Index of Sheets

TOTAL SHEETS = 14

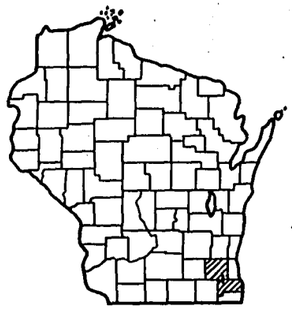
STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
0051-13-36	-	-
0067-13-30	-	-

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

ASPHALTIC RESURFACING

S.T.H. 36 TO WAUKESHA ROAD



(BEACH DRIVE TO N. COUNTY LINE)

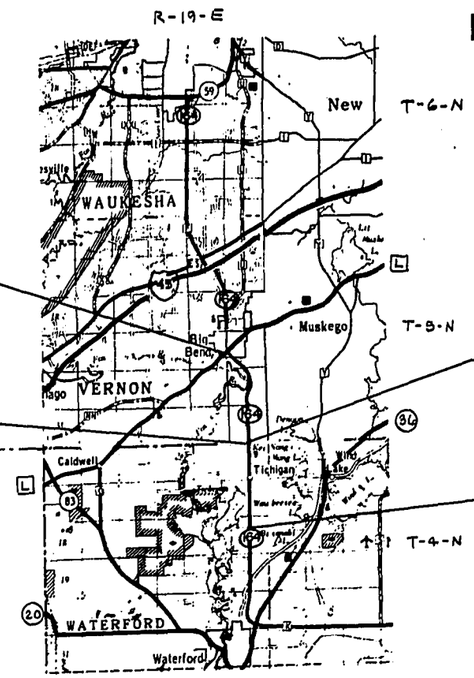
S.T.H. 164
RACINE COUNTY

STATE PROJECT NUMBER
0051-13-36

(S. COUNTY LINE TO C.T.H. "L")

S.T.H. 164
WAUKESHA COUNTY

STATE PROJECT NUMBER
0067-13-30



END PROJECT 0067-13-30
STA.360+81

END PROJECT 0051-13-36
STA.205+43.10

BEGIN PROJECT 0067-13-30
STA.220+00

BEGIN PROJECT 0051-13-36
STA.84+75

CONTRACTOR - PAYNE & DOLAN
PROJECT START - AUG. 21 1991
PROJECT COMPLETED - SEPT 27 1991
PROJECT COST - $390,000
PROJECT MANAGER - D. OLDENBURG
PROJECT DIARY NO. - 1261

Conventional Signs

County Line		Caution Symbol (Combustible fluids under pressure)	CAUTION
Township or Range Line		Railroads	
Section Line		Fence	—x(TYPE)x—
Corporate or City Limits		Culverts in Place	
Property line		Culverts Required	
Lot Line		Power Pole	
Existing Right of Way Line		Telephone or Telegraph Pole	
New Right of Way Line		Right of Way Markers	
Base or Survey Line		Marsh	
Slope Intercept		Wooded Area	
Existing Roadway or Private Entrance		Grade Elevation	

Layout

Scale

Total Net Length of Centerline = Mi.
NET LENGTH OF CENTERLINE = 2.286 MI. (0051-13-36)
NET LENGTH OF CENTERLINE = 2.666 MI. (0067-13-30)
TOTAL NET LENGTH OF CENTERLINE = 4.952 MI.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Surveyor _____ District Checker A.T.L.
Designer D.R.S. C. O. Checker _____
District Supervisor GSGEJM C. O. Coordinator _____

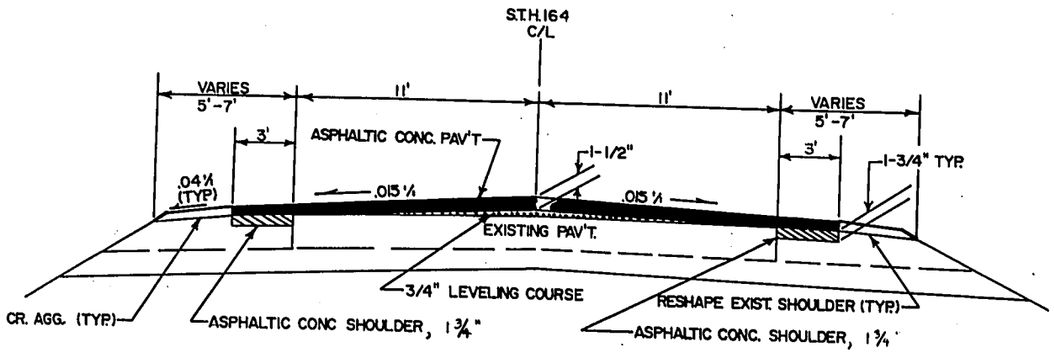
Approved:
Date 4-24-90 _____ District Transportation Director

Approved:
Date 4/29/91 William Bordish Chief Maintenance Engineer

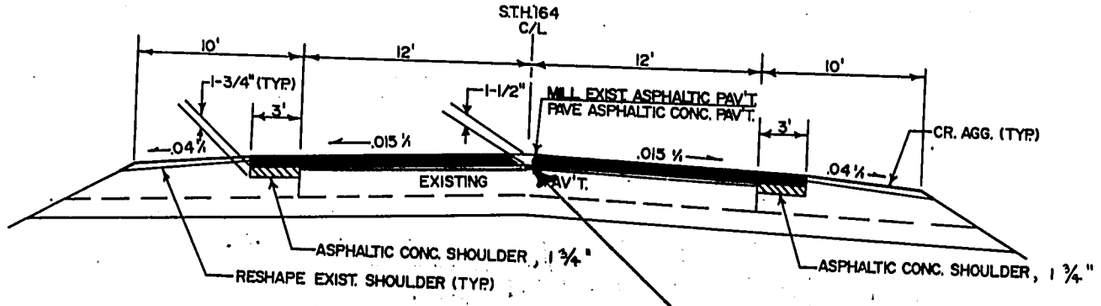
Vehicle No. 12

STATE PROJECT NUMBER	SHEET NO.
0051-13-36/0067-13-30	2.0

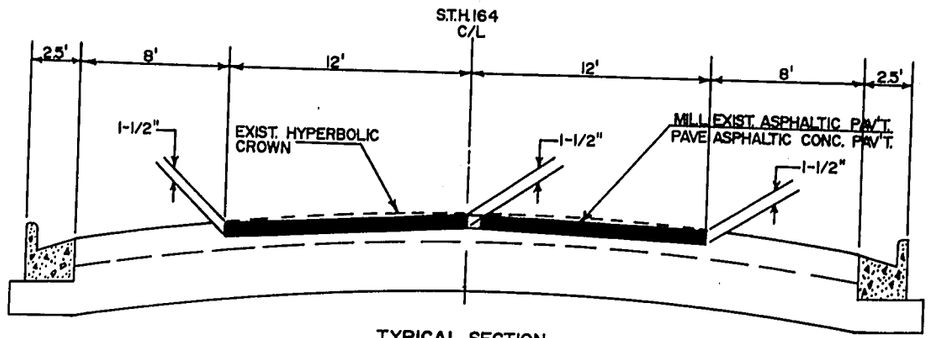
TYPICAL SECTIONS



TYPICAL SECTION
STA. 84+75 TO STA. 205+43.1



TYPICAL SECTION
STA.220+00 TO STA356+00



TYPICAL SECTION
STA356+00 TO STA.360+81

GENERAL NOTES

1. WHEN THE QUANTITY OF THE ITEMS OF BASE OR SURFACE COURSE IS MEASURED BY THE TON, THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.
2. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

UTILITIES (0051-13-36)

INGERSOLL CABLE CORP.
TV CABLE
P.O. BOX 425
MUSKEGO, WI 53150
MARK CARL (414) 422-1700

WISCONSIN ELECTRIC POWER CO.
ELECTRIC LINES
4401 GREEN BAY RD.
KENOSHA, WI 53142
JERRY LONDRE (414) 657-7151

WISCONSIN NATURAL GAS CO.
GAS LINES
201 1st. ST. C.T.H."KR"
RACINE, WI 53403
ALICE LINDERS (414) 534-5100

SOUTHEAST TELEPHONE (WINDLAKE & WATERFORD)
TELEPHONE LINES
311 ELIZABETH ST.
WATERFORD, WI 53185
DONALD HEWITT (414) 534-5100

WISCONSIN BELL INC.
TELEPHONE LINES
220 WISCONSIN AVE.
WAUKESHA, WI 53186
RUSSELL A. LUND (414) 678-4092

TOWN OF WATERFORD
SANITARY SEWER
415 N. MILWAUKEE
WATERFORD, WI 53185
RON HUCHEVAR (414) 534-4646

UTILITIES (0067-13-30)

