Ap 09

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details (Includes Erosion Control)
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
Section No.	4	Right of Way Plat
Section No.	5	Plan and Profile
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plates
Section No.	8 ✓	Structure Plans
Section No.	9	Computer Earthwork Data
Section No.	9	Cross Sections

TOTAL SHEETS = 330

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6675-00-71	OMA 2004 350	1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

USH 51/STH 29 CORRIDOR - WAUSAU

WEST ARTERIAL FRONTAGE ROAD, CTH NN TO SHERMAN STREET

CTH R
MARATHON COUNTY

PROJ. ID: 6675-00-71 WITH WA

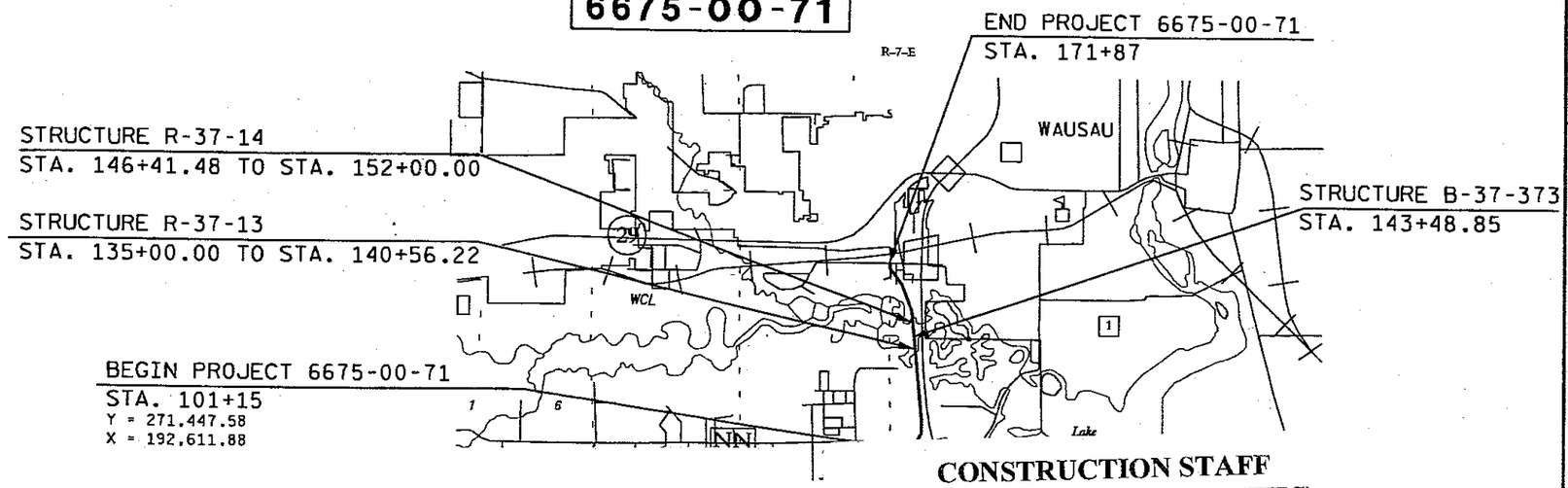
Drawing ID: 6675-00-00

+35 D

COUNTY: MARATHON



STATE PROJECT NUMBER
6675-00-71



DESIGN DESIGNATION

A.D.T.	(2005)	=	6000
A.D.T.	(2025)	=	8000
D.H.V.	(2025)	=	988 vph
D.D.		=	55-45
T. (% ADT)		=	5.3%
DESIGN SPEED		=	40 mph
ESALS		=	963,600

CONVENTIONAL SYMBOLS

PLAN		PROFILE	
CORPORATE LIMITS		GRADE LINE	
PROPERTY LINE		ORIGINAL GROUND	
LOT LINE		MARSH OR ROCK PROFILE (To be noted as such)	
LIMITED HIGHWAY EASEMENT		SPECIAL DITCH	
EXISTING RIGHT OF WAY		GRADE ELEVATION	
PROPOSED OR NEW R/W LINE			
SLOPE INTERCEPT		CULVERT (Profile View)	
REFERENCE LINE		UTILITIES	
EXISTING CULVERT		ELECTRIC	
PROPOSED CULVERT (Box or Pipe)		FIBER OPTIC	
COMBUSTIBLE FLUIDS	CAUTION	GAS	
		SANITARY SEWER	
MARSH AREA		STORM SEWER	
		TELEPHONE	
		WATER	
WOODED OR SHRUB AREA		UTILITY PEDESTAL	
		POWER POLE	
		TELEPHONE POLE	

AS BUILT PLAN

SUPERVISOR: Mark Steidl

PROJECT MANAGER: Michael Baumann

CONTRACTOR: James Peterson Sons, Inc.

DATE STARTED: 05/24/2004

DATE COMPLETED: 11/01/2005

TOTAL NET LENGTH OF CENTERLINE = 1.339 MI.

Coordinates on this plan are referenced to the Wisconsin County Coordinate System (WCCS), Marathon County.

CONSTRUCTION STAFF (NAME / RESPONSIBILITIES)

Greg Graf (Earth Tech) Assistant Eng.

Michael Marcell (Earth Tech) Inspector

ACCEPTED FOR

COUNTY of MARATHON

12/09/03 (Date) (Signature & Title of Official)

ORIGINAL PLANS PREPARED BY

EMCS Inc.

205 West Highland Avenue, Suite 501,
Milwaukee, WI 53203
(414) 347-1607 FAX (414)347-1347

WISCONSIN PROFESSIONAL ENGINEER
SUSAN C. BARKER
E-27128
MILWAUKEE
WI

12/12/03 (Date) Susan C Barker (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY	
Surveyor	WISDOT/EMCS
Designer	EMCS
Project Manager	ADAM OSYPOWSKI
District Examiner	MARK STEIDL
District Supervisor	RON HETT
C.O. Examiner	Mike Banaszak

APPROVED FOR DISTRICT OFFICE

DATE: 12/12/03 (Signature)

E

FILE NAME : P:\40xx\4025\Plan\6675-00-71\DETAILS\010101_ti.dgn PLOT DATE : 12/09/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 10

STANDARD DETAIL DRAWINGS

8A5-16a	INLET COVERS TYPE A, H, A-S, & H-S
8A5-16b	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
8C1-5	INLETS TYPE 1, 2, 3, & 4
8C5-2	INLETS TYPE 8, 9, 10, & 11
8D1-13	CONCRETE CURB, CONCRETE CURB & GUTTER AND PAVEMENT TIES
8D5-9a	CURB RAMPS TYPE 1, 2, & 3
8D5-9b	CURB RAMPS TYPE 1-A
8E8-3	TYPICAL INSTALLATIONS OF EROSION BALES/TEMPORARY DITCH CHECKS
8E9-5	SILT FENCE
8E10-2	INLET PROTECTION TYPE A, B AND C
8E11-2	TURBIDITY BARRIER
8F1-11	APRON ENDWALLS FOR CULVERT PIPE
8F2-1	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
8F4-5	JOINT TIES FOR CONCRETE PIPE
9B2-6	CONDUIT
9B4-5	PULL BOX
9C2-2	CONCRETE BASES, TYPES 1, 2, & S
9C3-2	TRANSFORMER/PEDESTAL BASES
9C5-3	CONCRETE CONTROL CABINET BASES
9D1-2	CABINET SERVICE INSTALLATION
9D2-2	SIGNAL OR LIGHTING CONTROL CABINET
9E1-4a	POLE MOUNTINGS FOR TRAFFIC TYPE 2
9E1-4b	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY)
9E1-5c	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4
9E1-4d	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5
9E1-4g	HARDWARE DETAILS FOR POLE MOUNTINGS
9E6-1	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTING (TYPICAL) 13 FT OR 15 FT
9E3-2	NON-FREEWAY LIGHTING UNIT POLE WIRING
9F15-1b	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
11B1-4	CONCRETE CORRUGATED MEDIAN
11B2-1	CONCRETE MEDIAN NOSE
12A3-7	NAME PLATE (STRUCTURES)
13B2-4	CONCRETE PAVEMENT APPROACH SLAB
14B7-10a&b	CONCRETE BARRIER TEMPORARY PRECAST 12' - 6"
14B7-10c	CONCRETE BARRIER TEMPORARY PRECAST 12' - 6" (BENDING DIAGRAM)
14B7-10d	CONCRETE BARRIER TEMPORARY PRECAST 12' - 6" (ANCHORING DETAIL AND CRASH CUSHION)
14B15-4a	STEEL PLATE BEAM GUARD CLASS "A" INSTALLATION AND ELEMENTS
14B15-4b	STEEL PLATE BEAM GUARD CLASS "A" INSTALLATION AND ELEMENTS
14B18-4a	STEEL PLATE BEAM GUARD CLASS "A" (AT BRIDGES, OBSTACLES, AND SIDEROADS/DRIVEWAYS)
14B20-5a	STEEL THRIE BEAM STRUCTURE APPROACH
14B20-5b	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SQUARE END AND VERTICAL FACED PARAPETS
14B20-5c	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SLOPED END PARAPETS
14B24-4a,b,&c	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
15A3-1	MARKER POST, FLEXIBLE, FOR CULVERT END
15B1-7a& b	WOVEN WIRE FENCE
15C2-4a & b	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C3-1	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C6-4	SIGNING AND MARKING FOR TWO LANE BRIDGES
15C7-6a	PAVEMENT MARKING SYMBOLS
15C8-9a	PAVEMENT MARKING (MAINLINE)
15C8-9b	PAVEMENT MARKING (INTERSECTIONS)
15C8-9d	PAVEMENT MARKING (LEFT TURN LANE)
15C8-10e	PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)
15C18-1	MEDIAN ISLAND MARKING
15D12-2	TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 MPH
15D15-1	TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE
15D20-1	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D21-1	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE

NON-STANDARD ABBREVIATIONS

ASP	ASPHALTIC PAVEMENT
EOP	EDGE OF PAVEMENT
E-MAT	EROSION MAT
GR	GRAVEL
LO	VERTICAL LOW POINT
MON	MONUMENT
NOR	NORMAL
CPRC	CULVERT PIPE REINFORCED CONCRETE
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
AECPS	APRON ENDWALLS FOR CULVERT PIPE STEEL
AECPRC	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE
CPCS	CULVERT PIPE CORRUGATED STEEL
TOS	TOP OF STRUCTURE

REFERENCE LINE CALLOUTS

"R"	WEST ARTERIAL
"NN"	CTH NN (ULTIMATE)
"NT"	CTH NN (TEMPORARY)
"D"	DRIVEWAY TO DETENTION POND
"SH"	SHERMAN STREET
"TW"	28TH AVENUE

GROUND WATER LEVELS OBSERVED DURING SURFACE BORINGS

STATION	OFFSET	DRILLING DEPTH	GW ELEV	DATE OBSERVED
102+00	R/L	40'	1168.97	JUNE, 2002
106+00	R/L	20'	1169.88	JUNE, 2002
110+00	R/L	20'	1169.34	JUNE, 2002
115+00	20'LT	20'	1166.19	JUNE, 2002
121+00	R/L	20'	1159.72	JUNE, 2002
125+00	36'RT	20'	1161.16	JUNE, 2002
128+00	R/L	20'	1160.36	JUNE, 2002
132+00	30'RT	20'	1158.27	JUNE, 2002
135+48	97'LT	20'	1159.92	JUNE, 2002
147+00	70'RT	30'	1160.59	JUNE, 2002
150+00	47.5'RT	29'	1157.77	JUNE, 2002
155+00	32'RT	20'	1160-94	JUNE, 2002
160+00	R/L	20'	1159.46	JUNE, 2002
165+00	R/L	20'	1156.55	JUNE, 2002
115+00	50'RT	15'	1165.00	MARCH, 2003
120+00	50'RT	15'	1158.70	MARCH, 2003
125+00	60'RT	15'	1160.50	MARCH, 2003
130+00	60'RT	15'	1159.10	MARCH, 2003
135+00	60'RT	15'	1158.30	MARCH, 2003
140+00	75'RT	10'	1159.58	MARCH, 2003
150+00	75'RT	15'	1157.70	MARCH, 2003
155+00	90'RT	15'	1160.00	MARCH, 2003

STRUCTURE BORINGS COMPLETED FROM STA 135+00 - 152+00
IN BIG RIB RIVER, MARCH 2003, SURFACE ELEVATION = APPROX. 1160.50

GENERAL NOTES

CONCRETE PLACED AROUND MANHOLE & INLET CASTINGS SHALL BE VIBRATED.

ALL CURB & GUTTER RADII ARE MEASURED TO THE FLANGE LINE OF THE CURB.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

THE LOCATION OF DRIVEWAYS WILL BE DETERMINED BY THE ENGINEER.

EXCAVATION BELOW SUBGRADE IS NOT USED TO BALANCE YARDAGE AND IS NOT SHOWN ON THE CROSS SECTIONS. EBS IS MEASURED AND PAID FOR AS EXCAVATION COMMON.

THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE & ALL UTILITIES IN THE VICINITY OF THE PROJECT TO LOCATE THEIR FACILITIES AT LEAST 3 WORKING DAYS PRIOR TO BEGINNING WORK.

ITEMS SHOWN ON THE PLANS WHICH ARE NOT REQUIRED TO BE COMPLETED BY THE CONTRACTOR ARE INDICATED AS WORK DONE BY OTHERS.

EROSION CONTROL ITEMS SHOWN ON THE PLAN ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS AND DIMENSIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD. ALL EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DEEMS THE DEVICES NO LONGER NECESSARY.

ALL AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT FOR PAVED OR CR. AGG. AREAS, SHALL BE COVERED WITH TOPSOIL, FERTILIZER, SEEDED AND MULCHED OR COVERED WITH EROSION MAT AS NOTED ON THE PLAN OR AS DETERMINED BY THE ENGINEER.

INDIVIDUAL SIDE ROAD PAVING LIMITS AS SHOWN ON THE PLAN ARE SUBJECT TO APPROVAL IN THE FIELD BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY HIS OPERATIONS OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS SHOWN IN THE PLANS. AREAS OUTSIDE OF NORMAL CONSTRUCTION LIMITS SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE UNLESS OTHERWISE AGREED UPON BY THE ENGINEER. (NORMAL CONSTRUCTION LIMITS INCLUDE R/W AND TIAREAS.)

THE QUANTITIES FOR EROSION CONTROL ITEMS GENERALLY INCLUDE AN UNDISTRIBUTED AMOUNT FOR PROTECTION, CONTROL AND ABATEMENT OF WATER POLLUTION RESULTING FROM SOIL EROSION. THE DISTRIBUTION AND LOCATION OF THESE MATERIALS ARE TO BE DETERMINED BY THE ENGINEER.

CURB RAMPS ARE TO BE LOCATED IN THE FIELD BY THE ENGINEER.

PIPE ELEVATIONS AS SHOWN ON THE PLANS MAY BE ADJUSTED BY THE ENGINEER TO FIT EXISTING FIELD CONDITIONS.

INLET PROTECTION SHALL BE PLACED AT ALL INLET LOCATIONS ACCEPTING STORM WATER FROM THE PROJECT AREA OR AS DIRECTED BY THE ENGINEER.

FILL EXPANSION FACTOR IS SHOWN IN THE MISCELLANEOUS QUANTITY SHEETS.

ALL ASPHALTIC SURFACE WITHIN 5 FEET OF THE PROPOSED FINISHED ROADWAY GRADE LINE SHALL BE REMOVED AS SHOWN ON THE PLANS AND IS INCIDENTAL TO EXCAVATION COMMON.

JOINT TIES ARE REQUIRED ON THE LAST THREE JOINTS OF CONCRETE PIPE AT THE ENDWALL LOCATIONS SHOWN IN THE PLAN. THE JOINT TIES REQUIRED ARE NUMERATED, FOR INFORMATION ONLY, IN THE MISCELLANEOUS QUANTITY LISTING AND ALL COST FOR JOINT TIES SHALL BE INCLUDED UNDER OTHER ITEMS IN THE CONTRACT.

HMA PAVEMENT LAYERS SHALL BE PLACED WITH WITH FOLLOWING THICKNESSES AND NOMINAL SIZES:

4.5-INCHES OF TYPE E-1 HMA PAVEMENT
UPPER LAYER THICKNESS = 2-INCHES (12.5 MM)
LOWER LAYER THICKNESS = 2.5-INCHES (19.0 MM)

2-INCHES OF TYPE E-0.3 HMA PAVEMENT ON MULTI-USE PATH
UPPER LAYER THICKNESS = 2-INCHES (12.5 MM)

UTILITIES

CHARTER COMMUNICATIONS
853 MCINTOSH STREET
P.O. BOX 1818
WAUSAU, WI 54402-1818
JEFF KULAF
(715) 574-8241
DENNIS RUESS
(715) 574-8220

WISCONSIN PUBLIC SERVICE CORPORATION
LORI BUTRY
700 NORTH ADAMS STREET
P.O. BOX 19001
GREEN BAY, WI 54307-9001
(920) 733-1043

FIELD CONTACTS
1700 SHERMAN ST.
P.O. BOX 1166
WAUSAU, WI 54401-1166
CLAY VIRCKS (ELECTRIC)
(715) 848-7317
TOM CARLSON (GAS)
(715) 345-7567

CITY OF WAUSAU WATER WORKS
JOE GEHIN
SEWER AND WATER DIRECTOR
407 GRANT STREET
WAUSAU, WI 54403
(715) 261-6534

FIELD CONTACTS:
DENNIS GEIGER
(715) 261-7262
JOHN MOTL
(715) 571-9774

QWEST COMMUNICATIONS
KEVIN HUFF
13057 SOUTH MONITOR AVENUE
PALOS HEIGHTS, IL 60463
(703) 837-7927

CITY OF WAUSAU
JOHN HESS
PUBLIC WORKS DIRECTOR
407 GRANT STREET
WAUSAU, WI 54403
(715) 261-6740

AMERICAN TRANSMISSION COMPANY
ANDY EBERHARDT
N19 W23993 RIDGEVIEW PARKWAY WEST
PO BOX 47
WAUKESHA, WI 53187-0047
(262) 506-6864

CITY OF WAUSAU
GORDY POPKO
ELECTRICAL SERVICES
700 N. THIRD STREET
WAUSAU, WI 54403
(715) 261-6780

VERIZON
DENNIS BATES
521 FOURTH STREET
WAUSAU, WI 54403-4869
(715) 847-1511

FIELD CONTACTS
TOM HUNTER
(715) 847-1553
DALE KANITZ
(715) 847-1537

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

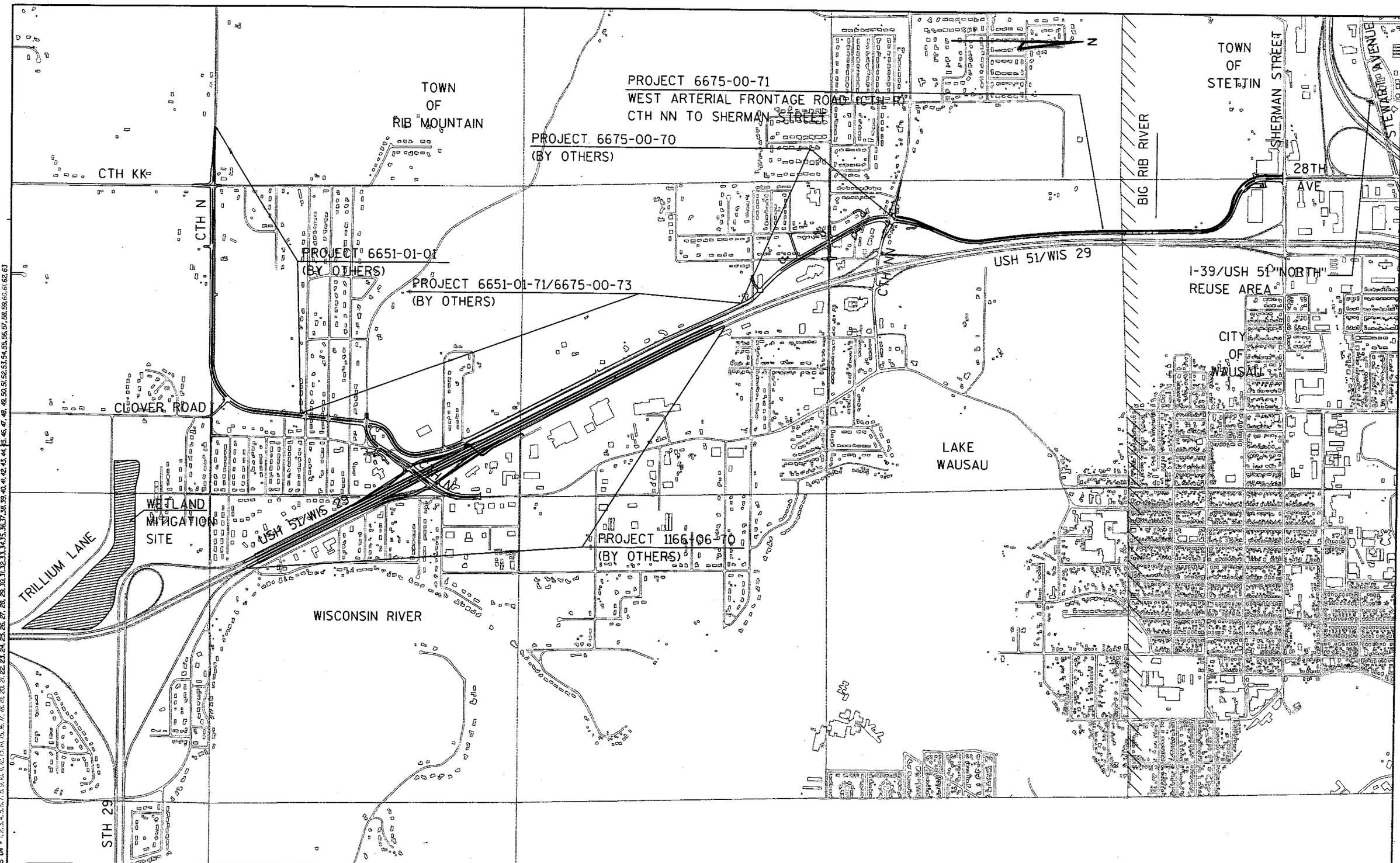
DNR LIAISON

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
CAMERON BUMP
473 GRIFFITH AVENUE
WISCONSIN RAPIDS, WI 54494
(715) 421-7867

ORDER OF SECTION 2 SHEETS

PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PAVING DETAILS
EROSION CONTROL
STORM SEWER
SIGNING
LIGHTING
TRAFFIC SIGNALS
PAVEMENT MARKING
TRAFFIC CONTROL AND CONSTRUCTION STAGING
FENCING
ALIGNMENT

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:6675-00-71	HWY: CTH R	COUNTY: MARATHON	PROJECT OVERVIEW	SCALE, FEET 0 750 1500	SHEET NO: 3	E

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BEGIN CONSTRUCTION
STA 100+85

TOWN OF RIB MOUNTAIN

BEGIN PROJECT 6675-00-71
STA 101+15 =
END PROJECT 6675-00-70
(ORIOLE LANE - CTH NN)
(BY OTHERS)

STRUCTURE R-37-13
STA. 135+00.00 TO
STA. 140+56.22

BIG RIB RIVER

END CONSTRUCTION
STA 58"TW"+05

END PROJECT
STA 171+87

TOWN OF STETTIN

STRUCTURE R-37-14
STA. 146+41.48 TO
STA. 152+00.00

28TH AVENUE

SHERMAN STREET

USH 51/WIS 29 SB
USH 51/WIS 29 NB

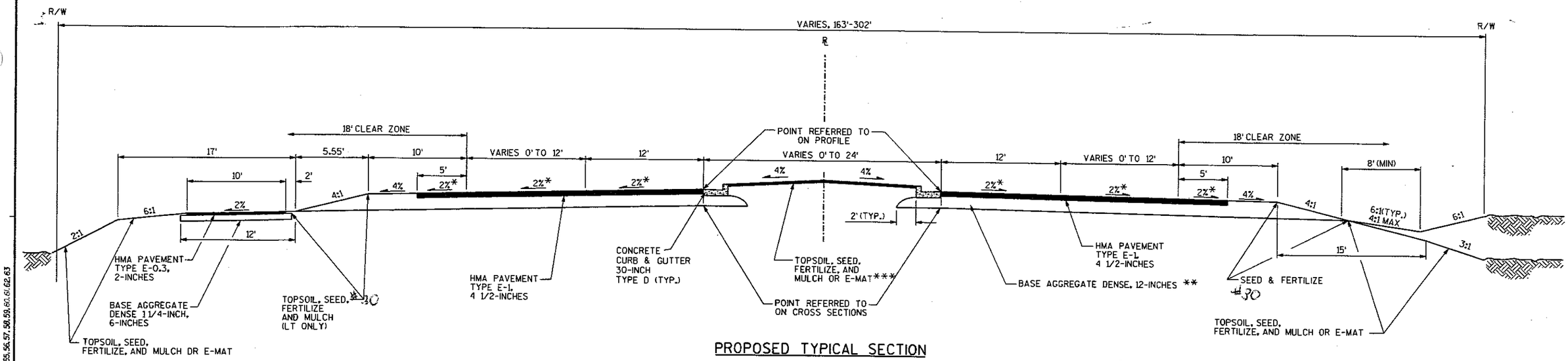
DETENTION POND
(BY OTHERS)

STRUCTURE B-37-373
STA. 143+48.85

AREA TO BE MANAGED AS
PETROLEUM CONTAMINATED
WASTE

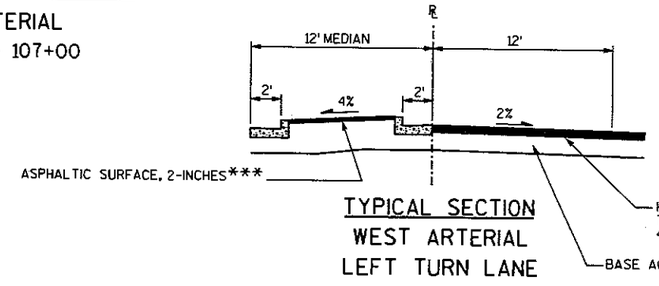
CITY OF WAUSAU

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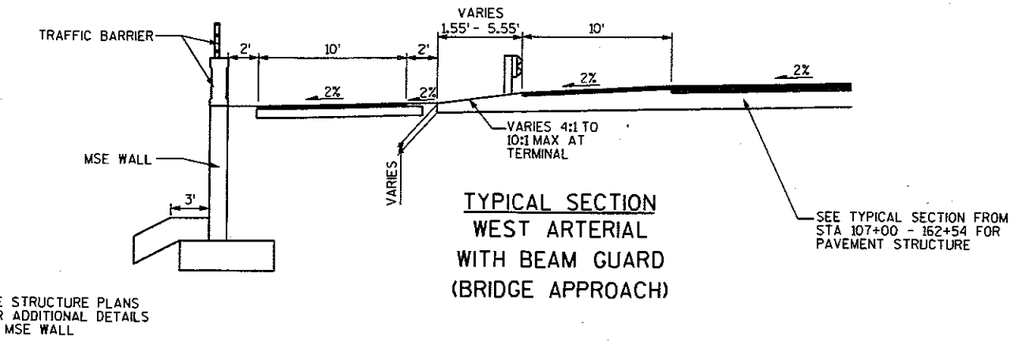


PROPOSED TYPICAL SECTION
WEST ARTERIAL
STA 101+15 - 107+00

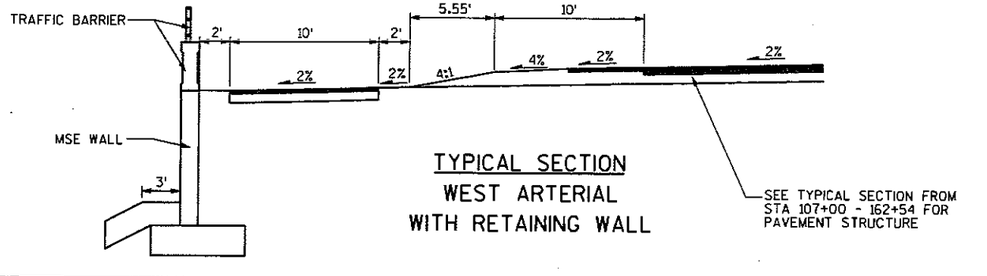
EMBANKMENT REINFORCEMENT REQUIRED FOR 2:1 SLOPES, SEE DETAIL



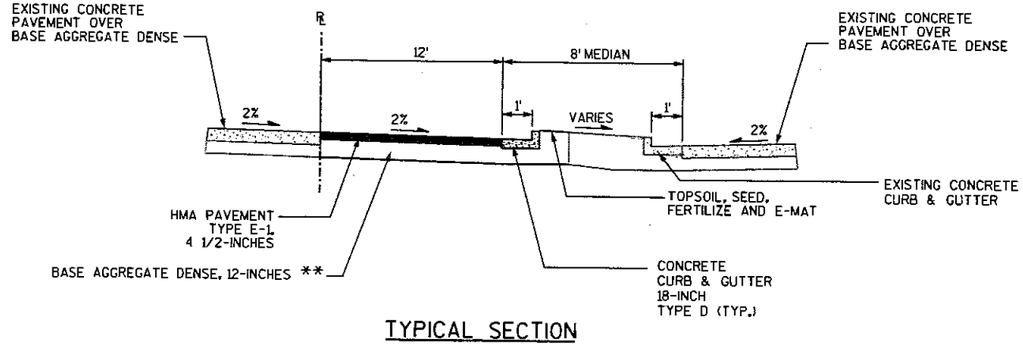
TYPICAL SECTION
WEST ARTERIAL
LEFT TURN LANE



TYPICAL SECTION
WEST ARTERIAL
WITH BEAM GUARD
(BRIDGE APPROACH)



TYPICAL SECTION
WEST ARTERIAL
WITH RETAINING WALL



TYPICAL SECTION
28TH AVENUE
LEFT TURN LANE

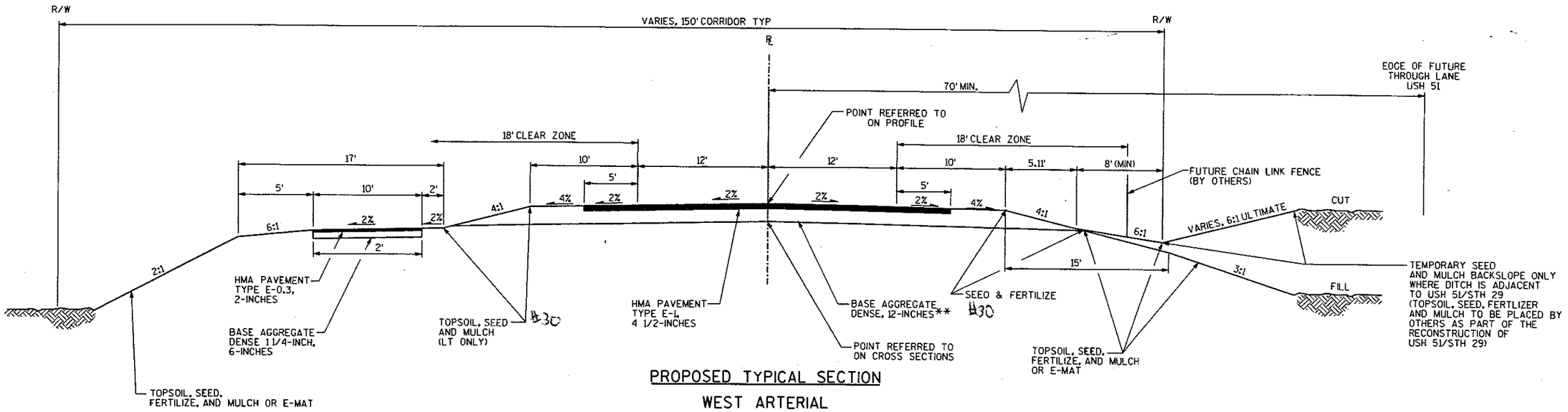
NOTES

* 2% NORMAL, VARIES DUE TO SUPERELEVATION (SEE PAVING DETAILS)
** SEE DETAIL FOR BASE AGGREGATE DENSE TYPE
*** ASPHALTIC SURFACE TO BE USED IN LEFT TURN LANE AREAS (SEE PAVING DETAILS FOR LOCATIONS)

STATE PROJECT NUMBER:6675-00-71	HWY: CTHR	COUNTY: MARATHON	TYPICAL SECTION	SCALE, FEET 0 N/A	SHEET NO: 5	E

FILE NAME : p:\40xx\4025\Plan\6675-00-71\DETAILS\020301_ts.dgn PLOT DATE : 12/18/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ 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

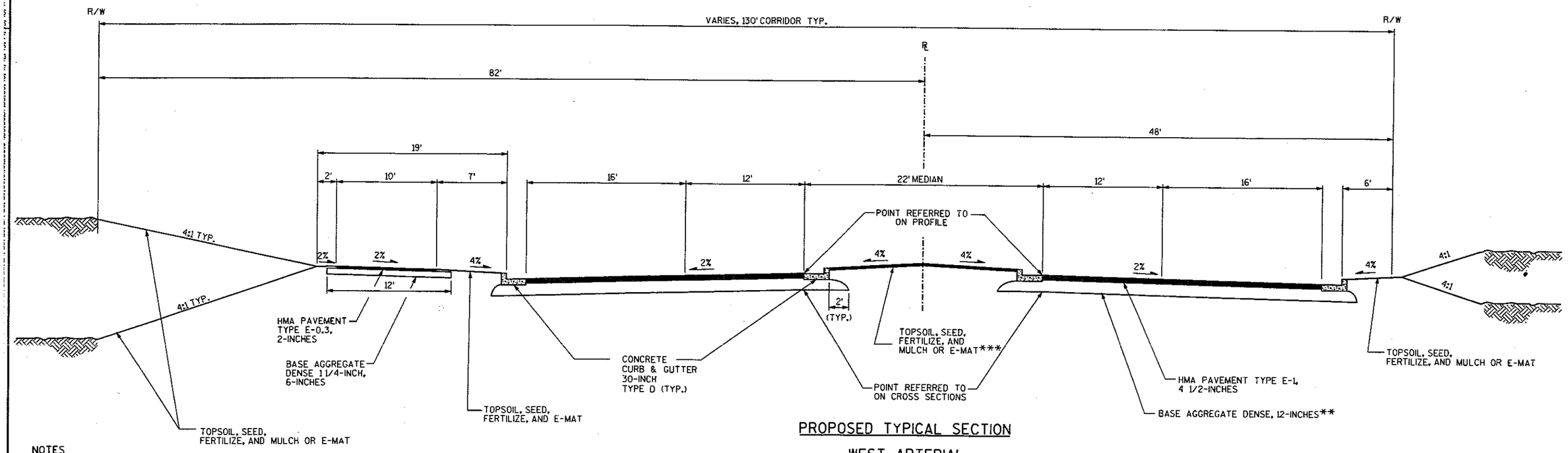


PROPOSED TYPICAL SECTION

WEST ARTERIAL

STA 107+00 - 162+54

EMBANKMENT REINFORCEMENT REQUIRED FOR 2:1 SLOPES, SEE DETAIL



PROPOSED TYPICAL SECTION

WEST ARTERIAL

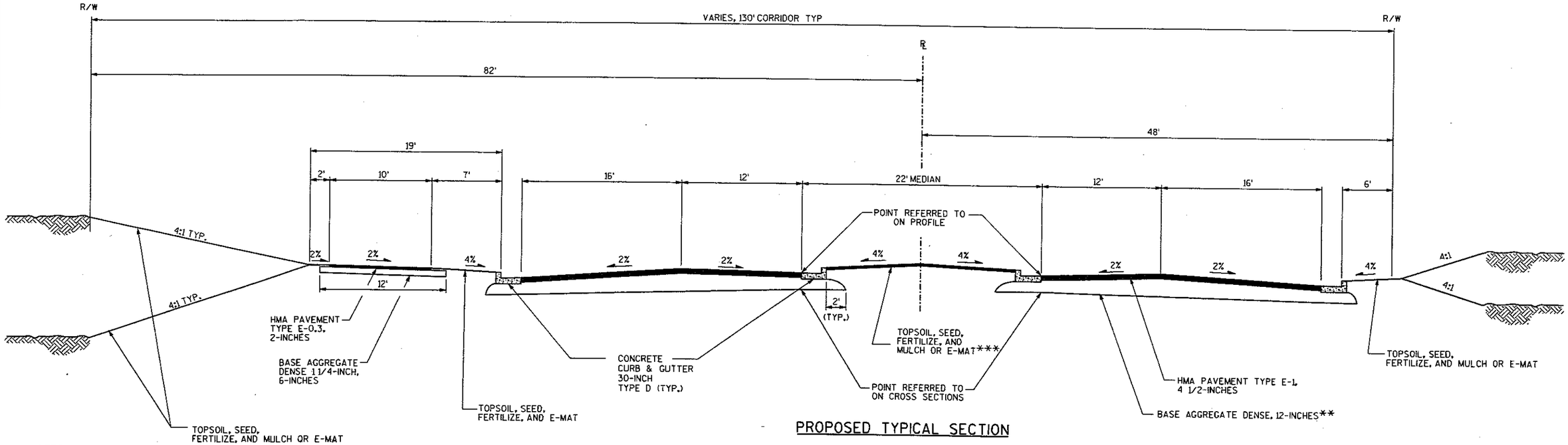
STA 162+54 - 168+00

NOTES

** SEE DETAIL FOR BASE AGGREGATE DENSE TYPE

*** ASPHALTIC SURFACE TO BE USED IN LEFT TURN LANE AREAS (SEE PAVING DETAILS FOR LOCATIONS)

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	TYPICAL SECTION	SCALE, FEET 0 N/A	SHEET NO: 6	E



PROPOSED TYPICAL SECTION

WEST ARTERIAL

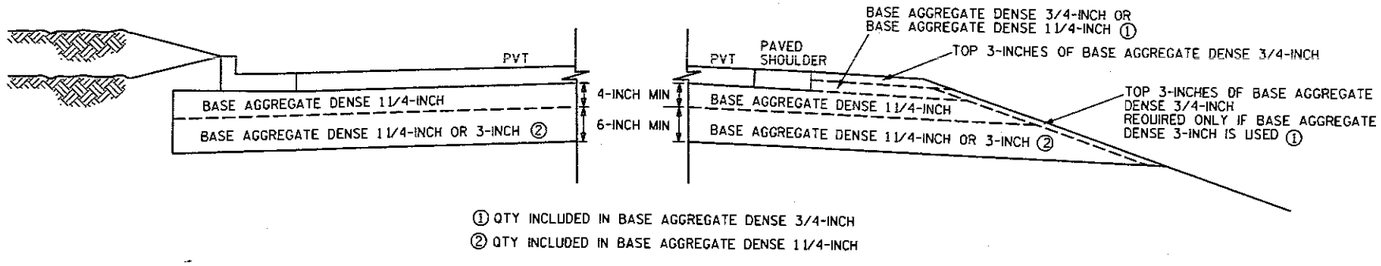
STA 168+00 - 171+87

NOTES

** SEE DETAIL FOR BASE AGGREGATE DENSE TYPE

*** ASPHALTIC SURFACE TO BE USED IN LEFT TURN LANE AREAS (SEE PAVING DETAILS FOR LOCATIONS)

** BASE AGGREGATE DENSE DETAIL



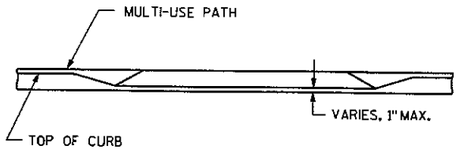
① QTY INCLUDED IN BASE AGGREGATE DENSE 3/4-INCH

② QTY INCLUDED IN BASE AGGREGATE DENSE 1 1/4-INCH

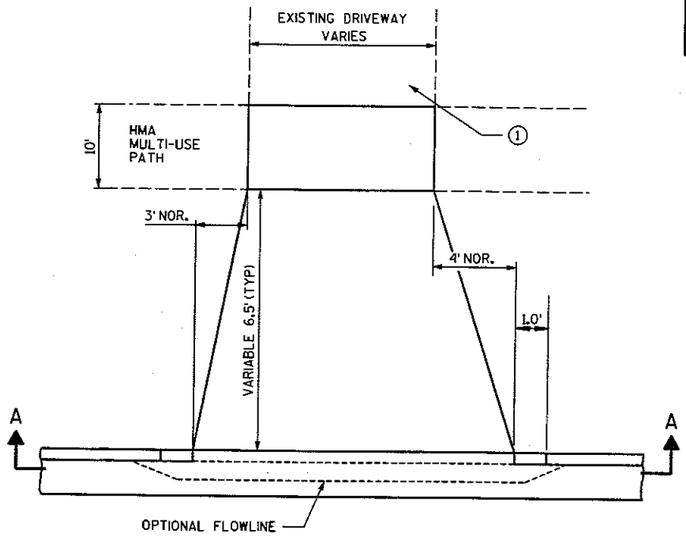
STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	TYPICAL SECTION	SCALE, FEET 0 N/A	SHEET NO: 7	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\details\020303_ts.dgn PLOT DATE : 12/18/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

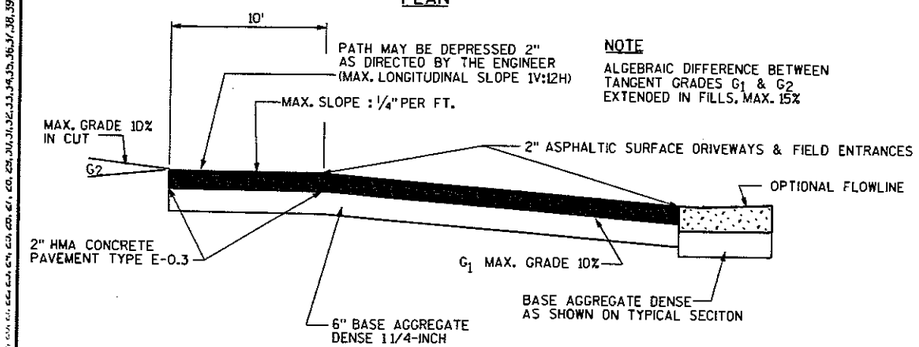
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



SECTION A-A



PLAN



NOTE

ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G_1 & G_2 EXTENDED IN FILLS, MAX. 15%

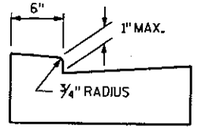
PROFILE

①REPLACE WITH THE FOLLOWING:

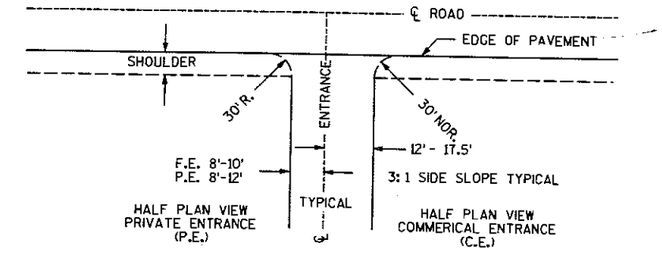
2" ASPHALTIC SURFACE DRIVEWAYS & FIELD ENTRANCES
OVER 6" BASE AGGREGATE DENSE 1 1/4-INCH

URBAN DRIVEWAY DETAIL

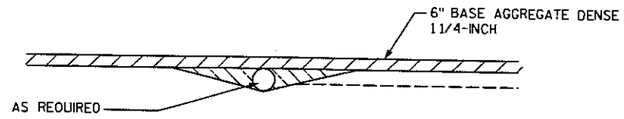
(FOR LOCATIONS WHERE DRIVEWAYS CROSS MULTI-USE PATH)



OPTIONAL METHOD
FOR
CONCRETE GUTTER



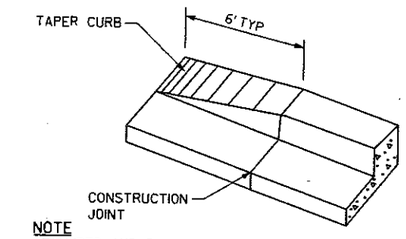
PLAN VIEW



PROFILE VIEW

RURAL DRIVEWAY DETAIL

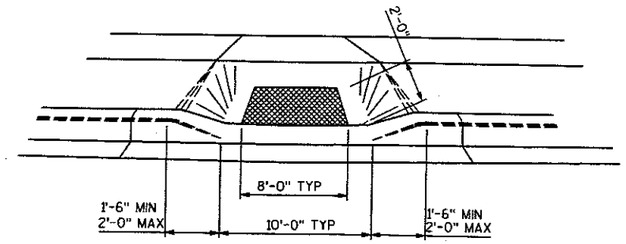
(POND ACCESS)



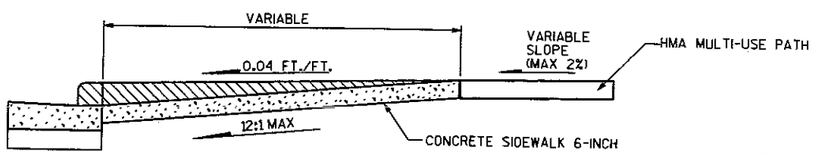
NOTE

MEASURED AND PAID FOR AS CONCRETE CURB AND GUTTER

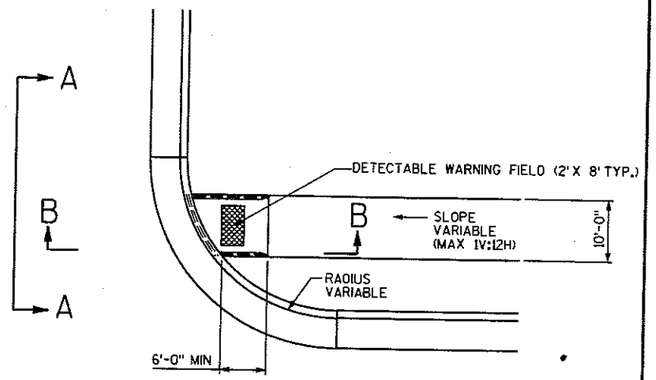
CURB & GUTTER TERMINI DETAIL



VIEW A-A



SECTION B-B



PLAN VIEW

GENERAL NOTES

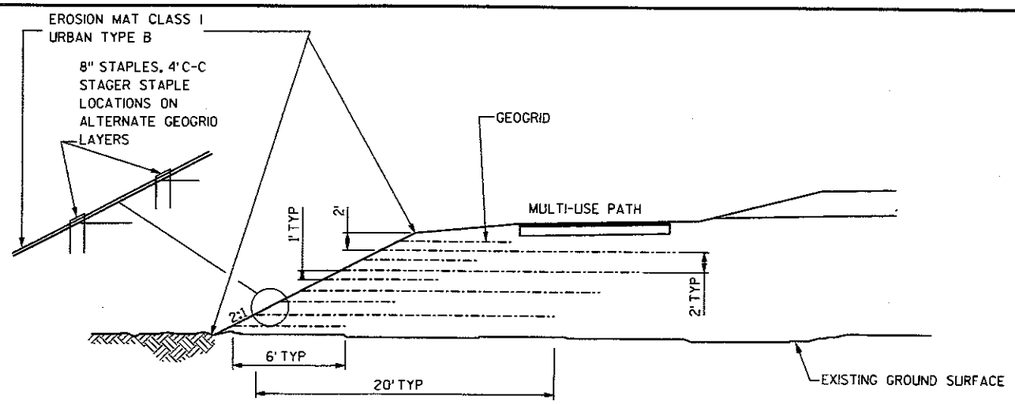
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE APPLICABLE SPECIAL PROVISIONS, AND THE STANDARD DETAIL DRAWINGS FOR CURB RAMPS

CURB RAMP

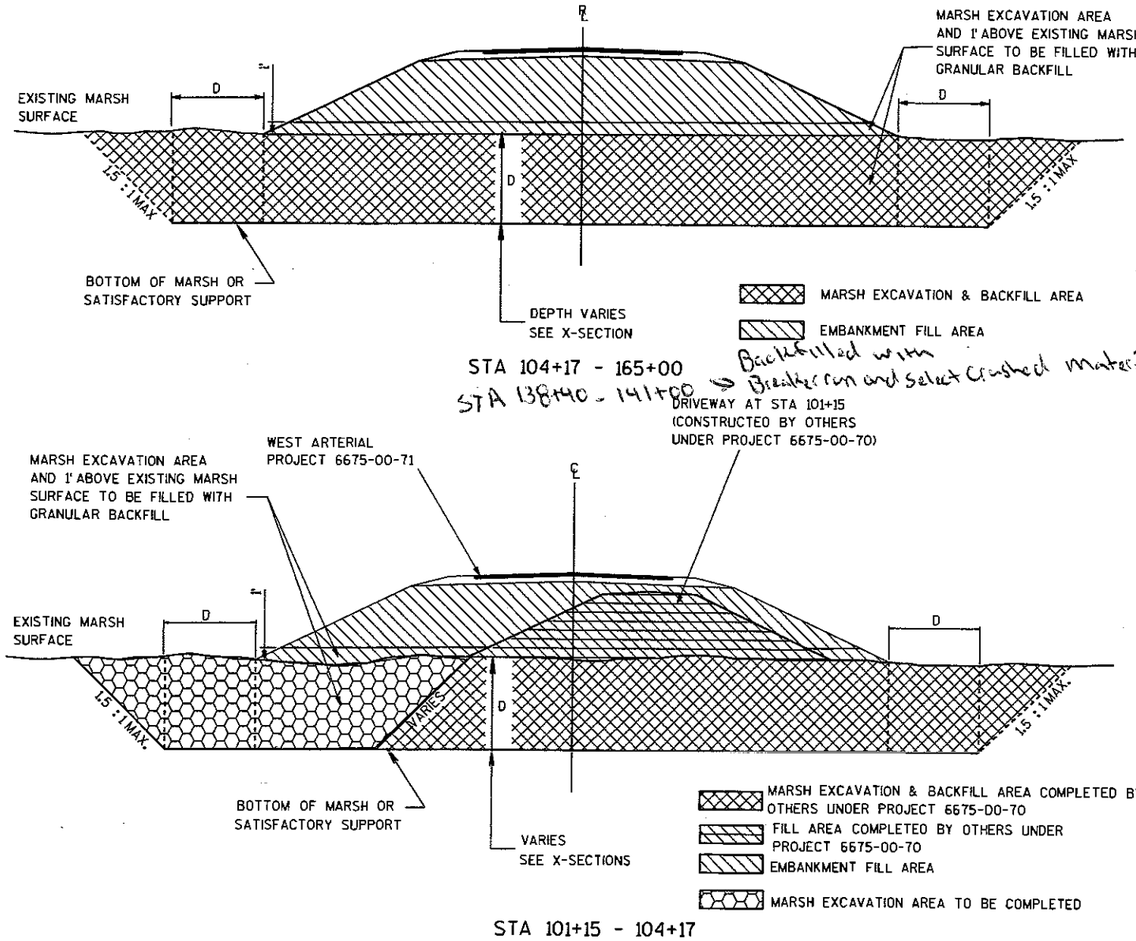
FOR MULTI-USE PATH

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CONSTRUCTION DETAILS	SCALE, FEET 0 N/A	SHEET NO: 8	E

FILE NAME : p:\40xx\4025\Plan\6675-00-71\DETAILS\021001_cd.dgn PLOT DATE : 12/18/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



EMBANKMENT REINFORCEMENT DETAILS

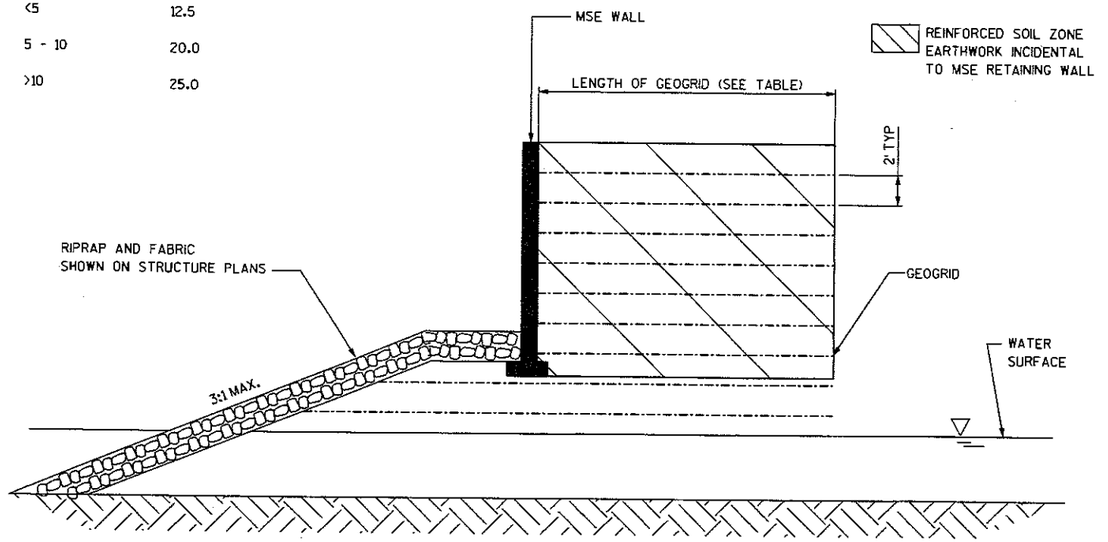


TYPICAL MARSH EXCAVATION SECTION

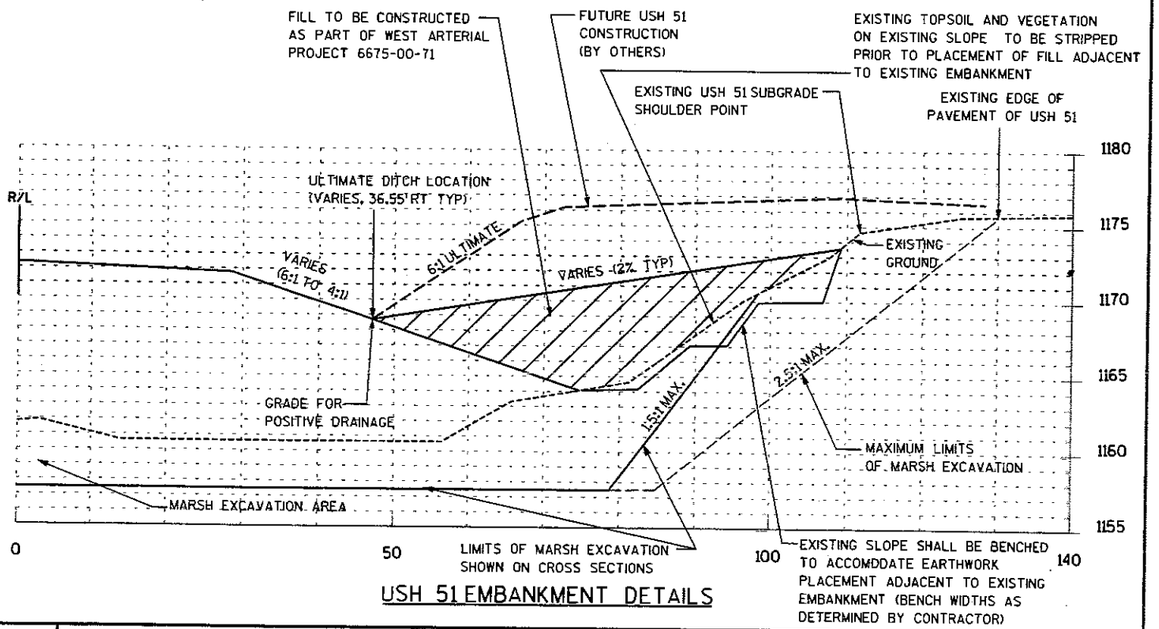
GEOGRID REINFORCEMENT ADJACENT TO MSE WALLS

WALL HEIGHT (FT)	LENGTH OF GEOGRID FROM BACK OF WALL (FT)
<5	12.5
5 - 10	20.0
>10	25.0

SEE STRUCTURE PLANS
FOR ADDITIONAL INFORMATION



EMBANKMENT REINFORCEMENT DETAILS AT MSE WALLS

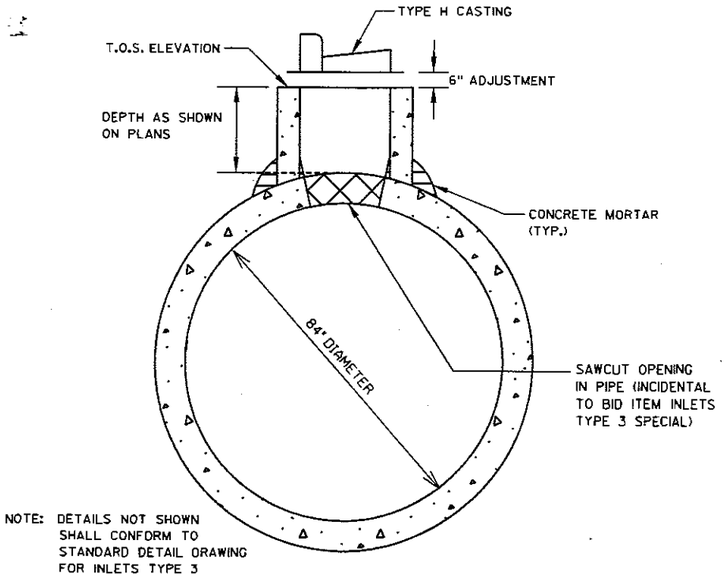


USH 51 EMBANKMENT DETAILS

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CONSTRUCTION DETAILS	SCALE, FEET 0 N/A	SHEET NO: 9	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 : p:\40xx\4025\Plan\6675-00-71\DETAILS\021002_cd.dgn PLOT DATE : 12/18/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



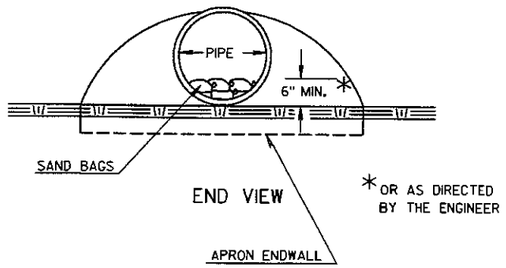
NOTE: DETAILS NOT SHOWN SHALL CONFORM TO STANDARD DETAIL DRAWING FOR INLETS TYPE 3

TYPE 3 SPECIAL INLET

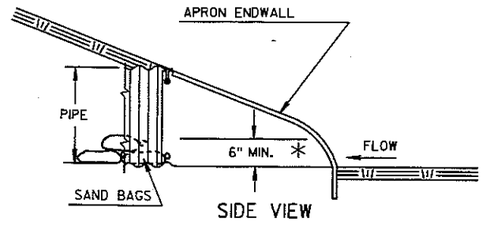
TYPICAL STORM SEWER PIPE THICKNESS USED TO CALCULATE STRUCTURE DEPTHS

STRUCTURE DEPTH = TOS ELEVATION - UPPER INVERT + PIPE THICKNESS

PIPE DIAMETER (IN.)	THICKNESS (IN.)
12	2
15	2.25
18	2.5
24	3
36	4
48	5

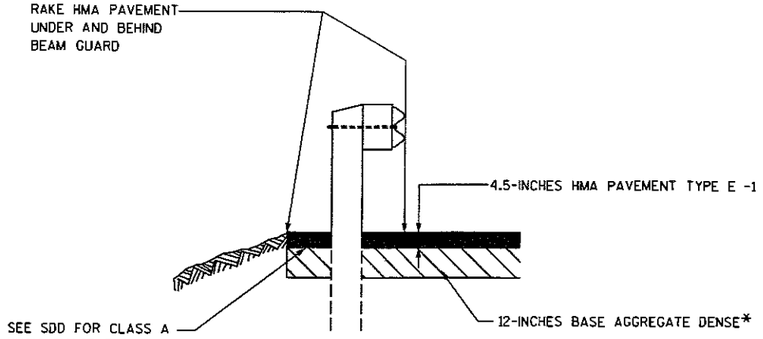


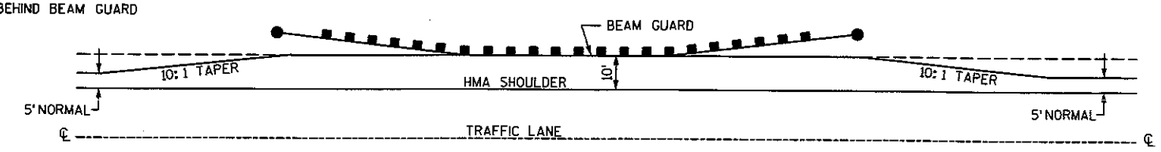
* OR AS DIRECTED BY THE ENGINEER



CULVERT PIPE DITCH CHECK

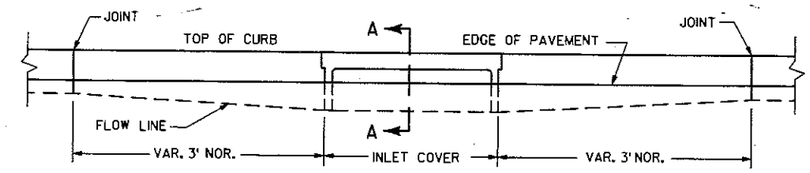
SEE EROSION CONTROL SHEETS AND MISCELLANEOUS QUANTITIES FOR LOCATIONS



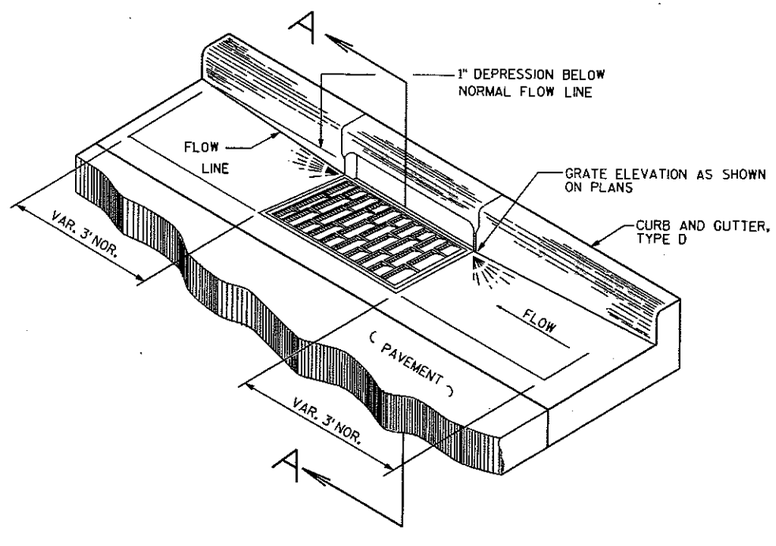


DETAIL FOR PAVED SHOULDER AT GUARDRAIL

* SEE TYPICAL SECTION FOR BASE AGGREGATE DENSE SIZES



ELEVATION



NOTE
(SEE "S.D.D. INLETS TYPE 3" AND THE MISCELLANEOUS QUANTITIES FOR MORE INFORMATION)

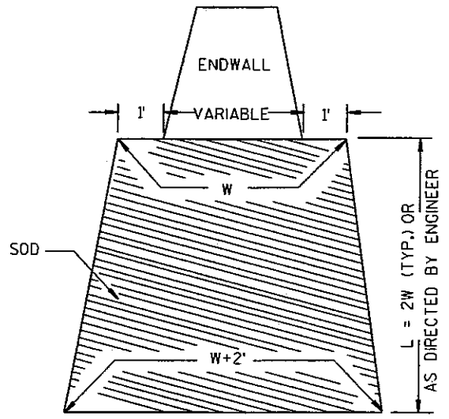
SECTION A-A

CURB AND GUTTER DETAIL AT INLETS

(TYPE 3-H INLETS SHOWN)

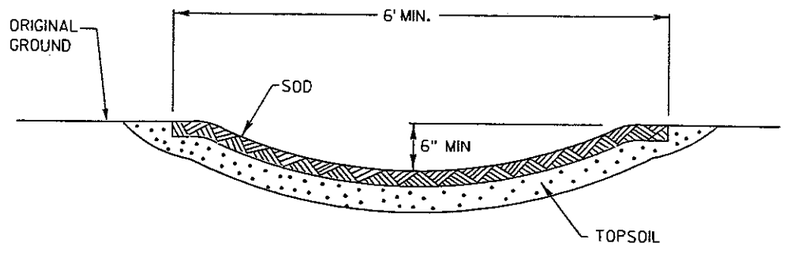
STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CONSTRUCTION DETAILS	SCALE, FEET 0 N/A	SHEET NO: 10	E

FILE NAME : p:\40xx\4025\Plan\6675-00-71\DETAILS\021003_cd.dgn PLOT DATE : 12/18/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



SOD TREATMENT AT CULVERTS

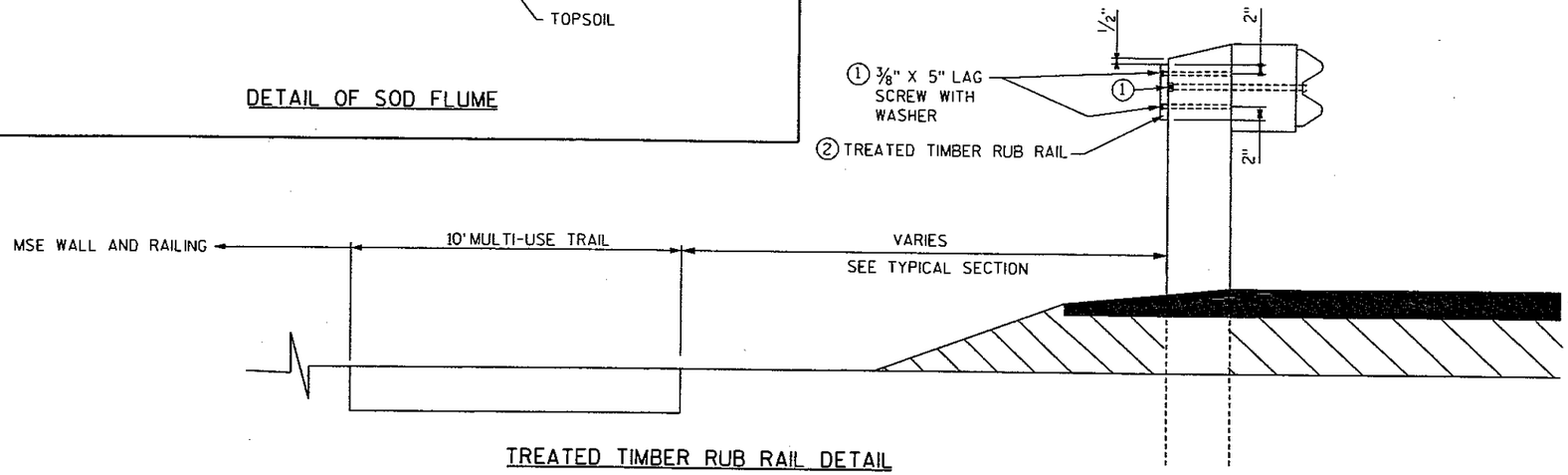
SEE EROSION CONTROL SHEETS AND MISCELLANEOUS QUANTITIES FOR LOCATIONS



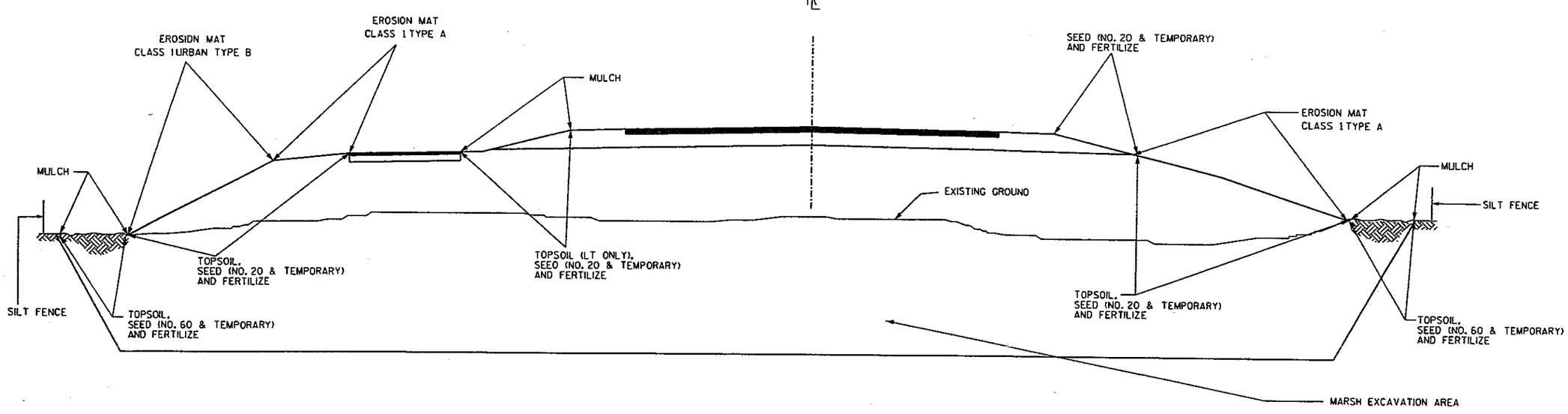
DETAIL OF SOD FLUME

① ALL CARRIAGE BOLTS & LAG SCREWS USED IN CONSTRUCTION THAT ARE ADJACENT TO THE MULTI-USE PATH SHALL BE COUNTERSUNK TO CLEAR SCREW HEAD OR BOLT NUT.

② 2"X10" TREATED TIMBER RUB RAIL REQUIRED WHERE BEAM GUARD IS ADJACENT TO MULTI-USE TRAIL



TREATED TIMBER RUB RAIL DETAIL



EROSION CONTROL AND RESTORATION DETAIL FOR EMBANKMENT THROUGH WETLAND AREAS

SEE TYPICAL SECTIONS AND EROSION CONTROL SHEETS FOR ADDITIONAL DETAILS

NOTES

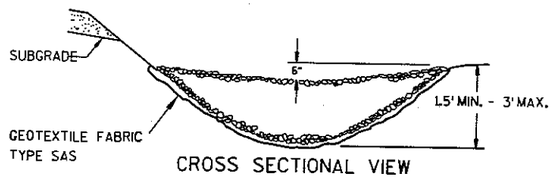
FOR AREAS WHERE THERE IS A DITCH SECTION (RIGHT) INSTALL EROSION MAT AS SHOWN ON THE EROSION CONTROL PLANS

FOR URBAN AREAS INSTALL RESTORATION ITEMS AS SHOWN ON THE EROSION CONTROL PLANS AND THE MISC QTY SHEETS

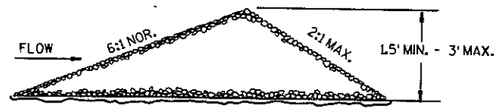
STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CONSTRUCTION DETAILS	SCALE, FEET 0 N/A	SHEET NO: 11	E

FILE NAME : P:\40xx\4025\Plan\6675-00-71\DETAILS\021004_cd.dgn PLOT DATE : 02/09/2004 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ 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

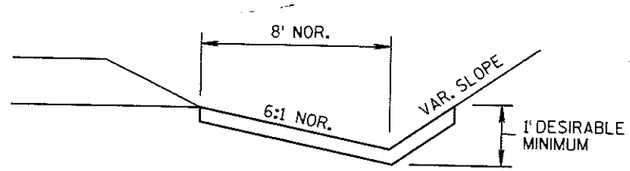


CROSS SECTIONAL VIEW

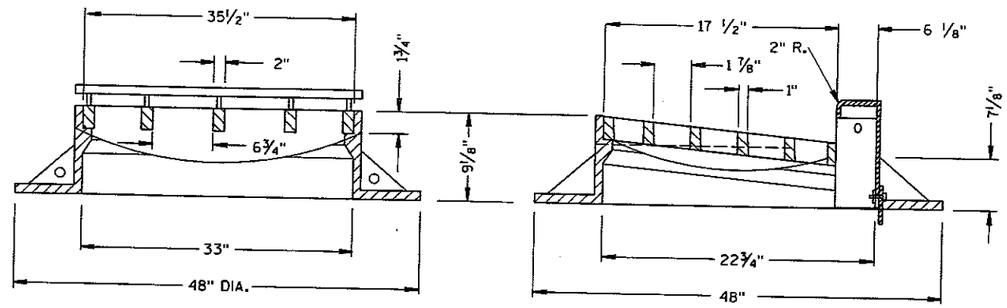


SIDE VIEW

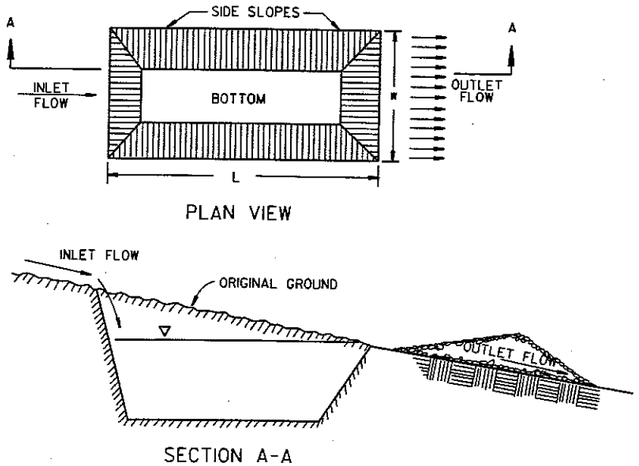
TEMPORARY STONE DITCH CHECK



EROSION MAT DETAIL FOR DITCHES



INLET COVERS TYPE SPECIAL



PLAN VIEW

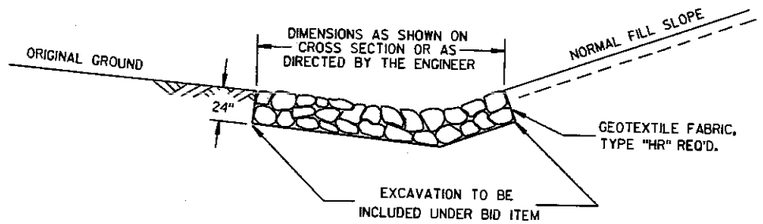
SECTION A-A

TEMPORARY EXCAVATED SEDIMENT TRAP WITH STONE DITCH CHECK

NOTES

EXCAVATION AND BACKFILL FOR SEDIMENT TRAP TO BE PAID FOR UNDER "EXCAVATION COMMON" ITEM. (EXACT DIMENSIONS TO BE AS DIRECTED BY THE ENGINEER.)

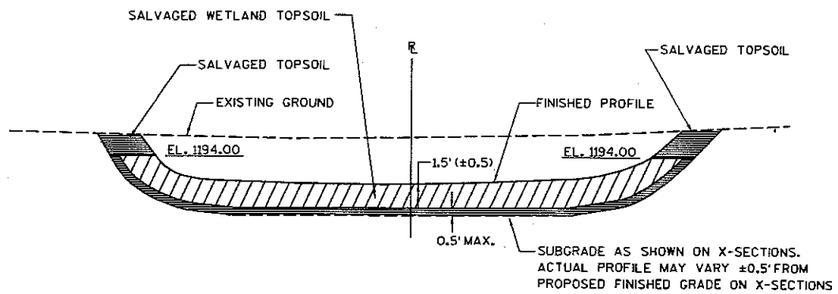
CLEANING OF SEDIMENT TRAPS, WHEN DIRECTED BY THE ENGINEER, IS PAID FOR UNDER THE ITEM OF "CLEANING SEDIMENT BASINS."



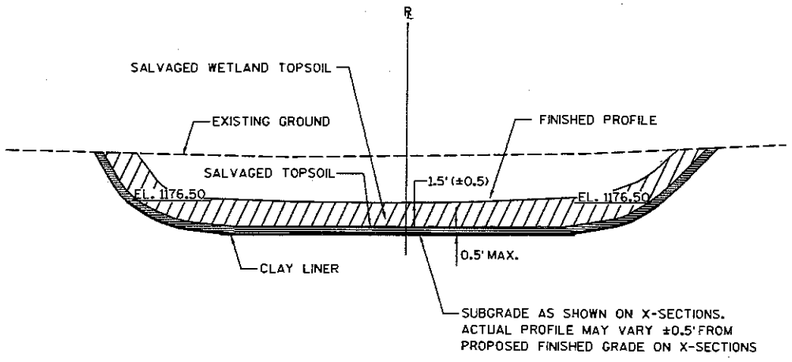
DETAIL FOR HEAVY RIPRAP IN DITCHES

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CONSTRUCTION DETAILS	SCALE, FEET 0 N/A	SHEET NO: 12	E

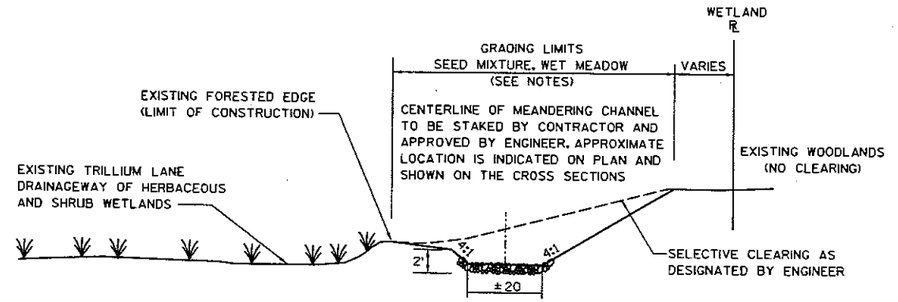
FILE NAME : p:\40xx\4025\plan\6675-00-71\details\021005_cd.dgn PLOT DATE : 12/18/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



SOIL RECONSTRUCTION PROFILE FOR AREA A
STA. 17"A"+00 TO 23"A"+00



SOIL RECONSTRUCTION PROFILE FOR AREA B
STA. 40"B"+00 TO 57"B"+00



NOTES: 1. INSTALL CLASS I, URBAN, TYPE B EROSION MAT ON ALL DISTURBED AREAS IN CHANNEL. EXCEPT IN AREAS WHERE EXPOSED ROCK IN CHANNEL CONSTRUCTION AREA EXCEEDS 50%. THIS AREA SHALL BE STABILIZED WITH NATIVE EXCAVATED ROCK OR RIP RAP LIGHT.

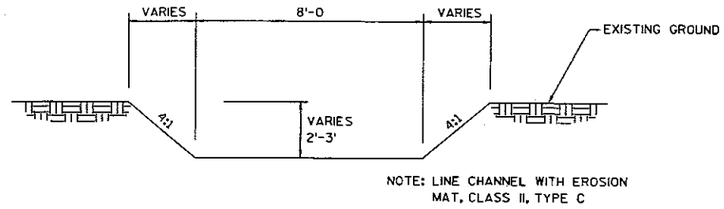
2. CONTRACTOR TO STAKE CENTERLINE TO MINIMIZE CLEARING AND DAMAGE TO EXISTING TREES. DISRUPTION TO EXPOSED BOULDERS SHALL ALSO BE MINIMIZED. ALIGNMENT AND TREES TO BE CLEARED SHALL BE APPROVED BY THE ENGINEER.

WETLAND CHANNEL CROSS SECTION AND SEEDING FOR AREA A
STA. 23'A'+00 TO 30'A'+50

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

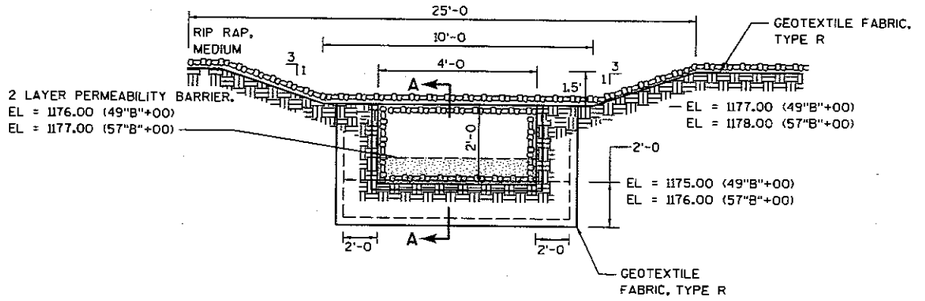
STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	WETLAND CONSTRUCTION DETAILS	SCALE, FEET 0 N/A	SHEET NO: 13	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\details\021006_cd.dgn PLOT DATE : 12/18/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

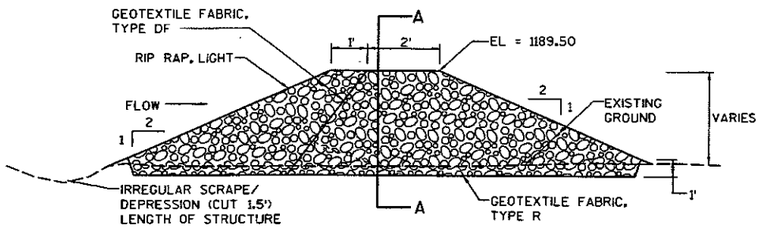


NOTE: LINE CHANNEL WITH EROSION MAT, CLASS II, TYPE C

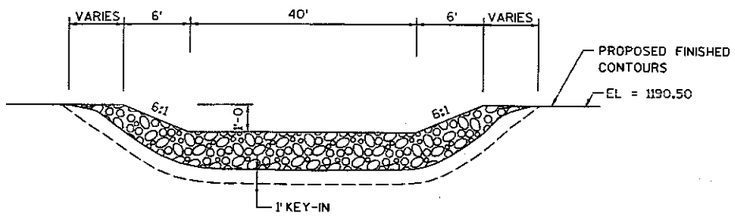
IRREGULAR DRAINAGE DITCH DETAIL
STA. 57"B"+40 - 60"B"+00



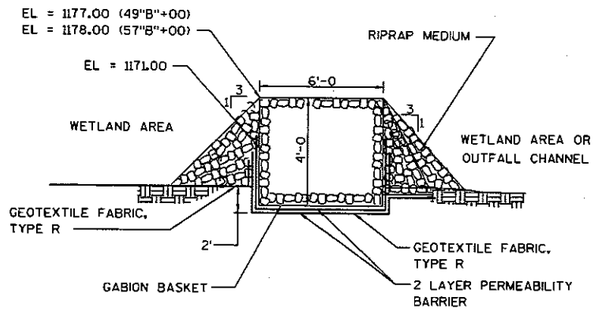
GABION BASKET & RIP RAP SPILLWAY
STA. 49"B"+00
STA. 57"B"+60



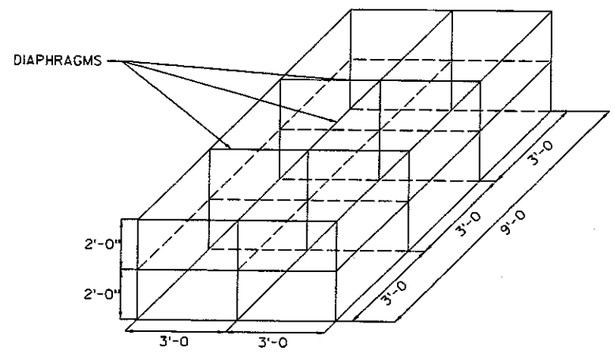
STONE WEEPER TYPICAL DETAIL
STA. 22"A"+40



STONE WEEPER - CROSS SECTION A-A



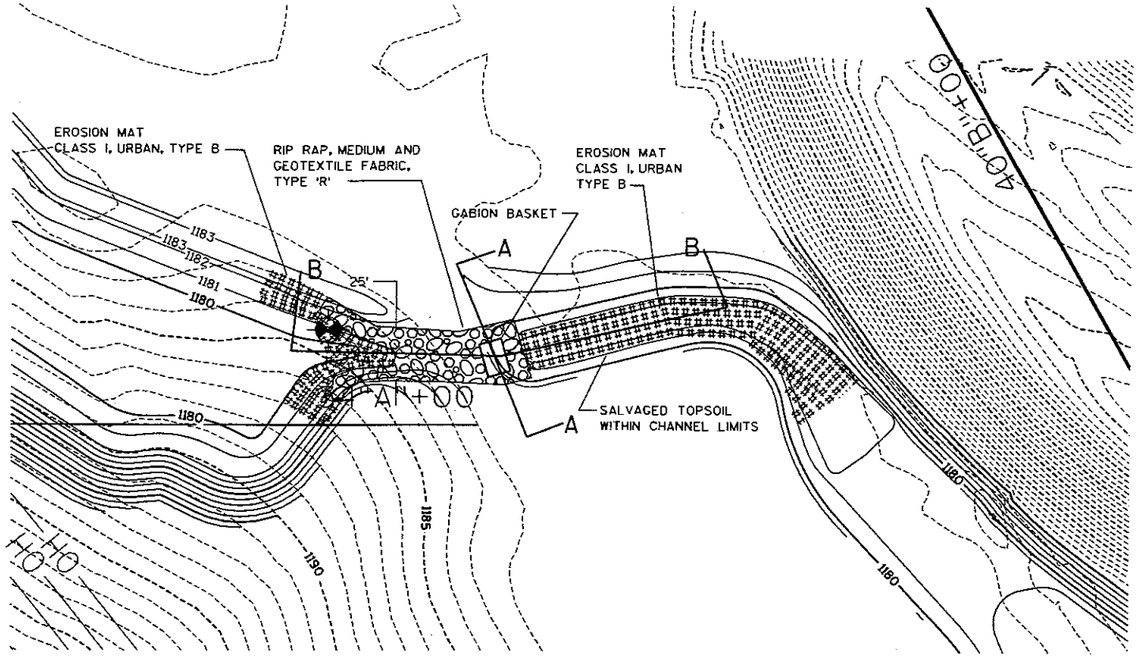
SECTION A-A



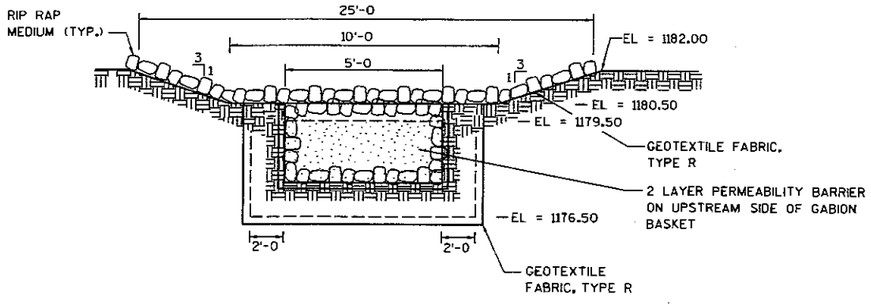
GABION BASKET DETAIL

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	WETLAND CONSTRUCTION DETAILS	SCALE, FEET 0 N/A	SHEET NO: 14	E

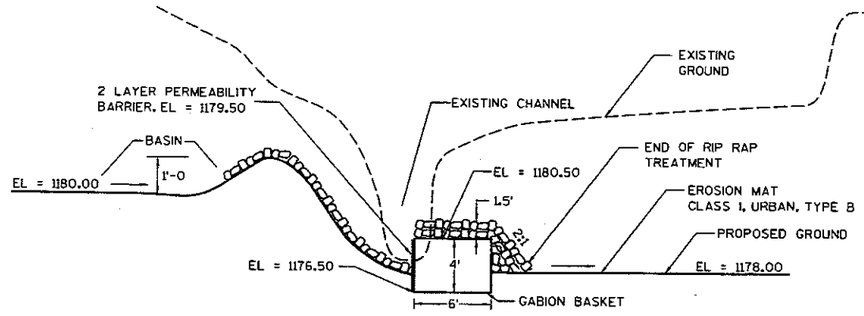
FILE NAME : p:\40xx\4025\plan\6675-00-71\details\021007_cd.dgn PLOT DATE : 12/18/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$



GABION BASKET & RIP RAP SPILLWAY
PLAN VIEW



GABION BASKET & RIP RAP SPILLWAY
A-A

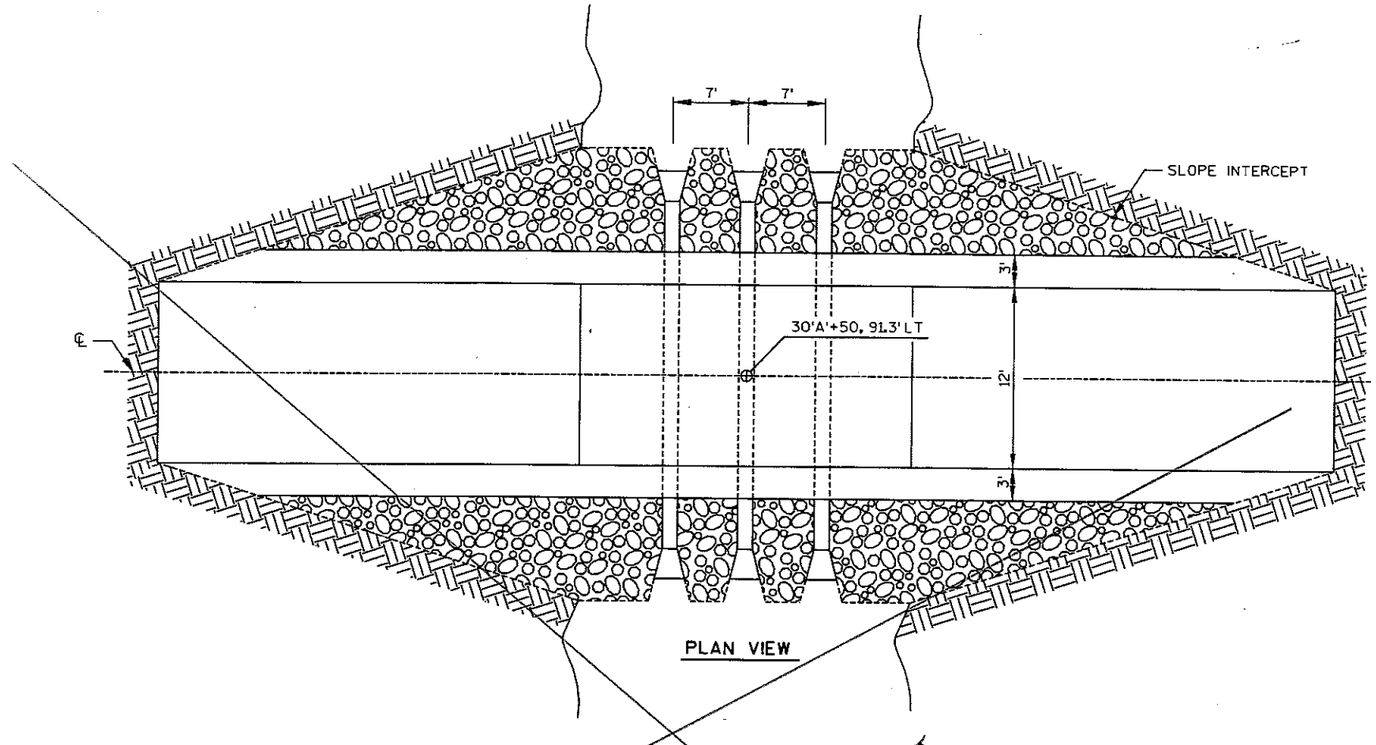


GABION BASKET & RIP RAP SPILLWAY
SECTION B-B

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	WETLAND CONSTRUCTION DETAILS	SCALE, FEET 0 N/A	SHEET NO: 15	E

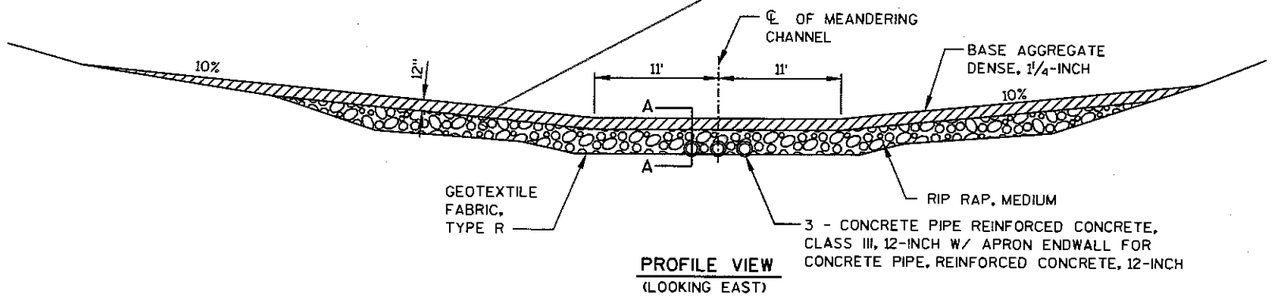
FILE NAME : p:\40xx\4025\plan\6675-00-71\details\021008_cd.dgn PLOT DATE : 12/18/2003 PLOT BY : $$...plotuser...$$ PLDT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

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

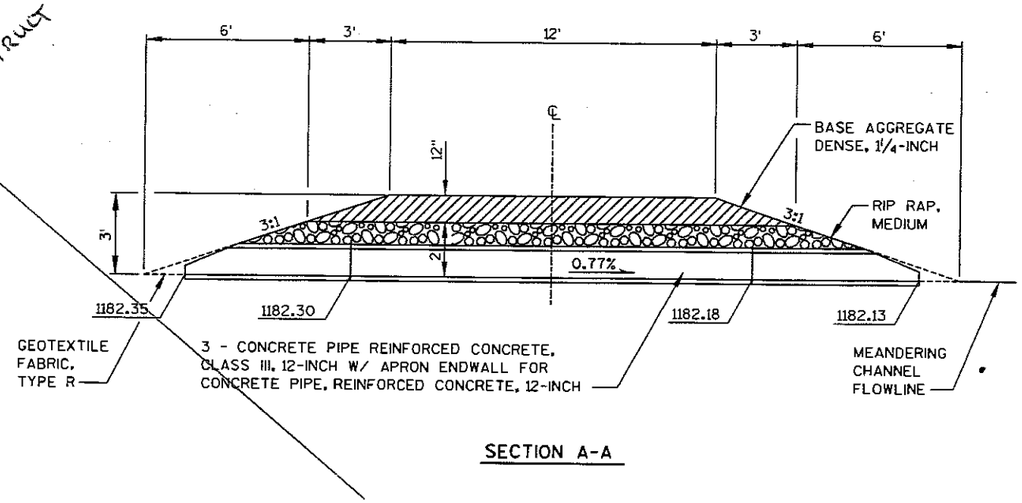


PLAN VIEW

Did Not Construct



PROFILE VIEW
(LOOKING EAST)



SECTION A-A

CHANNEL CROSSING DETAIL

STA. 30'A'+50

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	WETLAND CONSTRUCTION DETAILS	SCALE, FEET 0 N/A	SHEET NO: 16	E

WORK UNDER PROJECT 6675-00-70
(BY OTHERS)

N

LEGEND

1. CONCRETE CURB & GUTTER 30-INCH TYPE D
2. CONCRETE CURB & GUTTER 18-INCH TYPE D
3. BASE AGGREGATE DENSE
4. HMA PAVEMENT TYPE E-0.3
5. HMA PAVEMENT TYPE E-1
6. CONCRETE CORRUGATED MEDIAN
7. ASPHALTIC SURFACE DRIVEWAYS & FIELD ENTRANCES
8. ASPHALTIC SURFACE
9. CONCRETE MEDIAN SLOPED NOSE
10. CONCRETE SIDEWALK 6-INCH
11. CONCRETE CURB & GUTTER HES 30-INCH TYPE D
12. CONCRETE CURB & GUTTER 22-INCH
13. CONCRETE SIDEWALK 4-INCH

DETECTABLE WARNING FIELD
(SEE SDD FOR CURB RAMPS, ALL CURB RAMPS ARE TYPE 2)

XXX SAWING EXISTING PAVEMENT
YYY SAWING CONCRETE PAVEMENT FULL DEPTH

MATCH ASPHALT
PATH TO CURB RAMP
STA 100+79

100+78.69
72.80'LT

HMA PAVT CONSTRUCTED
TO STA 100+85 UNDER
PROJECT 6675-00-70
(BY OTHERS) TO ACCOMMODATE
LOOP DETECTORS
MATCH EXISTING PAVEMENT

101+03.22
68.21'LT

R=90'

EDGE OF THROUGH LANE

101+31.80
63.55'LT

PAVEMENT IS SUPERELEVATED
(SEE CROSS SECTIONS AND
ALIGNMENT DIAGRAM FOR
ADDITIONAL SUPERELEVATION
INFORMATION)

CTH NN

200'NT+00

100+00

00+NN202

BEGIN PROJECT
STA 101+15
MATCH EXISTING

203'NT+00

101+11.18
41.00'LT
1198.14

101+21.18
40.00'LT

101+61.26
36.00'LT

102+37.51
0.83'LT
1195.53

102+83.29
1.78'LT
1194.60

104+63.45
11.66'LT
1189.14

WEST ARTERIAL

102+60.09
10.46'RT
1195.45

102+03.59
35.83'RT

MEDIAN EOP
R=1388'
103+32.19
1385.89'RT

OUTSIDE EOP
R=800'
103+09.27
761.40'RT

MEDIAN EOP
R=2295'
108+60.28
2265.05'RT

MEDIAN EOP
R=2000'
107+50.71
2000'RT

R=20.4'

R=40.4'

2"D"+00

1"D"+00

0"D"+00

20'

DRIVEWAY TO
EXISTING
DETENTION POND

MATCH LINE STA 105+00

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	PAVING DETAILS	SCALE, FEET 0 20 40	SHEET NO: 17	E

FILE NAME : p:\40xx\4025\Plan\6675-00-71\PAVING\021201_pd.dgn PLOT DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

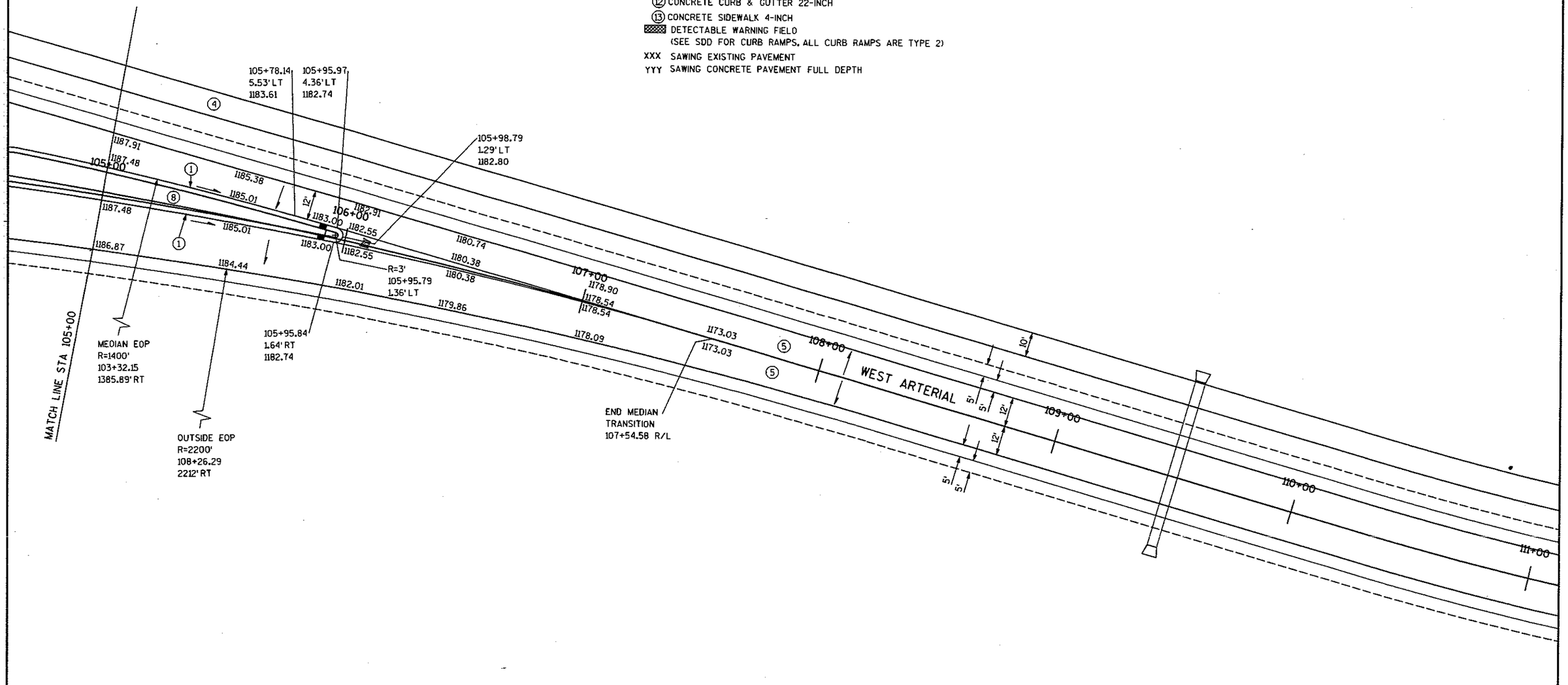
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

N

PAVEMENT IS SUPERELEVATED (SEE CROSS SECTIONS AND ALIGNMENT DIAGRAM FOR ADDITIONAL SUPERELEVATION INFORMATION)

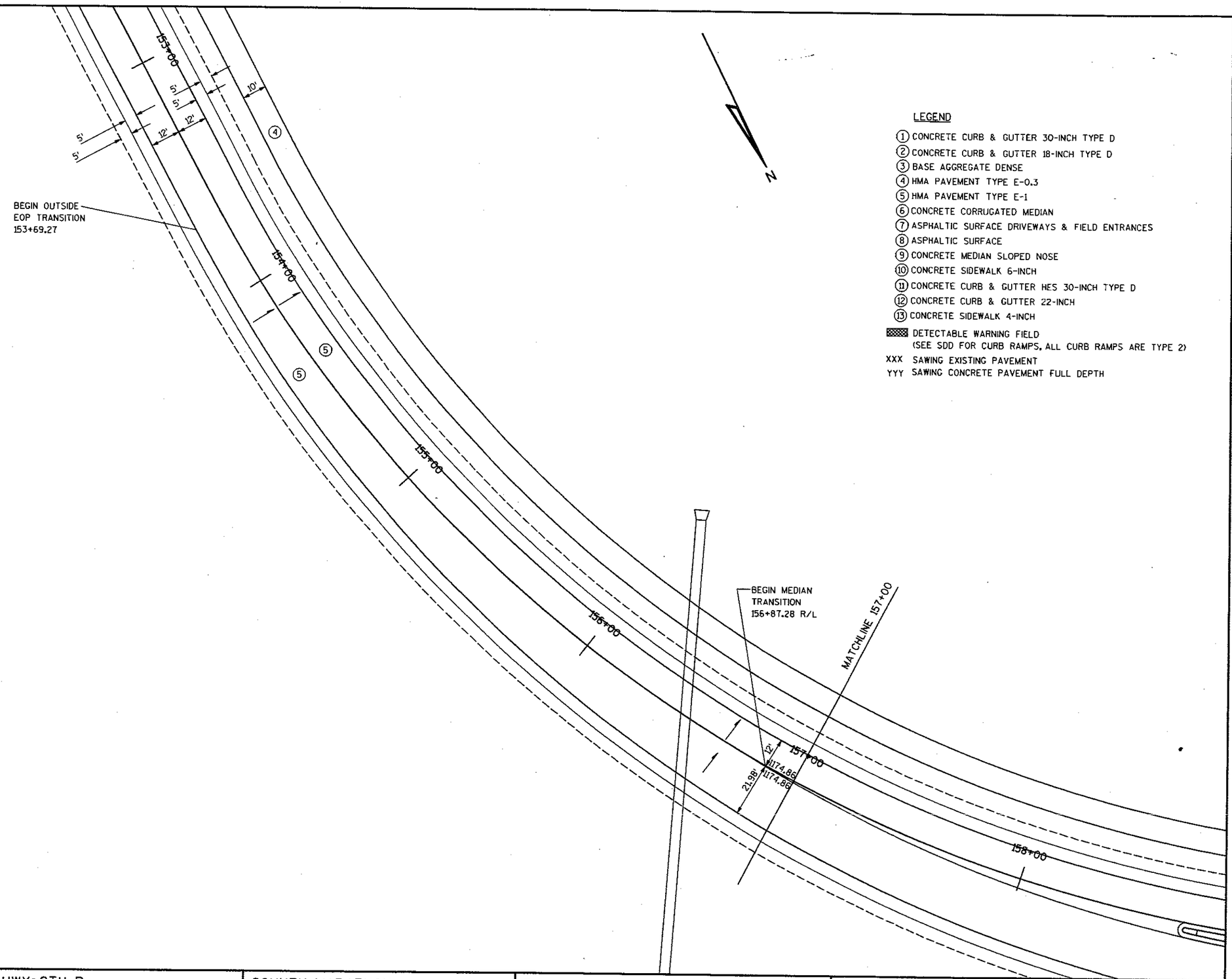
LEGEND

(1) CONCRETE CURB & GUTTER 30-INCH TYPE D
(2) CONCRETE CURB & GUTTER 18-INCH TYPE D
(3) BASE AGGREGATE DENSE
(4) HMA PAVEMENT TYPE E-0.3
(5) HMA PAVEMENT TYPE E-1
(6) CONCRETE CORRUGATED MEDIAN
(7) ASPHALTIC SURFACE DRIVEWAYS & FIELD ENTRANCES
(8) ASPHALTIC SURFACE
(9) CONCRETE MEDIAN SLOPED NOSE
(10) CONCRETE SIDEWALK 6-INCH
(11) CONCRETE CURB & GUTTER HES 30-INCH TYPE D
(12) CONCRETE CURB & GUTTER 22-INCH
(13) CONCRETE SIDEWALK 4-INCH
DETECTABLE WARNING FIELD (SEE SDD FOR CURB RAMPS, ALL CURB RAMPS ARE TYPE 2)
XXX SAWING EXISTING PAVEMENT
YYY SAWING CONCRETE PAVEMENT FULL DEPTH



STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	PAVING DETAILS	SCALE, FEET 0 20 40	SHEET NO: 18	E

FILE NAME : p:\40xx\4025\Plan\6675-00-71\PAVING\021202_pd.dgn PLOT DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$



LEGEND

1. CONCRETE CURB & GUTTER 30-INCH TYPE D
2. CONCRETE CURB & GUTTER 18-INCH TYPE D
3. BASE AGGREGATE DENSE
4. HMA PAVEMENT TYPE E-0.3
5. HMA PAVEMENT TYPE E-1
6. CONCRETE CORRUGATED MEDIAN
7. ASPHALTIC SURFACE DRIVEWAYS & FIELD ENTRANCES
8. ASPHALTIC SURFACE
9. CONCRETE MEDIAN SLOPED NOSE
10. CONCRETE SIDEWALK 6-INCH
11. CONCRETE CURB & GUTTER HES 30-INCH TYPE D
12. CONCRETE CURB & GUTTER 22-INCH
13. CONCRETE SIDEWALK 4-INCH

DETECTABLE WARNING FIELD
(SEE SDD FOR CURB RAMPS, ALL CURB RAMPS ARE TYPE 2)

XXX SAWING EXISTING PAVEMENT

YYY SAWING CONCRETE PAVEMENT FULL DEPTH

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	PAVING DETAILS	SCALE, FEET 0 20 40	SHEET NO: 19	E

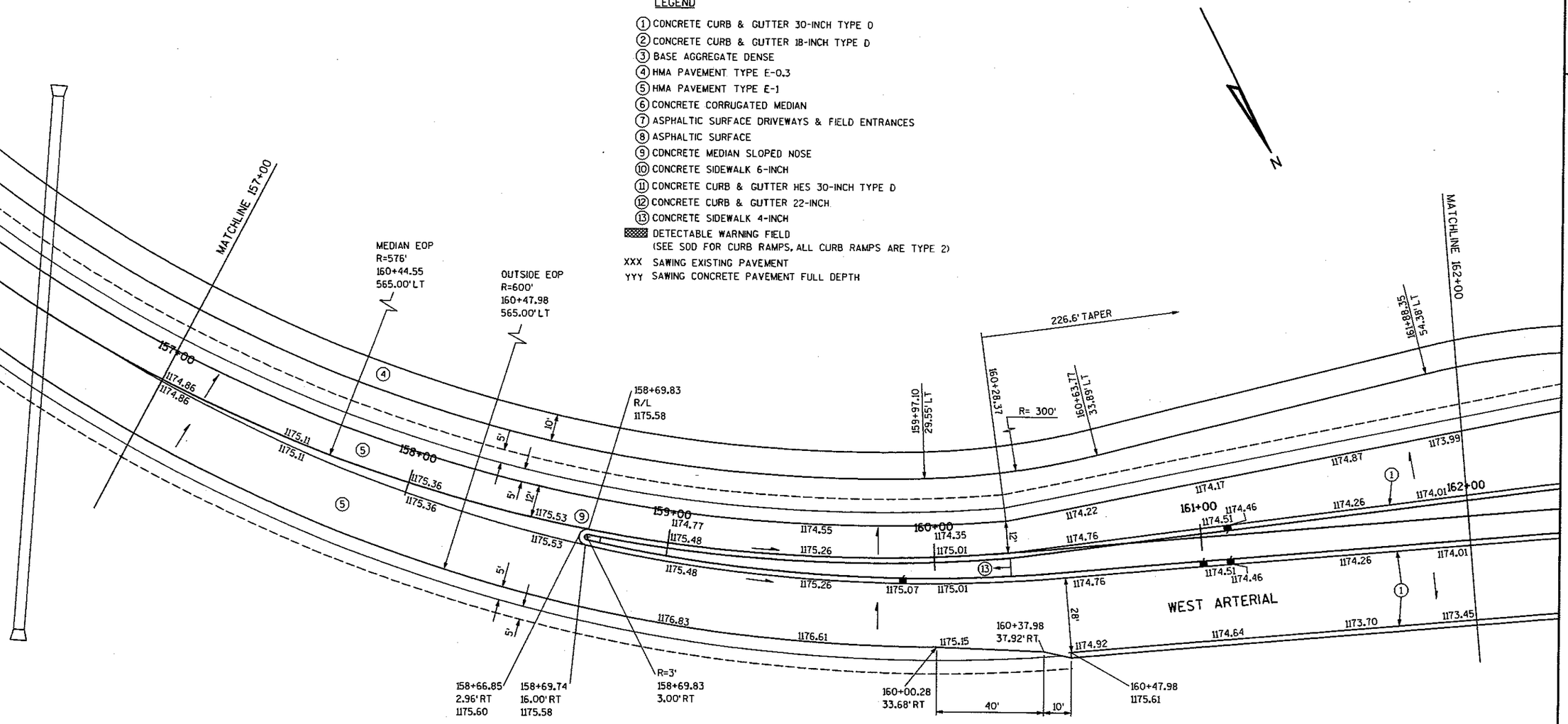
FILE NAME : p:\40xx\4025\Plan\6675-00-71\PAVING\021203_pd.dgn PLOT DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

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

LEGEND

(1) CONCRETE CURB & GUTTER 30-INCH TYPE D
(2) CONCRETE CURB & GUTTER 18-INCH TYPE D
(3) BASE AGGREGATE DENSE
(4) HMA PAVEMENT TYPE E-0.3
(5) HMA PAVEMENT TYPE E-1
(6) CONCRETE CORRUGATED MEDIAN
(7) ASPHALTIC SURFACE DRIVEWAYS & FIELD ENTRANCES
(8) ASPHALTIC SURFACE
(9) CONCRETE MEDIAN SLOPED NOSE
(10) CONCRETE SIDEWALK 6-INCH
(11) CONCRETE CURB & GUTTER HES 30-INCH TYPE D
(12) CONCRETE CURB & GUTTER 22-INCH
(13) CONCRETE SIDEWALK 4-INCH
DETECTABLE WARNING FIELD (SEE SOD FOR CURB RAMPS, ALL CURB RAMPS ARE TYPE 2)
XXX SAWING EXISTING PAVEMENT
YYY SAWING CONCRETE PAVEMENT FULL DEPTH



PAVEMENT IS SUPERELEVATED (SEE CROSS SECTIONS AND ALIGNMENT DIAGRAM FOR ADDITIONAL SUPERELEVATION INFORMATION)

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	PAVING DETAILS	SCALE, FEET 0 20 40	SHEET NO: 20	E

FILE NAME : p:\40xx\4025\Plan\6675-00-71\PAVING\021204_pd.dgn PLOT DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

LEGEND

1. CONCRETE CURB & GUTTER 30-INCH TYPE D
2. CONCRETE CURB & GUTTER 18-INCH TYPE D
3. BASE AGGREGATE DENSE
4. HMA PAVEMENT TYPE E-0.3
5. HMA PAVEMENT TYPE E-1
6. CONCRETE CORRUGATED MEDIAN
7. ASPHALTIC SURFACE DRIVEWAYS & FIELD ENTRANCES
8. ASPHALTIC SURFACE
9. CONCRETE MEDIAN SLOPED NOSE
10. CONCRETE SIDEWALK 6-INCH
11. CONCRETE CURB & GUTTER HES 30-INCH TYPE D
12. CONCRETE CURB & GUTTER 22-INCH
13. CONCRETE SIDEWALK 4-INCH

DETECTABLE WARNING FIELD (SEE SDD FOR CURB RAMPS, ALL CURB RAMPS ARE TYPE 2)

XXX SAWING EXISTING PAVEMENT

YYY SAWING CONCRETE PAVEMENT FULL DEPTH

* PAVEMENT FOR THE HOME DEPOT PARKING LOT AND DRIVEWAYS SHALL BE 3-INCHES OF ASPHALTIC SURFACE DRIVEWAYS, AND FIELD ENTRANCES OVER 6-INCHES OF BASE AGGREGATE DENSE 1 1/4-INCH

N

MATCHLINE 162+00

MATCHLINE 167+00

WEST ARTERIAL

162+85.18 5.70' LT

163+82.48 8.00' LT

226.6' TAPER

R=300'

162+53.46 1173.37

162+00 1174.01

163+00 1173.51

164+00 1172.85 1172.64

163+82.01 11.00' LT 1173.10

164+29.07 T.35' RT 1172.80

164+24.19 11.00' RT 1172.89

R=5' 164+24.19 6.00' RT

R=8.5' 164+30.21 47.50' RT

R=75' 163+82.01 64.00' RT

164+20.11 62.22' RT

165+00 1172.51

165+09.58 1.74 RT 1172.51

165+07.34 7.35' RT 1172.55

R=5' 165+12.22 6.00' RT

165+12.22 11.00' RT 1172.45

165+54.39 11.00' LT 1172.24

166+00 1172.01

R=75' 166+71.00 64.00' LT

166+83.75 11.00' LT 1171.59

166+71.00 11.00' RT 1171.66

R=6.0' 165+04.30 46.00' RT

R=75' 165+54.39 64.00' RT

165+72.69 70.00 'RT

166+85.1 52.00' RT 1171.10

MATCH EXISTING SS GRATE 1170.21

HWY

HWY

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	PAVING DETAILS	SCALE, FEET 0 20 40	SHEET NO: 21	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\paving\021205_pd.dgn PLOT DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

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

LEGEND

1. CONCRETE CURB & GUTTER 30-INCH TYPE D
2. CONCRETE CURB & GUTTER 18-INCH TYPE D
3. BASE AGGREGATE DENSE
4. HMA PAVEMENT TYPE E-0.3
5. HMA PAVEMENT TYPE E-1
6. CONCRETE CORRUGATED MEDIAN
7. ASPHALTIC SURFACE DRIVEWAYS & FIELD ENTRANCES
8. ASPHALTIC SURFACE
9. CONCRETE MEDIAN SLOPED NOSE
10. CONCRETE SIDEWALK 6-INCH
11. CONCRETE CURB & GUTTER HES 30-INCH TYPE D
12. CONCRETE CURB & GUTTER 22-INCH
13. CONCRETE SIDEWALK 4-INCH

* PAVEMENT FOR THE HOME DEPOT PARKING LOT AND DRIVEWAYS SHALL BE 3-INCHES OF ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES OVER 6-INCHES OF BASE AGGREGATE DENSE 1 1/4-INCH

DETECTABLE WARNING FIELD (SEE SOD FOR CURB RAMPS. ALL CURB RAMPS ARE TYPE 2)

XXX SAWING EXISTING PAVEMENT

YYY SAWING CONCRETE PAVEMENT FULL DEPTH

(11) (CURB AND GUTTER THROUGH DRIVEWAYS SHALL BE HES)

MATCHLINE 167+00

END PROJECT STA 171+87 MATCH EXISTING PAVEMENT

MATCH EXISTING 171+89.07 103.60' LT

R=65' 171+21.36 104.00' LT

R=80' 171+51.57 81.00' LT

R=3' 171+61.25 4.61' LT

171+62.13 7.48' LT 172.72

171+64.24 4.36' LT 172.79

171+61.63 1.64' LT 172.70

171+38.91 11.00' LT 172.40

171+51.42 1.00' LT 172.47

171+01.56 1.00' LT 171.60

171+18.39 51.00' RT 171.77

171+71.38 51.00' RT 171.07

170+18.91 1.00' RT 170.52

168+93.91 1.00' RT 170.32

168+93.91 11.00' RT 170.54

169+81.56 11.00' R 170.46

168+91.38 39.00' RT 169.93

168+39.10 56.50' RT 170.30

168+81.81 81.08' RT 170.63

R 20' 168+16.61 57.44' RT

R 35' 19+16.40 75.75' RT

R=80' 171+38.66 69.00' RT

R=65' 171+18.39 116.00' RT

MATCH EXISTING 171+84.67 116.25' RT

MATCH EXISTING CURB 168+89.01 127.80' RT

R 6' 167+88.92 111.45' RT

R 8' 167+85.20 135.55' RT

R 6' 168+39.20 143.86' RT

167+89.76 105.49' RT 171.35

168+27.05 84.97' RT 171.80

167+83.86 143.52' RT 170.92

167+77.58 123.75' RT 170.70

168+39.79 149.85' RT 171.25

167+05.16 8.24' LT 171.54

167+08.82 4.17' LT 171.58

167+06.57 0.84' RT 171.62

R=5' 167+03.92 3.40' LT

HIHG POINT 167+03.74 106.39' RT 170.95

MATCH EXISTING SS GRATE 170.22

2%

POINT	STATION	OFFSET
100	170+71.38	51.00' RT
101	171+37.30	53.71 RT
102	171+35.45	98.67' RT
103	24'SH"+55.0	18.14' RT
104	25'SH'+26.7	13.17' RT

WEST ARTERIAL

SHERMAN STREET

MH

TNI

INL

GUY POLE

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	PAVING DETAILS	SCALE, FEET 0 20 40	SHEET NO: 22	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\paving\021206_pd.dgn PLOT DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

LEGEND

1. CONCRETE CURB & GUTTER 30-INCH TYPE D
2. CONCRETE CURB & GUTTER 18-INCH TYPE D
3. BASE AGGREGATE DENSE
4. HMA PAVEMENT TYPE E-0.3
5. HMA PAVEMENT TYPE E-1
6. CONCRETE CORRUGATED MEDIAN
7. ASPHALTIC SURFACE DRIVEWAYS & FIELD ENTRANCES
8. ASPHALTIC SURFACE
9. CONCRETE MEDIAN SLOPED NOSE
10. CONCRETE SIDEWALK 6-INCH
11. CONCRETE CURB & GUTTER HES 30-INCH TYPE D
12. CONCRETE CURB & GUTTER 22-INCH
13. CONCRETE SIDEWALK 4-INCH

DETECTABLE WARNING FIELD (SEE SDD FOR CURB RAMPS, ALL CURB RAMPS ARE TYPE 2)

XXX SAWING EXISTING PAVEMENT

YYY SAWING CONCRETE PAVEMENT FULL DEPTH

* PAVEMENT FOR THE HOME DEPOT PARKING LOT AND DRIVEWAYS SHALL BE 3-INCHES OF ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES OVER 6-INCHES OF BASE AGGREGATE DENSE 1 1/4-INCH

N

22"SH+00

23"SH+00

24"SH+00

25"SH+00

55"TW"+00

56"TW"+00

57"TW"+00

58"TW"+00

59"TW"+00

60"TW"+00

171+00

171+99

MATCH EXISTING 55"TW"+46

R =80' 55"TW"+96.07 59.60' LT

MATCH EXISTING 58"TW"+05

GUY POLE

INL

WEST ARTERIAL

SHERMAN STREET

28TH AVENUE

75'

20'

12'

1173.98

1174.69

1175.40

1175.43

1176.29

55+75.47 15.16' RT 1173.90

MATCH EXISTING 56"TW"+95

R =3' 55"TW"+78.47 15.36' RT

HIGH SIDE CURB AND GUTTER AROUND MEDIAN NOSE

57+30 12' RT 1175.90

R =80' 55"TW"+85.81 92.01' RT

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	PAVING DETAILS	SCALE, FEET 0 20 40	SHEET NO: 23	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\paving\021207_pd.dgn PLOT DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

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

NOTES*

1. EXISTING TOPOGRAPHY ALLOWS FOR APPROXIMATELY 2000 CY OF MATERIAL
2. SLOPES OF DEPOSITED MATERIAL SHALL BE 10:1 OR FLATTER
3. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION REGARDING REUSE AREA AND RESTORATION

I-39/USH 51 "NORTH" REUSE AREA*

32ND AVENUE

STH 29 WB RAMP

STH 29 EB RAMP

STH 29 WB

STH 29 EB

STH 29 EB RAMP

STEWART AVENUE

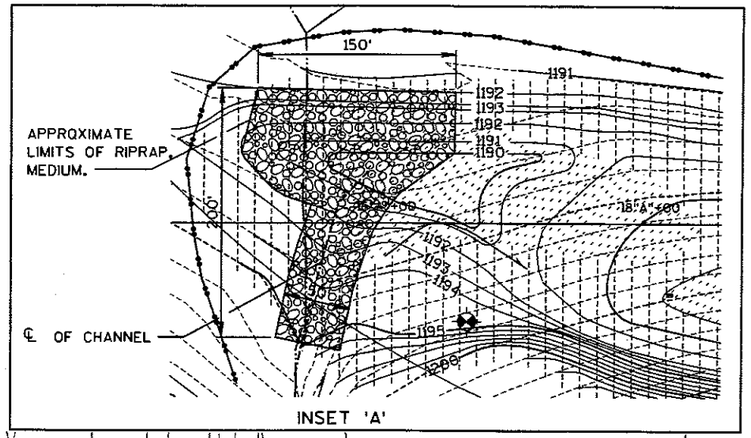
SHERMAN STREET

WEST ARTERIAL

28TH AVENUE

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	I-39/USH 51 "NORTH" REUSE AREA	SCALE, FEET 0 100 200	SHEET NO: 24	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\details\021601_cm.dgn PLOT DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



INSET 'A'

INSTALL EROSION MAT, CLASS I, URBAN, TYPE B ON CHANNEL BETWEEN STATIONS 22"A"+40 AND 30"A"+50 EXCEPT IN AREAS WHERE EXPOSED ROCK EXCEDES 50% OF CHANNEL AREA. THIS AREA SHALL BE STABILIZED WITH NATIVE EXCAVATED ROCK OR RIP RAP MEDIUM.

STA 30"A"+50. 91.3 LT CONSTRUCT CHANNEL CROSSING 3-CULVERT PIPE, REINFORCED CONCRETE CLASS III, 12-INCH WX APRON ENDWALLS REQUIRED. (SEE DETAIL)

N

ATC

APPROX R/W

QWEST COMMUNICATIONS

MAINTAIN 30' HORIZONTAL CLEARANCE AROUND OVERHEAD POWER POLES.

NO TREE/SHRUB PLANTING WITHIN LIMITS OF OVERHEAD LINES

STA. 34"A"+40, 30' LT. INSTALL GABION BASKET AND RIP RAP SPILLWAY (SEE DETAIL)

FAR NORTH AREA B (BY OTHERS)

NORTHERN LIMITS OF CONSTRUCTION

SILT FENCE (TYP.)

STA. 22"A"+40, 20' LT STONE WEEPER (SEE DETAIL)

APPROX R/W

RIPRAP, MEDIUM REQ'D. SEE INSET 'A'

STA 10"A"+00 N=179,505.22 E=274,849.78

10"A"+00 12"A"+00 14"A"+00 18"A"+00 20"A"+00 22"A"+00 24"A"+00 26"A"+00 28"A"+00 30"A"+00

AREA A

WISDOT FORESTED UPLAND BUFFER

MEANDERING CHANNEL ALIGNMENT TO BE STAKED BY CONTRACTOR. ALIGNMENT TO BE STAKED TO MINIMIZE IMPACT TO TREES. FINAL ALIGNMENT TO BE APPROVED BY ENGINEER PRIOR TO SELECTIVE CLEARING.

Seed Mix #75

TRILLIUM LANE

STA 34"A"+30.22 N=179,505.22 E=277,279.99

AREA B

EXISTING UNIMPROVED ACCESS TO REMAIN

EXISTING TRILLIUM LANE DRAINAGE WAY

PROPOSED R/W AND ALIGNMENT OF FAR SOUTH WEST ARTERIAL (BY OTHERS)

EXISTING 2 - 36" CMCP'S TO REMAIN

Stock Pile Marsh Material

Could not Construct Meandering Channel Water Weeps out at 22A+40 to or existing Channel to Mitigation Site B

Encountered Large Rocks Contractor Broke Down some and Hauled and buried in Mitigation Site "B"

NOTES:

1. AREA A SHALL NOT RECEIVE CLAY LINER. AREA SHALL BE COMPACTED TO 90% OF MODIFIED PROCTOR DENSITY. COMPACTION OF THE NATIVE SOILS INTENDED TO REDUCE INFILTRATION SUITABLE FOR WET-WOODLAND REPLACEMENT.
2. ALL CONSTRUCTION AREAS SHALL BE PLANTED WITH SEEDING MIXTURE NO. 60 AT END OF CONSTRUCTION.
3. SEE X-SECTIONS FOR FINISHED CONTOUR LAYOUT.

LEGEND

- FLOW ARROW
- WETLAND SEED MIXTURE
- COMBINATION OF WET MEADOW SEEDING (BY CONTRACTOR) WOODLAND PLANTING (BY OTHERS)
- WET MEADOW SEEDING (BY CONTRACTOR)
- AQUATIC EMERGENT

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: 6675-00-71	HWY: CTH R	COUNTY: MARATHON	WETLAND AREA A GRADING & RESTORATION	SCALE, FEET 0 100 200	SHEET NO: 25	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\details\021602_cm.dgn PLOT DATE : 12/19/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : 6-26-03 Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

LEGEND

FLOW ARROW

WETLAND SEED MIXTURE

COMBINATION OF WET MEADOW SEEDING (BY CONTRACTOR) WOODLAND PLANTING (BY OTHERS)

WET MEADOW SEEDING (BY CONTRACTOR)

AQUATIC EMERGENT

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
68		BERNSTEIN MONUMENT IN MEDIAN	1210.45
		OF STH29 OVERPASS 120' EAST	
		OF USH 51 BEHIND BEAMGUARD	

Stock Piled Marsh Material

Earth Berm

Approx location of buried Rocky Waste Mtg. 'A'

STA 36"B"+00
N=180,024.02
E=277,347.68

2

MAINTAIN 2' CLEARANCE OVER FIBER OPTIC LINE

INSTALL SILT FENCE AT EDGE OF EXISTING WETLAND

PROPERTY LINE

EXISTING WETLAND BOUNDARY

OWEST COMMUNICATIONS FIBER OPTIC LINE

MAINTAIN 30' CLEARANCE FROM ATC POWERPOLES

N

AREA B

STA. 57'B'+40 - STA. 60'B'+00
CONSTRUCT IRREGULAR DITCH TO EXISTING DRAINAGE SWALE (SEE DETAIL)

CAUTION

END GRADING
STA 60"B"+00
140' FT-RT

EXISTING TRILLIUM LANE WETLAND DRAINAGE

2 EXISTING 36" CMCP
I.E. 1175.6 (TO REMAIN)
FUTURE PROPOSED
DRAINAGE STRUCTURES
I.E. 1174.00 (BY OTHERS)

45'EB

50'EB

55'EB

60'EB

50'LT

STA 64"B"+50
N=177,552.03
E=278,766.05

STA. 49"B"+40
75' LT
GABION BASKET
(SEE DETAIL)

CORRIDOR FOR POTENTIAL FUTURE CTH N TO USH 51 SB SLIP RAMP

SILT FENCE (TYP.)

STA. 57"B"+50
20' RT
GABION BASKET
(SEE DETAIL)

APPROXIMATE AREA OF ELEVATED MOUNDS TO BE CONSTRUCTED WITH SALVAGED WETLAND TOPSOIL. TOP ELEV. = 1177.5

FUTURE WIS 29 RAMP (BY OTHERS)

FUTURE FAR NORTH AREA B (BY OTHERS.)

APPROXIMATE AREA OF ELEVATED MOUNDS TO BE CONSTRUCTED WITH SALVAGED WETLAND TOPSOIL. TOP ELEV. = 1177.5

36'B'+00

38'B'+00

40'B'+00

42'B'+00

44'B'+00

46'B'+00

48'B'+00

52'B'+00

54'B'+00

56'B'+00

58'B'+00

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	WETLAND AREA B GRADING & RESTORATION	SCALE, FEET 0 100 200	SHEET NO: 26	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\details\021603_cm.dgn PLOT DATE : 12/19/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : 6-26-03 Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP-TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE-TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = 24 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 24 ACRES

N

LEGEND

- EROSION MAT, CLASS I, URBAN, TYPE A
- EROSION MAT, CLASS I, URBAN, TYPE B
- EROSION MAT, CLASS I, TYPE A
- EROSION MAT, CLASS I, TYPE B
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SILT FENCE
- TURBIDITY BARRIER
- TST — TEMPORARY SEDIMENT TRAP WITH STONE DITCH CHECK
- (A) INLET PROTECTION TYPE A
- (D) INLET PROTECTION TYPE D
- (IP) INLET PROTECTION (SEE NOTE)

NOTES
PLACE INLET PROTECTION TYPE A AT ALL INLETS IN ROADWAY UNTIL CURB AND GUTTER IS POURED. THEN PLACE INLET PROTECTION TYPE C.

