

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
9479 - 00 - 70		

INDEX OF SHEETS

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Sheet No. 8.1	Computer Earthwork Data
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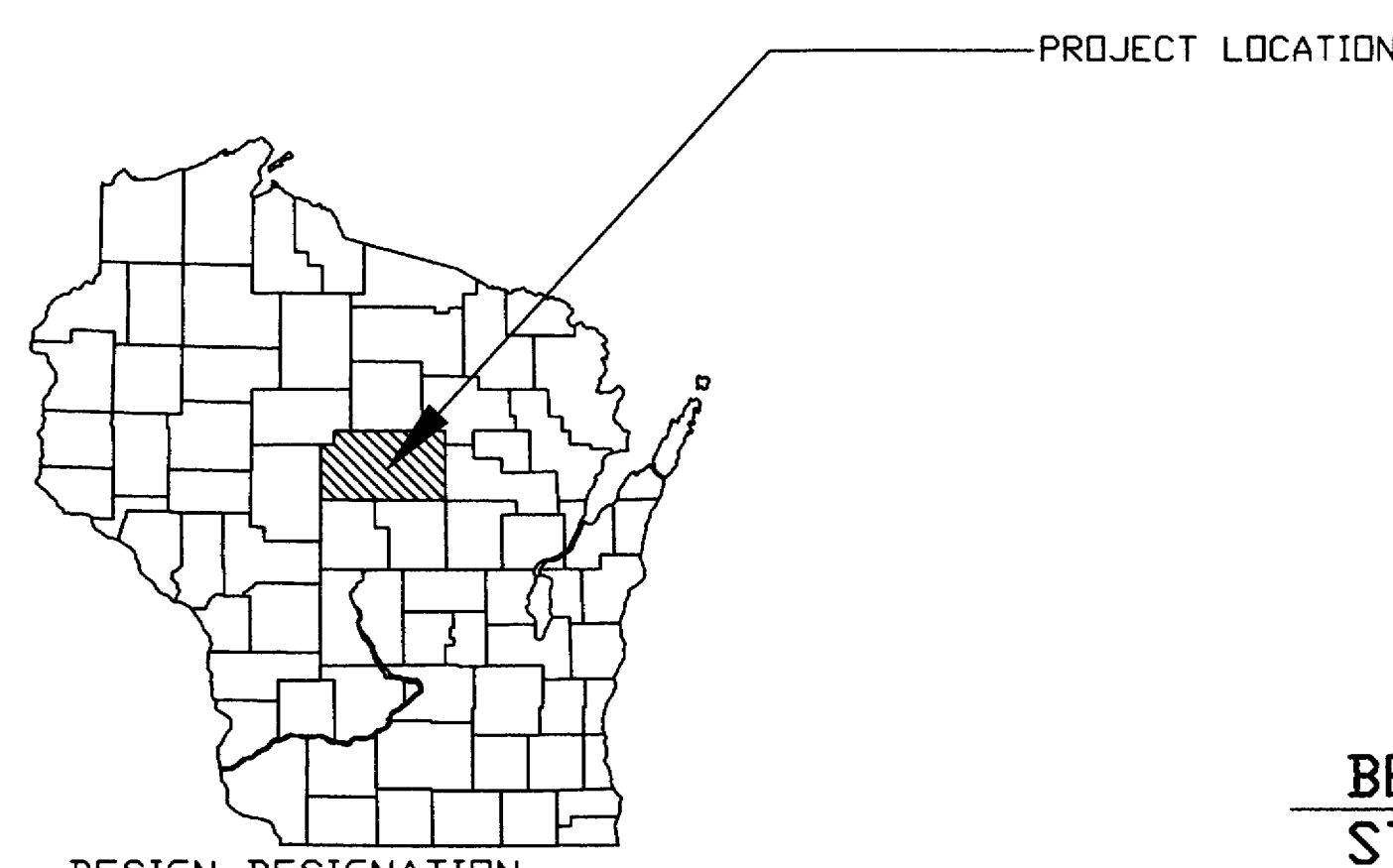
TOTAL SHEETS =

CTH S - STH 107
C.T.H. A
MARATHON COUNTY

STATE PROJECT NUMBER
9479 - 00 - 70

END PROJECT
STA. 26+33.00

BEGIN PROJECT
STA. 7+50.00

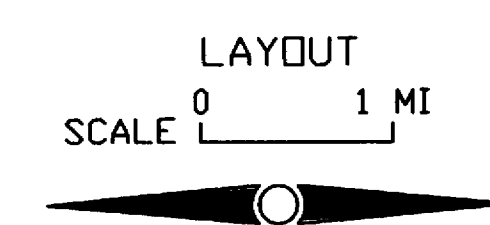
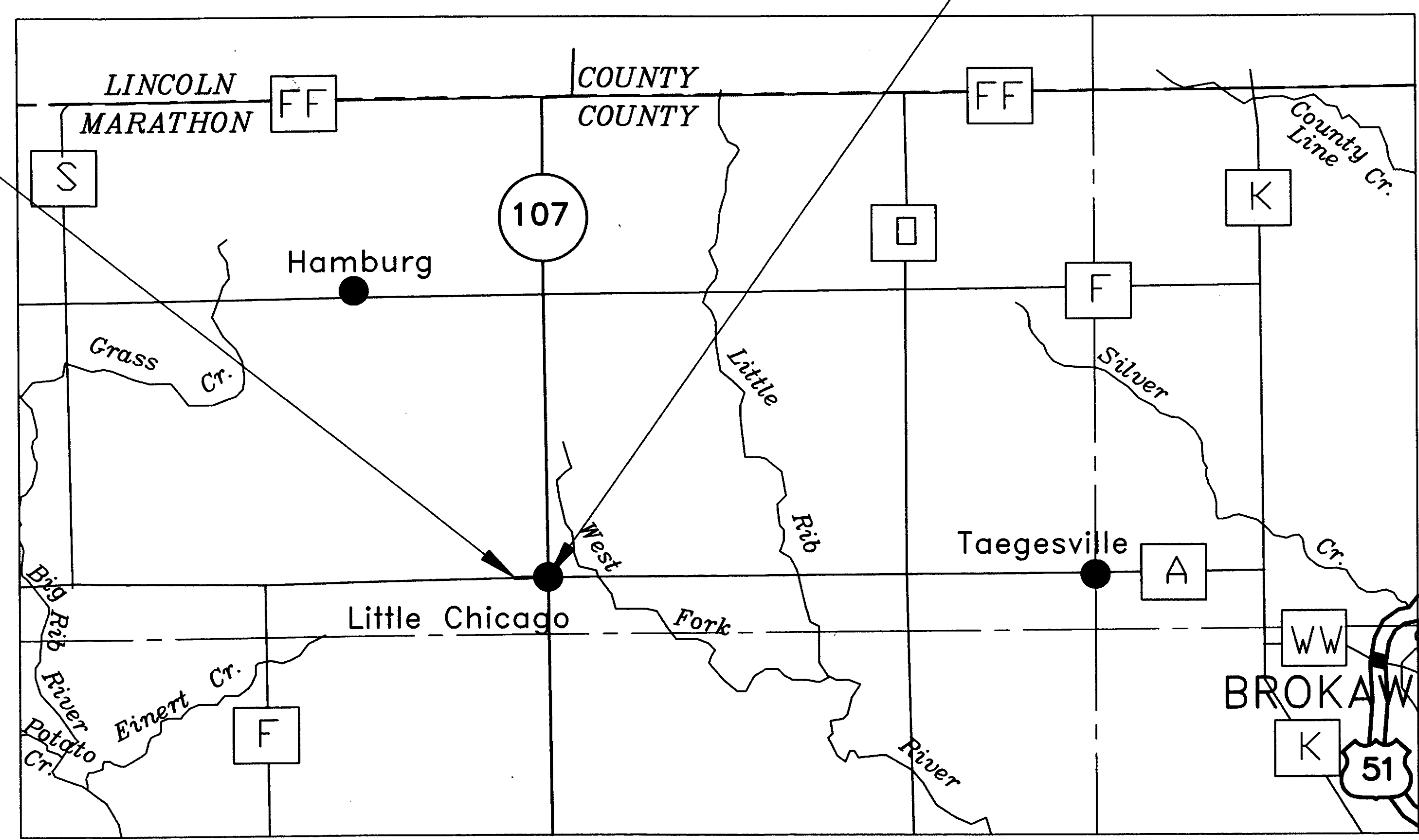


DESIGN DESIGNATION

A.D.T. (1998)	= 1300
A.D.T. (2000)	= 1400
A.D.T. (2020)	= 1800
D.H.V. (1998)	= 5.2
D. (1998)	= 62/38%
T. (1998)	=
DESIGN SPEED	= 55
ESALS	= 233,600

CONVENTIONAL SYMBOLS

COUNTY LINE		COMBUSTIBLE FLUIDS	
CORPORATE LIMITS		UNDERGROUND UTILITIES	
PROPERTY LINE		GAS	
LOT LINE		ELECTRIC	
LIMITED EASEMENT		TELEPHONE OR TELEGRAPH	
EXISTING RIGHT OF WAY		COMMUNICATIONS LINE	
PROPOSED OR NEW R/W LINE		SERVICE PEDESTAL	
SURVEY LINE		POWER POLE	
SLOPE INTERCEPT		TELEPHONE POLE	
ORIGINAL GROUND		RAILROAD	
MARSH OR ROCK PROFILE (To be noted as such)		SANITARY SEWER	
MARSH AREA		STORM SEWER	
WOODED OR SHRUB AREA		WATER	
RIP RAP		EXISTING CULVERT	
EROSION BALES		PROPOSED CULVERT (Box or Pipe)	
STUMP		CULVERT (Profile View)	
CONIFEROUS TREE		SILT FENCE	
		BENCHMARK	
		CONTROL POINT	
		DECIDUOUS TREE	
		BUSH/SHRUB	



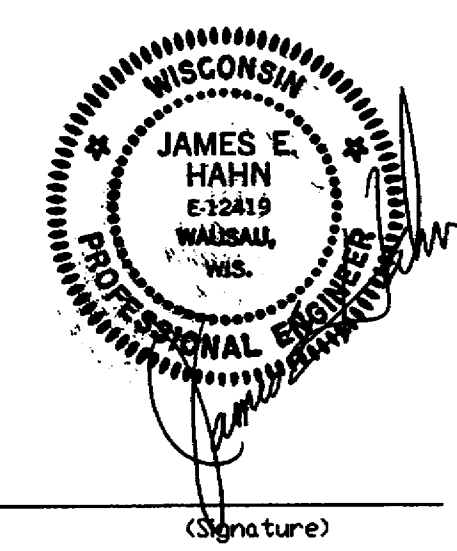
Coordinates on this plan are referenced to the Wisconsin County Coordinate System (WCCS), Marathon County.
ORIGIN OF DATUM: Chiseled '□' on top of southwest corner of parapet wall, S.T.H. 107 bridge over creek 400 feet south of C.T.H. A, Elev. 1273.42.

TOTAL NET LENGTH OF CENTERLINE = 0.347 MI. (URBAN)

ACCEPTED BY THE MARATHON
COUNTY HIGHWAY DEPARTMENT

5/31/00
(Date)

ORIGINAL PLANS PREPARED BY



May 25, 2000
(Date)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY	REI
Surveyor	REI
Designer	REI
District Examiner	
District Supervisor	
Proj. Dev. Engineer	
C.D. Examiner	

APPROVED FOR DISTRICT OFFICE	
DATE: _____	(Signature)
AUTHORIZED FOR BUREAU OF HIGHWAY OPERATIONS	
DATE: _____	(Signature)
AUTHORIZED FOR BUREAU OF HIGHWAY DEVELOPMENT	
DATE: _____	(Signature)

E

GENERAL NOTES

BEARINGS AND DISTANCES SHOWN ON THIS PLAN ARE GROUND.

ALL RADII ARE MEASURED TO THE BACK OF THE CURB, UNLESS OTHERWISE NOTED.

THE LOCATIONS OF EXISTING UTILITIES SHOWN ON THIS PLAN ARE BASED ON AVAILABLE INFORMATION AND ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS PRESENT THAT ARE NOT SHOWN ON THE PLAN.

EXCAVATION BELOW SUBGRADE (EBS) IS NOT SHOWN ON THIS PLAN. EBS IS TO BE PAID FOR AS COMMON EXCAVATION. EXACT LOCATIONS OF EBS, IF NEEDED, ARE TO BE DETERMINED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR SEEDING AND MULCHING AND FERTILIZING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY THE CONTRACTORS OPERATION.

ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH "THE WISCONSIN CONSTRUCTION SITE BEST MANAGEMENT PRACTICE HANDBOOK" DEVELOPED BY THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES. THE EXACT LOCATION OF EROSION CONTROL DEVICES WILL DETERMINED IN THE FIELD BY THE ENGINEER. ANY STRUCTURES WITH TYPE H OR MS COVERS SHALL BE PROTECTED WITH SILT FENCE DURING CONSTRUCTION ACTIVITIES.

THE EXACT LOCATION OF ALL DRIVEWAY OPENINGS AND APRONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

CONSTRUCT INSIDE EDGE OF SIDEWALK $\frac{1}{4}$ INCH ABOVE THE TOP OF CURB WHEN THEY ARE ADJACENT TO EACH OTHER.

A BUTT JOINT SHALL BE PLACED AT ALL LOCATIONS WHERE NEW PAVEMENTS IS TO MATCH EXISTING PAVEMENT.

ALL BUTT JOINTS SHALL BE A VERTICAL SAWCUT, THROUGH EXISTING DRIVEWAYS AND PAVEMENTS AT REMOVAL LIMITS.

RIM ELEVATIONS SHOWN FOR CURB INLETS WITH TYPE H COVER ARE TO THE FLOWLINE OF THE CURB/COVER.

ALL STORM SEWER INVERTS, ELEVATIONS, PIPE LENGTHS AND GRADES ARE COMPUTED CENTER TO CENTER OF STRUCTURES, EXCEPT AT ENDWALLS, WHERE PIPE LENGTHS ARE MEASURED TO THE PIPE END OF THE ENDWALL.

ASPHALTIC CONCRETE PAVEMENT TYPE MV SHALL BE CONSTRUCTED WITH ONE 2 $\frac{1}{2}$ INCH LOWER LAYER AND ONE 1 $\frac{1}{2}$ INCH UPPER LAYER.

REPLACEMENT AND RESTORATION OF DRIVEWAYS WITH LIKE MATERIALS SHALL BE INCIDENTAL TO DRIVEWAY APPROACH ITEM.

ALL EXISTING CULVERT PIPE AND STORM SEWER STRUCTURES AND APPURTENANCES WITHIN THE RIGHT OF WAY SHALL BE REMOVED.

STATION & OFFSET LOCATIONS GIVEN FOR STORM DRAINAGE STRUCTURES ARE TO THE CENTER OF THE GRATE OR COVER OPENING.

UTILITIES

WISCONSIN PUBLIC SERVICE
P.O. BOX 19002
700 NORTH ADAMS STREET GREEN BAY, WI 54307-9002
ATTENTION: REAL ESTATE DEPT.
PHONE: (414) 433-1387

GTE TELEPHONE COMPANY
FOR FIELD LOCATES CALL DIGGER'S HOTLINE
PHONE: (800) 242-8511

FOR FIELD LOCATES CALL DIGGER'S HOTLINE
PHONE: (800) 242-8511

DESIGN CONTACT

REI
4080 NORTH 20TH AVENUE
WAUSAU, WI 54401
PHONE: (715) 675-9784
ATTN. JIM HAHN

MARATHON COUNTY HIGHWAY DEPARTMENT
1430 WEST STREET
WAUSAU, WI 54401
ATTN. GLENN SPEICH

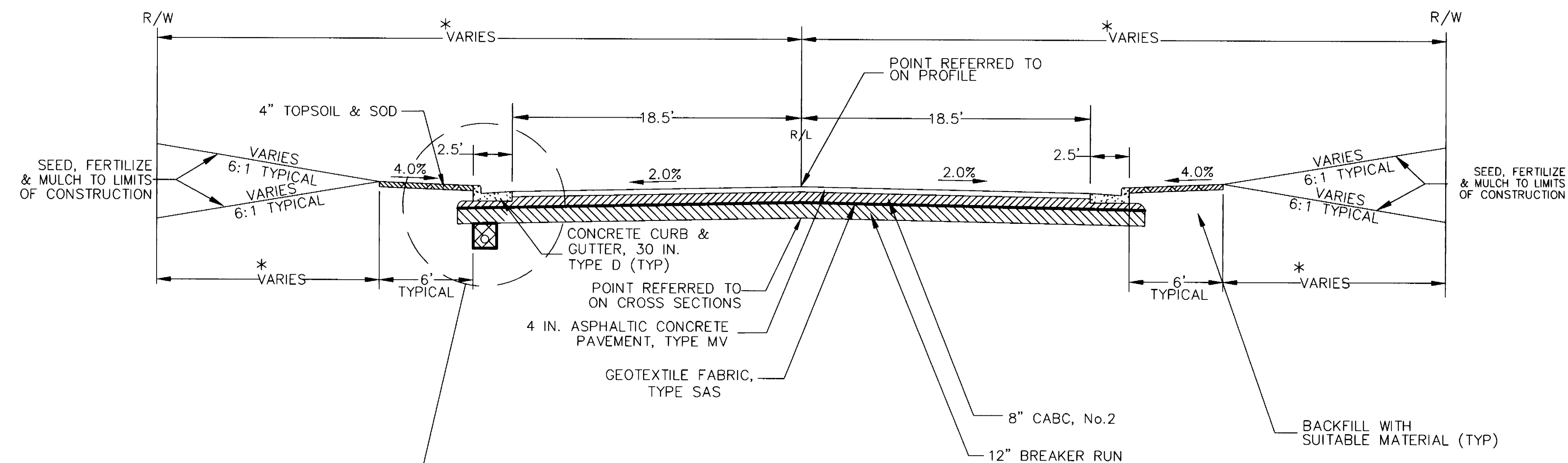
ABBREVIATIONS

AH	AHEAD
ASPH	ASPHALTIC
AVG	AVERAGE
BK	BACK
BVCE	BEGIN VERTICAL CURVE ELEVATION
BVCS	BEGIN VERTICAL CURVE STATION
BM	BENCHMARK
CL	CENTERLINE
CONC	CONCRETE
CMP	CORRUGATED METAL PIPE
CTH	COUNTY TRUNK HIGHWAY
CABC	CRUSHED AGGREGATE BASE COURSE
CY	CUBIC YARD
C&G	CURB AND GUTTER
C	CUT
DIST	DISTRICT
X	EAST GRID COORDINATE
E	EAST OR EAST PROJECT COORDINATE
EL OR ELEV	ELEVATION
EVCE	END VERTICAL CURVE ELEVATION
EVCS	END VERTICAL CURVE STATION
EW	ENDWALL
ENT	ENTRANCE
EXC	EXCAVATION
EBS	EXCAVATION BELOW SUBGRADE
EXIST	EXISTING
FERT	FERTILIZE
F	FILL
FG	FINISHED GRADE
FL	FLOW LINE
HDPE	HIGH DENSITY POLYETHYLENE
IN DIA	INCH DIAMETER
INL	INLET
INV	INVERT
JT	JOINT
JCT	JUNCTION
LT	LEFT
LF	LINEAR FOOT
LS	LUMP SUM
MH	MANHOLE
MIN	MINIMUM
Y	NORTH GRID COORDINATE
N	NORTH OR NORTH PROJECT COORDINATE
NO	NUMBER
OBLIT	OBLITERATE
OCBC	OPEN GRADED BASE COURSE
PAVT	PAVEMENT
PU	PIPE UNDERDRAIN
PI	POINT OF INTERSECTION
PVI	POINT OF VERTICAL INTERSECTION
PCC	PORTLAND CEMENT CONCRETE
LB	POUNDS
PROJ	PROJECT
PL	PROPERTY LINE
R	RADIUS
RP	RADIUS POINT
R	RANGE
RECY	RECYCLED
RL	REFERENCE LINE
REIN	REINFORCE
RCHEP	REINFORCED CONCRETE HORIZONTAL ELIPTICAL PIPE
RCP	REINFORCED CONCRETE PIPE
REQ'D	REQUIRED
RW	RETAINING WALL
RT	RIGHT
R/W	RIGHT-OF-WAY
SALV	SALVAGED
SEC	SECTION
SW	SIDEWALK
SI	SLOPE INTERCEPT
SPECS	SPECIFICATIONS
SF	SQUARE FOOT
SS	STORM SEWER

STANDARD DETAIL DRAWNGS

SDD NUMBER	TITLE
8A5-15A	Inlet covers Type A, H, A-S & H-S
8A5-15B	Inlet covers Type B, B-A, C, MS, MS-A & WM
8A5-15d	Inlet cover, Type Z Manhole covers Type K,J, J-S, L & M
8B6-3	Manholes, Type 1
8B7-3	Manholes Types 2 and 3
8C1-5	Inlets, Types 1, 2, 3 & 4
8C5-2	Inlets, Types 8, 9, 10 & 11
8D1-13	Concrete Curb, Concrete Curb and Gutter and Pavement Ties
8E8-2	Typical Installations of Erosion Bales
8E9-4	Silt Fence
8F1-11	Apron Endwalls for Culvert Pipe
8F2-1	Apron Endwalls for Pipe Arch and Elliptical Pipe
8F5-1	Class B Bedding for Culvert Pipe and Storm Sewer
15C2-3	Barricades and Signs for Road Closures
15C7-5a	Pavement Marking Symbols
15C8-8a	Pavement Marking (Mainline)

TYPICAL SECTIONS

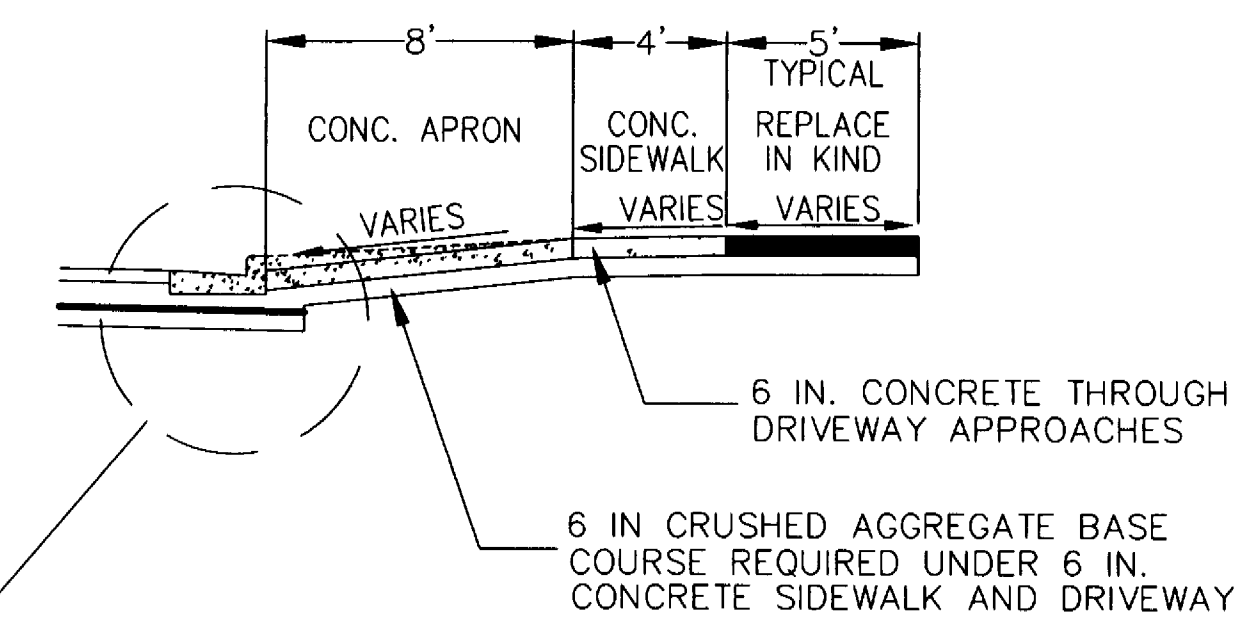
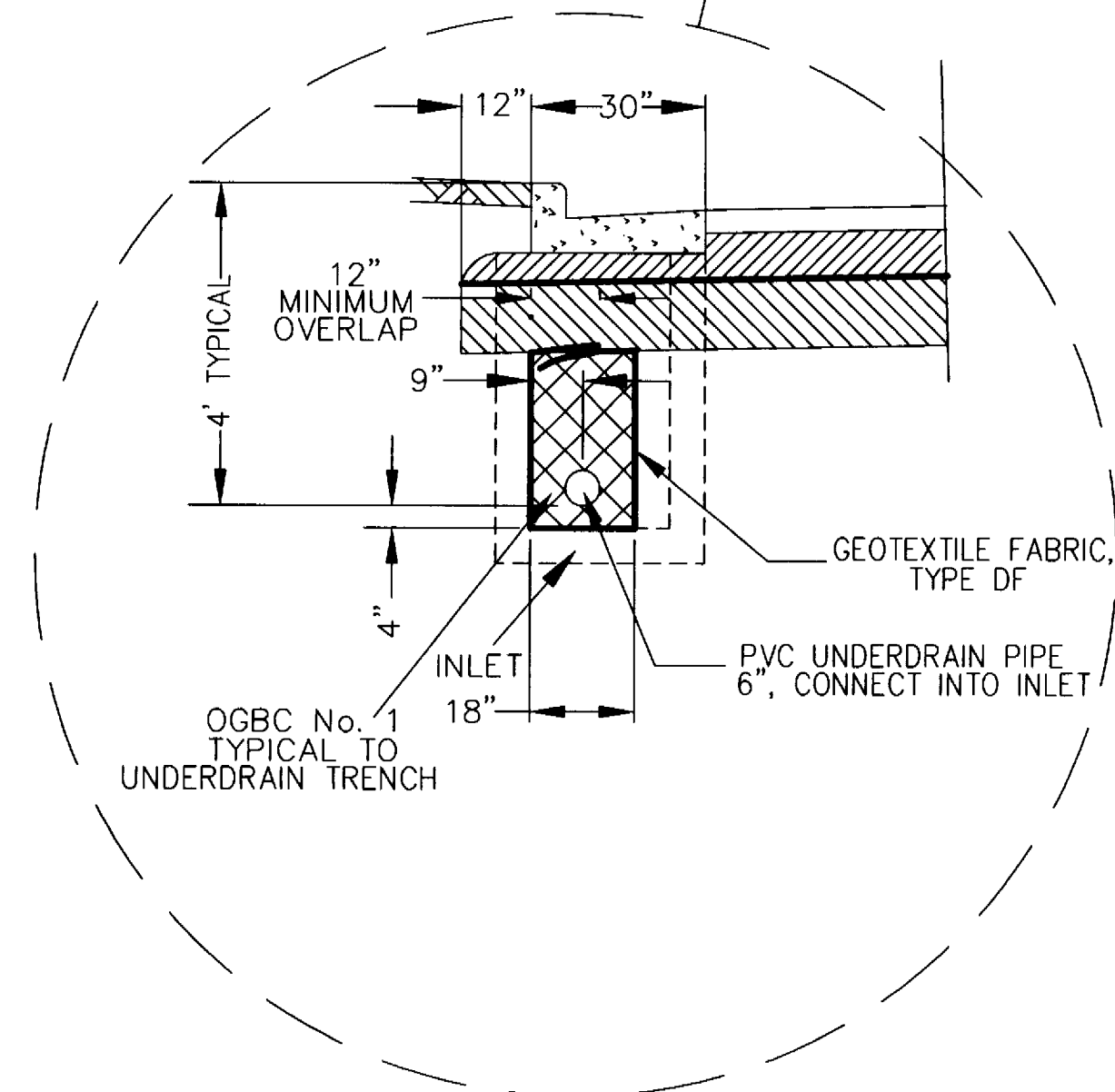


TYPICAL FINISHED SECTION

C.T.H. A

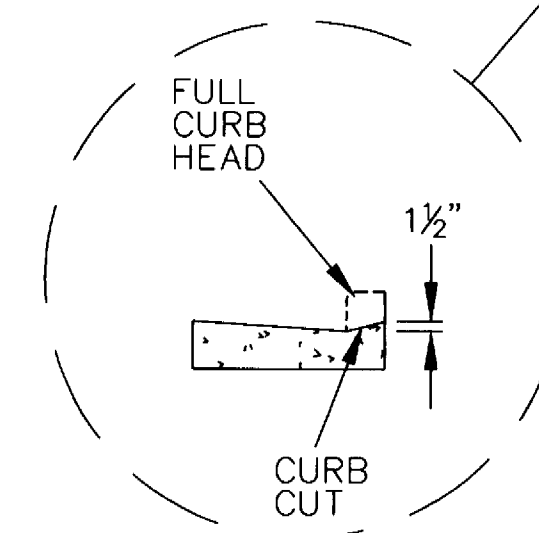
8"A"+44.4 TO 26"A"+00

1"=5'



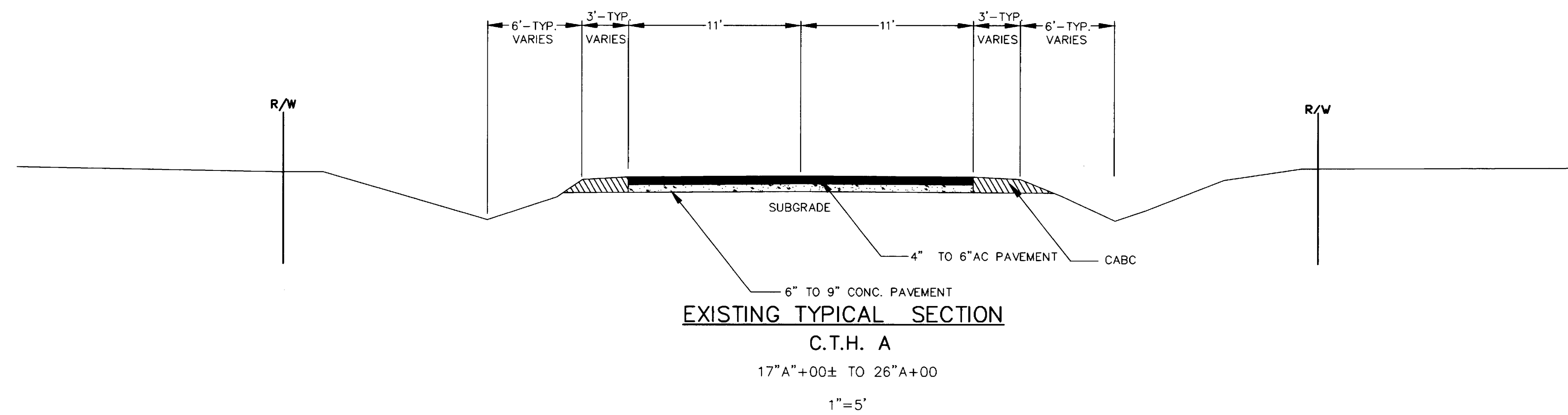
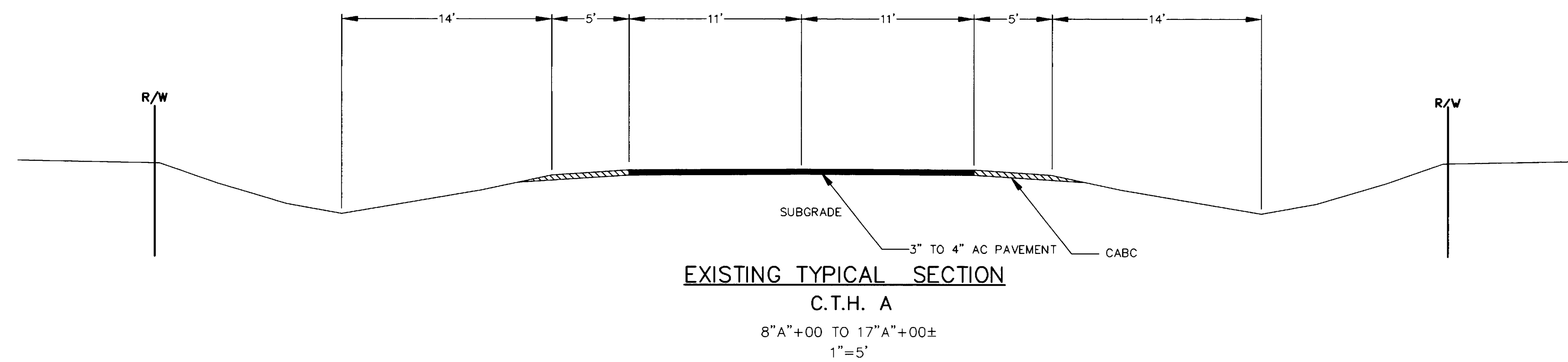
TYPICAL DRIVEWAY SECTION, LT, RT

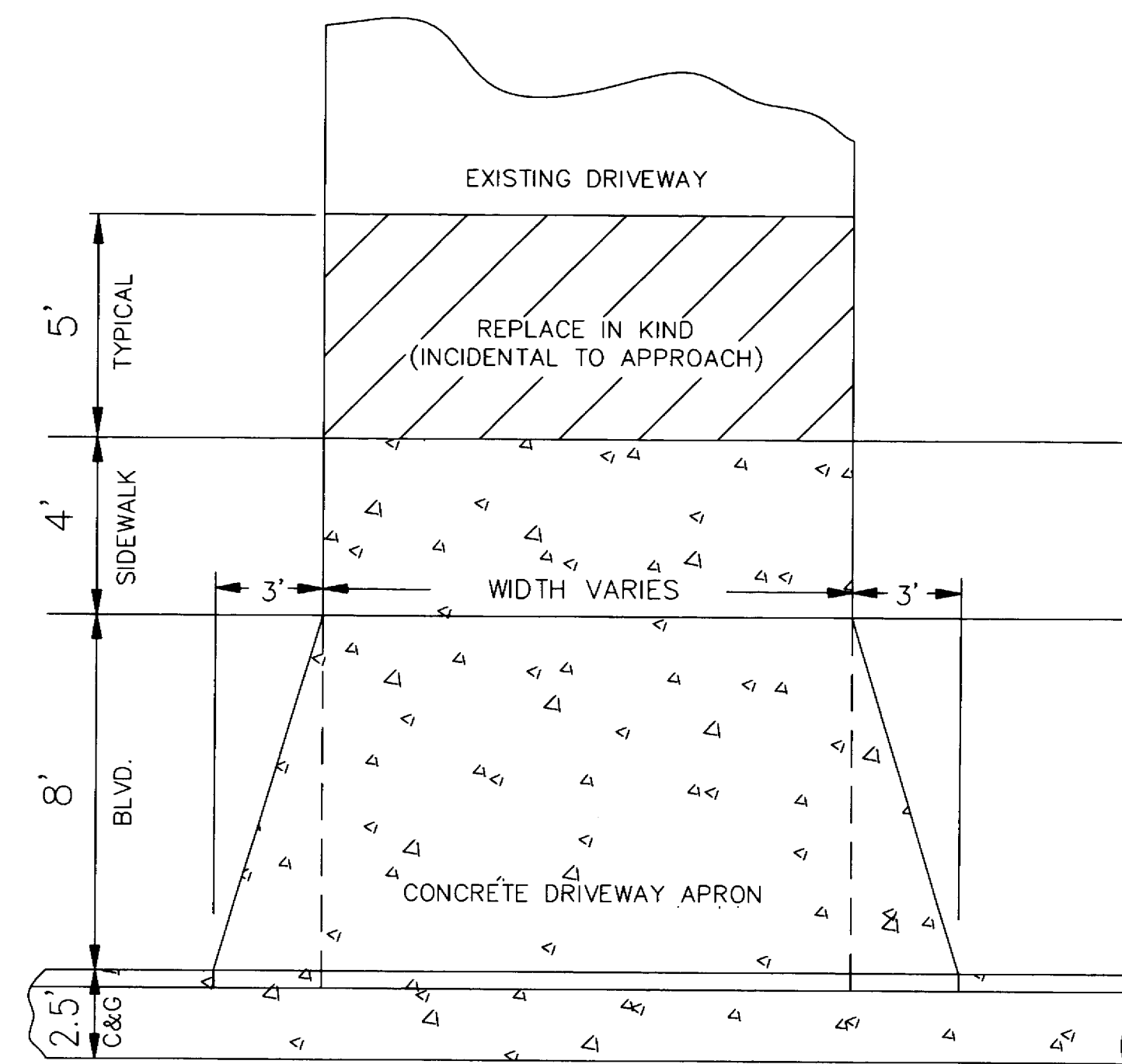
1" = 5'



* RIGHT-OF-WAY WIDTHS: 7"A"+50 TO 23"A"+14.4, RT, R-O-W = 41.25 FEET RIGHT OF REFERENCE LINE
 23"A"+14.40 TO 26"A"+11.40, RT, R-O-W = 33 FEET RIGHT OF REFERENCE LINE
 7"A"+50 TO 18"A"+86.87, LT, R-O-W = 41.25 FEET LEFT OF REFERENCE LINE
 18"A"+86.87 TO 26"A"+13.79, LT, R-O-W = 33 FEET LEFT OF REFERENCE LINE

STATE PROJECT NUMBER 9479-00-70, C.T.H. A	SHEET NO. 2.3
TYPICAL SECTIONS	

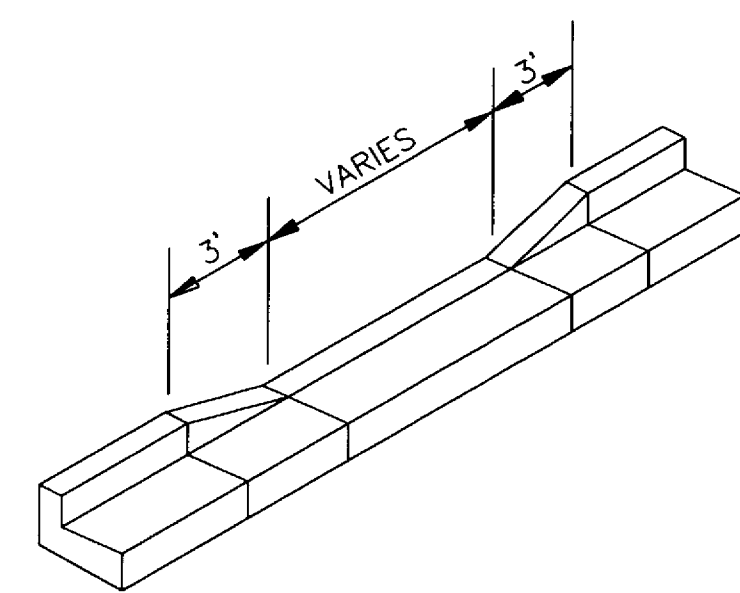




TYPICAL DRIVEWAY PLAN

NOT TO SCALE

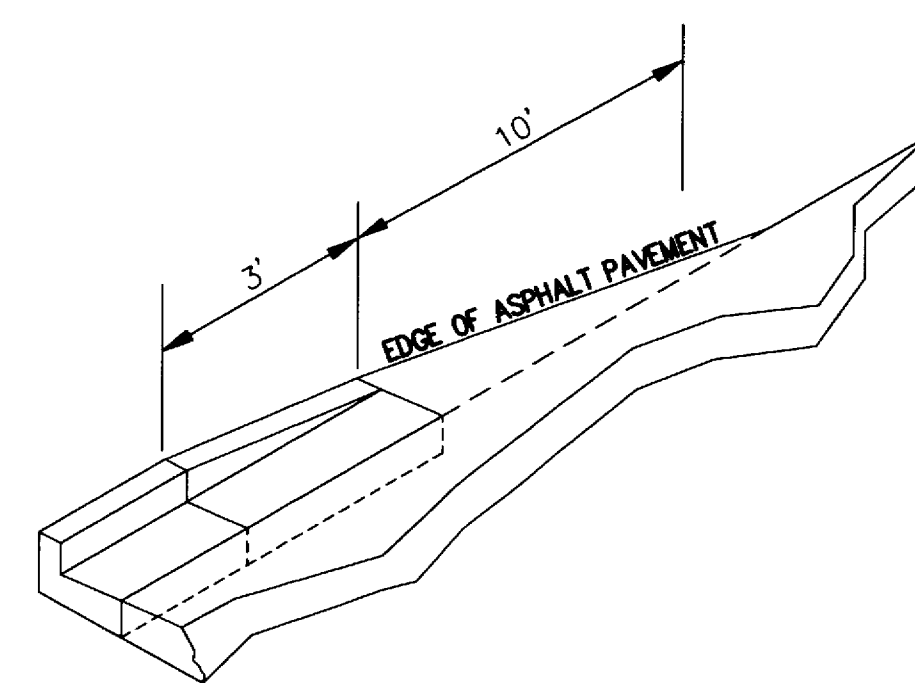
12"A"+27.16, LT
13"A"+17.02, RT
17"A"+14.44, LT
17"A"+28.02, RT
18"A"+33, LT
19"A"+15.75, RT
19"A"+62.27, LT
20"A"+81.34, LT
21"A"+08.55RT
21"A"+14.40, LT
22"A"+32.92, LT
22"A"+34.92, RT
23"A"+22.58, LT
24"A"+70.49, RT
25"A"+50, LT



STANDARD CURB CUT

NOT TO SCALE

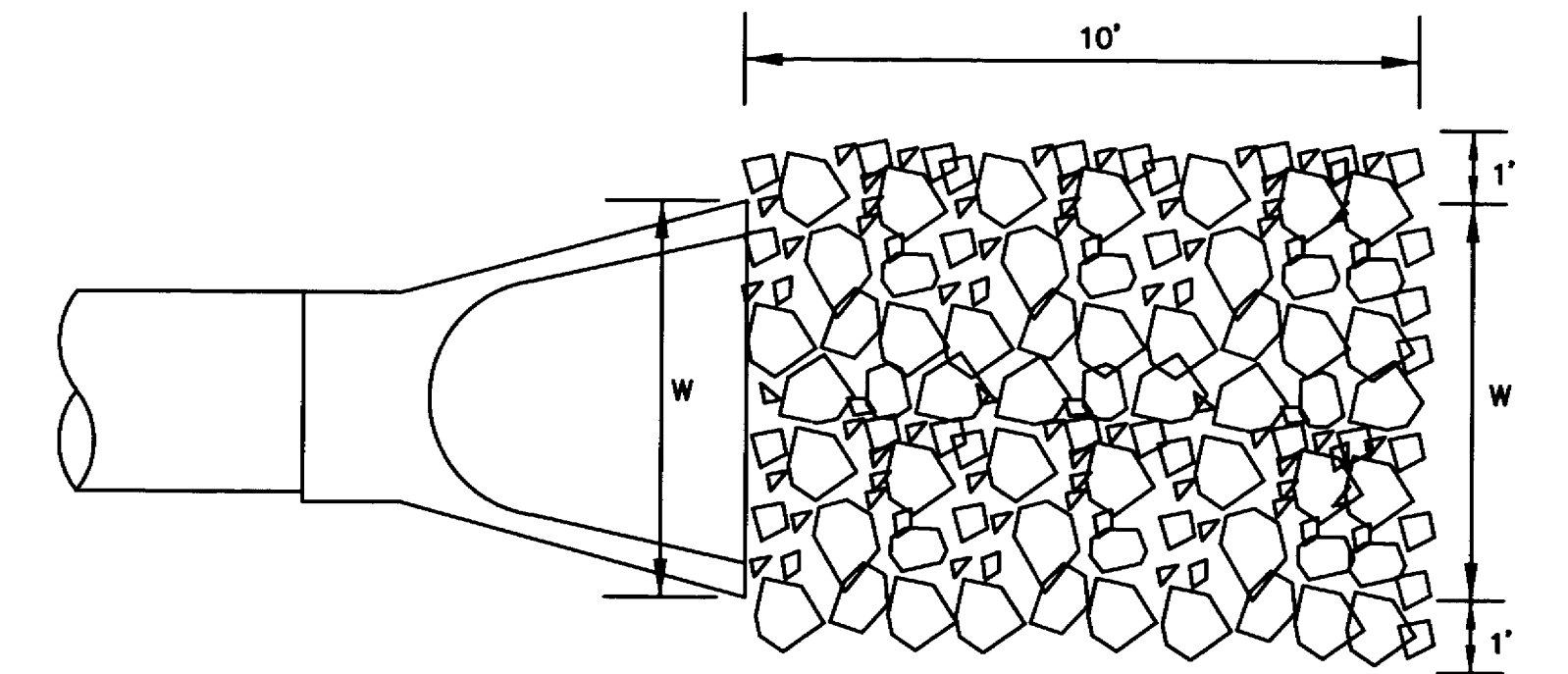
12"A"+27.16, LT
13"A"+17.02, RT
17"A"+14.44, LT
17"A"+28.02, RT
18"A"+33, LT
19"A"+15.75, RT
19"A"+62.27, LT
20"A"+81.34, LT
21"A"+08.55RT
21"A"+14.40, LT
22"A"+32.92, LT
22"A"+34.92, RT
23"A"+22.58, LT
24"A"+70.49, RT
25"A"+50, LT



TAPERED CURB ENDING

NOT TO SCALE

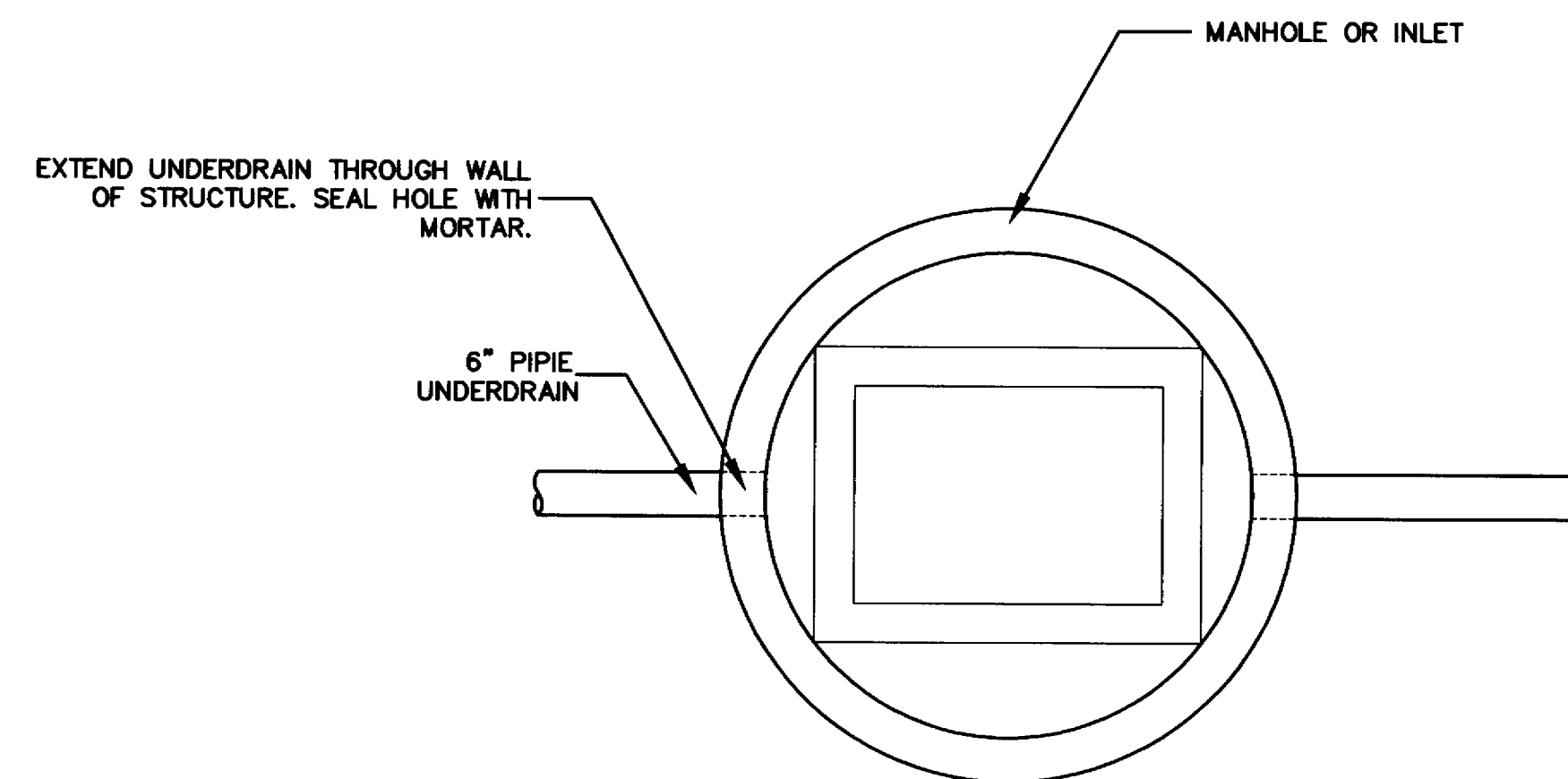
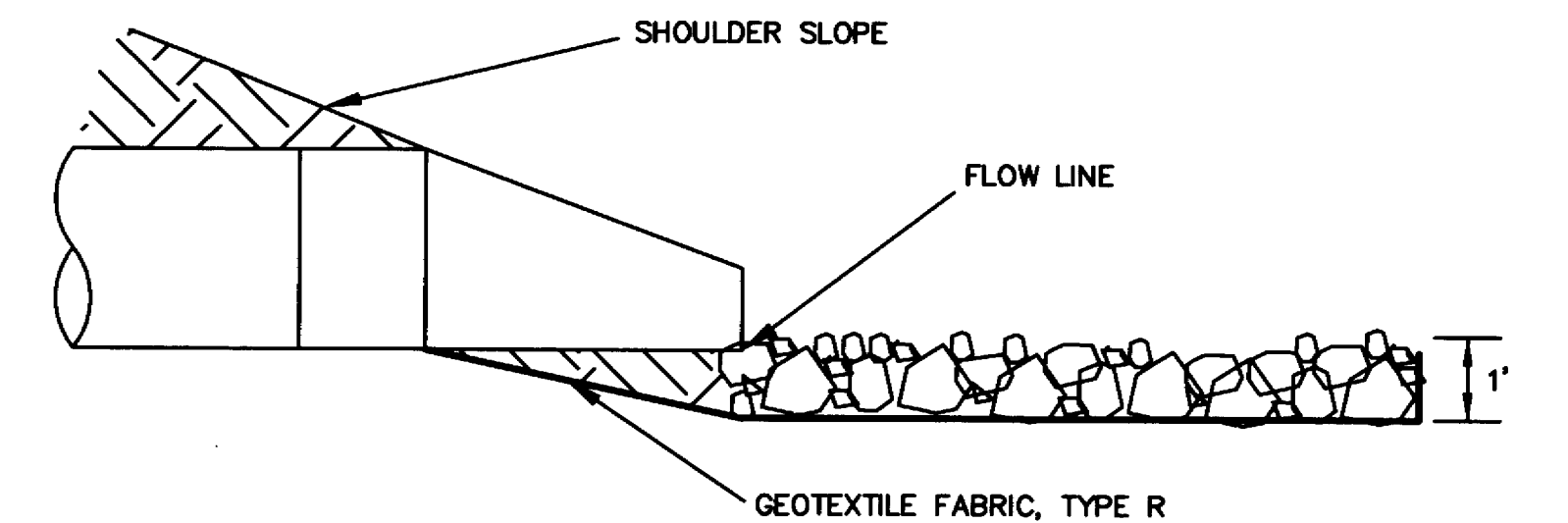
48"A"+00, LT, RT
49"107"+53.86, LT
50"107"+47.35, LT



MEDIUM RIPRAP AT ENDWALL

NOT TO SCALE

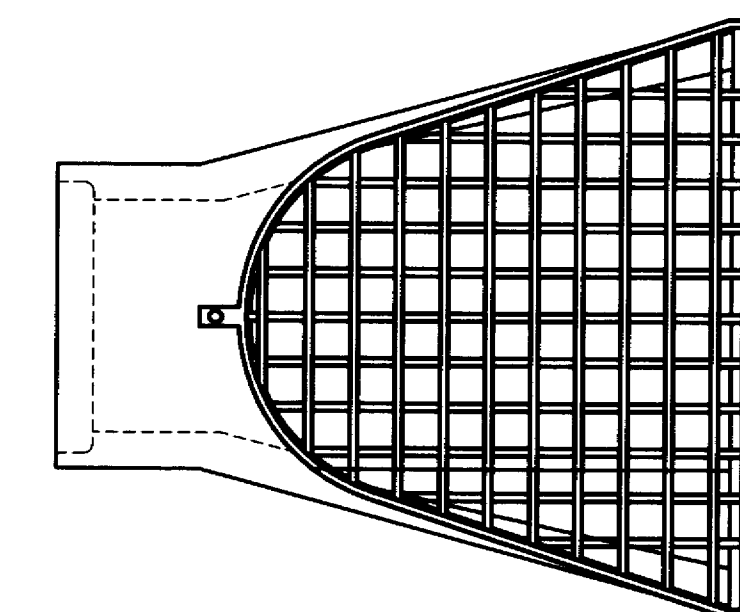
10"A"+08, LT, RT
47"107"+00, LT



PLAN OF PIPE UNDERDRAIN

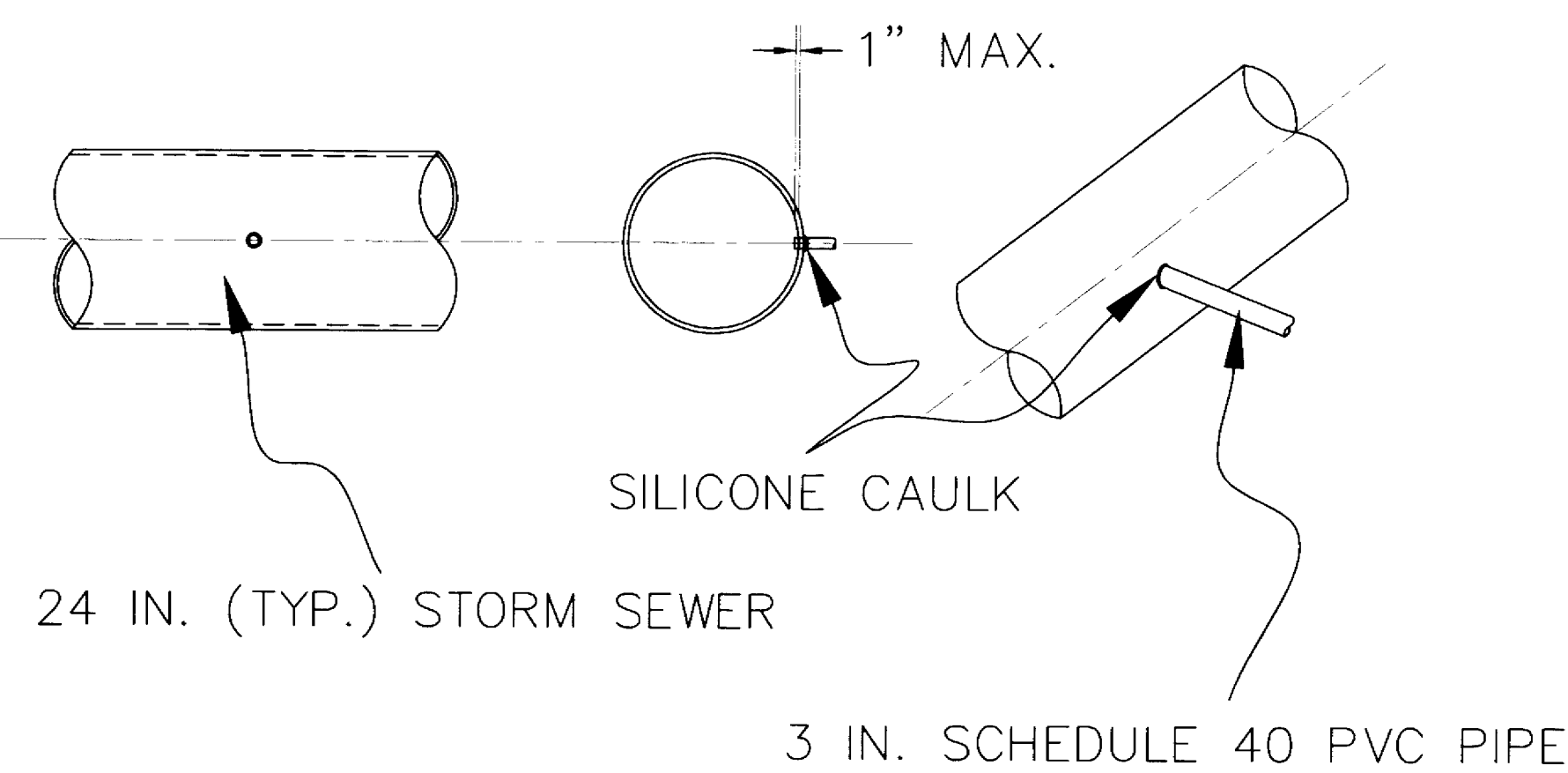
NOT TO SCALE

PIPE UNDERDRAIN, 6" CONNECTION
TO MANHOLE OR INLET.
NOTE: CONTRACT UNIT PRICE FOR
6" PIPE UNDERDRAIN SHALL
INCLUDE THE COST OF CONNECTION
TO MANHOLE OR INLET.



