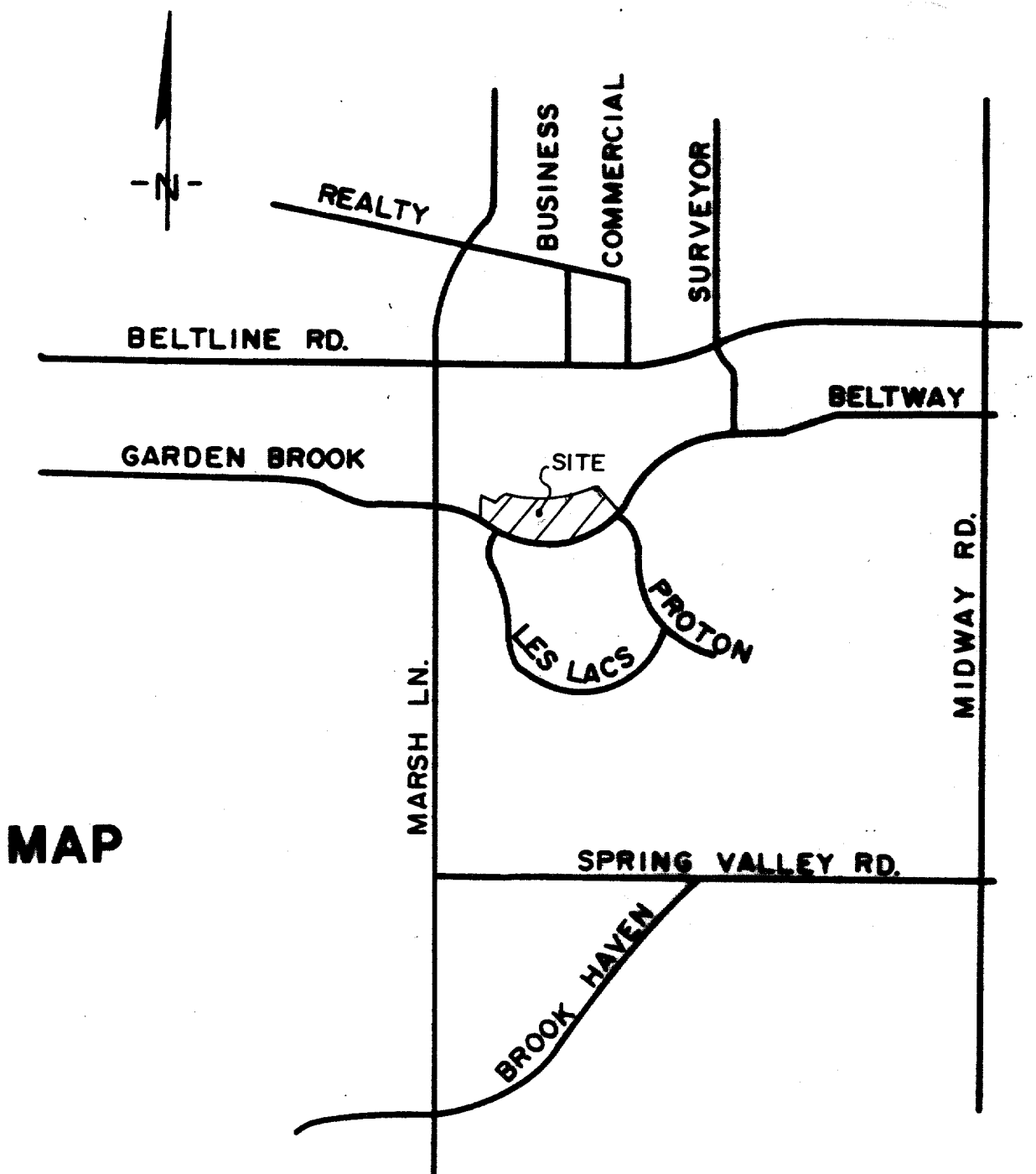


FINAL PLAT & ENGINEERING PLANS FOR ADDISON TOWN CENTER SUBDIVISION ADDISON, TEXAS

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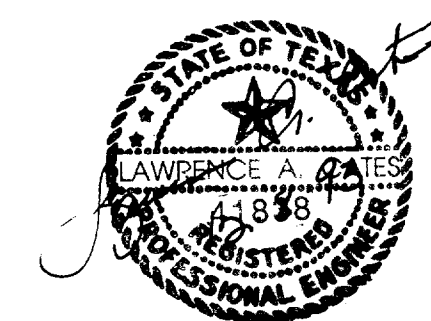
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LOCATION MAP

OWNER:
GRAND LAND, LTD.
 8800 N. CENTRAL EXPWY, STE 330
 DALLAS, TEXAS 75231
 (214) 750-6528

ENGINEER:
LAWRENCE A. CATES & ASSOCIATES, INC.
 14200 MIDWAY ROAD, SUITE 122
 DALLAS, TEXAS 75244
 (214) 385-2272



JUNE 15, 1993

AS-BUILTS

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

ADDISON TOWN CENTER SUBDIVISION

FF-6

OWNER'S CERTIFICATE

STATE OF TEXAS
COUNTY OF DALLAS

WHEREAS ADDISON INVESTORS, LTD., GRAND LAND, LTD., APPLBEE'S OF TEXAS, INC., AND RESOLUTION TRUST CORPORATION, AS RECEIVER FOR BRIGHT BANC SAVINGS ASSOCIATION ARE THE SOLE OWNERS OF A TRACT OF LAND SITUATED IN THE TOWN OF ADDISON, DALLAS COUNTY, TEXAS; AND BEING OUT OF THE THOMAS L. CHENOWITH SURVEY, ABSTRACT NO. 273; AND BEING PART OF LES LACS PLAZA SUBDIVISION, AN ADDITION TO THE TOWN OF ADDISON AS RECORDED IN VOLUME 83064, PAGE 2724 OF THE MAP RECORDS OF DALLAS COUNTY, TEXAS AND BEING ALL OF PRINTEMPS ADDITION NO. 1, AN ADDITION TO THE TOWN OF ADDISON AS RECORDED IN VOLUME 89013, PAGE 0827 OF THE MAP RECORDS OF DALLAS COUNTY, TEXAS; AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT AN IRON ROD FOUND AT THE INTERSECTION OF THE EAST LINE OF MARSH LANE (100 FOOT WIDE RIGHT-OF-WAY) AND THE NORTH LINE OF BELTWAY DRIVE (80 FOOT WIDE RIGHT-OF-WAY);

THENCE: N 00°58' 06" E, ALONG THE EAST LINE OF SAID MARSH LANE, A DISTANCE OF 686.45 FEET TO AN IRON ROD FOUND AT THE SOUTHWEST CORNER OF A TRACT OF LAND CONVEYED TO A.P. STEPHENS BY DEED RECORDED IN VOLUME 88159, PAGE 4535 OF THE MAP RECORDS OF DALLAS COUNTY, TEXAS;

THENCE: S 89°03' 54" E, ALONG THE SOUTH LINE OF SAID A.P. STEPHENS TRACT A DISTANCE OF 248.50 FEET TO AN IRON ROD FOUND AT THE SOUTHWEST CORNER OF SAID PRINTEMPS ADDITION NO. 1;

THENCE: N 00°58' 06" E, ALONG A COMMON LINE OF THE SAID A.P. STEPHENS AND PRINTEMPS ADDITION NO. 1 TRACTS, A DISTANCE OF 284.73 FEET TO AN IRON ROD FOUND FOR CORNER;

THENCE: S 88°53' 11" E, ALONG A COMMON LINE OF SAID A.P. STEPHENS AND PRINTEMPS ADDITION NO. 1 TRACTS, A DISTANCE OF 230.72 FEET TO AN IRON ROD FOUND FOR CORNER;

THENCE: N 01°08' 45" E, ALONG A COMMON LINE OF SAID A.P. STEPHENS AND PRINTEMPS ADDITION NO. 1 TRACTS, A DISTANCE OF 252.35 FEET TO AN IRON ROD FOUND AT THE NORTHEAST CORNER OF SAID A.P. STEPHENS TRACT, SAID POINT ALSO BEING IN THE SOUTH LINE OF BELT LINE ROAD (100 FOOT WIDE RIGHT-OF-WAY);

THENCE: S 88°53' 15" E, ALONG THE SOUTH LINE OF SAID BELT LINE ROAD AND THE NORTH LINE OF SAID PRINTEMPS ADDITION NO. 1, A DISTANCE OF 48.54 FEET TO AN IRON ROD FOUND FOR CORNER;

THENCE: S 89°00' 26" E, CONTINUING ALONG THE SOUTH LINE OF SAID BELT LINE ROAD AND THE NORTH LINE OF SAID PRINTEMPS ADDITION NO. 1, A DISTANCE OF 484.39 FEET TO AN IRON ROD FOUND FOR CORNER;

THENCE: S 82° 41' 55" E, CONTINUING ALONG THE SOUTH LINE OF SAID BELT LINE ROAD AND THE NORTH LINE OF SAID PRINTEMPS ADDITION NO. 1, A DISTANCE OF 100.11 FEET TO AN IRON ROD FOUND FOR CORNER;

THENCE: S 89° 00' 26" E, CONTINUING ALONG THE SAID SOUTH LINE OF BELTLINE ROAD AND THE NORTH LINE OF SAID PRINTEMPS ADDITION NO. 1, A DISTANCE OF 156.50 FEET TO AN "X" SET IN CONCRETE FOR CORNER IN THE WEST LINE OF A 20' X 260' QUIT CLAIM TRACT FROM THE TOWN OF ADDISON, TEXAS AS RECORDED IN VOLUME 82205 AT PAGE 5407 OF THE DEED RECORDS OF DALLAS COUNTY, TEXAS;

THENCE: N 00° 59' 34" E, A DISTANCE OF 11.00 FEET TO THE NORTHWEST CORNER OF SAID QUIT CLAIM TRACT, SAID POINT BEING IN THE SOUTH LINE OF BELT LINE ROAD (100.00 FOOT RIGHT-OF-WAY AT THIS POINT);

THENCE: S 89° 00' 26" E, ALONG THE SOUTH LINE OF BELT LINE ROAD A DISTANCE OF 20.00 FEET TO AN "X" SET IN CONCRETE, SAID POINT BEING THE NORTHEAST CORNER OF THE SAID PRINTEMPS ADDITION NO. 1;

THENCE: S 00° 59' 34" W, ALONG THE EAST LINE OF SAID PRINTEMPS ADDITION NO. 1 A DISTANCE OF 280.00 FEET TO THE SOUTHEAST CORNER OF SAME, A 1/2" IRON ROD FOUND FOR CORNER;

THENCE: S 89° 00' 26" E, A DISTANCE OF 20.00 FEET TO A 5/8" IRON ROD SET FOR CORNER, SAID POINT BEING THE MOST WESTERLY SOUTHWEST CORNER OF LOT 3 IN BLOCK A OF PRINTEMPS ADDITION NO. 2, AN ADDITION TO THE TOWN OF ADDISON AS RECORDED IN VOLUME 92185 AT PAGE 2251 OF THE MAP RECORDS OF DALLAS COUNTY, TEXAS;

THENCE: S 00° 59' 34" W, A DISTANCE OF 32.25 FEET TO A 5/8" IRON ROD SET FOR CORNER;

THENCE: N 89° 00' 26" W, A DISTANCE OF 136.87 FEET TO A 5/8" IRON ROD SET FOR CORNER;

THENCE: S 00° 59' 34" W, A DISTANCE OF 857.82 FEET TO A 5/8" IRON ROD SET FOR CORNER;

THENCE: N 85° 27' 35" E, A DISTANCE OF 254.33 FEET TO A 5/8" IRON ROD SET FOR CORNER;

THENCE: N 45° 59' 34" E, A DISTANCE OF 224.57 FEET TO AN IRON ROD FOUND AT THE BEGINNING OF A CURVE TO THE LEFT;

THENCE: IN A NORTHEASTERLY DIRECTION ALONG SAID CURVE TO THE LEFT HAVING A RADIUS OF 458.50 FEET, A CENTRAL ANGLE OF 31° 20' 46" AND AN ARC LENGTH OF 250.84 FEET TO AN IRON ROD FOUND AT THE BEGINNING OF A COMPOUND CURVE TO THE LEFT;

THENCE: IN A NORTHERLY DIRECTION ALONG SAID COMPOUND CURVE TO THE LEFT HAVING A RADIUS OF 308.05 FEET, A CENTRAL ANGLE OF 29° 37' 16" AND AN ARC LENGTH OF 159.26 FEET TO AN IRON ROD FOUND AT THE END OF SAID CURVE;

THENCE: N 14° 58' 28" W, A DISTANCE OF 75.00 FEET TO AN IRON ROD FOUND AT THE SOUTHWEST CORNER OF LOT 3, BLOCK A OF THE SAID PRINTEMPS ADDITION NO. 2;

THENCE: N 79° 49' 35" E, ALONG THE SOUTH LINE OF SAID LOT 3, BLOCK A OF THE PRINTEMPS ADDITION NO. 2, A DISTANCE OF 535.35 FEET TO AN IRON ROD FOUND AT THE SOUTHWEST CORNER OF SAID LOT 3, BLOCK A, SAID POINT ALSO BEING THE SOUTHWEST CORNER OF A TRACT OF LAND CONVEYED TO FIRST INTERSTATE BANK OF TEXAS BY DEED RECORDED IN VOLUME 88192, PAGE 2509 OF THE MAP RECORDS OF DALLAS COUNTY, TEXAS AND CONTINUING ALONG SAID BEARING AND THE SOUTH LINE OF SAID FIRST INTERSTATE BANK TRACT IN ALL A DISTANCE OF 730.73 FEET TO AN IRON ROD FOUND IN THE WEST LINE OF A 100 FOOT WIDE TEXAS POWER AND LIGHT RIGHT-OF-WAY;

THENCE: S 00° 55' 55" W, ALONG THE WEST LINE OF SAID T.P. & L. R.O.W. A DISTANCE OF 233.20 FEET TO AN IRON ROD FOUND IN THE NORTH LINE OF SAID BELTWAY DRIVE, SAID POINT ALSO BEING IN A CURVE TO THE LEFT WHOSE CHORD BEARS S 76°28' 43" W, A DISTANCE OF 193.94 FEET;

THENCE: IN A WESTERLY DIRECTION ALONG THE NORTH LINE OF SAID BELTWAY DRIVE AND SAID CURVE TO THE LEFT HAVING A RADIUS OF 408.50 FEET, A CENTRAL ANGLE OF 27°27' 51", A CHORD WHICH BEARS S 76°28' 43" W A DISTANCE OF 193.94 FEET, AND AN ARC LENGTH OF 195.81 FEET TO AN IRON ROD FOUND AT THE BEGINNING OF A COMPOUND CURVE TO THE LEFT;

THENCE: IN A SOUTHWESTERLY DIRECTION CONTINUING ALONG THE NORTH LINE OF SAID BELTWAY DRIVE AND SAID COMPOUND CURVE TO THE LEFT HAVING A RADIUS OF 610.00 FEET, A CENTRAL ANGLE OF 28°43' 55" AND AN ARC LENGTH OF 284.81 FEET TO AN IRON ROD FOUND AT THE END OF SAID COMPOUND CURVE TO THE LEFT;

THENCE: S 36° 00' 52" W, CONTINUING ALONG THE NORTH LINE OF SAID BELTWAY DRIVE A DISTANCE OF 550.90 FEET TO AN IRON ROD FOUND AT THE BEGINNING OF A CURVE TO THE RIGHT;

THENCE: IN A WESTERLY DIRECTION CONTINUING ALONG THE NORTH LINE OF SAID BELTWAY DRIVE AND SAID CURVE TO THE RIGHT HAVING A RADIUS OF 760.00 FEET, A CENTRAL ANGLE OF 89° 54' 30" AND AN ARC LENGTH OF 1,192.59 FEET TO AN IRON ROD FOUND AT THE END OF SAID CURVE TO THE RIGHT;

THENCE: N 54° 04' 38" W, ALONG THE NORTH LINE OF SAID BELTWAY DRIVE A DISTANCE OF 290.76 FEET TO AN IRON ROD FOUND AT THE BEGINNING OF A CURVE TO THE LEFT;

THENCE: IN A NORTHWESTERLY DIRECTION CONTINUING ALONG THE NORTH LINE OF SAID BELTWAY DRIVE AND SAID CURVE TO THE LEFT HAVING A RADIUS OF 540.00 FEET, A CENTRAL ANGLE OF 35° 00' 00" AND AN ARC LENGTH OF 329.87 FEET TO AN IRON ROD FOUND AT THE END OF SAID CURVE TO THE LEFT;

THENCE: N 89° 04' 38" W, CONTINUING ALONG THE NORTH LINE OF SAID BELTWAY DRIVE A DISTANCE OF 56.88 FEET TO THE POINT OF BEGINNING AND CONTAINING 46.2515 ACRES (2,014,715 S.F.) OF LAND, MORE OR LESS.

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS:

THAT ADDISON INVESTORS, LTD. ("OWNER") DOES HEREBY ADOPT THIS PLAT DESIGNATING THE HEREINABOVE PROPERTY AS LOTS 1 & 3, BLOCK D, THAT GRAND LAND, LTD. ("OWNER") DOES HEREBY ADOPT THIS PLAT DESIGNATING THE HEREINABOVE PROPERTY AS LOTS 1 - 19, BLOCK A, LOTS 1 - 6, BLOCK B, LOTS 1 - 18, BLOCK C, THAT APPLBEE'S OF TEXAS, INC. ("OWNER") DOES HEREBY ADOPT THIS PLAT DESIGNATING THE HEREINABOVE PROPERTY AS LOT 2, BLOCK D, AND THAT RESOLUTION TRUST CORPORATION, AS RECEIVER FOR BRIGHT BANC SAVINGS ASSOCIATION ("OWNER") DOES HEREBY ADOPT THIS PLAT DESIGNATING THE HEREINABOVE PROPERTY AS LOT 4, BLOCK D, OF ADDISON TOWN CENTER 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, INCLUDING, 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 OR ANY OTHER STRUCTURE WITHIN THE DRAINAGE AND FLOODWAY EASEMENT. 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 AND DRAINAGE FACILITY DEEMED NECESSARY BY THE CITY FOR DRAINAGE PURPOSES. EACH PROPERTY OWNER SHALL KEEP THE NATURAL DRAINAGE CHANNELS AND CREEKS TRAVERSING THE DRAINAGE AND FLOODWAY EASEMENT ADJACENT TO HIS PROPERTY CLEAN AND FREE OF DEBRIS, SILT, GROWTH, VEGETATION, WEEDS, RUBBISH, REFUSE, MATTER AND ANY SUBSTANCE WHICH WOULD RESULT IN UNSANITARY CONDITIONS OR OBSTRUCT THE FLOW OF WATER, AND THE CITY SHALL HAVE THE RIGHT OF INGRESS AND EGRESS FOR THE PURPOSE OF INSPECTION AND SUPERVISION AND MAINTENANCE WORK BY THE PROPERTY OWNER TO ELIMINATE AND UNDESIRABLE CONDITIONS WHICH MAY OCCUR. THE NATURAL DRAINAGE CHANNELS AND CREEKS THROUGH THE DRAINAGE AND FLOODWAY EASEMENT, AS IN THE CASE OF ALL NATURAL CHANNELS, ARE SUBJECT TO STORM WATER OVERFLOW AND NATURAL BANK EROSION TO AN EXTENT THAT CANNOT BE DEFINITELY DEFINED. THE CITY SHALL NOT BE HELD LIABLE FOR ANY DAMAGES OR INJURIES OF ANY NATURE RESULTING FROM THE OCCURRENCE OF THESE NATURAL PHENOMENA, NOR RESULTING FROM THE FAILURE OF ANY STRUCTURE OR STRUCTURES, WITHIN THE NATURAL DRAINAGE CHANNELS, AND THE OWNERS HEREBY AGREE TO IDENTIFY AND HOLD HARMLESS THE CITY FROM ANY SUCH DAMAGES AND INJURIES. BUILDING AREAS OUTSIDE THE DRAINAGE AND FLOODWAY EASEMENT LINE SHALL BE FILLED TO A MINIMUM ELEVATION AS SHOWN ON THE PLAT. THE MINIMUM FLOOR OF ELEVATION OF EACH LOT SHALL BE SHOWN ON THE PLAT.

OWNER:
LOT 4, BLOCK D
RESOLUTION TRUST CORPORATION
3500 MAPLE AVE.
DALLAS, TEXAS 75219
(214) 443-2300

OWNER:
LOT 2, BLOCK D
APPLBEE'S OF TEXAS, INC.
4551 W. 107TH ST., STE. 100
OVERLAND PARK, KANSAS 66207
(913) 967-4000

OWNER:
LOTS 1 & 3, BLOCK D
ADDISON INVESTORS, LTD.
151 FALLS ST., STE. 201
GREENVIEW, S.C. 29601
(803) 271-3894

OWNER:
LOT 1-19, BLK A
LOT 1-6, BLK B
LOT 1-18, BLK C
GRAND LAND, LTD.
8800 N. CENTRAL EXPWY., STE. 330
DALLAS, TEXAS 75231
(214) 750-6528

AUG. 06, 1993

THE MAINTENANCE OR PAYING OF THE UTILITY AND FIRE LANE EASEMENTS IS THE RESPONSIBILITY OF THE PROPERTY OWNER. ALL PUBLIC UTILITIES SHALL AT ALL TIMES HAVE THE FULL RIGHT OF INGRESS AND EGRESS TO AND FROM AND UPON THE SAID UTILITY EASEMENTS FOR THE PURPOSE OF CONSTRUCTING, RECONSTRUCTING, INSPECTING, PATROLLING, MAINTAINING AND ADDING TO OR REMOVING ALL OR PARTS OF ITS RESPECTIVE SYSTEM WITHOUT THE NECESSITY AT ANY TIME OF PROCURING THE PERMISSION OF ANYONE. ANY PUBLIC UTILITY SHALL HAVE THE RIGHT OF INGRESS AND EGRESS TO PRIVATE PROPERTY FOR THE PURPOSE OF READING METERS AND ANY MAINTENANCE AND SERVICE REQUIRED OR ORDINARILY PERFORMED BY THAT UTILITY. BUILDINGS, FENCES, TREES, SHRUBS OR OTHER IMPROVEMENTS OR GROWTH MAY BE CONSTRUCTED, RECONSTRUCTED OR PLACED UPON, OVER OR ACROSS THE UTILITY EASEMENTS AS SHOWN PROVIDED, HOWEVER, THAT OWNER SHALL AT ITS SOLE COST AND EXPENSE BE RESPONSIBLE UNDER ANY AND ALL CIRCUMSTANCES FOR THE MAINTENANCE AND REPAIR OF SUCH IMPROVEMENTS OR GROWTH, AND ANY PUBLIC UTILITY SHALL HAVE THE RIGHT TO REMOVE AND KEEP REMOVED ALL OR PARTS OF ANY BUILDINGS, FENCES, TREES, SHRUBS OR OTHER IMPROVEMENTS OR GROWTH WHICH IN ANY WAY ENDANGER OR INTERFERE WITH THE CONSTRUCTION, 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 THE 8th DAY OF Nov 1993.

David W. ...
ADDISON INVESTORS, LTD.
BY: CENTENNIAL AMERICAN PROPERTIES
NEVADA, LTD., GENERAL PARTNER
DAVID GLENN, PRESIDENT

STATE OF TEXAS
COUNTY OF DALLAS

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED DAVID GLENN KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE ABOVE AND FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATION EXPRESSED AND IN THE CAPACITY THEREIN STATED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE ON THIS THE 8th DAY OF Nov 1993.

Tommy Merritt
NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS EXPIRATION

WITNESS MY HAND AT DALLAS, TEXAS, THIS THE 9th DAY OF Nov 1993.

Stephen H. Brooks
GRAND LAND, LTD.
BY: GRAND HOMES, INC.,
GENERAL PARTNER
STEPHEN H. BROOKS, PRESIDENT

STATE OF TEXAS
COUNTY OF DALLAS

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED STEPHEN H. BROOKS KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE ABOVE AND FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATION EXPRESSED AND IN THE CAPACITY THEREIN STATED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE ON THIS THE 9th DAY OF Nov 1993.

Janet Bishop
NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS EXPIRATION

THIS PLAT HAS BEEN APPROVED BY THE PLANNING AND ZONING COMMISSION ON THIS THE 15th DAY OF Nov 1993.

Frankie Tilley
CHAIRMAN
PLANNING AND ZONING COMMISSION

THIS PLAT HAS BEEN APPROVED BY THE CITY COUNCIL ON THIS THE 20th DAY OF Nov 1993.

Mayor
CITY SECRETARY

WITNESS MY HAND AT Overland Park, Kansas THIS THE 17th DAY OF November 1993.

APPLBEE'S OF TEXAS, INC.,
A TEXAS CORPORATION

Robert T. Steinkamp
BY: ABE J. GUSTIN, JR. ROBERT T. STEINKAMP
VICE PRESIDENT SECRETARY

STATE OF KANSAS
COUNTY OF JOHNSON

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED ABE J. GUSTIN, JR. KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE ABOVE AND FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATION EXPRESSED AND IN THE CAPACITY THEREIN STATED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE ON THIS THE 17th DAY OF November 1993.

Debra K. Nieuwenhuis
NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS EXPIRATION

DEBRA K. NIEUWENHUIS
Notary Public - State of Kansas
My Appl. Expires 6-15-97

WITNESS MY HAND AT AMESCO, INC. THIS THE 30th DAY OF November 1993.

RESOLUTION TRUST CORPORATION, AS RECEIVER FOR BRIGHT BANC SAVINGS ASSOCIATION, AND NOT IN ITS CORPORATE CAPACITY

BY: Paul R. Nauschütz, Jr.
TITLE: Vice-President

STATE OF Texas
COUNTY OF Dallas

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED Paul R. Nauschütz, Jr. KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE ABOVE AND FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATION EXPRESSED AND IN THE CAPACITY THEREIN STATED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE ON THIS THE 30th DAY OF November 1993.

Dacher Garrison
NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS EXPIRATION

DACHER GARRISON
NOTARY PUBLIC
STATE OF TEXAS
My Comm. Exp. 12-14-94

STATE OF TEXAS
COUNTY OF DALLAS

KNOW ALL MEN BY THESE PRESENTS

THAT I, LAWRENCE A. CATES, DO HEREBY CERTIFY THAT I HAVE PREPARED THIS REPLAT FROM AN ACTUAL SURVEY OF THE LAND, AND THAT THE CORNER MONUMENTS SHOWN THEREON WERE PLACED AS DEFINED BY THE FIELD NOTES FOR SAID TRACT IN ACCORDANCE WITH THE PLATTING RULES AND REGULATIONS OF THE TOWN OF ADDISON, TEXAS.

Lawrence A. Cates
LAWRENCE A. CATES
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 3717

STATE OF TEXAS
COUNTY OF DALLAS

STATE OF TEXAS
COUNTY OF DALLAS

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED, LAWRENCE A. CATES, KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE ABOVE AND FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATION EXPRESSED AND IN THE CAPACITY THEREIN STATED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE ON THIS THE 9th DAY OF Nov 1993.

Tommy Merritt
NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS EXPIRATION

TOMMY MERRITT
NOTARY PUBLIC
State of Texas
Commission Expires

FINAL PLAT

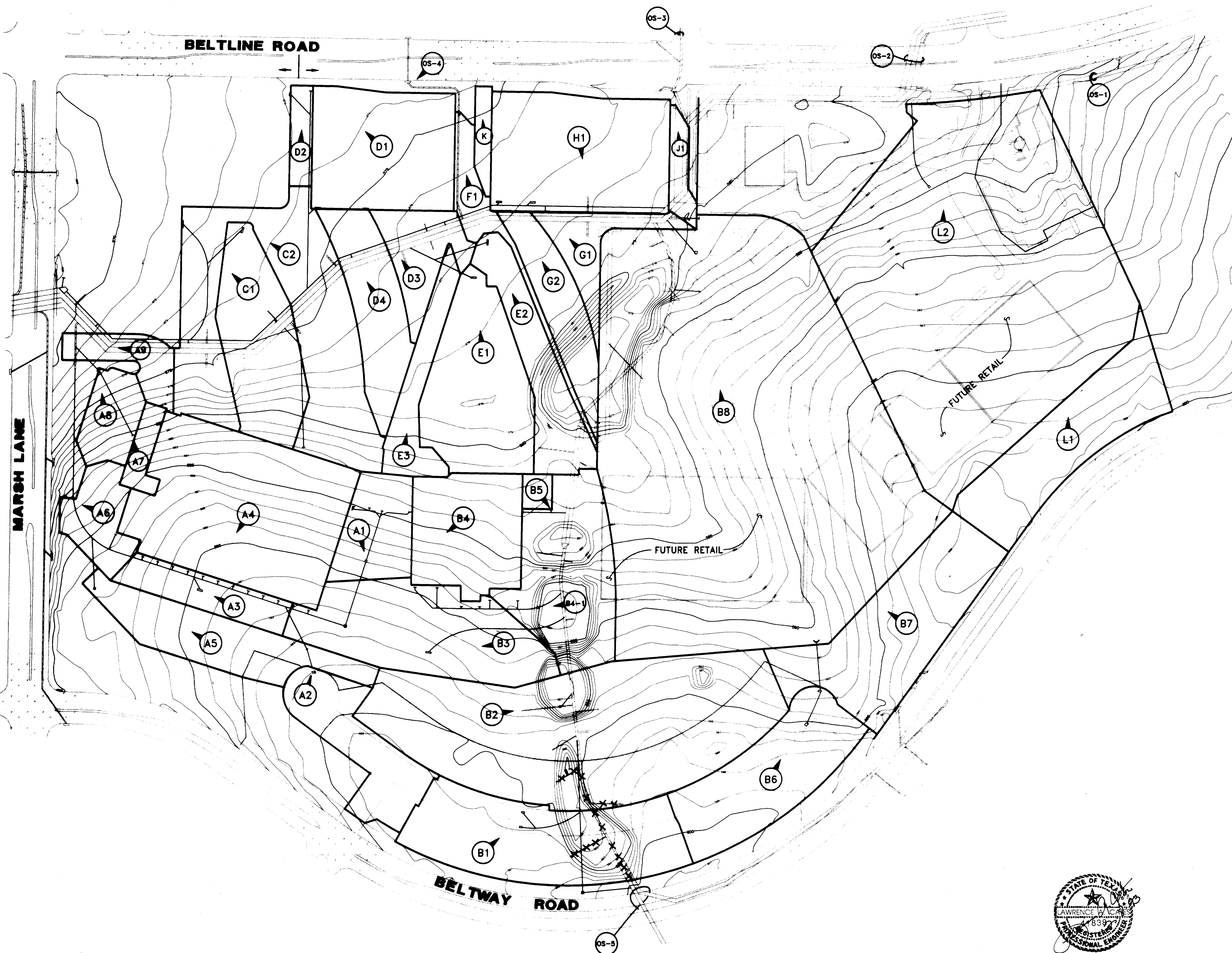
ADDISON TOWN CENTER

A REPLAT OF
PRINTEMPS ADDITION NO. 1
AND A PART OF
THE REMAINDER OF LES LACS PLAZA SUBDIVISION
BEING IN THE
THOMAS L. CHENOWITH SURVEY, ABSTRACT NO. 273

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

SURVEYOR/ENGINEER:
LAWRENCE A. CATES & ASSOC., INC.
14200 MIDWAY ROAD, SUITE 122
DALLAS, TEXAS 75244
(214) 385-2272

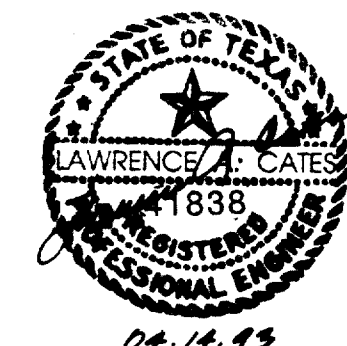
93 DEC -8 AM 10:50
PLAT 8-8028
DALLAS COUNTY
COUNTY CLERK



DRAINAGE SUMMARY

AREA	ACRES	C	I100	Q100	REMARKS
A1	0.68	0.9	8.74	5.35	INC. ROOF DRAIN-BLDG. A
A2	0.87	0.7	8.74	5.32	FROM RES. SUBD.
A3	0.56	0.9	8.74	4.40	TO 10' C.I.
A4	2.69	0.9	8.74	21.13	KMART ROOF DRAINAGE
A5	1.18	0.4	7.70	3.60	PARK AREA
A6	0.49	0.9	8.74	3.85	TO 10' C.I.
A7	0.15	0.9	8.74	1.41	GARDEN SHOP DRAINAGE
A8	0.44	0.9	8.74	3.46	TO 8' C.I.
A9	0.36	0.9	8.74	2.83	TO MARCH LANE
B1	1.96	0.7	8.74	11.99	FROM SUBD. TO 34"
B2	4.45	0.45	7.70	15.4	PARK AREA
B3	1.46	0.9	8.74	11.48	TO 14' C.I.
B4	1.24	0.9	8.74	9.75	TO 10' C.I.
B4-1	1.84	0.9	8.74	14.75	WIND-ONNE ROOF DRAIN
B5	0.10	0.9	8.74	0.79	8' GRATE INLET
B6	1.44	0.7	8.74	9.91	BLDG. B ROOF DRAIN
B7	1.93	0.4	7.70	5.94	FROM SUBD.
B8	11.51	0.9	8.74	96.54	FUTURE PARK
C1	1.22	0.9	8.74	8.80	FUTURE PH. II (BLS etc. PH. 1)
C2	2.84	0.9	8.74	20.80	TO 10' C.I.
D1	1.66	0.9	8.74	13.06	TO 14' C.I.
D2	0.21	0.9	8.74	1.57	TO 8' C.I.
D3	0.81	0.9	8.74	4.80	TO 10' C.I.
D4	0.93	0.9	8.74	7.31	
E1	1.58	0.9	8.74	12.43	
E2	0.87	0.9	8.74	6.84	TO 10' C.I.
E3	0.90	0.9	8.74	4.73	TO 10' C.I.
F1	0.51	0.9	8.74	4.01	
G1	0.40	0.9	8.74	3.15	TO 8' C.I.
G2	0.75	0.9	8.74	5.90	TO 8' C.I.
H1	2.00	0.9	8.74	15.73	
J1	0.18	0.9	8.74	1.42	FUTURE LOT 2
K	0.12	0.9	8.74	0.94	TO EXIST. INLET
L1	1.47	0.45	7.70	5.09	TO BELT LINE ROAD
L2	7.85	0.9	8.74	61.75	FUTURE PARK
OS-1	175.00	0.60	6.8	07.14	FUTURE RETAIL
OS-2	414.00	0.80	4.8	1590	FROM 94" RCP
OS-3	40.98	0.90	7.7	284	FROM AREA N. OF BELT LINE
OS-4	01.14	0.90	8.7	9	54" (BUSINESS DR.)
OS-5	82.00	0.52	7.8	246	WIND-ONNE ROOF DRAIN
					4' GRATE INLET

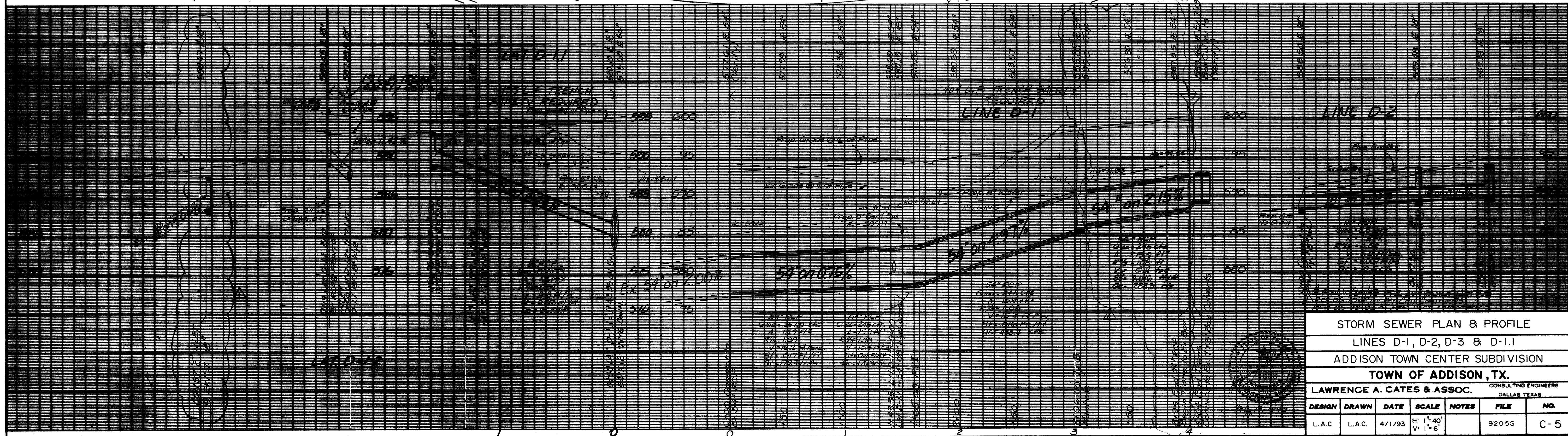
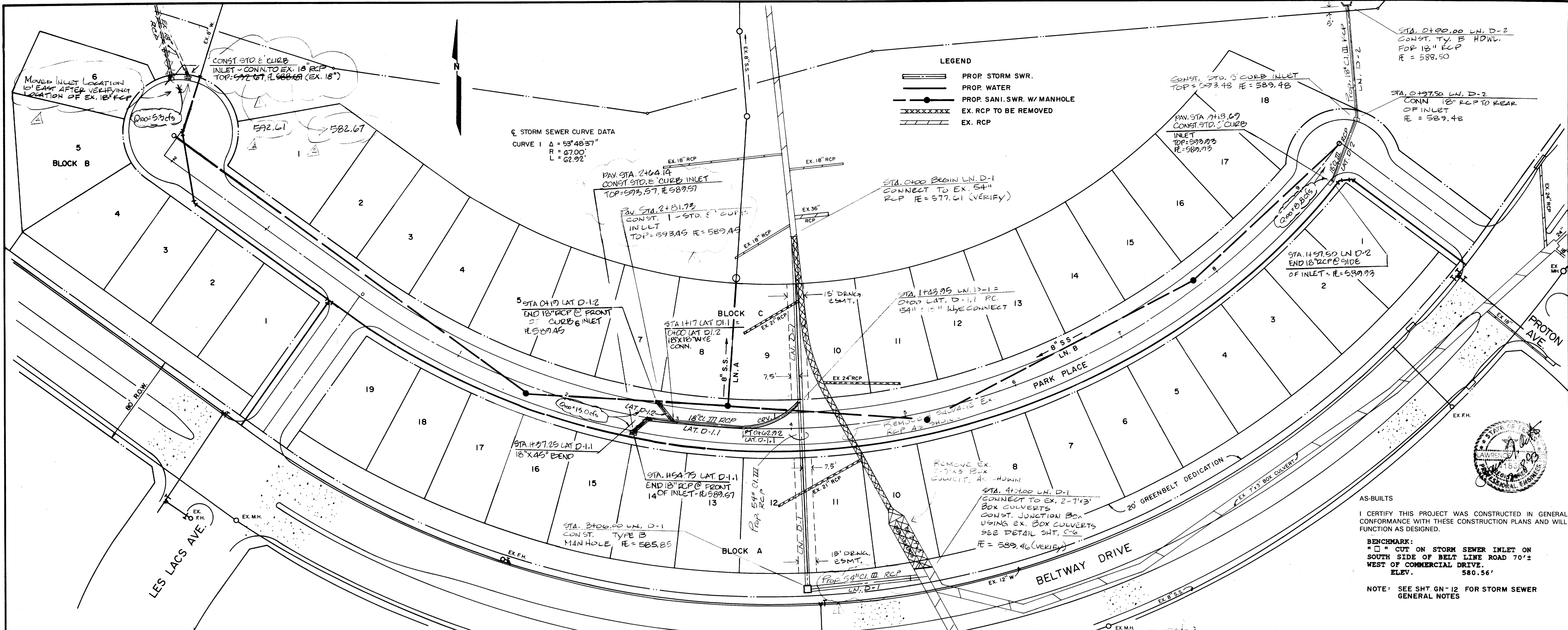
NOTE: THE AS-BUILT STAMP ON THIS SHEET PERTAINS TO THE SUBDIVISION AREA ONLY. OTHER AREAS ARE OUTSIDE THE LIMITS OF THIS PROJECT & CURRENTLY UNDER CONSTRUCTION.



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

REV. 5-11-93: REV. DA, A2 & "C" FOR DA'S A2, B1, & B6

DRAINAGE AREA MAP						
KMART No. 4885						
ADDISON TOWN CENTER						
TOWN OF ADDISON, TEXAS						
LAWRENCE A. CATES & ASSOC.						CONSULTING ENGINEERS DALLAS, TEXAS
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
LAC	LAC	4-1-93	1"=100'	D.P.	91012 DRNGAREA	C-4



NOTE:
FIELD VERIFY BOX
CULVERT DIMENSIONS

#4 Dowels x 2'-0" @ 18" O.C.
To Be Drilled & Grouted
12" Into Exist. Box.

Chisel Keyway
(Per Detail This Sheet)

1" x 2" Keyway

TYPICAL KEYWAY DETAIL
Scale: 1" = 1'-0"

- GENERAL NOTES
1. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF $f'c = 3000$ PSI AT 28 DAYS.
 2. REINFORCING STEEL $F_y = 40$ KSI.
 3. BAR LAPS SHALL BE 30" DIAMETERS.
 4. EXPOSED EDGES AND CORNERS TO BE CHAMFERED $3/4"$.

Note:
Match Inside Top & Bottom
of Existing Box Culvert.

#5 Bars @ 12" O.C. W./E.F.
#4 Bars @ 12" O.C. W./E.F.

PLAN
Scale: 1" = 2'-0"

Chisel Keyway
(Per Detail This Sheet)

#5 Bars @ 12" O.C. W.
(Top & Bottom Typ.)

#5 Dowel x 2'-0" @ 18" O.C.
To Be Drilled & Grouted
Into Exist. Box.

SECTION A-A
Scale: 1" = 2'-0"

Elev. 587.46
(Field Verify)

2' x 2' Corner Bars ~
Match Wall & Slab
Steel (Typ.)

#5 Bars @ 12" O.C. W.
(Top & Bottom Typ.)

SECTION B-B
Scale: 1" = 2'-0"

#4 Bars @ 12" O.C. W.

keyway ~ See
Detail This Sheet

#4 Bars (Diagonal)

SECTION C-C
NTS

Remove Exist. Culvert
Top Slab 1'-0" Back
From Culvert Wall
Removal

Remove Exist. Culvert
Wall

Sawcut Bottom
Slab Section of
Exist. Dbl. 3' x 7'
Box Culvert

#5 Dowel x 2'-0" @ 12" O.C.
To Be Drilled & Grouted
Into Exist. Box Culvert
Bottom Slab

Exist. Bottom Slab of
Box Culvert

Chisel Keyway
(See Detail)
This Sheet

SECTION D-D
Scale: 1" = 1'-0"

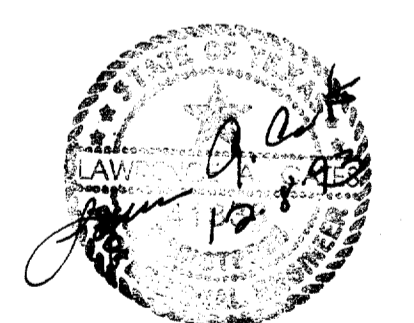
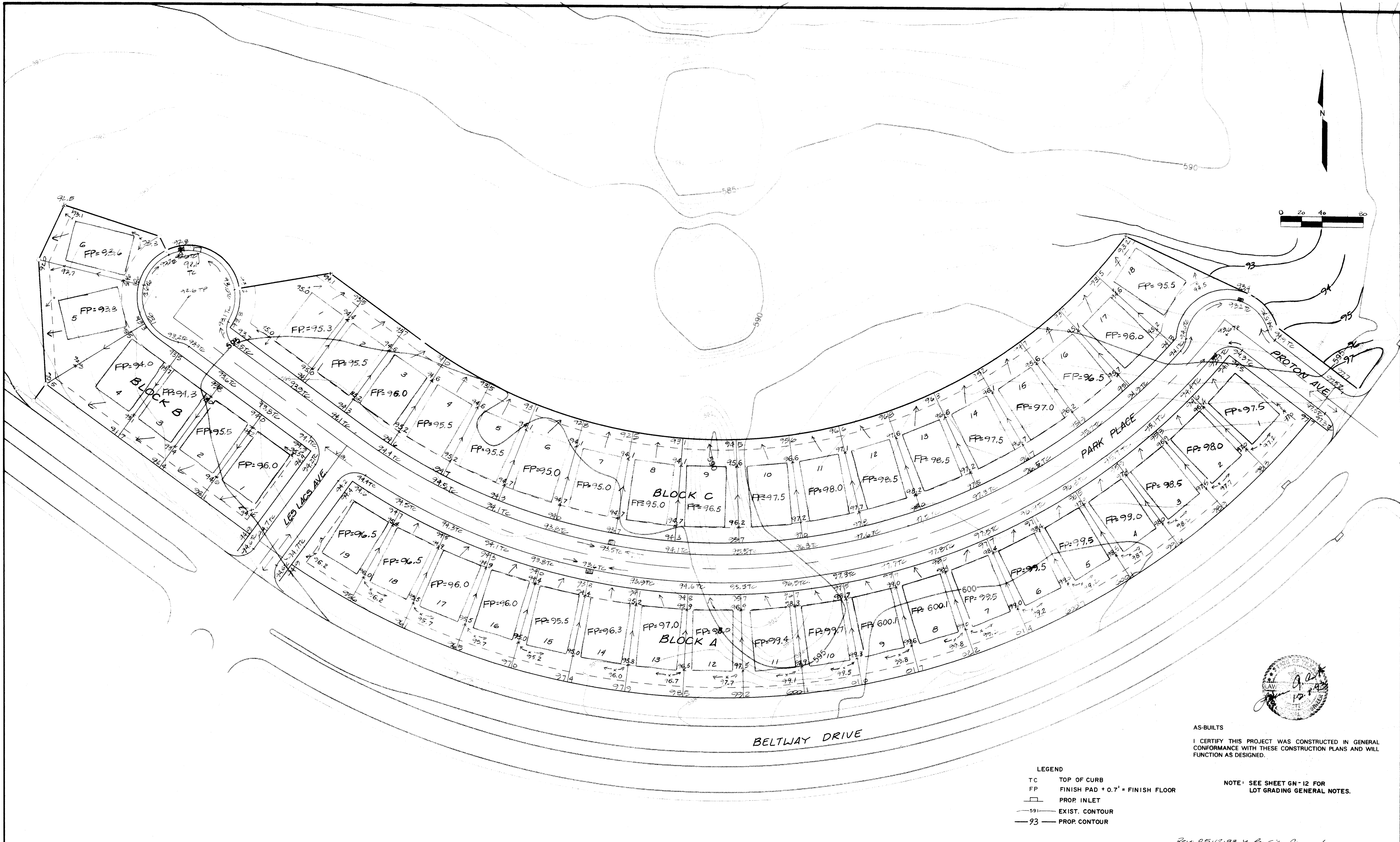
- Concrete Slab To Remain
- Concrete Removal

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



54" RCP JUNCTION BOX DETAILS						
Les Lacs Avenue & Proton Avenue Profiles						
ADDISON TOWN CENTER SUBDIVISION						
TOWN OF ADDISON, TEXAS						
LAWRENCE A. CATES & ASSOC. CONSULTING ENGINEERS DALLAS, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
LAC	LAC		NOTED			C-6

DEMOLITION PLAN
Scale: 1" = 2'-0"

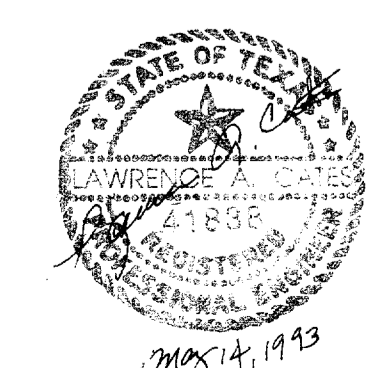


AS-BUILTS
 I CERTIFY THIS PROJECT WAS CONSTRUCTED IN GENERAL CONFORMANCE WITH THESE CONSTRUCTION PLANS AND WILL FUNCTION AS DESIGNED.

