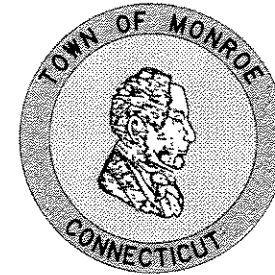


TOWN OF MONROE
DEPARTMENT OF PUBLIC WORKS



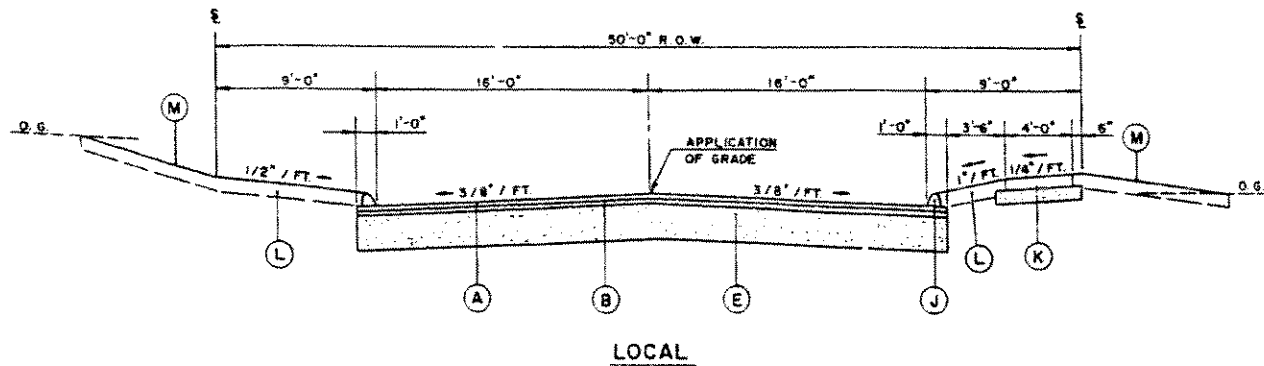
STANDARD DRAWINGS
FOR
ROADWAYS AND INCIDENTAL CONSTRUCTION
NOVEMBER 1990

PREPARED BY
DeLEUW, CATHER & COMPANY

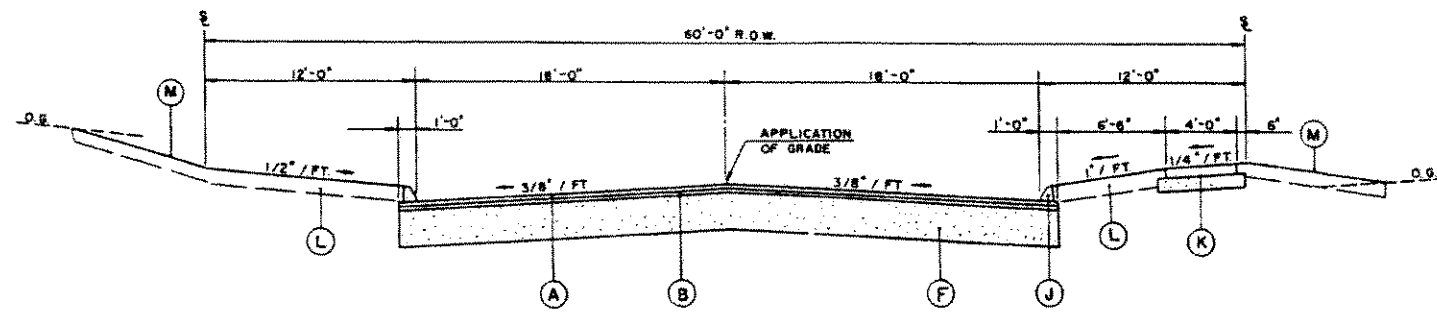
LIST OF DRAWINGS					
STD. SHEET NO.	TITLE	REVISION DATE	STD. SHEET NO.	TITLE	REVISION DATE
1	TYPICAL ROADWAY SECTIONS	JULY 2006	15	METAL BEAM RAIL (TYPE R-B AND TYPE MD-B)	
2	SIDEWALKS AND DRIVES, MISCELLANEOUS DETAILS		16	EROSION PROTECTION PAVEMENT FOR RAILS	
3	CHANNEL AND DITCH		16A	EROSION AND SEDIMENTATION CONTROL DETAILS	DEC. 1997
4	UNDERDRAINS, PIPE TRENCH	DEC. 1997	16B	EROSION AND SEDIMENTATION CONTROL DETAILS	DEC. 1997
5	TYPE 'C' CATCH BASIN, TYPE 'C' DROP INLET		16C	EROSION AND SEDIMENTATION CONTROL DETAILS	DEC. 1997
6	TYPE 'C-L' CATCH BASIN, TYPE 'C-L' DROP INLET		17	TREATMENTS FOR SIDEWALK RAMPS	
7	STEEL FRAME AND GRATE - TYPE 'A' FOR TYPE 'C' AND 'C-L' CATCH BASIN AND DROP INLET	AUG. 1995	18	PLANTING DETAILS	
8	MANHOLE, FRAME AND COVER		19	CHAIN LINK FENCE	
9	METAL AND REINFORCED CONCRETE CULVERT END				
10	ENDWALLS				
11	ENDWALLS FOR PIPE ARCH				
12	PRECAST CONCRETE CATCH BASIN, TYPE 'C' OR 'C-L'				
13	TYPE 'C' CATCH BASIN, DOUBLE GRATE - TYPE I AND II				
14	TYPE 'C-L' CATCH BASIN, DOUBLE GRATE - TYPE I AND II				

GENERAL NOTES:

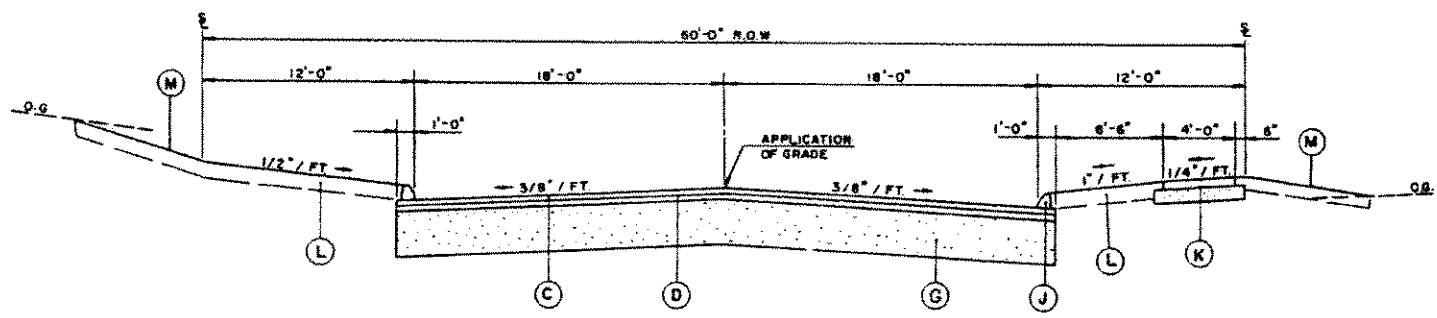
1. ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE FOLLOWING:
 - A. "STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION, FORM 814A, 1995 OR LATEST EDITION WITH ALL REVISIONS.
 - B. TOWN OF MONROE REGULATIONS.
2. "ENGINEER" SHALL MEAN THE DIRECTOR OF PUBLIC WORKS OF THE TOWN OF MONROE.
3. ANY DISCREPANCIES BETWEEN THESE STANDARD DRAWINGS AND THE ABOVE SHALL BE DECIDED BY THE DIRECTOR OF PUBLIC WORKS. HIS DECISION SHALL BE FINAL AND BINDING.
4. NO CHANGES OR REVISIONS WILL BE ALLOWED TO THESE STANDARD DRAWINGS WITHOUT WRITTEN PERMISSION FROM THE DIRECTOR OF PUBLIC WORKS.



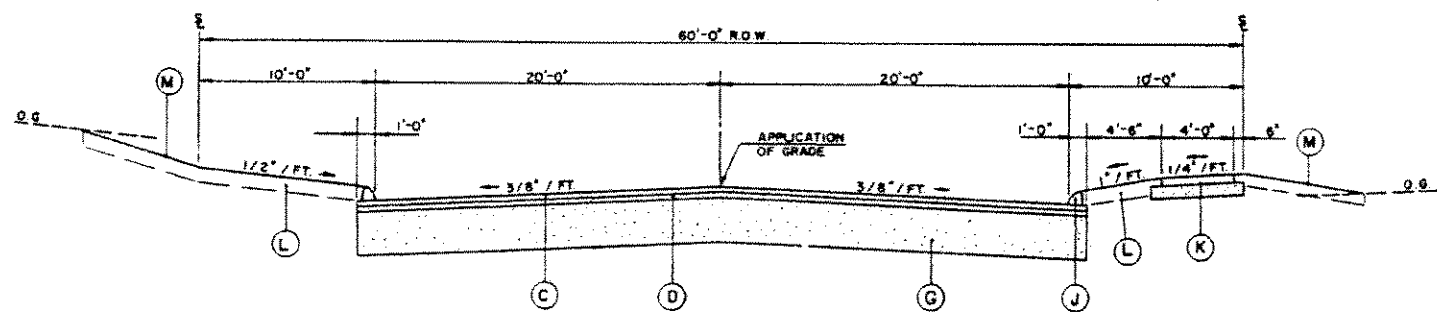
LOCAL



COLLECTOR

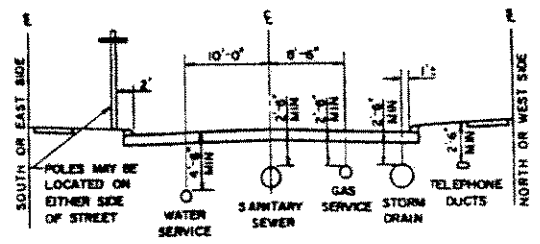


COMMERCIAL



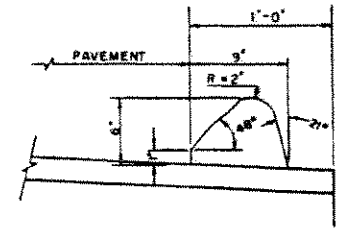
ARTERIAL

TYPICAL ROADWAY SECTIONS

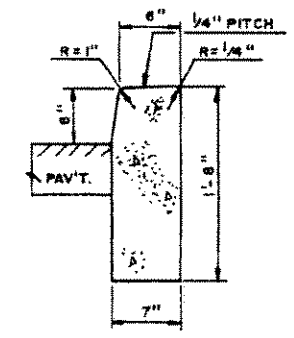


UTILITY LOCATION

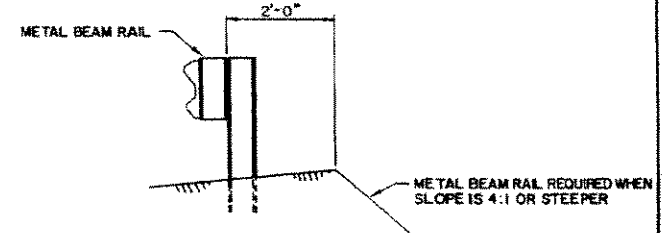
NOTE: THESE UTILITY LOCATIONS SHALL BE FOLLOWED WHEREVER POSSIBLE. ALL CHANGES IN LOCATION MUST BE APPROVED BY THE PLANNING & ZONING ENGINEER.



BITUMINOUS CONC. LIP CURBING

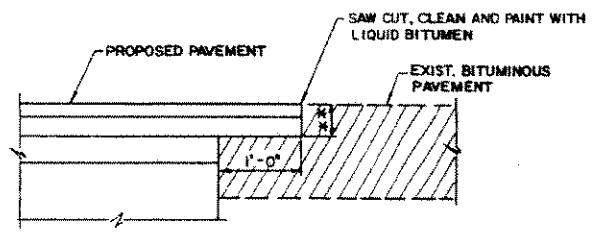


CONCRETE CURBING



EMBANKMENT AT METAL BEAM RAIL

NOTE: METAL BEAM RAIL TO BE LOCATED AS SHOWN ON STANDARD SHEET NO. 15, OR AS DIRECTED BY THE ENGINEER.



PAVEMENT MATCH TREATMENT

- (A) 1/2" BITUMINOUS CONCRETE - CLASS 2
- (B) 2 1/2" BITUMINOUS CONCRETE - CLASS 1
- (C) 2" BITUMINOUS CONCRETE - CLASS 2
- (D) 3" BITUMINOUS CONCRETE - CLASS 1
- (E) PROCESSED AGGREGATE BASE: 10" MIN AND 18" MAX. (SEE NOTE 1)
- (F) PROCESSED AGGREGATE BASE: 12" MIN AND 18" MAX. (SEE NOTE 1)
- (G) PROCESSED AGGREGATE BASE: 18" MIN AND 24" MAX. (SEE NOTE 1)
- (J) 6" BITUMINOUS CONCRETE LIP CURBING (SEE DETAIL)
- (K) CONCRETE SIDEWALK IF REQUIRED BY THE TOWN (SEE DETAIL)
- (L) 6" TOPSOIL, FERTILIZE AND SEED.
- (M) 2:1 SLOPE (MAX.) CUT OR FILL. METAL BEAM RAIL REQUIRED ON FILL SLOPES 4:1 OR STEEPER (SEE STANDARD SHEET NO. 15)

NOTES:

1. OVERLAP BOTH PROPOSED BITUMINOUS CONCRETE COURSES (CLASS 1 AND CLASS 2) OVER EXISTING SUBBASE.
2. ** MINIMUM THICKNESS TO BE SAME AS PROPOSED BITUMINOUS OR MATCH THICKNESS OF EXISTING PAVEMENT, WHICH EVER IS GREATER.

NOTES:

1. THE THICKNESS OF PROCESSED AGGREGATE BASE SHALL BE AS DETERMINED BY THE DIRECTOR OF PUBLIC WORKS PERFORMING SOIL TESTING. THE PROCESSED AGGREGATE BASE SHALL BE PLACED IN TWO (2) EQUAL LIFTS FOR A THICKNESS OF UP TO 12". FOR A THICKNESS GREATER THAN 12", UP TO 24" IT SHALL BE PLACED IN THREE (3) EQUAL LIFTS.

REVISIONS		
NO.	DATE	DESCRIPTION
1	6/98	PAVEMENT CLASS
2	JULY 2008	ROADWAY SECTION

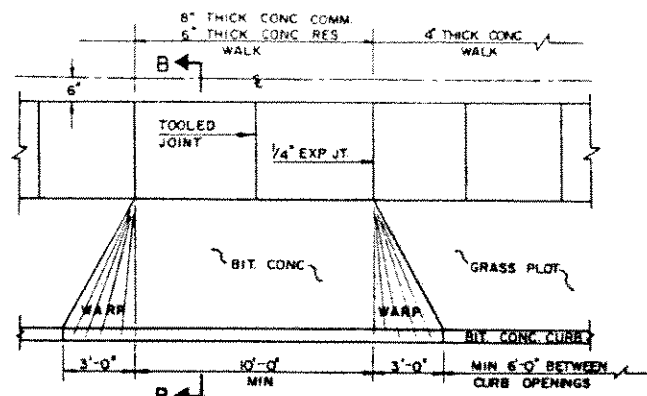
TOWN OF MONROE
DEPARTMENT OF PUBLIC WORKS
MONROE, CONNECTICUT

TYPICAL ROADWAY SECTIONS

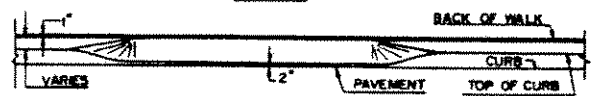
NOT TO SCALE NOV. 1990

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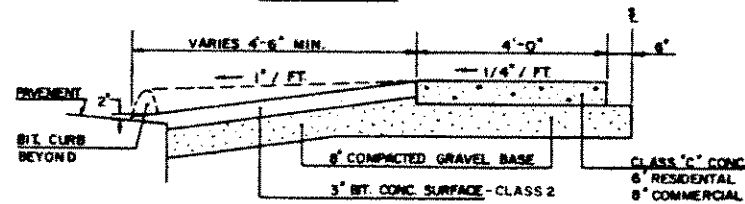
STD. NO.
1



PLAN

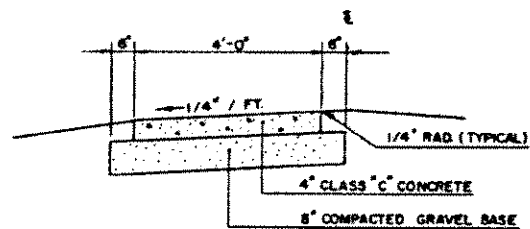


ELEVATION

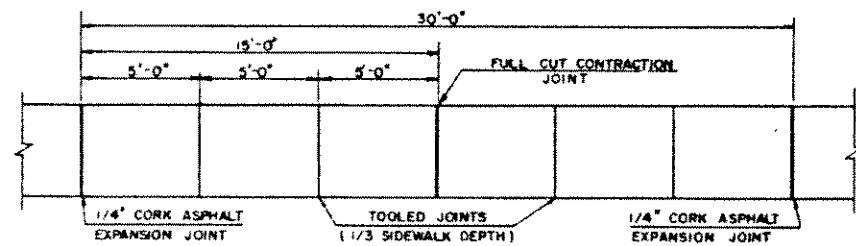


SECTION B-B

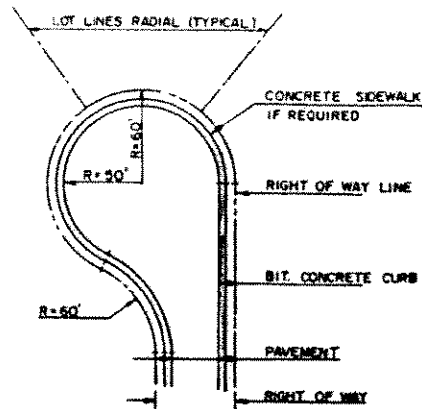
DRIVES



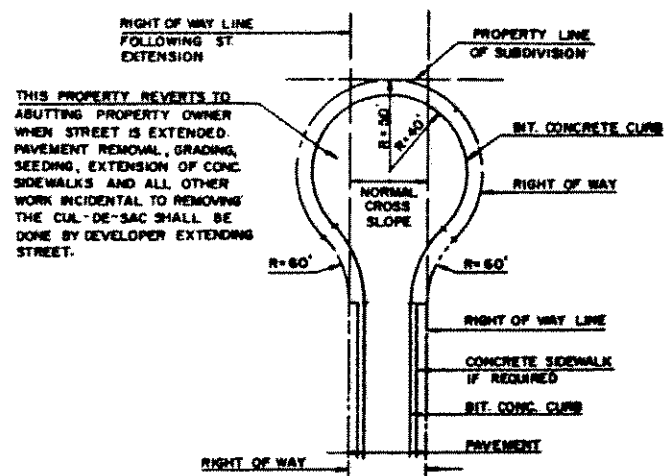
SIDEWALKS



SIDEWALKS

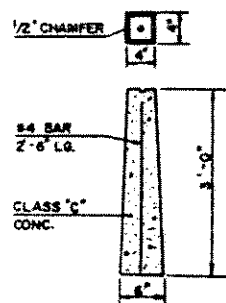


PERMANENT

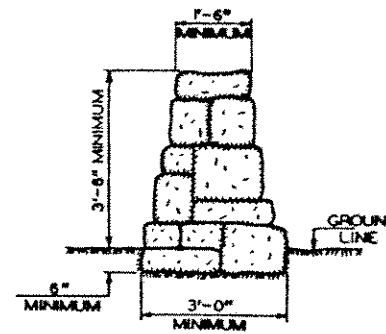


TEMPORARY

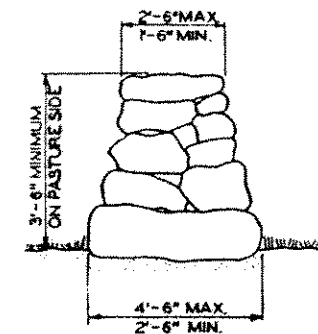
CUL-DE-SAC



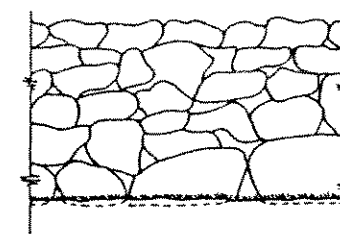
MONUMENT



STONE WALL FENCE



FARM WALL FENCE



ELEVATION

REVISIONS		
NO	DATE	DESCRIPTION

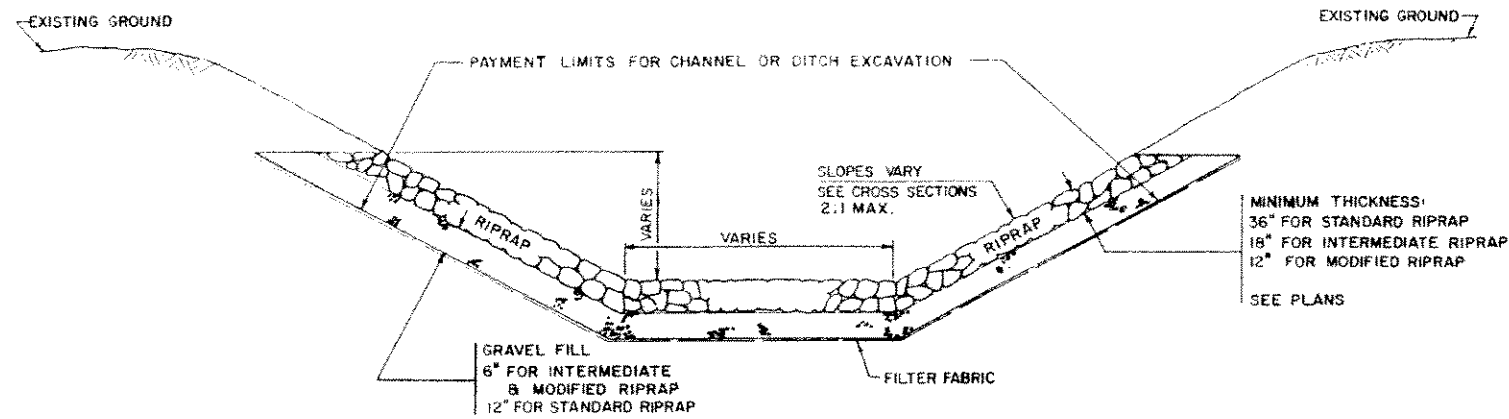
TOWN OF MONROE
DEPARTMENT OF PUBLIC WORKS
MONROE, CONNECTICUT

**SIDEWALKS AND DRIVES,
MISCELLANEOUS DETAILS**

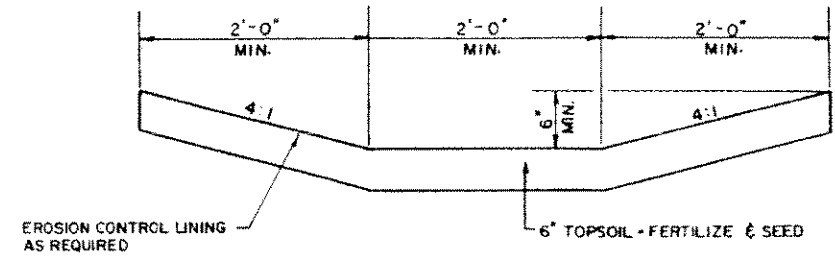
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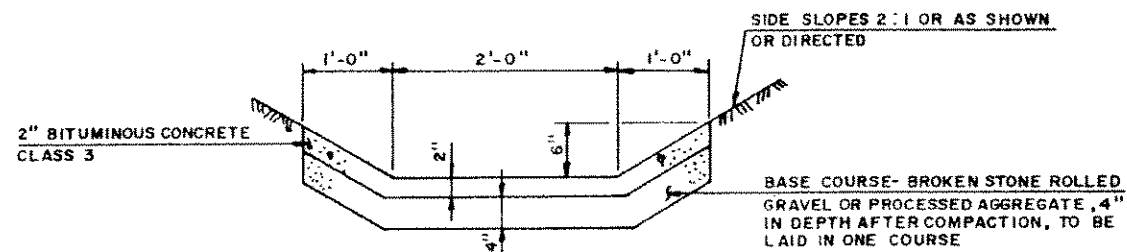
STD. NO. 2



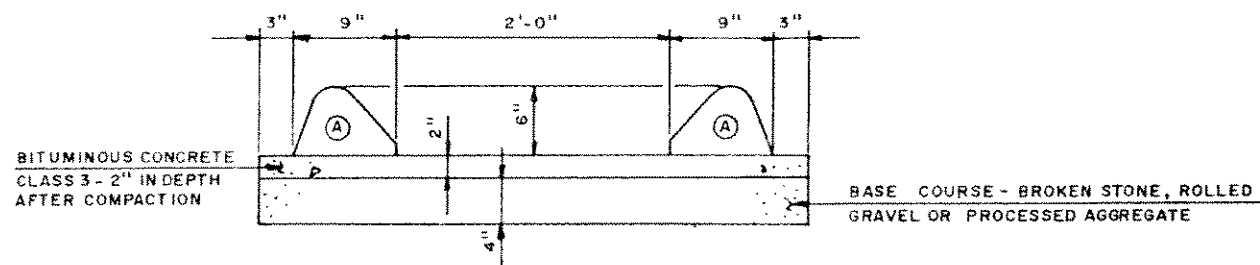
RIPRAP DITCH OR CHANNEL



GRASS DITCH



PAVED DITCH



(A) TO BE CONSTRUCTED TO CONFORM TO BITUMINOUS CONCRETE LIP CURBING-CLASS 3 AS SHOWN ON PLANS.

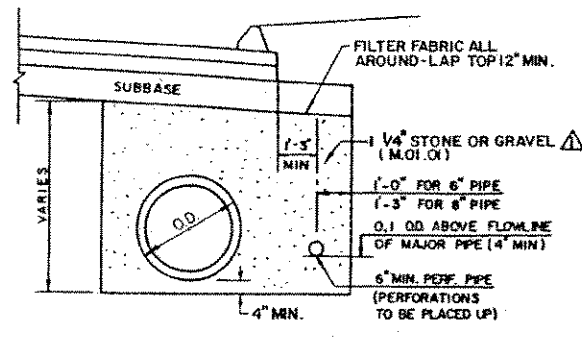
ALTERNATE PAVED DITCH

NOTES

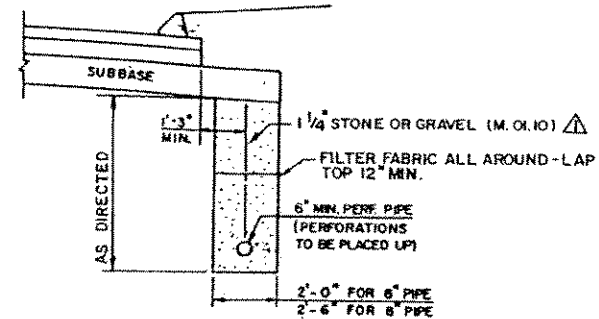
PAVED DITCHES WILL BE USED ONLY AT LOCATIONS WHERE THEY WILL NOT BE A HAZARD TO VEHICLES THAT RUN OFF THE ROAD.