GALVANIZED TRASH GUARD

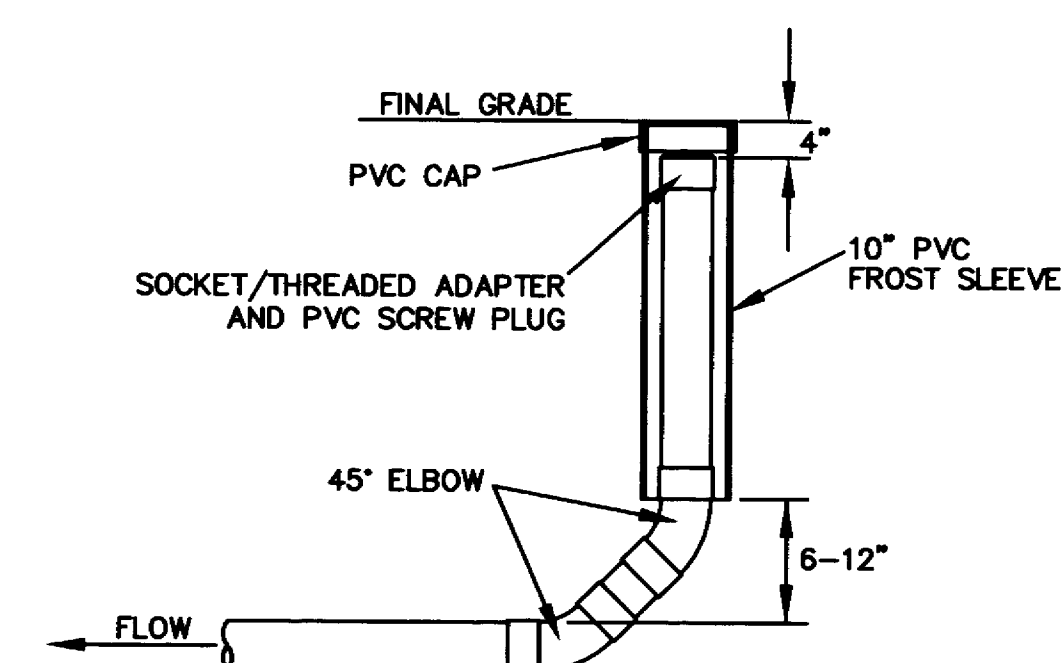
NOT TO SCALE
47"107"+00, LT



CLEARWATER DRAIN CONNECTION

NOT TO SCALE

20"A"+41, LT
19"A"+05, LT
24"A"+56.50, LT

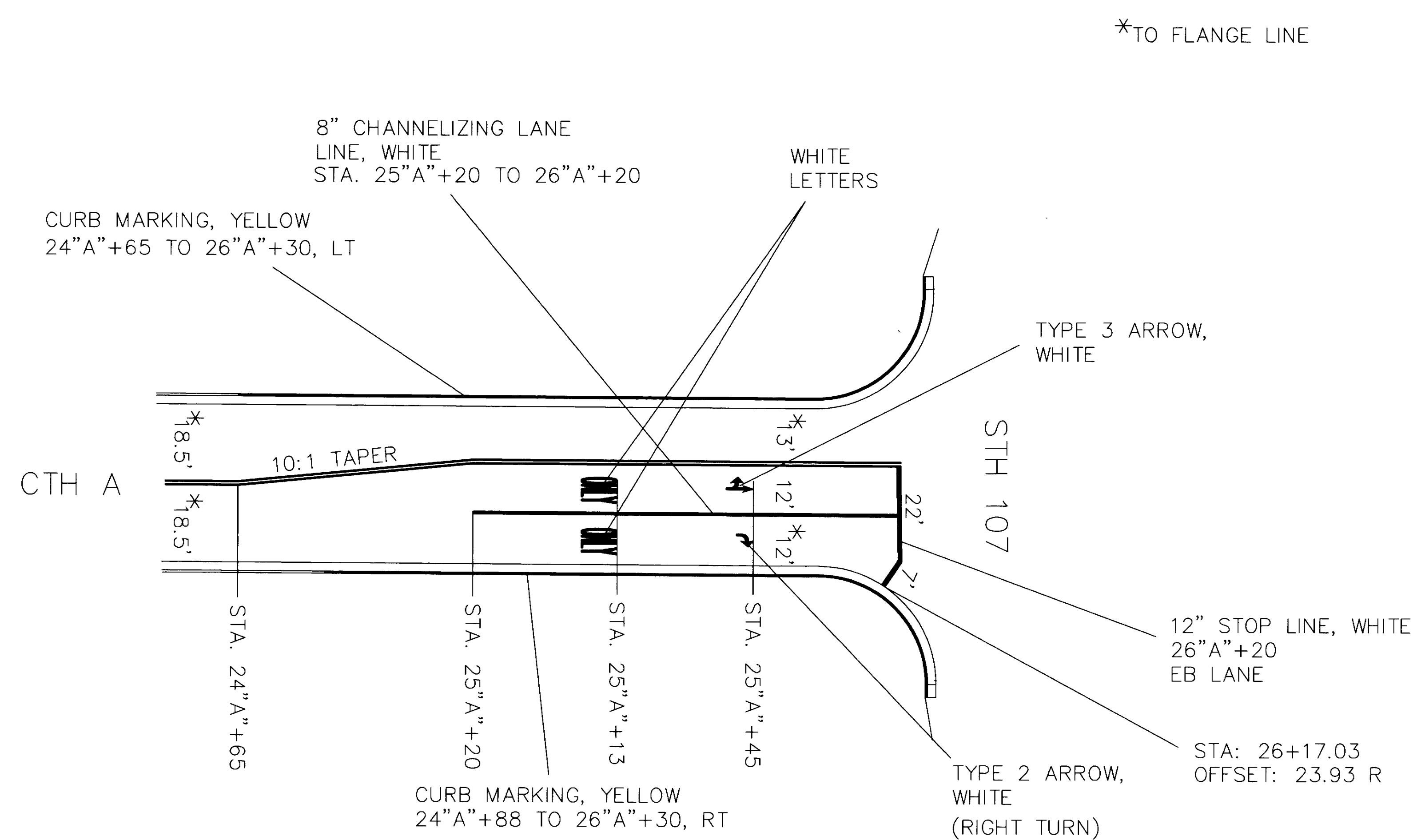


DETAIL OF PIPE UNDERDRAIN CLEANOUT

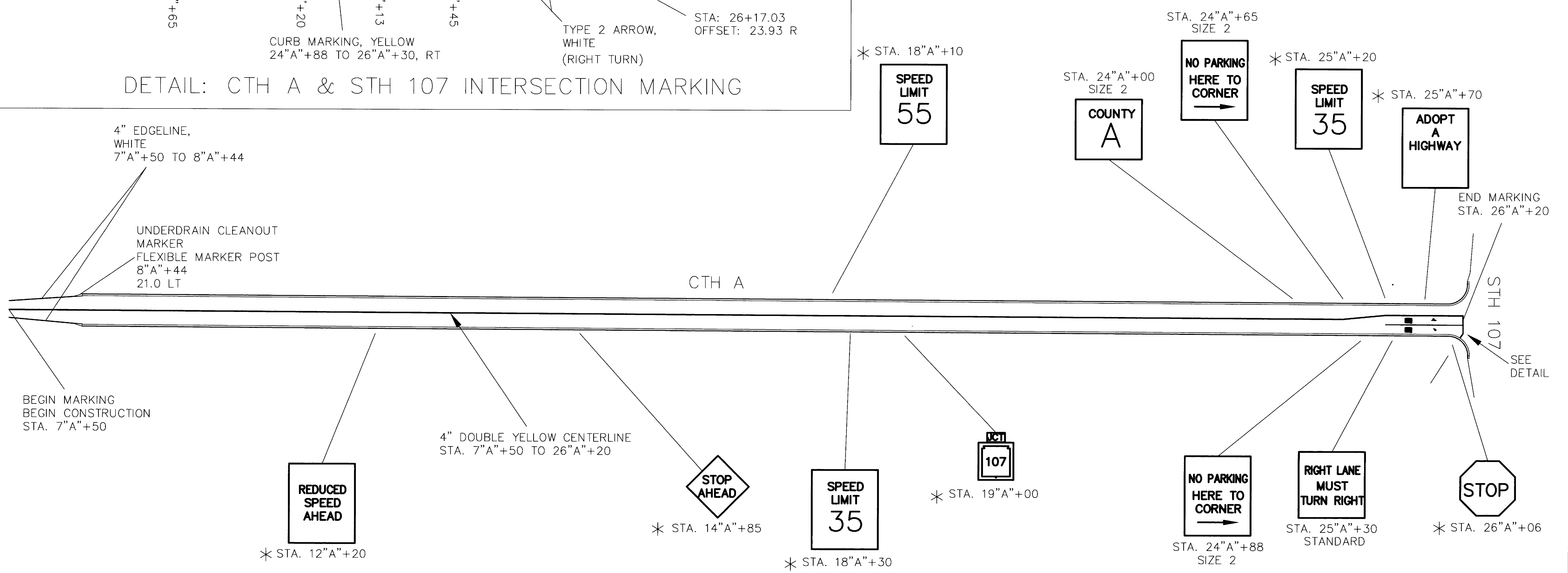
NOT TO SCALE

STA. 8"A"+40, 20.25 LT, RT

-BAR DIAMETER 1"
-BOLT DIAMETER 3/4"
-6" MINIMUM SPACING BETWEEN BARS
-CONNECTOR PLATE W/BOLT ATTACHED AT THREE POINTS TO ENDWALL



DETAIL: CTH A & STH 107 INTERSECTION MARKING



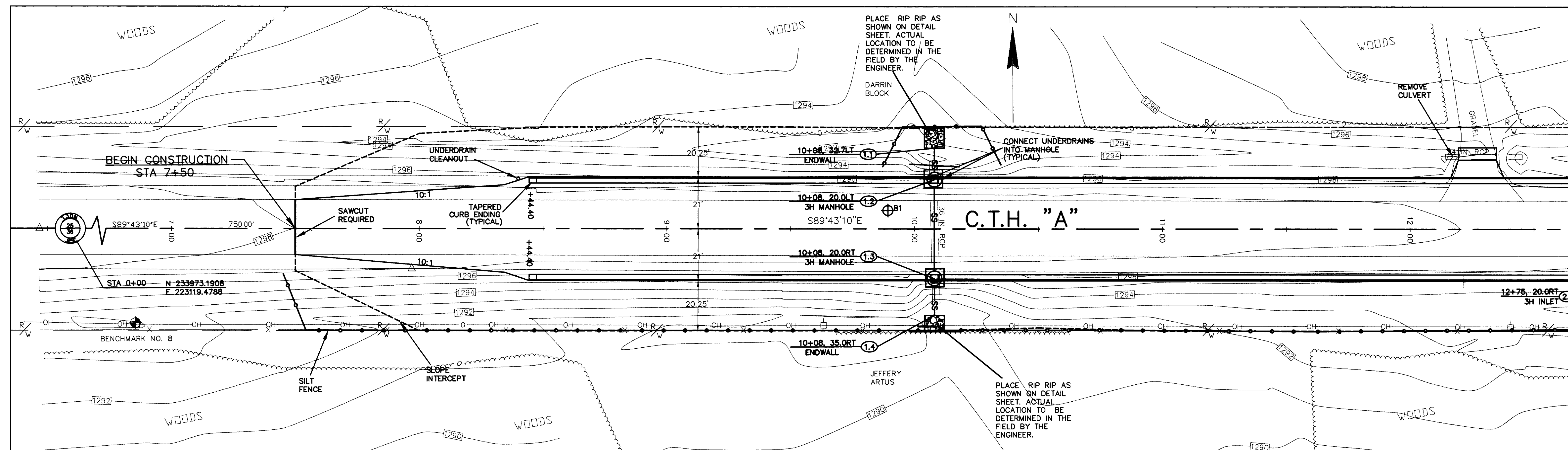
STORM SEWER STRUCTURE CHART

STATION	LOCATION	STRUCTURE NUMBER	MANHOLE TYPE 1 EACH	MANHOLE TYPE 3 EACH	INLET TYPE 3 EACH	INLET TYPE 8 EACH	INLET TYPE 9 EACH	CONCRETE APRON ENDWALL	COVER TYPE J EACH	COVER TYPE H EACH	COVER TYPE MS EACH	ENDWALL WITH GUARD EACH	DRAINS TO	RIM ELEV	INVERT ELEV.
10+08	32.7LT	1.1	—	—	—	—	—	1	—	—	—	—	1.2	—	1290.68
10+08	20.0LT	1.2	—	1	—	—	—	—	—	1	—	—	1.3	1296.23	1290.56
10+08	20.0RT	1.3	—	1	—	—	—	—	—	1	—	—	1.4	1296.23	1290.18
10+08	35.0LT	1.4	—	—	—	—	—	1	—	—	—	—	DITCH	—	1290.04
12+75	20.0RT	2.1	—	—	1	—	—	—	—	1	—	—	3.1	1294.88	1290.83
12+75	20.0LT	2.2	—	—	1	—	—	—	—	1	—	—	2.1	1294.88	1291.28
16+00	20.0RT	3.1	—	—	1	—	—	—	—	1	—	—	4.1	1291.80	1287.15
16+00	20.0LT	3.2	—	—	1	—	—	—	—	1	—	—	3.1	1291.80	1287.60
18+00	20.0RT	4.1	1	—	—	—	—	—	—	1	—	—	5.1	1288.06	1282.97
18+00	20.0LT	4.2	—	—	1	—	—	—	—	1	—	—	4.1	1288.06	1284.18
20+11.5	20.0RT	5.1	1	—	—	—	—	—	—	1	—	—	6.1	1284.26	1278.76
20+11.5	20.0LT	5.2	—	—	1	—	—	—	—	1	—	—	5.1	1284.26	1280.30
20+11.5	30.0LT	5.3	—	—	—	1	—	—	—	—	1	—	5.2	1283.50	1280.35
22+00	20.0RT	6.1	1	—	—	—	—	—	—	1	—	—	7.1	1281.94	1276.69
22+00	20.0LT	6.2	—	—	1	—	—	—	—	1	—	—	6.1	1281.94	1277.89
24+00	20.0RT	7.1	1	—	—	—	—	—	—	1	—	—	8.1	1277.26	1272.89
24+00	20.0LT	7.2	—	—	1	—	—	—	—	1	—	—	7.1	1277.26	1274.09
25+99	20.0RT	8.1	1	—	—	—	—	—	—	1	—	—	9.1	1274.75	1270.51
25+98	20.0LT	8.2	—	—	1	—	—	—	—	1	—	—	8.1	1274.75	1271.67
26+26.70	21.0RT	9.1	—	1	—	—	—	—	1	—	—	—	10.1	1274.76	1269.81
51+40	18.0LT	9.2	—	—	—	—	1	—	—	—	2	—	9.1	1274.59	1270.63
47+00	26.0LT	10.1	—	—	—	—	—	1	—	—	—	1	DITCH	—	1268.42
TOTAL			5	3	9	1	1	3	1	16	3	1			

STORM SEWER PIPE CHART

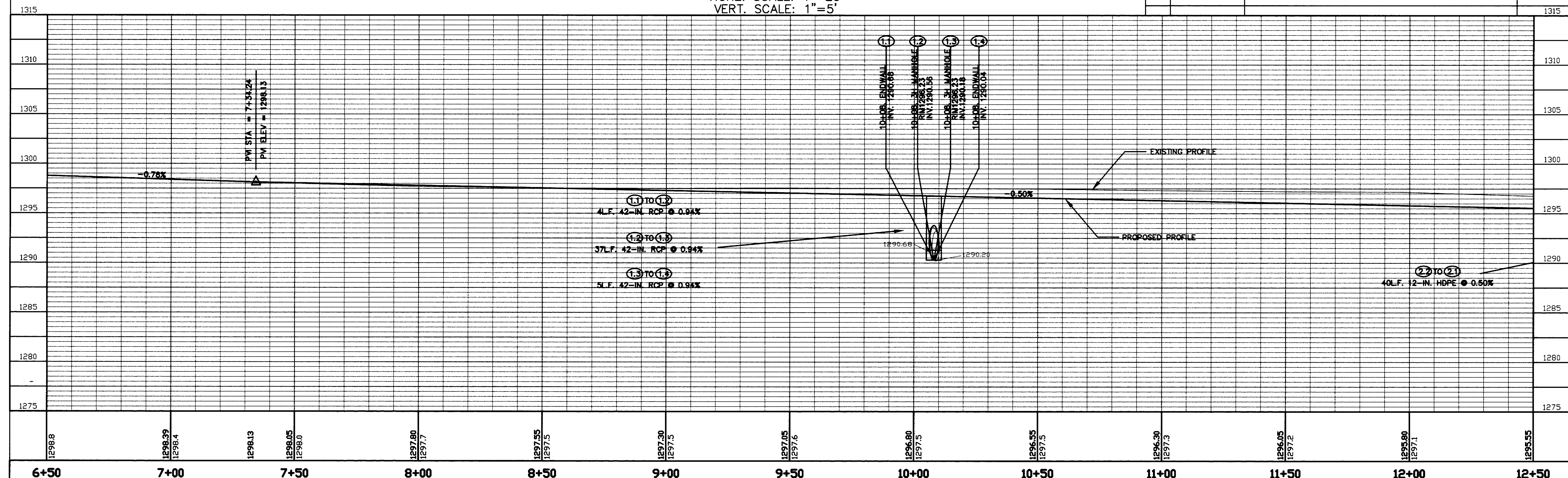
LOCATION		SIZE	LENGTH	GRADE	ELEV.	ELEV.	TYPE OF	
FROM	TO	(IN.)	(FT.)	%	INLET	DISCHG.	PIPE	REMARKS
1.1	1.2	42	4	0.94	1290.68	1290.56	RCP	
1.2	1.3	42	40	0.94	1290.56	1290.18	RCP	
1.3	1.4	42	5	0.94	1290.18	1290.04	RCP	
2.2	2.1	12	40	0.50	1291.28	1291.08	HDPE	
2.1	3.1	12	325	1.13	1290.83	1287.15	HDPE	
3.2	3.1	12	40	0.50	1287.60	1287.40	HDPE	
3.1	4.1	12	200	1.59	1287.15	1283.98	HDPE	
4.2	4.1	12	40	0.50	1284.18	1283.98	HDPE	
4.1	5.1	24	212	1.99	1282.98	1278.76	HDPE	
5.3	5.2	12	10	0.50	1280.35	1280.30	HDPE	
5.2	5.1	12	40	1.35	1280.30	1279.76	HDPE	
5.1	6.1	24	188	1.88	1278.76	1277.69	HDPE	
6.2	6.1	12	40	0.50	1277.89	1276.69	HDPE	
6.1	7.1	24	200	1.90	1277.69	1272.89	HDPE	
7.2	7.1	12	40	0.50	1274.09	1272.89	HDPE	
7.1	8.1	24	200	1.19	1272.89	1270.51	HDPE	
8.2	8.1	12	40	0.40	1271.67	1271.51	HDPE	
8.1	9.1	24	28	1.00	1270.51	1270.23	HDPE	
9.2	9.1	24X38	161	0.25	1270.63	1270.23	RCP	ELLIPTICAL
9.1	10.1	29X45	271	0.50	1269.81	1268.42	RCP	ELLIPTICAL

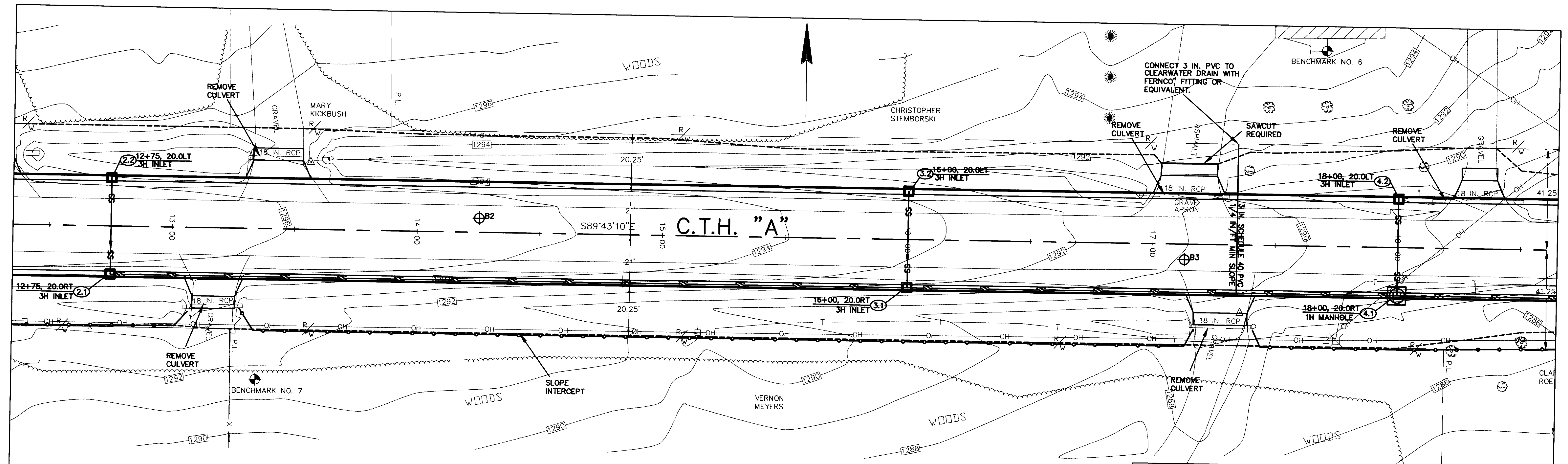
PIPE SUMMARY
12 IN., STORM SEWER — 855 L.F.
24 IN., STORM SEWER — 828 L.F.
24X38 IN. — 161 L.F.
29X45 IN. — 271 L.F.
42 IN. — 50 L.F.
ENDWALL SUMMARY
29X45 IN. — 1 EACH
42 IN. — 2 EACH
TRASH GUARD FOR 29X45 IN. ENDWALL — 1 EACH



HORZ. SCALE: 1"=20'
VERT. SCALE: 1"=5'

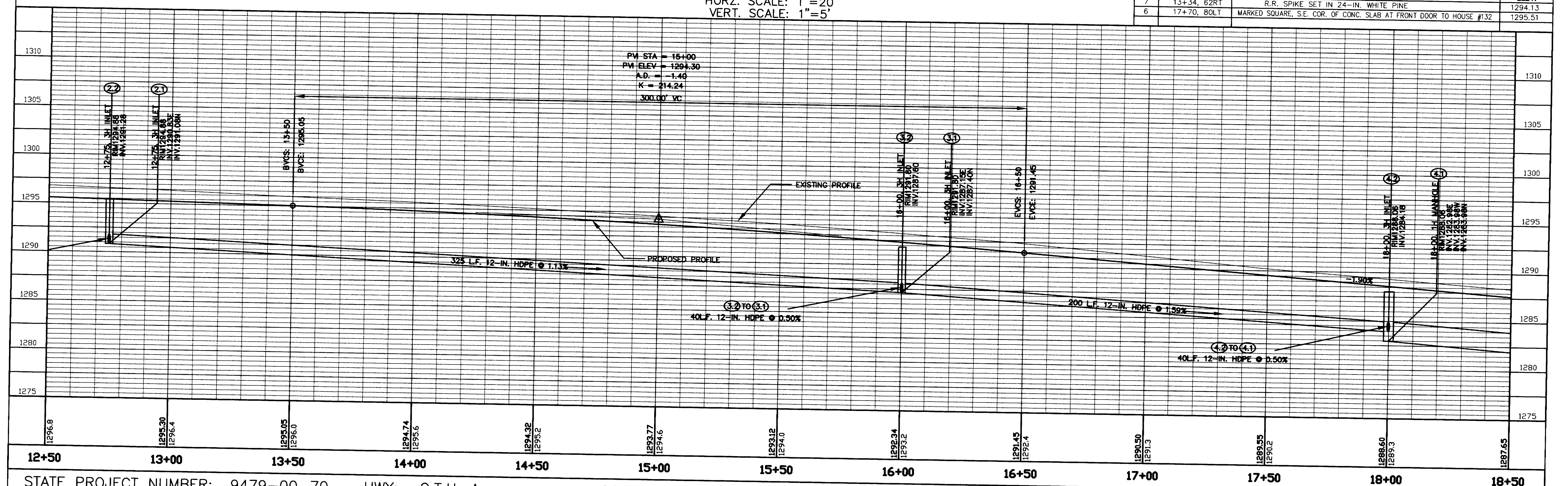
BENCHMARKS			
No.	STATION	DESCRIPTION	ELEV.
8	6+85, 38RT	60D SPIKE SET IN POWER POLE NO. 3005 36E7	1295.73





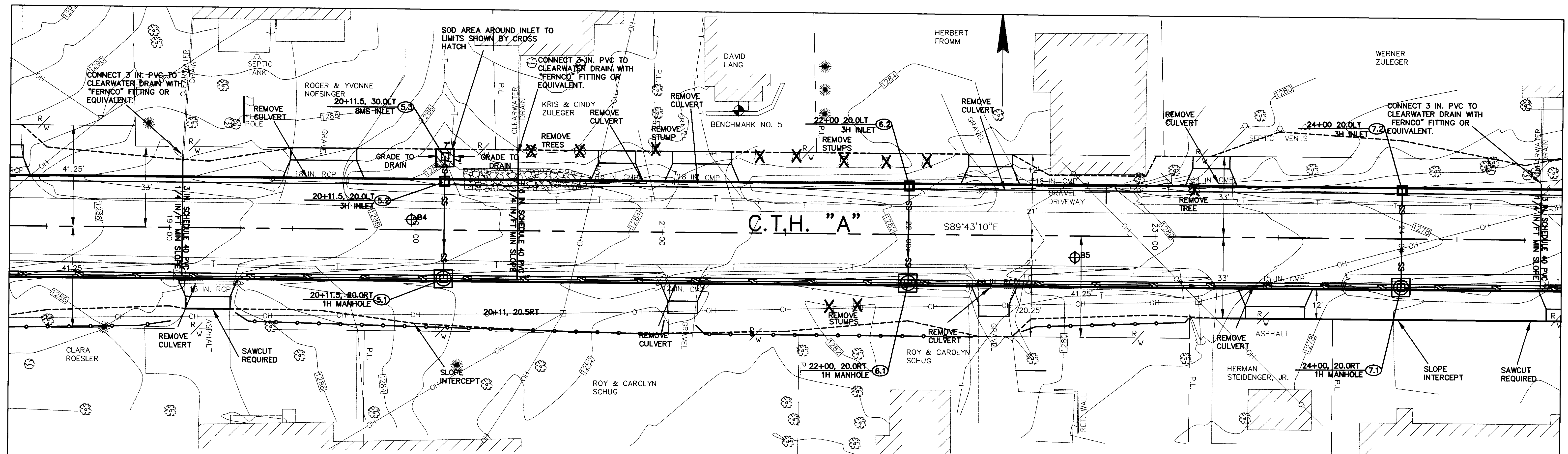
HORZ. SCALE: 1"=20'
VERT. SCALE: 1"=5'

BENCHMARKS		
No.	STATION	DESCRIPTION
7	13+34, 62RT	R.R. SPIKE SET IN 24-IN. WHITE PINE
6	17+70, 80LT	MARKED SQUARE, S.E. COR. OF CONC. SLAB AT FRONT DOOR TO HOUSE #132
		ELEV.
		1294.13
		1295.51



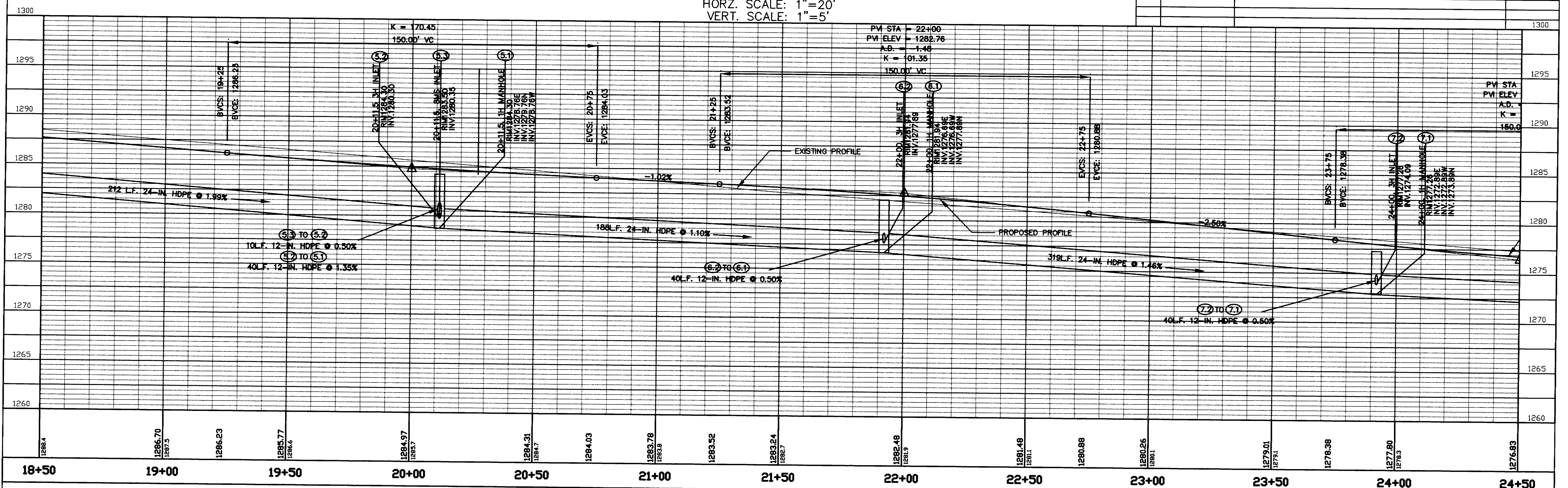
STATE PROJECT NUMBER: 9479-00-70 HWY: C.T.H. A COUNTY: MARATHON

FILE NAME: PLOT DATE: ORG DATE: PLOT NAME: Originator: Dist: SHEET NO: 5.2



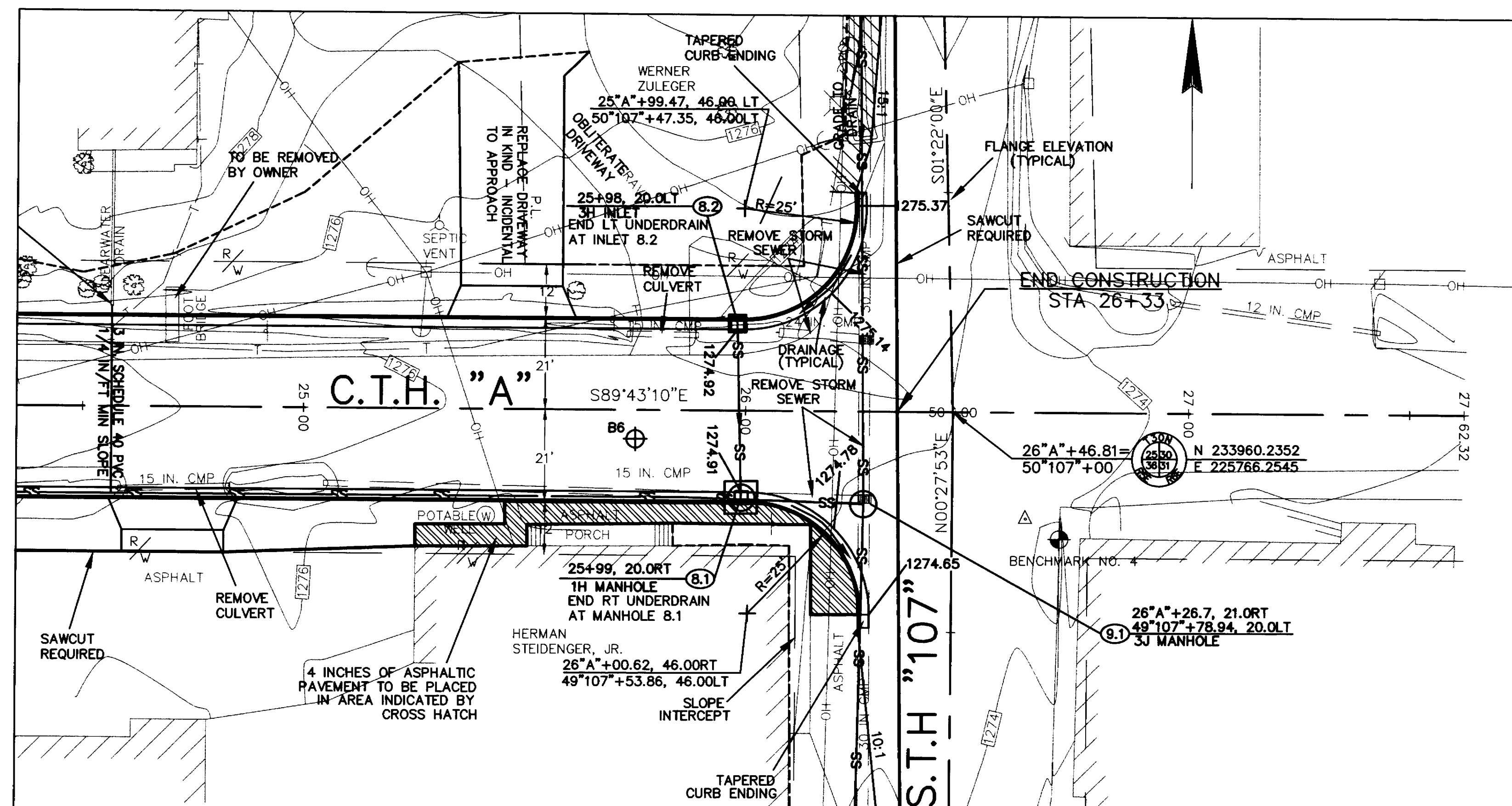
HORZ. SCALE: 1"=20'
VERT. SCALE: 1"=5'

No.	STATION	BENCHMARKS	
		DESCRIPTION	ELEV.



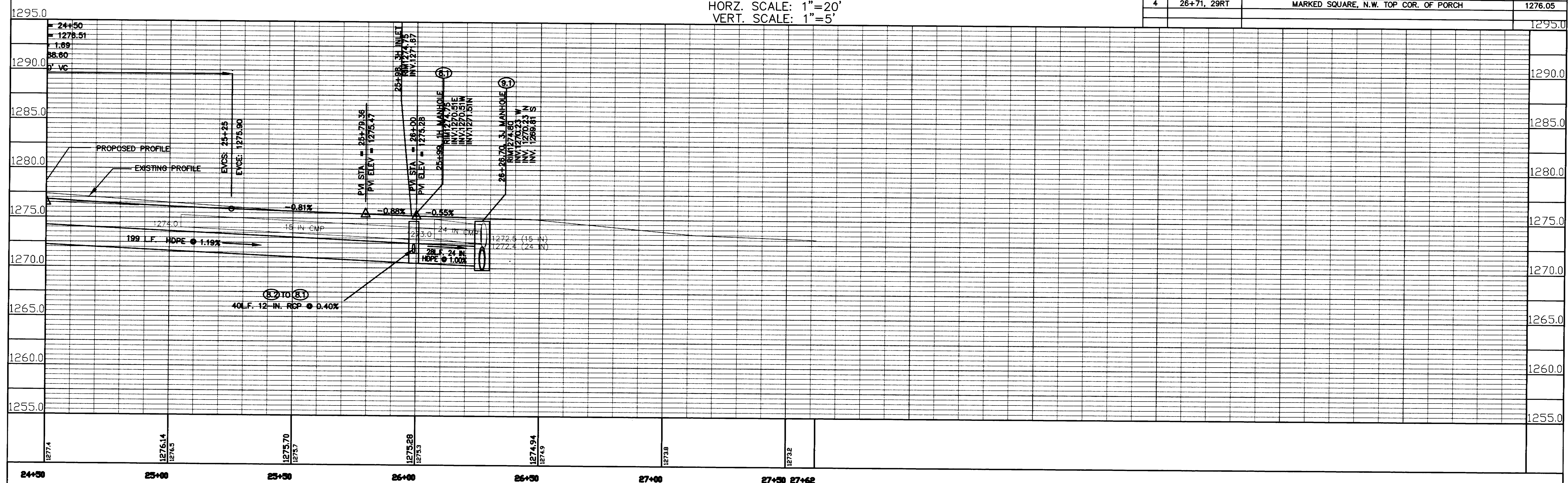
STATE PROJECT NUMBER: 9479-00-70 HWY: C.T.H. A COUNTY: MARATHON SHEET NO: 5.3

FILE NAME: PLOT DATE: ORG DATE: PLOT NAME: Originator: Dist PLOT SCALE:



HORZ. SCALE: 1"=20'
VERT. SCALE: 1"=5'

BENCHMARKS			
No.	STATION	DESCRIPTION	ELEV.
4	26+71, 29RT	MARKED SQUARE, N.W. TOP COR. OF PORCH	1276.05



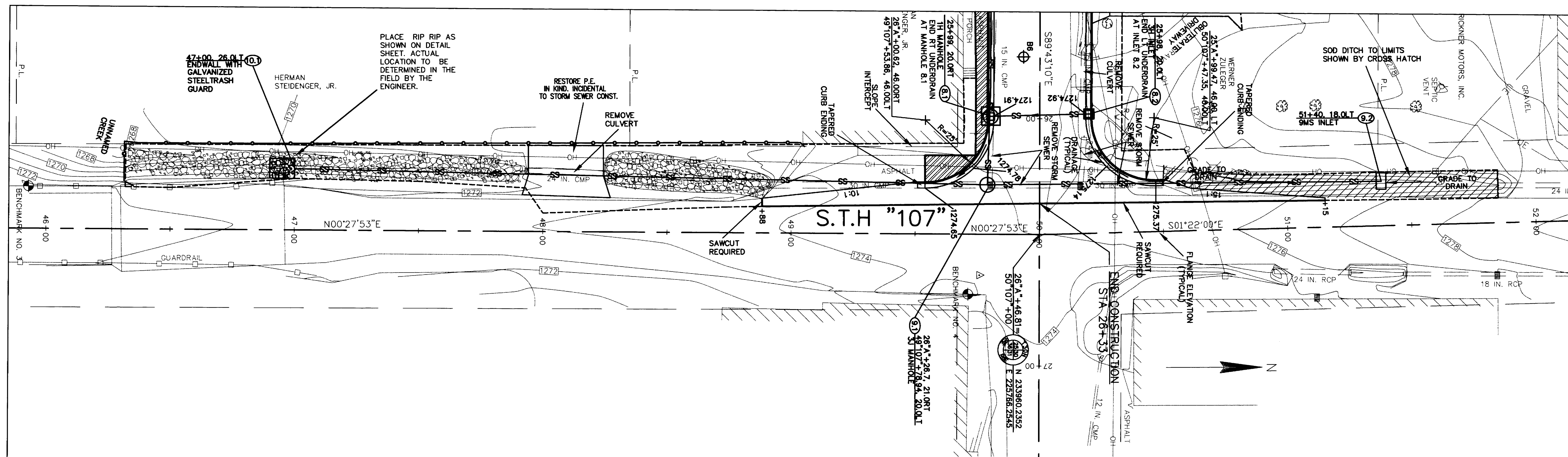
STATE PROJECT NUMBER: 9479-00-70

HWY: CTH A

COUNTY: MARATHON

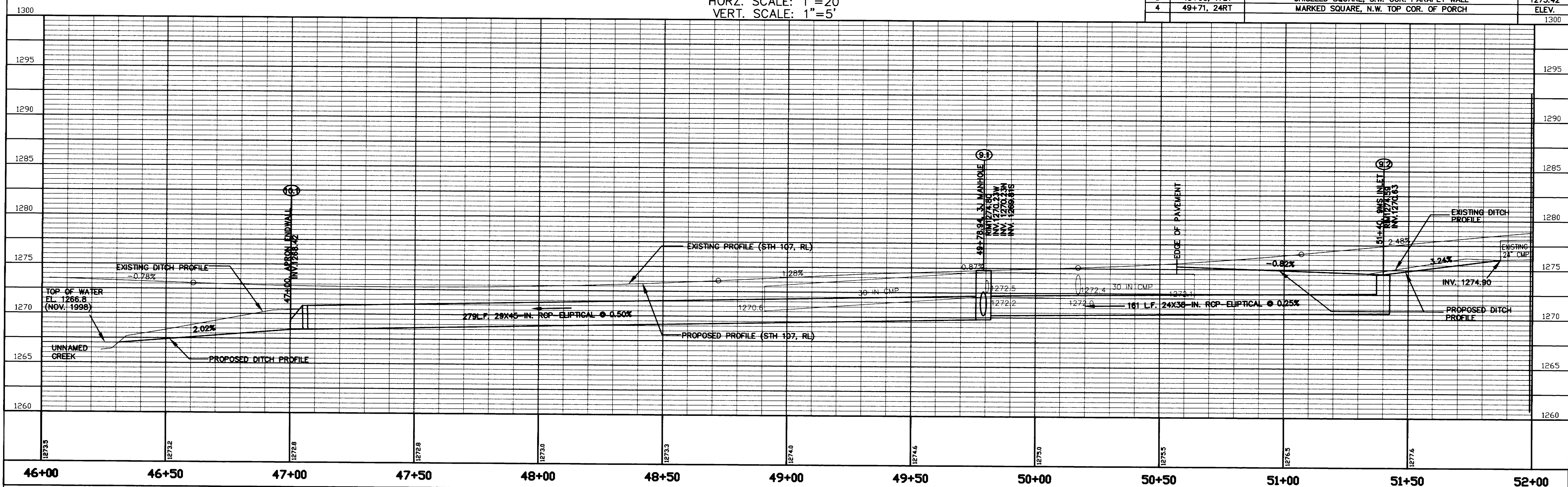
SHEET NO: 5.4

FILE NAME: PLOT DATE: ORG DATE: PLOT NAME: Originator: Dist PLOT SCALE:

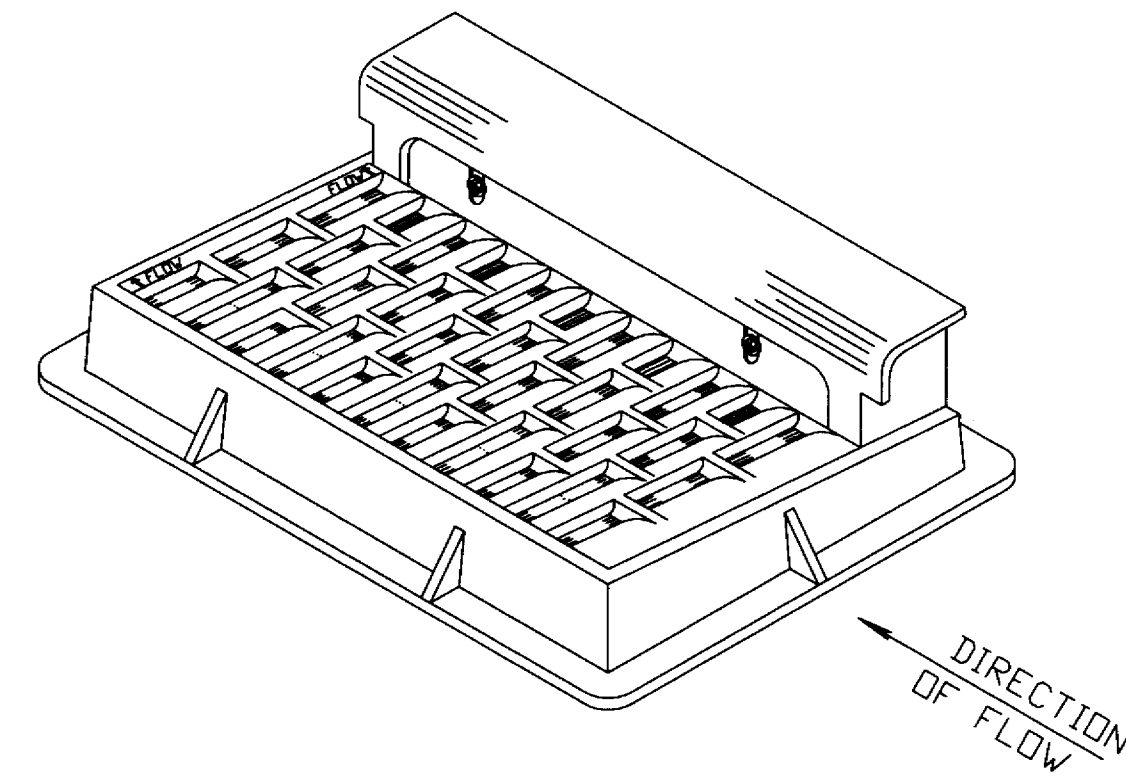
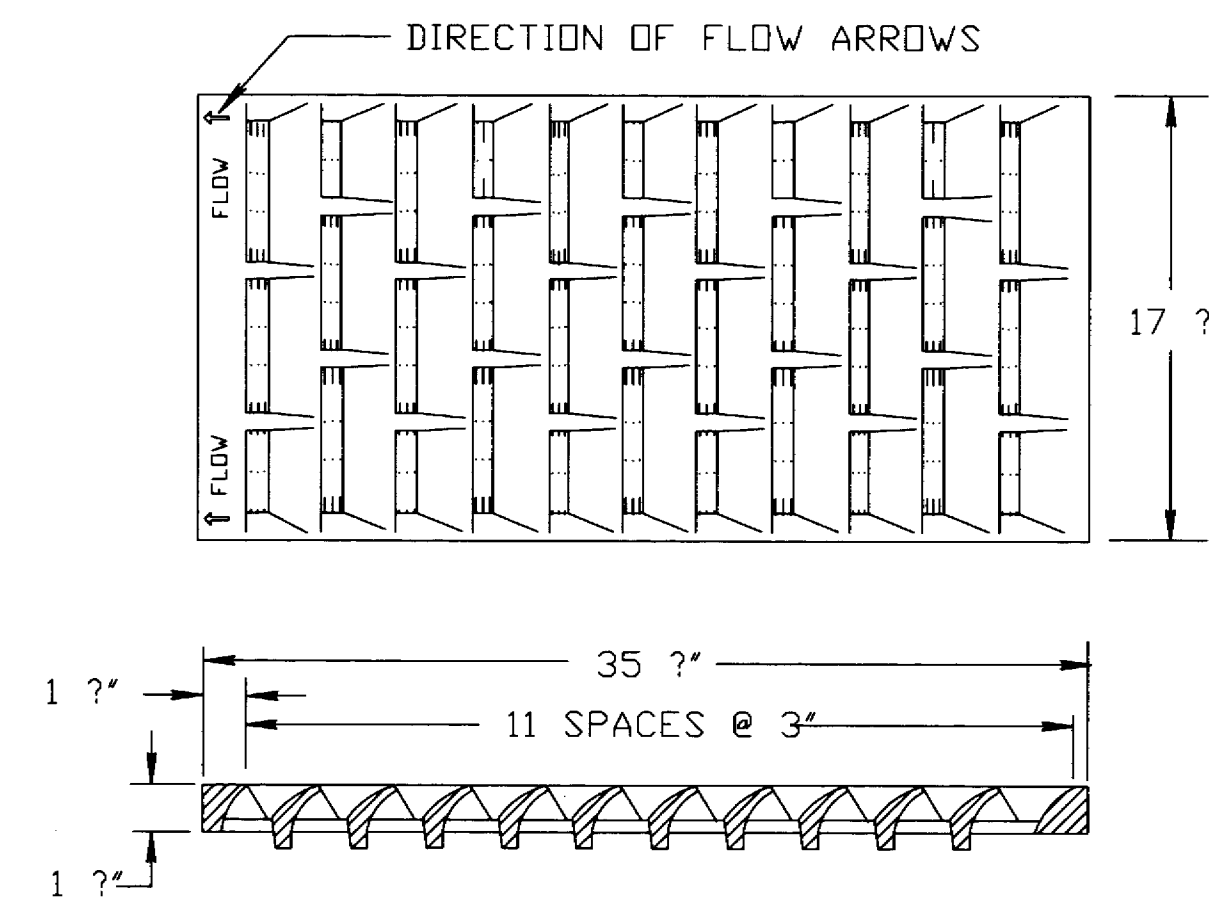


BENCHMARKS			
No.	STATION	DESCRIPTION	ELEV.
3	45+93, 17LT	CHISELED SQUARE, S.W. COR. PARAPET WALL	1273.42
4	49+71, 24RT	MARKED SQUARE, N.W. TOP COR. OF PORCH	ELEV.

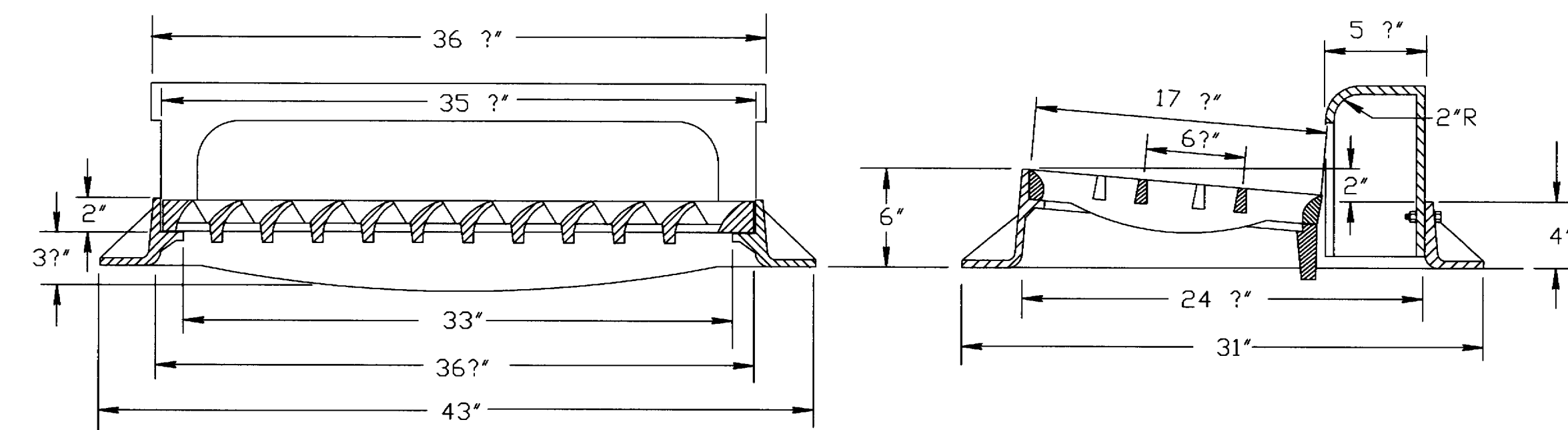
HORZ. SCALE: 1"=20'
VERT. SCALE: 1"=5'



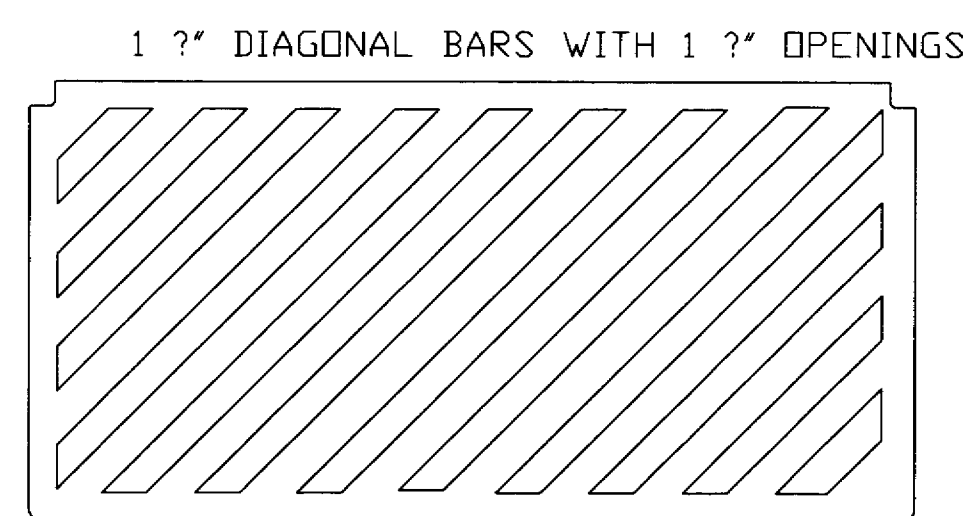
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6\"/>



TYPE "H"
(APPROXIMATE WEIGHT 422 LBS.)
FRAME..... 175 LBS.
GRATE..... 138 LBS.
CURB BOX..... 109 LBS.



SPECIAL GRATE FOR
TYPE "H" COVER

(MEASURES 35 1/2\"/>

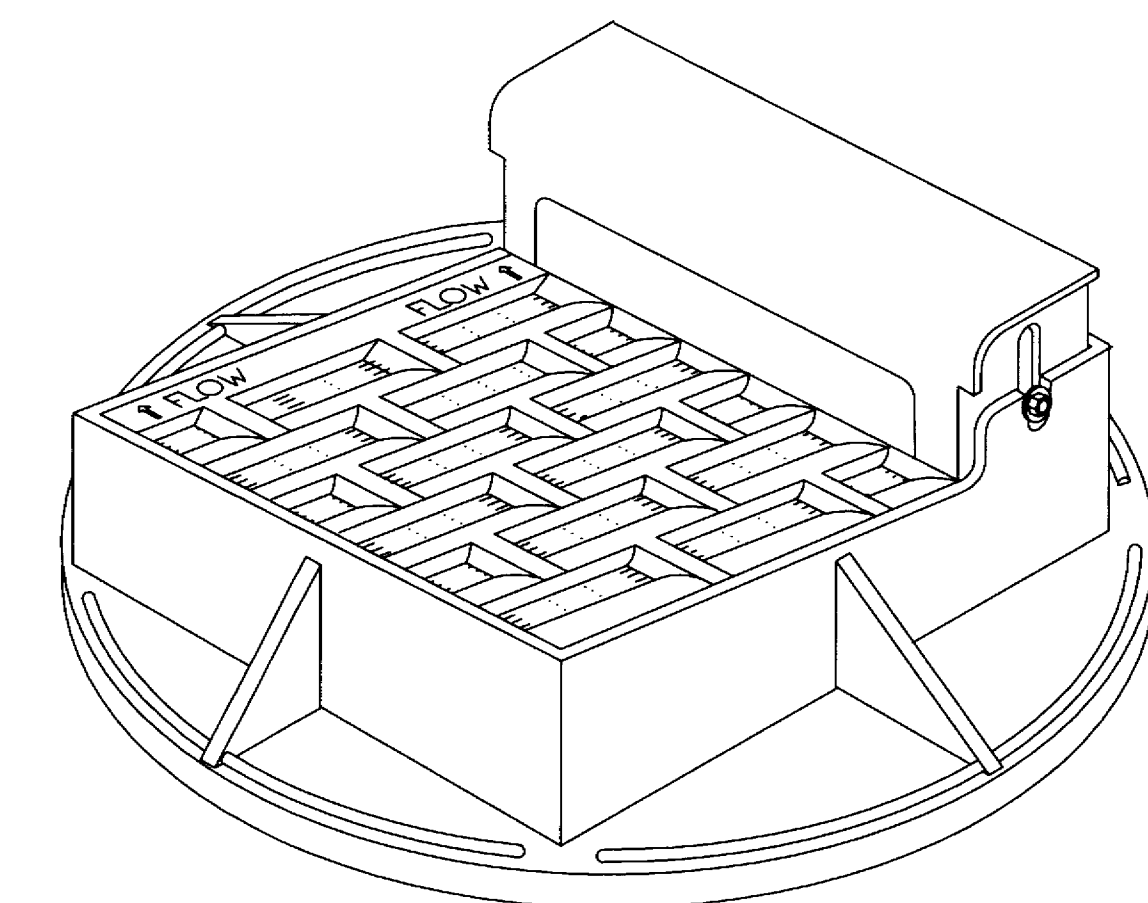
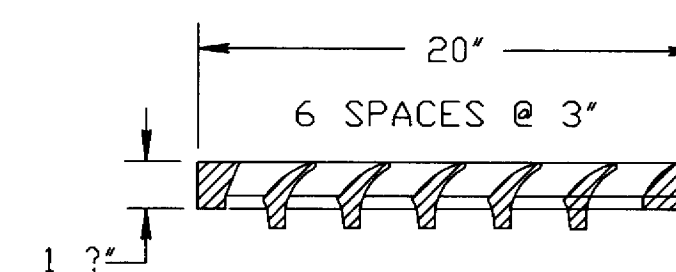
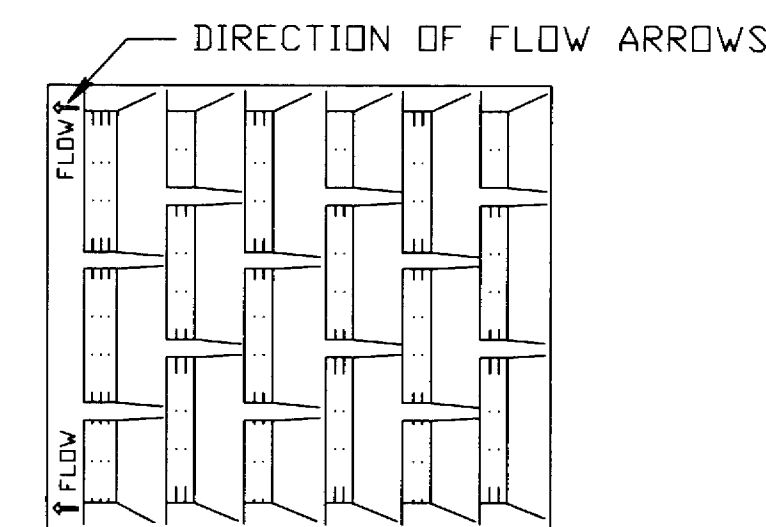
NOTE:
GRATE IS REVERSIBLE.

GENERAL NOTES

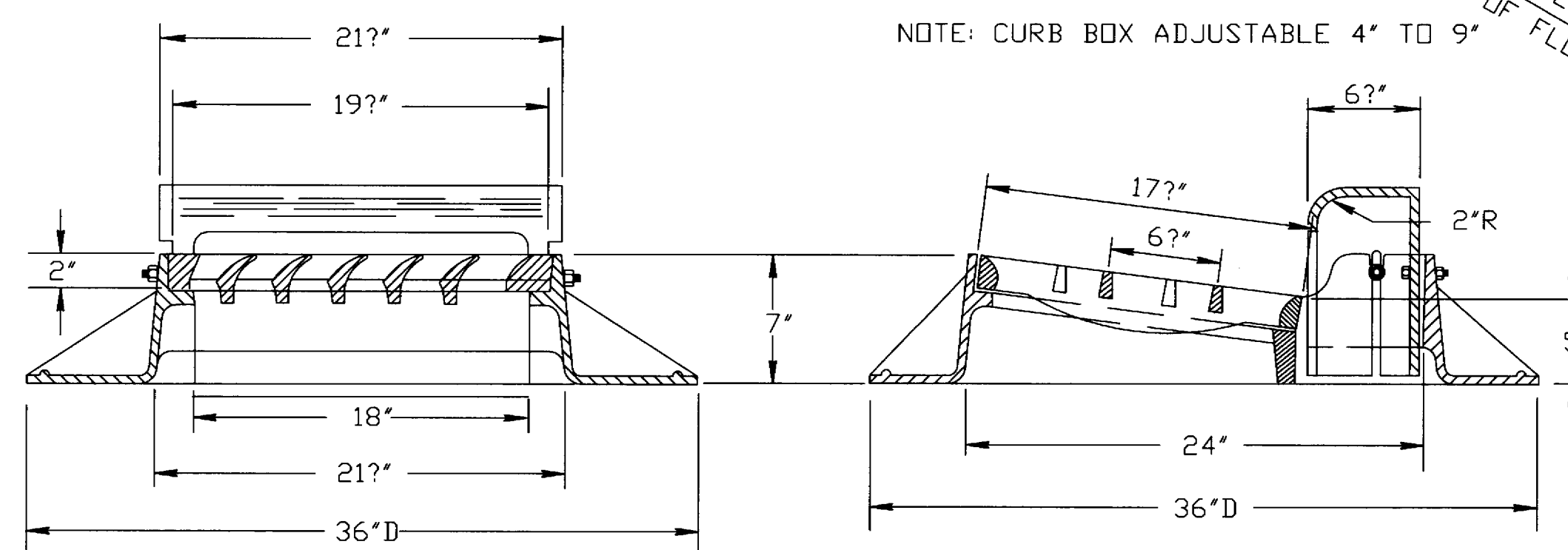
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH. ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.