SEE TYPICAL SECTIONS AND CONSTRUCTION DETAILS FOR ADDITIONAL EROSION CONTROL DETAILS

BEGIN PROJECT
STA 101+15

E-MAT PLACED TO TOE OF SLOPE
DISTURBED AREAS BEYOND THE TOE OF SLOPE SHALL BE SEEDED AND MULCHED

WORK UNDER PROJECT 6675-00-70 (BY OTHERS)

WEST ARTERIAL

CTH NN

SOD

100-YEAR FLOODPLAIN

TST

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	EROSION CONTROL	SCALE, FEET 0 50 100	SHEET NO: 27	E

FILE NAME : p:\40xx\4025\Plan\6675-00-71\Erosion Control\022001_ec.dgn PLOT DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ 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

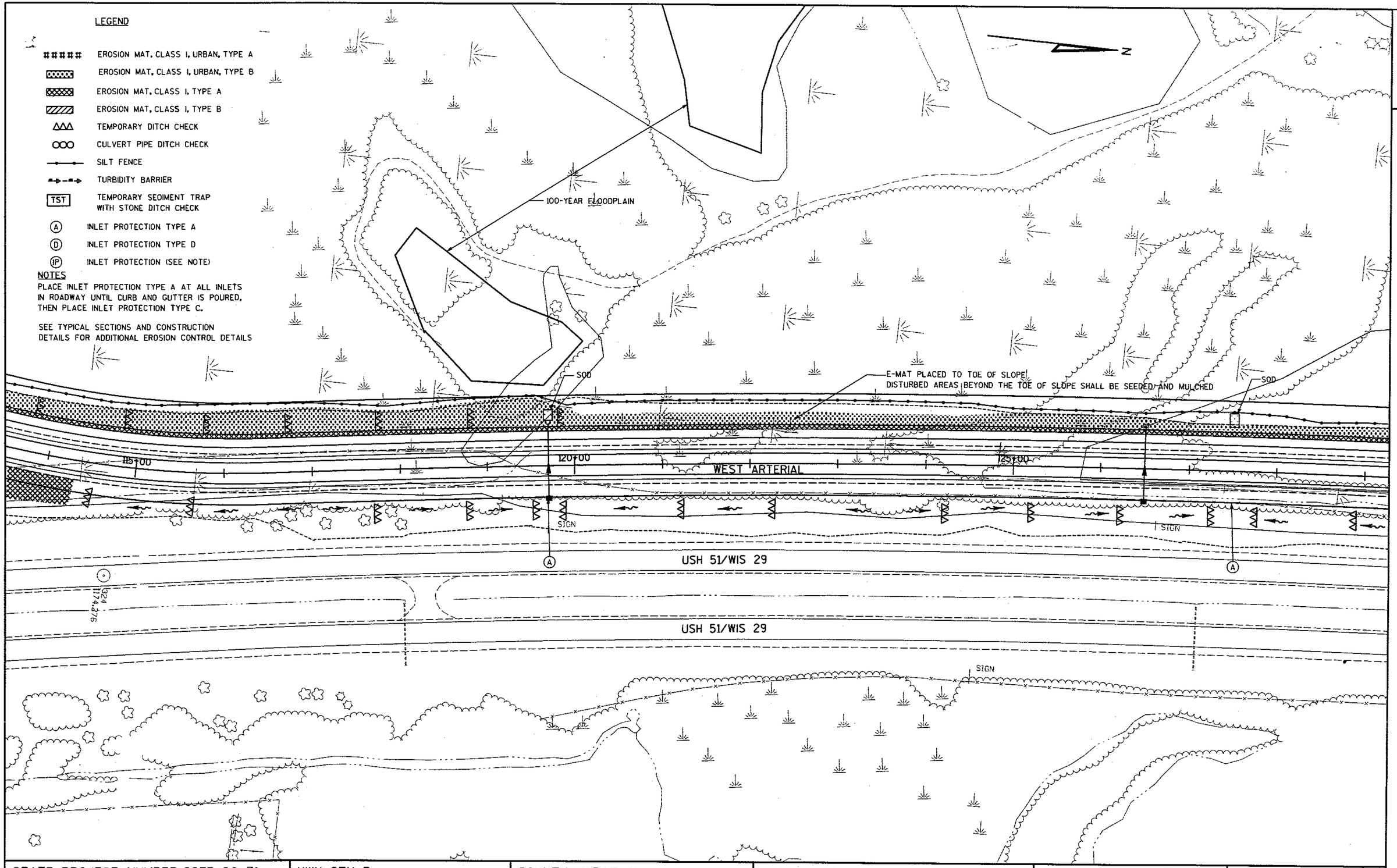
LEGEND

- ##### EROSION MAT, CLASS I, URBAN, TYPE A
- EROSION MAT, CLASS I, URBAN, TYPE B
- EROSION MAT, CLASS I, TYPE A
- EROSION MAT, CLASS I, TYPE B
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SILT FENCE
- TURBIDITY BARRIER
- TST — TEMPORARY SEDIMENT TRAP WITH STONE DITCH CHECK
- (A) INLET PROTECTION TYPE A
- (D) INLET PROTECTION TYPE D
- (IP) INLET PROTECTION (SEE NOTE)

NOTES

PLACE INLET PROTECTION TYPE A AT ALL INLETS IN ROADWAY UNTIL CURB AND GUTTER IS POURED, THEN PLACE INLET PROTECTION TYPE C.

SEE TYPICAL SECTIONS AND CONSTRUCTION DETAILS FOR ADDITIONAL EROSION CONTROL DETAILS



STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	EROSION CONTROL	SCALE, FEET 0 50 100	SHEET NO: 28	E

100-YEAR FLOODPLAIN

N

LEGEND

- ##### EROSION MAT, CLASS I, URBAN, TYPE A
- EROSION MAT, CLASS I, URBAN, TYPE B
- EROSION MAT, CLASS I, TYPE A
- EROSION MAT, CLASS I, TYPE B
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SILT FENCE
- TURBIDITY BARRIER
- TST — TEMPORARY SEDIMENT TRAP WITH STONE DITCH CHECK
- (A) INLET PROTECTION TYPE A
- (D) INLET PROTECTION TYPE D
- (IP) INLET PROTECTION (SEE NOTE)

NOTES

PLACE INLET PROTECTION TYPE A AT ALL INLETS IN ROADWAY UNTIL CURB AND GUTTER IS POURED, THEN PLACE INLET PROTECTION TYPE C.

SEE TYPICAL SECTIONS AND CONSTRUCTION DETAILS FOR ADDITIONAL EROSION CONTROL DETAILS

BIG RIB RIVER

SOD

HEAVY RIPRAP TO BE PLACED ALONG WALLS AND ABUTMENTS (SEE STRUCTURE PLANS)

130+00

WEST ARTERIAL

135+00

140+00

LAKE WAUSAU

SIGN

USH 51/WIS 29

HEAVY RIPRAP

WRAP TURBIDITY BARRIER TO PREVENT POTENTIAL MIGRATION OF ANIMALS FROM THE RIVER INTO THE PROJECT SITE

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	EROSION CONTROL	SCALE, FEET 0 50 100	SHEET NO: 29	E

FILE NAME : p:\40xx\4025\Plan\6675-00-71\Erosion Control\022003_ec.dgn PLOT DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ 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

LEGEND

- ##### EROSION MAT, CLASS I, URBAN, TYPE A
- EROSION MAT, CLASS I, URBAN, TYPE B
- EROSION MAT, CLASS I, TYPE A
- EROSION MAT, CLASS I, TYPE B
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SILT FENCE
- TURBIDITY BARRIER
- TST — TEMPORARY SEDIMENT TRAP WITH STONE DITCH CHECK
- (A) INLET PROTECTION TYPE A
- (D) INLET PROTECTION TYPE D
- (IP) INLET PROTECTION (SEE NOTE)

NOTES

PLACE INLET PROTECTION TYPE A AT ALL INLETS IN ROADWAY UNTIL CURB AND GUTTER IS POURED, THEN PLACE INLET PROTECTION TYPE C.

SEE TYPICAL SECTIONS AND CONSTRUCTION DETAILS FOR ADDITIONAL EROSION CONTROL DETAILS

N

BIG RIB RIVER

HEAVY RIPRAP TO BE PLACED ALONG WALLS AND ABUTMENTS (SEE STRUCTURE PLANS)

E-MAT PLACED TO TOE OF SLOPE
DISTURBED AREAS BEYOND THE TOE OF SLOPE SHALL BE SEEDED AND MULCHED

SOD

145+00

150+00

155+00

160+00

WEST ARTERIAL

TST

GAGING STATION

SIGN

USH 51/WIS 29

USH 51/WIS 29

WRAP TURBIDITY BARRIER TO PREVENT POTENTIAL MIGRATION OF ANIMALS FROM THE RIVER INTO THE PROJECT SITE

HEAVY RIPRAP

100-YEAR FLOODPLAIN

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	EROSION CONTROL	SCALE, FEET 0 50 100	SHEET NO: 30	E

E-MAT PLACED TO TOE OF SLOPE
DISTURBED AREAS BEYOND THE TOE OF SLOPE SHALL BE SEEDED AND MULCHED

WEST ARTERIAL

SHERMAN STREET

28TH AVENUE

NORTHWESTERN RR

165+00

170+00

171+99

55'TW'+00

60'TW'+00

25'SH'+00

SOD

100-YEAR FLOODPLAIN

LEGEND

- ##### EROSION MAT, CLASS I, URBAN, TYPE A
- EROSION MAT, CLASS I, URBAN, TYPE B
- EROSION MAT, CLASS I, TYPE A
- EROSION MAT, CLASS I, TYPE B
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SILT FENCE
- TURBIDITY BARRIER
- TST TEMPORARY SEDIMENT TRAP WITH STONE DITCH CHECK
- (A) INLET PROTECTION TYPE A
- (D) INLET PROTECTION TYPE D
- (IP) INLET PROTECTION (SEE NOTE)

NOTES

PLACE INLET PROTECTION TYPE A AT ALL INLETS IN ROADWAY UNTIL CURB AND GUTTER IS POURED, THEN PLACE INLET PROTECTION TYPE C.

SEE TYPICAL SECTIONS AND CONSTRUCTION DETAILS FOR ADDITIONAL EROSION CONTROL DETAILS.

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:6675-00-71	HWY: CTH R	COUNTY: MARATHON	EROSION CONTROL	SCALE, FEET 0 50 100	SHEET NO: 31	E

FILE NAME : p:\40xx\4025\Plan\6675-00-71\Erosion Control\022005_ec.dgn PLOT DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

NOTE
SEE CROSS SECTIONS FOR ADDITIONAL CULVERT DETAILS

N

CTH NN

WEST ARTERIAL

100+00

105+00

110+00

200' LT

200' RT

50.0 STA 105+90.30, 3.21 LT
3H INLET Rim Elev. 1182.93

50.1 STA 105+90.30, 0.23 RT
3H INLET Rim Elev. 1182.94

STA 109+50.00

CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 29x45-INCH
APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 29x45-INCH

102.0 Rim Elev. 1182.10
STA 106+07 0.00 RT

1168.55

12' 12CPSS

102.1 I.E. 1176.34

1166.24

50.2 STA 105+90.30, 46.30 RT
APRON ENDWALL FOR
CULVERT PIPE REINFORCED
CONCRETE 12-INCH
I.E. ~~1176.58~~
1177.00

I.E. 1166.58

STA 113+00.00

CULVERT PIPE REINFORCED CONCRETE CLASS III 36-INCH
APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH

1166.46

1190
1185
1180
1175

"D"+00
2'0"+00
6'0"+00

SSPRC, 12"
Cl. III @ 6.85%

50.0 50.1

~~1181.97~~ ~~1181.97~~

~~1178.53~~ 1178.53
~~1178.44~~

~~1178.35~~ 1178.24
1178.24 ~~1178.24~~

STA 105+90.30

SSPRC, 12"
Cl. III @ 3.16%

50.2

1177.00

~~1176.58~~
~~1176.98~~

1200
1190
1180
1170

PROPOSED PROFILE

EXISTING GROUND

48 S.F.
12" 12CPSS

1178.36

STA 1176.34

STATE PROJECT NUMBER: 6675-00-71	HWY: CTH R	COUNTY: MARATHON	STORM SEWER DETAIL	SCALE, FEET 0 50 100	SHEET NO: 3 Z	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\storm sewer\022501_ss.dgn PLOT DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 41

N

NOTE
SEE CROSS SECTIONS FOR ADDITIONAL CULVERT DETAILS

1166.21

60.4 STA 119+70, 53.93 LT
APRON ENDWALLS FOR
CULVERT PIPE REINFORCED
CONCRETE 24-INCH
I.E. ~~1162.92~~
1162.87

60.5 STA 126+50, 55.27 LT
APRON ENDWALLS FOR
CULVERT PIPE REINFORCED
CONCRETE 24-INCH
I.E. ~~1162.04~~
1162.13

115+00 120+00 125+00

WEST ARTERIAL

1166.46

STA 119+70, 36.55 RT 60.0
9 MS INLET
12in Elev 1167.25

STA 126+50, 36.55 RT 60.1
9 MS INLET
Rim Elev. 1167.40

SIGN SIGN

USH 51/WIS 29

SSPRC, 24"
CL. III @ 1.0%

60.0 ~~1167.18~~ 1167.25

60.4
1162.87
~~1162.92~~
~~1162.98~~

STA 119+70

~~1163.81~~
1163.85

60.5
1162.13
~~1162.04~~
~~1162.17~~

SSPRC, 24"
CL. III @ 2.0%

1167.40 60.1
~~1167.18~~
~~1163.85~~
1164.00

STA 126+50

1180 1170 1160 1150

PROPOSED PROFILE
EXISTING GROUND
SPECIAL DITCH, LEFT
SPECIAL DITCH, RIGHT

1.60% 0.50% -1.10% 0.72% -0.70% 0.73% 0.66%

STATE PROJECT NUMBER: 6675-00-71	HWY: CTH R	COUNTY: MARATHON	STORM SEWER DETAIL	SCALE, FEET 0 50 100	SHEET NO: 33	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\storm sewer\022502_ss.dgn
PLOT DATE : 12/17/2003
PLOT BY : $$...plotuser...$$ PLOT NAME :
PLOT SCALE : $$.....plotscale.....$$
WISDOT/CADDS SHEET 41

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

NOTE
SEE CROSS SECTIONS FOR ADDITIONAL CULVERT DETAILS

60.6 STA 132+33.4, 54.82 LT
APRON ENDWALLS FOR CULVERT
PIPE REINFORCED CONCRETE 24-INCH
I.E. ~~1162.39~~ 1162.45

SEE STRUCTURE PLANS
FOR WALL INLET DETAILS

N

130+00 WEST ARTERIAL 135+00 140+00 LAKE WAUSAU

SIGN

60.2 STA 132+33.4, 36.55 RT
9 MS INLET
Rim Elev. 1166.96

CONCRETE SURFACE DRAIN TYPE B
(SEE SDD FOR CONCRETE SURFACE
DRAIN FLUME TYPE AT STRUCTURES.
SEE EROSION CONTROL PLANS FOR
RIPRAP AND FABRIC AREA)

USH 51/WIS 29

USH 51/WIS 29

SSPRC, 24"
CL. III @ 1.52%

60.2 1166.96
~~1167.18~~

60.6
1162.45
~~1162.39~~
~~1162.48~~

STA 132+33.4

~~1163.74~~ ~~1163.49~~
1163.66

1190
1180
1170
1160

PROPOSED PROFILE
-0.75%
0.65%
4.64%
SPECIAL DITCH, RIGHT
ORIGINAL GROUND

STATE PROJECT NUMBER: 6675-00-71	HWY: CTH R	COUNTY: MARATHON	STORM SEWER DETAIL	SCALE, FEET 0 50 100	SHEET NO: 34	E

SEE STRUCTURE PLANS
FOR WALL INLET DETAILS

60.7 STA 152+20, 46.84 RT
APRON ENDWALLS FOR CULVERT
PIPE REINFORCED CONCRETE 24-INCH
I.E. ~~1169.82~~ 1169.95

Top Water Elev. = 1160.87
1160.55

Top Water Elev. = 1160.25
INV. ~~1160.20~~ 1160.83
Bottom H2O 1160.20

145+00 150+00 155+00

WEST ARTERIAL

60.3 STA 152+00, 36.55 RT
9 MS INLET
12in Elev. 1174.30

SQUARING STATION
SIGN

USH 51/WIS 29

USH 51/WIS 29

STA 156+50
CULVERT PIPE REINFORCED
CONCRETE CLASS III 36-INCH

STA 156+00
APRON ENDWALLS FOR CULVERT
PIPE REINFORCED CONCRETE 36-INCH

STA 157+00
APRON ENDWALLS FOR CULVERT
PIPE REINFORCED CONCRETE 36-INCH

NOTE
SEE CROSS SECTIONS FOR ADDITIONAL CULVERT DETAILS

SSPRC, 24"
CL. III ~~0.10%~~

60.3 1174.30
~~1174.15~~

60.7
~~1169.92~~ 1169.95
~~1169.98~~

~~1170.80~~ 1170.85

PROPOSED PROFILE

0.75% 3.3% -0.50% 0.50% -0.50% 4.48%

SPECIAL DITCH, RIGHT

ORIGINAL GROUND

1190 1180 1170 1160

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: 6675-00-71	HWY: CTH R	COUNTY: MARATHON	STORM SEWER DETAIL	SCALE, FEET 0 50 100	SHEET NO: 35	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\storm sewer\022504_ss.dgn
PLOT DATE : 12/17/2003
PLOT BY : $$...plotuser...$$ PLOT NAME :
PLOT SCALE : $$.....plotscale.....$$
WISDOT/CADDS SHEET 41

2

STA. 164+17.75 77.0 LT
APRON ENDWALLS FOR CULVERT
PIPE REINFORCED CONCRETE 18-INCH
I.E. ~~1167.30~~ 1167.06

NOTE
SEE CROSS SECTIONS FOR ADDITIONAL CULVERT DETAILS

STA. 164+17.75 40.5 LT
3H INLET
Rim 1173.57

STA. 164+17.17 1.4 LT
3H INLET
Rim 1172.58

STA. 164+06.87 5.68 LT
3H INLET
Rim 1176.76

STA. 164+17.75 9.5 RT
3H INLET
Rim 1172.58

STA. 164+06.87 9.5 RT
3H INLET
Rim 1172.63

STA. 161+10 58.42 LT
APRON ENDWALL FOR CULVERT
PIPE REINFORCED CONCRETE 12-INCH
I.E. ~~1168.99~~ 1168.98

STA. 161+10 2.27 LT
3H INLET
Rim Elev 1174.24

STA. 159+88 49.63 LT
APRON ENDWALL FOR CULVERT
PIPE REINFORCED CONCRETE 12-INCH
I.E. ~~1168.30~~ 1168.32

STA. 159+88 8.10RT
3H INLET
Rim Elev 1174.88

STA. 166+01.04 51.9 RT
SPECIAL MANHOLE
Rim 1170.58

STA. 164+99.11 49.0 RT
SPECIAL MANHOLE
Rim 1171.31

CONNECT TO EXISTING
84" STORM SEWER
FIELD VERIFY LOCATION
AND ELEVATION

REMOVE SS
(36-INCH HDPE)
165+00

CAUTION

REMOVE
INLET

STA. 166+87.38 40.5 RT
3H INLET
Rim Elev. 1170.55

STA. 164+17.75 40.5 RT
3H INLET
Rim Elev 1171.81

INLET TO
REMAIN

STA. 164+06.87 40.5 RT
3H INLET
Rim Elev 1171.84

STA. 161+10 9.5 RT
3H INLET
Rim Elev. 1174.28

STA. 161+00 9.5 RT
3H INLET
Rim Elev. 1174.32

STA. 166+97.38 40.5 RT
3H INLET
Rim Elev. 1170.50

STA. 166+97.38 3.96 RT
3H INLET
Rim Elev. 1171.24

STA. 166+87.38 40.5 LT
3H INLET Rim Elev. 1172.19

STA. 166+97.38 40.5 LT
3H INLET Rim Elev. 1172.16

STA. 166+87.38 9.42 LT
3H INLET Rim Elev. 1171.32

STA. 166+97.38 8.3 LT
3H INLET Rim Elev. 1171.32

REMOVE SS
(12-INCH)

REMOVE
INLETS

SEAL PIPE

CONNECT TO EXISTING
84" STORM SEWER
FIELD VERIFY LOCATION
AND ELEVATION

STA. 169+54 40.5 LT
3H SPECIAL INLET
Rim Elev 1170.56

STA. 169+74 40.5 LT
3H SPECIAL INLET
Rim Elev 1170.46

STA. 169+54 ~~1.5~~ 2.5 RT
3H INLET
Rim Elev 1169.95

STA. 169+74 ~~1.5~~ 2.5 RT
3H INLET
Rim Elev 1170.09

STA. 169+79 9.5 RT
3H INLET
Rim Elev 1170.32

STA. 169+15.64 42.1 RT
3H INLET
Rim Elev. 1169.77

STA. 169+35 43.4 RT
3H INLET
Rim Elev 1169.80

STA. 169+54 44.7 RT
3H INLET
Rim Elev. 1169.79

STA. 169+54 9.5 RT
3H INLET
Rim Elev 1170.10

170+00

WEST ARTERIAL

CAUTION

SHEFFMAN STREET

28TH AVENUE

Rim Elev 1175.33

STA. 57"TW.+01.76 12.5 RT
12 INLET
REMOVE EXISTING INLET AND CASTING. CONNECT NEW INLET TO EXISTING PIPE & CONNECT NEW PIPE TO EXISTING PIPE. FIELD VERIFY AND MATCH EXISTING ELEVATIONS.

REMOVE SS
(12-INCH)
SEAL PIPE

REMOVE
INLETS

REMOVE
INLET

REMOVE SS
(12-INCH)

PROPOSED PROFILE

ORIGINAL GROUND

EXISTING-SSPRC 84"
FIELD VERIFY
LOCATION AND DEPTH

1169.58
1169.53

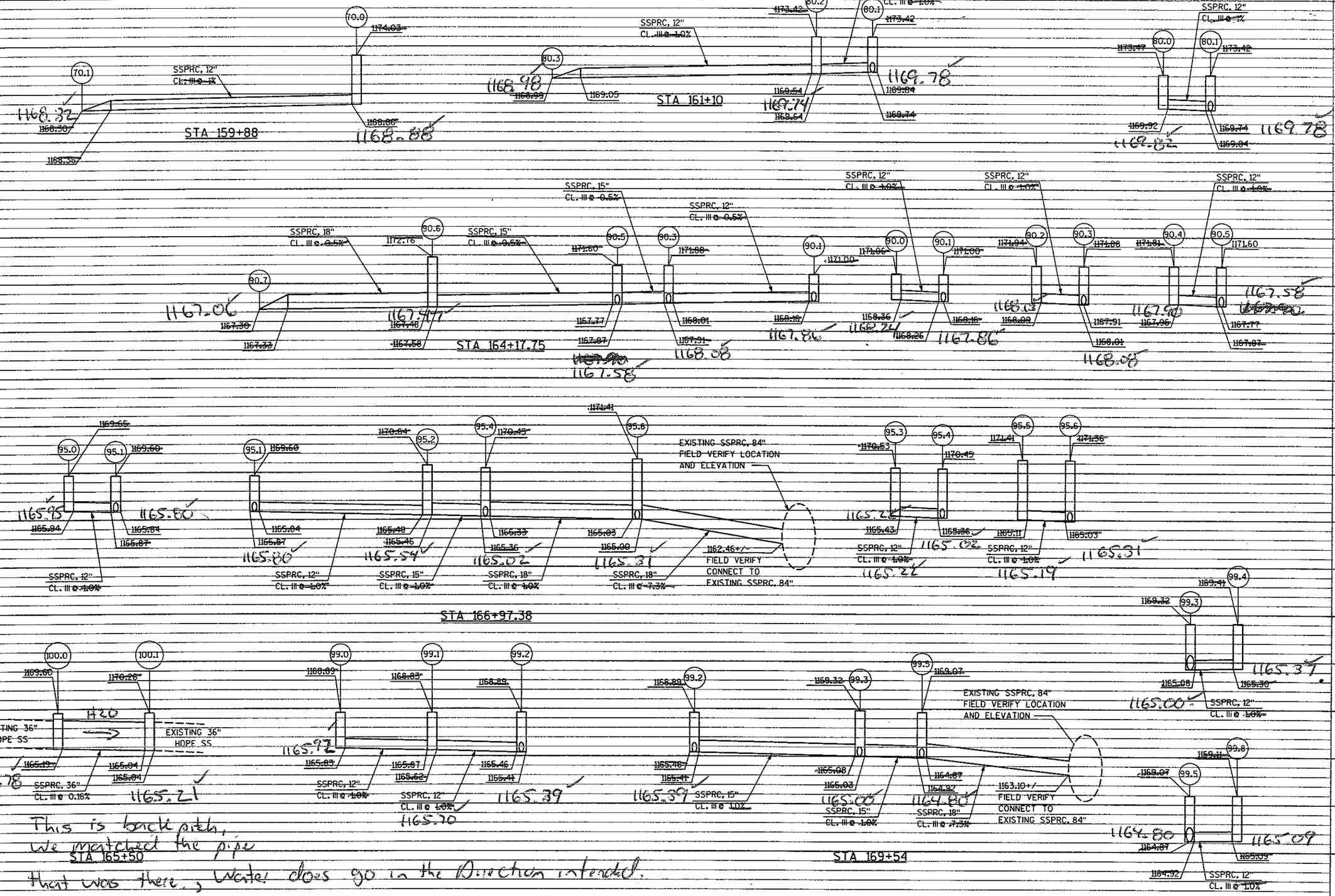
101.0
1174.39
14'-SSPRC, 12"
CL. III @ ~~8.77%~~
1171.23
+/-~~1171.38~~
MATCH EXISTING
FIELD VERIFY
+/-1170.33
MATCH EXISTING
FIELD VERIFY

1180
1170
1160
1150

STATE PROJECT NUMBER: 6675-00-71	HWY: CTH R	COUNTY: MARATHON	STORM SEWER DETAIL	SCALE, FEET 0 50 100	SHEET NO: 36	E

FILE NAME : P:\40xx\4025\Plan\6675-00-71\Storm Sewer\022505_ss.dgn
PLOT DATE : 02/11/2004
PLOT BY : $$...plotuser...$$ PLOT NAME :
PLOT SCALE : $$.....plotscale.....$$
WISDOT/CADDS SHEET 41

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



This is back pitch, we matched the pipe that was there, Water does go in the Direction intended.

STATE PROJECT NUMBER: 6675-00-70	HWY: CTH R	COUNTY: MARATHON	STORM SEWER DETAIL	SCALE, FEET	SHEET NO: 37	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\storm sewer\022506_ss.dgn PLOT DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 41

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

Existing

TO	TO
51	29
↑	↑

REMOVE
SOUTH
M3-1
24" X 12"
COUNTY R
M1-5A
24" X 24"
M6-1
21" X 21"
MOVE TO SHERMAN ST.

JCT
M2-1
21" X 15"
COUNTY R
M1-5A
24" X 24"
REMAIN

WEST
M3-4
24" X 12"
COUNTY NN
M1-5A
24" X 24"
M6-1
21" X 21"
REMOVE

END
M4-6
24" X 12"
COUNTY R
M1-5A
24" X 24"
REMOVE

REMOVE
SOUTH
M3-3
24" X 12"
COUNTY R
M1-5A
24" X 24"
MOVE

COUNTY R
M1-5A
24" X 24"
M6-4
21" X 21"
J13-1
(6)

This sign was moved across the intersection

TO TO
M4-5 M4-5
24" X 12" 24" X 12"
51 29 COUNTY NN
M1-4 M1-6 M1-5A
24" X 24" 24" X 24" 24" X 24"
M6-1 M6-1 M6-4
21" X 21" 21" X 21" 21" X 21"
J3-3
(5)

LEFT LANE MUST TURN LEFT
R3-7ZL
30" X 30"
REMOVE

RIGHT LANE MUST TURN RIGHT
R3-7ZR
30" X 30"
REMOVE

REMOVE END M4-5 24" X 12" | REMOVE EAST M4-5 24" X 12" | TO M4-5 24" X 12" | TO M4-5 24" X 12"
COUNTY R M1-5A 24" X 24" | COUNTY NN M1-5A 24" X 24" | 51 M1-4 24" X 24" | 29 M1-6 24" X 24"
(1) M6-1 21" X 21" | M6-1 21" X 21" | M6-1 21" X 21" | M6-1 21" X 21"
REMOVE
(2) M6-4 21" X 21"
MOVE
(3)

REMOVE
SOUTH
M3-1
24" X 12"
COUNTY R
M1-5A
24" X 24"
M6-1
21" X 21"
MOVE TO SHERMAN ST.

COUNTY R
M1-5A
24" X 24"
M6-4
21" X 21"
J13-1
(4)
Mounted on Signal pole

JCT
M2-1
21" X 15"
COUNTY R
M1-5A
24" X 24"
REMAIN

LEGEND
- PROPOSED SIGN MOUNTED ON POST
- EXISTING SIGN MOUNTED ON POST
- (XX) DESIGNATES SIGN NUMBER

ULTIMATE CONSTRUCTION OF CTH NN AND THE WEST ARTERIAL SOUTH OF STA 101+15 TO BE CONSTRUCTED BY OTHERS UNDER PROJECT 6675-00-70

ADDITIONAL PERMANENT SIGNING REQUIRED FOR CTH NN AND THE WEST ARTERIAL SOUTH OF STA 101+15 TO BE COMPLETED UNDER PROJECT 6675-00-70

40"BW"+00 BLUEBIRD LANE
WEST ARTERIAL
CTH NN
MATCHLINE 101+00
100+00
105+00
0"D"+00
1"D"+00
2"D"+00
POOL
JCT County NN
North County R
Speed limit 35 mph

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	PERMANENT SIGNING	SCALE, FEET 0 50 100	SHEET NO: 38	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\signing\023201_ps.dgn PLOT DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

LEGEND

- PROPOSED SIGN MOUNTED ON POST
- EXISTING SIGN MOUNTED ON POST
- (XX) DESIGNATES SIGN NUMBER

N

W3-3
36" X 36"
9

TO M4-5 24" X 12" | TO M4-5 24" X 12"
51 M1-4 24" X 24" | 29 M1-6 24" X 24" | COUNTY R M1-5A 24" X 24"
M5-1L 21" X 21" | M5-1L 21" X 21" | M6-1 21" X 21"
J2-3
11

JCT M2-1 21" X 15"
COUNTY NN M1-5A 24" X 24"
J1-1
13

R4-7
36" X 48"
14

W6-1
36" X 36"
17

W6-3
30" X 30"
15

SPEED LIMIT 35
R2-1
24" X 30"
12

W6-2
36" X 36"
8

W4-2R
36" X 36"
19

COUNTY R
M1-5A
24" X 24"
10

NO PASSING ZONE
W14-3
48" X 36"
(TO BE PLACED BASED ON ACTUAL NO PASSING ZONE LOCATED)
18

adopt as highway by others

ULTIMATE CONSTRUCTION OF CTH NN AND THE WEST ARTERIAL SOUTH OF STA 101+15 TO BE CONSTRUCTED BY OTHERS UNDER PROJECT 6675-00-70

ADDITIONAL PERMANENT SIGNING REQUIRED FOR CTH NN AND THE WEST ARTERIAL SOUTH OF STA 101+15 TO BE COMPLETED UNDER PROJECT 6675-00-70

WEST ARTERIAL
CTH NN
MATCHLINE 101+00
MATCHLINE 114+00
100+00
105+00
110+00
0"D"+00
1"D"+00
2"D"+00
199'LT+00
198'LT+00
200'LT+00
202'LT+00
902'LT+00
SIGN
W/I SIGN
FILLER CAPS
CANOPY
M.H.
M.G.P.
G.P.
WALLS
ANT.
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:6675-00-71	HWY: CTH R	COUNTY: MARATHON	PERMANENT SIGNING	SCALE, FEET 0 50 100	SHEET NO: 39	E

LEGEND

- PROPOSED SIGN MOUNTED ON POST
- EXISTING SIGN MOUNTED ON POST
- (XX) DESIGNATES SIGN NUMBER

N

MATCHLINE 114+00

115+00

120+00

WEST ARTERIAL

125+00

MATCHLINE 129+50

SIGN

EXISTING SIGN ON USH 51 SB
TO REMAIN IN PLACE, GRADE AROUND SIGN

EXISTING SIGN ON USH 51 SB
TO REMAIN IN PLACE, GRADE AROUND SIGN

SIGN

USH 51/WIS 29

USH 51/WIS 29

324
1174.276

REMOVE DELINEATORS
ON OUTSIDE SOUTHBOUND
SHOULDER OF USH 51/29 FROM
STA 113+50 - 155+50

SIGN

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	PERMANENT SIGNING	SCALE, FEET 0 50 100	SHEET NO: 40	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\signing\023203_ps.dgn PLOT DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

2

N

LEGEND

- PROPOSED SIGN MOUNTED ON POST
- EXISTING SIGN MOUNTED ON POST
- (XX) DESIGNATES SIGN NUMBER

W5-52L
12" X 36"
(21)

SPEED LIMIT 35
R2-1
24" X 30"
(23)

W5-52L
12" X 36"
(26)

130+00

WEST ARTERIAL

135+00

140+00

LAKE WAUBAU

145

MATCHLINE
144+75

BIG RIB RIVER
(24)
13-1
42" X 24"

SIGN
EXISTING SIGN ON USH 51 SB
TO REMAIN IN PLACE, GRADE AROUND SIGN
(25)

MATCHLINE
128+50

SIGN
EXISTING SIGN ON USH 51 SB
TO REMAIN IN PLACE, GRADE AROUND SIGN

USH 51/WIS 29

(22)
SPEED LIMIT 35
R2-1
24" X 30"

USH 51/WIS 29

W5-52R
12" X 36"

SIGN

REMOVE DELINEATORS ON OUTSIDE SOUTHBOUND SHOULDER OF USH 51/29 FROM STA 113+50 - 155+50

SIGN

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:6675-00-71	HWY: CTH R	COUNTY: MARATHON	PERMANENT SIGNING	SCALE, FEET 0 50 100	SHEET NO: 41	E

FILE NAME : P:\40xx\4025\Plan\6675-00-71\SIGNING\023204_ps.dgn PLOT DATE : 02/12/2004 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

LEGEND

- PROPOSED SIGN MOUNTED ON POST
- EXISTING SIGN MOUNTED ON POST
- (XX) DESIGNATES SIGN NUMBER

N

MATCHLINE 162+00

2

W5-52R
12" X 36"
29

BIG RIB RIVER
I3-1
42" X 24"
32

W5-52R
12" X 36"
34

(TO BE PLACED BASED ON ACTUAL NO PASSING ZONE LOCATED)

NO PASSING ZONE
W14-3
48" X 36"
36

42

NO PARKING ANY TIME
R7-1D
18" X 24"

W6-3
30" X 30"
40

DO NOT ENTER
R5-1
30" X 30"
38

39

R4-7
36" X 48"

41

NO PARKING ANY TIME
R7-1D
18" X 24"

160+00

145+00

150+00

WEST ARTERIAL

155+00

MATCHLINE 144+75

W5-52L
12" X 36"
31

EXISTING SIGN ON USH 51 SB TO REMAIN IN PLACE, GRADE AROUND SIGN

GUAGING STATION

SIGN

EXISTING SIGN ON USH 51 SB TO REMAIN IN PLACE, GRADE AROUND SIGN

37

W6-1
36" X 36"

EXISTING SIGN ON USH 51 SB TO REMAIN IN PLACE, GRADE AROUND SIGN

REMOVE DELINEATORS ON OUTSIDE SOUTHBOUND SHOULDER OF USH 51/29 FROM STA 113+50 - 155+50

USH 51/WIS 29

USH 51/WIS 29

SIGN

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	PERMANENT SIGNING	SCALE, FEET 0 50 100	SHEET NO: 42	E

FILE NAME : P:\40xx\4025\Plan\6675-00-71\SIGNING\023205_ps.dgn PLOT DATE : 02/12/2004 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

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

LEGEND

- PROPOSED SIGN MOUNTED ON POST
- EXISTING SIGN MOUNTED ON POST
- (XX) DESIGNATES SIGN NUMBER
- * MOUNT ON SIGNAL POLE SEE SIGNAL PLAN FOR MOUNTING DETAILS

WEST ARTERIAL

SHERMAN STREET

28TH AVENUE

28TH STREET

D3

SHERMAN STREET

D3

MOVE

MATCHLINE 162+00

165+00

170+00

171+99

55"TW"+00

60"TW"+00

00+SH"+00

25"SH"+00

NORTHWESTERN RR

60	W4-2R 36" X 36"				
61	R4-7 24" X 30"	Bond to pole			
62	R7-1D 18" X 24"				
63	M1-5A 24" X 24"				
64	M4-12 24" X 6"				
65	D11-1 24" X 18"				
66	D11-1 24" X 18"				
67	M4-5 24" X 12" (TO)	M4-5 24" X 12" (TO)	M3-3 24" X 12" (SOUTH)	M3-2 24" X 12" (EAST)	M4-6 24" X 12" (END)
	M1-4 24" X 24" (51)	M1-6 24" X 24" (29)	M1-5A 24" X 24" (COUNTY R)	M6-1 21" X 21"	M6-1 21" X 21"
	J33-3				
68	R1-1F 36" X 36"				
69	R1-1F 36" X 36"				
70	R4-7 24" X 30"				
71	R4-7 24" X 30"				
72	M1-5A 24" X 24"	M6-1 21" X 21"	J13-1		
73	M1-5A 24" X 24"	J1-1			
74	M2-1 21" X 15"	M1-5A 24" X 24"	J1-1		
75	M2-1 21" X 15"	M1-5A 24" X 24"	J1-1		
76	R3-6L 42" X 48"				
77	R3-6R 42" X 48"				
78	R4-7 24" X 30"	Bond to pole			
79	R3-5SL 24" X 30"				
80	R3-8a (MOD) 48" X 30"				

REMOVE FROM SIGN BRIDGE

MOUNT ON SIGN BRIDGE

MOVED FROM CTH NN

MOVED FROM CTH NN

REMOVE

moved (TO Sign) pole

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	PERMANENT SIGNING	SCALE, FEET 0 50 100 / SHEET NO: 43 E

FILE NAME : p:\40xx\4025\plan\6675-00-71\signing\023206_ps.dgn PLOT DATE : 12/17/2003 PLOT BY : **...plotuser...** PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : **.....plotscale.....** 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

STA. 147+50.00, 26.55' LT
LM-25

147+00

III-150-12-5-1, 3

148+00

WEST ARTERIAL

STA. 149+00.00, 26.55' LT
LM-24

149+00

III-150-12-5-2, 4

STA. 150+00.00, 26.55' LT
LM-23

150+00

4-#4
1-#6 GRD.

III-150-12-5-1, 3

151+00

MATCH LINE 151+50

N

SIGN

[8] GUAGING STATION

GENERAL NOTES

1. ALL STREET LIGHTING SHALL BE FED FROM TRAFFIC CONTROL CABINET LCC-1

2. CONDUIT SHALL BE PLACED 24" BELOW GRADE AND RUN PARALLEL TO CURB AND/OR ROADWAY.

3. ALL LIGHTING CONDUCTORS SHALL BE RUN IN 2" PVC CONDUIT UNLESS OTHERWISE NOTED.

4. LIGHT POLE AND BASE REMOVALS ARE PAID FOR UNDER THE TRAFFIC SIGNAL ITEMS.

5. LIGHTING POLE SHALL ACSO CARRY TRAFFIC SIGNAL FIXTURES. WIRING FOR LIGHTS LM-1, LM-2, AND LM-3 SHALL BE INSTALLED IN THE TRAFFIC SIGNAL CONDUIT.

STREET LIGHTING LEGEND

- POLE, LUMINAIRE, AND MAST ARM
- LM-X POLE DESIGNATION
- ------- 2" NON-METALLIC CONDUIT, SCHEDULE 40, UNLESS OTHERWISE NOTED
- PULL BOX

LIGHTING UNIT CODE

III - 150 - 3.7 - 5 - 1

- 1 — CIRCUIT NUMBER
- 5 — BASE TYPE (OR SIGNAL BASE NUMBER)
- 3.7 — MAST ARM BRACKET LENGTH IN FEET
- 150 — LAMP WATTAGE
- III — DISTRIBUTION TYPE

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	LIGHTING	SCALE, FEET 0 20 40	SHEET NO: 44	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\details\023501_lp.dgn PLOT DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

STA. 152+00.00, 26.55' LT
LM-22

MATCH LINE 152+50

152+00

III-150-12-5-2, 4

STA. 153+50.00, 26.55' LT
LM-21

153+00

154+00

III-150-12-5-1, 3

STA. 155+00.00, 26.55' LT
LM-20

WEST ARTERIAL

155+00

STA. 156+25.00, 26.55' LT
LM-19

4-#4
1-#6 GRD.

156+00

III-150-12-5-2, 4

III-150-12-5-1, 3

MATCH LINE 157+00

N

GENERAL NOTES

1. ALL STREET LIGHTING SHALL BE FED FROM TRAFFIC CONTROL CABINET LCC-1
2. CONDUIT SHALL BE PLACED 24" BELOW GRADE AND RUN PARALLEL TO CURB AND/OR ROADWAY.
3. ALL LIGHTING CONDUCTORS SHALL BE RUN IN 2" PVC CONDUIT UNLESS OTHERWISE NOTED.
4. LIGHT POLE AND BASE REMOVALS ARE PAID FOR UNDER THE TRAFFIC SIGNAL ITEMS.
5. LIGHTING POLE SHALL ALSO CARRY TRAFFIC SIGNAL FIXTURES. WIRING FOR LIGHTS LM-1, LM-2, AND LM-3 SHALL BE INSTALLED IN THE TRAFFIC SIGNAL CONDUIT.

LIGHTING UNIT CODE

III - 150 - 3.7 - 5 - 1

- CIRCUIT NUMBER
- BASE TYPE (OR SIGNAL BASE NUMBER)
- MAST ARM BRACKET LENGTH IN FEET
- LAMP WATTAGE
- DISTRIBUTION TYPE

STREET LIGHTING LEGEND

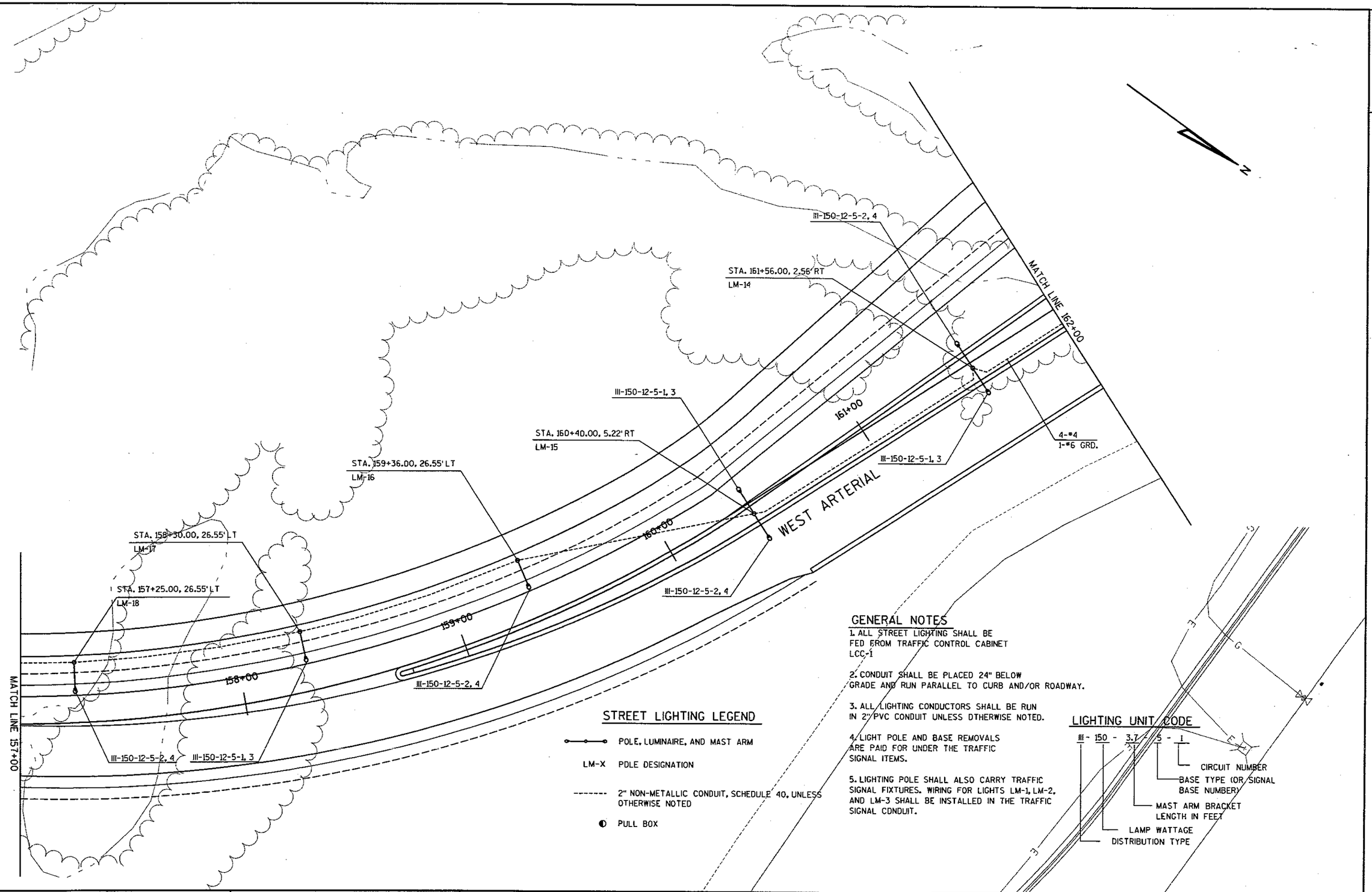
- POLE, LUMINAIRE, AND MAST ARM
- LM-X POLE DESIGNATION
- 2" NON-METALLIC CONDUIT, SCHEDULE 40, UNLESS OTHERWISE NOTED
- PULL BOX

SIGN

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	LIGHTING	SCALE, FEET 0 20 40	SHEET NO: 45	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\details\023502_lp.dgn PLOT DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ 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



STREET LIGHTING LEGEND

- POLE, LUMINAIRE, AND MAST ARM
- LM-X POLE DESIGNATION
- ------- 2" NON-METALLIC CONDUIT, SCHEDULE 40, UNLESS OTHERWISE NOTED
- PULL BOX

GENERAL NOTES

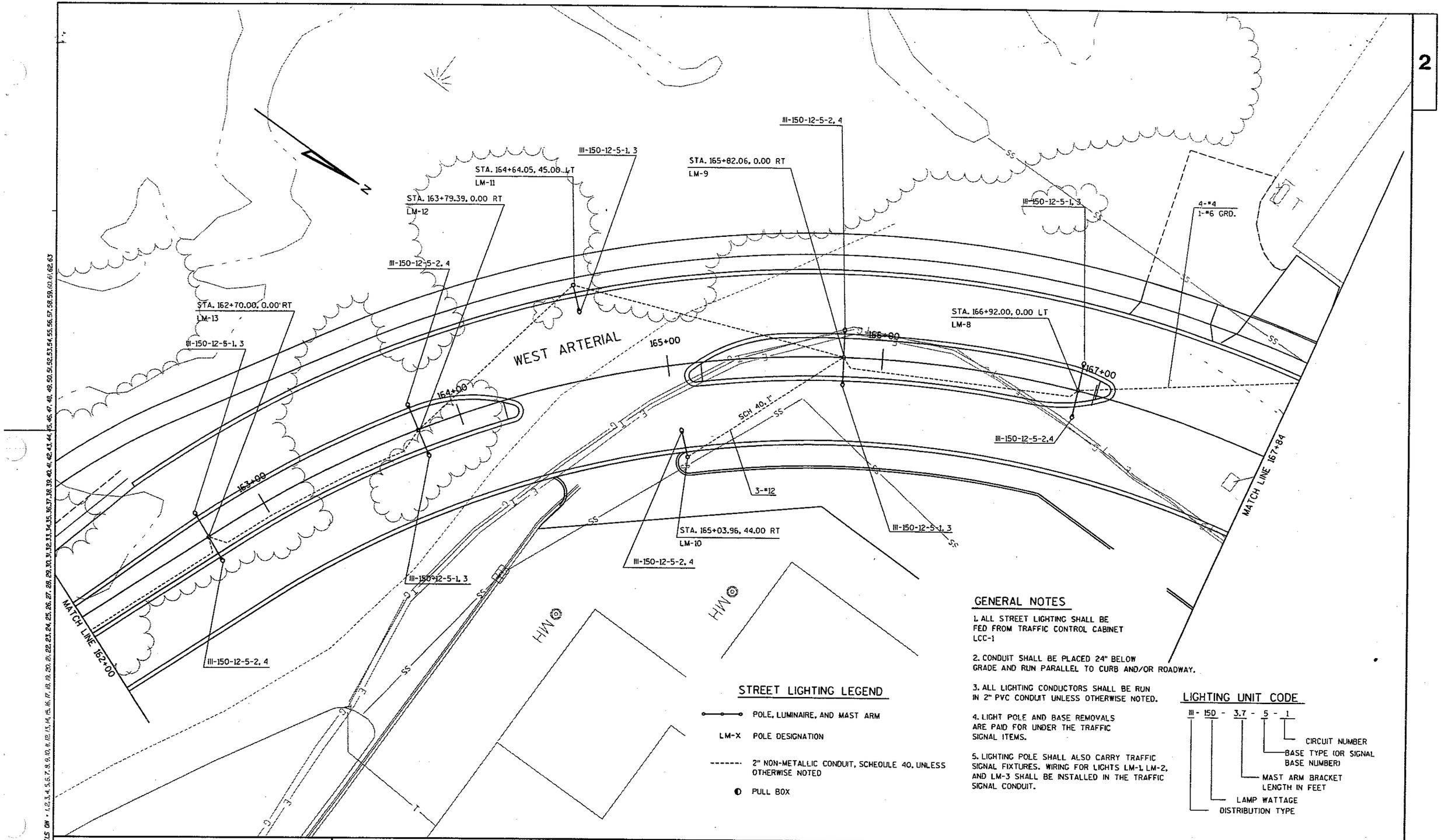
1. ALL STREET LIGHTING SHALL BE FED FROM TRAFFIC CONTROL CABINET LCC-1
2. CONDUIT SHALL BE PLACED 24" BELOW GRADE AND RUN PARALLEL TO CURB AND/OR ROADWAY.
3. ALL LIGHTING CONDUCTORS SHALL BE RUN IN 2" PVC CONDUIT UNLESS OTHERWISE NOTED.
4. LIGHT POLE AND BASE REMOVALS ARE PAID FOR UNDER THE TRAFFIC SIGNAL ITEMS.
5. LIGHTING POLE SHALL ALSO CARRY TRAFFIC SIGNAL FIXTURES. WIRING FOR LIGHTS LM-1, LM-2, AND LM-3 SHALL BE INSTALLED IN THE TRAFFIC SIGNAL CONDUIT.

LIGHTING UNIT CODE

III - 150 - 3.7 / 5 - 1

- CIRCUIT NUMBER
- BASE TYPE (OR SIGNAL BASE NUMBER)
- MAST ARM BRACKET LENGTH IN FEET
- LAMP WATTAGE
- DISTRIBUTION TYPE

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	LIGHTING	SCALE, FEET 0 20 40	SHEET NO: 46	E



GENERAL NOTES

1. ALL STREET LIGHTING SHALL BE FED FROM TRAFFIC CONTROL CABINET LCC-1

2. CONDUIT SHALL BE PLACED 24" BELOW GRADE AND RUN PARALLEL TO CURB AND/OR ROADWAY.

3. ALL LIGHTING CONDUCTORS SHALL BE RUN IN 2" PVC CONDUIT UNLESS OTHERWISE NOTED.

4. LIGHT POLE AND BASE REMOVALS ARE PAID FOR UNDER THE TRAFFIC SIGNAL ITEMS.

5. LIGHTING POLE SHALL ALSO CARRY TRAFFIC SIGNAL FIXTURES. WIRING FOR LIGHTS LM-1, LM-2, AND LM-3 SHALL BE INSTALLED IN THE TRAFFIC SIGNAL CONDUIT.

STREET LIGHTING LEGEND

- POLE, LUMINAIRE, AND MAST ARM
- LM-X POLE DESIGNATION
- ------- 2" NON-METALLIC CONDUIT, SCHEDULE 40, UNLESS OTHERWISE NOTED
- PULL BOX

LIGHTING UNIT CODE

III - 150 - 3.7 - 5 - 1

- III — DISTRIBUTION TYPE
- 150 — LAMP WATTAGE
- 3.7 — MAST ARM BRACKET LENGTH IN FEET
- 5 — BASE TYPE (OR SIGNAL BASE NUMBER)
- 1 — CIRCUIT NUMBER

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	LIGHTING	SCALE, FEET 0 20 40	SHEET NO: 47	E

FILE NAME : P:\40xx\4025\Plan\6675-00-71\DETAILS\023504_LP.dgn PLOT DATE : 01/30/2004 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ 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

STREET LIGHTING LEGEND

- POLE, LUMINAIRE, AND MAST ARM
- LM-X POLE DESIGNATION
- 2" NON-METALLIC CONDUIT, SCHEDULE 40, UNLESS OTHERWISE NOTED
- PULL BOX
- TRAFFIC OR LIGHTING CONTROL CABINET ON CONCRETE CONTROL CABINET BASE TYPE 9

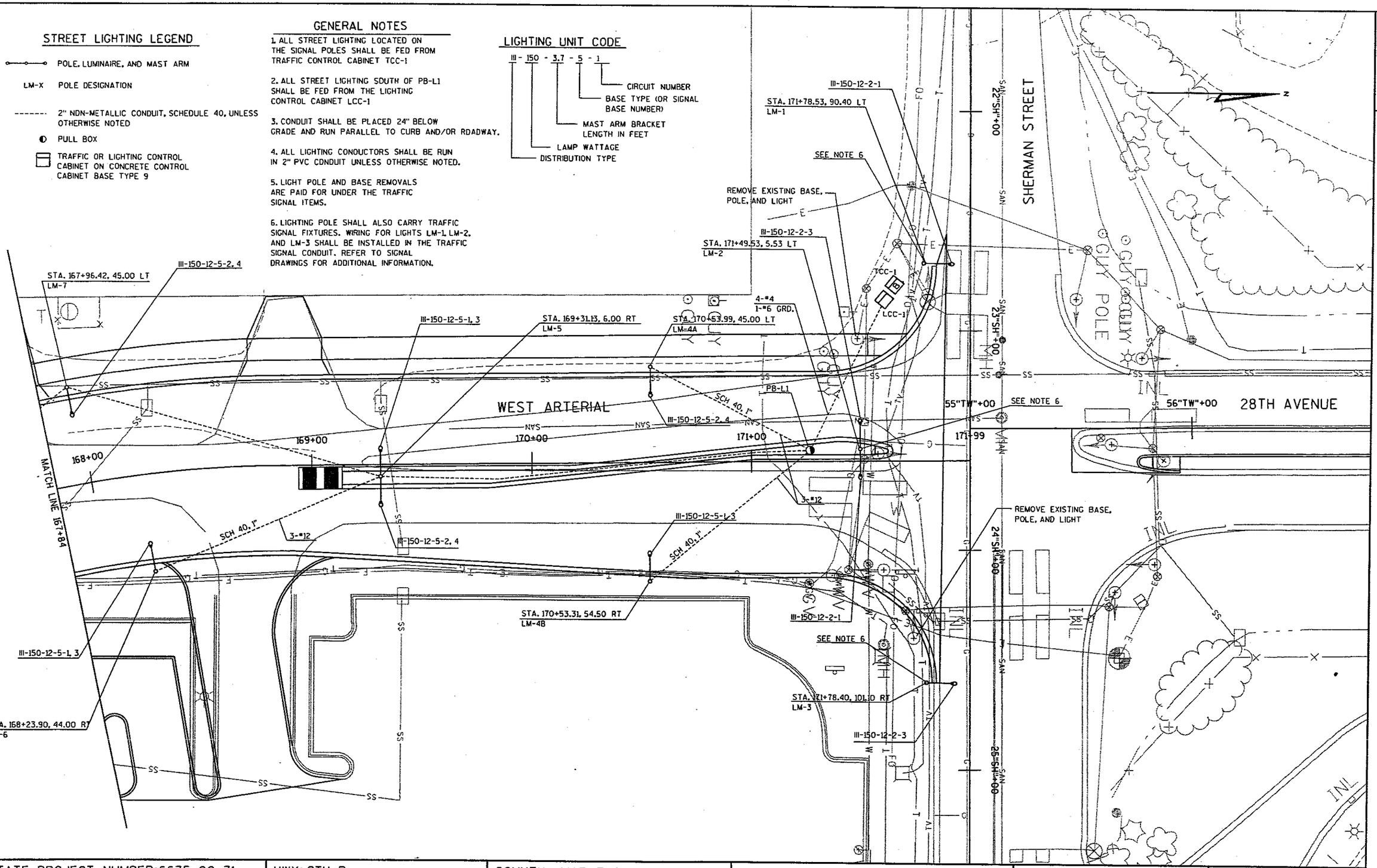
GENERAL NOTES

1. ALL STREET LIGHTING LOCATED ON THE SIGNAL POLES SHALL BE FED FROM TRAFFIC CONTROL CABINET TCC-1
2. ALL STREET LIGHTING SOUTH OF PB-L1 SHALL BE FED FROM THE LIGHTING CONTROL CABINET LCC-1
3. CONDUIT SHALL BE PLACED 24" BELOW GRADE AND RUN PARALLEL TO CURB AND/OR ROADWAY.
4. ALL LIGHTING CONDUCTORS SHALL BE RUN IN 2" PVC CONDUIT UNLESS OTHERWISE NOTED.
5. LIGHT POLE AND BASE REMOVALS ARE PAID FOR UNDER THE TRAFFIC SIGNAL ITEMS.
6. LIGHTING POLE SHALL ALSO CARRY TRAFFIC SIGNAL FIXTURES. WIRING FOR LIGHTS LM-1, LM-2, AND LM-3 SHALL BE INSTALLED IN THE TRAFFIC SIGNAL CONDUIT. REFER TO SIGNAL DRAWINGS FOR ADDITIONAL INFORMATION.

LIGHTING UNIT CODE

III - 150 - 3.7 - 5 - 1

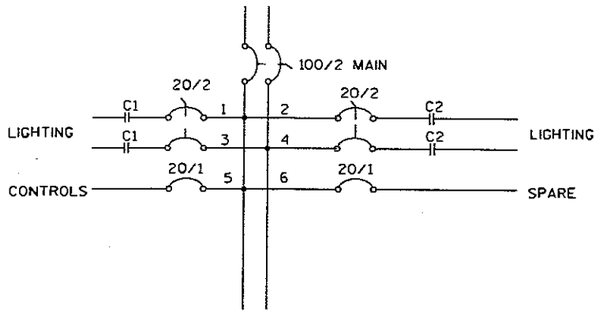
- CIRCUIT NUMBER
- BASE TYPE (OR SIGNAL BASE NUMBER)
- MAST ARM BRACKET LENGTH IN FEET
- LAMP WATTAGE
- DISTRIBUTION TYPE



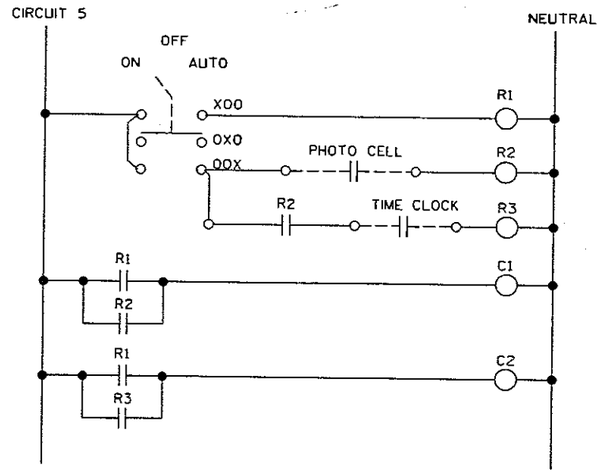
STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	LIGHTING	SCALE, FEET 0 20 40	SHEET NO: 48	E

FILE NAME : P:\40xx\4025\Plan\6675-00-71\DETAILS\023505_LP.dgn PLOT DATE : 01/29/2004 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

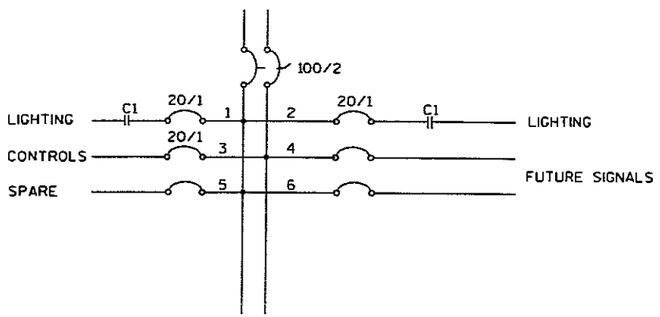
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



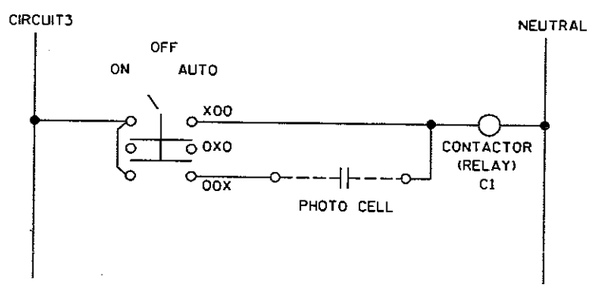
LCC-1
NO SCALE



LCC-1 CONTROL SCHEMATIC
NO SCALE



TCC-1
NO SCALE



TCC-1 CONTROL SCHEMATIC
NO SCALE

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:6675-00-71	HWY: CTH R	COUNTY: MARATHON	LIGHTING CIRCUIT DETAILS	SCALE, FEET 0 N/A	SHEET NO: 49	E

FILE NAME : P:\40xx\4025\Plan\6675-00-71\DETAILS\023506_LP.dgn PLOT DATE : 01/29/2004 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

CONSTRUCTION NOTES

CONDUIT RUNS FROM CONTROL BOX TO ADJACENT PULL BOX SHALL BE (5) 3-INCH AND ONE (1) 2-INCH.

CONDUIT FROM 24" PULL BOX TO 12" PULL BOX SHALL BE ONE (1) 2-INCH.

CONDUIT FROM 24" PULL BOX TO 24" PULL BOX SHALL BE TWO (2) 3-INCH.

CONDUIT FROM SIGNAL BASE TO PULL BOX SHALL BE 2-INCH.

FOLOING STOP SIGNS SHALL BE INSTALLED ON SIGNAL POLES SB-4.

TERMINATION OF BONDING JUMPERS IN PULL BOXES TO BE LUG AND BOLT CONNECTION AND CAULKED (SILICONE) AFTER INSTALLATION.

EACH LOOP DETECTOR SHALL HAVE A SEPARATE LEAD-IN CABLE TO THE CONTROL CABINET.

EXACT LOCATIONS OF PULL BOXES TO BE DETERMINED IN THE FIELD

ALL PROPOSED METAL PULL BOXES THAT CARRY 50 VOLTS OR MORE SHALL HAVE GROUNDING LUGS.

* LOOP DETECTOR LOCATION IS TO FRONT CENTER OF LOOP.

LOOPS SHALL BE CENTERED IN THEIR RESPECTIVE LANES, UNLESS OTHERWISE NOTED.

ANY NEW CONDUIT RUNS WHERE EXISTING GROUNDING WIRE OR SIGNAL WIRE IS NOT LONG ENOUGH, SHALL BE REPLACED.

ALL CONDUIT RUNS SHALL HAVE AN EXTRA PULL WIRE INSTALLED TO PULL FUTURE CABLE. COSTS FOR ADDITIONAL PULL WIRE SHALL BE INCLUDED IN COSTS FOR ALL WIRE INSTALLATION

ALL LENSES ARE 12-INCH

SIGNALS WILL BE CONTROLLED FROM EXISTING CONTROL CABINET EXCB1.
CB1 WILL BE INSTALLED FOR THE LIGHTING CONTROL CABINET (SEE LIGHTING PLANS).
NOTE: CONTROL CABINET AT CB1 WILL BE USED FOR CONTROL OF TRAFFIC SIGNALS TO BE COMPLETED UNDER PROJECT 1166-09-79

CONFIGURATION WITH HEAD NUMBERS

3-V	3-V	4-V	5-V	4-H
EX8D	EX2A, EX4A, EX6A	EX2C, EX2D, EX4C, EX6C, EX8C	EX8A	EX2B, EX4B, EX6B, EX8B

LEGEND

- CB — CONCRETE CONTROL CABINET BASE, TYPE 9
- PROPOSED NON-METALLIC CONDUIT
- EXISTING NON-METALLIC CONDUIT
- EXISTING TRAFFIC SIGNAL
- EXISTING PULL BOX
- SB-1 — SIGNAL HEAD, PEDESTAL MOUNT (TYPE 1 BASE, ALUMINUM STANDARD)
- XX — SIGNAL HEAD, MAST-ARM MOUNT (TYPE 2 BASE, TYPE 2 POLE)
- XX — SIGNAL HEAD, MAST-ARM MOUNT WITH LUMINAIRE (TYPE 2 BASE, TYPE 3 POLE)
- PH4-1 / PED84-1 — PEDESTRIAN HEAD WITH PUSH BUTTON
- PB-1 — PULL BOXES, STEEL, 24-IN X 42-IN
- PB-1 — PULL BOXES, STEEL, 24-IN X 36-IN
- PB-1 — PULL BOXES, STEEL, 12-IN X 24-IN
- 6X6 LOOP 3 TURNS — LOOP DETECTOR CONDUIT, INSTALLED INTO BASE COURSE
- 3-V 2C — SIGNAL HEAD CONFIGURATION/ IDENTIFICATION

REMOVE AND SALVAGE EXISTING SIGNAL POLE & EQUIPMENT FROM EX-SB5 AND INSTALL SIGNAL EQUIPMENT ON PROPOSED LIGHT POLE AND BASE (SB-1).

CONNECT CONDUIT INTO EXISTING CONDUIT

LIGHTING CONTROL CABINET LCC1 TO BE PLACED ON CB1 (SEE LIGHTING PLANS)

REMOVE EXISTING PB

REMOVE AND SALVAGE EXISTING SIGNAL EQUIPMENT & TROMBONE ARM FROM EX-SB6 AND INSTALL ON PROPOSED TYPE 2 POLE AND TYPE 2 BASE (SB-2).

ABANDON EXISTING LOOP DETECTOR

PROTECT EXISTING LOOP DETECTOR (TYP. OF 4)

REMOVE AND SALVAGE EXISTING SIGNAL POLE & EQUIPMENT FROM EX-SB2 AND INSTALL SIGNAL EQUIPMENT ON EX-SB11

REMOVE AND SALVAGE EXISTING SIGNAL POLE & EQUIPMENT FROM EX-SB 7 AND INSTALL SIGNAL EQUIPMENT ON PROPOSED LIGHT POLE, AND BASE(SB-3).

PROTECT EXISTING LOOP DETECTOR

6X20 LOOP 3 TURNS

LOWER EXISTING PULL BOX COVER TO MATCH PROPOSED PAVEMENT ELEVATION AND INSTALL LOCKING COVER.

REMOVE AND SALVAGE EXISTING SIGNAL POLE & EQUIPMENT FROM EX-SB11 AND INSTALL SIGNAL EQUIPMENT ON PROPOSED TYPE 1 CONCRETE BASE (SB-6).

REMOVE EXISTING PB

PROJECT LIMITS

230' TO STOP BAR

REMOVE AND SALVAGE EXISTING SIGNAL POLE & EQUIPMENT FROM EX-SB8 AND INSTALL ON PROPOSED TYPE 1 BASE (SB-4).

REMOVE AND SALVAGE EXISTING SIGNAL POLE & EQUIPMENT FROM EX-SB-9 AND INSTALL SIGNAL EQUIPMENT ON PROPOSED LIGHT POLE AND BASE (SB-5).

CONNECT CONDUIT INTO EXISTING CONDUIT

28TH AVE.

SHERMAN ST.

MATCH LINE 56"TW"+77.4

2032 PM & (AM) PEAK HOUR VOLUMES

(34) (75) (2)
42 94 3
3 (2)
(26) 32 — 525 (220)
(388) 286 — 438 (150)
(72) 90
135 109 364
(108) (87) (49)

LANE CONFIGURATION

STATE PROJECT NUMBER: 6675-00-71	HWY: CTH R	COUNTY: MARATHON	SHERMAN ST. & 28TH AVE. SIGNAL	SCALE, FEET 0 20 40	SHEET NO: 50	E

FILE NAME : P:\40xx\4025\Plan\6675-00-71\DETAILS\024001_sp.dgn PLOT DATE : 02/02/2004 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

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

SEQUENCE OF OPERATION

NOT USED | — | NOT USED | |

RING 1

	HEAD NUMBERS	01 R/W	01 CLEAR TO **	02 R/W	02 CLEAR TO **	03 R/W	03 CLEAR TO **	04 R/W	04 CLEAR TO **	FLASH
01										
02	2A, 2B, 2C			G G Y R				R R R		Y
03										
04	4A, 4B, 4C			R R R				G G Y R		R
05										
06	6A, 6B, 6C			R R R				R R R		Y
07										
08	8A, 8B, 8C, 8D			R R R				R R R		R
02P										
04P										
06P										
08P										

NOT USED | — | NOT USED | |

RING 2.

	HEAD NUMBERS	05 R/W	05 CLEAR TO **	06 R/W	06 CLEAR TO **	07 R/W	07 CLEAR TO **	08 R/W	08 CLEAR TO **
01									
02	2A, 2B, 2C			R R R				R R R	
03									
04	4A, 4B, 4C			R R R				R R R	
05									
06	6A, 6B, 6C			G G Y R				R R R	
07									
08	8A, 8B, 8C, 8D			R R R				G G Y R	
02P									
04P									
06P									
08P									

BARRIER

N

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1 BELOW)

* WHEN CALLED, TIMED STEADY WALK, THEN FLASHING DON'T WALK, THEN GOES TO STEADY DON'T WALK.

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
01		
02		4, 6, 8
03		
04		2, 6, 8
05		
06		2, 4, 8
07		
08		2, 4, 6

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	CALLS ONLY	EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE	NUMBER OF TURNS
EX21*			X*		2			X		6X6	5
EX22		X			2	2				6X6	4
EX23*			X*		2			X		6X6	5
EX24		X			2	2				6X6	4
EX25			X		2					6X20	3
EX26		ABANDON EXISTING LOOP DETECTOR									
27			X		2					6X20	3
EX41		X			4	4				6X20	4
EX42		X			4	4		X		6X20	4
EX43		X			4	4		X		6X20	4
EX44		X			4	4		X		6X20	4
61		X			6	6				6X20	3
62		X			6	6				6X20	3
63			X		6					6X20	3
64			X		6					6X20	3
65			X		6			X		6X20	3
66		X			6	6			X	6X20	3
EX81				X		8			X	6X6	3
EX82		X			8	8				6X20	3
EX83		X			8	8				6X20	3
EX84				X		8			X	6X6	3
EX85		X			8	8				6X20	3
EX86		X			8	8				6X20	3

*LOOPS EX-21 AND EX-22 SHALL CALL THE RAILROAD PRE-EMPTION SEQUENCE FOR PHASE 2 TO CLEAR QUEUES FROM THE UPSTREAM RAILROAD TRACKS. DURING THE RAILROAD PRE-EMPTION SEQUENCE, PHASES 4, 6, AND 8 WILL CLEAR TO PHASE 2.

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL
1			
2			
3			
4			
5			
6			
7			
8			

OVERLAPS

O.L. "A" =
O.L. "B" =
O.L. "C" =
O.L. "D" =

TYPE OF INTERCONNECT	
NONE	X
TBC	
CLOSED LOOP	
HARDWIRE	
TONE (FREQ)	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	X
EMERGENCY VEHICLE	

TYPE OF LIGHTING	
NONE	
IN TRAFFIC CONTROL CABINET	
IN SEPARATE CONTROL CABINET	X

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
3. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.
4. SIGNAL CONTROLLER IS NOT INTERCONNECTED WITH RAILROAD CONTROLLER.

SEQUENCE OF OPERATION
SHERMAN STREET AND 28TH AVENUE

(C) WAUSAU — MARATHON COUNTY

SIGNAL NO.

DATE — SHEET NO. OF

STATE PROJECT NUMBER:6675-00-01 | HWY: CTH R | COUNTY: MARATHON | SEQUENCE OF OPERATIONS | SCALE, FEET 0 N/A | SHEET NO: 51 | 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 : P:\40xx\4025\Plan\6675-00-71\DETAILS\024101_ph.dgn PLOT DATE : 12/29/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

SHERMAN

BASES		CONDUCTORS JUMPERED					SIGNAL INDICATION WIRE COLOR			
ORIGIN	END	FROM	TO	CABLE	HEAD	PHASE	GREEN	YELLOW	RED	GREEN ARROW
EX-CB1	SB-5			21/C	EX4B	4	GREEN/WHITE	ORANGE/RED	RED/WHITE	
		SB-5	SB-4	21/C	EX6A	6	GREEN/BLACK	ORANGE/BLACK	RED/BLACK	
EX-CB1	SB-3			21/C	EX2C	2	GREEN	ORANGE	RED	BLUE
EX-CB1	SB-1			21/C	EX4A	4	GREEN/WHITE	ORANGE/RED	RED/WHITE	
					EX8C	8	BLUE/RED	ORANGE/GREEN	RED/GREEN	
		SB-1	SB-2	21/C	EX2B	2	GREEN	ORANGE	RED	BLUE
EX-CB1	EX-SB11			21/C	EX6C	6	GREEN/BLACK	ORANGE/BLACK	RED/BLACK	BLUE/WHITE
					EX2D	2	GREEN	ORANGE	RED	BLUE
		EX-SB-11	SB-6	21/C	EX8D	8	BLUE/RED	ORANGE/GREEN	RED/GREEN	

ELECTRICAL WIRE, TRAFFIC SIGNALS, NO. 10

	GROUNDING AND EQUIPMENT
LOCATION	GROUNDING CONDUCTOR
FROM	TO
EXCB1 -	SB-5
SB-5	SB-4
SB-4	SB-3
SB-3	SB-2
SB-2	SB-1
SB-1	EX-SB1 (EXIST SIGNAL BASE)
SB-1	EX-SB4
EX-SB11	SB-6

	EQUIPMENT
LOCATION	GROUNDING CONDUCTOR
FROM	TO
SB-1	PB-1
SB-2	PB-2
SB-3	PB-3
SB-4	PB-4
SB-5	PB-5
SB-6	EX-PB1

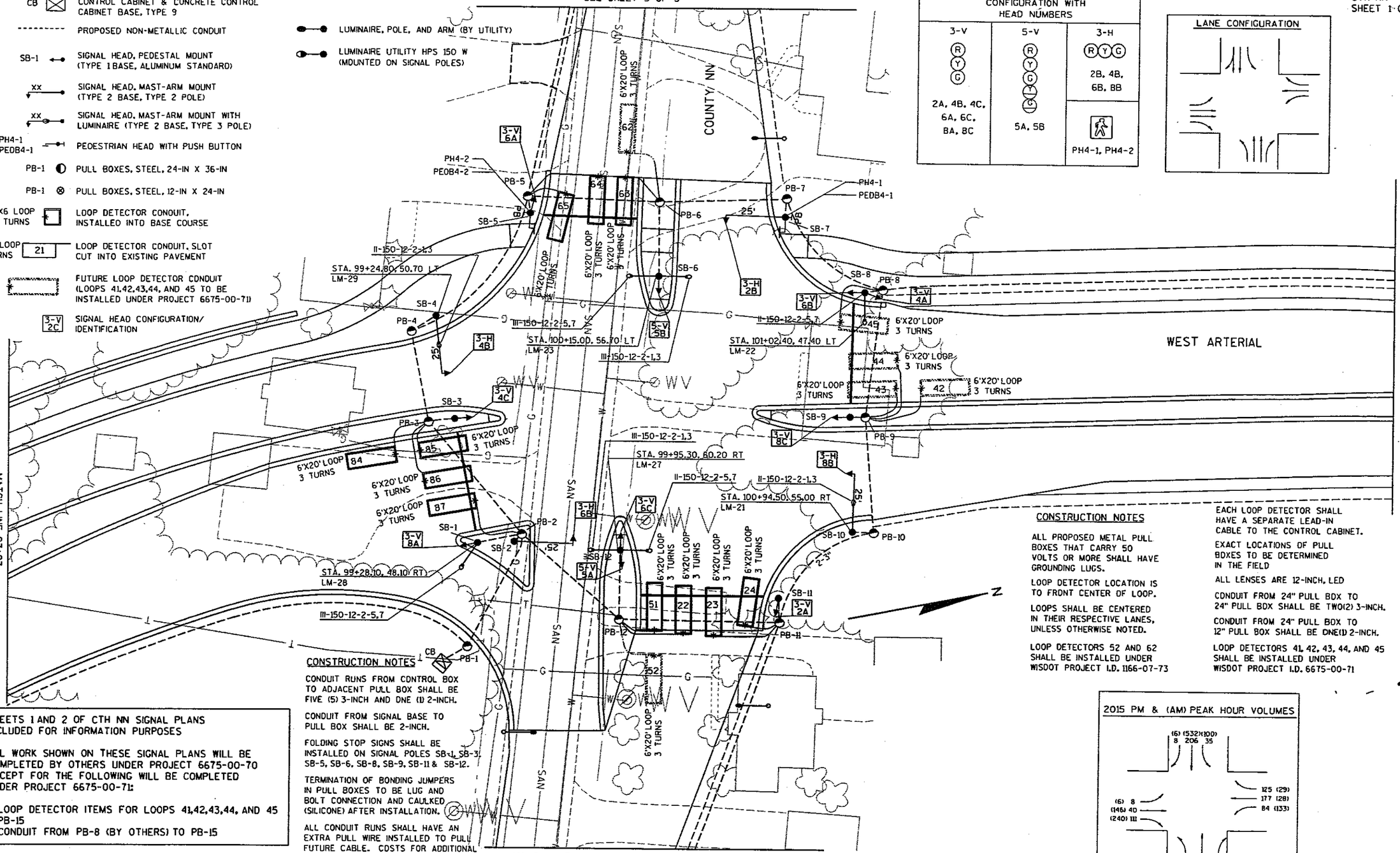
LEGEND

- CB — CONTROL CABINET & CONCRETE CONTROL CABINET BASE, TYPE 9
- PROPOSED NON-METALLIC CONDUIT
- SB-1 — SIGNAL HEAD, PEDESTAL MOUNT (TYPE 1 BASE, ALUMINUM STANDARD)
- xx — SIGNAL HEAD, MAST-ARM MOUNT (TYPE 2 BASE, TYPE 2 POLE)
- xx — SIGNAL HEAD, MAST-ARM MOUNT WITH LUMINAIRE (TYPE 2 BASE, TYPE 3 POLE)
- PH4-1 / PEDB4-1 — PEDESTRIAN HEAD WITH PUSH BUTTON
- PB-1 — PULL BOXES, STEEL, 24-IN X 36-IN
- PB-1 — PULL BOXES, STEEL, 12-IN X 24-IN
- 6X6 LOOP 3 TURNS — LOOP DETECTOR CONDUIT, INSTALLED INTO BASE COURSE
- 6X14 LOOP 4 TURNS [21] — LOOP DETECTOR CONDUIT, SLOT CUT INTO EXISTING PAVEMENT
- FUTURE LOOP DETECTOR CONDUIT (LOOPS 41,42,43,44, AND 45 TO BE INSTALLED UNDER PROJECT 6675-00-71)
- [3-V 2C] — SIGNAL HEAD CONFIGURATION/ IDENTIFICATION
- LUMINAIRE, POLE, AND ARM (BY UTILITY)
- LUMINAIRE UTILITY HPS 150 W (MOUNTED ON SIGNAL POLES)

MATCH LINE 199+27
SEE SHEET 3 OF 3

CONFIGURATION WITH HEAD NUMBERS		
3-V	5-V	3-H
(R) (Y) (G)	(R) (Y) (G) (G) (Y)	(R)(Y)(G)
2A, 4B, 4C, 6A, 6C, 8A, 8C	5A, 5B	2B, 4B, 6B, 8B
		PH4-1, PH4-2

LANE CONFIGURATION



MATCH LINE 97+27
SEE SHEET 2 OF 3

MATCH LINE 103+26
SEE SHEET 2 OF 3

MATCH LINE 202+89
SEE SHEET 3 OF 3

CONSTRUCTION NOTES

CONDUIT RUNS FROM CONTROL BOX TO ADJACENT PULL BOX SHALL BE FIVE (5) 3-INCH AND ONE (1) 2-INCH.

CONDUIT FROM SIGNAL BASE TO PULL BOX SHALL BE 2-INCH.

FOLDING STOP SIGNS SHALL BE INSTALLED ON SIGNAL POLES SB-1, SB-3, SB-5, SB-6, SB-8, SB-9, SB-11 & SB-12.

TERMINATION OF BONDING JUMPERS IN PULL BOXES TO BE LUG AND BOLT CONNECTION AND CAULKED (SILICONE) AFTER INSTALLATION.

ALL CONDUIT RUNS SHALL HAVE AN EXTRA PULL WIRE INSTALLED TO PULL FUTURE CABLE. COSTS FOR ADDITIONAL PULL WIRE SHALL BE INCLUDED IN COSTS FOR ALL WIRE INSTALLATION

CONSTRUCTION NOTES

ALL PROPOSED METAL PULL BOXES THAT CARRY 50 VOLTS OR MORE SHALL HAVE GROUNDING LUGS.

LOOP DETECTOR LOCATION IS TO FRONT CENTER OF LOOP.

LOOPS SHALL BE CENTERED IN THEIR RESPECTIVE LANES, UNLESS OTHERWISE NOTED.

LOOP DETECTORS 52 AND 62 SHALL BE INSTALLED UNDER WISDOT PROJECT I.D. 1166-07-73

EACH LOOP DETECTOR SHALL HAVE A SEPARATE LEAD-IN CABLE TO THE CONTROL CABINET.

EXACT LOCATIONS OF PULL BOXES TO BE DETERMINED IN THE FIELD

ALL LENSES ARE 12-INCH, LED

CONDUIT FROM 24" PULL BOX TO 24" PULL BOX SHALL BE TWO(2) 3-INCH.

CONDUIT FROM 24" PULL BOX TO 12" PULL BOX SHALL BE ONE(1) 2-INCH.

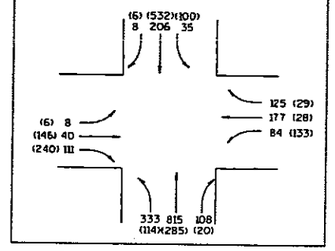
LOOP DETECTORS 41, 42, 43, 44, AND 45 SHALL BE INSTALLED UNDER WISDOT PROJECT I.D. 6675-00-71

SHEETS 1 AND 2 OF CTH NN SIGNAL PLANS INCLUDED FOR INFORMATION PURPOSES

ALL WORK SHOWN ON THESE SIGNAL PLANS WILL BE COMPLETED BY OTHERS UNDER PROJECT 6675-00-70 EXCEPT FOR THE FOLLOWING WILL BE COMPLETED UNDER PROJECT 6675-00-71:

- LOOP DETECTOR ITEMS FOR LOOPS 41,42,43,44, AND 45
- PB-15
- CONDUIT FROM PB-8 (BY OTHERS) TO PB-15

2015 PM & (AM) PEAK HOUR VOLUMES



STATE PROJECT NUMBER: 6675-00-71	HWY: CTH R	COUNTY: MARATHON	TRAFFIC SIGNAL PLAN - CTH NN	SCALE, FEET 0 20 40	SHEET NO: 53	E

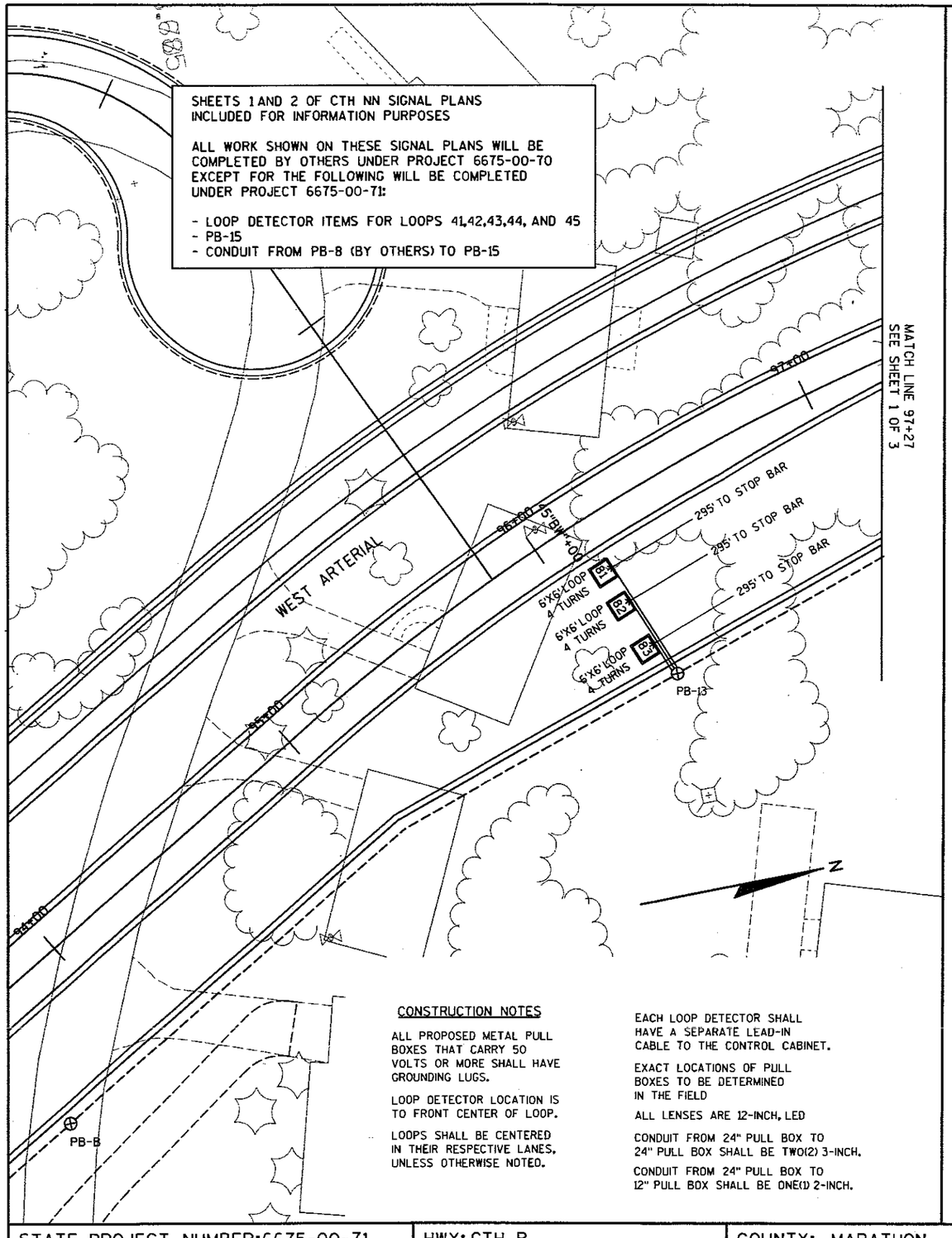
FILE NAME : P:\40xx\4025\Plan\6675-00-71\DETAILS\024002_sp.dgn PLOT DATE : 02/10/2004 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

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

SHEETS 1 AND 2 OF CTH NN SIGNAL PLANS INCLUDED FOR INFORMATION PURPOSES

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- LOOP DETECTOR ITEMS FOR LOOPS 41,42,43,44, AND 45
- PB-15
- CONDUIT FROM PB-8 (BY OTHERS) TO PB-15



CONSTRUCTION NOTES

ALL PROPOSED METAL PULL BOXES THAT CARRY 50 VOLTS OR MORE SHALL HAVE GROUNDING LUGS.

LOOP OETECTOR LOCATION IS TO FRONT CENTER OF LOOP.

LOOPS SHALL BE CENTERED IN THEIR RESPECTIVE LANES, UNLESS OTHERWISE NOTED.

EACH LOOP DETECTOR SHALL HAVE A SEPARATE LEAD-IN CABLE TO THE CONTROL CABINET.

EXACT LOCATIONS OF PULL BOXES TO BE DETERMINED IN THE FIELD

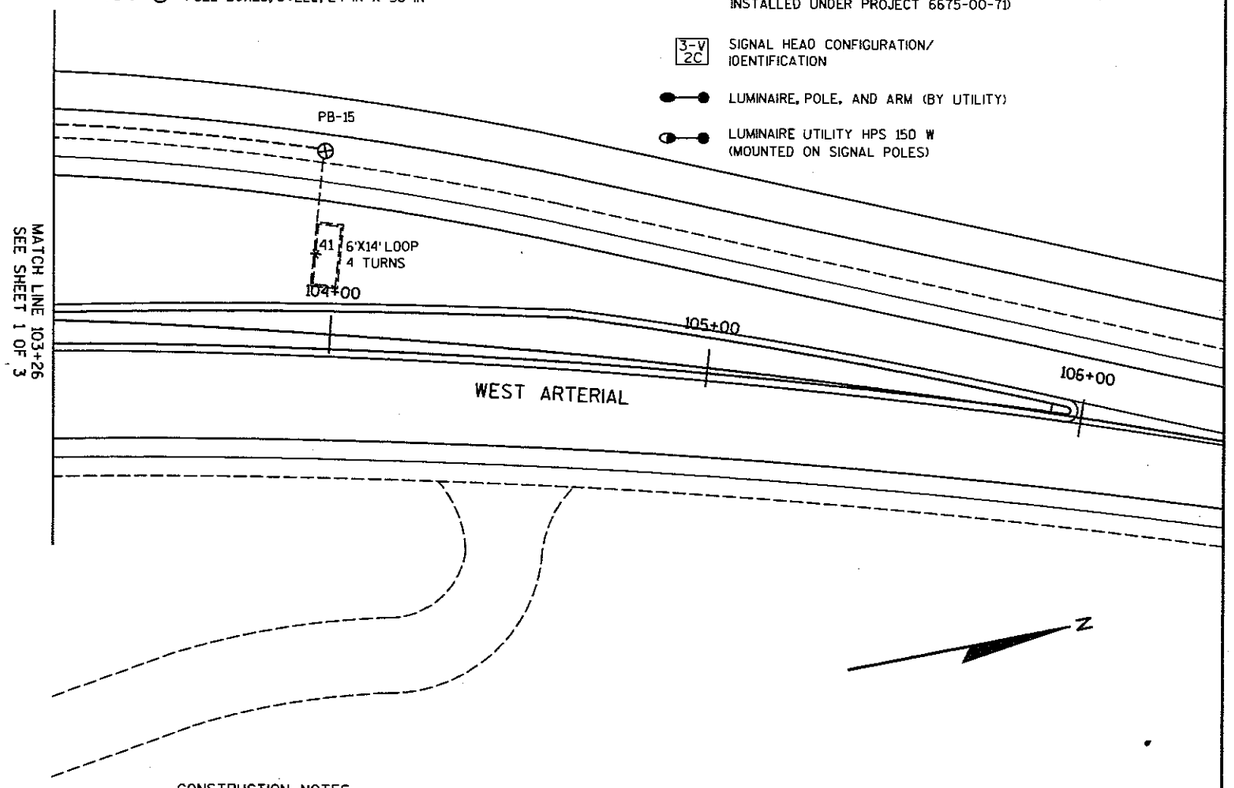
ALL LENSES ARE 12-INCH, LED

CONDUIT FROM 24" PULL BOX TO 24" PULL BOX SHALL BE TWO(2) 3-INCH.

CONDUIT FROM 24" PULL BOX TO 12" PULL BOX SHALL BE ONE(1) 2-INCH.

LEGEND

CB	CONTROL CABINET & CONCRETE CONTROL CABINET BASE, TYPE 9
---------	PROPOSED NON-METALLIC CONDUIT
SB-1	SIGNAL HEAD, PEDESTAL MOUNT (TYPE 1 BASE, ALUMINUM STANDARD)
XX	SIGNAL HEAD, MAST-ARM MOUNT (TYPE 2 BASE, TYPE 2 POLE)
XX	SIGNAL HEAD, MAST-ARM MOUNT WITH LUMINAIRE (TYPE 2 BASE, TYPE 3 POLE)
PH4-1 PEOB4-1	PEDESTRIAN HEAD WITH PUSH BUTTON
PB-1	PULL BOXES, STEEL, 24-IN X 36-IN
	LIGHTING CONTROL CABINET
---------	PROPOSED LIGHTING CONDUIT
PB-1	PULL BOXES, STEEL, 12-IN X 24-IN
6X6 LOOP 3 TURNS	LOOP DETECTOR CONDUIT, INSTALLED INTO BASE COURSE
6X14 LOOP 4 TURNS 21	LOOP OETECTOR CONDUIT, SLOT CUT INTO EXISTING PAVEMENT
	FUTURE LOOP DETECTOR CONDUIT (LOOPS 41,42,43,44, AND 45 TO BE INSTALLED UNDER PROJECT 6675-00-71)
3-V 2C	SIGNAL HEAD CONFIGURATION/ IDENTIFICATION
	LUMINAIRE, POLE, AND ARM (BY UTILITY)
	LUMINAIRE UTILITY HPS 150 W (MOUNTED ON SIGNAL POLES)



CONSTRUCTION NOTES

CONDUIT RUNS FROM CONTROL BOX TO ADJACENT PULL BOX SHALL BE FIVE (5) 3-INCH AND ONE (1) 2-INCH.

CONDUIT FROM SIGNAL BASE TO PULL BOX SHALL BE 2-INCH.

TERMINATION OF BONDING JUMPERS IN PULL BOXES TO BE LUG AND BOLT CONNECTION AND CAULKED (SILICONE) AFTER INSTALLATION.

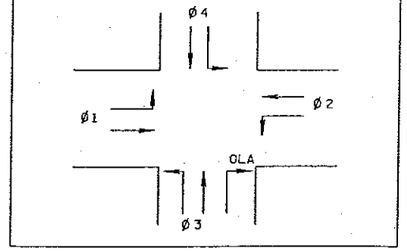
ALL CONDUIT RUNS SHALL HAVE AN EXTRA PULL WIRE INSTALLED TO PULL FUTURE CABLE. COSTS FOR ADDITIONAL PULL WIRE SHALL BE INCLUDED IN COSTS FOR ALL WIRE INSTALLATION

LOOP OETECTORS 52 AND 62 SHALL BE INSTALLED UNDER WISDOT PROJECT I.D. 1166-07-73

LOOP OETECTORS 41, 42, 43, 44, AND 45 SHALL BE INSTALLED UNDER WISOOT PROJECT I.D. 6675-00-71

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	TRAFFIC SIGNAL PLAN - CTH NN	SCALE, FEET 0 20 40	SHEET NO: 54	E

PROPOSED SIGNAL PHASING
FOR PROJECT ID. 6675-00-71



LEGEND

- CB1 — CONCRETE CONTROL, CABINET BASE, TYPE 9
- EXCB-1 — EXISTING SIGNAL CONTROL CABINET
- PROPOSED 2" NON-METALLIC CONDUIT UNLESS OTHERWISE NOTED
- EXISTING NON-METALLIC CONDUIT
- EXISTING TRAFFIC SIGNAL
- EXISTING PULL BOX
- PROPOSED SIGNAL HEAD
- PB-1A — PULL BOXES, STEEL, 24-IN X 42-IN
- EX21 — EXISTING LOOP DETECTOR CONDUIT
- FY-1 — ADVISORY SIGN, QUEUE CUTTER BEACON, CONCRETE BASE, TYPE 1
- QP — QUANTITY POINT

FUTURE SIGNAL CONTROLLER TO BE INSTALLED UNDER WISDOT I.D. 1166-09-78/79

CONDUIT SHALL BE INSTALLED AT LEAST 5 FEET BELOW BOTTOM OF RAIL SCHEDULE 80 CONDUIT REQUIRED

NO DISTURBANCE ALLOWED WITHIN 25 FEET OF CENTERLINE OF RAILROAD TRACKS

EXISTING RAILROAD CROSSING INDICATION (TYP.)

PROPOSED FUTURE CURB AND GUTTER UNDER PROJECT I.D. 1166-09-78 (TYP.)

INSTALL CONDUIT INTO EXISTING PULL BOX

28TH AVENUE SOUTHBOUND

28TH AVENUE NORTHBOUND

PROVIDE 4" EPOXY DYNAMIC ENVELOPE PAVEMENT MARKING AS SHOWN (TYP.)

PROVIDE 24" EPOXY STOP BAR PAVEMENT MARKING AS SHOWN (TYP.)

INSTALL QUEUE CUTTER BEACON EQUIPMENT IN EXISTING CONTROLLER. PROVIDE APPROXIMATELY 30 FEET OF SLACK FOR CONNECTING QUEUE CUTTER BEACON EQUIPMENT TO FUTURE CONTROLLER CB1 LOCATED IN THE SOUTHWEST QUADRANT OF THE INTERSECTION. AMOUNT OF SLACK TO BE FIELD VERIFIED BY ENGINEER. SLACK TO BE LEFT IN EXPB-3A

SHERMAN ST.

CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED BEFORE PLACING THE SIGNAL CABLE INTO SYSTEM.
2. ALL METAL PULL BOXES THAT CARRY 50 VOLTS OR MORE TO BE BONDED.
3. TERMINATION OF BONDING JUMPERS IN PULL BOXES TO BE LUG AND BOLT CONNECTION AND CAULKED (SILICONE) AFTER INSTALLATION.
4. ALL SIGNAL EQUIPMENT SHALL HAVE A MINIMUM OF 2'CLEARANCE TO FACE OF CURB.
5. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AND STRUCTURES AS SHOWN ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS OR STRUCTURES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
6. THE ENGINEER SHALL ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
7. QUEUE CUTTER BEACONS WILL BE CONTROLLED FROM EXISTING CONTROL CABINET EXCB-1 UNTIL COMPLETION OF WISDOT I.D. 1166-09-78
8. FUTURE CONTROL CABINET CB-1 WILL BE USED FOR CONTROL OF TRAFFIC SIGNALS AND QUEUE CUTTER BEACONS AFTER COMPLETION OF WISDOT I.D. 1166-09-78.
9. FINAL FLASHER BEACON LOCATIONS SHALL BE FIELD VERIFIED SO THEY DO NOT OBSTRUCT RAILROAD CROSSING INDICATIONS.

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	28TH AVE. QUEUE CUTTER BEACONS	SCALE, FEET 0 20 40	SHEET NO: 54A	E

EXISTING SIGNAL CONTROL CABINET
AT 28TH/SHERMAN INTERSECTION

EXISTING SIGNAL EQUIPMENT IN CABINET

EX21

EX23

24 VDC DP/DT

24 VDC DP/DT

EXISTING CONTROLLER

EXISTING OUTPUT TERMINAL STRIP (SIGNALS)

PHASE 2 (Ø2) RED

INTERFACE RELAYS
DOUBLE POLE (DP)
DOUBLE THROW (DT)
WITH SCREW TERMINAL
TUBE BASE
AB* 700-HA32Z24
AB* 700-HN125

EXISTING LOOP DETECTOR AMPLIFIERS (TYP.)

INPUT FROM EXISTING LOOP DETECTOR LEAD-IN CABLES.

120V POWER FROM EXISTING CONTROLLER'S TERMINAL STRIP

EXISTING POWER CABLES TO SIGNAL INDICATIONS

FLASHER BEACON EQUIPMENT TO BE INSTALLED IN EXISTING SIGNAL CABINET

15/1

120 VAC
TIME DELAY RELAYS (TDR)
P&B* CNT-35-96

P_2 N P_1 G

TVSS

TDR 120VAC

TDR 120VAC

PTR W/ EXTENSION

120 VAC
204 NEMA FLASHER
W/ SOCKET AND
MOUNTING BRACKET

TDR DELAY = 5 SECONDS
TDR EXTENSION = 30 SECONDS

TO FLASHER UNIT

NOTE: TRANSIENT VOLTAGE SURGE SUPPRESSION = TVSS

WIRING DETAIL
ADVANCE FLASHER FOR QUEUE CUTTER BEACON

POLE CAP

DRILL 1½" DIA. HOLE & PROVIDE GROMMET FOR CABLE ENTRANCE (TYP. TOP BRACKET)

FLASHING YELLOW BEACON (8" DIA.) (TYP.)

PINNACLE CAP ONLY (TYP. BOTTOM BRACKET)

ALL 8" LENSES SHALL BE LED

MOUNT WITH ¾" STAINLESS STEEL BANDS

PINNACLE CAP & NEOPRENE WASHER (TYP. TOP BRACKET)

CLOSE NIPPLE, 1½" I.D. x 1¾" (MIN.) WITH LOCK NUT (TYP.)

MOUNT WITH ONE ⅜" x 24 NF STAINLESS STEEL BOLT & WASHER (TYP. TOP BRACKET)

MOUNT WITH ONE ¾" STAINLESS STEEL BAND (TYP. TOP BRACKET)

MOUNT WITH TWO ¾" STAINLESS STEEL BANDS (TYP. LOWER BRACKET)

MOUNTING BRACKET (TYP.)

15'-4½" O.D. PIPE (TRAFFIC SIGNAL STANDARD)

SIGN MOUNTING HEIGHT (SEE SIGNING DETAILS)

PEDESTAL BASE

CONCRETE BASE, TYPE 1

TYPICAL DETAIL
ADVANCE FLASHER FOR QUEUE CUTTER BEACON

DO NOT STOP ON TRACKS

R8-8

24" x 30"

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	ADVANCE FLASHER FOR QUEUE CUTTER	SCALE, FEET 0 N/A	SHEET NO: 54B	E

FILE NAME: s:\e5a1\T01--T50\732\420\Micros\Traffic Signals\signalsheets\North\flasher_detail_2.dgn PLOT DATE: 08/24/2004 01:32:18 PM ORG DATE : PLOT NAME : Originator : Dist PLOT SCALE :

WISDOT/CADDS SHEET 42

LEVELS ON • 1

PAVEMENT MARKING

MARKING ID	BEGIN STATION	BEGIN LOCATION	END STATION	END LOCATION	647.0576 PAVEMENT MARKING STOP LINE EPOXY, 24 INCH LF	646.0106 PAVEMENT MARKING EPOXY 4 INCH LF
SOUTH OF NORTHBOUND RAIL CROSSING	58"TW"+47.0	21.5' RT	58"TW"+48.0	44.5' RT	24	
	58"TW"+56.0	21.5' RT	58"TW"+61.0	44.0' RT		24
NORTH OF NORTHBOUND RAIL CROSSING	58"TW"+73.0	21.5' RT	58"TW"+77.5	44.0' RT		24
SOUTH OF SOUTHBOUND RAIL CROSSING	58"TW"+47.0	23.5' LT	58"TW"+51.5	0.5' LT		24
NORTH OF SOUTHBOUND RAIL CROSSING	58"TW"+64.0	24.0' LT	58"TW"+69.0	1.0' LT		24
	58"TW"+77.0	24.0' LT	58"TW"+77.0	1.0' LT	24	
TOTAL					24	96

647.0726 PAVEMENT MARKING DIAGONAL, EPOXY 12 INCH LF

quantity is unknown

PULL BOXES

EQUIPMENT ID	STATION	LOCATION	653.014 PULL BOXES STEEL 24 INCH X 42 INCH EACH
28th AVENUE INTERSECTION			
PB-1A	58"TW"+86.0	32.0' LT	1
PB-2A	59"TW"+04.0	15.0' RT	1
TOTAL			2

ADVANCE FLASHER ASSEMBLIES

EQUIPMENT ID	STATION	LOCATION	SPV.0060.50 ADVANCE FLASHER ASSEMBLY TYPE 1 EACH
28th AVENUE INTERSECTION			
FY-1	58"TW"+92.5	35.0' LT	1
FY-2	58"TW"+92.5	15.0' RT	1
TOTAL			2

CONDUIT AND CABLE

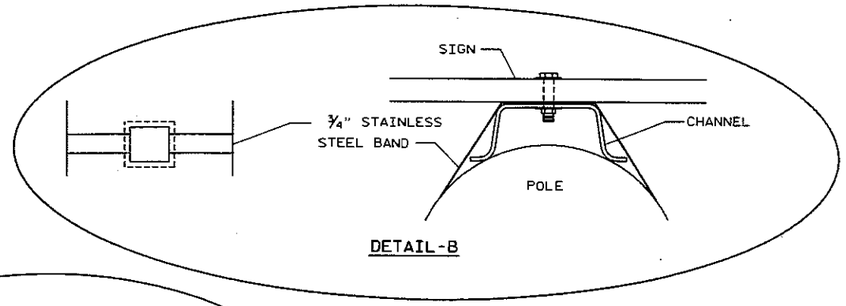
				CONDUIT		CABLE		
				652.0225 CONDUIT, RIGID NONMETALLIC SCHEDULE 40, 2-INCH	652.06 CONDUIT-SPECIAL 2-INCH	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG	655.0515 GROUNDING CONDUCTOR	
CABLE/CONDUIT ID	FROM	TO	LINEAR DIST FT	LF	LF	LF	LF	COMMENT
28th Avenue	EXCB-1		6	-	-	6	6	
	EXCB -1	EXPB-1A	19	-	-	19	19	
	EXPB-1A		6	-	-	6	6	
	EXPB-1A	EXPB-2A	59	-	-	59	59	
	EXPB-2A		6	-	-	6	6	
	EXPB-2A	EXPB-3A	55	-	-	55	55	
	EXPB-3A		6	-	-	6	6	
			30	-	-	30	30	EXTRA SLACK FOR CONNECTION TO FUTURE CONTROLLER
	EXPB-3A	EXPB-4A	107	-	-	107	107	
	EXPB-4A		6	-	-	6	6	
	EXPB-4A	EXPB-5A	86	-	-	86	86	
	EXPB-5A		6	-	-	6	6	
	EXPB-5A	PB-1A	110	41	69	110	110	CONDUIT UNDER RAILROAD TRACKS SHALL BE SCHEDULE 80
	PB-1A		6	-	-	6	6	
	PB-1A	FY-1	7	7	-	7	7	
	PB-1A	PB-2A	52	-	52	52	52	
	PB-2A		6	-	-	6	6	
	PB-2A	FY-2	11	11	-	11	11	
TOTAL				59	121	584	584	

BASES

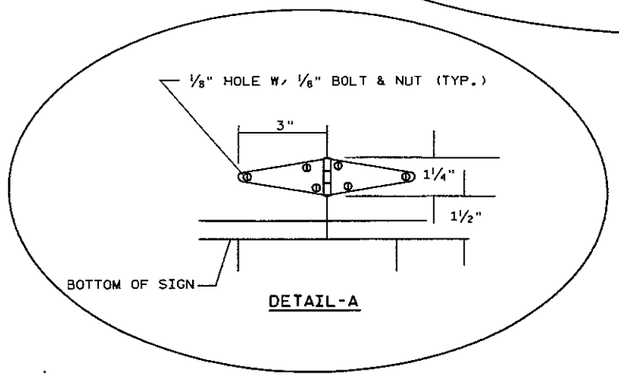
EQUIPMENT ID	STATION	LOCATION	654.0101 CONCRETE BASES TYPE 1 EACH
28th AVENUE INTERSECTION			
FY-1	58"TW"+92.5	35.0' LT	1
FY-2	58"TW"+92.5	15.0' RT	1
TOTAL			2

QUEUE CUTTER CONTROLLER EQUIPMENT

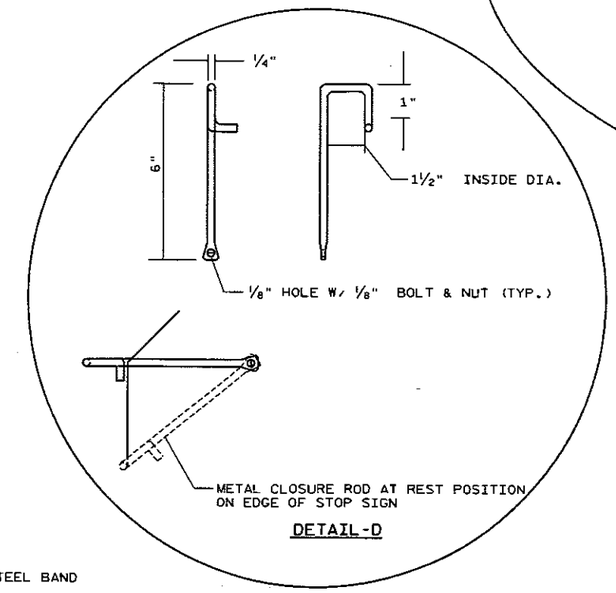
EQUIPMENT ID	SPV.0105.01 QUEUE CUTTER CONTROLLER EQUIPMENT LS
28th AVENUE INTERSECTION	
EXCB-1	1
TOTAL	1



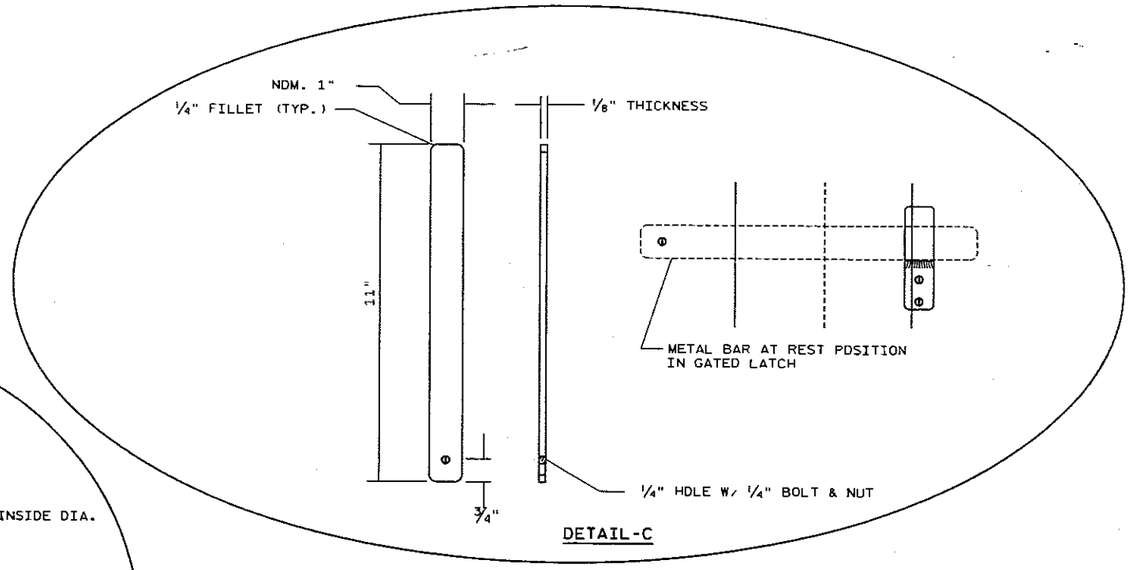
DETAIL-B



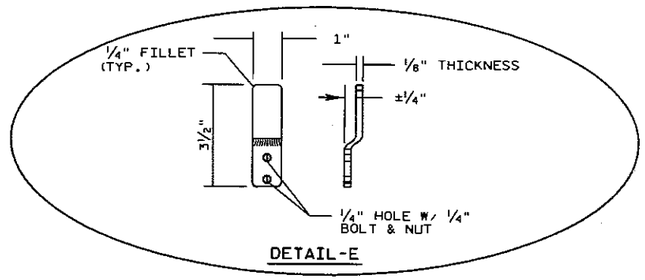
DETAIL-A



DETAIL-D

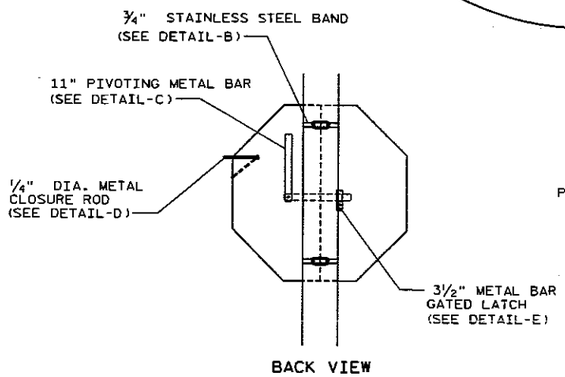


DETAIL-C

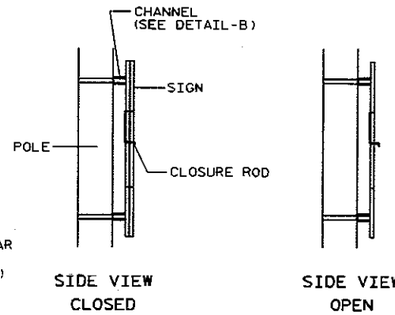


DETAIL-E

FRONT VIEW

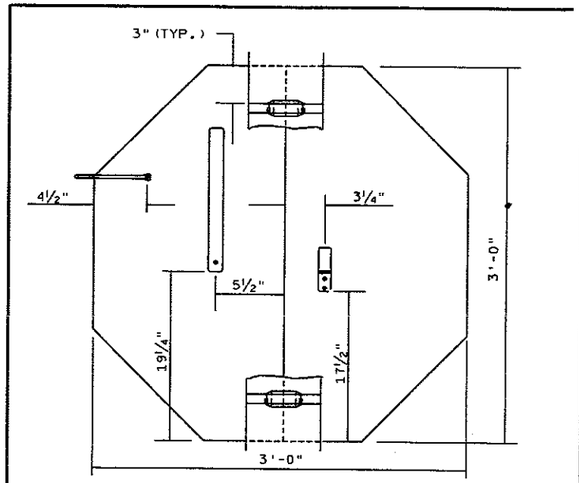


BACK VIEW



SIDE VIEW CLOSED

SIDE VIEW OPEN



ITEM LOCATION DETAIL

GENERAL NOTES:

1. ALL HARDWARE USED ON THE FOLDING STOP SIGN INSTALLATION SHALL CONFORM TO 637.2.4 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHTWAY & STRUCTURE CONSTRUCTION.

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 N/A	SHEET NO: 55	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 : p:\40xx\4025\plan\6675-00-71\details\024004_sp.dgn PLOT DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

LEGEND

1. PAVEMENT MARKING STOP LINE EPOXY 18-INCH
2. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
3. NOT USED
4. PAVEMENT MARKING EPOXY 4-INCH
5. PAVEMENT MARKING CHANNELIZING EPOXY 8-INCH
6. PAVEMENT MARKING CURB EPOXY
7. PAVEMENT MARKING ISLAND NOSE EPOXY
8. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (25'C-C)
9. PAVEMENT MARKING ARROWS EPOXY TYPE 3
10. PAVEMENT MARKING WOROS EPOXY "ONLY"
11. PAVEMENT MARKING ARROWS EPOXY TYPE 2
12. PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY
13. PAVEMENT MARKING PARKING STALL EPOXY
14. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (10'C-C)
15. PAVEMENT MARKING WORDS EPOXY "STOP"

⊙ DELINEATOR POSTS FLEXIBLE

NOTE
PROPOSED CENTERLINE FROM STA 110+40 TO 153+10 TO BE ESTABLISHED USING LOCATING NO-PASSING ZONES

ULTIMATE CONSTRUCTION OF CTH NN AND THE WEST ARTERIAL SOUTH OF STA 101+15 TO BE CONSTRUCTED BY OTHERS UNDER PROJECT 6675-00-70

ADDITIONAL PERMANENT PAVEMENT MARKING REQUIRED FOR CTH NN AND THE WEST ARTERIAL SOUTH OF STA 101+15 TO BE COMPLETED UNDER PROJECT 6675-00-70

PAVEMENT MARKING SHOWN TO BE INSTALLED UPON COMPLETION OF THE WEST ARTERIAL FROM CTH NN TO SHERMAN STREET

2

(YELLOW EDGE LINE) ④
MATCH LINE STA 100+80
194"NT"+00
195"NT"+00
196"NT"+00
197"NT"+00
198"NT"+00
199"NT"+00
200"NT"+00
201"NT"+00
202"NT"+00
203"NT"+00
204"NT"+00
205"NT"+00
206"NT"+00
CTH NN
⑧ (WHITE)
⑤
⑩
④ (3' DASH, 12' SKIP)
④ (WHITE EDGE LINE)
④ (YELLOW EDGE LINE)
STA 199"NT"+00
STA 98+45
STA 97+00
STA 94+12
RAVEN AVENUE
MARTIN AVE.
BLUEBIRD LANE
44"BF"+00
45"BF"+00
0"BF"+00
WEST ARTERIAL
(WHITE DASHED ④ LANE LINE)
(WHITE DASHED ④ LANE LINE)
CANOPY
FILLER CAPS
SIGN
MH
HW
WALLS
ANT.
Ø33

STATE PROJECT NUMBER:6675-00-70	HWY: CTH R	COUNTY: MARATHON	PAVEMENT MARKING	SCALE, FEET 0 50 100	SHEET NO: 56	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\permanent marking\024501_pm.dgn PLOT DATE : 12/17/2003 PLOT BY : ss...plotuser...ss PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : ss.....plotscale.....ss WISDOT/CADDS SHEET 42

LEGEND

1. PAVEMENT MARKING STOP LINE EPOXY 18-INCH
2. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
3. NOT USED
4. PAVEMENT MARKING EPOXY 4-INCH
5. PAVEMENT MARKING CHANNELIZING EPOXY 8-INCH
6. PAVEMENT MARKING CURB EPOXY
7. PAVEMENT MARKING ISLAND NOSE EPOXY
8. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (25'C-C)
9. PAVEMENT MARKING ARROWS EPOXY TYPE 3
10. PAVEMENT MARKING WORDS EPOXY "ONLY"
11. PAVEMENT MARKING ARROWS EPOXY TYPE 2
12. PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY
13. PAVEMENT MARKING PARKING STALL EPOXY
14. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (10'C-C)
15. PAVEMENT MARKING WORDS EPOXY "STOP"

NOTE

PROPOSED CENTERLINE FROM STA 110+40 TO 153+10 TO BE ESTABLISHED USING LOCATING NO-PASSING ZONES

N

WEST ARTERIAL

STA 102+37

STA 102+84 (END LANE LINE)

④ (WHITE EDGE LINE)

(WHITE DASHED ④ LANE LINE)

STA 102+60 (END LANE LINE)

④ (DOUBLE YELLOW EDGE LINE)

④ (DOUBLE YELLOW ALONG R/L)

⑥⑦

⑧ (YELLOW)

STA 107+55 (END TRANSITION AREA)

④ (YELLOW DASHED CENTERLINE)

STA 110+40 (END DOUBLE YELLOW BEGIN DASHEDYELLOW)

ULTIMATE CONSTRUCTION OF CTH NN AND THE WEST ARTERIAL SOUTH OF STA 101+15 TO BE CONSTRUCTED BY OTHERS UNDER PROJECT 6675-00-70

MATCHLINE STA 100+80

MATCHLINE 114+00

USH 51/WIS 29

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	PAVEMENT MARKING	SCALE, FEET 0 50 100	SHEET NO: 57	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\permanent marking\024502_pt_05 PLOT DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

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

LEGEND

1. PAVEMENT MARKING STOP LINE EPOXY 18-INCH
2. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
3. NOT USED
4. PAVEMENT MARKING EPOXY 4-INCH
5. PAVEMENT MARKING CHANNELIZING EPOXY 8-INCH
6. PAVEMENT MARKING CURB EPOXY
7. PAVEMENT MARKING ISLAND NOSE EPOXY
8. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (25'C-C)
9. PAVEMENT MARKING ARROWS EPOXY TYPE 3
10. PAVEMENT MARKING WORDS EPOXY "ONLY"
11. PAVEMENT MARKING ARROWS EPOXY TYPE 2
12. PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY
13. PAVEMENT MARKING PARKING STALL EPOXY
14. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (10'C-C)
15. PAVEMENT MARKING WORDS EPOXY "STOP"

NOTE

PROPOSED CENTERLINE FROM STA 110+40 TO 153+10 TO BE ESTABLISHED USING LOCATING NO-PASSING ZONES

N

MATCHLINE 114+00

MATCHLINE 129+50

115+00

120+00

125+00

WEST ARTERIAL

SIGN

(4) (YELLOW DASHED CENTERLINE)

(4) (WHITE EDGE LINE)

SIGN

USH 51/WIS 29

USH 51/WIS 29

324
1174.276

SIGN

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	PAVEMENT MARKING	SCALE, FEET 0 50 100	SHEET NO: 58	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\permanent marking\024503_pm.dgn DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

LEGEND

1. PAVEMENT MARKING STOP LINE EPOXY 18-INCH
2. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
3. NOT USED
4. PAVEMENT MARKING EPOXY 4-INCH
5. PAVEMENT MARKING CHANNELIZING EPOXY 8-INCH
6. PAVEMENT MARKING CURB EPOXY
7. PAVEMENT MARKING ISLAND NOSE EPOXY
8. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (25'C-C)
9. PAVEMENT MARKING ARROWS EPOXY TYPE 3
10. PAVEMENT MARKING WORDS EPOXY "ONLY"
11. PAVEMENT MARKING ARROWS EPOXY TYPE 2
12. PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY
13. PAVEMENT MARKING PARKING STALL EPOXY
14. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (10'C-C)
15. PAVEMENT MARKING WORDS EPOXY "STOP"

NOTE
PROPOSED CENTERLINE FROM
STA 110+40 TO 153+10 TO BE ESTABLISHED
USING LOCATING NO-PASSING ZONES

N

MATCHLINE 129+50

130+00

135+00

140+00

145

MATCHLINE 144+75

WEST ARTERIAL

④ (WHITE EDGE LINE)

④ (WHITE EDGE LINE)

④ (YELLOW DASHED CENTERLINE)

SIGN

SIGN

SIGN

SIGN

USH 51/WIS 29

USH 51/WIS 29

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:6675-00-71	HWY: CTH R	COUNTY: MARATHON	PAVEMENT MARKING	SCALE, FEET 0 50 100	SHEET NO: 59	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\permanent marking\024504_pML.dgn DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

LEGEND

1. PAVEMENT MARKING STOP LINE EPOXY 18-INCH
2. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
3. NOT USED
4. PAVEMENT MARKING EPOXY 4-INCH
5. PAVEMENT MARKING CHANNELIZING EPOXY 8-INCH
6. PAVEMENT MARKING CURB EPOXY
7. PAVEMENT MARKING ISLAND NOSE EPOXY
8. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (25'C-C)
9. PAVEMENT MARKING ARROWS EPOXY TYPE 3
10. PAVEMENT MARKING WORDS EPOXY "ONLY"
11. PAVEMENT MARKING ARROWS EPOXY TYPE 2
12. PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY
13. PAVEMENT MARKING PARKING STALL EPOXY
14. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (10'C-C)
15. PAVEMENT MARKING WORDS EPOXY "STOP"

NOTE

PROPOSED CENTERLINE FROM STA 110+40 TO 153+10 TO BE ESTABLISHED USING LOCATING NO-PASSING ZONES

N

2

MATCHLINE 162+00

160+00

STA 160+48 (BEGIN WHITE DASHED LANE LINE)

6 7

4 (WHITE EDGE LINE)

4 (DOUBLE YELLOW EDGE LINE)

8 (YELLOW)

STA 153+10 (BEGIN DOUBLE YELLOW)

STA 156+80 (BEGIN TRANSITION AREA)

4 (WHITE EDGE LINE)

155+00

150+00

145+00

WEST ARTERIAL

(YELLOW DASHED CENTERLINE) 4

(DOUBLE YELLOW 4 ALONG R/L)

MATCHLINE 144+75

GUAGING STATION

SIGN

USH 51/WIS 29

USH 51/WIS 29

SIGN

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	PAVEMENT MARKING	SCALE, FEET 0 50 100	SHEET NO: 60	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\permanent marking\024505_pML01.dgn DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

LEGEND

1. PAVEMENT MARKING STOP LINE EPOXY 18-INCH
2. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
3. NOT USED
4. PAVEMENT MARKING EPOXY 4-INCH
5. PAVEMENT MARKING CHANNELIZING EPOXY 8-INCH
6. PAVEMENT MARKING CURB EPOXY
7. PAVEMENT MARKING ISLAND NOSE EPOXY
8. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (25' C-C)
9. PAVEMENT MARKING ARROWS EPOXY TYPE 3
10. PAVEMENT MARKING WORDS EPOXY "ONLY"
11. PAVEMENT MARKING ARROWS EPOXY TYPE 2
12. PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY
13. PAVEMENT MARKING PARKING STALL EPOXY
14. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (10' C-C)
15. PAVEMENT MARKING WORDS EPOXY "STOP"

NOTE

PROPOSED CENTERLINE FROM STA 110+40 TO 153+10 TO BE ESTABLISHED USING LOCATING NO-PASSING ZONES

SHERMAN STREET

28TH AVENUE

WEST ARTERIAL

STA 165+80 (BEGIN WHITE LANE LINE)

(WHITE DASHED LANE LINE)

(5' DASH, 5' SKIP WHITE)

(WHITE EDGE LINE)

MATCHLINE 162+00

STA 110+00

STA 171+99

STA 55"TW"+00

STA 60"TW"+00

STA 20"SH"+00

STA 25"SH"+00

R=57'

9' TYP.

19' TYP.

(WHITE)

NORTHWESTERN RR

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	PAVEMENT MARKING	SCALE, FEET 0 50 100	SHEET NO: 61	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\permanent marking\024506_pm.dgn DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ 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

LEGEND

- SIGN POST
- DRUM WITH/WITHOUT TYPE C LIGHT (25'C-C SPACING)
- TYPE III BARRICADE WITH/WITHOUT SIGN
- TEMPORARY SIGN SUPPORT
- TYPE II BARRICADE WITH/WITHDUT SIGN
- TRAFFIC FLOW ARROW
- WORK AREA
- CONCRETE BARRIER TEMPORARY PRECAST

NOTE
SEE SDD FOR TRAFFIC CONTROL, VEHICLE ENTRANCE/EXIT DR HAUL ROAD FOR ADDITIONAL TRAFFIC CONTROL AS REQUIRED DURING HAULING OPERATIONS

ULTIMATE CONSTRUCTION OF CTH NN AND THE WEST ARTERIAL SOUTH OF STA 101+15 TO BE CONSTRUCTED BY OTHERS UNDER PROJECT 6675-00-70

ADDITIONAL TRAFFIC CONTROL REQUIRED FOR CTH NN AND THE WEST ARTERIAL SOUTH OF STA 101+15 TO BE COMPLETED UNDER PROJECT 6675-00-70

TRAFFIC CONTROL AND REMOVEABLE PAVEMENT MARKING SHOWN ON THIS SHEET TO BE COMPLETED UNDER PROJECT 6675-00-71

CONTRACTOR TO COORDINATE PLACEMENT OF ULTIMATE TRAFFIC CONTROL ON CTH NN AND ON THE WEST ARTERIAL SOUTH OF STA 101+15 WITH PROJECT 6675-00-70

TRAFFIC CONTROL TO BE MAINTAINED UNTIL PROJECT 6675-00-71 IS OPENED TO THROUGH TRAFFIC

TRAFFIC CONTROL NOTES (APPLICABLE TO ALL STAGES)

- THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
- ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.
- ANY SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN-USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPRDVED BY THE ENGINEER.
- SIGNS DESIGNATED AS "WO" ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.
- SEE SPECIAL PROVISIONS FOR ADDITIONAL TRAFFIC/STAGING REQUIREMENTS.
- SEE S.D.D. TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS) WHEN FLAGGING IS REQUIRED

END ROAD WORK G20-2A 48" X 24"
WETLAND BOUNDARY
TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE EDGELINE)
TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW EDGELINE)
MATCH LINE 101+15
ROAD CLOSED RR-2 48" X 30"
TRUCK ENTRANCE W08-6 (MOD)
ROAD WORK AHEAD W20-1
ROAD WORK 500 FT W20-1
FLOODPLAIN BOUNDARY
345 1170.424
1175
1170
CTH NN
194"NT"+00
195"NT"+00
196"NT"+00
197"NT"+00
198"NT"+00
199"NT"+00
200"NT"+00
201"NT"+00
202"NT"+00
203"NT"+00
204"NT"+00
205"NT"+00
206"NT"+00
100.00'
WEST ARTERIAL (BY OTHERS)
RAVEN AVENUE
CO 1198.885
STA 94+12
44"BF"+00
218 1194.560
N
SIGN
CANOPY
FILLER CAPS
HW
GV
WV
MH
GUY
INL
ANT
C.P.

LEGEND

- SIGN POST
- DRUM WITH/WITHOUT TYPE C LIGHT (25'C-C SPACING)
- TYPE III BARRICADE WITH/WITHOUT SIGN
- TEMPORARY SIGN SUPPORT
- TYPE II BARRICADE WITH/WITHOUT SIGN
- TRAFFIC FLOW ARROW
- WORK AREA
- CONCRETE BARRIER TEMPORARY PRECAST

ULTIMATE CONSTRUCTION OF CTH NN AND THE WEST ARTERIAL SOUTH OF STA 101+15 TO BE CONSTRUCTED BY OTHERS UNDER PROJECT 6675-00-70

ADDITIONAL TRAFFIC CONTROL REQUIRED FOR CTH NN AND THE WEST ARTERIAL SOUTH OF STA 101+15 TO BE COMPLETED UNDER PROJECT 6675-00-70

FLOODPLAIN BOUNDARY

WETLAND BOUNDARY

CTH NN

WEST ARTERIAL

MATCH LINE 101+15

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 1	SCALE, FEET 0 50 100	SHEET NO: 63	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\traffic control\025002_tc.dgn DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

LEGEND

- SIGN POST
- DRUM WITH/WITHOUT TYPE C LIGHT (25'C-C SPACING)
- TYPE III BARRICADE WITH/WITHOUT SIGN
- TEMPORARY SIGN SUPPORT
- TYPE II BARRICADE WITH/WITHOUT SIGN
- TRAFFIC FLOW ARROW
- WORK AREA
- CONCRETE BARRIER TEMPORARY PRECAST

N

FLOODPLAIN BOUNDARY

WETLAND BOUNDARY

POPLAR

WEST ARTERIAL

USH 51/WIS 29

USH 51/WIS 29

1320
1175.62

1324
1174.276

SIGN

DURING PLACEMENT OF THE CONCRETE BARRIER A LANE CLOSURE WILL LIKELY BE REQUIRED ON USH 51/STH 29. SEE SDD TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 MPH.

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 1	SCALE, FEET 0 50 100	SHEET NO: 64	E

2

N

LEGEND

- SIGN POST
- DRUM WITH/WITHOUT TYPE C LIGHT (25'C-C SPACING)
- TYPE III BARRICADE WITH/WITHOUT SIGN
- TEMPORARY SIGN SUPPORT
- TYPE II BARRICADE WITH/WITHOUT SIGN
- TRAFFIC FLOW ARROW
- WORK AREA
- CONCRETE BARRIER TEMPORARY PRECAST

BIG RIB RIVER

WETLAND BOUNDARY

140'OD

WEST APPROAC

140'OD

140'OD

USH 51/WIS 29

USH 51/WIS 29

SIGN

SIGN

DURING PLACEMENT OF THE CONCRETE BARRIER A LANE CLOSURE WILL LIKELY BE REQUIRED ON USH 51/STH 29. SEE SDD TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 MPH.

CONNECT BARRIER TO EXISTING BRIDGE

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 1	SCALE, FEET 0 50 100	SHEET NO: 65	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\traffic control\025004_tc.dgn PLOT DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

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

WETLAND BOUNDARY

BIG RIB RIVER

14'-0"

EXIST.

EXIST.

WEST APPROAL

1st GUARDING STATION

SIGN

FLOODPLAIN BOUNDARY

USH 51/WIS 29

CONNECT BARRIER TO EXISTING BRIDGE

SIGN

DURING PLACEMENT OF THE CONCRETE BARRIER A LANE CLOSURE WILL LIKELY BE REQUIRED ON USH 51/STH 29. SEE SOD TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 MPH AND TRAFFIC CONTROL, EXIST AND ENTRANCE RAMP WITHIN LANE CLOSURE.

