PROJECT ID: 1580-23-71 DESIGN ID 1580-23-D +15D

COUNTY: BARRON & RUSK

Nov 02

ORDER OF SHEETS

Sheet No.	1	Title
Sheet No.		Typical Sections and Details
Sheet No.		Estimate of Quantities
Sheet No.		Miscellaneous Quantities
Sheet No.		Right of Way Plat
Sheet No.		Plan and Profile
Sheet No.		Standard Detail Drawings
Sheet No.		Sign Plates
Sheet No.		Structure Plans
Sheet No.		Computer Earthwork Data
Sheet No.		Cross Sections

TOTAL SHEETS = 38

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1580-23-71	NH2003035	1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

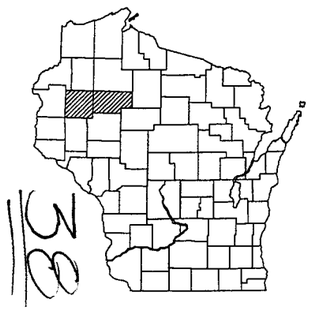
PLAN OF PROPOSED IMPROVEMENT

CAMERON - WEYERHAEUSER

LIMITS

U.S.H. 8

BARRON & RUSK COUNTIES



EQ. STA. 136B+70 BK=
STA. 0+00 AHEAD

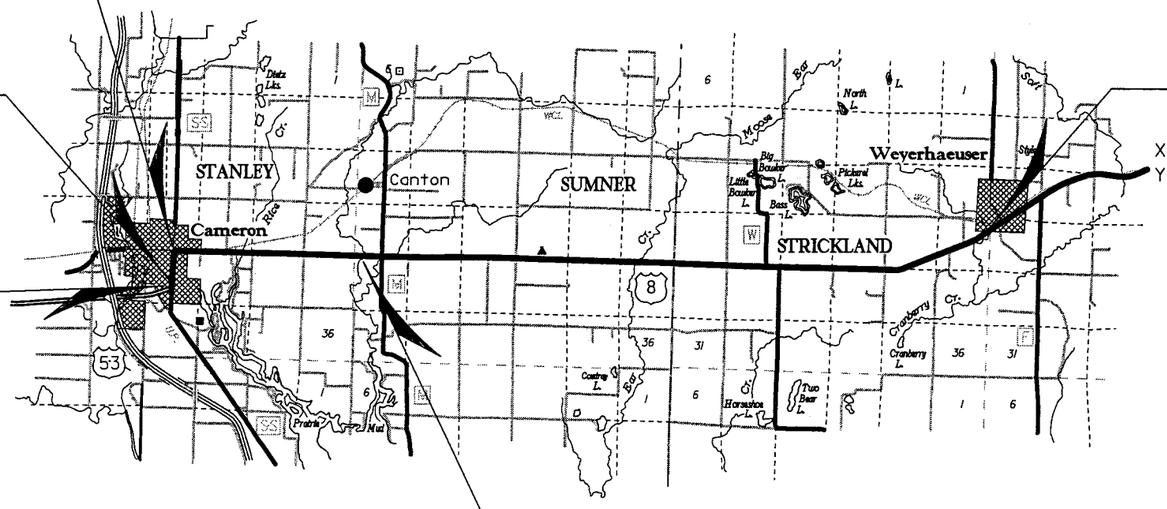
EQ. STA. 351E+87.23 BK=
STA. 99B+20.99 AHEAD

EQ. STA. 349W+43.91 BK=
STA. 349A+43.91 AHEAD

EQ. STA. 352W+10.29 BK=
STA. 99B+55.50 AHEAD

EQ. STA. 354A+02.54 BK=
STA. 102B+56.85 AHEAD
(12' LT.)

STATE PROJECT NUMBER
1580-23-71



END CONSTRUCTION
PROJECT 1580-23-71
STA. 797+00
X 580,290 (+/- 200)
Y 1,633,350 (+/- 200)

BEGIN CONSTRUCTION
PROJECT 1580-23-71
STA. 346E+00
Y 575,375 (+/- 200)
X 1,553,920 (+/- 200)

EXCEPTION TO NET C/L LENGTH
STA. 190+06 TO STA 191+06
STRUCTURE B-3-134-97

N

DESIGN DESIGNATION

A.D.T. (YR 2003)	=	5,200 (RURAL SECTION)
A.D.T. (YR 2023)	=	7,600 (RURAL SECTION)
D.H.V.	=	10.5
D.	=	62/38
T.	=	7.4
DESIGN SPEED	=	55
ESALS	=	2,036,700

CONVENTIONAL SYMBOLS

PLAN
- CORPORATE LIMITS
- PROPERTY LINE (PL + 58.1)
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE
- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES
- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

LAYOUT
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 15.73 MI.

"All Coordinates shown on this plan are scaled from U.S.G.S. Topographic Maps.
Rice Lake South Quadrangle, Barron County 7.5' Series, 1978
and
Weyerhauser Quadrangle, Rusk County 7.5' Series, 1972"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
- Surveyor
- Designer: WILLIAM KOVALESKI, JR, P.E.
- Project Manager: JIM RIEDL
- District Examiner: MATT DICKENSON
- District Supervisor: LANCE BURGER, P.E.
- C.O. Examiner: C. BUJANOWSKI

APPROVED FOR DISTRICT OFFICE
DATE: 7-11-2002 (Signature)

E

GENERAL NOTES:
1) ASPHALTIC LAYBACKS SHALL BE REQUIRED ON GRAVEL ROADS.
2) EXISTING PAVED SIDE ROADS SHALL BE OVERLAYED TO MATCH EXISTING RADII AND GEOMETRY. SEE SIDE ROAD DETAILS FOR VARIOUS JOINTS. EXCEPTION INTERSECTIONS IDENTIFIED TO BE GRADED AND SHAPED.
3) TEMPORARY CENTERLINE MARKING SHALL BE USED ON FIRST PAVEMENT LAYER IN ACCORDANCE W/ THE STANDARD AND SUPPLEMENTAL SPECIFICATIONS.
4) 3.5-INCH ASPHALTIC CONCRETE PAVEMENT SHALL BE CONSTRUCTED WITH AN 1.75-INCH UPPER LAYER AND 1.75-INCH LOWER LAYER. WHEN THE QUANTITY OF UPPER OR LOWER LAYER IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH INDICATED ON PLANS SHALL BE CONSIDERED APPROXIMATE. ACTUAL DEPTH WILL DEPEND UPON DISTRIBUTION OF MATERIALS AS DIRECTED BY THE FIELD ENGINEER.
5) ALL PAVEMENT JOINTS SHALL BE CUT AND TRIMMED TO A NEAT LINE UNLESS OTHERWISE INDICATED AS A SAW CUT.
6) THE LOCATIONS AND LIMITS OF PRIVATE ENTRANCES SHALL BE IDENTIFIED BY THE FIELD ENGINEER.
7) THERE ARE UTILITY FACILITIES IN THE PROJECT AREA WHICH ARE NOT SHOWN ON THE PLANS.

STANDARD DETAIL DRAWINGS

9B2-6	CONDUIT
9B4-4	PULL BOX
9F11-2	LOOP DETECTOR INSTALLED IN EXISTING CONCRETE PAVEMENT W/ NEW ASPHALTIC OVERLAY
13A6-2	RUMBLE STRIPS AT INTERSECTION
14B15-4a & b	CLASS "A" STEEL PLATE BEAM GUARD INSTALLATION & ELEMENTS
14B18-4a	CLASS "A" STEEL PLATE BEAM GUARD (AT BRIDGES, OBSTACLES, AND SIDE ROADS/DRIVEWAYS)
14B24-3a & b & c ..	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
15C4-1	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UN-DIVIDED ROAD OPEN TO TRAFFIC
15C8-8a	PAVEMENT MARKING (MAINLINE)
15C8-8b	PAVEMENT MARKING (INTERSECTIONS)
15C8-9e	PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)
15C12-2	TRAFFIC CONTROL OR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

UTILITIES
DAIRYLAND POWER COOPERATIVE
PO BOX 817
LACROSSE, WISCONSIN 54602
CONTACT: MR. KURT CHILDS

EXCEL ENERGY
1414 W. HAMILTON AVENUE
PO BOX 8
EAU CLAIRE, WISCONSIN 54702-0008
CONTACT: MS. PAM TAYLOR

CHIBARDUM TELEPHONE COOPERATIVES
PO BOX 164
110 N. SECOND AVENUE
DALLAS, WISCONSIN 54733
CONTACT: MR. DAVE THOMPSON

CHARTER COMMUNICATION
2304 S. MAIN STREET
RICE LAKE, WISCONSIN 54868
CONTACT: MR. JAMEY OLDEEN

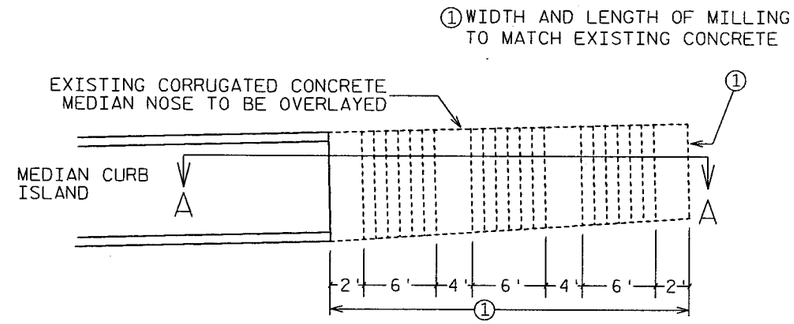
WISCONSIN GAS COMPANY
1921 8TH STREET SOUTH
WISCONSIN RAPIDS, WISCONSIN 54494
CONTACT: MR. THOMS KROSTAG

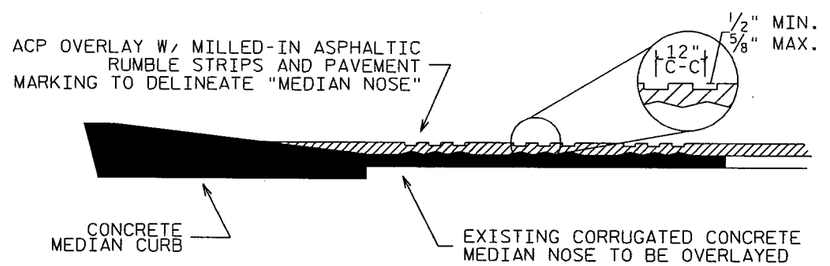
BARRON ELECTRIC COOPERATIVE
1456 E. LASALLE STREET
BARRON, WISCONSIN 54812
CONTACT: MR. DALLAS SLOAN

VILLAGE OF CAMERON STREET DEPT.
607 SOUTH LIMIT AVENUE
CAMERON, WISCONSIN 54822
CONTACT: MR. STEVE BECKER

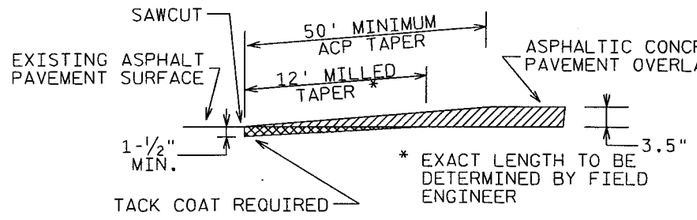
DIGGERS HOTLINE
Toll Free (800) 242-8511
Milwaukee Area (414) 259-1181
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

MILLING DETAILS AND FLOWLINES

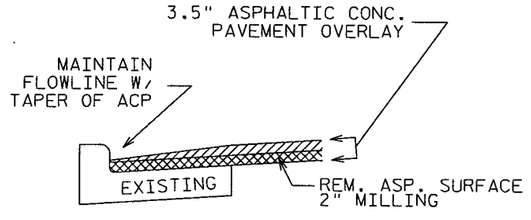




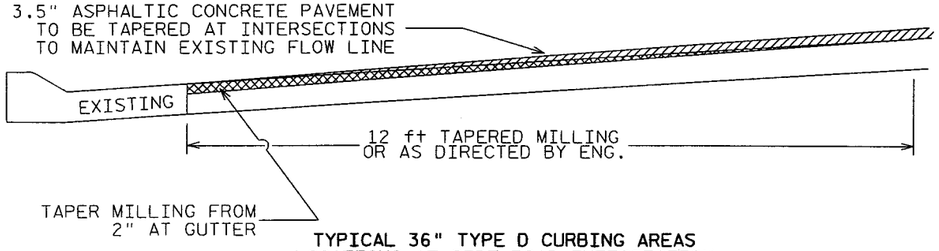
MILLED-IN RUMBLE STRIPS AT MEDIAN NOSES
APPROX. STA. 98B+00 & STA. 101B+00



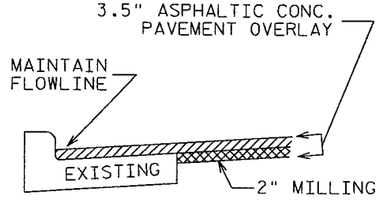
BUTT JOINT DETAIL
MAINLINE AND SIDE ROAD



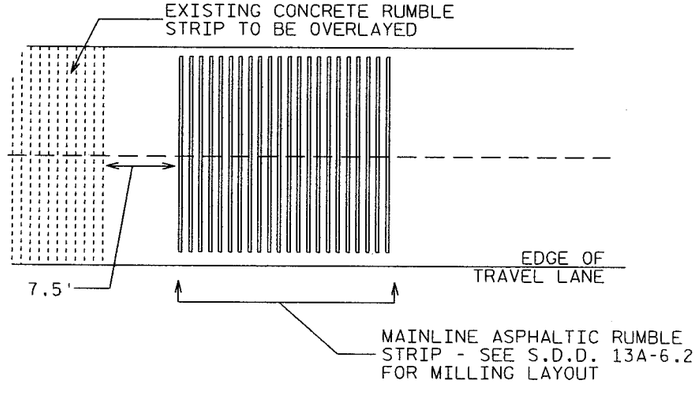
GENERAL 30" TYPE D CURBING AREAS
STA. 126B+64 TO STA. 136B+70



TYPICAL 36" TYPE D CURBING AREAS
LOCATIONS AT SIDE ROAD INTERSECTION
CTH M & CTH W

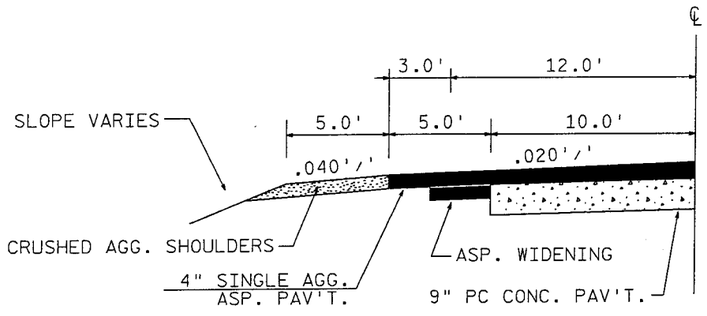


GENERAL 30" TYPE D CURBING AREA
APPROX. STA. 120B+00 TO 123B+00
135B+41 TO 11+28 RT



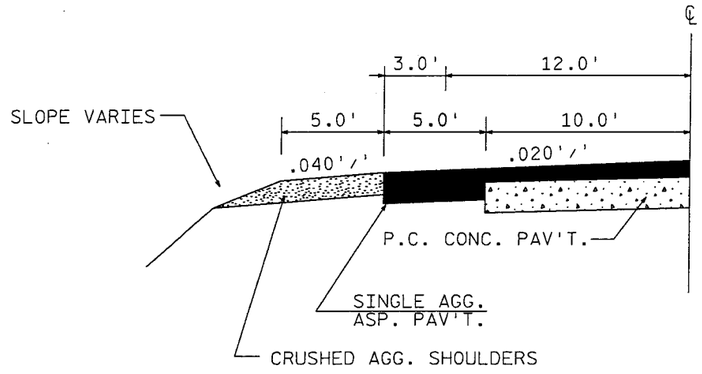
MILLED-IN RUMBLE STRIP
APPROX. STA. 348E+00

STATE PROJECT NUMBER: 1580-23-71	HWY: U.S.H. 8	COUNTY: BARRON & RUSK	DETAILS AND GENERAL NOTES	SCALE, FEET 0 25' 50'	SHEET NO: 2	E



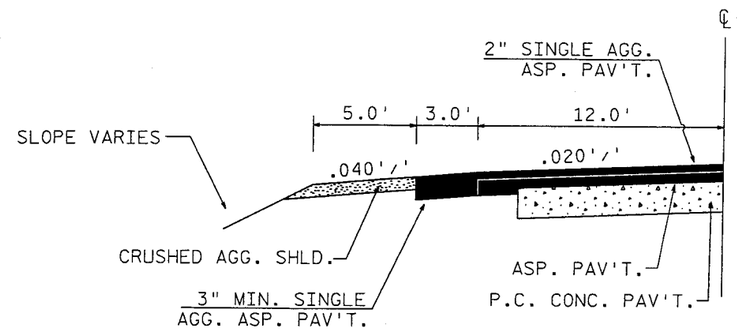
TYPICAL EXISTING SECTION

STA. 4+19 TO 53+00



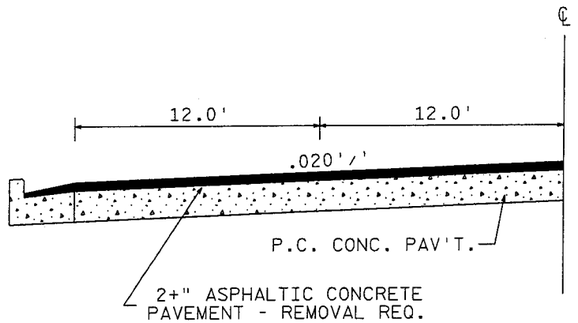
TYPICAL EXISTING SECTION

STA. 53+00 TO 205+03
211+33 TO 445+53
446+37 TO 459+87
464+50 TO 493+56
500+56 TO 560+90
567+10 TO 650+35
656+65 TO 667+30
673+00 TO 728+30
734+70 TO 795+07



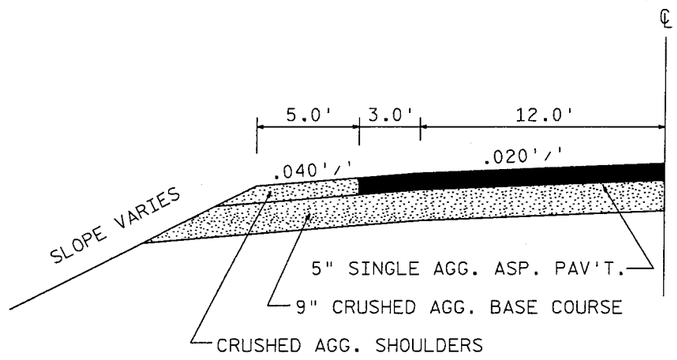
TYPICAL EXISTING SECTION

STA. 205+03 TO 211+33
459+87 O 464+50



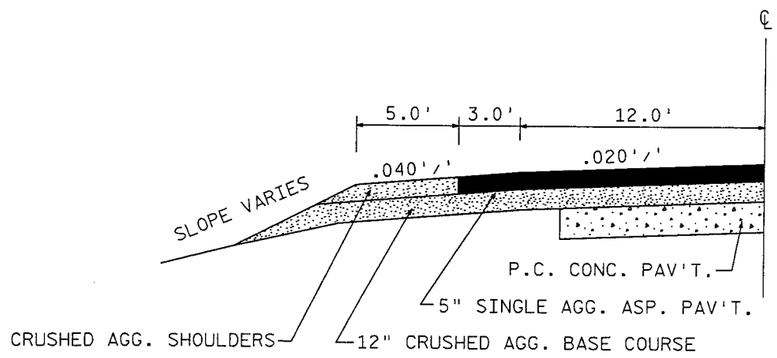
TYPICAL EXISTING SECTION

CURB AND GUTTER SECTION WITHIN VILLAGE
STA. 126B+60 TO 136B+70



TYPICAL EXISTING SECTION

STA. 445+53 TO 446+37
570+34 TO 571+30



TYPICAL EXISTING SECTION

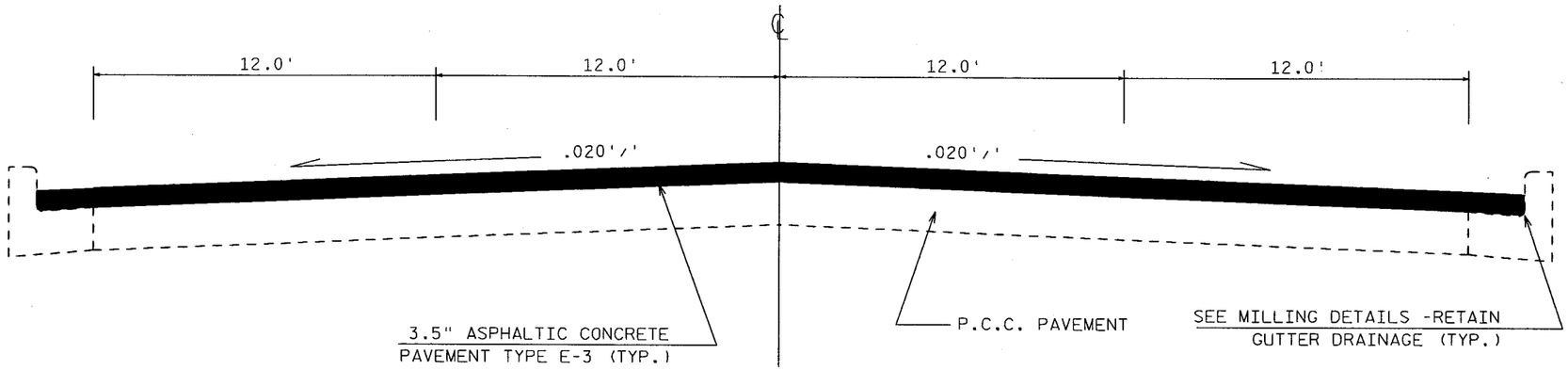
CRUSHED AGG. LIFT SECTIONS
STA. 493+56 TO 500+56
560+90 TO 567+10
650+35 TO 656+65
667+30 TO 673+00
728+30 TO 734+70

STATE PROJECT NUMBER: 1580-23-71	HWY: U.S.H. 8	COUNTY: BARRON & RUSK	TYPICAL EXISTING SECTIONS	SCALE, FEET 0	SHEET NO: 3	E

FILE NAME : X:±PROJECTS±D8±15802300±Msta±typicals.dgn
PLOT DATE: 14-JUN-2002 12:53
ORG DATE :
PLOT NAME :
Originator : Dist
PLOT SCALE :7.477410:1.000000
WISDOT/CADDS SHEET 42
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

TYPICAL FINISHED CURB & GUTTER SECTION

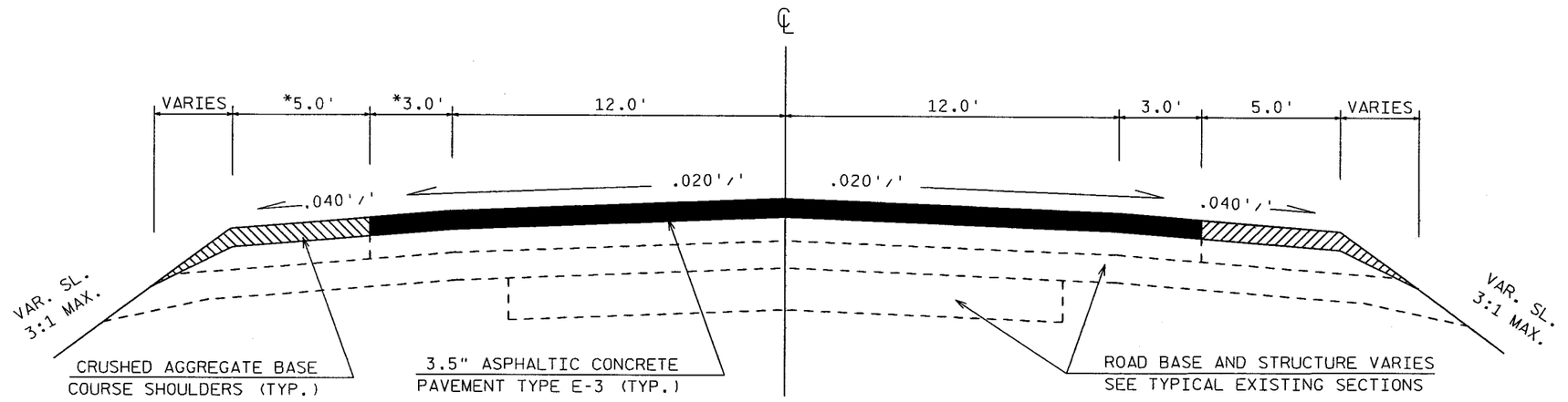
STA. 126B+60 TO STA. 136B+70



TYPICAL FINISHED SECTION

STA. 0+00 TO STA. 797+00

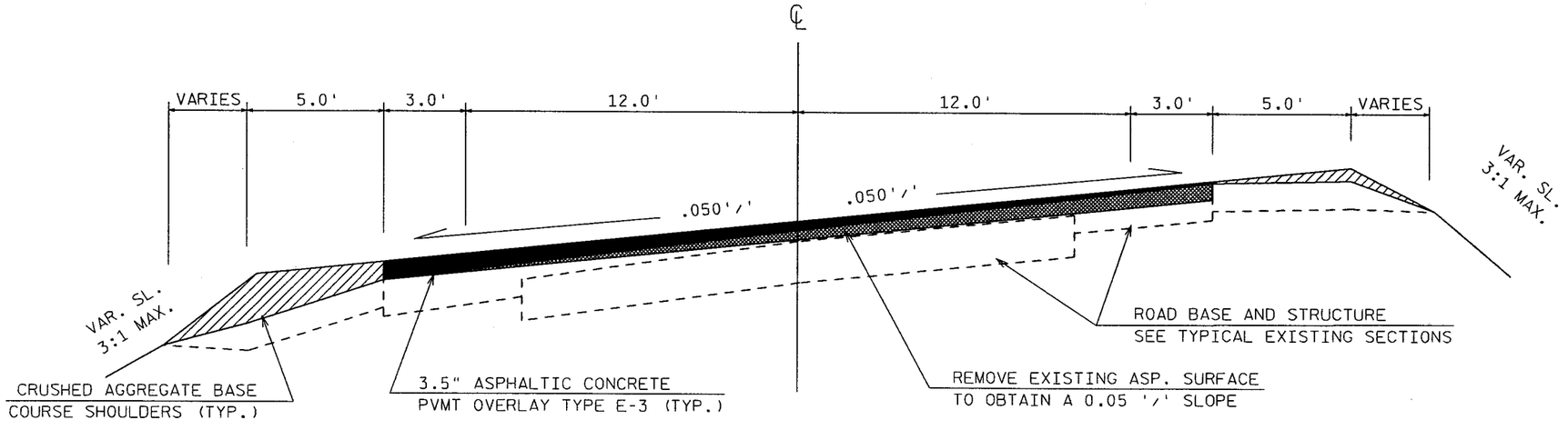
*NOTE: DISTANCE INDICATED AS TYPICAL - VARIATIONS DEPEND ON PRESENCE OF CHANNELIZING LANES OR OTHER



TYPICAL FINISHED SUPERELEVATED SECTION

PC STA. 715+62.35 TO PT STA. 724+87.65

ASPHALTIC CONCRETE PAVEMENT TYPE E-3 LOWER LAYER 1.75" UPPER LAYER 1.75"
ASPHALTIC CONCRETE PAVEMENT
CRUSHED AGGREGATE
(MILL) REM. OF ASP. SURFACE AND OVERLAY W/ 3.5" ASP.



