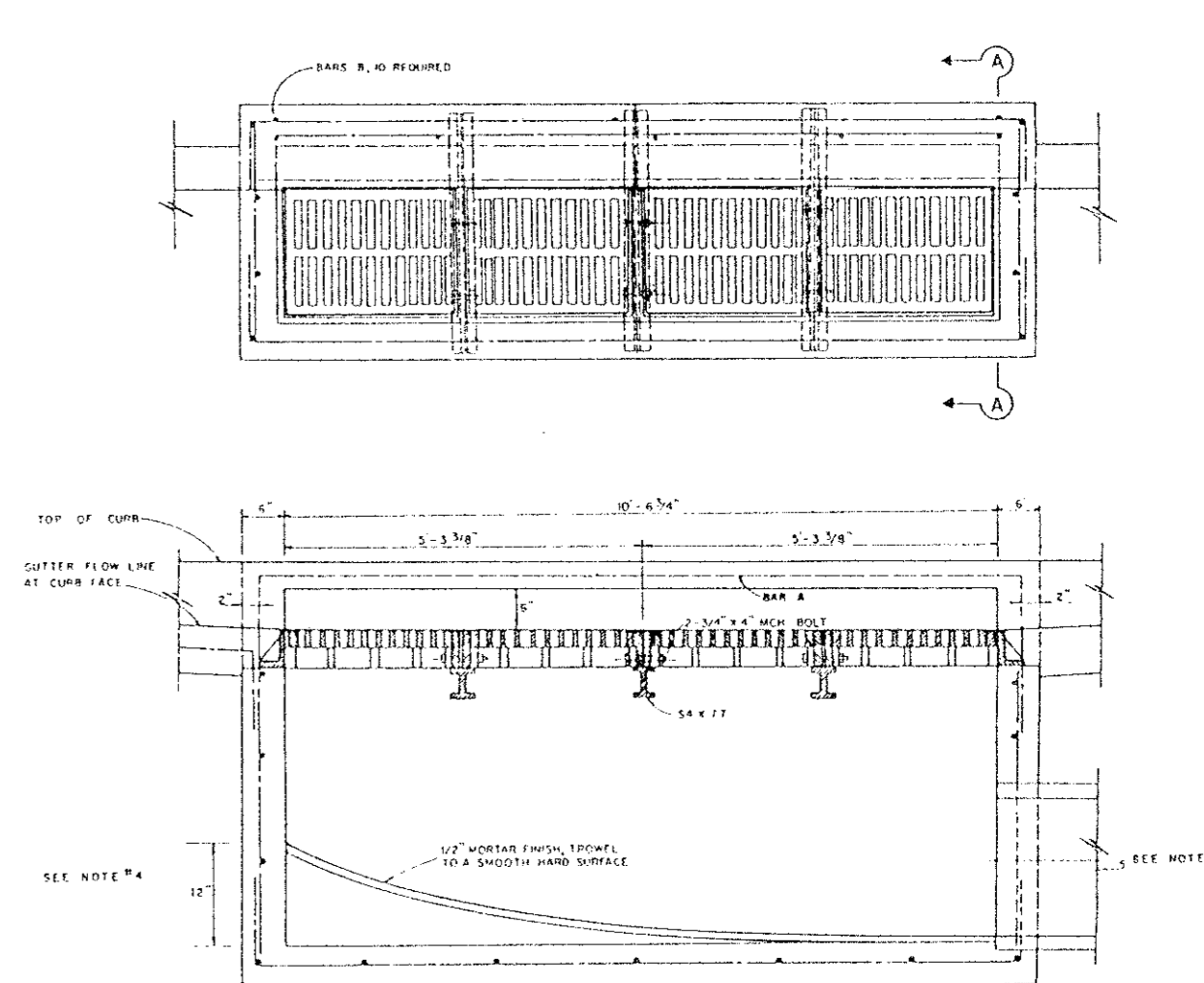
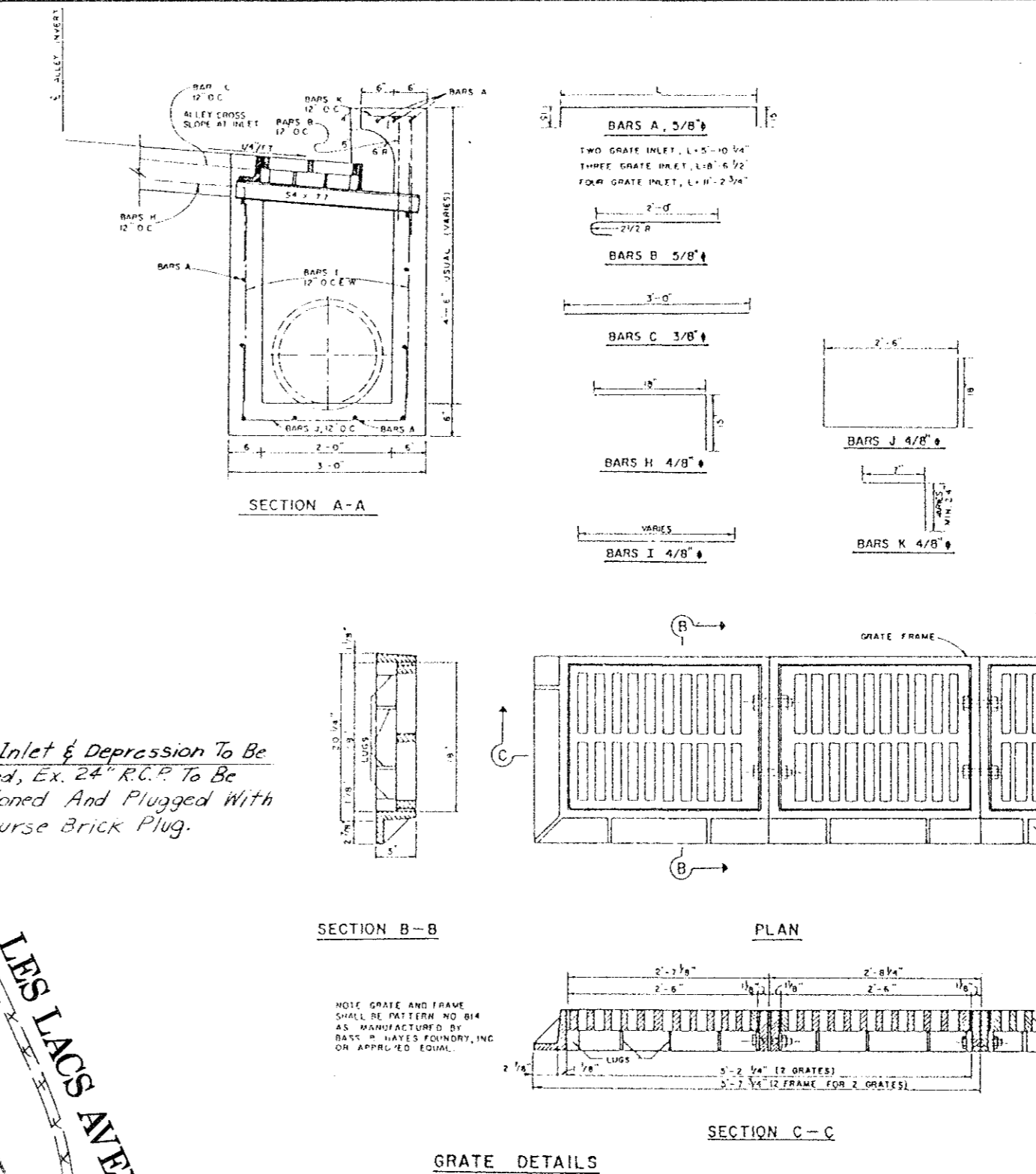
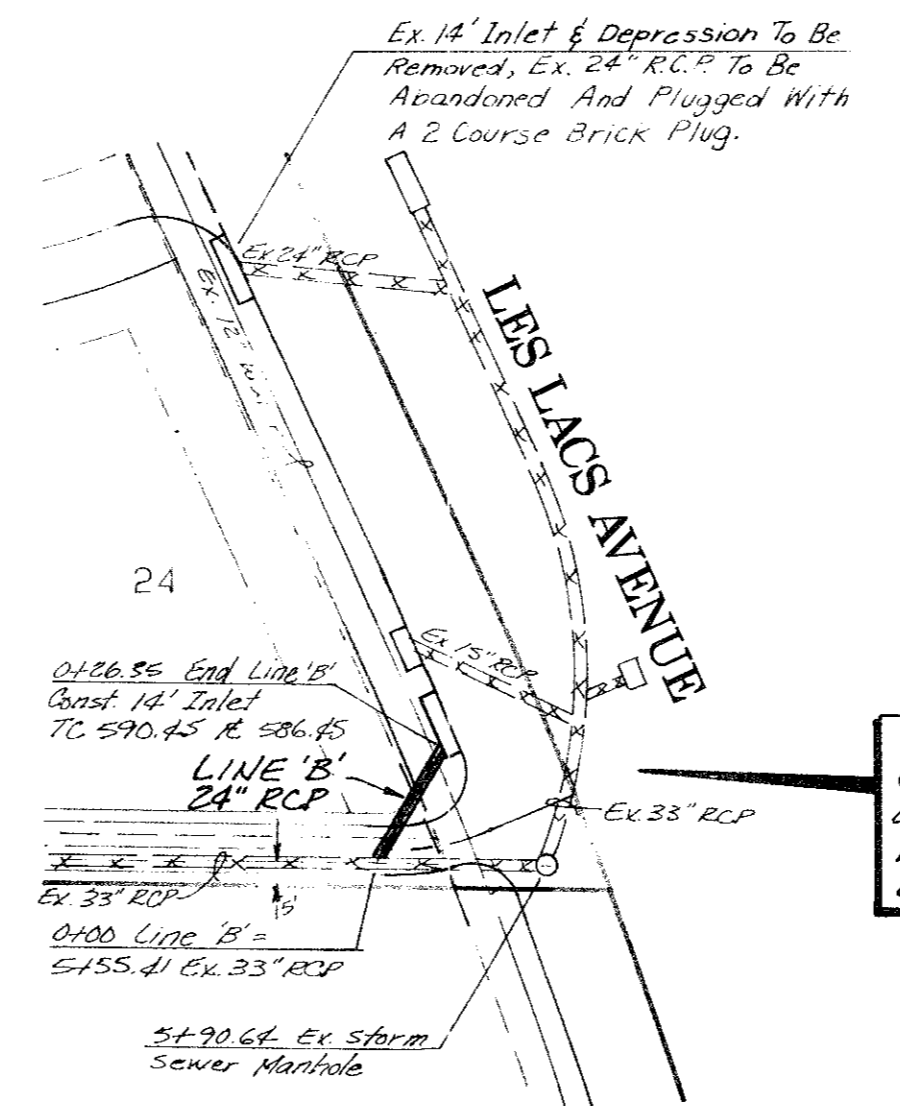
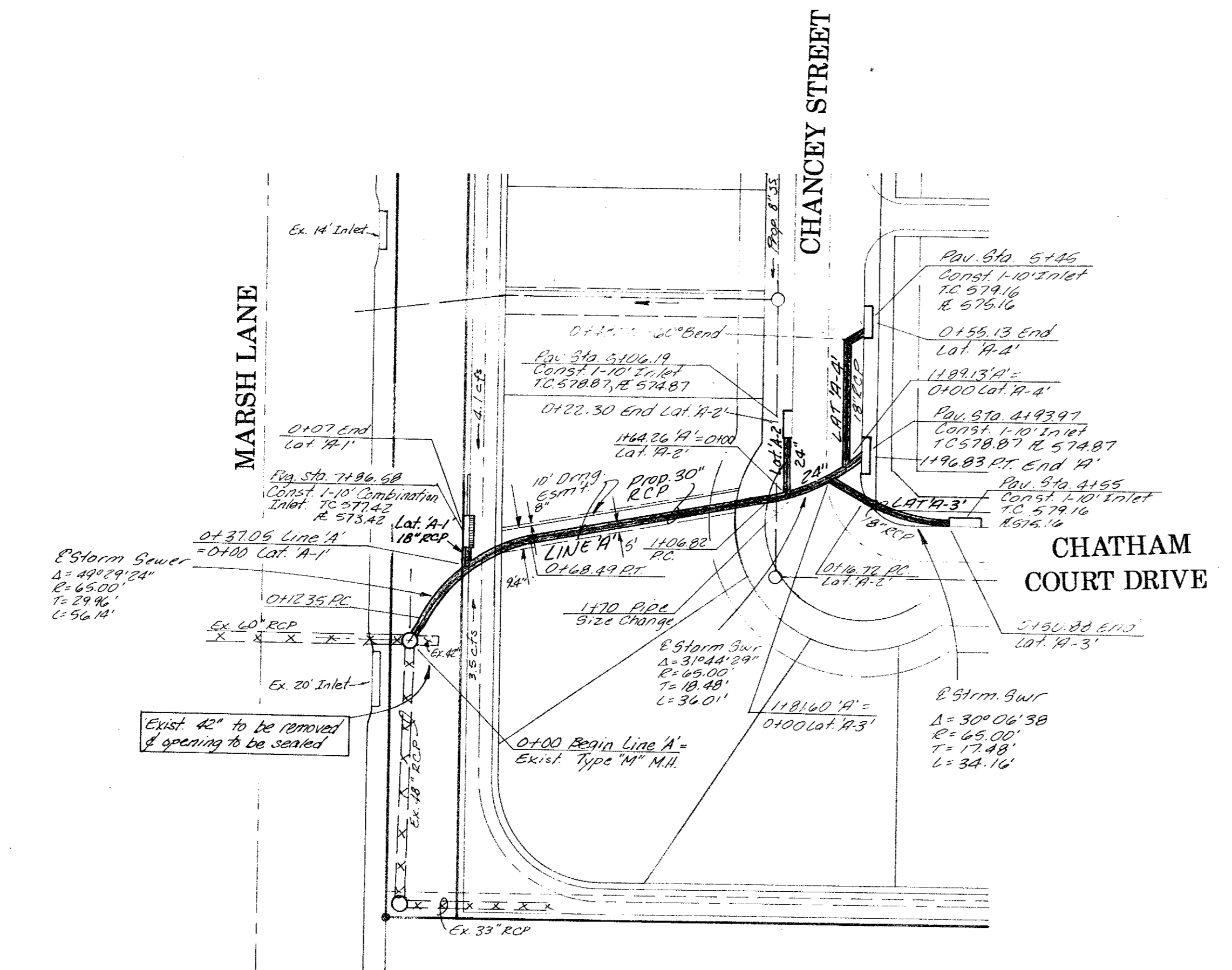
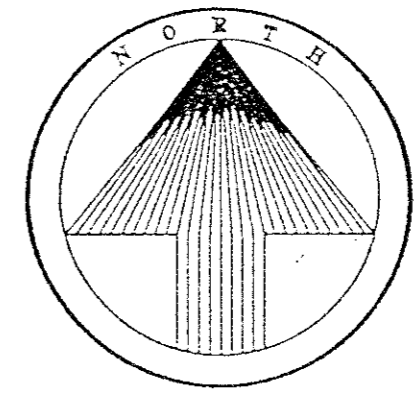
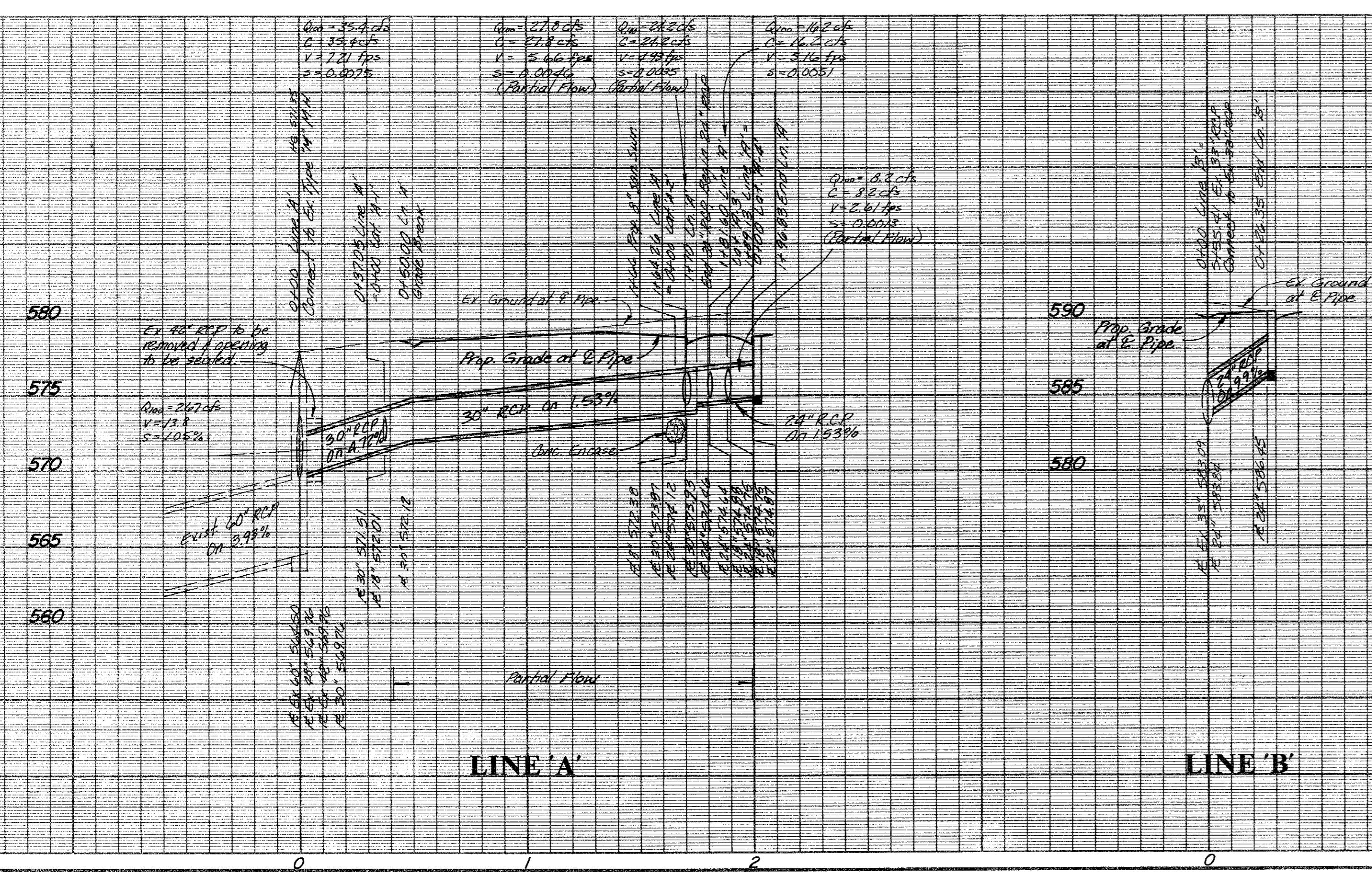


Revisions	Date	Description	Drawn By	Checked By



NOTES:
 1. COORDINATE POINTS TO BE SET BY ALL CONTRACTORS.
 2. ALL MANHOLES AND INLETS TO BE SET TO THE SAME ELEVATION UNLESS OTHERWISE NOTED OTHERWISE.
 3. ALL MANHOLES TO BE SET TO THE SAME ELEVATION UNLESS OTHERWISE NOTED OTHERWISE.
 4. ALL MANHOLES TO BE SET TO THE SAME ELEVATION UNLESS OTHERWISE NOTED OTHERWISE.
 5. ALL MANHOLES TO BE SET TO THE SAME ELEVATION UNLESS OTHERWISE NOTED OTHERWISE.

BENCHMARKS:
 Square cut on N.W. corner of footing of T.U. Electric tower No. 12N-3W-T288 near Addison Fire Station No. 2. Elev. 605.20
 Square cut on top of curb of east median nose in the centerline of Beltway Drive at Les Lacs Avenue. Elev. 594.42
 Square cut on centerline of 14' inlet at the N.E. corner of the intersection of Beltway Drive and Marsh Lane. Elev. 585.20

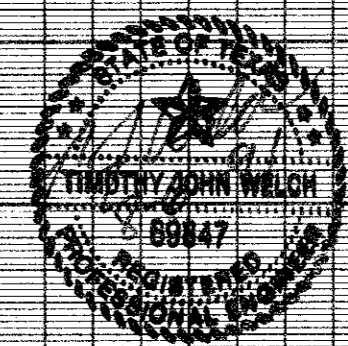


AS BUILT
 I CERTIFY THIS PROJECT WAS CONSTRUCTED IN GENERAL CONFORMANCE WITH THESE CONSTRUCTION PLANS AND WILL FUNCTION AS DESIGNED.

STORM SEWER PLAN & PROFILES
CHATHAM COURT
 TOWN OF ADDISON, TEXAS

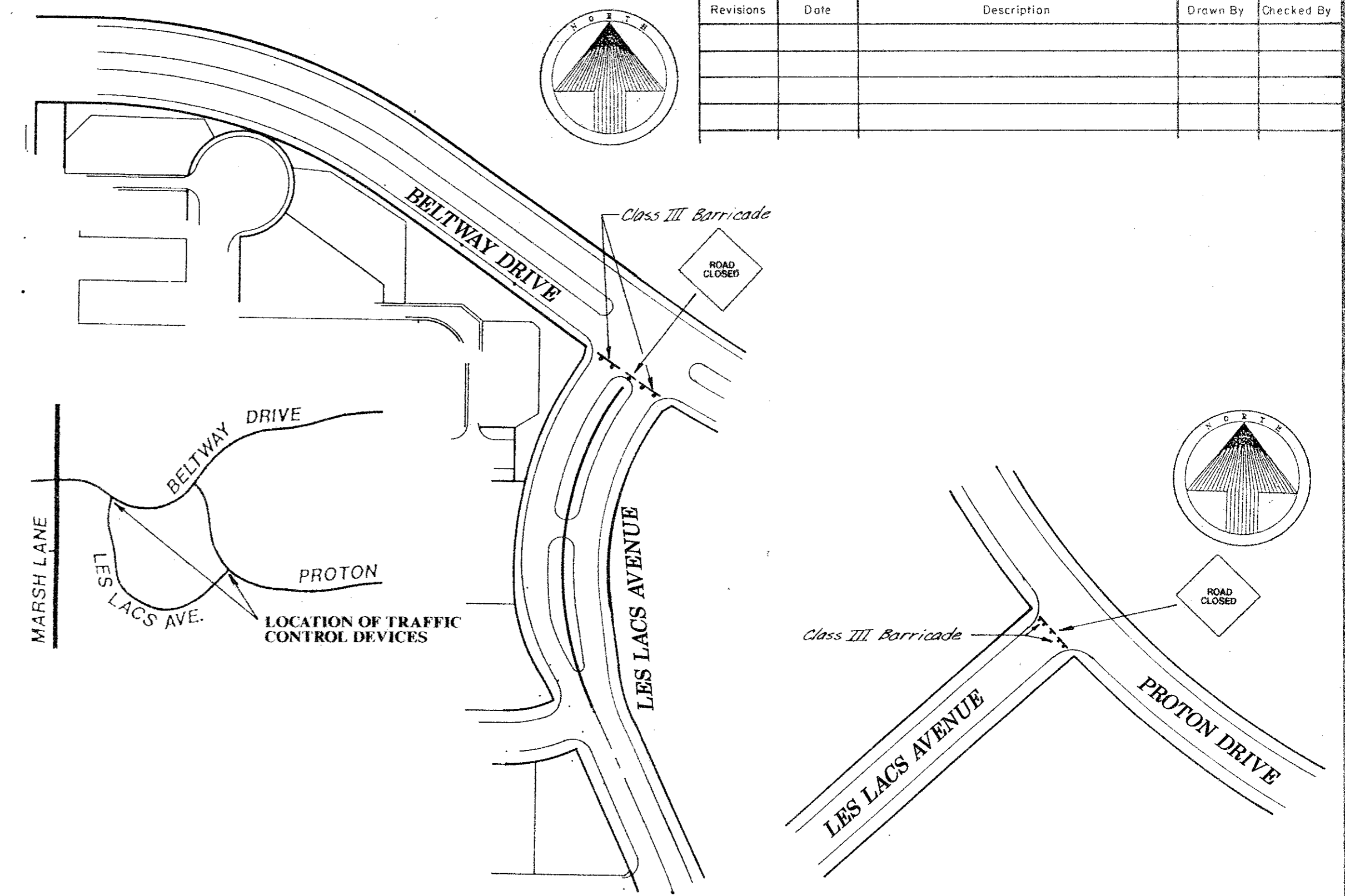
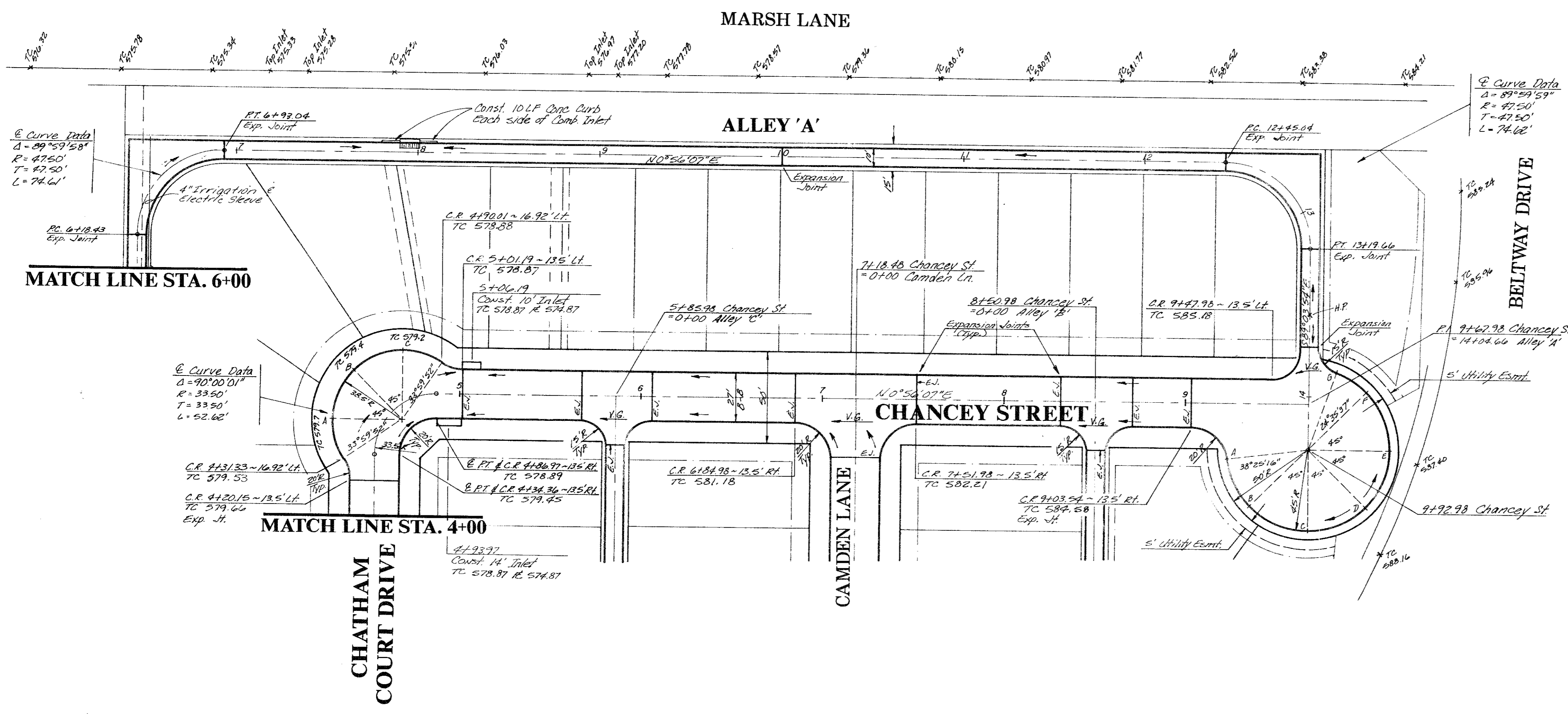
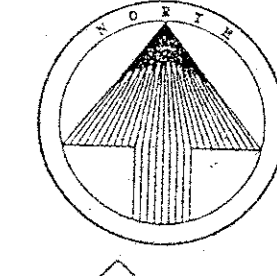
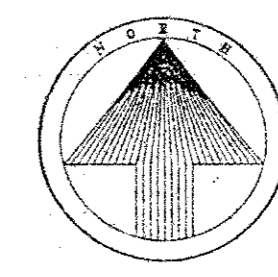
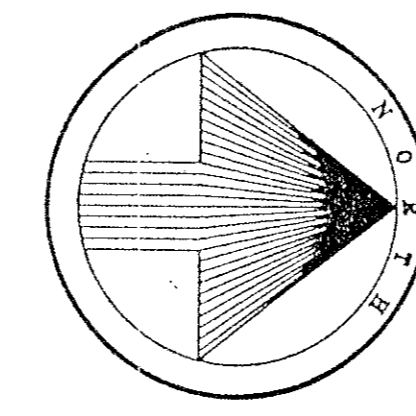
THE NELSON CORPORATION
 LAND PLANNING • ENGINEERING • SURVEYING
 5999 SUMMERSIDE DRIVE • SUITE 202 • DALLAS, TEXAS 75252 • (214) 380-2605

DESIGN	DRAWN	DATE	SCALE	FILE	SHEET NO.
TNC	TNC	AUG, 1991	1"=40' H 1"=6' V	90025-4	DR-1



ARCHIVE SURFACES N02220

Revisions	Date	Description	Drawn By	Checked By

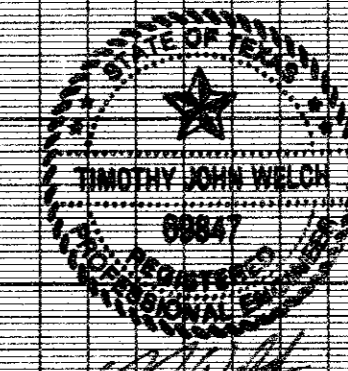
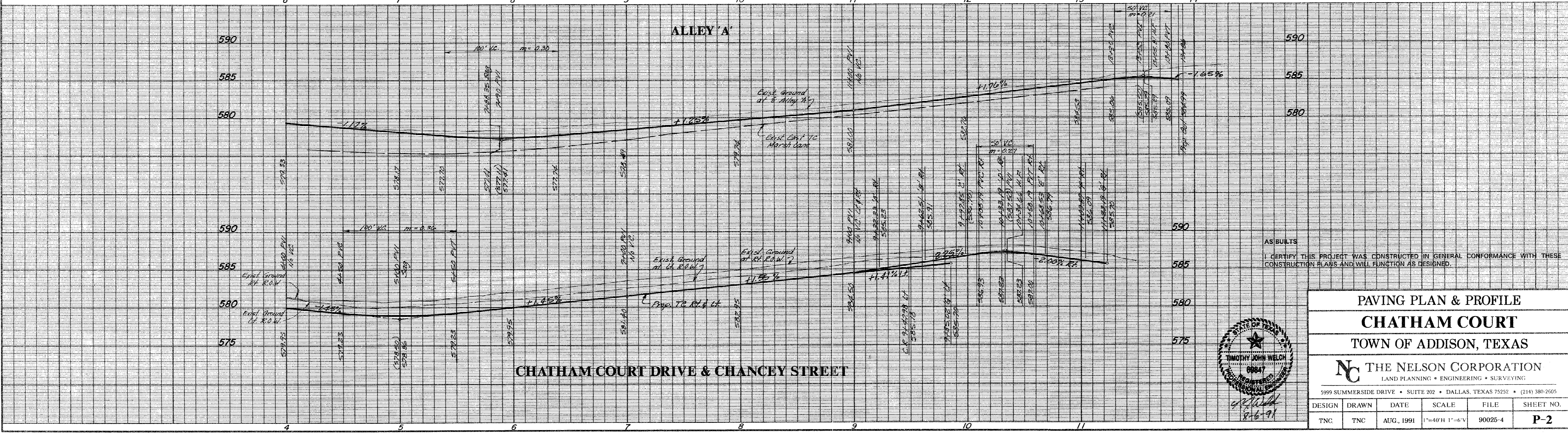


GENERAL NOTES:

- All installations, materials, procedures, removals and maintenance of the traffic control devices (TCD's) shown on the plan shall conform with the latest edition of the Texas Manual on Uniform Traffic Control Devices (TMUTCD).
- Portable signs shall be turned away from oncoming traffic when the contractor is not working.
- During construction, maintain at a minimum one twelve foot lane on the existing road for thru traffic as shown on the Traffic Control & Warning Device Plan.
- The height and positioning of proposed warning signs shall be as follows:
 - Single-panel signs shall be mounted a minimum height of 7' and double panel signs shall be mounted a minimum height of 6' as measured from the bottom edge of the bottom panel to the nearest roadway surface.
 - Warning signs shall be placed a minimum of 6' from the nearest pavement or shoulder edge as measured from the nearest panel edge.
- Proposed sign posts shall be of breakaway material (portable, wood, perforated metal, etc.).
- Sign panels shall have a smooth, sealed reflectorized surface of a color consistent with the TMUTCD with a contrasting legend.
- Daily inspections of all proposed TCD's shall be made by the contractor to insure proper traffic control and good equipment condition.
- Payment for installation, maintenance, removals, flagmen and other incidentals associated with the proposed traffic control plan on this sheet, will be subsidiary to the various bid items.

BENCHMARKS:

- Square cut on N.W. corner of footing of T.U. Electric tower No. 12N-3W-T288 near Addison Fire Station No. 2. Elev. 605.20
- Square cut on top of curb of east median nose in the centerline of Beltway Drive at Les Lacs Avenue. Elev. 594.42
- Square cut on centerline of 14' inlet at the N.E. corner of the intersection of Beltway Drive and Marsh Lane. Elev. 585.20



PAVING PLAN & PROFILE
CHATHAM COURT
 TOWN OF ADDISON, TEXAS

THE NELSON CORPORATION
 LAND PLANNING • ENGINEERING • SURVEYING
 5999 SUMMERSIDE DRIVE • SUITE 202 • DALLAS, TEXAS 75252 • (214) 380-2605

DESIGN	DRAWN	DATE	SCALE	FILE	SHEET NO.
TNC	TNC	AUG, 1991	1"=40'H 1"=6'V	90025-4	P-2

CONSTRUCTION PLANS

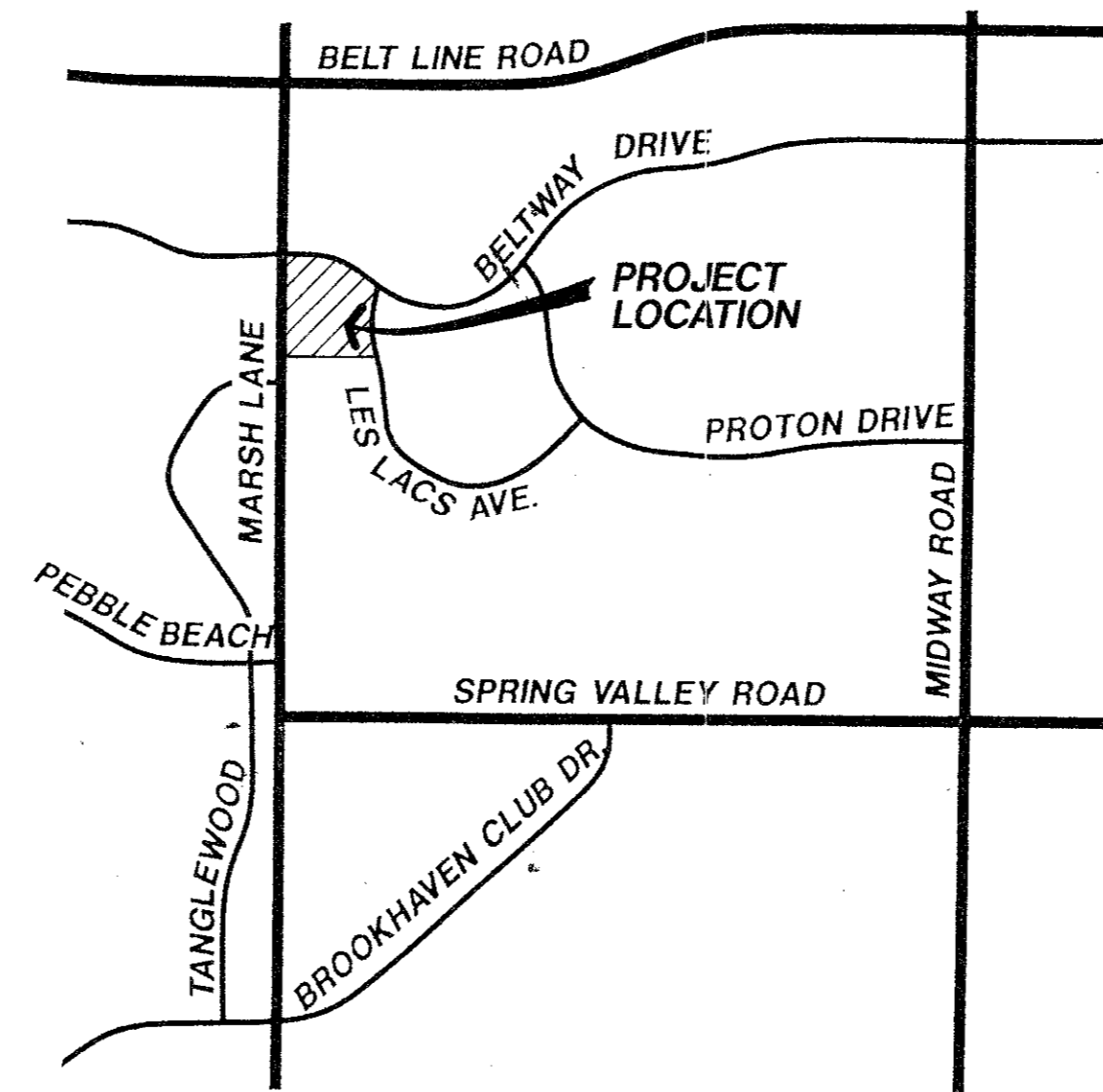
FOR

CHATHAM COURT

TOWN OF ADDISON, TEXAS

GENERAL NOTES

- A. Prior to final acceptance by the Town of Addison.
- 1) A Texas Registered Professional engineer shall certify that the project was constructed in accordance with the plans and specifications approved by the Town of Addison.
- The owner shall provide 1 reproducible set of as-builts (sealed and certified by a Texas Registered Engineer) and 2 blue line sets.
- 2) A five foot sidewalk shall be installed along Les Lecs Avenue. See attached detail.
- 4) A one year maintenance bond is required for the internal subdivision infrastructure.
- 5) Contractor shall demonstrate that the water and sanitary sewer systems meet the proper pressure, bacteria, and mandrel tests. In addition, the owner shall provide a VHS format video tape of the sanitary sewer.
- B. Prior to starting construction, the contractor shall contract the utility companies to locate existing facilities. These include but may not be limited to the following:
- 1) Town of Addison
 - 2) Lone Star Gas
 - 4) Southwestern Bell
 - 5) Storer Cable
 - 6) Planned Cable Systems
 - 7) TU Electric
- C. Prior to beginning construction, the owner or his authorized representative shall convene a Pre-Construction Conference between the Town of Addison, Consulting Engineer, Contractor(s), utility companies and any other affected parties. Notify Bruce Ellis 450-2847 at least 48-hours prior to the time of the conference and 48-hours prior to beginning of construction.
- D. Any existing pavement, curbs, and/or sidewalks damaged or removed will be repaired by the contractor at their expense.
- E. Lot pins shall be in place during construction and prior to final acceptance. Concrete monuments shall be placed as shown on the final plat and iron pins shall be placed at block corners, curve points and angle points in public right-of-way. Concrete monuments shall be six (6) inches in diameter and twenty-four (24) inches long. An iron rod one-half inch in diameter embedded at least three (3) inches in the monument at the exact intersection point of the monument. The monuments shall be set at such an elevation that after construction, the top of the monument will be not less than twelve (12) inches below the ground surface.
- F. The contractor shall stamp a 2-inch "S" in the curb at the location of the sewer service line.
- G. At intersections that have valley drainage, the crown of the intersecting streets will culminate in a distance of 40 feet from the intersecting curb line unless otherwise noted.
- H. Temporary or permanent street barricades shall remain at all points of ingress and egress to prevent public use until such street received final acceptance.
- I. Contractor shall obtain a right-of-way permit by the Town of Addison for working within the public right-of-way.
- J. During construction, the owner shall provide a qualified geotechnical lab to perform materials testing during the construction, at the request of the Town of Addison.
- K. The contractor shall submit material sheets to the Town of Addison for approval prior to incorporating materials into the job.
- L. The utility contractor shall submit to the Town of Addison for approval a trench safety plan sealed by a registered professional engineer for the installation of utilities greater than five (5) feet in depth.



LOCATION MAP
NOT TO SCALE

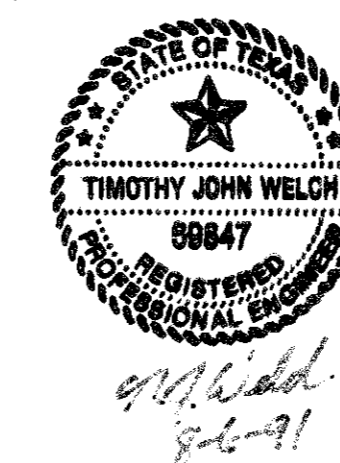
CHATHAM COURT

SHEET NO.	DESCRIPTION
FP-1	FINAL PLAT
PAVING PLAN AND PROFILE	
P-1 P-2 P-3	PAVING PLAN AND PROFILE PAVING PLAN AND PROFILE PAVING PLAN AND PROFILE
WATER & SANITARY SEWER	
WS-1 WS-2	WATER & SANITARY SEWER PLAN SANITARY SEWER PROFILES
DRAINAGE PLAN AND PROFILES	
DA-1 DR-1 GR-1	DRAINAGE AREA MAP DRAINAGE PLAN AND PROFILE GRADING AND EROSION CONTROL PLAN
CONSTRUCTION PLANS	
D-1 THRU D-10	CONSTRUCTION DETAILS

AS BUILTS

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

ENGINEER
THE NELSON CORPORATION
5999 SUMMERSIDE DR., SUITE 202
DALLAS, TEXAS 75252
(214) 380-2605



OWNER
ARCADIA REALTY
4516 LOVERS LANE
DALLAS, TEXAS 75225
(214) 490-0604



OWNERS CERTIFICATION

WHEREAS, ARCADIA LAND PARTNERS 4, acting by and through the undersigned, its duly authorized officer, are the owners of that certain tract of land out of the THOMAS L. CHENOWITH SURVEY, Abstract No. 273, in the City of Addison, Dallas County, Texas, and being a part of the three tracts conveyed to the Republic National Bank of Dallas, Trustee, by deed recorded in Volume 80142, Page 2193 (37.393 acre tract) of the Deed Records of Dallas County, Texas, and a part of the 83.7 acre tract of land conveyed to the Les Lacs Village, Inc. by deed recorded in Volume 81038, Page 328 of the Deed Records of Dallas County, Texas, and being more particularly described as follows:

BEGINNING at a cross-mark set for the intersection of the south right-of-way line of Beltway Drive (an 80' ROW) with the east right-of-way line of Marsh Lane (a 100' ROW);

THENCE with the said south right-of-way line, the following courses and distances to wit: South 89° 04' 38" East, a distance of 56.90 feet to a 5/8" iron rod set for the beginning of a tangency curve to the right;

Along said curve to the right, having a central angle of 35° 00' 00", a radius of 460.00 feet, a chord bearing and distance of South 71° 34' 38" East, 276.65 feet, and an arc distance of 281.00 feet to a 5/8" iron rod set for corner;

South 54° 04' 38" East, a distance of 290.76 feet to a cross-mark found for the intersection of the south right-of-way line of Beltway Drive with the centerline of Les Lacs Avenue (a private street) conveyed to the City of Addison by plat recorded in Volume 82016, Page 1073, Deed Records of Dallas County, Texas;

THENCE with the said centerline, the following courses and distances to wit: South 35° 55' 22" West, a distance of 9.68 feet to a 1/2" iron rod found for the beginning of a tangency curve to the left;

Along said curve to the left, having a central angle of 60° 29' 28", a radius of 300.00 feet, a chord bearing and distance of South 05° 40' 38" West, 302.22 feet, and an arc distance of 316.73 feet to a 1/2" iron rod found for corner;

South 24° 34' 06" East, a distance of 115.95 feet to a cross-mark found for the beginning of a tangency curve to the right;

Along said curve to the right, having a central angle of 04° 04' 01", a radius of 1,000.00 feet, a chord bearing and distance of South 22° 32' 06" East, 70.97 feet, and an arc distance of 70.98 feet to a cross-mark found for the end of said curve;

THENCE North 89° 03' 55" West, a distance of 606.63 feet to a 5/8" iron rod found in said east right-of-way line of Marsh Lane;

THENCE with said east right-of-way line, North 00° 56' 07" East, a distance of 728.71 feet to the **POINT OF BEGINNING** and containing 8.0000 acres.

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS:

That ARCADIA LAND PARTNERS 4 hereby adopt this plat designating the hereinabove property as CHATHAM COURT, an addition to the Town of Addison, Texas, and, subject to the conditions, restrictions and reservations stated hereinafter, owner dedicates to the public use forever the streets and alleys shown thereon.

The easements shown on this plat are hereby reserved for the purposes as indicated, but not limited to, the installation and maintenance of water, sanitary sewer, storm sewer, drainage, electric, telephone, gas and cable television. Owner shall have the right to use these easements, provided however, that it does not unreasonably interfere or impede with the provision of the services to others. Said utility easements are hereby being reserved by mutual use and accommodation of all public utilities using or desiring to use the same. An express easement of ingress and egress is hereby expressly granted on, over and across all such easements for the benefit of the provider of services for which easements are granted.