>30

PLACE END SECTION OF BARRIER OUTSIDE OF CLEAR ZONE FOR USH 51/STH 29 FREEWAY (ADDITIONAL FILL REQUIRED TO TAPER END SECTION - SEE CROSS SECTIONS)

LEGEND

- SIGN POST
- DRUM WITH/WITHOUT TYPE C LIGHT (25'-C-C SPACING)
- TYPE III BARRICADE WITH/WITHOUT SIGN
- TEMPORARY SIGN SUPPORT
- TYPE II BARRICADE WITH/WITHOUT SIGN
- TRAFFIC FLOW ARROW
- WORK AREA
- CONCRETE BARRIER TEMPORARY PRECAST

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 1	SCALE, FEET 0 50 100	SHEET NO: 66	E

LEGEND

- SIGN POST
- DRUM WITH/WITHOUT TYPE C LIGHT (25'C-C SPACING)
- TYPE III BARRICADE WITH/WITHOUT SIGN
- TEMPORARY SIGN SUPPORT
- TYPE II BARRICADE WITH/WITHOUT SIGN
- TRAFFIC FLOW ARROW
- WORK AREA
- CONCRETE BARRIER TEMPORARY PRECAST

WETLAND BOUNDARY

ROAD CLOSED
R11-2
48" X 30"

TEMPDRARY PAVEMENT MARKING
4-INCH
(DOUBLE YELLOW)

TEMPORARY PAVEMENT MARKING
4-INCH
(WHITE EDGELINE)

TEMPORARY PAVEMENT MARKING
STOP LINE 18-INCH

TEMPORARY
PAVEMENT
MARKING
REMOVEABLE TAPE
4-INCH
(YELLOW
3' DASH, 12' SKIP)

ASPHALTIC SURFACE
TEMPORARY
(SEE TYPICAL SECTION
SHOWN BELOW)

ROAD WORK AHEAD
W20-1

ROAD WORK 500 FT
W20-1

END ROAD WORK
G20-2A
48" X 24"

DURING OFF-PEAK HOURS THE INSIDE SOUTHBOUND LANE OF 28TH AVENUE MAY BE CLOSED DURING CONSTRUCTION OF THE LEFT TURN LANE ON 28TH AVENUE. SEE SDD FOR TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY. (SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION)

ROAD WORK AHEAD
W20-1

ROAD WORK 500 FT
W20-1

55'TW"+00

171-99

60'TW"+00

28TH AVENUE

25'SH"+00

PAVEMENT MARKING, TEMPORARY
ASPHALT AND DRUMS TO BE INSTALLED
AT THE END OF STAGE 1A TO ACCOMMODATE
TRAFFIC CONFIGURATION IN STAGE 1B
(FLAGGING MAY BE REQUIRED)

END ROAD WORK
G20-2A
48" X 24"

END ROAD WORK
G20-2A
48" X 24"

SHERMAN STREET

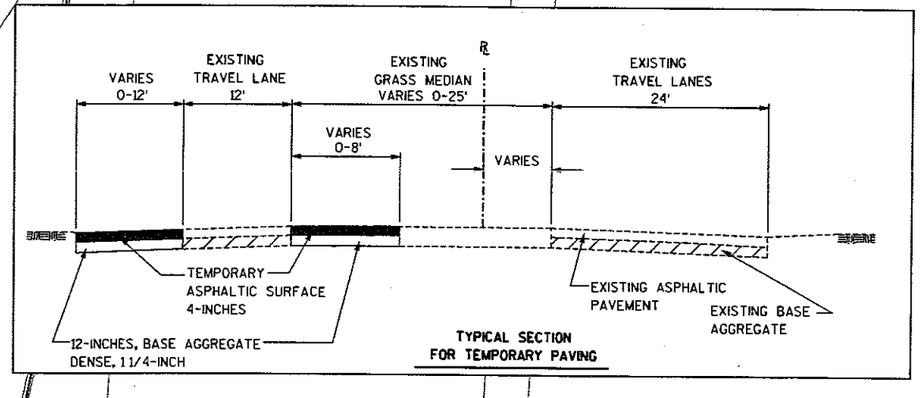
NORTHWESTERN RR

ROAD WORK 500 FT
W20-1

ROAD WORK AHEAD
W20-1

WEST LATERAL

TYPICAL SECTION FOR TEMPORARY PAVING



STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 1A	SCALE, FEET 0 50 100	SHEET NO: 67	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\traffic control\025006_tc.dgn PLOT DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

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

LEGEND

- SIGN POST
- DRUM WITH/WITHOUT TYPE C LIGHT (25'C-C SPACING)
- TYPE III BARRICADE WITH/WITHOUT SIGN
- TEMPORARY SIGN SUPPORT
- TYPE II BARRICADE WITH/WITHOUT SIGN
- TRAFFIC FLOW ARROW
- WORK AREA
- CONCRETE BARRIER TEMPORARY PRECAST

WETLAND BOUNDARY

ROAD WORK AHEAD W20-1

ROAD WORK 500 FT W20-1

TEMPORARY PAVEMENT MARKING FROM STAGE 1A

ASPHALTIC SURFACE TEMPORARY FROM STAGE 1A

ROAD CLOSED R11-2 48" X 30"

W01-3R

W01-6 48" X 24"

TEMPORARY CONNECTIONS TO EXISTING SS MAY BE REQUIRED TO MAINTAIN DRAINAGE

WEST STREET

55"TW"+00

171-99

25"SH"+00

END ROAD WORK G20-2A 48" X 24"

MOUNT ON EXISTING OVERHEAD SIGN BRIDGE

ONLY R3-5L 42" X 48"

R3-6R 42" X 48"

REMOVE PAVEMENT MARKING ARROWS (REMOVE LEFT TURN ARROW)

DO NOT ENTER R5-1 36" X 36"

ROAD WORK AHEAD W20-1

ROAD WORK 500 FT W20-1

60"TW"+00

28TH AVENUE

R4-7 24" X 30" PERMANENT SIGN #78 (SEE SIGNING SHEETS)

END ROAD WORK G20-2A 48" X 24"

ROAD CLOSED R11-2 48" X 30"

SHERMAN STREET

NORTHWESTERN RR

ROAD WORK 500 FT W20-1

ROAD WORK AHEAD W20-1

STATE PROJECT NUMBER: 6675-00-71	HWY: CTH R	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 1B	SCALE, FEET 0 50 100	SHEET NO: 68	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\traffic control\025007_tc.dgn PLOT DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

WETLAND BOUNDARY

TEMPORARY PAVEMENT MARKING
REMOVEABLE TAPE
(DOUBLE YELLOW)

TEMPORARY PAVEMENT MARKING
FROM STAGE 1A

ASPHALTIC SURFACE
TEMPORARY
FROM STAGE 1A

ROAD CLOSED
R11-2
48" X 30"

ROAD WORK AHEAD
W20-1

ROAD WORK 500 FT
W20-1

END ROAD WORK
G20-2A
48" X 24"

MOUNT ON EXISTING OVERHEAD SIGN BRIDGE

ONLY
R3-5L
42" X 48"

R3-6R
42" X 48"

DO NOT ENTER
R5-1
36" X 36"

28TH AVENUE

WEST RETURN

SHERMAN STREET

NORTHWESTERN RR

W01-3R

165'100

20'SH+00

55'TW+00

171'99

25'SH+00

60'TW+00

LEGEND

- SIGN POST
- DRUM WITH/WITHOUT TYPE C LIGHT (25'C-C SPACING)
- TYPE III BARRICADE WITH/WITHOUT SIGN
- TEMPORARY SIGN SUPPORT
- TYPE II BARRICADE WITH/WITHOUT SIGN
- TRAFFIC FLOW ARROW
- WORK AREA
- CONCRETE BARRIER TEMPORARY PRECAST

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 1C	SCALE, FEET 0 50 100	SHEET NO: 69	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\traffic control\025008_tc.dgn PLOT DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

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

2

NOTE: ALL TEMPORARY PAVEMENT MARKING IS REMOVEABLE TAPE

WETLAND BOUNDARY

ROAD WORK AHEAD W20-1

ROAD WORK 500 FT W20-1

CONTRACTOR SHALL COORDINATE WITH WAUSAU STEEL TO MAINTAIN ACCESS FOR DELIVERIES

TEMPORARY PAVEMENT MARKING REMOVEABLE TAPE 4-INCH (DOUBLE YELLOW)

ROAD CLOSED R11-2 48" X 30"

TEMPORARY PAVEMENT MARKING REMOVEABLE TAPE 4-INCH (WHITE EDGELINE)

TEMPORARY PAVEMENT MARKING REMOVEABLE TAPE STOP LINE 18-INCH

TEMPORARY PAVEMENT MARKING REMOVEABLE TAPE CHANNELIZATION 8-INCH

END ROAD WORK G20-2A 48" X 24"

LEGEND

- SIGN POST
- DRUM WITH/WITHOUT TYPE C LIGHT (25' C-C SPACING)
- TYPE III BARRICADE WITH/WITHOUT SIGN
- TEMPORARY SIGN SUPPORT
- TYPE II BARRICADE WITH/WITHOUT SIGN
- TRAFFIC FLOW ARROW
- WORK AREA
- CONCRETE BARRIER TEMPORARY PRECAST

20"SH"+00

END ROAD WORK G20-2A 48" X 24"

MOUNT ON EXISTING OVERHEAD SIGN BRIDGE

R3-6L 42" X 48"

ONLY R3-5R 42" X 48"

TEMPORARY PAVEMENT MARKING REMOVEABLE TAPE 4-INCH (WHITE 3' DASH, 12' SKIP)

REMOVE PAVEMENT MARKING ARROWS (REMOVE THROUGH ARROW)

ROAD WORK AHEAD W20-1

ROAD WORK 500 FT W20-1

TW"+00

60"TW"+00

28TH AVENUE

TEMPORARY PAVEMENT MARKING REMOVEABLE TAPE ARROWS

NOTE: WORDS AND ARROWS REMAINING ON SOUTHBOUND 28TH AVENUE UPON COMPLETION OF STAGE 2 SHALL BE REMOVED AND REPLACED WITH PERMANENT PAVEMENT MARKING (SEE PAVEMENT MARKING DETAILS)

25"SH"+00

SHERMAN STREET

END ROAD WORK G20-2A 48" X 24"

ROAD CLOSED R11-2 48" X 30"

W01-6 48" X 24"

ROAD WORK 500 FT W20-1

ROAD WORK AHEAD W20-1

NORTHWESTERN RR

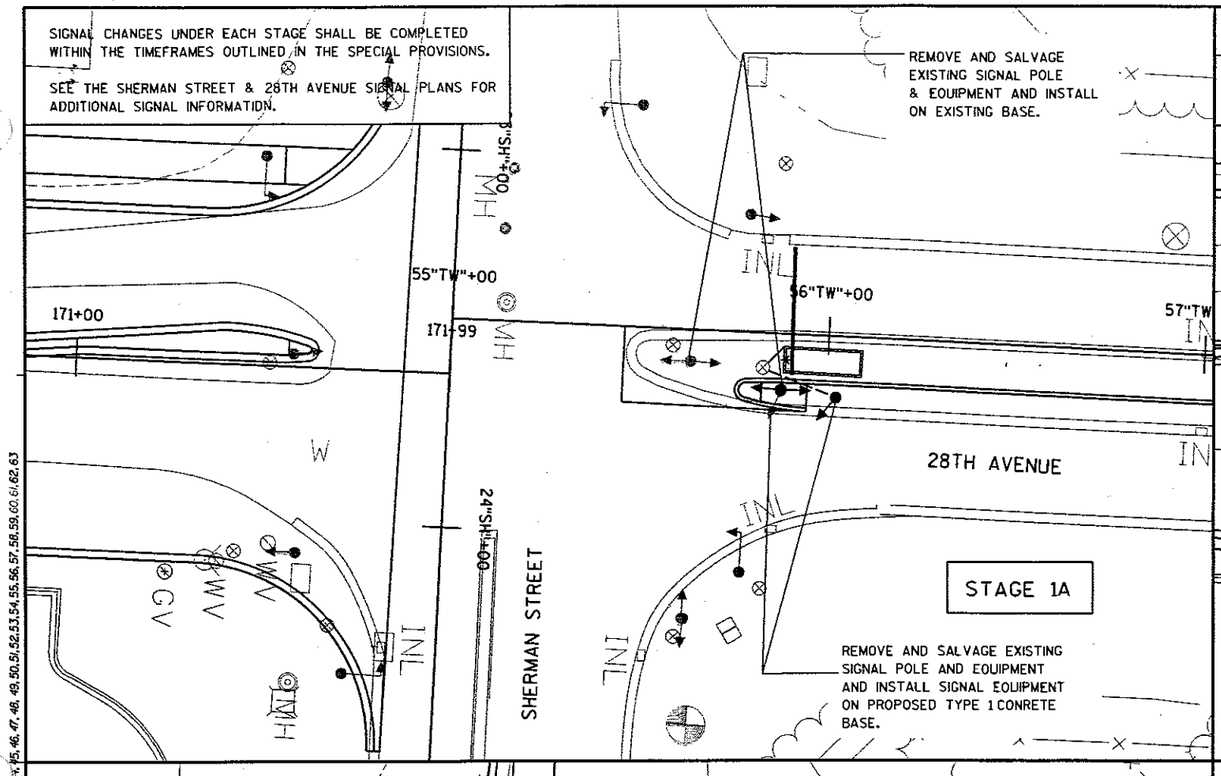
STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 2	SCALE, FEET 0 50 100	SHEET NO: 70	E

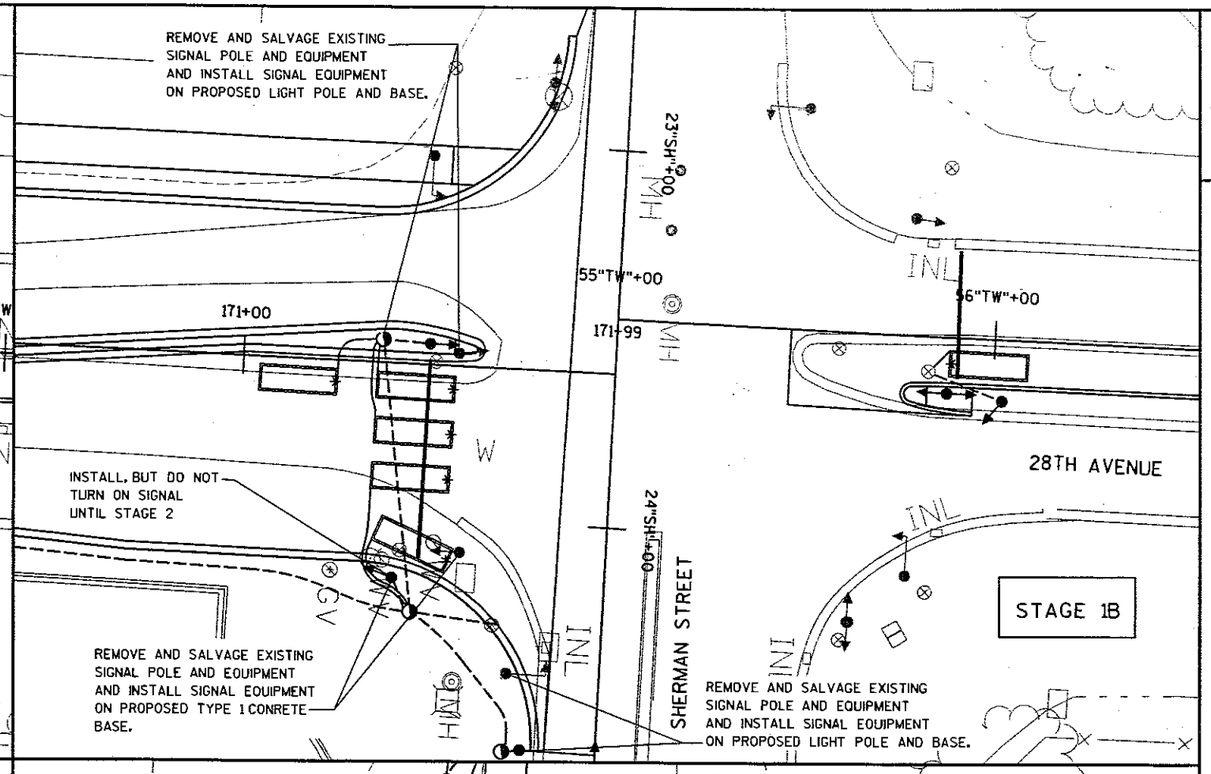
FILE NAME : P:\40xx\4025\Plan\6675-00-71\Traffic Control\025009_tc.dgn DATE : 02/09/2004 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

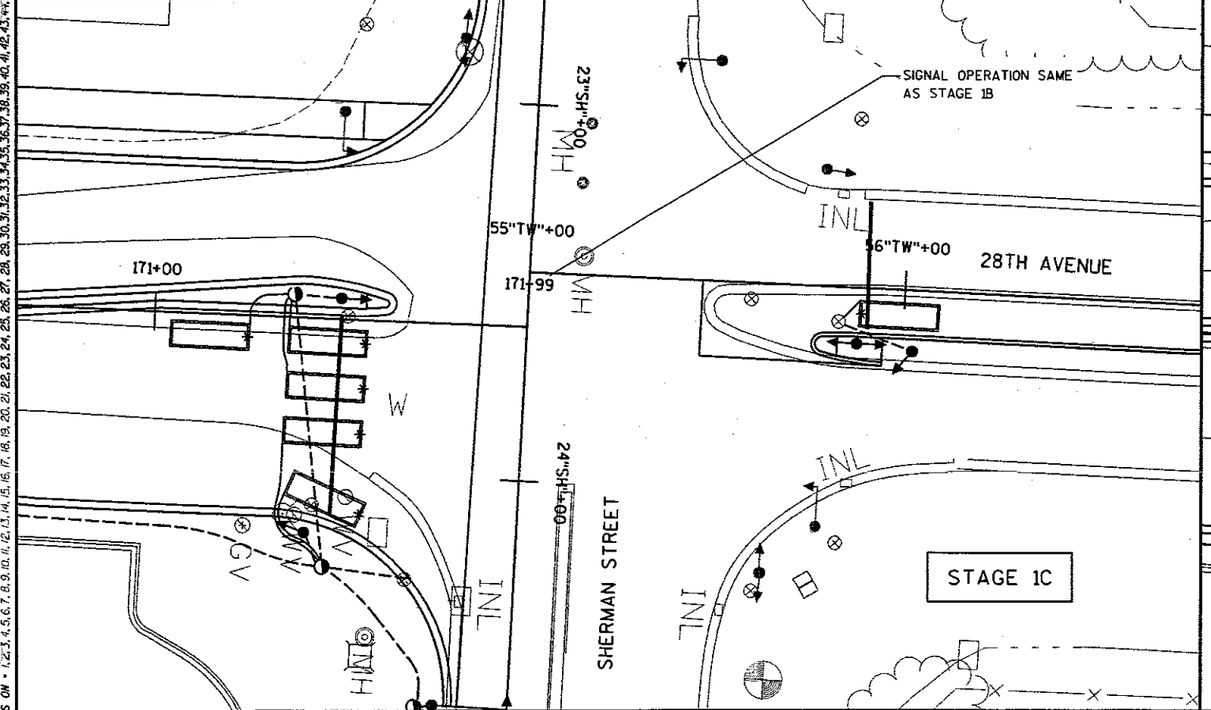
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

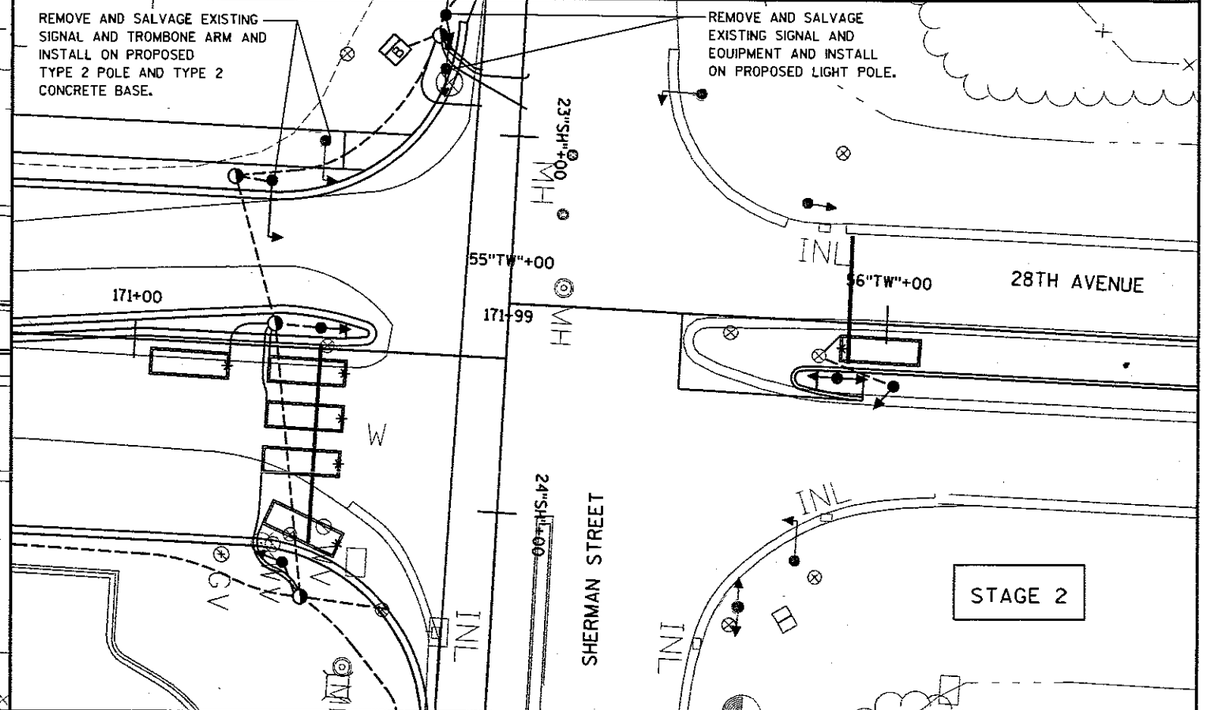
SIGNAL CHANGES UNDER EACH STAGE SHALL BE COMPLETED WITHIN THE TIMEFRAMES OUTLINED IN THE SPECIAL PROVISIONS.

SEE THE SHERMAN STREET & 28TH AVENUE SIGNAL PLANS FOR ADDITIONAL SIGNAL INFORMATION.









2

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	TRAFFIC CONTROL - TRAFFIC SIGNALS	SCALE, FEET 0 20 40	SHEET NO: 71	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 : p:\40xx\4025\plan\6675-00-71\traffic control\025010_tc.dgn PLOT DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

NOTES
FOR INFORMATION ONLY.
CONTRACTOR SHALL COMPLY WITH SECT. 107.19 OF THE STANDARD SPECIFICATIONS AND THE SPECIAL PROVISIONS.

N

LEGEND
- SIGN POST
- DRUM WITH/WITHOUT TYPE C LIGHT (25' C-C SPACING)
- TYPE III BARRICADE WITH/WITHOUT SIGN
- TEMPORARY SIGN SUPPORT
- TYPE II BARRICADE WITH/WITHOUT SIGN
- TRAFFIC FLOW ARROW
- WORK AREA
- CONCRETE BARRIER TEMPORARY PRECAST
- BUOY
- BOAT TRAFFIC PATTERN



DANGER BUOY (EXAMPLE)

BOAT TRAFFIC TO PRIVATE PROPERTY

MAIN CHANNEL BOAT TRAFFIC

BIG RIB RIVER

50' SPACING (TYP.)

WEST ARTERIAL

140+00

LAKE WAUBAU

145+00

150+00

SIGN

USH 51/WIS 29

USH 51/WIS 29

SIGN

EXISTING PIERS

GAUGING STATION

SIGN

MAIN CHANNEL BOAT TRAFFIC

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	BOATING TRAFFIC CONTROL	SCALE, FEET 0 50 100	SHEET NO: 72	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\traffic control\025011_tc.dgn PLOT DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

NOTES
FOR INFORMATION ONLY.
CONTRACTOR SHALL COMPLY WITH SECT. 107.19 OF THE STANDARD SPECIFICATIONS AND THE SPECIAL PROVISIONS.

LEGEND
- SIGN POST
- DRUM WITH/WITHOUT TYPE C LIGHT (25'C-C SPACING)
- TYPE III BARRICADE WITH/WITHOUT SIGN
- TEMPORARY SIGN SUPPORT
- TYPE II BARRICADE WITH/WITHOUT SIGN
- TRAFFIC FLOW ARROW
- WORK AREA
- CONCRETE BARRIER TEMPORARY PRECAST
- SNOWMOBILE TRAFFIC PATTERN
- (S) PLACE SIGN ON EVERY OTHER DRUM

R55-16
12" X 12"

N

SNOWMOBILE TRAFFIC

BIG RIB RIVER

50' SPACING (TYP.)

WEST ARTERIAL

140+00

LAKE WAUSAU

145+00

150+00

SIGN

USH 51/WIS 29

USH 51/WIS 29

EXISTING PIERS

GUAGING STATION

SIGN

SIGN

SNOWMOBILE TRAFFIC

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

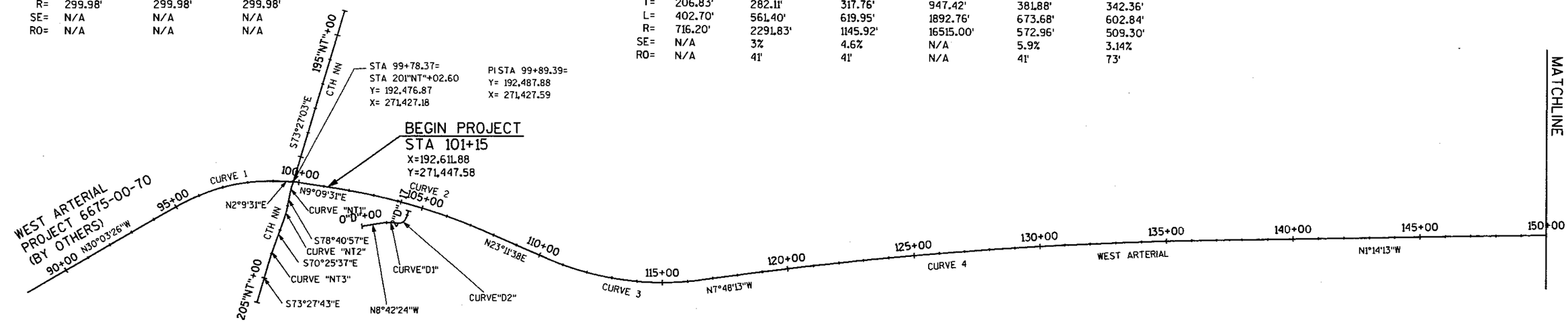
STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	SNOWMOBILE TRAFFIC CONTROL	SCALE, FEET 0 50 100	SHEET NO: 73	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\traffic control\025012_tc.dgn PLOT DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

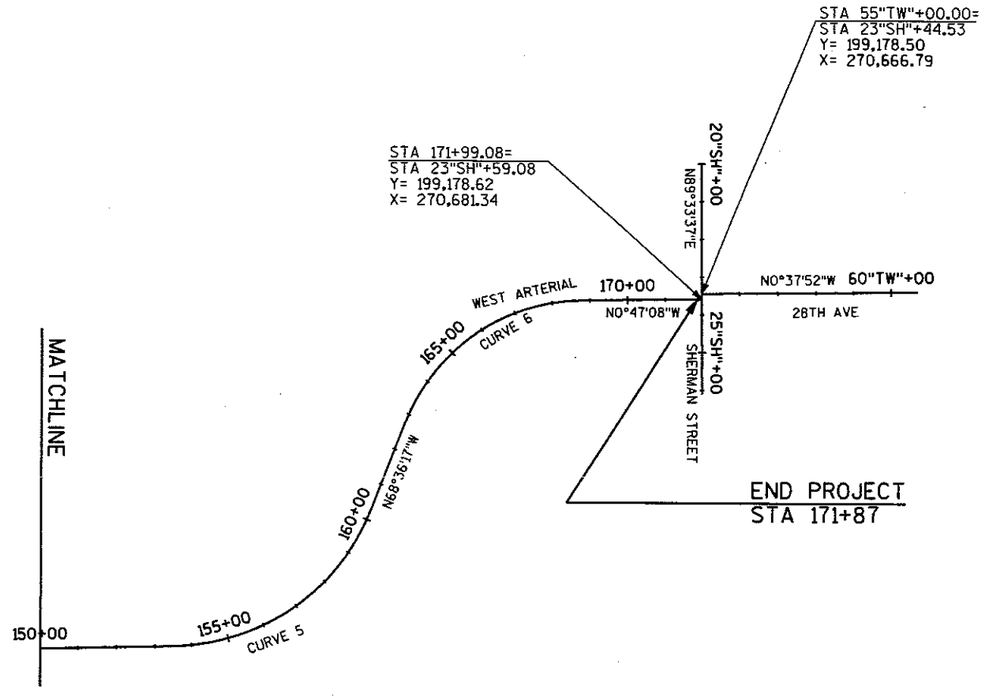
WISDOT/CADDS SHEET 42

	CURVE "NT1"	CURVE "NT2"	CURVE "NT3"
PI STA=	201"NT"+32.80	202"NT"+28.95	203"NT"+94.10
X=	271,456.12	271,550.42	271,706.10
Y=	192,468.27	192,449.39	192,394.04
PC=	201"NT"+19.09	202"NT"+07.30	203"NT"+86.15
PT=	201"NT"+46.48	202"NT"+50.52	204"NT"+02.04
DELTA=	5°13'55"	8°15'21"	3°02'06"
T=	13.71'	21.65'	7.95'
L=	27.39'	43.22'	15.89'
R=	299.98'	299.98'	299.98'
SE=	N/A	N/A	N/A
RO=	N/A	N/A	N/A

	CURVE 1	CURVE 2	CURVE 3	CURVE 4	CURVE 5	CURVE 6
PI STA=	97+16.78	104+57.87	113+51.23	127+56.41	157+36.57	166+21.09
X=	271,416.91	271,502.16	271,855.12	271,662.21	271,597.83	270,690.38
Y=	192,204.51	192,950.38	193,774.14	195,181.74	198,163.28	198,518.81
PC=	95+09.95	101+75.75	110+33.47	118+09.00	153+54.69	162+78.74
PT=	99+12.65	107+37.16	116+53.42	137+01.76	160+28.37	168+81.57
DELTA=	32°12'57"	14°02'06"	30°59'50"	6°34'00"	67°22'04"	67°49'09"
T=	206.83'	282.11'	317.76'	947.42'	381.88'	342.36'
L=	402.70'	561.40'	619.95'	1892.76'	673.68'	602.84'
R=	716.20'	2291.83'	1145.92'	16515.00'	572.96'	509.30'
SE=	N/A	3%	4.6%	N/A	5.9%	3.14%
RO=	N/A	41'	41'	N/A	41'	73'



	CURVE "D1"	CURVE "D2"
PI STA=	1"D"+18.01	1"D"+71.46
X=	271,585.89	271,593.24
Y=	192,2863.85	192,917.12
PC=	0"D"+88.59	1"D"+47.07
PT=	1"D"+47.07	1"D"+88.18
DELTA=	15°34'16"	77°29'09"
T=	29.43'	24.39'
L=	58.43'	41.11'
R=	215.20'	30.40'
SE=	N/A	N/A
RO=	N/A	N/A



STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	ALIGNMENT PLAN	SCALE, FEET 0 200 400	SHEET NO: 14	E

DATE 19FEB04

ESTIMATE OF QUANTITIES

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6675-00-71 QUANTITY
0010	201.0105	CLEARING	STA	60.000	60.000
0020	201.0115	CLEARING	ACRE	6.100	6.100
0030	201.0205	GRUBBING	STA	60.000	60.000
0040	201.0215	GRUBBING	ACRE	6.100	6.100
0050	204.0110	REMOVING ASPHALTIC SURFACE	SY	2,120.000	2,120.000
0060	204.0150	REMOVING CURB & GUTTER	LF	1,075.000	1,075.000
0070	204.0165	REMOVING GUARDRAIL	LF	710.000	710.000
0080	204.0170	REMOVING FENCE	LF	3,695.000	3,695.000
0090	204.0195	REMOVING CONCRETE BASES	EACH	6.000	6.000
0100	204.0220	REMOVING INLETS	EACH	8.000	8.000
0110	204.0245	REMOVING STORM SEWER (SIZE) 01. 12-INCH	LF	205.000	205.000
0120	204.0245	REMOVING STORM SEWER (SIZE) 02. 36-INCH	LF	115.000	115.000
0130	204.0280	SEALING PIPES	EACH	3.000	3.000
0140	204.9060.S	REMOVING (ITEM DESCRIPTION) 01. PULL BOXES	EACH	5.000	5.000
0150	205.0100	EXCAVATION COMMON	CY	241,550.000	241,550.000
0160	205.0400	EXCAVATION MARSH	CY	91,514.000	91,514.000
0170	206.1000	EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 01. B-37-373	LS	1.000	1.000
0180	206.5000	COFFERDAMS (STRUCTURE) 01. B-37-373	LS	1.000	1.000
0190	208.1100	SELECT BORROW	CY	29,906.000	29,906.000
0200	209.0100	BACKFILL GRANULAR	CY	170,026.000	170,026.000
0210	210.0100	BACKFILL STRUCTURE	CY	256.000	256.000
0220	213.0100	FINISHING ROADWAY (PROJECT) 01. 6675-00-71	EACH	1.000	1.000
0230	301.0100.S	QMP BASE AGGREGATE	TON	35,815.000	35,815.000
0240	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	2,890.000	2,890.000
0250	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	32,925.000	32,925.000
0260	311.0115	BREAKER RUN	CY	750.000	750.000
0270	416.0050	CONCRETE PAVEMENT APPROACH SLAB	SY	84.000	84.000
0280	416.1010	CONCRETE SURFACE DRAINS	CY	4.000	4.000
0290	455.0105	ASPHALTIC MATERIAL PG58-28	TON	516.000	516.000
0300	455.0605	TACK COAT	GAL	789.000	789.000
0310	460.1100	HMA PAVEMENT TYPE E-0.3	TON	802.000	802.000
0320	460.1101	HMA PAVEMENT TYPE E-1	TON	7,789.000	7,789.000
0330	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	5,500.000	5,500.000
0340	460.3000	QMP HMA MIXTURE	TON	8,591.000	8,591.000
0350	465.0105	ASPHALTIC SURFACE	TON	50.000	50.000
0360	465.0120	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	TON	375.000	375.000
0370	465.0125	ASPHALTIC SURFACE TEMPORARY	TON	105.000	105.000
0380	502.0100	CONCRETE MASONRY BRIDGES	CY	2,002.000	2,002.000
0390	502.0300.S	QMP CONCRETE STRUCTURES 5-CYLINDER	CY	2,002.000	2,002.000
0400	502.0400.S	INCENTIVE STRENGTH CONCRETE STRUCTURES	DOL	20,020.000	20,020.000
0410	502.1100	CONCRETE MASONRY SEAL	CY	396.000	396.000
0420	502.3100	EXPANSION DEVICE (STRUCTURE) 01. B-37-373	LS	1.000	1.000
0430	502.3200	PROTECTIVE SURFACE TREATMENT	SY	4,545.000	4,545.000
0440	503.0155	PRESTRESSED GIRDER TYPE I 54W-INCH	LF	3,962.000	3,962.000
0450	504.0500	CONCRETE MASONRY RETAINING WALLS	CY	509.000	509.000
0460	505.0115	BAR STEEL REINFORCEMENT RETAINING WALLS	LB	44,815.000	44,815.000
0470	505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	116,215.000	116,215.000
0480	505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	352,265.000	352,265.000
0490	506.0105	STRUCTURAL STEEL CARBON	LB	560.000	560.000

DATE 19FEB04

E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6675-00-71 QUANTITY
0500	506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	14.000	14.000
0510	506.2610	BEARING PADS ELASTOMERIC LAMINATED	EACH	42.000	42.000
0520	506.4000	STEEL DIAPHRAGMS (STRUCTURE) 01. B-37-373	EACH	60.000	60.000
0530	511.2105	PILING STEEL DELIVERED AND DRIVEN HP 10-INCH X 42 LB	LF	3,498.000	3,498.000
0540	511.2115	PILING STEEL DELIVERED AND DRIVEN HP 12-INCH X 74 LB	LF	8,400.000	8,400.000
~~0550~~	~~513.4055~~	~~RAILING TUBULAR TYPE H (STRUCTURE) 01. B-37-373~~	~~LS~~	~~1.000~~	~~1.000~~
0560	513.7010	RAILING STEEL TYPE C2 (STRUCTURE) 01. B-37-373	LS	1.000	1.000
0570	513.7010	RAILING STEEL TYPE C2 (STRUCTURE) 02. R-37-13	LS	1.000	1.000
0580	513.7010	RAILING STEEL TYPE C2 (STRUCTURE) 03. R-37-14	LS	1.000	1.000
0590	514.0445	FLOOR DRAINS TYPE GC	EACH	12.000	12.000
0600	514.0460	FLOOR DRAINS TYPE H	EACH	6.000	6.000
0610	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	30.000	30.000
0620	522.0112	CULVERT PIPE REINFORCED CONCRETE CLASS III 12-INCH	LF	45.000	45.000
0630	522.0136	CULVERT PIPE REINFORCED CONCRETE CLASS III 36-INCH	LF	252.000	252.000
0640	522.1012	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH	EACH	9.000	9.000
0650	522.1018	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH	EACH	1.000	1.000
0660	522.1024	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH	EACH	4.000	4.000
0670	522.1036	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH	EACH	4.000	4.000
0680	523.0129	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 29X45-INCH	LF	69.000	69.000
0690	523.0529	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 29X45-INCH	EACH	2.000	2.000
0700	532.0500.S	WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH	SF	14,530.000	14,530.000
0710	601.0322	CONCRETE CURB & GUTTER 22-INCH	LF	705.000	705.000
0720	601.0407	CONCRETE CURB & GUTTER 18-INCH TYPE D	LF	250.000	250.000
0730	601.0411	CONCRETE CURB & GUTTER 30-INCH TYPE D	LF	5,085.000	5,085.000
0740	602.0405	CONCRETE SIDEWALK 4-INCH	SF	1,700.000	1,700.000
0750	602.0415	CONCRETE SIDEWALK 6-INCH	SF	124.000	124.000
0760	602.0501.S	CURB RAMP DETECTABLE WARNING FIELD	SF	16.000	16.000
0770	603.0800	CONCRETE BARRIER TEMPORARY PRECAST CONTRACTOR FURNISHED & INSTALLED	LF	3,650.000	3,650.000
0780	606.0100	RIPRAP LIGHT	CY	45.000	45.000
0790	606.0200	RIPRAP MEDIUM	CY	1,190.000	1,190.000
0800	606.0300	RIPRAP HEAVY	CY	3,227.000	3,227.000
0810	606.0700	GROUTED RIPRAP HEAVY	CY	58.000	58.000
0820	607.0600.S	STORM SEWER PIPE (INCH) 01. 36-INCH	LF	92.000	92.000
0830	608.0312	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH	LF	396.000	396.000
0840	608.0315	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH	LF	111.000	111.000

DATE 19FEB04 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6675-00-71 QUANTITY
0850	608.0318	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH	LF	132.000	132.000
0860	608.0324	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH	LF	346.000	346.000
0870	611.0210	MANHOLES TYPE 3	EACH	2.000	2.000
0880	611.0301	INLETS TYPE 1	EACH	1.000	1.000
0890	611.0303	INLETS TYPE 3	EACH	27.000	27.000
0900	611.0307	INLETS TYPE 9	EACH	4.000	4.000
0910	611.0624	INLET COVERS TYPE H	EACH	29.000	29.000
0920	611.0642	INLET COVERS TYPE MS	EACH	8.000	8.000
0930	611.0666	INLET COVERS TYPE Z	EACH	1.000	1.000
0940	612.0106	PIPE UNDERDRAIN 6-INCH	LF	156.000	156.000
0950	612.0206	PIPE UNDERDRAIN UNPERFORATED 6-INCH	LF	60.000	60.000
0960	614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	4.000	4.000
0970	614.0200	STEEL THRIE BEAM STRUCTURE APPROACH	LF	134.000	134.000
0980	614.0370	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL	EACH	4.000	4.000
0990	614.0620.S	MARKER POSTS CULVERT END FLEXIBLE	EACH	14.000	14.000
1000	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 6675-00-71	EACH	1.000	1.000
1010	619.1000	MOBILIZATION	EACH	1.000	1.000
1020	620.0100	CONCRETE CORRUGATED MEDIAN	SF	200.000	200.000
1030	620.0300	CONCRETE MEDIAN SLOPED NOSE	SF	175.000	175.000
1040	623.0200	DUST CONTROL SURFACE TREATMENT	SY	8,700.000	8,700.000
1050	624.0100	WATER	MGAL	500.000	500.000
1060	625.0100	TOPSOIL	SY	74,025.000	74,025.000
1070	625.0500	SALVAGED TOPSOIL	SY	100,506.000	100,506.000
1080	627.0200	MULCHING	SY	37,000.000	37,000.000
1090	628.1505	SILT FENCE DELIVERED	LF	13,625.000	13,625.000
1100	628.1510	SILT FENCE INSTALLED	LF	13,625.000	13,625.000
1110	628.1520	SILT FENCE MAINTENANCE	LF	15,625.000	15,625.000
1120	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	14.000	14.000
1130	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	22.000	22.000
1140	628.1920	CLEANING SEDIMENT BASINS	CY	600.000	600.000
1150	628.2005	EROSION MAT DELIVERED CLASS I TYPE A	SY	15,850.000	15,850.000
1160	628.2010	EROSION MAT DELIVERED CLASS I TYPE B	SY	2,500.000	2,500.000
1170	628.2015	EROSION MAT DELIVERED URBAN CLASS I TYPE A	SY	4,400.000	4,400.000
1180	628.2020	EROSION MAT DELIVERED URBAN CLASS I TYPE B	SY	23,300.000	23,300.000
1190	628.3005	EROSION MAT INSTALLED CLASS I TYPE A	SY	15,850.000	15,850.000
1200	628.3010	EROSION MAT INSTALLED CLASS I TYPE B	SY	2,500.000	2,500.000
1210	628.3015	EROSION MAT INSTALLED URBAN CLASS I TYPE A	SY	4,400.000	4,400.000
1220	628.3020	EROSION MAT INSTALLED URBAN CLASS I TYPE B	SY	23,300.000	23,300.000
1230	628.6005	TURBIDITY BARRIERS	SY	2,900.000	2,900.000
1240	628.7005	INLET PROTECTION TYPE A	EACH	37.000	37.000
1250	628.7015	INLET PROTECTION TYPE C	EACH	34.000	34.000
1260	628.7020	INLET PROTECTION TYPE D	EACH	12.000	12.000
1270	628.7505	TEMPORARY DITCH CHECKS DELIVERED	LF	620.000	620.000
1280	628.7510	TEMPORARY DITCH CHECKS INSTALLED	LF	620.000	620.000
1290	628.7550	CULVERT PIPE DITCH CHECKS	EACH	4.000	4.000
1300	628.7560.S	STONE OR ROCK DITCH CHECKS	CY	20.000	20.000

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ESTIMATE OF QUANTITIES

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6675-00-71 QUANTITY
1310	629.0210	FERTILIZER TYPE B	CWT	50.000	50.000
1320	630.0120	SEEDING MIXTURE NO. 20	LB	1,905.000	1,905.000
1330	630.0160	SEEDING MIXTURE NO. 60	LB	1,480.000	1,480.000
1340	630.0200	SEEDING TEMPORARY	LB	2,125.000	2,125.000
1350	631.1100	SOD EROSION CONTROL	SY	126.000	126.000
1360	633.0200	DELINEATOR POSTS FLEXIBLE	EACH	42.000	42.000
1370	634.0614	POSTS WOOD 4X6-INCH X 14-FT	EACH	18.000	18.000
1380	634.0616	POSTS WOOD 4X6-INCH X 16-FT	EACH	28.000	28.000
1390	634.0618	POSTS WOOD 4X6-INCH X 18-FT	EACH	13.000	13.000
1400	637.0202	SIGNS REFLECTIVE TYPE II	SF	430.230	430.230
1410	638.2102	MOVING SIGNS TYPE II	EACH	17.000	17.000
1420	638.2602	REMOVING SIGNS TYPE II	EACH	17.000	17.000
1430	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	36.000	36.000
1440	638.4000	MOVING SMALL SIGN SUPPORTS	EACH	9.000	9.000
1450	642.5000	FIELD OFFICE TYPE B (PROJECT) 01. 6675-00-71	EACH	1.000	1.000
1460	643.0100	TRAFFIC CONTROL (PROJECT) 01. 6675-00-71	EACH	1.000	1.000
1470	643.0300	TRAFFIC CONTROL DRUMS	DAYS	26,335.000	26,335.000
1480	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAYS	2,840.000	2,840.000
1490	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAYS	3,610.000	3,610.000
1500	643.0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C	DAYS	275.000	275.000
1510	643.0800	TRAFFIC CONTROL ARROW BOARDS	DAYS	10.000	10.000
1520	643.0900	TRAFFIC CONTROL SIGNS	DAYS	4,035.000	4,035.000
1530	645.0110	GEOTEXTILE FABRIC TYPE DF	SY	148.000	148.000
1540	645.0120	GEOTEXTILE FABRIC TYPE HR	SY	5,042.000	5,042.000
1550	645.0130	GEOTEXTILE FABRIC TYPE R	SY	3,095.000	3,095.000
1560	645.0140	GEOTEXTILE FABRIC TYPE SAS	SY	1,130.000	1,130.000
1570	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	18,245.000	18,245.000
1580	646.0226	PAVEMENT MARKING CHANNELIZING EPOXY 8-INCH	LF	1,060.000	1,060.000
1590	647.0166	PAVEMENT MARKING ARROWS EPOXY TYPE 2	EACH	11.000	11.000
1600	647.0176	PAVEMENT MARKING ARROWS EPOXY TYPE 3	EACH	6.000	6.000
1610	647.0356	PAVEMENT MARKING WORDS EPOXY	EACH	9.000	9.000
1620	647.0456	PAVEMENT MARKING CURB EPOXY	LF	215.000	215.000
1630	647.0566	PAVEMENT MARKING STOP LINE EPOXY 18-INCH	LF	140.000	140.000
1640	647.0606	PAVEMENT MARKING ISLAND NOSE EPOXY	EACH	8.000	8.000
1650	647.0656	PAVEMENT MARKING PARKING STALL EPOXY	LF	585.000	585.000
1660	647.0726	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH	LF	320.000	320.000
1670	647.0856	PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY	SF	80.000	80.000
1680	647.0955	REMOVING PAVEMENT MARKINGS ARROWS	EACH	12.000	12.000
1690	647.0965	REMOVING PAVEMENT MARKINGS WORDS	EACH	3.000	3.000
1700	648.0100	LOCATING NO-PASSING ZONES	MI	0.810	0.810
1710	649.0100	TEMPORARY PAVEMENT MARKING 4-INCH	LF	1,685.000	1,685.000
1720	649.0400	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH	LF	5,425.000	5,425.000
1730	649.0800	TEMPORARY PAVEMENT MARKING CHANNELIZING REMOVABLE TAPE 8-INCH	LF	65.000	65.000
1740	649.1100	TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH	LF	15.000	15.000
1750	649.1200	TEMPORARY PAVEMENT MARKING STOP LINE REMOVABLE TAPE 18-INCH	LF	3.000	3.000
1760	649.1800	TEMPORARY PAVEMENT MARKING ARROWS REMOVABLE TAPE	EACH	45.000	45.000

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E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6675-00-71 QUANTITY
1770	650.4000	CONSTRUCTION STAKING STORM SEWER SYSTEM	EACH	44.000	44.000
1780	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	26,470.000	26,470.000
1790	650.5000	CONSTRUCTION STAKING BASE	LF	16,603.000	16,603.000
1800	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	6,175.000	6,175.000
1810	650.6000	CONSTRUCTION STAKING PIPE CULVERTS	EACH	3.000	3.000
1820	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 01. B-37-373	LS	1.000	1.000
1830	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 02. R-37-13	LS	1.000	1.000
1840	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 03. R-37-14	LS	1.000	1.000
1850	650.8500	CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (PROJECT) 01. 6675-00-71	LS	1.000	1.000
~~1860~~	~~650.9900~~	~~CONSTRUCTION STAKING INITIAL LAYOUT~~	~~LF~~	~~15,202.000~~	~~15,202.000~~
1870	652.0210	CONDUIT RIGID NONMETALLIC SCHEDULE 40 1-INCH	LF	410.000	410.000
1880	652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	3,290.000	3,290.000
1890	652.0235	CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	LF	616.000	616.000
1900	652.0800	CONDUIT LOOP DETECTOR	LF	883.000	883.000
1910	653.0105	PULL BOXES STEEL 12X24-INCH	EACH	2.000	2.000
1920	653.0120	PULL BOXES STEEL 18X24-INCH	EACH	1.000	1.000
1930	653.0135	PULL BOXES STEEL 24X36-INCH	EACH	2.000	2.000
1940	654.0101	CONCRETE BASES TYPE 1	EACH	2.000	2.000
1950	654.0102	CONCRETE BASES TYPE 2	EACH	4.000	4.000
1960	654.0105	CONCRETE BASES TYPE 5	EACH	23.000	23.000
1970	654.0215	CONCRETE CONTROL CABINET BASES TYPE 9	EACH	2.000	2.000
1980	655.0230	CABLE TRAFFIC SIGNAL 5-14 AWG	LF	195.000	195.000
1990	655.0290	CABLE TRAFFIC SIGNAL 21-14 AWG	LF	932.000	932.000
2000	655.0305	CABLE TYPE UF 2-12 AWG GROUNDED	LF	620.000	620.000
2010	655.0515	ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG	LF	1,556.000	1,556.000
2020	655.0610	ELECTRICAL WIRE LIGHTING 12 AWG	LF	5,606.000	5,606.000
2030	655.0625	ELECTRICAL WIRE LIGHTING 6 AWG	LF	2,715.000	2,715.000
2040	655.0630	ELECTRICAL WIRE LIGHTING 4 AWG	LF	10,860.000	10,860.000
2050	655.0700	LOOP DETECTOR LEAD IN CABLE	LF	4,300.000	4,300.000
2060	655.0800	LOOP DETECTOR WIRE	LF	3,452.000	3,452.000
2070	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 01. 100A (WEST ARTERIAL/SHERMAN ST- LIGHTING)	LS	1.000	1.000
2080	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 02. 100A (WEST ARTERIAL/SHERMAN ST- SIGNALS)	LS	1.000	1.000
2090	657.0255	TRANSFORMER BASES STANDARD 11 1/2-INCH BOLT CIRCLE	EACH	26.000	26.000
2100	657.0315	POLES TYPE 4	EACH	2.000	2.000
2110	657.0320	POLES TYPE 5	EACH	23.000	23.000
2120	657.0395.S	POLES (TYPE) 01. TYPE 3	EACH	1.000	1.000
2130	657.0395.S	POLES (TYPE) 02. TYPE 2	EACH	1.000	1.000
2140	657.0710	LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 12-FT	EACH	34.000	34.000
2150	658.5069	SIGNAL MOUNTING HARDWARE (LOCATION) 01. WEST ARTERIAL/SHERMAN STREET	LS	1.000	1.000
2160	659.0115	LUMINAIRES UTILITY HPS 150 WATTS	EACH	34.000	34.000
2170	674.0300	REMOVE CABLE	LF	805.000	805.000

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E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6675-00-71 QUANTITY
2180	690.0100	SAWING EXISTING PAVEMENT	LF	720.000	720.000
2190	690.0200	SAWING CONCRETE PAVEMENT FULL DEPTH	LF	330.000	330.000
2200	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT $5. 00/HR	HRS	400.000	400.000
2210	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT $5.00/HR	HRS	1,800.000	1,800.000
~~2220~~	~~SPV.0035~~	~~SPECIAL 01. QMP SUBGRADE~~	~~CY~~	~~267,570.000~~	~~267,570.000~~
2230	SPV.0035	SPECIAL 02. GABIONS	CY	24.000	24.000
2240	SPV.0060	SPECIAL 01. INLETS TYPE 3 SPECIAL	EACH	2.000	2.000
2250	SPV.0060	SPECIAL 02. LOWER EXISTING PULL BOX COVER	EACH	1.000	1.000
2260	SPV.0060	SPECIAL 03. REMOVE, SALVAGE & REINSTALL EXISTING SIGNAL EQUIPMENT	EACH	7.000	7.000
2270	SPV.0060	SPECIAL 04. REPAIR EXISTING LOOP DETECTOR	EACH	5.000	5.000
2280	SPV.0060	SPECIAL 05. LIGHTING CONTROL CABINET (TYPE 3866- SPECIAL)	EACH	1.000	1.000
2290	SPV.0060	SPECIAL 06. INLET COVERS TYPE SPECIAL	EACH	2.000	2.000
2300	SPV.0060	SPECIAL 07. TRAFFIC CONTROL CABINET (TYPE 3866- SPECIAL)	EACH	1.000	1.000
2310	SPV.0085	SPECIAL 01. SEEDING MIXTURE WETLAND MEADOW	LB	225.000	225.000
2320	SPV.0085	SPECIAL 02. SEEDING MIXTURE AQUATIC EMERGENT	LB	47.000	47.000
2330	SPV.0090	SPECIAL 01. CONC CURB & GUTTER HES 30-IN TYPE D	LF	135.000	135.000
2340	SPV.0090	SPECIAL 02. CONC BARRIER TEMP PRECAST CONTRACTOR FURNISHED AND INSTALLED, SPECIAL	LF	3,650.000	3,650.000
2350	SPV.0090	SPECIAL 03. TREATED TIMBER RUB RAIL	LF	167.000	167.000
2360	SPV.0180	SPECIAL 01. GEOGRID REINFORCEMENT	SY	89,525.000	89,525.000
2370	SPV.0180	SPECIAL 02. SALVAGED WETLAND TOPSOIL	SY	94,787.000	94,787.000
2380	SPV.0195	SPECIAL 01. MANAGEMENT OF PETROLEUM CONTAMINATED MATERIAL	TON	3,444.000	3,444.000
2390	SPV.0195	SPECIAL 02. CLAY LINER	TON	40.000	40.000
2345	SPV.0195	SPECIAL 03. Removal of F Building Mat. Debris	TON	9,000.000	9,000.000
2400	SPV.0060	SPECIAL 08 Salvage Existing Light Pole, Luminaire	Each	2.000	2.000
2415	311.0110	BREAKER RUN	TON	11,000.000	11,000.000
2420	312.0110	SELECT CRUSHED MATERIAL	TON	1800.000	1,800.000
2425	SPV.0035	SPECIAL 02. LOAD, HAUL, AND STOCKPILE	CY	8,075.000	8,075.000
2430	SPV.0035	SPECIAL 03. LOAD, HAUL, AND STOCKPILE	CY	5,000.000	5,000.000
2585	SPV.0055	SPECIAL 02. MAINTENANCE AND REPAIR OF HAUL ROAD SPECIAL	DOL	5,000.000	5,000.000
2445	SPV.0055	SPECIAL 01. FUEL COST ADJUSTMENT	DOL	100,000.000	100,000.000
2450	SPV.0105	SPECIAL 01. BREAK DOWN, LOAD, HAUL,	LS.	1.000	1.000
~~155~~	~~SPV.0085~~	~~AND BURY ROCK~~			
155	SPV.0085	SPECIAL 03. SEEDING Erosion Control	LB	60.000	60.000
160	BOS.3105	SPLICES HP	DOL	17.000	17.000
165	513.7010	RAILING TYP C2 04B-37-373	L.S.	1.000	1.000
170	SPV.0060	SPECIAL 09 RAILING TUBULAR	EACH	-1.000	-1.000
~~95~~	~~602.0501.S~~	~~TYPE H B-37-373~~			
175	602.0501.S	CURB RAMP DETECTABLE WARNING FIELD	S.F.	16.000	16.000
85	206.5000	COFFERDAMS B-37-373	L.S.	1.000	1.000
80	206.1000	EXC FOR STRUCTURE BRIDGES	L.S.	1.000	1.000
90	SPV.0060	SPECIAL 10. COFFERDAMS B-37-373	EACH	-1.000	-1.000
95	SPV.0060	SPECIAL 11. EXC. FOR STRUCTURES BRIDGES	EACH	-1.000	-1.000
15	206.5000	COFFERDAMS B-37-373	L.S.	1.000	1.000
10	206.1000	EXC FOR STRUCTURES BRIDGES B-37-373	L.S.	1.000	1.000
00	SPV.0060	SPECIAL 12. COFFERDAMS B-37-373	EACH	-1.000	-1.000
05	SPV.0060	SPECIAL 13 EXC FOR STRUCTURE BRIDGES B-37-373	EACH	-1.000	-1.000

mber					Quantity
25	204.9060,S	REMOVING DELINEATORS POSTS	EACH	43.000	43.000
575	SPV.0165	SPECIAL 01. RUSTIFICATION AND	S.F.	1,600.000	1,600.000
	—	DECORATIVE CONCRETE B-37-373			
50	647.0576	PAVEMENT MARKING STOP LINE	L.F.	48.000	48.000
—	—	EPOXY 24-INCH			
555	646.0600	REMOVING PAVEMENT MARKINGS	L.F.	48.000	48.000
565	SPV.0045	SPECIAL 01. RAILROAD FLAGGER 8-Hour DAY	DAY	1.000	1.000
570	SPV.0075	SPECIAL 01. RAILROAD FLAGGER OVERTIME	HRS	1.000	1.000
560	SPV.0105	SPECIAL 03. RAILROAD INSURANCE	LS	1.000	1.000
535	652.0605	CONDUIT SPECIAL 2-INCH	LF	121.000	121.000
580	653.0140	PULL BOXES STEEL 24x42-INCH	EACH	1.000	1.000
545	SPV.0105	SPECIAL 02. QUEUE CUTTER	L.S.	1.000	1.000
—	—	CONTROLLER EQUIPMENT			
540	SPV.0060	SPECIAL 14. ADANCE FLASHER	Each	2.000	2.000
—	—	ASSEMBLY - TYPE I			
					6999-04-81 Quantity
05	305.0110	BASE AGGREGATE DENSE 3/4-Inch	TON	215.000	215.000
00	208.0100	BORROW	CY	12.000	12.000
665	601.0409	CONCRETE CURB & GUTTER 30-INCH TYPE A	LF	6.000	6.000
	650.5000	CONSTRUCTION STAKING BASE	LF	285.000	285.000
595	205.0100	EXCAVATION COMMON	CY	88.000	88.000
630	629.0210	FERTILIZER TYPE B	CWT	1.000	1.000
040	619.1000	MOBILIZATION	EACH	1.000	1.000
625	627.0200	MULCHING	SY	500.000	500.000
645	647.0563	PAVEMENT MARKING STOP LINE PAINT	LF	37.000	37.000
—	—	18-INCH			
590	204.0150	REMOVING CURB & GUTTER	LF	270.000	270.000
660	690.0200	SAWING CONCRETE PAVEMENT FULL DEPTH	LF	165.000	165.000
655	690.0100	SAWING EXISTING PAVEMENT	LF	140.000	140.000
635	630.0130	SEEDING MIXTURE NO.30	LB	10.000	10.000
640	643.0100	TRAFFIC CONTROL (PROJECT)	EACH	1.000	1.000
					6675-00-71 Quantity
010	SPV.0105	SPECIAL 04. MOVING 1-INCH TO 3-INCH BREAKER	LS	1.000	1.000
—	—	RUN			
	SPV.0105	SPECIAL 05. BARRICADE DECAYED CONCRETE	LS	1.000	1.000
—	—	MANHOLE			

					QUANTITY
020	SPV.0105	SPECIAL 06. INSTALL 6-INCH PIPE	LS	1.000	1.000
025	SPV.0105	SPECIAL 07, MOVE STOCKPILED MATERIAL AT REUSE #1	LS	1.000	1.000
030	SPV.0105	SPECIAL 08. ADJUSTING EXISTING INLET	LS	1.000	1.000
035	SPV.0060	SPECIAL 14. REINSTALL HOME DEPOT LIGHT BASE,	EACH	1.000	1.000
		POLE AND LUMINAIRE			
0235	SPV.0165	SPECIAL 02. CONCRETE STAINING B-37-373	SF	25,308.000	25,308.000
0245	630.0130	SEEDING MIXTURE NO. 30	LB	400.000	400.000
0255	804.6060	ICE HOT WEATHER CONCRETING	DOL	3,340.000	3,340.000
0265	SPV.0165	SPECIAL 03 PROTECTIVE SURFACE TREATMENT	SF	4,297.680	4,297.680
0270	SPV.0105	SPECIAL 09. DEWATERING MITIGATION SITE B	LS	1.000	1.000
0280	SPV.0105	SPECIAL 10 ADJUST SENSITIVITY & FREQUENCY OF LOOP DETECTORS	LS	1.000	1.000
0285	SPV.0180	SPECIAL 03 GEOGRID REINFORCEMENT	SY	10,736.200	10,736.200

CLEARING AND GRUBBING ITEMS

CAT.	STAGE	LOCATION	201.0105 CLEARING STA	201.0205 GRUBBING STA	201.0115 CLEARING ACRE	201.0215 GRUBBING ACRE
0010	1	WEST ARTERIAL				
		110+00 - 141+00	31	31	--	--
		146+00 - 159+00	13	13	--	--
		159+00 - 167+00	16	16	--	--
CAT. 0010 TOTAL			60	60	0	0
0070	1	WETLAND MITIGATION SITE AREA A				
		15"A"+00 to 16"A"+40	--	--	0.3	0.3
		18"A"+00 to 20"A"+00	--	--	0.2	0.2
		23"A"+50 to 31"A"+00	--	--	2.0	2.0
		31"A"+00 to 33"A"+60	--	--	1.0	1.0
		WETLAND MITIGATION SITE AREA B				
		40"B"+00 to 43"B"+00	--	--	0.8	0.8
		45"B"+00 to 49"B"+00	--	--	1.0	1.0
		49"B"+00 to 51"B"+00	--	--	0.1	0.1
		53"B"+00 to 54"B"+00	--	--	0.7	0.7
CAT. 0070 TOTAL			0	0	6.1	6.1
TOTAL			60	60	6.1	6.1

REMOVING STORM SEWER

CAT.	STAGE	LOCATION	204.0245.01 12-INCH LF	204.0245.02 36-INCH LF	REMARKS
0010	1	HOME DEPOT PARKING LOT			
		165+00 - 165+50, RT	--	115	EXISTING SS TRUNKLINE
		WEST ARTERIAL			
		168+00, RT	30	--	EXISTING SS LATERALS
		169+00, RT	40	--	EXISTING SS LATERALS
		170+70, RT	30	--	EXISTING SS LATERALS
		28TH AVENUE			
		57"TW"+02, RT	14	--	EXISTING SS LATERALS
0010	2	WEST ARTERIAL			
		168+00, LT	55	--	EXISTING SS LATERALS
		169+00, LT	36	--	EXISTING SS LATERALS
TOTAL			205	115	

REMOVING GUARDRAIL

CAT.	STAGE	LOCATION	204.0165 LF
0010	1	USH 51/STH 29	
		135+31 - 140+66, RT	535
		146+33 - 148+08, RT	175
TOTAL			710

SEALING PIPES

CAT.	STAGE	LOCATION	204.0280 EACH	REMARKS
0010	1	WEST ARTERIAL		
		171+86, RT	1	12-INCH SS
0010	2	WEST ARTERIAL		
		178+33, LT	1	12-INCH SS
		179+32, LT	1	12-INCH SS
TOTAL			3	

REMOVING ASPHALTIC SURFACE

CAT.	STAGE	LOCATION	204.0110 SY	REMARKS
0010	1	WEST ARTERIAL		
		164+00 - 169+00, RT	2120	HOME DEPOT PARKING LOT (OUTSIDE OF WEST ARTERIAL)
TOTAL			2120	

REMOVING CURB AND GUTTER

CAT.	STAGE	LOCATION	204.0150 LF	REMARKS
0010	1	WEST ARTERIAL		
		164+40 - 168+92, RT	650	HOME DEPOT PARKING LOT
		171+60 - 171+83, RT	90	SE RADIUS OF SHERMAN STREET/WEST ARTERIAL
		28TH AVENUE		
		55"TW"+46 - 58"TW"+05, RT	335	EXISTING 28TH AVENUE MEDIAN
TOTAL			1075	

REMOVING FENCE

CAT.	STAGE	LOCATION	204.0170 LF
0010	1	WEST ARTERIAL	
		112+50 - 140+70, RT	2820
		146+25 - 155+00, RT	875
TOTAL			3695

REMOVING INLETS

CAT.	STAGE	LOCATION	204.0220 REMOVING INLETS EACH
0010	1	HOME DEPOT PARKING LOT	
		165+60, RT	1
		WEST ARTERIAL	
		167+75, RT	1
		169+40, RT	1
		171+85, RT	1
		171+62, RT	1
		28TH AVENUE	
		57"TW"+02, RT	1
0010	2	WEST ARTERIAL	
		168+25, LT	1
		169+30, LT	1
TOTAL			8

EARTHWORK SUMMARY

CAT.	LOCATION	205.0100 EXCAVATION COMMON* CY	FILL CY	FILL (EXP.) CY	208.1100 SELECT BORROW CY	209.0100 BACKFILL GRANULAR (EXP.) CY	205.0400 EXCAVATION MARSH CY	~~SPV.0035.01 OMP SUBGRADE CY~~	SPV.0195.01 MANAGEMENT OF PETRDLEUM-CONTAMINATED MATERIAL TON
0010	WEST ARTERIAL								
	101+15 - 125+00	--	--	--		93844	50600	--	--
	130+90 - 140+50	--	--	--		35727	19574	--	--
	148+50 - 155+00	--	--	--		37011	21340	--	--
0010	WEST ARTERIAL								
	101+15 - 140+50	99	118317	147896		--	--	~~147896~~	--
	146+50 - 171+87	3898	95739	119674	29906	--	--	~~119674~~	--
	28TH AVENUE								
	55"TW"+46 - 58"TW"+23	283	0	0		--	--	--	--
	DRIVEWAY TO DETENTION POND								
	0"D"+00 - 2"D"+17	--	2989	3736		--	--	--	--
0010	WEST ARTERIAL								
	158+30 - 160+20	--	--	--		3444	--	--	3444
CAT. 0010 TOTAL		4280	217045	271306	29906	170026	91514	~~267570~~	3444
0070	WETLAND MITIGATION SITE AREA A	90611	0	0		--	--	--	--
	WETLAND MITIGATION SITE AREA B	146509	0	0		--	--	--	--
CAT. 0070 TOTAL		237120	0	0	0	0	0	0	0
TOTAL		241400	217045	271306	29906	170026	91514	~~267570~~	3444

* ADDITIONAL QTY SHOWN ELSEWHERE FOR TEMPORARY SEDIMENT TRAP

[ ] VALUES SHOWN ON EARTHWORK SHEETS

SEE EARTHWORK SHEETS FOR ADDITIONAL INFORMATION

3

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

BASE AGGREGATE DENSE ITEMS

CAT.	STAGE	LOCATION	305.0110 3/4-INCH TON	305.0120 1 1/4-INCH TON	301.0100.S OMP TON
0010	1	WEST ARTERIAL			
		101+15 - 140+64, LT&RT	2000	15600	17600
		146+34 - 166+50, LT&RT	700	8400	9100
		166+50 - 171+87, RT	--	2000	2000
		28TH AVENUE			
		55"TW"+46 - 58"TW"+05	--	320	320
		TEMPORARY ASPHALT AREA			
		167+50 - 171+87, LT	--	310	310
		DRIVEWAYS			
		PONO ACCESS	--	150	150
		HOME DEPOT	--	700	700
STAGE 1 SUBTOTAL			2700	27480	30180
0010	2	WEST ARTERIAL			
		166+50 - 171+87, LT	190	1600	1790
		DRIVEWAYS			
		WAUSAU STEEL	--	280	280
STAGE 2 SUBTOTAL			190	1880	2070
CAT. 0010 TOTAL			2890	29360	32250
0020	1	WEST ARTERIAL			
		160+50 - 171+87, RT	--	340	340
		163+54 - 166+50, LT	--	90	90
STAGE 1 SUBTOTAL			0	430	430
0020	2	WEST ARTERIAL			
		166+50 - 171+87, LT	--	155	155
		MULTIUSE PATH			
		101+15 - 140+64	--	1760	1760
		146+34 - 171+44	--	1130	1130
STAGE 2 SUBTOTAL			0	3045	3045
CAT. 0020 TOTAL			0	3475	3475
0070	1	WETLAND MITIGATION SITE AREA A			
		30"A"+50	--	90	90
CAT. 0070 TOTAL			0	90	90
TOTAL			2890	32925	35815

CONCRETE CURB AND GUTTER ITEMS

CAT.	STAGE	LOCATION	601.0322 22-INCH LF	601.0407 18-INCH TYPE D LF	601.0411 30-INCH TYPE O LF	SPV.0090.01 HES 30-INCH TYPE O LF
0010	1	WEST ARTERIAL				
		101+15 - 106+00, MEDIAN	--	--	970	--
		156+67 - 164+30, MEDIAN	--	--	1135	--
		160+50 - 171+87, RT	--	--	1125	--
		162+52 - 166+50, LT	--	--	400	--
		165+05 - 167+10, MEDIAN	--	--	340	--
		168+90 - 171+65, MEDIAN	--	--	277	--
		28TH AVENUE				
		56"TW"+74 - 58"TW"+05	--	250	--	--
		HOME DEPOT PARKING LOT	705	--	--	--
	2	WEST ARTERIAL				
		166+50 - 171+87, LT	--	--	485	135
		165+05 - 167+10, MEDIAN	--	--	75	--
		168+90 - 171+65, MEDIAN	--	--	278	--
TOTAL			705	250	5085	135

CONCRETE PAVEMENT APPROACH SLAB

CAT.	STAGE	LOCATION	416.0050 SY
0010	1	WEST ARTERIAL	
		140+48 - 140+64	42
		146+34 - 146+50	42
TOTAL			84

CONCRETE SURFACE DRAINS

CAT.	STAGE	LOCATION	416.1010 CY
0010	1	WEST ARTERIAL	
		140+42, RT	4
TOTAL			4

BREAKER RUN AND GEOTEXTILE FABRIC ITEMS

CAT.	STAGE	LOCATION	311.0115 BREAKER RUN CY	645.0140 GEOTEXTILE FABRIC TYPE SAS* SY
0010	1	UNDISTRIBUTED**	750	1100
TOTAL			750	1100

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

** UNDISTRIBUTED QUANTITIES INTENDED FOR USE IN THE EVENT EBS IS DIRECTED BY THE ENGINEER BETWEEN STATIONS 155+00 AND 165+00

3

ASPHALTIC ITEMS

CAT.	STAGE	LOCATION	455.0105 ASPHALTIC MATERIAL PG58-28 TON	455.0605 TACK COAT GAL	460.1100 HMA PAVEMENT TYPE E-0.3 TON	460.1101 HMA PAVEMENT TYPE E-1 TON	460.2000 INCENTIVE DENSITY HMA PAVEMENT DOL	460.3000 OMP HMA MIXTURE TON	465.0105 ASPHALTIC SURFACE TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON
0010	1	WEST ARTERIAL									
		100+85 - 140+64, LT & RT	243	410	--	4055	2596	4055	50	--	--
		146+34 - 164+00, LT & RT	118	200	--	1965	1259	1965	--	--	--
		164+00 - 171+87, RT	44	75	--	727	465	727	--	--	--
		167+50 - 171+87, LT	--	--	--	--	--	--	--	--	105
		28TH AVENUE									
		55"TW"+46 - 58"TW"+05	5	9	--	86	55	86	--	--	--
		HOME DEPOT	--	--	--	--	--	--	--	355	--
STAGE 1 SUBTOTAL			410	694	0	6833	4375	6833	50	355	105
0010	2	WEST ARTERIAL									
		164+00 - 171+87, LT	44	75	--	727	465	727		--	
		WAUSAU STEEL DRIVEWAYS	--	--	--	--	--	--	--	20	--
STAGE 2 SUBTOTAL			44	75	0	727	465	727	0	20	0
CAT. 0010 SUBTOTAL			454	769	0	7560	4840	7560	50	375	105
0020	1	WEST ARTERIAL									
		150+50 - 171+87, RT	8	9	--	125	80	125	--	--	--
		162+50 - 164+00, LT	1	2	--	16	10	16	--	--	--
STAGE 1 SUBTOTAL			9	11	0	141	90	141	0	0	0
0020	2	WEST ARTERIAL									
		164+00 - 171+87, LT	5	9	--	88	55	88	--	--	--
		MULTIUSE PATH									
		100+78 - 140+64	29	--	488	--	313	488	--	--	--
		146+34 - 171+44	19	--	314	--	202	314	--	--	--
STAGE 2 SUBTOTAL			53	9	802	88	570	890	0	0	0
CAT. 0020 SUBTOTAL			62	20	802	229	660	1031	0	0	0
TOTAL			516	789	802	7789	5500	8591	50	375	105

CONCRETE SIDEWALK ITEMS

CAT.	STAGE	LOCATION	602.0405 CONCRETE SIDEWALK 4-INCH SF	602.0415 CONCRETE SIDEWALK 6-INCH SF	602.0501.S CURB RAMP DETECTABLE WARNING FIELD SF
0010	2	WEST ARTERIAL			
		158+70 -160+30, RT	700	--	--
		169+00 - 172+00, LT & RT	1000	--	--
CAT. 0010 SUBTOTAL			1700	0	0
0020	2	WEST ARTERIAL			
		171+45, LT	--	124	16
CAT. 0020 SUBTOTAL			0	124	16
TOTAL			1700	124	16

CONCRETE BARRIER TEMPORARY PRECAST ITEMS

CAT.	STAGE	STA - STA	SPV.0090.02 CONTRACTOR FURNISHED AND DELIVERED, SPECIAL LF	603.0800 CONTRACTOR FURNISHED AND INSTALLED LF
0010	1	WEST ARTERIAL		
		113+50 - 140+56, RT	2750	2750
		146+35 - 155+15, RT	900	900
TOTAL			3650	3650

STATE PROJECT NUMBER: 6675-00-71 | HWY: CTH R | COUNTY: MARATHON | MISCELLANEOUS QUANTITIES | SCALE, FEET 0 N/A | SHEET NO: 82 | E

RIPRAP AND GEOTEXTILE FABRIC ITEMS

CAT.	STAGE	LOCATION	606.0100 RIPRAP LIGHT CY	606.0200 RIPRAP MEDIUM CY	606.0300* RIPRAP HEAVY CY	645.0110 GEOTEXTILE FABRIC TYPE DF SY	645.0120* GEOTEXTILE FABRIC TYPE HR SY	645.0130 GEOTEXTILE FABRIC TYPE R SY	REMARKS
0010	1	WEST ARTERIAL							
		140+30, RT	--	--	75	--	155	--	INCLUDES RIPRAP REQUIRED FOR CONCRETE SURFACE DRAIN
		154+00, RT	--	--	35	--	75	--	
CAT. 0010 TOTAL			0	0	110	0	230	0	
0070	1	WETLAND MITIGATION SITE							
		15"A"+50	--	740	--	--	--	2225	
		22"A"+40 - 30"A"+50	--	150	--	--	--	150	CHANNEL LINING WHERE EROSION MAT NOT USED
		22"A"+40	45	--	--	20	--	125	STONE WEEPER
		30"A"+50	--	195	--	--	--	185	CHANNEL CROSSING
		34"A"+40	--	65	--	--	--	230	CHANNEL LINING AND GABION SLOPES
		49"B"+40	--	20	--	--	--	90	GABION SLOPES
		57"B"+50	--	20	--	--	--	90	GABION SLOPES
CAT. 0070 TOTAL			45	1190	0	20	0	3095	
TOTAL			45	1190	110	20	230	3095	

*ADDITIONAL QUANTITIES SHOWN ON STRUCTURE PLANS

STEEL PLATE BEAM GUARD AND TREATED TIMBER RUB RAIL ITEMS

CAT.	STAGE	LOCATION	614.0220 STEEL THRIE BEAM STRUCTURE APPROACH LF	614.0370 STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL EACH	SPV.0090.03 TREATED TIMBER RUB RAIL LF	REMARKS
0010	1	WEST ARTERIAL				
		139+65 - 140+52, LT&RT	67	2	--	SOUTH APPROACH
		146+46 - 147+32, LT&RT	67	2	--	NORTH APPROACH
		139+65 - 140+52, LT	--	--	83.5	
		146+46 - 147+32, LT	--	--	83.5	
TOTAL			134	4	167	

MARKER POSTS CULVERT END FLEXIBLE

CAT.	STAGE	LOCATION	614.0620.S EACH
0010	1	WEST ARTERIAL	
		105+90.3, RT	1
		109+50, LT & RT	2
		113+00, LT & RT	2
		119+70, LT	1
		127+50, LT	1
		134+80, LT	1
		152+20, LT	1
		156+00, LT	1
		157+00, RT	1
		159+88, LT	1
		161+10, LT	1
		164+17.75, LT	1
TOTAL			14

CONCRETE MEDIAN ITEMS

CAT.	STAGE	LOCATION	620.0100 CONCRETE CORRUGATED MEDIAN SF	620.0300 CONCRETE MEDIAN SLOPED NOSE SF
0010	1	WEST ARTERIAL		
		105+95	--	10
		158+70	--	12
		164+25	--	36
		165+15	--	37
		28TH AVENUE		
		55"TW"+80	--	25
0010	2	WEST ARTERIAL		
		167+00	--	38
		169+00	200	--
		171+60	--	17
TOTAL			200	175

DUST CONTROL SURFACE TREATMENT

CAT.	STAGE	LOCATION	623.0200 SY
0010	1	WEST ARTERIAL	
		165+00 - 171+87, LT	4350
0010	2	WEST ARTERIAL	
		165+00 - 171+87, RT	4350
TOTAL			8700

WATER

CAT.	LOCATION	624.0100 MGAL
0010	DUST CONTROL	100
	COMPACTION	400
TOTAL		500

RESTORATION ITEMS

CAT.	STAGE	LOCATION	625.0100 TOPSOIL SY	625.0500 SALVAGED TOPSOIL SY	SPV.0180.02 SALVAGED WETLAND TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIX NO. 20 LBS	630.0160 SEEDING MIX NO. 60 LBS	630.0200 SEEDING TEMPORARY LBS	SPV.0085.01 SEEDING WET MEADOW LBS	SPV.0085.02 SEEDING AQUATIC EMERGENT LBS
0010	1	WEST ARTERIAL										
		101+00 - 140+64, LT	14395	--	--	5300	9	315	40	390	--	--
		146+34 - 164+00, LT	6215	--	--	2840	5	125	25	170	--	--
		101+00 - 140+64, RT	21250	--	--	15260	15	605	20	640	--	--
		146+34 - 164+00, RT	13815	--	--	5800	8	385	10	400	--	--
		164+00 - 171+87, RT	1385	--	--	200	1	40	5	40	--	--
		28TH AVENUE										
		56"TW"+80 - 58"TW"+23, RT	180	--	--	--	1	5	--	5	--	--
0010	2	WEST ARTERIAL										
		164+00 - 171+87, LT	1985	--	--	200	1	50	--	55	--	--
0010	1&2	25% UNDISTRIBUTED	14800	--	--	7400	10	380	25	425	--	--
CAT. 0010 TOTAL			74025	0	0	37000	50	1905	125	2125	0	0
0070	1	WETLAND MITIGATION SITE AREA A	--	38583	32864	--	--	--	520	--	90	7
		WETLAND MITIGATION SITE AREA B	--	61923	61923	--	--	--	835	--	135	40
CAT. 0070 TOTAL			0	100506	94787	0	0	0	1355	0	225	47
TOTAL			74025	100506	94787	37000	50	1905	1480	2125	225	47

NOTE:
- WET MEADOW SEEDING TO BE SOWN AT 15 LBS/ACRE
- AQUATIC EMERGENT SEEDING TO BE SOWN AT 10 LBS/ACRE

TEMPORARY SEDIMENT TRAP & STONE DITCH CHECK ITEMS

CAT.	STAGE	LOCATION	205.0100 EXCAVATION COMMON* CY	628.1920 CLEANING SEDIMENT BASINS CY	645.0140 GEOTEXTILE FABRIC TYPE SAS* SY	628.7560.S STONE OR ROCK DITCH CHECKS CY
0010	1	WEST ARTERIAL				
		113+00, RT	75	300	15	10
		146+70, RT	75	300	15	10
TOTAL			150	600	30	20

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

3

STATE PROJECT NUMBER: 6675-00-71	HWY: CTH R	COUNTY: MARATHON	MISCELLANEOUS QUANTITIES	SCALE, FEET 0 N/A	SHEET NO: 83	E

FILE NAME : P:\40xx\4025\Plan\6675-00-71\Misc Quantities\030203_mq.dgn PLOT DATE : 02/10/2004 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 43

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

EROSION MAT ITEMS

CAT.	STAGE	LOCATION	DELIVERED CLASS I TYPE A 628.2005 SY	DELIVERED CLASS I TYPE B 628.2010 SY	DELIVERED CLASS I URBAN TYPE A 628.2015 SY	DELIVERED CLASS I URBAN TYPE B 628.2020 SY	INSTALLED CLASS I TYPE A 628.3005 SY	INSTALLED CLASS I TYPE B 628.3010 SY	INSTALLED CLASS I URBAN TYPE A 628.3015 SY	INSTALLED CLASS I URBAN TYPE B 628.3020 SY
0010	1	WEST ARTERIAL								
		101+00 - 139+70, LT	2200	--	--	12000	2200	--	--	12000
		101+15 - 114+50, RT	6000	--	--	--	6000	--	--	--
		147+00 - 164+00, RT	3000	2000	800	--	3000	2000	800	--
		147+00 - 171+87, LT	1450	--	1500	3000	1450	--	1500	3000
		28TH AVENUE								
		55"TW"+75 - 58"TW"+23	--	--	225	--	--	--	225	--
		25% UNDISTRIBUTED	3200	500	625	3800	3200	500	625	3800
STAGE 1 SUBTOTAL			15850	2500	3150	18800	15850	2500	3150	18800
0010	2	WEST ARTERIAL								
		164+00 - 171+87, RT	--	--	1000	--	--	--	1000	--
		25% UNDISTRIBUTED	--	--	250	--	--	--	250	--
STAGE 2 SUBTOTAL			0	0	1250	0	0	0	1250	0
CAT. 0010 TOTAL			15850	2500	4400	18800	15850	2500	4400	18800
0070	1	WETLAND MITIGATION SITE								
		22"A"+40 - 30"A"+50	--	--	--	2000	--	--	--	2000
		34"A"+00 - 36"A"+50	--	--	--	1000	--	--	--	1000
		57"B"+40 - 60"B"+00	--	--	--	600	--	--	--	600
		25% UNDISTRIBUTED	--	--	--	900	--	--	--	900
CAT. 0070 TOTAL			0	0	0	4500	0	0	0	4500
TOTAL			15850	2500	4400	23300	15850	2500	4400	23300

TURBIDITY BARRIERS

CAT.	STAGE	LOCATION	628.6005 SY
0010	1	WEST ARTERIAL	
		130+00 - 142+00, LT	1100
		146+00 - 163+00, LT & RT	1200
		25% UNDISTRIBUTED	600
TOTAL			2900

SILT FENCE ITEMS

CAT.	STAGE	LOCATION	628.1505 DELIVERED LF	628.1510 INSTALLED LF	628.1520 MAINTENANCE LF
0010	1	WEST ARTERIAL			
		102+00 - 139+00, LT	3700	3700	3700
		102+00 - 113+00, RT	1100	1100	1100
		149+00 - 167+00, LT	1800	1800	1800
		155+00 - 164+00, RT	900	900	900
		25% UNDISTRIBUTED	2000	2000	4000
CAT. 0010 TOTAL			9500	9500	11500
0070	1	WETLAND MITIGATION AREA A	2500	2500	2500
		WETLAND MITIGATION AREA B	800	800	800
		25% UNDISTRIBUTED	825	825	825
CAT. 0070 TOTAL			4125	4125	4125
TOTAL			13625	13625	15625

TEMPORARY DITCH CHECK ITEMS

CAT.	STAGE	LOCATION	628.7505 TEMPORARY DITCH CHECK DELIVERED LF	628.7510 TEMPORARY DITCH CHECK INSTALLED LF
0010	1	WEST ARTERIAL		
		114+00 - 120+00, LT	85	85
		114+00 - 161+00, RT	410	410
		25% UNDISTRIBUTED	125	125
TOTAL			620	620

INLET PROTECTION ITEMS

CAT.	STAGE	LOCATION	628.7005 INLET PROTECTION TYPE A EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7020 INLET PROTECTION TYPE D EACH
0010	1	WEST ARTERIAL			
		101+15 - 171+87	28	24	12
		28TH AVENUE			
		55"TW"+75 - 58'TW"+23	1	2	--
0010	2	WEST ARTERIAL			
		101+15 - 171+87	8	8	--
TOTAL			37	34	12

CULVERT PIPE DITCH CHECKS

CAT.	STAGE	LOCATION	628.7550 EACH
0010	1	WEST ARTERIAL	
		109+50	2
		113+50	1
		156+50	1
TOTAL			4

SOD EROSION CONTROL

CAT.	STAGE	LOCATION	631.1100 SY
0010	1	WEST ARTERIAL	
		106+00, RT	14
		109+50, LT & RT	18
		113+00, LT	9
		119+70, LT	8
		127+50, LT	8
		134+80, LT	8
		152+20, LT	8
		156+00, LT	14
		159+86, LT	4
		161+10, LT	4
		164+18, LT	6
		25% UNDISTRIBUTED	25
TOTAL			126

MOBILIZATION EROSION CONTROL ITEMS

CAT.	STAGE	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
0010	1	WEST ARTERIAL		
		101+15 - 171+87	11	17
0010	2	WEST ARTERIAL		
		166+50 - 171+87	1	1
CAT. 0010 TOTAL			12	18
0070	1	WETLAND MITIGATION SITE AREA A	1	2
		WETLAND MITIGATION SITE AREA B	1	2
CAT. 0070 TOTAL			2	4
TOTAL			14	22

DELINEATOR POSTS FLEXIBLE

CAT.	STAGE 1	LOCATION	633.0200 EACH
0010	1	CTH NN	
		189"NT"+50 - 200"NT"+00	20
		202"NT"+00 - 204"NT"+50	22
TOTAL			42

3

PERMANENT SIGNING

SIGN NO	SIGN CODE	SIGN SIZE INCHES	SIGN, TYPE II REFLECTIVE 637.0202 SF	WOOD POSTS, 4"x 6" 14FT 634.0614 EACH	16FT 634.0616 EACH	18FT 634.0618 EACH	REMARKS
1	M6-1	21 X 21	3.06	--	--	--	ADD TO EXISTING DIRECTIONAL ASSEMBLY
2	M6-4	21 X 21	3.06	--	--	--	ADD TO EXISTING DIRECTIONAL ASSEMBLY
4	J13-1			--	1	--	
	M1-5A	24 X 24	4.00	--	--	--	
	M6-4	21 X 21	3.06	--	--	--	
5	J3-3			--	--	2	
	M4-5	24 X 12	2.00	--	--	--	
	M4-5	24 X 12	2.00	--	--	--	
	M1-4	24 X 24	4.00	--	--	--	
	M1-6	24 X 24	4.00	--	--	--	
	M1-5A	24 X 24	4.00	--	--	--	
	M6-1	21 X 21	3.06	--	--	--	
	M6-1	21 X 21	3.06	--	--	--	
	M6-4	21 X 21	3.06	--	--	--	
6	J13-1			--	1	--	
	M1-5A	24 X 24	4.00	--	--	--	
	M6-4	21 X 21	3.06	--	--	--	
8	W6-2	36 X 36	9.00	--	--	1	
9	W3-3	36 X 36	9.00	--	--	1	
10	M1-5A	24 X 24	4.00	1	--	--	
11	J2-3			--	--	2	
	M4-5	24 X 12	2.00	--	--	--	
	M4-5	24 X 12	2.00	--	--	--	
	M1-4	24 X 24	4.00	--	--	--	
	M1-6	24 X 24	4.00	--	--	--	
	M5-1L	21 X 21	3.06	--	--	--	
	M5-1L	21 X 21	3.06	--	--	--	
	M1-5A	24 X 24	4.00	--	--	--	
	M6-1	21 X 21	3.06	--	--	--	
12	R2-1	24 X 30	5.00	--	1	--	
13	J1-1			--	1	--	
	M2-1	21 X 15	2.19	--	--	--	
	M1-5A	24 X 24	4.00	--	--	--	
14	R4-7	36 X 48	12.00	--	1	--	
15	W6-3	30 X 30	6.25	--	1	--	
17	W6-1	36 X 36	9.00	--	--	1	
18	W14-3	48 X 36	6.00	--	--	1	
19	W4-2R	36 X 36	9.00	--	1	--	
21	W5-52L	12 X 36	3.00	--	1	--	
22	R2-1	24 X 30	5.00	--	1	--	
23	R2-1	24 X 30	5.00	--	1	--	
24	I3-1	42 X 24	7.00	--	1	--	
25	W5-52R	12 X 36	3.00	--	1	--	
26	W5-52L	12 X 36	3.00	--	1	--	
29	W5-52R	12 X 36	3.00	--	1	--	
31	W5-52L	12 X 36	3.00	--	1	--	
32	I3-1	42 X 24	7.00	--	1	--	
34	W5-52R	12 X 36	3.00	--	--	1	
36	W14-3	48 X 36	6.00	--	--	1	
37	W6-1	36 X 36	9.00	--	--	1	
38	R5-1	30 X 30	6.25	--	1	--	
39	R4-7	36 X 48	12.00	--	1	--	
40	W6-3	30 X 30	6.25	--	1	--	

PERMANENT SIGNING CONT'D

SIGN NO	SIGN CODE	SIGN SIZE INCHES	SIGN, TYPE II REFLECTIVE 637.0202 SF	WOOD POSTS, 4"x 6" 14FT 634.0614 EACH	16FT 634.0616 EACH	18FT 634.0618 EACH	REMARKS
41	R7-1D	18 X 24	3.00	1	--	--	
42	R7-1D	18 X 24	3.00	1	--	--	
52	W6-2	36 X 36	9.00	--	--	1	
53	R7-1D	18 X 24	3.00	1	--	--	
54	R4-7	24 X 30	5.00	1	--	--	
55	R4-7	24 X 30	5.00	1	--	--	
56	R7-1D	18 X 24	3.00	1	--	--	
57	W3-3	36 X 36	9.00	--	1	--	
58	R2-1	24 X 30	5.00	--	1	--	
59	R7-1D	18 X 24	3.00	--	1	--	
60	W4-2R	36 X 36	9.00	--	1	--	
61	R4-7	24 X 30	5.00	1	--	--	
62	R7-1D	18 X 24	3.00	1	--	--	
63	M1-5A	24 X 24	4.00	1	--	--	
64	M4-12	24 X 6	1.00	--	--	--	SAME POST AS 65
65	D11-1	24 X 18	3.00	1	--	--	
66	D11-1	24 X 18	3.00	1	--	--	
67	J33-3			--	2	--	
	M4-5	24 X 12	2.00	--	--	--	
	M4-5	24 X 12	2.00	--	--	--	
	M3-3	24 X 12	2.00	--	--	--	
	M3-2	24 X 12	2.00	--	--	--	
	M4-6	24 X 12	2.00	--	--	--	
	M1-4	24 X 24	4.00	--	--	--	
	M1-6	24 X 24	4.00	--	--	--	
	M1-5A	24 X 24	4.00	--	--	--	
	M6-1	21 X 21	3.06	--	--	--	
	M6-1	21 X 21	3.06	--	--	--	
68	R1-1F	36 X 36	7.46	--	--	--	MOUNT ON SIGNAL POLE (SEE SIGNAL PLANS)
69	R1-1F	36 X 36	7.46	--	--	--	MOUNT ON SIGNAL POLE (SEE SIGNAL PLANS)
70	R4-7	24 X 30	5.00	1	--	--	
71	R4-7	24 X 30	5.00	1	--	--	
72	J13-1			--	1	--	
	M1-5A	24 X 24	4.00	--	--	--	
	M6-1	21 X 21	3.06	--	--	--	
73	J1-1			--	1	--	
	M2-1	21 X 15	2.19	--	--	--	
	M1-5A	24 X 24	4.00	--	--	--	
74	J1-1			--	1	--	
	M2-1	21 X 15	2.19	--	--	--	
	M1-5A	24 X 24	4.00	--	--	--	
75	J1-1			--	--	1	
	M2-1	21 X 15	2.19	--	--	--	
	M1-5A	24 X 24	4.00	--	--	--	
76	R3-6L	42 X 48	14.00	--	--	--	MOUNT ON OVERHEAD SIGN BRIDGE
77	R3-6R	42 X 48	14.00	--	--	--	MOUNT ON OVERHEAD SIGN BRIDGE
78	R4-7	24 X 30	5.00	1	--	--	
79	R3-55L	24 X 30	5.00	1	--	--	
80	R8-3a(MOD)	48 X 30	10.00	2	--	--	
TOTAL			430.23	18	28	13	

NOTE: THE FOLLOWING SIGN NUMBERS ARE NOT USED: 3,7,16,20,27,28,30,33,35,43-51
ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED.

3

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

REMOVING SIGNS AND SIGN SUPPORTS

CAT.	APPROX. LOCATION	638.2603 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	638.2102 MOVING SIGNS TYPE II EACH	638.4 MOVING SMALL SIGN SUPPORTS EACH	REMARKS
0010	WEST ARTERIAL					
	92+70, LT	1	1	--	--	RT LANE MUST TURN RT
	92+70, RT	1	1	--	--	LT LANE MUST TURN LT
	95+00, RT	3	--	8	3	CTH NN/CTH R/51/29 ASSEMBLY
	98+10, LT	1	--	1	1	SOUTH CTH R ASSEMBLY
	98+10, LT	3	1	--	--	CTH NN ASSEMBLY
	98+10, LT	2	1	--	--	END CTH R
	167+00, RT	--	--	1	1	STOP SIGN - HOME DEPOT DRIVEWAY
	169+00, RT	--	--	1	1	STOP SIGN - HOME DEPOT DRIVEWAY
	171+60, LT	1	1	--	--	KEEP RIGHT
	171+85, RT	--	--	2	1	28TH AVE/SHERMAN ST
	28TH AVENUE					
	55"TW"+50, RT	1	1	--	--	KEEP RIGHT
	57"TW"+00, LT	2	--	--	--	REMOVE FROM OVERHEAD SIGN BRIDGE
	CTH NN					
	200"NT"+00, RT	1	--	2	1	CTH R ASSEMBLY
	202"NT"+00, LT	1	--	2	1	CTH R ASSEMBLY
	USH 51/STH 29					
	113+50 - 155+50, RT	--	30	--	--	DELINEATORS ON SOUTHBOUND OUTSIDE SHOULDER
TOTAL		17	36	17	9	

TEMPORARY PAVEMENT MARKING ITEMS

CAT.	STAGE		649.0100 4-INCH LF	649.1100 STOP LINE 18-INCH LF	REMOVABLE TAPE 649.0400 4-INCH LF	REMOVABLE TAPE 649.0800 CHANNELIZING 8-INCH LF	REMOVABLE TAPE 649.1800 ARROWS EACH	REMOVABLE TAPE 649.1200 STOP LINE 18-INCH LF
0010	1	WEST ARTERIAL						
		94+00 - 99+50	--	--	905	--	--	--
		CTH NN						
		196"NT"+50 - 201"NT"+00	--	--	920	--	--	--
		201"NT"+00 - 205"NT"+00	--	--	1060	--	--	--
		WEST ARTERIAL						
		167+50 - 172+00	1685	15	10	--	--	--
		28TH AVENUE						
		55"TW"+00 - 56"TW"+00	--	--	15	--		--
		WEST ARTERIAL						
		164+50 - 167+50	--	--	640	--	--	--
0010	2	WEST ARTERIAL						
		164+00 - 172+00	--	--	1860	65	--	45
		28TH AVENUE						
		56"TW"+00 - 58"TW"+00	--	--	15	--	3	--
TOTAL			1685	15	5425	65	3	45

3

TRAFFIC CONTROL ITEMS

CAT.	STAGE	LOCATION	643.0300 DRUMS EACH	643.0300 DRUMS DAYS	643.0420 TYPE III BARRICADES EACH	643.0420 TYPE III BARRICADES DAYS	643.0705 LIGHTS TYPE A EACH	643.0705 LIGHTS TYPE A DAYS	643.0715 LIGHTS TYPE C EACH	643.0715 LIGHTS TYPE C DAYS	643.0900 SIGNS EACH	643.0900 SIGNS DAYS	643.0800 ARROW BOARDS EACH	643.0800 ARROW BOARDS DAYS
0010	1	WEST ARTERIAL												
		94+00 - 165+00	96	24000	8	2000	10	2500	--	--	12	3000	--	--
		USH51/STH29 LANE CLOSURE*	62	310	3	15	6	30	25	125	18	90	2	10
		165+00 - 171+87 & 28TH AVE	60	1890	16	555	22	750	10	150	17	705	--	--
0010	2	WEST ARTERIAL												
		165+00 - 171+87	9	135	18	270	22	330	--	--	16	240	--	--
TOTAL				26335		2840		3610		275		4035		10

* BID ITEMS TO BE USED FOR LANE CLOSURE ON USH 51/STH 29 WHILE SETTING CONCRETE BARRIER

REMOVING PAVEMENT MARKING ITEMS

CAT.	STAGE		647.0955 ARROWS LF	647.0965 WORDS LF	REMARKS
0010	1	28TH AVENUE			
		56"TW"+00 - 58"TW"+00	3	--	
0010	2	28TH AVENUE			
		56"TW"+00 - 58"TW"+00	3	--	
		56"TW"+00 - 58"TW"+00	6	3	COMPLETE AT THE END OF STAGE 2
TOTAL			12	3	

PAVEMENT MARKING ITEMS

CAT.	LOCATION	646.0106 EPOXY 4-INCH SOLID WHITE LF	646.0106 EPOXY 4-INCH SOLID YELLOW LF	646.0106 EPOXY 4-INCH SKIPS WHITE LF	646.0106 EPOXY 4-INCH SKIPS YELLOW LF	646.0226 CHANNELIZING EPOXY 8-INCH WHITE LF	647.0166 ARROWS EPOXY TYPE 2 EACH	647.0176 ARROWS EPOXY TYPE 3 EACH	647.0356 WORDS EPOXY WHITE EACH	647.0456 CURB EPOXY YELLOW LF	647.0566 STOP LINE EPOXY 18-INCH WHITE LF	647.0606 ISLAND NOSE EPOXY YELLOW EACH	647.0656 PARKING STALL EPOXY LF	647.0726 DIAGONAL EPOXY 12-INCH YELLOW LF	647.0856 CONCRETE CORRUGATED MEDIAN EPOXY SF	648.0100 LOCATING NO-PASSING ZONES MI
0010	WEST ARTERIAL															
	110+40 - 153+10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.81
	94+00 - 100+00	--	--	125	--	325	--	--	--	--	--	--	--	--	--	--
	101+05 - 162+55	12105	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	101+05 - 103+00	--	--	80	--	143	2	--	1	--	44	--	--	--	--	--
	105+90 - 110+40	--	1215	--	--	--	--	--	--	10	--	1	--	60	--	--
	110+40 - 153+10	--	--	--	1070	--	--	--	--	--	--	--	--	--	--	--
	153+10 - 160+50	--	1420	--	--	--	--	--	--	10	--	1	--	95	--	--
	160+50 - 171+87	--	--	420	--	255	4	--	3	185	60	5	--	--	80	--
	28TH AVENUE															
	55"TW"+00 - 58"TW"+05	--	--	65	--	163	2	6	1	10	36	1	--	--	--	--
	CTH NN															
	189"NT"+50 - 200"NT"+00	--	725	--	--	118	2	--	1	--	--	--	--	--	--	--
	202"NT"+00 - 204"NT"+50	285	680	15	--	56	1	--	1	--	--	--	--	50	--	--
	HOME DEPOT PARKING LOT	40	--	--	--	--	--	--	2	--	--	--	585	115	--	--
TOTAL		12430	4040	705	1070	1060	11	6	9	215	140	8	585	320	80	0.81
			18245													

STATE PROJECT NUMBER: 6675-00-71	HWY: CTH R	COUNTY: MARATHON	MISCELLANEOUS QUANTITIES	SCALE, FEET 0 N/A	SHEET NO: 86	E

FILE NAME : P:\40xx\4025\Plan\6675-00-71\Misc Quantities\030206_mq.dgn PLOT DATE : 02/10/2004 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 43

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

CONSTRUCTION STAKING ITEMS

CAT.	LOCATION	650.4000 STORM SEWER EACH	650.4500 SUBGRADE LF	650.5000 BASE LF	650.5500 CURB AND GUTTER LF	650.6000 PIPE CULVERTS EACH	~~650.9900 INITIAL LAYOUT LF~~
0010	WEST ARTERIAL						
	101+15 - 106+00	--	1940	970	970	1	~~970~~
	106+00 - 158+67	--	10534	5267	--	2	~~5627~~
	158+67 - 171+87	--	7260	3630	4955	--	~~4400~~
	28TH AVENUE						
	SS"TW"+00 - S8"TW"+05	--	257	257	250	--	~~305~~
	PROJECT						
	INLETS/MANHOLES	36	--	--	--	--	--
	ENDWALLS	8	--	--	--	--	--
CAT. 0010 TOTAL		44	19991	10124	6175	3	~~11302~~
0020	MULTI-USE PATH						
	101+15 - 140+64	--	3949	3949	--	--	--
	146+34- 171+64	--	2530	2530	--	--	--
CAT. 0020 TOTAL		0	6479	6479	0	0	0
0070	WETLAND MITIGATION SITE AREA A	--	--	--	--	--	~~2000~~
	WETLAND MITIGATION SITE AREA B	--	--	--	--	--	~~1900~~
CAT. 0020 TOTAL		0	0	0	0	0	~~3900~~
TOTAL		44	26470	16603	6175	3	~~15202~~

NOTES: FOLLOW CONSTRUCTION STAGING WHEN STAKING ABOVE ITEMS.
QTY OF SUBGRADE STAKING ON THE ROADWAY HAS BEEN DOUBLED TO ALLOW FOR STAKING THE SUBGRADE TWICE.

RIGID NONMETALLIC CONDUIT ITEMS

CAT.	FROM	TO	652.0225 SCHEDULE 40 2-INCH LF	652.0235 SCHEDULE 40 3-INCH LF	REMARKS
0050	CTH NN INTERSECTION				
	PB-8	PB-15	285	--	PB-8 INSTALLED UNDER PROJECT 6675-00-70
0050	SHERMAN STREET INTERSECTION				
	CB1	PB-1	10	50	(5) 3-INCH AND (1) 2-INCH
	PB-1	SB-1	6	---	
		PB-2	---	140	(2) 3-INCH
		EXIST. CONDUIT SW QUADRANT	---	30	(2) 3-INCH
	PB-2	SB-2	6	---	
		PB-3	---	74	(2) 3-INCH
	PB-3	SB-3	10	---	
		PB-4	---	184	(2) 3-INCH
	PB-4	SB-4	5	---	
		PB-5	---	90	(2) 3-INCH
		PB-6	230	---	
		EXIST. CONDUIT SE QUADRANT	---	48	(2) 3-INCH
	PB-5	SB-5	6	---	
	EX-PB1	SB-6	17	---	
TOTAL			575	616	

REMOVING CONCRETE BASES

CAT.	EXISTING SIGNAL POLE	STATION	LOCATION	204.0195 EACH	REMARKS
0050	SHERMAN STREET INTERSECTION				
	EX-SB2	55'TW'+63.7	7.7'RT	1	TRAFFIC SIGNAL BASE
	EX-SB5	171+80.2	76.1'LT	1	TRAFFIC SIGNAL BASE
	EX-SB6	171+48.3	55.6'LT	1	TRAFFIC SIGNAL/LIGHT POLE BASE
	EX-SB7	171+57.5	2.9'LT	1	TRAFFIC SIGNAL BASE
	EX-SB8	171+59.6	49.8'RT	1	TRAFFIC SIGNAL BASE
	EX-SB9	171+72.5	81.0'RT	1	TRAFFIC SIGNAL/LIGHT POLE BASE
TOTAL				6	

REMOVING PULL BOXES

CAT.	STATION	LOCATION	204.9060.S EACH
0050	SHERMAN STREET INTERSECTION		
	171+66.6	67.8'RT	1
	171+52.8	79.0'LT	1
	171+80.4	72.5'LT	1
	171+51.6	LO'LT	1
	171+44.1	49.8'RT	1
TOTAL			5

PULL BOXES ITEMS

CAT.	PULL BOX NO.	STATION	LOCATION	653.0105 PULL BOXES STEEL 12 INCH X 24 INCH EACH	653.0135 PULL BOXES STEEL 24 INCH X 36 INCH EACH	653.0140 PULL BOXES STEEL 24 INCH X 42 INCH EACH
0050	CTH NN INTERSECTION					
	PB-15	103+95.7	48.5'LT	1	--	---
0050	SHERMAN STREET INTERSECTION					
	PB-1	171+77.3	84.0'LT	---	1	---
	PB-2	171+24.5	42.6'LT	---	---	1
	PB-3	171+37.2	6.1'LT	---	---	1
	PB-4	171+65.8	65.8'RT	---	---	1
	PB-5	171+73.8	101.8'RT	---	1	---
	PB-6	169+18.1	49.0'RT	1	---	---
TOTAL			TOTAL	2	2	3

LOOP DETECTOR ITEMS

CAT.	LOOP NO.	STATION	LOCATION	SIZE FT	NO. OF TURNS	655.0800 LOOP DETECTOR WIRE LF	655.0700 LOOP DETECTOR LEAD IN CABLE LF	652.0800 CONDUIT LOOP DETECTOR LF
0050	CTH NN INTERSECTION							
	41	103+94.3	21.1'LT	6X14	4	301	634	59
	42	101+25.0	5.9'LT	6X20	3	335	296	83
	43	100+94.0	5.9'LT	6X20	3	269	296	72
	44	100+94.8	17.9'LT	6X20	3	341	296	84
	45	100+91.2	35.1'LT	6X20	3	317	351	80
0050	SHERMAN STREET INTERSECTION							
	27	55'TW'+88.1	6.4'RT	6X20	3	203	75	61
	61	171+56.8	6.4'RT	6X20	3	209	233	62
	62	171+25.8	6.4'RT	6X20	3	269	233	72
	63	171+56.8	18.6'RT	6X20	3	281	233	74
	64	171+56.8	30.6'RT	6X20	3	389	141	92
	65	171+57.3	52.1'RT	6X20	3	305	141	78
	66	169+19.0	25.5'RT	6X20	3	233	371	66
	EX41	EXISTING	SHERMAN ST	6X20	3	---	250	---
	EX42	EXISTING	SHERMAN ST	6X20	3	---	250	---
	EX43	EXISTING	SHERMAN ST	6X20	3	---	250	---
	EX44	EXISTING	SHERMAN ST	6X20	3	---	250	---
TOTAL						3452	4300	883

3

STATE PROJECT NUMBER: 6675-00-71 | HWY: CTH R | COUNTY: MARATHON | MISCELLANEOUS QUANTITIES | SCALE, FEET 0 N/A | SHEET NO: 87 | 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

ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG

CAT.	LOCATION FROM	TO	655.0515 GROUNDED CONDUCTOR LF	655.0515 EQUIPMENT GROUNDING CONDUCTOR LF	REMARKS
0050	SHERMAN STREET INTERSECTION				
	EXCB1	SB-5	192	192	
	SB-5	SB-4	60	60	
	SB-4	SB-3	112	112	
	SB-3	SB-2	58	58	
	SB-2	SB-1	87	87	
	SB-1	EX-SB4	116	116	CONNECT NEW WIRE TO EXISTING GROUNDING WIRE IN EX-SB4
	EX-SB11	SB-6	30	30	
	SB-6	EX-SB1	88	88	
	SB-1	PB-1	---	10	
	SB-2	PB-2	---	10	
	SB-3	PB-3	---	10	
	SB-4	PB-4	---	5	
	SB-5	PB-5	---	10	
	SB-6	EX-PB1	---	25	
TOTAL			743	813	
				1556	

POLES AND CONCRETE BASE ITEMS

CAT.	SIGNAL NO.	STATION	LOCATION	654.0101 CONCRETE BASES TYPE 1 EACH	654.0102 CONCRETE BASES TYPE 2 EACH	657.0395.S.02 POLES, TYPE 2 EACH
0050	SHERMAN STREET INTERSECTION					
	SB-1*	171+72.13 ~~171+78.5~~	~~90.4'LT~~ 66.3'LT	---	---	---
	SB-2	171+40.01 ~~171+34.2~~	~~44.0'LT~~ 43.9'LT	---	1	1
	SB-3*	171+49.5	5.5'LT	---	---	---
	SB-4	171+74.30 ~~171+42.1~~	~~57.0'RT~~ 62.5'RT	1	---	---
	SB-5*	171+74.30 ~~171+78.4~~	~~101.1'RT~~ 109.3'RT	---	---	---
	SB-6	55'TW'+98.5	16.0'RT	1	---	---
TOTAL				2	1	1

*CONCRETE BASES AND POLE TYPES LISTED ON LIGHTING QUANTITIES

LOWER EXISTING PULL BOX COVER

CAT.	LOCATION	PULL BOX NUMBER	SPV.0060.02 EACH
0050	SHERMAN STREET INTERSECTION		
	SHERMAN ST	EX-PB1	1
TOTAL			1

REMOVE, RELOCATE, AND SALVAGE EXISTING SIGNAL EQUIPMENT

CAT.	STATION	LOCATION	SPV.0060.03 EACH	REMARKS
0050	SHERMAN STREET INTERSECTION			
	EX-SB5 171+80.2	76.1'LT	1	RELOCATE TO SB-1
	EX-SB6 171+48.3	55.6'LT	1	RELOCATE TO SB-2
	EX-SB7 171+57.5	2.9'LT	1	RELOCATE TO SB-3
	EX-SB8 171+59.6	49.8'RT	1	RELOCATE TO SB-4
	EX-SB9 171+72.5	81.0'RT	1	RELOCATE TO SB-5
	EX-SB2 55'TW'+63.7	7.7'RT	1	RELOCATE TO RX-SB11
	EX-SB11 55'TW'+87.5	15.0'RT	1	RELOCATE TO SB-6
TOTAL			7	

NOTE: SEE PLANS FOR SPECIFIC EQUIPMENT TO BE SALVAGED AND REINSTALLED AT EACH LOCATION

REMOVE CABLE

CAT.	LOCATION FROM	TO	674.0030 REMOVE CABLE LF	REMARKS
0050	SHERMAN STREET INTERSECTION			
	CB	EX-SB9	135	TRAFFIC SIGNAL CABLE
	EX-SB9	EX-SB8	65	TRAFFIC SIGNAL CABLE
	CB	EX-SB5	70	TRAFFIC SIGNAL CABLE
	CB	EX-SB6	280	TRAFFIC SIGNAL CABLE
	CB	EX-SB7	195	TRAFFIC SIGNAL CABLE
	CB	EX-SB11	60	TRAFFIC SIGNAL CABLE
TOTAL			805	

TRAFFIC SIGNAL CABLE ITEMS

CAT.	LOCATION FROM	TO	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG LF	655.0290 CABLE TRAFFIC SIGNAL 21-14 AWG LF
0050	SHERMAN STREET INTERSECTION			
	EXCB1	SB-1	---	286
	SB-1	SB-2	---	81
	EXCB1	SB-3	---	243
	EXCB1	SB-4	---	146
	SB-4	SB-5	---	61
	EXCB1	EX-SB11	---	85
	EX-SB11	SB-6	---	30
	SB-1	EX4A	15	---
	SB-1	EX8C	15	---
	SB-2	EX2B	45	---
	SB-3	EX2C	15	---
	SB-4	EX6A	15	---
	SB-5	EX4B	45	---
	EX-SB11	EX6C	15	---
	EX-SB11	EX2D	15	---
	SB-6	EX8D	15	---
TOTAL			195	932

REPAIR EXISTING LOOP DETECTOR

CAT.	LOCATION	LOOP NUMBER	SPV.0060.04 EACH
0050	SHERMAN STREET INTERSECTION		
	SHERMAN ST	EX-25	1
	SHERMAN ST	EX-41	1
	SHERMAN ST	EX-42	1
	SHERMAN ST	EX-43	1
	SHERMAN ST	EX-44	1
TOTAL			5

STREET LIGHTING WIRE AND CONDUIT ITEMS

CAT.	LOCATION FROM	TO	655.0305 CABLE TYPE UF 2-12AWG GROUNDED LF	655.0610 ELECTRICAL WIRE LIGHTING NO. 12 LF*	655.0625 NO. 6 LF	655.0630 NO. 4 LF	652.0225 NONMETALLIC CONDUIT SCHEDULE 40, 2-INCH LF*	652.0210 SCHEDULE 40, 1-INCH LF
0040	LCC-1	LM-1**	40	--	--	--	--	--
	LCC-1	LM-2**	400	--	--	--	--	--
	LM-2	LM-3**	180	--	--	--	--	--
	LCC-1	PB-L1	--	--	100	400	100	--
	PB-L1	LM-5	--	--	210	840	210	--
	PB-L1	LM-4A	--	270	--	--	--	90
	PB-L1	LM-4B	--	330	--	--	--	110
	LM-5	LM-6	--	360	--	--	--	120
	LM-5	LM-7	--	--	160	640	160	--
	LM-7	LM-8	--	--	120	480	120	--
	LM-8	LM-9	--	--	120	480	120	--
	LM-9	LM-10	--	270	--	--	--	90
	LM-9	LM-11	--	--	140	560	140	--
	LM-11	LM-12	--	--	110	440	110	--
	LM-12	LM-13	--	--	120	480	120	--
	LM-13	LM-14	--	--	125	500	125	--
	LM-14	LM-15	--	--	125	500	125	--
	LM-15	LM-16	--	--	120	480	120	--
	LM-16	LM-17	--	--	110	440	110	--
	LM-17	LM-18	--	--	110	440	110	--
	LM-18	LM-19	--	--	110	440	110	--
	LM-19	LM-20	--	--	135	540	135	--
	LM-20	LM-21	--	--	160	640	160	--
	LM-21	LM-22	--	--	160	640	160	--
	LM-22	LM-23	--	--	160	640	160	--
	LM-23	LM-24	--	--	160	640	160	--
	LM-24	LM-25	--	--	160	640	160	--
TOTAL			620	1230	2715	10860	2715	410

* ADDITIONAL QUANTITIES LISTED ELSEWHERE
** LOCATED IN CONDUIT FOR TRAFFIC SIGNALS

3

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: 6675-00-71 | HWY: CTH R | COUNTY: MARATHON | MISCELLANEOUS QUANTITIES | SCALE, FEET 0 N/A | SHEET NO: 88 | E

FILE NAME : P:\40xx\4025\Plan\6675-00-71\Misc Quantities\030208_mq.dgn | PLOT DATE : 02/11/2004 | PLOT BY : $$...plotuser...$$ PLOT NAME : | PLOT SCALE : $$.....plotscale.....$$ | WISDOT/CADDS SHEET 43

STREET LIGHTING ITEMS

CAT.	STATION	DESCRIPTION	LOCATION	657.0395.S.01 POLES TYPE 3 EACH	657.0315 POLES TYPE 4 EACH	657.0320 POLES TYPE 5 EACH	654.0102 CONCRETE BASES TYPE 2 EACH	654.0105 CONCRETE BASES TYPE 5 EACH	657.0255 TRANSFORMER BASES STANDARD 11 1/2" BOLT CIRCLE EACH*	659.0115 LUMINAIRES UTILITY 150 W EACH
0040	171+66.00	LCC-1	80.0' LT	--	--	--	--	--	--	--
	171+78.53	LM-1	90.40 LT	--	1	--	1	--	1	1
	171+49.53	LM-2	5.53 LT	--	1	--	1	--	1	2
	171+78.40	LM-3	101.10 RT	1	--	--	1	--	1	1
	170+53.99	LM-4A	45.00 LT	--	--	1	--	1	1	1
	170+53.31	LM-4B	54.50 RT	--	--	1	--	1	1	1
	169+31.13	LM-5	6.00 RT	--	--	1	--	1	1	2
	168+23.90	LM-6	44.00 RT	--	--	1	--	1	1	1
	167+96.42	LM-7	45.00 LT	--	--	1	--	1	1	1
	166+92.00	LM-8	0.00 RT	--	--	1	--	1	1	2
	165+82.06	LM-9	0.00 RT	--	--	1	--	1	1	2
	165+03.96	LM-10	44.00 RT	--	--	1	--	1	1	1
	164+64.05	LM-11	45.00 LT	--	--	1	--	1	1	1
	163+79.39	LM-12	0.00 RT	--	--	1	--	1	1	2
	162+70.00	LM-13	0.00 RT	--	--	1	--	1	1	2
	161+56.00	LM-14	2.56 RT	--	--	1	--	1	1	2
	160+40.00	LM-15	5.22 RT	--	--	1	--	1	1	2
	159+36.00	LM-16	26.55 LT	--	--	1	--	1	1	1
	158+30.00	LM-17	26.55 LT	--	--	1	--	1	1	1
	157+25.00	LM-18	26.55 LT	--	--	1	--	1	1	1
	156+25.00	LM-19	26.55 LT	--	--	1	--	1	1	1
	155+00.00	LM-20	26.55 LT	--	--	1	--	1	1	1
	153+50.00	LM-21	26.55 LT	--	--	1	--	1	1	1
	152+00.00	LM-22	26.55 LT	--	--	1	--	1	1	1
	150+00.00	LM-23	26.55 LT	--	--	1	--	1	1	1
	149+00.00	LM-24	26.55 LT	--	--	1	--	1	1	1
	147+50.00	LM-25	26.55 LT	--	--	1	--	1	1	1
	171+27.00	PB-L1	5.00 LT	--	--	--	--	--	--	--
TOTALS				1	2	23	3	23	26	34

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

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

STREET LIGHTING ITEMS CONT'D.

CAT.	STATION	DESCRIPTION	LOCATION	655.0610 ELECTRICAL WIRE NO. 12 LF*	657.0710 LUMINAIRE ARMS TRUSS TYPE 4 1/2" CLAMP, 12 FT EACH	653.0140 PULL BOXES STEEL 24X42-INCH EACH	654.0215 CONCRETE CONTROL CABINET BASE (TYPE 9) EACH	656.0200.01 ELECTRICAL SERVICE METER BREAKER PEDESTAL 100A (WEST ARTERIAL/SHERMAN ST - LIGHTING) LS	656.0200.02 ELECTRICAL SERVICE METER BREAKER PEDESTAL 100A (WEST ARTERIAL/SHERMAN ST - SIGNALS) LS	SPV.0060.05 LIGHTING CONTROL CABINET (TYPE 3866 SPECIAL) EACH	SPV.0060.07 TRAFFIC CONTROL CABINET (TYPE 3866 SPECIAL) EACH
0040	171+66.00	LCC-1	80.0'LT	--	--	--	1	1	--	1	--
	171+60.00	TCC-1	76.0'LT	--	--	--	1	--	1	--	1
	171+78.53	LM-1	90.40 LT	132	1	--	--	--	--	--	--
	171+49.53	LM-2	5.53 LT	250	2	--	--	--	--	--	--
	171+78.40	LM-3	10L10 RT	132	1	--	--	--	--	--	--
	170+53.99	LM-4A	45.00 LT	132	1	--	--	--	--	--	--
	170+53.31	LM-4B	54.50 RT	132	1	--	--	--	--	--	--
	169+31.13	LM-5	6.00 RT	250	2	--	--	--	--	--	--
	168+23.90	LM-6	44.00 RT	132	1	--	--	--	--	--	--
	167+96.42	LM-7	45.00 LT	132	1	--	--	--	--	--	--
	166+92.00	LM-8	0.00 RT	250	2	--	--	--	--	--	--
	165+82.06	LM-9	0.00 RT	250	2	--	--	--	--	--	--
	165+03.96	LM-10	44.00 RT	132	1	--	--	--	--	--	--
	164+64.05	LM-11	45.00 LT	132	1	--	--	--	--	--	--
	163+79.39	LM-12	0.00 RT	250	2	--	--	--	--	--	--
	162+70.00	LM-13	0.00 RT	250	2	--	--	--	--	--	--
	161+56.00	LM-14	2.56 RT	250	2	--	--	--	--	--	--
	160+40.00	LM-15	5.22 RT	250	2	--	--	--	--	--	--
	159+36.00	LM-16	26.55 LT	132	1	--	--	--	--	--	--
	158+30.00	LM-17	26.55 LT	132	1	--	--	--	--	--	--
	157+25.00	LM-18	26.55 LT	132	1	--	--	--	--	--	--
	156+25.00	LM-19	26.55 LT	132	1	--	--	--	--	--	--
	155+00.00	LM-20	26.55 LT	132	1	--	--	--	--	--	--
	153+50.00	LM-21	26.55 LT	132	1	--	--	--	--	--	--
	152+00.00	LM-22	26.55 LT	132	1	--	--	--	--	--	--
	150+00.00	LM-23	26.55 LT	132	1	--	--	--	--	--	--
	149+00.00	LM-24	26.55 LT	132	1	--	--	--	--	--	--
	147+50.00	LM-25	26.55 LT	132	1	--	--	--	--	--	--
	171+27.00	PB-L1	5.00 LT	--	--	1	--	--	--	--	--
TOTALS				4376	34	1	2	1	1	1	1

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

SAWING PAVEMENT ITEMS

CAT.	STAGE	LOCATION	690.0100 EXISTING PAVEMENT LF	690.0200 CONCRETE PAVEMENT FULL DEPTH LF
0010	1	WEST ARTERIAL		
		171+87	110	--
		28TH AVENUE		
		55"TW"+46 - 58"TW"+05	--	330
		HOME DEPOT	500	--
0010	2	WEST ARTERIAL		
		171+87	110	--
TOTAL			720	330

STATE PROJECT NUMBER: 6675-00-71	HWY: CTH R	COUNTY: MARATHON	MISCELLANEOUS QUANTITIES	SCALE, FEET 0 N/A	SHEET NO: 90	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

STORM SEWER SCHEDULE

STRUCTURE NO.	STATION	OFFSET (FT)	TO STRUCTURE	C-C (FT)	RIM/GRATE ELEV.	TOS ELEV.	INVERT ELEV. UPPER	INVERT ELEV. LOWER	MH TYPE	INLET TYPE	DEPTH (FT)	COVER TYPE	SS PIPE HDPE 36-INCH L.F.	STORM SEWER PIPE REINFORCED CONCRETE CL III 12-INCH L.F.	CL III 15-INCH	CL III 18-INCH L.F.	CL III 24-INCH L.F.	SLOPE (FT/FT)	REMARKS
50.0	105+90.30	3.2LT	50.1	3.4	1182.80	1181.97	1178.44	1178.35	--	3	3.70	H	--	3.4	--	--	--	0.0685	
50.1	105+90.3	0.23RT	50.2	41.8	1182.80	1181.97	1178.24	1176.96	--	3	3.90	H	--	40.3	--	--	--	0.0316	
50.2	105+90.3	46.30RT	--	--	--	--	1176.96	1176.58	--	--	--	--	--	--	--	--	--	0.0316	AECPRC 12-INCH
60.0	119+70	36.55RT	60.4	84.3	1167.18	1167.18	1163.81	1162.98	--	9	3.62	MS(2)	--	--	--	--	84.3	0.0100	
60.1	126+50	36.55RT	60.5	85.7	1167.10	1167.10	1163.85	1162.17	--	9	3.50	MS(2)	--	--	--	--	85.7	0.0200	
60.2	132+33.4	36.55RT	60.6	91.4	1167.18	1167.18	1163.74	1162.48	--	9	3.69	MS(2)	--	--	--	--	91.4	0.015	
60.3	152+00	36.55RT	60.7	84.9	1174.15	1174.15	1170.80	1169.98	--	9	3.60	MS(2)	--	--	--	--	84.9	0.0100	
60.4	119+70	53.93LT	--	--	--	--	1162.98	1162.92	--	--	--	--	--	--	--	--	--	0.0100	AECPRC 24-INCH
60.5	126+50	55.27LT	--	--	--	--	1162.17	1162.04	--	--	--	--	--	--	--	--	--	0.0200	AECPRC 24-INCH
60.6	132+33.4	54.82LT	--	--	--	--	1162.48	1162.39	--	--	--	--	--	--	--	--	--	0.015	AECPRC 24-INCH
60.7	152+00	46.84RT	--	--	--	--	1169.98	1169.92	--	--	--	--	--	--	--	--	--	0.0100	AECPRC 24-INCH
70.0	159+88	8.10RT	70.1	51.7	1174.86	1174.03	1168.86	1168.36	--	3	5.34	H	--	51.7	--	--	--	0.0100	
70.1	159+88	49.63LT	--	--	--	--	1168.36	1168.30	--	--	--	--	--	--	--	--	--	0.0100	AECPRC 12-INCH
80.0	161+00	9.5RT	80.1	10	1174.30	1173.47	1169.92	1169.84	--	3	3.72	H	--	10	--	--	--	0.0100	
80.1	161+10	9.5RT	80.2	11.8	1174.25	1173.42	1169.74	1169.64	--	3	3.85	H	--	11.8	--	--	--	0.0100	
80.2	161+10	2.27LT	80.3	50.2	1174.25	1173.42	1169.54	1169.05	--	3	4.05	H	--	50.2	--	--	--	0.0100	
80.3	161+10	58.42LT	--	--	--	--	1169.05	1168.99	--	--	--	--	--	--	--	--	--	0.0100	AECPRC 12-INCH
90.0	164+06.87	40.5RT	90.1	10	1171.89	1171.06	1168.36	1168.26	--	3	2.87	H	--	10	--	--	--	0.0100	
90.1	164+17.75	40.5RT	90.3	31	1171.83	1171.00	1168.16	1168.01	--	3	3.01	H	--	31	--	--	--	0.005	
90.2	164+06.87	9.5RT	90.3	10.7	1172.77	1171.94	1168.09	1168.01	--	3	4.02	H	--	10.7	--	--	--	0.005	
90.3	164+17.75	9.5RT	90.5	10.9	1172.71	1171.88	1167.91	1167.87	--	3	4.16	H	--	--	10.9	--	--	0.005	
90.4	164+06.87	5.66LT	90.5	11.8	1172.64	1171.81	1167.96	1167.87	--	3	4.02	H	--	11.8	--	--	--	0.005	
90.5	164+17.75	1.4LT	90.6	39.1	1172.43	1171.60	1167.77	1167.58	--	3	4.02	H	--	--	39.1	--	--	0.005	
90.6	164+17.75	40.5LT	90.7	30.4	1173.59	1172.76	1167.48	1167.33	--	3	5.49	H	--	--	--	30.4	--	0.005	
90.7	164+17.75	77.0LT	--	--	--	--	1167.33	1167.30	--	--	--	--	--	--	--	--	--	0.005	AECPRC 18-INCH
95.0	166+87.38	40.5RT	95.1	10	1170.48	1169.65	1165.94	1165.87	--	3	3.88	H	--	10				0.0100	
95.1	166+97.38	40.5RT	95.2	36.5	1170.43	1169.60	1165.84	1165.49	--	3	3.93	H	--	36.5				0.0100	
95.2	166+97.38	3.96RT	95.4	12.3	1171.47	1170.64	1165.46	1165.36	--	3	5.39	H	--		12.3			0.0100	
95.3	166+87.38	9.42LT	95.4	10.2	1171.36	1170.53	1165.43	1165.36	--	3	5.26	H	--	10.2				0.0100	
95.4	166+97.38	8.3LT	95.6	32.1	1171.28	1170.45	1165.33	1165.03	--	3	5.33	H	--			32.1		0.0100	
95.5	166+87.38	40.5LT	95.6	10.8	1172.24	1171.41	1165.11	1165.03	--	3	6.47	H	--	10.8				0.0100	
95.6	166+97.38	40.5LT	EXIST 84"	34.5	1172.19	1171.36	1165.00	1162.46	--	3	6.57	H	--			34.5		0.0730	CONNECT TO EXISTING 84" STORM SEWER
99.0	169+15.64	42.1RT	99.1	19.4	1169.72	1168.89	1165.83	1164.67	--	3	3.23	H	--	19.4	--	--	--	0.0100	
99.1	169+35	43.4RT	99.2	19	1169.66	1168.83	1165.62	1165.46	--	3	3.38	H	--	19	--	--	--	0.0100	
99.2	169+54	44.7RT	99.3	35.2	1169.72	1168.89	1165.41	1165.08	--	3	3.67	H	--	--	35.2	--	--	0.0100	
99.3	169+54	9.5 RT	99.5	13	1170.15	1169.32	1165.03	1164.92	--	3	4.48	H	--	--	13	--	--	0.0100	
99.4	169+79	9.5RT	99.3	25	1170.24	1169.41	1165.30	1165.08	--	3	4.28	H	--	25	--	--	--	0.0100	
99.5	169+54	1.5RT	EXIST 84"	34.7	1169.90	1169.07	1164.87	1163.10	--	3	4.41	H	--	--	--	34.7	--	0.0730	CONNECT TO EXISTING 84" STORM SEWER
99.6	169+54	40.5LT	EXIST 84"	--	1170.41	1169.58	--	--	--	3 SPECIAL	L54	H	--	--	--	--	--	--	FIELD VERIFY DEPTH OF INLET. SEE DETAIL
99.7	169+74	40.5LT	EXIST 84"	--	1170.36	1169.53	--	--	--	3 SPECIAL	L47	H	--	--	--	--	--	--	FIELD VERIFY DEPTH OF INLET. SEE DETAIL
99.8	169+74	1.5RT	99.5	20	1169.94	1169.11	1165.09	1164.92	--	3	4.19	H	--	20.0	--	--	--	0.0100	
100.0	166+01.04	51.9RT	100.1	92	1170.69	1169.60	1165.19	1165.04	3	--	4.41	SPECIAL	92	--	--	--	--	0.0016	MATCH EXISTING 36" PIPE (SLOPE = .0018'/')
100.1	164+99.11	49.0RT	EXIST	--	1171.35	1170.26	1165.04	--	3	--	5.22	SPECIAL	--	--	--	--	--	0.0016	MATCH EXISTING 36" PIPE (SLOPE = .0010'/')
101.0	57"TW"+01.76	12.5RT	EXIST 12"	14	1175.22	1174.39	+/-1171.38	EXIST 12"	--	1	3.18	Z	--	14	--	--	--	0.0874	CONNECT TO EXISTING 12" STORM SEWER

- LOCATION IS REFERENCED TO THE CENTER OF THE STRUCTURE FOR ALL STRUCTURE TYPES
- GRATE ELEVATION IS REFERENCED TO THE FOLLOWING:
  - FLOWLINE OF INLET COVER FOR TYPE H AND MS COVERS
  - RIM OF MANHOLE COVER FOR TYPE J COVERS
- INLET & DISCHARGE ELEVATIONS AND STRUCTURE DEPTHS SHALL BE VERIFIED IN THE FIELD
- OFFSETS FOR ENDWALLS ARE TO DISCHARGE END OF ENDWALL. PIPE LENGTH IS FROM CENTER OF STRUCTURE TO OFFSET, MINUS LENGTH OF AEW. INVERT ELEVATION IS THE DISCHARGE POINT OF THE ENDWALL.
-ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED.