NOTE: CURB BOX ADJUSTABLE 4\"/>

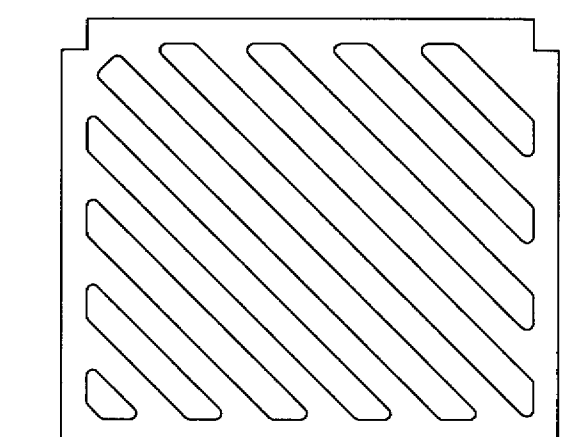


TYPE "A"

(APPROXIMATE WEIGHT 325 LBS.)
FRAME..... 157 LBS.
GRATE..... 84 LBS.
CURB BOX..... 84 LBS.

NOTE:
GRATE IS REVERSIBLE.

1 1/2\"/>



SPECIAL GRATE FOR
TYPE "A" COVER

(MEASURES 19 1/2\"/>

NOTE:
GRATE IS REVERSIBLE.

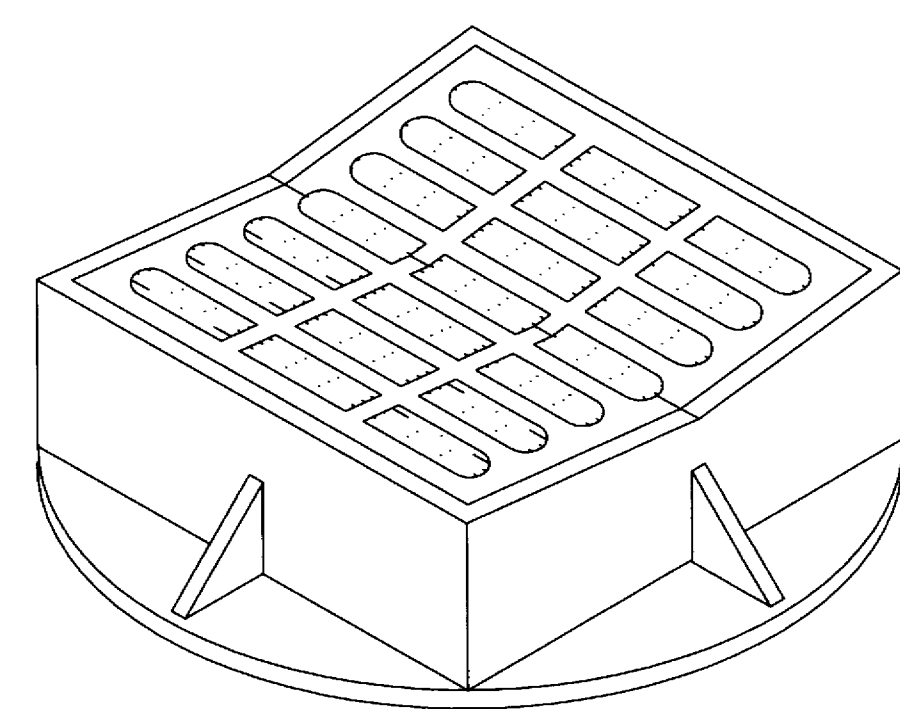
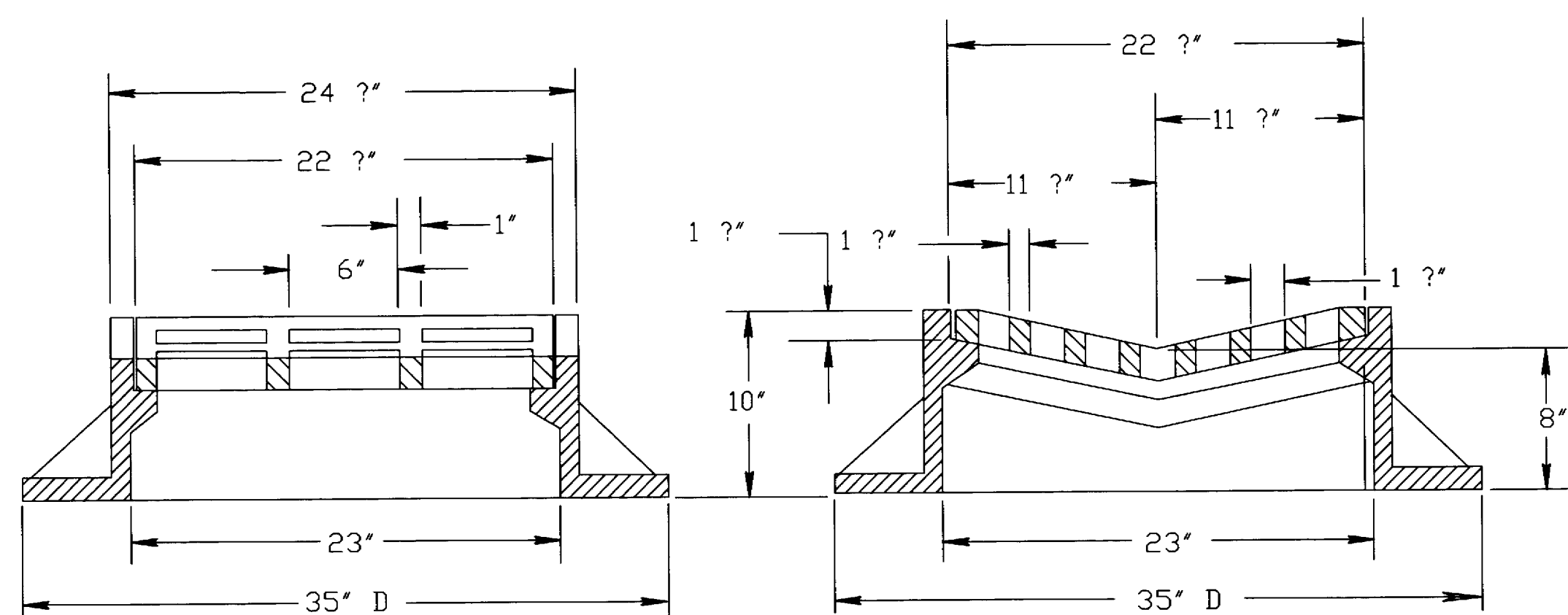
INLET COVERS
TYPE A, H, A-S, & H-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

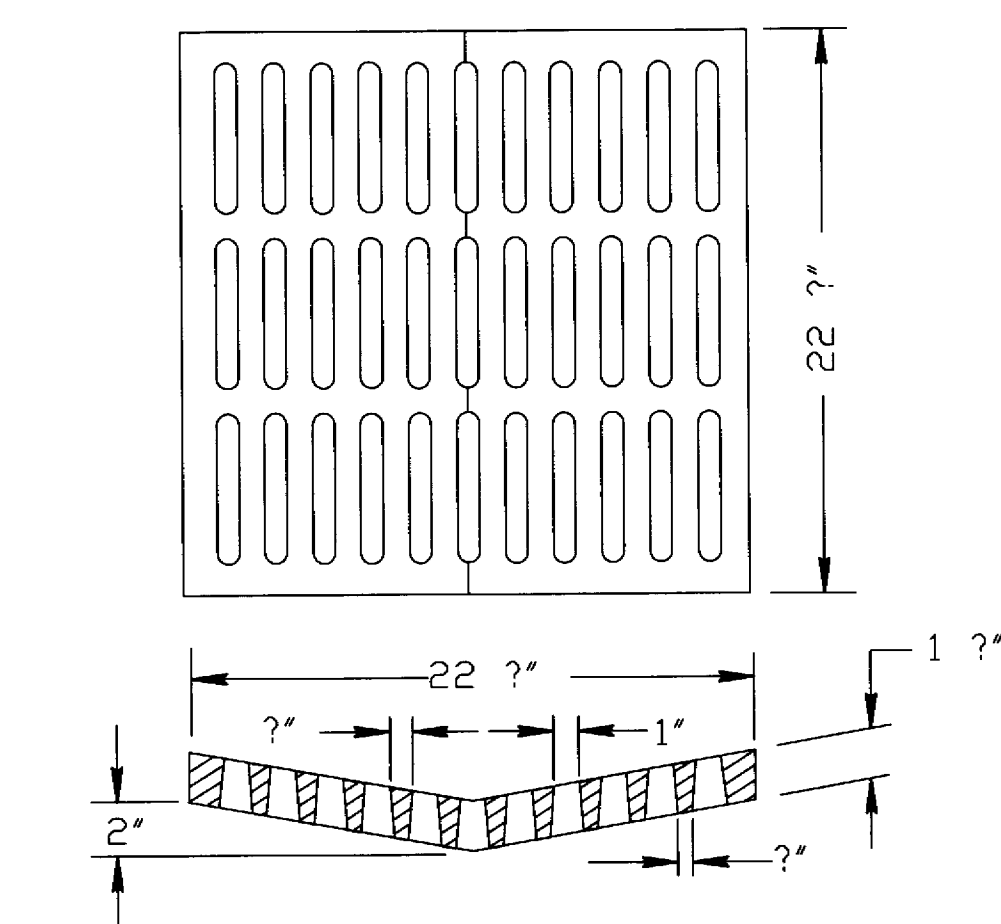
APPROVED

DATE _____ CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

S.D.D. 8 A 5-15a

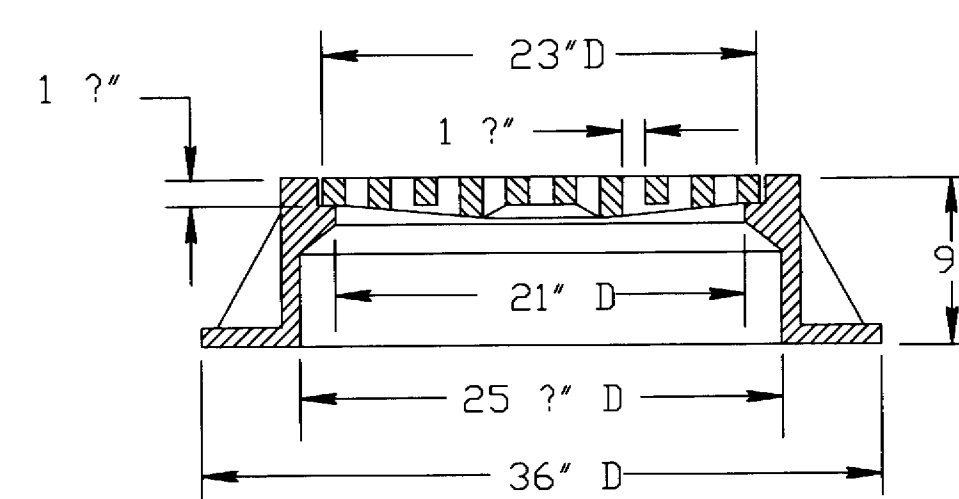
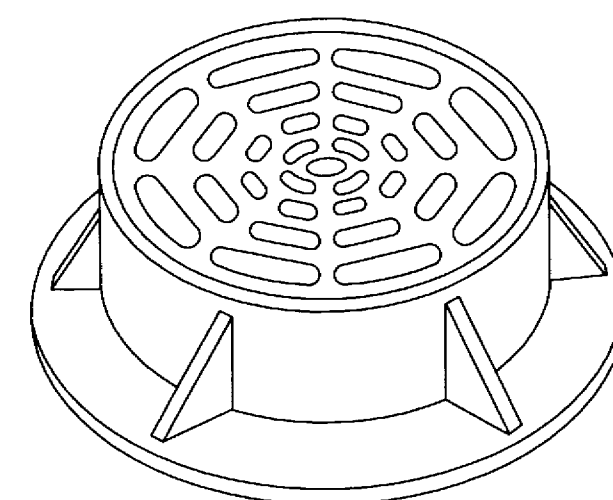


TYPE "B"
(APPROXIMATE WEIGHT 395 LBS.)
FRAME..... 285 LBS.
GRATE..... 110 LBS.

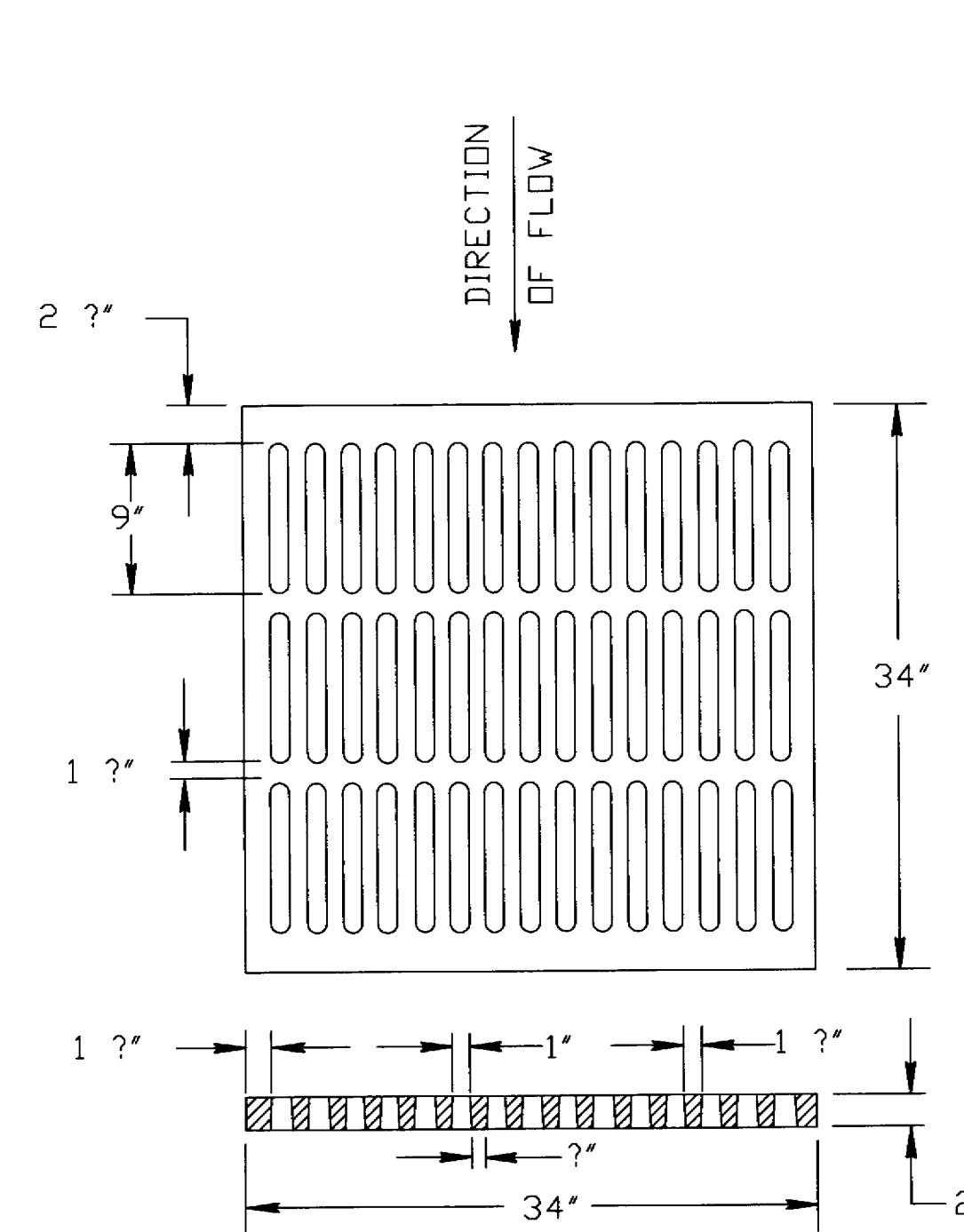


ALTERNATIVE GRATE FOR
TYPE "B" COVER

(APPROXIMATE GRATE WEIGHT 125 LBS.)
GRATE..... 125 LBS.
USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE

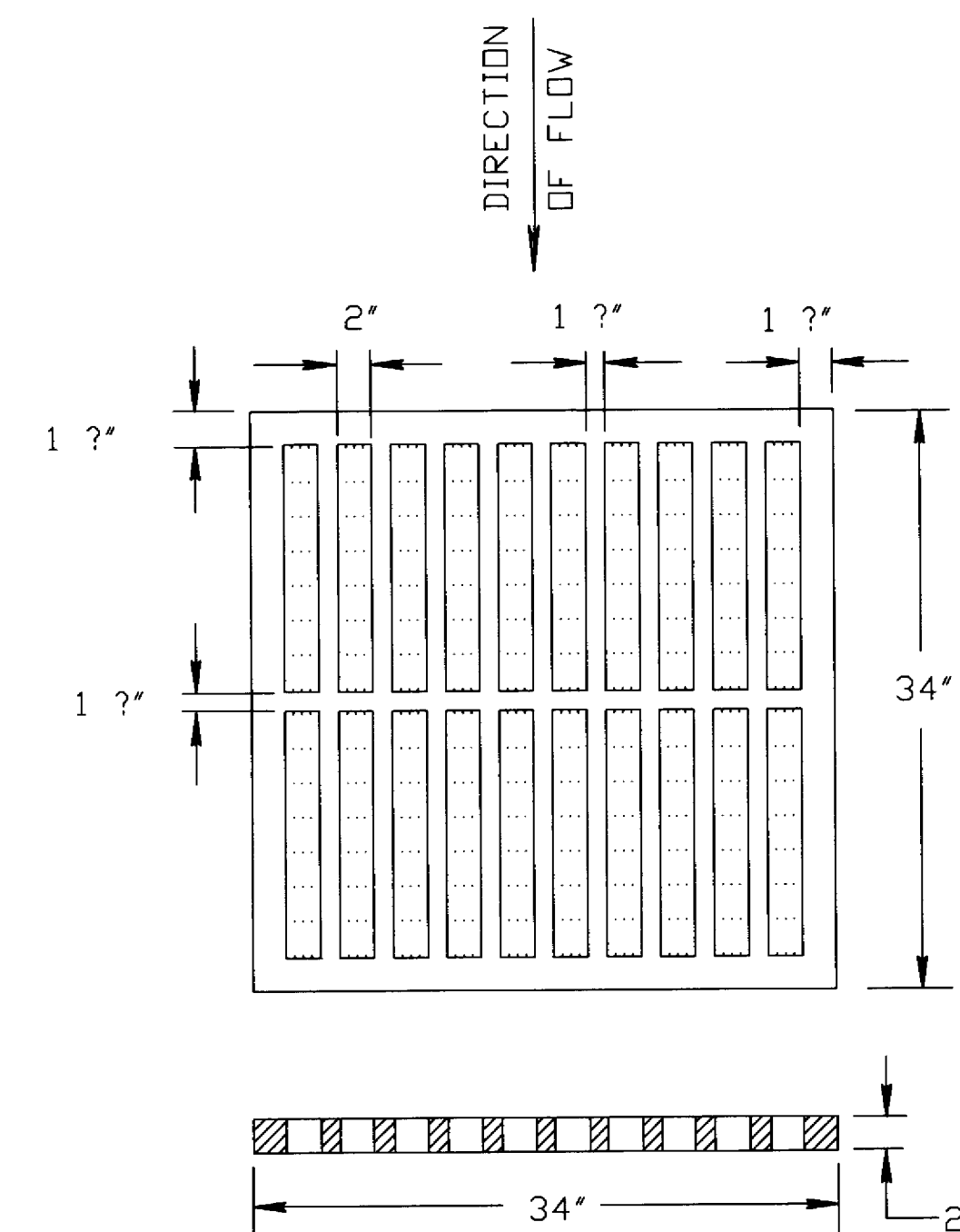


TYPE "C"
(APPROXIMATE WEIGHT 340 LBS.)
FRAME..... 235 LBS.
GRATE..... 105 LBS.



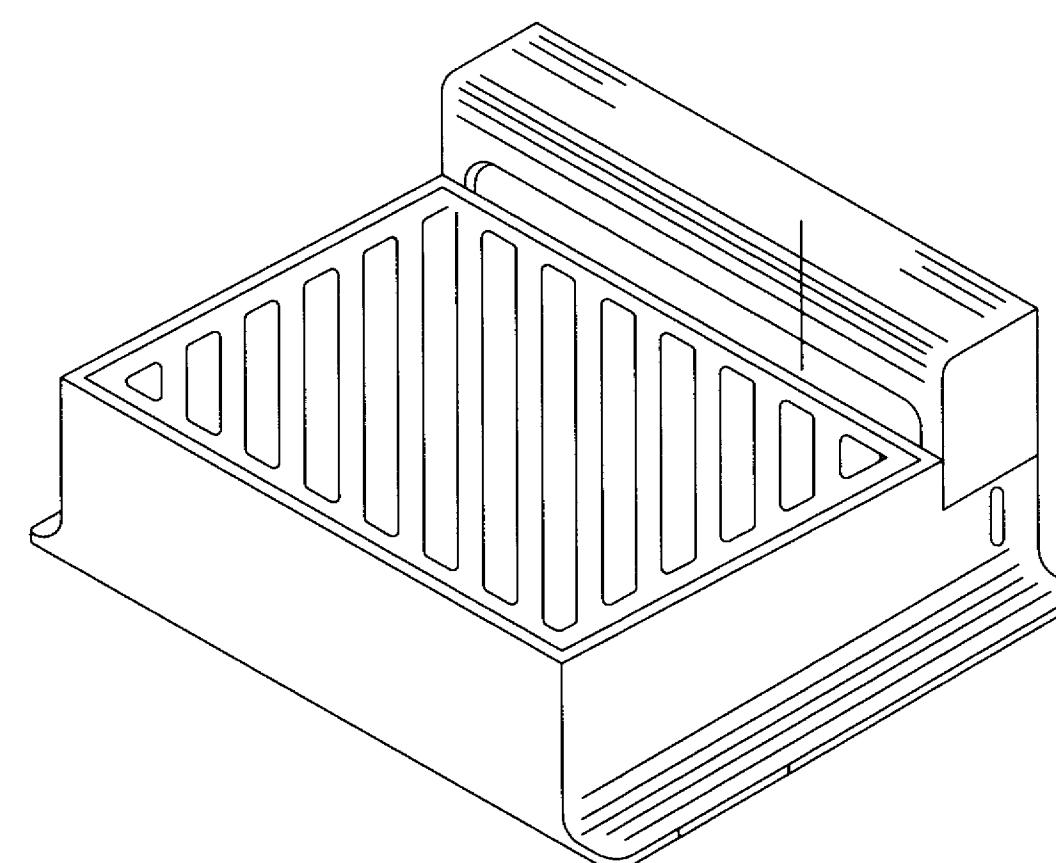
ALTERNATIVE TYPE "MS"
(APPROXIMATE GRATE WEIGHT 365 LBS.)
GRATE..... 365 LBS.

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

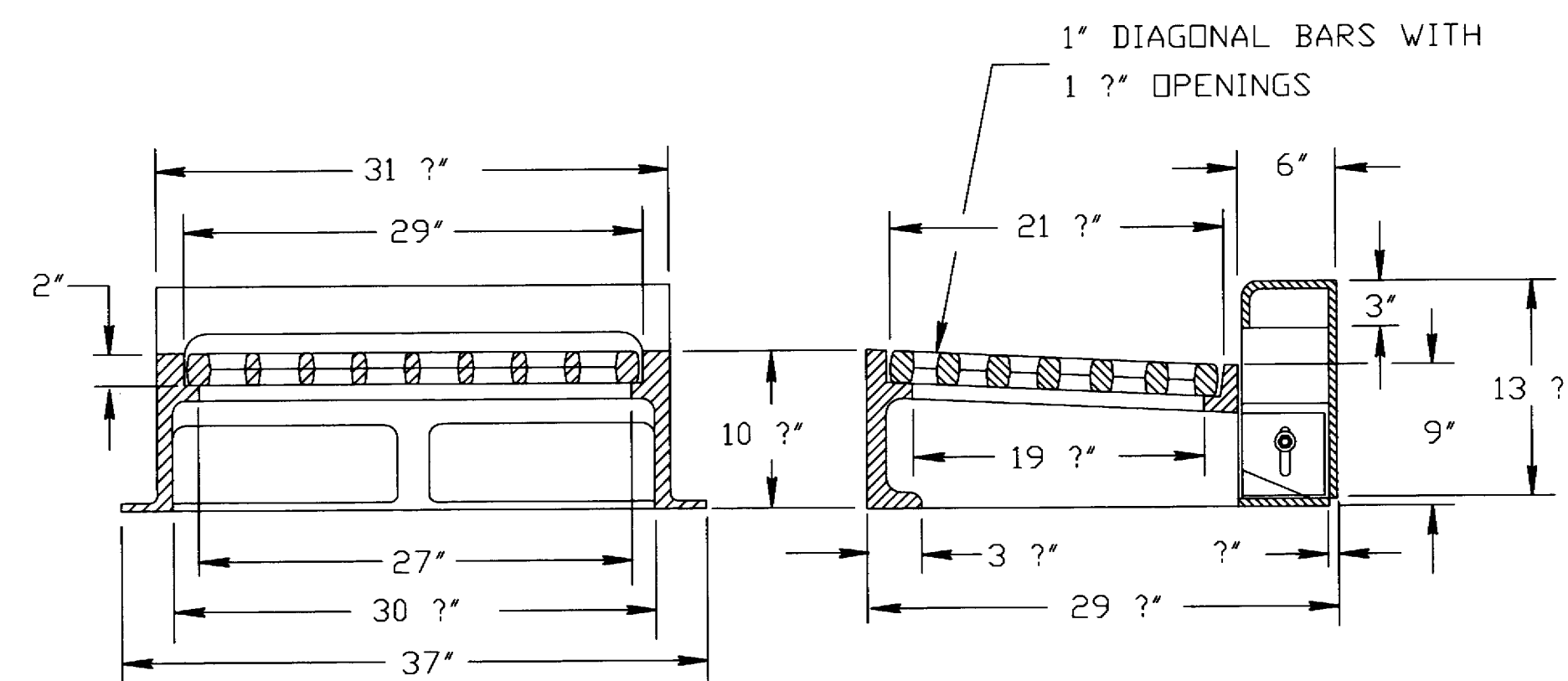


TYPE "MS"
(APPROXIMATE GRATE WEIGHT 270 LBS.)
GRATE..... 270 LBS.

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE



DIAGONAL SLOTS, SHALL BE ORIENTED
TO THE DIRECTION OF FLOW AS ILLUSTRATED.
GRATES ARE MANUFACTURED TO BE REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"
(APPROXIMATE WEIGHT 670 LBS.)
FRAME..... 360 LBS.
GRATE..... 160 LBS.
CURB BOX..... 150 LBS.

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

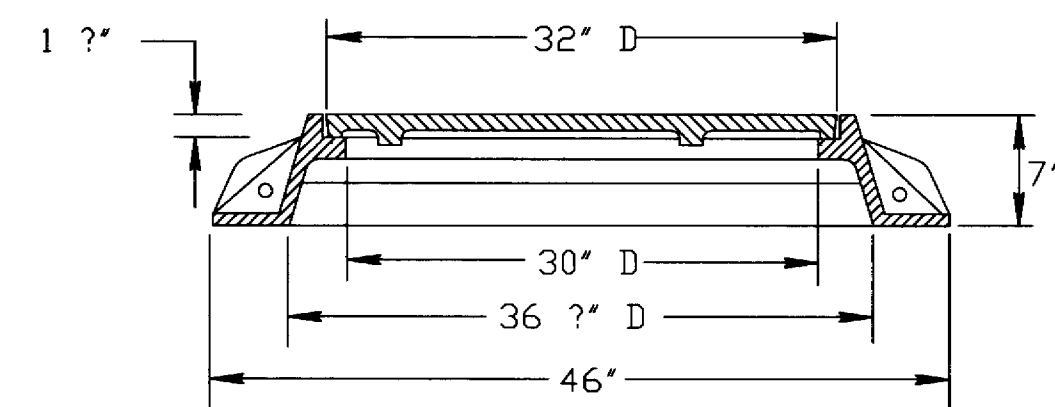
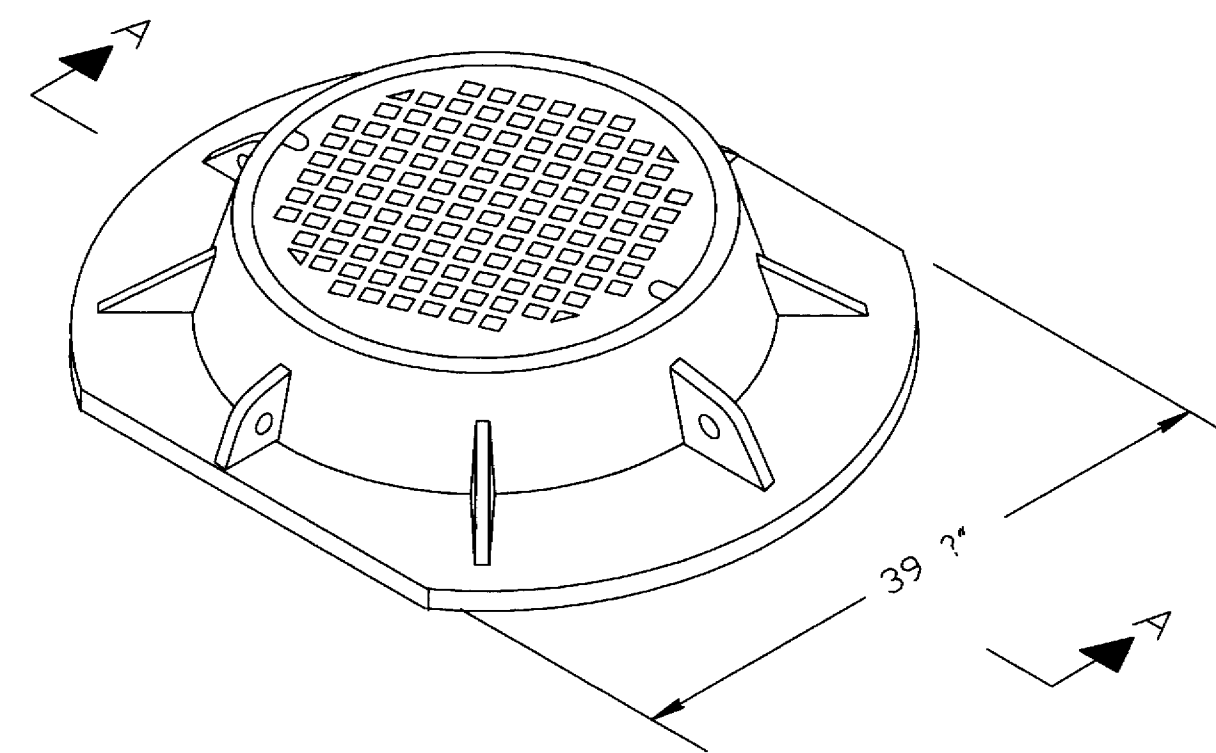
THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

INLET COVERS
TYPE B, B-A, C, MS, MS-A, & WM

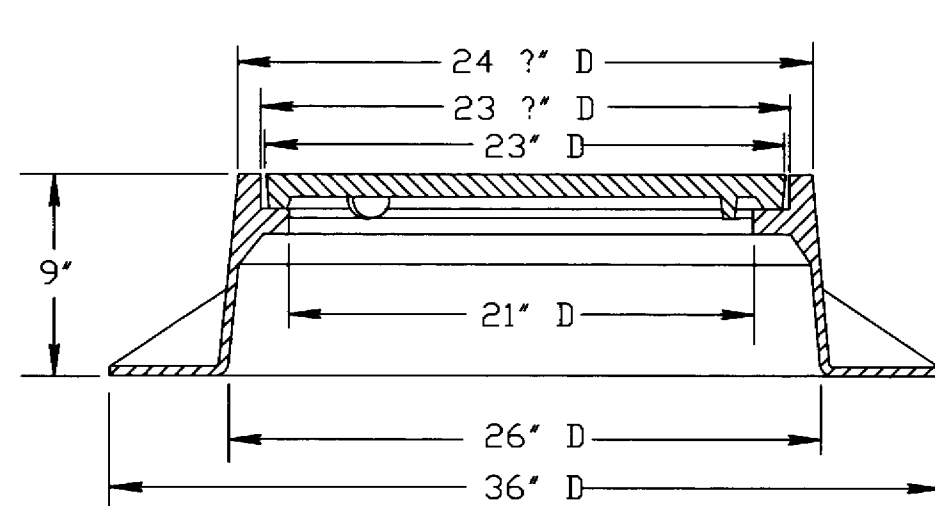
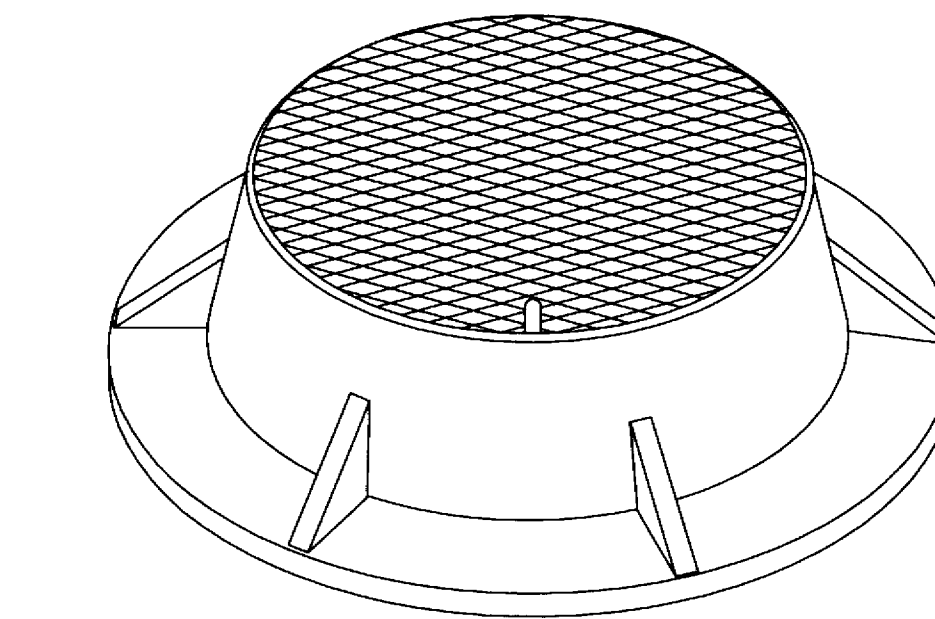
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

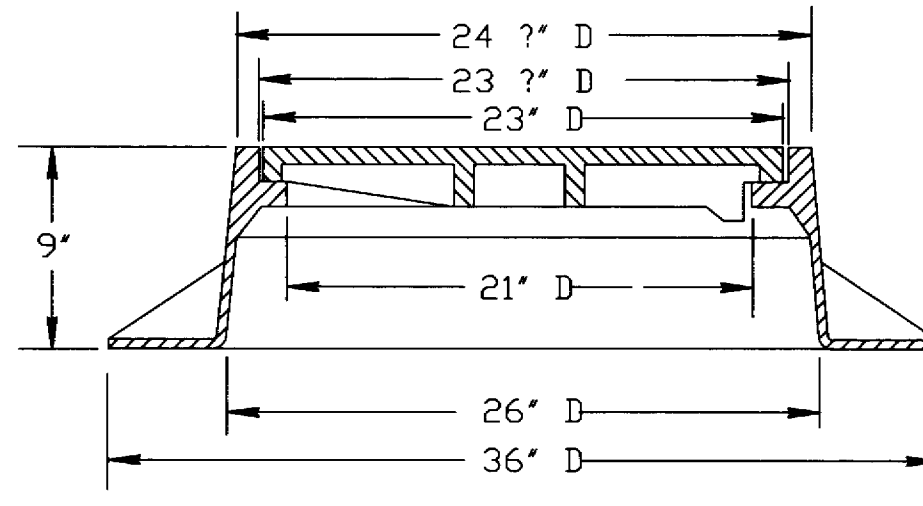
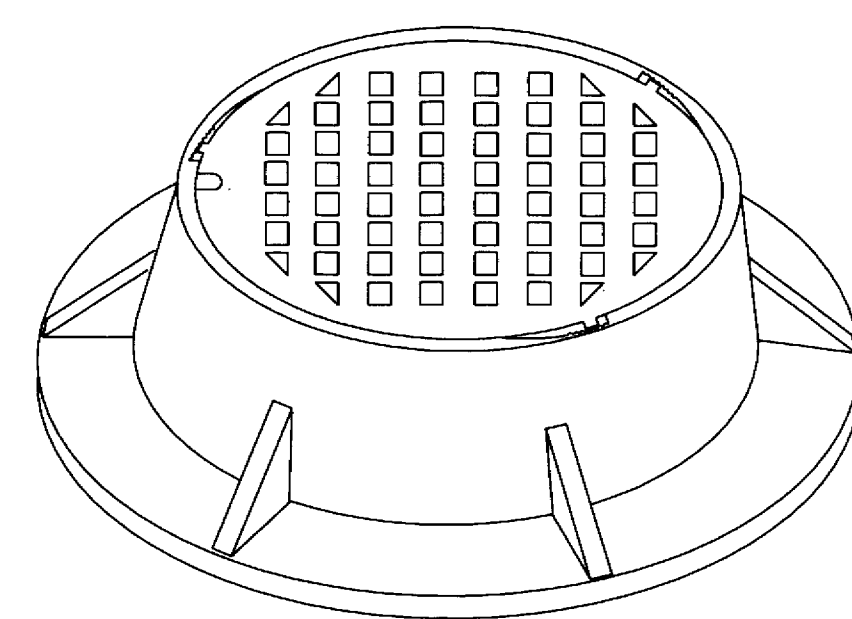
DATE _____ CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



SECTION A-A
TYPE "K"
(APPROXIMATE WEIGHT 415 LBS.)
FRAME..... 210 LBS.
LID..... 205 LBS.



TYPE "J"
(APPROXIMATE WEIGHT 250 LBS.)
FRAME..... 135 LBS.
LID..... 115 LBS.



TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(APPROXIMATE WEIGHT 245 LBS.)
FRAME..... 145 LBS.
LID..... 100 LBS.
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

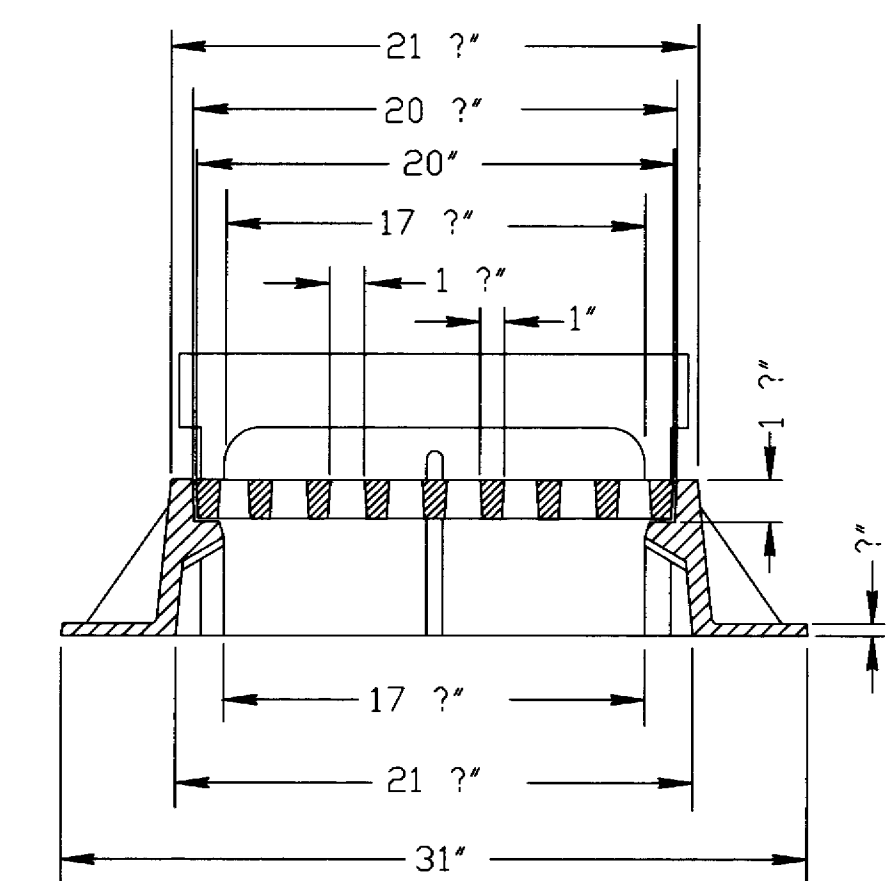
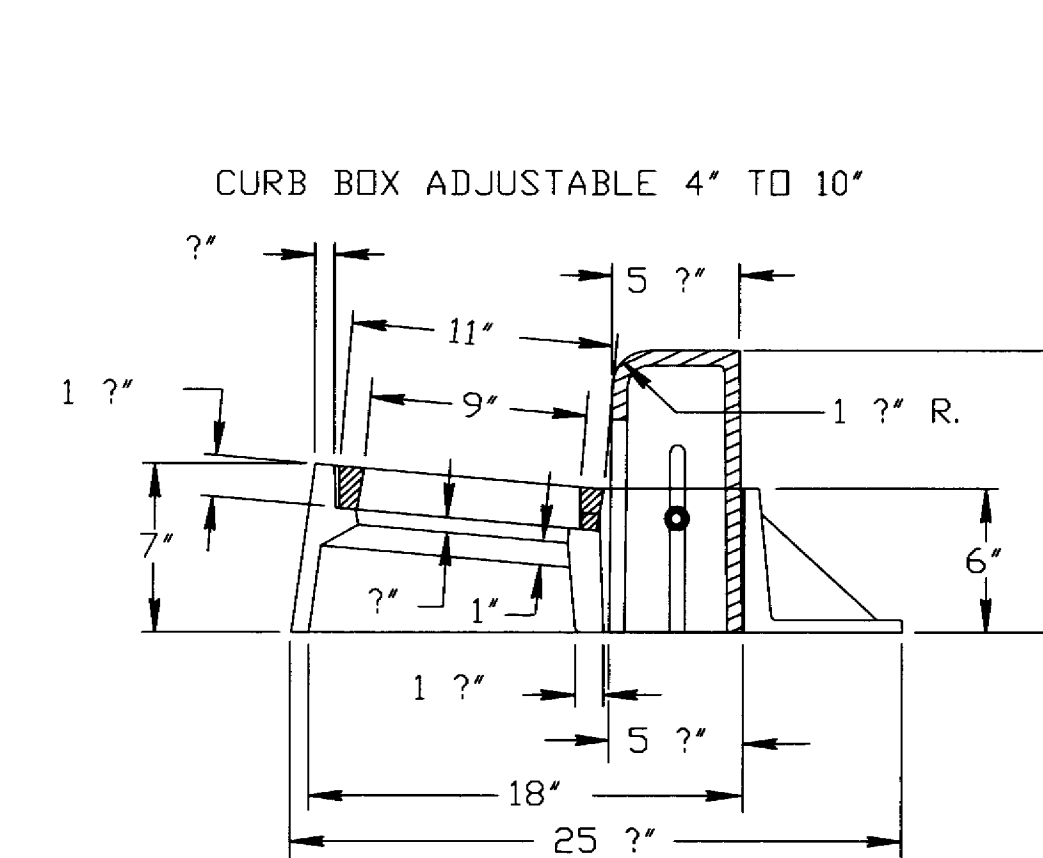
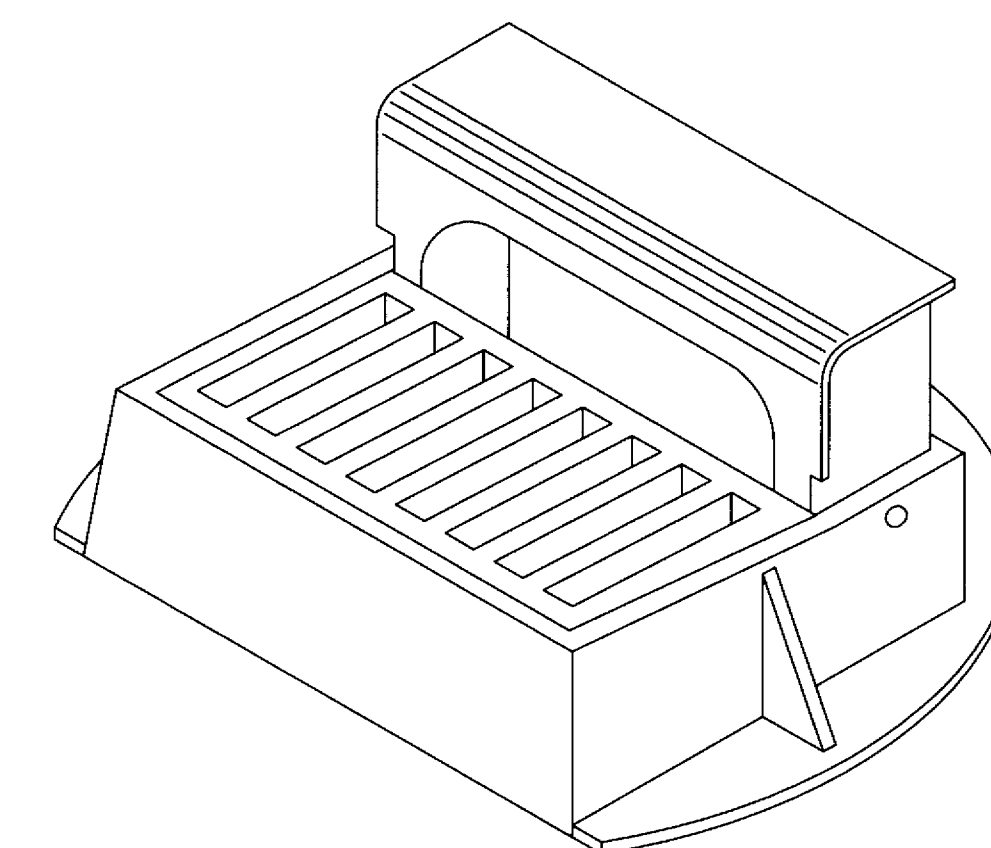
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

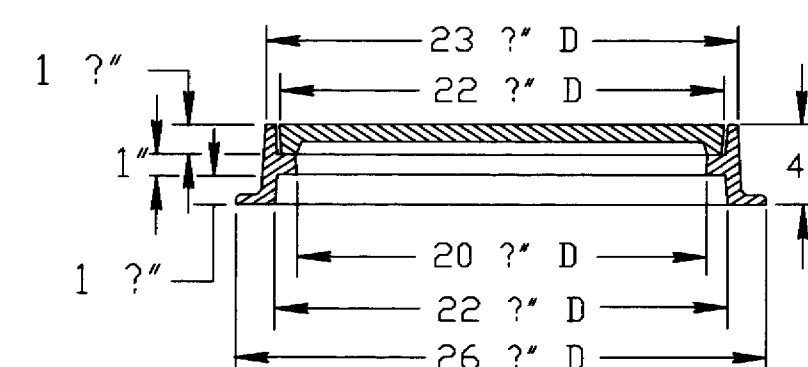
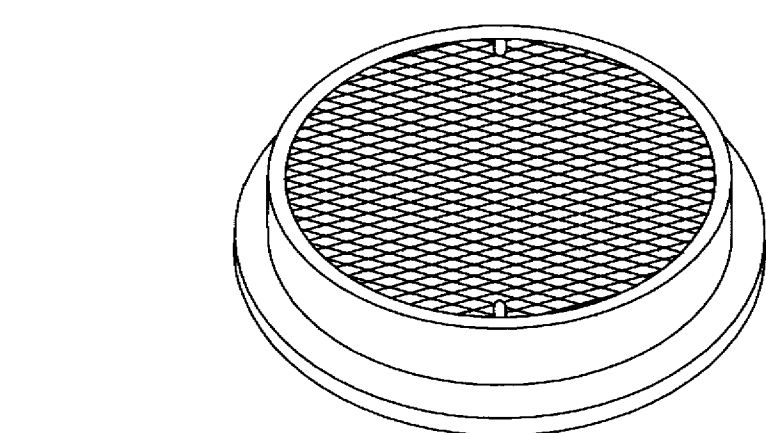
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

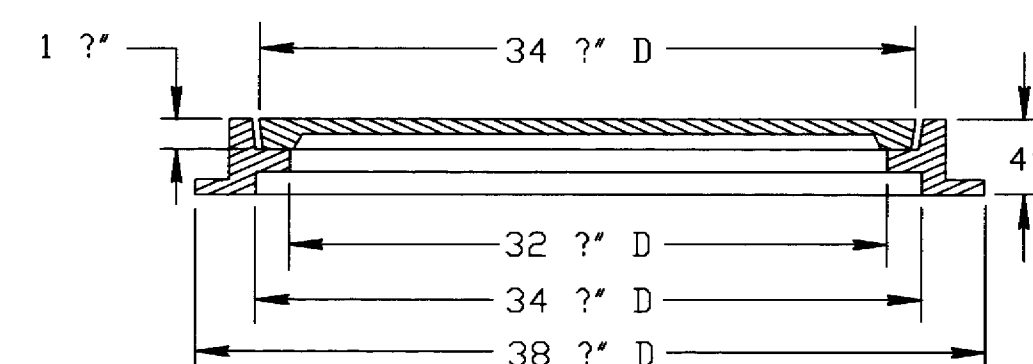
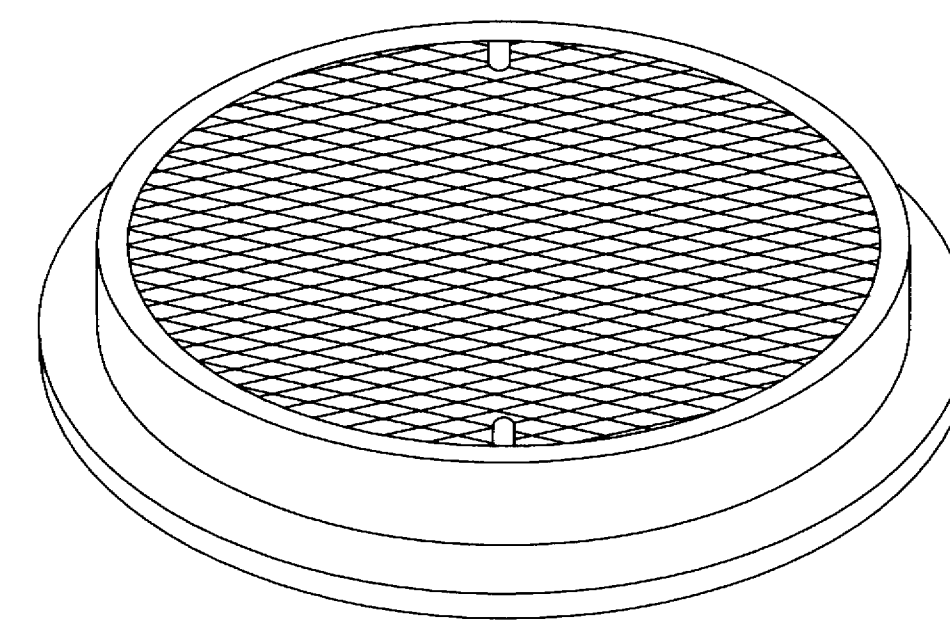
THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.



INLET COVER TYPE "Z"
(APPROXIMATE WEIGHT 340 LBS.)
FRAME..... 198 LBS.
GRATE..... 50 LBS.
CURB BOX..... 92 LBS.