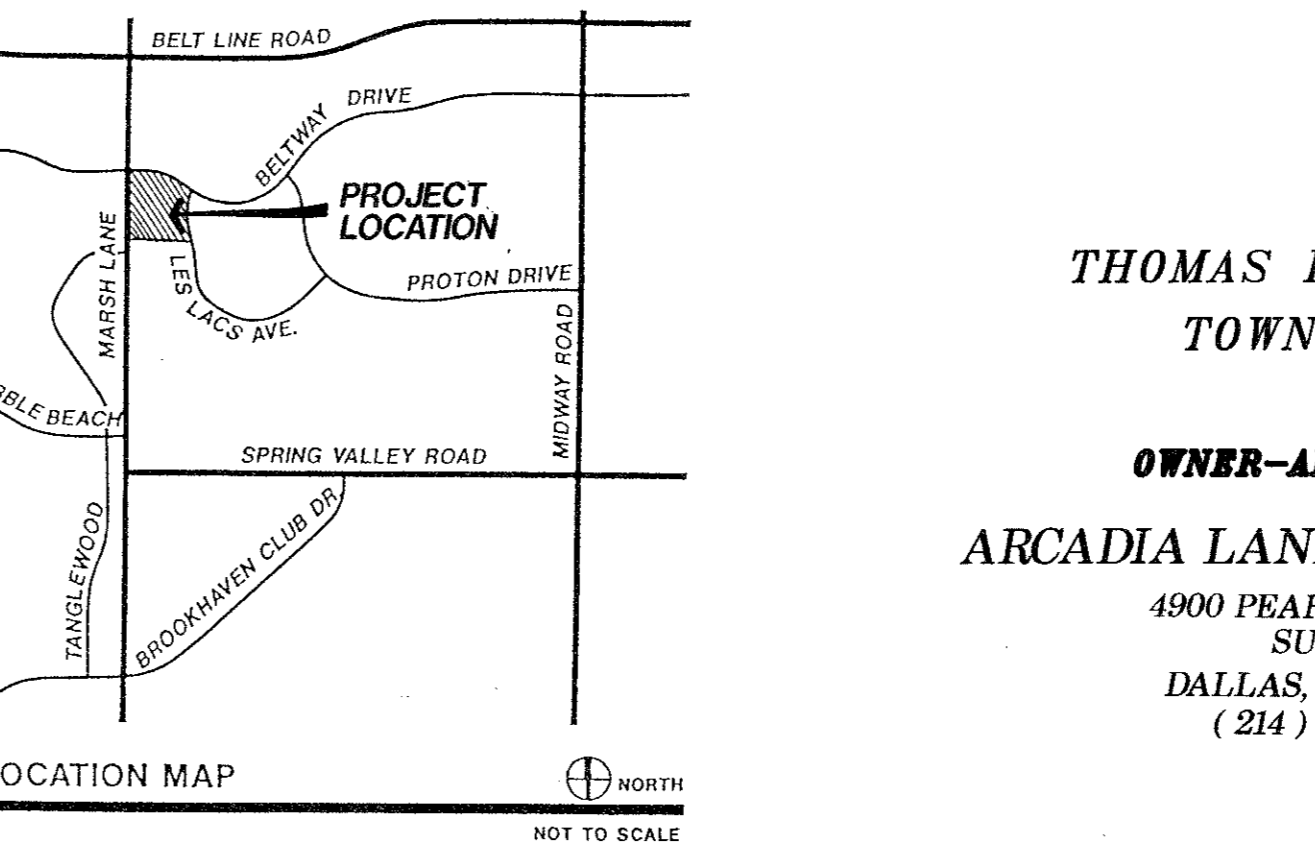
Any drainage and floodway easement shown hereon is hereby dedicated to the public's use forever, but including the following covenants with regards to maintenance responsibilities. The existing channels or creeks traversing the drainage and floodway easement will remain as an open channel, unless required to be enclosed by ordinance, at all times and shall be maintained by the individual owners of the lot or lots that are traversed by or adjacent to the drainage and floodway easement. The city will not be responsible for the maintenance and operation of said creek or creeks or for any damage or injury of private property or person that results from the flow of water along said creek, or for the control of erosion. No obstruction to the natural flow of water run-off shall be permitted by construction of any type building, fence of any other structure within the drainage and floodway easement. Provided, however, it is understood that in the event it becomes necessary for the city to channelize or consider erecting any type of drainage structure in order to improve the storm drainage, then in such event, the city shall have the right, but not the obligation, to enter upon the drainage and floodway easement at any point, or points, with all rights of ingress and egress to investigate, survey, erect, construct or maintain any drainage facility deemed necessary by the city for maintenance or efficiency of its respective system or service.

Water main and sanitary sewer easements shall also include additional area of working space for construction and maintenance of the systems. Additional easement area is also conveyed for installation and maintenance of manholes, cleanouts, fire hydrants, water service and sewer services from the main to curb or pavement line, and the descriptions of such additional easements herein granted shall be determined by their locations as installed.

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

WITNESS MY HAND at Dallas, Texas, this 16th day of December 1991.

ARCADIA LAND PARTNERS 4
 WILLIAM GIETEMA, JR.
 IN HIS CAPACITY AS CHAIRMAN OF THE BOARD FOR ARCADIA REALTY CORP.
 IN ITS CAPACITY AS GENERAL PARTNER FOR
 ARCADIA LAND PARTNERS 4



SURVEYOR CERTIFICATION

STATE OF TEXAS
 COUNTY OF DALLAS

THAT I, Brian Marcus, do hereby certify that I have prepared this plat from an actual survey of the land and that the corner monuments shown thereon actually exist, and their location, size and material described are correctly shown.

Brian Marcus
 Registered Professional Land Surveyor #4695
 THE NELSON CORPORATION
 5999 Summerside Drive, Dallas, Texas 75252,
 (214) 380-2605

STATE OF TEXAS
 COUNTY OF DALLAS

BEFORE ME, the undersigned, a Notary Public in and for the State of Texas, on this day personally appeared Brian Marcus, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 16th day of December 1991.
 KATHLEEN SAWYER
 Notary Public, State of Texas
 My Commission Expires 1-19-93

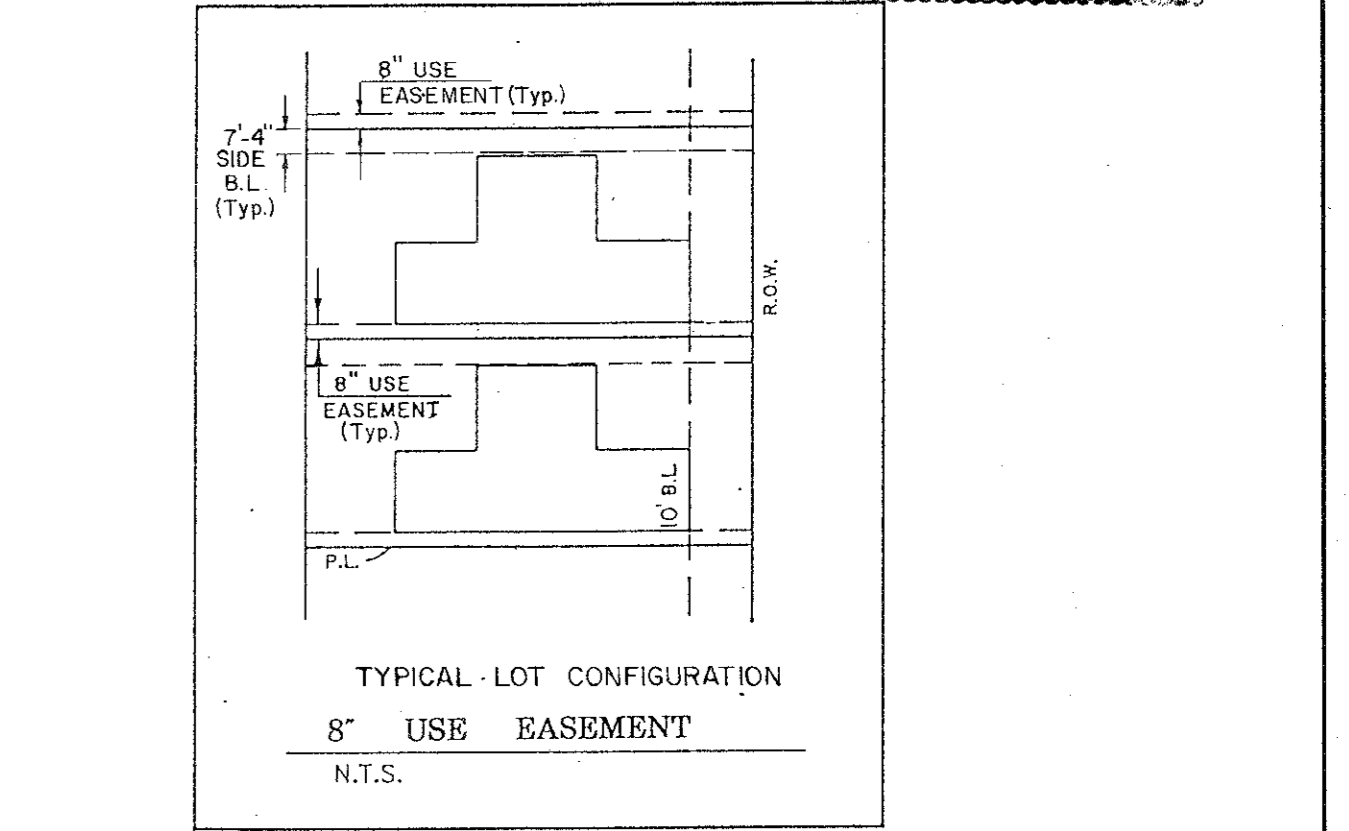
APPROVED this day of December 1991, by the Planning and Zoning Commission of the Town of Addison, Texas.

City Secretary
 Town of Addison, Texas

STATE OF TEXAS
 COUNTY OF COLLIN

BEFORE ME, the undersigned, a Notary Public in and for The State of Texas, on this day personally appeared William Gietema, Jr., of ARCADIA LAND PARTNERS 4, known to me to be the person and officer whose name is subscribed to the foregoing instrument, and acknowledged to me that the same was the act of the said corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated.

GIVEN UNDER MY SEAL OF OFFICE this 16th day of December 1991.
 KATHLEEN SAWYER
 Notary Public, State of Texas
 My Commission Expires 1-19-93



- A. Driveway access/curb cuts to Les Lacs Avenue and Beltway Drive are prohibited.
- B. No masonry walls or columns are permitted in the ten foot utility/grainage easements located between lots 11 and 12, block A, and lots 13 and 14, block A.
- C. Property owners shall provide access to the utility and drainage easements as may be necessary for inspection and maintenance of facilities by the Town of Addison and public utility companies.

FINAL PLAT
 OF
CHATHAM COURT
 AN ADDITION TO THE TOWN OF ADDISON
 8.000 ACRE TRACT (44 LOTS)
 OUT OF THE
 THOMAS L. CHENOWITH SURVEY, ABSTRACT NO. 273
 TOWN OF ADDISON, DALLAS COUNTY, TEXAS

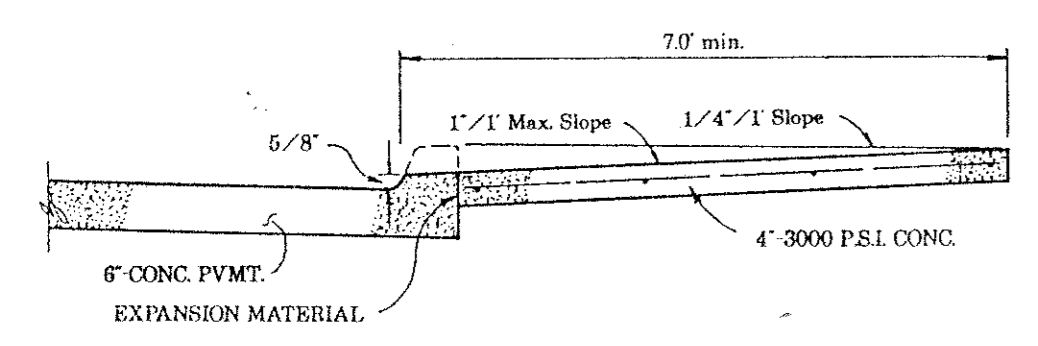
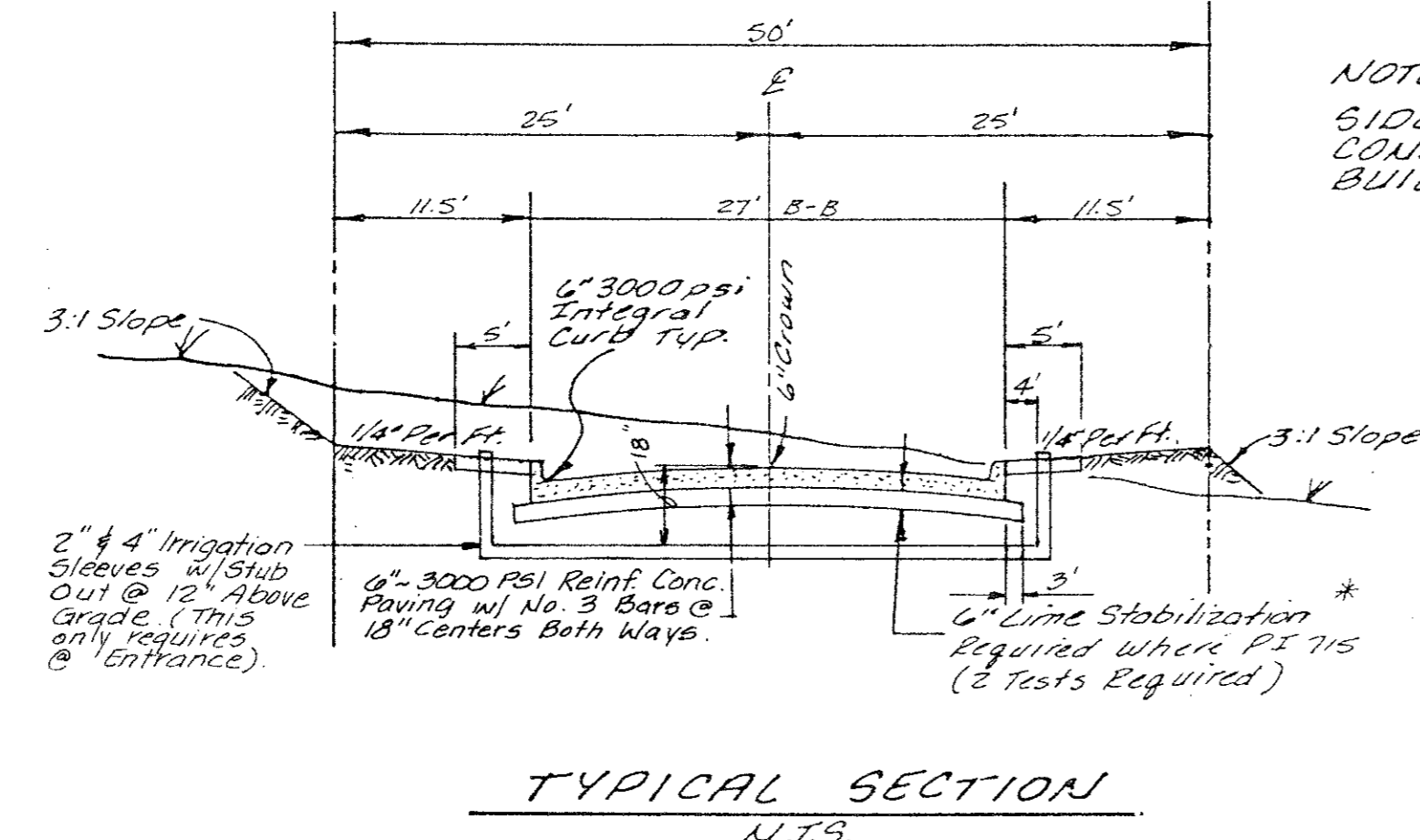
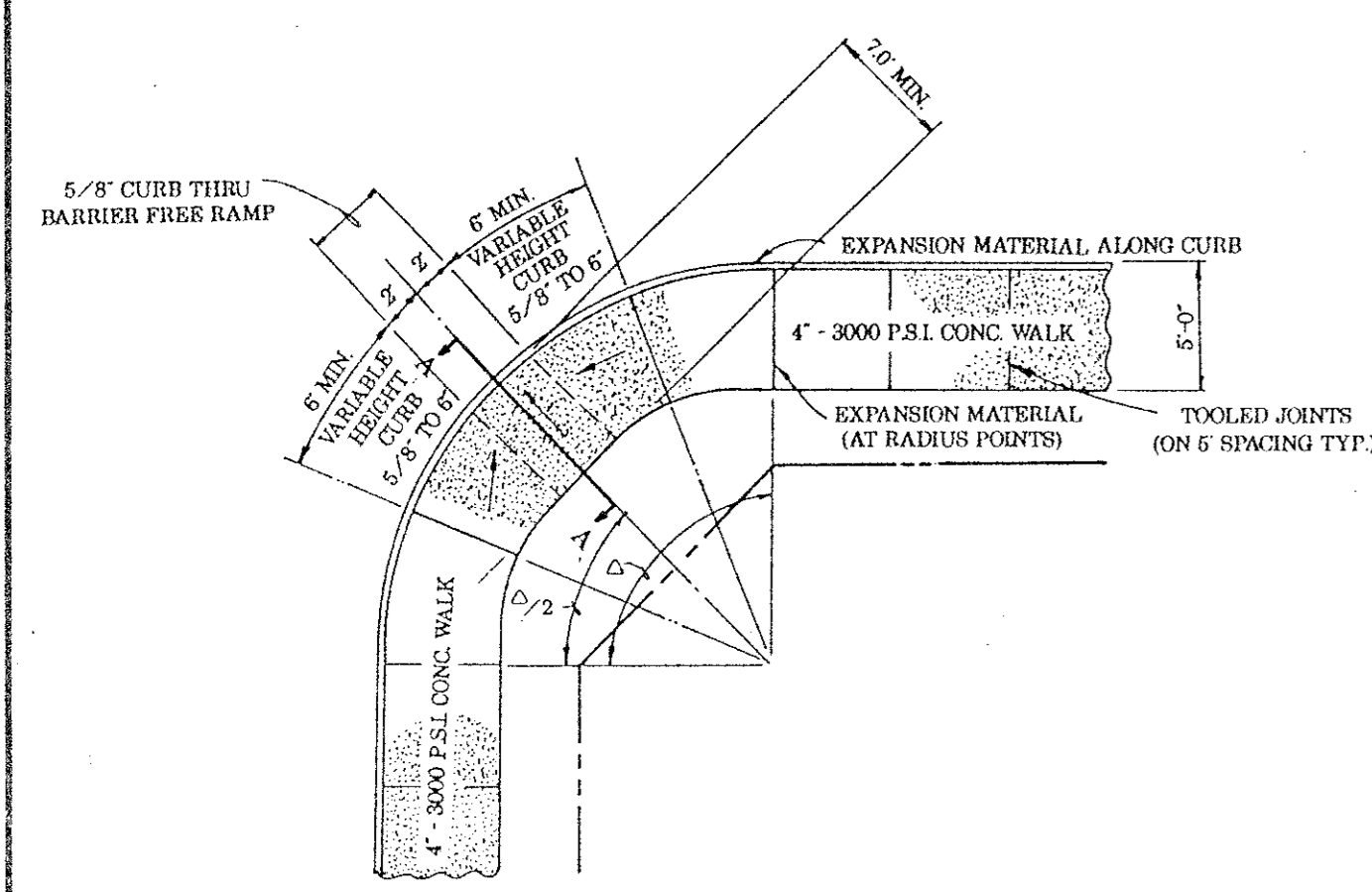
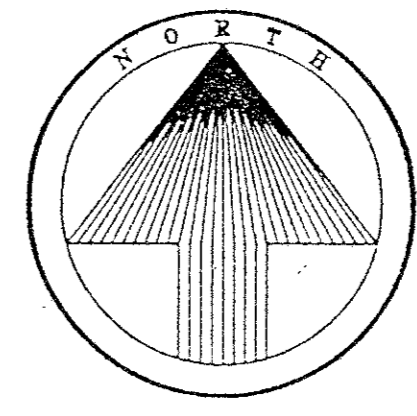
OWNER-APPLICANT
 ARCADIA LAND PARTNERS 4
 4900 PEAR RIDGE DRIVE
 SUITE 2311
 DALLAS, TEXAS 75287
 (214) 248-7654

PLANNER-ENGINEER-SURVEYOR
 THE NELSON CORPORATION
 5999 SUMMERSIDE DRIVE, SUITE 202
 DALLAS, TEXAS 75252
 (214) 380-2605

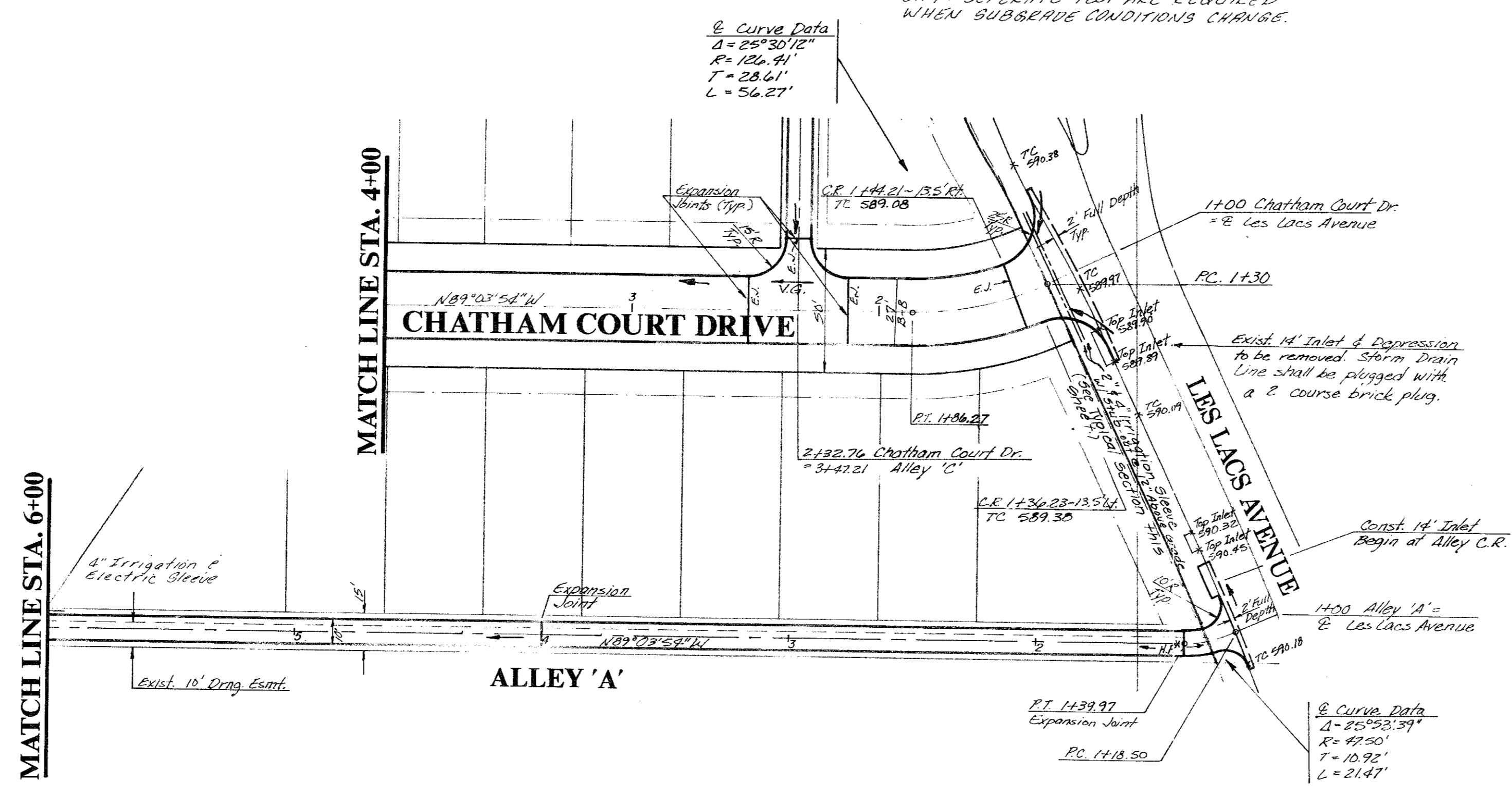
SCALE 1"=50'
 Recorded in 91046 Pg 1435, A.R.D.C.T.

NOTE:
 ALL IRON RODS SET ARE 1/2" IRON RODS EXCEPT P.C., P.T., P.L. & BLOCK CORNERS ARE 1" IRON ROD SET, UNLESS NOTED.
 MONUMENT TO BE SET IN CONCRETE

Revisions	Date	Description	Drawn By	Checked By



SECTION "A - A"
BARRIER FREE RAMP DETAIL
(WALK ABUTTING CURB)



PAVING GENERAL NOTES:

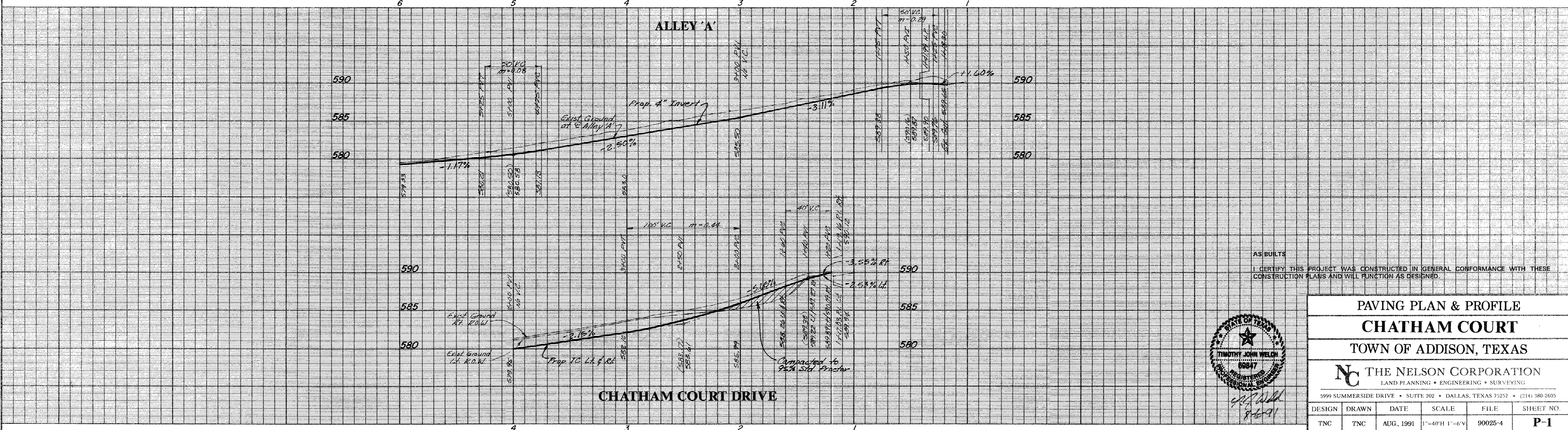
- Contraction Joints: Transverse contraction joints shall be sawed joints perpendicular to the centerline and surface of the pavement. Where sawed joints are used, contraction joints at 20-foot intervals shall be sawed as soon as sawing can be accomplished without damage to the pavement.
- Expansion Joints: Transverse expansion joints shall be formed perpendicular to the centerline and surface of the pavement and shall be constructed as shown on the plans.

PAVING GENERAL NOTES:

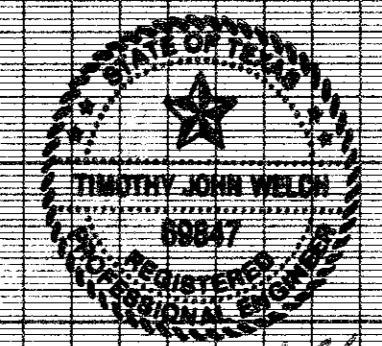
- Unless otherwise noted all material and construction shall conform to applicable specifications of the Town of Addison with amendments - The North Central Texas Council of Governments "Standard Specifications for Public Works Construction", Parts I and II, latest edition.
- All curb dimensions are to back of curb.
- Pavement reinforcing will be grade 60.
- All on-site concrete pavement will be 6" thick and have a minimum strength of 3000 PSI at 28 days.
- Construct a barrier-free curb and ramp at all intersections. See Sheet P-1 for details.
- The Contractor will be responsible for field verifying the location of all existing utilities prior to his operations.
- Hydrated lime will be applied as a slurry.
- No flyash is allowed.

BENCHMARKS:

- Square cut on N.W. corner of footing of T.U. Electric tower No. 12N-3W-T288 near Addison Fire Station No. 2. Elev. 605.20
- Square cut on top of curb of east median nose in the centerline of Beltway Drive at Les Lacs Avenue. Elev. 594.42
- Square cut on centerline of 14' inlet at the N.E. corner of the intersection of Beltway Drive and Marsh Lane. Elev. 585.20



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



PAVING PLAN & PROFILE
CHATHAM COURT
TOWN OF ADDISON, TEXAS

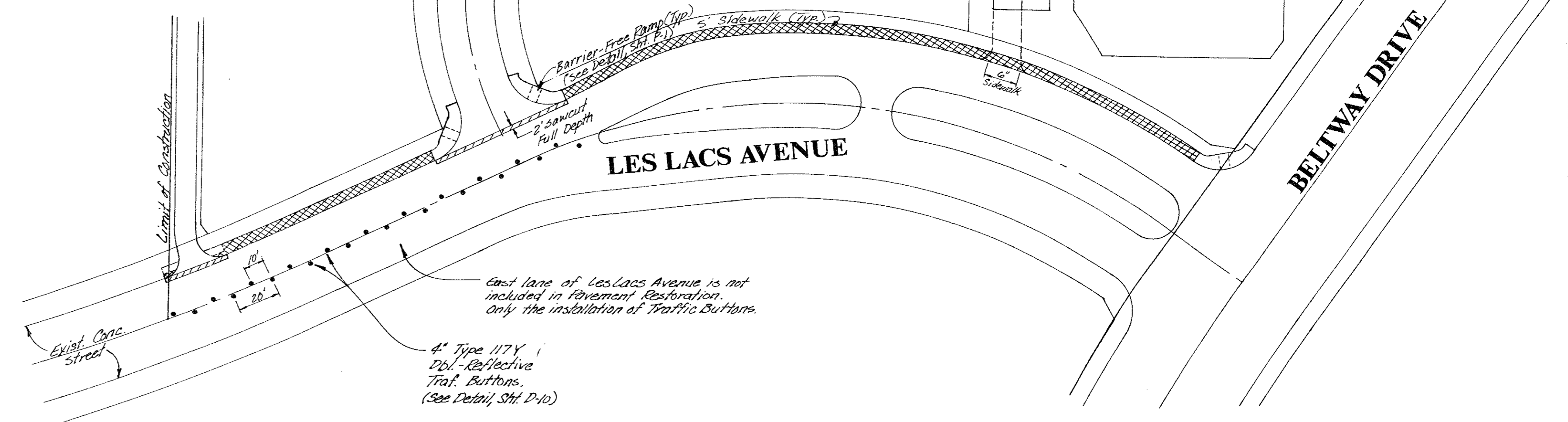
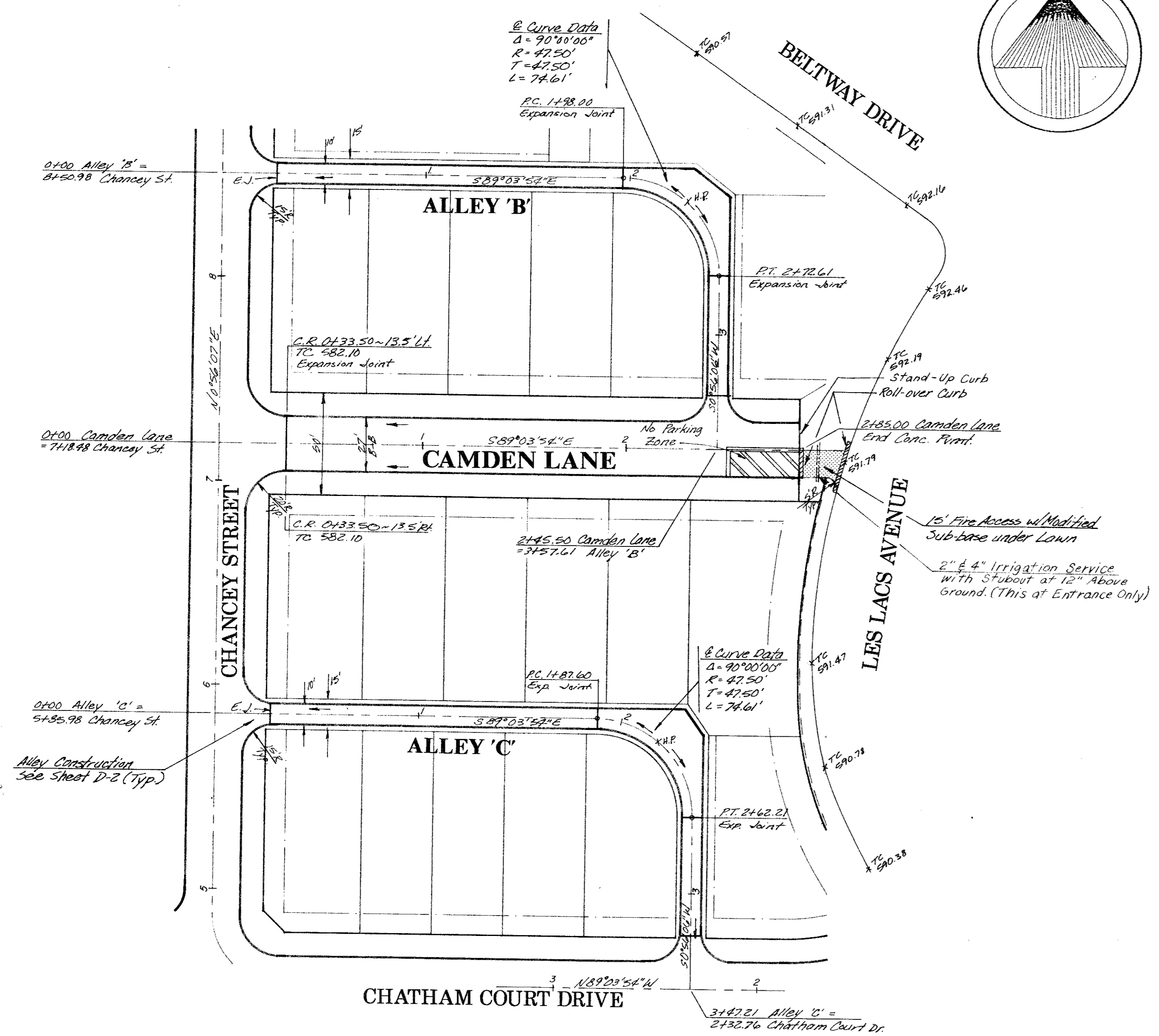
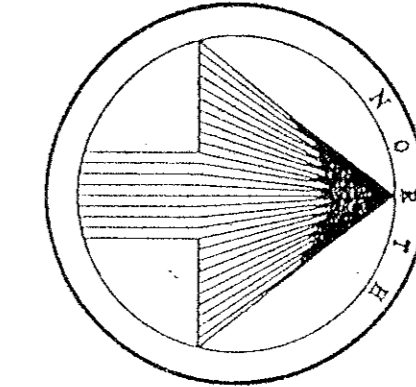
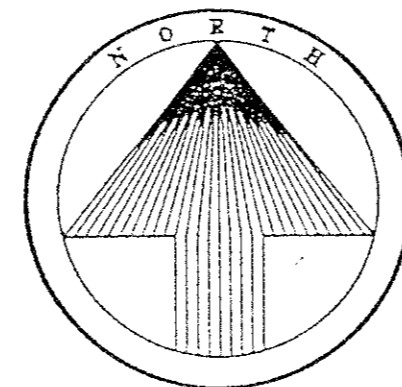
THE NELSON CORPORATION
LAND PLANNING • ENGINEERING • SURVEYING
5999 SUMMERSIDE DRIVE • SUITE 202 • DALLAS, TEXAS 75252 • (214) 380-2605

DESIGN	DRAWN	DATE	SCALE	FILE	SHEET NO.
TNC	TNC	AUG, 1991	1"=40'H 1"=6'V	90025-4	P-1

GENERAL NOTES

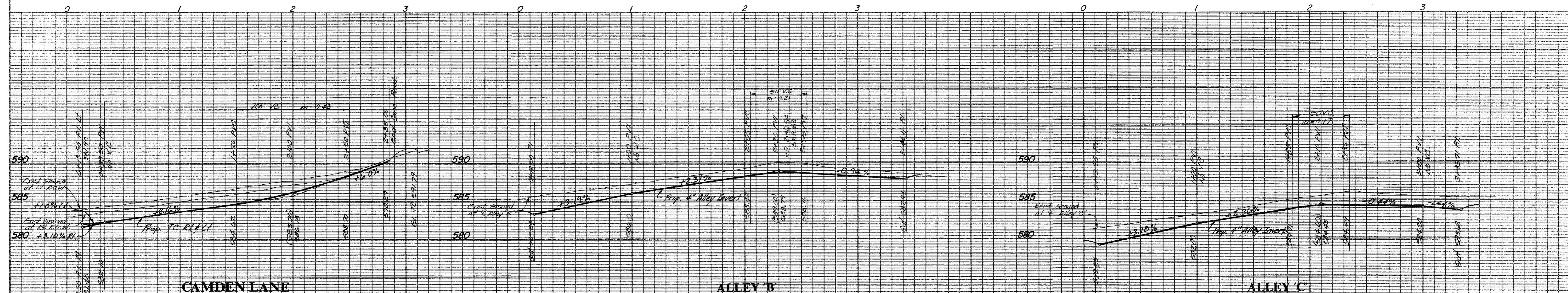
1. The Contractor is required to place the necessary construction sign, detour sign, street closing sign, land closing sign, men working sign, two way traffic sign, warning signs, road construction and end of construction signs on the barricades at all times during the project construction.
2. The Contractor is responsible to keep barricading in place and in working order at all times.
3. The Contractor is responsible for one (1) Port-a-can for each increment of 20 employees.
4. The Contractor shall be responsible for the restoration of the west lane only of Les Lacs Avenue to include route and re-sealing/repair, installation of five foot sidewalk, and traffic buttons which shall be constructed in accordance with the Town of Addison's standard specifications.
5. All joints through the gutters shall be sealed with hot-poured rubber sealer unless otherwise specified.
6. Any removal of concrete pavement shall be made by a power driven saw prior to the replacement of the paving.
7. The Contractor shall be responsible to visit site to field verify the condition of Les Lacs Avenue.

Revisions	Date	Description	Drawn By	Checked By



LES LACS AVENUE RESTORATION PLAN

- BENCHMARKS:**
- Square cut on N.W. corner of footing of T.U. Electric tower No. 12N-3W-T288 near Addison Fire Station No. 2. Elev. 605.20
 - Square cut on top of curb of east median nose in the centerline of Beltway Drive at Les Lacs Avenue. Elev. 594.42
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CAMDEN LANE

ALLEY B

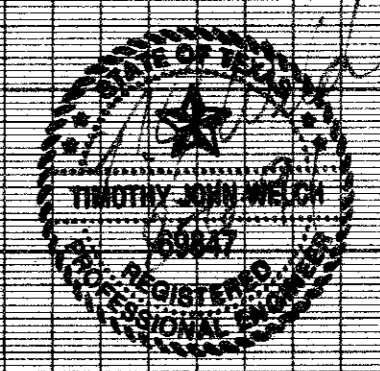
ALLEY C

PAVING PLAN & PROFILE
CHATHAM COURT
 TOWN OF ADDISON, TEXAS

THE NELSON CORPORATION
 LAND PLANNING • ENGINEERING • SURVEYING

5999 SUMMERSIDE DRIVE • SUITE 202 • DALLAS, TEXAS 75252 • (214) 380-2605

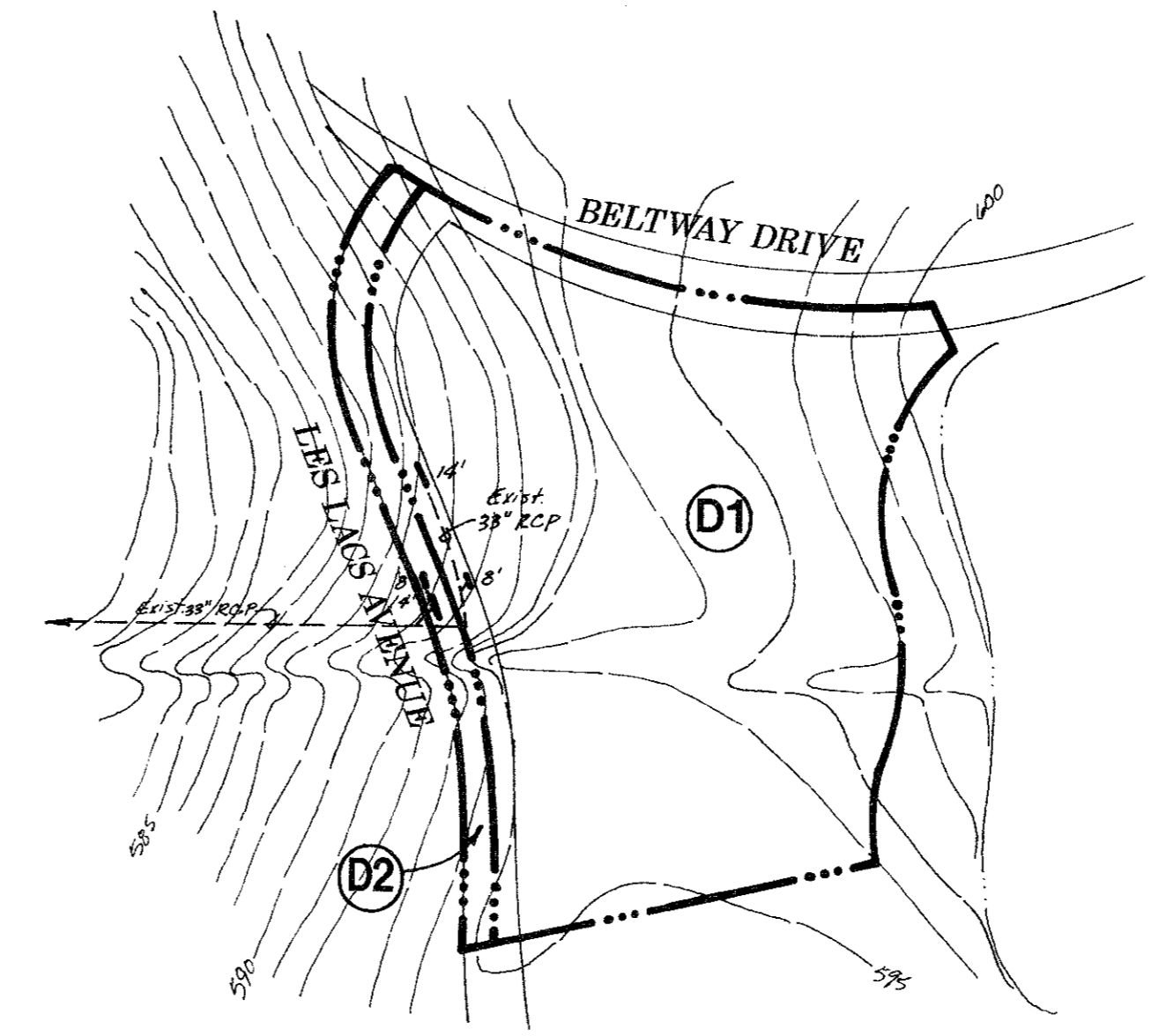
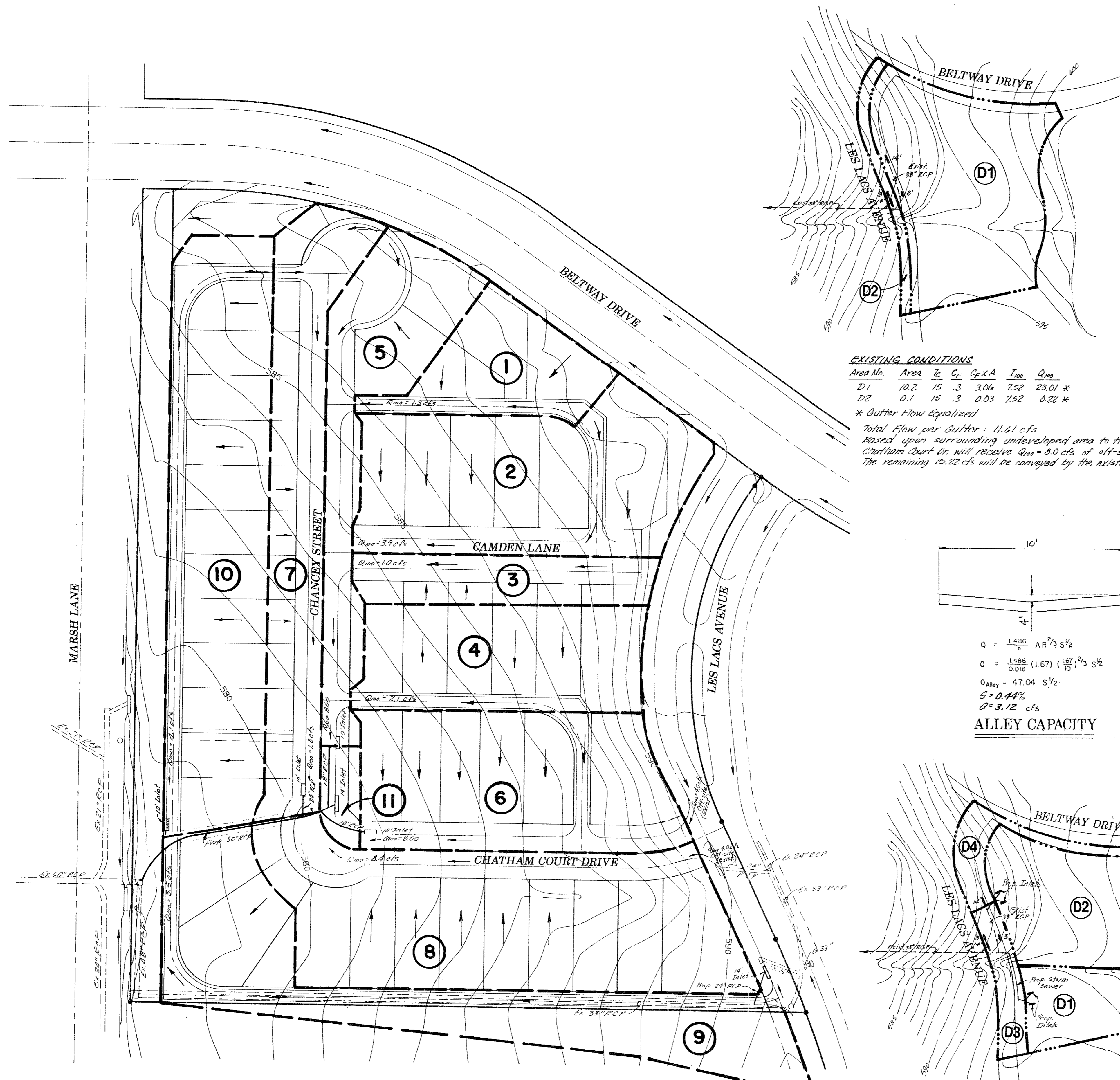
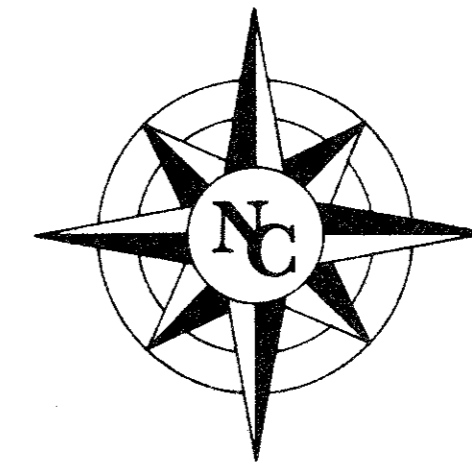
DESIGN	DRAWN	DATE	SCALE	FILE	SHEET NO.
TNC	TNC	AUG, 1991	1"=40'H 1"=5'V	90025-4	P-3



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

REVISIONS: 08/11/91

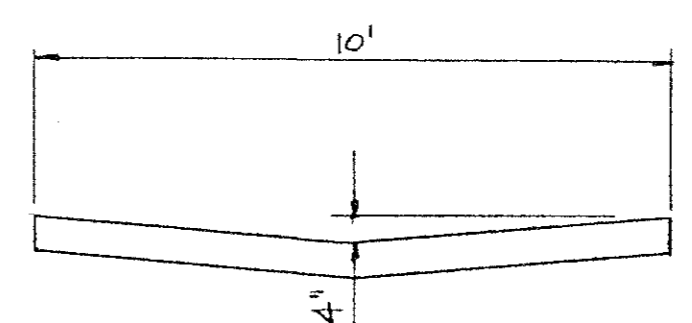
Revisions	Date	Description	Drawn By	Checked By



EXISTING CONDITIONS

Area No.	Area	Tc	Cp	Cp x A	I ₁₀₀	Q ₁₀₀
D1	10.2	15	.3	3.06	7.52	23.01 *
D2	0.1	15	.3	0.03	7.52	0.22 *

* Gutter Flow Equalized
 Total Flow per Gutter: 11.61 cfs
 Based upon surrounding undeveloped area to the east, Chatham Court Dr will receive Q₁₀₀ = 8.0 cfs of off-site run-off. The remaining 3.61 cfs will be conveyed by the existing storm inlet.