INGERSOLL CABLE CORP.
TV CABLE
P.O. BOX 425
MUSKEGO, WI 53150
MARK CARL (414) 422-1700

WISCONSIN ELECTRIC POWER CO.
ELECTRIC LINES
S13 W33800 HWY 18
DELEFIELD, WI 53018
VIC KRANITZ (414) 544-7381

WISCONSIN NATURAL GAS CO.
GAS LINES
1830 S. WEST AVE.
WAUKESHA, WI 53186
JAMES HANSEN (414) 678-4092

WISCONSIN BELL INC.
TELEPHONE LINES
220 WISCONSIN AVE.
WAUKESHA, WI 53186
RUSSELL A. LUND (414) 678-4092

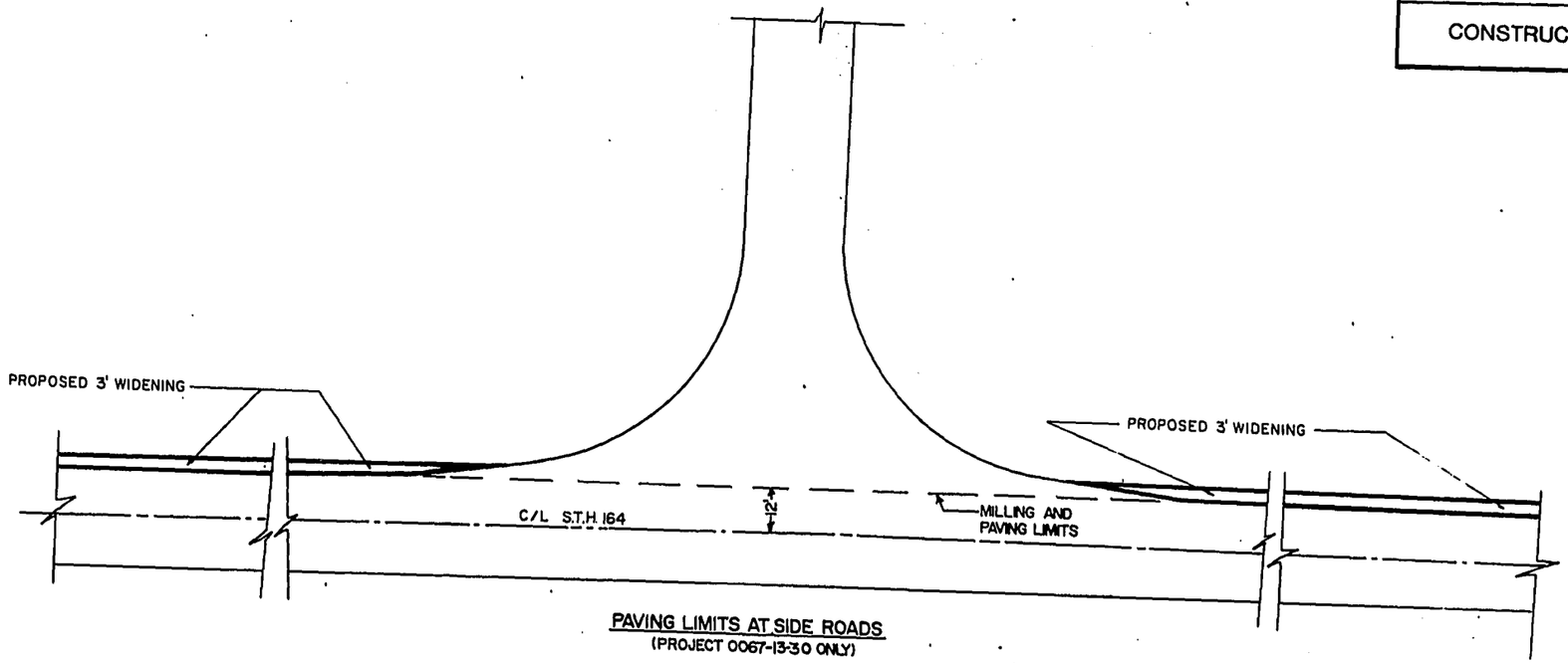
DIGGERS HOT LINE

(414) 344-5111 (METRO AREA)
1-800-242-8511 (OUTSIDE METRO AREA)

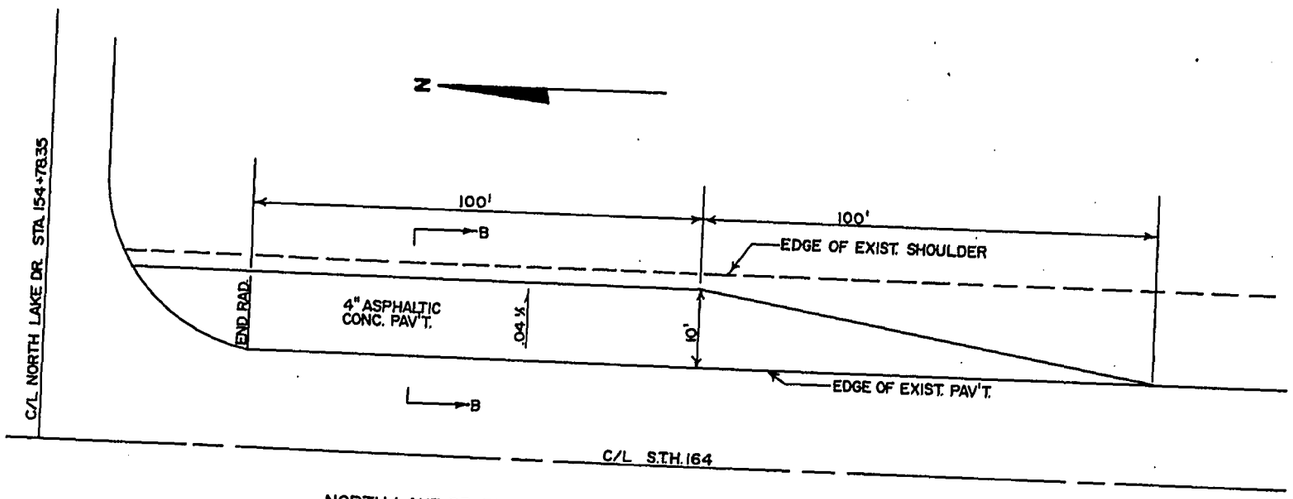
S.D.D. NO.	TITLE
14B2-8a&b	CLASS "A" STEEL PLATE BEAM GUARD (TWO SHEETS)
14B2-8c	CLASS "A" STEEL PLATE BEAM GUARD, SPECIAL ANCHORAGES
14B3-2	CLASS "B" STEEL PLATE BEAM GUARD
15C12-1	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C8-3	PAVEMENT MARKING

STATE PROJECT NUMBER	SHEET NO.
0051-13-36/0067-13-30	2.1

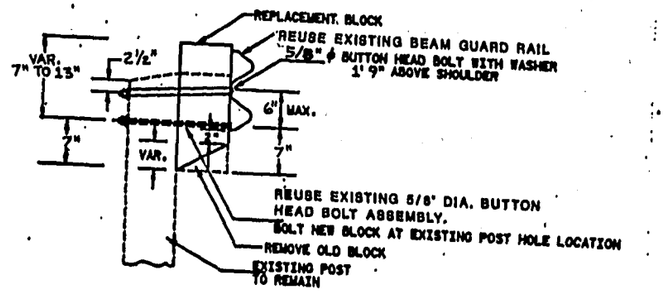
CONSTRUCTION DETAILS



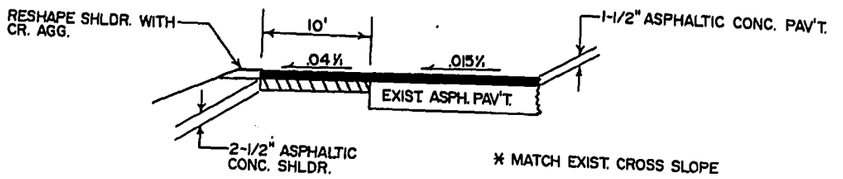
PAVING LIMITS AT SIDE ROADS
(PROJECT 0067-13-30 ONLY)



NORTH LAKE DR. RIGHT TURN LANE DETAIL



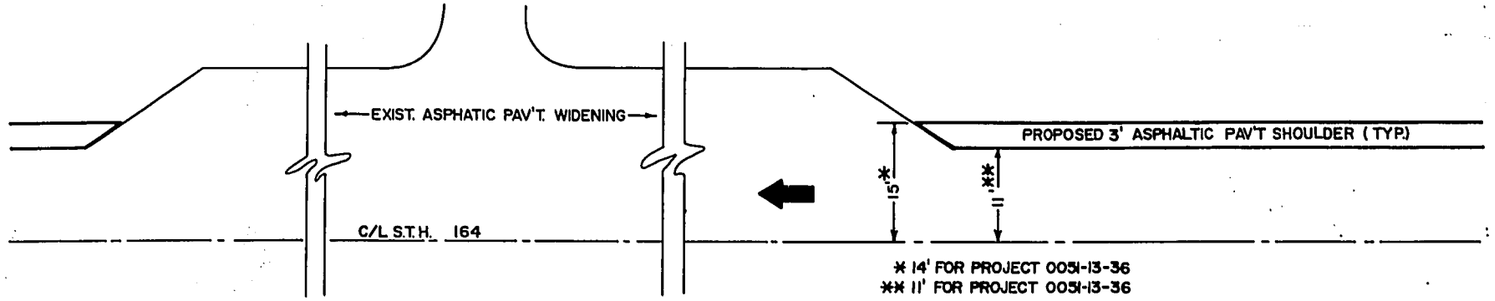
HEIGHT ADJUSTING REPLACEMENT BLOCK
FOR "ADJUSTING STEEL PLATE BEAM GUARD"