REVISIONS		
NO.	DATE	DESCRIPTION

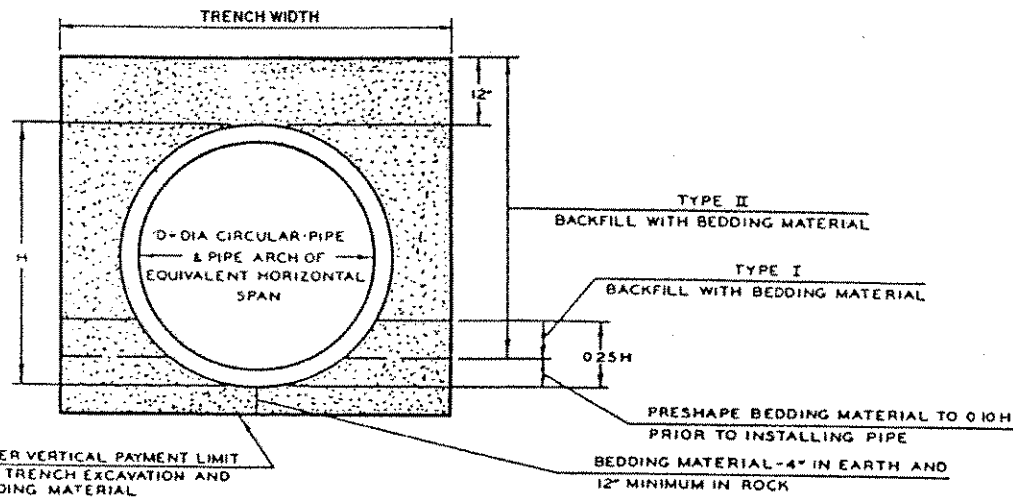
TOWN OF MONROE DEPARTMENT OF PUBLIC WORKS MONROE, CONNECTICUT	
CHANNEL AND DITCH	
NOT TO SCALE	NOV 1990
DeLEUW CATHER De LEUW, CATHER & COMPANY Engineers and Planners	
STD. NO.	3



UNDERDRAIN WITH STORM SEWER

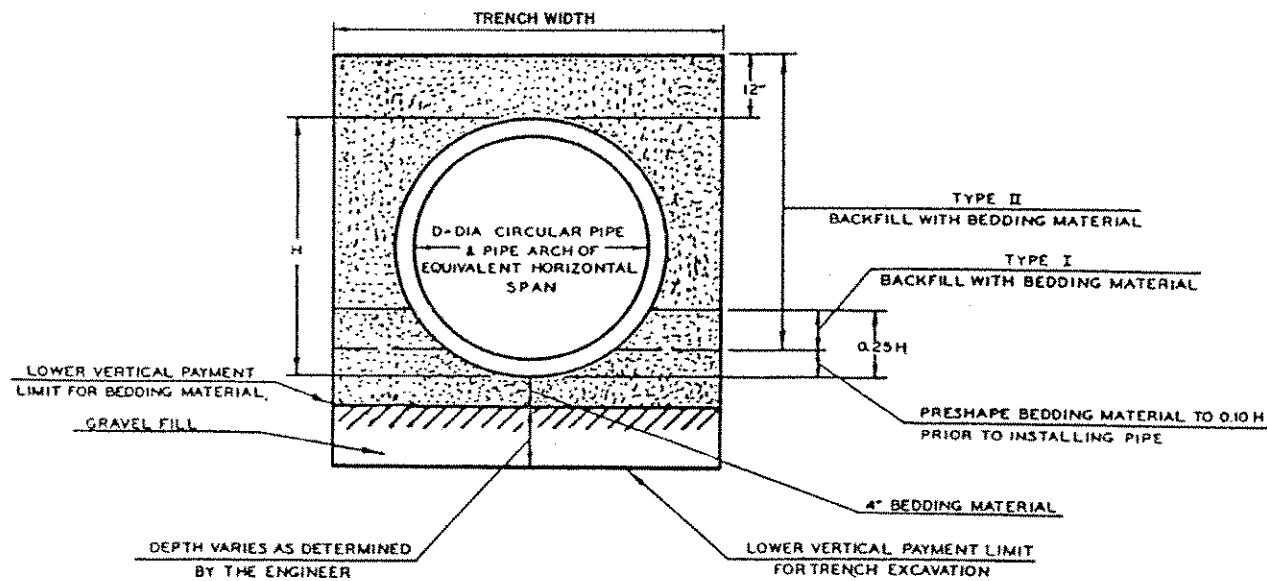


UNDERDRAIN



LOWER VERTICAL PAYMENT LIMIT FOR TRENCH EXCAVATION AND BEDDING MATERIAL

INSTALLATION WHERE GRAVEL FILL NOT USED



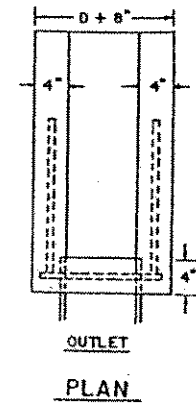
LOWER VERTICAL PAYMENT LIMIT FOR BEDDING MATERIAL

INSTALLATION WHERE GRAVEL FILL IS USED

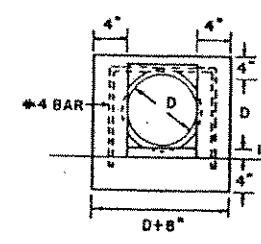
PIPE TRENCH

D	TRENCH WIDTH
LESS THAN 30"	D + 2'
30" OR GREATER	D + 3'

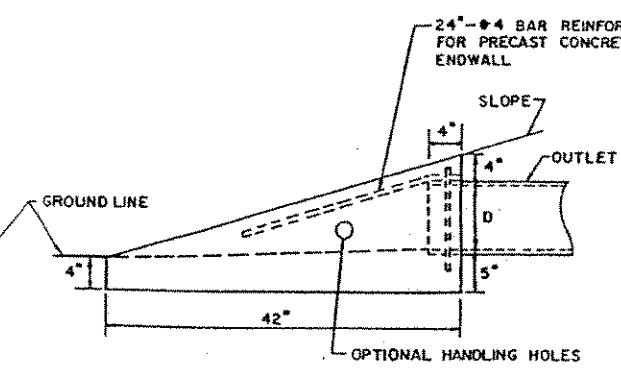
- NOTES:
1. USE TYPE I INSTALLATION FOR "D" LESS THAN 48"
 2. USE TYPE II INSTALLATION FOR "D" OF 48" OR LARGER.



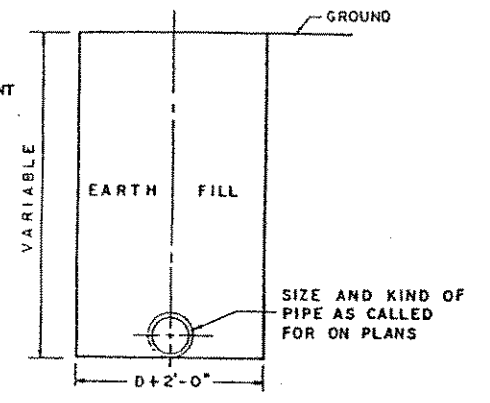
OUTLET PLAN



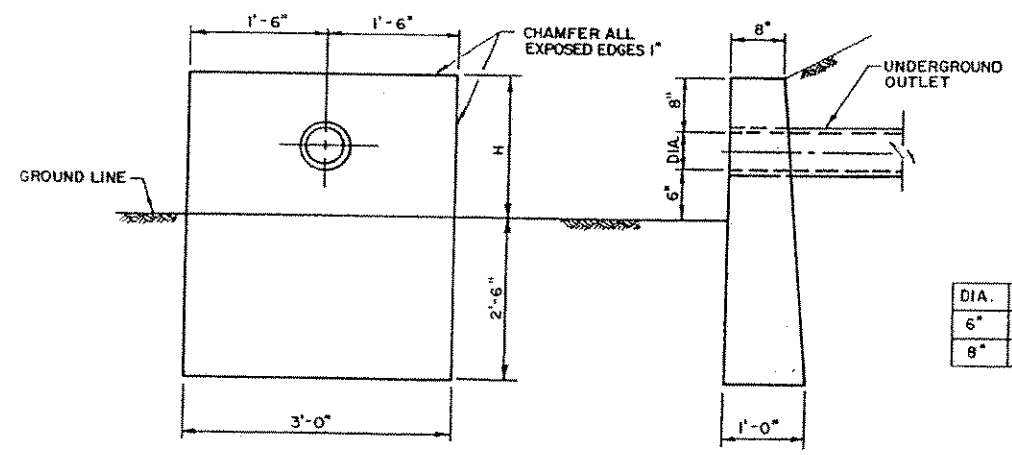
FRONT



SIDE ENDWALL



OUTLETS



FRONT VIEW

END VIEW

ENDWALL

DIA.	H
6"	1'-8"
8"	1'-10"

NOTES:

1. THE OUTLET ENDWALL CAN BE EITHER PRECAST OR CAST IN PLACE. CONCRETE SHALL BE CLASS "C" CONCRETE.
2. IF PRECAST CONC. ENDWALL IS USED, OUTLET SHALL BE GROUTED & SEALED TO ENDWALL OPENING WITH NON-SHRINK GROUT.

UNDERDRAIN OUTLET DETAILS

REVISIONS		
NO	DATE	DESCRIPTION
1	DEC. 1997	UNDERDRAIN

TOWN OF MONROE
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MONROE, CONNECTICUT

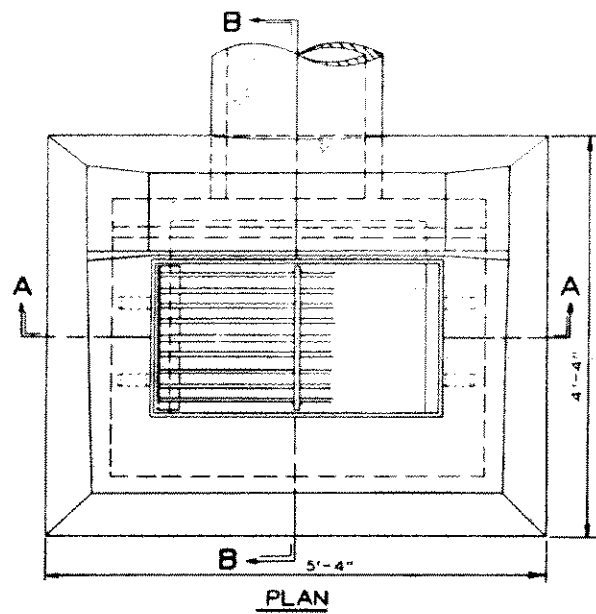
UNDERDRAINS, PIPE TRENCH

NOT TO SCALE NOV. 1990

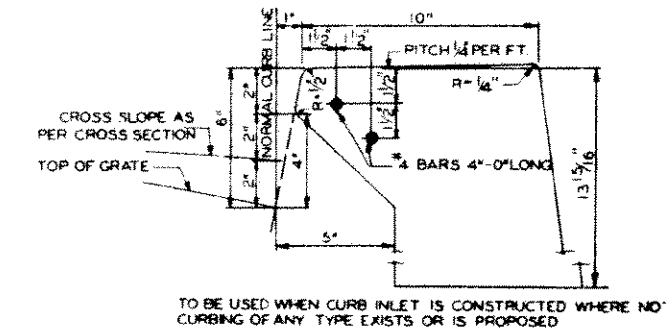
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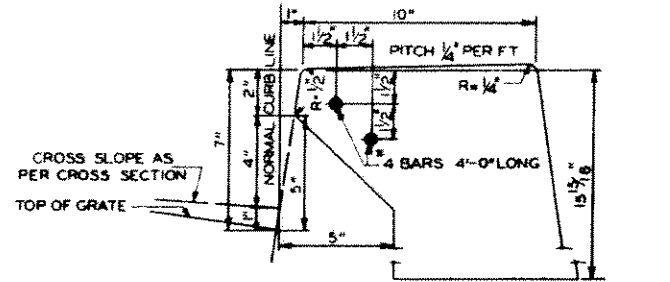
STD. NO. 4



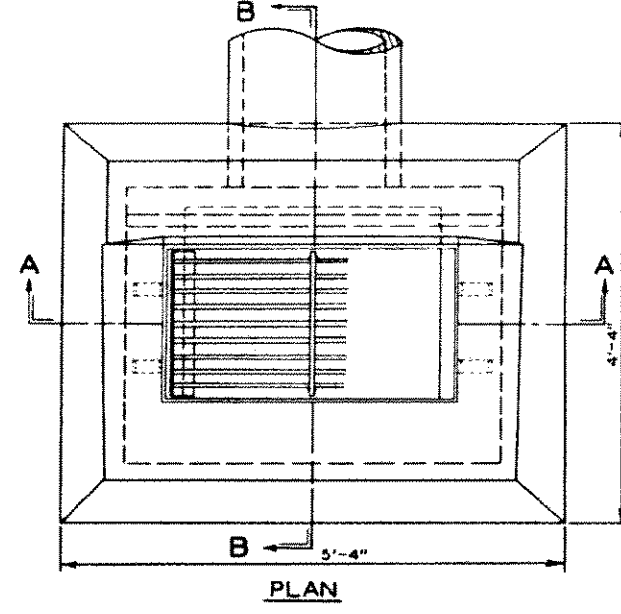
PLAN



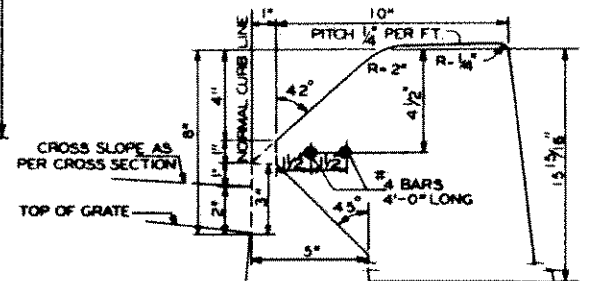
TO BE USED WHEN CURB INLET IS CONSTRUCTED WHERE NO CURBING OF ANY TYPE EXISTS OR IS PROPOSED



DETAIL OF CURB INLET
PLAIN CURB TYPE

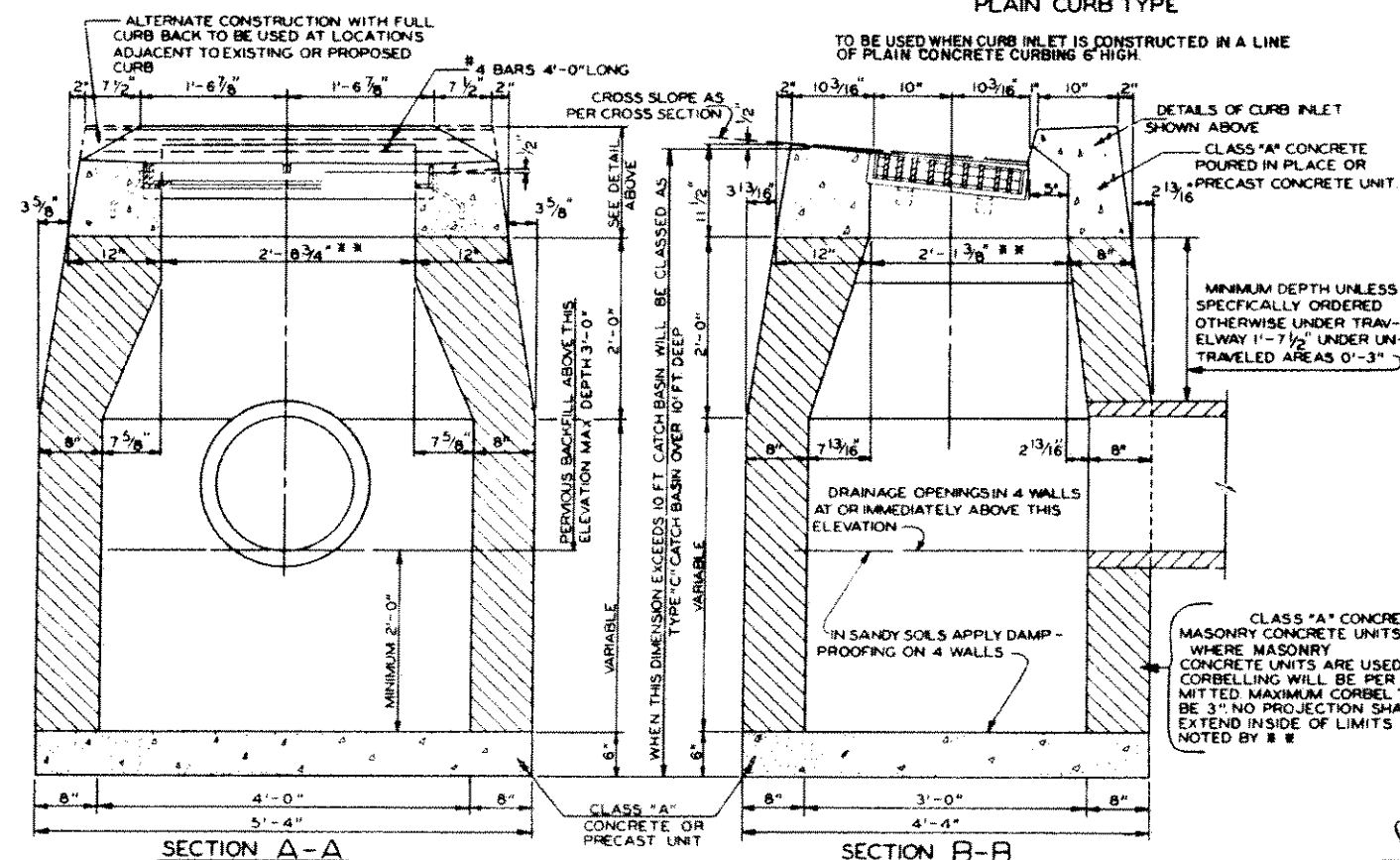


PLAN



DETAIL OF CURB INLET
BITUMINOUS CONCRETE
LIP CURBING

- NOTES
- FOR DETAILS OF FRAME SEE STD. SHEET NO 7.
 - WHERE TYPE "C" CATCH BASIN OR TYPE "C" DROP INLET IS CONSTRUCTED IN PAVEMENT AREA THE NORMAL CROSS SLOPE OF THE GUTTER SHALL BE VARIED TO MATCH CROSS SLOPE OF GRATE. DETAILS ARE SHOWN ON THIS SHEET.
 - WALLS OF ALL CATCH BASINS OVER 10 FEET DEEP TO BE INCREASED TO 12" THICKNESS INSIDE DIMENSIONS TO REMAIN THE SAME.

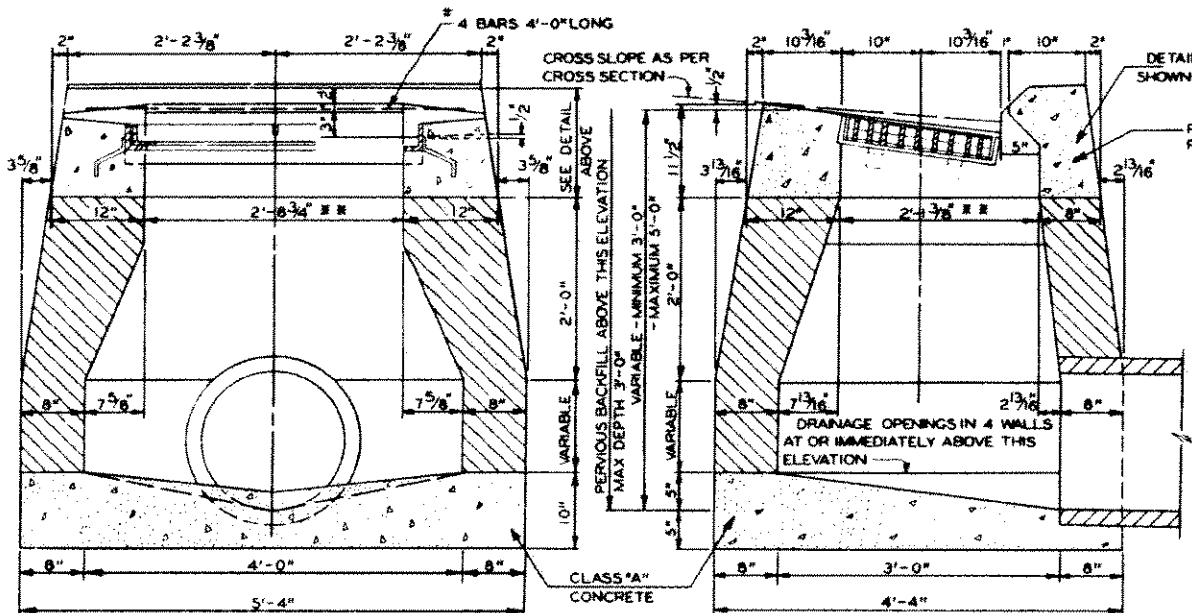


SECTION A-A

SECTION B-B

WHERE PRECAST CONCRETE UNIT IS USED FOR SUMP, THE TOP OF THE UNIT SHALL BE AT LEAST 6" BELOW THE BOTTOM OF THE PIPE OUTLET FROM THE CATCH BASIN.

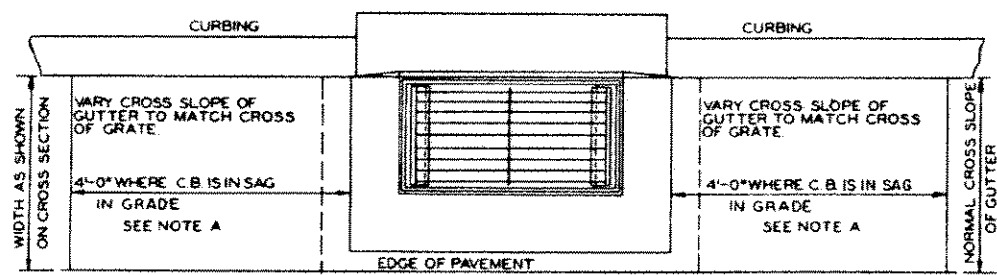
TYPE "C" CATCH BASIN



SECTION A-A

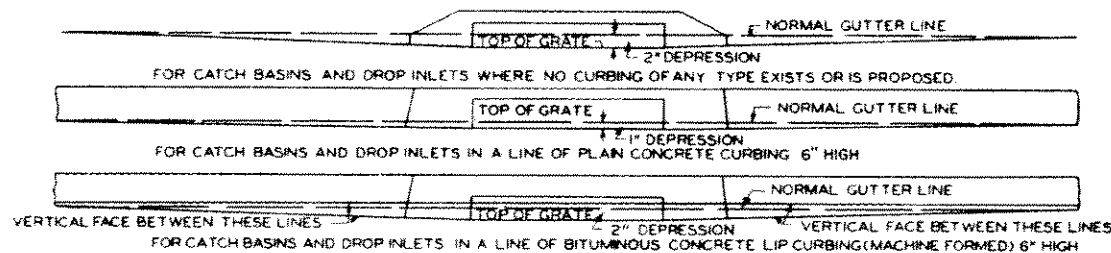
SECTION B-B

TYPE "C" DROP INLET



PLAN

NOTE A
6'-0" ON UPGRADE
SIDE OF CONTINUOUS GRADE
1'-0" ON DOWNGRADE SIDE
OF CONTINUOUS GRADE OR
AS DIRECTED



ELEVATION

DETAILS OF DEPRESSED GUTTER STRIP

REVISIONS		
NO	DATE	DESCRIPTION

TOWN OF MONROE
DEPARTMENT OF PUBLIC WORKS
MONROE, CONNECTICUT

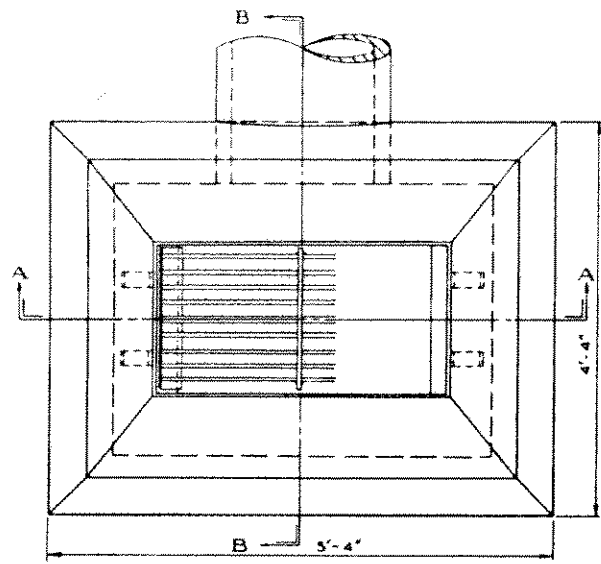
TYPE "C" CATCH BASIN
TYPE "C" DROP INLET

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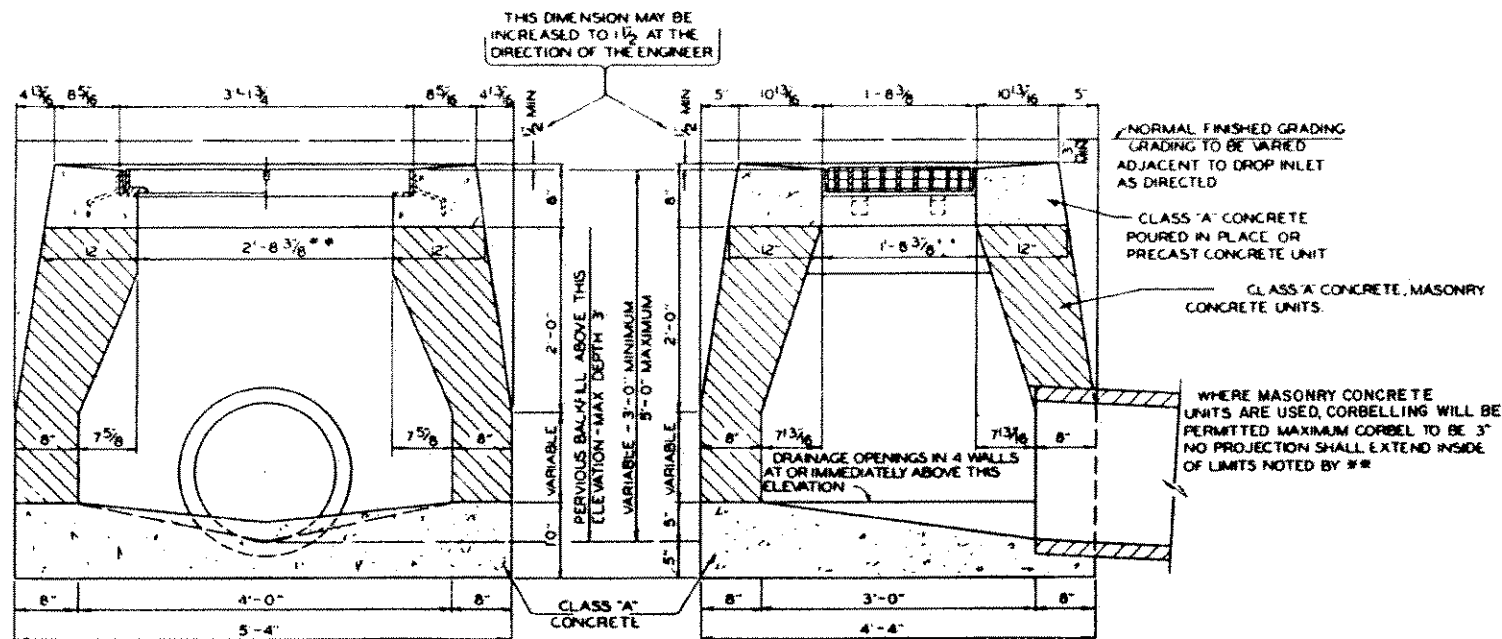
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STD. NO
5