NOTE: SEE SHEET GN-12 FOR LOT GRADING GENERAL NOTES.

- LEGEND**
- TC TOP OF CURB
 - FP FINISH PAD + 0.7' = FINISH FLOOR
 - PROP INLET
 - 591- EXIST. CONTOUR
 - 93- PROP CONTOUR

BENCHMARK:
 "□" CUT ON STORM SEWER INLET ON SOUTH SIDE OF BELT LINE ROAD 70'± WEST OF COMMERCIAL DRIVE.
 ELEV. 580.56'



LOT GRADING PLAN						
ADDISON TOWN CENTER SUBDIVISION						
TOWN OF ADDISON, TX.						
LAWRENCE A. CATES & ASSOC. CONSULTING ENGINEERS DALLAS, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
L.A.C.	L.A.C.		1" = 40'		92056	C-1.0

Rev. 05-12-93 by Per City Council

STABILIZED CONSTRUCTION ACCESS

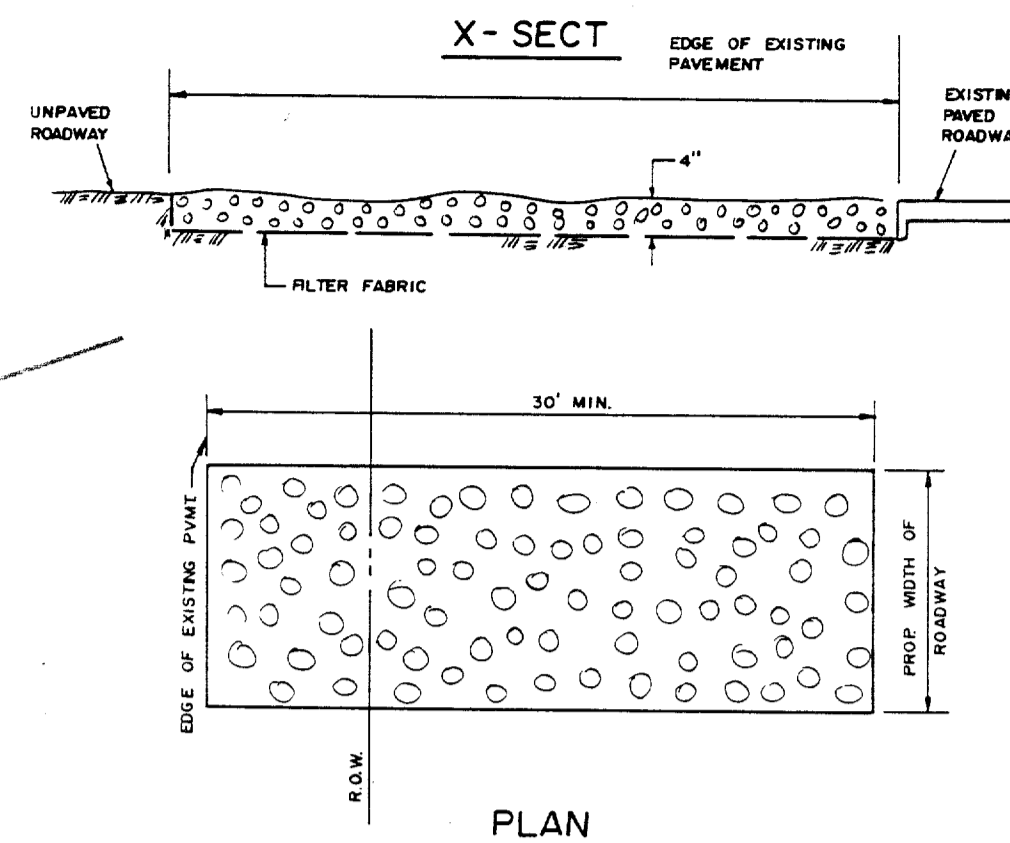
A STABILIZED CONSTRUCTION ENTRANCE APPLIES TO POINTS OF CONSTRUCTION INGRESS AND EGRESS WHERE SEDIMENT MAY BE TRACKED OR FLOW OFF THE CONSTRUCTION SITE.

MAINTENANCE

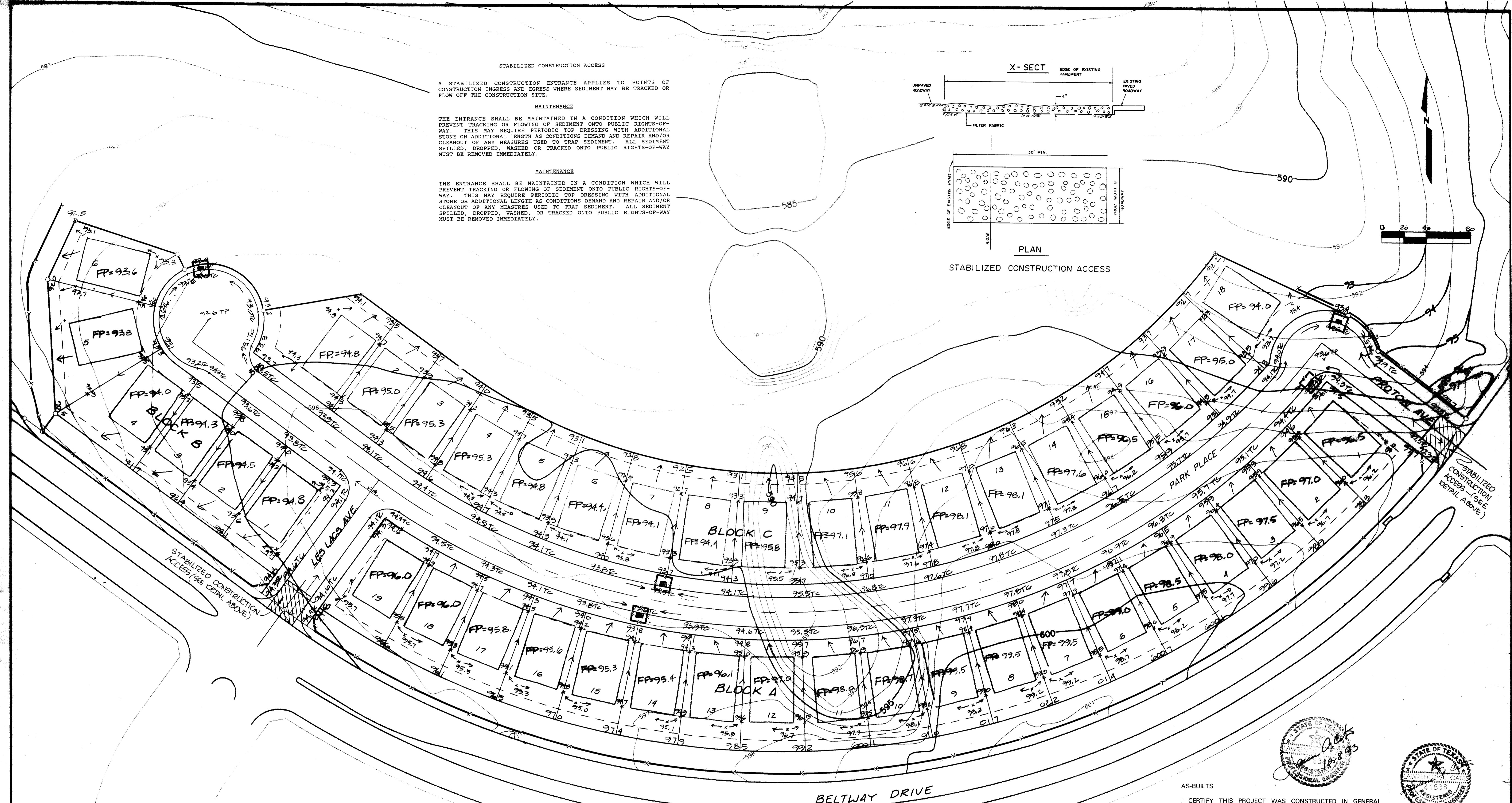
THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT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



PLAN
STABILIZED CONSTRUCTION ACCESS



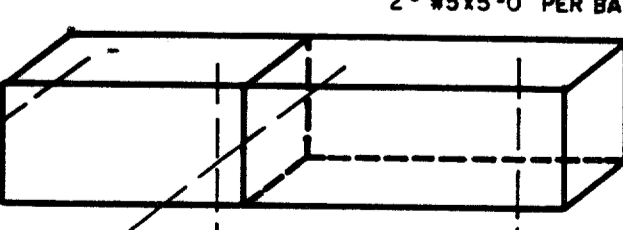
STABILIZED CONSTRUCTION ACCESS (SEE DETAIL ABOVE)

STABILIZED CONSTRUCTION ACCESS (SEE DETAIL ABOVE)

CONSTRUCTION SEQUENCE

1. OBTAIN GRADING PERMIT.
2. INSTALL ALL EROSION CONTROL MEASURES AND DEVICES BEFORE CLEARING SITE IF POSSIBLE.
3. CLEAR SITE.
4. INSTALL ANY REMAINING CONTROL MEASURES AND DEVICES THAT COULD NOT BE INSTALLED PRIOR TO SITE CLEARING.
5. GRADE SITE.
6. INSTALL ALL UNDERGROUND UTILITIES.
 - A. INSTALL HAY BALES AROUND CATCH BASINS AND INLETS.
7. INSTALL PAVEMENT.
8. SEED ALL AREAS OUTSIDE CONSTRUCTION LIMITS - SEWER OUTFALL AND WATER LINE RIGHT OF WAYS, CUT/FILL SLOPES WITHIN THIRTY (30) WORKING DAYS AFTER GRADING WORK HAS BEEN COMPLETED AND UTILITY LINES HAVE BEEN ACCEPTED BY THE CITY.
9. INSPECT AND MAINTAIN ALL EROSION CONTROL MEASURES AND DEVICES AFTER EACH RAIN AND FOR THE DURATION OF CONSTRUCTION.
10. CONTRACTOR TO PROVIDE ADDITIONAL EROSION CONTROL AS NEEDED AND REQUESTED BY THE CITY OR ENGINEER IF PROPOSED EROSION CONTROL IS INSUFFICIENT.

ANGLE FIRST STAKE TOWARD PREVIOUSLY LAID BALE
2 - 45' x 5' 0" PER BALE



HAY BALE PLACEMENT FOR EROSION CONTROL
N.T.S.

- NOTES:**
1. HAY BALES TO BE PLACED 4" INTO GROU-D.
 2. WHEN SILT DEPTHS ARE 6" THE SILT SHALL BE REMOVED.

X DENOTES HAY BALES

NOTE: SEE LOT GRADING PLAN, SHT. C-10 FOR CORRECT ELEVATIONS AS BUILT.

NOTE:

1. ALL AREAS DISTURBED DURING CONSTRUCTION OUTSIDE THE LIMITS OF THE PROJECT SHALL BE RESTORED AND HYDROMULCHED WITH BERMUDA.
2. ALL SPOILS SHALL BE USED ONSITE OR REMOVED FROM ADDISON AND PROPERLY DISPOSED OF.

BENCHMARK:

"□" CUT ON STORM SEWER INLET ON SOUTH SIDE OF BELT LINE ROAD 70'± WEST OF COMMERCIAL DRIVE.

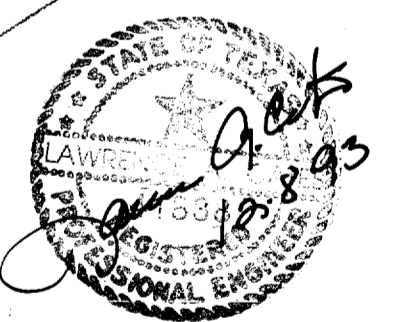
ELEV. 580.56'

LEGEND

- TC TOP OF CURB
- FP FINISH PAD ± 0.7' = FINISH FLOOR
- PROP. INLET
- 591- EXIST. CONTOUR
- 93- PROP. CONTOUR

AS-BUILTS

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



NOTE: SEE SHEET GM-12 FOR LOT GRADING GENERAL NOTES.

REV. 05-12-93 - ADDED STAB. ACCESS

EROSION CONTROL PLAN						
ADDISON TOWN CENTER SUBDIVISION						
TOWN OF ADDISON, TX.						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
L.A.C.	L.A.C.		1" = 40'		92056	C-11

GENERAL NOTES - WATER

GENERAL NOTES - SANITARY SEWER

GENERAL NOTES - DRAINAGE

GENERAL NOTES - PAVING

GENERAL NOTES - LOT GRADING

- ALL WORK AND MATERIAL SHALL BE IN ACCORDANCE WITH THE TOWN OF ADDISON STANDARD SPECIFICATIONS AND GENERAL DESIGN STANDARDS.
- ALL 8" PIPE SHALL BE INSTALLED WITH MINIMUM 42" COVER OVER TOP OF PIPE, AND 10" OR LARGER PIPE WITH 48" COVER OVER TOP OF PIPE.
- ALL CONNECTIONS TO EXISTING SYSTEMS SHALL BE MADE UNDER PRESSURE UNLESS DRY CONNECTION WILL NOT CAUSE ANYONE TO BE WITHOUT WATER.
- ALL PIPE 6" IN DIAMETER AND LARGER USED IN DISTRIBUTION SYSTEM SHALL BE RATED FOR A MINIMUM OF 150 PSI, SHALL DISPLAY THE APPROPRIATE AWWA SPECIFICATION STAMP, SHALL DISPLAY THE NATIONAL SANITATION FOUNDATION (NSF) STAMP, SHALL CONFORM TO THE TEXAS STATE BOARD OF FIRE INSURANCE REQUIREMENTS, AND SHALL BE PVC AS APPROVED.
- PVC PIPE SHALL MEET THE REQUIREMENTS OF AWWA C-900 "STANDARD FOR PVC PRESSURE PIPE" PRESSURE CLASSES OF 150 PSI MINIMUM. PIPE SHALL BE FURNISHED IN 20 FOOT LAYING LENGTHS. THE EMBEDMENT FOR PVC PIPE SHALL BE A CLASS 4 EMBEDMENT. THE EMBEDMENT CONSISTS OF A CRADLE OF SAND A MINIMUM OF 8" BELOW THE PIPE AND THEN BROUGHT UP TO A POINT 12" ABOVE THE PIPE.
- THE COMPLETED LINE SHALL BE STERILIZED BEFORE BEING APPROVED FOR SERVICE. TEXAS STATE DEPARTMENT OF HEALTH APPROVED BACTERIOLOGICAL TESTS SHALL BE RECEIVED PRIOR TO ACCEPTANCE OF THE LINE OR PLACING LINE IN OPERATION. SAMPLES SHALL BE TAKEN IN THE PRESENCE OF THE DIRECTOR OF UTILITIES OF HIS DESIGNEE.
- THE CONTRACTOR SHALL FURNISH AND/OR INSTALL ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR TESTING (NO PAY ITEM).
- FIRE HYDRANTS TO BE TOWN OF ADDISON APPROVED (WUELLER CENTURION MODEL).
- FIRE HYDRANTS SHALL BE PAINTED AS PER TOWN OF ADDISON STANDARDS AND SPECIFICATIONS AND LOCATED IN A PROTECTED AREA WITH 6" CURB OR BOLLARDS.
- STEAMER NOZZLES ON FIRE HYDRANTS SHALL BE 18" ABOVE THE TOP OF THE CURB ON FINISHED GRADE, AND SHALL FACE THE CENTER OF THE FIRE LANE OR STREET. FIRE HYDRANTS SHALL USUALLY BE LOCATED FOUR (4) FEET, BUT NOT LESS THAN TWO (2) FEET NOR MORE THAN SIX (6) FEET, BEHIND THE CURB.
- THE LOCATION OF ALL UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING PUBLIC RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL PUBLIC UTILITIES MUST BE COMPLETELY FLUSHED. THE TOWN WILL MAKE THE FINAL DETERMINATION IF REPAIRS ARE REQUIRED AND THAT DECISION WILL BE FINAL. THE FINAL SET OF TAPES AND LOSS WILL BE GIVEN TO THE INSPECTOR OF THE CONSTRUCTION (NO PAY ITEM).
- THE LOCATION OF ALL UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING PUBLIC RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL PUBLIC UTILITIES MUST BE COMPLETELY FLUSHED. THE TOWN WILL MAKE THE FINAL DETERMINATION IF REPAIRS ARE REQUIRED AND THAT DECISION WILL BE FINAL. THE FINAL SET OF TAPES AND LOSS WILL BE GIVEN TO THE INSPECTOR OF THE CONSTRUCTION (NO PAY ITEM).
- CONTRACTOR SHALL PROTECT ALL PUBLIC UTILITIES IN THE CONSTRUCTION OF THIS PROJECT. ALL MANHOLES, CLEANOUTS, VALVE BOXES, FIRE HYDRANTS, ETC. MUST BE ADJUSTED TO PROPER LINE AND GRADE BY THE UTILITY CONTRACTOR AFTER PLACEMENT OF PAVING.
- UTILITY CONTRACTOR SHALL BE RESPONSIBLE FOR PAVING OF INLET BLOCKOUTS, VARIABLE HEIGHT CURBS, AND INLET THROATS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRENCH SAFETY REQUIREMENTS IN ACCORDANCE WITH TOWN STANDARDS, TEXAS STATE LAW, AND OSHA STANDARDS. CONTRACTOR TO PROVIDE TOWN WITH TRENCH SAFETY PLANS.
- CONTRACTOR SHALL PROVIDE A MINIMUM CLEARANCE OF 12 INCHES BETWEEN WATER AND STORM SEWER INLETS.
- UTILITY CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING DESIGN ENGINEER WITH ONE SET OF "AS-BUILT" DRAWINGS UPON COMPLETION OF PROJECT. AS-BUILT DRAWINGS SHALL GIVE HORIZONTAL TIES TO ALL FIRE HYDRANTS, SEWER SERVICES AND OTHER KEY SUBTERRANEAN UTILITY IMPROVEMENTS. AS-BUILT DRAWINGS SHALL BE SUBMITTED PRIOR TO ACCEPTANCE OF SUBDIVISION BY THE TOWN OF ADDISON AND BEFORE FINAL PAYMENT IS MADE TO THE CONTRACTOR.
- GROUND ELEVATIONS SHOULD BE AT OR NEAR PROPOSED SUBGRADE ELEVATIONS IN STREET RIGHTS-OF-WAY PRIOR TO CONSTRUCTION OF ALL UTILITY IMPROVEMENTS. THE UTILITY CONTRACTOR SHALL BE RESPONSIBLE FOR RETURNING ALL GRADES WITHIN 0.2 FEET OF ESTABLISHED GRADES AFTER CONSTRUCTION OF ALL UTILITIES. DESIGN ENGINEER SHALL VERIFY GRADES PRIOR TO MOBILIZATION OF PAVING CONTRACTOR. ANY REVERIFICATION OF GRADES BY THE DESIGN ENGINEER SHALL BE AT THE UTILITY CONTRACTOR'S EXPENSE AND WILL BE PAID DIRECTLY TO THE DESIGN ENGINEER BY THE UTILITY CONTRACTOR. FAILURE TO MAKE PAYMENT SHALL RESULT IN THE ENGINEER DEDUCTING THE AMOUNT FROM UTILITY CONTRACTOR'S CONTRACT AT AN HOURLY RATE ESTABLISHED BY THE DESIGN ENGINEER.
- DESIGN ENGINEER TO PROVIDE ONE SET OF CONSTRUCTION STAKES FOR THOSE IMPROVEMENTS. ANY RESTAKING SHALL BE AT THE CONTRACTOR'S EXPENSE AND WILL BE PAID DIRECTLY TO THE ENGINEER BY THE UTILITY CONTRACTOR. FAILURE TO MAKE PAYMENT SHALL RESULT IN THE ENGINEER DEDUCTING THE AMOUNT FROM THE UTILITY CONTRACTOR'S CONTRACT AT AN HOURLY RATE ESTABLISHED BY THE DESIGN ENGINEER.
- BEDDING AND BACKFILL SHALL BE CONSIDERED ON SUBSIDIARY TO THE PAY ITEM FOR PIPE AND SHALL NOT BE PAID FOR DIRECTLY.
- ALL BARRICADES, WARNING SIGNS, LIGHTS, DEVICES, ETC. FOR THE GUIDANCE AND PROTECTION OF TRAFFIC AND PEDESTRIANS MUST CONFORM TO THE INSTALLATION SHOWING THE 1980 TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AS CURRENTLY AMENDED, TEXAS STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION AND SHALL BE INCIDENTAL TO THE COST OF CONSTRUCTION (NO PAY ITEM).
- UTILITY CONTRACTOR SHALL BE RESPONSIBLE FOR CLOSING ALL OPEN TRENCHES AT THE END OF EACH WORKING DAY.
- WHEN INSTALLING WATER MAINS AT SANITARY SEWER CROSSINGS, NO JOINT OF WATER MAIN SHALL BE LOCATED WITHIN NINE (9) FEET OF THE SEWER CROSSING.

- ALL WORK AND MATERIAL SHALL BE IN ACCORDANCE WITH THE TOWN OF ADDISON STANDARD SPECIFICATIONS AND GENERAL DESIGN STANDARDS.
- ALL SANITARY SEWER PIPE UTILIZED SHALL BE PVC PIPE TYPE SDR-35.
- SEWER LATERALS SHALL BE EXTENDED TO RIGHT-OF-WAY LINES AND SHALL EXTEND ABOVE THE GROUND PER DETAILS.
- PIPE AND FITTINGS SHALL BE EXTRA STRENGTH PIPE CONFORMING TO ASTM C700.
- MANHOLES SHALL BE CONSTRUCTED OF CAST-IN-PLACE 3000 PSI CONCRETE AND SHALL BE 4" INSIDE DIAMETER.
- CONSTRUCTION WILL BEING AT DOWNSTREAM END OF PROJECT AN CONTINUE UPSTREAM WITH BELLS FACING UPSTREAM. CONSTRUCTION OF BRANCH MAIN WILL NOT BEGIN BEFORE MAIN IS CONSTRUCTED TO BRANCH POINT. NOT MORE THAN 300 FEET OF TRENCH SHALL BE OPENED IN ADVANCE OF PIPE INSTALLATION.
- THE ENTIRE SEWER SYSTEM SHALL BE FLUSHED AS DIRECTED BY THE DIRECTOR OF UTILITIES.
- THE CONTRACTOR SHALL FURNISH ADEQUATE PERSONNEL AND EQUIPMENT REQUIRED TO PERFORM TESTS (NO PAY ITEM).
- UPON COMPLETION OF PVC SANITARY SEWER PIPE INSTALLATION, AND AFTER 30 DAYS, THE CONTRACTOR SHALL PULL A MANDREL THROUGH THE PIPE TO TEST FOR A MAXIMUM OF 5% DEFLECTION (NO PAY ITEM).
- THE CONTRACTOR WILL BE REQUIRED TO RETAIN A QUALIFIED COMPANY TO PERFORM A VIDEO INSPECTION OF THE SEWER MAINS IN THE SUBDIVISION AT THE CONTRACTOR'S EXPENSE. PRIOR TO VIDEO INSPECTION SEWER MAINS WILL BE COMPLETELY FLUSHED. THE TOWN WILL MAKE THE FINAL DETERMINATION IF REPAIRS ARE REQUIRED AND THAT DECISION WILL BE FINAL. THE FINAL SET OF TAPES AND LOSS WILL BE GIVEN TO THE INSPECTOR OF THE CONSTRUCTION (NO PAY ITEM).
- THE LOCATION OF ALL UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING PUBLIC RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL PUBLIC UTILITIES MUST BE DETERMINED BY THE CONTRACTOR. IT SHALL BE THE DUTY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLAN MAY BE PRESENT.
- CONTRACTOR SHALL PROTECT ALL PUBLIC UTILITIES IN THE CONSTRUCTION OF THIS PROJECT. ALL MANHOLES, CLEANOUTS, VALVE BOXES, FIRE HYDRANTS, ETC. MUST BE ADJUSTED TO PROPER LINE AND GRADE BY THE UTILITY CONTRACTOR AFTER PLACEMENT OF PAVING.
- UTILITY CONTRACTOR SHALL BE RESPONSIBLE FOR PAVING OF INLET BLOCKOUTS, VARIABLE HEIGHT CURBS, AND INLET THROATS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRENCH SAFETY REQUIREMENTS IN ACCORDANCE WITH TOWN STANDARDS, TEXAS STATE LAW, AND OSHA STANDARDS. CONTRACTOR TO PROVIDE TOWN WITH TRENCH SAFETY PLANS PRIOR TO MOBILIZATION.
- UTILITY CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING DESIGN ENGINEER WITH ONE SET OF "AS-BUILT" DRAWINGS UPON COMPLETION OF PROJECT. AS-BUILT DRAWINGS SHALL GIVE HORIZONTAL TIES TO ALL FIRE HYDRANTS, SEWER SERVICES AND OTHER KEY SUBTERRANEAN UTILITY IMPROVEMENTS. AS-BUILT DRAWINGS SHALL BE SUBMITTED PRIOR TO ACCEPTANCE OF SUBDIVISION BY THE TOWN OF ADDISON AND BEFORE FINAL PAYMENT IS MADE TO THE CONTRACTOR.
- GROUND ELEVATIONS SHOULD BE AT OR NEAR PROPOSED SUBGRADE ELEVATIONS IN STREET RIGHTS-OF-WAY PRIOR TO CONSTRUCTION OF ALL UTILITY IMPROVEMENTS. THE UTILITY CONTRACTOR SHALL BE RESPONSIBLE FOR RETURNING ALL GRADES WITHIN 0.2 FEET OF ESTABLISHED GRADES AFTER CONSTRUCTION OF ALL UTILITIES. DESIGN ENGINEER SHALL VERIFY GRADES PRIOR TO MOBILIZATION OF PAVING CONTRACTOR. ANY REVERIFICATION OF GRADES BY THE DESIGN ENGINEER SHALL BE AT THE UTILITY CONTRACTOR'S EXPENSE AND WILL BE PAID DIRECTLY TO THE DESIGN ENGINEER BY THE UTILITY CONTRACTOR. FAILURE TO MAKE PAYMENT SHALL RESULT IN THE ENGINEER DEDUCTING THE AMOUNT FROM UTILITY CONTRACTOR'S CONTRACT AT AN HOURLY RATE ESTABLISHED BY THE DESIGN ENGINEER.
- DESIGN ENGINEER TO PROVIDE ONE SET OF CONSTRUCTION STAKES FOR THOSE IMPROVEMENTS. ANY RESTAKING SHALL BE AT THE CONTRACTOR'S EXPENSE AND WILL BE PAID DIRECTLY TO THE ENGINEER BY THE UTILITY CONTRACTOR. FAILURE TO MAKE PAYMENT SHALL RESULT IN THE ENGINEER DEDUCTING THE AMOUNT FROM THE UTILITY CONTRACTOR'S CONTRACT AT AN HOURLY RATE ESTABLISHED BY THE DESIGN ENGINEER.
- BEDDING AND BACKFILL SHALL BE CONSIDERED ON SUBSIDIARY TO THE PAY ITEM FOR PIPE AND SHALL NOT BE PAID FOR DIRECTLY.
- ALL BARRICADES, WARNING SIGNS, LIGHTS, DEVICES, ETC. FOR THE GUIDANCE AND PROTECTION OF TRAFFIC AND PEDESTRIANS MUST CONFORM TO THE INSTALLATION SHOWING THE 1980 TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AS CURRENTLY AMENDED, TEXAS STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION AND SHALL BE INCIDENTAL TO THE COST OF CONSTRUCTION (NO PAY ITEM).
- UTILITY CONTRACTOR SHALL BE RESPONSIBLE FOR CLOSING ALL OPEN TRENCHES AT THE END OF EACH WORKING DAY.
- WHEN INSTALLING WATER MAINS AT SANITARY SEWER CROSSINGS, NO JOINT OF WATER MAIN SHALL BE LOCATED WITHIN NINE (9) FEET OF THE SANITARY CROSSING.

- ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TOWN OF ADDISON STANDARD SPECIFICATIONS AND GENERAL DESIGN STANDARDS.
- ALL STORM SEWER PIPE SHALL BE CLASS III RCP, ASTM C76.
- ALL DITCHES SHALL BE TAMPED AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.
- SEE WATER AND SANITARY SEWER PLAN AND PAVING PLAN/PROFILE FOR ADDITIONAL INFORMATION RELATED TO PAVING, DRAINAGE AND OTHER UTILITY CONSTRUCTION.
- THE LOCATION OF EXISTING UTILITIES INDICATED ON THESE PLANS ARE TAKEN FROM PUBLIC RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL PUBLIC UTILITIES SHALL BE DETERMINED BY THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN IN THESE PLANS MAY BE PRESENT.
- ALL CONCRETE USED IN THE CONSTRUCTION OF STORM SEWER MANHOLES, INLETS, ETC. SHALL HAVE A MINIMUM OF 3,600 PSI AT 28 DAYS. (5.5 SACK MIX)
- NO UTILITY TRENCHES SHALL BE LEFT OPEN OVER NIGHT DURING THE CONSTRUCTION OF ALL UNDERGROUND DRAINAGE FACILITIES.
- ALL BARRICADES, WARNING SIGNS, LIGHTS, ETC. FOR THE GUIDANCE AND PROTECTION OF TRAFFIC AND PEDESTRIANS MUST CONFORM TO THE INSTALLATION SHOWING IN THE 1980 TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AS CURRENTLY AMENDED, TEXAS STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION, AND SHALL BE INCIDENTAL TO THE COST OF CONSTRUCTION (NO PAY ITEM).
- ALL CAST IRON CASTINGS SHALL CONFORM TO ASTM A 48, CLASS 30, GRAY CAST IRON.
- CONSTRUCTION SHALL BEGIN AT DOWNSTREAM END OF PROJECT AND CONTINUE UPSTREAM WITH PIPE GROOVES FACING UPSTREAM. PIPE SHALL BE LAID ON UNDISTURBED SOIL OR GRANULAR MATERIAL UNLESS OTHERWISE SPECIFIED ON APPROVED CONSTRUCTION DRAWINGS. NO MORE THAN 1/2 OF THE TONGUE LENGTH SHALL BE EXPOSED BEFORE JOINT MATERIAL IS APPLIED.
- UTILITY CONTRACTOR SHALL BE RESPONSIBLE FOR PAVING OF INLET BLOCKOUTS, VARIABLE HEIGHT CURBS, AND INLET THROATS. (NO PAY ITEM).
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRENCH SAFETY REQUIREMENTS IN ACCORDANCE WITH TOWN STANDARDS, TEXAS STATE LAW AND OSHA STANDARDS. CONTRACTOR TO PROVIDE TOWN WITH TRENCH SAFETY PLANS.
- CONTRACTOR SHALL PROVIDE A MINIMUM CLEARANCE OF 12 INCHES BETWEEN WATER AND STORM SEWER INLETS.
- UTILITY CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING DESIGN ENGINEER WITH ONE SET OF "AS-BUILT" DRAWINGS UPON COMPLETION OF PROJECT. AS-BUILT DRAWINGS SHALL GIVE HORIZONTAL TIES TO ALL FIRE HYDRANTS, SEWER SERVICES AND OTHER KEY SUBTERRANEAN UTILITY IMPROVEMENTS. AS-BUILT DRAWINGS SHALL BE SUBMITTED PRIOR TO ACCEPTANCE OF SUBDIVISION BY THE TOWN OF ADDISON AND BEFORE FINAL PAYMENT IS MADE TO THE CONTRACTOR.
- GROUND ELEVATIONS SHOULD BE AT OR NEAR PROPOSED SUBGRADE ELEVATIONS IN STREET RIGHTS-OF-WAY PRIOR TO CONSTRUCTION OF ALL UTILITY IMPROVEMENTS. THE UTILITY CONTRACTOR SHALL BE RESPONSIBLE FOR RETURNING ALL GRADES WITHIN 0.2 FEET OF ESTABLISHED GRADES AFTER CONSTRUCTION OF ALL UTILITIES. DESIGN ENGINEER SHALL VERIFY GRADES PRIOR TO MOBILIZATION OF PAVING CONTRACTOR. ANY REVERIFICATION OF GRADES BY THE DESIGN ENGINEER SHALL BE AT THE UTILITY CONTRACTOR'S EXPENSE AND WILL BE PAID DIRECTLY TO THE DESIGN ENGINEER BY THE UTILITY CONTRACTOR. FAILURE TO MAKE PAYMENT SHALL RESULT IN THE ENGINEER DEDUCTING THE AMOUNT FROM UTILITY CONTRACTOR'S CONTRACT AT AN HOURLY RATE ESTABLISHED BY THE DESIGN ENGINEER.
- DESIGN ENGINEER TO PROVIDE ONE SET OF CONSTRUCTION STAKES FOR THOSE IMPROVEMENTS. ANY RESTAKING SHALL BE AT THE CONTRACTOR'S EXPENSE AND WILL BE PAID DIRECTLY TO THE ENGINEER BY THE UTILITY CONTRACTOR. FAILURE TO MAKE PAYMENT SHALL RESULT IN THE ENGINEER DEDUCTING THE AMOUNT FROM THE UTILITY CONTRACTOR'S CONTRACT AT AN HOURLY RATE ESTABLISHED BY THE DESIGN ENGINEER.
- BEDDING AND BACKFILL SHALL BE CONSIDERED ON SUBSIDIARY TO THE PAY ITEM FOR PIPE AND SHALL NOT BE PAID FOR DIRECTLY.

- ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" PUBLISHED BY THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS - LATEST EDITION AND THE LATEST TOWN OF ADDISON CONSTRUCTION STANDARDS AND SPECIFICATIONS FOR ROADS, STREETS, STRUCTURES AND UTILITIES. ALL TESTING WILL BE PERFORMED BY A CERTIFIED TECHNICIAN IN THE PRESENCE OF A TOWN INSPECTOR.
 - RESIDENTIAL STREETS SHALL BE CONSTRUCTED OF REINFORCED CONCRETE HAVING A MINIMUM THICKNESS OF SIX INCHES WITH MONOLITHIC CURB AND GUTTERS. THE MINIMUM WIDTH OF RESIDENTIAL STREETS SHALL BE 27 FEET MEASURED FROM BACK OF CURBS.
 - WHEN REQUESTED, THE PAVING CONTRACTOR SHALL PROVIDE THE TOWN ENGINEER WITH A CONCRETE MIX DESIGN, PREPARED BY AN APPROVED INDEPENDENT TESTING LABORATORY.
 - STEEL REINFORCING BARS SHALL BE NEW BILLET STEEL GRADE 60 OR GRADE 40, CONFORMING TO ASTM A615. BARS THAT REQUIRE BENDING SHALL BE GRADE 40. ALL REINFORCING BARS SHALL BE THE DEFORMED TYPE.
 - CONCRETE SHALL NOT BE POURED WHEN THE TEMPERATURE IS BELOW 40 DEGREES F, AND FALLING. CONCRETE MAY BE POURED WHEN THE TEMPERATURE IS ABOVE 35 DEGREES F, AND RISING. SALT OR OTHER CHEMICAL ADDITIVES SHALL NOT BE ADDED TO CONCRETE TO PREVENT FREEZING. THE PAVING CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY CONCRETE THAT FREEZES DURING CURING.
 - IMMEDIATELY UPON UNINTENDED STOPPAGE OF POURING OPERATION, A STANDARD BULKHEAD SHALL BE INSTALLED AT RIGHT ANGLES TO THE CENTERLINE OF PAVEMENT.
 - JOINT SEALING MATERIAL SHALL BE PLACED IN SAWED AND OTHER JOINTS AS REQUIRED.
 - PAVEMENT SHALL BE FINISHED WITH A BELT FINISH OR AS DIRECTED BY THE TOWN ENGINEER. AFTER FINISHING IS COMPLETE AND THE CONCRETE IS STILL WORKABLE, THE GUTTER SURFACE SHALL BE TESTED FOR TRULNESS WITH AN APPROVED 10 FOOT STEEL STRAIGHT EDGE BY THE CONTRACTOR. THE MAXIMUM ORDINATE MEASUREMENT SHALL BE 1/16 INCH.
 - CURBS SHALL BE BACKFILLED FORM 3 TO 7 DAYS AFTER POURING CONCRETE OR AS DIRECTED BY THE TOWN ENGINEER.
 - ALL SUB-GRADE IS TO BE COMPACTED TO A MINIMUM F 95% OF STANDARD PROCTOR AT +/-2% OF OPTIMUM MOISTURE AND LIME STABILIZED ACCORDING TO THE FOLLOWING TABLE:
- | PLASTICITY INDEX | % LIME REQUIRED |
|------------------|-----------------|
| +25 | 6 |
| 21 - 25 | 5 |
| 15 - 20 | 4 |
| 14 OR LESS | 0 |
- TESTING OF MATERIALS REQUIRED FOR THE CONSTRUCTION OF THE SPECIFIED STREET IMPROVEMENTS SHALL BE PERFORMED BY AN APPROVED AGENCY FOR TESTING MATERIALS IN THE PRESENCE OF A TOWN INSPECTOR. THE NOMINATION OF THE TESTING LABORATORY AND THE PAYMENT OF SUCH TESTING SERVICES SHALL BE MADE BY THE CONTRACTOR. THE ENGINEER SHALL APPROVE THE LABORATORY. NOMINATED TO DO THE TESTING OF MATERIALS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SHOW BY STANDARD TESTING PROCEDURES THAT THE WORK CONSTRUCTED DOES MEET THE REQUIREMENTS OF THE SPECIFICATIONS.
 - THE CONTRACTOR SHALL FURNISH A MAINTENANCE BOND TO THE TOWN TO RUN ONE (1) YEAR FROM THE DATE OF ACCEPTANCE OF IMPROVEMENTS BY THE TOWN.
 - ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.
 - THE CONCRETE SHALL BE A MINIMUM OF 5.5 SACK CEMENT WITH COMPRESSIVE STRENGTH OF 3600 PSI AT 28 DAYS. SLUMP SHALL BE A 3" +/- 1/2" WITH MECHANICAL FINISHING, OR 4" +/- 1/2" F BY HAND FINISHING. AIR CONTENT SHALL BE 5% +/- 1%. WEIGHT/C.F. WITH A YIELD OF 27.0 +/- 0.2. CONCRETE MAXIMUM TEMPERATURE OF 99 +/- 5. ALL TESTING WILL BE PERFORMED BY A CERTIFIED TECHNICIAN IN THE PRESENCE OF A TOWN INSPECTOR. THE FOLLOWING TESTS ARE TO BE PERFORMED FOR EACH 100 YARDS OF CONCRETE OR PORTION THEREOF, PLACED ON ANY GIVEN DAY:
 - STRENGTH TEST, MOLD THREE (3) BEAMS TO BE TESTED AT 7 DAY, 14 DAY AND 28 DAY.
 - SLUMP
 - AIR CONTENT
 - WEIGHT AND YIELD
 - TEMPERATURE
 EXPANSION JOINT: NO MORE THAN 400' APART. PLACED AT THE BEGINNING AND END OF EACH DAY'S RUN OR AT COLD JOINT AND AT THE CURB RETURNS.
 DOWEL: FOR 6" PAVEMENT 3/4" DOWEL FOR 8" PAVEMENT 1" DOWEL
 REINFORCEMENT: #3 BARS @ 24" OC BOTH WAYS WITH A MINIMUM OF 75% TIED.
 - A CONSTRUCTION JOINT SHALL BE USED IN ALL BLOCK OUTS OR LANE PAVEMENT. THE RE-BARS SHALL EXTEND PAST THE EDGE OF THE PAVEMENT 18".
 - BARRIER-FREE CURBS SHALL BE CONSTRUCTED AT ALL STREET INTERSECTIONS. SEE SHEET SD-10.
 - CHAIRS APPROVED BY THE ENGINEER SHALL BE USED TO SUPPORT REINFORCING STEEL AND SHALL BE PLACED AT THE INTERSECTION OF LONGITUDINAL AND TRANSVERSE BARS AT 4'-0" SPACING.
 - PAVING LAYOUT WILL NECESSITATE THAT ALL CONSTRUCTION AND WARNING JOINTS COINCIDE WITH LANE LINES. THRU-LANE CONSTRUCTION WILL BE CONTINUOUS WITH ALL LEFT TURN LANES AND TRANSITIONS TO BE POURED AS FILL-INS SUBJECT TO APPROVAL BY THE ENGINEER.

- ALL CONSTRUCTION TO BE IN ACCORDANCE WITH PROVISIONS OUTLINED IN F.H.A. DATA SHEET 790 AND SPECIFICATIONS PREPARED BY REED ENGINEERING GROUP, REED PROJECT NO. 1357, DATED FEBRUARY, 1993.
- ALL SELECT FILL SHOULD CONTAIN NO DELETERIOUS MATERIAL AND SHOULD BE COMPACTED TO A DRY DENSITY OF AT LEAST 95 PERCENT STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D 698) AT OR WITHIN THREE PERCENTAGE POINTS OF THE MATERIAL'S OPTIMUM MOISTURE CONTENT.
- ALL CLAY SOILS USED AS FILL SHOULD BE COMPACTED TO A DRY DENSITY OF AT LEAST 93 PERCENT OF STANDARD PROCTOR AND NOT EXCEEDING 98 PERCENT. THE COMPACTED MOISTURE CONTENT OF THE CLAYS DURING PLACEMENT SHOULD BE A LEAST OPTIMUM AND NOT EXCEEDING 4 PERCENTAGE POINTS ABOVE OPTIMUM.
- LIMESTONE OR OTHER ROCK-LIKE MATERIALS USED AS FILL SHOULD BE COMPACTED TO AT LEAST 85 PERCENT OF STANDARD PROCTOR MAXIMUM DRY DENSITY. NO INDIVIDUAL ROCK PIECES LARGER THAN ABOUT 6 INCHES IN DIAMETER SHOULD BE USED IN FILL. ADDITIONALLY, NO ROCK FILL SHOULD BE USED WITHIN 1 FOOT BELOW THE BOTTOM OF FLOOR SLABS.
- COMPACTION SHOULD BE ACCOMPLISHED BY PLACING THE FILL IN ABOUT 6 INCH TO 8 INCH THICK LIFT LOOSE LIFTS AND COMPACTING EACH LIFT TO AT LEAST THE SPECIFIED MINIMUM DRY DENSITY. FIELD DENSITY TESTS SHOULD BE PERFORMED ON EACH LIFT AS NECESSARY TO EVALUATE FOR ADEQUATE COMPACTION.
- THE UPPER ONE (1) FOOT IN BUILDING PAD AREAS WHICH CONTAIN FILL SHALL BE REMOVED AND THE EXPOSED SURFACE SCARIFIED TO A DEPTH OF AT LEAST SIX (6) INCHES AND RECOMPACTED TO AT LEAST 93 PERCENT STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D 698) AND NOT MORE THAN 98 PERCENT AT OR ABOVE OPTIMUM. THE EXPOSED SURFACE SHALL BE PROOFROLLED WITH HEAVY EQUIPMENT AND FURTHER TESTED AS NECESSARY. AFTER RECONSTRUCTION, PROOFROLLING AND TESTING THE EXPOSED SURFACE, ANY WEAK OR HIGHLY ORGANIC SOILS TESTED SHALL BE REMOVED. UPON COMPLETION OF THE ABOVE PROOFROLLING AND TESTING, THE SOILS PREVIOUSLY REMOVED COULD BE REPLACED PROVIDED THEY ARE FREE OF NY DELETERIOUS MATERIALS AND COMPACTED TO AT LEAST 98 PERCENT STANDARD PROCTOR AT OR ABOVE OPTIMUM.
- ALL EXISTING FILL AREAS SHOULD BE PROOFROLLED WITH HEAVY EQUIPMENT. ANY UNSUITABLE MATERIALS THUS EXPOSED SHOULD BE REMOVED AND REPLACED WITH WELL-COMPACTED MATERIALS DESCRIBED IN NOTES NUMBERED 2-5.
- FRONT YARDS TO BE "DISHED OUT" FOR UTILITY SPOIL.
- ALL BOULDERS ENCOUNTERED DURING THE EXCAVATION PHASE OF THIS PROJECT IF ANY SHALL BE REMOVED AND PLACED TO ANY AREA DESIGNATED BY THE OWNER, DESIGN ENGINEER OR ITS REPRESENTATIVE. BOULDERS WILL NOT BE PLACED IN TOWN OF ADDISON.
- THE EXCAVATION WITHIN STREET RIGHTS-OF-WAY SHALL BE CUT/FILLED TO PLUS OR MINUS 0.1 FEET OF DESIGN GRADE.
- DESIGN ENGINEER SHALL PROVIDE ONE SET OF GRADE STAKES. ANY RESTAKING SHALL BE AT THE CONTRACTOR'S EXPENSE.
- AFTER THE PAVING PHASE HAS BEEN COMPLETED, THE EXCAVATION CONTRACTOR SHALL MOVE BACK ON SITE AND "FINAL BENCH" ALL LOTS OR THOSE LOTS IDENTIFIED BY THE OWNER, DESIGN ENGINEER OR ITS REPRESENTATIVE. ALL PADS SHALL BE PLUS OR MINUS 0.25 FEET OF DESIGN GRADE.