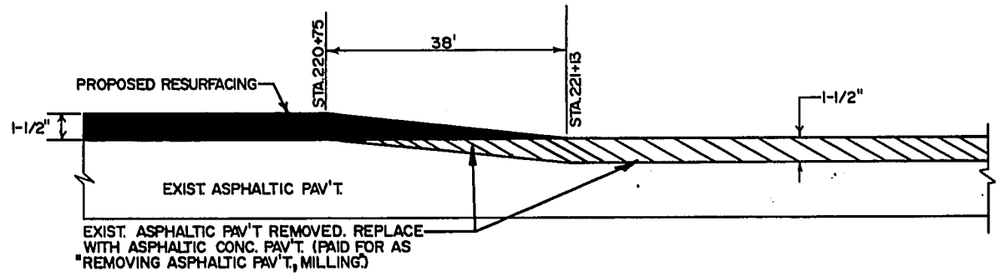
SECTION B-B

STATE PROJECT NUMBER	SHEET NO.
0051-13-36/0067-13-30	2, 2

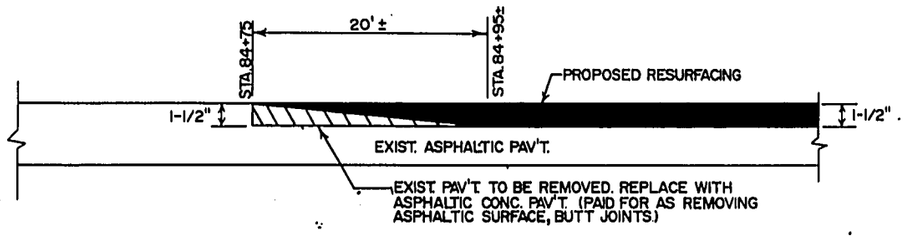
CONSTRUCTION DETAILS



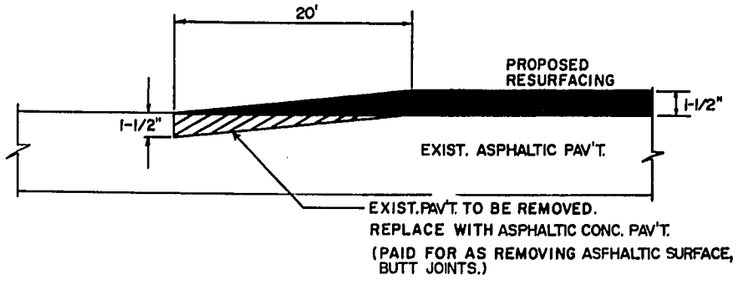
TYPICAL DETAIL AT INTERSECTION TAPERS



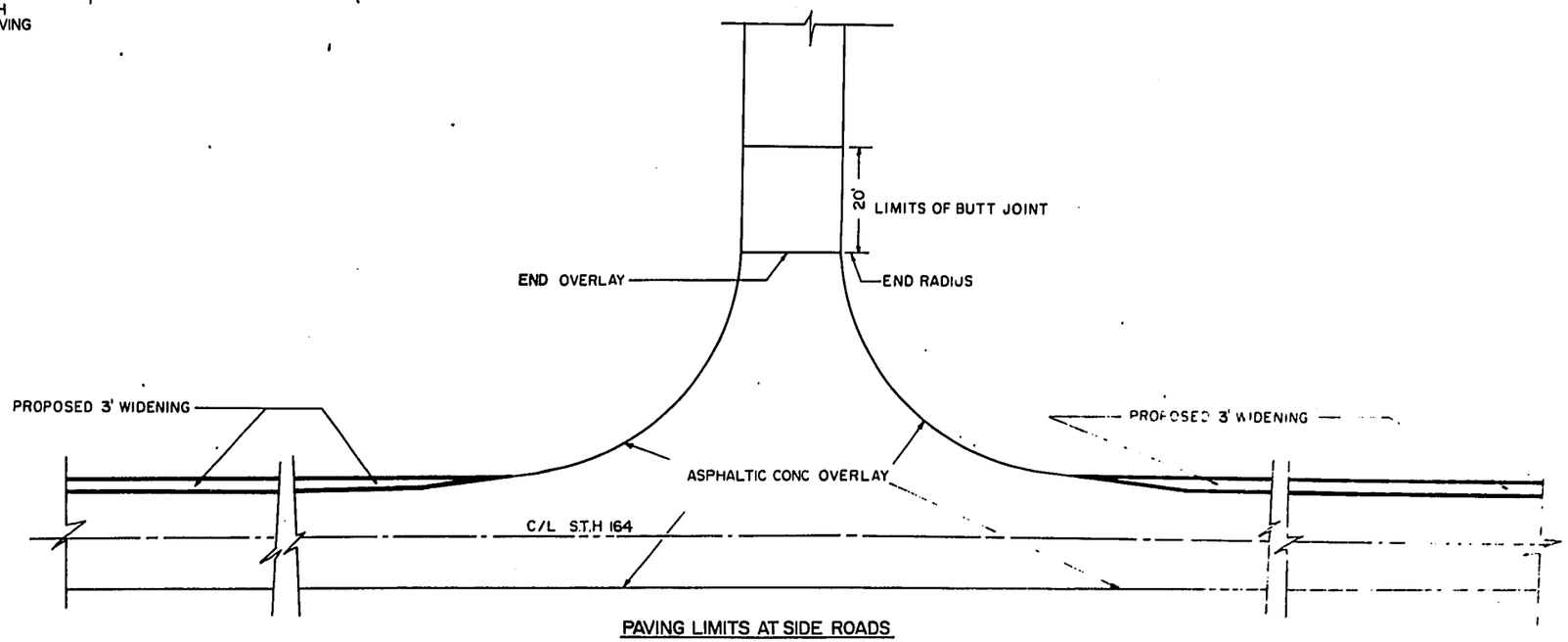
DETAIL AT BEGINNING OF MILLING SEGMENT



BUTT JOINT DETAIL
STA. 84+75



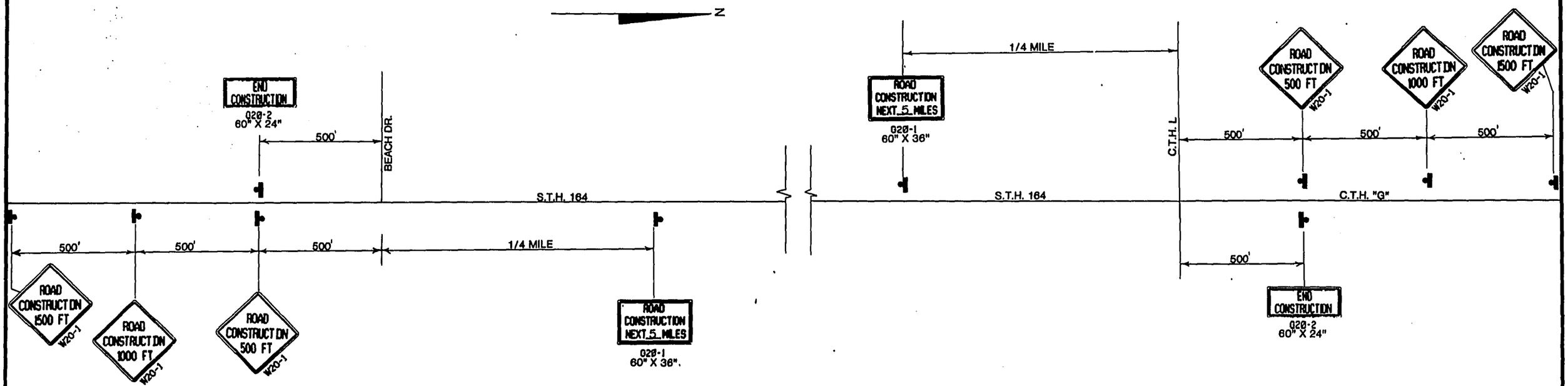
BUTT JOINT DETAIL ON SIDE ROADS
(PROJECT 0051-13-36 ONLY)



PAVING LIMITS AT SIDE ROADS
(PROJECT 0051-13-36 ONLY)

STATE PROJECT NUMBER	SHEET NO.
0051-13-36/0067-13-30	2, 3

ADVANCE SIGNING FOR TRAFFIC CONTROL



GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES MAY BE ADJUSTED TO FIT CONDITIONS AS DIRECTED BY THE ENGINEER.

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS, OR AS DIRECTED BY THE ENGINEER.

DATE 04/30/91

ESTIMATE OF QUANTITIES

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	0051-13-36 QUANTITY	0067-13-30 QUANTITY
20411	REMOVING GUARDRAIL	L.F.	385.00	200.00	185.00
20419	REMOVING ASPHALTIC SURFACE, BUTT JOINTS	S.Y.	285.00	285.00	
20421	REMOVING ASPHALTIC PAVEMENT, MILLING	TON	3,300.00		3,300.00
21102	PREPARATION OF FOUNDATION FOR ASPHALTIC PAVING, PROJECT 0067-13-30	L.S.	1.00		1.00
21103	PREPARATION OF FOUNDATION FOR ASPHALTIC PAVING, PROJECT 0051-13-36	L.S.	1.00	1.00	
21131	PREPARATION OF FOUNDATION FOR ASPHALTIC SHOULDERS	STA.	502.00	236.00	266.00
30404	CRUSHED AGGREGATE BASE COURSE	TON	4,200.00	2,200.00	2,000.00
40204	ASPHALTIC MATERIAL FOR TACK COAT	GAL.	3,450.00	2,050.00	1,400.00
40501	ASPHALTIC MATERIAL FOR PLANT MIXES	TON	645.00	355.00	290.00
40701	ASPHALTIC CONCRETE PAVEMENT	TON	11,300.00	6,200.00	5,100.00
61406	ANCHORAGES FOR STEEL PLATE BEAM GUARD	EACH	4.00		4.00
61408	STEEL PLATE BEAM GUARD, CLASS A	L.F.	360.00	15.00	345.00
61409	STEEL PLATE BEAM GUARD, CLASS B	L.F.	135.00	135.00	
61412	ANCHORAGES FOR STEEL PLATE BEAM GUARD, TYPE 1	EACH	1.00	1.00	
61432	ADJUSTING STEEL PLATE BEAM GUARD	L.F.	580.00		580.00
61802	MAINTENANCE AND REPAIR OF HAUL ROADS, PROJECT 0051-13-36	L.S.	1.00	1.00	
61803	MAINTENANCE AND REPAIR OF HAUL ROADS, PROJECT 0067-13-30	L.S.	1.00		1.00
61910	MOBILIZATION	L.S.	1.00	.50	.50
64201	FIELD OFFICE, TYPE A	L.S.	1.00	.50	.50
64302	TRAFFIC CONTROL, PROJECT 0051-13-30	L.S.	1.00	1.00	
64303	TRAFFIC CONTROL, PROJECT 0067-13-30	L.S.	1.00		1.00
64406	PAVEMENT MARKING, EPOXY, 4-INCH	L.F.	72,660.00	31,680.00	40,980.00
64484	TEMPORARY PAVEMENT MARKING	L.F.	4,100.00	1,900.00	2,200.00

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	0051-13-36 QUANTITY	0067-13-30 QUANTITY
90351	HAULING EXCESS SHOULDER MATERIAL	C.Y.	50.00	50.00	

Sheet 3

STATE PROJECT NUMBER	SHEET NO.
0051-13-36 & 0067-13-30	3A

MISCELLANEOUS QUANTITIES

STH 164 · RACINE & WAUK. CO.