PLAN

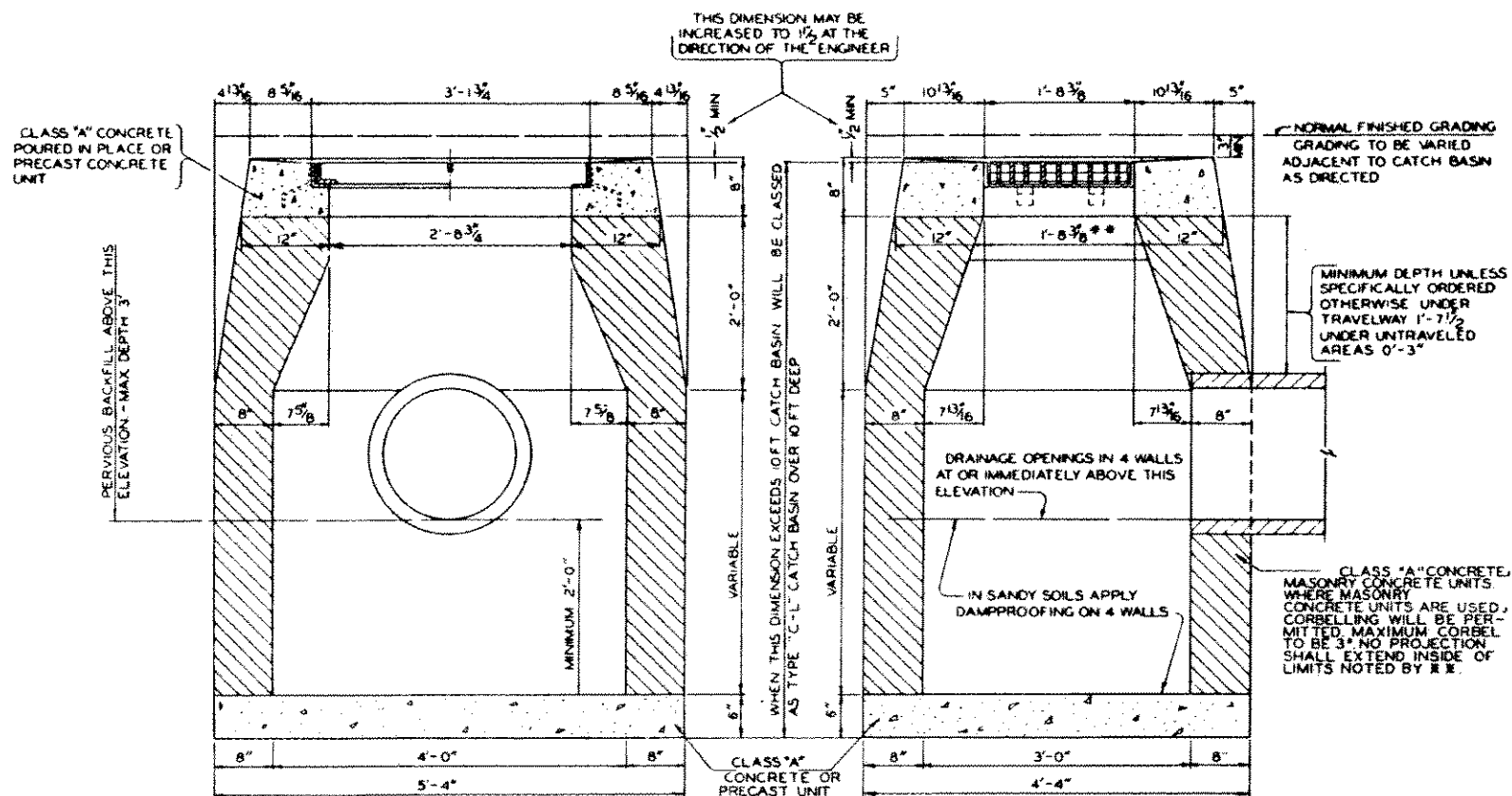
TYPE "C-L" CATCH BASIN & TYPE "C-L" DROP INLET



SECTION A-A

SECTION B-B

TYPE "C-L" DROP INLET



SECTION A-A

SECTION B-B

TYPE "C-L" CATCH BASIN

WHERE PRECAST CONCRETE UNIT IS USED FOR SUMP, THE TOP OF THE UNIT SHALL BE AT LEAST 6" BELOW THE BOTTOM OF THE PIPE OUTLETTING FROM THE CATCH BASIN.

NOTES

- FOR DETAIL OF FRAME AND GRATE SEE STD. SHEET NO. 7
- WALLS OF ALL CATCH BASINS OVER 10 FT. DEEP TO BE INCREASED TO 12" THICKNESS. INSIDE DIMENSIONS TO REMAIN THE SAME.

TOWN OF MONROE
DEPARTMENT OF PUBLIC WORKS
MONROE, CONNECTICUT

TYPE "C-L" CATCH BASIN
TYPE "C-L" DROP INLET

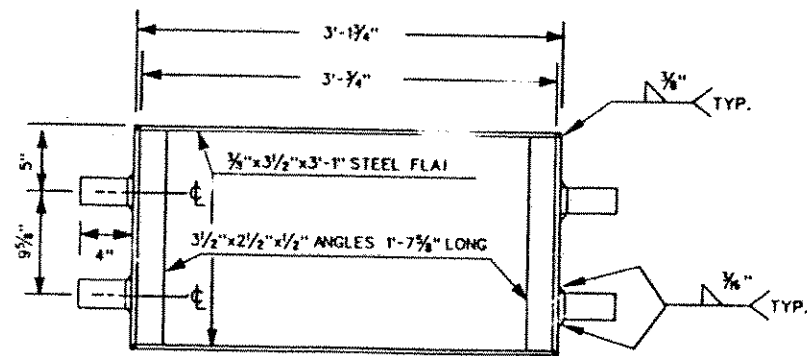
NOT TO SCALE NOV. 1990

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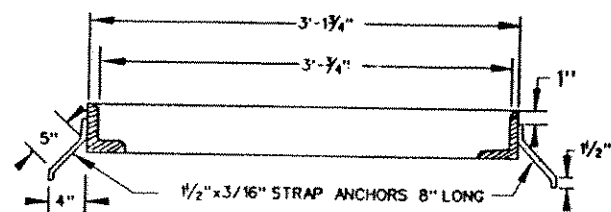
STD. NO.
6

REVISIONS		
NO	DATE	DESCRIPTION

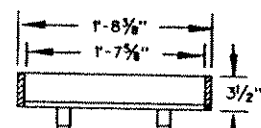
STEEL FRAME



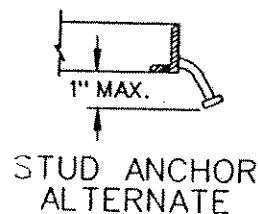
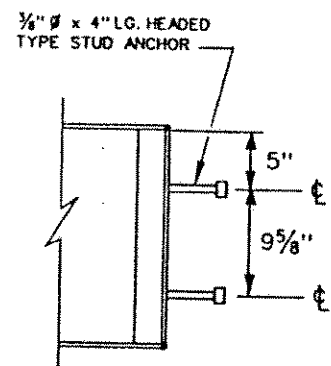
PLAN



LONGITUDINAL SECTION



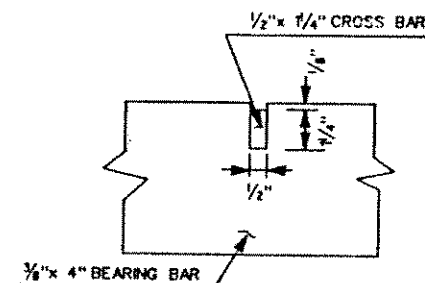
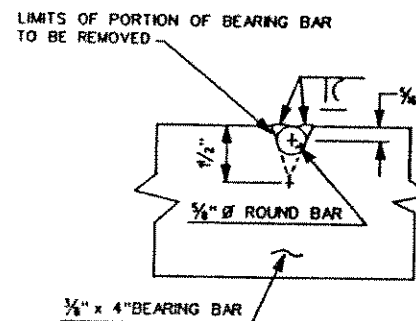
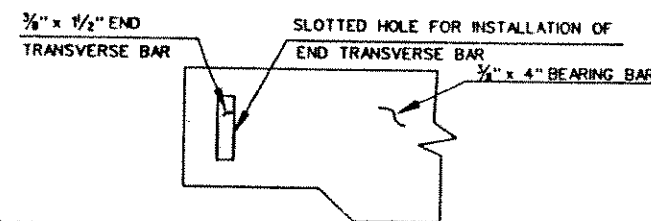
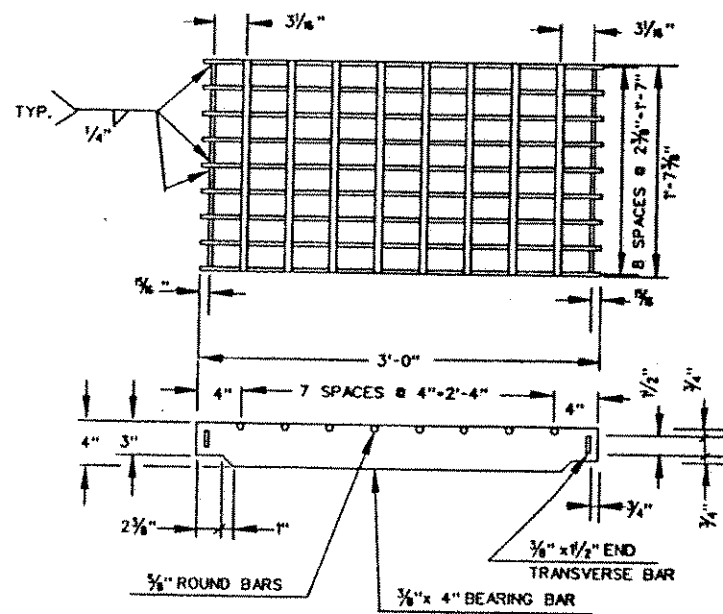
TRANSVERSE SECTION



STUD ANCHOR ALTERNATE

GRATE

TYPE A



NOTES

GENERAL

STEEL FRAMES AND GRATES SHALL BE GALVANIZED IN ACCORDANCE WITH M.06.03.

STEEL

ALL METAL UNITS SUBJECT TO MANUFACTURING TOLERANCES.

ONLY LOW HYDROGEN ELECTRODES SHALL BE USED.

DIMENSIONAL TOLERANCES MAY BE $\pm 1/16$ ".

WELDING WILL BE PERFORMED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION

NOTE: This Replaces Std. No. 7 Dated November, 1990

REVISIONS		
NO.	DATE	DESCRIPTION

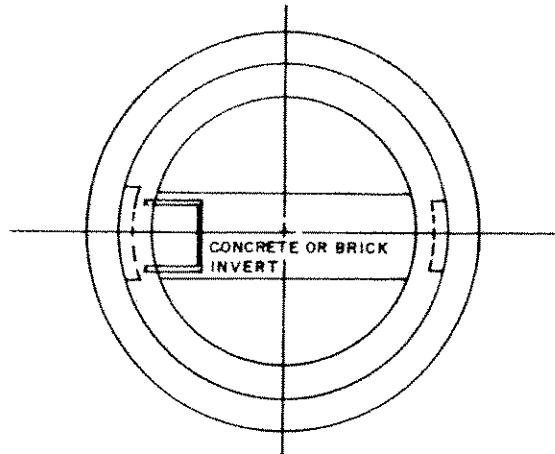
TOWN OF MONROE
DEPARTMENT OF PUBLIC WORKS
MONROE, CONNECTICUT

**STEEL FRAME AND GRATE - TYPE A
FOR TYPE 'C' AND 'C-L'
CATCH BASIN AND DROP INLET**

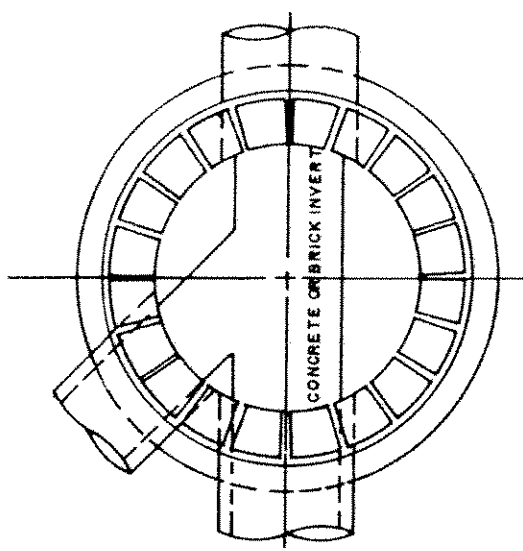
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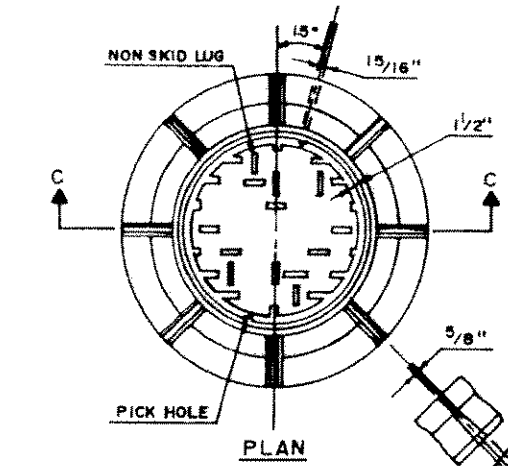
SHEET NO. 7



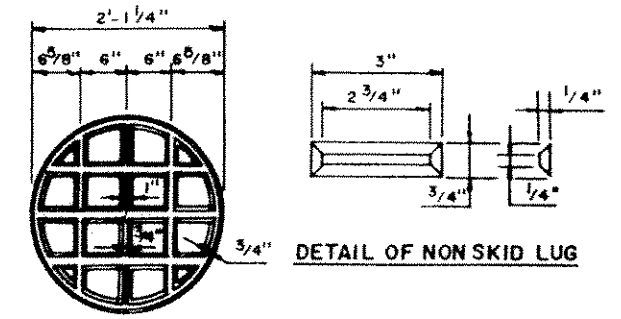
CROSS SECTION A-A



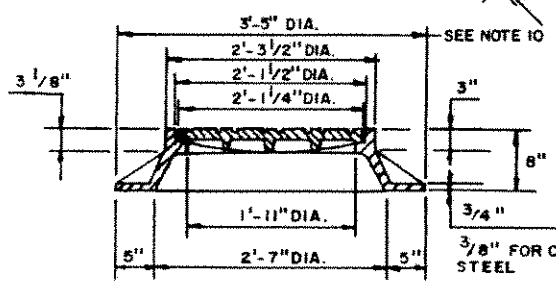
CROSS SECTION B-B



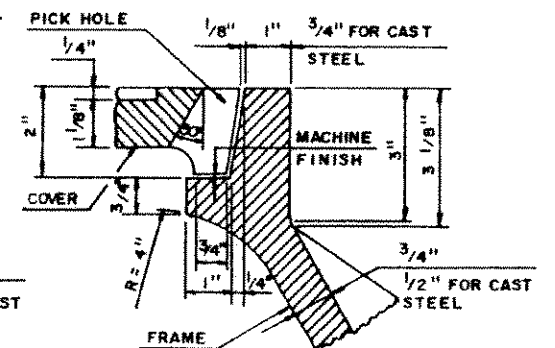
PLAN



DETAIL OF NON SKID LUG



SECTION C-C



DETAIL OF SEAT

FRAME & COVER

MATERIAL	CAST IRON	CAST STEEL
APPROXIMATE WEIGHT COVER	184 LB.	134 LB.
APPROXIMATE WEIGHT FRAME	312 LB.	227 LB.

ALL DIMENSIONS SUBJECT TO MANUFACTURING TOLERANCES.

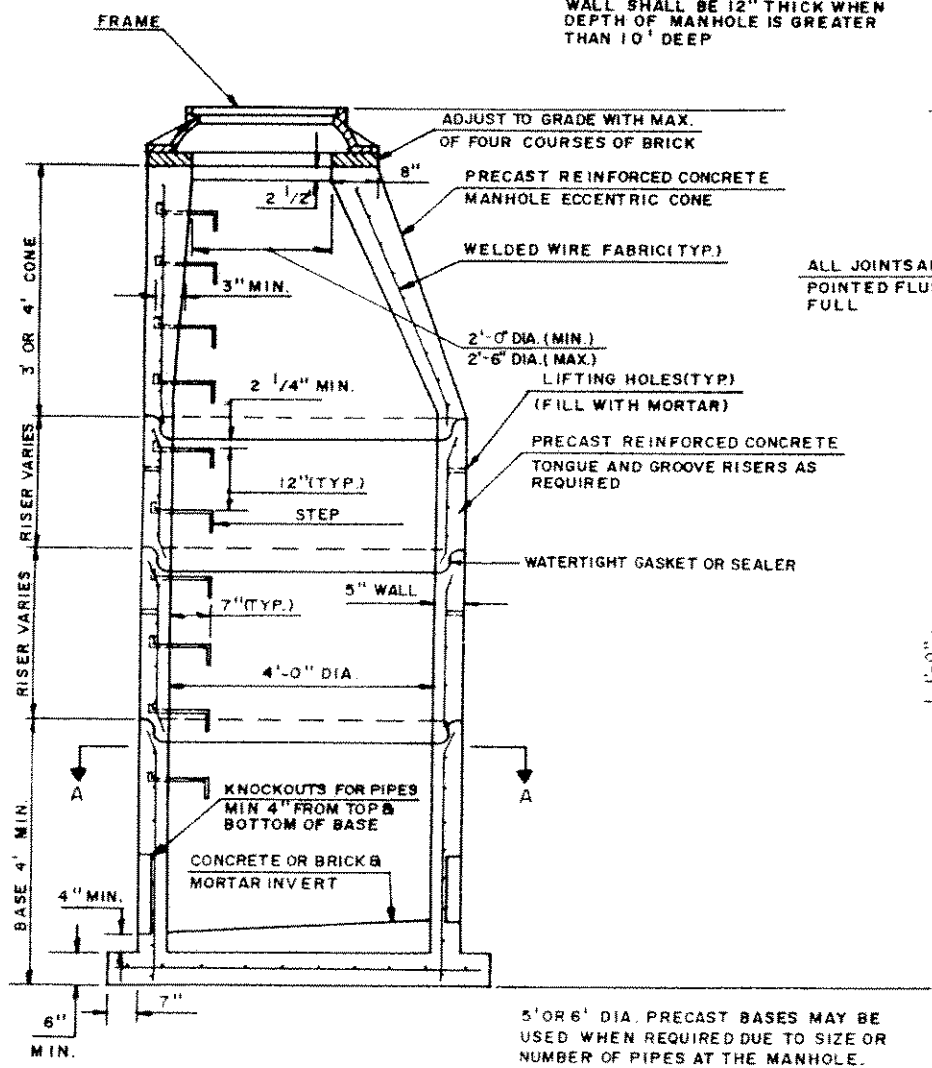
NOTES

1. WALLS SHALL BE BUILT OF MASONRY CONCRETE UNITS OR CLASS "A" CONCRETE AT THE OPTION OF THE CONTRACTOR.
2. MASONRY CONCRETE UNITS TO BE LAID IN CEMENT SAND MORTAR 1:2 MIX. JOINTS TO BE NOT OVER 1/2" ON INSIDE FACE.
3. CHANNELS MAY BE SHAPED IN CONCRETE BASE OF MANHOLE OR FORMED OF BRICK OR MASONRY.
4. BOLTED TYPE MANHOLE COVER SHALL BE USED AS DIRECTED BY THE ENGINEER.
5. UNLESS OTHERWISE SPECIFIED CLASS "A" CONCRETE SHALL CONFORM TO THE "STATE OF CONNECTICUT, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION", FORM 814, 1988, OR LATEST REVISION.
6. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
7. CAST IRON SHALL CONFORM TO AASHTO M105, CLASS 25 FOR FRAMES AND CLASS 50 FOR GRATES.
8. CAST STEEL SHALL CONFORM TO ASTM A27, GRADE OPTIONAL, AND SHALL BE THOROUGHLY ANNEALED.
9. BRICK SHALL CONFORM TO AASHTO M91, GRADE SS.
10. A FRAME DIAMETER OF 3'-3" WITH 4" FLANGE MUST BE USED WHEN THE TOP DIAMETER OF THE PRECAST CONE IS LESS THAN 3'-6". ALL OTHER FRAME DIMENSIONS ARE TO REMAIN THE SAME.

WALL SHALL BE A MIN. OF 6" WITH MASONRY CONCRETE UNITS AND CLASS "A" CONCRETE. WALL SHALL BE 12" THICK WHEN DEPTH OF MANHOLE IS GREATER THAN 10' DEEP

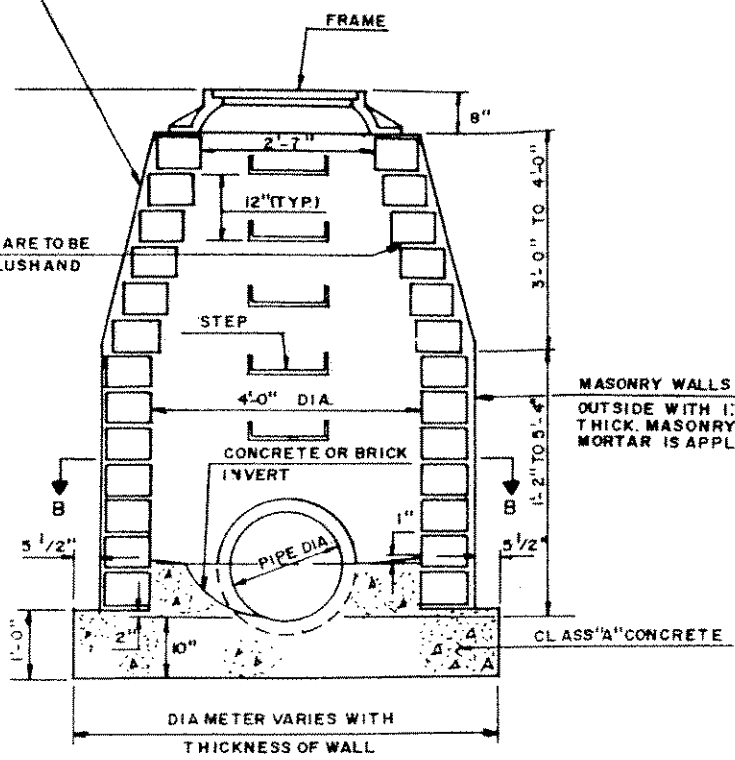
ALL JOINTS ARE TO BE POINTED FLUSH AND FULL

MASONRY WALLS ARE TO BE PLASTERED OUTSIDE WITH 1:2 CEMENT MORTAR 1/2" THICK. MASONRY MUST BE WET WHEN MORTAR IS APPLIED.



VERTICAL SECTION MANHOLE REINFORCED PRECAST CONCRETE UNITS

5' OR 6' DIA. PRECAST BASES MAY BE USED WHEN REQUIRED DUE TO SIZE OR NUMBER OF PIPES AT THE MANHOLE. PRECAST REDUCERS WILL BE PLACED ABOVE THE 5' AND 6' AS DIRECTED BY THE ENGINEER. WALL THICKNESS TO INCREASE 1" FOR EACH 1' OF INSIDE DIAMETER INCREASE.



VERTICAL SECTION MANHOLE MASONRY CONCRETE UNITS OR CLASS "A" CONCRETE

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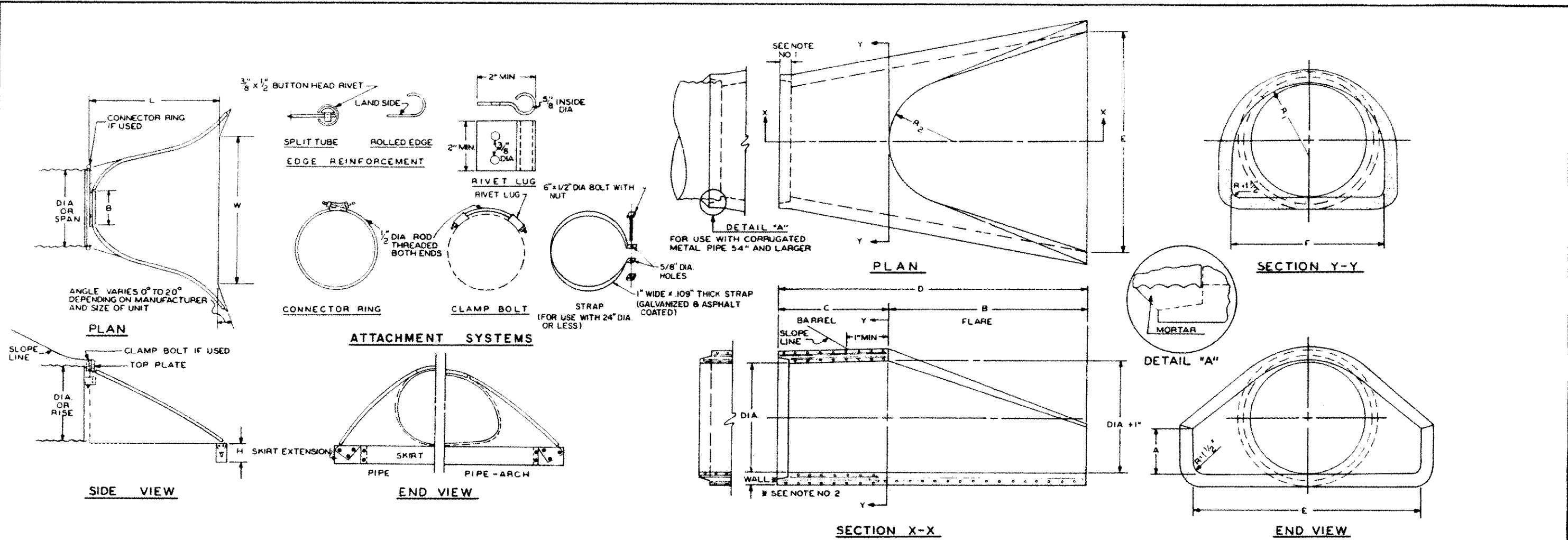
**MANHOLE
FRAME AND COVER**

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REVISIONS		
NO.	DATE	DESCRIPTION



NOTES
 1. JOINTS SHALL BE TONGUE AND GROOVE OR BELL AND SPIGOT AS REQUIRED TO PIPE INSTALLED.
 2. WALL THICKNESS SHALL CONFORM TO PIPE THICKNESS.