ALLEY CAPACITY

$$Q = \frac{1.486}{n} AR^{2/3} S^{1/2}$$

$$Q = \frac{1.486}{0.016} (1.67) \left(\frac{157}{10}\right)^{2/3} S^{1/2}$$

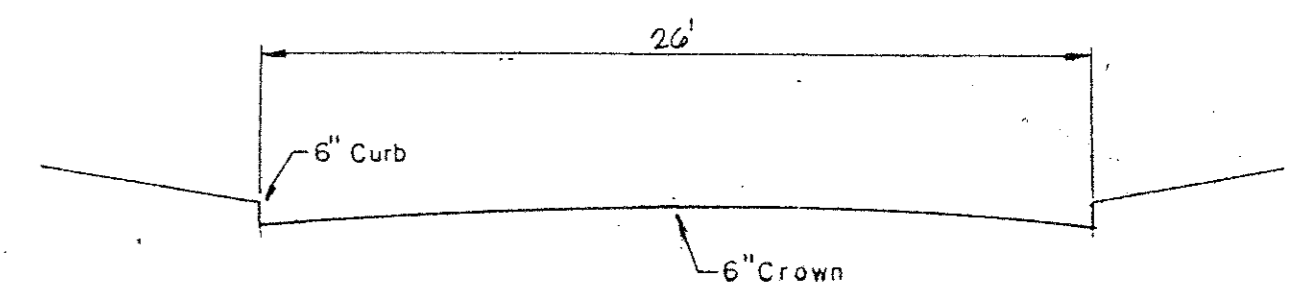
$$Q_{Alley} = 47.04 S^{1/2}$$

$$S = 0.44\%$$

$$Q = 3.12 \text{ cfs}$$

AREA NO.	AREA (AC)	Tc	Cp	Cp x A	I ₁₀₀	Q ₁₀₀ (cfs)	Q ₁₀₀	INLET	INLET TYPE	BY-PASS
1	0.33	15	0.5	0.17	7.52	1.3	1.3			
2	0.89	15	0.5	0.45	7.52	3.9	5.2			
3	0.28	15	0.5	0.14	7.52	1.0	6.2			
4	0.55	15	0.5	0.28	7.52	2.1	8.3			
5	0.41	15	0.5	0.20	7.52	2.3	8.0	1-10'	I	2.6
6	0.80	15	0.5	0.40	7.52	3.0	8.0	1-10'	I	5.6
7	0.67	15	0.5	0.34	7.52	1.8	1.8			
8	1.18	15	0.5	0.59	7.52	4.4	6.2*	1-10'	IA	
9	0.92	15	0.5	0.46	7.52	3.5	3.5			
10	1.1	15	0.5	0.55	7.52	4.1	7.6	1-10'	III A	
11							8.2	1-14'	IA	

* GUTTER FLOWS EQUALIZED
 I - STD. CURB OPENING INLET ON GRADE
 IA - STD. CURB OPENING INLET AT LOW POINT
 III A - GATE INLET (CURB TYPE) AT LOW POINT



STREET CAPACITY

$$Q = \frac{1.486}{n} AR^{2/3} S^{1/2}$$

$$n = 0.016$$

$$A = 4.33 \text{ Ft.}^2$$

$$Q = \frac{1.486}{0.016} (4.33) \left(\frac{4.33}{27}\right)^{2/3} S^{1/2}$$

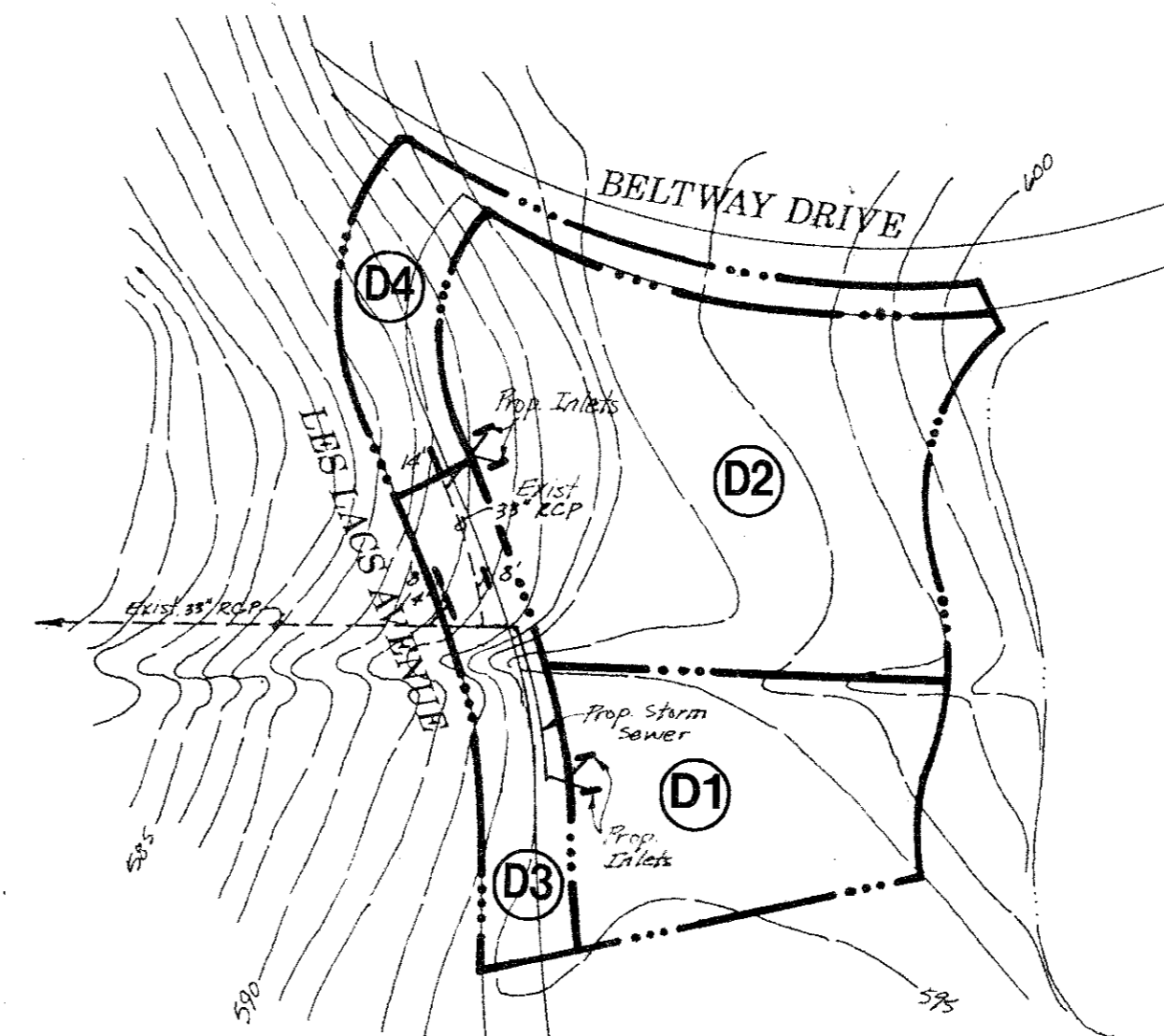
$$Q_{Str.Cap} = 118.70 S^{1/2}$$

$$S = 1.45\%$$

$$Q = 14.3 \text{ cfs (715 cfs/side)}$$

- LEGEND**
- DRAINAGE AREA LINE
 - - - EXIST. CONTOUR LINE
 - PROP. STORM SEWER LINE
 - EXIST. STORM SEWER LINE
 - ① DRAINAGE AREA

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



DEVELOPED CONDITION

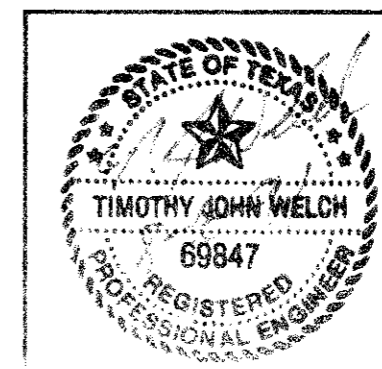
Area No.	Area	Tc	Cp	Cp x A	I ₁₀₀	Q ₁₀₀
D1	2.46	15	.5	1.23	7.52	9.25
D2	4.95	15	.5	2.48	7.52	18.65
D3	1.35	15	.5	0.68	7.52	5.11
D4	1.44	15	.5	0.72	7.52	5.41

Areas D1 & D2, when developed, will be collected by a proposed storm sewer system located in Les Lacs Avenue. Chatham Court Drive will collect 5.0 cfs of off-site run-off.

DRAINAGE AREA MAP

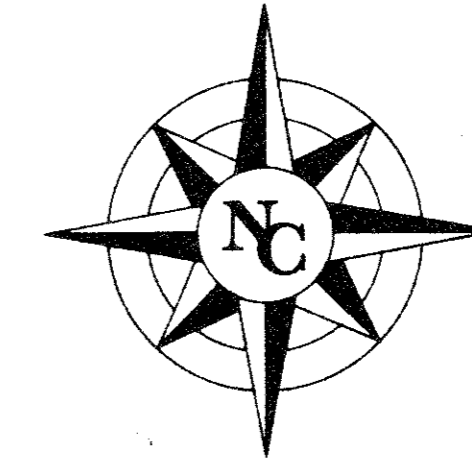
**CHATHAM COURT
 TOWN OF ADDISON, TEXAS**

Date: AUGUST, 1991	Scale: 1" = 50'	SHEET OF
Drawn By: TNC	Approved By: TNC	DA-1 SHEETS



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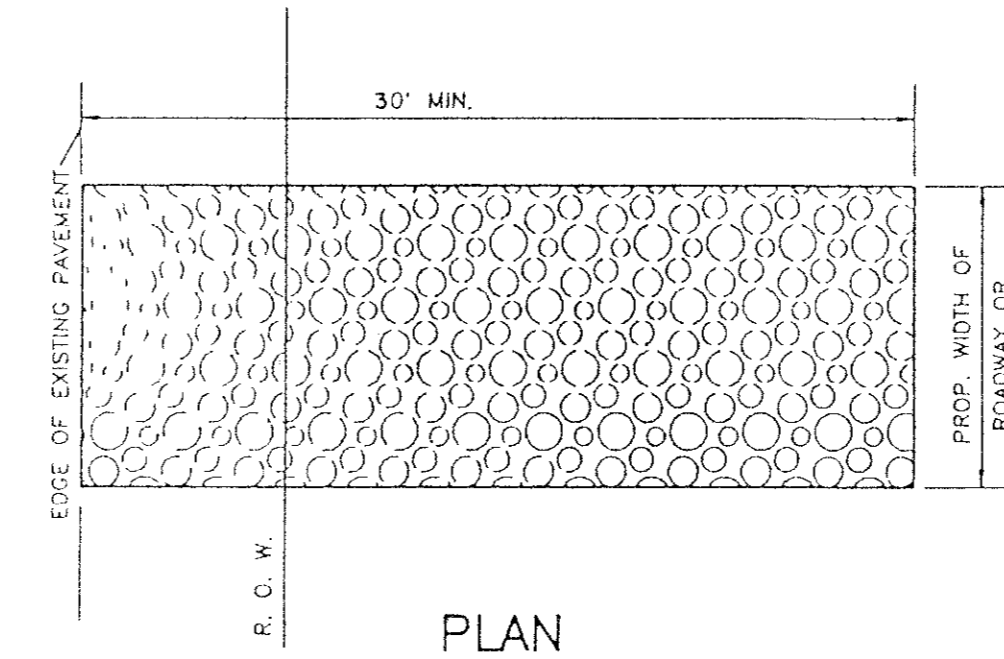
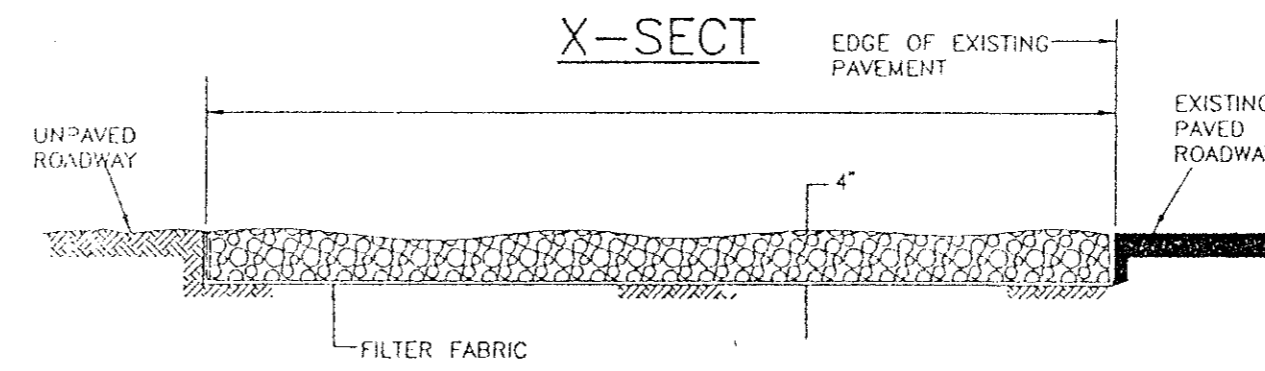
Revisions	Date	Description	Drawn By	Checked By



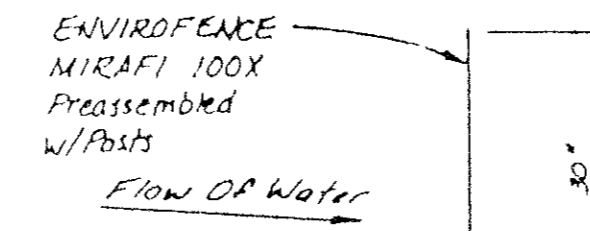
STABILIZED CONSTRUCTION ACCESS

A STABILIZED CONSTRUCTION ENTRANCE APPLIES TO POINTS OF CONSTRUCTION INGRESS AND EGRESS WHERE SEDIMENT MAY BE TRACKED OR FLOW OFF THE CONSTRUCTION SITE.

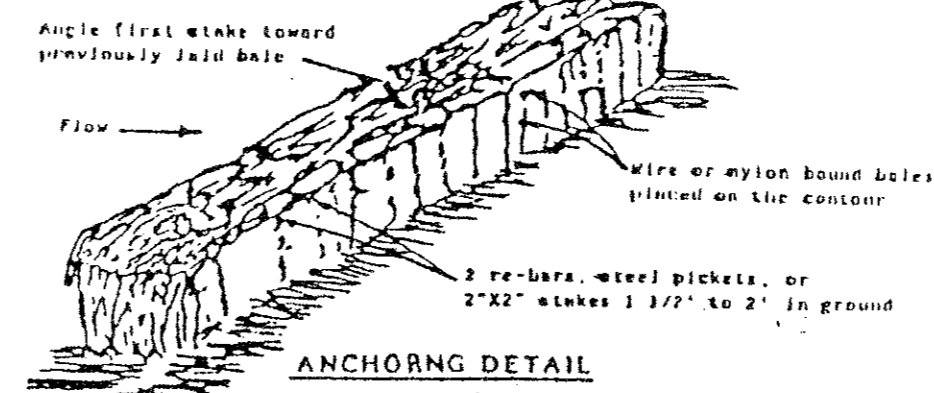
MAINTENANCE
THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.



MAINTENANCE
THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.



SILTATION FENCE EROSION CONTROL DEVICE



HAY BALE EROSION CONTROL DEVICE

NOTE: All excess material shall be distributed throughout the site.

EROSION CONTROL SPECIFICATIONS

- The grading contractor shall provide and maintain erosion control devices in the areas indicated on the grading plan or any other areas as directed by the Owner's representative or the Town of Addison.
- The utility contractor shall provide and maintain an erosion control device around all openings into the storm sewer system to project completion or as directed by Owner's representative or the Town of Addison.
- The paving contractor shall, upon completion of fine grading provide and maintain erosion control devices in the areas indicated on the grading plan or as directed by the Owner's representative or the Town of Addison.
- Upon completion of fine grading, all street parkways shall be seeded, fertilized and maintained by the paving contractor.
- Erosion control devices may be added or reduced in the field as directed by the Town of Addison's inspector or Owner's representative.

GRADING SPECIFICATIONS

- All Grading shall conform to the following sections of the North Central Texas C.O.G. Standard Specifications for Public Works construction, latest edition, as applicable:

Item	3.2	Clearing and Grubbing
	3.3	Unclassified Street Excavation
	3.4	Parkways
	3.5	Unclassified Channel Excavation
	3.6	Borrow
	3.7	Embankment
- Lot Grading shall be completed to provide sufficient dirt on each pad to achieve the critical pad grades and spot grades on each lot. After achieving critical pad grades indicated on this plan, the contractor is to uniformly fill all pads until the preferred pad grade is met, or, fill pad grades in priority locations as indicated by the engineer.
- Compaction performed in pad areas, streets and alleys shall be a minimum of 95% density at a moisture content of 1 to 3% wet of optimum.
- Remove topsoil in street/alley right-of-ways and pad areas to a depth of 4". Place topsoil in front and backyard areas at the direction of the Owner's representative.
- Finished Floor elevations are assumed to be 9" above Finished Pad elevations.
- The Grading contractor is to provide pad compaction testing for each 8' lift at the rate of one random test at the direction of the engineer for every four pads.
- All lots are to be left in a smooth, bladed condition, without any severe change in slope or low spots. Minimum grade across any lot is to be 1%. Maximum slope is to be 3:1, unless otherwise approved in the field.
- All excess material shall be distributed throughout the site.
- TOLERANCES FOR GRADING ARE:

	ROUGH GRADING	FINAL GRADING
Streets	± 0.1'	± 0.1'
Pads	± 0.5'	± 0.25'
Lot Corners	± 0.5'	± 0.25'

LEGEND

- EXISTING CONTOUR
- EXISTING TOP OF CURB ELEVATION
- CRITICAL FINISHED PAD ELEVATION
- PREFERRED FINISHED PAD ELEVATION
- DIRECTION OF FLOW
- EROSION CONTROL DEVICE BY GRADING CONTRACTOR MAINTAINED TO PROJECT COMPLETION
- EROSION CONTROL DEVICE BY PAVING CONTRACTOR PLACED UPON COMPLETION OF FINAL GRADING
- PROPOSED TOP OF CURB OR SPOT ELEVATION
- PROBABLE RETAINING WALL
- EROSION CONTROL DEVICE BY UTILITY CONTRACTOR
- EXISTING ASPHALT PAVEMENT TO BE REMOVED
- BLOCK NUMBER

AS BUILTS

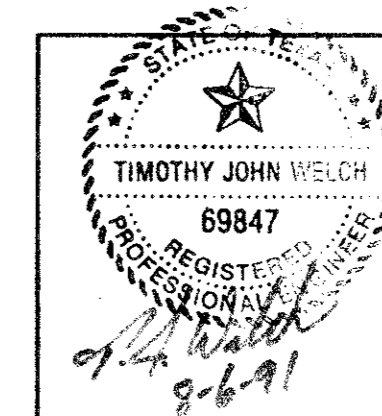
I CERTIFY THIS PROJECT WAS CONSTRUCTED IN GENERAL CONFORMANCE WITH THESE CONSTRUCTION PLANS AND WILL FUNCTION AS DESIGNED.

GRADING & EROSION PLAN

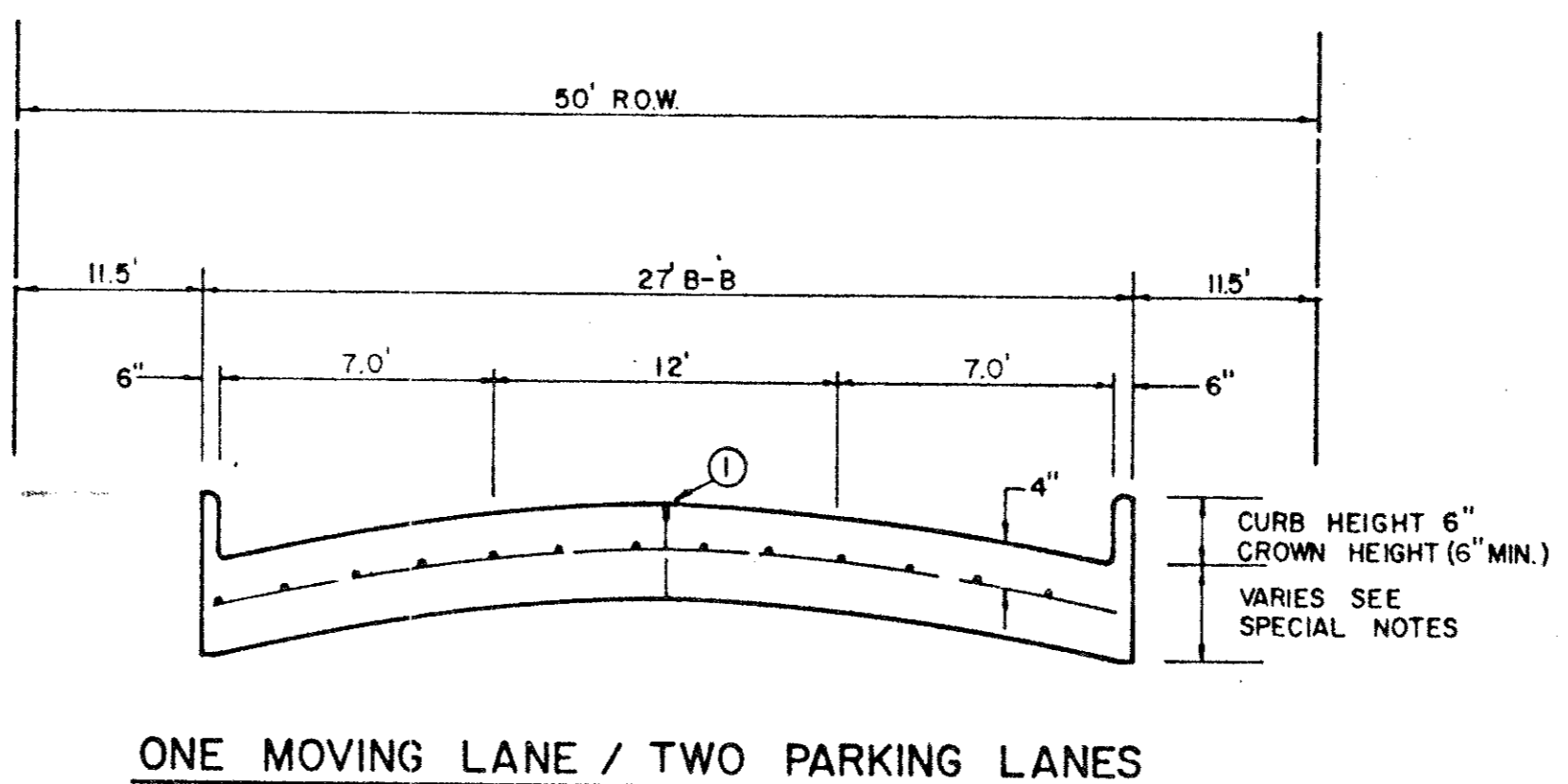
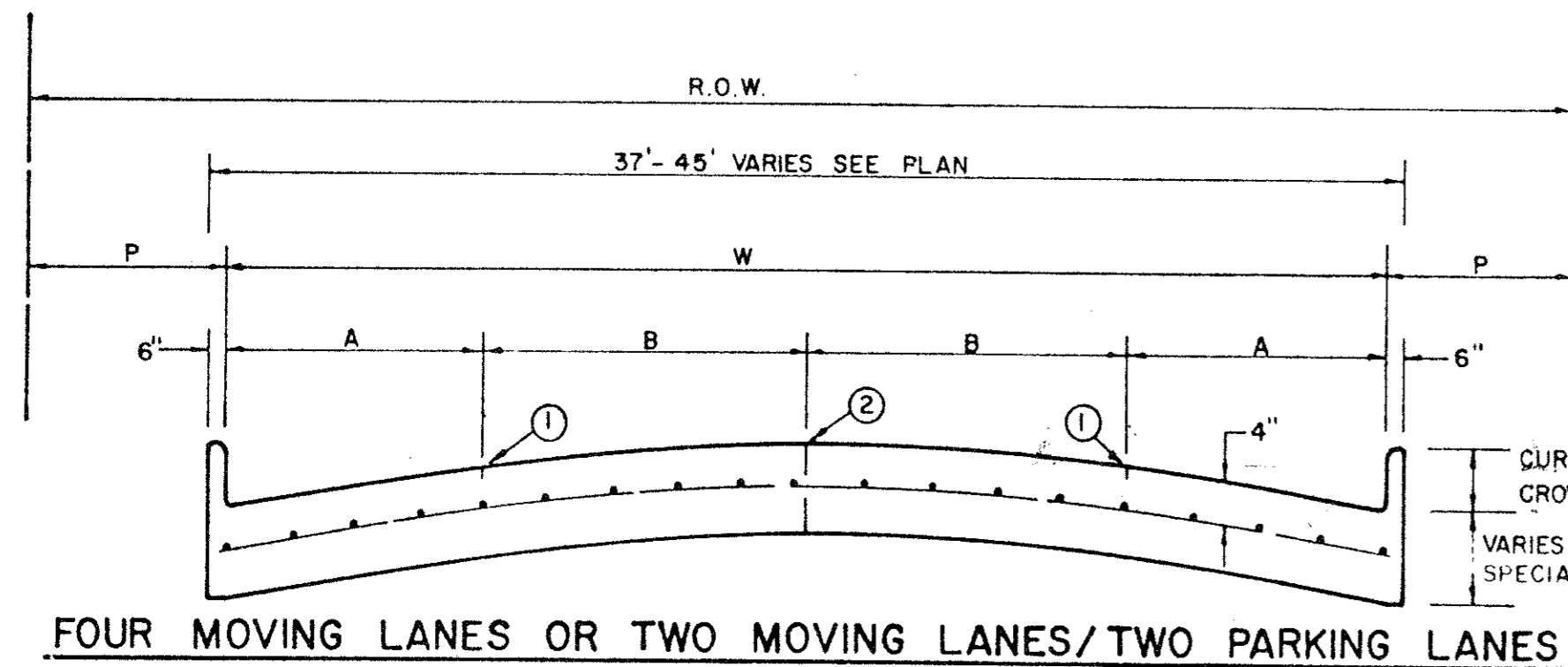
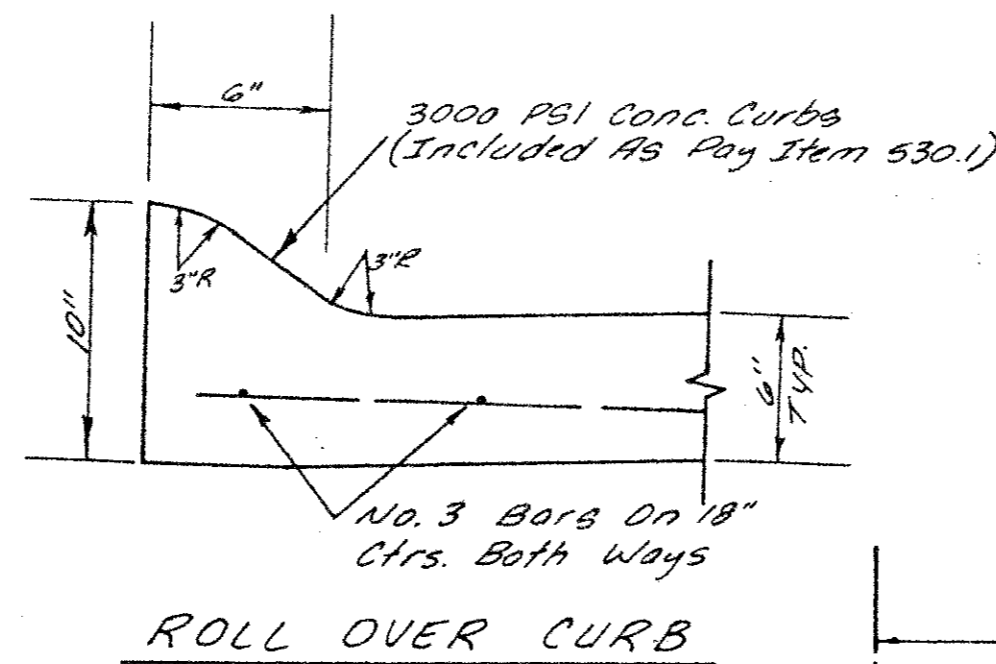
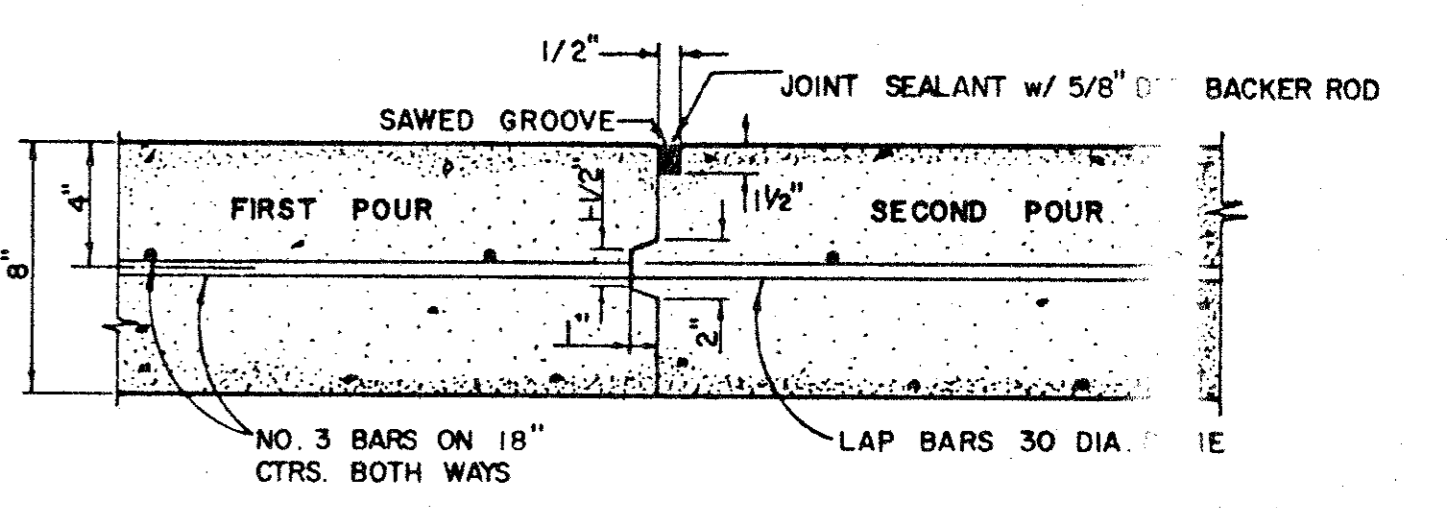
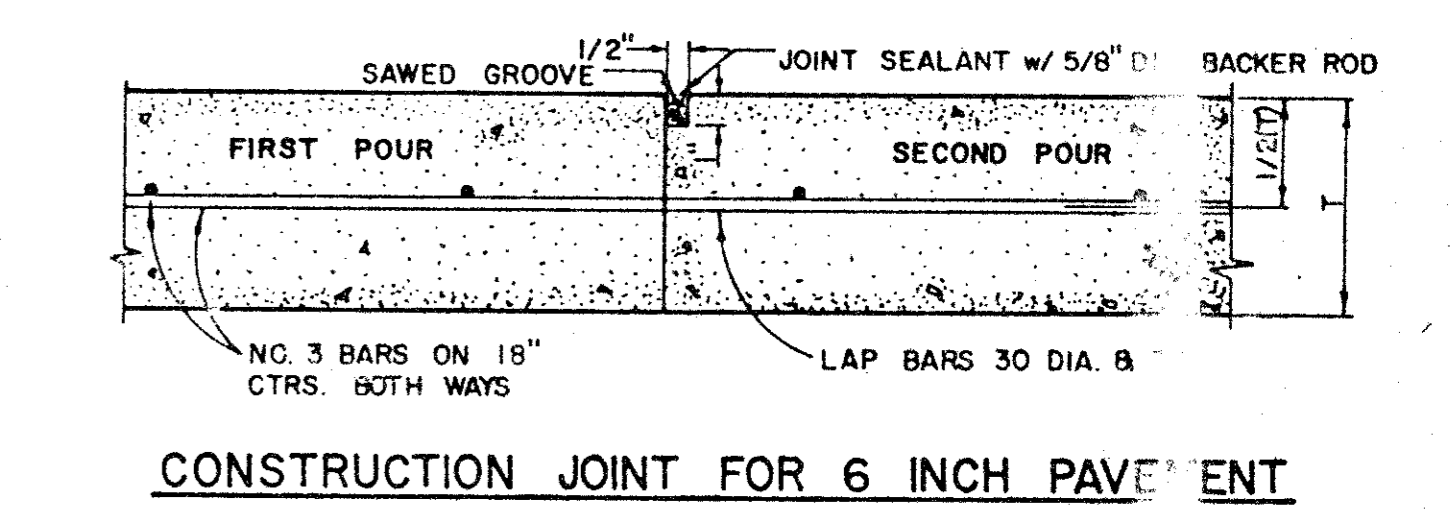
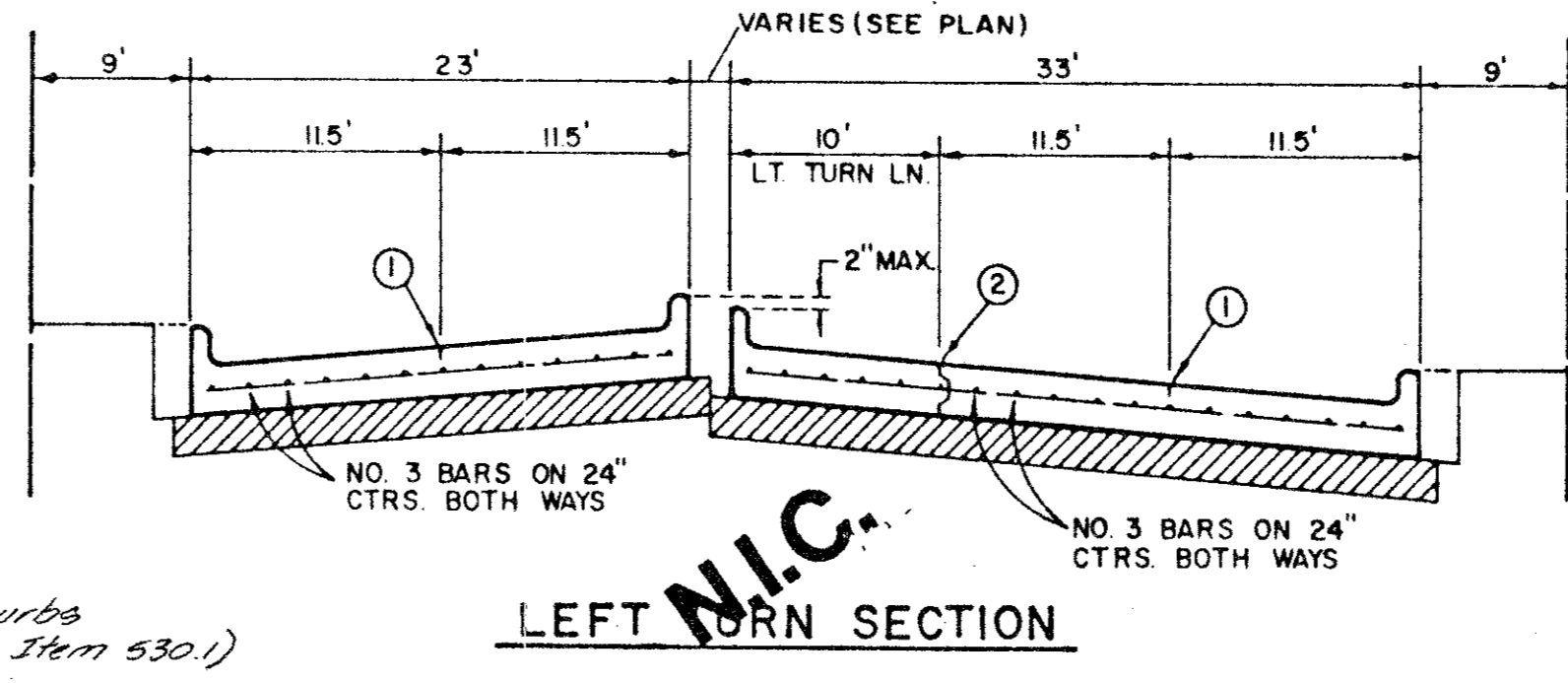
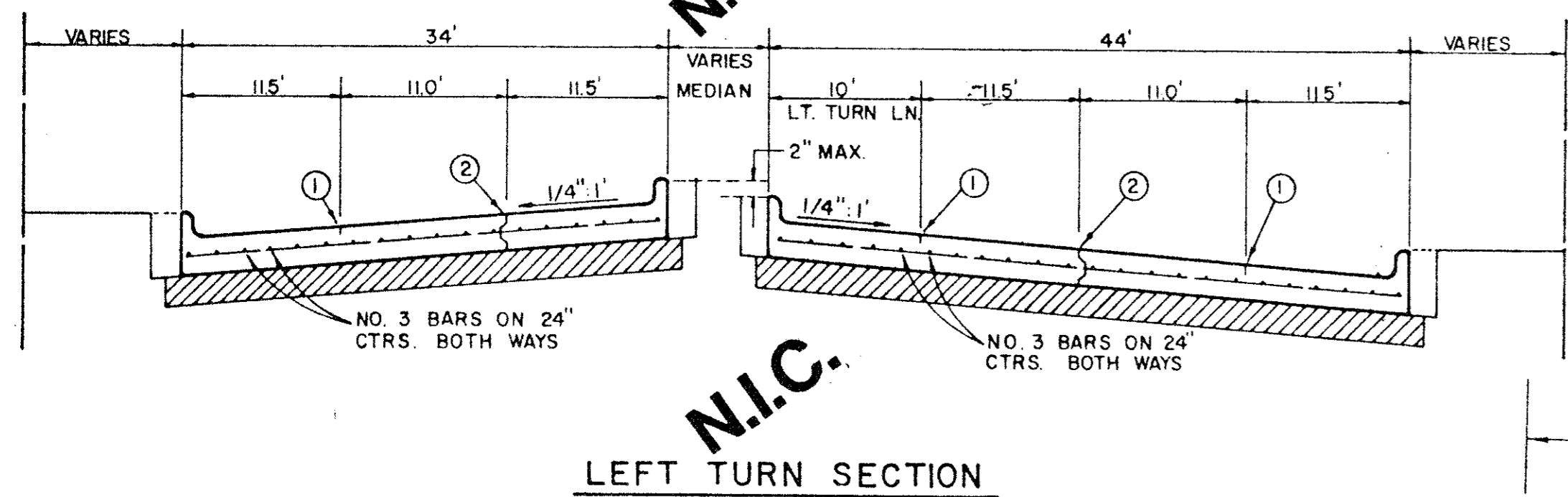
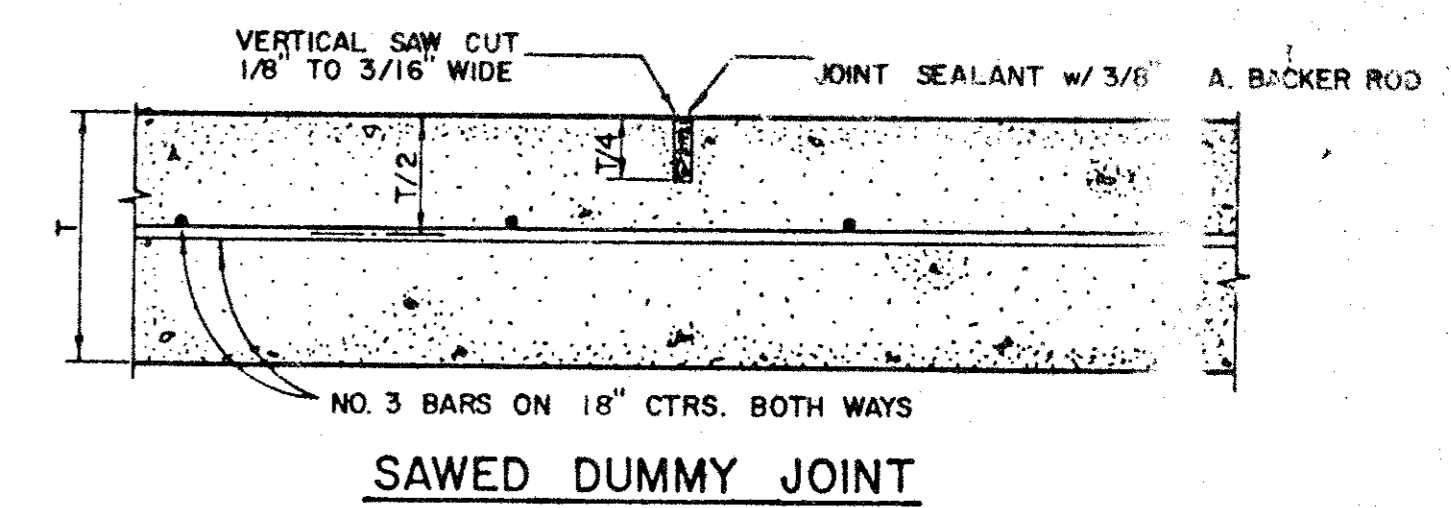
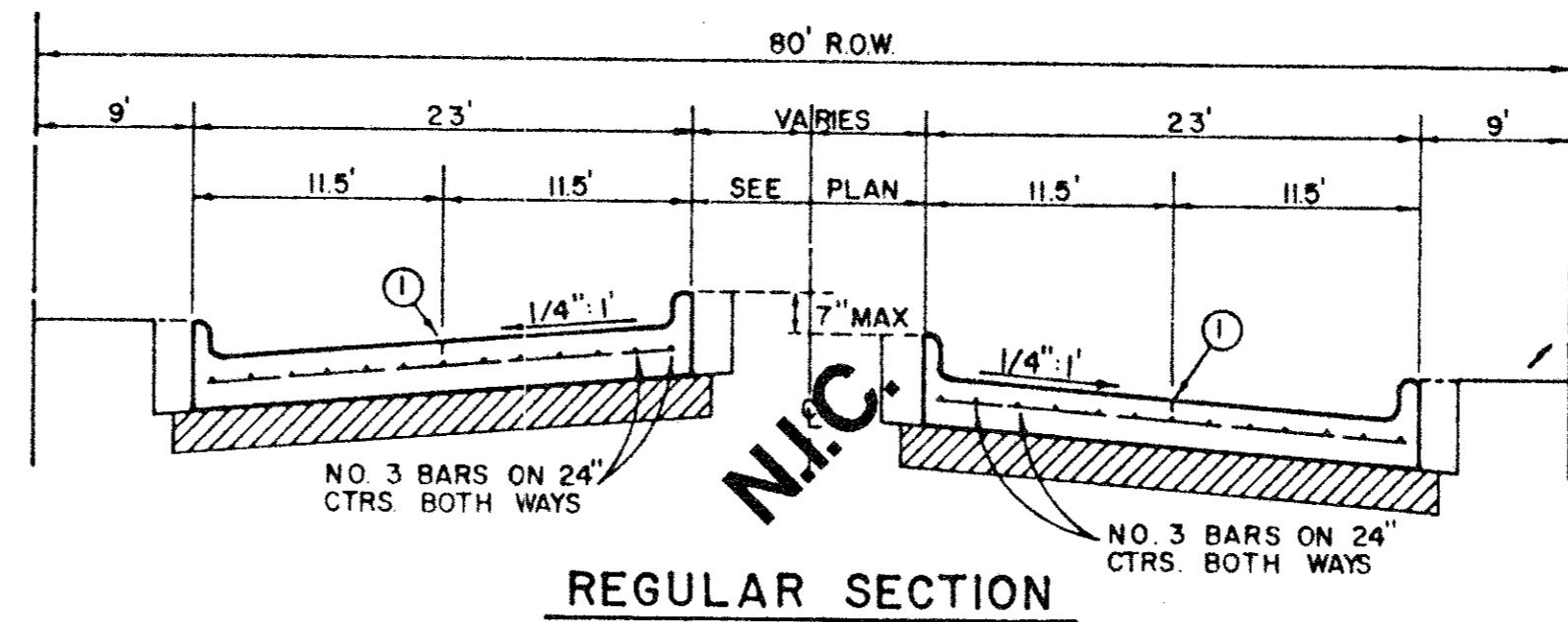
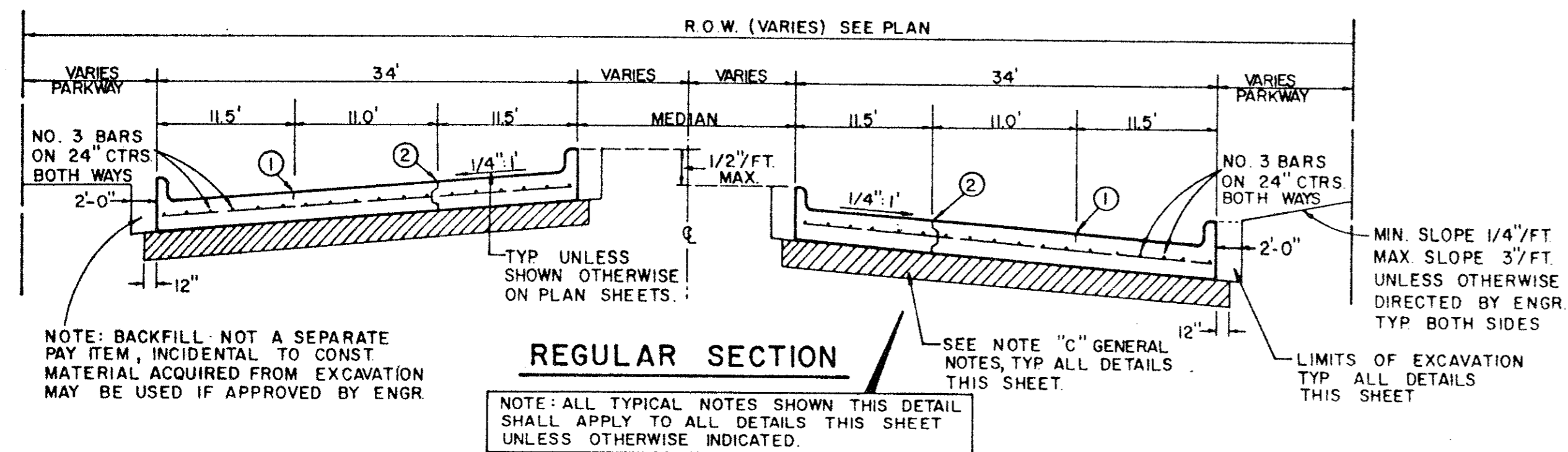
CHATHAM COURT

TOWN OF ADDISON, TEXAS

Date: AUGUST, 1991	Scale: 1" = 50'	SHEET GR-1 OF
Drawn By: T.N.C.	Approved By: T.N.C.	SHEETS



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STREET TYPE	STREET WIDTH (W)	A	B	ROW 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

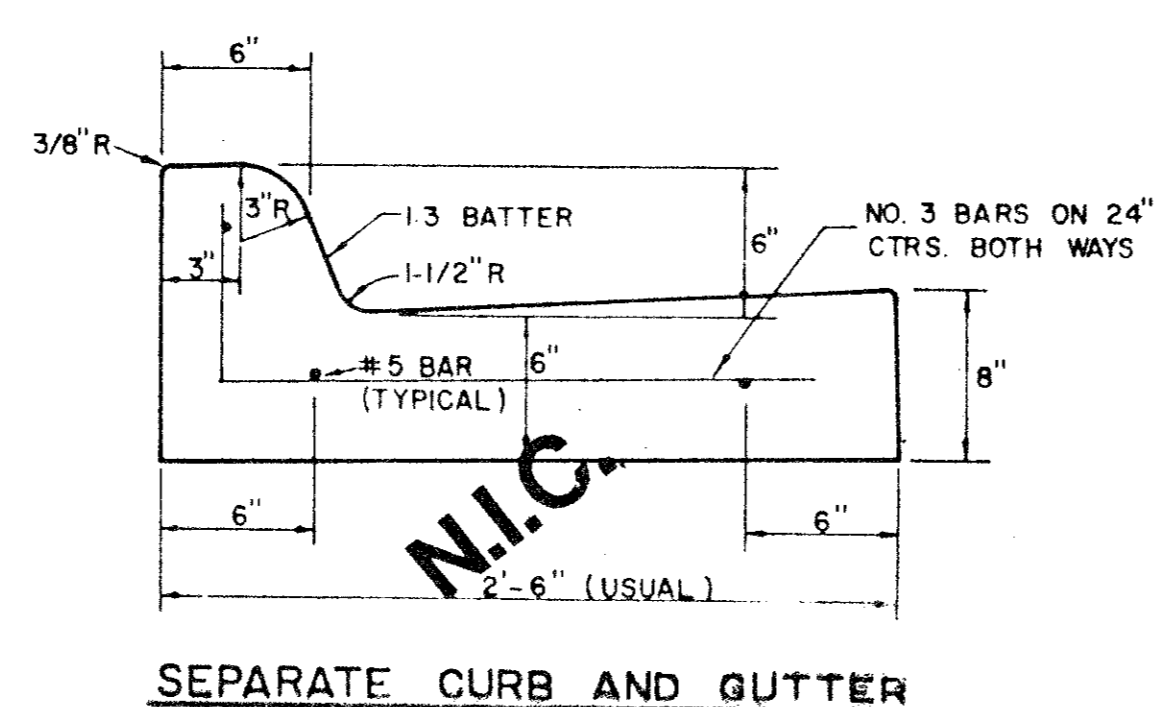
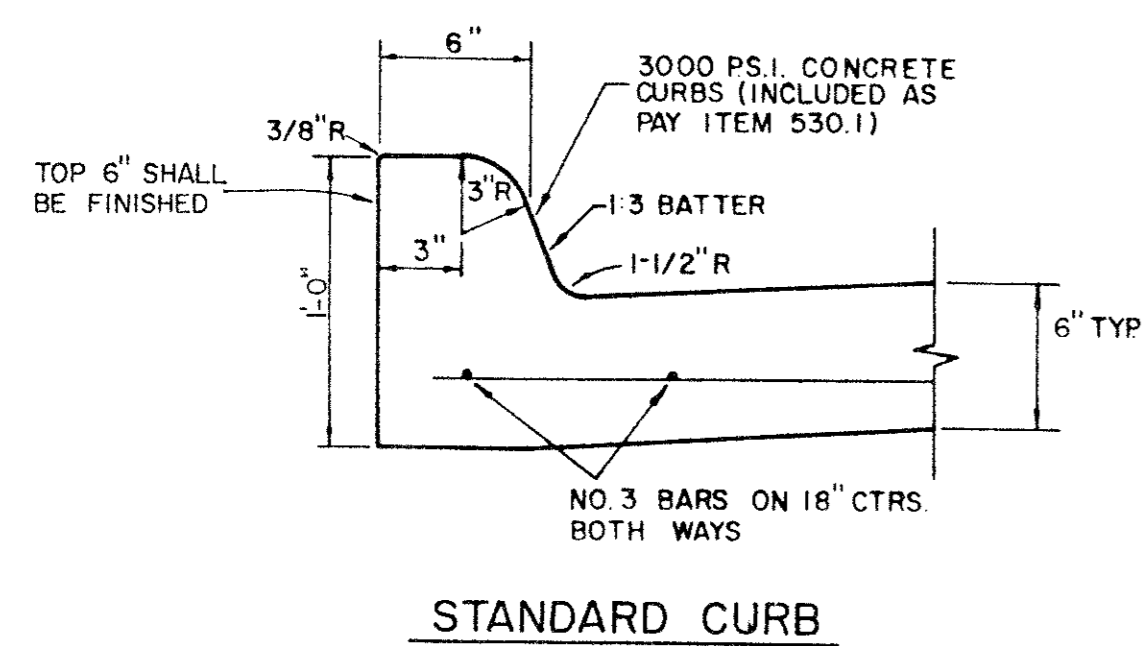
LOCAL STREET

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

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.