REMOVING GUARDRAIL

PROJECT	LOCATION (STATION-STATION)		L.F.
0051-13-36	154+95 - 156+35	LT	150
"	182+58 - 183+09	LT	50
0067-13-30	305+25 - 306+85	LT	160
"	355+19 - 355+44	RT	25

ANCHORAGES FOR STEEL PLATE BEAM GUARD

PROJECT	LOCATION		EACH	TYPE
0051-13-36	STA. 156+35	LT	1	(TYPE 1)
0067-13-30	STA. 305+00	LT	1	STANDARD
"	STA. 307+15	LT	1	"
"	STA. 348+76	RT	1	"
"	STA. 355+84	RT	1	"

REMOVING ASPHALTIC PAVEMENT, MILLING

PROJECT	LOCATION (STATION-STATION)	TONS
0067-13-30	220+75± - 360+81	3300

ADJUSTING STEEL PLATE BEAM GUARD

	LOCATION (STATION-STATION)		L.F.
PROJ. 0067-13-30	349+41 - 355+19	RT	580

REMOVING ASPHALTIC SURFACE, BUTT JOINTS

PROJECT	LOCATION	S.Y.
0051-13-36	STA. 84+75	60
	BEACH DRIVE	45
"	NORTH LAKE DRIVE (LT)	45
"	NORTH LAKE DRIVE (RT)	45
"	COUNTY LINE ROAD (LT)	45
"	COUNTY LINE ROAD (RT)	45

HAULING EXCESS SHOULDER MATERIAL

	LOCATION (STATION-STATION)	C.Y.
PROJ. 0067-13-36	UNDISTRIBUTED	50

STEEL PLATE BEAM GUARD, CLASS A

PROJECT	LOCATION (STATION-STATION)		L.F.
0051-13-36	156+20 - 156+35	LT	15
0067-13-30	305+00 - 307+15	LT	215
"	348+76 - 349+41	RT	65
"	355+19 - 355+84	RT	65

ASPHALTIC CONCRETE PAVEMENT

PROJECT I.D.	3/4-INCH LEVELING COURSE	3-FOOT SHOULDERS, 1 3/4-INCH	1-1/2-INCH OVERLAY
	TONS	TONS	TONS
0051-13-36	1750	850	3600
0067-13-30	--	950	4150

STEEL PLATE BEAM GUARD, CLASS B

PROJECT	LOCATION (STATION-STATION)		L.F.
0051-13-36	154+95 - 156+20	LT	135

PAVEMENT MARKING, EPOXY, 4-INCH

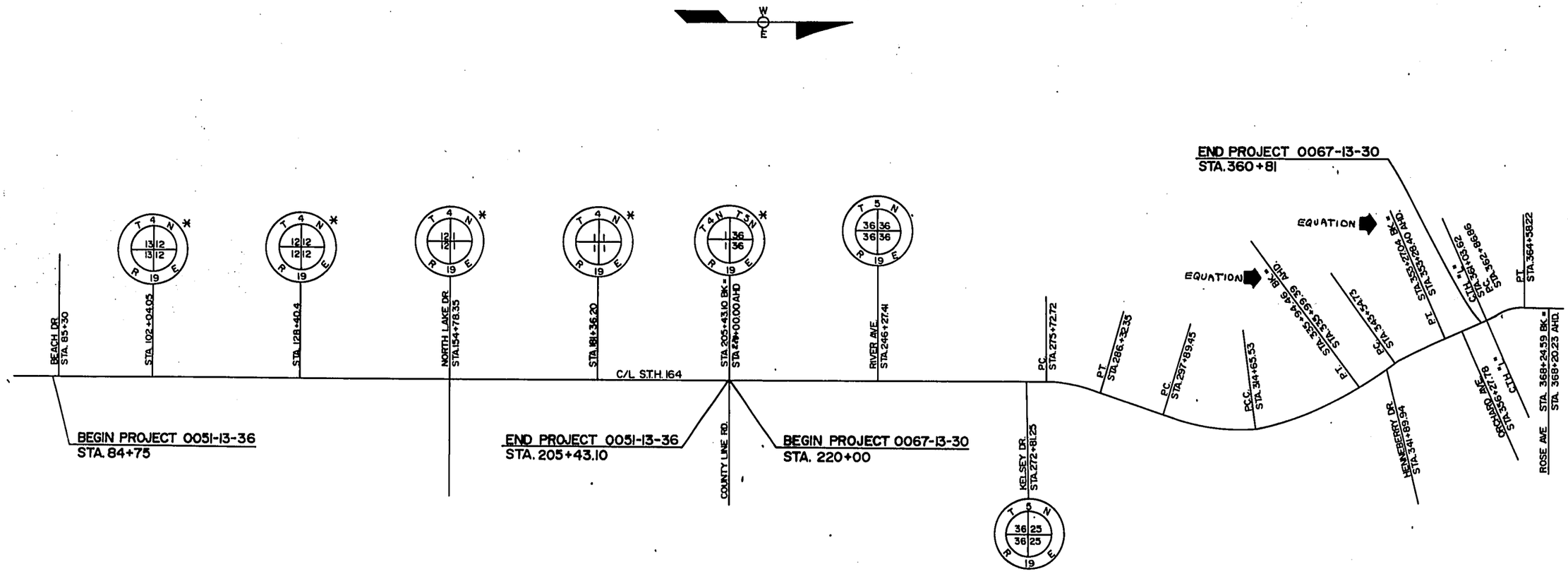
PROJECT I.D.	NO PASSING L.F.	CENTERLINE L.F.	EDGELINE L.F.
0051-13-36	5090	2950	23,640
0067-13-30	11,865	2425	26,690

LEVELS ON = 1, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20,

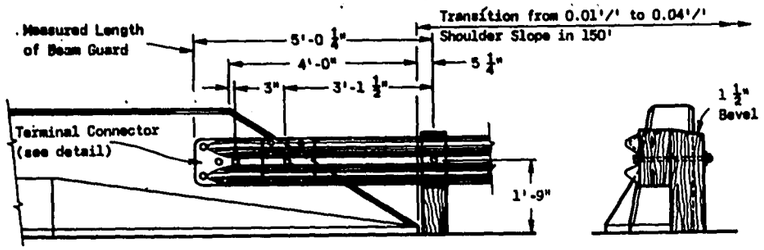
FILE NAME: HDGN:D2_QUANT:1640TY1.DGN

STATE PROJECT NUMBER	SHEET NO.
0051-13-36/0067-13-30	5.0

ALIGNMENT

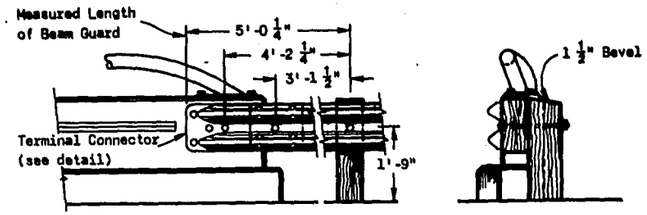


* 4" DIAMETER X 1½" HIGH METAL RING TO BE INSTALLED AT THE TIME OF PAVING. (RING TO BE PROVIDED BY D.O.T.)



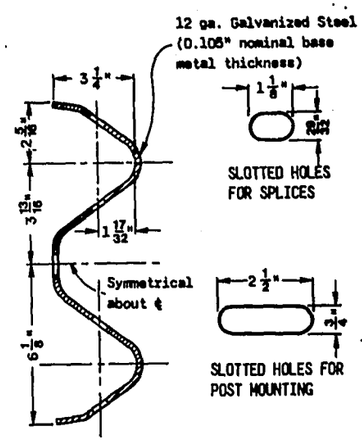
FRONT VIEW END VIEW

SLOPED FACE PARAPET



FRONT VIEW END VIEW

VERTICAL FACE PARAPET



SECTION THRU RAIL ELEMENT

GENERAL NOTES

Details of construction, materials and workmanship not shown on this drawing shall conform to the pertinent requirements of the Standard Specifications, the applicable Special Provisions

The type of anchorage and the exact location of the beginning and end of each beam guard installation shall be as shown on the plans or as directed by the Engineer.

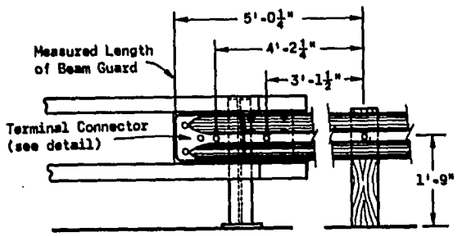
Shoulder widening to accommodate the anchored end of the beam guard shall be accomplished at a rate of widening not to exceed 5 to 1.

Standard Anchorages - Upon approval of the Engineer, the 6 foot offset may be reduced to nothing where existing conditions will not permit the desirable offset. However, when no offset greater than or equal to 3 feet can be provided, the minimum length of guardrail in advance of an obstacle (obstacle to anchor) shall be 150 feet.

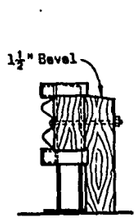
The "Post Footing Details at Piers" shall be used when beam guard posts are over structure footings and less than 3 feet-6 inches of earth is provided over the top of the footing.

(1) The minimum clearance from the front face of beam guard to obstacle shall be 4 feet unless otherwise shown on contract plans. When clearance is less than 4 feet, post spacing shall be reduced to 3 feet-1 1/2 inches C-C.

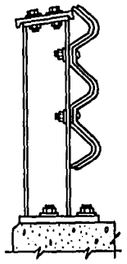
(2) This section shall include at least one 12'-6" Rail Element and a Terminal Connector or W-Thrie Beam Transition Section as required for structure mounting.



