

TOWN OF ADDISON

Texas

PUBLIC WORKS DEPARTMENT

GLENN CURTISS DRIVE

PAVING, STORM DRAINAGE, AND WATER UTILITY IMPROVEMENTS

INDEX OF SHEETS

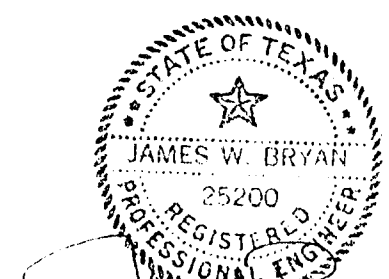
<u>Title</u>	<u>Sheet No.</u>
Title Sheet	1
Drainage Area Map	2
Paving Plans	3-5
Storm Sewer	6-8
Water Line	9
Standard Details	D1 - D10

SYMBOL LEGEND	
SYM	DESCRIPTION
G	GAS METER
E	ELECTRIC METER
C	CLEANOUT
W	WATER METER
V	WATER VALVE
P	POWER POLE
A	ANCHOR/GUY WIRE
F	FIRE HYDRANT
S	STEEL BARRIER PIPE
FL	FLOW LINE
CL	CENTERLINE



Johnson, Brickell, Mulcahy, and Associates, Inc.
 15400 Knoll Trail - Suite 111 - Dallas, Tx 75248
 (214) 661-1265

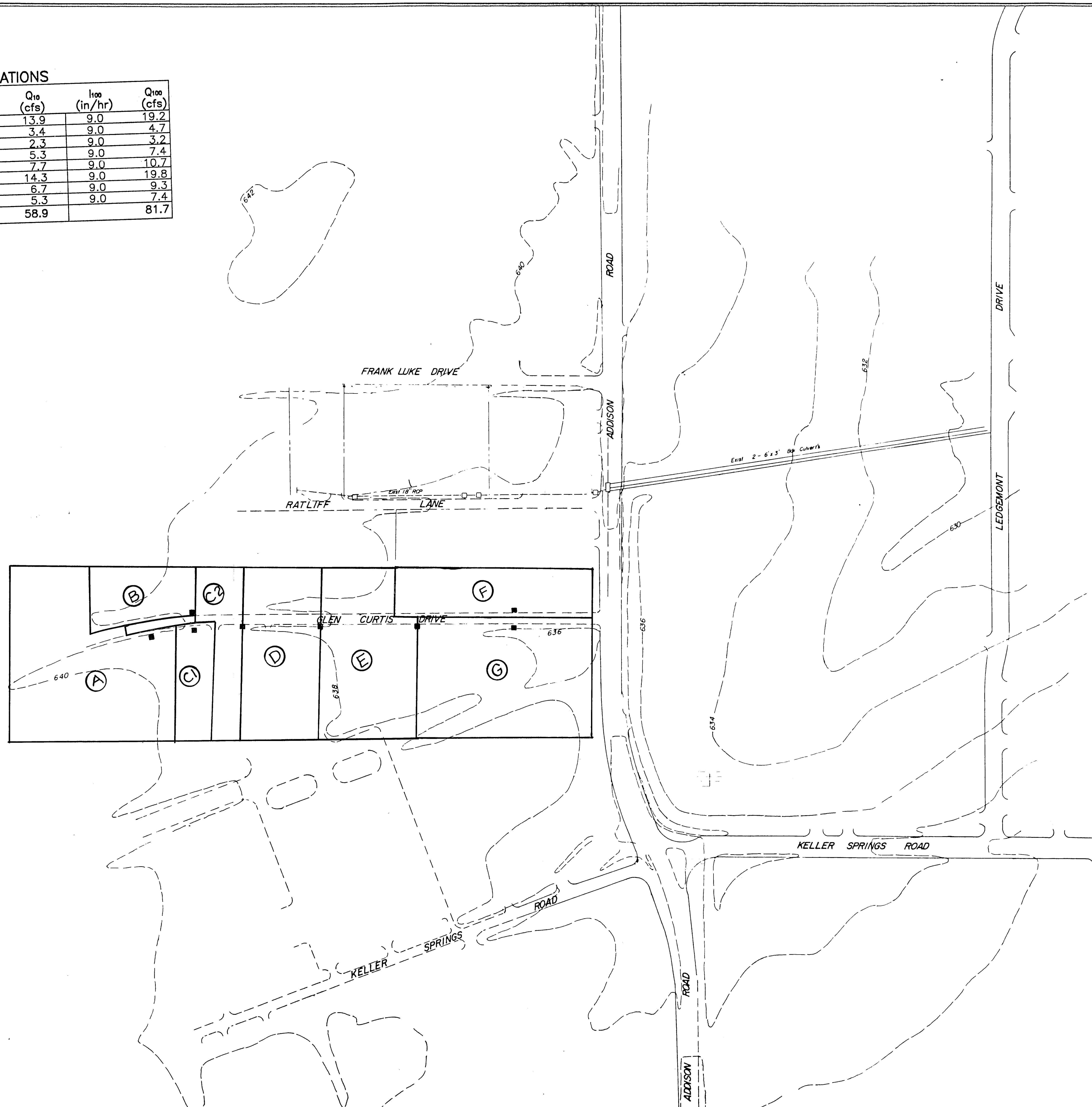
TOWN OF ADDISON APPROVAL
 RECOMMENDED FOR APPROVAL:
[Signature] 4-7-93
 DIRECTOR OF PUBLIC WORKS DATE



[Signature] 4/7/93
 THE STANDARD SHEETS INCORPORATED IN THESE PLANS HAVE BEEN
 SELECTED UNDER MY SUPERVISION AS BEING APPLICABLE TO THIS PROJECT.

DRAINAGE AREA CALCULATIONS

AREA	ACRES	C.A. (C=0.9)	T.C. (min)	I_{10} (in/hr)	Q_{10} (cfs)	I_{100} (in/hr)	Q_{100} (cfs)
A	2.37	2.13	10	6.5	13.9	9.0	19.2
B	0.58	0.52	10	6.5	3.4	9.0	4.7
C1	0.39	0.35	10	6.5	2.3	9.0	3.2
C2	0.91	0.82	10	6.5	5.3	9.0	7.4
D	1.32	1.19	10	6.5	7.7	9.0	10.7
E	2.44	2.20	10	6.5	14.3	9.0	19.8
F	1.14	1.03	10	6.5	6.7	9.0	9.3
G	0.91	0.82	10	6.5	5.3	9.0	7.4
					58.9		81.7

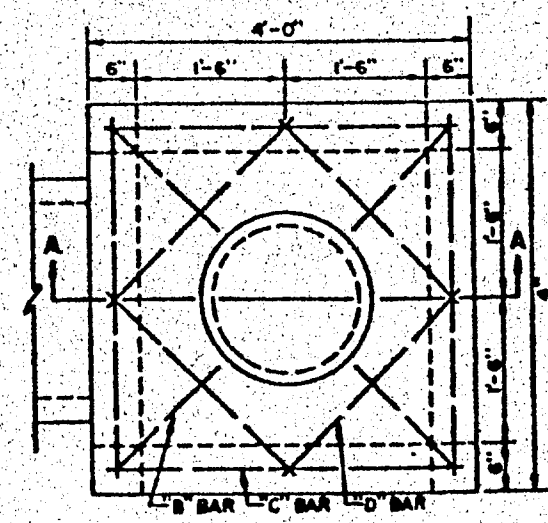


J.W.B.
4171113

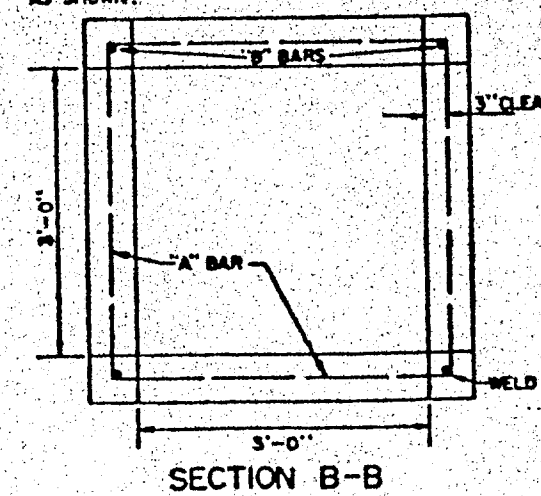
DRAINAGE AREA MAP
GLENN CURTISS DRIVE
ADDISON, TEXAS

JBM JOHNSON, BRICKELL, MULCAHY, AND ASSOCIATES, INC. CONSULTING ENGINEERS			
DESIGNED	DRAWN	SCALE	SHEET No.
CHECKED	DATE	1"=200'	2

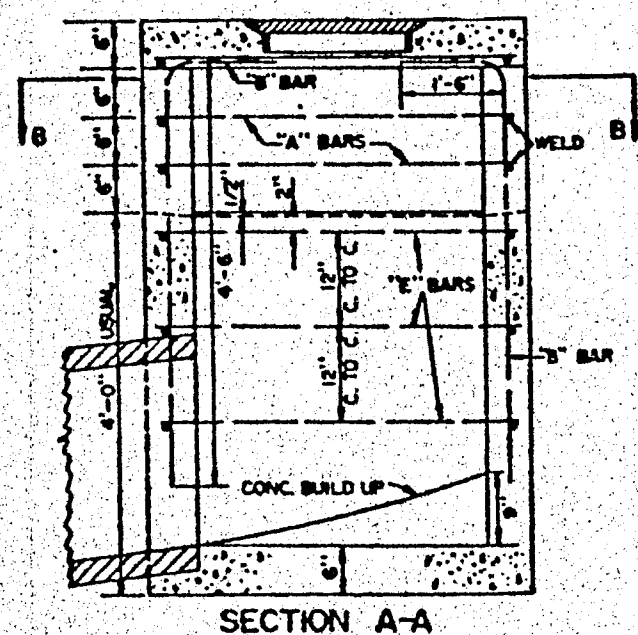
SPECIAL "Y" INLET



"A" BARS SHALL BE NO. 8 BARS PLACED AS SHOWN & WELDED AT EACH CORNER OF THE INLET. ALL OTHER BARS SHALL BE NO. 5 BARS PLACED AS SHOWN.

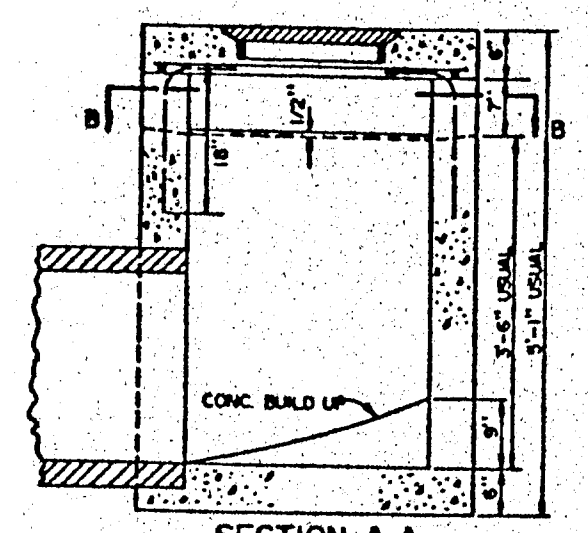
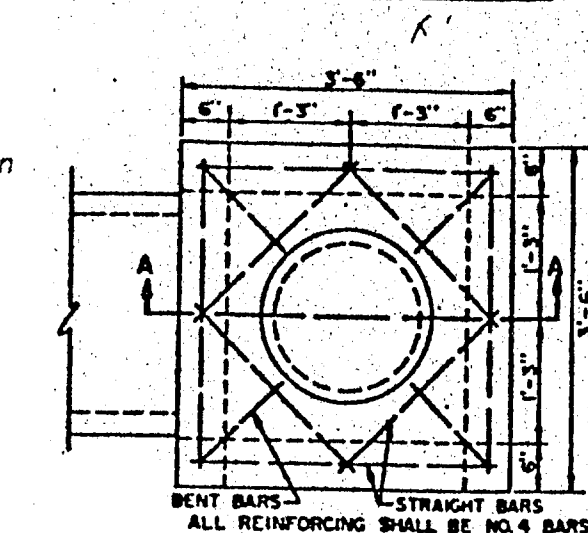


NOTES: ALL CONCRETE TO BE 3000 P.S.I. DEPTH OF INLETS SHALL VARY TO SUIT CONDITIONS IN THE FIELD OR AS SPECIFIED ON PLANS.

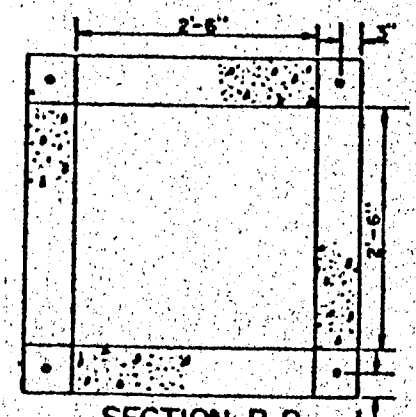


SECTION A-A

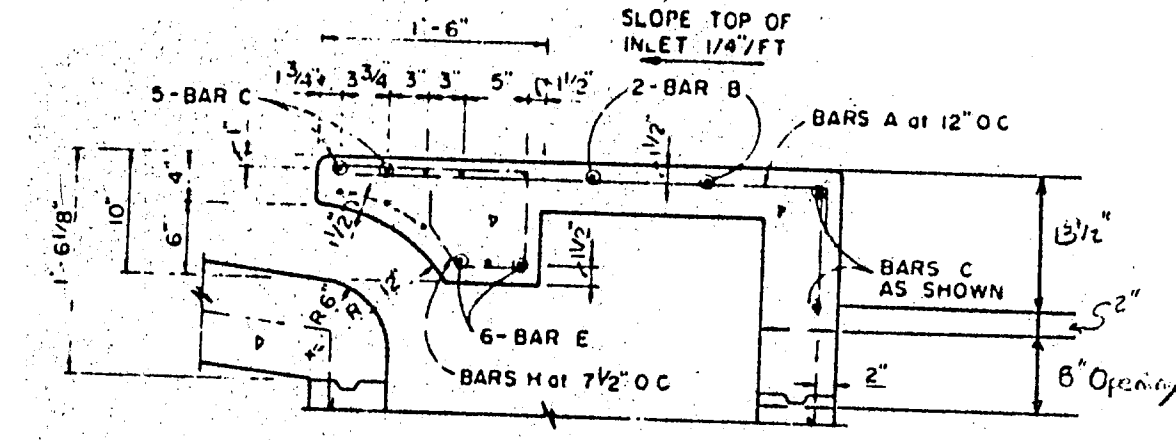
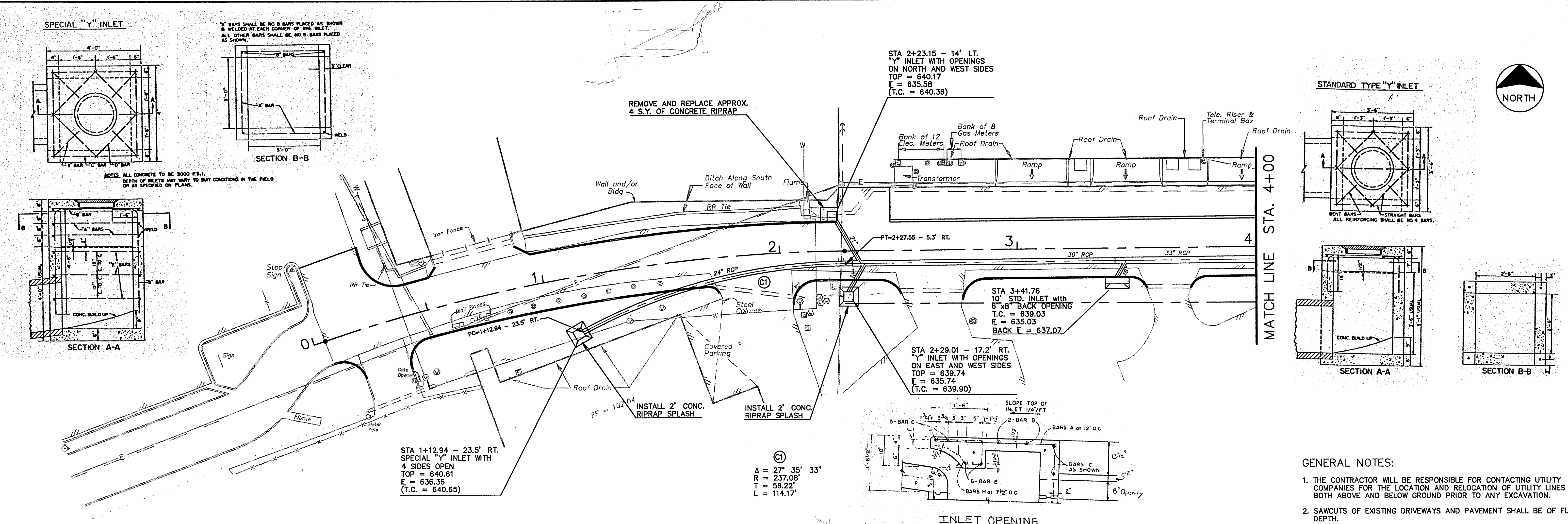
STANDARD TYPE "Y" INLET



SECTION A-A



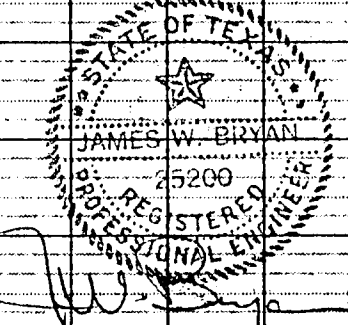
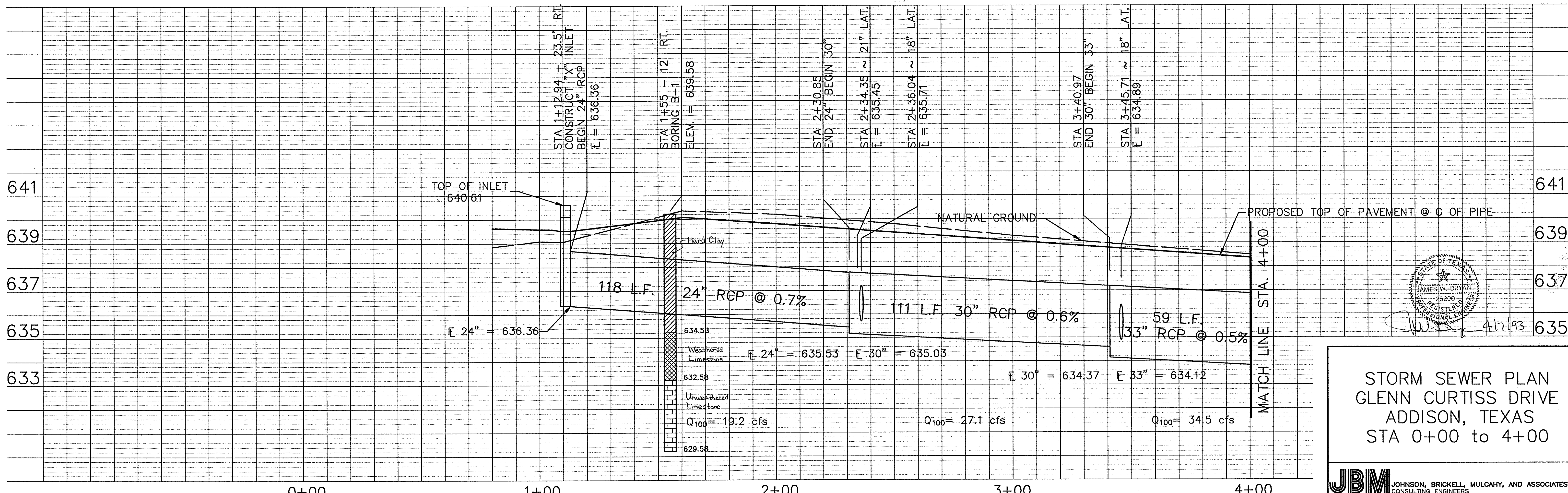
SECTION B-B



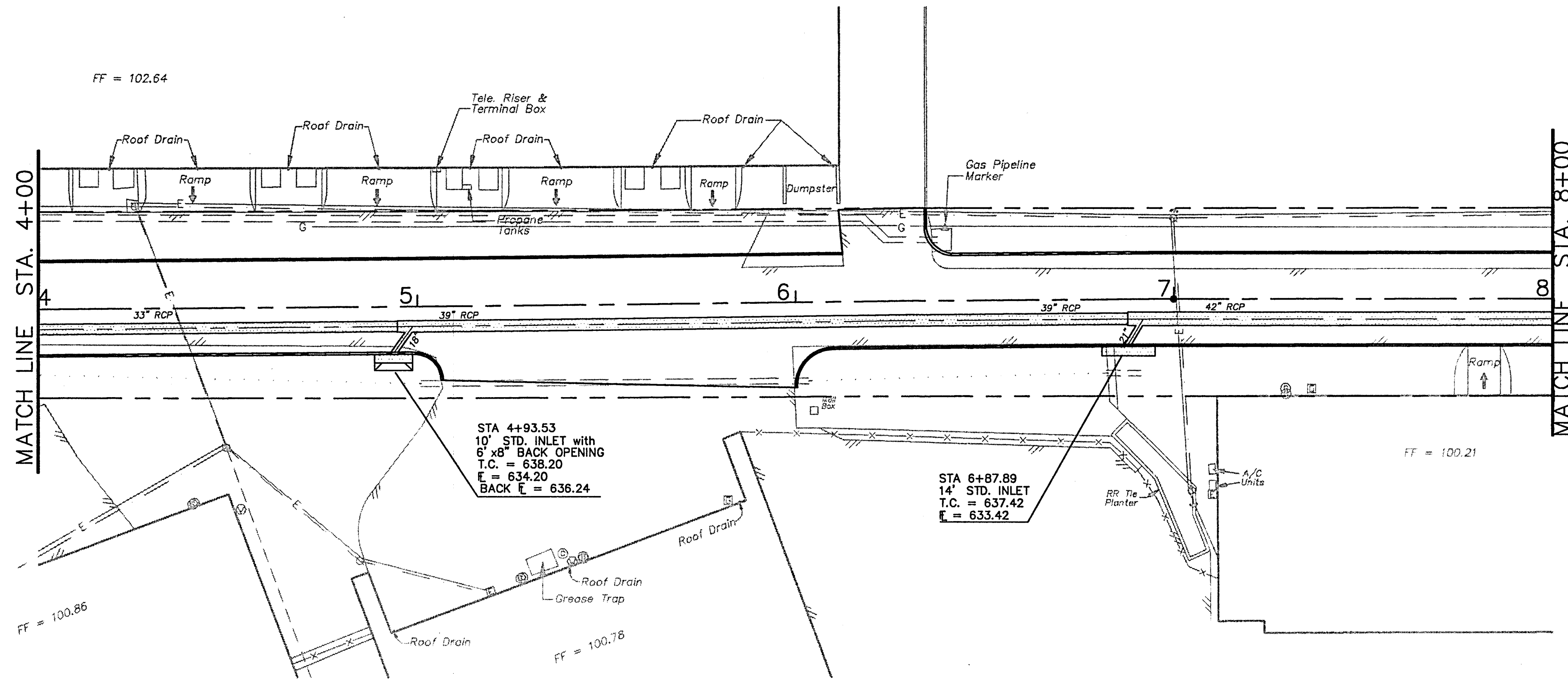
INLET OPENING

GENERAL NOTES:

1. THE CONTRACTOR WILL BE RESPONSIBLE FOR CONTACTING UTILITY COMPANIES FOR THE LOCATION AND RELOCATION OF UTILITY LINES BOTH ABOVE AND BELOW GROUND PRIOR TO ANY EXCAVATION.
2. SAWCUTS OF EXISTING DRIVEWAYS AND PAVEMENT SHALL BE OF FULL DEPTH.
3. THE CONTRACTOR SHALL PROTECT AND MAINTAIN EXISTING IRRIGATION SYSTEMS THROUGHOUT THE PROJECT.

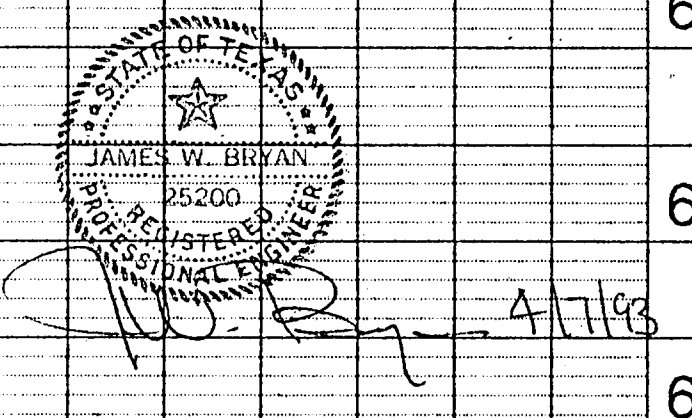
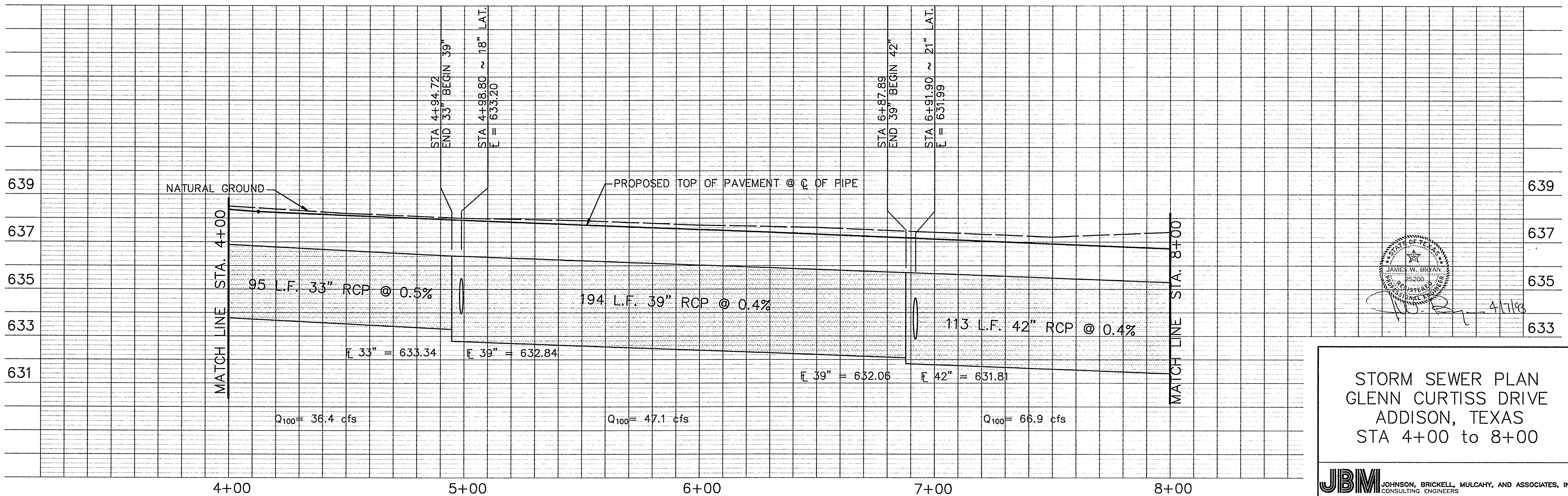


STORM SEWER PLAN
GLENN CURTISS DRIVE
ADDISON, TEXAS
STA 0+00 to 4+00



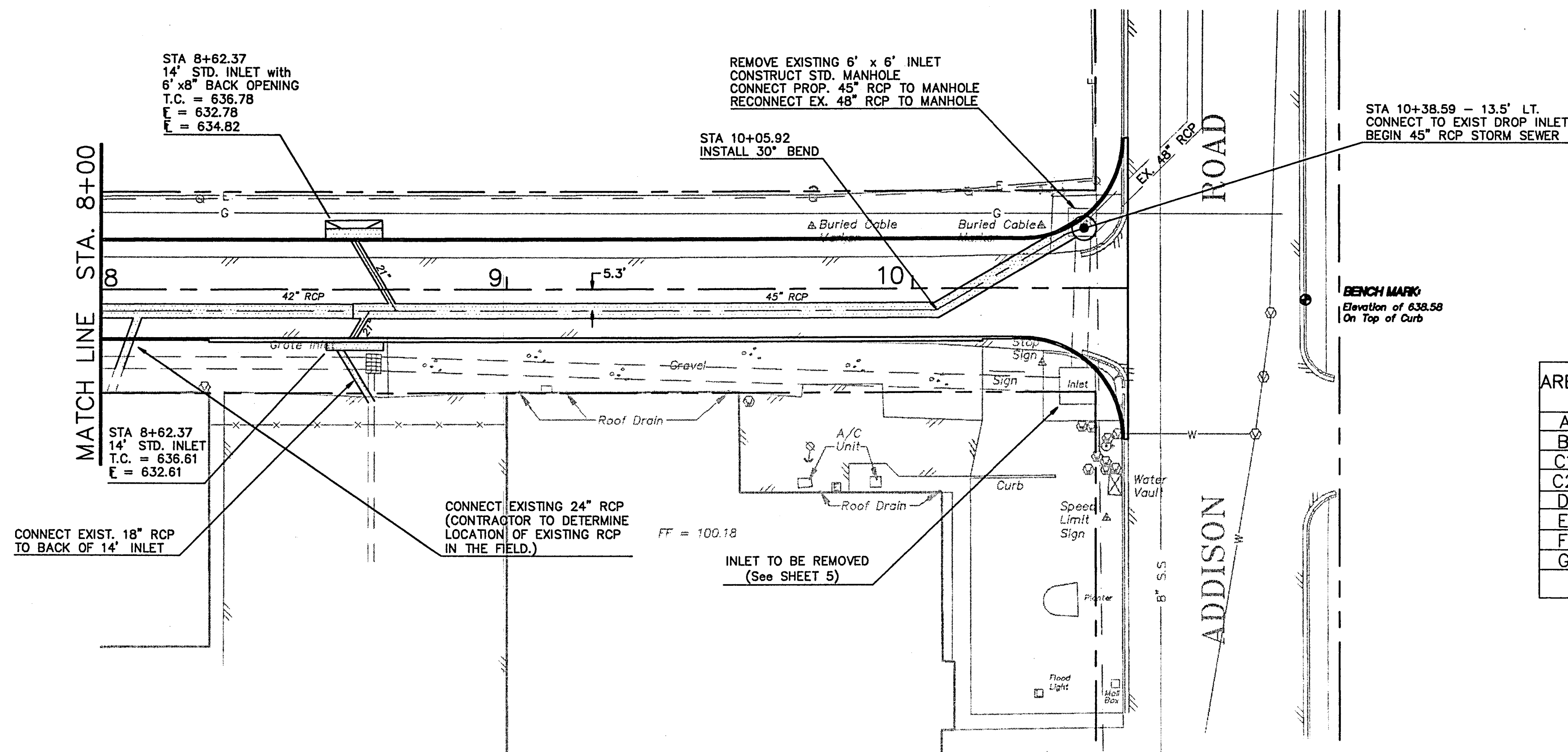
STA 4+93.53
 10' STD. INLET with
 6' x 6' BACK OPENING
 T.C. = 638.20
 E. = 634.20
 BACK E. = 636.24

STA 6+87.89
 14' STD. INLET
 T.C. = 637.42
 E. = 633.42



STORM SEWER PLAN
 GLENN CURTISS DRIVE
 ADDISON, TEXAS
 STA 4+00 to 8+00

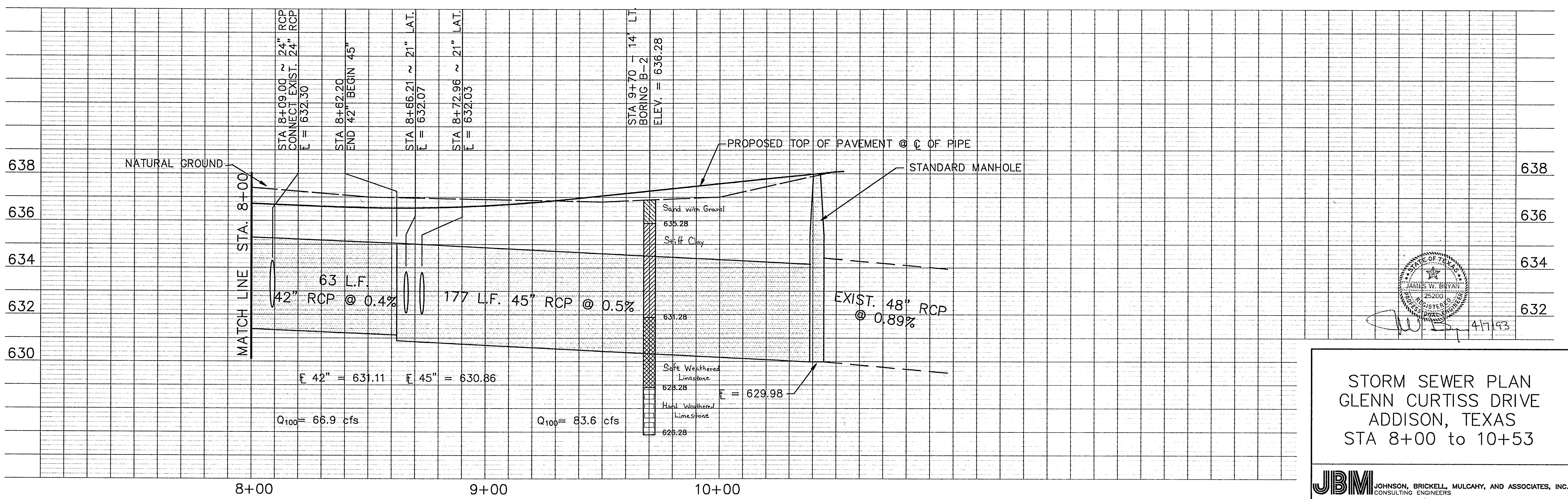
JIBM JOHNSON, BRICKELL, MULCAHY, AND ASSOCIATES, INC. CONSULTING ENGINEERS		DESIGNED	DAT	DRAWN	RS	SCALE	SHEET No.
CHECKED	JWB	DATE	4/93	1"=20' 1"=2'	HORZ. VERT.		7



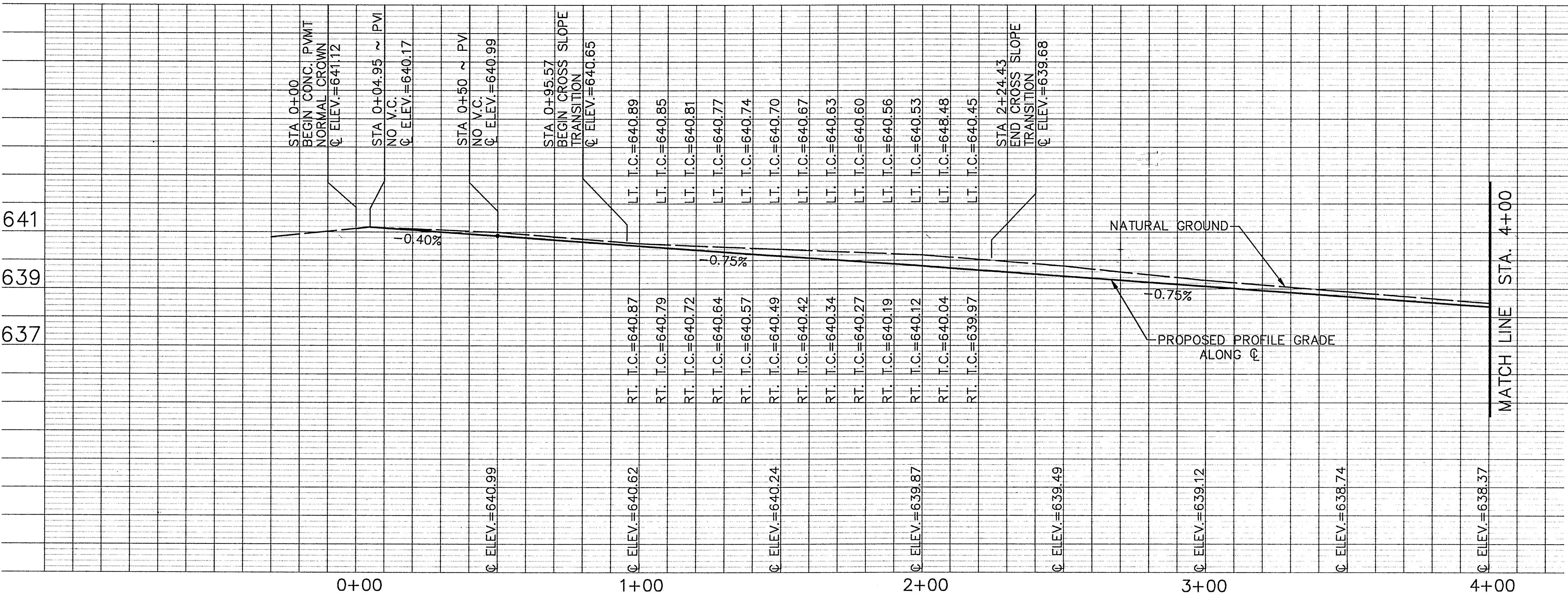
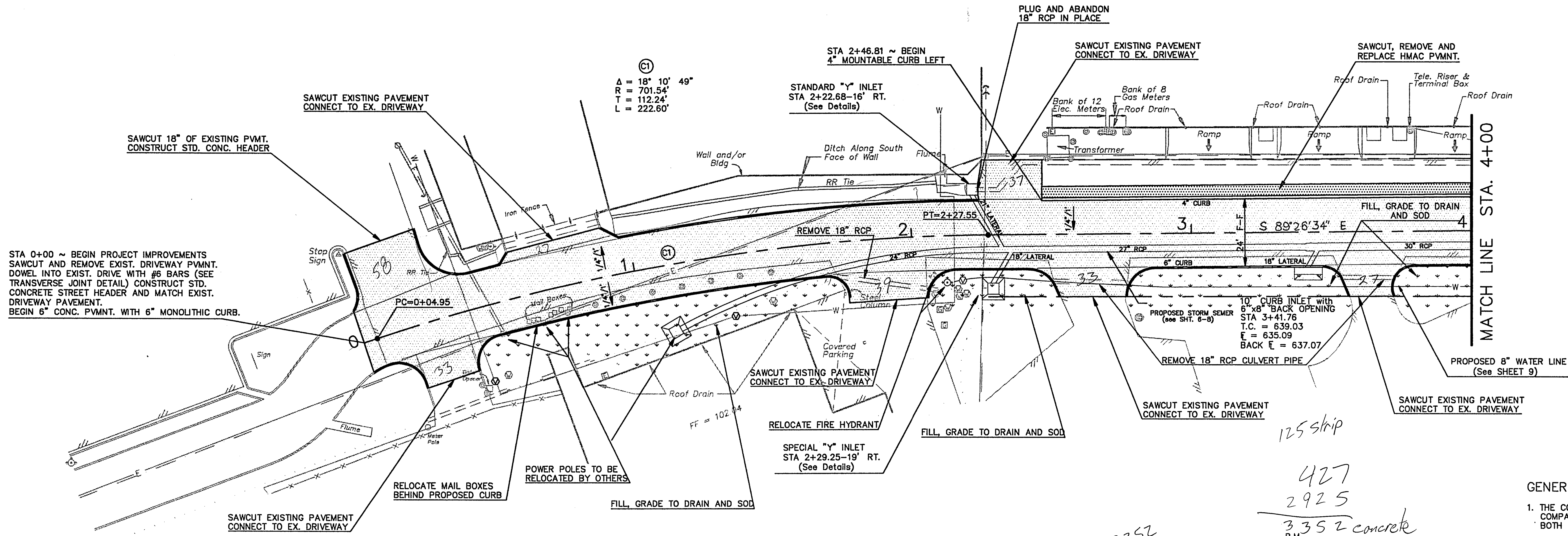
DRAINAGE AREA CALCULATIONS

AREA	ACRES	C.A. (C=0.9)	T.C. (min)	I ₁₀ (in/hr)	Q ₁₀ (cfs)	I ₁₀₀ (in/hr)	Q ₁₀₀ (cfs)
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					58.9		81.7

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 2. SAWCUTS OF EXISTING DRIVEWAYS AND PAVEMENT SHALL BE OF FULL DEPTH.
 3. THE CONTRACTOR SHALL PROTECT AND MAINTAIN EXISTING IRRIGATION SYSTEMS THROUGHOUT THE PROJECT.