STORM SEWER ITEMS

			STORM SEWER PIPE REINFORCED CONCRETE CLASS III				STORM SEWER PIPE	MANHOLES	INLETS				INLET COVERS			
			608.0312	608.0315	608.0318	608.0324	607.0600.S	611.0210	611.0301	611.0303	SPV.0060.01	611.0307	611.0624	611.0642	611.0666	SPV.0060.06
			12-INCH	15-INCH	18-INCH	24-INCH	36-INCH (HDPE)	TYPE 3	TYPE 1	TYPE 3	TYPE 3 SPECIAL	TYPE 9	TYPE H	TYPE MS	TYPE Z	TYPE SPECIAL
CAT.	LOCATION	STAGE	LF	LF	LF	LF	LF	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
0010	PROJECT	1	250	76	132	346	92	2	1	19	2	4	21	8	1	2
		2	146	35	--	--	--	--	--	8	--	--	8	--	--	--
TOTAL			396	111	132	346	92	2	1	27	2	4	29	8	1	2

CLAY LINER

CAT.	LOCATION	SPV.0195.02 TONS
0070	WETLAND MTIGATION SITE AREA B	40
TOTAL		40

3

CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III

CAT.	STAGE	STATION	LOCATION	523.0129 24X45-INCH LF
0010	1	109+50	LT & RT	69
TOTAL				69

APRON ENDWALLS FOR CULVERT PIPE HORIZONTAL ELLIPTICAL

CAT.	STAGE	STATION	LOCATION	523.0529 29X45-INCH EACH	PIPE JOINT TIES* EACH
0010	1	109+50	LT	1	6
		109+50	RT	1	6
TOTAL				2	12

* NON-BID ITEM, FOR INFORMATION ONLY

CULVERT PIPE REINFORCED CONCRETE CLASS III

CAT.	STAGE	STATION	LOCATION	522.0112 12-INCH LF	522.013 36-INCH LF
0010	1	113+00	LT & RT	--	90
		156+50	LT & RT	--	162
CAT. 0010 TOTAL				0	252
0070	1	30"A"+50	LT & RT	45	--
CAT. 0070 TOTAL				45	0
TOTAL				45	252

APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE

CAT.	STAGE	SS STRUCTURE NO.	STATION	LOCATION	522.1012 12-INCH EACH	522.1018 18-INCH EACH	522.1024 24-INCH EACH	522.1036 36-INCH EACH	PIPE JOINT TIES* EACH
0010	1	50.2	105+90.3	RT	1	---	---	---	6
		--	113+00	LT & RT	---	---	---	2	12
		60.4	119+70	LT	---	---	1	---	6
		60.5	126+50	LT	---	---	1	---	6
		60.6	132+33	LT	---	---	1	---	6
		60.7	152+20	LT	---	---	1	---	6
		--	156+00	LT	---	---	---	1	6
		--	157+00	RT	---	---	---	1	6
		70.1	159+88	LT	1	---	---	---	6
		80.3	161+10	LT	1	---	---	---	6
		90.7	164+17.75	LT	---	1	---	---	6
CAT. 0010 TOTAL					3	1	4	4	72
0070	1	--	30"A"+50	LT & RT	6	--	--	--	18
CAT. 0070 TOTAL					6	0	0	0	18
TOTAL					9	1	4	4	90

* NON-BID ITEM, FOR INFORMATION ONLY

GABIONS

CAT.	LOCATION	SPV.0035.02 CY
0070	WETLAND MTIGATION SITE	
	34"A"+40	8
	49"B"+40	8
	57"B"+50	8
TOTAL		24

GEOGRID REINFORCEMENT

CAT.	STAGE	LOCATION	SPV.0180.01 SY
0010	1	WEST ARTERIAL	
		101+50 - 135+00	44925
		135+00 - 140+56	9205
		146+42 - 152+00	12550
		152+00 - 166+00	22845
TOTAL			89525

CONVENTIONAL SIGNS AND ABBREVIATIONS

- STATE LINE
- COUNTY LINE
- TOWNSHIP AND RANGE LINES
- SECTION LINE
- QUARTER LINE
- SIXTEENTH LINE
- NEW REFERENCE LINE
- NEW R/W LINE
- EXISTING R/W LINE
- PROPERTY LINE (P.L.)
- CORPORATE LIMITS (NAME)
- LOT, TIE AND OTHER MINOR LINES
- SLOPE INTERCEPTS (SLOPE INTERCEPTS)
- UNDERGROUND FACILITY (GAS, TELEPHONE, ELECTRIC, ETC.) (G (TYPE))
- FENCE
- TEMPORARY LIMITED EASEMENT
- PERMANENT LIMITED EASEMENT
- BEAM GUARD
- TRANSMISSION STRUCTURE AND LINE (T.P. (TYPE))
- PEDESTAL

- SECTION CORNER
- NOTATION FOR COMBUSTIBLE FLUIDS (CAUTION)
- BRIDGE
- STREAM OR RIVER (NAME)
- LAKE (NAME)
- CULVERT (BOX, PIPE OR CATTLE PASS) (TYPE)
- RAIL LINE (SMALL SCALE) (LARGE SCALE)
- SIGN / SIGN

- FOUNDATION OR RUIN (FDN.)
- BUILDING (TYPE)
- CEMETERY
- R/W MONUMENT
- NON-MONUMENTED R/W POINT
- IRON PIN FOUND (I.P.)
- VALVE (GAS (TYPE))
- WINDMILL
- SILO, MANHOLE, VENT, SEPTIC VENT, WELL, ETC. (M.H. (TYPE))
- GAS PUMPS (G.P.)
- BUSHES
- TREES (DECIDUOUS) (CONIFEROUS)
- WOODS
- ENCROACHING SIGN (E-1 / SIGN)

	COMPENSABLE	NON-COMPENSABLE
POWER POLE		
TELEPHONE POLE		

- NO ACCESS (BY ACQUISITION)
- NO ACCESS (BY STATUTORY AUTHORITY)
- NO ACCESS (BY PREVIOUS PROJECT)

- COORDINATE POINT
- EXISTING FEATURES (XXXX)
- PROPOSED FEATURES (XXXX)
- ALIGNMENT POINTS (XXXX)

ACRES	AC	HOUSE TRAILER	HT
ACCESS RIGHTS	AR	HIGHWAY EASEMENT	HE
ACCESS POINT	A.P.	LENGTH	L
AHEAD	AH	LONG CHORD	LC
ALUMINUM	ALUM	LONG CHORD BEARING	LCB
AND OTHERS	ET AL	MONUMENT	MON
ANTENNA	ANT	OUTLOT	OL.
APARTMENTS	APTS	PAGE	P
BACK	BK	PRIVATE DRIVEWAY	P.D.
BARN	B	PARKER-KALON FASTENER	PK
BLOCK	BLK	PERMANENT LIMITED EASEMENT	PLE
BUILDING	BLDG	POWER POLE	PP
CENTERLINE	C/L, ℄	PROPERTY LINE	P.L.
CERTIFIED SURVEY MAP	CSM	RADIUS	R
CONCRETE	CONC	REFERENCE LINE	R/L
CORNER	COR	RESTRICTED DEVELOPMENT EASEMENT	RDE
CABLE PEDESTAL	CP	RIGHT OF WAY	R/W
ELECTRIC PEDESTAL	EP	SECTION LINE	S/L
FOUNDATION	FDN	SHED	S
GALVANIZED	GALV	STATION	STA
GARAGE	G	TANGENT	TAN
GAS PUMP	GP	TANK	T
GAS VALVE	GV	TELEPHONE PEDESTAL	TP
HOUSE	H	TEMPORARY LIMITED EASEMENT	TLE
		VOLUME	VOL
		WALL	W

NOTES

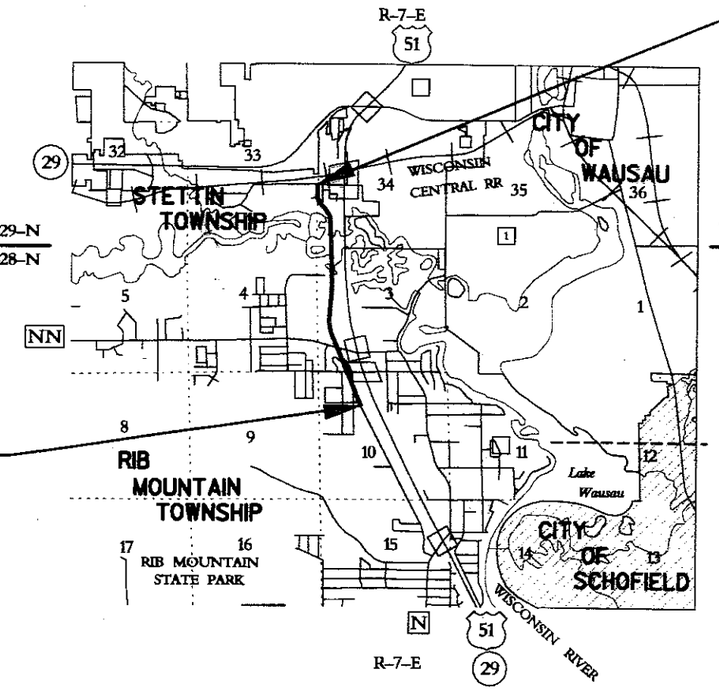
ALL PLAT COORDINATES ARE GROUND COORDINATES.
COORDINATES AND BEARINGS ON THIS PLAT ARE ORIENTED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (MARATHON COUNTY) (ENGLISH) NAD 83 (91) ADJUSTMENT. ALL PLAT DISTANCES ARE GROUND LENGTH.

RIGHT OF WAY MONUMENTS ARE TYPE II AND ARE PLACED PRIOR TO OR AT THE TIME OF LAND TITLE TRANSFER.

RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.

DISTANCES TO BUILDINGS IS APPROXIMATE.

BEGIN RELOCATION ORDER
PROJECT
STATION 68+00
1680.87' SOUTH OF AND 438.73' WEST OF THE NORTH 1/4 CORNER, SECTION 10, TOWNSHIP 28 NORTH, RANGE 7 EAST



END RELOCATION ORDER
PROJECT
STATION 171+99.08
10.58' SOUTH OF AND 12.10' EAST OF THE WEST 1/4 CORNER OF SECTION 34, TOWNSHIP 29 NORTH, RANGE 7 EAST

GN

LAYOUT

0 2 Mi.

SCALE

TOTAL NET LENGTH OF CENTERLINE 1.970 Mi.

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
6675-00-20	4.1	13
FEDERAL PROJECT NUMBER		

PLAT OF RIGHT-OF-WAY REQUIRED FOR

WEST ARTERIAL
ORIOLE LANE - SHERMAN STREET

CONSTRUCTION PROJECT NUMBER

ACCEPTED FOR

MARATHON COUNTY

4/22/02 (Date) (Signature & Title of Official)

ORIGINAL PLANS PREPARED BY

BMCI
205 West Highland Avenue, Suite 501,
Milwaukee, WI 53203
(414) 347-1807 FAX (414)347-1347

WISCONSIN
CRAIG W. RILEY
S-2264
MILWAUKEE, WIS.
LAND SURVEYOR

2-19-2002 (Date) Craig W Riley (Signature)

REVISION DATE
MAR. 20, 2003
JULY 22, 2003

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED FOR DISTRICT OFFICE

DATE: 2-21-02 (Signature)

93 E

SCHEDULE OF LANDS & INTERESTS REQUIRED

AREAS SHOWN IN THE TOTAL ACRES COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

PARCEL NUMBER	SHEET NUMBER	OWNER	INTEREST REQUIRED	TOTAL SF	R/W REQUIRED SQUARE FEET SF NEW	SF EXISTING	SF TOTAL	TOTAL REM. SF	T.I. TEMP. SF	PARCEL NUMBER
1	4.4	THE WISCONSIN CONFERENCE ASSOCIATION OF THE SEVEN-DAY ADVENTISTS	FEE	180,446	144,463	35,983	180,446	0	-	1
2	4.4	SZMANDA PROPERTIES, LLC	FEE, TI, BLDG	225,503	70,141	-	70,141	155,362	5,119	2
3	4.4	RIB MOUNTAIN PARTNERS, LLC	FEE, TI	43,560	22,630	-	22,630	20,930	3,004	3
4	4.4, 4.5	EDWARD O. LUEDTKE, JAMES A. HUMMERT AND PEYTON MUEHLMEIER D/B/A MIDWAY MOTOR LODGE OF WAUSAU MIDWAY MOTOR LODGE OF WAUSAU WISCONSIN	FEE, TI,AR	329,900	70,487	-	70,487	259,413	6,502	4
6	4.5	ELIZABETH R. ZARNKE TRUSTEE OF THE GERALDINE M. ZARNKE IRREVOCABLE TRUST	FEE, TI, BLDG	21,789	10,014	1,698	11,712	10,077	2,647	6
7	4.5	GERALD W., JAMES J., AND KENNETH W. DREWEK, W/ LIFE ESTATE TO LORETTA EWAN DREWEK	FEE, TI, BLDG	21,789	9,054	2,063	11,117	10,672	1,891	7
8	4.5	PAUL W. SZMANDA	FEE, TI	21,786	8,660	2,058	10,718	11,068	953	8
9	4.5	JOSEPH S. & BARBARA J. BUSKA	FEE, TI, BLDG	44,473	25,202	-	25,202	19,271	5,178	9
11	4.5	MICHAEL J. AND BETTY A. BRESNAHAN	FEE, TI	12,226	543	-	543	11,683	632	11
12	4.5	HELKE - CORSTEN, LLP	FEE, TI, BLDG	20,412	14,081	-	14,081	6,331	6,331	12
13	4.5	TANGLEWOOD LANES, INC	FEE, TI, BLDG	137,123	24,845	-	24,845	112,278	14,164	13
14	4.5	PATRICIA L. DETERT	FEE, TI	28,946	6,994	-	6,994	21,952	2,984	14
16	4.5	DUWAYNE TOSHNER	FEE, TI	43,346	15,862	-	15,862	27,484	2,722	16
17	4.5	SCOTT R. & TERESA M. PARKS	FEE, TI	22,179	3,068	-	3,068	19,111	3,103	17
18	4.6	MARVIN L. & MARGARET M. ROY	FEE, TI	14,451	11,314	-	11,314	3,137	1,437	18
19	4.6	VIRGINIA L. LITERSKI	FEE, TI	11,015	10,413	-	10,413	602	413	19
21	4.6	SHAWN A. & SARAH J. SABATKE	FEE, TI, BLDG	11,642	4,205	-	4,205	7,437	1,577	21
22	4.6	WILBUR W. & BEATRICE L. NINNEMANN	FEE, TI	24,438	377	-	377	24,061	3,064	22
23	4.6	RONALD R. & BONNIE M. WENTA	FEE, TI, BLDG	21,983	5,431	-	5,431	16,552	1,790	23
24	4.6	LAVERN J. AND LEO F. BERNA	FEE, TI	31,372	29,498	-	29,498	1,874	859	24
26	4.6	ANNE G. SCHIERL, TRUSTEE OF THE RUTH C. SCHIERL TRUST	FEE, TI	63,137	10,251	-	10,251	52,886	2,820	26
27	4.6	JOANN FORD	FEE	35,809	35,809	-	35,809	-	-	27
28	4.6	BERNELL AND JANET ELLENBECKER	FEE	20,103	20,103	-	20,103	-	-	28
29	4.6	TIMOTHY G. AND LOIS A. MURPHY	FEE	21,569	21,569	-	21,569	-	-	29
31	4.6	GEORGE A. AND MARY E LEONHARD	FEE	26,445	26,445	-	26,445	0	-	31
32	4.6	EDWARD P. AND VICTORIA GIERSZEWSKI, JR.	FEE, AR, TI	36,341	1,953	-	1,953	34,388	1,612	32
33	4.6	GENE E. AND GERALDINE R. KLAPPERICH	FEE, AR, TI	31,220	893	-	893	30,327	1,315	33
34	4.6	JOYCE M. PEVYTOE	FEE, AR, TI	21,910	345	-	345	21,565	955	34
36	4.6	ARTHUR S. AND DEBRA J. DELLENBACH	FEE, AR	51,618	34,591	-	34,591	17,027	-	36
37	4.4	JOSEPH M. AND MILDRED WEIGAND	TI	26,408	-	-	-	26,408	2,501	37
38	4.5	SCOTT R. & JUDY R. BARGENDER	FEE, TI	59,883	10,683	-	10,683	49,200	1,200	38
39	4.5	EUGENE KREMSREITER	TI	19,881	-	-	-	19,881	2,140	39
41	4.5	FRANK J. JR. & LORRAINE R. LEPISKO	TI	19,152	-	-	-	19,152	2,861	41
42	4.5	STATE OF WISCONSIN MOTOR VEHICLE DEPARTMENT	FEE, TI	70,035	200	-	200	69,835	250	42
43	4.6	RAY V. & ALICE L. DECKELMAN	FEE, TI	42,829	607	-	607	42,222	1,859	43
44	4.6	RICHARD J. AND DONNALEE HIORNS	FEE, TI	18,896	645	-	645	18,251	1,166	44
46	4.7	OTIS D. & RUTH A. KRUZAN	FEE, TI	21,780	280	1,764	2,044	19,736	520	46
47	4.7	EDWARD W. & ADELINE F. GEHRKE	FEE, TI	43,560	1,031	5,161	6,192	37,368	1,331	47
48	4.7	CONSTANCE J. SHEVY	FEE, TI	54,780	1,601	10,014	11,615	43,165	1,707	48
49	4.7	ADELINE WIEMANN	FEE, TI	32,234	3,152	6,700	9,852	22,382	1,012	49
51	4.7	RANDY T. & KATHY A. KNIPPEL FROEHLICH	FEE, TI	43,560	3,418	4,519	7,937	35,623	683	51
52	4.7	PAUL F. & DORIS A. ZIEGLMEIER	FEE, TI	76,359	8,506	7,926	16,432	59,927	1,199	52
53	4.7	SALLY ANN SCHOESSON & LEE H. FOSBENDER & SHIRLEY A. FOSBENDER	FEE	50,676	521	-	521	50,155	-	53
54	4.7	PRUDENCE M. LANG	FEE, TI	43,560	792	-	792	42,768	1,298	54
56	4.7	JOHN J. & JOYCE M. STEPANIK	FEE, TI	44,582	762	-	762	43,820	1,932	56
57	4.8	JOHN J. & JOYCE M. STEPANIK (TRUSTEES OF THE STEPANIK REVOCABLE TRUST)	FEE	1,483,903	211,863	-	211,863	1,272,040	-	57
58	4.9, 4.10	RICHARD A. AND MARY E. JARVIS	FEE	1,393,513	89,122	-	89,122	1,304,391	-	58
59	4.10	CATHERINE J. CHENG AND STEVEN R. FOUST	FEE	941,279	55,830	-	55,830	885,449	-	59
61	4.11, 4.12	FLORSTED DEVELOPMENT CORPORATION	FEE	1,609,524	189,916	-	189,916	1,419,608	-	61
62	4.12	HOME DEPOT U.S.A., INC	FEE, TI	694,947	108,279	-	108,279	586,668	44,768	62
63	4.12	WAUSAU STEEL CORPORATION	FEE, TI	1,266,423	1,797	-	1,797	1,264,626	27,388	63
64	4.6	TIMOTHY G. AND LOIS A. MURPHY	FEE	109,378	59,837	-	59,837	49,541	-	64
66	4.4	GEORGE M. AND PAULETTE F. WADZINSKI	FEE	946,998	48,714	-	48,714	898,284	-	66
113	4.5	TANGLEWOOD LANES, INC	FEE, TI, BLDG	24,603	24,206	-	24,206	397	313	113
136	4.6	ARTHUR S. AND DEBRA J. DELLENBACH	FEE, AR	30,048	15,205	-	15,205	14,843	-	136
80	4.4,4.12	WISCONSIN PUBLIC SERVICE CORPORATION - ELECTRIC	RELEASE OF RIGHTS							80
81	4.4,4.5,4.6,4.7,4.12	VERIZON NORTH, INC.	RELEASE OF RIGHTS							81
82	4.5,4.6	ATC, LLC	RELEASE OF RIGHTS							82
83	4.12	WISCONSIN PUBLIC SERVICE CORPORATION - GAS	RELEASE OF RIGHTS							83
84	4.12	CITY OF WAUSAU-WATER	RELEASE OF RIGHTS							84

NOTE: CAL'D = CALCULATED FROM DRAWING FILE
SF = SQUARE FEET

4

REVISION DATE
MAR. 20, 2003
JULY 22, 2003

DATE FEB. 22, 2002

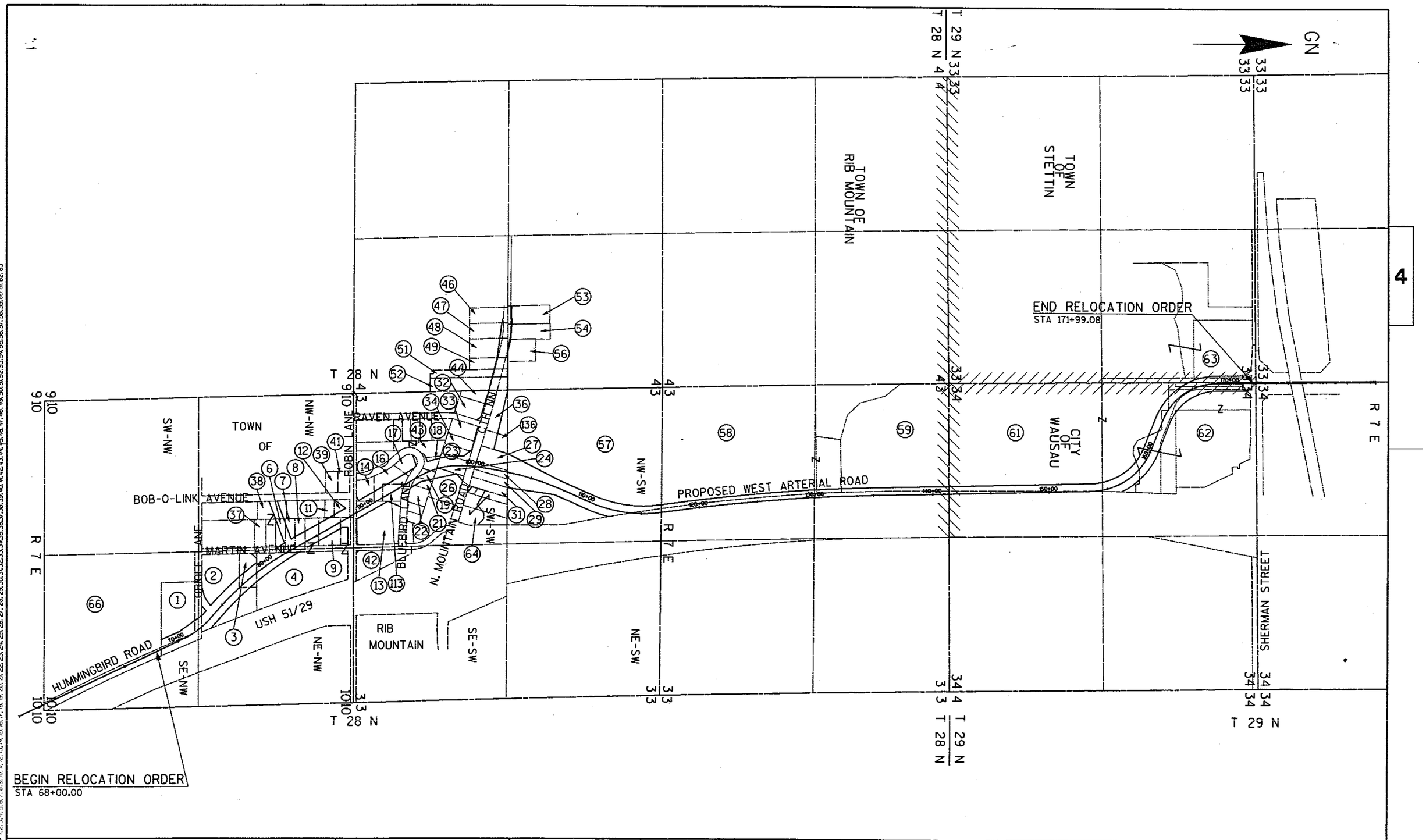
SCALE, FEET
0 N/A

HWY: WEST ARTERIAL
COUNTY: MARATHON

STATE R/W PROJECT NUMBER 6675-00-20
CONSTRUCTION PROJECT NUMBER

PLAT SHEET NO: 4.2
PS&E SHEET NO: 94

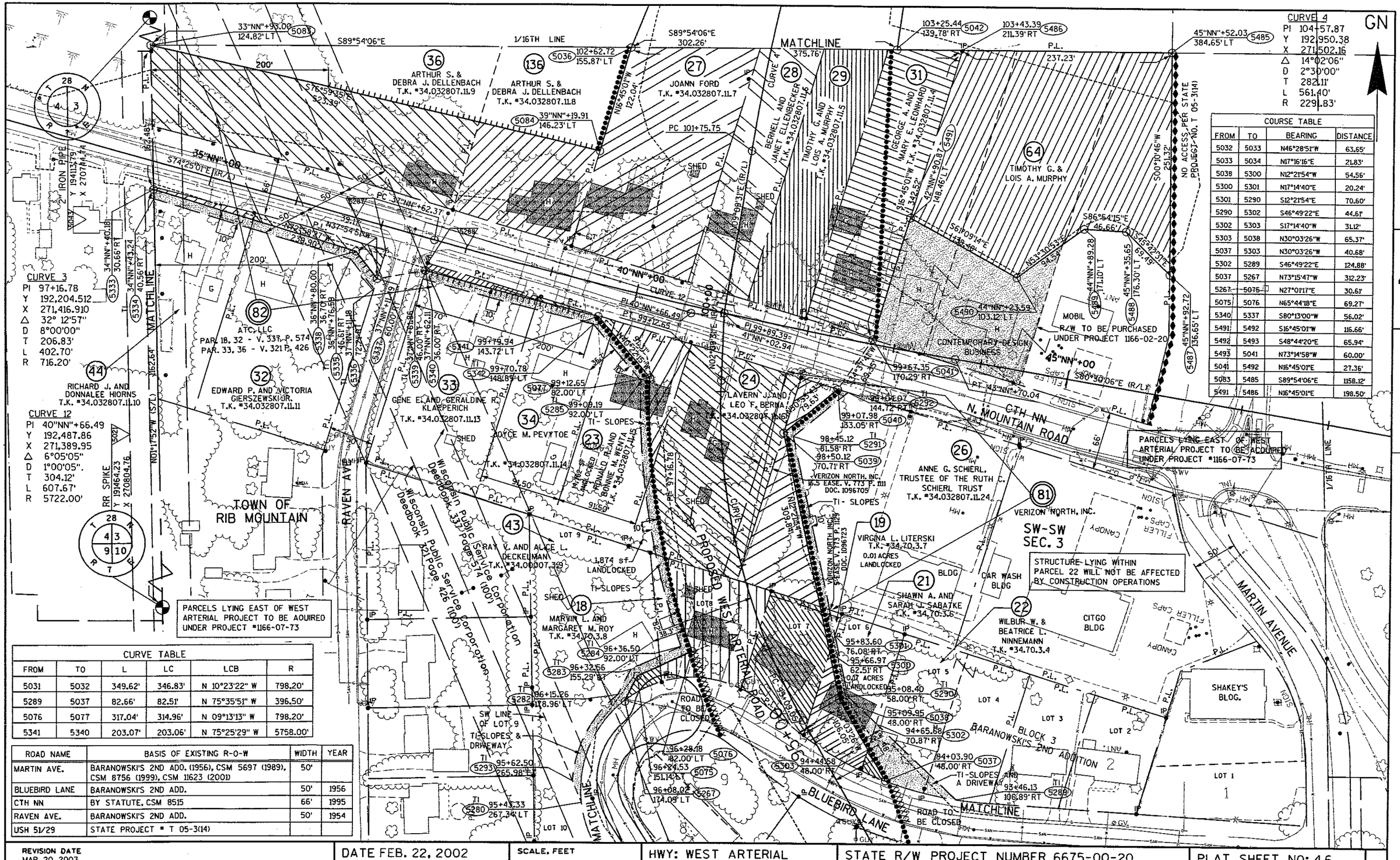
E



REVISION DATE MAR. 20, 2003 JULY 22, 2003 (N.C.)	DATE FEB. 22, 2002	NOT TO SCALE	HWY: WEST ARTERIAL	STATE R/W PROJECT NUMBER 6675-00-20	PLAT SHEET NO: 4. 3
			COUNTY: MARATHON	CONSTRUCTION PROJECT NUMBER	PS&E SHEET NO: 95 E

FILE NAME : p:\40xx\4025\rw plat\040103_rw.dgn PLOT DATE : 12/15/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 70

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



CURVE TABLE					
FROM	TO	L	LC	LCB	R
5031	5032	349.62'	346.83'	N 10°23'22" W	798.20'
5289	5037	82.66'	82.51'	N 75°35'51" W	396.50'
5076	5077	317.04'	314.96'	N 09°13'13" W	798.20'
5341	5340	203.07'	203.06'	N 75°25'29" W	5758.00'

ROAD NAME	BASIS OF EXISTING R-O-W	WIDTH	YEAR
MARTIN AVE.	BARANOWSKI'S 2ND ADD. (1956), CSM 5697 (1989), CSM 8756 (1999), CSM 11623 (2001)	50'	
BLUEBIRD LANE	BARANOWSKI'S 2ND ADD.	50'	1956
CTH NN	BY STATUTE, CSM 8515	66'	1995
RAVEN AVE.	BARANOWSKI'S 2ND ADD.	50'	1954
USH 51/29	STATE PROJECT # T 05-3(14)		

REVISION DATE
MAR. 20, 2003
JULY 22, 2003

DATE FEB. 22, 2002
GRID FACTOR N/A

SCALE, FEET
0 50 100

HWY: WEST ARTERIAL
COUNTY: MARATHON

STATE R/W PROJECT NUMBER 6675-00-20
CONSTRUCTION PROJECT NUMBER

PLAT SHEET NO: 4.6
PS&E SHEET NO: 96

E

FILE NAME : p:\40xx\4025\rw plat\040106_rw.dgn PLOT DATE : 12/15/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 75

NE1/4 - SE1/4
SEC. 4

(53) SALLY ANN SCHOESSON & LEE H. FOSBENDER & SHIRLEY A. FOSBENDER
T.K. # 34.42807.13.2

(54) PRUDENCE M. LANG
T.K. # 34.42807.13.4

(56) JOHN J. & JOYCE M. STEPANIK
T.K. # 34.42807.13.20

PARCEL 1 - CSM 9796-40-19

(81) VERIZON NORTH, INC.
PARCEL 52-V.173 MR P.793 #658167 (10' EASE.)
PARCEL 52-V.253 P.136 (33' EASE.)

PATRICK D. STEPANIK
T.K. # 34.42807.13.19

2" IRON PIPE
5043
Y 194113.79
X 270744.74

T 28 N
R 7 E
4 3

GN

LOT 1 CSM 11316-47-178

TI-SLOPES

20+00

25+00

S88°37'21"E (R/L)

N. MOUNTAIN ROAD/CTH NN

30"NN"+00

CURVE 10

PI 29"NN"+72.41

1/16TH LINE

LOT 2 CSM 4011-36-14

MATCHLINE

SEE SHEET 4.8

4

S74°26'01"E (R/L)

35"NN"+00

TI-SLOPES

(46) OTIS O. & RUTH A. KRUZAN
T.K. # 34.42807.16.8

(47) EDWARD W. AND ADELINE F. GEHRKE
T.K. # 34.42807.16.9

(48) CONSTANCE J. SHEVY
T.K. # 34.42807.16.6

(49) ADELINE WIEMANN
T.K. # 34.42807.16.1

(51) RANDY T. & KATHY A. KNIPPEL FROEHLICH
T.K. # 34.42807.16.4

(52) PAUL F. & DORIS A. ZIEGLMEIER
T.K. # 34.42807.16.3

2805 FROEHLICH

CSM 2843-11-13

33' EASE. VERIZON NORTH, INC

LOT 1 CSM 9011-36-14

SEE SHEET 4.6

10' EASE. VERIZON NORTH, INC

TOWN OF RIB MOUNTAIN

RR SPIKE
Y 191464.23
X 270804.76

T 28 N
R 7 E
4 3
9 10

SE1/4 - SE1/4
SEC. 4

CURVE 10
PI 29"NN"+72.41
Y 192,782.277
X 270,334.248
Δ 14°12'20"
D 3°49'11"
T 186.91'
L 371.90'
R 1500.00'

CURVE TABLE					
FROM	TO	L	LC	LCB	R
5414	5415	361.98'	361.06'	N 81°31'11" W	1460.00'
5420	5424	327.57'	326.95'	S 82°31'44" E	1540.00'

ROAD NAME	BASIS OF EXISTING R-O-W	WIDTH	YEAR
CTH NN	BY STATUTE 80.01(2)-(66'), CSM 9796, CSM 2843, CSM 9011, CSM 11316	66'	

COURSE TABLE			
FROM	TO	BEARING	DISTANCE
5426	5333	S01°17'52"E	155.81'
5333	5414	N76°18'35"W	282.93'
5415	5416	N01°22'39"E	5.50'
5416	5419	N01°22'39"E	66.00'
5419	5420	N01°22'39"E	8.50'
5424	5426	S89°38'20"E	302.38'

REVISION DATE
MAR. 20, 2003
JULY 22, 2003 (N.C.)

DATE FEB. 22, 2002
GRID FACTOR N/A

SCALE, FEET
0 50 100

HWY: WEST ARTERIAL
COUNTY: MARATHON

STATE R/W PROJECT NUMBER 6675-00-20
CONSTRUCTION PROJECT NUMBER

PLAT SHEET NO: 4.7
PS&E SHEET NO: 97 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

FILE NAME : p:\40xx\4025\rw plat\040107_rw.dgn PLOT DATE : 12/15/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 75

ROAD NAME	BASIS OF EXISTING R-O-W	WIDTH	YEAR
USH 51/29	STATE PROJECT # T 05-3(14)		

GN

1/16TH LINE
102+62.72
155.87' LT
5036

N22°24'30"E
263.98'

S89°40'15"E
302.38'

N29°24'6"E
250.60'

107+37.16
80.00' LT
5430

105+00

N23°11'38"E
296.32'

110+33.47
80.00' RT
5431

N23°11'38"E (R/L)

L = 576.67'
LC = 569.66'
LCB = N07°41'42"E
R = 1065.92'

110+00

1,102,189 SQUARE FEET
LYING WEST OF WEST ARTERIAL

(57)
JOHN J. AND JOYCE
STEPANIK
(TRUSTEES OF THE STEPANIK
REVOCABLE TRUST)
T.K. # 34.32807.10
T.K. # 34.32807.10.1

NW-SW
SEC. 3

CURVE 5
PI 113+51.23
Y 193,774.14
X 271,855.12
Δ 30°59'50"
D 5°00'00"
T 317.76'
L 619.95'
R 1145.92'

2" IRON PIPE
Y 194113.79
X 270744.74
5509

T 28 N
R 7 E
4 3

983.87'

S89°40'15"E

TOWN OF
RIB MOUNTAIN

4

CURVE 4

P.I.

103+25.44
139.78' RT
5042

MATCHLINE

CURVE 4
PI 104+57.87
Y 192,950.38
X 271,502.16
Δ 14°02'06"
D 2°30'00"
T 282.11'
L 561.40'
R 2291.83'

PT 107+37.16
70.00' RT
5433

N23°11'38"E
296.32'

169,851 SQUARE FEET LANDLOCKED
LYING EAST OF WEST ARTERIAL

PC 110+33.47
70.00' RT
5434

L = 200.87'
LC = 200.64'
LCB = S18°27'40"W
R = 1215.92'

L = 468.70'
LC = 468.68'
LCB = N08°55'42"W
R = 16,570.22'

115+00

CURVE 5

N07°48'13"W (R/L)

80'

116+53.42
80.00' LT
5432

N07°48'13"W
30.32'

116+83.74
80.00' LT
5429

116+75.74
24.06' LT
5438

56.91'

36'

112+22.78
70.00' RT
5435

113+06.47
36.00' RT
5436

PI 113+51.23

NO ACCESS PER STATE
PROJECT NO: T 05-3(14)

PK NAIL
Y 194098.62
X 273384.42
5508

116+53.42
36.00' RT
5437

SEE SHEET 4.6

SIGN

SIGN

USH 51/STH 29

REVISION DATE	DATE FEB. 22, 2002	SCALE, FEET	HWY: WEST ARTERIAL	STATE R/W PROJECT NUMBER 6675-00-20	PLAT SHEET NO: 4.8	
MAR. 20, 2003 JULY 22, 2003 (N.C.)	GRID FACTOR	0 50 100	COUNTY: MARATHON	CONSTRUCTION PROJECT NUMBER	PS&E SHEET NO: 98	E

FILE NAME : p:\40xx\4025\rw plot\040108_rw.dgn PLOT DATE : 12/15/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 75

ROAD NAME	BASIS OF EXISTING R-O-W	WIDTH	YEAR
USH 51/29	STATE PROJECT # T 05-3(14)		

(58) RICHARD A. AND MARY E. JARVIS
T.K. # 34.32807.7
T.K. # 34.32807.6.3

2" IRON PIPE
Y 194113.79
X 270744.74

T 28 N
R 7 E
4 3

SW-NW SEC. 3

TOWN OF RIB MOUNTAIN

1,208,500 SQUARE FEET REMAINING THIS 40

983.87'

S89°40'15"E

P.I.

MATCHLINE

116+75.69 (5438)
23.66' LT

116+83.74 (5429)
80.00' LT

125.26'
N07°48'13"W

L = 2292.41'
LC = 2290.58'
LCB = N04°09'17"W
R = 16,570.22'

N07°48'13"W (R/L)

56.54'

PC 118+09.00 (5439)
80.00' LT

L = 1901.95'
LC = 1900.91'
LCB = N04°31'13"W
R = 16,595.00'

80'

36'

120+00

125+00

130+00

PI 127+56.41

CURVE 6

STATE OF WISCONSIN
SCENIC EASEMENT
200' STRIP ALONG USH
V. 30 P. 297 #887401

SEE SHEET 4.10

4

SIGN

NO ACCESS PER STATE
PROJECT NO. T 05-3(14)

USH 51/STH 29

PC 118+09.00 (5439)
36.00' LT

Pk. NAIL
Y 194098.62
X 273384.42

T 28 N
R 7 E
3 3

1/16TH LINE

CURVE 6
PI 127+56.41
Y 195,181.74
X 271,662.21
Δ 6°33'60"
D 0°20'49"
T 947.42'
L 1892.76'
R 16515.00'

REVISION DATE	DATE FEB. 22, 2002	SCALE, FEET	HWY: WEST ARTERIAL	STATE R/W PROJECT NUMBER 6675-00-20	PLAT SHEET NO: 4.9	
MAR. 20, 2003 JULY 22, 2003 (N.C.)	GRID FACTOR	0 50 100	COUNTY: MARATHON	CONSTRUCTION PROJECT NUMBER	PS&E SHEET NO: 99	E

FILE NAME : p:\40xx\4025\rw plat\040109_rw.dgn PLOT DATE : 12/15/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 75

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

ROAD NAME	BASIS OF EXISTING R-O-W	WIDTH	YEAR
USH 51/29	STATE PROJECT # T. 05-3(14)		

GN

SEC. 3 NW-NW

(58) RICHARD A. AND MARY E. JARVIS
T.K. # 34.32807.6.3
T.K. # 34.32807.7
PARCEL A
CSM 5726-21-44

(59) CATHERINE J. CHENG AND STEVEN R. FOUST
T.K. # 34.102807.6.1

TOWN OF RIB MOUNTAIN

P.L.

PARCEL A - CSM 5726-21-44

95,891 SQUARE FEET REMAINING THIS 40

SEE SHEET 4.9

80'

L = 1901.95'
LC = 1900.91'
LCB = NO4°31'13"W
R = 16,595.00'

PT 137+01.76 (5441) 80.00' LT

200' STRIP ALONG USH V. 30 P. 297 #587401

STATE OF WISCONSIN SCENIC EASEMENT

STATE OF WISCONSIN
LIMITED HIGHWAY EASEMENT
V. 458 P.194 #517896

217'

CURVE 6
PI 127+56.41
Y 195,181.74
X 271,662.21
Δ 6°33'60"
D 0°20'49"
T 947.42'
L 1892.76'
R 16515.00'

2" IRON PIPE
Y 196558.75
X 270693.56
5502

N89°34'16"E 2,714'

TOWN OF RIB MOUNTAIN LIMITS

CITY OF WAUSAU CORPORATE LIMITS

MATCHLINE

141+35.83 (5442) 80.00' LT

438.05'
N01°14'13"W

66.26'

N00°11'29"W
173.30'

140+00

N01°14'13"W (R/L)

LAKE WAUSAU

141+38.88 (5443) 13.74' LT

TOWN OF SETTIN LIMITS

135+00

P.L.

L = 2292.41'
LC = 2290.58'
LCB = NO4°09'17"W
R = 16,570.22

(5444) 139+65.62 16.91' LT

130+00

CURVE 6

36'

NO ACCESS PER STATE PROJECT NO. T 05-3(14)

SIGN

137+01.76 (5445) 36.00' RT

N00°13'28"W 57.47'

MATCHLINE

USH 51/STH 29

SIGN

SIGN

SIGN

1/16TH LINE

2" TRON PIPE
Y 196578.55
X 273338.43
5503

4

REVISION DATE	DATE FEB. 22, 2002	SCALE, FEET	HWY: WEST ARTERIAL	STATE R/W PROJECT NUMBER 6675-00-20	PLAT SHEET NO: 4.10	
MAR. 20, 2003 JULY 22, 2003 (N.C.)	GRID FACTOR	0 50 100	COUNTY: MARATHON	CONSTRUCTION PROJECT NUMBER	PS&E SHEET NO: 100	E

FILE NAME : p:\40xx\4025\rw plat\040110_rw.dgn PLOT DATE : 12/15/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 75

ROAD_NAME	BASIS OF EXISTING R-O-W	WIDTH	YEAR
USH 51/29	STATE PROJECT # T 05-3(14)		

CITY OF WAUSAU

CITY OF WAUSAU CORPORATE LIMITS

858.78'
N89°34'16"E

P.O.B.

T28N T29N 4 33 3 34 R7E R7E

2" IRON PIPE
Y 196558.75
X 270693.56
5502

STATE OF WISCONSIN
LIMITED HIGHWAY EASEMENT
S. 588' FOR CHANNEL CHANGE
V. 458 P.560 #518483

(61)

FLORSTEO DEVELOPMENT CORPORATION
T.K. # 59.342907.10.4
T.K. # 59.342907.11

1,118,998 SQUARE FEET
REMAINING THIS 40

SW-SW SEC. 34

NW-SW SEC. 34

CURVE 7
PI 157+36.57
Y 198,163.28
X 271,597.83
Δ 67°22'04"
D 10°00'00"
T 381.88'
L 673.68'
R 572.96'

STATE OF WISCONSIN
SCENIC EASEMENT
200' STRIP ALONG USH
V. 30 P. 297 #587401

193+54.69
80.00' LT
5446

L = 579.61'
LC = 546.80'
CB = N34°59'15"W
R = 492.96'

MATCHLINE

155+00

CURVE 7

MATCHLINE
141+39.83
80.00' LT
5442

N01°14'13"W 1214.86'

80'

66.26'

145.00

N01°14'13"W (R/L)

150.00

P.I.

LAKE WAUBAU

N00°11'29"W 1399.58'

36'

141+38.88
13.74' LT
5448

NO ACCESS PER STATE
PROJECT T 05-3(14)

AGUMING STATION
SIGN

USH 51/STH 29

PC 153+54.69
36.00' RT
5447

155+18.89
36.00' RT
5448

155+28.96
89.93' RT
5479

SIGN

COURSE TABLE			
FROM	TO	BEARING	DISTANCE
5475	5461	S01°56'26"W	207.63'

TOWN OF STETTIN

146TH LINE

T28N T29N 3 34 R7E R7E

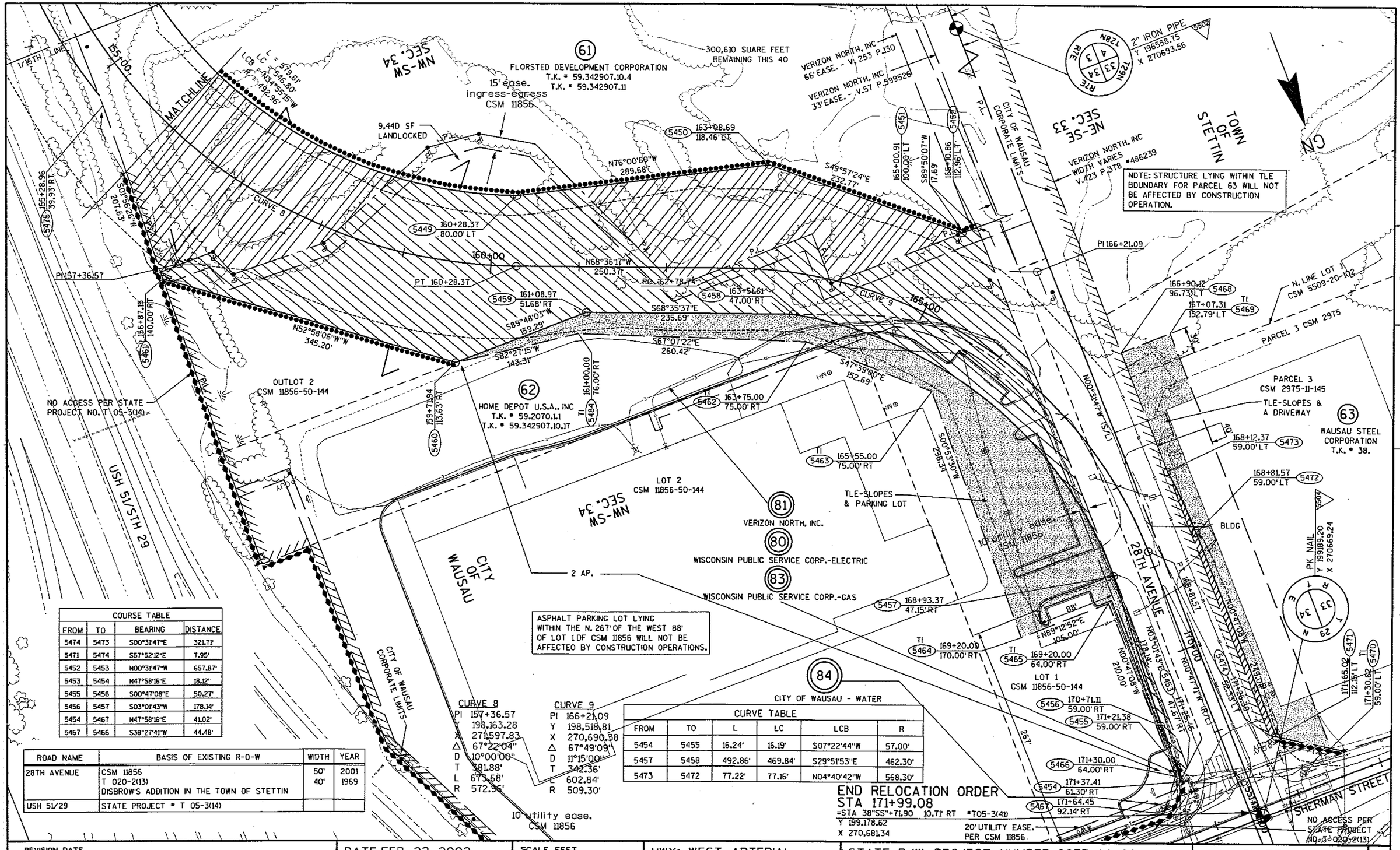
2" IRON PIPE
Y 196578.55
X 273338.43
5503

4

REVISION DATE	DATE FEB. 22, 2002	SCALE, FEET 0 50 100	HWY: WEST ARTERIAL	STATE R/W PROJECT NUMBER 6675-00-20	PLAT SHEET NO: 4.11	
MAR. 20, 2003 JULY 22, 2003 (N.C.)	GRID FACTOR		COUNTY: MARATHON	CONSTRUCTION PROJECT NUMBER	PS&E SHEET NO: 101	E

FILE NAME : p:\40xx\4025\rw plat\040111_rw.dgn PLOT DATE : 12/15/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 75

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,



COURSE TABLE			
FROM	TO	BEARING	DISTANCE
5474	5473	S00°31'47"E	321.71'
5471	5474	S57°52'12"E	7.95'
5452	5453	N00°31'47"W	657.87'
5453	5454	N47°58'16"E	18.12'
5455	5456	S00°47'08"E	50.27'
5456	5457	S03°01'43"W	178.14'
5454	5467	N47°58'16"E	41.02'
5467	5466	S38°27'41"W	44.48'

ROAD NAME	BASIS OF EXISTING R-O-W	WIDTH	YEAR
28TH AVENUE	CSM 11856	50'	2001
	T 020-2(13)	40'	1969
	DISBROW'S ADDITION IN THE TOWN OF STETTIN		
USH 51/29	STATE PROJECT • T 05-3(14)		

CURVE 8
PI 157+36.57
Y 198,163.28
X 271,597.83
Δ 67°22'04"
D 10°00'00"
T 381.88'
L 673.68'
R 572.96'

CURVE 9
PI 166+21.09
Y 198,518.81
X 270,690.58
Δ 67°49'09"
D 11°15'00"
T 342.36'
L 602.84'
R 509.30'

CURVE TABLE					
FROM	TO	L	LC	LCB	R
5454	5455	16.24'	16.19'	S07°22'44"W	57.00'
5457	5458	492.86'	469.84'	S29°51'53"E	462.30'
5473	5472	77.22'	77.16'	N04°40'42"W	568.30'

4

REVISION DATE MAR. 20, 2003 JULY 22, 2003 (N.C.)	DATE FEB. 22, 2002	SCALE. FEET 0 50 100	HWY: WEST ARTERIAL	STATE R/W PROJECT NUMBER 6675-00-20	PLAT SHEET NO: 4.12	
	GRID FACTOR		COUNTY: MARATHON	CONSTRUCTION PROJECT NUMBER	PS&E SHEET NO: 102	E

FILE NAME : p:\40xx\4025\rw plot\040112_rw.dgn PLOT DATE : 12/15/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 75

Point	Station	Offset	Y	X
5000	68+49.25	-15.57	189827.36	272981.60
5006	74+68.35	-70.00	190278.65	272596.21
5007	78+93.68	-70.00	190595.88	272294.65
5009	81+81.44	-76.21	190836.51	272120.90
5010	68+18.79	49.57	189827.57	273053.52
5011	71+86.37	77.27	190178.65	272904.76
5012	72+16.62	33.83	190178.62	272850.38
5013	72+86.75	60.00	190252.20	272820.53
5014	73+40.73	60.00	190292.60	272777.85
5015	74+68.35	60.00	190376.56	272681.73
5016	78+93.68	60.00	190676.33	272396.77
5017	83+04.54	49.04	191006.74	272166.69
5018	83+88.61	-82.00	191013.87	272011.17
5021	24"R"+60.84	0.00	191464.23	270804.76
5025	84+06.98	48.00	191094.89	272114.49
5028	51"R"+11.50	0.00	191470.31	273455.41
5036	102+62.72	-155.87	192788.07	271319.89
5037	94+03.90	48.00	191957.75	271615.17
5038	95+09.95	48.00	192049.54	271562.05
5039	98+50.12	70.71	192352.19	271495.70
5040	99+07.98	133.05	192402.38	271557.52
5041	99+67.35	170.29	192459.44	271596.93
5042	103+25.44	139.78'	192787.55	271622.14
5043			194113.79	270744.74
5056	88+33.00	-82.00	191398.50	271788.59
5057	87+83.13	-193.05	191299.72	271717.45
5058	87+26.91	48.00	191371.80	271954.25
5059	87+65.97	70.49	191416.87	271954.14
5060	37"R"+62.45	50.00	191417.22	272106.48
5061	38"R"+30.61	-25.00	191492.37	272174.47
5062	38"R"+10.16	-45.00	191512.32	272153.97
5063	37"R"+60.15	-45.00	191512.21	272103.96
5064	37"R"+45.49	-30.00	191497.18	272089.34
5065	88+69.54	50.93	191496.71	271885.34
5066	88+77.02	48.00	191501.72	271879.06
5067	91+76.72	48.00	191761.11	271728.95
5068	92+47.78	143.95	191870.68	271776.41
5069	89+63.63	-122.56	191491.26	271688.07
5070	90+00.00	-82.00	191543.05	2717.04.95
5071	95+09.95	-82.00	191984.43	271449.53
5072	95+36.29	-92.55	192005.15	271425.98
5073	95+49.50	-190.06	191974.28	271332.15
5075	96+24.53	-151.14	192074.93	271330.07
5076	96+28.18	-82.00	192103.39	271393.22
5077	99+12.65	-82.00	192414.28	271342.76
5083	33"NN"+93.00	-124.82	192789.01	270774.75
5084	39"NN"+19.91	-146.23	192671.21	271284.71
5200	79+99.46	-135.80	190644.73	272175.68
5201	79+74.93	-100.00	190644.83	272219.80
5202	79+53.85	-70.27	190644.92	272256.71
5203	78+52.83	60.00	190645.30	272421.67
5206	6"OR"+97.40	-30.00	190178.45	272437.08
5207	74+30.99	-70.00	190254.07	272624.35
5208	74+68.35	-80.00	190271.13	272589.63
5210	78+93.68	-80.00	190589.69	272286.80
5211	79+41.13	-179.29	190568.75	272177.57
5212	79+34.15	-169.41	190568.73	272189.98
5213	79+61.87	-163.46	190596.09	272176.89
5227	6"OR"+97.41	-40.00	190188.45	272437.08
5228	74+42.12	-80.00	190253.86	272609.39
5229	79+61.06	-80.34	190644.89	272244.18
5230	81+44.35	-69.48	190807.40	272146.63
5231	81+05.02	-158.51	190724.78	272093.67
5232	81+37.19	-137.83	190764.78	272092.68
5233	81+65.68	-85.55	190817.71	272121.37
5236	22"MD"+05.63	33.00	190806.80	271882.53
5239	87+24.75	-92.00	191299.80	271834.16

Point	Station	Offset	Y	X
5240	33"R"+14.74	243.00	191223.19	271659.22
5241	32"R"+94.74	243.00	191223.14	271639.22
5242	32"R"+90.52	43.00	191423.13	271634.56
5243	32"R"+10.52	43.00	191422.95	271554.54
5244	32"R"+10.31	33.00	191432.95	271554.31
5245	33"R"+10.33	33.00	191433.18	271654.33
5246	33"R"+44.21	0.00	191466.26	271688.12
5247	32"R"+05.77	-25.00	191491.94	271549.64
5248	32"R"+05.83	-35.00	191500.94	271549.67
5249	89+75.91	-123.84	191501.24	271680.80
5250	90+04.46	-92.00	191541.90	271694.06
5251	94+64.05	-200.18	191885.50	271370.23
5252	94+59.92	-209.61	191877.21	271364.14
5253	95+41.11	-187.07	191966.23	271339.65
5254	84+43.61	68.00	191136.61	272113.45
5255	87+21.57	68.00	191377.19	271974.23
5256	87+38.66	77.84	191396.91	271974.19
5257	37"R"+62.90	70.00	191397.22	272106.98
5259	37"R"+61.89	0.00	191467.21	272105.81
5260	38"R"+30.61	0.00	191467.37	272174.53
5261	37"R"+58.12	-135.00	191602.21	272101.73
5262	37"R"+38.11	-135.00	191602.16	272081.72
5263	37"R"+39.96	-52.96	191520.12	272083.76
5264	37"R"+37.07	-50.00	191517.16	272080.87
5265	88+82.79	68.00	191516.73	271893.48
5266	91+66.64	68.00	191762.41	27175L31
5267	96+08.02	-174.09	192047.66	271316.17
5269	83+55.76	48.52	191050.82	272140.59
5280	95+43.33	-267.34	191931.78	271267.09
5282	96+15.26	-178.96	192054.21	271308.28
5283	96+32.56	-155.29	192082.60	271322.76
5284	96+36.50	-92.00	192108.67	271380.61
5285	99+09.19	-92.00	192410.76	271332.63
5287	37"NN"+12.34	26.35	192557.61	271041.74
5288	37"NN"+62.33	27.37	192543.20	271089.62
5289	93+46.13	106.89	191937.22	271695.08
5290	95+08.40	58.00	192053.20	27157L48
5291	98+45.12	81.58	192348.31	271506.79
5292	99+04.07	144.72	192398.89	271569.10
5293	95+62.50	-265.98	191955.92	271256.52
5295	80+24.35	-208.16	190624.80	272101.15
5296	81+02.48	-154.31	190724.79	272098.67
5299	94+95.57	-205.77	191909.98	271349.61
5300	95+66.97	62.51	192102.83	271550.36
5301	95+83.60	76.08	192122.16	271556.36
5302	94+65.68	70.87	192022.68	271604.01
5303	94+44.58	48.00	191992.96	271594.79
5304	94+93.83	-215.62	191903.55	271341.96
5305	92+36.02	161.67	191869.38	271797.64
5310	38"R"+12.46	50.00	191417.33	272156.50
5311	33"R"+70.35	0.00	191466.32	271714.27
5312	33"R"+70.35	33.00	191433.32	271714.34
5313	81+22.03	-112.44	190764.85	272122.68
5314	80+89.65	-133.35	190724.85	272123.68
5315	88+64.24	0.00	191466.61	271843.92
5330	95+08.32	-92.00	191978.00	27144L69
5331	95+28.49	-99.93	191993.87	271423.67
5333	34"NN"+40.18	30.66	192626.58	270778.43
5334	34"NN"+43.24	40.56	192616.22	270778.66
5335	36"NN"+76.59	46.61	192547.70	271001.86
5336	37"NN"+11.18	72.21	192513.75	271028.31
5337	37"NN"+11.49	60.00	192525.43	27103L88
5338	36"NN"+80.00	36.70	192556.33	271007.81
5339	37"NN"+61.86	46.00	192525.38	271084.16
5340	37"NN"+62.11	36.00	192534.95	271087.09
5341	99+79.94	-143.72	192483.85	271283.61

Point	Station	Offset	Y	X
5342	99+70.78	-148.89	192474.89	271278.10
5343	99+5L03	-130.77	192454.46	271295.47
5400	82+37.58	-78.78	190884.77	272089.61
5401	23"MD"+88.47	33.00	190869.50	272054.28
5402	20"MD"+74.30	33.00	190761.76	271759.17
5403	20"MD"+46.93	33.00	190752.65	271730.20
5404	20"MD"+64.87	-33.00	19082L00	271728.61
5405	20"MO"+74.30	-33.00	190823.75	271736.53
5406	83+07.06	-105.54	190931.50	272031.65
5407	83+03.89	-80.99	190941.06	272054.48
5408	22"MD"+33.22	43.00	190806.86	27191L88
5409	22"MO"+38.05	-43.00	190889.31	271886.92
5410	83+15.01	-91.23	190945.27	272040.21
5411	22"MD"+65.64	-33.00	190889.37	271916.27
5412	82+28.25	-88.38	190871.88	272085.97
5414	31"NN"+57.41	0.00	192732.07	270514.29
5415	27"NN"+85.51	40.00	192752.28	270146.56
5416	27"NN"+85.51	34.50	192746.78	270146.43
5417	27"NN"+85.51	50.00	192736.78	270146.19
5418	31"NN"+57.41	40.00	192693.54	270503.54
5419	27"NN"+85.51	0.00	192786.77	270147.39
5420	27"NN"+85.51	-31.50	192818.26	270148.15
5421	27"NN"+85.51	-40.00	192826.76	270148.15
5422	28"NN"+44.77	-40.00	192824.10	270209.14
5423	28"NN"+43.98	-50.00	192834.13	270208.94
5424	31"NN"+04.56	-40.00	192784.25	270472.53
5425	31"NN"+57.46	-53.82	192783.89	270528.80
5426	33"NN"+94.94	-118.44	192782.34	270774.90
5427	31"NN"+03.44	-50.00	192794.24	270473.75
5428	31"NN"+54.66	-63.39	192793.89	270528.56
5429	116+83.74	-80.00	194108.14	271728.59
5430	107+37.16	-80.00	193241.20	271539.73
5431	110+33.47	-80.00	193513.57	271656.43
5432	116+53.42	-80.00	194078.10	271732.72
5433	107+37.16	70.00	193182.12	271677.61
5434	110+33.47	70.00	193454.49	271794.31
5435	112+22.78	70.00	193644.81	271857.85
5436	113+06.47	36.00	193737.40	271842.22
5437	116+53.42	36.00	194093.85	271847.64
5438	116+75.74	-24.06	194107.81	271785.10
5439	118+09.00	36.00	194247.99	271826.51
5440	118+09.00	-80.00	194232.24	27171L59
5441	137+01.76	-80.00	196127.23	27156L77
5442	141+39.83	-80.00	196565.18	271552.32
5443	141+38.88	-13.74	196565.68	271618.58
5444	140+83.92	-13.49	196392.38	271619.16
5445	137+01.76	36.00	196129.71	271677.75
5446	153+54.69	-80.00	197779.76	271526.09
5447	153+54.69	36.00	197782.26	271642.07
5448	155+18.89	36.00	197953.82	271613.52
5449	160+28.37	-80.00	198228.10	271213.08
5450	163+08.69	-118.46	198298.10	270931.98
5451	165+00.91	-100.00	198447.86	270753.78
5452	165+10.86	-112.96	198447.81	270736.10
5453	171+25.46	47.67	199105.65	270730.01
5454	171+37.41	61.30	199117.79	270743.48
5455	171+21.38	59.00	199101.73	270741.40
5456	170+71.11	59.00	199051.47	270742.09
5457	168+93.37	47.15	198873.58	270732.68
5458	163+51.61	47.00	198466.13	270966.64
5459	161+08.97	51.68	198380.11	27118L07
5460	159+71.94	113.63	198380.66	271345.36
5461	156+87.15	140.00	198172.76	271620.94
5462	163+75.00	75.00	198500.72	270963.35
5463	165+55.00	75.00	198603.59	270850.51
5464	169+20.00	170.00	198901.89	270855.15

Point	Station	Offset	Y	X
5465	169+20.00	64.00	198900.44	270749.16
5466	171+30.00	64.00	199110.42	270746.28
5467	171+64.45	92.14	199145.25	270773.95
5468	166+90.12	-96.73	198637.92	270634.34
5469	167+07.31	-152.79	198637.45	270574.34
5470	171+65.02	-112.15	199143.02	270569.66
5471	171+30.62	-59.00	199109.35	270623.28
5472	168+81.57	-59.00	198860.33	270626.70
5473	168+12.37	-59.00	198783.42	270632.99
5474	171+26.30	-52.33	199105.12	270630.02
5475	155+28.96	39.93	197965.25	271613.91
5480	6"OR"+80.68	30.00	190118.44	272420.38
5481	38"R"+20.38	-35.00	191502.35	272164.22
5482	38"R"+50.40	-35.00	191502.42	272194.23
5483	38"R"+50.62	-25.00	191492.42	272194.48
5484	161+00.00	76.00	198399.48	271203.29
5485	45"NN"+52.03	-384.65	192787.02	271932.87
5486	103+43.39	211.39	192787.43	271695.64
5487	45"NN"+92.87	-136.65	192535.70	271932.08
5488	45"NN"+35.65	-176.30	192584.23	271882.34
5489	44"NN"+89.28	-171.10	192586.75	271835.75
5490	44"NN"+23.59	-103.12	192530.54	271759.74
5491	42"NN"+90.87	-148.46	192597.35	271638.44
5492	100+15.39	175.32	192485.64	271604.81
5493	43"NN"+34.27	1.56	192442.15	271654.38
5494	43"NN"+12.46	-70.14	192516.51	271645.44
5495	42"NN"+83.82	-87.14	192538.26	271620.65
5496	43"NN"+06.06	-15.55	192463.89	271629.60
5497	6"OR"+89.33	322.70	189825.74	272429.16
5500			194113.79	270744.74
5501			194098.62	273384.42
5502				
5503			196578.55	273338.43

4

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

REVISION DATE
MAR. 20, 2003
JULY 22, 2003 (N.C.)

DATE FEB. 22, 2002

GRID FACTOR

SCALE, FEET
0 N/A

HWY: WEST ARTERIAL

COUNTY: MARATHON

STATE R/W PROJECT NUMBER 6675-00-20

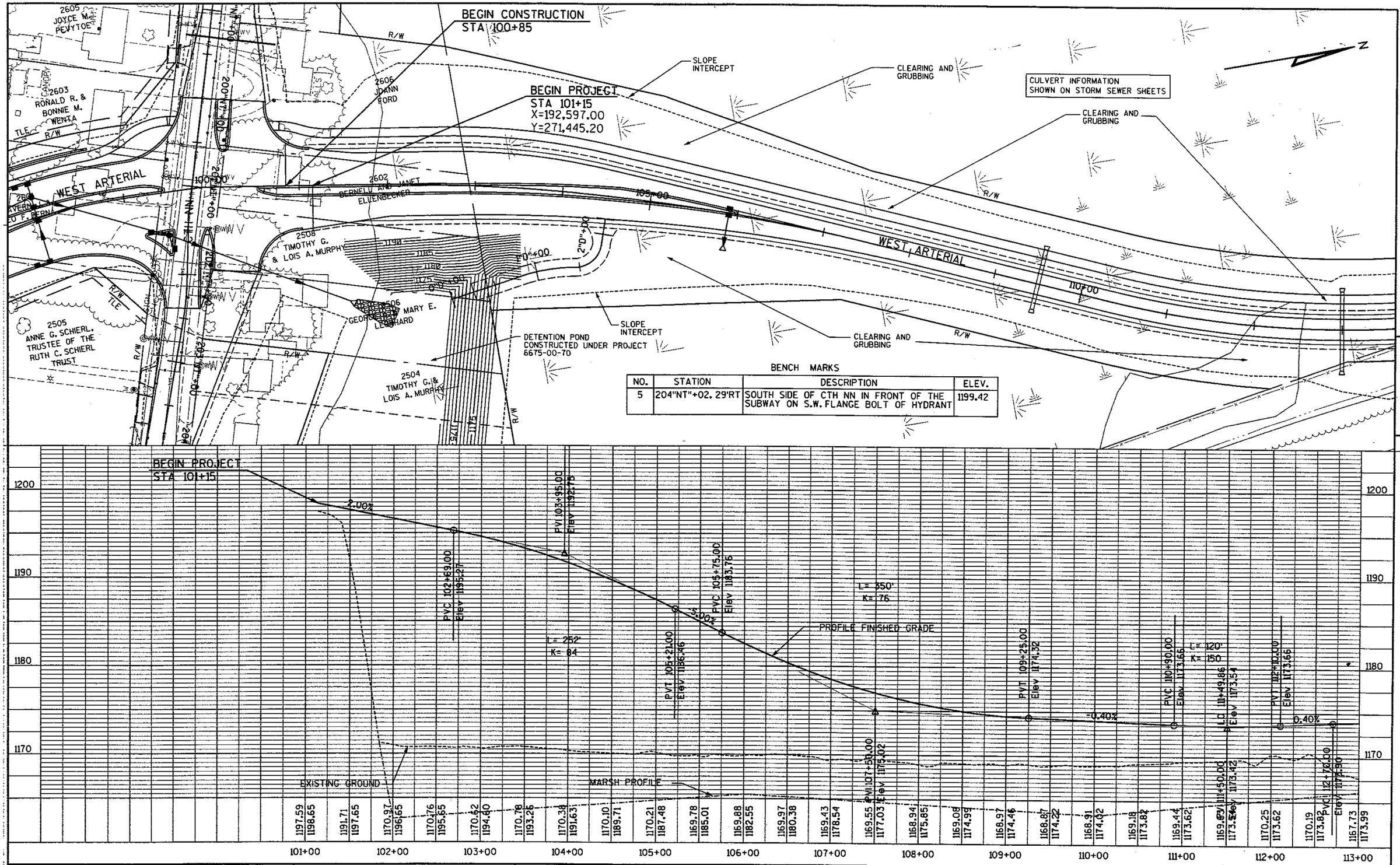
CONSTRUCTION PROJECT NUMBER

PLAT SHEET NO: 4.13

PS&E SHEET NO: 103 E

FILE NAME : p:\40xx\4025\rw plat\040113_rw.dgn PLOT DATE : 12/15/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 75


BEGIN CONSTRUCTION
STA 100+85
BEGIN PROJECT
STA 101+15
X=192,597.00
Y=271,445.20
SLOPE INTERCEPT
CLEARING AND GRUBBING
CULVERT INFORMATION SHOWN ON STORM SEWER SHEETS
WEST ARTERIAL
2605 JOYCE M. PEVYTOE
2603 RONALD R. & BONNIE M. WENTA
2606 JOANN FORD
2602 BERNELD AND JANET ELVENBECKER
2508 TIMOTHY G. & LOIS A. MURPHY
2506 GEORGE & MARY E. LEONHARD
2505 ANNE G. SCHIERL, TRUSTEE OF THE RUTH C. SCHIERL TRUST
2504 TIMOTHY G. & LOIS A. MURPHY
DETENTION POND CONSTRUCTED UNDER PROJECT 6675-00-70
R/W
ILE
CANOPY
105+00
110+00
200+00
201+00
202+00
203+00
204+00
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231+00
232+00
233+00
234+00
235+00
236+00
237+00
238+00
239+00

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
15	119+70, 58'RT	NW BOLT OF W POST OF STATE PATROL SIGN EXIT 190 ON WEST SIDE OF USH 51	1170.25

CULVERT INFORMATION
SHOWN ON STORM SEWER SHEETS

CLEARING AND GRUBBING

CLEARING AND GRUBBING

F.E. Pipe Installed by property Owner

CLEARING AND GRUBBING

R/W

SLOPE INTERCEPT

CLEARING AND GRUBBING

115+00

120+00

125+00

WEST ARTERIAL

SIGN

SIGN

USH 51/WIS 29

CLEARING AND GRUBBING

REMOVE FENCE

CLEARING AND GRUBBING

324
174.276

PVI 113+30.00
Elev 174.14
L= 120'
K= 133

PVI 113+90.00
Elev 173.84

-0.50%

0.50%

1.60%

0.68%

SPECIAL DITCH, LEFT

MARSH PROFILE

1.10%

PVC 119+10.00
Elev 117.24

PVI 119+70.00
Elev 117.09

L= 120'
K= 120

PVT 120+30.00
Elev 117.24

EXISTING GROUND

0.50%

0.72%

PVC 122+40.00
Elev 172.29

PVI 123+00.00
Elev 172.59

L= 120'
K= 120

PVI 123+60.00
Elev 172.29

PROFILE FINISHED GRADE

-0.50%

-0.70%

SPECIAL DITCH, RIGHT

PVC 125+90.00
Elev 171.14

L= 120'
K= 120

PVI 126+50.00
Elev 170.84

PVT 127+10.00
Elev 171.14

0.73%

0.5

1180
1170
1160
1150

1167.73	1168.02	1168.04	1168.43	1168.50	1168.20	1168.67	1168.58	1167.97	1168.20	1164.95	1166.96	1168.11	1164.15	1163.87	1162.86	1161.78	1161.96	1162.80	1162.19	1161.76	1161.84	1161.80	1161.91	1161.89	1164.12	1163.91	1163.98	1164.35	1163.65	1163.44
1173.99	1173.98	1173.79	1173.54	1173.29	1173.04	1172.79	1172.54	1172.29	1172.04	1171.79	1171.54	1171.29	1171.11	1171.13	1171.34	1171.59	1171.84	1172.09	1172.34	1172.44	1172.34	1172.09	1171.84	1171.59	1171.34	1171.10	1170.99	1171.10	1171.34	1171.59

113+00 114+00 115+00 116+00 117+00 118+00 119+00 120+00 121+00 122+00 123+00 124+00 125+00 126+00 127+00 128+00

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	PLAN AND PROFILE	SHEET NO: 105	E

FILE NAME : p:\40xx\4025\Plan\6675-00-71\Plan & Profile\050102_pp.dgn PLOT DATE : 12/18/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 40

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

5

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
14	129+87, 61'RT	NE BOLT OF E POST OF FOOD/LODGING SIGN EXIT 190 ON WEST SIDE OF USH 51	1164.56

CLEARING AND GRUBBING

SLOPE INTERCEPT

RETAINING WALL R-37-13

CLEARING AND GRUBBING

R/W

BIG RIB RIVER

N

130+00

135+00

140+00

WEST ARTERIAL

SIGN

SIGN

USH 51/WIS 29

REMOVE FENCE

CLEARING AND GRUBBING

REMOVE GUARDRAIL

USH 51/WIS 29

SIGN

CULVERT INFORMATION SHOWN ON STORM SEWER SHEETS

5

PVC 128+90.00 Elev 1172.04

PVI 129+50.00 Elev 1172.34

L= 120' K= 119

PVT 130+10.00 Elev 1172.04

0%

-0.50%

-0.75%

PVC 131+75.00 Elev 1171.21

LC 132+33.39 Elev 1171.06

L= 150' K= 55

PROFILE FINISHED GRADE

PVT 133+25.00 Elev 1171.42

0.79%

0.65%

PVI 132+50.00 Elev 1170.83

EXISTING GROUND

MARSH PROFILE

SPECIAL DITCH, RIGHT

PVC 139+10.00 Elev 1176.06

PVI 139+70.00 Elev 1176.53

4.64%

L= 120' K= 411

1180

1170

1160

1150

1163.44 1171.59	1163.06 1171.84	1163.23 1172.09	1163.66 1172.19	1160.93 1172.09	1160.67 1171.84	1161.62 1171.59	1161.10 1171.33	1161.05 1171.11	1162.04 1171.07	1162.86 1171.25	1162.91 1171.62	1162.31 1172.02	1160.73 1172.41	1161.04 1172.81	1161.81 1173.21	1155.48 1173.60	1152.71 1174.00	1156.96 1174.39	1157.34 1174.79	1159.93 1175.18	1159.67 1175.58	1155.88 1175.98	1154.44 1176.35	1153.24 1176.67

128+00 129+00 130+00 131+00 132+00 133+00 134+00 135+00 136+00 137+00 138+00 139+00 140+00

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	PLAN AND PROFILE	SHEET NO: 106	E

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
126	146+18, 223'RT	CHISELED SQUARE IN NE END OF RIB RIVER BRIDGE FOR NORTHBOUND USH 51	1175.52

TREATED TIMBER RUB RAIL (SEE CONSTRUCTION DETAIL)

STEEL THRIE BEAM STRUCTURE APPROACH AND ENERGY ABSORBING TERMINAL

BIG RIB RIVER

CULVERT INFORMATION SHOWN ON STORM SEWER SHEETS

RETAINING WALL R-37-14

TREATED TIMBER RUB RAIL (SEE CONSTRUCTION DETAIL)

SLOPE INTERCEPT

R/W

CLEARING AND GRUBBING

140+00 145+00 150+00 155+00

LAKE WAUBAU

WEST ARTERIAL

REMOVE GUARDRAIL

STEEL THRIE BEAM STRUCTURE APPROACH AND ENERGY ABSORBING TERMINAL

REMOVE GUARDRAIL

RODENTICIDE STATION

SIGN

USH 51/WIS 29

EXISTING WEATHER STATION TO ~~BE REMOVED~~ BY OTHERS PRIOR TO CONSTRUCTION

CLEARING AND GRUBBING

REMOVE FENCE

Asphalt Driveway Apron

5

SIGN

USH 51/WIS 29

PROFILE FINISHED GRADE

PVT 140+30.00 Elev 1176.83

0.50%

PVC 147+20.00 Elev 1180.28

0.75%

L= 120'
K= 95

PVT 148+80.00 Elev 1180.58

PVT 148+40.00 Elev 1180.13

-0.76%

-0.50%

0.50%

-0.50%

-4.78%

SPECIAL DITCH, RIGHT

EXISTING GROUND

STA 143+49.5
STRUCTURE B-37-373
5 SPAN 54-INCH GIRDERS
44 FEET CLEAR ROADWAY

MARSH PROFILE

MARSH PROFILE

1180 1170 1160 1150

140+00	141+00	142+00	143+00	144+00	145+00	146+00	147+00	148+00	149+00	150+00	151+00	152+00	153+00	154+00	155+00
1153.24	1152.17	1152.70	1157.33	1158.46	1159.35	1159.85	1160.03	1159.87	1159.59	1158.00	1156.41	1157.15	1160.10	1162.30	1161.87
1176.67	1176.93	1177.18	1177.43	1177.68	1177.93	1178.18	1178.43	1178.68	1178.93	1179.18	1179.43	1179.68	1179.93	1180.18	1180.38
															1162.27
															1180.35
															1161.25
															1180.05
															1161.95
															1179.67
															1160.69
															1179.29
															1160.68
															1178.91
															1160.61
															1178.53
															1160.61
															1178.15
															1160.61
															1177.77
															1160.61
															1177.39
															1162.97
															1177.02
															1163.63
															1176.64
															1164.38
															1176.26
															1161.81
															1175.88
															1162.39
															1175.50
															1162.66
															1175.12

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:6675-00-71 | HWY: CTH R | COUNTY: MARATHON | PLAN AND PROFILE | SHEET NO: 107 | E

FILE NAME : P:\40xx\4025\Plan\6675-00-71\Plan & Profile\050104_pp.dgn PLOT DATE : 02/09/2004 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 40

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
13	161+69, 204'RT	CHISELED SQUARE IN SW CORNER OF GREEN TRANSFORMER SLAB ON BACK SIDE OF HOME DEPOT	1171.84

Salvage Existing Light Pole, Luminaire

CLEARING AND GRUBBING

AREA TO BE MANAGED AS PETROLEUM CONTAMINATED WASTE

R/W

SLOPE INTERCEPT

CLEARING AND GRUBBING

WAUSAU STEEL

R/W

N

155+00

160+00

WEST ARTERIAL

REMOVE FENCE

USH 51/WIS 29

R/W

TLE

HOME DEPOT USA, INC

CLEARING AND GRUBBING

SLOPE INTERCEPT

CAUTION

CAUTION

HWY

REMOVE CURB AND GUTTER

TLE

CULVERT INFORMATION SHOWN ON STORM SEWER SHEETS

5

PVC 155+40.00 Elev 1174.82
L= 120'
K= 95
PVI 156+12.83 Elev 1174.94
PVT 156+80.00 Elev 1174.66
PVI 158+65.00 Elev 1175.69
PVI 154+00.00 Elev 1174.36
PVC 158+05.00 Elev 1175.39
L= 120'
K= 120
PVT 159+25.00 Elev 1175.39

0.50%

PROFILE FINISHED GRADE

-0.50%

EXISTING GROUND

SPECIAL DITCH, RIGHT

PROFILE FOR AREA TO MANAGED AS PETROLEUM CONTAMINATED MATERIAL

1180
1170
1160
1150

155+00	156+00	157+00	158+00	159+00	160+00	161+00	162+00	163+00	164+00	165+00	166+00	167+00
1162.66 / 1175.12	1161.82 / 1174.74	1160.34 / 1174.55	1160.34 / 1174.62	1160.34 / 1174.86	1160.34 / 1175.11	1162.28 / 1175.36	1163.98 / 1175.53	1164.08 / 1175.48	1164.28 / 1175.26	1164.61 / 1175.01	1165.04 / 1174.76	1165.02 / 1174.51	1164.59 / 1174.26	1163.45 / 1174.01	1165.85 / 1173.76	1166.10 / 1173.51	1166.83 / 1173.26	1167.28 / 1173.01	1167.35 / 1172.76	1168.39 / 1172.51	1169.06 / 1172.26	1169.90 / 1172.01	1170.66 / 1171.76	1170.68 / 1171.51

STATE PROJECT NUMBER: 6675-00-71	HWY: CTH R	COUNTY: MARATHON	PLAN AND PROFILE	SHEET NO: 108	E

FILE NAME : P:\40xx\4025\Plan\6675-00-71\Plan & Profile\050105_pp.dgn DOT DATE : 02/11/2004 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 40

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

CULVERT INFORMATION
SHOWN ON STORM SEWER SHEETS

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
12	25"SH+20.66'LT	YELLOW TAG ON S SIDE OF PP #81AA42 IN NE CORNER OF 28TH & SHERMAN	1173.49

2901
WAUSAU STEEL CORP.

WAUSAU STEEL

CAUTION

TLE

SLOPE INTERCEPT

R/W

BEGIN CONSTRUCTION
STA 55"TW"+46

REMOVE PAVEMENT

REMOVE CURB & GUTTER

55"TW"+00

60"TW"+00

170'00

171'00

WEST ARTERIAL

28TH AVENUE

END PROJECT
STA 171+87

SLOPE INTERCEPT

REMOVE CURB AND GUTTER

REMOVE CURB AND GUTTER

SHERMAN STREET

25"SH+00

END CONSTRUCTION
STA 58"TW"+05

INL

MH

N

5

PVC 169+14.50
Elev 170.44
Lvc 169+49.50
Elev 170.35
L = 140'
K = 70
PVT 170+54.50
Elev 171.4
PVI 169+84.50
Elev 170.09
PVI 171+87.00
Elev 173.13
1.50%
PROFILE FINISHED GRADE
EXISTING GROUND

PVC 55+46.00
Elev 173.42
PVT 55+55.81
Elev 173.25
PVI 57+50.00
Elev 176.47
PVT 58+05.00
Elev 177.18
-1.71%
1.66%
1.28%
PROFILE FINISHED GRADE
EXISTING GROUND

1180
1170
1160
1150

167+00	168+00	169+00	170+00	171+00	172+00	55"TW"+00	56"TW"+00	57"TW"+00	58"TW"+00	59"TW"+00	60"TW"+00
170.68 / 171.51	170.79 / 171.26	171.20 / 171.01	171.47 / 170.76	171.64 / 170.51	171.72 / 170.35	171.90 / 170.53	172.14 / 171.07	172.41 / 171.82	172.71 / 172.57	173.53	173.35 / 173.35	173.98 / 173.98	174.86 / 174.81	175.69 / 175.64	176.47 / 176.47	177.12 / 177.11	177.51	177.65	178.09	178.79	179.16

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	PLAN AND PROFILE	SHEET NO: 109	E

FILE NAME : P:\40xx\4025\Plan\6675-00-71\Plan & Profile\050106_pp.dgn PLOT DATE : 02/11/2004 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 40

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

RONALD R. & BONNIE M. WENTA

2606 JOANN FORD

2604 LAVERNE A. & LEO F. BERNA

2602 BERNELL AND JANET ELLENBECKER

2508 TIMOTHY G. & LOIS A. MURPHY

2505 ANNE G. SCHIERL, TRUSTEE OF THE RUTH C. SCHIERL TRUST

2506 GEORGE & MARY E. LEONHARD

2504 TIMOTHY G. & LOIS A. MURPHY

2502 TIMOTHY G. & LOIS A. MURPHY

200'N 100'00"

100'00"

200'N 100'00"

200'N 100'00"

200'N 100'00"

105'00

1+D"+00

2+D"+00

0+D"+00

110'00

346 1170.404

316 1154.420

CULVERT INFORMATION SHOWN ON STORM SEWER SHEETS

5

1190
1185
1180
1175
1170
1160

PVI 0+00.00 Elev 1175.00

PVC 0+62.34 Elev 1176.25

PVT 1+12.34 Elev 1179.25

PVI 2+07.37 Elev 1183.75

PVI 3+13.37 Elev 1188.95

L= 50'
K= 6

2.00%

10.00%

2.00%

MATCH TOP OF DETENTION POND BERM

FINISHED PROFILE

EXISTING GROUND

PVI 0+87.34 Elev 1176.75

1170.86 1175.00

1170.68 1176.00

1170.53 1178.13

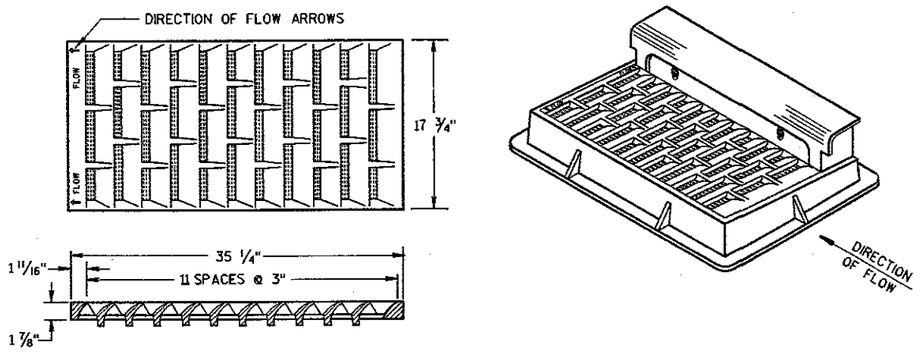
1170.41 1183.01

1170.30 1188.01

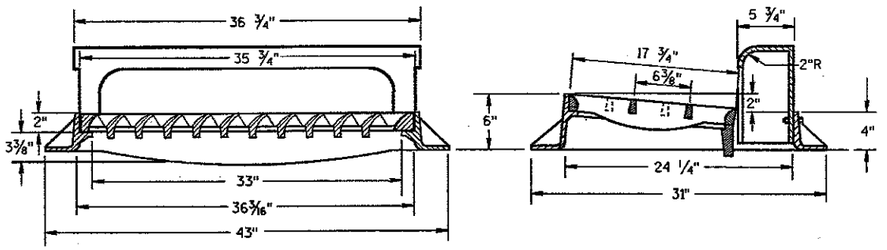
0+00 1+00 2+00 3+00

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	PLAN AND PROFILE - DETENTION POND DRIVEWAY	SHEET NO: 110	E

NOTE:
GRATE IS REVERSIBLE.



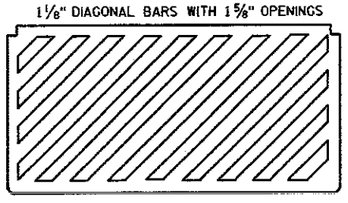
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"



TYPE "H"

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

1 1/8" DIAGONAL BARS WITH 1 5/8" OPENINGS



SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")
(APPROXIMATE WEIGHT 172 LBS.)
GRATE..... 172 LBS.

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

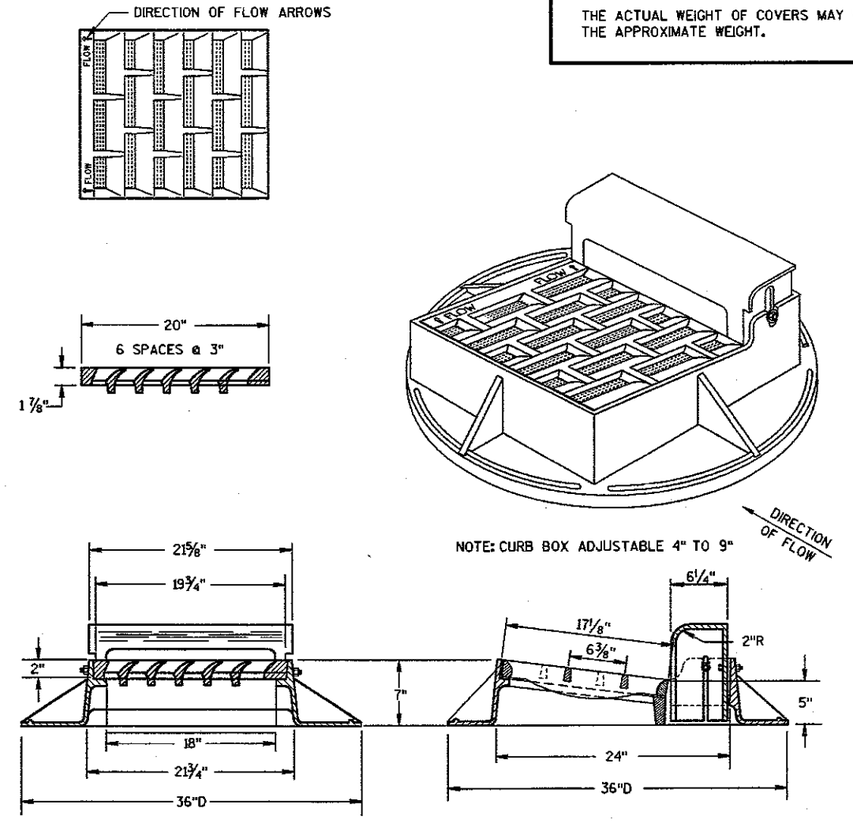
GENERAL NOTES

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

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

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

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



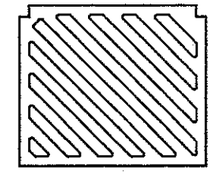
NOTE: CURB BOX ADJUSTABLE 4" TO 9"

NOTE:
GRATE IS REVERSIBLE.

TYPE "A"

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

1" DIAGONAL BARS WITH 1 1/2" OPENINGS



SPECIAL GRATE FOR TYPE "A" COVER

(MEASURES 19 3/4" X 17" X 1 7/8")
GRATE..... 84 LBS.

(NOTED AS TYPE A-S ON DRAINAGE TABLE)

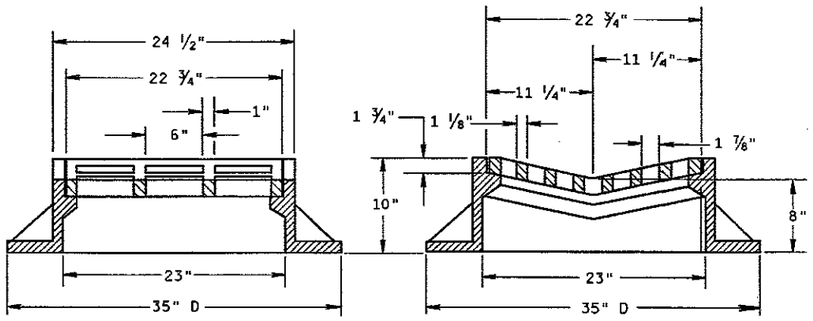
INLET COVERS
TYPE A, H, A-S, & H-S

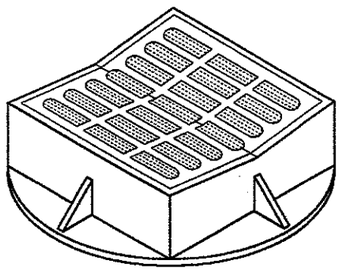
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/04/99
DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

S.D.D. 8 A 5-16a

S.D.D. 8 A 5-16a

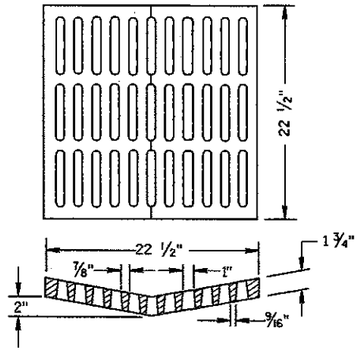




TYPE "B"

(APPROXIMATE WEIGHT 395 LBS.)

FRAME..... 285 LBS.
GRATE..... 110 LBS.

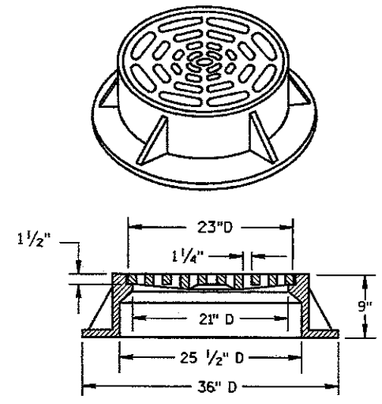


ALTERNATIVE GRATE FOR TYPE "B" COVER

(APPROXIMATE GRATE WEIGHT 125 LBS.)
GRATE.....125 LBS.

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.

NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

(APPROXIMATE WEIGHT 340 LBS.)

FRAME..... 235 LBS.
GRATE..... 105 LBS.

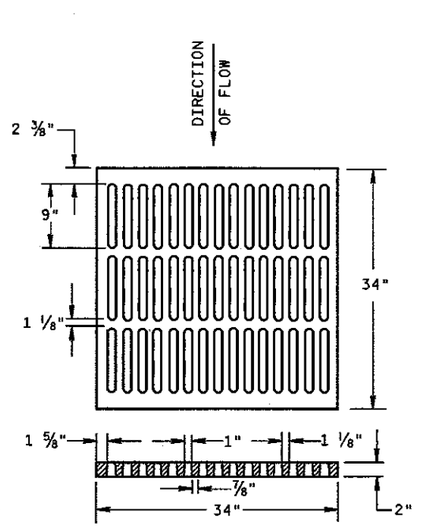
GENERAL NOTES

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

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

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

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

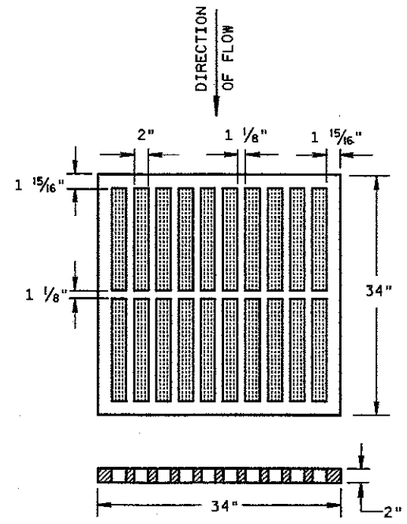


ALTERNATIVE TYPE "MS"

(APPROXIMATE GRATE WEIGHT 365 LBS.)
GRATE.....365 LBS.

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED

NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

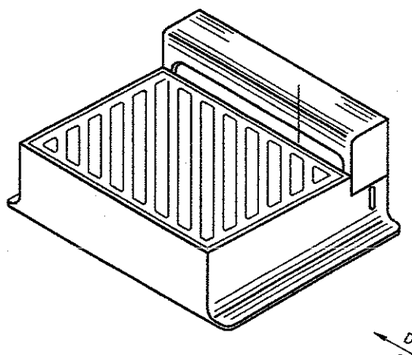


TYPE "MS"

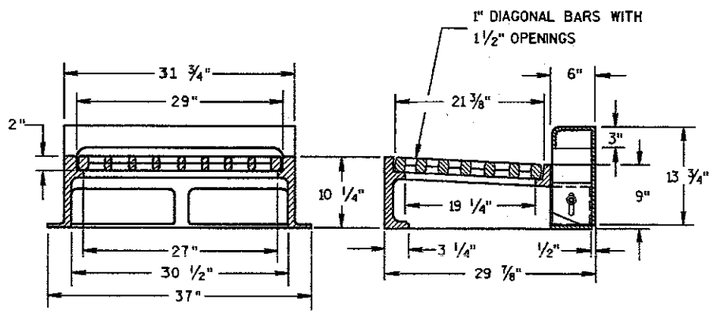
(APPROXIMATE GRATE WEIGHT 270 LBS.)
GRATE.....270 LBS.

USE ON FREEWAYS AND EXPRESSWAYS

NOTED AS TYPE MS ON DRAINAGE TABLE



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



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

(APPROXIMATE WEIGHT 670 LBS.)

FRAME..... 360 LBS.
GRATE..... 160 LBS.
CURB BOX..... 150 LBS.

112

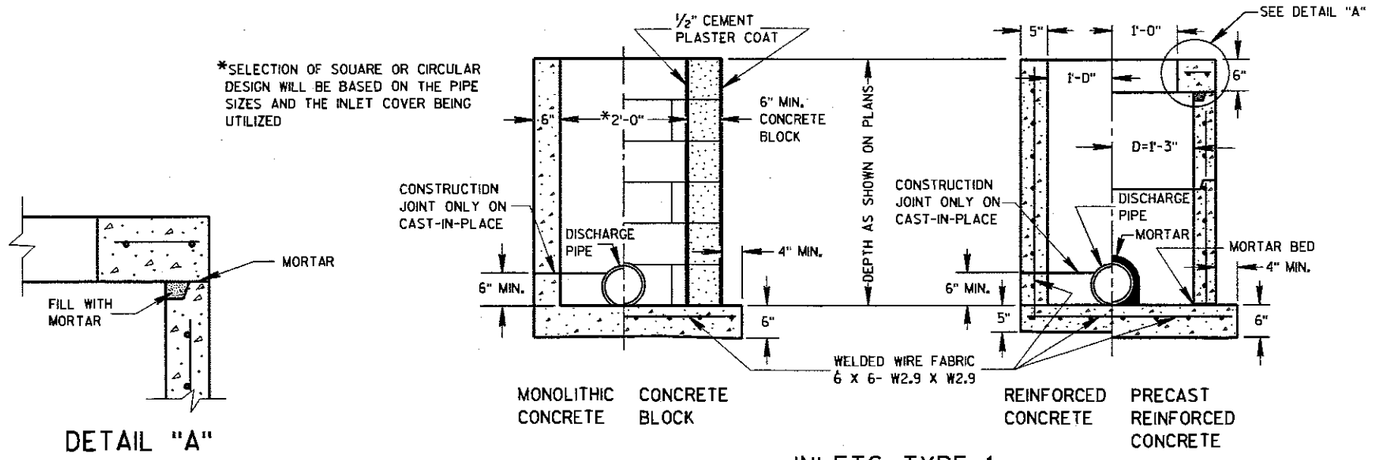
INLET COVERS
TYPE B, B-A, C, MS, MS-A, & WM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 10/04/99 DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

S.D.D. 8 A 5-16b

S.D.D. 8 A 5-16b



DETAIL "A"

INLETS TYPE 1

GENERAL NOTES

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

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

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

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

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

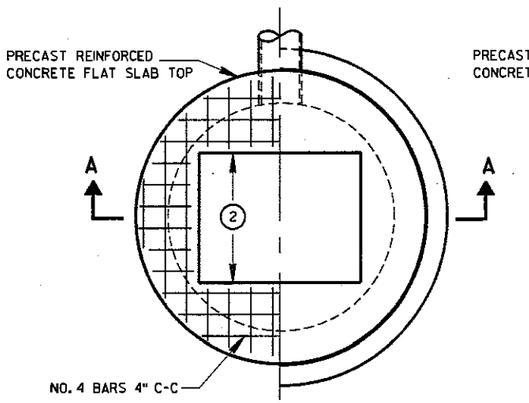
PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON THE STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

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

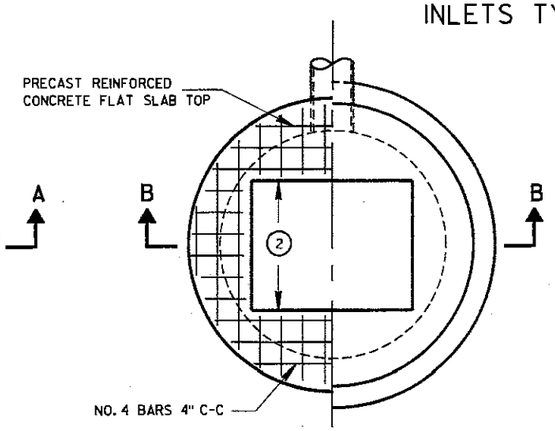
PRECAST REINFORCED CONCRETE RISERS SHALL BE PLACED WITH TONGUE DOWN.

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

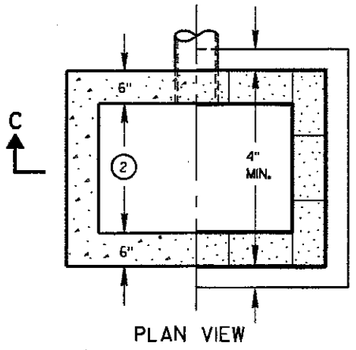
(2) USE 2'-0" OPENING FOR TYPE 1, 2 & 3 INLETS, 2'-6½" OPENING FOR TYPE 4 INLETS.



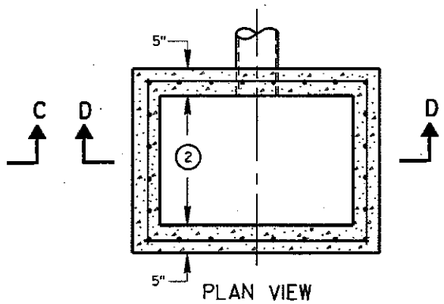
PLAN VIEW



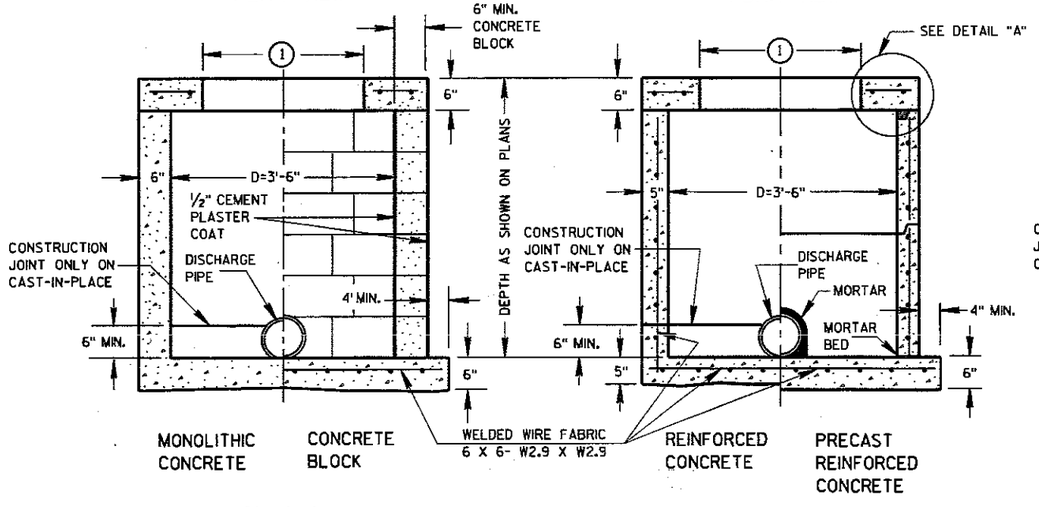
PLAN VIEW



PLAN VIEW

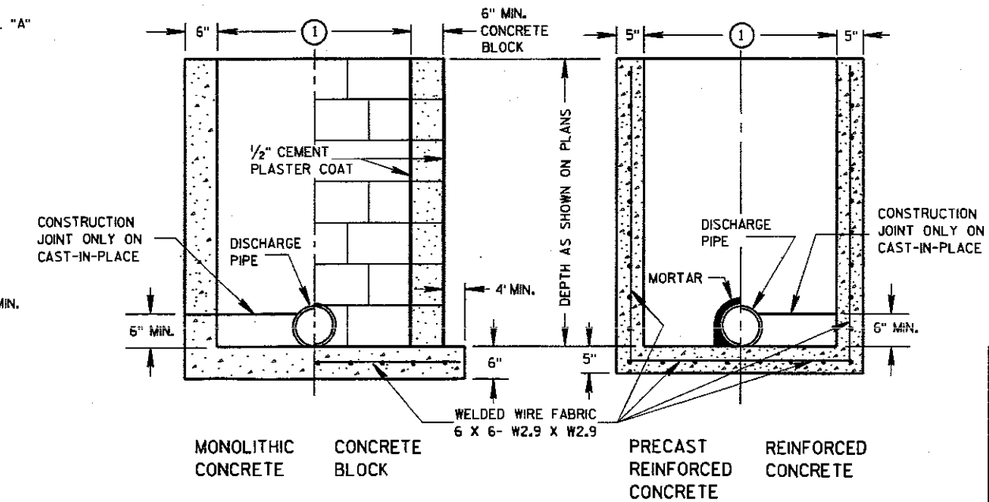


PLAN VIEW



SECTION A-A

SECTION B-B



SECTION C-C

SECTION D-D

INLETS TYPE 2, 3 & 4

113

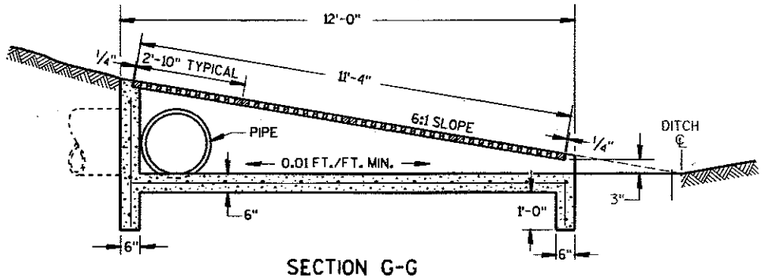
INLETS TYPE 1, 2, 3 & 4

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

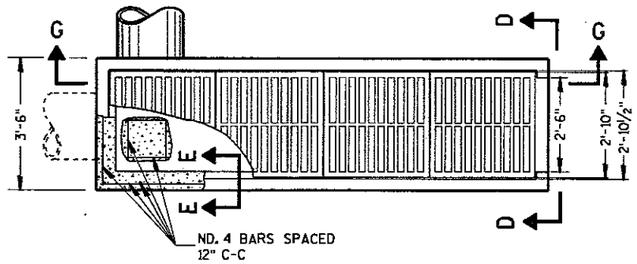
APPROVED
8/26/94
DATE
Roy L. Shimeall
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

S.D.D. 8 C 1-5

S.D.D. 8 C 1-5



SECTION G-G



PLAN VIEW

GENERAL NOTES

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

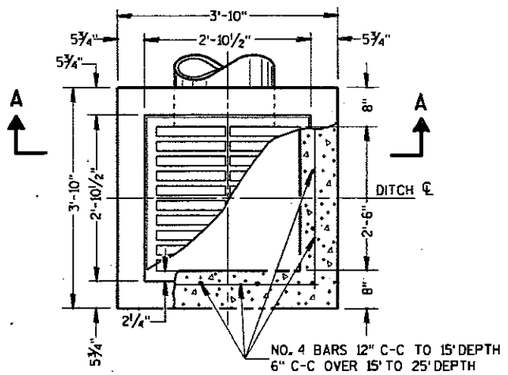
DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

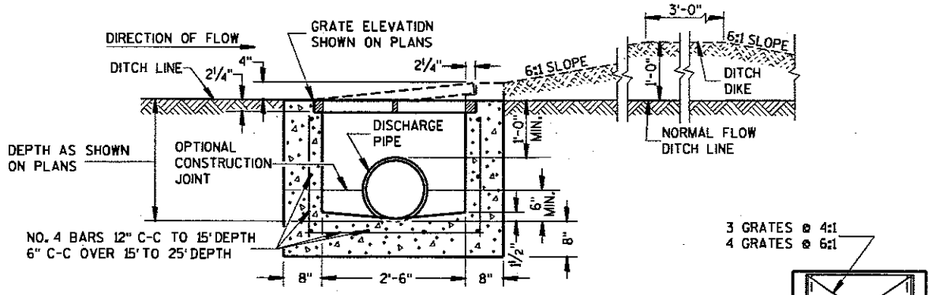
ALL INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 8-MS", ETC. THIS DESIGNATION IS INTERPRETED TO MEAN THAT THE NUMBER, OR FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER OR IRON CASTING TO BE USED THEREWITH TO COMPRISE THE COMPLETE UNIT.

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

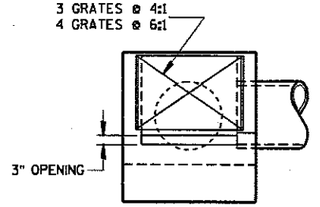
REINFORCED CONCRETE INLET TYPE 11



PLAN VIEW

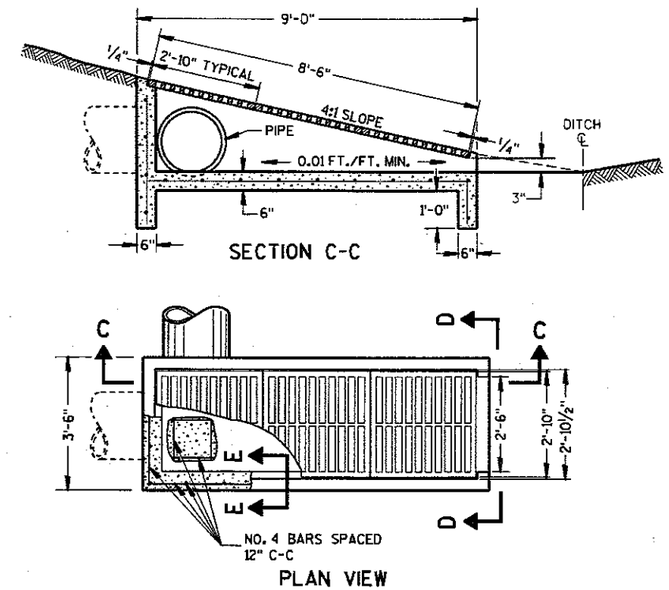


SECTION A-A



SECTION D-D

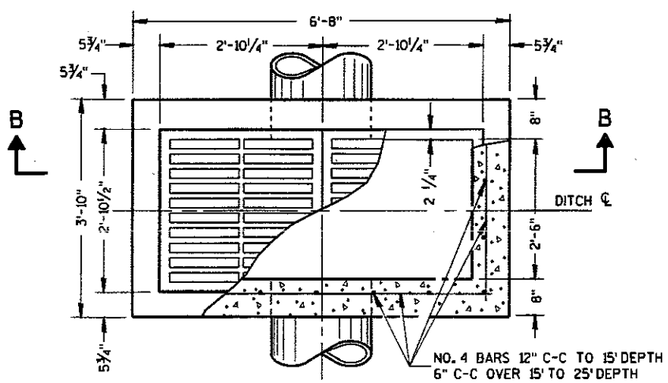
REINFORCED CONCRETE INLET TYPE 8



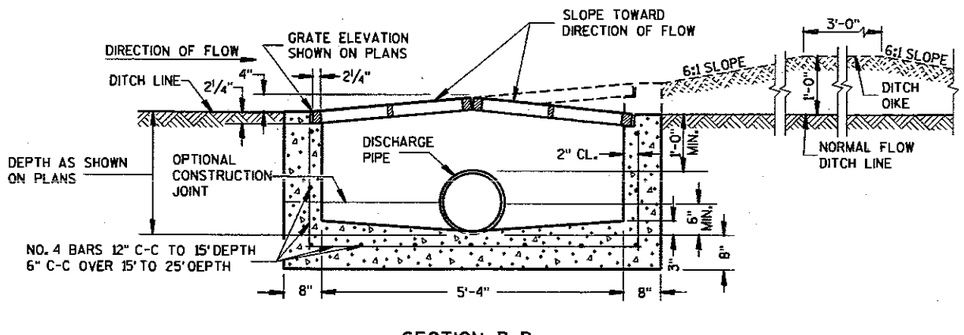
SECTION C-C

PLAN VIEW

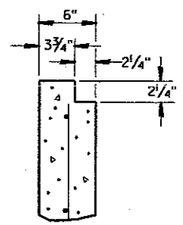
REINFORCED CONCRETE INLET TYPE 10



PLAN VIEW



SECTION B-B



SECTION E-E

REINFORCED CONCRETE INLET TYPE 9

INLETS TYPE 8, 9, 10 AND 11

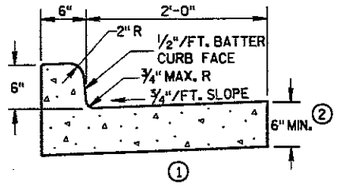
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/10/94
DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

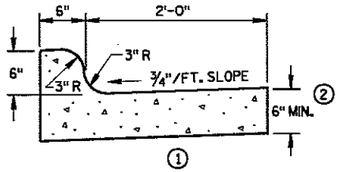
S.D.D. 8 C 5-2

S.D.D. 8 C 5-2



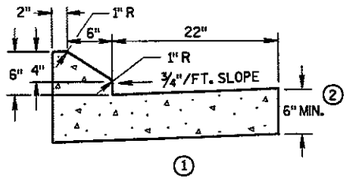
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TYPES A & D



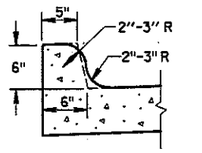
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TYPES K & L



1

TYPES G & J

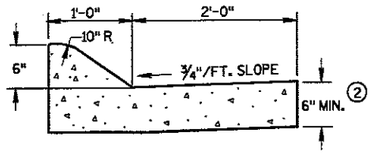


OPTIONAL CURB SHAPE

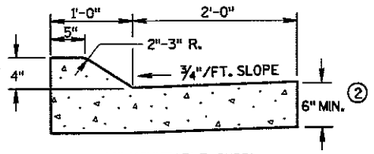
1

FOR TYPES K & L

CONCRETE CURB & GUTTER 30"



(6" MOUNTABLE CURB)



(4" MOUNTABLE CURB)

1

TYPES A & D

CONCRETE CURB & GUTTER 36"

GENERAL NOTES

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

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

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

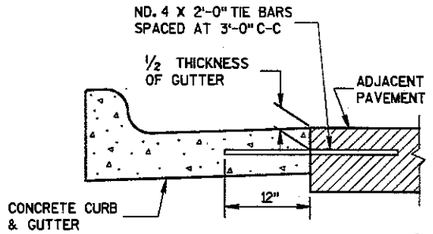
WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

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

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G AND K.

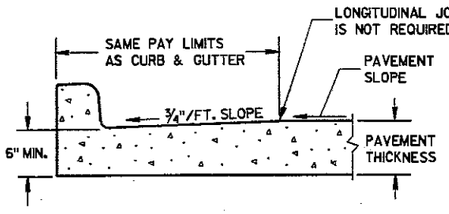
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(3) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

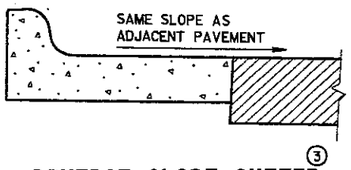


1

TYPICAL TIE BAR LOCATION



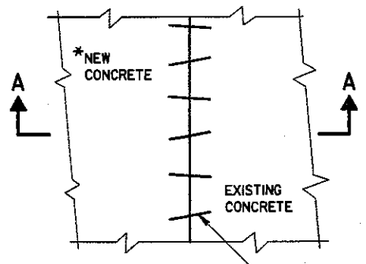
PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



3

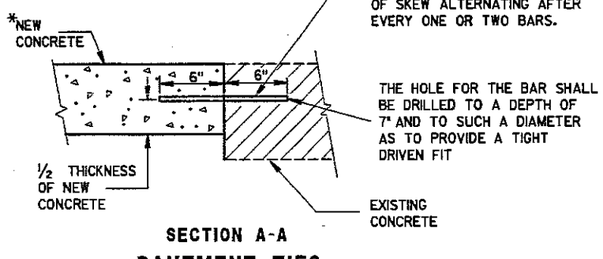
REVERSE SLOPE GUTTER

(TYPICAL FOR ALL CURB & GUTTER TYPES)



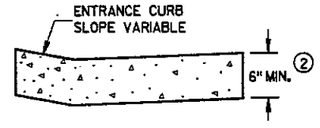
PLAN VIEW

*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.



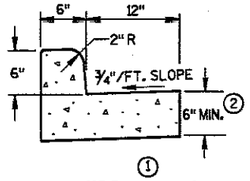
SECTION A-A

PAVEMENT TIES



DRIVEWAY ENTRANCE CURB

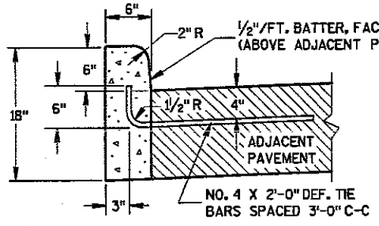
(WHEN DIRECTED BY THE ENGINEER)



1

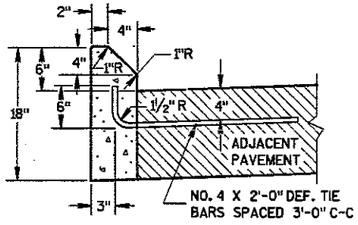
TYPES A & D

CONCRETE CURB & GUTTER 18"



1

TYPES A & D



1

TYPES G & J

CONCRETE CURB

115

CONCRETE CURB, CONCRETE CURB & GUTTER AND PAVEMENT TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

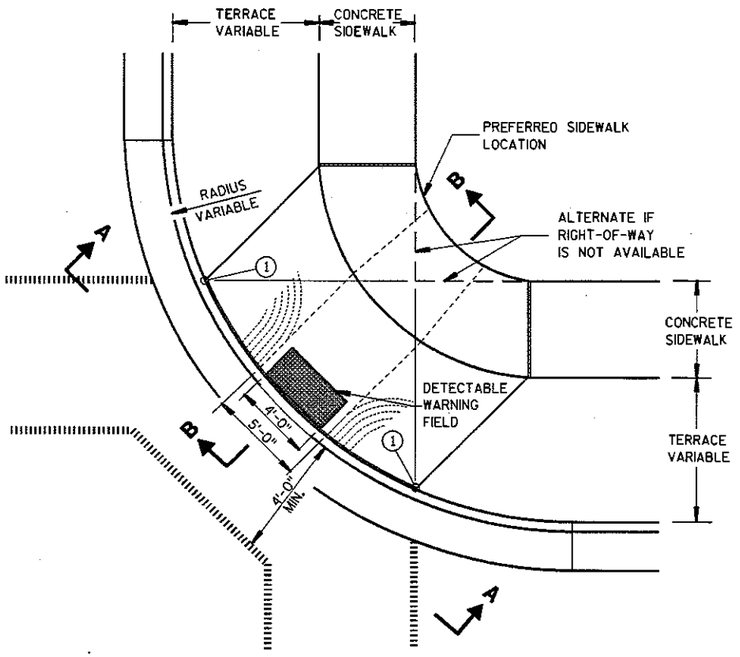
APPROVED 04/16/99 DATE

Roy D. Thomsen
CHIEF ROADWAY DEVELOPMENT ENGINEER

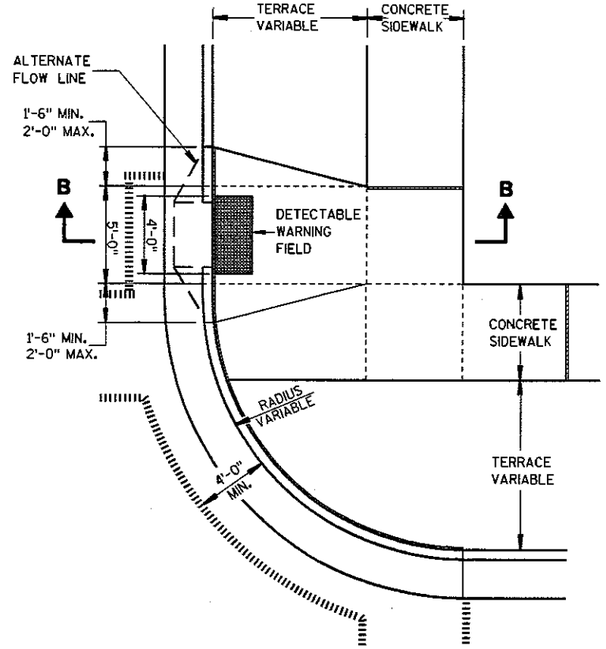
FHWA

S.D.D. 8 D 1-13

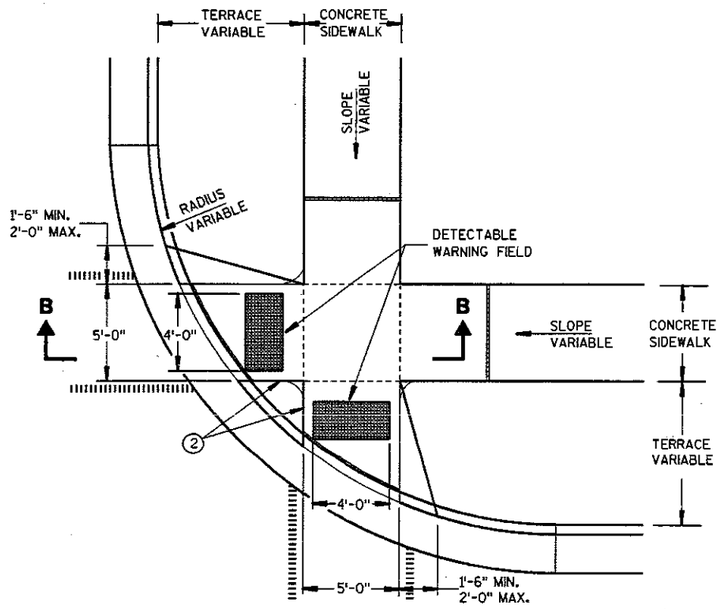
S.D.D. 8 D 1-13



PLAN VIEW
TYPE 1 RAMP
(CENTER OF CORNER RADIUS)



PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)



PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)

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.

RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". ALL OTHER CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

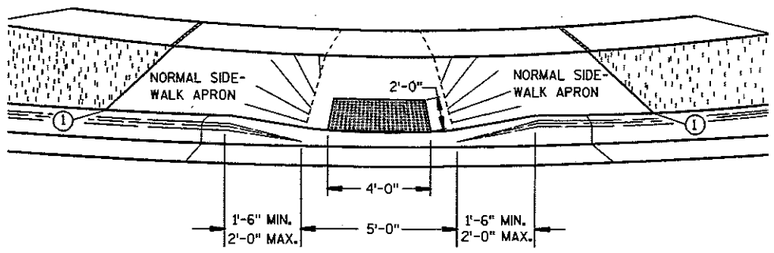
USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.

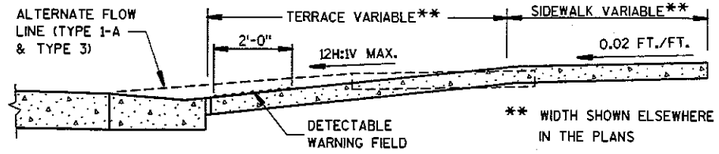
(2) WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



VIEW A-A



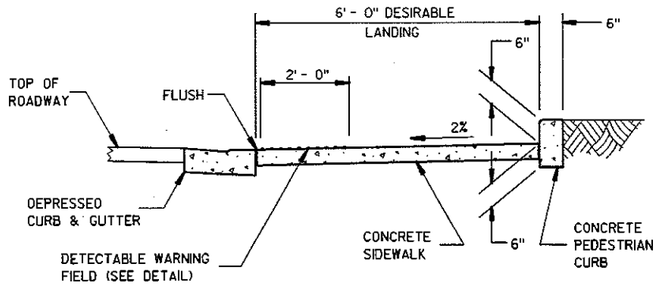
SECTION B-B

6

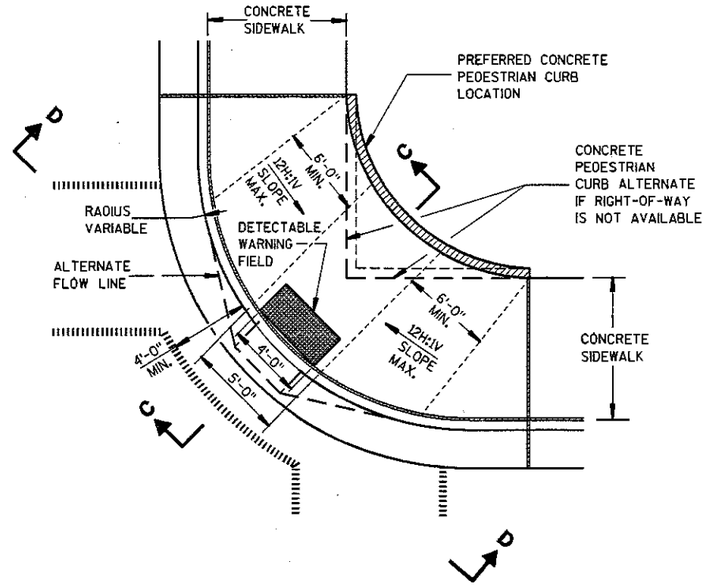
CURB RAMPS
TYPES 1, 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 8 D 5-9a



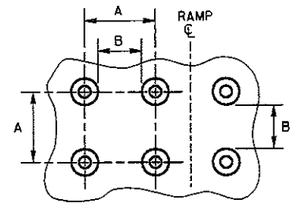
SECTION C-C



PLAN VIEW

TYPE 1-A RAMP

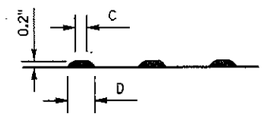
(NO TERRACE)



PLAN VIEW

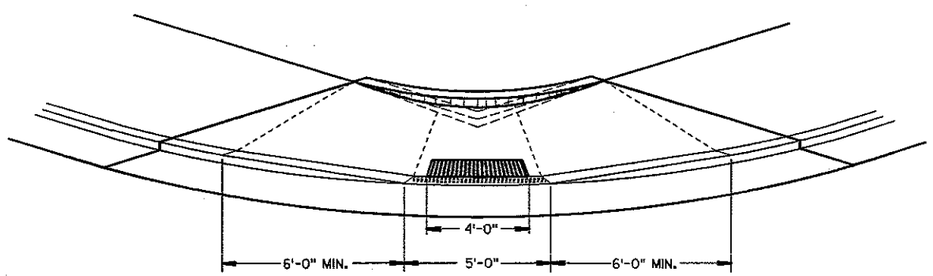
	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



ELEVATION VIEW

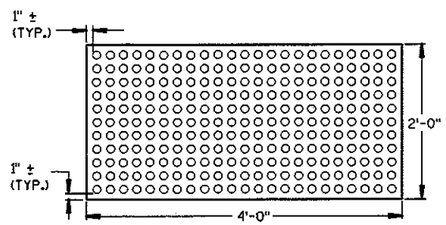
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



VIEW D-D

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



PLAN VIEW

DETECTABLE WARNING FIELD (TYPICAL)

6

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CURB RAMPS
TYPE 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

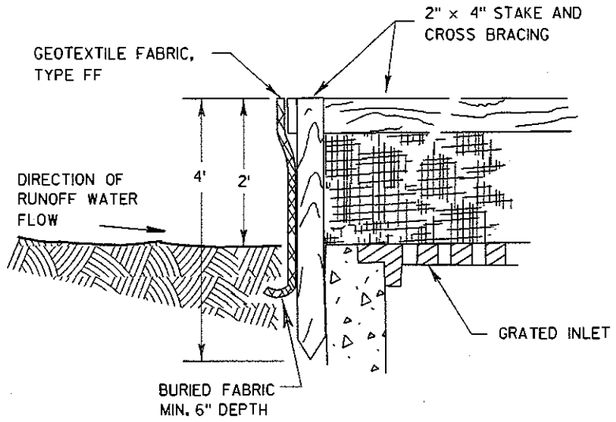
APPROVED 6/25/03
DATE

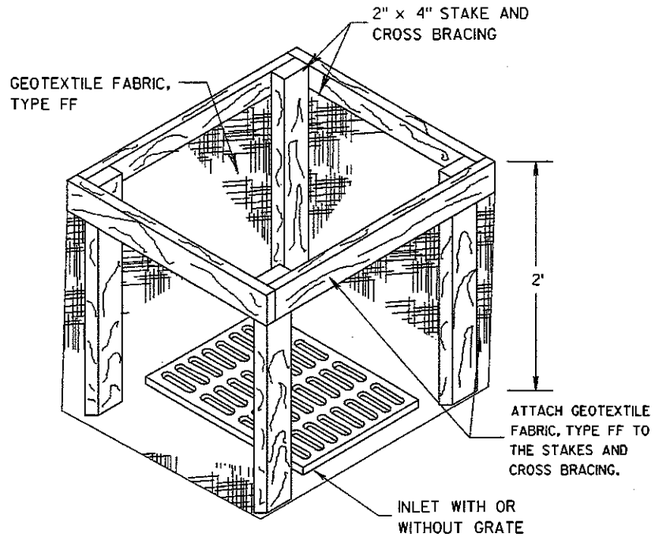
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

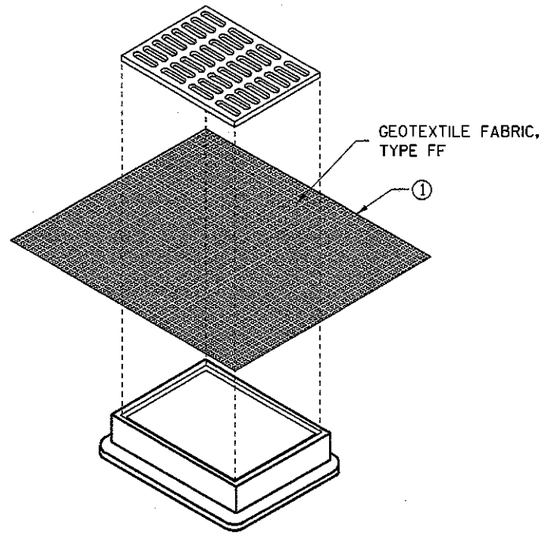
S.D.D. 8 D 5-9b

S.D.D. 8 D 5-9b



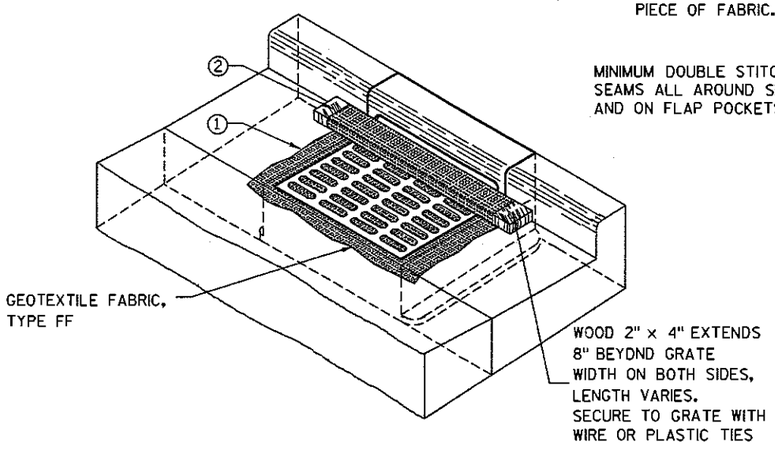


INLET PROTECTION, TYPE A

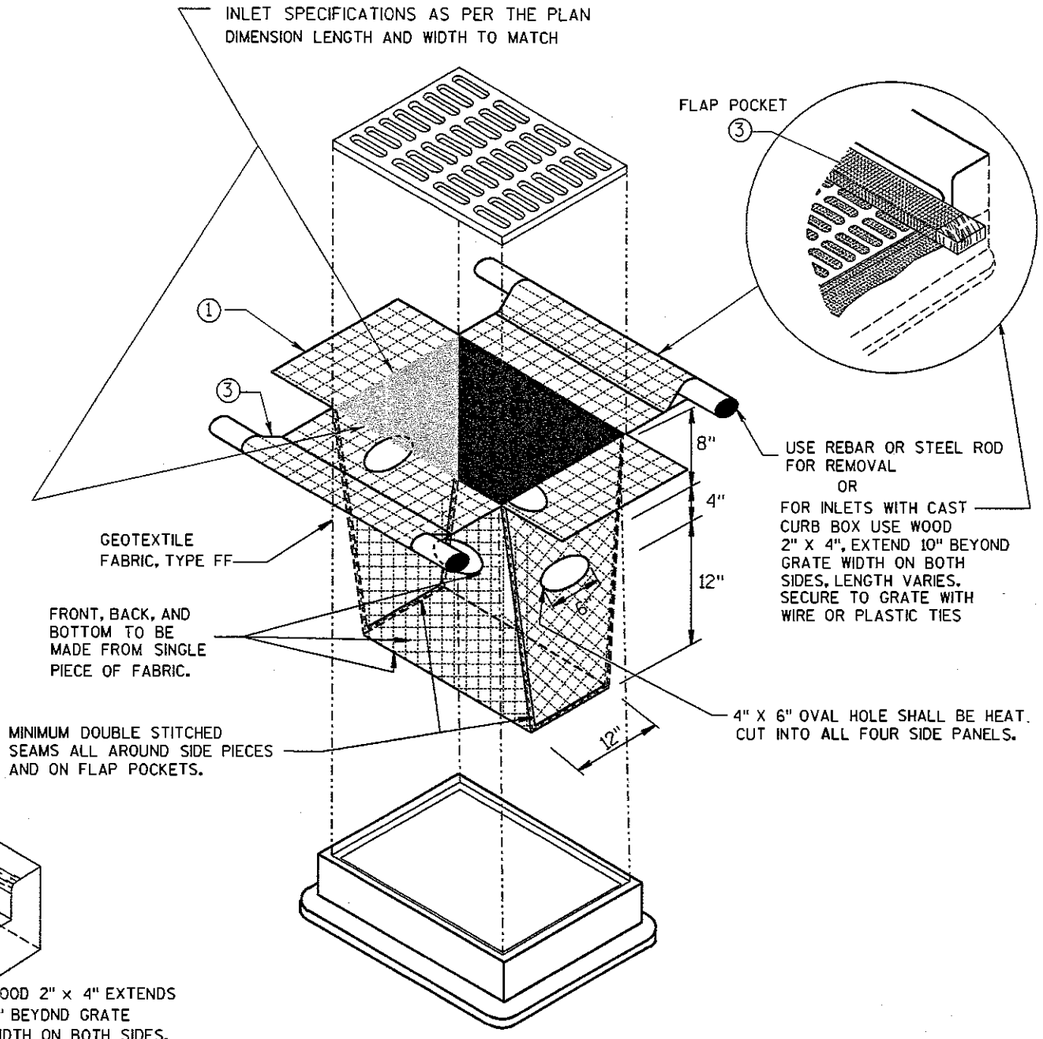


INLET PROTECTION, TYPE B (WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE ②)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

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INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

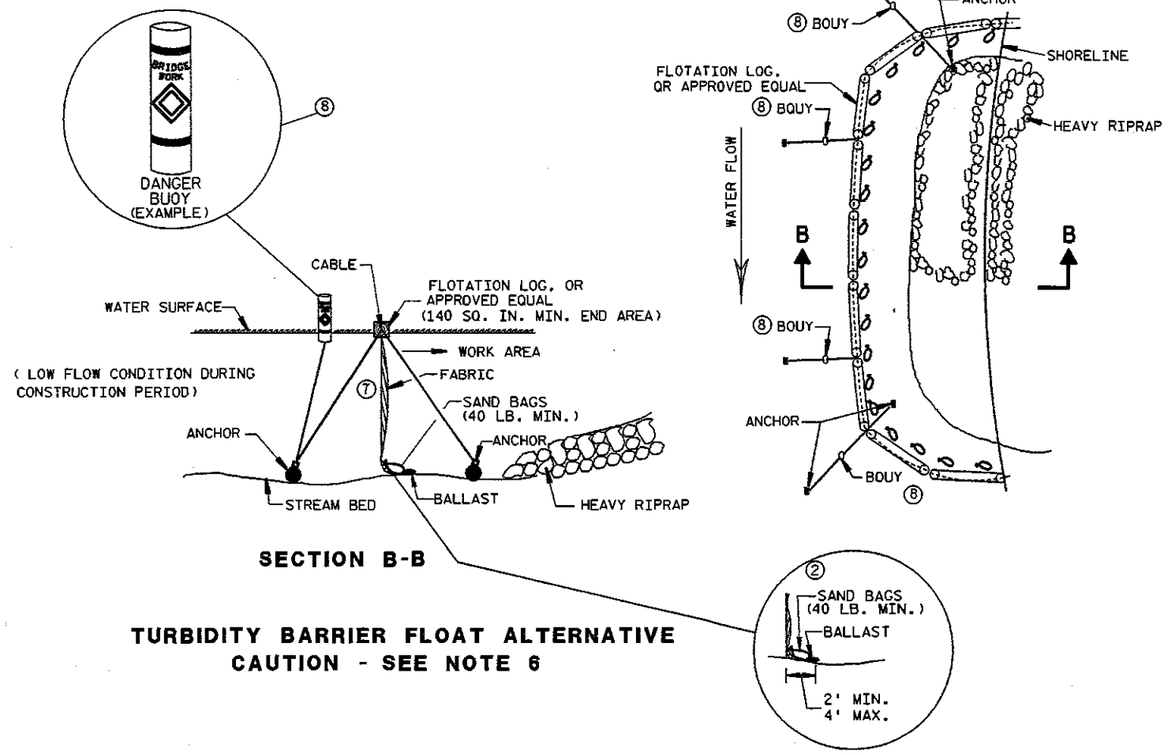
APPROVED 10/16/02
DATE

CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

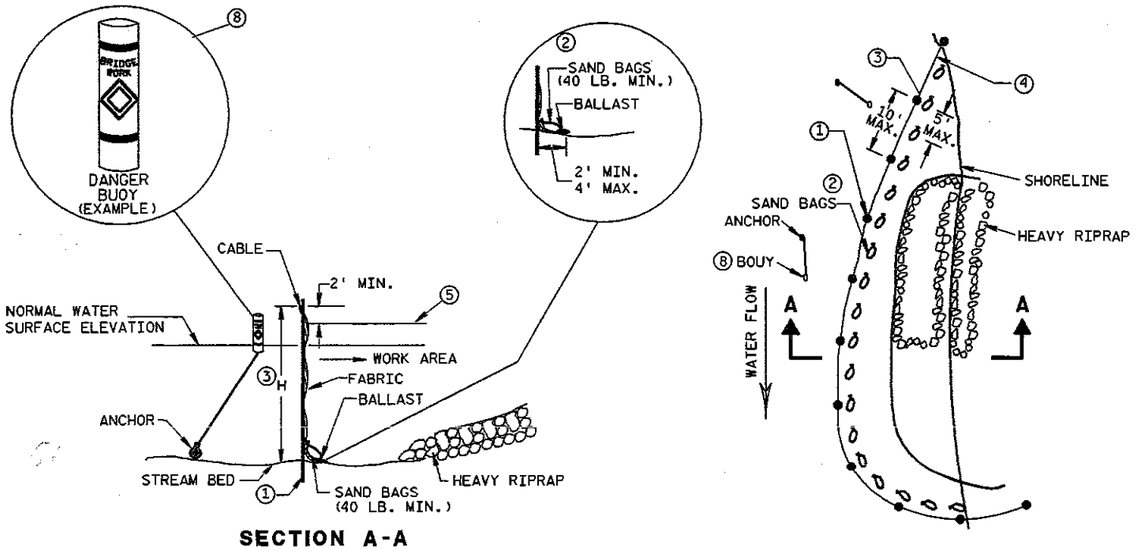
6

S.D.D. 8 E 10-2



SECTION B-B

TURBIDITY BARRIER FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



SECTION A-A

TURBIDITY BARRIER STANDARD POST INSTALLATION

PLAN VIEW

TURBIDITY BARRIER PLACEMENT DETAILS

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.