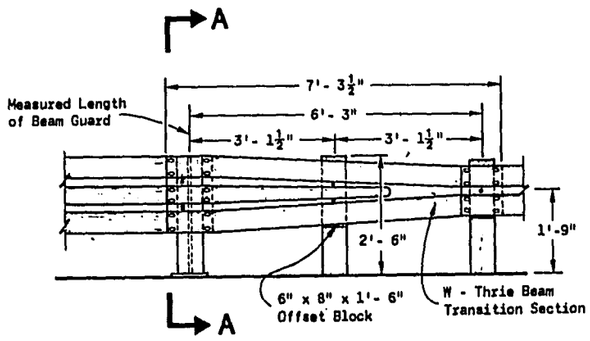
FRONT VIEW



END VIEW



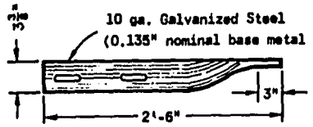
SECTION A–A

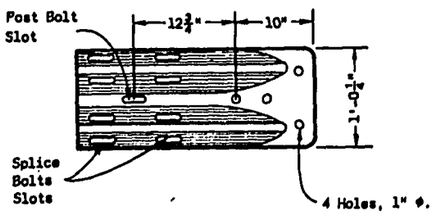


FRONT VIEW

RAILING TYPE "W"

RAILING TYPE "F"

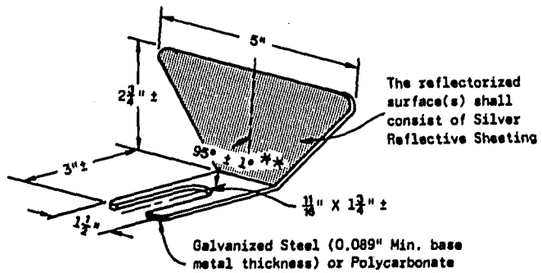




NOTE:
1" I.D., 2" O.D. (0.134" Nominal thickness) galvanized metal washer required under the head of splice bolts used in the Terminal Connector only.

TERMINAL CONNECTOR

STRUCTURE MOUNTING DETAILS



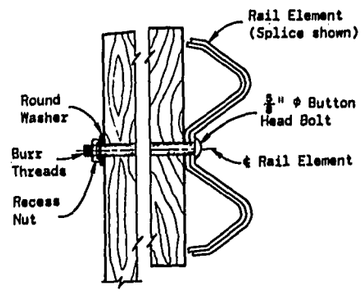
REFLECTOR SPACING

	Beam Guard Length	Reflector Spacing	No. Surfaces Reflectorized	Min. No. Reflectors
One Way Traffic	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
Two Way Traffic	< 200' *	25' C-C	1 *	6
	> 200' *	50' C-C	1 *	
Two Way Traffic	< 200'	50' C-C	2 **	3
	> 200'	100' C-C	2 **	

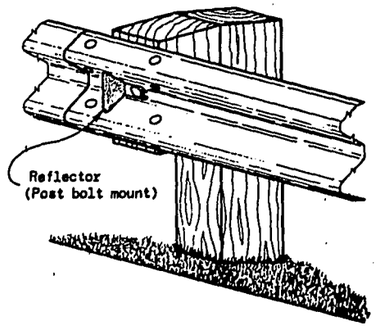
* Every other reflector reversed for 2-way visibility. Contractor may furnish two-sided reflectors in lieu of one-sided reflectors.

** Angle of bend to be 90° ± 1° for two-sided reflectors.

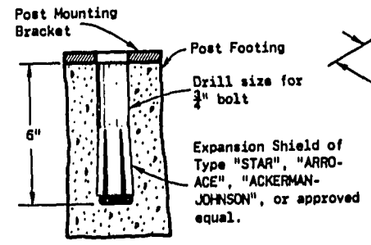
REFLECTOR DETAIL



BUTTON HEAD BOLT DETAIL

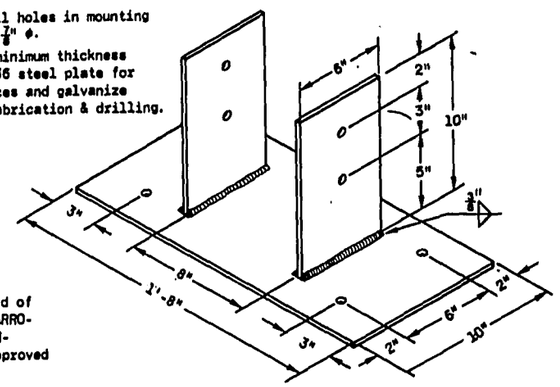


TYPICAL INSTALLATION



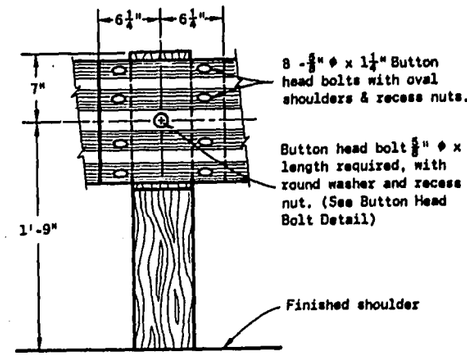
EXPANSION SHIELD DETAIL

NOTE:
Drill all holes in mounting bracket 7/8" ϕ.
Use 3/8" minimum thickness ASTM A 36 steel plate for all pieces and galvanize after fabrication & drilling.



POST MOUNTING BRACKET

POST FOOTING DETAIL AT PIERS



RAIL ELEMENT SPLICING AND POST MOUNTING DETAIL

NOTE:
THIS STANDARD DETAIL DRAWING CONSISTS OF TWO SHEETS AND BOTH SHEETS ARE REQUIRED WHEN THIS DRAWING IS CALLED FOR IN CONTRACT PLANS.

CAUTION: WHEN SPECIAL ANCHORAGES ARE SPECIFIED, SHEET 8c IS ALSO REQUIRED.

CLASS "A"
STEEL PLATE BEAM GUARD

State of Wisconsin
Department of Transportation

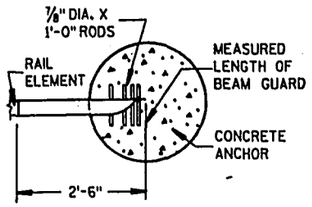
APPROVED 1-31-85
DATE

CHIEF DESIGN ENGINEER

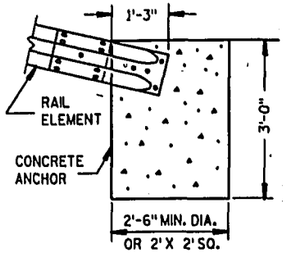
FHWA

S.D.D. 14 B 2-8a

S.D.D. 14 B 2-8a



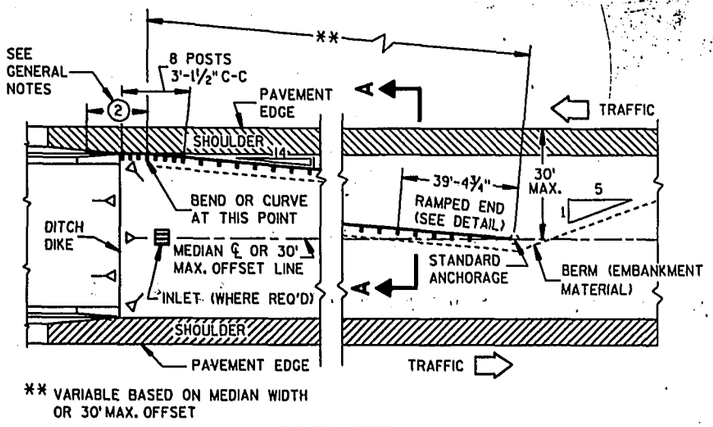
PLAN VIEW IN SECTION



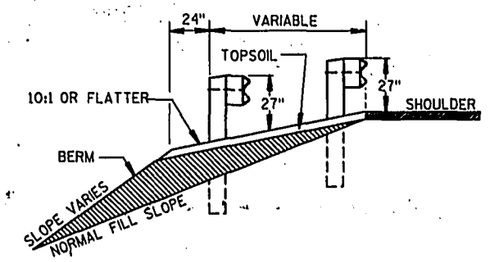
FRONT VIEW IN SECTION

STANDARD ANCHORAGE DETAIL

(STANDARD SPECIFICATION ITEM "ANCHORAGE FOR STEEL PLATE BEAM GUARD")