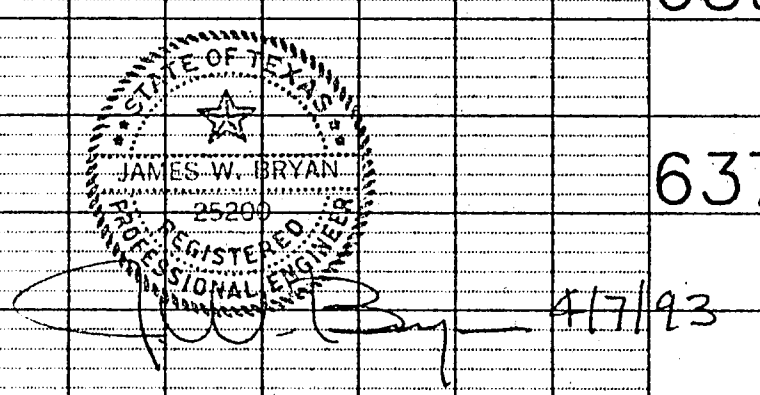


STORM SEWER PLAN
GLENN CURTISS DRIVE
ADDISON, TEXAS
STA 8+00 to 10+53



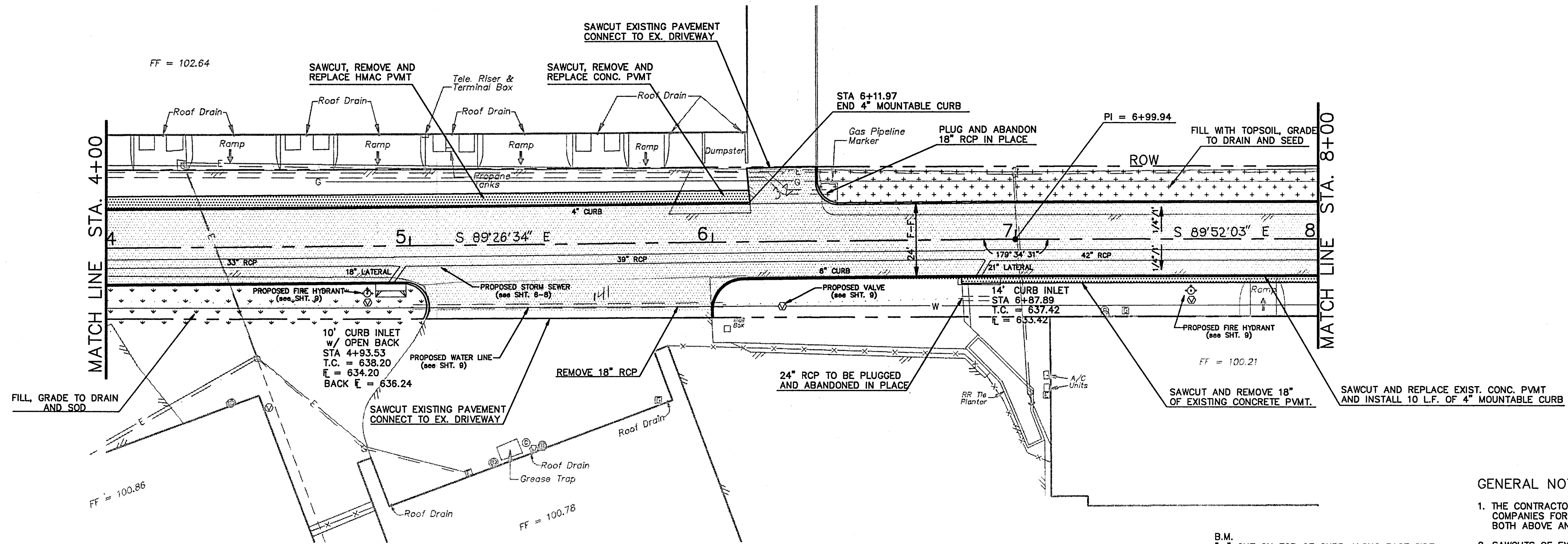
125 strip
427
2925
3352 concrete
B.M.
"+" CUT ON TOP OF CURB ALONG EAST SIDE OF ADDISON ROAD AT GLENN CURTISS DRIVE STA 10+96.98 - 2.82' RIGHT ELEV.=638.58 (SEE SHEET 5 FOR LOCATION)

- GENERAL NOTES:
1. THE CONTRACTOR WILL BE RESPONSIBLE FOR CONTACTING UTILITY COMPANIES FOR THE LOCATION AND RELOCATION OF UTILITY LINES BOTH ABOVE AND BELOW GROUND PRIOR TO ANY EXCAVATION.
 2. SAWCUTS OF EXISTING DRIVEWAYS AND PAVEMENT SHALL BE OF FULL DEPTH.
 3. THE CONTRACTOR SHALL PROTECT AND MAINTAIN EXISTING IRRIGATION SYSTEMS THROUGHOUT THE PROJECT.



PAVING PLAN AND PROFILE
GLENN CURTISS DRIVE
ADDISON, TEXAS
STA 0+00 to 4+00

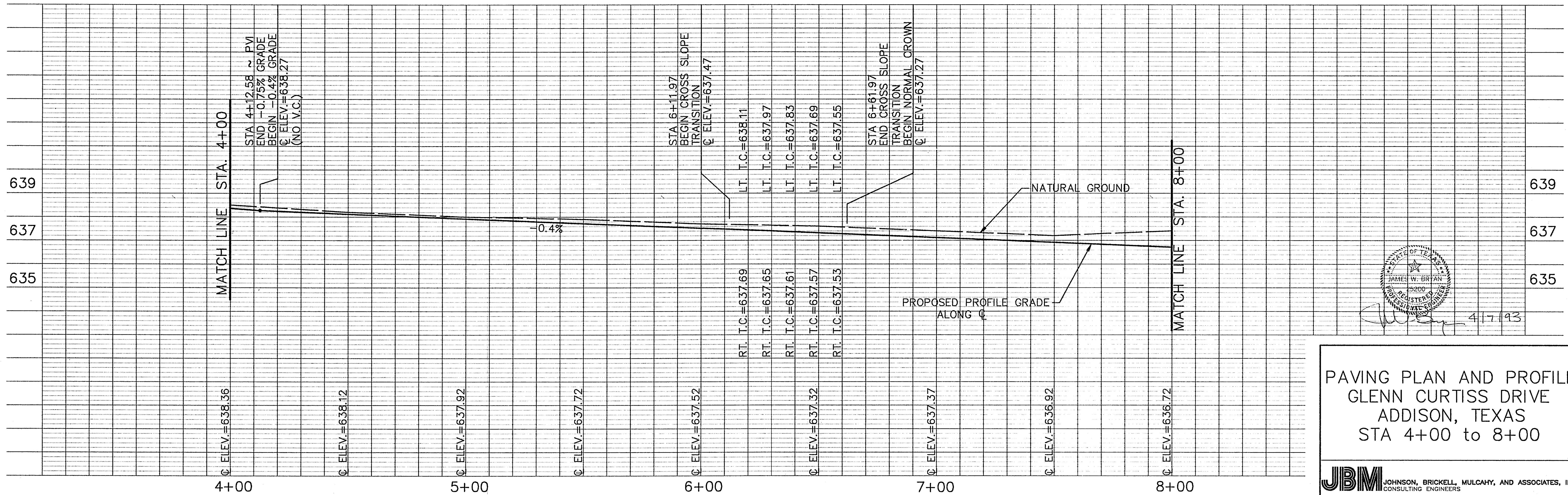
DESIGNED DAT		DRAWN RS		SCALE		SHEET No.	
CHECKED JWB	DATE	4/93		1"=20' HORZ.	1"=2' VERT.		3



GENERAL NOTES:

1. THE CONTRACTOR WILL BE RESPONSIBLE FOR CONTACTING UTILITY COMPANIES FOR THE LOCATION AND RELOCATION OF UTILITY LINES BOTH ABOVE AND BELOW GROUND PRIOR TO ANY EXCAVATION.
2. SAWCUTS OF EXISTING DRIVEWAYS AND PAVEMENT SHALL BE OF FULL DEPTH.
3. THE CONTRACTOR SHALL PROTECT AND MAINTAIN EXISTING IRRIGATION SYSTEMS THROUGHOUT THE PROJECT.

B.M.
 "+*" CUT ON TOP OF CURB ALONG EAST SIDE OF ADDISON ROAD AT GLENN CURTISS DRIVE STA 10+96.98 - 2.82' RIGHT ELEV.=638.58 (SEE SHEET 5 FOR LOCATION)

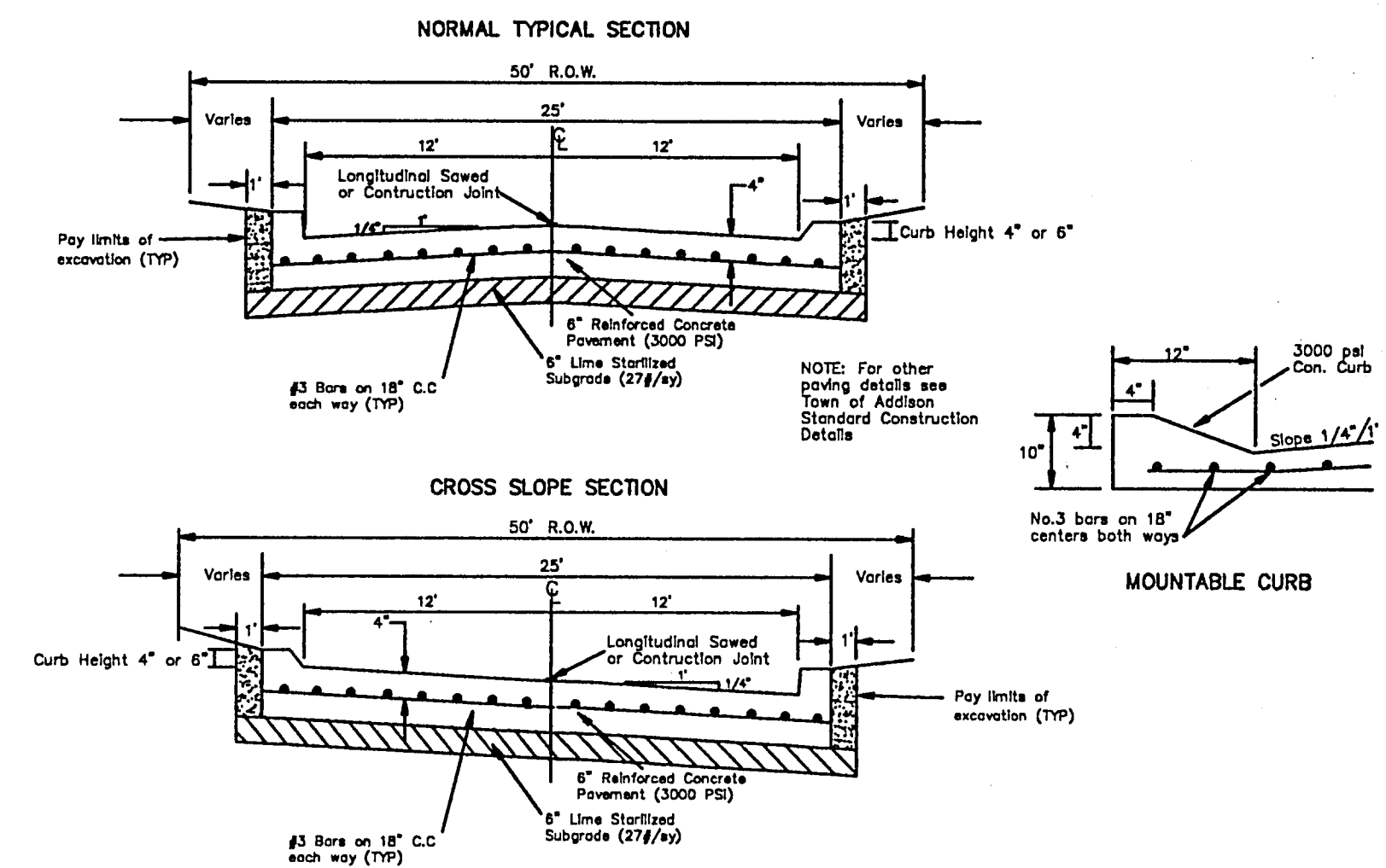
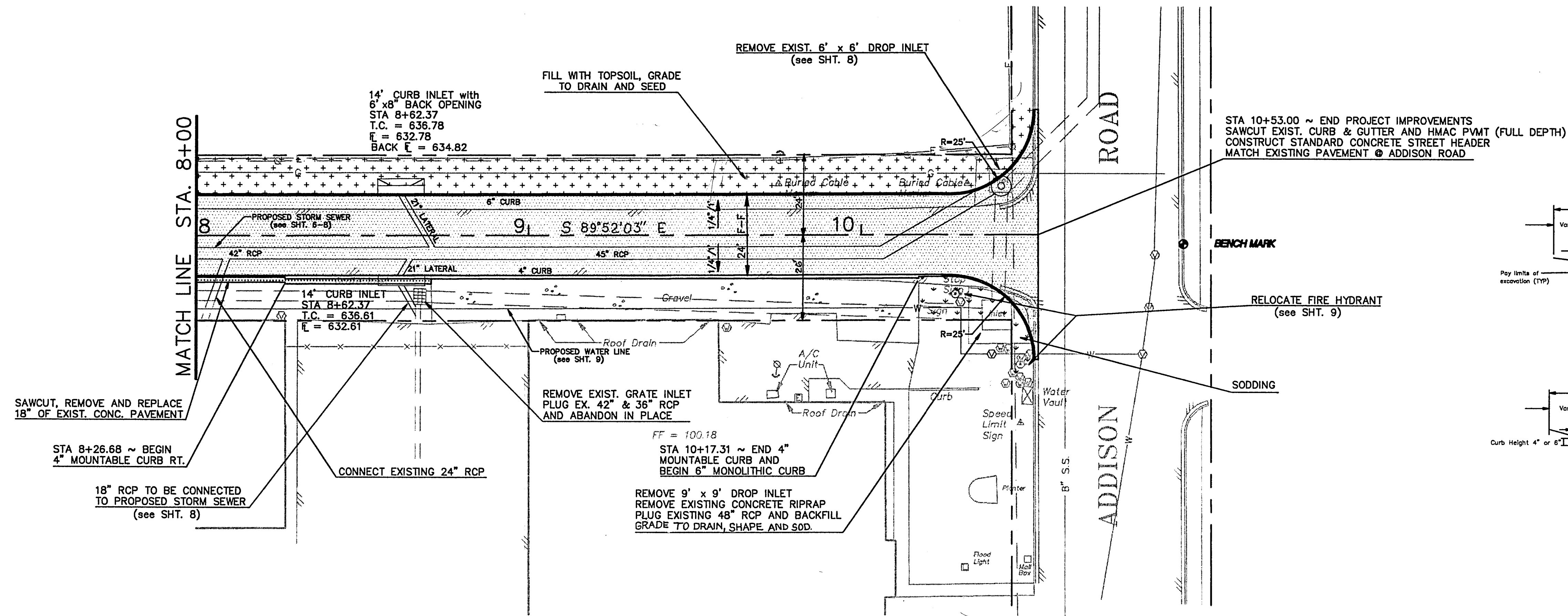


Professional Engineer Seal for James W. Brinkell, State of Texas, License No. 25200, dated 4/7/93.

**PAVING PLAN AND PROFILE
 GLENN CURTISS DRIVE
 ADDISON, TEXAS
 STA 4+00 to 8+00**

JBMI JOHNSON, BRICKELL, MULCAHY, AND ASSOCIATES, INC.
 CONSULTING ENGINEERS

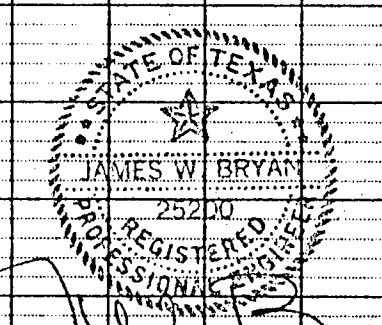
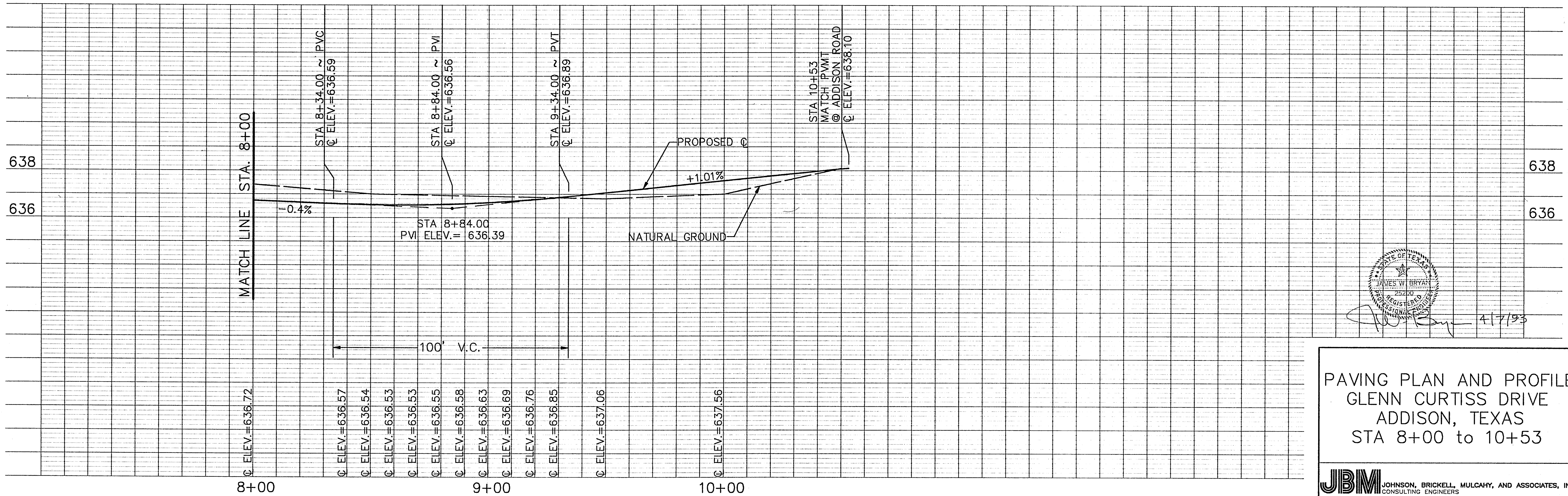
DESIGNED	DAT	DRAWN	RS	SCALE	SHEET No.
CHECKED	JWB	DATE	4/93	1"=20' HORZ. 1"=2' VERT.	4



GENERAL NOTES:

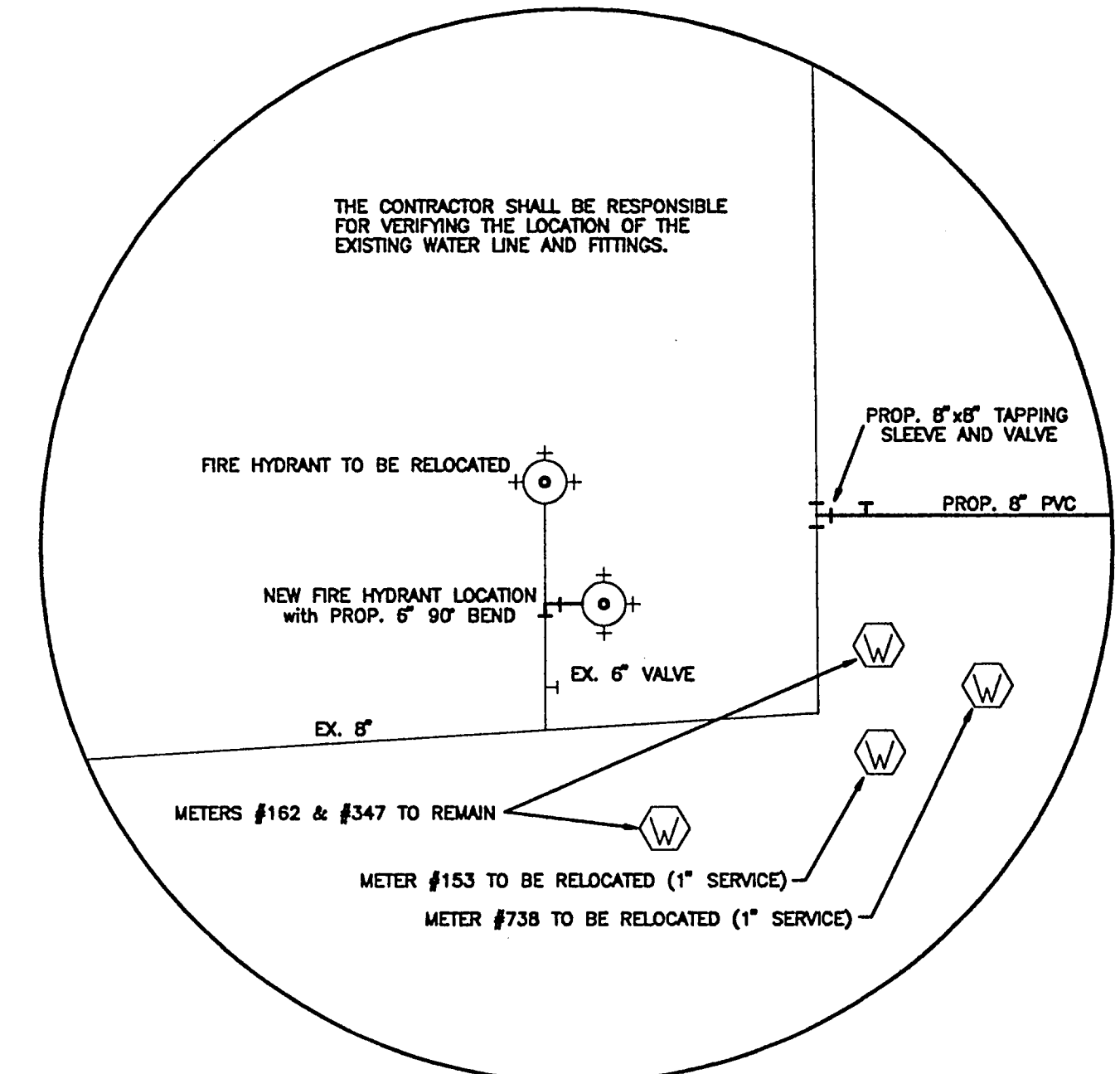
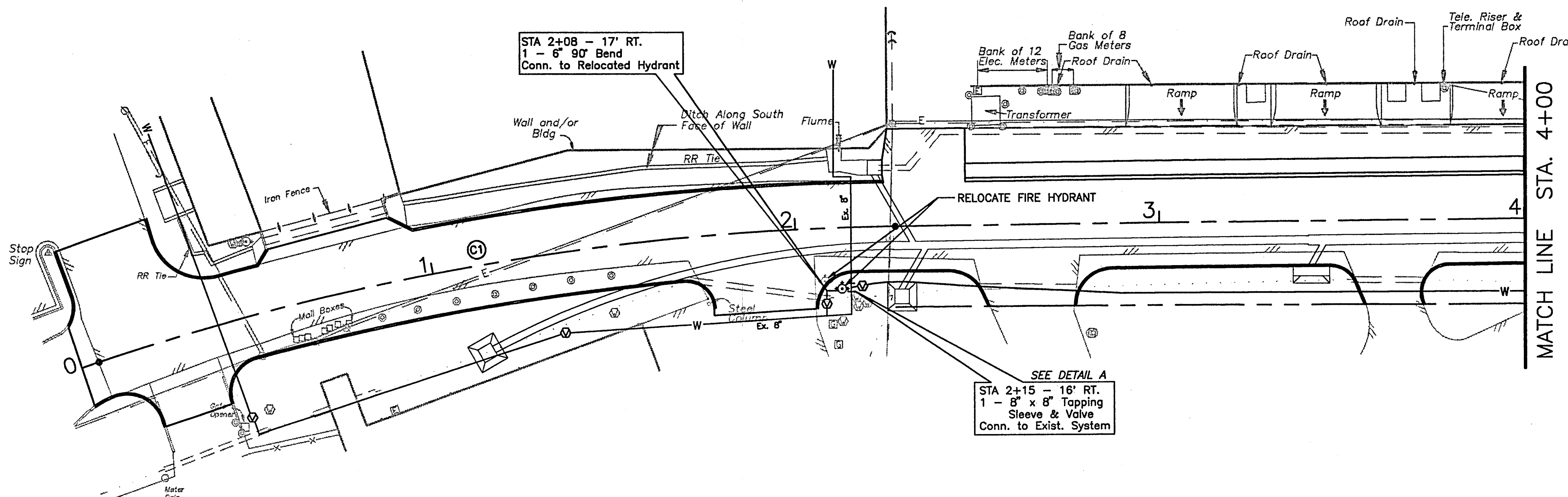
1. THE CONTRACTOR WILL BE RESPONSIBLE FOR CONTACTING UTILITY COMPANIES FOR THE LOCATION AND RELOCATION OF UTILITY LINES BOTH ABOVE AND BELOW GROUND PRIOR TO ANY EXCAVATION.
2. SAWCUTS OF EXISTING DRIVEWAYS AND PAVEMENT SHALL BE OF FULL DEPTH.
3. THE CONTRACTOR SHALL PROTECT AND MAINTAIN EXISTING IRRIGATION SYSTEMS THROUGHOUT THE PROJECT.

B.M.
 "+*" CUT ON TOP OF CURB ALONG EAST SIDE OF ADDISON ROAD AT GLENN CURTISS DRIVE
 STA 10+96.98 - 2.82' RIGHT ELEV.=638.58
 (SEE SHEET 5 FOR LOCATION)



**PAVING PLAN AND PROFILE
 GLENN CURTISS DRIVE
 ADDISON, TEXAS
 STA 8+00 to 10+53**

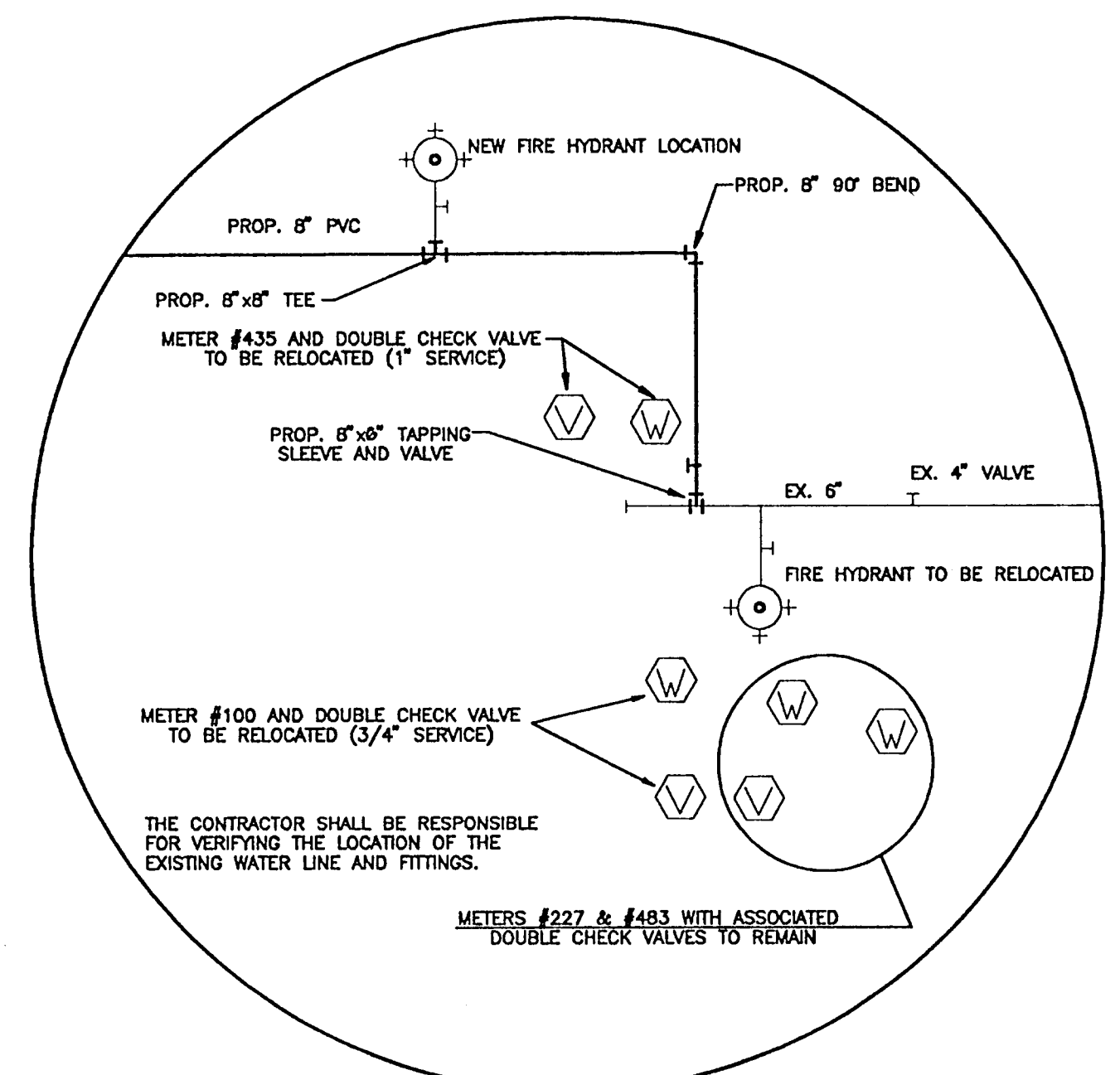
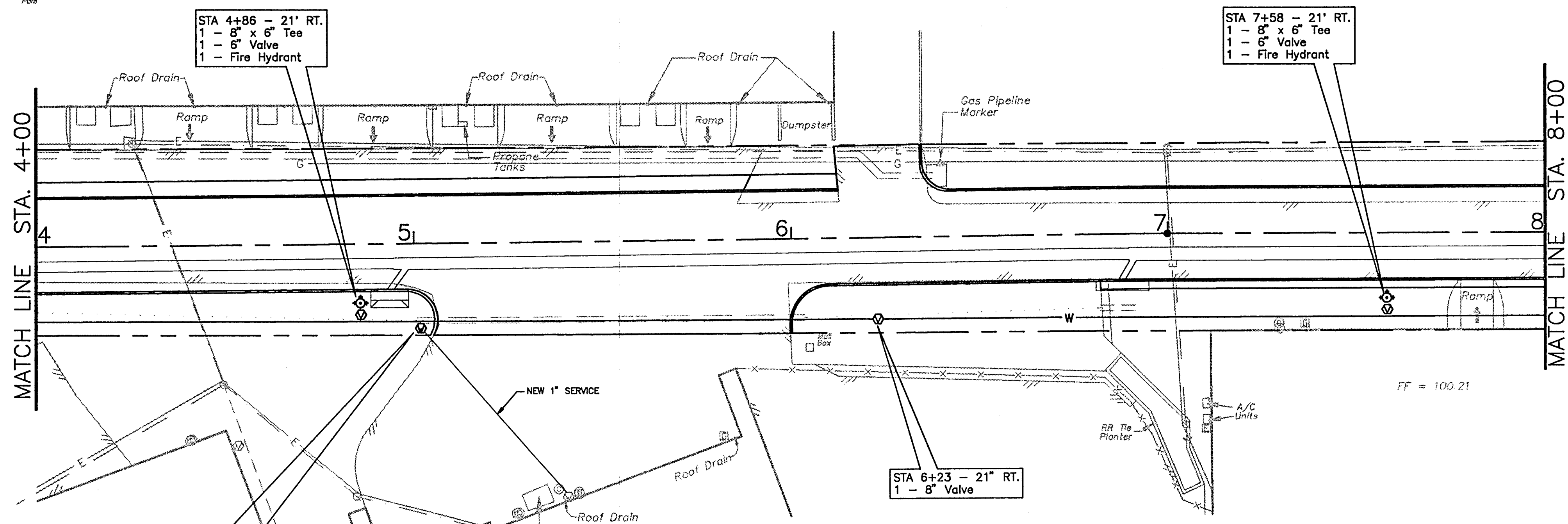
JB&M JOHNSON, BRICKELL, MULCAHY, AND ASSOCIATES, INC. CONSULTING ENGINEERS		DESIGNED	DAT	DRAWN	RS	SCALE	SHEET No.
CHECKED	JWB	DATE	4/93	1"=20' HORZ	1"=2' VERT.		5



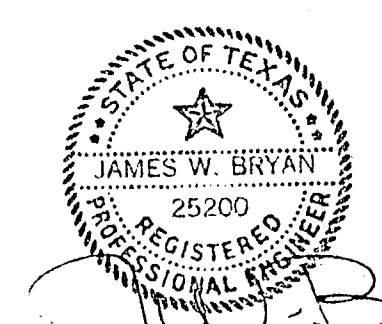
DETAIL A
NOT TO SCALE

GENERAL NOTES:

1. THE CONTRACTOR WILL BE RESPONSIBLE FOR CONTACTING UTILITY COMPANIES FOR THE LOCATION AND RELOCATION OF UTILITY LINES BOTH ABOVE AND BELOW GROUND PRIOR TO ANY EXCAVATION.
2. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING WATER LINES, FIRE HYDRANTS, FITTINGS, METERS AND SERVICES.
3. THE WATER LINE SHALL HAVE A MINIMUM DEPTH OF COVER OF 3 FEET.



DETAIL B
NOT TO SCALE



WATER LINE PLAN
GLENN CURTISS DRIVE
ADDISON, TEXAS

JBMM		JOHNSON, BRICKELL, MULCAHY, AND ASSOCIATES, INC. CONSULTING ENGINEERS		
DESIGNED	DAT	DRAWN	RS	SCALE
CHECKED	JWB	DATE	4/93	1"=20'
				SHEET No.
				9

STA 8+19 - 23' RT.
1 - RELOCATE METER #435 TO THIS LOCATION
1 - 1" SERVICE TAP
INSTALL NEW 1" SERVICE TO 4790 GLENN CURTISS DRIVE

STA 5+02 - 23' RT.
1 - RELOCATE METER #738 TO THIS LOCATION
1 - 1" SERVICE TAP
INSTALL NEW 1" SERVICE TO 4700 GLENN CURTISS DRIVE

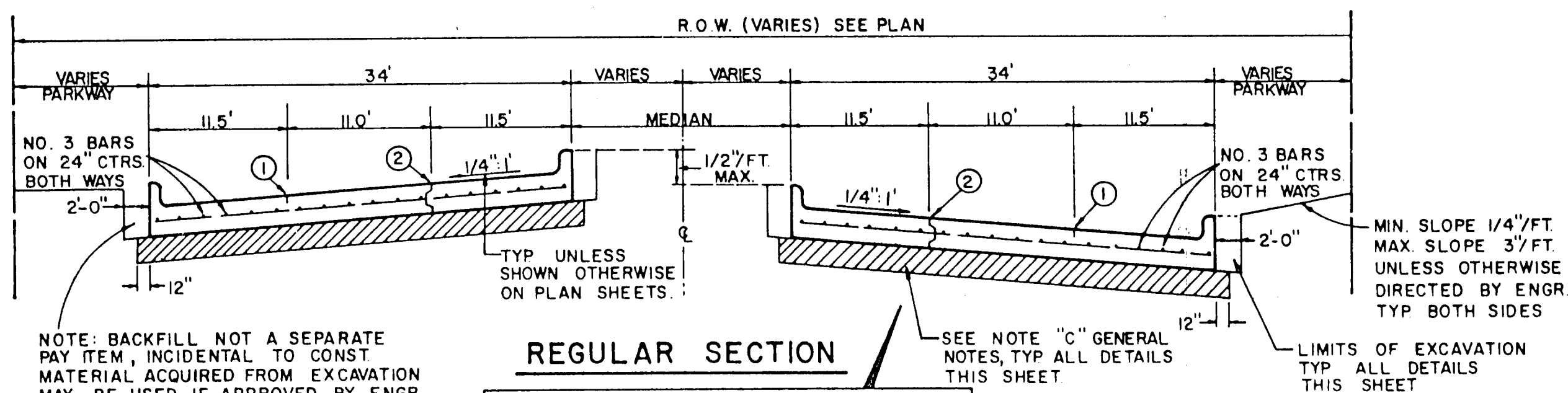
STA 9+64 - 23' RT.
1 - RELOCATE METER #435 TO THIS LOCATION
1 - 3/4" SERVICE TAP
INSTALL NEW 3/4" SERVICE TO 16151 ADDISON ROAD

STA 10+30 - 22' RT.
1 - 8" x 8" Tee
Conn. relocated hydrant
SEE DETAIL B

STA 10+46 - 36' RT.
1 - 8" x 6" Tapping Sleeve & Valve
Conn. to Exist. System
SEE DETAIL B

STA 10+46 - 22' RT.
1 - 8" 90° Bend

BENCH MARK
Elevation of 638.58
On Top of Curb



REGULAR SECTION

NOTE: BACKFILL NOT A SEPARATE PAY ITEM, INCIDENTAL TO CONST MATERIAL ACQUIRED FROM EXCAVATION MAY BE USED IF APPROVED BY ENGR

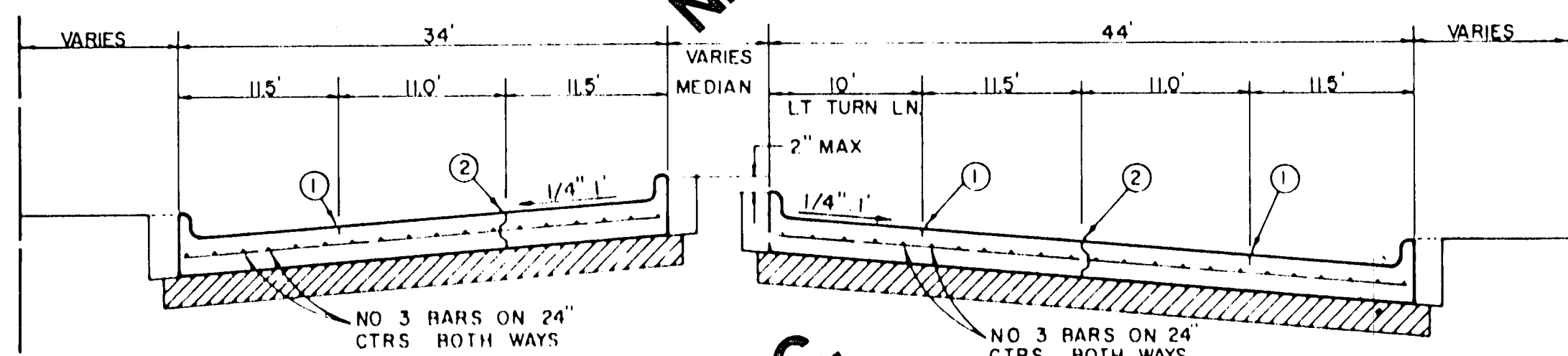
NOTE: ALL TYPICAL NOTES SHOWN THIS DETAIL SHALL APPLY TO ALL DETAILS THIS SHEET UNLESS OTHERWISE INDICATED.

