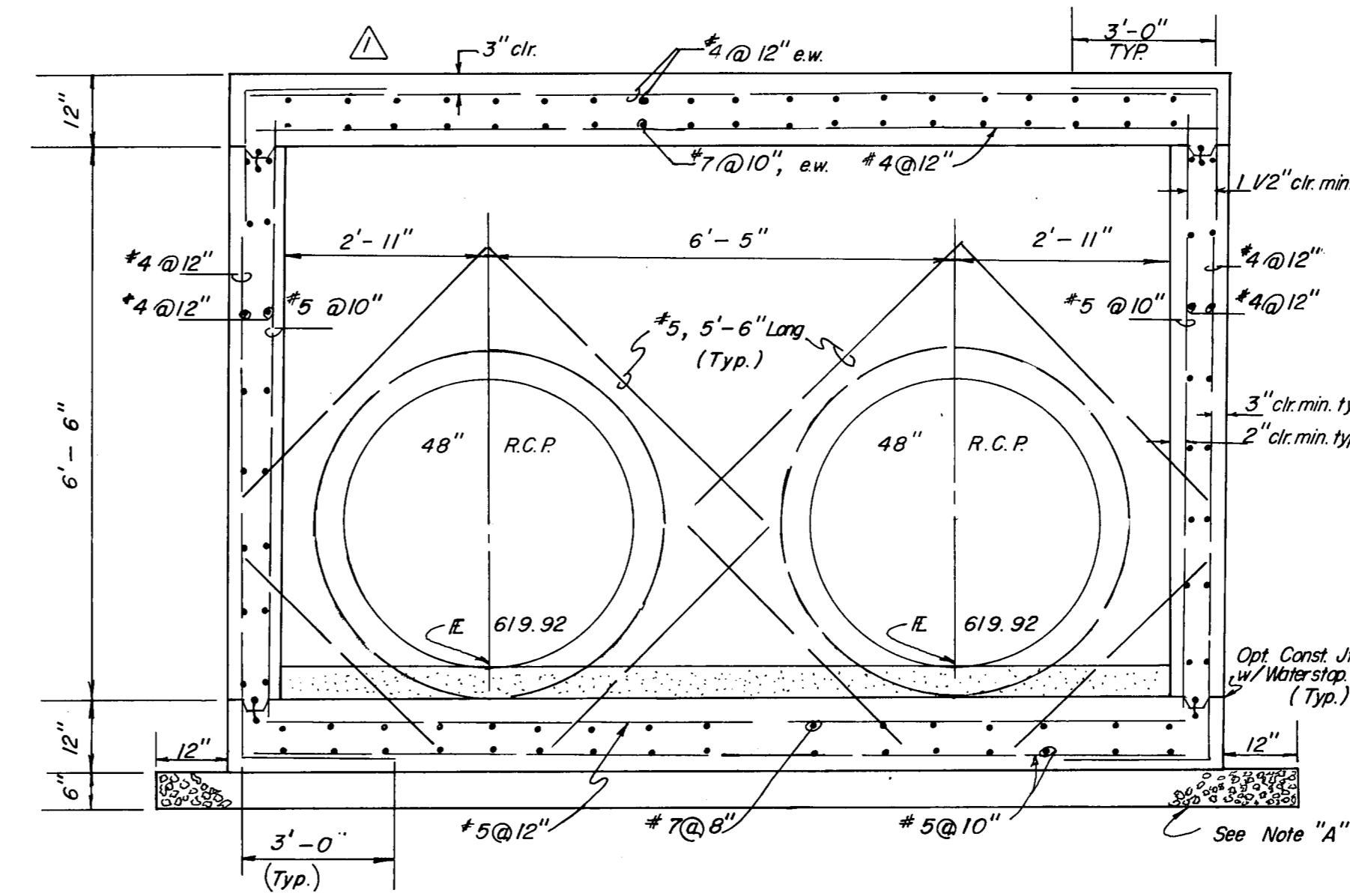
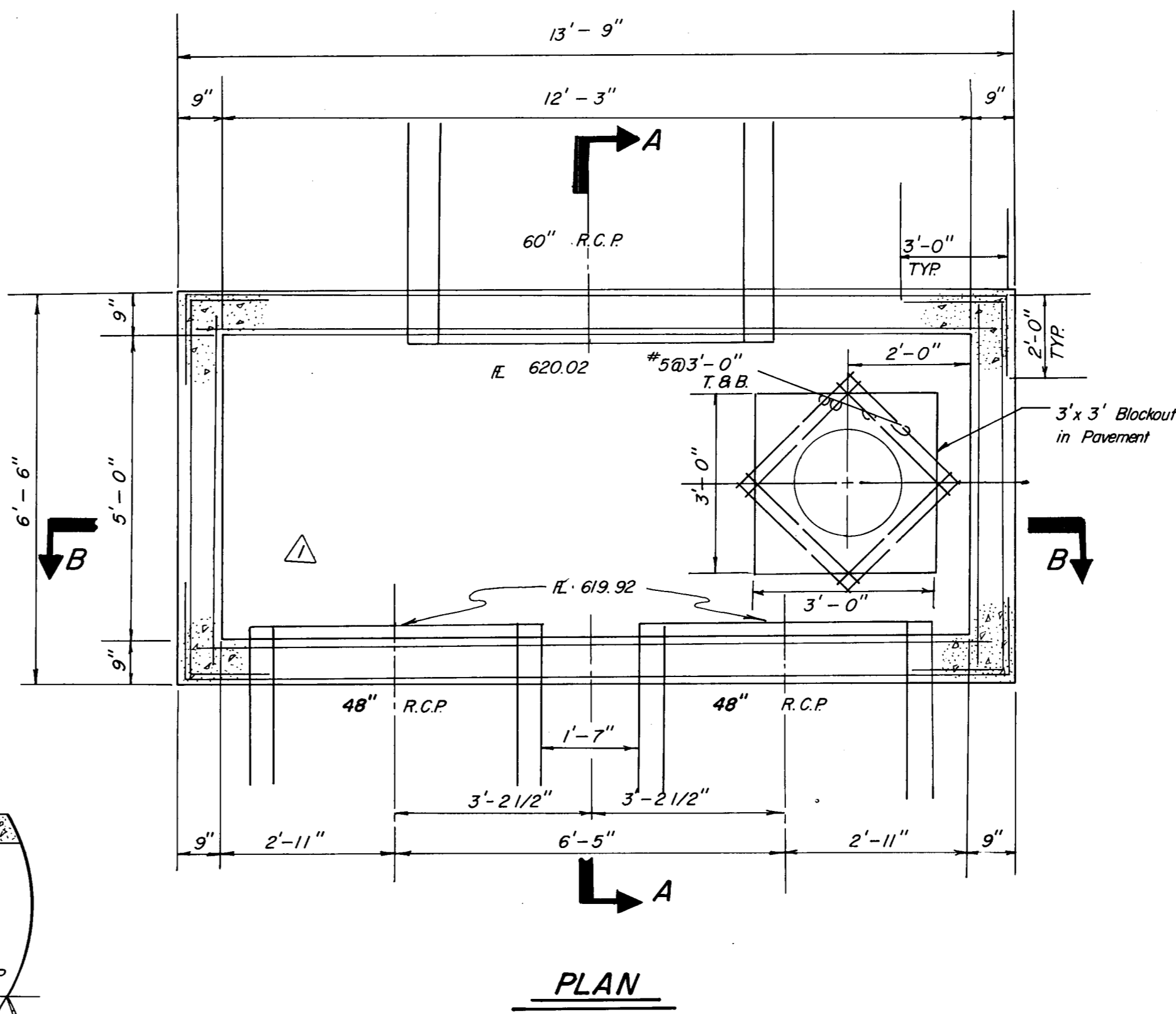
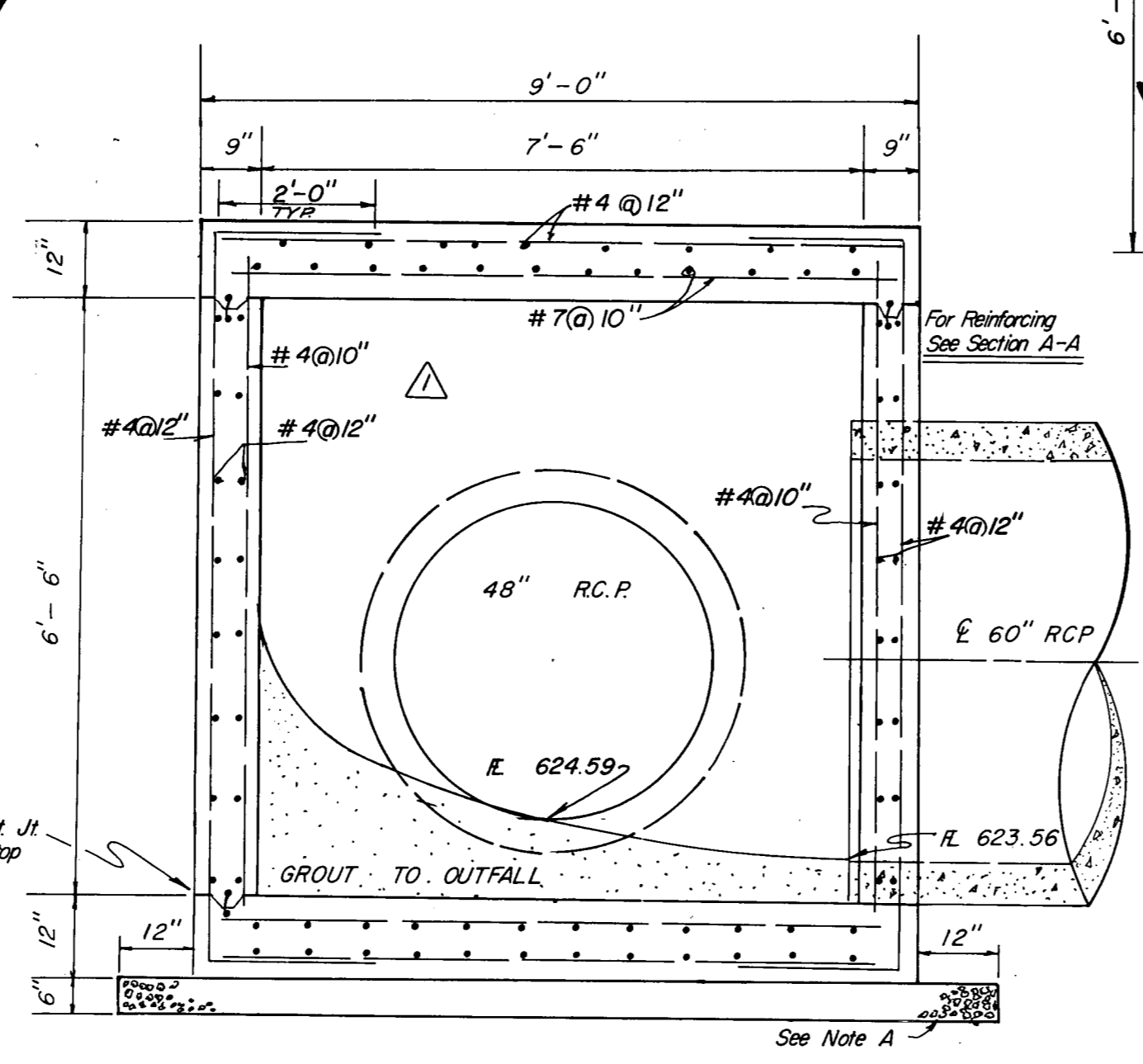
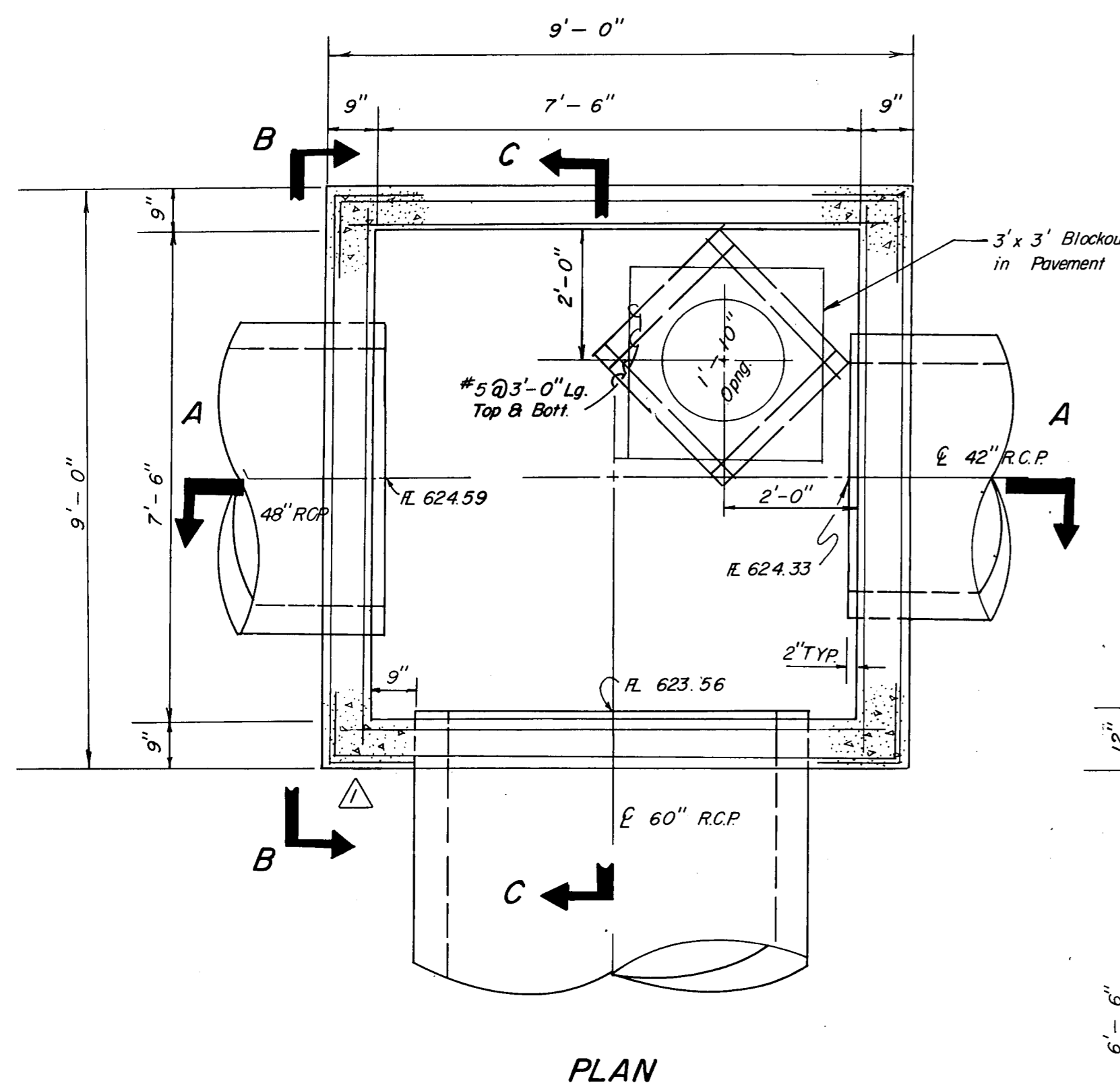
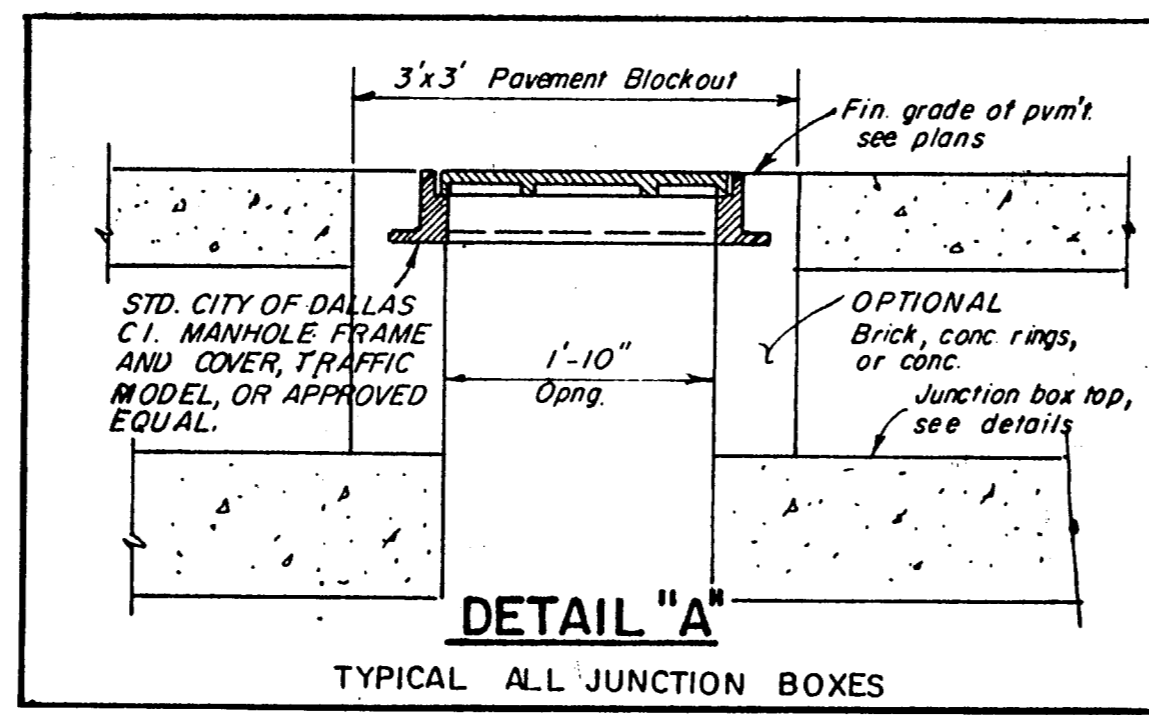


TBM - " " cut on N.W. top curb, corner of parking lot, Building 15950 Midway Road. Elevation 634.57

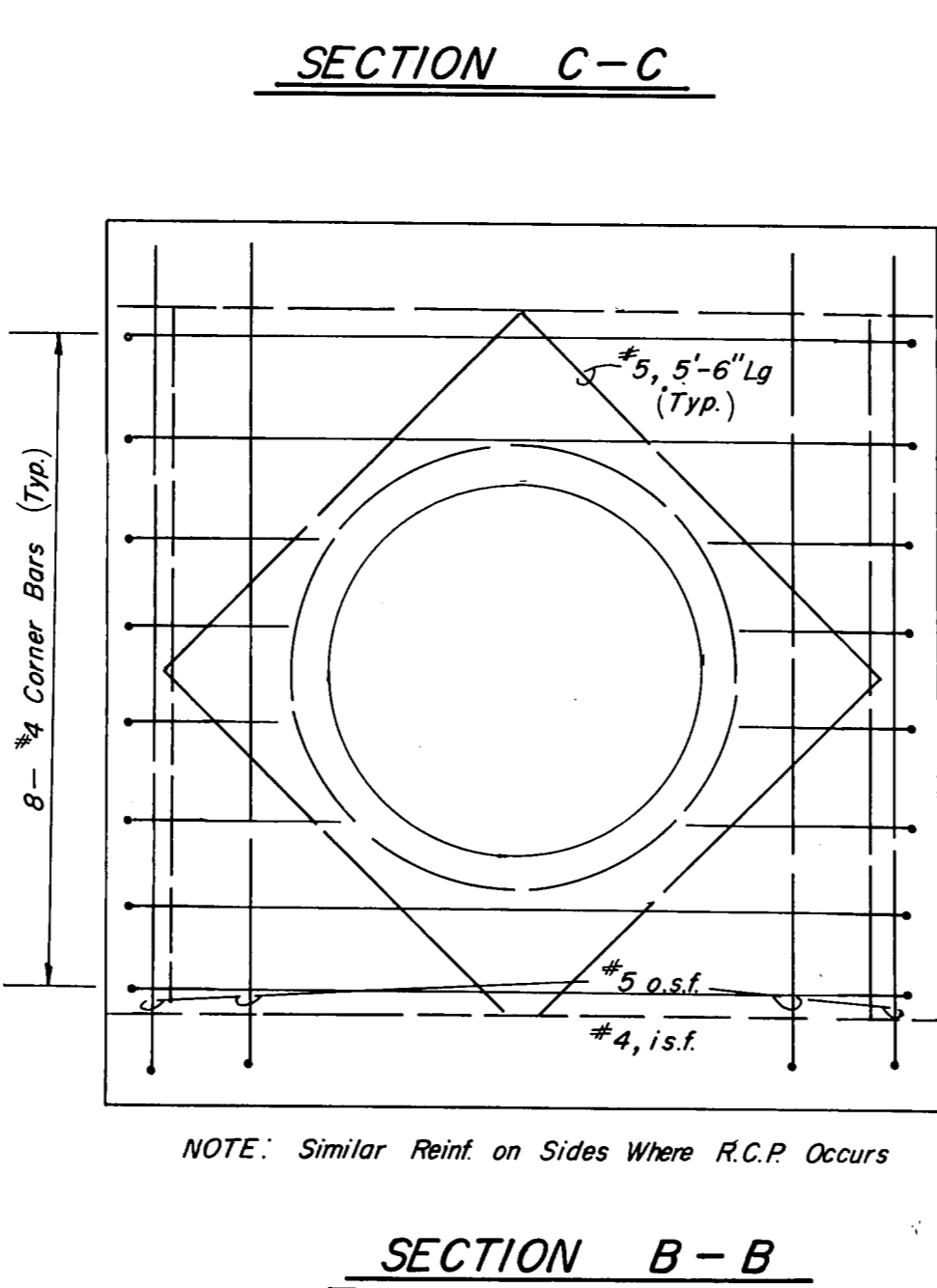
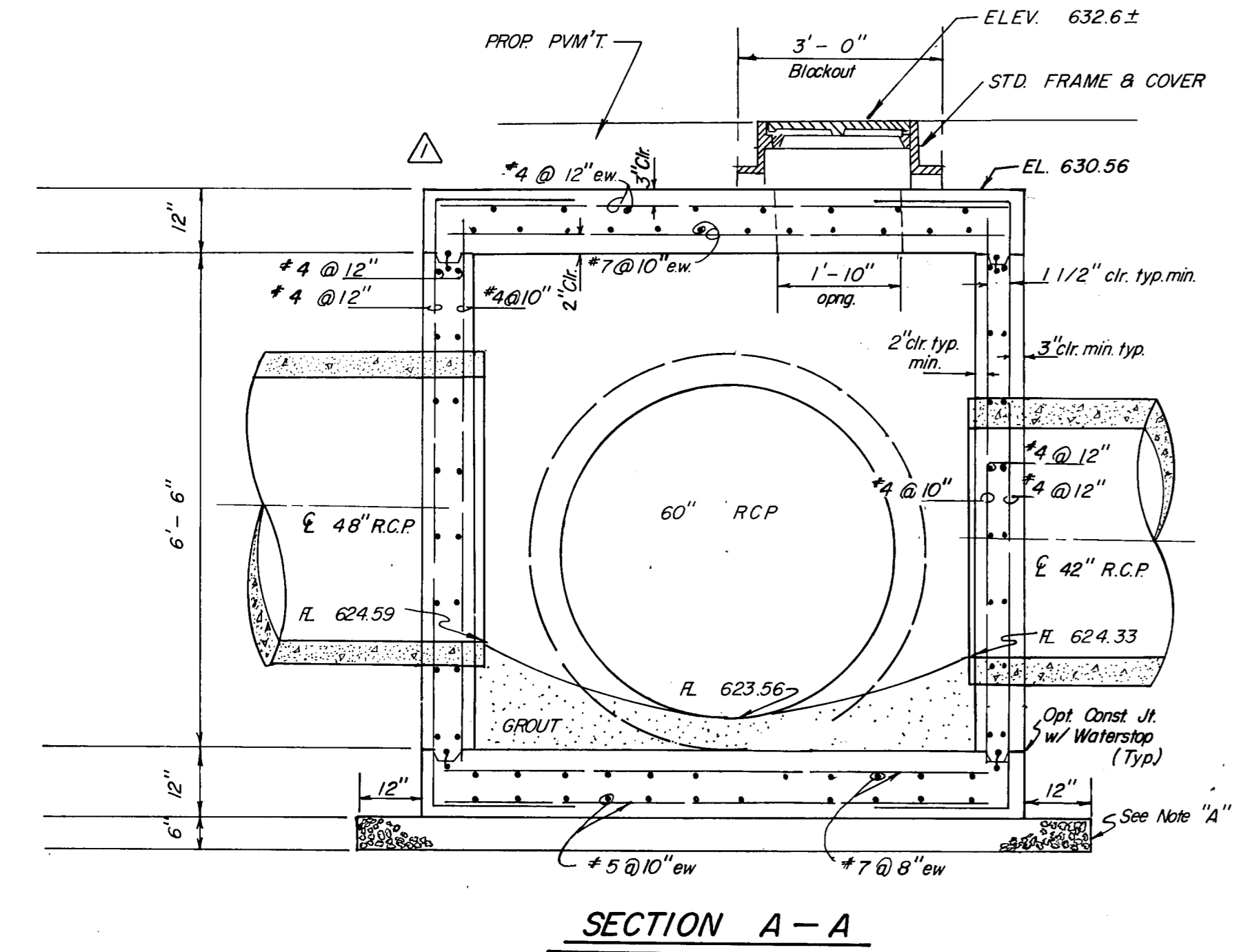
Addison Airport



No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
KELLER SPRINGS/DOOLEY RD. IMPROVEMENTS			
DRAINAGE			
DOOLEY RD. No. STA. 5+00 - HDWL.			
GINN, INC.			
Consulting Engineers Dallas, Texas			
Designed - RLO	Drawn - RLO	Date - JUNE, 1986	Job No. - 263
Approved - HWG	Checked - JCR	Scale - 1"=20' H/1"=5' V	Sheet 17 Of 30



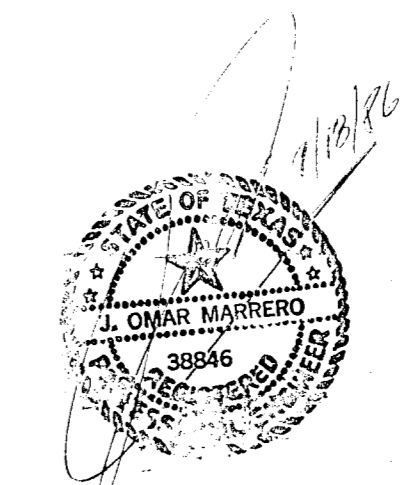
- GENERAL NOTES**
(Typ. All Junction Boxes)
- All concrete shall be Class A, 3000 PSI concrete.
 - Reinforcing shall conform to ASTM A615, grade 60.
 - Provide all necessary reinforcing accessories to hold bars in proper position.
 - All reinforcing shall be detailed in accordance with ACI Standard 315.
 - Provide corner bars of the same size and number as horizontal bars at all corners, or bend bars as indicated on plan.
 - Contractor shall submit shop drawings in accordance with ACI Standards, latest edition, (for approval prior to any construction being done) showing all information as to exact location, size, number; bending, splicing and placing schedules and lists of reinforcement. No work shall commence on structures until approval of shop drawings is received.
 - All labor and materials for construction of junction boxes shall be included in the unit price bid for the structure. No additional compensation will be allowed.



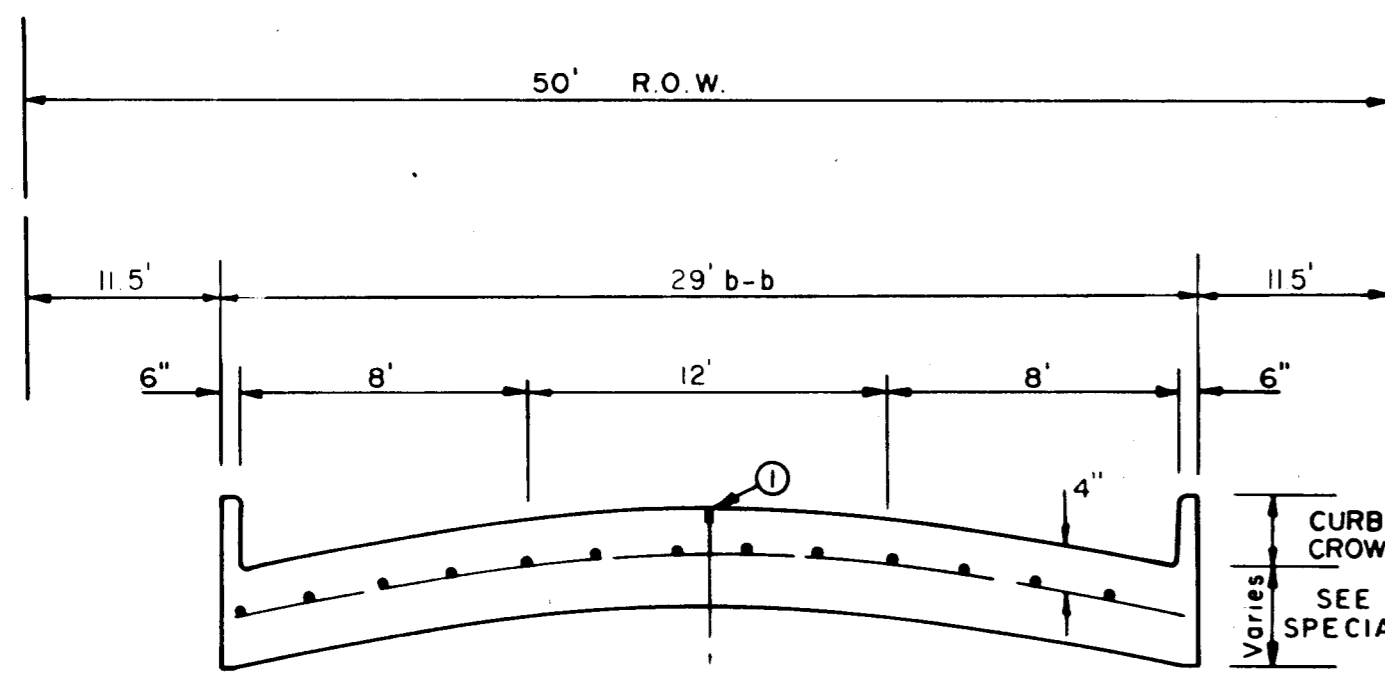
JUNCTION BOX NO. 1
PAY ITEM 475.1

JUNCTION BOX NO. 2
PAY ITEM 475.2

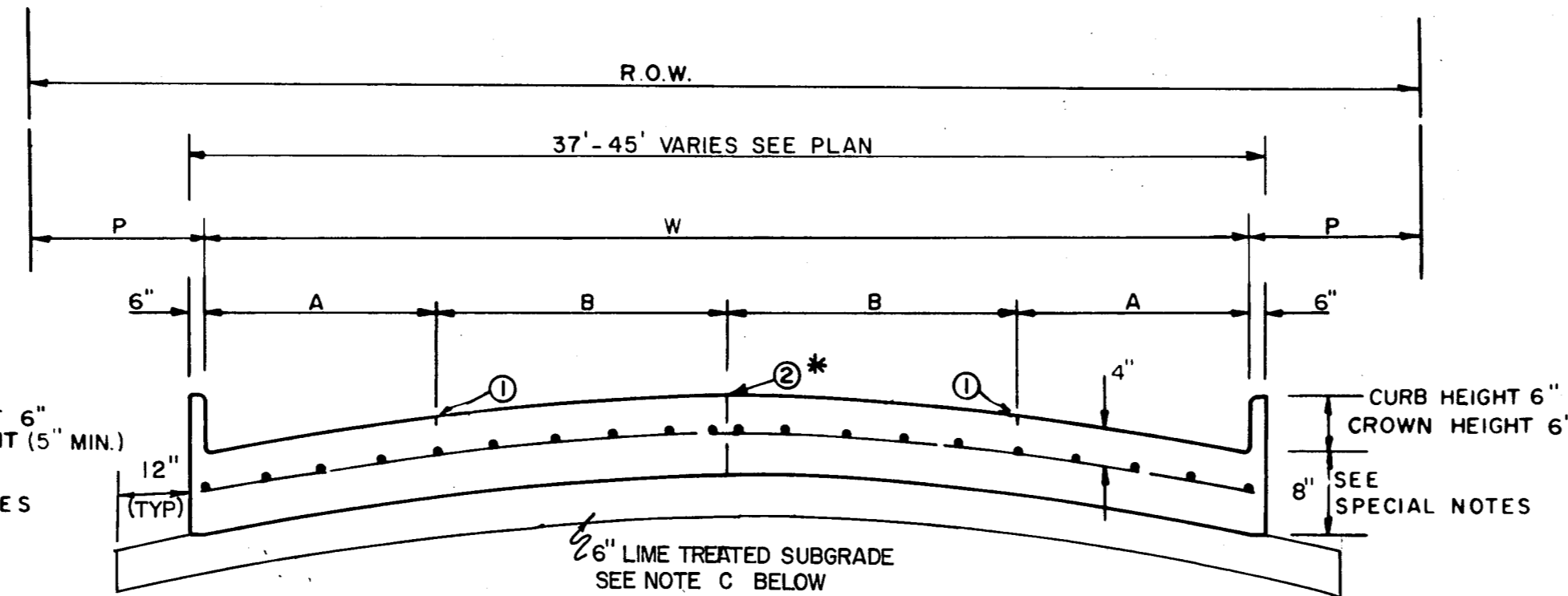
NOTE A:
Overexcavate & backfill with 6" thick bedding material (crushed stone) NOT a separate pay item.



REVISED REINFORCING STEEL		RLO	9-15-86
No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
KELLER SPRINGS/DOOLEY RD. IMPROVEMENTS			
DRAINAGE - JUNCTION BOX DETAILS			
GINN, INC. Consulting Engineers Dallas, Texas			
Designed - RLO	Drawn - RLO	Date - JUNE, 1986	Job No. - 263
Approved - HWG	Checked - JCK	Scale - NONE	Sheet 1a of 30



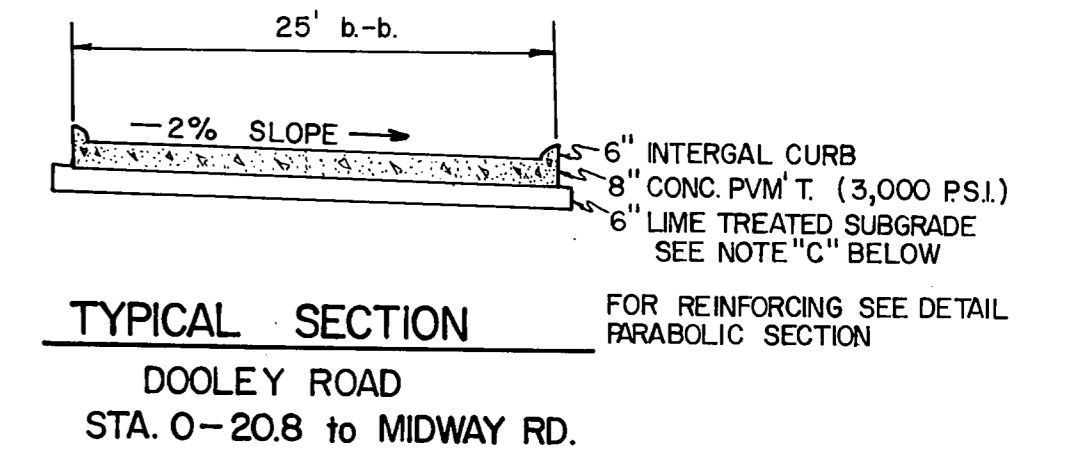
ONE MOVING LANE / TWO PARKING LANES
(LOCAL STREET)



STREET TYPE	STREET WIDTH (W)	A	B	R.O.W. WIDTH	P
COLLECTOR /	36' *	8'	10'	60'	11.5'
COLLECTOR /	40'	8' OR 10'	10' OR 12'	60'	9.5'
COLLECTOR /	44'	11'	11'	65'	10.0'

* FULL WIDTH PAVEMENT OF 36' WIDTH STREETS IS ALLOWED WHERE APPROVED BY THE TOWN OF ADDISON

FOR DOOLEY RD. STA. 12+00 - 15+00
SEE PLAN SHEET NO. 6
FOR KELLER SPRINGS STA. 0+37.54 - 4+00
SEE PLAN SHEET NO. 7

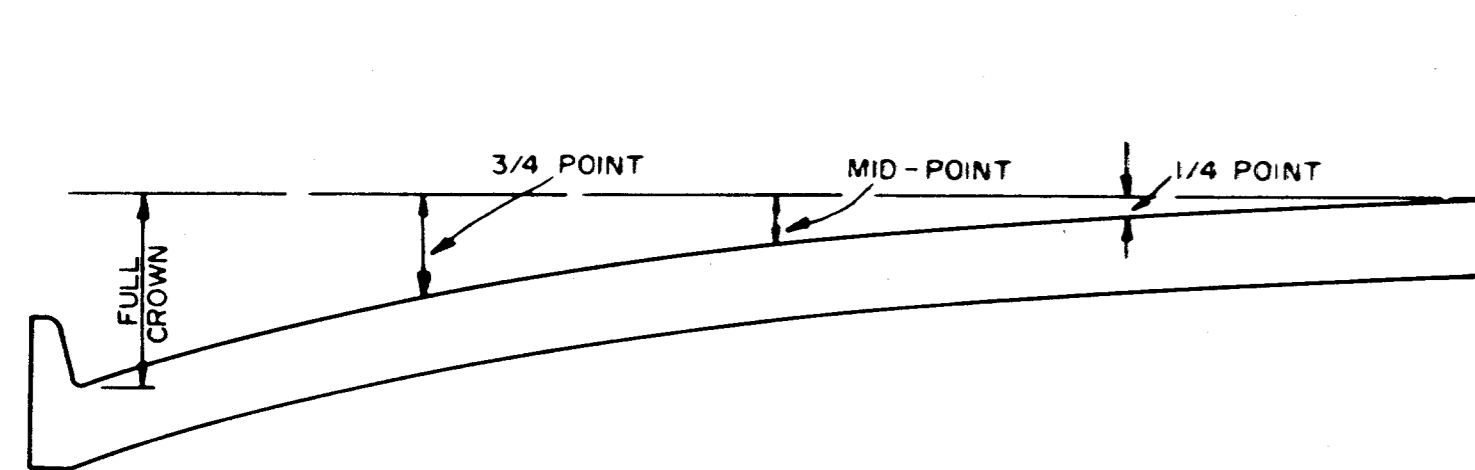


TYPICAL SECTION
FOR REINFORCING SEE DETAIL PARABOLIC SECTION
DOOLEY ROAD
STA. 0-20.8 to MIDWAY RD.