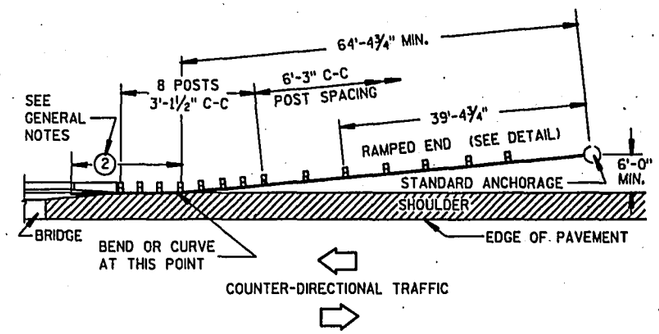


PLAN VIEW



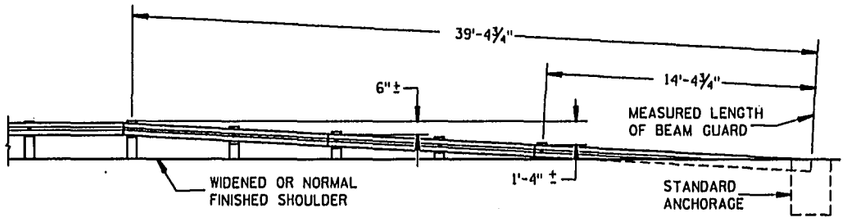
SECTION A-A

TYPICAL MEDIAN INSTALLATION AT STRUCTURES



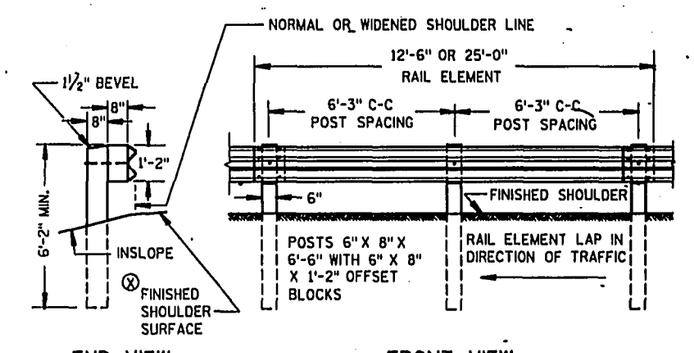
PLAN VIEW

TYPICAL INSTALLATION AT FULL WIDTH STRUCTURES



FRONT VIEW

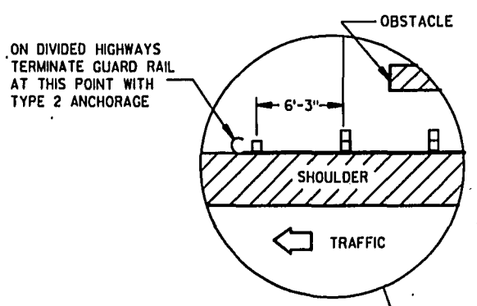
TYPICAL RAMPED END

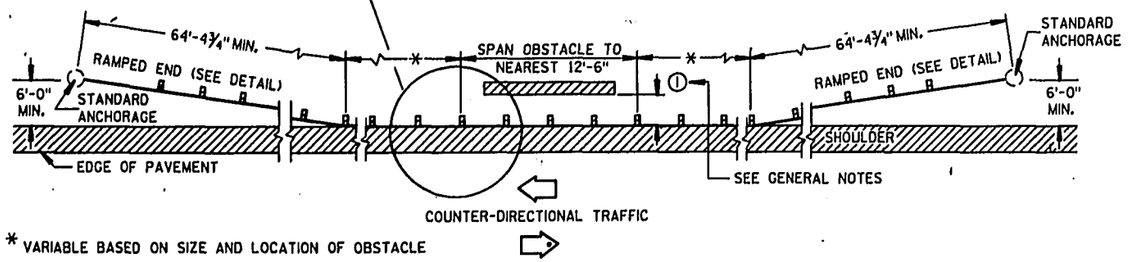


END VIEW FRONT VIEW

TYPICAL STEEL PLATE BEAM GUARD INSTALLATION

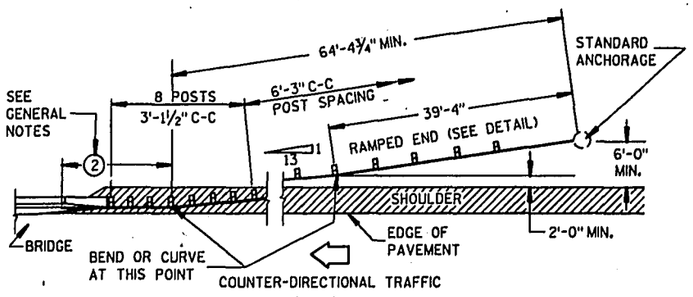
Ⓧ SHOULDER OR EMBANKMENT SLOPE IN FRONT OF BEAM GUARD SHALL BE 10:1 OR FLATTER





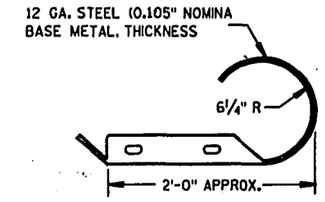
PLAN VIEW

TYPICAL INSTALLATION AT OBSTACLES



PLAN VIEW

TYPICAL INSTALLATION AT NARROW STRUCTURES



PLAN VIEW

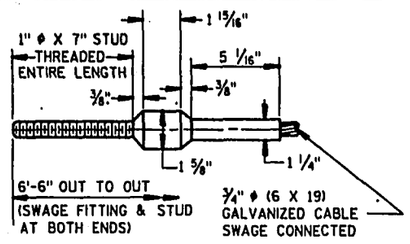
END SECTION (ROUNDED)

CLASS "A"
STEEL PLATE BEAM GUARD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

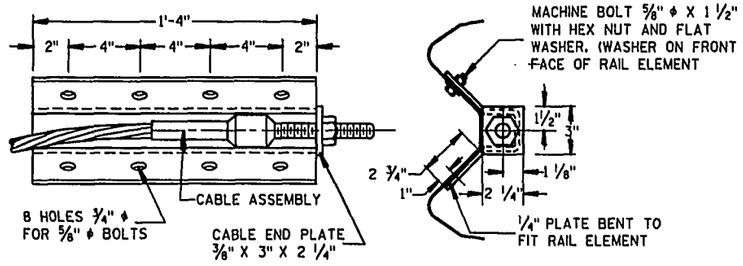
S.D.D. 14B 2-8b

S.D.D. 14B 2-8b



CABLE ASSEMBLY

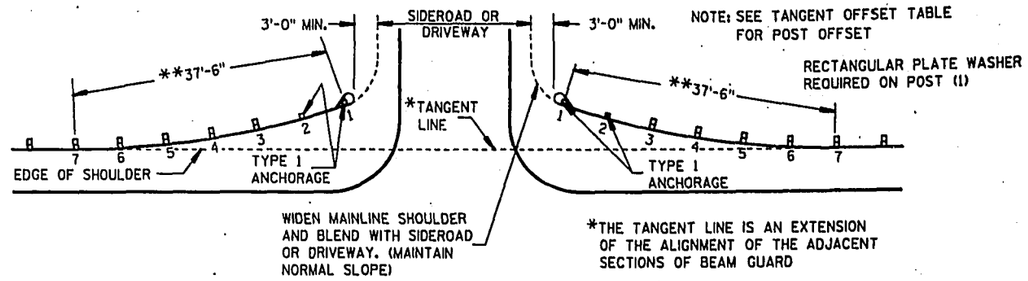
CABLE, SWAGE FITTING, STUD AND NUT SHALL DEVELOP A MINIMUM BREAKING STRENGTH OF 40,000 LB (TIGHTEN UNTIL TAUT)



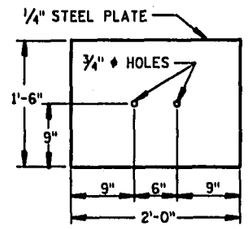
FRONT VIEW

END VIEW

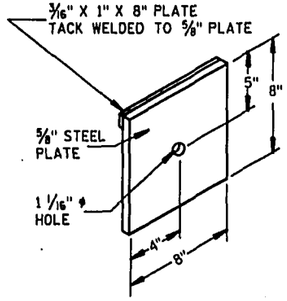
ANCHOR PLATE DETAIL



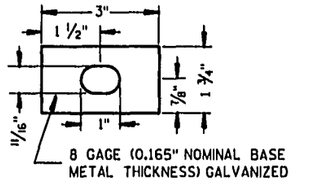
TYPICAL INSTALLATION AT MINOR SIDEROADS OR DRIVEWAYS



SOIL PLATE



STEEL BEARING PLATE

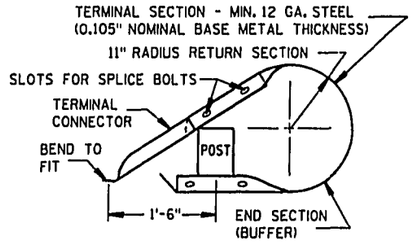


RECTANGULAR PLATE WASHER

(REQUIRED ON END POST OF TYPE 1 ANCHORAGE)

NOTE:

TYPE 1 AND TYPE 2 ANCHORAGES SHALL CONSIST OF STEEL TUBE(S), SOIL PLATE(S), WOOD BREAK-AWAY POST(S), BEARING PLATE, ANCHOR PLATE, CABLE ASSEMBLY AND ALL ASSOCIATED HARDWARE. ALL STEEL PARTS SHALL BE GALVANIZED.

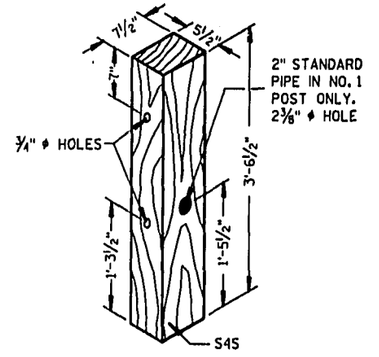


PLAN VIEW

TERMINAL SECTION DETAIL

(TYPE 1 ANCHOR ONLY)

NOTE:
THIS TERMINAL SECTION DETAIL ILLUSTRATES TWO PIECE CONSTRUCTION. A ONE PIECE TERMINAL SECTION CONFORMING TO THIS DETAIL IS ACCEPTABLE

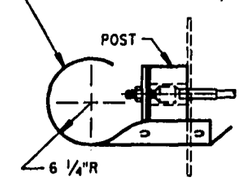


WOOD BREAKAWAY POST

TANGENT OFFSET TABLE	
POST NO.	OFFSET (FEET)
1	4.00
2	2.78
3	1.78
4	1.00
5	0.44
6	0.11
7	0.00

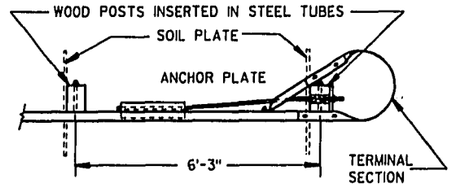
**37'-6" INSTALLATION, 6 SPACES AT 6'-3"