STATE PROJECT NUMBER: 1580-23-71	HWY: U.S.H. 8	COUNTY: BARRON & RUSK	TYPICAL FINISHED SECTIONS	SCALE, FEET	SHEET NO: 4	E

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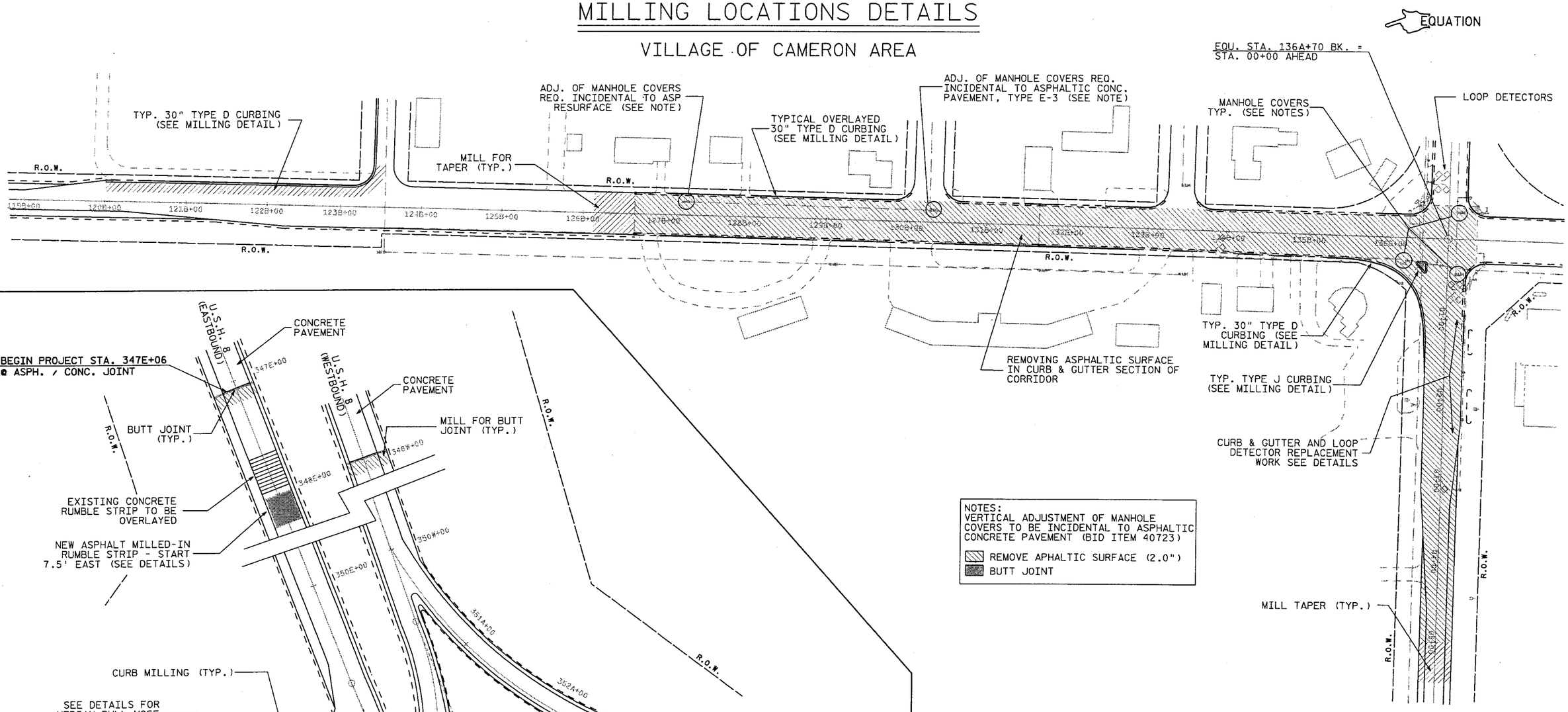
PLOT DATE: 01-AUG-2002 13:06
ORG DATE :
PLOT NAME :
Originator : Dist
PLOT SCALE : 5.000000:1.000000
WISDOT/CADDS SHEET 42

MILLING LOCATIONS DETAILS

VILLAGE OF CAMERON AREA



NOTES:
VERTICAL ADJUSTMENT OF MANHOLE COVERS TO BE INCIDENTAL TO ASPHALTIC CONCRETE PAVEMENT (BID ITEM 40723)

- REMOVE APHALTIC SURFACE (2.0")
- BUTT JOINT

N

STATE PROJECT NUMBER: 1580-23-71	HWY: U.S.H. 8	COUNTY: BARRON & RUSK	MILLING LOCATION DETAILS	SCALE, FEET 0 25' 50'	SHEET NO: 5	E

LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

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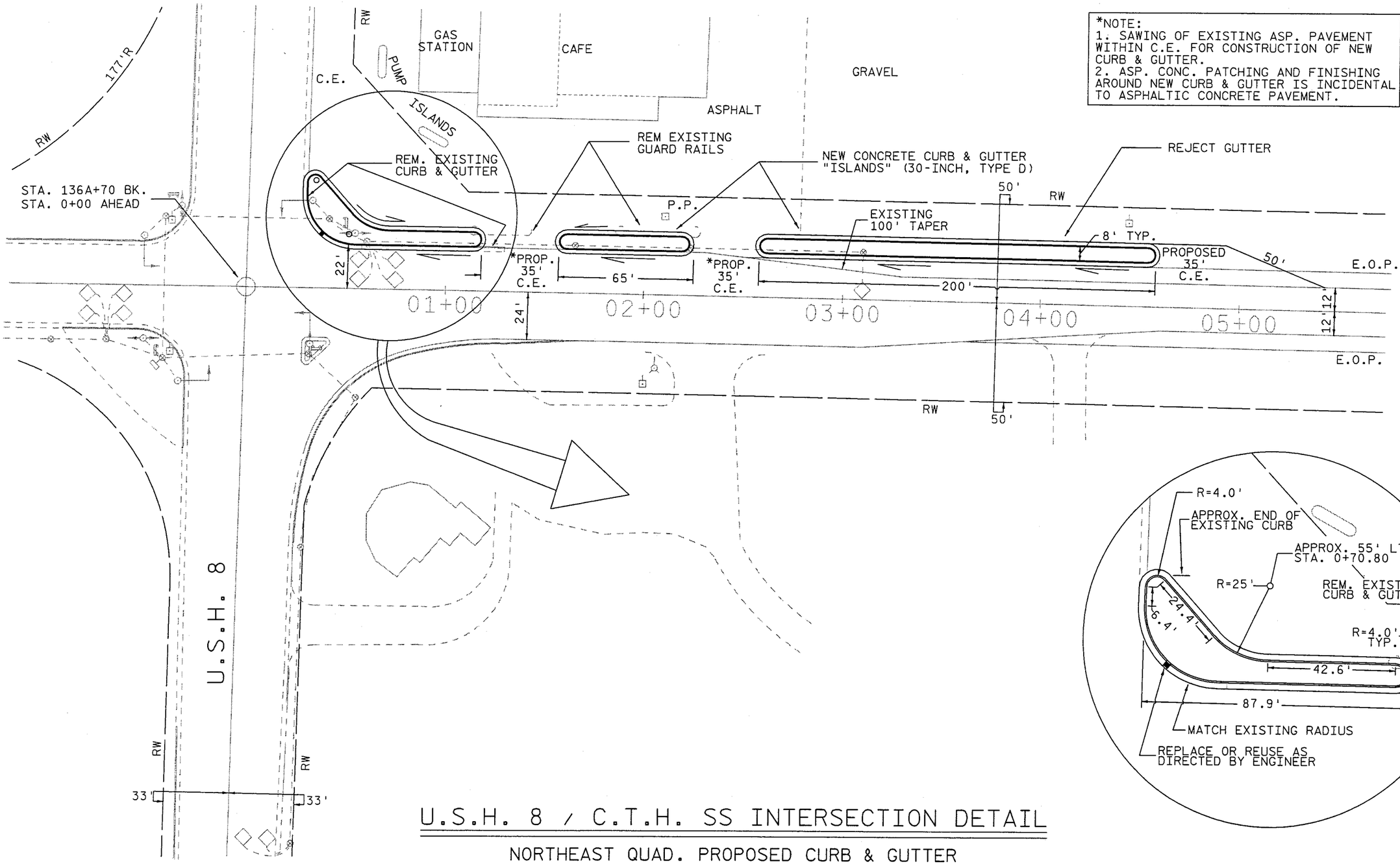
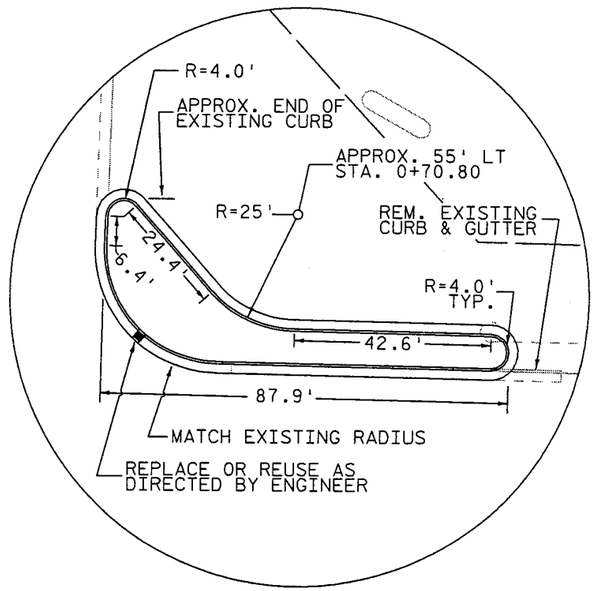
ORG DATE :
PLOT NAME :
Originator : Dist
PLOT SCALE : 124.623494:1.000000
WISDOT/CADDS SHEET 42

*NOTE:
1. SAWING OF EXISTING ASP. PAVEMENT WITHIN C.E. FOR CONSTRUCTION OF NEW CURB & GUTTER.
2. ASP. CONC. PATCHING AND FINISHING AROUND NEW CURB & GUTTER IS INCIDENTAL TO ASPHALTIC CONCRETE PAVEMENT.

N

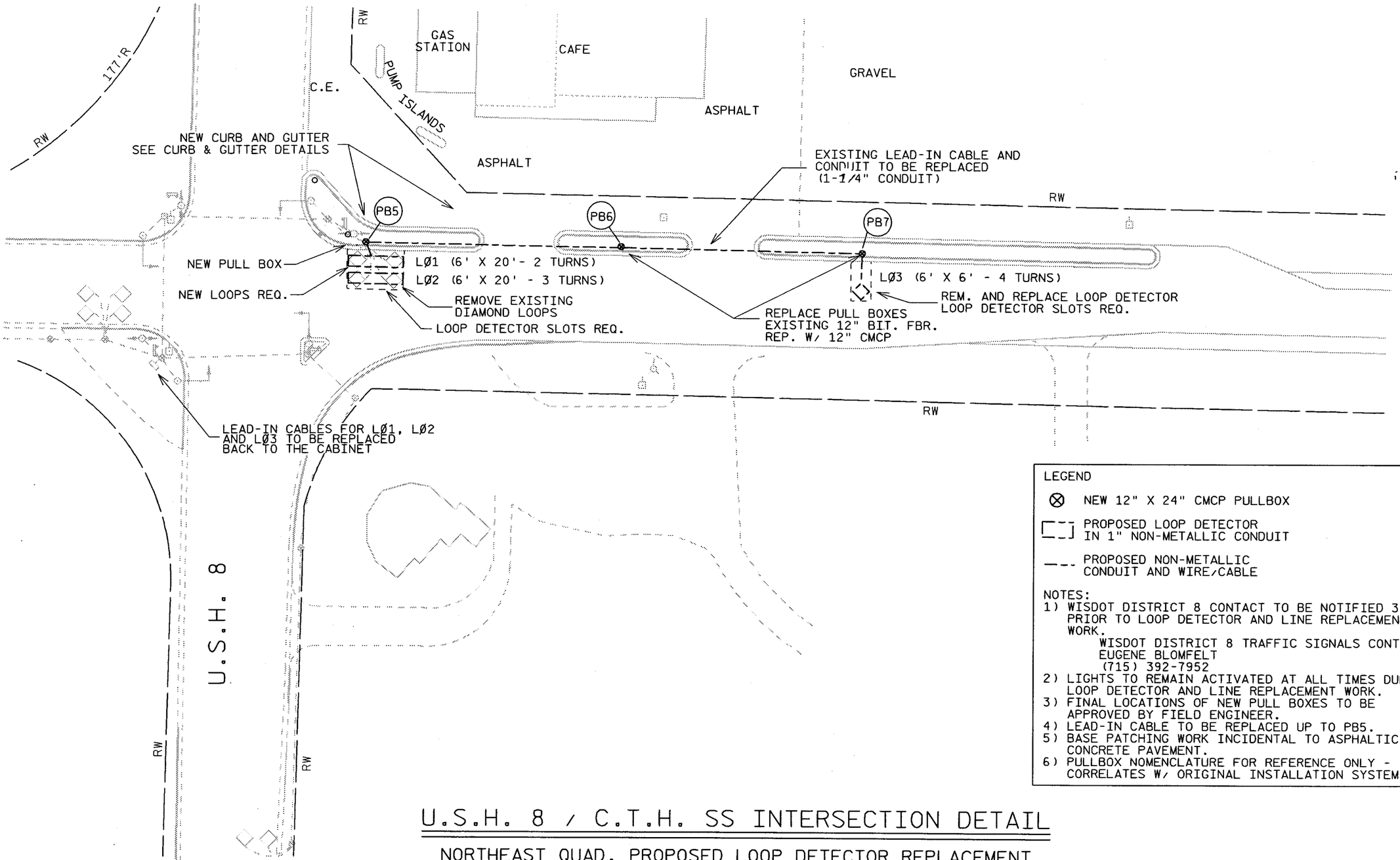




U.S.H. 8 / C.T.H. SS INTERSECTION DETAIL

NORTHEAST QUAD. PROPOSED CURB & GUTTER

STATE PROJECT NUMBER: 1580-23-00	HWY: U.S.H. 8	COUNTY: BARRON & RUSK	CURB & GUTTER DETAIL	SCALE, FEET 0 25' 50'	SHEET NO: 6	E



LEGEND

⊗ NEW 12" X 24" CMCP PULLBOX

PROPOSED LOOP DETECTOR IN 1" NON-METALLIC CONDUIT

PROPOSED NON-METALLIC CONDUIT AND WIRE/CABLE

NOTES:
1) WISDOT DISTRICT 8 CONTACT TO BE NOTIFIED 3 DAYS PRIOR TO LOOP DETECTOR AND LINE REPLACEMENT WORK.
   WISDOT DISTRICT 8 TRAFFIC SIGNALS CONTACT
   EUGENE BLOMFELT
   (715) 392-7952
2) LIGHTS TO REMAIN ACTIVATED AT ALL TIMES DURING LOOP DETECTOR AND LINE REPLACEMENT WORK.
3) FINAL LOCATIONS OF NEW PULL BOXES TO BE APPROVED BY FIELD ENGINEER.
4) LEAD-IN CABLE TO BE REPLACED UP TO PB5.
5) BASE PATCHING WORK INCIDENTAL TO ASPHALTIC CONCRETE PAVEMENT.
6) PULLBOX NOMENCLATURE FOR REFERENCE ONLY - CORRELATES W/ ORIGINAL INSTALLATION SYSTEM.

U.S.H. 8 / C.T.H. SS INTERSECTION DETAIL

NORTHEAST QUAD. PROPOSED LOOP DETECTOR REPLACEMENT
PULL BOX ADJUSTMENTS (SEE DETAILS SHEETS)

STATE PROJECT NUMBER: 1580-23-00	HWY: U.S.H. 8	COUNTY: BARRON & RUSK	LOOP DETECTOR DETAILS	SCALE, FEET 0 25' 50'	SHEET NO: 7	E

FILE NAME : X:±PROJECTS±D8±15802300±Nsta±typicals.dgn
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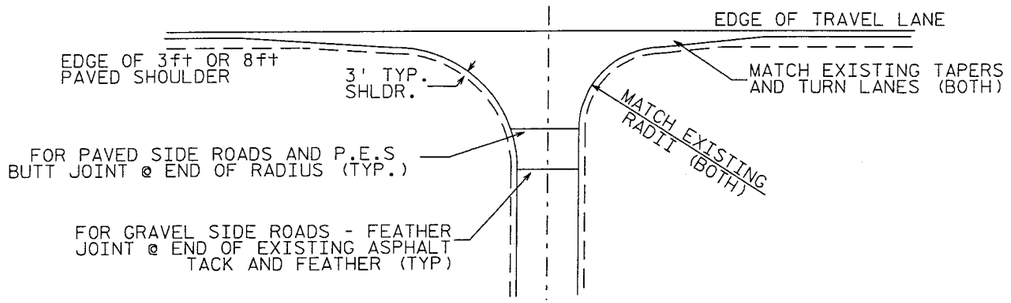
ORG DATE :
PLOT NAME :
Originator : Dist
PLOT SCALE : 50.000000:1.000000
WISDOT/CADDS SHEET 42

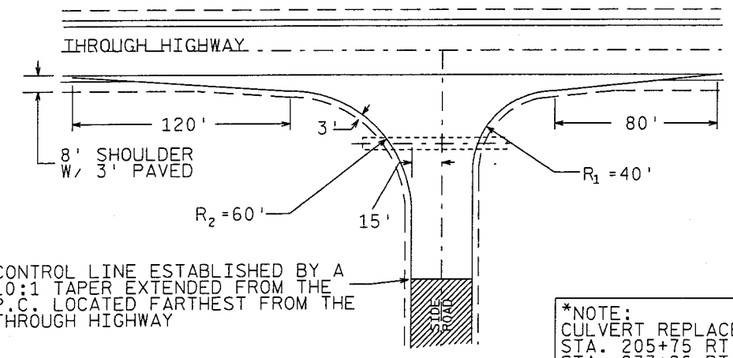
TYPICAL SIDE ROADS AND ENTRANCES PAVED AND CRUSHED AGGREGATE



NOTE:
PAVING OF TAPERS AND RADII NOT REQUIRED FOR PRIVATE ENTRANCES W/ CRUSHED AGGREGATE. SHOULDER MATERIAL SHALL BE FEATHERED TO MEET EXISTING GRADE (SEE TYPICAL CROSS SECTIONS)

SIDE ROADS REQUIRING GRADING AND SHAPING

STA. 205+75 RT - 24⅜STREET (SEE DETAIL THIS PAGE)
233+96 RT - 25 STREET
549+29 RT - LOG CABIN ROAD
653+73 RT - TOWN ROAD 6
706+06 RT & LT - CRANBERRY LK. ROAD
775+33 RT - CEDAR SWAMP ROAD
789+18 LT - OLESIAK ROAD



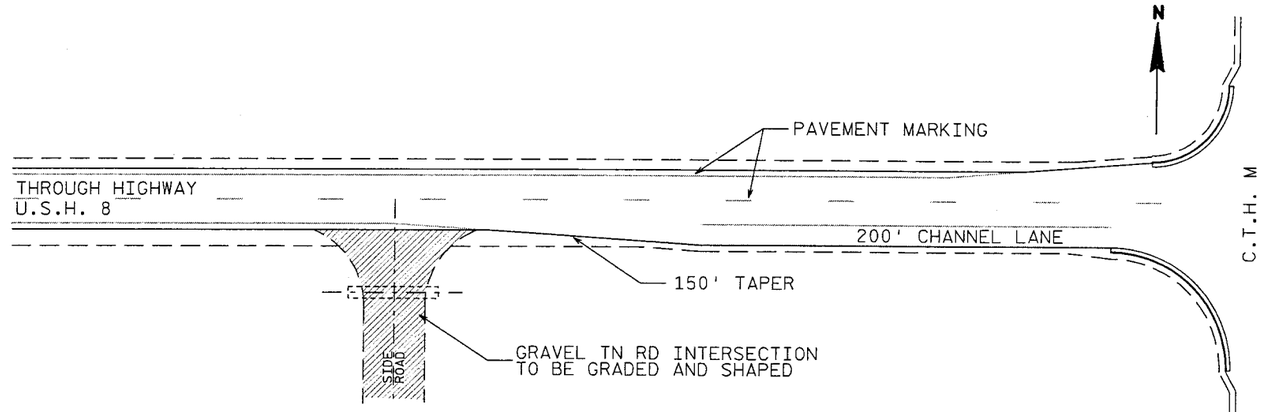
CONTROL LINE ESTABLISHED BY A 10:1 TAPER EXTENDED FROM THE P.C. LOCATED FARTHEST FROM THE THROUGH HIGHWAY

*REMOVING OLD CULVERT AND INSTALLATION OF 18" CULVERT PIPE (CLASS III) AND APRON END WALLS REQ.

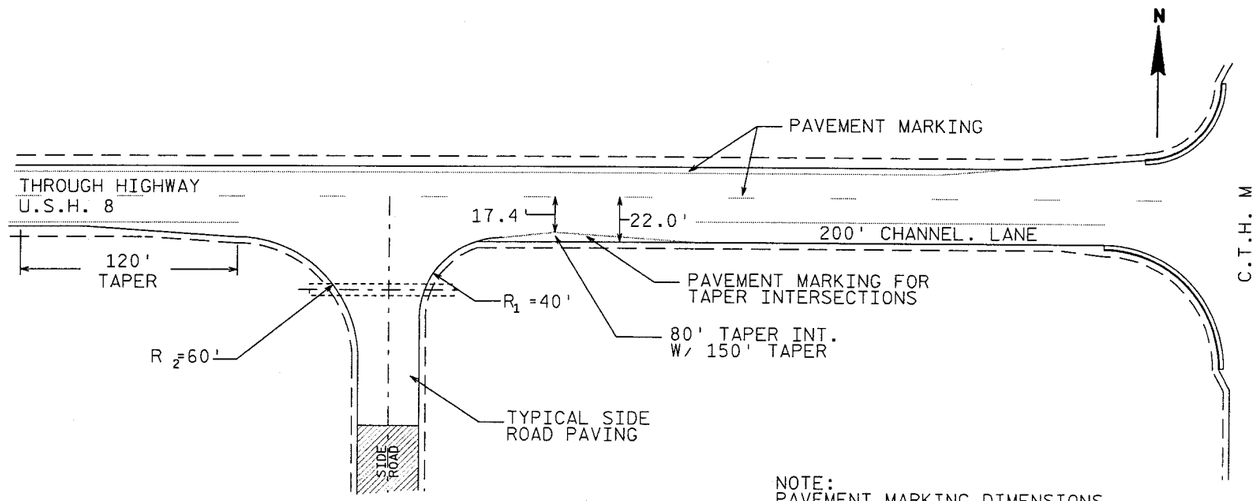
*NOTE:
CULVERT REPLACEMENT LOCATIONS
STA. 205+75 RT
STA. 233+96 RT
STA. 653+73 RT
STA. 706+06 RT & LT
STA. 775+33 RT
STA. 789+18 LT

GRADING AND SHAPING DETAIL FOR TOWN ROAD

STA. 205+75 RT - 24⅜STREET



EXISTING



FINISHED

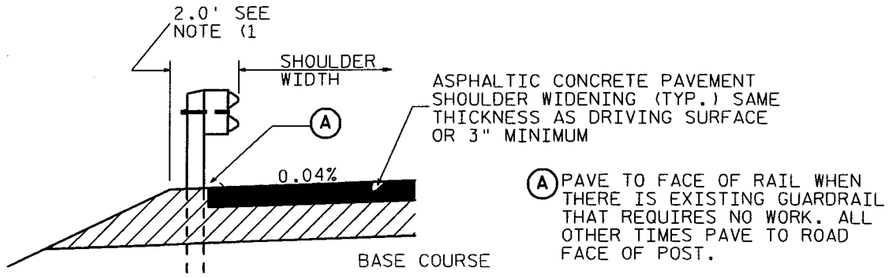
NOTE:
PAVEMENT MARKING DIMENSIONS ARE APPROXIMATE.