TURBIDITY BARRIER MAY BE REMOVED AT THE ENGINEERS DISCRETION, WHEN PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

① DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.

② SANDBAGS TO BE USED AS ADDITIDNAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.

③ WHEN BARRIER HEIGHT, H, EXCEEDS 8 FT., POST SPACING MAY NEED TO BE DECREASED.

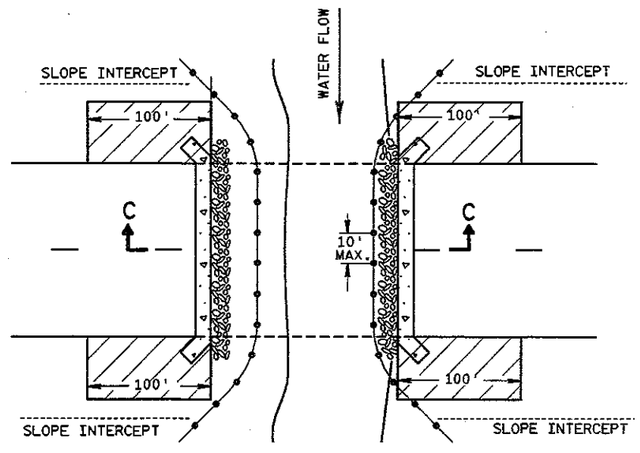
④ IN WATERWAYS SUBJECT TQ FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

⑤ ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MIMIMUM BARRIER HEIGHT SHALL BE 2'GREATER THAN EITHER THE 02 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WICHEVER IS GREATER.

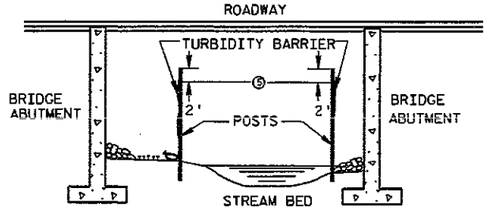
⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.

⑦ ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.

⑧ USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



PLAN VIEW



SECTION C-C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

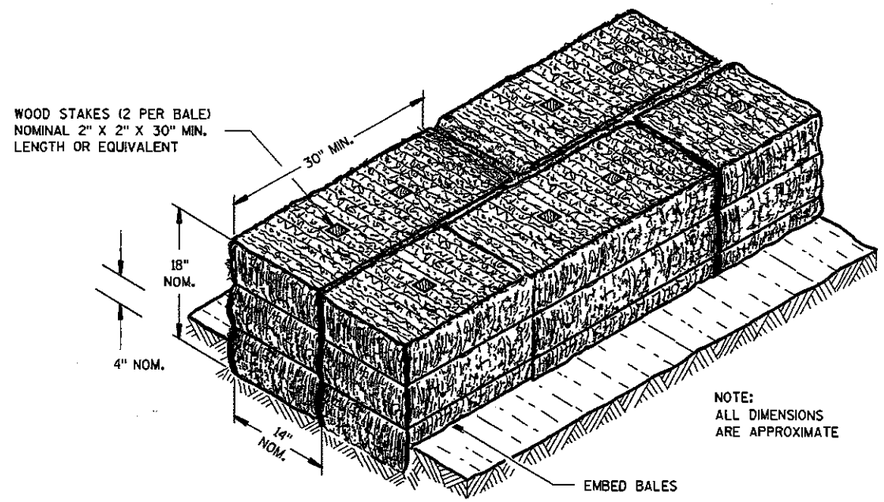
119

TURBIDITY BARRIER

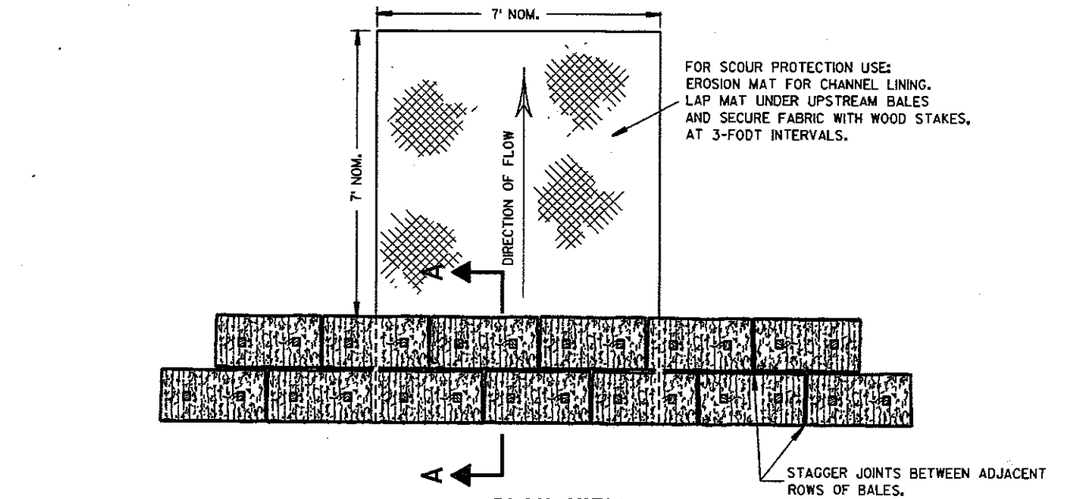
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 6/4/02 DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

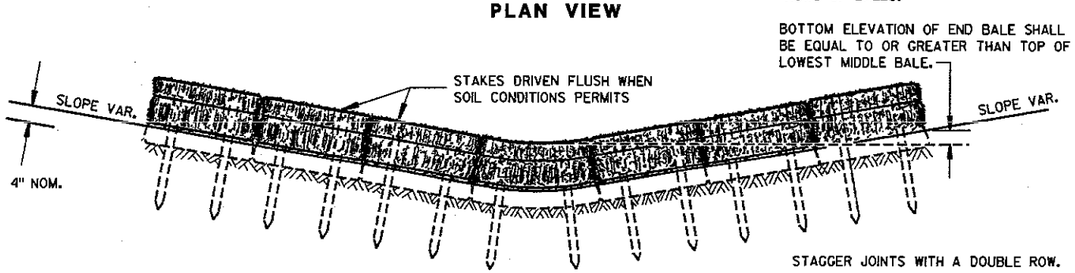
S.D.D. 8 E 11-2



SECTION A-A



PLAN VIEW



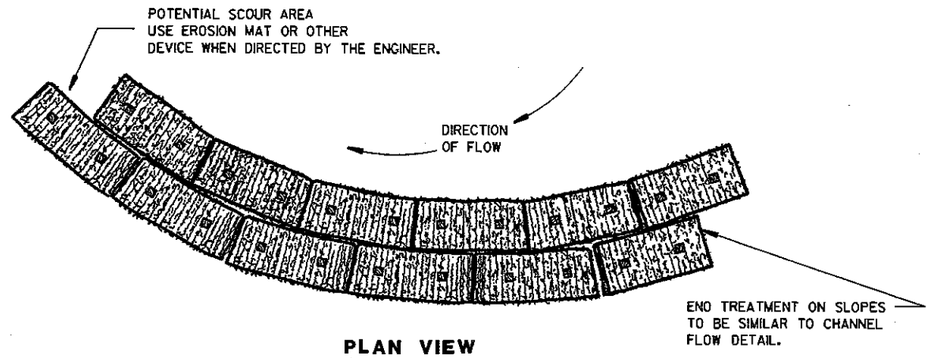
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

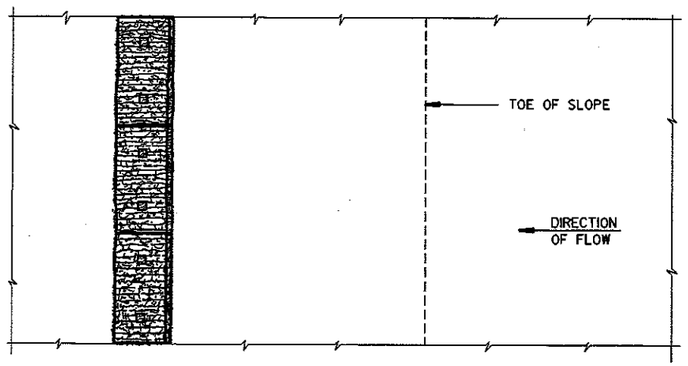
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

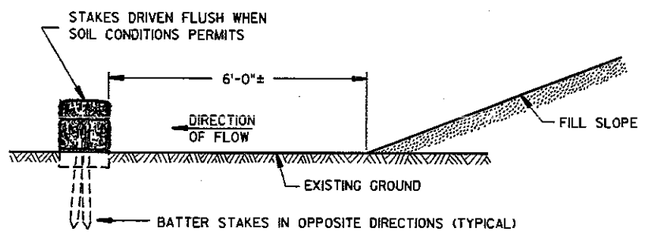


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

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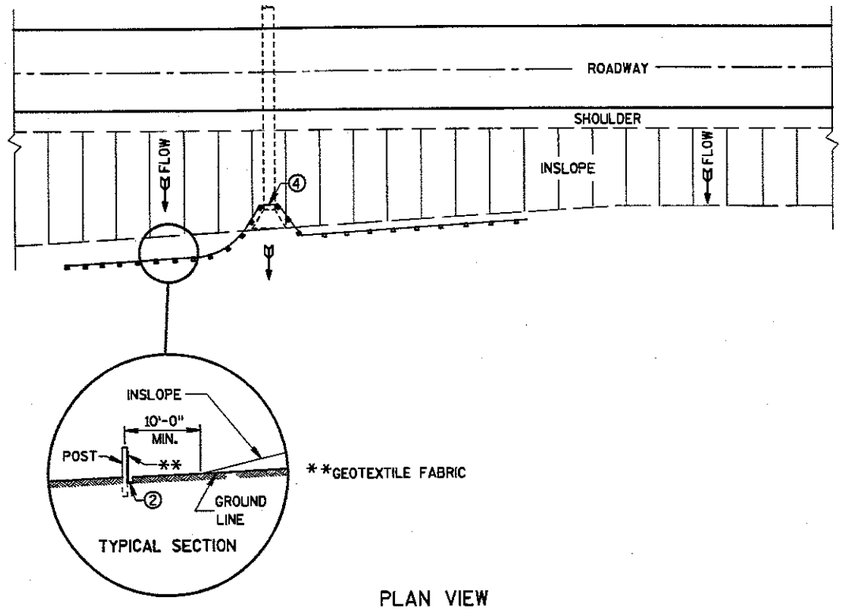
TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 6/4/02
DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

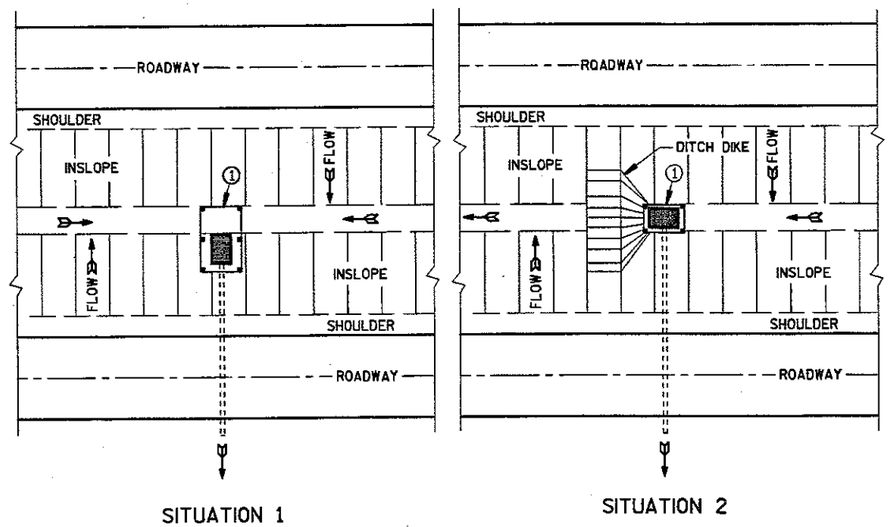
S.D.D. 8 E 8-3

S.D.D. 8 1-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

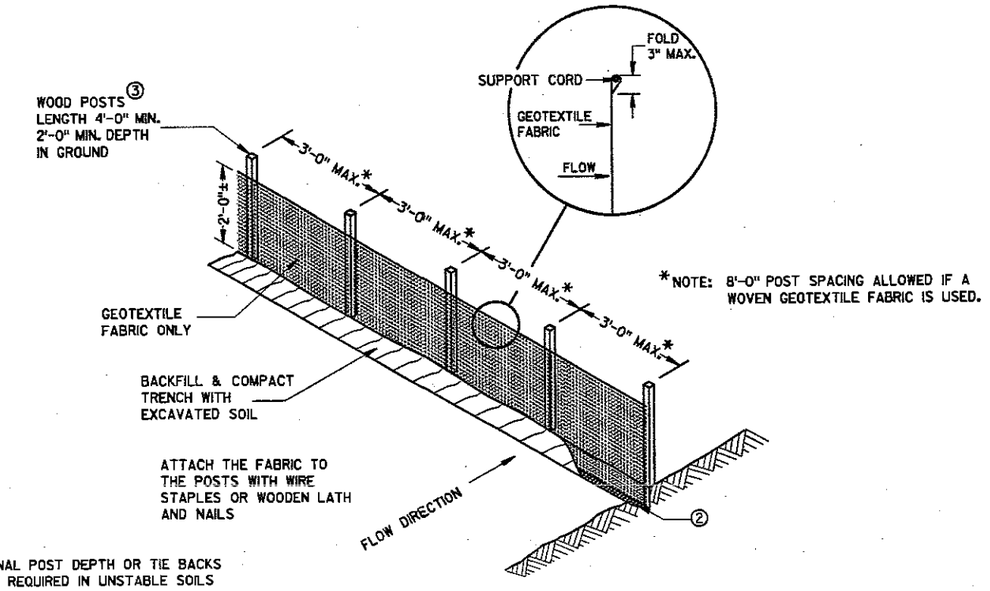
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

② TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

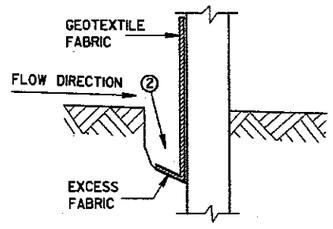
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

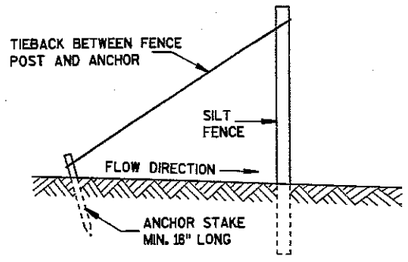


NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

SILT FENCE



TRENCH DETAIL



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

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SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 03/06/00 DATE — CHIEF ROADWAY DEVELOPMENT ENGINEER
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S.D.D. 8 E 9-5

S.D.D. 8 E 9-5

METAL APRON ENDWALLS

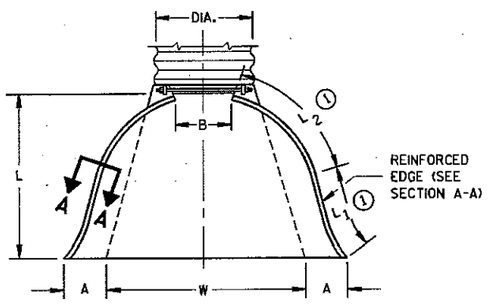
PIPE DIA. (IN.)	MIN. THICK. (inches) STEEL	MIN. THICK. (inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1½")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17½	24	2½ to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21¾	30	2½ to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28¼	36	2½ to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29⅝	42	2½ to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37¼	48	2½ to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52¼	60	2½ to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59¾	72	2½ to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75⅝	84	2½ to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2¼ to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85½	102	2¼ to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1½ to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1½ to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1½ to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1½ to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

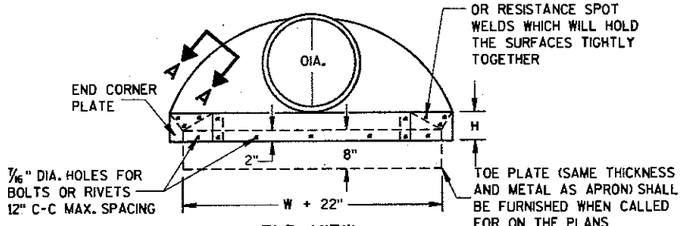
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48⅜	72⅛	24	2	3 to 1
15	2¼	6	27	46	73	30	2¼	3 to 1
18	2½	9	27	46	73	36	2½	3 to 1
21	2¾	9	36	37½	73½	42	2¾	3 to 1
24	3	9½	43½	30	73½	48	3	3 to 1
27	3¼	10½	49½	24	73½	54	3¼	3 to 1
30	3½	12	54	19¾	73½	60	3½	3 to 1
36	4	15	63	34¾	97¾	72	4	3 to 1
42	4½	21	63	35	98	78	4½	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5½	27	65	* 33¼-35 **	* 98¼- 100 **	90	5½	2⅔ to 1
60	6	* 30-35 **	60	39	99	96	5	2 to 1
66	6½	* 24-30 **	* 72-78 **	* 21-27 **	99	102	5½	2 to 1
72	7	* 24-36 **	78	21	99	108	6	2 to 1
78	7½	* 24-36 **	78	21	99	114	6½	2 to 1
84	8	36	90½	21	111½	120	6½	1½ to 1
90	8½	41	87½	24	111½	132	6½	1½ to 1

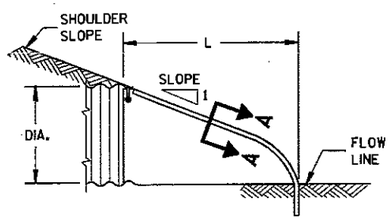
*MINIMUM
**MAXIMUM



PLAN VIEW

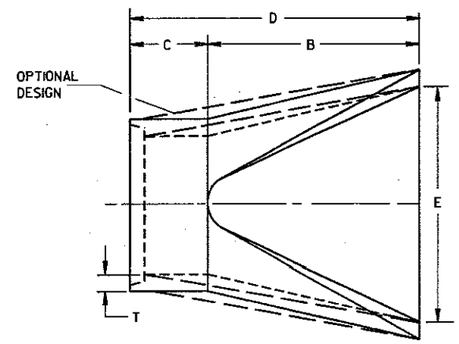


END VIEW

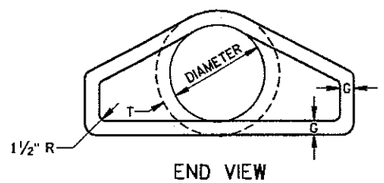


SIDE ELEVATION

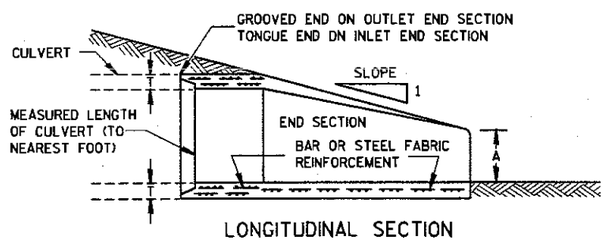
METAL ENDWALLS



PLAN

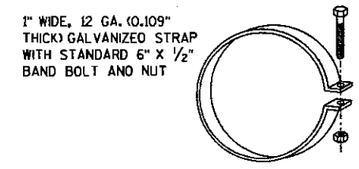


END VIEW



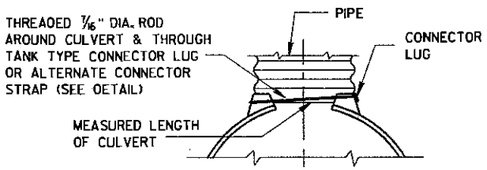
LONGITUDINAL SECTION

CONCRETE ENDWALLS

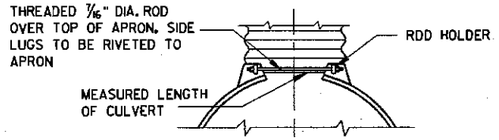


ALTERNATE FOR TYPE 1 CONNECTION

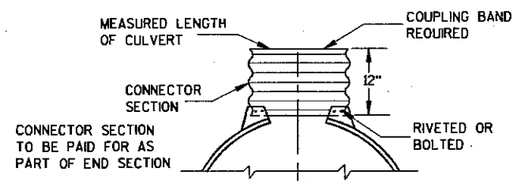
END SECTION CONNECTOR STRAP



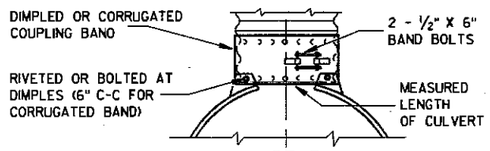
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

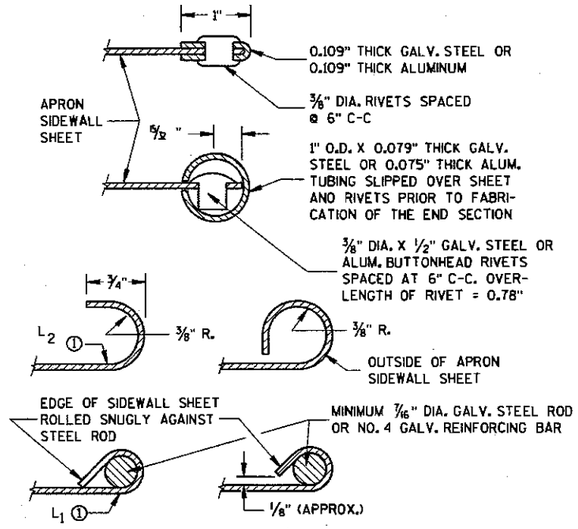
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

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.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

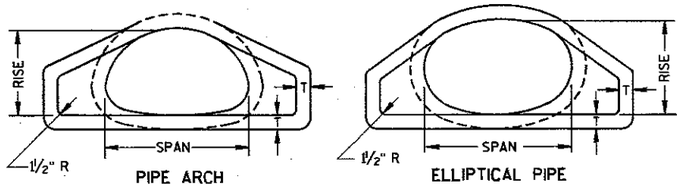
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

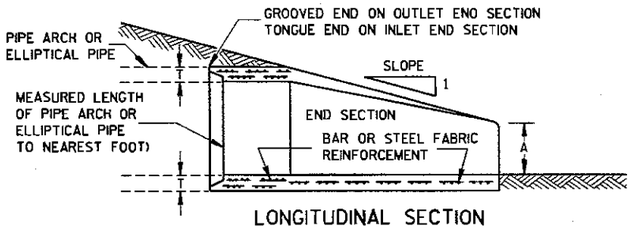
APPROVED 11/30/94 DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

S.D.D. 8 F 1-11

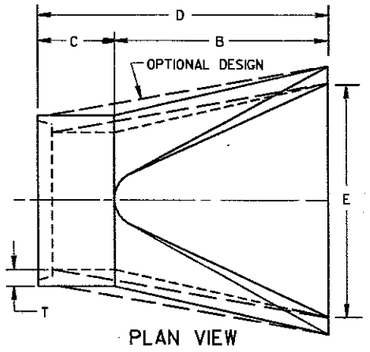
S.D.D. 8 F 1-11



END VIEW

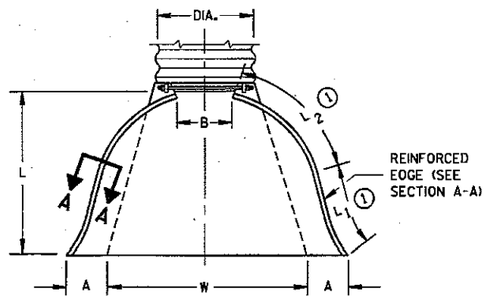


LONGITUDINAL SECTION

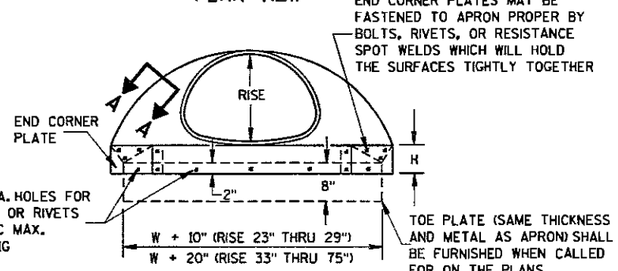


PLAN VIEW

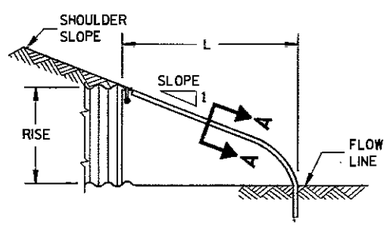
CONCRETE ENDWALLS



PLAN VIEW

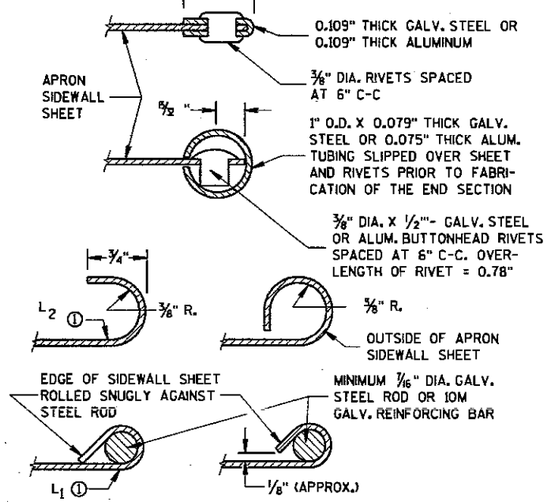


END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (inches)	(inches) SPAN	RISE	MIN. THICK. (inches) STEEL	ALUM.	DIMENSIONS (inches) A (±1")	B (MAX.)	H (±1")	L (±1½")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
15	17	13	.064	.060	7	9	6	19	14	16	30	2½to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19⅜	36	2½to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21¾	42	2½to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27½	48	2½to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37⅝	60	2½to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45⅜	75	2½to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54¾	85	2½to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2½to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72¾	102	2¼to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82¼	114	2¼to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS

EQUIV. DIA. (inches)	(inches) SPAN	RISE	MIN. THICK. (inches) STEEL	ALUM.	DIMENSIONS (inches) A (±1")	B (MAX.)	H (±1")	L (±1½")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
48	53	41	.109	.105	18	26	12	63	24	72¾	90	2½to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1½to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1½to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

*EXCEPT CENTER PANEL SEE GENERAL NOTES

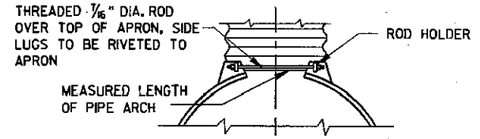
REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (inches)	DIMENSIONS (inches) **SPAN	**RISE	T	A	B	C	D	E	APPROX. SLOPE
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11⅛	60	36	96	72	3 to 1
42	51	31	4½	15⅜	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

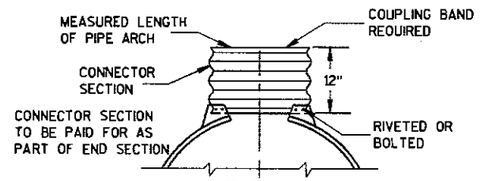
EQUIV. DIA. (inches)	DIMENSIONS (inches) **SPAN	**RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½to 1
42	53	34	5	15¾	60	36	96	78	2½to 1
48	60	38	5½	21	60	36	96	84	2½to 1
54	68	43	6	25½	60	36	96	90	2½to 1
60	76	48	6½	30	60	36	96	96	2½to 1

**NOMINAL SIZE



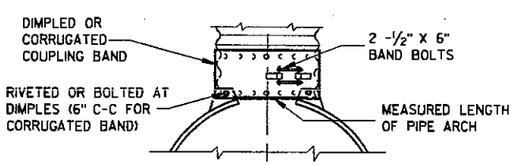
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:
ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

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.

CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENOWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS ANO ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

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APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

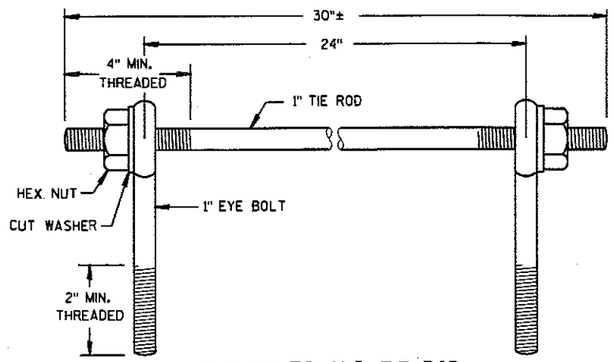
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 11/30/94 DATE — Doug L. Thompson, CHIEF ROADWAY DEVELOPMENT ENGINEER

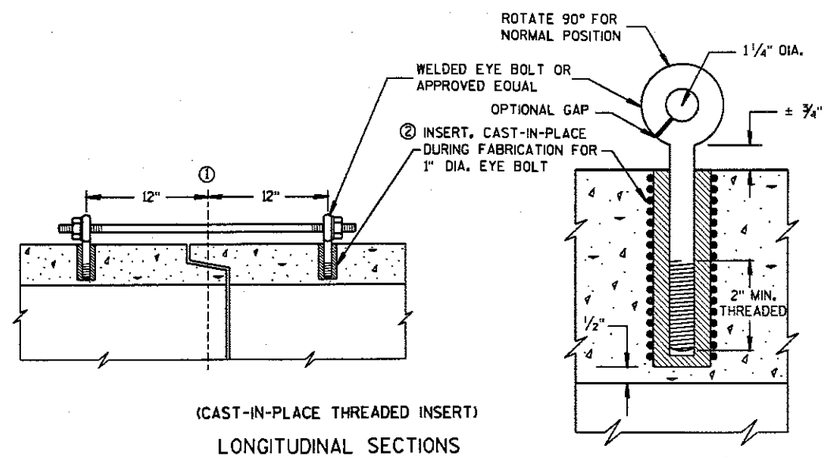
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EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

GENERAL NOTES

CONCRETE CULVERT PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED ON THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES. UNLESS OTHERWISE STATED IN THE CONTRACT THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE CULVERT PIPE AS INDICTED ON THE PLANS AND BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO CILVERT PIPE, REINFORCED CONCRETE CULVERT PIPE, OR REINFORCED CONCRETE PIPE CATTLE PASS.

DETAILED ORAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

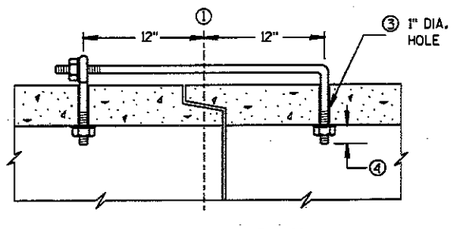
③ HOLES SHALL BE CAST-IN-PLACE OR ORILLED 12" FROM ℄ OF TONGUE AND GROOVE.

④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2".

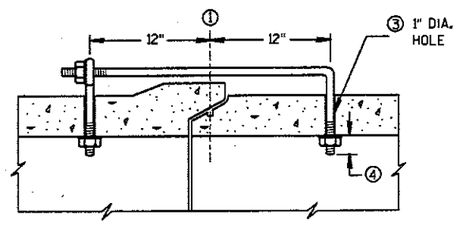
⑤ ROD DIAMETER + 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)



(TONGUE & GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

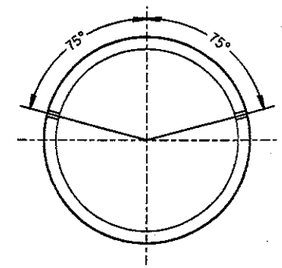
EYE BOLT DIMENSION TABLE

PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	

ADJUSTABLE TIE ROD TABLE

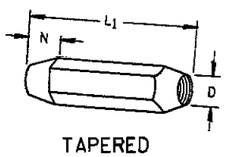
PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 7/16

DIMENSIONS SHOWN ARE IN INCHES

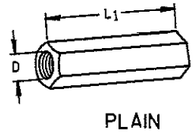


PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



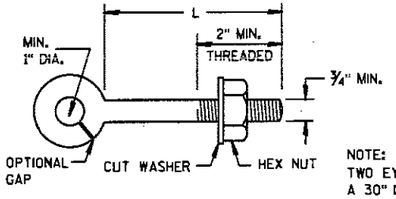
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PLAIN

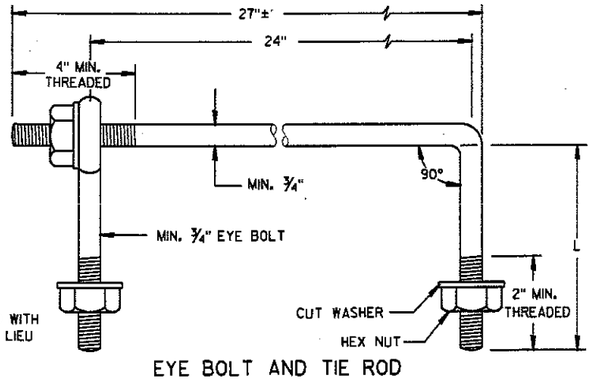
RIGHT AND LEFT THREADS

SLEEVE NUTS



EYE BOLT

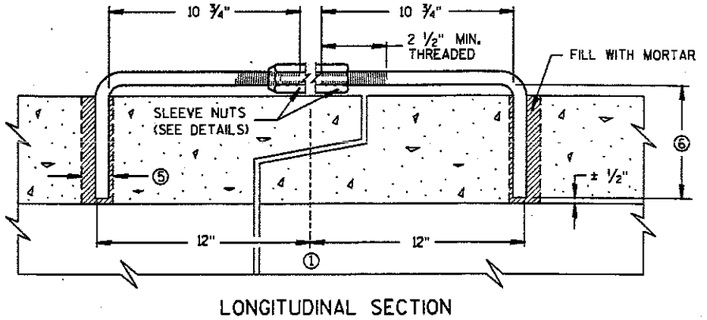
NOTE:
TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)



LONGITUDINAL SECTION

(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)

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JOINT TIES FOR CONCRETE PIPE

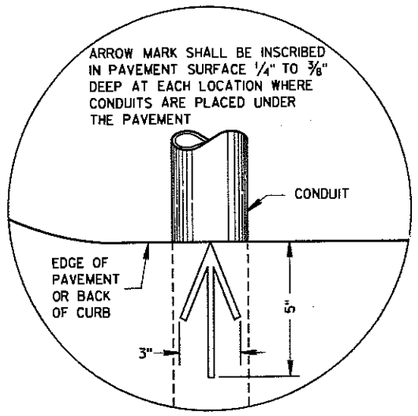
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 6/10/92 DATE
FHWA

STATE DESIGN ENGINEER FOR HWYS

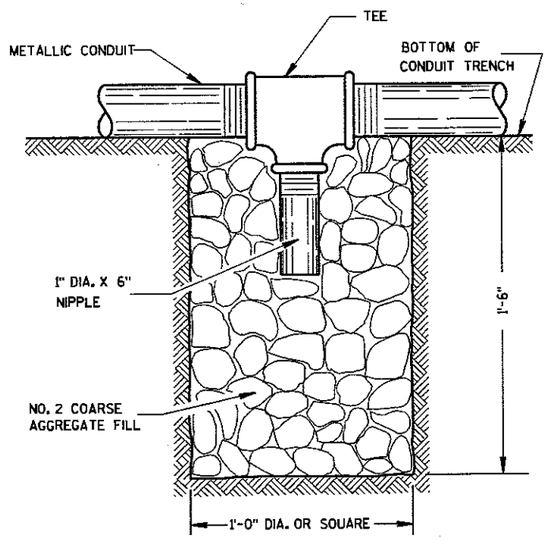
S.D.D. 8 F 4-5

S.D.D. 8 F 4-5



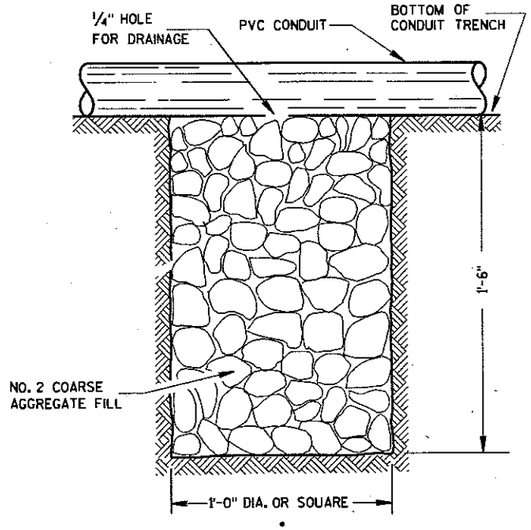
PLAN VIEW

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.

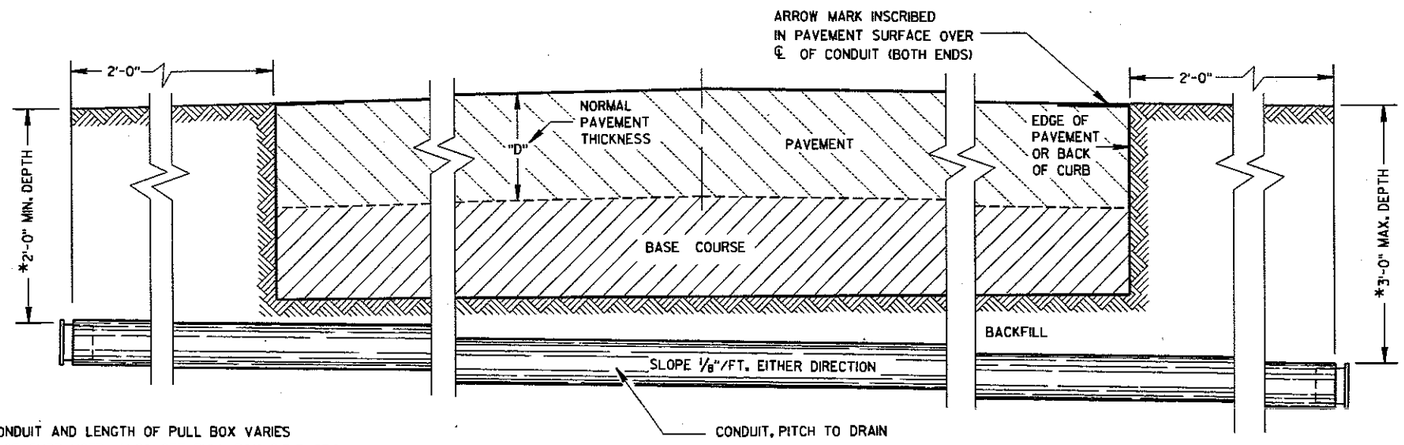
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

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 652.3.11

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

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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.

PULL BOXES LOCATED IN THE ROADWAYS 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.

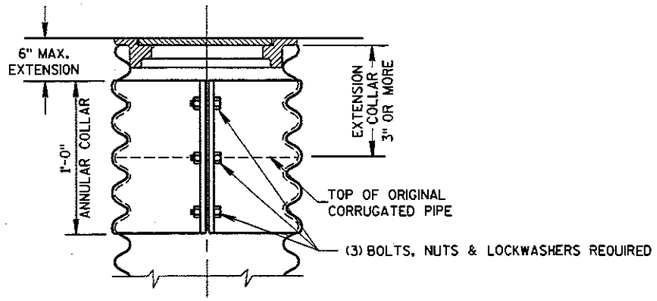
RODENT WIRE SCREEN SHALL BE 1/8" STAINLESS STEEL MESH AND BE INSTALLED WITH A STAINLESS STEEL HOSE CLAMP OF SUFFICIENT SIZE.

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

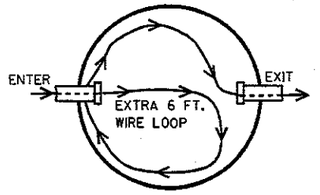
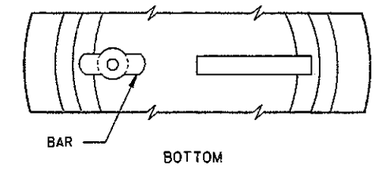
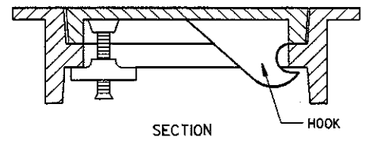


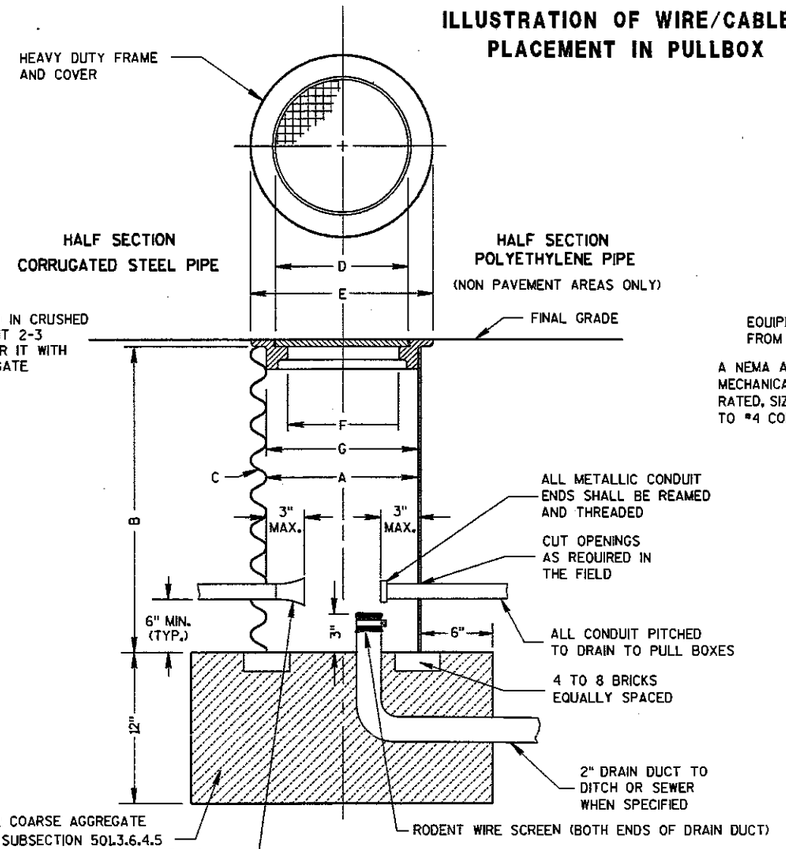
ILLUSTRATION OF WIRE/CABLE PLACEMENT IN PULLBOX



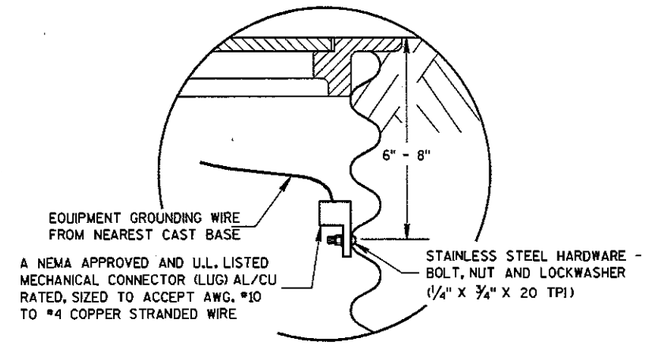


ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



PULL BOX



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

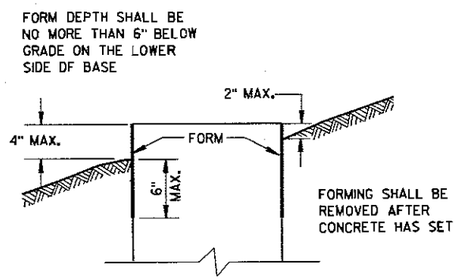
12b2

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/11/02
DATE
STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA

S.D.D. 9 B 4-5



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

GENERAL NOTES (CONTINUED)

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

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

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2 AND TYPE 5 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 AND 641.2.2 OF THE STANDARD SPECIFICATIONS, ASTM A-449, OR ASTM A-687 (GRADE 105).

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(3) (4) 1" DIA. X 5'-0" ANCHOR RODS.

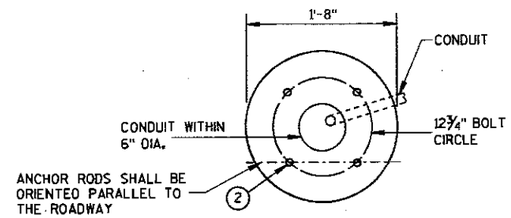
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

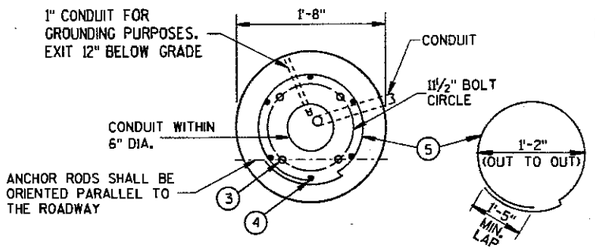
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

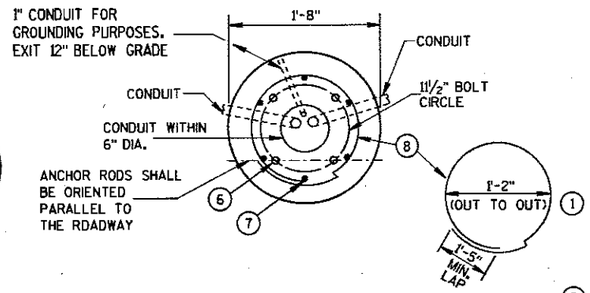
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

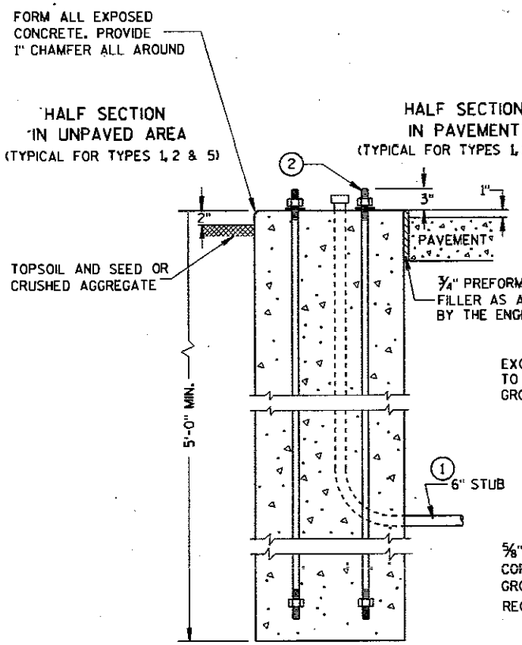
(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT

(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

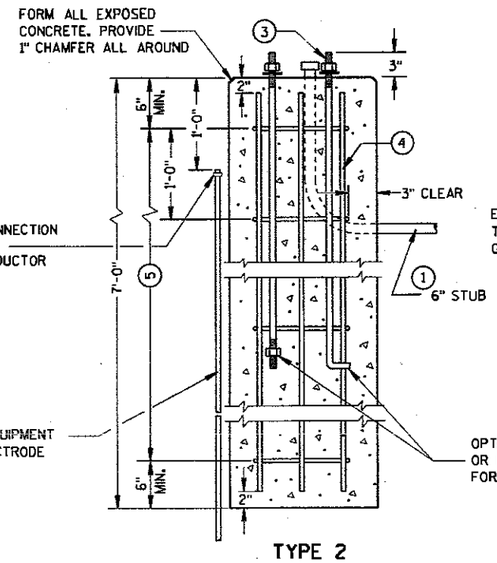




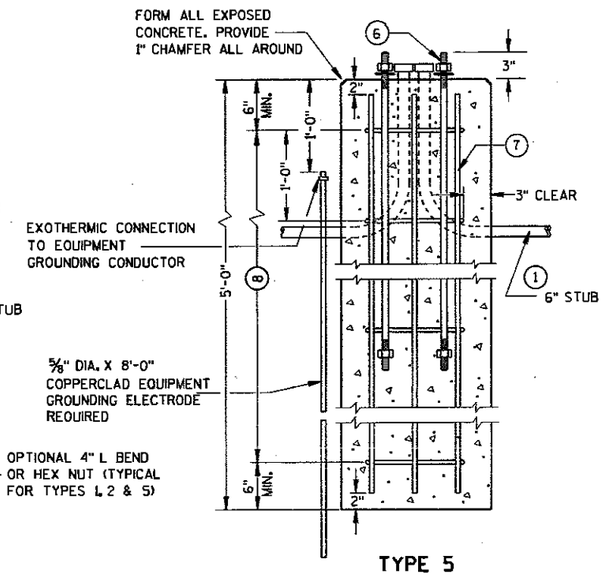




TYPE 1



TYPE 2



TYPE 5

CONCRETE BASES

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CONCRETE BASES, TYPES 1, 2 & 5

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 10/21/96 DATE
STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA

S.D.D. 9 C 2-2

S.D.D. 9 C 2-2

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCOROANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS, ASTM A-325, (92,000 YIELD) HEAVY HEX NUT AND BE GALVANIZED IN ACCOROANCE WITH ASTM A-153, CLASS C.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED AND U.L. LISTED MECHANICAL CONNECTOR (LUG) AL/CU RATED AND SIZED TO ACCEPT #10 AWG STRANDED WIRE, SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

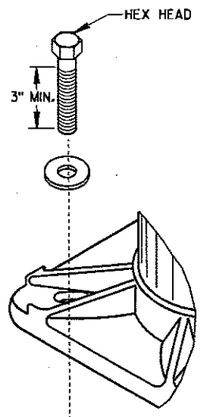
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

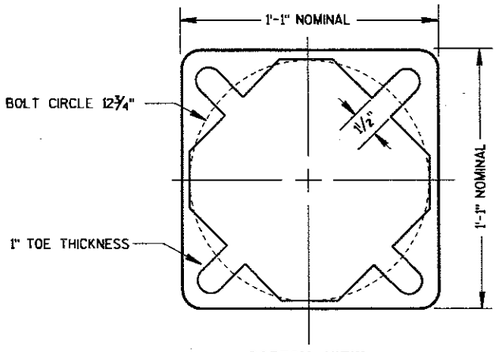
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCOROANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

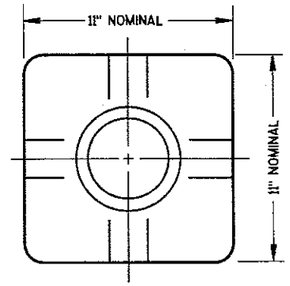
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1½", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

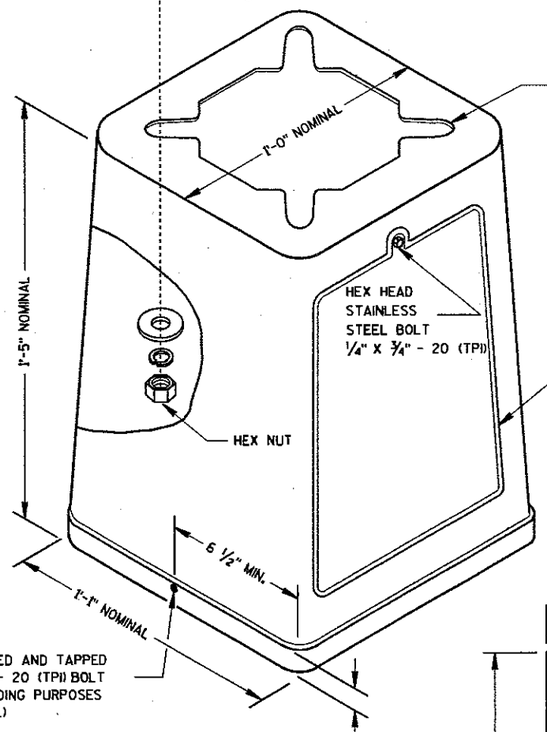




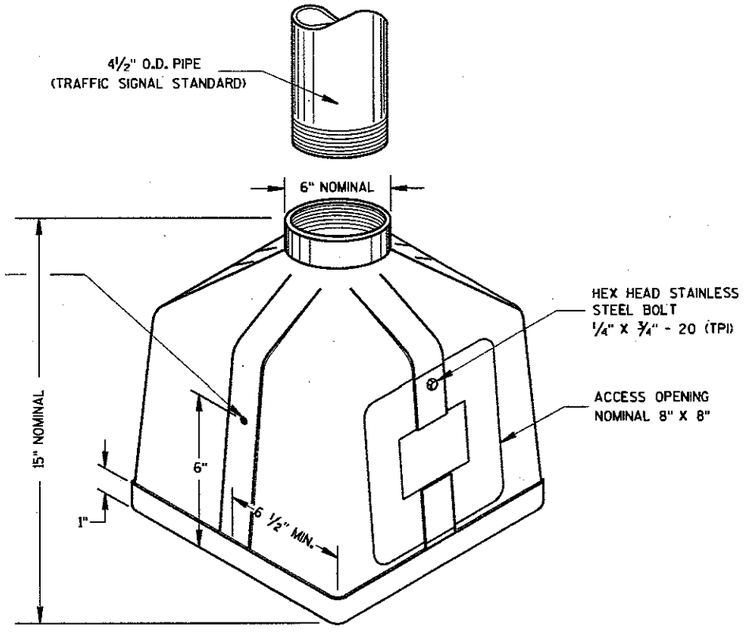
BOTTOM VIEW
(PEDESTAL BASE)



TOP VIEW
(PEDESTAL BASE)

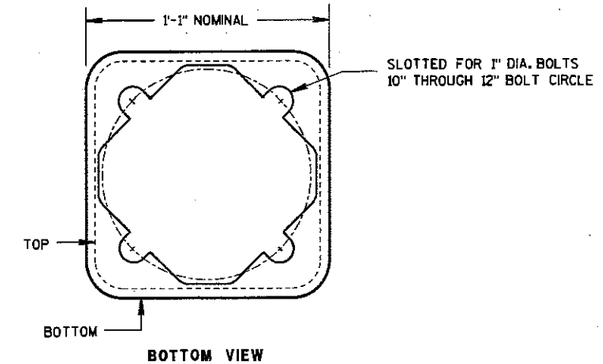


ISOMETRIC VIEW

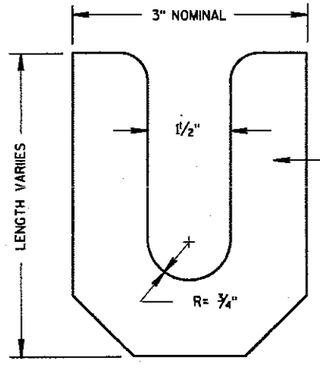


ISOMETRIC VIEW

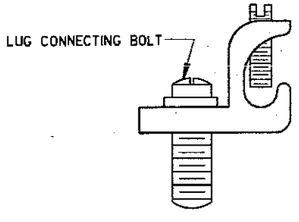
PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)



LEVELING SHIM



TYPICAL MECHANICAL
CONNECTOR LUG
TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES

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TRANSFORMER/PEDESTAL BASES

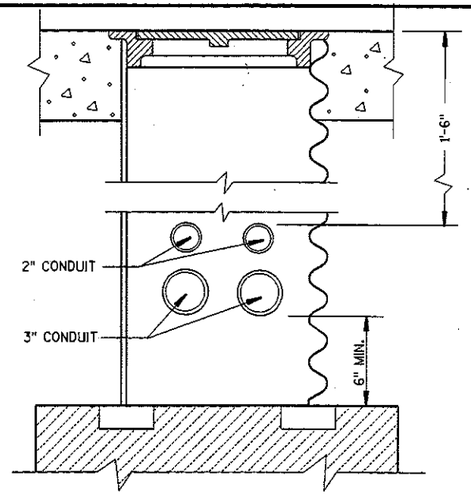
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 10/21/96 DATE
STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA

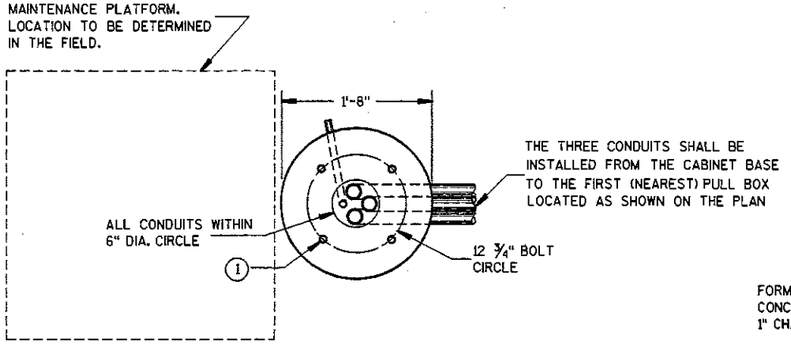
S.D.D. 9 C 3-2

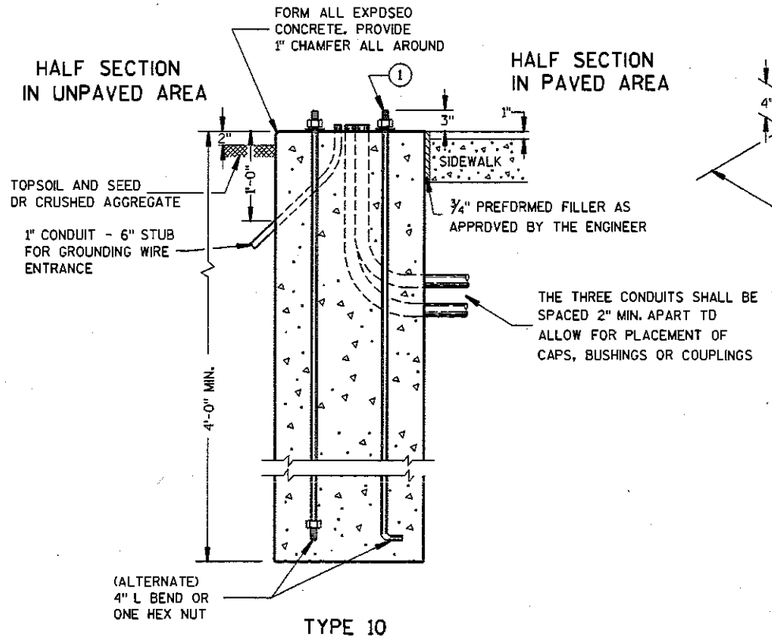
S.D.D. 9 C 3-2

CONTROL CABINET BASE TYPE	DIMENSIONS				C.Y. CONCRETE (APPROX.)
	H	I	J	K	
TYPE 6 - 30" CABINET	34"	60"	10"	17"	.64
TYPE 7 - 38" CABINET	42"	60"	10"	21"	.93
TYPE 8 - 38" CABINET	42"	72"	12"	21"	1.29
TYPE 9 - VARIABLE	54"	72"	14"	27"	1.56
TYPE 10 - POST MOUNT	AS SHOWN				.32

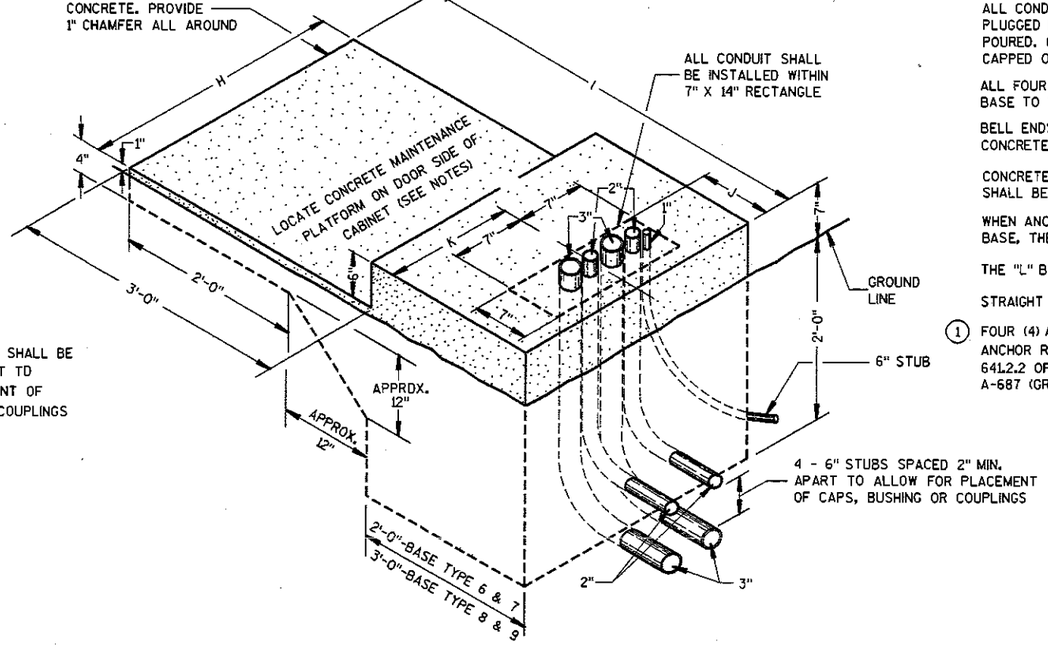


CONDUIT LOCATIONS IN 24" X 36" PULL BOX
(LEADING TO CONTROLLER CABINET BASE TYPE 6, 7, 8 AND 9)





TYPE 10



TYPE 6,7,8 AND 9
(ISOMETRIC VIEW)

GENERAL NOTES

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

INSTALL FOUR ½ INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

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

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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.

CONTROL CABINET BASE TOP SURFACES SHALL BE TROWEL FINISHED AND LEVEL.

WHEN A TYPE 10 CONTROL CABINET BASE IS USED TO POST MOUNT A CONTROL CABINET, A 36" SQUARE 4" THICK CONCRETE MAINTENANCE PLATFORM SHALL BE REQUIRED ON THE DOOR SIDE OF THE CABINET. THE TOP 1 INCH SHALL BE ABOVE FINISHED GRADE AND BE BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

ALL FOUR (TWO INCH AND THREE INCH) CONDUIT SHALL BE INSTALLED FROM THE CABINET BASE TO THE FIRST (NEAREST PULL BOX LOCATED AS SHOWN ON THE PLANS.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

WHEN ANCHOR RODS USING THE ALTERNATE L BEND ARE FURNISHED FOR THE TYPE 10 BASE, THE 4" L BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH.

THE "L" BEND SHALL NOT BE THREADED.

STRAIGHT ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD.

(1) FOUR (4) ANCHOR RODS, 1" DIA. X 3'-6"
ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 AND 641.2.2 OF THE STANDARD SPECIFICATIONS AND IN ACCORDANCE WITH A-449, OR ASTM. A-687 (GRADE 105).

CONCRETE CONTROL CABINET BASES

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CONCRETE CONTROL CABINET BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

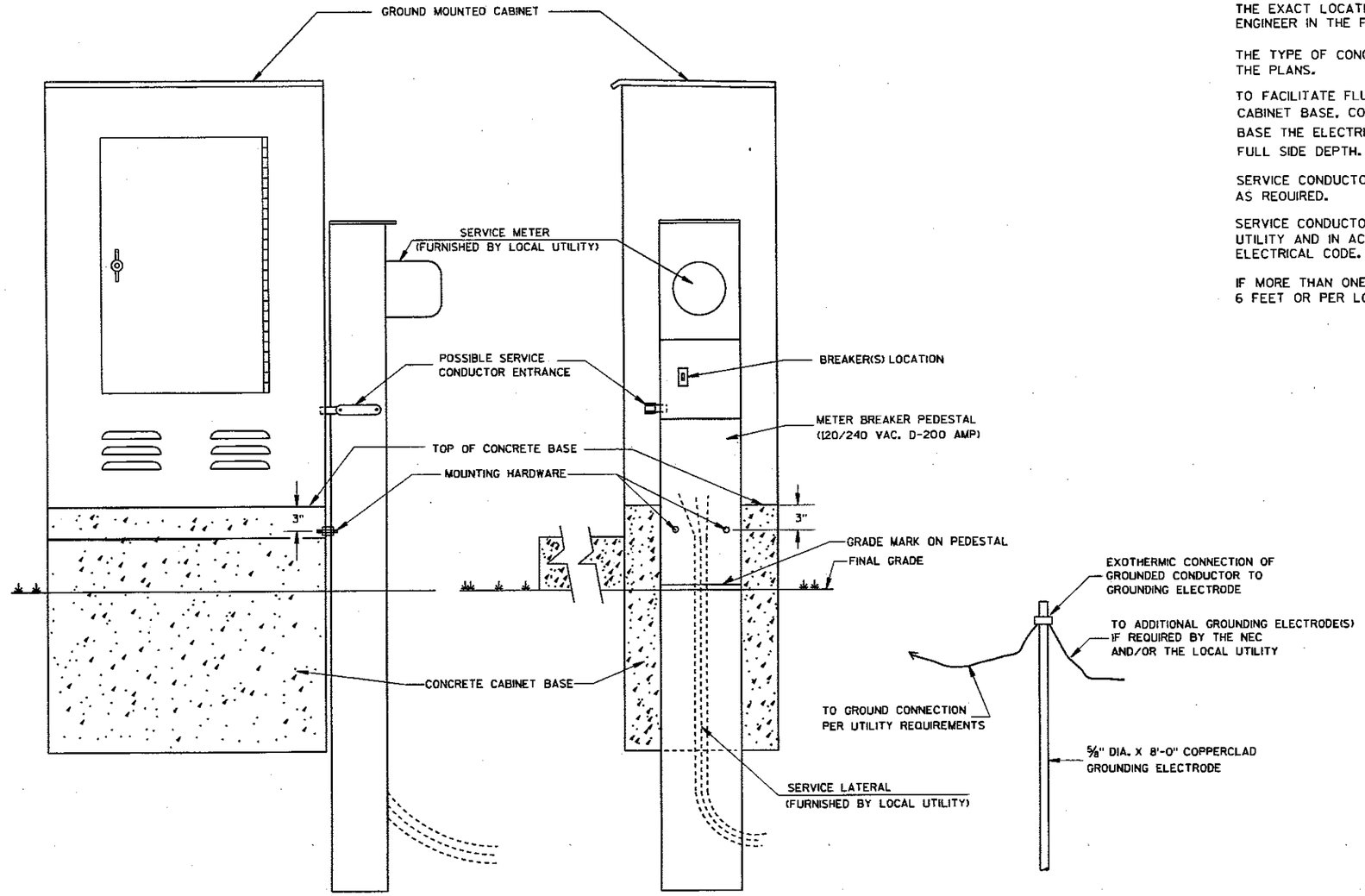
APPROVED
3/24/03
DATE
STATE ELECTRICAL ENGINEER FOR HIGHWAYS

FHWA

6

S.D.D. 9 C 5-3

S.D.D. 9 C 5-3



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE, CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRIC SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

130

CABINET SERVICE INSTALLATION
(METER BREAKER PEDESTAL)

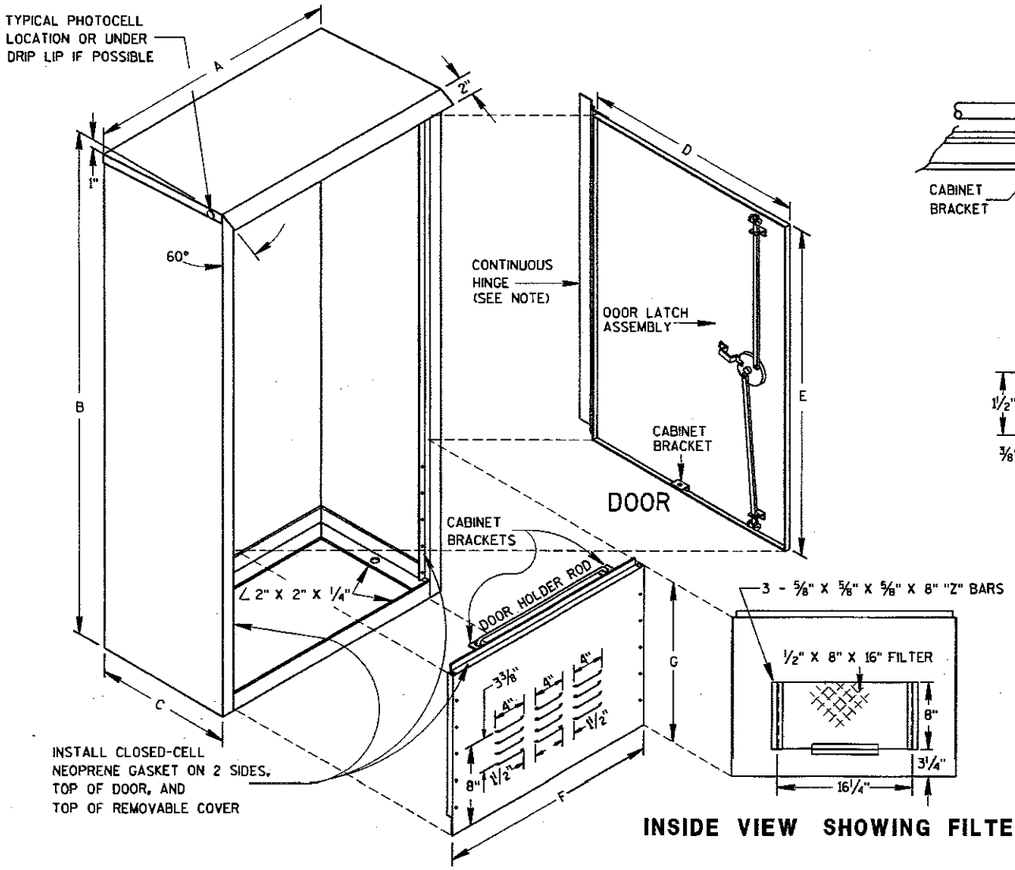
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 10/21/96 DATE
FHWA

STATE ELECTRICAL ENGINEER FOR HIGHWAYS

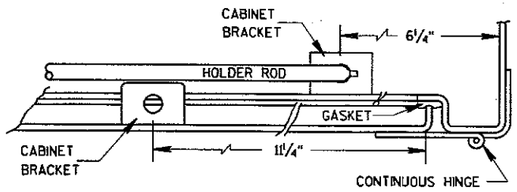
S.D.D. 9 D 1-2

S.D.D. 9 D 1-2

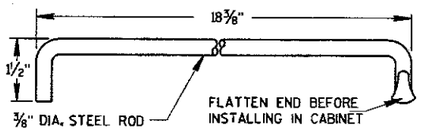


INSIDE VIEW SHOWING FILTER

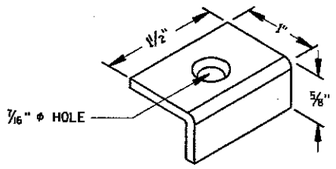
REMOVABLE COVER



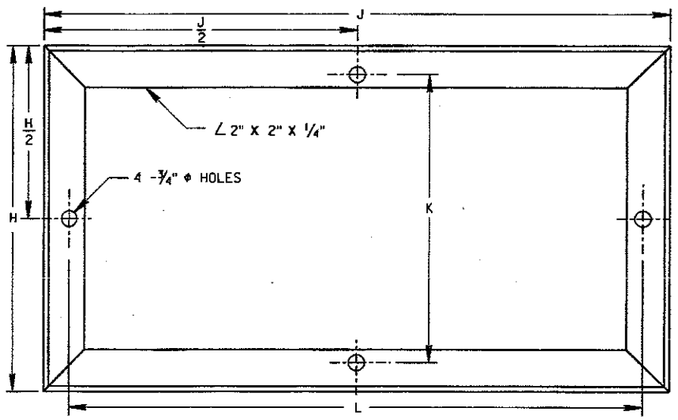
HINGE & DOOR HOLDER



HOLDER ROD



CABINET BRACKET



MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 1/2	16 1/2	24
D	26 1/2	34 3/4	33 3/4
E	38 3/4	38 3/4	38 3/4
F	26 1/2	34 3/4	33 3/4
G	19	19	25
H	16 1/2	16 1/2	24
H/2	8 1/4	8 1/4	12
J	30	38	38
J/2	15	19	19
K	13 3/4	13 3/4	21 1/4
L	27 1/2	35 1/2	35 1/2

GENERAL NOTES

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

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

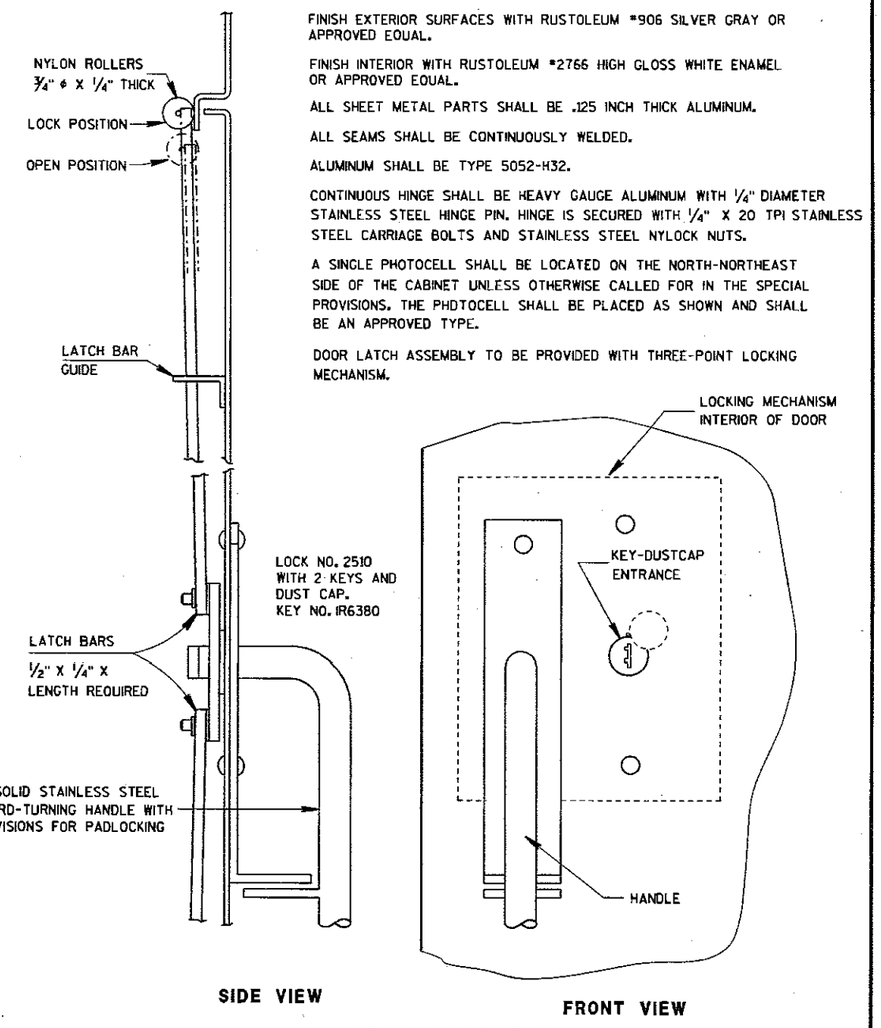
ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH 1/4" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH 1/4" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH-NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE AN APPROVED TYPE.

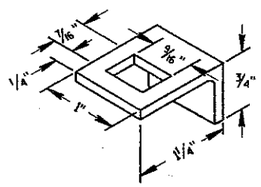
DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.



SIDE VIEW

FRONT VIEW

LATCH ASSEMBLY



LATCH BAR GUIDE

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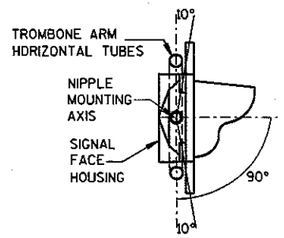
SIGNAL OR LIGHTING CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/21/96
DATE
STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA

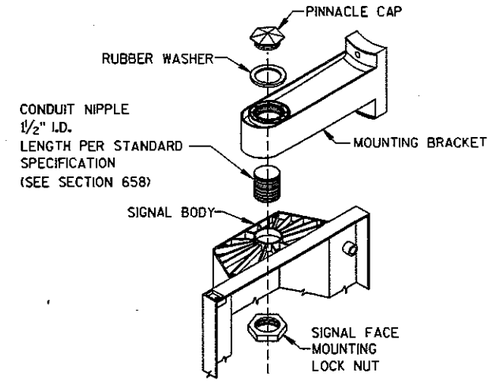
S.D.D. 9 D 2-2

S.D.D. 9 D 2-2



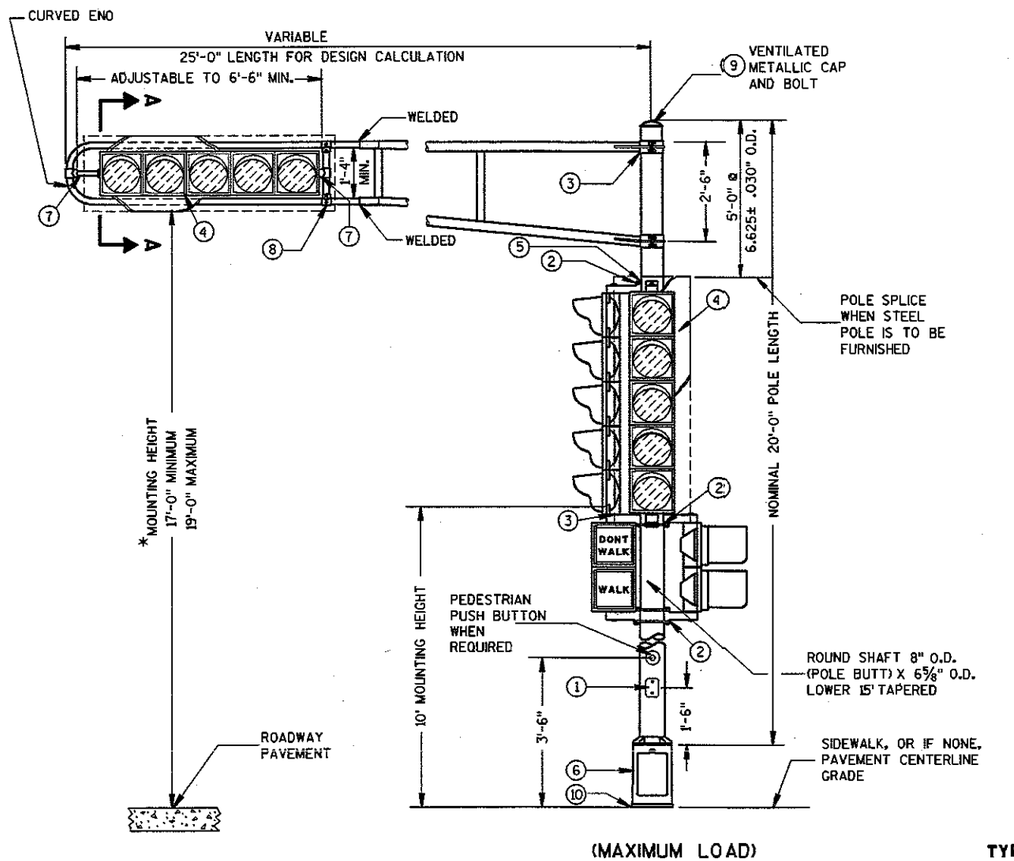
SECTION A-A

(10 DEGREES TILT REQUIREMENT OF FACE(S) IN THE TROMBONE MOUNTING)

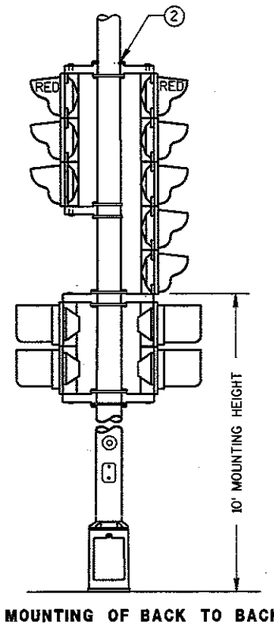


SIGNAL FACE MOUNTING DETAIL

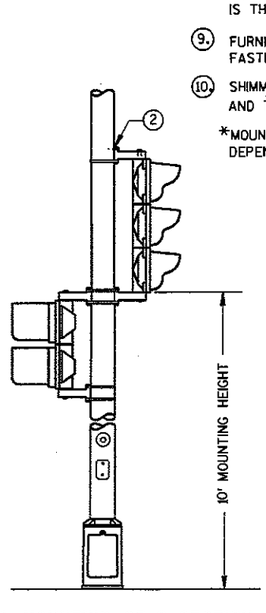
(BANDED)



(MAXIMUM LOAD)



TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE

TYPE 2 POLE MOUNTING CONFIGURATION

GENERAL NOTES

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

POLES SHALL BE EITHER ALUMINUM OR GALVANIZED STEEL AS CALLED FOR IN THE CONTRACT.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE/ROPE IN ACCORDANCE WITH STANDARD SPECIFICATION 652 SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

TYPE 2 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

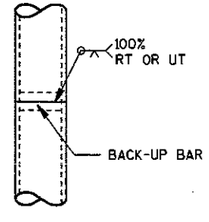
WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

1. 4" X 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.
2. SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS - SEC. 658)
3. GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HDLE IN POLE SHAFT FOR WIRING.
4. SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, WITH SELF-TAPPING STAINLESS STEEL SCREWS.
5. POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACES.
6. CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.
7. MOUNTING BRACKET NIPPLES FOR THE SIGNAL FACE(S) SHALL BE 2 INCHES IN LENGTH AND 1½ INCHES IN DIAMETER. (SEE STANDARD SPECIFICATION - SECTION 658).
8. VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (¼" X ¾" LONG- 20 TPI, STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS THE SLIDING TYPE.
9. FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
10. SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

*MOUNTING HEIGHT LIMITATION DIMENSIONS OF THE TROMBONE MAST ARM WILL BE DEPENDENT UPON THE USE/NON-USE OF A TRANSFORMER BASE.

FOR MANUFACTURERS USE ONLY

WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN/BRIDGE FOR VERIFICATION AND APPROVAL.



POLE SPLICE DETAIL

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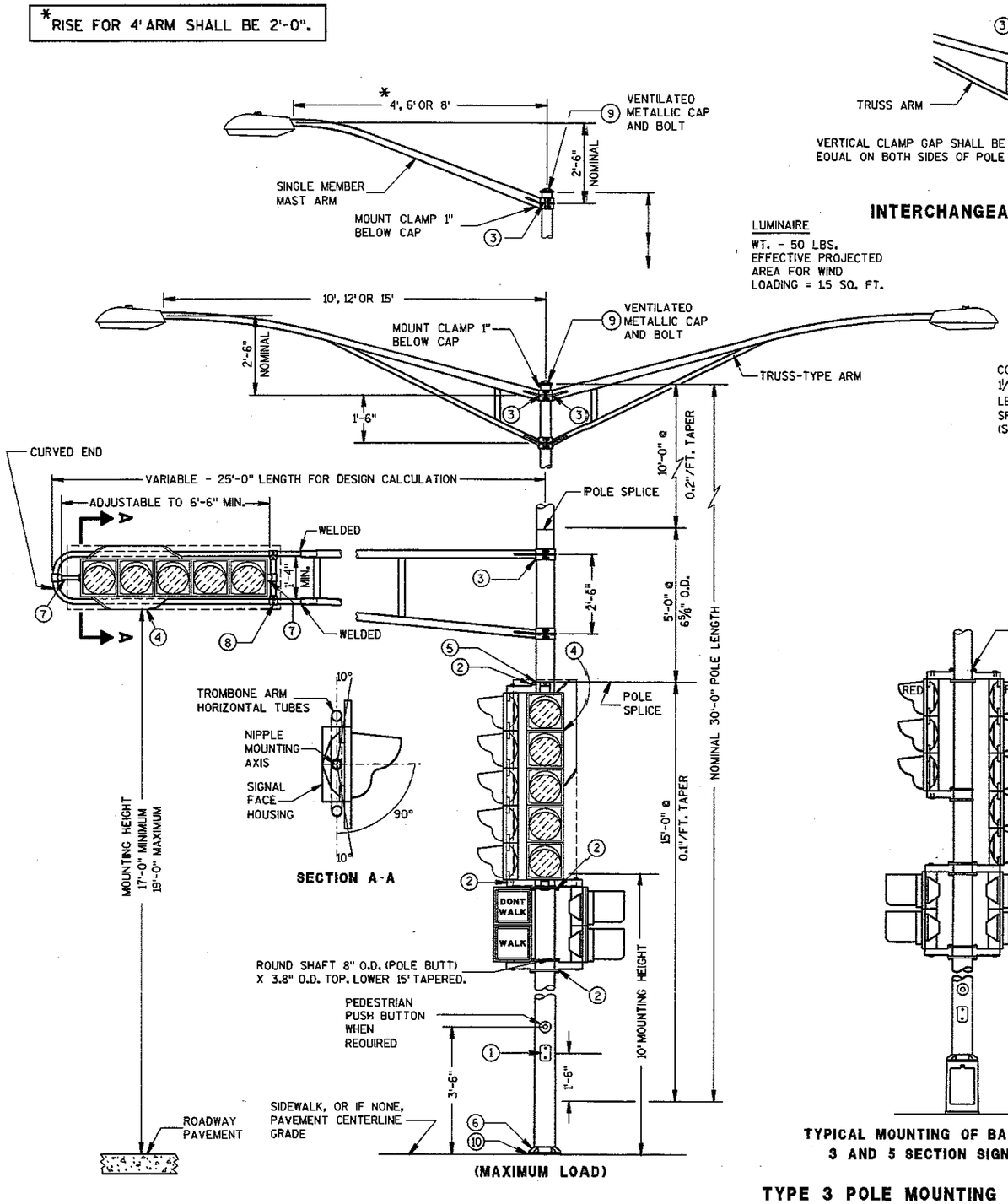
POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 9 E 1-4a

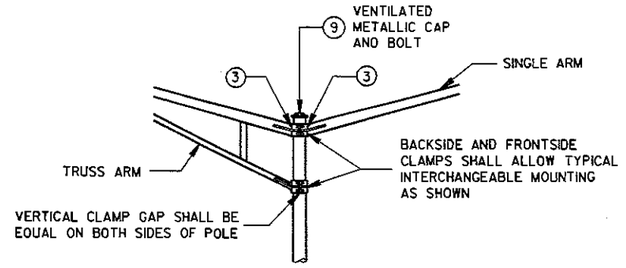
S.D.D. 9 E 1-4a

*RISE FOR 4' ARM SHALL BE 2'-0".

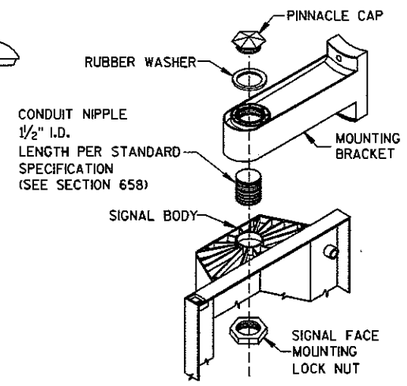


LUMINAIRE

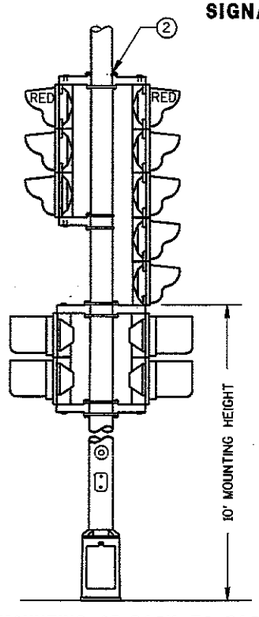
WT. - 50 LBS.
EFFECTIVE PROJECTED AREA FOR WIND LOADING = 1.5 SQ. FT.



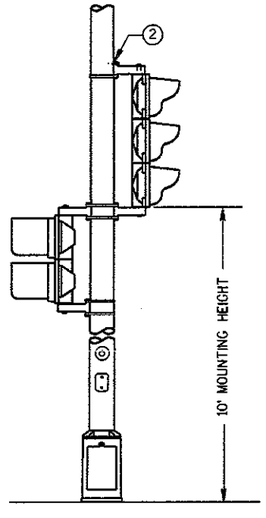
INTERCHANGEABLE MOUNTING DETAIL



SIGNAL FACE MOUNTING DETAIL
(BANDED)



TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE

GENERAL NOTES

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

ALL TYPE 3 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

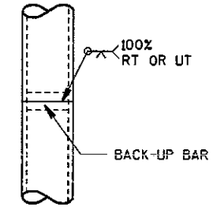
A PULL WIRE/ROPE IN ACCORDANCE WITH STANDARD SPECIFICATION 652, SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

1. 4" X 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.
2. SIGNAL FACE MOUNTING BRACKETS, MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS - SEC. 658)
3. GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.
4. SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, WITH SELF-TAPPING STAINLESS STEEL SCREWS.
5. POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.
6. TYPE 3 POLE CONFIGURATIONS SHALL BE MOUNTED DIRECTLY TO THEIR CONCRETE BASES.
7. MOUNTING BRACKET NIPPLES FOR THE SIGNAL FACE(S) SHALL BE 2 INCHES IN LENGTH AND 1½ INCHES IN DIAMETER. (SEE STANDARD SPECIFICATION - SECTION 658)
8. VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (1/4 " X ¾" -20 TPI, STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS THE SLIDING TYPE.
9. FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
10. SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN/BRIDGE FOR VERIFICATION AND APPROVAL.



POLE SPLICE DETAIL

TYPE 3 POLE MOUNTING CONFIGURATION

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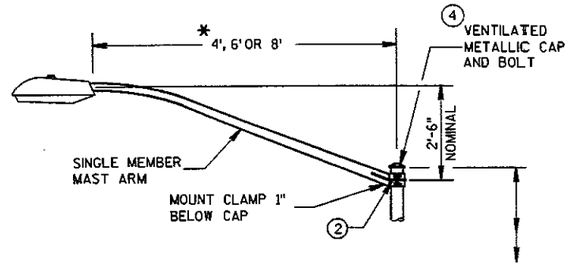
POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY)

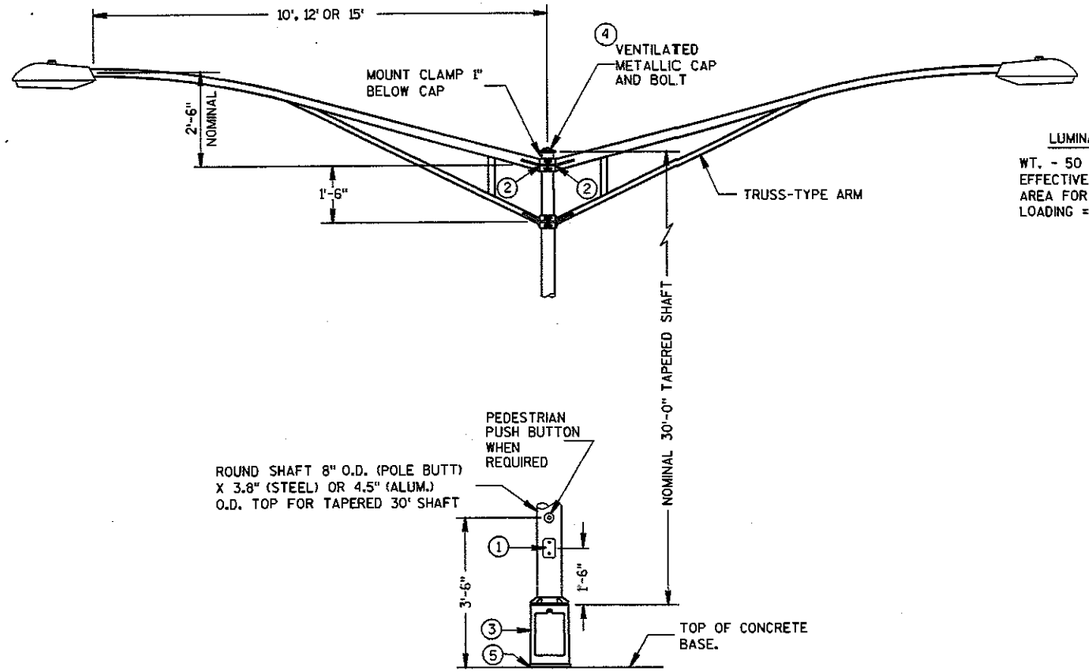
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 9 E 1-4b

S.D.D. 9 E 1-4b

*RISE FOR 4' ARM SHALL BE 2'-0".

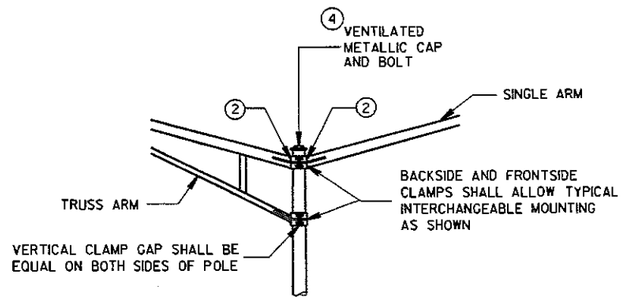




LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED AREA FOR WIND LOADING = 1.5 SQ. FT.

TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY



INTERCHANGEABLE MOUNTING DETAIL

GENERAL NOTES

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

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(L) 4" x 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2.) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

(3.) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4.) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5.) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

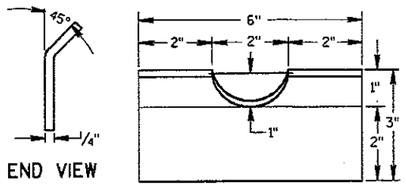
134

POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 9 E 1-4d

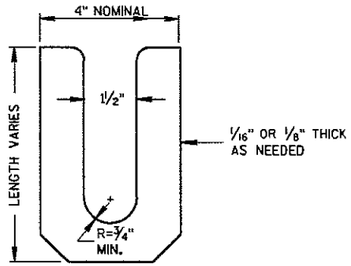
S.D.D. 9 E 1-4d



FRONT VIEW

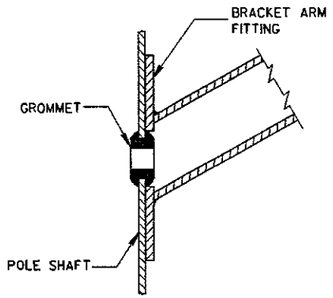
RECTANGULAR CLAMP SHIM

(4 TO A SET)

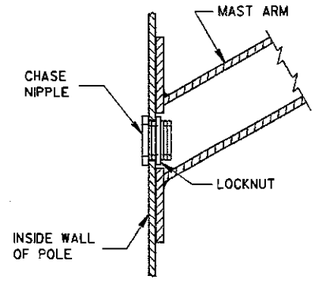


LEVELING SHIM (15)

SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

(12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(13) OUTSIDE SHIM DIAMETER - (4.5" O.D. FOR LUMINAIRE MAST ARM)
(6.625" O.D. FOR TROMBONE MAST ARM)

(14) VARIABLE SHIM THICKNESS - (0.10", 0.25", 0.35", 0.53" OR 0.70")

SHIM THICKNESS FOR TROMBONE MAST ARMS MAY BE TYPICALLY 0.25", 0.35", 0.53" OR 0.70".

SHIM THICKNESS FOR LUMINAIRE MAST ARMS MAY BE TYPICALLY 0.10", 0.25" OR 0.35".

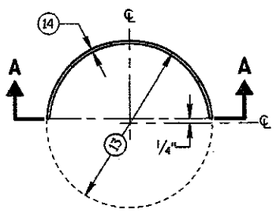
SHIM MATERIAL SHALL BE ALUMINUM ALLOY.

SHIM THICKNESS SHALL BE IMPRESSED INTO EACH SHIM. NUMERALS SHALL BE 1/4" HIGH AND LEGIBLE.

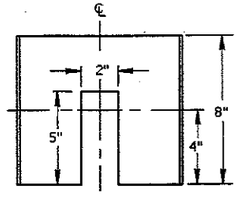
THE CONTRACTOR SHALL SUBMIT TWO COPIES OF ALL SHIM SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL.

(15) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



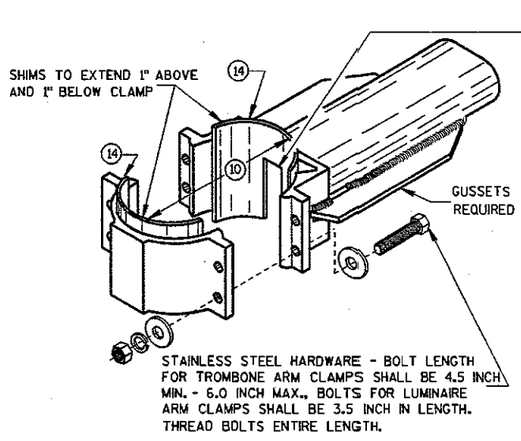
PLAN VIEW



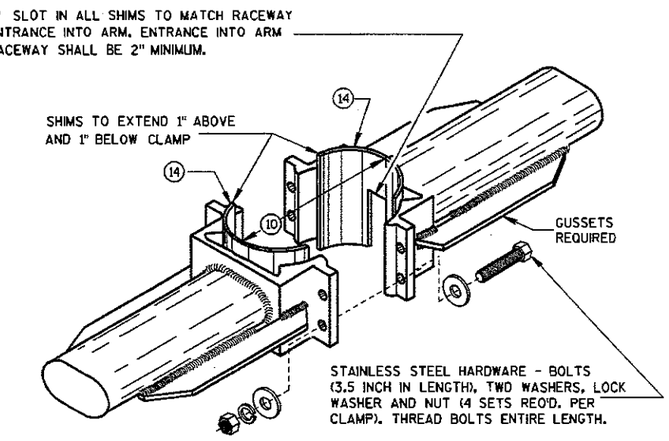
SECTION A-A

CIRCULAR CLAMP SHIM

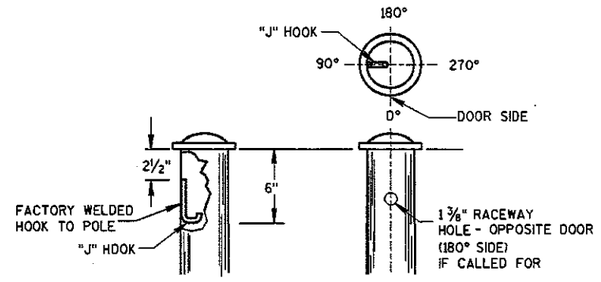
(2 TO A SET)



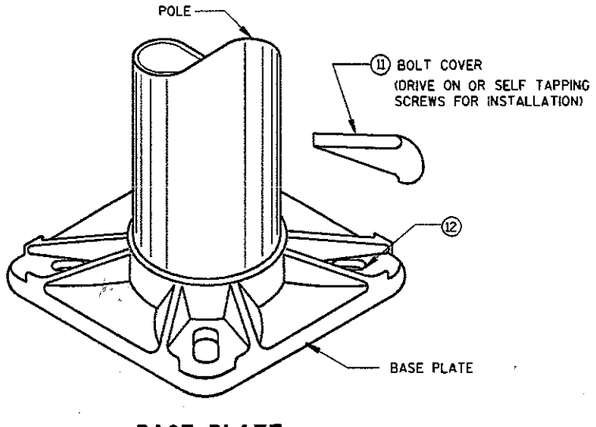
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



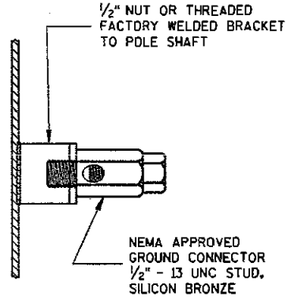
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

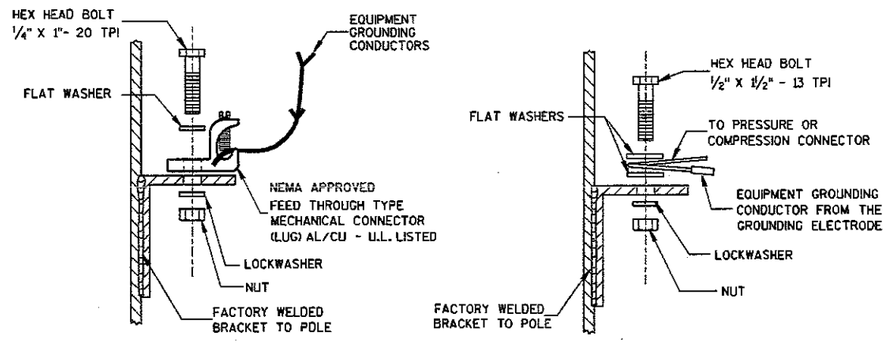


TYPICAL "J" HOOK LOCATION



BASE PLATE





TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

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HARDWARE DETAILS FOR POLE MOUNTINGS

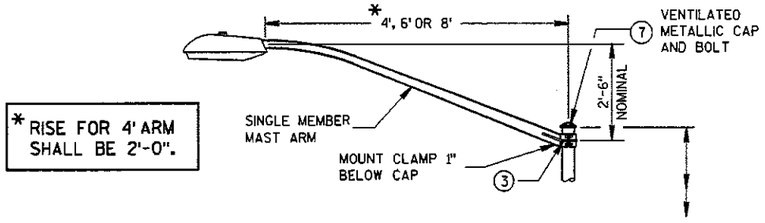
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

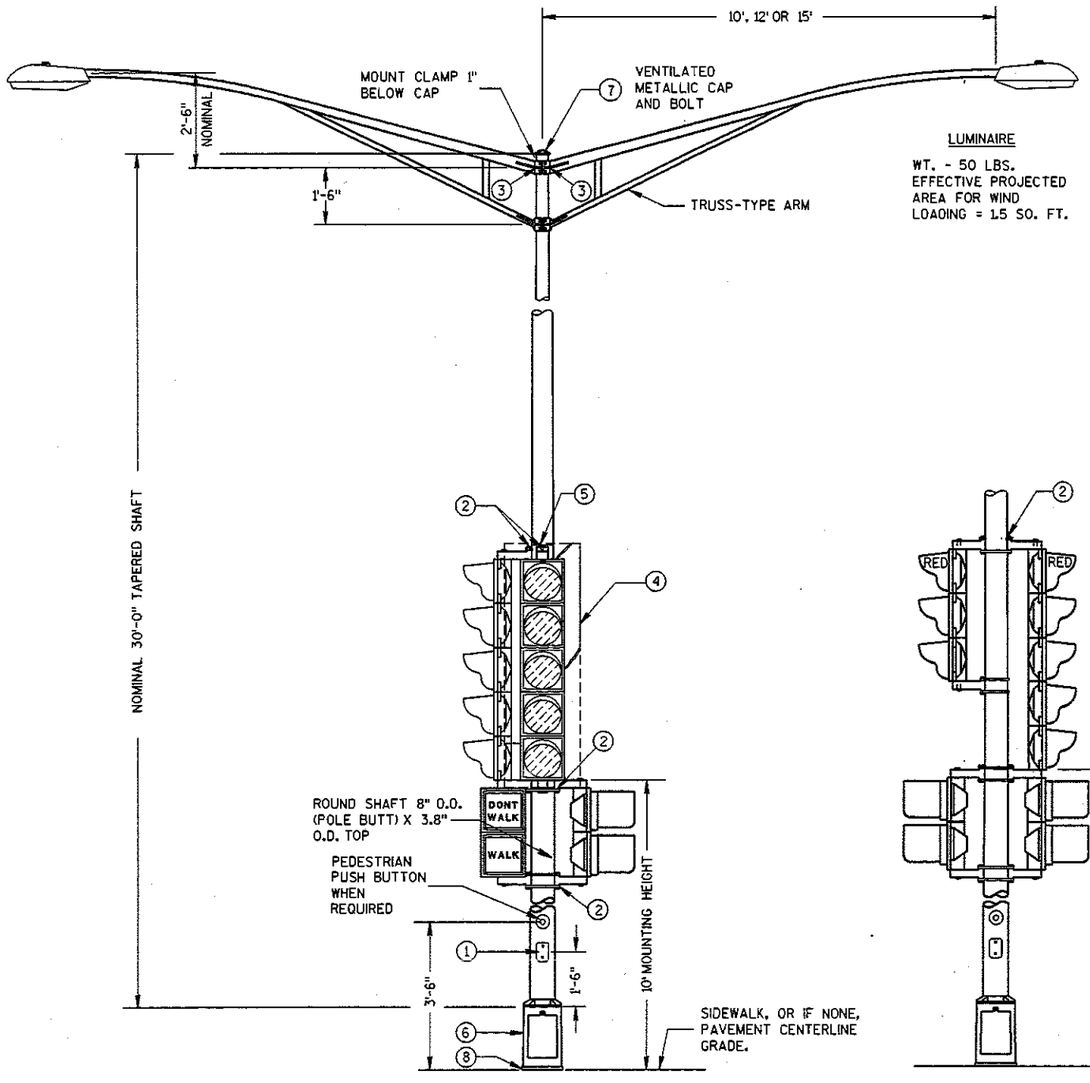
APPROVED 3/05/07 DATE — STATE ELECTRICAL ENGINEER FOR HIGHWAYS

FHWA

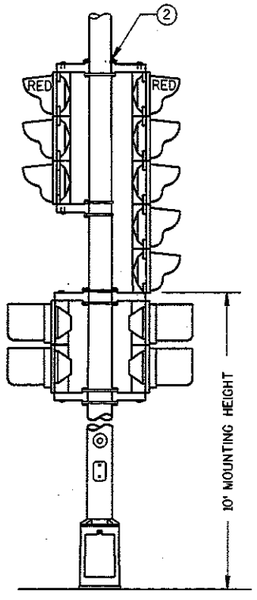
S.D.D. 9 E 1-4g

S.D.D. 9 E 1-4

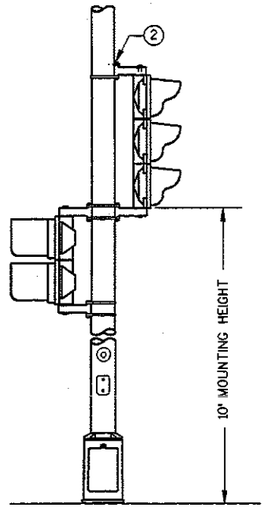




(MAXIMUM LOAD)

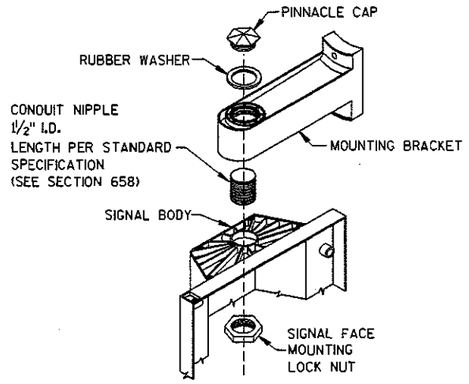


TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE

TYPE 4 POLE MOUNTING CONFIGURATION



SIGNAL FACE MOUNTING DETAIL
(BANDED)

GENERAL NOTES

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

ALL TYPE 4 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL.

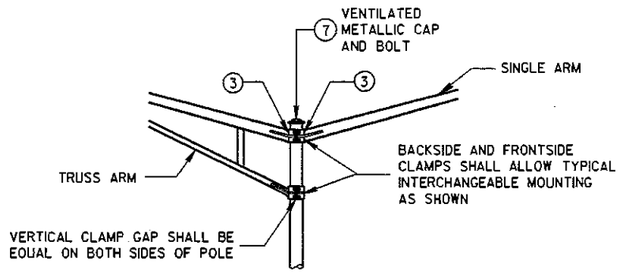
SECTION 657, POLES, OF THE STANOARO SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

THE SLIPFITTER ENO OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

"TYPE 4" SHALL BE INDENT PRINTED WITH 1/2-INCH HIGH FIGURES ON TWO OPPOSITE EDGES OF POLE PLATE.

1. 4" X 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.
2. SIGNAL FACE MOUNTING BRACKETS, MOUNT WITH CAP SCREWS AND BANDING. (SEE STANOARO SPECIFICATIONS - SEC. 658).
3. GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.
4. SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, WITH SELF-TAPPING STAINLESS STEEL SCREWS.
5. POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.
6. CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.
7. FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
8. SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.



INTERCHANGEABLE MOUNTING DETAIL

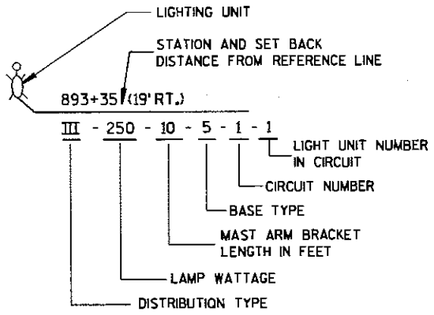
6

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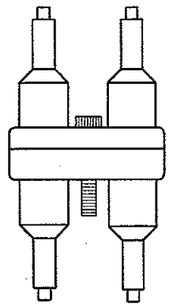
POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

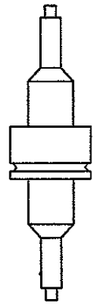
S.D.D. 9 E 1-5c



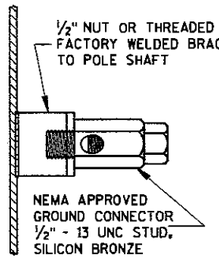
LIGHTING UNIT CODE
(TYPICAL)

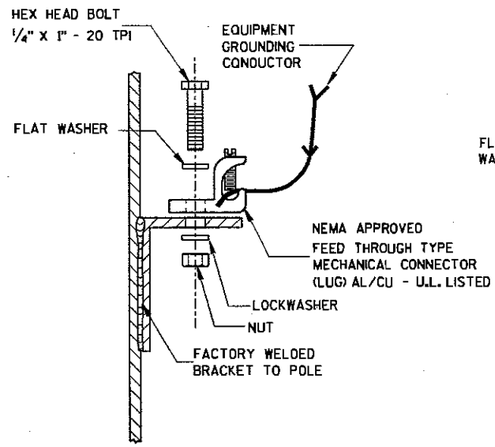


DETAIL "A"
DOUBLE POLE

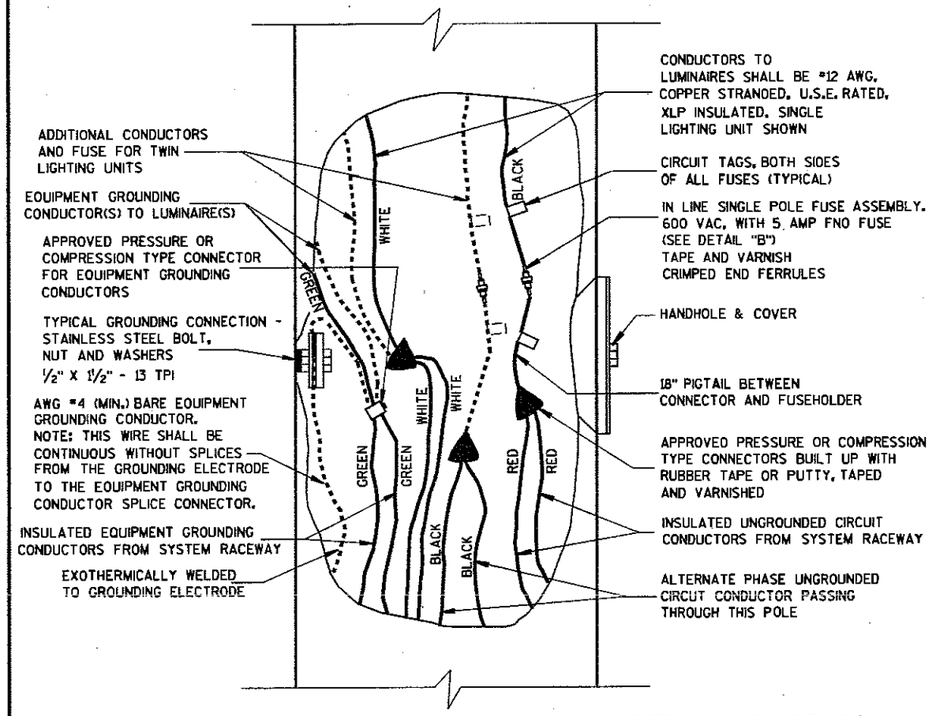


DETAIL "B"
SINGLE POLE

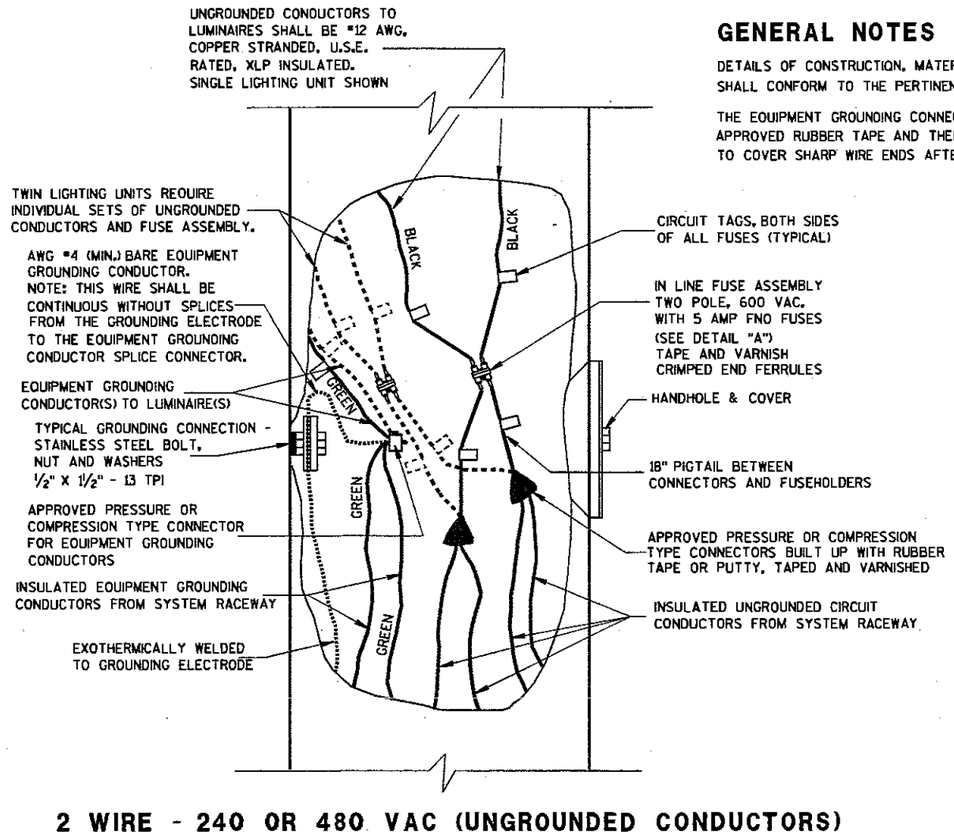




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTOR)
WITH GROUNDED CONDUCTOR AND
WITH EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS)
WITH EQUIPMENT GROUNDING CONDUCTOR

GENERAL NOTES

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

THE EQUIPMENT GROUNDING CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND THEN 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

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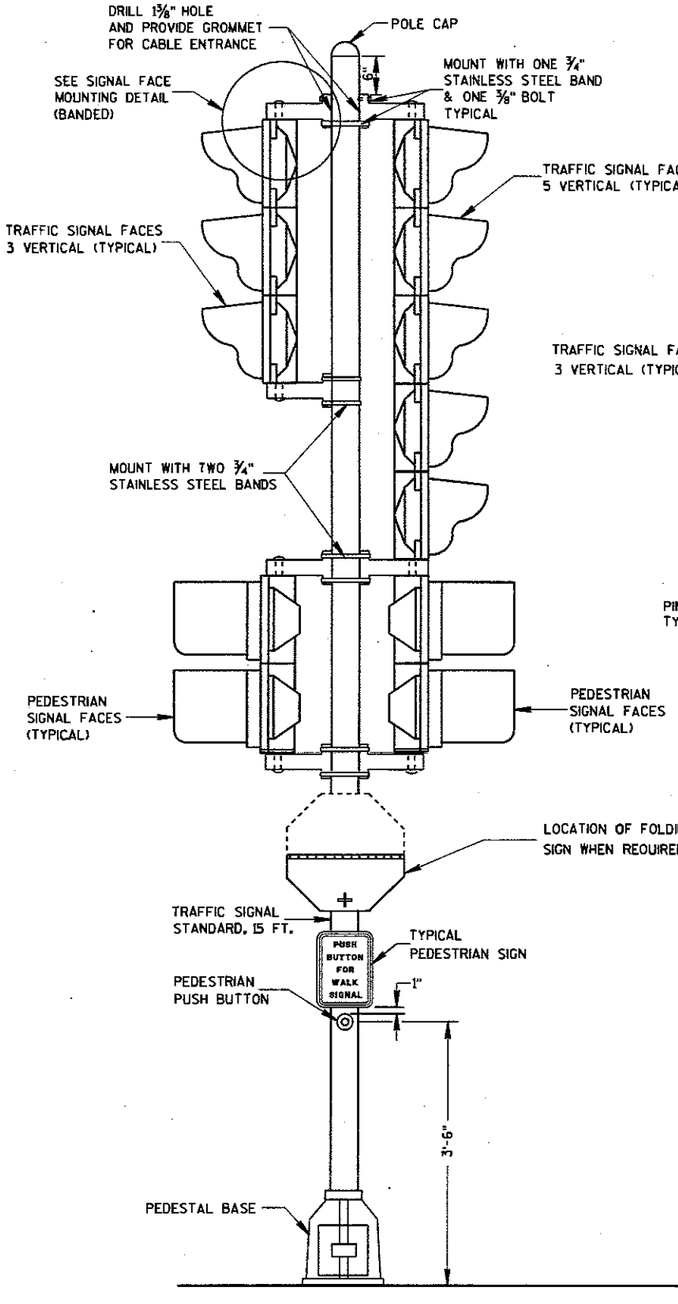
NON-FREEWAY LIGHTING UNIT
POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

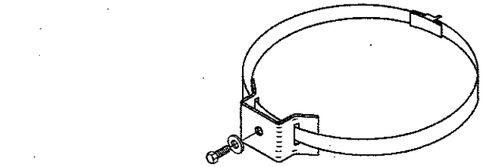
APPROVED
10/21/96
DATE
STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA

S.D.D. 9 E 3-2

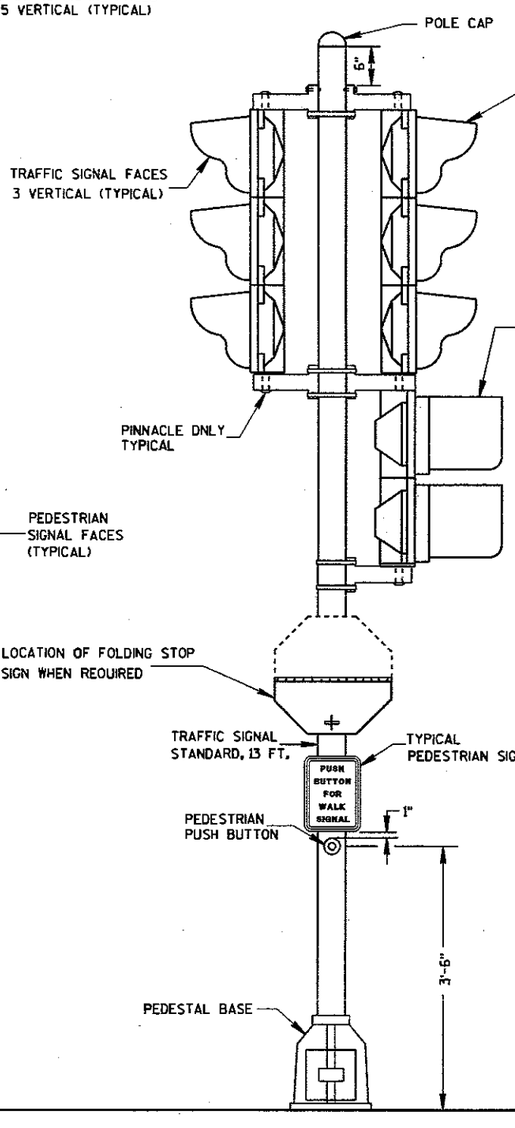
S.D.D. 9 E 3-2



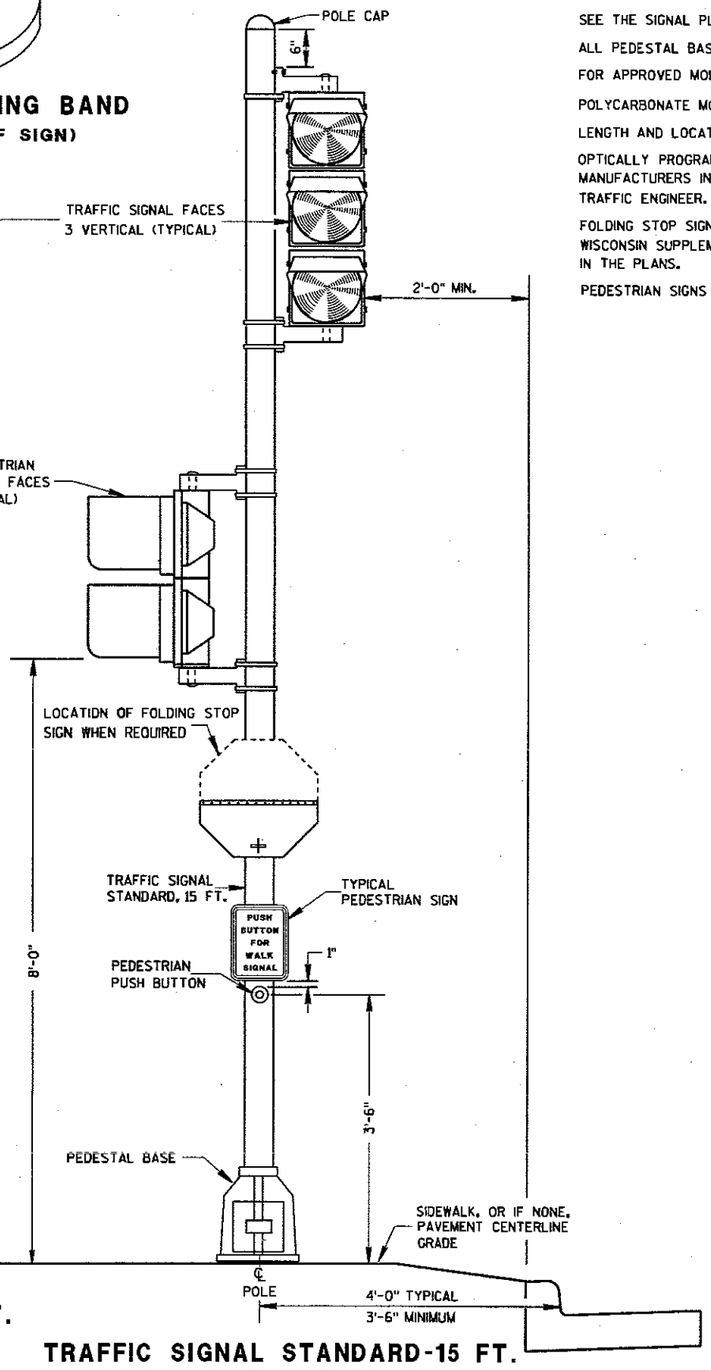
TRAFFIC SIGNAL STANDARD-15 FT.



TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



TRAFFIC SIGNAL STANDARD-13 FT.



TRAFFIC SIGNAL STANDARD-15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

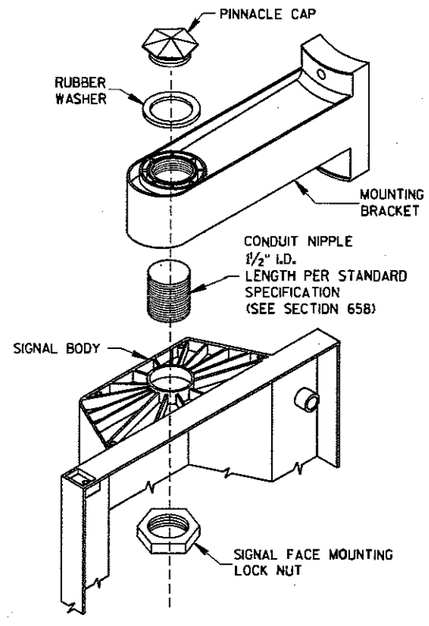
POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE DISTRICT TRAFFIC ENGINEER.

FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.



SIGNAL FACE MOUNTING DETAIL
(BANDED)

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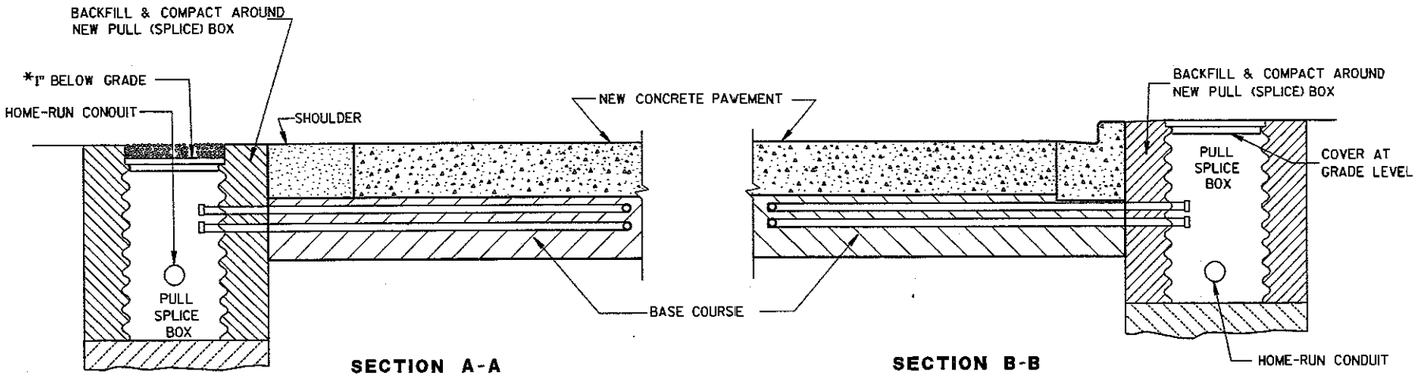
TRAFFIC SIGNAL STANDARD
POLY BRACKET MOUNTINGS (TYPICAL)
13 FT. OR 15 FT.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/21/96
DATE
STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA

S.D.D. 9 E 6-1

S.D.D. 9 E 6-1



SECTION A-A
NO CURB & GUTTER

SECTION B-B
CURB & GUTTER

*RECESS PULL (SPLICE) 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.

LOOP DETECTOR INSTALLATION 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, CONFIGURATION 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 (SPLICE) 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 OHMMETER 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.

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.

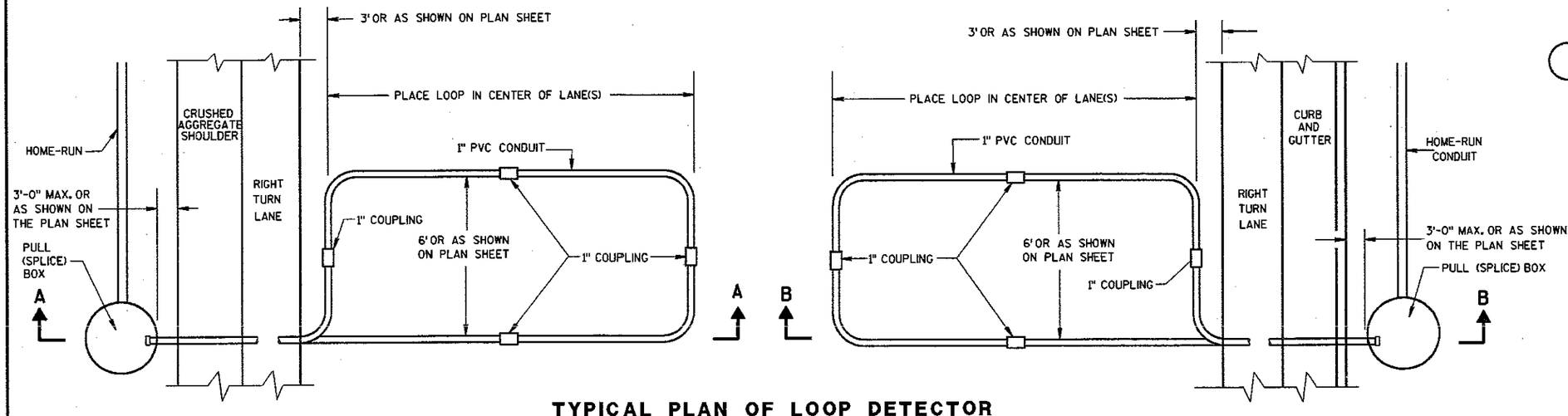
THE #12 AWG. LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

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

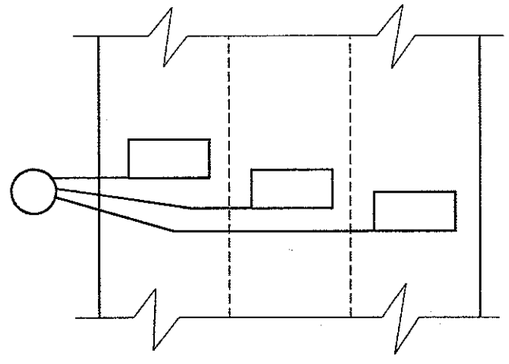
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE, NON-SPLICED CONTINUOUS LENGTH.

PROTECTION OF THE CONDUITS IN THE BASE COURSE SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.