REINFORCED CONCRETE PAVEMENT

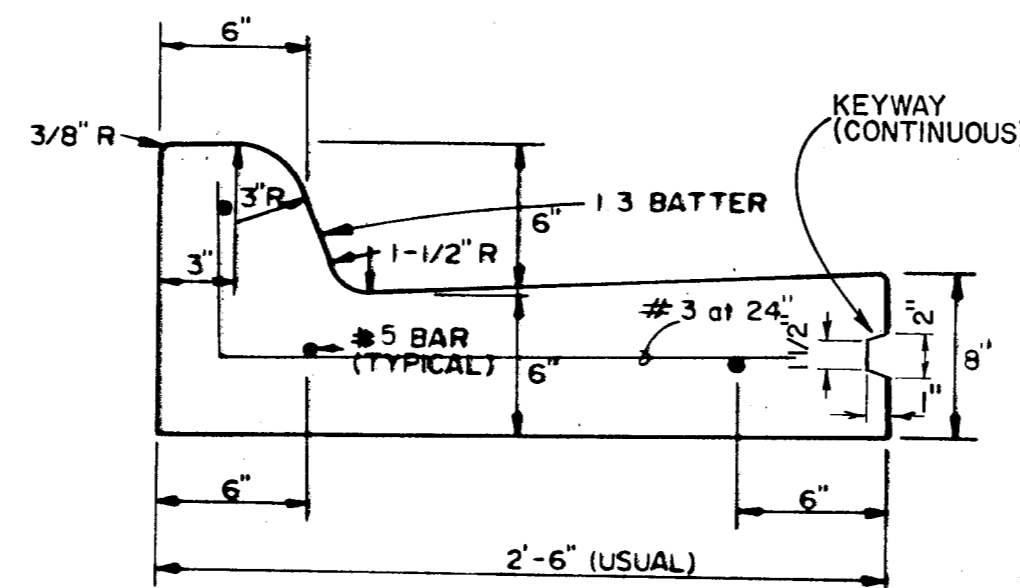
ALL REINFORCING BARS SHALL BE NO. 3 TRANSVERSE BARS TO BE SPACED ON 2'-0" CENTERS, LONGITUDINAL BARS TO BE SPACED ON 2'-0" EXCEPT WHERE NOTED

- ① SAWED LONGITUDINAL DUMMY JOINT
- ② CONSTRUCTION JOINT (FULL WIDTH PVMT. IS ALLOWED WHERE APPROVED BY ENGINEER)

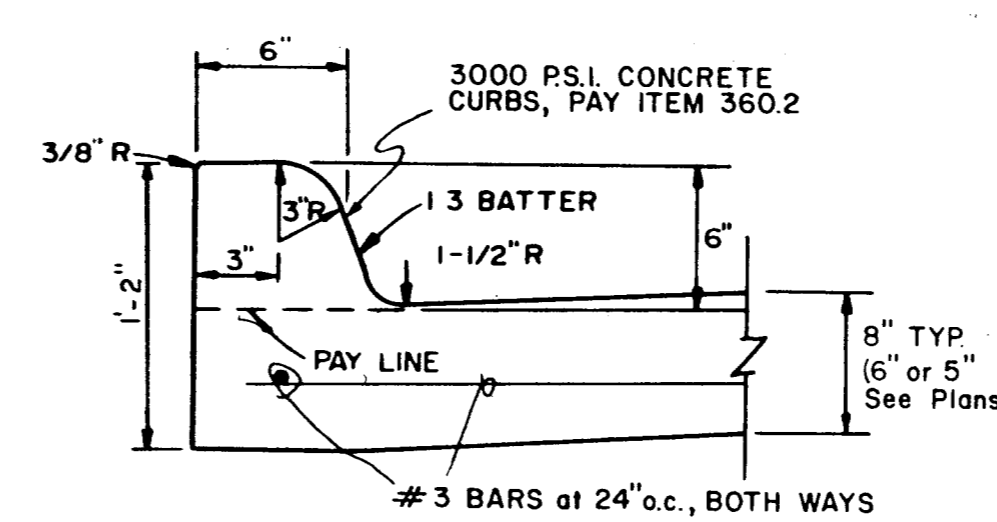


ROADWAY WIDTH (W)	TOTAL CROWN HEIGHT	3/4 POINT	MID-POINT	1/4 POINT
26'	6"	3 - 3/8"	1 - 1/2"	3/8"
36'	6"	3 - 3/8"	1 - 1/2"	3/8"
44'	6"	3 - 3/8"	1 - 1/2"	3/8"
48'	6"	3 - 3/8"	1 - 1/2"	3/8"

TABLE OF CROWN HEIGHTS AND ORDINATES FOR VARIOUS PARABOLIC SECTIONS



SEPARATE CURB-AND-GUTTER
PAY ITEM 360.3



INTEGRAL CURB
PAY ITEM 360.2

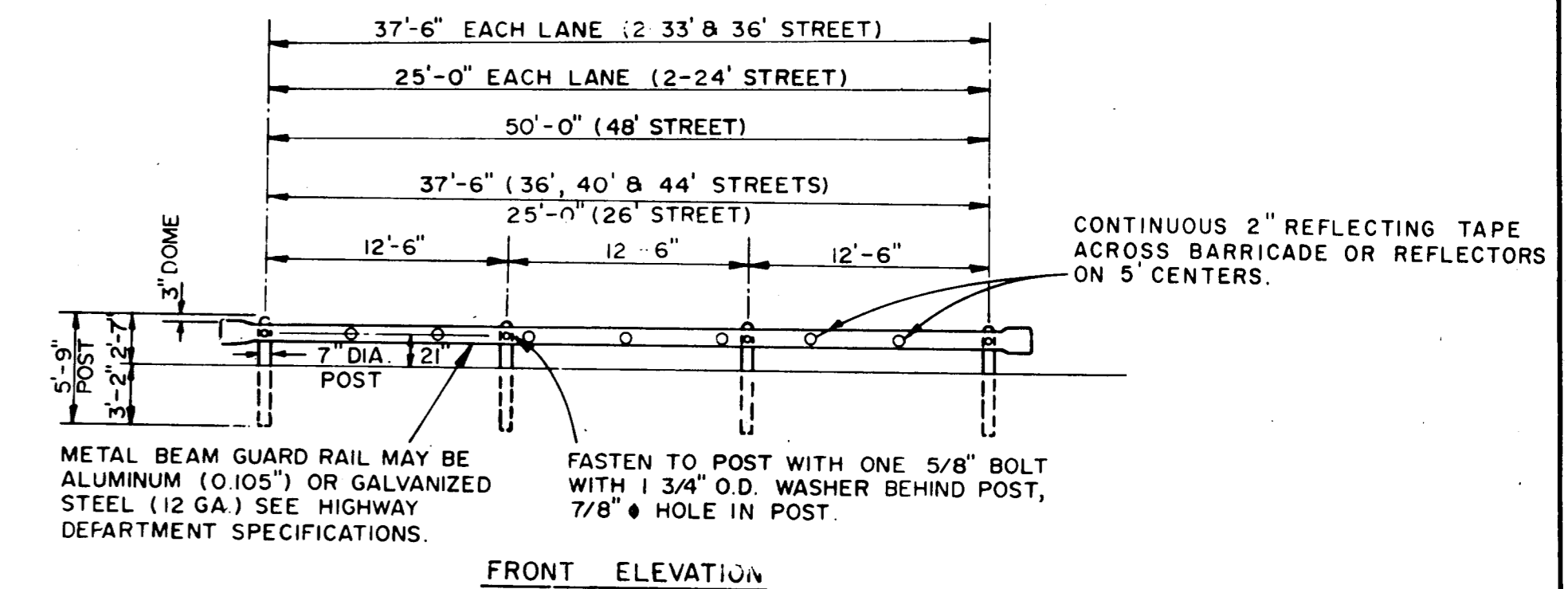
CURB AND CURB-AND-GUTTER

GENERAL NOTES

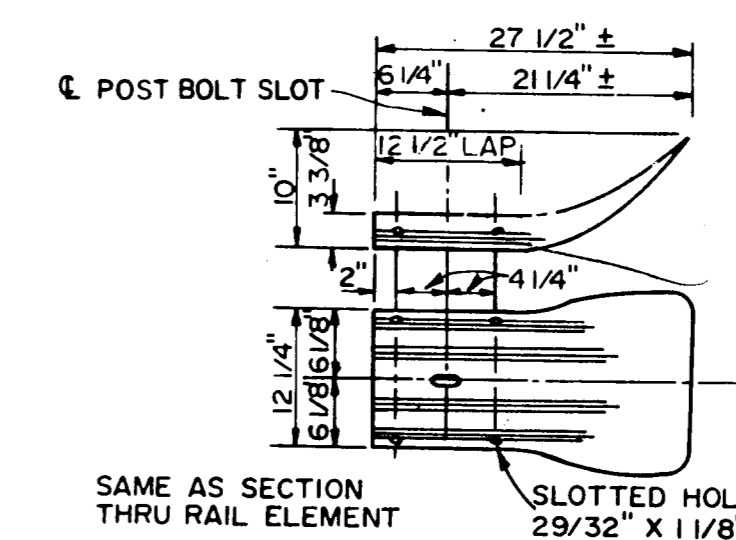
- A. GENERAL
USUAL PAVEMENT THICKNESS IS AS SHOWN IN SPECIAL NOTES. SUBGRADE DESIGN SHALL CONFORM TO THE TOWN OF ADDISON, DEPARTMENT OF ENGINEERING REQUIREMENTS, AND SHALL EXTEND 12" (MIN.) BEHIND CURB.
- B. REINFORCED CONCRETE PAVEMENT
 - 1. CONCRETE STRENGTH SHALL BE AS SHOWN IN SPECIAL NOTES.
 - 2. ALL CURBS SHALL BE INTEGRAL WITH PAVEMENT.
 - 3. DETAIL AND ARRANGEMENT OF PAVEMENT JOINTS, ALL TYPES, SHALL BE AS SHOWN ON SHEET SD-3
 - 4. BAR LAPS SHALL BE THIRTY DIAMETERS.
- C. SUBGRADE
SUBGRADE UNDER ALL PAVEMENT SHALL BE 6 INCHES THICK AND SHALL BE STABILIZED WITH 6 PERCENT BY WEIGHT OF HYDRATED LIME (27 LBS./SY.) AND COMPACTED TO A DENSITY NOT LESS THAN 95 PERCENT AS DETERMINED BY A.A.S.H.O. T-99 LABORATORY TESTS MAY BE SUBMITTED TO THE ENGINEERING DEPARTMENT FOR APPROVAL TO LOWER AMOUNT OF LIME REQUIRED.
- D. BAR CHAIRS OR AN APPROVED DEVICE SHALL BE FURNISHED.

SPECIAL NOTES

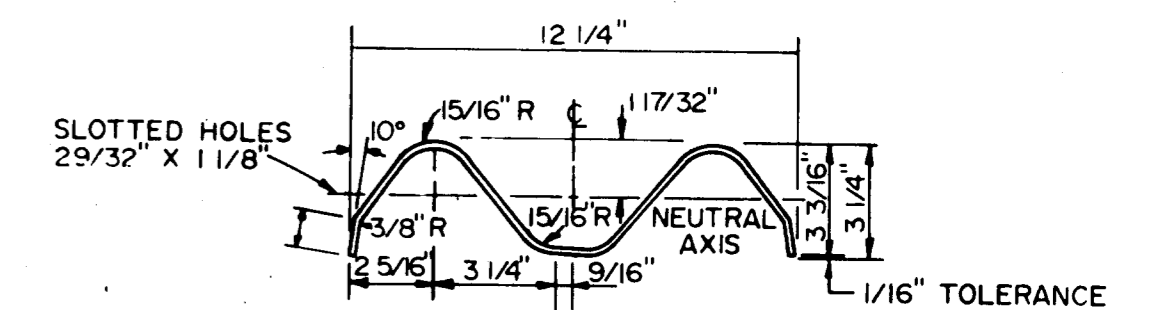
PAVEMENT THICKNESS AND STRENGTHS SHALL BE AS FOLLOWS;
TYPE (RETAIL THRU INDUSTRIAL)
8" - 3000 P.S.I.



FRONT ELEVATION



TERMINAL SECTION

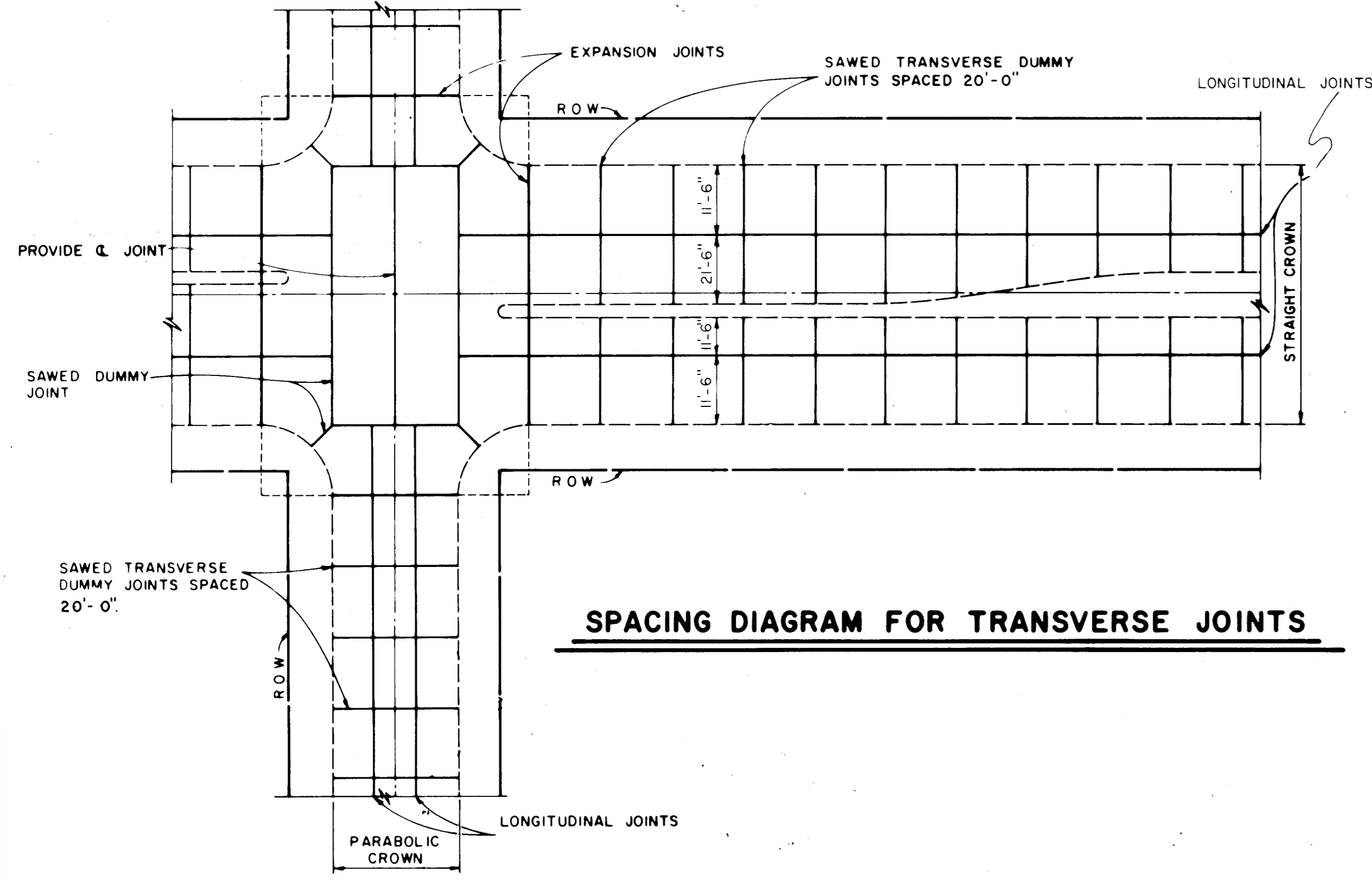


SECTION THRU RAIL ELEMENT

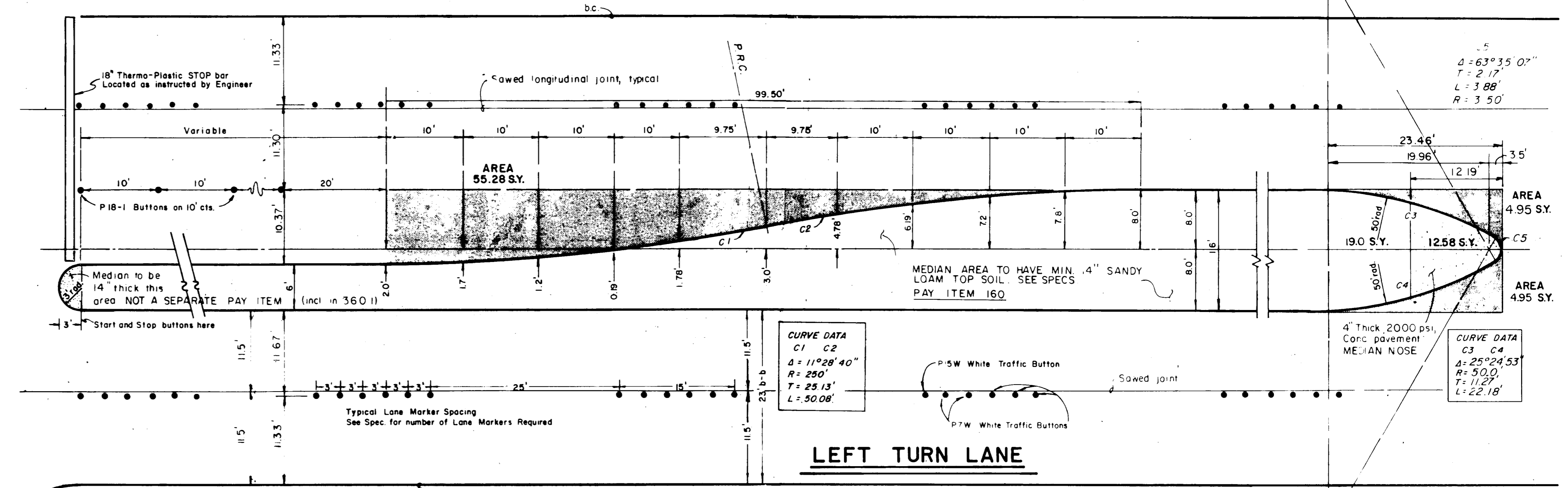
BARRICADE DETAIL
PAY ITEM 540.1



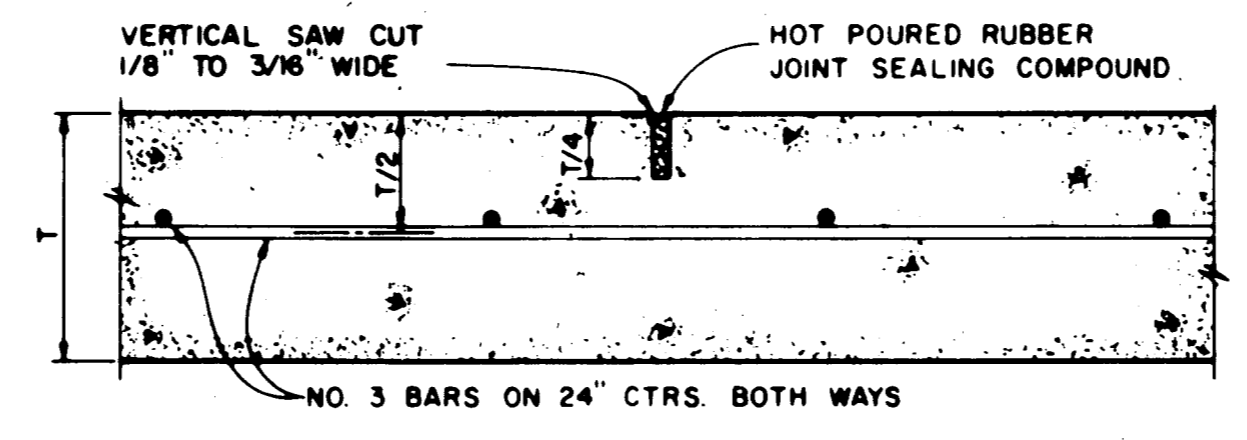
NO.	REVISION	BY	DATE
TOWN OF ADDISON, TEXAS DEPARTMENT OF ENGINEERING			
STANDARD CONSTRUCTION DETAILS PAVING			
PARABOLIC CROWN STREETS			
APPROVED		H. WAYNE GINN, P.E.	
DATE MARCH, 1984		SHEET	SD-2



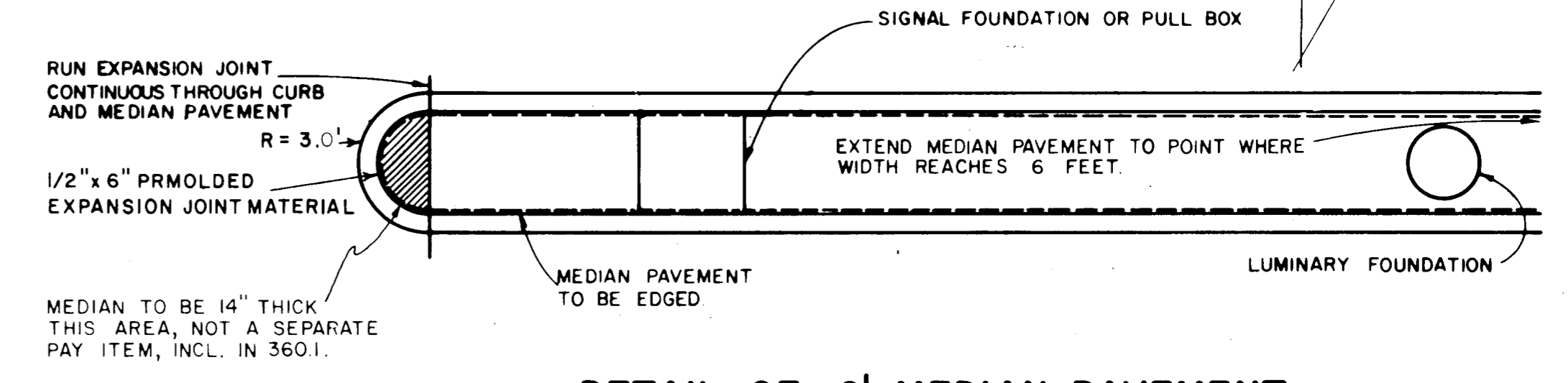
SPACING DIAGRAM FOR TRANSVERSE JOINTS



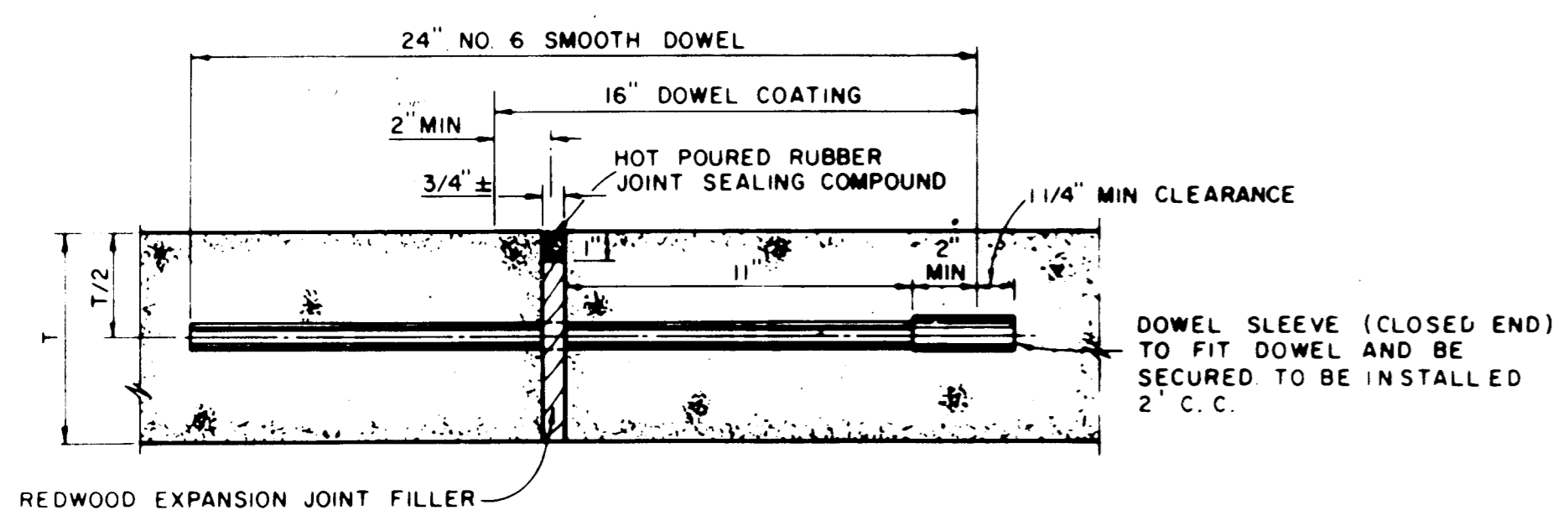
LEFT TURN LANE



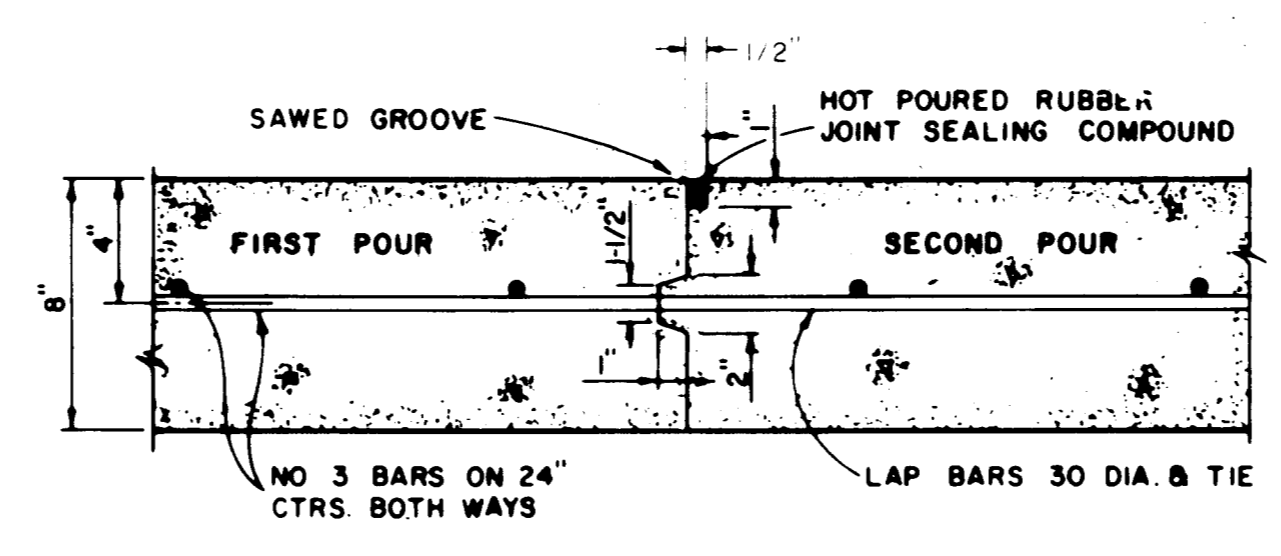
SAWED DUMMY JOINT



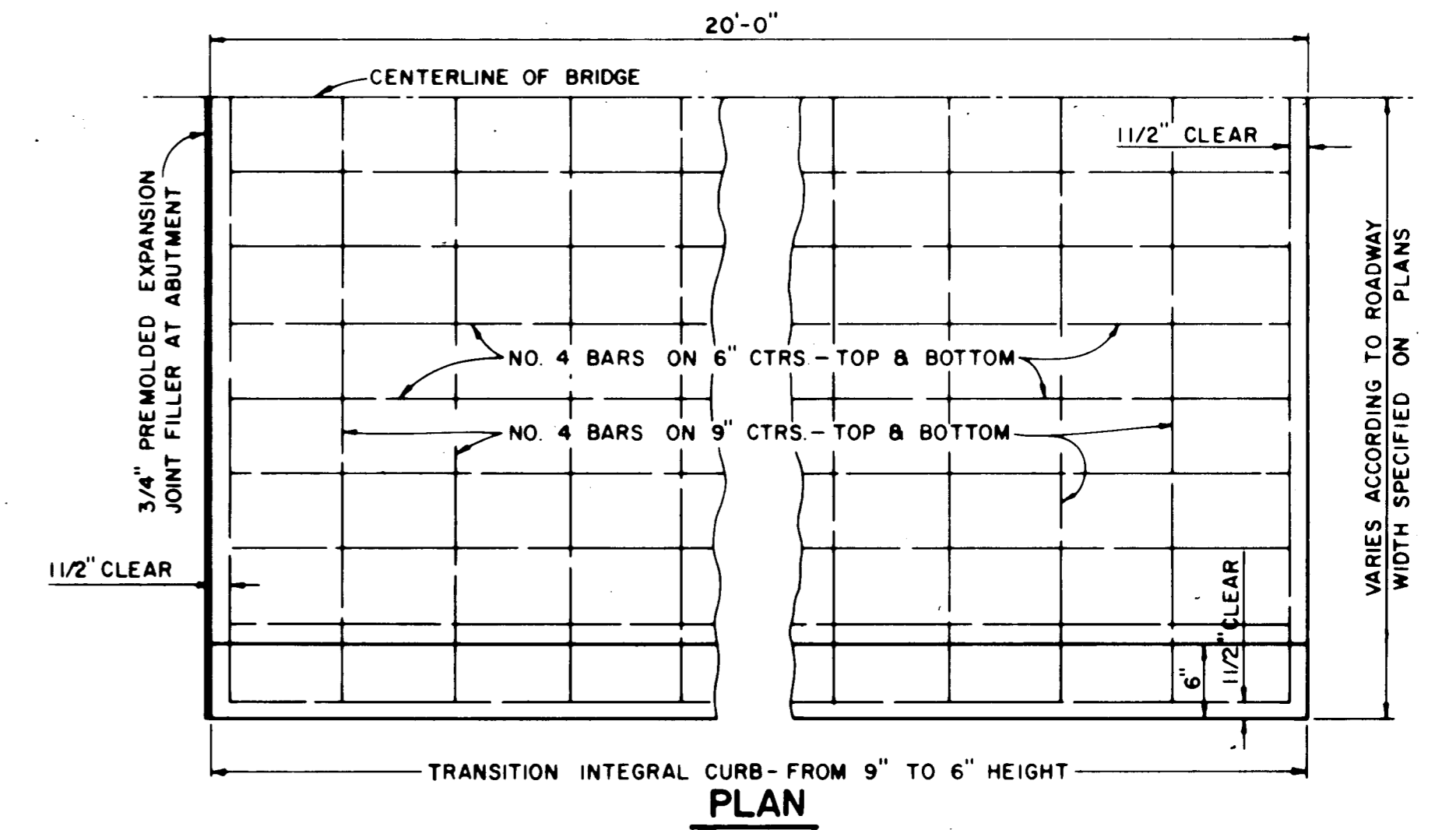
DETAIL OF 6' MEDIAN PAVEMENT



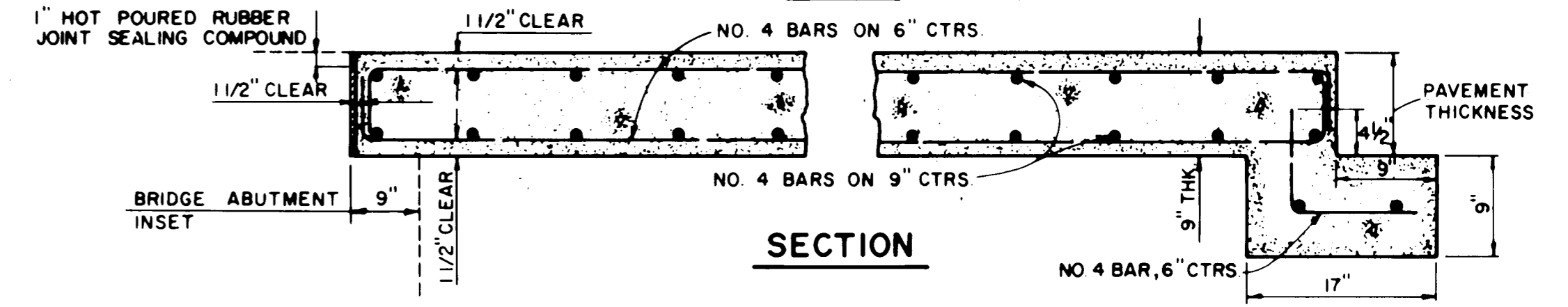
TRANSVERSE EXPANSION JOINT
(SPACED 600 FT MAXIMUM; LOCATE AT INTERSECTIONS)



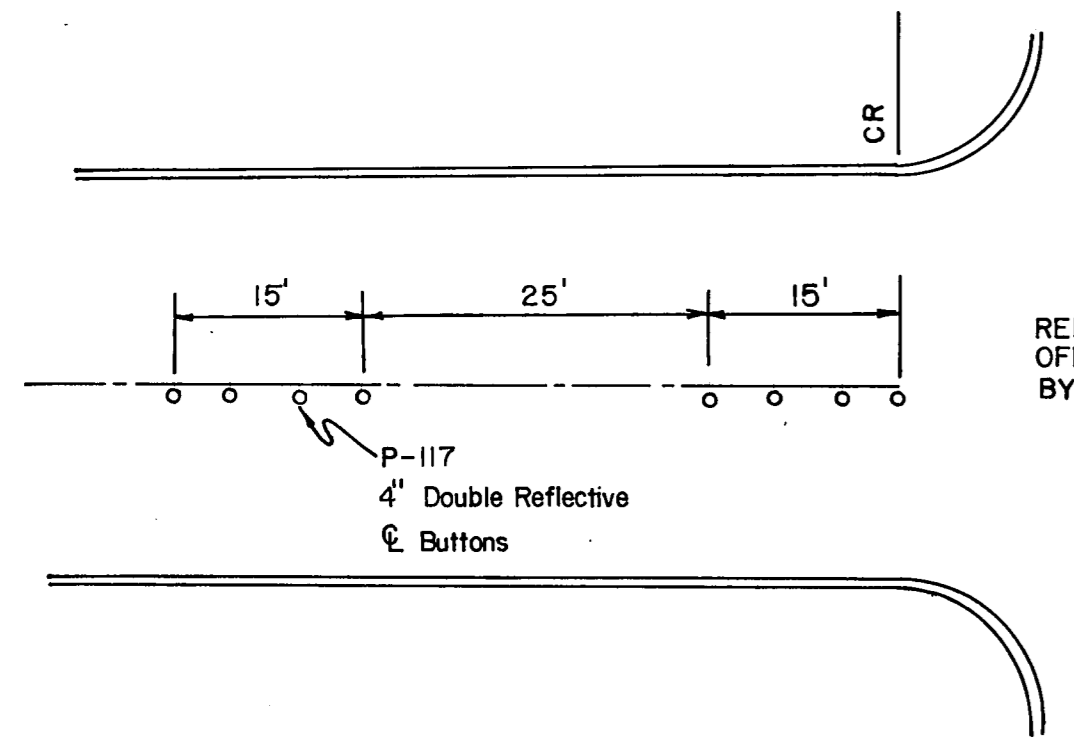
CONSTRUCTION JOINT FOR 8" PAVEMENT



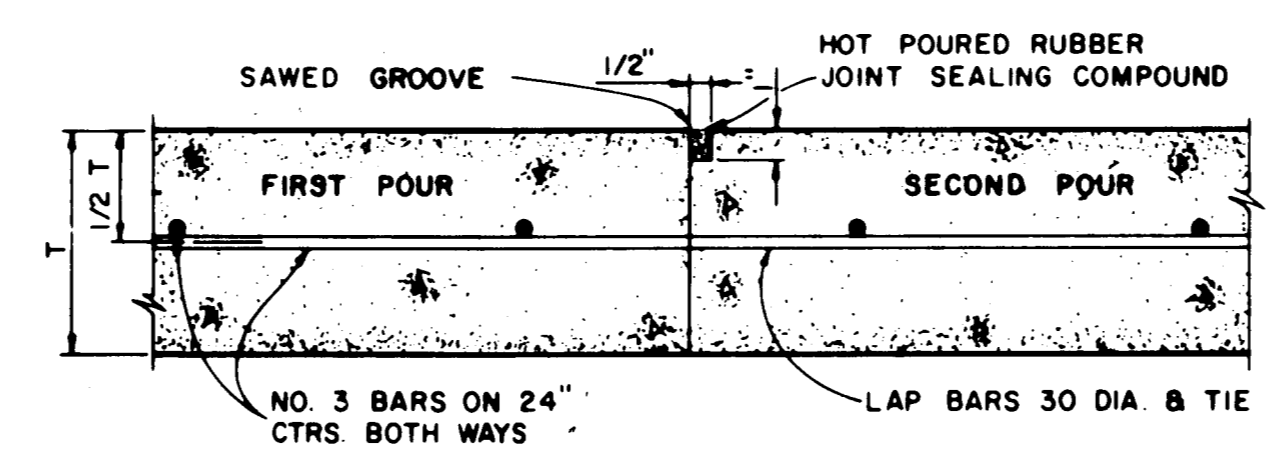
BRIDGE APPROACH SLAB



SECTION



STANDARD BUTTON LAYOUT



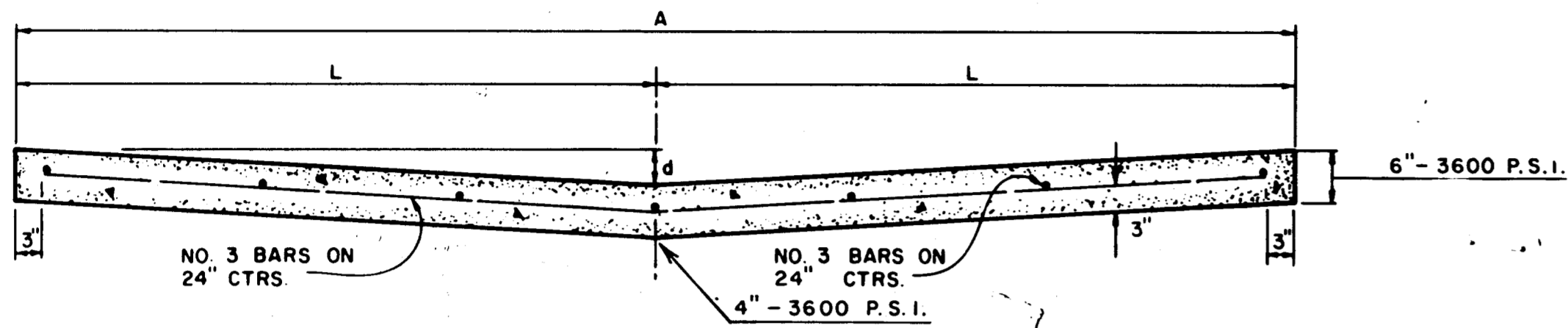
CONSTRUCTION JOINT FOR 5" OR 6" PAVEMENT



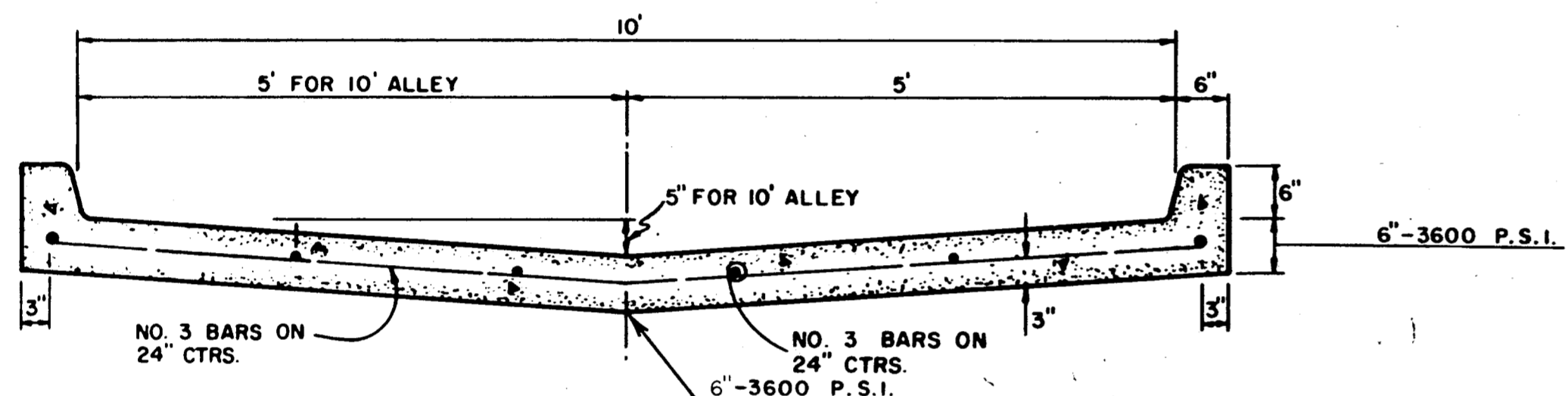
NO.	REVISION	BY	DATE
TOWN OF ADDISON, TEXAS DEPARTMENT OF ENGINEERING			
STANDARD CONSTRUCTION DETAILS PAVING			
PAVEMENT JOINTS			
APPROVED		H. WAYNE GINN, P.E.	
DATE MARCH, 1984		SHEET SD-3	

ALLEY WIDTH (A)	HALF SECTION WIDTH (L)	INVERT DEPTH (d)
10'	5'	5"
12'	6'	6"
16'	8'	6"
20'	10'	6"

ALLEY WIDTH	A	B	C	D	E	F
10'	10'	2'-6"	15'	1'-6"	12'	8.6'
12'	12'	1'-6"	15'	1'-6"	12'	8.5'
16'	16'	2'-0"	20'	2'-0"	16'	8.0'
20'	20'	0	20'	0	20'	10.0'

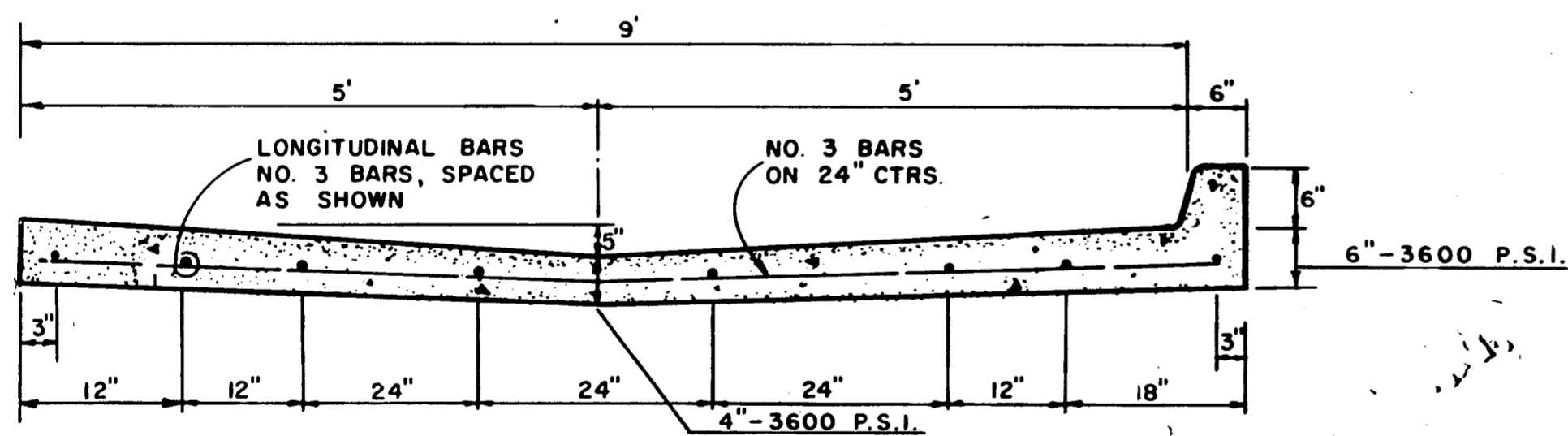


STANDARD 10', 12', 16', & 20' ALLEY SECTION



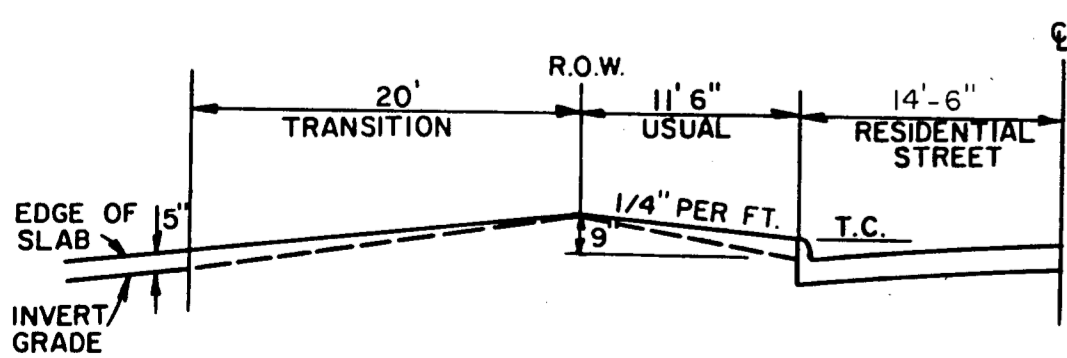
STANDARD ALLEY SECTION WITH CURBS

NOTE: CURBS NOT ALLOWED IN RESIDENTIAL AREAS EXCEPT AS APPROVED BY THE CITY.