STATE PROJECT NUMBER: 1580-23-71	HWY: U.S.H. 8	COUNTY: BARRON & RUSK	SIDE ROAD DETAILS	SCALE, FEET 0 25' 50'	SHEET NO: 8	E

LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FILE NAME : x:±PROJECTS±D8±15802300±Msta±typicals.dgn PLOT DATE: 03-JUL-2002 16:02 ORG DATE : PLOT NAME : Originator : Dist PLOT SCALE : 74.774096:1.000000

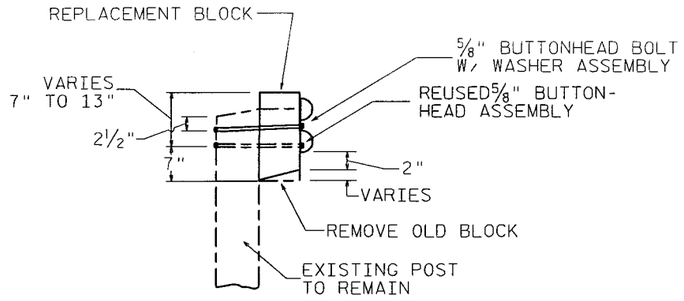
WISDOT/CADDS SHEET 42



(A) PAVE TO FACE OF RAIL WHEN THERE IS EXISTING GUARDRAIL THAT REQUIRES NO WORK. ALL OTHER TIMES PAVE TO ROAD FACE OF POST.

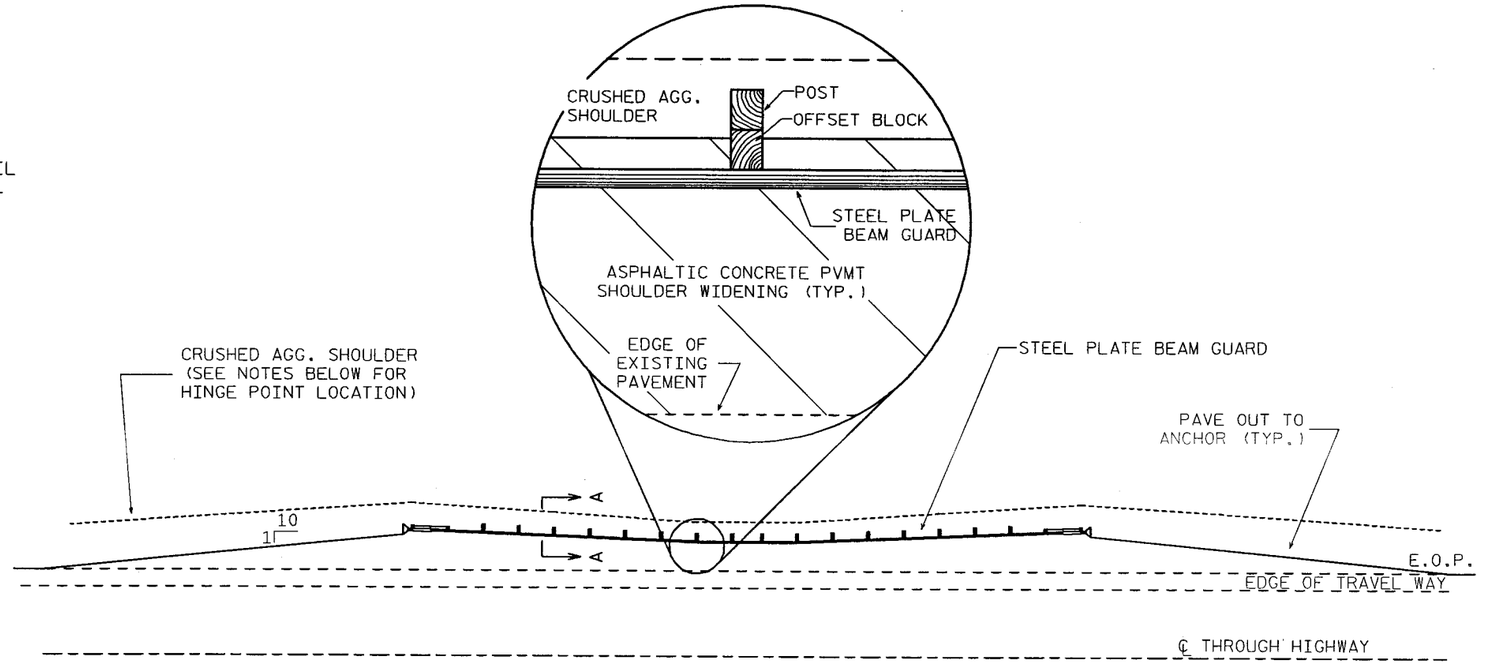
SHOULDER DETAIL AT BEAM GUARD

SECTION A-A



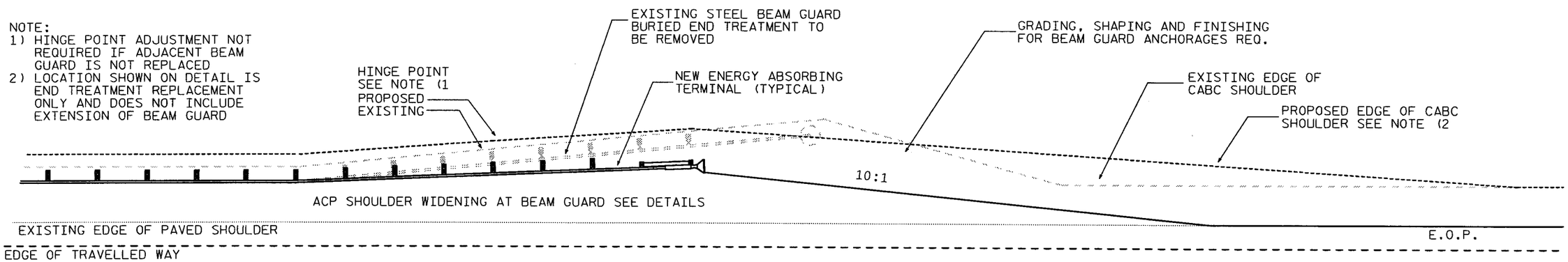
HEIGHT ADJUSTMENT REPLACEMENT BLOCK

TYPICAL FOR ADJUSTING GUARD FENCE HEIGHT, STEEL BEAM TYPE



ASPHALTIC PAVING ALONG BEAM GUARD

NOTE:
1) HINGE POINT ADJUSTMENT NOT REQUIRED IF ADJACENT BEAM GUARD IS NOT REPLACED
2) LOCATION SHOWN ON DETAIL IS END TREATMENT REPLACEMENT ONLY AND DOES NOT INCLUDE EXTENSION OF BEAM GUARD



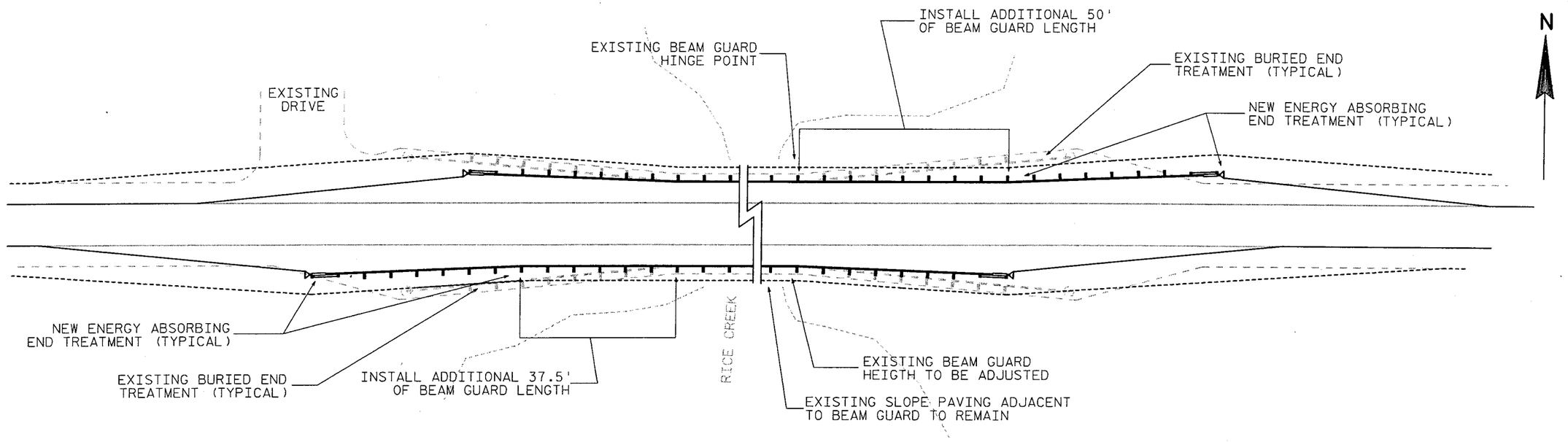
TYPICAL STEEL BEAM GUARD END TREATMENT REPLACEMENT

STATE PROJECT NUMBER: 1580-23-71	HWY: U.S.H. 8	COUNTY: BARRON & RUSK	BEAM GUARD DETAILS	SCALE, FEET	SHEET NO: 9	E

FILE NAME : X:±PROJECTS±D8±15802300±Msta±typicals.dgn
PLOT DATE: 29-JUL-2002 09:12
ORG DATE :
PLOT NAME :
Originator : Dist
PLOT SCALE : 7.500000:1.000000
WISDOT/CADDS SHEET 42
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

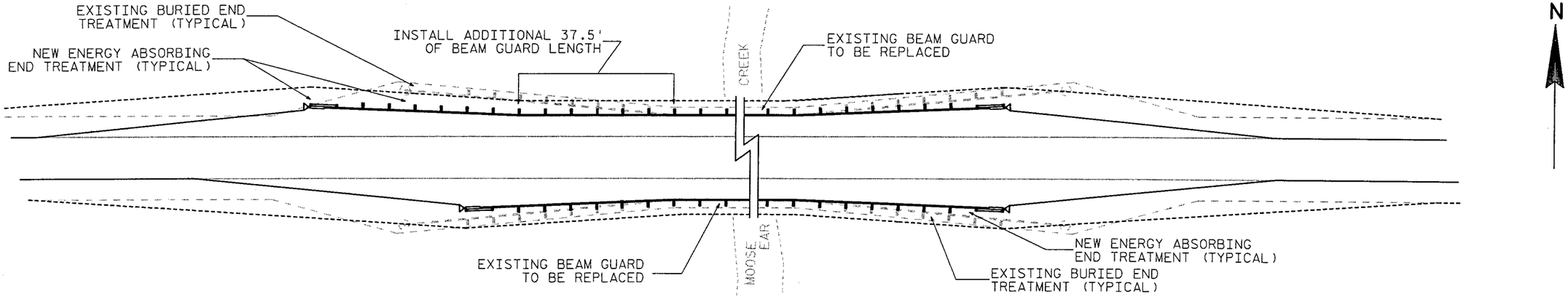
RICE CREEK TWIN CULVERT LOCATION

APPROX. STA. 66+80



MOOSE EAR CREEK TWIN CULVERT LOCATION

APPROX. STA. 462+27



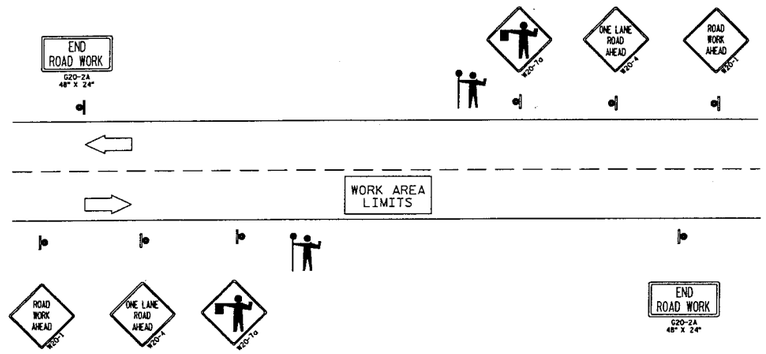
STEEL BEAM GUARD ADJUSTMENT AND EXTENSIONS DETAILS

STATE PROJECT NUMBER: 1580-23-71	HWY: U.S.H. 8	COUNTY: BARRON & RUSK	BEAM GUARD DETAILS	SCALE, FEET 0	SHEET NO: 10	E

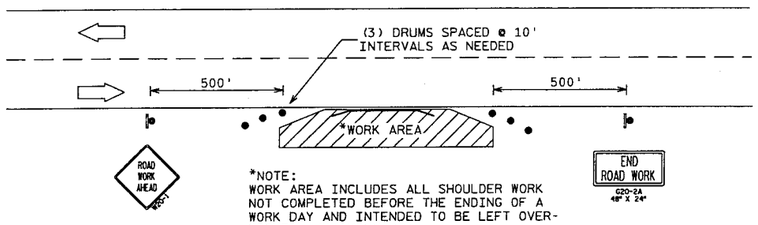
FILE NAME : X:±PROJECTS±D8±15802300±Msta±typicals.dgn PLOT DATE: 14-JUN-2002 12:42 ORG DATE : PLOT NAME : Originator : Dist PLOT SCALE : 7.477410:1.000000

WISDOT/CADDS SHEET 42

① TRAFFIC CONTROL FOR LANE CLOSURE (MOVING OPERATIONS)
SEE S.D.D. 15C12-2 FOR DEVICE LOCATIONS

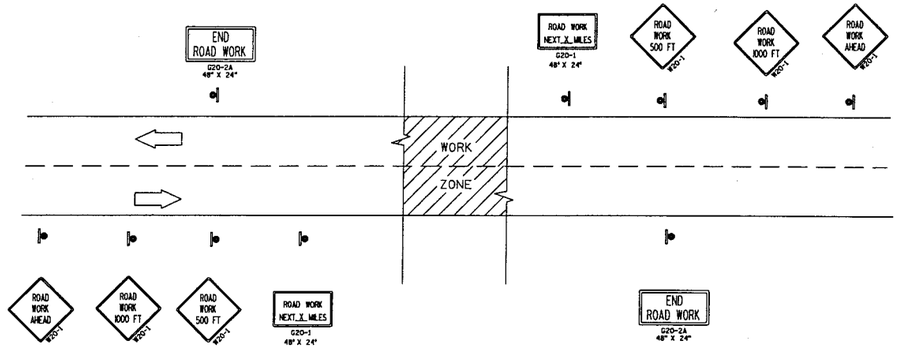


② TRAFFIC CONTROL FOR SHOULDER
WORK LEFT OVERNIGHT

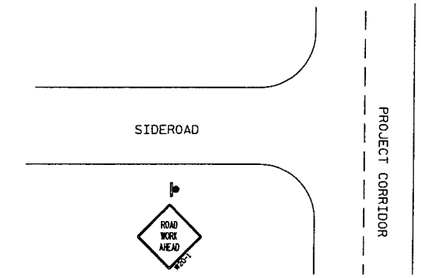


*NOTE:
WORK AREA INCLUDES ALL SHOULDER WORK NOT COMPLETED BEFORE THE ENDING OF A WORK DAY AND INTENDED TO BE LEFT OVER-NIGHT. (BEAM GUARD)

③ TRAFFIC CONTROL, ADVANCE WARNING SIGNS
SEE S.D.D. 15C4-1 FOR DEVICE LOCATIONS



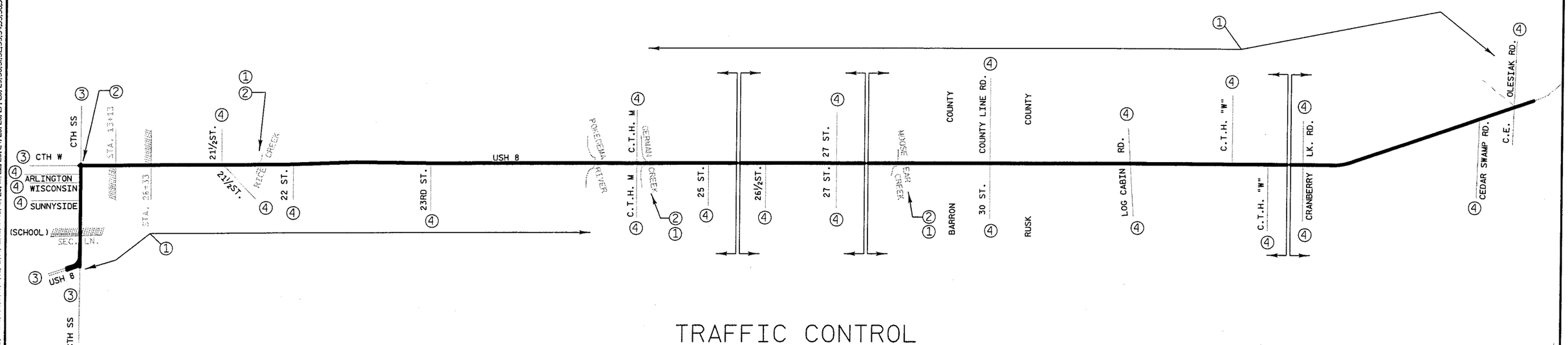
④ TRAFFIC CONTROL, ADVANCE WARNING SIGNS
SIDEROAD
SEE S.D.D. 15C4-1 FOR DEVICE LOCATION



① TRAFFIC CONTROL FOR LANE CLOSURE (MOVING OPERATIONS)
SEE S.D.D. 15C12-2
② TRAFFIC CONTROL FOR SHOULDER WORK LEFT OVERNIGHT
DRUM SPACING AT 10'
③ TRAFFIC CONTROL, ADVANCE WARNING SIGNS
SEE S.D.D. 15C4-1
④ TRAFFIC CONTROL, ADVANCE WARNING SIGNS - SIDEROAD
SEE S.D.D. 15C4-1

NOTES:
TRAFFIC CONTROL DEVICES LOCATIONS FOR REFERENCE ONLY. CONTRACTOR IS RESPONSIBLE FOR PLACEMENT OF TRAFFIC CONTROL DEVICES AND COMPLIANCE WITH CONTRACT SPECIFICATIONS.

N



TRAFFIC CONTROL

STATE PROJECT NUMBER: 1580-23-71	HWY: U.S.H. 8	COUNTY: BARRON & RUSK	TRAFFIC CONTROL	SCALE, FEET 0 25' 50'	SHEET NO: 11	E

FILE NAME : X:±PROJECTS±D8±15802300±Msta±typicals.dgn
PLOT DATE: 02-JUL-2002 14:58
ORG DATE :
PLOT NAME :
Originator : Dist
PLOT SCALE : 2775.988313:1.000000
WISDOT/CADDS SHEET 42

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1580-23-71 QUANTITY
0010	20335	REMOVING SMALL PIPE CULVERTS	EACH	7.00	7.00
0020	20405	REMOVING CURB AND GUTTER	L.F.	120.00	120.00
0030	20411	REMOVING GUARDRAIL	L.F.	375.00	375.00
0040	20420	REMOVING ASPHALTIC SURFACE, MILLING	S.Y.	16,472.00	16,472.00
0050	21301	FINISHING ROADWAY	LS	1.00	1.00
0060	30404	CRUSHED AGGREGATE BASE COURSE	TON	33,439.00	33,439.00
0070	40204	ASPHALTIC MATERIAL FOR TACK COAT	GAL.	16,003.00	16,003.00
0080	40301	QMP, ASPHALTIC MIXTURE	TON	62,719.00	62,719.00
0090	40501	ASPHALTIC MATERIAL FOR PLANT MIXES	TON	3,767.00	3,767.00
0100	40723	ASPHALTIC CONCRETE PAVEMENT, TYPE E-3	TON	62,719.00	62,719.00
0110	40728	DENSITY INCENTIVE, ASPHALTIC CONCRETE PAVEMENT	DOL	40,150.00	40,150.00
0120	40729	PROFILE INDEX INCENTIVE, ASPHALTIC CONCRETE PAVEMENT	DOL	64,000.00	64,000.00
0130	52003	CULVERT PIPE, CLASS III, 18-INCH	L.F.	576.00	576.00
0140	52061	APRON ENDWALLS FOR CULVERT PIPE, 18-INCH	EACH	14.00	14.00
0150	60133	CONCRETE CURB AND GUTTER, 30-INCH, TYPE D	L.F.	768.00	768.00
0160	61408	STEEL PLATE BEAM GUARD, CLASS A	L.F.	425.00	425.00
0170	61432	ADJUSTING STEEL PLATE BEAM GUARD	L.F.	150.00	150.00
0180	61435	STEEL PLATE BEAM GUARD, ENERGY ABSORBING TERMINAL	EACH	12.00	12.00
0190	61801	MAINTENANCE AND REPAIR OF HAUL ROADS	LS	1.00	1.00
0200	61910	MOBILIZATION	LS	1.00	1.00
0210	64202	FIELD OFFICE, TYPE B	LS	1.00	1.00
0220	64301	TRAFFIC CONTROL	LS	1.00	1.00
0230	64602	PAVEMENT MARKING, 4-INCH, EPOXY	L.F.	167,307.00	167,307.00
0240	64618	PAVEMENT MARKING, CHANNELIZING, 8-INCH, EPOXY	L.F.	1,752.00	1,752.00
0250	64626	PAVEMENT MARKING, SAME DAY, 4-INCH, EPOXY	L.F.	88,904.00	88,904.00
0260	64778	PAVEMENT MARKING, CURB, EPOXY	L.F.	739.00	739.00
0270	64901	TEMPORARY PAVEMENT MARKING, 4-INCH	L.F.	58,281.00	58,281.00
0280	65080	CONSTRUCTION STAKING, RESURFACING REFERENCE	L.F.	84,567.00	84,567.00
0290	65217	NONMETALLIC CONDUIT, SCHEDULE 40, 1 1/4-INCH	L.F.	170.00	170.00
0300	65250	LOOP DETECTOR CONDUIT	L.F.	300.00	300.00

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1580-23-71 QUANTITY
0310	65255	LOOP DETECTOR SLOTS	L.F.	30.00	30.00
0320	65301	PULL BOXES, STEEL, 12X24-INCH	EACH	3.00	3.00
0330	65580	LOOP DETECTOR LEAD IN CABLE	L.F.	900.00	900.00
0340	65585	LOOP DETECTOR WIRE	L.F.	400.00	400.00
0350	66501	SAWING EXISTING PAVEMENT	L.F.	200.00	200.00
0360	90004	MISC GRADING, SHAPING AND FINISHING INTER- SECTION, STA.789+18 LT	LS	1.00	1.00
0370	90329	GRADING, SHAPING AND FINISHING FOR BEAM GUARD TERMINALS AND ANCHORAGES	EACH	12.00	12.00
0380	90338	GRADING, SHAPING & FINISHING INTERSECTION, STA. 205+75 RT	LS	1.00	1.00
0390	90339	GRADING, SHAPING & FINISHING INTERSECTION, STA. 233+96 RT	LS	1.00	1.00
0400	90340	GRADING, SHAPING & FINISHING INTERSECTION, STA. 549+29 RT	LS	1.00	1.00
0410	90341	GRADING, SHAPING & FINISHING INTERSECTION, STA. 653+73 RT	LS	1.00	1.00
0420	90342	GRADING, SHAPING & FINISHING INTERSECTION, STA. 706+06 RT & LT	LS	1.00	1.00
0430	90343	GRADING, SHAPING & FINISHING INTERSECTION, STA. 775+33 RT	LS	1.00	1.00
0440	90365	QMP, BASE COURSES	TON	33,439.00	33,439.00
0450	90375	QMP, NUCLEAR DENSITY FOR ASPHALTIC PAVEMENT	TON	62,719.00	62,719.00
0460	90884	ASPHALTIC RUMBLE STRIPS, AT INTERSECTION	S.Y.	121.00	121.00

CULVERT REPLACEMENT WORK AT SIDE ROADS

STATION	LOCATION	*BID ITEM	20335 REMOVING SMALL PIPE CULVERT EACH	52003 CULVERT PIPE CLASS III 18 INCH L.F.	52061 APRON ENDWALLS FOR CULVERT PIPE 18 INCH EACH	REMARKS
205+75	RT	90341	1	84	2	24-3/8 STREET
233+96	RT	90342	1	84	2	25 STREET
653+73	RT	90004	1	72	2	TN. RD. 6
706+06	RT & LT	90342	2	168	4	CRANBERRY LK. ROAD
775+33	RT	90343	1	84	2	CEDAR SWAMP ROAD
789+18	LT	90004	1	84	2	OLESIAK ROAD
		TOTALS	7	576	14	

NOTE: BID ITEMS LISTED CORRESPONDS WITH INTERSECTION SHAPING, GRADING, AND FINISHING WORK.