METAL CULVERT END

REINFORCED CONCRETE CULVERT END

PIPE ARCH SIZE	DIMENSIONS FOR METAL CULVERT END					THICKNESS (INCHES)
	SPAN	RISE	B (MAX)	H (± 1")	L (± 1/2")	
17"	13"	9"	6"	9"	30"	064
21"	15"	10"	6"	23"	36"	064
24"	18"	12"	6"	28"	42"	064
28"	20"	14"	6"	32"	48"	064
35"	24"	16"	6"	39"	60"	079
42"	29"	18"	8"	46"	75"	079
49"	33"	21"	9"	53"	85"	109
57"	38"	26"	12"	63"	90"	109
64"	43"	30"	12"	70"	102"	109
71"	47"	33"	12"	77"	114"	109

PIPE DIA.	DIMENSIONS FOR METAL CULVERT END					THICKNESS (INCHES)
	B (MAX)	H (± 1")	L (± 1/2")	W (± 2")	THICKNESS (INCHES)	
12"	6"	6"	21"	24"	064	
15"	8"	6"	26"	30"	064	
18"	10"	6"	31"	36"	064	
21"	12"	6"	36"	42"	064	
24"	13"	6"	41"	48"	064	
30"	16"	8"	51"	60"	079	
36"	19"	9"	60"	72"	079	
42"	22"	11"	69"	84"	109	
48"	27"	12"	78"	90"	109	
54"	30"	12"	84"	102"	109	
60"	33"	12"	87"	114"	109	
66"	36"	12"	87"	120"	109	
72"	39"	12"	87"	126"	109	
78"	42"	12"	87"	132"	109	
84"	45"	12"	87"	138"	109	

DIA.	DIMENSIONS FOR REINFORCED CONCRETE CULVERT END								FLARE REINFORCEMENT	
	A	B	C	D	E	F	R ₁	R ₂	MIN. AREA OF LONGITUDINALS SQ. IN. PER FT.	MIN. AREA OF TRANSVERSE STEEL SQ. IN. PER FT.
12"	4"	2'-0"	4'-0 3/8"	6'-0 3/8"	2'-0"	1'-7 15/16"	10 ka"	9"	0.048	0.048
15"	6"	2'-3"	3'-10"	6'-1"	2'-6"	2'-0 3/16"	1'-0 1/2"	11"	0.054	0.054
18"	9"	2'-3"	3'-10"	6'-1"	3'-0"	2'-5"	1'-3 1/2"	1'-0"	0.060	0.060
21"	9"	2'-11"	3'-2"	6'-1"	3'-6"	2'-7 1/2"	1'-4"	1'-1"	0.066	0.066
24"	9 1/2"	3'-7 1/2"	2'-6"	6'-1 1/2"	4'-0"	2'-9 3/16"	1'-4 3/16"	1'-2"	0.072	0.072
30"	1'-0"	4'-6"	1'-7 3/4"	6'-1 3/4"	5'-0"	3'-1"	1'-6 1/2"	1'-3"	0.084	0.084
36"	1'-3"	5'-3"	2'-10 3/4"	8'-1 3/4"	6'-0"	3'-11 1/8"	2'-0 1/8"	1'-8"	0.096	0.096
42"	1'-9"	5'-3"	2'-11"	8'-2"	6'-6"	4'-5 7/8"	2'-3 1/2"	1'-10"	0.108	0.108
48"	2'-0"	6'-0"	2'-2"	8'-2"	7'-0"	4'-8 1/2"	2'-4 1/2"	1'-10"	0.120	0.120
54"	2'-3"	5'-5"	2'-11"	8'-4"	7'-6"	5'-5 1/2"	2'-9 1/8"	2'-0"	0.132	0.132
60"	2'-6"	5'-0"	3'-3"	8'-3"	8'-0"	6'-0 1/2"	3'-0 1/8"	2'-0"	0.144	0.144

REVISIONS		
NO.	DATE	DESCRIPTION

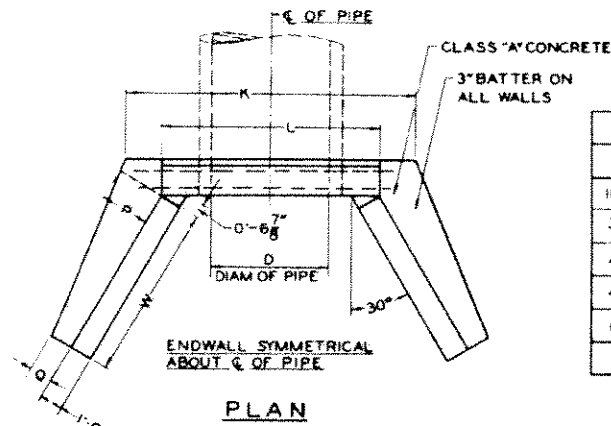
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 DEPARTMENT OF PUBLIC WORKS
 MONROE, CONNECTICUT

**METAL AND REINFORCED
 CONCRETE CULVERT END**

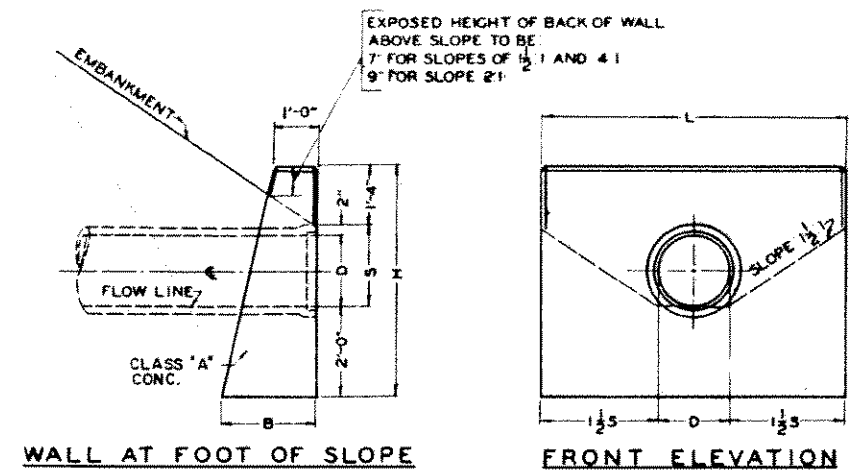
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D	B	C	G	H	K	L	P	Q	R	W	VOL.
INS	FT.&INS	FT.&INS	FT.&INS	FT.&INS	FT.&INS	FT.&INS	FT.&INS	FT.&INS	FT.&INS	FT.&INS	CU.YD.
36"	1'-6"	2'-0"	3'-3"	6'-8"	9'-1 1/2"	7'-3 3/4"	1'-4 7/8"	0'-9 3/4"	3'-4 7/8"	5'-5 3/4"	5.87
42"	1'-6"	2'-0"	3'-3"	7'-2"	9'-10 1/2"	7'-9 3/4"	1'-6 3/8"	0'-9 3/4"	3'-10 1/2"	6'-7 3/4"	6.67
48"	1'-7"	2'-6"	3'-9"	8'-2"	10'-10"	8'-3 3/4"	1'-9 3/8"	0'-11 1/4"	4'-9"	7'-9 1/2"	9.11
60"	1'-7"	2'-6"	3'-9"	9'-2"	12'-4 1/2"	9'-3 3/4"	2'-0 3/8"	0'-11 1/4"	5'-9"	10'-1 1/2"	12.43
72"	1'-7"	2'-6"	3'-9"	10'-2"	13'-10 3/8"	10'-3 3/4"	2'-3 3/8"	0'-11 1/4"	6'-9"	12'-5 1/2"	18.30



STANDARD ENDWALL

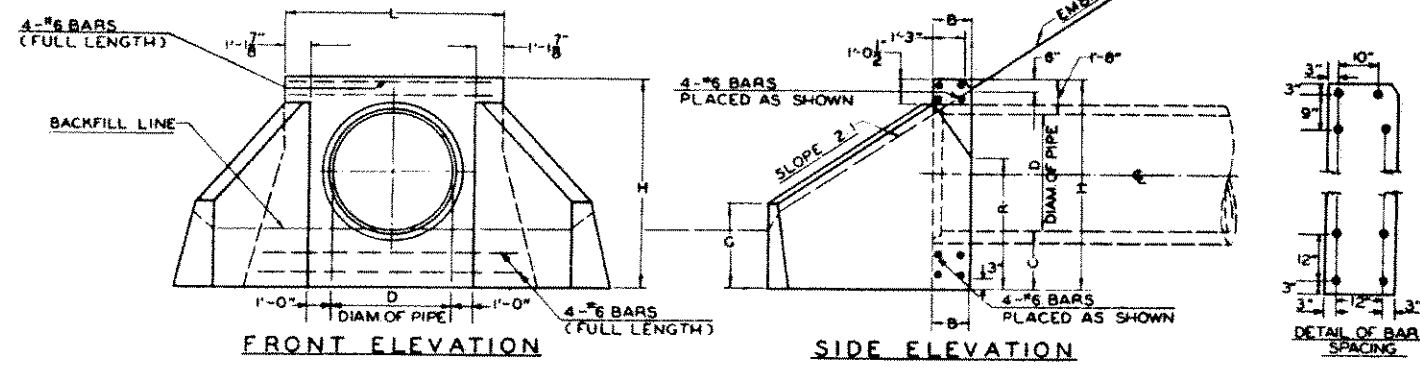
H = TOTAL HEIGHT OF ENDWALL
 B = BASE
 D = INSIDE DIAMETER OF PIPE
 S = HEIGHT OF SLOPE ABOVE FLOW LINE AT FACE OF WALL - MINIMUM = D+2"
 L = LENGTH OF WALL = 3S+D

D	S	H	L	BATTER	B	VOL.
INS	FT.&INS	FT.&INS	FT.&INS	INS/FT.	FT.&INS	CU.YD.
12"	1'-2"	4'-8"	4'-8"	2 1/2"	1'-11 1/4"	1.10
15"	1'-5"	4'-9"	5'-6"	2 1/2"	1'-11 3/8"	1.45
18"	1'-8"	5'-0"	6'-6"	2 1/2"	2'-0 1/2"	1.83
24"	2'-2"	5'-6"	8'-6"	2 1/2"	2'-3 1/4"	2.72
30"	2'-8"	6'-0"	10'-6"	2 1/2"	2'-3"	3.79
36"	3'-2"	6'-6"	12'-6"	3"	2'-7 1/2"	5.45
42"	3'-8"	7'-0"	14'-6"	3"	2'-9"	6.40*
48"	4'-2"	7'-6"	16'-6"	3"	2'-10 1/2"	8.00*

* VOLUME BASED ON 'D' AND WALL THICKNESS AT C OF PIPE HAS BEEN DEDUCTED

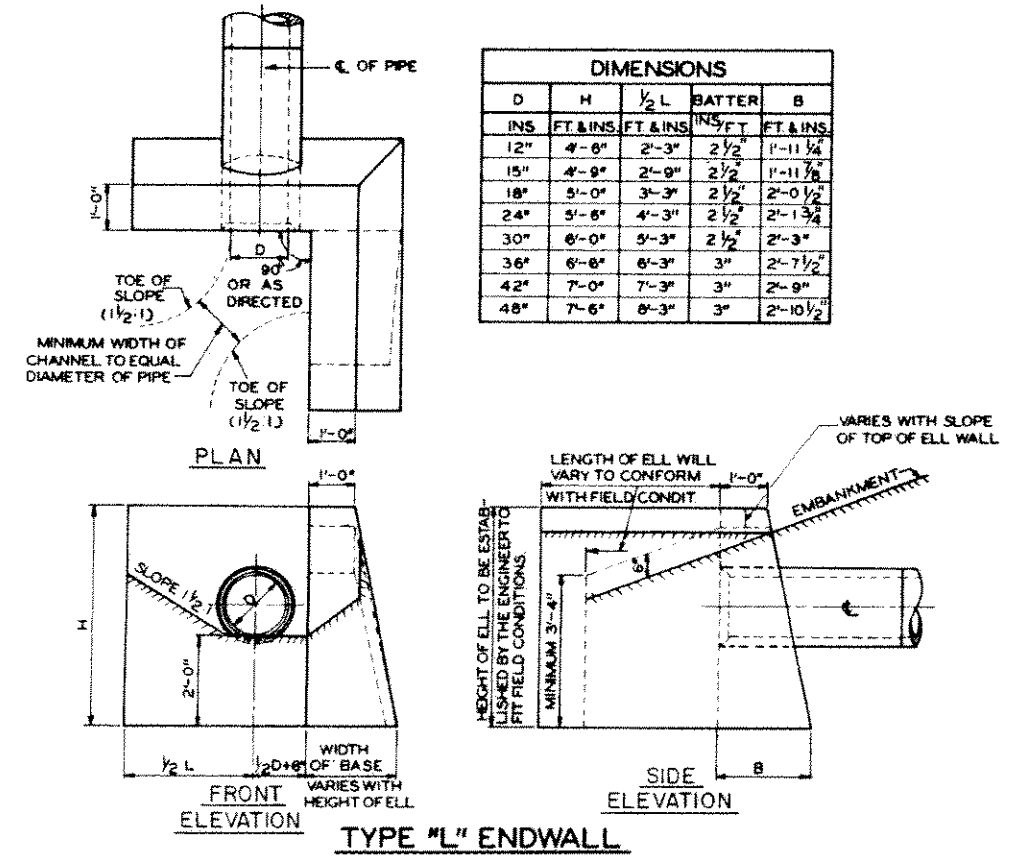
GENERAL NOTES

- ALL EDGES OF EXPOSED SURFACES TO BE CHAMFERED APPROXIMATELY ONE INCH.
- ALL CONSTRUCTION DIMENSIONS ARE NOMINAL.
- THESE ENDWALLS WILL BE USED ONLY AT LOCATIONS WHERE THEY WILL NOT BE A HAZARD TO VEHICLES THAT RUN OFF THE ROAD.
- WHEN ONE ENDWALL IS TO BE USED FOR TWO PIPES, THE DIMENSIONS OF THAT ENDWALL SHALL CONFORM TO THAT REQUIRED FOR THE LARGER PIPE, EXCEPT THE DIMENSION 'L' SHALL BE INCREASED BY THE OUTSIDE DIAMETER OF THE SMALLER PIPE PLUS ONE FOOT.
- CONSTRUCTION MATERIAL TO BE CLASS 'A' CONCRETE.



STANDARD WING TYPE ENDWALL

REINFORCEMENT TO BE PLACED FOR 48" PIPE AND UP



TYPE 'L' ENDWALL

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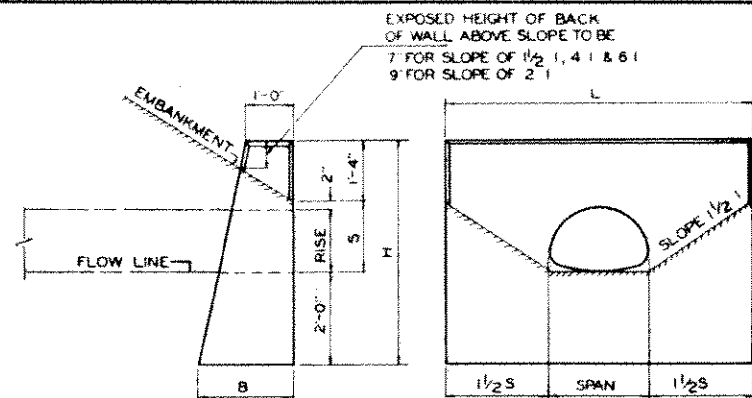
ENDWALLS

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NO.	DATE	DESCRIPTION



WALL AT FOOT OF SLOPE

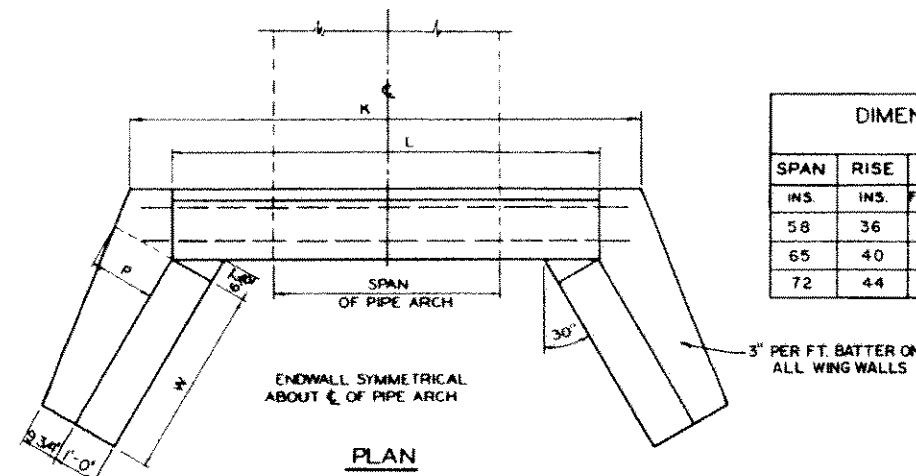
FRONT ELEVATION

DIMENSIONS AND QUANTITIES FOR ONE ENDWALL BASED ON S = RISE + 2"

SPAN	RISE	S	H	L	BATTER	B	VOL.
INS.	INS.	FT & INS.	FT & INS.	FT & INS.	INS./FT.	FT & INS.	C.Y.
18	11	1'-1"	4'-5"	4'-9"	2 1/2	1'-11"	1.13
22	13	1'-3"	4'-7"	5'-7"	2 1/2	1'-11 1/2	1.40
25	16	1'-6"	4'-10"	6'-7"	2 1/2	2'-0 1/4	1.78
29	18	1'-8"	5'-0"	7'-5"	2 1/2	2'-0 1/2	2.12
36	22	2'-0"	5'-4"	9'-0"	2 1/2	2'-1 3/8	2.77
43	27	2'-5"	5'-9"	10'-10"	2 1/2	2'-2 3/8	3.68
50	31	2'-9"	6'-1"	12'-5"	2 1/2	2'-3 1/4	4.57
58	36	3'-2"	6'-6"	14'-4"	3"	2'-7 1/2	5.17 *
65	40	3'-6"	6'-10"	15'-11"	3"	2'-8 1/2	6.52 *
72	44	3'-10"	7'-2"	17'-6"	3"	2'-9 1/2	7.61 *

* VOLUME BASED ON AREA OF PIPE-ARCH AND WALL THICKNESS HAS BEEN DEDUCTED
 A TOLERANCE OF PLUS OR MINUS 1 INCH WILL BE PERMITTED IN DIMENSIONS SPAN, RISE, H, L AND B.

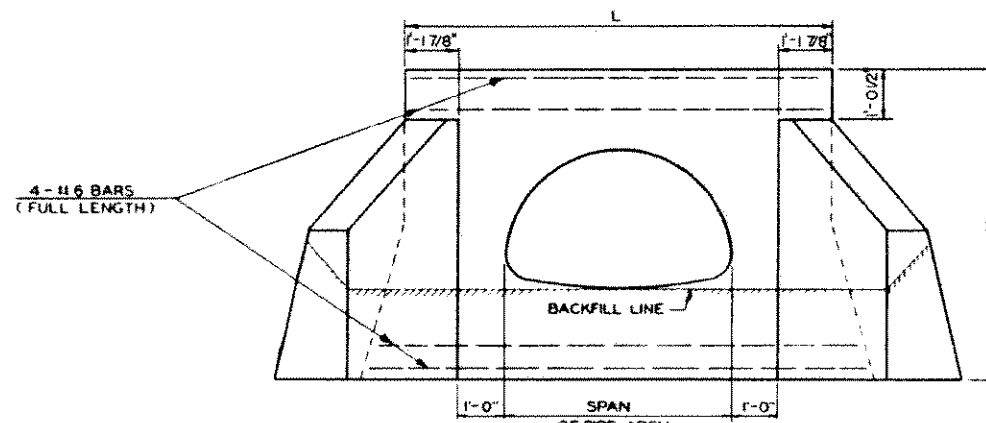
STANDARD ENDWALL FOR PIPE-ARCH



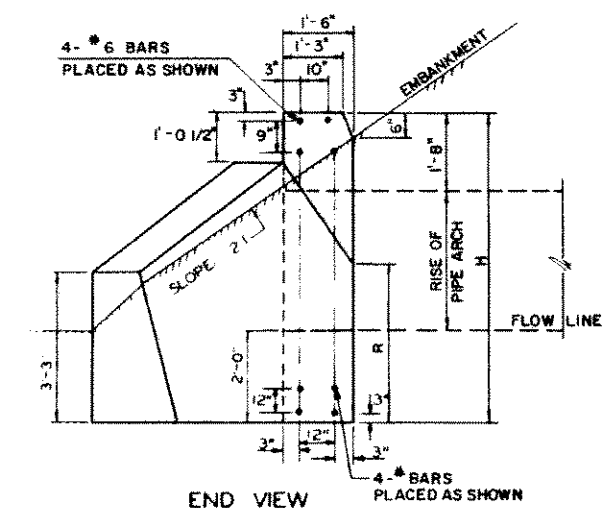
PLAN

DIMENSIONS AND QUANTITIES FOR ONE WING TYPE ENDWALL

SPAN	RISE	H	K	L	P	R	W	VOL.
INS.	INS.	FT & INS.	FT & INS.	FT & INS.	FT & INS.	FT & INS.	FT & INS.	C.Y.
58	36	6'-8"	10'-11 1/2"	9'-4 7/8"	1'-4 7/8"	3'-4 7/8"	5'-5 3/4"	6.00
65	40	7'-0"	11'-9"	9'-8 3/4"	1'-5 7/8"	3'-8 7/8"	6'-3"	7.00
72	44	7'-4"	12'-6 1/2"	10'-3 3/4"	1'-6 7/8"	4'-0 7/8"	7'-0 1/4"	8.50



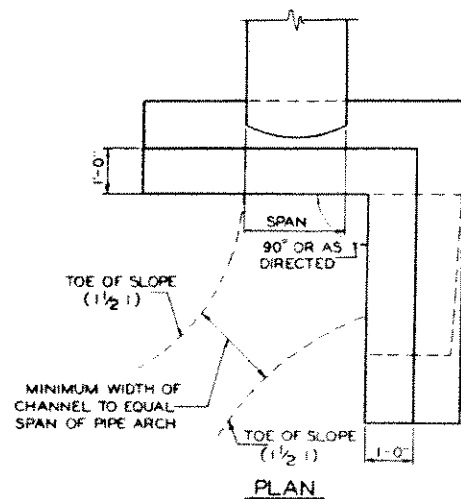
SIDE VIEW



END VIEW

STANDARD WING TYPE ENDWALL FOR PIPE-ARCH

H = TOTAL HEIGHT OF ENDWALL
 B = BASE
 S = HEIGHT OF SLOPE ABOVE FLOW LINE AT FACE OF WALL - MINIMUM = RISE + 2"
 L = LENGTH OF WALL = 3S + SPAN

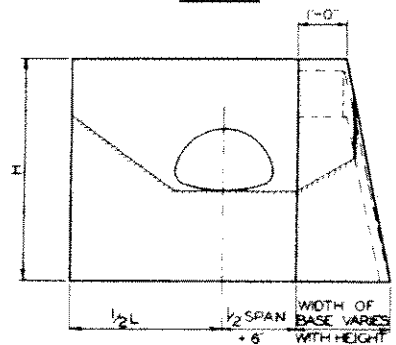


PLAN

DIMENSIONS

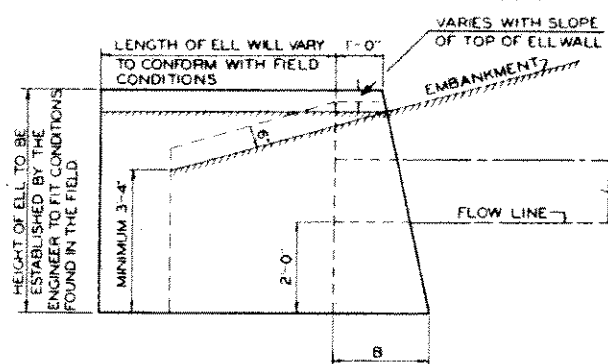
SPAN	RISE	H	1/2 L	BATTER	B
INS.	INS.	FT & INS.	FT & INS.	INS./FT.	FT & INS.
18	11	4'-5"	2'-4 1/2	2 1/2	1'-11"
22	13	4'-7"	2'-9 1/2	2 1/2	1'-11 1/2
25	16	4'-10"	3'-3 1/2	2 1/2	2'-0 1/4
29	18	5'-0"	3'-8 1/2	2 1/2	2'-0 1/2
36	22	5'-4"	4'-6"	2 1/2	2'-1 3/8
43	27	5'-9"	5'-5"	2 1/2	2'-2 3/8
50	31	6'-1"	6'-2 1/2	2 1/2	2'-3 1/4
58	36	6'-6"	7'-2"	3"	2'-7 1/2
65	40	6'-10"	7'-11 1/2	3"	2'-8 1/2
72	44	7'-2"	8'-9"	3"	2'-9 1/2

A TOLERANCE OF PLUS OR MINUS 1 INCH WILL BE PERMITTED IN DIMENSIONS SPAN, RISE, 1/2 L AND B.



FRONT VIEW

TYPE "L" ENDWALL FOR PIPE-ARCH



SIDE VIEW

GENERAL NOTES

- ALL EDGES OF EXPOSED SURFACES TO BE CHAMFERED APPROXIMATELY ONE INCH.
- ALL CONSTRUCTION DIMENSIONS ARE NOMINAL.
- THESE ENDWALLS WILL BE USED ONLY AT LOCATIONS WHERE THEY WILL NOT BE A HAZARD TO VEHICLES THAT RUN OFF THE ROAD.
- WHEN ONE ENDWALL IS TO BE USED FOR TWO PIPES, THE DIMENSIONS OF THAT ENDWALL SHALL CONFORM TO THAT REQUIRED FOR THE LARGER PIPE, EXCEPT THE DIMENSION "L" SHALL BE INCREASED BY THE OUTSIDE DIAMETER OF THE SMALLER PIPE PLUS ONE FOOT.
- CONSTRUCTION MATERIAL TO BE CLASS "A" CONCRETE.