TYPE "L"
(APPROXIMATE WEIGHT 145 LBS.)
FRAME..... 75#
LID..... 70#



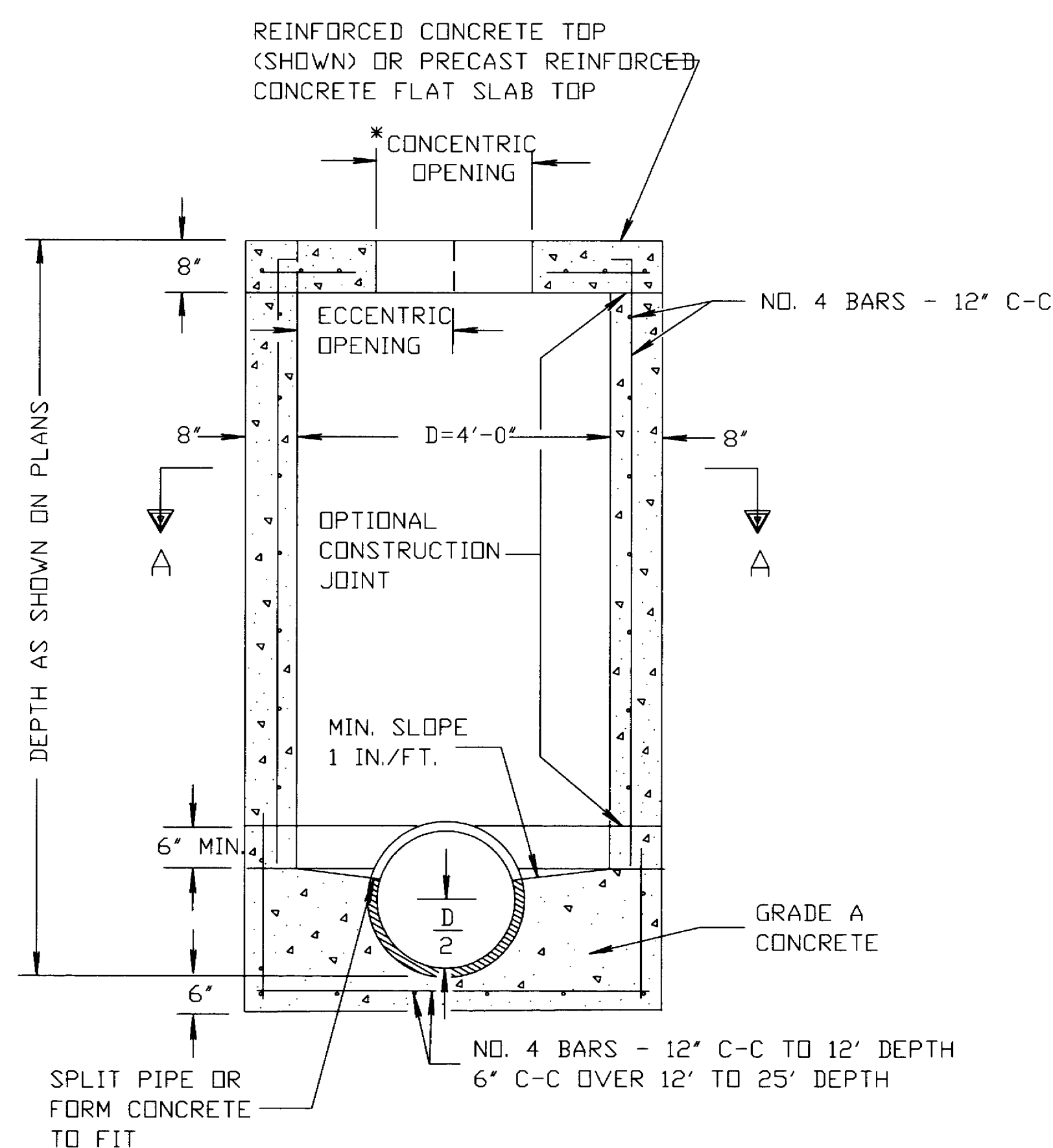
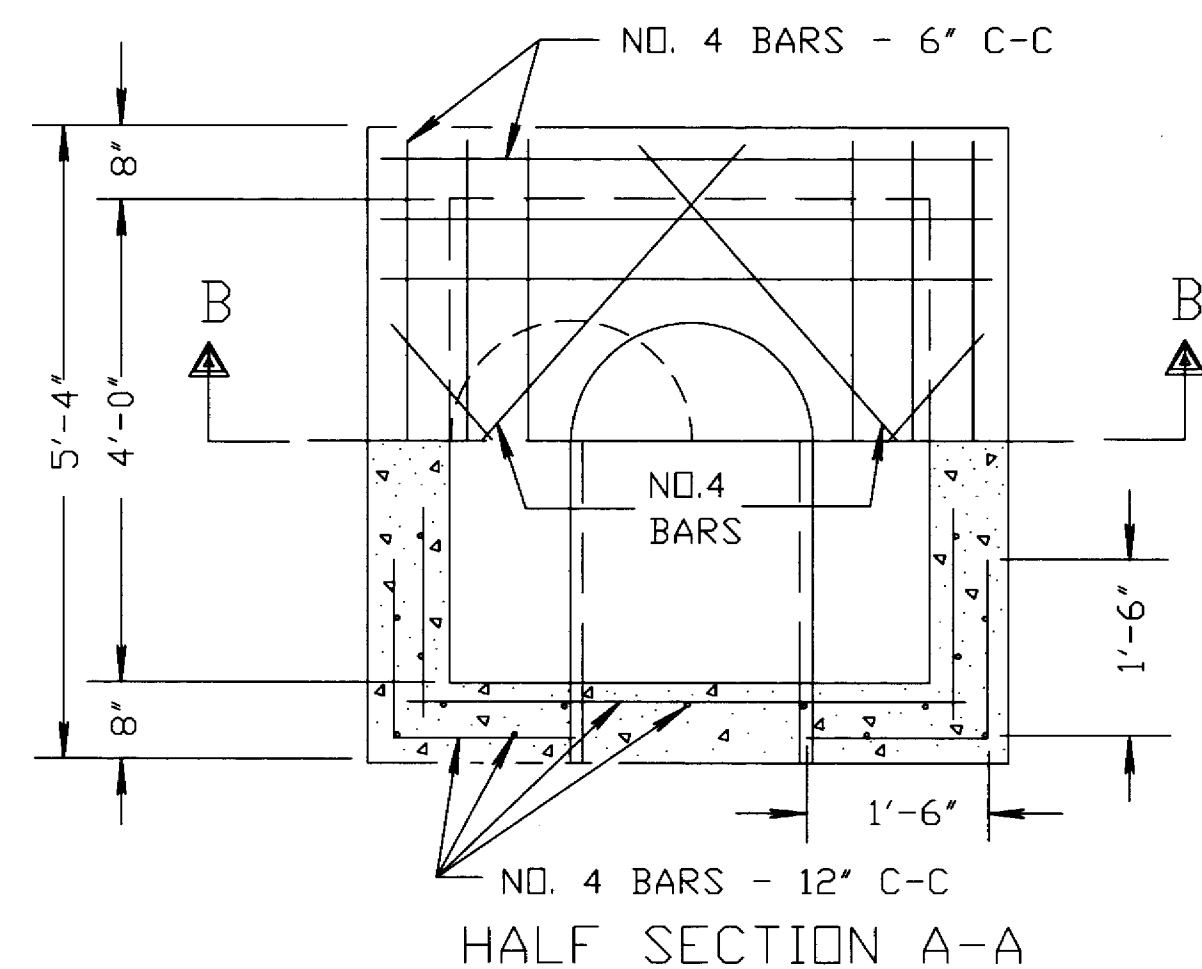
TYPE "M"
(APPROXIMATE WEIGHT 385 LBS.)
FRAME..... 125#
LID..... 260#

INLET COVER, TYPE Z
MANHOLE COVERS, TYPE
K, J, J-S, L & M

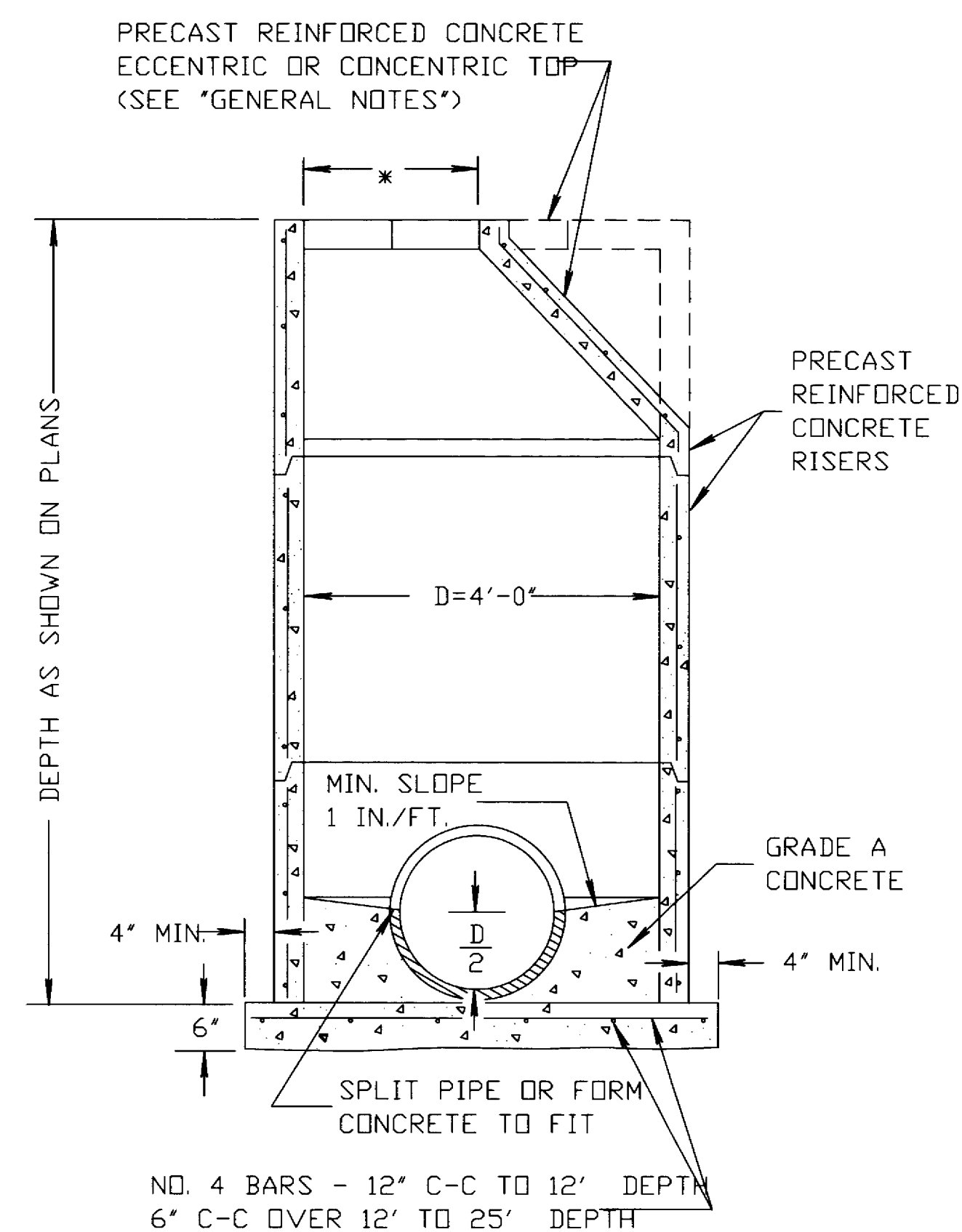
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

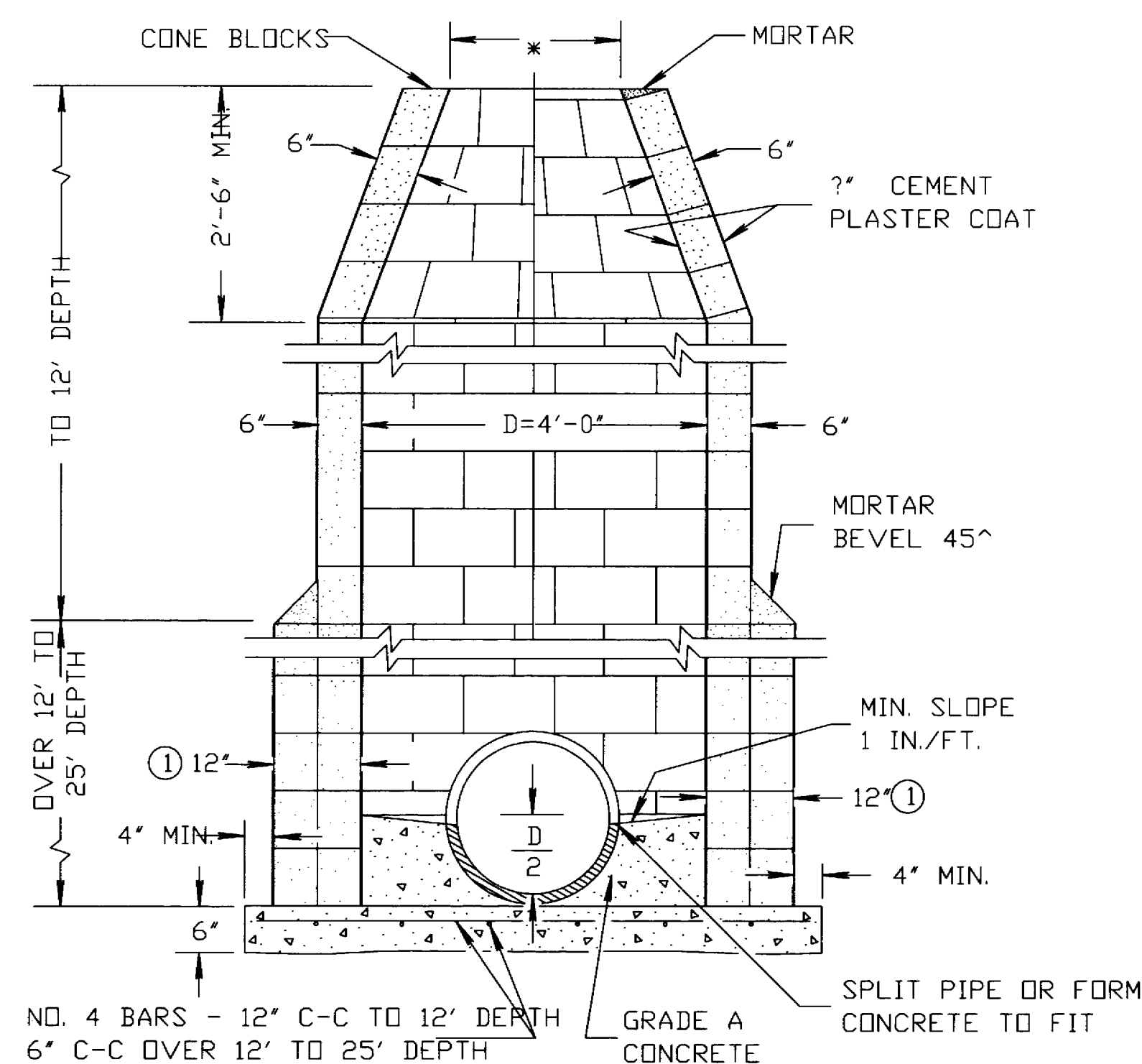
DATE _____ CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



SECTION B-B
REINFORCED CONCRETE



PRECAST REINFORCED CONCRETE



CONCRETE BLOCK

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 1-C", "CATCH BASINS 1-B", "INLETS 3-H", ETC. THE FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE CONE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES; AND BE CAPABLE OF SUPPORTING A CONCENTRATED LOAD OF 300 LBS. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

SOLID ALUMINUM STEPS SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 0.75 INCH. ALUMINUM SURFACES TO BE EMBEDDED IN CONCRETE SHALL BE GIVEN ONE COAT OF SUITABLE QUALITY PAINT, SUCH AS ZINC CHROMATE PRIMER CONFORMING TO FEDERAL SPECIFICATION TT-P-645 OR EQUIVALENT. STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED CONCRETE RISERS MAY BE PLACED WITH TONGUE UP OR DOWN.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

* USE 2'-0" DIAMETER OPENING WITH TYPE "C", "L" AND "J" COVERS, OR 3'-0" DIAMETER WITH TYPE "K" AND "M" COVERS.

① 2 COURSES 6" BLOCK.

MANHOLES TYPE 1

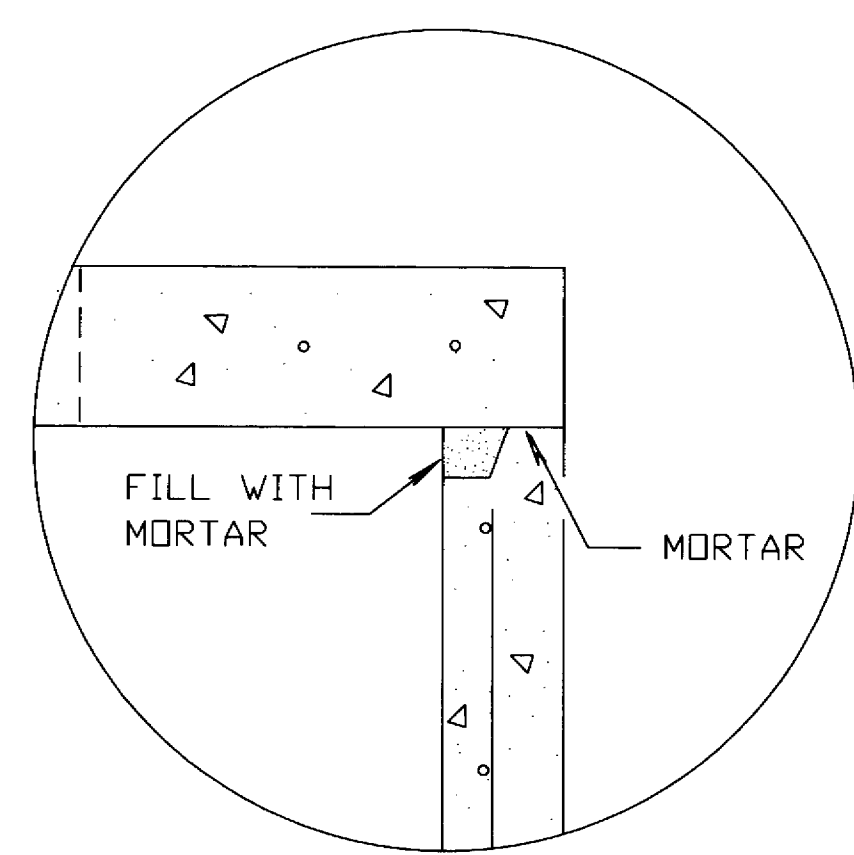
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

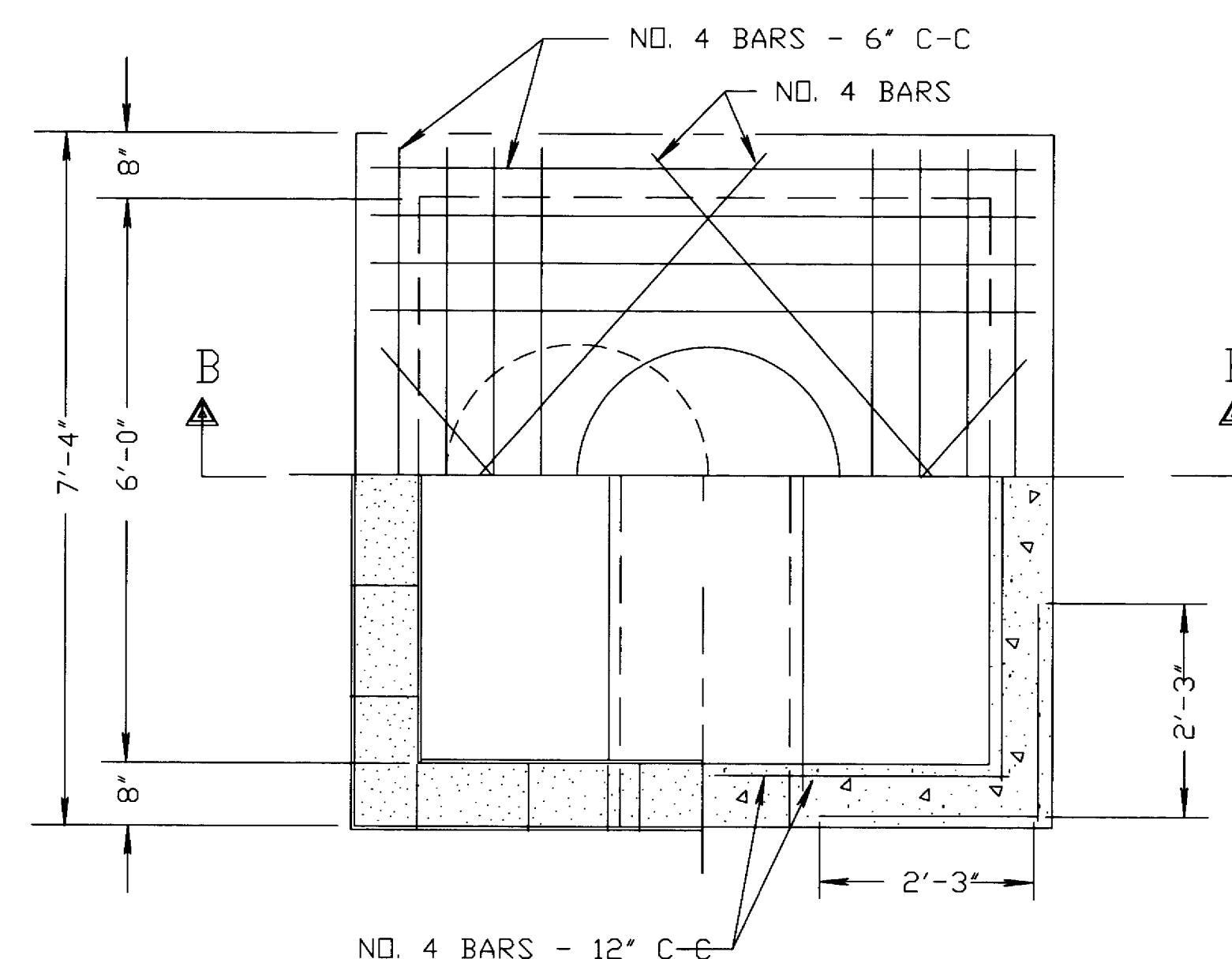
DATE
FHWA

STATE DESIGN ENGINEER FOR HWYS

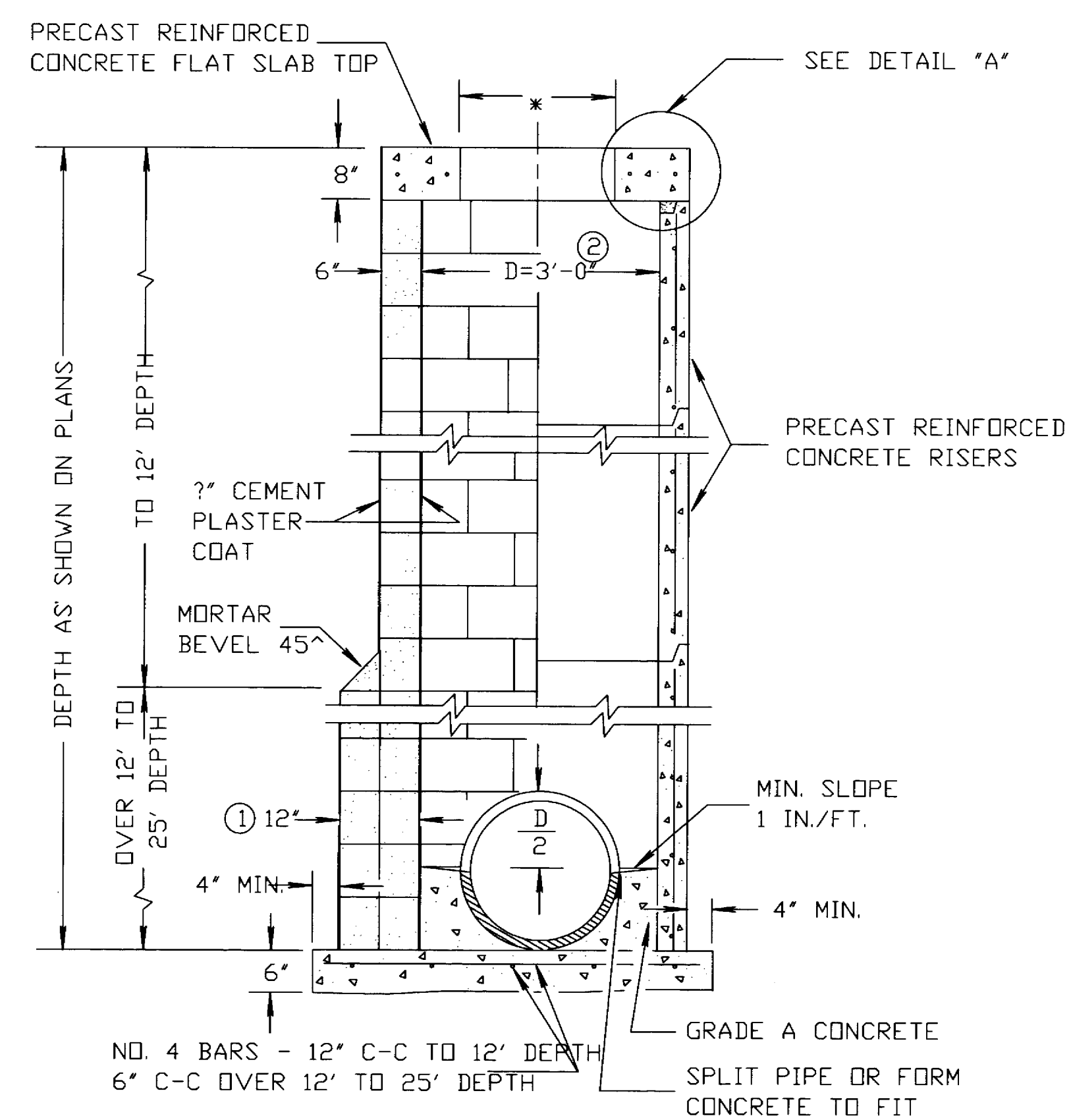
S.D.D. 8 B 6-3



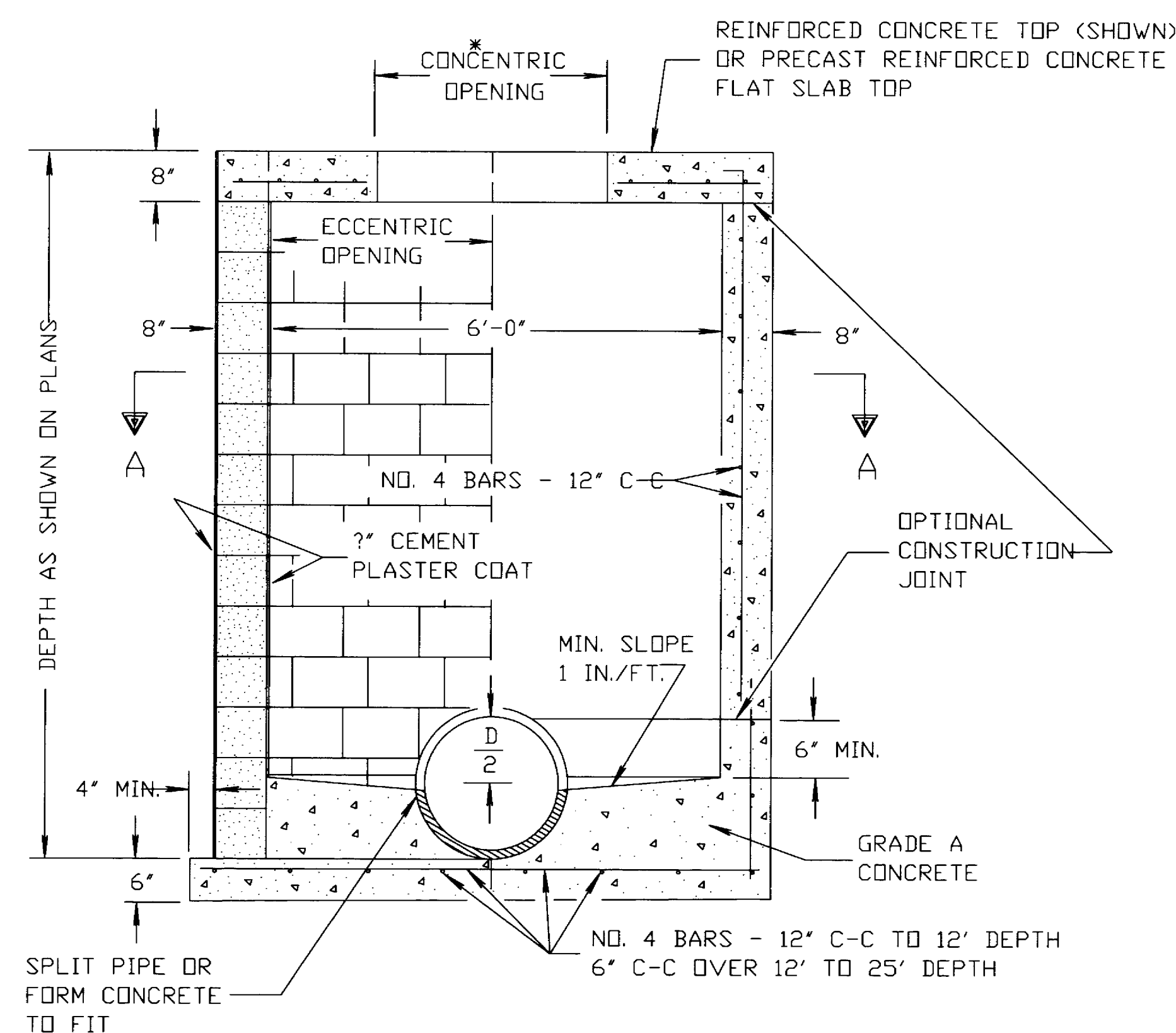
DETAIL "A"



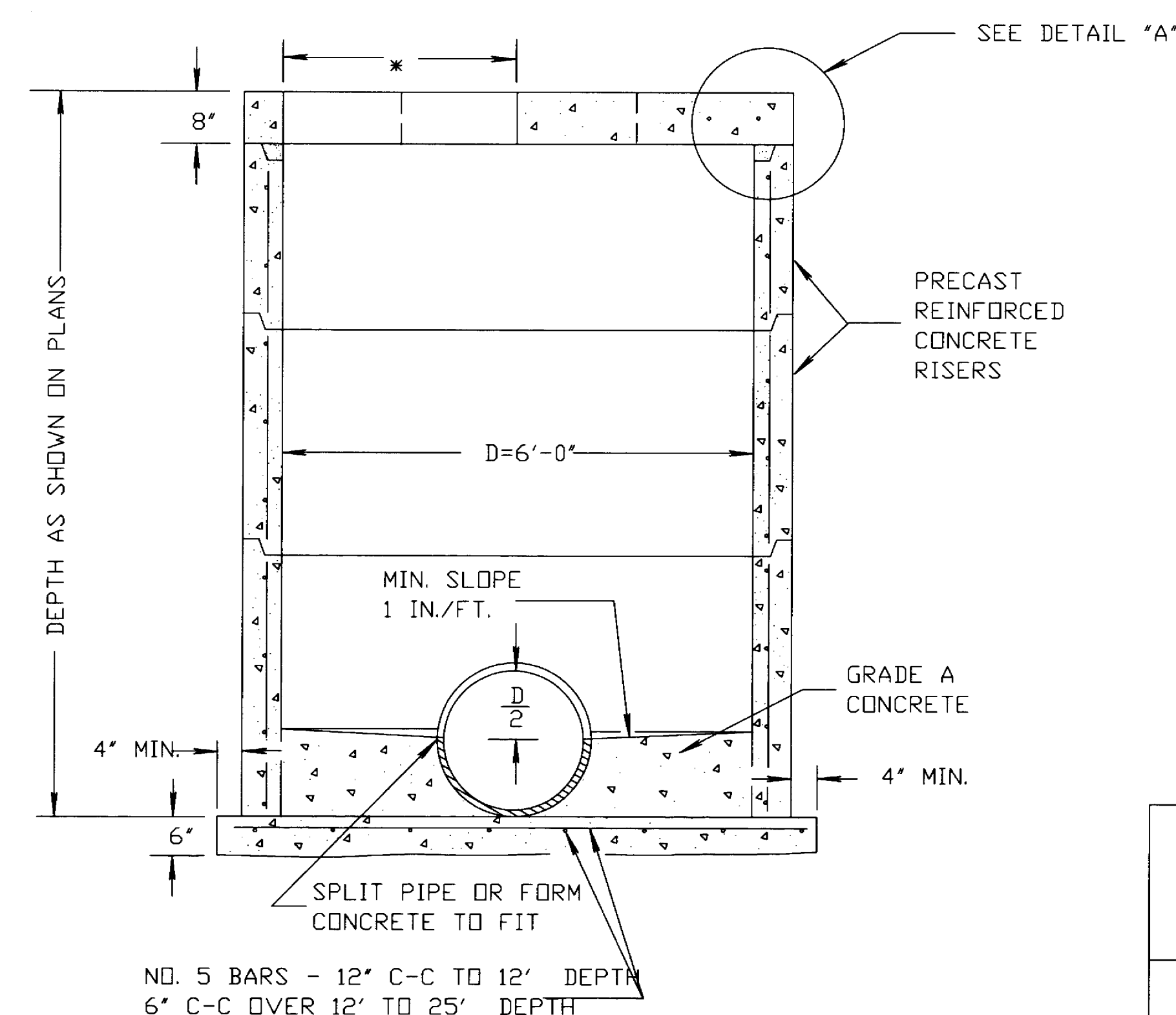
HALF SECTION A-A



MANHOLES TYPE 2



SECTION B-B



PRECAST REINFORCED CONCRETE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 1-C", "CATCH BASINS 1-B", "INLETS 3-H", ETC. THE FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

STEPS MEETING THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES; AND BE CAPABLE OF SUPPORTING A CONCENTRATED LOAD OF 300 LBS. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

SOLID ALUMINUM STEPS SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 0.75 INCH. ALUMINUM SURFACES TO BE EMBEDDED IN CONCRETE SHALL BE GIVEN ONE COAT OF SUITABLE QUALITY PAINT, SUCH AS ZINC CHROMATE PRIMER CONFORMING TO FEDERAL SPECIFICATION TT-P-645 OR EQUIVALENT. STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED CONCRETE RISERS MAY BE PLACED WITH TONGUE UP OR DOWN.

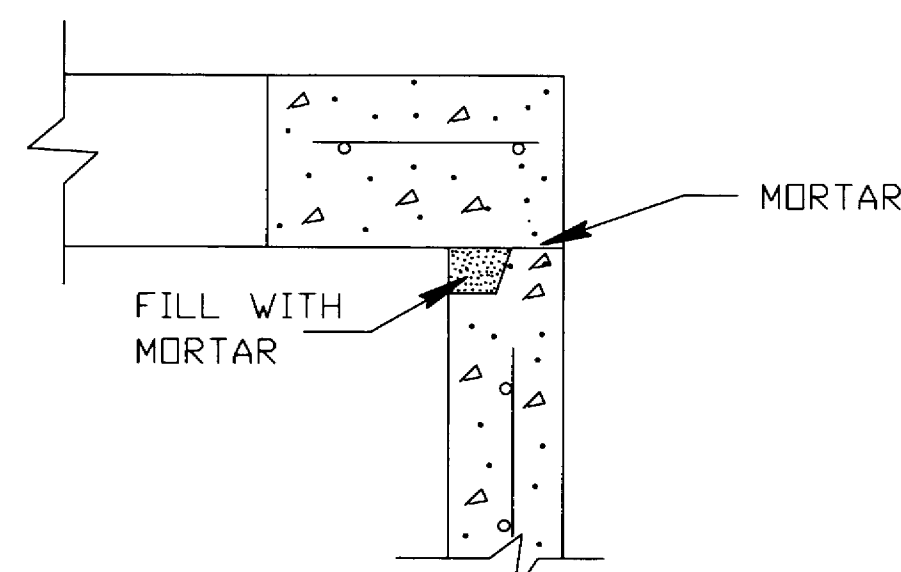
ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

* USE 2'-0" DIAMETER OPENING WITH TYPE "C", "L" AND "J" COVERS, OR 3'-0" DIAMETER WITH TYPE "K" AND "M" COVERS.

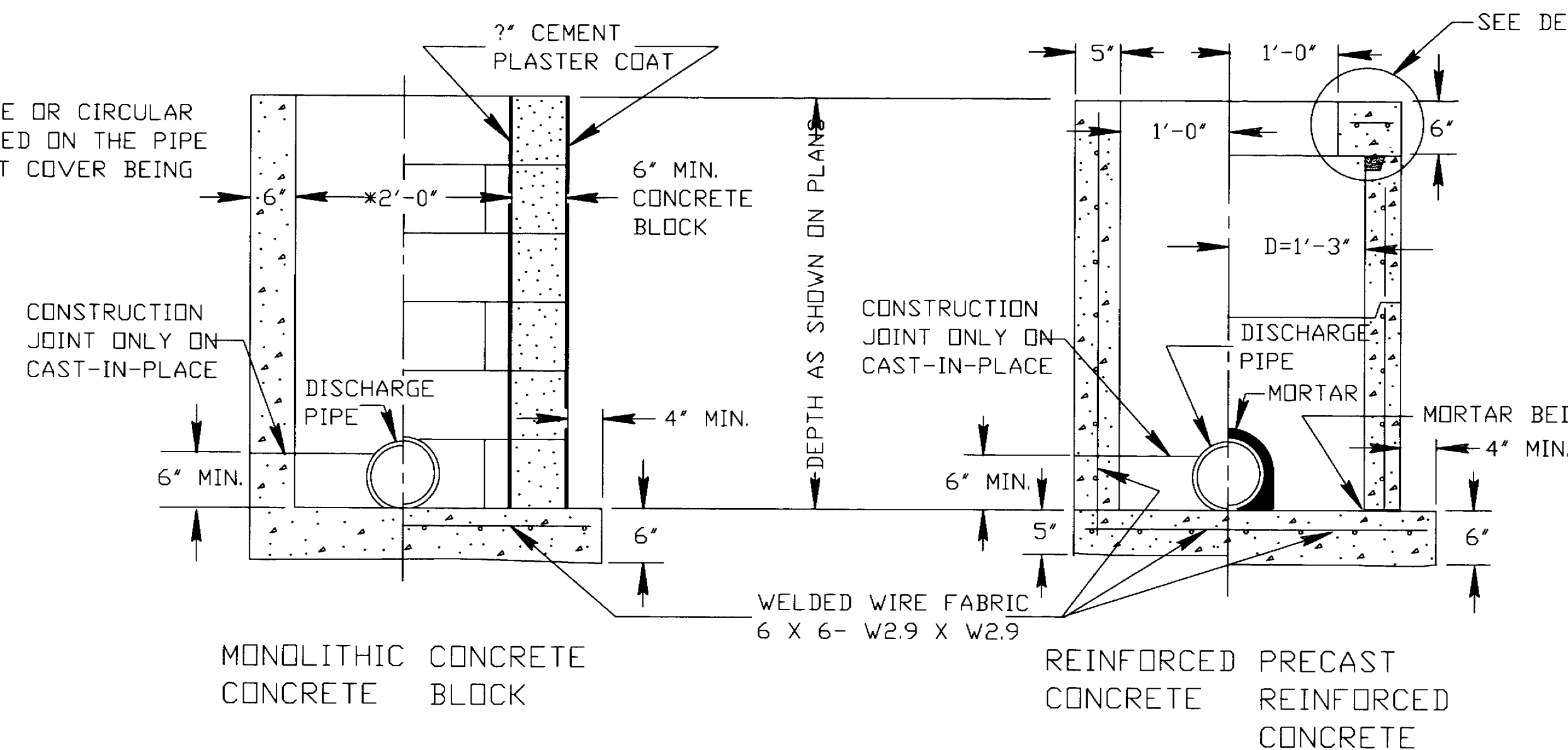
① 2 COURSES 6" BLOCK.

② WHEN CONNECTING PIPES ARE 24" OR LARGER THE PRECAST MANHOLES MAY BE INCREASED TO 42" DIAMETER.

*SELECTION OF SQUARE OR CIRCULAR DESIGN WILL BE BASED ON THE PIPE SIZES AND THE INLET COVER BEING UTILIZED



DETAIL "A"



INLETS TYPE 1

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 1-C", "CATCH BASINS 1-B", "INLETS 3-H", ETC. THE FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

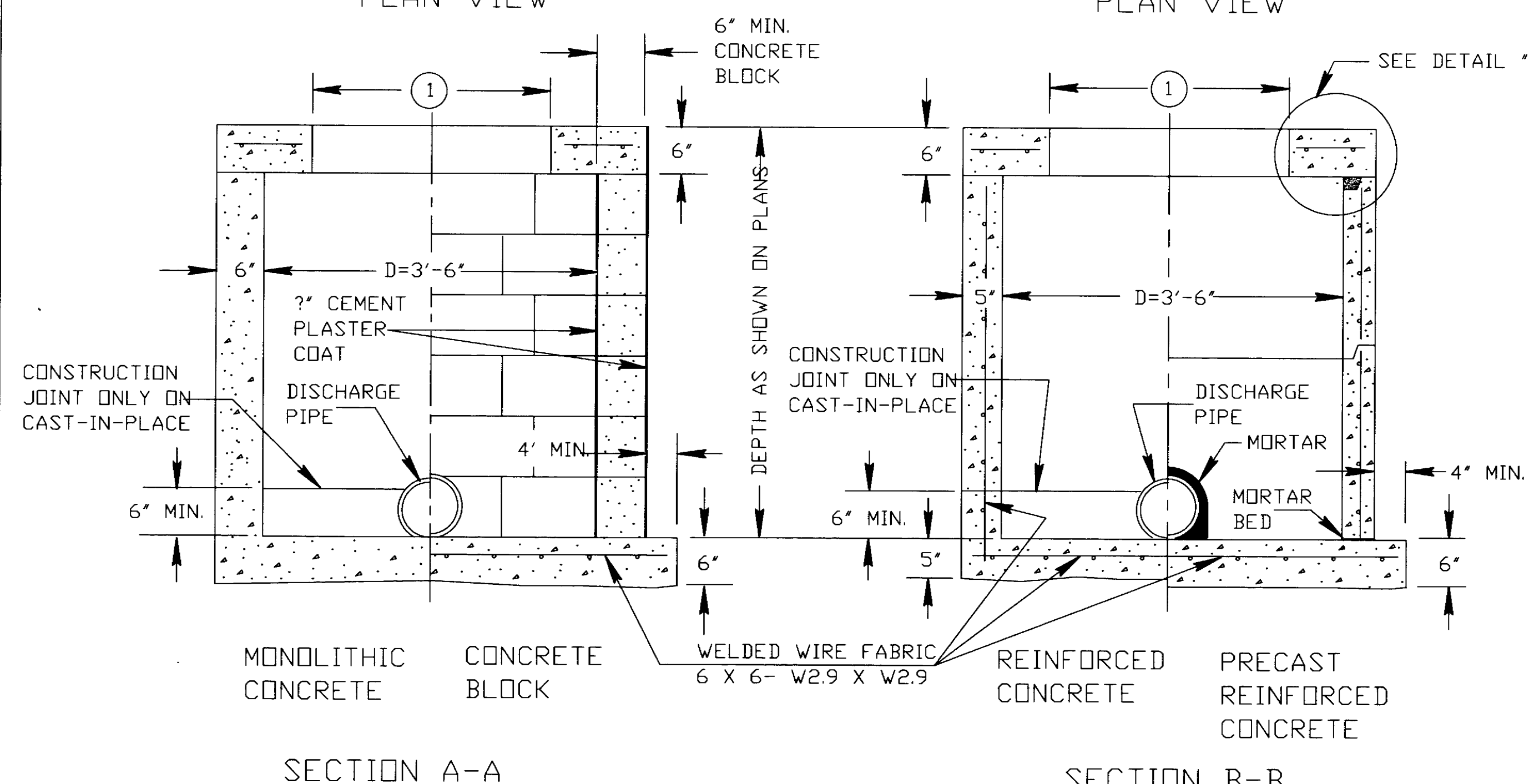
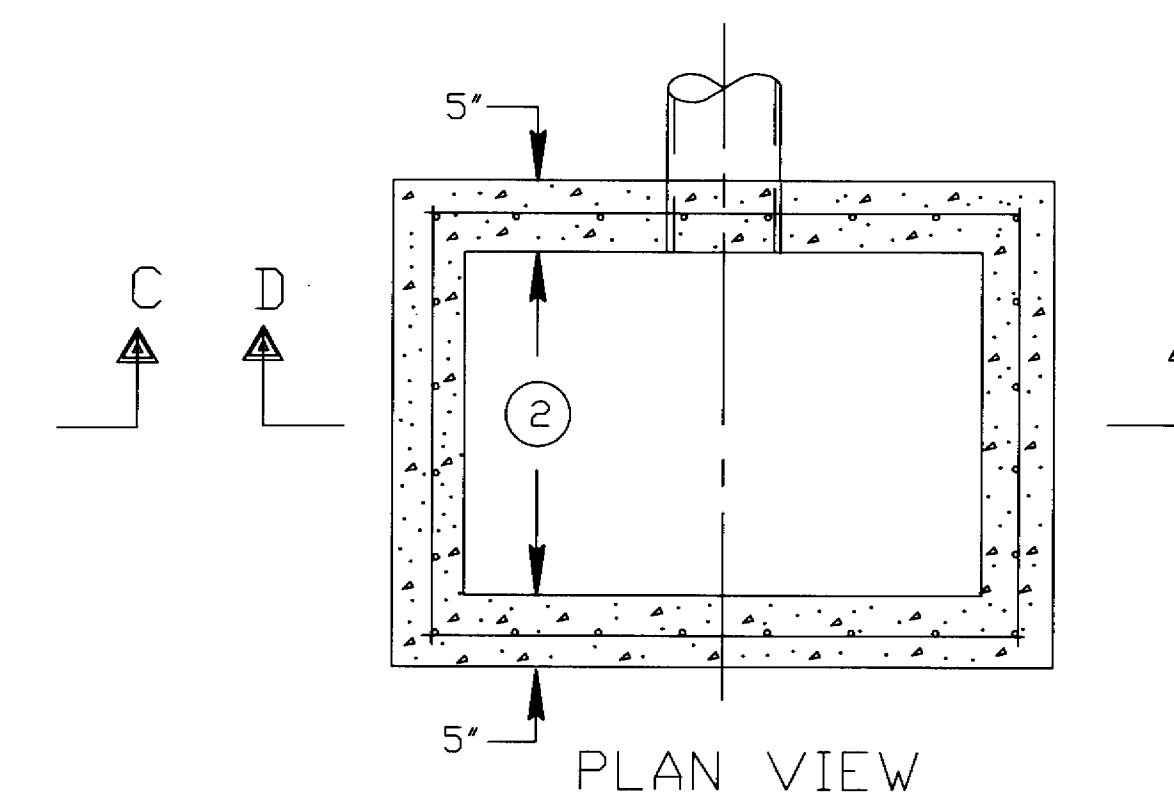
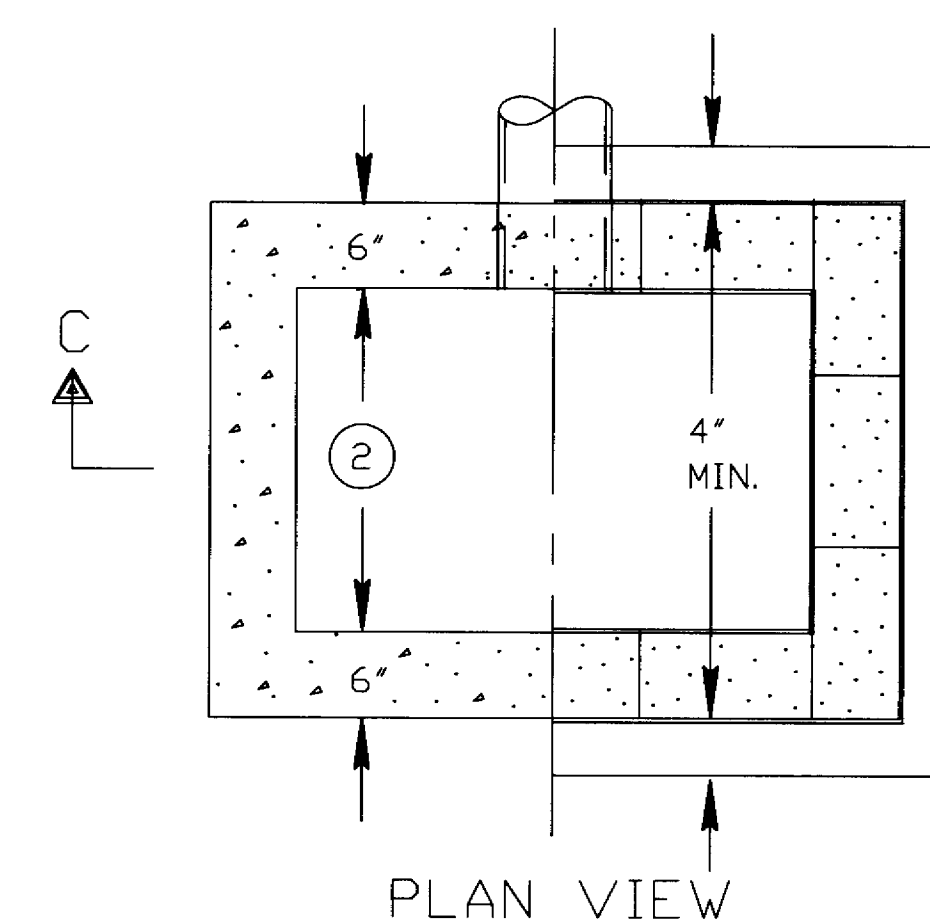
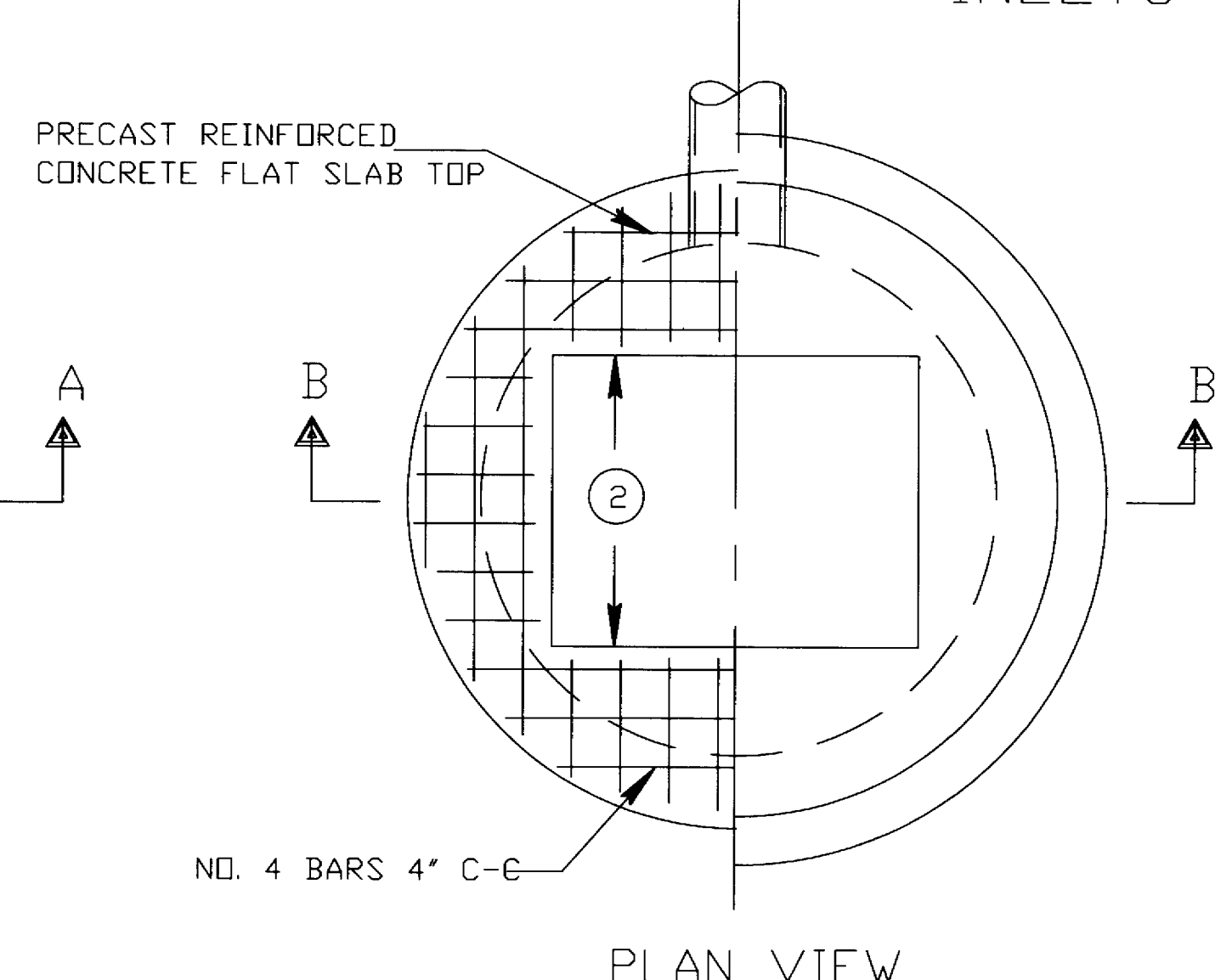
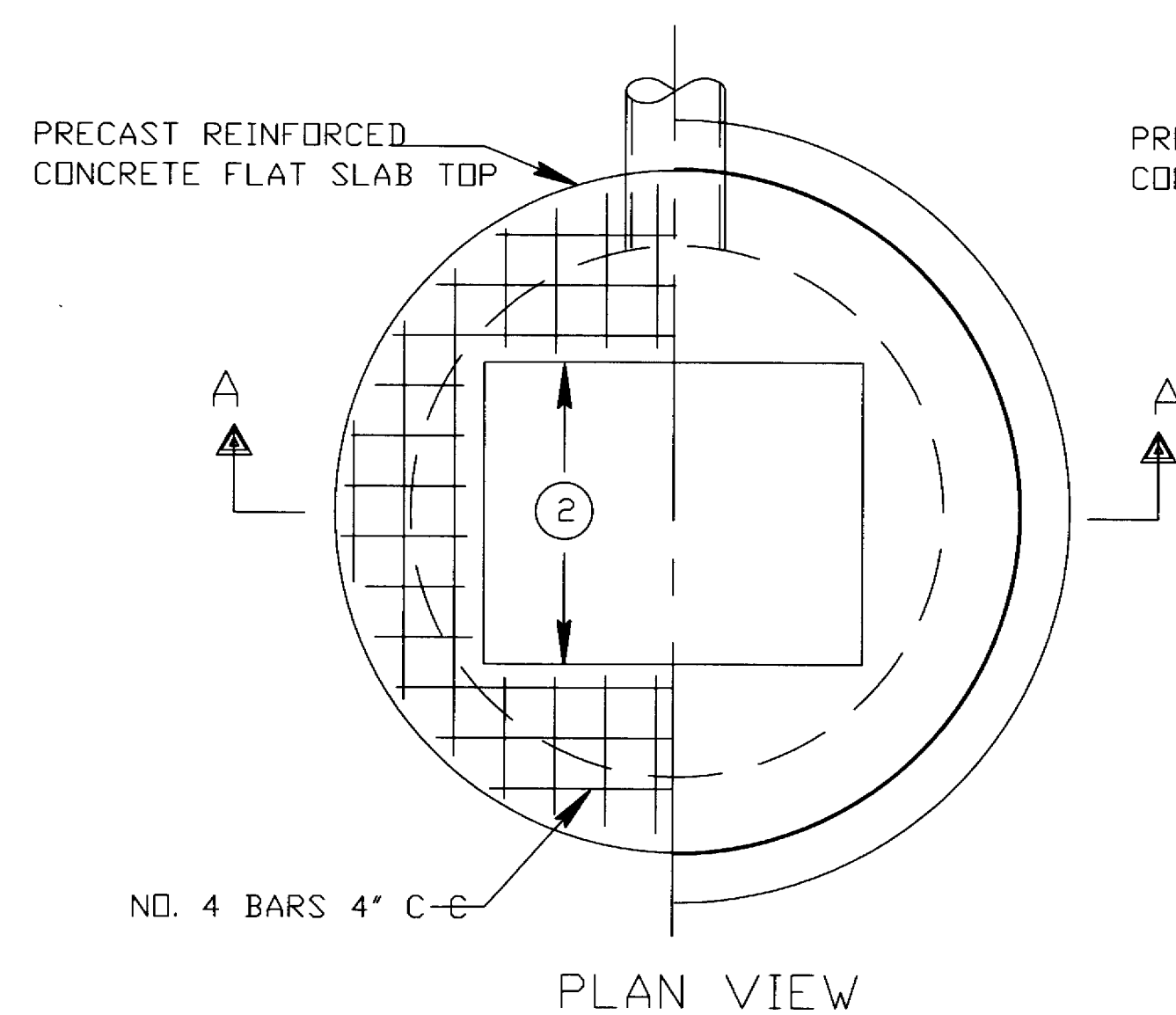
PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON THE STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

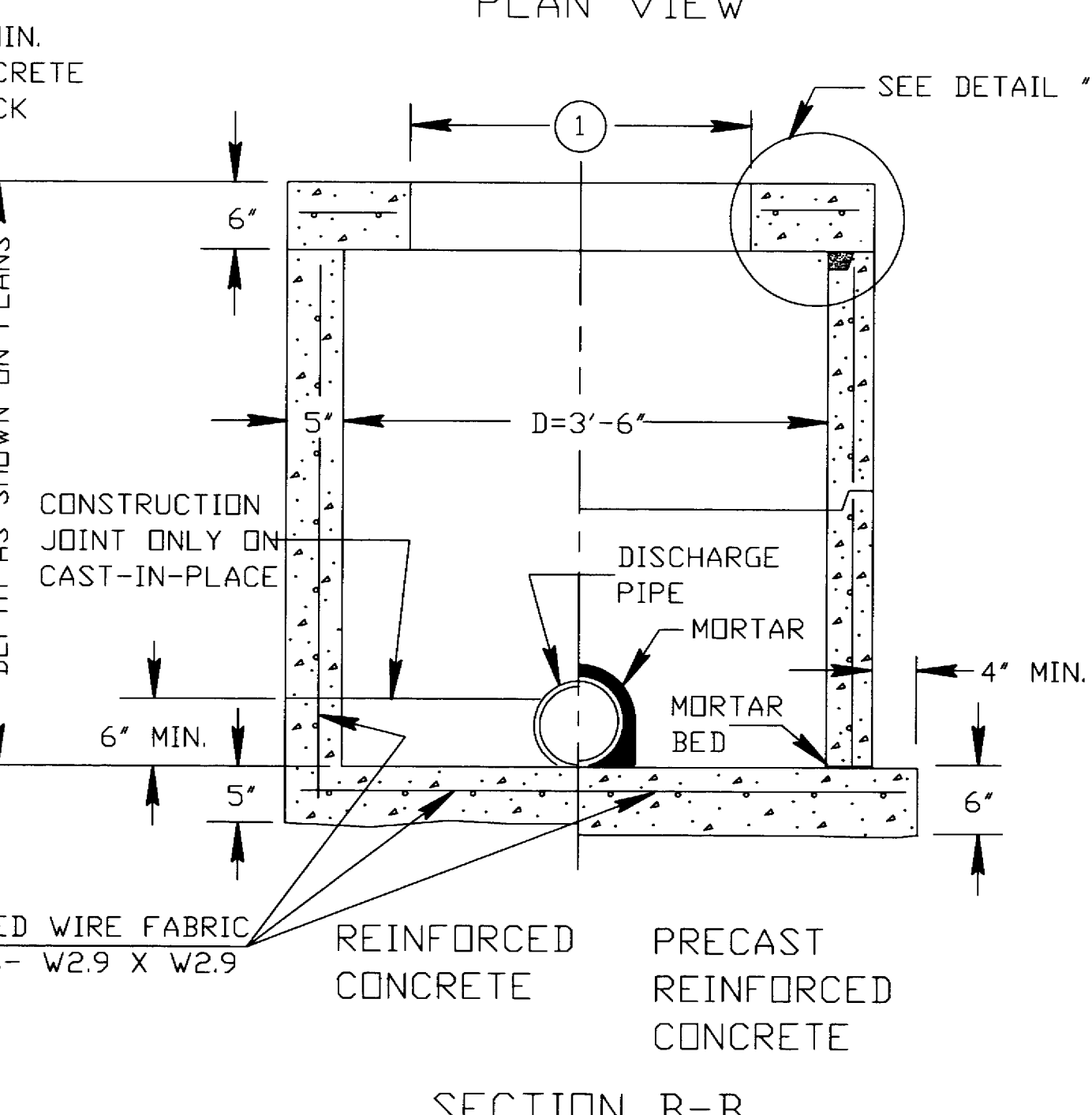
ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED CONCRETE RISERS SHALL BE PLACED WITH TONGUE DOWN.

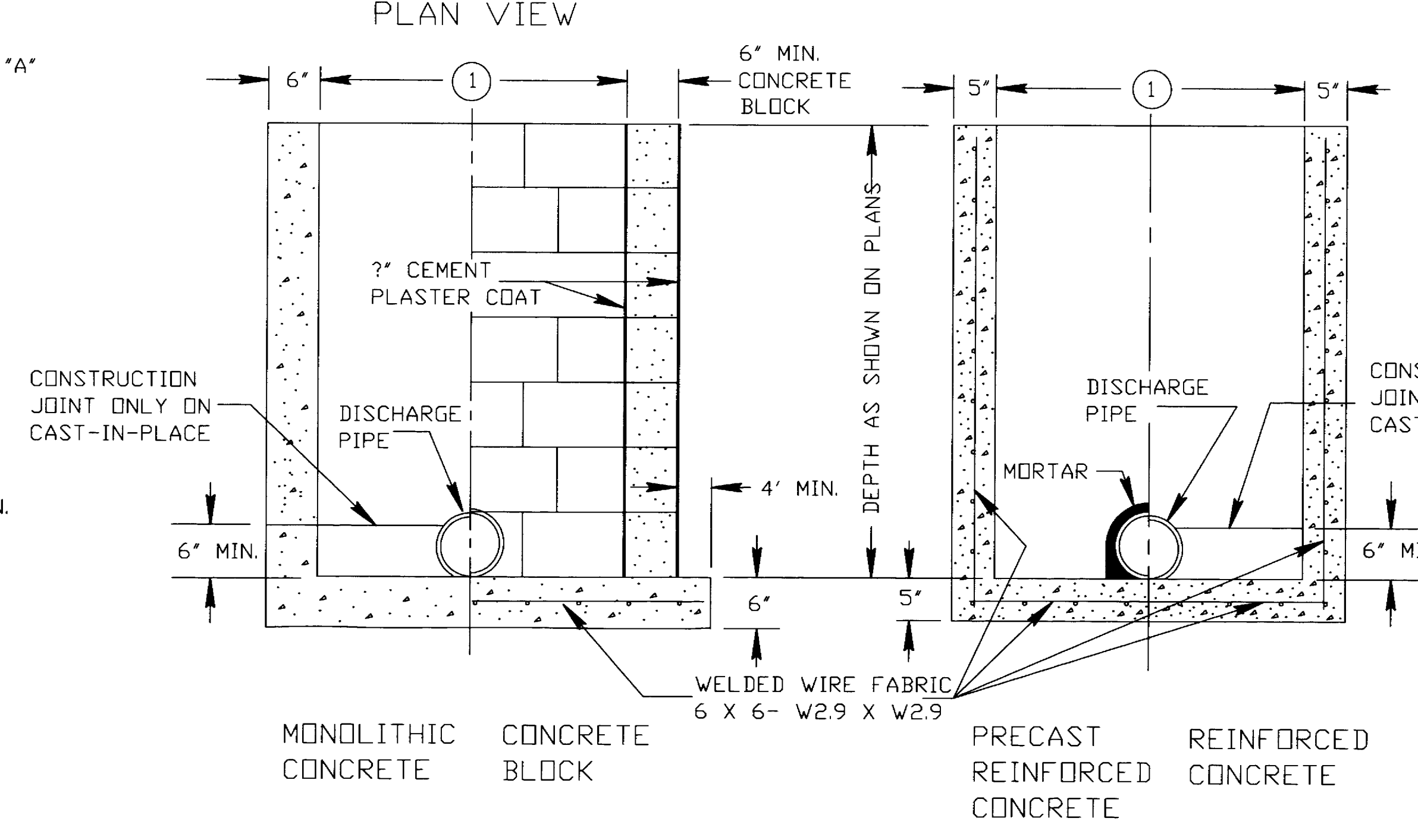
- ① USE 2'-6" OPENING FOR TYPE 2 INLETS, 3'-0" OPENING FOR TYPE 3 INLETS, AND 2'-11" FOR TYPE 4 INLETS.
- ② USE 2'-0" OPENING FOR TYPE 1, 2 & 3 INLETS, 2'-6" OPENING FOR TYPE 4 INLETS.