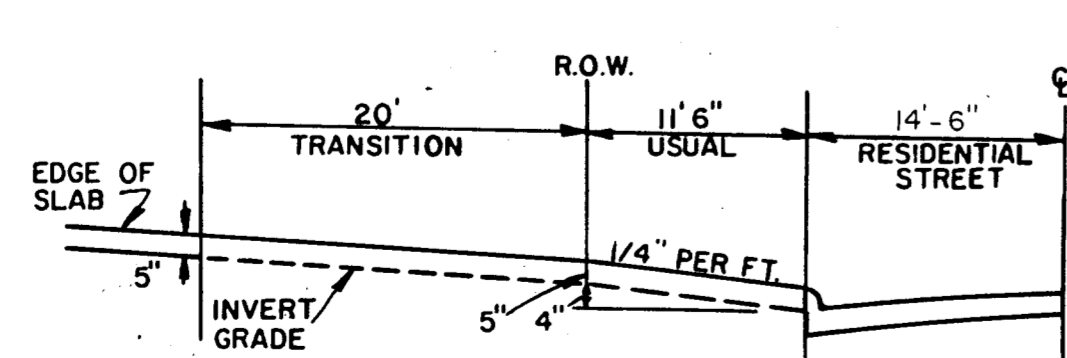


ALTERNATE 10' ALLEY SECTION / CURB

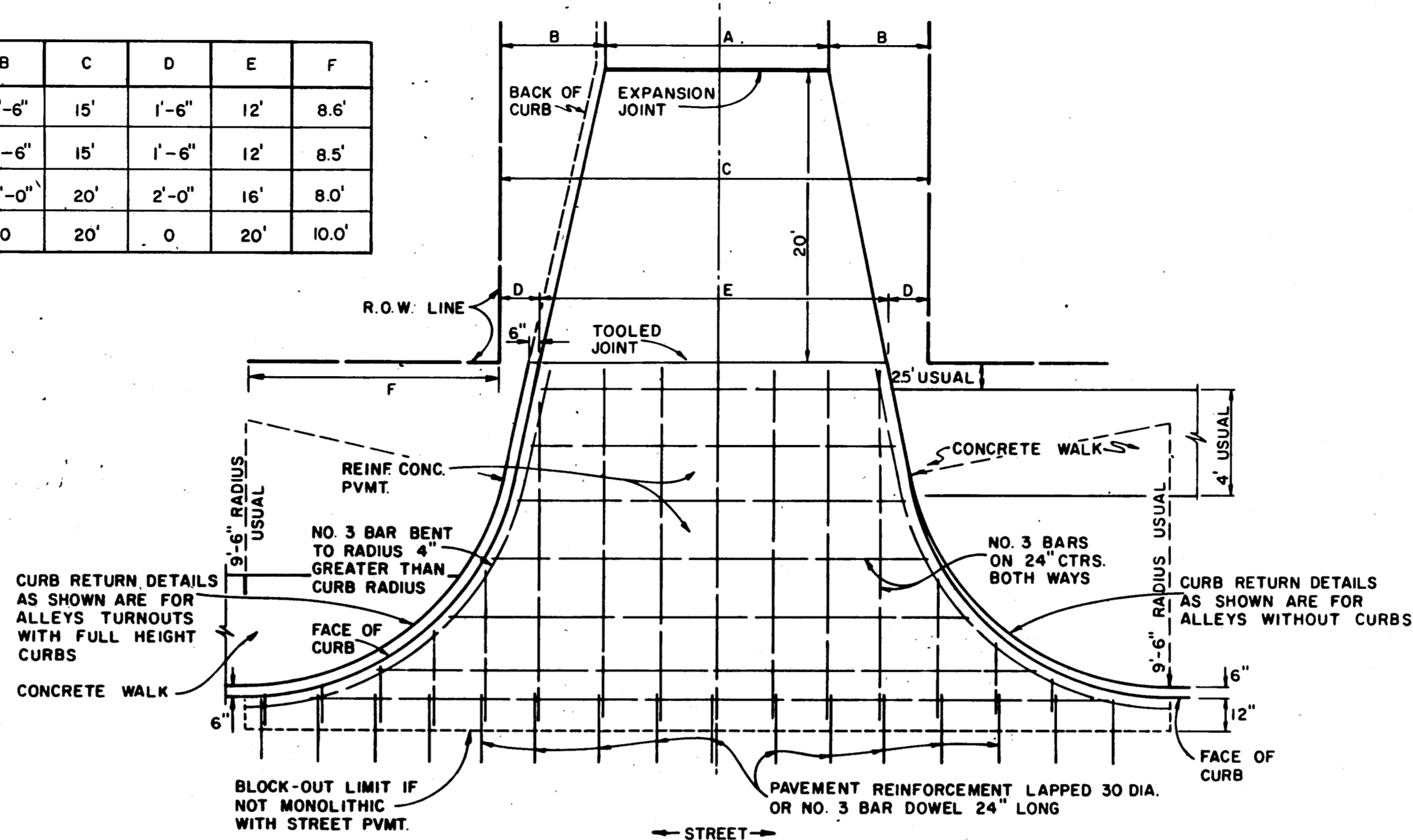
NOTE: CURBS NOT ALLOWED IN RESIDENTIAL AREAS EXCEPT AS APPROVED BY THE CITY.



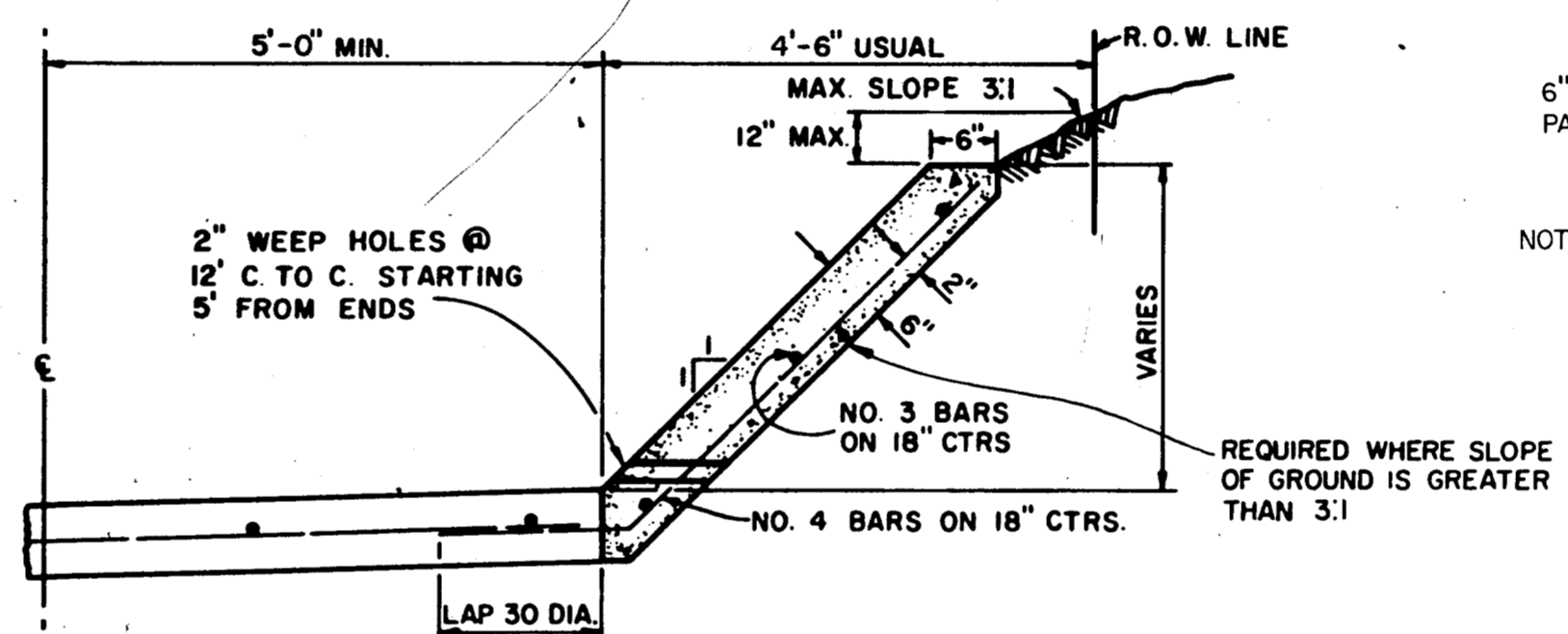
TYPE I ALLEY ENTRANCE



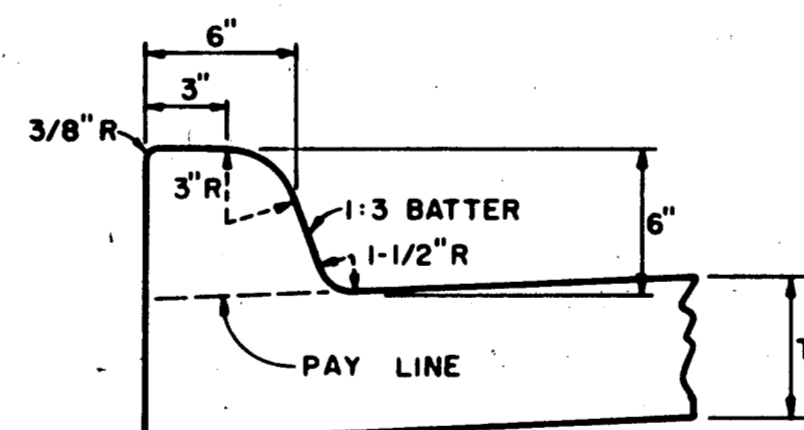
TYPE II ALLEY ENTRANCE



ALLEY RETURN DETAILS



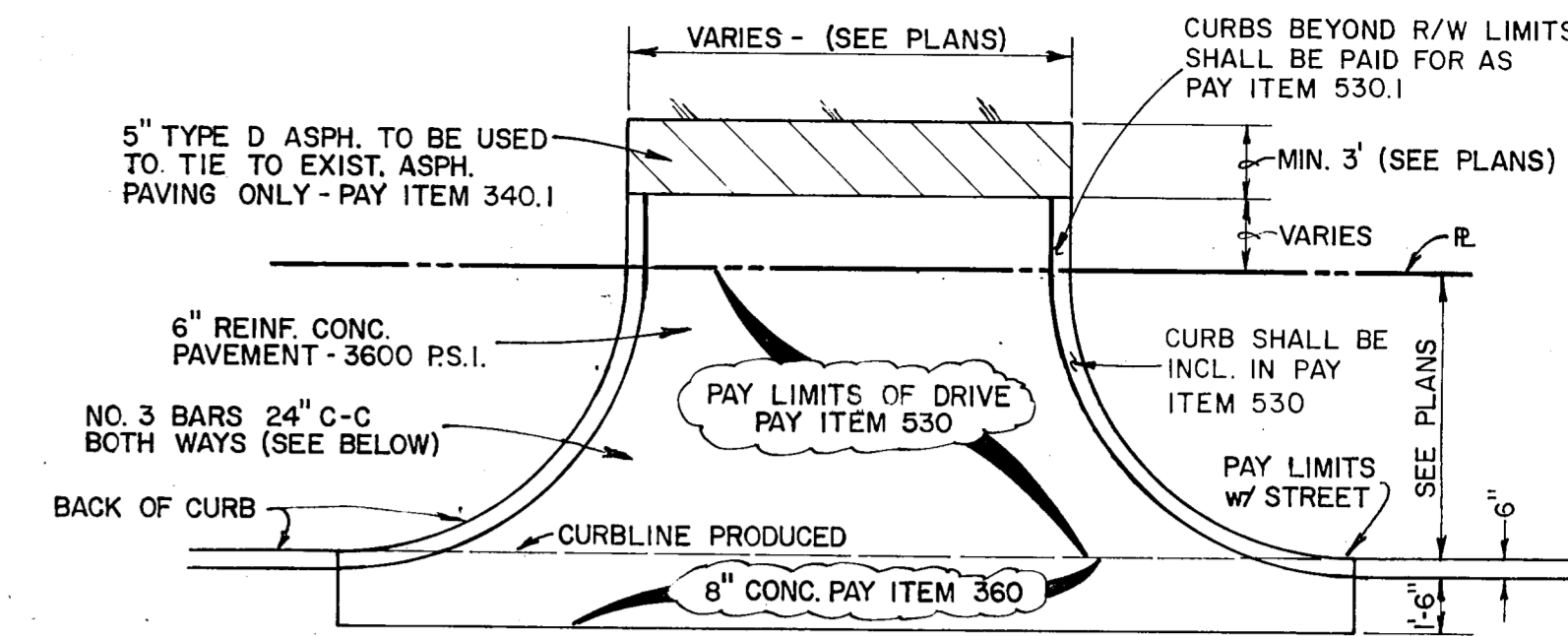
ALLEY SLOPE PROTECTION



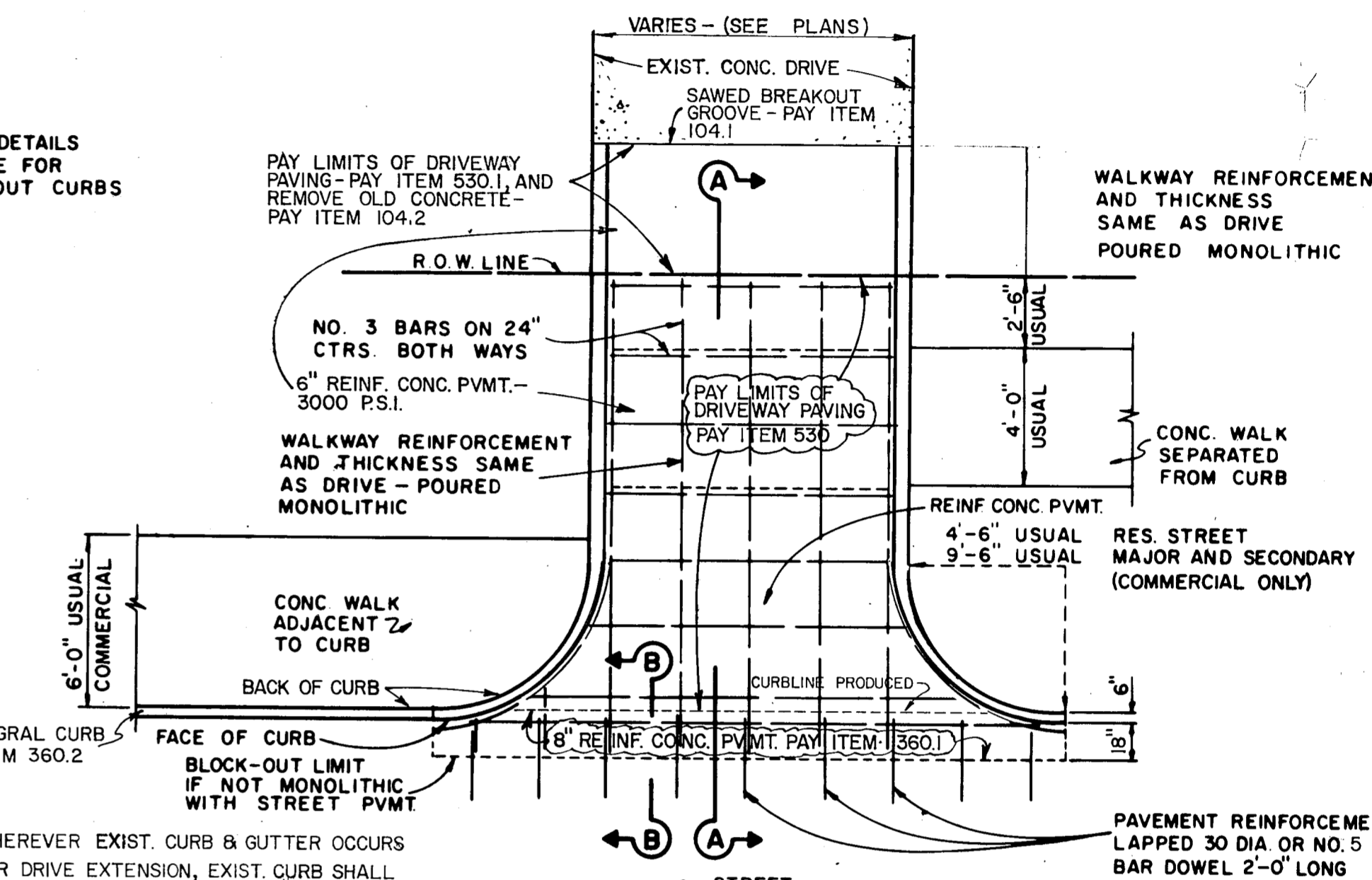
INTEGRAL CURB

GENERAL NOTES FOR ALLEYS AND DRIVEWAYS

1. CONCRETE FOR ALLEY RETURNS AND DRIVEWAYS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS IDENTICAL TO THAT SPECIFIED FOR THE STREET PAVEMENT BASE WHEN BUILT AS COMPONENTS OF A CONCRETE PAVING PROJECT. WHEN BUILT SEPARATELY, THE STRENGTH SHALL BE AS SPECIFIED ON THE CONSTRUCTION PLANS.
2. CONCRETE FOR ALLEY PAVEMENT SHALL BE OF THE STRENGTH SPECIFIED ON THE CONSTRUCTION PLANS. (3000 P.S.I. OR 3600 P.S.I. MINIMUM COMPRESSIVE)
3. SPACING AND CONSTRUCTION OF JOINTS SHALL CONFORM TO STREET PAVEMENT DETAILS.

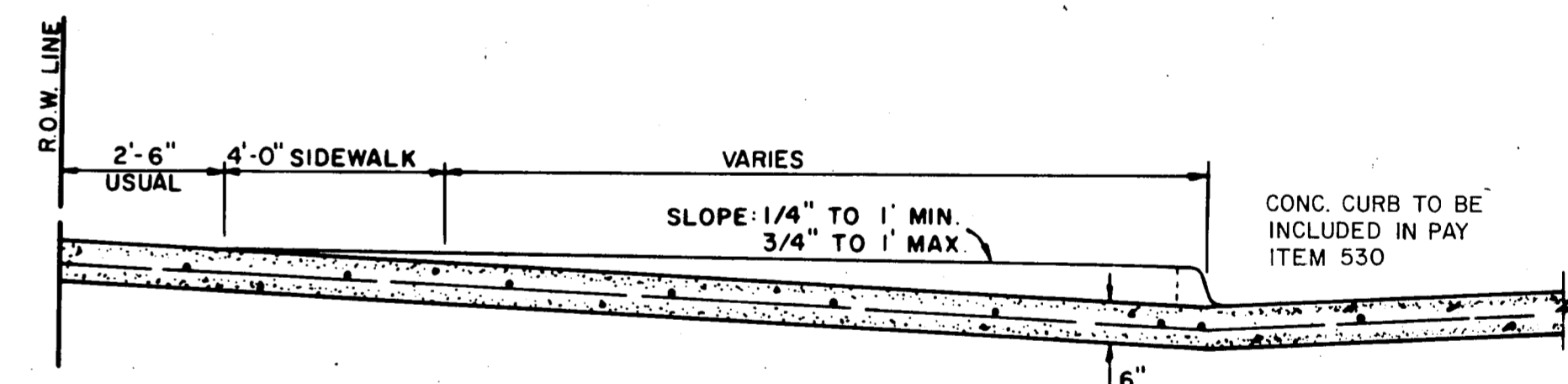


DRIVEWAY PAVING DETAIL

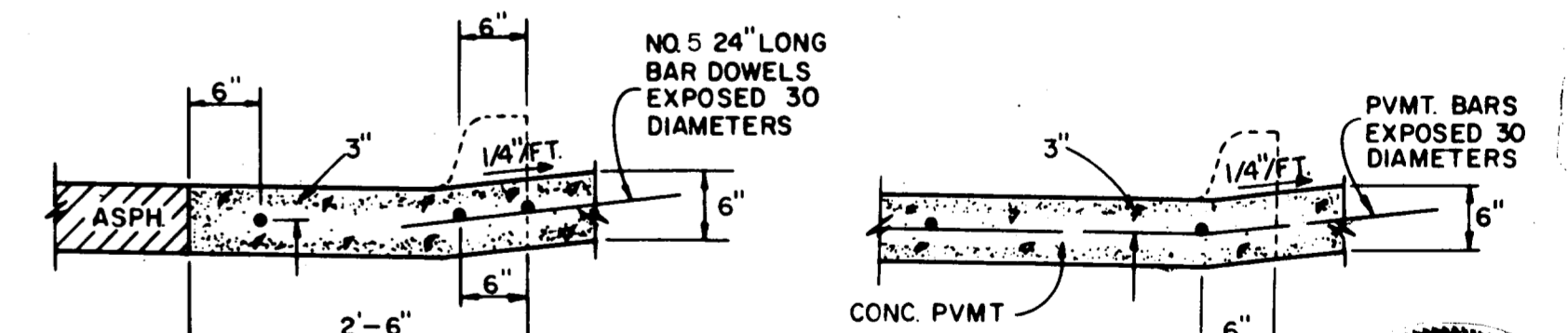


DRIVEWAY RETURN TO STREET

NOTE: WHEREVER EXIST. CURB & GUTTER OCCURS FOR DRIVE EXTENSION, EXIST. CURB SHALL NOT BE REMOVED BEYOND CURB RETURN UNLESS DIRECTED BY ENGINEER.

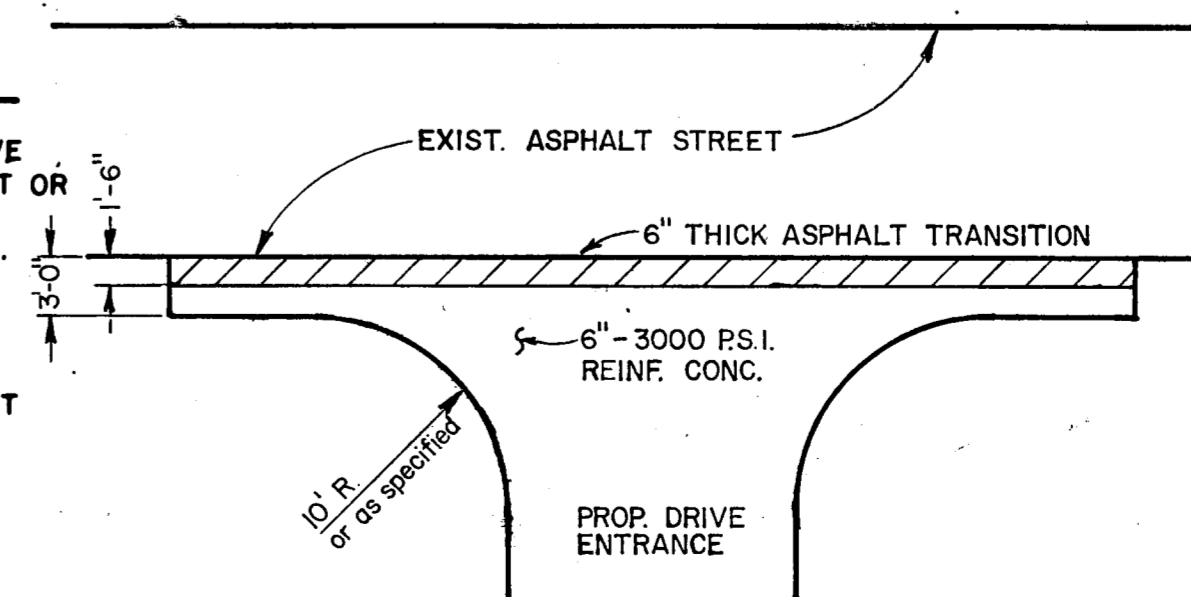


SECTION A-A



SECTION B-B

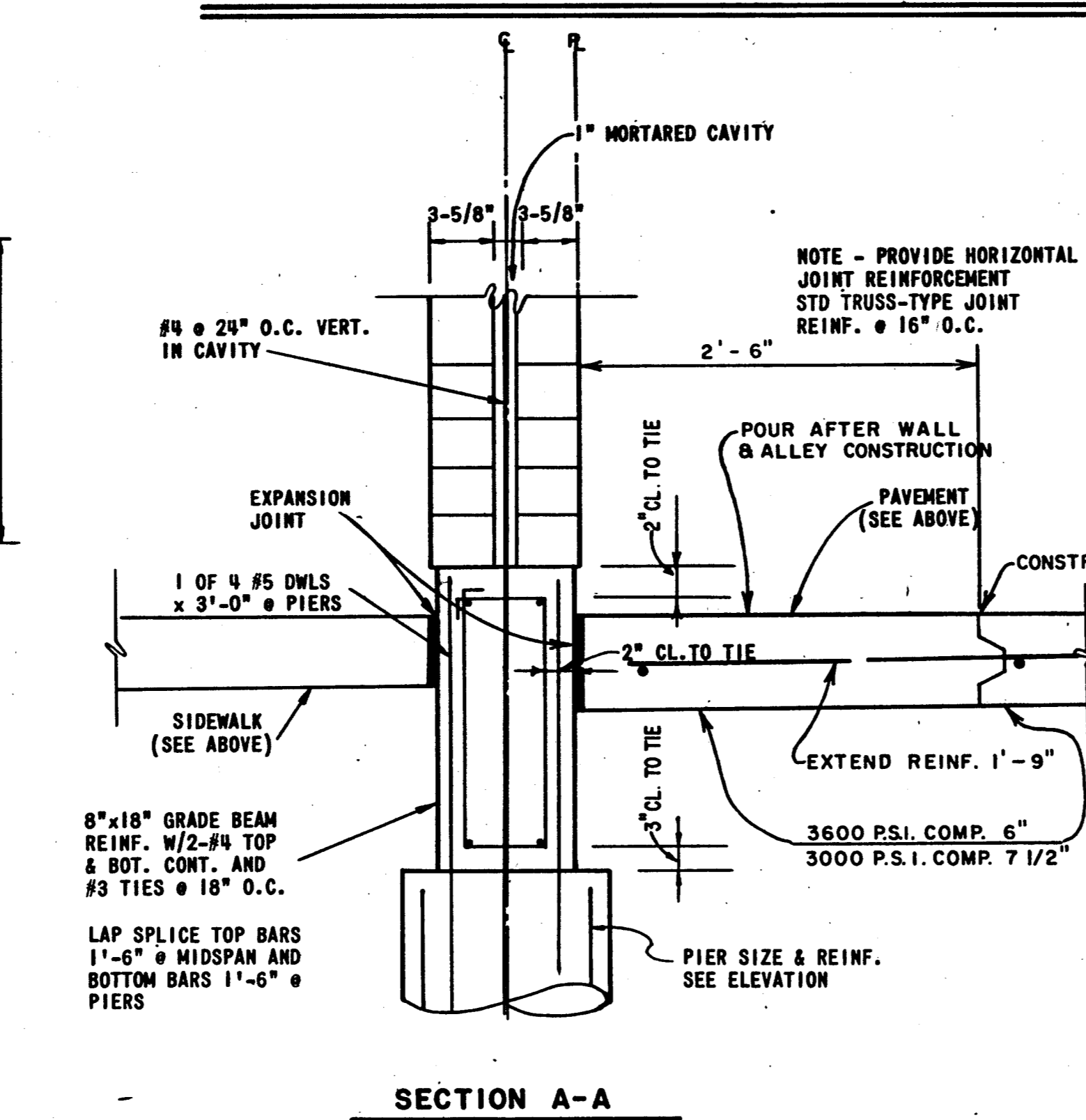
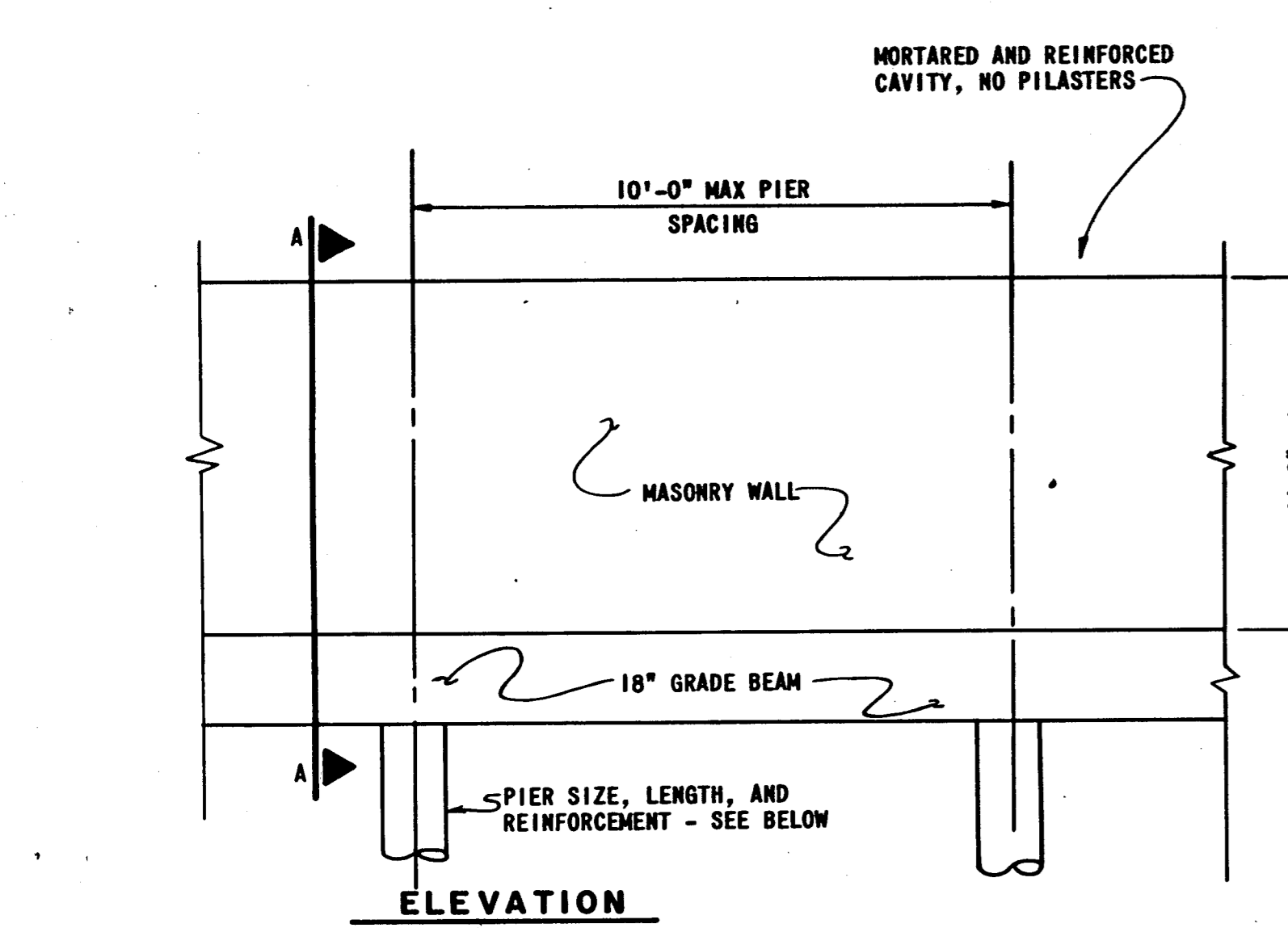
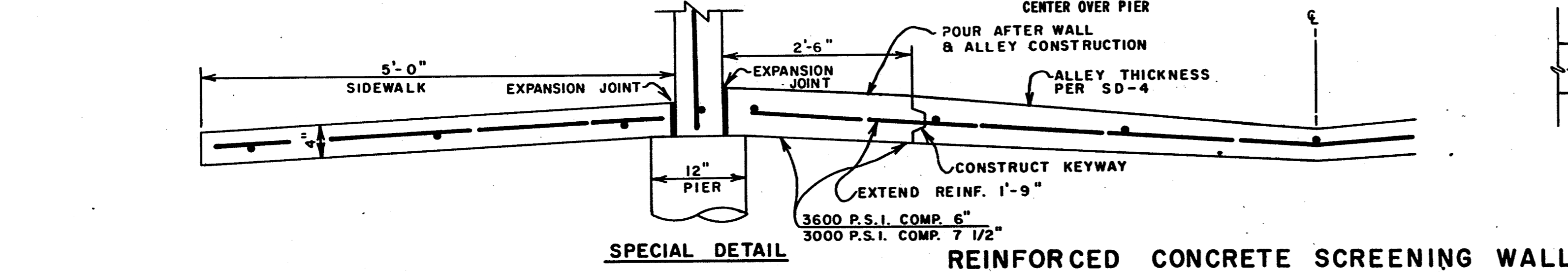
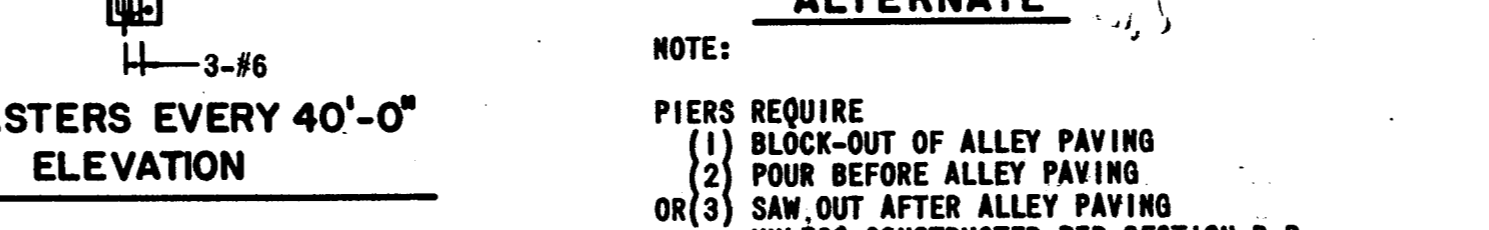
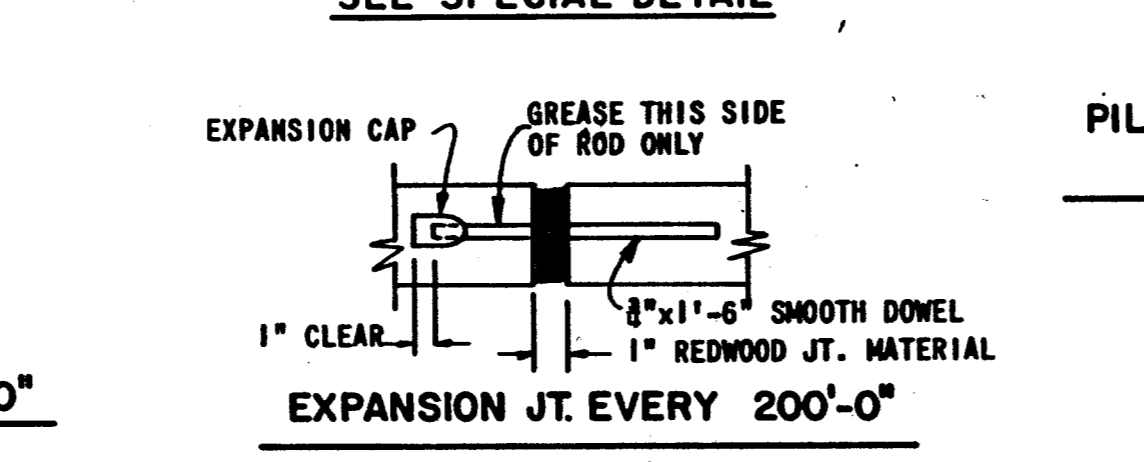
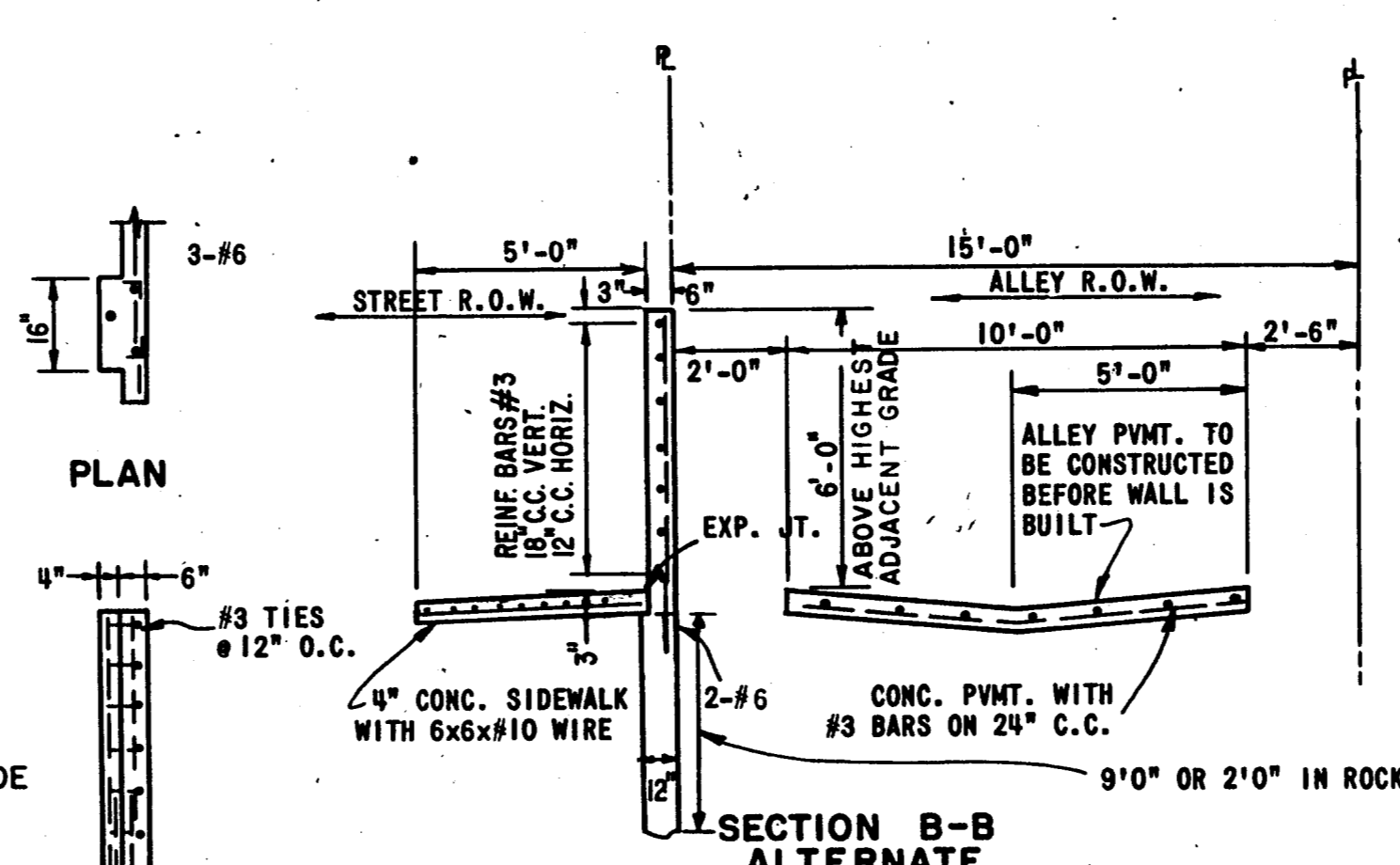
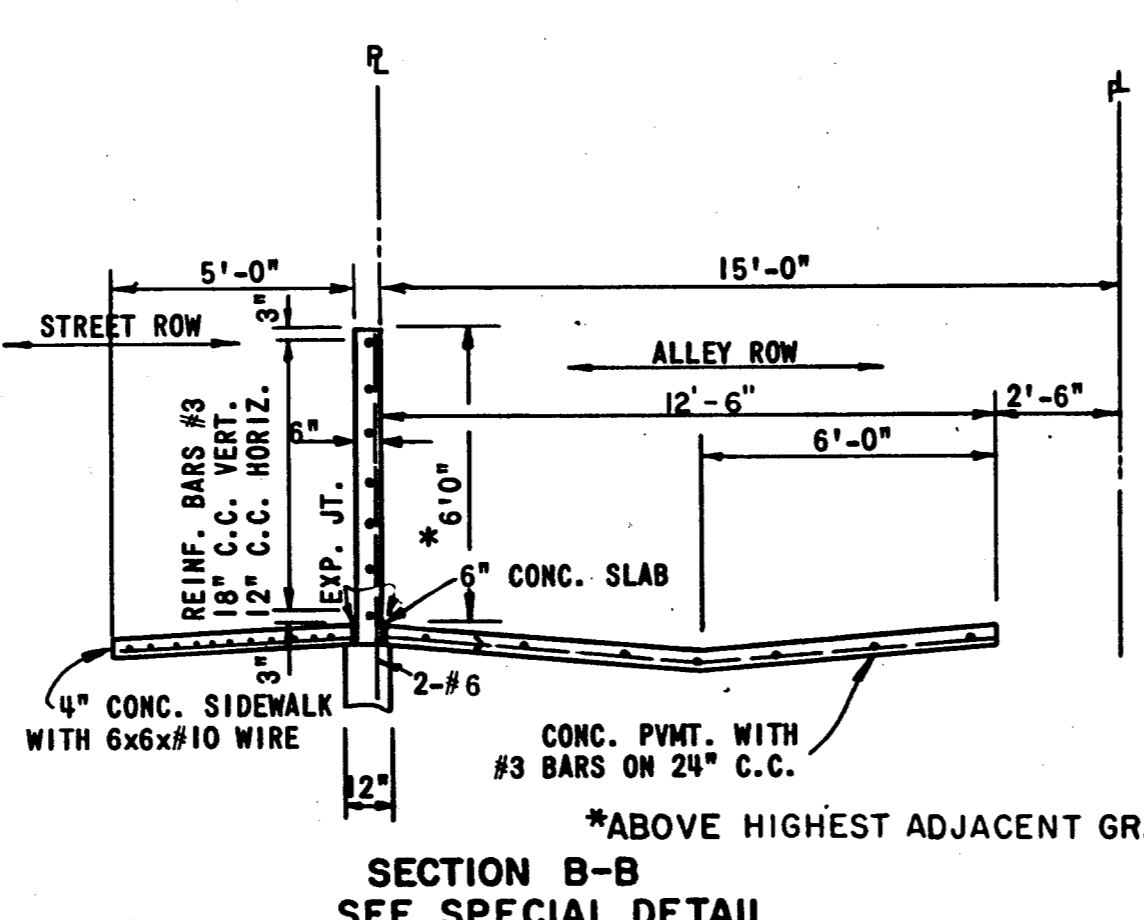
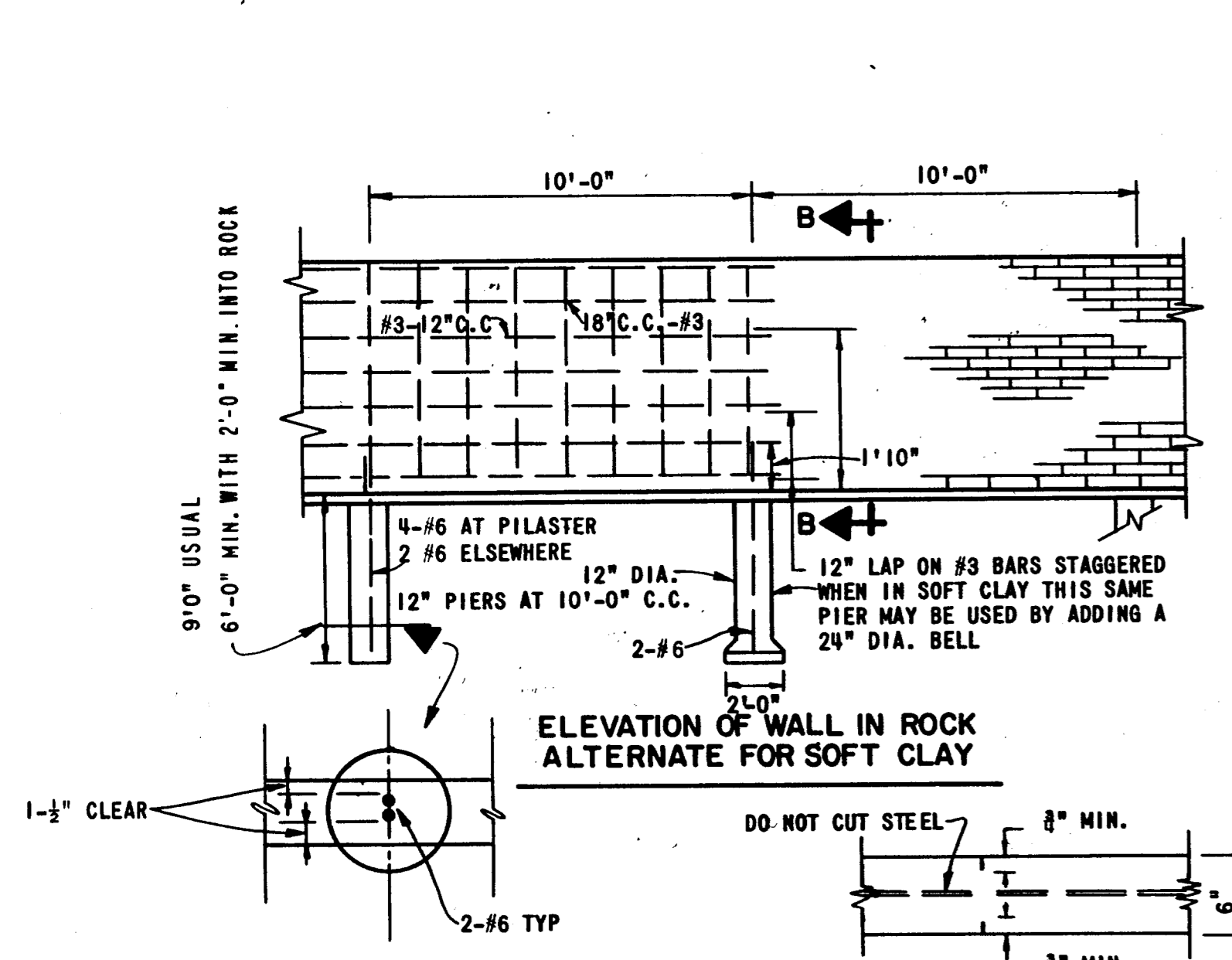
DRIVEWAY RETURN DETAILS