CURB AND GUTTER WORK SUMMARY

STATION	TO STATION	LOCATION	20405 REMOVING CURB & GUTTER L.F.	60133 CONC. CURB & GUTTER, 30-INCH, TYPE D L.F.
0+00	- 4+75	LT	120	768
		TOTAL	120	768

STEEL PLATE BEAM GUARD WORK SUMMARY

STA.	TO STA.	LOCATION	20411 REMOVING GAURDRAIL L.F.	61408 STEEL PLATE BEAM GUARD, CLASS A L.F.	61432 ADJUSTING STEEL PLATE BEAM GUARD L.F.	61435 STEEL PLATE BEAM GUARD, E.A.T. EACH	90329 GRADING, SHAPING & FINISHING FOR BEAM GUARD TERM. & ANCHOR. EACH	REMARKS
0+00	- 5+50	LT	75	-	-	-	-	USH 8 / CTH SS INT.
66+75	- 66+85	RT & LT	-	88	150	4	4	RICE CREEK
208+79	- 210+29	RT & LT	150	150	-	4	4	GERMAN CREEK
461+52	- 463+02	RT & LT	150	188	-	4	4	MOOSE EAR CREEK
		TOTALS	375	425	150	12	12	

REMOVING ASPHALTIC SURFACE, MILLING

STATION	TO STATION	LOCATION	20420 S.Y.	REMARKS
STA. E. W & B		RT & LT	466	USH 8 & CTH SS INT. - BUTT JOINT AND CURB
126B+64	- 135B+00	RT & LT	6,787	CURB AND GUTTER AREA IN CAMERON
0+00	- 5+50	RT & LT	3,095	USH 8 & CTH SS INTERSECTION IN VILLAGE
715+10	- 725+41	RT & LT	3,733	SUPERELEVATION CORRECTING
ENTIRE PROJECT		RT & LT	2,391	MISC. TN RDs AND CURB & GUTTER
		TOTAL	16,472	

CRUSHED AGGREGATE BASE COURSE

STA.	TO STA.	LOCATION	VOLUME CF	VOLUME TON	50% SHR TON	30404 CRUSHED AGG. BASE COURSE TON	REMARKS
STA. E & W		RT & LT	1,902	106	159	159	4 SHOULDERS
349A+43	- 354A+02	RT & LT	1,043	58	87	87	ONE LANE ON-RAMP
97B+50	- 102B+00	RT & LT	1,926	107	161	161	SHLDR. WIDTH VAR.
102B+00	- 126B+64	RT & LT	6,948	386	580	580	4' WIDTH SHLDR.
5+50	- 797+00	RT & LT	389,418	21,634	32,452	32,452	5' WIDTH SHLDR.
		TOTAL	401,238	22,291	33,439	33,439	

ASPHALTIC CONCRETE PAVEMENT SUMMARY

STATION	TO STATION	LOCATION	40723 ASPH. CONC. PAV., TYPE E-3 TON	40501 ASPH. MAT'L FOR PLANT MIX TON	40204 ASPH. MAT'L FOR TACK COAT GAL.	REMARKS
STA. E. W & A		RT & LT	806	49	206	W OF INTERSECTION
97B+50	- 136B+70	RT & LT	3,910	235	998	
0+00	- 797+00	RT & LT	55,128	3,308	14,064	
97B+50	- 136B+70	TN RDs	254	16	65	3 TN RDs COUNT
0+00	- 797+00	TN RDs	2,437	147	622	19 TN RDs COUNT
97B+50	- 136B+70	PEs	55	4	15	3 PEs COUNT
0+00	- 797+00	PEs	129	8	33	7 PEs COUNT
		TOTALS	62,719	3,767	16,003	

PAVEMENT MARKING

STATION	TO	STATION	64602 4-INCH EPOXY PASSING YELLOW LT. L.F.	PASSING YELLOW RT L.F.	PASSING YELLOW C/L L.F.	NO PASSING YELLOW LT. L.F.	NO PASSING YELLOW RT. L.F.	LANE LINE WHITE LT. L.F.	LANE LINE WHITE RT. L.F.	EDGE LINE WHITE LT. L.F.	EDGE LINE WHITE RT. L.F.	64618 8-INCH EPOXY CHANNELIZING WHITE LT. L.F.	CHANNELIZING WHITE RT. L.F.	64626 SAME DAY, 4-INCH EPOXY PASSING YELLOW LT. L.F.	PASSING YELLOW RT. L.F.	C/L YELLOW C/L PASSING L.F.	NO PASSING YELLOW LT. L.F.	NO PASSING YELLOW RT. L.F.	64778 CURB EPOXY CURB YELLOW LT. L.F.	CURB YELLOW RT. L.F.	64901 TEMPORARY PAVEMENT MARKING, 4-INCH PASSING YELLOW LT. L.F.	PASSING YELLOW RT. L.F.	PASSING YELLOW C/L L.F.	NO PASSING YELLOW LT. L.F.	NO PASSING YELLOW RT. L.F.	LANE LINE WHITE LT. L.F.	LANE LINE WHITE RT. L.F.
347E+06	-	351E+87	-	-	-	478	-	-	104	-	490	-	-	-	-	-	-	-	-	128	-	-	-	-	-	-	33
347W+96	-	352W+10	-	-	-	-	393	57	-	606	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18	-
349A+44	-	354A+02	-	-	-	-	262	-	-	176	-	-	124	-	-	-	-	-	-	-	-	-	-	-	-	-	-
97B+50	-	136B+70	-	-	-	-	-	409	519	3,279	3,900	271	37	-	-	-	4,141	4,217	563	48	-	-	-	4,141	4,217	131	166
0+00	-	5+50	-	-	-	-	-	-	-	50	400	-	-	-	-	-	550	550	-	-	-	-	-	550	550	-	-
5+50	-	797+00	-	-	-	-	-	-	-	78,092	78,092	396	924	4,066	22,150	10,620	20,460	22,150	-	-	20,460	22,150	3,398	1,301	1,166	-	-
		TOTALS	-	-	-	478	655	466	623	82,203	82,882	667	1,085	4,066	22,150	10,620	25,151	26,917	563	176	20,460	22,150	3,398	5,992	5,933	149	199
										TOTAL	167,307	TOTAL	1,752				TOTAL	88,904	TOTAL	739						TOTAL	58,281

CONSTRUCTION STAKING, RESURFACING REFERENCE

STA.	STATION	TO	STATION	65080 L.F.	REMARKS
E	346+00	-	351+77	577	EASTBOUND LANE
W	350+30	-	354+00	370	WESTBOUND LANE
A	97+50	-	102+00	450	ONRAMP
B	102+00	-	136+70	3,470	MAINLINE
	+00	-	797+00	79,700	MAINLINE
			TOTAL	84,567	

LOOP DETECTOR REPLACEMENT WORK SUMMARY

STATION	TO	STATION	LOCATION	65217 NONMETALLIC CONDUIT, SCHEDULE 40, 1 1/4 INCH L.F.	65250 LOOP DET. CONDUIT L.F.	65255 LOOP DETECTOR SLOTS L.F.	65301 PULL BOXES STEEL 12X24-INCH EACH	65580 LOOP DET. LEAD IN CABLE L.F.	65585 LOOP DET. WIRE L.F.
0+66	-	3+15	LT	170	300	30	3	900	400
			TOTAL	170	300	30	3	900	400

SAWING EXISTING PAVEMENT

STATION	TO	STATION	LOCATION	66501 L.F.	REMARKS
0+70	-	2+75	LT	200	CURB & GUTTER WORK
			TOTAL	200	

GRADING, SHAPING AND FINISHING INTERSECTIONS

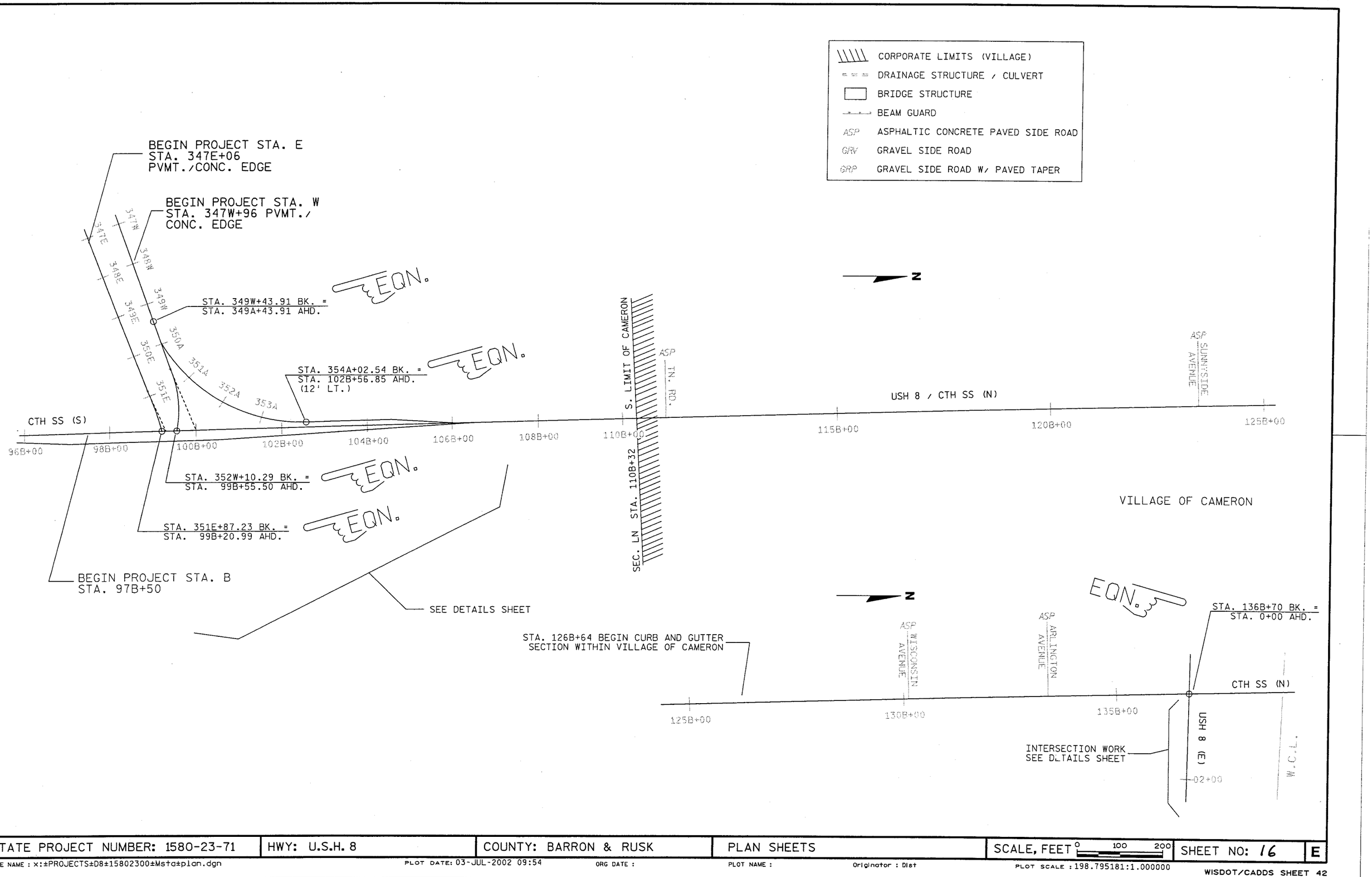
STATION	LOCATION	BID ITEM	CABC** C.Y.	BORROW** C.Y.	SALVAGED TOPSOIL** S.Y.	MULCHING** S.Y.	FERTILIZER** TYPE B CWT	SEEDING** MIX NO. 20 LB	REMARKS
205+75	RT	90338	75	160	240	240	15	7	24-3/8 STREET
233+96	RT	90339	75	160	240	240	15	7	25 STREET
549+29	RT	90340	5	20	125	125	8	5	LOG CABIN ROAD
653+73	RT	90341	75	160	240	240	15	7	TN. RD. 6
706+06	RT & LT	90342	150	320	480	480	31	13	CRANBERRY LK. ROAD
775+33	RT	90343	75	160	240	240	15	7	CEDAR SWAMP ROAD
789+18	LT	90004	75	160	240	240	15	7	OLESIAK ROAD
		TOTALS	530	1,140	1,805	1,805	116	51	

** FOR BIDDING PURPOSES ONLY.

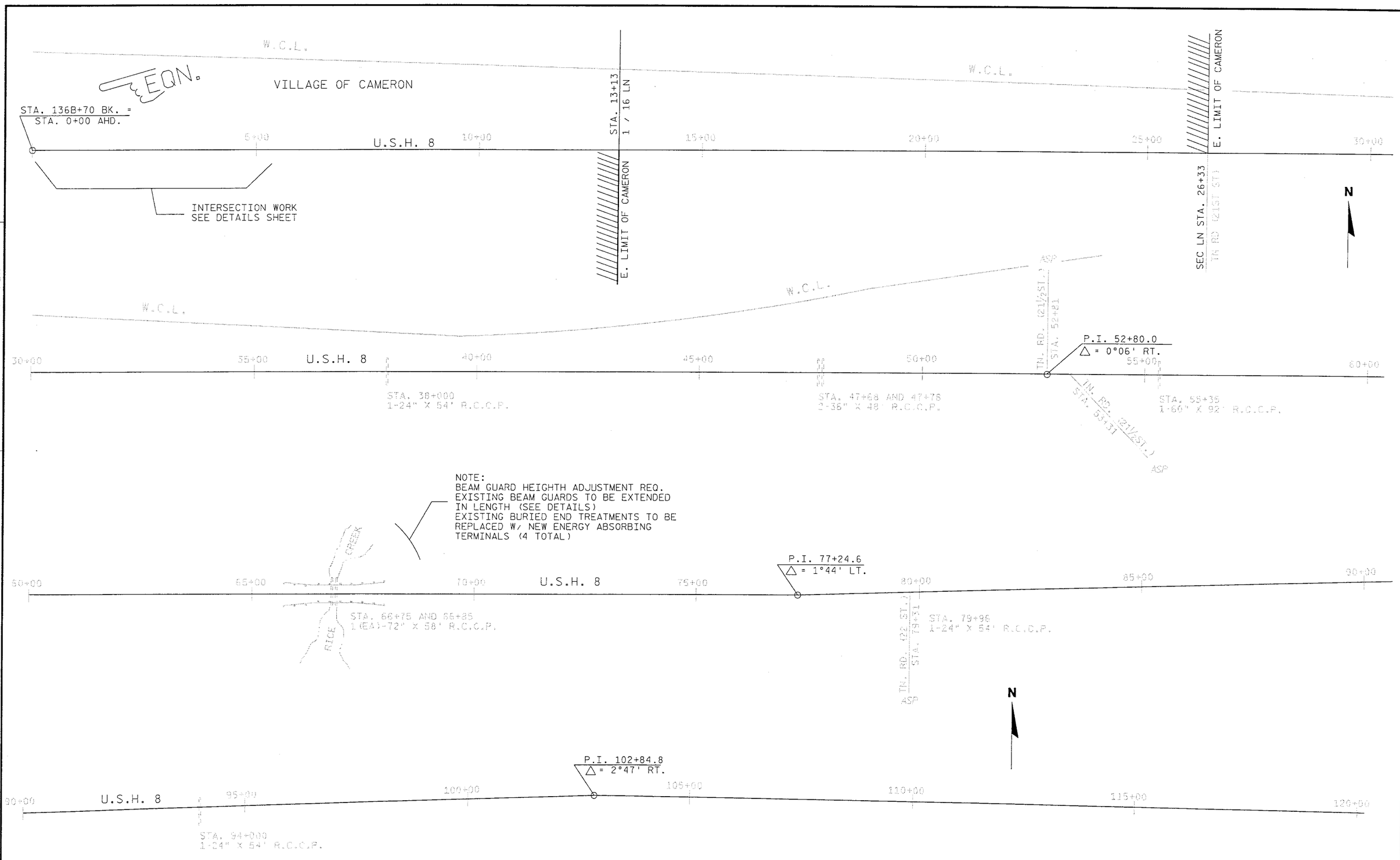
ASPHALTIC RUMBLE STRIPS

STATION	TO	STATION	90884 S.Y.	REMARKS
348E+01	-	348E+26	67	MAINLINE RUMBLE STRIP
97B+70	-	98B+00	27	MEDIAN NOSE
100B+73	-	101B+03	27	MEDIAN NOSE
		TOTAL	121	

LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



STATE PROJECT NUMBER: 1580-23-71	HWY: U.S.H. 8	COUNTY: BARRON & RUSK	PLAN SHEETS	SCALE, FEET 0 100 200	SHEET NO: 16	E



LEVELS ON - 1,2,3,4,6,7,8,9,10,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NUMBER: 1580-23-71	HWY: U.S.H. 8	COUNTY: BARRON & RUSK	PLAN SHEETS	SCALE, FEET 0 100 200	SHEET NO: 17	E

FILE NAME : X:‡PROJECTS‡D8‡15802300‡Msta‡plan.dgn PLOT DATE: 17-JUN-2002 11:34 ORG DATE : PLOT NAME : Originator : Dist PLOT SCALE : 198.795181:1.000000

WISDOT/CADDS SHEET 42

N

P.I. 132+10.5
△ = 2°28' LT.

120+00 125+00 130+00 135+00 U.S.H. 8 140+00 145+00 150+00

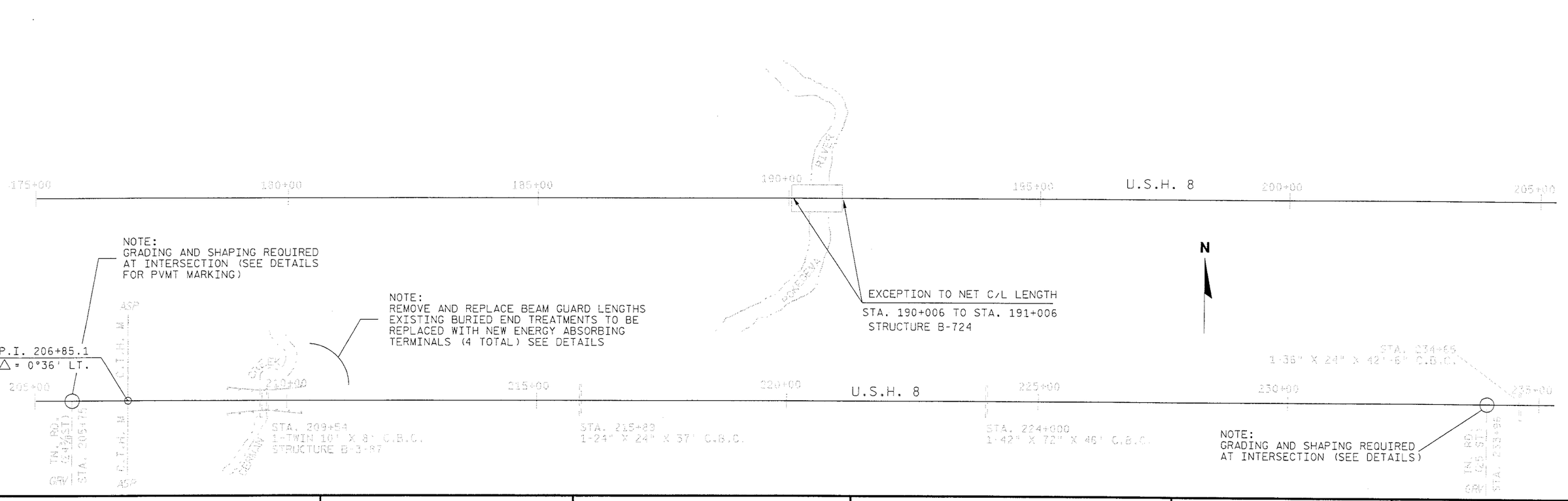
IN. RD. (CSAH 31)
STA. 131+35
ASP

P.I. 171+92.4 BK.=
170+000 AHD.
△ = 1°23' RT.

EQN.

150+00 155+00 U.S.H. 8 160+00 165+00 170+00 175+00

STA. 156+000
1-24" X 52' R.C.C.P.



STATE PROJECT NUMBER: 1580-23-71	HWY: U.S.H. 8	COUNTY: BARRON & RUSK	PLAN SHEETS	SCALE, FEET 0 100 200	SHEET NO: 18	E

FILE NAME : X:±PROJECTS±D8±15802300±Msta±plan.dgn PLOT DATE: 17-JUN-2002 11:35 ORG DATE : PLOT NAME : Originator : Dist PLOT SCALE : 198.795181:1.000000

WISDOT/CADDS SHEET 42

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

N

P.I. 240+52.7
△ = 1°30' LT.

235+00 240+00 245+00 250+00 U.S.H. 8 255+00 260+00 265+00

STA. 257+37
1-36" X 24" X 45' C.B.C.

P.I. 279+80.6
△ = 1°12' RT.

265+00 270+00 275+00 280+00 285+00 U.S.H. 8 290+00 295+00

STA. 273+003
1-48" X 72" X 41' C.B.C.

P.I. 316+99.8
△ = 0°18' RT.

295+00 300+00 305+00 U.S.H. 8 310+00 315+00 320+00 325+00

STA. 306+22
1-24" X 24" X 36' C.B.C.

TN. RD. (26½ST)
STA. 312+51
GRP

N

GRP
(27 ST)
SEC. LN.

325+00 330+00 U.S.H. 8 335+00 340+00 345+00 350+00 355+00

STA. 333+62
1-24" X 24" X 36'-6" C.B.C.

STA. 338+60
1-36" X 72" R.C.C.P.

TN. RD.
STA. 339+18
ASP

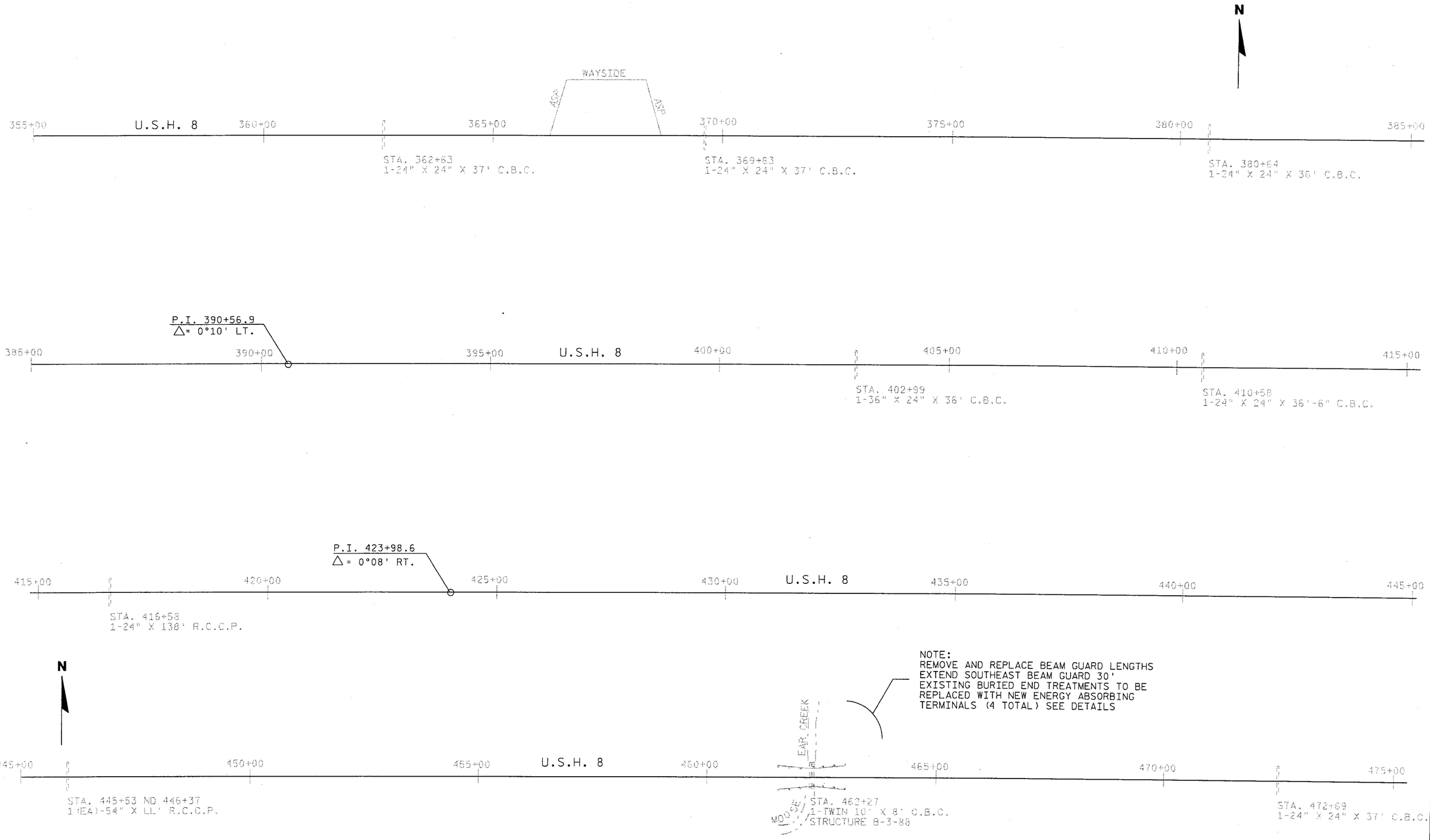
STA. 340+73
1-42" X 86' R.C.C.P.