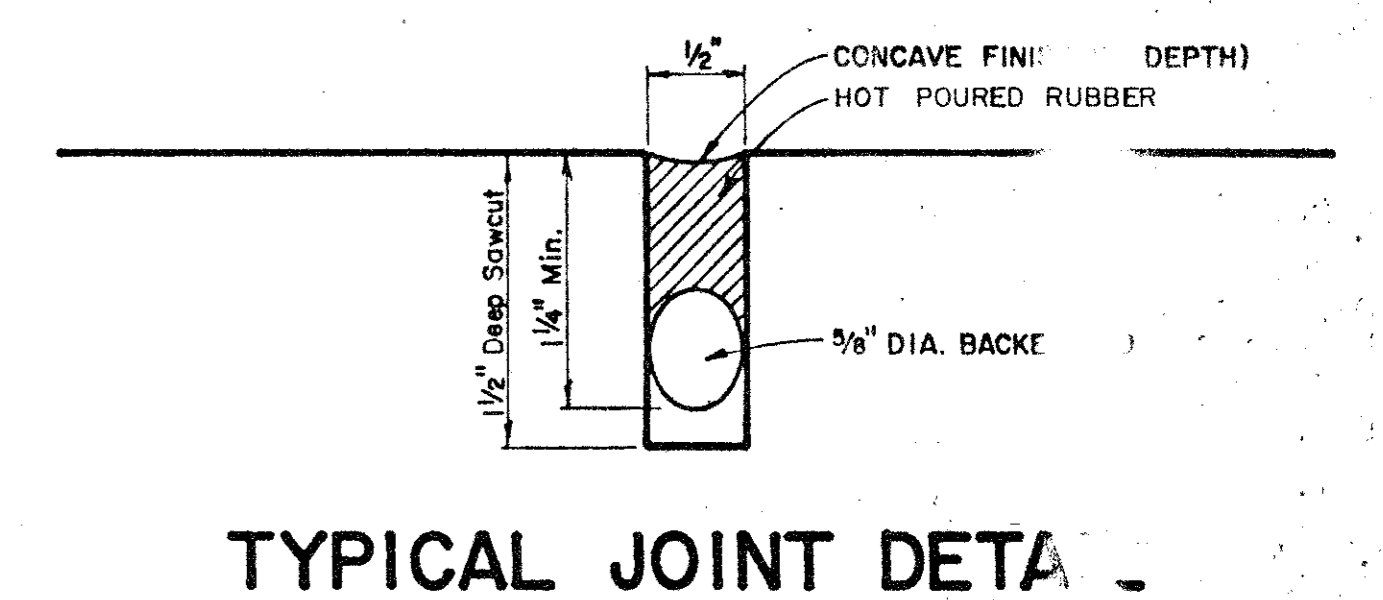
AS BUILTS
 I CERTIFY THIS PROJECT WAS CONSTRUCTED IN GENERAL CONFORMANCE WITH THESE CONSTRUCTION PLANS AND WILL FUNCTION AS DESIGNED.



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

- GENERAL NOTES**
- A. GENERAL PAVEMENT THICKNESS FOR STREETS SHOWN ON THIS SHEET IS IN SPECIAL NOTES.
 - B. STANDARD SPECIFICATIONS REINFORCED CONCRETE PAVEMENTS
 1. ALL CURBS SHALL BE PLACED AT THE SAME TIME WITH THE PAVEMENT.
 2. CURBS SHALL MEET THE SAME CONCRETE SPECIFICATIONS AS SPECIFIED FOR THE CONCRETE PAVEMENT.
 3. DETAIL AND ARRANGEMENT OF JOINTS, ALL JOINTS SHALL BE AS SHOWN ON THE STANDARD CONSTRUCTION PLANS AND SHALL BE APPROVED BY ENGINEER.
 4. BAR LAPS SHALL BE 30 DIAMETERS.
 - C. BAR CHAIRS OR AN APPROVED SUPPORTING DEVICE SHALL BE FURNISHED.



TYPICAL JOINT DETAIL

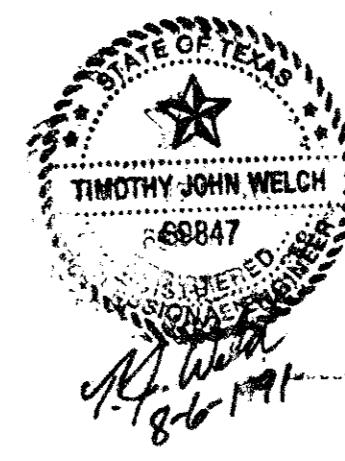
TOWN OF ADDISON, TEXAS
 DEPARTMENT OF ENGINEERING

STANDARD CONSTRUCTION DETAILS

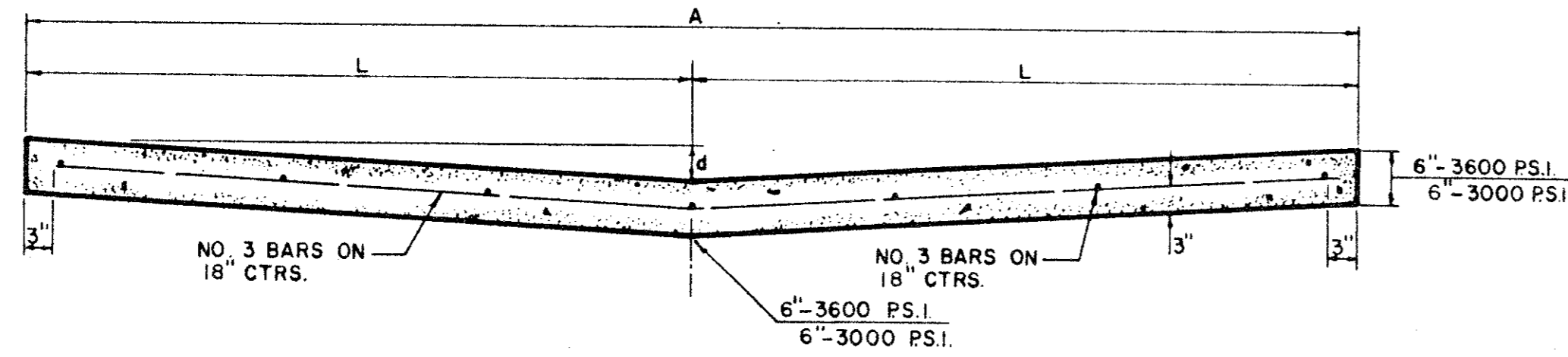
PAVING

STREET CROWNS & JOINTS

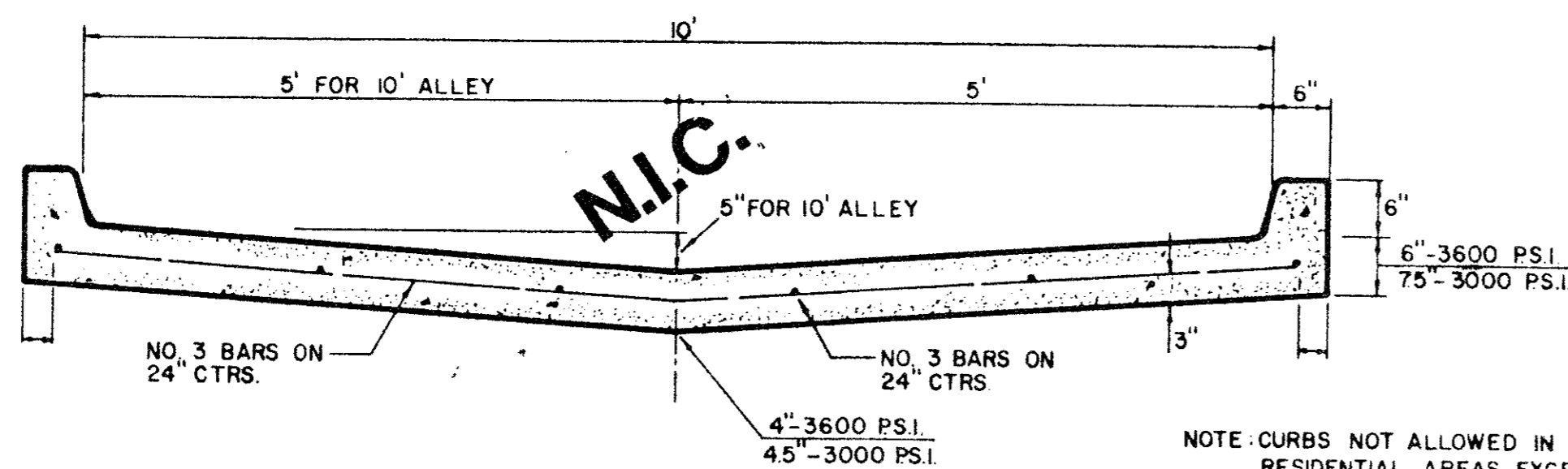
Designed - _____ Drawn - _____ Date - AUGUST, 1991 Job No. - 90025-4
 Approved - _____ Checked - _____ Scale - _____ Sheet D-1 OF _____



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

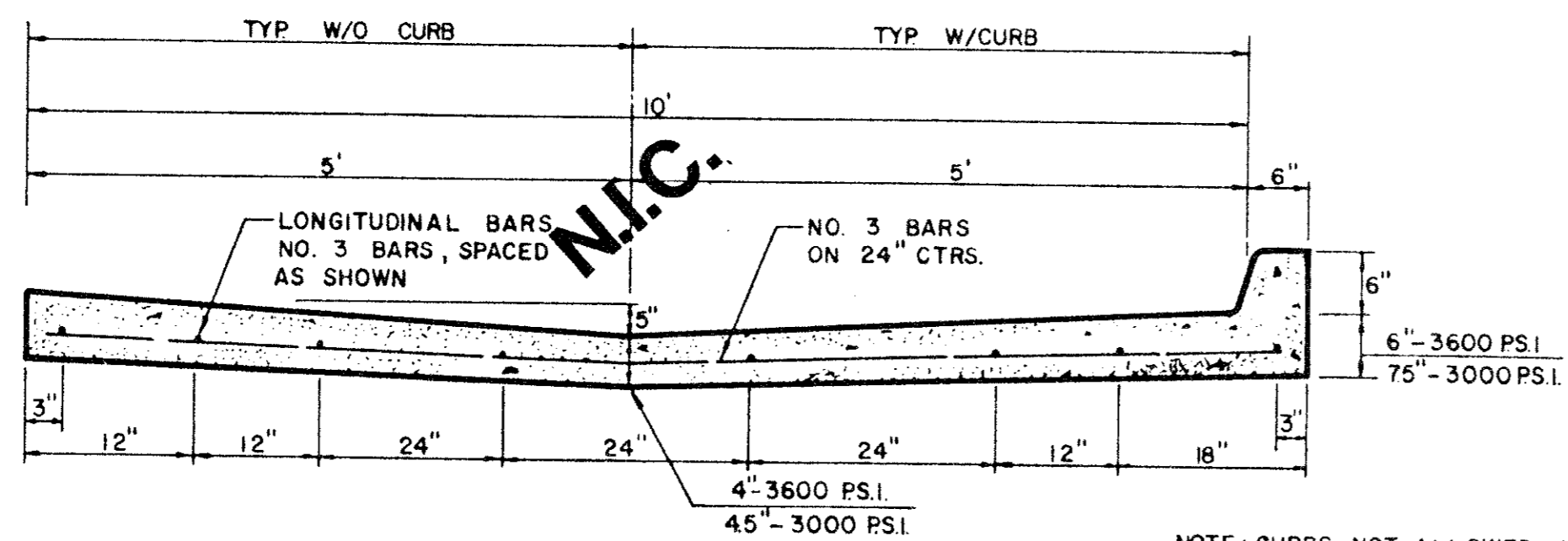


STANDARD 10', 12', 16', & 20' ALLEY SECTION



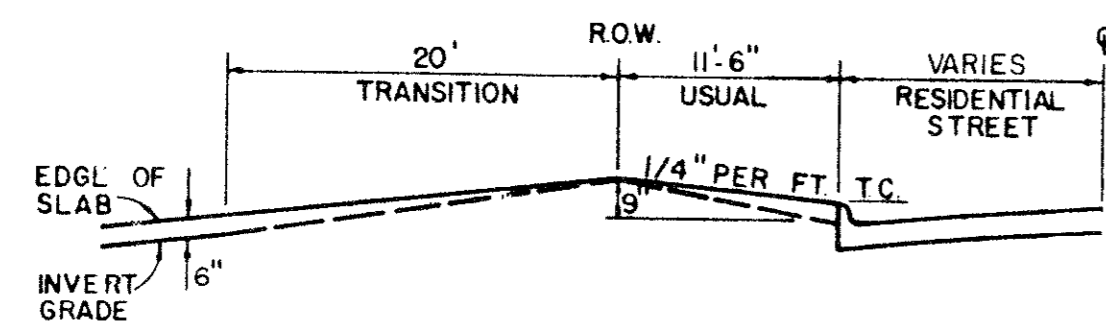
STANDARD ALLEY SECTION WITH CURBS

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

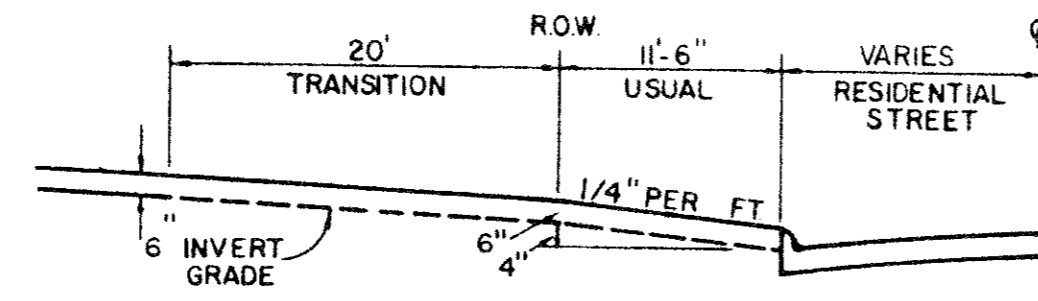


ALTERNATE 10' ALLEY SECTION / CURB

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



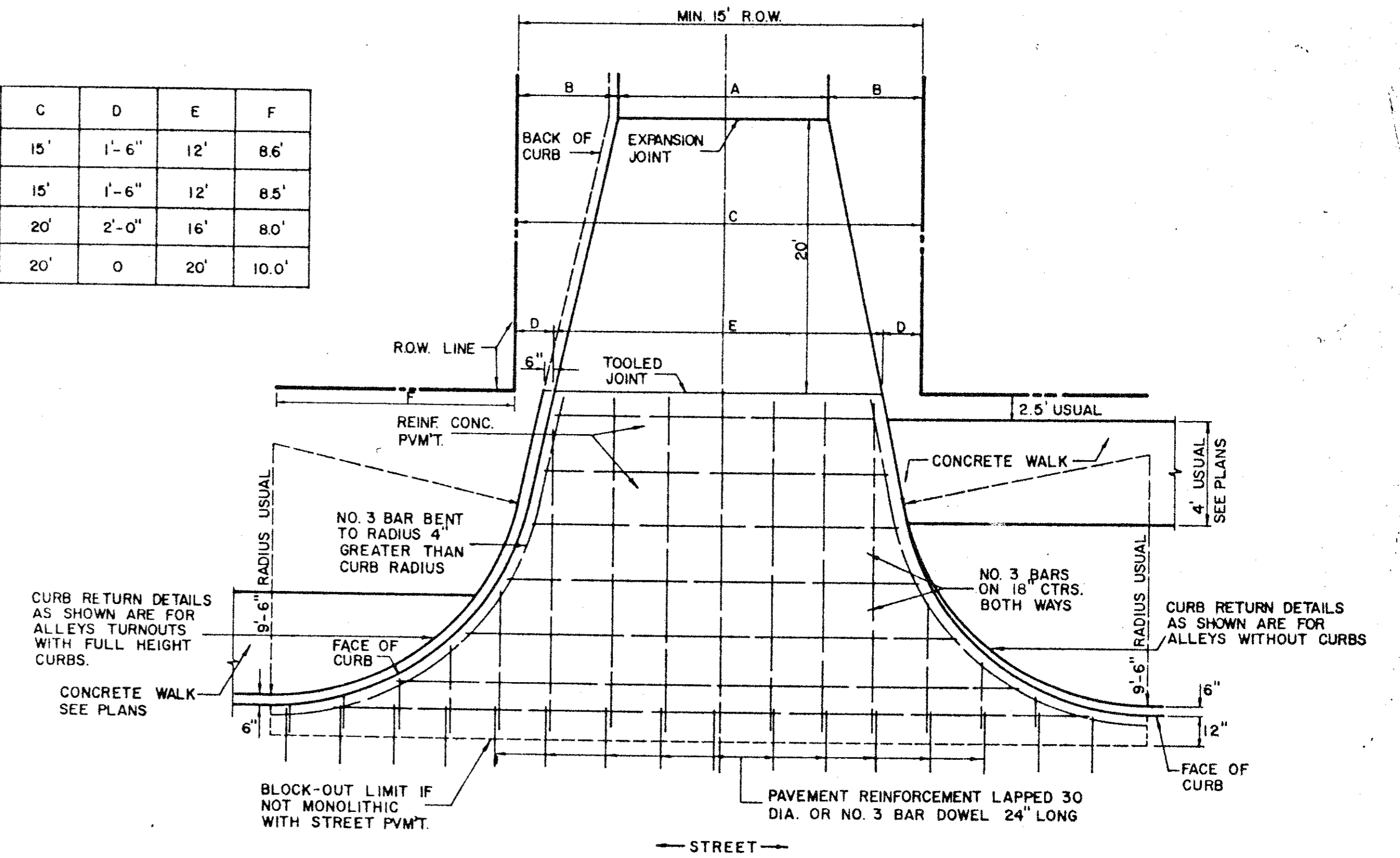
TYPE I ALLEY ENTRANCE



TYPE II ALLEY ENTRANCE

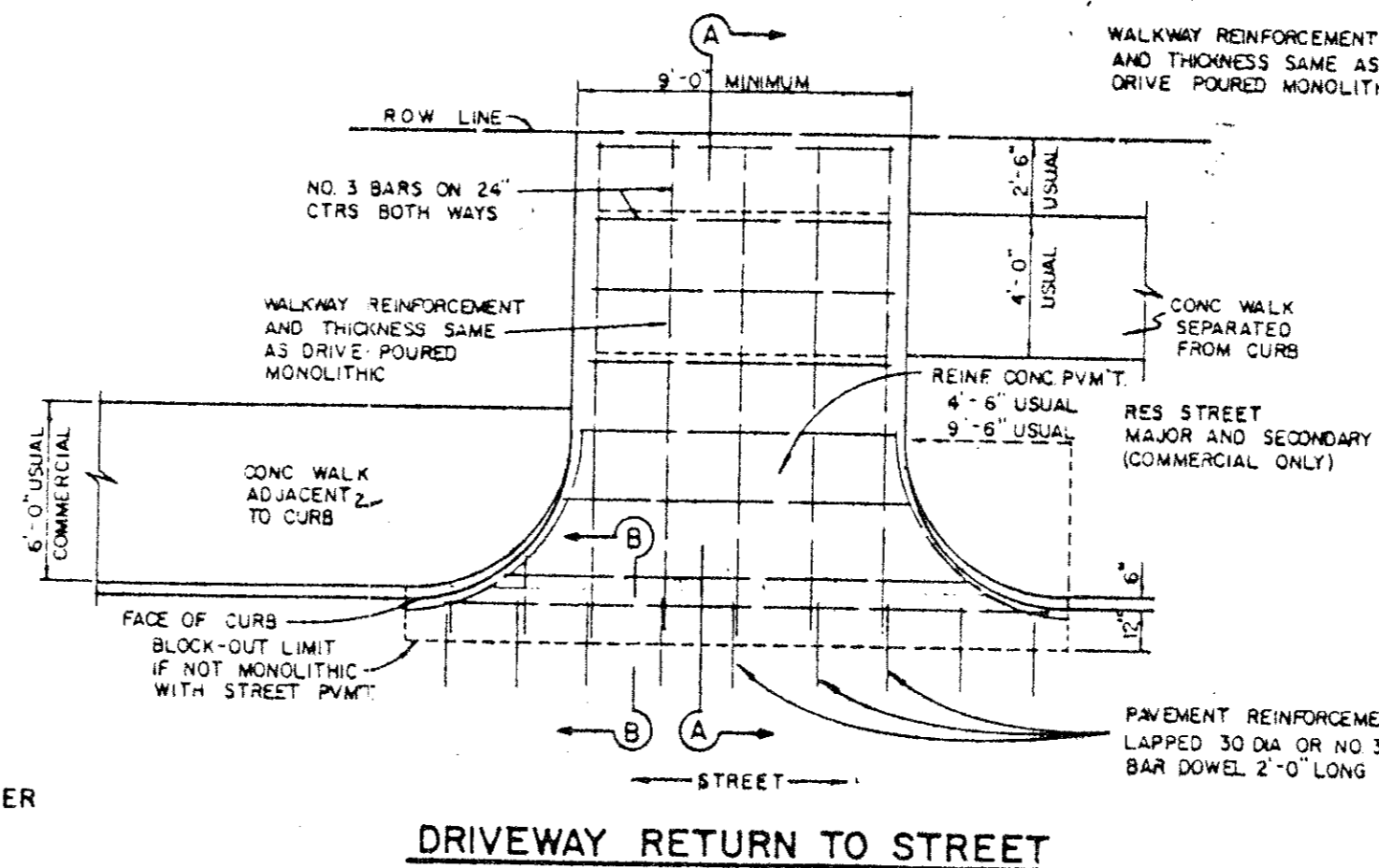
N.I.C.

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"

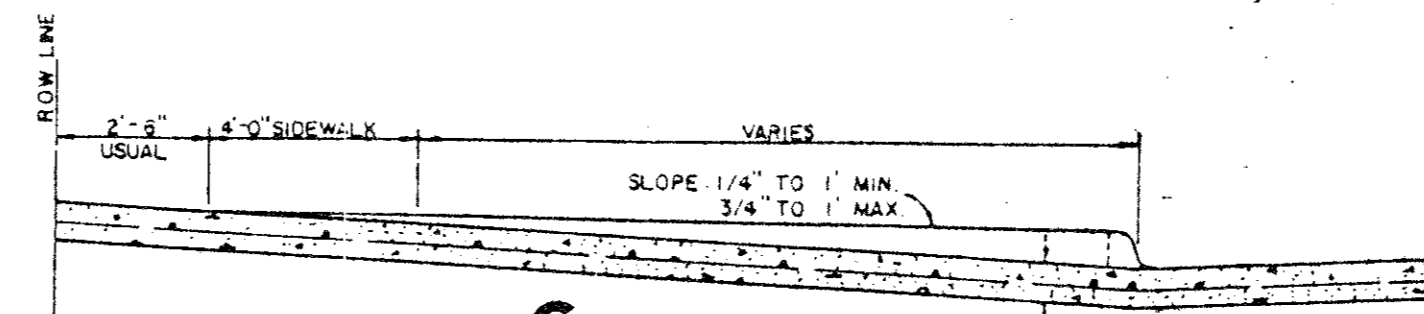


ALLEY RETURN DETAILS

FOR DETAILS ONLY-SEE PLAN FOR DIMENSIONS

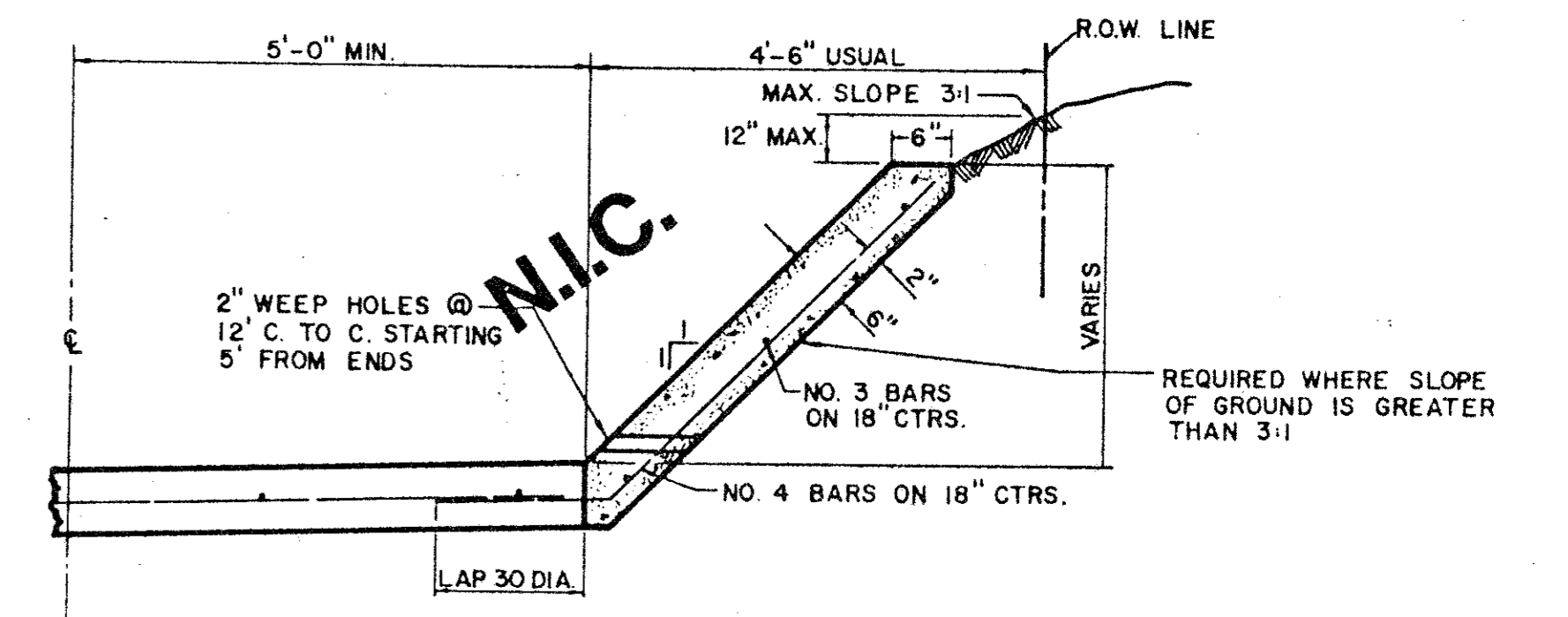


DRIVEWAY RETURN TO STREET



SECTION A-A

SECTION B-B
DRIVEWAY RETURN DETAILS



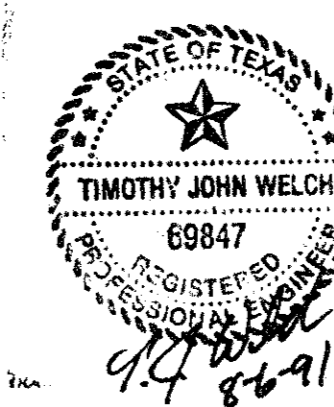
ALLEY SLOPE PROTECTION

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.

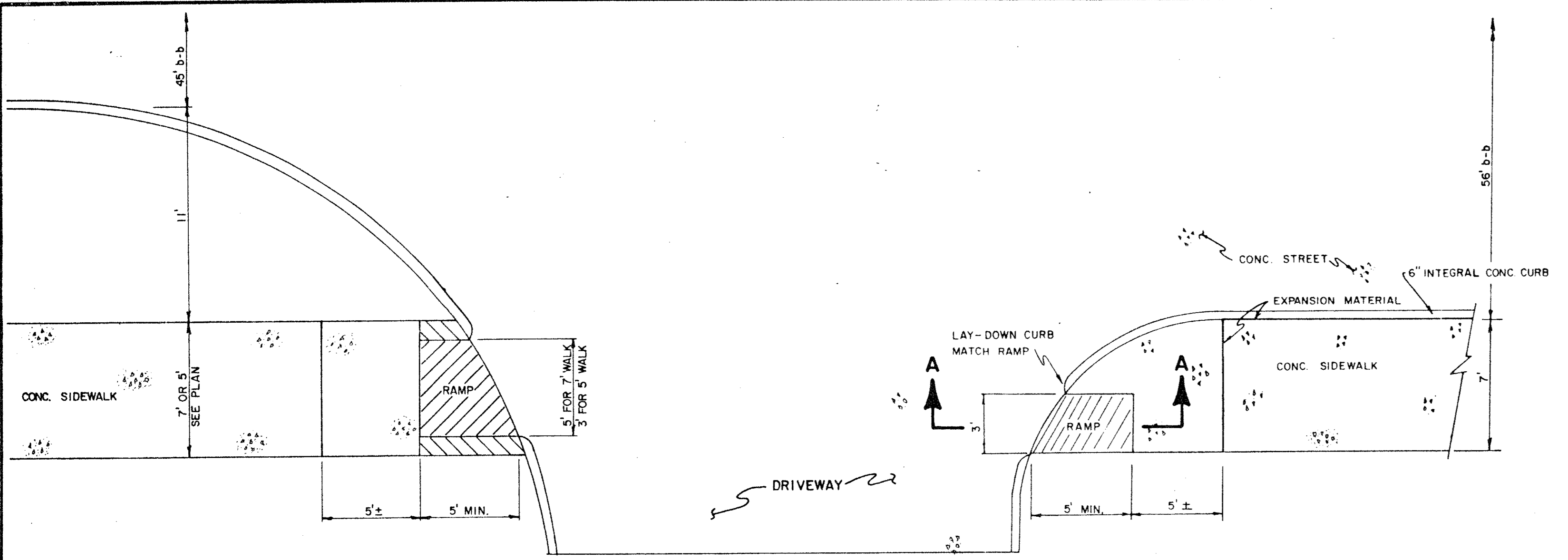
AS BUILTS

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



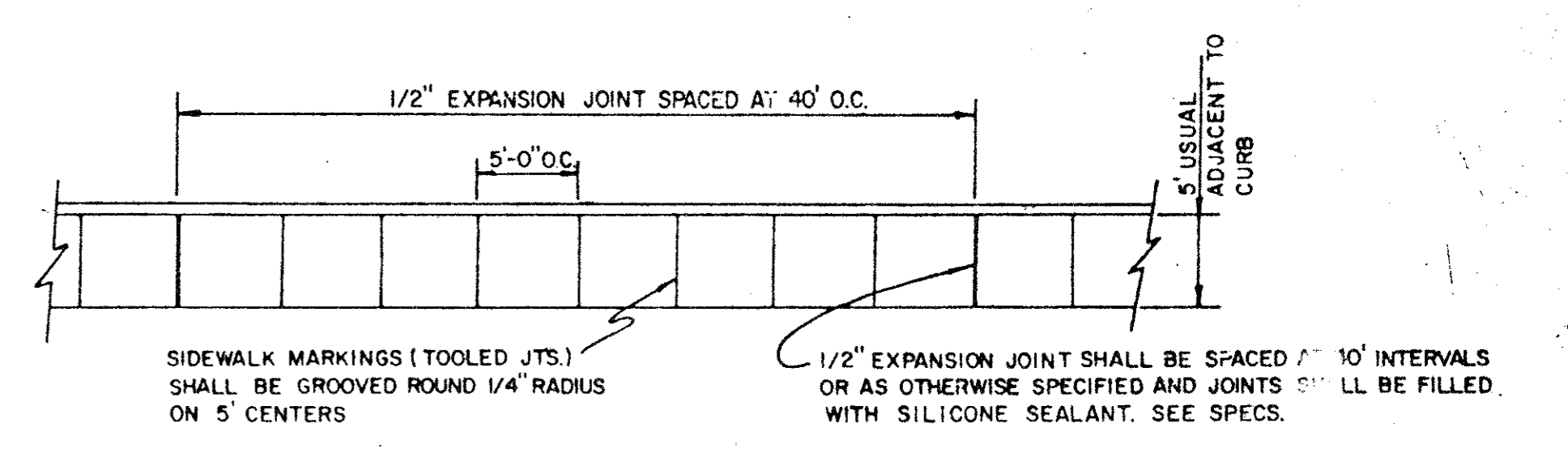
TOWN OF ADDISON, TEXAS
 DEPARTMENT OF ENGINEERING
STANDARD CONSTRUCTION DETAILS
PAVING
ALLEY & DRIVEWAY RETURNS

Designed -	Drawn -	Date - AUGUST, 1991	Job No. - 90025-4
Approved -	Checked -	Scale -	Sheet D-2 OF

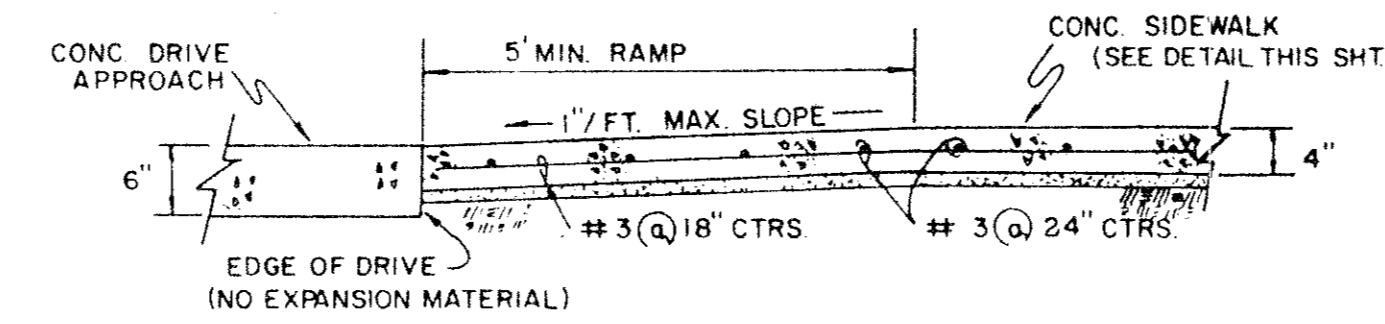


PLAN

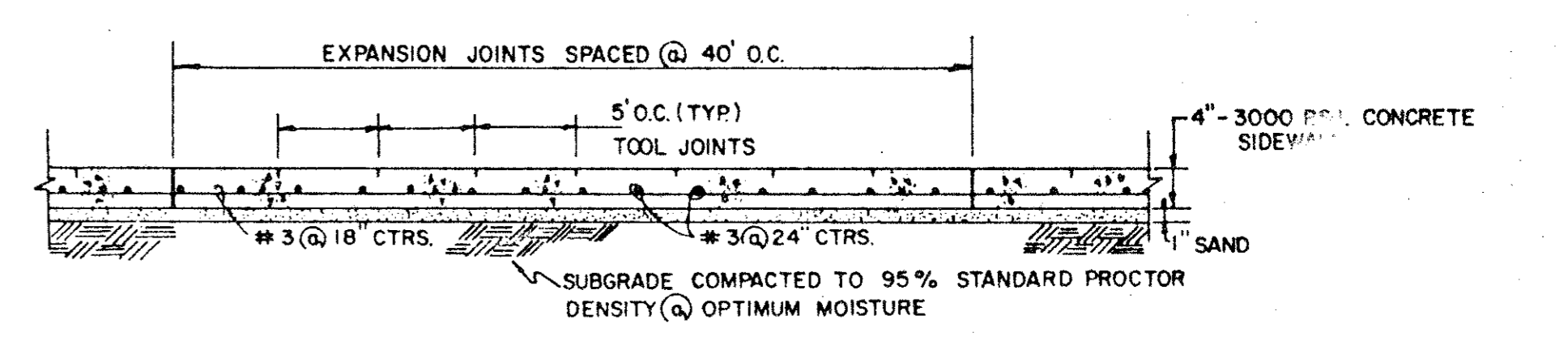
NOTE:
MODIFY RAMP TO
FIT DIFFERENT RADIUS