SEE NOTE "C" GENERAL NOTES, TYP ALL DETAILS THIS SHEET

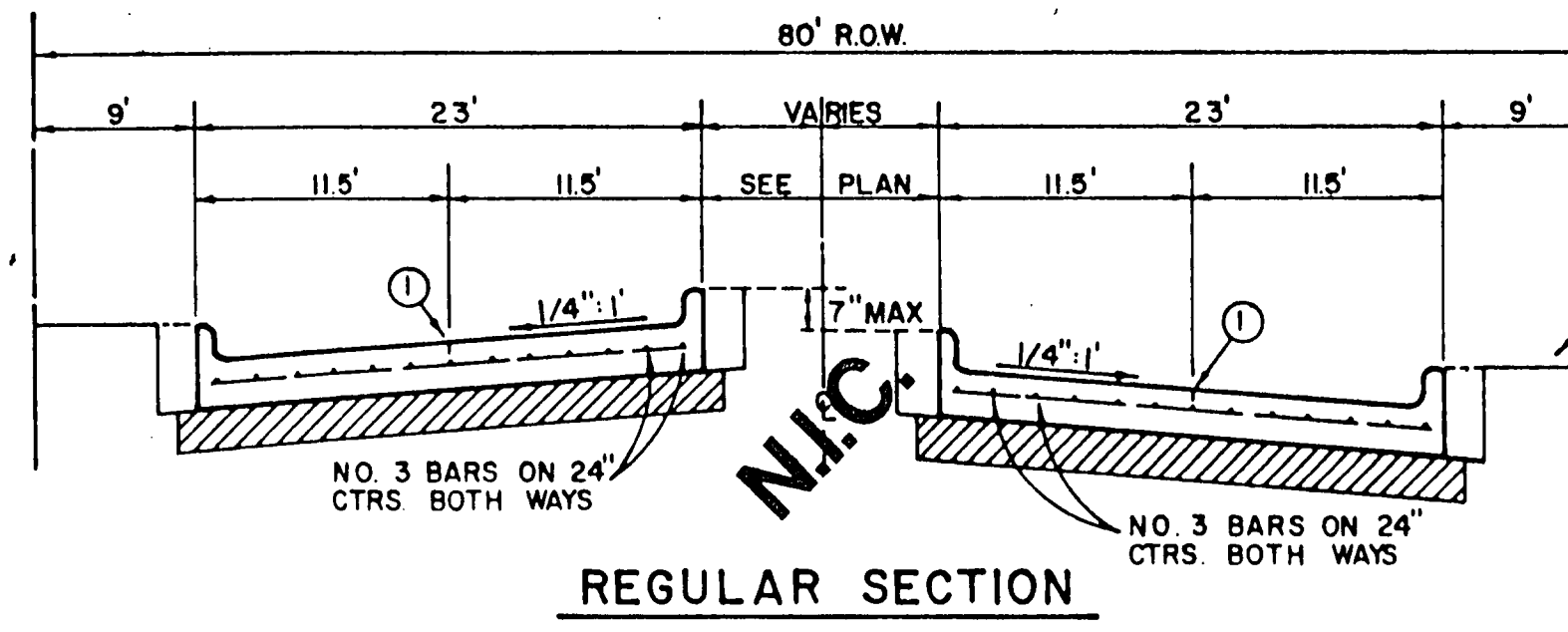
MIN. SLOPE 1/4"/FT MAX SLOPE 3'/FT UNLESS OTHERWISE DIRECTED BY ENGR TYP BOTH SIDES

LIMITS OF EXCAVATION TYP ALL DETAILS THIS SHEET

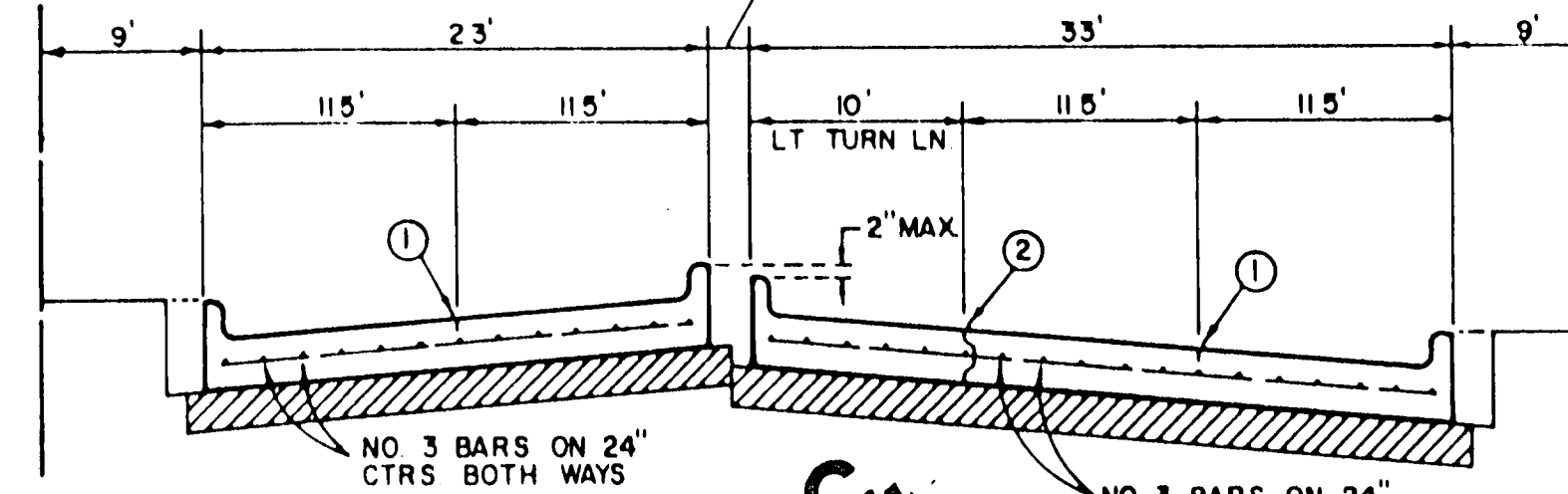
TYP UNLESS SHOWN OTHERWISE ON PLAN SHEETS



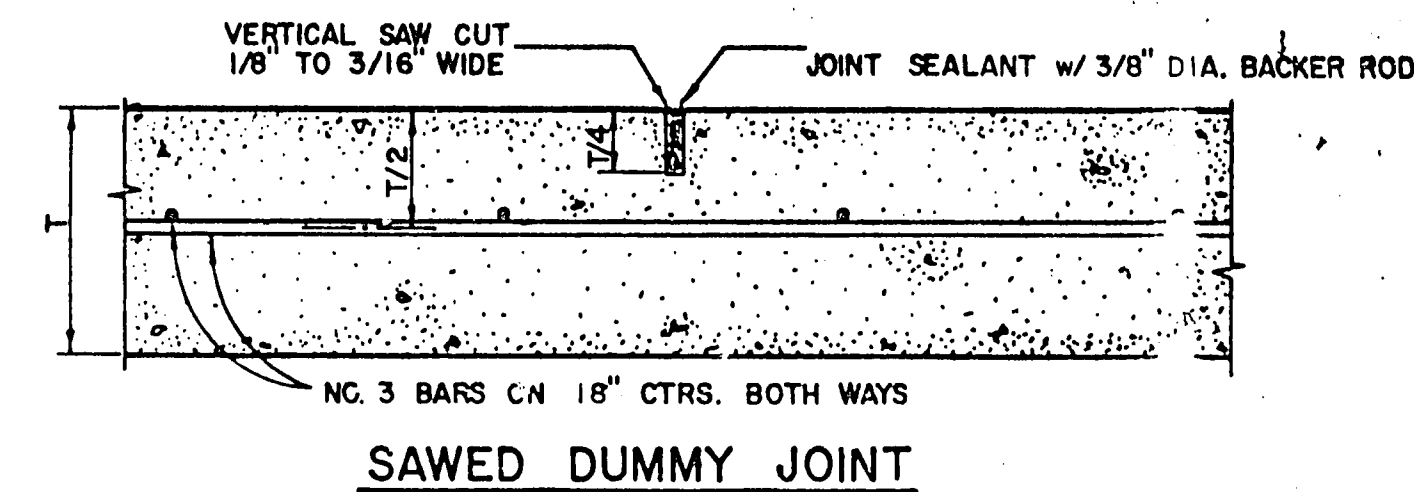
LEFT TURN SECTION
MAJOR ARTERIAL



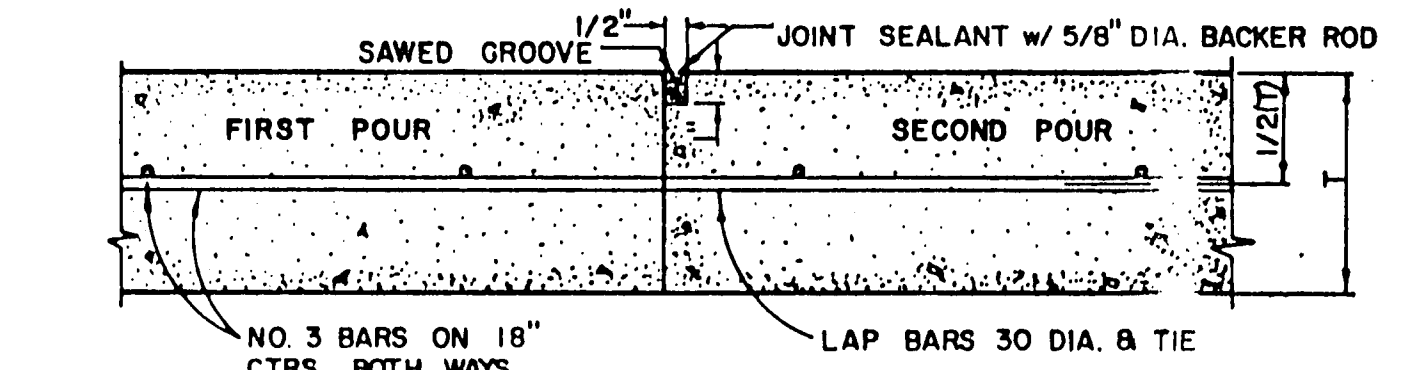
REGULAR SECTION



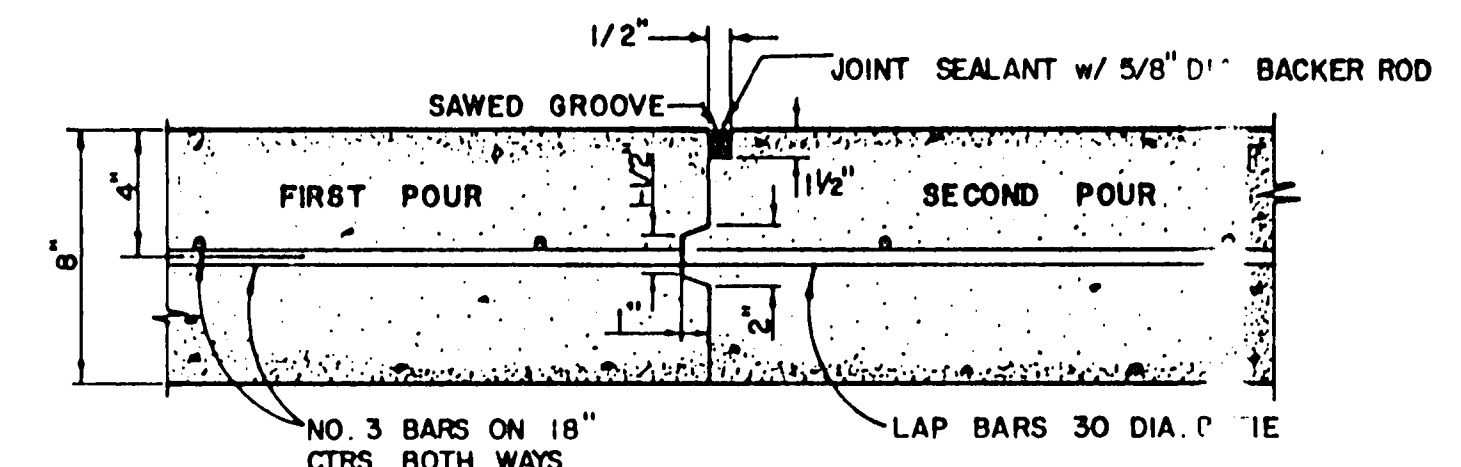
LEFT TURN SECTION
MINOR ARTERIAL



SAWED DUMMY JOINT



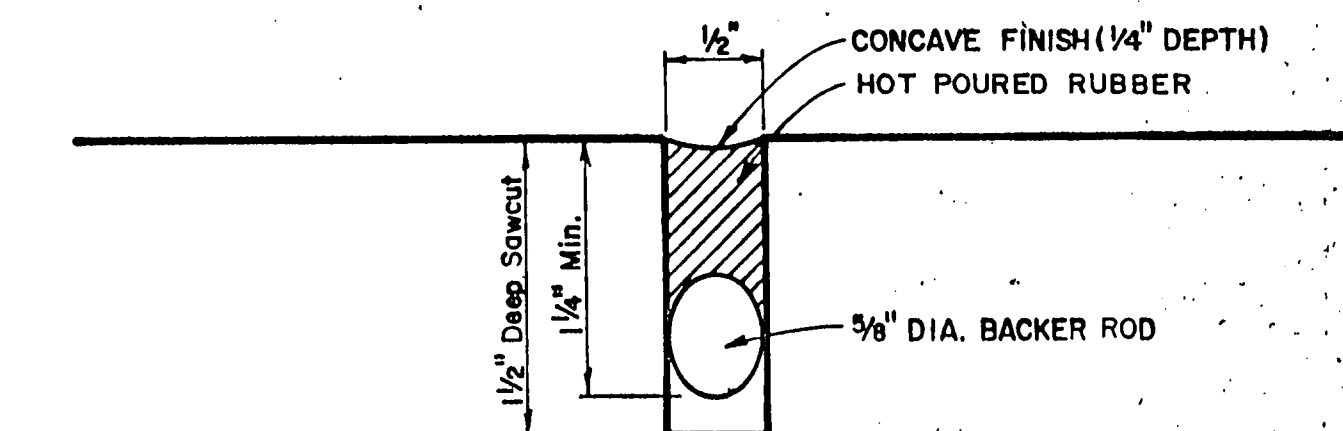
CONSTRUCTION JOINT FOR 6 INCH PAVEMENT



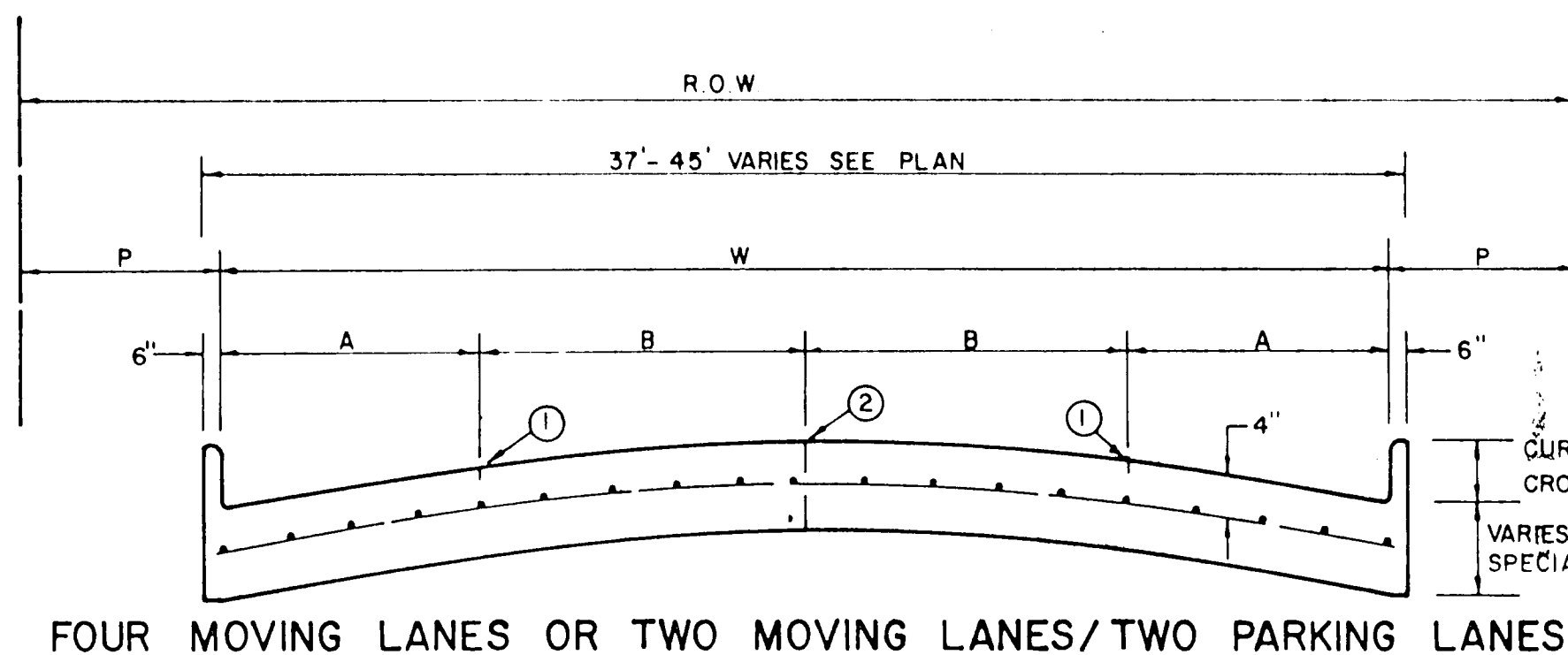
CONSTRUCTION JOINT FOR 8 INCH PAVEMENT

GENERAL NOTES

- A. GENERAL PAVEMENT THICKNESS FOR STREETS SHALL BE AS SPECIFIED BELOW IN SPECIAL NOTES.
- D. STANDARD SPECIFICATIONS REINFORCED CONCRETE PAVEMENTS
 1. ALL CURBS SHALL BE PLACED INTEGRAL WITH PAVEMENT
 2. CURBS SHALL MEET THE SAME COMPRESSIVE STRENGTH AS SPECIFIED FOR THE CONCRETE PAVEMENT.
 3. DETAIL AND ARRANGEMENT OF JOINTS, ALL TYPES, SHALL BE AS SHOWN ON THE STANDARD CONSTRUCTION DETAILS, OR AS APPROVED BY ENGINEER.
 4. BAR LAPS SHALL BE 30 DIAMETERS.
- C. BAR CHAIRS OR AN APPROVED SUPPORTING DEVICE SHALL BE FURNISHED.



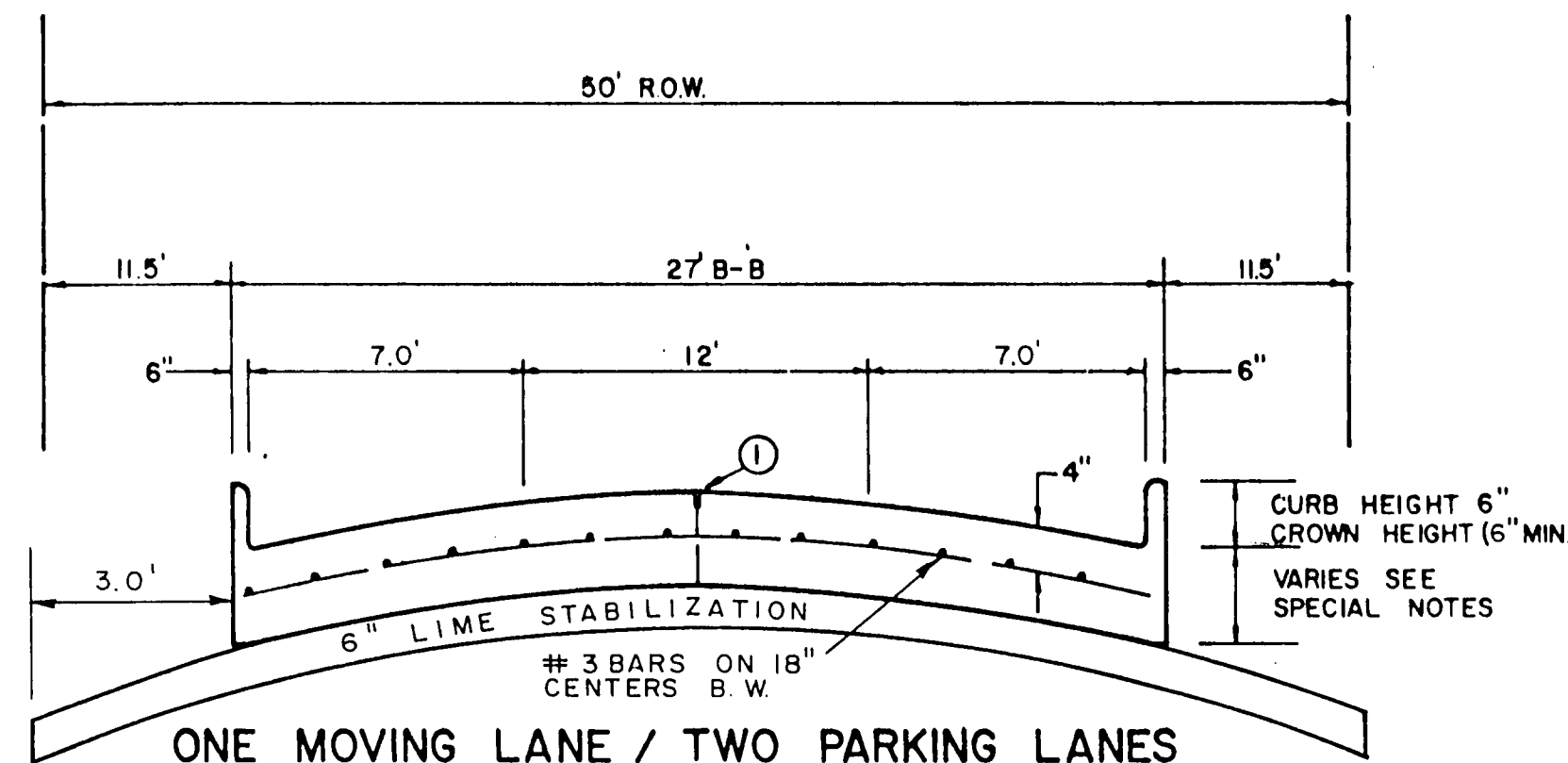
TYPICAL JOINT DETAIL



FOUR MOVING LANES OR TWO MOVING LANES/TWO PARKING LANES

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'

COLLECTOR STREET



ONE MOVING LANE / TWO PARKING LANES

LOCAL STREET

REINFORCED CONCRETE PAVEMENT

ALL REINFORCING BARS SHALL BE NO. 3 TRANSVERSE BARS TO BE SPACED ON 1'-6" CENTERS; LONGITUDINAL BARS TO BE SPACED ON 1'-6" EXCEPT WHERE NOTED.

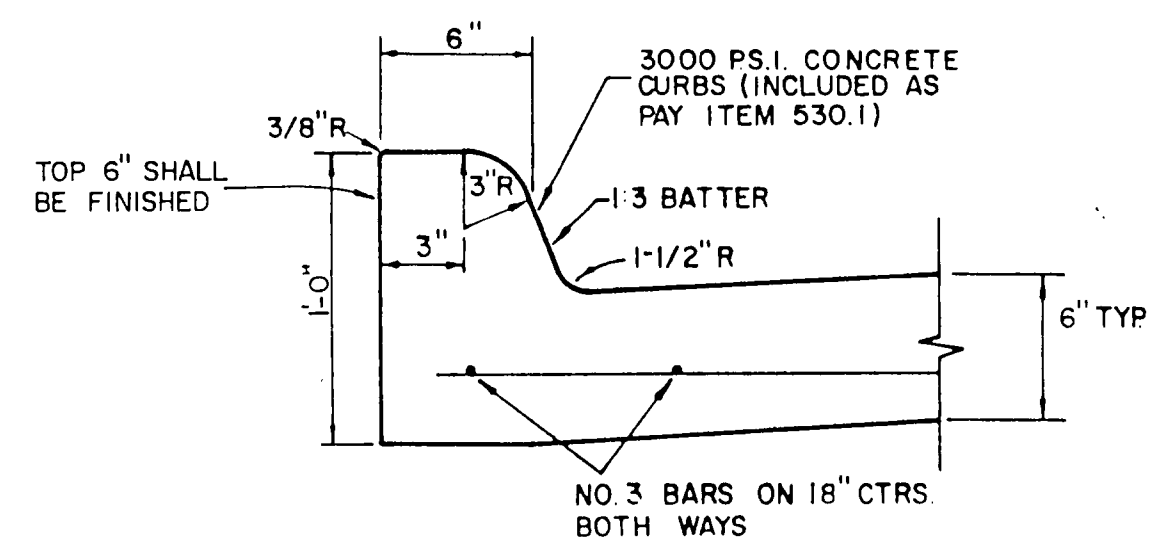
UNDIVIDED STREETS-PROVIDE 4" DBL.-REF YELLOW & BUTTON P-117-Y PATTERNS TO BE ESTABLISHED BY ENGINEER. SEE DETAIL SHEET

① SAWED LONGITUDINAL DUMMY JOINT.

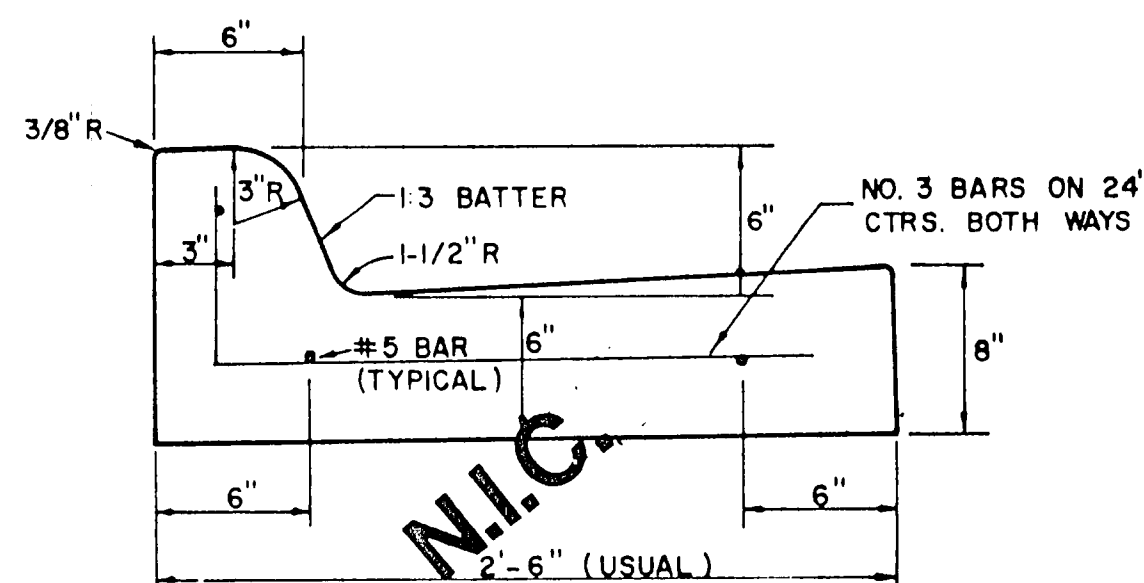
② CONSTRUCTION JOINT (FULL WIDTH PAVMT IS ALLOWED WHERE APPROVED BY ENGINEER.

③ FINISH SHALL BE TRANSVERSE WITH TRAFFIC LANES AND SHALL BE STEEL TINED BROOM FINISH.

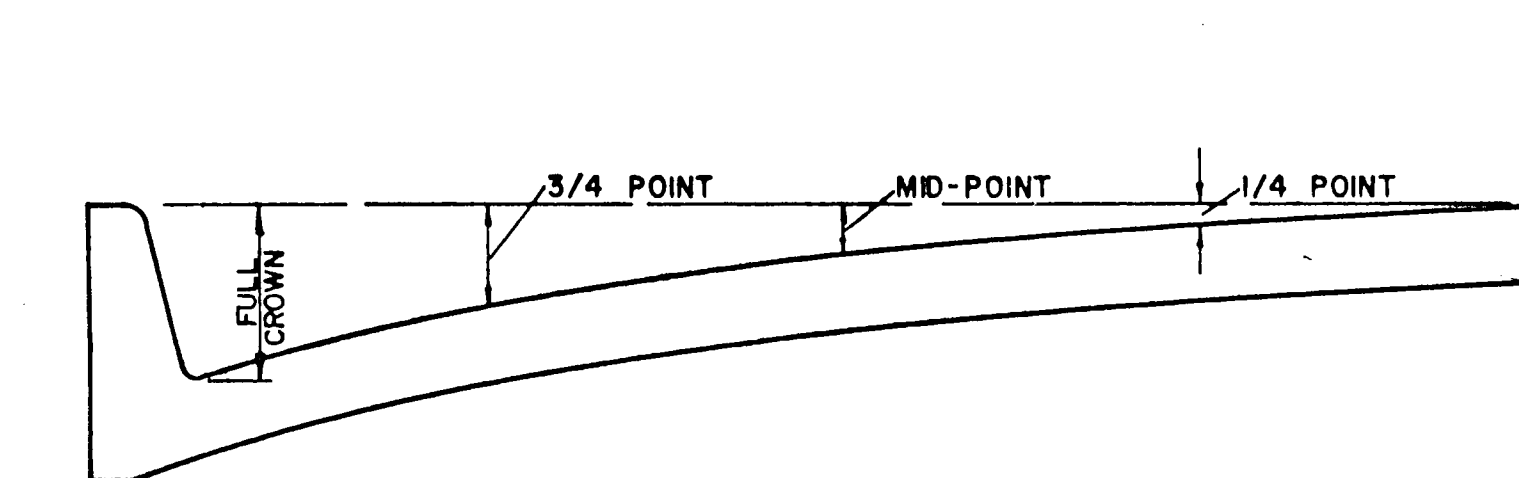
* OPTIMIZE LIME CONTENT BASED ON A LIME/PH CURVE PH SHOULD BE APPROX. 12.43. TEST SHALL BE CONDUCTED BY A QUALIFIED GEOTECHNICAL FIRM PROVIDED BY THE DEVELOPER. TEST RESULTS SHALL BE PROVIDED TO THE CITY. SEPERATE TEST ARE REQUIRED WHEN SUBGRADE CONDITIONS CHANGE.