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

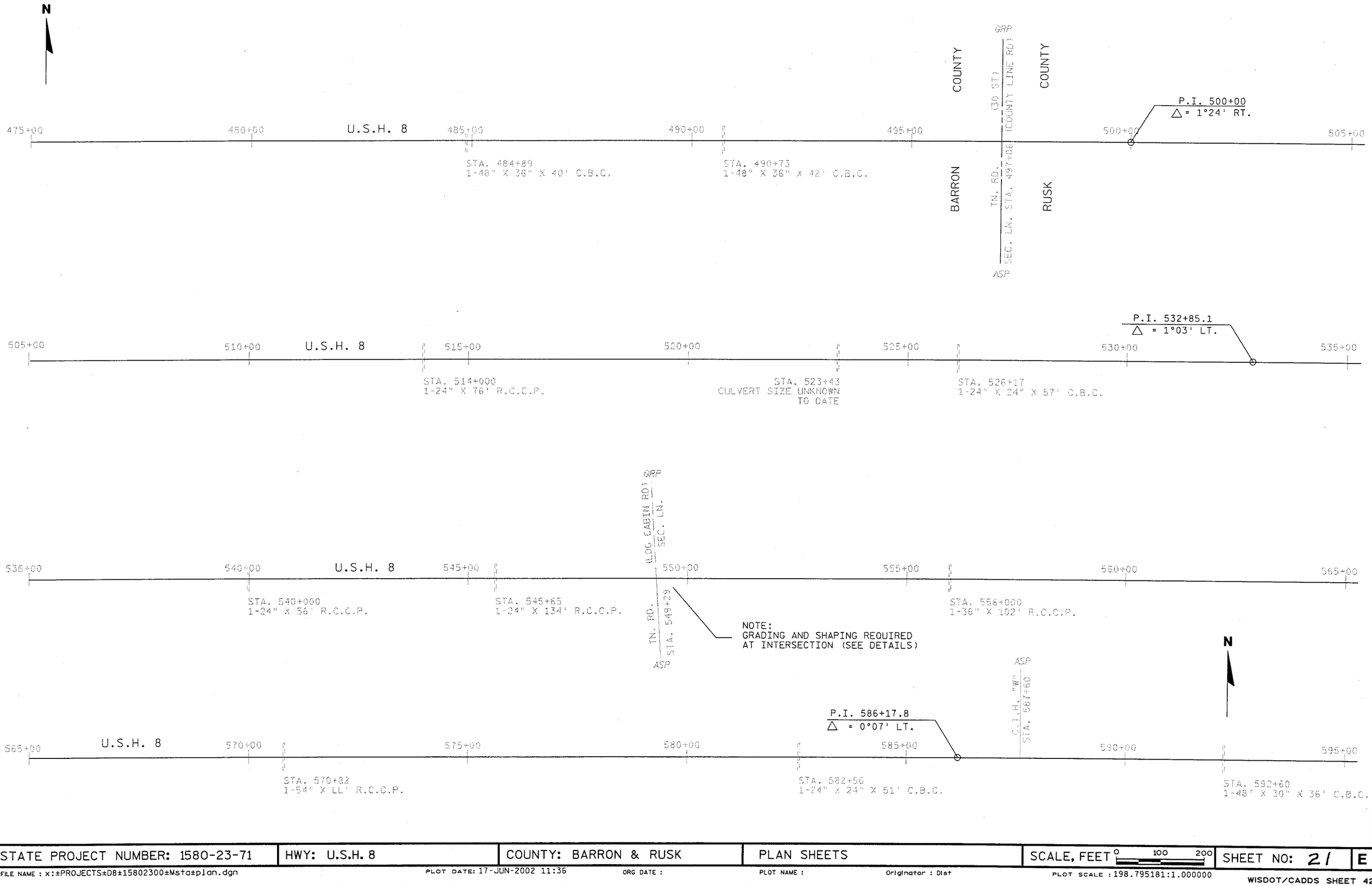
STATE PROJECT NUMBER: 1580-23-71	HWY: U.S.H. 8	COUNTY: BARRON & RUSK	PLAN SHEETS	SCALE, FEET 0 100 200	SHEET NO: 19	E

FILE NAME : X:±PROJECTS±D8±15802300±Msta±plan.dgn PLOT DATE: 17-JUN-2002 11:35 ORG DATE : PLOT NAME : Originator : Dist PLOT SCALE : 198.795181:1.000000

WISDOT/CADDS SHEET 42



STATE PROJECT NUMBER: 1580-23-71	HWY: U.S.H. 8	COUNTY: BARRON & RUSK	PLAN SHEETS	SCALE, FEET 0 100 200	SHEET NO: 20	E

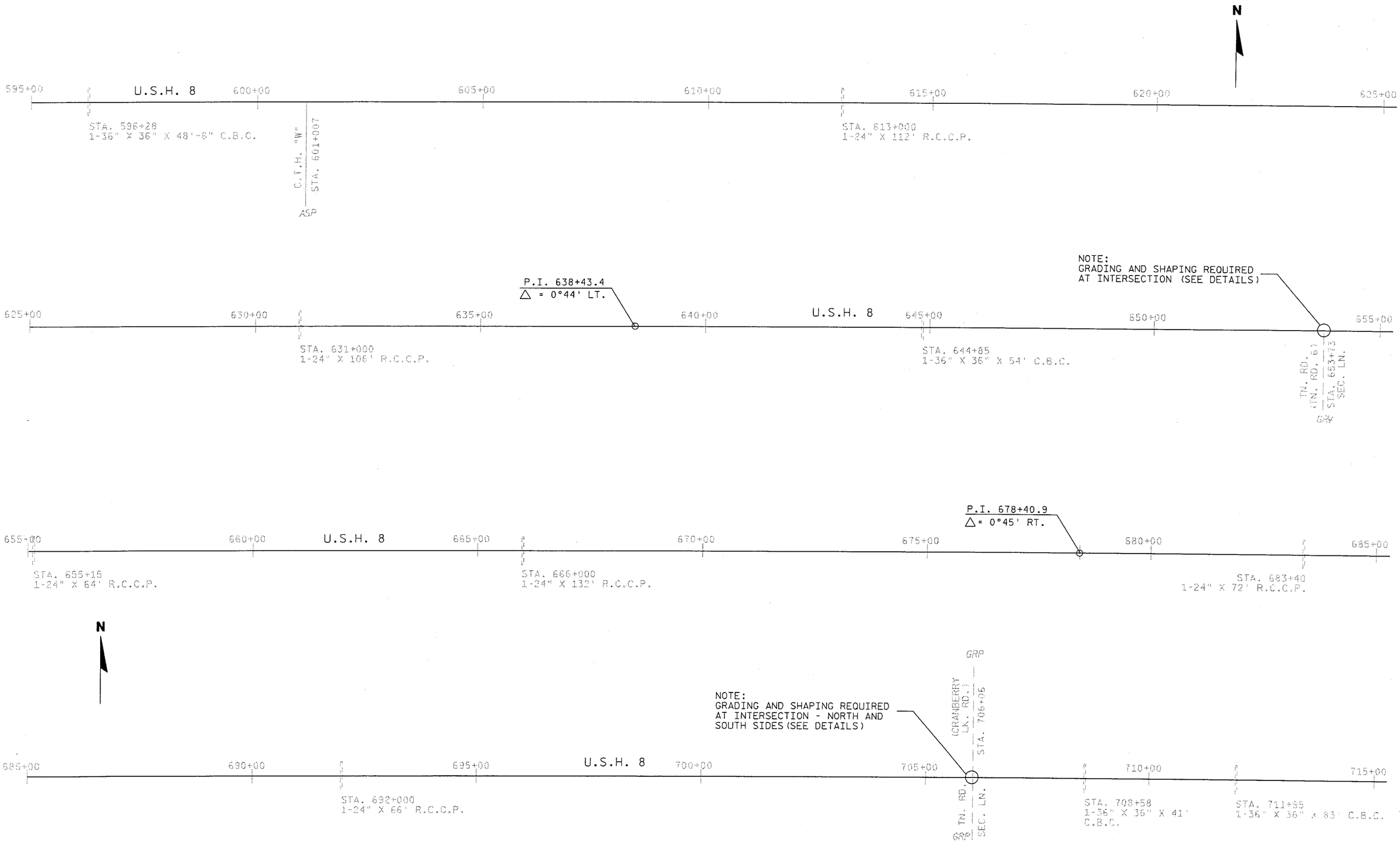


STATE PROJECT NUMBER: 1580-23-71	HWY: U.S.H. 8	COUNTY: BARRON & RUSK	PLAN SHEETS	SCALE, FEET 0 100 200	SHEET NO: 21	E

FILE NAME : x:±PROJECTS±D8±1580300±Msta±plan.dgn PLOT DATE: 17-JUN-2002 11:36 ORG DATE : PLOT NAME : Originator : Dist PLOT SCALE : 198.795181:1.000000

WISDOT/CADDS SHEET 42

LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

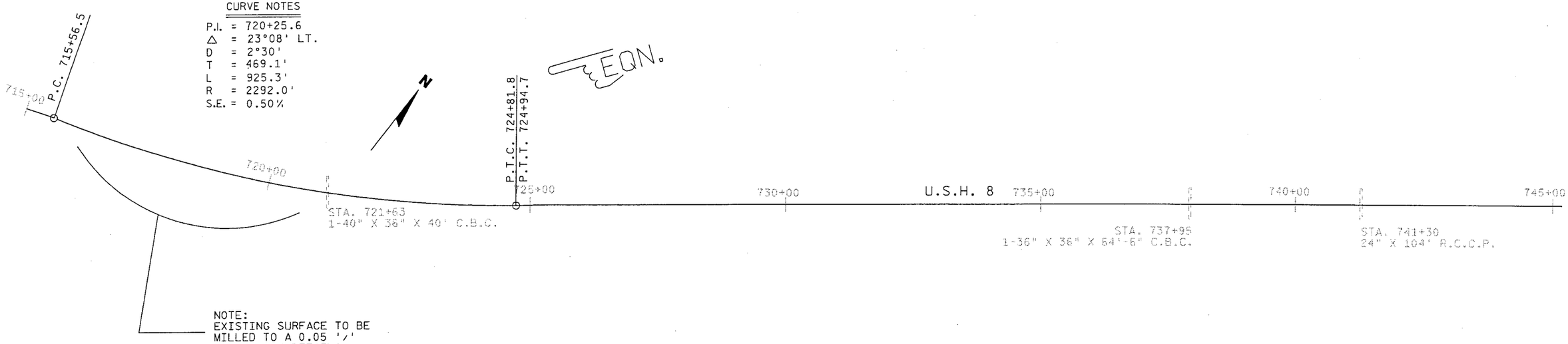


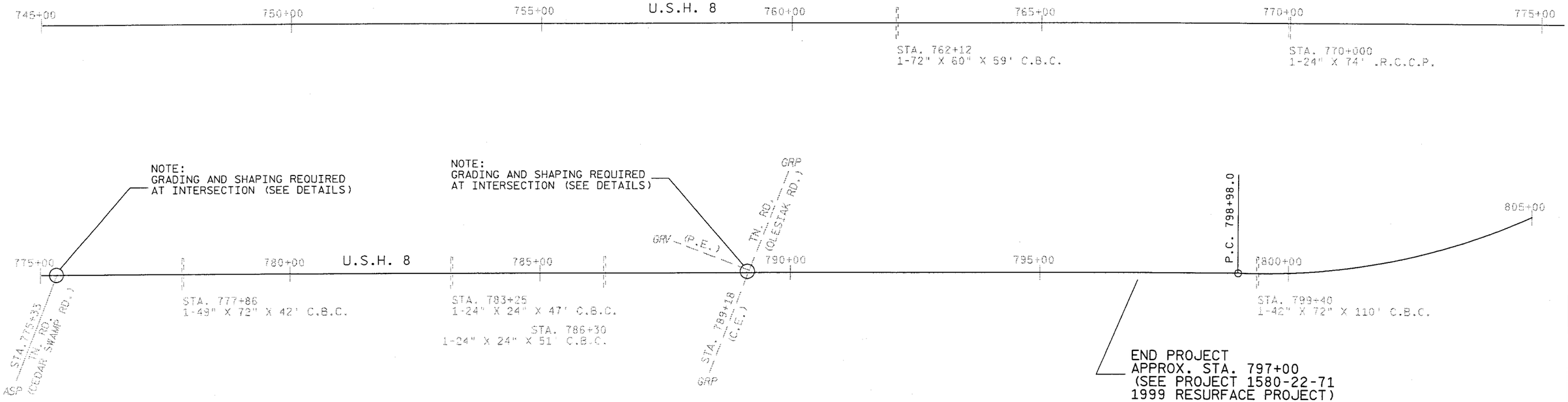
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NUMBER: 1580-23-71	HWY: U.S.H. 8	COUNTY: BARRON & RUSK	PLAN SHEETS	SCALE, FEET 0 100 200	SHEET NO: 22	E

FILE NAME : X:±PROJECTS±D8±15802300±Msta±plan.dgn PLOT DATE: 17-JUN-2002 11:36 ORG DATE : PLOT NAME : Originator : Dist PLOT SCALE : 198.795181:1.000000

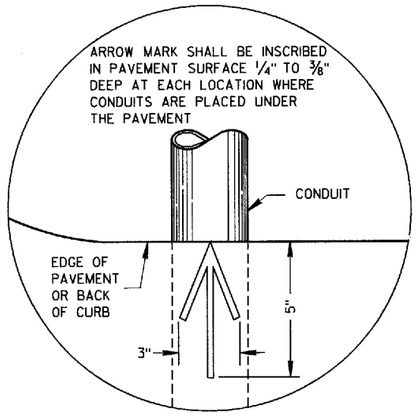
CURVE NOTES
P.I. = 720+25.6
△ = 23°08' LT.
D = 2°30'
T = 469.1'
L = 925.3'
R = 2292.0'
S.E. = 0.50%





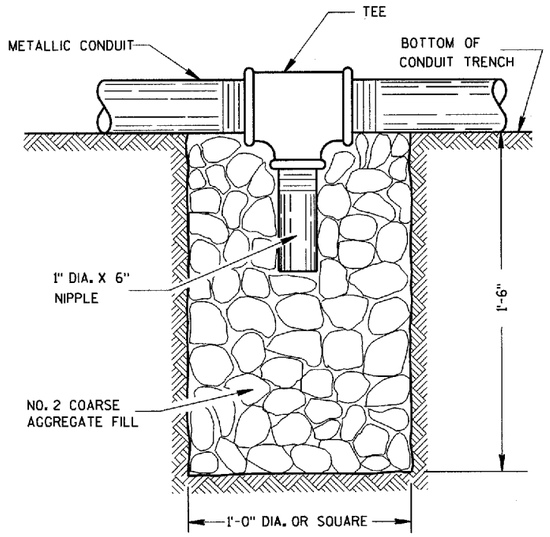
STATE PROJECT NUMBER: 1580-23-71	HWY: U.S.H. 8	COUNTY: BARRON & RUSK	PLAN SHEETS	SCALE, FEET 0 100 200	SHEET NO: 23 E

FILE NAME : x:±PROJECTS±D8±15802300±Msta±plan.dgn
PLOT DATE: 03-JUL-2002 16:04
ORG DATE :
PLOT NAME :
Originator : Dist
PLOT SCALE :198.795181:1.000000
WISDOT/CADDS SHEET 42



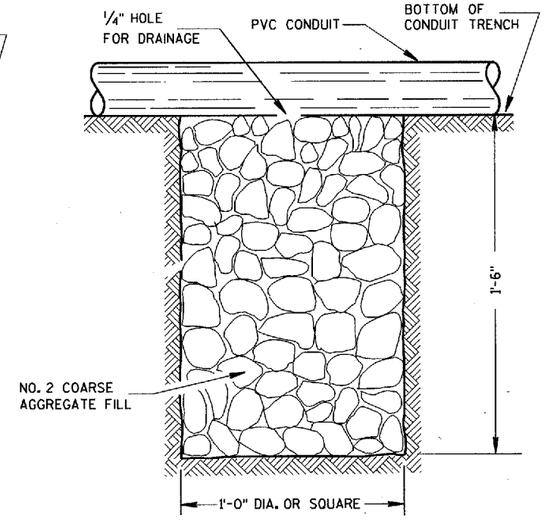
PLAN VIEW

ARROW MARK



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

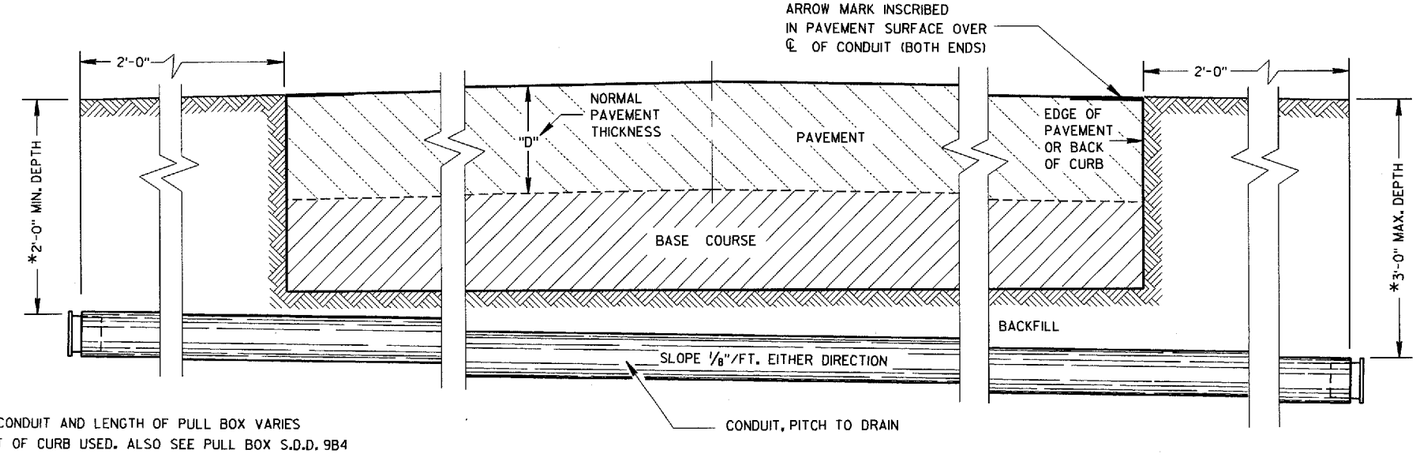
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

POLY ROPE OR A PULL WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS UNLESS OTHERWISE APPROVED BY THE PROJECT ENGINEER.



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 10/21/96 DATE
FHWA

STATE ELECTRICAL ENGINEER FOR HIGHWAYS

S.D.D. 9 B 2-6

S.D.D. 9 B 2-6

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		TYPE OF PIPE									
		CORRUGATED STEEL									POLYETHYLENE SDR 32.5
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24	12
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48	24
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.4
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4	10 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2	14 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	8 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2	11 1/2
WEIGHT IN POUNDS *											
FRAME AND COVER		60	60	60	110	110	110	155	155	155	60

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

POLYETHYLENE PULL BOXES SHALL NOT BE INSTALLED IN CONCRETE OR ASPHALTIC PAVEMENT. PULL BOXES LOCATED IN THE ROADWAY SHALL HAVE LOCKING COVERS.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE. THE MECHANICAL CONNECTION (INSIDE AND OUTSIDE) TO THE PULL BOX, SHALL BE TOTALLY AND PERMANENTLY SEALED WITH A SILICONE OR RUBBERIZED CAULKING COMPOUND AS APPROVED BY THE ENGINEER.

GROUNDING LUGS ARE NOT REQUIRED IN PULL BOXES WHEN VOLTAGES OF LESS THAN 50 VOLTS AC ARE THE ONLY VOLTAGES ENCOUNTERED IN THE BOXES.

DRAIN DUCT SHALL BE MEASURED AND PAID FOR SEPARATELY.

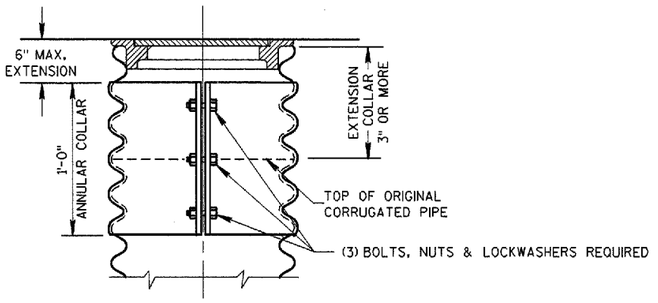
RODENT WIRE SCREEN SHALL BE 1/8" STAINLESS STEEL MESH AND BE INSTALLED WITH A STAINLESS STEEL HOSE CLAMP OF SUFFICIENT SIZE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

S.D.D. 9B2, "CONDUIT", APPLIES TO THIS DRAWING.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.

IF PULL BOX EQUIPMENT GROUNDING IS REQUIRED USING AN EQUIPMENT GROUNDING ELECTRODE IN EACH PULL BOX, THE EQUIPMENT GROUNDING ELECTRODE SHALL BE 5/8" X 8'-0", COPPERCLAD AND BE EXOTHERMICALLY WELDED TO A #4 AWG, COPPER, STRANDED WIRE (BARE OR GREEN INSULATED). THE #4 AWG WIRE SHALL BE 4 FEET IN LENGTH, NEATLY COILED, TAPED AND AVAILABLE FOR USE WHEN REQUIRED.



CORRUGATED PIPE EXTENDER

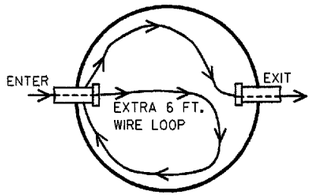
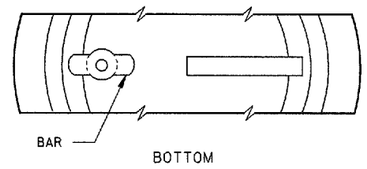
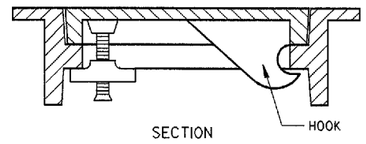


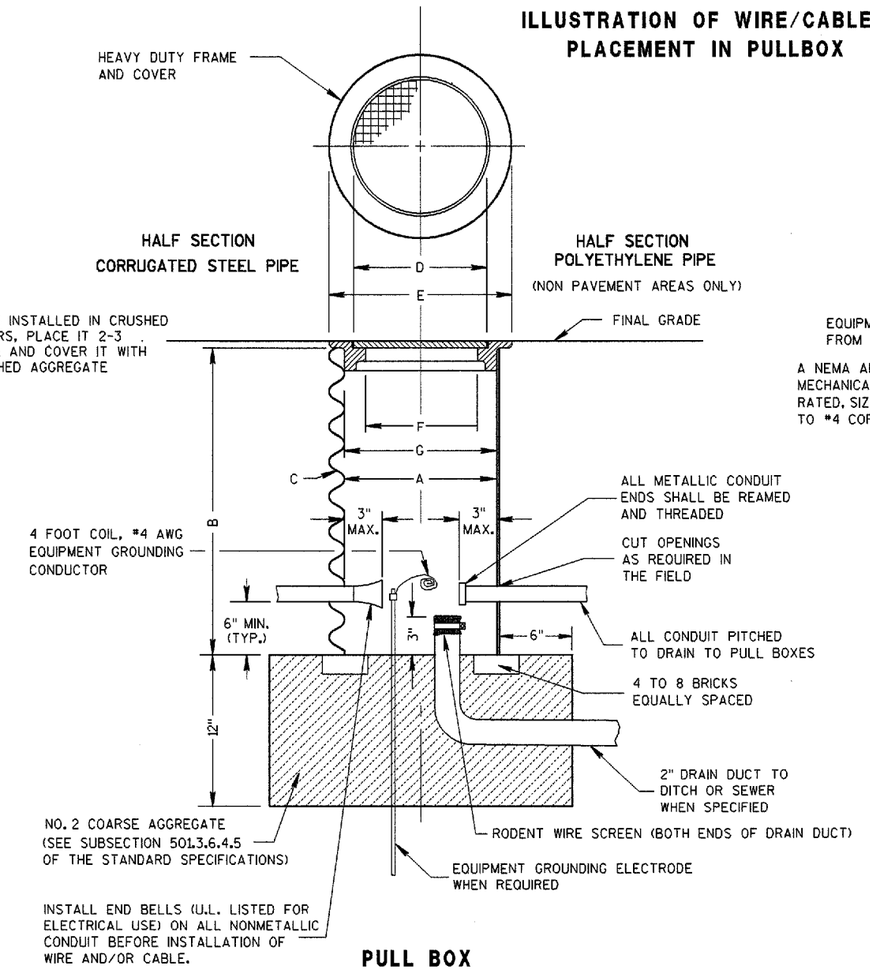
ILLUSTRATION OF WIRE/CABLE PLACEMENT IN PULLBOX



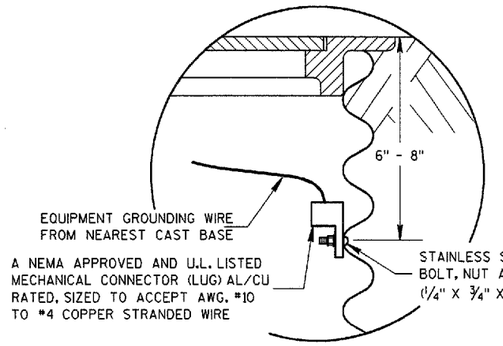


ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



PULL BOX



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

PULL BOX

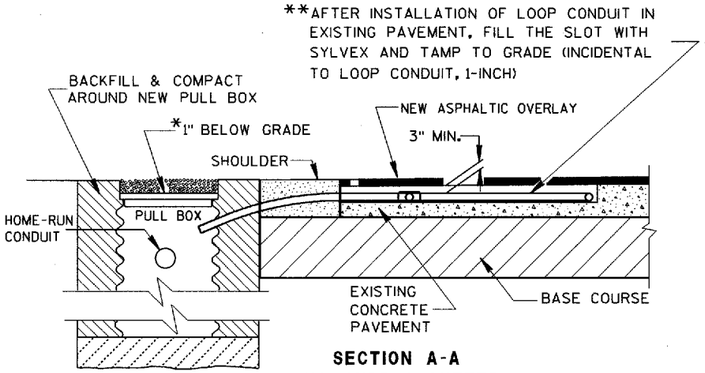
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 9/10/99 DATE
FHWA

STATE ELECTRICAL ENGINEER FOR HIGHWAYS

S.D.D. 9 B 4-4

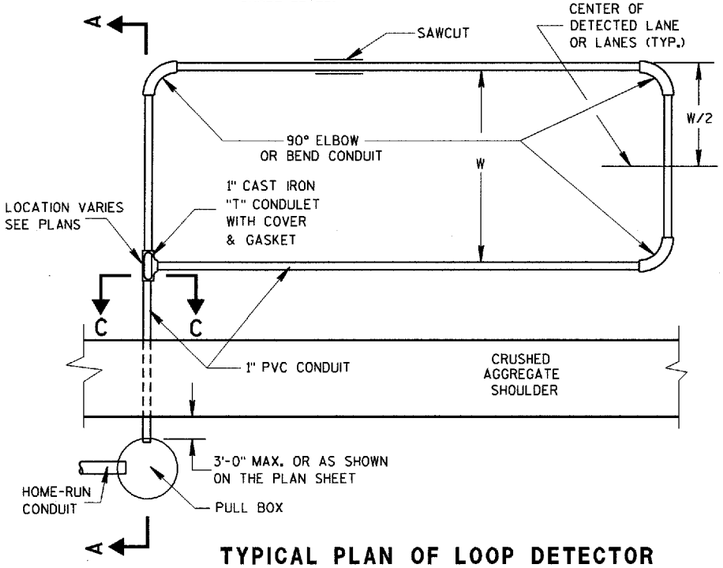
S.D.D. 9 B 4-4



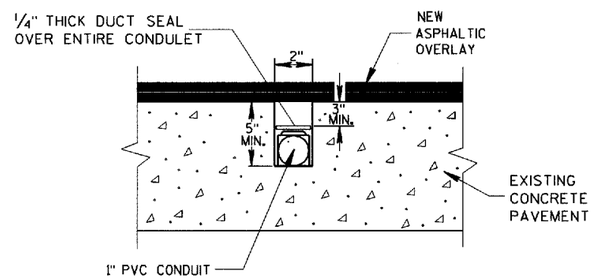
SECTION A-A
NO CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAIL

*RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.