PLAN

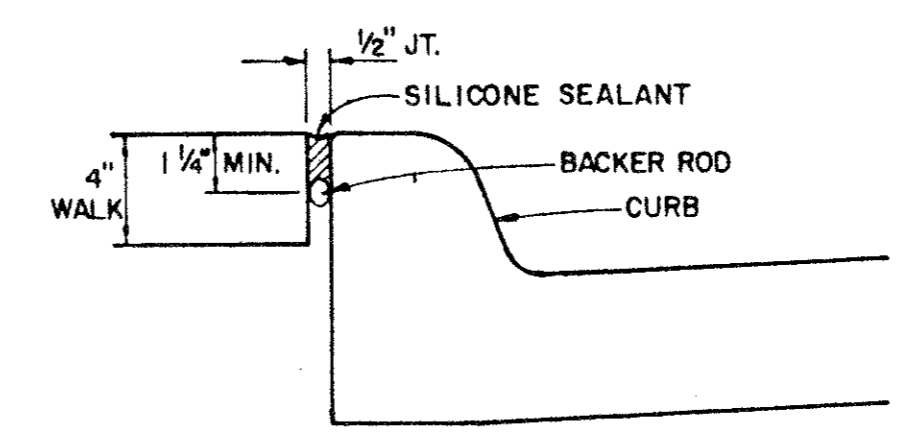


SECTION A-A

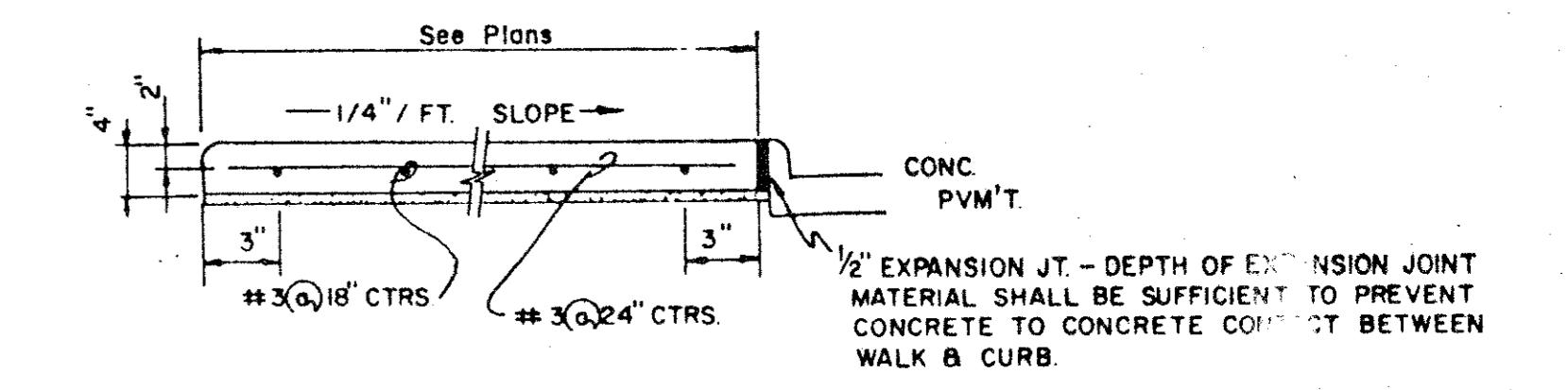


SIDE ELEVATION

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

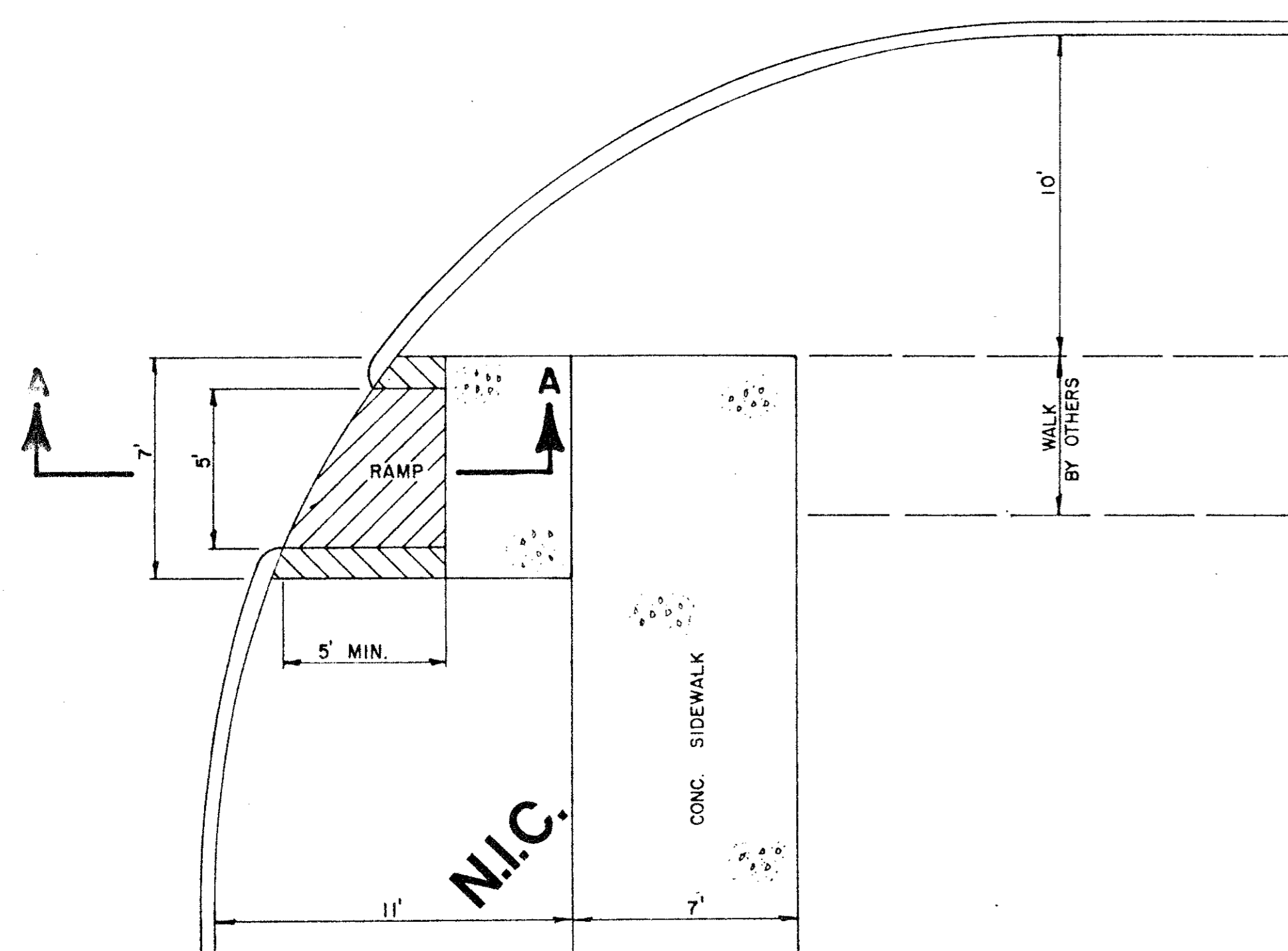


EXPANSION JOINT DETAIL

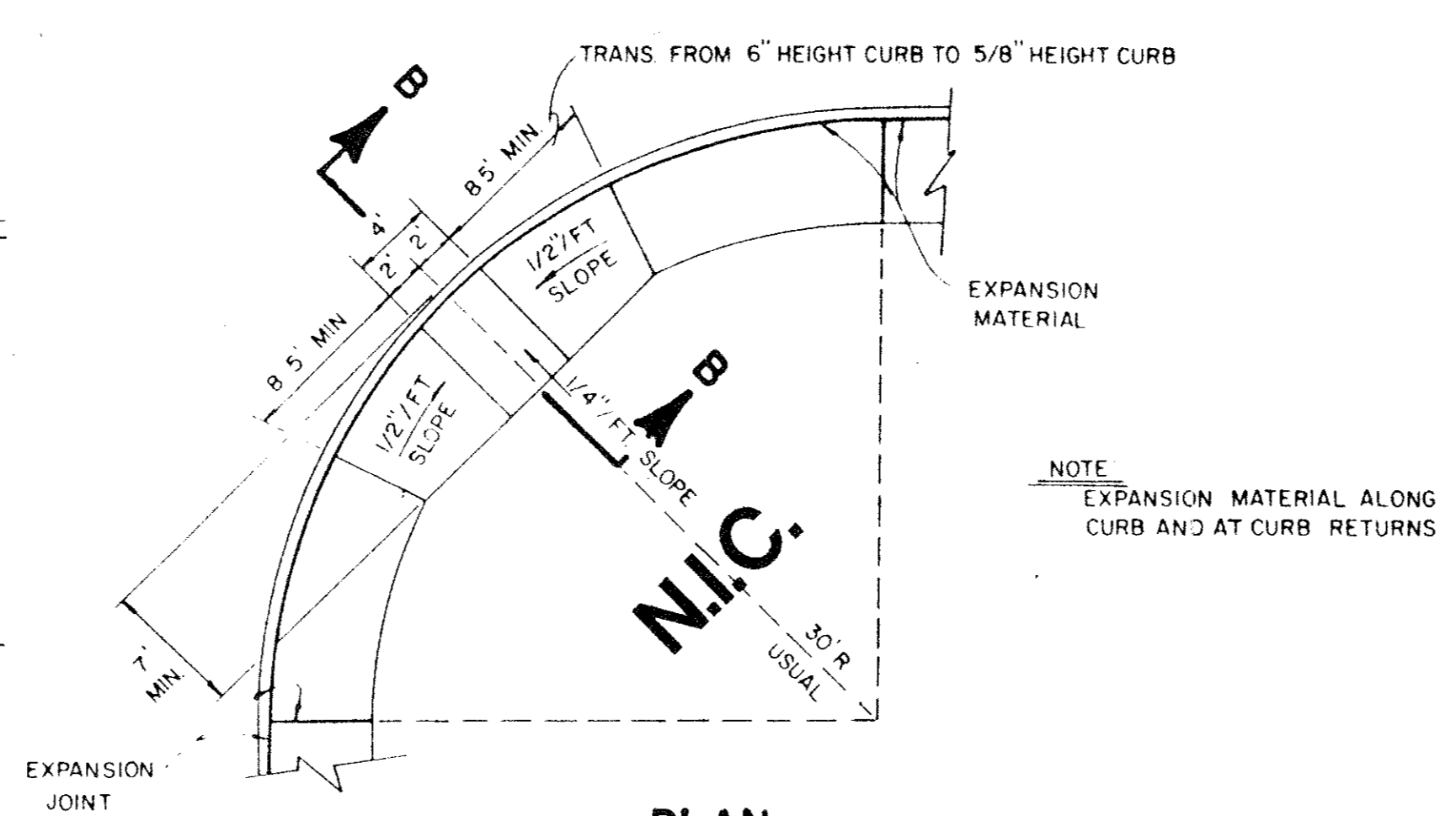


SECTION

CONCRETE SIDEWALK DETAIL

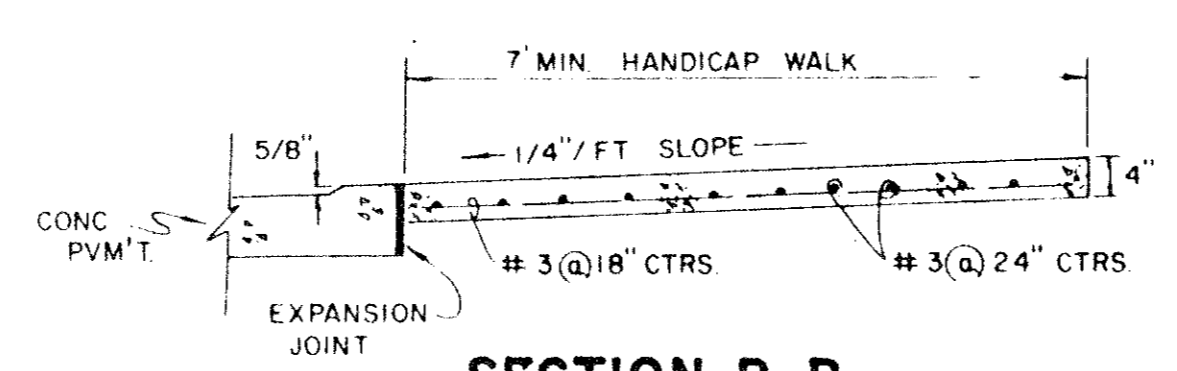


**BARRIER FREE RAMP DETAIL
WITH WALK SEPARATE FROM CURB**



PLAN

NOTE:
EXPANSION MATERIAL ALONG
CURB AND AT CURB RETURNS



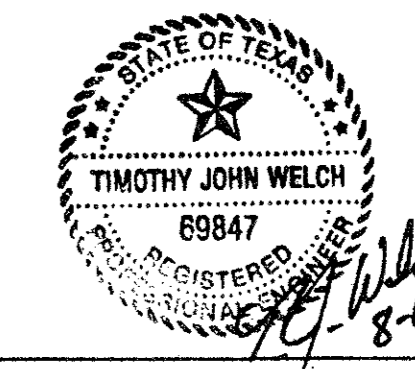
SECTION B-B

HANDICAP ROLL-DOWN CURB DETAIL

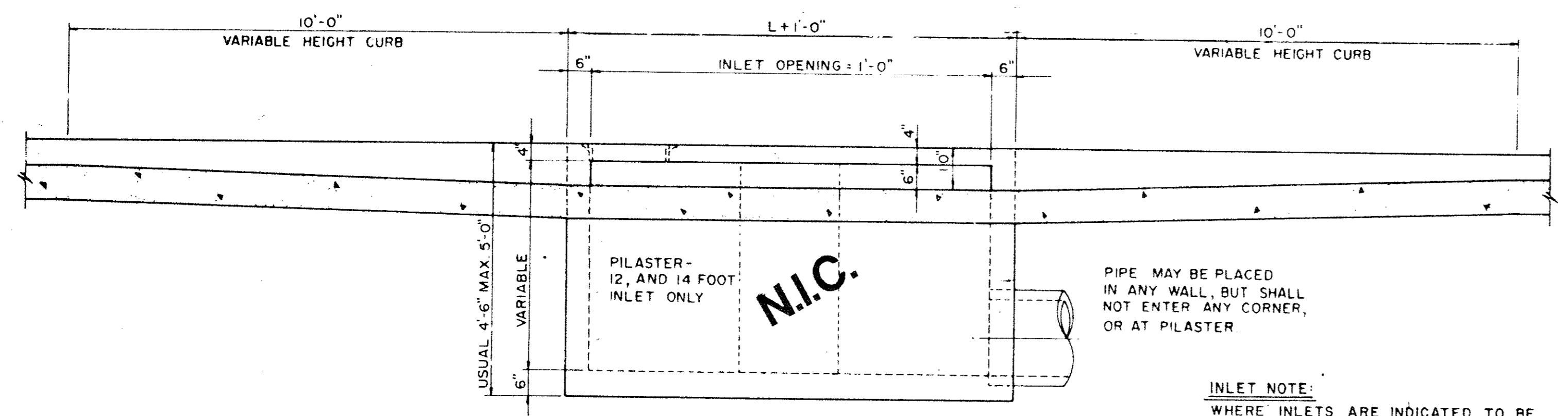
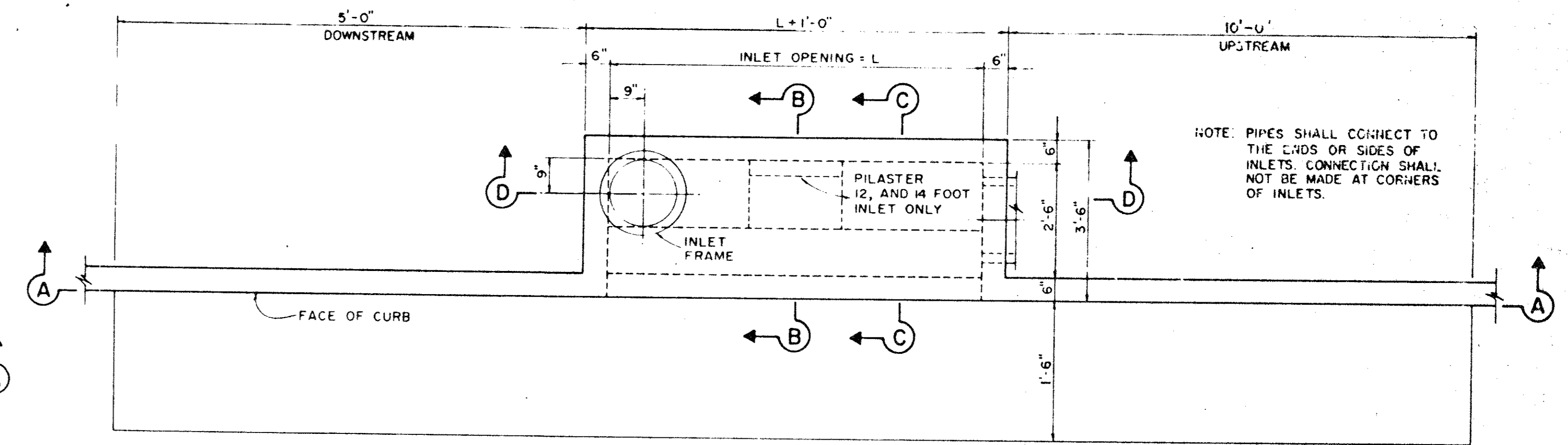
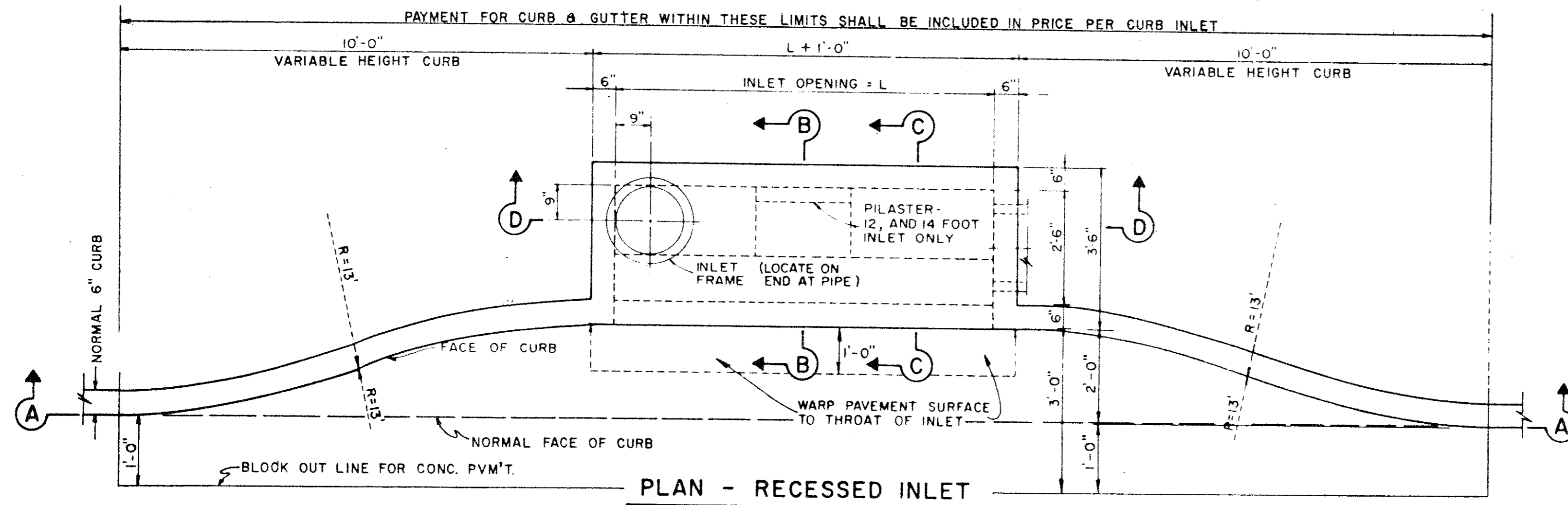
GENERAL NOTES

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

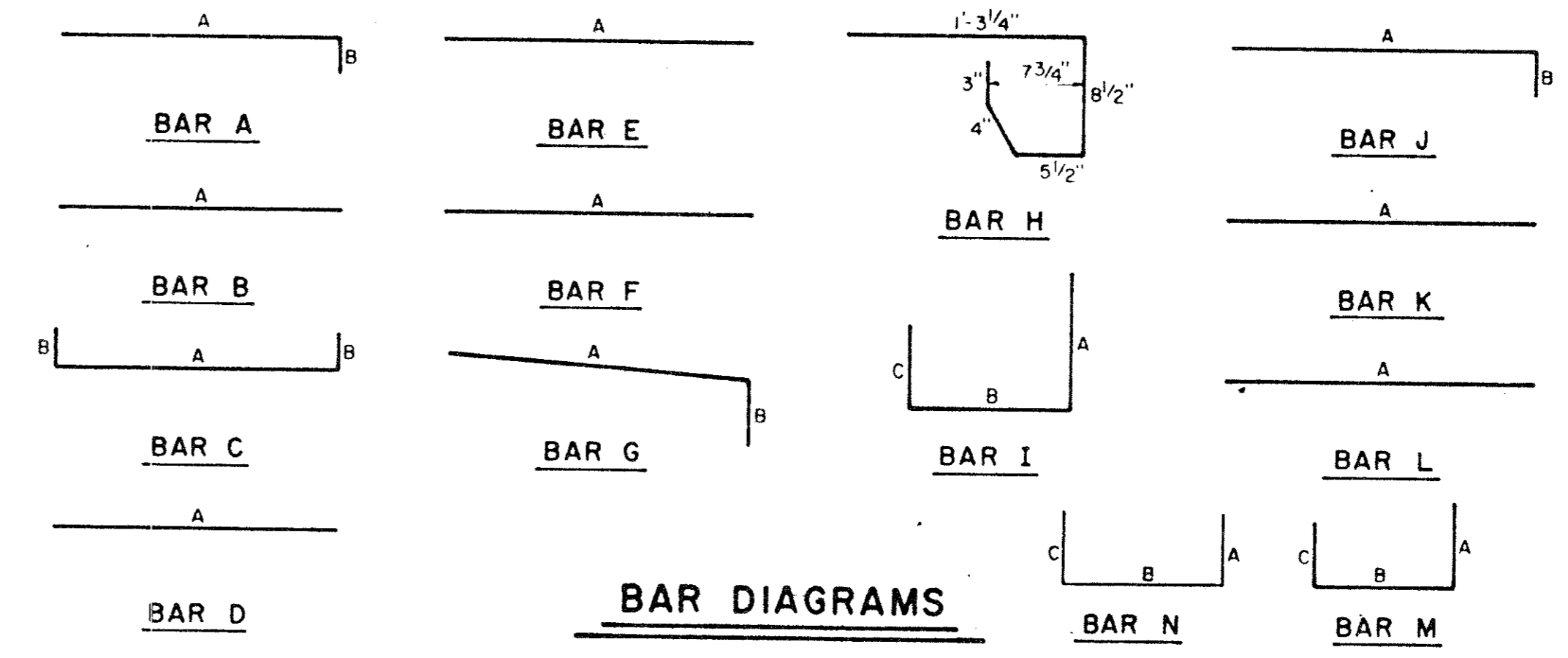


NO.	REVISION	BY	DATE
TOWN OF ADDISON, TEXAS DEPARTMENT OF ENGINEERING			
STANDARD CONSTRUCTION DETAILS PAVING			
SIDEWALKS & RAMPS			
APPROVED _____			
DATE AUGUST, 1991		SHEET D-3	



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

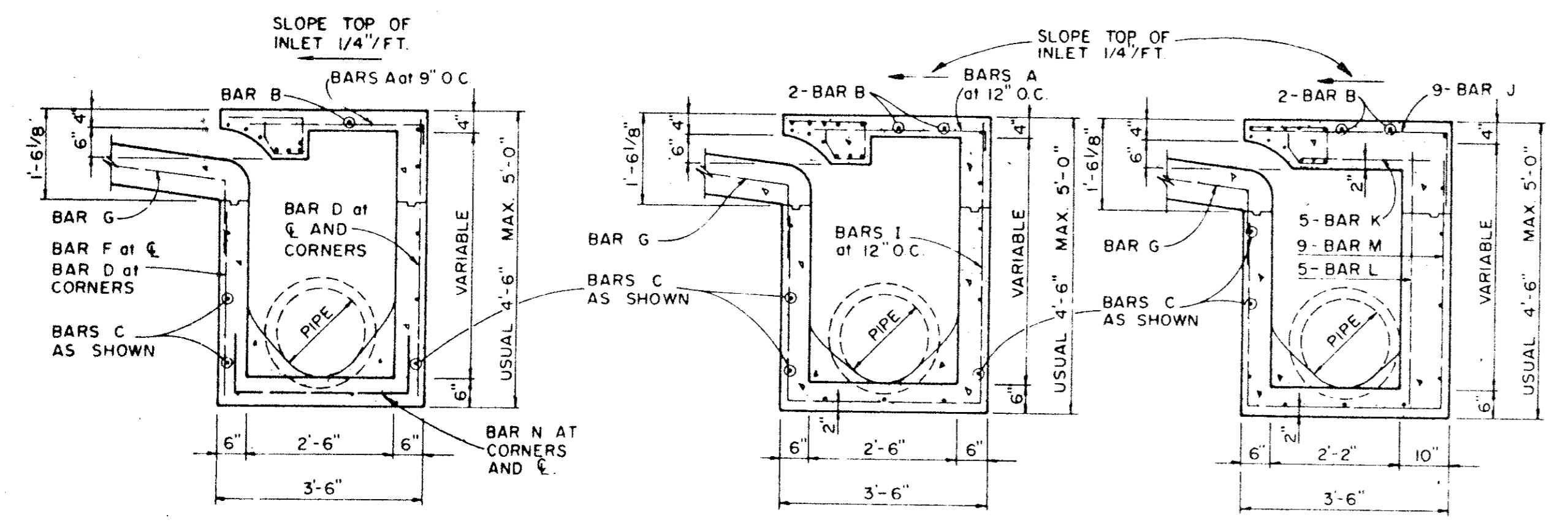
INLET NOTE:
WHERE INLETS ARE INDICATED TO BE MODIFIED, REFER TO PLAN/PROFILE SHEETS FOR ELEV. DIFFERENT SIZES OR MODIFICATIONS. ALL OTHER ITEMS SHALL REMAIN AS SHOWN ON THIS STANDARD DETAIL SHEET.



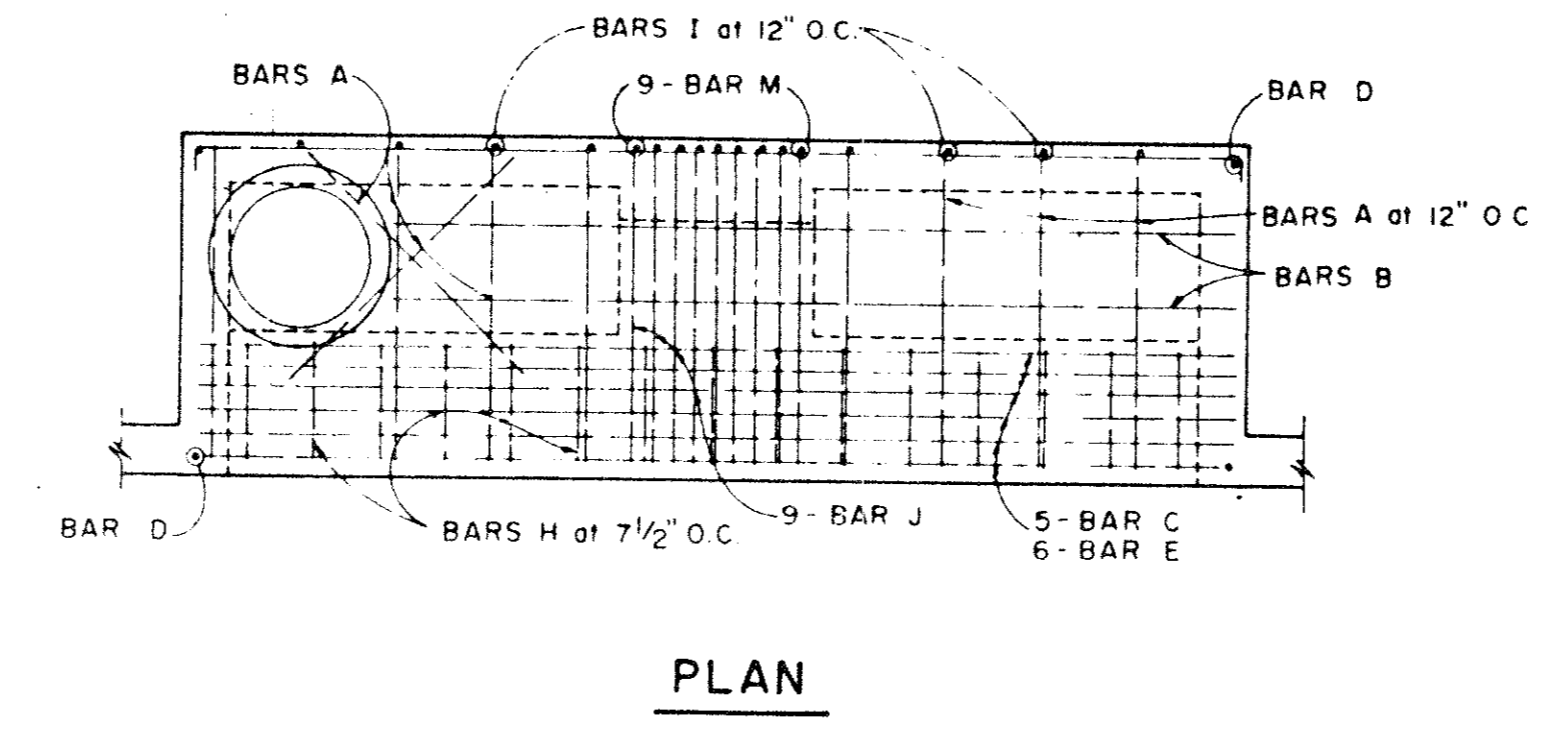
REINFORCING STEEL SCHEDULE

DIMENSIONS SHOWN ARE FOR MAXIMUM SIZE INLETS

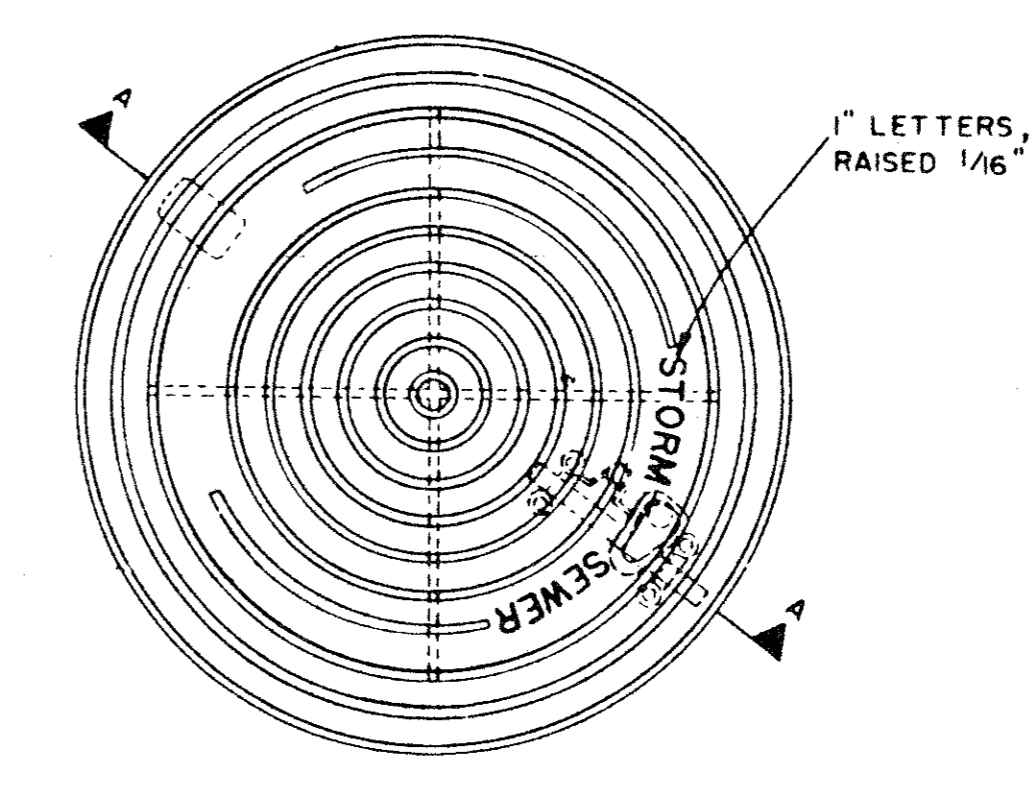
INLET LENGTH	BAR TYPE	BAR DIA (1/8 IN)	NO. REQ'D	BAR DIMENSIONS		
				A	B	C
4	A	3	6	3'-2"	0'-3"	-
	B	3	1	2'-10"	-	-
	C	4	15	4'-8"	0'-6"	-
	D	4	5	4'-8"	-	-
	F	4	1	3'-2"	-	-
	G	3	5	2'-0"	1'-3"	-
	H	3	4	-	-	-
	N	3	3	3'-2"	3'-2"	3'-2"
6	A	3	9	3'-2"	0'-3"	-
	B	3	1	4'-10"	-	-
	C	4	15	6'-8"	0'-6"	-
	D	4	5	4'-8"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



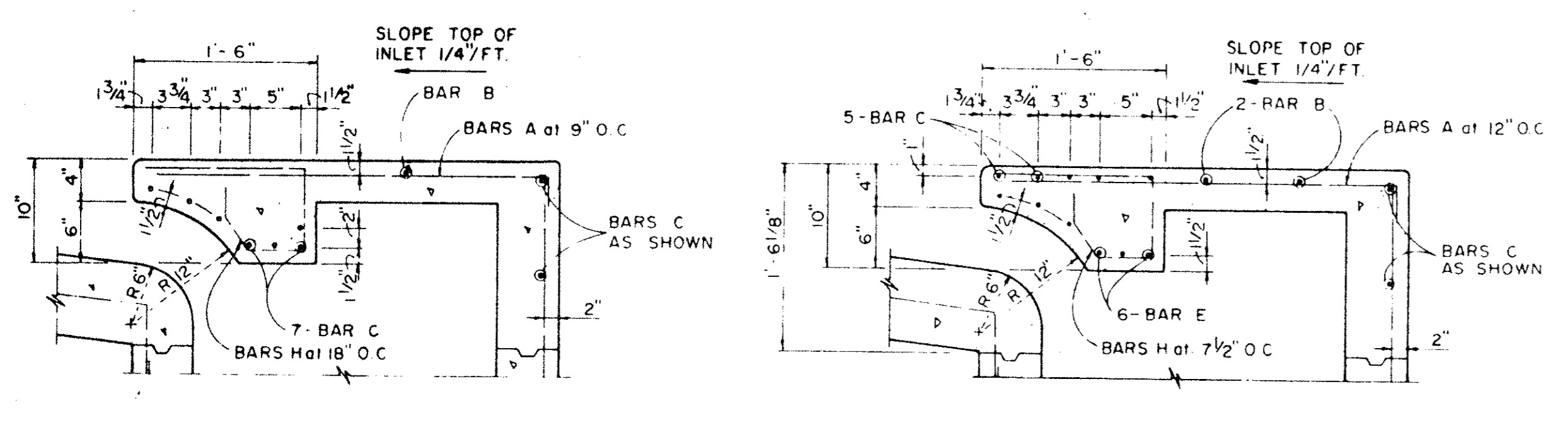
SECTION B-B SECTION C-C SECTION B-B SECTION C-C



PLAN



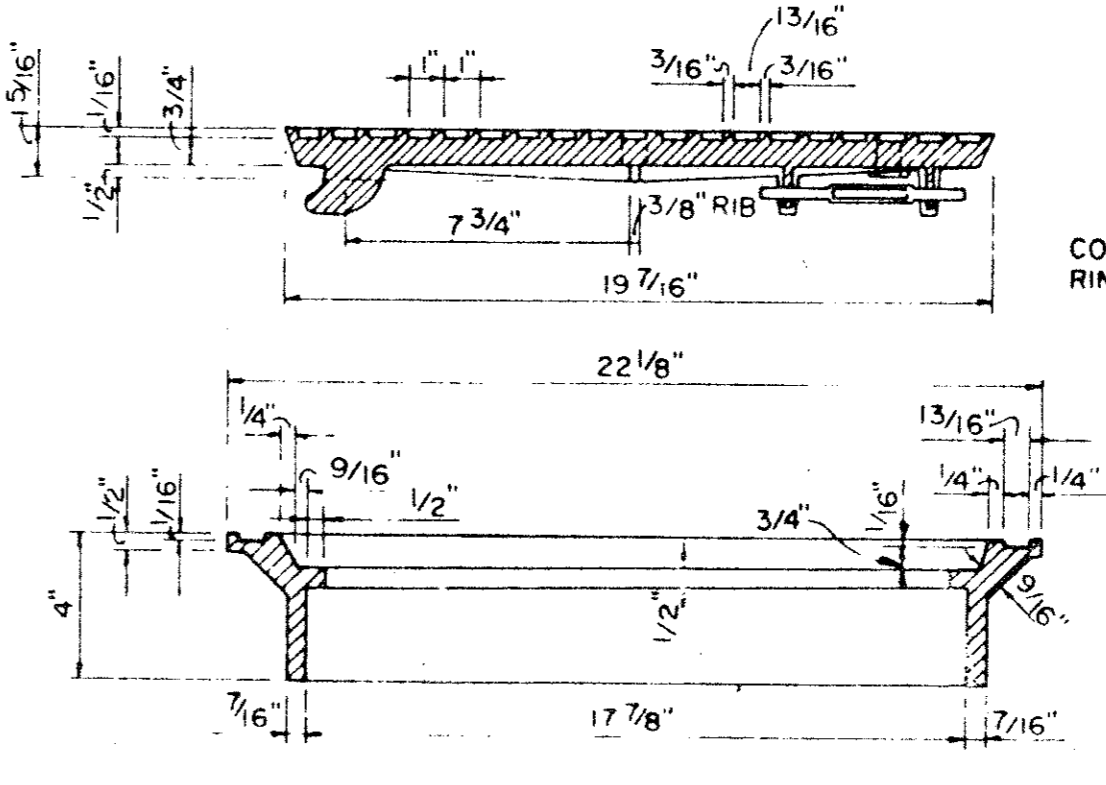
PLAN OF FRAME



SECTION C-C SECTION D-D FOR 12' & 14' ONLY

4, 6, AND 8 FOOT INLETS

10, 12, AND 14 FOOT INLETS



SECTION OF FRAME AND COVER

INLET FRAME AND COVER



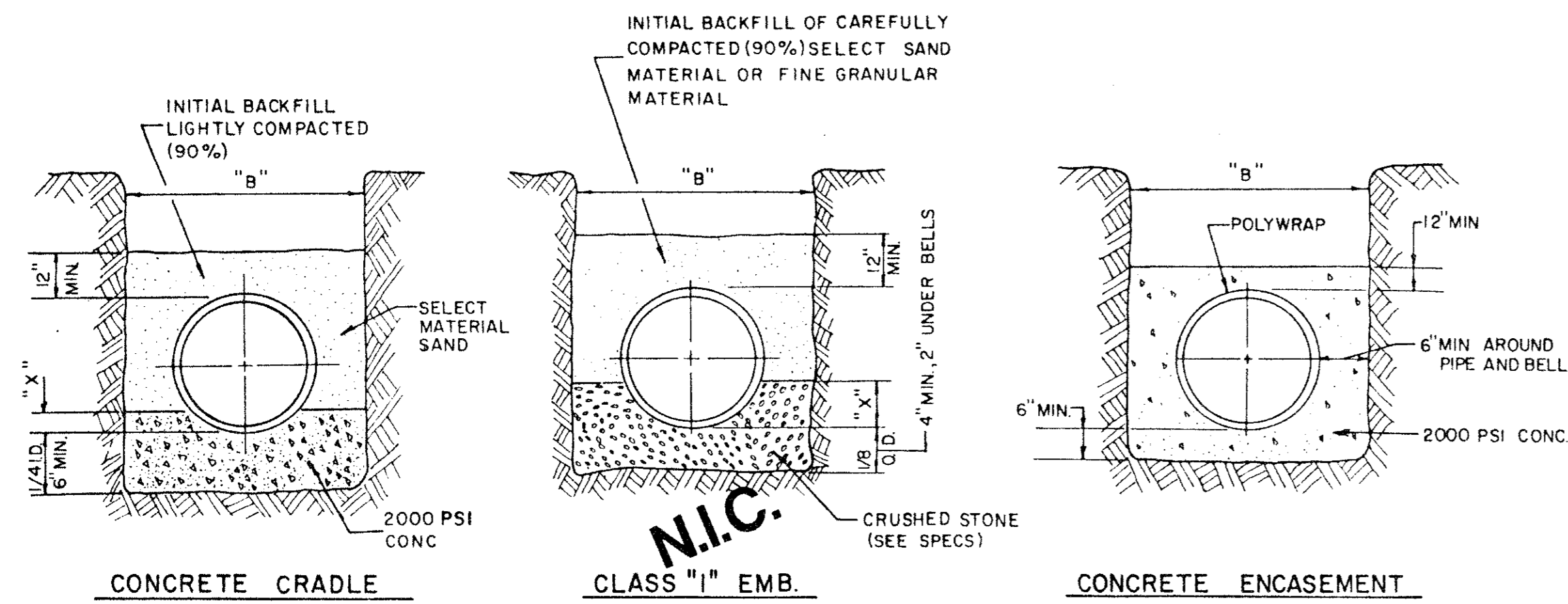
AS BUILT * SEE DIAGRAM FOR DIMENSIONS
I CERTIFY THIS PROJECT WAS CONSTRUCTED IN GENERAL CONFORMANCE WITH THESE CONSTRUCTION PLANS AND WILL FUNCTION AS DESIGNED.

TOWN OF ADDISON, TEXAS
DEPARTMENT OF ENGINEERING

STANDARD CONSTRUCTION DETAILS
STORM DRAINAGE

CURB INLETS

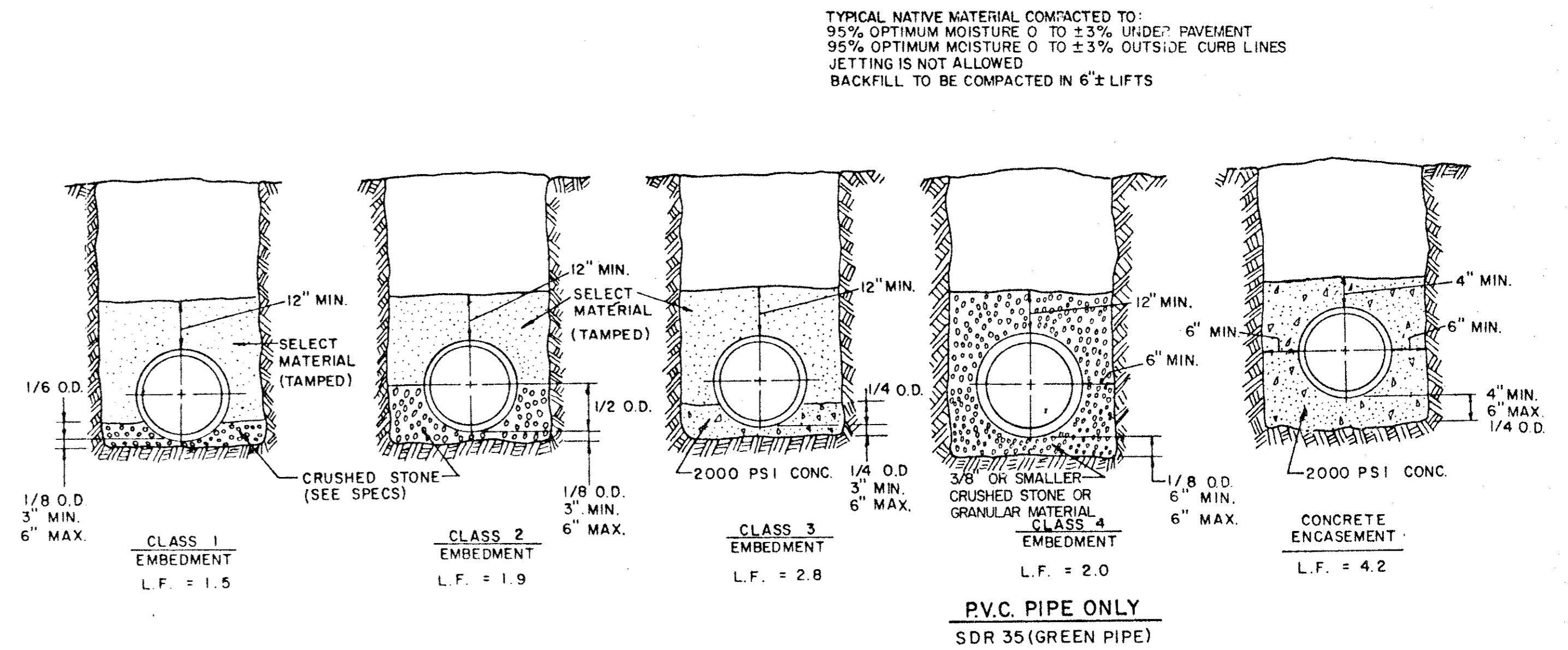
Designed - Drawn - Date - AUGUST, 1991 Job No - 90025-4
Approved - Checked - Scale - Sheet D-4 of



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	"X" IS A MINIMUM DEPTH	"B" TRENCH WIDTH FOR COMPUTATION OF QUANTITIES	CONCRETE		CRUSHED STONE FOR CLASS "I" EMB.
				FOR EMB.	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



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

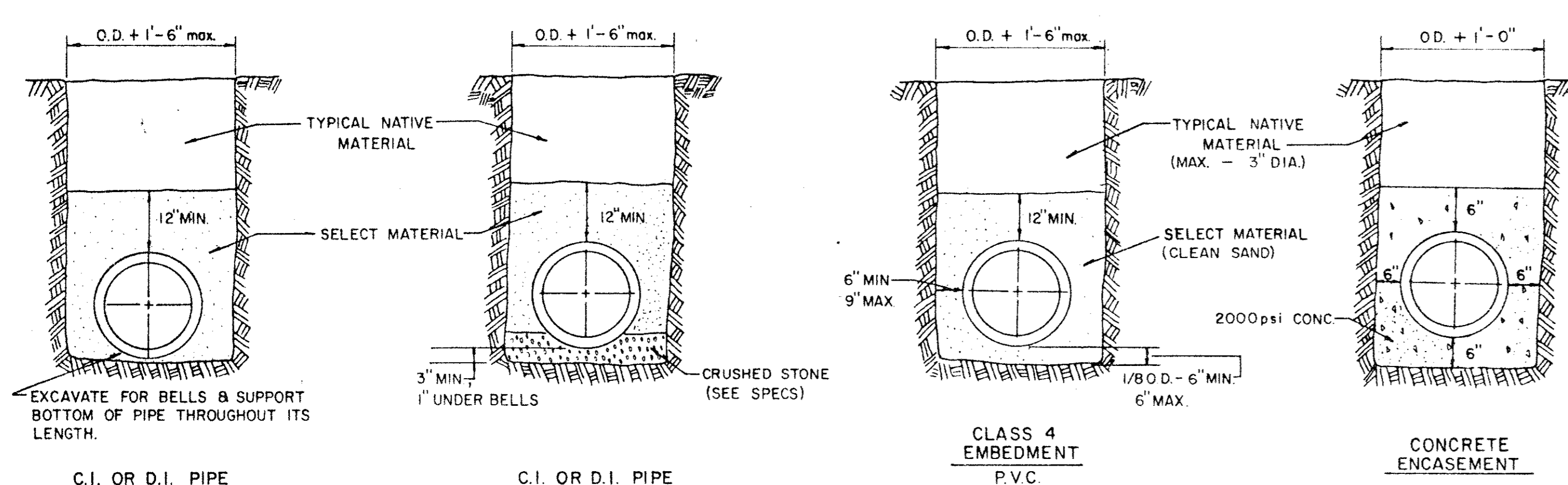
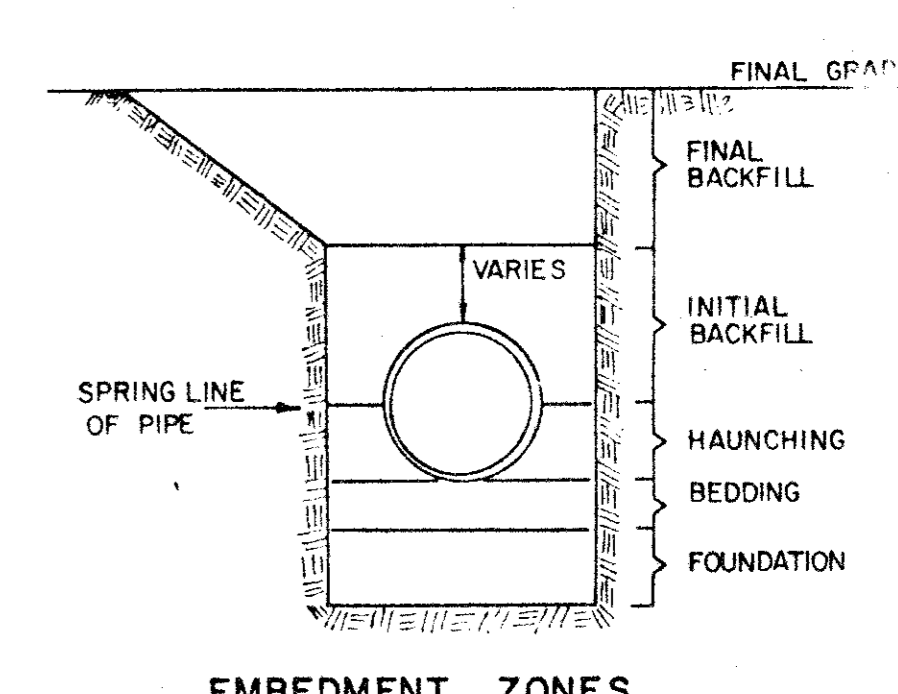
SIZE OF PIPE IN INCHES I.D.	O.D. OF PIPE IN INCHES	TRENCH WIDTH IN INCHES	TRENCH WIDTH IN FEET	CLASS 1 EMBEDMENT CRUSHED STONE	CLASS 2 EMBEDMENT CRUSHED STONE	CLASS 3 EMBEDMENT CONCRETE	CONCRETE ENCASEMENT
12	16.00	32	2.67	4.1	6.5	4.8	15.8
15	19.50	36	3.00	4.8	7.8	6.4	19.2
18	23.00	39	3.25	5.7	9.2	8.2	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	36.8
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

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

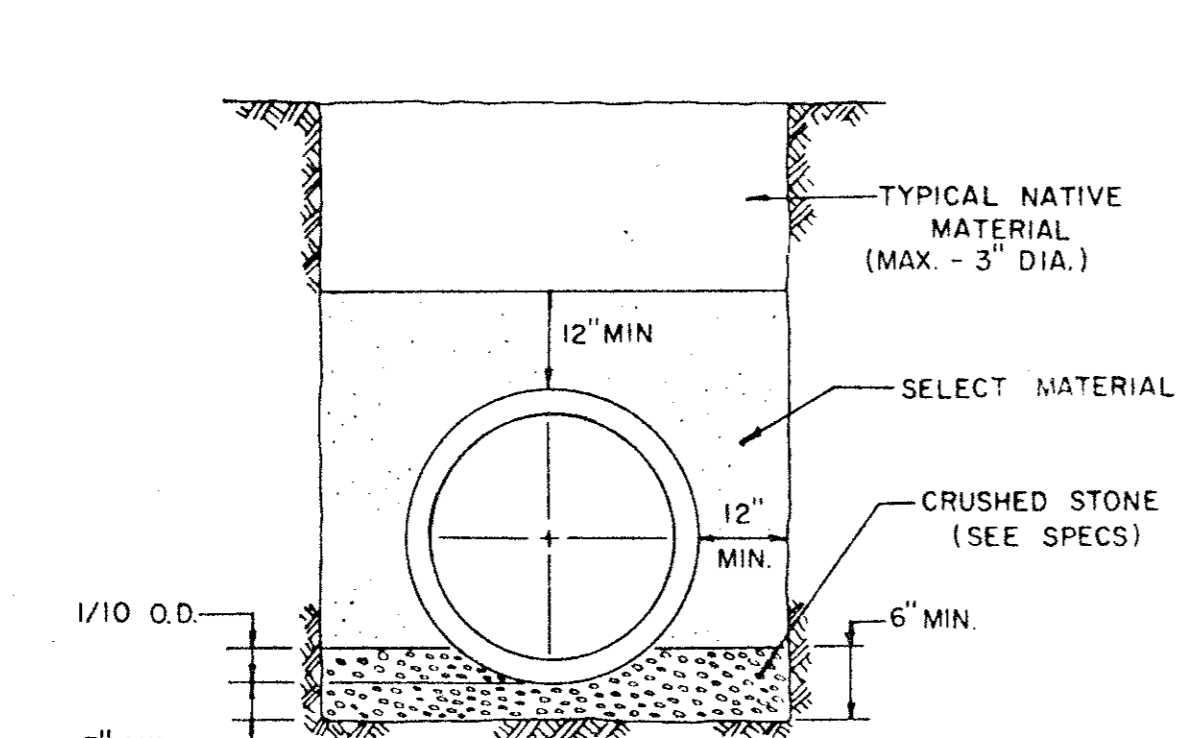
SIZE OF PIPE IN INCHES	O.D. OF PIPE IN INCHES	TRENCH WIDTH IN INCHES	TRENCH WIDTH IN FEET	CLASS 4 EMBEDMENT CRUSHED STONE	CONCRETE ENCASEMENT
6	6.28	24	2.00	8.0	11.7
8	8.16	24	2.00	8.7	12.4
10	10.20	26	2.18	10.2	14.2
12	12.24	28	2.35	11.7	15.9
16	15.30	31	2.61	14.0	18.8
24		36	3.0		
30		42	3.5		

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

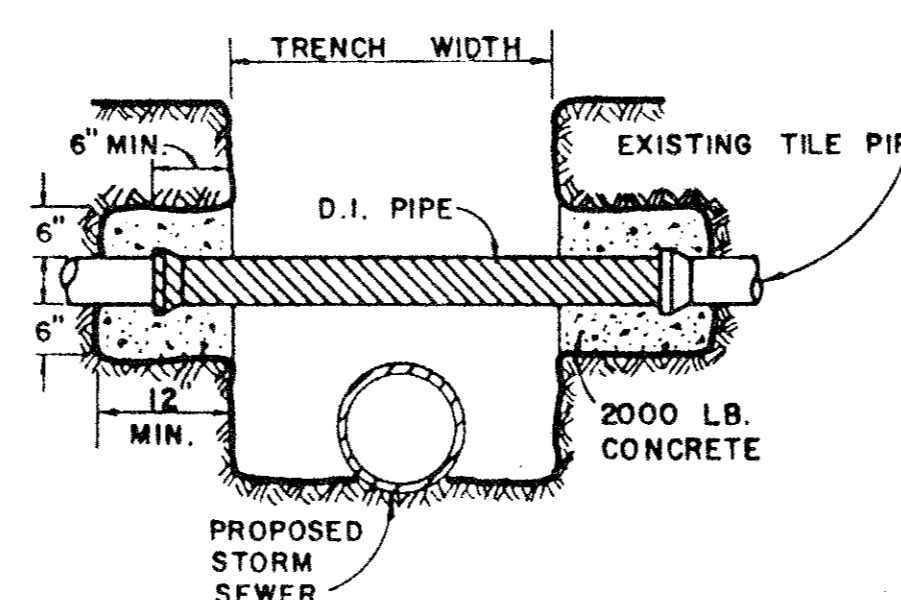
AS BUILTS
I CERTIFY THIS PROJECT WAS CONSTRUCTED IN GENERAL CONFORMANCE WITH THESE CONSTRUCTION PLANS AND WILL FUNCTION AS DESIGNED.