TYPICAL DRIVE CONNECTION TO EXISTING ASPHALT STREET

NO.	REVISION	BY	DATE
TOWN OF ADDISON, TEXAS DEPARTMENT OF ENGINEERING			
STANDARD CONSTRUCTION DETAILS PAVING			
ALLEY AND DRIVEWAY RETURNS			
APPROVED _____ H. WAYNE GINN, P.E.			
DATE: MARCH, 1984		SHEET SD-4	



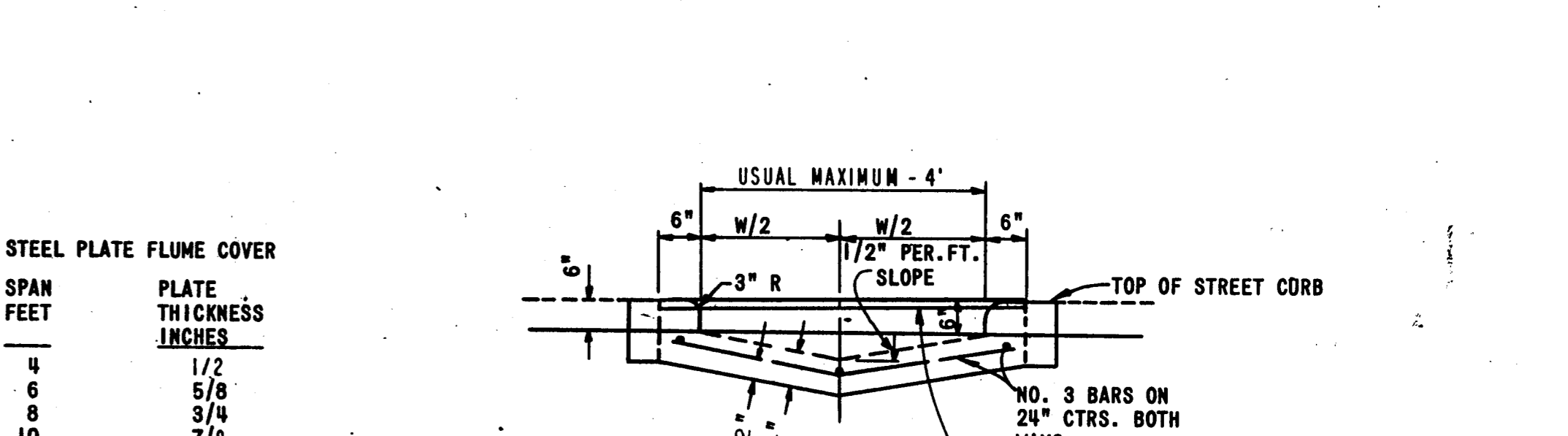
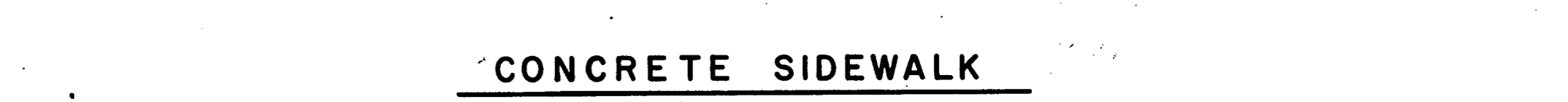
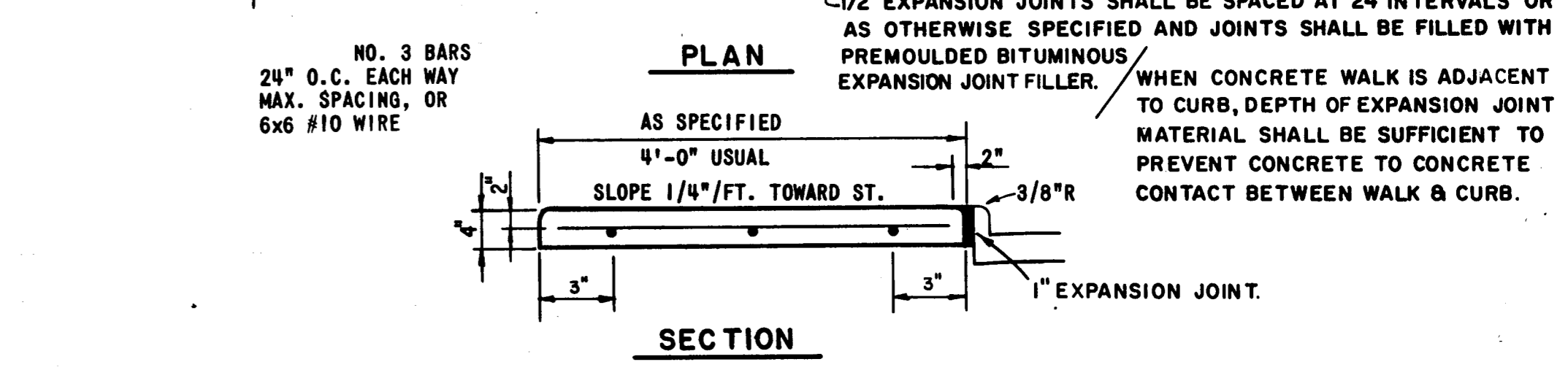
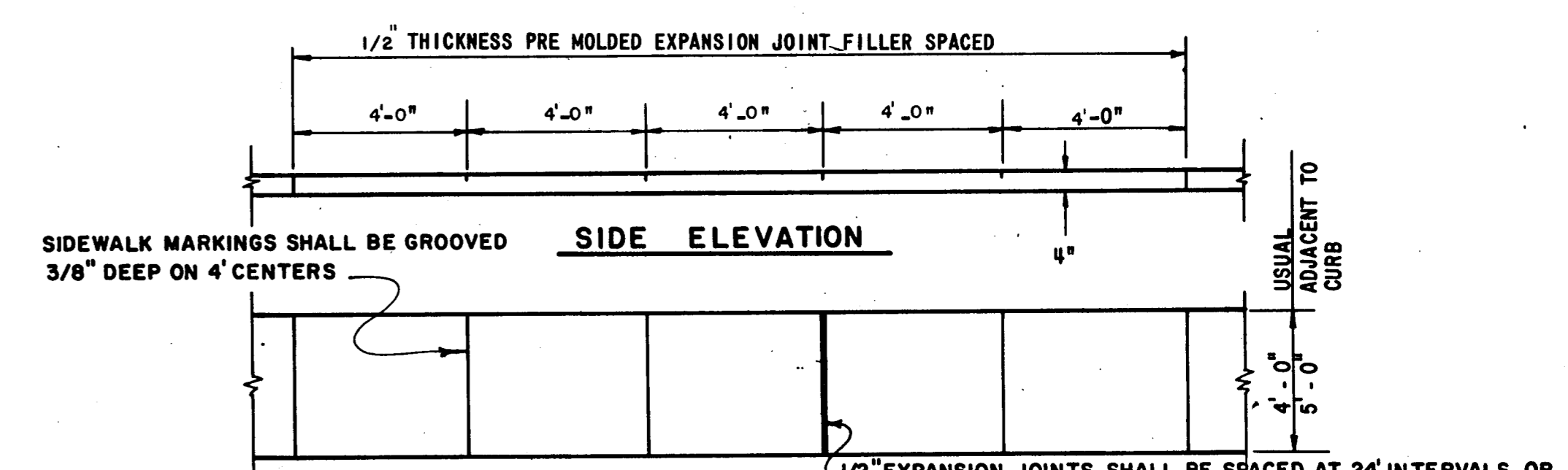


DRILLED PIERS - 12" REINF. W/ 4-#4 VERT. & #4 TIES @ 24" O.C. MINIMUM LENGTH OF PIER IS 6'-0". *PIER BOTTOM MAY BE EITHER OF THE TWO ALTERNATES:

- 12" # STRAIGHT SHAFT EMBEDDED MINIMUM 2'-0" INTO LIMESTONE. RESULTING BEARING STRESS IS 8.0 KIPS PER SQUARE FOOT.
- 12" # SHAFT W/ 24" # BELL IN CLAY. RESULTING BEARING STRESS IS 2.0 KIPS PER SQUARE FOOT.

* SEE GENERAL NOTE NO. 9

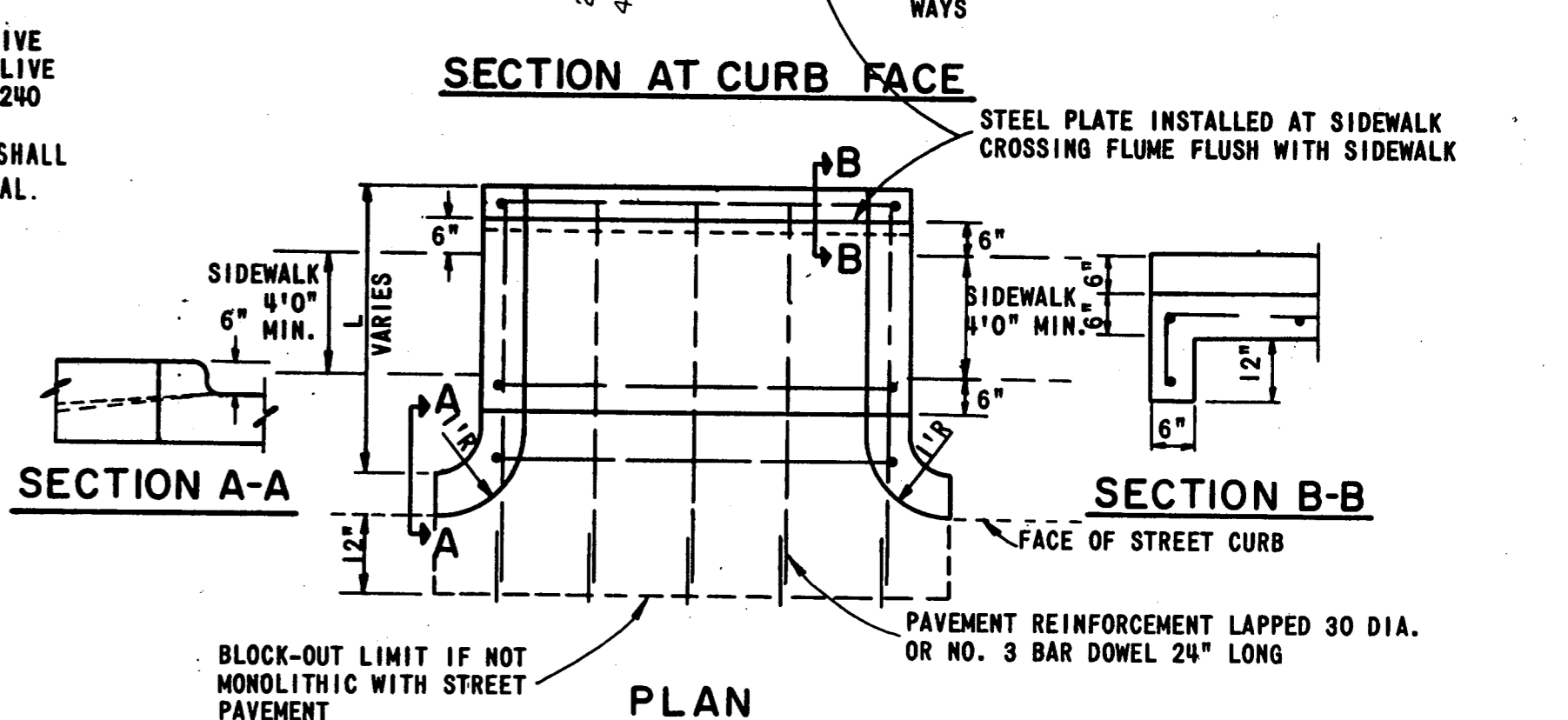
NOTE:
PIERS REQUIRE
(1) BLOCK-OUT OF ALLEY PAVING
(2) POUR BEFORE ALLEY PAVING
OR (3) SAW OUT AFTER ALLEY PAVING UNLESS CONSTRUCTED PER SECTION B-B



STEEL PLATE FLUME COVER

SPAN FEET	PLATE THICKNESS INCHES
4	1/2
6	5/8
8	3/4
10	7/8

BASED ON 100 P.S.I. LIVE LOAD AND MAX. DEAD & LIVE LOAD DEFLECTION OF L/240 BOLT PLATE DOWN WITH BRASS BOLTS. SURFACE SHALL BE A NON-SKID MATERIAL.



- GENERAL NOTE:
1. CONCRETE - NORMAL WEIGHT, 3000 PSI. @ 28 DAYS
 2. REINFORCEMENT - ASTM A 615 - GR. 60
 3. MASONRY - COMPRESSIVE STRENGTH OF 2000 PSI, f'm = 900 PSI
 4. WIND LOAD - 20 PSF
 5. PIER BEARING STRESSES - SEE BRICK SCREENING WALL NOTES
 6. MORTAR - TYPE S, 1800 PSI
 7. PROVIDE CONTROL JOINTS @ 50 FT
 8. PROVIDE EXPANSION JOINTS @ 200 FT ON CENTER MAXIMUM
 9. WHERE THERE IS NO ALLEY PAVEMENT, PROVIDE MIN. 9 FT. LENGTH OF PIERS. THIS APPLIES TO BOTH THE REINFORCED CONCRETE SCREENING WALL AND THE BRICK SCREENING WALL
 10. ALL EXPOSED CONCRETE SHALL HAVE FINISHED SURFACE.

FLUME PAY ITEM 432.1

NO.	REVISION	BY	DATE

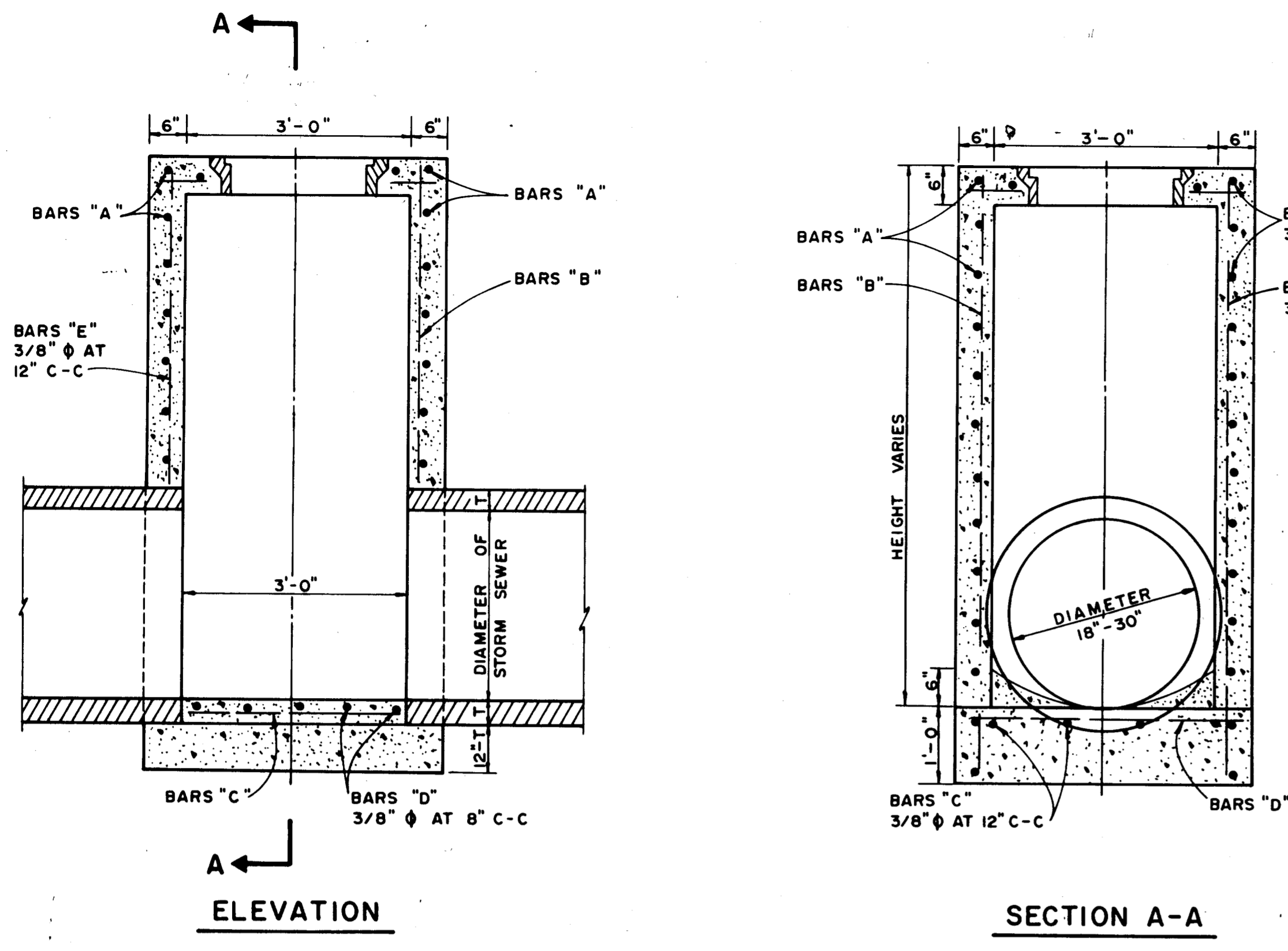
TOWN OF ADDISON, TEXAS
DEPARTMENT OF ENGINEERING
STANDARD CONSTRUCTION DETAILS
PAVING

SCREENING WALL - SIDEWALK

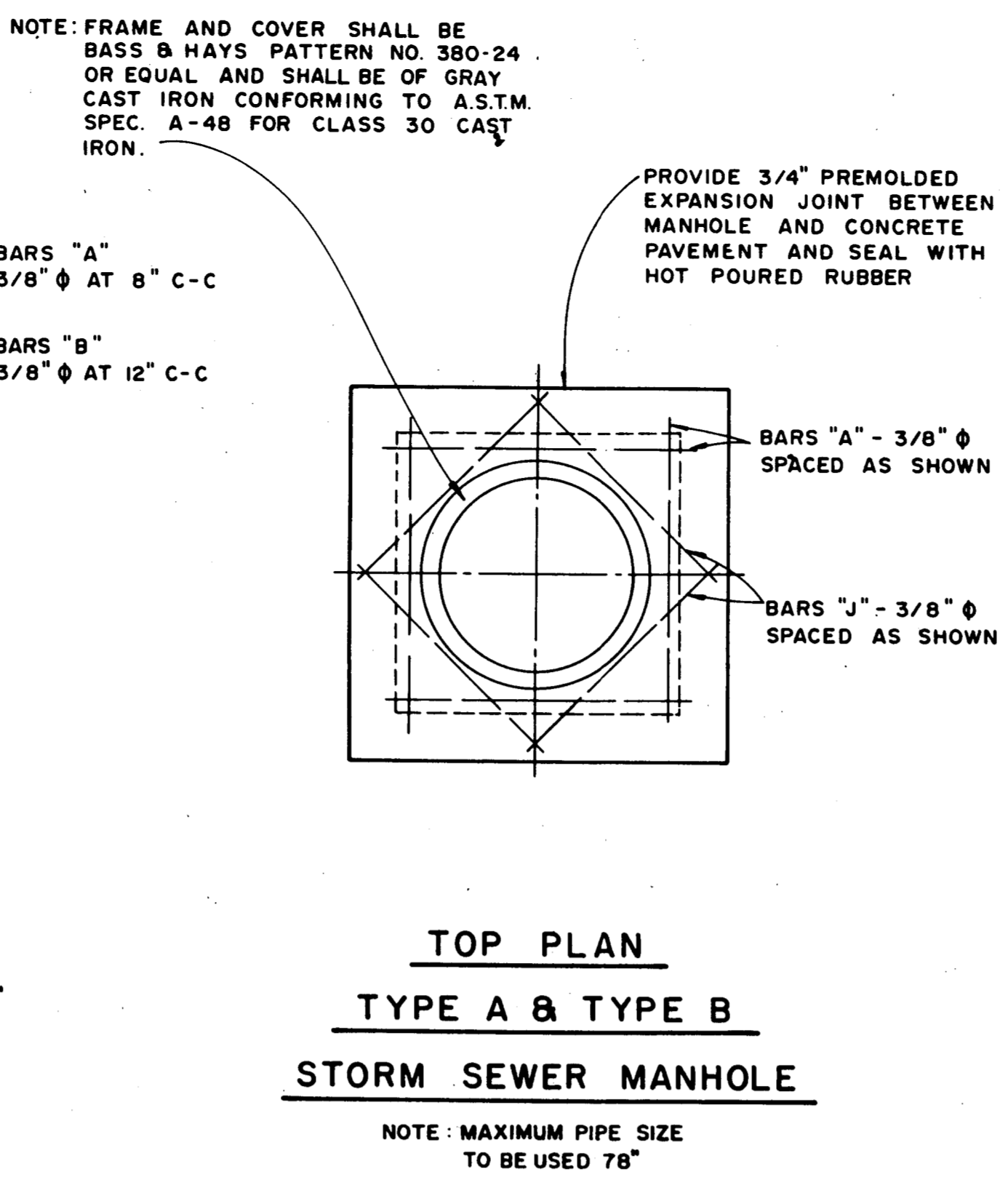
APPROVED: H. WAYNE GINN, PE
DATE: MARCH, 1984

SHEET SD-7

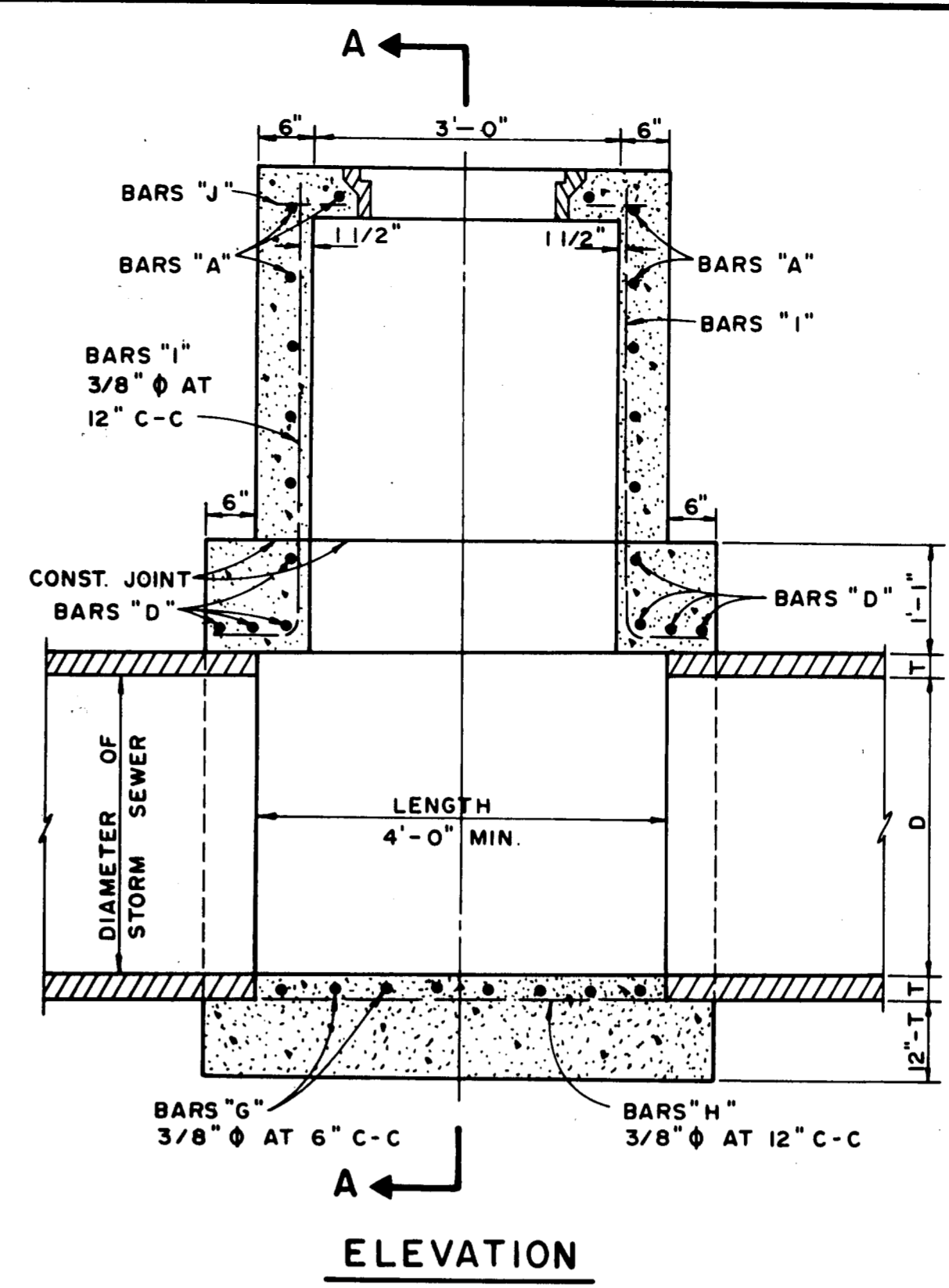




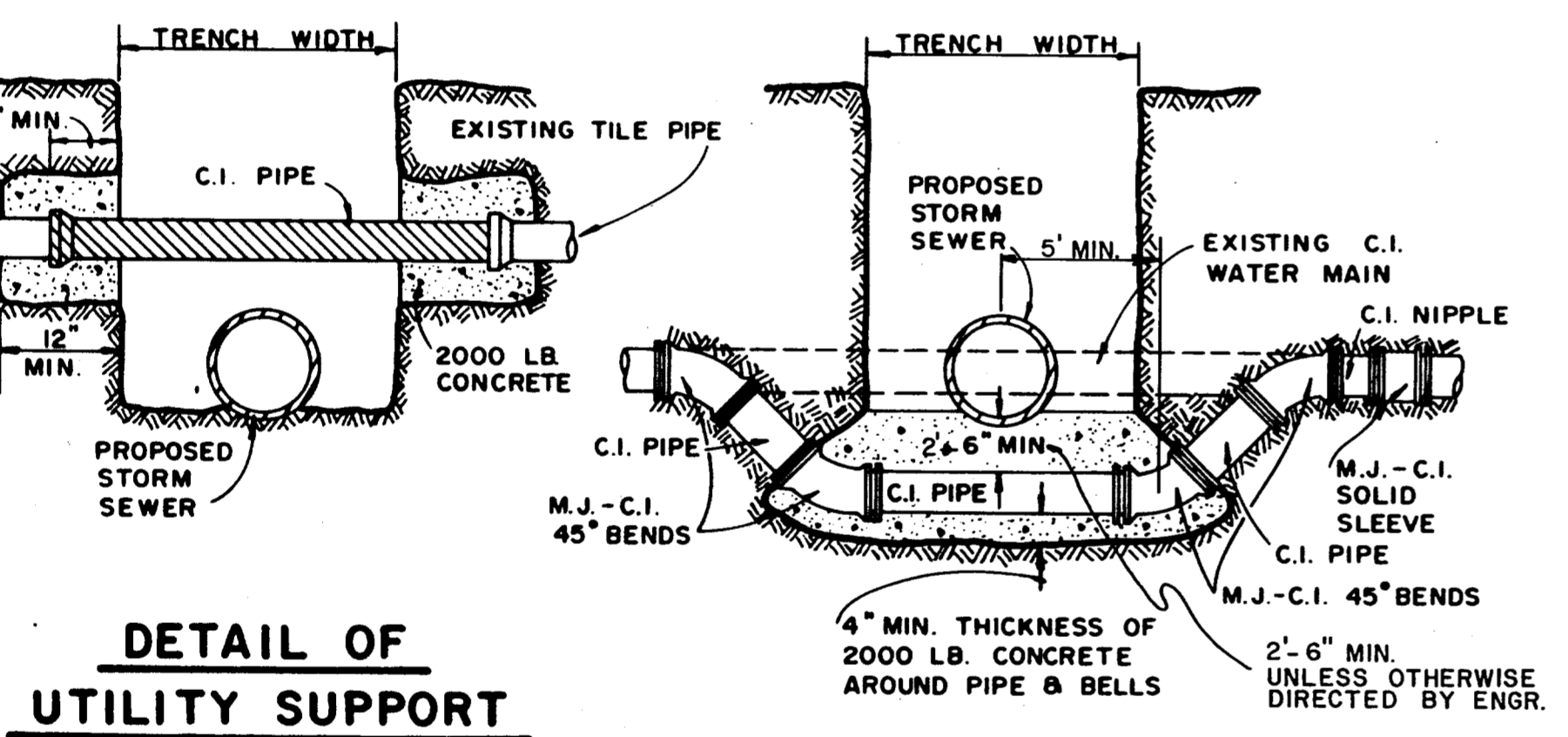
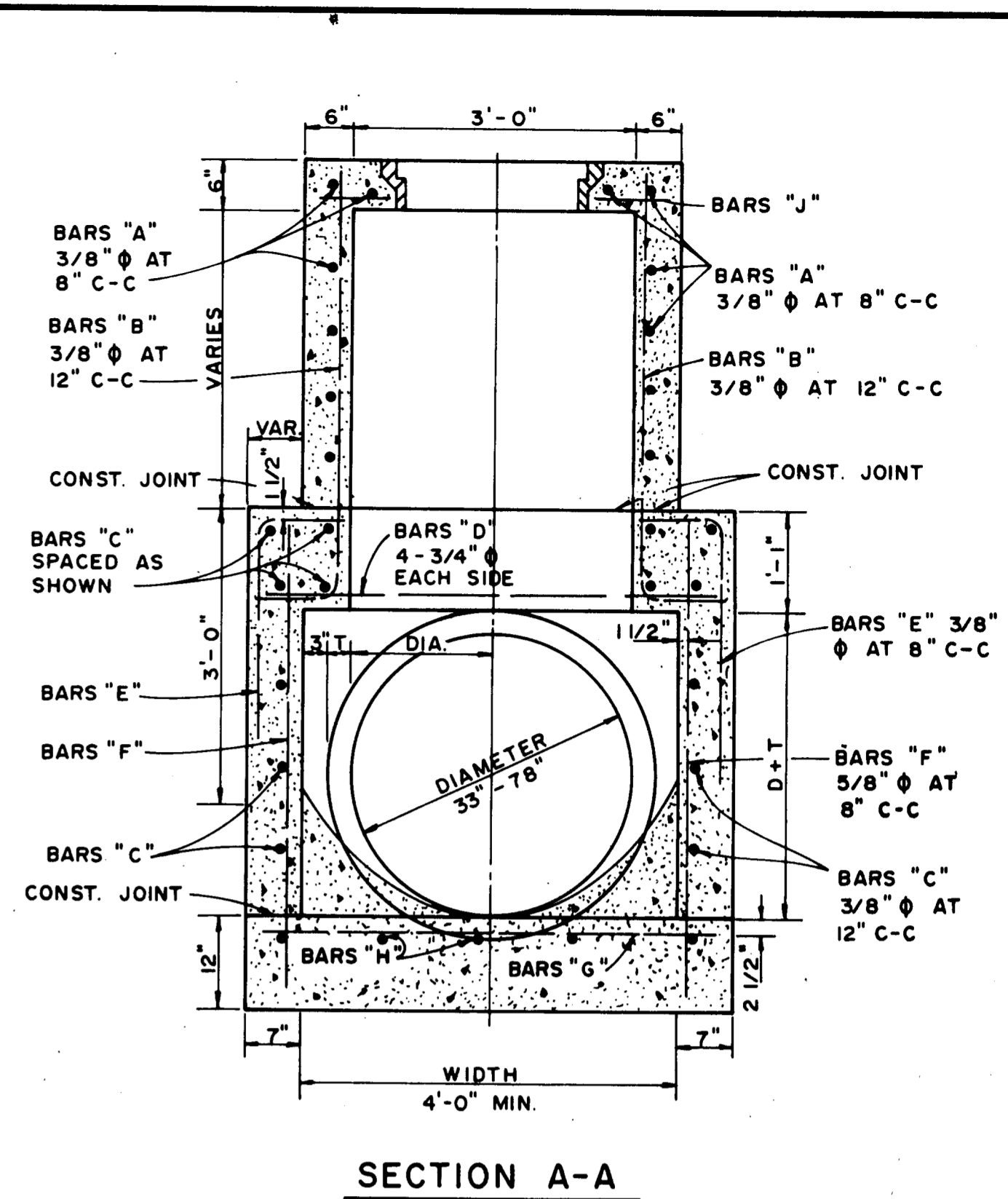
TYPE A STORM SEWER MANHOLE
(FOR PIPE 18" TO 30" IN DIAMETER)