TANGENT OFFSET TABLE

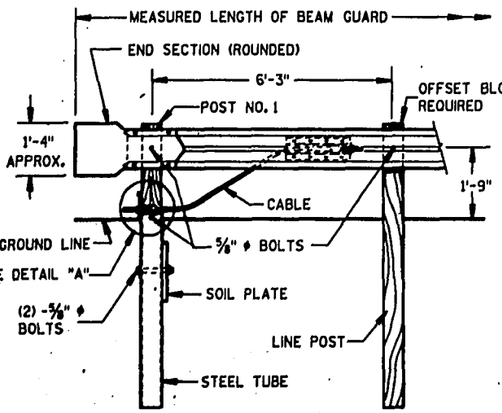


PLAN VIEW

END SECTION (ROUNDED)

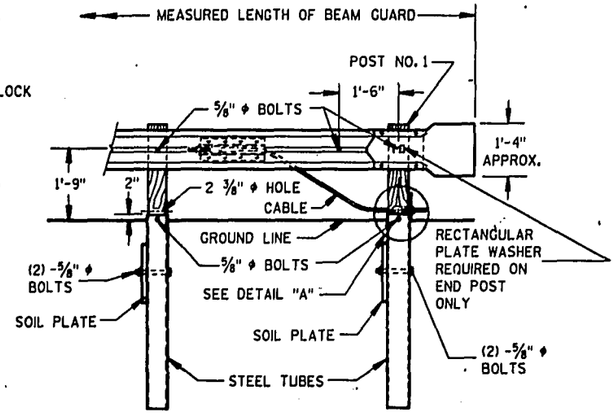


PLAN VIEW



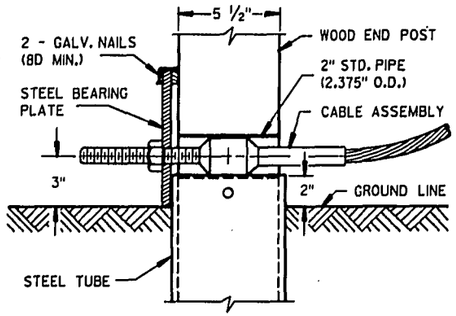
FRONT VIEW

TYPE 2 ANCHORAGE



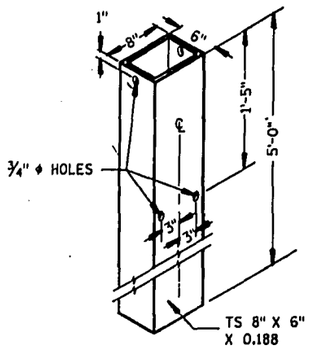
FRONT VIEW

TYPE 1 ANCHORAGE



DETAIL "A"

(POST NO. 1)



STEEL TUBE

THE STEEL TUBE SHALL CONFORM TO REQUIREMENTS OF ASTM A501

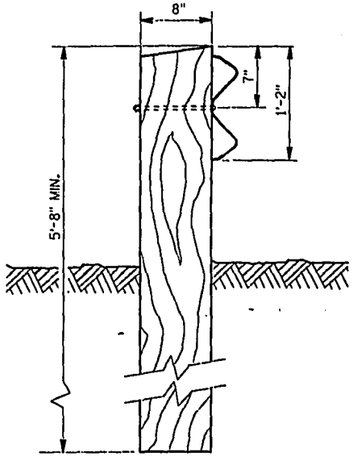
NOTE:
THIS SHEET SUPPLEMENTS SDD 14 B 2-8a AND SDD 14B 2-8b WHEN SPECIAL ANCHORAGES ARE SPECIFIED. ALL THREE SHEETS ARE REQUIRED WHEN THIS DRAWING IS CALLED FOR IN CONTRACT PLANS.

CLASS "A"
STEEL PLATE BEAM GUARD
SPECIAL ANCHORAGES

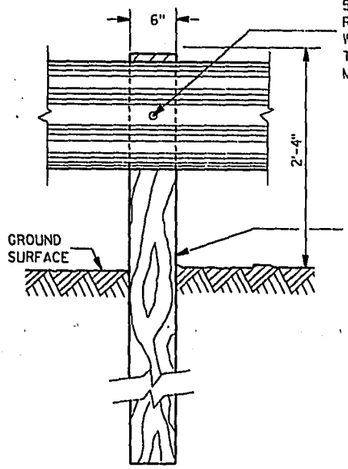
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 14B 2-8c

S.D.D. 14B 2-8c



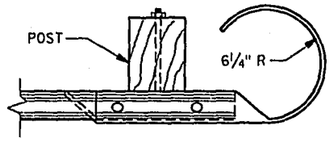
END VIEW



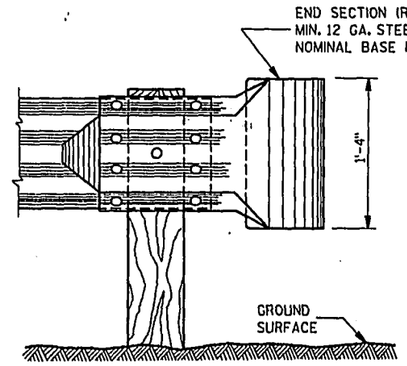
FRONT VIEW

BUTTONHEAD MOUNTING BOLT 5/8 " DIA. X LENGTH AS REQUIRED, SECURED WITH WASHER & NUT. THREAD END TO BE BURRED FOLLOWING MOUNTING.

SAWED TREATED TIMBER POSTS 6" X 8" X 6'-0" SHALL BE FURNISHED AND PLACED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.