STANDARD CURB



SEPARATE CURB AND GUTTER



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

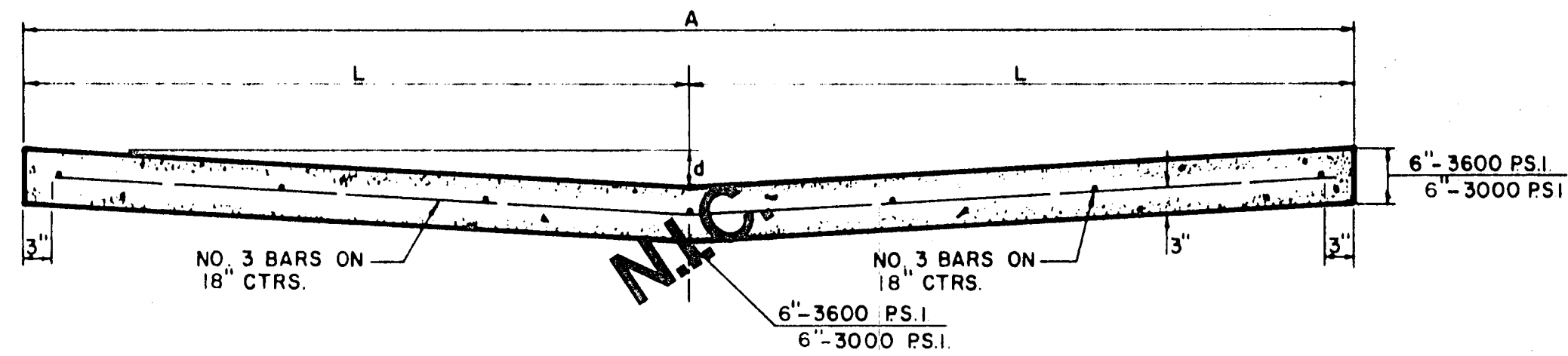
TOWN OF ADDISON, TEXAS
DEPARTMENT OF ENGINEERING

STANDARD CONSTRUCTION DETAILS
PAVING

STREET CROWNS & JOINTS

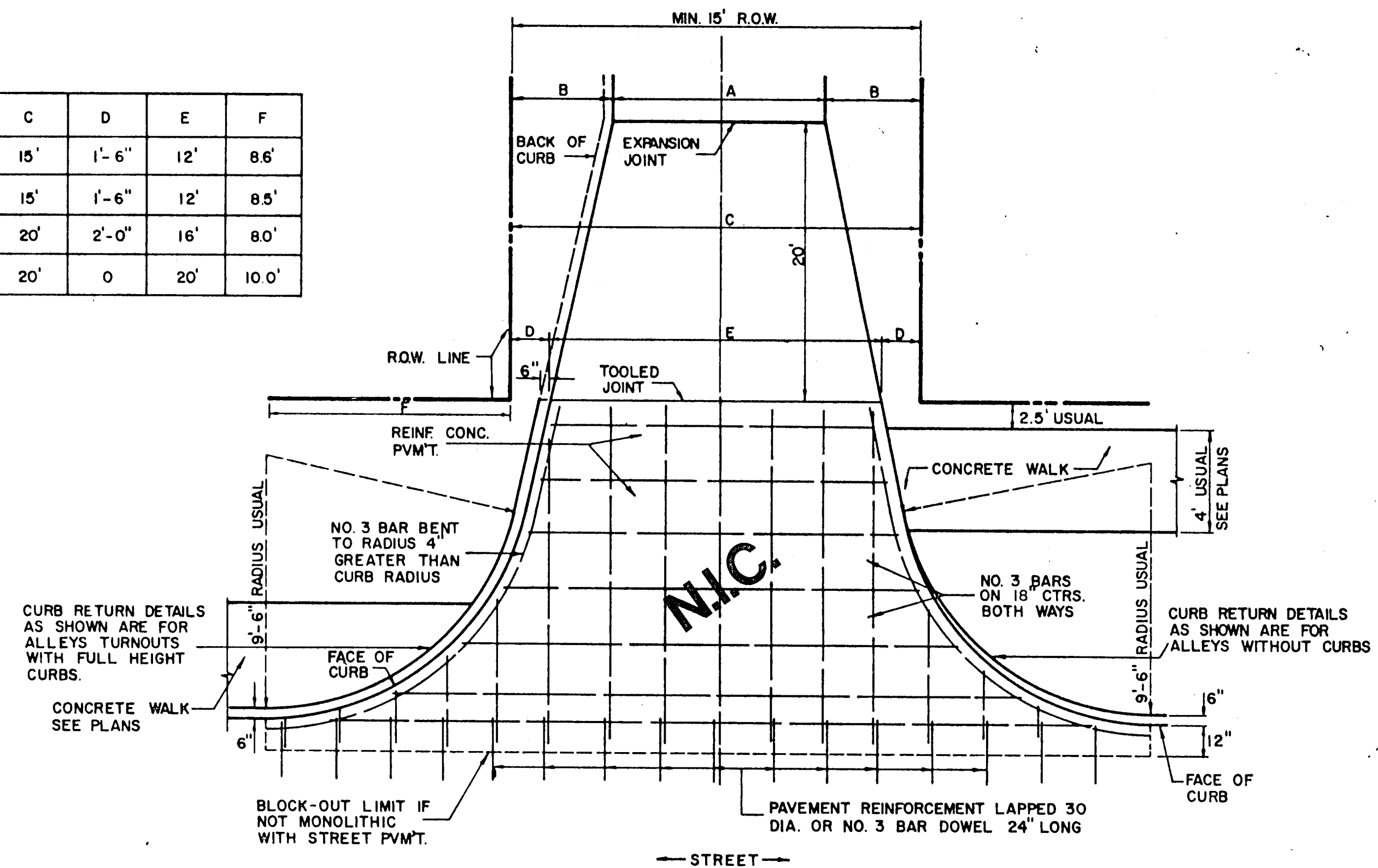
Designed -	Drawn -	Date - AUGUST, 1991	Job No. - 90025-6
Approved -	Checked -	Scale -	Sheet D-1 OF

ALLEY WIDTH (A)	HALF SECTION WIDTH (L)	INVERT DEPTH (d)
10'	5'	4"
12'	6'	6"
16'	8'	6"
20'	10'	6"



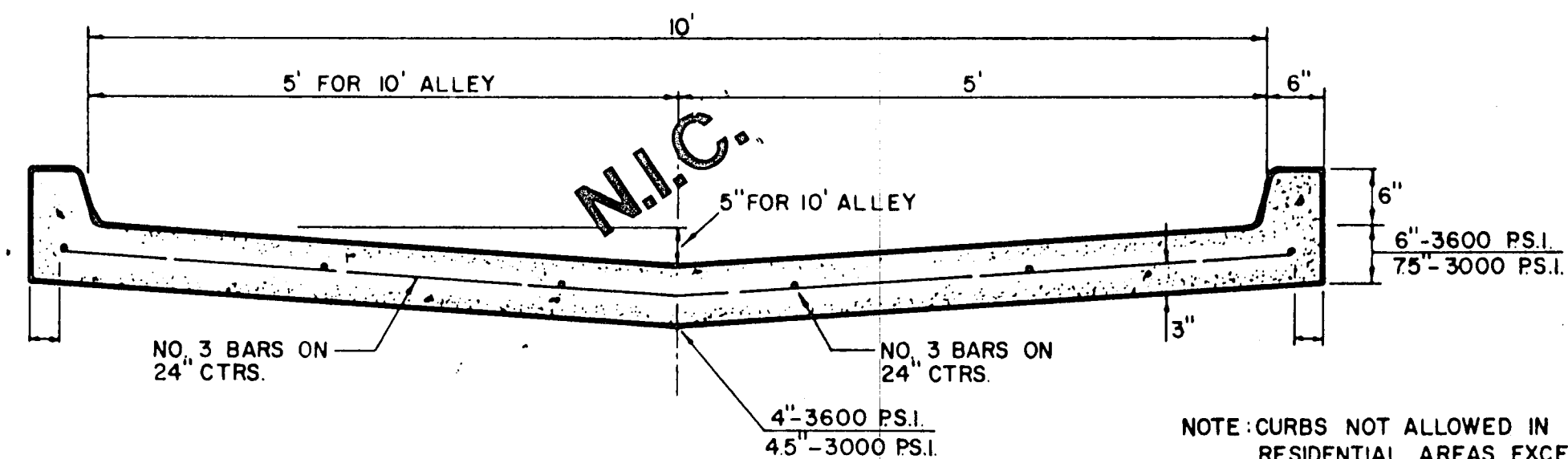
STANDARD 10', 12', 16', & 20' ALLEY SECTION

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'



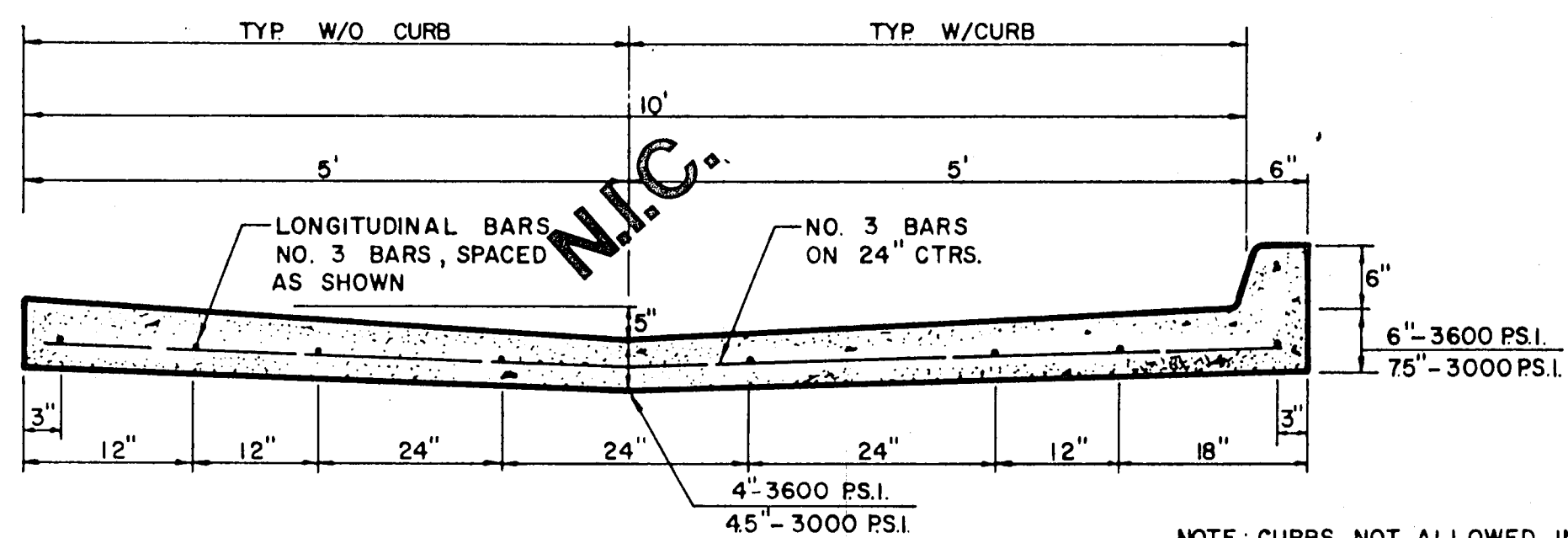
ALLEY RETURN DETAILS

FOR DETAILS ONLY - SEE PLAN FOR DIMENSIONS



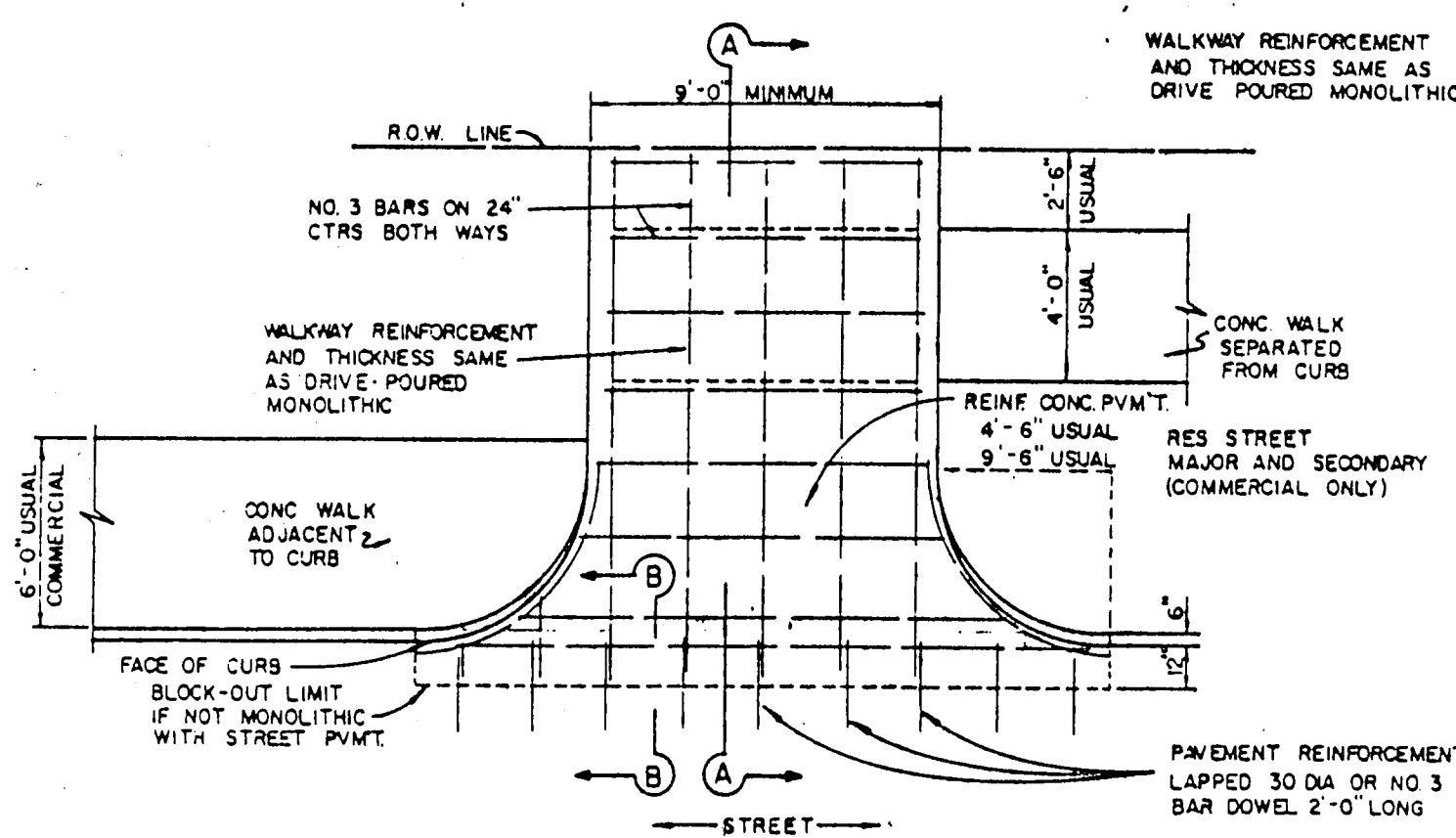
STANDARD ALLEY SECTION WITH CURBS

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

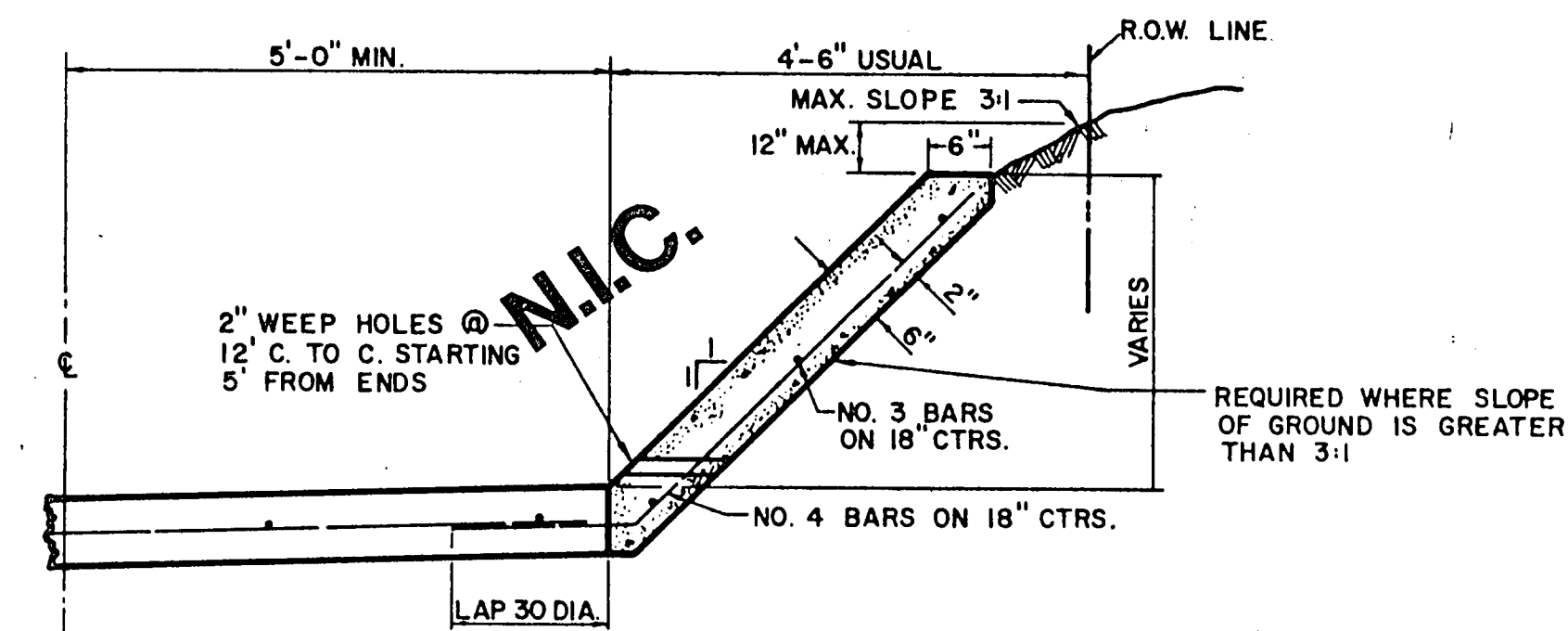


ALTERNATE 10' ALLEY SECTION / CURB

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



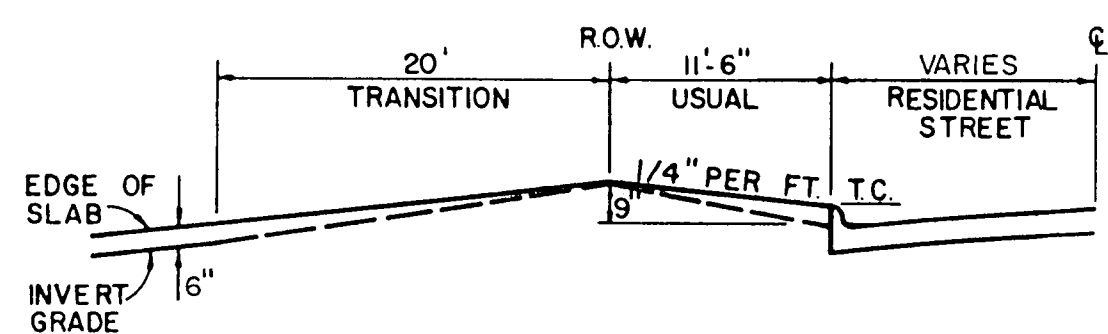
DRIVEWAY RETURN TO STREET



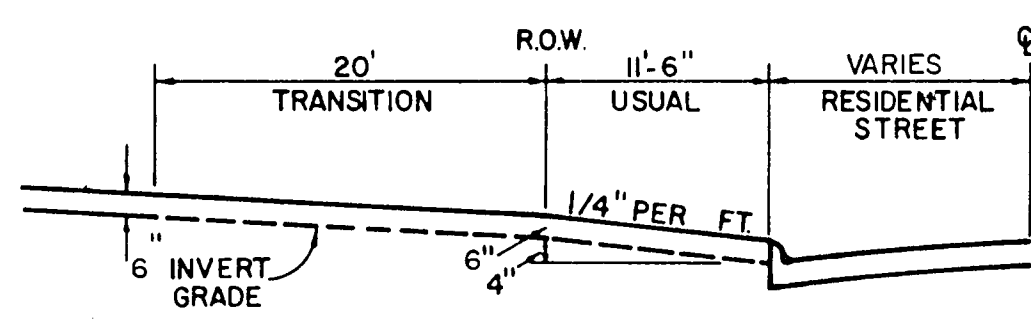
ALLEY SLOPE PROTECTION

GENERAL NOTES FOR ALLEYS AND DRIVEWAYS

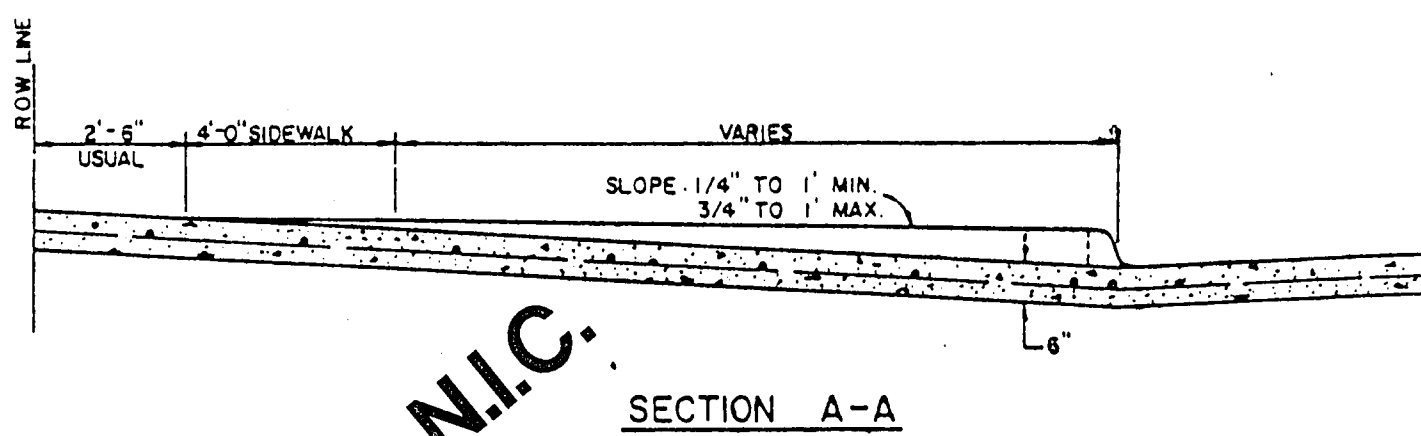
1. CONCRETE FOR ALLEY RETURNS AND DRIVEWAYS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS IDENTICAL TO THAT SPECIFIED FOR THE STREET PAVEMENT OR BASE WHEN BUILT AS COMPONENTS OF A CONCRETE PAVING PROJECT. WHEN BUILT SEPARATELY, THE STRENGTH SHALL BE AS SPECIFIED ON THE CONSTRUCTION PLANS.
2. CONCRETE 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.



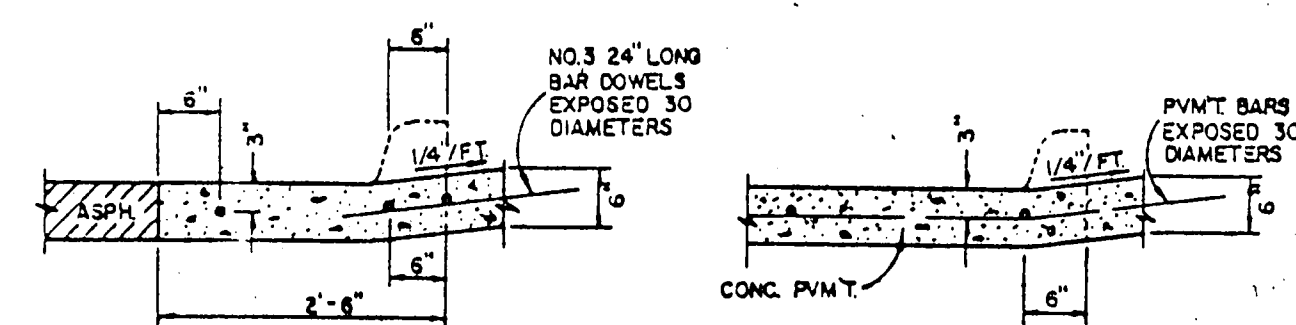
TYPE I ALLEY ENTRANCE



TYPE II ALLEY ENTRANCE



SECTION A-A



SECTION B-B

AS BUILTS DRIVEWAY RETURN DETAILS

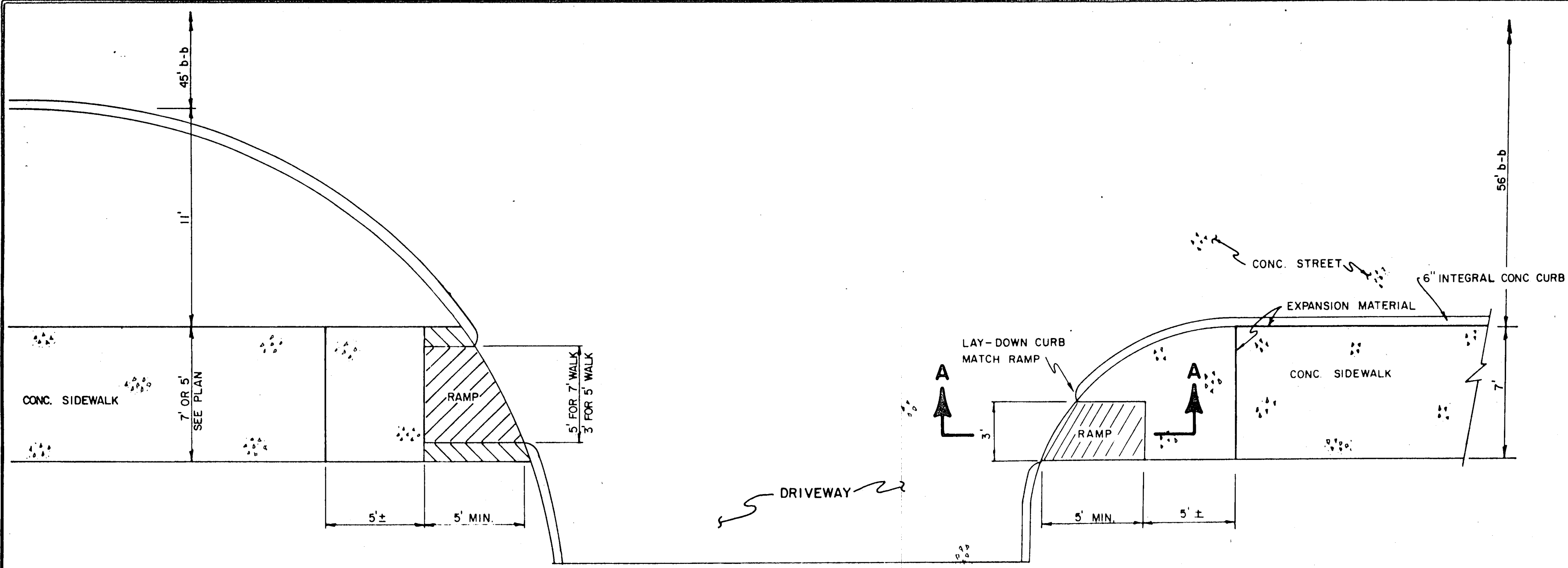
I CERTIFY THIS PROJECT WAS CONSTRUCTED IN GENERAL CONFORMANCE WITH THESE CONSTRUCTION PLANS AND WILL FUNCTION AS DESIGNED.

TOWN OF ADDISON, TEXAS
DEPARTMENT OF ENGINEERING

STANDARD CONSTRUCTION DETAILS
PAVING

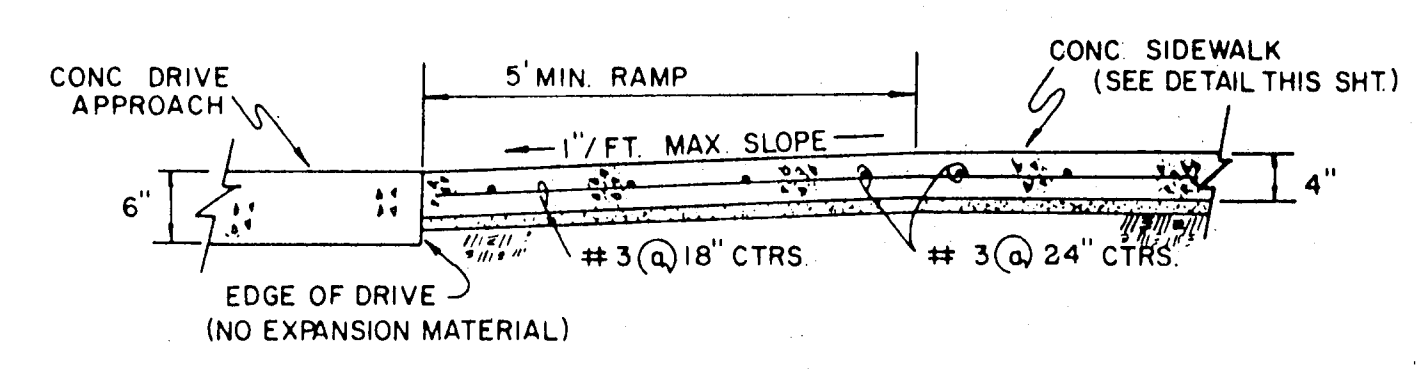
ALLEY & DRIVEWAY RETURNS

Designed -	Drawn -	Date - AUGUST, 1991	Job No. - 90025-6
Approved -	Checked -	Scale -	Sheet D-2 Of

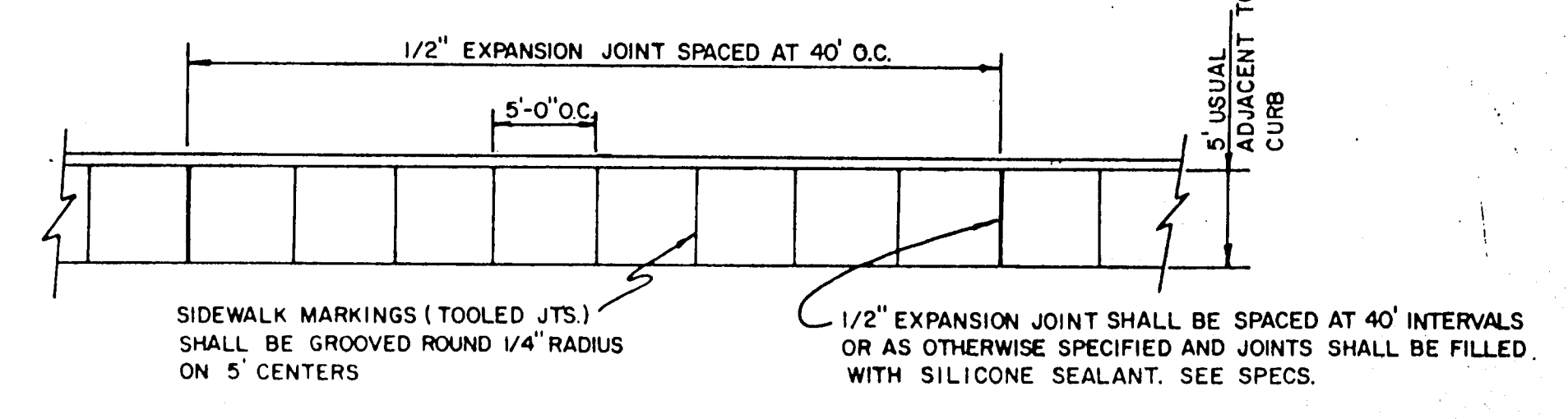


PLAN

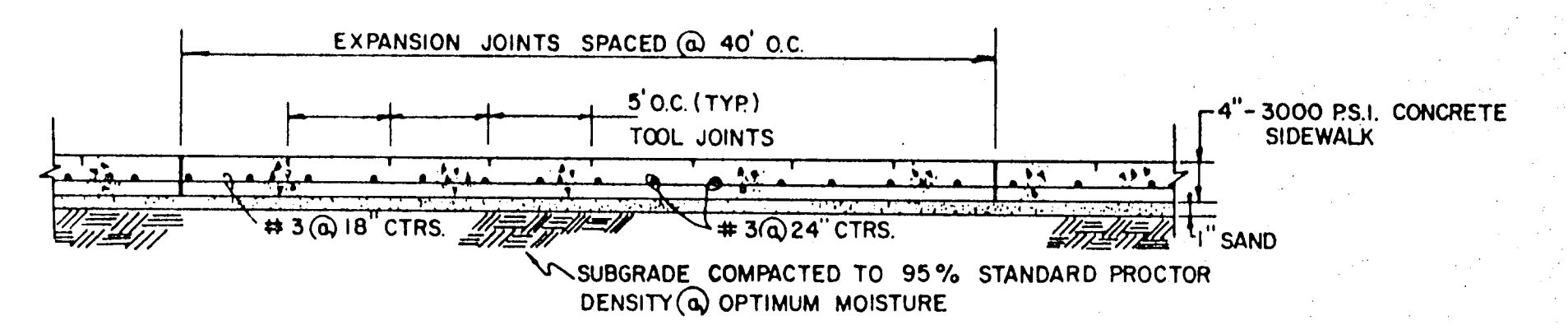
NOTE
MODIFY RAMP TO
FIT DIFFERENT RADIUS