TYPICAL PLAN OF LOOP DETECTOR



SIDE VIEW
SECTION C-C

LOOP DETECTOR SLOT DETAIL

GENERAL NOTES

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

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS SUCH AS 3M TYPE 82A1 OR APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

THE GROUND RESISTANCE READING OF THE LOOP SHALL READ "INFINITY" TO GROUND ON AN OHMETER USING A MULTIPLIER SCALE OF 1 MEGOHM AND AN INPUT RESISTANCE OF 11 MEGOHMS MINIMUM BEFORE SPLICING THE LOOP TO THE LEAD-IN CABLE.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

IN THE EVENT EPOXY IS USED AS A LOOP SLOT FILLER, THE SLOT SHALL BE TOTALLY CLEAN AND DRY BEFORE ITS INSTALLATION.

BEFORE PLACING THE 1 INCH CONDUIT IN THE CLEANED OUT SLOT, PLACE SOME OF THE TAR OR EPOXY SEALANT IN THE SLOT TO A DEPTH OF APPROXIMATELY 1/2 INCH.

ONCE THE 2" LOOP SLOT HAS BEEN CHIPPED OUT, THE LOOP INSTALLATION SHALL BE COMPLETED PRIOR TO OPENING THE LANE(S) TO TRAFFIC.

ANTI-SIEZE LUBRICATING MATERIAL SHALL BE USED ON ALL THREADS OF THREADED ASSEMBLIES BEFORE INSTALLATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

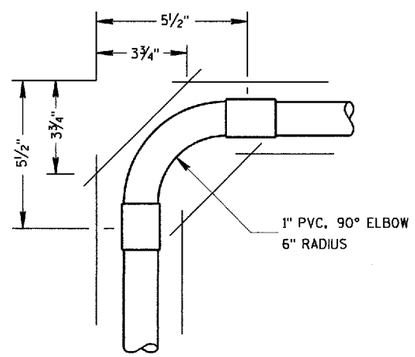
THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL BOX, THROUGH THE LOOP CONDUIT BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE, NON-SPLICED, CONTINUOUS LENGTH.

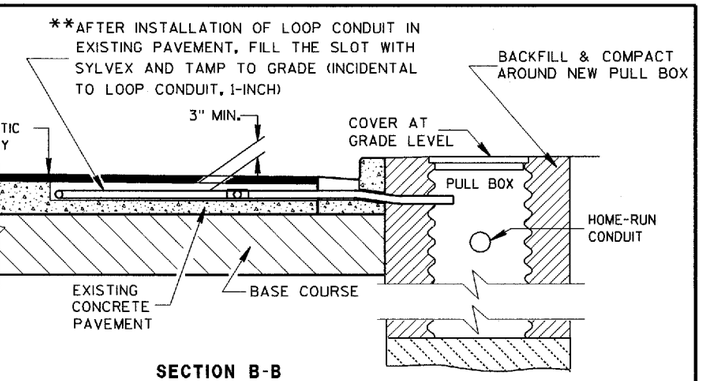
DRIVE A 1 1/2" MAX. PK NAIL INTO THE NEW ASPHALTIC OVERLAY AND ON TOP OF THE CONDULET AFTER THE NEW ASPHALTIC OVERLAY IS INSTALLED, IF REQUESTED BY THE DISTRICT TRAFFIC SECTION.

**AFTER THE SYLVEX HAS BEEN TAMPED, SEAL THE SLOT/SYLVEX/PAVEMENT OPENING WITH HOT POURED ELASTIC TYPE MATERIAL CONFORMING TO THE REQUIREMENTS OF THE "SPECIFICATION FOR JOINT SEALANTS, HOT POURED, FOR CONCRETE AND ASPHALT PAVEMENTS, ASTM DESIGNATION: D3405".



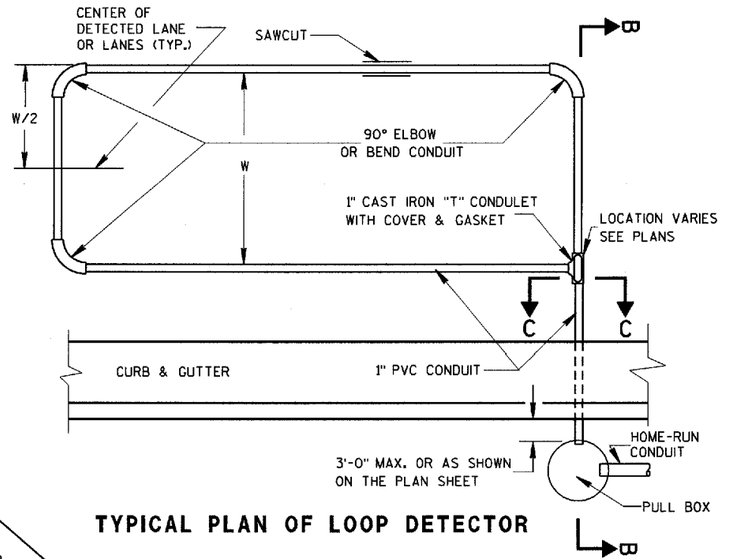
TOP VIEW

CORNER SAW SLOT DETAIL

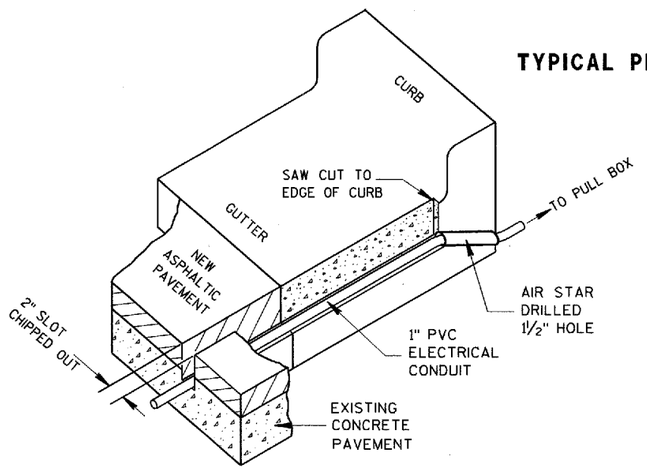


SECTION B-B
CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAIL



TYPICAL PLAN OF LOOP DETECTOR



ISOMETRIC VIEW

TYPICAL SAW CUT DETAIL FOR LEAD-IN CONDUIT

LOOP DETECTOR INSTALLED IN EXISTING CONCRETE PAVEMENT WITH NEW ASPHALTIC OVERLAY

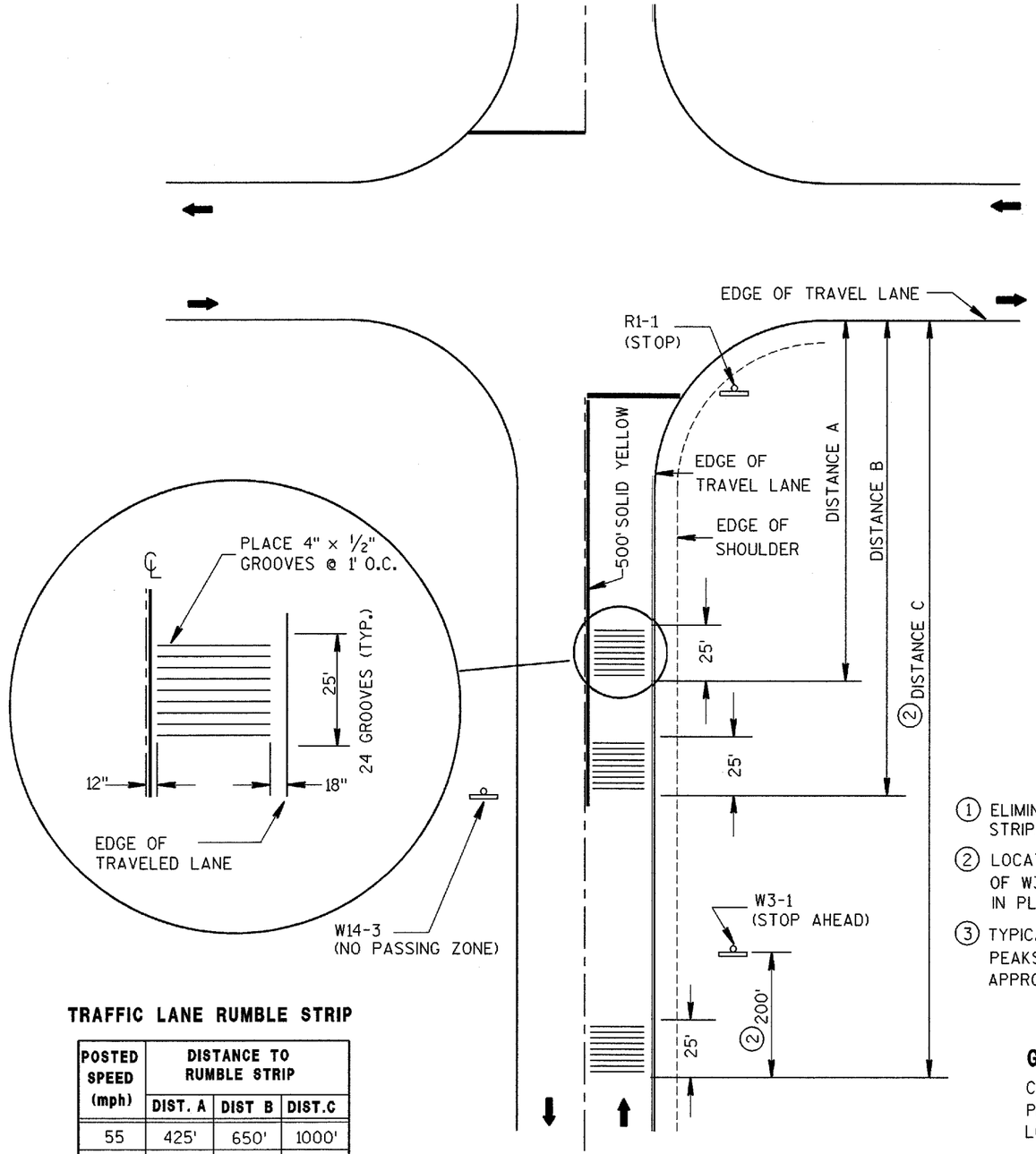
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/21/96
DATE
FHWA

STATE ELECTRICAL ENGINEER FOR HIGHWAYS

S.D.D. 9 F 11-2

S.D.D. 9 F 11-2



ARROW SYMBOL (➡) SHOWS DIRECTION OF TRAVEL

PLAN VIEW

RUMBLE STRIP LOCATION

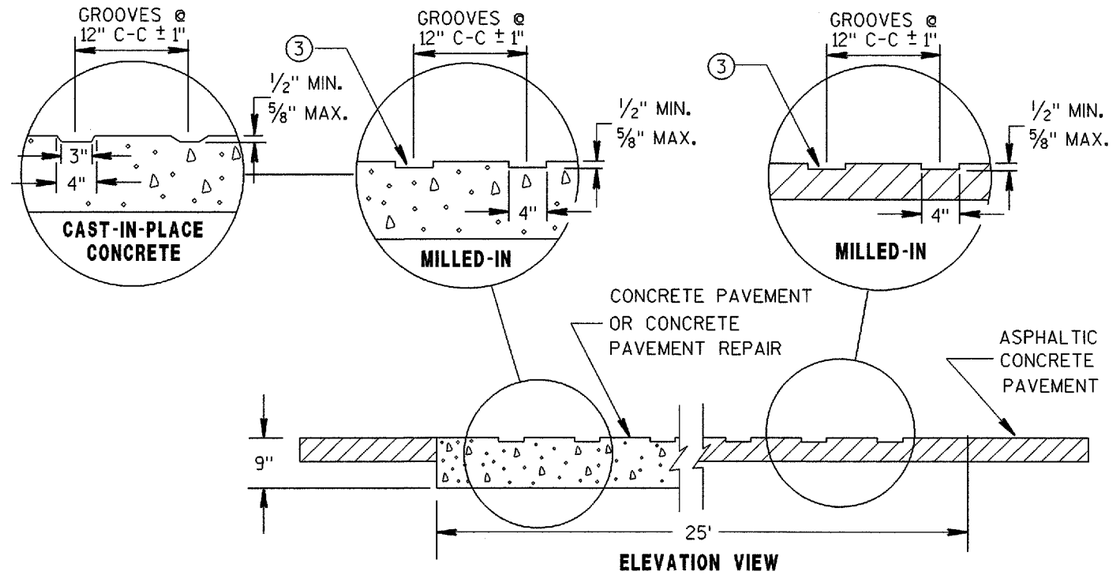
TRAFFIC LANE RUMBLE STRIP

POSTED SPEED (mph)	DISTANCE TO RUMBLE STRIP		
	DIST. A	DIST B	DIST.C
55	425'	650'	1000'
50	325'	450'	800'
45	275'	400'	650'
40	225'	(1)	550'
35	175'	(1)	475'
≤30	125'	(1)	425'

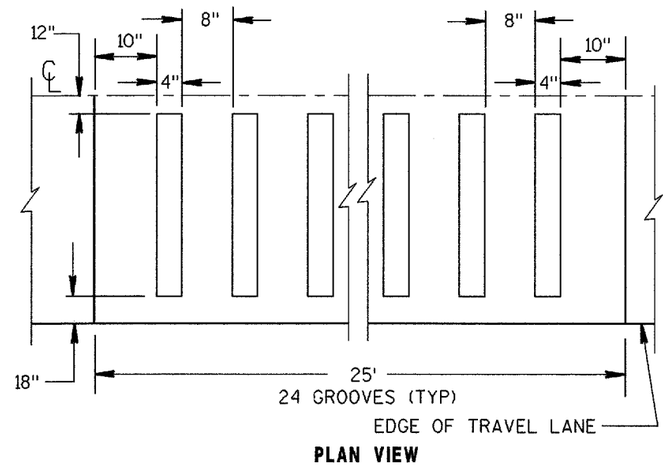
(1) ELIMINATE THE MIDDLE SET OF RUMBLE STRIPS.

(2) LOCATE RUMBLE STRIP 200' IN ADVANCE OF W3-1 SIGN AS SHOWN. IF W3-1 IS NOT IN PLACE, USE DISTANCE C.

(3) TYPICAL VERTICAL VARIATION BETWEEN PEAKS AND VALLEYS WITHIN THE CUT APPROXIMATELY 1/16"



ELEVATION VIEW



PLAN VIEW

CONCRETE PAVEMENT MILLED-IN OR CAST-IN-PLACE

ASPHALTIC PAVEMENT MILLED-IN

GENERAL NOTES

CONTRACTOR SHALL CONFIRM RUMBLE STRIP LOCATION WITH THE ENGINEER PRIOR TO INSTALLATION. THE ENGINEER MAY MODIFY THE RUMBLE STRIP LOCATION AS FIELD CONDITIONS DICTATE.

WHEN CONCRETE PAVEMENT IS INSTALLED IN THE RUMBLE STRIP AREA, THE CONCRETE SHALL EXTEND FROM THE ℄ TO THE EDGE OF TRAVEL WAY.

WHEN ASPHALTIC PAVEMENT IS NEW IN THE RUMBLE AREA THE CONTRACTOR SHALL ALLOW THE PAVEMENT TO CURE A MINIMUM OF 7 DAYS PRIOR TO RUMBLE INSTALLATION.

PAVEMENT MARKING AND SIGNING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

RUMBLE STRIPS AT INTERSECTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 6/22/01 (DATE)

CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

S.D.D. 13 A 6-2

S.D.D. 13 A 6-2

GENERAL NOTES

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

(1) W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

DO NOT MIX STEEL POSTS AND WOOD POSTS IN A SINGLE INSTALLATION.

(2) USE STRUCTURAL STEEL POSTS CONFORMING TO AASHTO M183. GALVANIZE ACCORDING TO AASHTO M 111. EITHER SET THE POSTS IN DRILLED HOLES OR DRIVE TO GRADE. REMOVE MUSHROOMING CAUSED BY DRIVING AND REPAIR DAMAGED SPELTER COATING ON GALVANIZED POSTS.

(3) INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(4) USE EITHER WOOD OR APPROVED PLASTIC BLOCKOUTS ON WOOD POSTS.

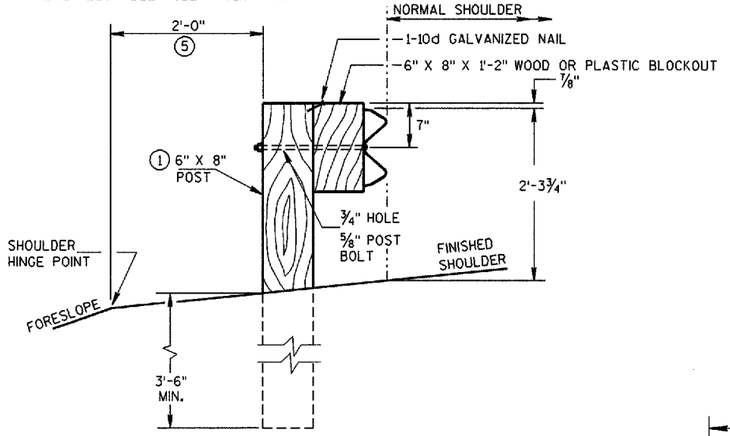
(5) WHEN SPECIFIED IN THE PLANS, THE 2-FOOT MINIMUM TO HINGE POINT MAY BE REDUCED OR ELIMINATED IF EXISTING CONDITIONS DO NOT PERMIT THE DESIRABLE EARTHWORK.

INCREASE POST LENGTH TO PROVIDE A MINIMUM EMBEDMENT OF 3'-6" IF THE SHOULDER HINGE POINT IS LOCATED IN FRONT OF THE POST.

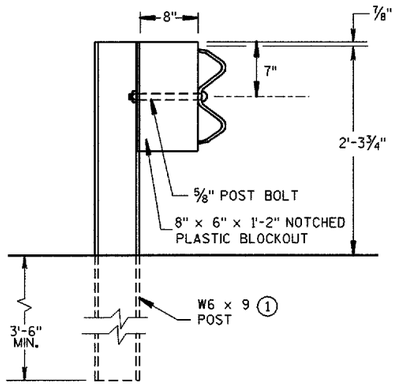
(6) IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2½ INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN YHE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATEY.

INSTALL BEAM GUARD SECTIONS AND ALL NECESSARY HARDWARE ACCORDING TO THE APPLICABLE PLAN AND CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS.

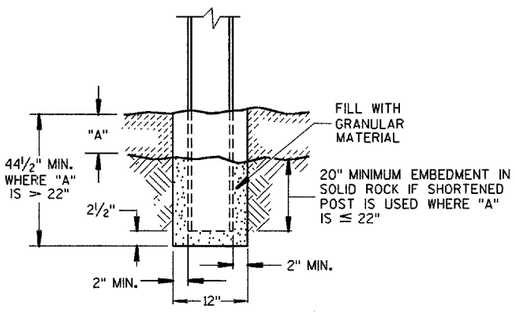
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



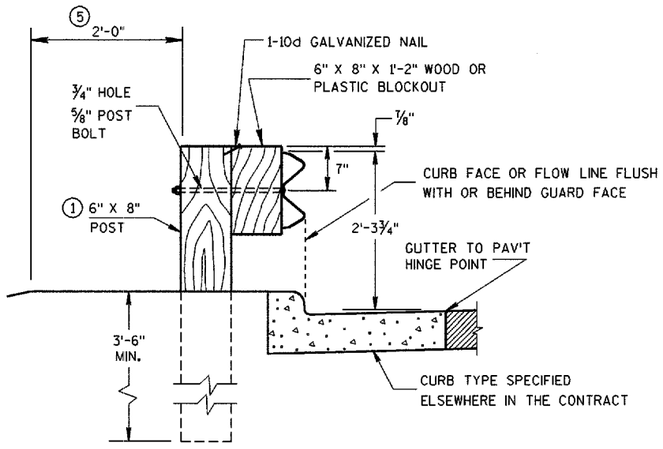
END VIEW
LOCATED ALONG A ROADWAY SHOULDER



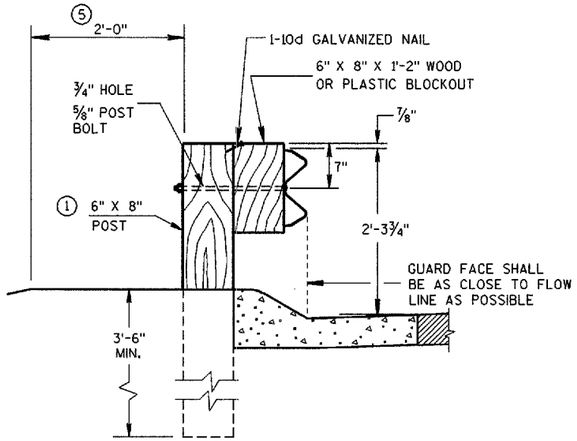
END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE



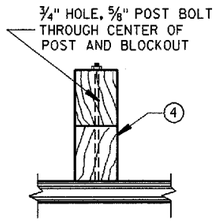
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (6)



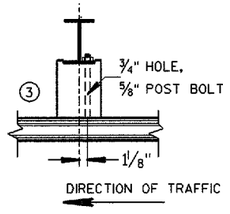
END VIEW
LOCATED ALONG A CURBED ROADWAY



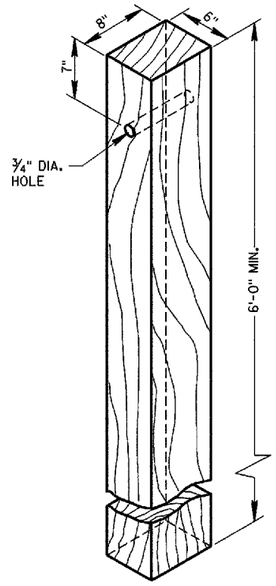
END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY



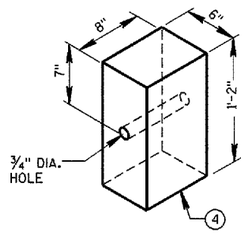
PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



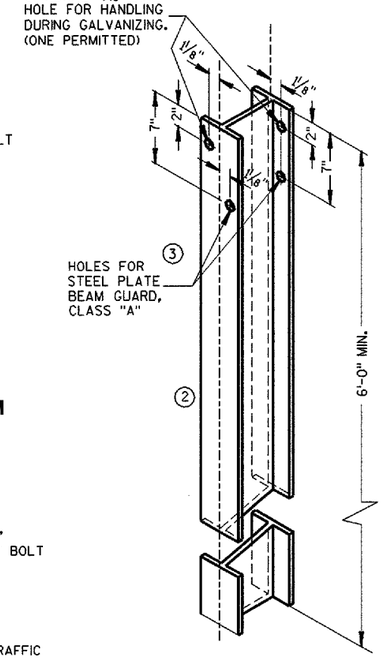
PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM



WOOD POST
(6"X8") NOMINAL

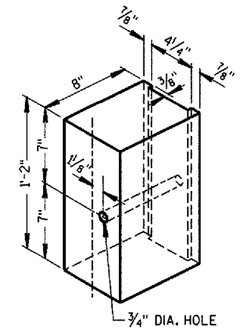


WOOD OR PLASTIC
BLOCKOUT FOR WOOD POSTS



STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) (1)

ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED



NOTCHED PLASTIC BLOCKOUT
FOR STEEL POSTS

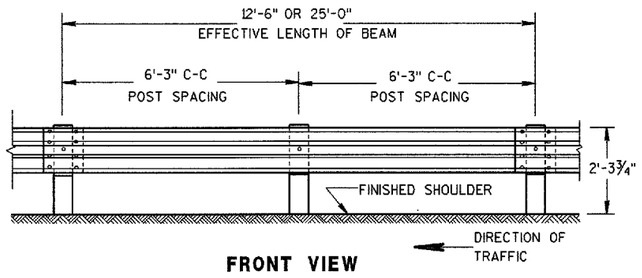
STEEL PLATE BEAM GUARD,
CLASS 'A'
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

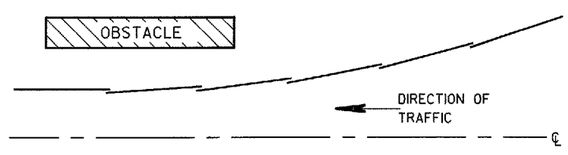
TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

S.D.D. 14 B 15-4a

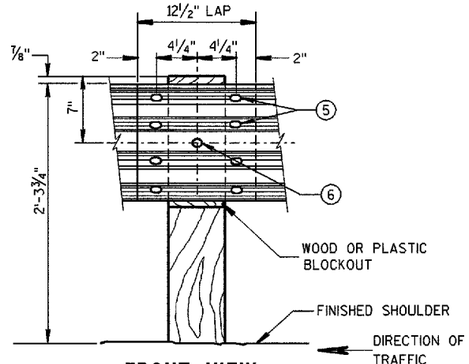
S.D.D. 14 B 15-4a



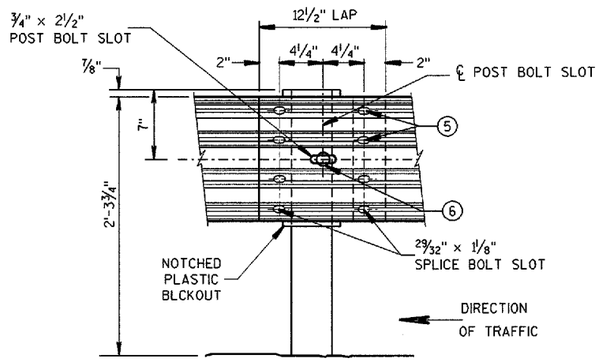
FRONT VIEW



PLAN VIEW
BEAM LAPPING DETAIL



FRONT VIEW
BEAM SPLICE AT WOOD POST
AND POST MOUNTING DETAIL



FRONT VIEW
BEAM SPLICE AT STEEL POST

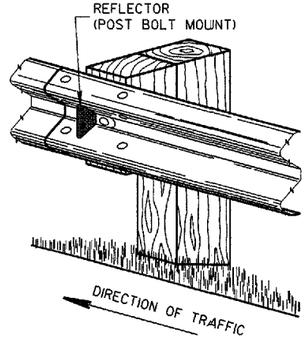
TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD

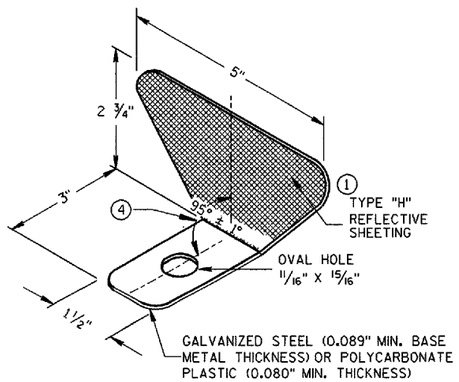
GENERAL NOTES

1. PROVIDE TYPE "H" SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH TYPE "H" YELLOW REFLECTIVE SHEETING.
2. DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.
3. REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
4. PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.
5. 8 -⅝" ϕ X 1¼" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.
6. ⅝" ϕ X 1'-6" BUTTON HEAD BOLT AND AND RECESS NUT WITH ROUND WASHER UNDER NUT.