REVISIONS

NO.	DATE	DESCRIPTION

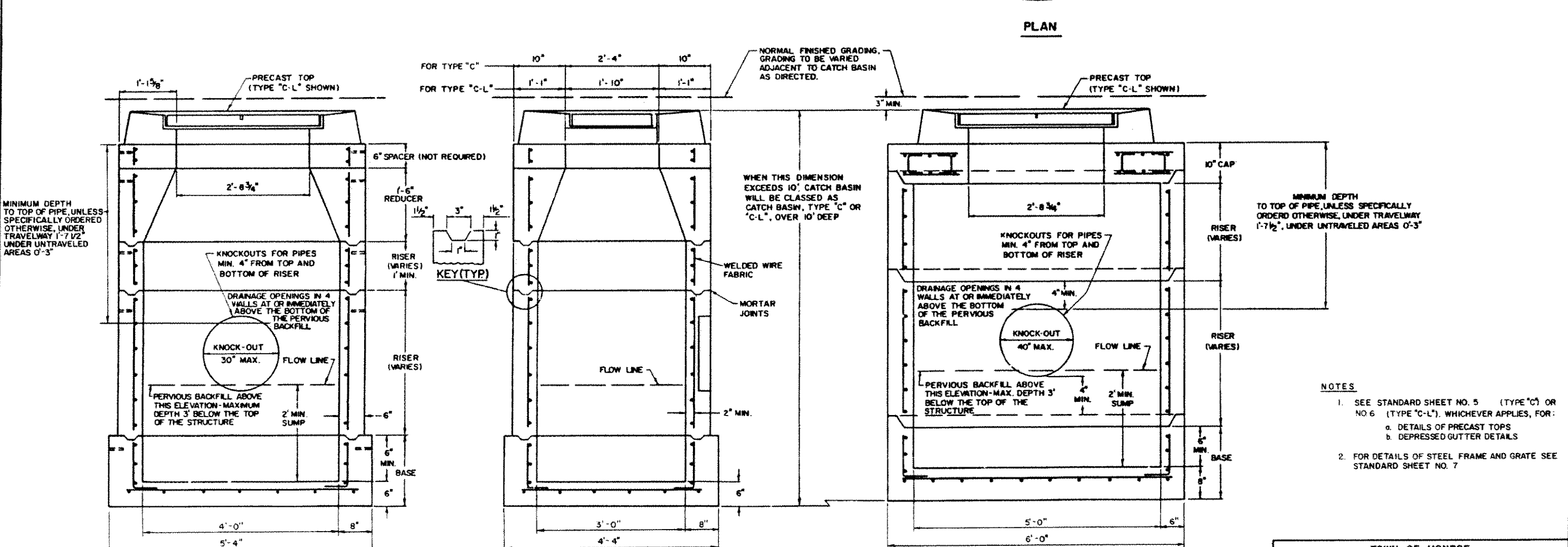
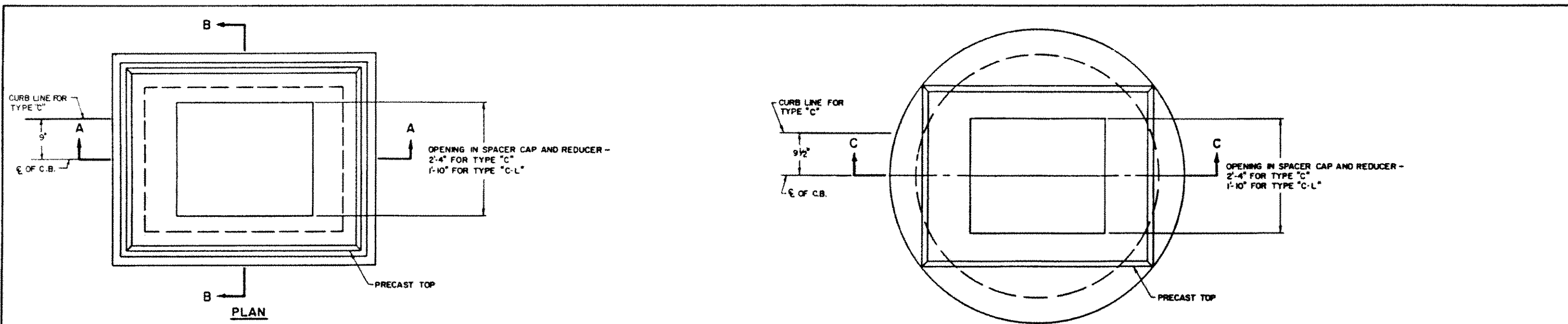
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ENDWALLS
 FOR PIPE-ARCH

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- NOTES**
- SEE STANDARD SHEET NO. 5 (TYPE "C") OR NO. 6 (TYPE "C-L"), WHICHEVER APPLIES, FOR:
 - DETAILS OF PRECAST TOPS
 - DEPRESSED GUTTER DETAILS
 - FOR DETAILS OF STEEL FRAME AND GRATE SEE STANDARD SHEET NO. 7

SECTION A-A
STANDARD CATCH BASIN
TYPE "C" OR "C-L"

SECTION B-B

SECTION C-C
ROUND CATCH BASIN
TYPE "C" OR "C-L"
(ALTERNATE)

REVISIONS		
NO.	DATE	DESCRIPTION

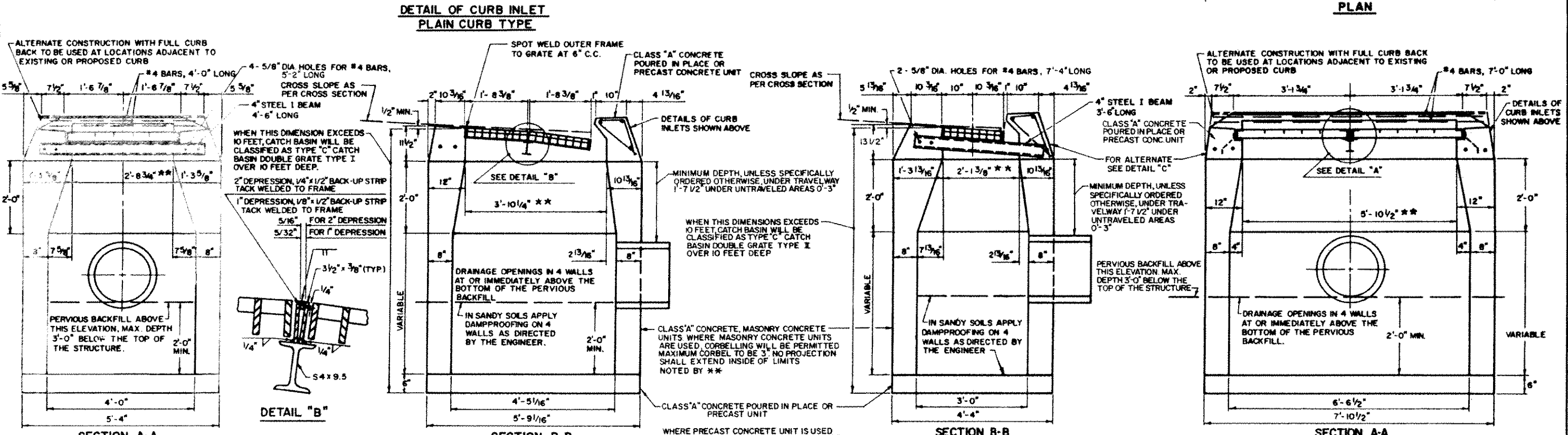
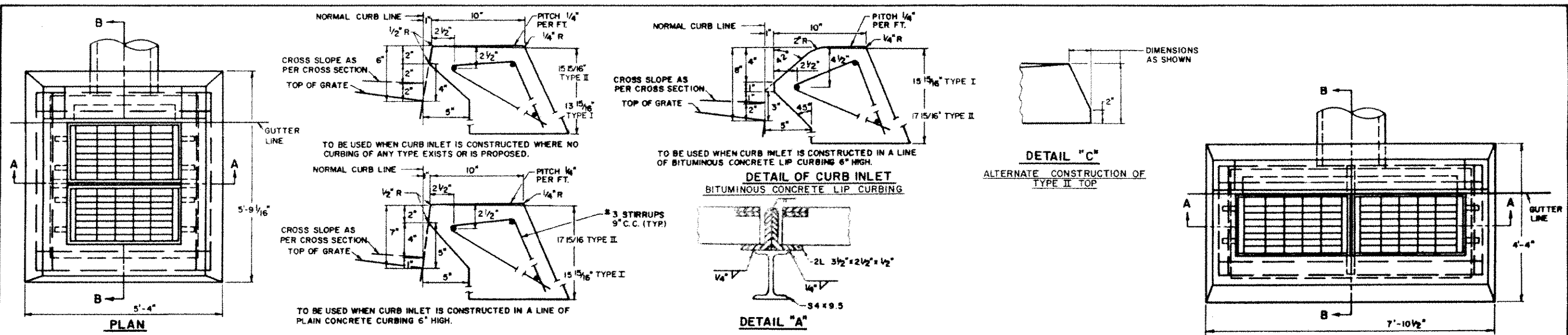
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**PRECAST CONCRETE CATCH BASIN
TYPE "C" OR "C-L"**

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TYPE "C" CATCH BASIN DOUBLE GRATE - TYPE I

TYPE "C" CATCH BASIN DOUBLE GRATE - TYPE II

- NOTES**
- FOR DETAILS OF STEEL FRAME & GRATE SEE STANDARD SHEET NO. 7
TWO FRAMES & GRATES REQUIRED FOR EACH CATCH BASIN.
 - WALLS OF ALL CATCH BASINS OVER 10 FT. DEEP TO BE INCREASED TO 12" THICKNESS, INSIDE DIMENSIONS TO REMAIN THE SAME.
 - PAINT ONLY EXPOSED SURFACES OF FRAMES AND STEEL BEAM NOT IN CONTACT WITH CONCRETE IN ACCORDANCE WITH PAINTING NOTES ON STANDARD SHEET NO. 7.
 - ALL BARS SHALL HAVE 2" COVER.
 - ALL STRAIGHT REINFORCING BARS WILL BE #4 BARS.
 - ALL STIRRUPS WILL BE #3 BARS 9" C.C. TYPICAL.
 - FOR DEPRESSED GUTTER STRIP SEE STD. SHEET NO. 5.

REVISIONS		
NO	DATE	DESCRIPTION

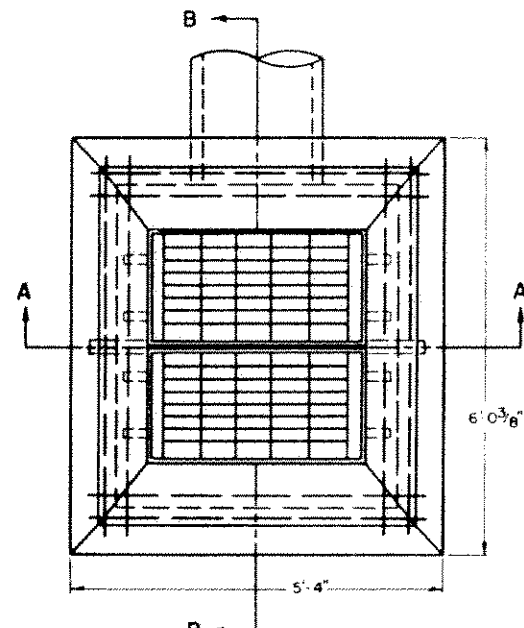
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**TYPE "C" CATCH BASIN
DOUBLE GRATE - TYPE I AND II**

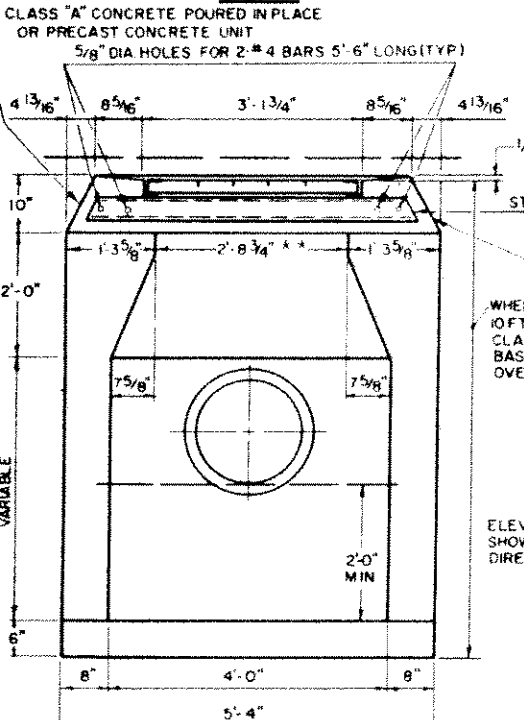
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STD. NO.
13

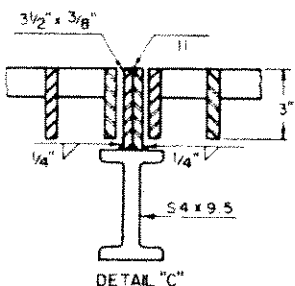


PLAN

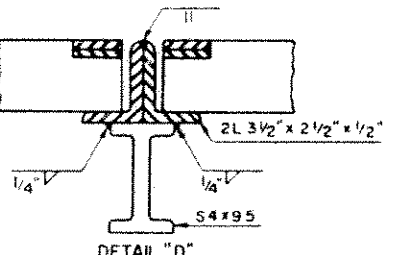


SECTION A-A

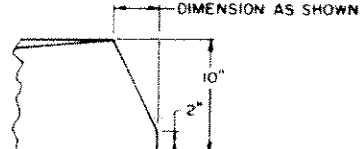
TYPE "C-L" CATCH BASIN DOUBLE GRATE - TYPE I



DETAIL "C"

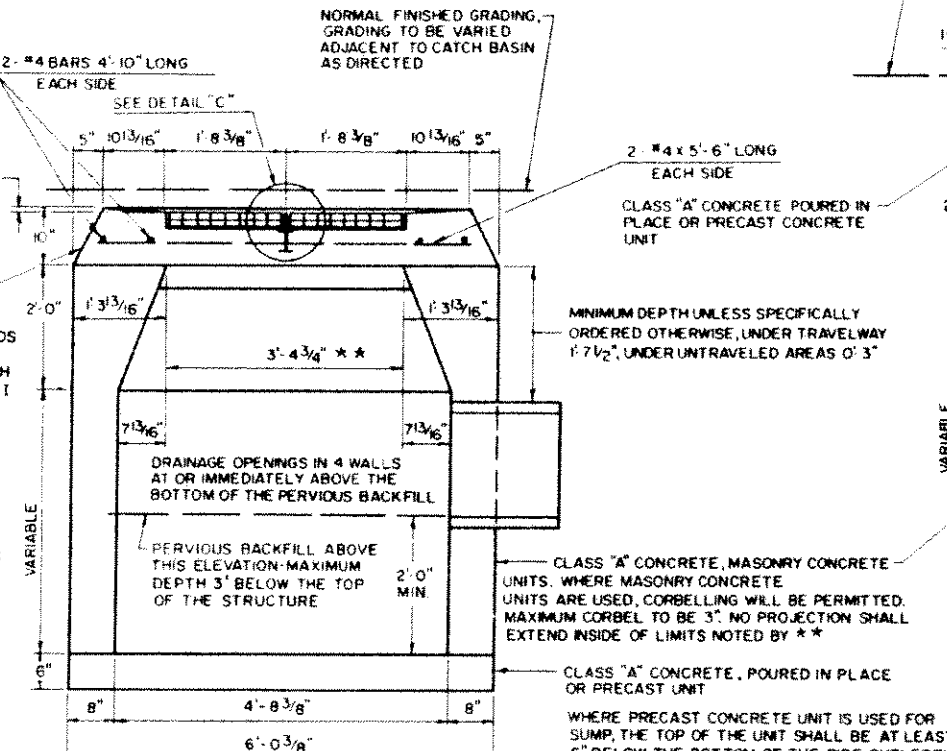


DETAIL "D"

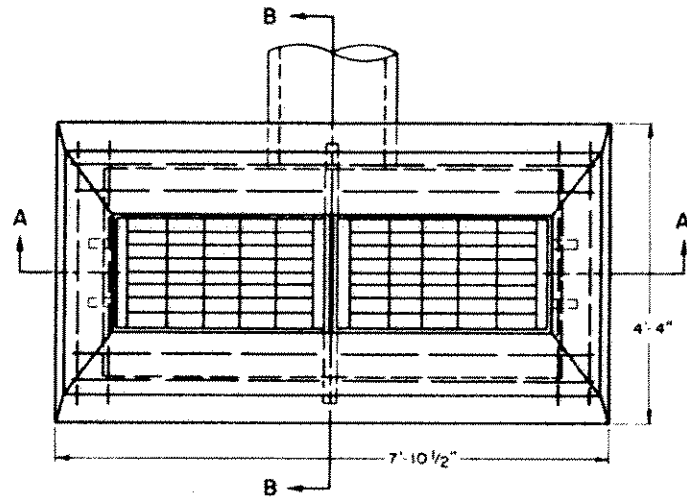


DETAIL "E"

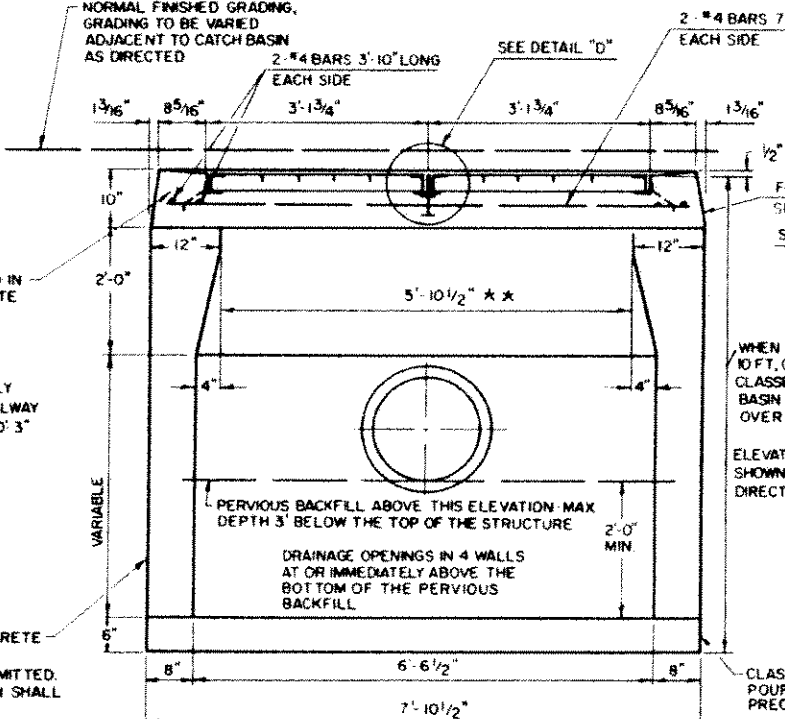
ALTERNATE CONSTRUCTION OF TYPE I AND II TOP



SECTION B-B

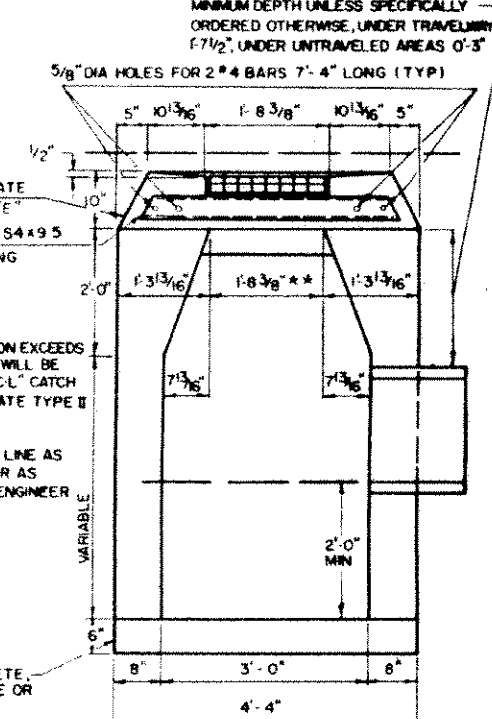


PLAN



SECTION A-A

TYPE "C-L" CATCH BASIN DOUBLE GRATE - TYPE II



SECTION B-B

NOTES

- FOR DETAILS OF STEEL FRAME & GRATE SEE STANDARD SHEET NO. 7 TWO FRAMES & GRATES REQUIRED FOR EACH CATCH BASIN.
- WALLS OF ALL CATCH BASINS OVER 10 FEET DEEP TO BE INCREASED TO 12" THICKNESS, INSIDE DIMENSIONS TO REMAIN THE SAME.
- PAINT ONLY EXPOSED SURFACES OF FRAMES AND STEEL BEAM NOT IN CONTACT WITH CONCRETE IN ACCORDANCE WITH PAINTING NOTES ON STANDARD SHEET NO. 7
- ALL BARS SHALL HAVE 2" COVER.

REVISIONS		
NO.	DATE	DESCRIPTION

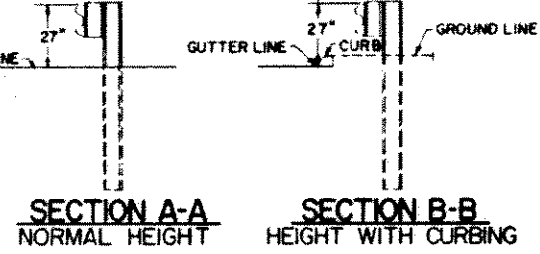
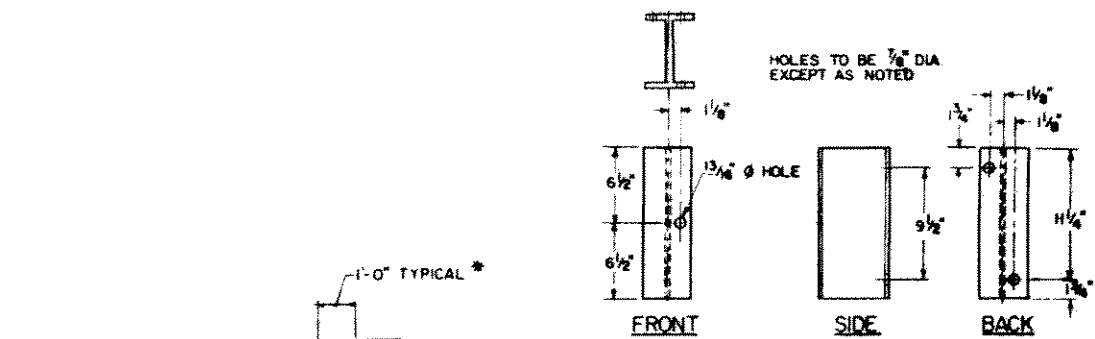
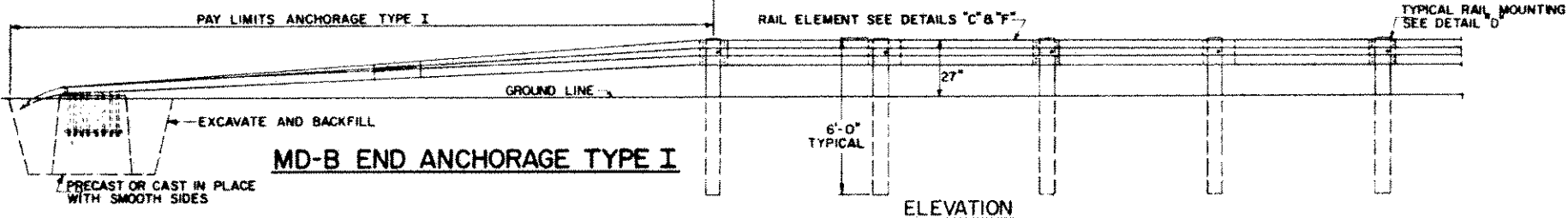
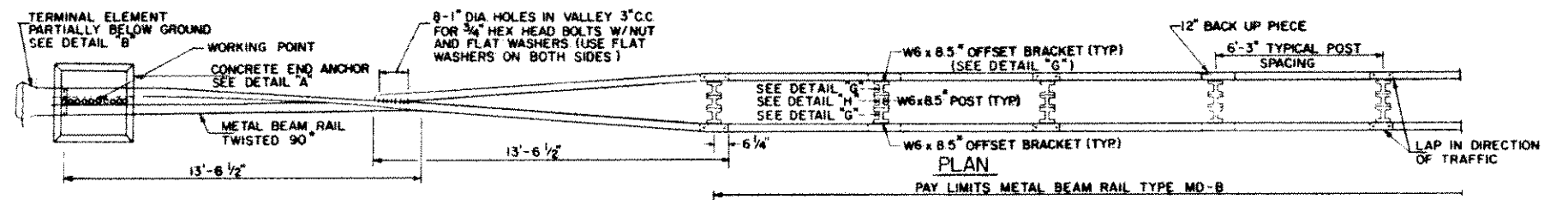
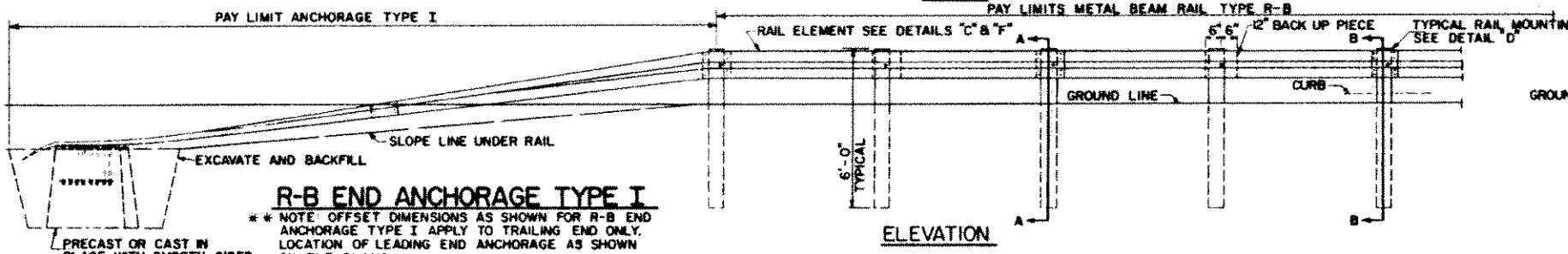
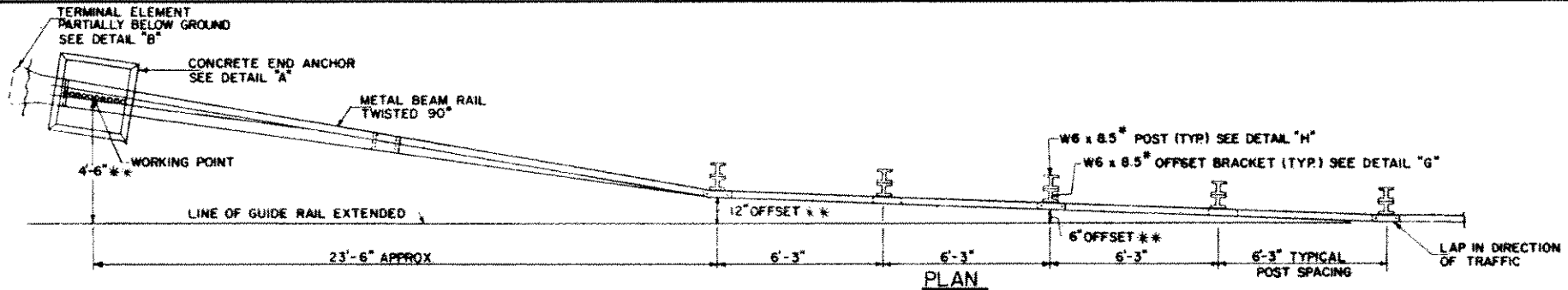
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DEPARTMENT OF PUBLIC WORKS
MONROE, CONNECTICUT

**TYPE "C-L" CATCH BASIN
DOUBLE GRATE - TYPE I AND II**

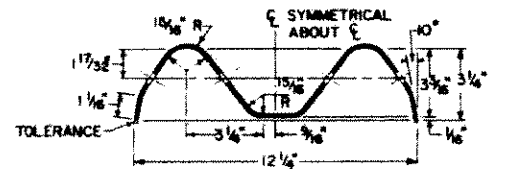
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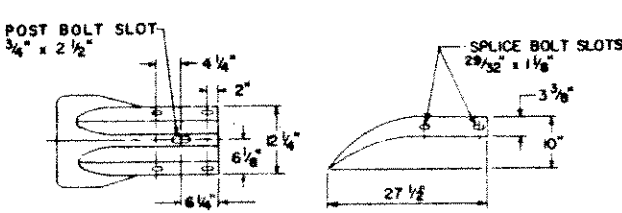
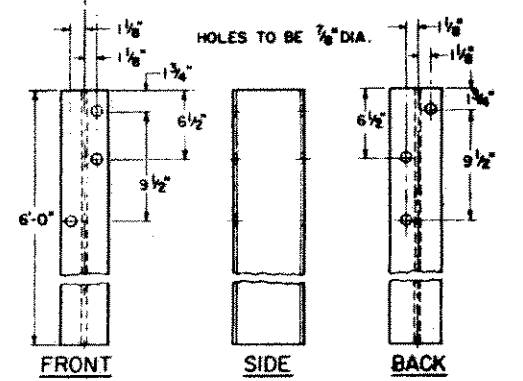
STD. NO. 14



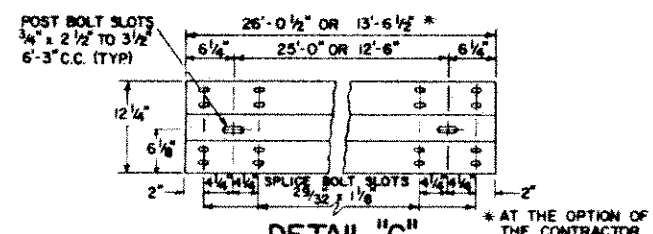
NOTES: 1. SEE STANDARD SHEET NO. 1 FOR 'EMBANKMENT AT METAL BEAM RAIL'.
2. SEE STANDARD SHEET NO. 16 FOR 'PAVEMENT FOR RAILS'.