SECTION A-A

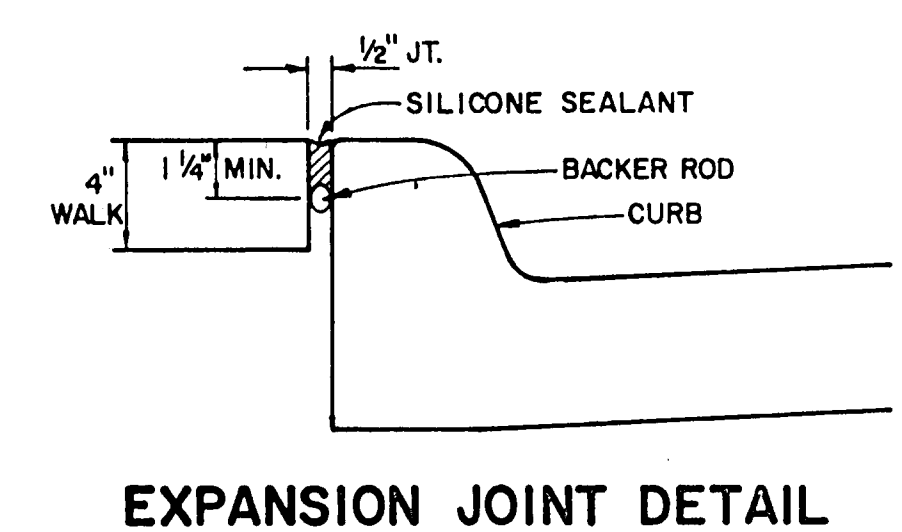


PLAN

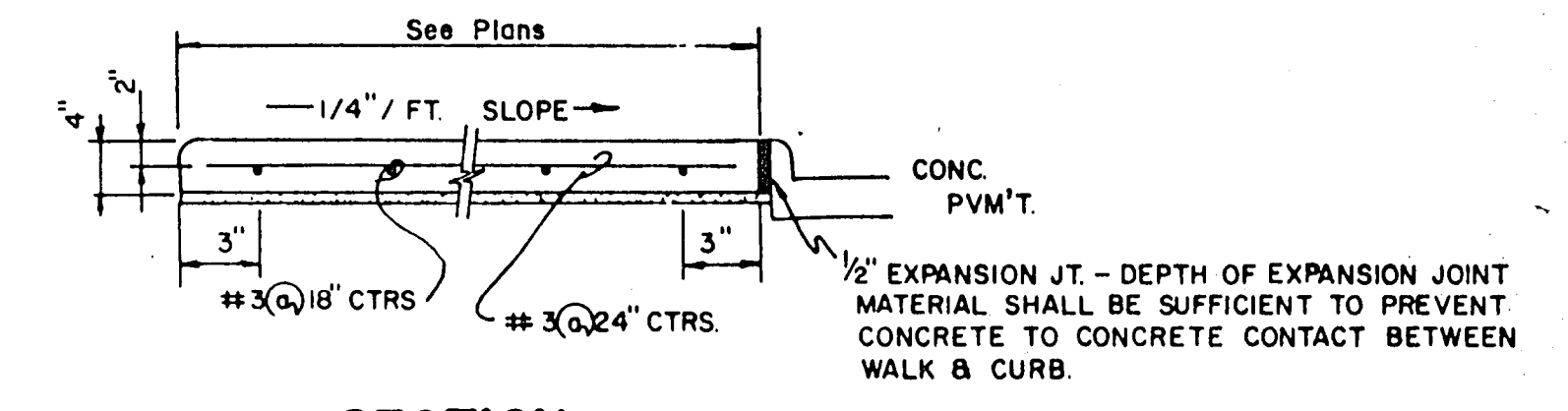


SIDE ELEVATION

**BARRIER FREE RAMP DETAIL
WITH WALK ADJACENT TO CURB**

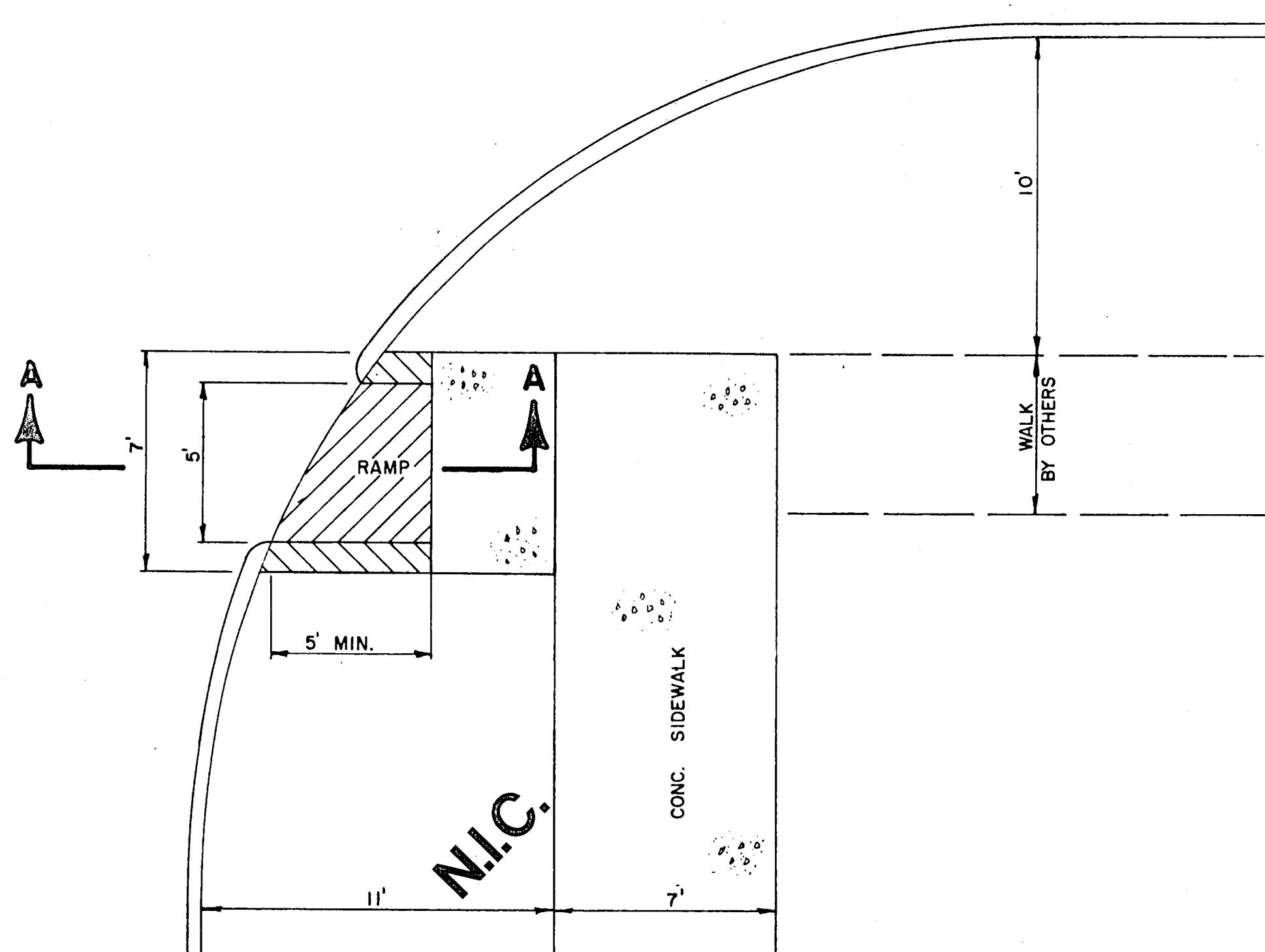


EXPANSION JOINT DETAIL

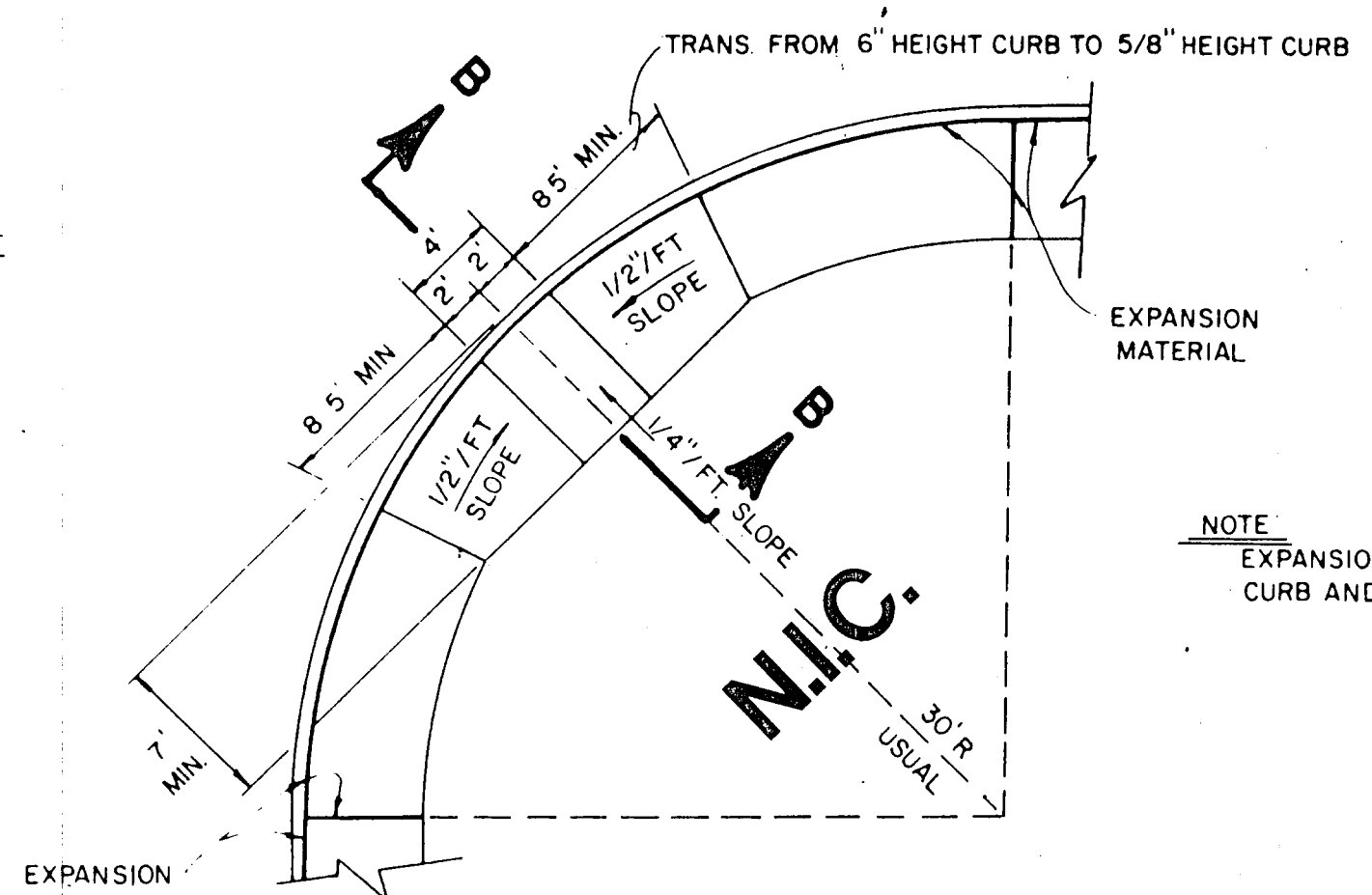


SECTION

CONCRETE SIDEWALK DETAIL

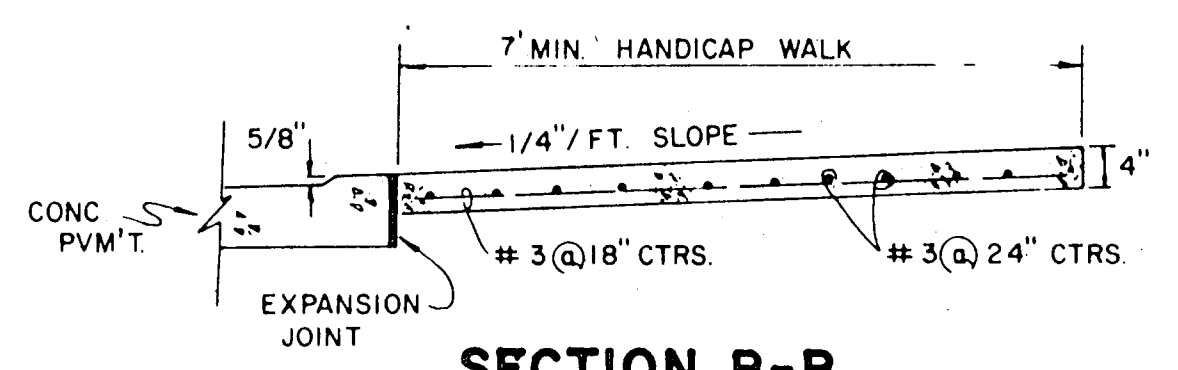


**BARRIER FREE RAMP DETAIL
WITH WALK SEPARATE FROM CURB**



PLAN

NOTE
EXPANSION MATERIAL ALONG
CURB AND AT CURB RETURNS



SECTION B-B

HANDICAP ROLL-DOWN CURB DETAIL

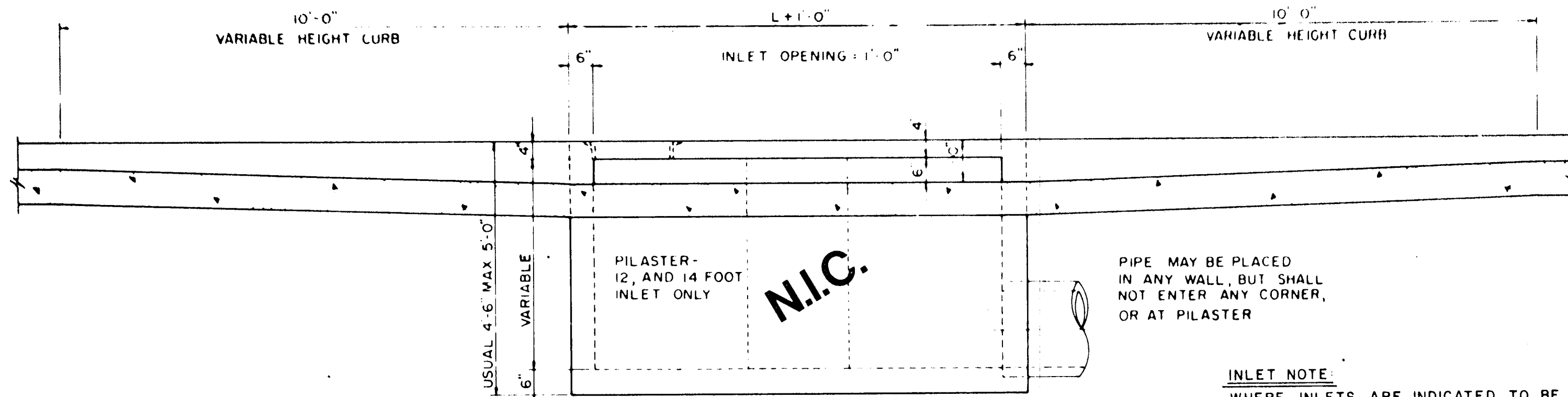
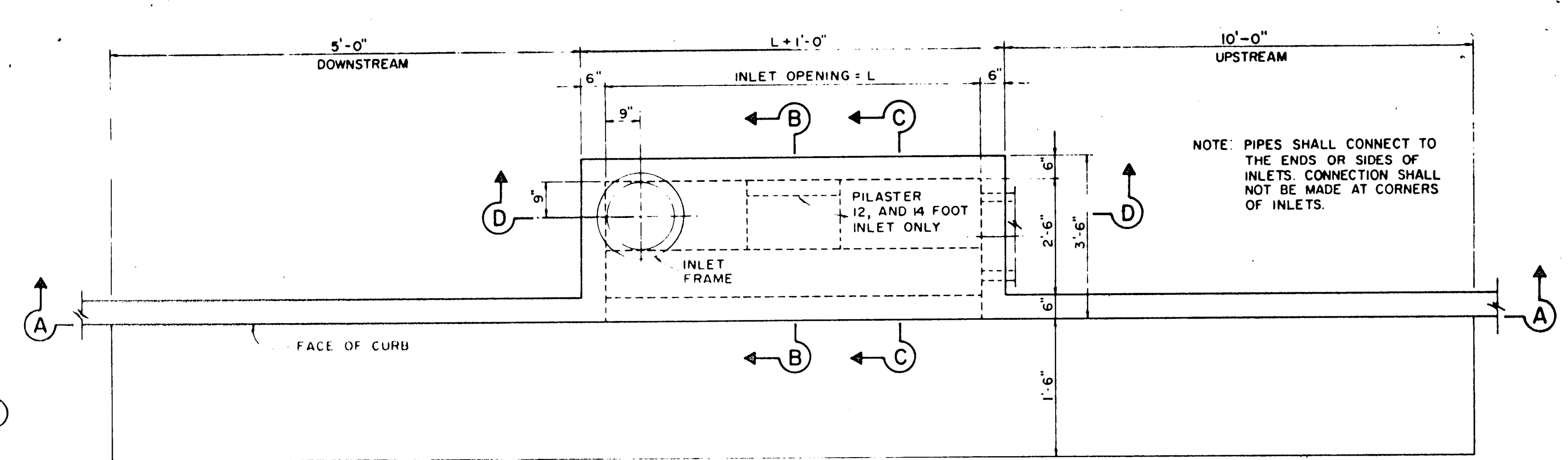
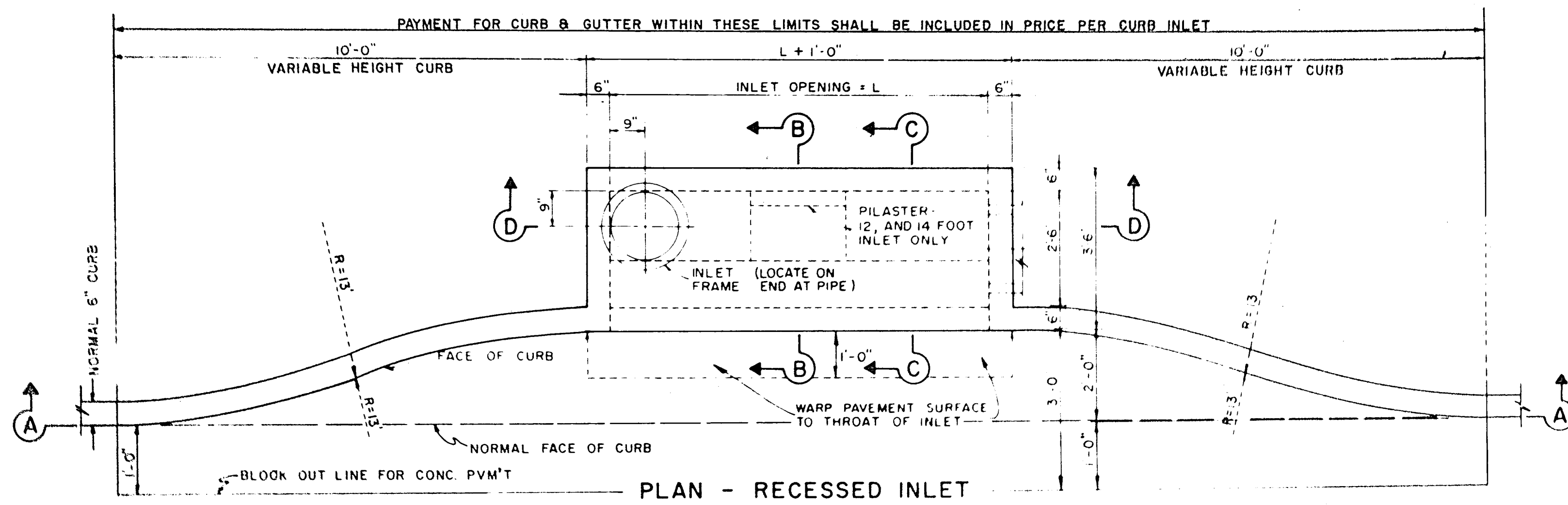
GENERAL NOTES

1. Reinforced concrete sidewalk shall be 5 or 7 feet wide, a minimum of four (4) inches thick and shall be 3000 psi at 28 days (5 sack mix). Unless noted otherwise.
2. Chamfer all exposed edges of concrete (1/4) inch.
3. All bar dimensions are given as center to center of bars and are located as shown.
4. All reinforcing steel shall be No. 3 on 18 inch centers longitudinally, 24 inch centers transversely and shall conform to the requirements of ASTM A-615, Grade 60.
5. 1" thick min. fine, washed sand cushion shall be free from organic materials or clays and shall be used for grade adjustment.
6. Subgrade shall be compacted to a density not less than 95% at optimum moisture.
7. Tooled joints (contraction joints) shall be on five (5) foot centers and shall be round one-fourth (1/4) inch radius.
8. A one-half (1/2) inch expansion joint shall be placed every eight (8) tooled joints, and where works abut old work, or where new work is constructed adjacent to other concrete, a one-half inch expansion joint shall be used where sidewalk is adjacent to curb, the expansion joint shall be made of pre-molded bituminous expansion joint filler or redwood with silicone sealant. See Specs.
9. Sidewalks shall be finished by lightly brooming surface transversely to direction of main traffic or where adjacent sidewalks differ from this standard, new sidewalks shall conform to adjacent sidewalk (e.g. exposed aggregate).
10. Cross slope walk one-fourth (1/4) inch per foot towards curb or as shown on the drawings to provide drainage.

AS BUILTS

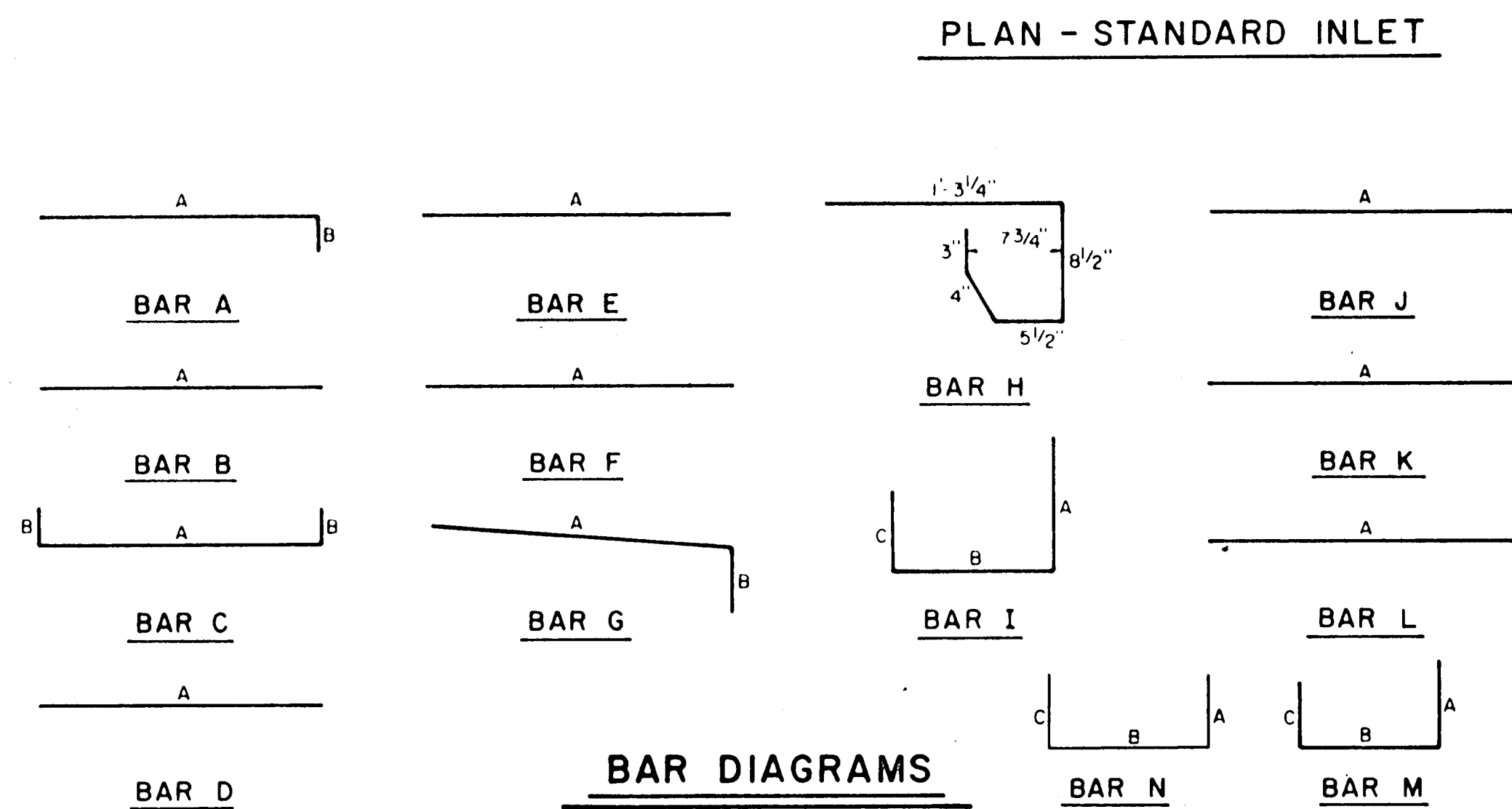
I CERTIFY THIS PROJECT WAS CONSTRUCTED IN GENERAL CONFORMANCE WITH THESE CONSTRUCTION PLANS AND WILL FUNCTION AS DESIGNED.

NO.	REVISION	BY	DATE
TOWN OF ADDISON, TEXAS DEPARTMENT OF ENGINEERING			
STANDARD CONSTRUCTION DETAILS PAVING			
SIDEWALKS & RAMPS			
APPROVED _____			
DATE AUGUST, 1991		SHEET	D-3



SECTION A-A-RECESSED AND STANDARD INLETS
4, 6, 8, 10, 12, AND 14 FOOT INLETS

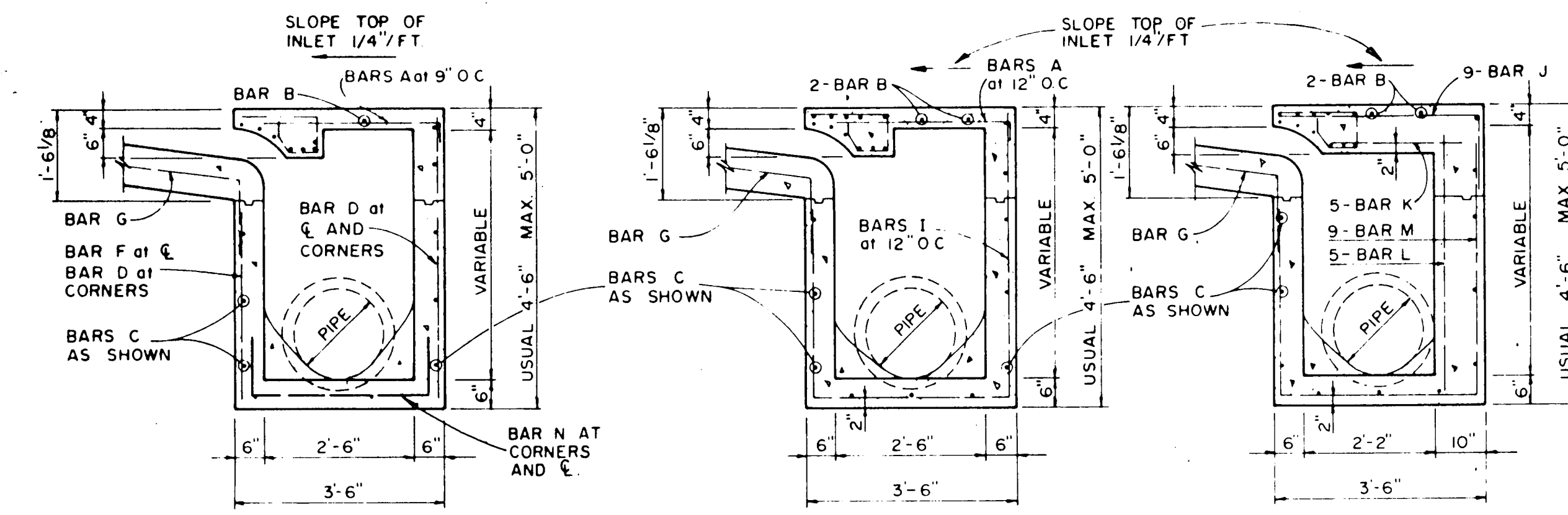
INLET NOTE:
WHERE INLETS ARE INDICATED TO BE MODIFIED, REFER TO PLAN/PROFILE SHEETS FOR ELEV. DIFFERENT SIZES ON MODIFICATIONS. ALL OTHER ITEMS SHALL REMAIN AS SHOWN ON THIS STANDARD DETAIL SHEET.



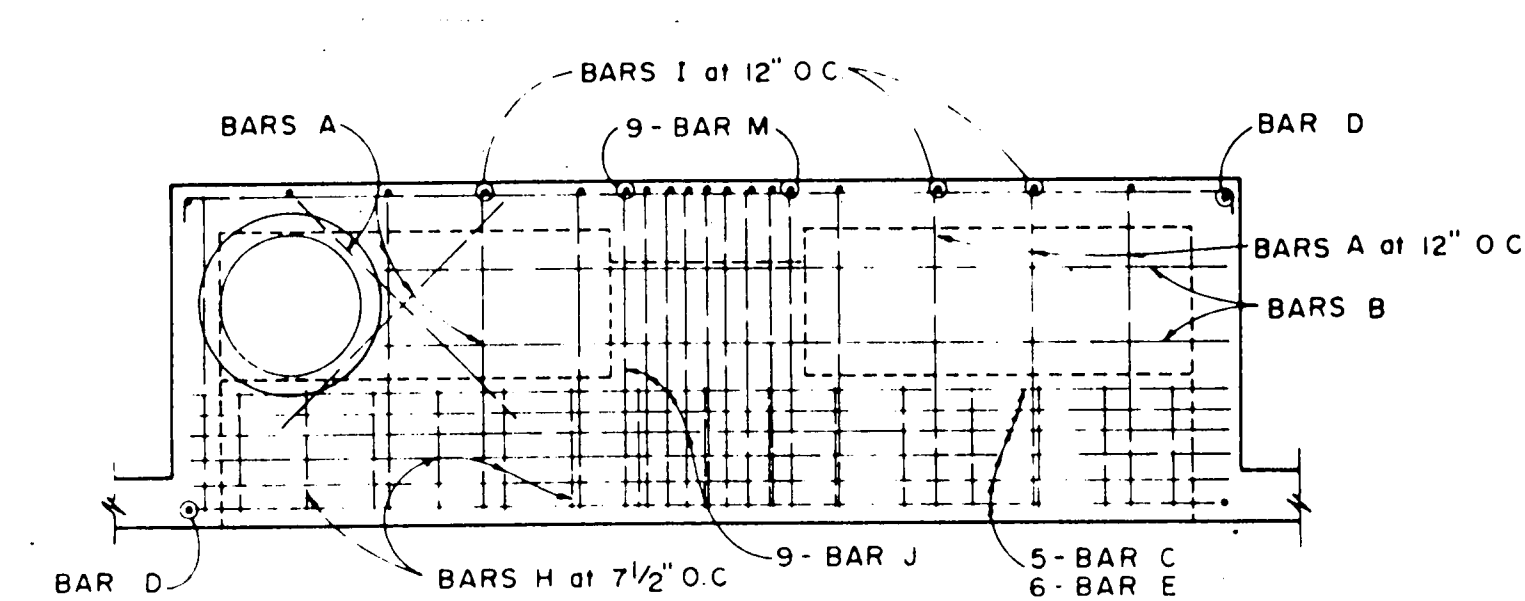
REINFORCING STEEL SCHEDULE

DIMENSIONS SHOWN ARE FOR MAXIMUM SIZE INLETS

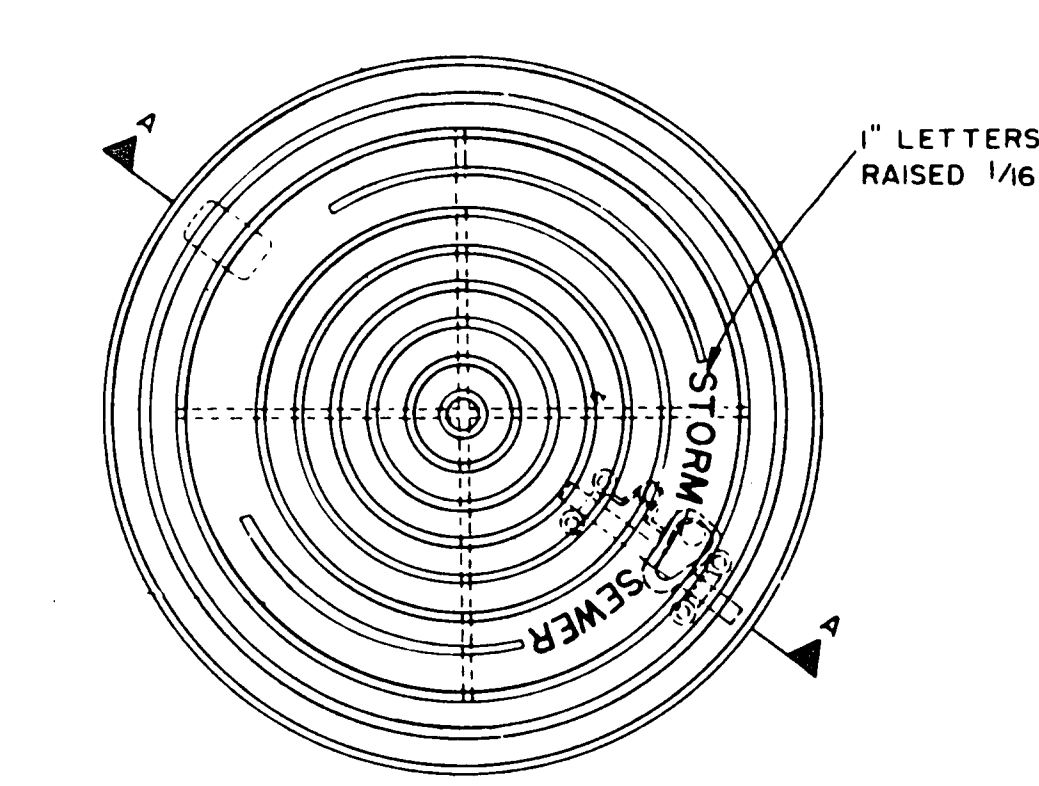
INLET LENGTH	BAR TYPE	BAR DIA. (1/8 IN.)	NO. REQ'D	BAR DIMENSIONS		
				A	B	C
4	A	3	6	3'-2"	0'-3"	-
	B	3	1	2'-10"	-	-
	C	4	15	4'-8"	0'-6"	-
	D	4	5	4'-8"	-	-
	F	4	1	3'-2"	-	-
	G	3	5	2'-0"	1'-3"	-
	H	3	4	*	*	*
	N	3	3	3'-2"	3'-2"	3'-2"
6	A	3	9	3'-2"	0'-3"	-
	B	3	1	4'-10"	-	-
	C	4	15	6'-8"	0'-6"	-
	D	4	5	4'-8"	-	-
	F	4	1	3'-2"	-	-
	G	3	5	2'-0"	1'-3"	-
	H	3	6	*	*	*
	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	8	*	*	*
	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"
	L	4	5	4'-3"	-	-
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"
	J	5	9	3'-2"	1'-3"	-
	K	4	5	2'-3"	-	-
	L	4	5	4'-3"	-	-
	M	5	9	4'-3"	3'-2"	3'-9"
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"
	J	5	9	3'-2"	1'-3"	-
	K	4	5	2'-3"	-	-
	L	4	5	4'-3"	-	-
	M	5	9	4'-3"	3'-2"	3'-9"



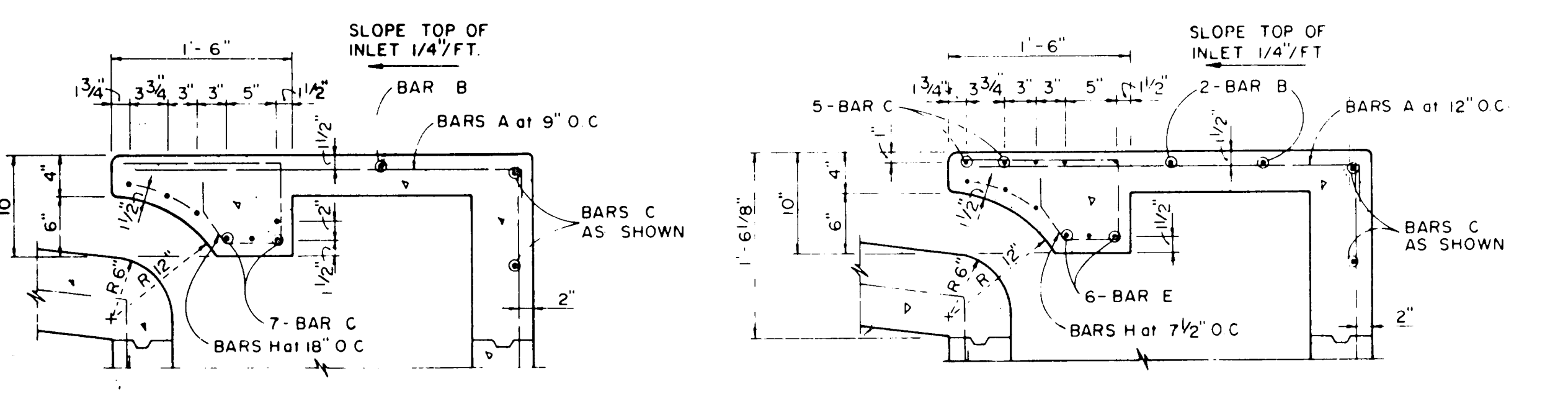
SECTION B-B SECTION C-C SECTION B-B



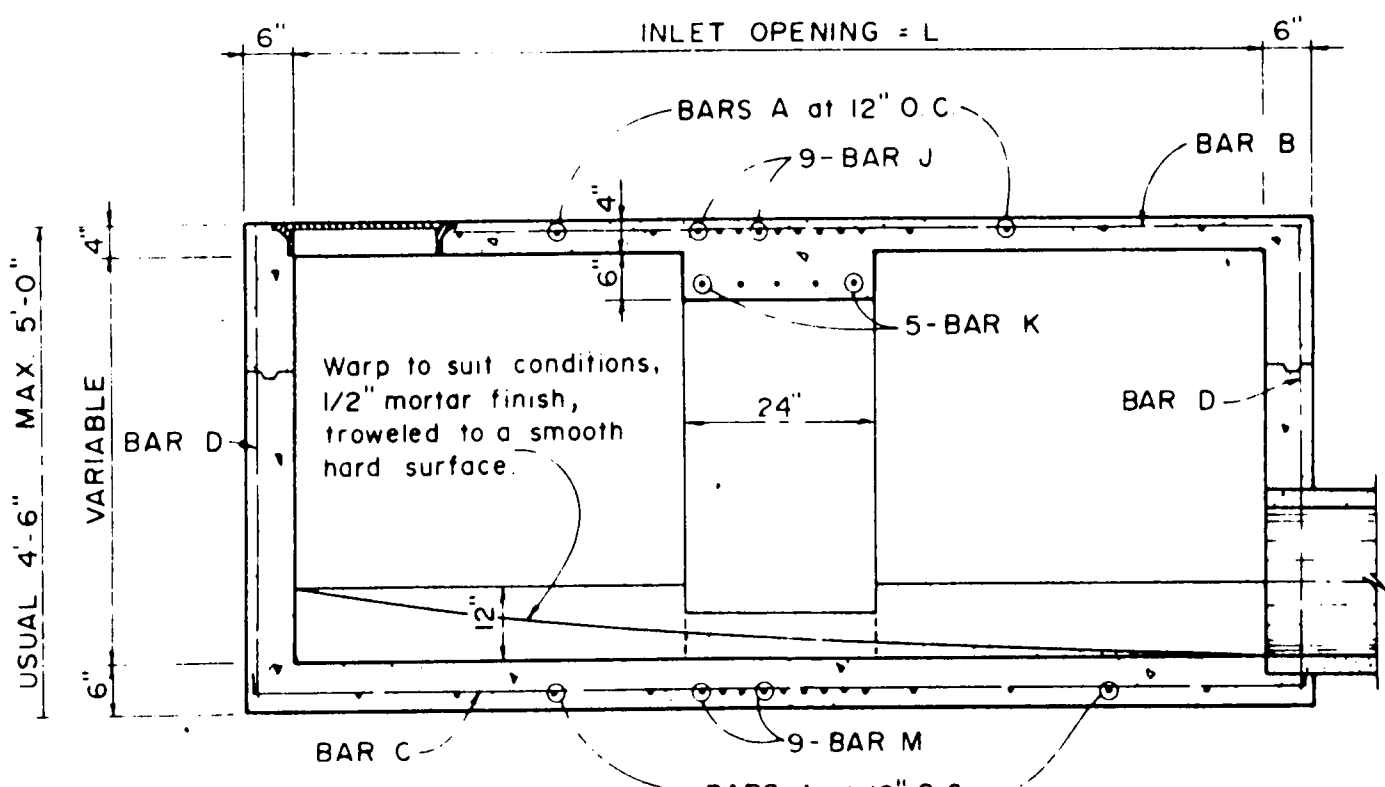
PLAN



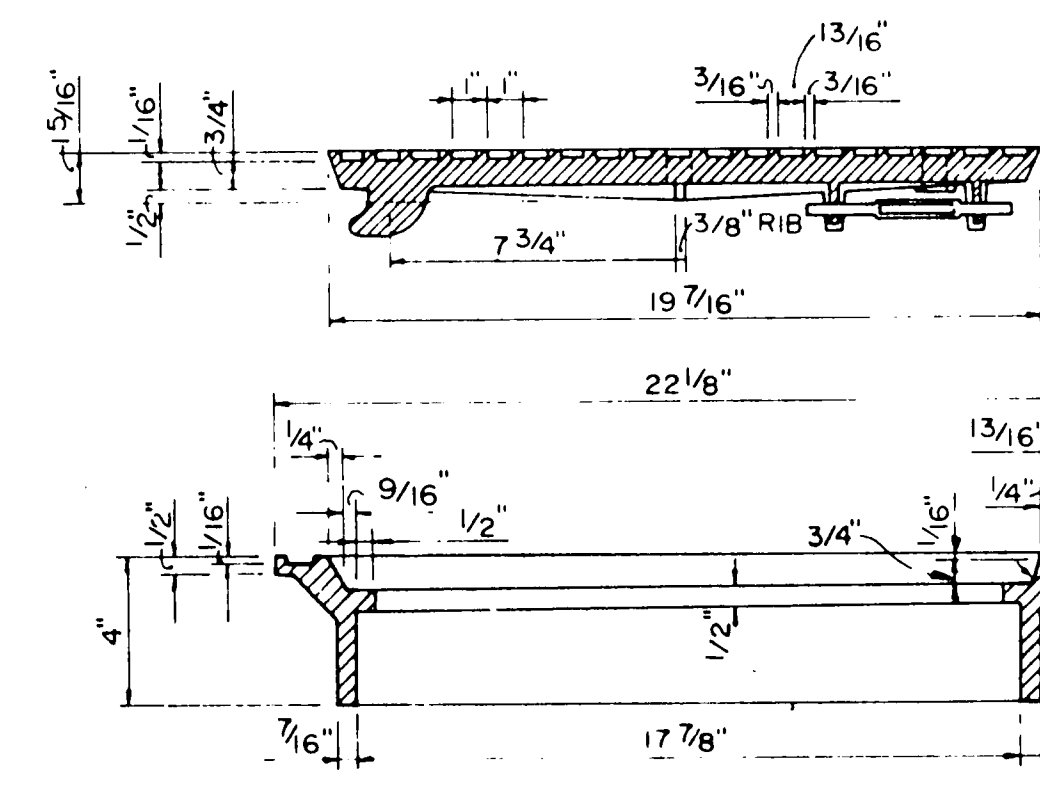
PLAN OF FRAME



SECTION C-C SECTION C-C



SECTION D-D FOR 12' & 14' ONLY



SECTION OF FRAME AND COVER
INLET FRAME AND COVER

COVER 55#
RING 45#

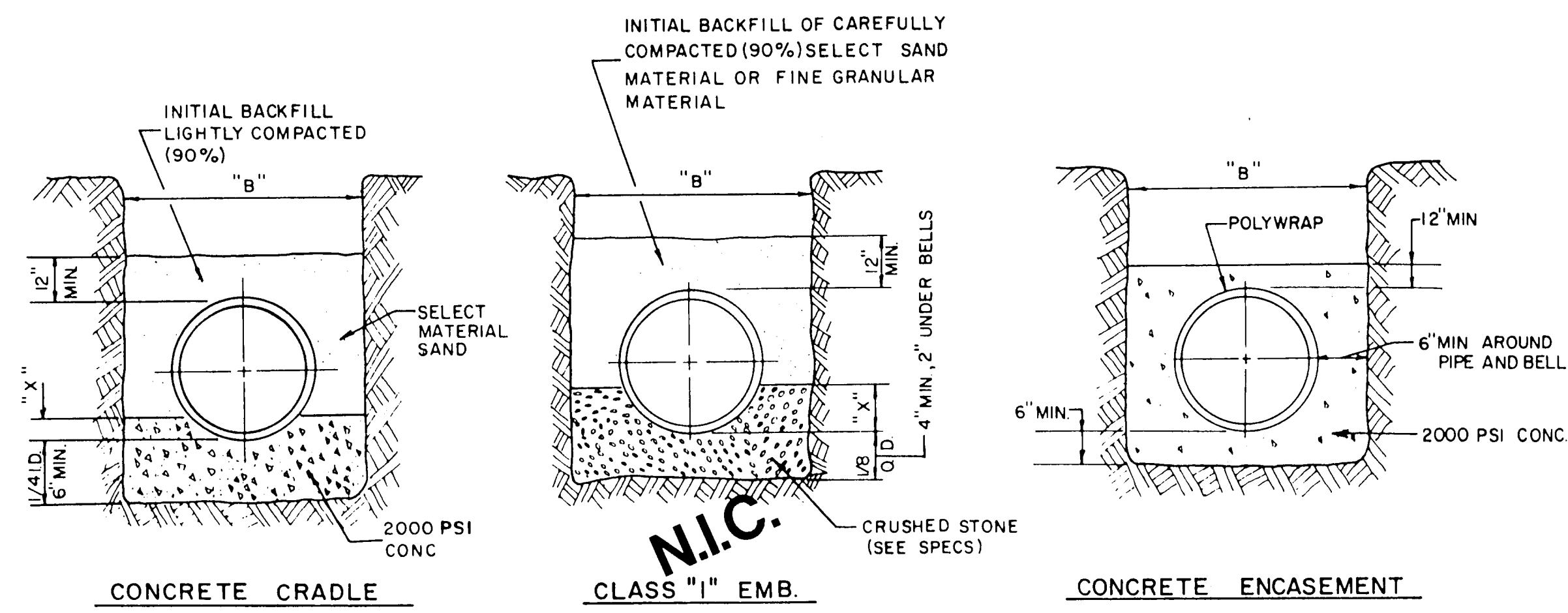
AS BUILT * SEE DIAGRAM FOR DIMENSIONS

I CERTIFY THIS PROJECT WAS CONSTRUCTED IN GENERAL CONFORMANCE WITH THESE CONSTRUCTION PLANS AND WILL FUNCTION AS DESIGNED.