EMBEDMENT DETAILS FOR WATER MAIN



EMBEDMENT DETAIL FOR STORM SEWER



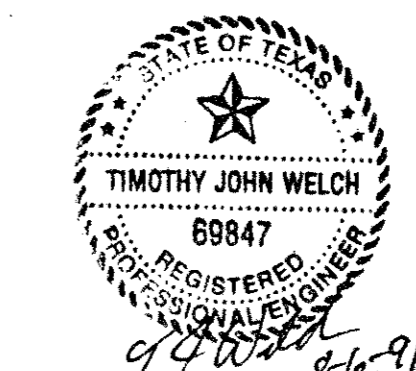
DETAIL OF UTILITY SUPPORT

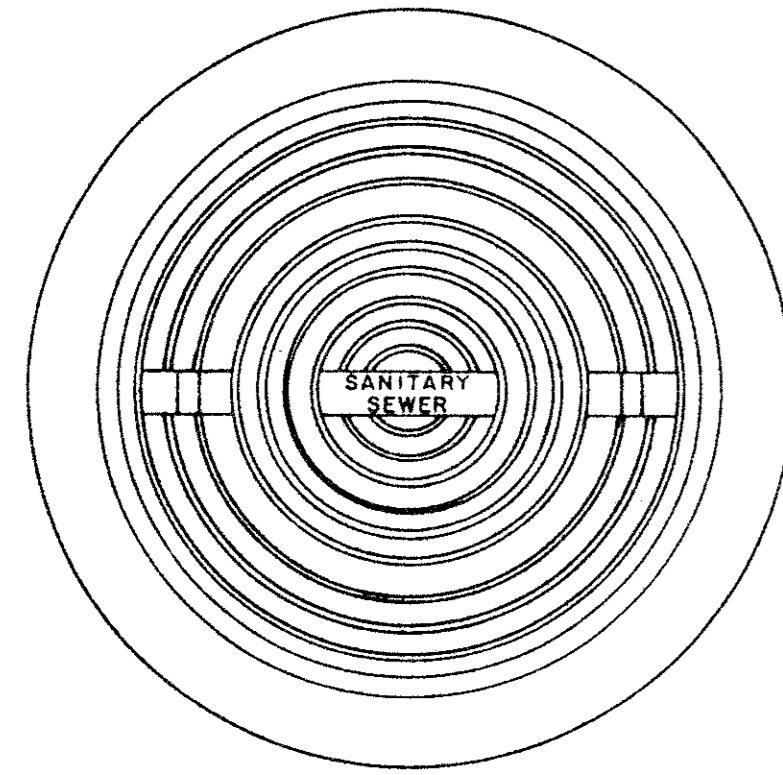
TOWN OF ADDISON, TEXAS
DEPARTMENT OF ENGINEERING

STANDARD CONSTRUCTION DETAILS

EMBEDMENT DETAILS

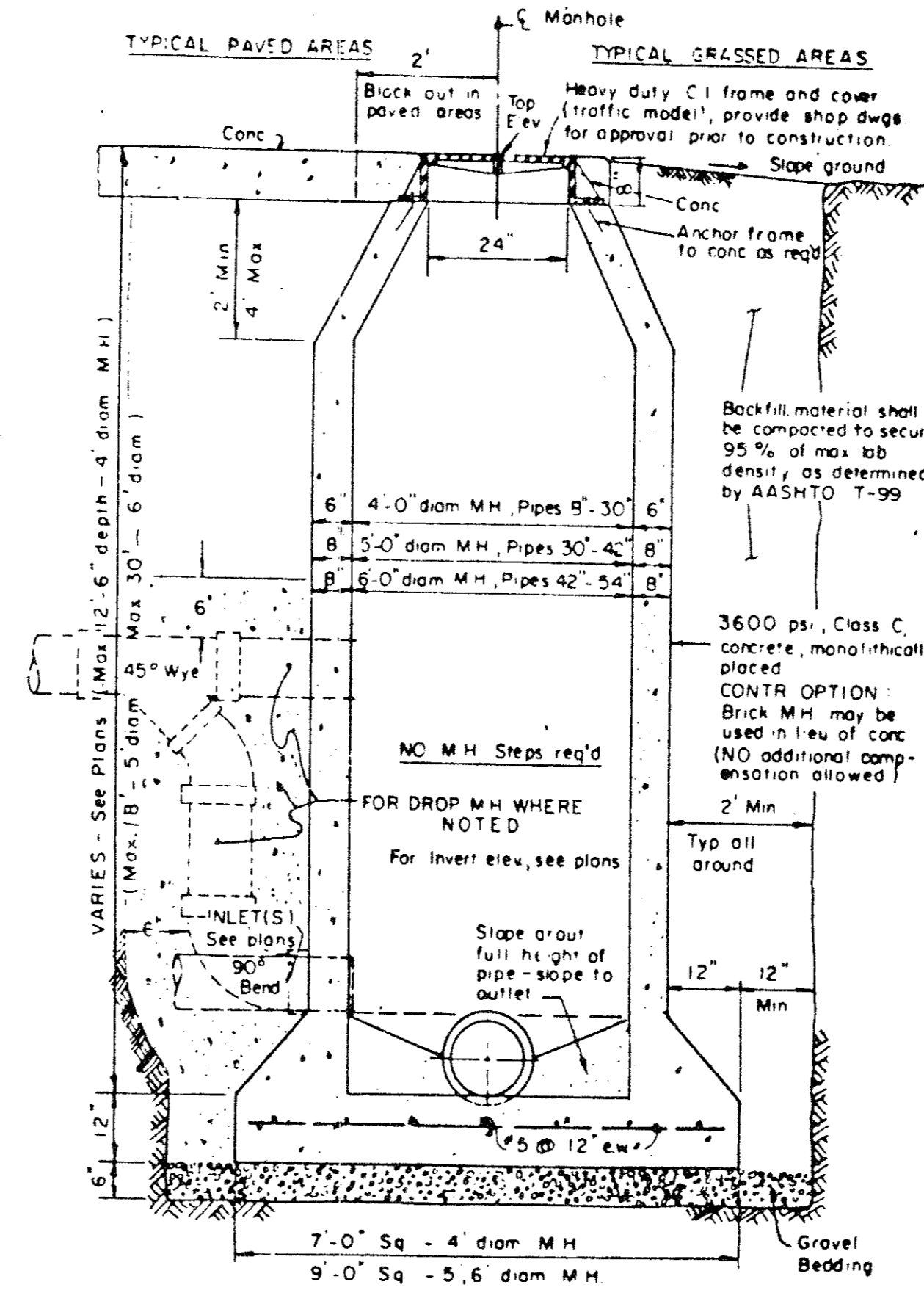
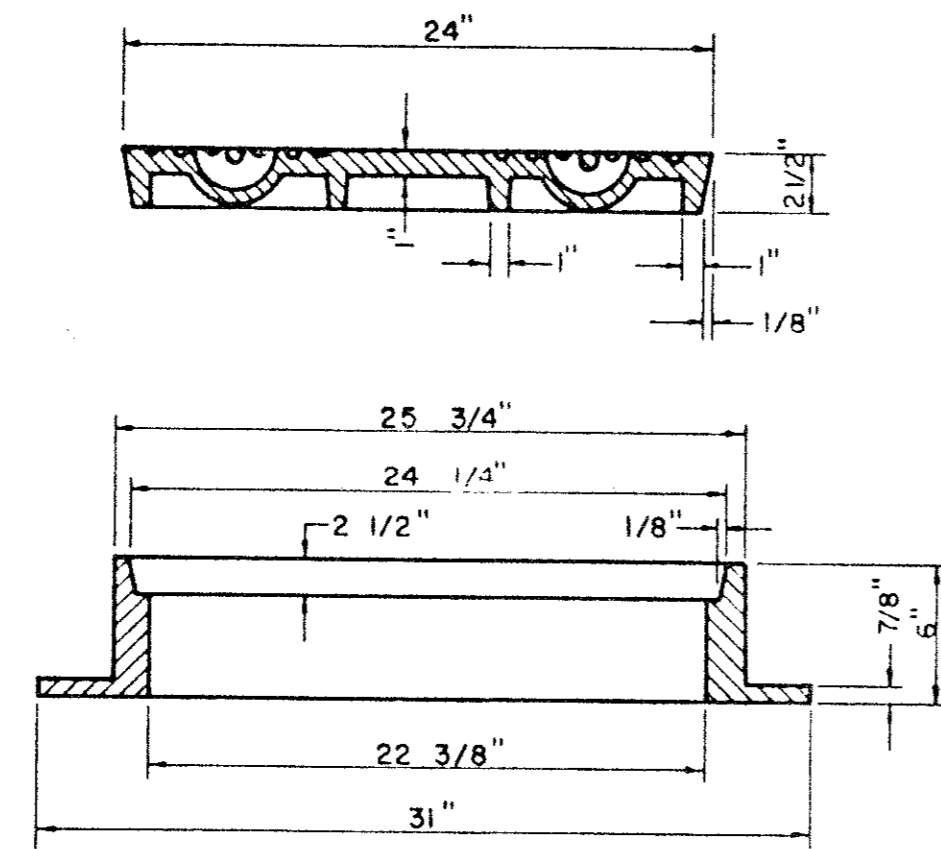
Designed - Drawn - Date - AUGUST, 1991 Job No. - 90025-4
Approved - Checked - Scale - Sheet D-5 Of





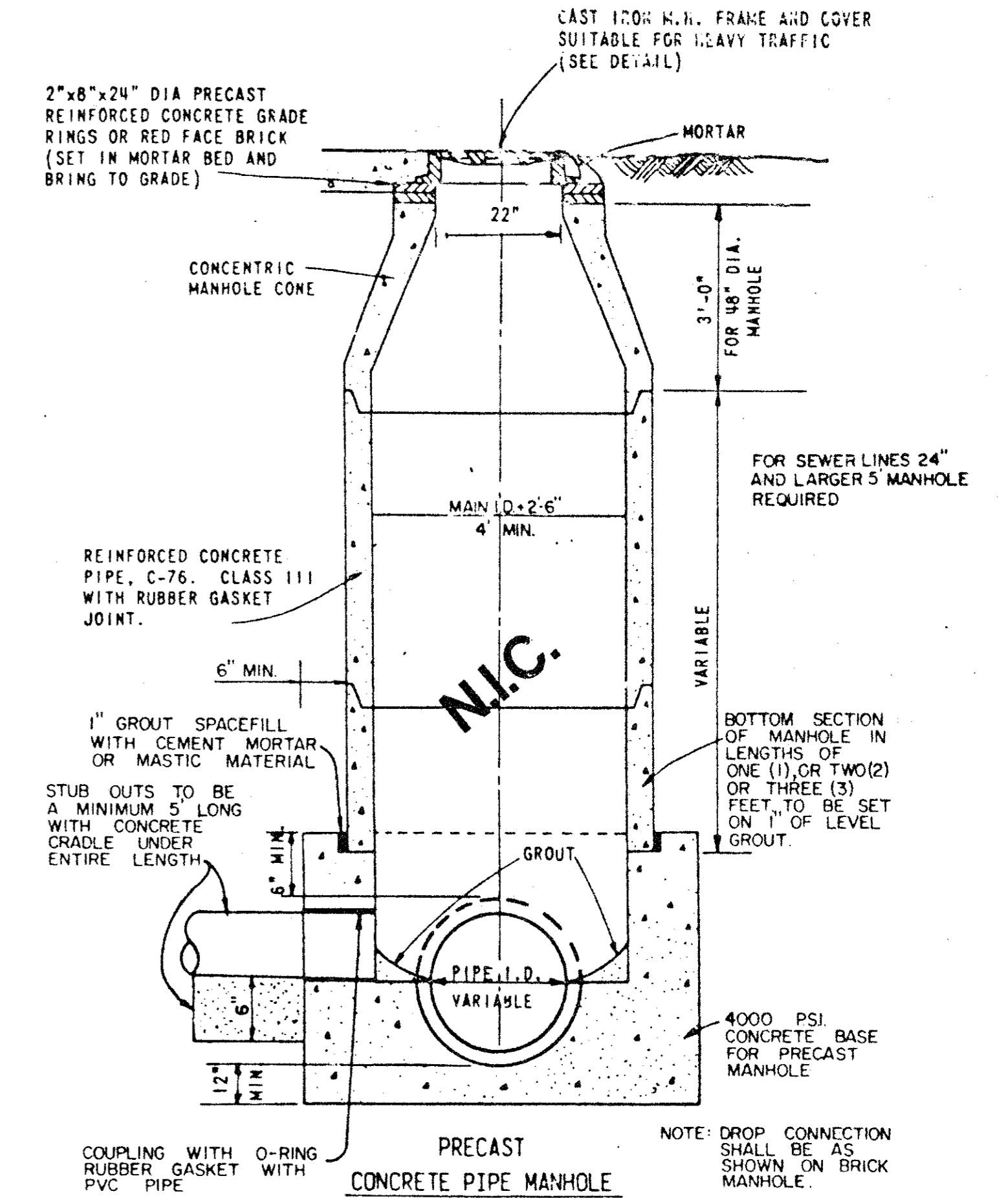
APPROX.
WEIGHT
RING AND COVER
365 LBS.

CAST IRON GRATE AND FRAME DETAIL

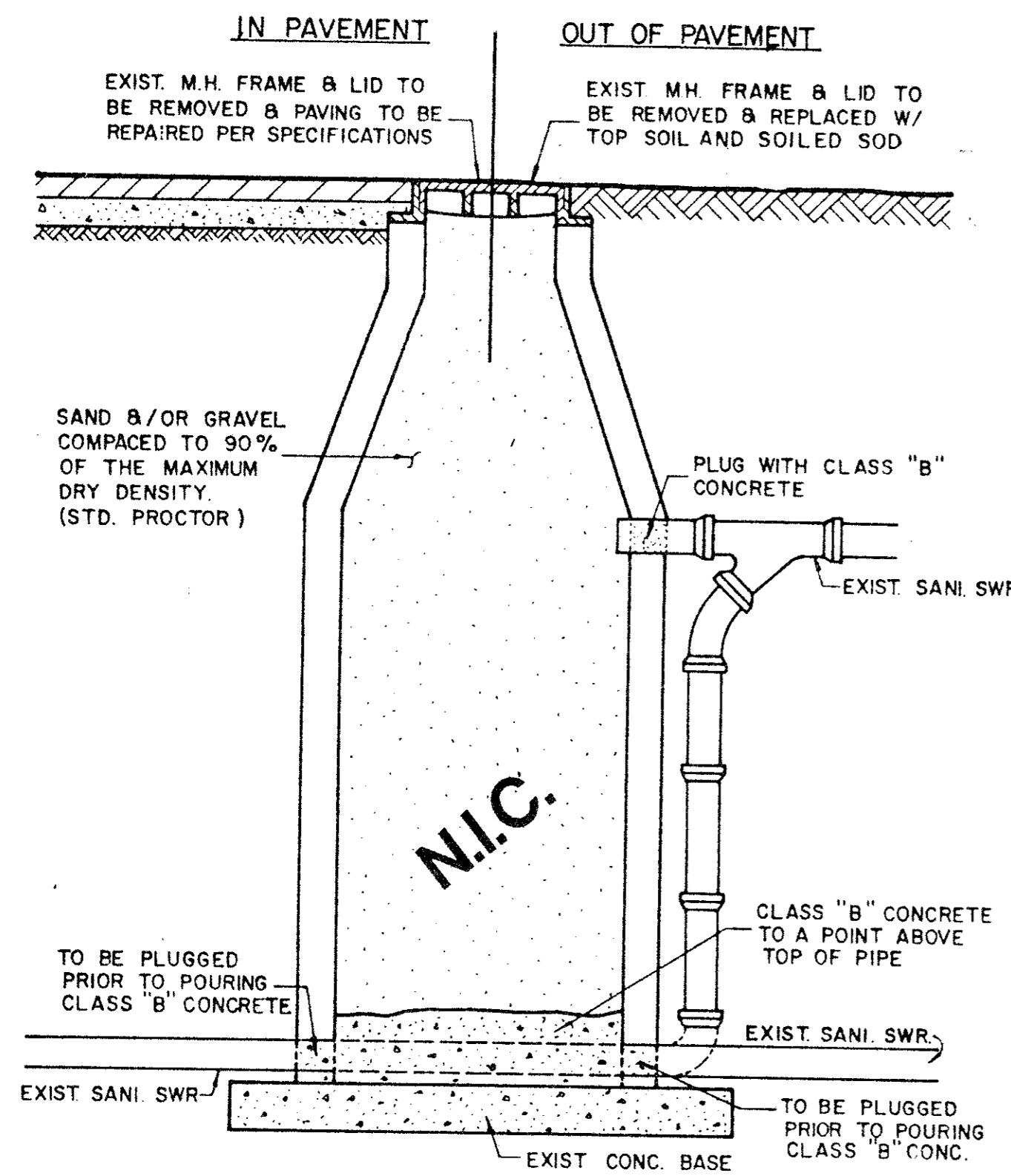


CAST IN PLACE MANHOLE

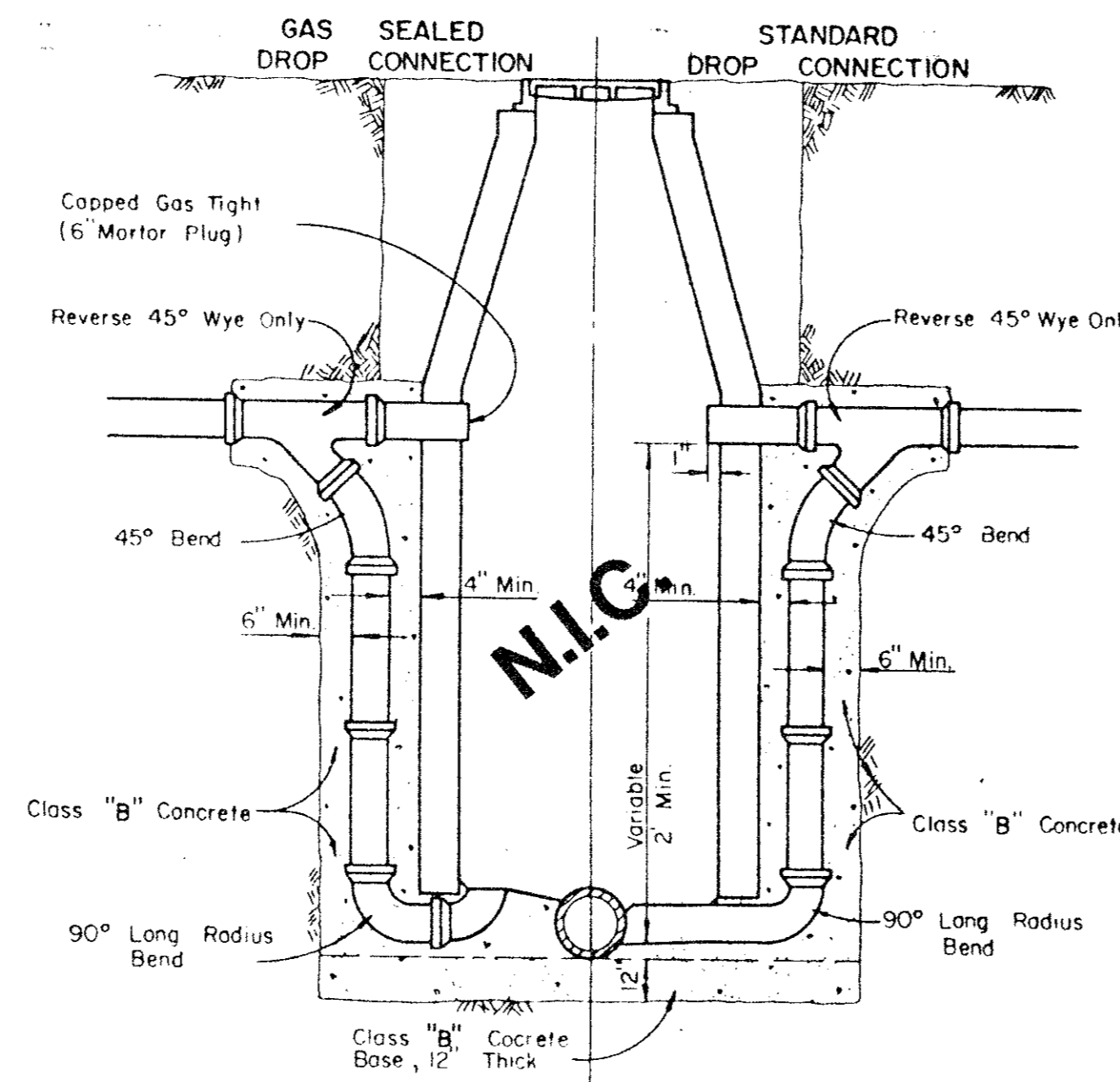
WHERE DROP M.H. IS REQUIRED, USE INSIDE
DROP CONNECTION AS PER TOWN OF ADDISON
STANDARDS.



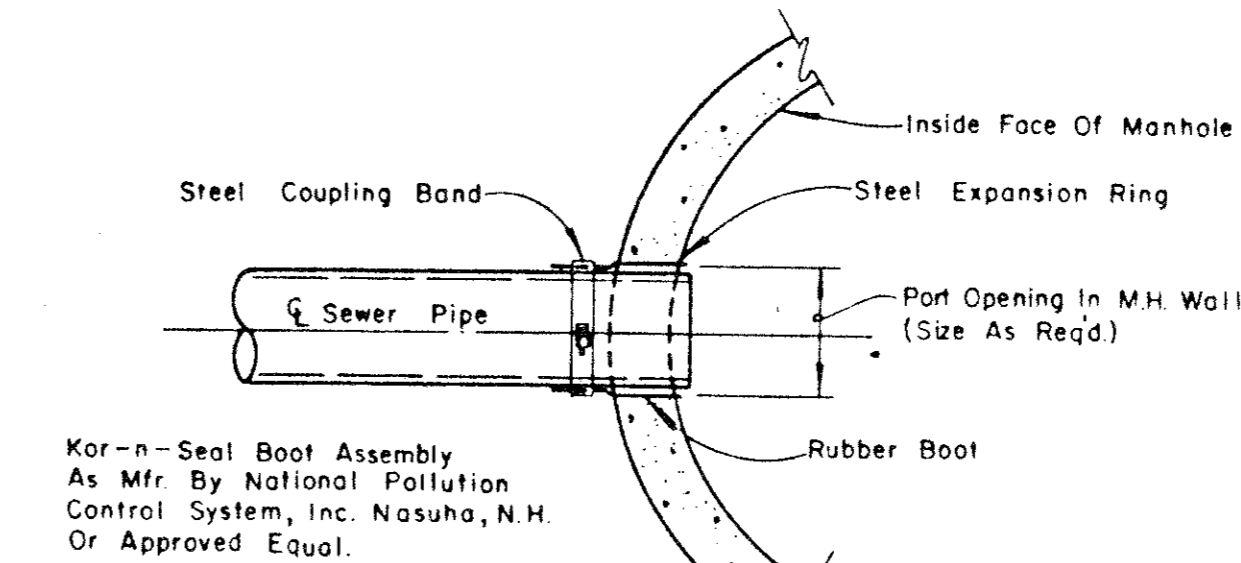
PRECAST MANHOLE



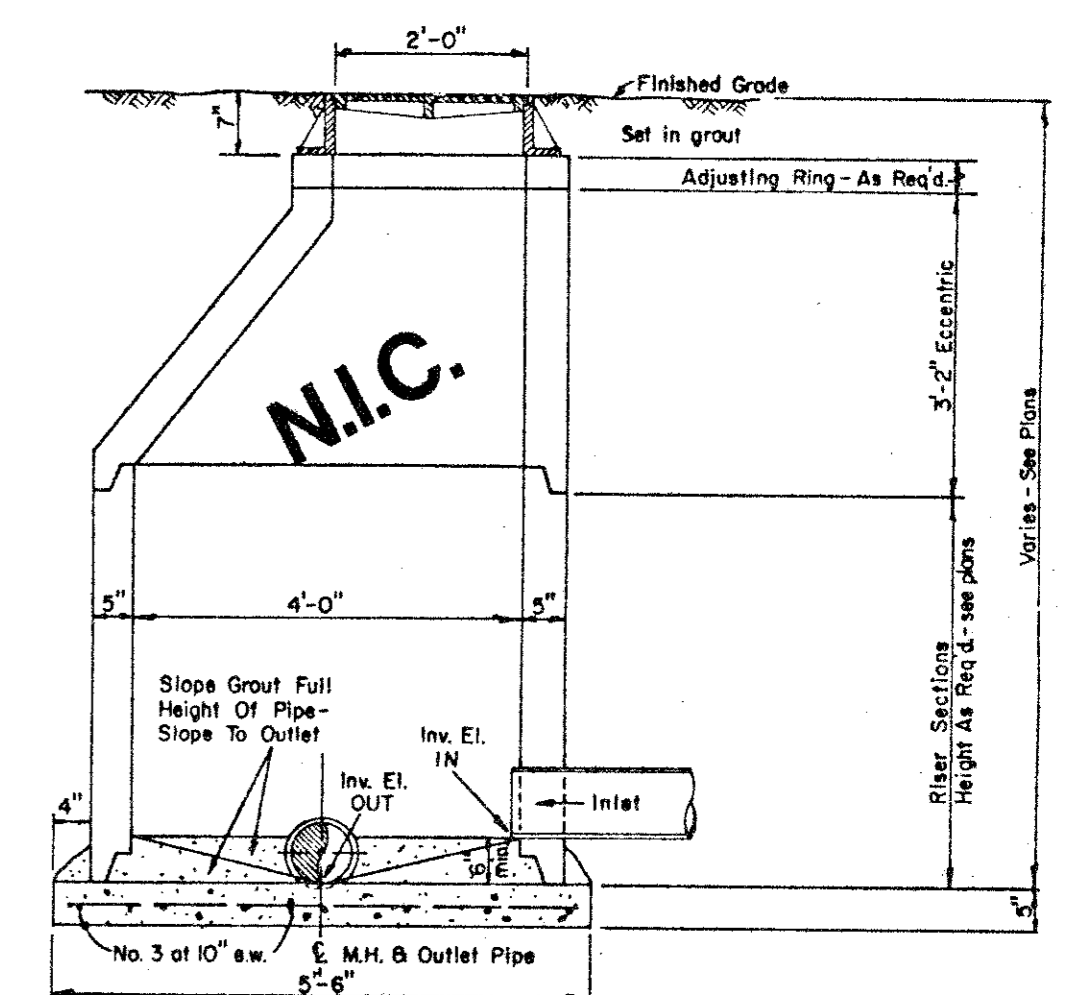
**ABANDONMENT OF EXISTING MANHOLE
IN AND OUT OF PAVEMENT**



**DROP CONNECTIONS FOR
SANITARY SEWER MANHOLES**



**TYPICAL SEWER
CONNECTION AT MANHOLE**



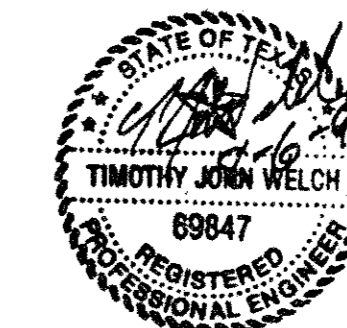
ECCENTRIC MANHOLE DETAIL

NOTE:
Contractor To Install Kor-n-Seal Boot Assembly Per
Mfr. Recommendations In A Neat And Workman-Like
Manner
AS BUILTS

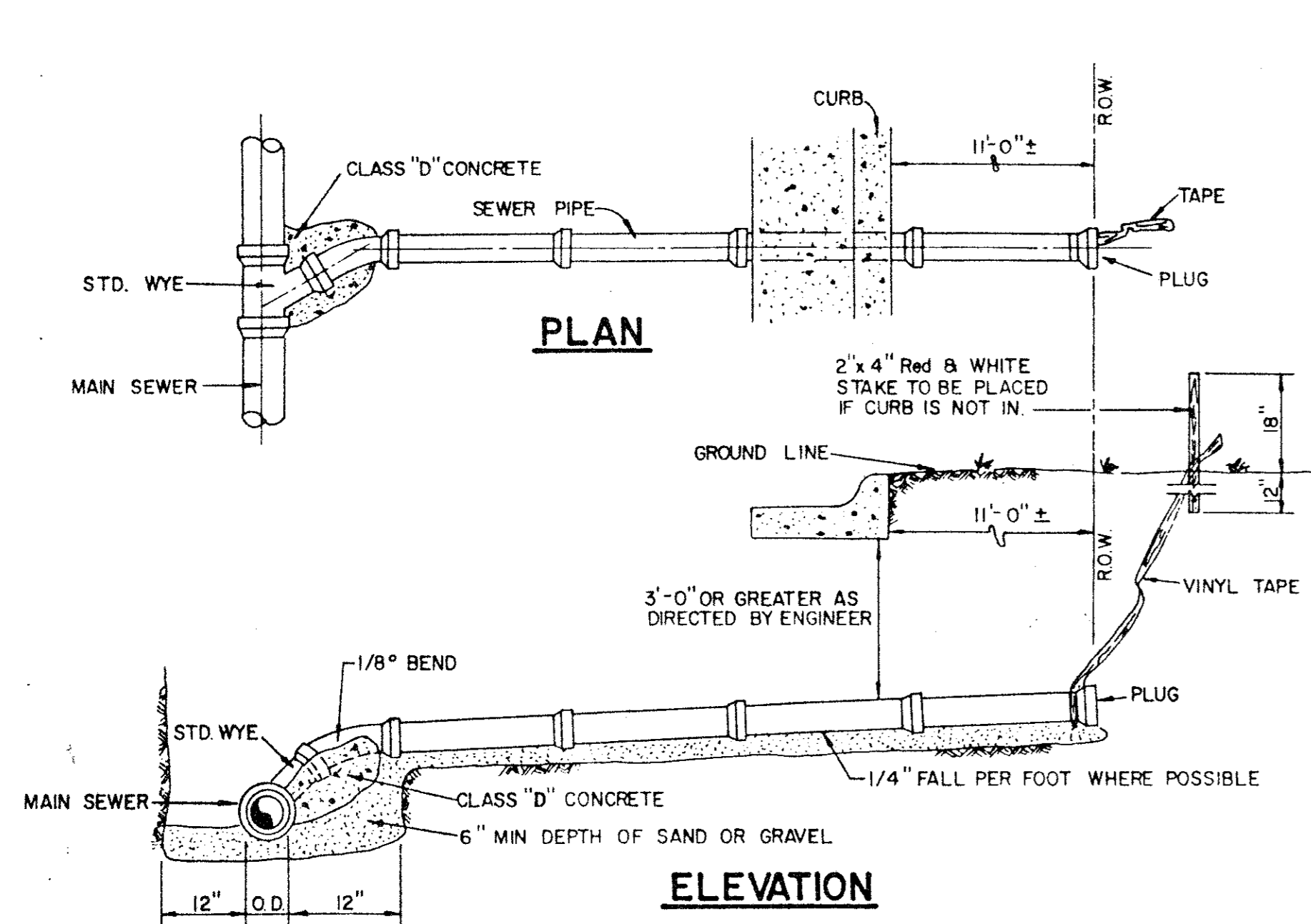
I CERTIFY THIS PROJECT WAS CONSTRUCTED IN GENERAL CONFORMANCE WITH THESE
CONSTRUCTION PLANS AND WILL FUNCTION AS DESIGNED.

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

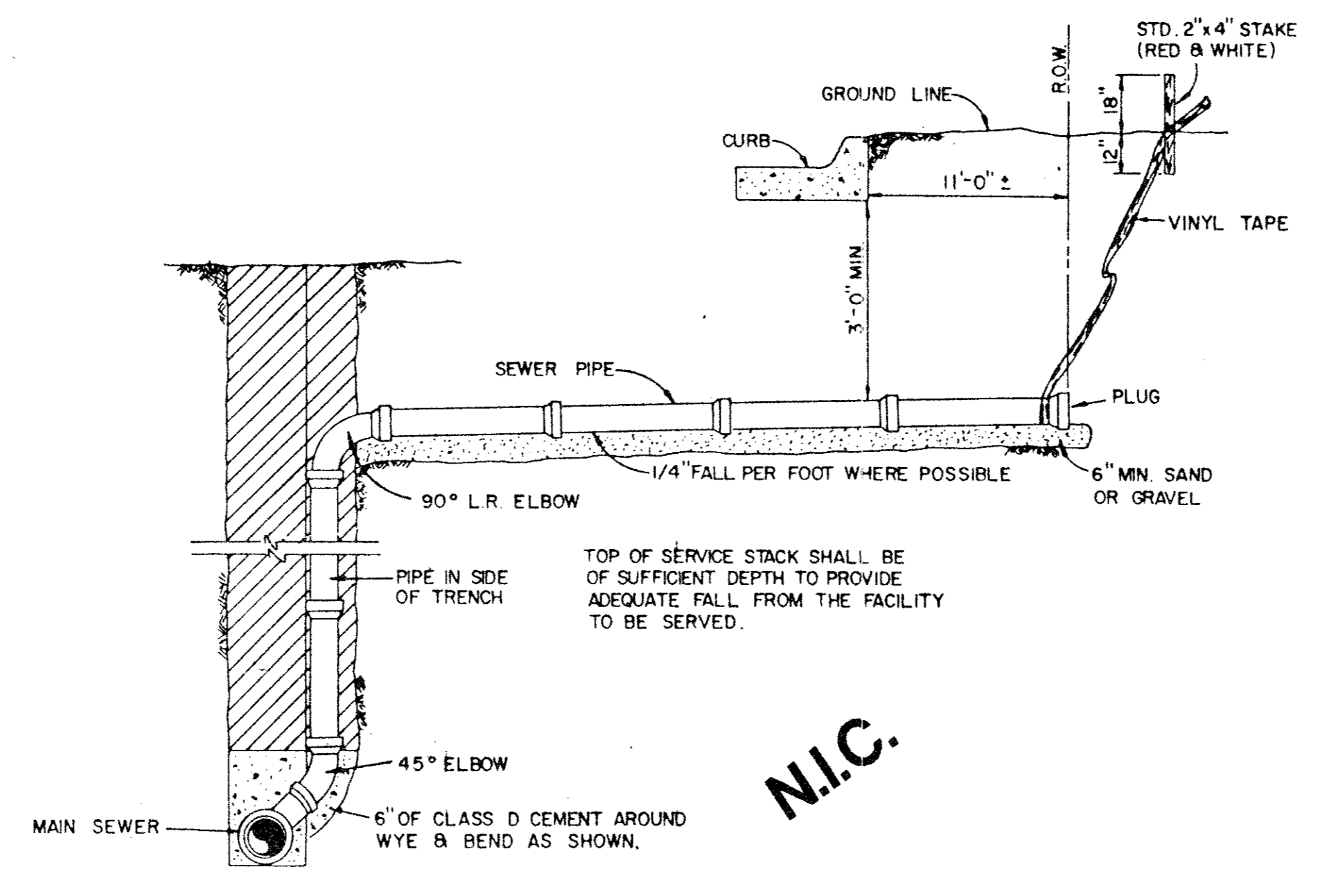
TOWN OF ADDISON, TEXAS
DEPARTMENT OF ENGINEERING
STANDARD CONSTRUCTION DETAILS
SANITARY SEWER
MANHOLES AND CONNECTIONS



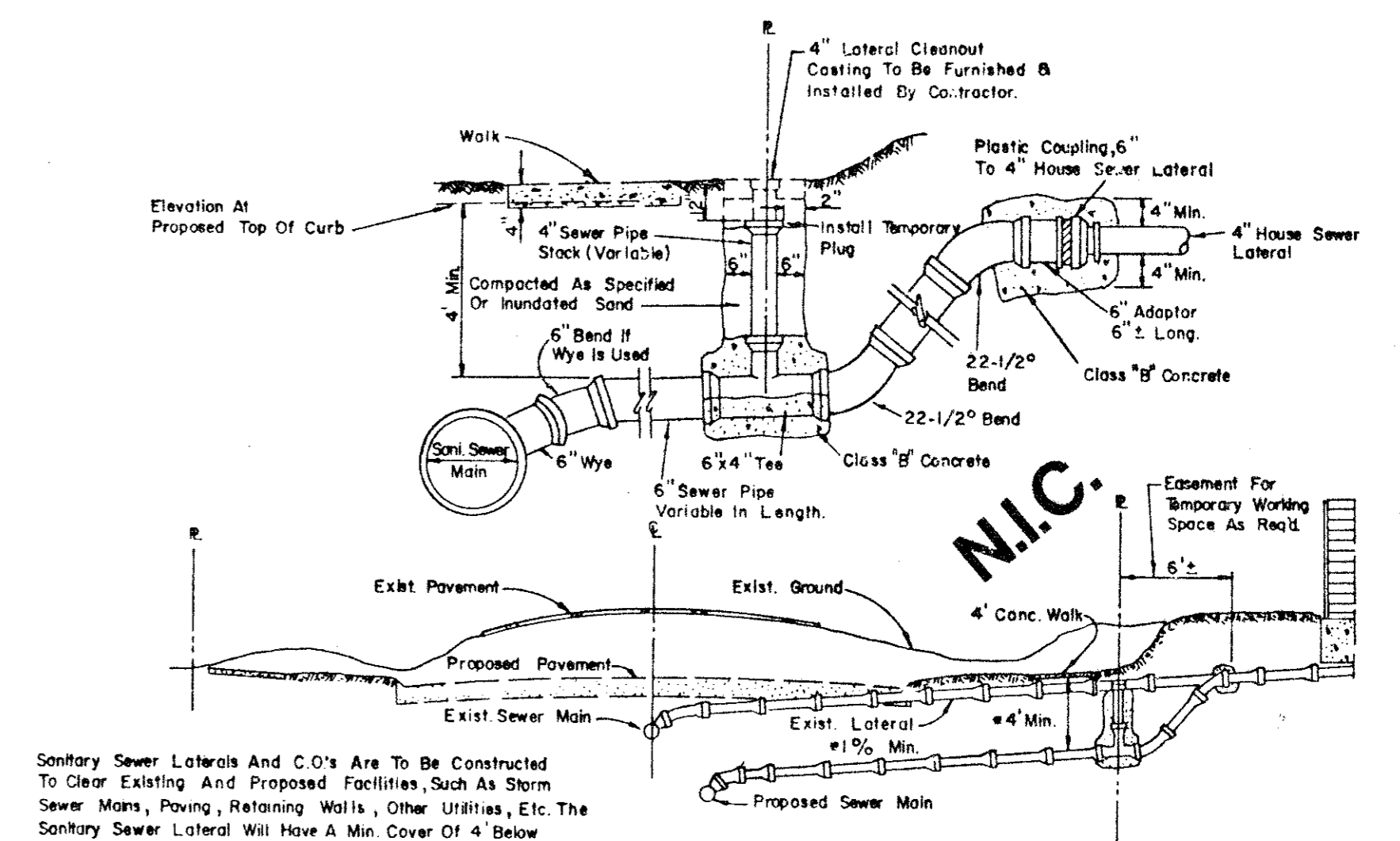
Designed - AUGUST, 1991
Drawn -
Checked -
Scale -
Job No. - 90025-4
Sheet - D-6 of



SANITARY SEWER SERVICE CONNECTION

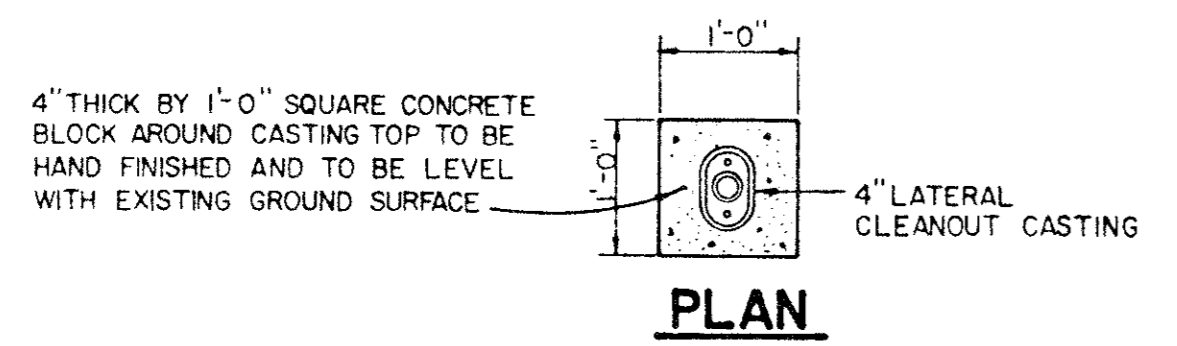


SANITARY SEWER DEEP SERVICE CONNECTION

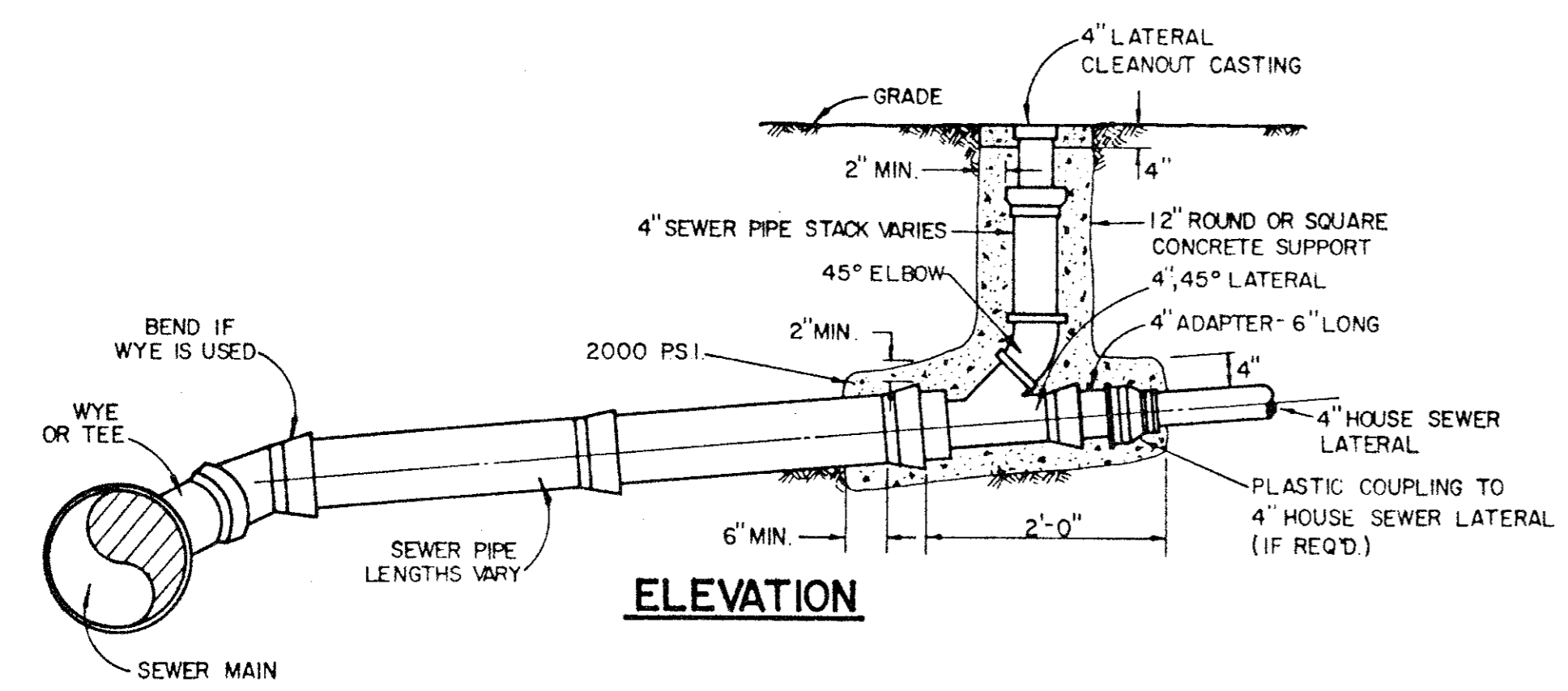


SANITARY SEWER LATERAL REPLACEMENT

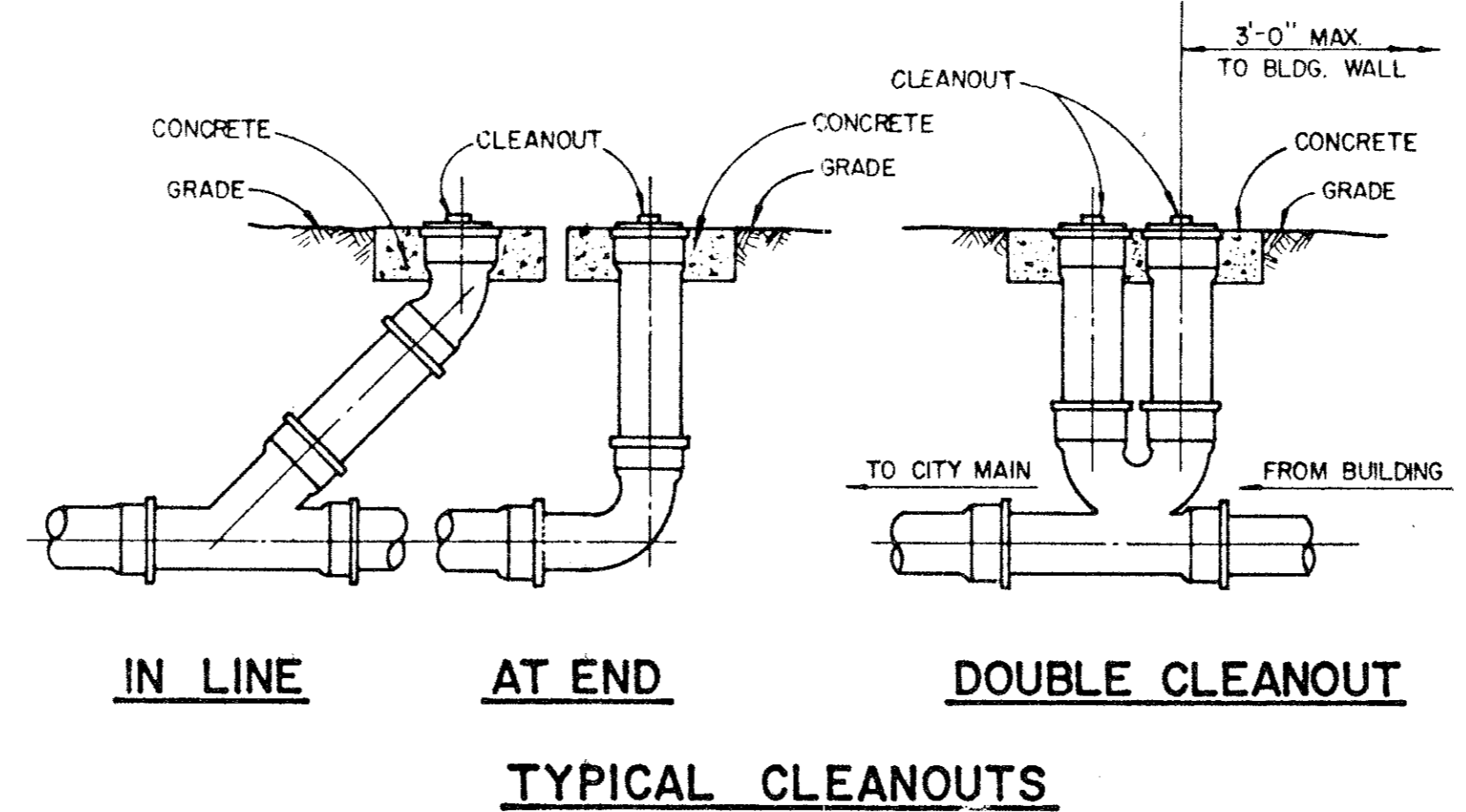
NOTE:
Cleanout To Be Installed On Property Line Except As Required To Avoid Conflict With Existing Or Proposed Facilities In Which Case The Location Shall Be Determined By The Engineer.