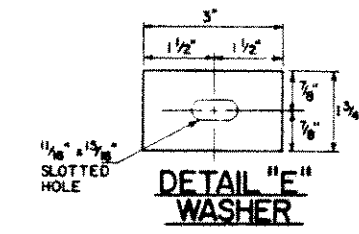
DETAIL "F" SECTION THRU RAIL ELEMENT
NOTE: ALL DIMENSIONS SUBJECT TO MANUFACTURING TOLERANCES



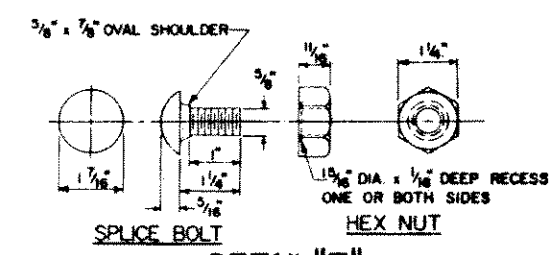
DETAIL "B" TERMINAL ELEMENT



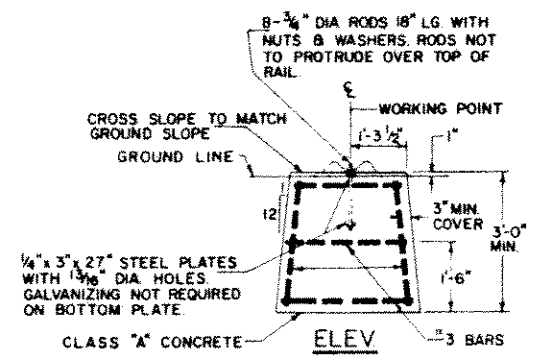
DETAIL "C" TYPICAL RAIL ELEMENT CLASS A (12 GA)
* AT THE OPTION OF THE CONTRACTOR



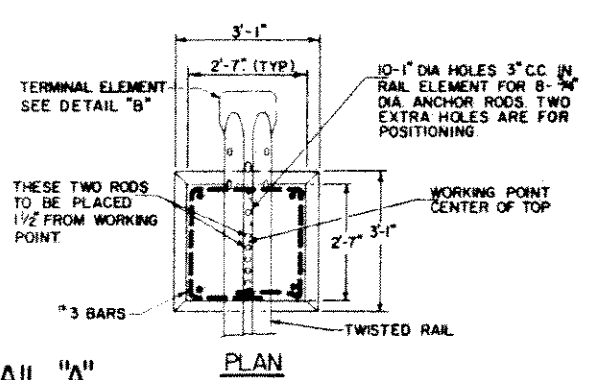
DETAIL "E" WASHER



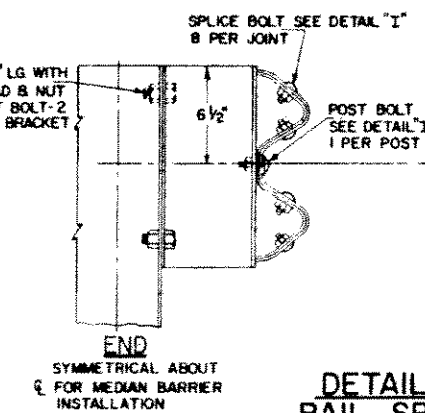
DETAIL "I" SPLICE BOLT AND NUT



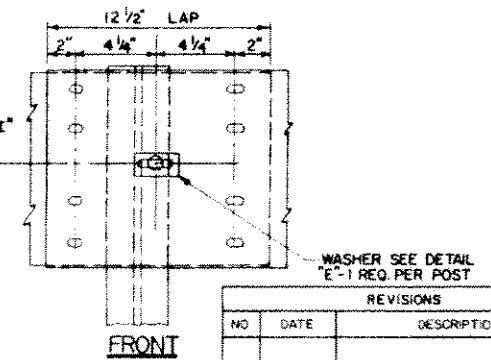
DETAIL "A" CONCRETE END ANCHOR



DETAIL "D" RAIL SPLICE FOR POST & BRACKET BOLT HOLE SPACING SEE DETAILS "G" & "H"



END SYMMETRICAL ABOUT C FOR MEDIAN BARRIER INSTALLATION



FRONT

REVISIONS		
NO	DATE	DESCRIPTION

NOTE: AFTER GALVANIZING, THE NUT SHALL BE FREE RUNNING ON THE BOLT.
NOTE: POST BOLT SHALL BE THE SAME AS THE SPLICE BOLT, EXCEPT THE LENGTH WILL BE 1/2".

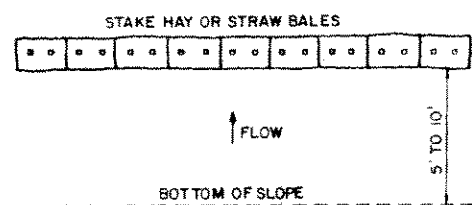
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MONROE, CONNECTICUT

METAL BEAM RAIL (TYPE R-B AND TYPE MD-B)

NOT TO SCALE NOV 1990

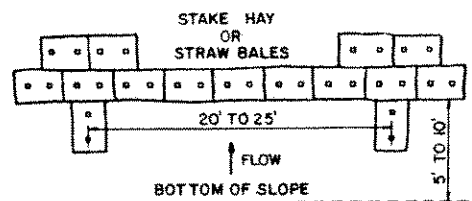
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STD. NO. 15



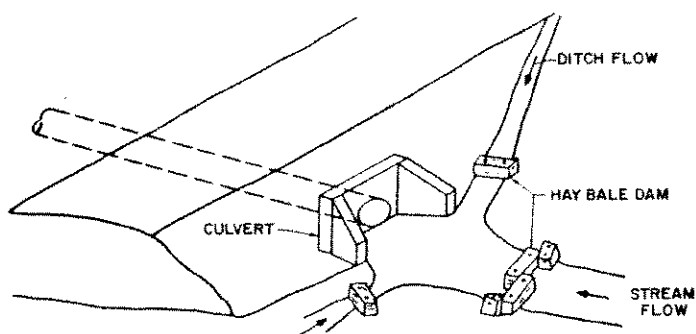
NOTE: NORMAL USE AT BOTTOM OF FILL SLOPE

EROSION PROTECTION TYPE A



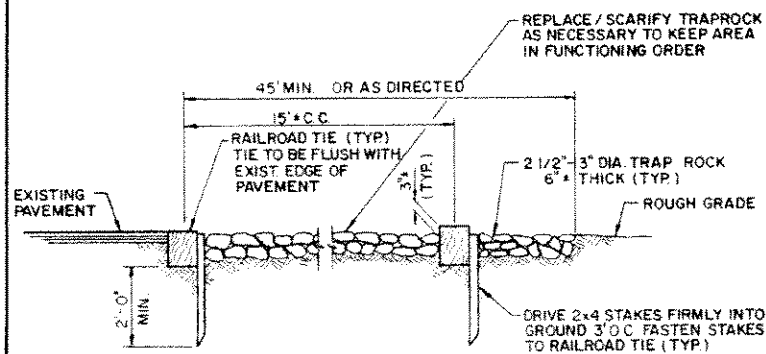
NOTE: NORMAL USE AT BOTTOM OF FILL SLOPE WHERE HEAVY FLOW MAY BE ANTICIPATED.

EROSION PROTECTION TYPE B



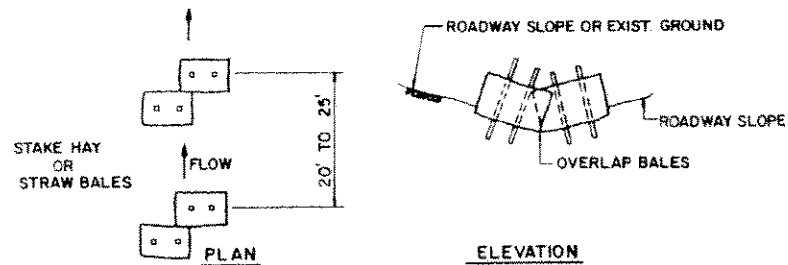
INLET PROTECTION

USE AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.

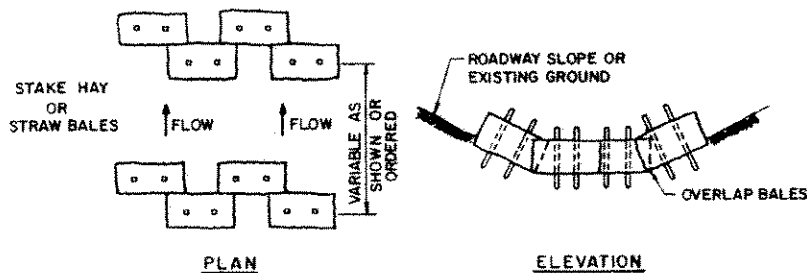


ANTI-TRACKING APRON

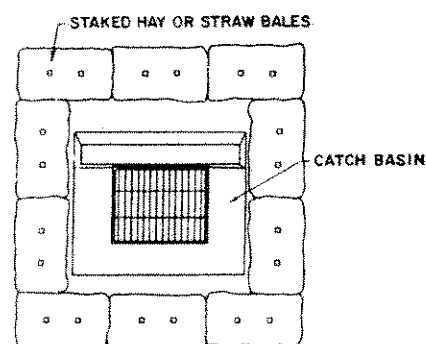
NOTE: MINIMUM WIDTH OF APRON TO BE 15', OR AS DIRECTED BY THE ENGINEER.



EROSION PROTECTION TYPE C



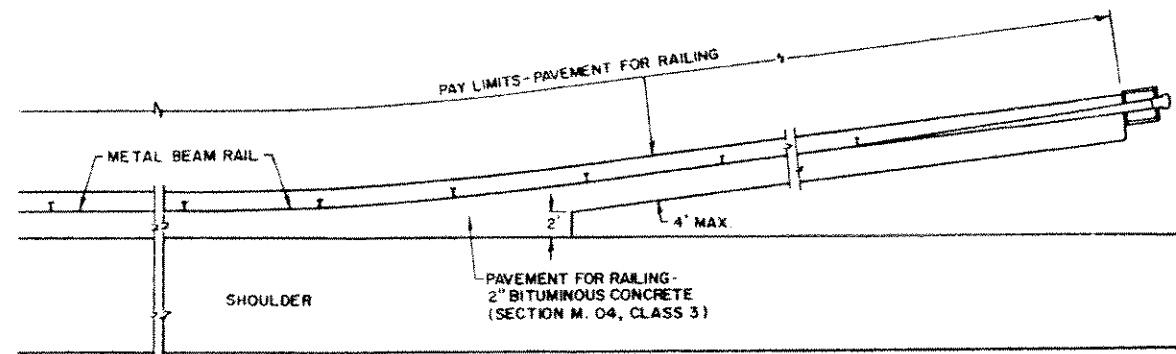
EROSION PROTECTION TYPE D



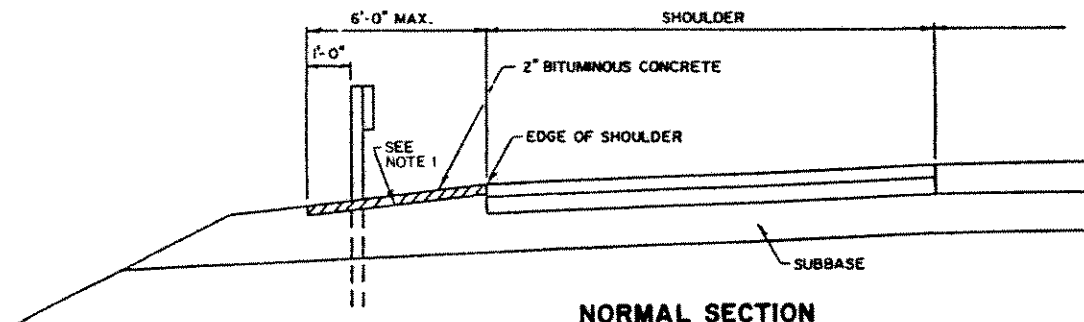
EROSION PROTECTION TYPE E

NOTES

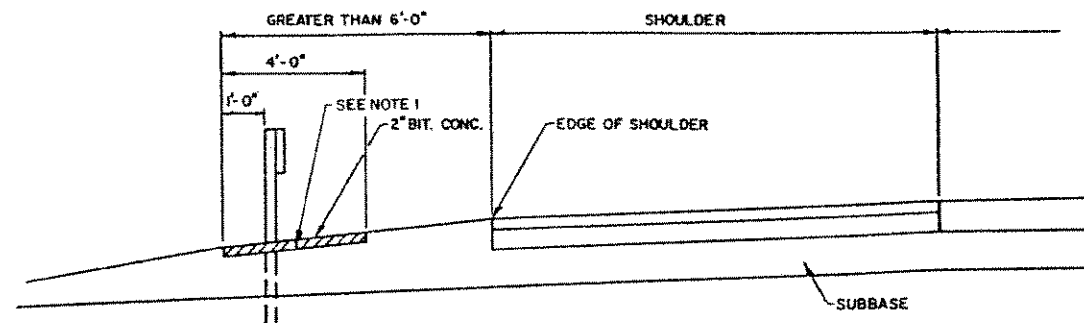
1. BALES SHALL BE "SEDIMENTATION CONTROL BALES" CONFORMING TO SECTION 2.18. FILTER FABRIC MAY BE SUBSTITUTED FOR BALES AND SHALL CONFORM TO SECTION 2.19 "SEDIMENTATION CONTROL SYSTEM".
2. STAKES SHALL BE HARDWOOD. MINIMUM SIZE SHALL BE 1" x 1" x 3'-0".
3. BALES SHALL BE 3" BELOW GROUND. FILTER FABRIC SHALL BE 6" BELOW GROUND AS DESCRIBED IN SECTION 2.19.
4. BALES SHALL BE PLACED AS SHOWN ON THE PLANS, INCLUDING THE UPSTREAM SIDE OF ALL DRIVEWAYS AND AS DIRECTED BY THE ENGINEER.
5. ALL METHODS, MATERIALS AND PROCEDURES FOR EROSION AND SEDIMENT CONTROL SHALL CONFORM TO FORM 814, B "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, THE CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION, JANUARY 1985" (OR LATEST REVISION), AND AS DIRECTED BY THE ENGINEER.



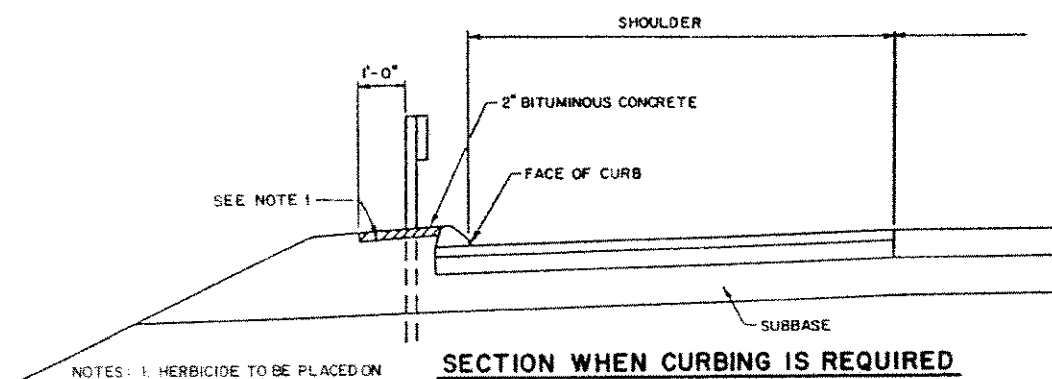
PLAN



NORMAL SECTION



TRANSITION OR OFFSET RAIL SECTION



SECTION WHEN CURBING IS REQUIRED

NOTES: 1. HERBICIDE TO BE PLACED ON THIS SURFACE.
2. SEE STANDARD SHEET NO 15 FOR METAL BEAM RAIL.

REVISIONS		
NO	DATE	DESCRIPTION

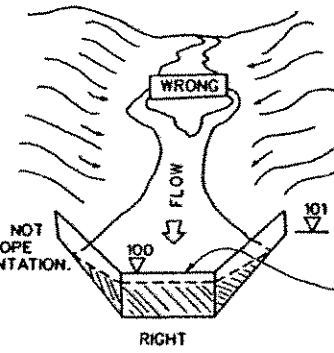
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**EROSION PROTECTION
PAVEMENT FOR RAILS**

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STD. NO.
16

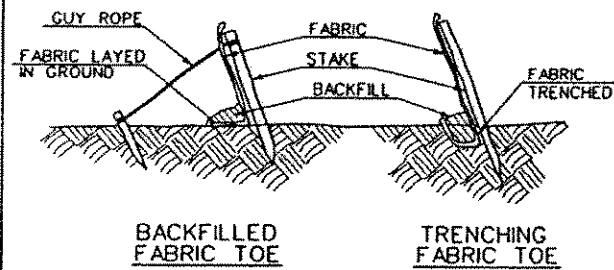


WHEN USING FABRIC AS A DIKE BE SURE THE ELEVATION OF THE ENDS OF THE DIKE ARE SLIGHTLY HIGHER THAN THE SPILLWAY AREA, OTHERWISE NO SEDIMENT WILL BE TRAPPED.

NOTE: CATCH BASIN ON SLOPE SHOULD NOT BE RINGED. RINGED BASIN ON SLOPE INCREASES EROSION AND SEDIMENTATION. USE A DIKE TO "SLOW THE FLOW" AND CONTAIN SEDIMENT.

FILTER FABRIC DIKE

END VIEW

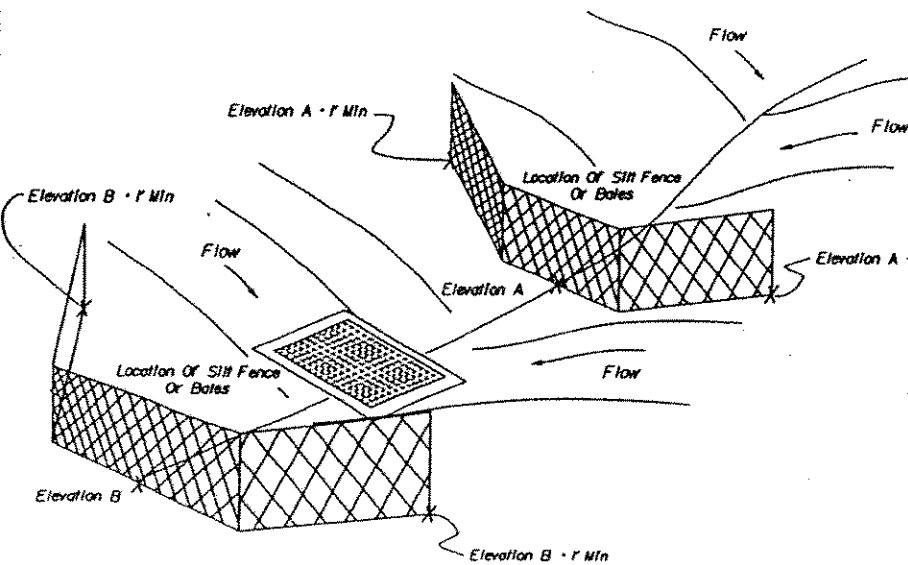


NOTES:

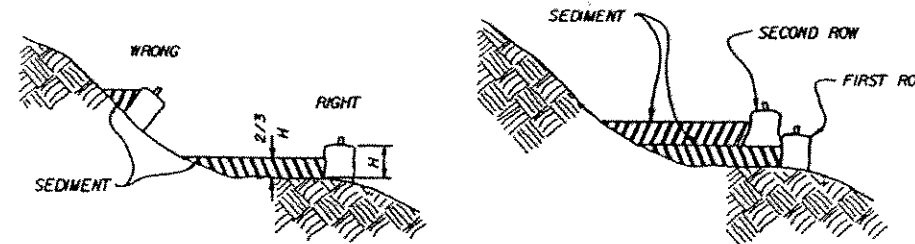
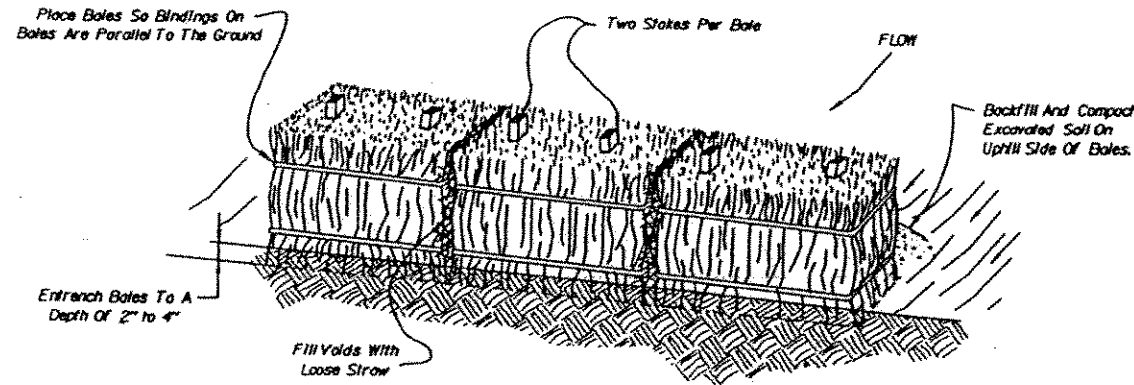
- A) Minimum Length Of Silt Fence Is 15 L.F.
- B) Maximum Post Spacing Is 10 L.F.
- C) Joints Only At Support Post With Minimum 6" Overlap, Securely Sealed.
- D) Sedimentation Deposits Shall Be Removed When It Reaches 1/2 The Height Of The Silt Fence.
- E) Silt Fence Shall Not Be Used In A Water Course.
- F) Upon Establishment Of Ground Cover On Disturbed Areas, And When Directed By The Engineer, Fence Will Be Removed And Any Sedimentation Will Be Thoroughly Spread Upon Existing Ground Cover.

SELF SUPPORTING SILT FENCE SHOULD BE PLACED SO THE FENCE LEANS TOWARD THE SOURCE OF SEDIMENT. SPACING OF STAKES AND USE OF GUY ROPES ARE DETERMINED ACCORDING TO FIELD NEEDS. GUY ROPE/WIRE AND TIE BACK STAKE SHOULD BE OF SUFFICIENT SIZE TO WITHSTAND THE EXPECTED LOAD. FOLLOW MANUFACTURER'S RECOMMENDATION FOR TRENCH DIMENSIONS.