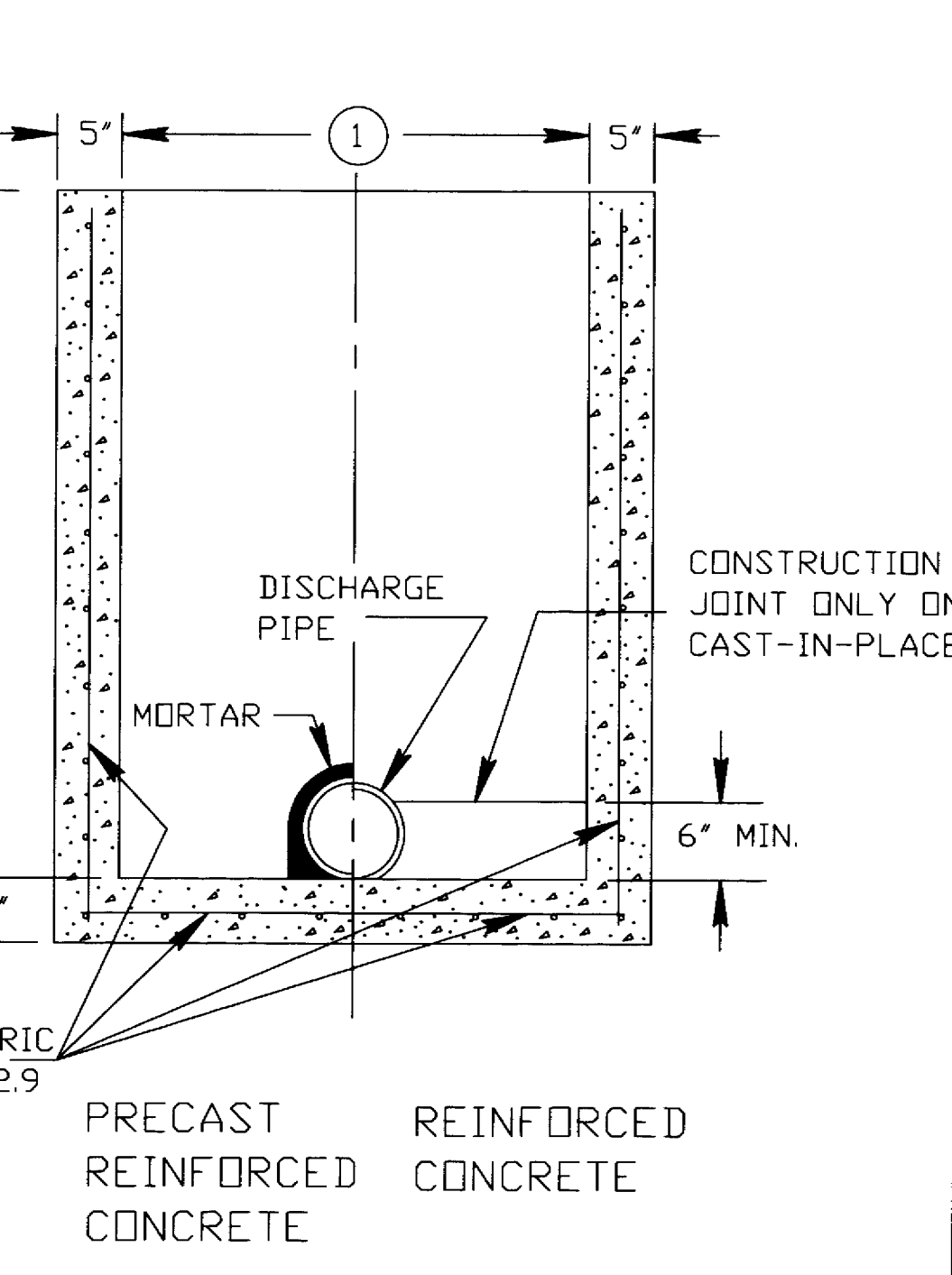
SECTION A-A



SECTION B-B



SECTION C-C



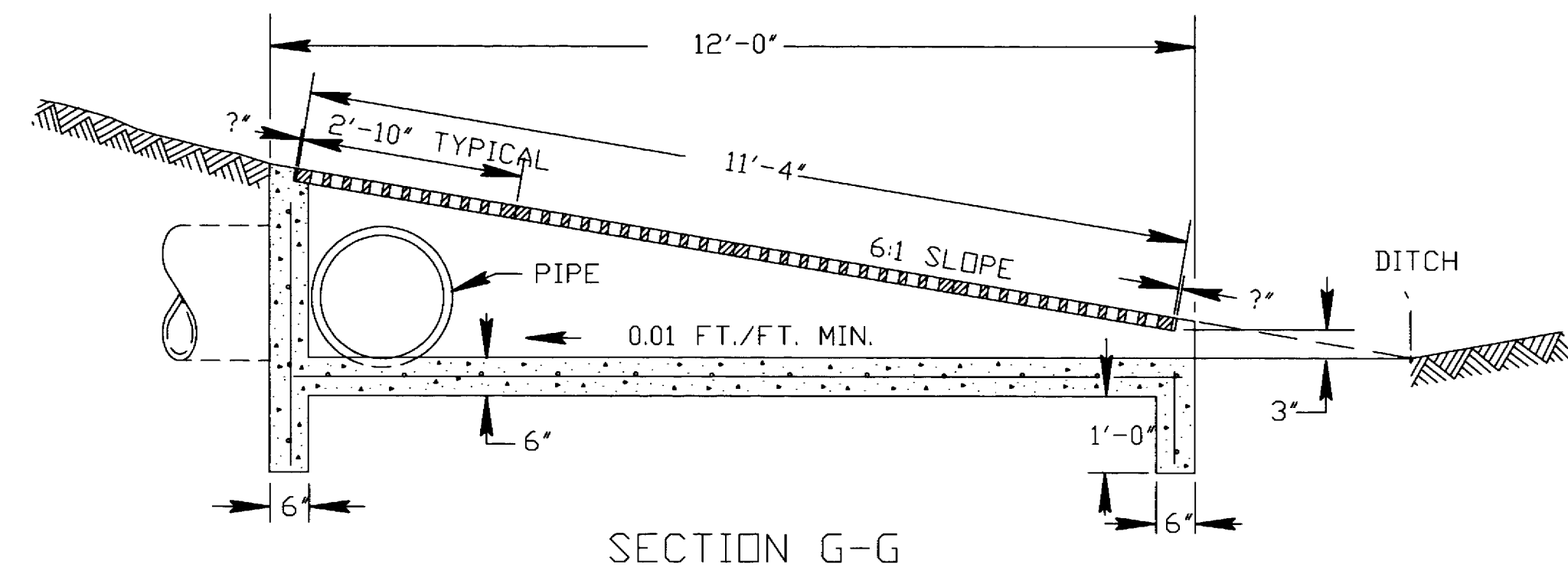
SECTION D-D

INLETS TYPE 1, 2, 3 & 4

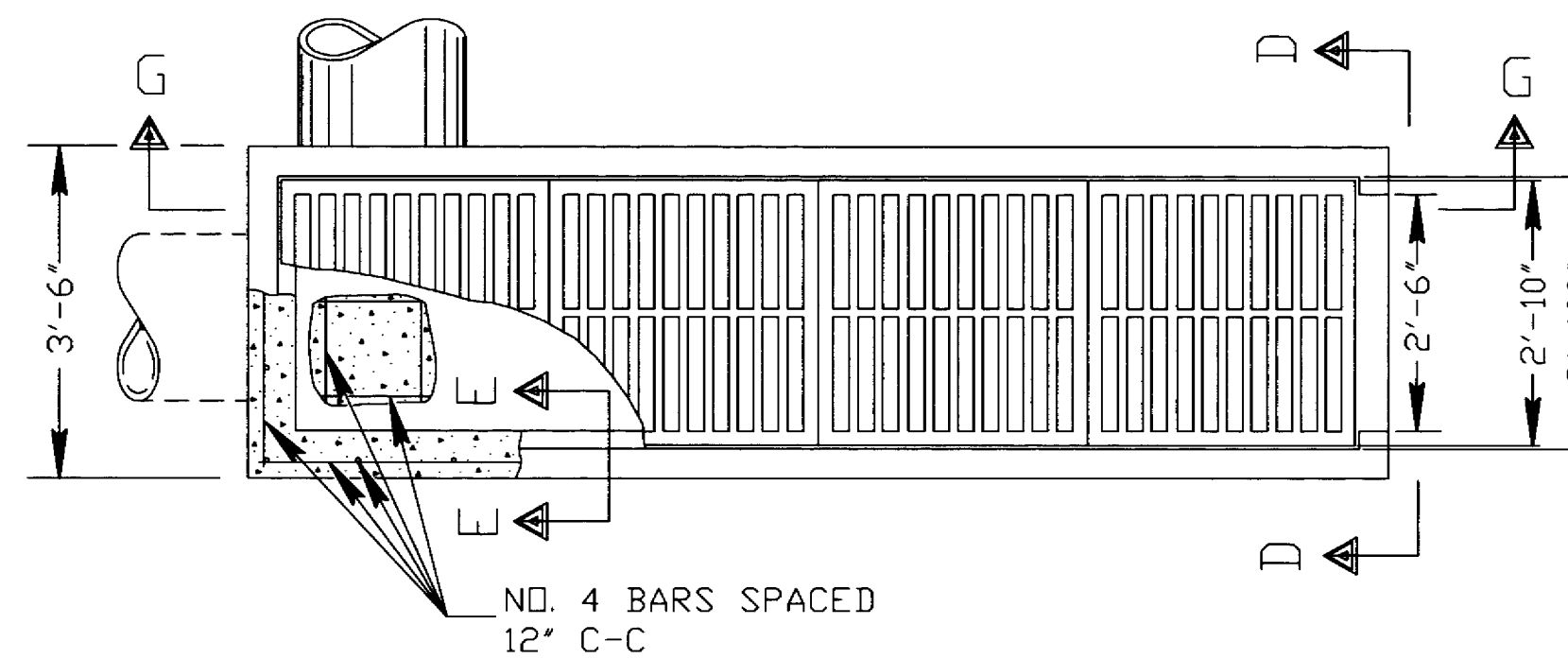
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

DATE _____ CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

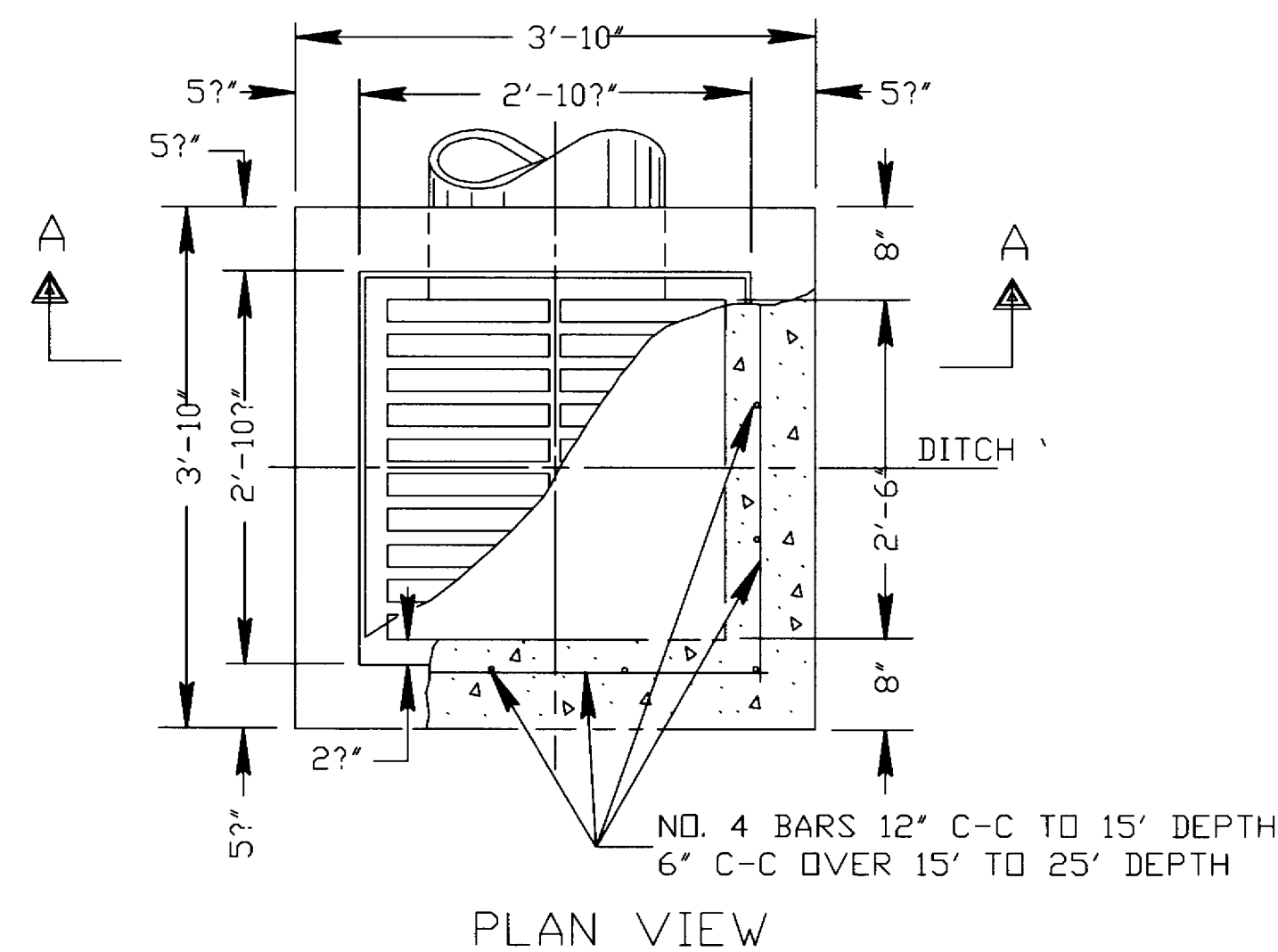


SECTION G-G

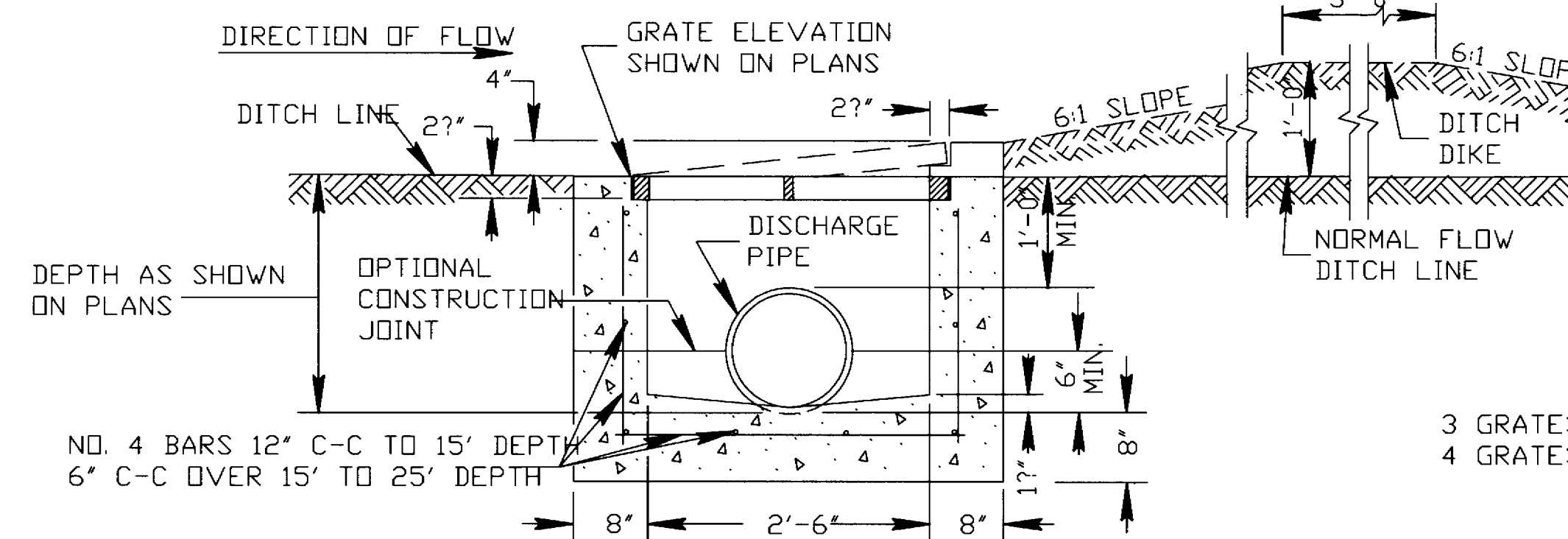


PLAN VIEW

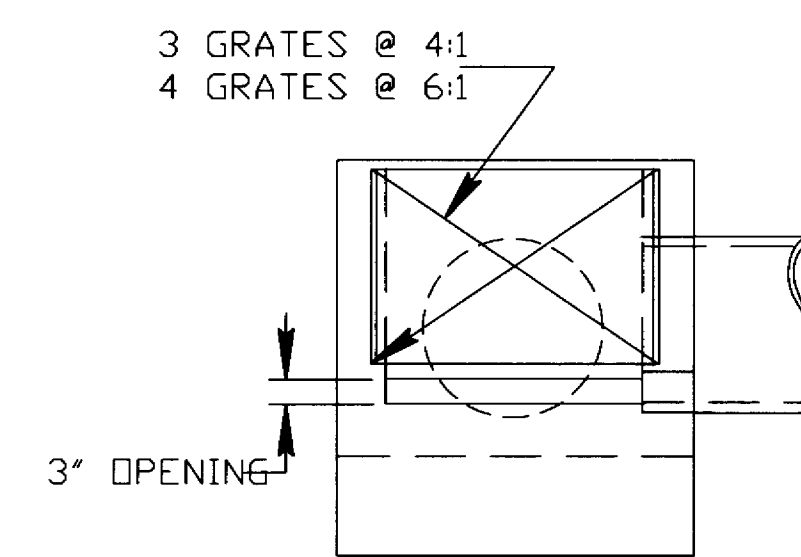
REINFORCED CONCRETE INLET TYPE 11



PLAN VIEW

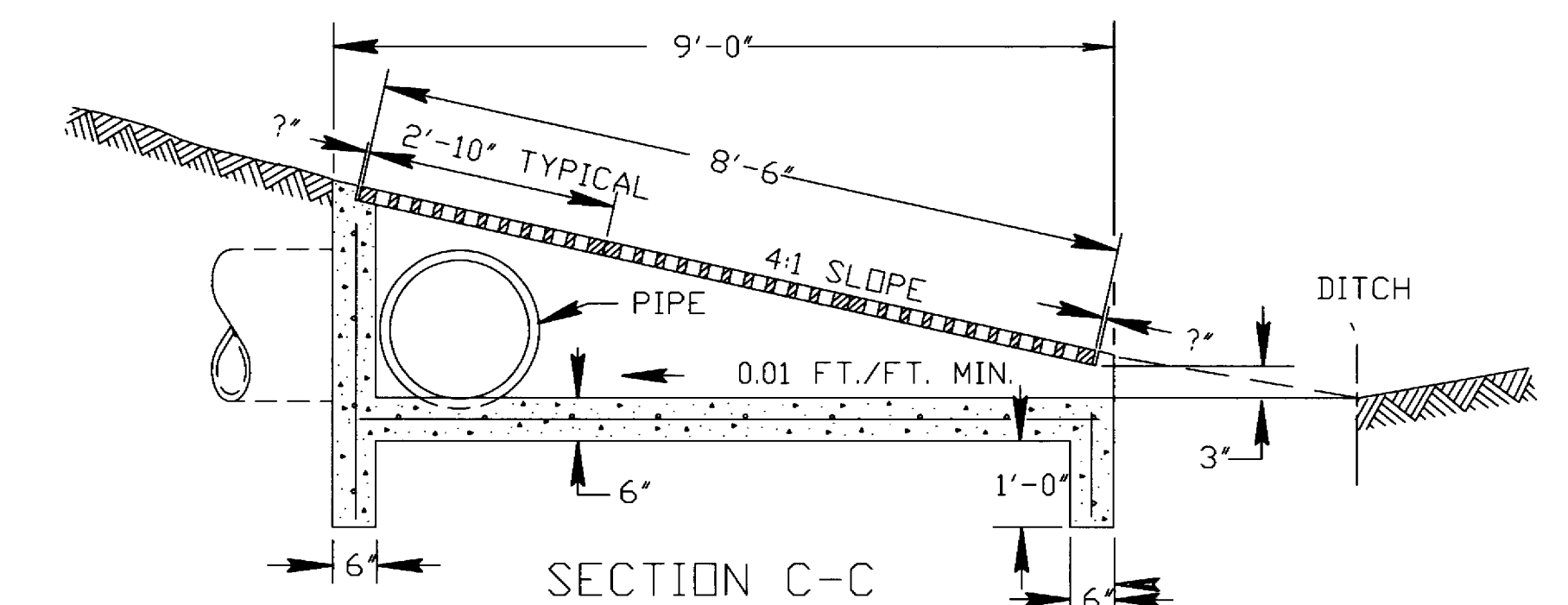


SECTION A-A

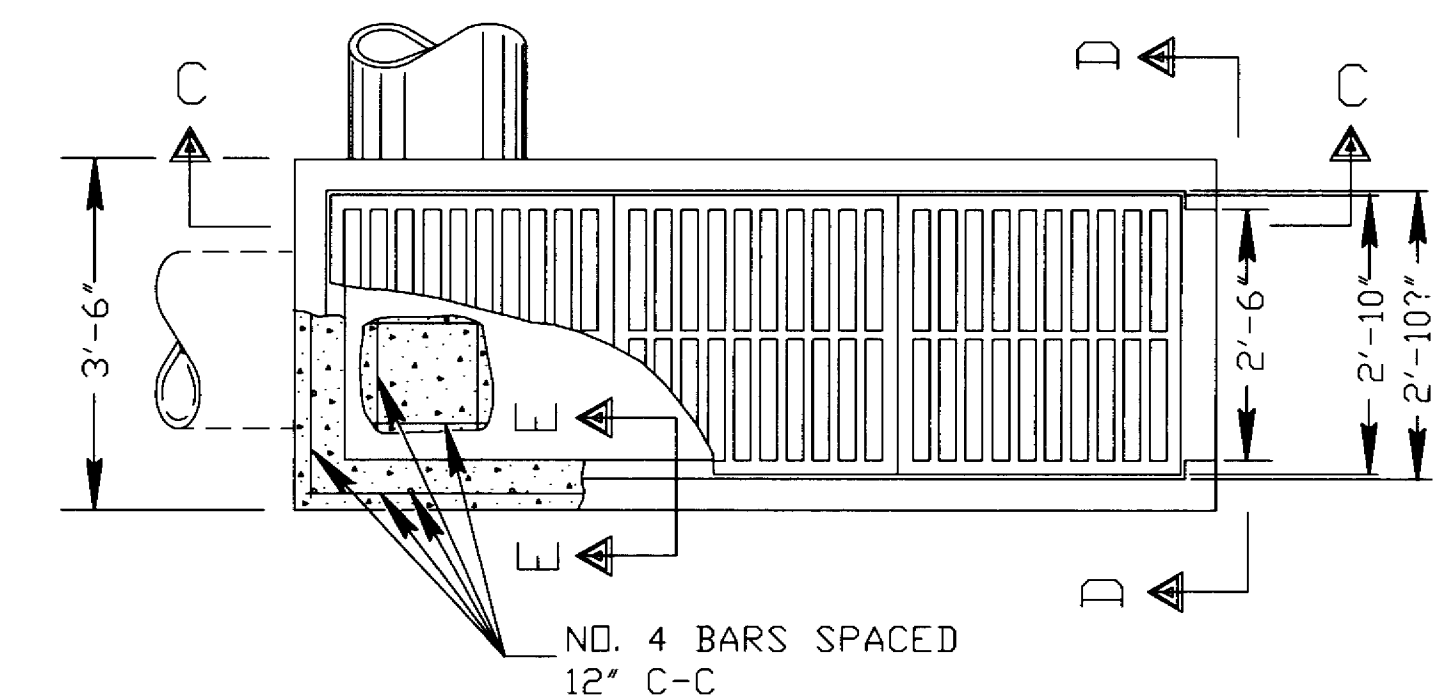


SECTION D-D

REINFORCED CONCRETE INLET TYPE 8

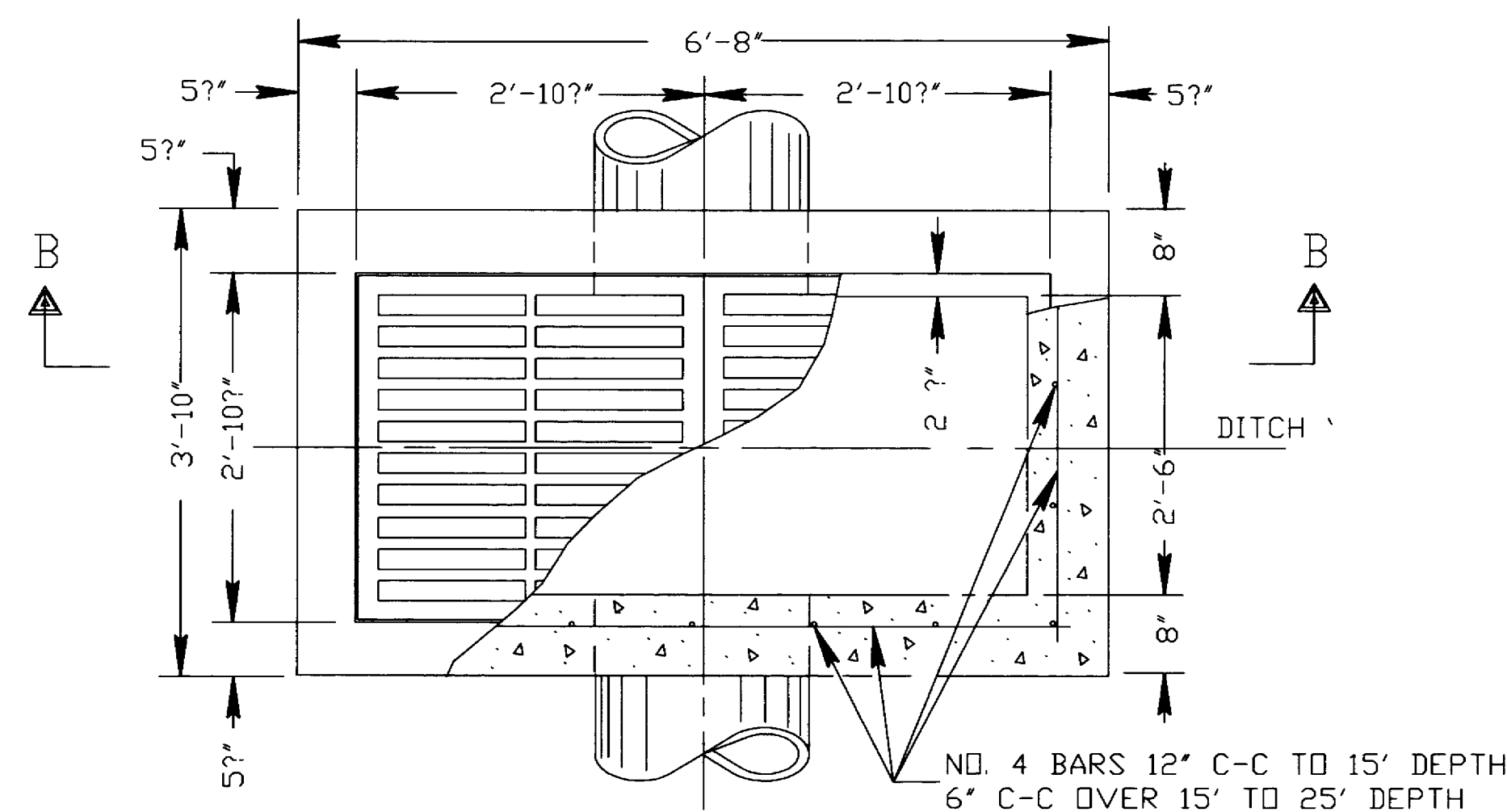


SECTION C-C

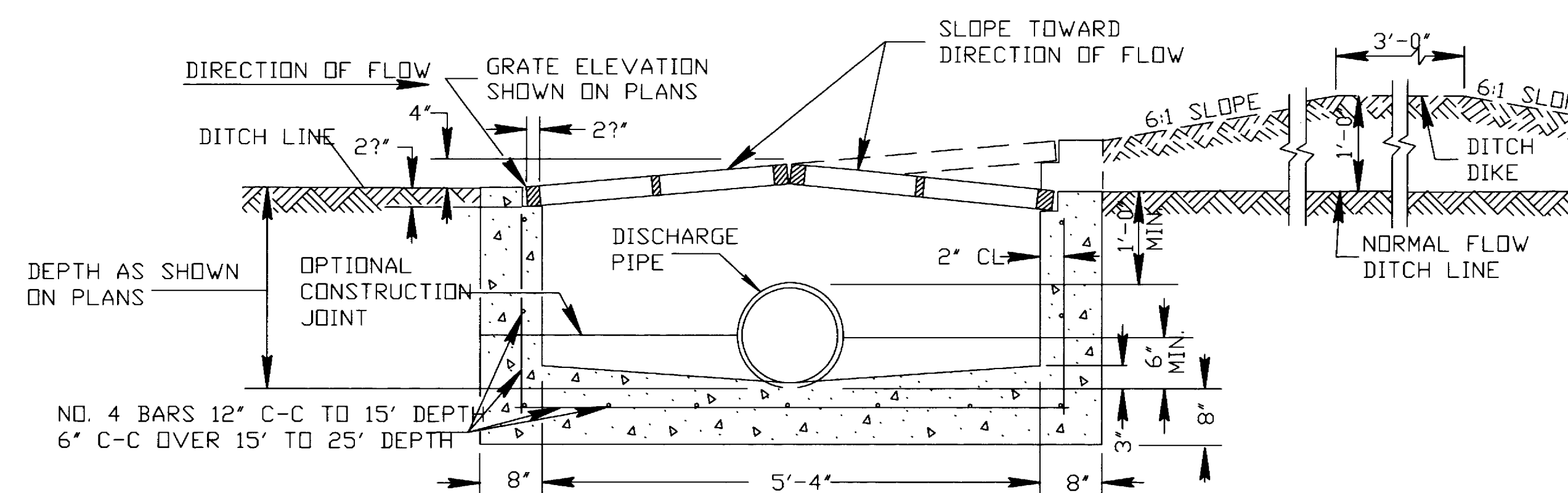


PLAN VIEW

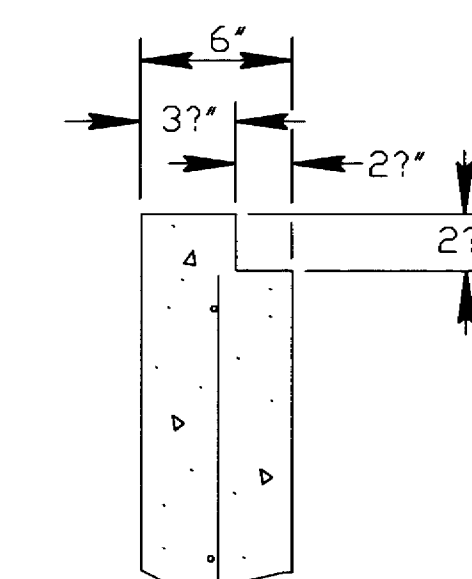
REINFORCED CONCRETE INLET TYPE 10



PLAN VIEW



SECTION B-B



SECTION E-E

REINFORCED CONCRETE INLET TYPE 9

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

PRECAST REINFORCED CONCRETE INLET UNITS, IF USED, SHALL CONFORM TO THE REQUIREMENTS OF THE CATCH BASINS, MANHOLES AND INLETS SECTION OF THE STANDARD SPECIFICATIONS. UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A CORRECTED LIST OF SIZES IS FURNISHED BY THE ENGINEER.

ALL INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 8-MS", ETC. THIS DESIGNATION IS INTERPRETED TO MEAN THAT THE NUMBER, OR FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER OR IRON CASTING TO BE USED THEREWITH TO COMPRISE THE COMPLETE UNIT.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

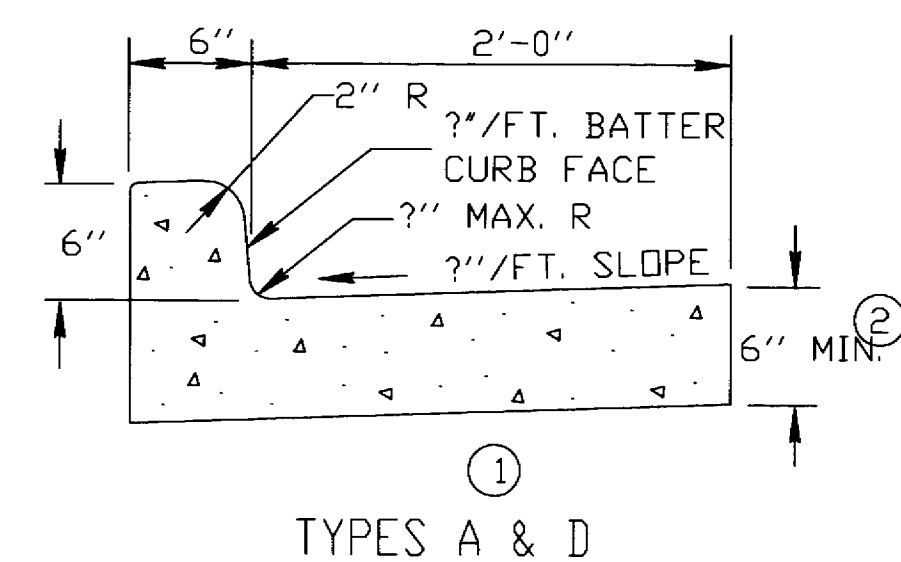
INLETS TYPE 8, 9, 10 AND 11

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

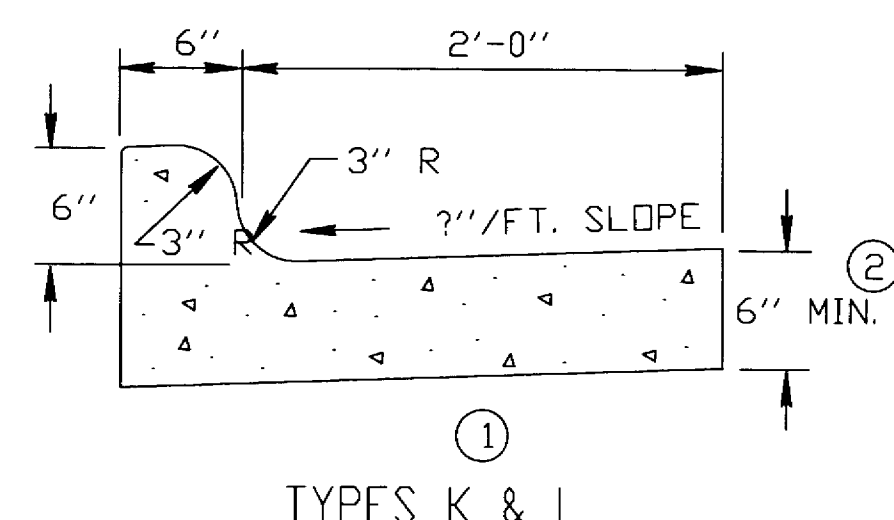
APPROVED

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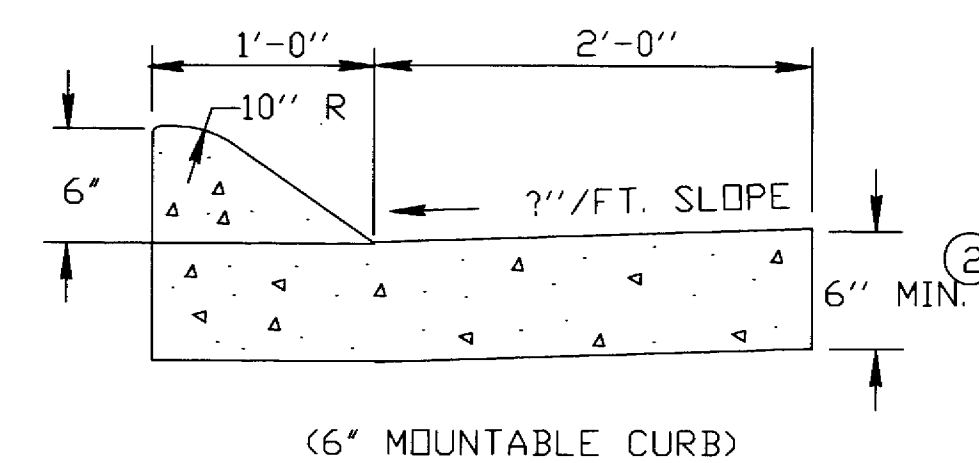
S.D.D. 8 C 5-2



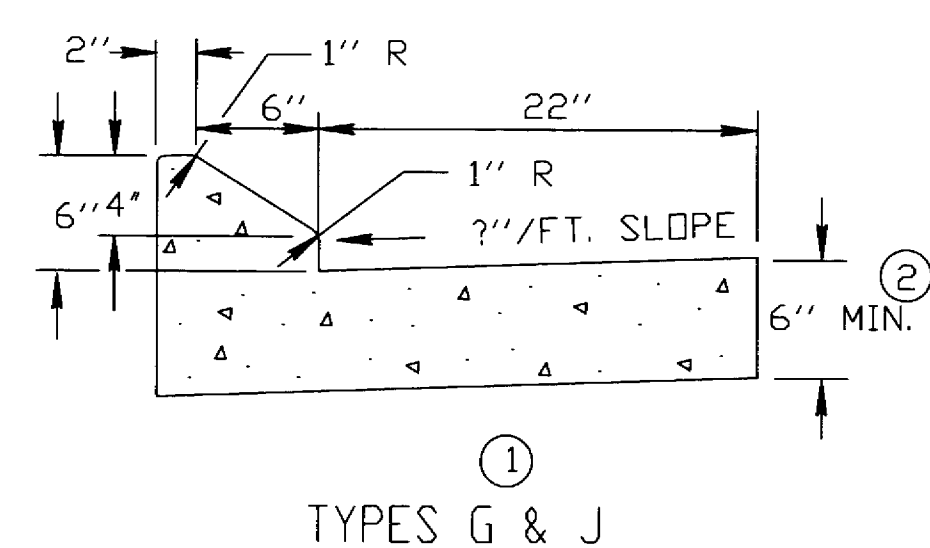
TYPES A & D



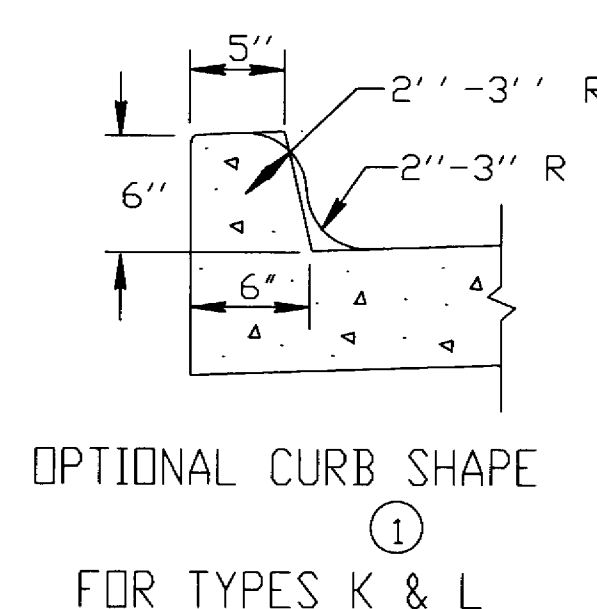
TYPES K & L



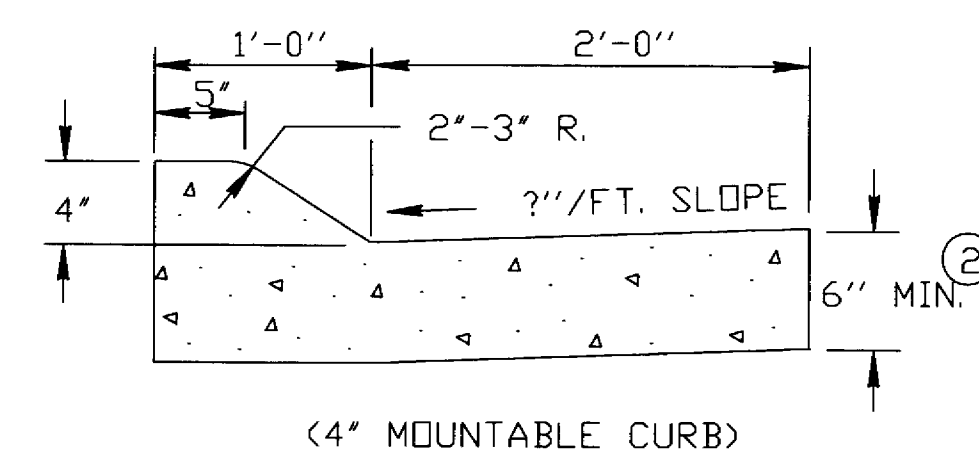
(6" MOUNTABLE CURB)



TYPES G & J

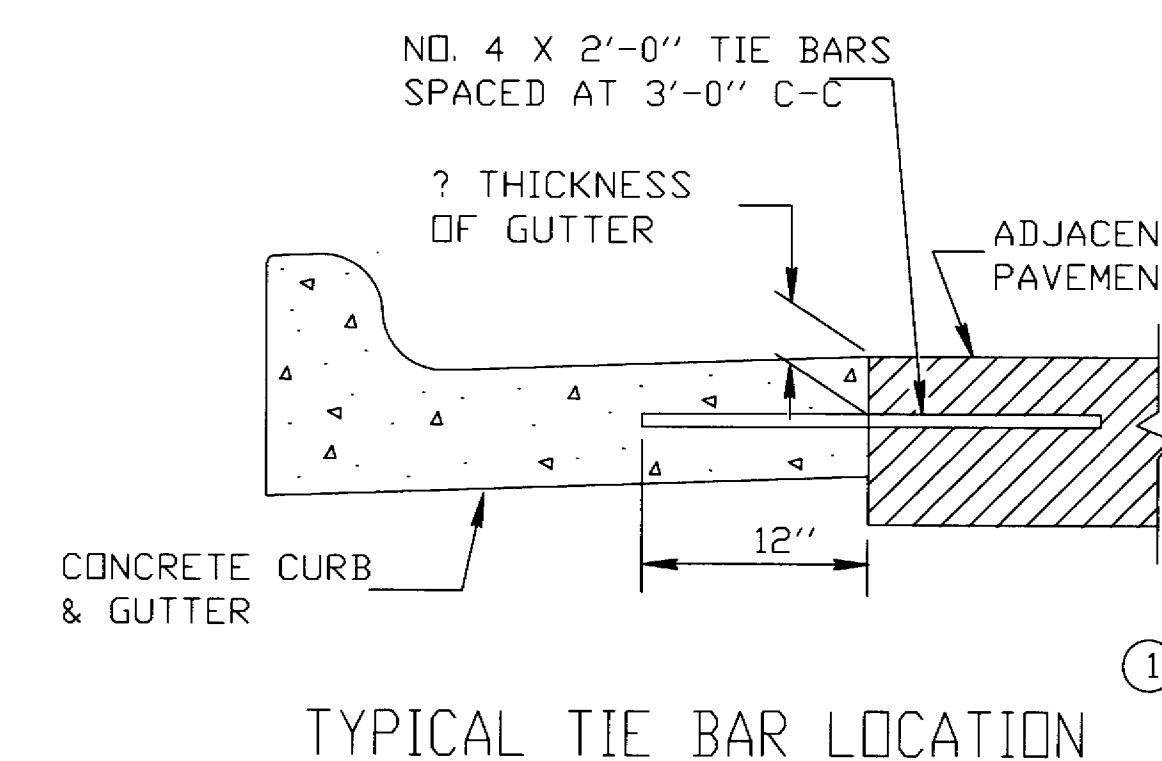


OPTIONAL CURB SHAPE
FOR TYPES K & L

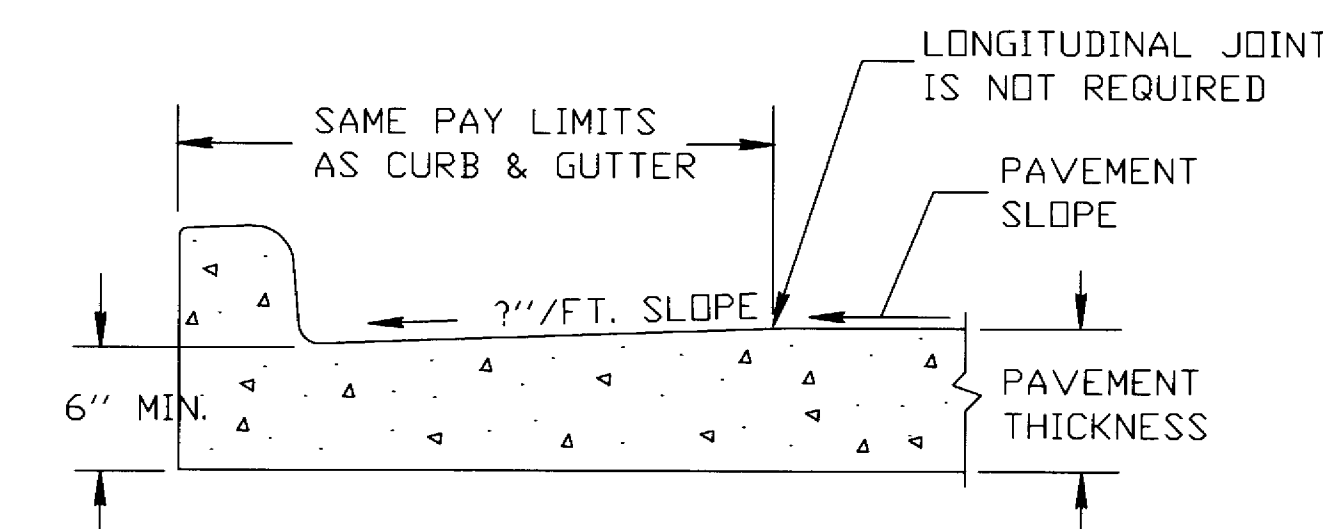


TYPES A & D
CONCRETE CURB & GUTTER 36"

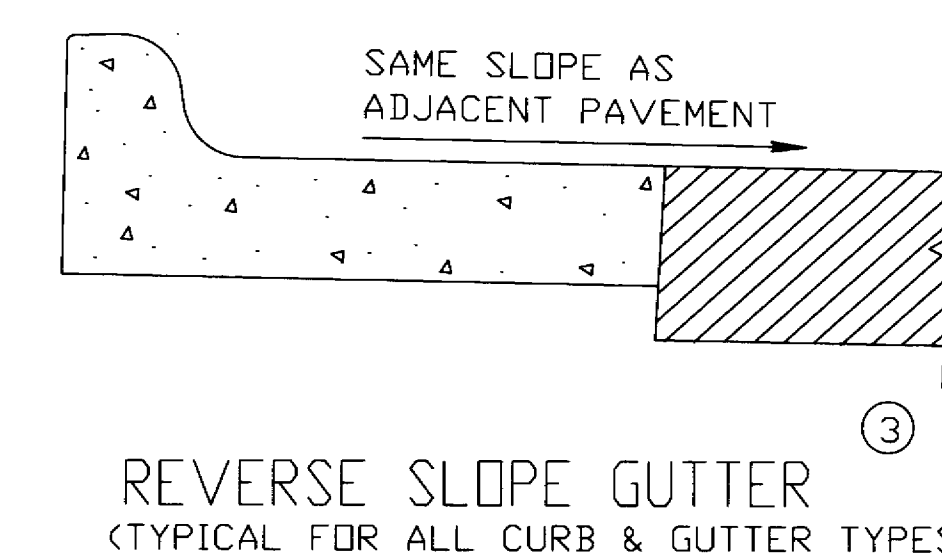
CONCRETE CURB & GUTTER 30"



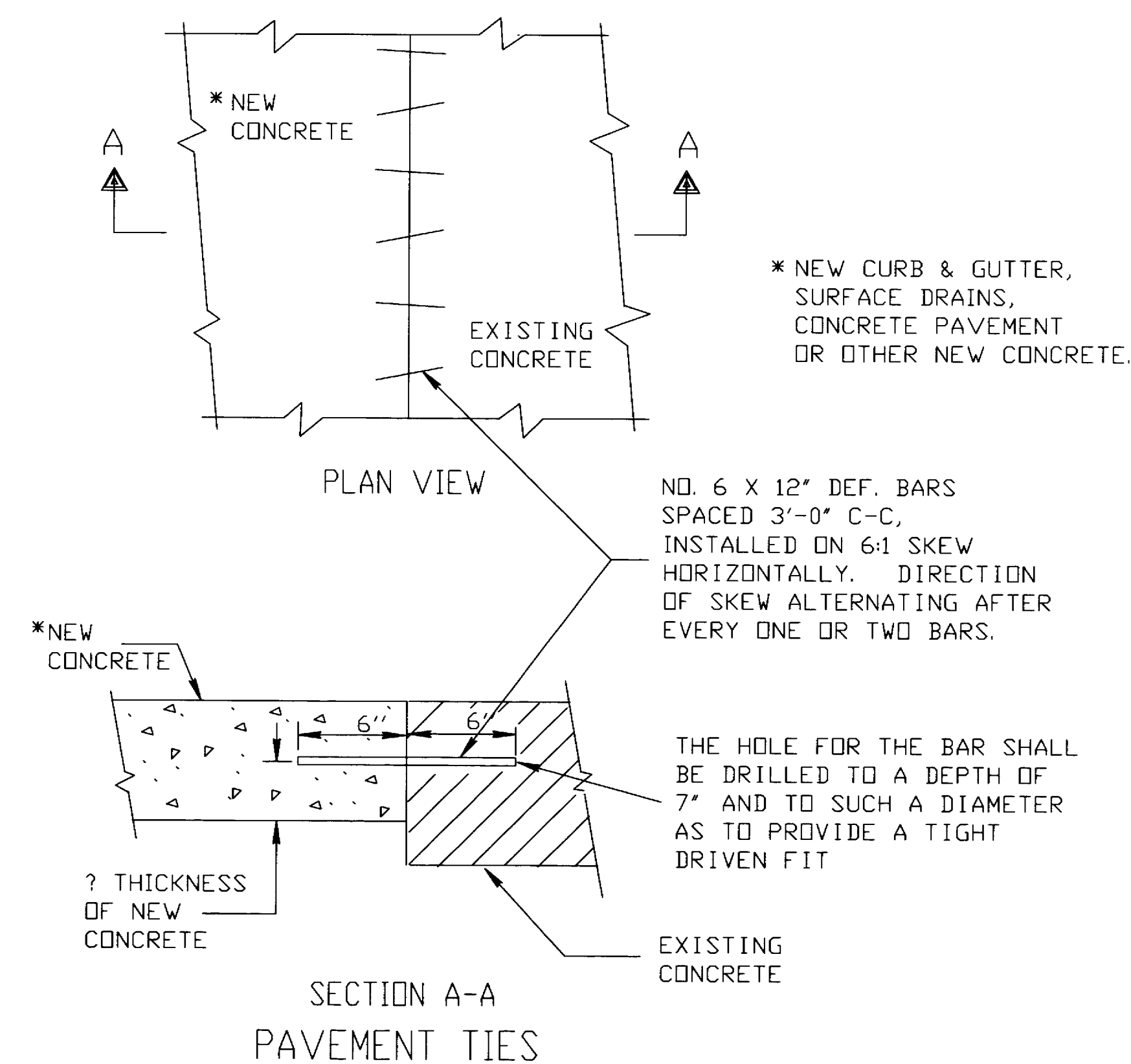
TYPICAL TIE BAR LOCATION



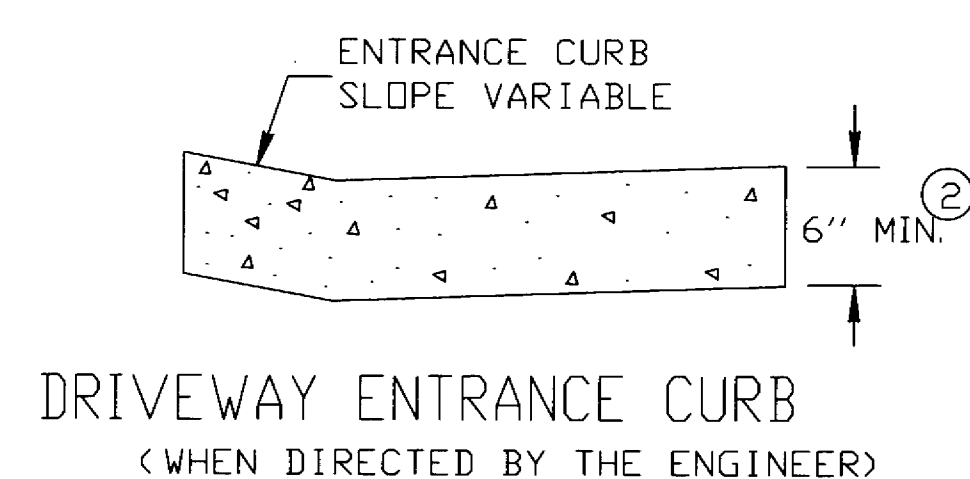
PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



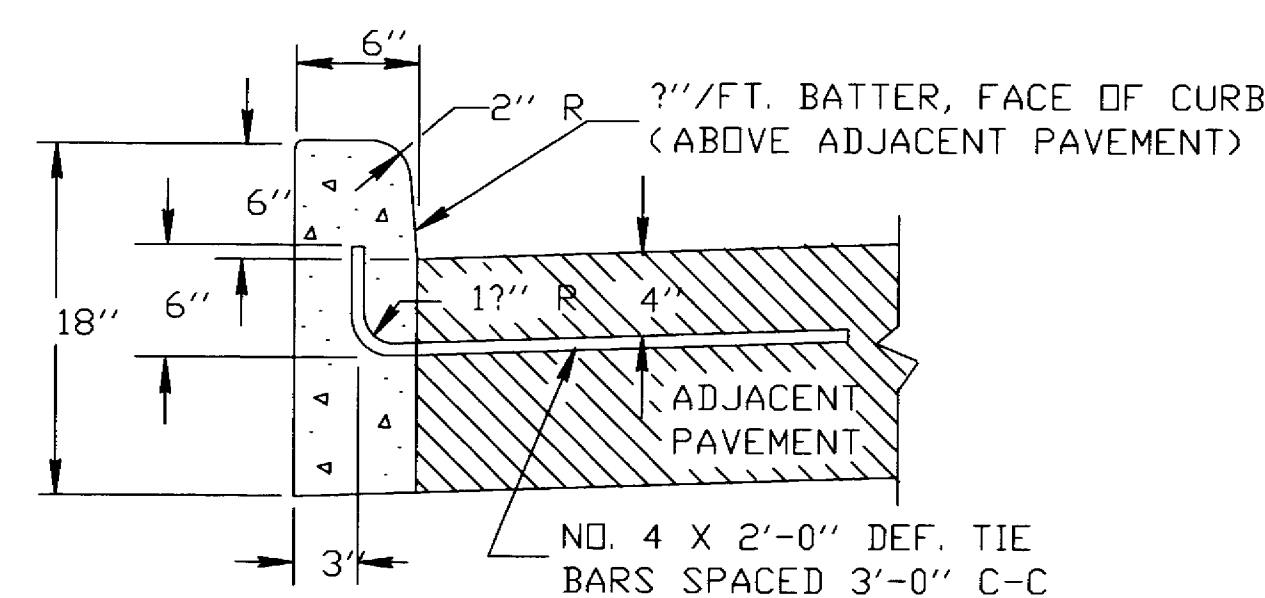
REVERSE SLOPE GUTTER
(TYPICAL FOR ALL CURB & GUTTER TYPES)



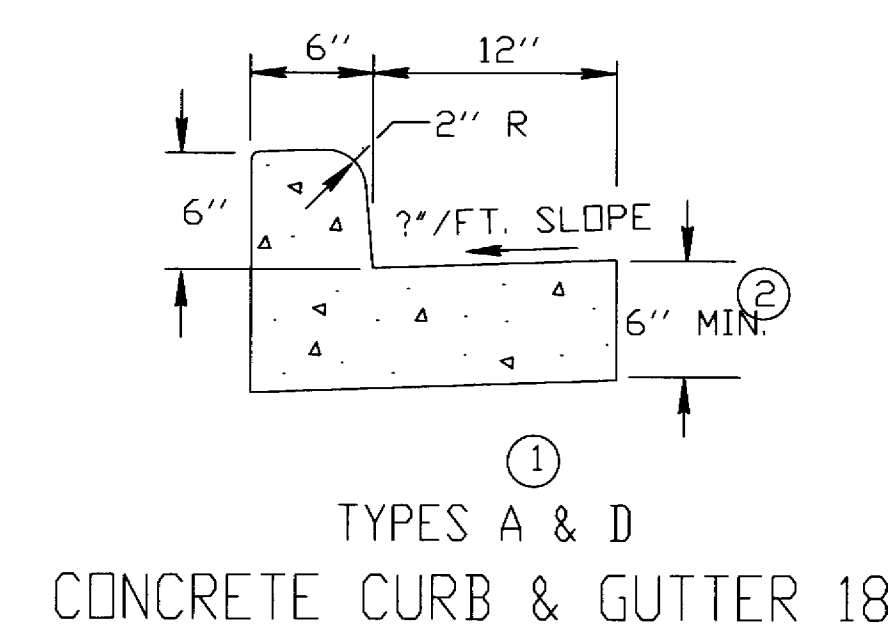
SECTION A-A
PAVEMENT TIES



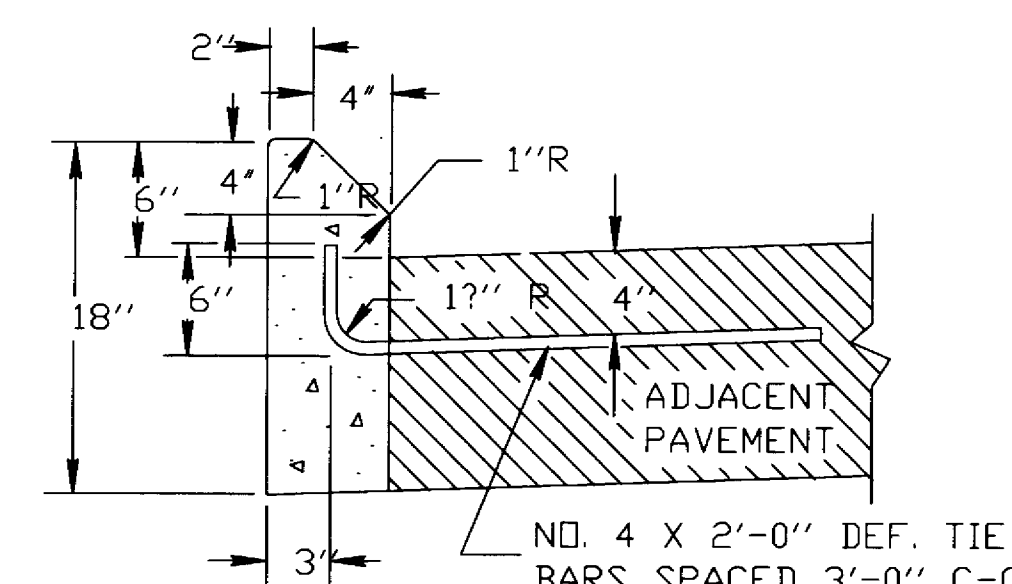
DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)



TYPES A & D



TYPES A & D
CONCRETE CURB & GUTTER 18"



TYPES G & J

CONCRETE CURB

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE COURSE AND UNCLASSIFIED EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