PLAN



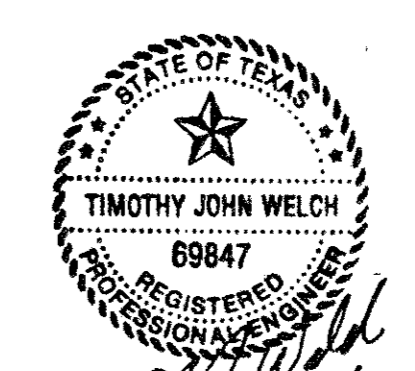
ELEVATION



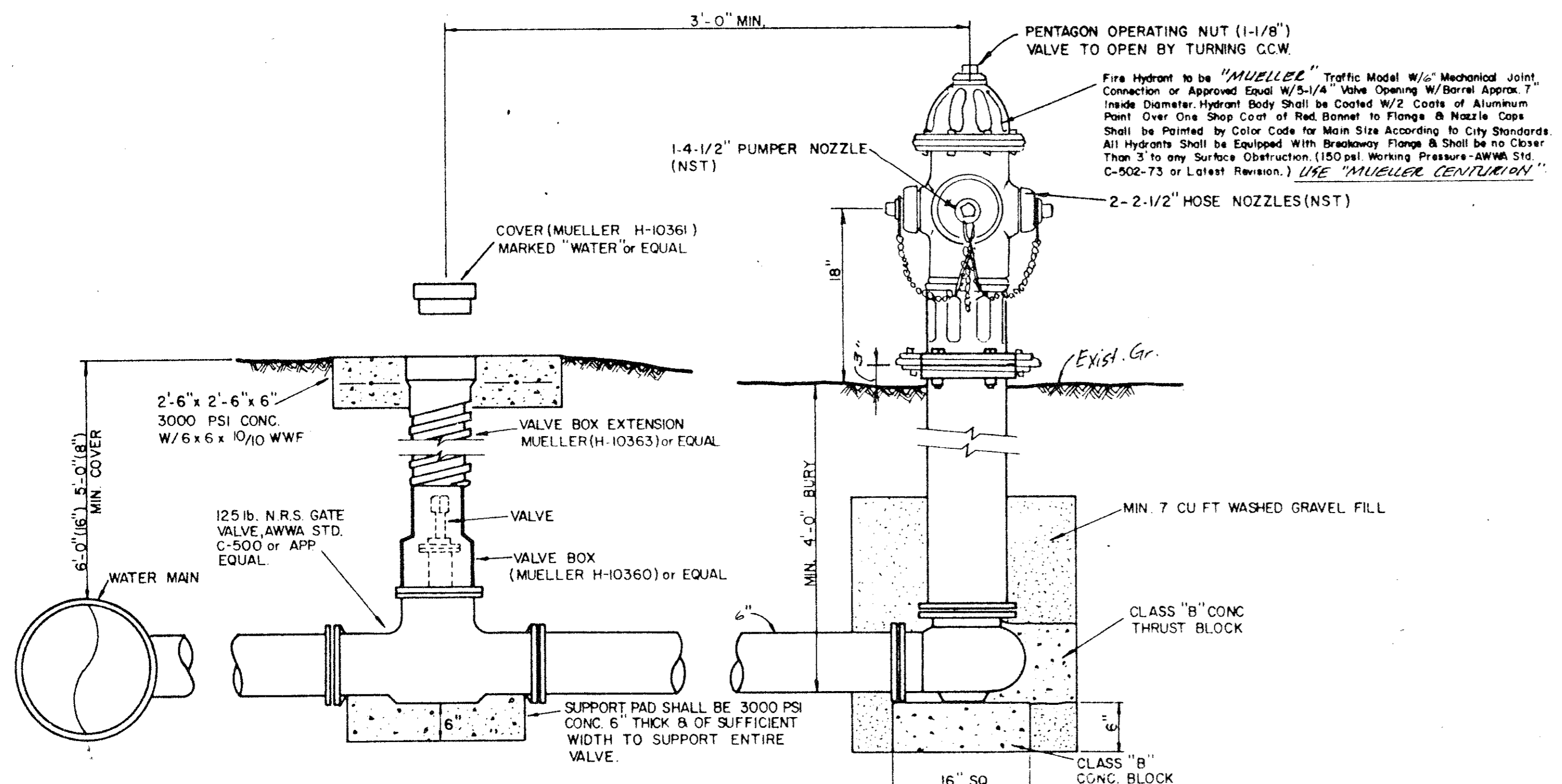
TYPICAL CLEANOUTS

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

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.



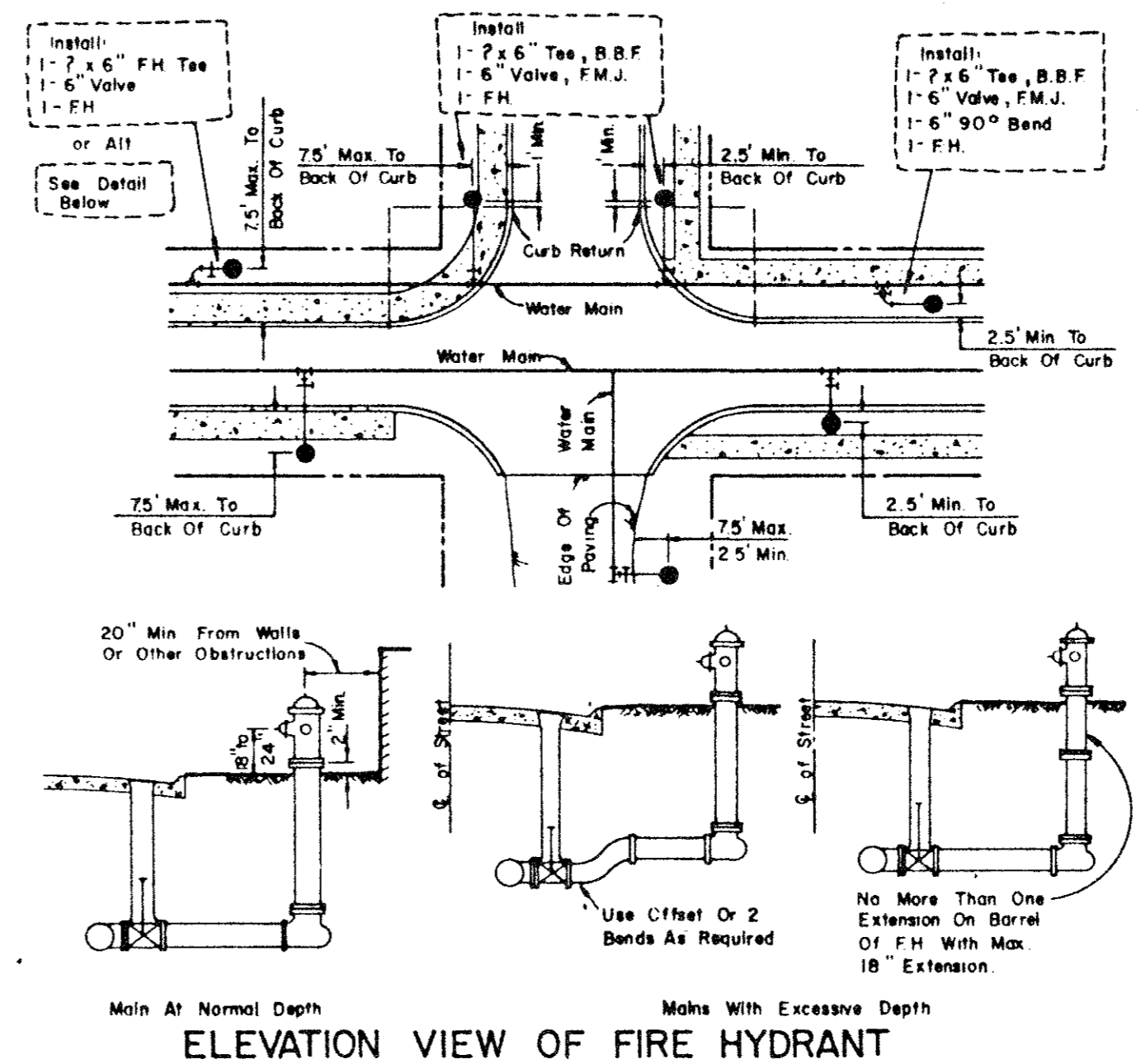
TOWN OF ADDISON, TEXAS DEPARTMENT OF ENGINEERING			
STANDARD CONSTRUCTION DETAILS SANITARY SEWER			
LATERALS AND CLEANOUTS			
Designed -	Drawn -	Date - AUGUST, 1991	Job No. - 90025-4
Approved -	Checked -	Scale -	Sheet D-7 Of



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

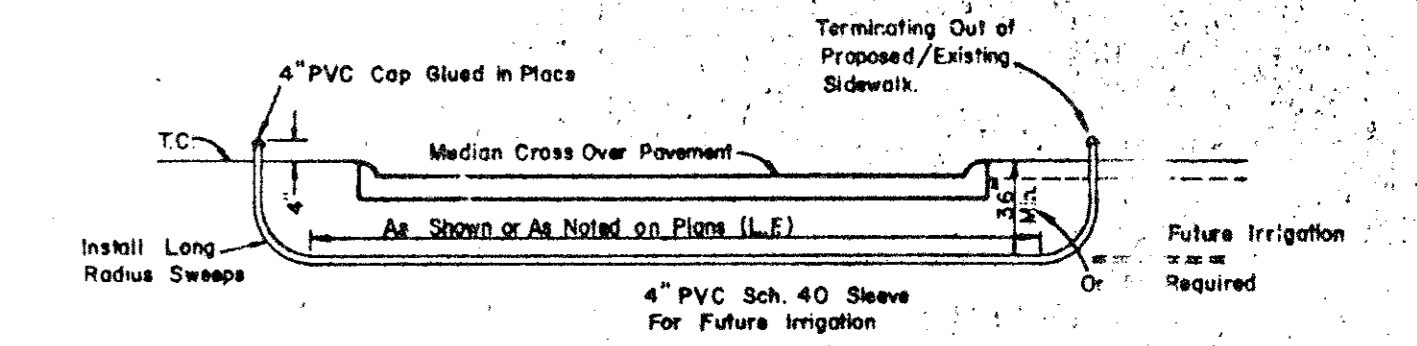
FIRE HYDRANT INSTALLATION
(INCLUDES 4" VALVE)
No Scale

- 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.

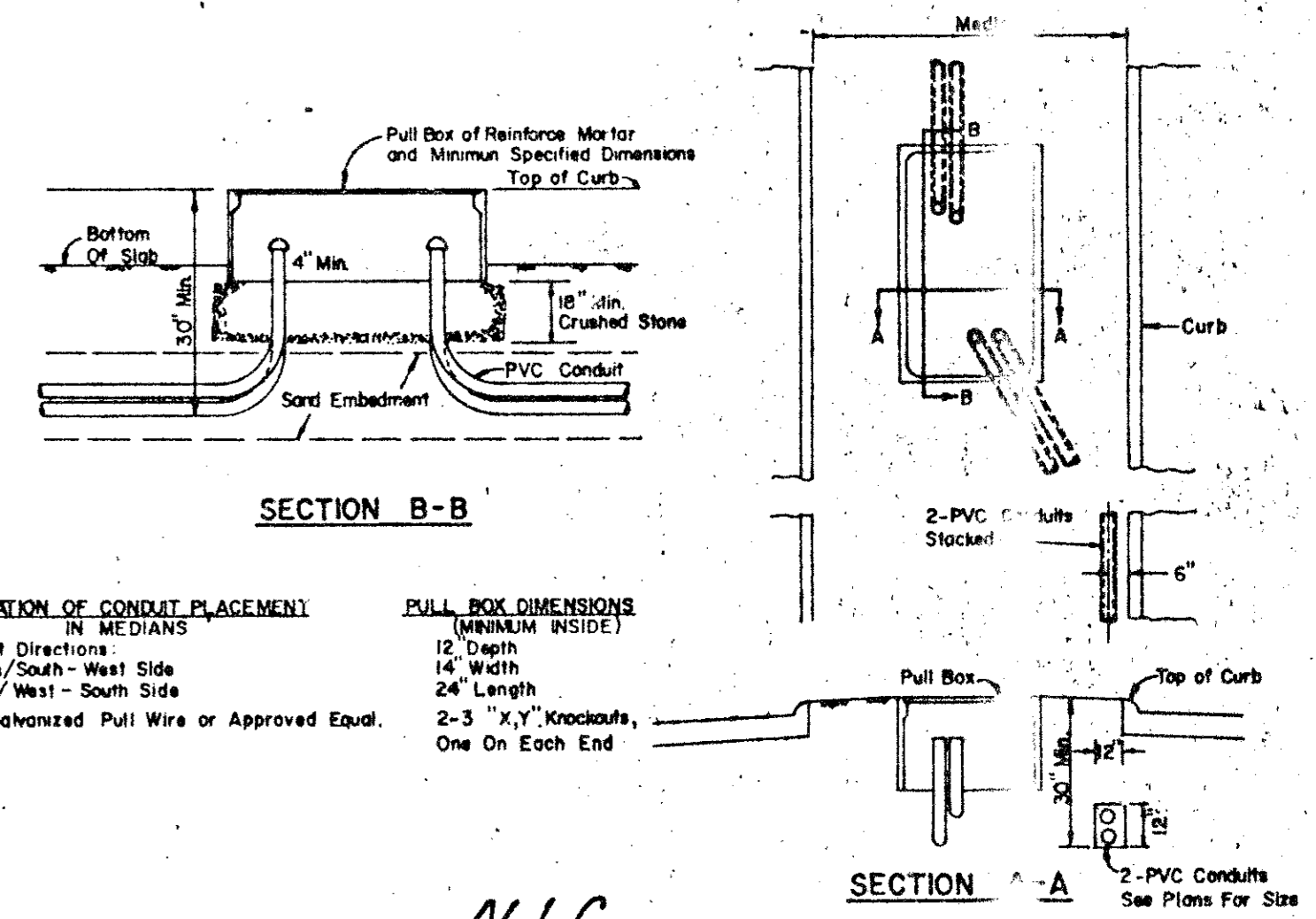


ELEVATION VIEW OF FIRE HYDRANT

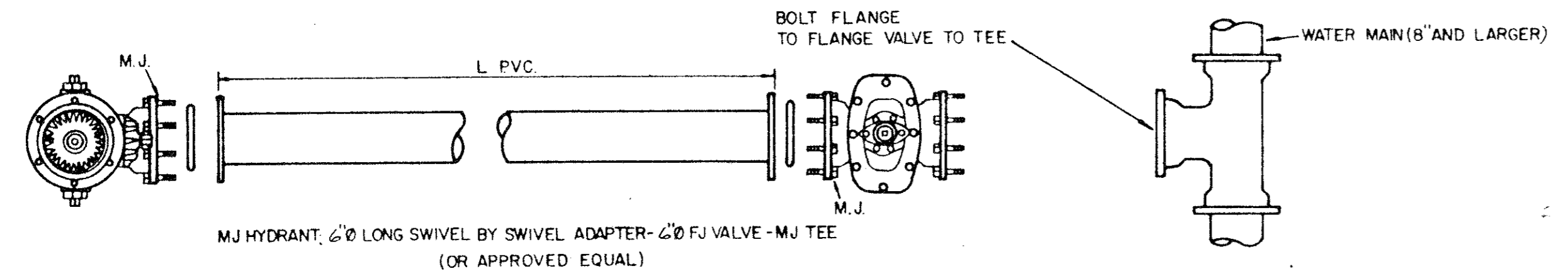
- GENERAL NOTES**
- G. OF F.H. Barrel Shall Be Not Less Than 6.0' Or More Than 9.0' From Back Of Curb Or Edge Of Pavement.
 - Do Not Set F.H. In An Existing Or Proposed Sidewalk Unless Otherwise Noted.
 - All F.H. Tees Shall Be M.J. With Anchoring On The Branch With M.J., M.J. S' Valve.
 - Set F.H. On 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.



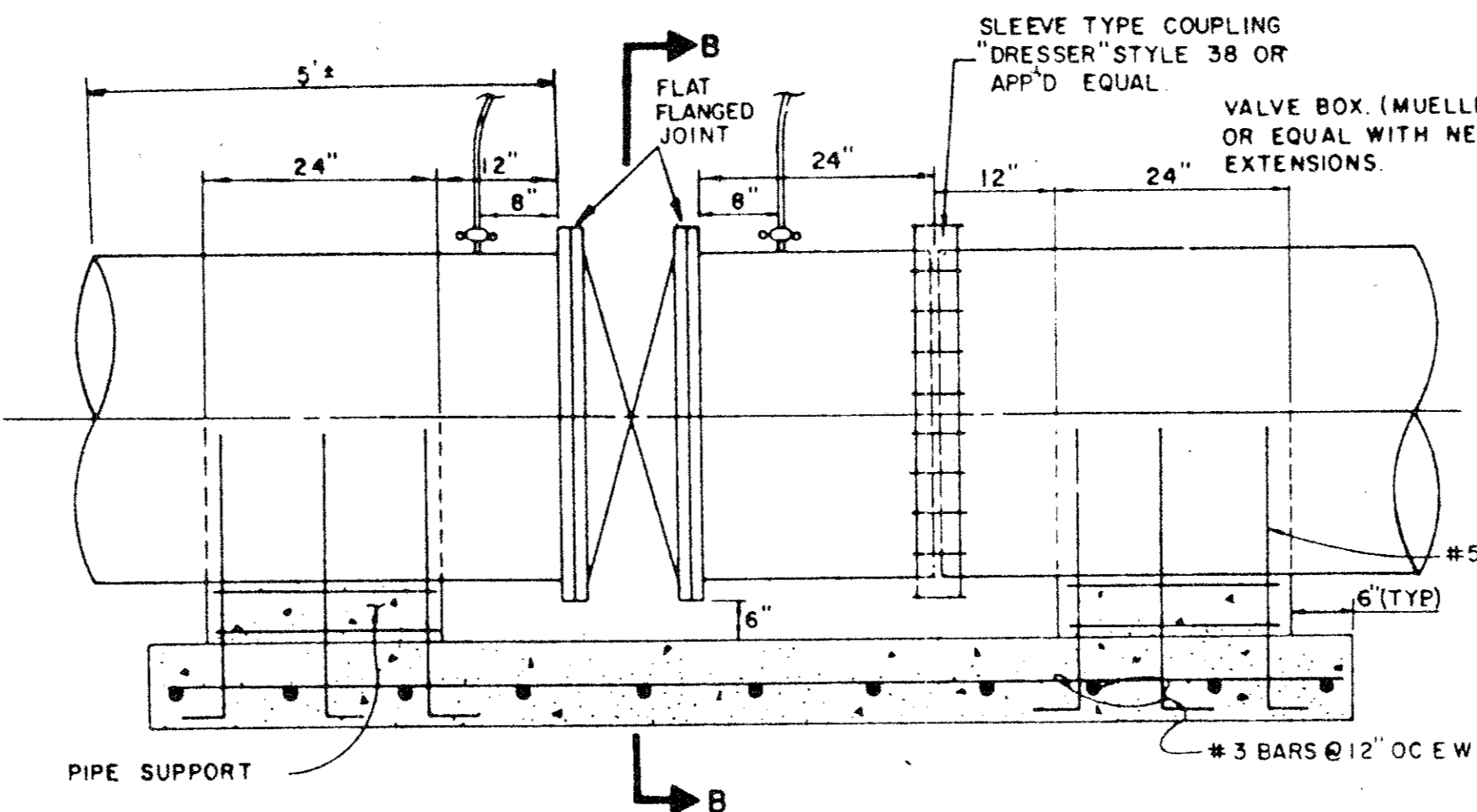
PVC SLEEVE FOR FUTURE IRRIGATION



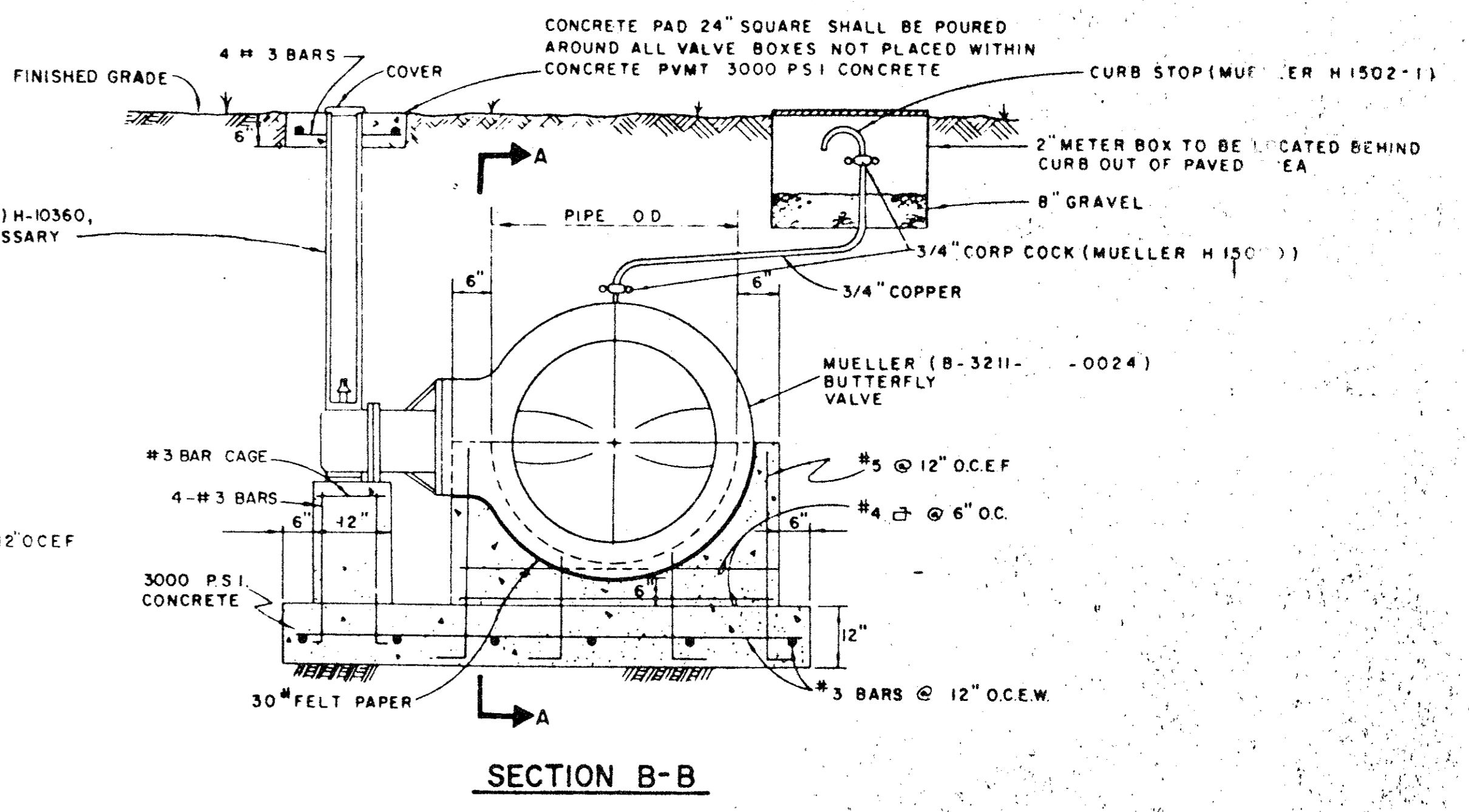
PULL BOX & CONDUIT DETAIL



TYPICAL FIRE HYDRANT INSTALLATION

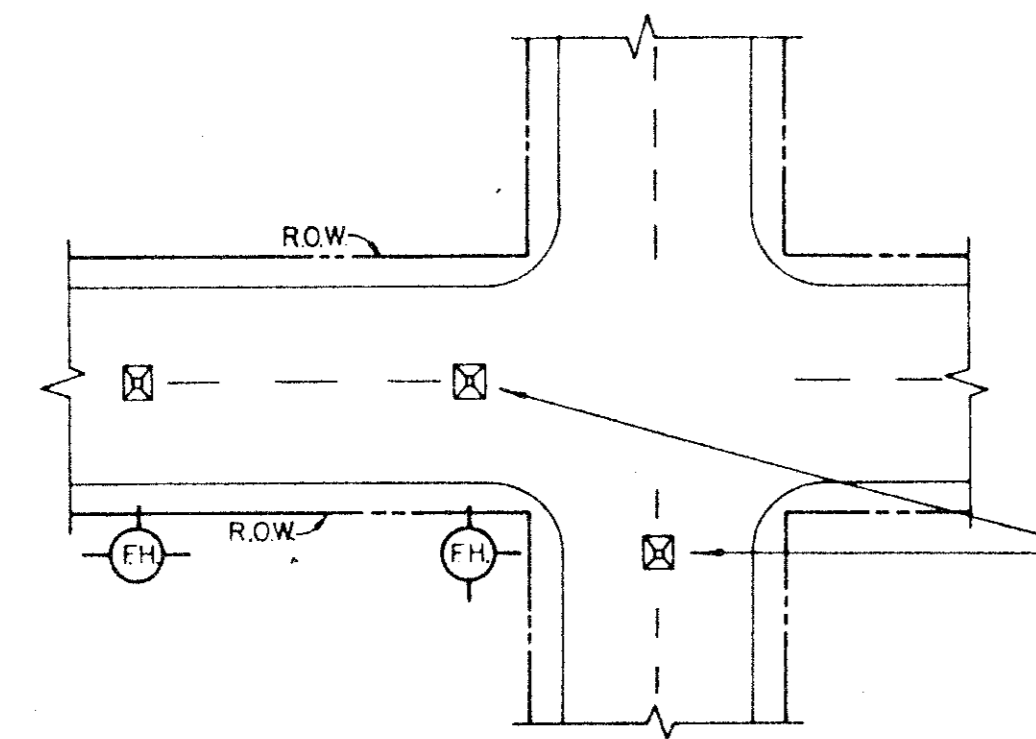


BUTTERFLY VALVE DETAIL



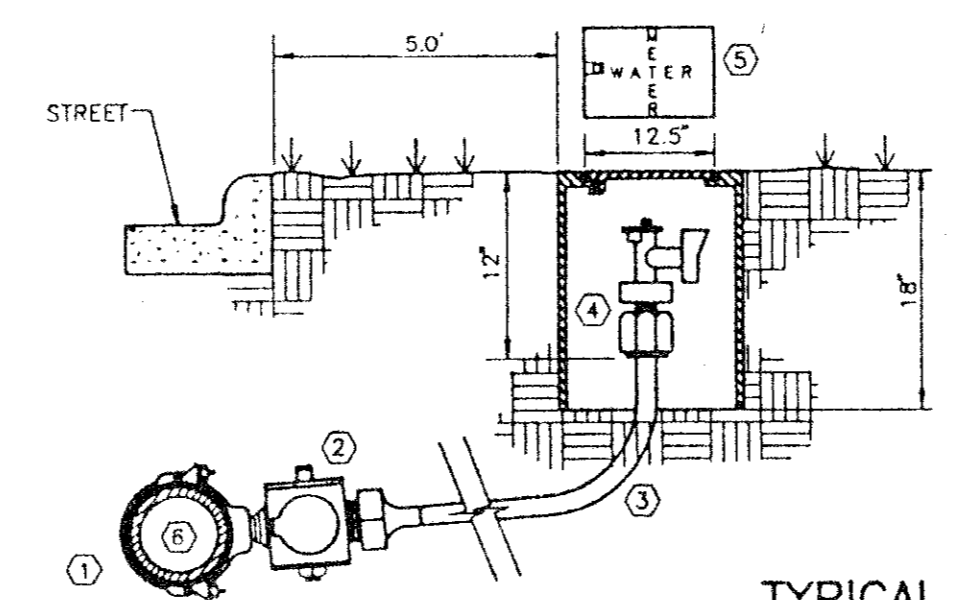
SECTION B-B

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



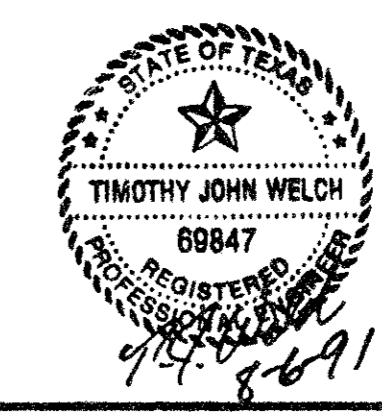
TYPICAL FIRE HYDRANT REFLECTOR INSTALLATION

A BLUE STIMSONITE 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.

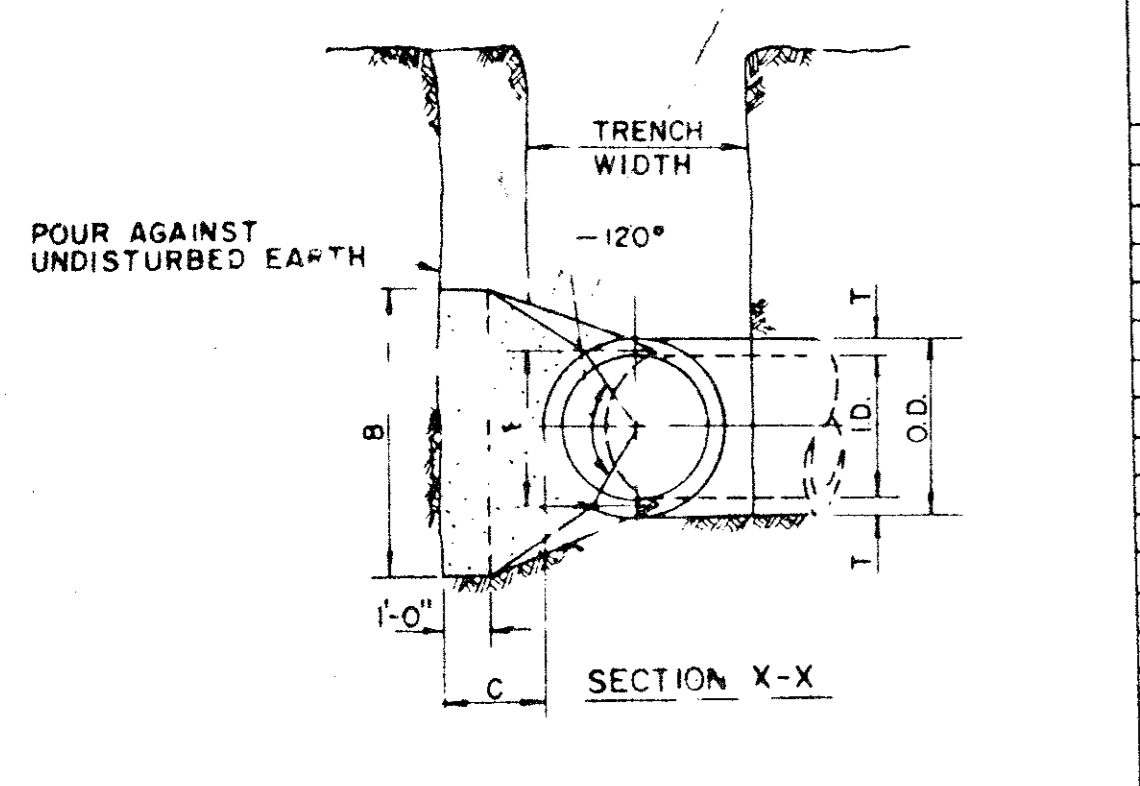
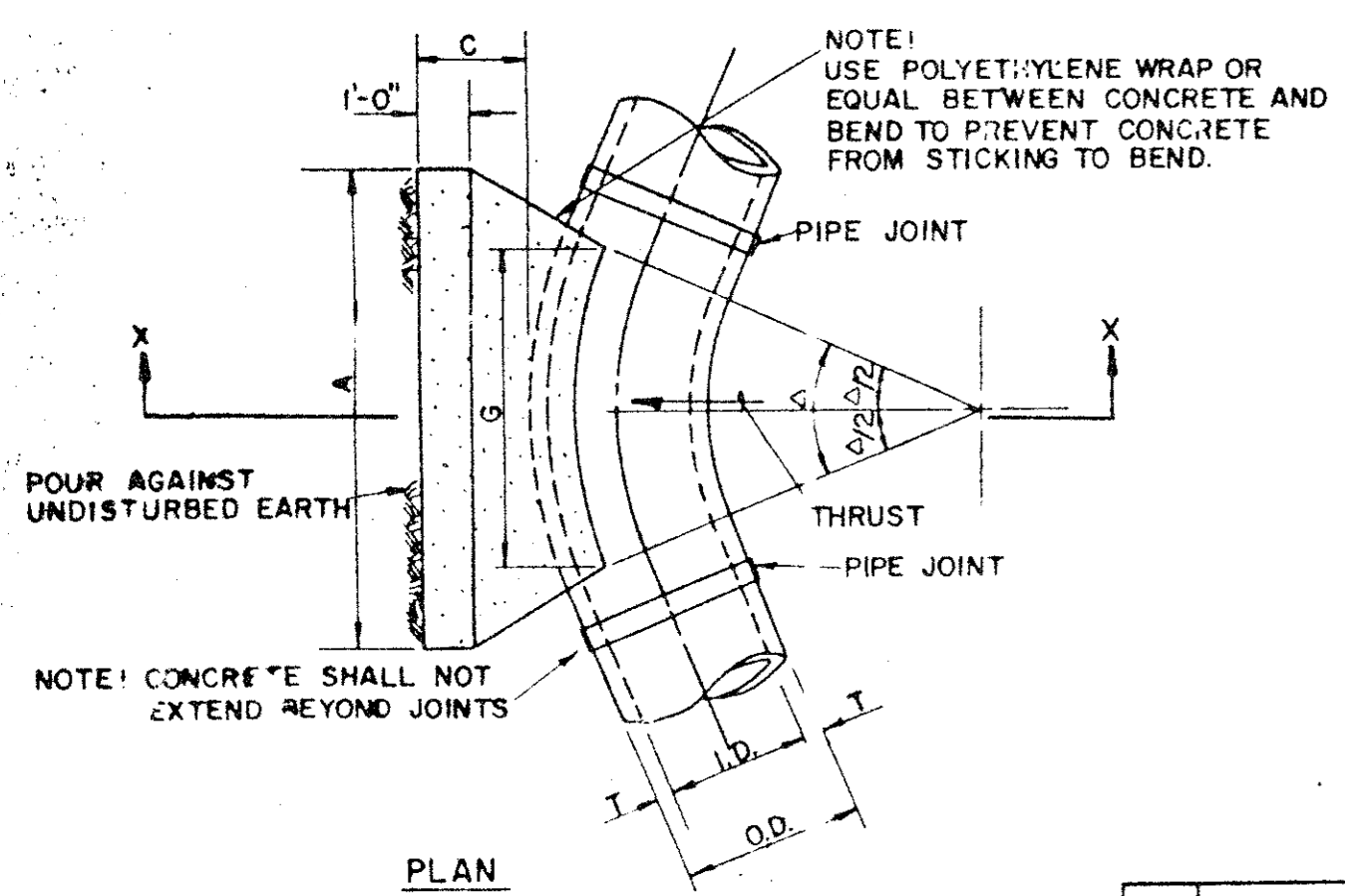


TYPICAL WATER SERVICE DETAIL

- DOUBLE STRAP BRONZE SADDLE W/CCW THREADS. MUELLER.
- CORPORATION STOP W/CCW THREADS. MUELLER H-15008 COMPRESSION OR H-15000 FLARED.
- 3/4" TYPE "W" SOFT COPPER W/NO SPLICES
- 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



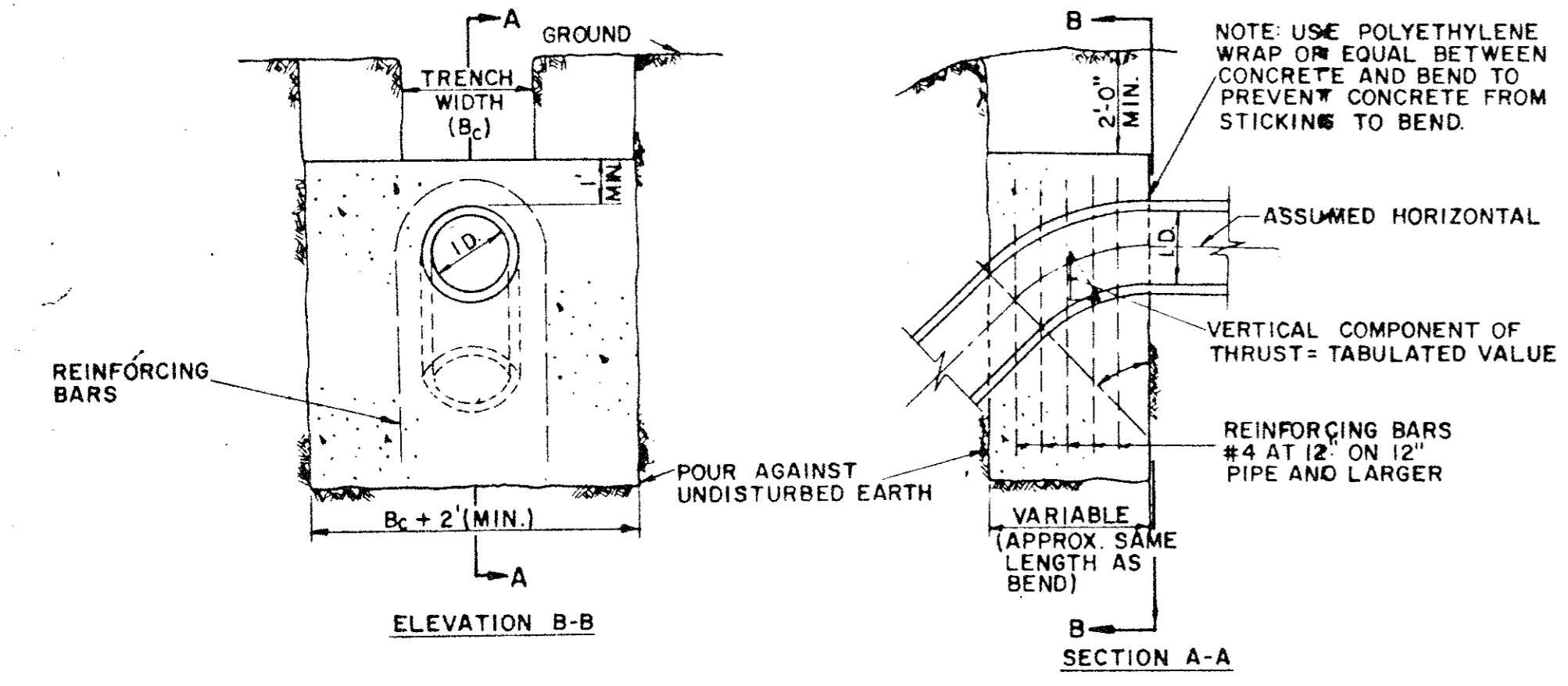
TOWN OF ADDISON, TEXAS DEPARTMENT OF ENGINEERING			
STANDARD CONSTRUCTION DETAILS WATER			
FIRE HYDRANTS, PULL BOXES AND VALVES			
Designed -	Drawn -	Date - AUGUST, 1991	Job No. - 90025-4
Approved -	Checked -	Scale -	Sheet D-8 Of



Δ	T	C	C	E
(IN)	(IN)	FT.	22.50° FT.	FT.
4.6,8	0.4	1.5	1.5	0.9
10,12	0.5	1.5	1.5	1.2
16,18	0.6	1.5	1.5	1.6
20	0.7	1.5	1.5	1.8
24	0.9	1.5	1.5	2.1
30	2.9	1.5	1.9	2.6
36	4.5	1.5	2.3	3.3
42	5.0	1.8	2.6	3.8
48	5.5	2.0	3.0	4.3
54	6.0	2.3	3.4	4.8
60	6.5	2.5	3.8	5.3
66	6.8	2.8	4.1	5.7
72	7.5	3.0	4.5	6.3
78	7.5	3.3	4.9	6.7
84	8.0	3.5	5.3	7.2
90	8.5	3.8	5.6	7.7
96	9.0	4.0	6.0	8.2

I.D.	G	Δ = 11.25°						Δ = 22.50°							
		EARTH		ROCK		VOL.		EARTH		ROCK		VOL.			
4.6,8	0.4	1.0	1.5	0.1	1.0	1.0	4.6,8	0.8	2.0	1.5	1.5	0.1	1.0	1.0	0.1
10,12	0.6	2.2	1.5	0.1	1.0	1.5	10,12	1.1	4.4	2.0	2.5	0.3	1.5	1.5	0.1
16,18	0.8	5.0	2.0	2.5	0.3	1.5	16,18	1.6	9.9	3.0	3.5	0.4	2.0	2.5	0.3
20	0.9	6.2	2.0	3.5	0.4	1.5	20	1.8	12.3	3.5	3.5	0.7	2.0	3.5	0.4
24	1.1	8.9	3.0	3.0	0.5	1.5	24	2.2	17.7	4.0	4.5	1.0	3.0	3.0	0.5
30	1.4	10.4	3.0	3.5	0.6	2.0	30	2.7	20.7	5.0	4.5	1.5	3.0	4.0	0.8
36	1.7	15.0	3.5	4.5	0.9	2.0	36	3.3	29.8	5.5	5.5	2.3	4.0	4.0	1.3
42	1.9	20.4	4.5	5.0	1.2	2.5	42	3.8	40.5	7.0	6.0	3.9	4.5	5.0	2.1
48	2.2	26.6	4.5	6.0	1.5	3.0	48	4.4	52.9	8.0	7.0	5.7	4.8	6.0	2.8
54	2.5	33.7	6.0	6.0	3.0	3.0	54	4.9	67.0	9.0	8.0	6.0	6.0	6.0	4.1
60	2.7	41.6	4.0	7.0	3.8	3.0	60	5.5	82.7	9.5	9.0	10.6	6.0	7.0	5.3
66	3.0	50.3	6.5	8.0	3.5	4.0	66	6.0	100.1	10.5	10.0	14.1	6.5	8.0	7.2
72	3.3	59.9	7.5	8.0	6.3	4.0	72	6.6	119.1	11.0	11.0	17.6	7.5	8.0	9.1
78	3.6	70.2	8.0	9.0	8.1	4.0	78	7.1	139.8	12.0	12.0	22.5	8.0	9.0	11.7
84	3.8	81.5	8.5	10.0	10.5	4.5	84	7.6	162.1	12.5	12.5	27.2	8.5	10.0	14.8
90	4.1	93.5	9.5	10.0	12.2	5.0	90	8.2	186.1	14.0	13.5	33.7	9.5	10.0	17.7
96	4.4	106.4	10.0	11.0	15.0	5.0	96	8.7	211.7	15.0	14.5	41.2	10.0	11.0	21.8

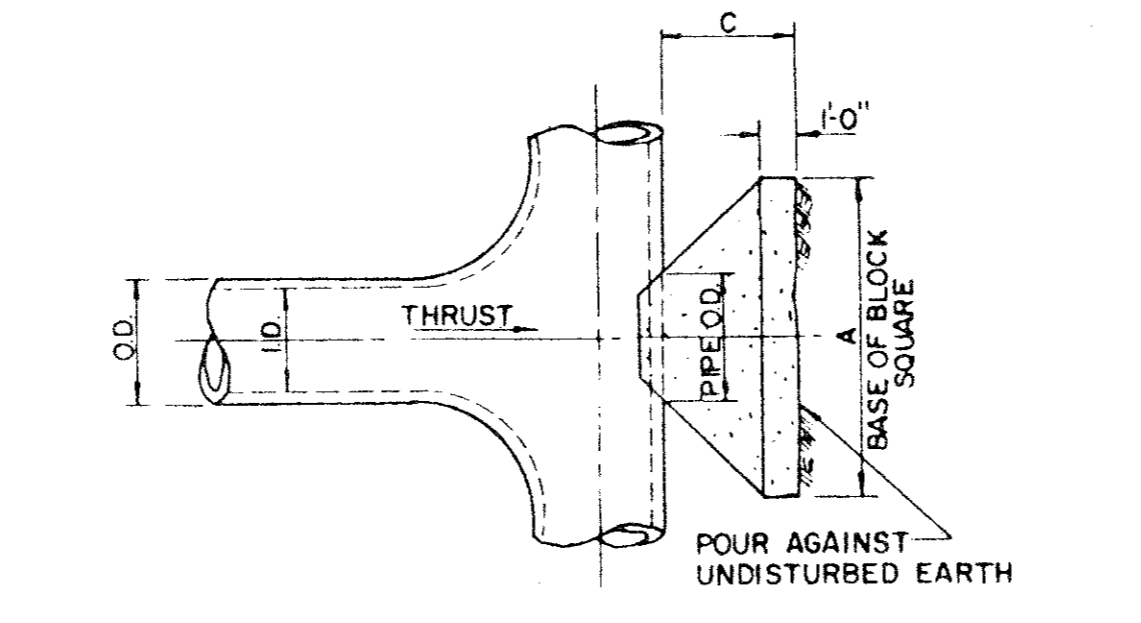
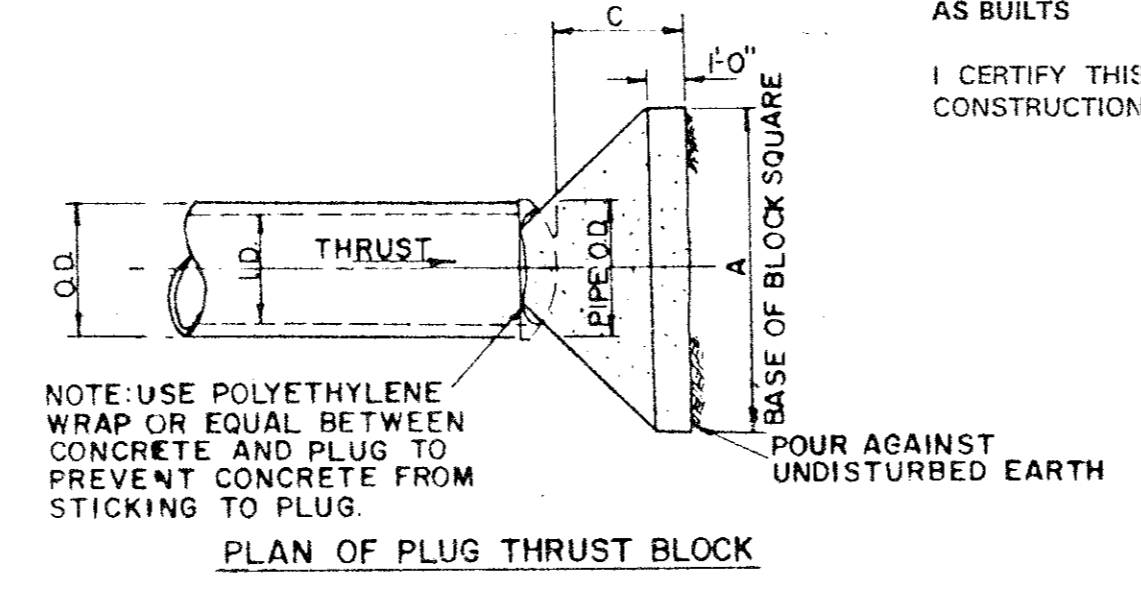
HORIZONTAL BEND THRUST BLOCK



Δ	T	C	C	E
(IN)	(IN)	FT.	22.50° FT.	FT.
4.6,8	1.0	0.5	2.0	4.6,8
10,12	2.2	1.1	4.3	10,12
16,18	5.0	2.5	9.7	16,18
20	6.1	3.1	12.0	20
24	8.2	4.4	17.3	24
30	16.5	5.2	20.3	30
36	14.9	7.5	29.2	36
42	20.3	10.1	39.8	42
48	26.5	13.2	51.9	48
54	33.5	16.8	65.7	54
60	41.4	20.7	81.2	60
66	50.1	25.0	98.2	66
72	59.6	29.8	117.0	72
78	69.9	35.0	137.0	78
84	81.1	40.5	159.0	84
90	93.1	46.5	183.0	90
96	106.0	53.0	208.0	96

- GENERAL NOTES FOR ALL THRUST BLOCKS**
- All Calculations Are Based On Internal Pressure Of 200 P.S.I. For 24" I.D. Pipe And Smaller And 150 P.S.I. On 30" I.D. And Larger.
 - Volumes Of Vertical Bend Thrust Blocks Are Net Volumes Of Concrete To Be Furnished. The Corresponding Weight Of The Concrete (Class F) Is Equal To Or Greater Than The Vertical Component Of Thrust On The Vertical Bend.
 - Wall Thickness (T) Assumed Here For Estimating Purposes Only.
 - Concrete For Blocking Shall Be Class B Concrete.
 - Dimensions May Be Varied As Required By Field Conditions Where And As Directed By The Engineer. The Volume Of Concrete Blocking Shall Not Be Less Than Shown Here.