SILT FENCE INSTALLATION



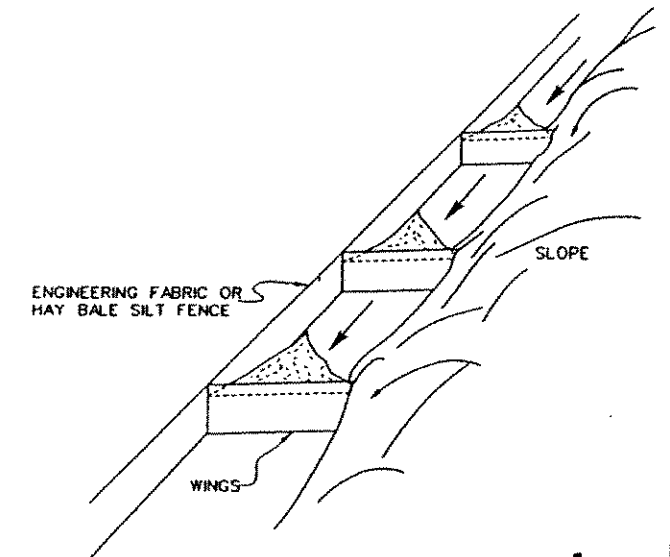
CATCH BASIN ON A SLOPE



PREFERRED PLACEMENT

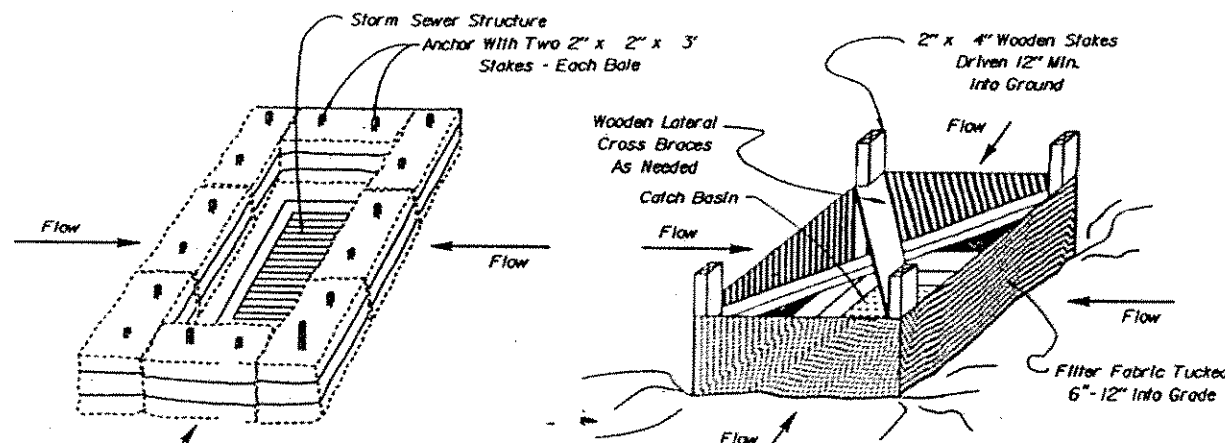
Bales Placed Away From Toe Of Slope Have A Larger Confinement Area. Additional Bales Should Be Added Behind Original Bales Before Sedimentation Tops The First Bales. Max. Depth of Sediment Behind Dike is 2/3 Height of Bale.

DIKES HAY / STRAW BALES



WHEN USING SILT FENCE ALONG TOE OF SLOPE, ADD WINGS TO PREVENT SEDIMENT FROM MOVING ALONG THE FENCE AND OFF THE SITE. SPACING OF THE WING SHALL BE DETERMINED BY THE ENGINEER.

SEDIMENTATION CONTROL SYSTEM TOE OF SLOPE



HAY BALE INSTALLATION AT CATCH BASIN

SILT FENCE INSTALLATION AT CATCH BASIN

CATCH BASIN IN A DEPRESSION

REVISIONS		
NO.	DATE	DESCRIPTION

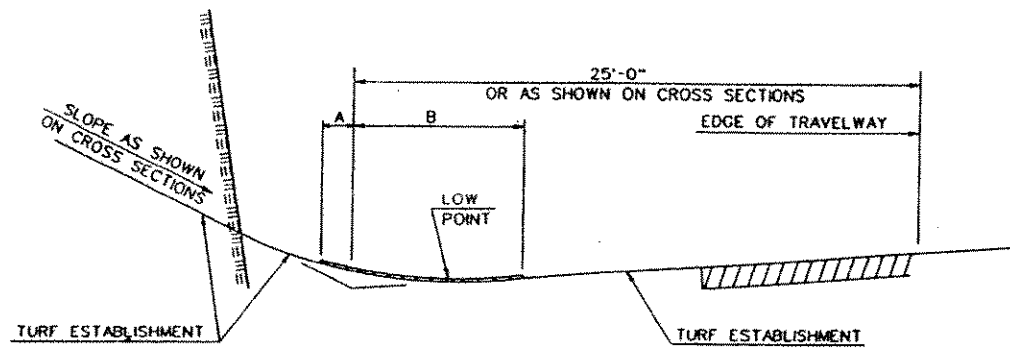
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MONROE, CONNECTICUT

EROSION AND SEDIMENTATION CONTROL DETAILS

NOT TO SCALE DEC. 1997

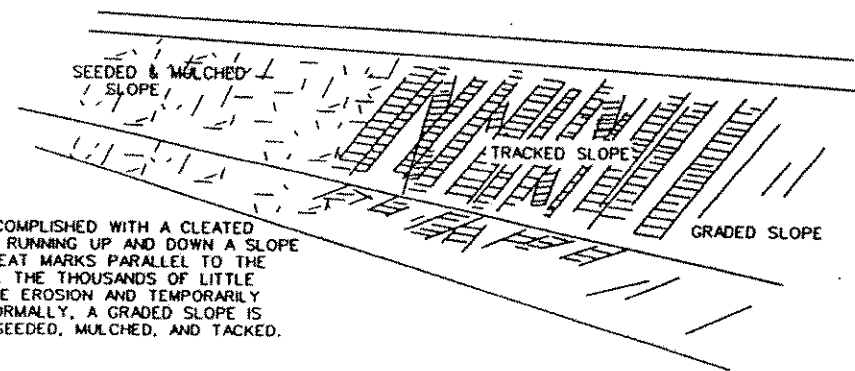
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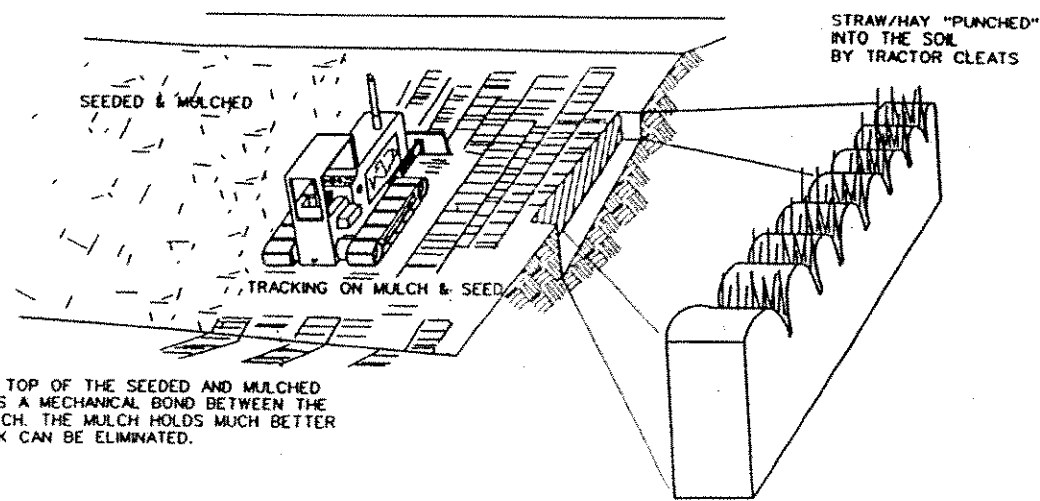
PLACEMENT OF EROSION CONTROL LINING

A	B	TOTAL WIDTH
0.5'	7.0'	7.5'
1.0'	9.0'	10.0'



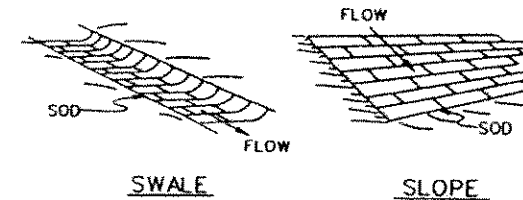
TRACKING IS ACCOMPLISHED WITH A CLEATED TRACTOR/DOZER RUNNING UP AND DOWN A SLOPE LEAVING THE CLEAT MARKS PARALLEL TO THE SLOPE CONTOUR. THE THOUSANDS OF LITTLE GROOVES MINIMIZE EROSION AND TEMPORARILY HOLD WATER. NORMALLY, A GRADED SLOPE IS TRACKED, THEN SEEDED, MULCHED, AND TACKED.

TRACKING PLAN



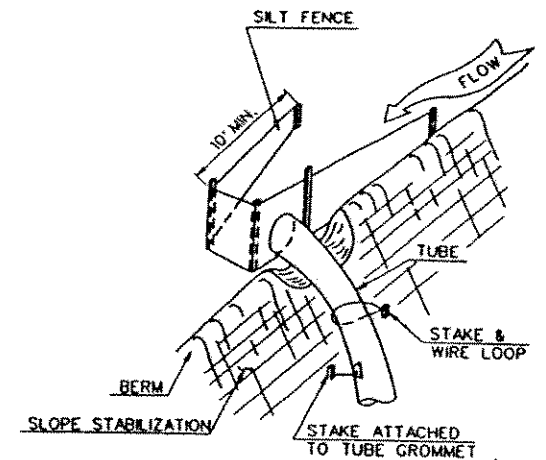
TRACKING ON TOP OF THE SEEDED AND MULCHED AREA CREATES A MECHANICAL BOND BETWEEN THE SOIL AND MULCH. THE MULCH HOLDS MUCH BETTER AND THE TACK CAN BE ELIMINATED.

TRACKING ON MULCH



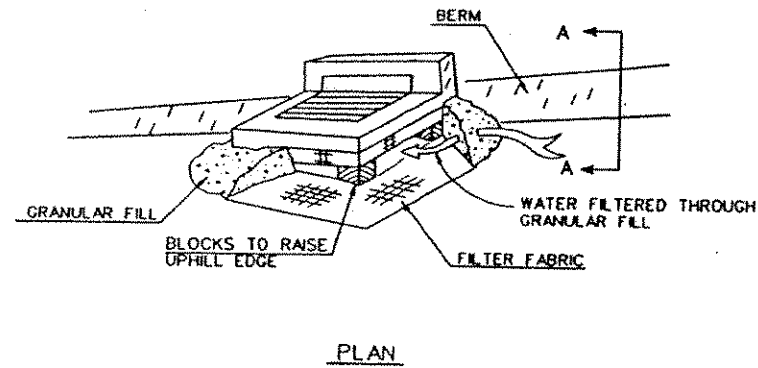
PLACE RECTANGULAR SOD STRIPS SO THE LONG DIMENSION IS PERPENDICULAR TO THE FLOW. TRIM EDGES, IF NECESSARY, TO ASSURE TIGHT JOINTS. SOD MAY HAVE TO BE ANCHORED BY STAKES OR STAPLES ON STEEP SLOPES.

SODDING ON SLOPES AND SWALES

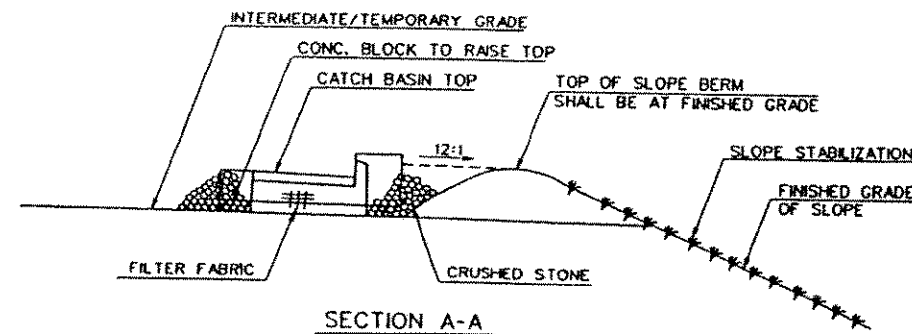


WHEN INSTALLING SLOPE DRAINS ATTACHED TO SILT FENCE AN OPENING IN THE BERM MUST BE MADE. BE SURE THE SILT FENCE EXTENDS A MINIMUM OF 10' UPSLOPE AND IS SECURELY BURIED TO COLLECT ALL THE FLOW. GROUND ELEVATION AT THE SILT FENCE ENDS SHOULD BE HIGHER THAN THE ELEVATION OF THE INLET OF THE SLOPE DRAIN TUBE. ANCHOR THE TUBE TO THE SLOPE BY ANY EFFECTIVE METHOD. DO NOT CONSTRICT THE TUBE.

SLOPE DRAIN



PLAN



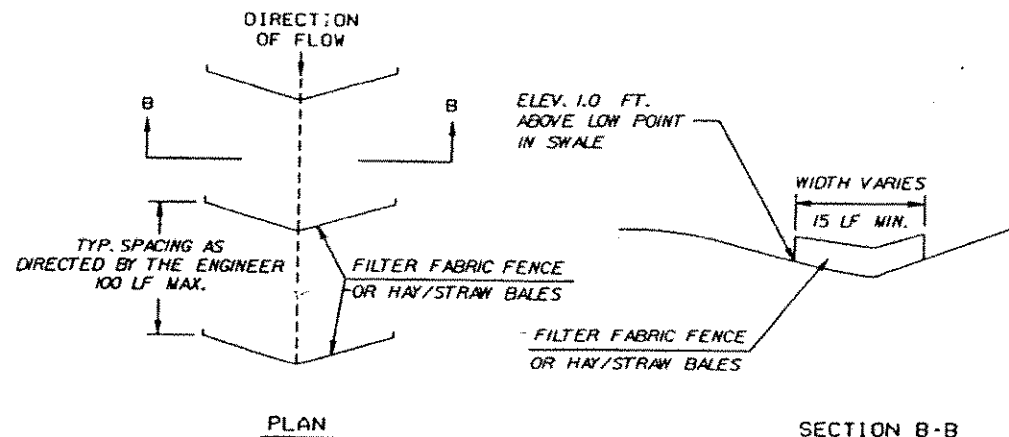
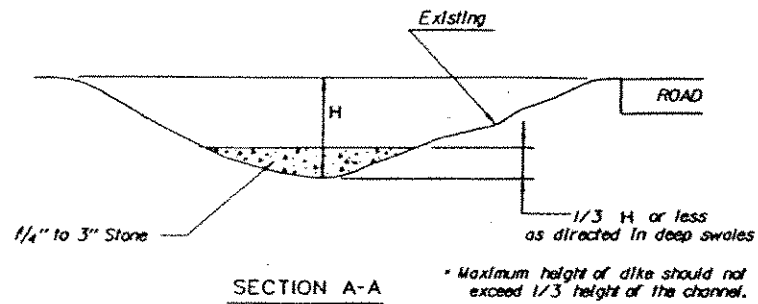
SECTION A-A

NOTE: THE CONTRACTOR SHALL MAINTAIN THE EARTHEN BERM AS DIRECTED BY THE ENGINEER.

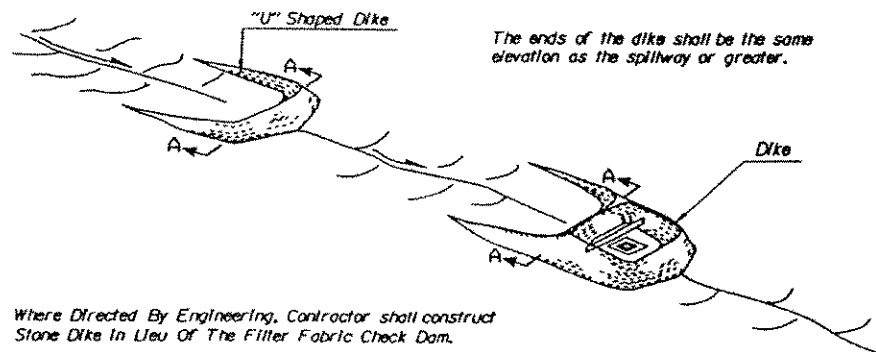
EROSION CONTROL BERM

REVISIONS		
NO.	DATE	DESCRIPTION

TOWN OF MONROE DEPARTMENT OF PUBLIC WORKS MONROE, CONNECTICUT	
EROSION AND SEDIMENTATION CONTROL DETAILS	
NOT TO SCALE	DEC. 1997
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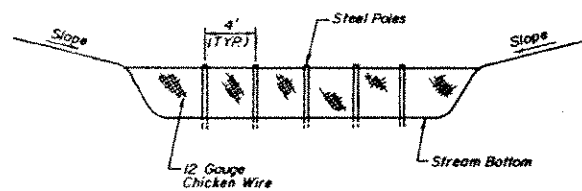
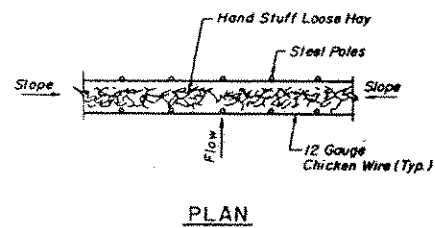


CHECK DAM
FILTER FABRIC OR HAY/STRAW BALES



Where Directed By Engineering, Contractor shall construct Stone DiKE In Lieu Of The Filter Fabric Check Dam.

STONE DIKE

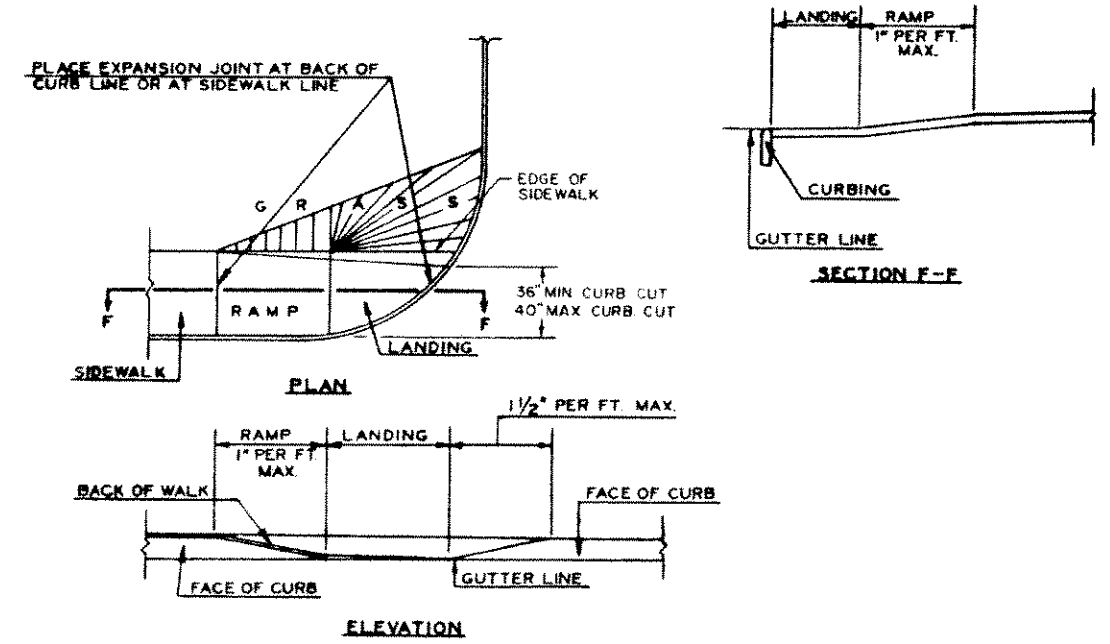
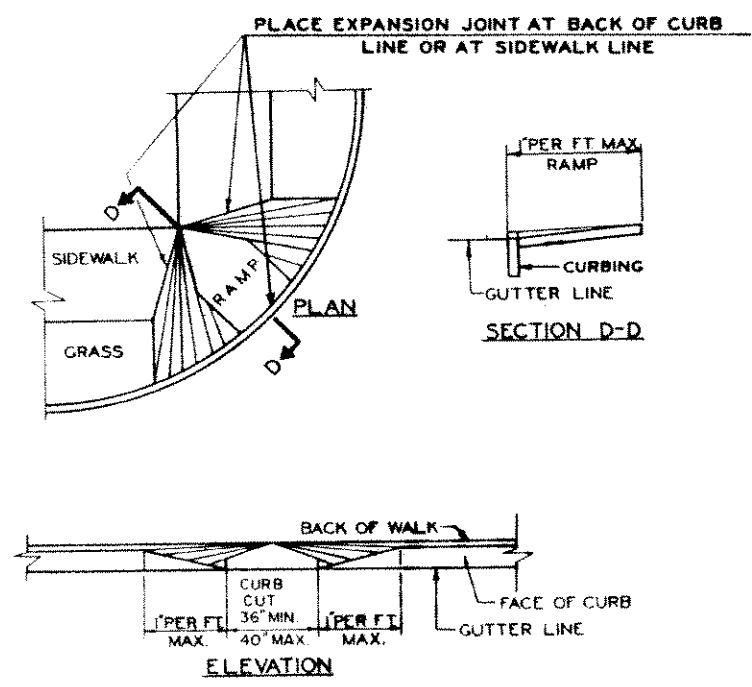
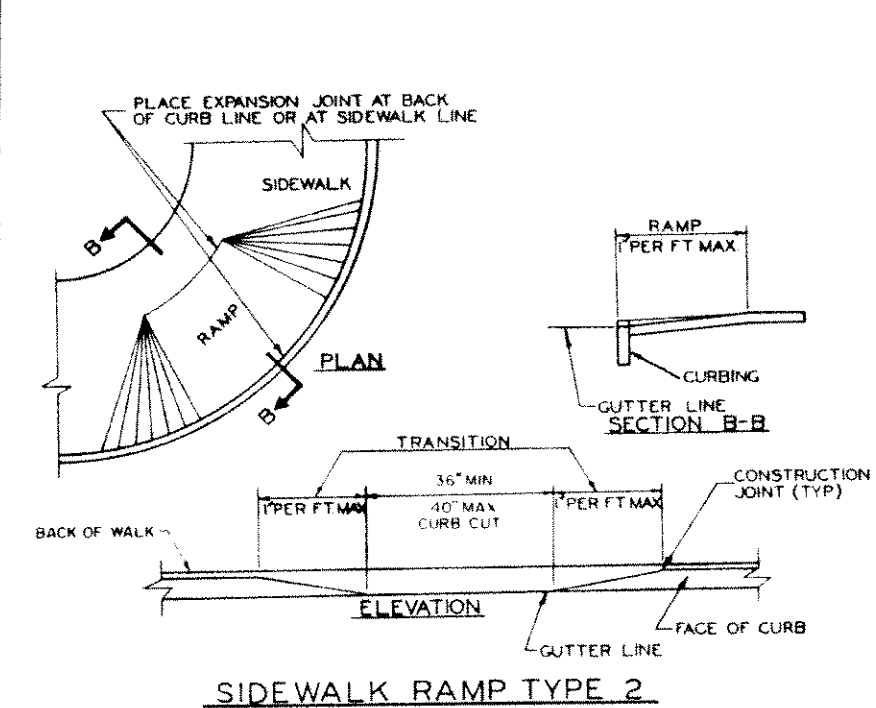
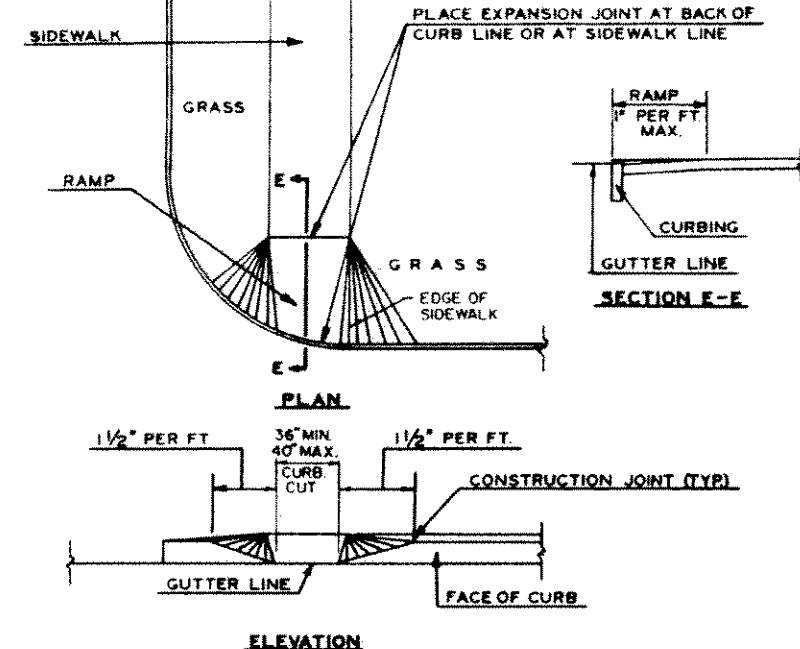
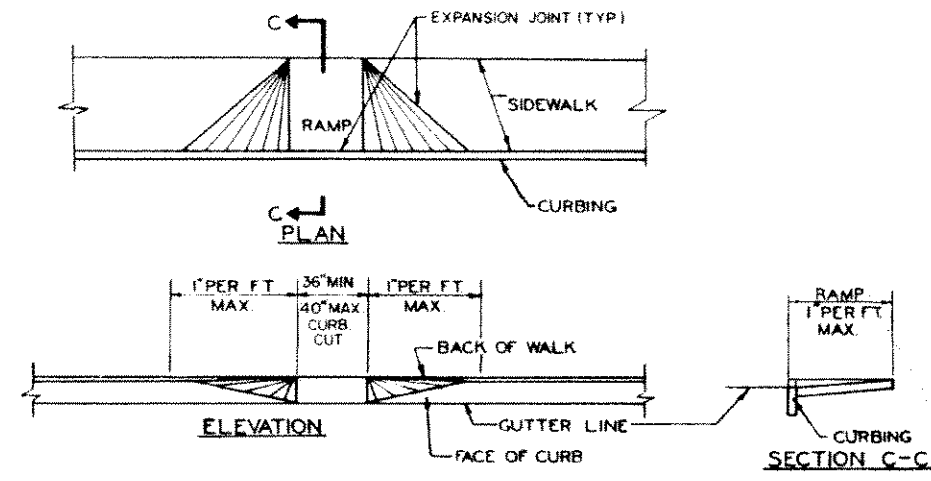
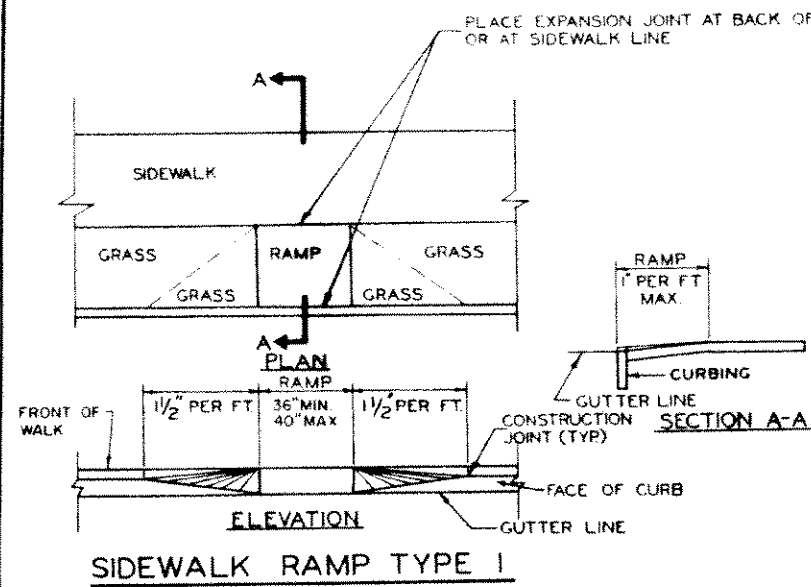


IN-STREAM WIRE & STRAW SEDIMENTATION FILTER

NOTE: Bottom & Edges of Chicken Wire to be Dug in or Otherwise Secured to Stream Bottom & Banks as Approved by Engineer.