GENERAL NOTES

- PRIOR TO FINAL ACCEPTANCE BY THE TOWN OF ADDISON:
 - A TEXAS REGISTERED PROFESSIONAL ENGINEER SHALL CERTIFY THAT THE PORTION OF THE PROJECT BEING DEDICATED TO ADDISON WAS CONSTRUCTED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS APPROVED BY THE TOWN OF ADDISON.
 - A FIVE (5) FOOT SIDEWALK SHALL BE INSTALLED ALONG BELTWAY DRIVE AS SHOWN. FIVE (5) FOOT SIDEWALK TO BE RECONSTRUCTED WITH DECEL LANES AS SHOWN ON SHEETS C-15 AND C-16.
 - A ONE (1) YEAR MAINTENANCE BOND IS REQUIRED FOR THE CITY'S PORTION OF THE INFRASTRUCTURE.
 - 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.
- PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANIES TO LOCATE EXISTING FACILITIES. THESE INCLUDE, BUT MAY NOT BE LIMITED TO, THE FOLLOWING:
 - TOWN OF ADDISON
 - LONE STAR GAS
 - SOUTHWESTERN BELL
 - STORER CABLE
 - PLANNED CABLE SYSTEMS
 - TU ELECTRIC
- 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. NOTICE BRUCE ELLIS (409-2847) AT LEAST 48 HOURS PRIOR TO THE TIME OF THE CONFERENCE AND 48 HOURS PRIOR TO BEGINNING OF CONSTRUCTION.
- ANY EXISTING PAVEMENT, CURB(S) AND/OR SIDEWALKS DAMAGED OR REMOVED WILL BE REPAIRED BY THE CONTRACTOR AT THEIR EXPENSE.
- LOT PINS SHALL BE IN PLACE DURING CONSTRUCTION AND PRIOR TO FINAL ACCEPTANCE. CONCRETE MONUMENTS SHALL BE PLACED ON ALL BOUNDARY CORNERS, 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. A COPPER PIN ONE-FOURTH 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 NOT BE LESS THAN TWELVE (12) INCHES BELOW THE GROUND SURFACE.
- THE CONTRACTOR SHALL STAMP A 2-INCH "S" IN THE CURB AT THE LOCATION OF THE SEWER SERVICE LINE.
- AT INTERSECTIONS THAT HAVE VALLEY DRAINAGE, THE CROWN OF THE INTERSECTION STREETS WILL CULMINATE IN A DISTANCE OF FORTY (40) FEET FROM THE INTERSECTING CURB LINE UNLESS OTHERWISE NOTED.
- TEMPORARY OR PERMANENT STREET BARRICADES SHALL REMAIN AT ALL POINTS OF INGRESS AND EGRESS TO PREVENT PUBLIC USE UNTIL SUCH STREET RECEIVED FINAL ACCEPTANCE.
- CONTRACTOR SHALL OBTAIN A RIGHT-OF-WAY PERMIT BY THE TOWN OF ADDISON FOR WORKING WITHIN THE PUBLIC RIGHT-OF-WAY EASEMENTS.
- 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.
- THE CONTRACTOR SHALL SUBMIT MATERIAL SHEETS TO THE TOWN OF ADDISON FOR APPROVAL PRIOR TO INCORPORATING MATERIALS INTO THE JOB.

REV. 05-12-93 PER CITY COMMENTS

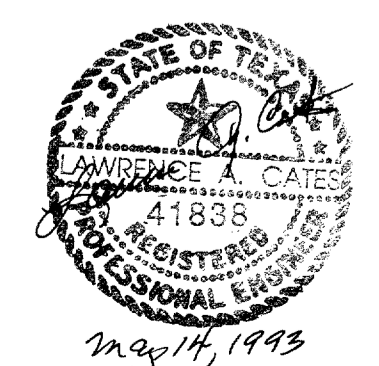
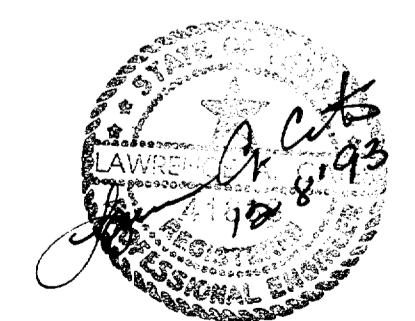
GENERAL NOTES
ADDISON TOWN CENTER

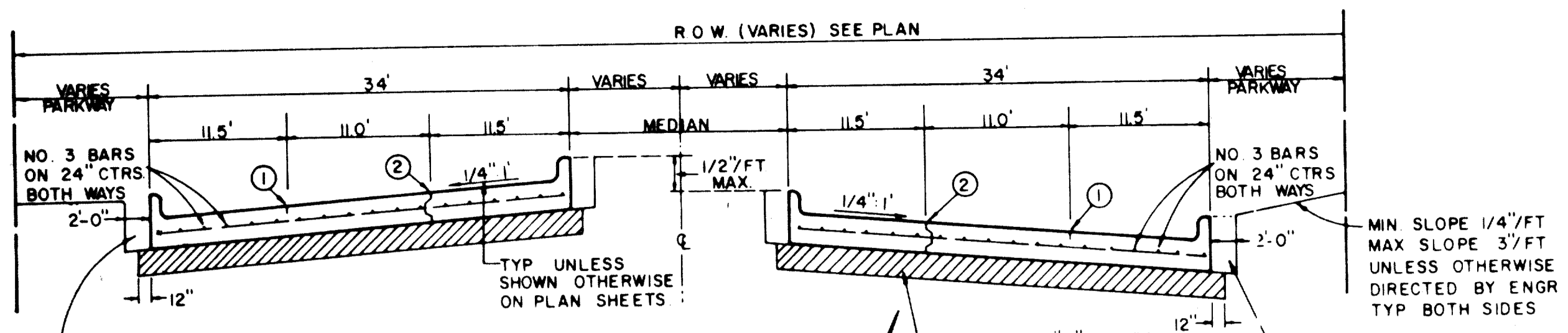
SUBDIVISION
TOWN OF ADDISON, TEXAS

LAWRENCE A. CATES & ASSOC. CONSULTING ENGINEERS
DALLAS, TEXAS

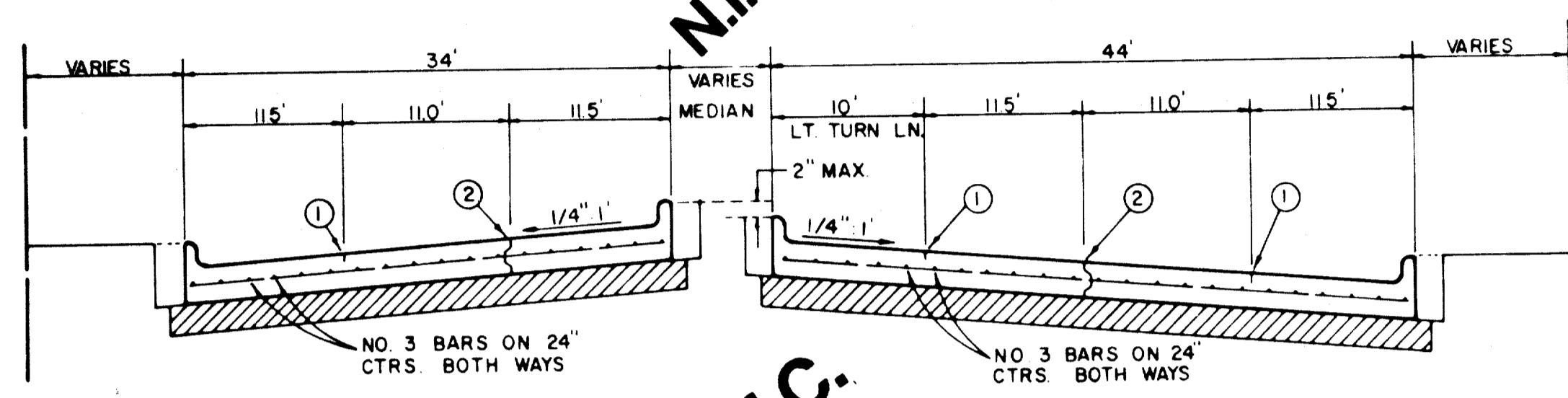
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AS-BUILTS
I CERTIFY THIS PROJECT WAS CONSTRUCTED IN GENERAL CONFORMANCE WITH THESE CONSTRUCTION PLANS AND WILL FUNCTION AS DESIGNED.

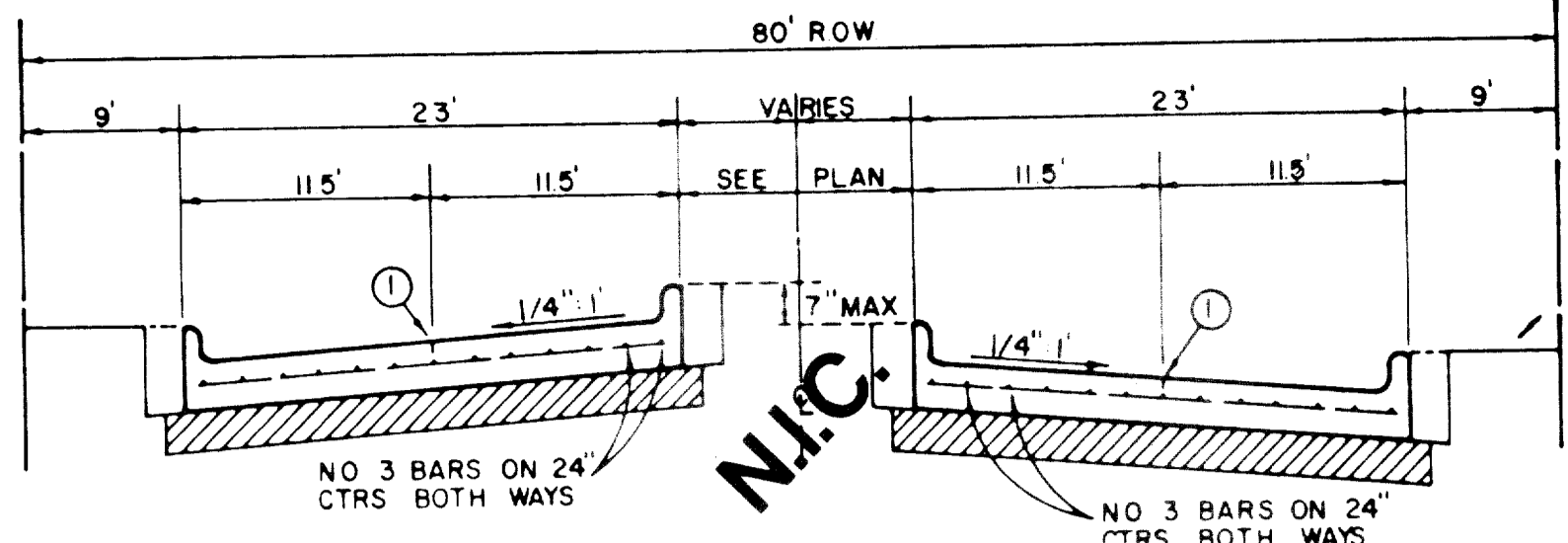




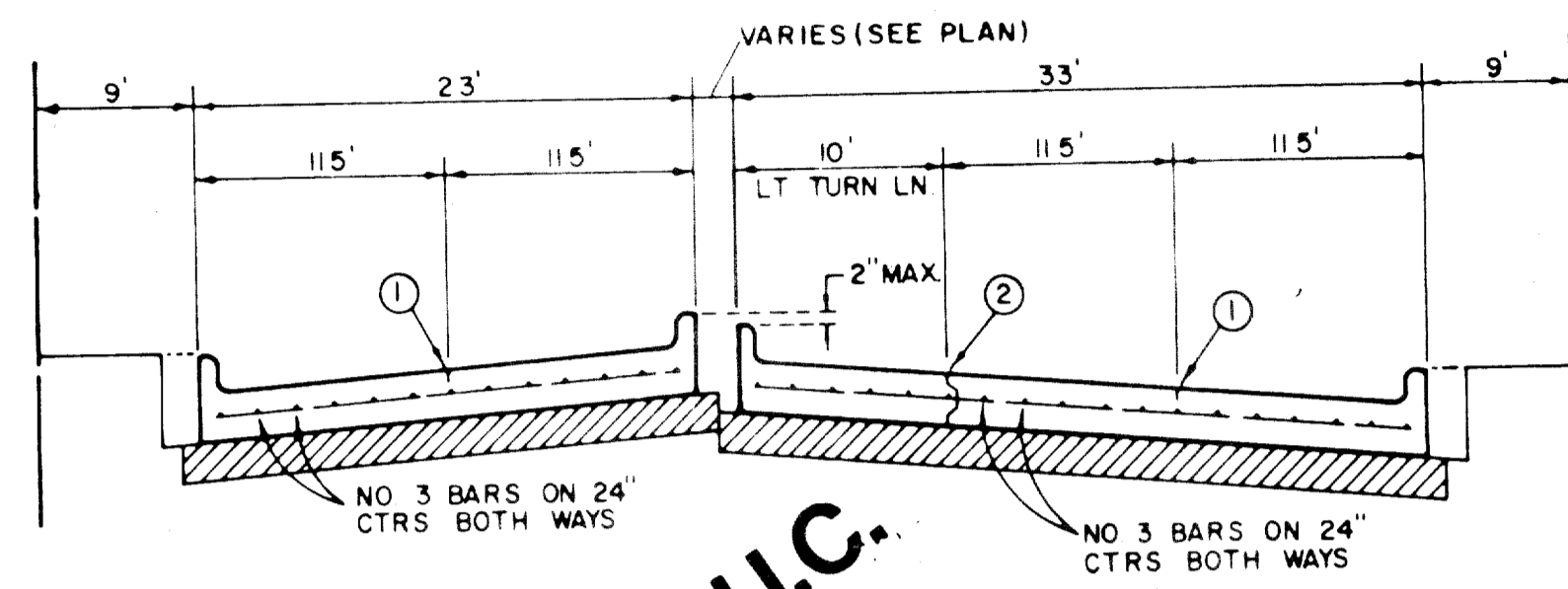
REGULAR SECTION



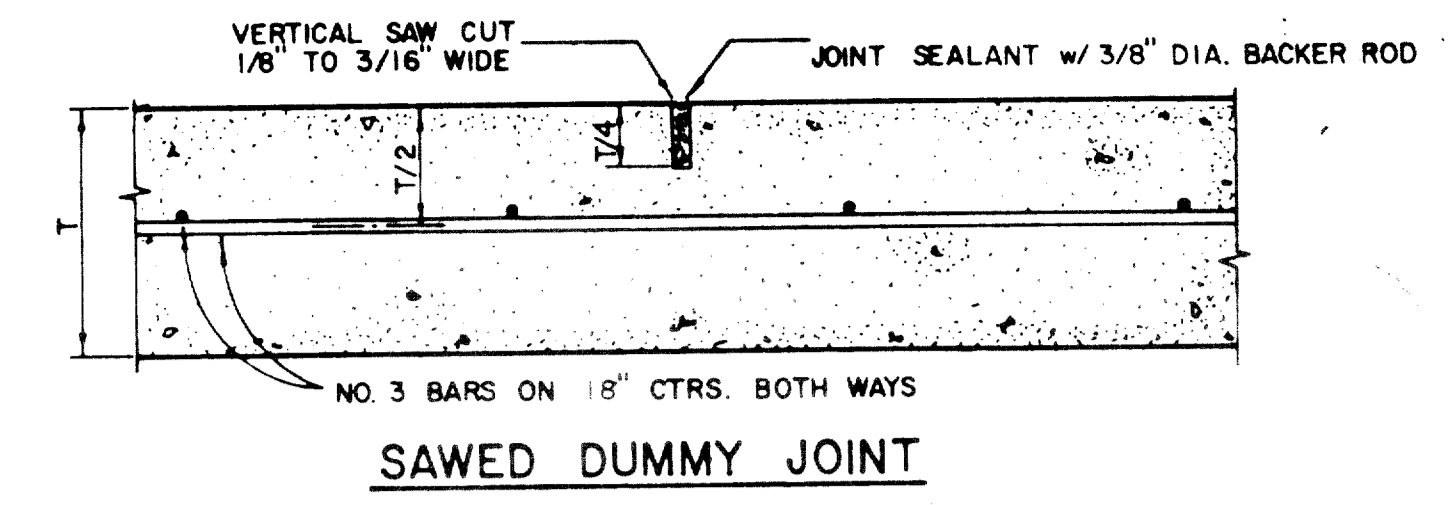
LEFT TURN SECTION
MAJOR ARTERIAL



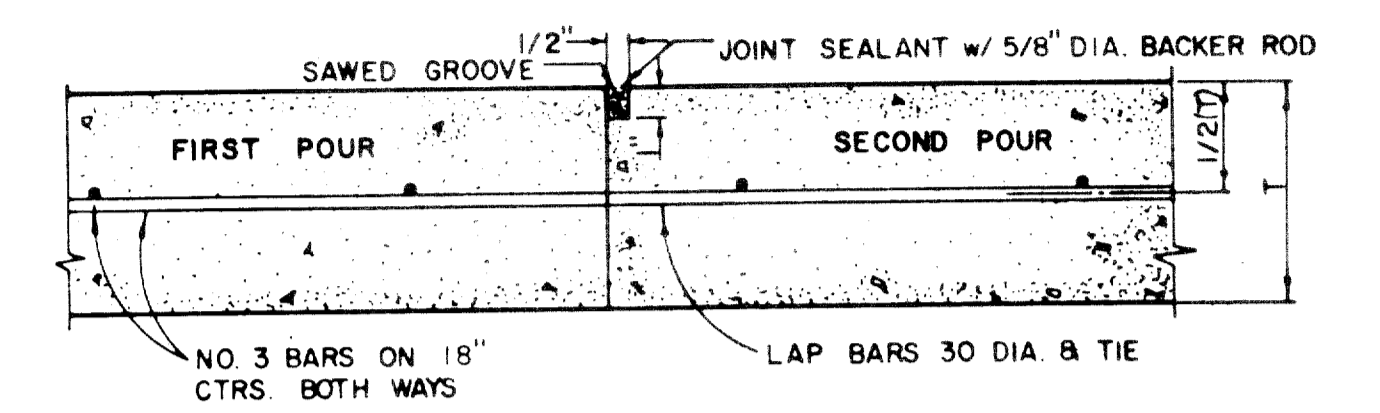
REGULAR SECTION



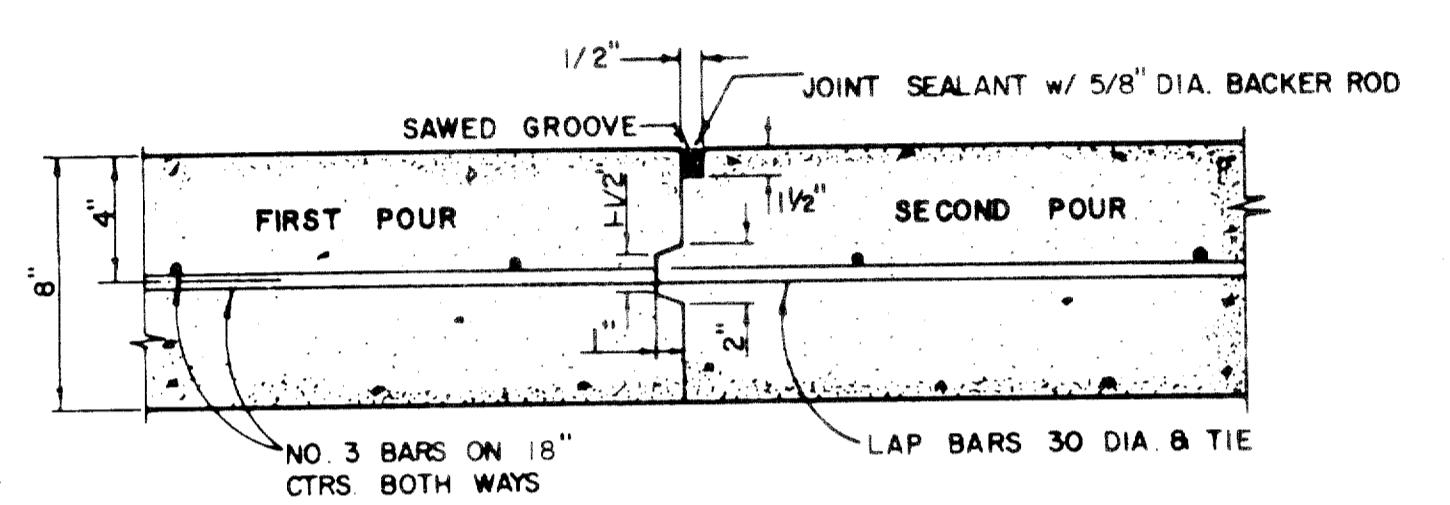
LEFT TURN SECTION
MINOR ARTERIAL



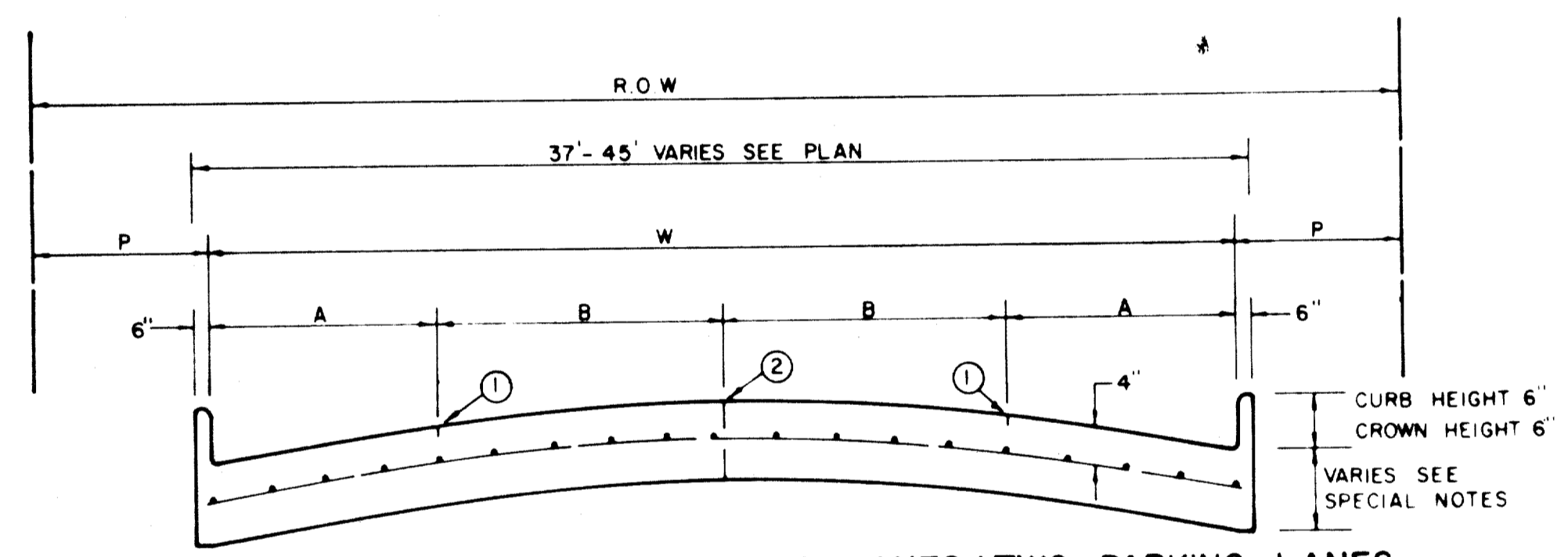
SAWED DUMMY JOINT



CONSTRUCTION JOINT FOR 6 INCH PAVEMENT



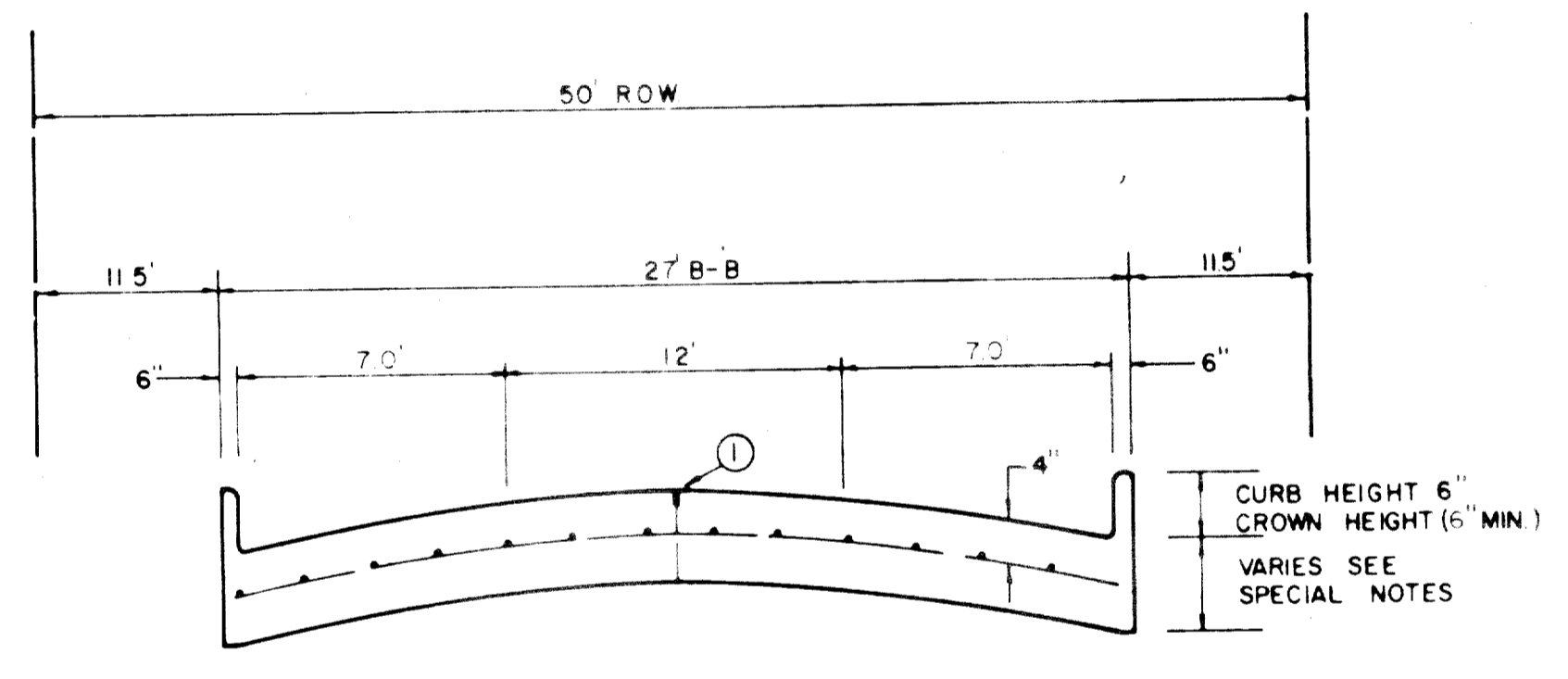
CONSTRUCTION JOINT FOR 8 INCH PAVEMENT



FOUR MOVING LANES OR TWO MOVING LANES/TWO PARKING LANES

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



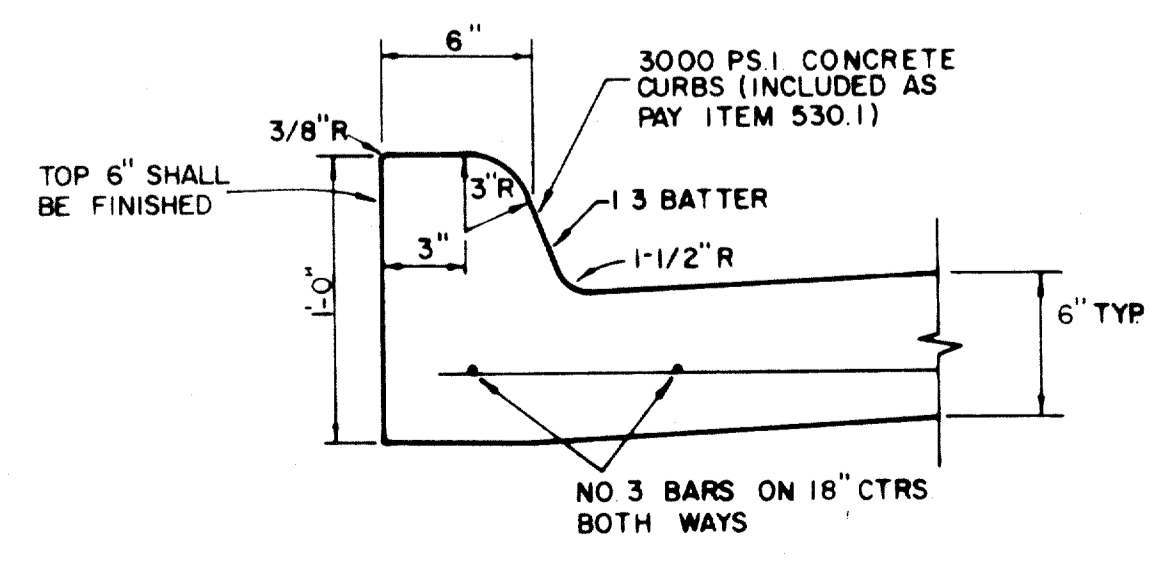
ONE MOVING LANE / TWO PARKING LANES

LOCAL STREET

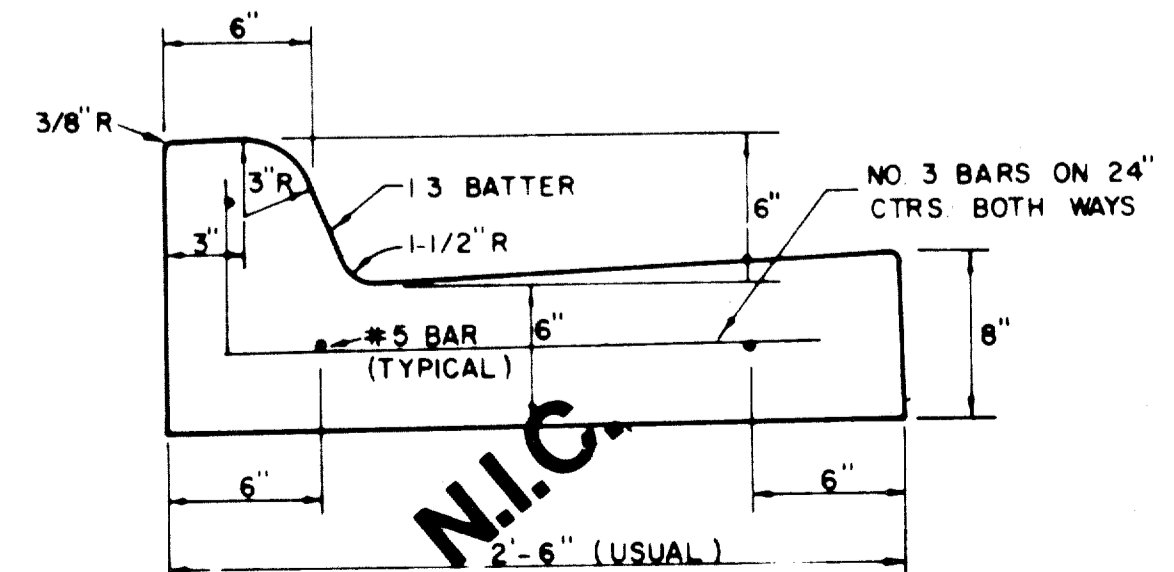
* FULL WIDTH PAVEMENT OF 36' WIDTH STREETS IS ALLOWED WHERE APPROVED BY THE ENGINEER

REINFORCED CONCRETE PAVEMENT

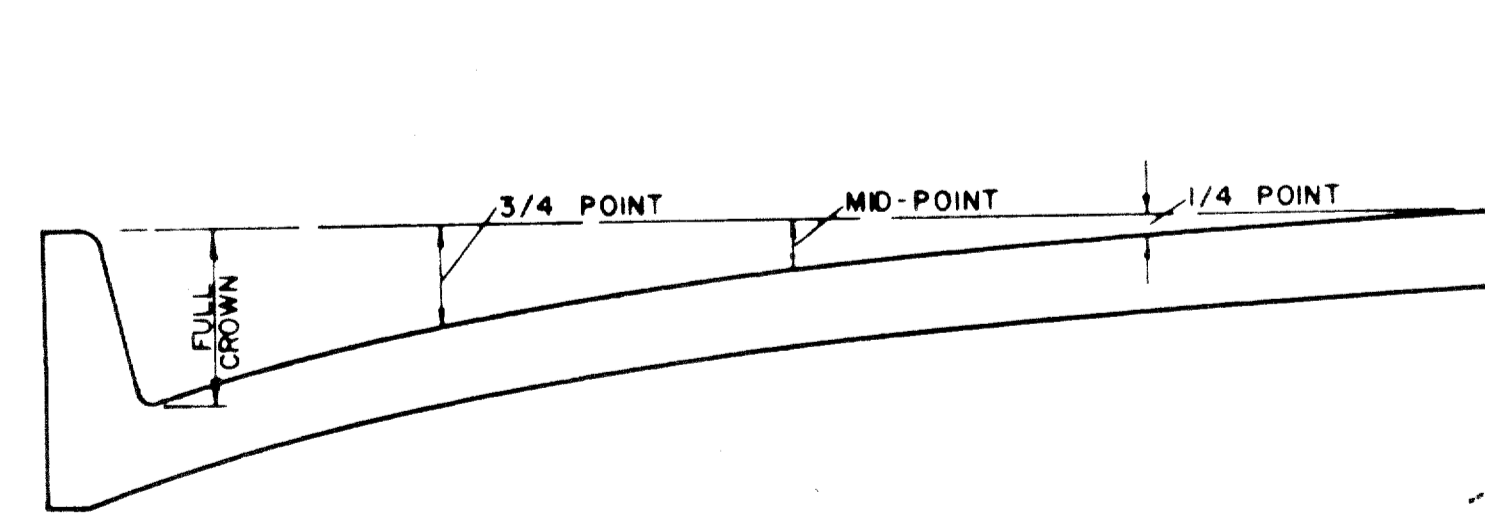
ALL REINFORCING BARS SHALL BE NO 3 TRANSVERSE BARS TO BE SPACED ON 1'-6" CENTERS, LONGITUDINAL BARS TO BE SPACED ON 1'-6" EXCEPT WHERE NOTED.
 UNDIVIDED STREETS-PROVIDE 4" DBL-REF YELLOW & BUTTON P-117-Y PATTERNS TO BE ESTABLISHED BY ENGINEER SEE DETAIL SHEET
 ① SAWED LONGITUDINAL DUMMY JOINT
 ② CONSTRUCTION JOINT (FULL WIDTH PAVT IS ALLOWED WHERE APPROVED BY ENGINEER)
 ③ FINISH SHALL BE TRANSVERSE WITH TRAFFIC LANES AND SHALL BE STEEL TINED BROOM FINISH.



STANDARD CURB



SEPARATE CURB AND GUTTER

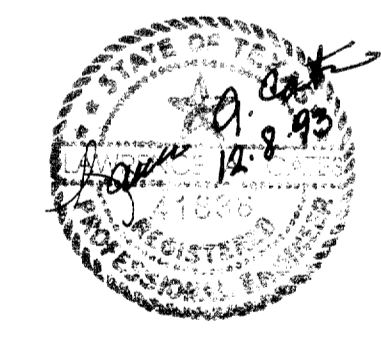


ROADWAY WIDTH (W)	TOTAL CROWN HEIGHT	3/4 POINT	MID-POINT	1/4 POINT
26'	6"	3-3/8"	1-1/2"	3/8"
36'	6"	3-3/8"	1-1/2"	3/8"
44'	6"	3-3/8"	1-1/2"	3/8"
48'	6"	3-3/8"	1-1/2"	3/8"

TABLE OF CROWN HEIGHTS AND ORDINATES FOR VARIOUS PARABOLIC SECTIONS

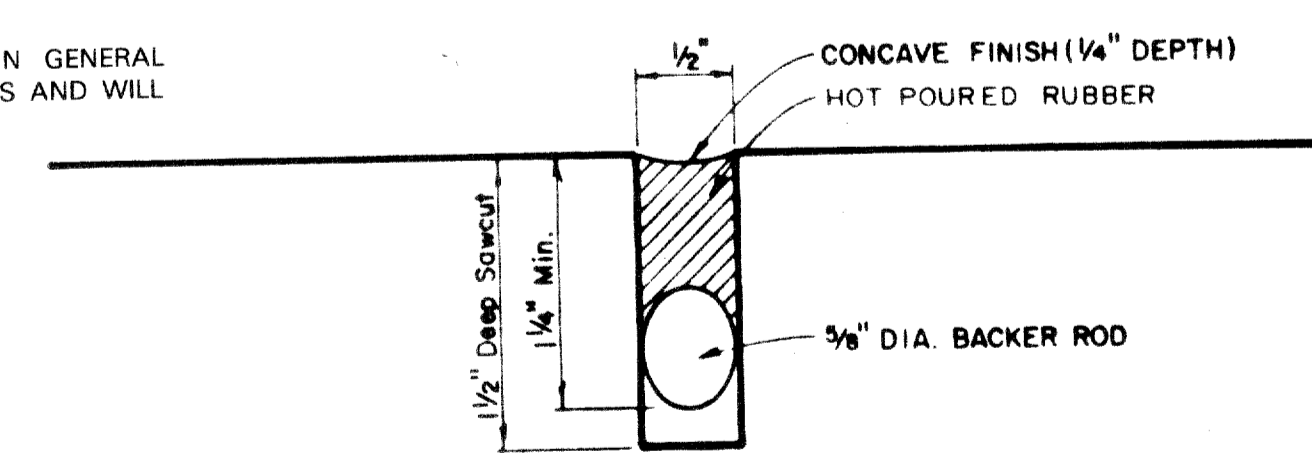
GENERAL NOTES

- A. GENERAL PAVEMENT THICKNESS FOR STREETS SHALL BE AS SPECIFIED BELOW IN SPECIAL NOTES.
- B. 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.



AS-BUILTS

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

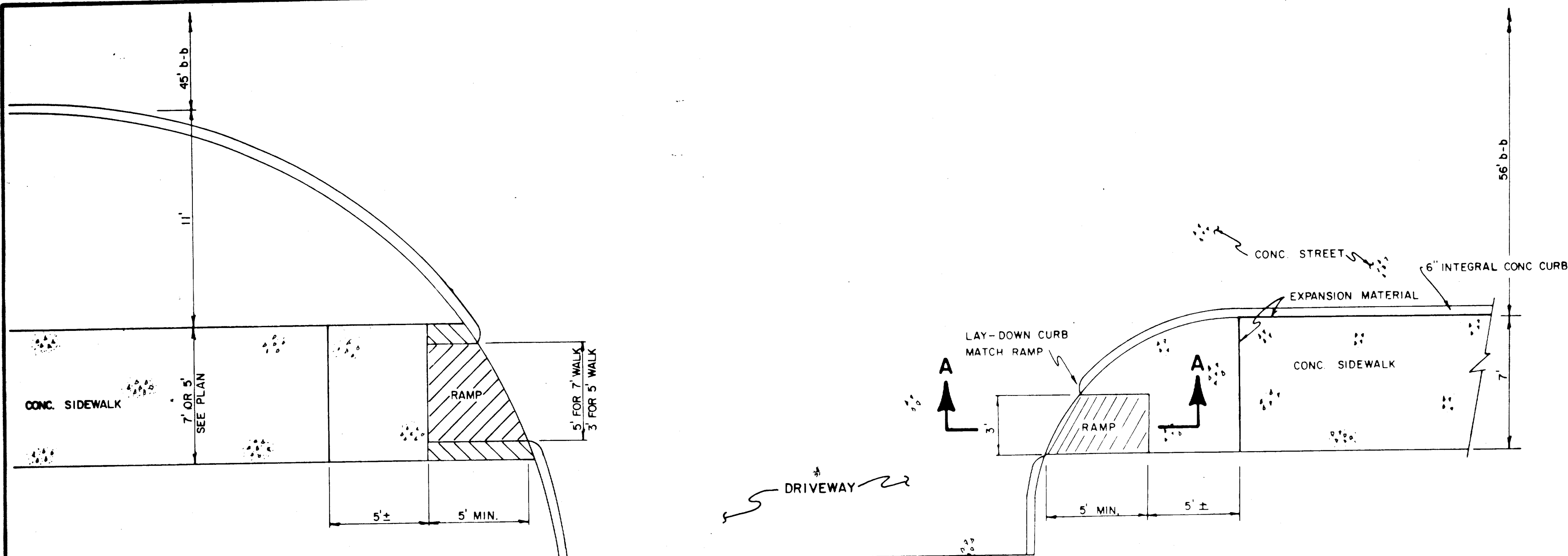


TYPICAL JOINT DETAIL

TOWN OF ADDISON, TEXAS
 DEPARTMENT OF ENGINEERING
STANDARD CONSTRUCTION DETAILS PAVING
STREET CROWNS & JOINTS

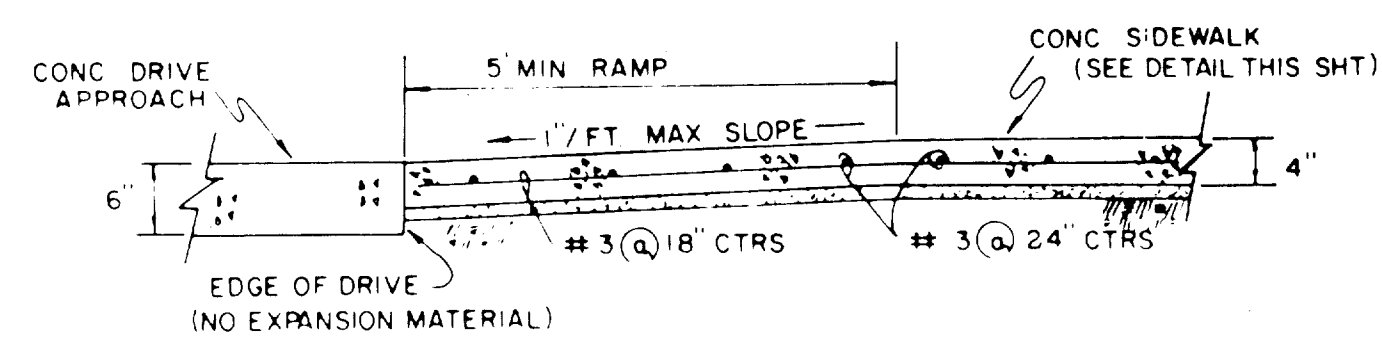
Designed -	Drawn -	Date -	Job No. -
Approved -	Checked -	Scale -	Sheet SD-1

May 14, 1993

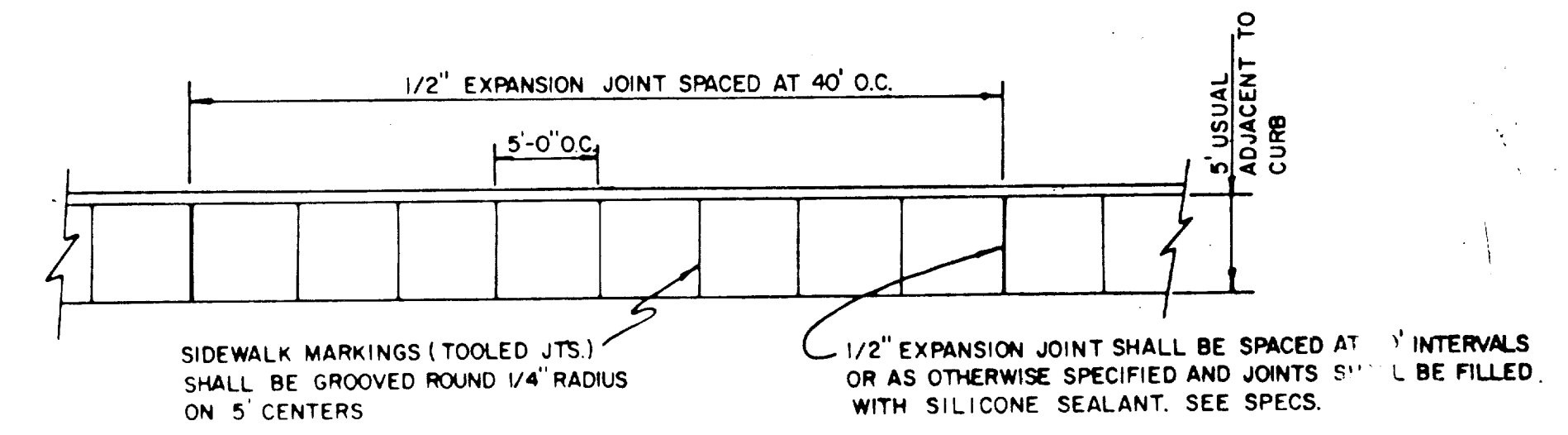


PLAN

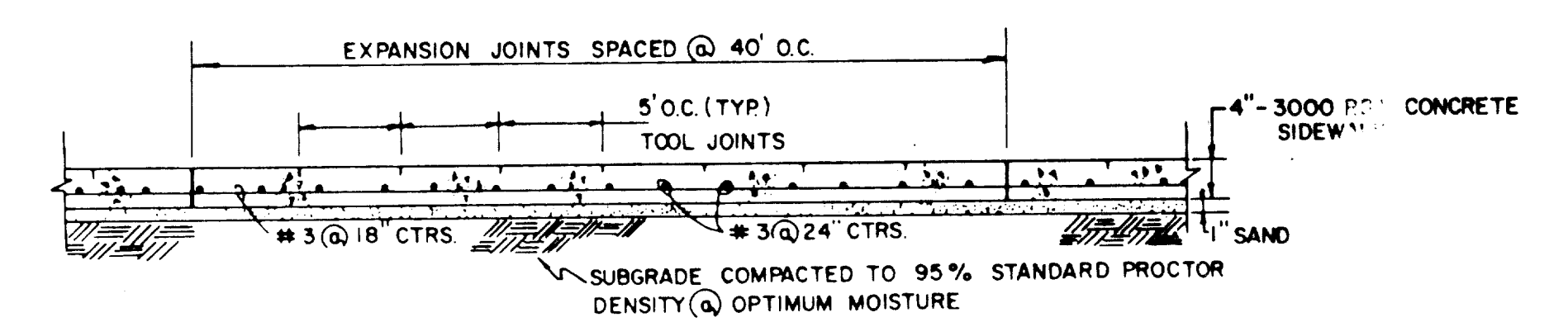
NOTE
MODIFY RAMP TO
FIT DIFFERENT RADIUS



SECTION A-A

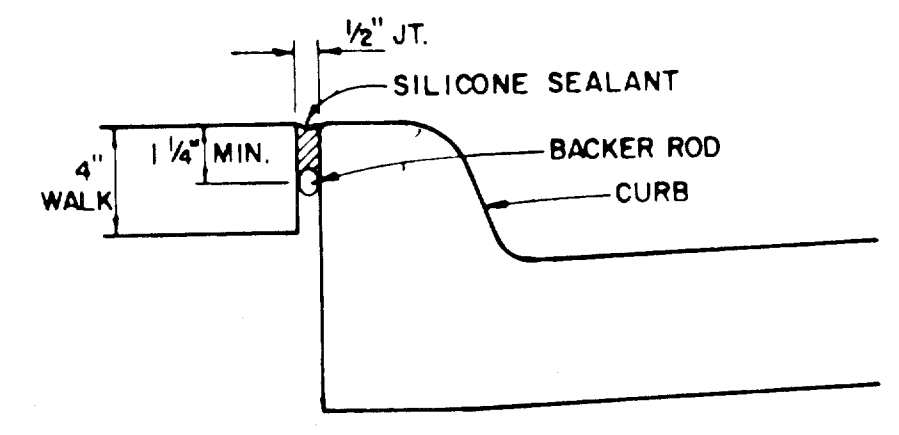


PLAN

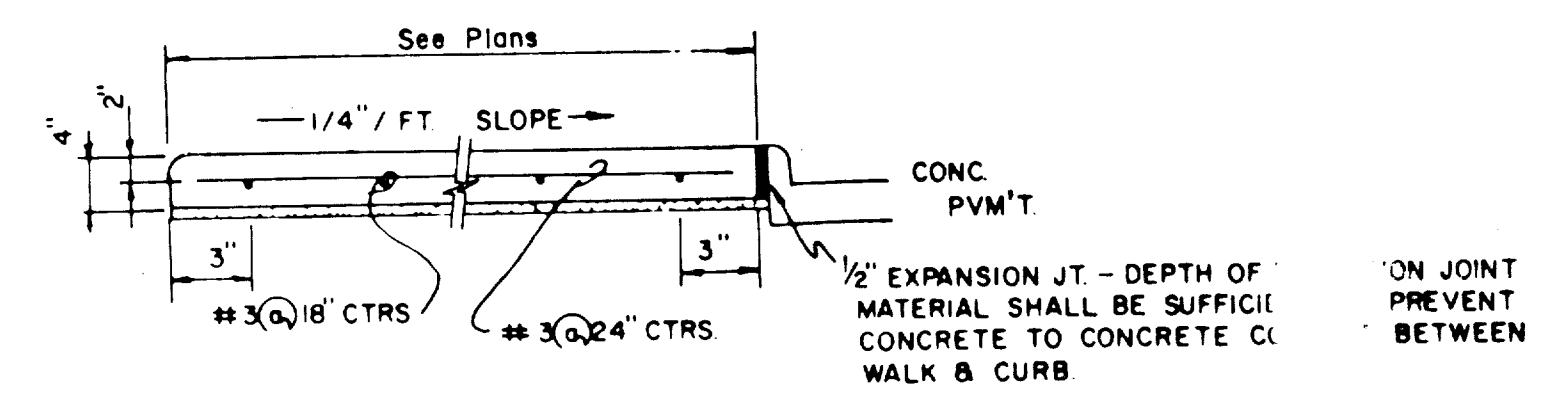


SIDE ELEVATION

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



EXPANSION JOINT DETAIL



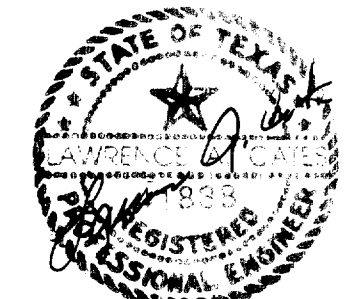
SECTION

CONCRETE SIDEWALK DETAIL

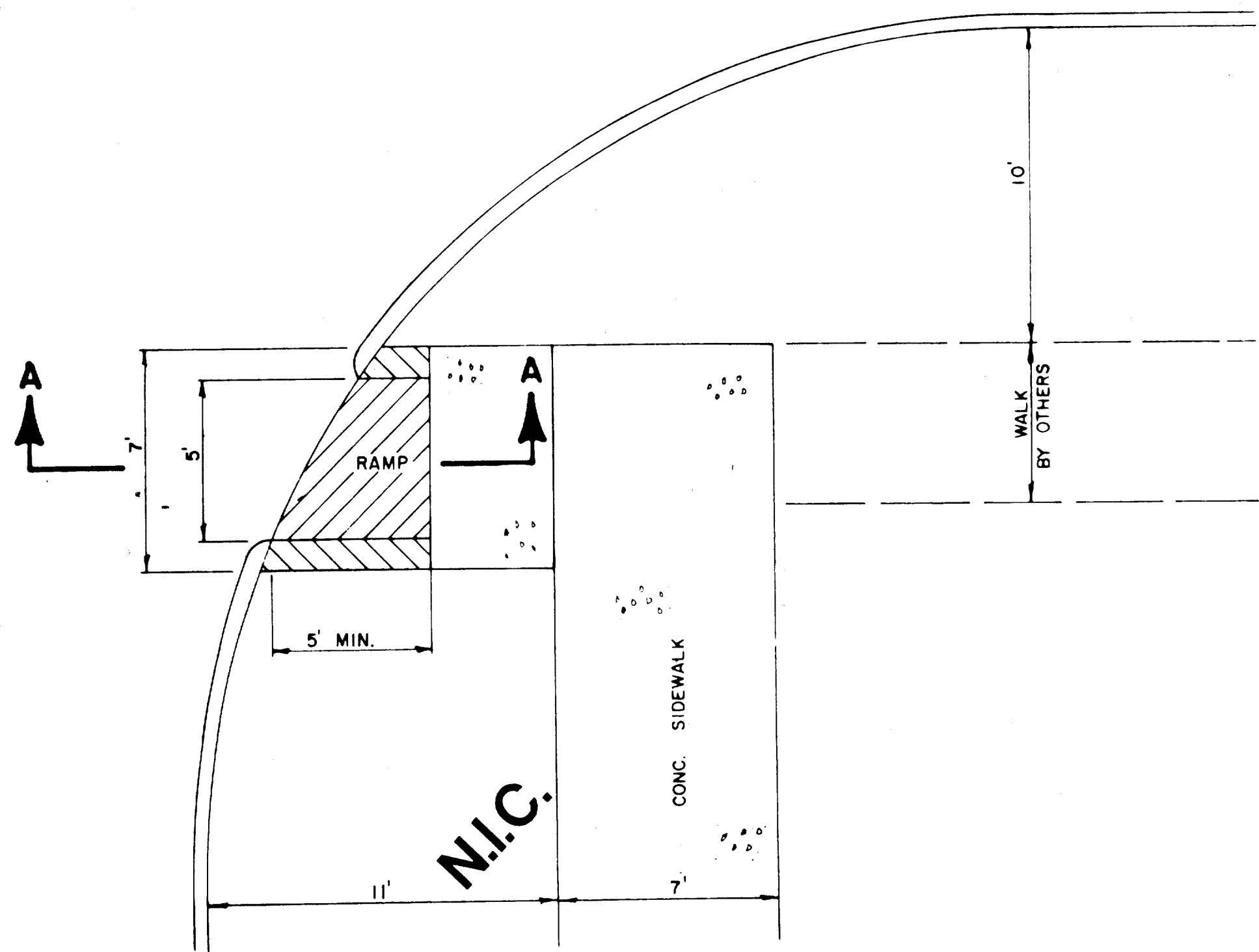
GENERAL NOTES

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.