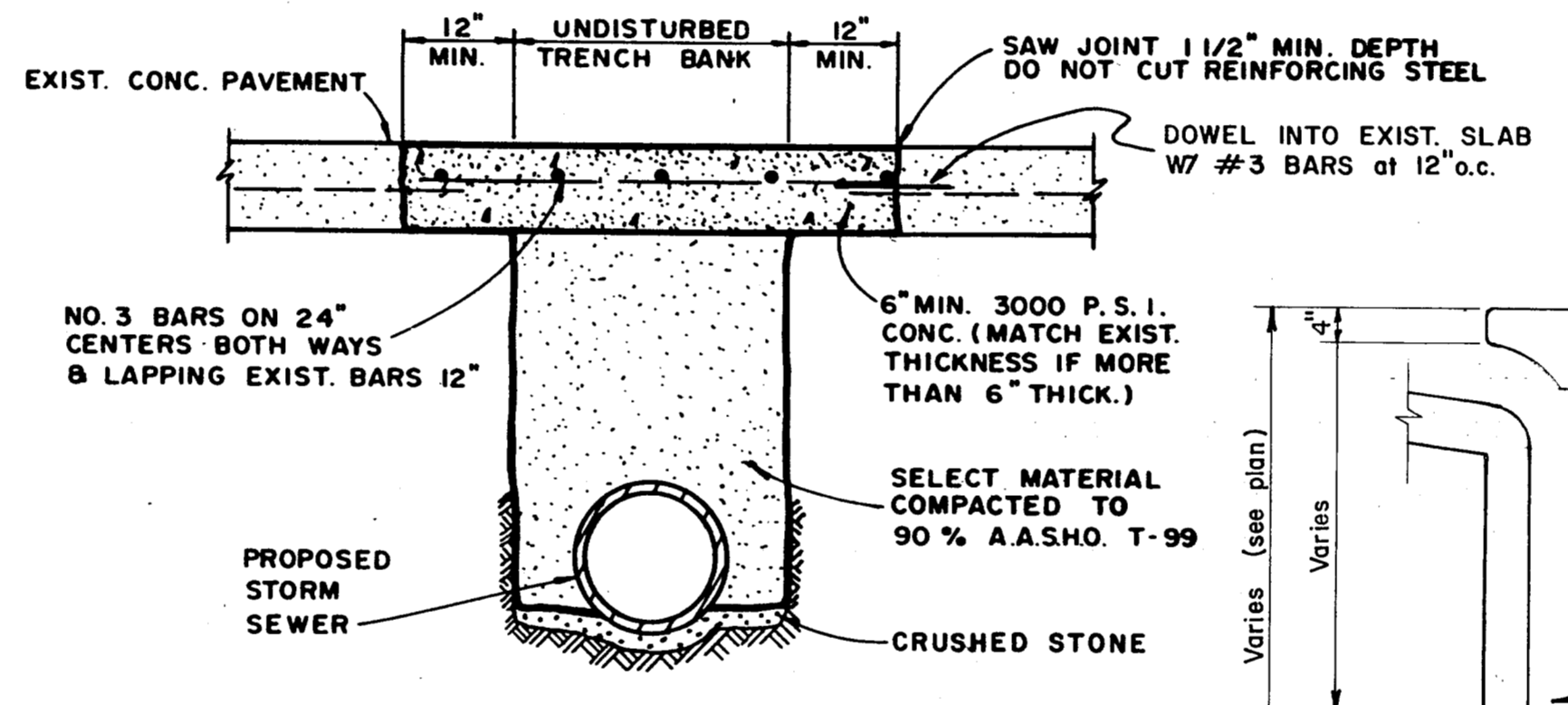
TOP PLAN
TYPE A & TYPE B
STORM SEWER MANHOLE
NOTE: MAXIMUM PIPE SIZE TO BE USED 78"



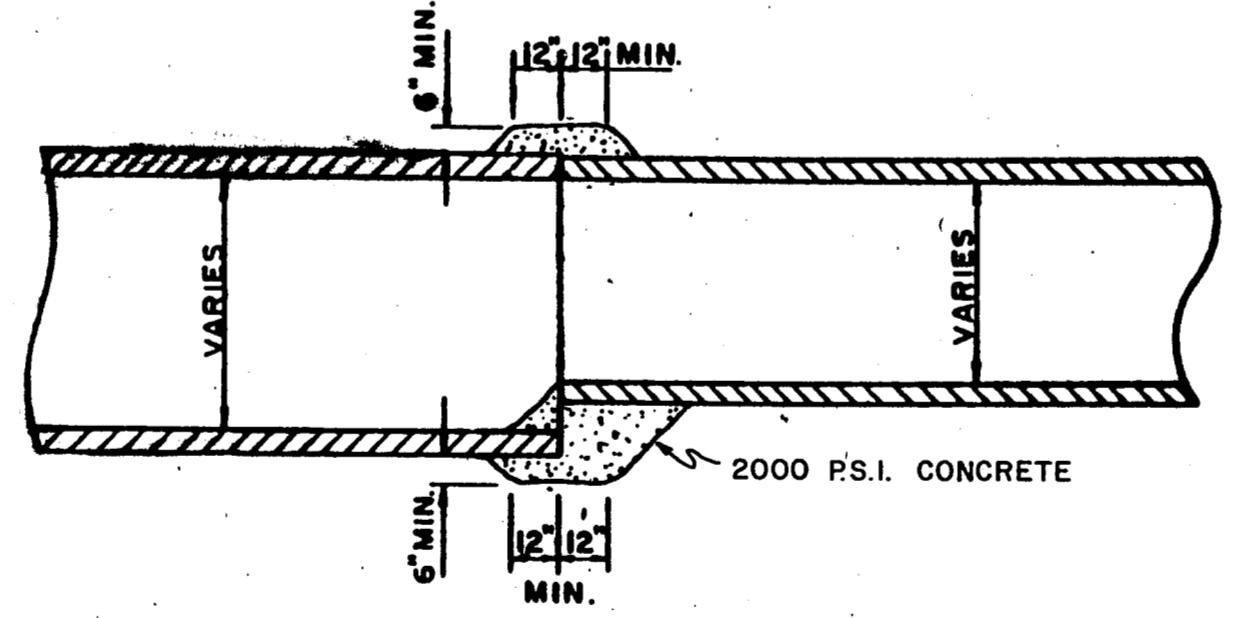
TYPE B STORM SEWER MANHOLE
(FOR PIPE 33" TO 78" IN DIAMETER)



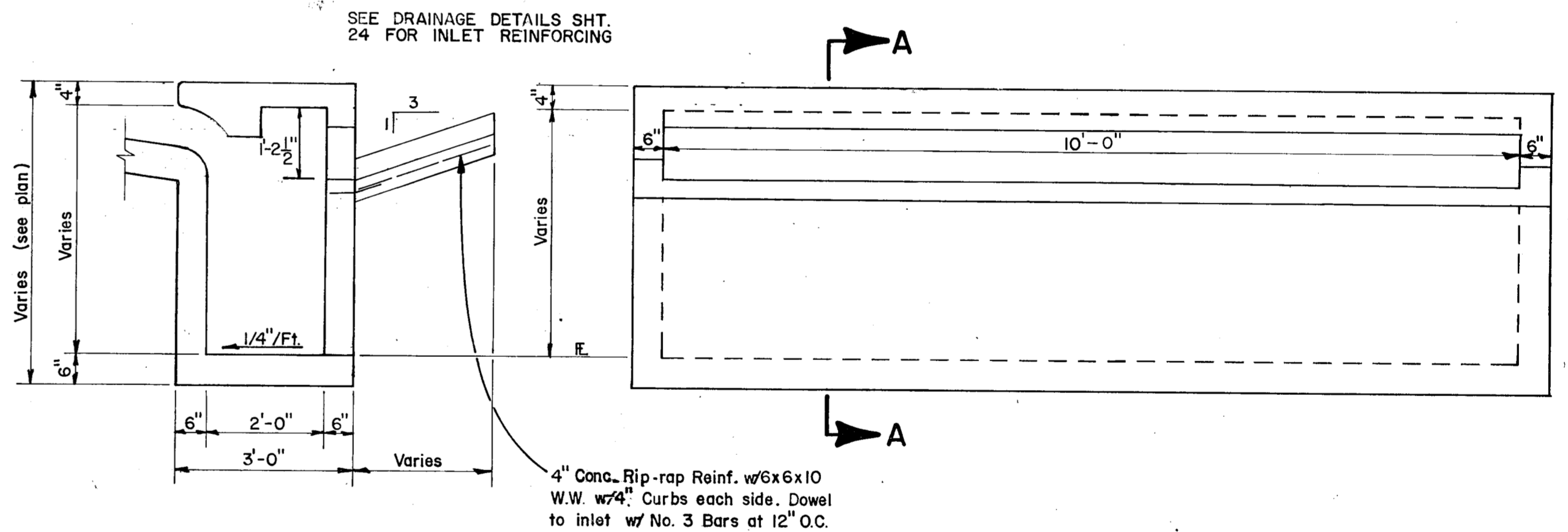
DETAIL OF UTILITY SUPPORT
DETAIL FOR WATER MAIN LOWERING
PAY ITEM 479.7



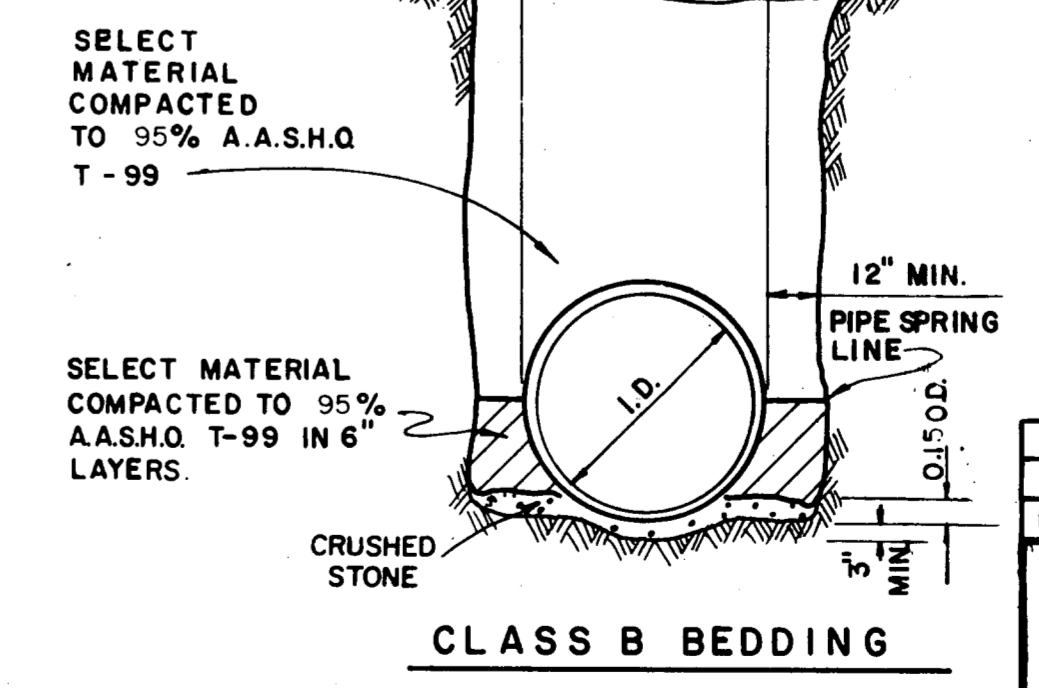
CONCRETE STREET OR DRIVEWAY REPAIR



DETAIL OF CONCRETE COLLAR FOR PIPE CONNECTIONS



SECTION A-A
MODIFIED CURB INLET WITH FLUME
PAY ITEM 470.21

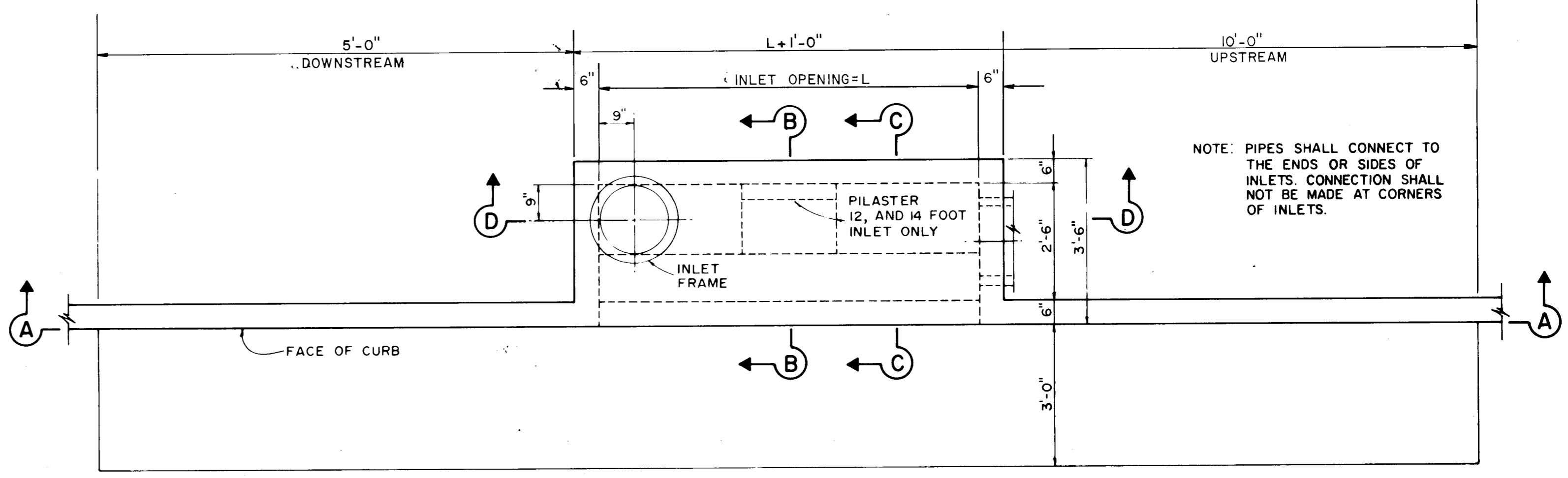
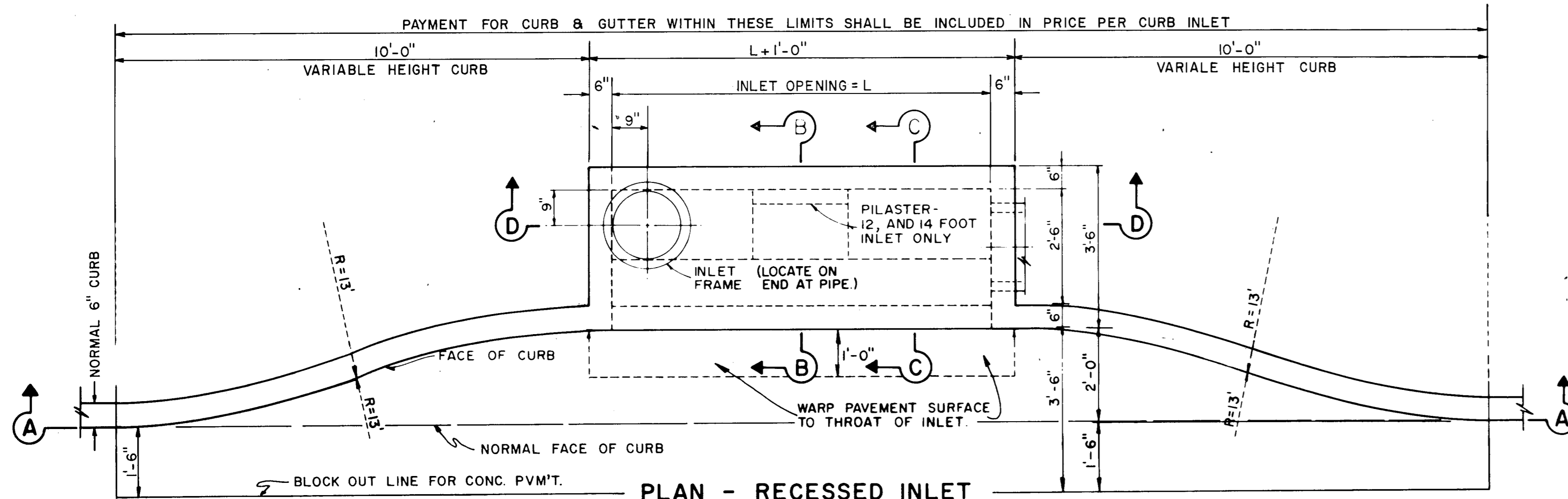


STORM SEWER PIPE BEDDING DETAIL

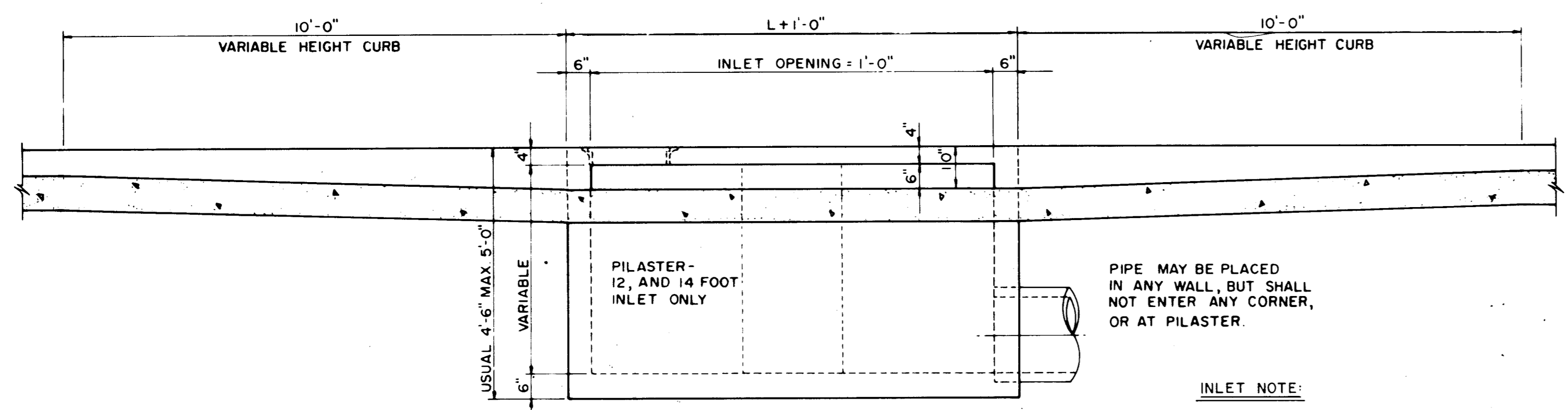
NOTE: IF ROCK ENCOUNTERED IN TRENCH BOTTOM, OVEREXCAVATE TRENCH A MINIMUM 8" AND BED PIPE IN GRAVEL OR CRUSHED STONE. IF JETTED SAND IS USED IN BACKFILL ABOVE SPRING LINE OF CORRUGATED METAL PIPE THE SAND SHALL BE COMPLETELY DRAINED AND TESTED FOR 90% DENSITY PRIOR TO ANY BACKFILL OVER PIPE.



NO.	REVISION	BY	DATE
TOWN OF ADDISON, TEXAS DEPARTMENT OF ENGINEERING			
STANDARD CONSTRUCTION DETAILS STORM DRAINAGE			
MANHOLES			
APPROVED _____ H. WAYNE GINN, P.E.			
DATE MARCH, 1984		SHEET SD-8	

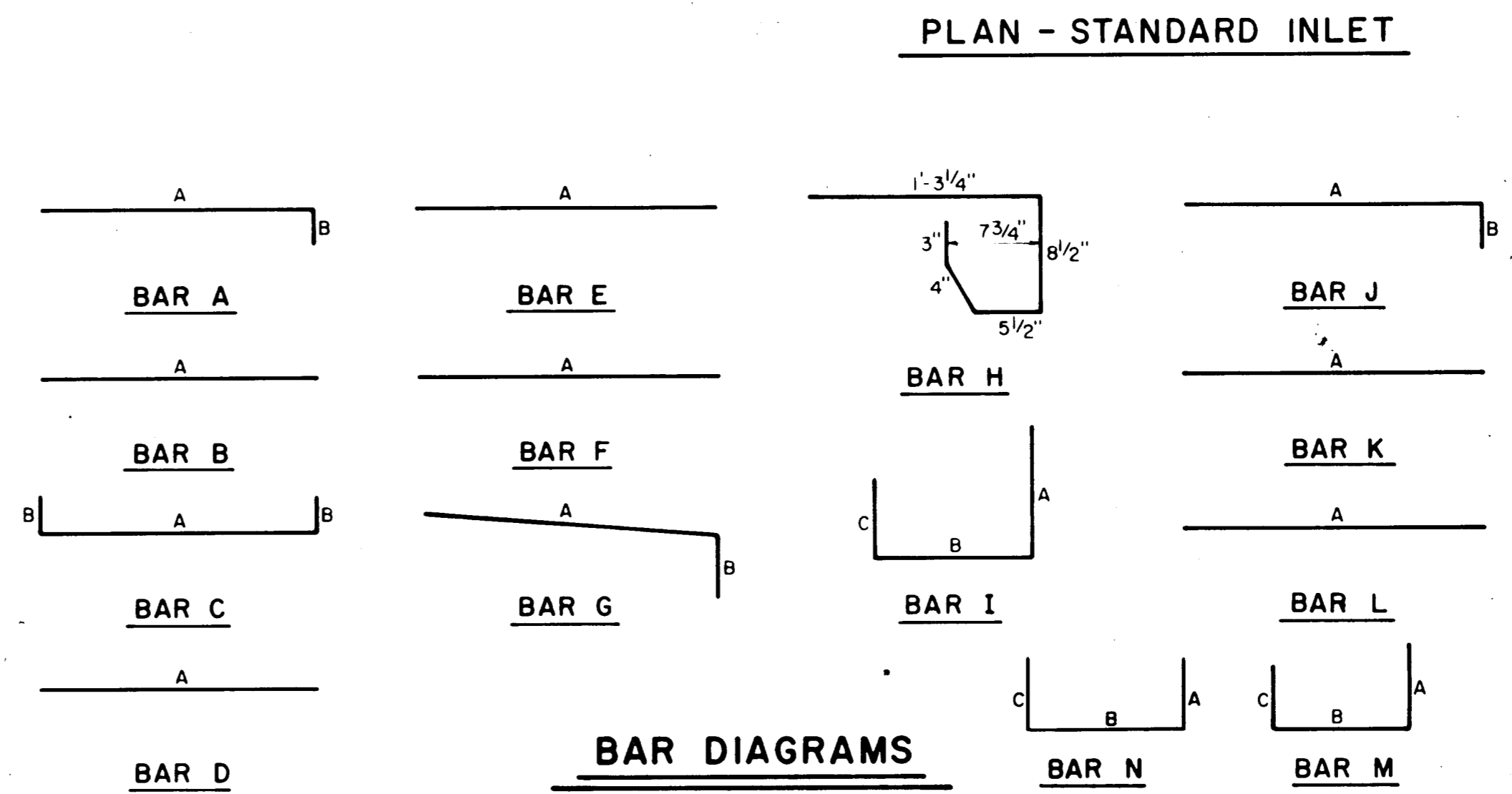


NOTE: PIPES SHALL CONNECT TO THE ENDS OR SIDES OF INLETS. CONNECTION SHALL NOT BE MADE AT CORNERS OF INLETS.



SECTION A-A-RECESSED AND STANDARD INLETS
5, 6, 8, 10, 12, AND 14 FOOT INLETS

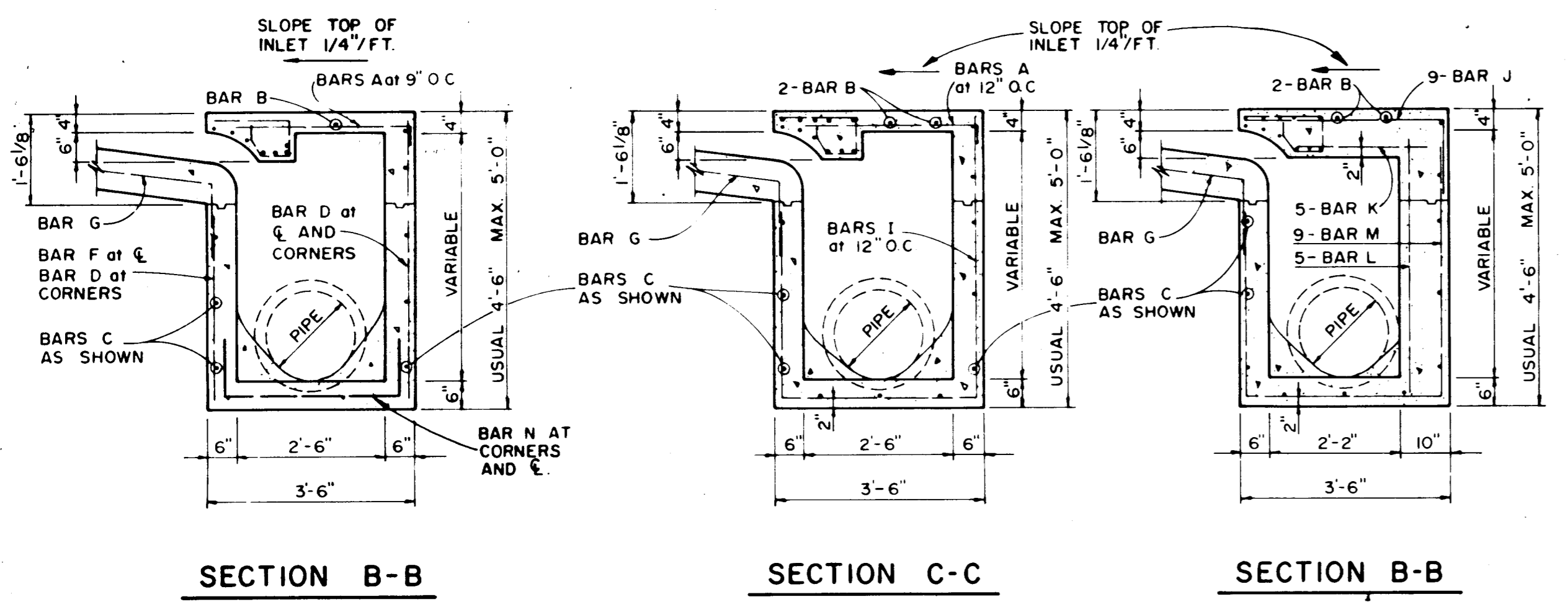
INLET NOTE:
WHERE INLETS ARE INDICATED TO BE MODIFIED, REFER TO PLAN/PROFILE SHEETS FOR ELEV. DIFFERENT SIZES ON MODIFICATIONS. ALL OTHER ITEMS SHALL REMAIN AS SHOWN ON THIS STANDARD DETAIL SHEET.



REINFORCING STEEL SCHEDULE

DIMENSIONS SHOWN ARE FOR MAXIMUM SIZE INLETS

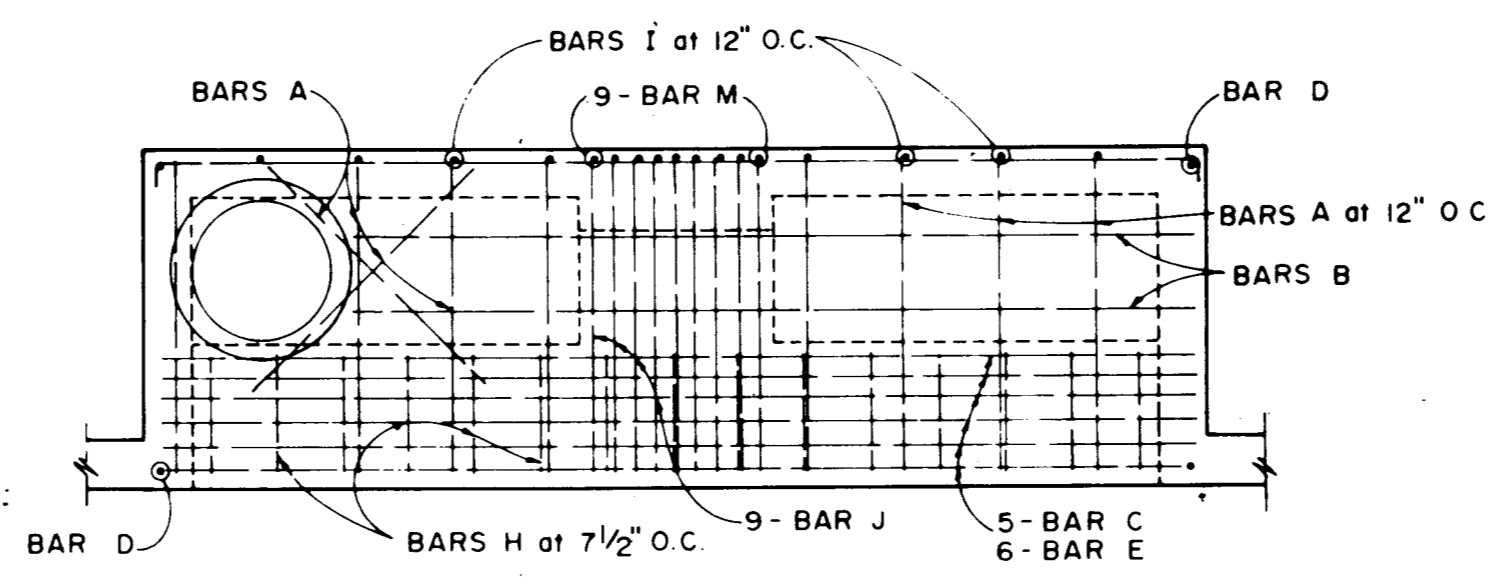
INLET LENGTH	BAR TYPE	BAR DIA (1/8 IN)	NO. REQ'D	BAR DIMENSIONS		
				A	B	C
4	A	3	6	3'-2"	0'-3"	-
	B	3	1	2'-10"	-	-
	C	4	15	4'-8"	0'-6"	-
	D	4	5	4'-8"	-	-
	F	4	1	3'-2"	-	-
	G	3	5	2'-0"	1'-3"	-
	H	3	3	*	*	*
	N	3	3	3'-2"	3'-2"	3'-2"
6	A	3	9	3'-2"	0'-3"	-
	B	3	1	4'-10"	-	-
	C	4	15	6'-8"	0'-6"	-
	D	4	5	4'-8"	-	-
	F	4	1	3'-2"	-	-
	G	3	5	2'-0"	1'-3"	-
	H	3	3	*	*	*
	N	3	3	3'-2"	3'-2"	3'-2"
8	A	3	12	3'-2"	0'-3"	-
	B	3	1	6'-10"	-	-
	C	4	15	8'-8"	0'-6"	-
	D	4	5	4'-8"	-	-
	F	4	1	3'-2"	-	-
	G	3	5	2'-0"	1'-3"	-
	H	3	3	*	*	*
	N	3	3	3'-2"	3'-2"	3'-2"
10	A	3	10	3'-2"	0'-3"	-
	B	3	2	8'-10"	-	-
	C	4	16	10'-8"	0'-6"	-
	D	4	4	4'-8"	-	-
	E	5	6	10'-8"	-	-
	G	3	5	2'-0"	1'-3"	-
	H	3	15	*	*	*
	I	4	8	4'-8"	3'-2"	3'-2"
12	A	3	12	3'-2"	0'-3"	-
	B	3	2	10'-10"	-	-
	C	4	16	12'-8"	0'-6"	-
	D	4	4	4'-8"	-	-
	E	5	6	12'-8"	-	-
	G	3	5	2'-0"	1'-3"	-
	H	3	18	*	*	*
	I	4	10	4'-8"	3'-2"	3'-2"
14	A	3	14	3'-2"	0'-3"	-
	B	3	2	10'-10"	-	-
	C	4	16	14'-8"	0'-6"	-
	D	4	4	4'-8"	-	-
	E	5	6	14'-8"	-	-
	G	3	5	2'-0"	1'-3"	-
	H	3	21	*	*	*
	I	4	12	4'-8"	3'-2"	3'-2"