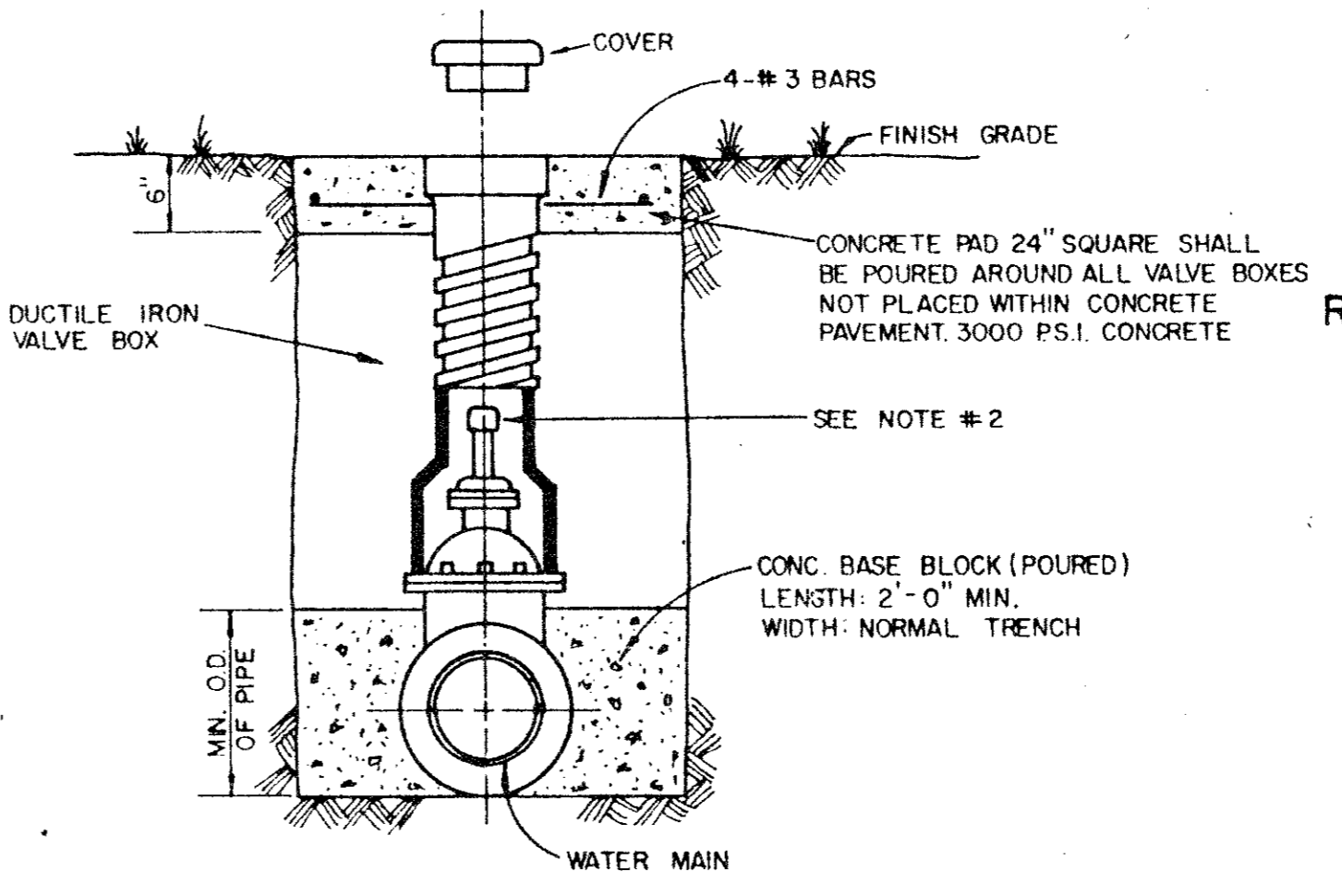
VERTICAL BEND THRUST BLOCK



I.D.	THRUST	EARTH		ROCK	
		FT.	FT.	FT.	FT.
4.6,8	1.1	1.5	2.5	0.3	2.0
10,12	2.2	1.5	3.5	0.6	2.5
16,18	2.5	2.0	5.5	1.6	4.0
20	3.1	2.0	6.0	1.7	4.0
24	4.2	2.5	7.0	3.1	5.0
30	5.0	3.0	7.5	4.1	5.5
36	7.6	4.0	9.0	7.3	6.5
42	10.4	4.5	10.5	11.0	7.5
48	13.6	5.0	12.0	15.6	8.5
54	17.2	5.5	13.5	21.4	9.5
60	21.2	6.0	15.0	28.4	10.5
66	25.7	6.5	16.5	36.8	11.5
72	30.5	7.5	17.5	47.2	12.5
78	35.8	8.0	19.0	58.9	13.5
84	41.6	8.5	20.5	72.3	14.5
90	47.7	9.0	22.0	87.7	15.5
96	54.3	9.5	23.5	104.8	16.5

PLUG & TEE THRUST BLOCK

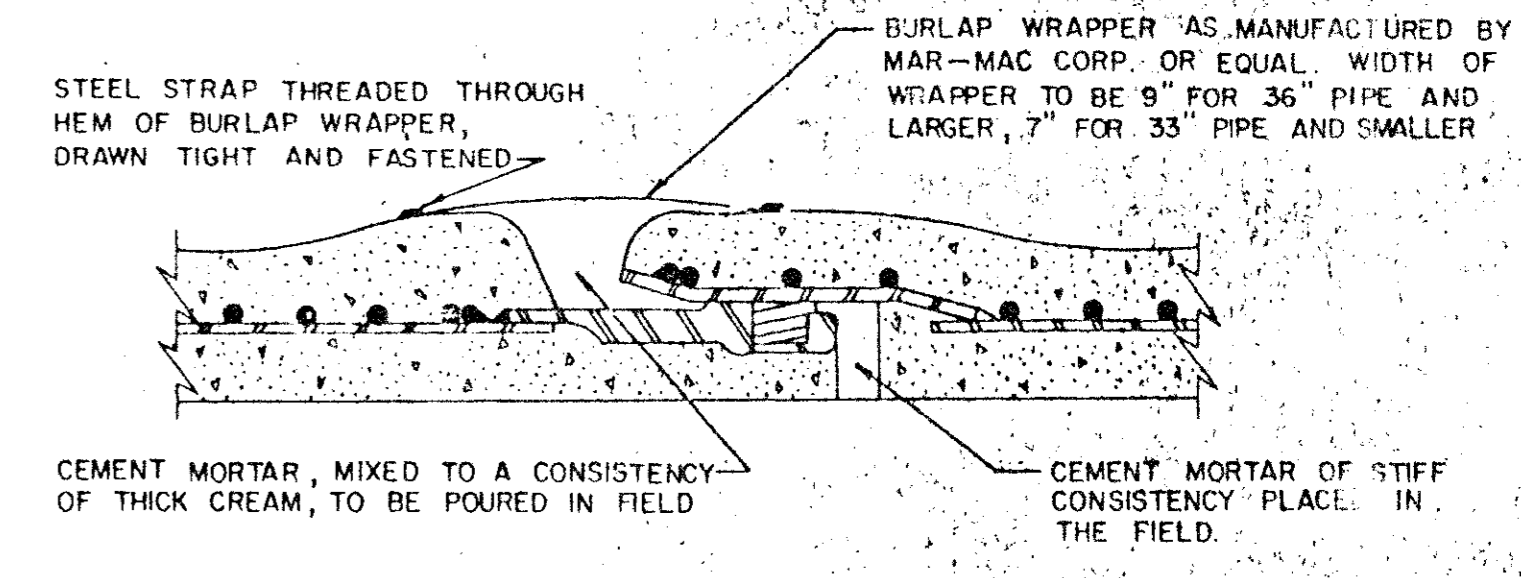
TYPICAL VALVE SETTING AND BOX



- NOTE:**
- GATE VALVES SHALL BE IN ACCORDANCE WITH AWWA STANDARD C-509-80 OR LATEST THEREOF ALL VALVES SHALL BE "MUELLER" 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. MANUFACTURED VALVE STACK DUCTILE IRON PIPE TO BE USED FOR EXTENSION GREATER THAN 4'-0" BELL END OF STACK TO BE FITTED OVER VALVE. VALVE AND VALVE STACK IS TO BE POLY WRAPPED.
 - VALVES SHALL BE OF DUCTILE IRON W/RUBBER ENCAPSULATED DISK BODY BOLTS SHALL BE STAINLESS STEEL OF SAME SIZE ON EACH VALVE.

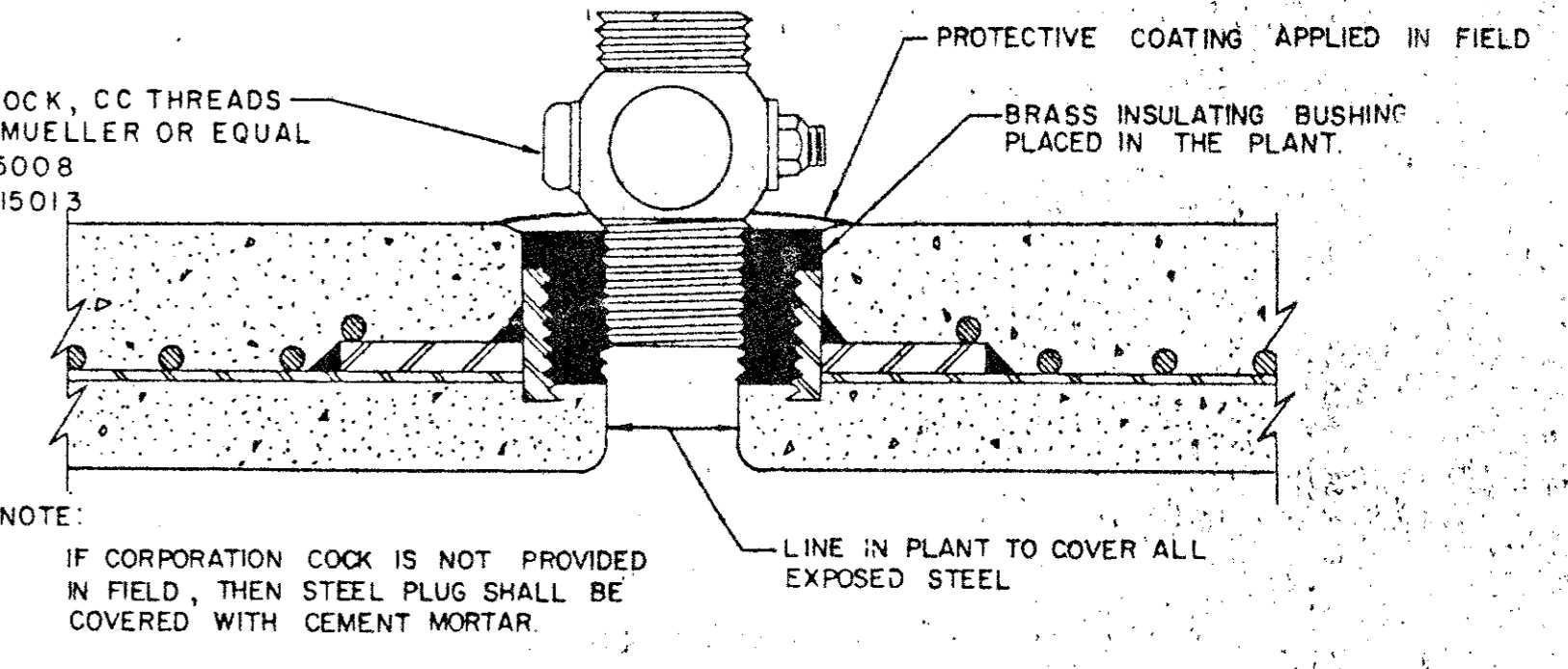
NOTE:

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 FINELY SHARP (PLASTER) SAND. WHERE SHOWN, COATING IS TO BE REINFORCED WITH WIRE MESH.

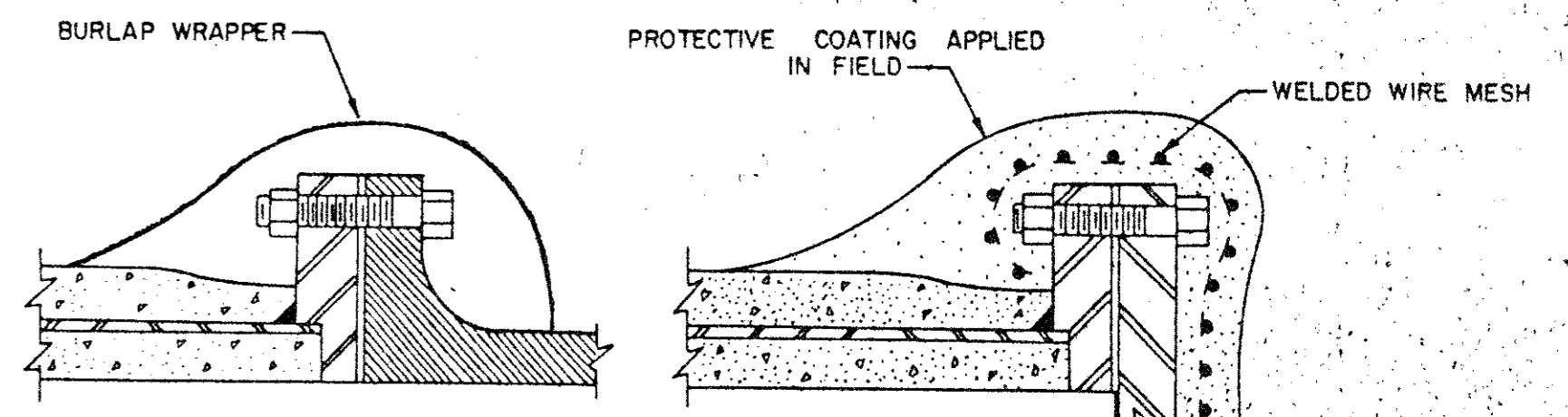


STANDARD RUBBER GASKET JOINT

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



THREADED CONNECTION



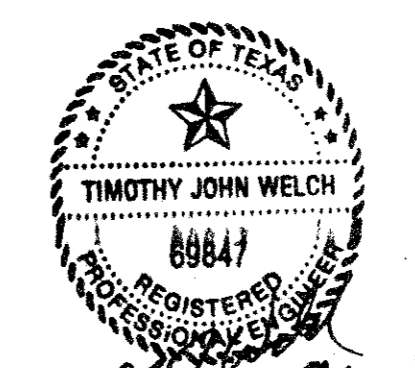
FLANGED CONNECTIONS

REINFORCED CONCRETE CYLINDER PIPE DETAILS

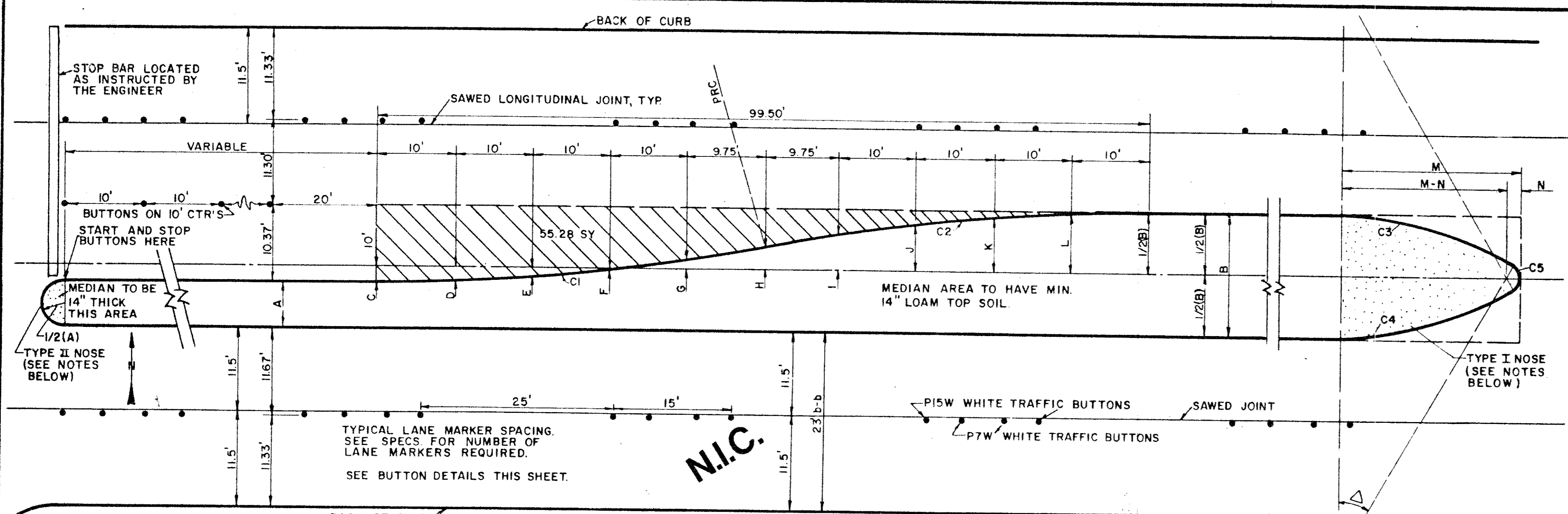
TOWN OF ADDISON, TEXAS
DEPARTMENT OF ENGINEERING

STANDARD CONSTRUCTION DETAILS WATER

THRUST BLOCKS



Designed -	Drawn -	Date - AUGUST, 1991	Job No. - 90025-4
Approved -	Checked -	Scale -	Sheet D-9 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	N
7	18°22'52"	50'	8.09'	16.04'	1.00'
8	20°09'11"		8.89'	17.53'	1.00'
9	21°47'12"		9.62'	19.01'	1.00'
10	23°18'41"		10.31'	20.34'	1.00'
11	24°44'50"		10.97'	21.60'	1.00'
12	23°06'32"		11.59'	22.78'	1.00'
13	27°24'27"		12.19'	23.92'	1.00'
14	25°08'28"		11.15'	21.4'	2.50'

CURVE DATA C1 C2

Δ = 11°28'40"
R = 250'
T = 25.15'
L = 50.08'

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

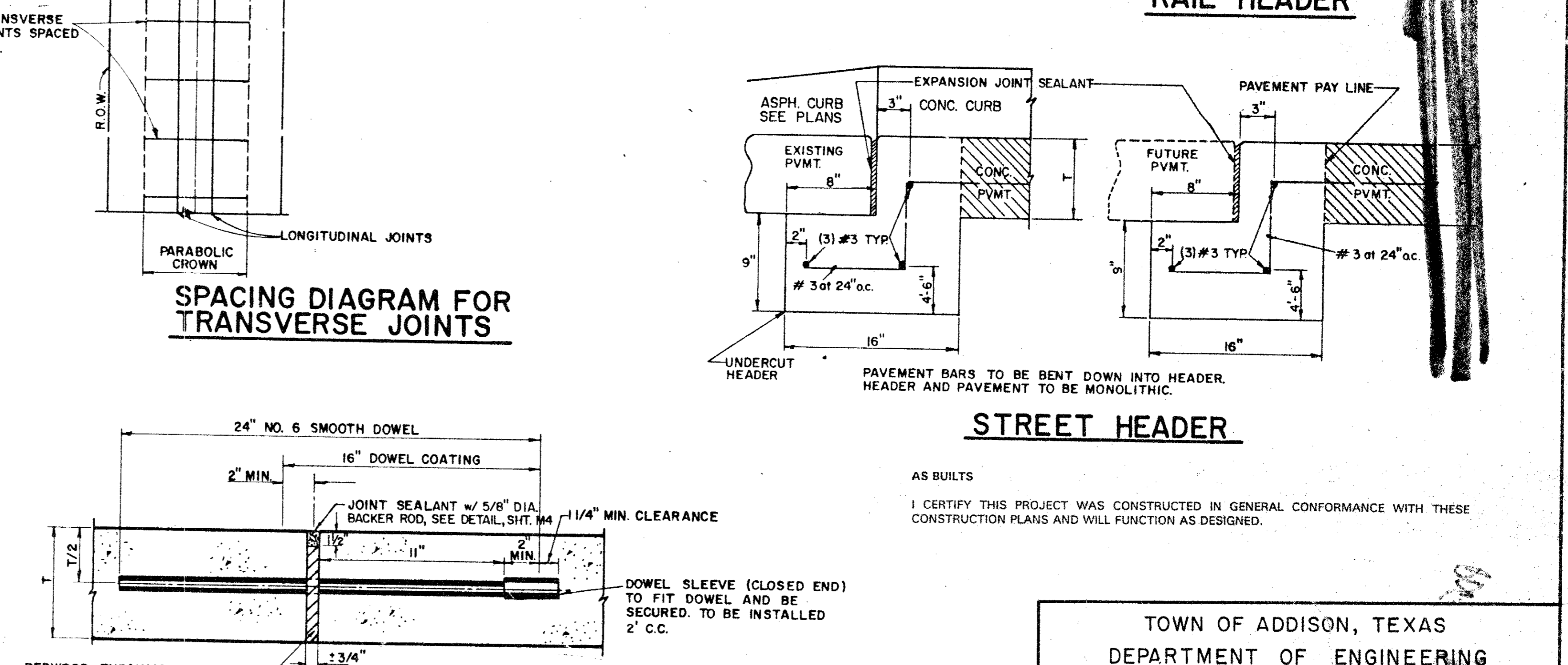
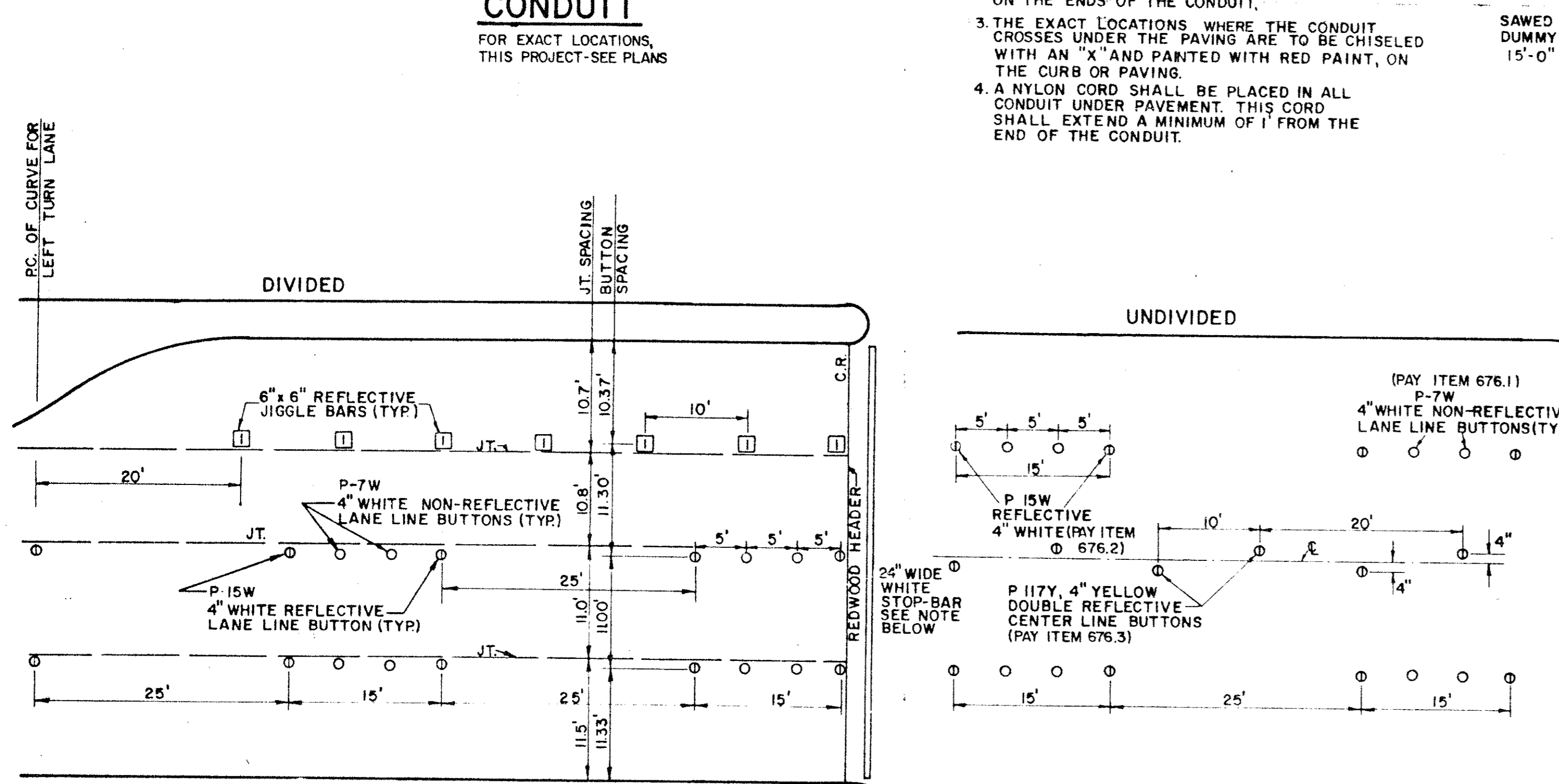
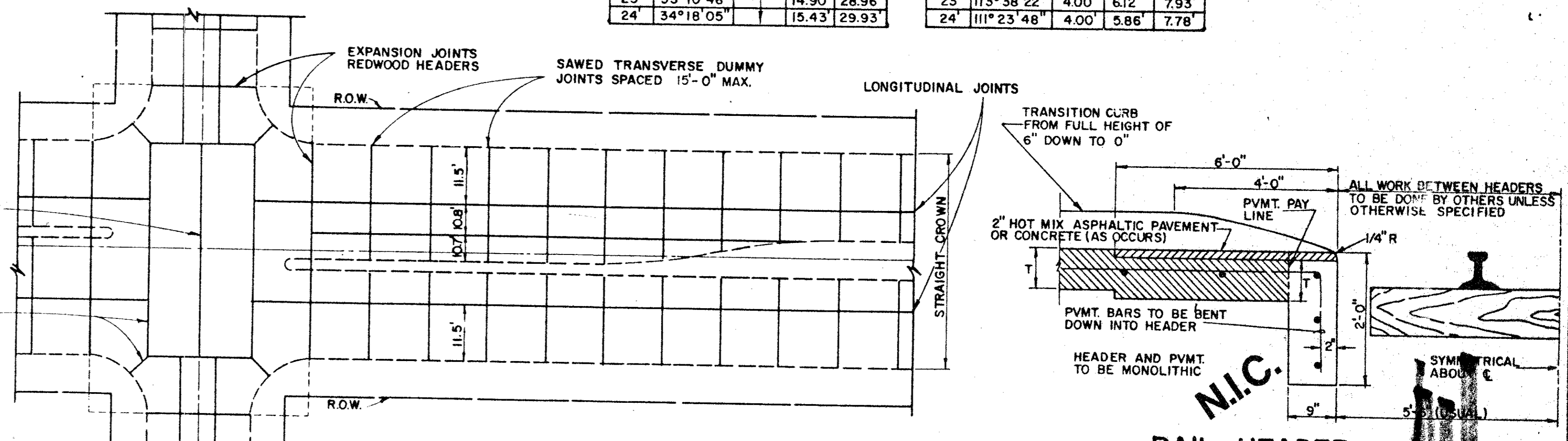
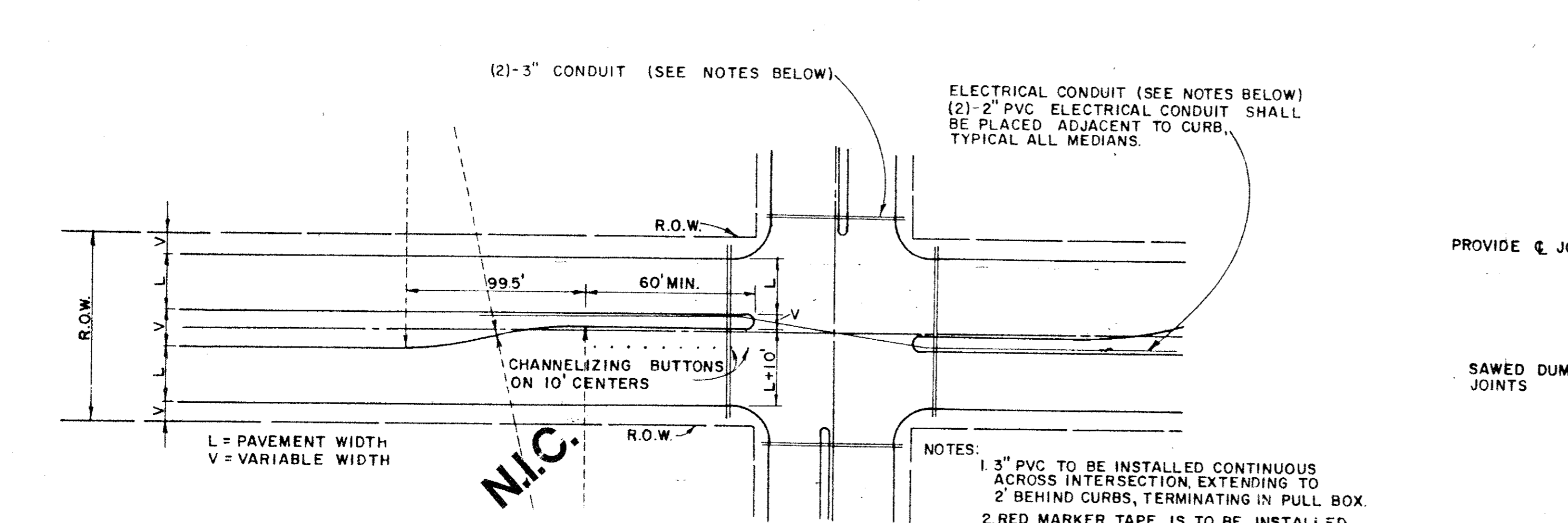
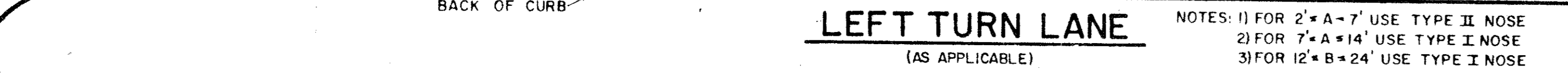
B	Δ	R	T	L
12	26°06'32"	50.00'	11.59'	22.78'
13	27°24'27"		12.19'	23.92'
14	25°08'28"		11.15'	21.94'
15	26°31'32"		11.79'	23.15'
16	25°24'53"		11.27'	22.18'
17	26°48'51"		11.92'	23.40'
18	28°08'58"		12.54'	24.57'
19	29°25'43"		13.13'	25.68'
20	29°35'30"		13.21'	25.82'
21	30°49'46"		13.79'	26.90'
22	32°01'26"		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"	1.00'	2.04'	2.23'
13	125°12'46"	1.00'	1.93'	2.19'
14	129°43'08"	2.50'	5.33'	5.66'
15	126°57'31"	2.50'	5.01'	5.54'
16	129°09'33"	3.50'	7.36'	7.89'
17	126°21'44"	3.50'	6.92'	7.72'
18	123°41'38"	3.50'	6.54'	7.56'
19	120°52'03"	3.50'	6.17'	7.38'
20	120°48'56"	4.00'	7.04'	8.43'
21	118°21'08"	4.00'	6.70'	8.26'
22	115°57'07"	4.00'	6.40'	8.10'
23	113°38'22"	4.00'	6.12'	7.93'
24	111°23'48"	4.00'	5.86'	7.78'

CURVE DATA C5 FOR 7' A=14'

A	Δ	R	T	L
7	143°14'15"	1.00'	3.01'	2.50'
8	139°41'38"	1.00'	2.72'	2.44'
9	136°25'35"	1.00'	2.50'	2.36'
10	133°22'38"	1.00'	2.32'	2.33'
11	130°30'20"	1.00'	2.17'	2.28'
12	127°47'32"	1.00'	2.04'	2.23'
13	125°12'46"	1.00'	1.93'	2.19'
14	129°43'08"	2.50'	5.33'	5.66'



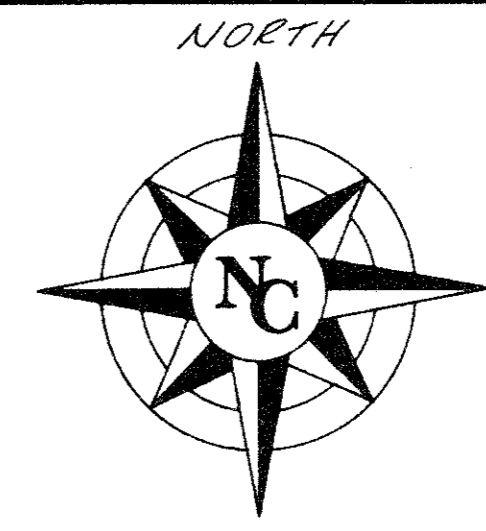
STATE OF TEXAS
TIMOTHY JOHN WELLS
REGISTERED PROFESSIONAL ENGINEER
6984

TOWN OF ADDISON, TEXAS
DEPARTMENT OF ENGINEERING

STANDARD CONSTRUCTION DETAILS PAVING

TURN LANES & JOINTS

Designed - _____ Drawn - _____ Date - AUGUST, 1991 Job No. - 90025-4
Checked - _____ Scale - _____

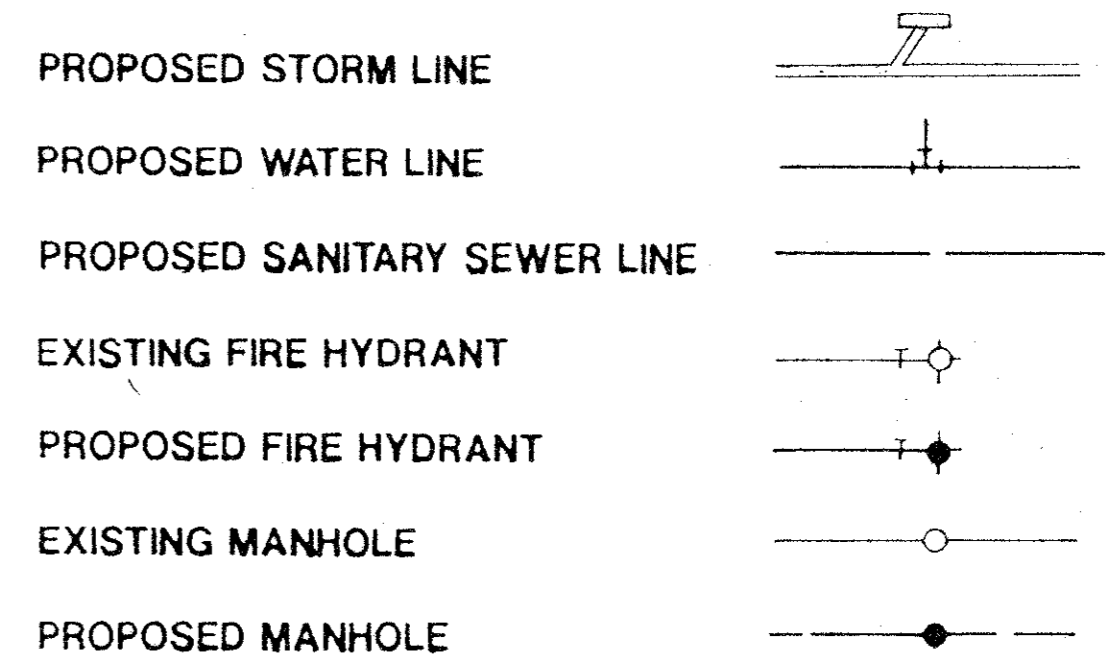


Revisions	Date	Description	Drawn By	Checked By

WATER & SANITARY GENERAL NOTES

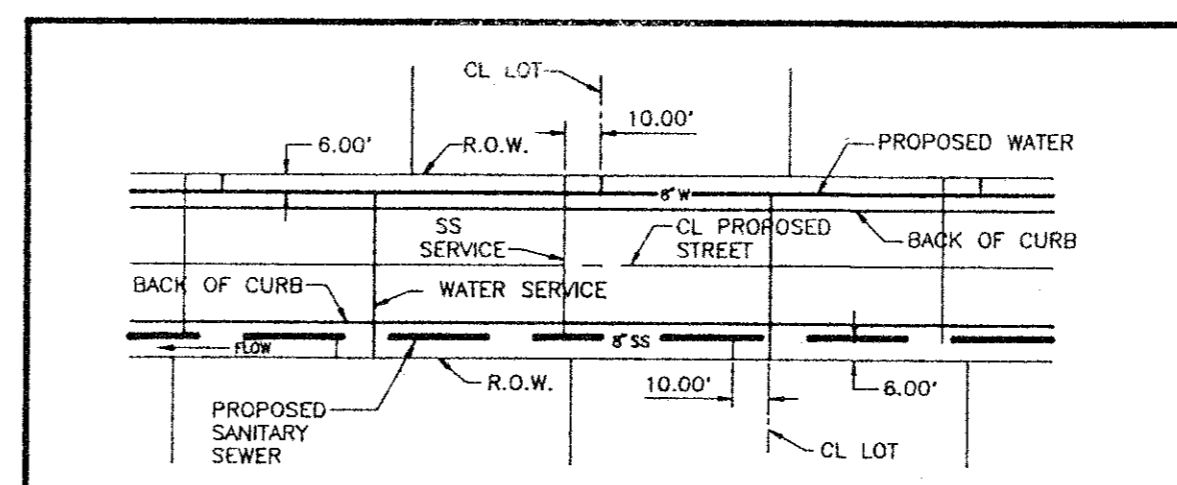
- All water mains shall be PVC SDR-18 water pipe.
- All sanitary sewer mains shall be PVC SDR-35 and shall have integral wall bell and spigot joints.
- All water mains shall have a minimum cover below finished grades as follows: 6" & 8" - 48", 12" - 60", or as required to clear other utilities.
- The location of all utilities are taken from existing public records. The exact location must be determined by the Contractor. It is the duty of the contractor to ascertain whether any other facilities (additional), other than those on the plans may be present.
- All utility and service laterals trenches shall be backfilled and compacted to 95% Standard Proctor Density.
- All manholes, cleanouts, valve boxes, fire hydrants, etc., must be adjusted to proper line and grade by the Contractor after placing of permanent paving.
- All work and materials shall be in accordance with the Town of Addison Standard Specifications.
- Contractor shall be responsible for providing "as-built" plans to the Engineer showing the location of sewer service by distance to the lot lines.
- All fire hydrants shall be Mueller Centurion model.
- The No. 12 plastic coated wire shall be placed in the trench over all water lines. The wire will be tied to all valves and fire hydrants and attached directly to the top of pipe and extend to six (6") inches above finished grade along the outside of all valve stacks and fire hydrants.
- All dimensions shown are to centerline of pipe and the R.O.W., unless otherwise noted.
- Contractor shall be responsible for trench safety and details as required.

UTILITY KEY



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

BENCHMARKS:
 Square cut on N.W. corner of footing of T.U. Electric tower No. 12N-3W-T288 near Addison Fire Station No. 2. Elev. 605.20
 Square cut on top of curb of east median nose in the centerline of Beltway Drive at Les Lacs Avenue. Elev. 594.42
 Square cut on centerline of 14' inlet at the N.E. corner of the intersection of Beltway Drive and Marsh Lane. Elev. 585.20

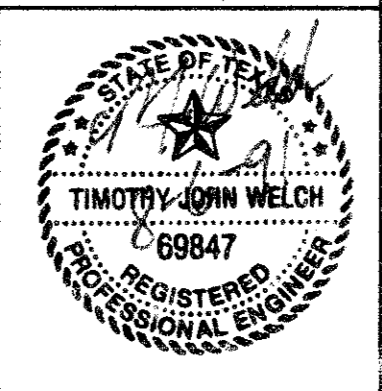


TYPICAL INSTALLATION DETAIL FOR WATER & SANITARY SEWER SERVICES
N.T.S.

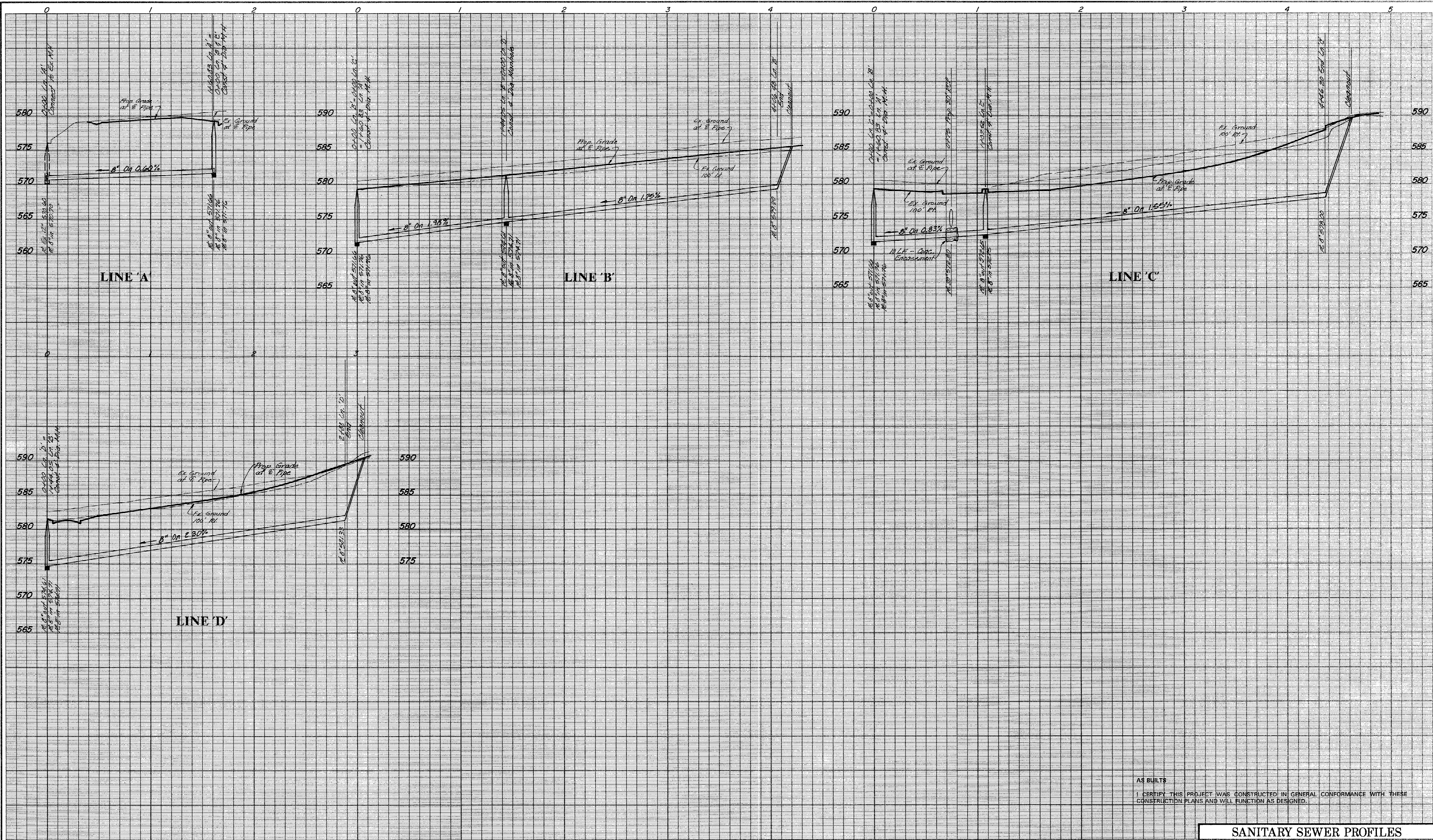
WATER & SANITARY SEWER PLAN

**CHATHAM COURT
TOWN OF ADDISON, TEXAS**

Date: AUGUST, 1991 Scale: 1" = 50'
 Drawn By: TNC Approved By: TNC SHEET **WS-1** OF SHEETS



THE NELSON CORPORATION
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AS-BUILT
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SANITARY SEWER PROFILES
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 TOWN OF ADDISON, TEXAS

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DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
TNC	TNC	AUGUST 1991	1" = 40' H 1" = 6' V	TNC	90025-4	WS-2

TELEPHONE POST