TOWN OF ADDISON, TEXAS
DEPARTMENT OF ENGINEERING

**STANDARD CONSTRUCTION DETAILS
STORM DRAINAGE**

CURB INLETS

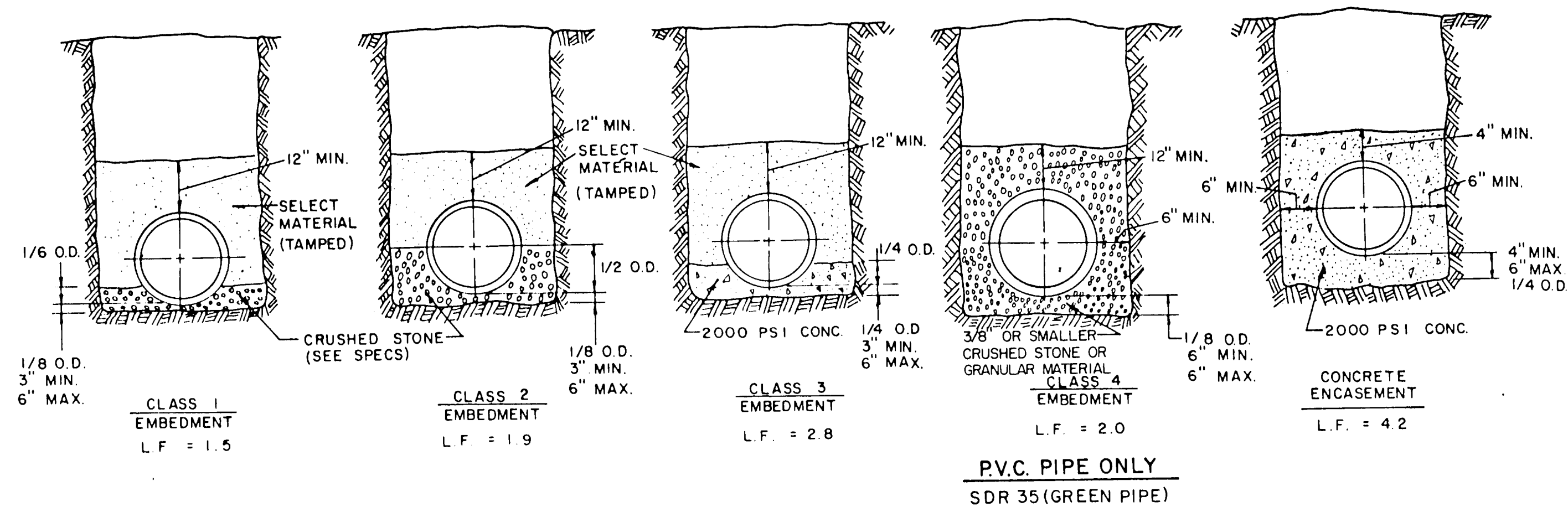


EMBEDMENT DETAILS FOR RCCP WATERLINE

TABLE OF QUANTITIES OF MATERIALS IN CUBIC YARDS PER 100 LINEAR FEET

INSIDE DIAMETER OF PIPE	APPROX OUTSIDE DIAMETER OF PIPE	IS A MINIMUM DEPTH	TRENCH WIDTH FOR COMPUTATION OF QUANTITIES	CONCRETE		CRUSHED STONE FOR CLASS "1" EMBEDMENT
				FOR EMBEDMENT	FOR ENCASUREMENT	
REINFORCED CONCRETE CYLINDER PIPE						
14"	17.25"	2.53'	3.4'	6.91	16.07	5.16
16"	19.38"	2.84'	3.6'	7.50	17.76	5.64
18"	21.78"	3.19'	3.8'	8.11	19.52	6.16
24"	27.75"	4.06'	4.4'	9.97	24.90	9.28

TYPICAL NATIVE MATERIAL COMPACTED TO:
95% OPTIMUM MOISTURE 0 TO +3% UNDER PAVEMENT
95% OPTIMUM MOISTURE 0 TO +3% OUTSIDE CURB LINES
JETTING IS NOT ALLOWED
BACKFILL TO BE COMPACTED IN 6" LIFTS
TYPICAL NATIVE MATERIAL (MAX. 3" DIA.)

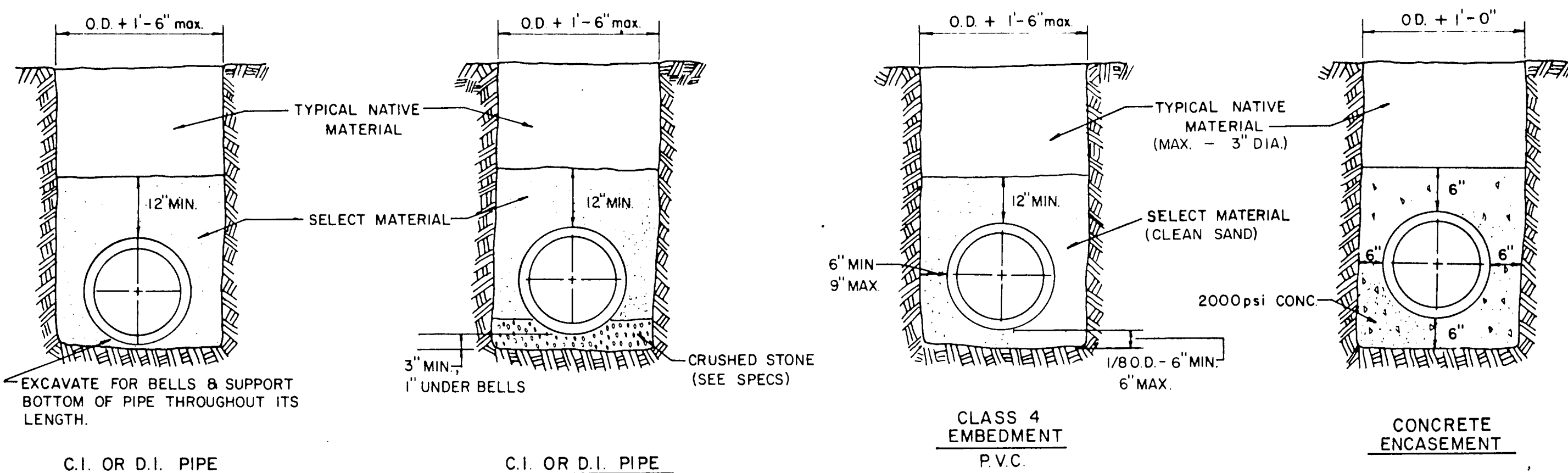


EMBEDMENT DETAILS FOR SANITARY SEWER

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

TABLE OF QUANTITIES PER 100 LINEAR FEET REINFORCED CONCRETE PIPE

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 ENCASUREMENT
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	24.9
21	26.50	43	3.58	6.9	11.0	10.2	28.7
24	30.00	46	3.83	8.3	13.1	12.4	32.8
27	33.50	51	4.25	10.3	16.1	14.4	34.8
30	37.00	57	4.75	12.7	20.1	17.0	39.2
33	40.50	62	5.17	15.1	23.8	19.3	43.8
36	44.00	67	5.58	18.0	28.6	22.1	43.8

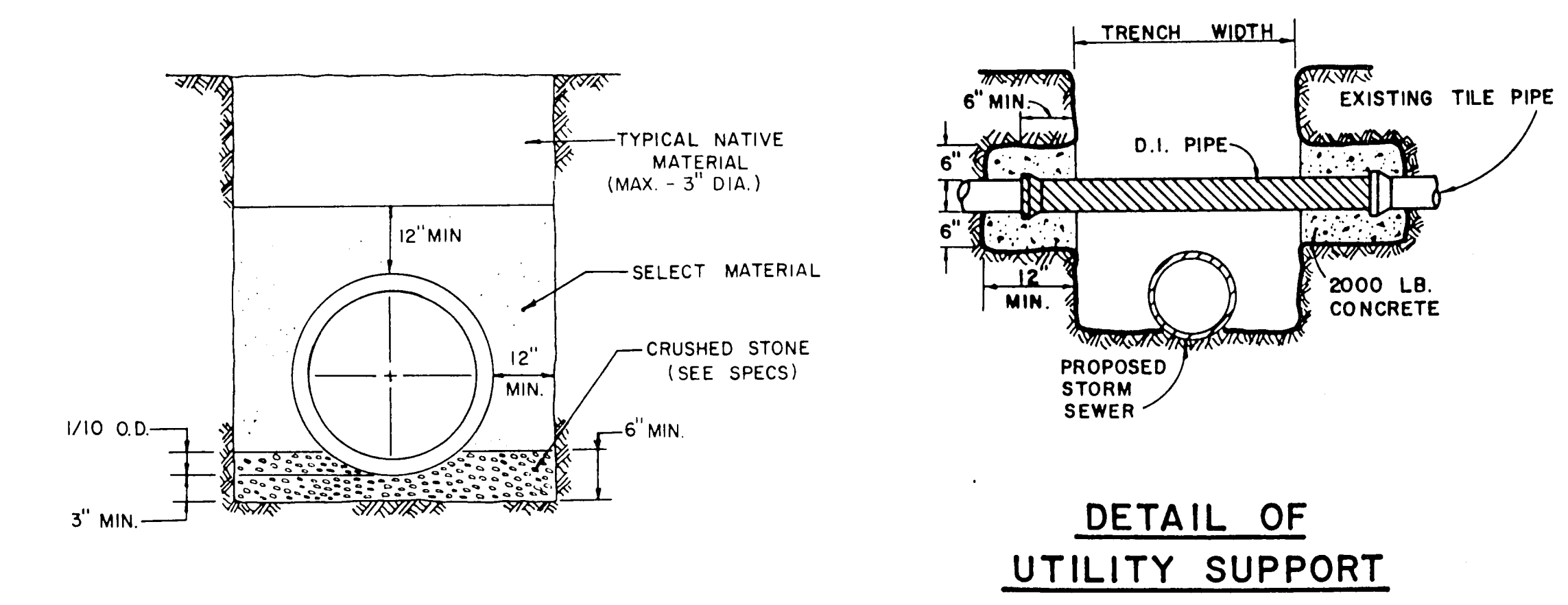
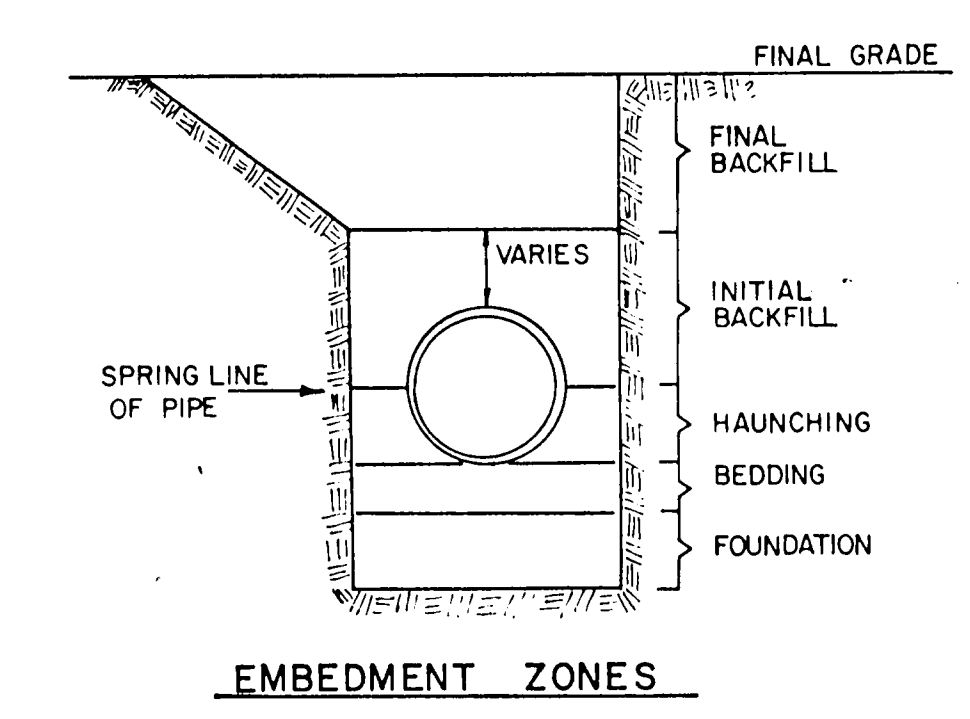


EMBEDMENT DETAILS FOR WATER MAIN

TABLE OF QUANTITIES PER 100 LINEAR FEET-PVC PIPE (IN CUBIC YARDS)

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 ENCASUREMENT
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	28	2.35	11.7	15.9
16	15.30	31	2.61	14.0	18.8
24		36	3.0		
30		42	3.5		

NOTE: ALL SANITARY SEWER LINES THIS PROJECT SHALL HAVE CLASS 4 EMBEDMENT UNLESS OTHERWISE NOTED.



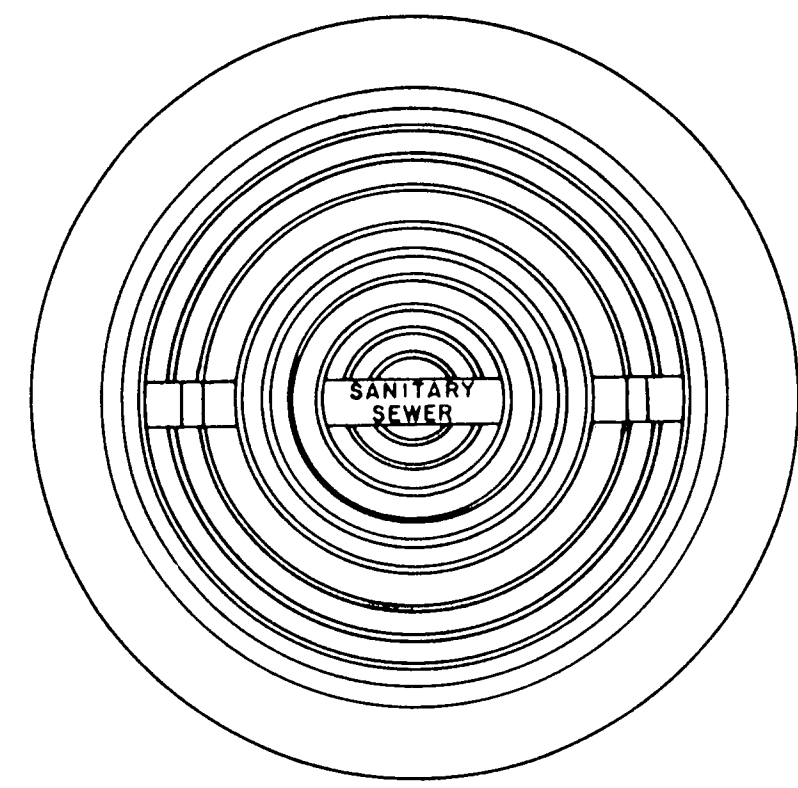
AS BUILTS
I CERTIFY THIS PROJECT WAS CONSTRUCTED IN GENERAL CONFORMANCE WITH THESE CONSTRUCTION PLANS AND WILL FUNCTION AS DESIGNED.

TOWN OF ADDISON, TEXAS
DEPARTMENT OF ENGINEERING

STANDARD CONSTRUCTION DETAILS

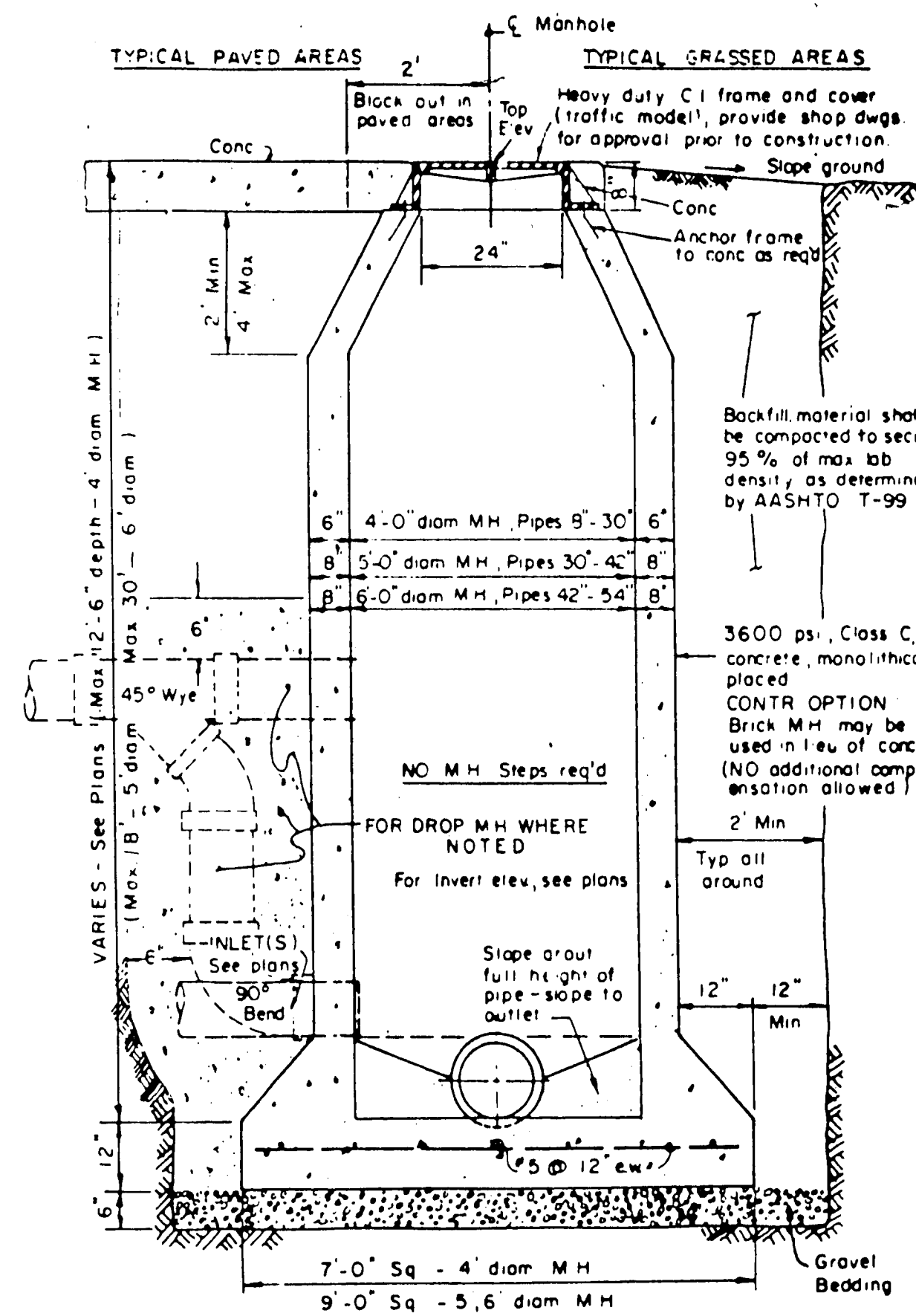
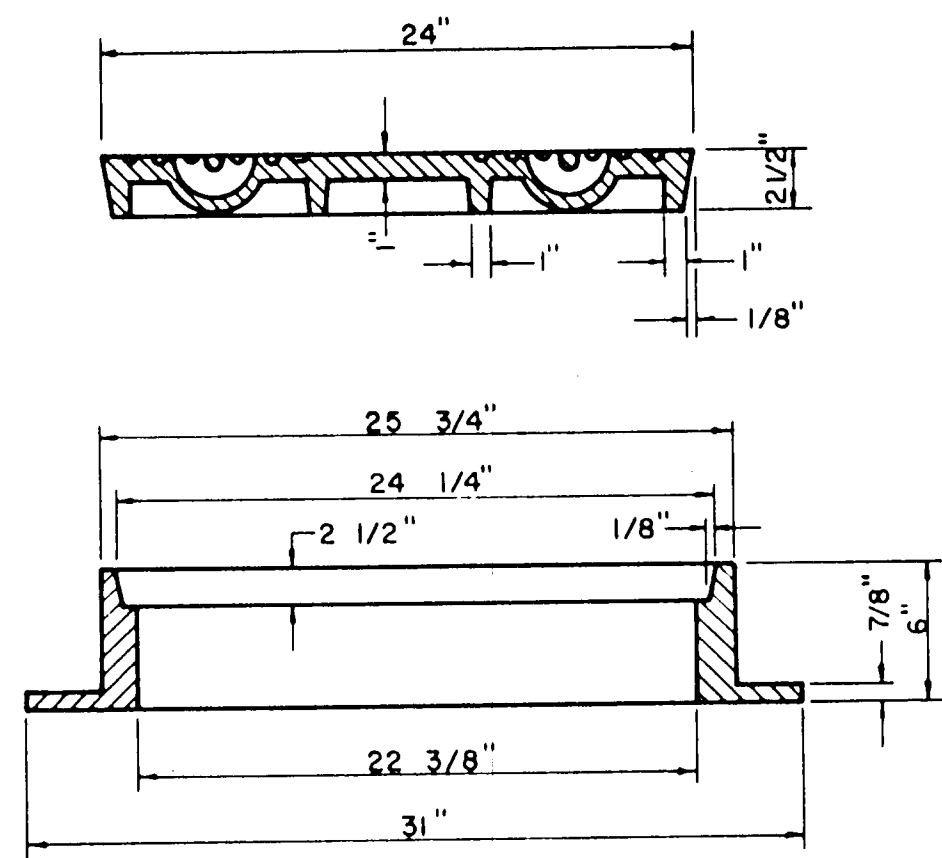
EMBEDMENT DETAILS

Designed -	Drawn -	Date - AUGUST, 1991	Job No. - 90025-6
Approved -	Checked -	Scale -	Sheet D-5 of



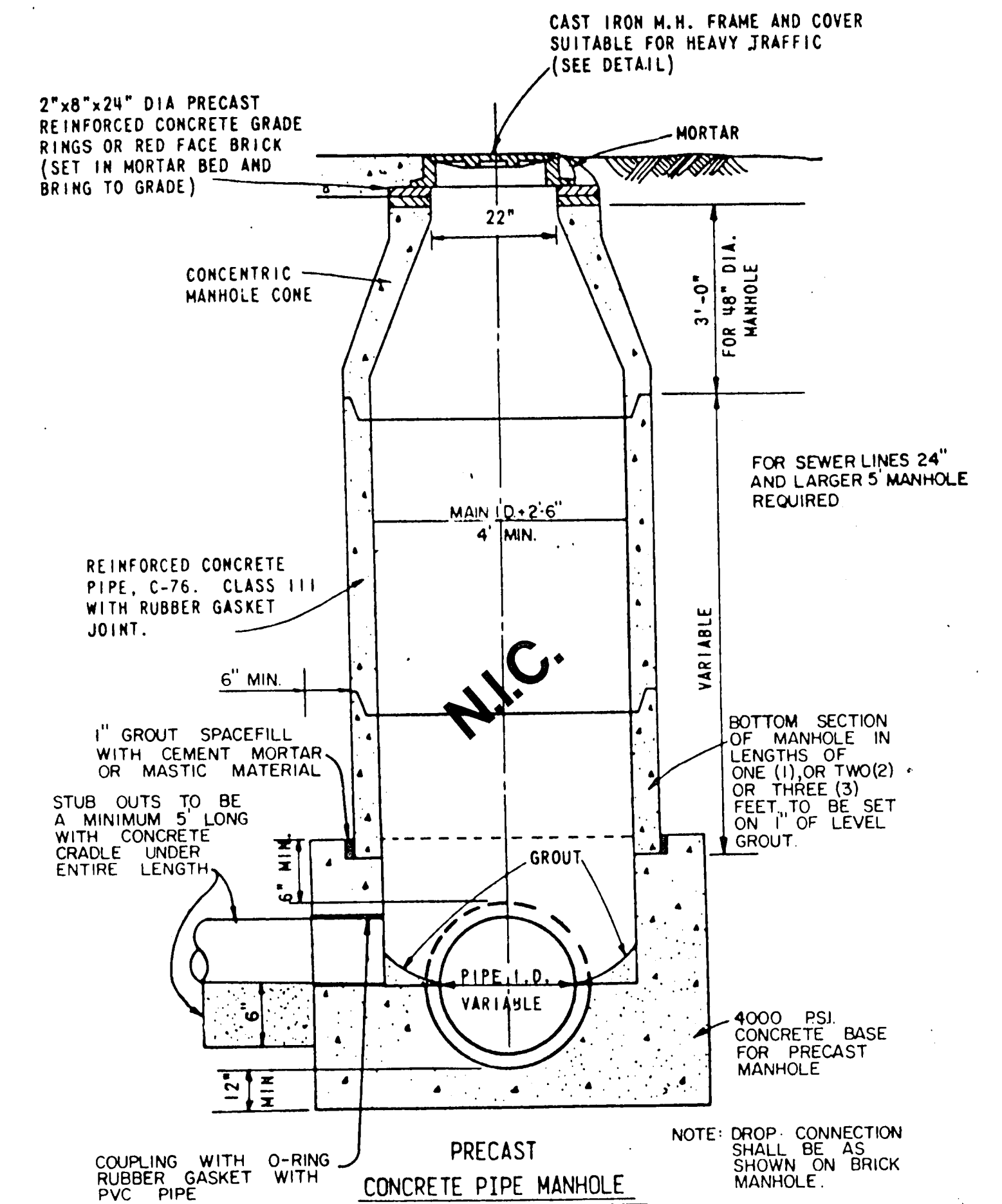
APPROX. WEIGHT RING AND COVER 385 LBS.

CAST IRON GRATE AND FRAME DETAIL

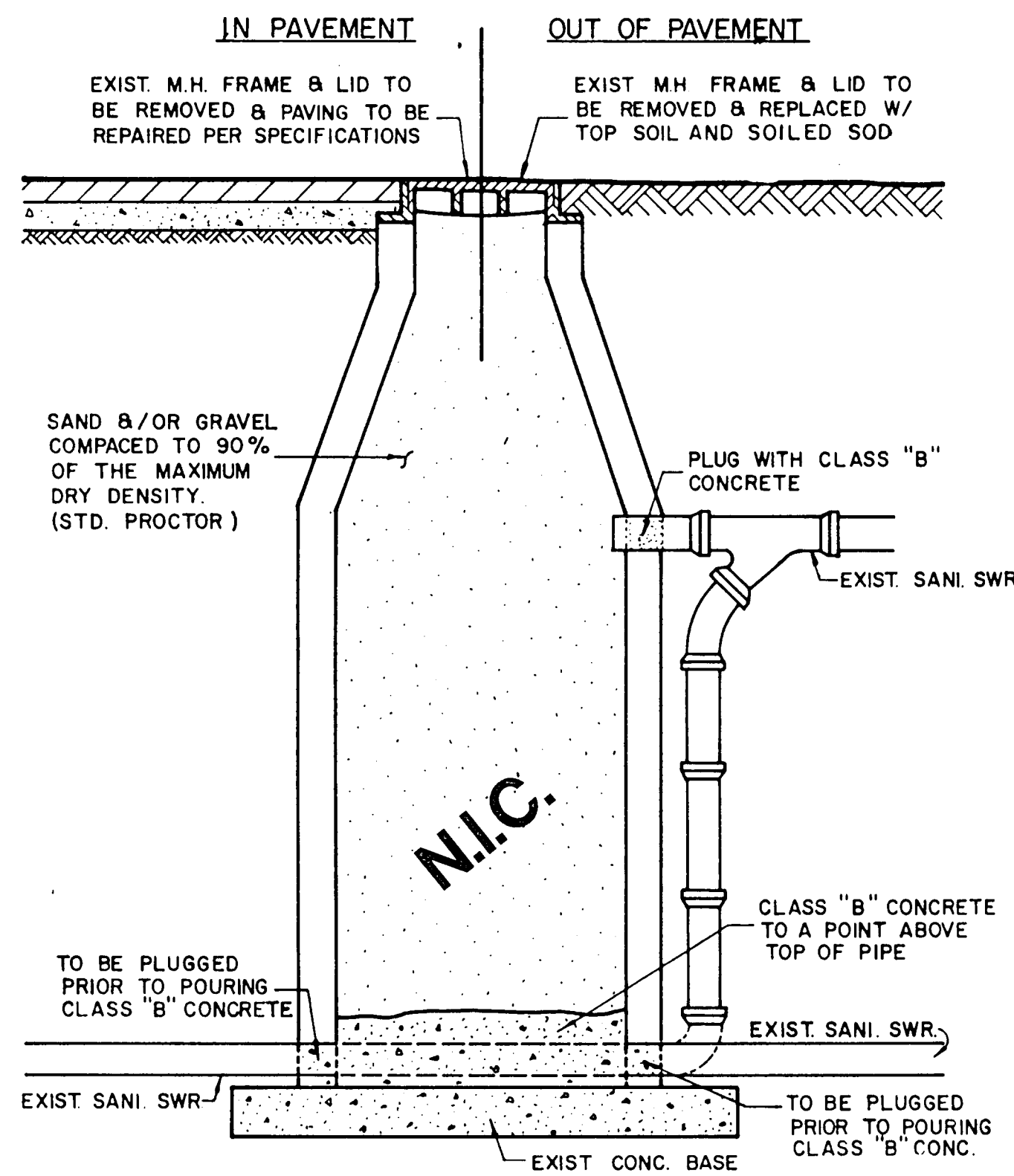


CAST IN PLACE MANHOLE

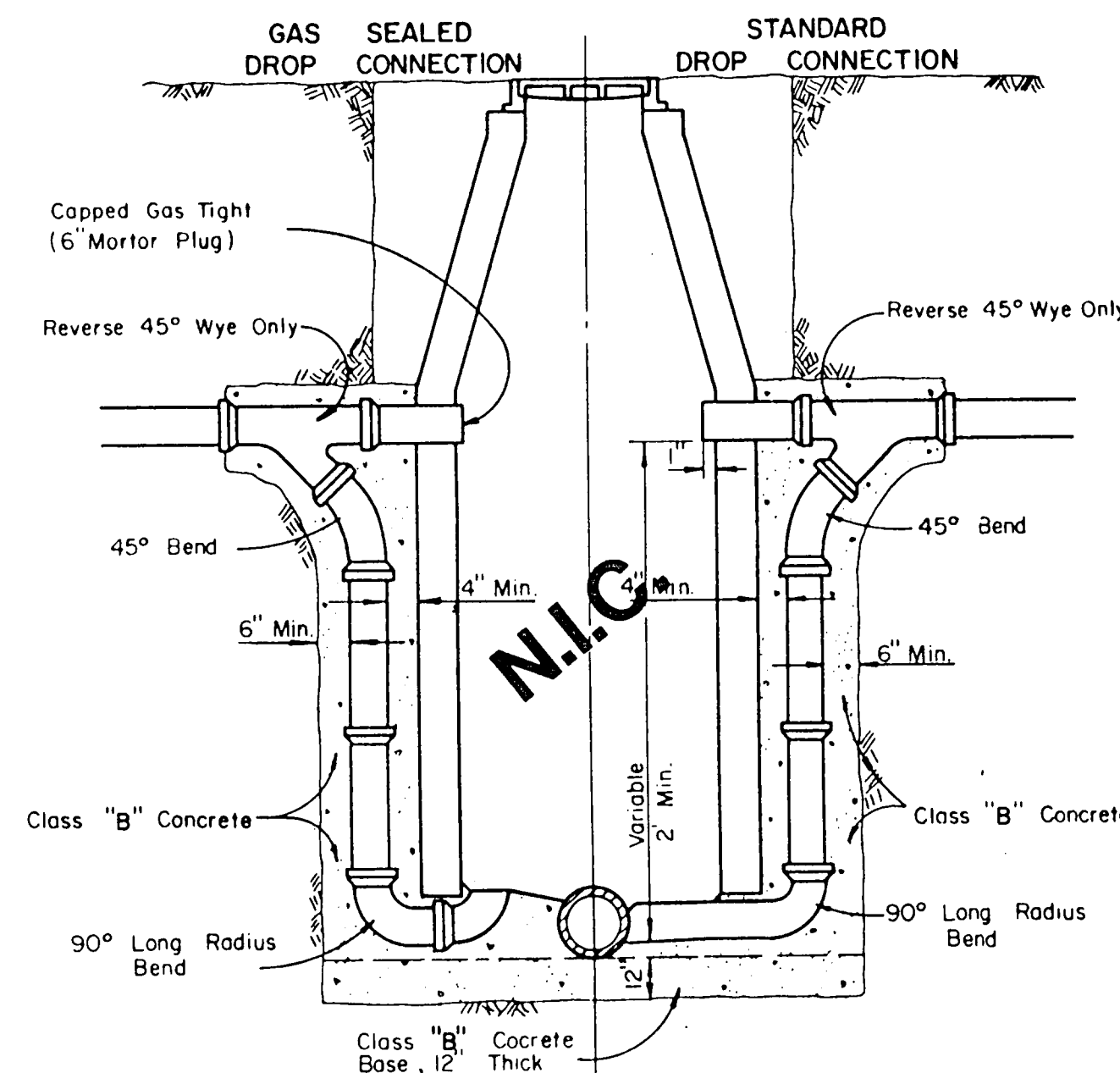
WHERE DROP M.H. IS REQUIRED, USE INSIDE DROP CONNECTION AS PER TOWN OF ADDISON STANDARDS.



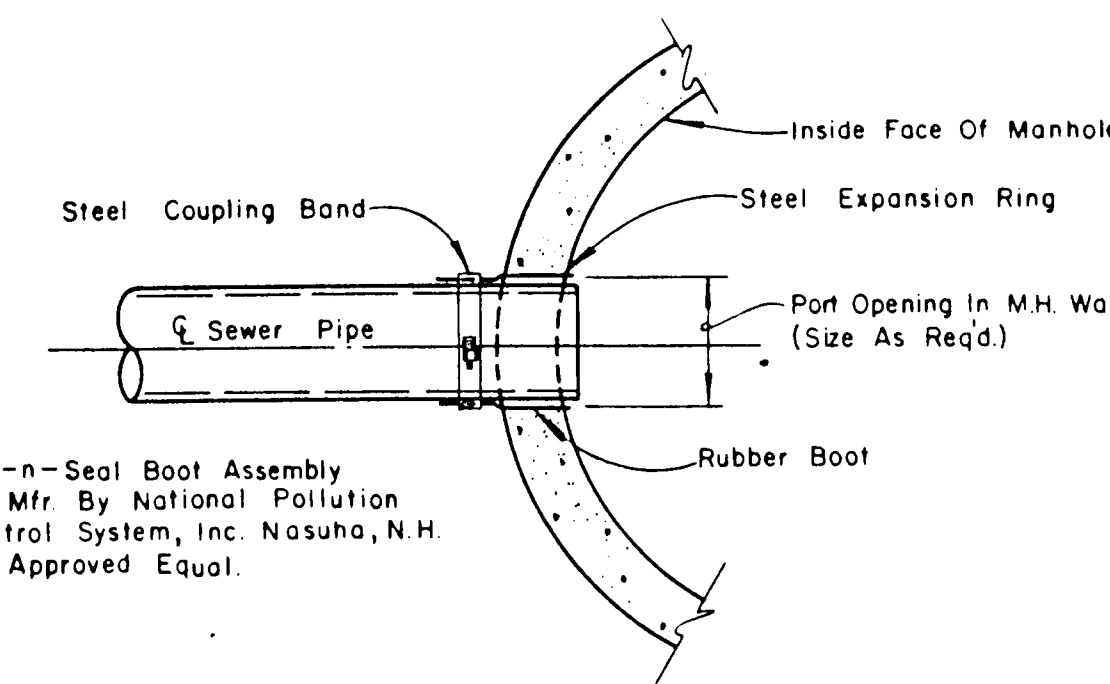
PRECAST MANHOLE



ABANDONMENT OF EXISTING MANHOLE IN AND OUT OF PAVEMENT



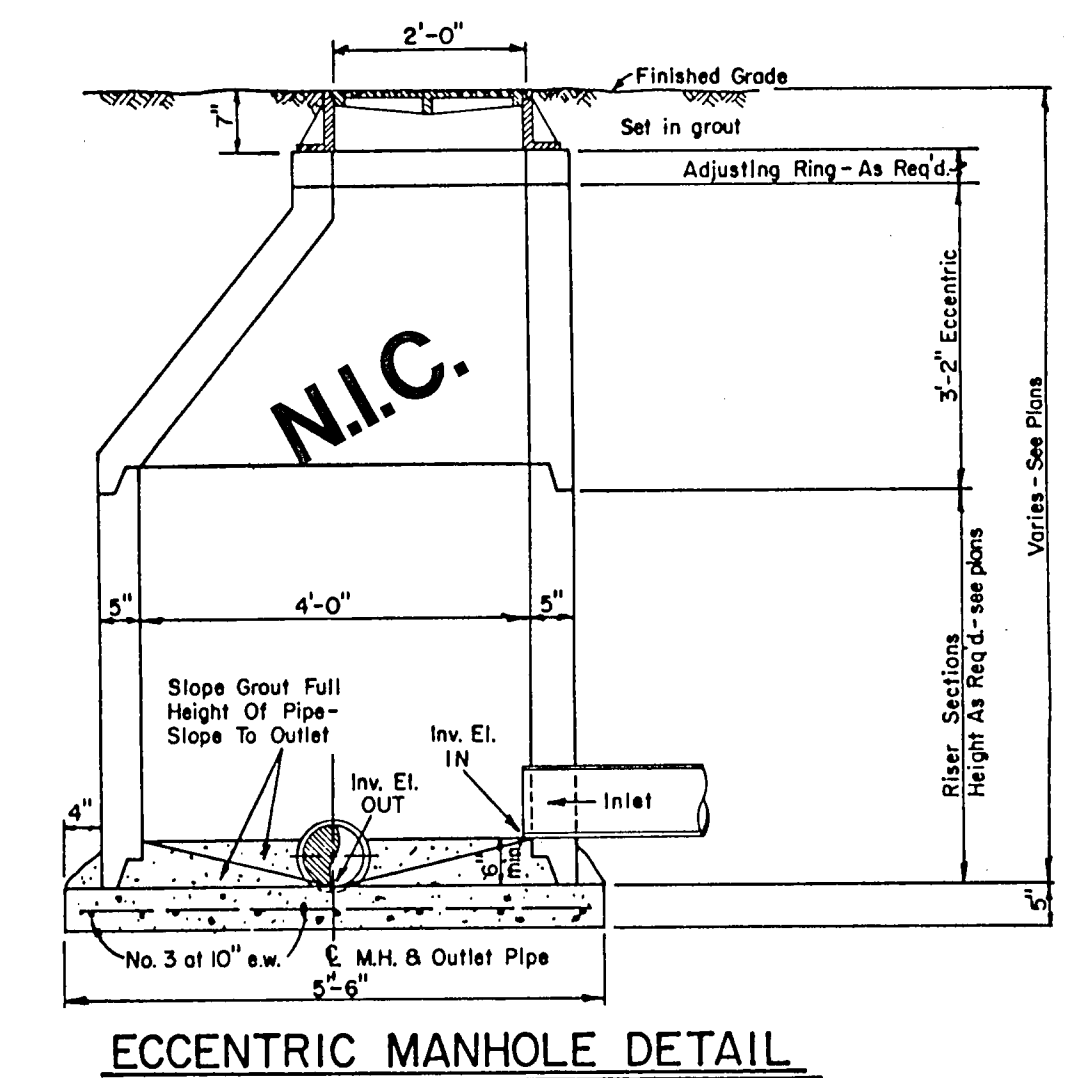
DROP CONNECTIONS FOR SANITARY SEWER MANHOLES



TYPICAL SEWER CONNECTION AT MANHOLE

AS BUILTS

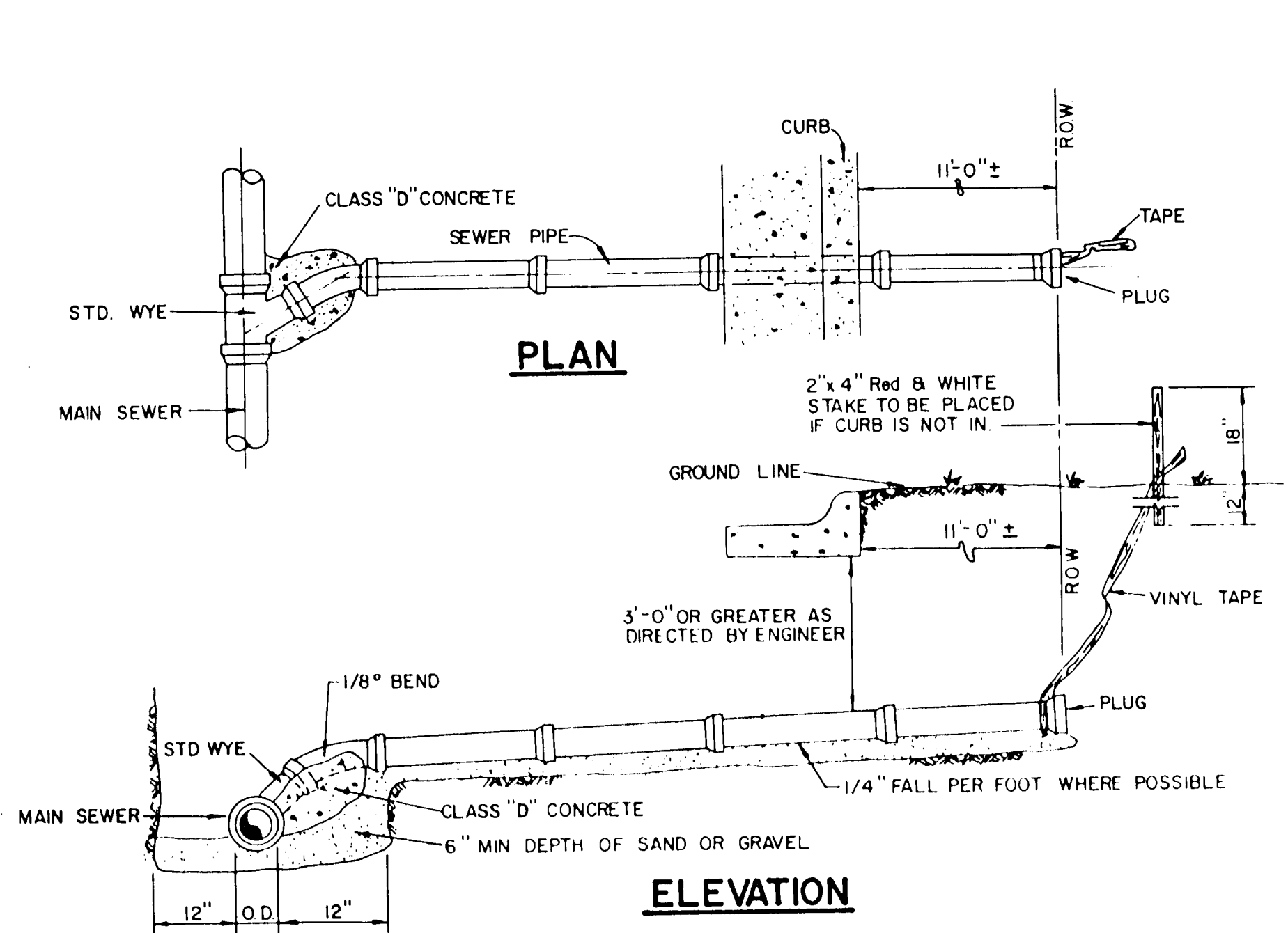
I CERTIFY THIS PROJECT WAS CONSTRUCTED IN GENERAL CONFORMANCE WITH THESE CONSTRUCTION PLANS AND WILL FUNCTION AS DESIGNED.