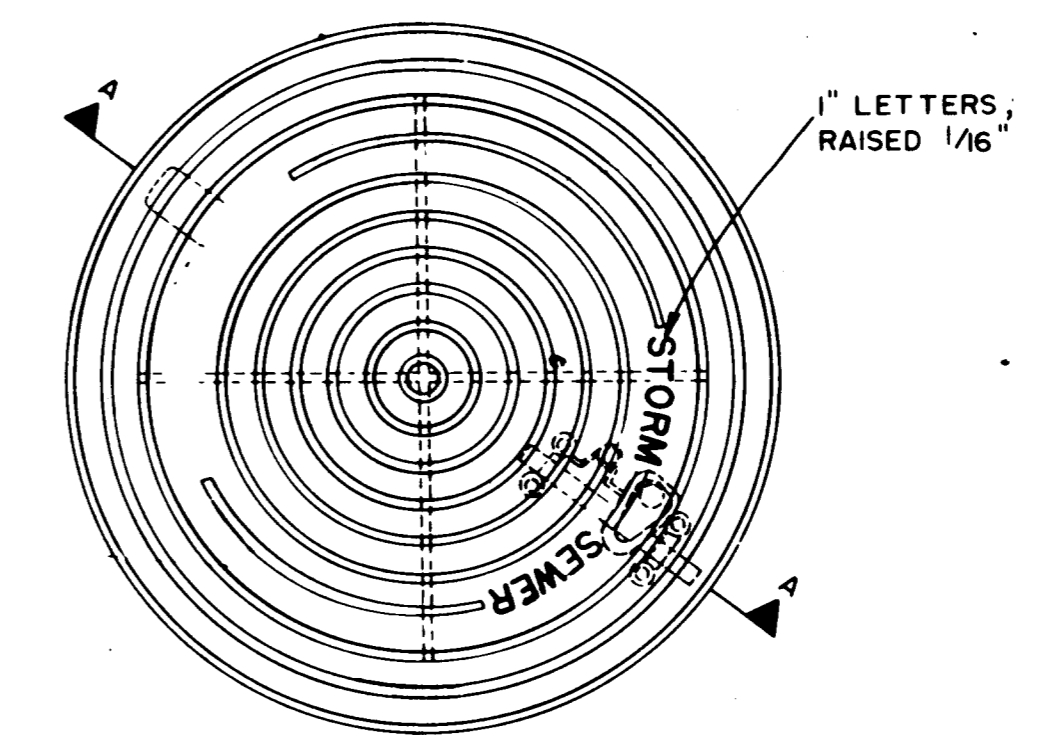
SECTION B-B

SECTION C-C

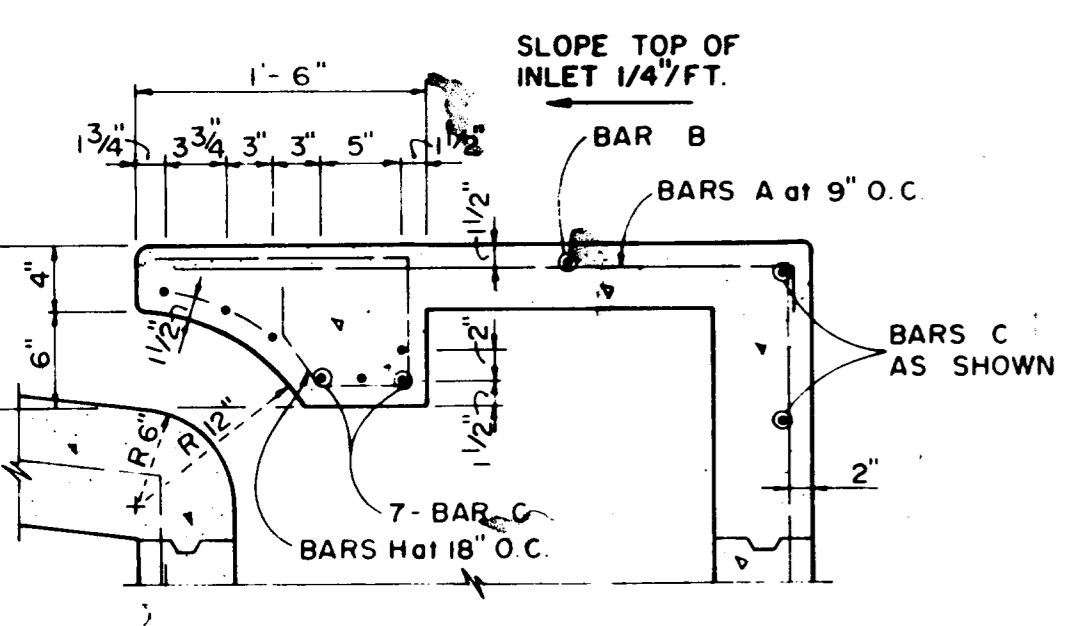
SECTION B-B



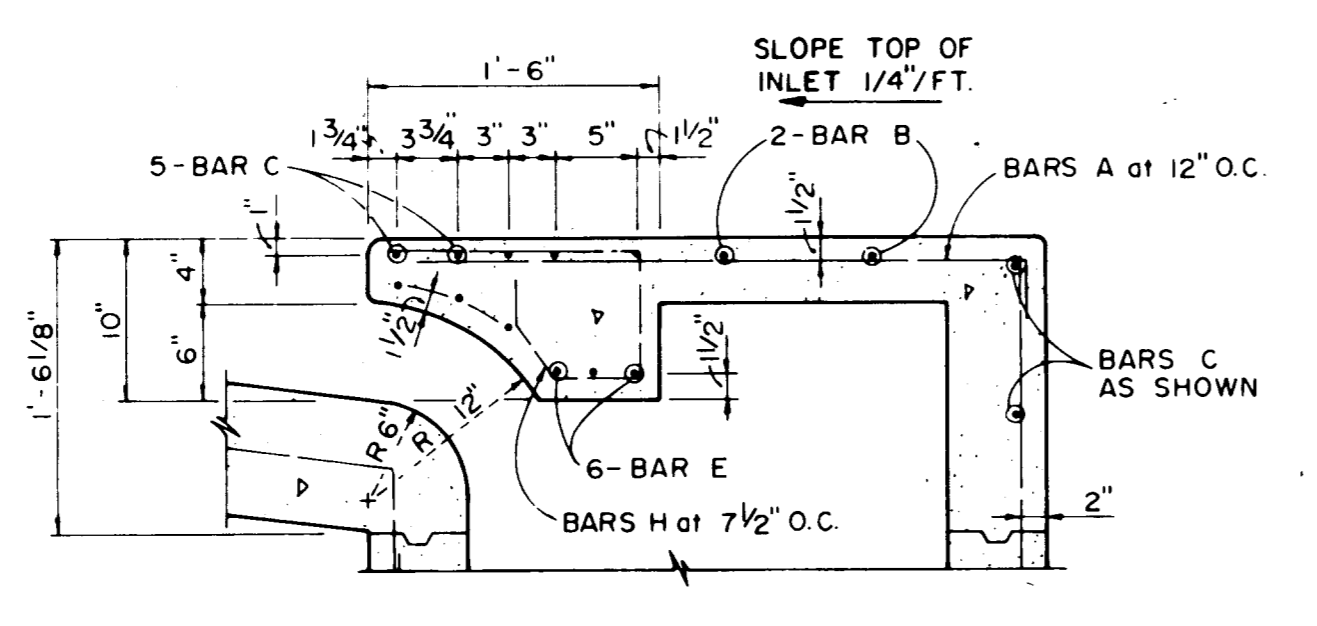
PLAN



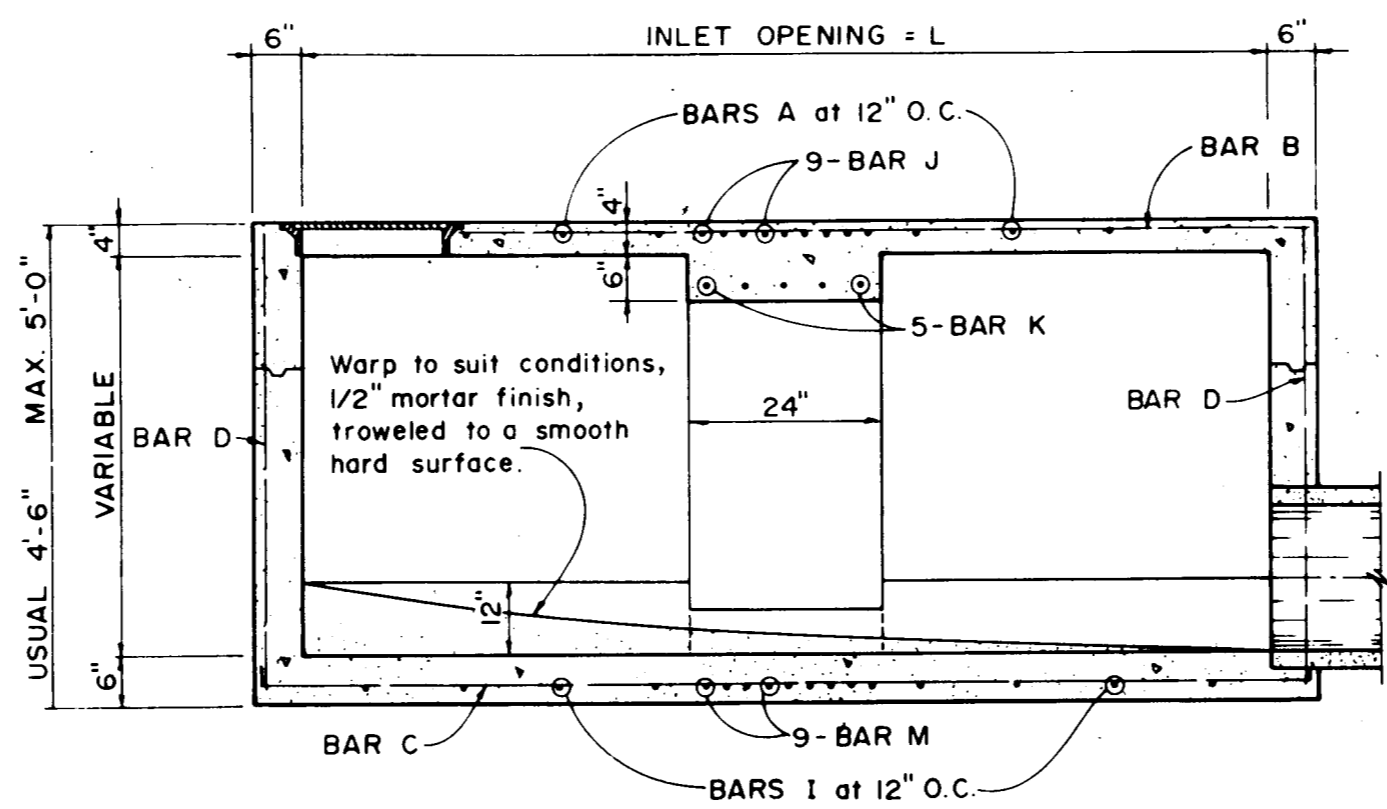
PLAN OF FRAME



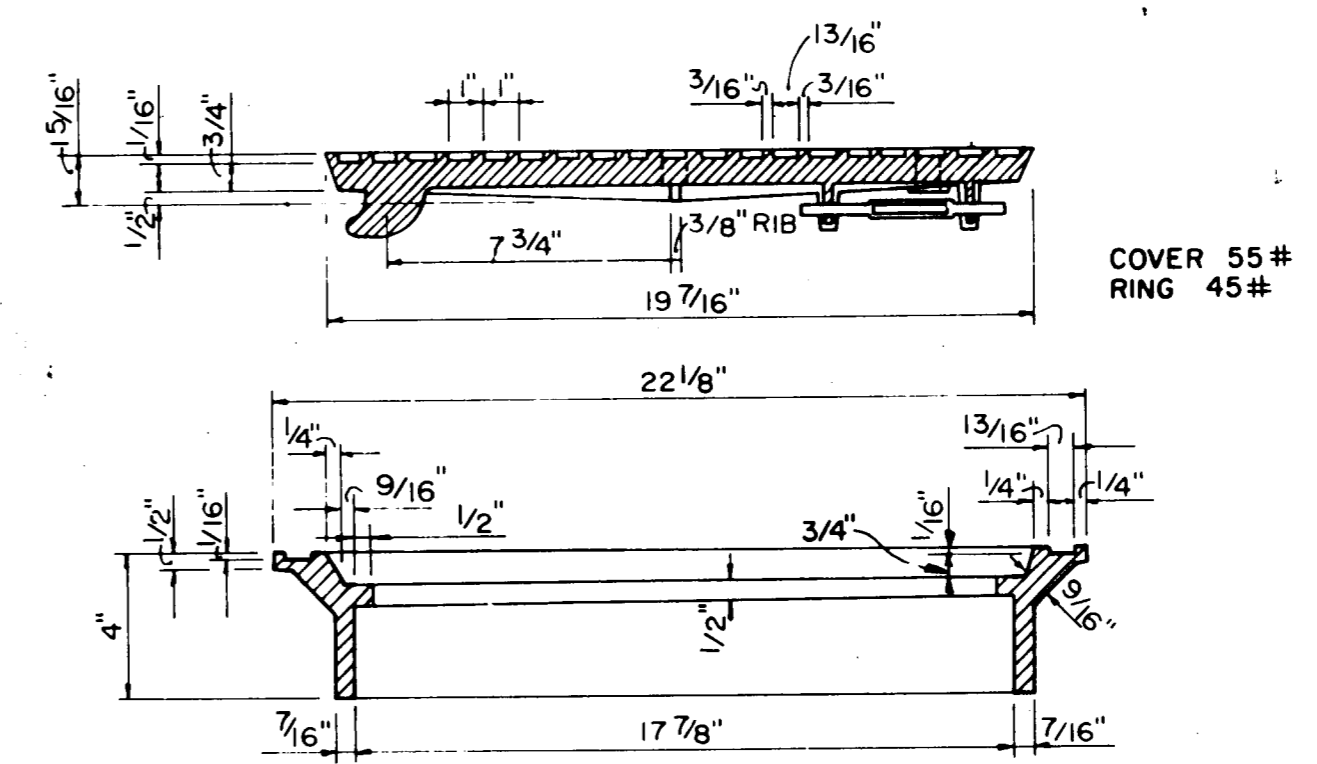
SECTION C-C



SECTION C-C

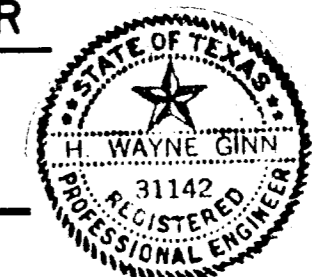


SECTION D-D FOR 12' & 14' ONLY

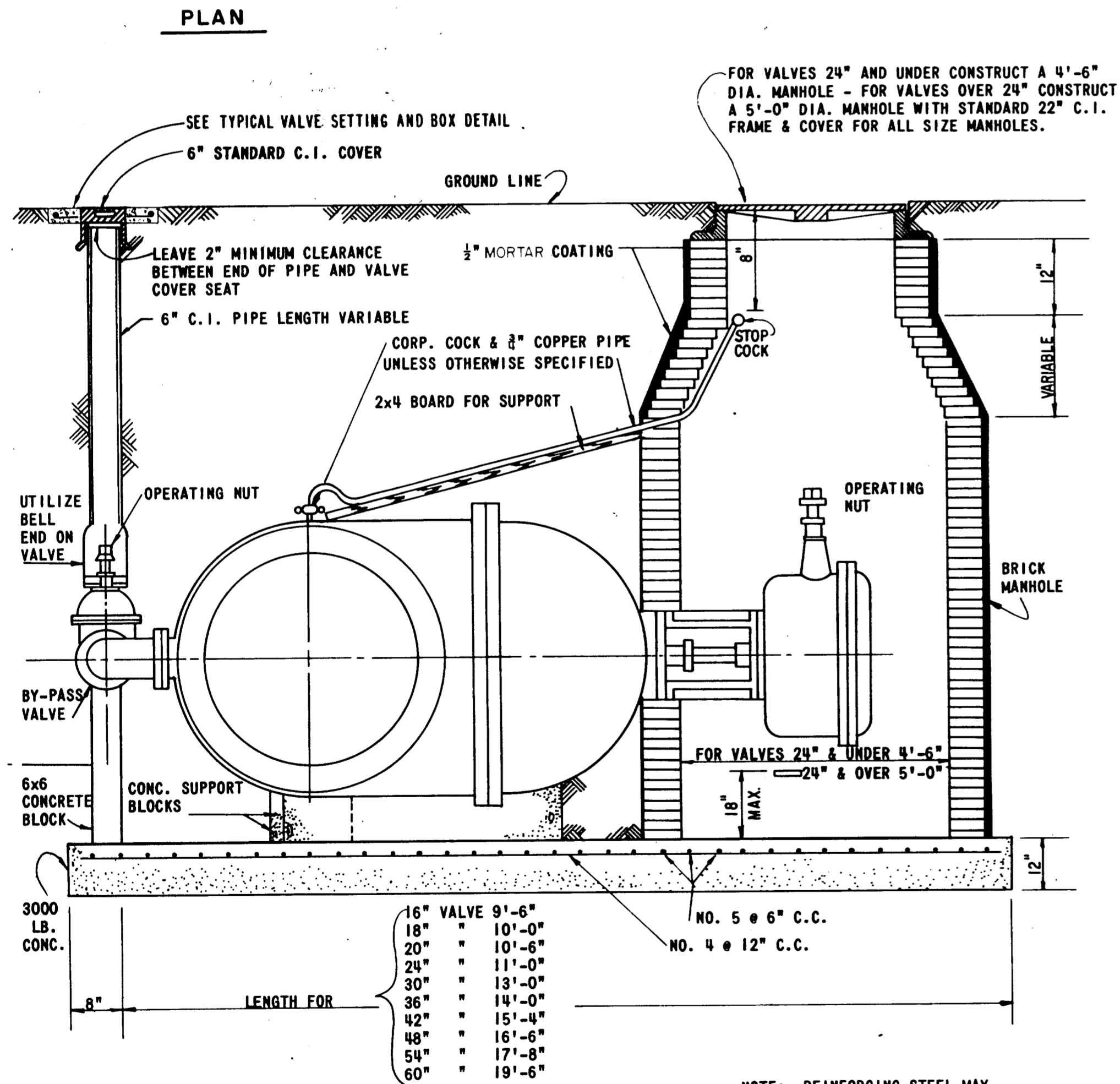
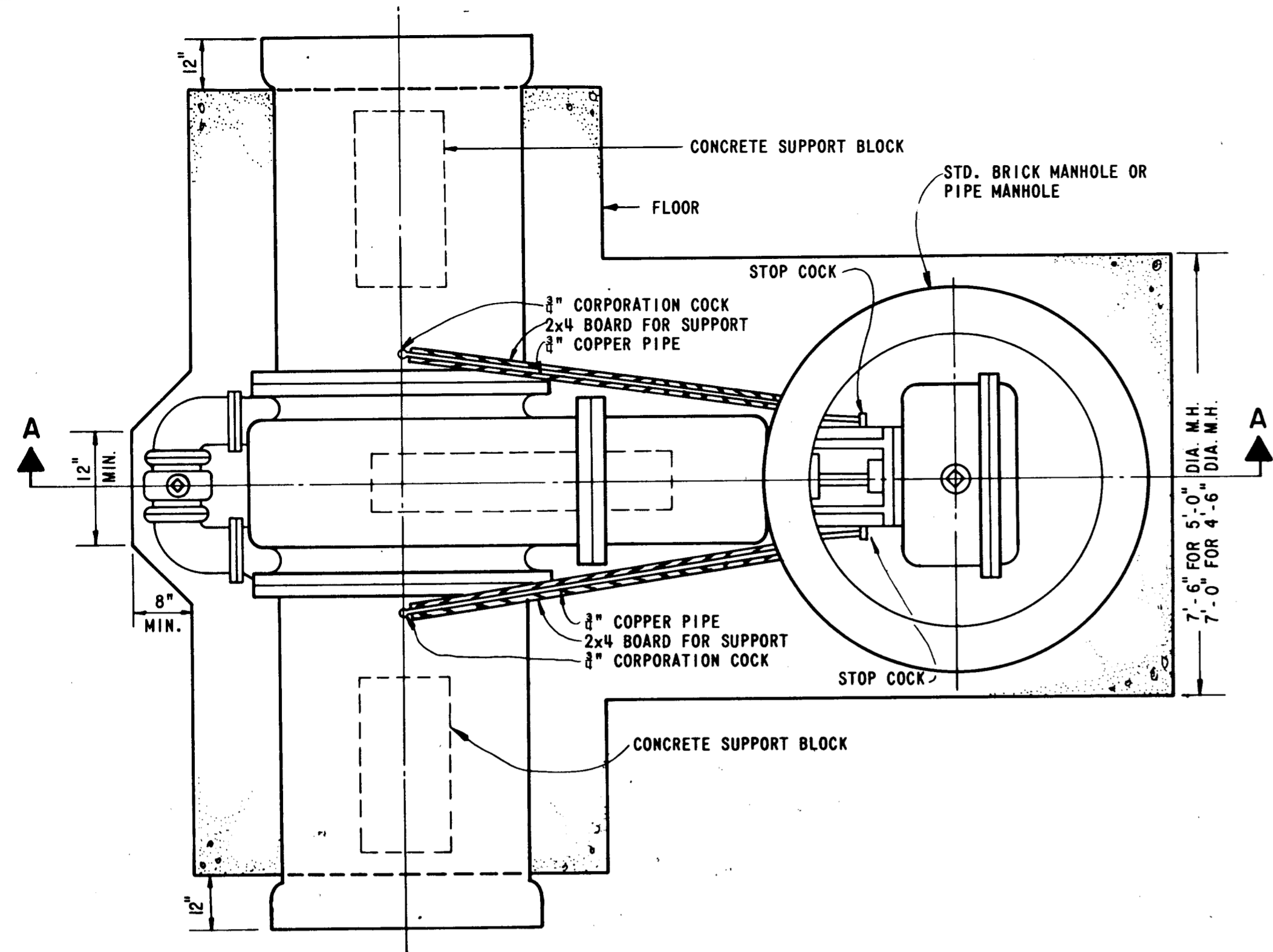


SECTION OF FRAME AND COVER

INLET FRAME AND COVER

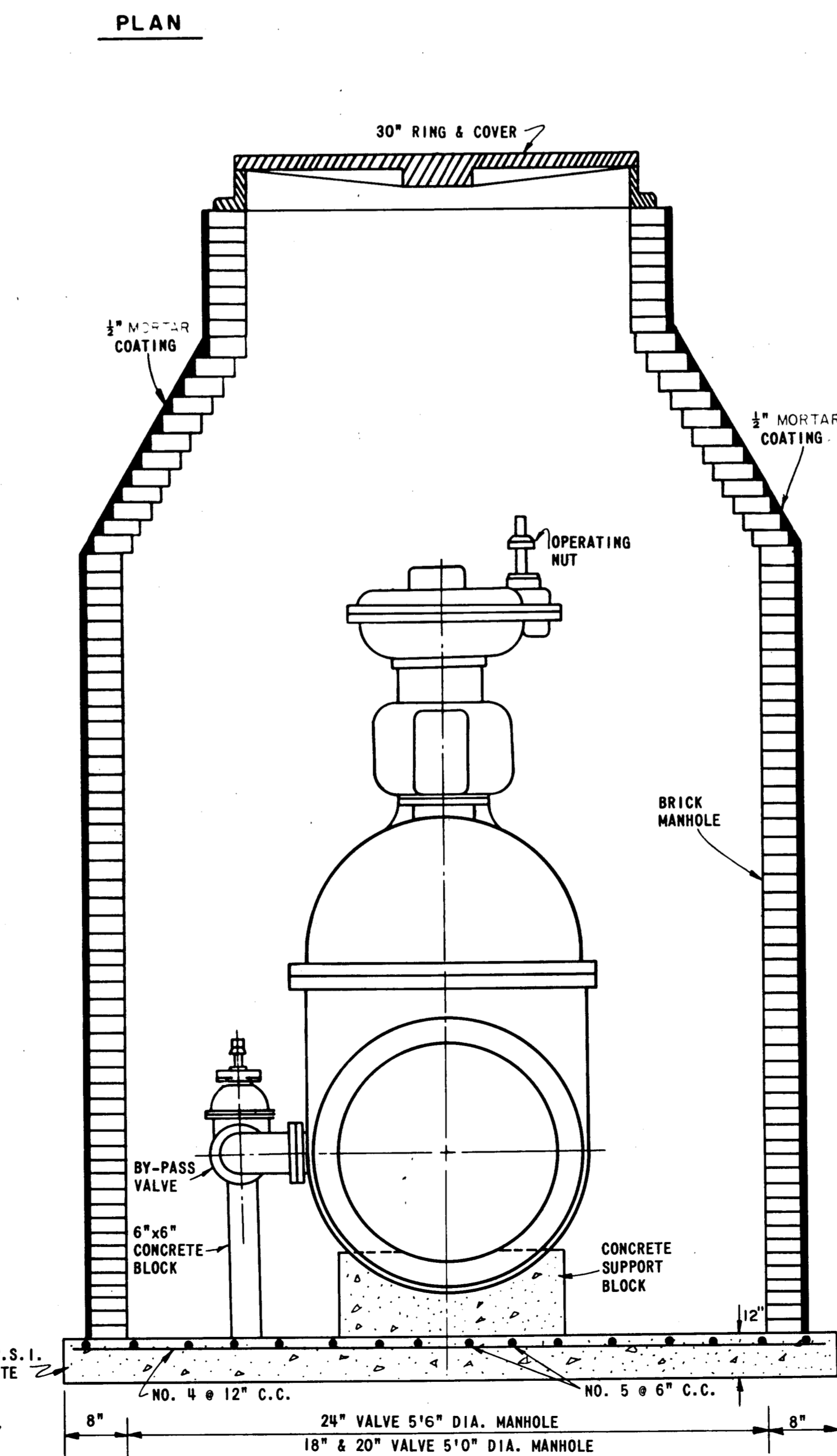
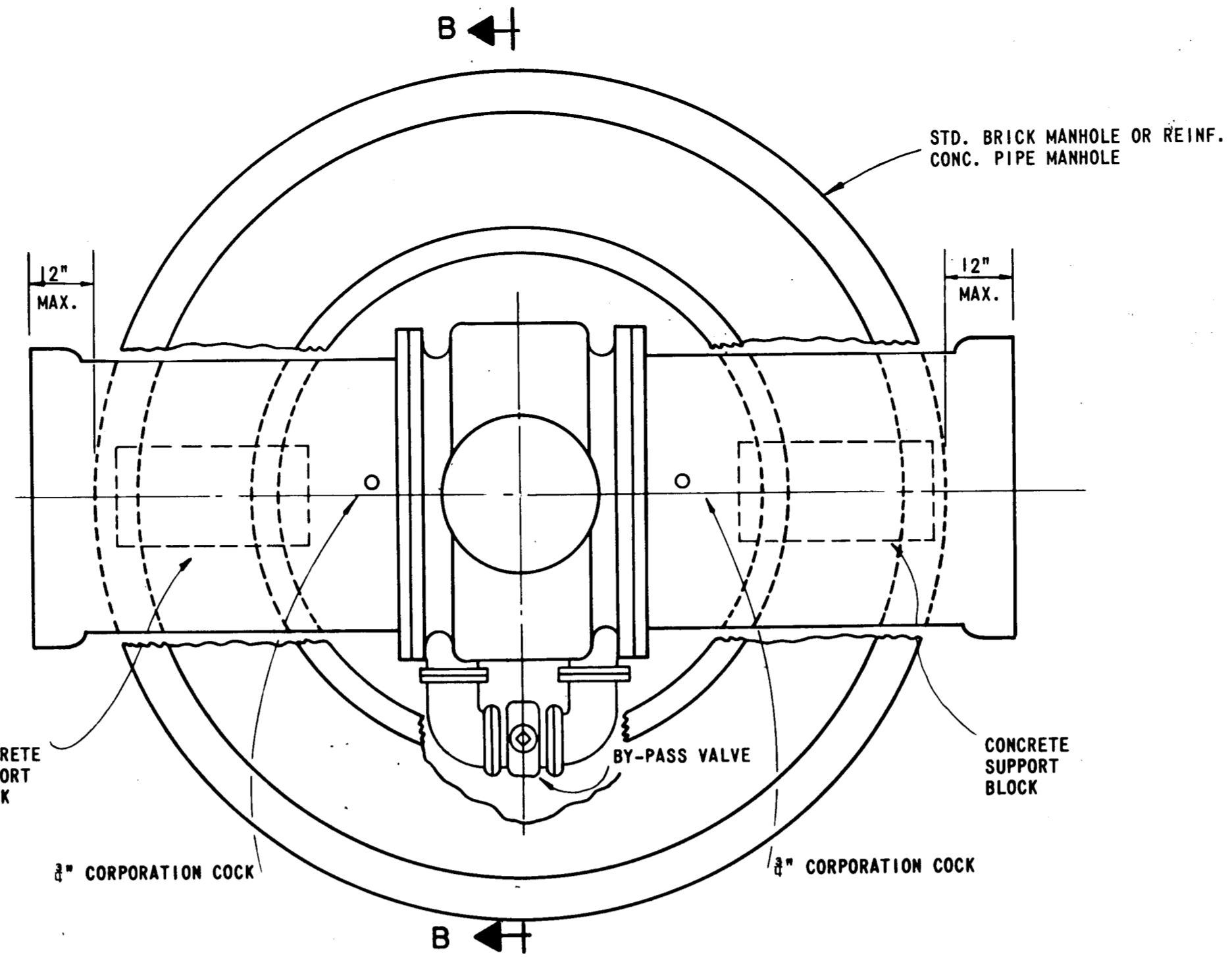


NO.	REVISION	BY	DATE
TOWN OF ADDISON, TEXAS DEPARTMENT OF ENGINEERING			
STANDARD CONSTRUCTION DETAILS STORM DRAINAGE			
CURB INLETS			
APPROVED _____		H. WAYNE GINN, P.E.	
DATE MARCH, 1984	SHEET SD-9		

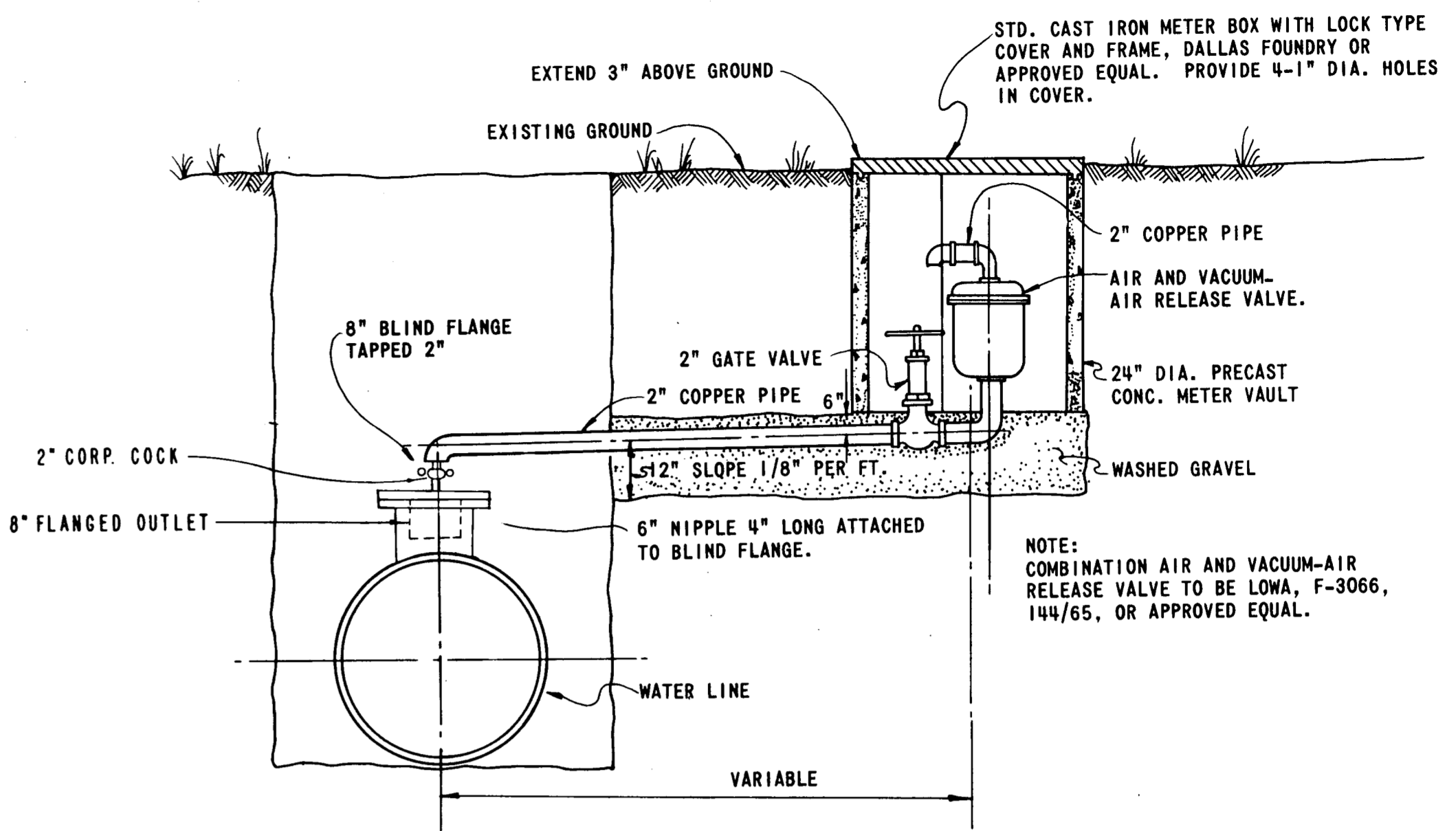


SECTION A-A
HORIZONTAL VALVE INSTALLATION

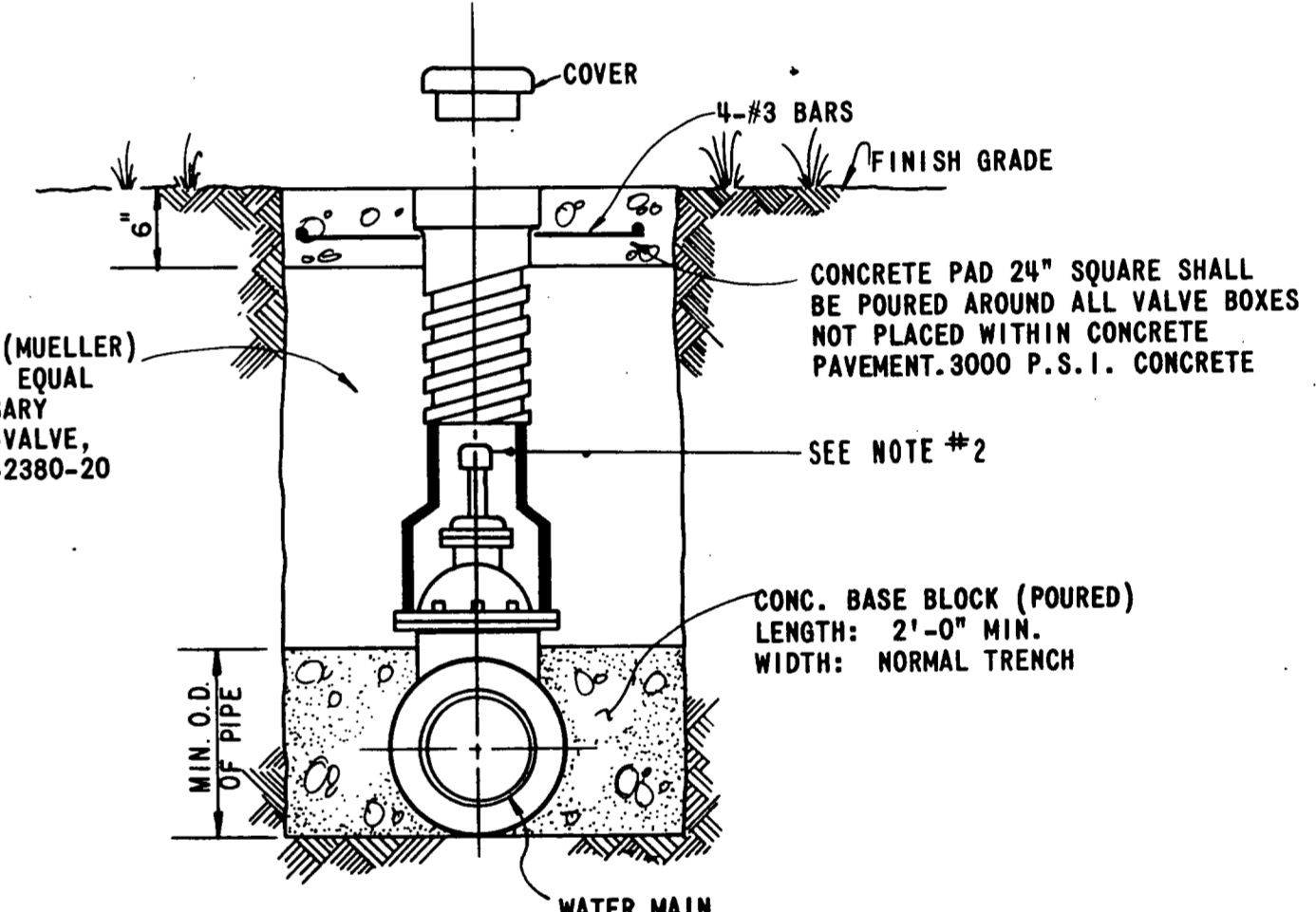
VALVE SHALL BE MUELLER A-2480-29-07 FOR REINF. CONC. CYLINDER PIPE AND A-2480-20-07 FOR DUCTILE IRON PIPE OR APPROVED EQUAL.



SECTION B-B
VERTICAL VALVE INSTALLATION

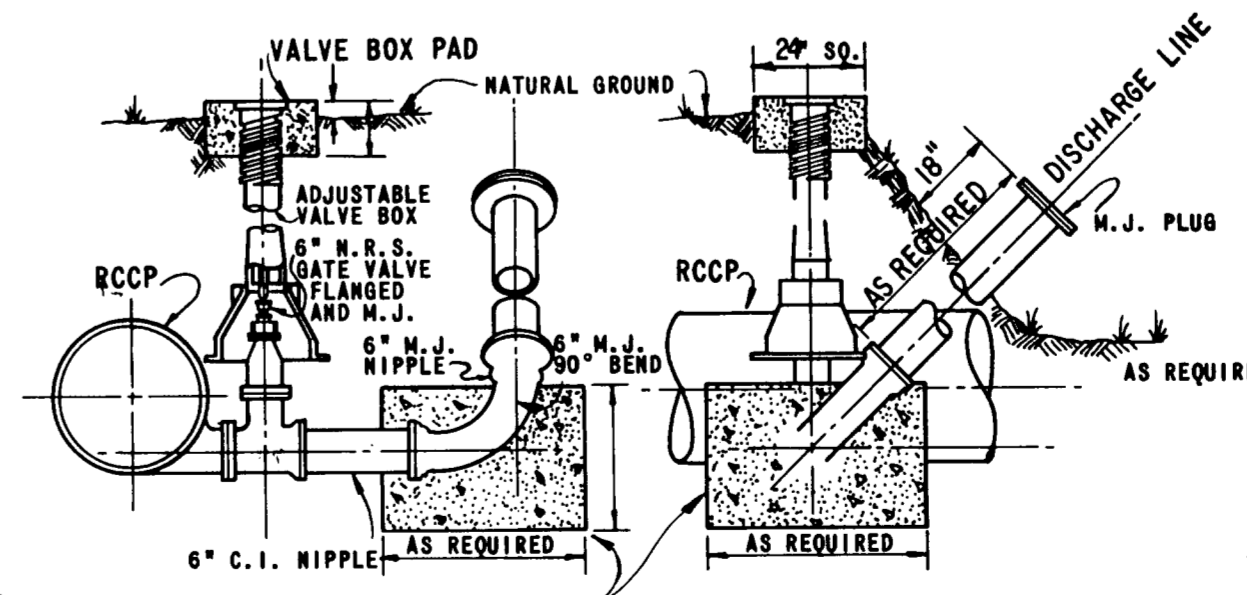


TYPICAL AIR AND VACUUM-AIR RELEASE VALVE INSTALLATION



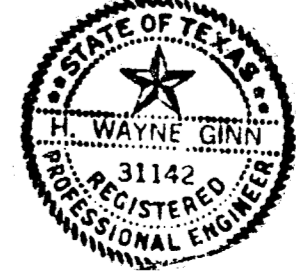
- NOTE:**
- 4"-12" R.S. GATE VALVES SHALL BE IN ACCORDANCE WITH AWWA STANDARD C-509-80 OR LATEST THEREOF. ALL VALVES SHALL BE MUELLER A-2370 OR APPROVED EQUAL.
 - A PERMANENTLY ATTACHED VALVE EXTENSION STEM SHALL BE REQUIRED FOR ANY VALVE THATS OPERATING NUT IS LOCATED IN EXCESS OF 4 FEET BELOW THE TOP OF VALVE BOX. THIS EXTENSION SHALL BE OF SUFFICIENT LENGTH TO INSURE THAT ITS TOP IS WITHIN 4" OF VALVE BOX LID.

TYPICAL VALVE SETTING AND BOX



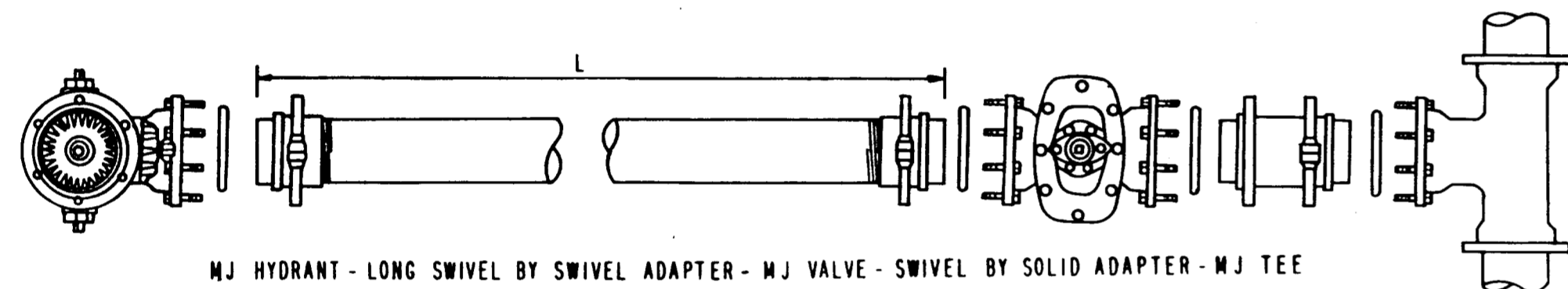
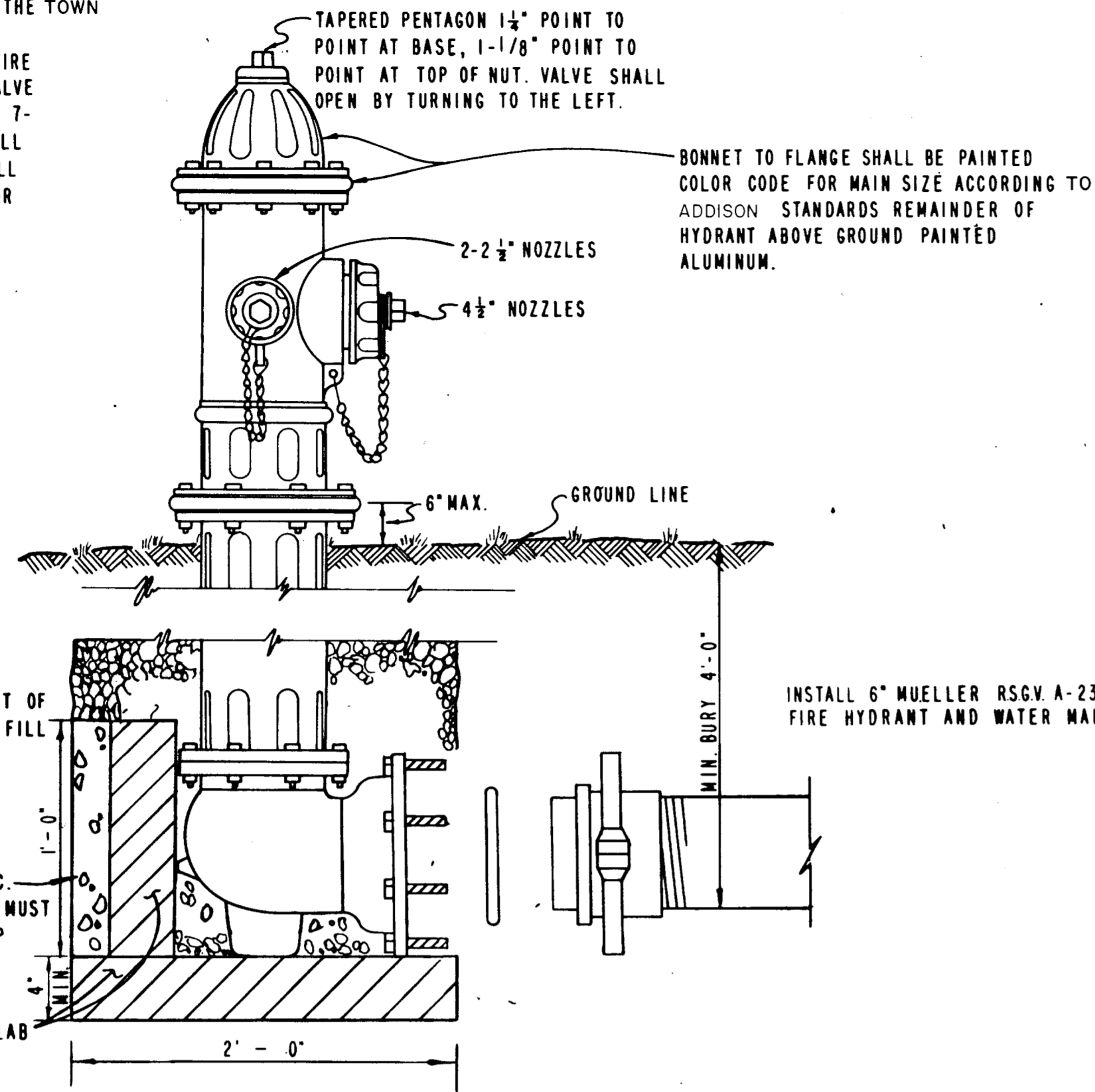
BLOW OFF VALVE DETAIL

NO.	REVISION	BY	DATE
TOWN OF ADDISON, TEXAS DEPARTMENT OF ENGINEERING			
STANDARD CONSTRUCTION DETAILS WATER			
VALVES			
APPROVED _____		H. WAYNE GINN, P.E.	
DATE MARCH, 1984		SHEET SD-15	



NOTE:

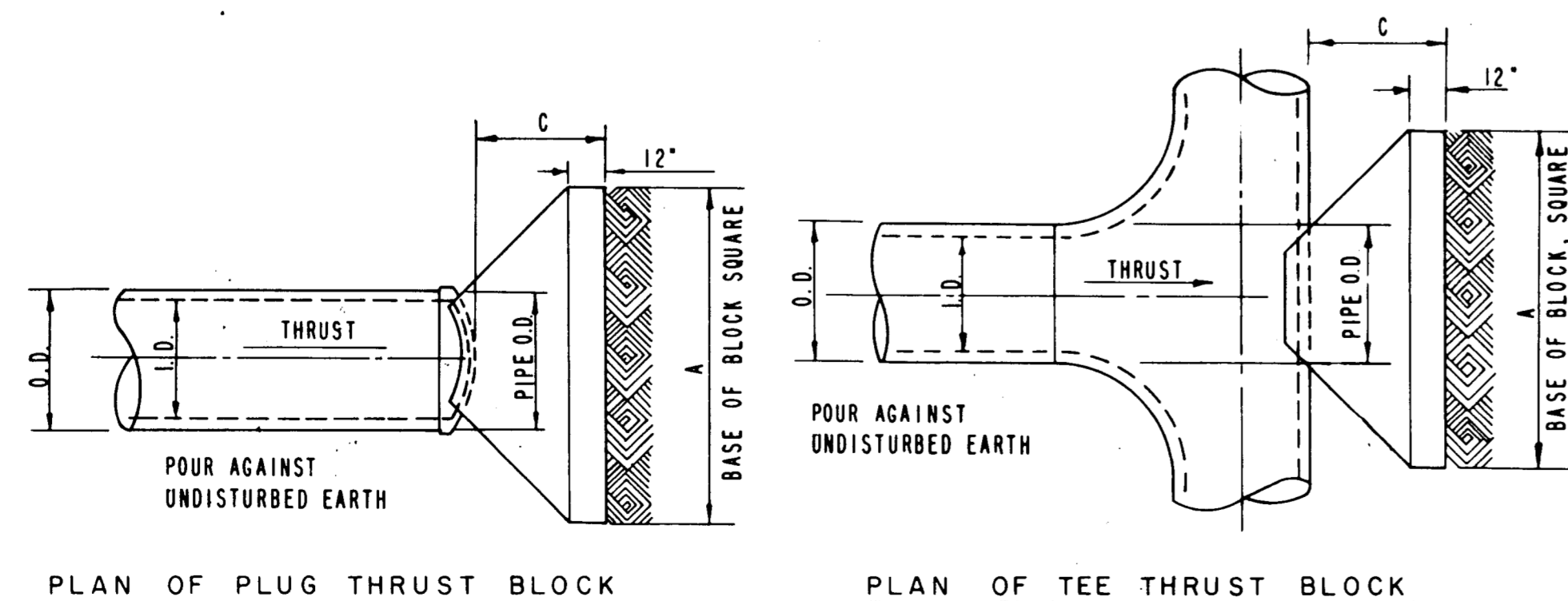
IN GENERAL, ALL FIRE HYDRANTS SHALL CONFORM TO AWWA STANDARD SPECIFICATIONS FOR FIRE HYDRANTS FOR ORDINARY WATER WORKS SERVICE, C-502-73, EXCEPT FOR CHANGES OR ADDITIONS OUTLINED IN THE TOWN OF ADDISON STANDARD SPECIFICATIONS FOR WATER AND SANITARY SEWER IMPROVEMENTS. FIRE HYDRANTS SHALL HAVE A 5-1/4" MINIMUM VALVE OPENING AND WITH A BARREL APPROXIMATELY 7-INCH INSIDE DIAMETER. ALL HYDRANTS SHALL BE EQUIPPED WITH A BREAKAWAY FLANGE. ALL HYDRANTS SHALL BE MUELLER CENTURION OR APPROVED EQUAL.