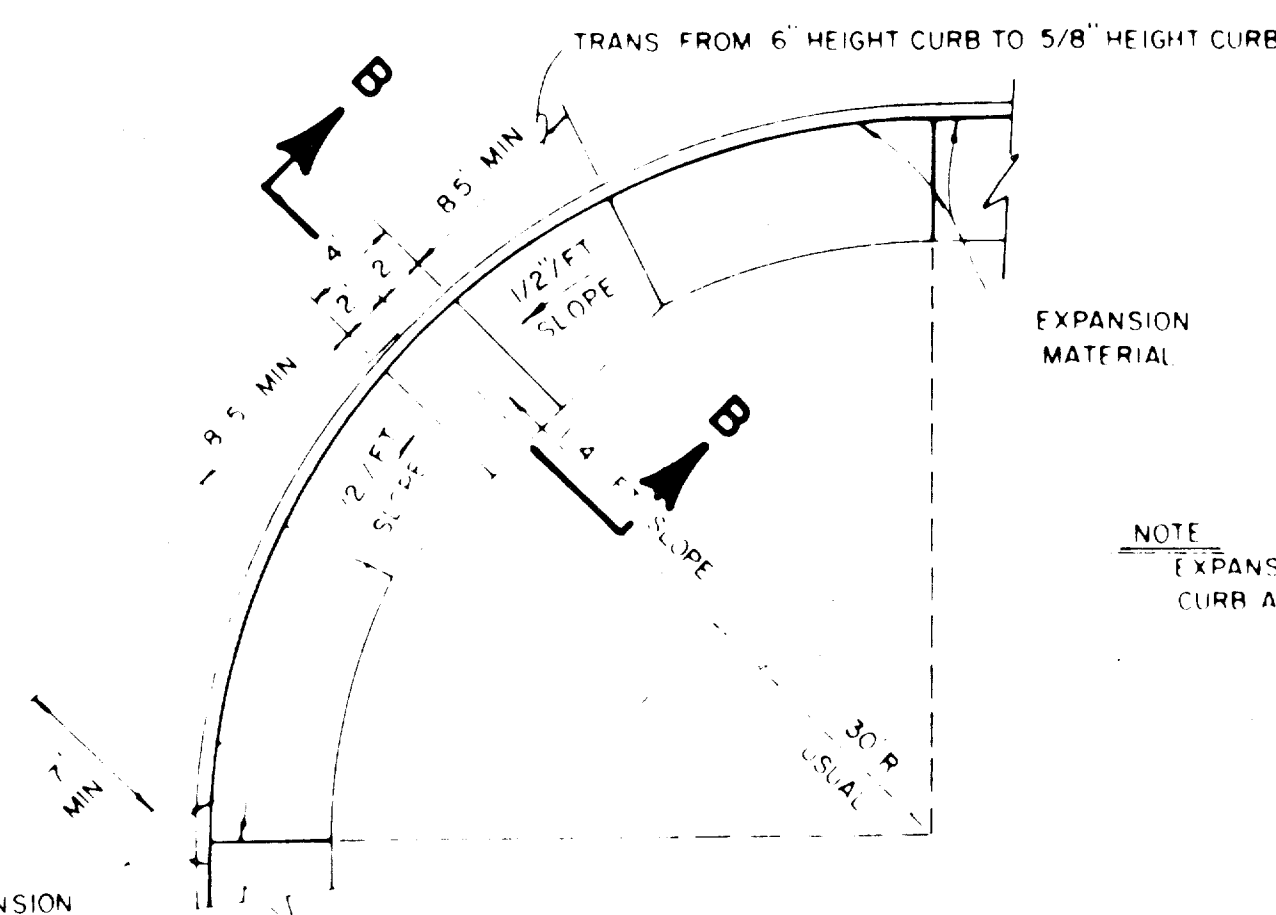
AS-BUILTS
I CERTIFY THIS PROJECT WAS CONSTRUCTED IN GENERAL CONFORMANCE WITH THESE CONSTRUCTION PLANS AND WILL FUNCTION AS DESIGNED.



NO.	REVISION	BY	DATE
TOWN OF ADDISON, TEXAS DEPARTMENT OF ENGINEERING			
STANDARD CONSTRUCTION DETAILS PAVING			
SIDEWALKS & RAMPS			
APPROVED _____			
DATE			SHEET SD-2

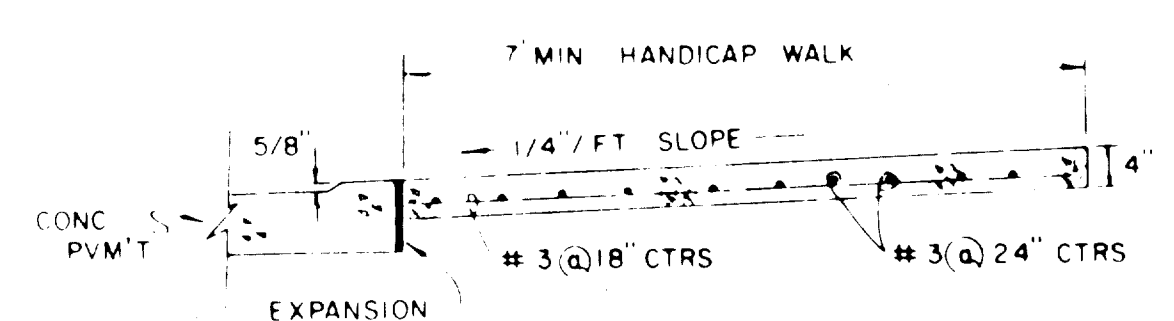


**BARRIER FREE RAMP DETAIL
WITH WALK SEPARATE FROM CURB**



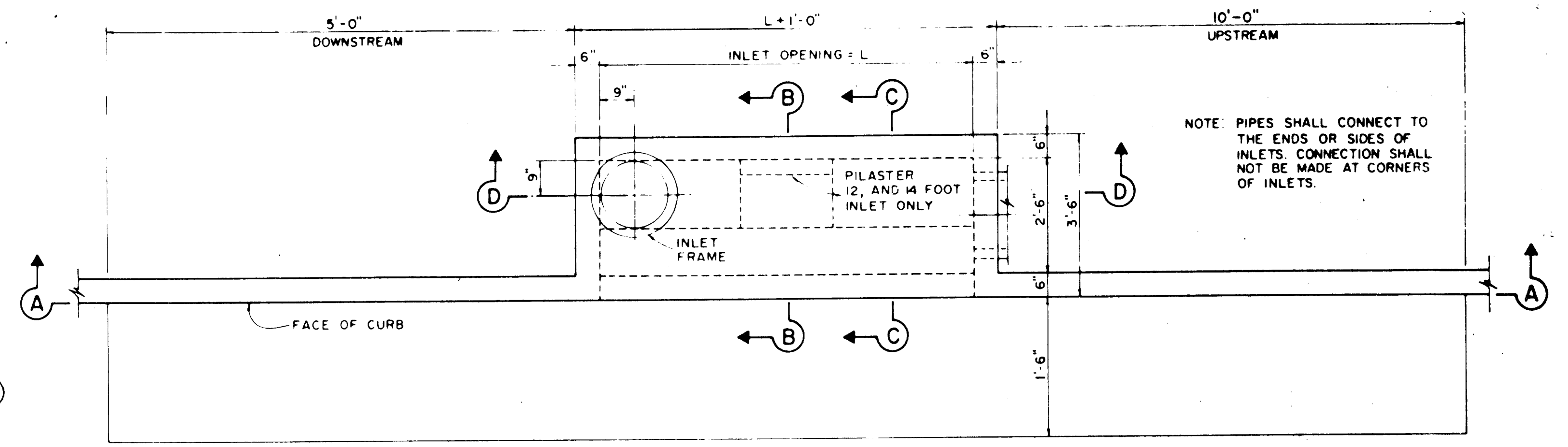
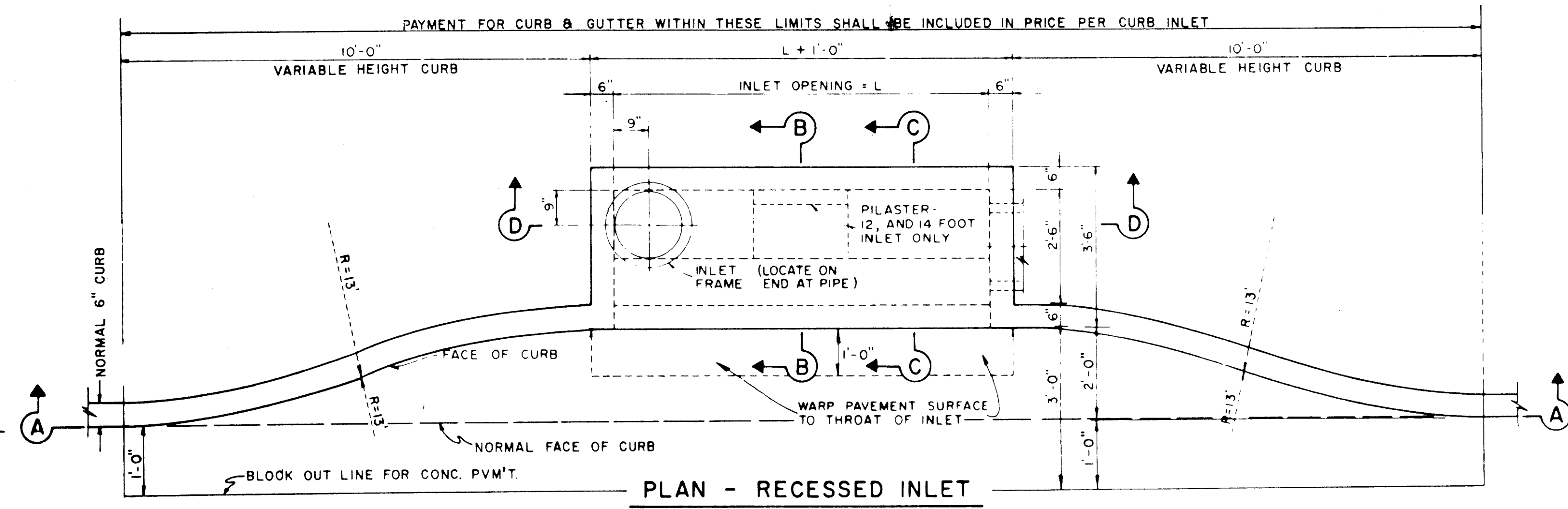
PLAN

NOTE
EXPANSION MATERIAL ALONG
CURB AND AT CURB RETURNS



SECTION B-B

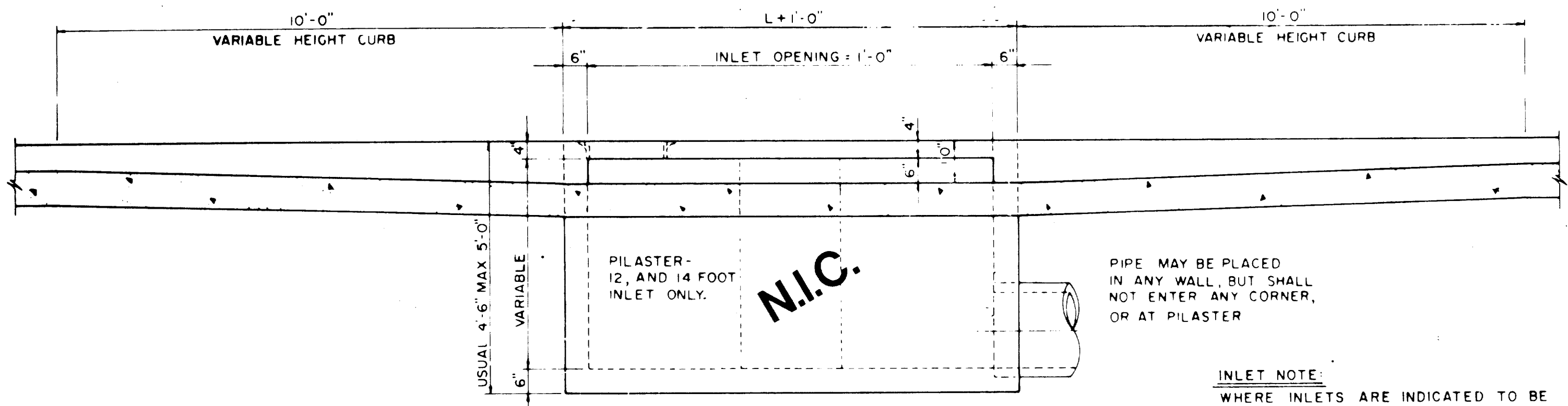
HANDICAP ROLL-DOWN CURB DETAIL



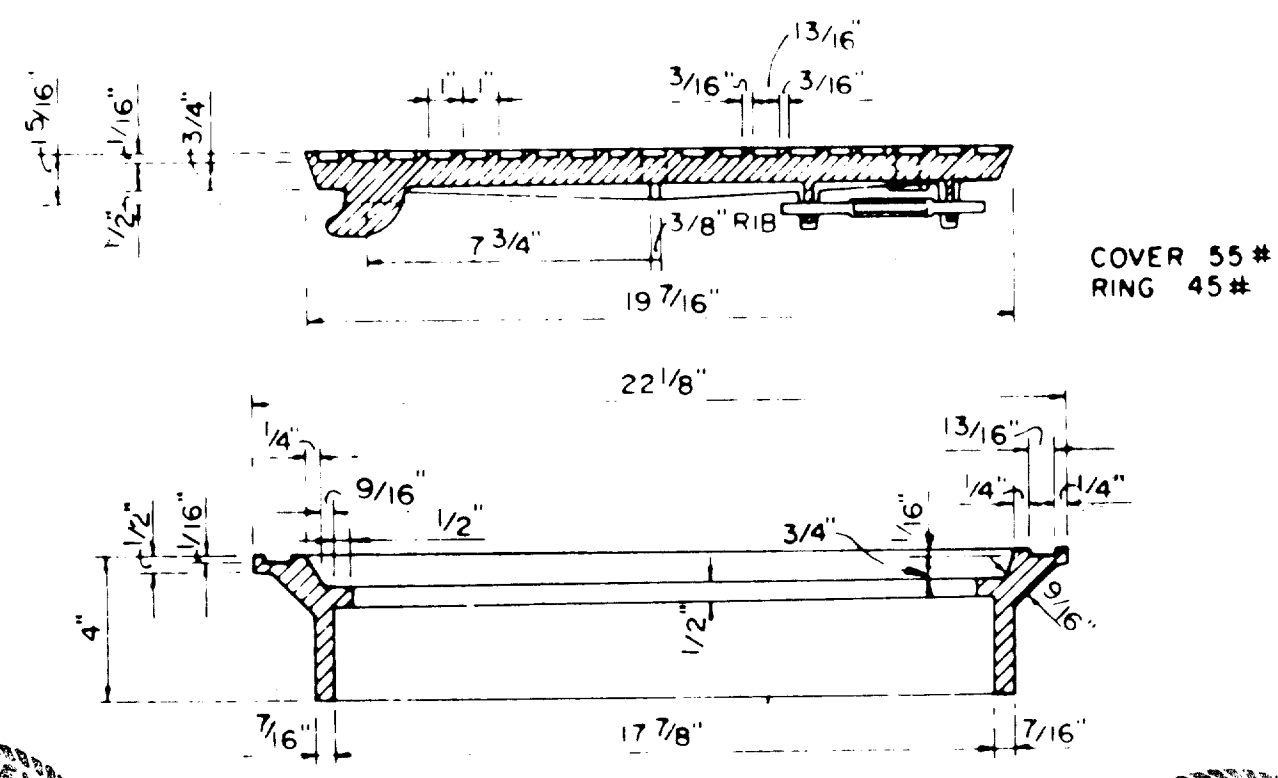
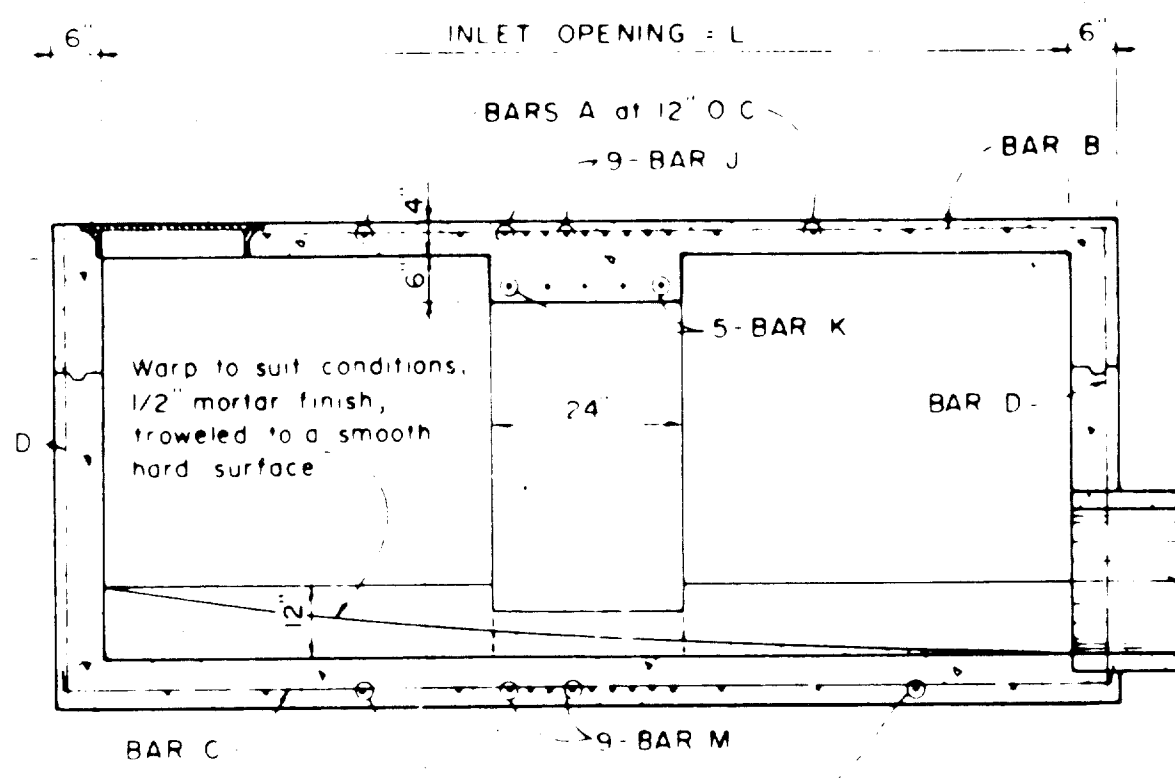
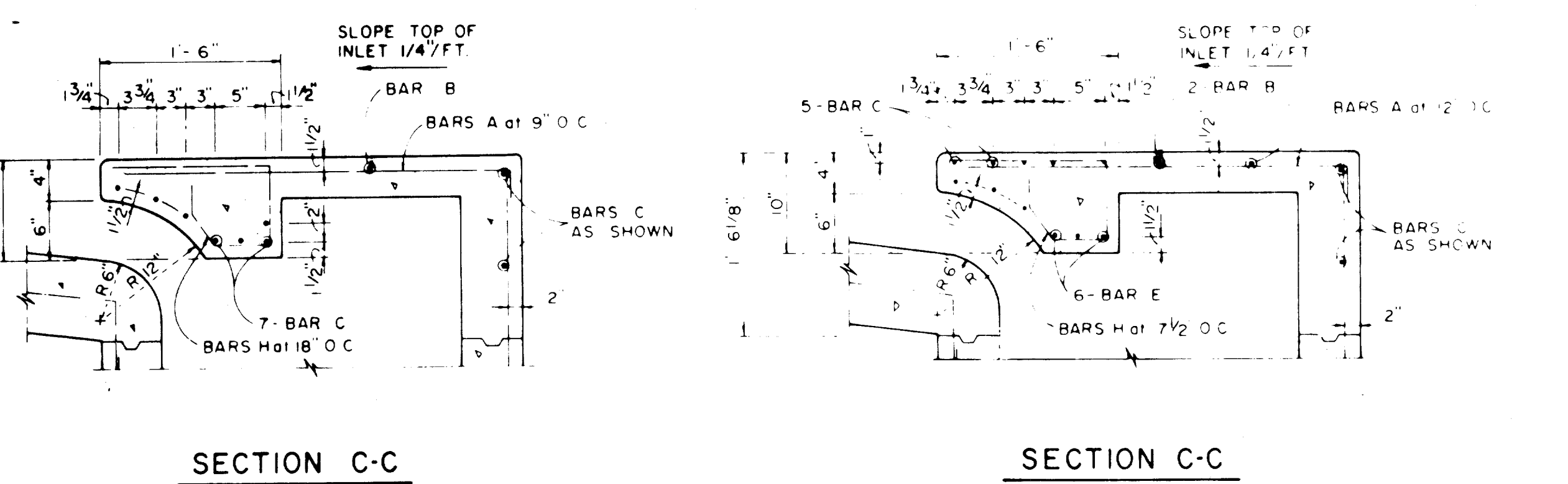
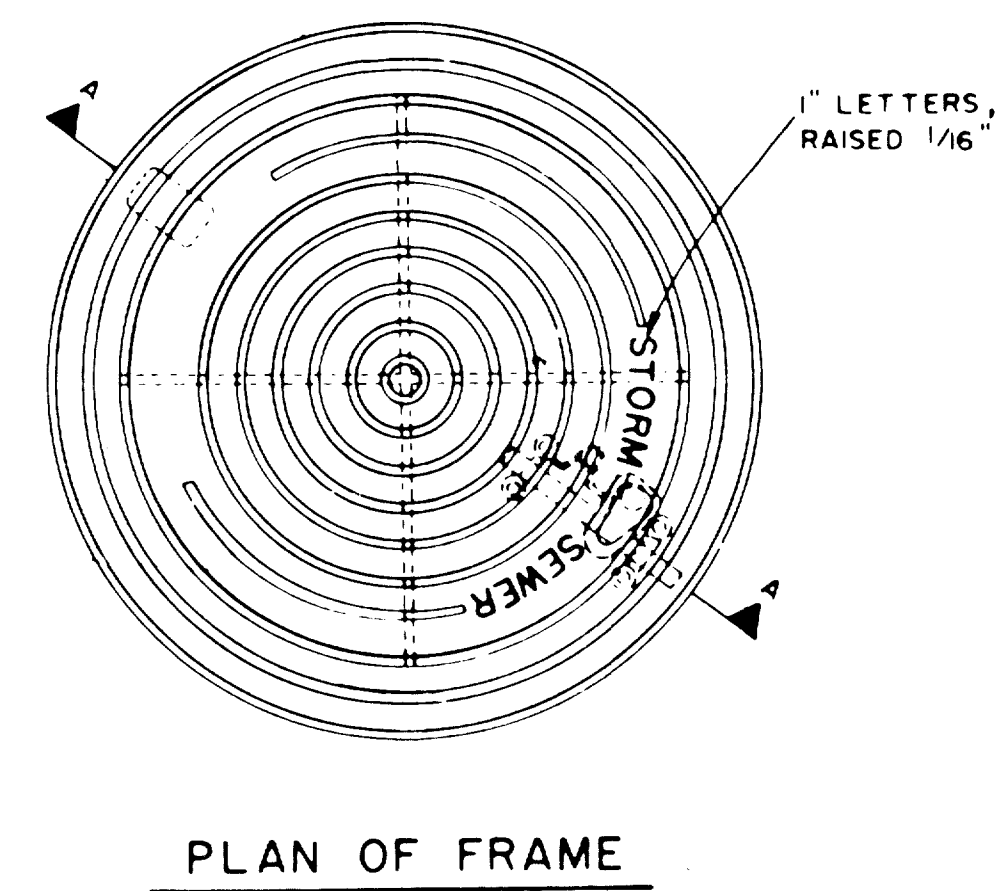
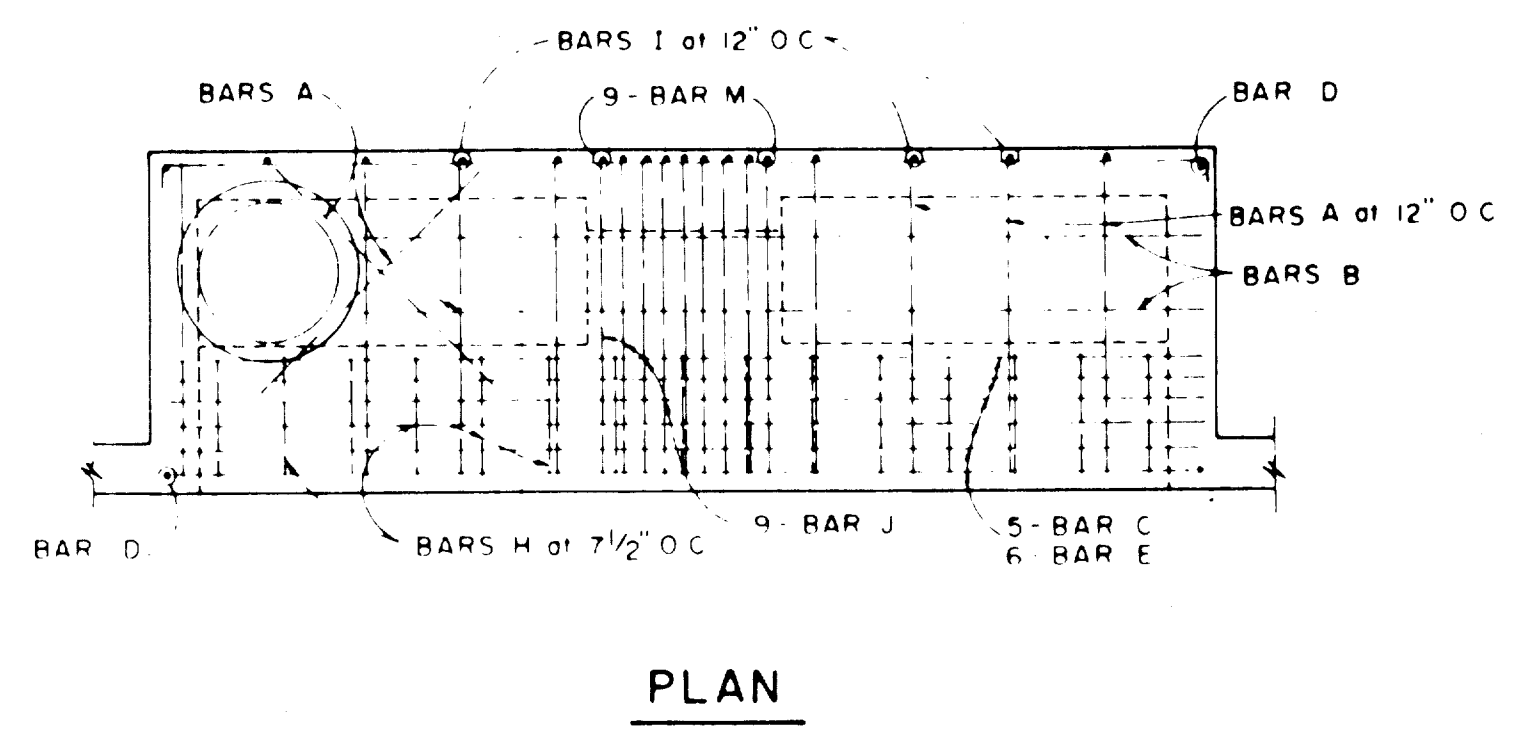
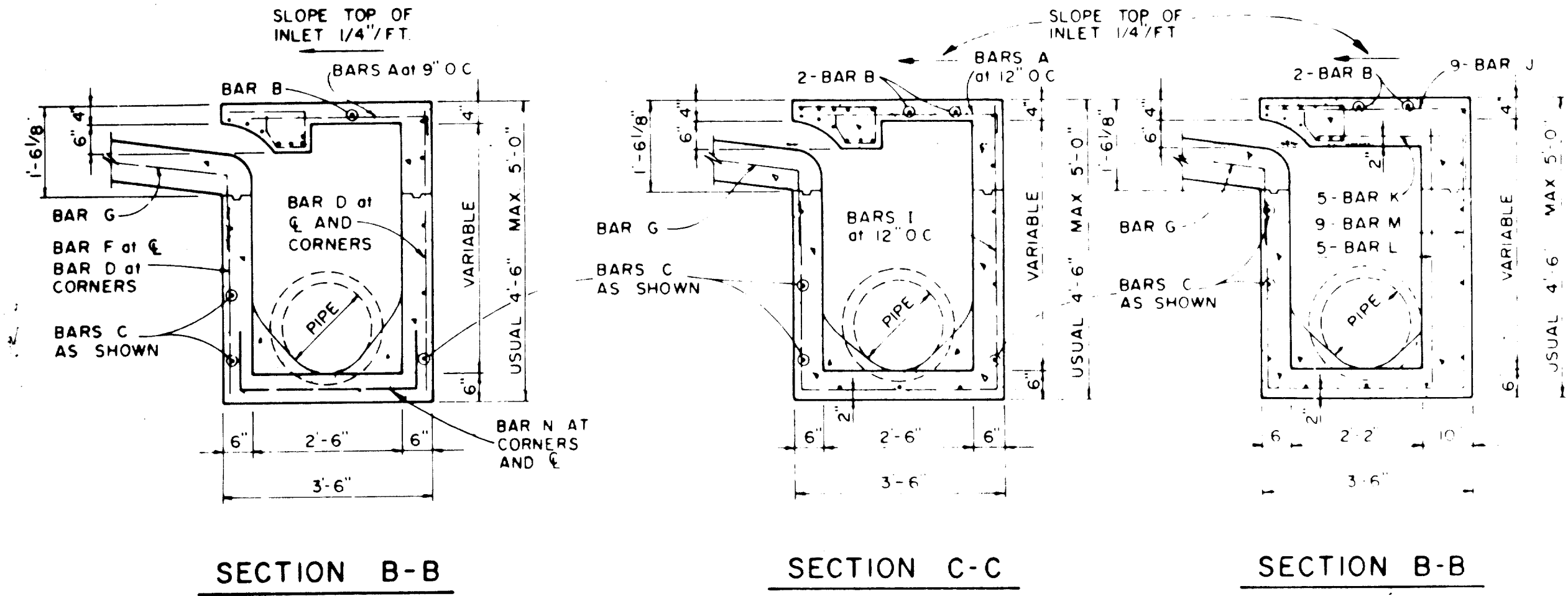
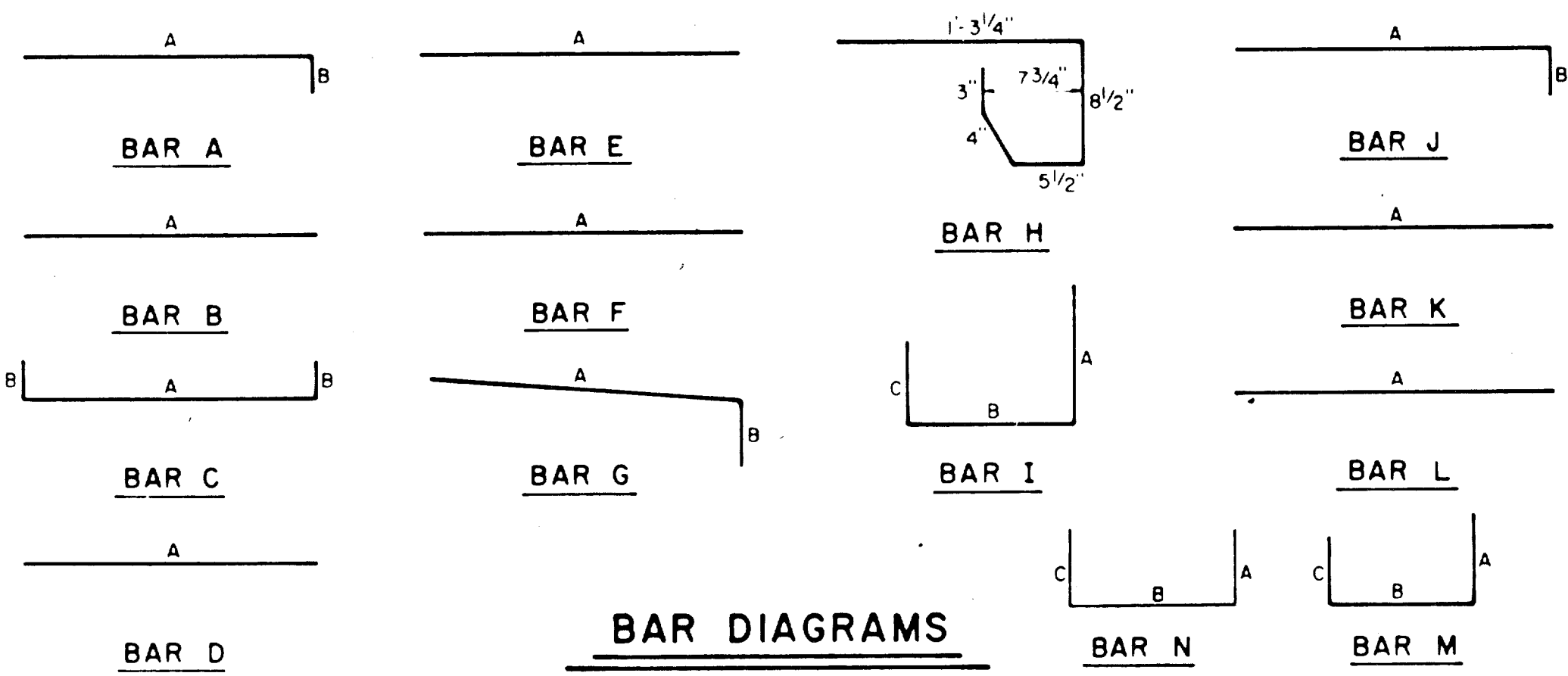
REINFORCING STEEL SCHEDULE

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"
	A	3	9	3'-2"	0'-3"	-
6	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"



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.