NO.	DATE	DESCRIPTION

TOWN OF MONROE DEPARTMENT OF PUBLIC WORKS MONROE, CONNECTICUT	
EROSION AND SEDIMENTATION CONTROL DETAILS	
NOT TO SCALE	DEC. 1987
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GENERAL NOTES

- 1. SIDEWALK RAMPS SHALL BE CONSTRUCTED AND PAID FOR UNDER THE ITEM "CONCRETE SIDEWALK", EXCEPT THAT THE FINAL TEXTURE OF THE RAMP SURFACE SHALL BE A COARSE BROOM FINISH TRANSVERSE TO THE SLOPE OF THE RAMP.
- 2. CARE SHALL BE TAKEN TO ASSURE A UNIFORM GRADE ON THE RAMP, FREE OF SAGS AND SHORT GRADE CHANGES.
- 3. THE BOTTOM OF THE RAMP SHALL MEET THE GUTTER LINE AT THE CURB FACE.

SIDEWALK RAMP TYPE 6

REVISIONS		
NO	DATE	DESCRIPTION

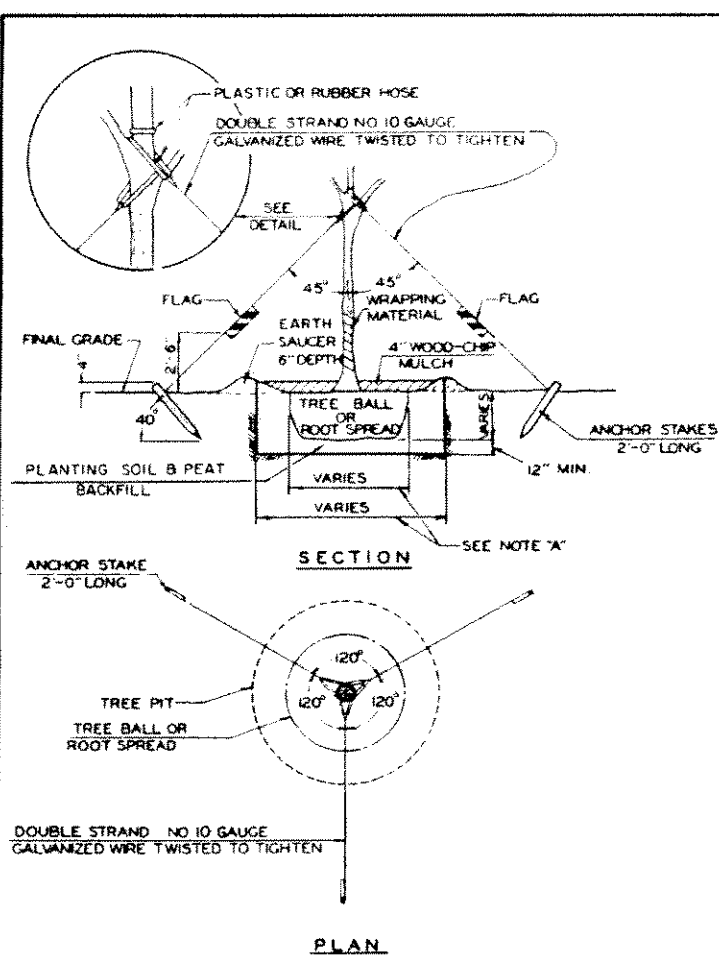
TOWN OF MONROE
DEPARTMENT OF PUBLIC WORKS
MONROE, CONNECTICUT

TREATMENTS FOR SIDEWALK RAMPS

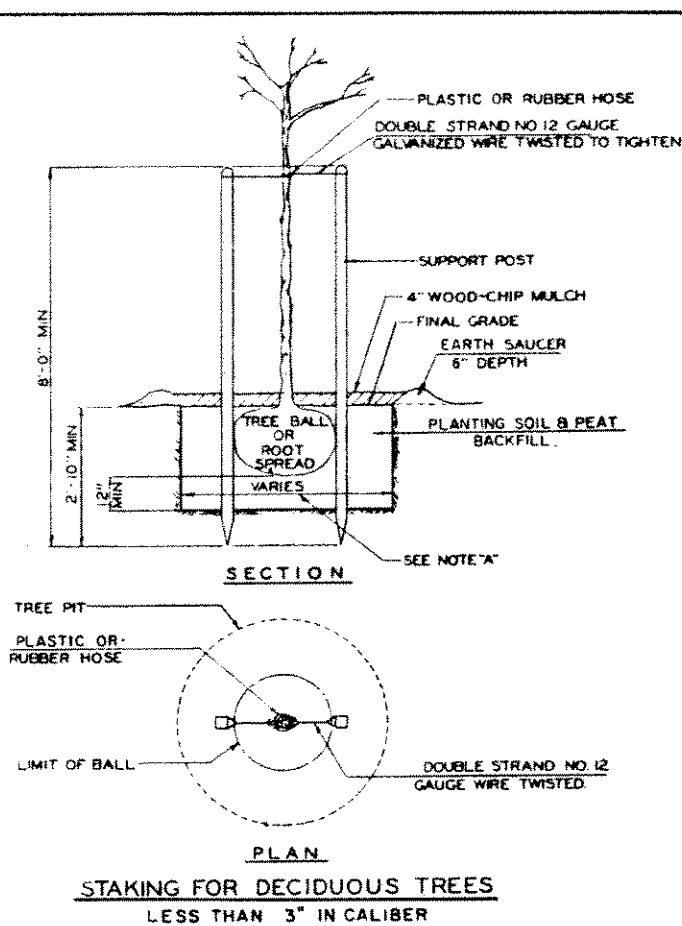
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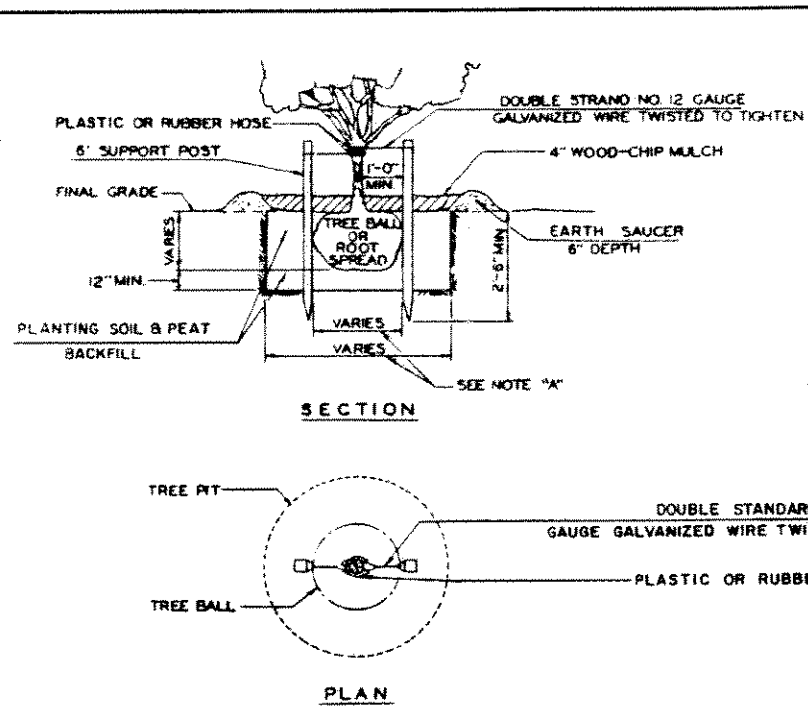
STD. NO.
17



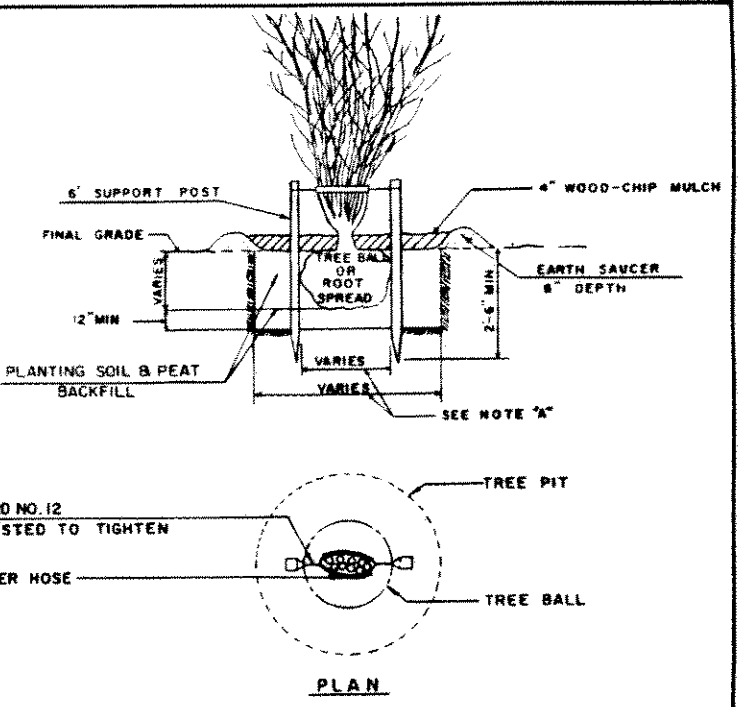
GUYING FOR DECIDUOUS TREES 3" IN CALIBER AND OVER AND FOR EVERGREEN TREES 8" AND OVER IN HEIGHT



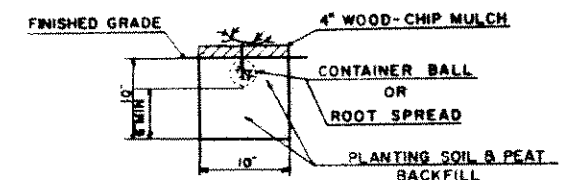
STAKING FOR DECIDUOUS TREES LESS THAN 3" IN CALIBER



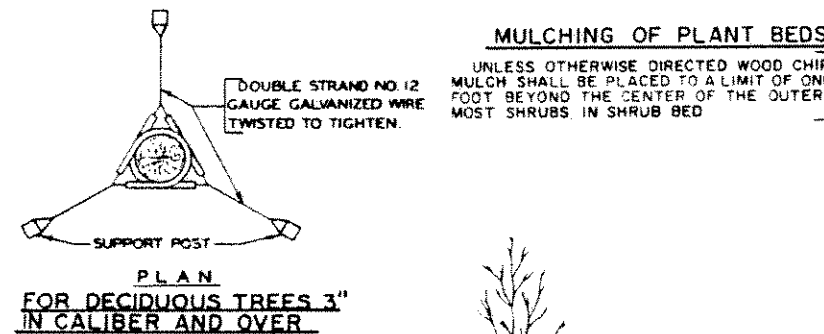
STAKING FOR LOW BRANCHED DECIDUOUS TREES AND EVERGREEN TREES FROM 5' TO 8' HIGH



STAKING FOR BUSH FORM DECIDUOUS TREES FROM 5' TO 10' HIGH

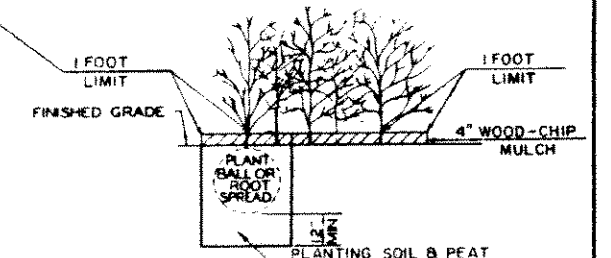


PLANTING FOR SEEDLINGS, VINES AND GROUND COVER PLANTS IN PITS ON SLOPES



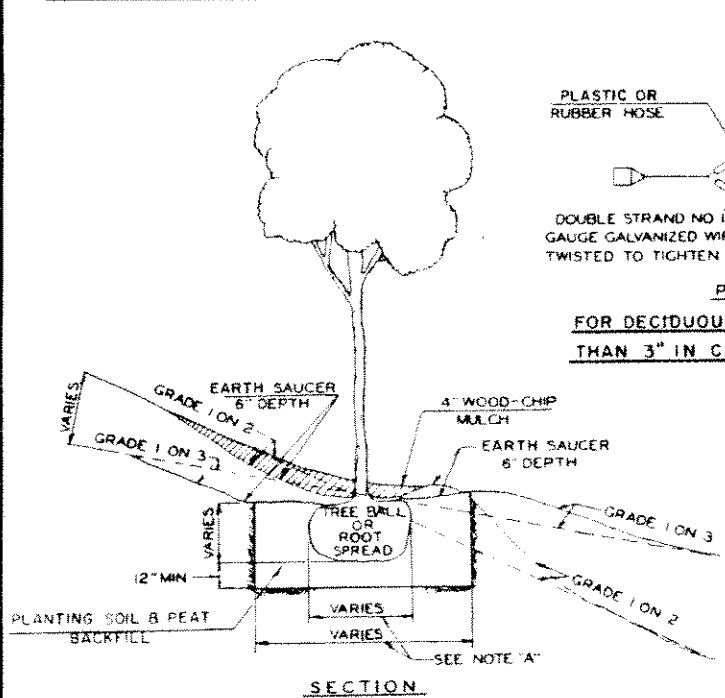
MULCHING OF PLANT BEDS

UNLESS OTHERWISE DIRECTED WOOD CHIP MULCH SHALL BE PLACED TO A LIMIT OF ONE FOOT BEYOND THE CENTER OF THE OUTER-MOST SHRUBS IN SHRUB BED

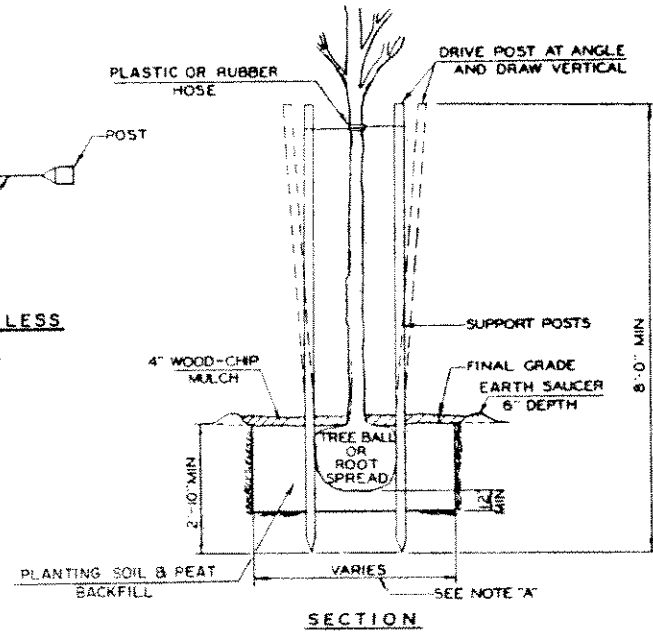


PLANTING FOR SHRUBS IN BEDS

NOTE "A": FOR WIDTH SEE STANDARD SPECIFICATIONS FORM 814

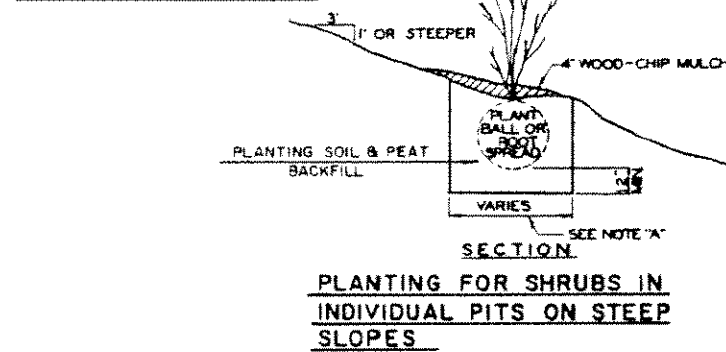


GRADING FOR TREE ON SLOPE



STAKING FOR DECIDUOUS TREES WITHIN 10 FEET OF WALKS AND OTHER PEDESTRIAN TRAFFIC

NOTE: FOR TREES 3" IN CALIBER AND OVER, USE 3 POSTS. FOR TREES LESS THAN 3" IN CALIBER USE 2 POSTS



PLANTING FOR SHRUBS IN INDIVIDUAL PITS ON STEEP SLOPES

REVISIONS		
NO.	DATE	DESCRIPTION

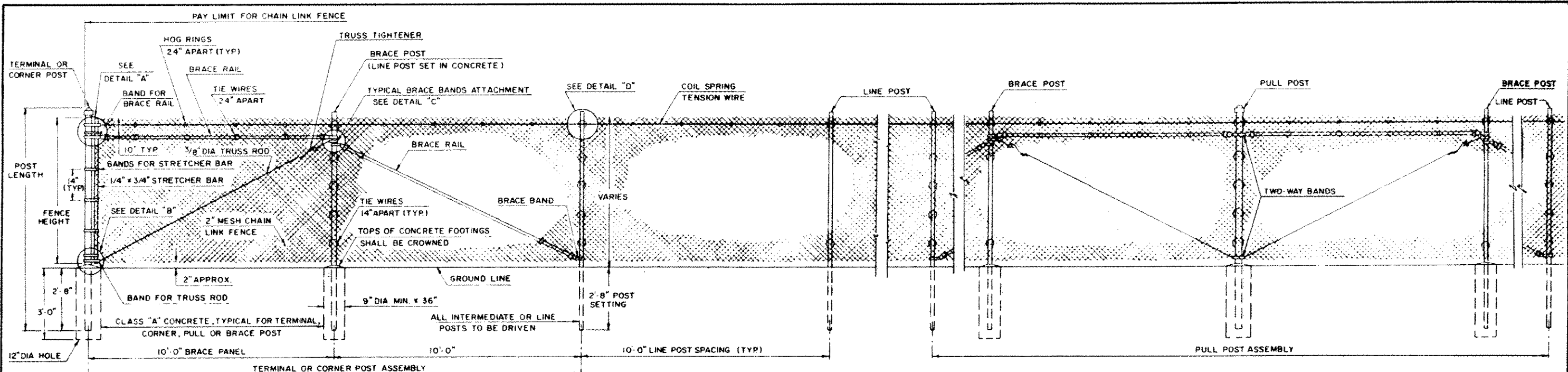
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PLANTING DETAILS

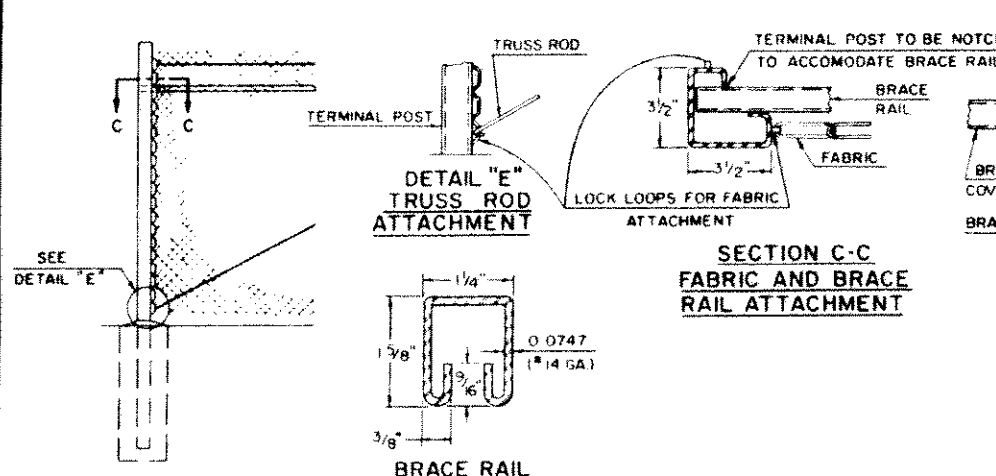
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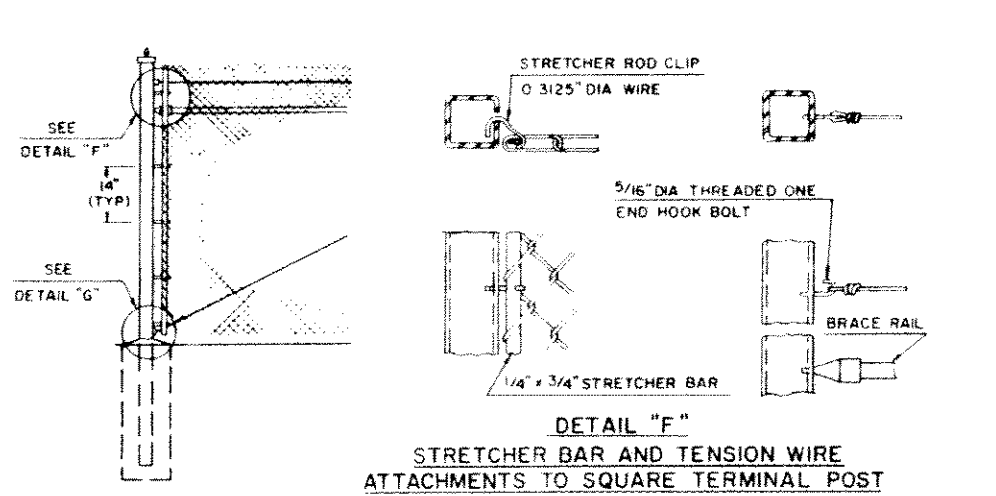
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ROUND PIPE TERMINAL, CORNER OR PULL POST

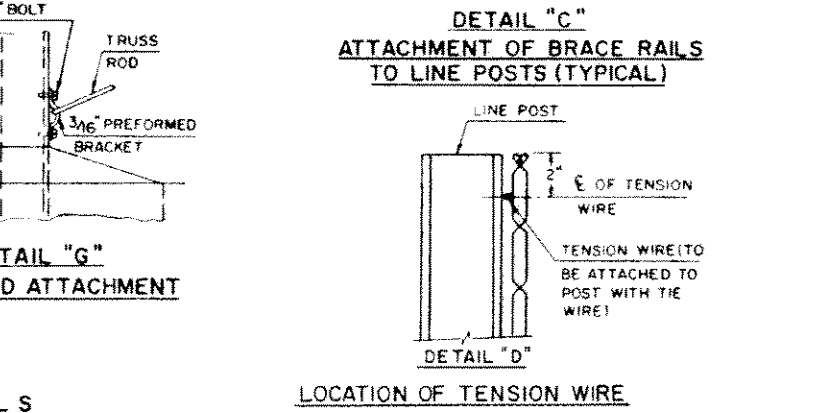
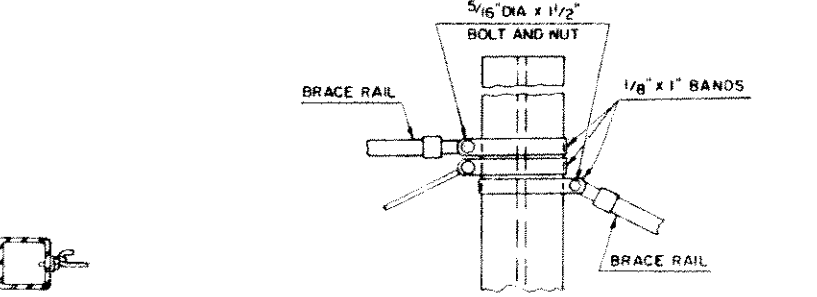
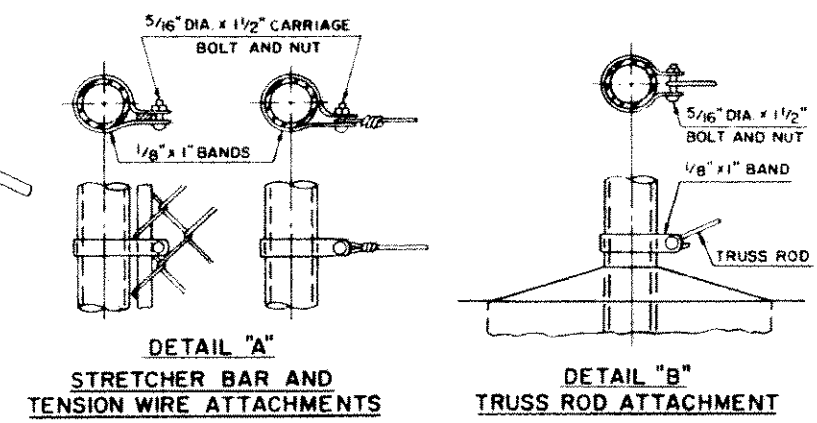


ROLL-FORMED SECTION TERMINAL, CORNER OR PULL POST



SQUARE TUBULAR TERMINAL, CORNER OR PULL POST

TYPICAL FENCE LAYOUT



	TYPE	MATERIAL	FENCE HEIGHT			
			6' OR LESS DIMENSIONS INCHES	WEIGHT Lbs. per ft.	GREATER THAN 6' DIMENSIONS INCHES	WEIGHT Lbs. per ft.
LINE BRACE OR INTERMEDIATE POST	"H"	STEEL	1.87 X 1.62	2.70	2.25 X 1.70	3.26
		ALUM. ALLOY		0.91		1.25
	"C"	STEEL	1.87 X 1.62	2.28	2.25 X 1.70	2.64
		ALUM. ALLOY		0.94		1.25
PIPE	STEEL CLASS 1		1.90 O.D.	2.72	2.37 O.D.	3.65
				2.28		3.12
	STEEL CLASS 2					
		ALUM. ALLOY				1.25
BRACE RAIL (OR TOP RAIL WHEN SPECIFIED)	ROLL-FORMED*	STEEL	1.62 X 1.25	1.35		
		ALUM. ALLOY		0.78		1.25
	PIPE	STEEL CLASS 1	1.31 O.D.	1.68	1.66 O.D.	2.27
		STEEL CLASS 2		1.34		1.84
TERMINAL CORNER OR PULL POSTS	ROLL-FORMED*	STEEL	3.50 X 3.50	4.84		
		ALUM. ALLOY		2.00		2.00
	TUBULAR	STEEL	2.00 X 2.00	3.60	2.50 X 2.50	5.70
		ALUM. ALLOY		1.25	3.00 X 3.00	2.00
PIPE	STEEL CLASS 1	2.37 O.D.	3.65	2.87 O.D.	5.79	
	STEEL CLASS 2		3.12		4.64	
		ALUM. ALLOY		1.25		2.00

* DIMENSIONS AND WEIGHT ARE FOR A FENCE HEIGHT OF 9' OR LESS.

MINIMUM DIMENSIONS AND WEIGHTS OF POSTS AND RAILS

GENERAL NOTES

- NOTE: A MINUS TOLERANCE OF 5% IN SIZE AND WEIGHT SHALL BE ALLOWED FOR THESE MEMBERS, BUT SHALL NOT APPLY TO THE ZINC OR POLYVINYL CHLORIDE COATING.
- 1) REFER TO SPECIFICATIONS FOR LOCATION OF PULL POST ASSEMBLIES
- 2) ALL SQUARE AND ROUND POSTS WILL BE CAPPED TO PREVENT WATER FROM ENTERING
- 3) WHERE ROCK IS ENCOUNTERED IT SHALL BE DRILLED AND THE POSTS SET IN CONCRETE OR MORTAR

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CHAIN LINK FENCE

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