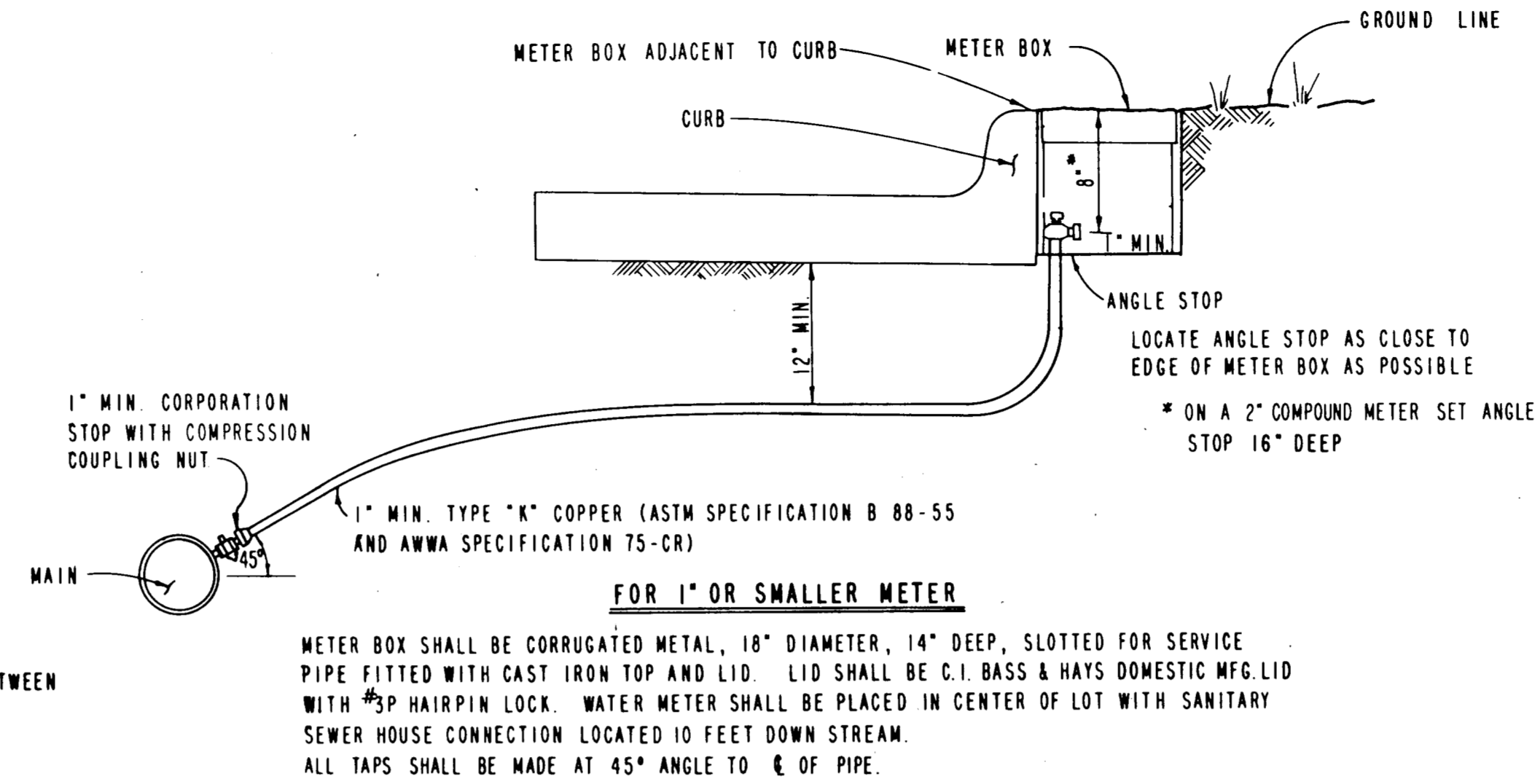
TYPICAL FIRE HYDRANT INSTALLATION

THRUST IN TONS FOR VERTICAL BENDS								
I.D. IN INCHES	Δ							
	11.25*	15*	22.50*	30*	45*	60*	75*	90*
12								
14								
16	2.94	3.90	5.78	7.54	10.66	13.06	14.56	15.08
18	3.72	4.94	7.30	9.54	13.50	16.52	18.42	19.08
20	4.60	6.10	9.02	11.78	16.66	20.40	22.76	23.56
24	6.62	8.78	12.98	16.96	23.98	29.38	32.76	33.92
30	10.34	13.72	20.28	26.52	37.50	45.92	51.22	53.02

TEES & PLUGS			
I.D. UNIT	A FT.	C FT.	THRUST TONS
12"			
14"			
16"	3.87	1.57	15.08
18"	4.37	1.77	19.09
20"	4.86	1.97	23.56
24"	5.82	2.36	33.93
30"	7.28	2.95	53.01



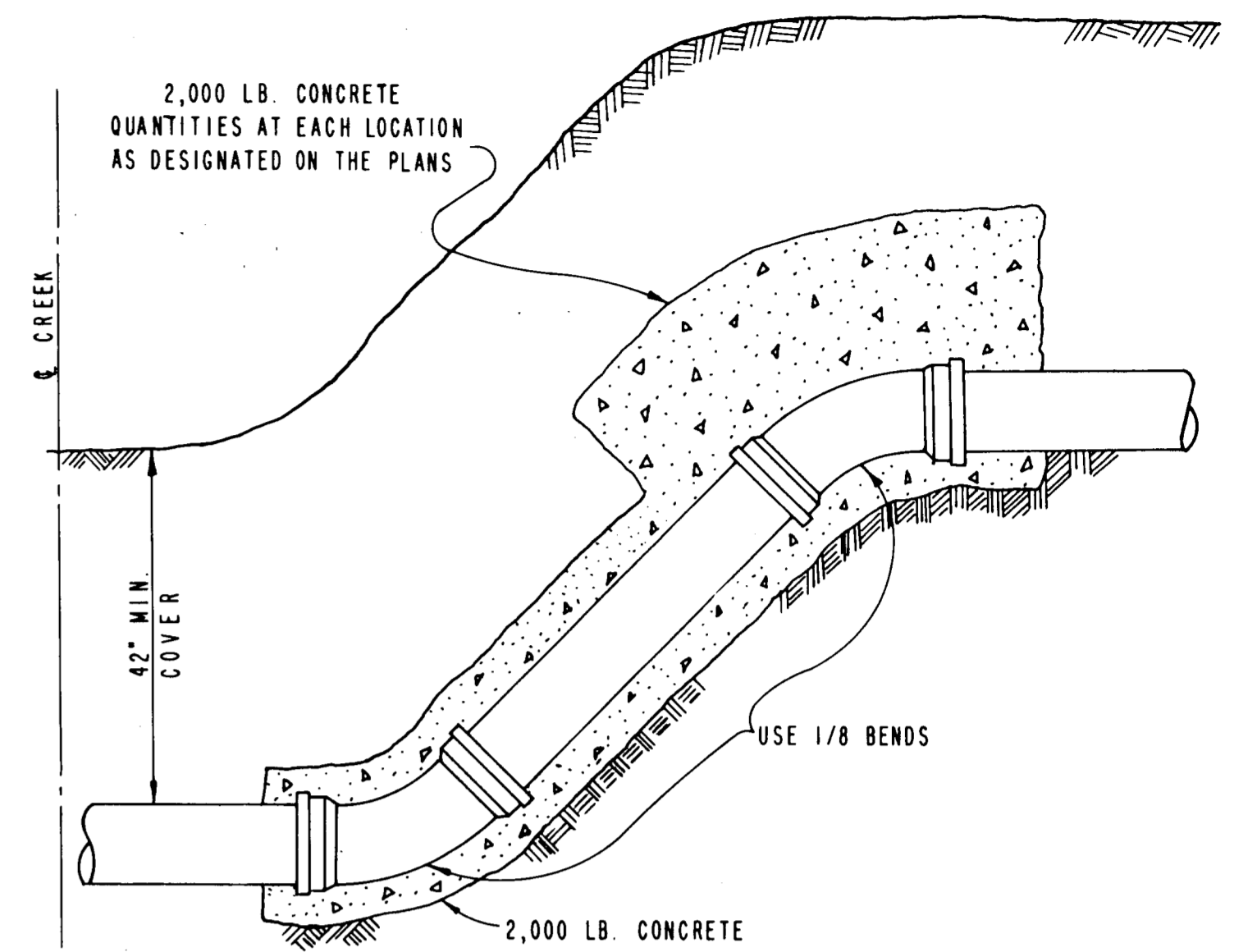
TYPICAL PLUG & TEE THRUST BLOCKS



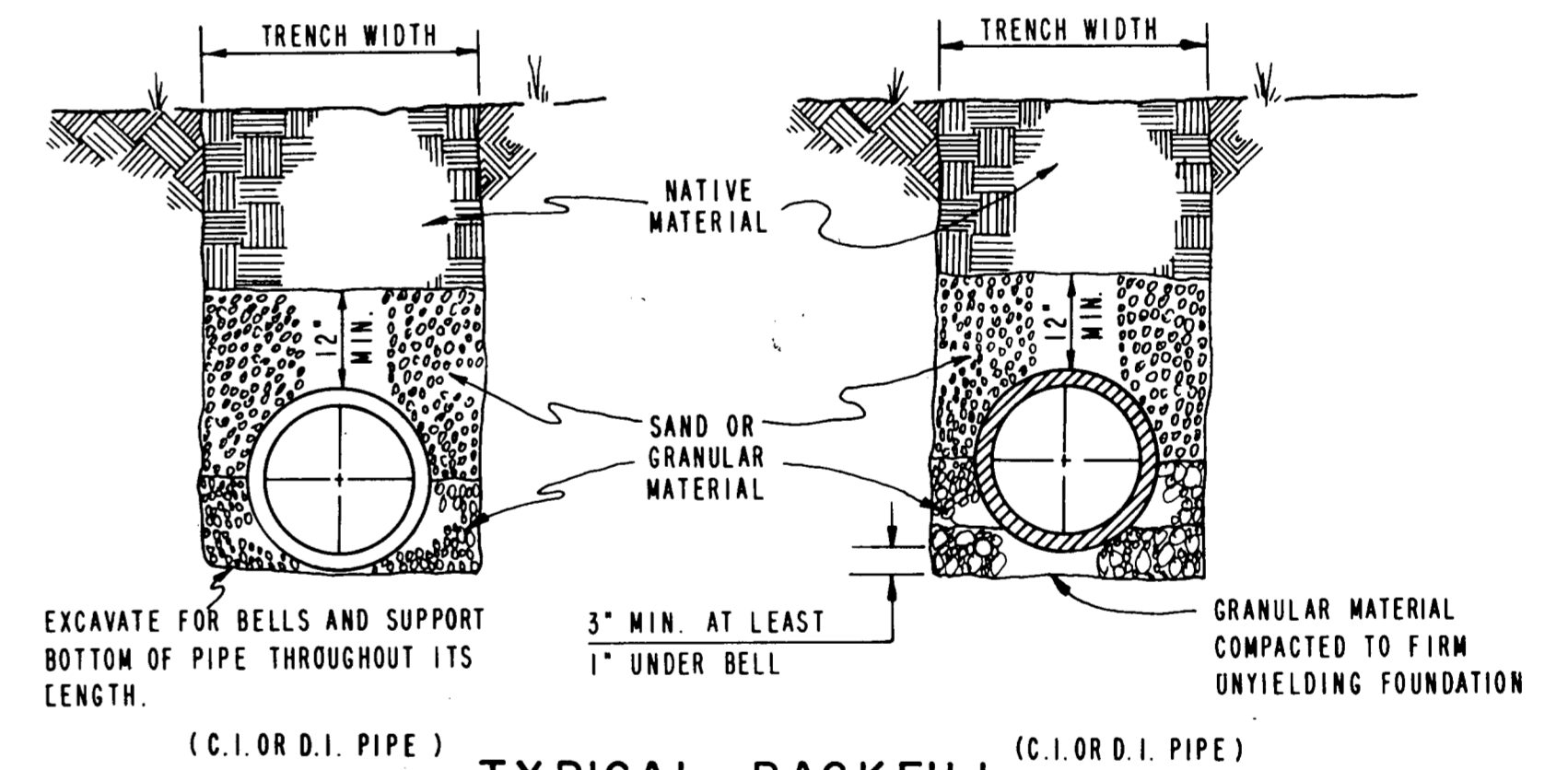
TYPICAL SERVICE CONNECTION WITH METER BOX

MUELLER TYPE K COPPER SERVICE PIPE SOFT ANNEALED	DOUBLE STRAP BRONZE SERVICE SADDLE WITH C.C. THREADS	MUELLER CORPORATION STOP	MUELLER ANGLE STOP	BASS & HAYS SLOTTED METER BOX
1 INCH		H-15008	H-14258	34AS
1 1/2 INCH	1 1/2 INCH	H-15013	H-14286	55A
2 INCH	2 INCH	H-15013	H-14286	55A

W/ H 15428 COUPLING



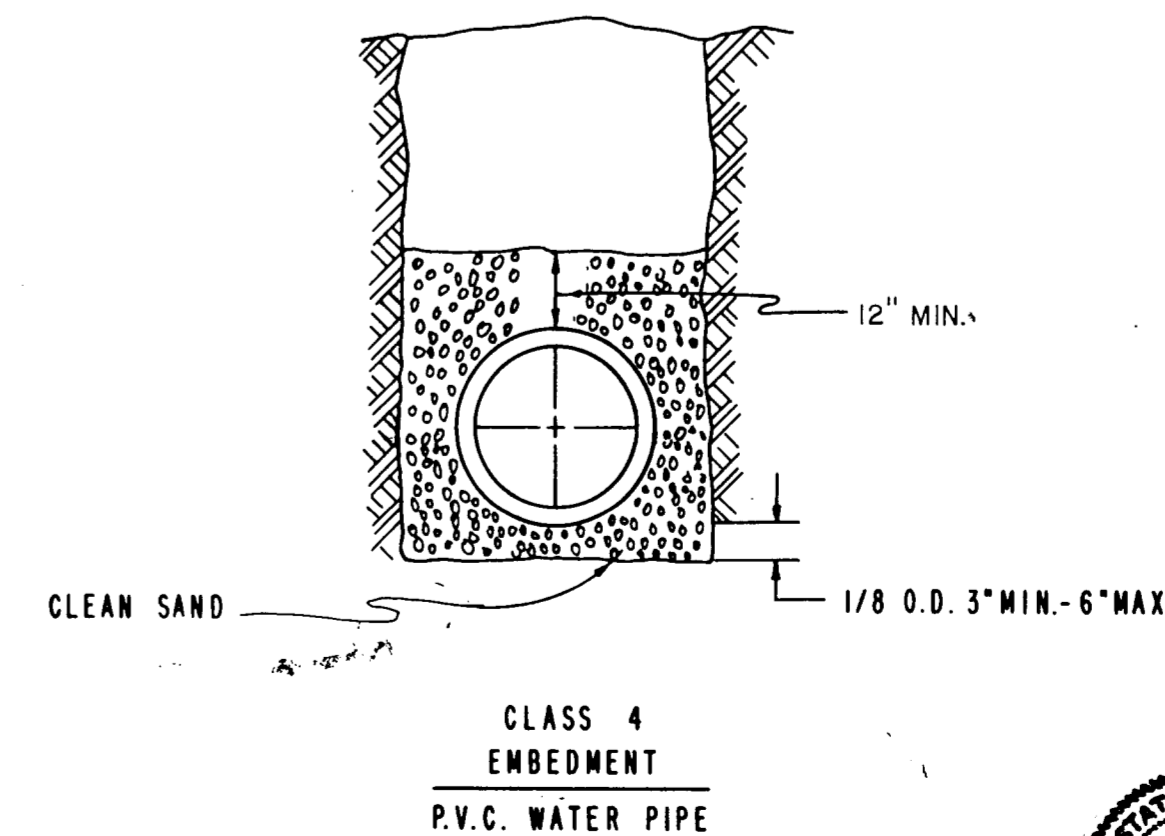
HALF-SECTION TYPICAL CREEK CROSSING



TYPICAL BACKFILL WATER MAIN

GENERAL NOTES:

ALL CALCULATIONS ARE BASED ON TOTAL INTERNAL PRESSURE OF 150 P.S.I.
 ALLOWABLE SOIL BEARING PRESSURES MUST BE AT LEAST ONE TON PER SQUARE FOOT FOR THE THRUST BLOCKS SHOWN. IN SOILS OF LESSER CAPACITY, INCREASE SIZE AND BEARING AREA PROPORTIONATELY. VOLUMES OF VERTICAL BEND THRUST BLOCKS ARE NET VOLUMES OF CONCRETE TO BE FURNISHED, AND THE CORRESPONDING WEIGHT OF THE CONCRETE (AT 4,000#/C.Y.) EQUALS THE VERTICAL COMPONENT OF THRUST ON THE VERTICAL BEND. ALL BEARING SURFACES OF THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED EARTH.
 CONCRETE FOR BLOCKING SHALL BE 2,000 CONCRETE.
 DIMENSIONS MAY BE VARIED AS REQUIRED BY FIELD CONDITIONS WHERE AND AS DIRECTED BY THE ENGINEER, BUT SHALL NOT BE LESS THAN THE DIMENSIONS SHOWN HERE.



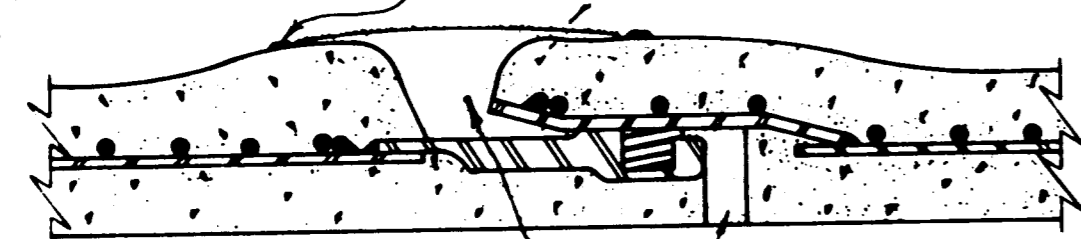
NO.	REVISION	BY	DATE
TOWN OF ADDISON, TEXAS DEPARTMENT OF ENGINEERING			
STANDARD CONSTRUCTION DETAILS WATER			
FIRE HYDRANT - SERVICE CONNECTION			
APPROVED	H. WAYNE GINN, P.E.		
DATE: MARCH, 1984	26	SHEET SD-16	



NOTE:

PROVIDE 1" MINIMUM THICKNESS CONCRETE OR CEMENT MORTAR COATING IN THE FIELD FOR THE PROTECTION OF ALL EXPOSED STEEL SUCH AS FLANGES, CAULKED JOINTS, THREADED OUTLETS, CLOSURES, ETC. THE CEMENT MORTAR USED SHALL CONSIST OF ONE PART PORTLAND CEMENT TO TWO AND ONE-HALF PARTS OF FINE, SHARP (PLASTER) SAND. WHERE SHOWN, COATING IS TO BE REINFORCED WITH WIRE MESH.

STEEL STRAP THREADED THROUGH HEM OF BURLAP WRAPPER, DRAWN TIGHT AND FASTENED.



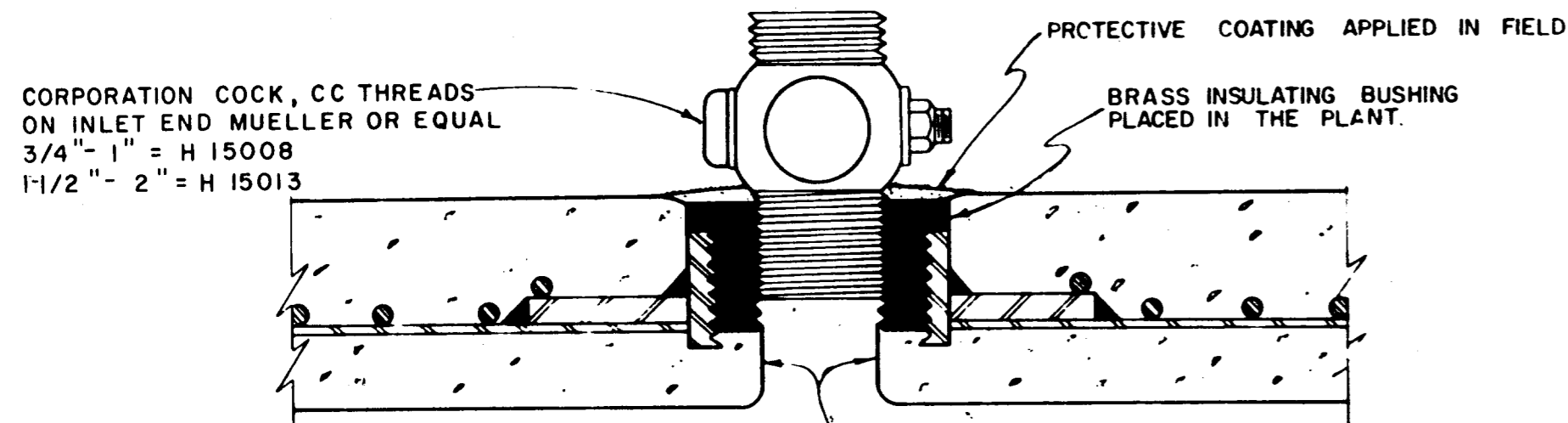
CEMENT MORTAR, MIXED TO A CONSISTENCY OF THICK CREAM, TO BE POURED IN FIELD.

BURLAP WRAPPER AS MANUFACTURED BY MAR-MAC CORP. OR EQUAL. WIDTH OF WRAPPER TO BE 9" FOR 36" PIPE AND LARGER, 7" FOR 33" AND SMALLER.

CEMENT MORTAR OF STIFF CONSISTENCY PLACED IN THE FIELD.

STANDARD RUBBER GASKET JOINT

NOTE: ALL CLOSURE SECTIONS SHALL BE FABRICATED WITH HAND HOLES TO ALLOW WIPING INSIDE OF JOINTS AFTER CLOSURE IS IN PLACE.



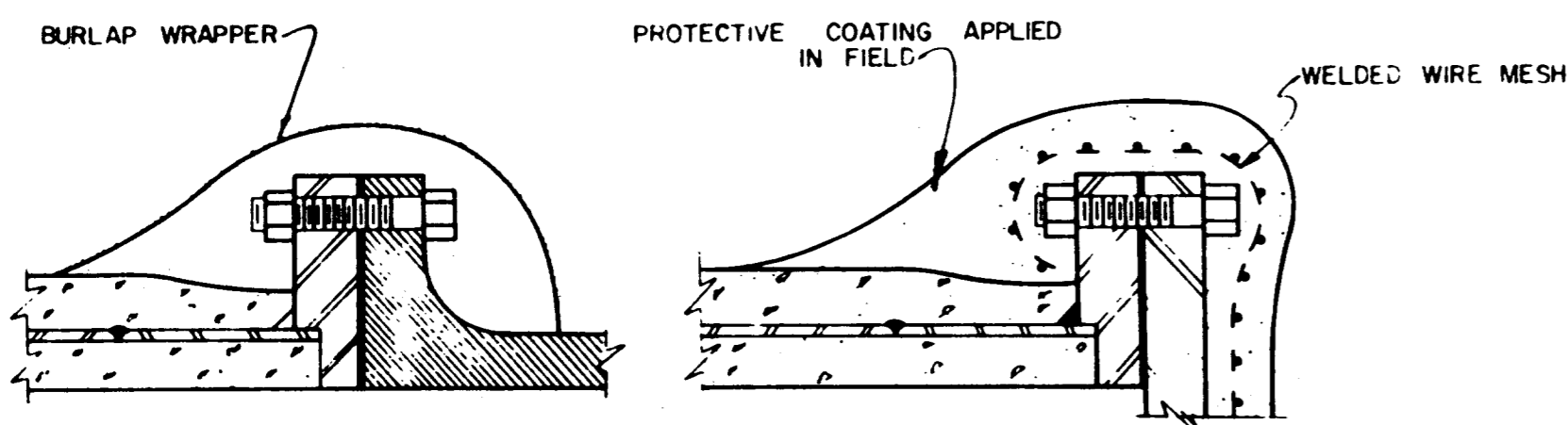
CORPORATION COCK, CC THREADS ON INLET END MUELLER OR EQUAL 3/4" - 1" = H 15008
1 1/2" - 2" = H 15013

BRASS INSULATING BUSHING PLACED IN THE PLANT.

LINE IN PLANT TO COVER ALL EXPOSED STEEL.

THREADED CONNECTION

NOTE: IF CORPORATION COCK IS NOT PROVIDED IN FIELD, THEN STEEL PLUG SHALL BE COVERED WITH CEMENT MORTAR.

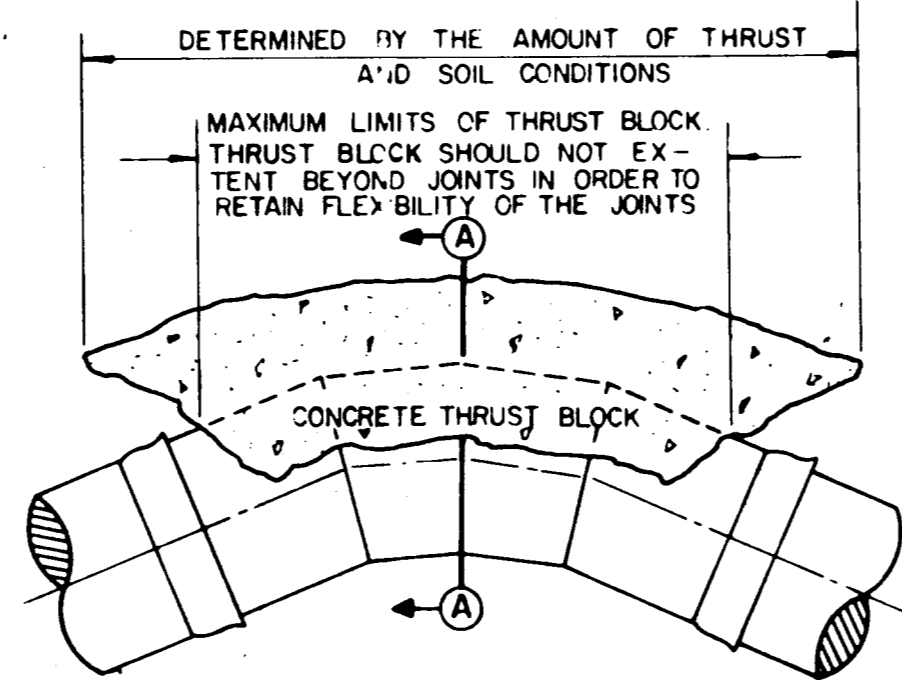


FLANGED CONNECTIONS

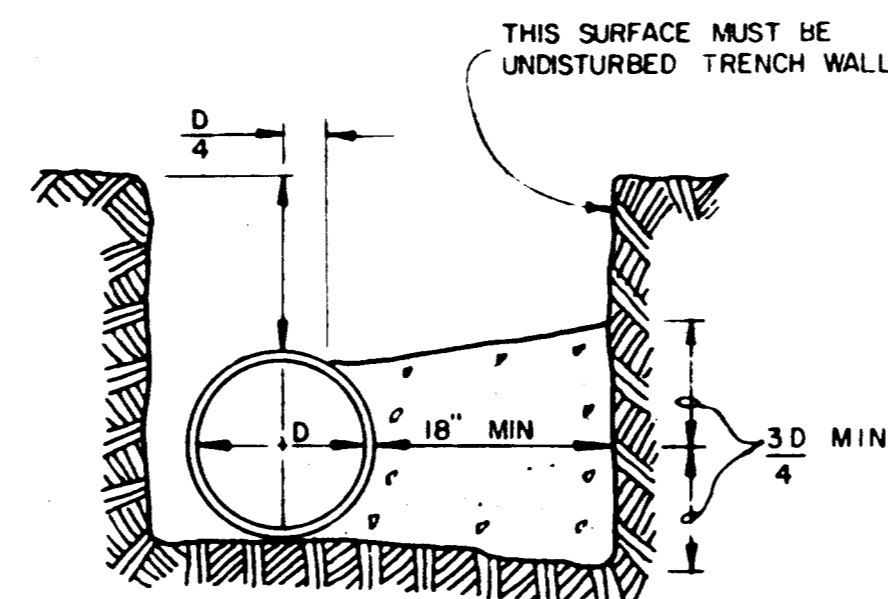
REINFORCED CONCRETE CYLINDER PIPE DETAILS

NOTE:

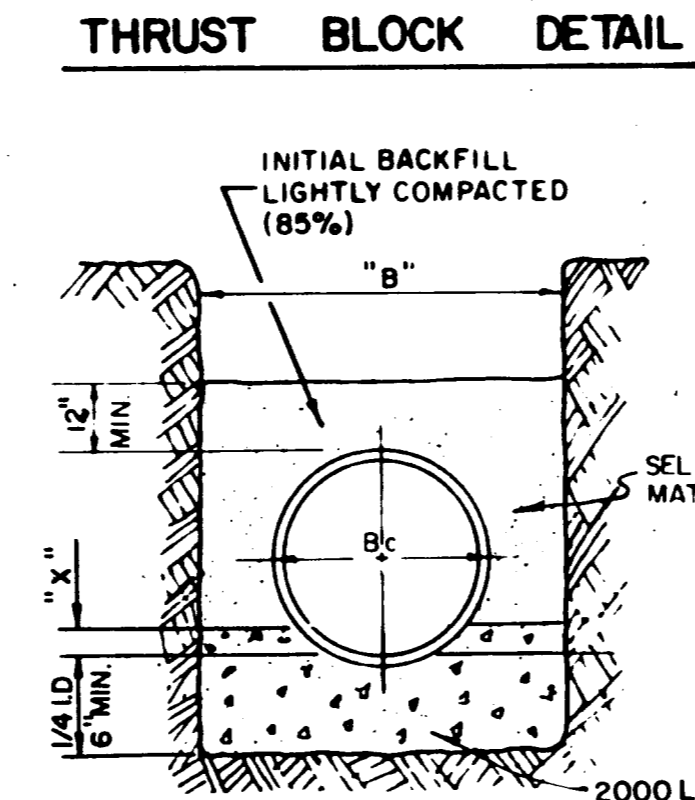
ANY SURFACE RECEIVING A CEMENT MORTAR COATING SHALL BE THOROUGHLY CLEAN AND WETTED WITH WATER JUST PRIOR TO PLACING THE CEMENT MORTAR COATING. AFTER PLACEMENT, CARE SHALL BE TAKEN TO PREVENT CEMENT MORTAR COATING FROM DRYING OUT TOO RAPIDLY BY COVERING WITH DAMP EARTH OR BURLAP. CEMENT MORTAR COATING SHALL NOT BE APPLIED DURING FREEZING WEATHER.



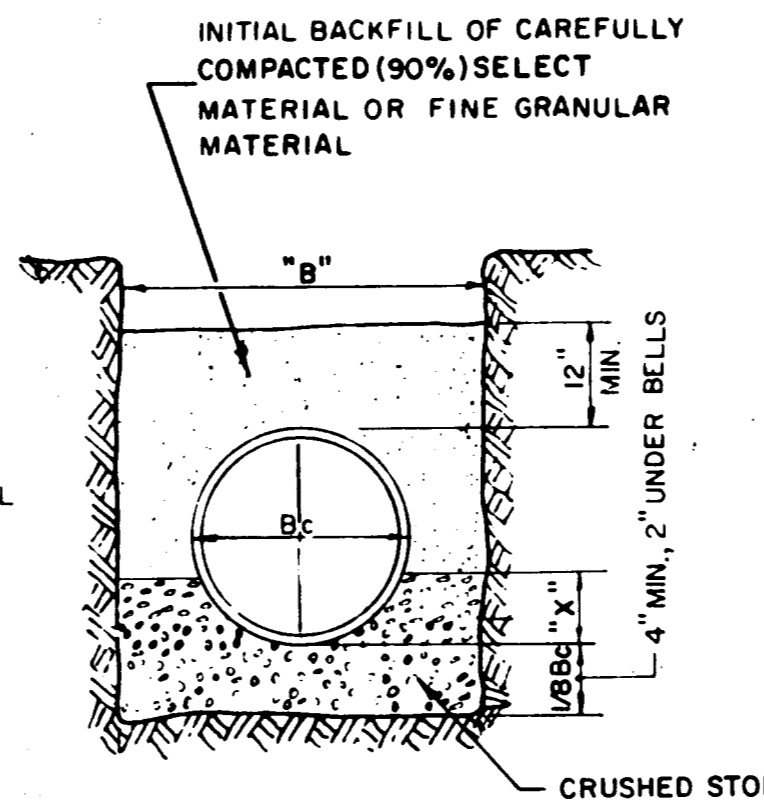
PLAN VIEW



THRUST BLOCK DETAIL

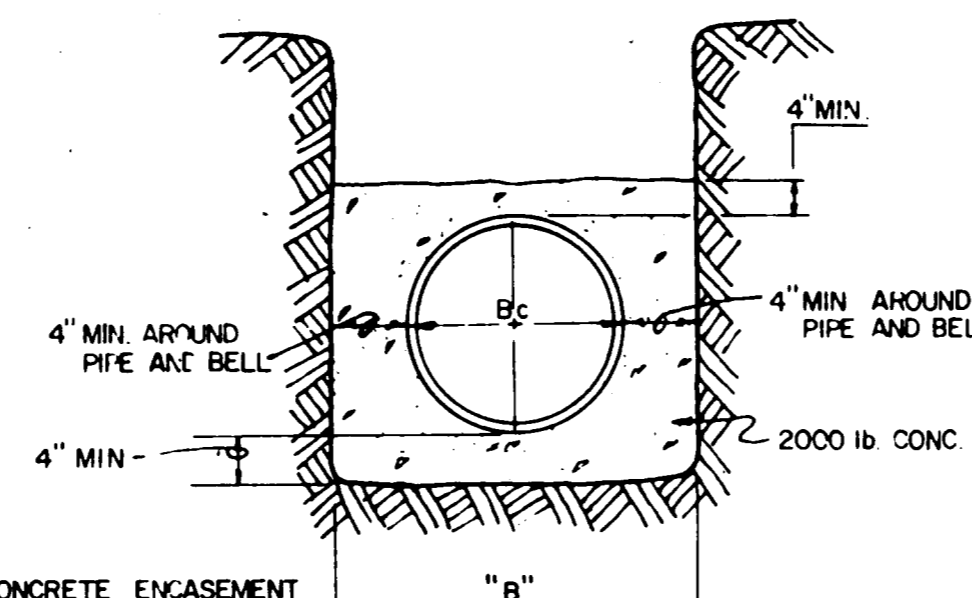


CONCRETE CRADLE



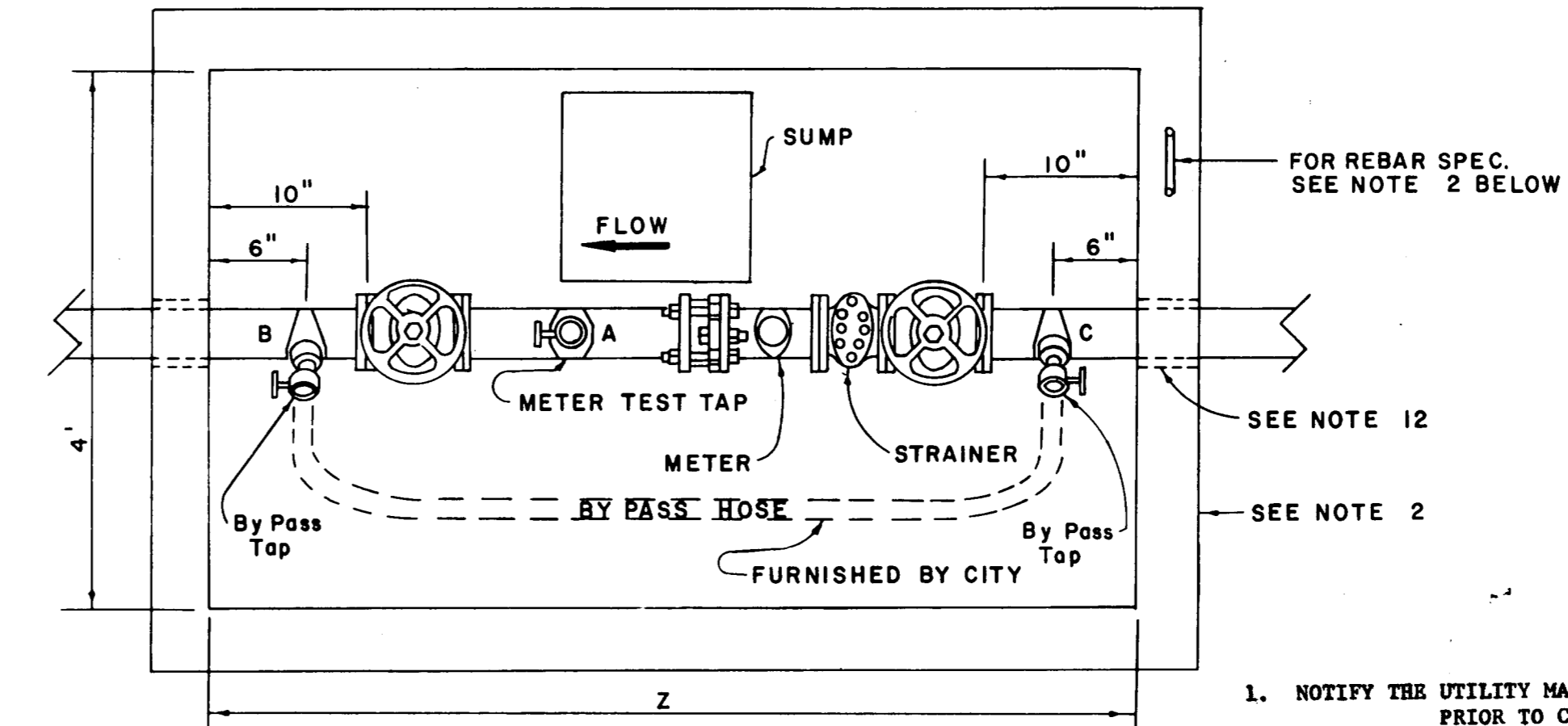
CLASS "I" EMB.

EMBEDMENT DETAILS



NOTE: CONCRETE ENCASMENT SHALL BEGIN AND END 6 INCHES FROM THE END OF A JOINT.

CONCRETE ENCASMENT

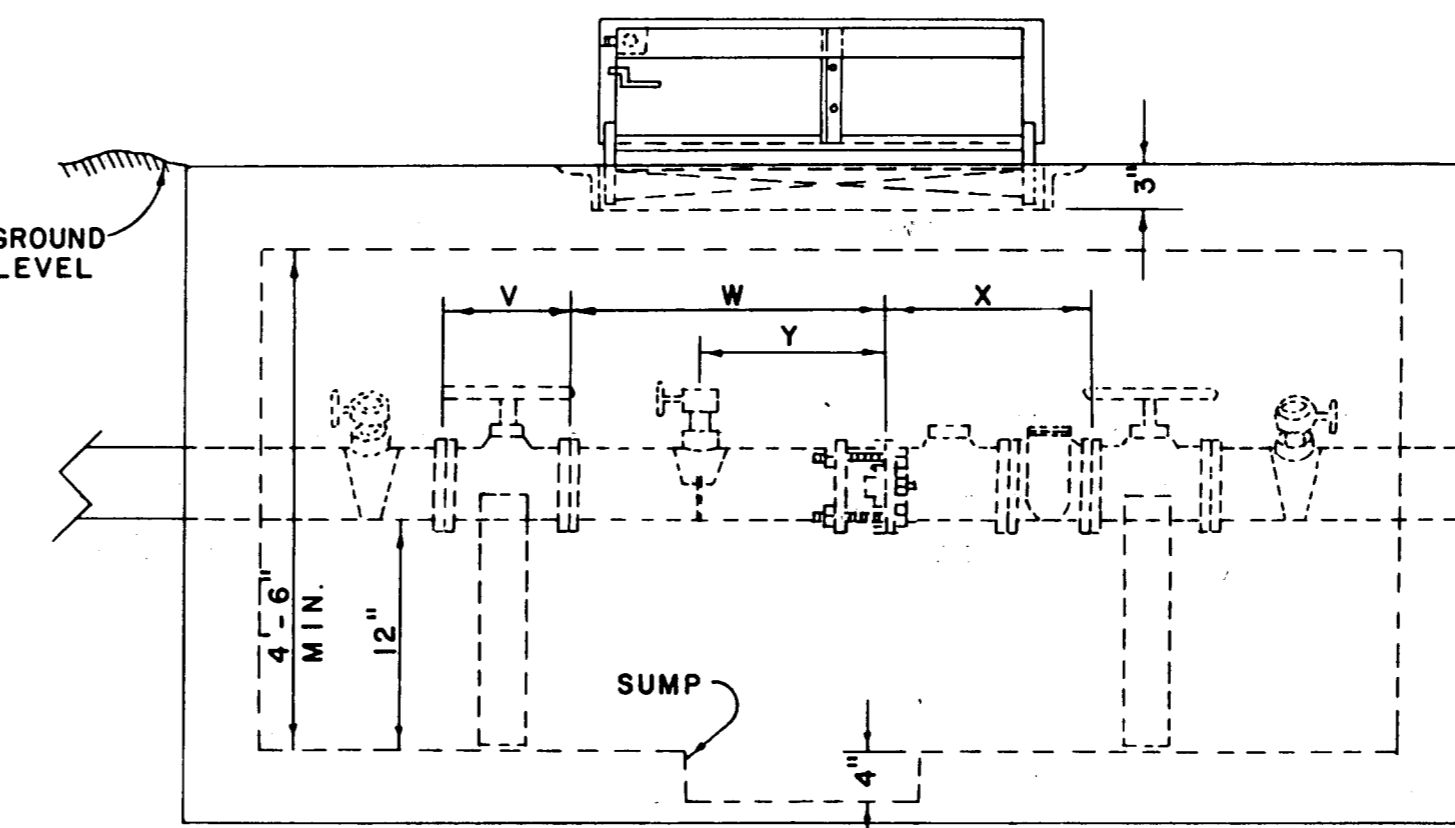


DIMENSION FOR 3", 4", & 6" M.V.