TYPICAL PLAN OF LOOP DETECTOR WITH 24" PULL (SPLICE) BOX



MULTI-LANE INSTLLATION

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LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)

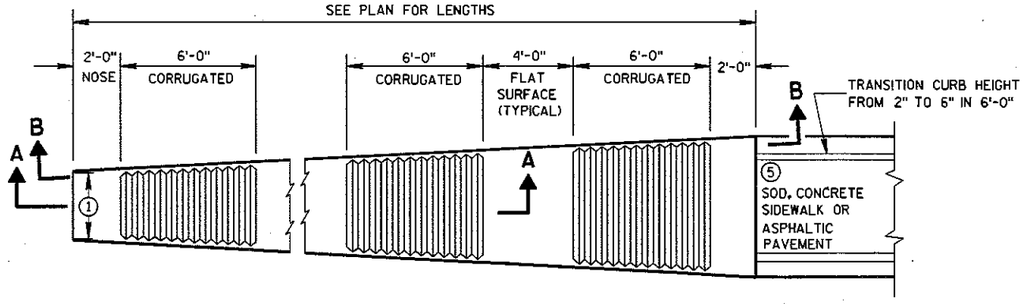
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 6/11/01
DATE
FHWA

STATE ELECTRICAL ENGINEER FOR HIGHWAYS

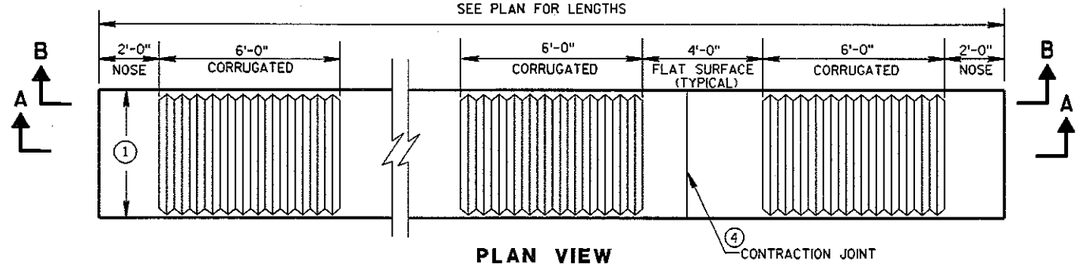
S.D.D. 9 F 15-1

S.D.D. 9 F 15-1b



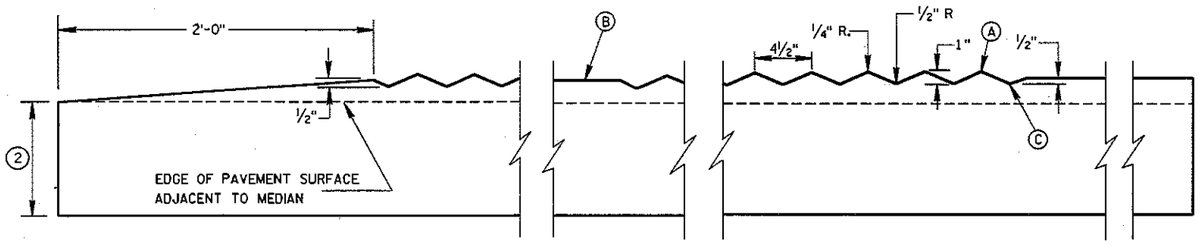
PLAN VIEW

VARIABLE WIDTH CONCRETE CORRUGATED MEDIAN



PLAN VIEW

UNIFORM WIDTH CONCRETE CORRUGATED MEDIAN



SECTION A-A

LONGITUDINAL SECTION

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.

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC FLOWING IN THE SAME DIRECTION NO PAVEMENT MARKING IS APPLIED TO THE CONCRETE CORRUGATED MEDIAN AREA.

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

(1) SEE PLANS FOR CONSTANT OR VARIABLE WIDTH.

(2) THE DEPTH OF THE CONCRETE CORRUGATED MEDIAN SHALL BE 9-INCHES UNLESS SHOWN OTHERWISE IN THE PLAN.

ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN IN THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

(2) ASPHALTIC CONCRETE OVER NEW OR EXISTING CONCRETE BASE COURSE, OR PAVEMENT.

(3) ASPHALTIC PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

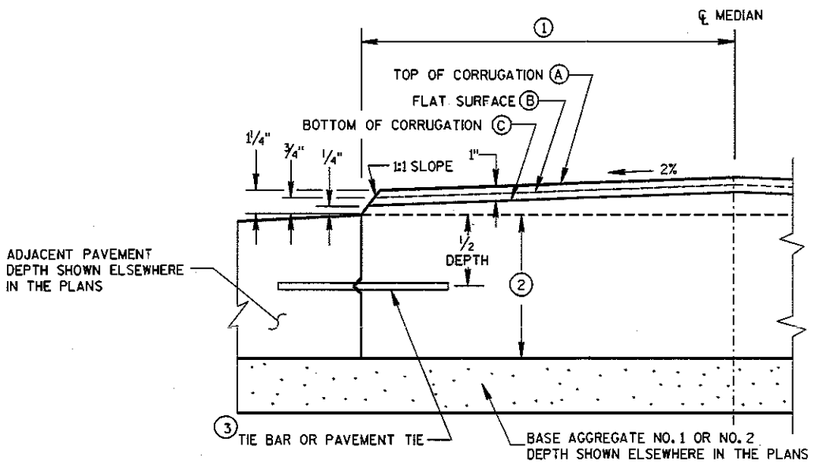
(3) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

INSTALL TIE BARS TO MAINTAIN A MINIMUM OF 3-INCHES OF COVER BETWEEN THE TIE BAR AND THE CONCRETE SURFACE (BOTTOM AND TOP).

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE PAVEMENT OR CONCRETE BASE COURSE, PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

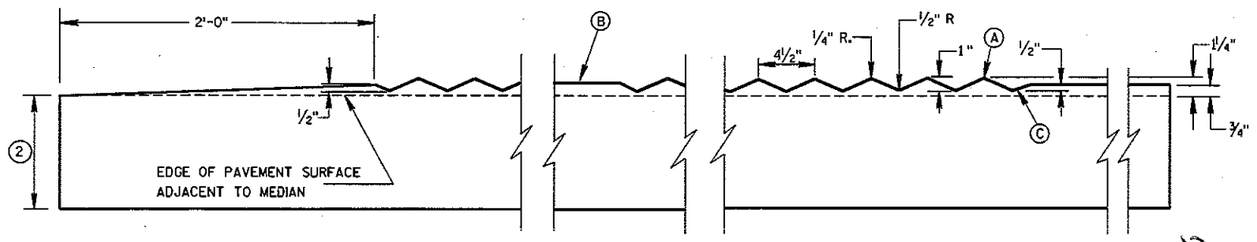
(4) CONCRETE PAVEMENT TRANSVERSE CONTRACTION JOINTS SHALL BE CONSTRUCTED TO MATCH THE JOINTS IN ADJACENT CONCRETE PAVEMENT. WHERE ADJACENT PAVEMENT IS ASPHALT WITH CRUSHED AGGREGATE BASE, TRANSVERSE CONTRACTION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS.

(5) SURFACE TYPE AND DETAILS ARE DEFINED ELSEWHERE IN THE PLAN.



HALF CROSS SECTION

(2) CONCRETE CORRUGATED MEDIAN AND ADJACENT PAVEMENT



SECTION B-B

LONGITUDINAL SECTION

140

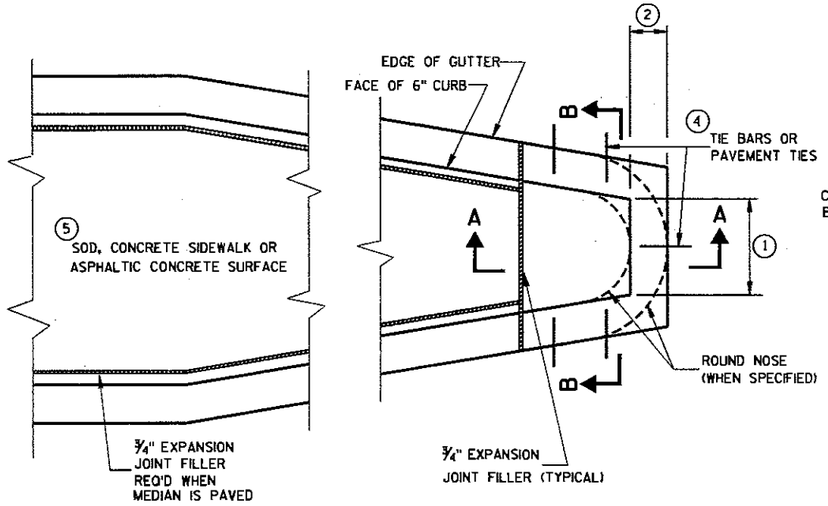
CONCRETE CORRUGATED MEDIAN

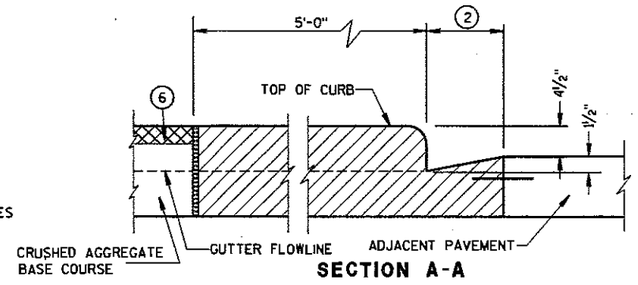
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 6/25/03
DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

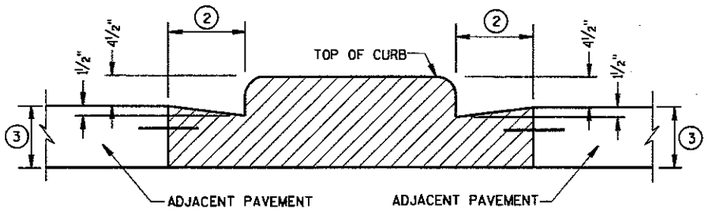
6

S.D.D. 11B 1-4





SECTION A-A



SECTION B-B

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) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

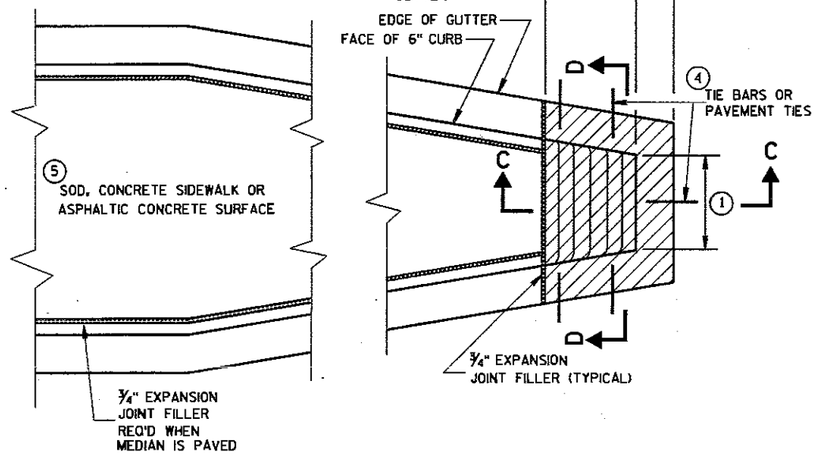
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

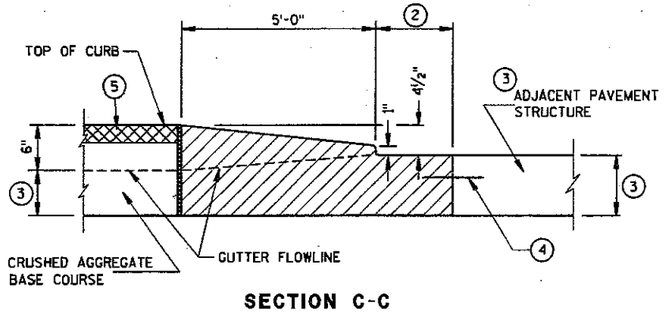
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

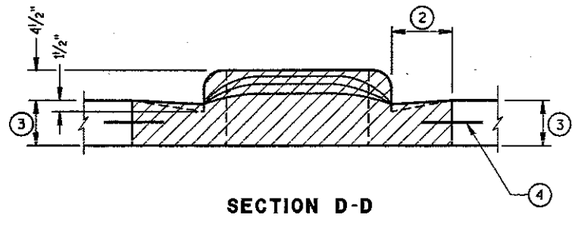
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

CONCRETE MEDIAN BLUNT NOSE DETAIL





SECTION C-C



SECTION D-D

CONCRETE MEDIAN SLOPED NOSE DETAIL

CONCRETE MEDIAN NOSE

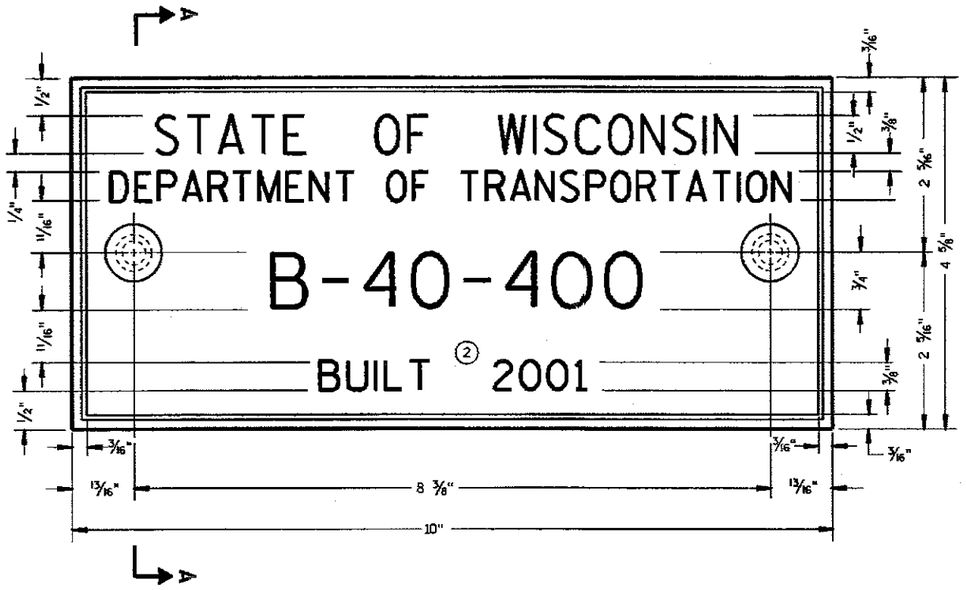
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 07/30/96 DATE — Roy J. Thiessen, CHIEF ROADWAY DEVELOPMENT ENGINEER

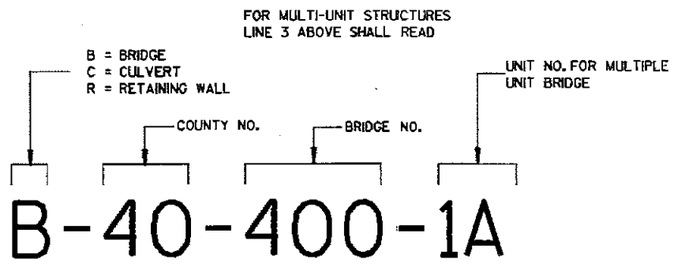
FHWA

S.D.D. 11 B 2-1

S.D.D. 11 B 2-1



TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)



NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

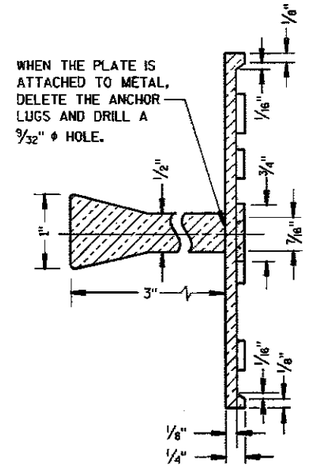
GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 506.2.4 OF THE STANDARD SPECIFICATIONS.

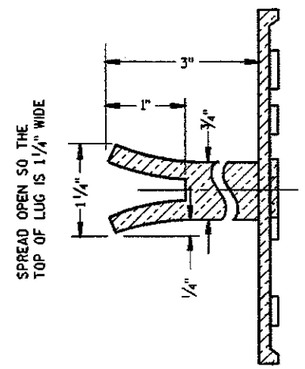
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

① EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

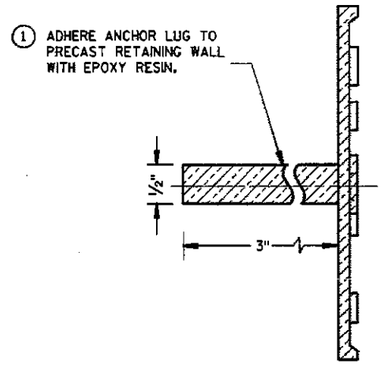
② REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

143

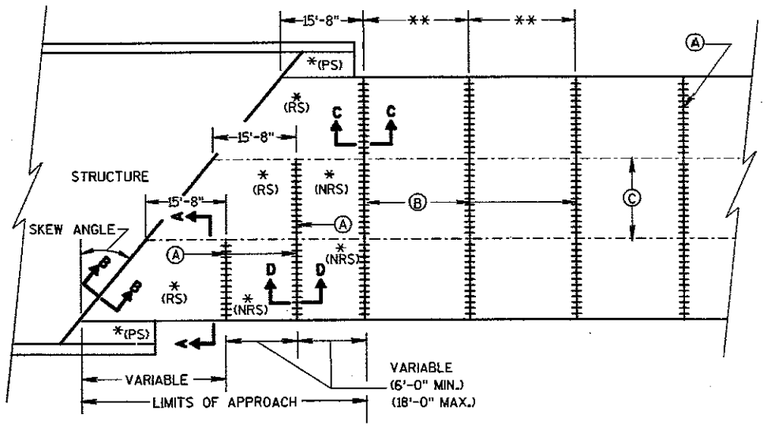
NAME PLATE
(STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

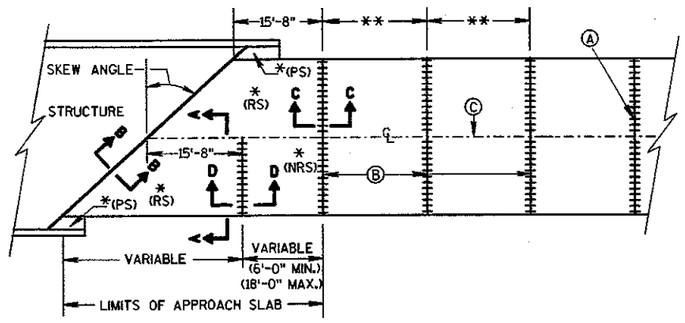
APPROVED
11/29/00 DATE
CHIEF STRUCTURAL DEVELOPMENT ENGINEER
FHWA

S.D.D. 12 A 3-7

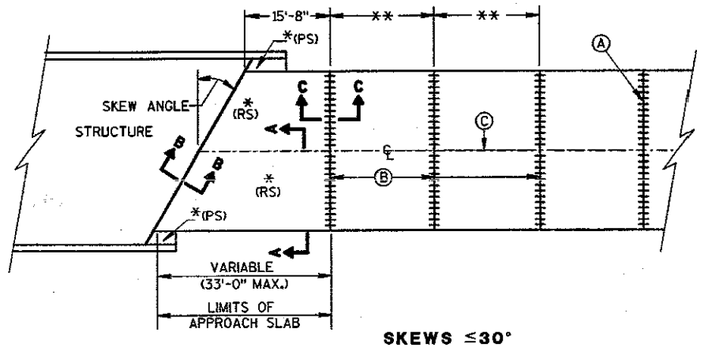
S.D.D. 12 A 3-7



SKEWED PAVEMENT
MORE THAN 2 LANES



SKEWS >30°
(PAVEMENT WIDTH ≤30')



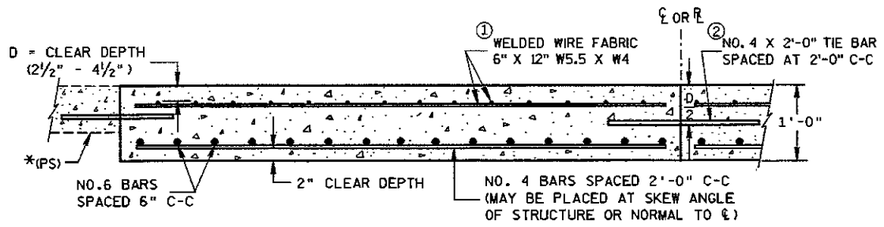
SKEWS ≤30°
(PAVEMENT WIDTH ≤30')

APPROACH SLAB AND ADJACENT PAVEMENT

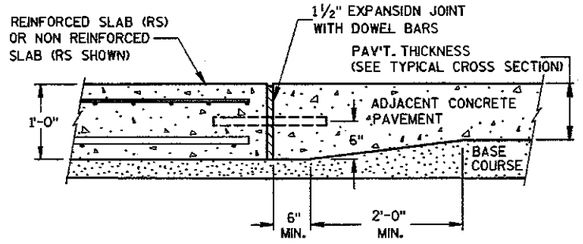
*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER: CONCRETE PAVEMENT, OR CONCRETE SURFACE DRAIN
(SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

**STANDARD TRANSVERSE JOINT SPACING
(SEE SDD 13C11 & SOD 13C12)

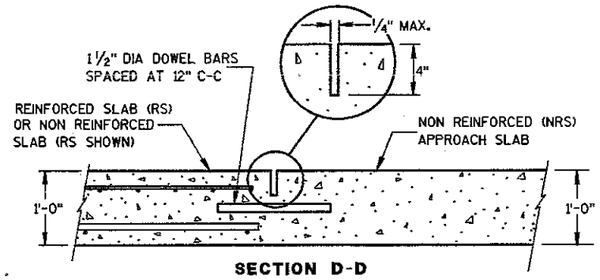
(A) STANDARD CONTRACTION JOINT NORMAL OR SKEWED TO ℄ OR ℄
(B) 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL OR SKEWED TO ℄ OR ℄
(C) STANDARD LONGITUDINAL JOINT AND TIE BARS.



SECTION A-A
REINFORCEMENT POSITIONING DETAIL



SECTION C-C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT



SECTION D-D
CONTRACTION JOINT

GENERAL NOTES

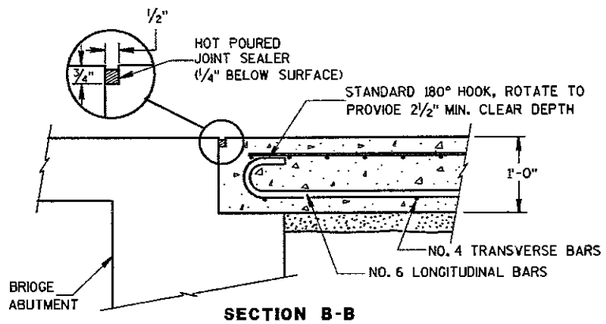
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

DOWEL BARS ARE NOT REQUIRED WHEN THE APPROACH SLAB ABUTS AN ASPHALT PAVEMENT OVER BASE COURSE.

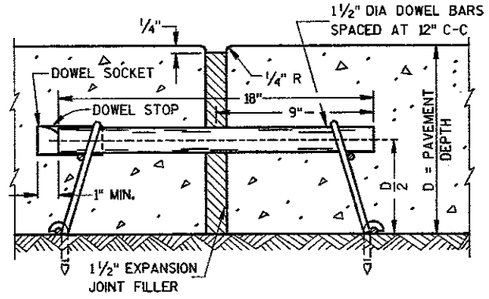
SPLICING OF NO. 6 BARS IN THE APPROACH SLAB IS PERMITTED FOR SKEWED STRUCTURES ONLY. SPLICES SHALL BE STAGGERED, WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP SHALL BE 20 INCHS.

① NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS MAY BE USED FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

② TIE BARS BETWEEN REINFORCED SLABS MAY BE OMITTED WHERE SLAB REINFORCEMENT EXTEND ACCROSS THE CENTERLINE OR REFERENCE LINE.



SECTION B-B
BEND DETAIL
BOTTOM REINFORCEMENT



EXPANSION JOINT

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CONCRETE PAVEMENT
APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10-14-99
DATE
CHIEF PAVEMENTS & RESEARCH ENGINEER
FHWA

S.D.D. 13 B 2-4

S.D.D. 13 B 2-4

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.

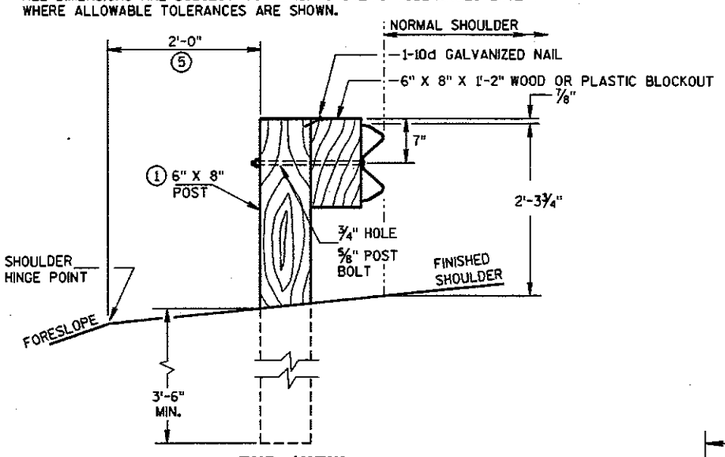
(5) WHEN SPECIFIED IN THE PLANS, THE 2-FOOT MINIMUM TO HINGE POINT MAY BE REDUCED OR ELIMINATED IF EXISTING CONDITIONS DO NOT PERMIT THE DESIRABLE EARTHWORK.

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

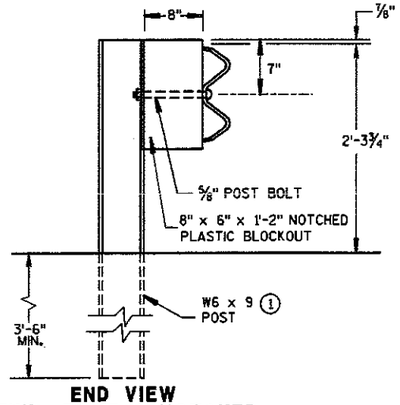
(6) IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2½ INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN THE HOLE. BACKFILL WITH MATERIAL EXCAVATED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

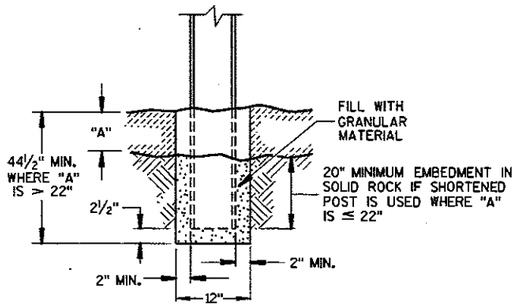
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



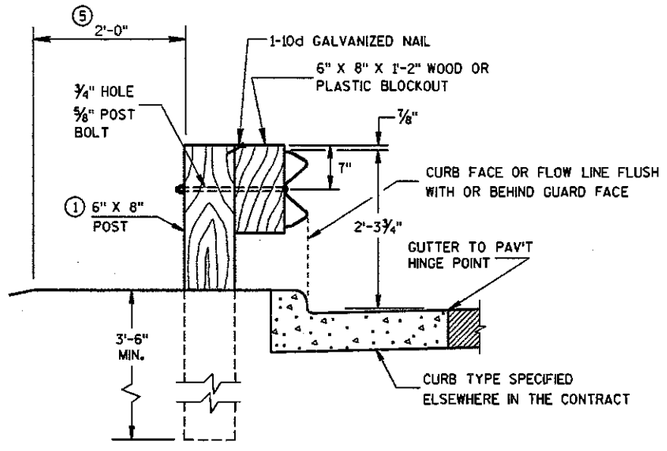
END VIEW
LOCATED ALONG A ROADWAY SHOULDER



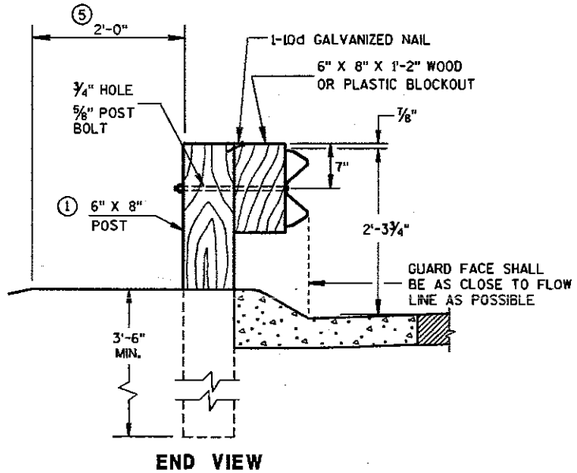
END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE



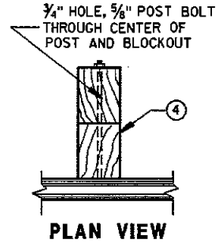
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (6)



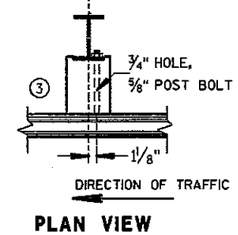
END VIEW
LOCATED ALONG A CURBED ROADWAY



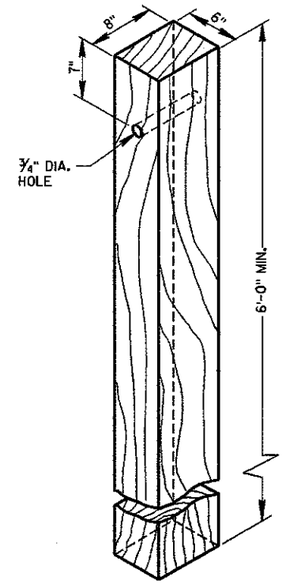
END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY



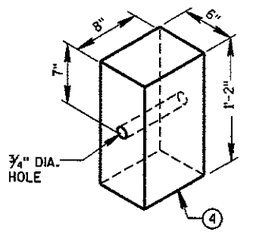
PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



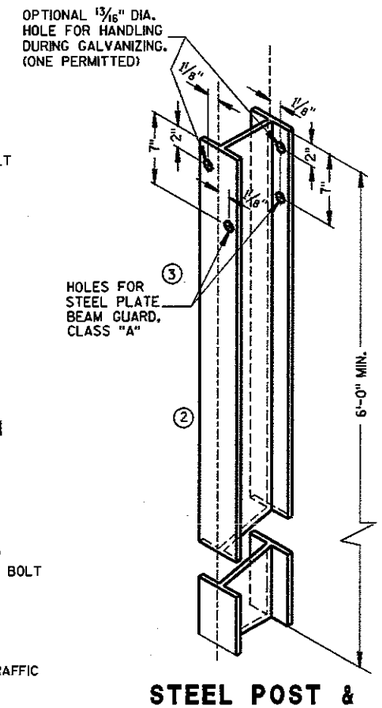
PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM



WOOD POST
(6"X8") NOMINAL

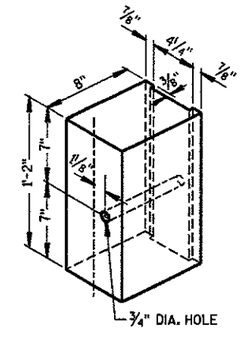


WOOD OR PLASTIC
BLOCKOUT FOR WOOD POSTS



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

ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED



NOTCHED PLASTIC BLOCKOUT
FOR STEEL POSTS

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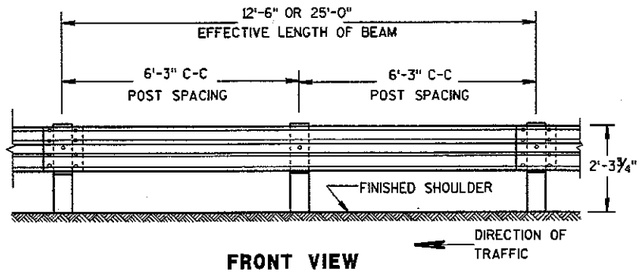
STEEL PLATE BEAM GUARD,
CLASS "A"
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

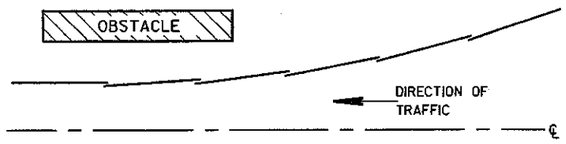
S.D.D. 14 B 15-4a

TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

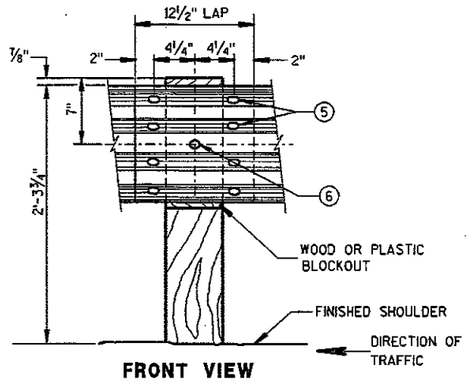
S.D.D. 14 B 15-4a



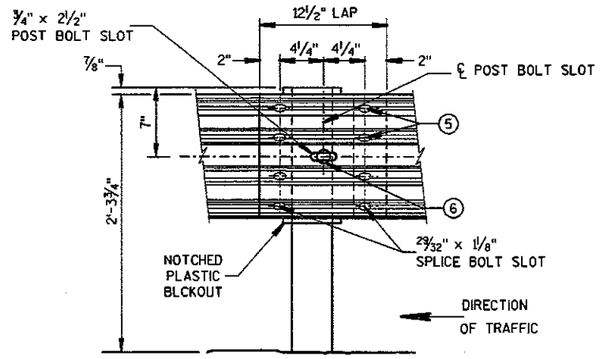
FRONT VIEW



PLAN VIEW
BEAM LAPPING DETAIL



FRONT VIEW
BEAM SPLICE AT WOOD POST
AND POST MOUNTING DETAIL

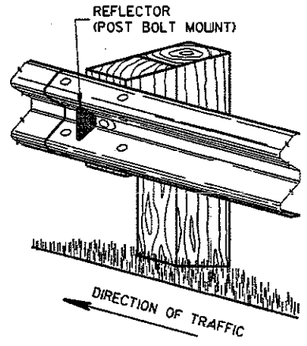


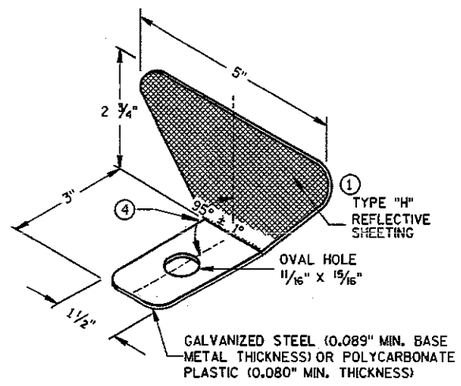
FRONT VIEW
BEAM SPLICE AT STEEL POST

TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD

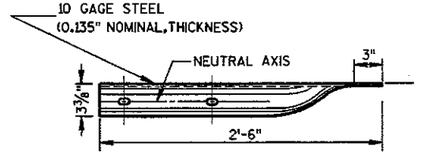
REFLECTOR SPACING ②

	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 ④	3
	> 200'	100' C-C	2	

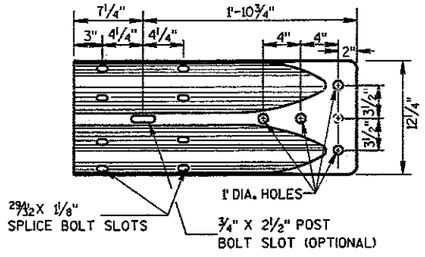




ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION ①



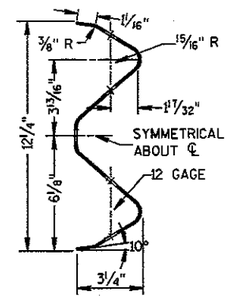
PLAN VIEW



FRONT VIEW

W BEAM TERMINAL CONNECTOR

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)



SECTION THRU W BEAM

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.

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

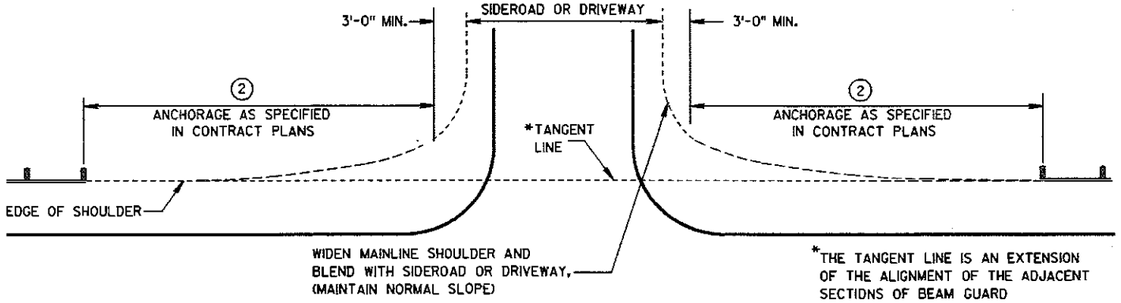
APPROVED
12/08/00
DATE

CHIEF ROADWAY DEVELOPMENT ENGINEER

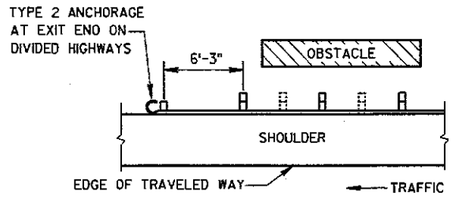
FHWA

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.

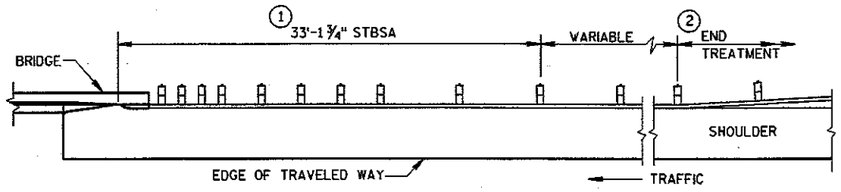
THE LOCATIONS AND LENGTHS OF BEAM GUARD ARE SHOWN ELSEWHERE IN THE PLAN.

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

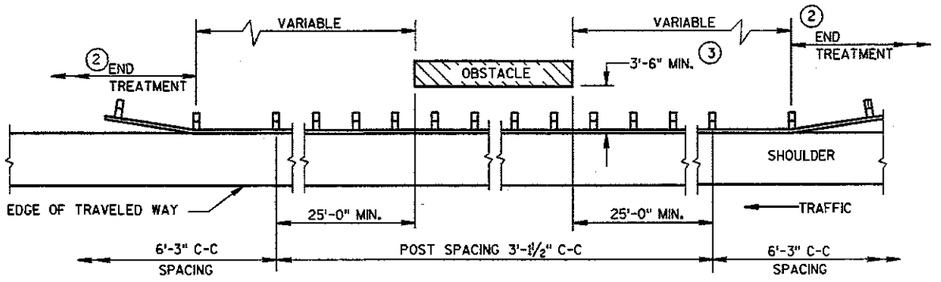
(2) USE AN APPROVED END TREATMENT FOR THE TRAFFIC APPROACH SIDE OF BRIDGE/OBSTACLES. USE TYPE 2 ANCHORAGE ONLY AT THE OOWNSTREAM ENDS OF BEAM GUARD LOCATED ALONG ROADWAYS WITH ONE WAY TRAFFIC.

(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"

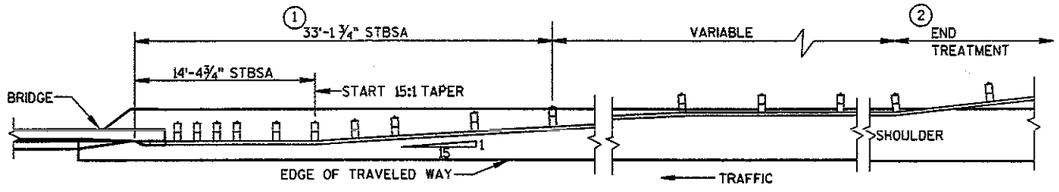


BEAM GUARD AT FULL WIDTH BRIDGES



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)

1442

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

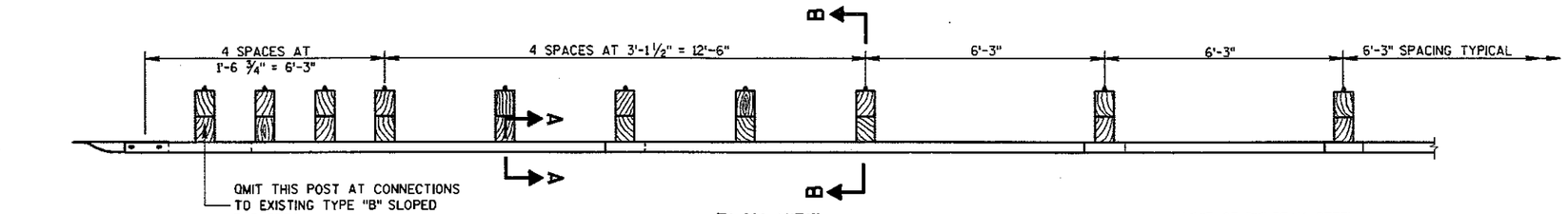
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 12/08/00 DATE
John Haverberg
CHIEF ROADWAY DEVELOPMENT ENGINEER

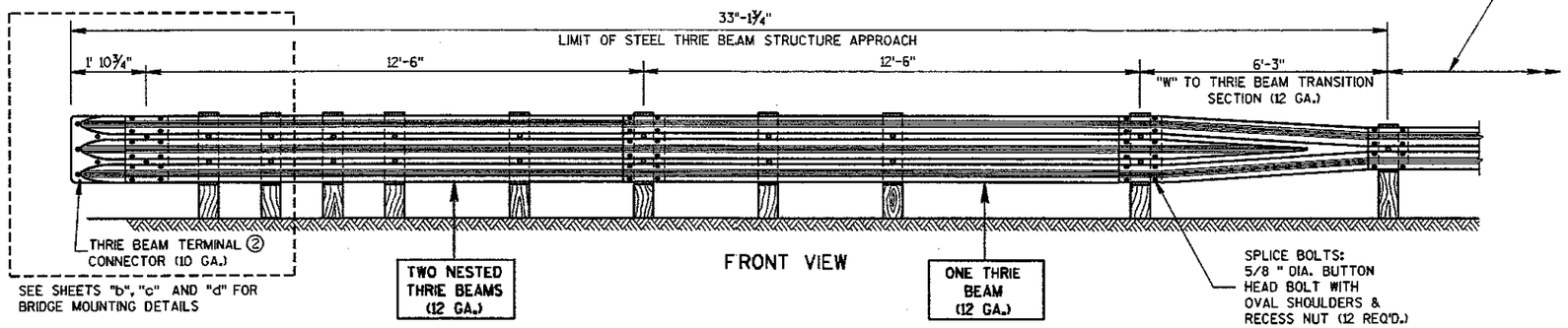
FHWA

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

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



PLAN VIEW



FRONT VIEW

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.

FURNISH AND CONSTRUCT THRIE BEAM STRUCTURAL APPROACH ACCORDING TO THE REQUIREMENTS OF SECTION 614 OF THE STANDARD SPECIFICATIONS. THRIE BEAM SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO DESIGNATION M180, CLASS "A", TYPE 2.

BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3.

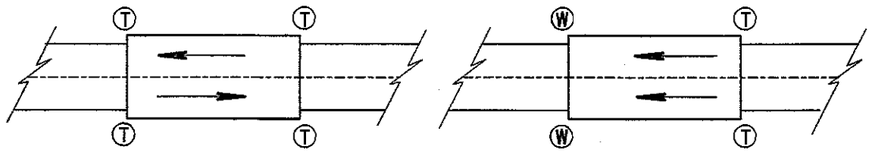
DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.

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 THE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATELY.

① INCREASE POST LENGTH TO PROVIDE A MINIMUM EMBEDMENT OF 4'-0" IF THE SHOULDER HINGE POINT IS LOCATED IN FRONT OF THE POST.

② BRIDGE RAILING TYPE "W" DO NOT REQUIRE A TERMINAL CONNECTOR.

③ WHEN SPECIFIED IN THE PLANS, THE CONTRACTOR MAY REDUCE OR ELIMINATE THE 2 FOOT MINIMUM TO HINGE POINT IF EXISTING CONDITIONS DO NOT PERMIT THE DESIRABLE EARTHWORK.

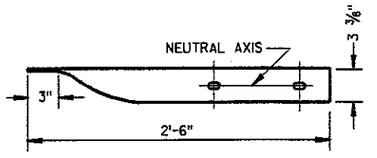


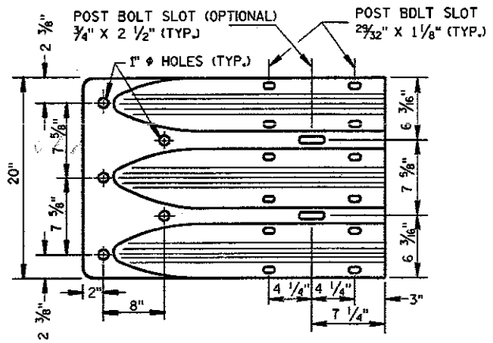
TWO WAY TRAFFIC ONE WAY TRAFFIC

Ⓣ THRIE BEAM CONNECTION

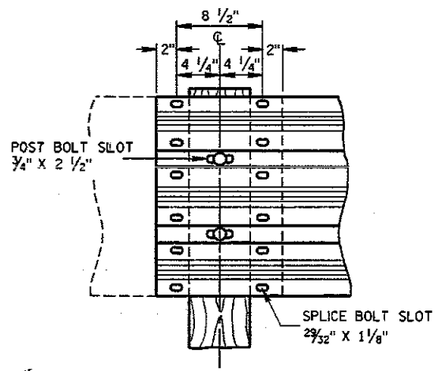
Ⓦ W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

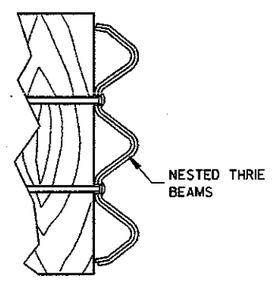




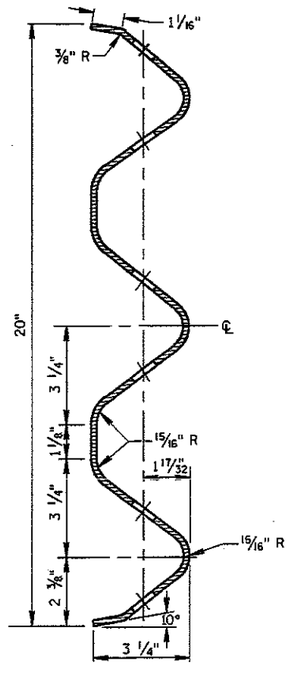
THRIE BEAM TERMINAL CONNECTOR



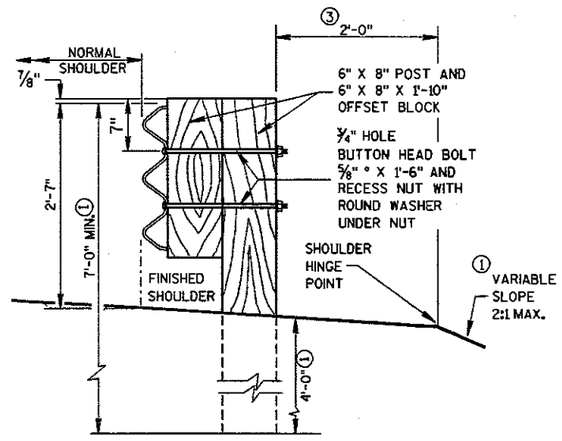
THRIE BEAM SPLICE



PARTIAL SECTION A-A



SECTION THRU THRIE BEAM RAIL ELEMENT



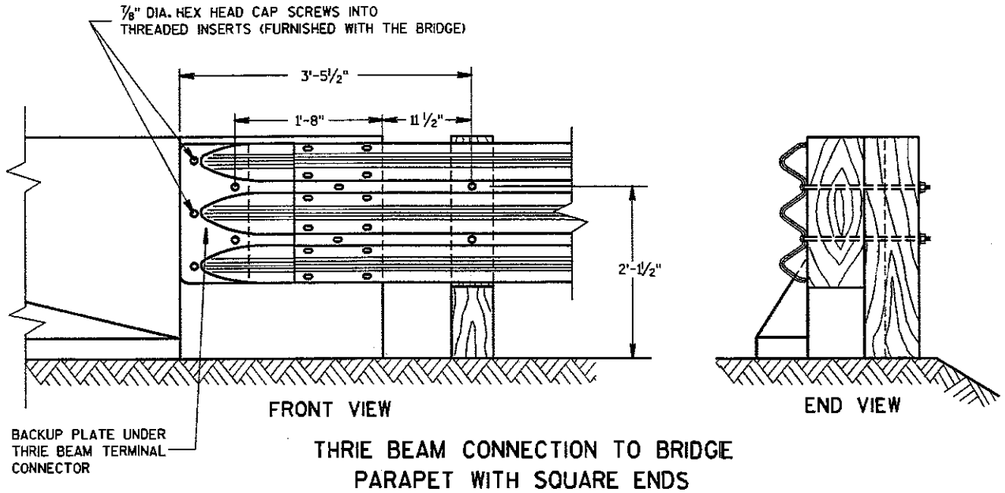
SECTION B-B

STEEL THRIE BEAM STRUCTURE APPROACH

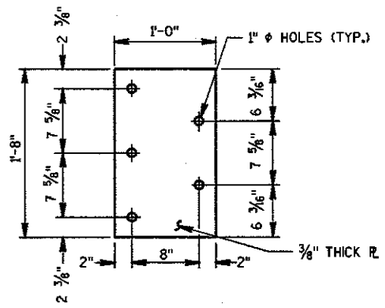
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 14 B 20-5c

S.D.D. 14 B 20-5c



THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS



② BACKUP PLATE DETAIL

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

BOLTS, PLATES, NUTS AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION A 325, AND BE GALVANIZED IN ACCORDANCE WITH ASTM A 153.

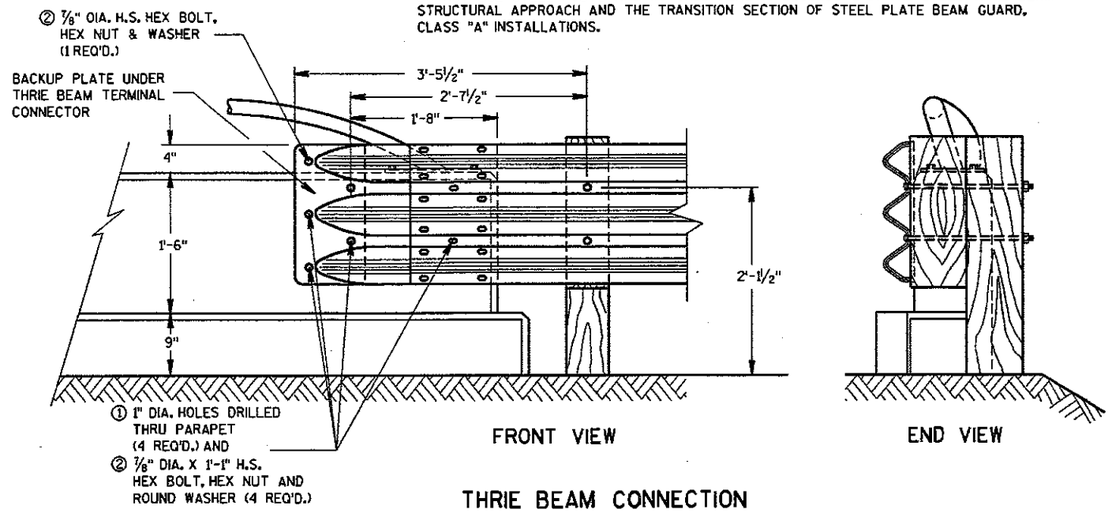
① INCLUDE THE PAYMENT FOR DRILLING BOLT HOLES THROUGH THE PARAPET, AND THE BACKUP PLATE AND ALL BOLTS, NUTS AND WASHERS IN THE ITEM "STEEL THRIE BEAM STRUCTURAL APPROACH".

② EACH BOLT AT THE BACK FACE OF THE PARAPET REQUIRES A HARDENED ROUND STEEL WASHER WITH A 2 ¼" O.D. X 5/32" THICK.

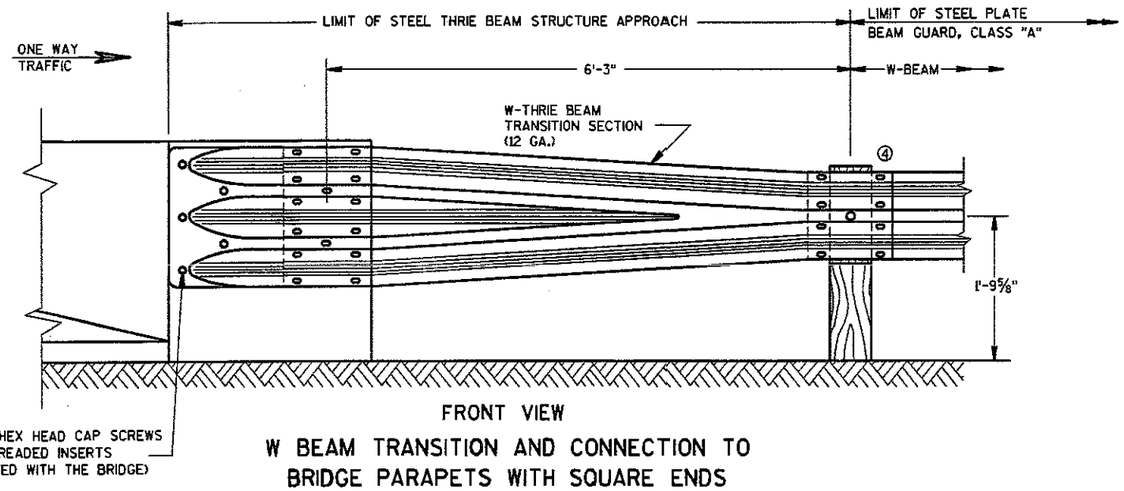
③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

④ W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POST WITH WDDD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.



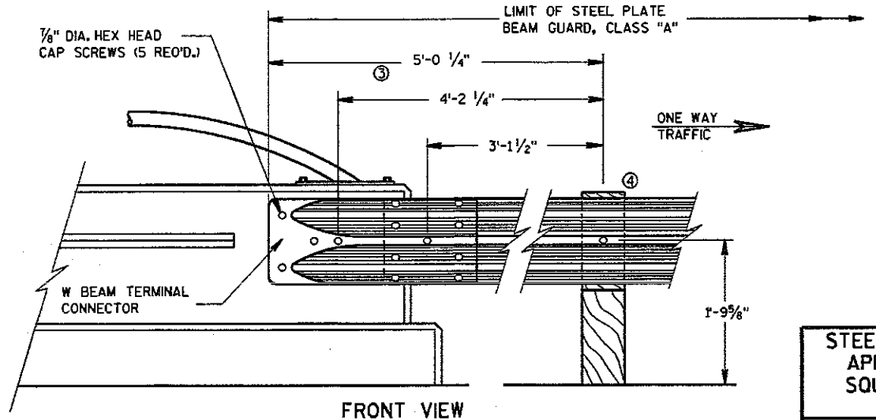
THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

1149

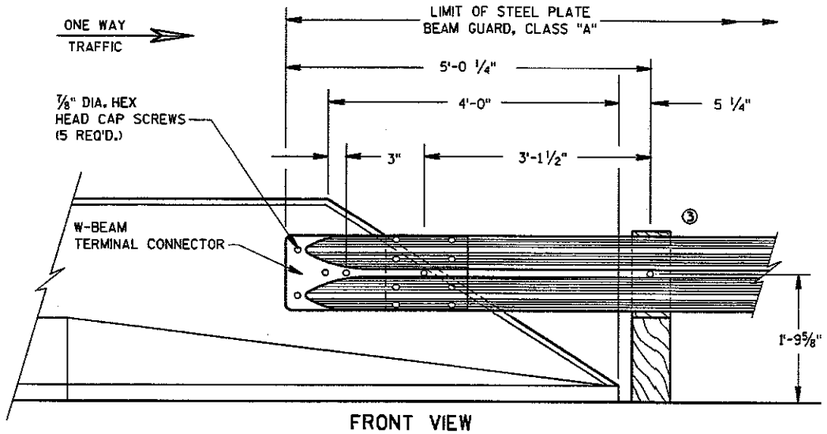
STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SQUARE END AND VERTICAL FACED PARAPETS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

S.D.D. 14 B 20-5b

S.D.D. 14 B 20-5b



FRONT VIEW
W BEAM CONNECTION TO
PARAPETS WITH SLOPED ENDS
(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

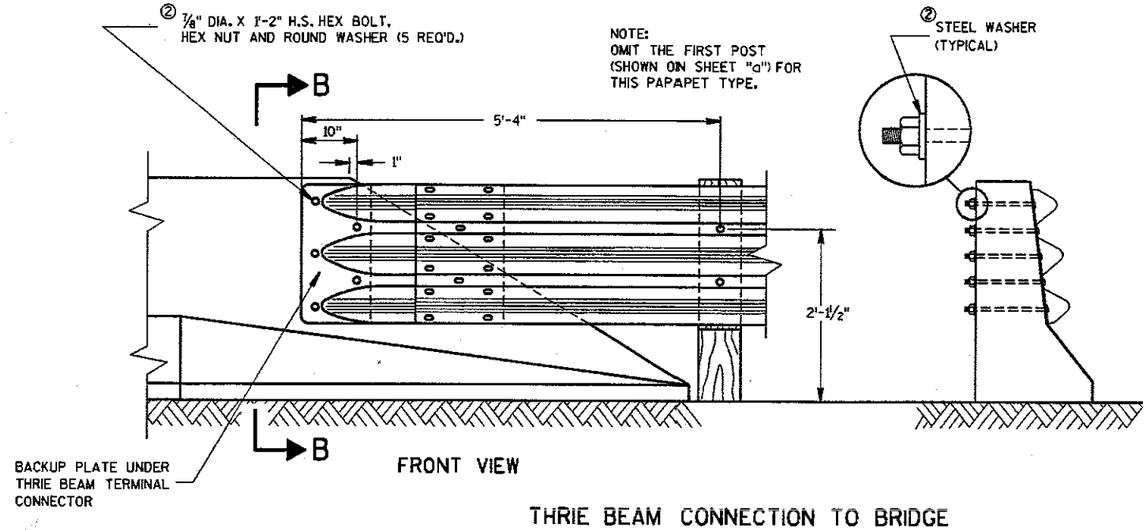
BOLTS, PLATES, NUTS AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION A 325, AND BE GALVANIZED IN ACCORDANCE WITH ASTM A 153.

① INCLUOE THE PAYMENT FOR DRILLING BOLT HOLES THROUGH THE PARAPET, AND THE BACKUP PLATE AND ALL BOLTS, NUTS AND WASHERS IN THE ITEM "STEEL THRIE BEAM STRUCTURAL APPROACH".

② EACH BOLT AT THE BACK FACE OF THE PARAPET REQUIRES A HARDENED ROUND STEEL WASHER WITH A 2 1/4" O.D. X 5/32" THICK.

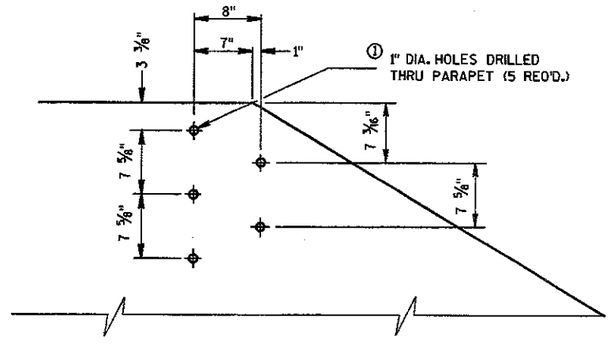
③ W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POST WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

OO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.



FRONT VIEW

THRIE BEAM CONNECTION TO BRIDGE
PARAPETS WITH SLOPED ENDS



DRILL HOLE LOCATION AND PATTERN
FOR THRIE BEAM CONNECTION

149

STEEL THRIE BEAM STRUCTURE
APPROACH, CONNECTION TO
SLOPED END PARAPETS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

S.D.D. 14 B 20-5c

S.D.D. 14 B 20-5c

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 AND ET-2000 PLUS
(12)	3	STEEL PLATE BEAM: 12 GA. 13'-6½"
(13)	1	ET-2000/ET-2000 PLUS GUARDRAIL EXTRUDER OR SKT-350 IMPACT HEAD: AS FURNISHED BY MANUFACTURER
(14)	1	REFLECTIVE SHEETING: 18" X 18"

GENERAL NOTES

(A) USE 3:1 OR FLATTER SLOPE FOR INSTALLATION ON EXISTING HIGHWAYS.

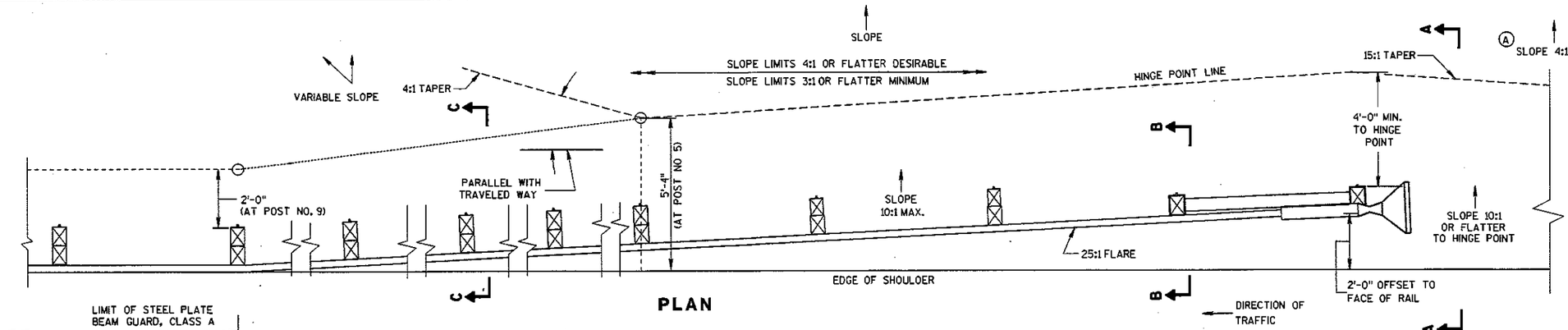
(B) DO NOT ATTACH GUARDRAIL TO POST BLOCKS AT POSTS NO. 3, 5 & 7.

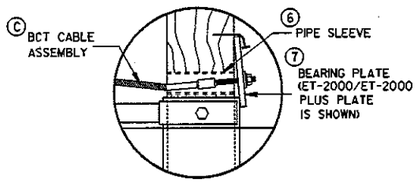
(C) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.

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

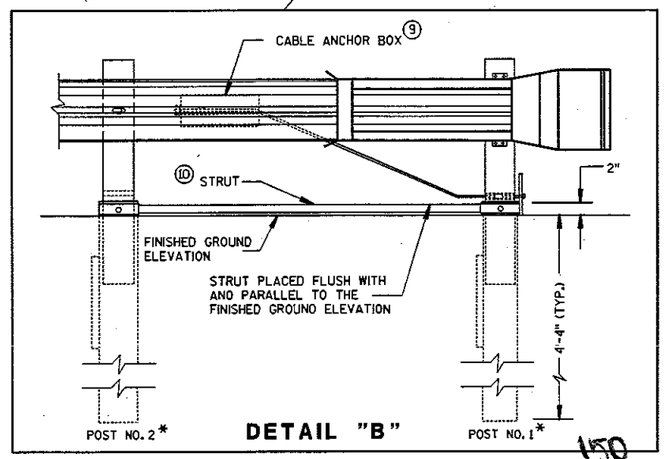
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

*DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

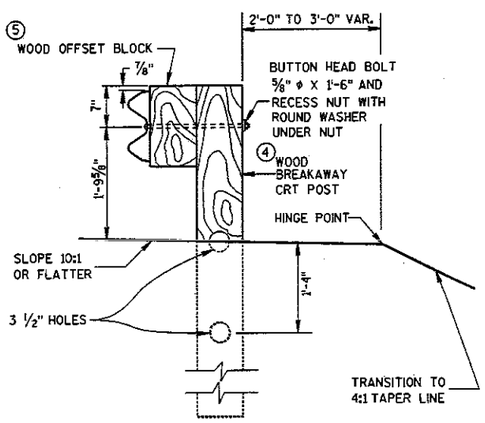




DETAIL "A"

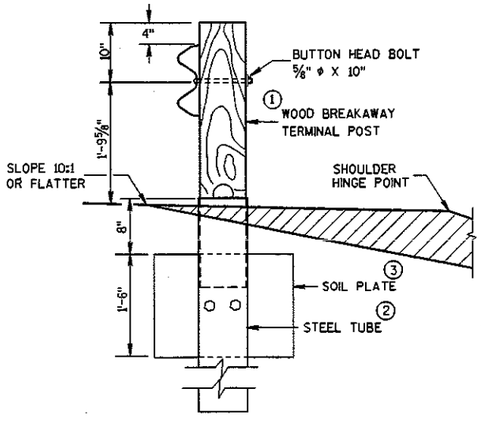


DETAIL "B"



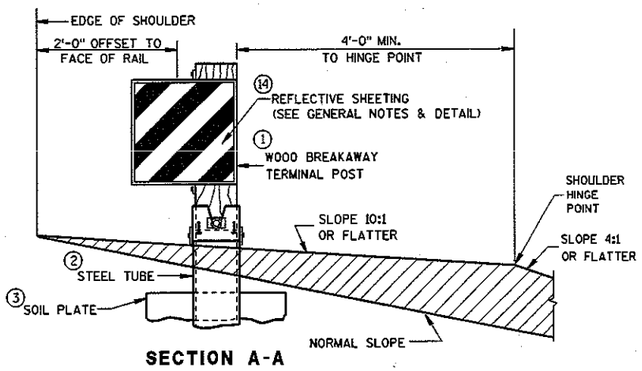
SECTION C-C

TYPICAL AT POST NOS. 4, 6, 8



SECTION B-B

TYPICAL AT POST NO. 2*



SECTION A-A

TYPICAL AT POST NO. 1*

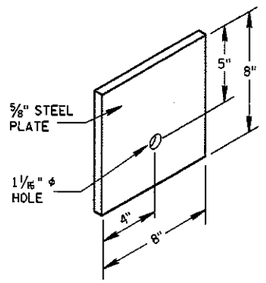
STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

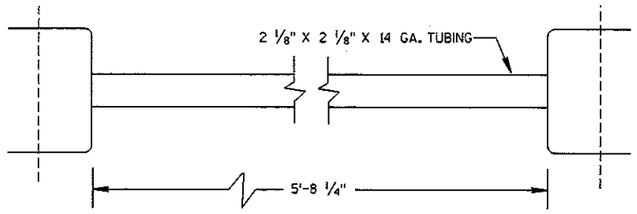
S.D.D. 14 B 24-4a

6

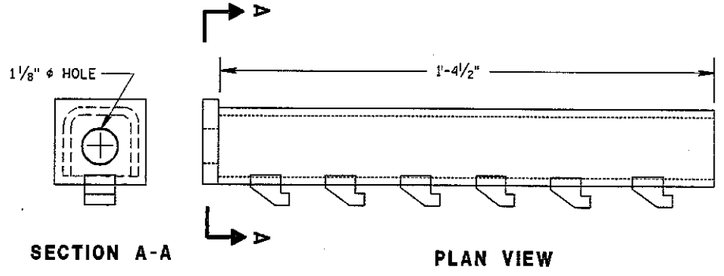
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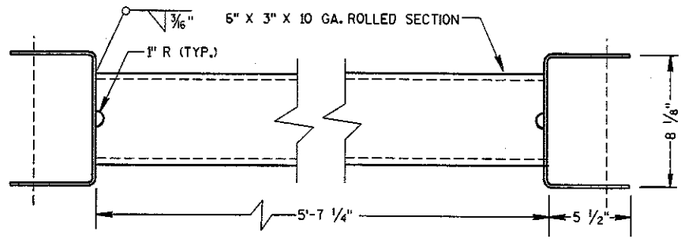
STEEL BEARING PLATE (SKT-350)



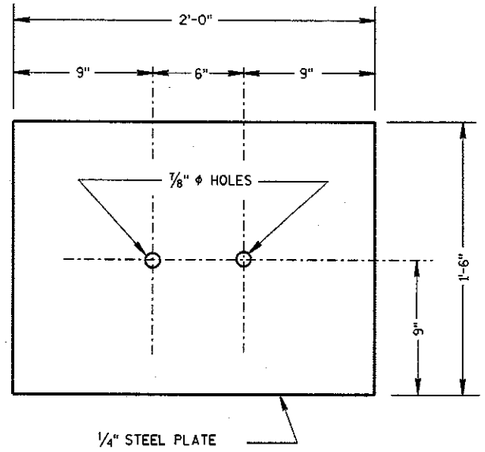
STRUT DETAIL (SKT-350)



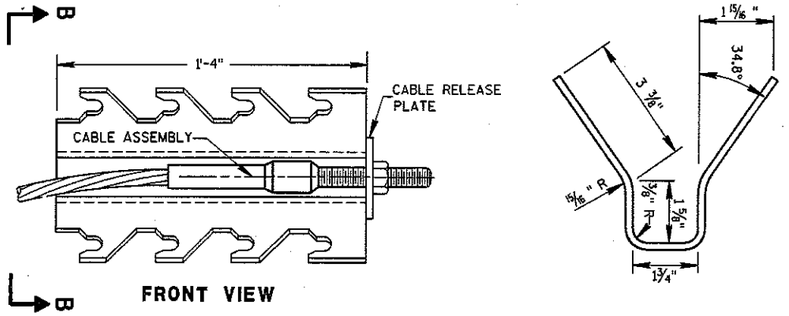
CABLE ANCHOR BOX (ET-2000/ET-2000 PLUS)



STRUT DETAIL (ET-2000/ET-2000 PLUS)

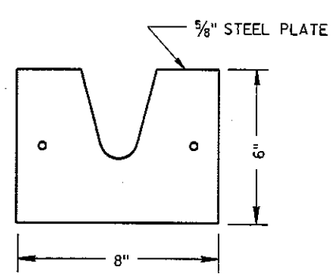


SOIL PLATE
(SKT-350, ET-2000/ET-2000 PLUS)

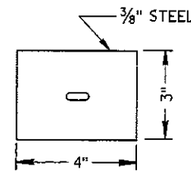


CABLE ANCHOR BOX (SKT-350)

(SKT-350)



STEEL BEARING PLATE
(ET-2000/ET-2000 PLUS)



BEARING PLATE WASHER
(ET-2000/ET-2000 PLUS)

(ET-2000/ET-2000 PLUS)

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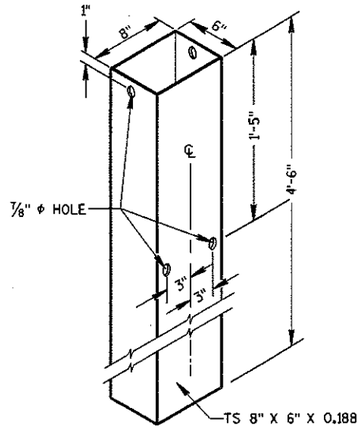
STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 24-4b

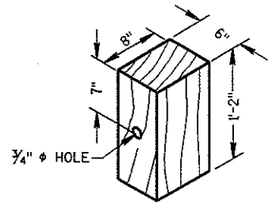
S.D.D. 14 B 24-4b



STEEL TUBE

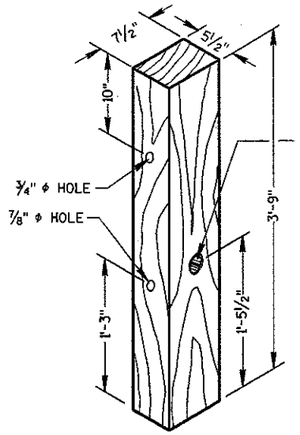
(POSTS NO. 1-4

THE STEEL TUBE SHALL CONFORM TO REQUIREMENTS OF ASTM A500



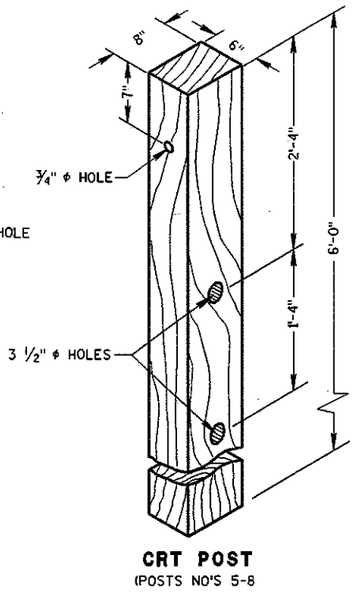
WOOD OFFSET BLOCK

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



TERMINAL POST

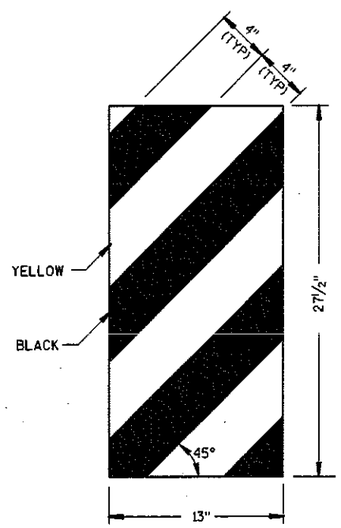
(POSTS NO. 1-4



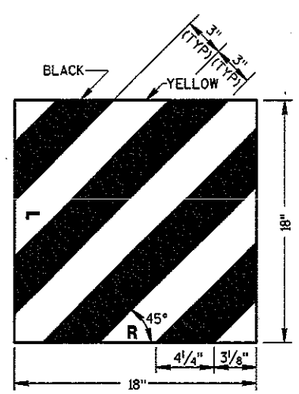
CRT POST

(POSTS NO'S 5-8

WOOD BREAKAWAY POSTS



ET-2000 PLUS ONLY



ET-2000 AND SKT-350

REFLECTIVE SHEETING DETAILS

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.

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 D4956-94, 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.

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STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

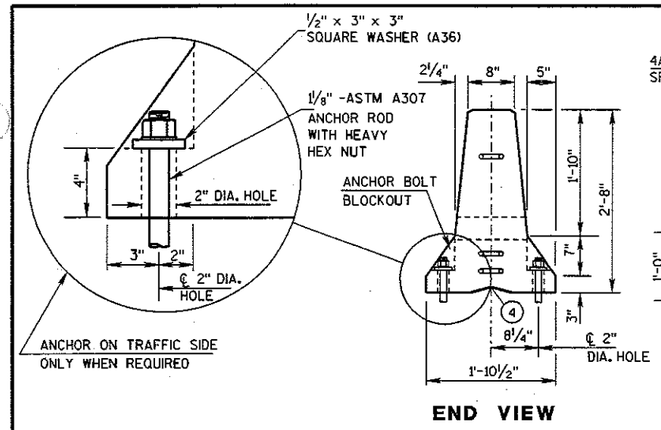
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 6/25/03
DATE

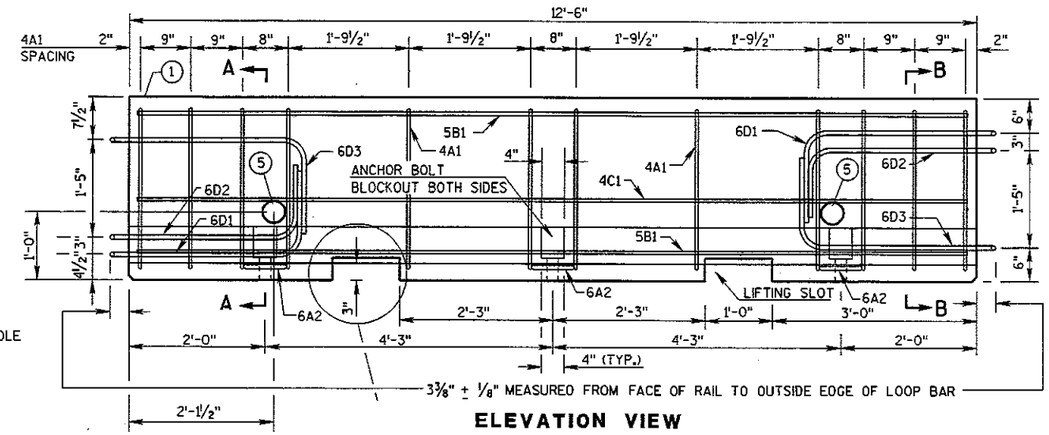
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

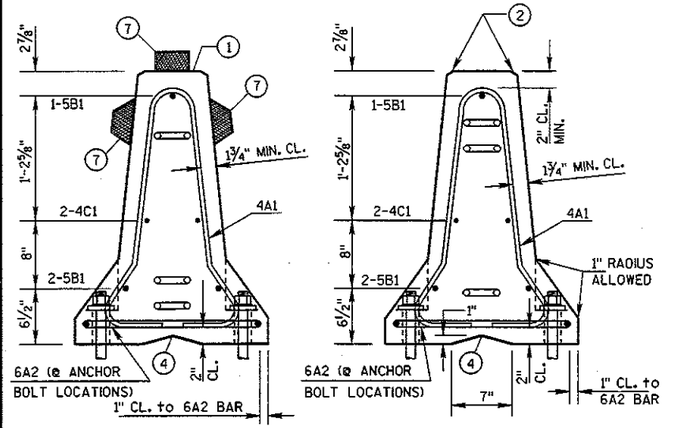
S.D.D. 14 B 24-4c



END VIEW

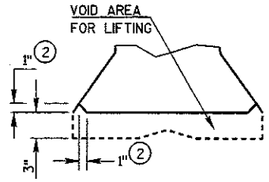


ELEVATION VIEW

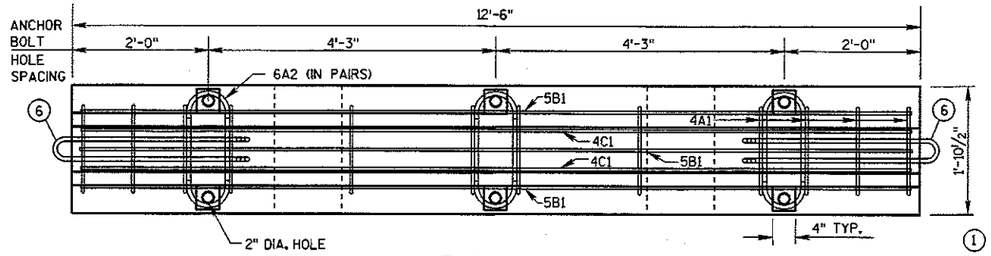


SECTION A-A
(STIRRUP PLACEMENT)

SECTION B-B
(STIRRUP PLACEMENT)

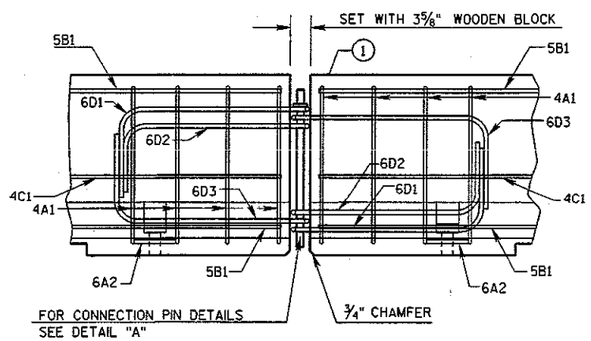


DETAIL "B"
LIFTING SLOT DETAIL

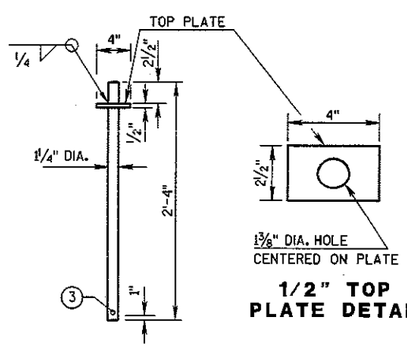


PLAN VIEW

DETAILS OF BARRIER SECTION



DETAILS OF BARRIER CONNECTION



1/2" TOP PLATE DETAIL

DETAIL "A"
CONNECTION PIN

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. THESE ARE TYPICAL DETAILS FOR THE FABRICATION AND INSTALLATION OF CONCRETE BARRIER TEMPORARY PRECAST, 12'-6".

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR CONCRETE REINFORCEMENT, EXCEPT FOR THE LOOP BARS (6D1, 6D2 AND 6D3).

USE ASTM A-615, GRADE 60, ¾" SMOOTH STEEL BARS FOR THE LOOP BARS (6D1, 6D2 AND 6D3) WITH A MINIMUM YIELD STRENGTH OF 60 ksi, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 ksi, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A 3½" PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN ⅛" OF THE PLAN DIMENSION.

USE EITHER S.D.D. 14 B 7-10 (a-d) OR S.D.D. 14 B 7-10 (e & f). ALL NEW BARRIERS MANUFACTURED AFTER JUNE 2003, MUST CONFORM TO S.D.D. 14 B 7-10 (a-d).

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" NEEDS TO BE ANCHORED IF THE DISTANCE TO THE DROPOFF OR EDGE OF BRIDGE DECK IS LESS THAN 2 FEET AND THE DROPOFF EXCEEDS 2 FEET.

CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.

PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

(1) MARK ONE END OF EACH BARRIER PERMANENTLY BY STAMPING OR FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
- a. TYPE CBTP
- b. MANUFACTURER
- c. DATE MANUFACTURED (MONTH AND YEAR)

(2) 1" CHAMFER TO PREVENT SPALLING.

(3) THE CONTRACTOR SHALL PROVIDE A ⅜" HOLE IN THE CONNECTION PIN.

(4) "V" NOTCH IS OPTIONAL.

(5) THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).

(6) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

(7) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURES INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.

IMPORTANT:
DO NOT INTERMIX 12'-6" CONCRETE BARRIER WITH 10'-0" CONCRETE BARRIER IN ANY SINGLE RUN OR INSTALLATION.

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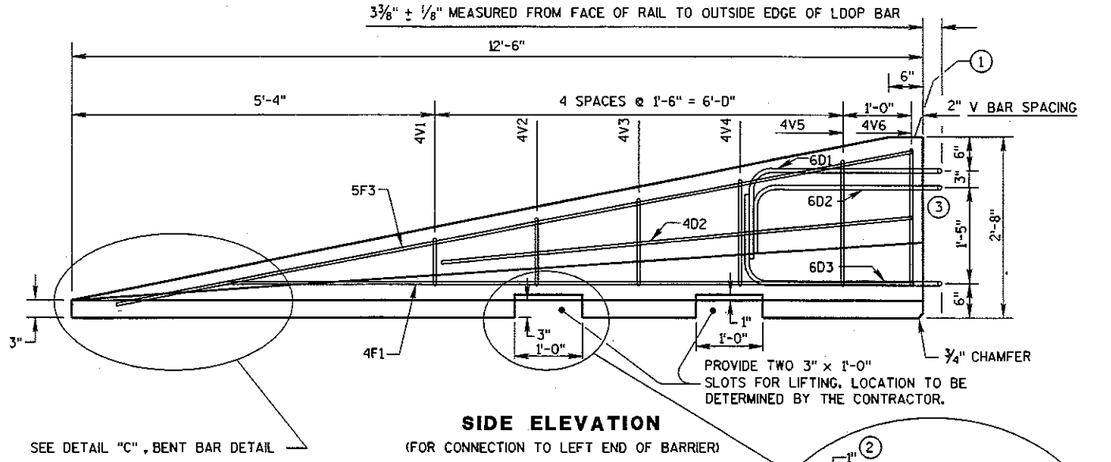
CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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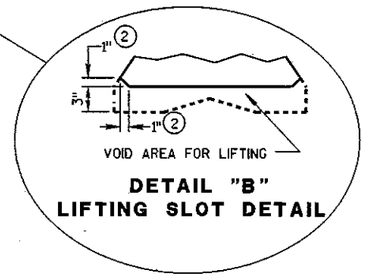
S.D.D. 14 B 7-10a

S.D.D. 14 B 7-10a

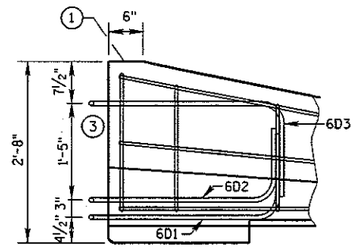


SIDE ELEVATION

(FOR CONNECTION TO LEFT END OF BARRIER)



DETAIL "B"
LIFTING SLOT DETAIL



SIDE ELEVATION

LOOP BAR ASSEMBLY INVERTED
FOR OPPOSITE END.
(FOR CONNECTION TO RIGHT END OF BARRIER)

GENERAL NOTES

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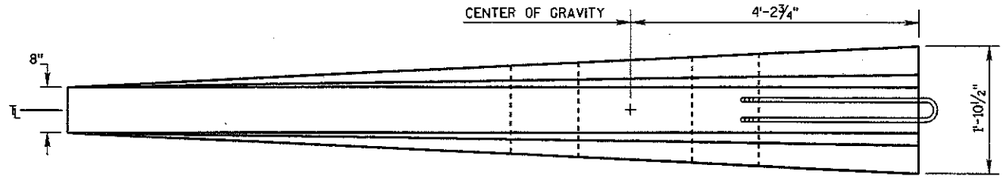
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- b. MANUFACTURER
- c. DATE MANUFACTURED (MONTH AND YEAR)

(2) 1" CHAMFER TO PREVENT SPALLING.

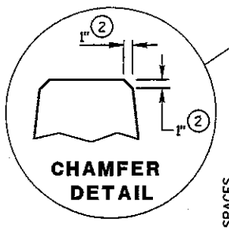
(3) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

IMPORTANT:

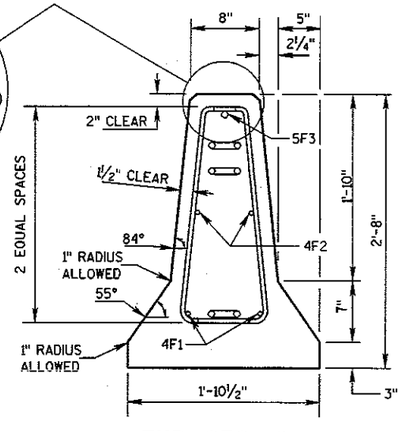
DO NOT INTERMIX 12'-6" CONCRETE BARRIER WITH 10'-0" CONCRETE BARRIER IN ANY SINGLE RUN OR INSTALLATION.



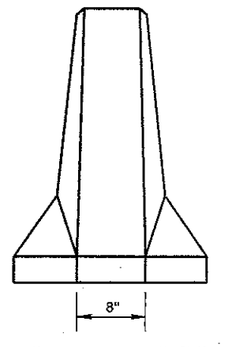
PLAN VIEW



CHAMFER DETAIL



END SECTION



FRONT ELEVATION

DETAILS OF BARRIER TAPER SECTION

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CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

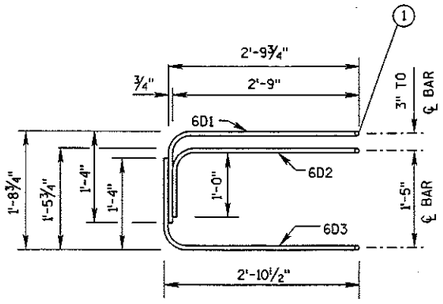
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 14 B 7-10b

BARRIER TAPER SECTION BILL OF MATERIALS

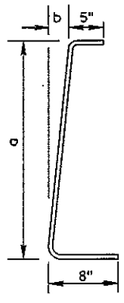
(PER 12'-6" BARRIER TAPER SECTION)

REINFORCING A615 Gr. 60			
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



ELEVATION

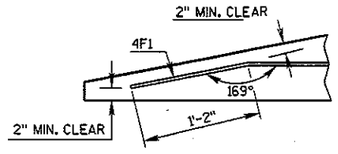
LOOP BAR ASSEMBLY



BAR	a	b
V1	10"	1"
V2	1'-1"	1¼"
V3	1'-5"	1⅝"
V4	1'-8"	1⅞"
V5	2'-0½"	2⅜"
V6	2'-3"	2¾"

4V BARS

2 AT EACH SIZE REQUIRED FOR STIRRUP ASSEMBLY



DETAIL "C"
BENT BAR DETAIL

TAPER BARRIER SECTION

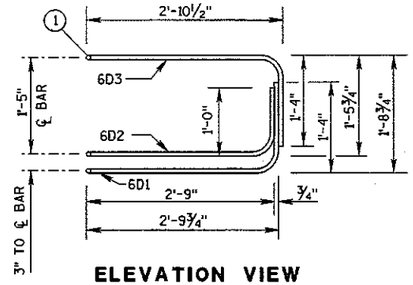
GENERAL NOTES

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.

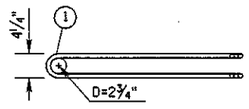
USE EITHER S.D.D. 14 B 7-10 (a-d) OR S.D.D. 14 B 7-10 (e & f). ALL NEW BARRIERS MANUFACTURED AFTER JUNE 2003, MUST CONFORM TO S.D.D. 14 B 7-10 (a-d).

(1) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

IMPORTANT:
DO NOT INTERMIX 12'-6" CONCRETE BARRIER WITH 10'-0" CONCRETE BARRIER IN ANY SINGLE RUN OR INSTALLATION.

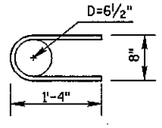


ELEVATION VIEW



PLAN VIEW
LOOP BAR ASSEMBLY

(MARKED END SHOWN, INVERT FOR OTHER END)

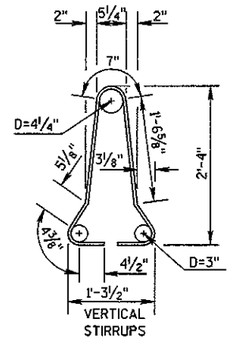


6A2

BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

REINFORCING A615 Gr. 60			
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



4A1

BARRIER SECTION

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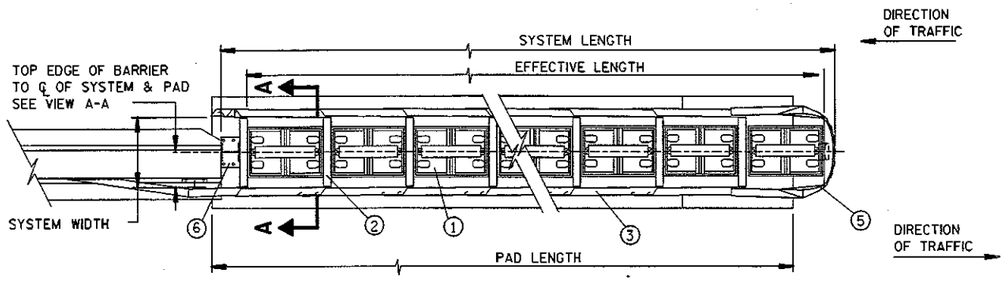
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6" BENDING DIAGRAM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

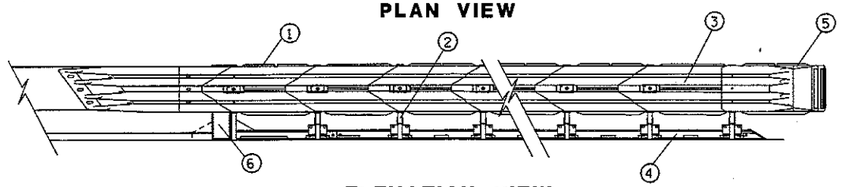
6

S.D.D. 14 B 7-10c

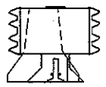
S.D.D. 14 B 7-10c



PLAN VIEW



ELEVATION VIEW



VIEW A-A

TYPICAL CRASH CUSHION

1. QUADGUARD CARTRIDGE
2. DIAPHRAGM
3. FENDER PANEL
4. MONORAIL
5. NOSE ASSEMBLY
6. BACKUP

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.

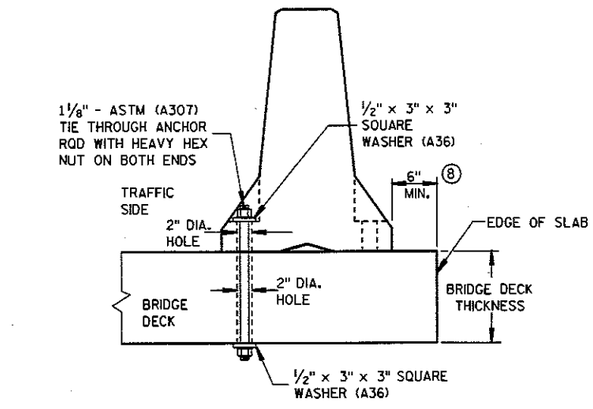
THE CRASH CUSHION SHALL BE MANUFACTURED, ASSEMBLED AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND AS DETAILED ELSEWHERE IN THE PLANS OR AS SHOWN ON THE APPROVED SHOP DRAWINGS. ANCHORING OF BARRIER IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST.

USE EITHER S.D.D. 14 B 7-1D (a-d) OR S.D.D. 14 B 7-10 (e & f). ALL NEW BARRIERS MANUFACTURED AFTER JUNE 2003, MUST CONFORM TO S.D.D. 14 B 7-10 (a-d).

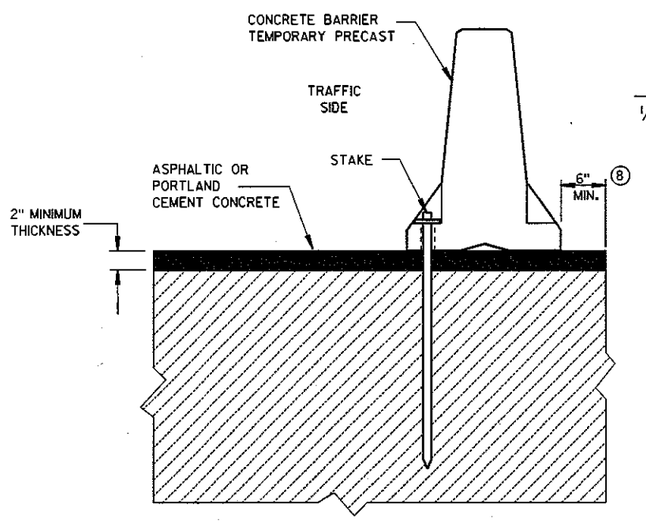
(7) PLACE TRANSITION SECTION IN A TANGENT SECTION OF BARRIER PARALLEL TO ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.

(8) CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" NEEDS TO BE ANCHORED IF THE DISTANCE TO THE DROPOFF OR EDGE OF BRIDGE DECK IS LESS THAN 2 FEET AND THE DROPOFF EXCEEDS 2 FEET.

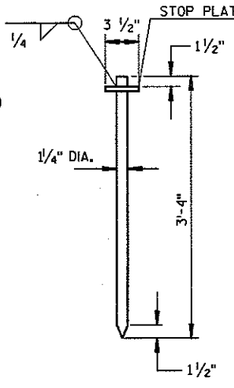
IMPORTANT:
DO NOT INTERMIX 12'-6" CONCRETE BARRIER WITH 10'-0" CONCRETE BARRIER IN ANY SINGLE RUN OR INSTALLATION.



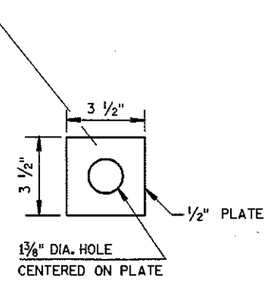
ANCHOR DETAIL FOR INSTALLATION ON BRIDGE DECK



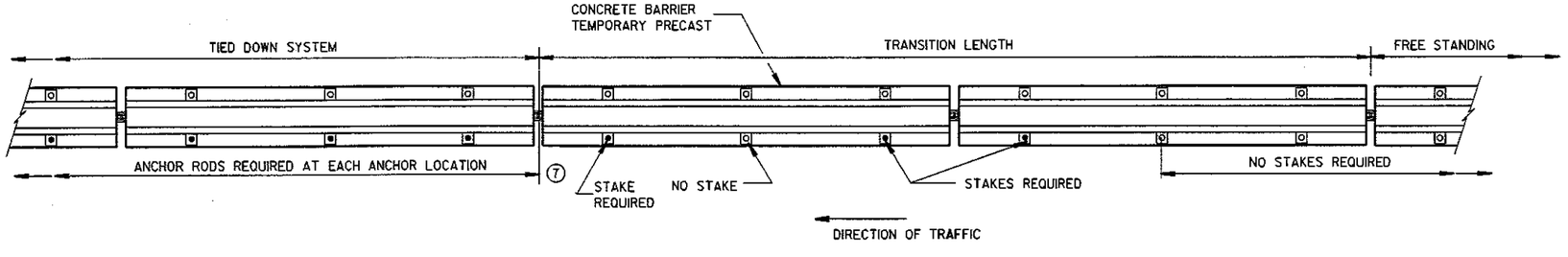
STAKE DOWN INSTALLATION FOR ASPHALTIC OR PORTLAND CEMENT CONCRETE SURFACE



STAKE



STOP PLATE



PLAN VIEW

FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

154

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"
ANCHORING DETAIL AND
CRASH CUSHION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

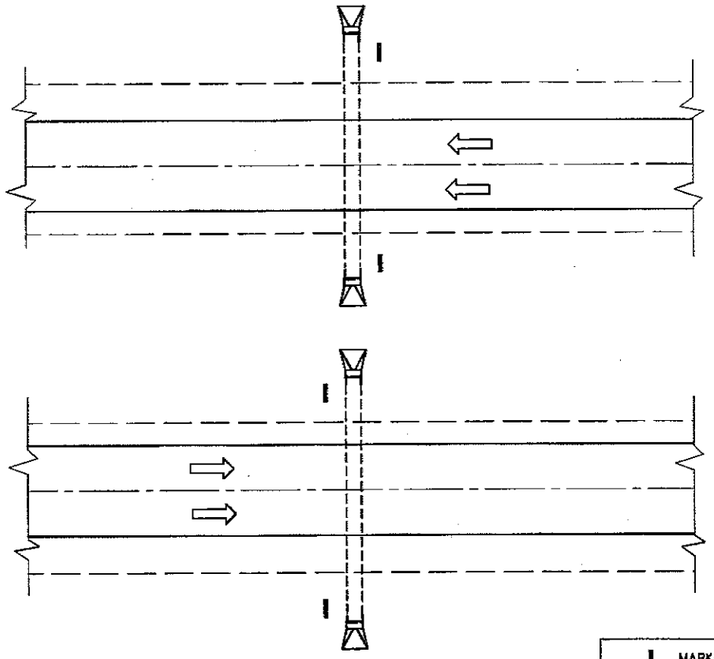
APPROVED
9/11/03
DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 14 B 7-10d

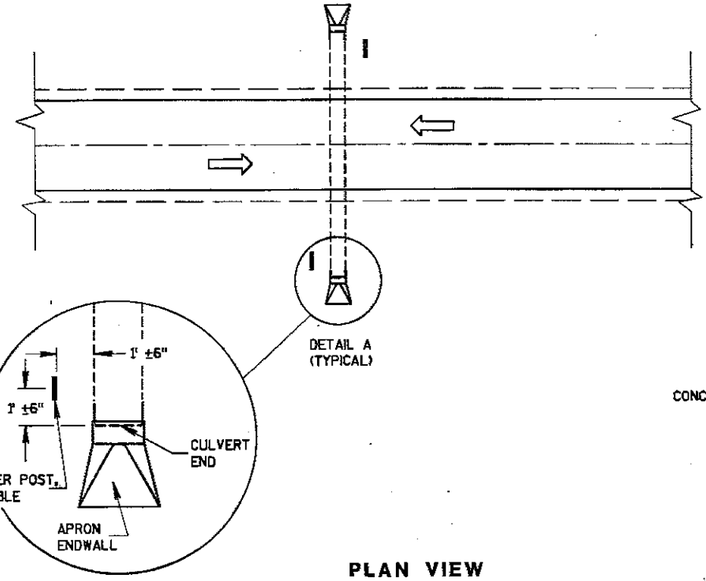
GENERAL NOTES

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



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A (TYPICAL)

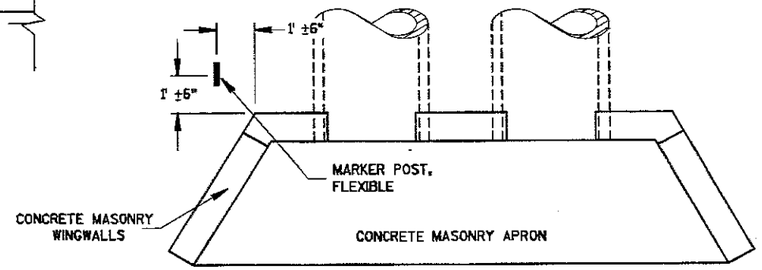
PLAN VIEW

UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

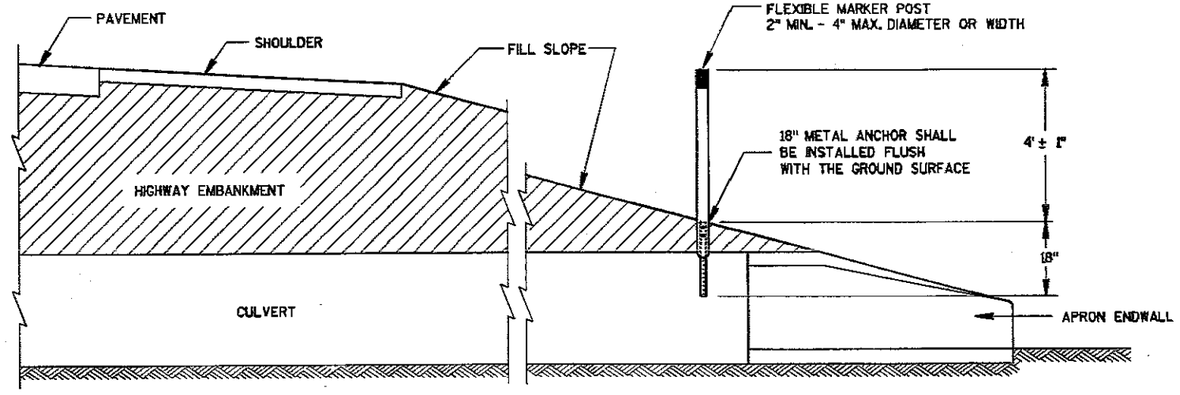
DIRECTION OF TRAFFIC FLOW

FLEXIBLE MARKER POST LOCATION



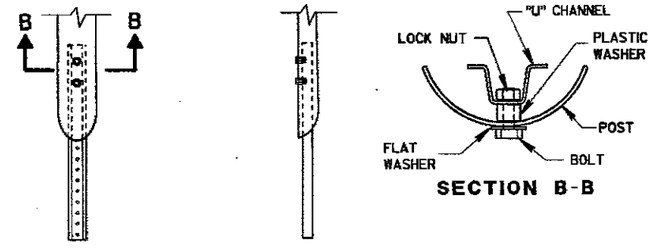
PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH



CROSS SECTION

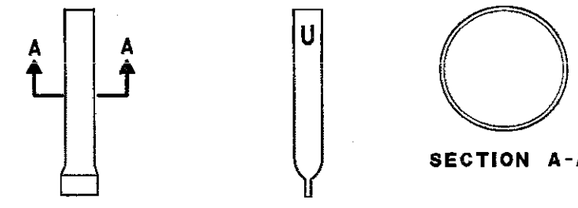
FLEXIBLE MARKER POST



SECTION B-B

FRONT VIEW SIDE VIEW

CURVED MARKER

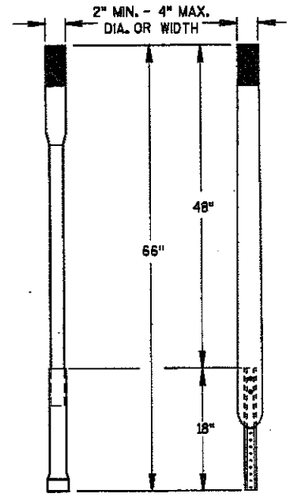


SECTION A-A

FRONT VIEW SIDE VIEW

ROUND MARKER

FLEXIBLE MARKER POST ANCHORS



ALTERNATE 1 ALTERNATE 2

FLEXIBLE MARKER POST

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MARKER POST, FLEXIBLE, FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 10/01/98 DATE

CHIEF ROADWAY DEVELOPMENT ENGINEER

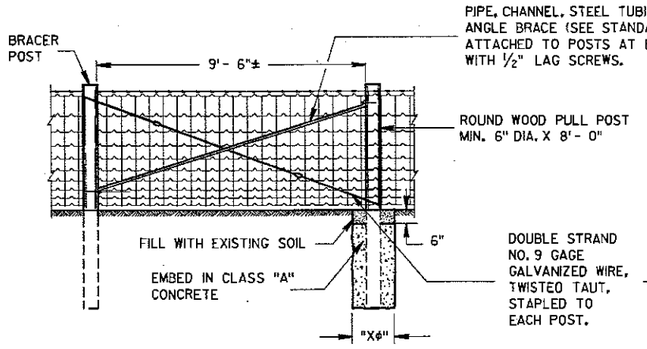
FHWA

S.D.D. 15 A 3-1

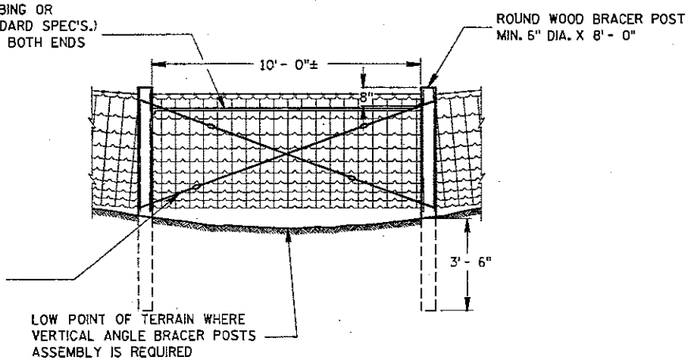
S.D.D. 15 A 3-1

NOTE: PULL OR STRETCHER POST ASSEMBLIES SHALL BE PLACED MIDWAY BETWEEN END POSTS AND CORNER POSTS WHERE A RUN OF FENCE EXCEEDS 660' BUT IS LESS THAN 1,320'. FOR RUNS OF FENCE IN EXCESS OF 1,320' MAXIMUM SPACING OF PULL OR STRETCHER POST ASSEMBLIES SHALL BE 660'± C-C.

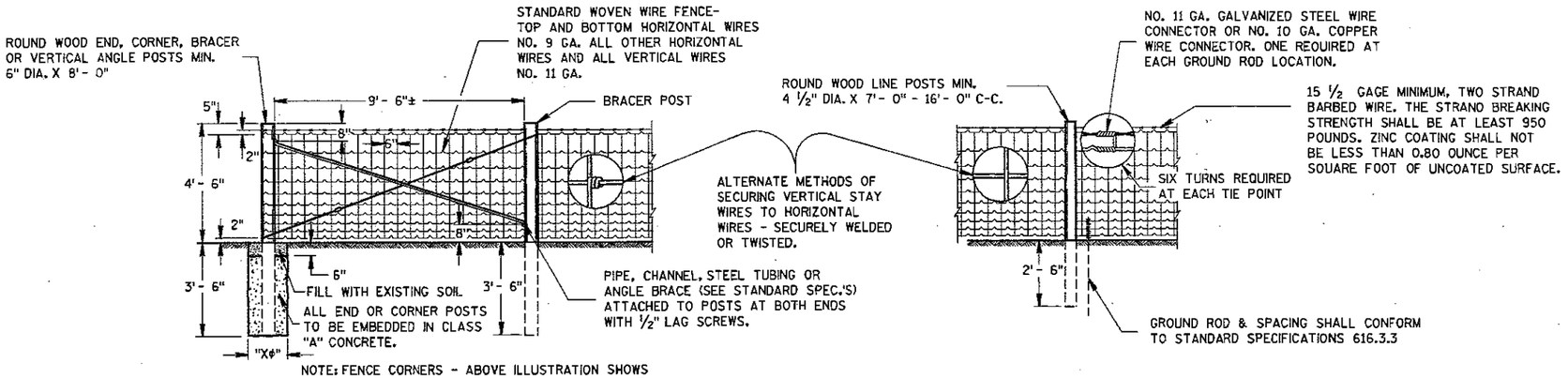
ILLUSTRATION SHOWS POSITION OF STANDARD STEEL BRACE, DOUBLE STRAND GALVANIZED WIRE, AND THE POST TO BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM LEFT TO RIGHT. THE BRACES SHALL BE POSITIONED ON THE OPPOSITE DIAGONALS AND THE OPPOSITE POST SHALL BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM RIGHT TO LEFT.



PULL OR STRETCHER POSTS ASSEMBLY



VERTICAL ANGLE BRACER POSTS ASSEMBLY



NOTE: FENCE CORNERS - ABOVE ILLUSTRATION SHOWS ONE LEG OF FENCE CONSTRUCTION AT FENCE CORNER. THE CONTIGUOUS LEG TO BE IDENTICAL CONSTRUCTION.

END OR CORNER POSTS ASSEMBLY

LINE FENCE CONSTRUCTION

GENERAL NOTES

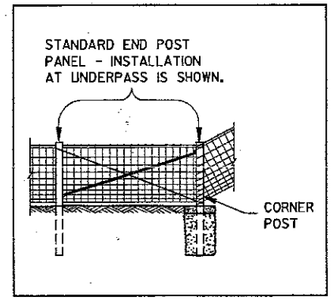
DETAILS OF CONSTRUCTION NOT SHOWN HEREON SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

"X∅" = DIAMETER OF THE POST PLUS 12".

FENCE STAPLES SHOULD NEVER BE DRIVEN VERTICALLY INTO WOOD POSTS (WITH BOTH LEGS PARALLEL WITH THE WOOD GRAIN), DOING SO CAN SEPARATE THE GRAIN AND SIGNIFICANTLY REDUCE THE HOLDING POWER. ROTATING THE STAPLES SLIGHTLY OFF VERTICAL STRADDLES THE GRAIN AND PROVIDES MORE RESISTANCE TO PULL-OUT.

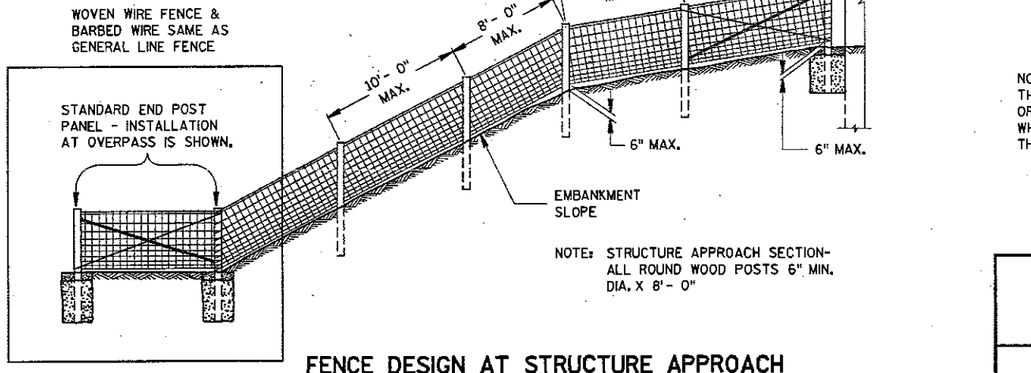
DO NOT STAPLE WIRE TIGHT TO THE LINE POSTS. ALLOW MOVEMENT OF WIRE FOR EXPANSION AND CONTRACTION. STAPLE ARRANGEMENT SHALL BE THE SAME FOR ALL OTHER POSTS EXCEPT THAT THEY SHALL BE DRIVEN TIGHT TO POSTS. ALL STAPLES SHALL BE 2" X 9 GAGE AND SHALL BE MANUFACTURED FROM GALVANIZED WIRE OR HOT DIP GALVANIZED AFTER FORMING. STAPLES SHALL HAVE SLASH-CUT POINTS.

FENCE SHALL BE LOCATED 3'-0" INSIDE THE RIGHT OF WAY LINE UNLESS OTHERWISE INDICATED ON THE PLANS.



ALTERNATE FENCE DESIGN AT STRUCTURE

GENERAL ROADSIDE VIEW OF WOVEN WIRE FENCE



NOTE: STRUCTURE APPROACH SECTION- ALL ROUND WOOD POSTS 6" MIN. DIA. X 8' - 0"

FENCE DESIGN AT STRUCTURE APPROACH

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

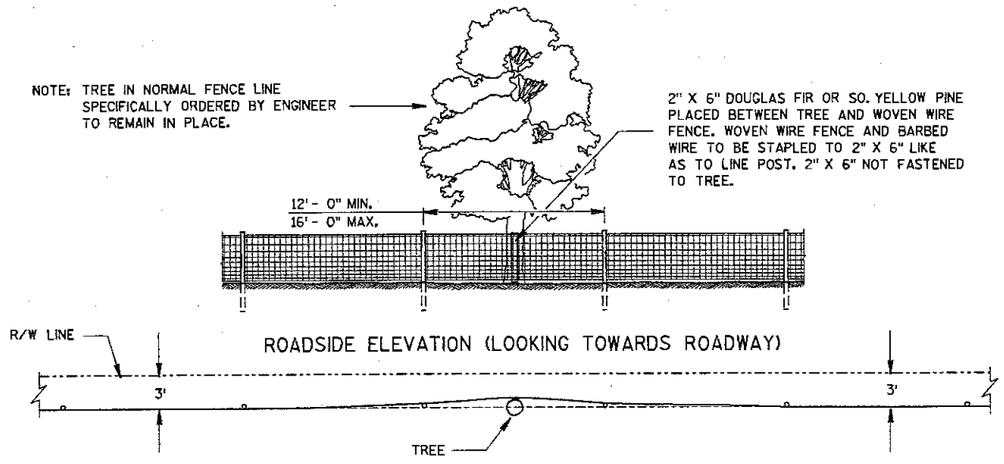
159

WOVEN WIRE FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

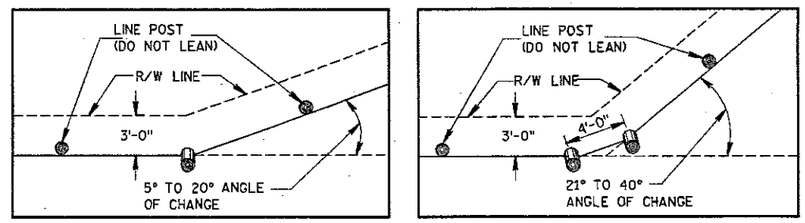
S.D.D.15 B 1-7a

S.D.D.15 B 1-7a



PLAN VIEW

FENCE DESIGN AT TREES REMAINING IN NORMAL FENCE LINE



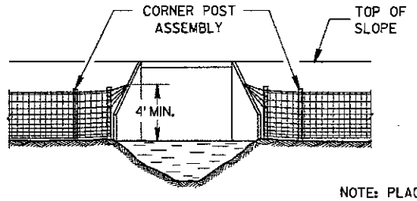
PLAN VIEW
SINGLE POST CORNER

PLAN VIEW
DOUBLE POST CORNER

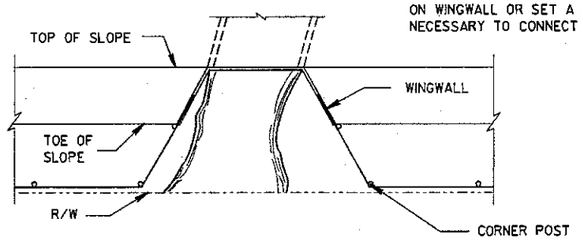
RIGHT OF WAY LINE CHANGE 40° AND LESS

NOTE: SINGLE AND DOUBLE POSTS SHALL BE A MIN. 6" DIA. X 8'-0" WITH A LEAN OF 4" TOWARD THE OUTSIDE OF THE CURVE.

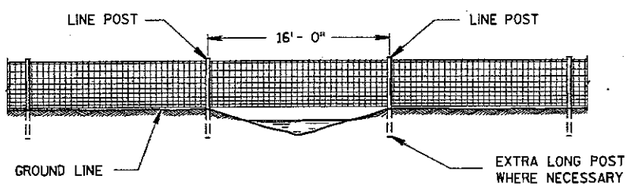
WHEN THE RIGHT OF WAY LINE CHANGE IS MORE THAN 40° USE THE CORNER OR STRETCHER POSTS ASSEMBLY.



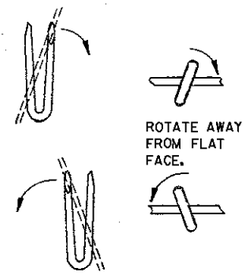
NOTE: PLACE A MINIMUM OF 4 STRANDS OF BARBED WIRE, 6" MAXIMUM CENTERS IN FAN SHAPE CONNECTED TO AN EYE BOLT ON WINGWALL OR SET A LONE POST WHEN NECESSARY TO CONNECT BARBED WIRE.



FENCE INSTALLATION TO WINGWALLS

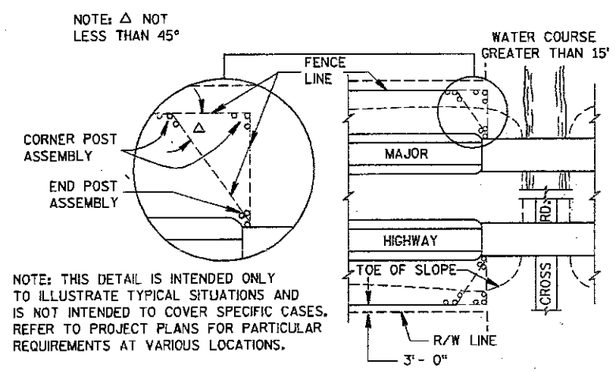


FENCE CONSTRUCTION OVER STREAM COURSES OF 15 FT. OR LESS IN WIDTH

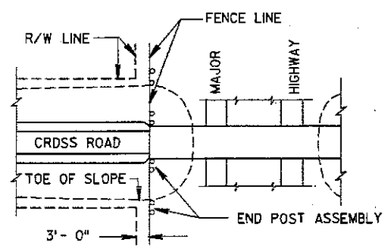


LINE POST

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



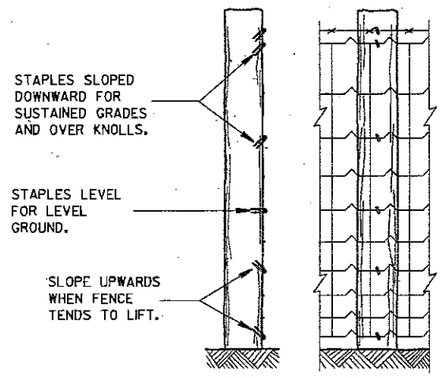
PLAN VIEW
MAJOR HIGHWAY OVERPASS OR STREAM COURSE CROSSING OF GREATER THAN 15 FT. IN WIDTH



PLAN VIEW
MAJOR HIGHWAY UNDERPASS

FENCE LOCATION AT STRUCTURES

NOTE: WHEN POSTS ARE DRIVEN THE SMALL END SHALL BE DOWN.



END ELEVATION

FARM SIDE ELEVATION

FENCE MOUNTING DETAIL

159

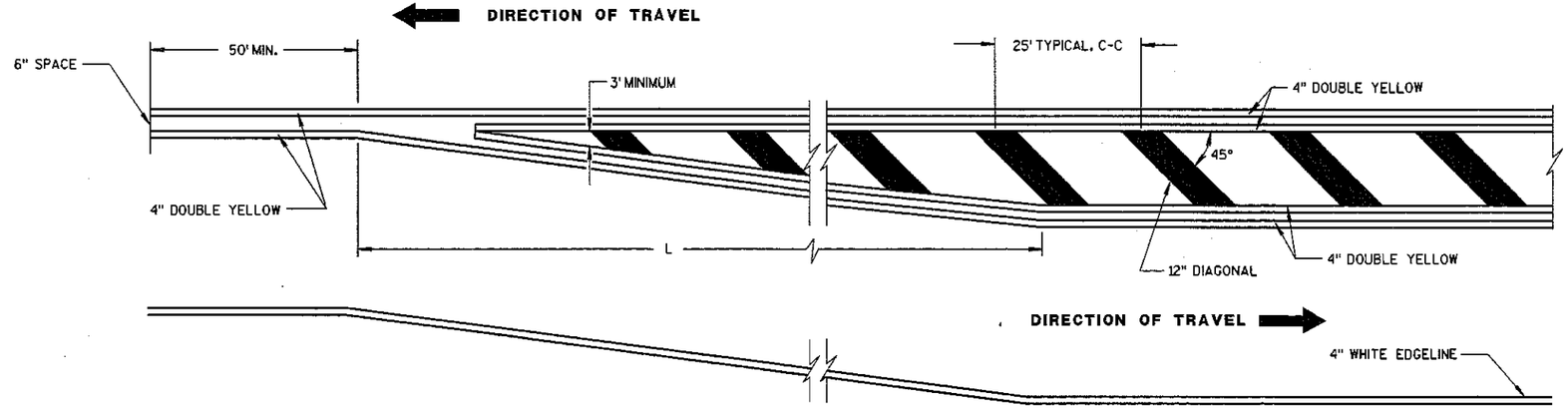
WOVEN WIRE FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 12-26-85 DATE
STATE DESIGN ENGINEER FOR HWYS
FHWA

S.D.D.15 B 1-7b

S.D.D.15 B 1-7b



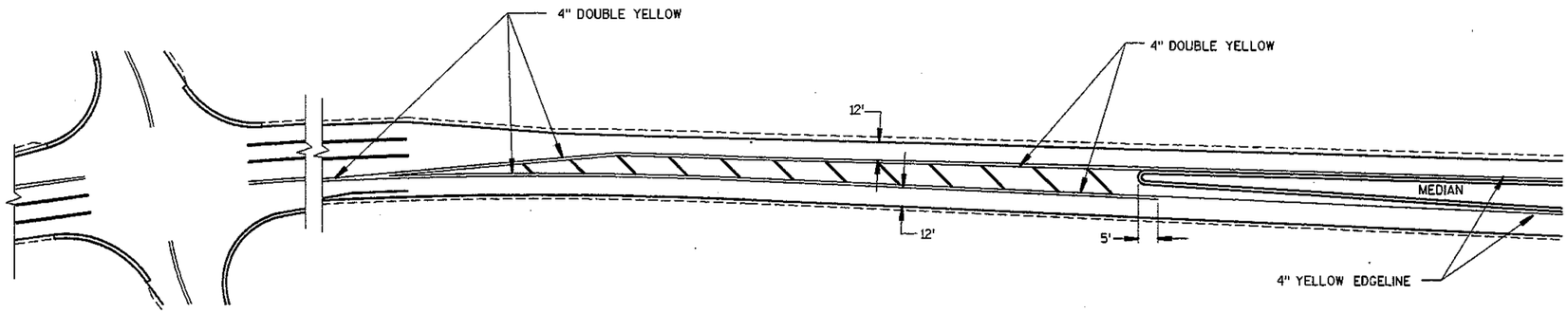
MEDIAN ISLAND DETAIL

GENERAL NOTE

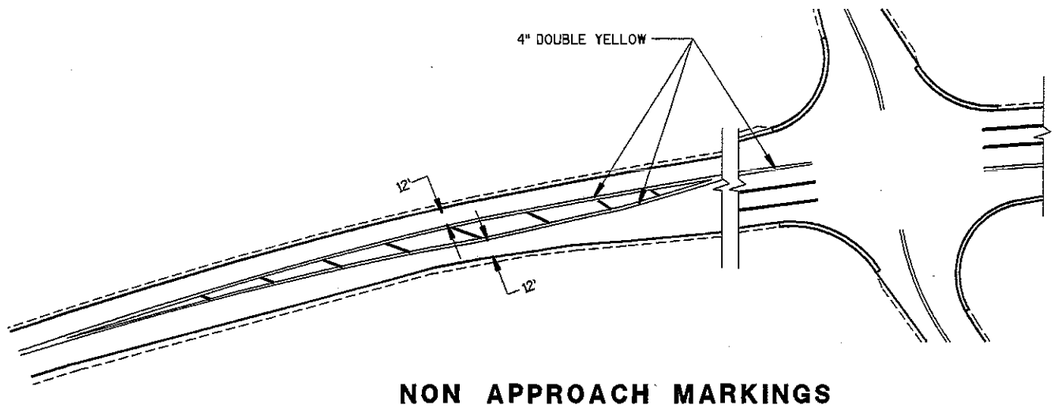
DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.

MINIMUM SHIFTING TAPER LENGTH TABLE

POSTED SPEED (S)	TAPER LENGTH (L)
25	100'
30	100'
35	125'
40	165'
45	270'
50	300'
55	330'
65	390'



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

160

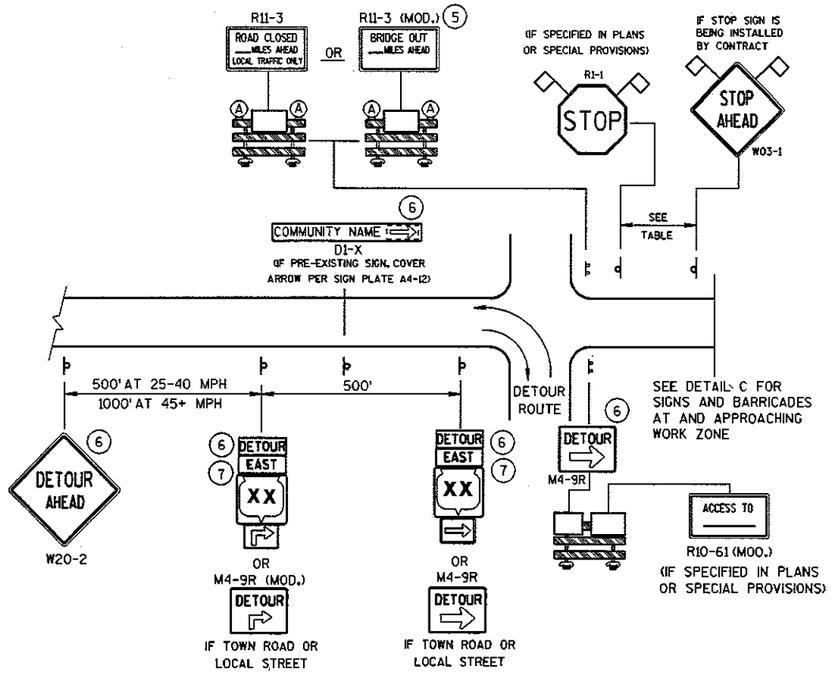
MEDIAN ISLAND MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3-17-03 DATE
Deborah T. Kowal for
CHIEF SIGNS AND MARKING ENGINEER
FHWA

6

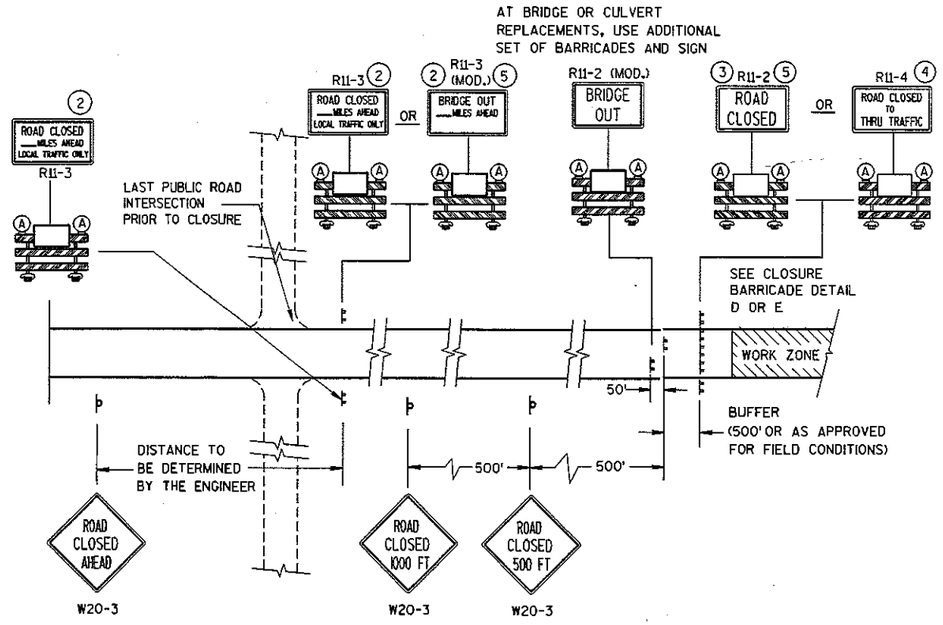
S.D.D. 15 C 18-1



DETAIL A

MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

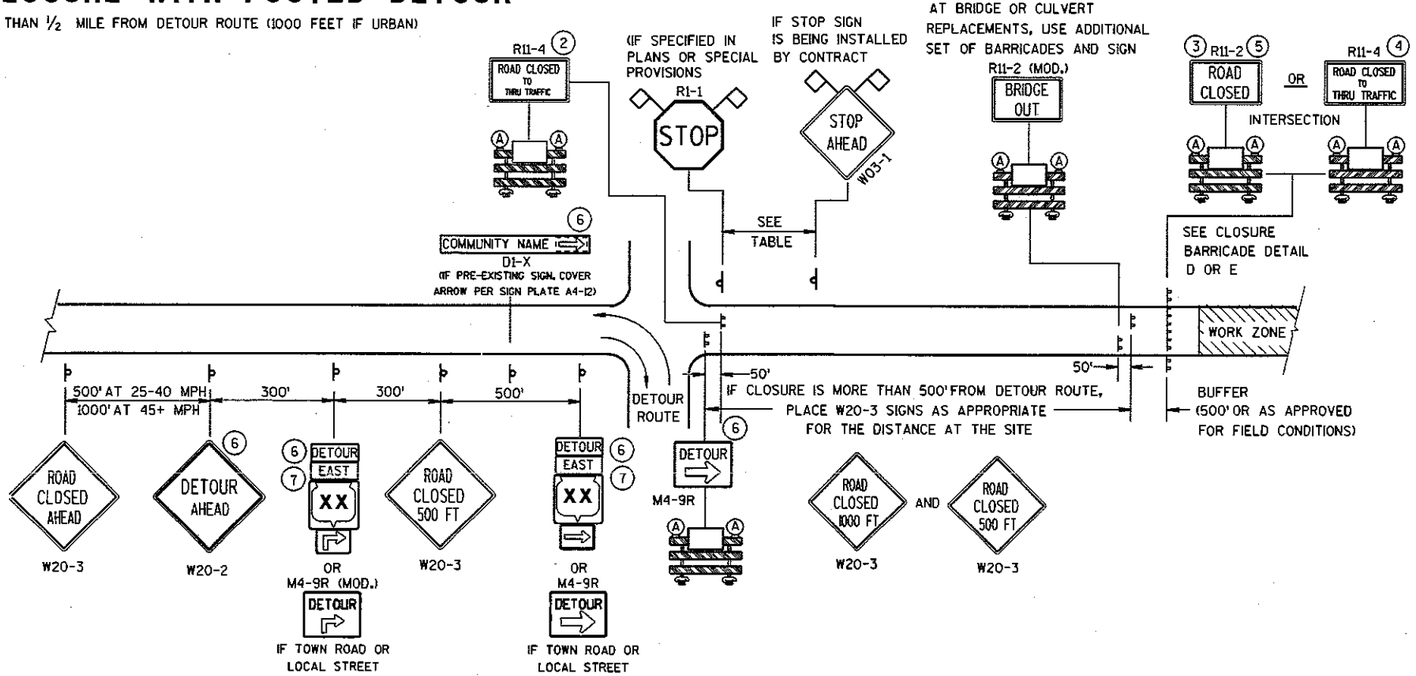


DETAIL C

MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-4b
FOR GENERAL NOTES
AND FOOTNOTES (1) THROUGH (7)



DETAIL B

MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

LEGEND

- POST MOUNTED SIGN
- TYPE III BARRICADES
- (A) TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
- WORK ZONE
- DETOUR EAST — M4-8, M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

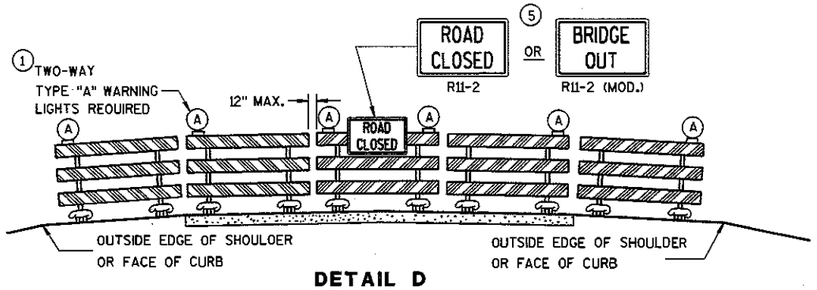
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BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 15 C 2-4a

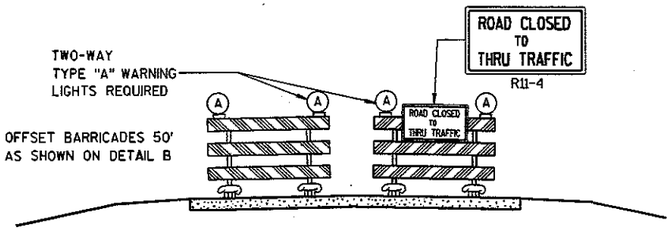
S.D.D. 15 C 2-4a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-4a FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE OETAIL O FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

THE REFLECTIVE SHEETING USED ON R11-2, R11-3, R11-4, R10-61 AND R1-1 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X AND M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

(1) TWO WARNING LIGHTS SHALL BE PROVIOED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

162

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

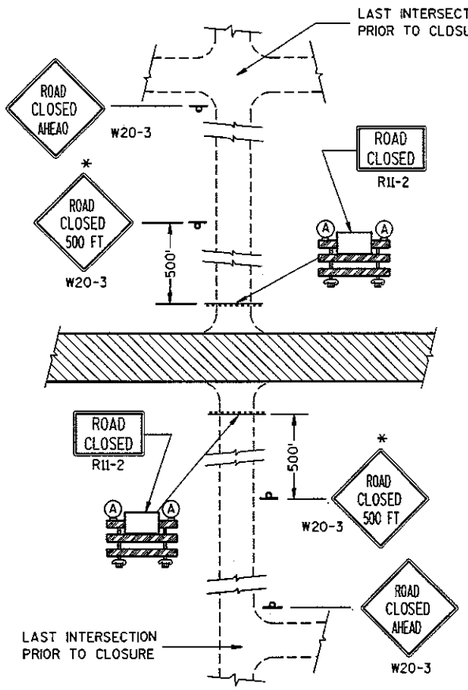
APPROVED
9/16/03
DATE

Thomas N. Notbohm for
CHIEF SIGNS AND MARKING ENGINEER

FHWA

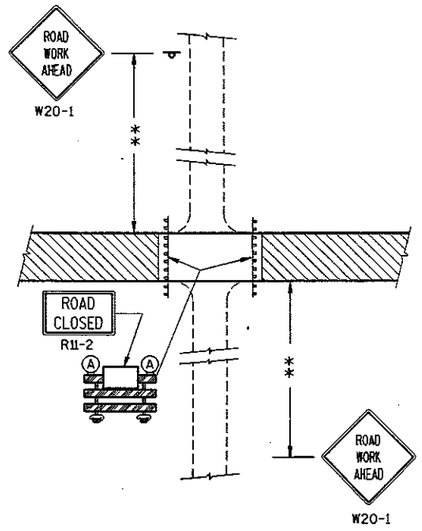
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S.D.D. 15 C 2-4b



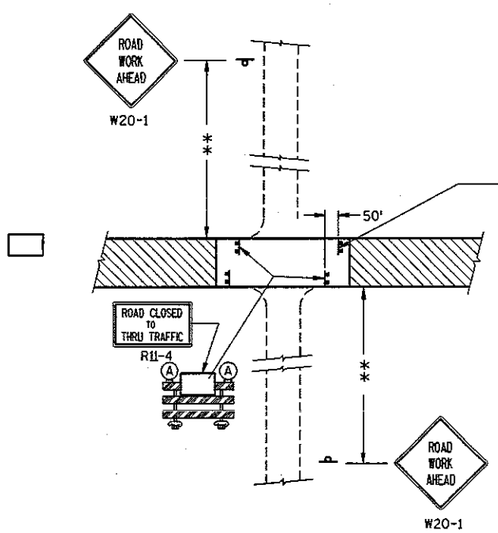
DETAIL 1

(NO ACCESS TO PROJECT)



DETAIL 2

(PUBLIC CROSS-TRAFFIC MAINTAINED. NO ACCESS TO PROJECT).