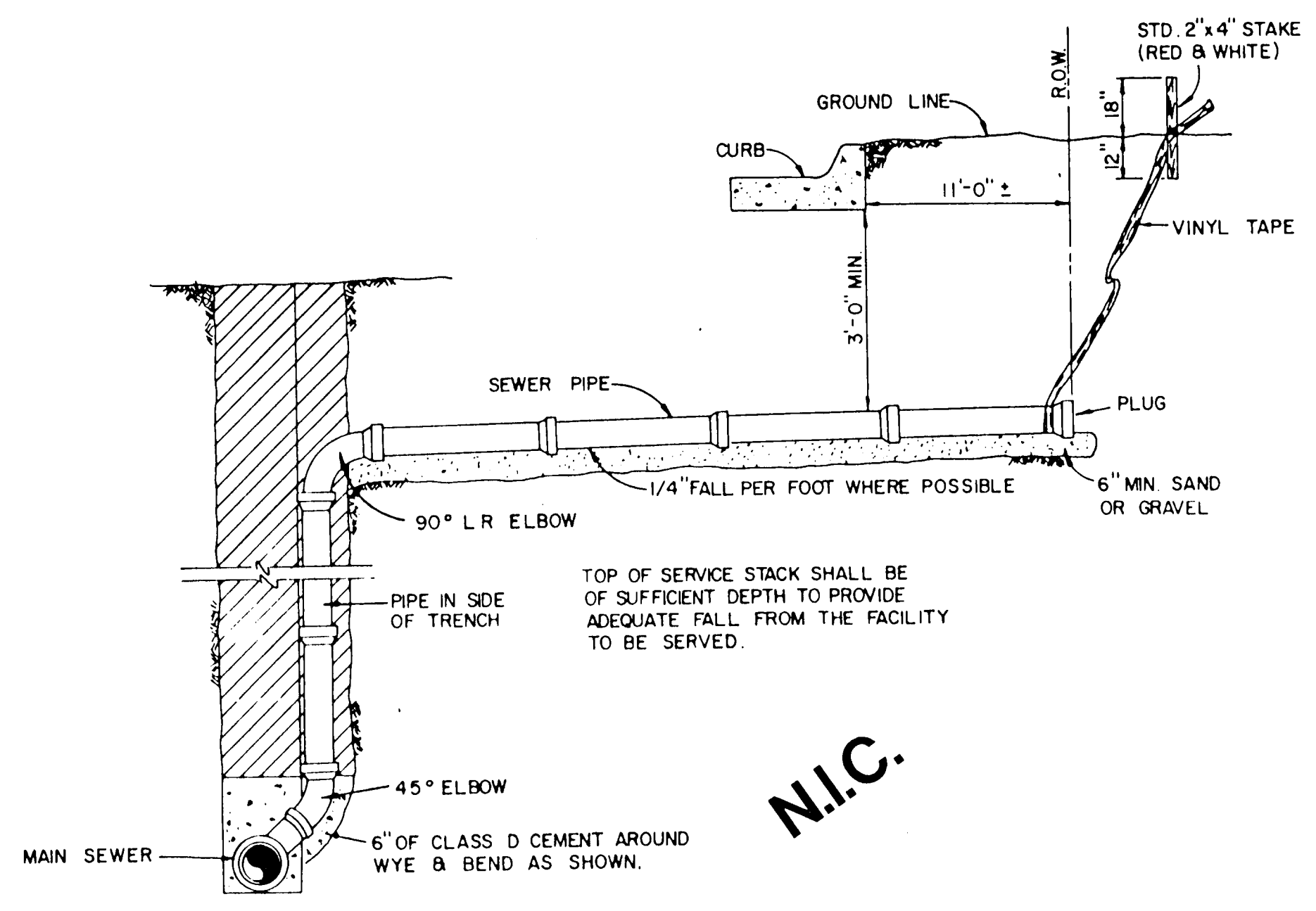
ECCENTRIC MANHOLE DETAIL

CLASS B Conc. - 2000psi at 28 days (Compressive)

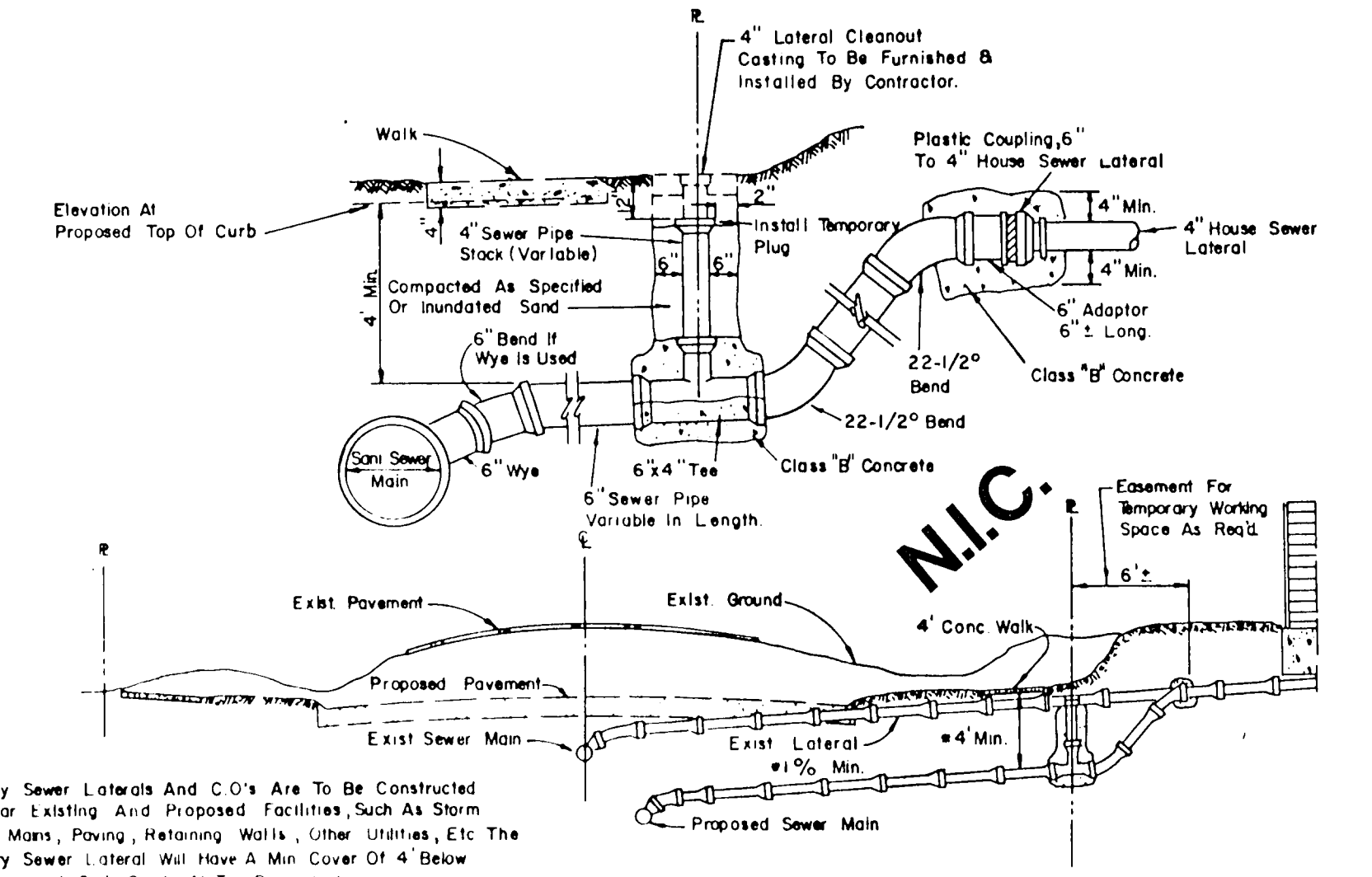
TOWN OF ADDISON, TEXAS DEPARTMENT OF ENGINEERING			
STANDARD CONSTRUCTION DETAILS SANITARY SEWER			
MANHOLES AND CONNECTIONS			
Designed -	Drawn -	Date - AUGUST, 1991	Job No. - 90025-6
Approved -	Checked -	Scale -	Sheet D-6 of



SANITARY SEWER SERVICE CONNECTION

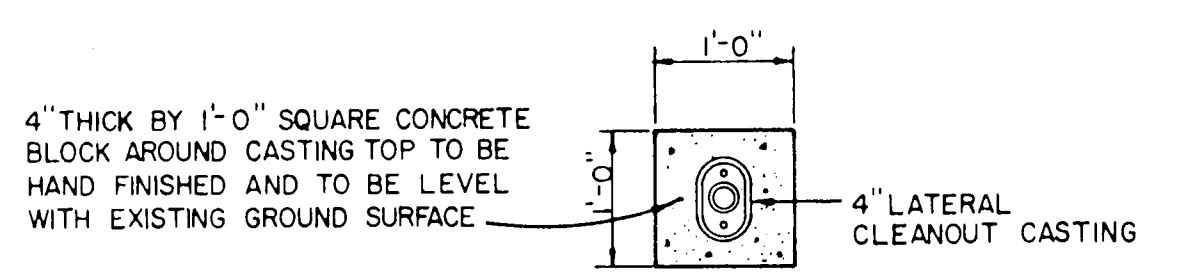


SANITARY SEWER DEEP SERVICE CONNECTION

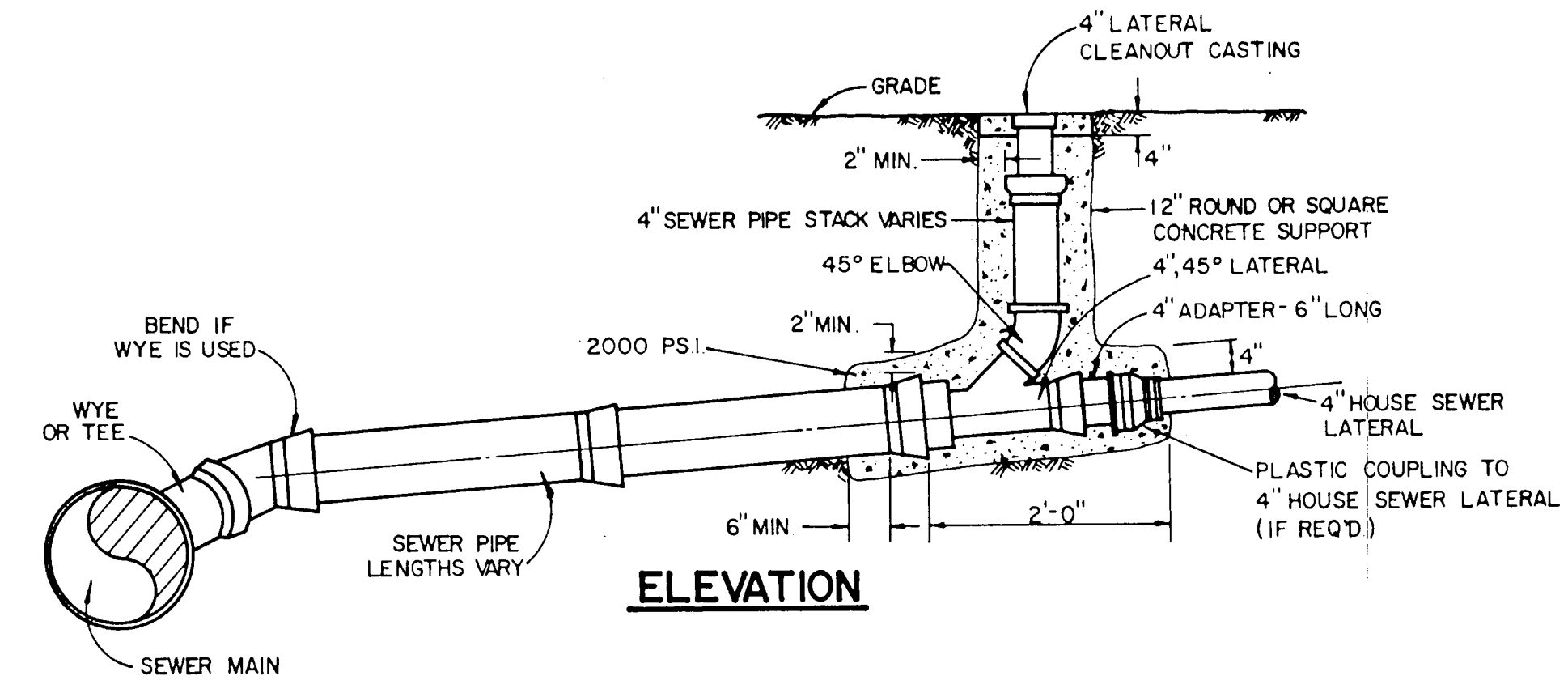


SANITARY SEWER LATERAL REPLACEMENT

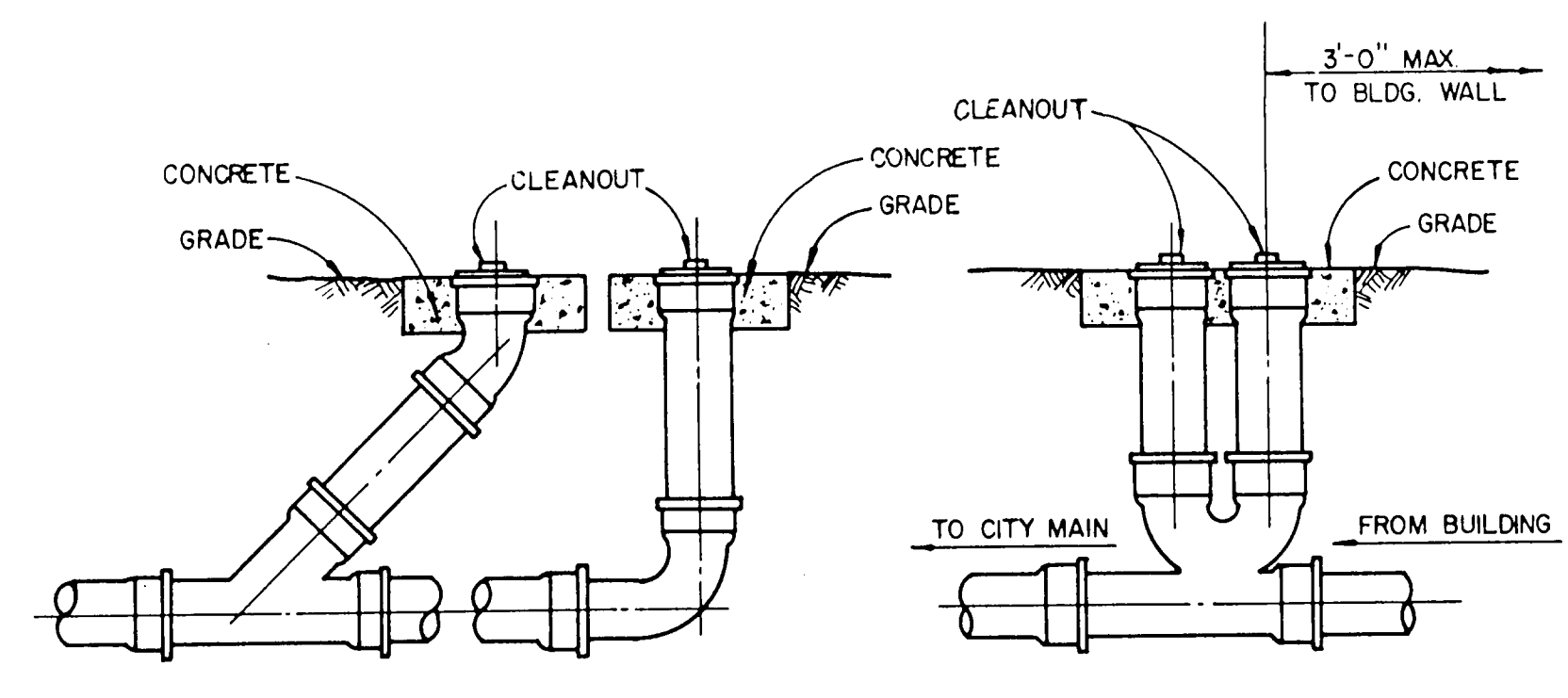
NOTE:
Cleanout To Be Installed On Property Line Except As Required To Avoid Conflict With Existing Or Proposed Facilities In Which Case The Location Shall Be Determined By The Engineer.



PLAN



ELEVATION



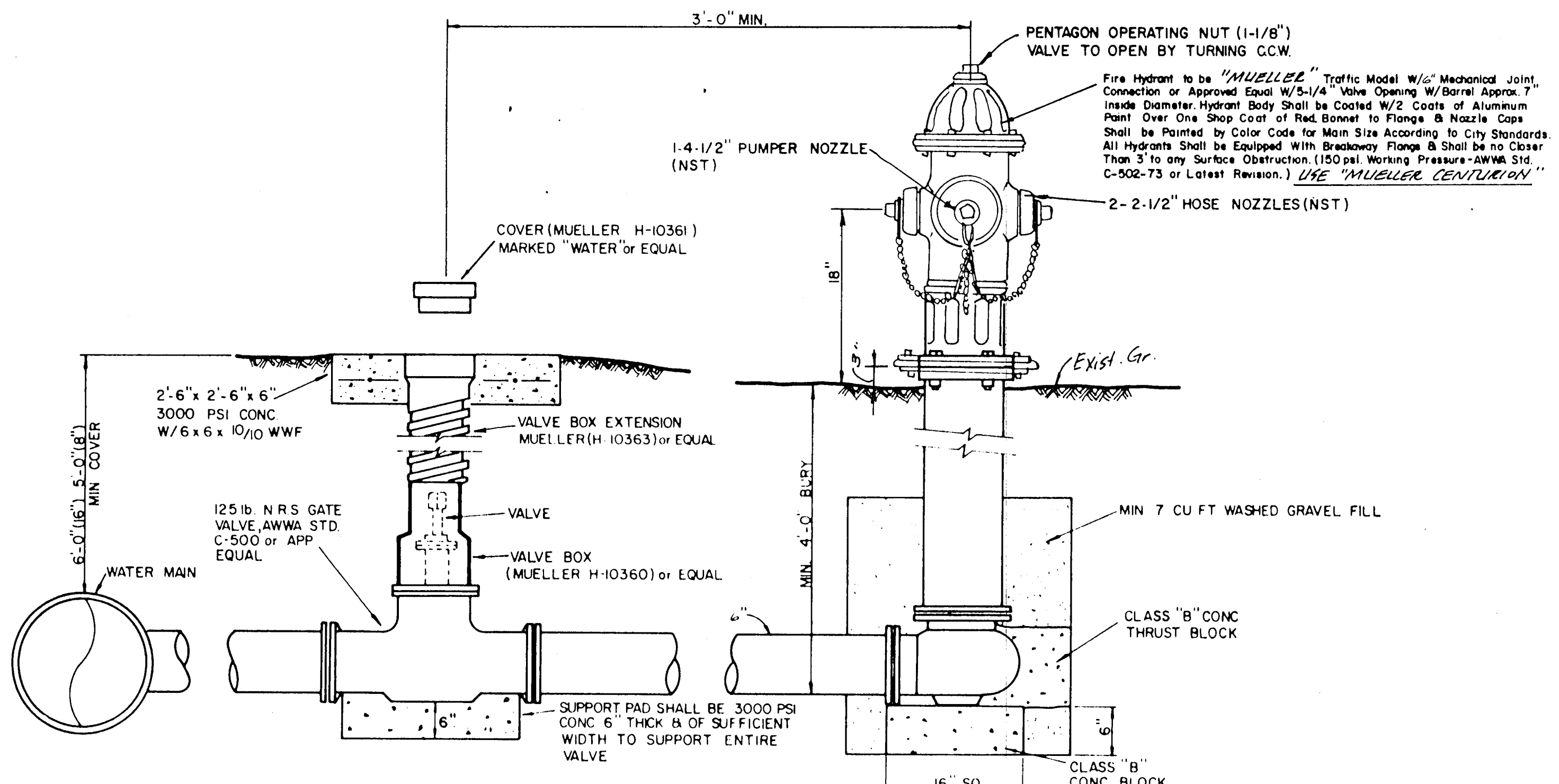
TYPICAL CLEANOUTS

ALL PVC SANITARY SEWER PIPE TO BE SDR 35 WITH INTEGRAL BELL.
IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD LOCATE HORIZONTALLY EACH 4' SERVICE IN RELATION TO THE SANITARY SEWER STATIONING.
FIELD TIES ARE TO BE INCLUDED AND RECORDED ON ALUMINIZED SANITARY SEWER TAPE. THIS TAPE, GREEN OR RED IN COLOR IS TO BE ATTACHED TO THE 4' SERVICE AT THE ROW LINE AND BROUGHT TO THE SURFACE TO BE USED AS A PERMANENT MARKER.

AS BUILTS

I CERTIFY THIS PROJECT WAS CONSTRUCTED IN GENERAL CONFORMANCE WITH THESE CONSTRUCTION PLANS AND WILL FUNCTION AS DESIGNED.

TOWN OF ADDISON, TEXAS			
DEPARTMENT OF ENGINEERING			
STANDARD CONSTRUCTION DETAILS			
SANITARY SEWER			
LATERALS AND CLEANOUTS			
Designed -	Drawn -	Date - AUGUST, 1991	Job No. - 90025-6
Approved -	Checked -	Scale -	Sheet D-7 of

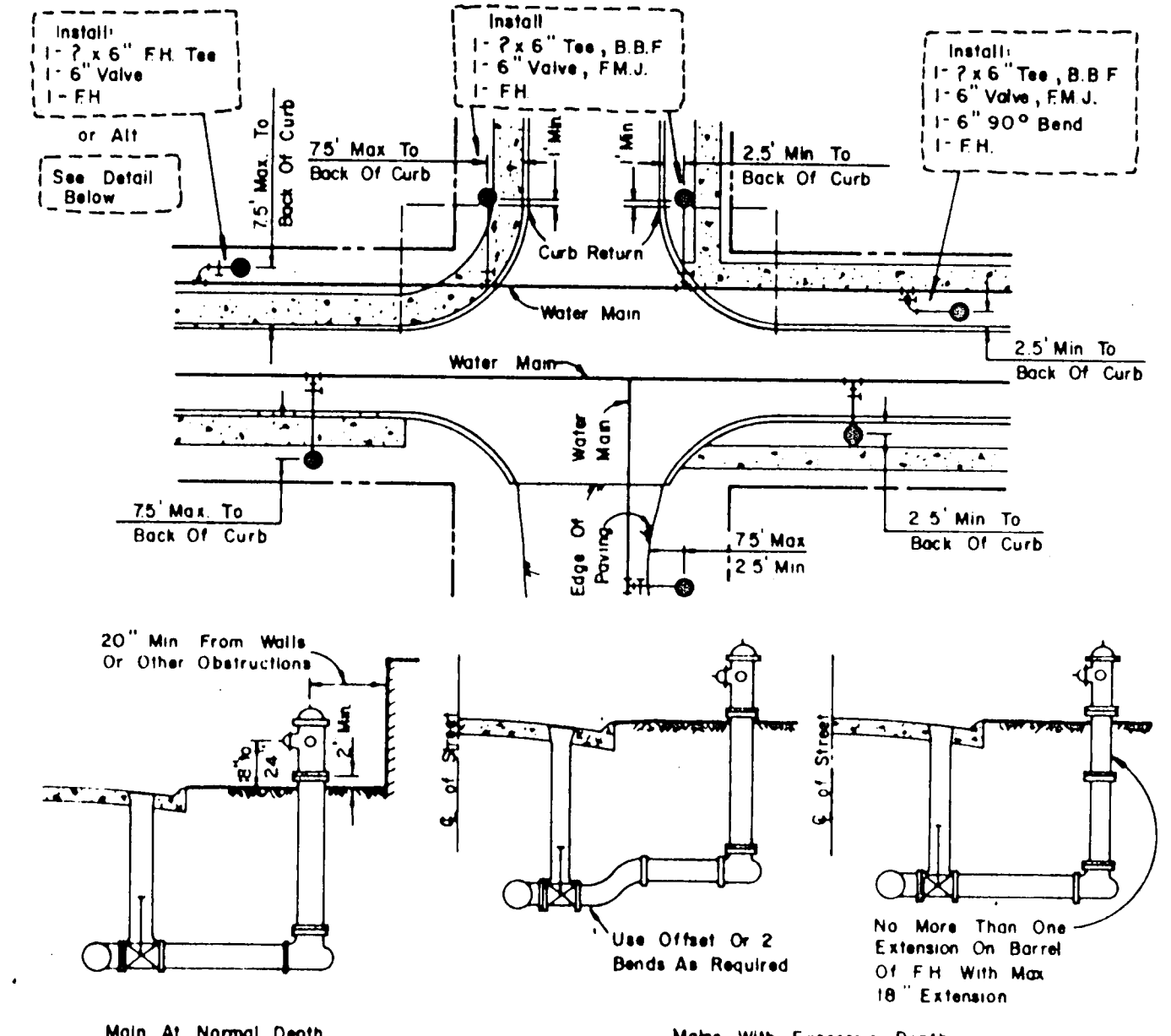


VALVE BOX DETAIL
(SEE PLANS FOR "MAIN SIZE")

FIRE HYDRANT INSTALLATION
(INCLUDES 4" VALVE)
No Scale

GATE VALVES AND VALVE BOXES

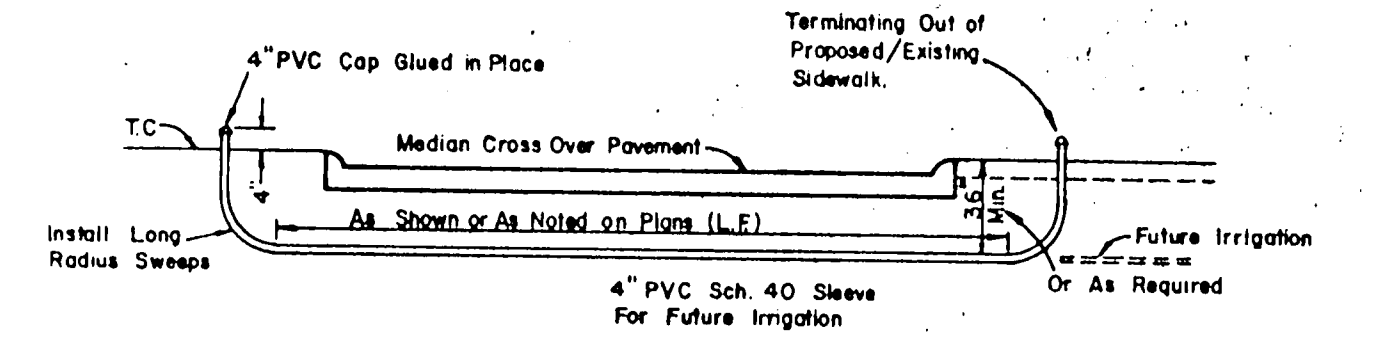
- GATE VALVES SHALL BE IRON BODY, BRONZE OR BRASS MOUNTED, NON-RISING STEM, PARALLEL SEAT TYPE VALVES, SHALL BE OF EQUAL OR GREATER PRESSURE CLASS THAN THE PIPING IN WHICH THEY ARE TO BE INSTALLED.
- VALVE BOXES SHALL BE CAST IRON AND SHALL BE OF SUFFICIENT LENGTH AND DIAMETER TO OPERATE ALL VALVES BURIED IN THE GROUND. COVERS SHALL BE MARKED "WATER" THE BOXES SHALL REST ON THE VALVE AND BE ADJUSTED SO THAT THE COVER MAY BE SET FLUSH WITH THE FINISHED GRADE.



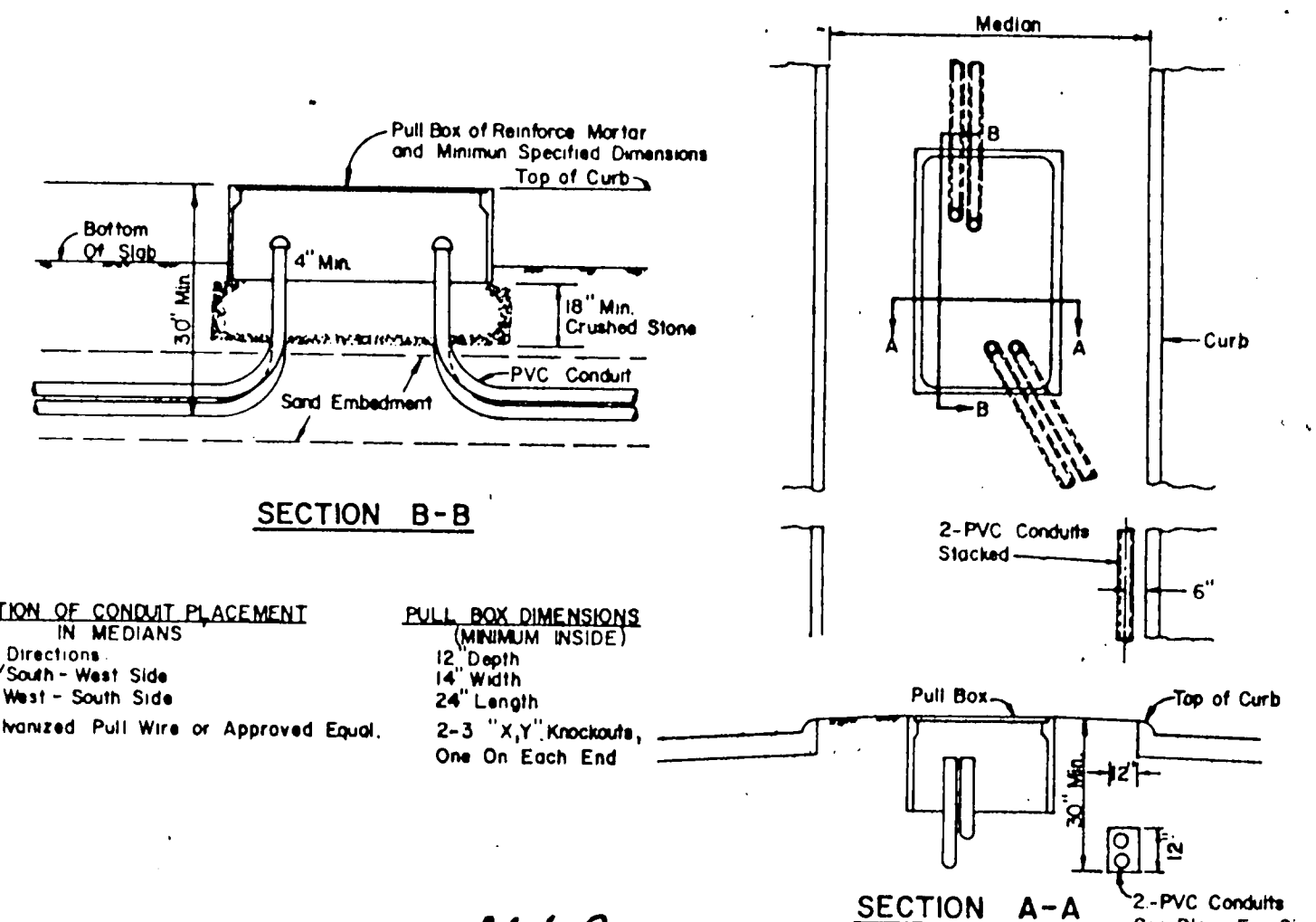
ELEVATION VIEW OF FIRE HYDRANT

GENERAL NOTES

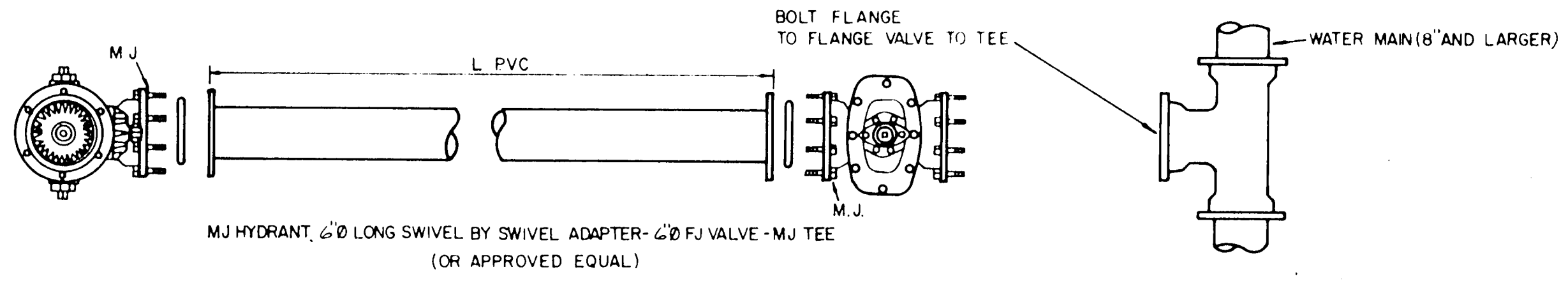
- G. O. F. H. Barrel Shall Be Not Less Than 6'0" Or More Than 9'0" From Back Of Curb Or Edge Of Pavement.
- Do Not Set F.H. In An Existing Or Proposed Sidewalk, Unless Otherwise Noted.
- All F.H. Tees Shall Be M.J. With Anchoring On The Branch With M.J., M.J. 6" Valve.
- Set F.H. On The Lot Line Extended When Possible.
- On Private Contracts, The Developer's Engineer Will Stake Location & Grade.
- Never Place F.H. Where Fire Truck Could Not Park Beside It.