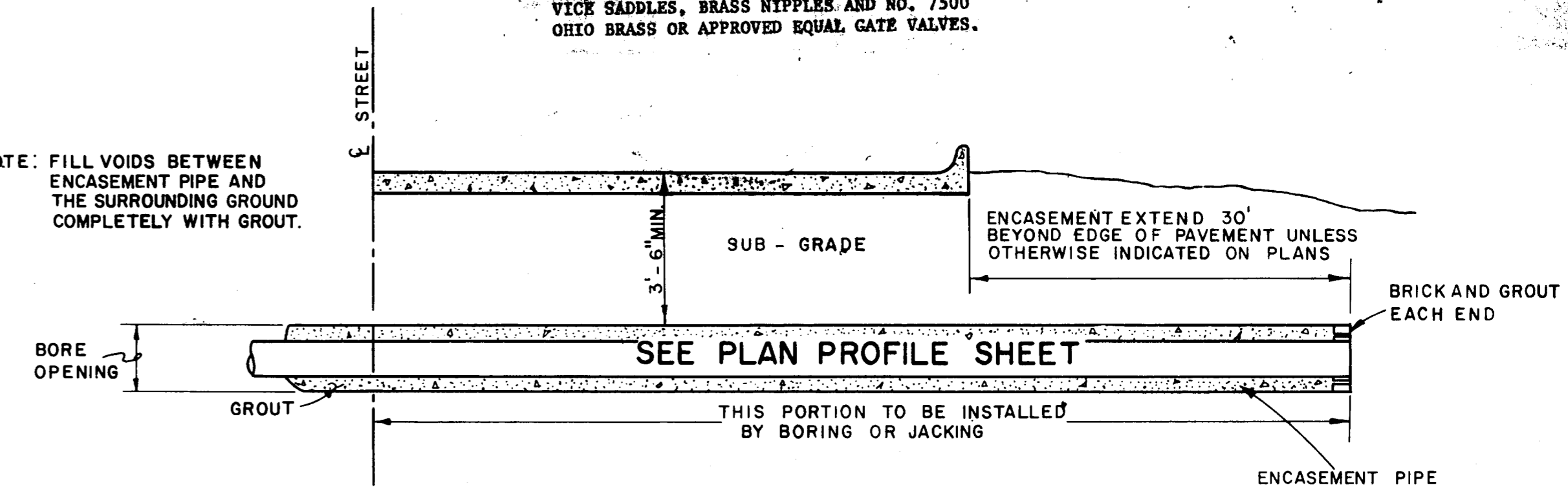
DIMENSION	3"	4"	6"
V	6"	9"	10.5"
W	15"	20"	18"
X	20"	23"	27"
Y	9"	9"	12"
Z	6'-1"	7'	7'-5"

METER VAULT & BY-PASS SPECIFICATIONS

- NOTIFY THE UTILITY MAINTENANCE DEPARTMENT PRIOR TO CONSTRUCTION OF VAULT OR BY-PASS ASSEMBLY.
- THE METER VAULT CAN BE EITHER POURED IN PLACE OR PREFABRICATED. CONCRETE SHALL BE 6" THICK AND BE 3000 PSI REINFORCED WITH #4 STEEL BARS ON 12" CENTERS EACH WAY IF THE VAULT IS POURED IN PLACE. PREFABRICATED VAULTS SHALL BE 4" THICK AND BE 4500 PSI CONCRETE #4 STEEL BARS ON 8" CENTERS, THESE ARE MINIMUM SPECIFICATIONS.
- THE VAULT WILL NOT BE PUT IN ANY DRIVE OR PARKING AREA AND MUST BE LOCATED IN A UTILITY EASEMENT.
- A DRAWING WITH THE EXACT MEASUREMENTS OF THE METER VAULT AND BY-PASS WILL BE GIVEN TO THE CONTRACTOR FOR A 3", 4" and 6" METER.
- THE VAULT LID SHALL BE A BILCO LID, TYPE Q-4 SINGLE LEAF DESIGN, ANGLE FRAME IS 1/2" STEEL WITH STRAP ANCHORS BOLTED TO THE EXTERIOR. THE LEAF IS 1/2" STEEL DIAMOND PATTERN PLATE, PIVOTING ON TORSION BARS FOR EASY OPERATION. THE MINIMUM LIVE LOAD CAPACITY IS 150 LBS. PER SQUARE FOOT. THE SIZE OF THE LID IS 3'x3'.
- THE LID SHALL BE PAINTED WITH 43-38 TNEBEC DIFFUSED ALUMINUM PAINT OR APPROVED EQUAL.
- CONTRACTOR SHALL MAKE 3 TAPS INSIDE THE VAULTS. TAP A MUST BE AT LEAST TWO PIPE DIAMETERS DOWNSTREAM OF METER AND MUST BE 2". TAPS B & C MUST BE MADE AT APPROXIMATELY 45° ANGLE ON EACH END OF THE PIPING BEFORE IT INTERSECTS THE WALL. CONTRACTOR SHALL FURNISH MUELLER NO. N-10499 FOR 3"x2", MUELLER NO. N-10501 FOR 4"x2", AND MUELLER NO. N-10505 FOR 6"x2", OR APPROVED EQUAL SERVICE SADDLES, BRASS HIPPLES AND NO. 7500 OHIO BRASS OR APPROVED EQUAL GATE VALVES.
- THE STRAINER, METER, AND FLEXIBLE COUPLING WILL BE PROVIDED AND INSTALLED BY THE TOWN OF ADDISON AT THE CONTRACTORS EXPENSE.
- THE STRAINER, METER AND FLEXIBLE COUPLING WILL NOT BE SET UNTIL THE METER VAULT AND TAPS ARE ACCEPTED BY THE TOWN OF ADDISON. UTILITY MAINTENANCE DEPARTMENT.
- THE GATE VALVES ARE REQUIRED TO BE MUELLER A-2370-6 FLANGED RESILIANT SEAT GATE VALVES.
- THE BOTTOM OF THE METER VAULT MUST BE 6" THICK CONCRETE WITH #4 REBAR ON 12" CENTERS AND HAVE A 4" FILL SAND CUSHION UNDERNEATH, A SUMP 4" DEEP AND 12" IN DIAMETER SHALL BE INSTALLED TO ONE SIDE OF THE CENTER OF THE BOTTOM SLAB. IF PRECAST VAULT IS USED WHERE THE SIDES JOIN THE BOTTOM, A LAYER RAM-SEK SHALL BE USED TO SEAL THE JOINT.
- CONTRACTOR SHALL HAVE A CHOICE OF EITHER HAVING A LINK SEAL WALL SLEEVE MODEL WS-8-12-5-6 FOR A 4" PIPE, WS-1036-8-6 OR WS-12-37-8-6" FOR 8" PIPE CAST IN THE VAULT OR HAVE THE VAULT WALL CORED BEFORE INSTALLATION OF VAULT AND PIPING. IN EITHER CASE, A LINK SEAL MODEL NO. LS-100-C MUST BE USED TO SEAL THE ANNULAR SPACE BETWEEN THE PIPE AND WALL OPENING. BREAKING OF THE WALL WITH A JACKHAMMER IS NOT PERMITTED.
- UNDER EACH VALVE WILL BE A CONCRETE SUPPORT.
- DEPTH OF VAULT SHALL BE A MINIMUM OF 4 1/2 FEET.



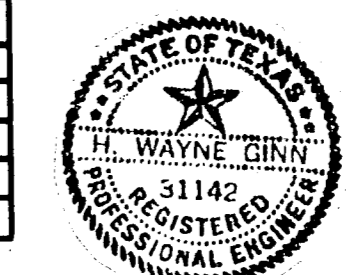
NOTE: FILL VOIDS BETWEEN ENCASEMENT PIPE AND THE SURROUNDING GROUND COMPLETELY WITH GROUT.



HALF-SECTION TYPICAL HIGHWAY CROSSING
NO SCALE

NOTE: ENCASEMENT PIPE MAY BE ELIMINATED FOR CITY STREETS.

TABLE OF QUANTITIES OF MATERIALS IN CUBIC YARDS PER 100 LINEAR FEET						
INSIDE DIAMETER OF PIPE	APPROX. OUTSIDE DIAMETER OF PIPE	"X" IS A MINIMUM DEPTH	"B" TRENCH WIDTH FOR COMPUTATION OF QUANTITIES	CONCRETE		CRUSHED STONE FOR CL" EMBEDMENT
				FOR EMBEDMENT	FOR ENCASEMENT	
REINFORCED CONCRETE CYLINDER PIPE						
14"	17.25"	2.53"	34"	6.91	16.07	5.16
16"	19.38"	2.84"	36"	7.50	17.76	5.64
18"	21.78"	3.19"	38"	8.11	19.52	6.16
24"	27.75"	4.06"	44"	9.97	24.90	9.28



NO.	REVISION	BY	DATE
TOWN OF ADDISON, TEXAS DEPARTMENT OF ENGINEERING			
STANDARD CONSTRUCTION DETAILS WATER			
WATER PIPE DETAILS			
APPROVED		H. WAYNE GINN, P.E.	
DATE MARCH, 1984	SHEET		SD-17

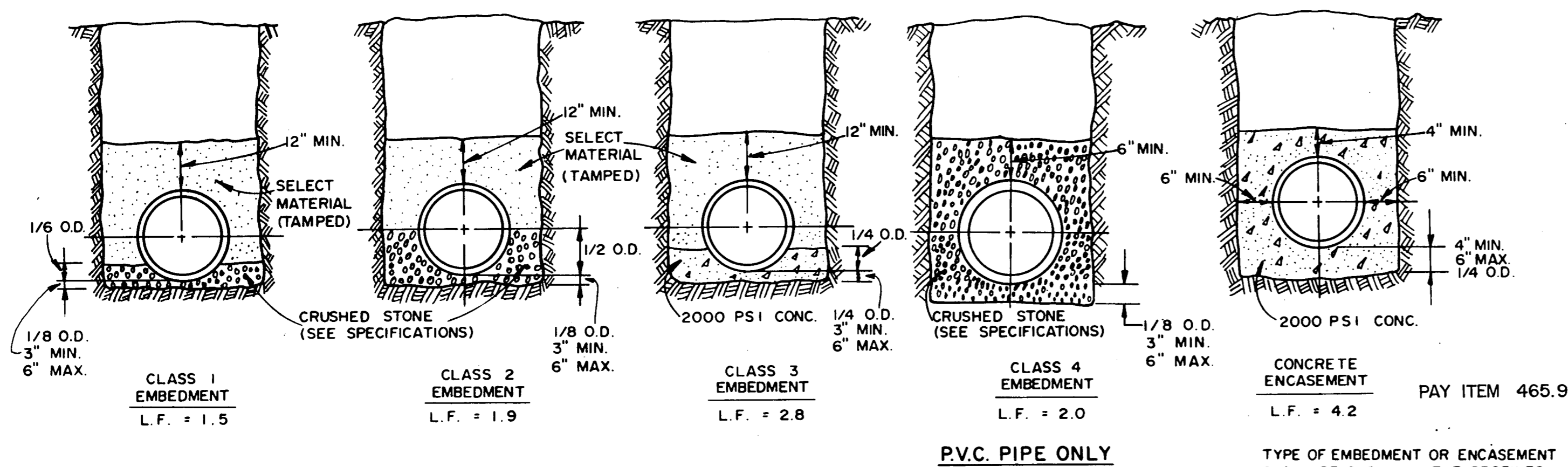
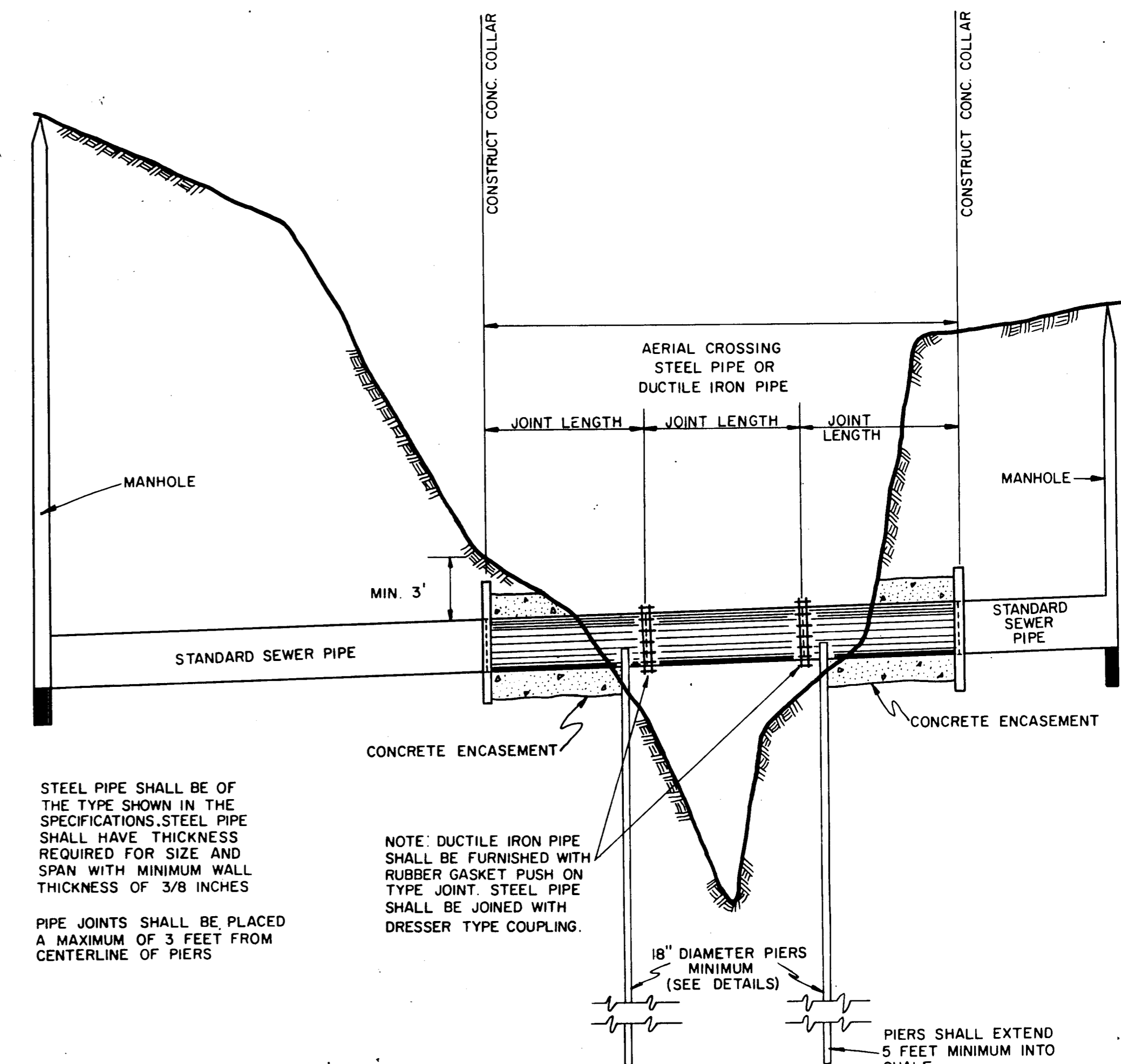


TABLE OF QUANTITIES OF 2000 PSI CONCRETE, GRAVEL OR CRUSHED STONE IN CUBIC YARDS PER 100 LINEAR FEET FOR EACH CLASS EMBEDMENT

SIZE OF PIPE IN INCHES I.D.	O.D. OF PIPE IN INCHES	TRENCH WIDTH IN INCHES	TRENCH WIDTH IN FEET	CLASS 1 EMBEDMENT CRUSHED STONE	CLASS 2 EMBEDMENT CRUSHED STONE	CLASS 3 EMBEDMENT CONCRETE	CONCRETE ENCASEMENT
12	16.00	32	2.67	4.1	6.5	4.8	15.8
15	19.50	36	3.00	4.8	7.8	6.4	19.2
18	23.00	39	3.25	5.7	9.2	8.2	21.2
21	26.50	43	3.58	6.9	11.0	10.2	24.9
24	30.00	46	3.83	8.3	13.1	12.4	28.7
27	33.50	51	4.25	10.3	16.1	14.4	32.8
30	37.00	57	4.75	12.7	20.1	17.0	34.8
33	40.50	62	5.17	15.1	23.8	19.3	39.2
36	44.00	67	5.58	18.0	28.6	22.1	43.8

SIZE OF PIPE IN INCHES	O.D. OF PIPE IN INCHES	TRENCH WIDTH IN INCHES	TRENCH WIDTH IN FEET	CLASS 4 EMBEDMENT CRUSHED STONE	CONCRETE ENCASEMENT
6	6.28	24	2.00	8.0	11.7
8	8.16	24	2.00	8.7	12.4
10	10.20	26	2.18	10.2	14.2
12	12.24	26	2.35	11.7	15.9
15	15.30	31	2.61	14.0	18.8

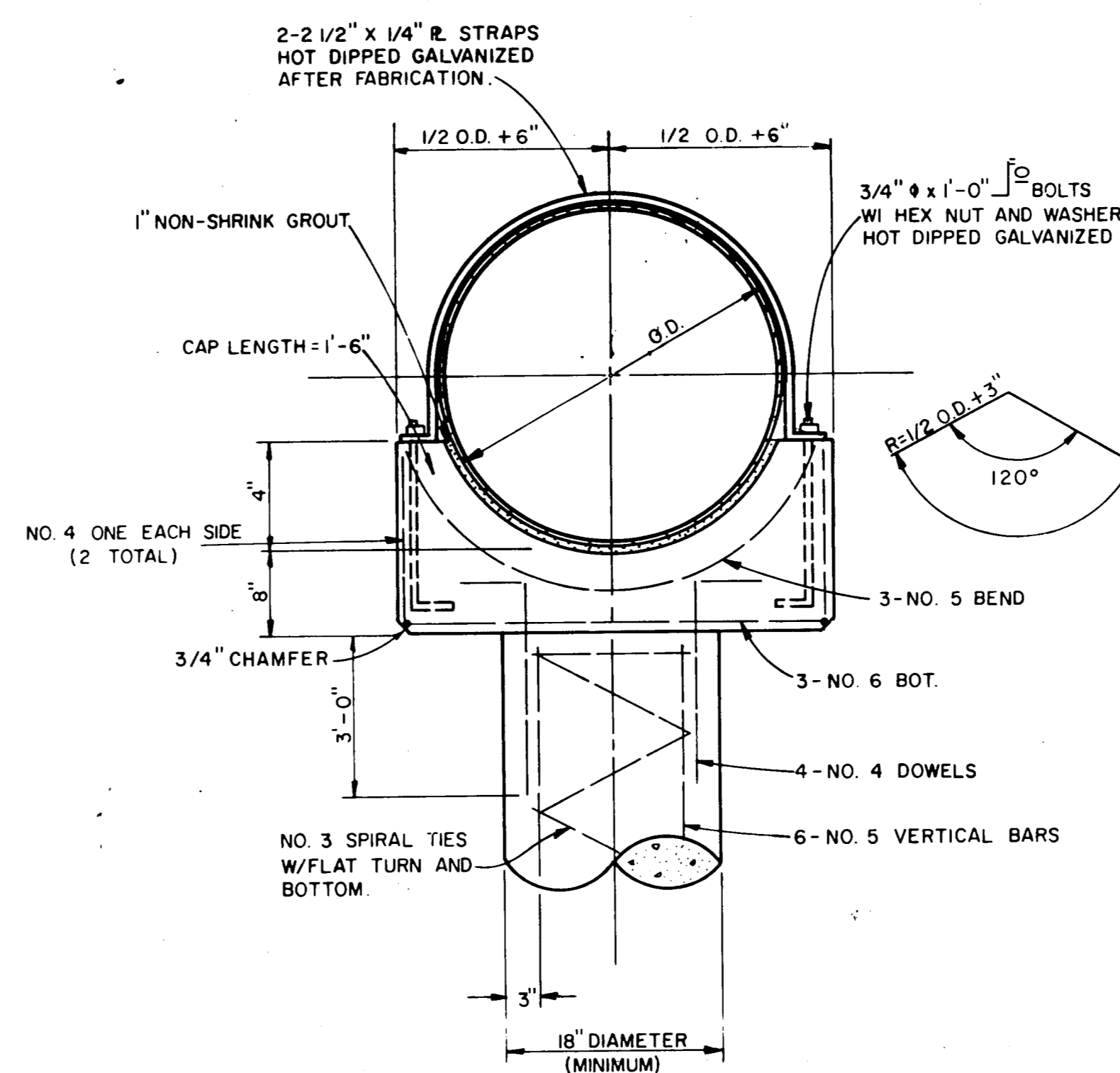
SIZE OF PIPE IN INCHES I.D.	O.D. OF PIPE IN INCHES	TRENCH WIDTH IN INCHES	TRENCH WIDTH IN FEET	CLASS 1 EMBEDMENT CRUSHED STONE	CLASS 2 EMBEDMENT CRUSHED STONE	CLASS 3 EMBEDMENT CONCRETE	CONCRETE ENCASEMENT
8	9.75	26	2.17	2.9	4.3	3.3	10.9
10	12.00	28	2.33	3.3	5.0	3.7	12.5
12	14.25	30	2.50	3.7	5.8	4.3	14.2
15	17.00	36	3.00	4.8	7.8	7.0	17.5
18	21.45	39	3.25	5.6	9.1	8.9	21.0
21	25.00	43	3.58	6.7	11.0	11.1	23.0
24	28.50	46	3.83	8.0	12.9	12.3	26.8
27	32.10	51	4.25	10.0	15.9	14.3	30.8
30	35.60	57	4.75	12.4	19.8	16.8	34.9
33	38.95	61	5.08	14.5	22.9	18.7	37.0
36	42.25	66	5.50	17.0	26.8	21.1	41.5



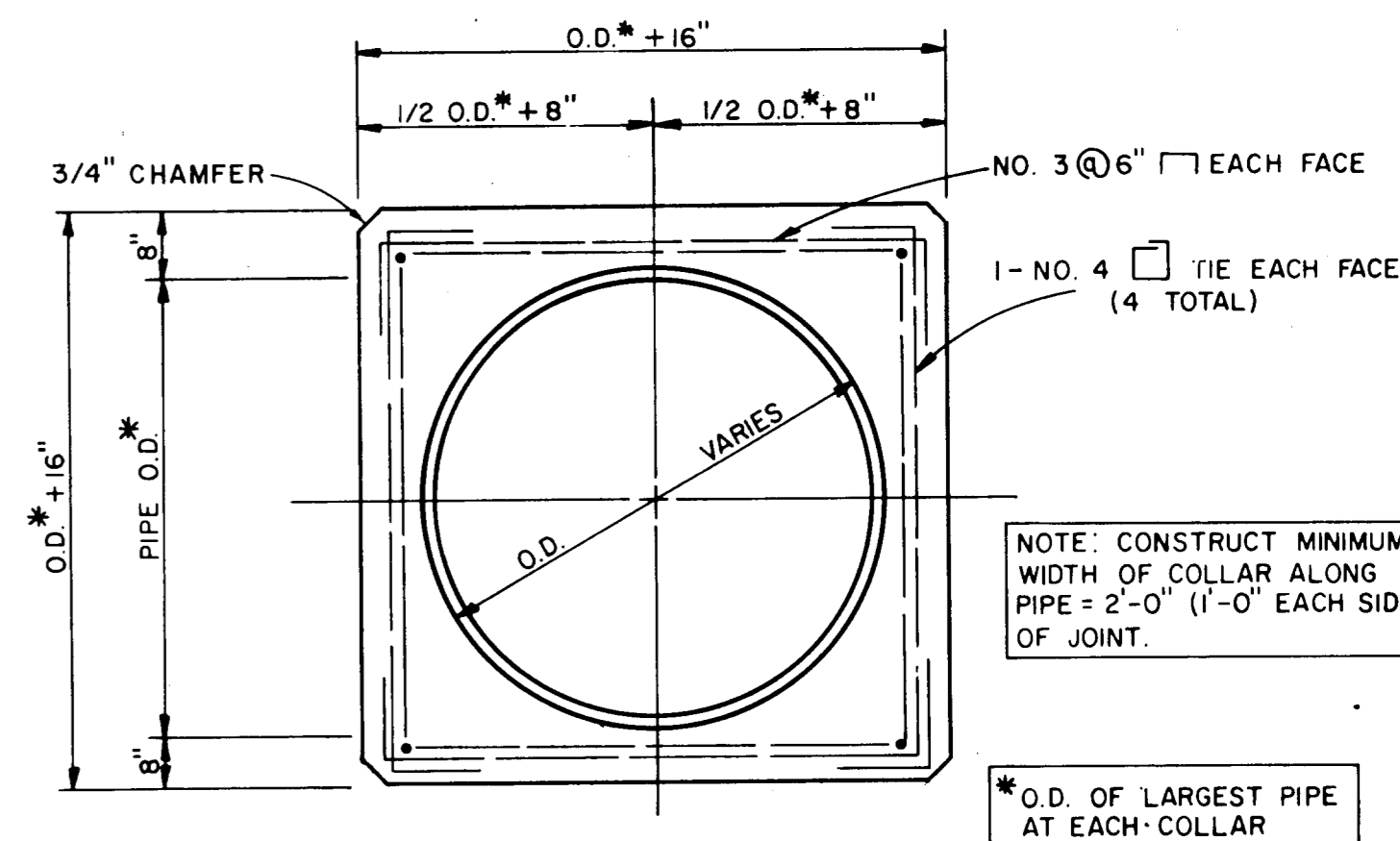
STEEL PIPE SHALL BE OF THE TYPE SHOWN IN THE SPECIFICATIONS. STEEL PIPE SHALL HAVE THICKNESS REQUIRED FOR SIZE AND SPAN WITH MINIMUM WALL THICKNESS OF 3/8 INCHES

PIPE JOINTS SHALL BE PLACED A MAXIMUM OF 3 FEET FROM CENTERLINE OF PIERS

AERIAL CROSSING DETAIL



AERIAL CROSSING PIER CAP DETAIL
N.T.S.



AERIAL CROSSING CONCRETE COLLAR DETAIL
N.T.S.

NO.	REVISION	BY	DATE
TOWN OF ADDISON, TEXAS DEPARTMENT OF ENGINEERING			
STANDARD CONSTRUCTION DETAILS SANITARY SEWER			
EMBEDMENT-AERIAL CROSSING			
APPROVED		H. WAYNE GINN, P.E.	
DATE MARCH, 1984		SHEET SD-20	

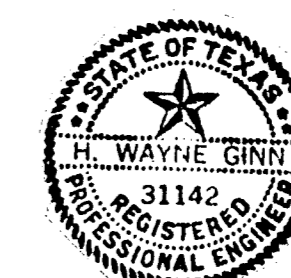
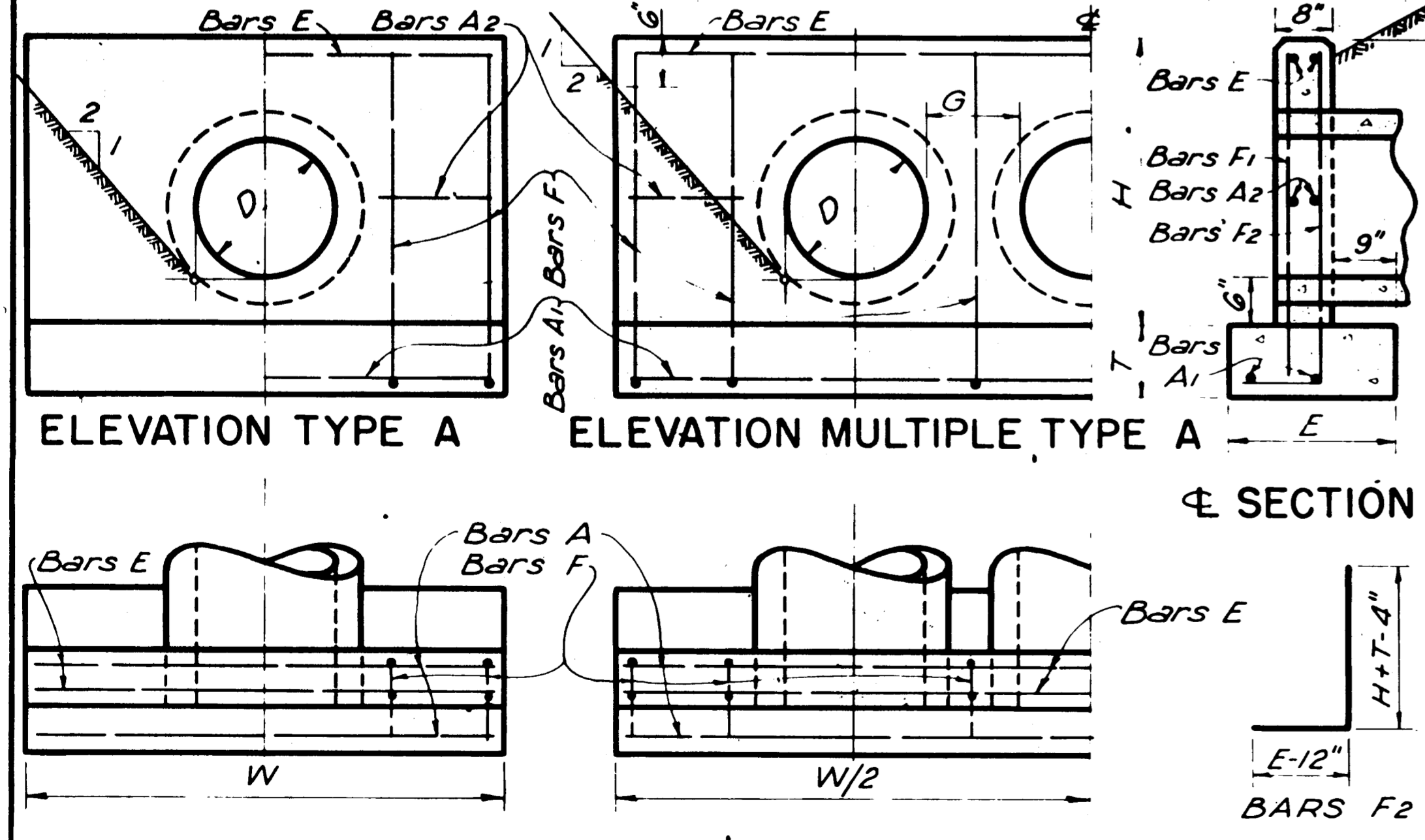


TABLE OF DIMENSIONS AND QUANTITIES FOR TWO TYPE A HEADWALLS

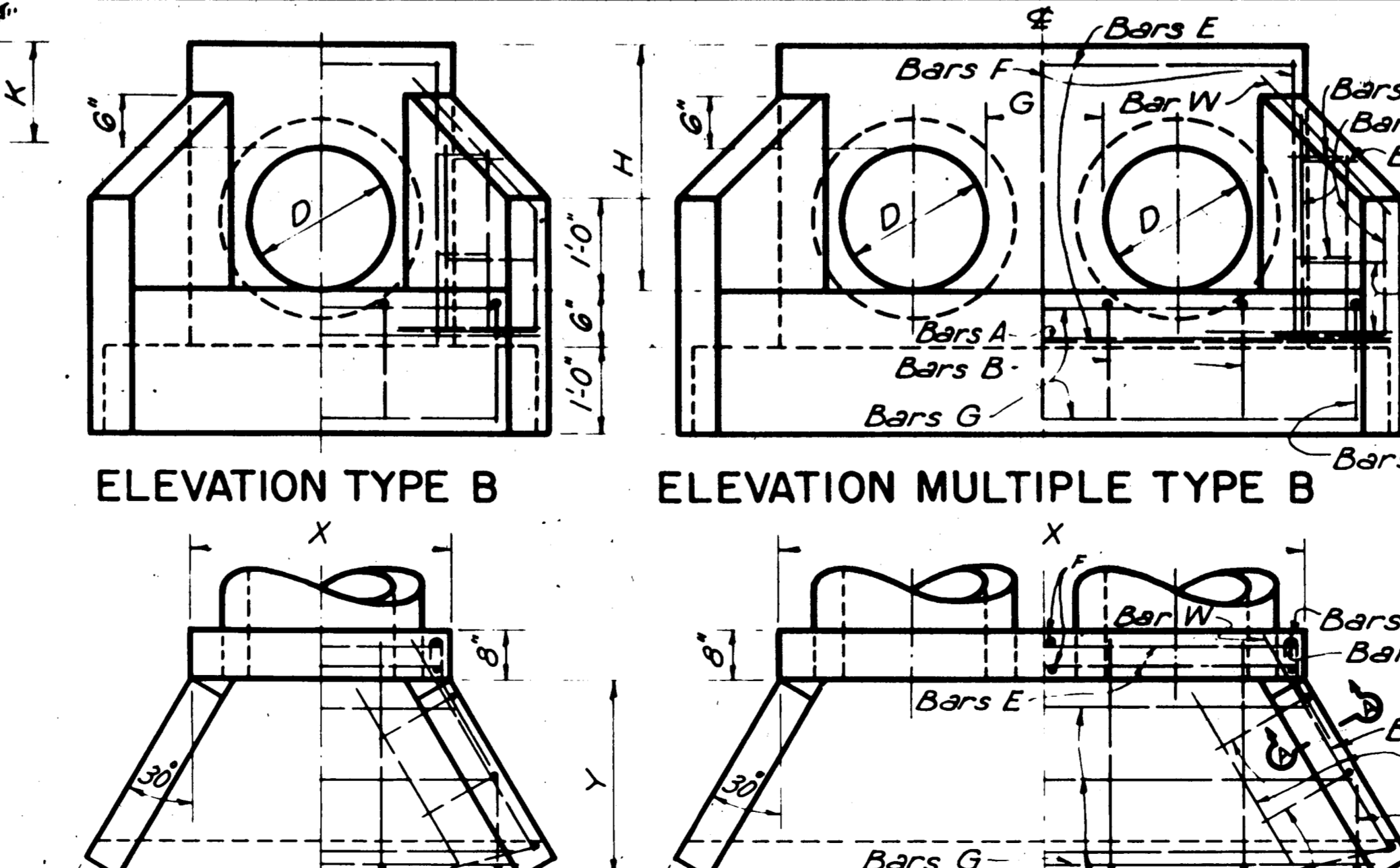
NO. OF PIPES	DIAM. OF PIPES	TABLE OF DIMENSIONS												TOTAL QUANTITIES							
		REINFORCING STEEL FOR TWO HEADWALLS												LBS.	C.Y.						
		BARS A1-A2		BARS E		BARS F1		BARS F2		BARS G		BARS S									
1	12"	12"	9"	1'-9"	2'-6"	7'-0"	6'-8"	10'	8'	2'-6"	8'	6'-8"	28'	12'	2'-11"	23'	12'	3'-8"	29'	98'	1.48

TABLE OF DIMENSIONS AND QUANTITIES FOR TWO TYPE B HEADWALLS

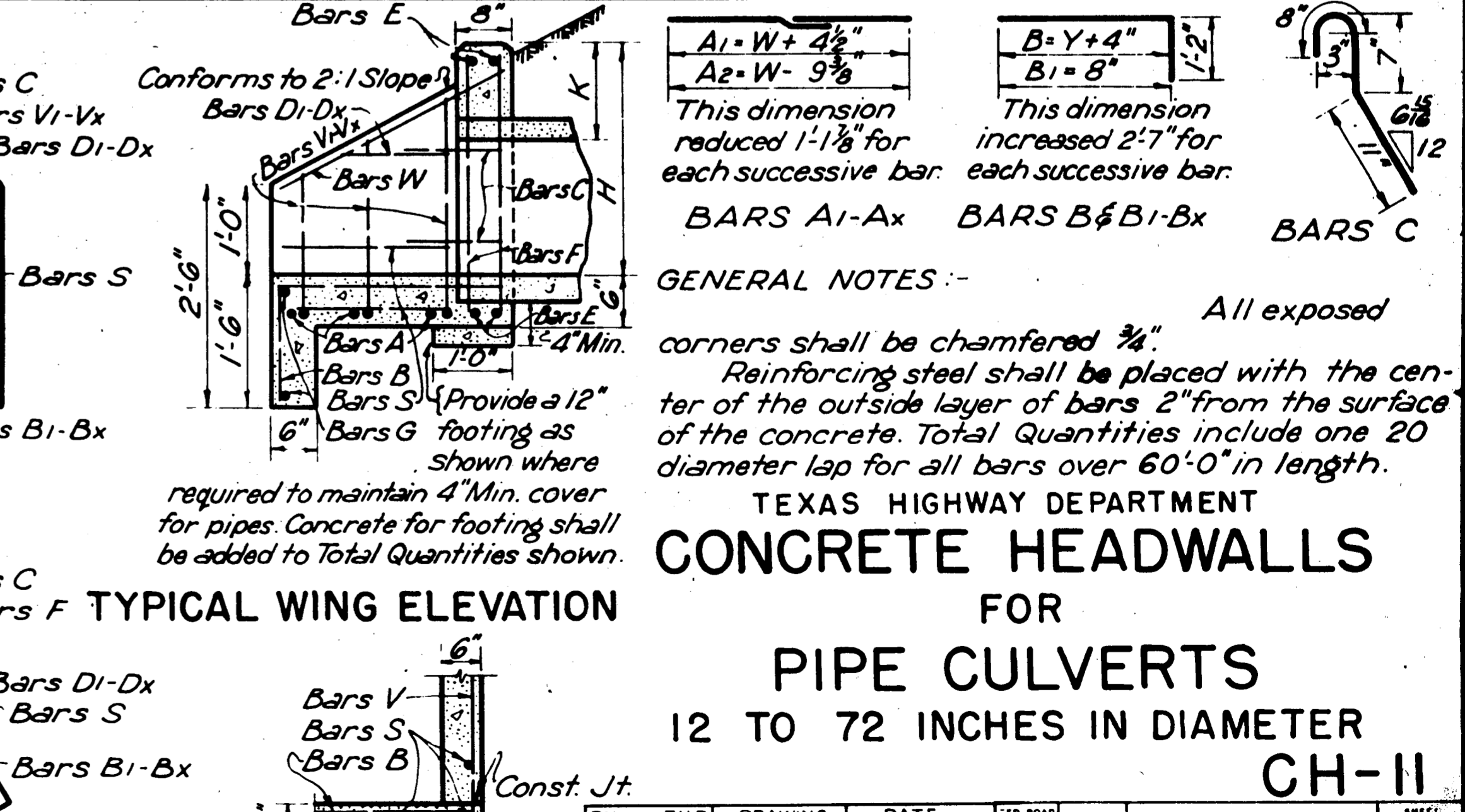
NO. OF PIPES	DIAM. OF PIPES	TABLE OF DIMENSIONS												TOTAL QUANTITIES																	
		REINFORCING STEEL AND QUANTITIES FOR TWO HEADWALLS												LBS.	C.Y.																
		BARS A1-Ax		BARS B		BARS B1-Bx		BARS C-2'0"		BARS D1-Dx		BARS E				BARS F		BARS G		BARS S		BARS V1-Vx		BARS W							
1	12"	12"	10"	2'-4"	2'-0"	1'-0"	2'-4"	2'	2'-8"	4'	6'	2'-6"	6'	4'	5'	2'-0"	17'	8'	2'-2"	12'	2'-8"	4'	8'	5'	4'	2'-11"	8'	1'-8"	7'	68'	52



PLAN TYPE A PLAN MULTIPLE TYPE A



PLAN TYPE B PLAN MULTIPLE TYPE B



TYPICAL WING ELEVATION SEC. A-A

$A1-W + 4\frac{1}{2}''$
 $A2-W - 9\frac{3}{8}''$
 This dimension reduced $1\frac{1}{8}''$ for each successive bar.

$B-Y + 4''$
 $B1-B''$
 This dimension increased $2\frac{7}{8}''$ for each successive bar.

BARS A1-Ax BARS B & B1-Bx BARS C

GENERAL NOTES:
 All exposed corners shall be chamfered $\frac{3}{8}''$.
 Reinforcing steel shall be placed with the center of the outside layer of bars 2" from the surface of the concrete. Total Quantities include one 20 diameter lap for all bars over 60'-0" in length.

TEXAS HIGHWAY DEPARTMENT
CONCRETE HEADWALLS
 FOR
PIPE CULVERTS
 12 TO 72 INCHES IN DIAMETER
CH-II

DN	THD	DRAWING	DATE	FR. BRAD	STATE	FEDERAL AID PROJECT NO.	SHEET NO.
CK	DN	THD	Original	Feb 1950	6	TEXAS	9D-21
DW	MDA	Rev. Nov 24	Quant note				
CK	DW	K.M.	Rev. 11-67	Concrete			
TR	OCR						
CK	TR	MDA					