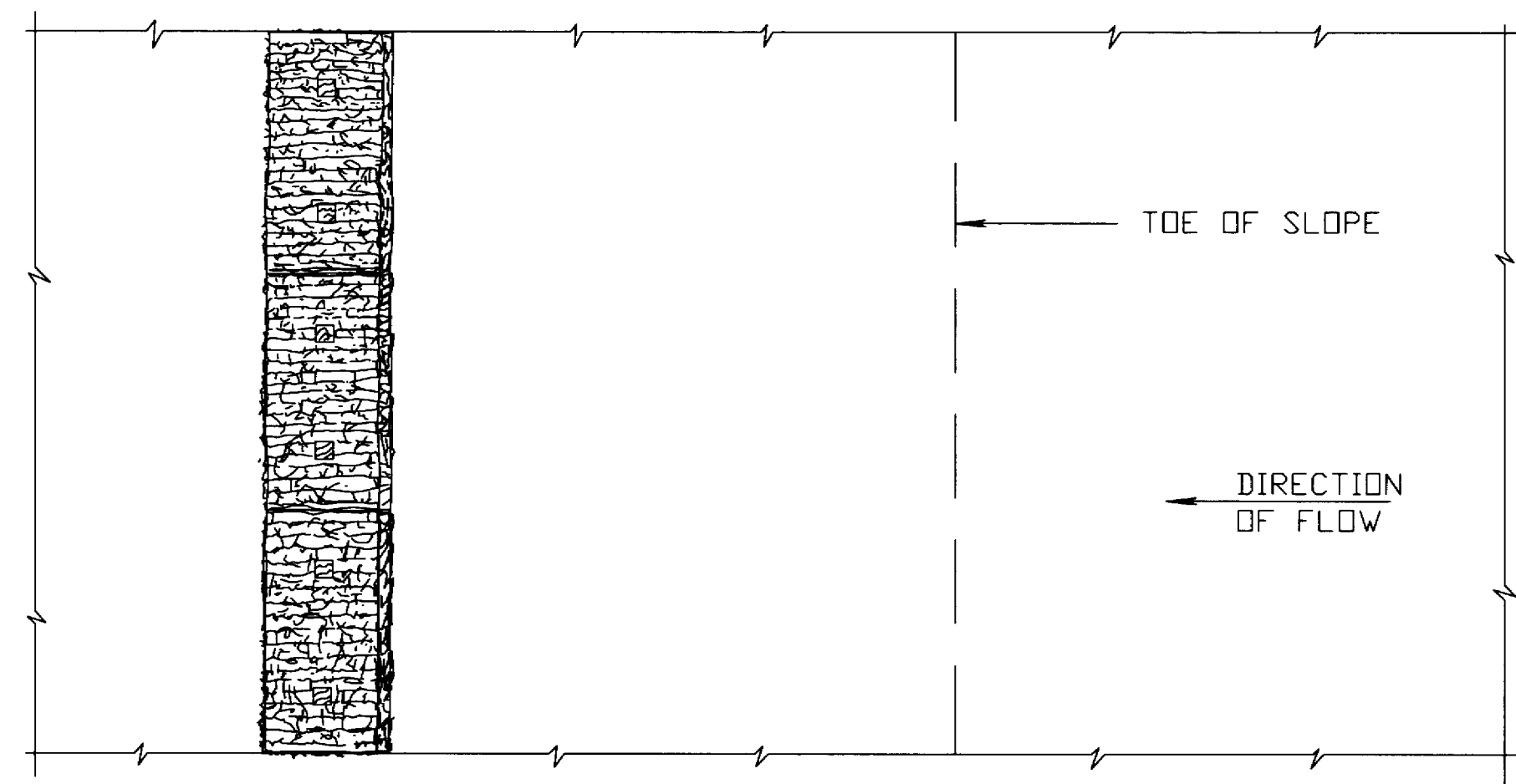
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G AND K.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

CONCRETE CURB, CONCRETE
CURB & GUTTER AND
PAVEMENT TIES

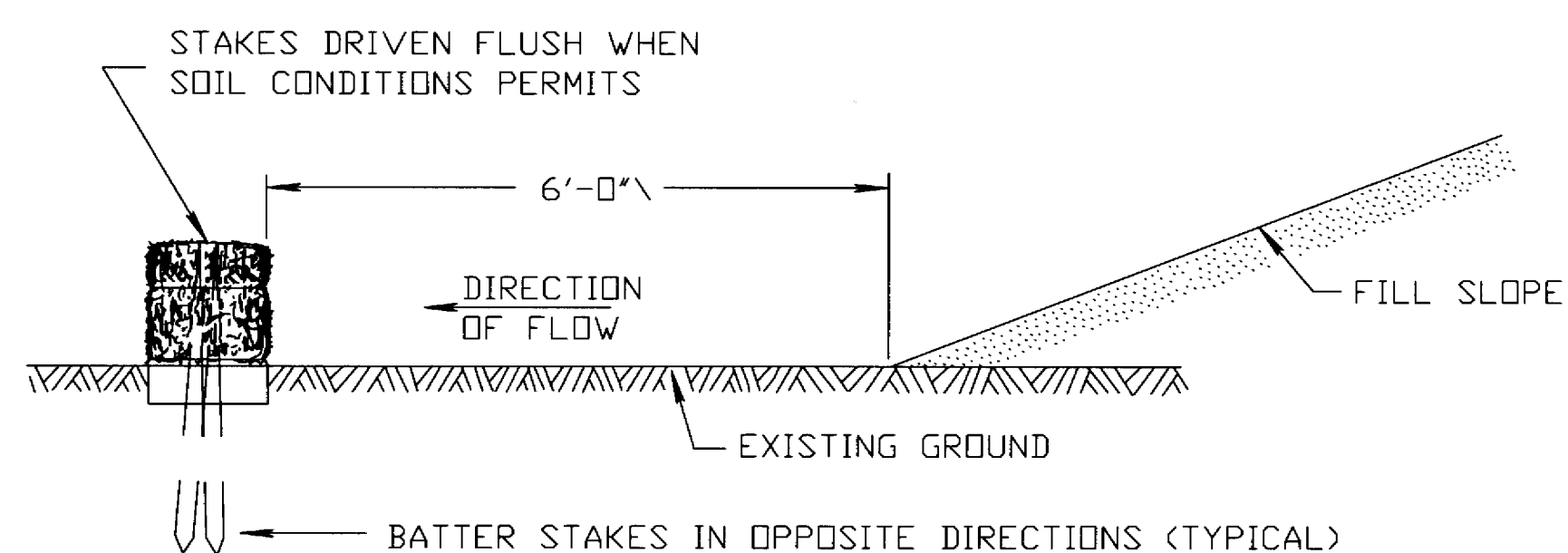
STATE OF WISCONSIN
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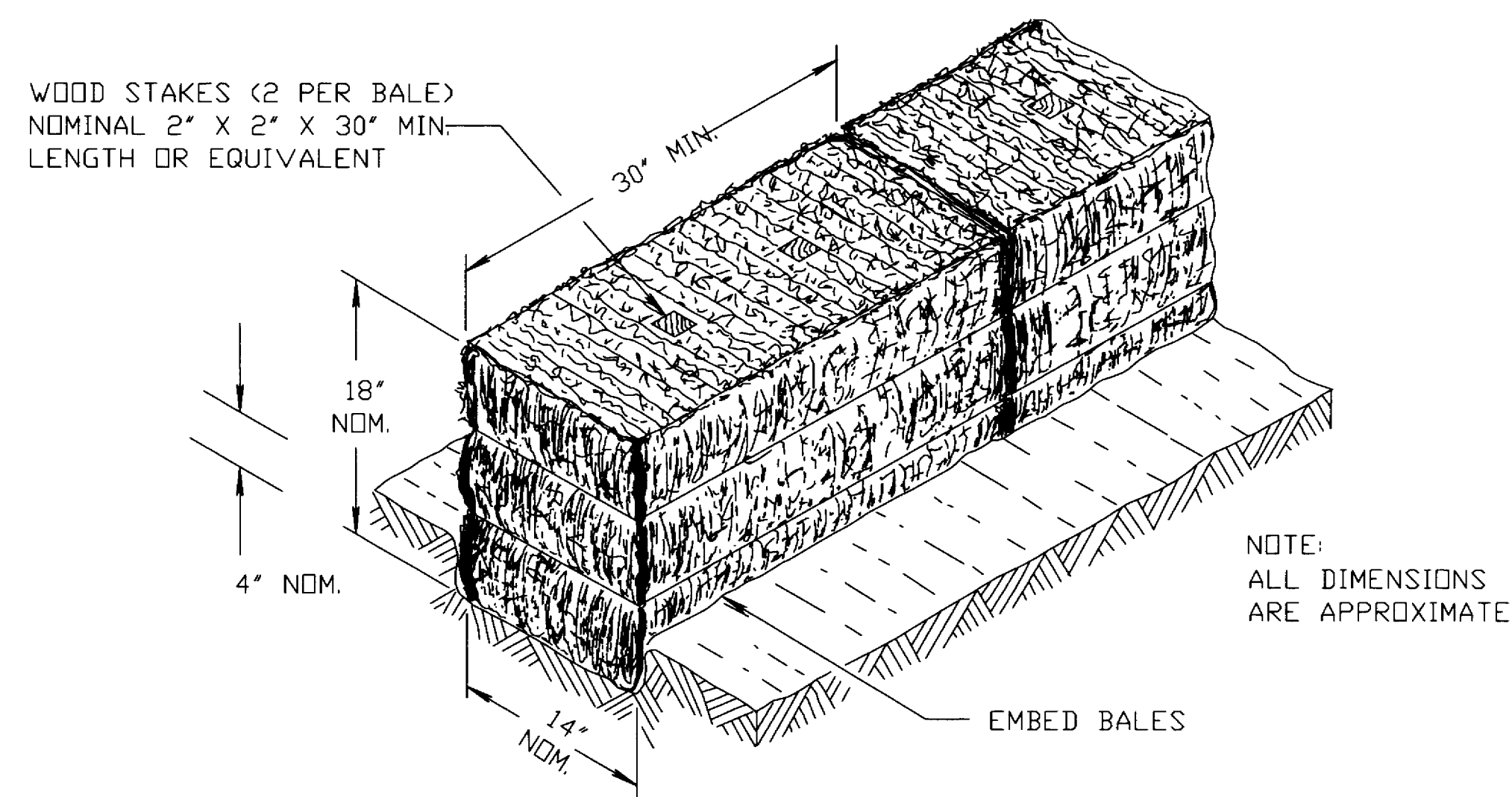
DATE _____ CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



PLAN VIEW

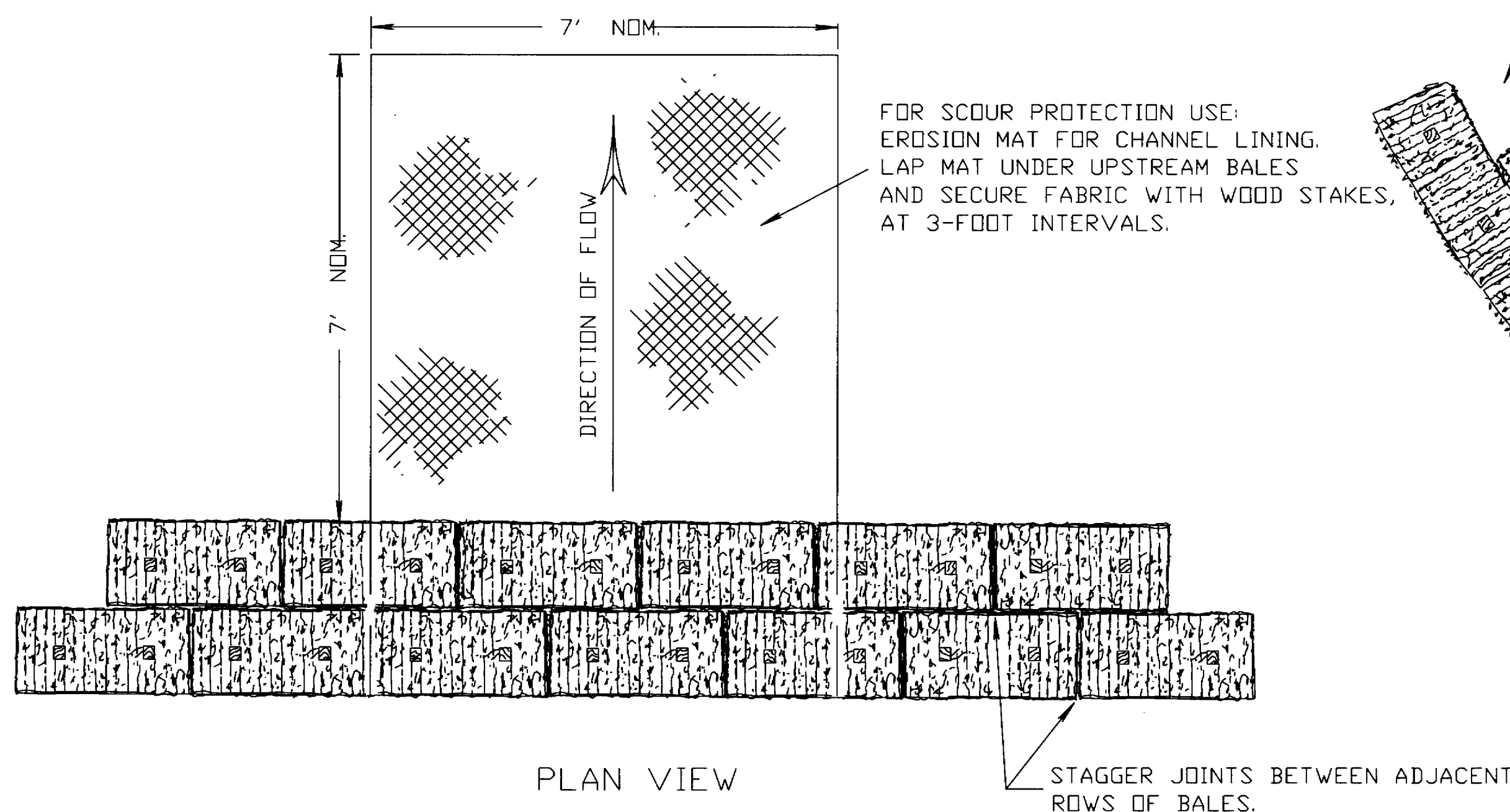


FRONT ELEVATION
WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE
EROSION BALES FOR SHEET FLOW

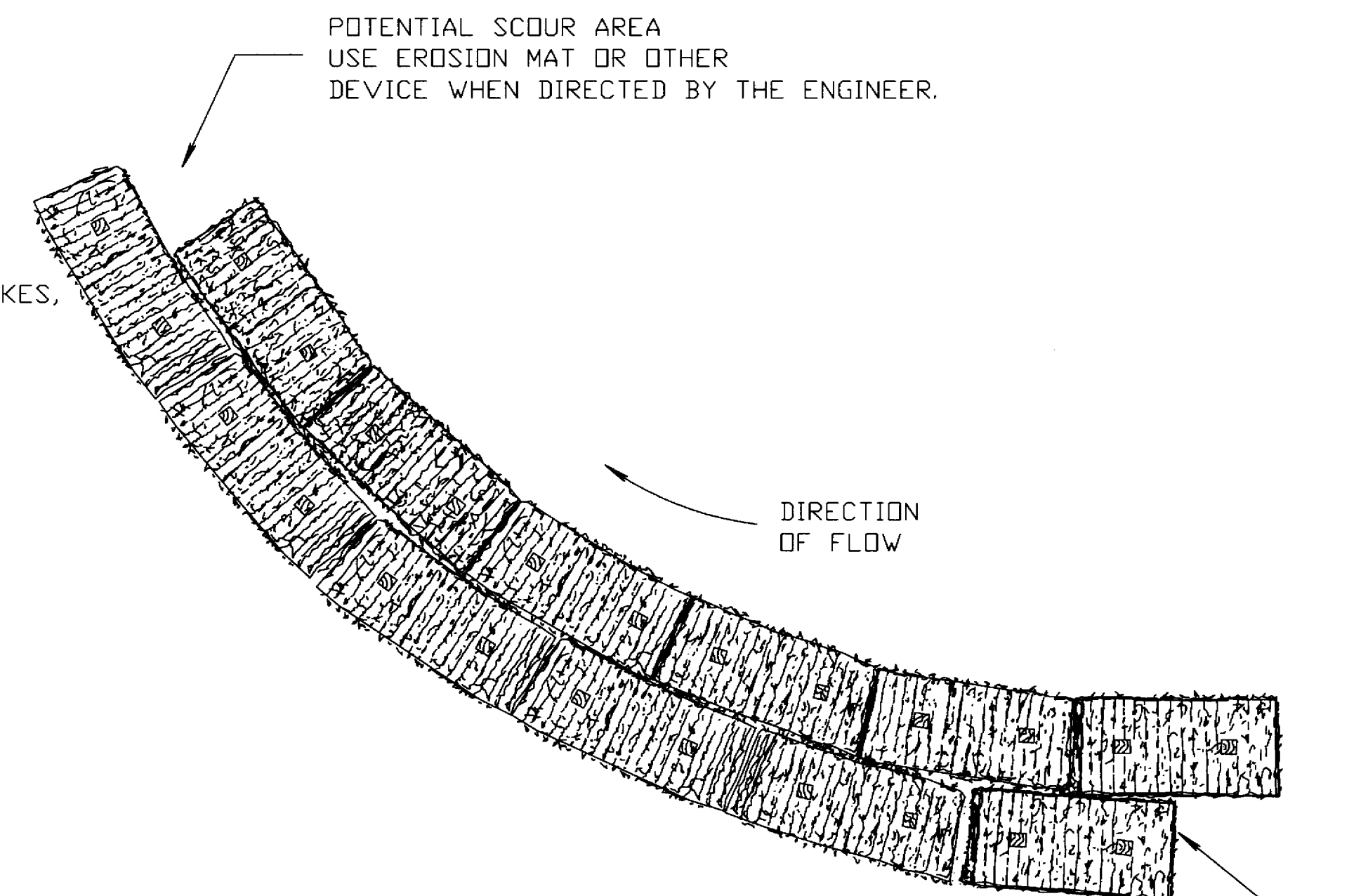


GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

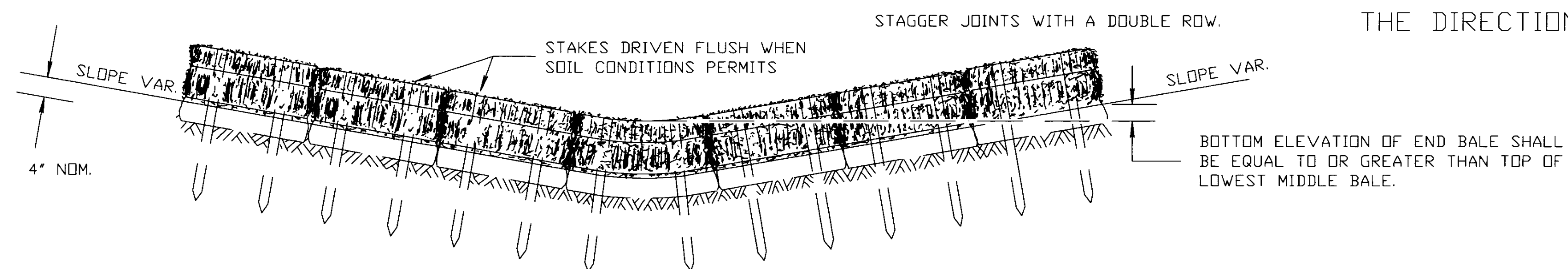


PLAN VIEW



PLAN VIEW

END TREATMENT ON SLOPES TO BE SIMILAR TO CHANNEL FLOW DETAIL.



FRONT ELEVATION

EROSION BALES FOR CHANNEL FLOW

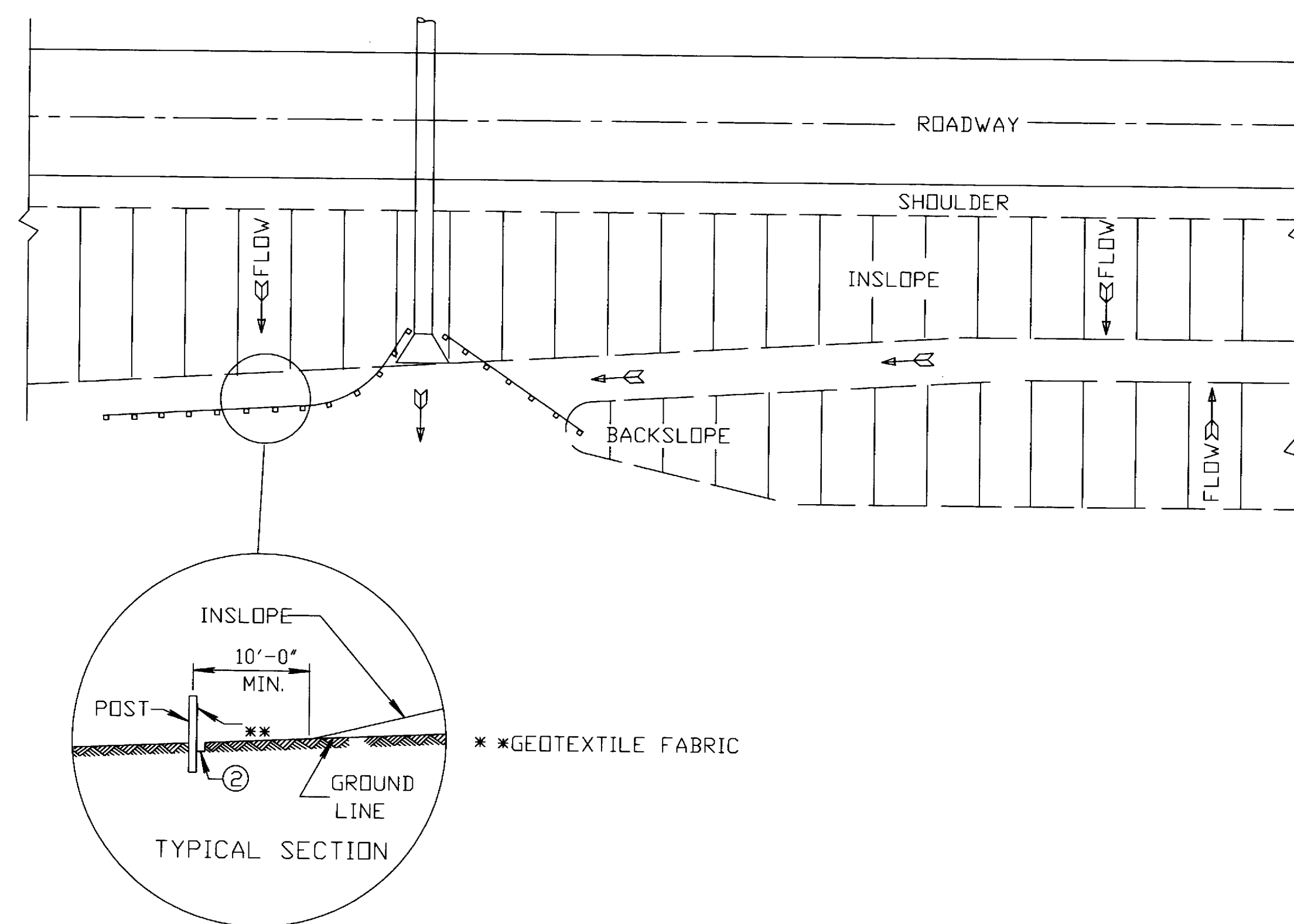
EROSION BALES WHEN ALTERING
THE DIRECTION OF FLOW

TYPICAL INSTALLATIONS OF EROSION BALES

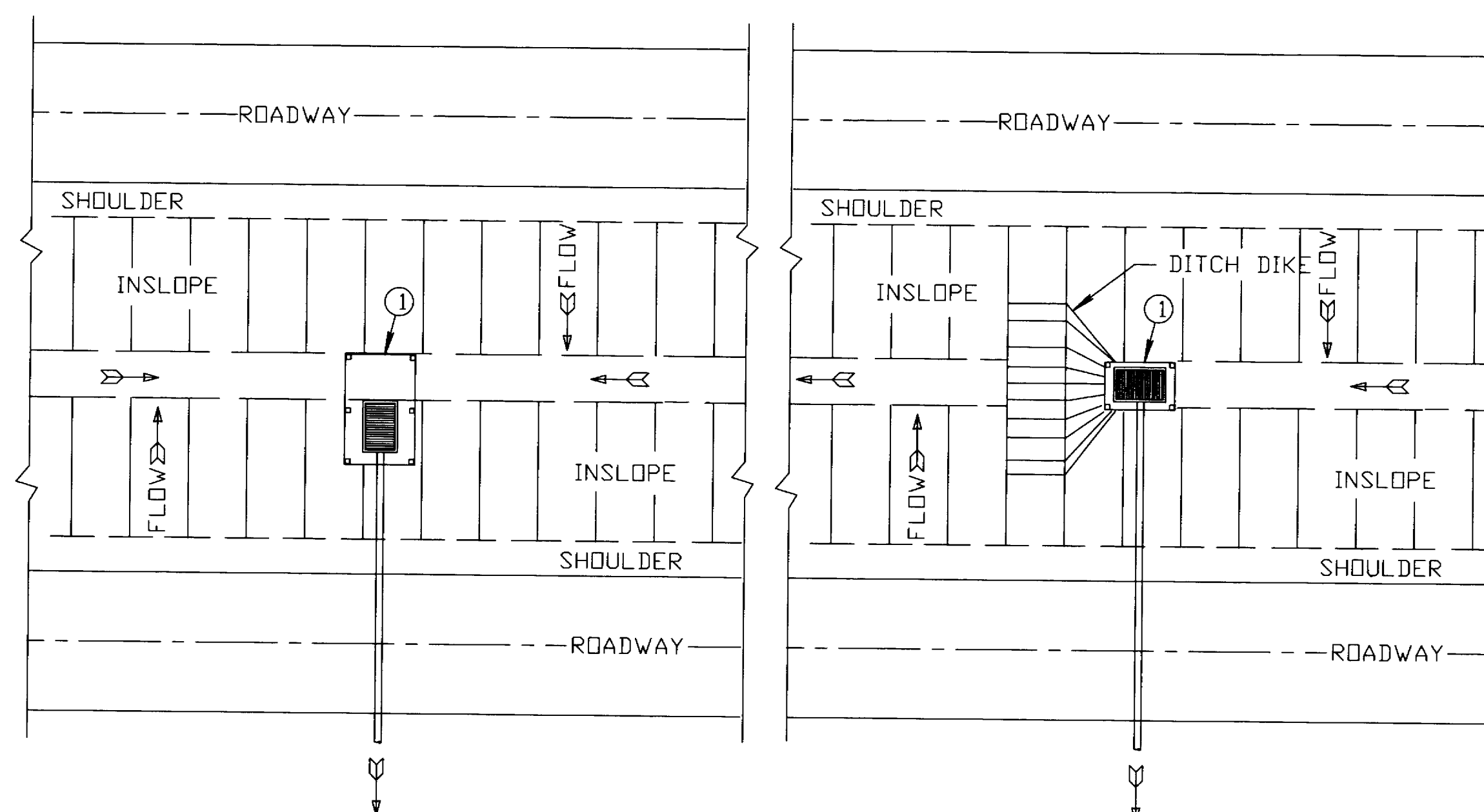
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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FHWA



PLAN VIEW
TYPICAL APPLICATIONS OF SILT FENCE

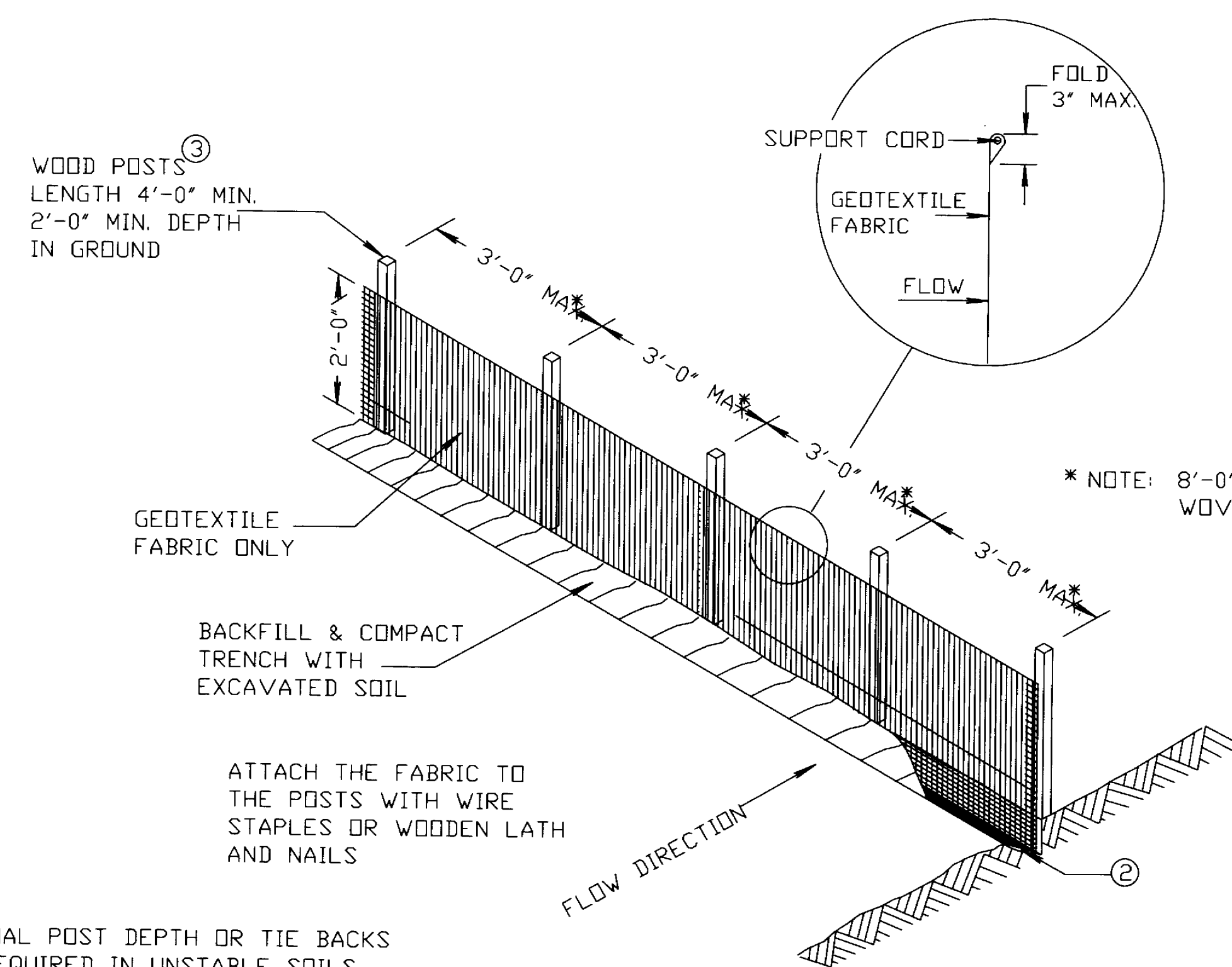


SITUATION 1
SITUATION 2
PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

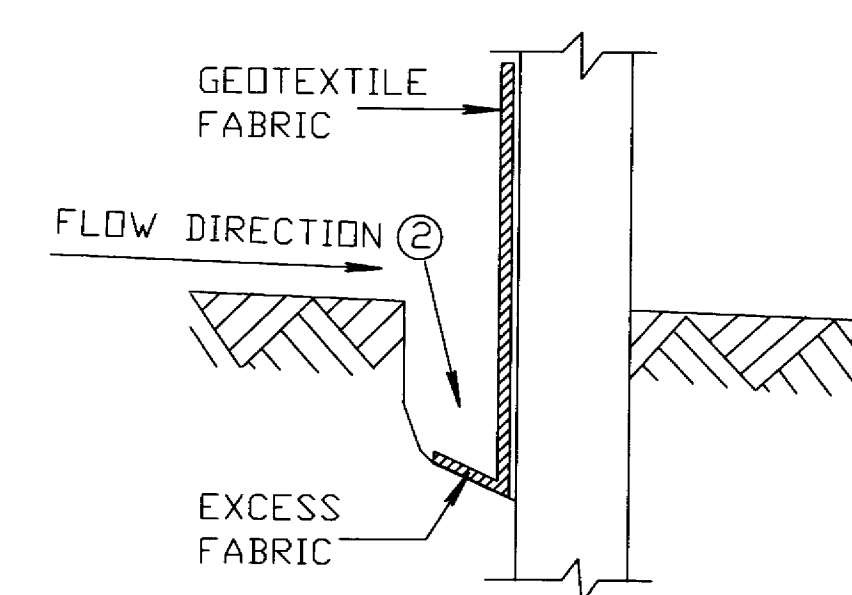
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

- ① HORIZONTAL BRACE WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS AS DIRECTED BY THE ENGINEER.
- ② TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1" X 1" OF OAK OR HICKORY.

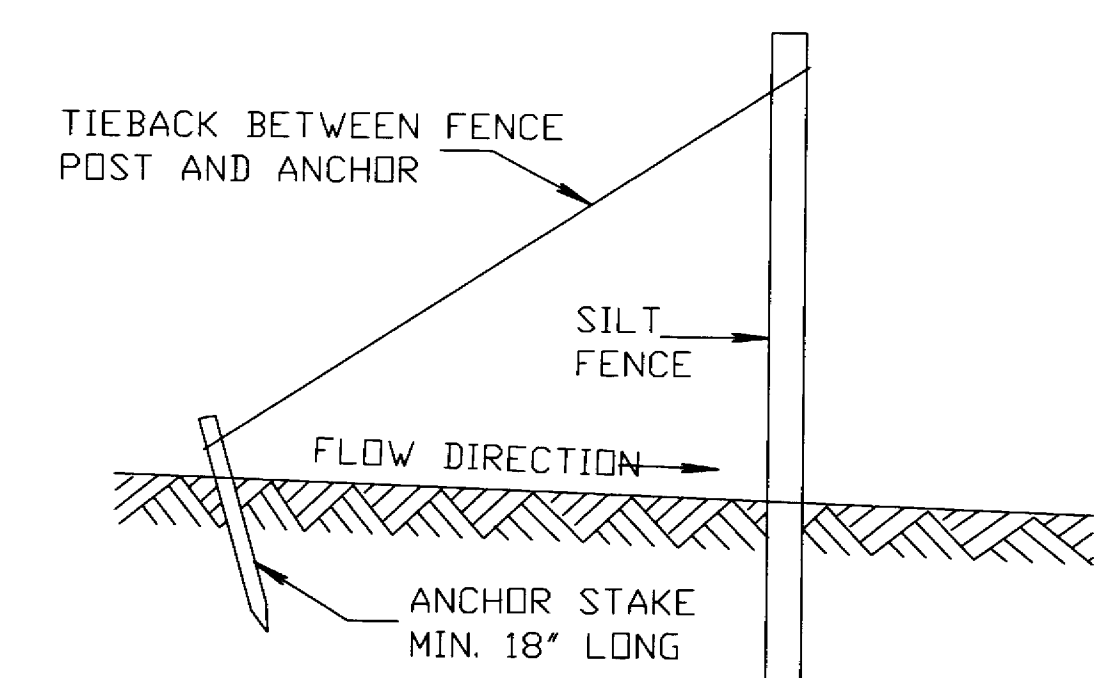


NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

SILT FENCE
(NON-REINFORCED)



TRENCH DETAIL



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

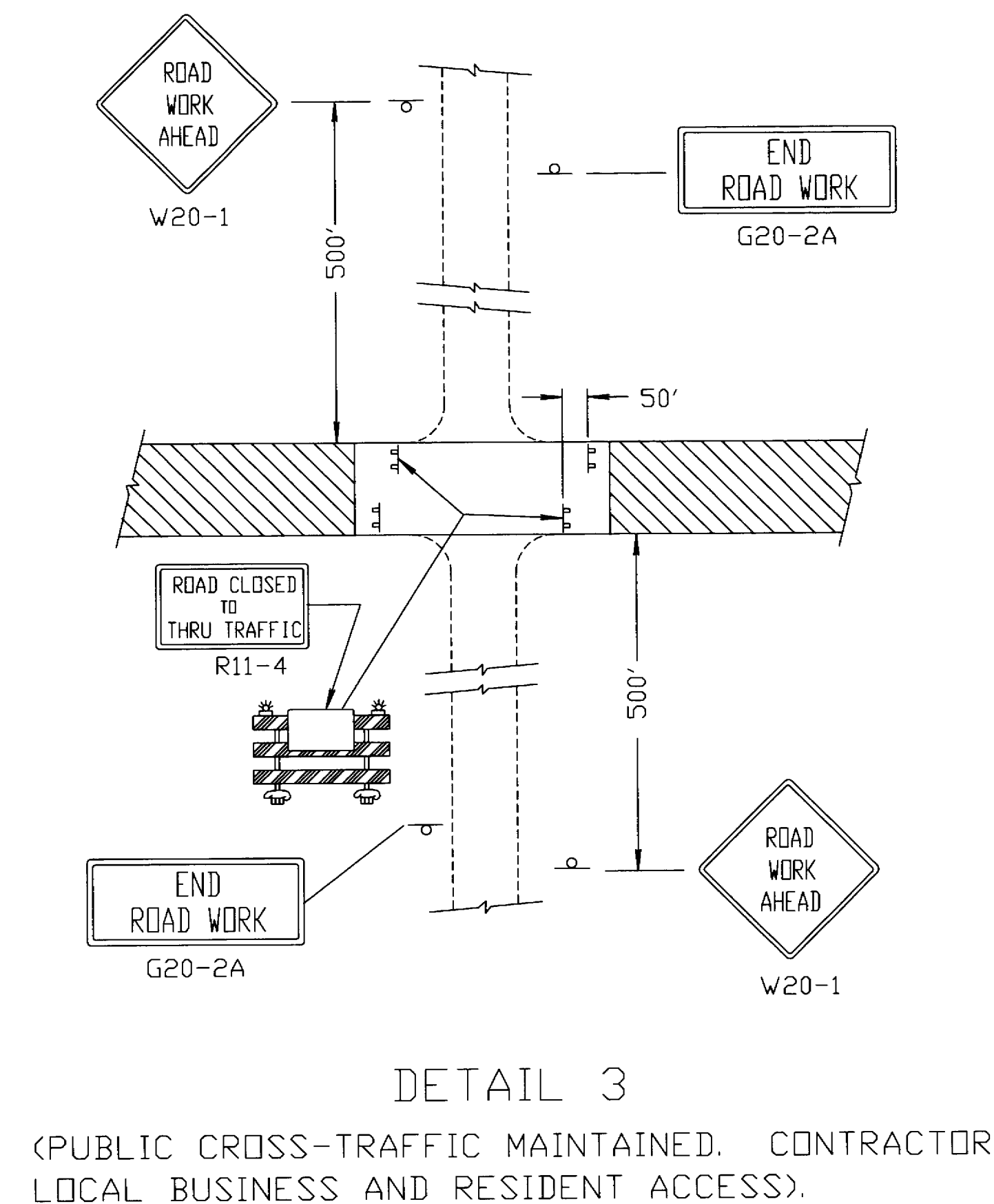
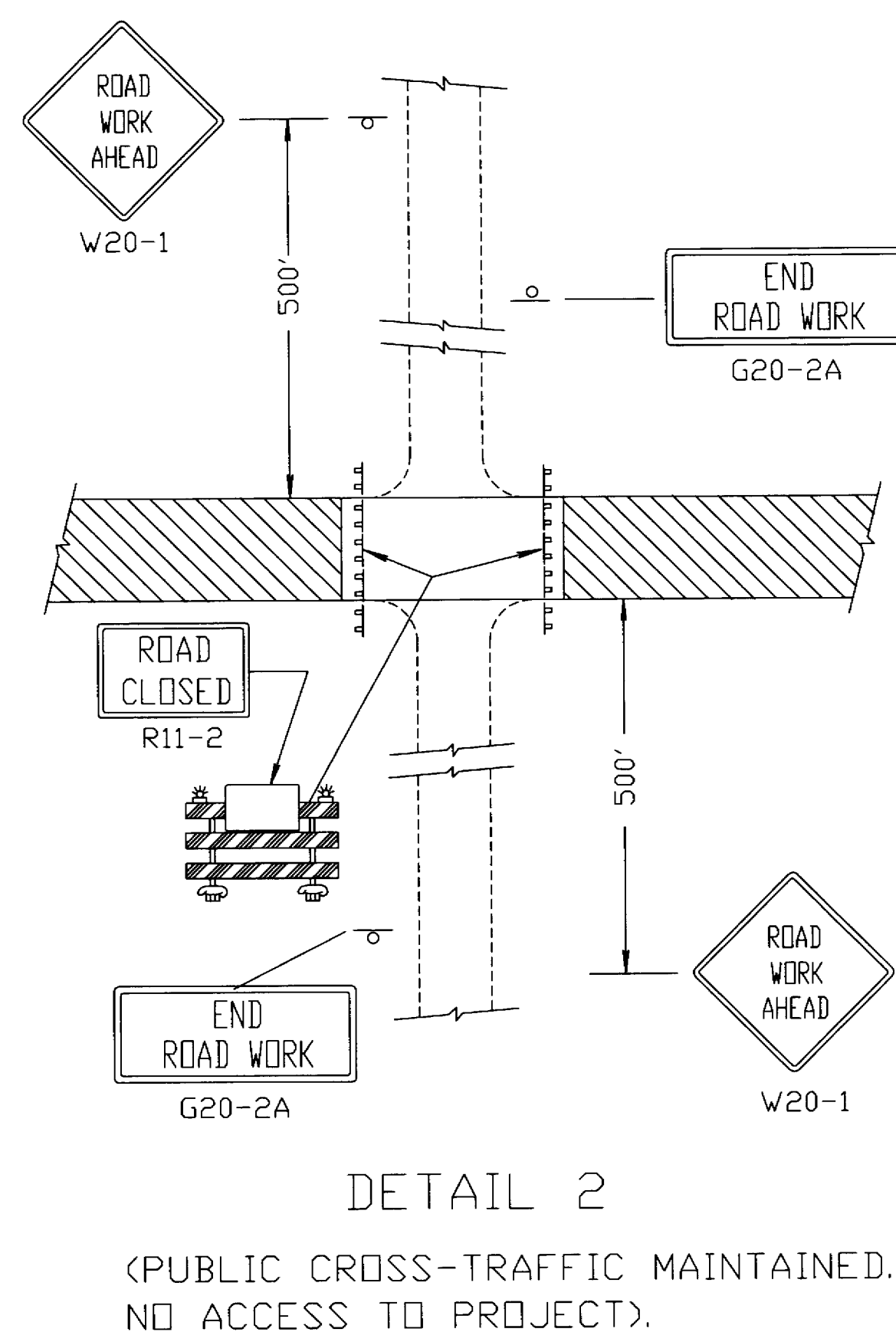
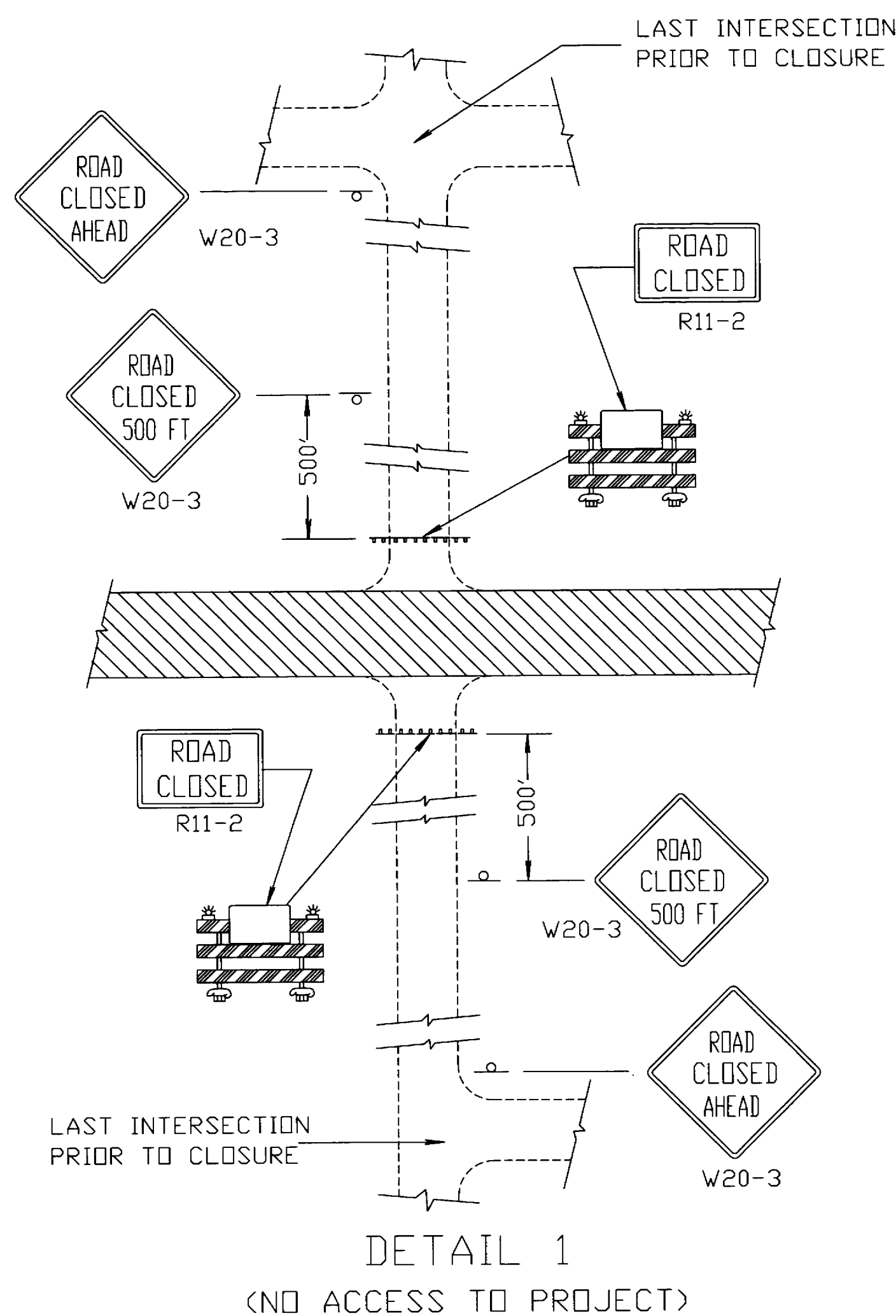
SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

DATE _____ CHIEF ROADWAY DEVELOPMENT ENGINEER
FHW

S.D.D. 8 E 9-4



GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND THEIR LOCATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE WISCONSIN MANUAL OF TRAFFIC CONTROL DEVICES, THE PLANS, SPECIFICATIONS AND CONTRACT.

SIGN AND BARRICADE LOCATIONS MAY BE ADJUSTED IN THE FIELD AS DIRECTED BY THE ENGINEER. ANY EXISTING TRAFFIC SIGNS THAT CONFLICT WITH THIS WORK SHALL BE COVERED AS DIRECTED BY THE ENGINEER. ALL "STOP" OR OTHER REGULATORY SIGNS ON THE SIDE ROADS SHALL NOT BE DISTURBED, EXCEPT WHEN NECESSARY TO COMPLETE THE WORK. THE SIGNS MUST THEN BE IMMEDIATELY REESTABLISHED.

BARRICADE DETAIL FOR FULL ROAD CLOSURES. TYPE "A" LOW INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

CLOSED TO THRU TRAFFIC SIGN (R11-4) SHALL BE ATTACHED ONLY TO THE TOP RAIL OF THE TYPE III BARRICADE. THE SIGNS SHALL NOT COVER MIDDLE RAIL.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

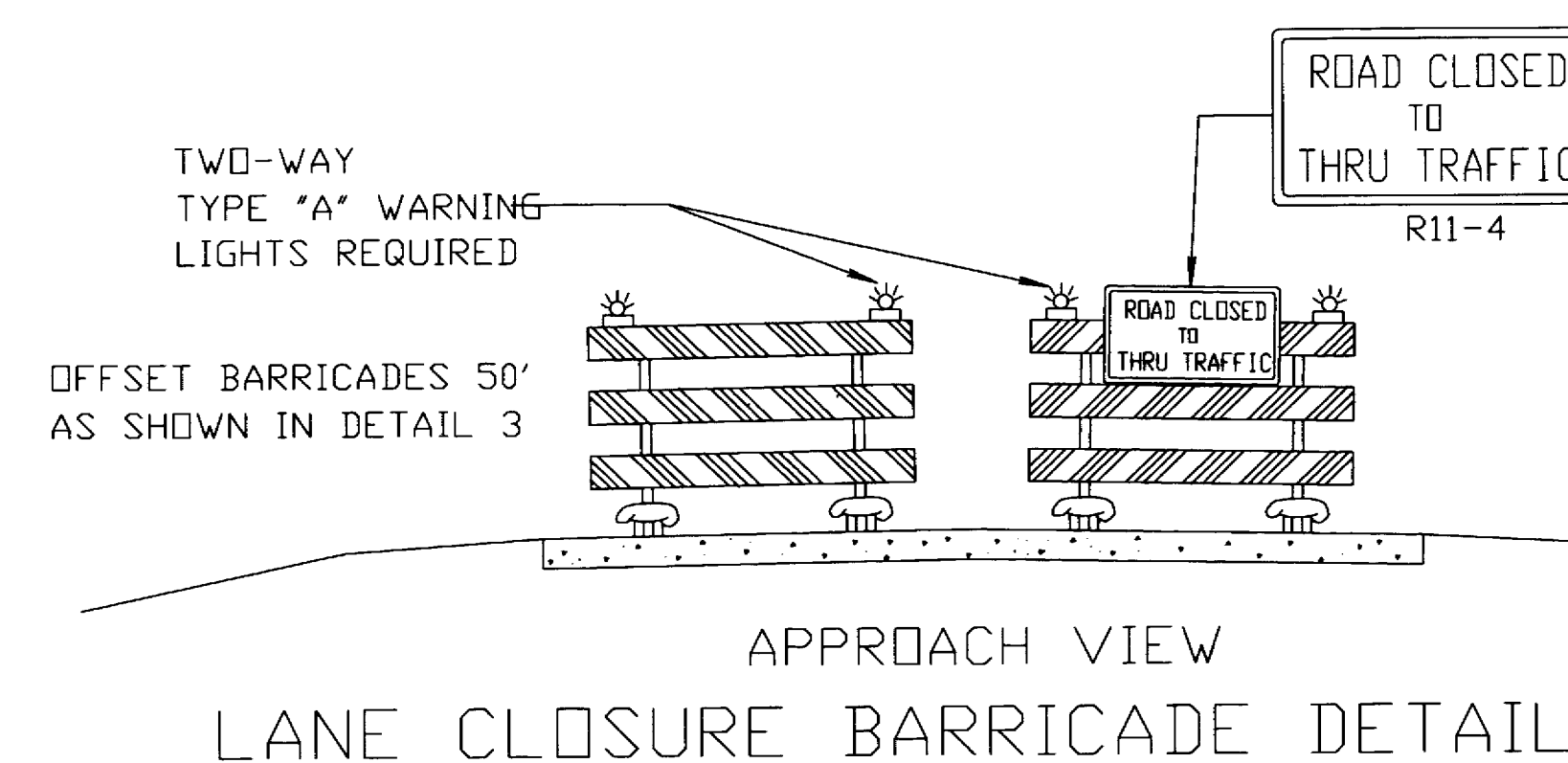
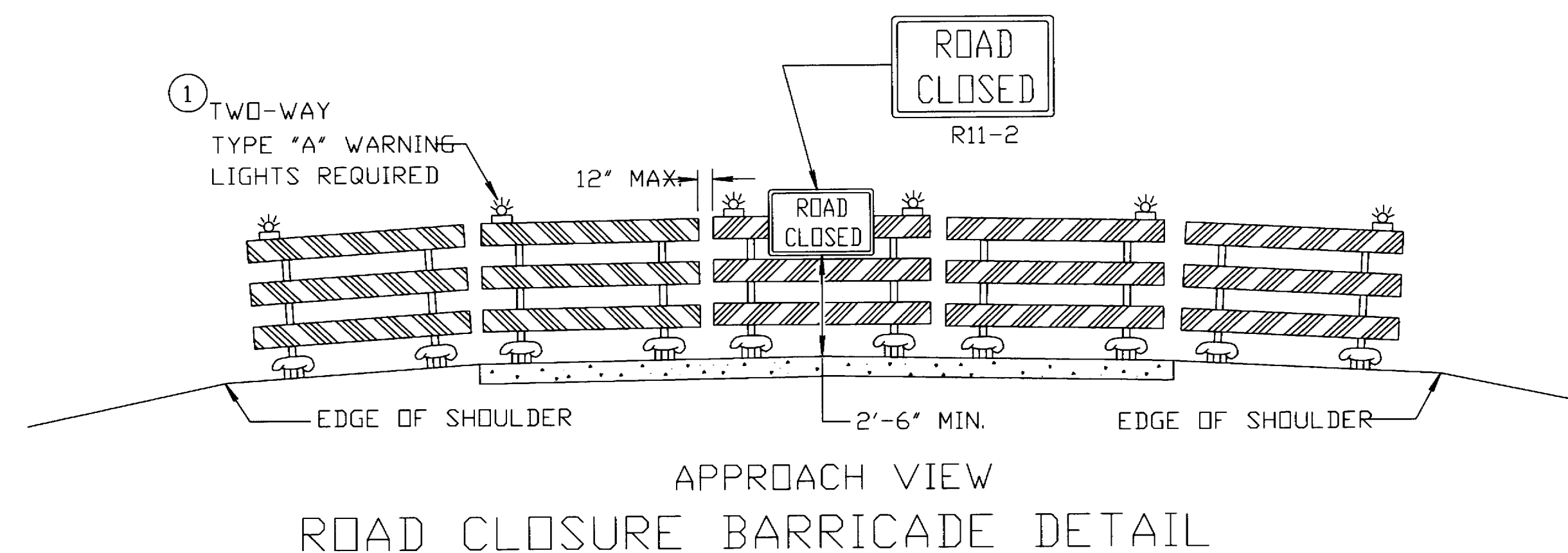
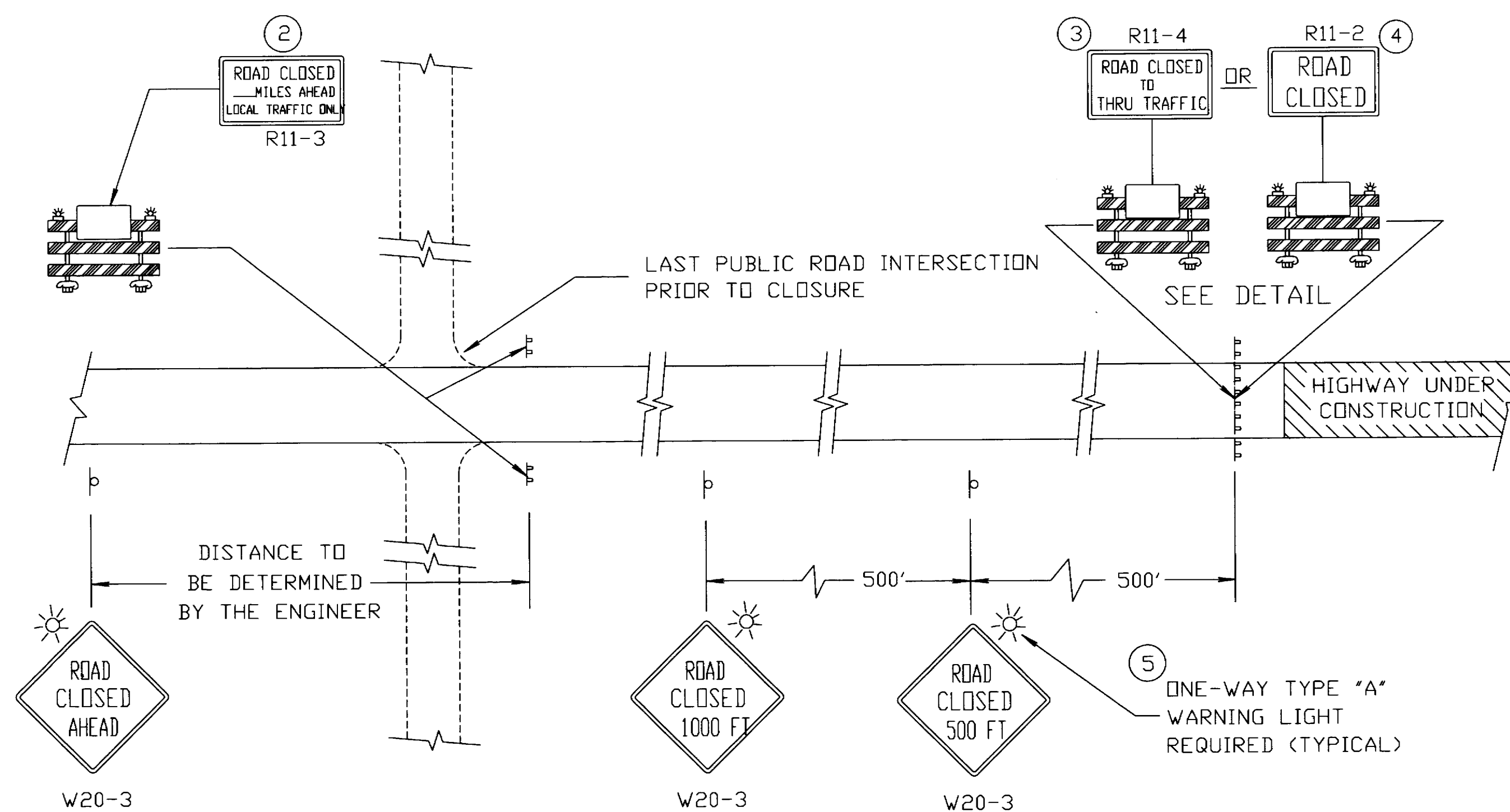
R11-2, "ROAD CLOSED" SIGNS SHALL BE 48" X 30".

R11-3, AND R11-4 SIGNS SHALL BE 60" X 30".

G20-2A SIGNS SHALL BE 48" X 24".

- 1 TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND AT LEAST ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN.
- 2 THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION
- 3 FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT. SEE LANE CLOSURE BARRICADE DETAIL
- 4 FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT. SEE ROAD CLOSURE BARRICADE DETAIL
- 5 ONE-WAY LIGHTS SHALL BE PROVIDED ON ALL ADVANCE WARNING SIGNS. THE UNIT SHALL BE POSITIONED SUCH THAT THE LIGHT SOURCE IS OUTSIDE THE SIGN FACE AND AT THE TOP OF THE SIGN.