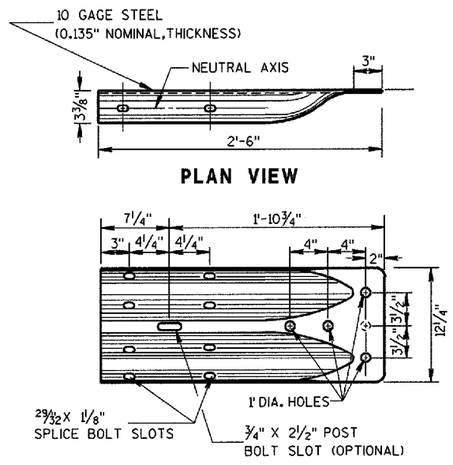
REFLECTOR SPACING ②

	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 ③	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2	3
	> 200'	100' C-C	2 ④	

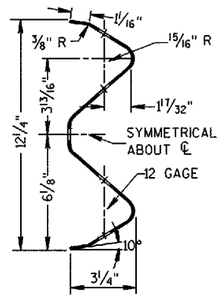




ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION ①



W BEAM TERMINAL CONNECTOR
(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)



SECTION THRU W BEAM

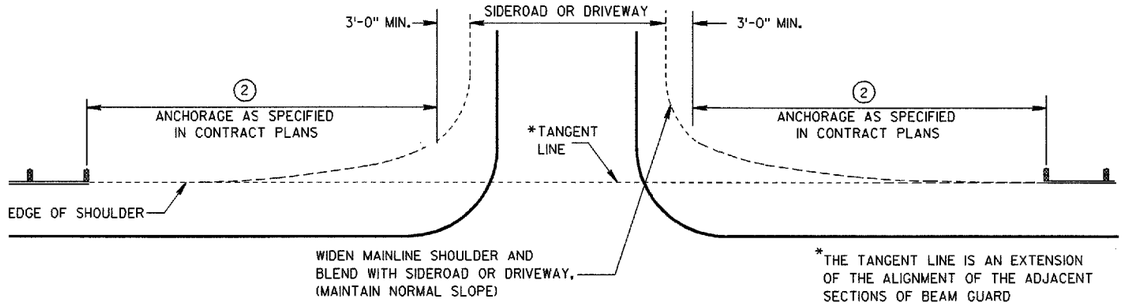
STEEL PLATE BEAM GUARD,
CLASS "A",
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

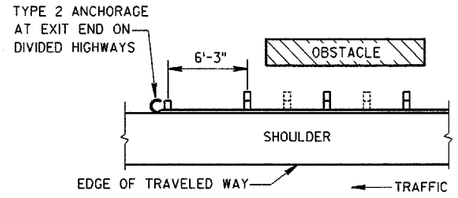
APPROVED
12/08/00
DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

S.D.D. 14 B 15-4b

S.D.D. 14 B 15-4b



BEAM GUARD AT SIDEROADS OR DRIVEWAYS



BEAM GUARD AT OBSTACLES EXIT END - ONE WAY TRAFFIC

GENERAL NOTES

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

W6 X 9 OR W6 X 8.5 STEEL POSTS WITH NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

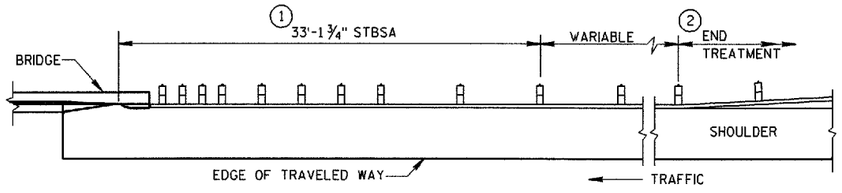
THE LOCATIONS AND LENGTHS OF BEAM GUARD ARE SHOWN ELSEWHERE IN THE PLAN.

(1) USE STEEL THRIE BEAM STRUCTURAL APPROACH (STBSA).

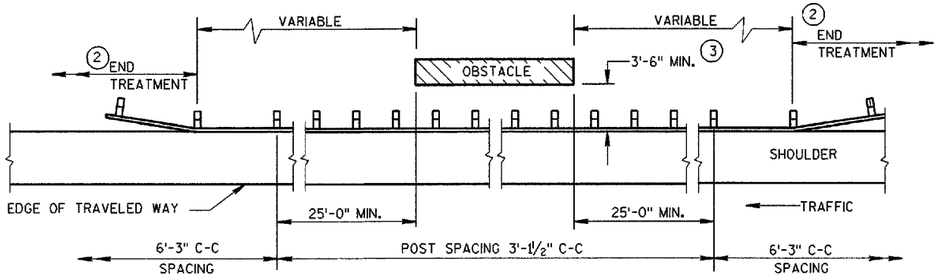
(2) USE AN APPROVED END TREATMENT FOR THE TRAFFIC APPROACH SIDE OF BRIDGE/OBSTACLES. USE TYPE 2 ANCHORAGE ONLY AT THE DOWNSTREAM ENDS OF BEAM GUARD LOCATED ALONG ROADWAYS WITH ONE WAY TRAFFIC.

(3) DESIGN DEFLECTION OF W-BEAM BARRIER SYSYTEM

LATERAL DISTANCE TO FIXED OBJECT	POST SPACING
3'-6" TO 4'-6"	3' - 1½"
4'-6" AND OVER	6' - 3"

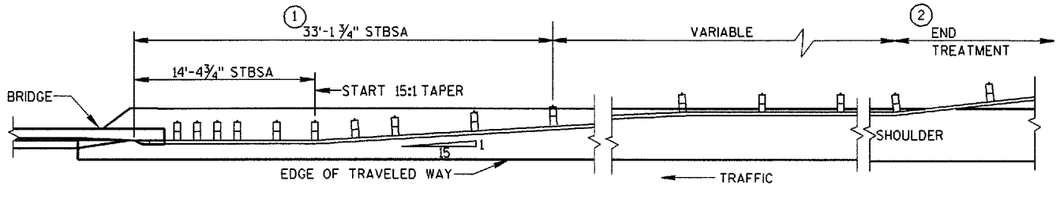


BEAM GUARD AT FULL WIDTH BRIDGES



BEAM GUARD AT OSBSTACLES - TWO WAY TRAFFIC

(RAIL TO OBSTACLE CLEARANCE 3'-6" TO 4'-6")



BEAM GUARD AT NARROW BRIDGES

(FLARED TO SHOULDER EDGE, THEN PARALLEL TO ROADWAY)

STEEL PLATE BEAM GUARD, CLASS "A" (AT BRIDGES, OBSTACLES AND SIDEROADS/DRIVEWAYS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

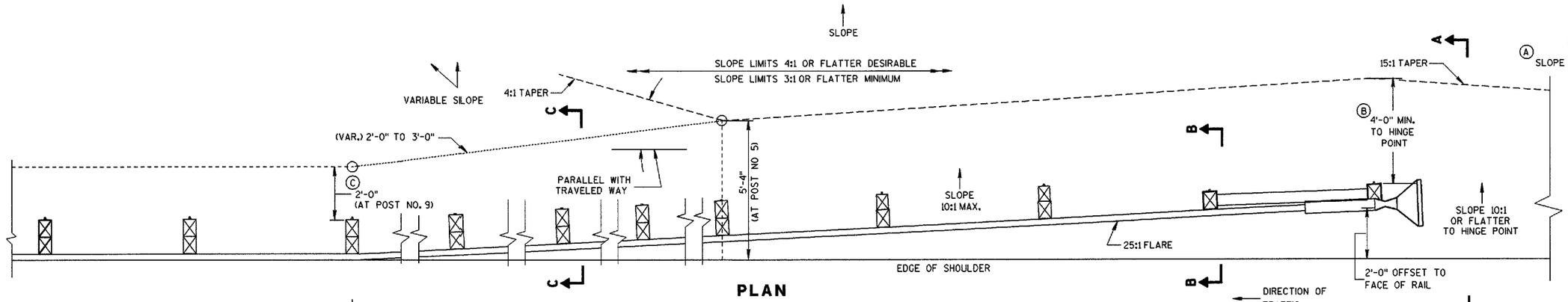
APPROVED
12/08/00
DATE

John Haverberg
CHIEF ROADWAY DEVELOPMENT ENGINEER

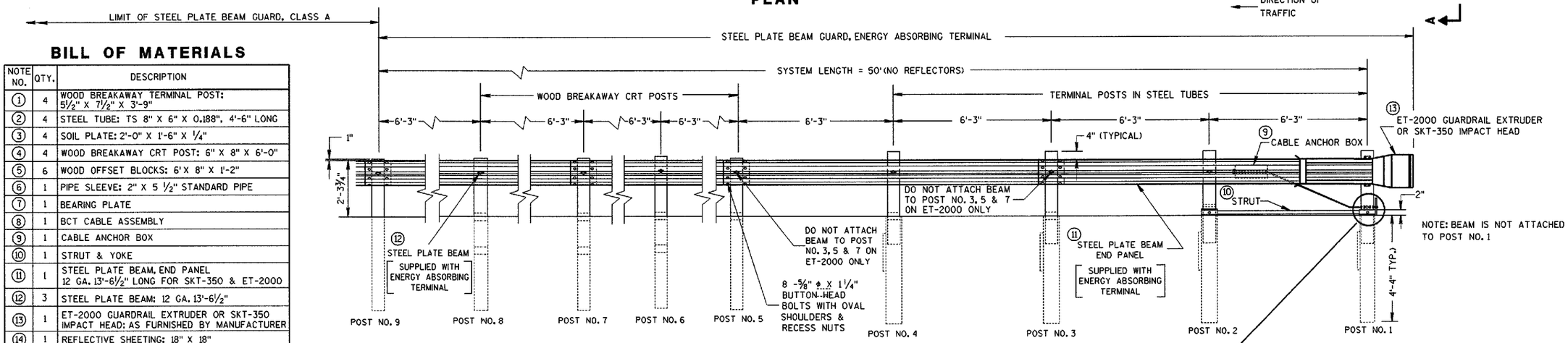
FHWA

S.D.D. 14 B 18-4a

S.D.D. 14 B 18-4a



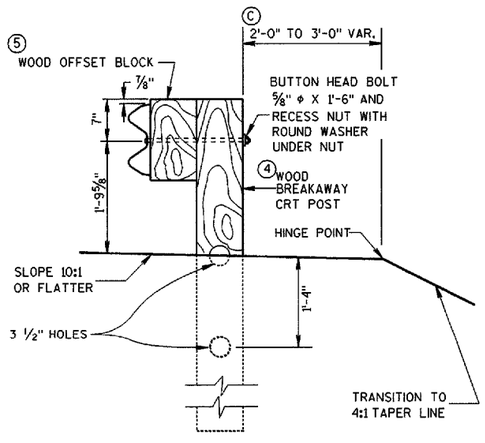
PLAN



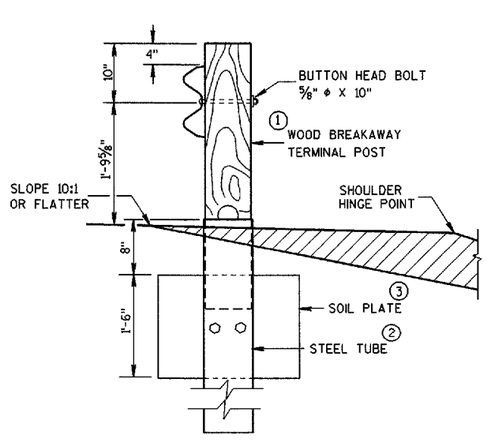
ELEVATION

BILL OF MATERIALS

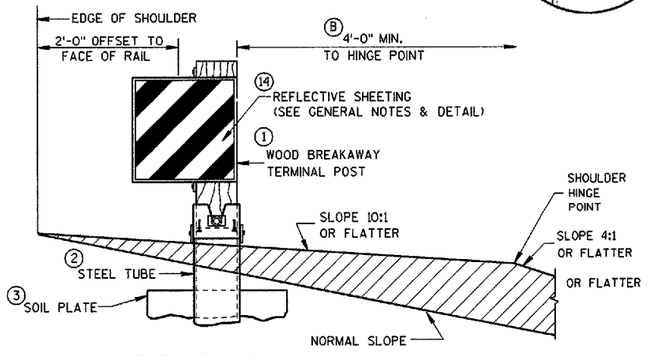
NOTE NO.	QTY.	DESCRIPTION
①	4	WOOD BREAKAWAY TERMINAL POST: 5½" X 7½" X 3'-9"
②	4	STEEL TUBE: TS 8" X 6" X 0.188", 4'-6" LONG
③	4	SOIL PLATE: 2'-0" X 1'-6" X ¼"
④	4	WOOD BREAKAWAY CRT POST: 6" X 8" X 6'-0"
⑤	6	WOOD OFFSET BLOCKS: 6' X 8" X 1'-2"
⑥	1	PIPE SLEEVE: 2" X 5 ½" STANDARD PIPE
⑦	1	BEARING PLATE
⑧	1	BCT CABLE ASSEMBLY
⑨	1	CABLE ANCHOR BOX
⑩	1	STRUT & YOKE
⑪	1	STEEL PLATE BEAM, END PANEL 12 GA. 13'-6½" LONG FOR SKT-350 & ET-2000
⑫	3	STEEL PLATE BEAM: 12 GA. 13'-6½"
⑬	1	ET-2000 GUARDRAIL EXTRUDER OR SKT-350 IMPACT HEAD: AS FURNISHED BY MANUFACTURER
⑭	1	REFLECTIVE SHEETING: 18" X 18"



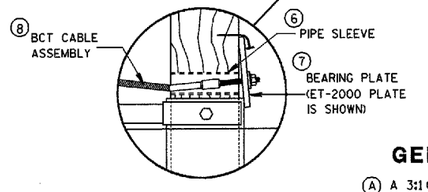
SECTION C-C
TYPICAL AT POST NOS. 5-8 INC.



SECTION B-B
TYPICAL AT POST NO. 2
(ADD WOOD OFFSET BLOCK AT POST 3 & 4)



SECTION A-A
TYPICAL AT POST NO. 1



GENERAL NOTES

(A) A 3:1 OR FLATTER SLOPE MAY BE USED FOR INSTALLATION ON EXISTING HIGHWAYS.

(B) WHEN SPECIFIED ELSEWHERE IN THE CONTRACT THE 4-FOOT MINIMUM TO HINGE POINT, MAY BE REDUCED OR ELIMINATED WHERE EXISTING CONDITIONS WILL NOT PERMIT THE DESIRABLE EARTHWORK. SIMILIARLY THE 15:1 TAPER MAY BE REDUCED TO 4:1.

(C) WHEN SPECIFIED ELSEWHERE IN THE CONTRACT THE 2-FOOT MINIMUM TO HINGE POINT, MAY BE REDUCED OR ELIMINATED WHERE EXISTING CONDITIONS WILL NOT PERMIT THE DESIRABLE EARTHWORK.

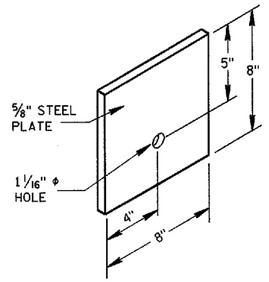
STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

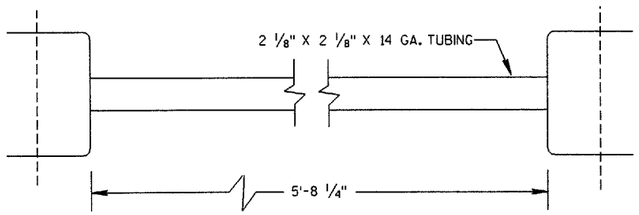
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 14 B 24-3a

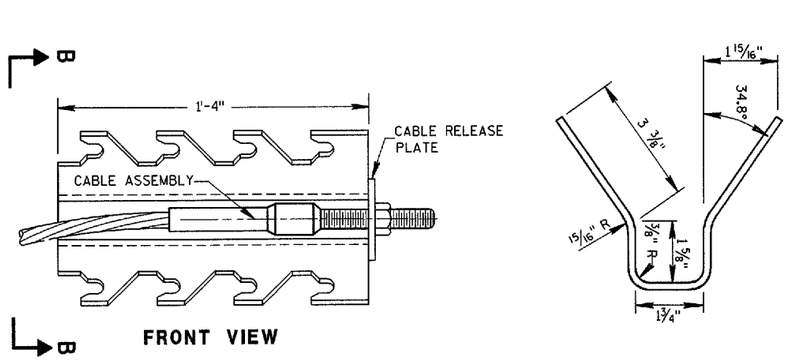
S.D.D. 14 B 24-3a



STEEL BEARING PLATE (SKT-350)



STRUT DETAIL (SKT-350)

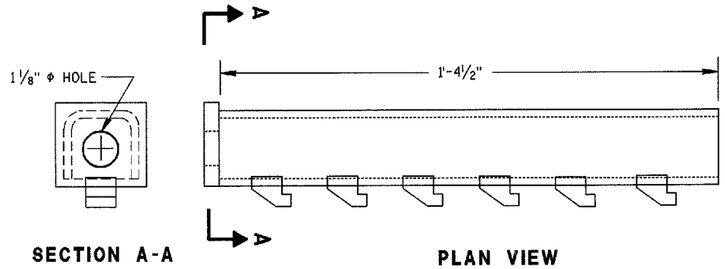


FRONT VIEW

SECTION B-B

CABLE ANCHOR BOX (SKT-350)

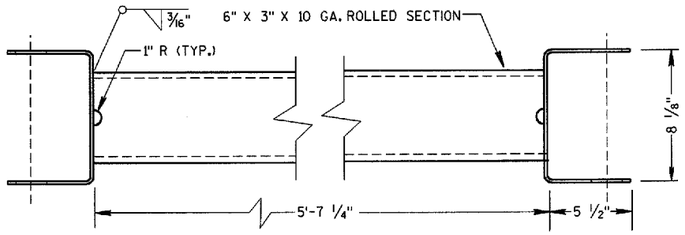
(SKT-350)



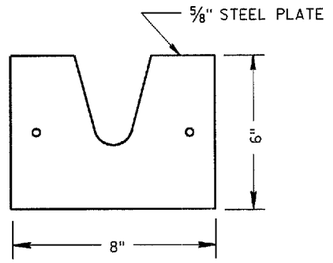
SECTION A-A

PLAN VIEW

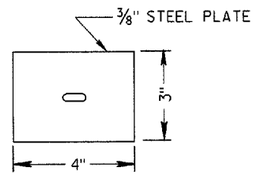
CABLE ANCHOR BOX (ET-2000)



STRUT DETAIL (ET-2000)

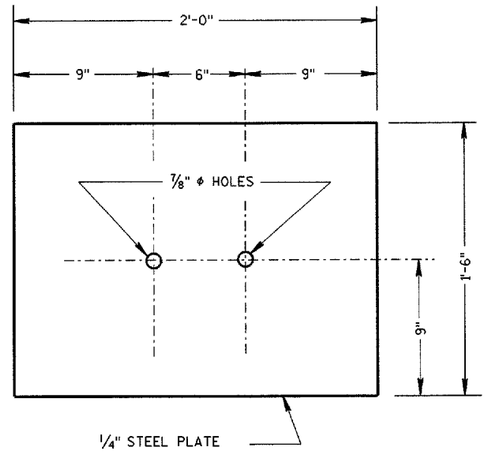


STEEL BEARING PLATE (ET-2000)



BEARING PLATE WASHER ET-2000)

(ET-2000)



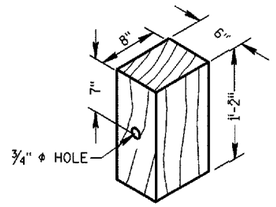
SOIL PLATE (SKT-350 & ET-2000)

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

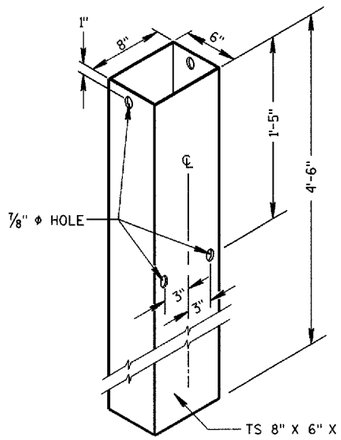
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 14 B 24-3b

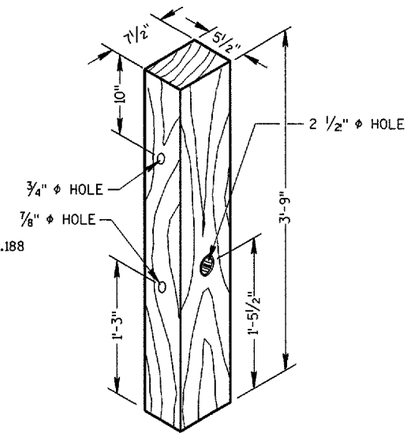
S.D.D. 14 B 24-3b



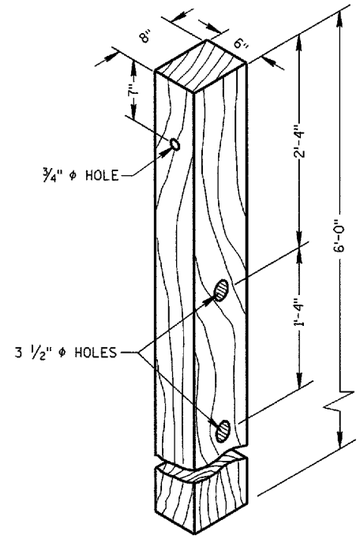
WOOD OFFSET BLOCK
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



STEEL TUBE
(POSTS NO. 1-4
THE STEEL TUBE SHALL CONFORM
TO REQUIREMENTS OF ASTM A500



TERMINAL POST
(POSTS NO. 1-4



CRT POST
(POSTS NO'S 5-8

WOOD BREAKAWAY POSTS

GENERAL NOTES

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

STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL SHALL BE EITHER THE EXTRUDER TERMINAL (ET-2000), OR THE SEQUENTIAL KINKING TERMINAL (SKT-350). THE CONTRACTOR SHALL NOT INTERMIX PROPRIATERY PRODUCT MATERIALS.

THE "ET-2000" IS AVAILABLE FROM SYRO, INC., 2524 N. STEMMONS FREEWAY, DALLAS TEXAS 75207. TELEPHONE 1-800-835-6086 OR 1-800-644-7976

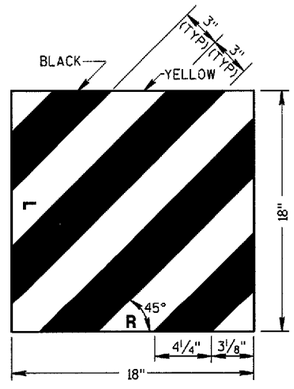
THE "SKT-350" IS AVAILABLE FROM ROAD SYSTEMS, INC., 7631 NEW CASTLE DRIVE, FRANKFORT, ILLINOIS 60423. TELEPHONE (815) 464-5917

THE ET-2000, AND SKT-350 END TERMINALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

STEEL PLATE BEAM GUARD, ENERGY ABSORBING TERMINAL SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH, WHICH SHALL INCLUDE HARDWARE, STEEL PLATE BEAM GUARD, POSTS, REFLECTIVE SHEETING AND INSTALLATION AS SHOWN.

REFLECTIVE SHEETING - SHALL CONFORM TO ASTM SPECIFICATION D4956-93b, REFLECTIVE SHEETING TYPE III, BACKING CLASS 4, PERFORMANCE REQUIREMENT TYPE III. THE MESSAGE AND LINES SHALL BE APPLIED TO THE SIGNS BY THE SILK SCREEN STENCIL PROCESS USING A BLACK OR DARK STENCIL PASTE AS A TYPE APPROVED BY THE MANUFACTURER OF THE FACE MATERIAL TO WHICH IT IS TO BE APPLIED. MESSAGE UNITS CUT FROM NONREFLECTIVE SHEETING AND APPLIED TO THE SIGN FACE ARE NOT ACCEPTABLE. AFTER THE APPROACH END OF THE STEEL PLATE BEAM GUARD INSTALLATION IS COMPLETE, CLEAN THE AREA WHERE THE REFLECTIVE SHEETING WILL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATION. ONCE CLEAN, APPLY REFLECTIVE SHEETING DIRECTLY TO THE STEEL PLATE BEAM GUARD AS SHOWN. THE CONTRACTOR SHALL TURN OVER THE MANUFACTURERS WARRANTY FOR THE REFLECTIVE SHEETING TO THE DEPARTMENT FOR POTENTIAL DEALING WITH THE MANUFACTURER. PAYMENT OF REFLECTIVE SHEETING IS INCIDENTAL TO STEEL PLATE BEAM GUARD, ENERGY ABSORBING TERMINAL.

WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 ½" INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH, PLACED IN THE HOLE AND BACKFILLED WITH ADEQUATELY COMPACTED MATERIAL EXCAVATED FROM THE HOLE.



REFLECTIVE SHEETING DETAIL

STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 12/08/00 DATE John Haverberg CHIEF ROADWAY DEVELOPMENT ENGINEER FHWA

S.D.D. 14 B 24-3c

S.D.D. 14 B 24-3c

TWO-LANE ROADWAY

SYMBOLS

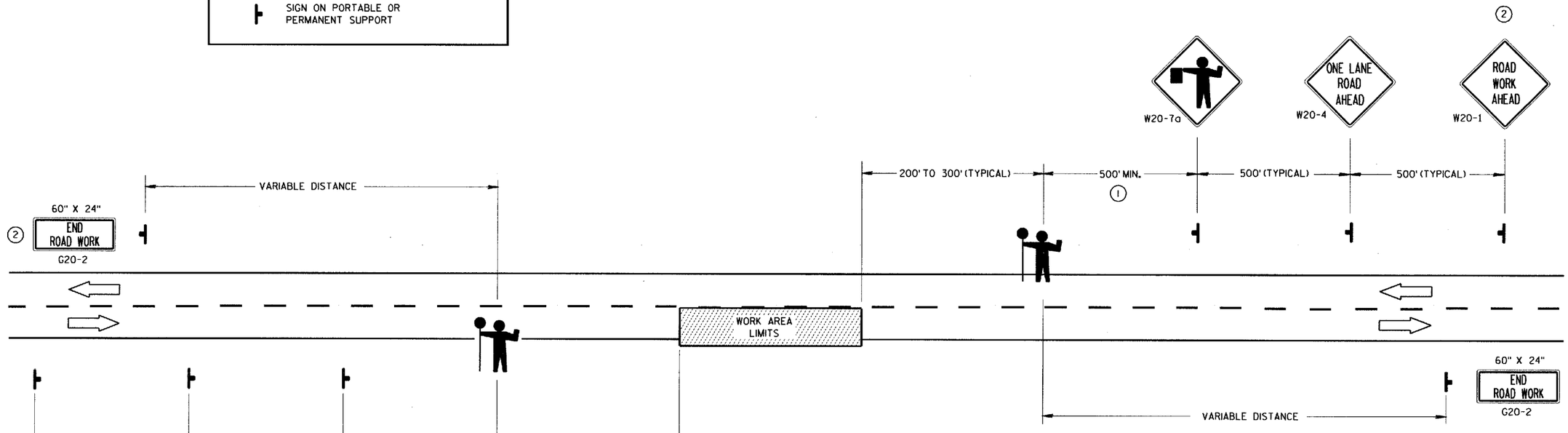
WORK AREA

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

SIGN ON PORTABLE OR PERMANENT SUPPORT

W20-7b

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 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 WORK 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

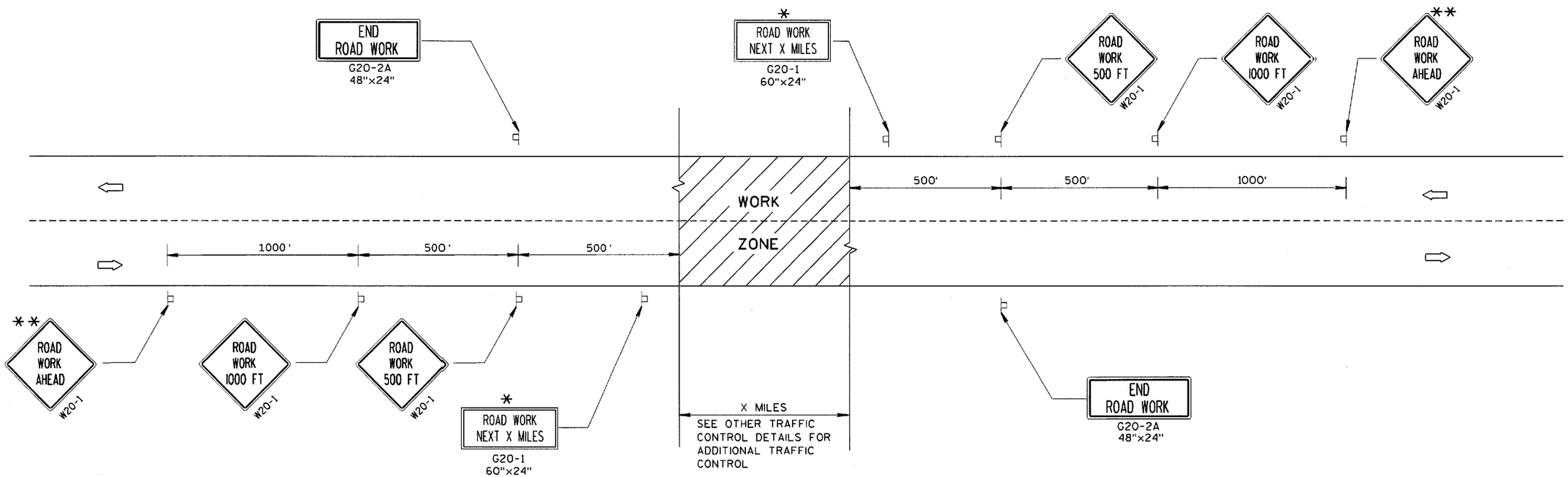
APPROVED
2/17/94
DATE

Peter F. Rusch
STATE TRAFFIC ENGINEER FOR HWYS

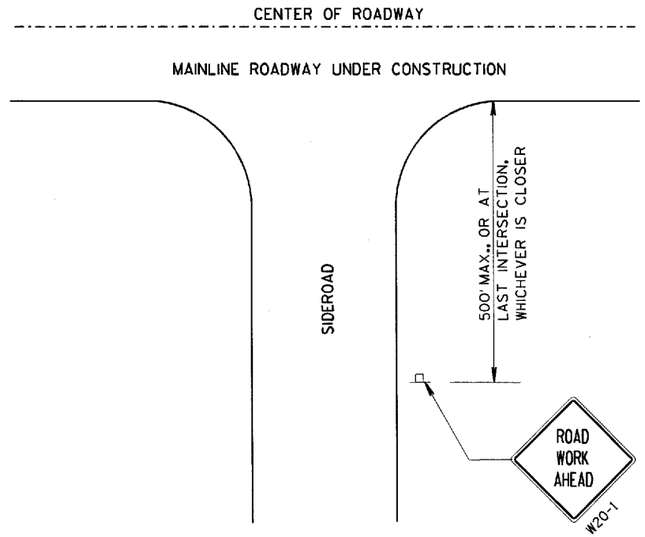
FHWA

S.D.D. 15 C 12-2

S.D.D. 15 C 12-2



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

** PLACE ADDITIONAL W20-1 "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA OR SIGNING.

LEGEND

⊢ POST MOUNTED SIGN

⇨ DIRECTION OF TRAFFIC FLOW

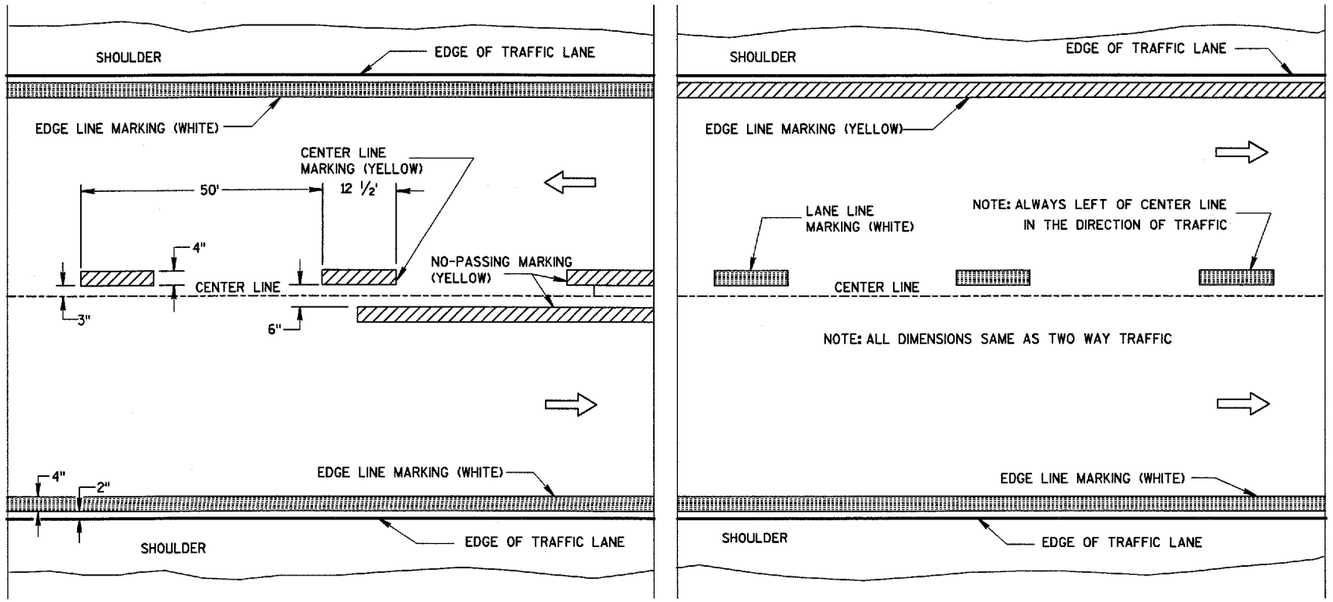
TRAFFIC CONTROL,
ADVANCE WARNING SIGNS
45 M.P.H. OR GREATER
TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/00 — DATE
Christa J. Spang — CHIEF SIGNS AND MARKING ENGINEER
FHWA

S.D.D. 15 C 4-1

S.D.D. 15 C 4-1



TWO WAY TRAFFIC

ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

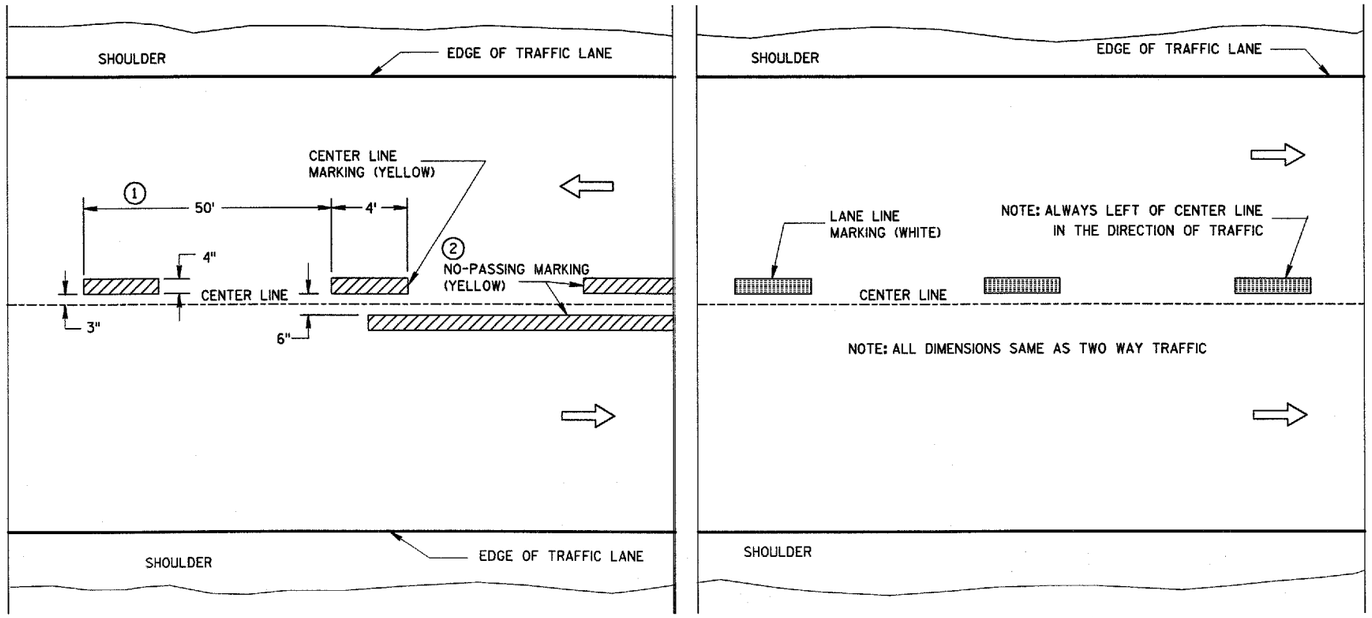
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

(1) HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.

(2) NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



TWO WAY TRAFFIC

ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

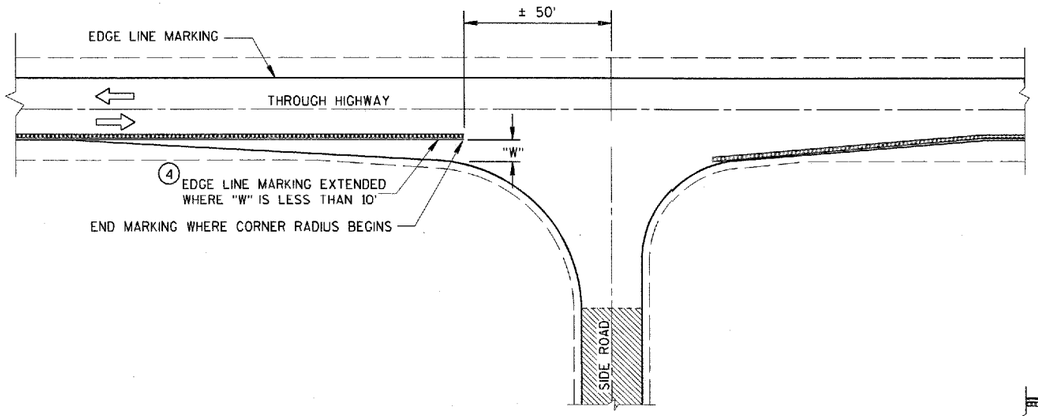
PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2-17-00
DATE
Chester J. Sparus
CHIEF SIGNS AND MARKING ENGINEER
FHWA

S.D.D. 15 C 8-9a

S.D.D. 15 C 8-9a

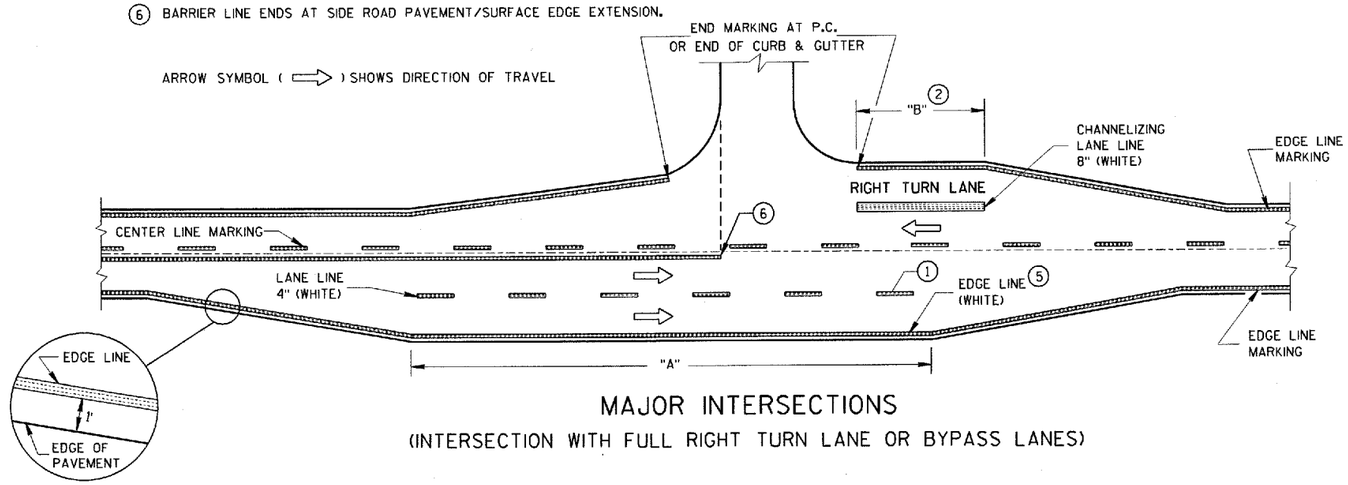


MINOR INTERSECTION WITHOUT CURBS

NOTES

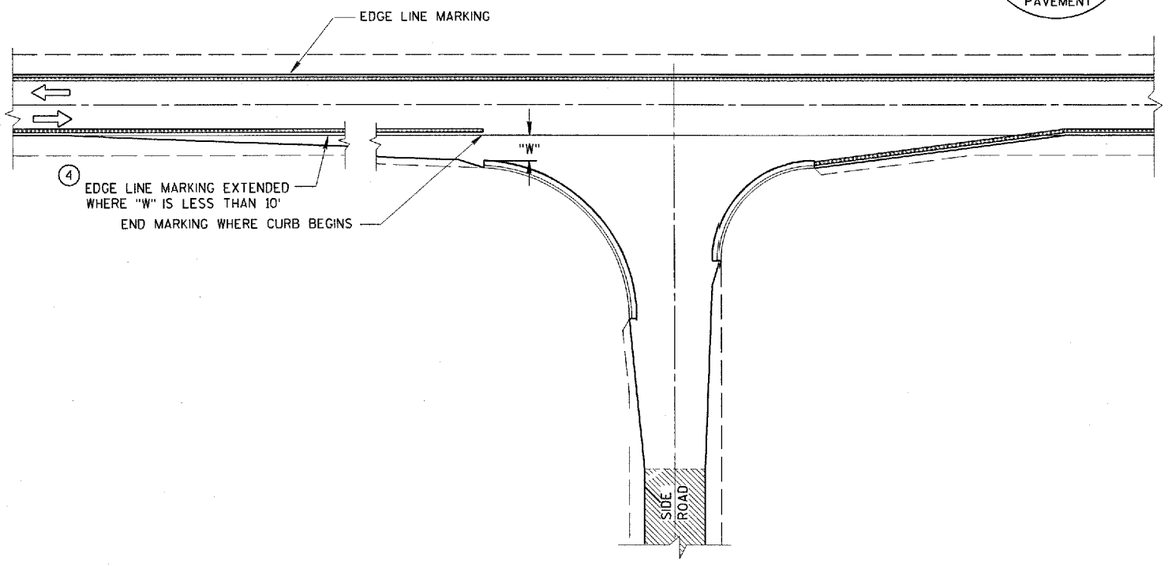
EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.
4. LOCATE THE EDGE LINE ALONG THE TAPER WHERE "W" IS 10' OR MORE.
5. THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.
6. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.



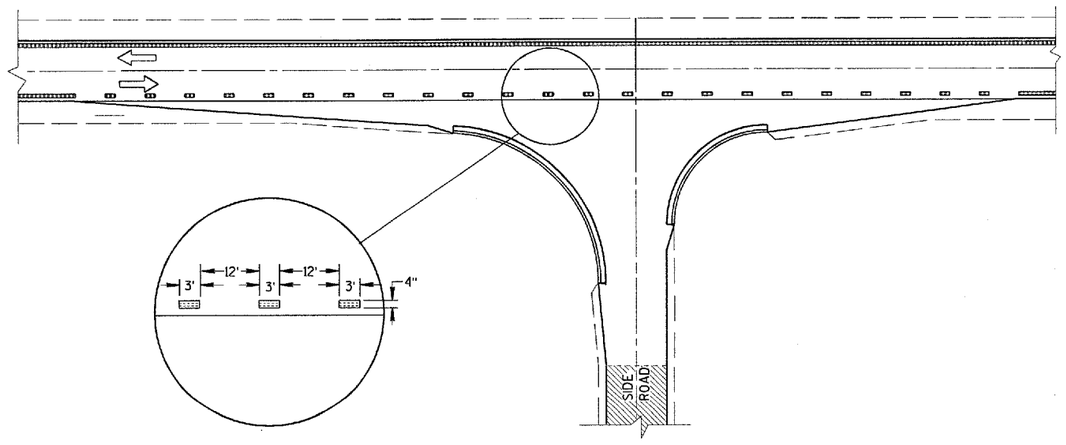
MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS

(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS

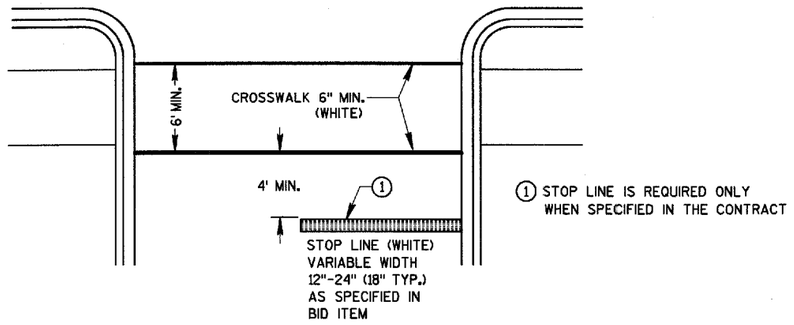
3 (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING
(INTERSECTIONS)

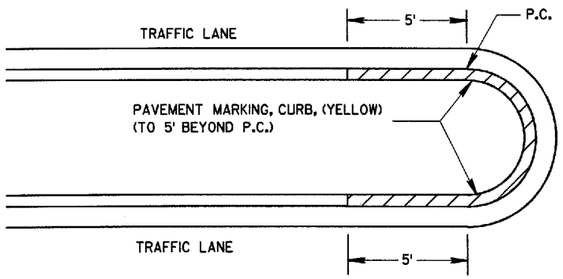
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 15 C 8-9b

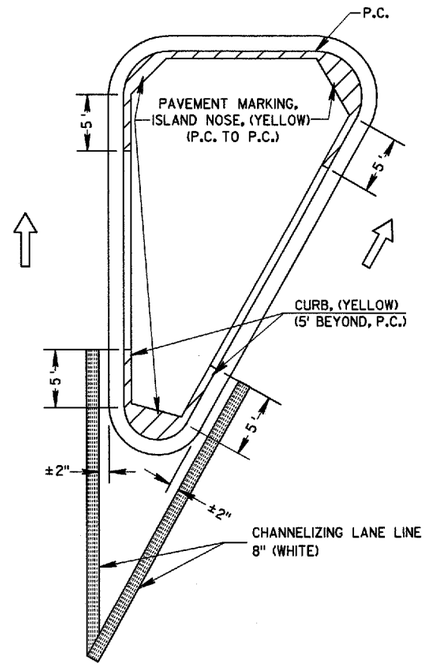
S.D.D. 15 C 8-9b



STOP LINE AND CROSSWALK

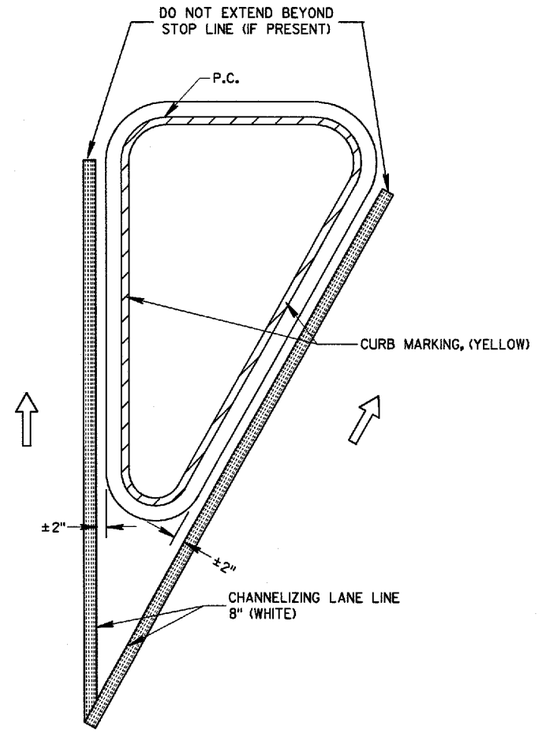


MEDIAN CURB



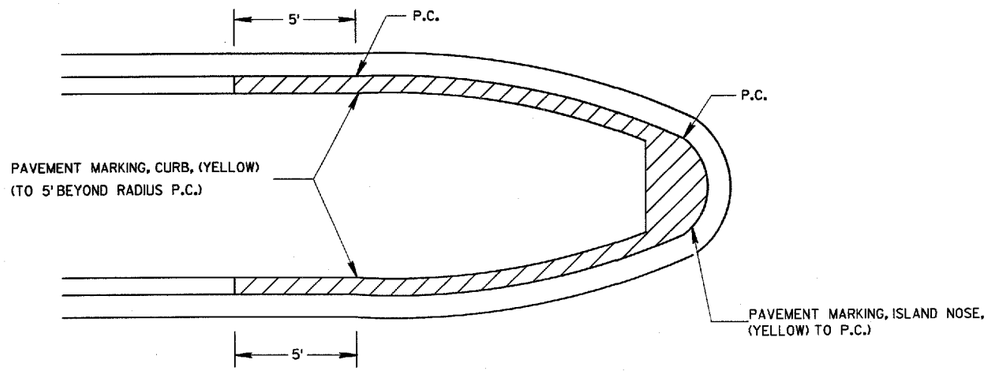
LARGE ISLAND

(GREATER THAN 50' PERIMETER OR ANY SIDE
GREATER THAN 25' BETWEEN CURVES)



SMALL ISLAND

(LESS THAN 50' PERIMETER OR ANY SIDE
LESS THAN 25' BETWEEN CURVES)



BULLET NOSE ISLAND

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL

PAVEMENT MARKING
(ISLANDS, STOP LINE &
CROSS WALK)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

DATE

CHIEF SIGNS AND MARKING ENGINEER

FHWA

S.D.D. 15 C 8-9e

S.D.D. 15 C 8-9e