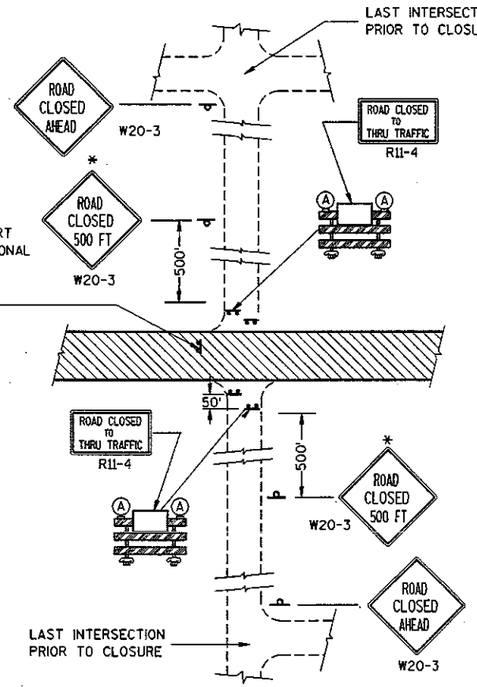
DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).

FOR BRIDGE OR CULVERT REPLACEMENT, USE ADDITIONAL SIGN ON BARRICADE

BRIDGE OUT XX MILES AHEAD

R11-3 (MOD.)



DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

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.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

THE REFLECTIVE SHEETING USED ON R11-2, R11-3 AND R11-4 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

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

6

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BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

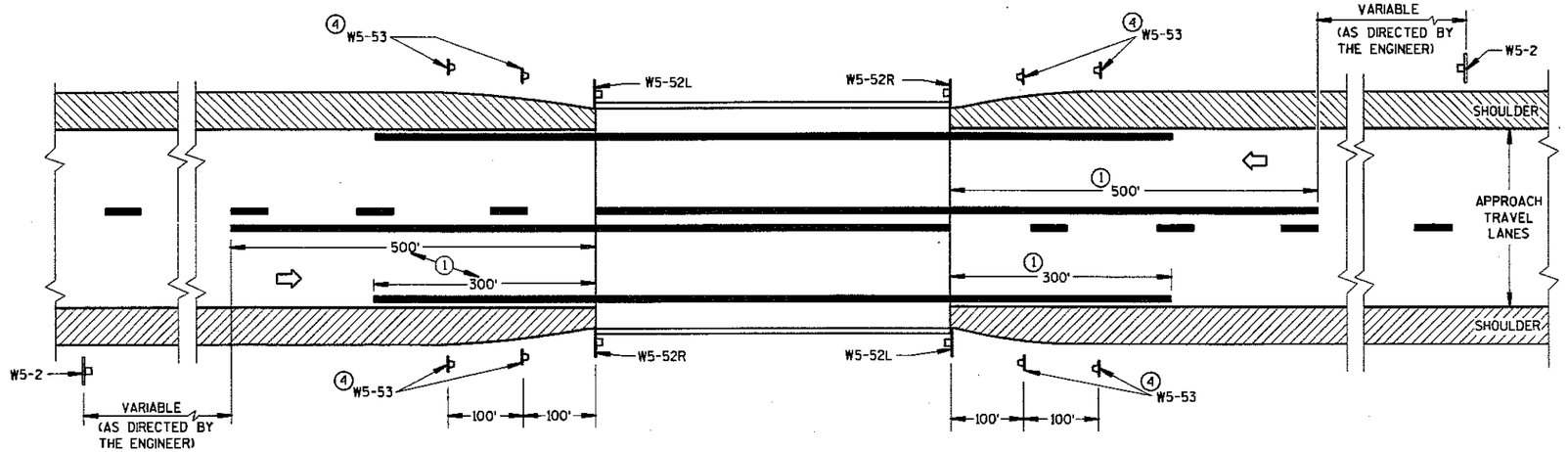
8/14/03
DATE

Thomas N. Notbohm for
CHIEF SIGNS AND MARKING ENGINEER

FHWA

S.D.D. 15 C 3-1

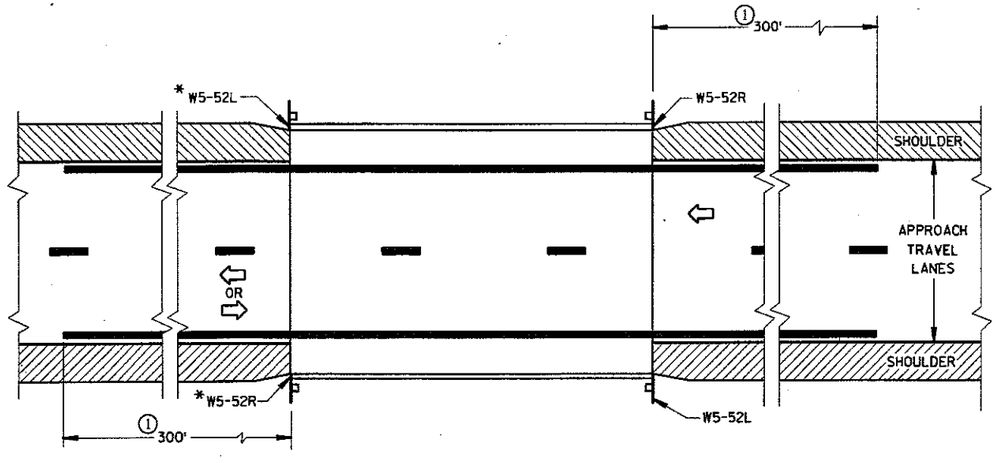
S.D. 15 C 3-1



SITUATION 1

WARRANTING CRITERION:

BRIDGE WIDTH IS AT LEAST 18 FEET BUT LESS THAN 24 FEET

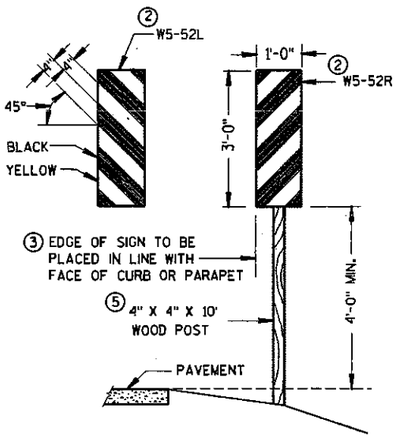


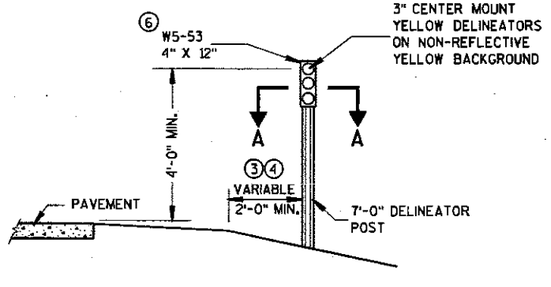
*OMIT ON ONE-WAY TRAVELLED WAYS

SITUATION 2

WARRANTING CRITERIA:

1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
2. BRIDGE IS LESS THAN 6 FEET WIDER (ON EACH SIDE) THAN APPROACH TRAVEL LANES.





OBJECT MARKER PLACEMENT

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.

PAVEMENT MARKING SHOWN ON THIS DRAWING IS NOT REQUIRED UNLESS OTHERWISE SPECIFIED IN THE CONTRACT. WHEN SPECIFIED, PAVEMENT MARKING SHALL CONFORM TO THIS DRAWING AND OTHER CONTRACT REQUIREMENTS.

(1) MINIMUM DISTANCE UNLESS OTHERWISE SHOWN ON THE PLAN.

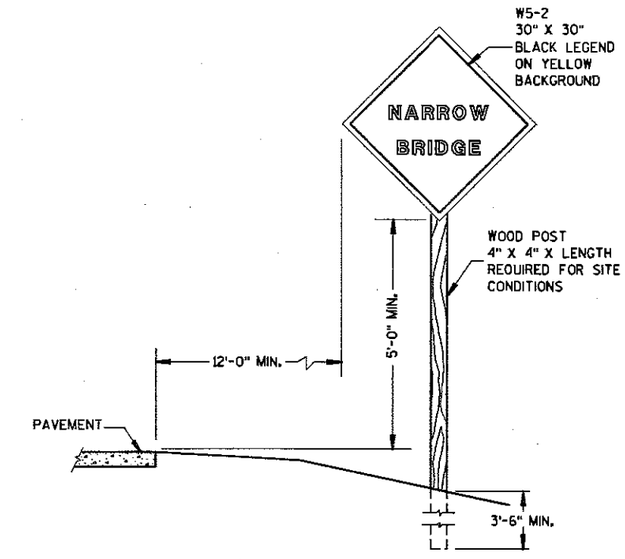
(2) FACE OF OBJECT MARKERS W5-52R AND W5-52L SHALL BE COVERED WITH TYPE H REFLECTIVE SHEETING.

(3) LOCATE OBJECT MARKER POST(S) BEHIND GUARDRAIL WHEN PRESENT.

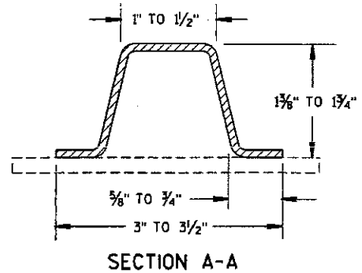
(4) OBJECT MARKERS (W5-53) SHALL BE LOCATED ALONG A LINE FLARED AWAY FROM THE BRIDGE CORNER TO DELINEATE THE NARROWING OF THE SHOULDER OR BERM.

(5) A 10 FOOT DELINEATOR POST MAY BE USED INSTEAD OF A WOOD POST.

(6) NON-BID ITEM. INCIDENTAL TO OTHER ITEMS.



SIGN PLACEMENT



SECTION A-A
(MINIMUM WEIGHT 1.9 LBS. PER FT. AFTER GALVANIZING)

164

SIGNING & MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-7-95
DATE
Charles J. Spang
for DIRECTOR, OFFICE OF TRAFFIC
FHWA

S.D.D. 15 C 6-4

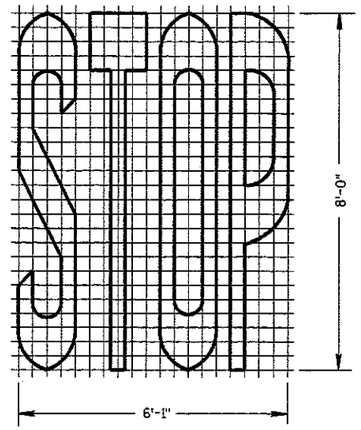
S.D.D. 15 C 6-4

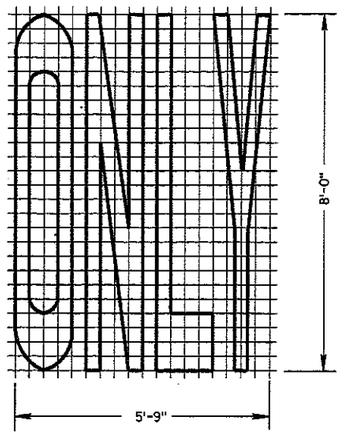
GENERAL NOTES

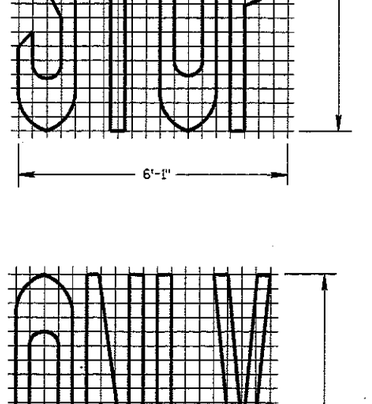
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

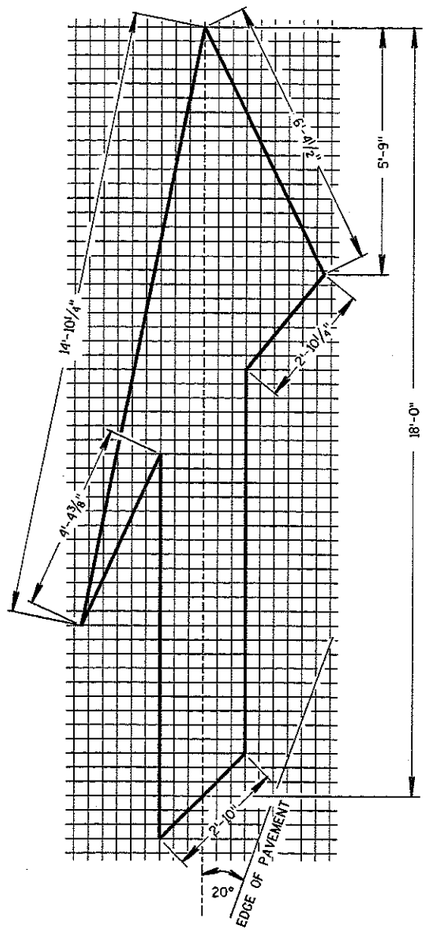
ALL LETTERS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED.

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

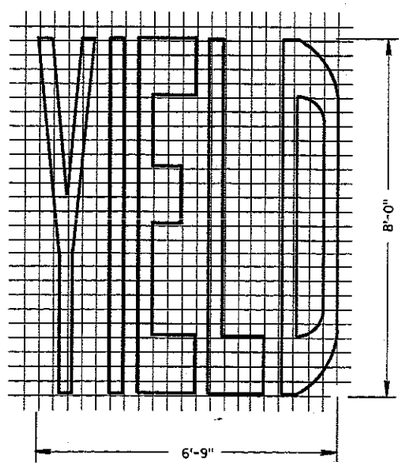


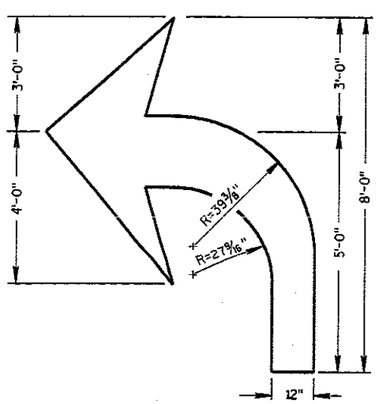




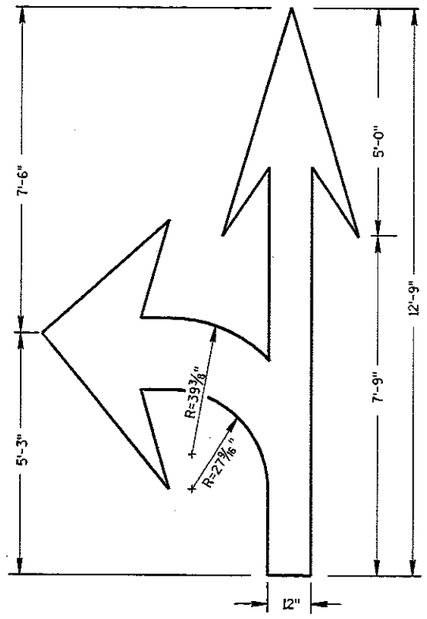


TYPE 5 LANE DROP ARROW

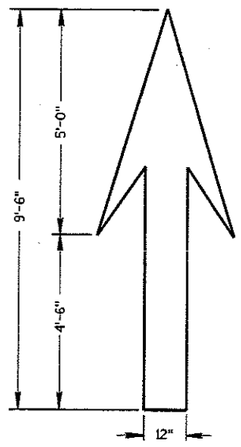




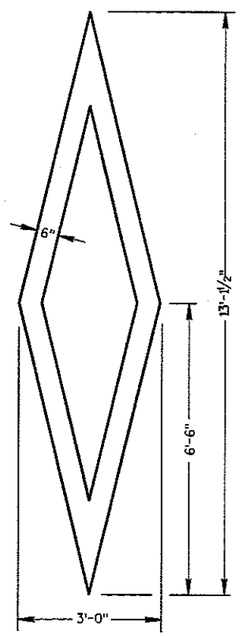
TYPE 2



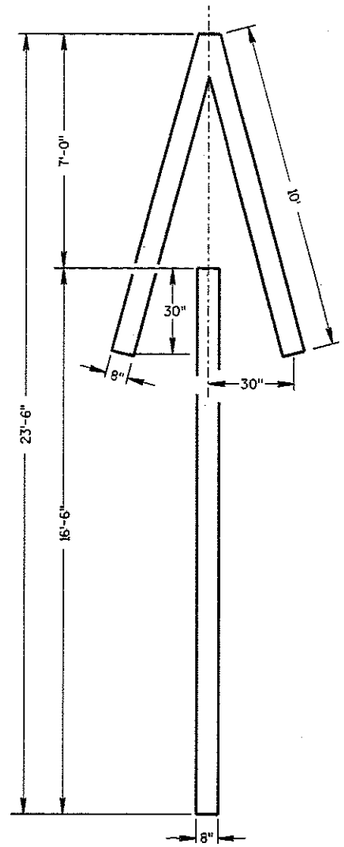
TYPE 3



TYPE 1



PREFERENTIAL LANE SYMBOL



TYPE 4

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PAVEMENT MARKING SYMBOLS

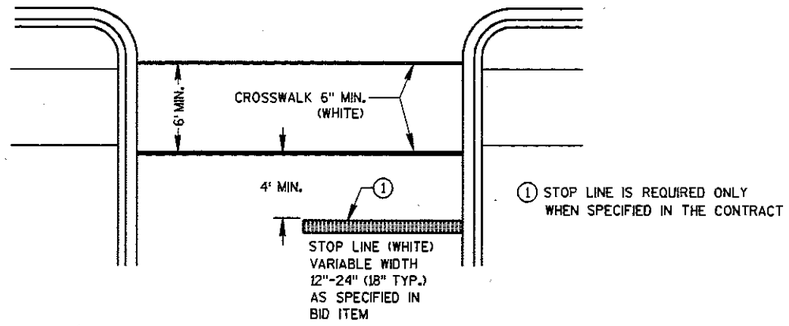
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3-18-03 DATE
Deborah D. Kyd for
CHIEF SIGNS AND MARKING ENGINEER
FHWA

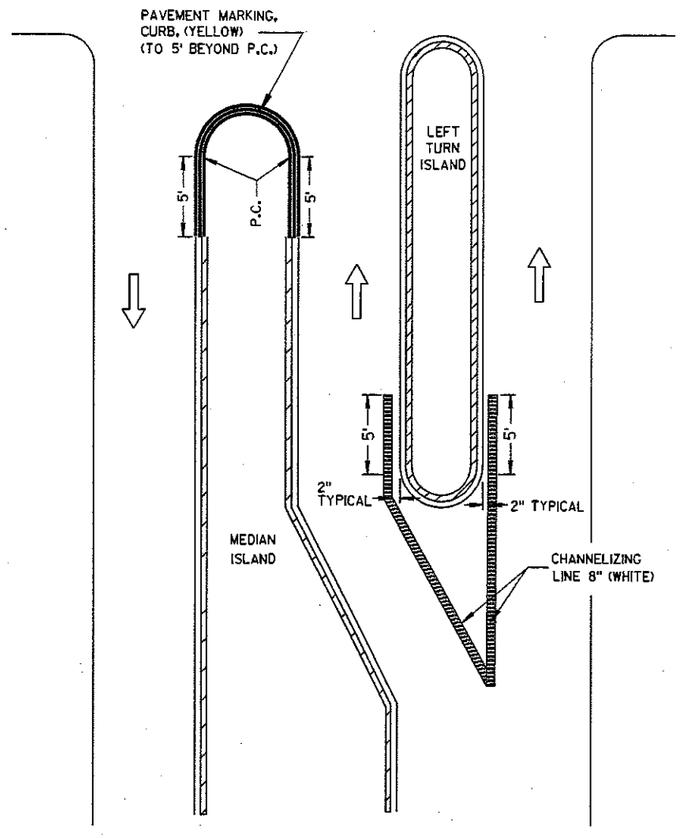
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S.D.D. 15 C 7-6a

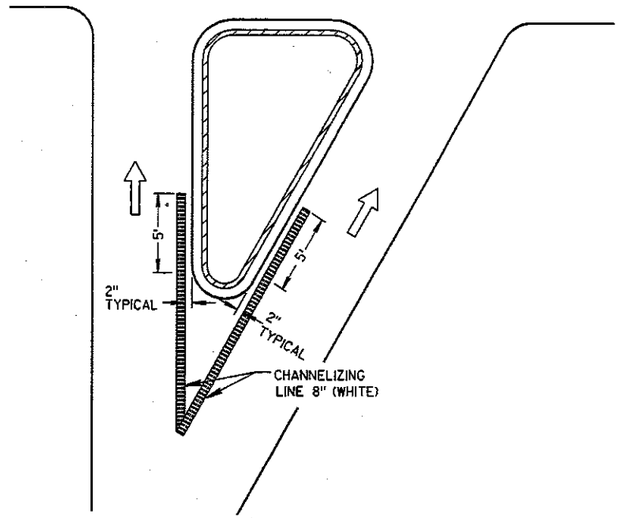
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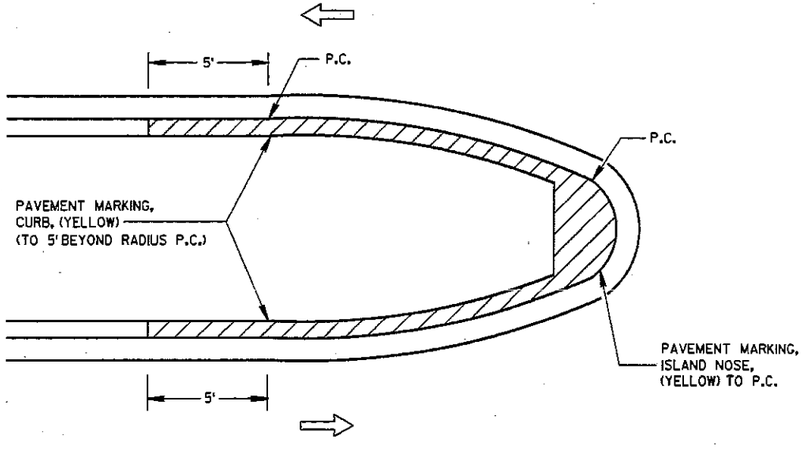
STOP LINE AND CROSSWALK



LEFT TURN & MEDIAN ISLAND



RIGHT TURN ISLAND



MEDIAN ISLAND WITH SLOPED NOSE

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL

PAVEMENT MARKING
(ISLANDS, STOP LINE & CROSS WALK)

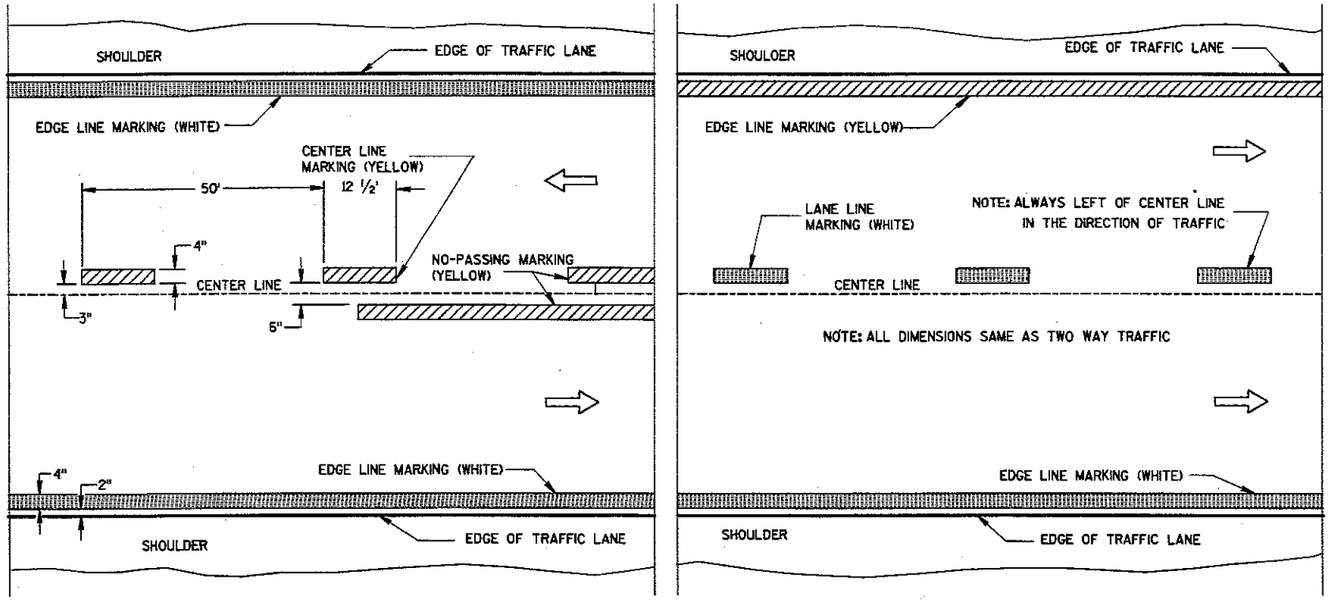
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
1-16-03 DATE
Deborah K. Voigt for
CHIEF SIGNS AND MARKING ENGINEER

FHWA

6

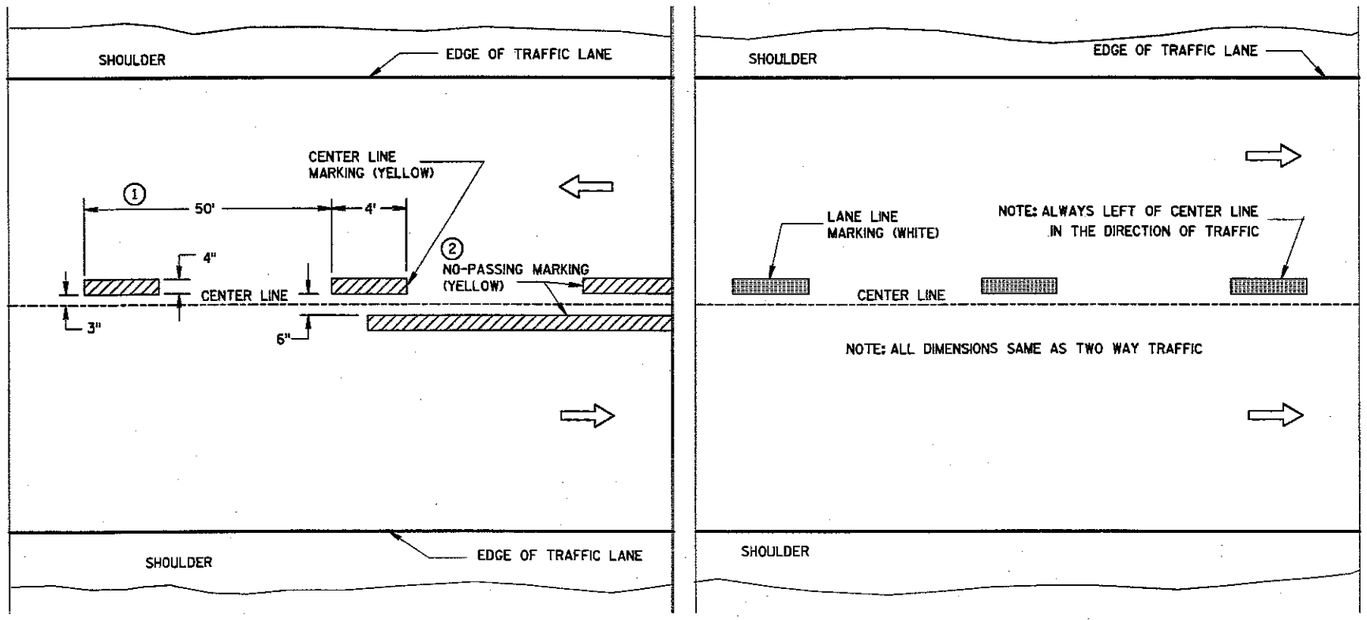
S.D.D. 15 C 8-10e



TWO WAY TRAFFIC

ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC

ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

GENERAL NOTES

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

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

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

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

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PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2-17-00
DATE
Charles J. Spang
CHIEF SIGNS AND MARKING ENGINEER
FHWA

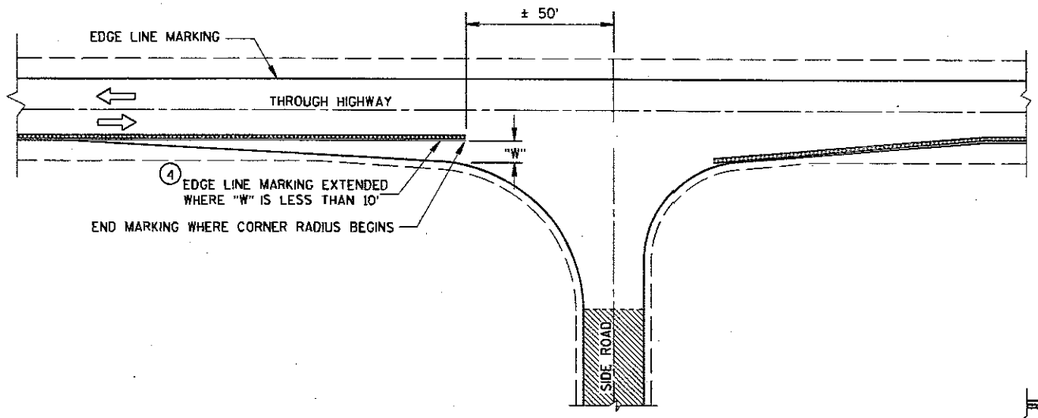
S.D.D. 15 C 8-9a

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

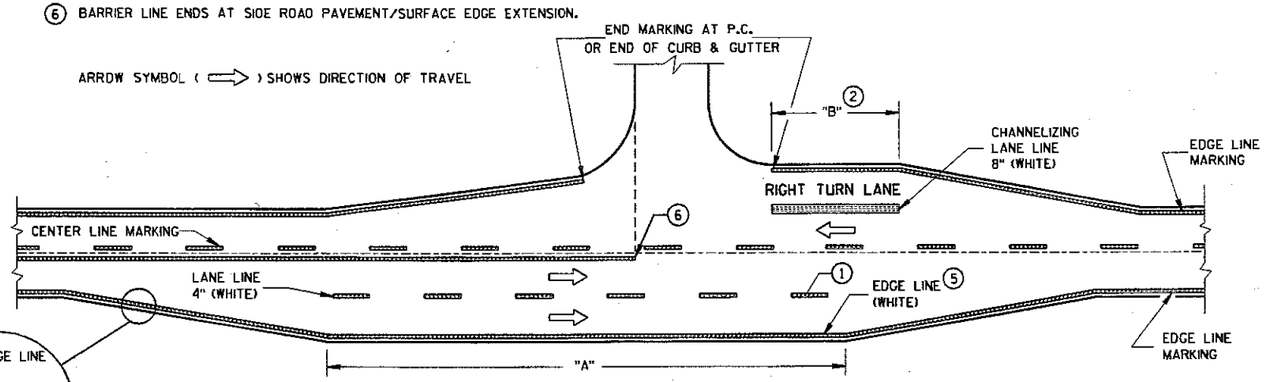
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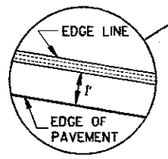
EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

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.

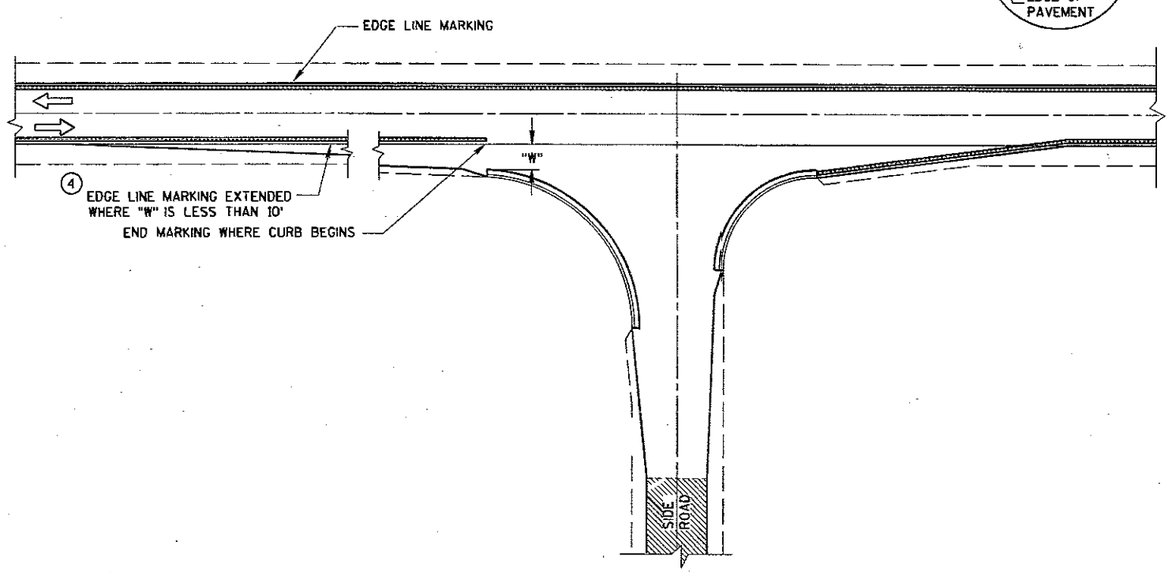


MINOR INTERSECTION WITHOUT CURBS

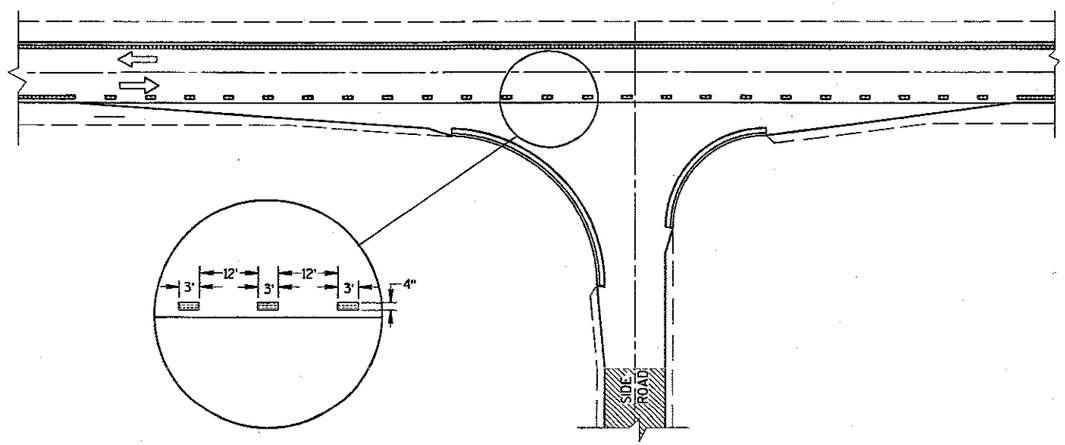




MAJOR INTERSECTIONS
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS
3 (FOR SPECIAL CONDITIONS AS SPECIFIED)

168

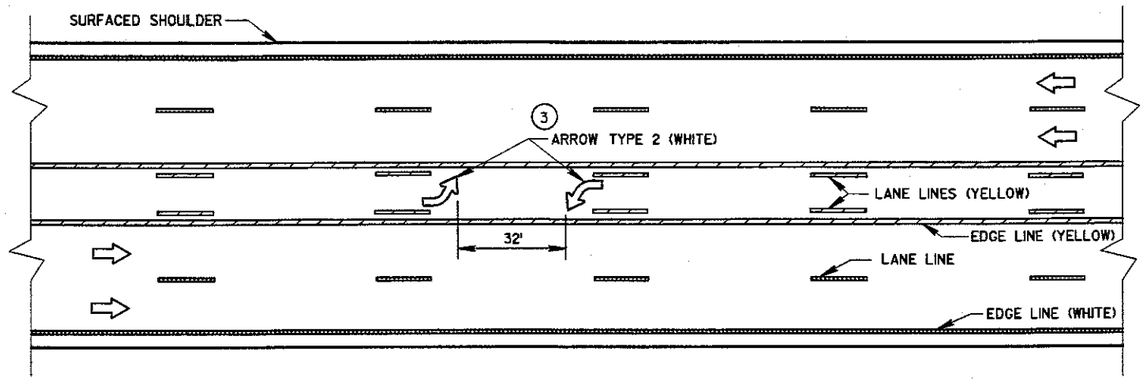
PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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

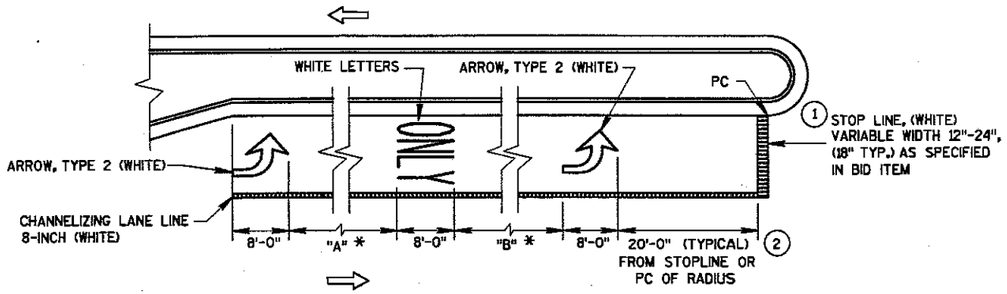
NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TWO WAY LEFT TURN LANE

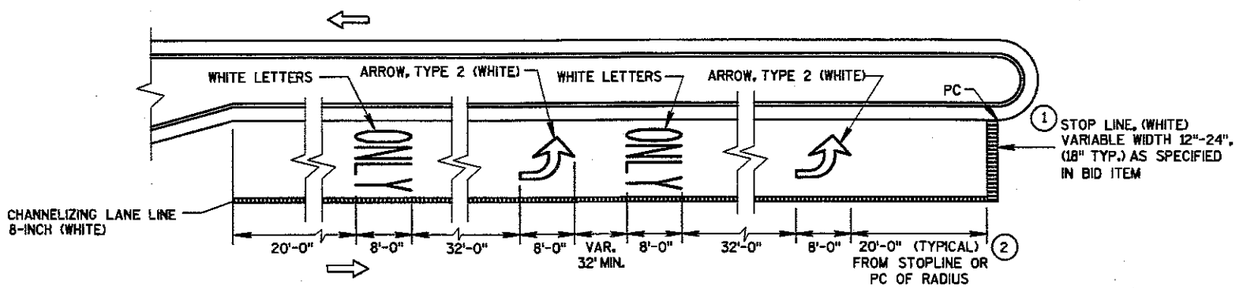
NOTES:

1. STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
3. A SET OF ARROWS IS REQUIRED EVERY 400' OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.

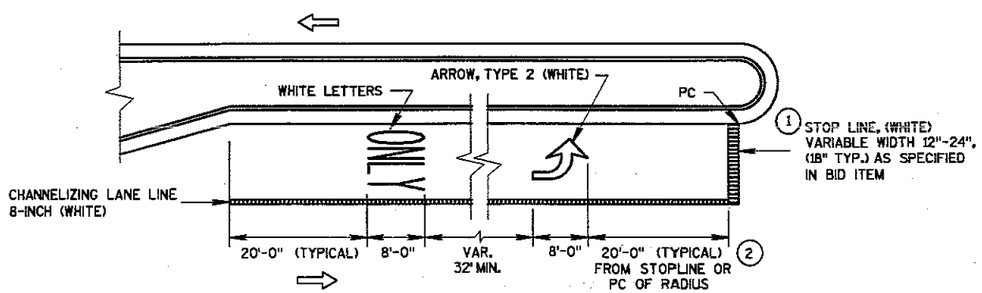


*VARIABLE, 32' MIN.
"A" = "B" (TYPICAL)

LEFT TURN LANE
(LENGTH 108' TO 167')



LEFT TURN LANE
(LENGTH OVER 167')



LEFT TURN LANE
(LENGTH UNDER 108')

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PAVEMENT MARKING
(LEFT TURN LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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

LEGEND

- POST WITH ATTACHED SIGN
- POST WITH ATTACHED SIGN IN DRUM
- DRUM WITH WARNING LIGHT (TYPE C)
- DRUM
- ARROW BOARD
- 8' TYPE III BARRICADE
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC

GENERAL NOTES :

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

(1) CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

GENERAL NOTES CONTINUED:

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 7 CONTINUOUS DAYS AND NIGHTS.

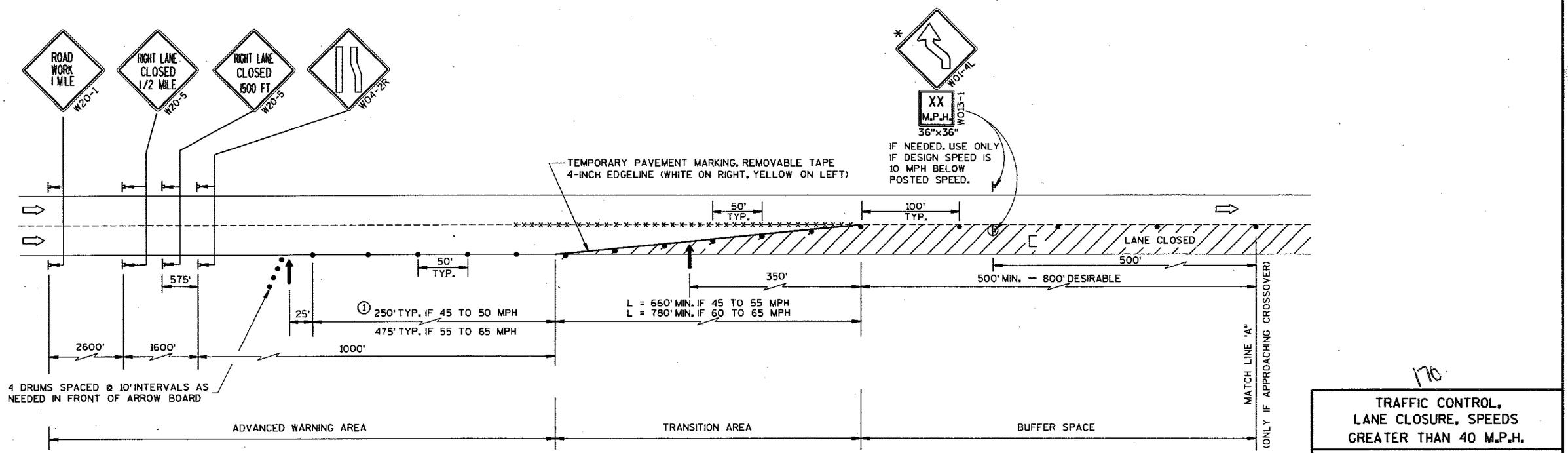
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

IF LANE CLOSURE IS MORE THAN 1 MILE, PLACE A TYPE III BARRICADE APPROXIMATELY EVERY 1/4 MILE ACROSS THE CLOSED LANE TO HELP ENFORCE THE DRUM LINE.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* THE LEFT REVERSE CURVE SIGN (WO1-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.



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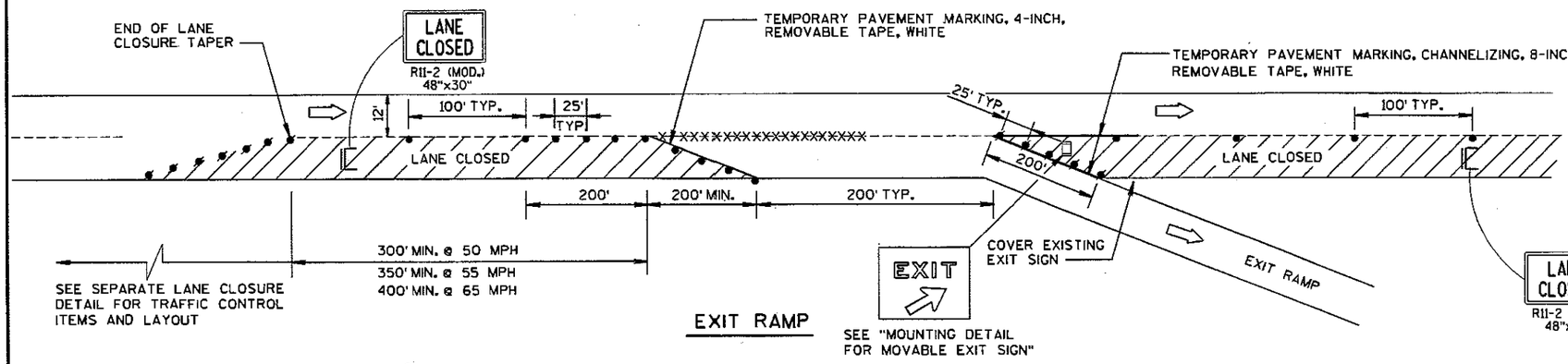
TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

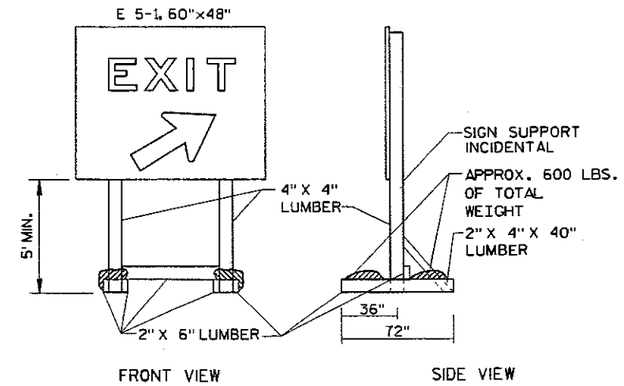
APPROVED
8-7-95
DATE
Charles J. Spang
for DIRECTOR, OFFICE OF TRAFFIC
FHWA

S.D.D. 15 D 12-2

S.D.D. 15 D 12-2

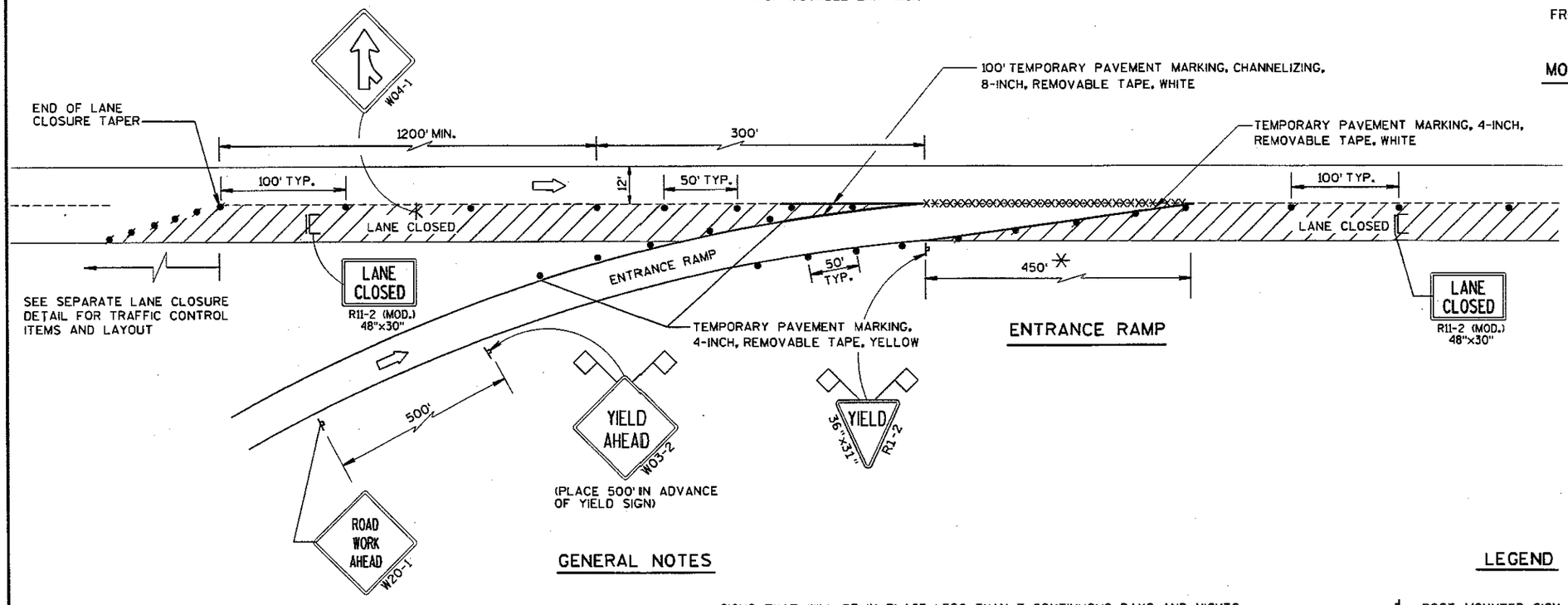


EXIT RAMP



NOTE: ALL LUMBER DIMENSIONS ARE NOMINAL

MOUNTING DETAIL FOR MOVABLE EXIT SIGN



ENTRANCE RAMP

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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

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.

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2 (MOD.) "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

✳ LENGTH OF OPENING MAY BE REDUCED TO 150 FEET DURING STAGING OF WORK IN IMMEDIATE AREA OF RAMP TAPER.

LEGEND

- POST MOUNTED SIGN
- SIGN ON PORTABLE SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH WARNING LIGHT, TYPE C (STEADY-BURN)
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE (8' EQUIVALENT) WITH SIGN
- FLAGS, 16"x16" MIN., ORANGE
- DIRECTION OF TRAFFIC FLOW

171

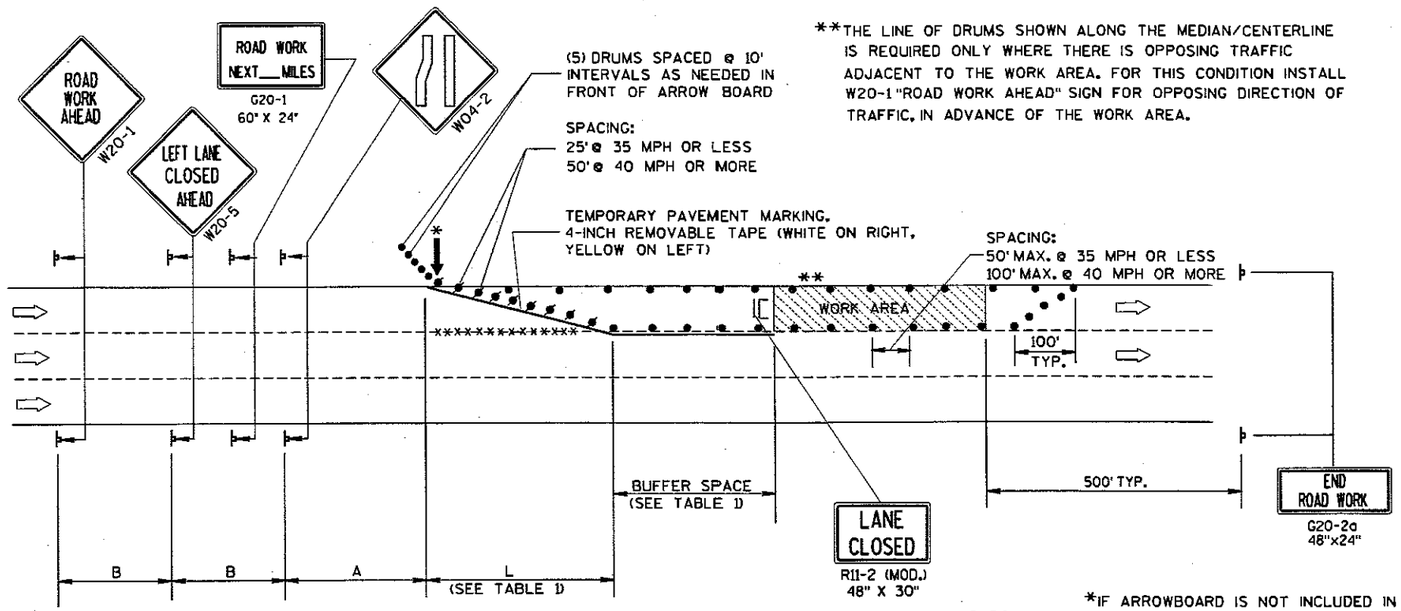
TRAFFIC CONTROL. EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/08
DATE
Chester J. Spong
CHIEF SIGNS AND MARKING ENGINEER
FHWA

S.D.D. 15 D 15-1

S.D.D. 15 D 15-1



**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF TRAFFIC, IN ADVANCE OF THE WORK AREA.

B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

(PLACE BARRICADE AND SIGN APPROX. EVERY 1000' ACROSS THE CLOSED LANE)

*IF ARROWBOARD IS NOT INCLUDED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER.

W01-6
48"x24"

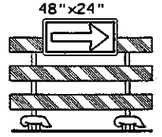


TABLE 1
TAPER AND BUFFER SPACE FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

LEGEND

- DRUM WITH/WITHOUT WARNING LIGHT, TYPE C (STEADY-BURN)
- POST MOUNTED SIGN
- ARROW BOARD
- IC/C TYPE III BARRICADE (8' EQUIVALENT) AND WARNING LIGHTS, TYPE A (FLASHING) WITH/WITHOUT SIGN
- DIRECTION OF TRAFFIC FLOW
- xxxx REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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

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

ALL SIGNS ARE 48"×48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

W20-1, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

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

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

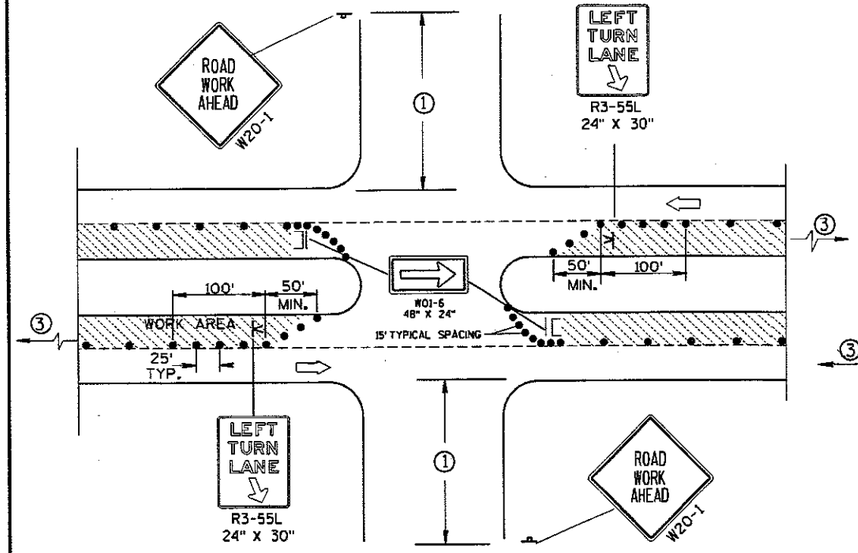
APPROVED
5/23/00
DATE

Charles J. Sprague
CHIEF SIGNS AND MARKING ENGINEER

FHWA

S.D.D. 15 D 20-1

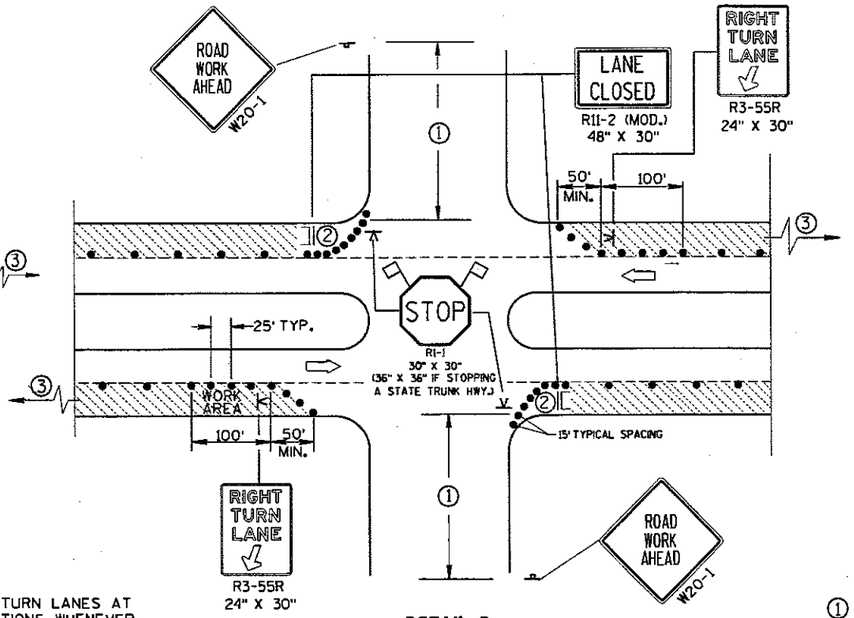
S.D.D. 15 D 20-1



DETAIL A

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.



DETAIL B

FOR RIGHT LANE CLOSURE AT INTERSECTION

GENERAL NOTES

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

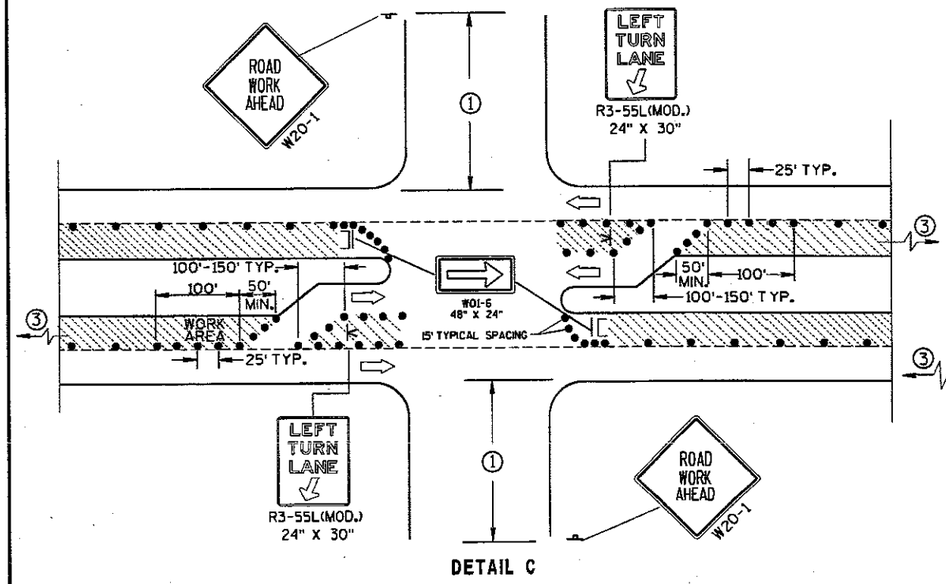
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35-40 MPH.
200' IF 25-30 MPH.

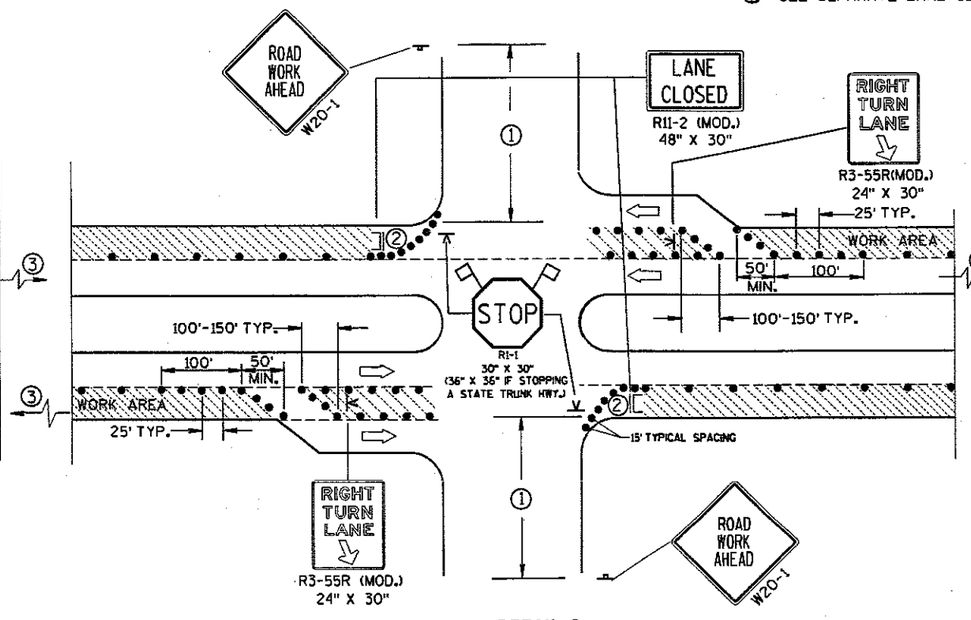
② ALSO USE BARRICADE AND 15' TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.

③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.



DETAIL C

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)



DETAIL D

FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

LEGEND

- DRUM
- POST MOUNTED SIGN
- SIGN ON PORTABLE SUPPORT (5' MIN. MOUNTING HEIGHT)
- TYPE III BARRICADE (8' EQUIVALENT) AND WARNING LIGHT, TYPE A (FLASHING) WITH SIGN
- DIRECTION OF TRAFFIC FLOW
- FLAGS, 16" X 16" MIN., ORANGE

173

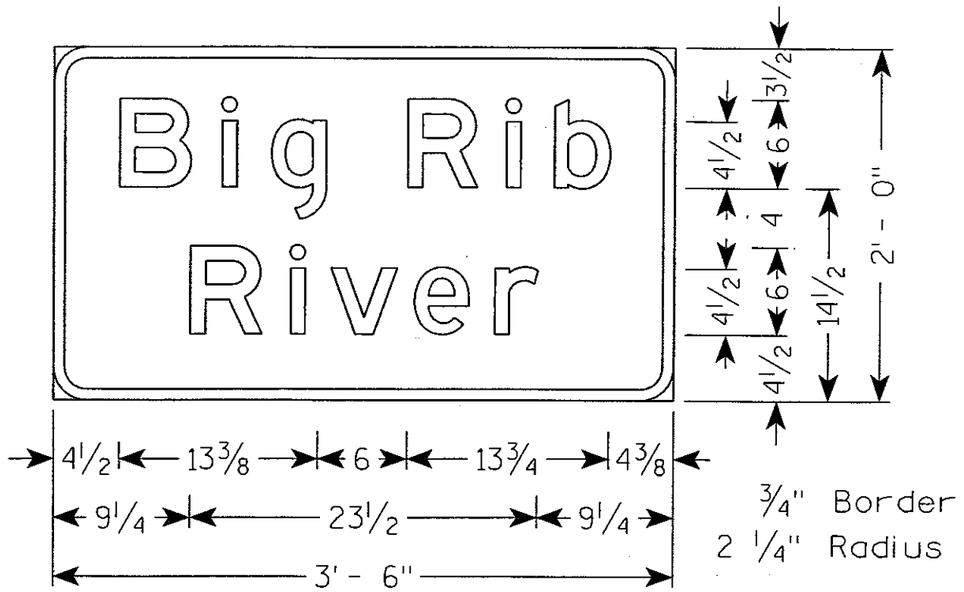
TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/28/00 DATE
Charles J. Spang
CHIEF SIGNS AND MARKING ENGINEER
FHWA

S.D.D. 15 D 21-1

S.D.D. 15 D 21-1



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message - White
3. Message Series - E

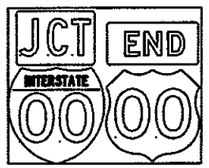
PROJECT NO: 6675-00-71	HWY: CTH R	COUNTY: MARATHON	PERMANENT SIGNING	SHEET NO: 174	E

FILE NAME : P:\40xx\4025\Plan\6675-00-71\SIGNING\070101_sd.dgn PLOT DATE : 02/12/2004 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

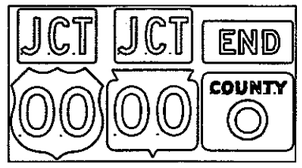
TYPICAL ASSEMBLIES



J1-1



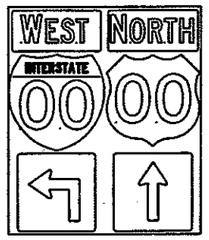
J1-2



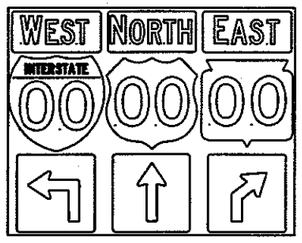
J1-3



J2-1



J2-2



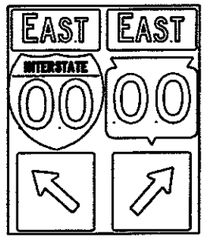
J2-3



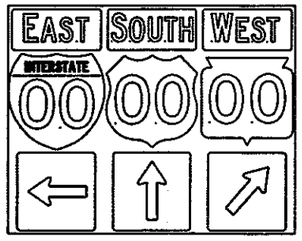
JV



J3-1



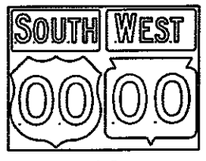
J3-2



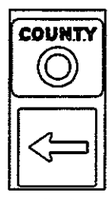
J3-3



J4-1



J4-2



J13-1



J12-1



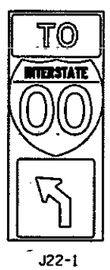
J32-1



J33-1



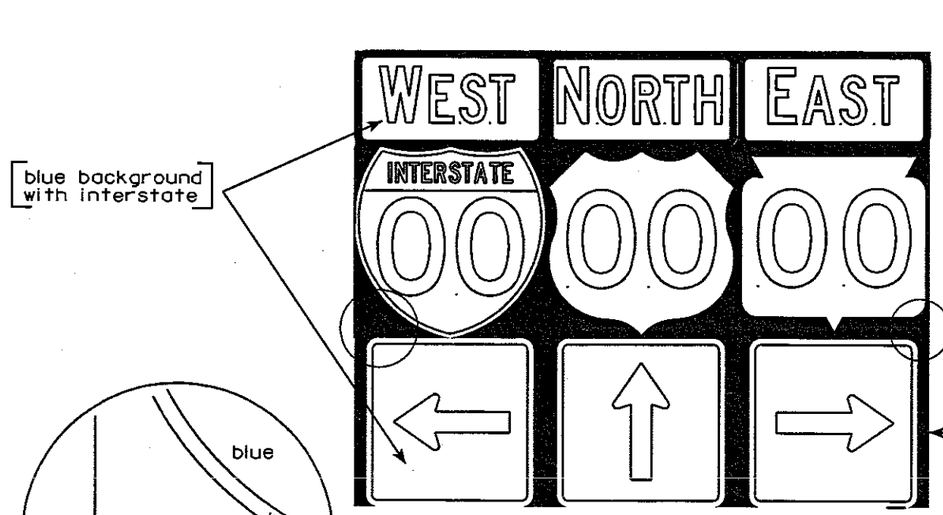
J23-1



J22-1

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square since base material is plywood.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 interstate marker shall be blue.



ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

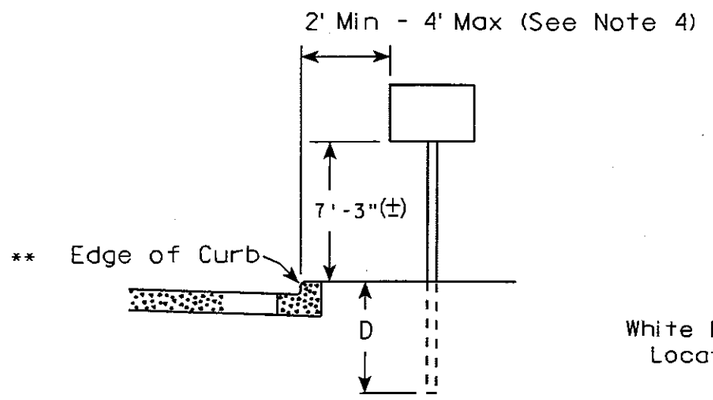
DATE 10/17/02 PLATE NO. A2-15.3

STATE PROJECT NUMBER:

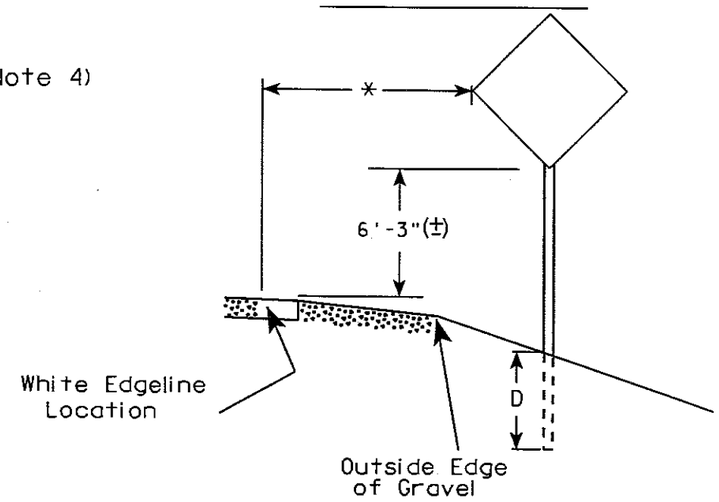
SHEET NO: 175 E

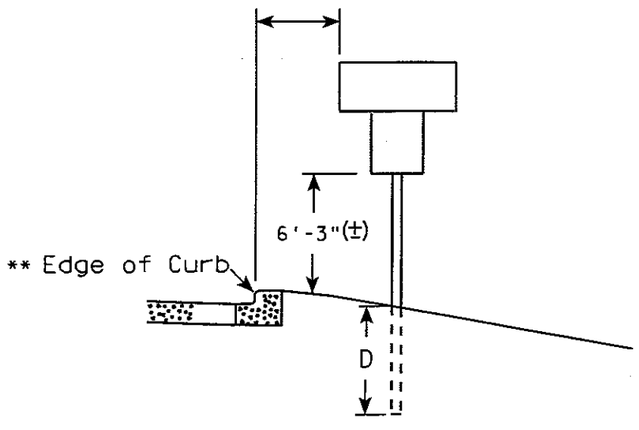
7

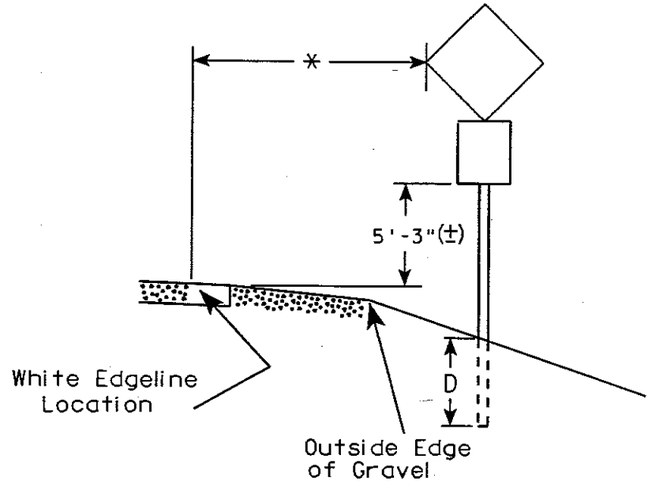
URBAN AREA



RURAL AREA (See Note 2)







GENERAL NOTES

1. Signs wider than 4 feet or larger than 20 sq. ft. shall be mounted on multiple posts. Refer to plate A4-4.
2. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
3. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically where there is sidewalk adjacent to the roadway or parking is permitted. This same criteria applies to mountable curb as well and measurement shall be taken from flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

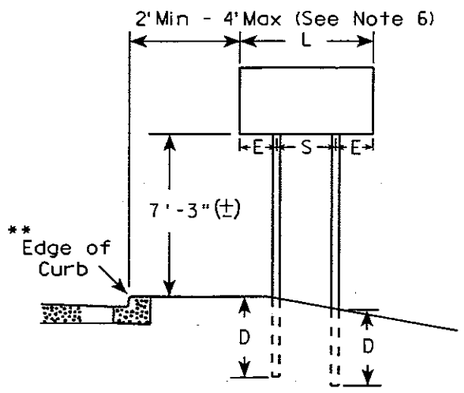
DATE 2/20/03 PLATE NO. A4-3.12

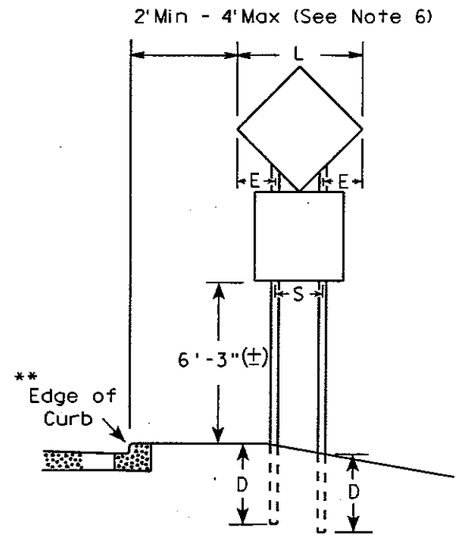
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STATE PROJECT NUMBER:	HWY:	COUNTY:			SHEET NO: 176 E

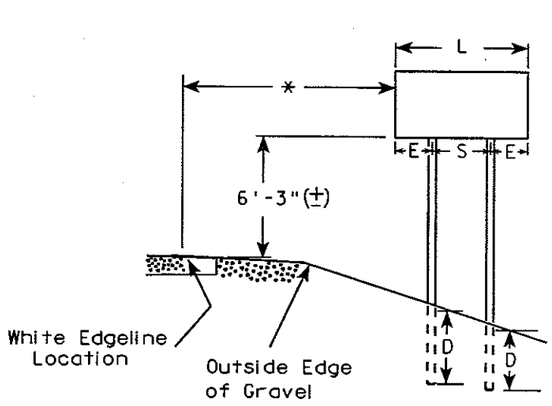
FILE NAME : C:\Users\Projects\tr_stdplate\A43.DGN PLOT DATE : 26-JAN-2004 07:13 PLOT BY : DOTDZK PLOT NAME : REV DATE : 12/20/02 Originator : Sandy Anderson PLOT SCALE : 101.632952:1.000000

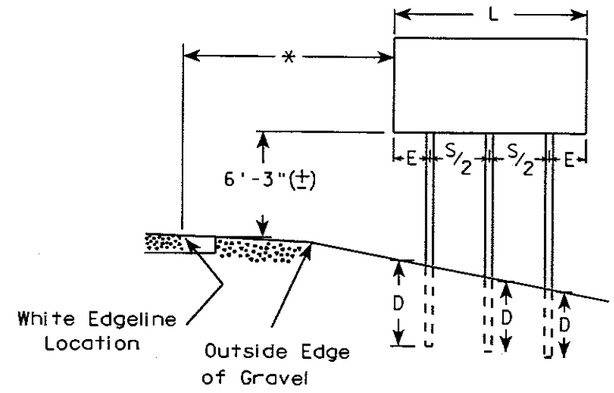
URBAN AREA

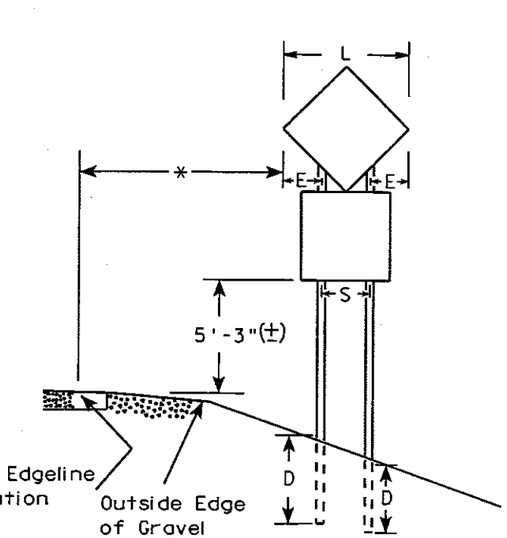




RURAL AREA (See Note 3)







GENERAL NOTES

1. For 3 post installations, spacing is S/2 and S must be greater than 7'-0".
2. For 4 post installations, spacing is S/3 and S must be greater than 10'-6".
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically where there is sidewalk adjacent to the roadway or parking is permitted. This same criteria applies to mountable curb as well and measurement shall be from the flow line.

DIAMOND SHAPED SIGNS		
L	S	E
Less than 60"	20"	L/2 - 10
60"--72"	32"	L/2 - 16
Greater than 72"	3 L/5	L/5

SIGN SHAPE OTHER THAN DIAMOND (Two Post Installations)		
L	S	E
Less than 60"	L-24"	12"
60" or more	3 L/5	L/5

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

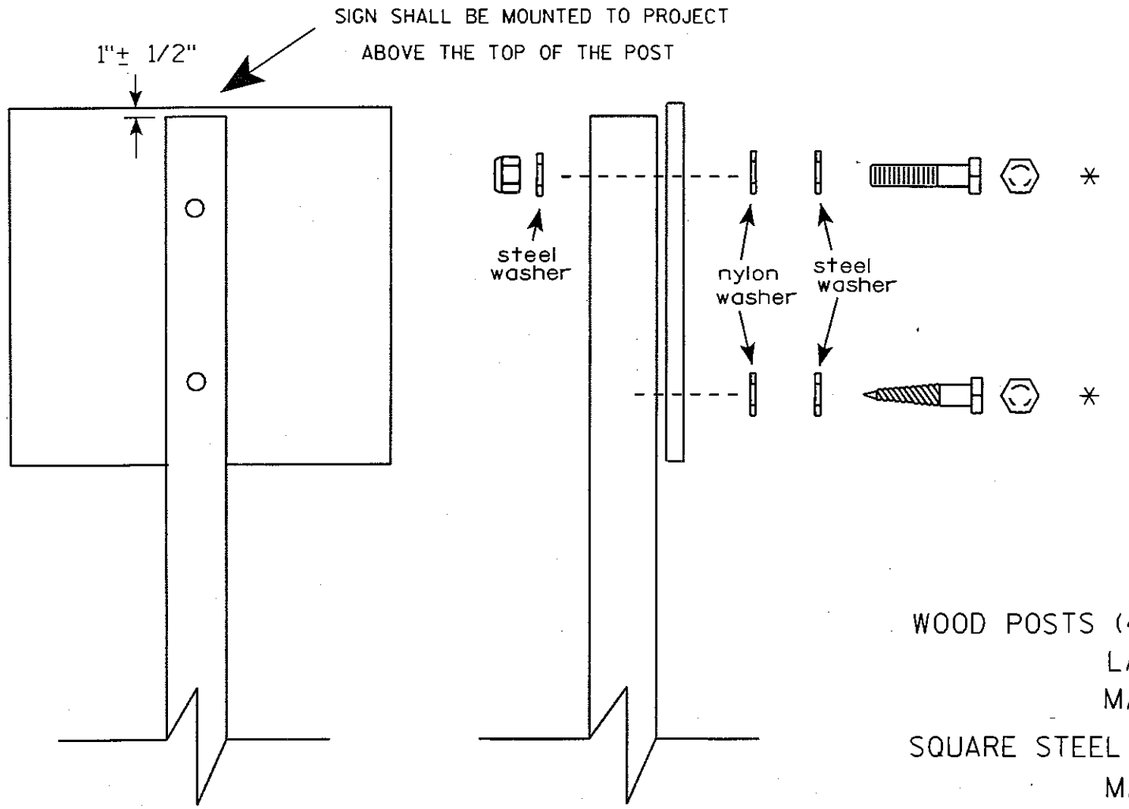
DATE 2/20/03 PLATE NO. A4-4.7

STATE PROJECT NUMBER:	HWY:	COUNTY:			SHEET NO: 177	E

7

LEVELS ON - 1,2,3, 5,6, 10,

57,58,59,60, 63



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

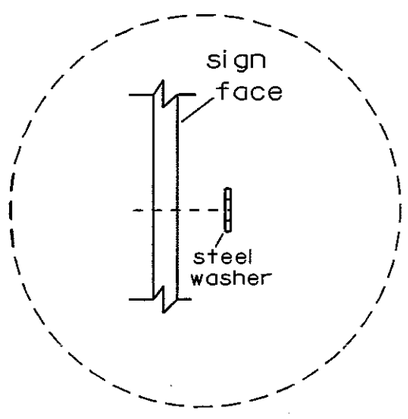
a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts

SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts

WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.



Washer Placement when Sign Has Other Than Type H or Type F Face

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs 9 sq. ft. or larger require the use of 3 fasteners.

7

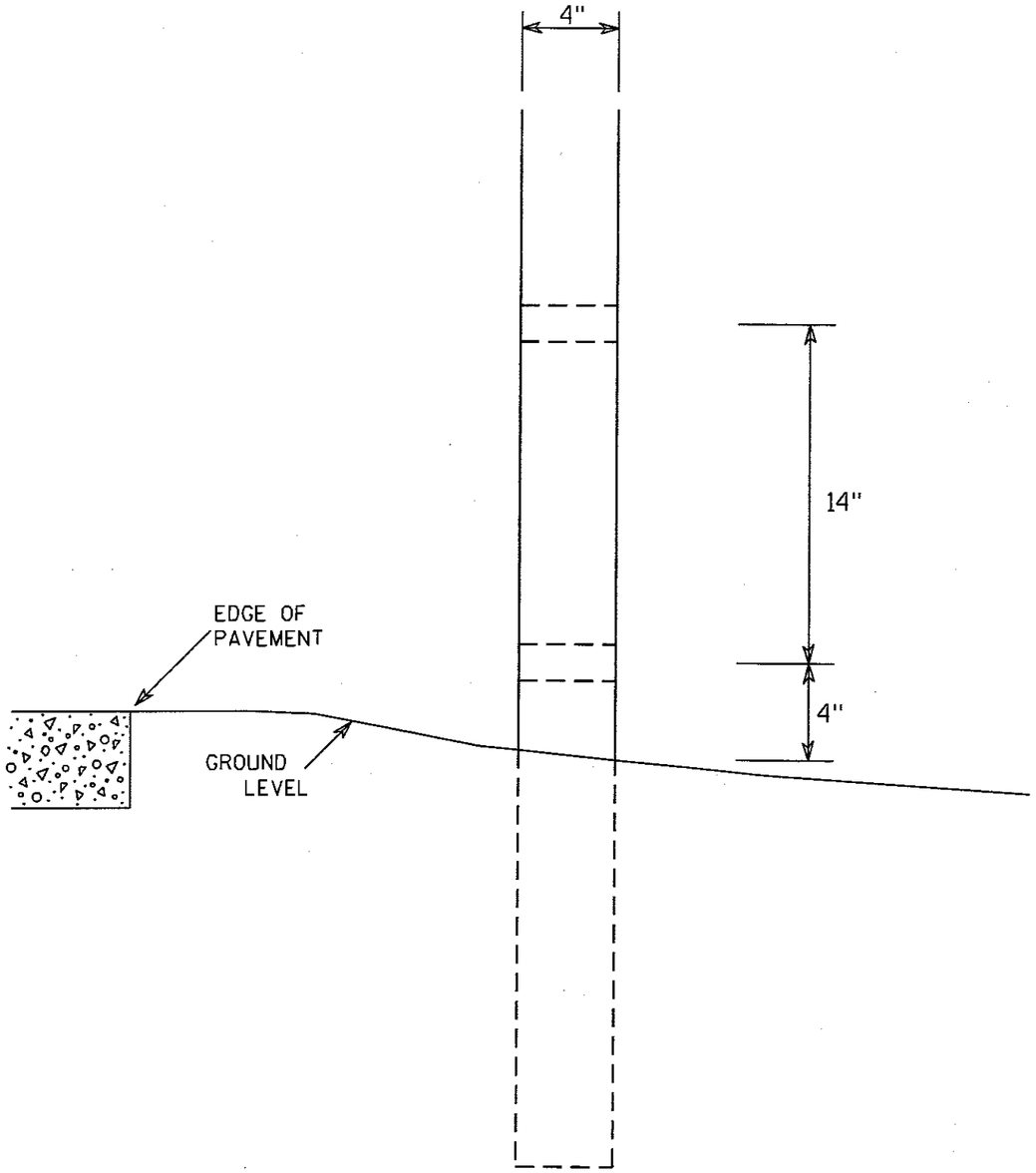
ATTACHMENT OF SIGNS TO POSTS

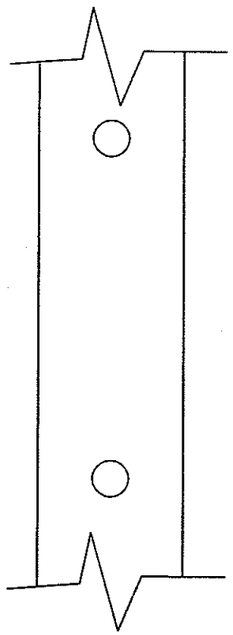
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 4/03/02 PLATE NO. A4-8.5

STATE PROJECT NUMBER: | SHEET NO: 178 | E





SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

STATE PROJECT NUMBER:

SHEET NO: 179 E

FILE NAME : C:\Users\Projects\tr_stdplate\A411.DGN PLOT DATE : 26-JAN-2004 07:15 PLOT BY : DOTDZK ORG DATE : 3/27/97 Originator : DON KLUEVER

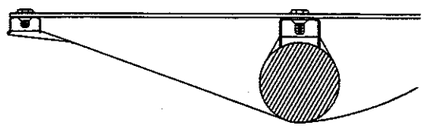
WISDOT/CADDS SHEET 42

7

LEVELS ON - 2.3.4.5.6. 10. 18.

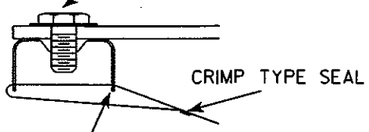
57.58.59.60.61.62.63

BRACE BANDING

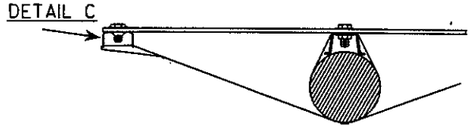


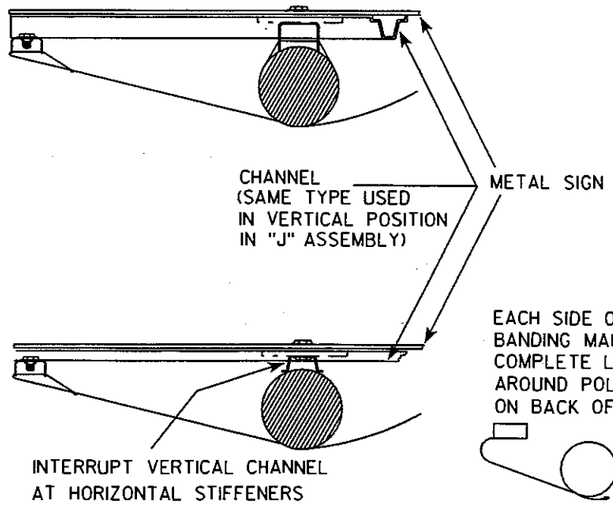
DETAIL C

CADMIUM PLATED STEEL BOLT THROUGH BLACK BORDER



DETAIL C



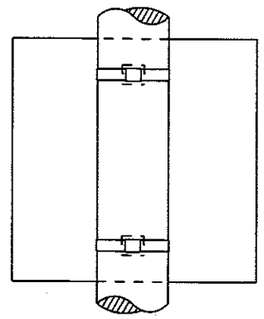


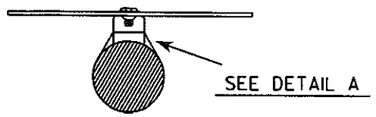
EACH SIDE OF BRACE BANDING MAKES ONE COMPLETE LOOP AROUND POLE-SEAL ON BACK OF POLE



BRACKET BANDING

SINGLE SIGN

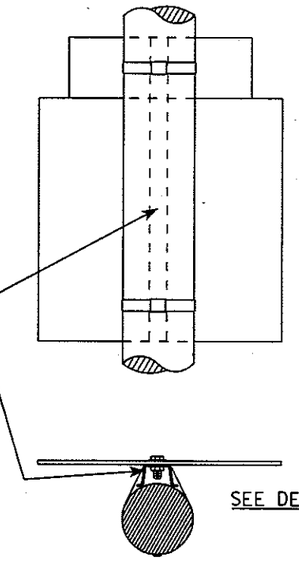


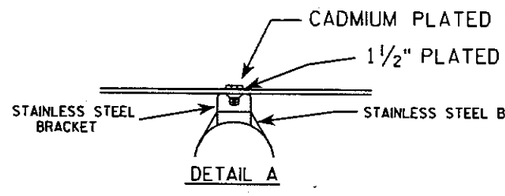


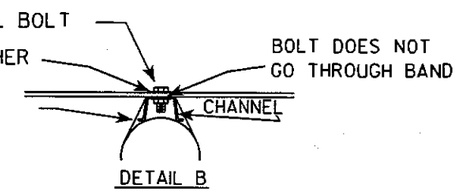
"J" ASSEMBLY

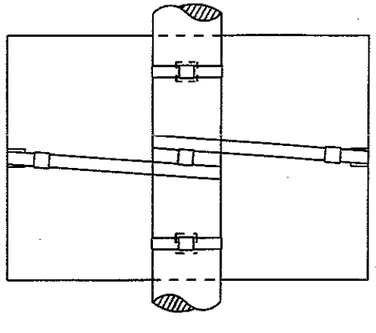
CHANNEL

SEE TYPICAL PANEL INSTALLATION SHEET



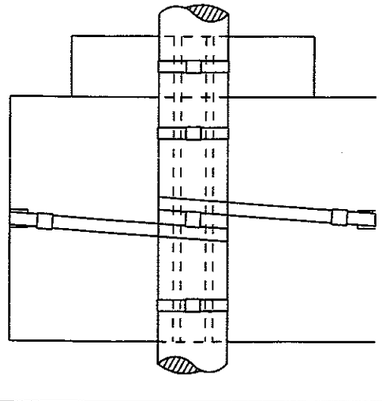






BRACE BANDING

BRACE BANDING SHALL BE TIGHTENED FIRMLY BUT NOT SO TIGHT AS TO APPRECIABLY CURVE FACE OF SIGN.



GENERAL NOTES

1. Signs 4' or greater in width shall have one brace band installed at the center of the sign.
2. Signs 3' or greater in height shall have three bracket bands installed. Signs less than 3' in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

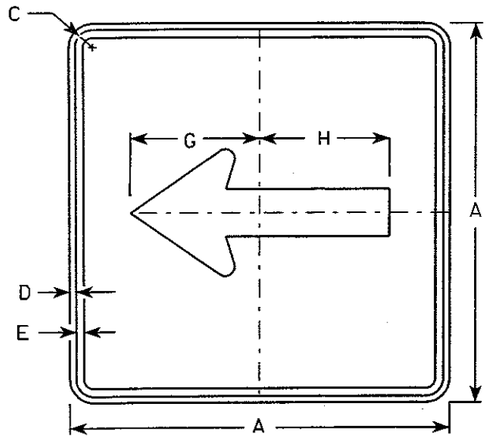
DATE 2/03/03 PLATE NO. A5-9.1

STATE PROJECT NUMBER:	HWY:	COUNTY:			SHEET NO: 180	E

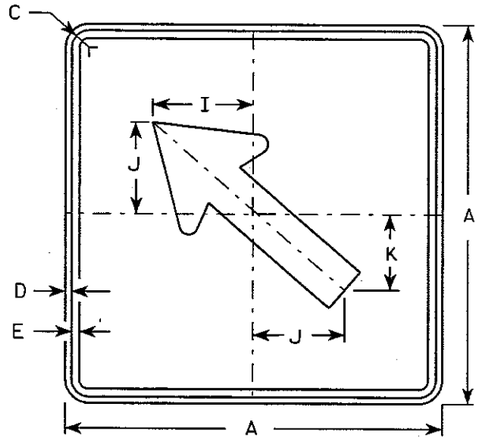
7

FILE NAME : C:\Users\Projects\tr_stdplate\A59.DGN PLOT DATE : 26-JAN-2004 07:16 PLOT BY : DOTDZK PLOT NAME : ORG DATE : Feb 2003 Originator : Sandy Anderson PLOT SCALE : 35.891566:1.000000

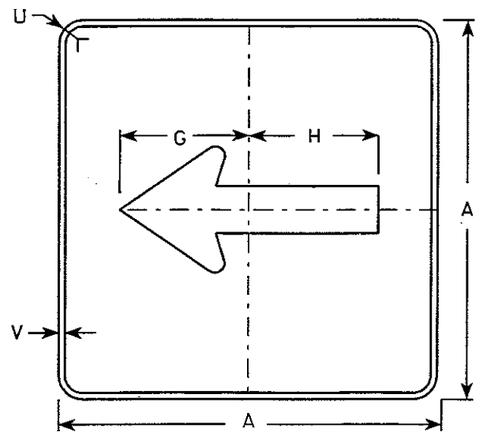
WISDOT/CADDS SHEET 42



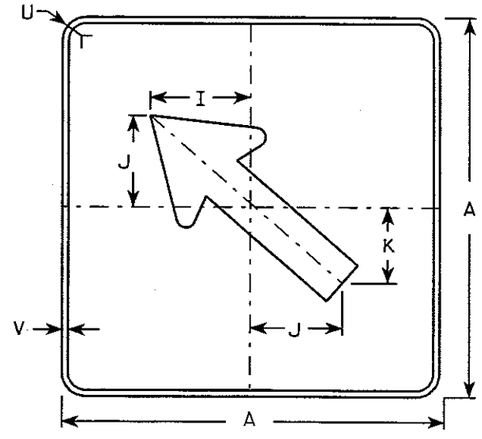
M6-1
MK6-1
MM6-1 (See Note 5)
MO6-1
MR6-1



M6-2
MK6-2
MM6-2 (See Note 5)
MO6-2
MR6-2



MB6-1
MG6-1
MN6-1



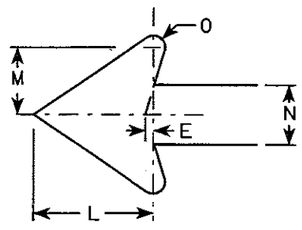
MB6-2
MG6-2
MN6-2

NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White - Type H Reflective (Detour or temporary Signs - Reflective) Message - Black
   MB6-1 and MB6-2 Background - Blue Message - White - Type H Reflective (Detour or temporary Signs - Reflective)
   MG6-1 and MG6-2 Background - Green Message - White - Type H Reflective
   MK6-1 and MK6-2 Background - Green Message - White - Type H Reflective
   MM6-1 and MM6-2 Background - White - Type H Reflective Message - Green
   MN6-1 and MN6-2 Background - Brown Message - White - Type H Reflective
   MO6-1 and MO6-2 Background - Orange - Reflective Message - Black
   MR6-1 and MR6-2 Background - Brown Message - Yellow - Type H Reflective
5. Border shall be omitted on MM series.

Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 mm



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m²
1																												
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06	0.28
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25	0.56
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25	0.56
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25	0.56

STANDARD SIGN M6-1 & M6-2 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

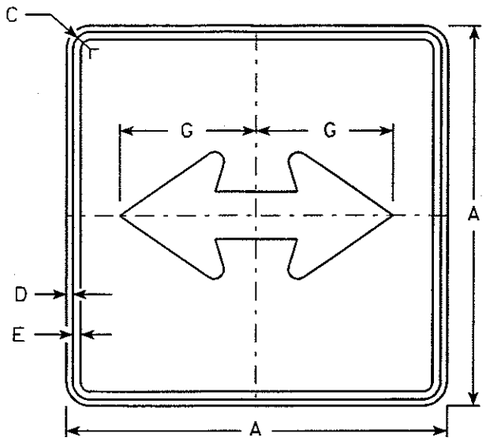
DATE 3/20/02 PLATE NO. M6-1.11

STATE PROJECT NUMBER:

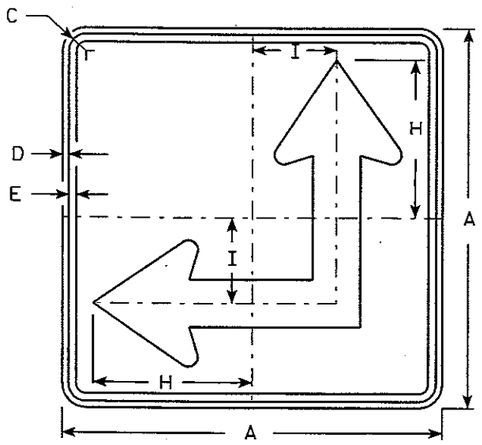
SHEET NO: 181 E

50.59.61.62.63

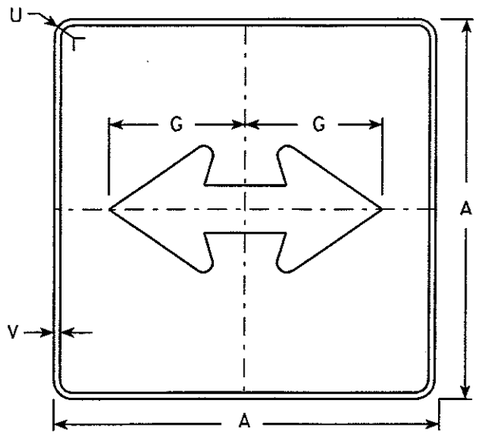
LEVELS ON • 2.3 5.6



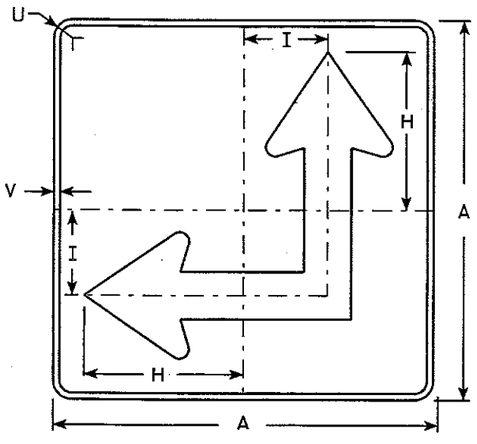
M6-4
MK6-4
MM6-4 (See Note 5)
MO6-4
MR6-4



M6-6
MK6-6
MM6-6 (See Note 5)
MO6-6
MR6-6



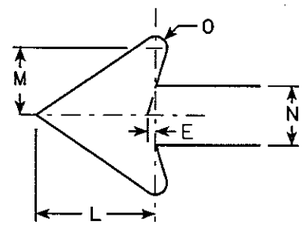
MB6-4
MG6-4
MN6-4



MB6-6
MG6-6
MN6-6

NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White - Type H Reflective (Detour or temporary Signs - Reflective) Message - Black
   MB6-4 and MB6-6 Background - Blue Message - White - Type H Reflective (Detour or temporary Signs - Reflective)
   MG6-4 and MG6-6 Background - Green Message - White - Type H Reflective
   MK6-4 and MK6-6 Background - Green Message - White - Type H Reflective
   MM6-4 and MM6-6 Background - White - Type H Reflective Message - Green
   MN6-4 and MN6-6 Background - Brown Message - White - Type H Reflective
   MO6-4 and MO6-6 Background - Orange - Reflective Message - Black
   MR6-4 and MR6-6 Background - Brown Message - Yellow - Type H Reflective
5. M6-6R same as M6-6L except arrow points ahead and right.
6. Border shall be omitted on MM series.



Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m²
1																												
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06	0.28
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56

STANDARD SIGN
M6-4 & M6-6
SERIES

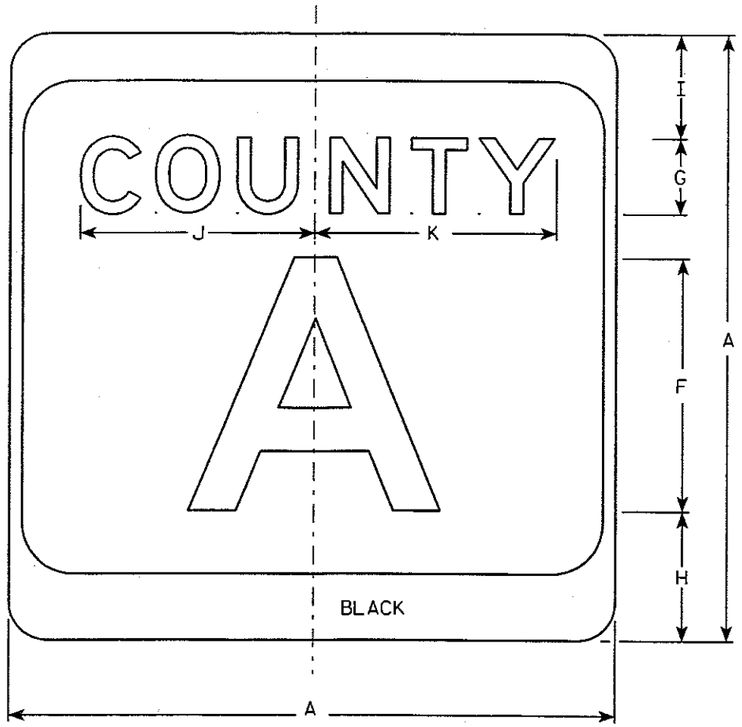
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spange for State Traffic Engineer

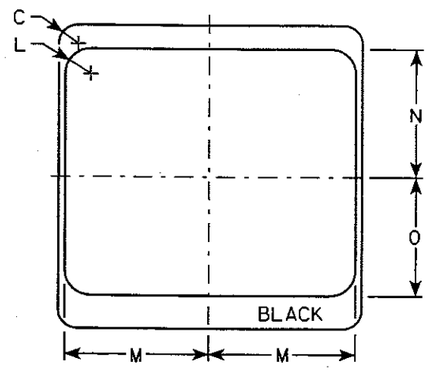
DATE 3/20/02 PLATE NO. M6-4.6

STATE PROJECT NUMBER:

SHEET NO: 182 E



M1-5A



NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropirate letters & optically adjust spacing to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq. m
1																												
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8												4.0	.36
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14												9.0	.81
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14												9.0	.81
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14												9.0	.81

CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

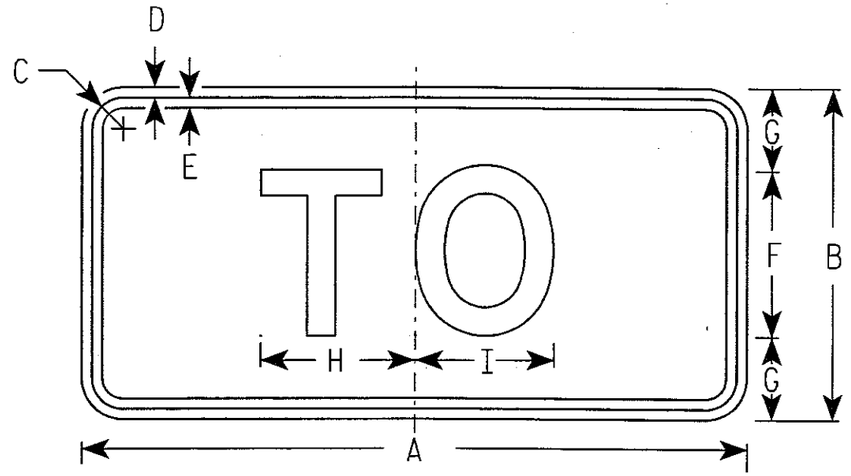
DATE 3/20/02 PLATE NO. M1-5A.7

STATE PROJECT NUMBER:

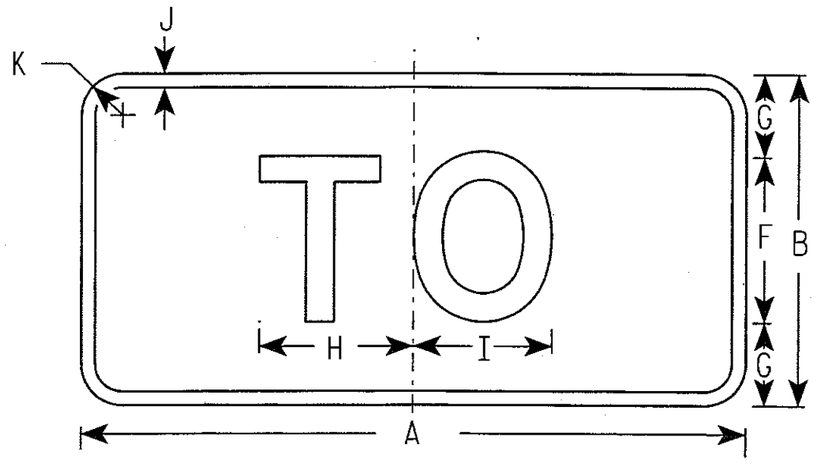
SHEET NO: 183 E

58.59.60.61.62.63

LEVELS ON • 2.3. 5.6. 10.



M4-5
MK4-5
MM4-5 *See Note 6



MB4-5
MG4-5
MN4-5

NOTES

1. Sign is Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-5 Background - White - Type H Reflective
   (Detour or temporary Signs - Reflective)
   Message - Black
   MB4-5 Background - Blue
   Message - White - Type H Reflective
   (Detour or temporary Signs - Reflective)
   MG4-5 Background - Green
   Message - White - Type H Reflective
   MK4-5 Background - Green
   Message - White - Type H Reflective
   MM4-5 Background - White - Type H Reflective
   Message - Green
   MN4-5 Background - Brown
   Message - White - Type H Reflective
6. Border shall be omitted on MM series.

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 300 mm
3	750 mm X 375 mm
4	750 mm X 375 mm
5	750 mm X 375 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24	12	1 1/8	3/8	3/8	6	3	5 5/8	5	1/2	1 1/2																2.00	0.18
3	30	15	1 3/8	3/8	1/2	8	3 1/2	7 1/2	6 5/8	1/2	1 1/2																3.13	0.28
4	30	15	1 3/8	3/8	1/2	8	3 1/2	7 1/2	6 5/8	1/2	1 1/2																3.13	0.28
5	30	15	1 3/8	3/8	1/2	8	3 1/2	7 1/2	6 5/8	1/2	1 1/2																3.13	0.28

STANDARD SIGN
M4-5

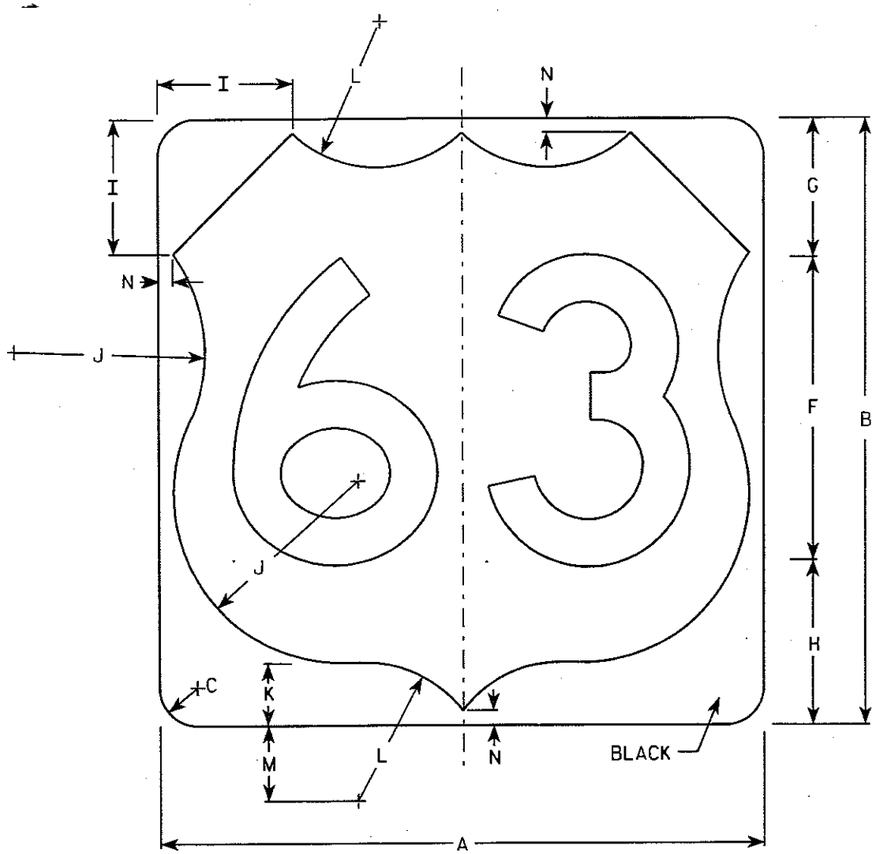
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

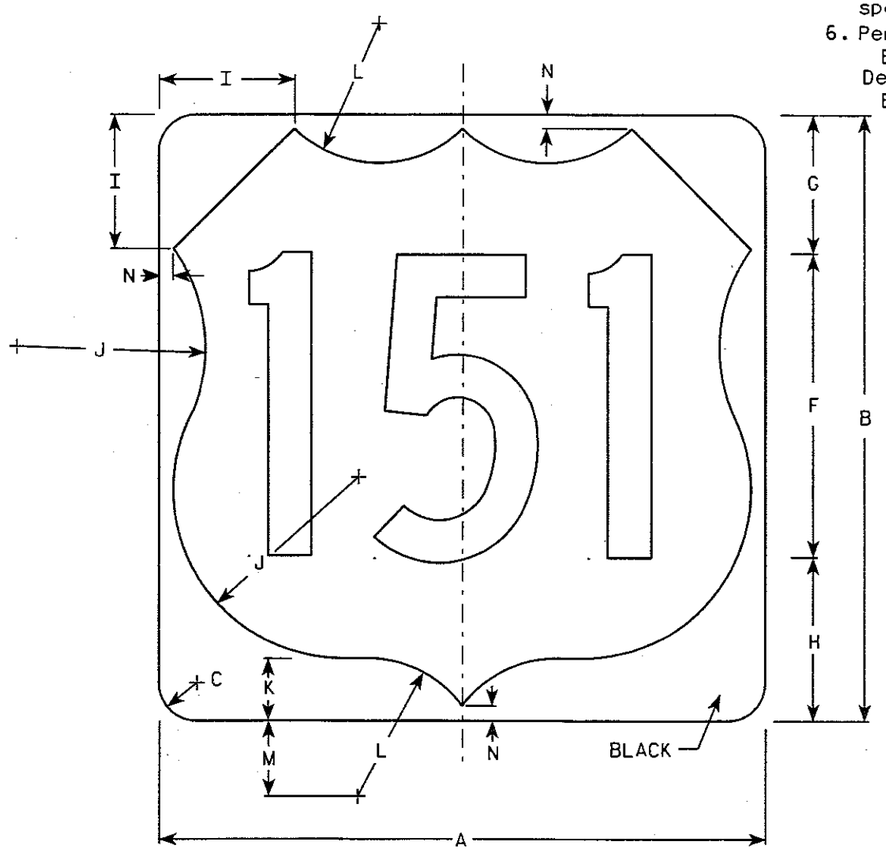
DATE 3/20/02 PLATE NO. M4-5.4

STATE PROJECT NUMBER:

SHEET NO: 184 E



M1-4



M1-4

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and adjust spacing as per Plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or other temporary signs
   Background - Reflective

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0	.36
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81

USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/19/02 PLATE NO. M1-4.8

STATE PROJECT NUMBER:

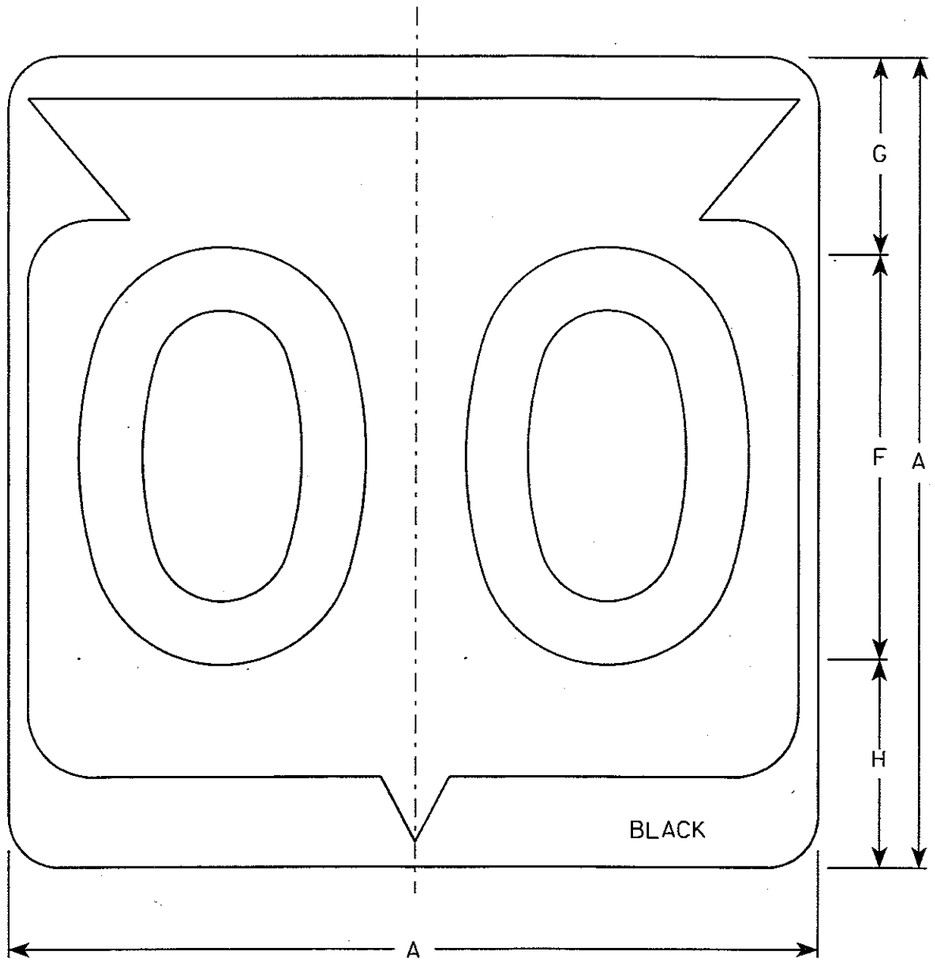
SHEET NO: 185 E

FILE NAME : C:\Users\Projects\tr_stdplate\M14.DGN PLOT DATE : 26-JAN-2004 07:22 ORG DATE : 1980 Originator : Sandy Anderson

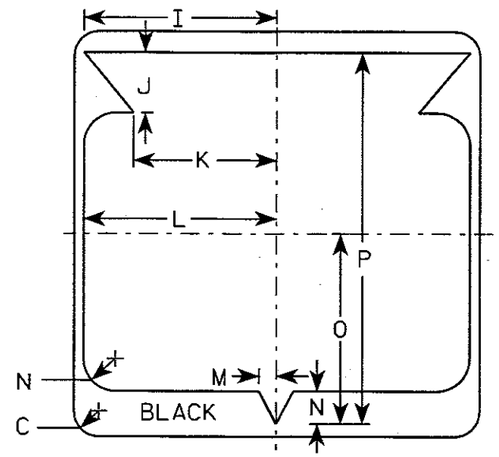
WISDOT/CADDS SHEET 42

58.59.60.61.62.

LEVELS ON • 2.3. 5.6. 10.



M1-6



NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate Series numerals and adjust spacing as per plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81

STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

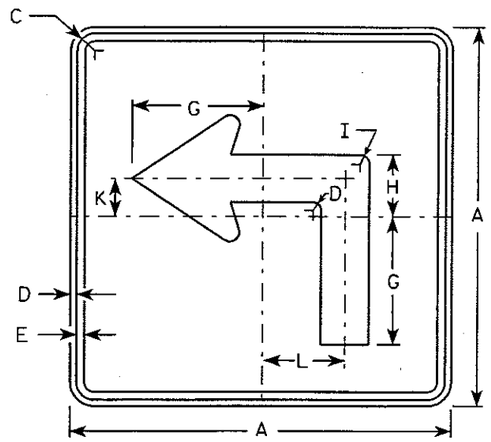
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

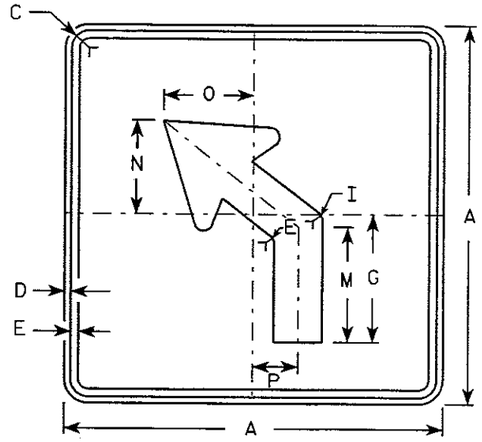
DATE 3/20/02 PLATE NO. M1-6.9

STATE PROJECT NUMBER:

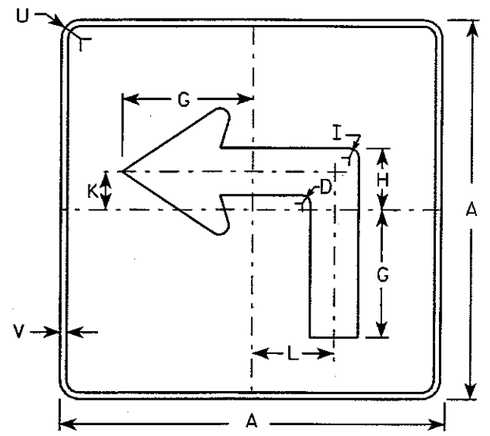
SHEET NO: 186 E



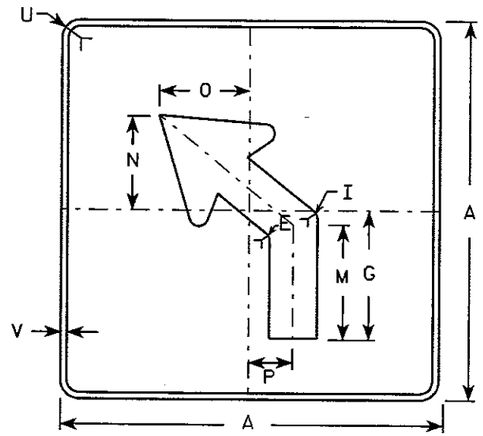
M5-1L
MK5-1L
MM5-1L (See Note 7)
MO5-1L
MR5-1L



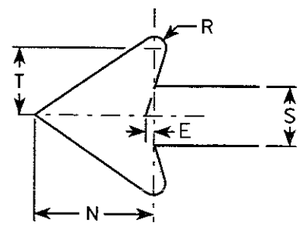
M5-2L
MK5-2L
MM5-2L (See Note 7)
MO5-2L
MR5-2L



MB5-1L
MG5-1L
MN5-1L



MB5-2L
MG5-2L
MN5-2L



NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White - Type H Reflective (Detour or temporary Signs - Reflective) Message - Black
   MB5-1 and MB5-2 Background - Blue Message - White - Type H Reflective (Detour or temporary Signs - Reflective)
   MG5-1 and MG5-2 Background - Green Message - White - Type H Reflective
   MK5-1 and MK5-2 Background - Green Message - White Type H Reflective
   MM5-1 and MM5-2 Background - White - Type H Reflective Message - Green
   MN5-1 and MN5-2 Background - Brown Message - White - Type H Reflective
   MO5-1 and MO5-2 Background - Orange - Reflective Message - Black
   MR5-1 and MR5-2 Background - Brown Message - Yellow - Type H Reflective
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.
7. Border shall be omitted on MM series.

Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06	0.28
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25	0.56
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25	0.56
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25	0.56

STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/03/03 PLATE NO. M5-1.10

STATE PROJECT NUMBER:

SHEET NO: 187 E

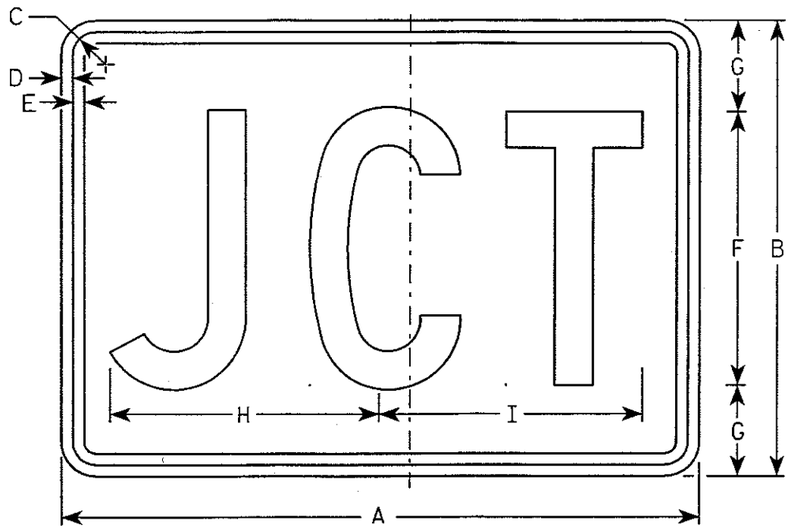
7

57.58.59.60.61.62.63

LEVELS ON - 2.3. 5.6. 10.

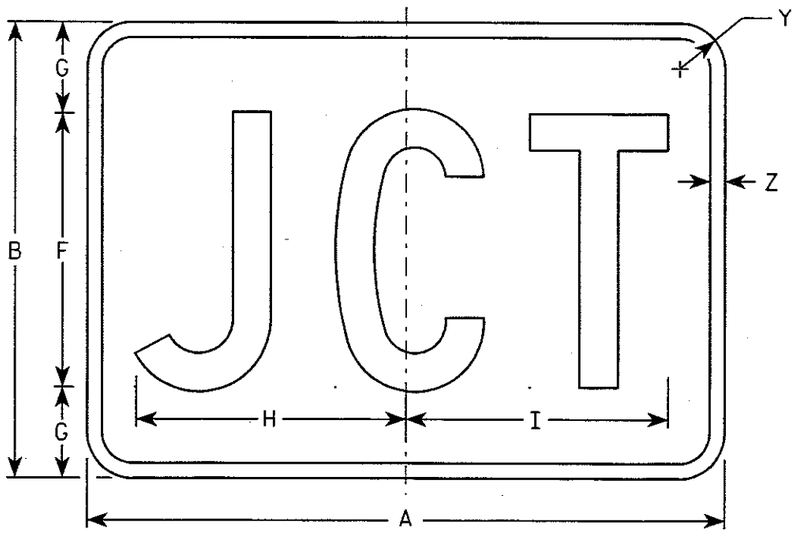
FILE NAME : C:\Users\Projects\tr_stdplate\M51.DGN PLOT DATE : 26-JAN-2004 07:23 PLOT BY : DOTDZK REV DATE : 2/04/03 Originator : DON KLUEVER

WISDOT/CADDS SHEET 42



M2-1
MK2-1
MM2-1*
MR2-1

*See Note 6



MB2-1
MG2-1
MN2-1

NOTES

1. Sign is Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White - Type H Reflective
   (Detour or temporary Signs - Reflective)
   Message - Black
   MB2-1 Background - Blue
   Message - White - Type H Reflective
   (Detour or temporary Signs - Reflective)
   MG2-1 Background - Green
   Message - White - Type H Reflective
   MK2-1 Background - Green
   Message - White - Type H Reflective
   MM2-1 Background - White - Type H Reflective
   Message - Green
   MN2-1 Background - Brown
   Message - White - Type H Reflective
   MR2-1 Background - Brown
   Message - Yellow - Type H Reflective
6. Border shall be omitted on MM2-1.

Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 375 mm
3	750 mm X 525 mm
4	750 mm X 525 mm
5	750 mm X 525 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m²
1																												
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20	0.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20

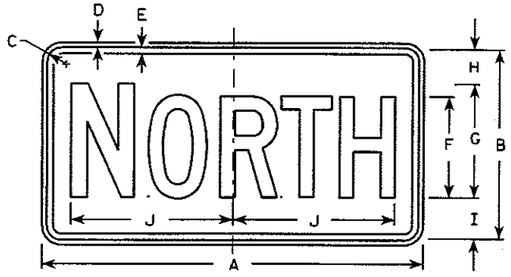
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

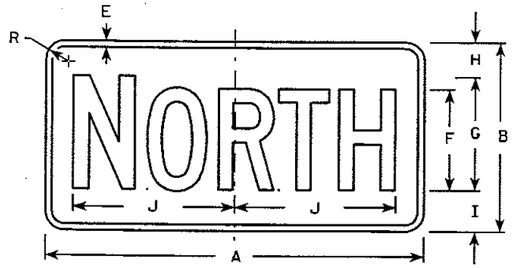
APPROVED Chester J Spang for State Traffic Engineer
DATE 3/20/02 PLATE NO. M2-1.9

STATE PROJECT NUMBER:

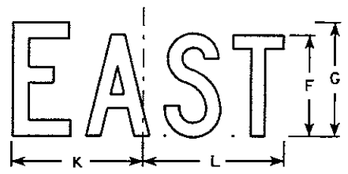
SHEET NO: 188 E



M3-1
MK3-1
MO3-1



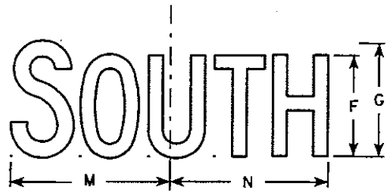
MB3-1
MG3-1
MM3-1*
MN3-1



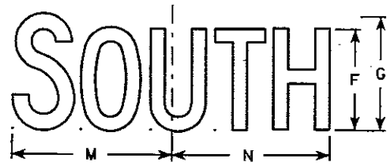
M3-2
MK3-2
MO3-2



MB3-2
MG3-2
MM3-2*
MN3-2



M3-3
MK3-3
MO3-3



MB3-3
MG3-3
MM3-3*
MN3-3



M3-4
MK3-4
MO3-4



MB3-4
MG3-4
MM3-4*
MN3-4

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 300 mm
3	750 mm X 375 mm
4	750 mm X 375 mm
5	750 mm X 375 mm

NOTES

1. All Signs Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White - Type H Reflective (Detour or temporary signs - Reflective)
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White - Type H Reflective (Detour or temporary signs - Reflective)
   MG3-1 thru MG3-4 Background - Green
   Message - White - Type H Reflective
   MK3-1 thru MK3-4 Background - Green
   Message - White - Type H Reflective
   MM3-1 thru MM3-4 Background - White - Type H Reflective
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White - Type H Reflective
   MO3-1 thru MO3-4 Background - Orange - Reflective
   Message - Black
6. Border shall be omitted on MM series.
7. Note the first letter of each direction is larger than the remainder of the message.