SIDEROAD CLOSURES



LEGEND

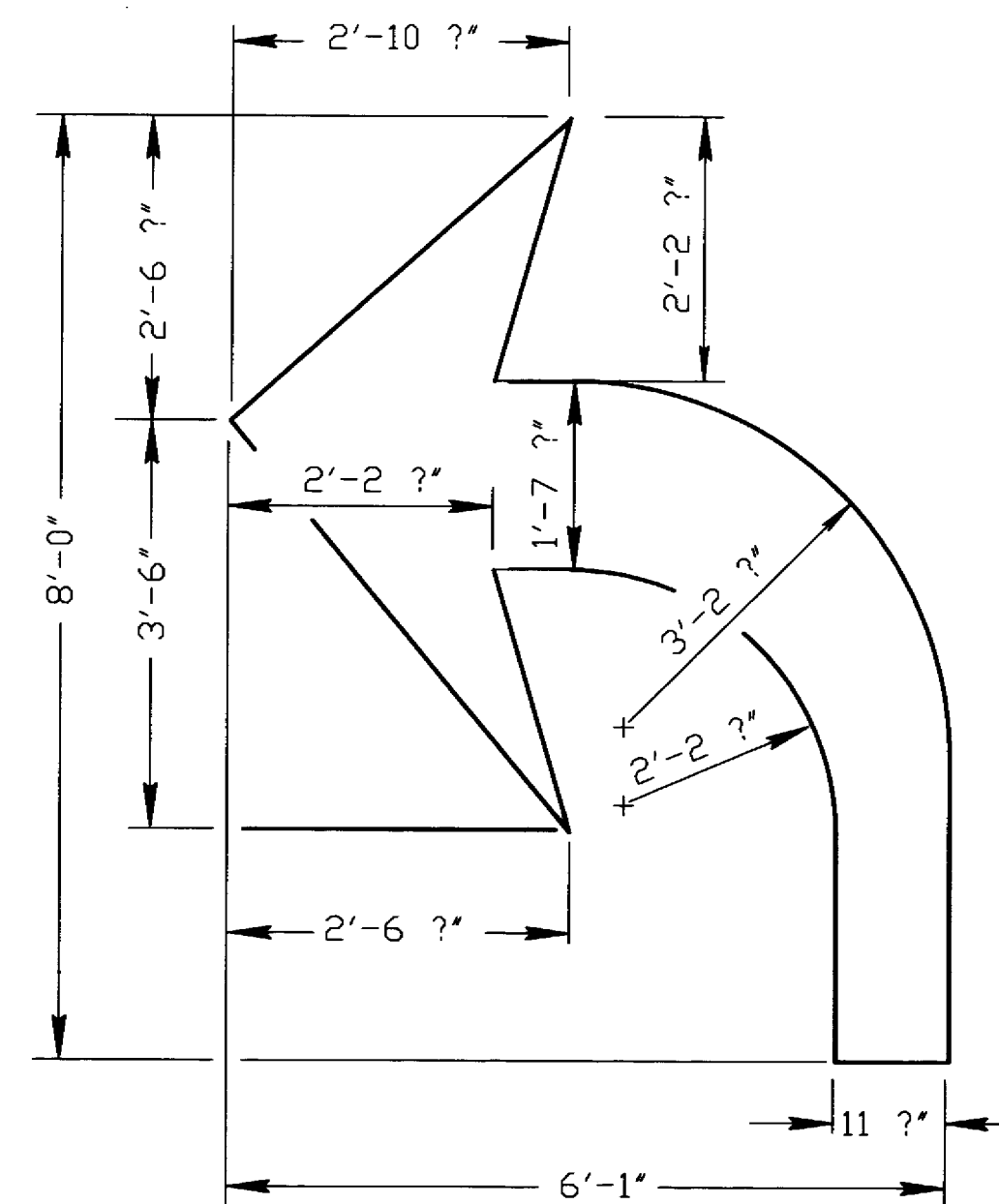
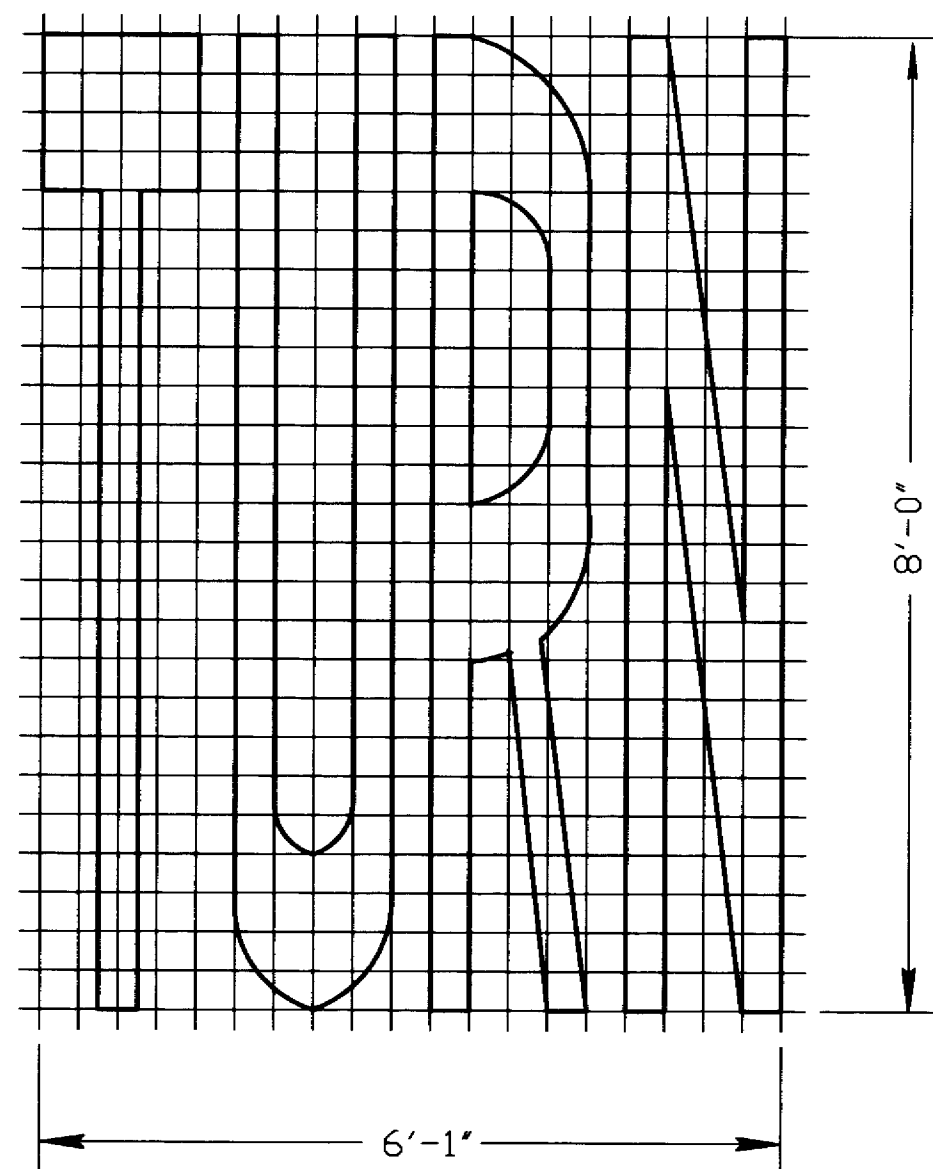
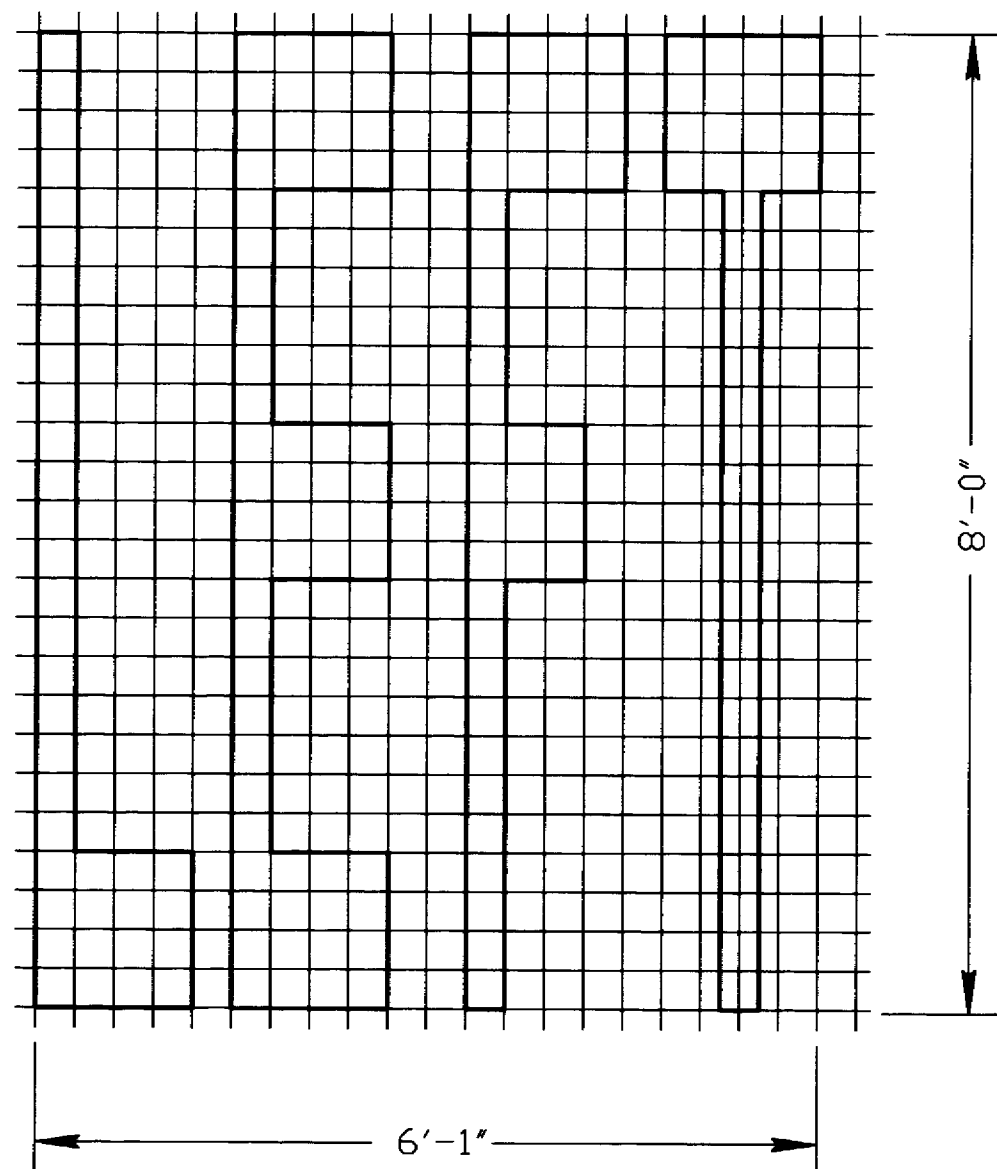
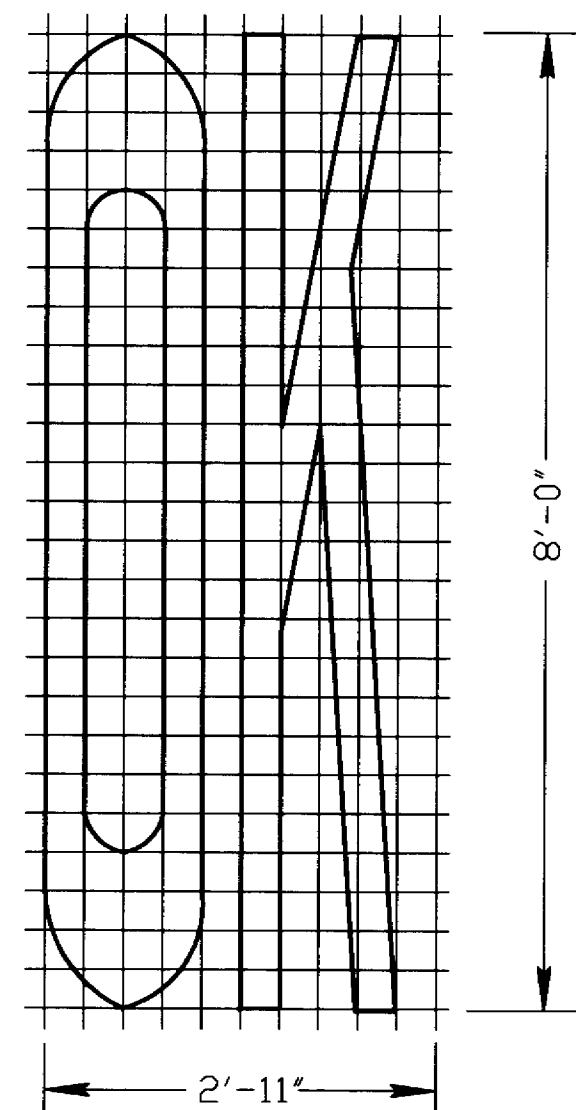
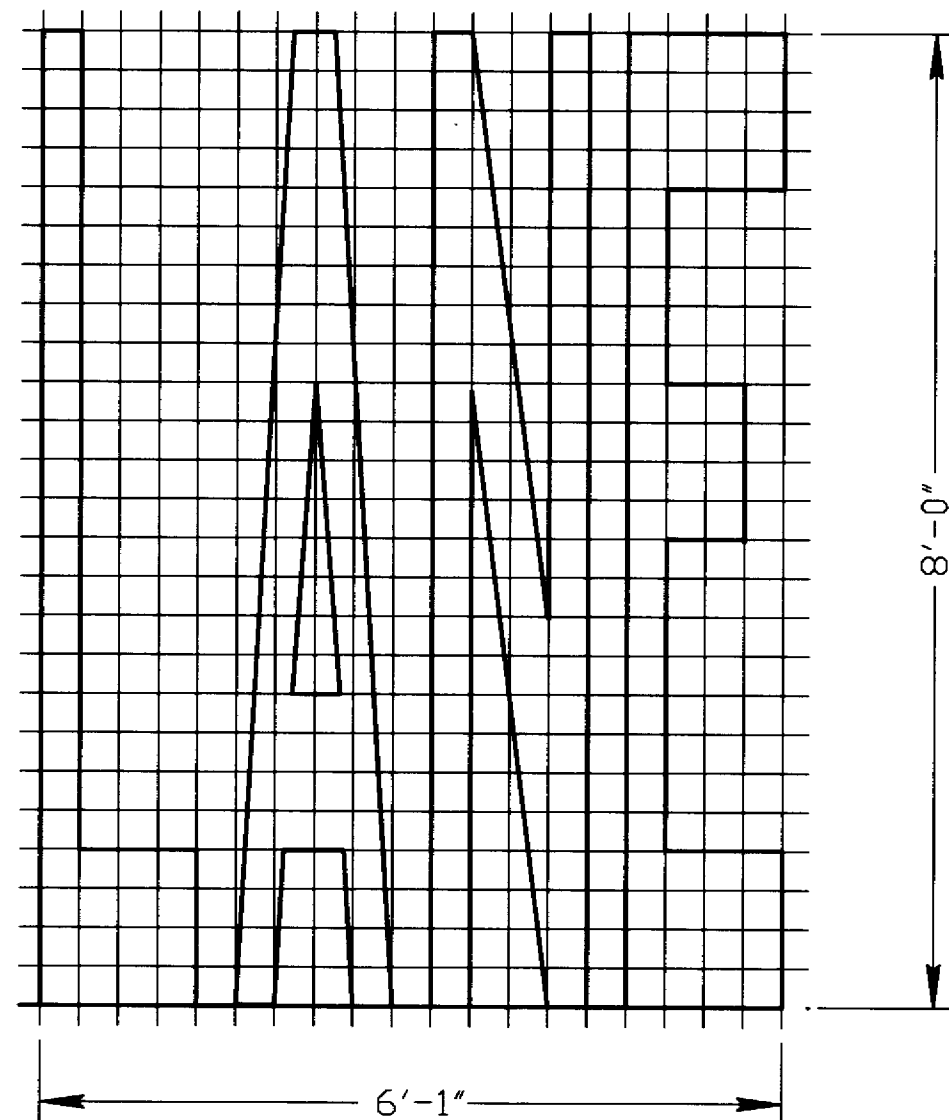
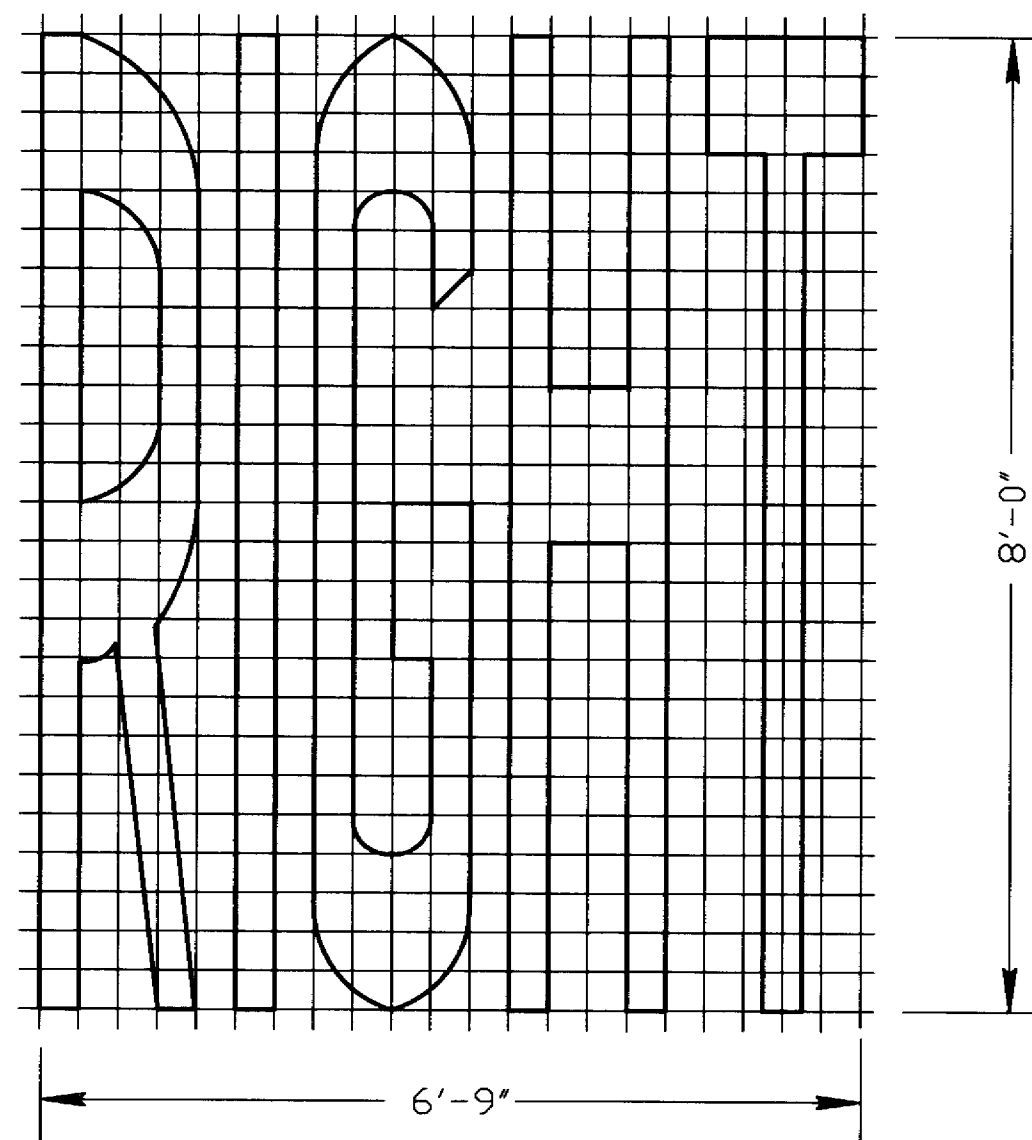
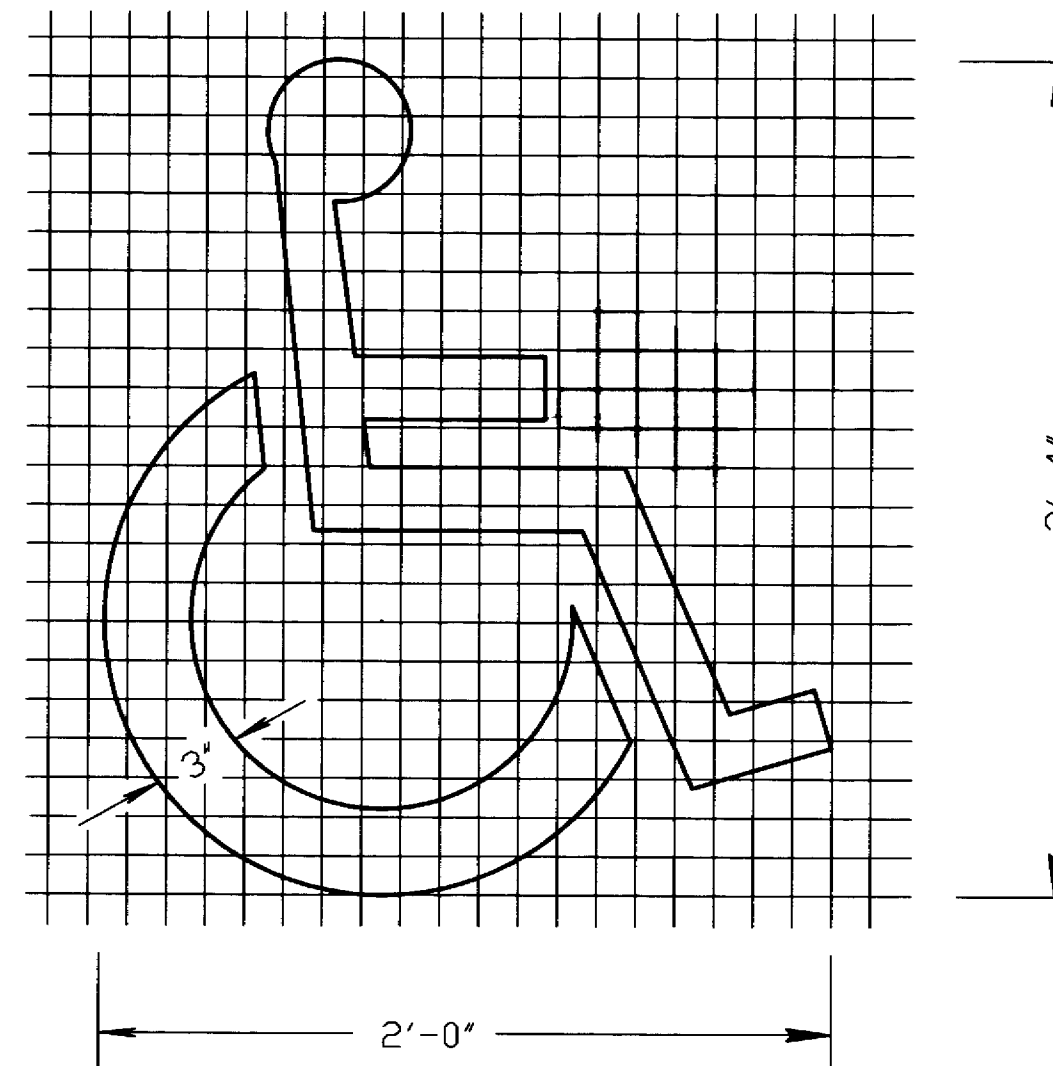
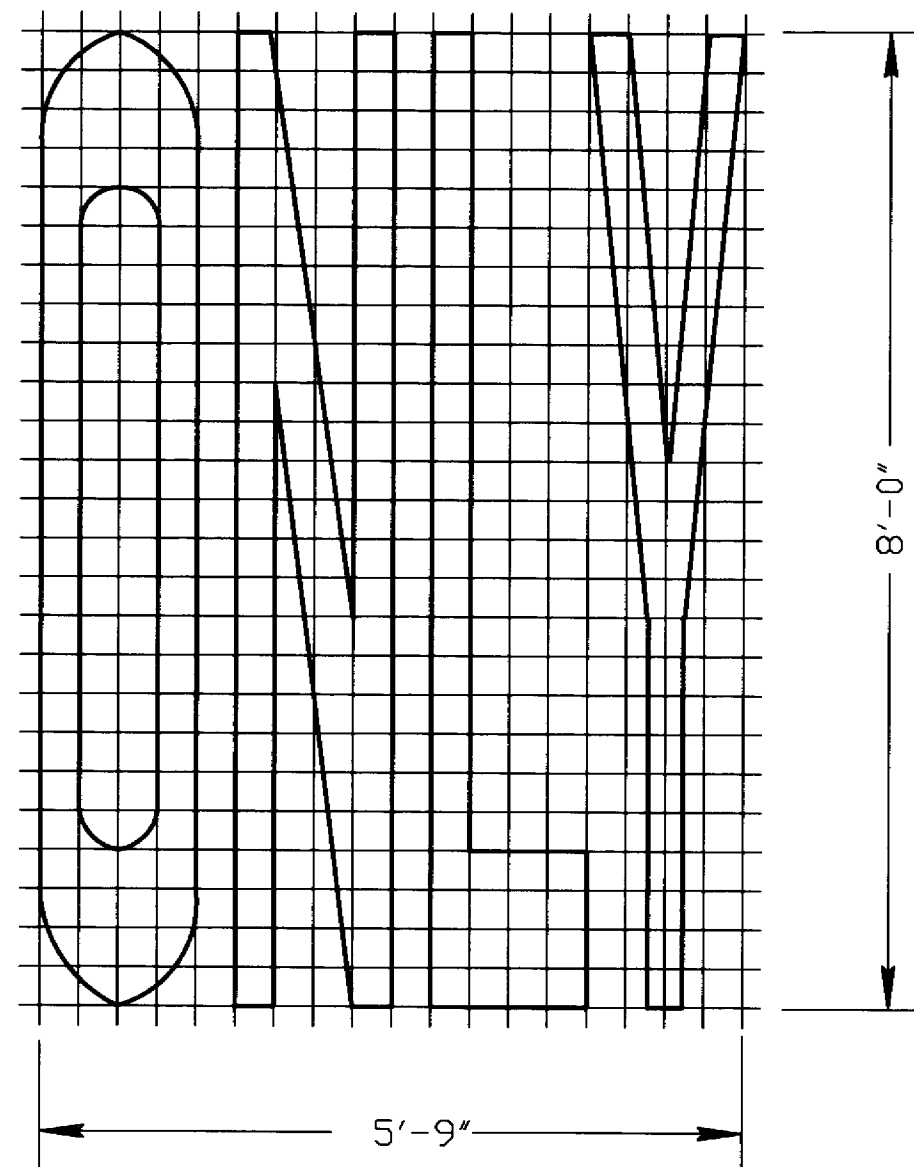
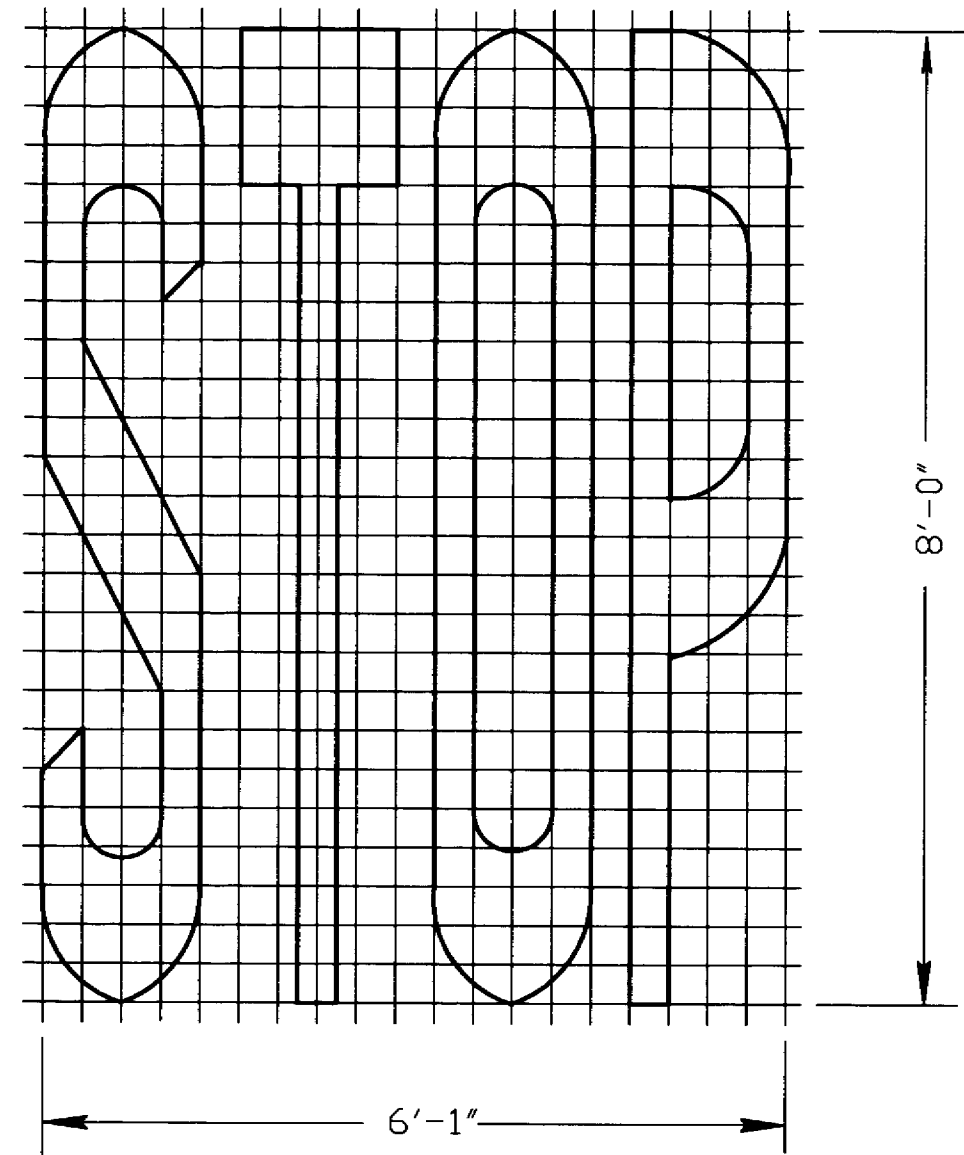
- POST MOUNTED WARNING SIGN
- TYPE III BARRICADES WITH TYPE "H" REFLECTIVE SHEETING
- TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
- WORK AREA

BARRICADES AND SIGNS
FOR
ROAD CLOSURES

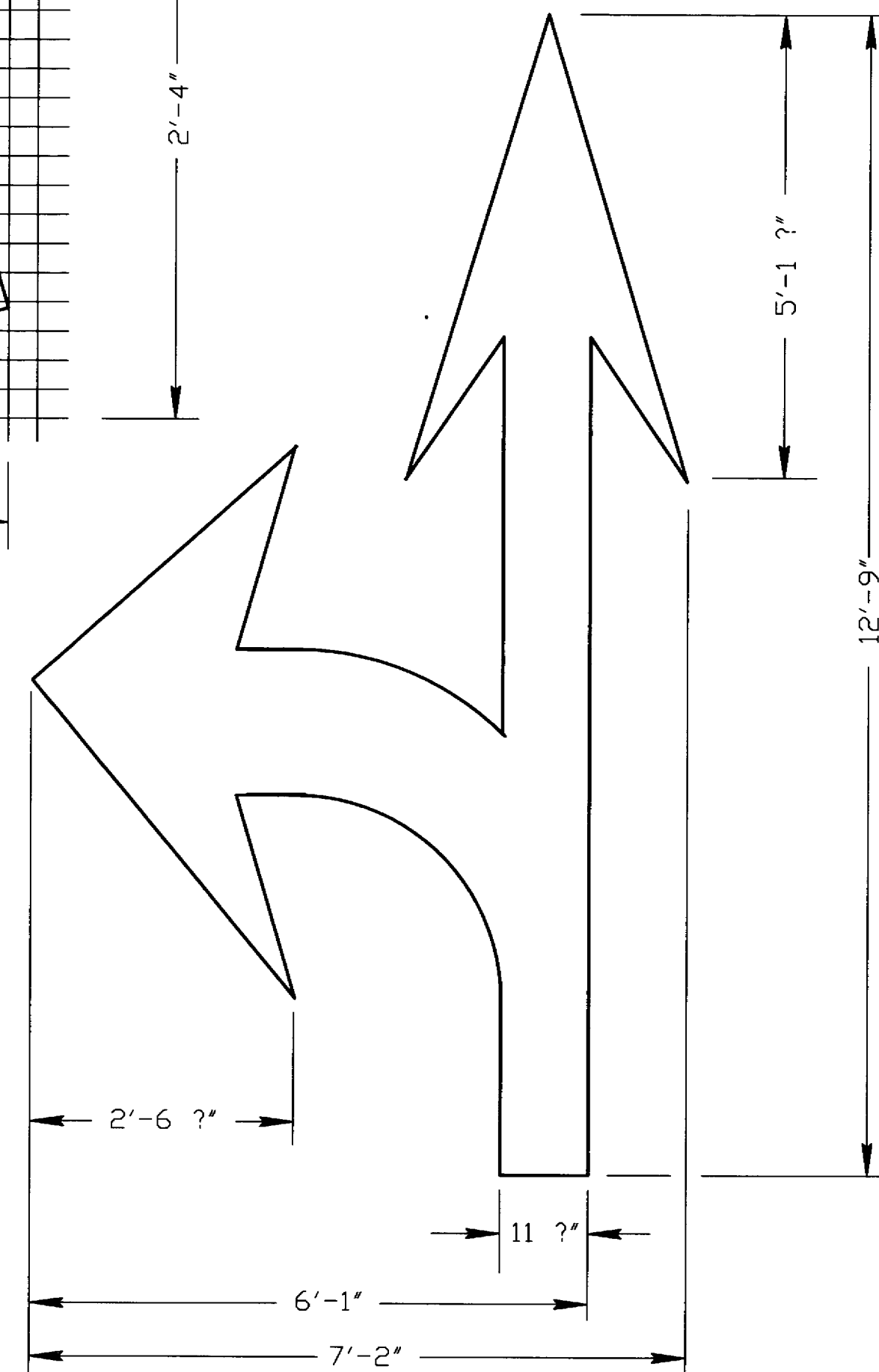
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

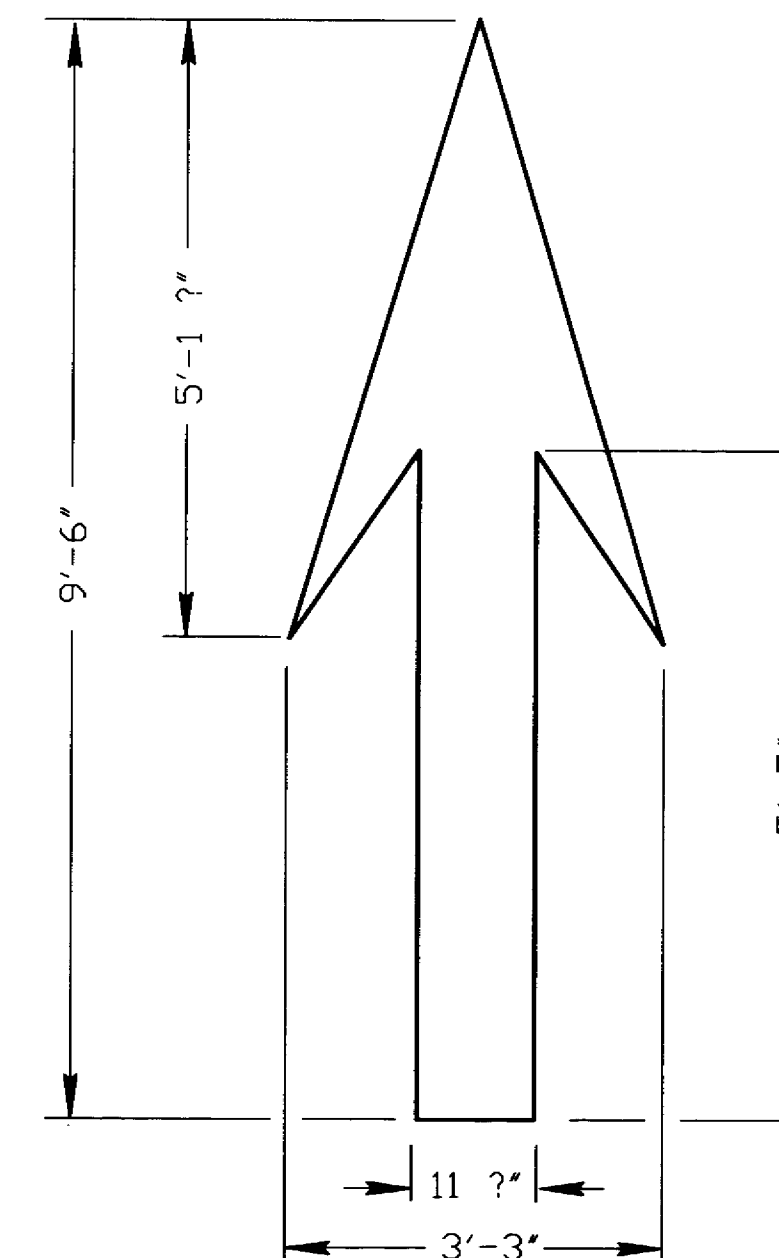
DATE DIRECTOR, OFFICE OF TRAFFIC
FHWA



TYPE 2



TYPE 3



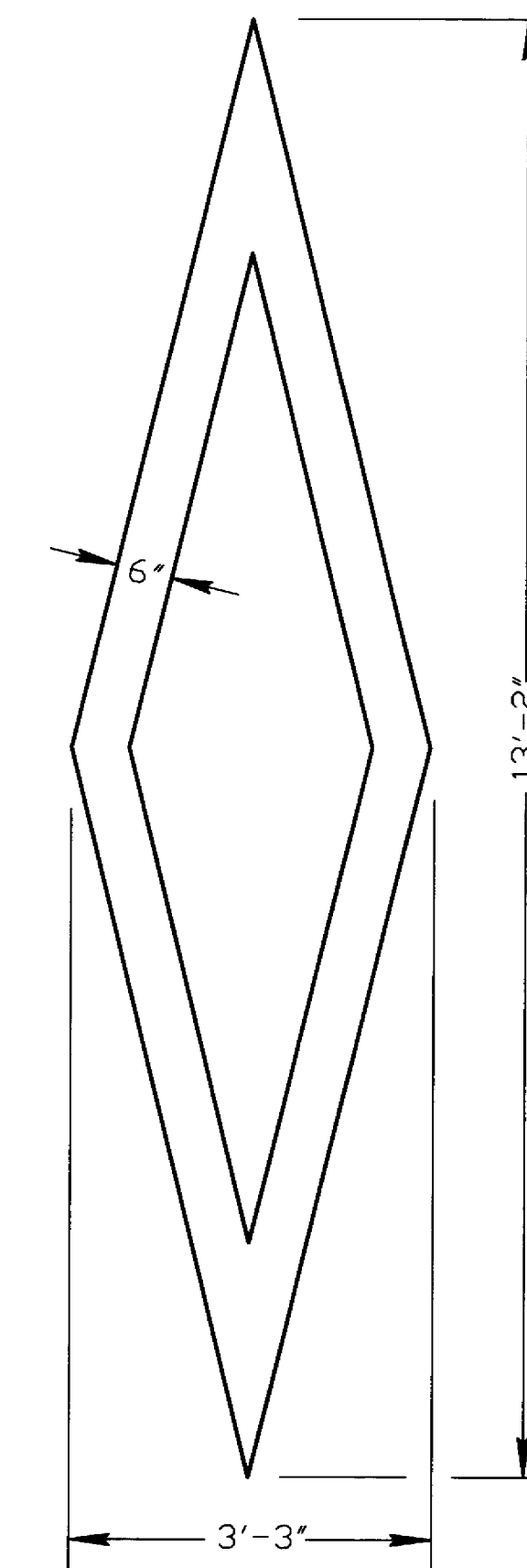
TYPE 1

GENERAL NOTES

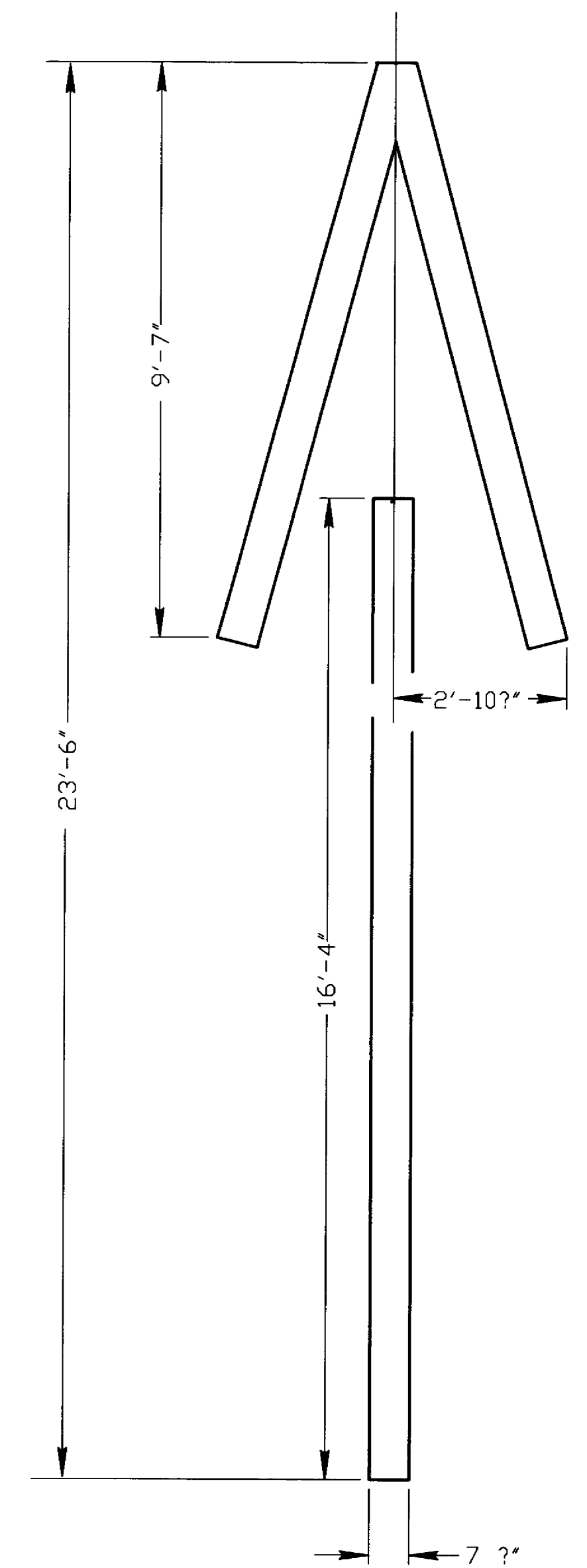
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

ALL LETTERS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED.

A DETAILED DRAWING OF THE HANDICAPPED PARKING SYMBOL IS ILLUSTRATED IN THE "STANDARD HIGHWAY SIGNS MANUAL" BY THE FEDERAL HIGHWAY ADMINISTRATION.



PREFERENTIAL
LANE SYMBOL



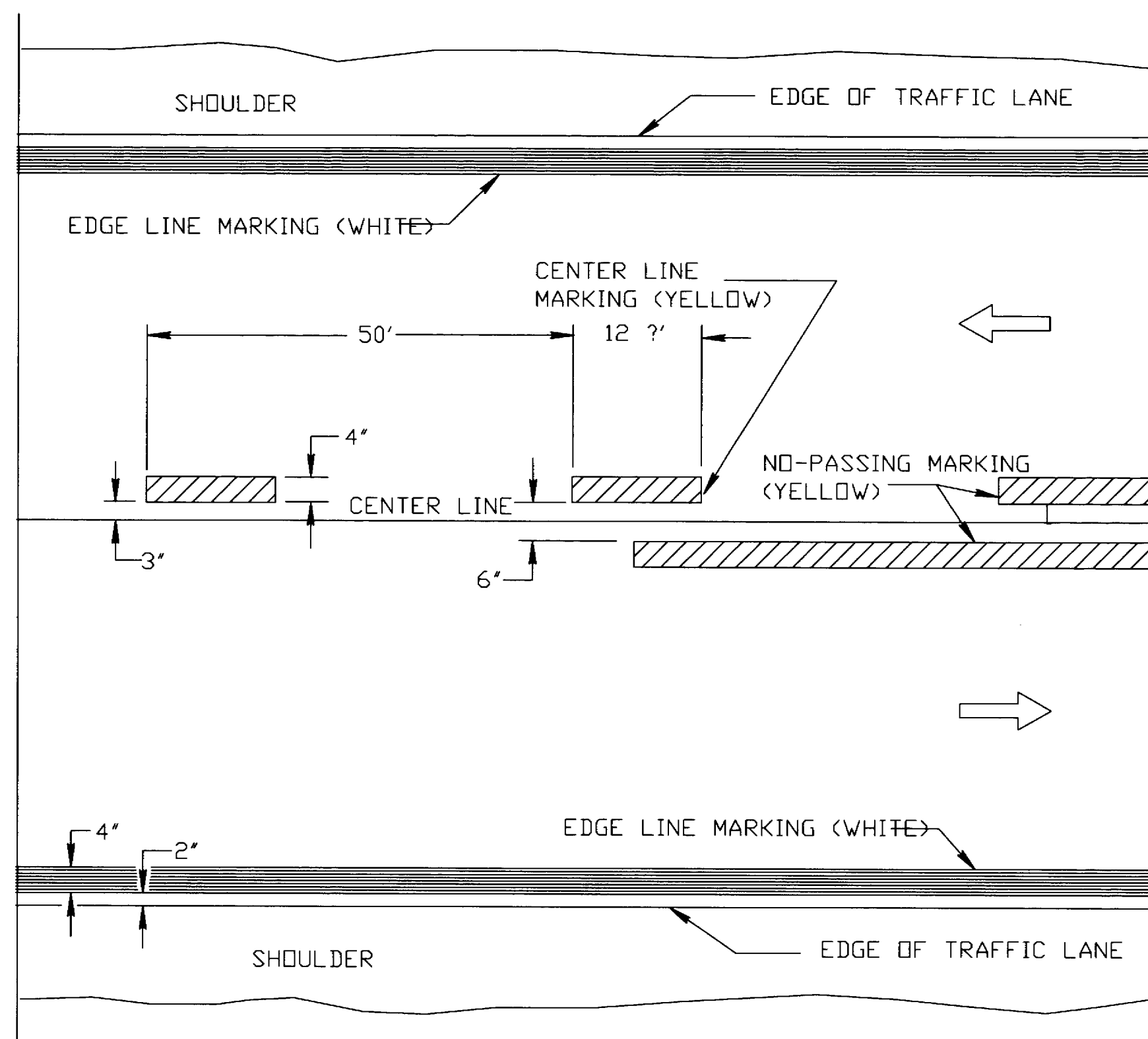
TYPE 4

PAVEMENT MARKING SYMBOLS

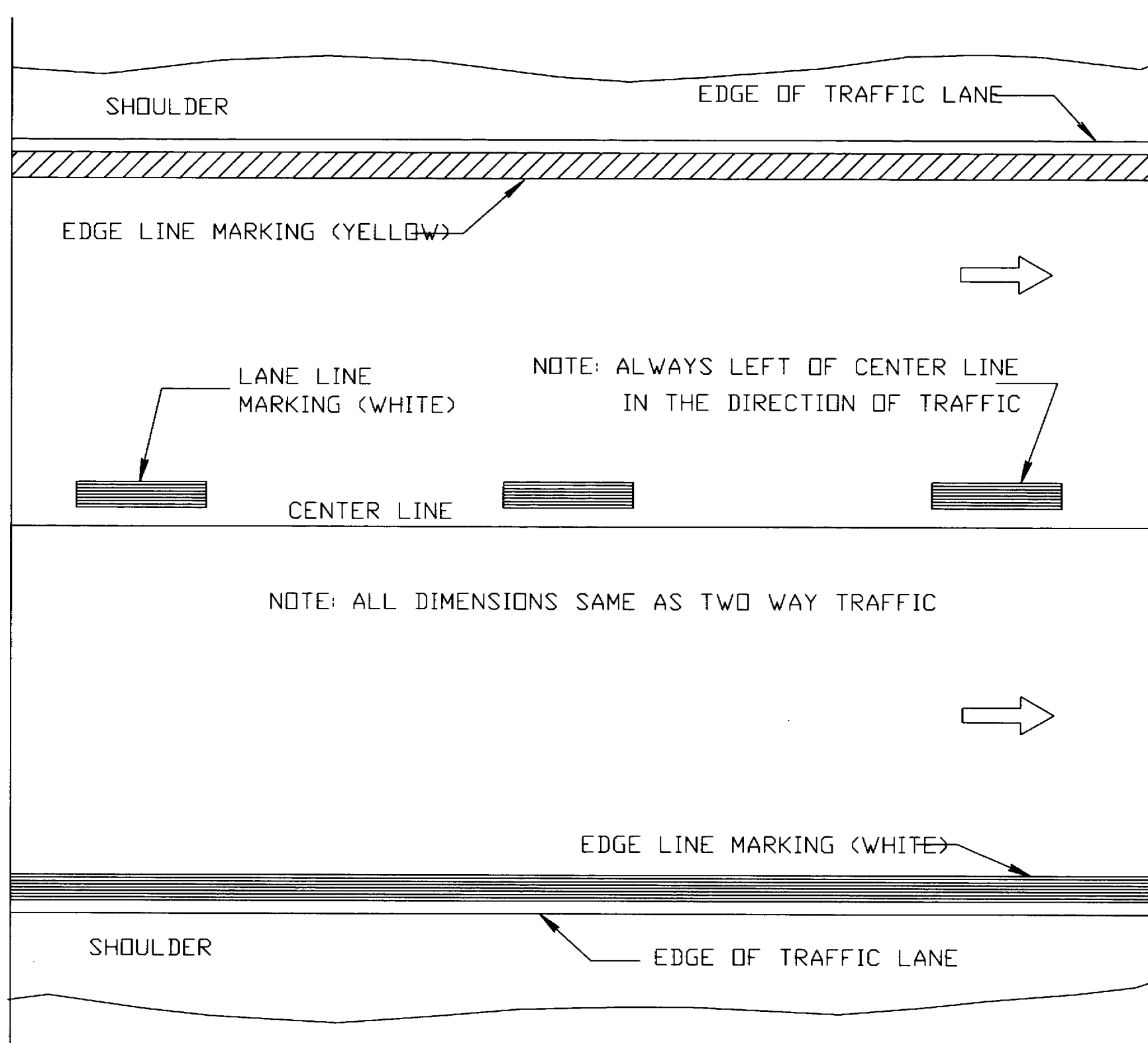
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

DATE DIRECTOR, OFFICE OF TRAFFIC
FHWA

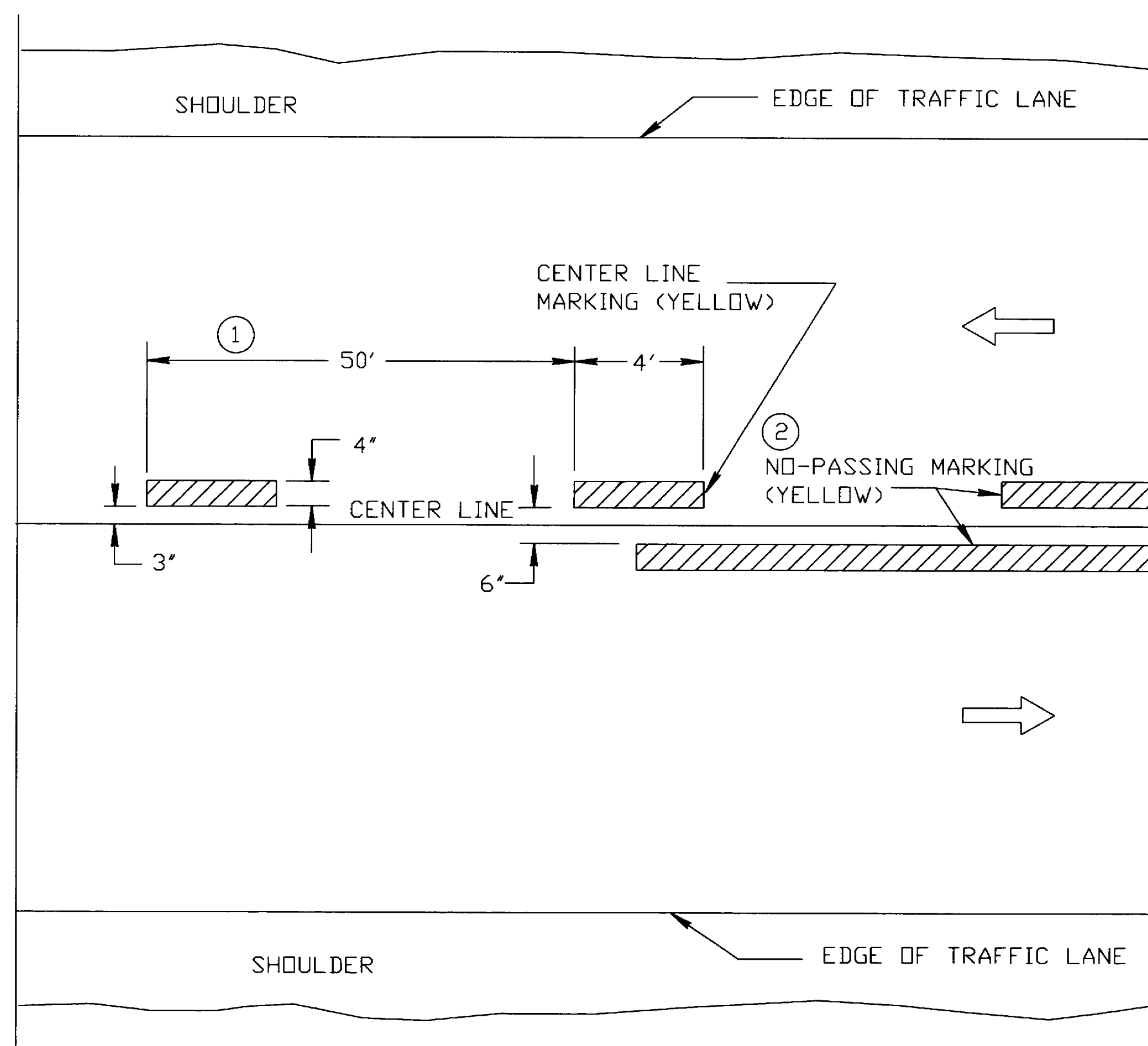


TWO WAY TRAFFIC

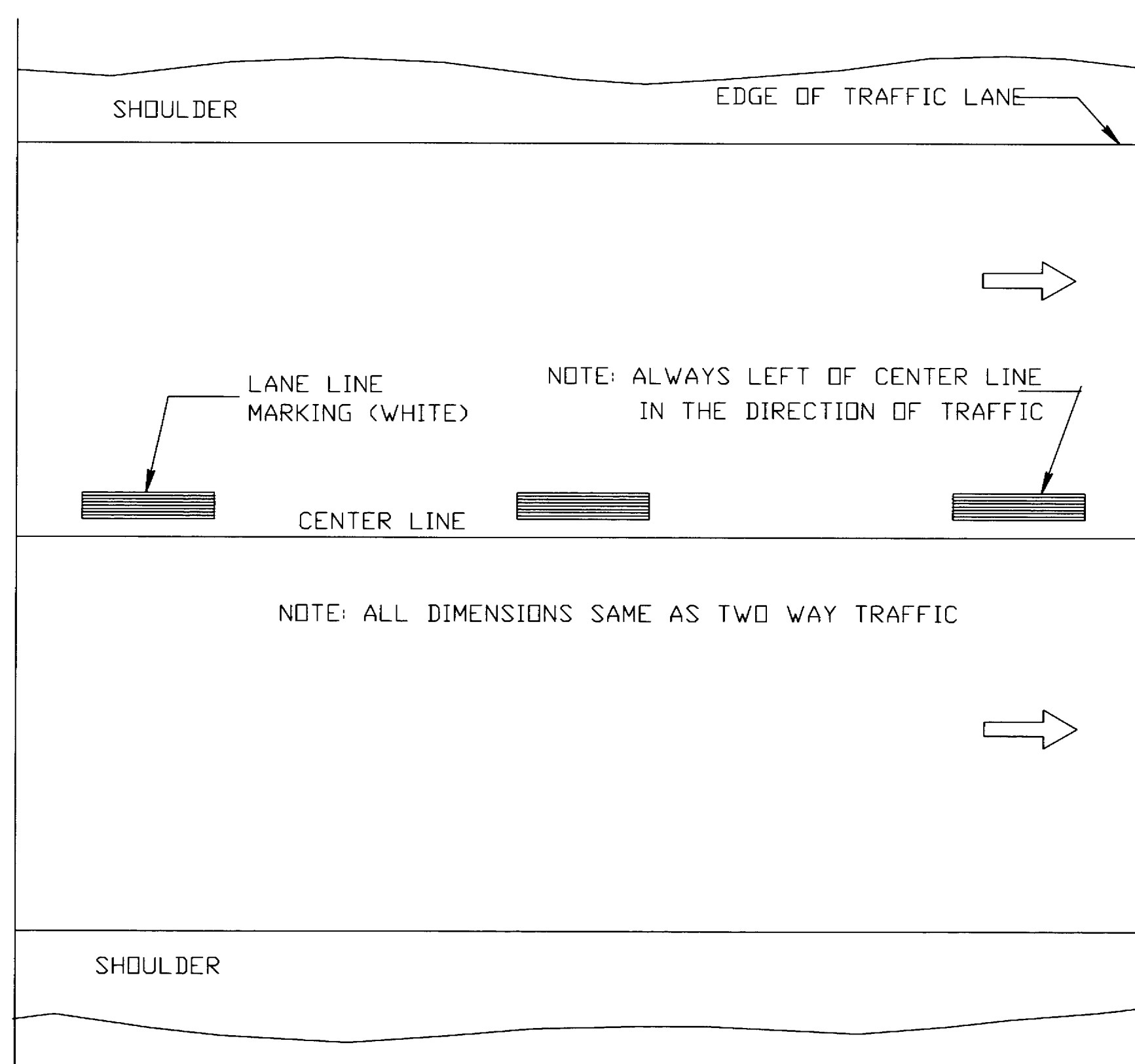


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

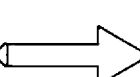
TEMPORARY (INTERMEDIATE) PAVEMENT MARKING
(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

- ① HALF CYCLE LENGTHS (25') WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
- ② NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.