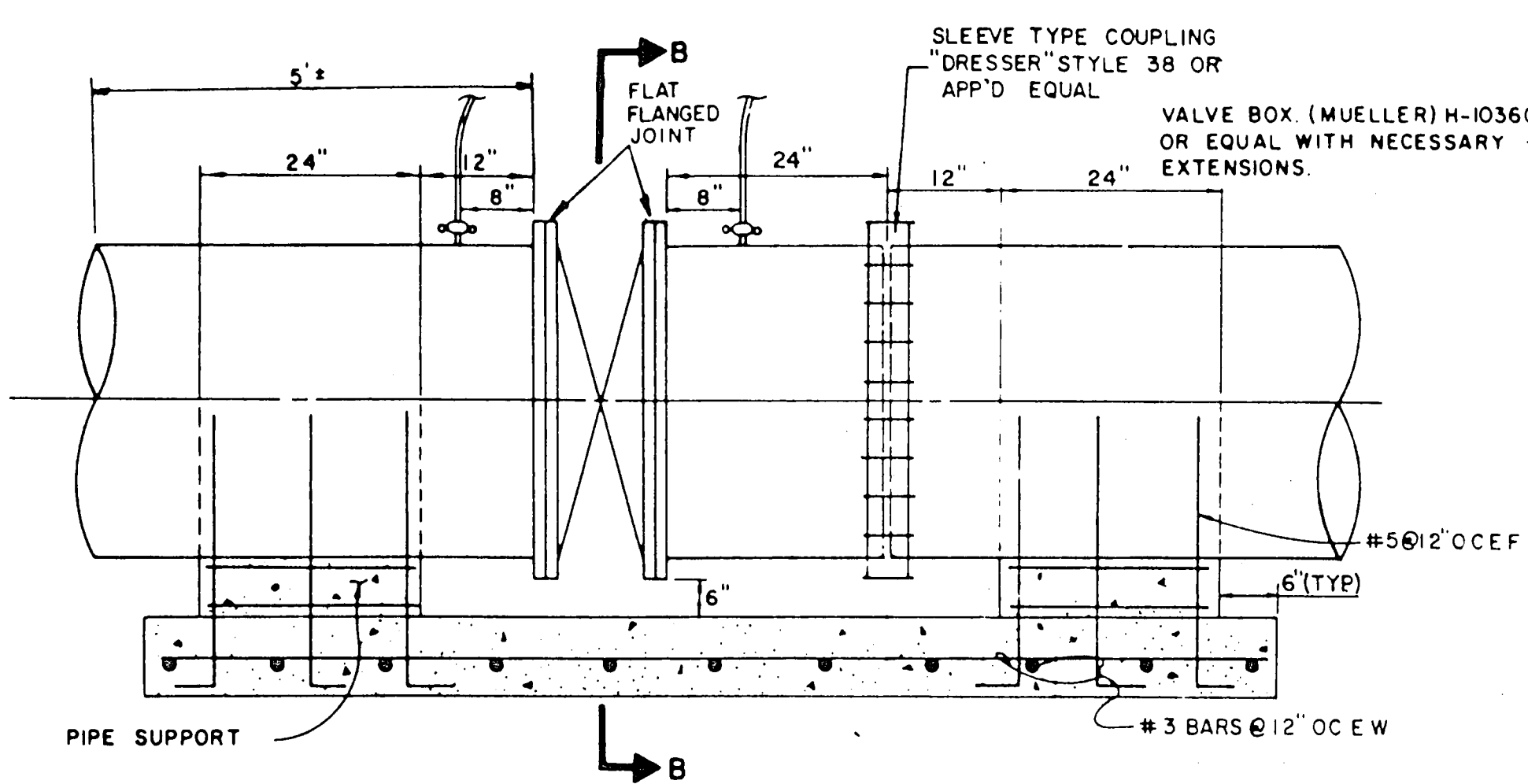
PVC SLEEVE FOR FUTURE IRRIGATION
N.I.C.



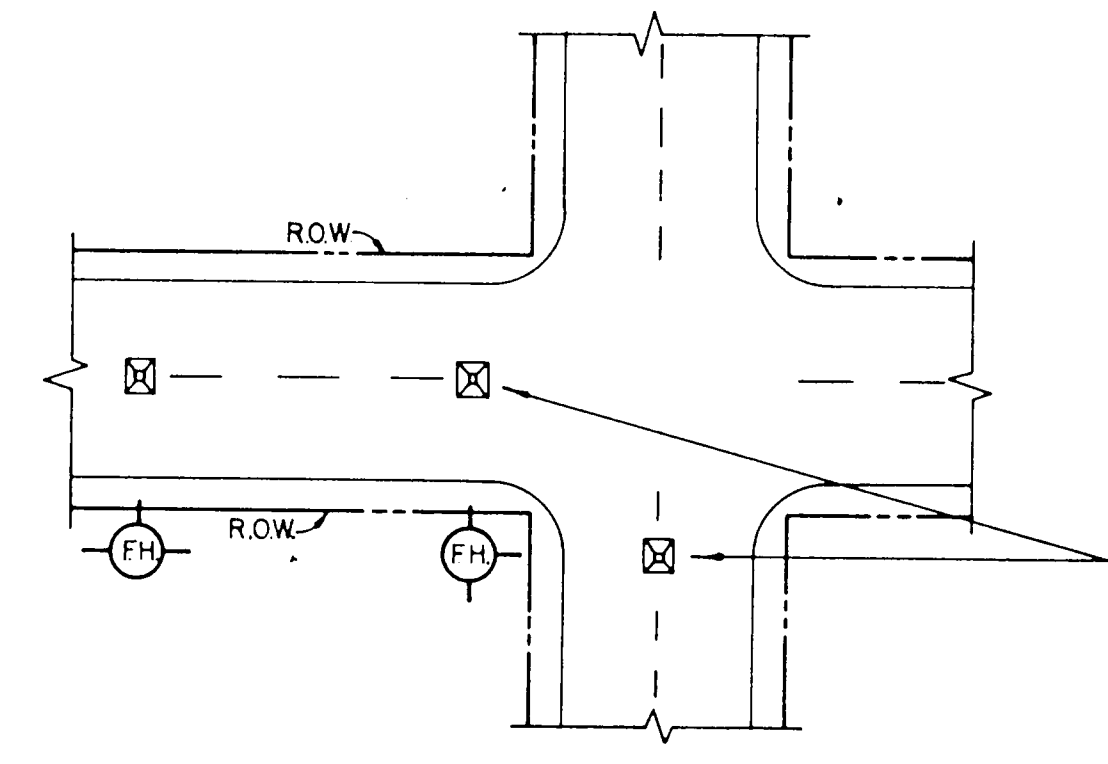
PULL BOX & CONDUIT DETAIL
N.I.C.



TYPICAL FIRE HYDRANT INSTALLATION

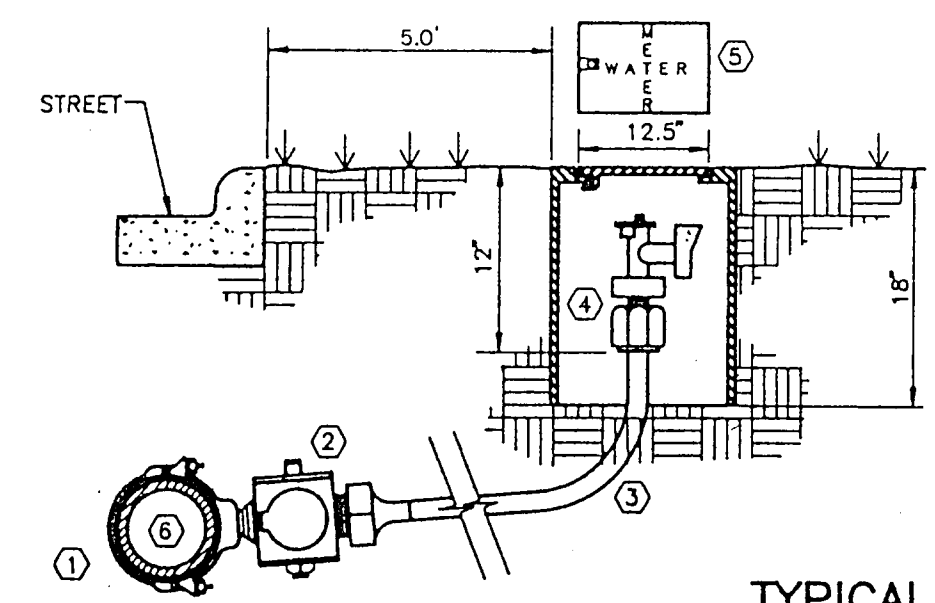


BUTTERFLY VALVE DETAIL
N.I.C.



TYPICAL FIRE HYDRANT REFLECTOR INSTALLATION

A BLUE STIMONITE FIRE-LITE REFLECTOR (OR APPROVED EQUAL) TO BE PLACED IN THE CENTER OF STREET OPPOSITE FIRE HYDRANTS. THE INSTALLATION OF THIS REFLECTOR SHALL BE AS PRESCRIBED BY THE MANUFACTURER.

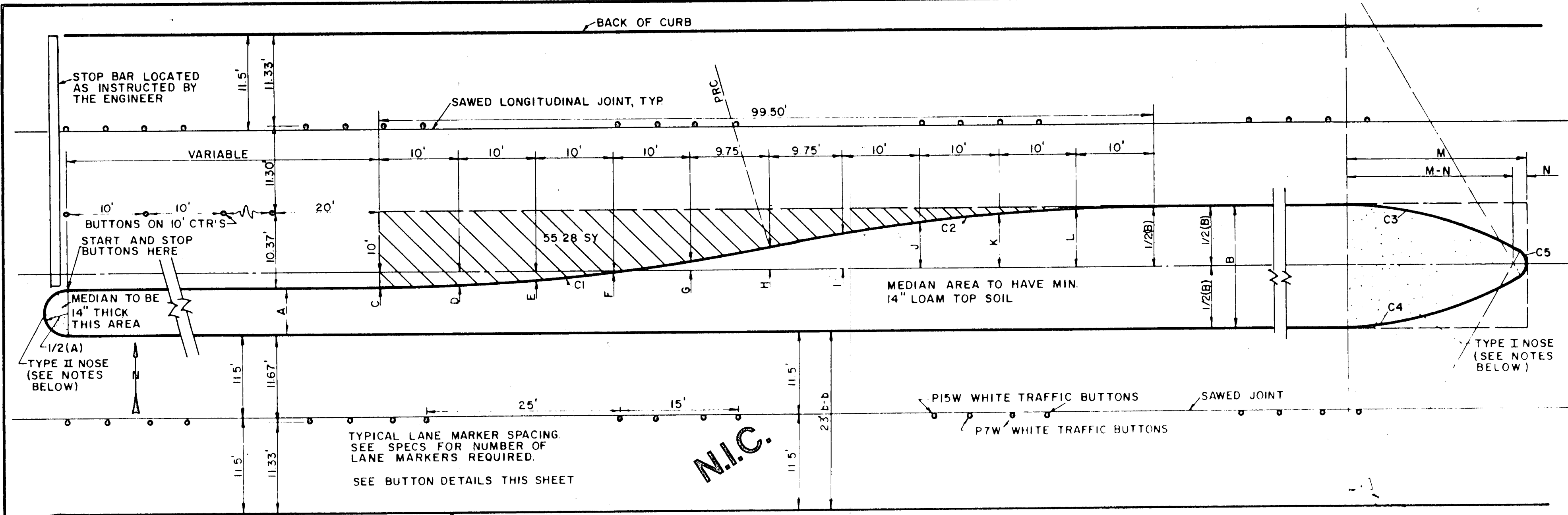


TYPICAL WATER SERVICE DETAIL

- DOUBLE STRAP BRONZE SADDLE W/CCW THREADS. MUELLER.
- CORPORATION STOP W/CCW THREADS. MUELLER. H-15008 COMPRESSION OR H-15000 FLARED.
- 3/4" TYPE "K" SOFT COPPER W/NO SPLICES AS BUILTS
- ANGLE STOP W/LOCK WING. MUELLER H-14258 COMPRESSION OR H-14255 FLARED.
- WATER METER BOX (RECTANGULAR SHAPE ONLY) CONCRETE OR METAL SHELL CONSTRUCTION
- WATER MAIN PVC AWWA C900 SDR 14/18 INTEGRAL WALL BELL

I CERTIFY THIS PROJECT WAS CONSTRUCTED IN GENERAL CONFORMANCE WITH THESE CONSTRUCTION PLANS AND WILL FUNCTION AS DESIGNED.

TOWN OF ADDISON, TEXAS DEPARTMENT OF ENGINEERING			
STANDARD CONSTRUCTION DETAILS WATER			
FIRE HYDRANTS, PULL BOXES AND VALVES			
Designed -	Drawn -	Date - AUGUST, 1991	Job No. - 90025-6
Approved -	Checked -	Scale -	Sheet D-8 OF



MEDIAN DIMENSION CHART

B	C	D	E	F	G	H	I	J	K	L	M	N
12	4.00'S	3.80'S	3.20'S	2.19'S	0.78'S	1.00'N	2.78'N	4.19'N	5.20'N	5.80'N	22.56'	1.00'
13	3.50'S	3.30'S	2.70'S	1.69'S	0.28'S	1.50'N	3.28'N	4.69'N	5.70'N	6.30'N	23.56'	1.00'
14	3.00'S	2.80'S	2.20'S	1.19'S	0.22'N	2.00'N	3.78'N	5.19'N	6.20'N	6.80'N	22.68'	2.50'
15	2.50'S	2.30'S	1.70'S	0.69'S	0.72'N	2.50'N	4.28'N	5.69'N	6.70'N	7.30'N	23.71'	2.50'
16	2.00'S	1.80'S	1.20'S	0.19'S	1.22'N	3.00'N	4.78'N	6.19'N	7.20'N	7.80'N	23.46'	3.50'
17	1.50'S	1.30'S	0.70'S	0.31'N	1.72'N	3.50'N	5.28'N	6.69'N	7.70'N	8.30'N	24.48'	3.50'
18	1.00'S	0.80'S	0.20'S	0.81'N	2.22'N	4.00'N	5.78'N	7.19'N	8.20'N	8.80'N	25.44'	3.50'
19	0.50'S	0.30'S	0.30'N	1.31'N	2.72'N	4.50'N	6.28'N	7.69'N	8.70'N	9.30'N	26.34'	3.50'
20	0.00'	0.20'N	0.80'N	1.81'N	3.22'N	5.00'N	6.78'N	8.19'N	9.20'N	9.80'N	26.72'	4.00'
21	0.50'N	0.70'N	1.30'N	2.31'N	3.72'N	5.50'N	7.28'N	8.69'N	9.70'N	10.30'N	27.57'	4.00'
22	1.00'N	1.20'N	1.80'N	2.81'N	4.22'N	6.00'N	7.78'N	9.19'N	10.20'N	10.80'N	28.39'	4.00'
23	1.50'N	1.70'N	2.30'N	3.31'N	4.72'N	6.50'N	8.28'N	9.69'N	10.70'N	11.30'N	29.17'	4.00'
24	2.00'N	2.30'N	2.80'N	3.81'N	5.22'N	7.00'N	8.78'N	10.19'N	11.20'N	11.80'N	29.92'	4.00'

N = NORTH OF CENTERLINE
S = SOUTH OF CENTERLINE

CURVE DATA C3 & C4 FOR 7' * A = 14'

A	Δ	R	T	L	M	N
7	18°22'52"	50'	8.09'	16.04'	16.45'	1.00'
8	20°09'11"		8.89'	17.59'	17.88'	1.00'
9	21°47'12"		9.62'	19.01'	19.19'	1.00'
10	23°18'41"		10.31'	20.34'	20.39'	1.00'
11	24°44'50"		10.97'	21.60'	21.51'	1.00'
12	26°06'32"		11.59'	22.78'	22.56'	1.00'
13	27°24'27"		12.19'	23.92'	23.56'	1.00'
14	28°08'28"		11.15'	21.94'	22.68'	2.50'

CURVE DATA C1 C2 FOR 11°28'40"

R = 250'
T = 25.13'
L = 50.08'

CURVE DATA C3 & C4 FOR 12' * B = 24'

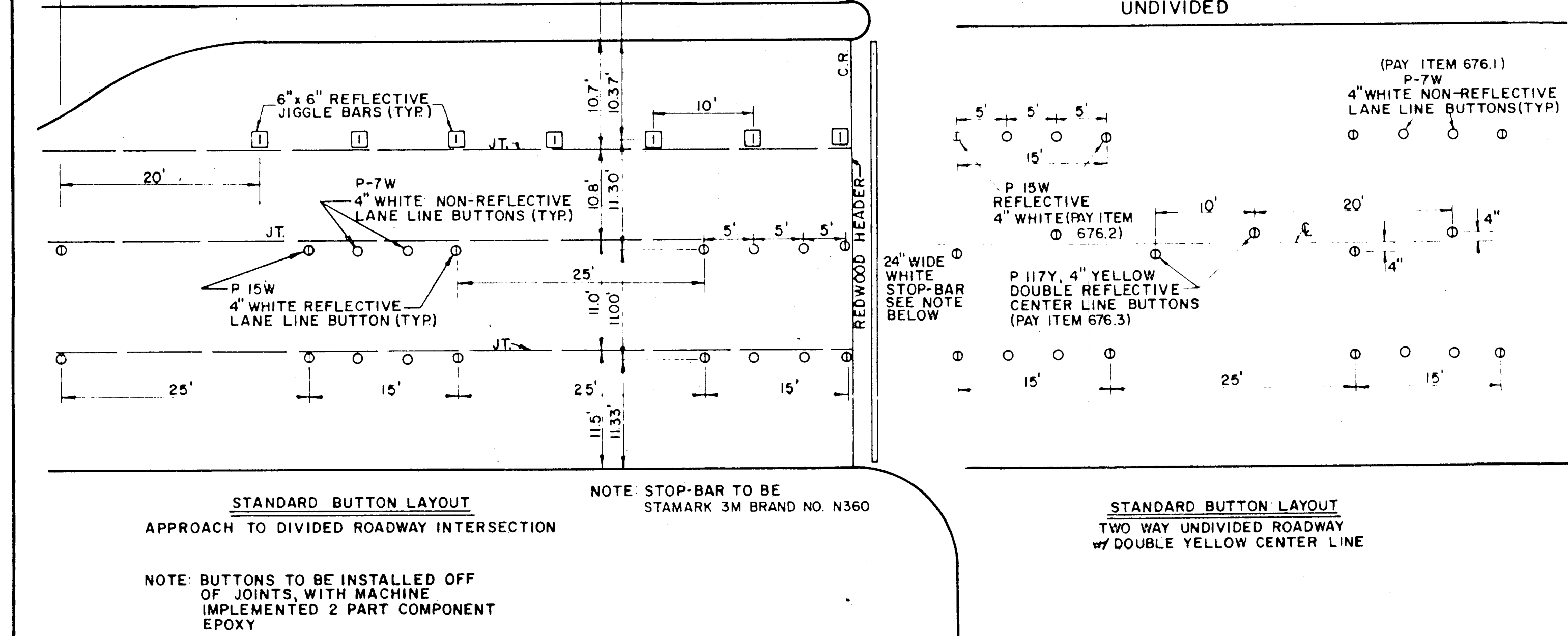
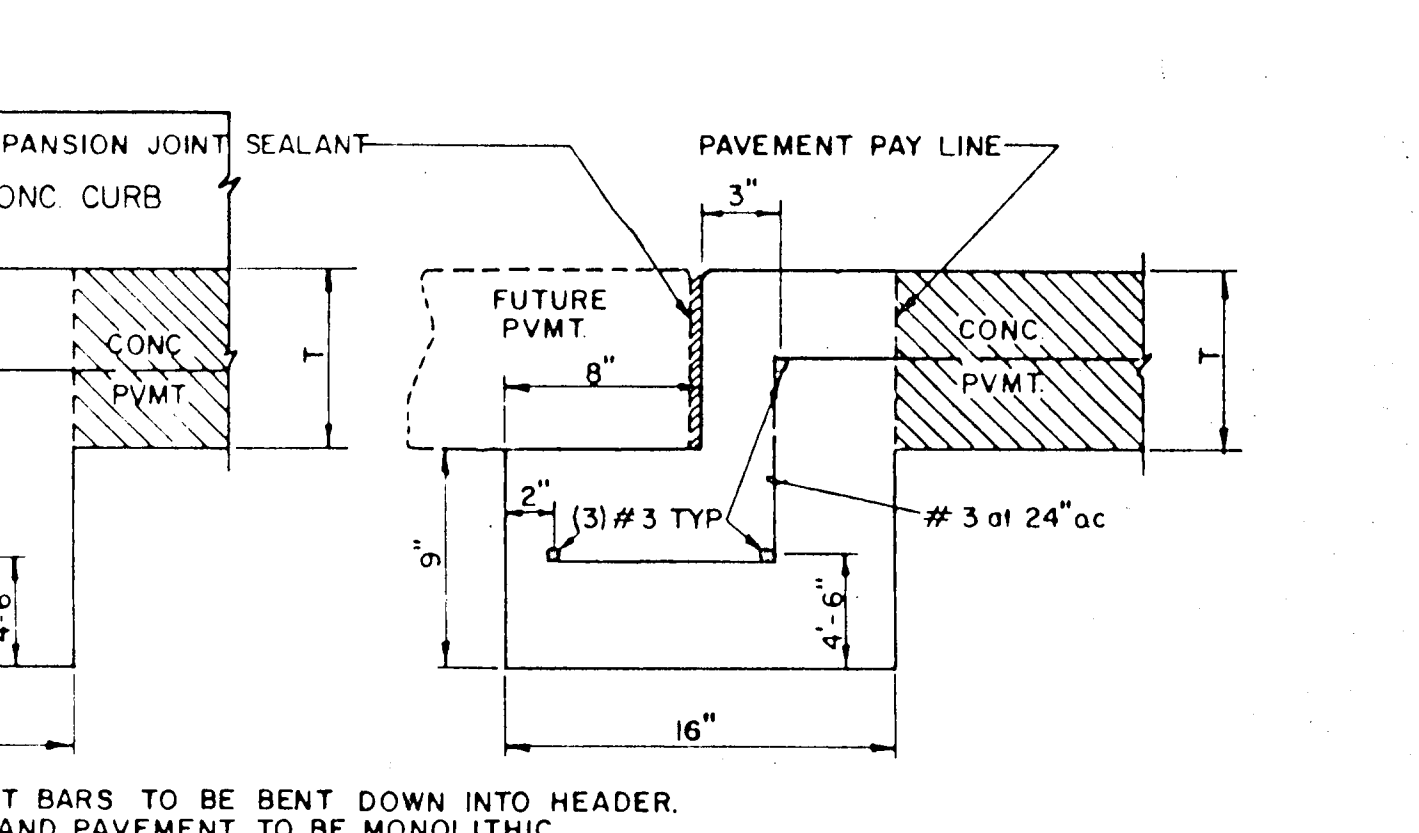
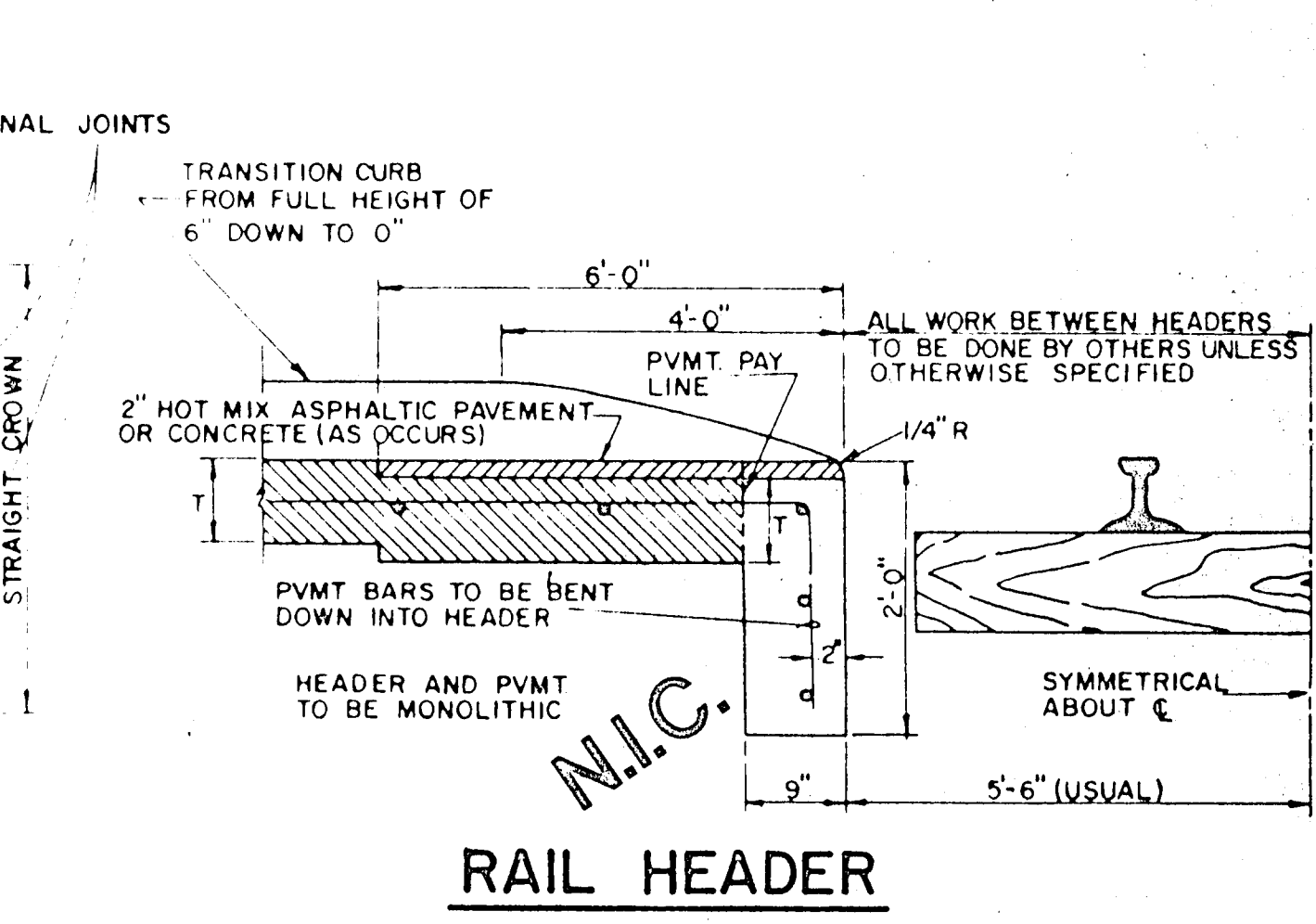
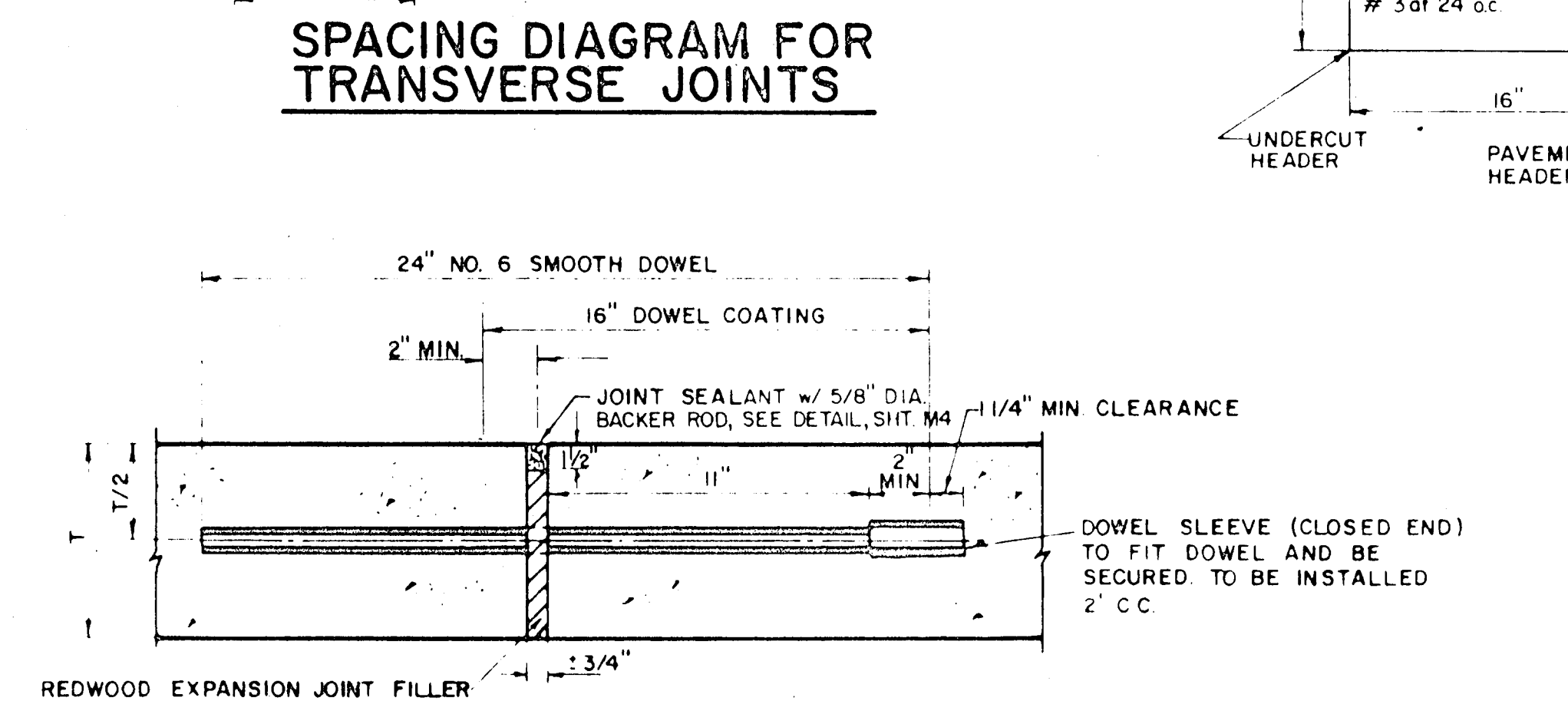
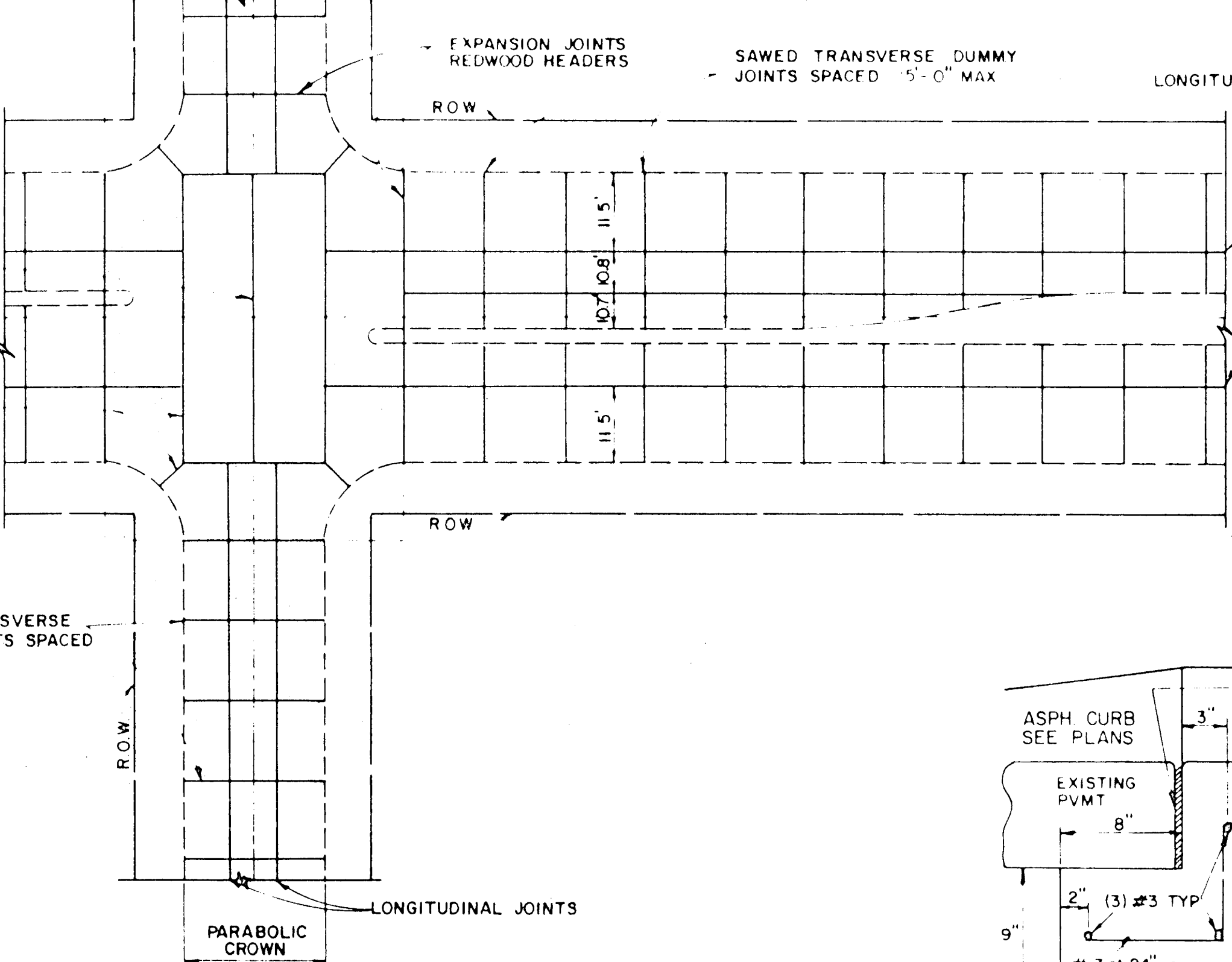
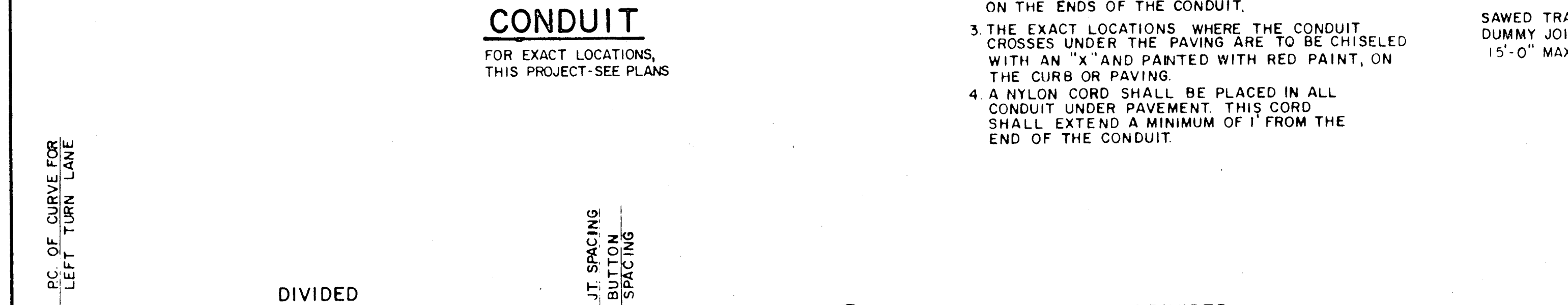
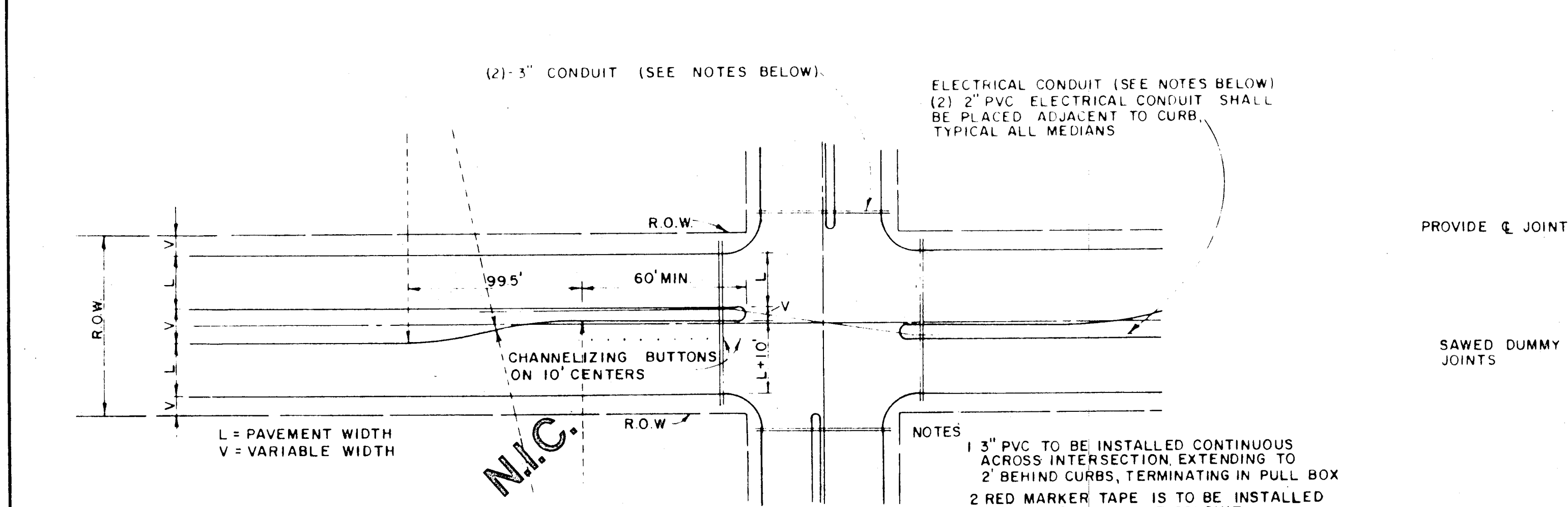
B	Δ	R	T	L
12	26°06'32"	50.00'	11.59'	22.78'
13	27°24'27"		12.19'	23.92'
14	28°08'28"		11.15'	21.94'
15	26°31'32"		11.79'	23.15'
16	25°24'53"		11.27'	22.18'
17	26°48'51"		11.92'	23.40'
18	28°08'58"		12.54'	24.57'
19	29°25'43"		13.13'	25.68'
20	29°35'30"		13.21'	25.82'
21	30°49'46"		13.79'	26.90'
22	32°01'26"		14.35'	27.95'
23	33°10'48"		14.90'	28.96'
24	34°18'05"		15.43'	29.93'

CURVE DATA C5 FOR 12' * B = 24'

B	Δ	R	T	L
12	127°47'32"	100'	2.04'	2.23'
13	125°12'46"	100'	1.93'	2.19'
14	129°43'08"	250'	5.33'	5.66'
15	126°57'31"	250'	5.01'	5.54'
16	129°09'33"	350'	7.36'	7.89'
17	126°21'44"	350'	6.92'	7.72'
18	123°41'38"	350'	6.54'	7.56'
19	120°52'03"	350'	6.17'	7.38'
20	120°48'56"	400'	7.04'	8.43'
21	118°21'08"	400'	6.70'	8.26'
22	115°57'07"	400'	6.40'	8.10'
23	113°38'22"	400'	6.12'	7.93'
24	111°23'48"	400'	5.86'	7.78'

CURVE DATA C5 FOR 7' * A = 14'

A	Δ	R	T	L
7	143°14'15"	100'	3.01'	2.50'
8	139°41'38"	100'	2.72'	2.44'
9	136°25'35"	100'	2.50'	2.38'
10	133°22'38"	100'	2.32'	2.33'
11	130°30'20"	100'	2.17'	2.28'
12	127°47'32"	100'	2.04'	2.23'
13	125°12'46"	100'	1.93'	2.19'
14	129°43'08"	250'	5.33'	5.66'



TOWN OF ADDISON, TEXAS
DEPARTMENT OF ENGINEERING

STANDARD CONSTRUCTION DETAILS
PAVING

TURN LANES & JOINTS

Designed - _____ Drawn - _____ Date - AUGUST, 1991 Job No. - 90025-6
Approved - _____ Checked - _____ Scale - _____ Sheet 13 of 14