4, 6, AND 8 FOOT INLETS

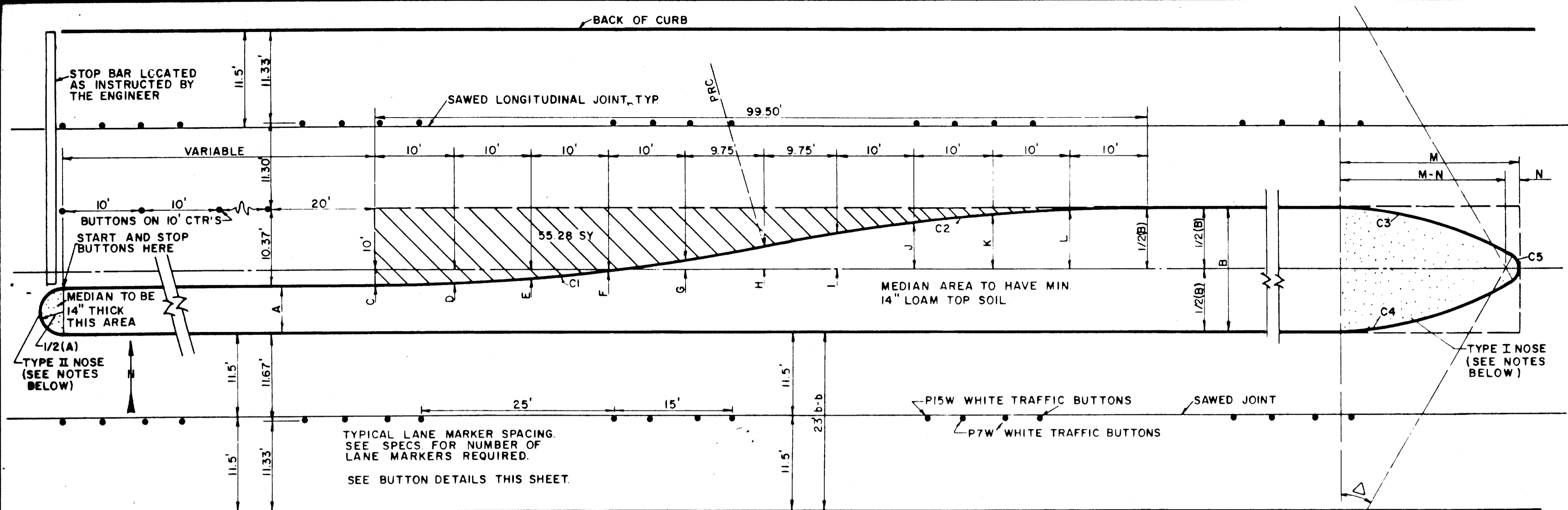
10, 12, AND 14 FOOT INLETS

SECTION D-D FOR 12' & 14' ONLY

SECTION OF FRAME AND COVER INLET FRAME AND COVER

TOWN OF ADDISON, TEXAS
DEPARTMENT OF ENGINEERING
STANDARD CONSTRUCTION DETAILS
STORM DRAINAGE
CURB INLETS

Designed -	Drawn -	Date -	Job No. -
Approved -	Checked -	Scale -	Sheet SD-3



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'S	2.00'N	3.78'N	5.19'N	6.20'N	6.80'N	24.56'	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	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

Δ = 11°28'40"
R = 250'
T = 25.13'
L = 50.08'

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

B	R	T	L	
12	26°06'32"	50.00'	11.59'	23.92'
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'

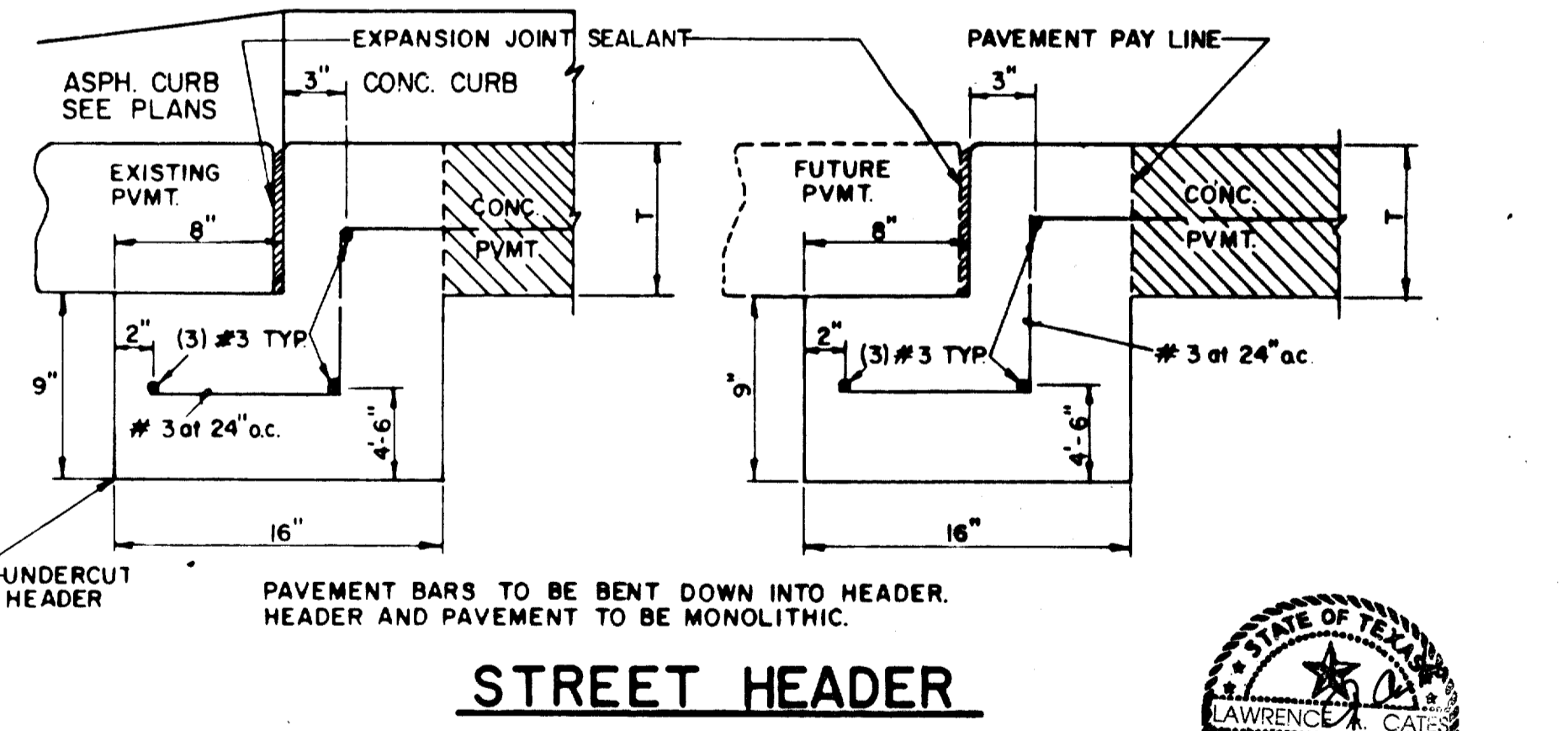
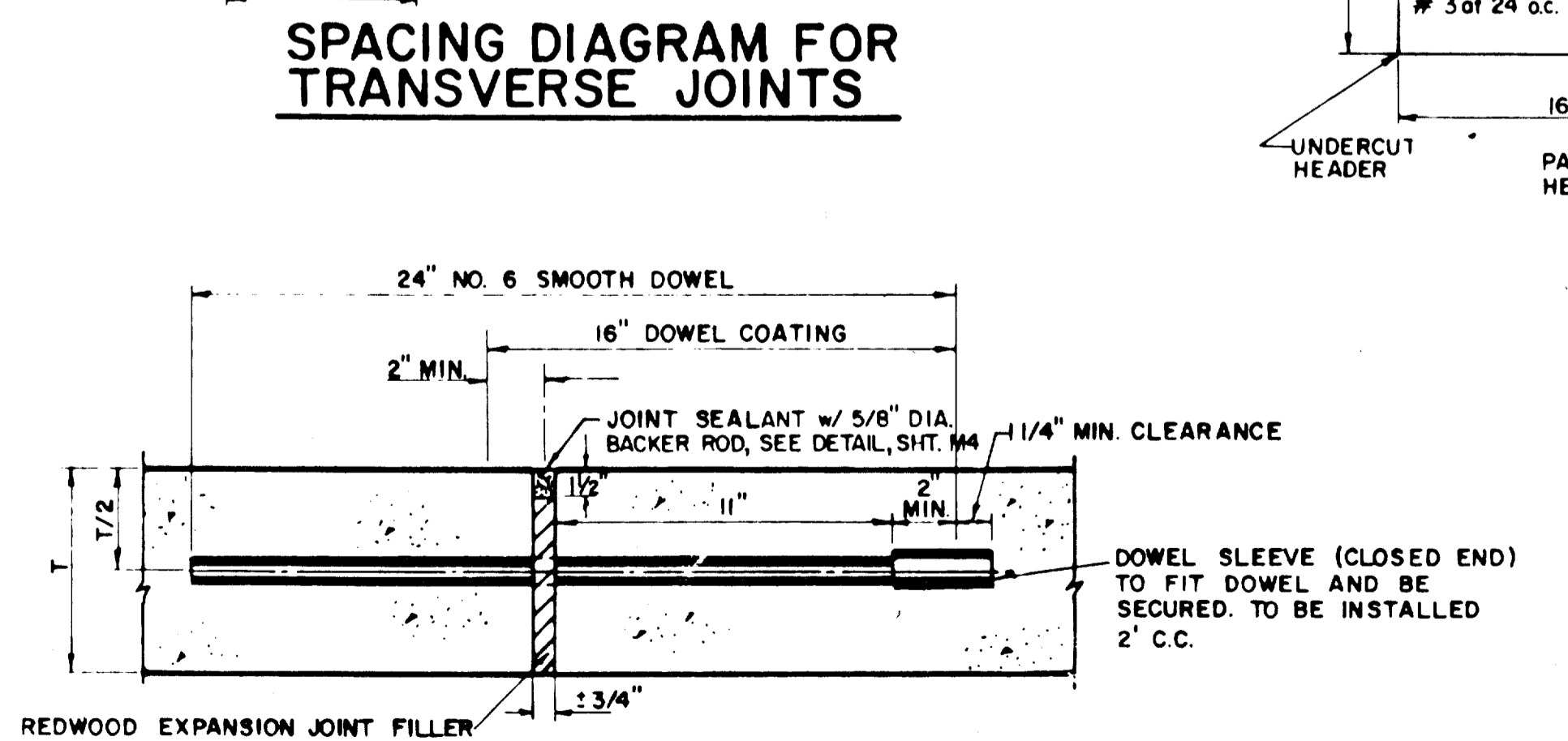
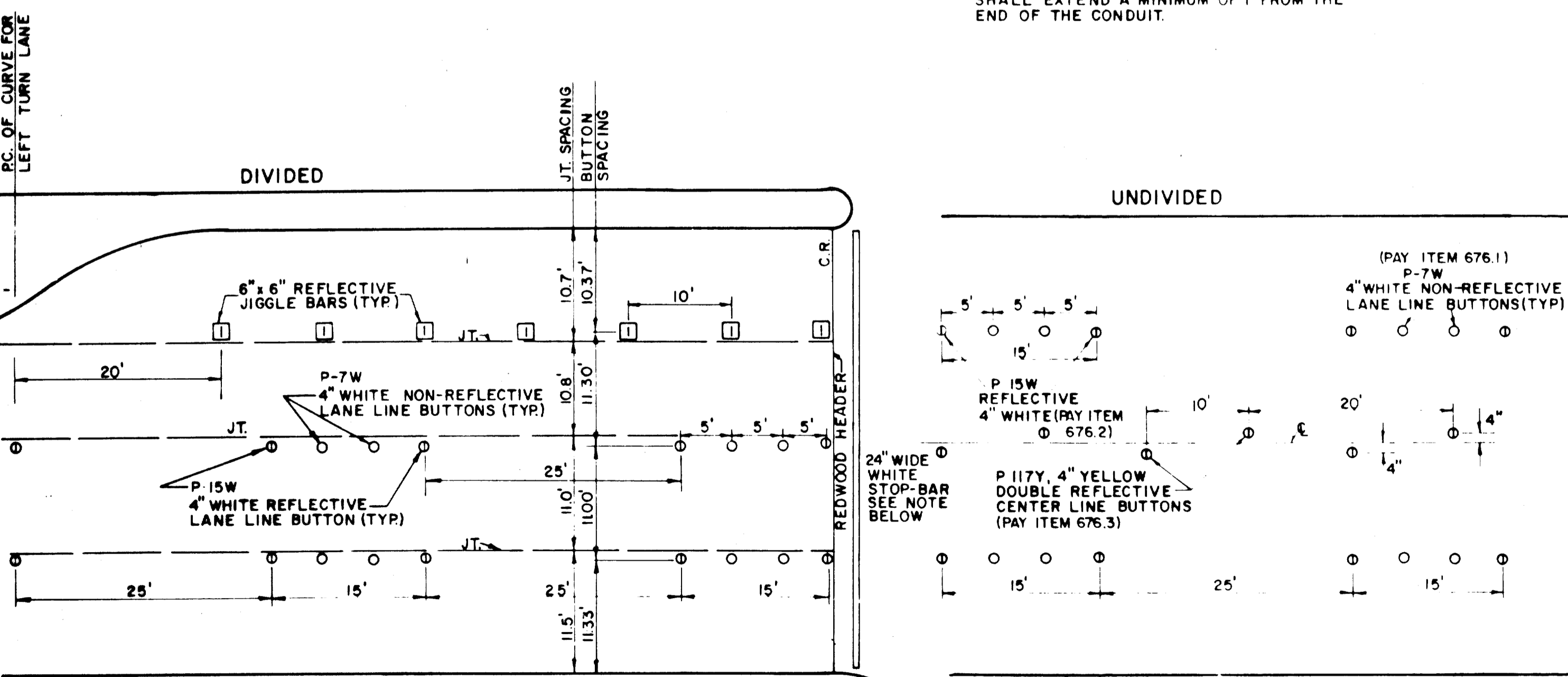
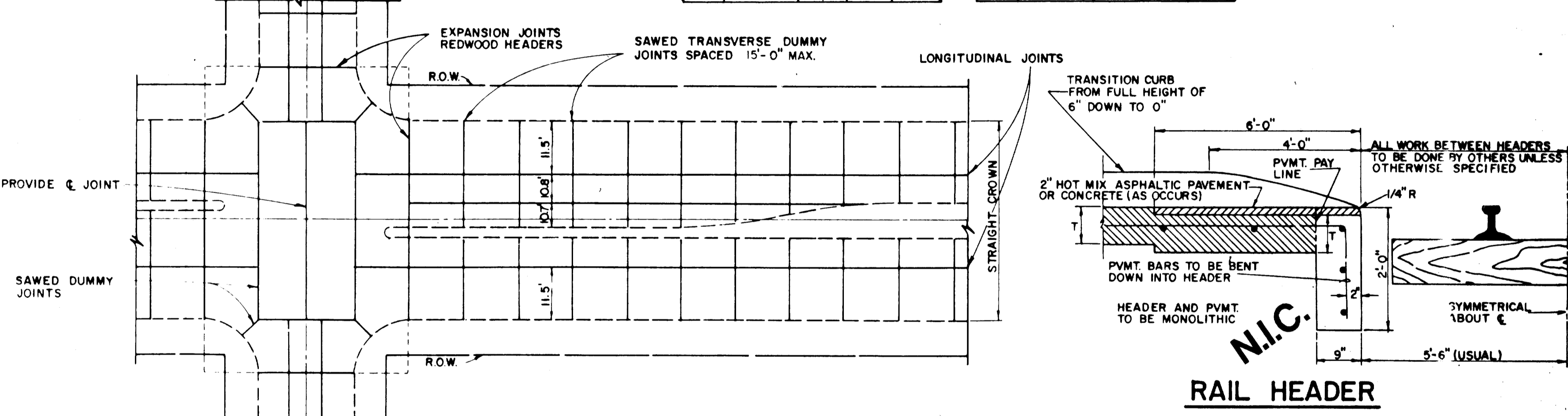
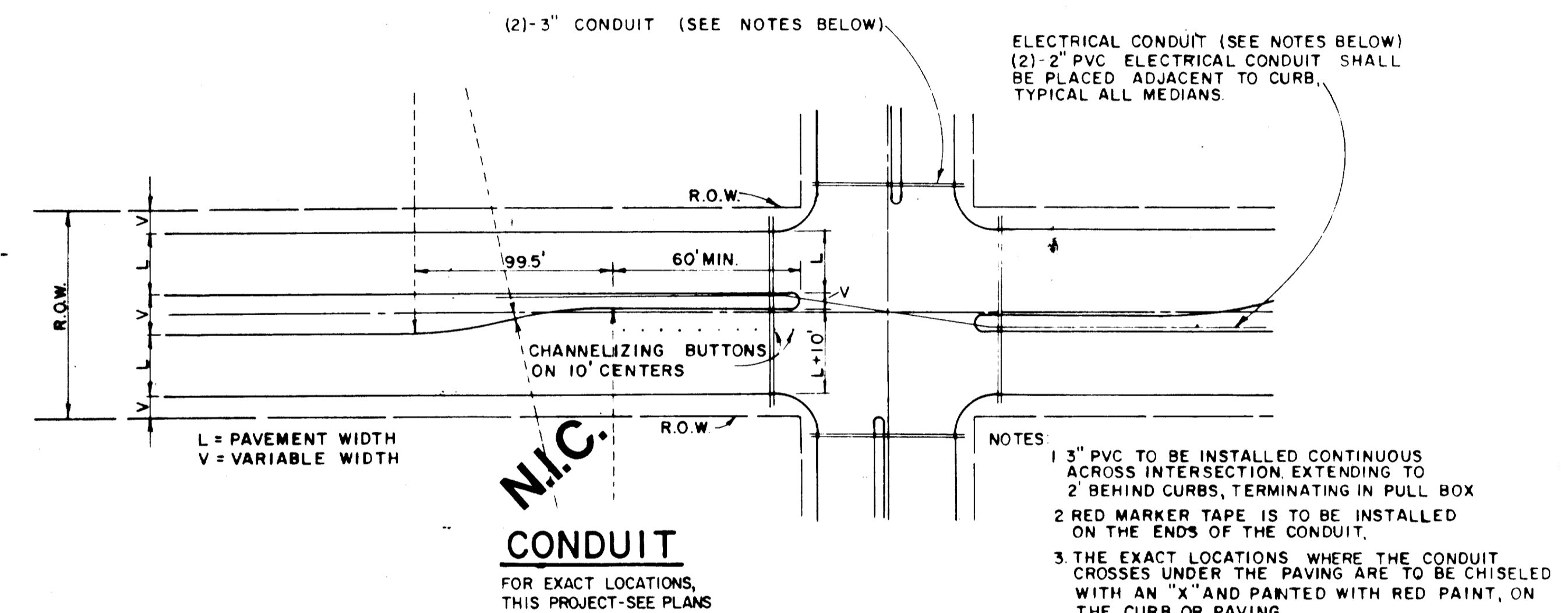
B	R	T	L	
12	127°47'32"	1.00'	2.04'	2.23'
13	125°42'46"	1.00'	1.93'	2.19'
14	129°43'08"	2.50'	5.33'	5.66'
15	126°57'31"	2.50'	5.01'	5.54'
16	129°09'33"	3.50'	7.36'	7.89'
17	126°21'44"	3.50'	6.92'	7.72'
18	123°41'38"	3.50'	6.54'	7.56'
19	120°52'03"	3.50'	6.17'	7.38'
20	120°48'56"	4.00'	7.04'	8.43'
21	118°21'08"	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	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'	2.38'
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'

LEFT TURN LANE (AS APPLICABLE)

NOTES: 1) FOR 2' A=7' USE TYPE II NOSE
2) FOR 7' A=14' USE TYPE I NOSE
3) FOR 12' B=24' USE TYPE I NOSE



STANDARD BUTTON LAYOUT APPROACH TO DIVIDED ROADWAY INTERSECTION

NOTE: STOP-BAR TO BE STAMARK 3M BRAND NO. N360

NOTE: BUTTONS TO BE INSTALLED OFF OF JOINTS, WITH MACHINE IMPLEMENTED 2 PART COMPONENT EPOXY

STANDARD BUTTON LAYOUT TWO WAY UNDIVIDED ROADWAY w/ DOUBLE YELLOW CENTER LINE

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

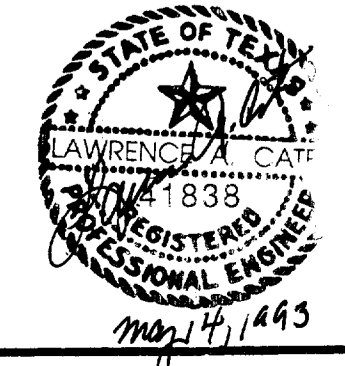
NOTE: DOWELS AND REINFORCING BARS SHALL BE SUPPORTED BY AN APPROVED DEVICE.

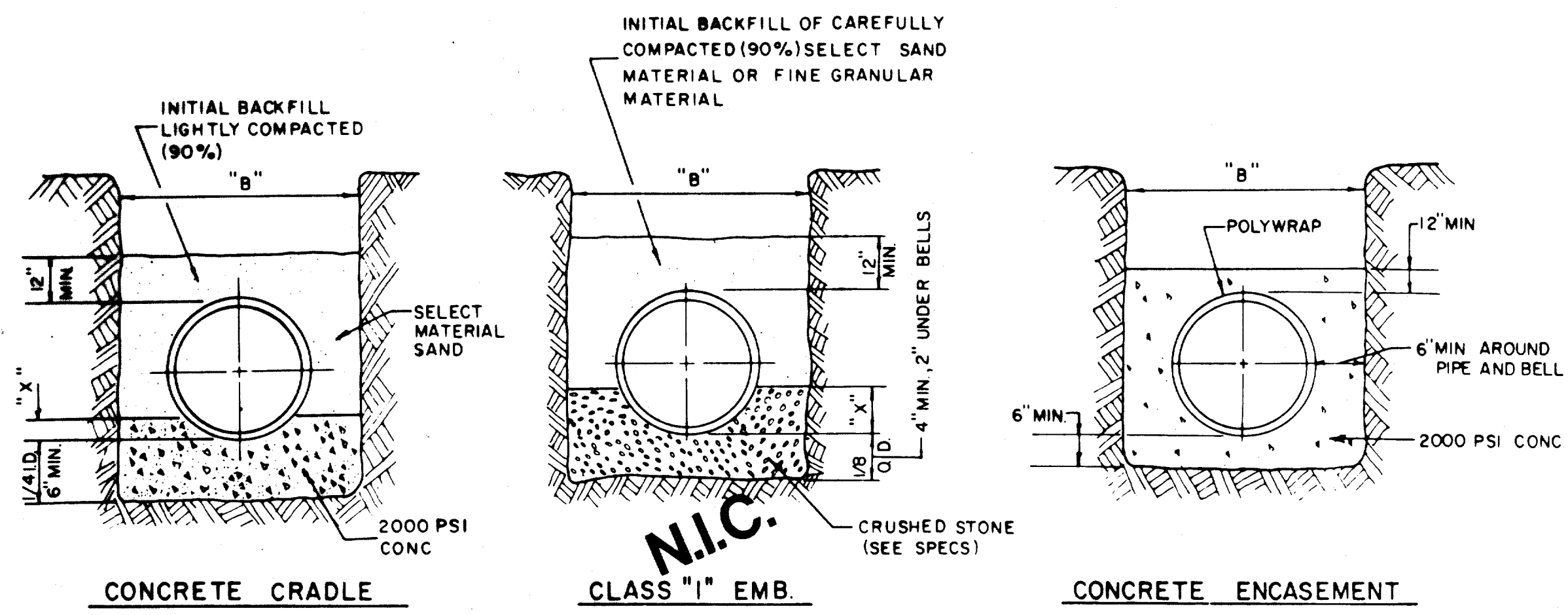
AS-BUILTS
I CERTIFY THIS PROJECT WAS CONSTRUCTED IN GENERAL CONFORMANCE WITH THESE CONSTRUCTION PLANS AND WILL FUNCTION AS DESIGNED.

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

TURN LANES & JOINTS

Designed -	Drawn -	Date -	Job No. -
Approved -	Checked -	Scale -	Sheet SD-4

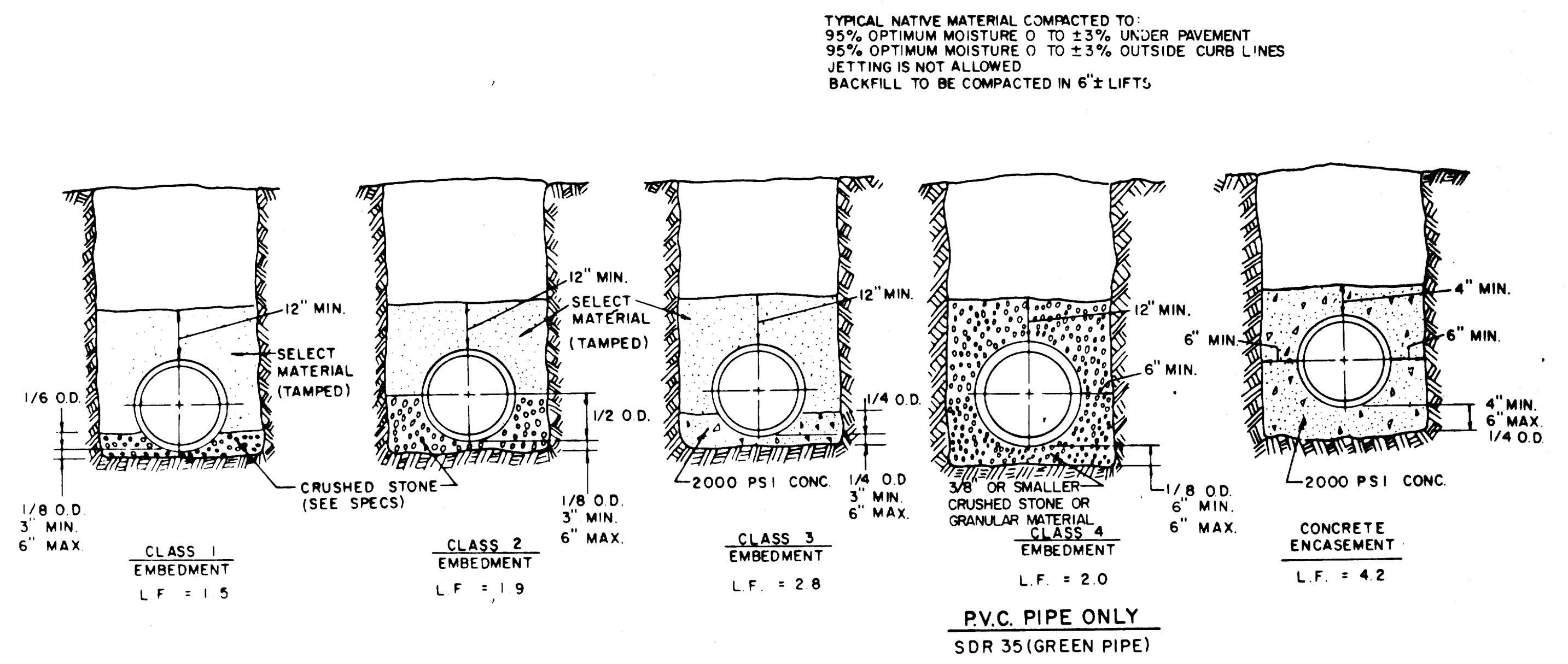




EMBEDMENT DETAILS FOR RCCP WATERLINE

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 ENCASEMENT	
N.I.C. REINFORCED CONCRETE CYLINDER PIPE						
14"	17.25"	2.53'	34"	6.91	16.07	5.16
16"	19.25"	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

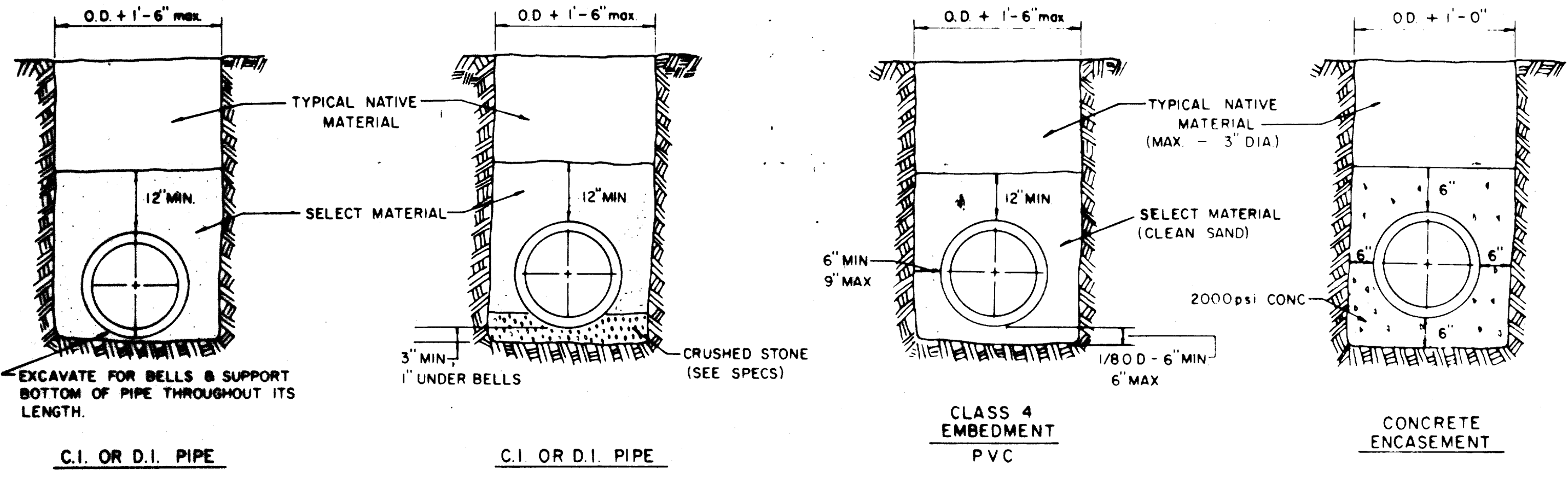
TABLE OF QUANTITIES OF 2000 PSI CONCRETE, GRAVEL OR CRUSHED STONE IN CUBIC YARDS PER 100 LINEAR FEET FOR EACH CLASS EMBEDMENT

TABLE OF QUANTITIES PER 100 LINEAR FEET REINFORCED CONCRETE PIPE

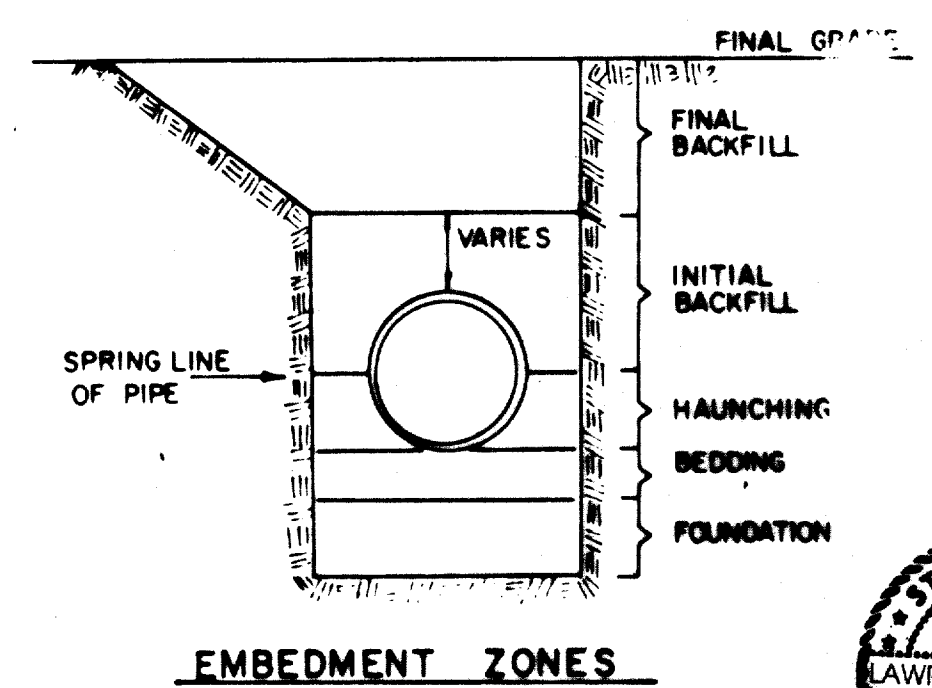
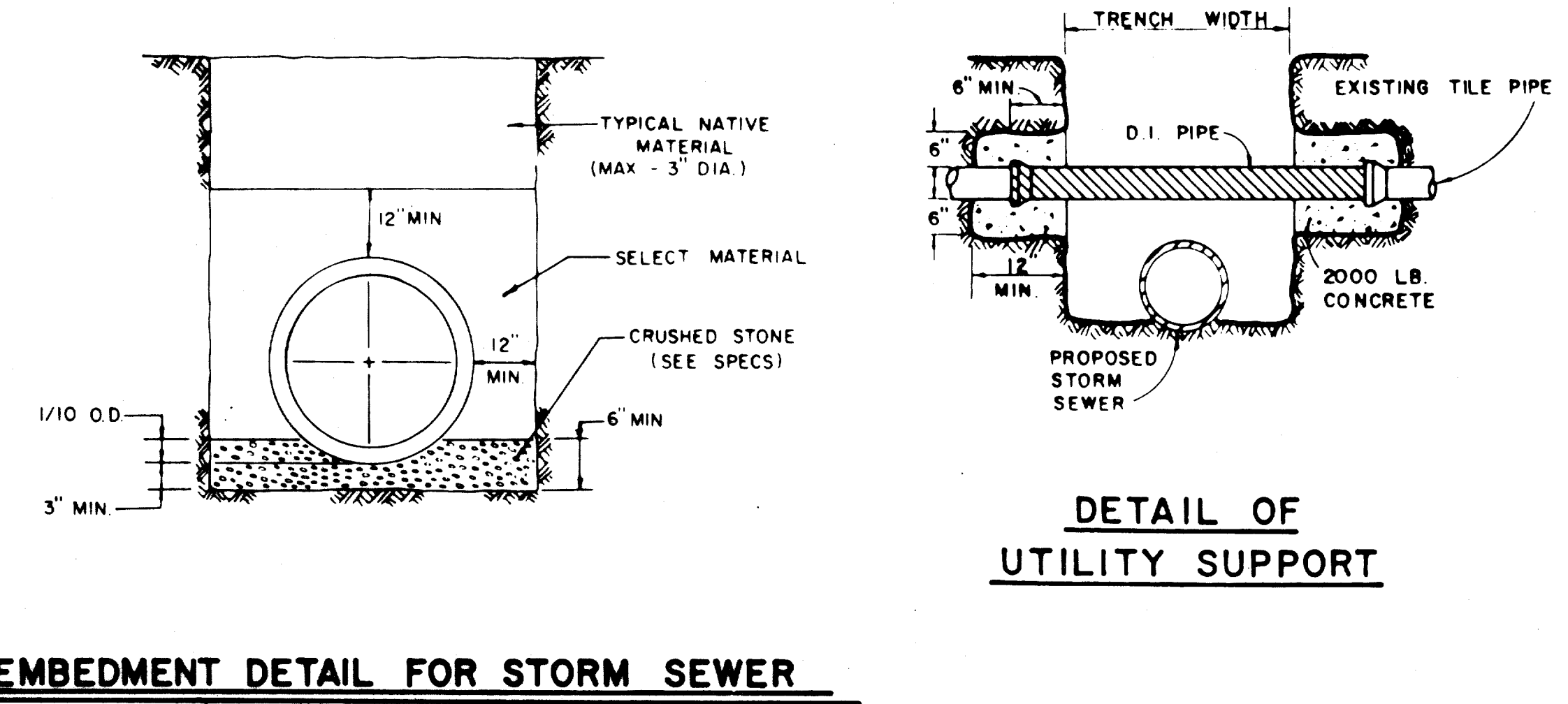
SIZE OF PIPE IN INCHES I.D.	O.D. OF PIPE IN INCHES	TRENCH WIDTH IN INCHES	TRENCH WIDTH IN FEET	CLASS 1 EMBEDMENT CRUSHED STONE	CLASS 2 EMBEDMENT CRUSHED STONE	CLASS 3 EMBEDMENT CONCRETE	CONCRETE ENCASEMENT
12	16.00	32	2.67	4.1	6.5	4.8	15.8
15	19.50	36	3.00	4.8	7.8	6.4	19.2
18	23.00	39	3.25	5.7	9.2	8.2	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	34.8
33	40.50	62	5.17	15.1	23.8	19.3	39.2
36	44.00	67	5.58	18.0	28.6	22.1	43.8

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		



EMBEDMENT DETAILS FOR WATER MAIN



AS-BUILTS

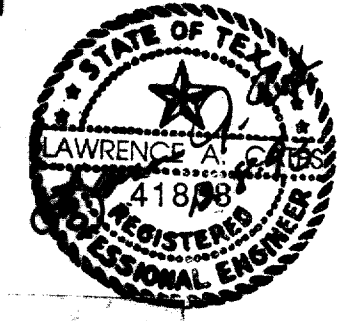
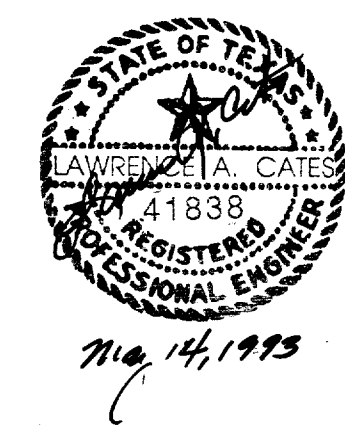
I CERTIFY THIS PROJECT WAS CONSTRUCTED IN GENERAL CONFORMANCE WITH THESE CONSTRUCTION PLANS AND WILL FUNCTION AS DESIGNED.

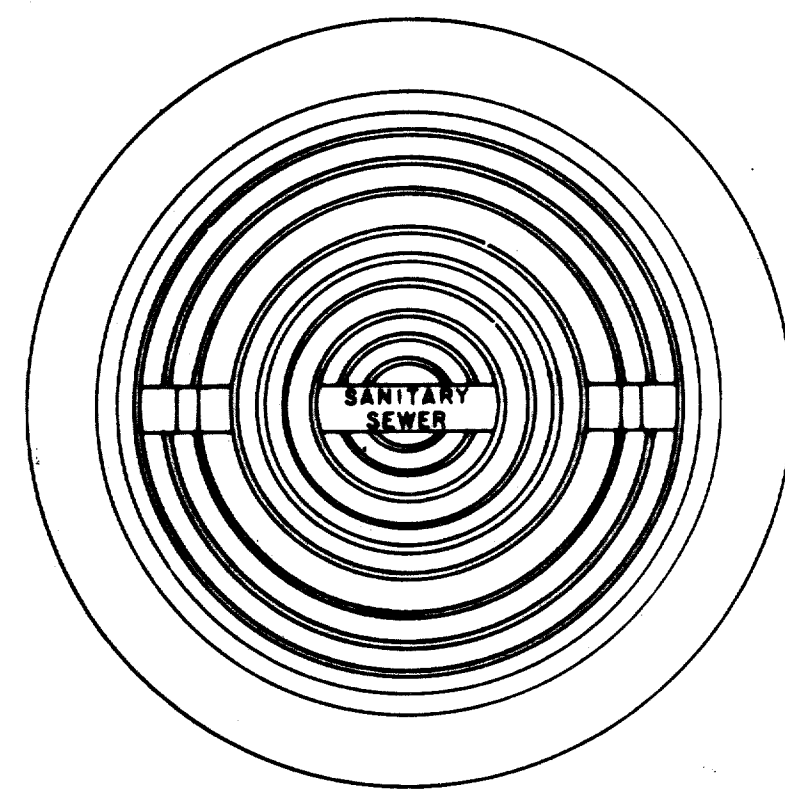
TOWN OF ADDISON, TEXAS
DEPARTMENT OF ENGINEERING

STANDARD CONSTRUCTION DETAILS

EMBEDMENT DETAILS

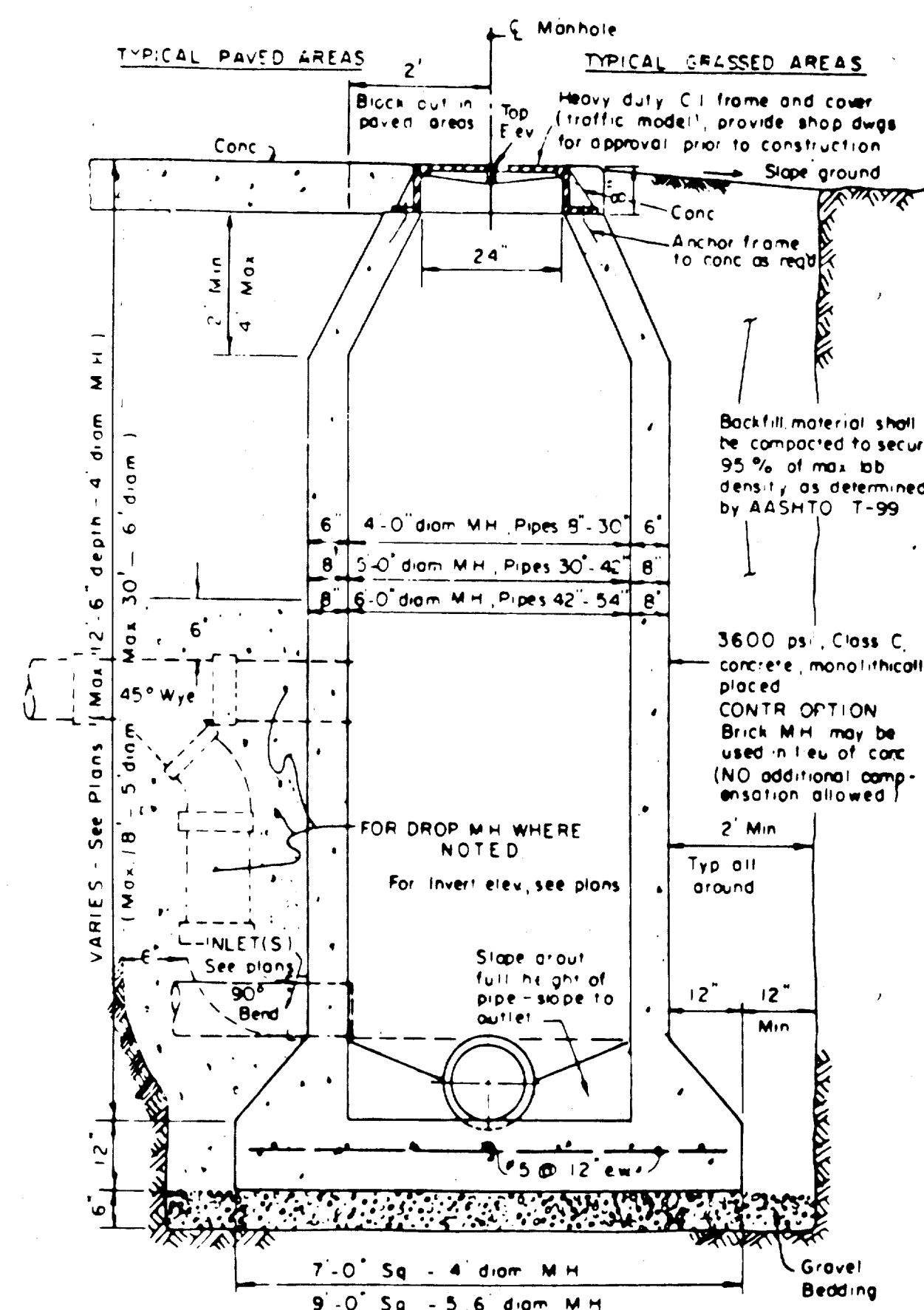
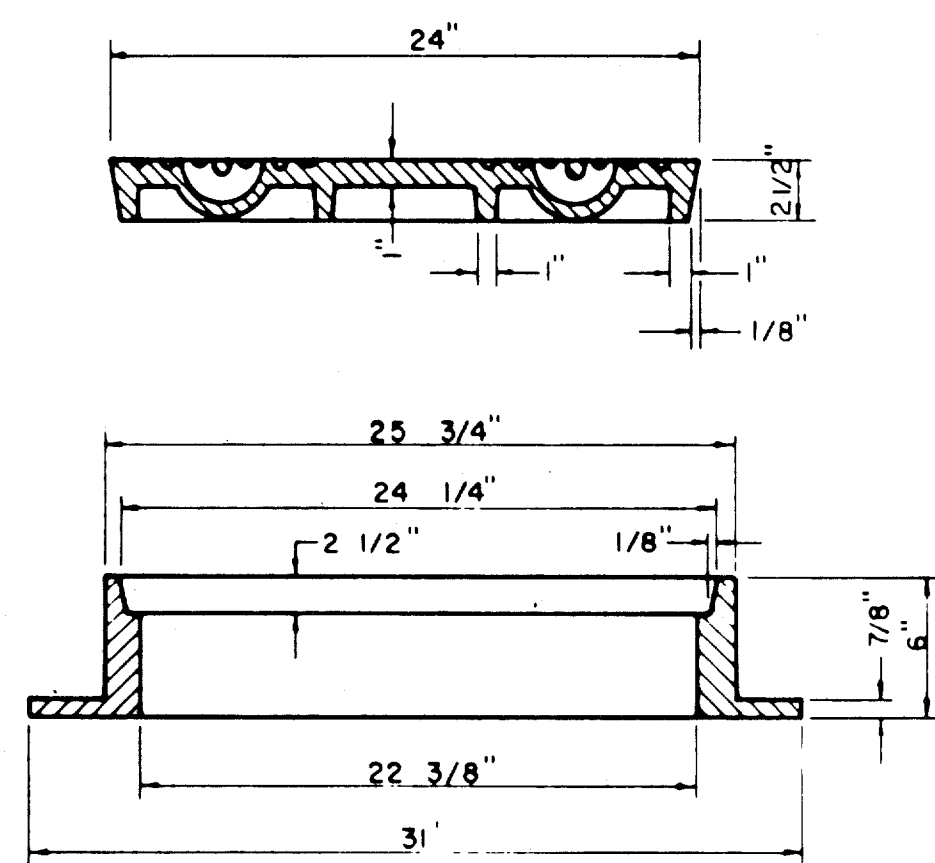
Designed - Drawn - Date - Job No. -
Approved - Checked - Scale - Sheet





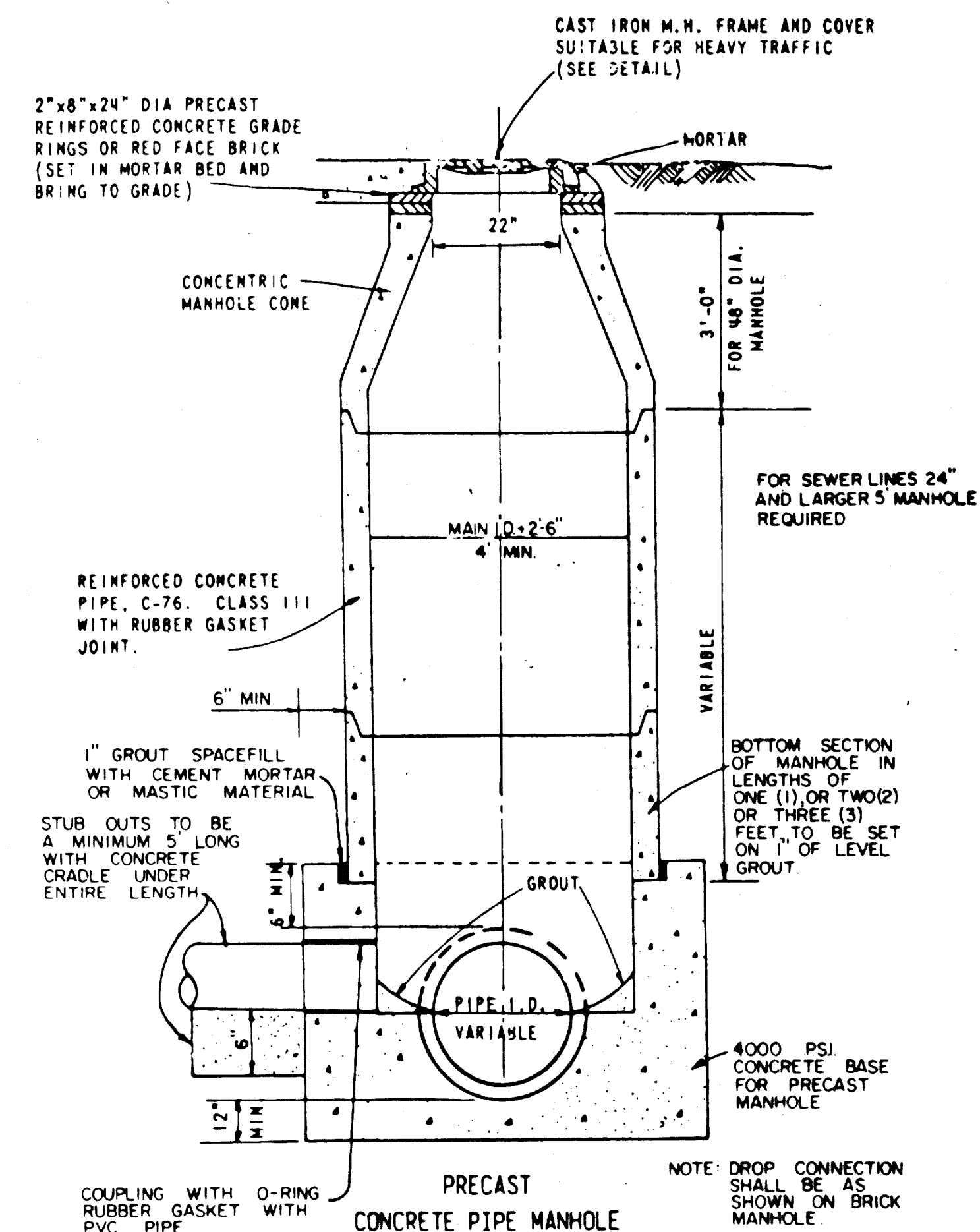
APPROX WEIGHT RING AND COVER 365 LBS.