NOTE

ARROW SYMBOL  > SHOWS DIRECTION OF TRAVEL

PAVEMENT MARKING
(MAINLINE)

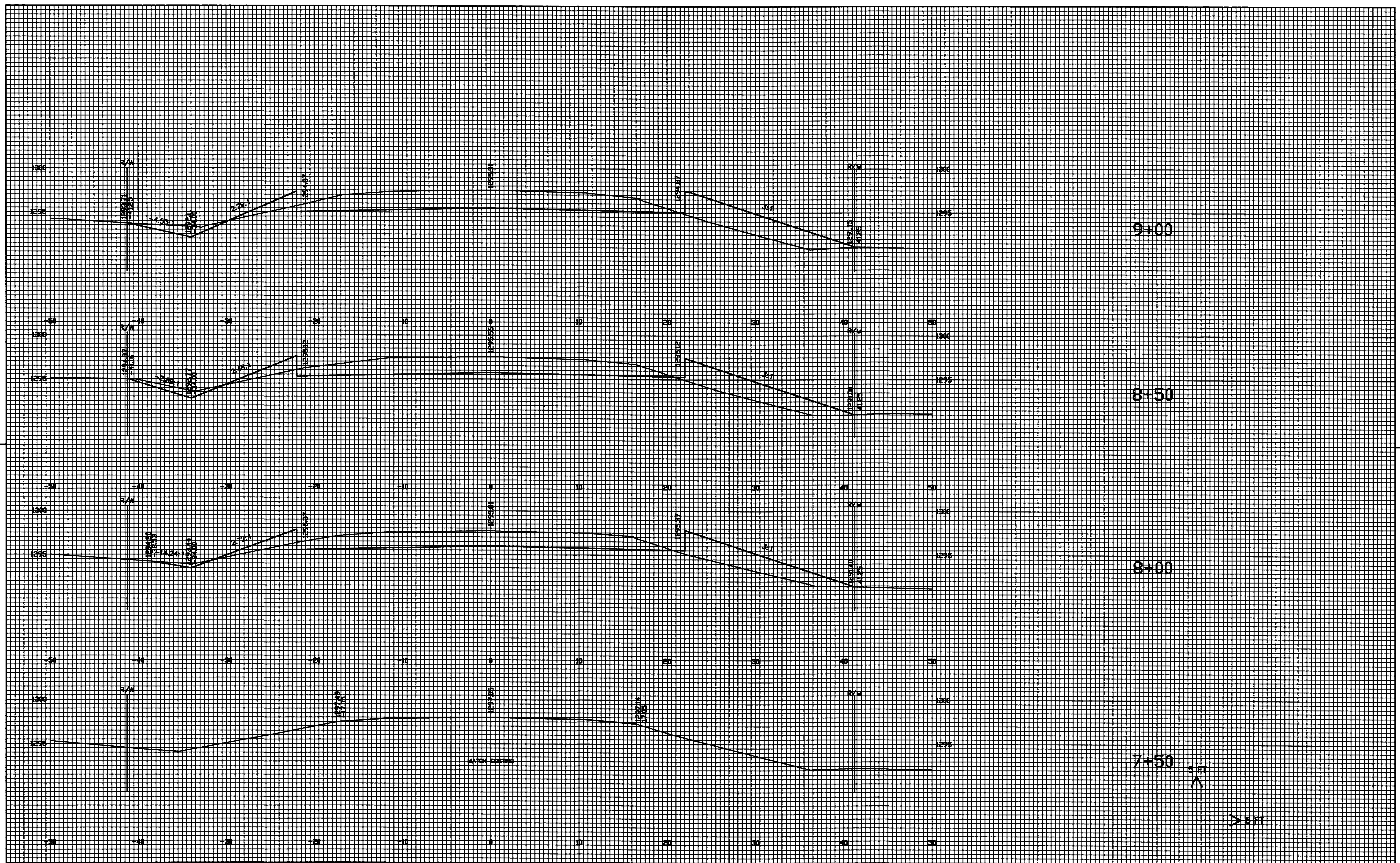
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

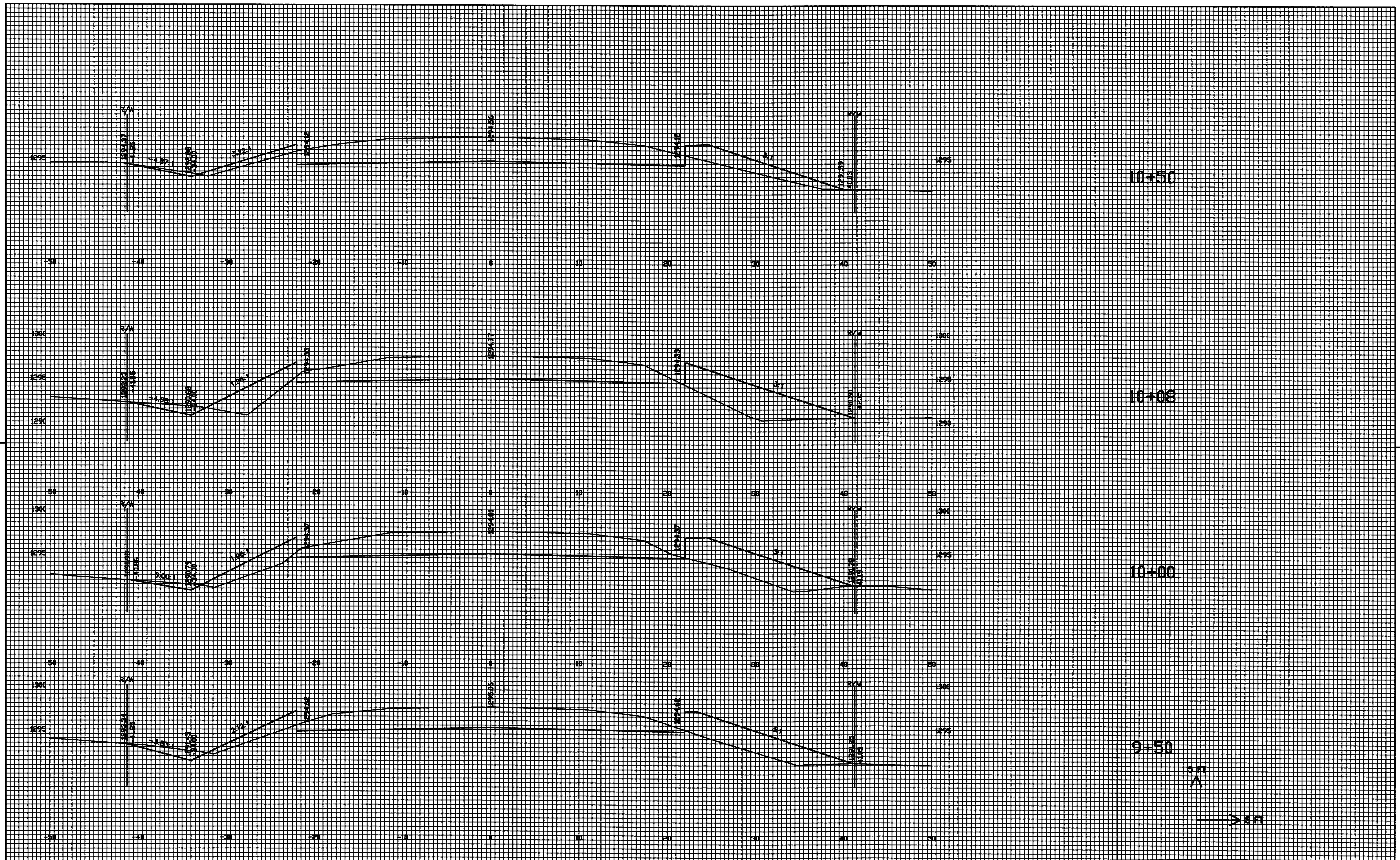
APPROVED

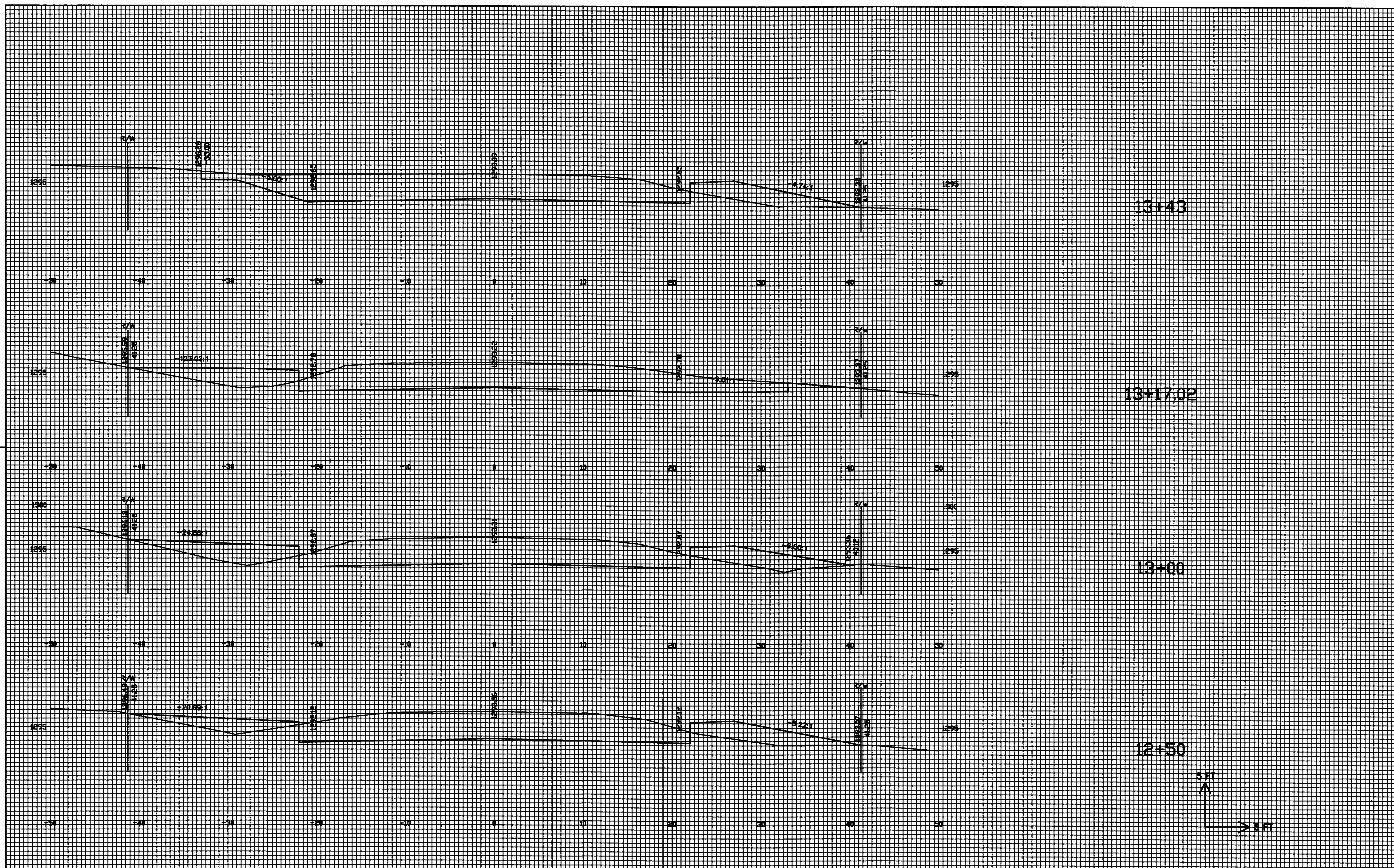
DATE

CHIEF SIGNS AND MARKING ENGINEER

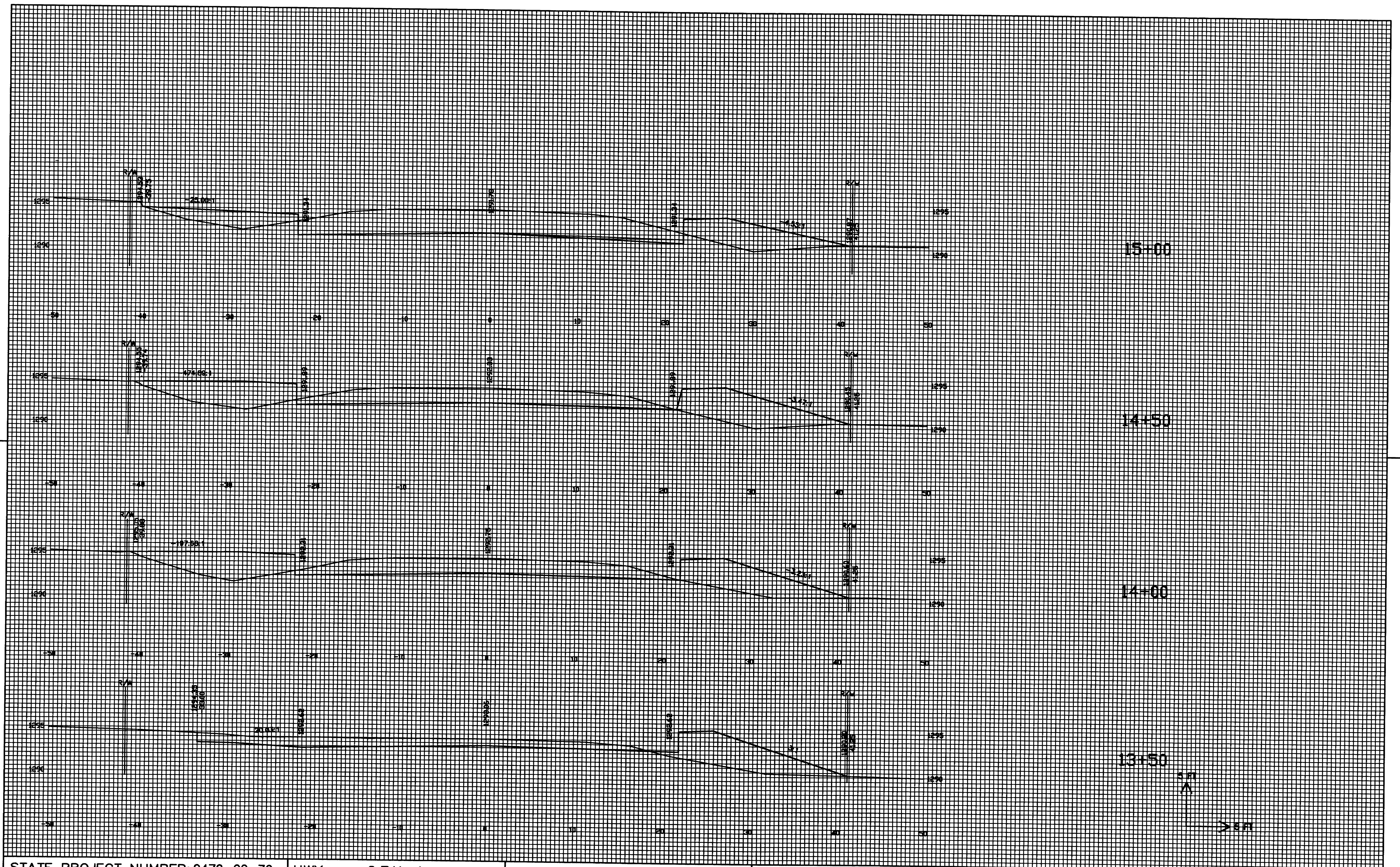
FHWA



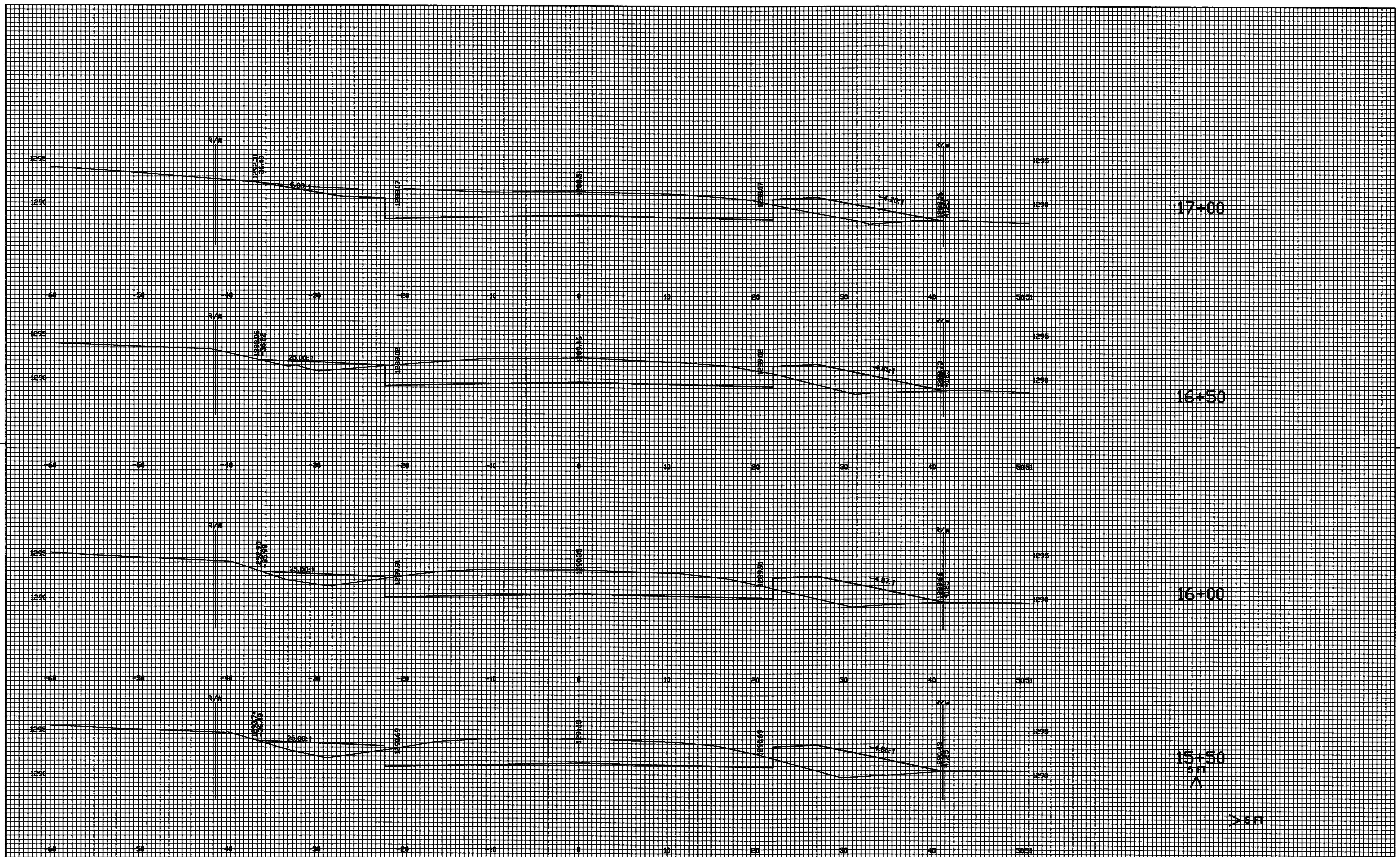


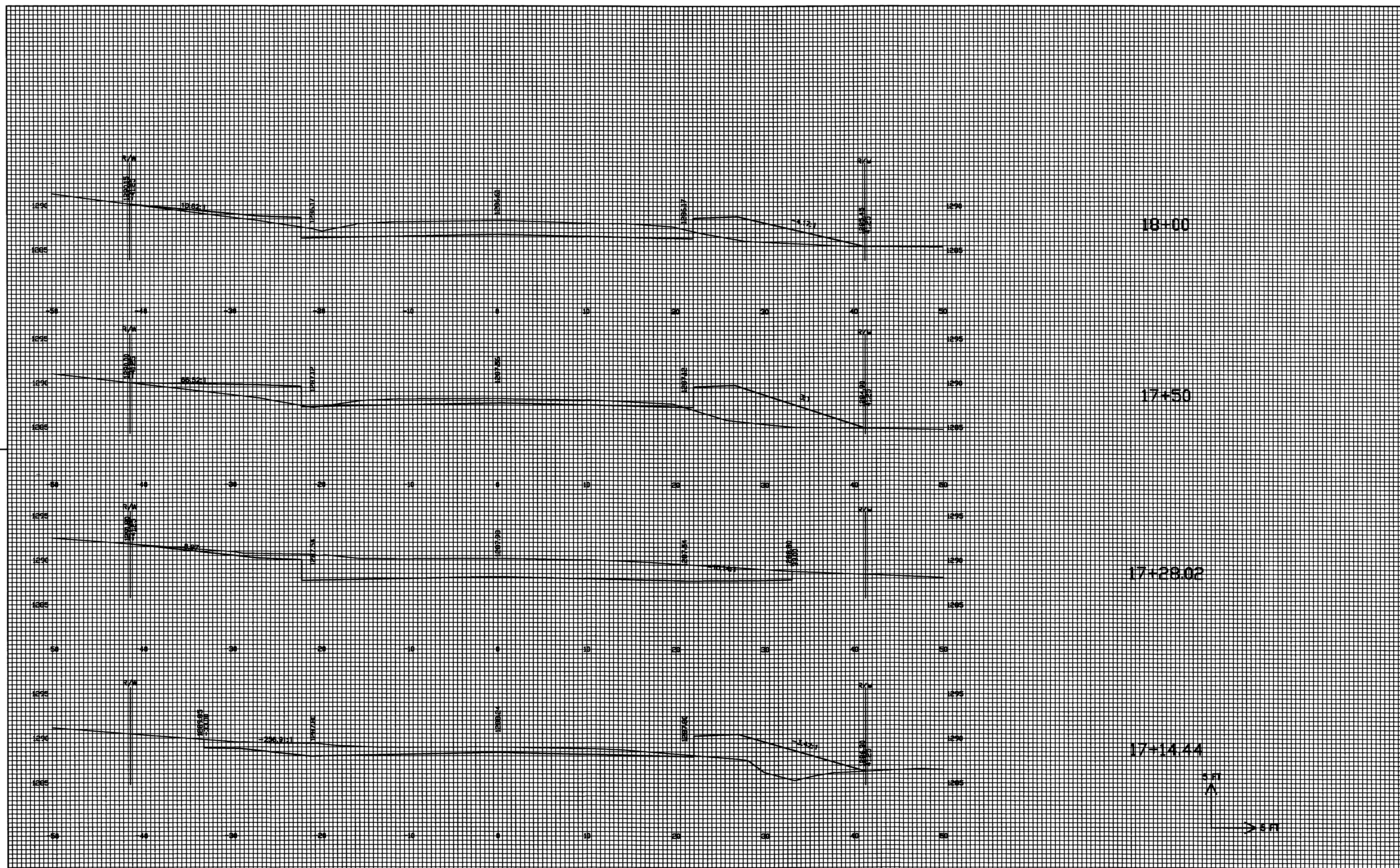


STATE PROJECT NUMBER: 9479-00-70	HWY: C.T.H. A	COUNTY: MARATHON	CROSS SECTIONS: 12+50 to 13+43	SHEET NO: 9.4	E
FILE NAME:	PLOT DATE:	ORG DATE:	PLOT NAME:	Originator: Dist	PLOT SCALE:



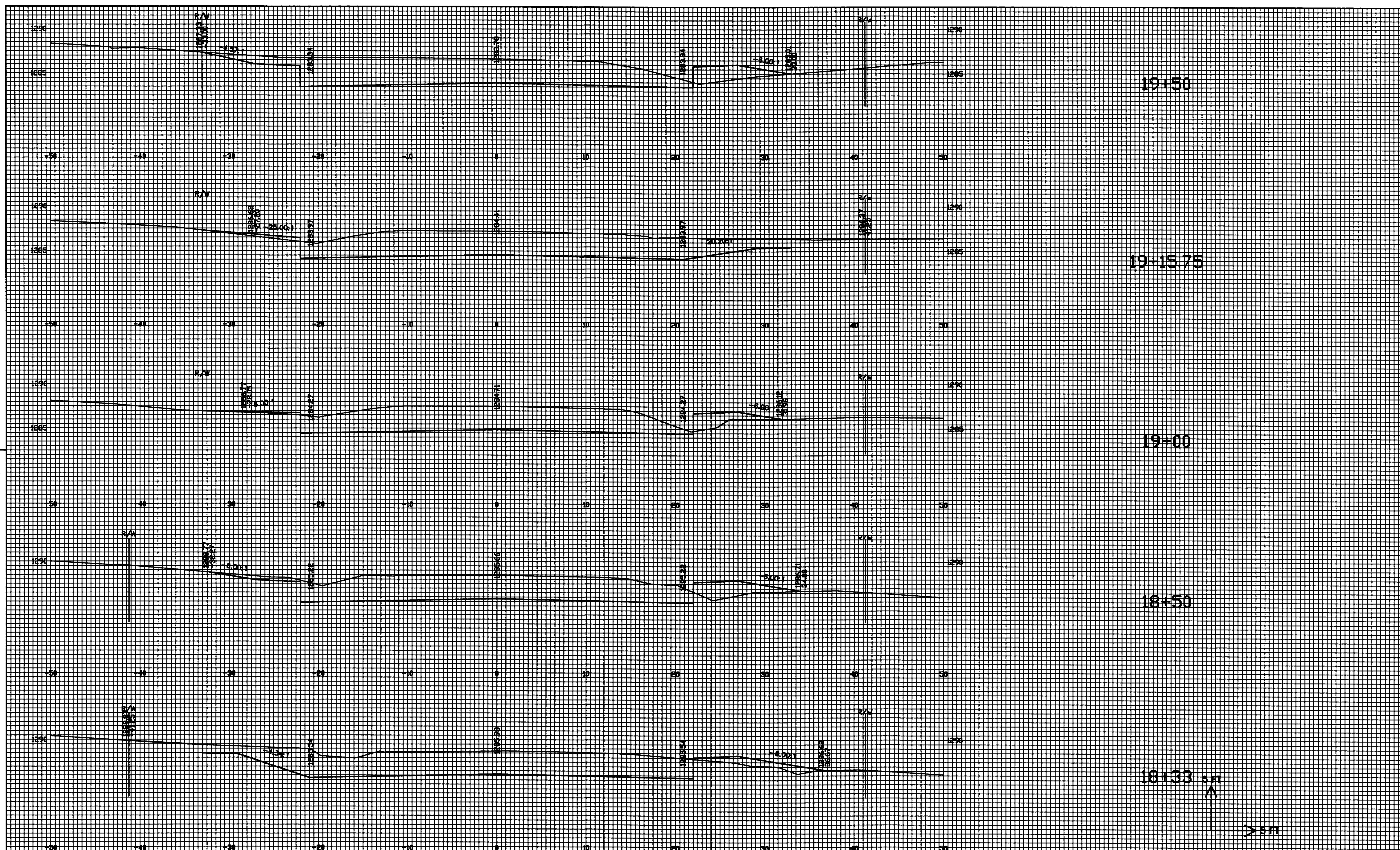
STATE PROJECT NUMBER: 9479-00-70	HWY: C.T.H. A	COUNTY: MARATHON	CROSS SECTIONS: 13+50 TO 15+00	SHEET NO: 9.5	E
FILE NAME:	PLOT DATE:	ORG DATE:	PLOT NAME:	Originator:	Dist
				PLOT SCALE:	WISDOT/CADDs SHEET 21





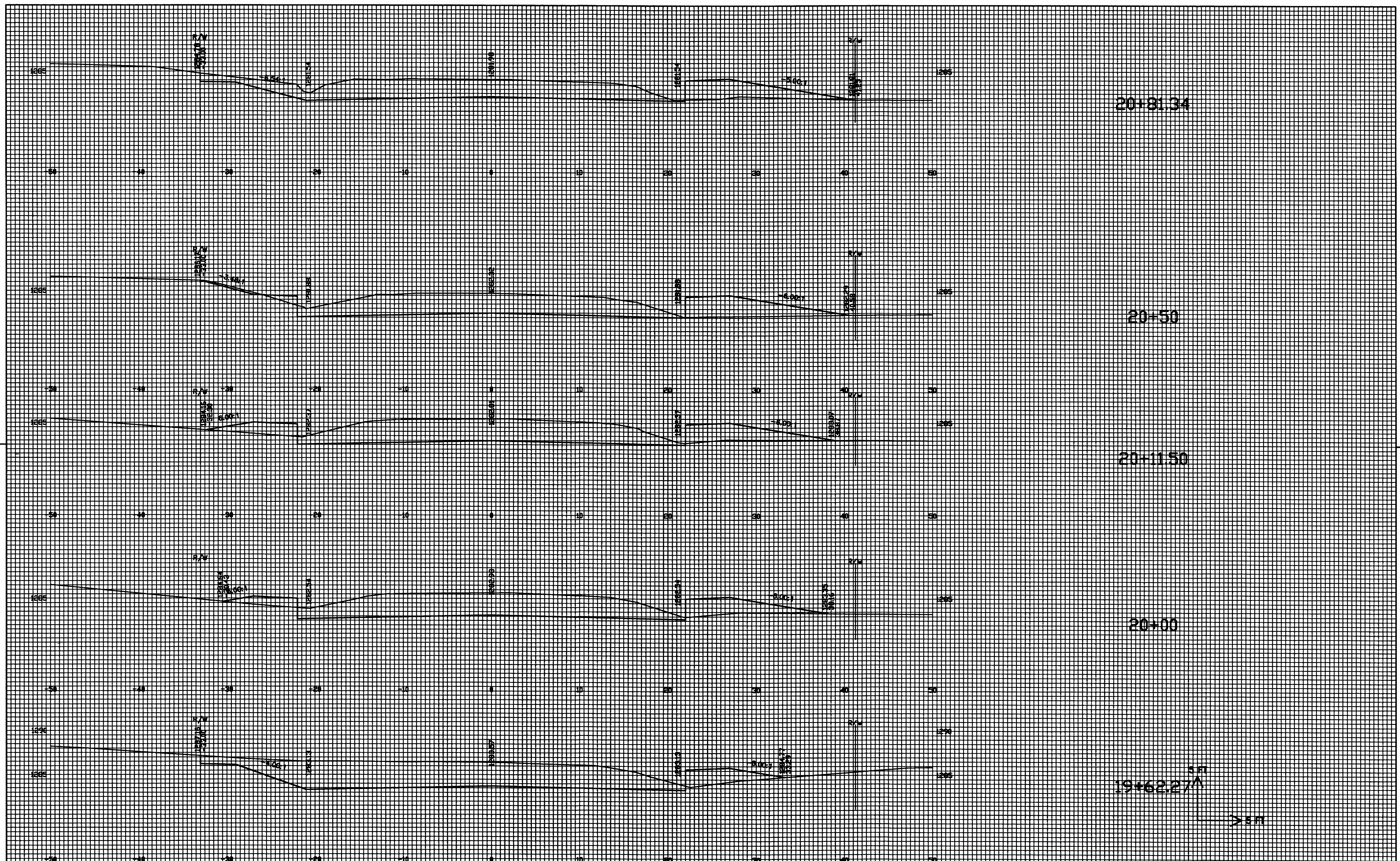
STATE PROJECT NUMBER: 9479-00-70	HWY: C.T.H. A	COUNTY: MARATHON	CROSS SECTIONS: 17+14.44 TO 18+00	SHEET NO: 9.7	E
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FILE NAME:	PLOT DATE:	ORG DATE:	PLOT NAME:	Originator:	Dist	PLOT SCALE:	WISDOT/CADDs SHEET 21
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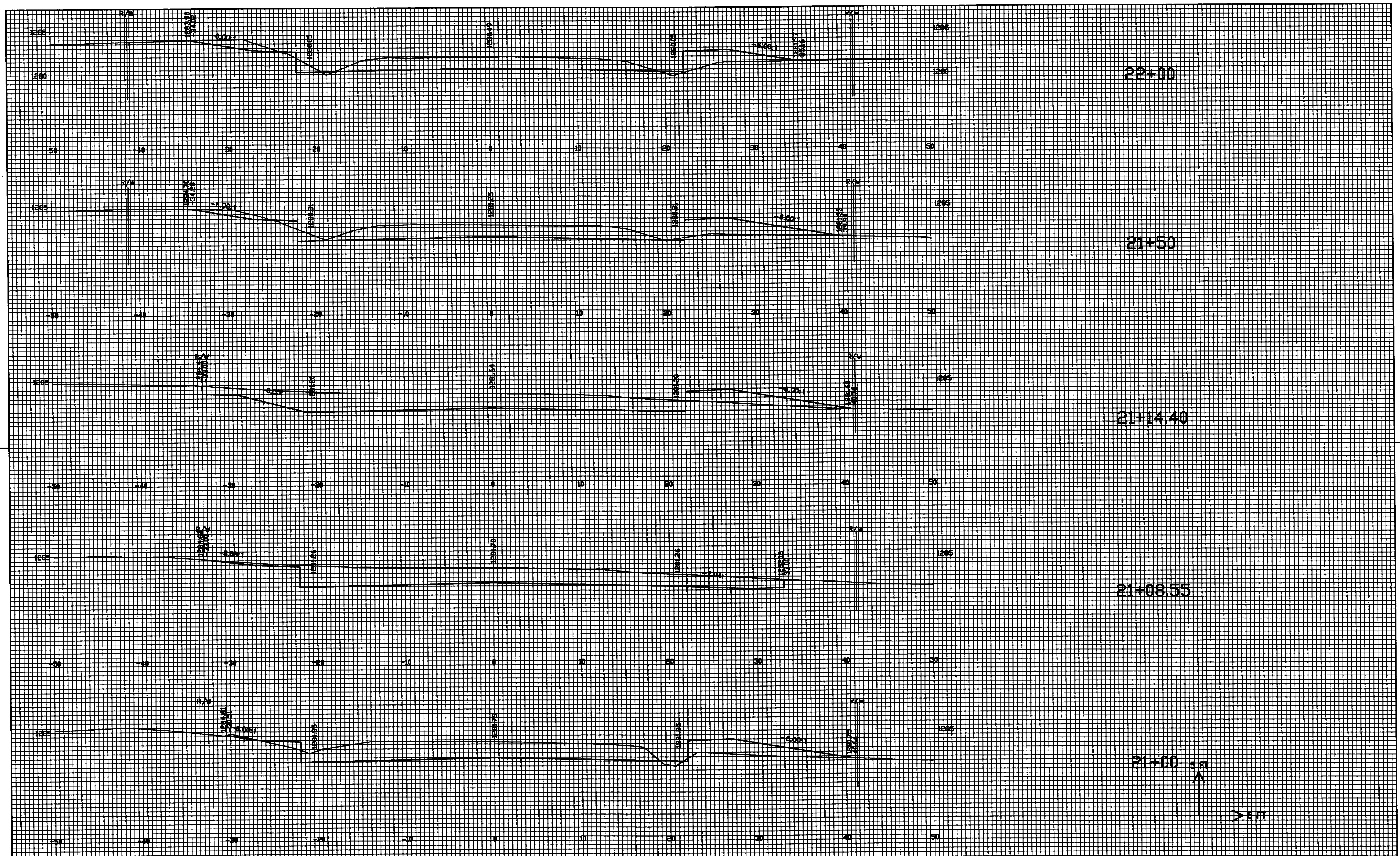
STATE PROJECT NUMBER: 9479-00-70	HWY: C.T.H. A	COUNTY: MARATHON	CROSS SECTIONS: 18+33 to 19+50	SHEET NO: 9.8	E
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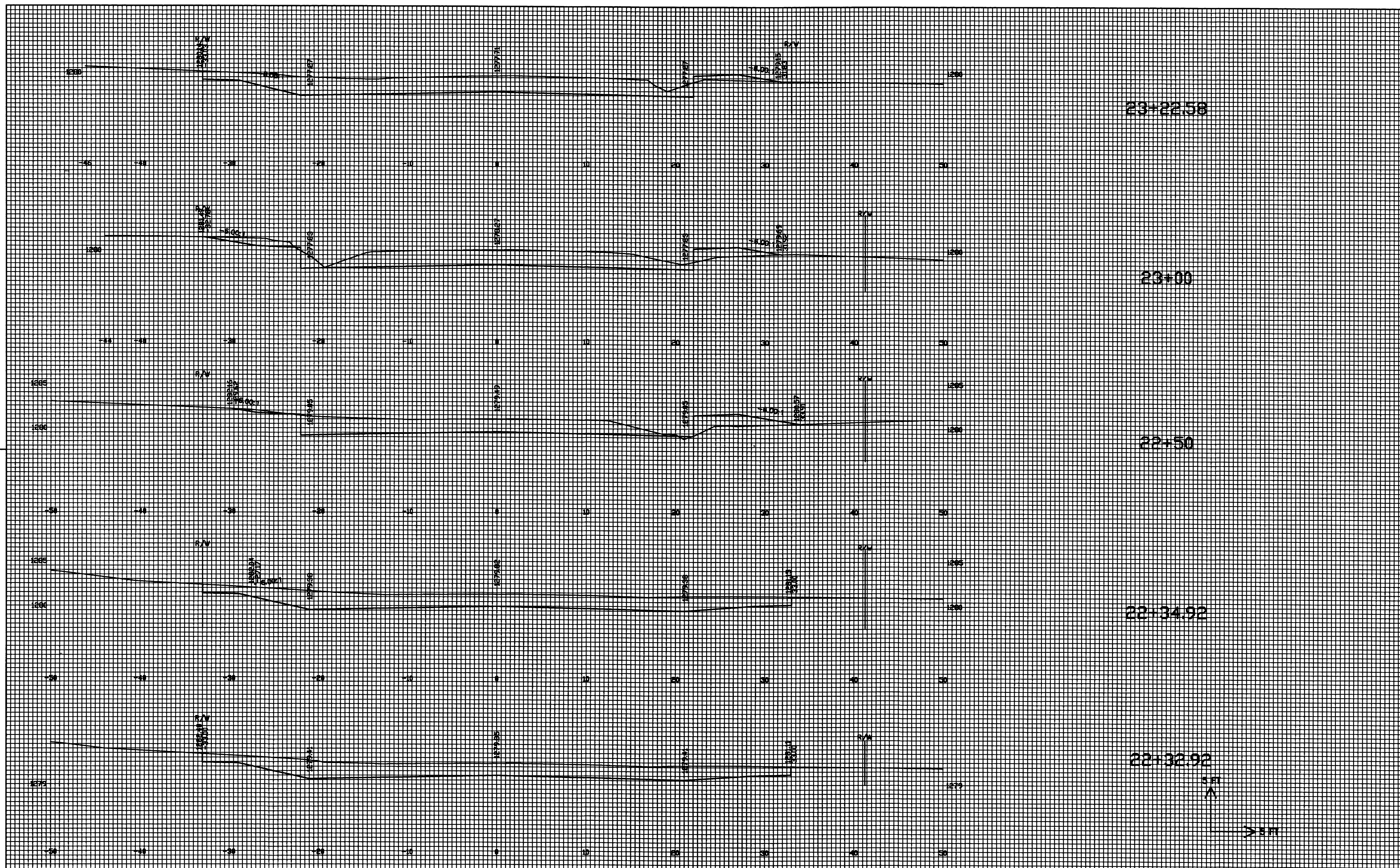
FILE NAME:	PLOT DATE:	ORG DATE:	PLOT NAME:	Originator:	Dist:	PLOT SCALE:	WISDOT/CADDs SHEET 21
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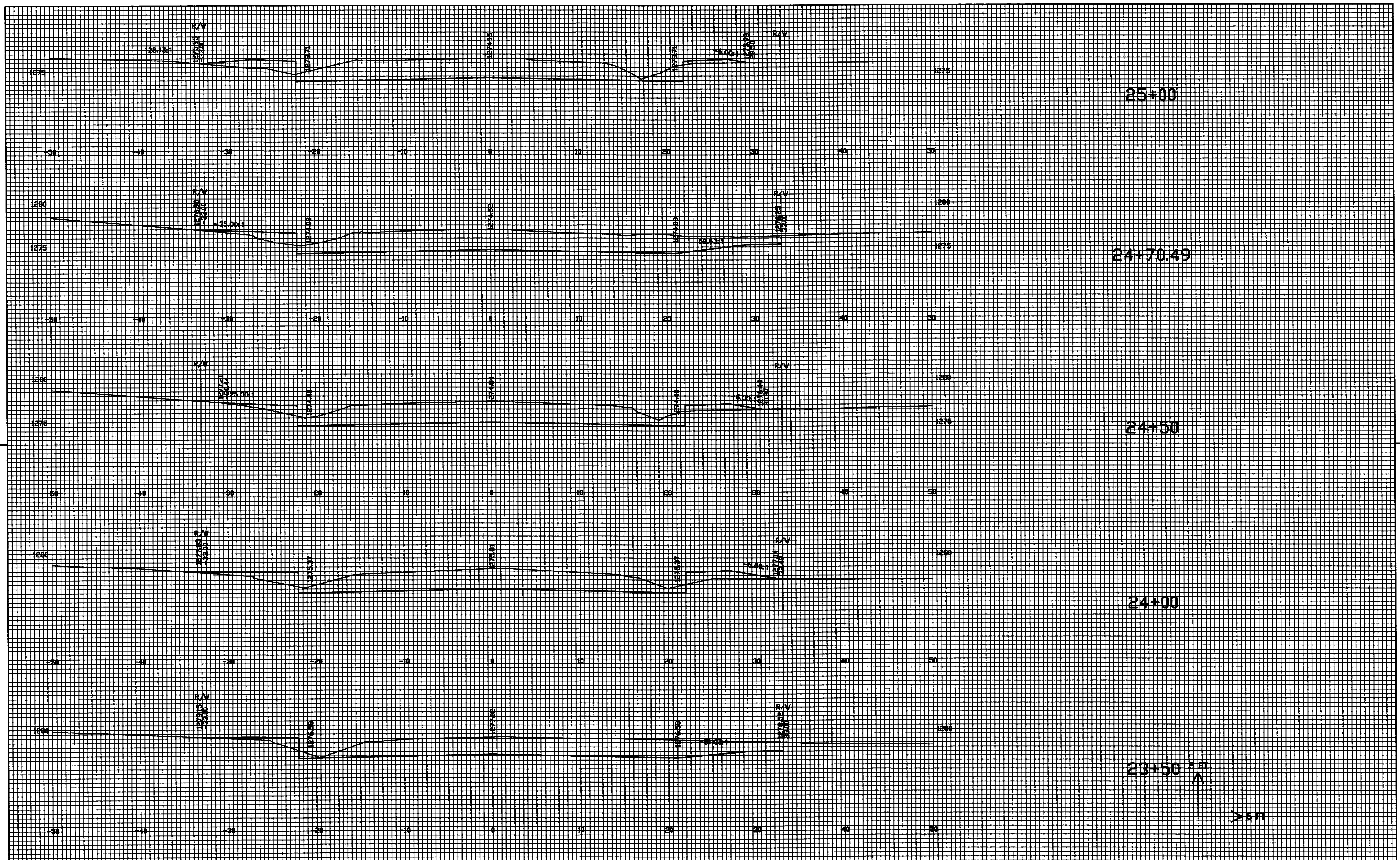
STATE PROJECT NUMBER: 9479-00-70	HWY: C.T.H. A	COUNTY: MARATHON	CROSS SECTIONS: 19+62.27 to 20+81.34	SHEET NO: 9.9	E
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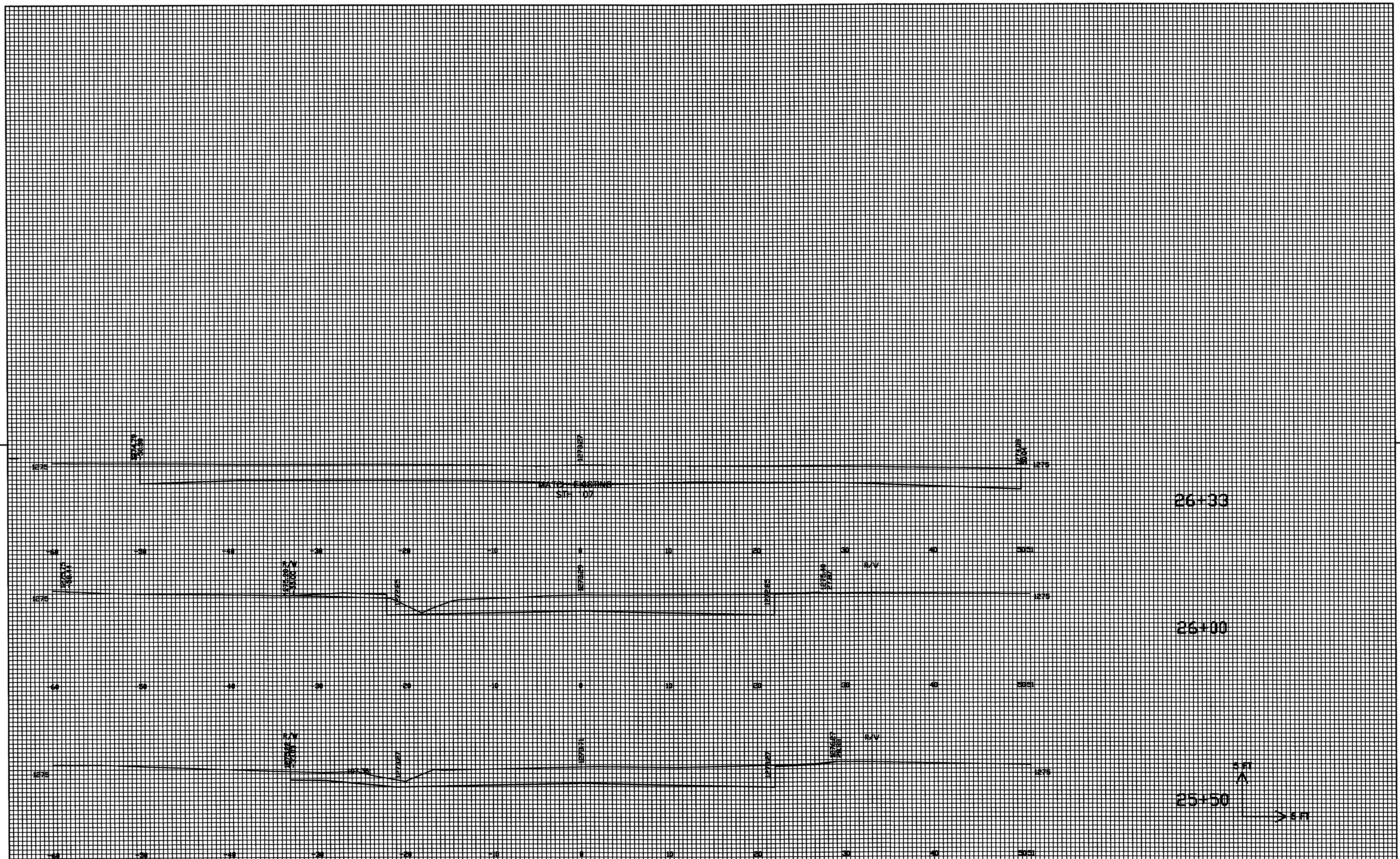
FILE NAME:	PLOT DATE:	ORG DATE:	PLOT NAME:	Originator:	Dist:	PLOT SCALE:	WSDOT/CADDs SHEET 21
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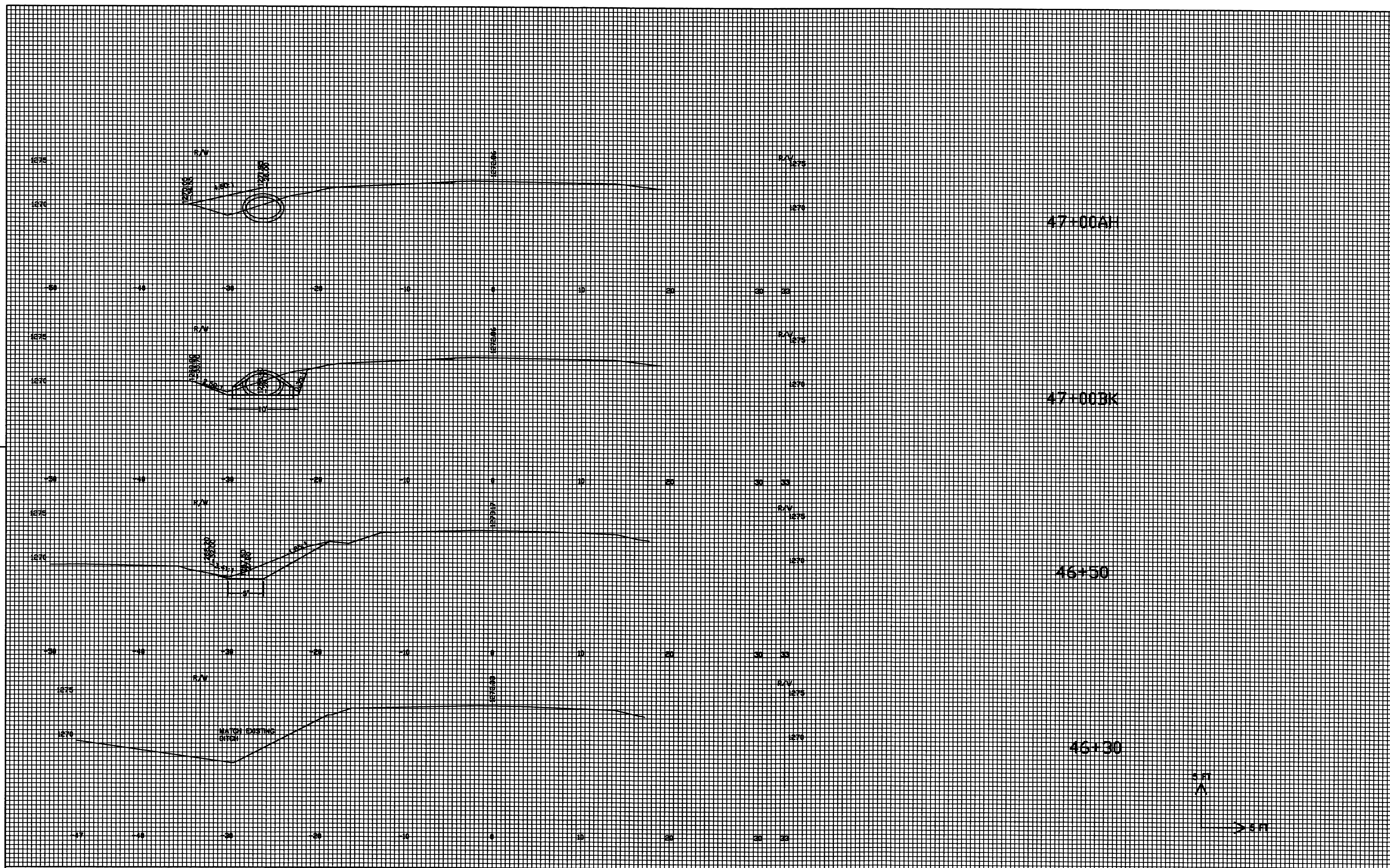


STATE PROJECT NUMBER: 9479-00-70		HWY: C.T.H. A		COUNTY: MARATHON		CROSS SECTIONS: 22+34.92 to 23+22.58		SHEET NO: 9.11		E
FILE NAME:		PLOT DATE:		ORG DATE:		PLOT NAME:		Originator: Dist		PLOT SCALE:



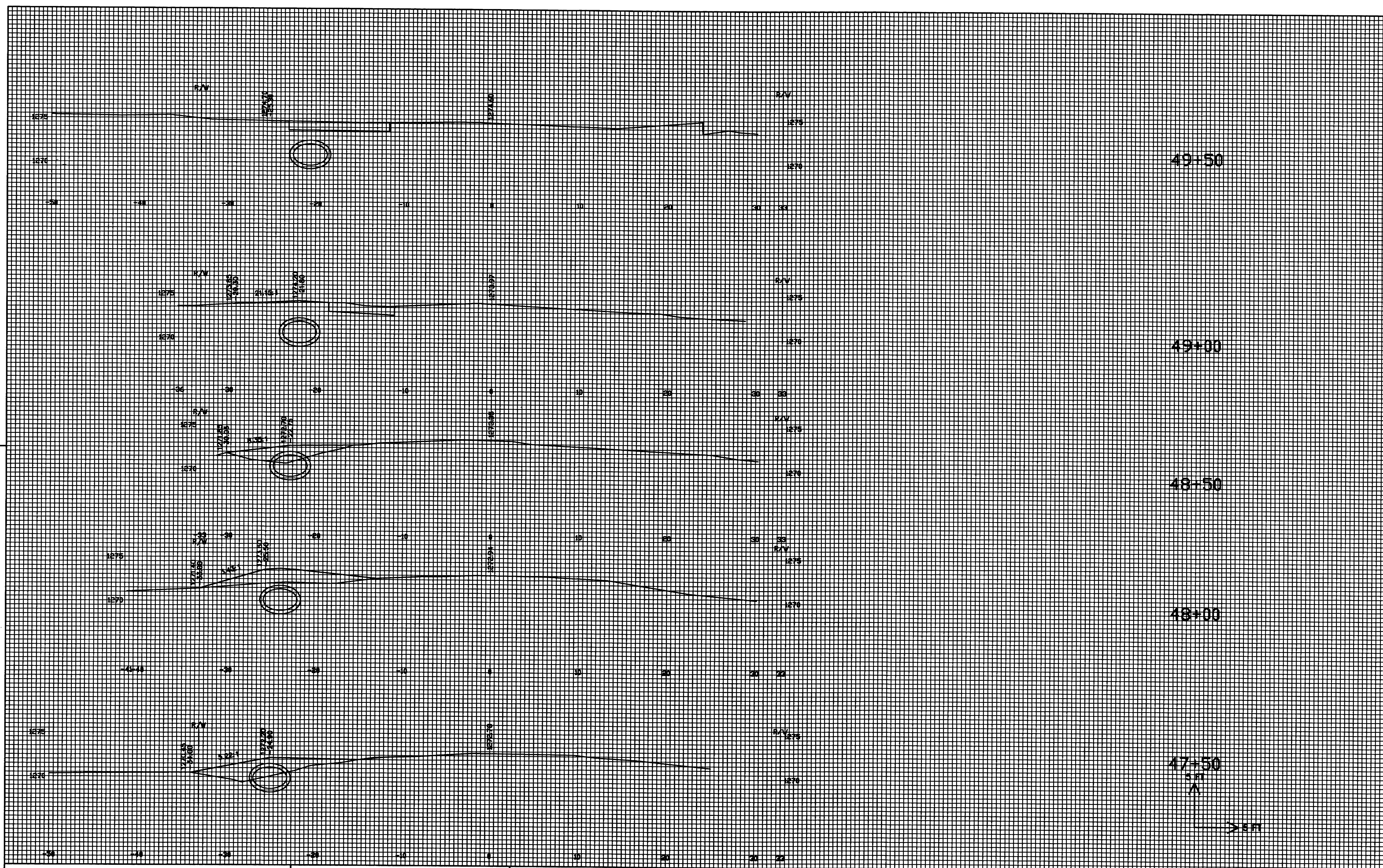


STATE PROJECT NUMBER: 9479-00-70	HWY: C.T.H. A	COUNTY: MARATHON	CROSS SECTIONS: 25+50 to 26+33	SHEET NO: 9.13	E
FILE NAME:	PLOT DATE:	ORG DATE:	PLOT NAME:	Originator:	Dist
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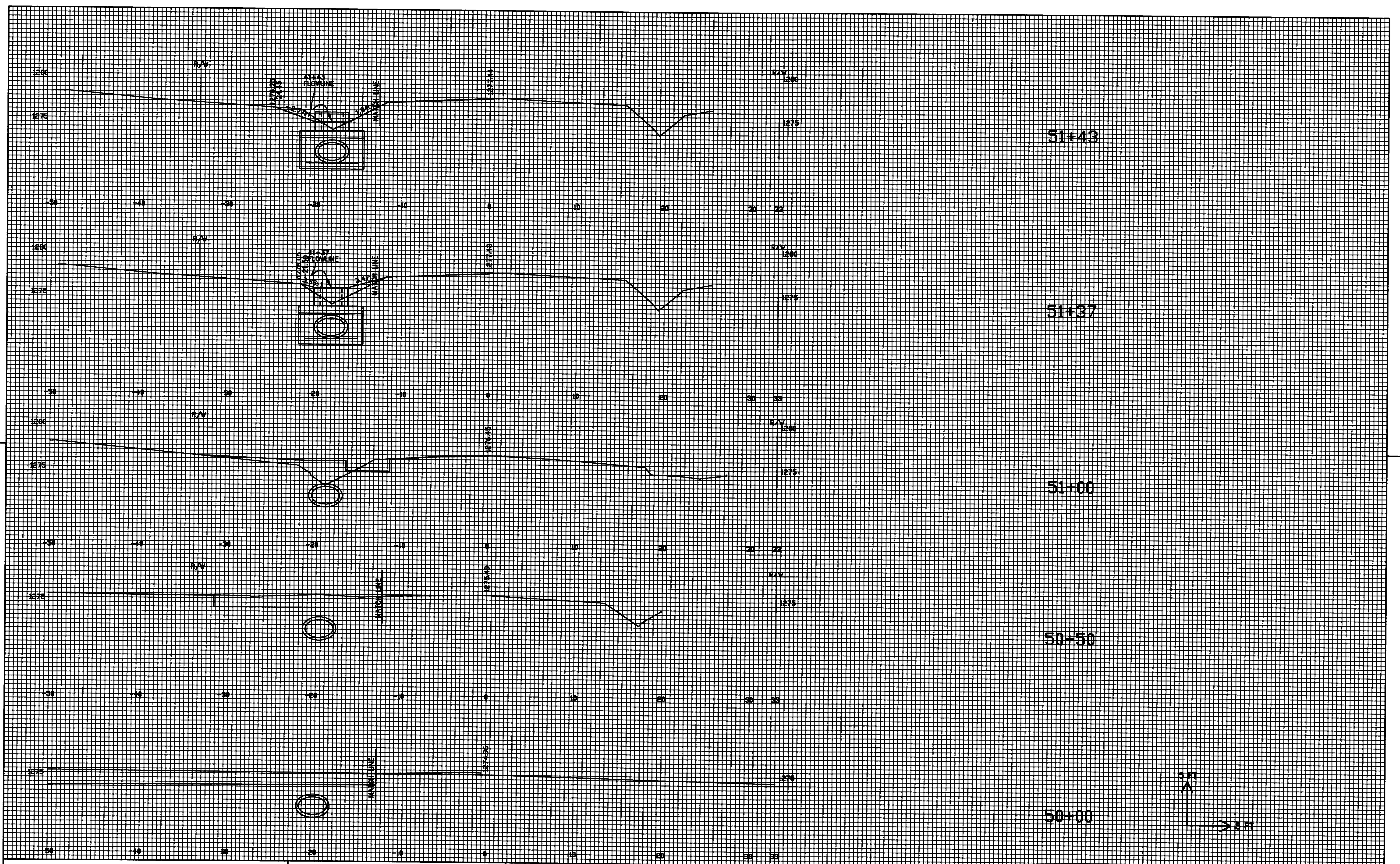
STATE PROJECT NUMBER: 9479-00-70	HWY: S.T.H. 107	COUNTY: MARATHON	CROSS SECTIONS: 46+30 TO 47+00AH	SHEET NO: 9.14	E
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FILE NAME:	PLOT DATE:	ORG DATE:	PLOT NAME:	Originator:	Dist	PLOT SCALE:	WISDOT/CADDs SHEET 21
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STATE PROJECT NUMBER: 9479-00-70	HWY: S.T.H. 107	COUNTY: MARATHON	CROSS SECTIONS: 47+50 TO 49+50	SHEET NO: 9.15	E
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FILE NAME:	PLOT DATE:	ORG DATE:	PLOT NAME:	Originator:	Dist	PLOT SCALE:	WISDOT/CADDs SHEET 21
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STATE PROJECT NUMBER: 9479-00-70	HWY: S.T.H. 107	COUNTY: MARATHON	CROSS SECTIONS: 50+00 TO 51+43	SHEET NO: 9.16	E
FILE NAME:	PLOT DATE:	ORG DATE:	PLOT NAME:	Originator:	Dist:
				PLOT SCALE:	WISDOT/CADD SHEET 21

FILE NAME:		PLOT DATE:		ORG DATE:		PLOT NAME:		Originator:		Dist:		PLOT SCALE:		WISDOT/CADDs SHEET 21	
STATE PROJECT NUMBER: 9479-00-70 HWY:				C.T.H. A		COUNTY:		MARATHON		CROSS SECTIONS: 51+50 TO 51+85				SHEET NO: 9.17	
														E	