PLAN

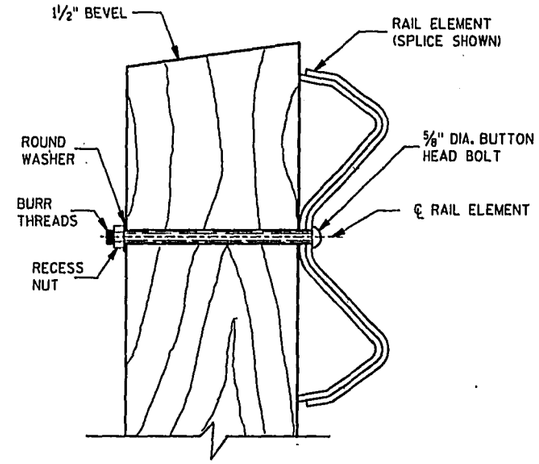


FRONT ELEVATION

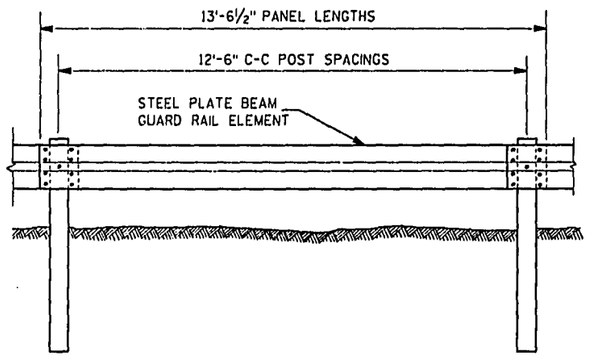
END SECTION (ROUNDED) DETAILS

GENERAL NOTES

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

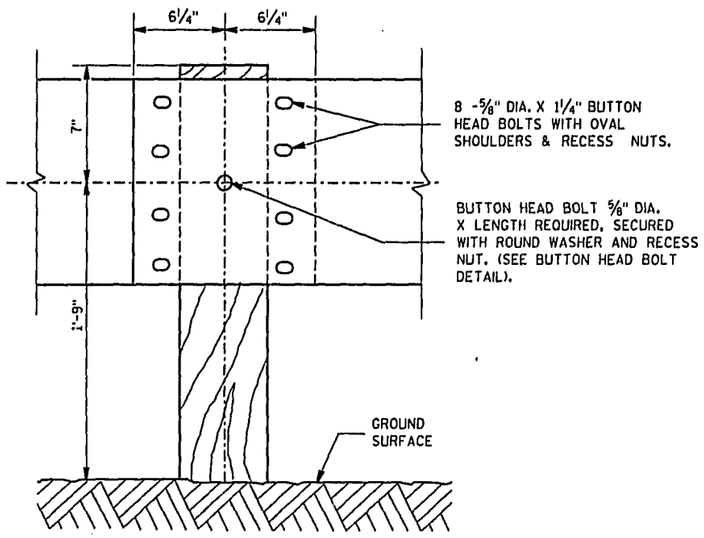


BUTTON HEAD BOLT DETAIL

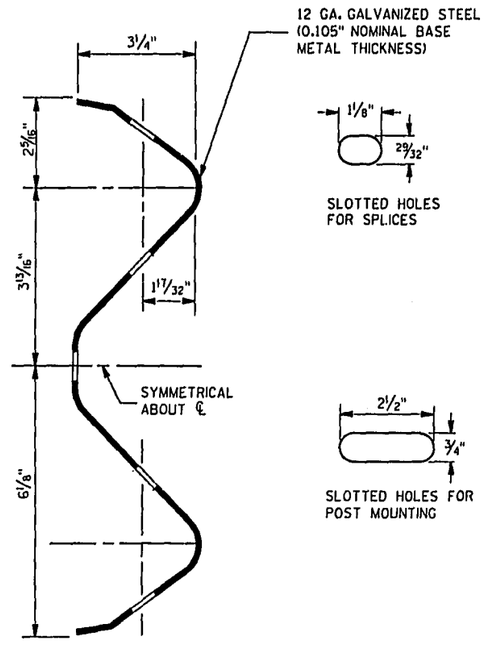


FRONT VIEW

POST DETAIL



RAIL ELEMENT SPLICING AND POST MOUNTING DETAIL



SECTION THRU RAIL ELEMENT

STEEL PLATE BEAM GUARD CLASS B

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 3-25-85 DATE

CHIEF DESIGN ENGINEER

FHWA

S.D.D. 14 B 3-2

S.D.D. 14 B 3-2

TWO-LANE ROADWAY

SYMBOLS

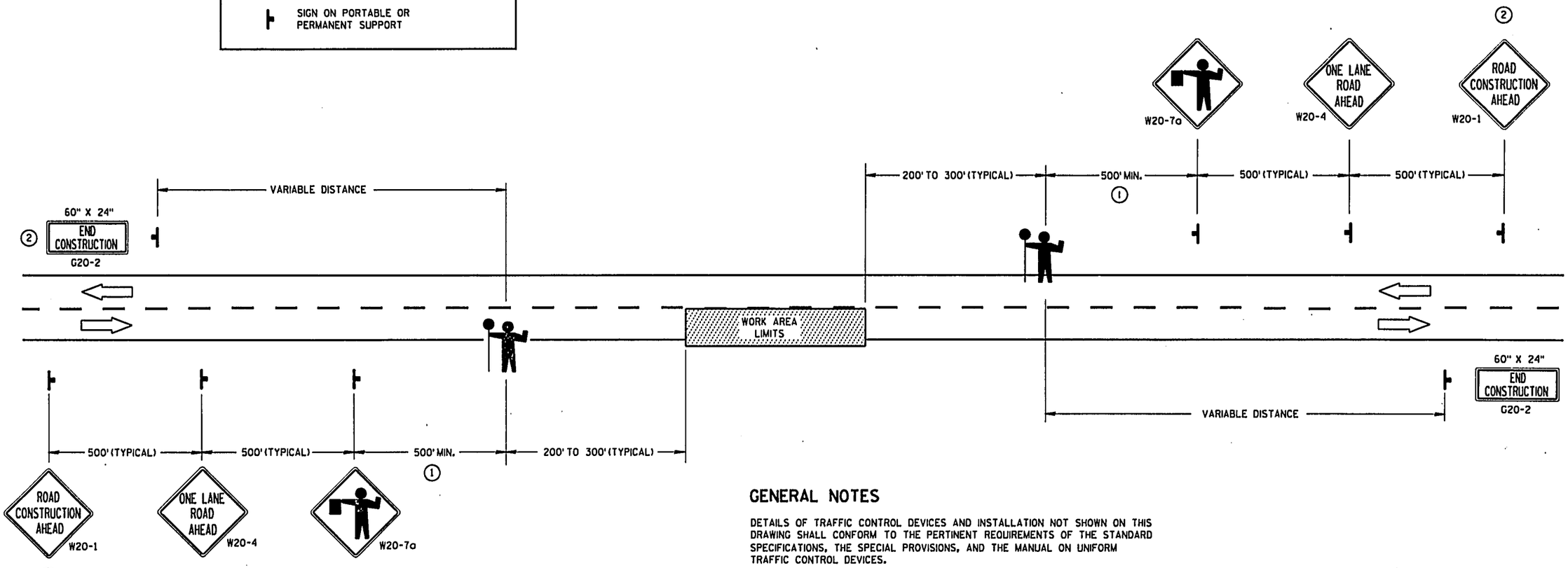
WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN ON PORTABLE OR PERMANENT SUPPORT

BE PREPARED TO STOP

USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



(1) FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS DIRECTED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD CONSTRUCTION WORK ZONE AREA.

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE LOCATION OF ALL FLAGGERS) SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, THE "FLAGGER AHEAD", THE "ROAD CONSTRUCTION AHEAD" AND THE ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

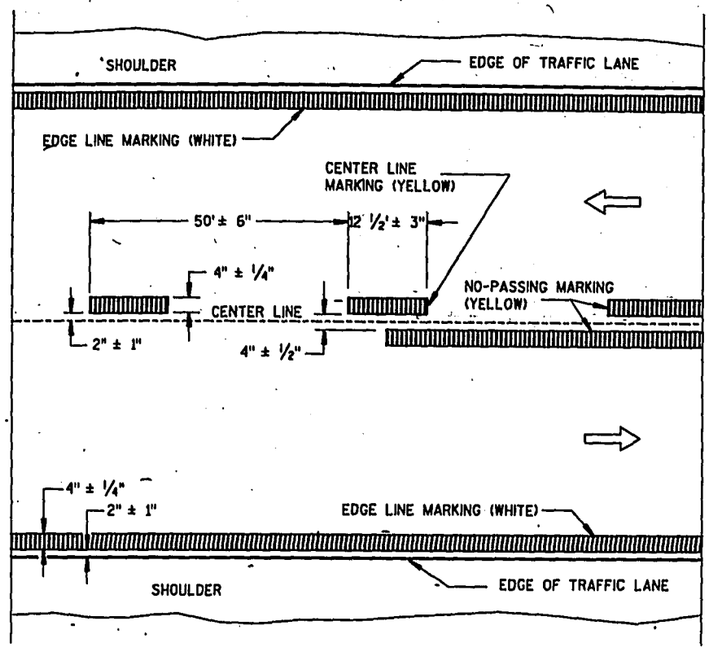
APPROVED
2-12-91
DATE

STATE TRAFFIC ENGINEER FOR HWYS

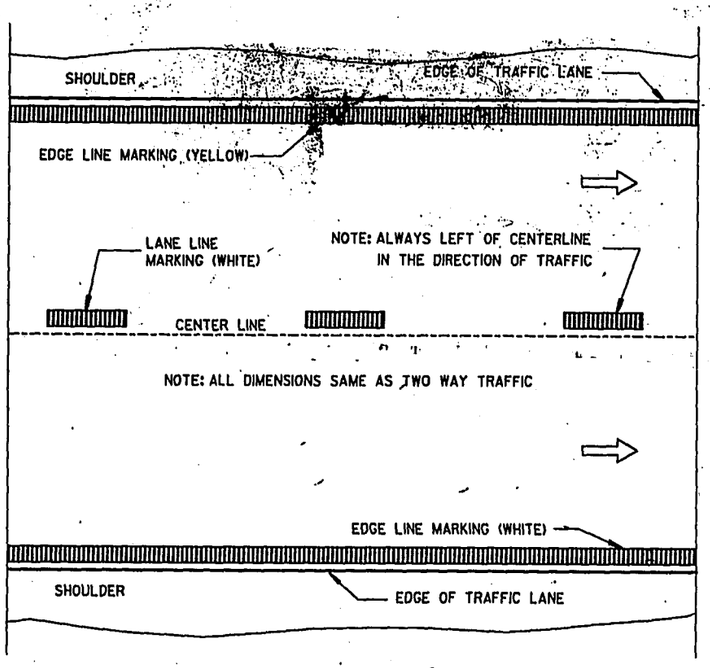
FHWA

S.D.D. 15 C 12-1

S.D.D. 15 C 12-1

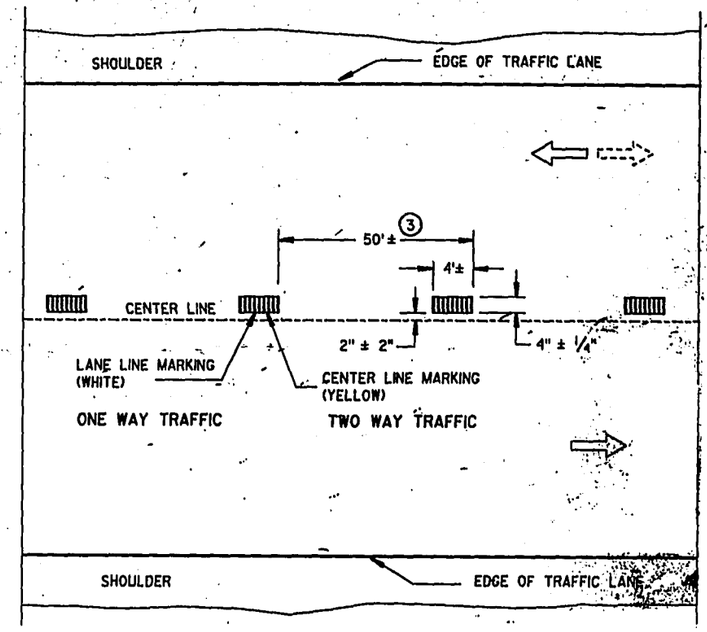


TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TEMPORARY PAVEMENT MARKING

GENERAL NOTES

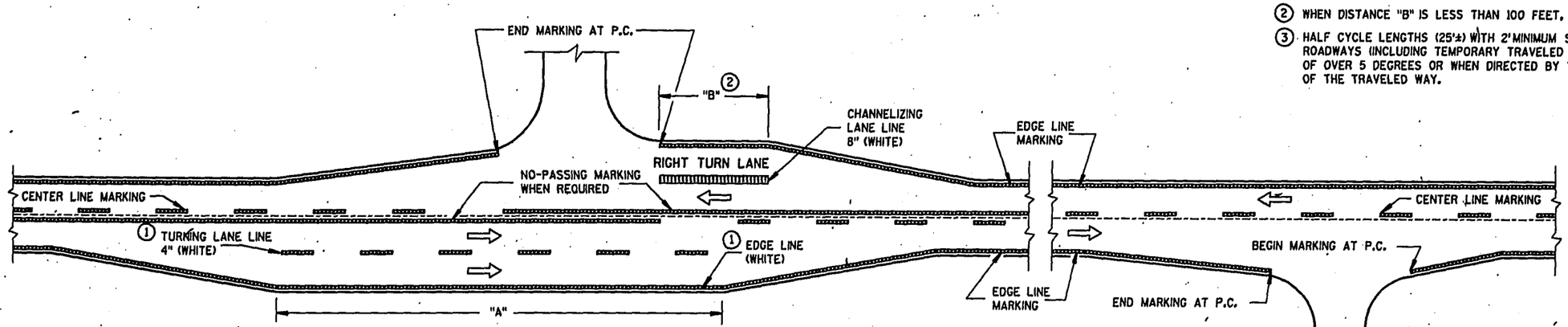
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT TURNING LANE MARKING.

② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.

③ 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.



MAJOR INTERSECTION

MINOR INTERSECTION

TYPICAL PAVEMENT MARKING FOR RURAL INTERSECTIONS

PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 3-10-89 DATE
STATE TRAFFIC ENGINEER FOR HWYS
FHWA

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