CAST IRON GRATE AND FRAME DETAIL

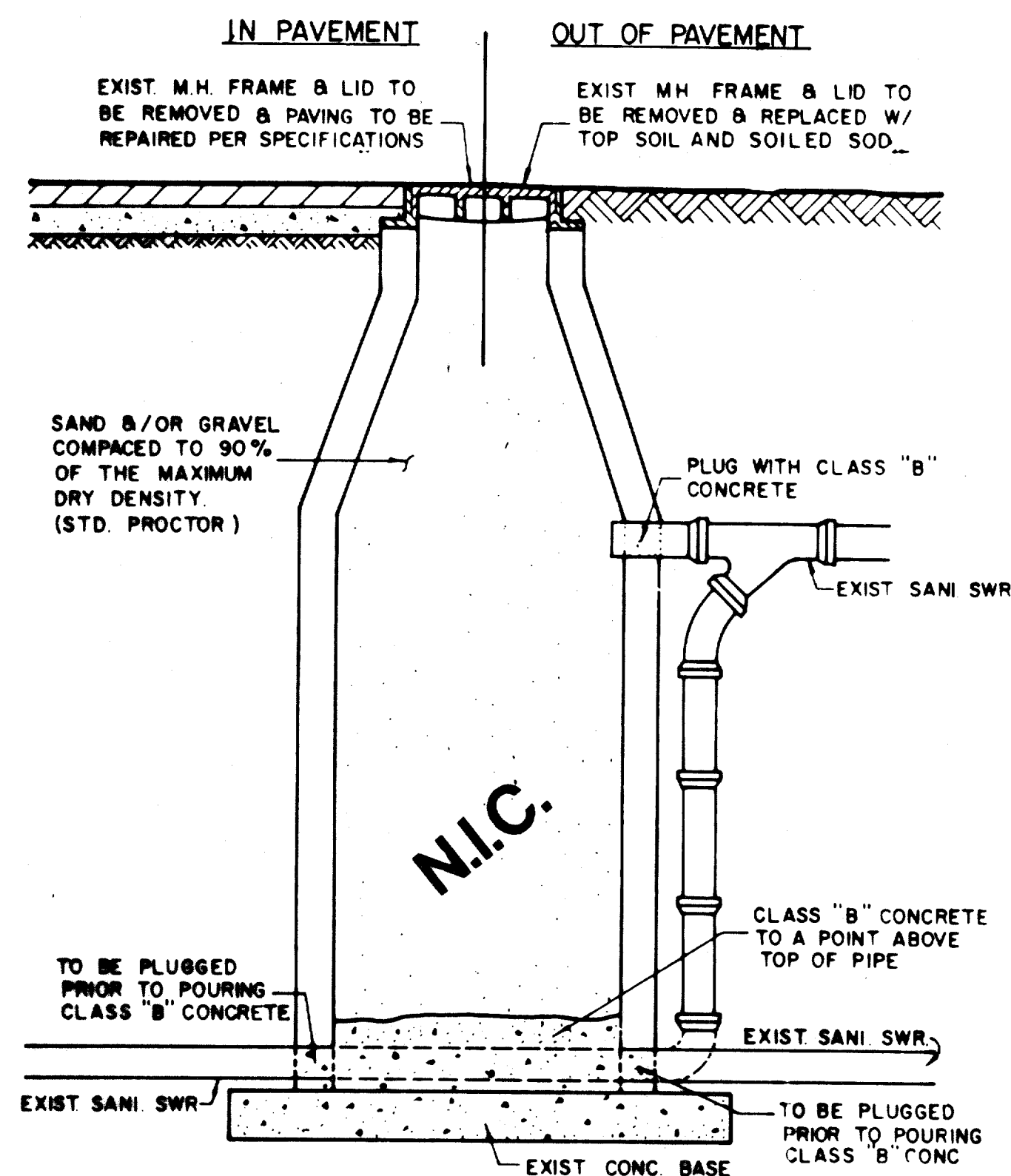


CAST IN PLACE MANHOLE

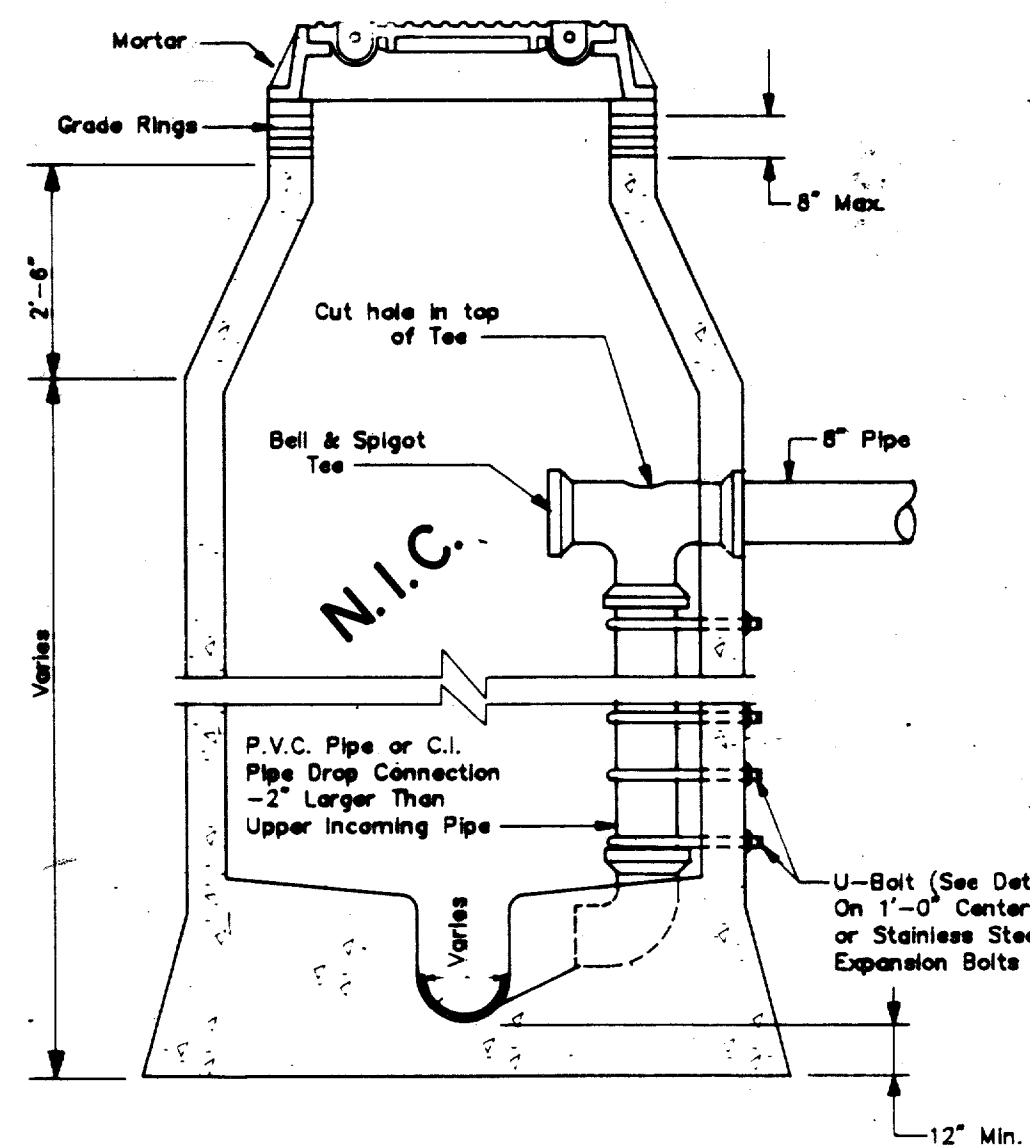
WHERE DROP M.H. IS REQUIRED, USE INSIDE DROP CONNECTION AS PER TOWN OF ADDISON STANDARDS.



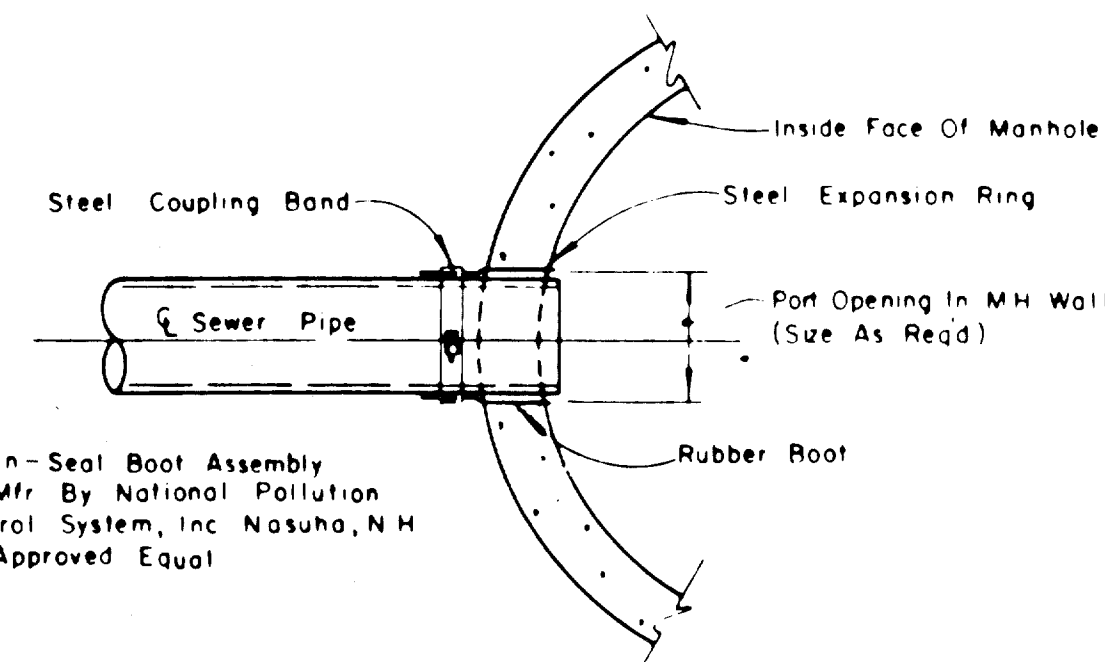
PRECAST MANHOLE



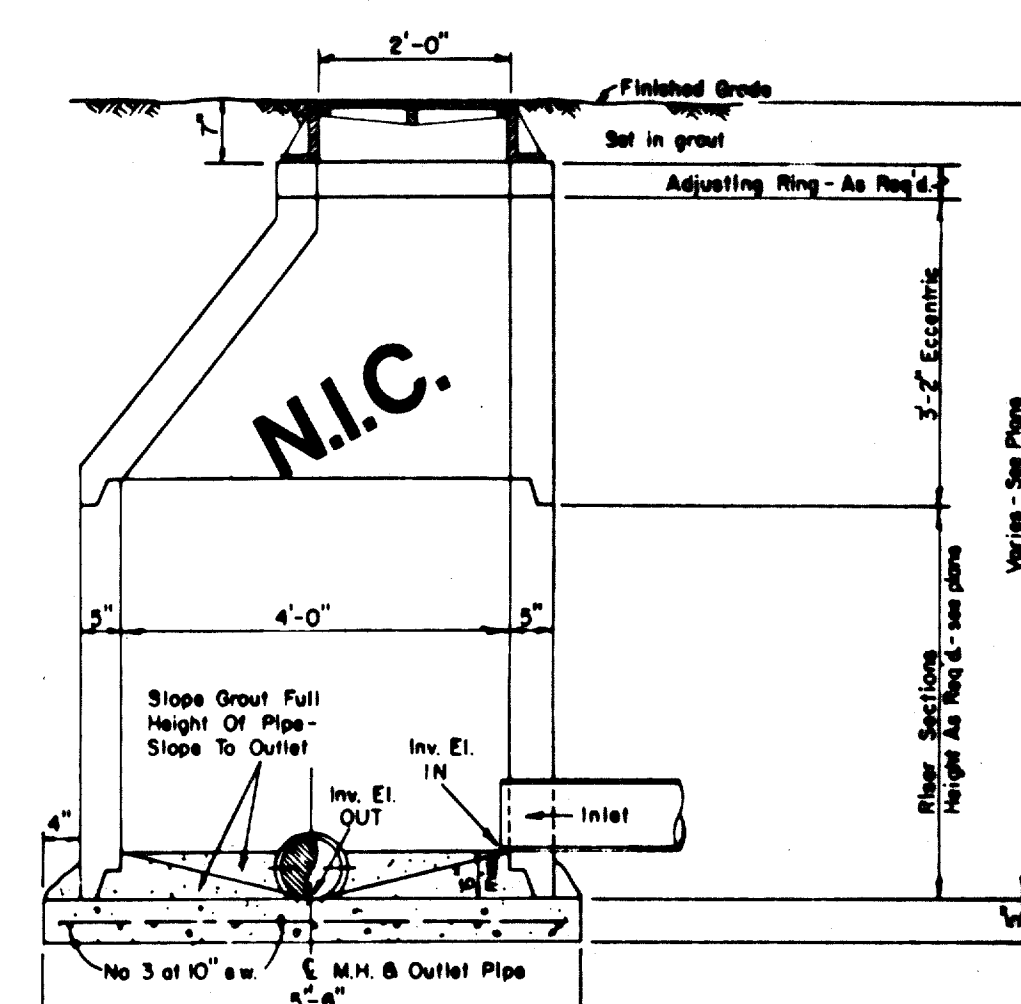
ABANDONMENT OF EXISTING MANHOLE IN AND OUT OF PAVEMENT



DROP CONNECTIONS FOR SANITARY SEWER MANHOLES

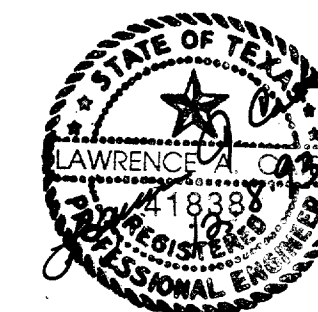


TYPICAL SEWER CONNECTION AT MANHOLE



ECCENTRIC MANHOLE DETAIL

NOTE: Contractor To Install Kor-n-Seal Boot Assembly Per Mr. 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.

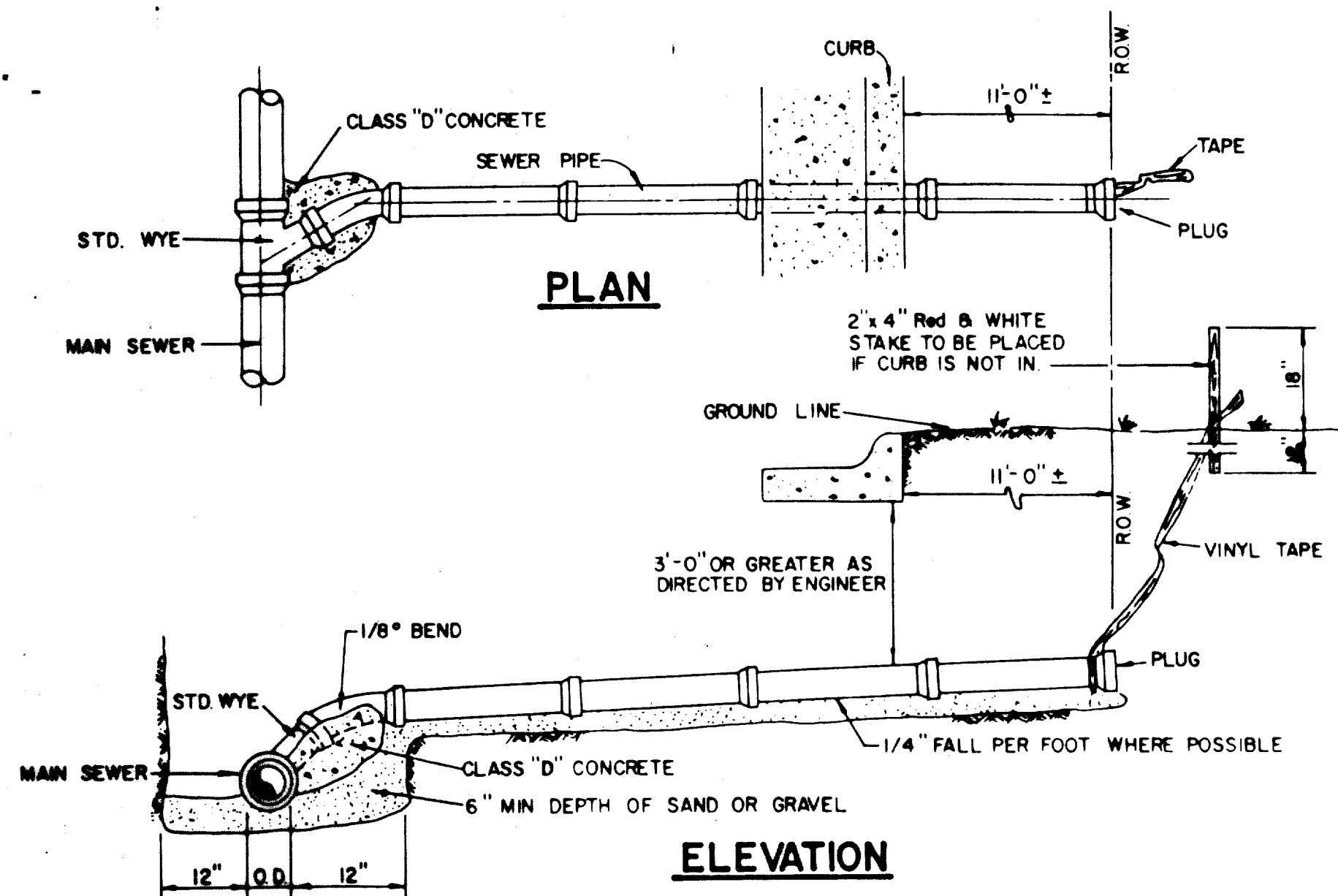
TOWN OF ADDISON, TEXAS
DEPARTMENT OF ENGINEERING
STANDARD CONSTRUCTION DETAILS
SANITARY SEWER

MANHOLES AND CONNECTIONS

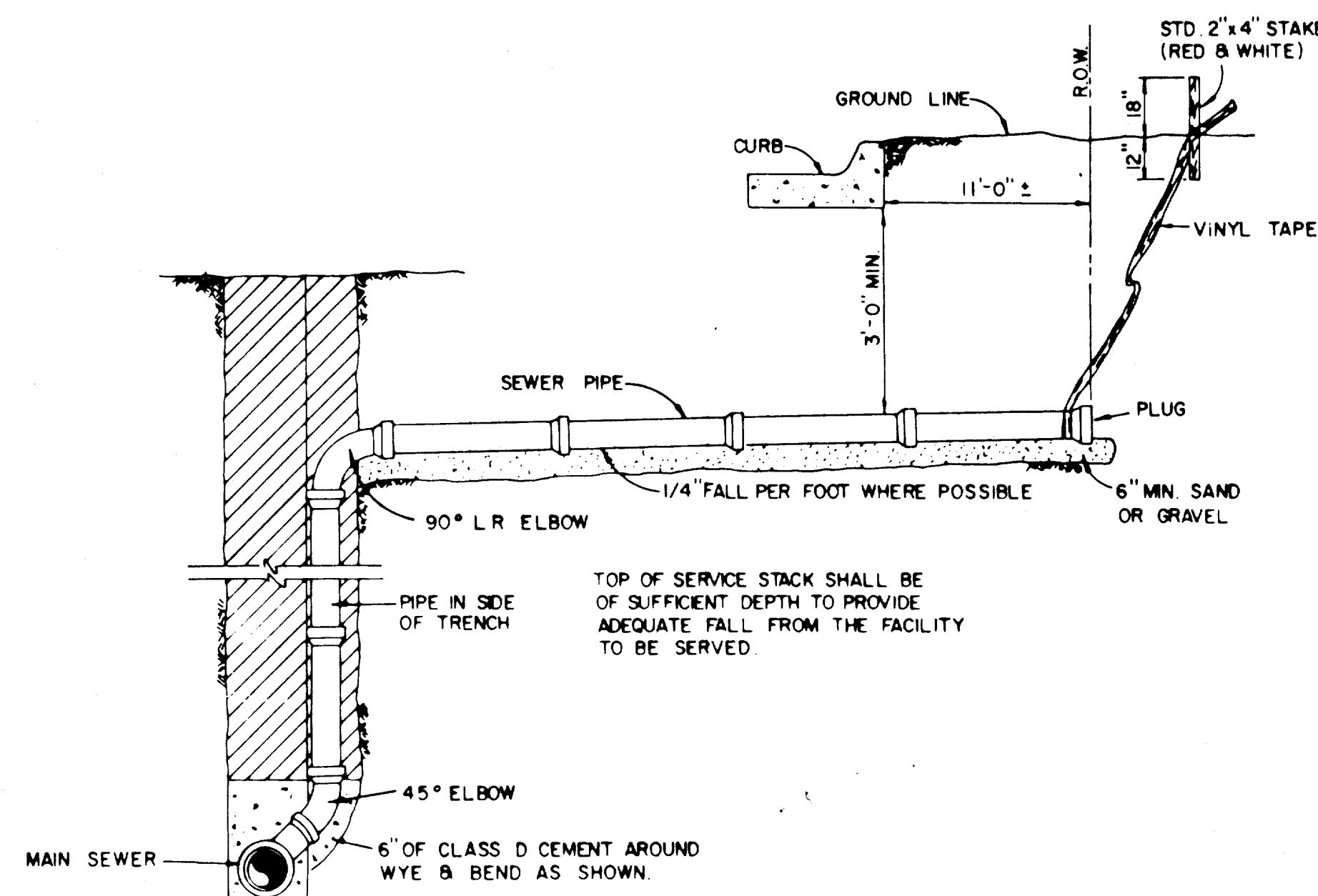
CLASS B Conc. - 2000psi at 28 days (Compressive)



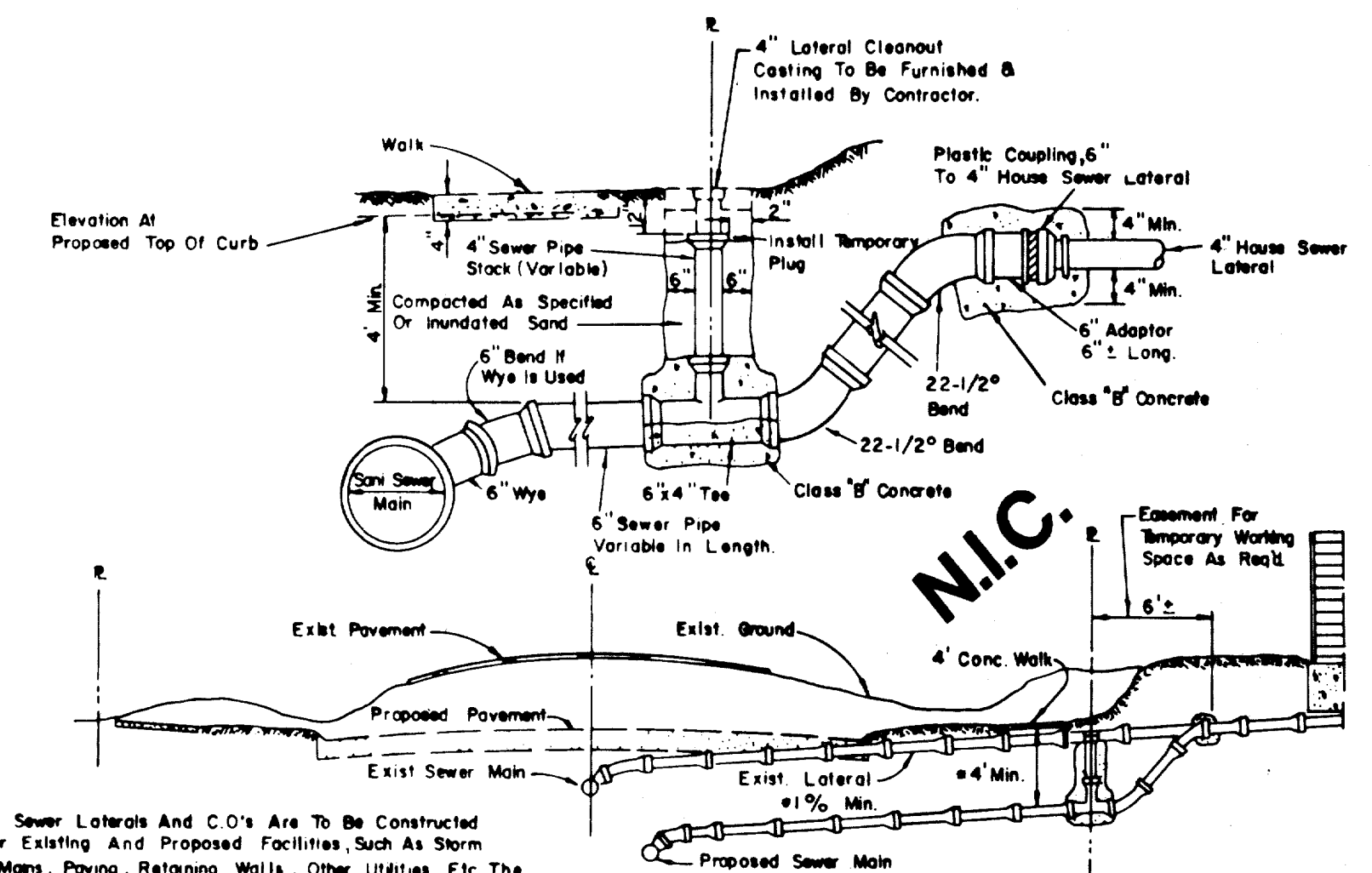
Designed -	Drawn -	Date -	Job No. -
Approved -	Checked -	Scale -	Sheet SD-6



SANITARY SEWER SERVICE CONNECTION

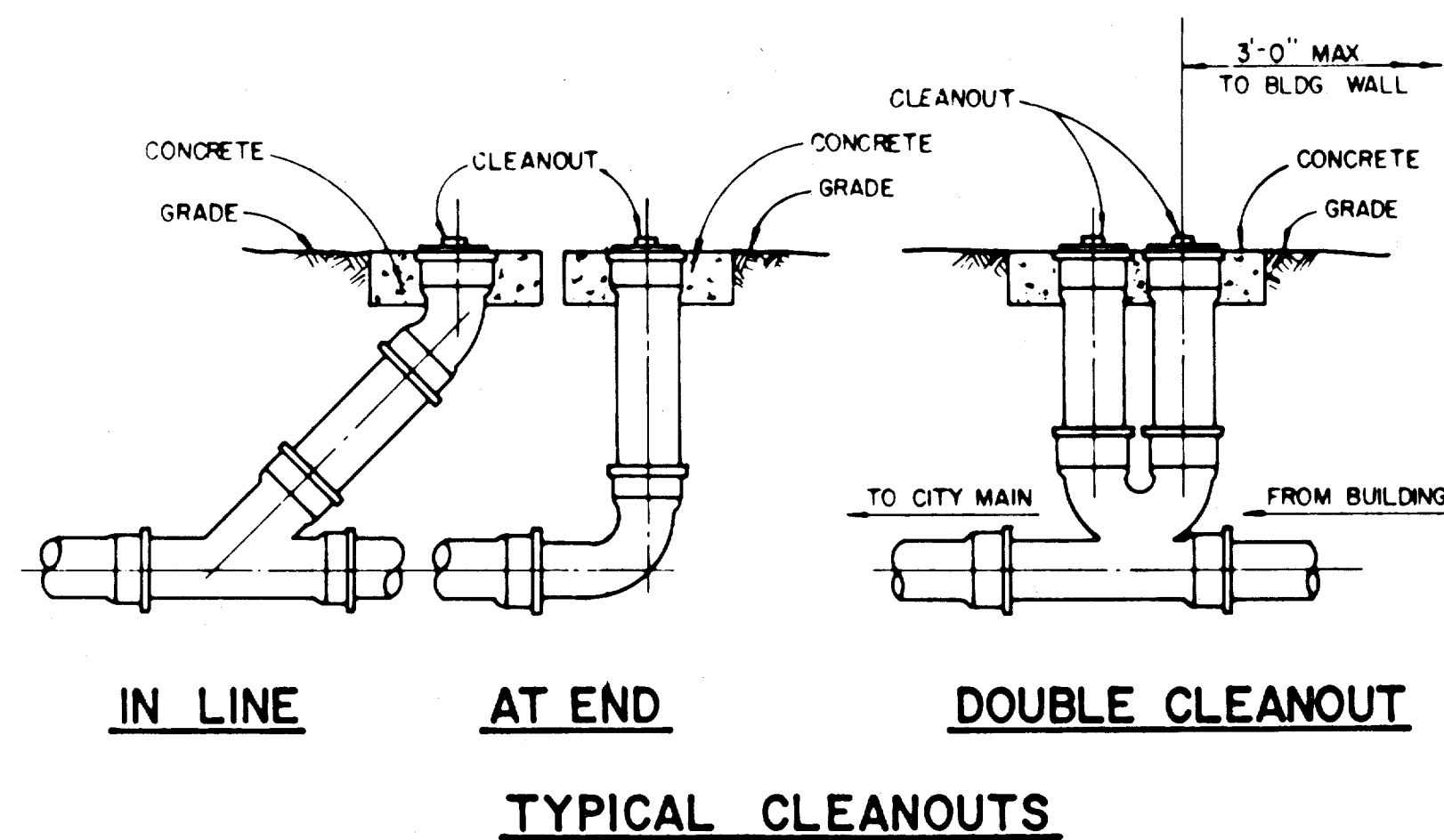
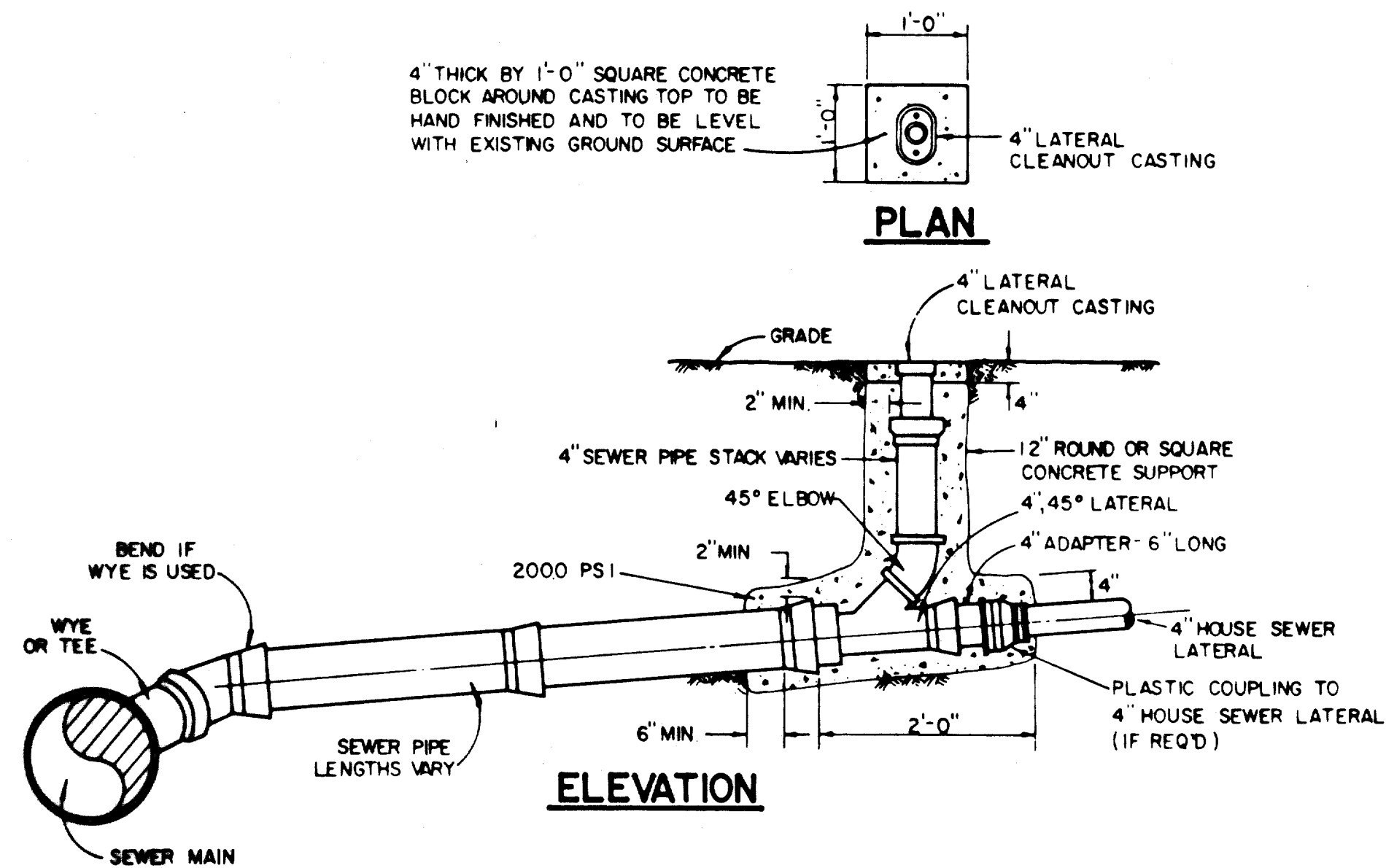


SANITARY SEWER DEEP SERVICE CONNECTION



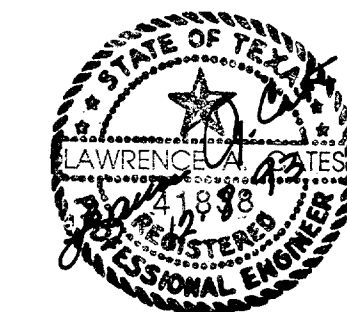
SANITARY SEWER LATERAL REPLACEMENT

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.



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.



May 14, 1993

AS-BUILTS

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

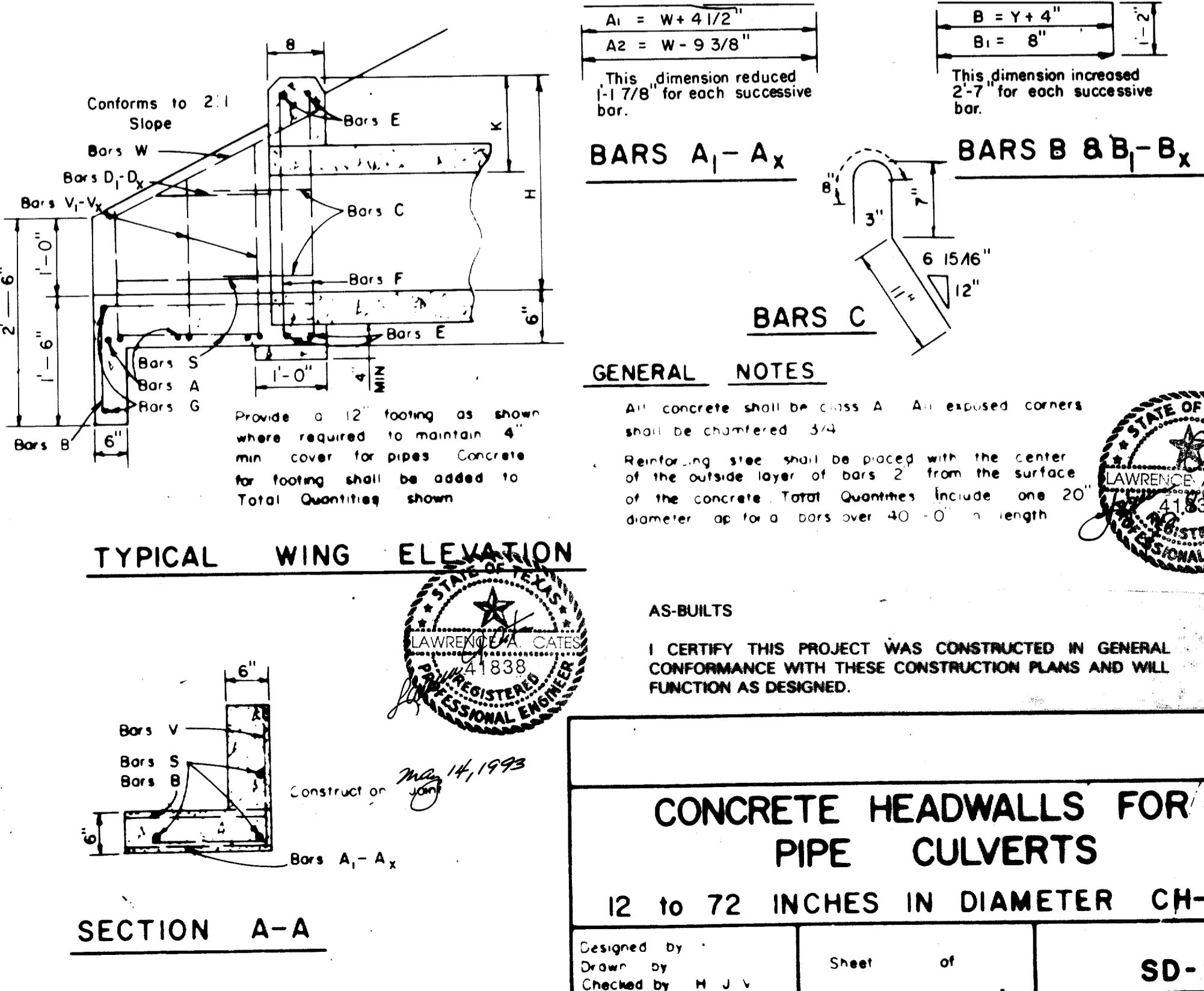
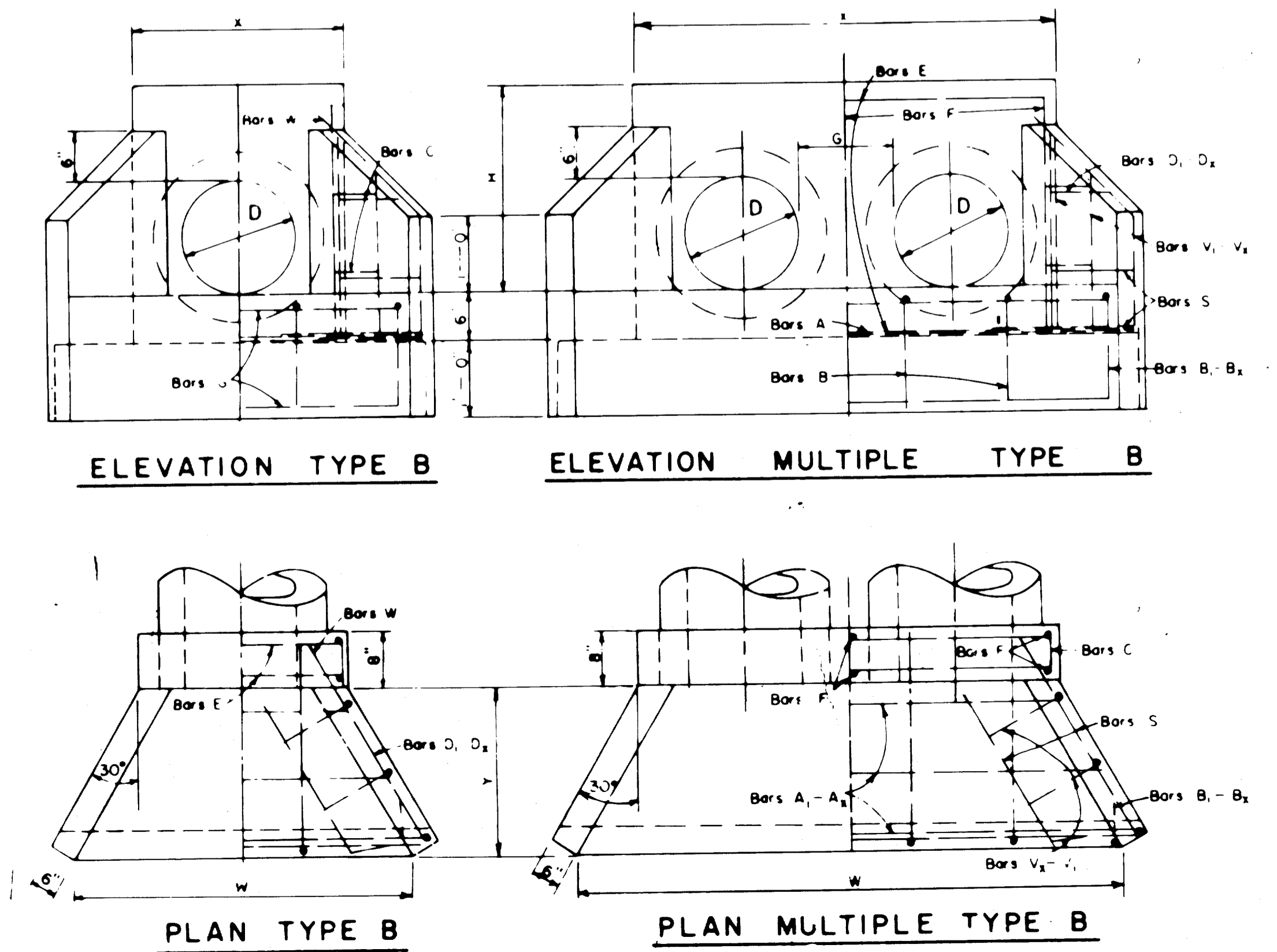
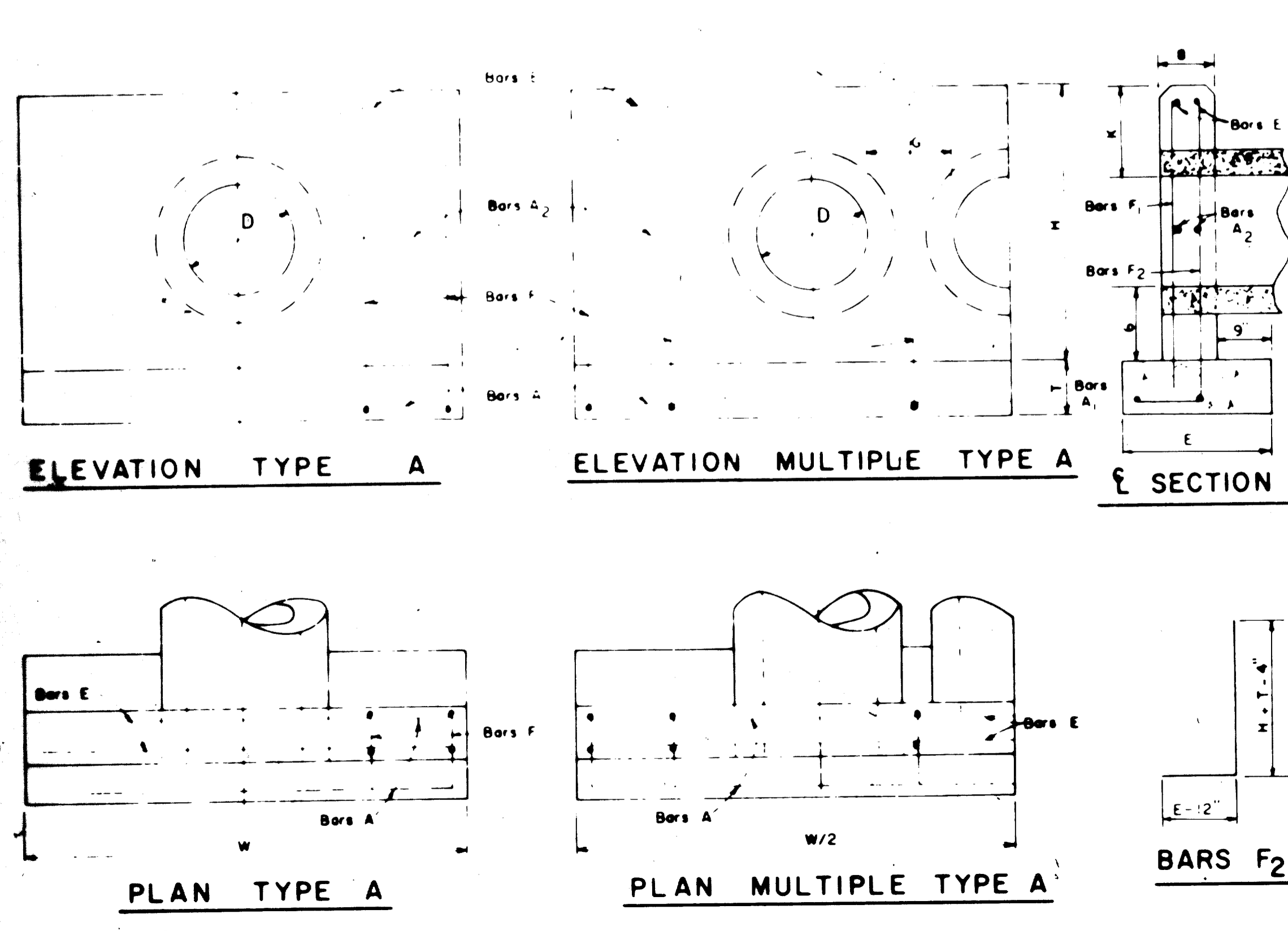
TOWN OF ADDISON, TEXAS
DEPARTMENT OF ENGINEERING

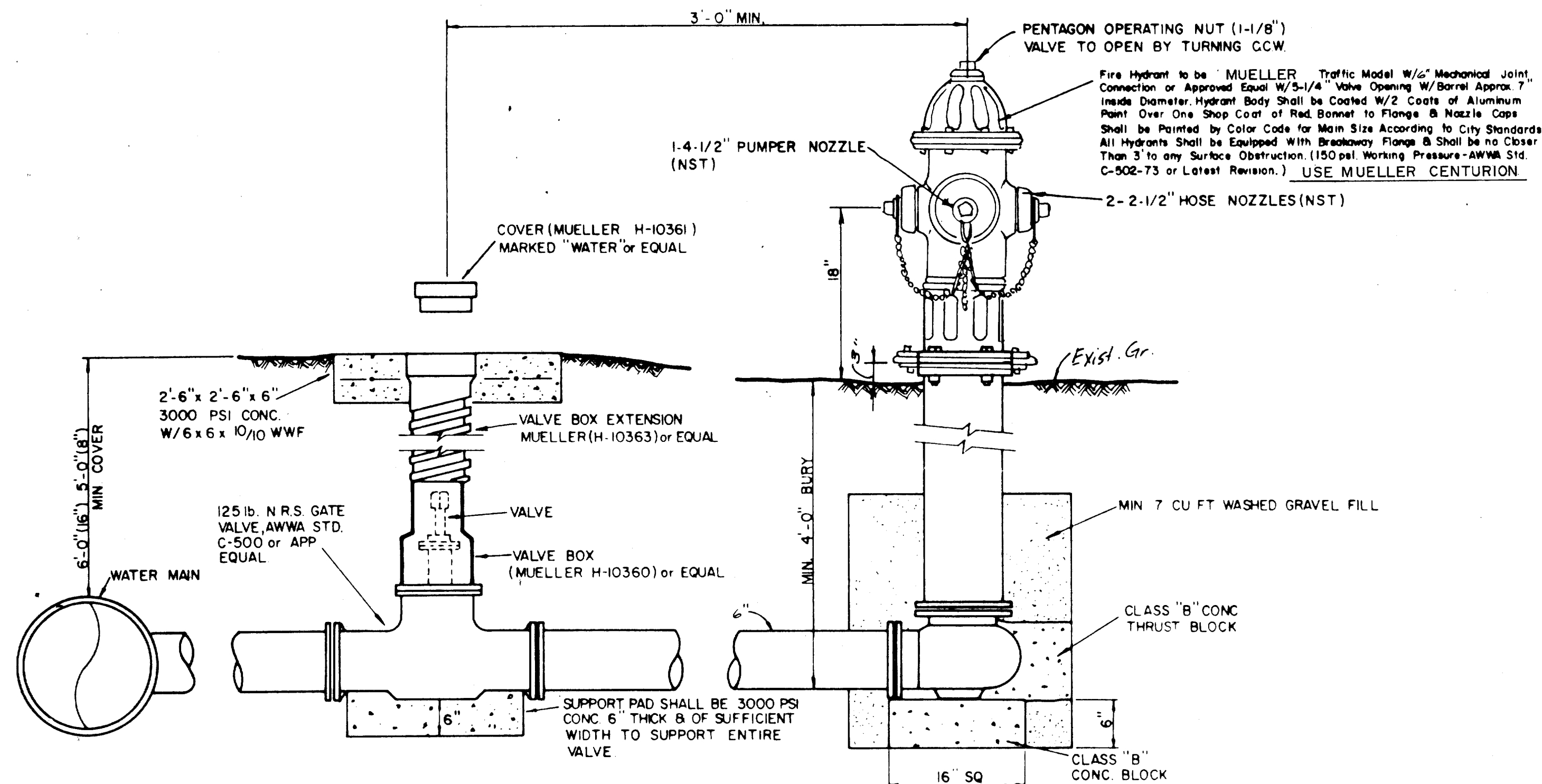
STANDARD CONSTRUCTION DETAILS
SANITARY SEWER

LATERALS AND CLEANOUTS

Designed -	Drawn -	Date -	Job No. -
Approved -	Checked -	Scale -	Sheet SD-7

TABLE OF DIMENSIONS AND QUANTITIES FOR TWO TYPE A HEADWALLS																				TABLE OF DIMENSIONS AND QUANTITIES FOR TWO TYPE B HEADWALLS																													
NO. OF PIPES	DIAM. OF PIPES	TABLE OF DIMENSIONS										TOTAL QUANTITIES		NO. OF PIPES	DIAM. OF PIPES	TABLE OF DIMENSIONS										TOTAL QUANTITIES																							
		G	K	T	E	H	W	Lgth	Wt	LBS	C Y	G	K			X	H	Y	W	Lgth	Wt	LBS	C Y																										
1	12"	12"	12"	9"	1'-9"	2'-6"	7'-0"	6'-8"	10	8	2'-6"	8	6'-8"	28	12	1/2"	2'-11"	23	12	1/2"	3'-8"	29	98	1.48	1	12"	12"	12"	9"	1'-9"	2'-6"	7'-0"	6'-8"	10	8	2'-6"	8	6'-8"	28	12	1/2"	2'-11"	23	12	1/2"	3'-8"	29	98	1.48

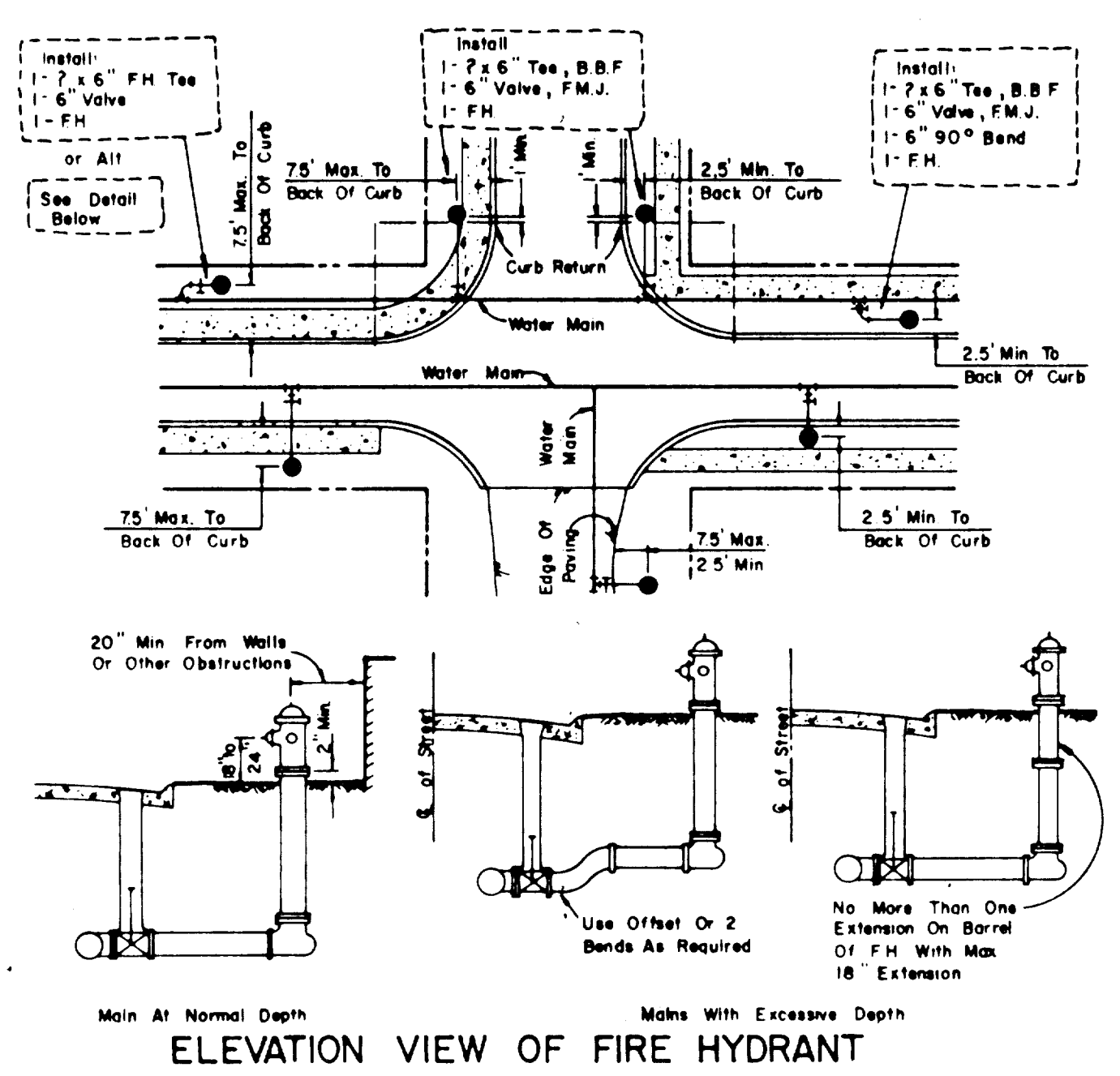




VALVE BOX DETAIL
(SEE PLANS FOR "MAIN SIZE")

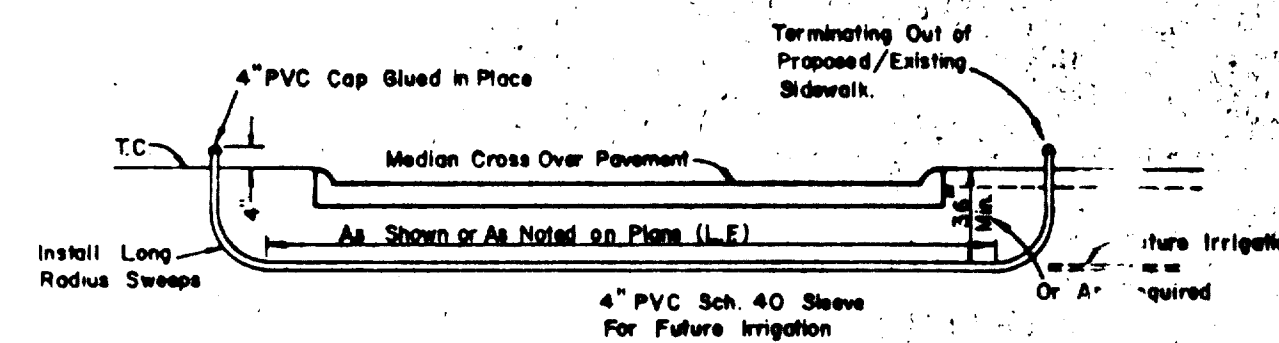
FIRE HYDRANT INSTALLATION
(INCLUDES 6" VALVE)
No Scale

- 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.

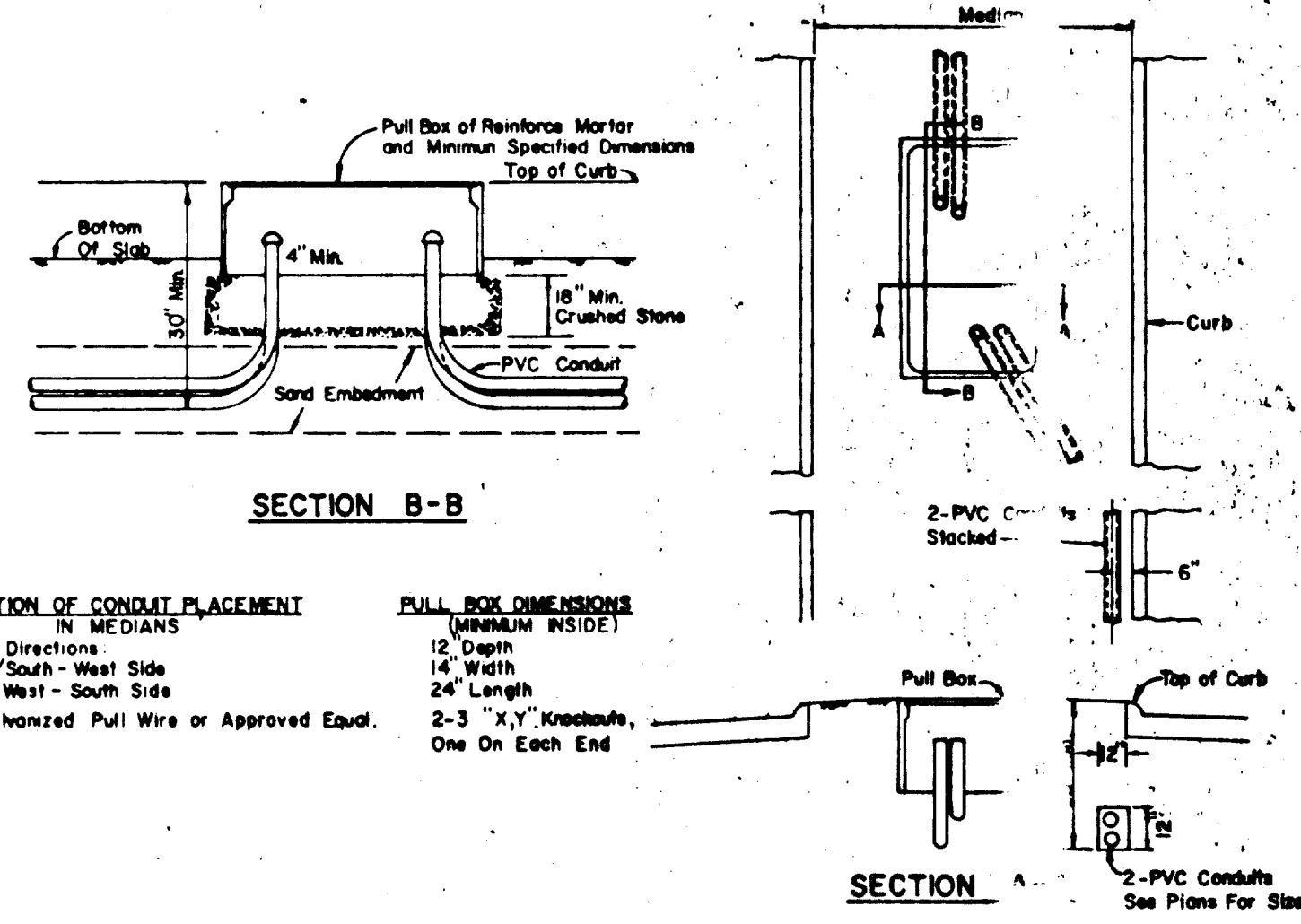


ELEVATION VIEW OF FIRE HYDRANT

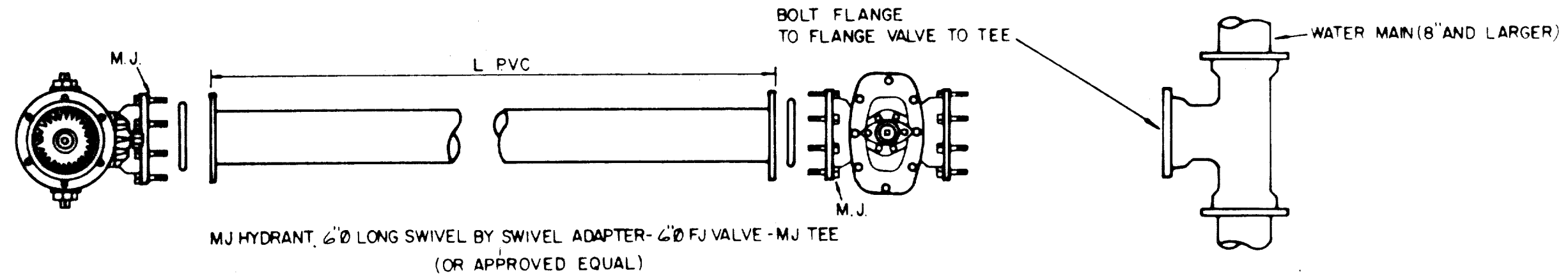
- GENERAL NOTES**
- Q. of F.H. Barrel Shall Be Not Less Than 6.0' Or More Than 9.0' From Back Of Curb Or Edge Of Pavement.
 - Do Not Set F.H. in an Existing Or Proposed Sidewalk, Unless Otherwise Noted.
 - All F.H. Tees Shall Be M.J. With Anchoring On The Branch With M.J., M.J. 6" Valve.
 - Set F.H. On The Lot Line Extended When Possible.
 - On Private Contracts, The Developer/Engineer Will Stake Location & Grade.
 - Never Place F.H. Where Fire Truck Could Not Park Beside It.



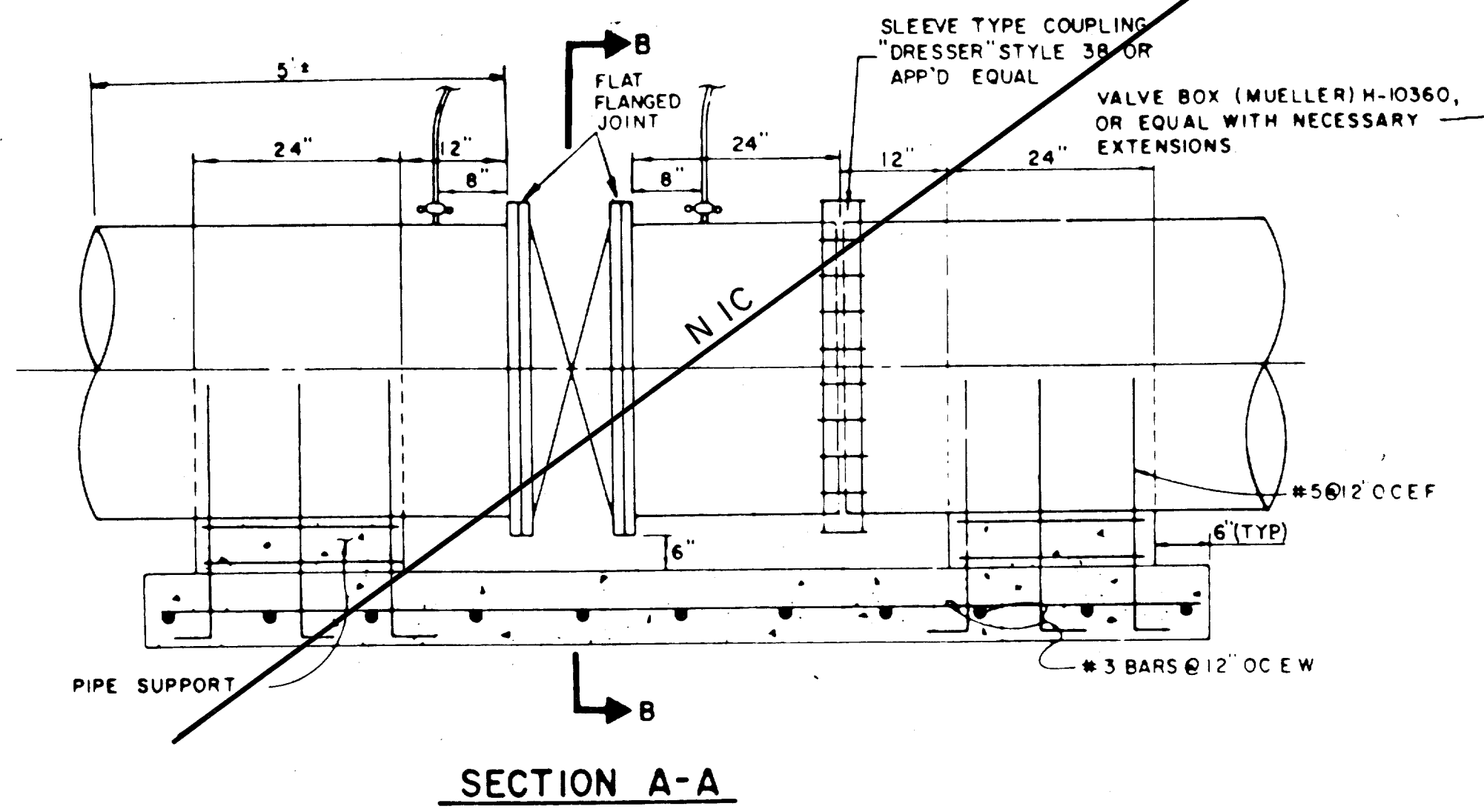
PVC SLEEVE FOR FUTURE IRRIGATION



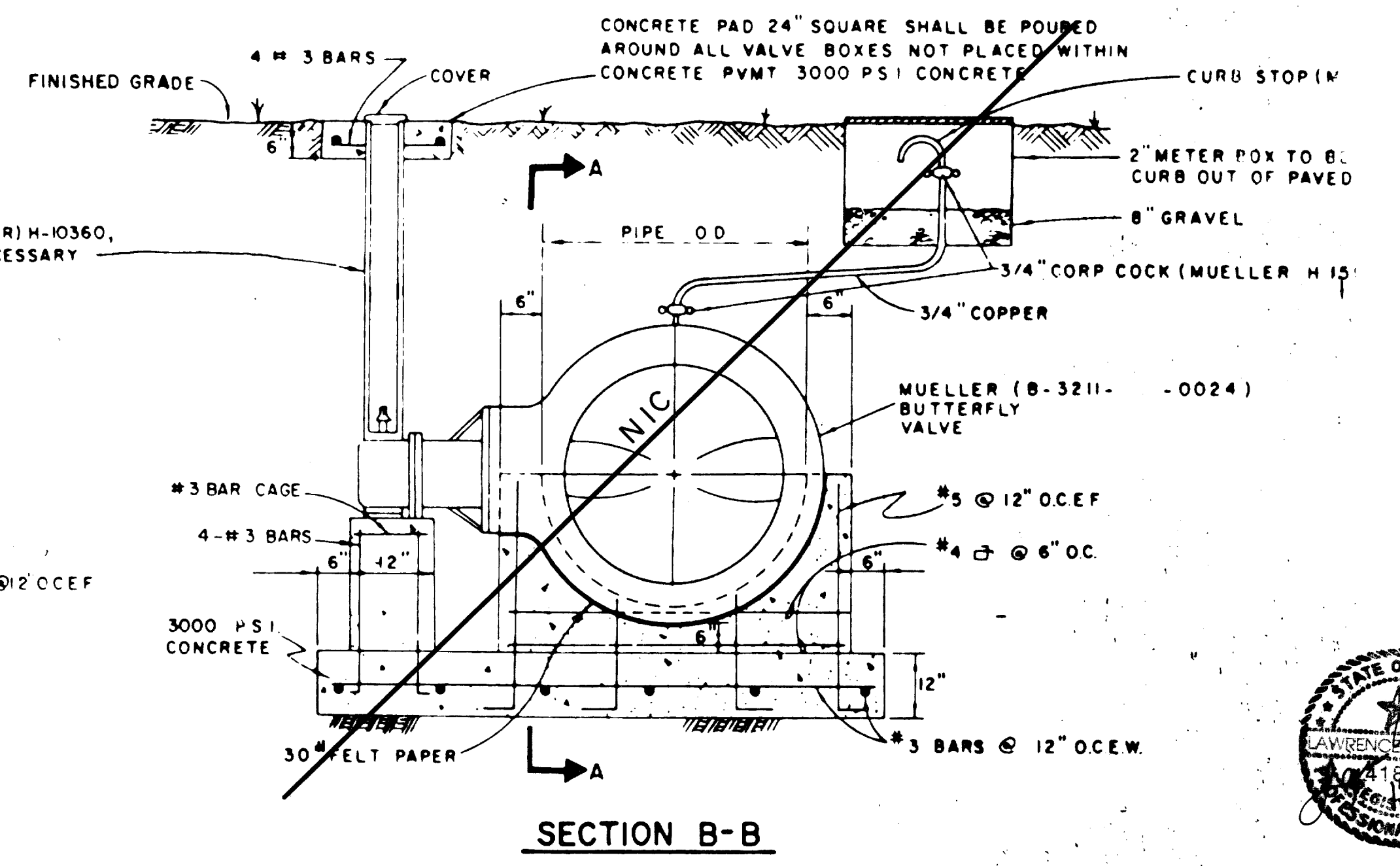
PULL BOX & CONDUIT DETAIL



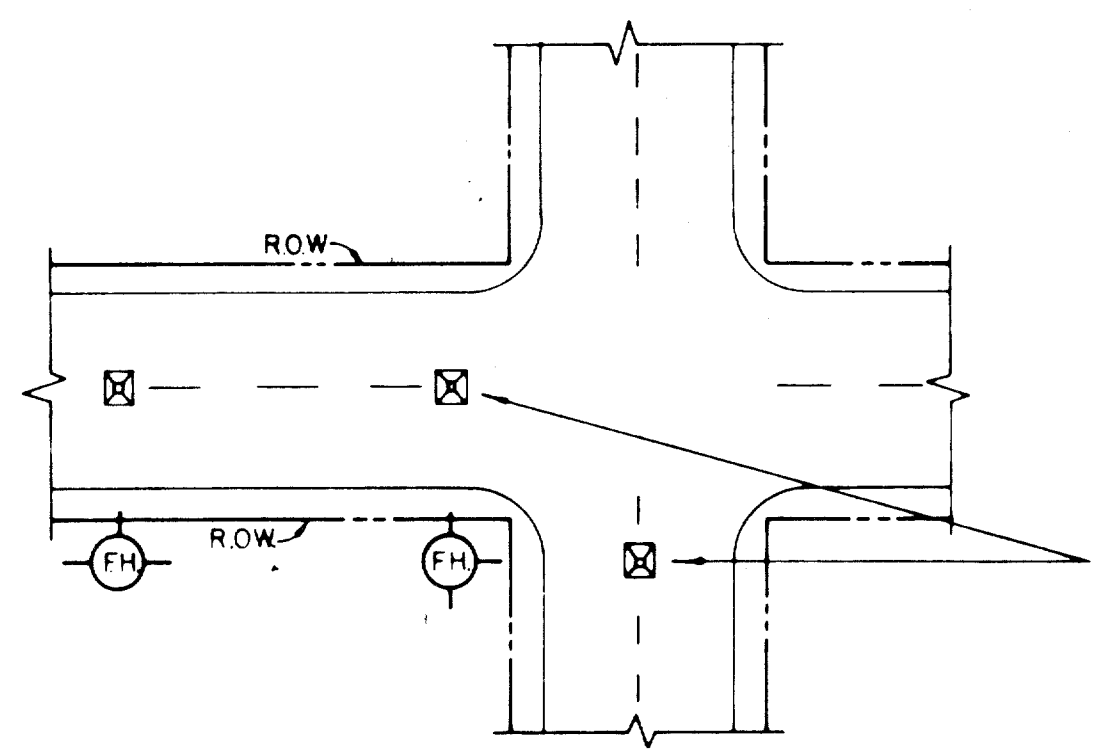
TYPICAL FIRE HYDRANT INSTALLATION



BUTTERFLY VALVE DETAIL

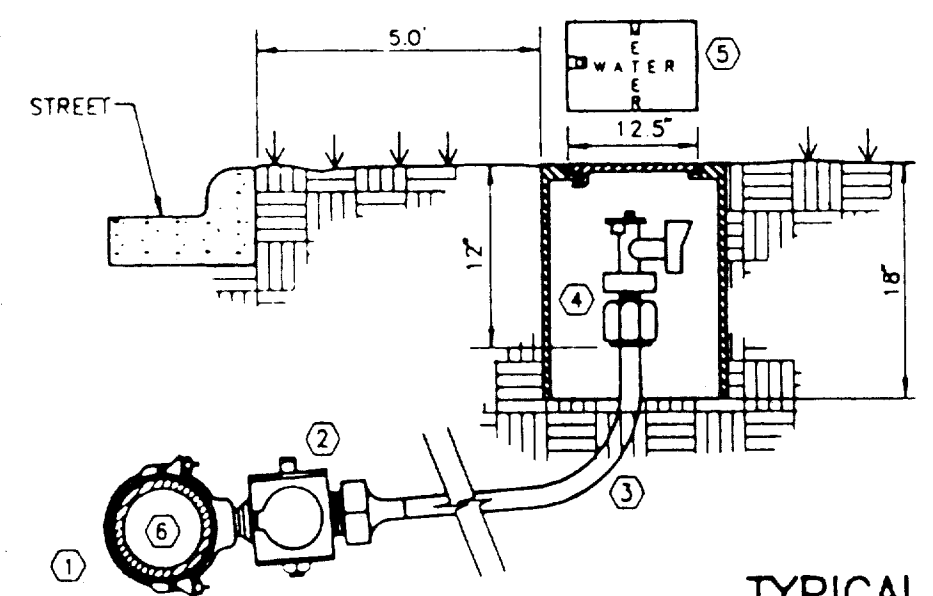


SECTION B-B



TYPICAL FIRE HYDRANT REFLECTOR INSTALLATION

A BLUE STIMMONITE 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



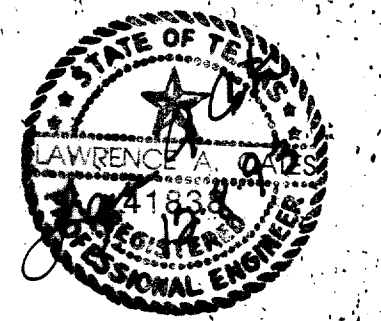
TYPICAL WATER SERVICE DETAIL

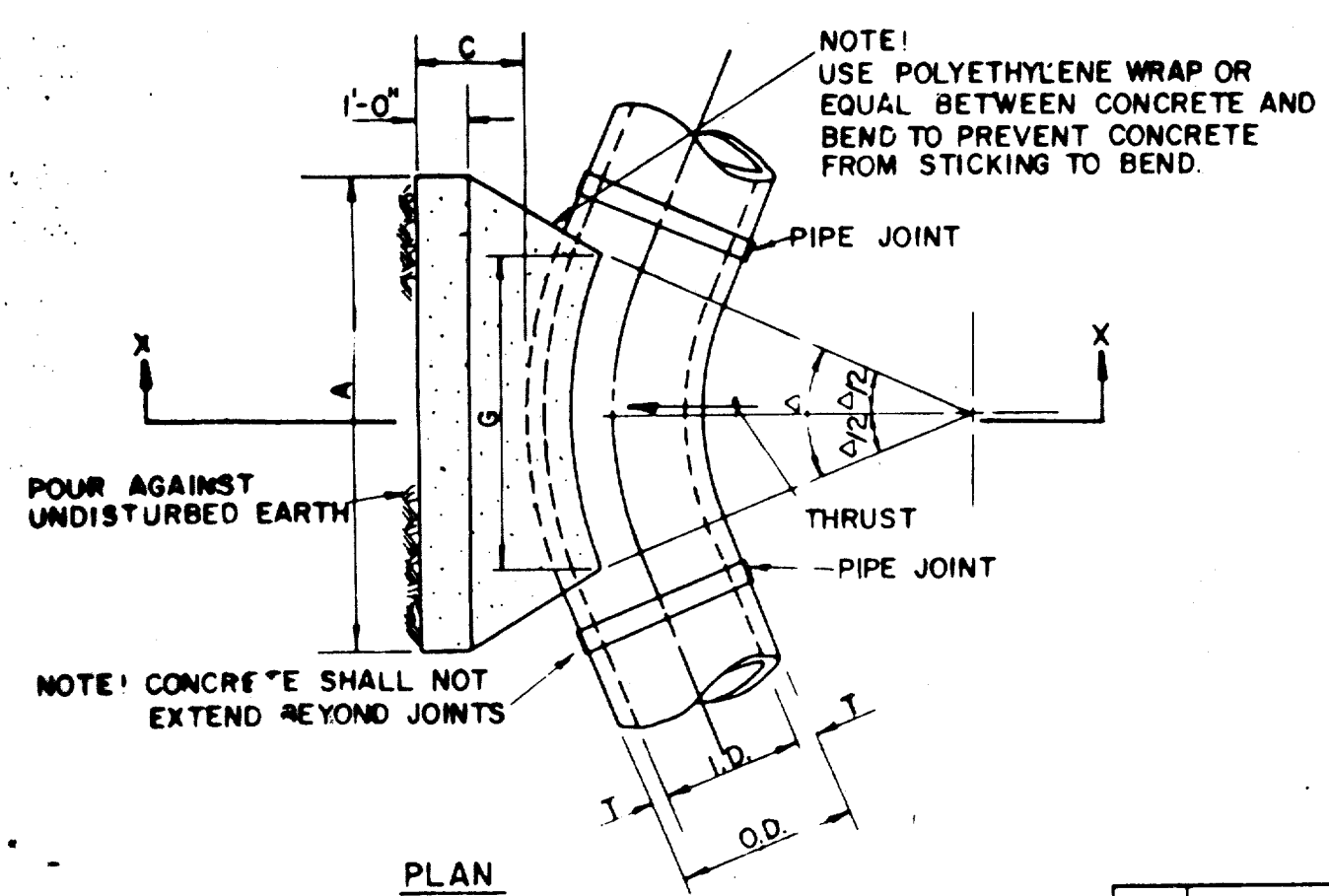
- DOUBLE STRAP BRONZE SADDLE W/CCW THREADS. MUELLER.
- CORPORATION STOP W/CCW THREADS. MUELLER H-15008 COMPRESSION OR H-15000 FLARED.
- 3/4" TYPE "K" SOFT COPPER W/NO SPLICES
- ANGLE STOP W/LOCK WING. MUELLER H-14255 COMPRESSION OR H-14255 FLARED.
- WATER METER BOX (RECTANGULAR SHAPE ONLY) CONCRETE OR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

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

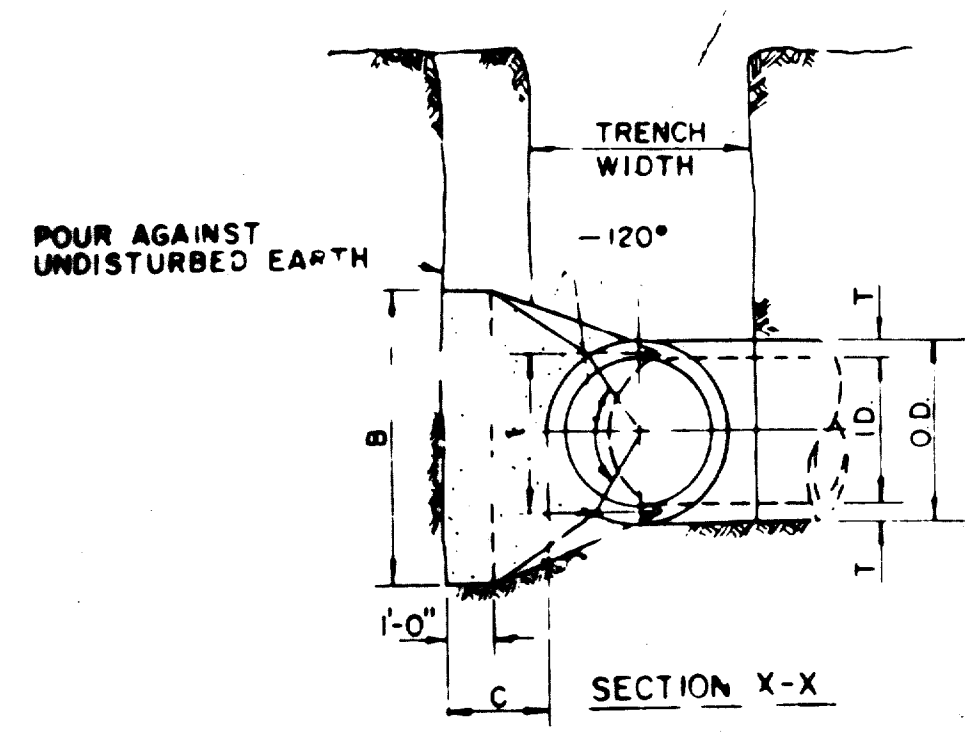
TOWN OF ADDISON, TEXAS
DEPARTMENT OF ENGINEERING
STANDARD CONSTRUCTION DETAILS
WATER
FIRE HYDRANTS, PULL BOXES AND VALVES

Designed -	Drawn -	Date -	Job No. -
Approved -	Checked -	Scale -	Sheet SD-10





I.D. (IN.)	T (IN.)	C 11.25°			C 22.50°			E (IN.)
		A	B	VOL. C.Y.	A	B	VOL. C.Y.	
4.68	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				
20.07	1.5	1.5	1.5	1.8				
24.09	1.5	1.5	1.5	2.1				
30.29	1.5	1.5	1.5	2.6				
36.45	1.5	2.3	3.3					
42.30	1.8	2.6	3.8					
48.55	2.0	3.0	4.3					
54.60	2.3	3.4	4.8					
60.65	2.5	3.8	5.3					
66.68	2.8	4.1	5.7					
72.75	3.0	4.5	6.3					
78.75	3.3	4.9	6.7					
84.80	3.5	5.3	7.2					
90.85	3.8	5.6	7.7					
96.90	4.0	6.0	8.2					

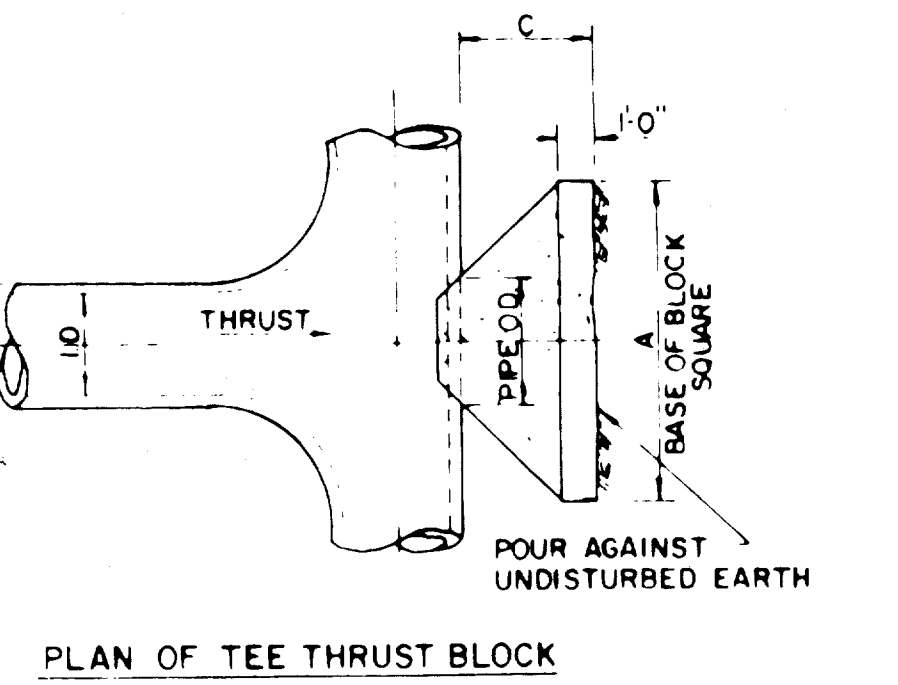
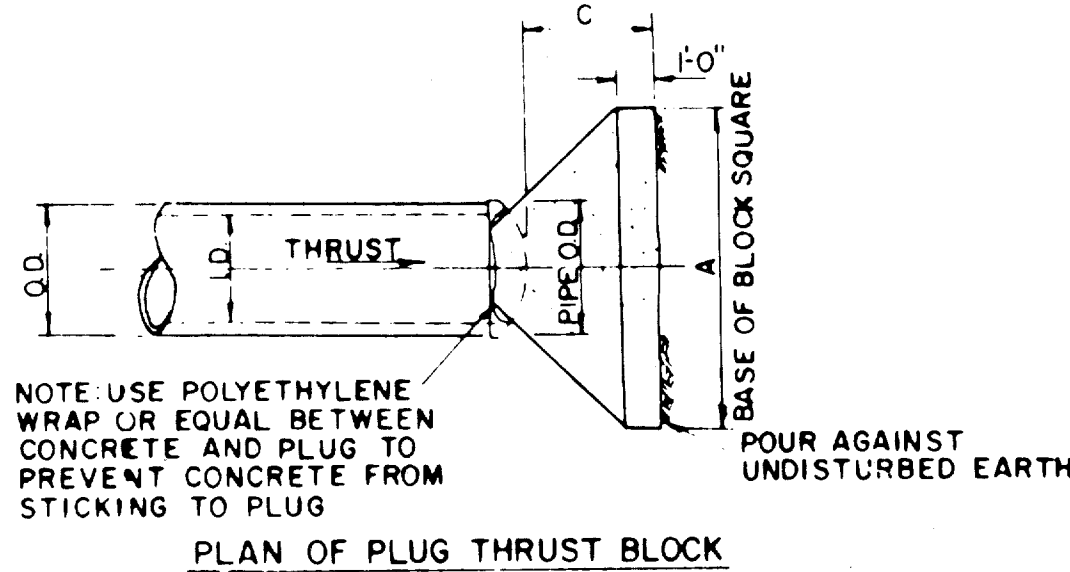


I.D. (IN.)	G (FT.)	THRUST (TONS)	EARTH			ROCK			I.D. (IN.)	G (FT.)	THRUST (TONS)	EARTH			ROCK		
			A	B	VOL. C.Y.	A	B	VOL. C.Y.				A	B	VOL. C.Y.	A	B	VOL. C.Y.
4.68	0.4	10	1.0	1.0	0.1	1.0	1.0	0.1	4.68	0.8	2.0	1.5	1.5	0.1	1.0	1.0	0.1
10.12	0.6	22	1.5	1.5	0.1	1.0	1.0	0.1	10.12	1.1	4.4	2.0	2.5	0.3	1.5	1.5	0.1
16.18	0.8	50	2.0	2.5	0.3	1.5	2.0	0.2	16.18	1.6	9.9	3.0	3.5	0.6	2.0	2.5	0.3
20.09	6.2	2.0	3.5	0.4	1.5	3.0	0.3	2.0	18	12.3	3.5	3.5	0.7	2.0	3.5	0.4	
24	11	8.9	3.0	3.0	0.5	1.5	3.0	0.3	24	22	17.7	4.0	4.5	1.0	3.0	3.0	0.5
30	14	10.4	3.0	3.5	0.6	2.0	3.5	0.4	30	27	20.7	5.0	4.5	1.5	3.0	4.0	0.8
36	17	15.0	3.5	4.5	0.9	2.0	4.0	0.5	36	33	29.6	5.5	5.5	2.3	4.0	4.0	1.3
42	19	20.4	4.5	5.0	1.5	2.5	5.0	0.8	42	38	40.5	7.0	6.0	3.9	4.5	5.0	2.1
48	22	26.6	4.5	6.0	2.0	2.5	6.0	1.1	48	44	52.9	8.0	7.0	5.7	4.8	6.0	2.8
54	25	33.7	6.0	6.0	3.0	3.0	6.0	1.4	54	49	67.0	9.0	8.0	8.0	6.0	6.0	4.1
60	27	41.6	6.0	7.0	3.8	3.0	7.0	1.8	60	55	82.7	9.5	9.0	10.6	6.0	7.0	5.3
66	30	50.3	6.5	8.0	5.1	3.5	8.0	2.7	66	60	100.1	10.5	10.0	14.1	6.5	8.0	7.2
72	33	59.9	7.5	8.0	6.3	4.0	8.0	3.7	72	66	119.1	11.0	11.0	17.6	7.5	8.0	9.1
78	36	70.2	8.0	9.0	8.1	4.0	9.0	3.9	78	71	139.8	12.0	12.0	22.5	8.0	9.0	11.7
84	38	81.5	8.5	10.0	10.3	4.5	10.0	5.3	84	76	162.1	13.0	12.5	27.2	8.5	10.0	14.8
90	41	93.5	9.5	10.0	12.2	5.0	10.0	6.3	90	82	186.1	14.0	13.5	33.7	9.5	10.0	17.7
96	44	106.4	10.0	11.0	15.0	5.0	11.0	7.4	96	87	211.7	15.0	14.5	41.2	10.0	11.0	21.8

HORIZONTAL BEND THRUST BLOCK

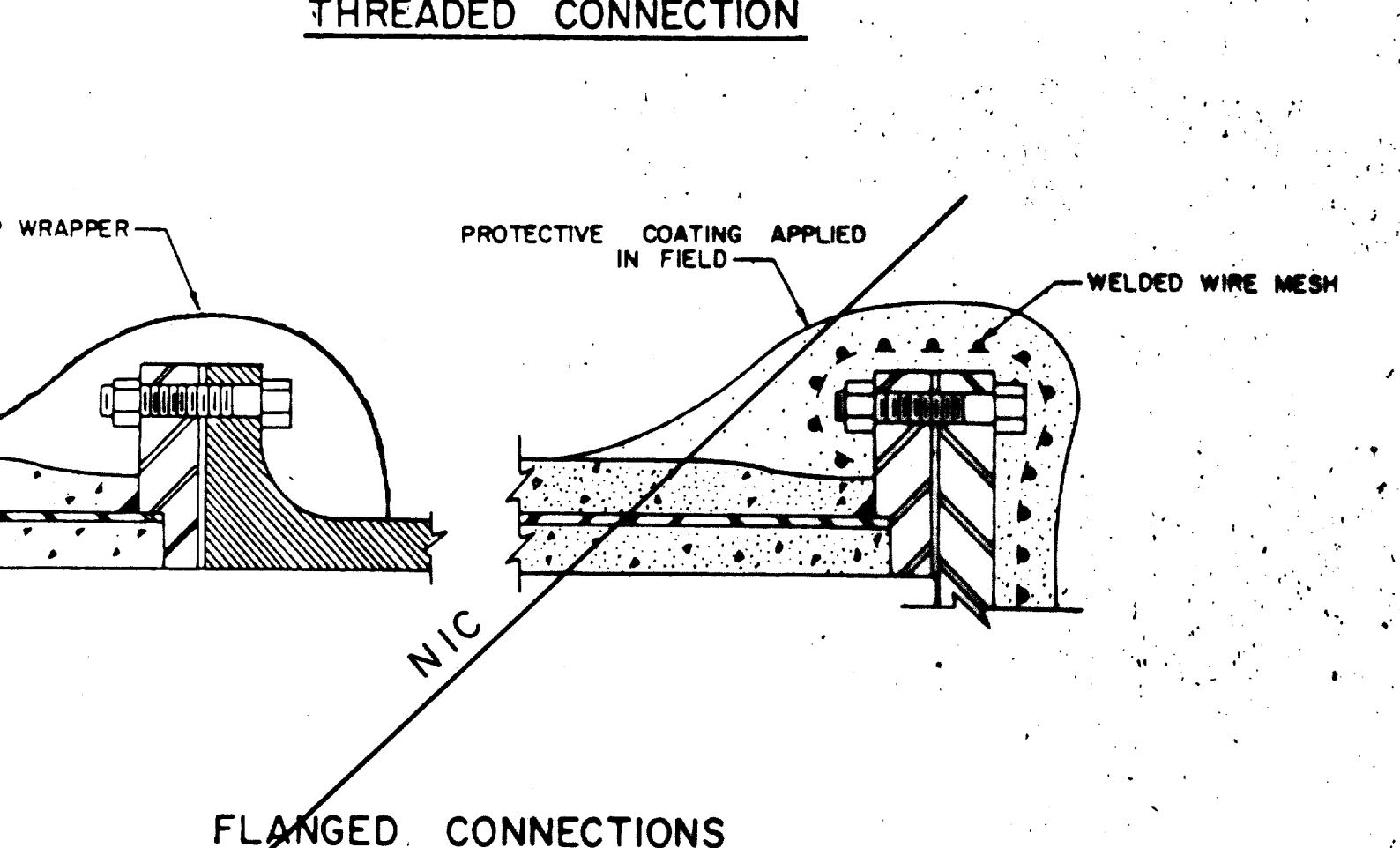
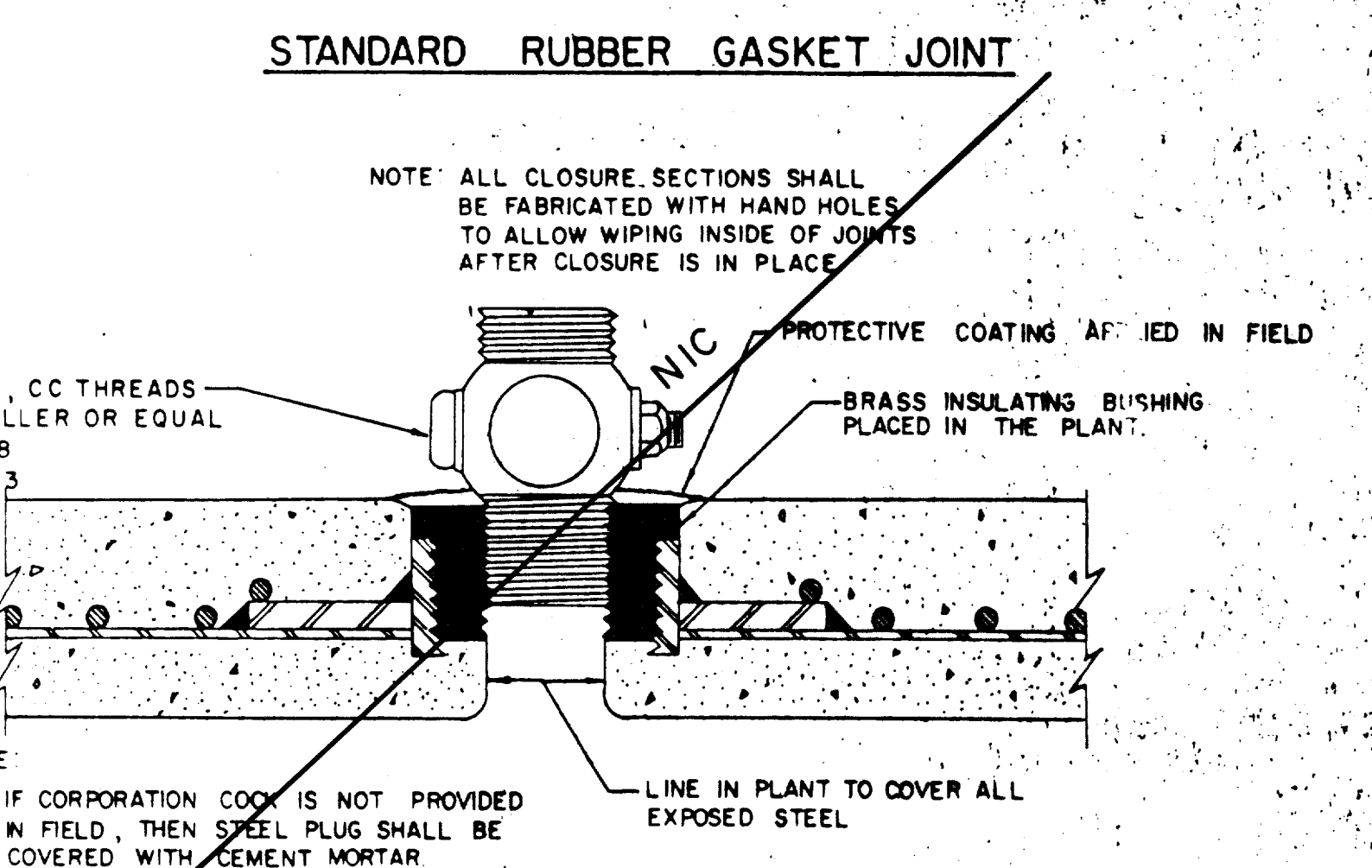
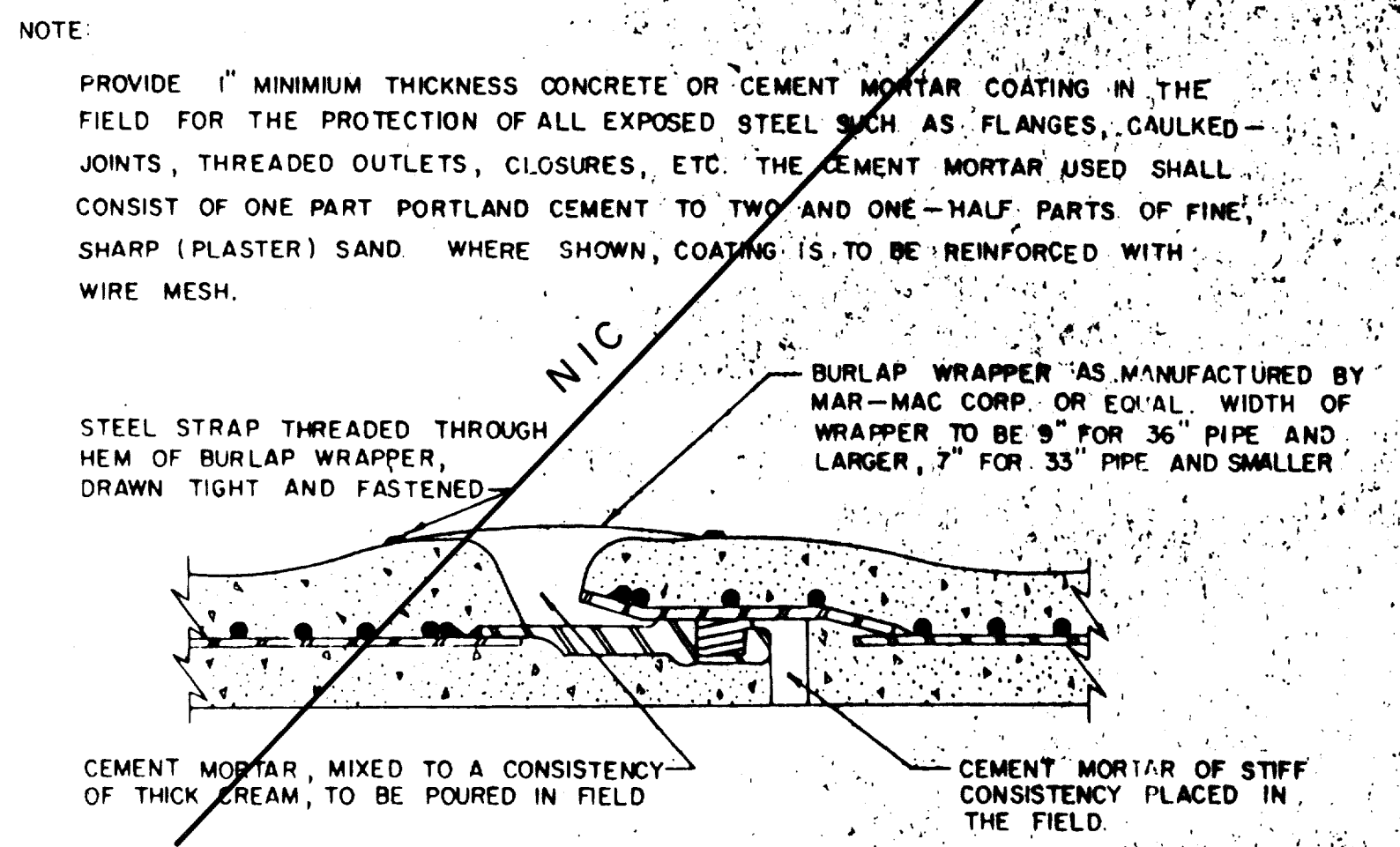
I.D. (IN.)	G (FT.)	THRUST (TONS)	EARTH			ROCK			I.D. (IN.)	G (FT.)	THRUST (TONS)	EARTH			ROCK		
			A	B	VOL. C.Y.	A	B	VOL. C.Y.				A	B	VOL. C.Y.	A	B	VOL. C.Y.
4.68	2.1	5.6	3.0	2.0	0.3	2.0	1.5	0.2	4.68	2.7	7.1	5.0	1.5	0.4	2.0	2.0	0.2
10.12	3.1	12.6	3.5	2.5	0.8	3.5	2.0	0.4	10.12	4.0	16.0	6.5	2.8	1.0	3.0	2.5	0.5
16.18	4.7	28.3	7.5	4.0	1.9	8.0	3.0	0.9	16.18	6.0	36.0	8.0	4.0	2.4	4.0	4.0	1.0
20	5.2	34.9	9.0	4.0	2.3	5.5	3.5	1.2	20	6.8	44.4	10.0	4.5	3.1	6.0	4.0	1.5
24	6.2	50.3	11.5	4.5	3.5	6.5	4.0	1.6	24	7.9	64.0	14.5	4.5	5.0	8.0	4.0	2.1
30	7.8	58.9	12.0	5.0	4.8	7.5	4.0	2.2	30	9.9	75.0	15.0	5.0	6.7	10.0	4.0	3.3
36	9.4	84.9	14.5	6.0	6.2	9.5	4.5	3.8	36	11.9	108.0	18.0	6.0	11.4	12.0	4.5	5.3
42	10.8	115.5	17.0	7.0	12.8	11.0	5.5	6.3	42	13.9	147.0	21.0	7.0	17.8	14.0	5.5	8.7
48	12.8	150.9	19.0	8.0	18.4	13.0	6.0	9.2	48	15.9	192.0	24.0	8.0	26.2	16.0	6.0	12.4
54	14.0	191.0	21.5	9.0	28.0	15.0	6.5	12.9	54	17.9	243.0	27.0	9.0	36.9	18.0	7.0	18.1
60	15.6	238.8	24.0	10.0	38.8	16.0	7.5	17.6	60	19.9	299.8	30.0	10.0	50.3	20.0	7.5	24.0
66	17.1	283.3	26.0	11.0	46.0	18.0	8.0	23.0	66	21.8	362.8	33.0	11.0	64.2	22.0	8.5	32.3
72	18.7	339.5	28.5	12.0	57.8	19.0	9.0	28.4	72	23.8	431.8	36.0	12.0	83.6	24.0	9.0	41.0
78	20.2	398.5	31.0	13.0	73.7	21.0	9.5	37.4	78	25.7	506.7	39.0	13.0	108.2	26.0	10.0	53.2
84	21.8	462.1	33.5	14.0	94.7	22.0	10.5	46.3	84	27.7	587.7	42.0	14.0	134.4	28.0	10.5	64.8
90	23.3	530.5	35.5	15.0	114.4	24.5	11.0	58.2	90	29.0	674.6	45.0	15.0	163.0	30.0	11.5	81.2
96	24.9	603.8	38.0	16.0	138.9	25.5	12.0	70.0	96	31.6	767.3	48.0	16.0	199.0	32.0	12.0	93.1

PLUG & TEE THRUST BLOCK



I.D. (IN.)	THRUST (TONS)	EARTH		ROCK		
		C	VOL. C.Y.	A	VOL. C.Y.	
4.68	5.1	1.5	2.5	0.3	2.0	0.2
10.12	11.5	1.5	3.5	0.6	2.5	0.3
16.18	23.5	2.0	4.5	1.4	4.0	0.9
20	31.5	2.0	6.0	1.7	4.0	0.9
24	45.2	2.5	7.0	3.1	5.0	1.7
30	53.0	3.0	7.5	4.1	5.5	2.4
36	76.3	4.0	9.0	7.3	6.5	4.2
42	104.0	4.5	10.5	11.0	7.5	6.2
48	136.0	5.0	12.0	15.6	8.5	8.7
54	172.0	5.5	13.5	21.4	9.5	11.9
60	212.0	6.0	15.0	28.8	10.5	15.7
66	237.0	6.5	16.5	36.8	11.5	20.5
72	305.0	7.5	17.5	47.2	12.5	27.2
78	358.0	8.0	19.0	58.9	13.5	33.7
84	416.0	8.5	20.5	72.3	14.5	41.2
90	477.0	9.0	22.0	87.7	15.5	49.7
96	543.0	9.5	23.5	104.8	16.5	61.0

PLUG & TEE THRUST BLOCK



REINFORCED CONCRETE CYLINDER PIPE DETAILS

AS-BUILTS

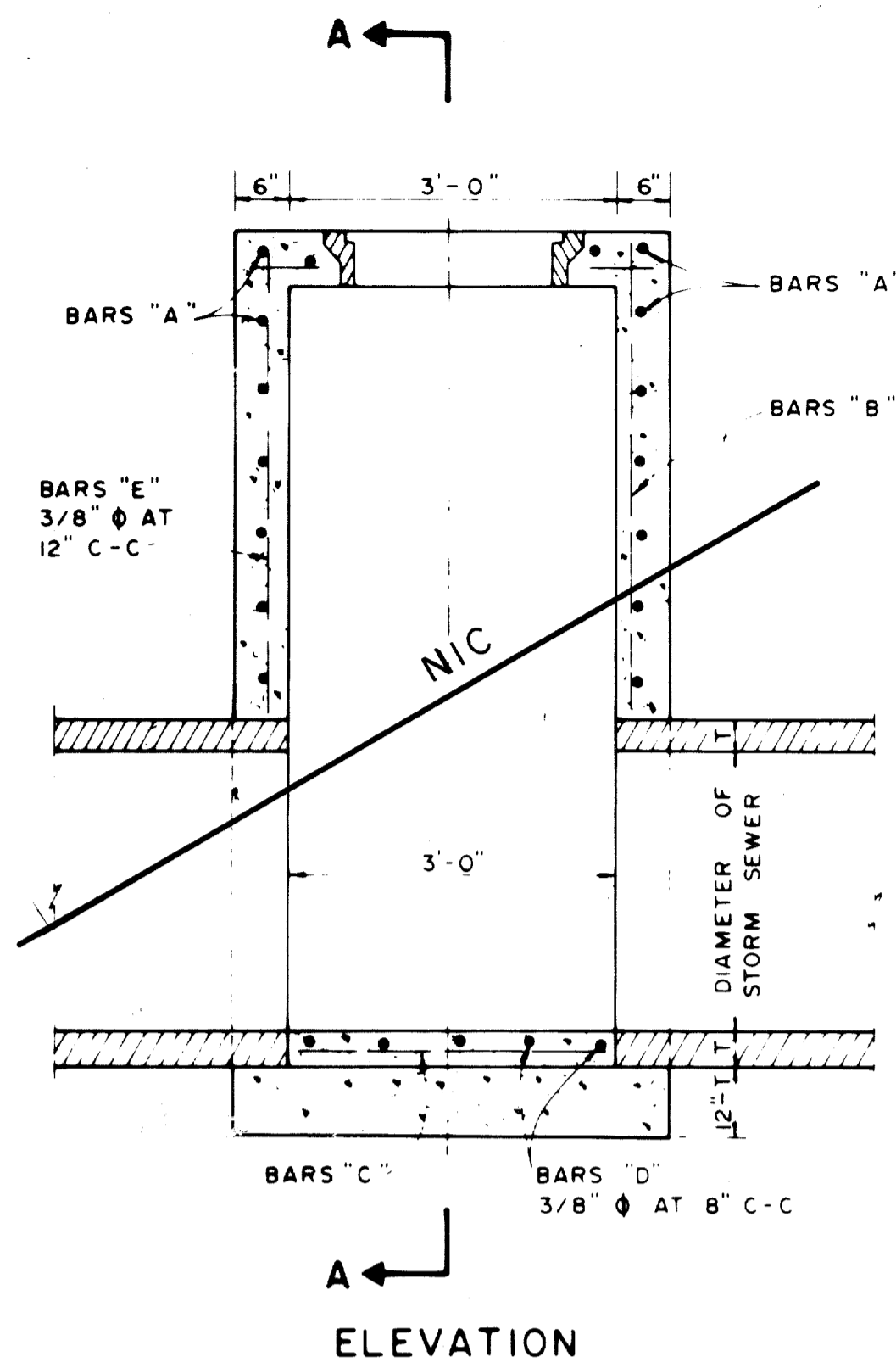
I CERTIFY THIS PROJECT WAS CONSTRUCTED IN GENERAL CONFORMANCE WITH THESE CONSTRUCTION PLANS AND WILL FUNCTION AS DESIGNED.

TOWN OF ADDISON, TEXAS
DEPARTMENT OF ENGINEERING

STANDARD CONSTRUCTION DETAILS
WATER
THRUST BLOCKS

DESIGNED - [Signature] DATE - [Date]
CHECKED - [Signature] SCALE - [Scale]
APPROVED - [Signature] SHEET - SD-11

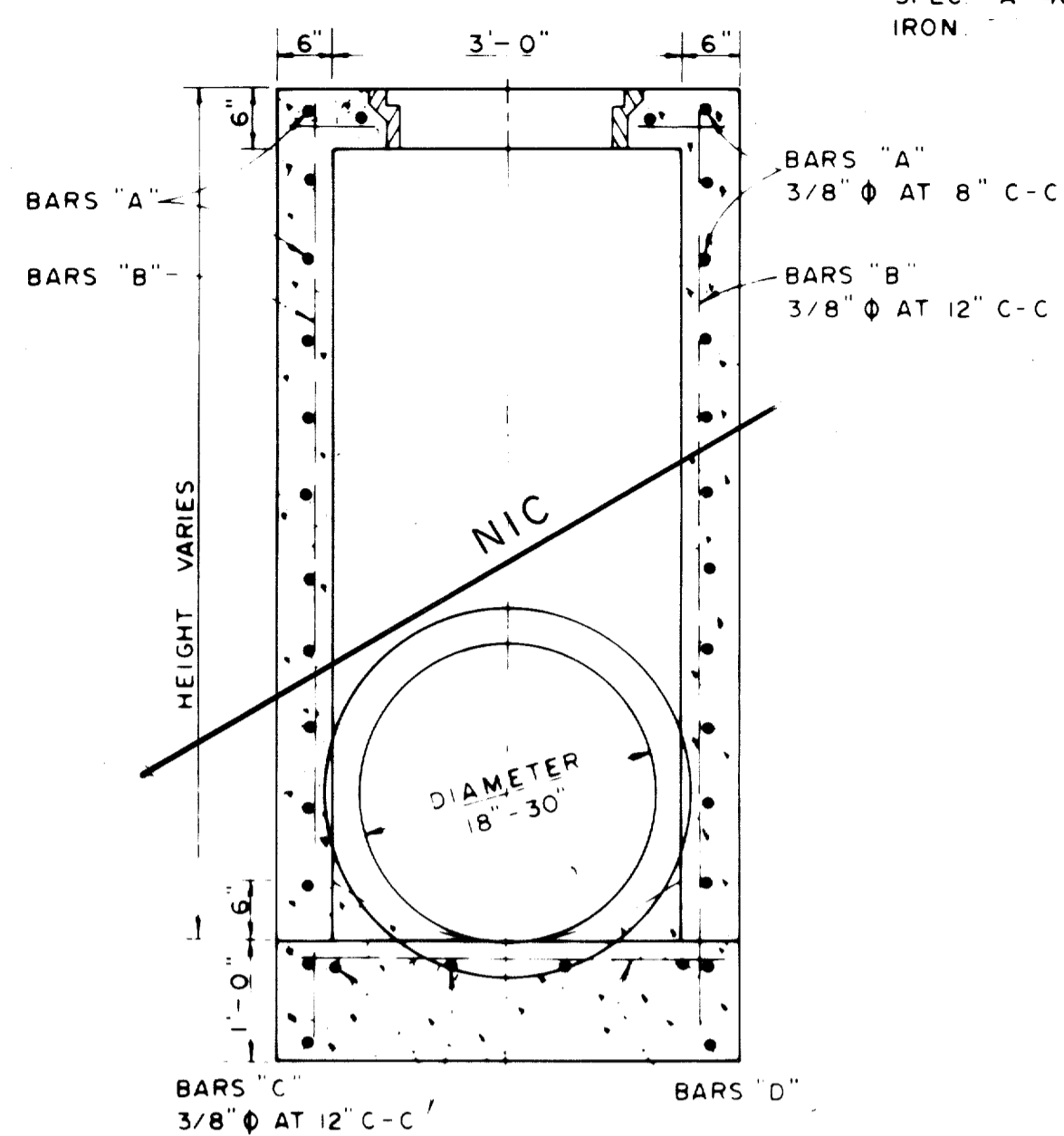
I.D. (IN.)	THRUST (TONS)	11.25°		22.50°		30°		45°		67.50°		90°		I.D. (IN.)
		A	VOL. C.Y.	A	VOL. C.Y.	A	VOL. C.Y.	A	VOL. C.Y.	A	VOL. C.Y.	A	VOL. C.Y.	
4.68	1.0	0.5	2.0	1.0	2.5	1.3	3.6	1.8	4.6	2.3	5.0	2.5	4.6	4.68
10.12	2.2	1.1	4.3	2.2	5.7	2.8	8.0	4.0	10.5	5.2	11.3	5.7	10.12	
16.18	3.0	2.3	9.7	4.9	12.7	6.4	18.0	9.0	23.9	11.8	23.3	12.7	16.18	
20	6.1	3.1	12.0	6.0	15.7	7.9	22.2	11.1	29.2	14.5	31.4	15.7	20	
24	8.2	4.4	17.3	8.7	22.6	11.3	32.0	16.0	41.8	20.9	45.2	22.6	24	
30	10.5	5.2	20.3	10.1	26.5	13.3	37.5	18.8	49.0	24.5	53.1	26.5	30	
36	14.9	7.5	29.2	14.6	38.2	19.1	54.0	27.0	70.5	35.3	76.4	38.2	36	
42	20.3	10.1	39.8	19.9	52.0	26.0	73.5	36.7	96.0	48.0	104.0	52.0	42	
48	26.5	13.2	51.9	26.0	67.9	33.9	96.0	48.0	126.0	62.7	136.0	67.9	48	
54	33.5	16.8	65.7	32.9	85.9	42.9	122.0	60.7	159.0	79.4	172.0	85.9	54	
60	41.4	20.7	81.2	40.6	106.0	53.0	150.0	75.0	194.0	98.0	212.0	106.0	60	
66	50.1	25.0	98.2	49.1	128.0	64.2	182.0	90.7	237.0	119.0	257.0	128.0	66	
72	59.6	29.8	117.0	58.4	153.0	76.3	216.0	108.0	282.0	141.0	305.0	153.0	72	
78	69.9	35.0	137.0	68.6	179.0	90.0	234.0	127.0	331.0	164.0	358.0	179.0	78	
84	81.1	40.5	159.0	79.5	208.0	104.0	294.0	147.0	384.0	192.0	416.0	208.0	84	
90	93.1	46.5	183.0	91.3	239.0	119.0	337.0	169.0	441.0	221.0	477.0	239.0	90	
96	106.0	53.0	208.0	104.0	272.0	136.0	384.0	192.0	502.0	251.0	543.0	272.0	96	



ELEVATION

TYPE A STORM SEWER MANHOLE

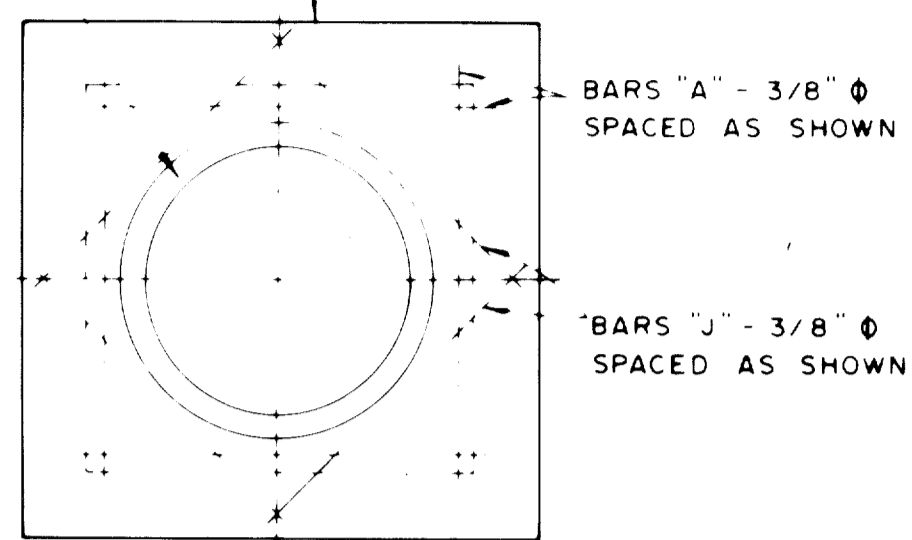
(FOR PIPE 18" TO 30" IN DIAMETER)



SECTION A-A

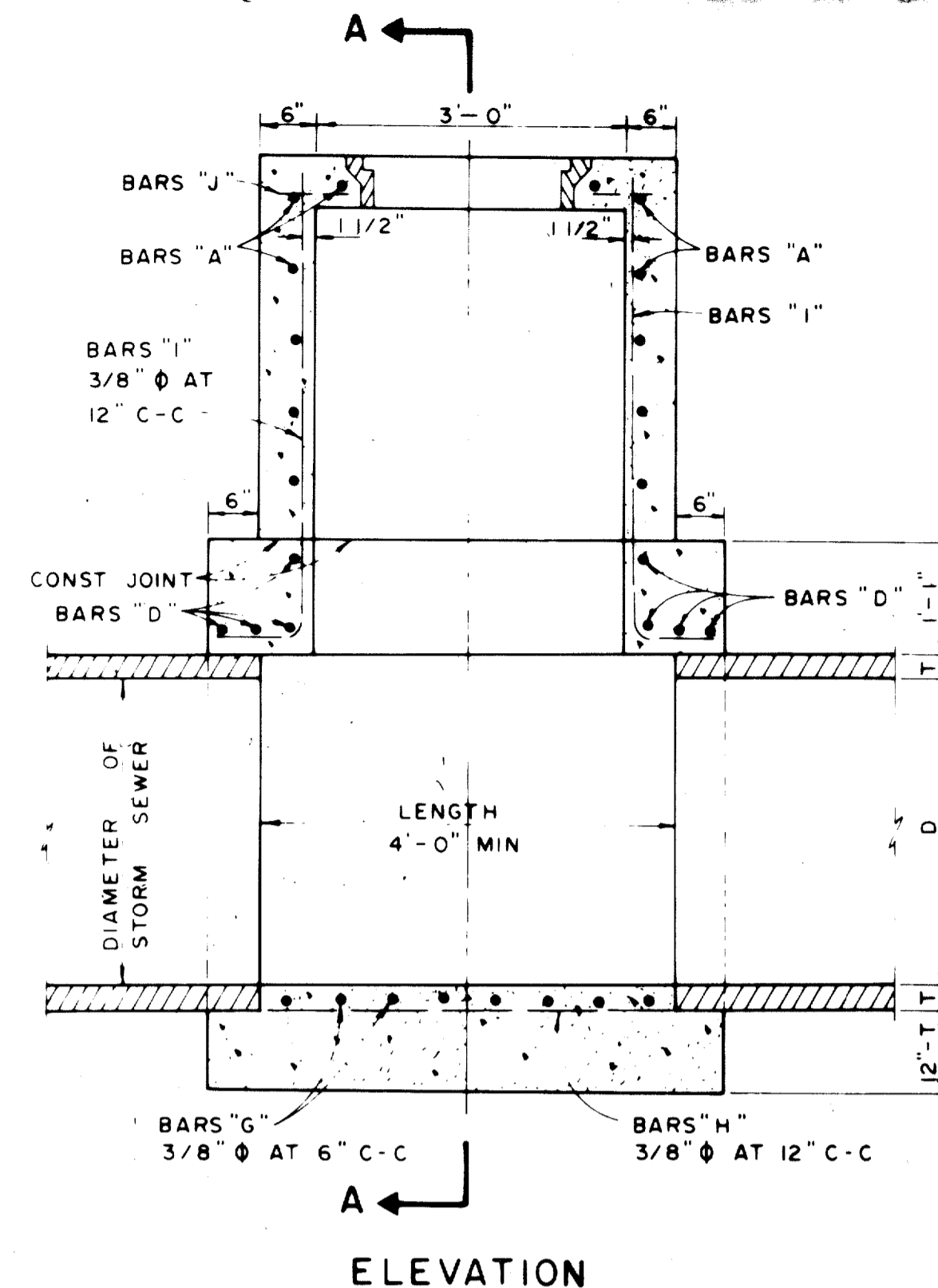
NOTE FRAME AND COVER SHALL BE BASS & HAYS PATTERN NO 380-24 OR EQUAL AND SHALL BE OF GRAY CAST IRON CONFORMING TO ASTM SPEC A-48 FOR CLASS 30 CAST IRON

PROVIDE 3/4" PREMOLDED EXPANSION JOINT BETWEEN MANHOLE AND CONCRETE PAVEMENT AND SEAL WITH HOT POURED RUBBER



TOP PLAN
TYPE A & TYPE B
STORM SEWER MANHOLE

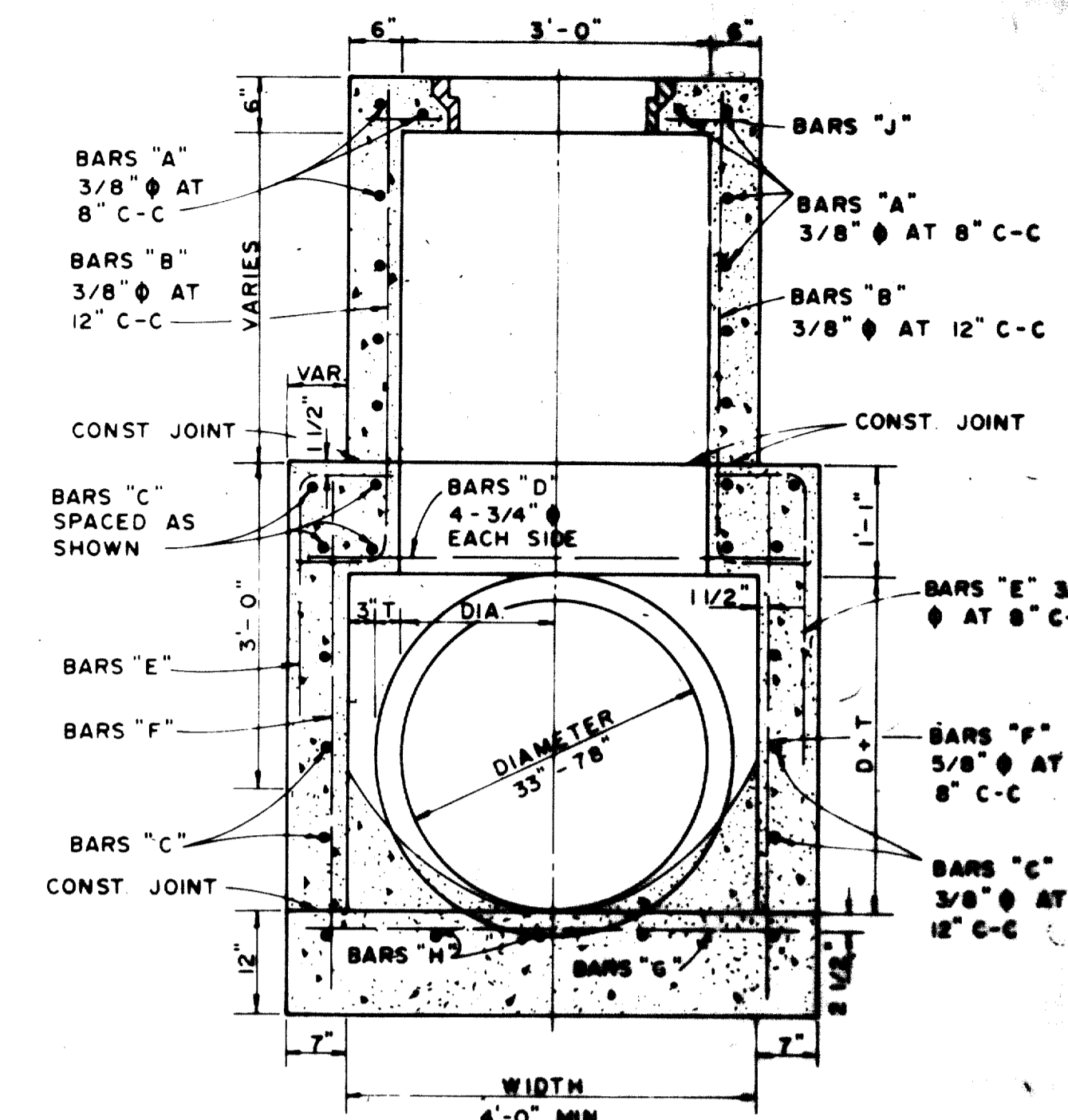
NOTE MAXIMUM PIPE SIZE TO BE USED 78"



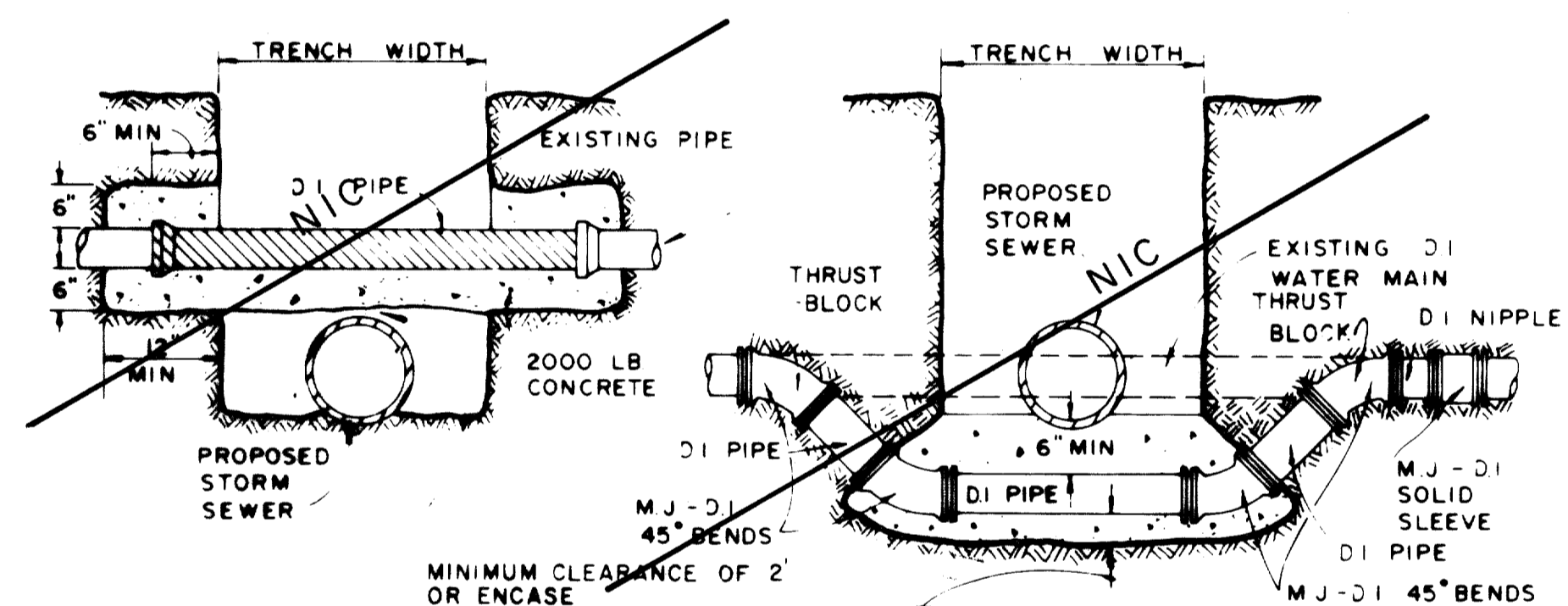
ELEVATION

TYPE B STORM SEWER MANHOLE

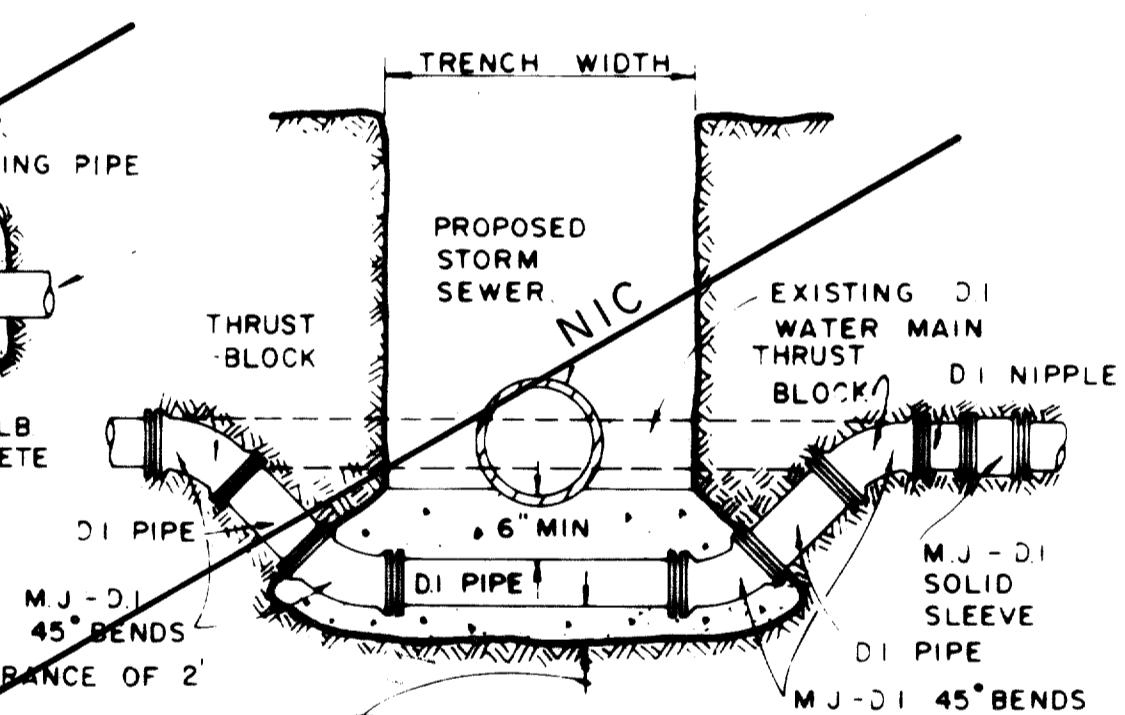
(FOR PIPE 33" TO 78" IN DIAMETER)



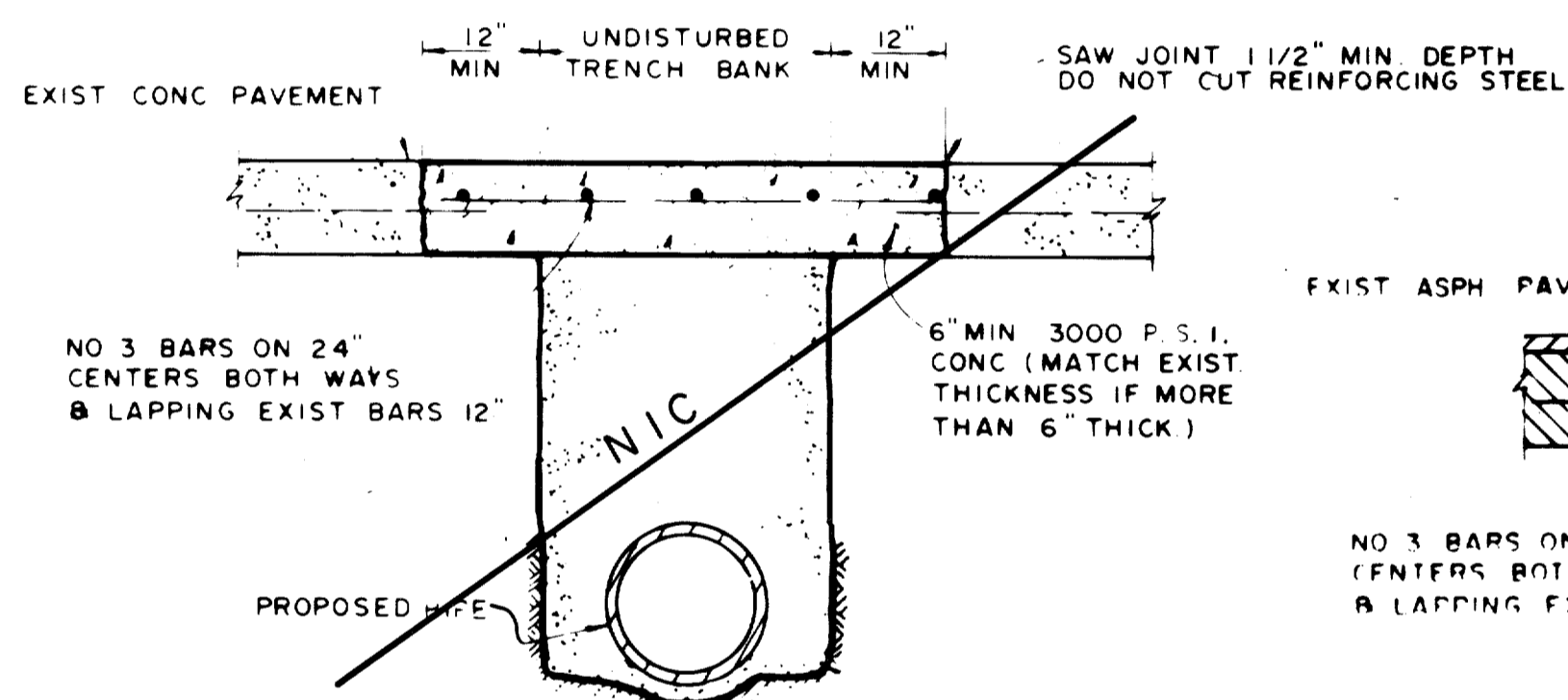
SECTION A-A



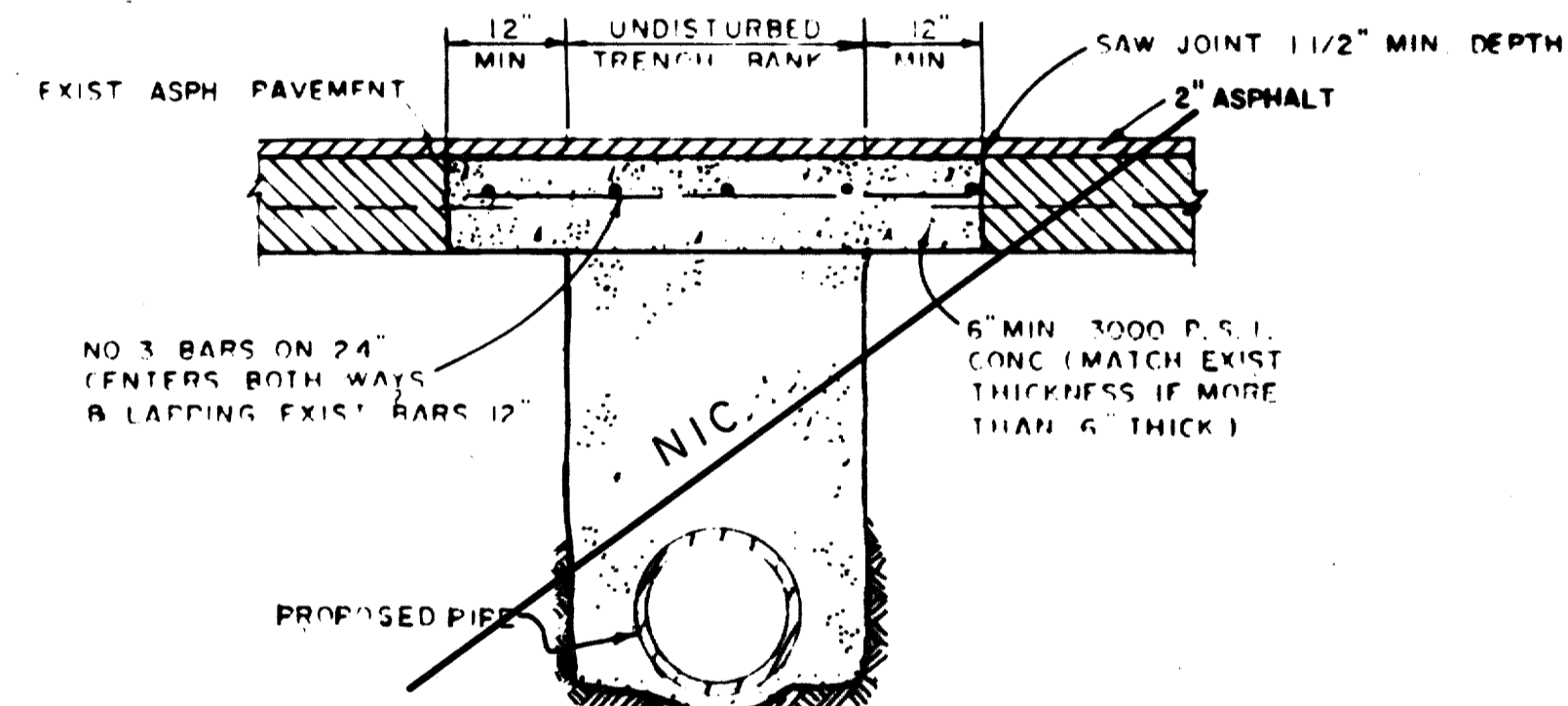
DETAIL OF UTILITY SUPPORT



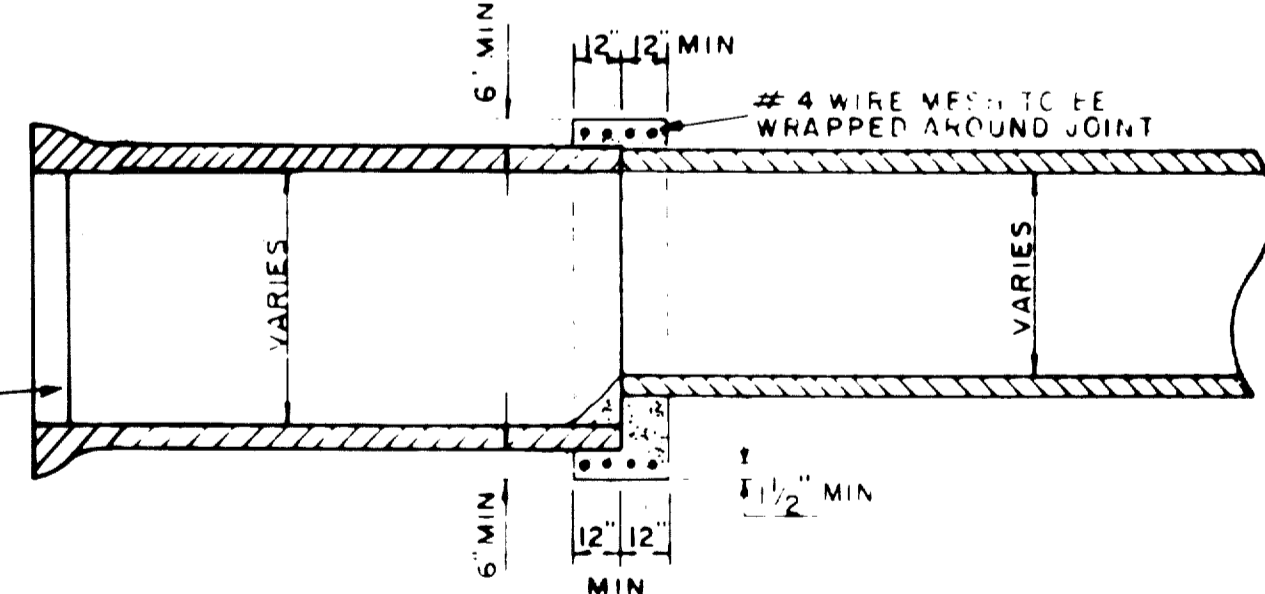
DETAIL FOR WATER MAIN LOWERING



CONCRETE STREET OR DRIVEWAY REPAIR

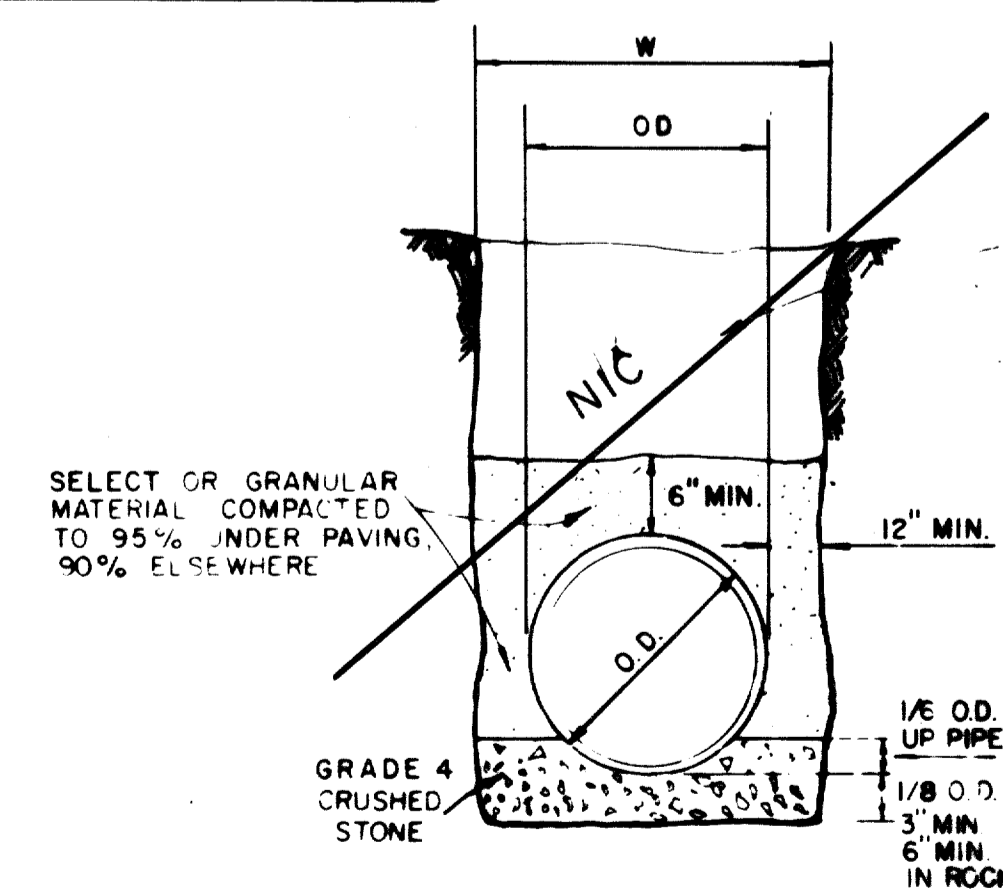


ASPHALT STREET OR DRIVEWAY REPAIR



DETAIL OF CONCRETE COLLAR FOR PIPE CONNECTIONS

ALL STORM SEWER PIPE PLUGS SHALL BE CONCRETE



STORM SEWER PIPE BEDDING DETAIL

DEPTH OF TRENCH BELOW PIPE:
3" MIN. FOR 27" PIPE & SMALLER
4" MIN. FOR 30" TO 60" PIPE
6" MIN. FOR 66" PIPE & LARGER

STATE OF TEXAS
LAWRENCE A. CATES
REGISTERED PROFESSIONAL ENGINEER
18886

AS-BUILTS

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

NO.	REVISION	BY

TOWN OF ADDISON
DEPARTMENT OF ENGINEERING

STANDARD CONSTRUCTION DETAILS
STORM DRAINAGE

MANHOLES & STORM SEWER

DATE: _____ SHEET 12