* See Note 6

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24	12	1 1/8	3/8	1/2	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00	0.18
3	30	15	1 1/8	3/8	1/2	8	9	2 3/4	3 1/4	12 3/4	10 3/8	11 1/8	12 5/8	12 1/2	11 5/8			1 1/2									3.13	0.28
4	30	15	1 1/8	3/8	1/2	8	9	2 3/4	3 1/4	12 3/4	10 3/8	11 1/8	12 5/8	12 1/2	11 5/8			1 1/2									3.13	0.28
5	30	15	1 1/8	3/8	1/2	8	9	2 3/4	3 1/4	12 3/4	10 3/8	11 1/8	12 5/8	12 1/2	11 5/8			1 1/2									3.13	0.28

STANDARD SIGNS
M3-1 thur M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

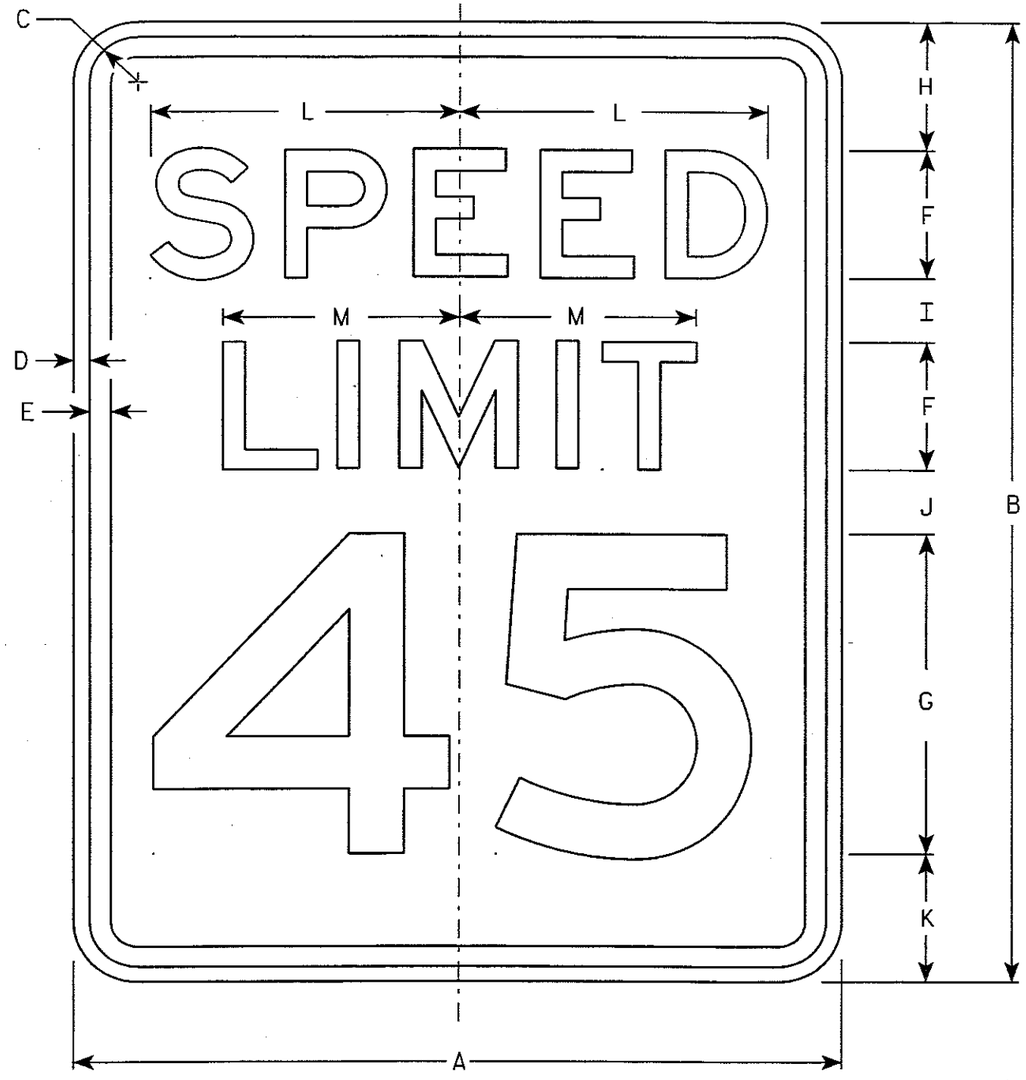
APPROVED Chester J Sprague for State Traffic Engineer

DATE 3/20/02 PLATE NO. M3-1.10

STATE PROJECT NUMBER:

SHEET NO: 199 E

FILE NAME : C:\Users\Projects\tr_stdplate\M31.DGN PLOT DATE : 26-JAN-2004 07:24 ORG DATE : 1980 Originator : Sandy Anderson



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

Metric equivalent for this sign is:

SIZE	
1	450 mm X 600 mm
2	600 mm X 750 mm
3	900 mm X 1200 mm
4	900 mm X 1200 mm
5	1200 mm X 1500 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0	.28
2	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0	.46
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0	1.11
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0	1.11
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0	1.86

STANDARD SIGN
R2-1

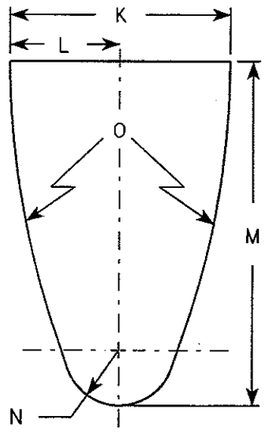
WISCONSIN DEPT OF TRANSPORTATION

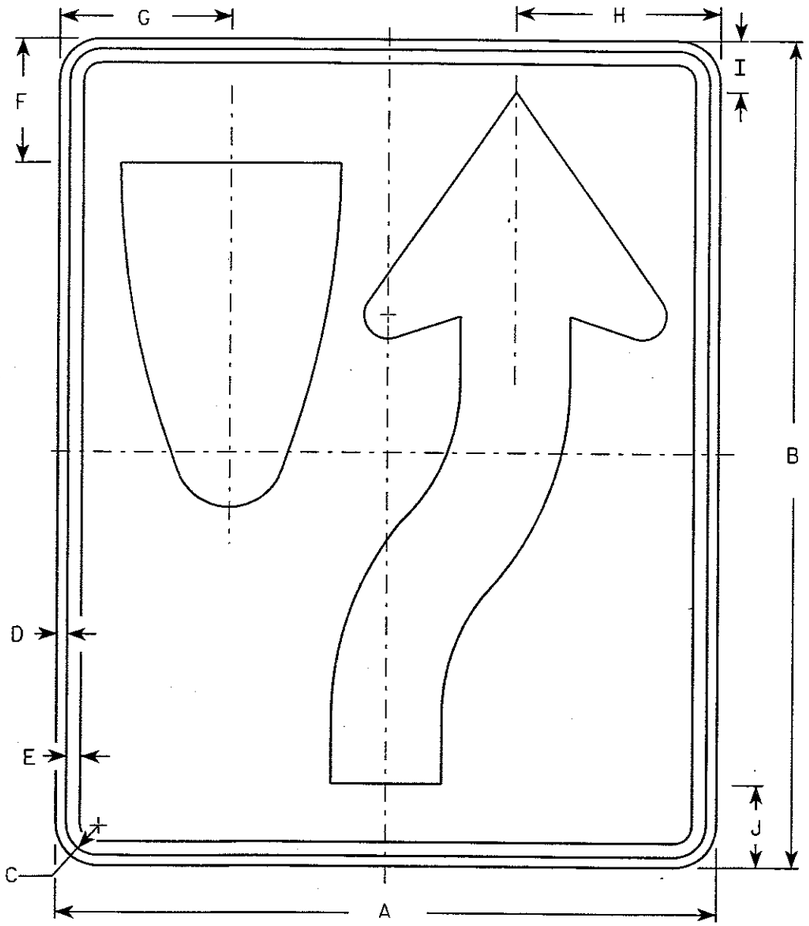
APPROVED Chester J Spanp
for State Traffic Engineer

DATE 2/01/02 PLATE NO. R2-1.11

STATE PROJECT NUMBER:

SHEET NO: 190 E

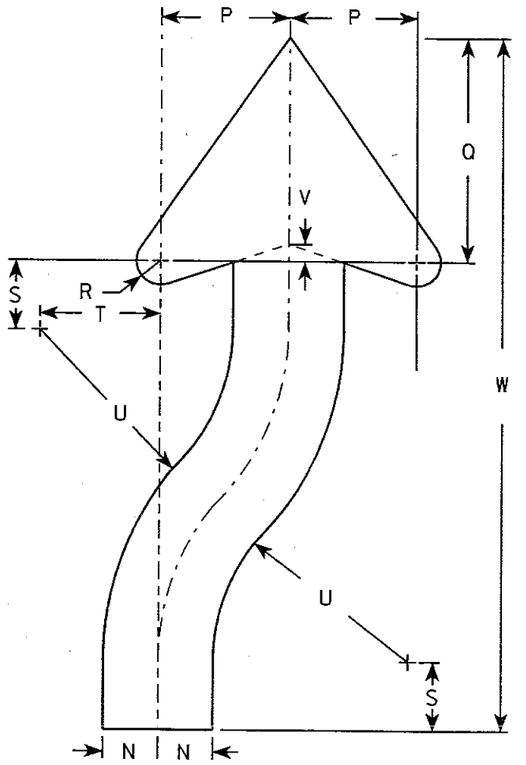




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

Metric equivalent for this sign is:

SIZE	
1	450 mm X 600 mm
2	600 mm X 750 mm
3	900 mm X 1200 mm
4	900 mm X 1200 mm
5	900 mm X 1200 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0	.27
2	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0	.45
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0	1.08
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0	1.08
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0	1.08

STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spray for State Traffic Engineer

DATE 2/6/02 PLATE NO. R4-7.7

STATE PROJECT NUMBER:

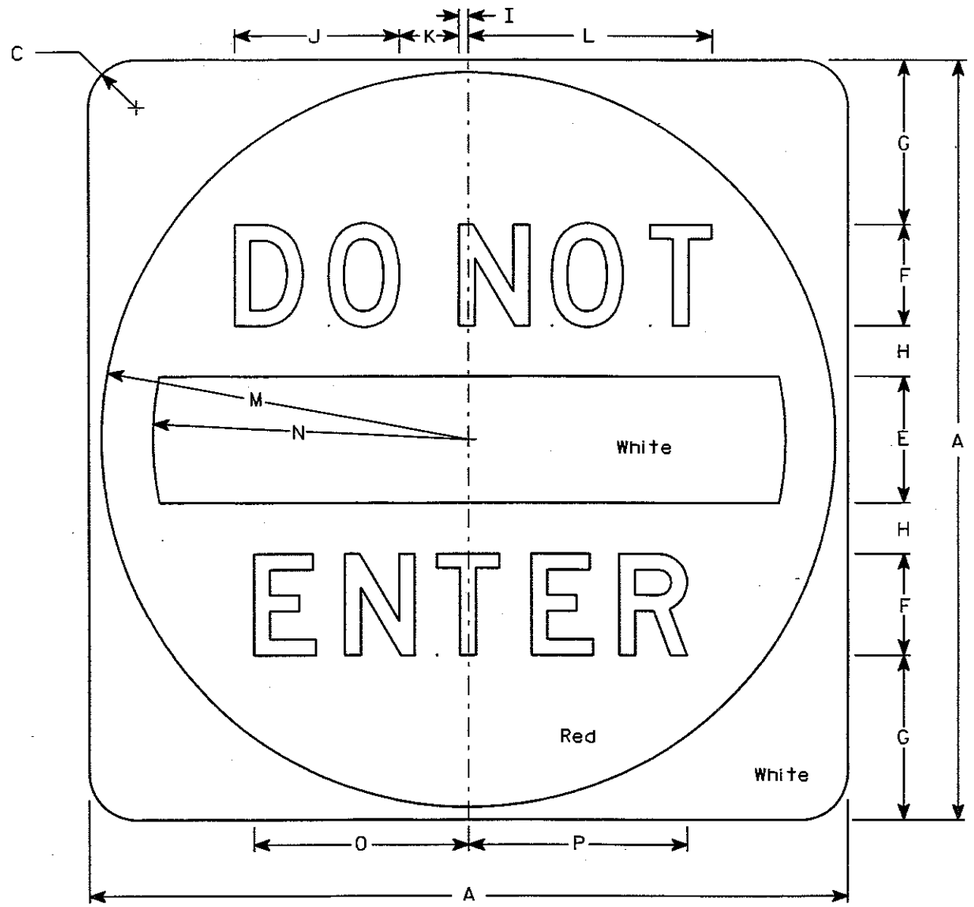
SHEET NO: 191 E

FILE NAME : C:\Users\Projects\tr_stdplate\R47.DGN PLOT DATE : 26-JAN-2004 07:26 ORG DATE : 12/15/97 Originator : Don Kluever

WISDOT/CADDS SHEET 42

LEVELS ON - 2.3. 5.6. 10.

58.59.60.61.62.63



R5-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See detail
   Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the cornors shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	
2	750 mm X 750 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	1200 mm X 1200 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.26	0.56
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0	0.81
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0	0.81
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0	1.44

STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

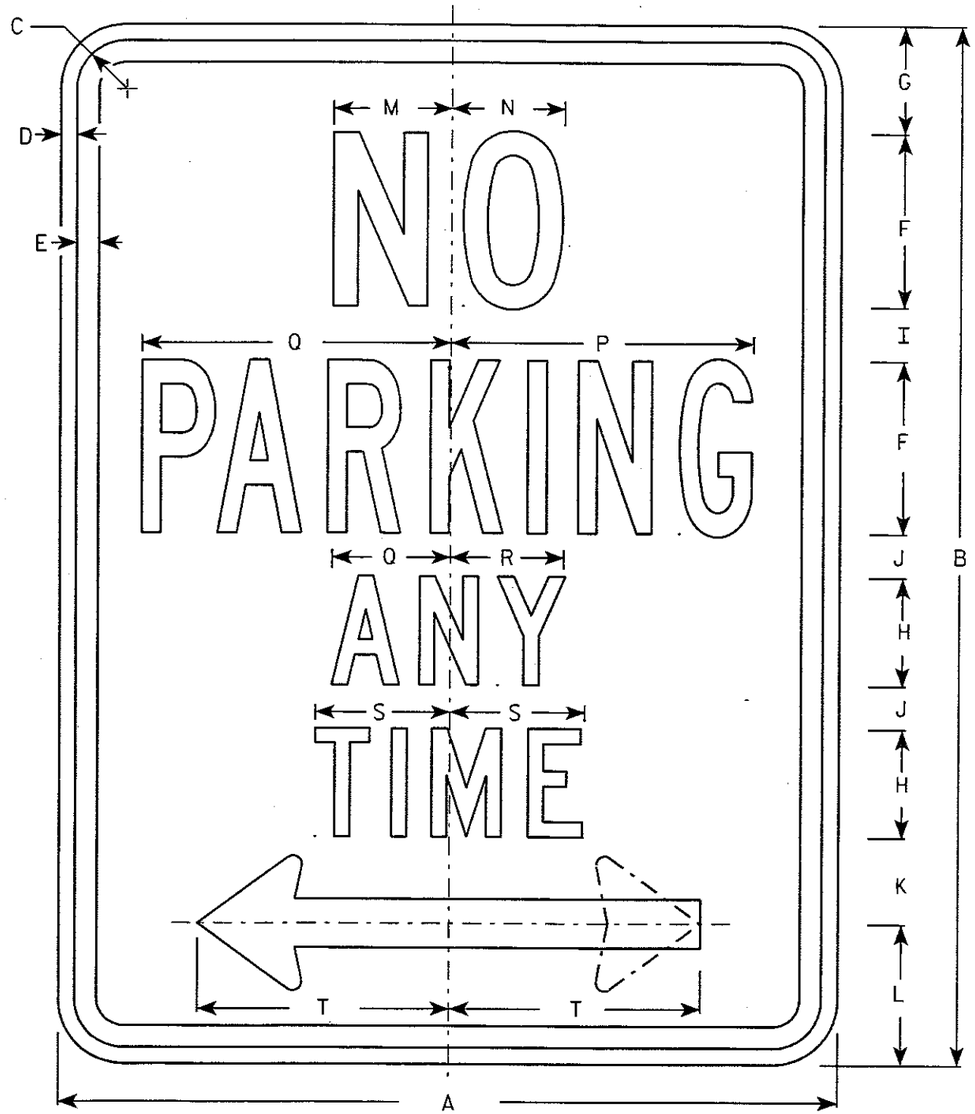
DATE 2/6/02 PLATE NO. R5-1.13

STATE PROJECT NUMBER:

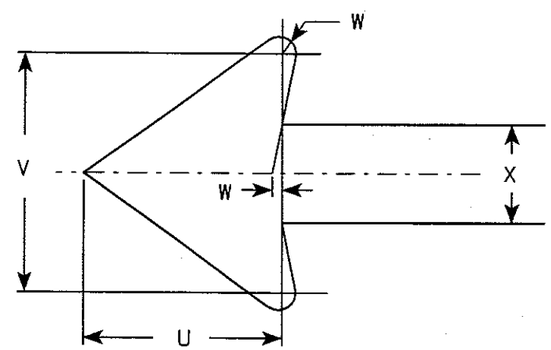
SHEET NO: 192 E

LEVELS ON - 2,3, 5,6, 10,

FILE NAME : C:\Users\Projects\tr_stdplate\R51.DGN PLOT DATE : 26-JAN-2004 07:27 ORG DATE : 4/21/98 Originator : Don Kluever



R7-1



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)

Metric equivalent for this sign is:

SIZE	
1	300 mm X 450 mm
2	450 mm X 600 mm
3	600 mm X 750 mm
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m²
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5	0.14
2	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0	0.27
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0	0.45
4																												
5																												

STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

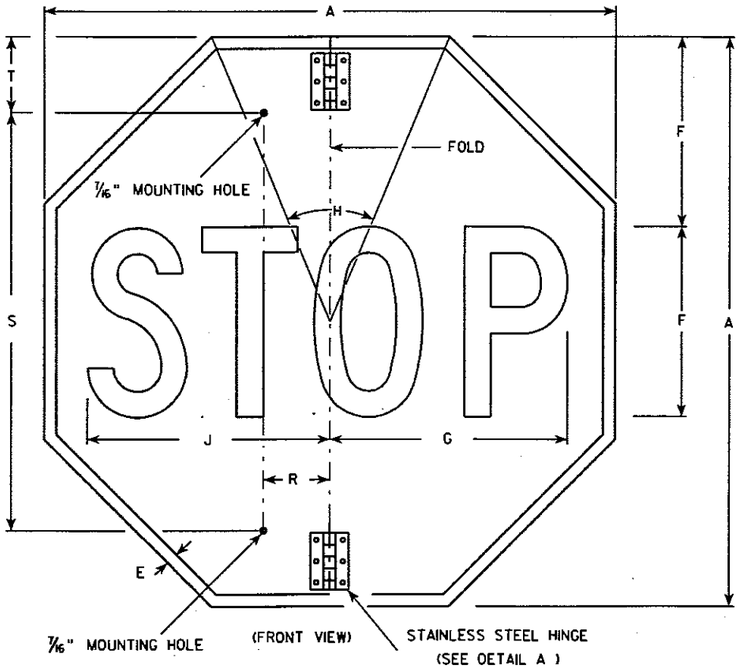
DATE 2/7/02 PLATE NO. R7-1.8

STATE PROJECT NUMBER:

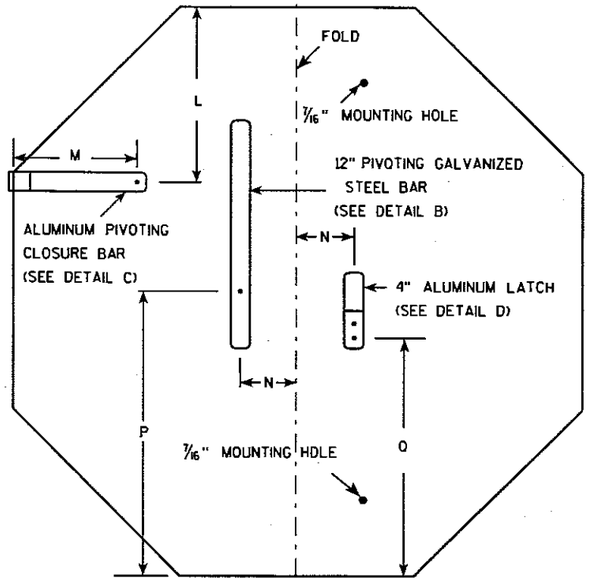
SHEET NO: 193 E

50.53.61.62.63

LEVELS ON • 2.3, 5.6, 10.



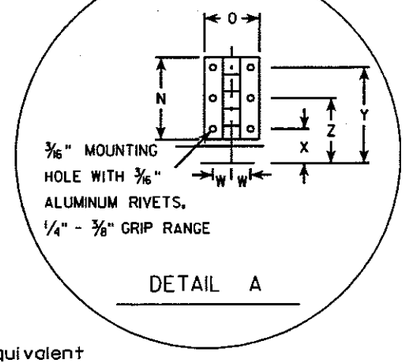
(FRONT VIEW)



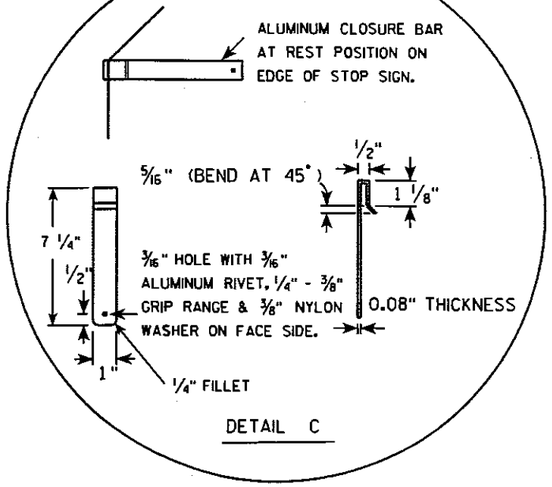
(BACK VIEW)

NOTES

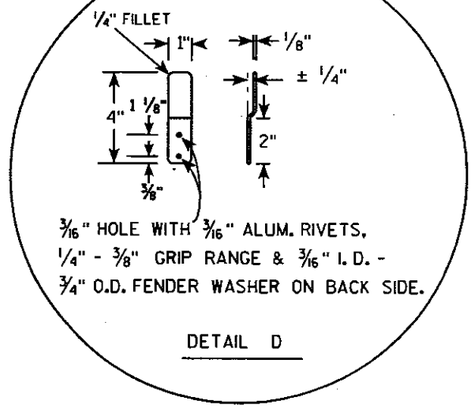
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.



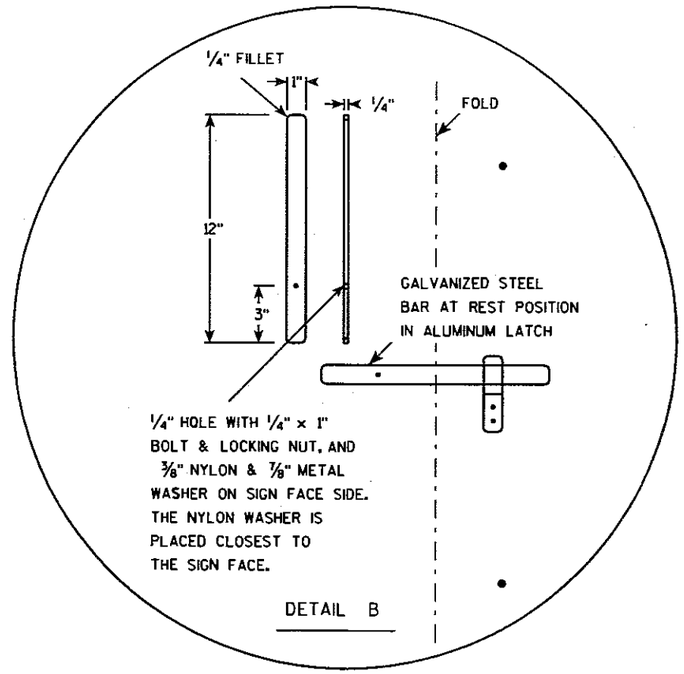
DETAIL A



DETAIL C



DETAIL D



DETAIL B

Metric equivalent for this sign is:

SIZE	
1	
2	750 mm X 750 mm
3	900 mm X 900 mm
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18	0.48
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46	0.69
4																												
5																												

STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spagg for State Traffic Engineer

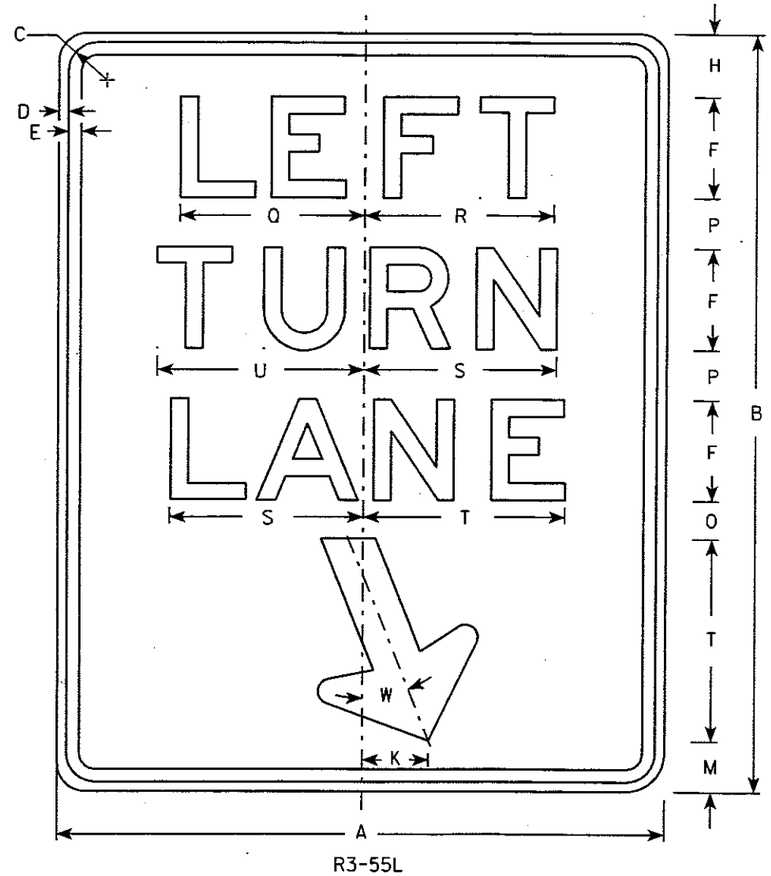
DATE 2/18/00 PLATE NO. R1-1F.2

7

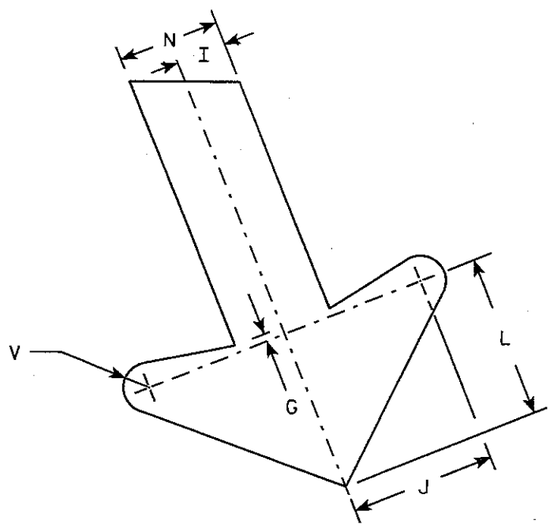
STATE PROJECT NUMBER:	HWY:	COUNTY:			SHEET NO: 94	E

FILE NAME : C:\Users\Projects\tr_stdplate\R11F.DGN PLOT DATE : 26-JAN-2004 07:28 PLOT BY : DOTDZK PLOT NAME : ORG DATE : Jan 2000 Originator : Sandy Anderson PLOT SCALE : 7.975904:1.000000

WISDOT/CADDS SHEET 42



R3-55L



ARROW DETAIL

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 750 mm
3	900 mm X 1200 mm
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24	30	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	2	1 1/2	2	7 1/4	7 1/2	7 5/8	8	8 1/8	1/2	22°				5.0	0.45
3	36	48	1 3/4	1/2	5/8	6	3/8	4 1/4	1 1/2	4 1/4	4	4 7/8	3 1/4	3	3	3 3/4	10 7/8	11 1/4	11 1/2	12	12 1/4	3/4	22°				12.0	1.08
4																												
5																												

STANDARD SIGN
R3-55L

WISCONSIN DEPT OF TRANSPORTATION

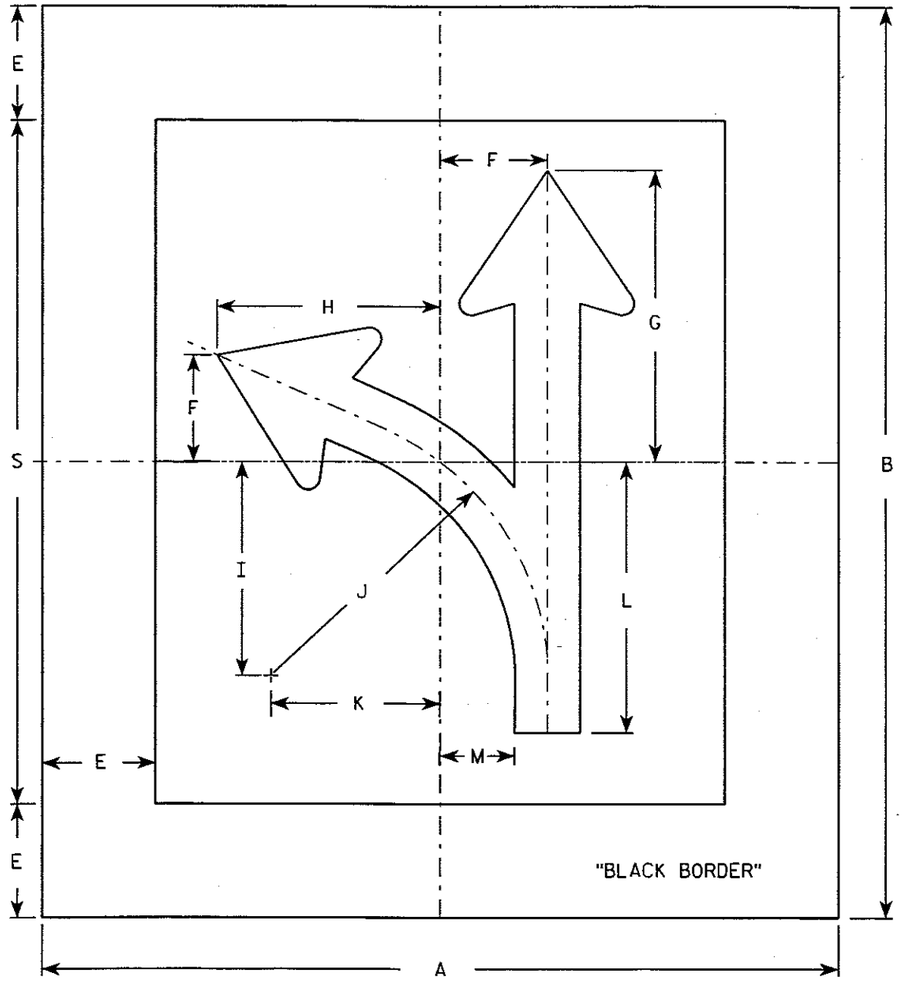
APPROVED Chester J Spang
for State Traffic Engineer

DATE 2/05/02 PLATE NO. R3-55L.5

STATE PROJECT NUMBER:

SHEET NO: 195 E

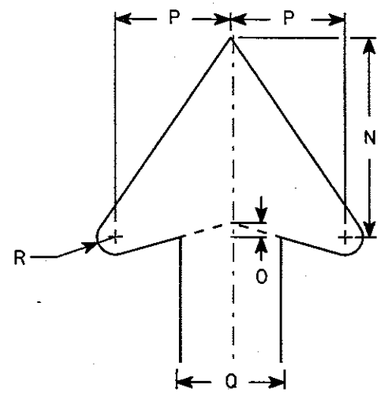
LEVELS ON • 2,3, 5,6, 10,



R3-6L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base material is plywood. When base material is metal, the corners shall be rounded.
4. R3-6R is the same as R3-6L except curved portion of arrow points right.
5. The 6" border is non-reflective black.



ARROW DETAIL

Metric equivalent for this sign is:

SIZE	
1	
2	1050 mm X 1200 mm
3	
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	42	48			6	5 5/8	15 3/8	11 3/4	11 1/4	14 1/2	8 7/8	14 1/4	3 7/8	7	1/2	4	3 1/2	5/8	36									14.0	1.26
3																												
4																												
5																												

STANDARD SIGN
R3-6

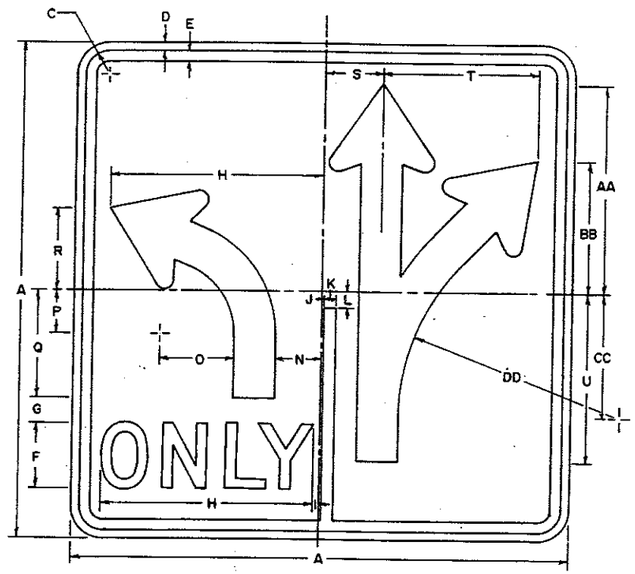
WISCONSIN DEPT OF TRANSPORTATION

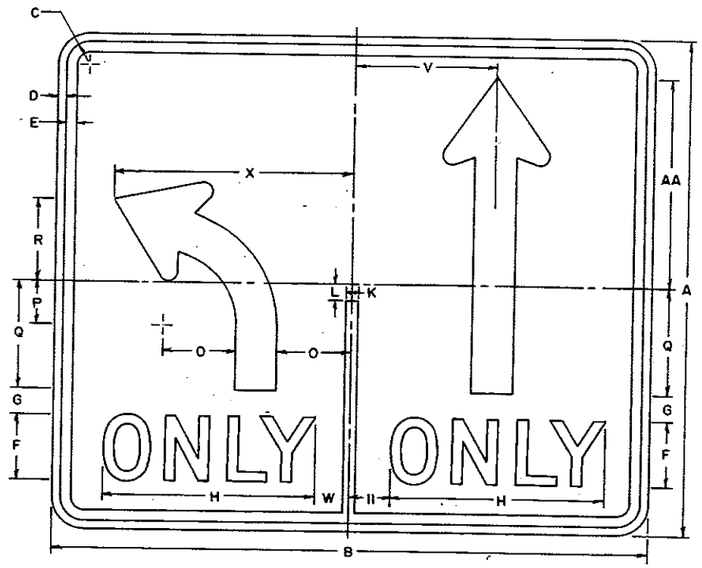
APPROVED Chester J Spacy
for State Traffic Engineer

DATE 10-28-96 PLATE NO. R3-6.4

STATE PROJECT NUMBER:

SHEET NO: 196 E



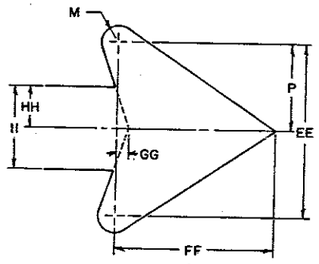


R3-8

NOTES Type H

1. Sign is Type II - Reflective - reference WIS D.O.T. Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
   Background – White
   Message – Black
3. Message Series "D".
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	CODE SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	30 x 30 Bid Area Sq. Ft.	36 x 30 Bid Area Sq. Ft.
Minimum	1																												
Standard	2	30	36	1 3/8	1/2	5/8	4	1 1/2	12 7/8	3/8	1/8	3/4	1	1/2	2 3/4	4 1/2	2 5/8	6 1/2	5	3 1/2	9 3/8	10 1/4	8 1/2	2	14 1/2			6.25	7.5
Oversize	3																												
Exp-way	4																												
Freeway	5																												
Bicycle	6																												
Snowmobile	7																												
		AA	BB	CC	DD	EE	FF	GG	HH	II	JJ	KK	LL	MM	NN	OO	PP	QQ	RR	SS	TT	UU	VV	WW	XX	YY	ZZ		
Minimum	1	12 5/8	8	7 1/2	13 1/4	5 1/4	4 3/4	3/8	1 1/4	2 1/2																			
Standard	2																												
Oversize	3																												
Exp-way	4																												
Freeway	5																												
Bicycle	6																												
Snowmobile	7																												



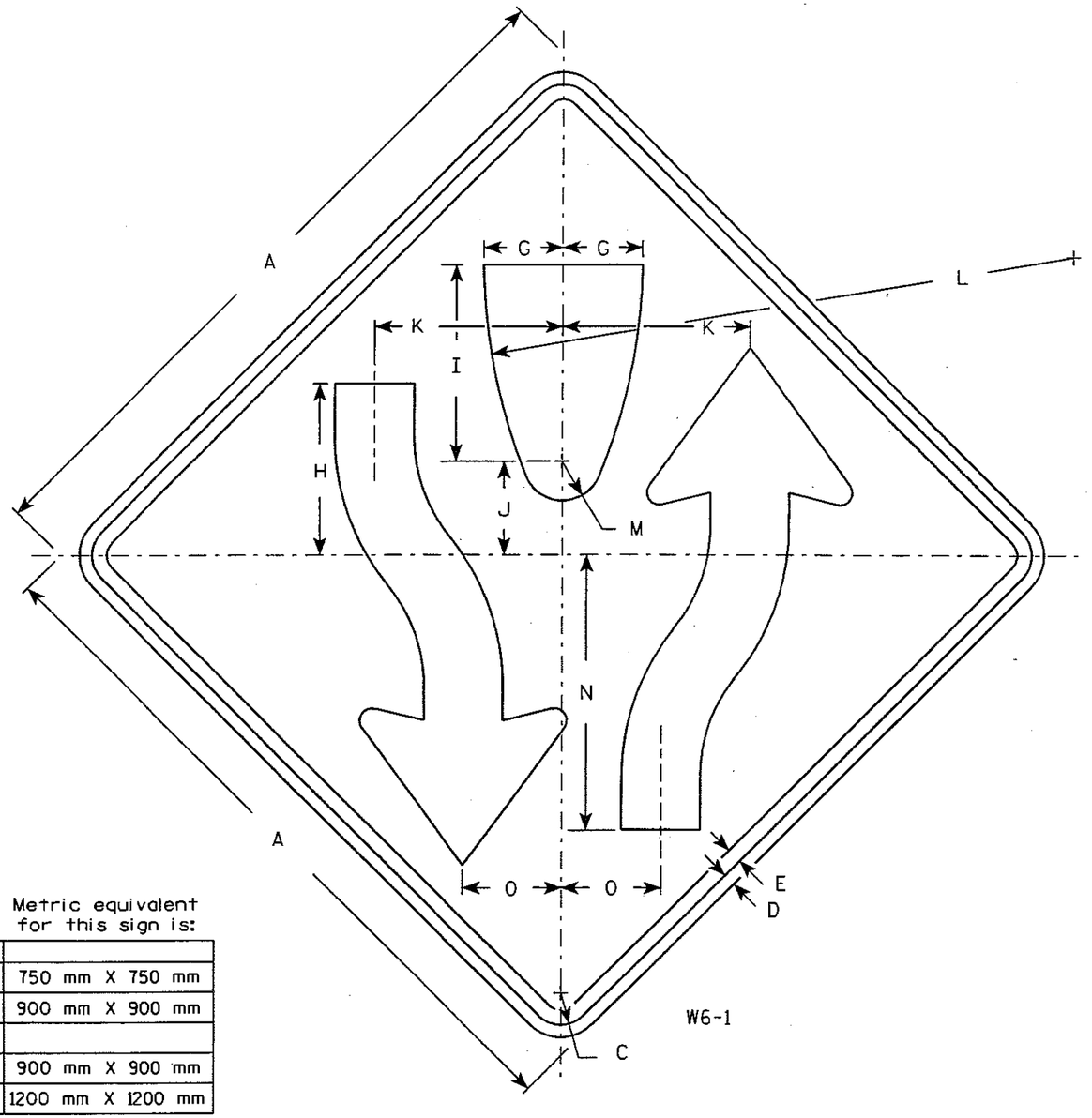
RV	CK	RA	RA
3			

Date Drawn – Date Redrawn – 9-1-81 MB
Date Revised –

TYPICAL SIGNS
R3-8 SERIES

WISCONSIN DEPT OF TRANSPORTATION
APPROVED
Chief Traffic Engineer
DATE 1-6-83 PLATE NO. R3-8.3

197



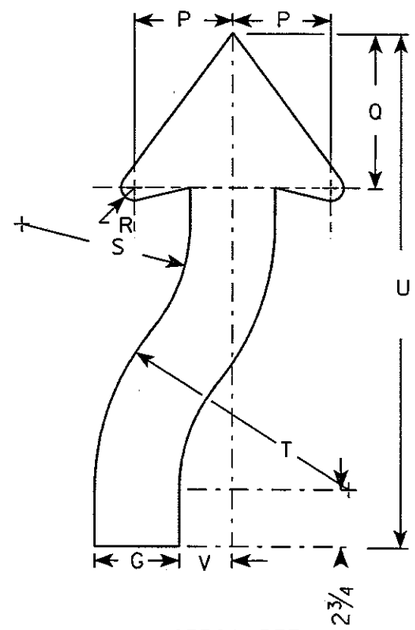
W6-1

Metric equivalent for this sign is:

SIZE	
1	750 mm X 750 mm
2	900 mm X 900 mm
3	
4	900 mm X 900 mm
5	1200 mm X 1200 mm

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W6-2 same as W6-1 but is rotated 180° when mounted.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m²
1	30		1 3/8	1/2	5/8		3 1/4	8	8 1/4	4 1/8	7 7/8	25	1 3/4	11 5/8	4 1/8	3 7/8	6 3/4	5/8	6 5/8	9 7/8	21 5/8	2					6.25	0.56
2	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0	0.81
3																												
4	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0	0.81
5	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0	1.44

STANDARD SIGN
W6-1 & W6-2

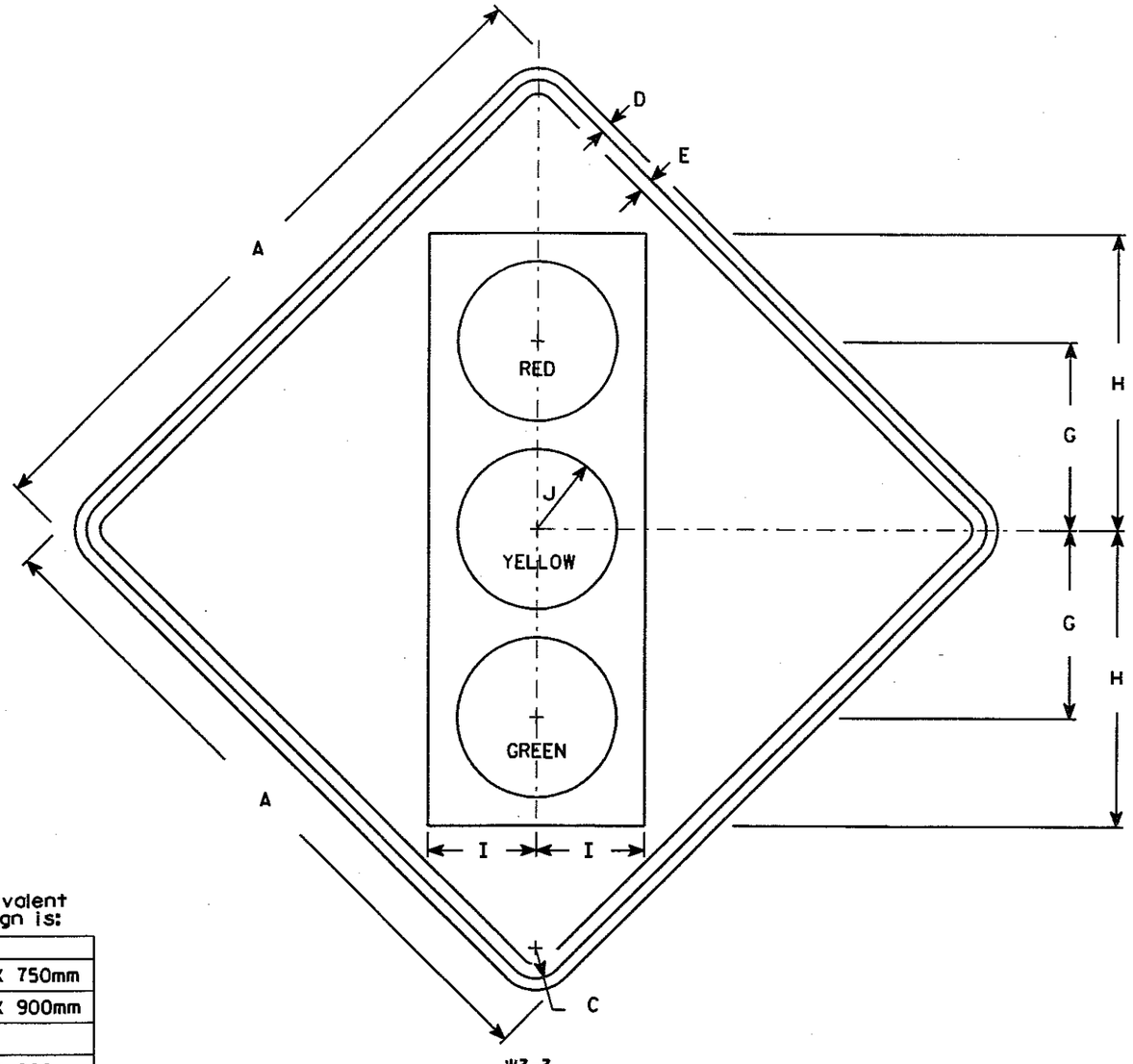
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chesta J Spange for State Traffic Engineer

DATE 01/15/02 PLATE NO. W6-1.11

STATE PROJECT NUMBER:	HWY:	COUNTY:			SHEET NO: 198 E

FILE NAME : C:\Users\Projects\tr_stdplate\W61.DGN PLOT DATE : 26-JAN-2004 07:50 ORG DATE : PLOT NAME : Originator : Artie Noll PLOT SCALE : 7.218750:1.000000
WISDOT/CADDS SHEET 42



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Symbol and border are non-reflective black.
   Top circle - Type H Reflectorized Red
   Center circle - Same as background
   Bottom circle - Type H Reflectorized Green

Metric equivalent for this sign is:

SIZE	
1	750mm X 750mm
2	900mm X 900mm
3	
4	900mm X 900mm
5	1200mm X 1200mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	30		1 3/8	1/2	5/8		8 3/4	13 3/4	5	3 3/4																	6.25	0.56
2	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0	0.81
3																												
4	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0	0.81
5	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0	1.44

STANDARD SIGN
W3-3

WISCONSIN DEPT OF TRANSPORTATION

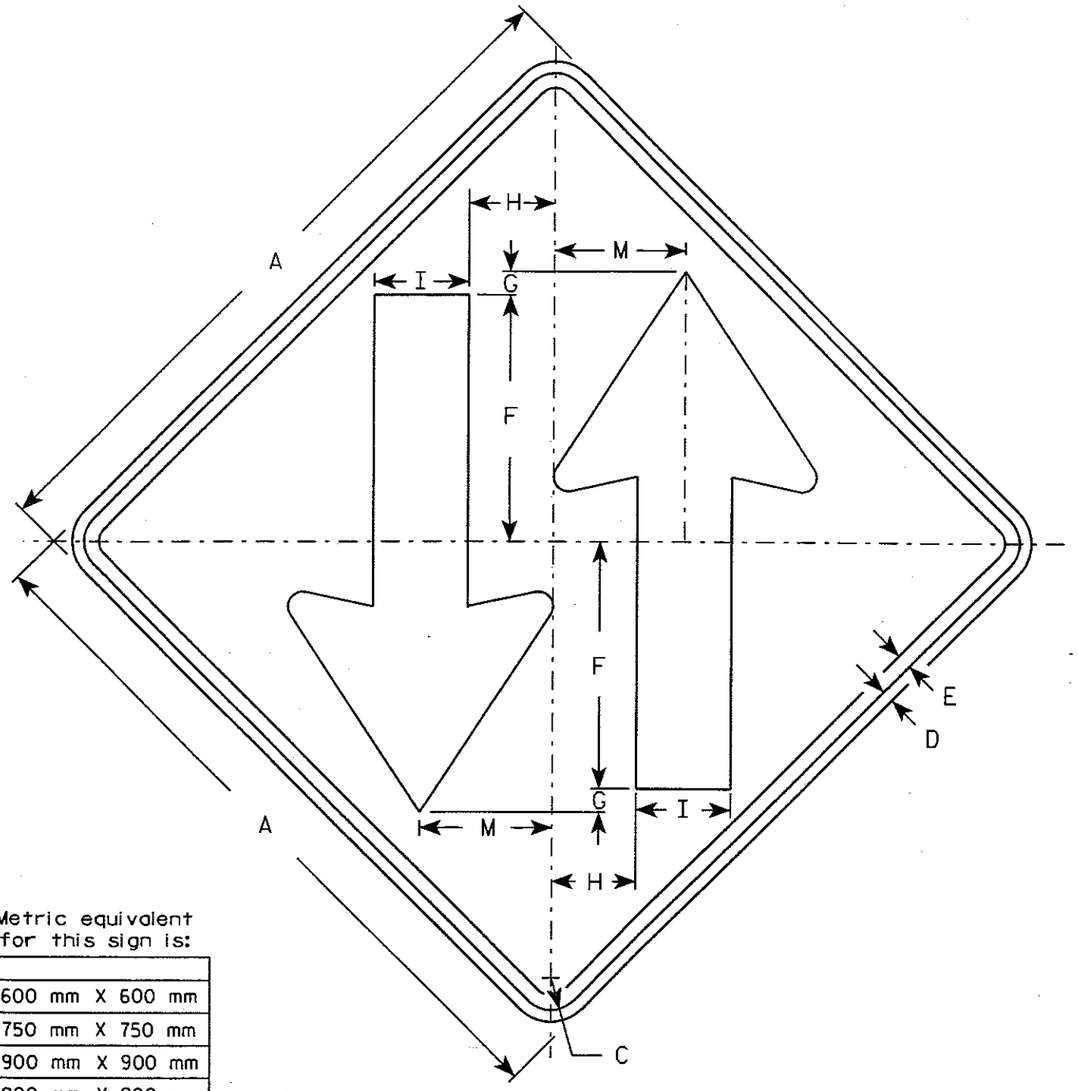
APPROVED Charles J Spang for State Traffic Engineer

DATE 01/14/02 PLATE NO. W3-3.7

STATE PROJECT NUMBER:	HWY:	COUNTY:			SHEET NO: 199	E

58.59.60. 63
LEVELS ON • 1.2.3. 5.6. 10.

FILE NAME : C:\Users\Projects\tr_stdplate\W33.DGN PLOT DATE : 26-JAN-2004 07:50 ORG DATE : PLOT NAME : Originator : Artie Noll PLOT SCALE : 7.734375:1.000000
WISDOT/CADDS SHEET 42



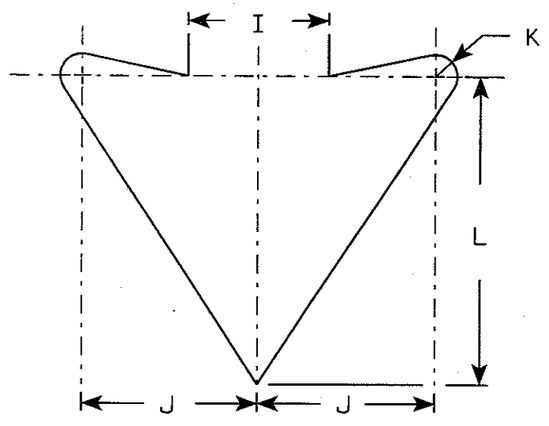
W6-3

Metric equivalent for this sign is:

SIZE	
1	600 mm X 600 mm
2	750 mm X 750 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	1200 mm X 1200 mm

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m²
1	24		1 1/8	3/8	1/2	8 1/8	1	2	3	4	1/2	7	3 1/2														4.0	0.36
2	30		1 3/8	1/2	5/8	10 1/2	1	3 5/8	4	5	5/8	8 3/4	5 5/8														6.25	0.56
3	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0	0.81
4	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0	0.81
5	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0	1.44

STANDARD SIGN
W6-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

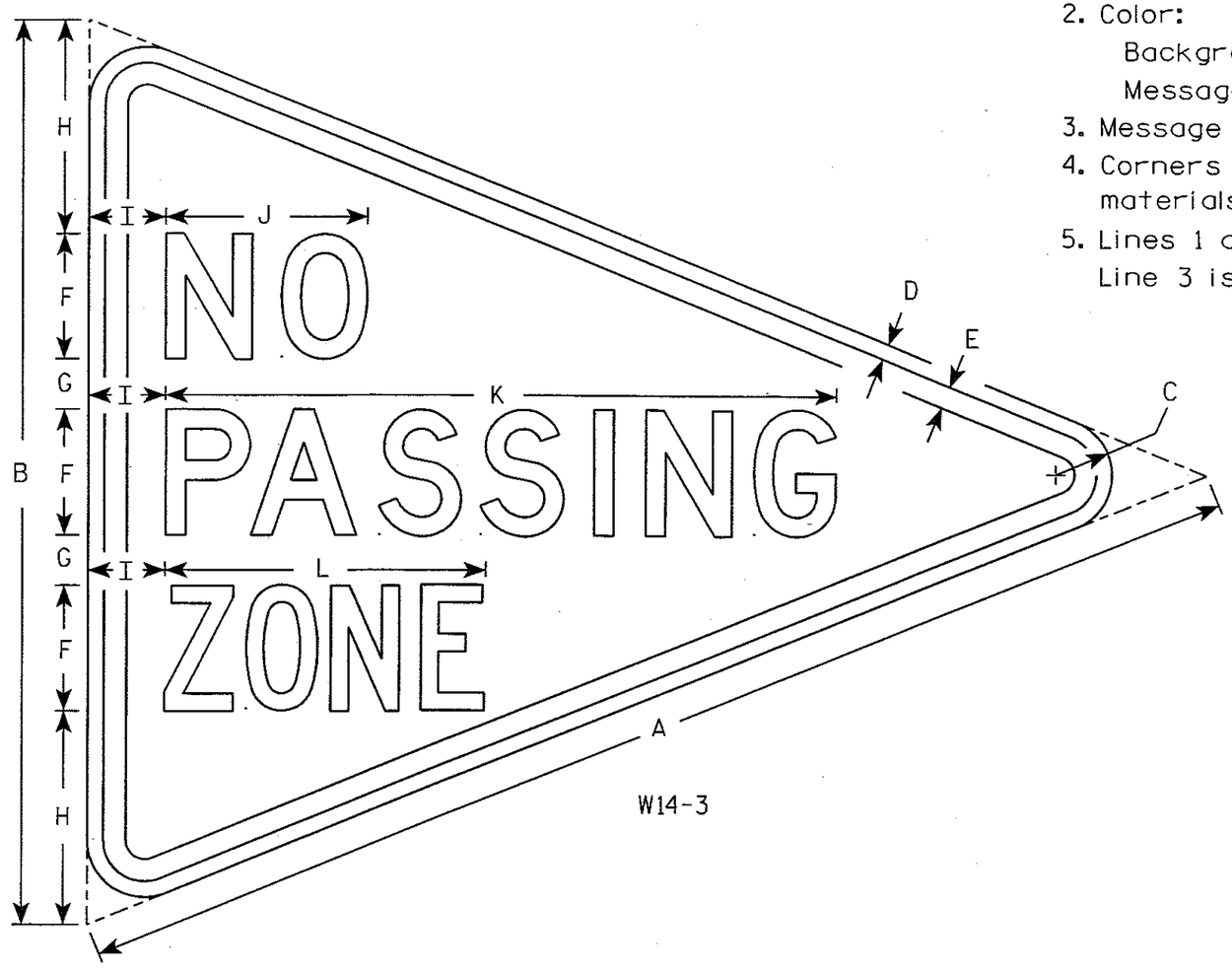
DATE 01/15/02 PLATE NO. W6-3.7

STATE PROJECT NUMBER: | HWY: | COUNTY: | SHEET NO: 200 | E

FILE NAME : C:\Users\Projects\tr_stdplate\W63.DGN PLOT DATE : 26-JAN-2004 07:51 ORG DATE : PLOT NAME : Originator : Artie Noll PLOT SCALE : 6.445313:1.000000
WISDOT/CADDS SHEET 42
57.58.59.60.61.62.63
LEVELS ON - I.D.I. 5.6. 10.

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See note 5
4. Corners and borders shall be rounded on all base materials for this sign.
5. Lines 1 and 2 are Series D.
   Line 3 is series C.



W14-3

Metric equivalent for this sign is:

SIZE	
1	
2	1200 mm X 900 mm
3	1600 mm X 1200 mm
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0	.54
3	64	48	3	3/4	1 1/4	6	3	12	4	10 3/4	33 5/8	16 1/2															10.7	.96
4																												
5																												

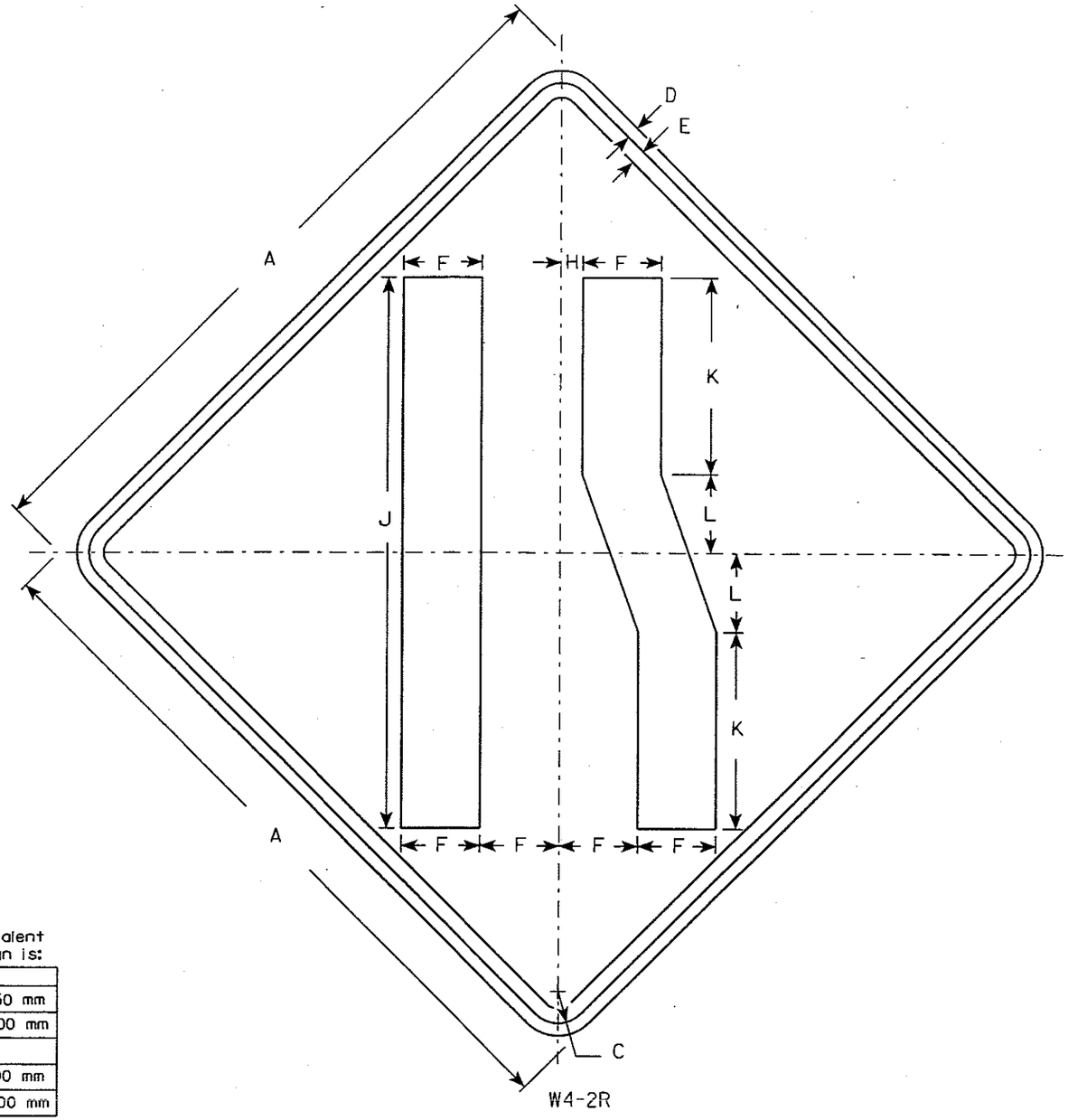
STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Charles J Spay for State Traffic Engineer

DATE 1/21/98 PLATE NO. W14-3.8

SHEET NO: 201 E



W4-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-2L is the same as W4-2R except the arrow is reversed along the vertical centerline.

Metric equivalent for this sign is:

SIZE	
1	750 mm X 750 mm
2	900 mm X 900 mm
3	
4	900 mm X 900 mm
5	1200 mm X 1200 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	30		1 3/8	1/2	5/8	3		7/8		23	8 1/4	3 1/4															6.25	0.56
2	36		1 5/8	5/8	3/4	4		1 1/8		28	10	4															9.0	0.81
3																												
4	36		1 5/8	5/8	3/4	4		1 1/8		28	10	4															9.0	0.81
5	48		2 1/4	3/4	1	5		1 1/2		37	13 1/4	5 1/4															16.0	1.44

STANDARD SIGN
W4-2

WISCONSIN DEPT OF TRANSPORTATION

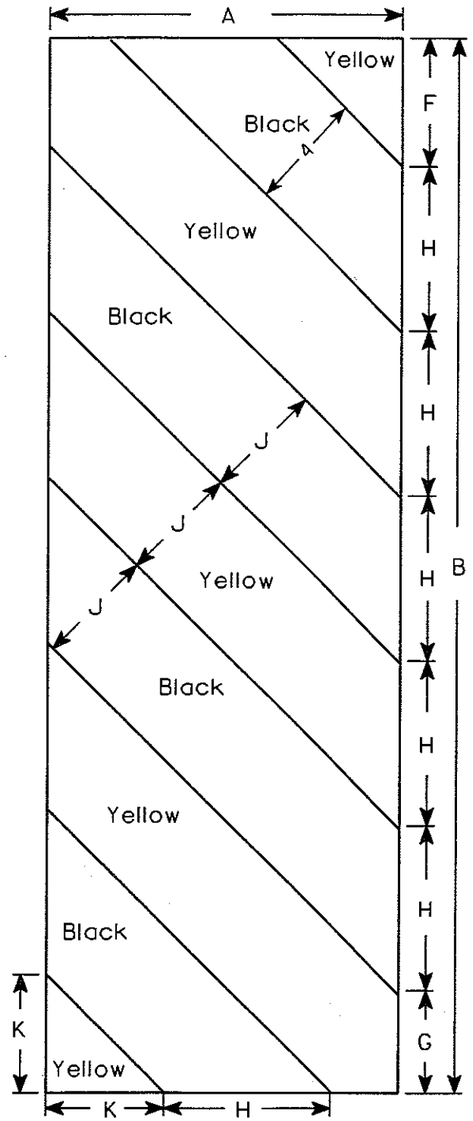
APPROVED Chester J Spong for State Traffic Engineer

DATE 7/7/97 PLATE NO. W4-2.9

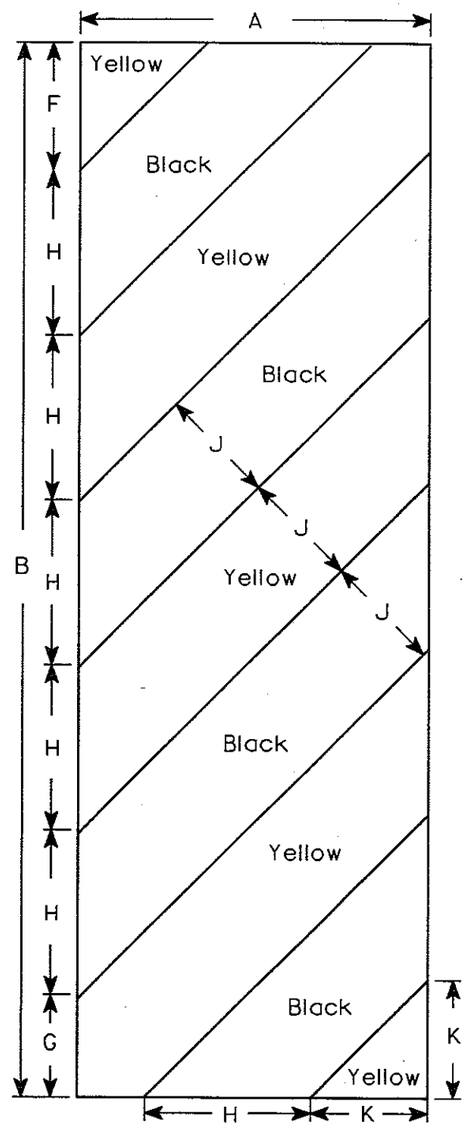
SHEET NO: 202 E

58,59,60,63
LEVELS ON - 2,3,5,6,10,
FILE NAME : C:±Users±Projects±tr_stdplate±W42.DGN
PLOT DATE: 26-JAN-2004 07:52
ORG DATE : 7/7/97
Originator : Don Kluever
WISDOT/CADDS SHEET 42

STATE PROJECT NUMBER	SHEET NO.



W5-52L



W5-52R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Alternate colors of stripes as shown.

Metric equivalent for this sign is:

SIZE	
1	
2	300 mm X 900 mm
3	450 mm X 1350 mm
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0	0.27
3	18	54				6	5 1/2	8 1/2	45°	6	6 9/16																6.75	0.61
4																												
5																												

STANDARD SIGN
W5-52L & W5-52R

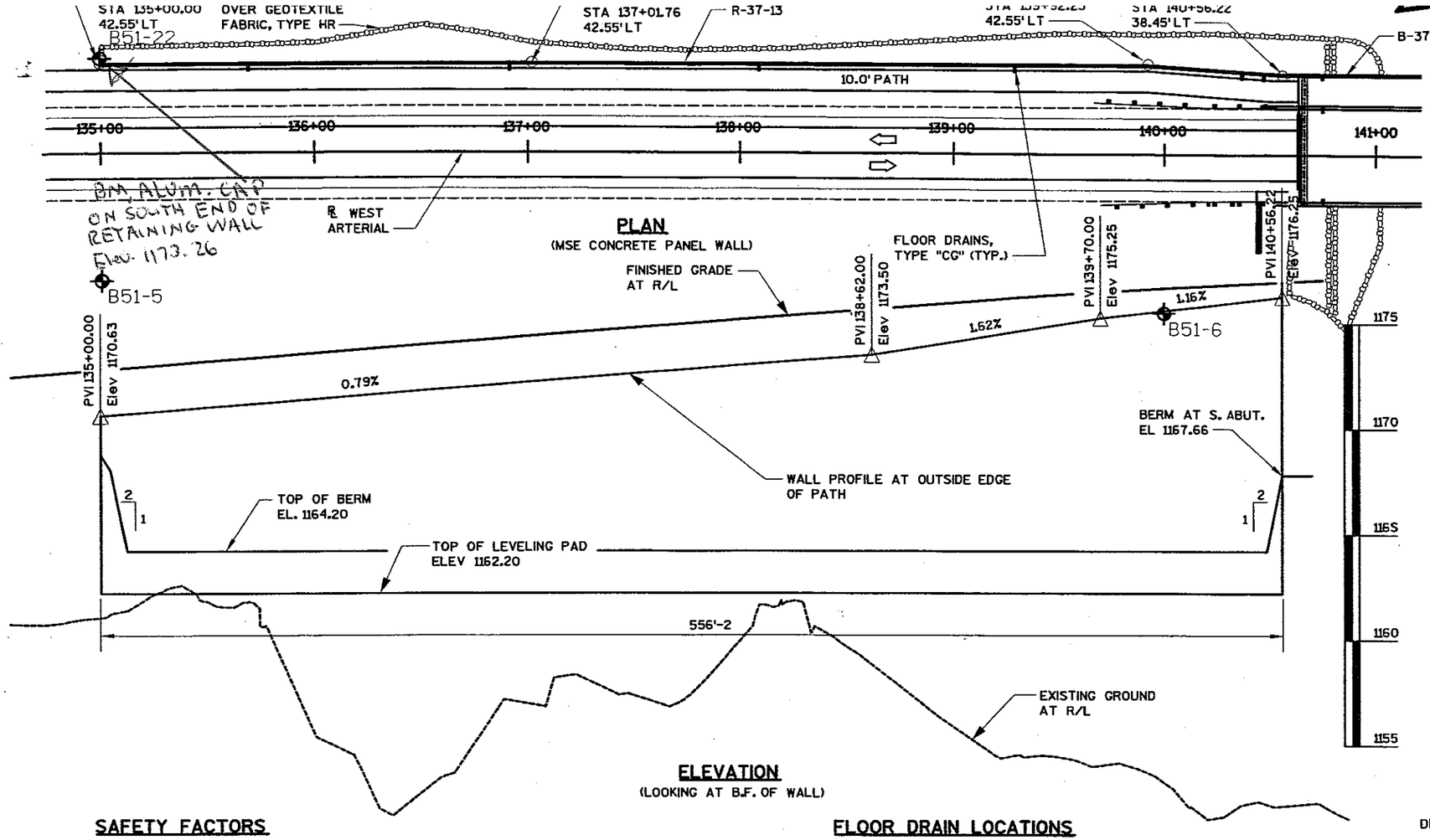
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

DATE 8/13/97 PLATE NO. W5-52.7

203

6675-00-71



ELEVATION
(LOOKING AT B.F. OF WALL)

DESIGN DATA

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS, AND SHOP DRAWINGS FOR THE RETAINING WALLS IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS SHALL BE INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL, MSE".

PLANS, ELEVATIONS AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE ELEVATIONS GIVEN ON THIS SHEET.

DESIGN FOR RETAINING WALL TO PROVIDE FOR FINISHED GRADE SLOPED BEHIND WALL AS SHOWN.

DESIGN RETAINING WALL FOR A LIVE LOAD SURCHARGE OF 240 psf.

CONCRETE MASONRY _____ f'c = 4,000 psi

HIGH STRENGTH BAR STEEL REINFORCEMENT _____ fy = 60,000 psi

TOTAL ESTIMATED QUANTITIES

CONCRETE MASONRY, RETAINING WALLS	254 C.Y.
BAR STEEL REINFORCEMENT, HS, COATED, RETAINING WALLS	22,385 LB.
RAILING STEEL, TYPE 'C2', STRUCTURE R-37-13	1 L.S.
FLOOR DRAINS, TYPE 'GC'	6 EACH
WALL CONCRETE PANEL, MECHANICALLY STABILIZED EARTH	6056 S.F.
RIPRAP HEAVY	821 C.Y.
GEOTEXTILE FABRIC, TYPE HR	1770 S.Y.

SAFETY FACTORS

MINIMUM DOT STANDARD	MSE CONCRETE PANEL WALL
SLIDING (FS>1.5)	1.5
OVERTURNING (FS>2.0)	2.0
GLOBAL STABILITY (FS>1.3)	1.5
ULTIMATE BEARING CAPACITY (FS>2) BASED ON WALL WIDTHS & IMBEDMENT DEPTHS SHOWN IN TABLE	2.0

SOIL PARAMETERS

STRATUM LOCATIONS AND SOIL DESCRIPTIONS	MIN. UNIT WEIGHT (pcf)	MIN. FRICTION ANGLE (DEGREES)	COHESION (psf)
EL. 1176.25 - EL. 1162.20 (REINFORCED EARTH)	120	32	0
RIPRAP	105	45	0
FILL ABOVE WATER TABLE	120	32	0
FILL BELOW WATER TABLE	110	28	0
RETAINED SOIL EL. 1176.25 - 1162.20 *			

* DESIGN WALL FOR THESE VALUES

FLOOR DRAIN LOCATIONS

FLOOR DRAIN NUMBER	STATION	OFFSET	ELEVATION
1	135+69.36	40.80 LT	1171.14
2	136+89.19	40.80 LT	1172.09
3	138+09.15	40.80 LT	1173.04
4	139+29.17	40.80 LT	1174.56
5	140+37.15	37.92 LT	1176.00
6	140+47.15	37.28 LT	1176.12

GEOMETRY TABLE

STATION	OFFSET TO F.F. WALL	COORDINATES	ELEV. A	ELEV. B
135+00.00	42.55' LT	E: 271,604.82 N: 195,925.82	1170.63	1162.20
PT 137+01.76	42.55' LT	E: 271,592.95 N: 196,418.43	1172.23	1162.20
140+56.22	38.45' LT	E: 271,595.66 N: 196,482.49	1176.25	1162.20

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

LIST OF DRAWINGS

1. GENERAL PLAN
2. TYPICAL SECTION
3. SECTION AND DETAILS
4. FLOOR DRAIN, TYPE 'GC'
5. COMBINATION RAIL, TYPE 'C2'
6. COMBINATION RAIL, TYPE 'C2'
7. SUBSURFACE EXPLORATION

WISCONSIN
DAVID J. WALKER E-23400 VERONA WI
PROFESSIONAL ENGINEER
12/18/03

DESIGN CONTACT: DAVID WALKER (608) 251-4843
BRIDGE OFFICE CONTACT: FINN HUBBARD (608) 266-8489

NO.	DATE	REVISION	BY

STRAND ASSOCIATES, INC. ENGINEERS
910 WEST WINGRA DRIVE
MADISON, WISCONSIN 53715
(608)-251-4843
(608) 251-8655 FAX
WWW.STRAND.COM

STRUCTURE R-37-13

WEST ARTERIAL RETAINING WALL

COUNTY: MARATHON		TOWN/CITY/VILLAGE: WAUSAU	
DESIGN SPEC.: AASHTO STD. SPEC. 2002		LOAD: HS-20	CONST. SPEC.: 2003
DESIGNED BY: KAS	DESIGN CK'D.: DJW	DRAWN BY: CDH	PLANS CK'D.: DJW

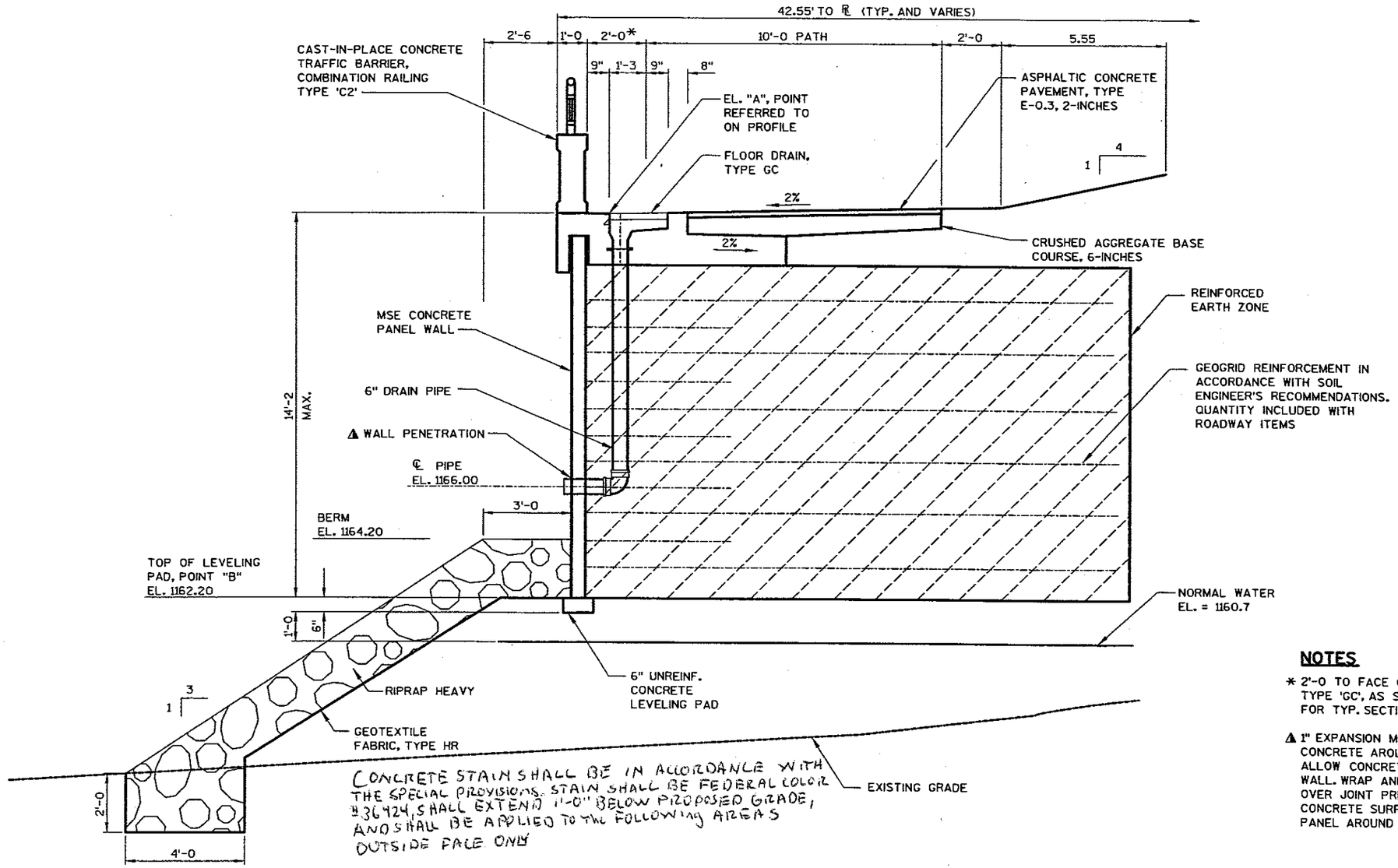
APPROVED: _____ CHIEF STRUCTURAL DESIGN ENGINEER — DATE: 1-23-04

GENERAL PLAN

SHEET 1 OF 7

DATE: 2004

8



MSE CONCRETE PANEL WALL TYPICAL SECTION AT FLOOR DRAIN

NOTES

* 2'-0 TO FACE OF STEP, TYP., EXCEPT AT FLOOR DRAINS, TYPE 'GC', AS SHOWN IN THIS SECTION. SEE SHEET 3 FOR TYP. SECTION.

⚠ 1" EXPANSION MATERIAL BANDED AROUND PIPE. FORM CONCRETE AROUND PIPE OVER EXPANSION MATERIAL. ALLOW CONCRETE TO SET PRIOR TO BACKFILLING BEHIND WALL. WRAP AND SECURE FILTER CLOTH AROUND PIPE OVER JOINT PRIOR TO BACKFILLING BEHIND WALL. TROWEL CONCRETE SURFACE SMOOTH AGAINST FACE OF WALL PANEL AROUND PIPE.

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

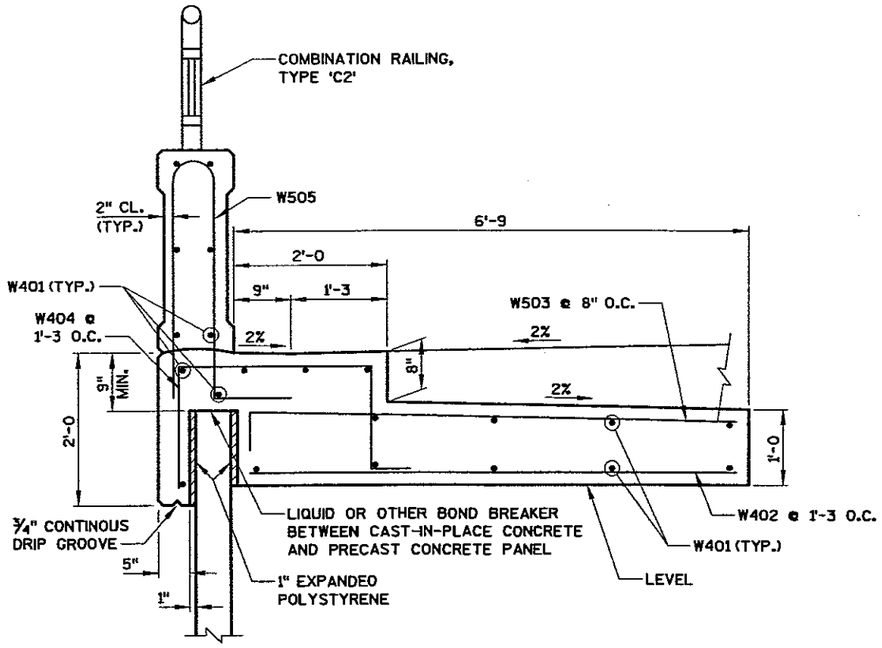
STRUCTURE R-37-13

CONST. SPEC.	2003	DRAWN BY	KAS	PLANS CK'D.	DJW

TYPICAL SECTION

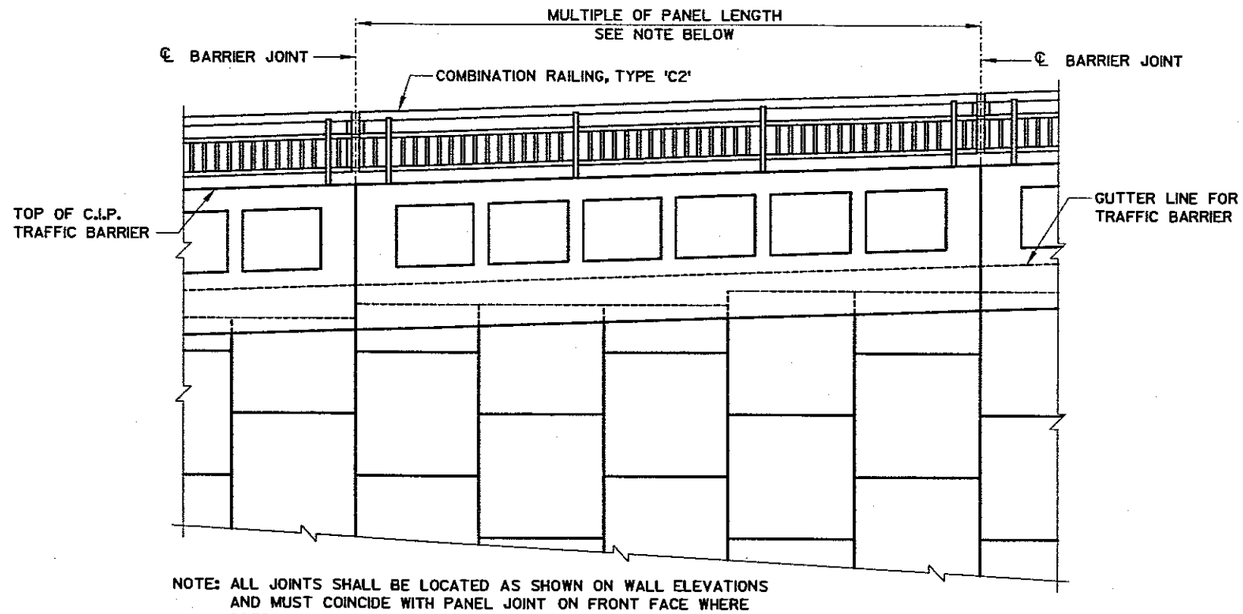
SHEET 2

205



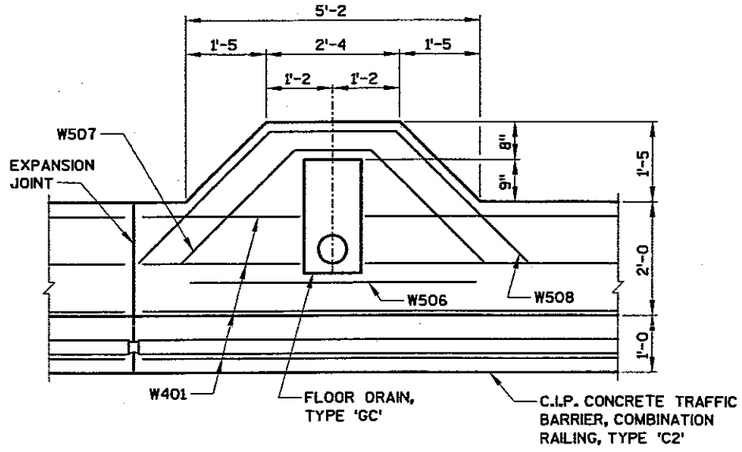
CAST-IN-PLACE CONCRETE TRAFFIC BARRIER DETAIL

OPTIONAL CONSTRUCTION JOINTS IN THE PARAPET AND FOOTING MAY BE USED. RUN BAR REINFORCEMENT THRU JOINT. LAP LONGITUDINAL BARS A MINIMUM OF 1'-9. DEFINE CONSTRUCTION JOINT WITH A ¾" "V" GROOVE.



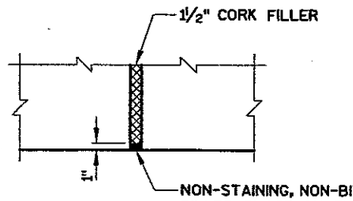
NOTE: ALL JOINTS SHALL BE LOCATED AS SHOWN ON WALL ELEVATIONS AND MUST COINCIDE WITH PANEL JOINT ON FRONT FACE WHERE BOTTOM OF LIP INTERSECTS WITH PANEL JOINT.

C.I.P. TRAFFIC BARRIER PARTIAL ELEVATION



CONCRETE TRAFFIC BARRIER PARTIAL PLAN

EXPANSION JOINTS TO BE A MINIMUM OF 3'-6 FROM ℄ OF FLOOR DRAINS.



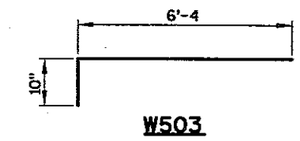
CONCRETE TRAFFIC BARRIER EXPANSION JOINT DETAIL

EXPANSION JOINT SPACING NOT TO EXCEED 25'. DO NOT RUN BAR STEEL THRU JOINT. LOCATE OVER WALL JOINT.

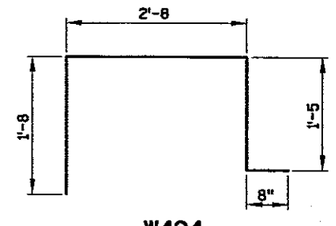
BILL OF BARS — COATED 22,385 LBS

MARK	NO. REQ'D	LENGTH	BENT	COAT	LOCATION
W401	315	38'-9		X	FOOTING & PARAPET - LONGIT.
W402	446	6'-4		X	FOOTING - TRANSV. - BOTTOM
W503	832	7'-1	X	X	FOOTING - TRANSV. - TOP
W404	446	6'-2	X	X	FOOTING - VERT.
W505	561	7'-1	X	X	PARAPET - VERT.
W506	6	5'-0		X	FOOTING - TRANSV. - @ DRAINS
W507	12	6'-10	X	X	FOOTING - TRANSV. - @ DRAINS
W508	12	8'-4	X	X	FOOTING - TRANSV. - @ DRAINS

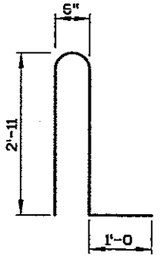
NOTE: THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE BAR SIZE. BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



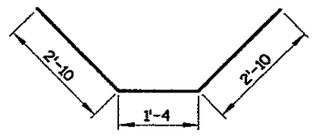
W503



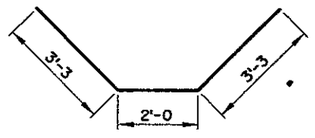
W404



W505



W507



W508

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

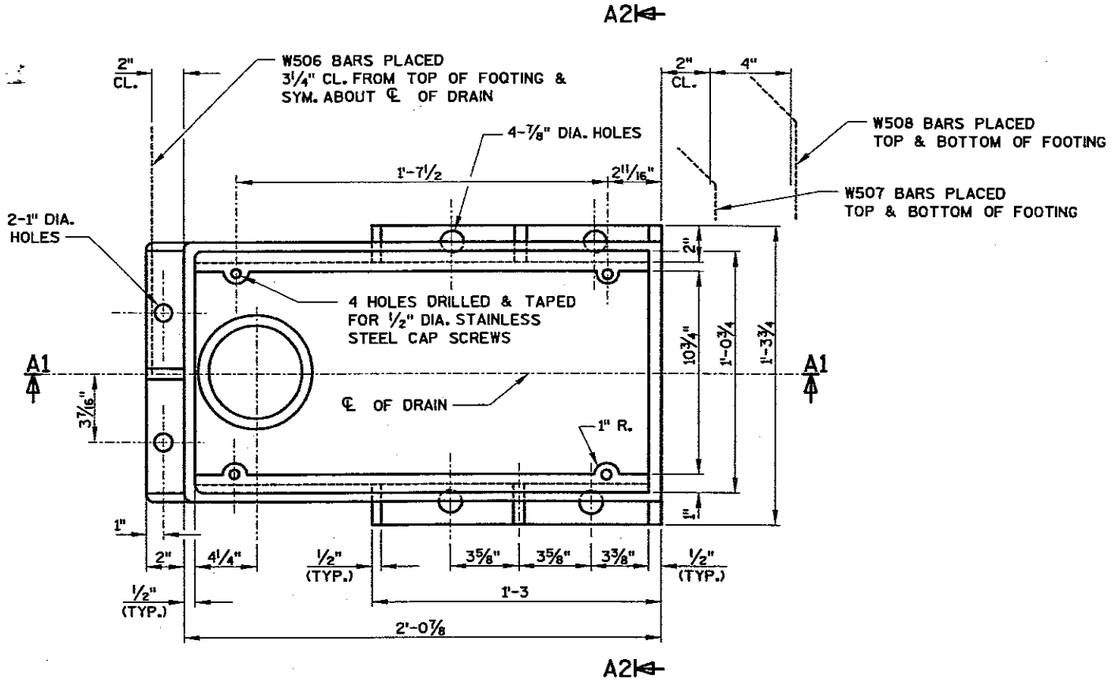
STRUCTURE R-37-13

CONST. SPEC.	2003	DRAWN BY	ADW	PLANS CK'D.	DJW

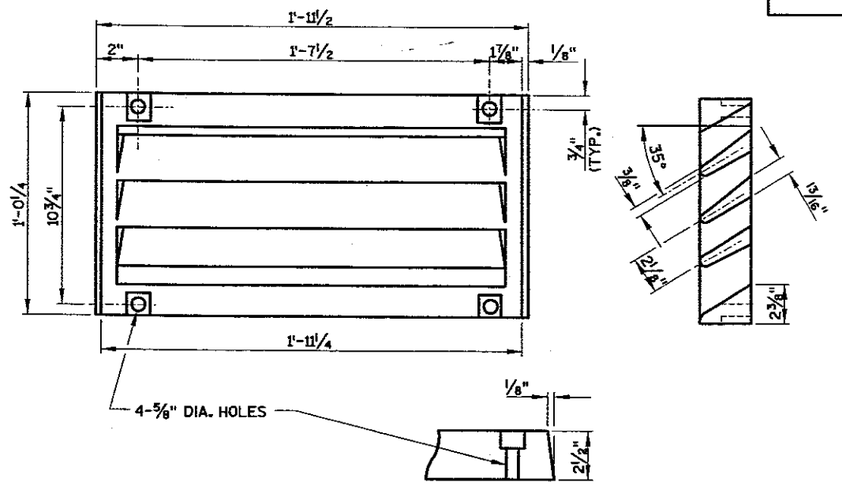
SECTION & DETAILS

SHEET 3

206



PLAN



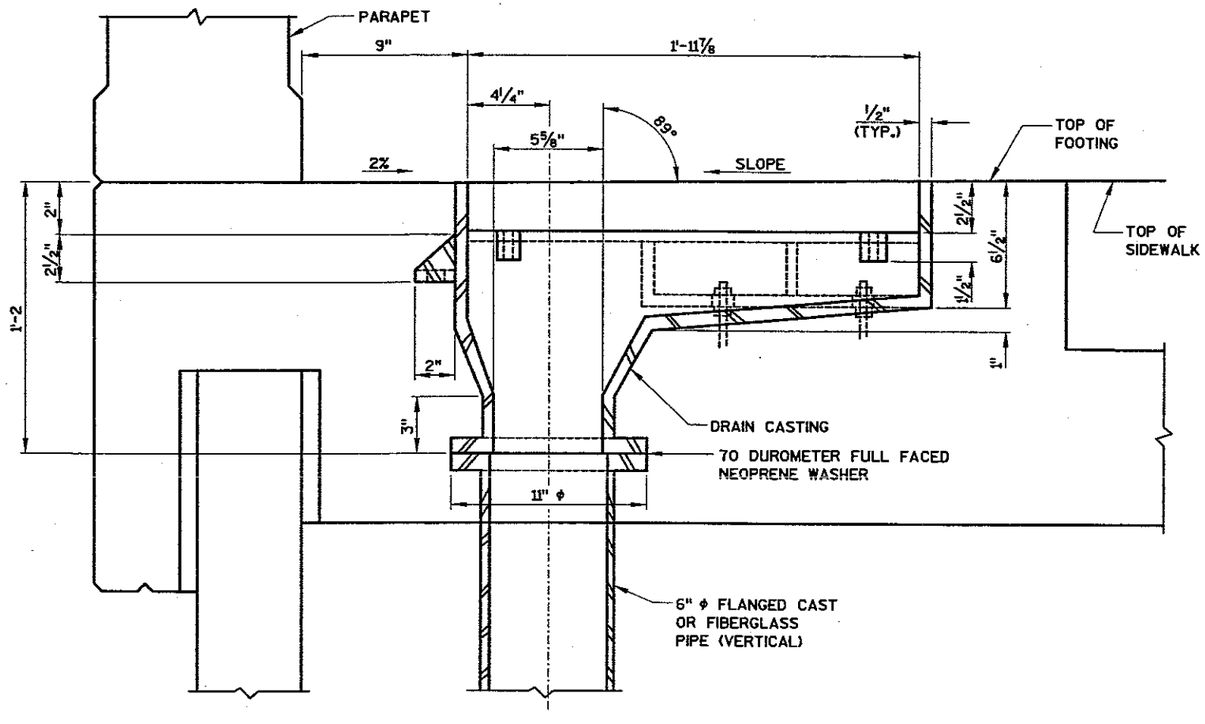
GRATE CASTING DETAIL
ATTACH GRATE TO FRAME FOR SHIPMENT

GENERAL NOTES

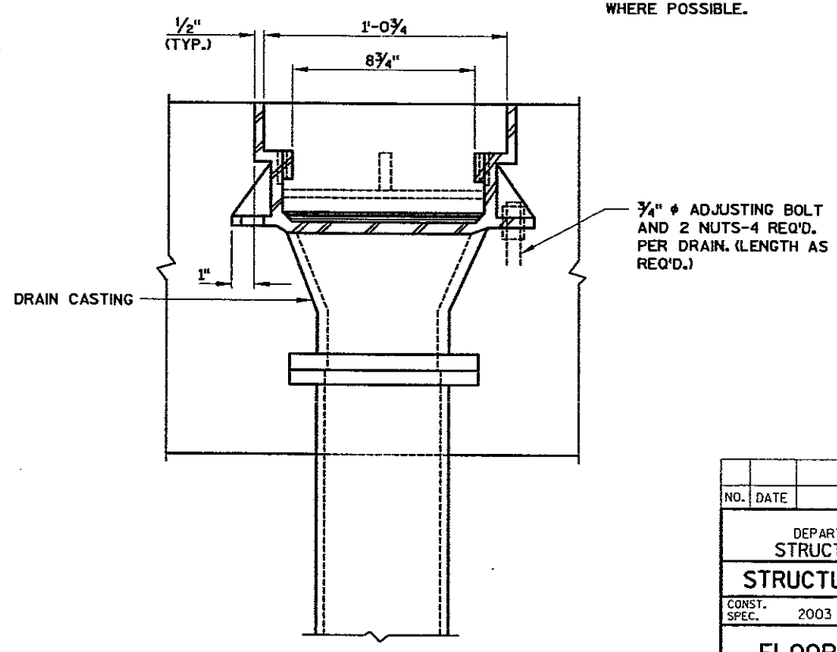
ALL MATERIAL FOR TYPE "GC" CASTING, EXCLUDING GRATE HOLD DOWN SCREWS, SHALL BE GRAY IRON CONFORMING TO ASTM A48, CLASS 30. (APPROXIMATE WEIGHT = 225#)

FLANGED 6" DIA. DOWNSPOUTS SHALL BE EITHER CAST MATERIAL OR FIBERGLASS CONFORMING TO ASTM D2996, GRADE 1, CLASS A.

TRANS. AND LONGIT. FOOTING BAR REINF. TO BE CUT A MAX OF 1" CL. FROM DRAIN FRAME. DISPLACE BARS WHERE POSSIBLE.



SECTION A1



SECTION A2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-37-13

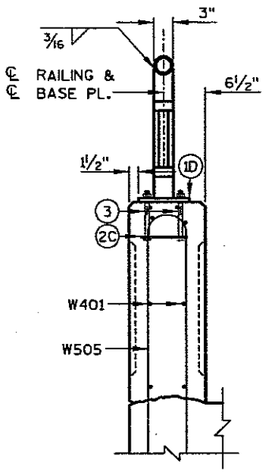
CONST. SPEC.	2003	DRAWN BY	ADW	PLANS CK'D.	DJW

FLOOR DRAIN TYPE 'GC'

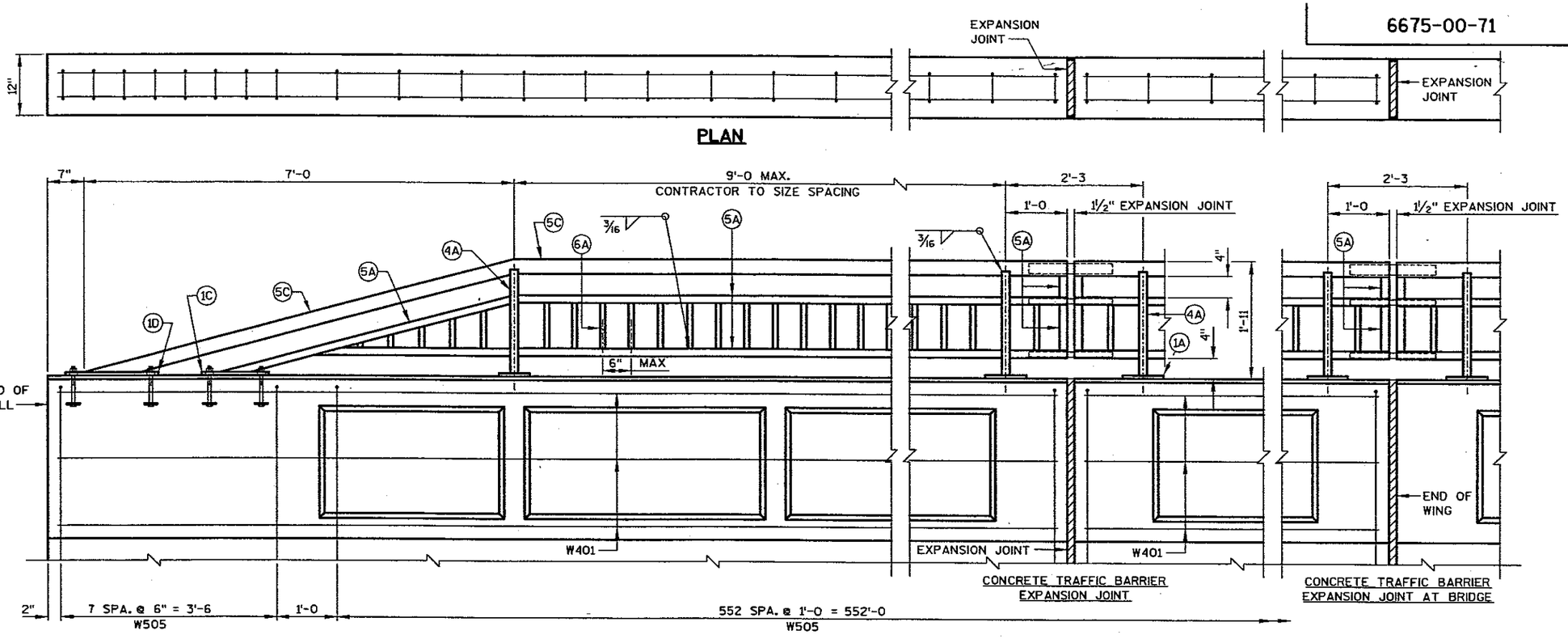
SHEET 4

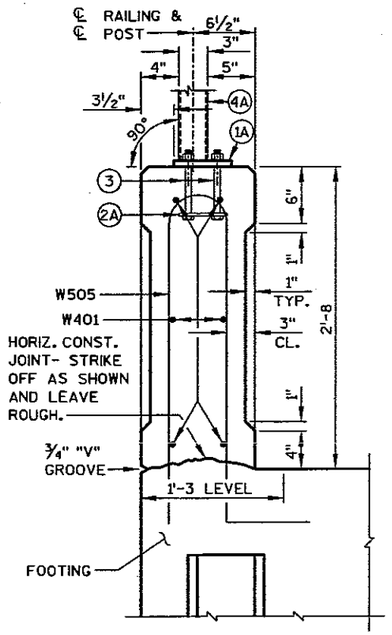
207

8



END VIEW





SECTION THRU PARAPET

* ADJUST LOCATIONS OF BARS TO ALLOW PLACEMENT OF ANCHOR ASSEMBLY FOR RAILING AND BEAM GUARD (WHEN REQ'D).

INSIDE ELEVATION

OPTIONAL CONSTRUCTION JOINTS IN THE PARAPETS MAY BE USED. RUN BAR REINF. THRU THE JOINT. LAP LONGIT. BARS A MIN. OF 1'-9. DEFINE CONSTR. JT. WITH A ¾" "V"-GROVE.

EXPANSION JOINT SPACING NOT TO EXCEED 25'. DO NOT RUN BAR STEEL THRU JOINT. LOCATE OVER WALL JOINT.
SEE SHEET 3 FOR LOCATIONS.

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

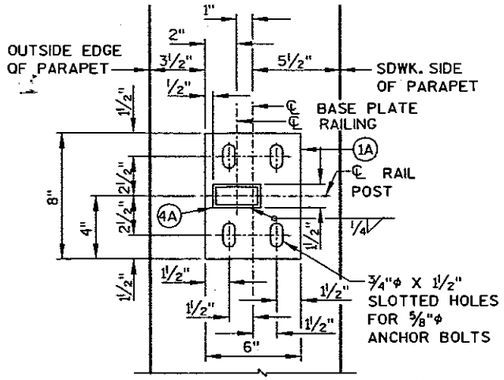
STRUCTURE R-37-13

CONST. SPEC.	2003	DRAWN BY	ADW	PLANS CK'D.	DJW

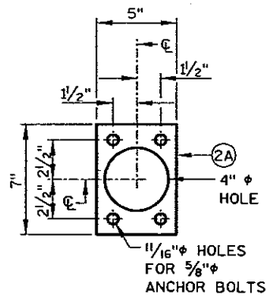
COMBINATION RAIL TYPE 'C2'

SHEET 5

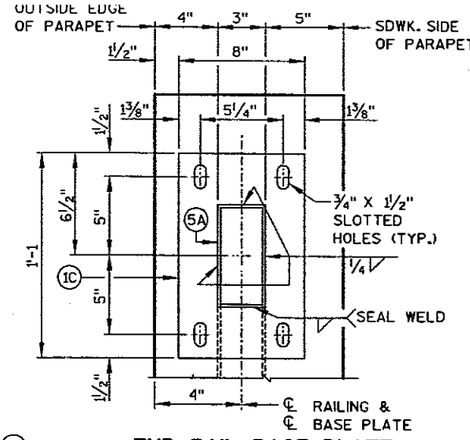
208



TYPICAL RAIL POST BASE PLATE

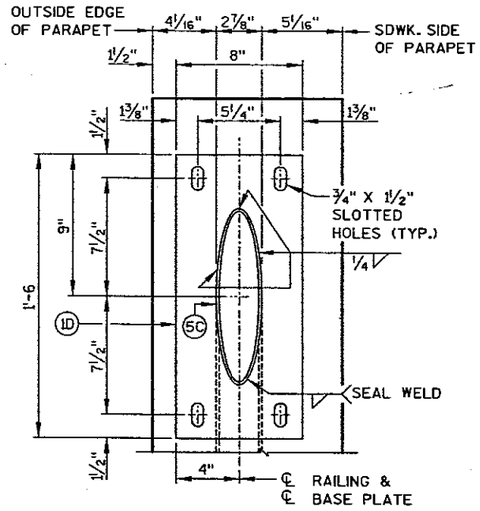


ANCHOR PLATE



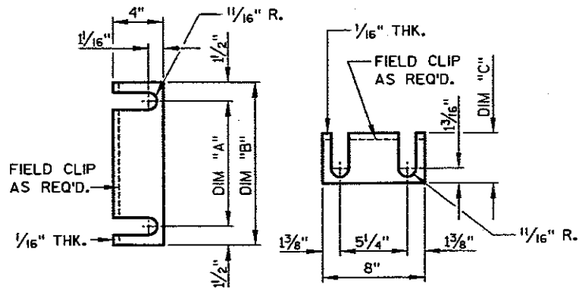
END RAIL BASE PLATE

FOR 3" X 1½" X 3/16" RAIL (5A)



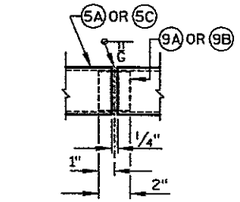
END RAIL BASE PLATE

FOR 2½" ϕ STANDARD PIPE RAIL (5C)



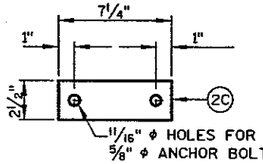
END RAIL SHIM DETAIL

8" X 1'-1 BASE PLATE (1C) DIM "A" = 10", DIM "B" = 1'-1, DIM "C" = 6½"
8" X 1'-6 BASE PLATE (1D) DIM "A" = 1'-3, DIM "B" = 1'-6, DIM "C" = 9"
(2 SETS PER POST)



SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



END RAIL ANCHOR PLATE

FOR END RAIL BASE PLATES (1C) & (1D)
2 REQ'D. PER END RAIL BASE PLATE

NOTES

BID ITEM SHALL BE "RAILING STEEL TYPE "C2", WHICH SHALL INCLUDE ALL STEEL ITEMS SHOWN, AND PAINTING.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

NO. 1, 2, 8, 9 AND NO. 10 SHALL CONFORM TO A.S.T.M. A709 GRADE 36. STRUCTURAL TUBING SHALL CONFORM TO A.S.T.M. A500 GRADE B (NO. 4, NO.5, AND NO.6).

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT.

FILL BOLT SLOT OPENINGS IN SHIMS AND PLATE NO. 1 AND CAULK AROUND PERIMETER OF PLATE NO. 1 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ALL JOINTS AND RECESSES IN CONCRETE PARAPET ARE TO BE VERTICAL.

AFTER FABRICATION, ALL MATERIAL, EXCEPT ANCHORAGE (NO. 2 & 3) & SHIMS SHALL BE PAINTED WITH A THREE COAT ZINC-RICH EPOXY SYSTEM PER WISDOT STANDARD SPECIFICATION, SECTION 517, EPOXY SYSTEM. SHIMS SHALL BE GIVEN ONE COAT OF ZINC RICH PRIMER PAINT. THE FINISH COLOR SHALL BE FEDERAL COLOR NO. , .

¼"ϕ VENT HOLES LOCATED IN TOP RAIL OVER RAIL POSTS AND AT LOW END OF OTHER RAILS

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

TOUCH-UP PAINTING TO BE DONE AT COMPLETION OF STEEL RAILING INSTALLATION TO THE SATISFACTION OF THE ENGINEER AT NO EXTRA COST.

LEGEND

(1A) PLATE ⅝" X 6" X 8" WITH ¾" X 1½" SLOTTED HOLES.

(1C) PLATE ⅝" X 8" X 1'-1 WITH ¾" X 1½" SLOTTED HOLES.

(1D) PLATE ⅝" X 8" X 1'-6 WITH ¾" X 1½" SLOTTED HOLES.

(2A) ¼" X 5" X 7" ANCHOR PLATE WITH 11/16" ϕ HOLES FOR ANCHOR BOLTS NO. 3.

(2C) ¼" X 2½" X 7¼" ANCHOR PLATE WITH 11/16" ϕ HOLES FOR ANCHOR BOLTS NO. 3.

(3) ⅝" DIA. X 7½" LONG ASTM F593 TYPE 316 STAINLESS STEEL ANCHOR BOLTS WITH NUT AND WASHERS OF SAME ALLOY GROUP. (ALTERNATE RAIL POST ANCHORAGE - 4 EQUIV. STAINLESS STEEL CONCRETE MASONRY ANCHORS, TYPE S (EPOXY), ⅝" ϕ, MINIMUM PULLOUT CAPACITY OF 15 KIPS. EMBED A MIN. OF 7" FOR RAIL POSTS AND 5" FOR END RAILS.)

(4A) STRUCTURAL TUBING 3" X 1½" X 3/16". PLACE VERTICAL. WELD TO NO. 1 & 5.

(5A) STRUCTURAL TUBING 3" X 1½" X 3/16" RAILS. WELD TO NO. 1 & NO. 4.

(5C) 2½" ϕ STANDARD PIPE RAIL (2.875" O.D.). WELD TO NO. 1 & NO. 4.

(6A) STRUCTURAL TUBING 1" X 1" X ⅛" PICKETS. WELD TO NO. 5. SPACE AT 6" MAX. ℄ TO ℄ SPACING. PLACE VERTICAL.

(6C) STRUCTURAL TUBING 1" X 1½" X ⅛" PICKETS. WELD TO NO. 11. PLACE VERTICAL.

(9A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. PROVIDE "SLIDING FIT".

(9B) CIRCULAR SLEEVE FABRICATED FROM 2" ϕ STANDARD PIPE.

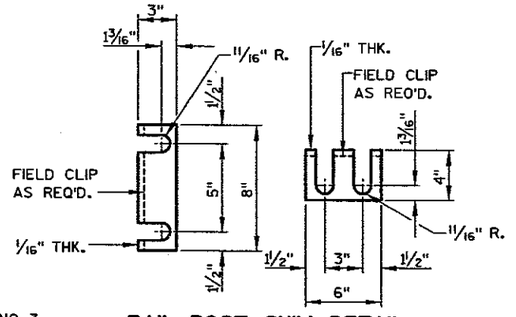
(10A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. (1'-4 @ FIELD ERECTION JTS.) (1'-4 @ STRIP SEAL EXP. JTS.)

(10B) CIRCULAR SLEEVE FABRICATED FROM 2" ϕ STANDARD PIPE. (1'-4 @ FIELD ERECTION JTS.) (1'-4 @ STRIP SEAL EXP. JTS.)

(11A) BAR 2½" X 1" X _'-__

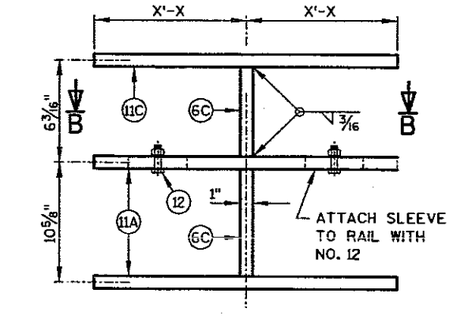
(11C) 2" ϕ STANDARD PIPE X _'-__.

(12) ½" DIA. STAINLESS STEEL BOLT WITH NUT AND LOCKWASHER.



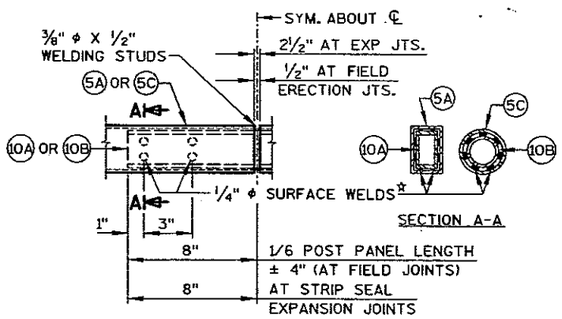
RAIL POST SHIM DETAIL

(2 SETS PER POST)



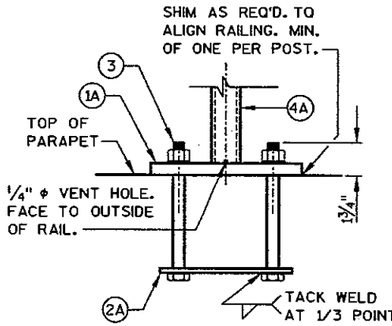
SECTION B-B

MODULAR JOINT SLEEVE DETAIL



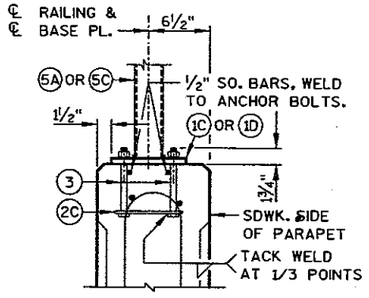
FIELD ERECTION JOINT DETAIL

☆MIN. ⅝" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.



ANCHOR BOLTS FOR RAIL POSTS

NOTE: ANCHOR PLATE NOT REQUIRED WHEN TYPE S ANCHORS ARE USED.



ANCHOR BOLTS FOR END RAIL

NOTE: ANCHOR PLATE NOT REQUIRED WHEN TYPE S ANCHORS ARE USED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-37-13

CONST. SPEC.	2003	DRAWN BY	ADW	PLANS CK'D.	DJW

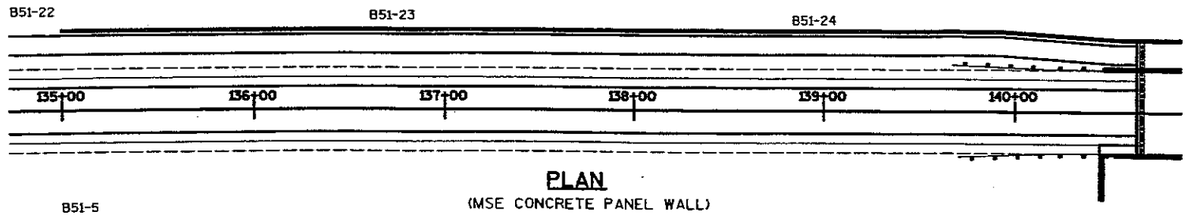
COMBINATION RAIL TYPE 'C2'

SHEET 6

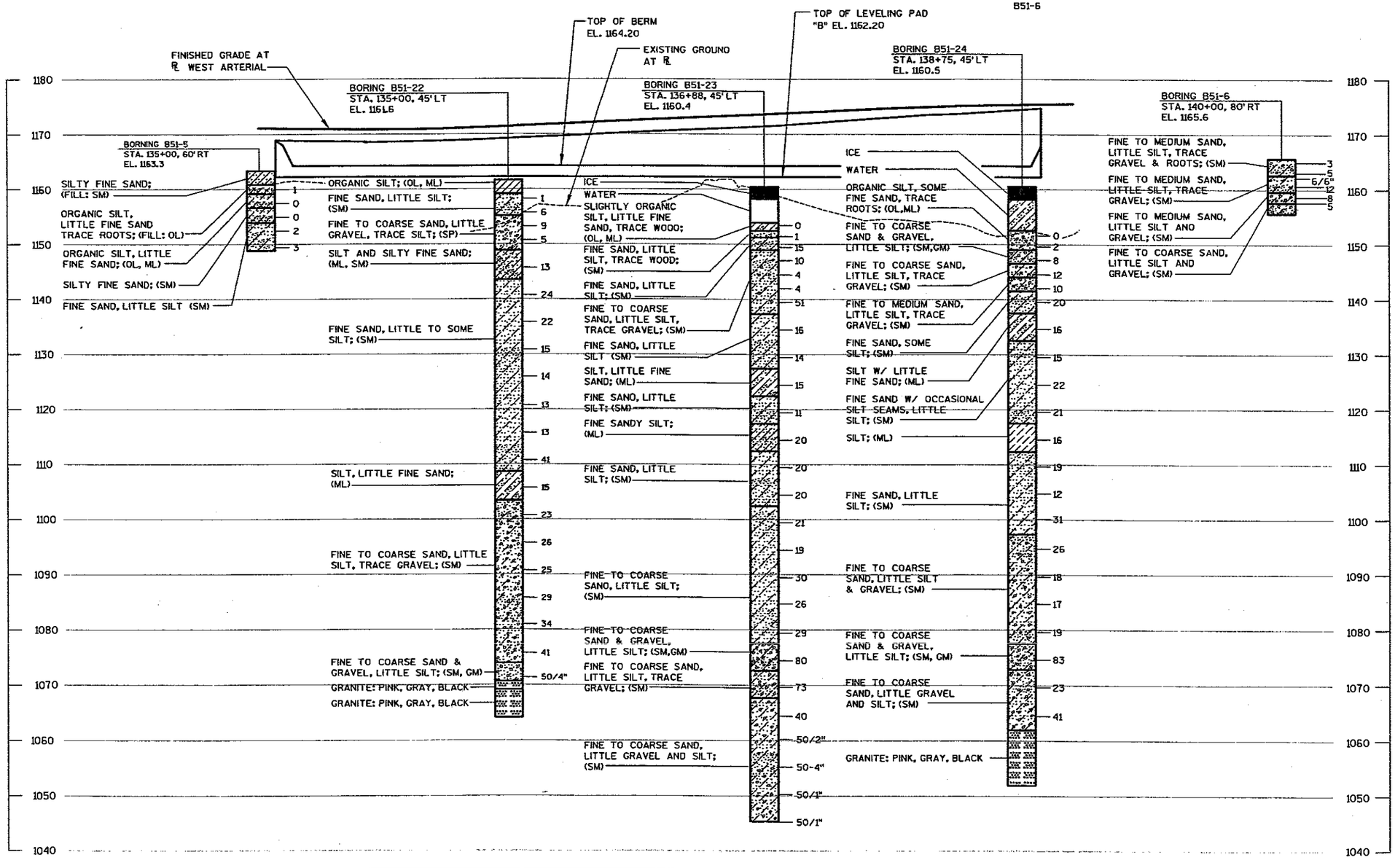
209

6675-00-71

8



PLAN
(MSE CONCRETE PANEL WALL)



6675-00-71

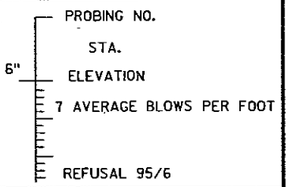
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

MATERIAL SYMBOLS

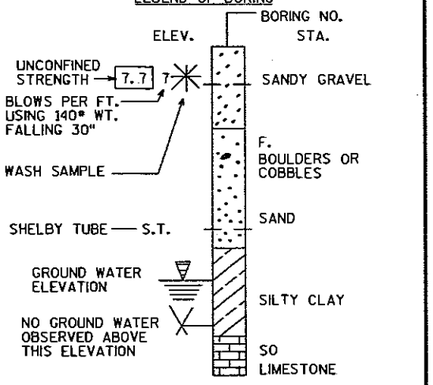
TOPSOIL, SAND, GRAVEL, SILT, PEAT, CLAY, SANDSTONE, LIMESTONE, IGNEOUS ROCK

LEGEND OF PROBING



95/6=95 BLOWS FOR 6" PENETRATION
PROBING TAKEN WITH A 350# WT. FALLING 18" ON A 2" O.D. POINT.

LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

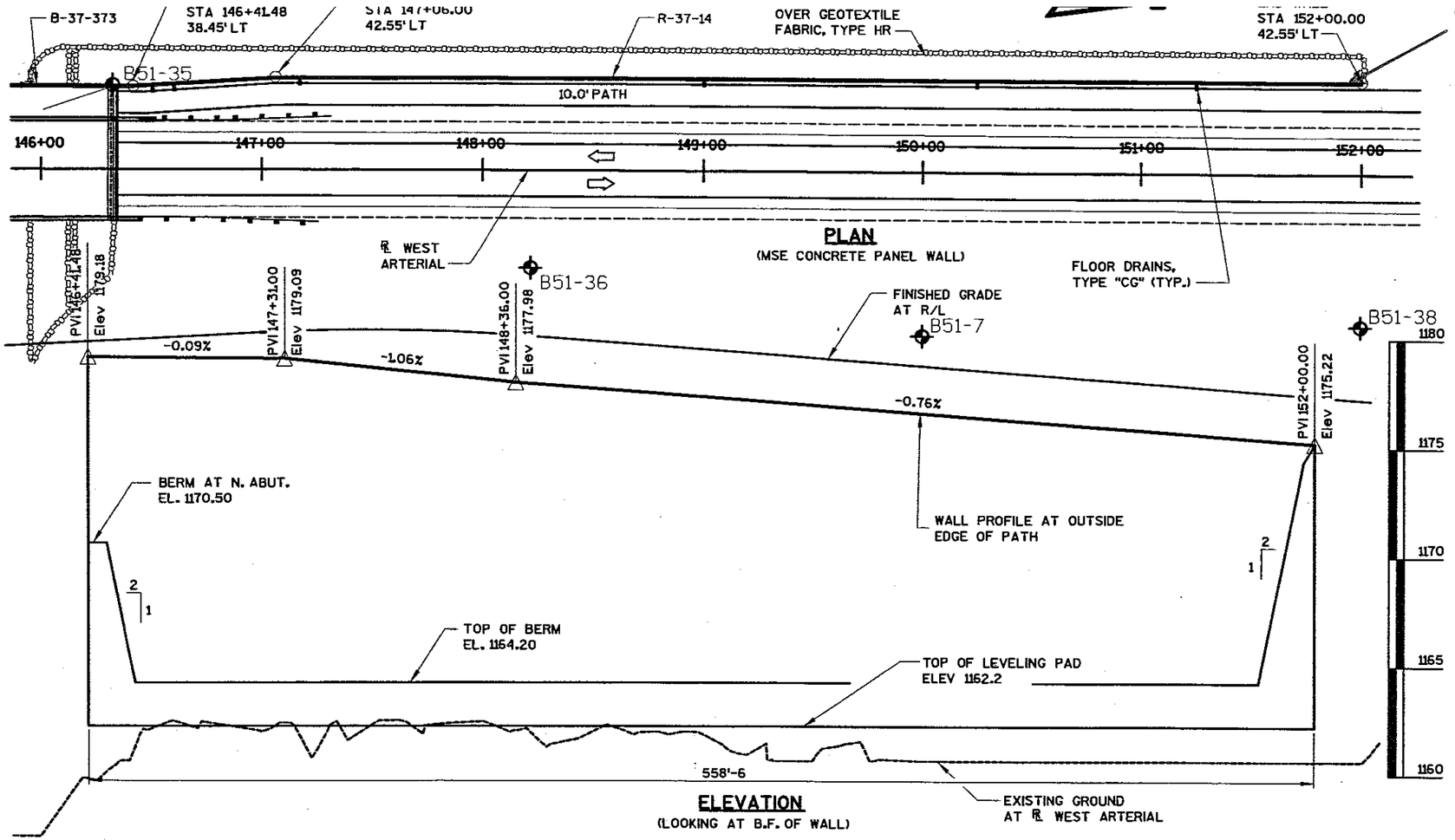
STRUCTURE R-37-13

CONST. SPEC.	2003	DRAWN BY	KAS	PLANS CK'D.	DJW

SUBSURFACE EXPLORATION

SHEET 7

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PLAN
(MSE CONCRETE PANEL WALL)

ELEVATION
(LOOKING AT B.F. OF WALL)

SAFETY FACTORS

MINIMUM DOT STANDARD	MSE CONCRETE PANEL WALL
SLIDING (FS>1.5)	1.5
OVERTURNING (FS>2.0)	2.0
GLOBAL STABILITY (FS>1.3)	1.5
ULTIMATE BEARING CAPACITY (FS>2) BASED ON WALL WIDTHS & IMBEDMENT DEPTHS SHOWN IN TABLE	2.0

SOIL PARAMETERS

STRATUM LOCATIONS AND SOIL DESCRIPTIONS	MIN. UNIT WEIGHT (pcf)	MIN. FRICTION ANGLE (DEGREES)	COHESION (psf)
EL. 1179.18 - EL. 1162.20 (REINFORCED EARTH)	120	32	0
RIPRAP	105	45	0
FILL ABOVE WATER TABLE	120	32	0
FILL BELOW WATER TABLE	110	28	0
RETAINED SOIL EL. 1179.18 - 1162.20 *			

* DESIGN WALL FOR THESE VALUES

FLOOR DRAIN LOCATIONS

FLOOR DRAIN NUMBER	STATION	OFFSET	ELEVATION
1	146+50.16	37.25 LT	1179.14
2	146+60.16	37.89 LT	1179.13
3	147+17.18	40.80 LT	1179.08
4	149+00.00	40.80 LT	1177.46
5	150+25.21	40.80 LT	1176.51
6	151+25.12	40.80 LT	1175.75

GEOMETRY TABLE

STATION	OFFSET TO F.F. WALL	COORDINATES	ELEV. A	ELEV. B
146+41.48	38.45' LT	E: 271,583.02 N: 197,067.60	1179.18	1162.20
147+06.00	42.55' LT	E: 271,577.54 N: 197,131.94	1179.12	1162.20
152+00.00	42.55' LT	E: 271,566.87 N: 197,625.91	1175.22	1162.20

DESIGN CONTACT: DAVID WALKER (608) 251-4843
BRIDGE OFFICE CONTACT: FINN HUBBARD (608) 266-8489

OF MSE WALL 1177.96

6675-00-71

DESIGN DATA

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS, AND SHOP DRAWINGS FOR THE RETAINING WALLS IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS SHALL BE INCLUDED IN THE BID ITEM "MSE CONCRETE PANEL WALL".

PLANS, ELEVATIONS AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE ELEVATIONS GIVEN ON THIS SHEET.

DESIGN FOR RETAINING WALL TO PROVIDE FOR FINISHED GRADE SLOPED BEHIND WALL AS SHOWN.

DESIGN RETAINING WALL FOR A LIVE LOAD SURCHARGE OF 240 psf.

CONCRETE MASONRY ---------- f'c = 4,000 psi

HIGH STRENGTH BAR STEEL REINFORCEMENT ---------- fy = 60,000 psi

TOTAL ESTIMATED QUANTITIES

CONCRETE MASONRY, RETAINING WALLS	255 C.Y.
BAR STEEL REINFORCEMENT, HS, COATED, RETAINING WALLS	22,430 LB.
RAILING STEEL, TYPE 'C2', STRUCTURE R-37-14	1 L.S.
FLOOR DRAINS, TYPE 'GC'	6 EACH
WALL CONCRETE PANEL, MECHNICALLY STBILIZED EARTH	8474 S.F.
RIPRAP HEAVY	790 C.Y.
GEOTEXTILE FABRIC, TYPE HR	1724 S.Y.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

LIST OF DRAWINGS

1. GENERAL PLAN
2. TYPICAL SECTION
3. SECTION AND DETAILS
4. FLOOR DRAIN, TYPE 'GC'
5. COMBINATION RAIL, TYPE 'C2'
6. COMBINATION RAIL, TYPE 'C2'
7. SUBSURFACE EXPLORATION

WISCONSIN
DAVID J. WALKER
E-23400
VERONA
WI
PROFESSIONAL ENGINEER
12/18/03

NO.	DATE	REVISION	BY

STRAND ASSOCIATES, INC. ENGINEERS
910 WEST WINGRA DRIVE
MADISON, WISCONSIN 53715
(608)-251-4843
(608) 251-8655 FAX
WWW.STRAND.COM

STRUCTURE R-37-14

WEST ARTERIAL RETAINING WALL

COUNTY: MARATHON		TOWN/CITY/VILLAGE: WAUSAU	
DESIGN SPEC.: AASHTO STD. SPEC. 2002	LOAD: HS-20	CONST. SPEC.: 2003	
DESIGNED BY: KAS	DESIGN CK'D.: DJW	DRAWN BY: CDH	PLANS CK'D.: DJW

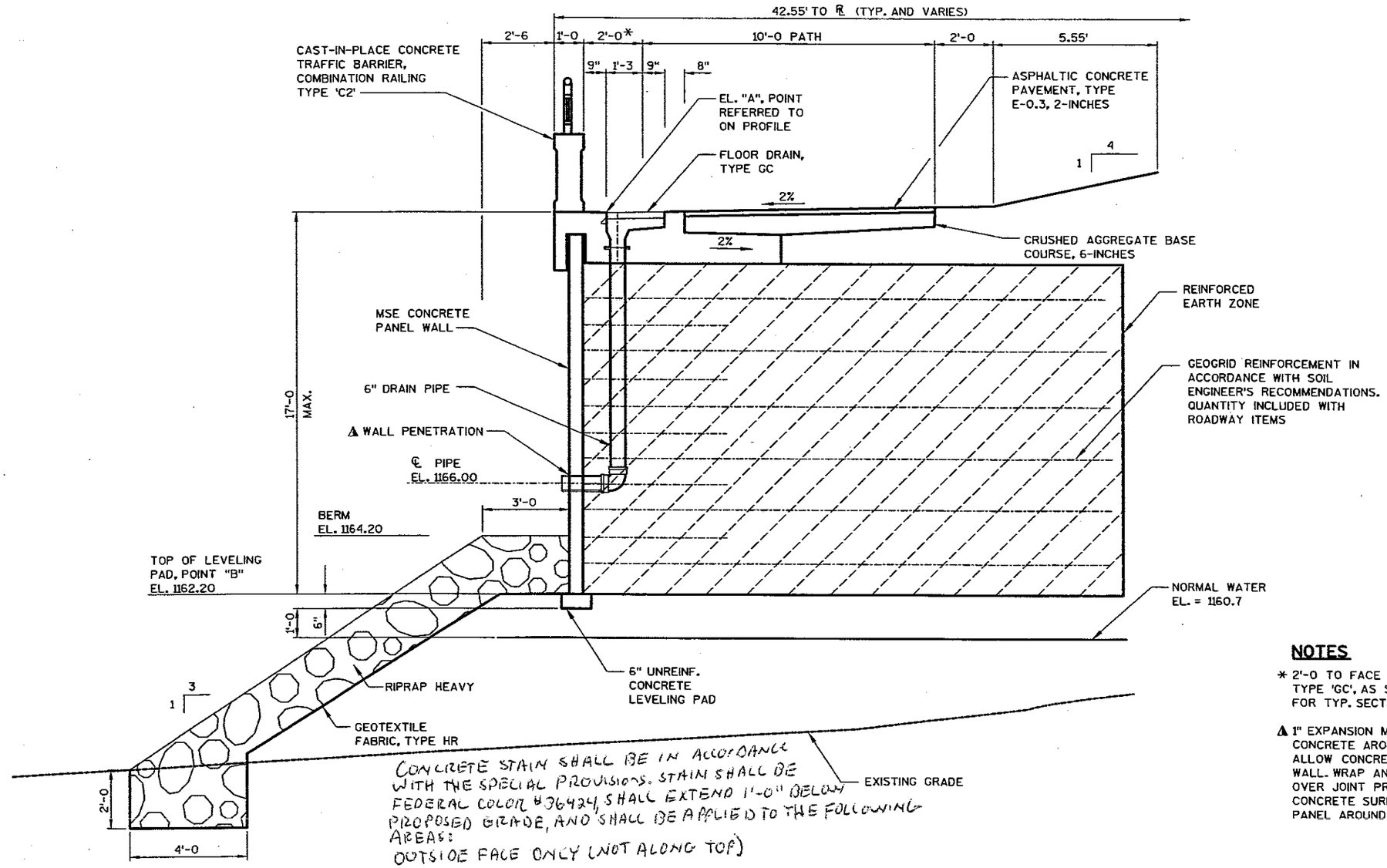
APPROVED: [signature] 1-22-04
CHIEF STRUCTURAL DESIGN ENGINEER — DATE

GENERAL PLAN

SHEET 1 OF 7

DATE: 2/11

8



CONCRETE STAIN SHALL BE IN ACCORDANCE WITH THE SPECIAL PROVISIONS. STAIN SHALL BE FEDERAL COLOR #36424, SHALL EXTEND 1'-0" BELOW PROPOSED GRADE, AND SHALL BE APPLIED TO THE FOLLOWING AREAS:
OUTSIDE FACE ONLY (NOT ALONG TOP)

MSE CONCRETE PANEL WALL TYPICAL SECTION AT FLOOR DRAIN

NOTES

* 2'-0 TO FACE OF STEP, TYP., EXCEPT AT FLOOR DRAINS, TYPE 'GC', AS SHOWN IN THIS SECTION. SEE SHEET 3 FOR TYP. SECTION.

⚠ 1" EXPANSION MATERIAL BANDED AROUND PIPE. FORM CONCRETE AROUND PIPE OVER EXPANSION MATERIAL. ALLOW CONCRETE TO SET PRIOR TO BACKFILLING BEHIND WALL. WRAP AND SECURE FILTER CLOTH AROUND PIPE OVER JOINT PRIOR TO BACKFILLING BEHIND WALL. TROWEL CONCRETE SURFACE SMOOTH AGAINST FACE OF WALL PANEL AROUND PIPE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-37-14

CONST. SPEC.	2003	DRAWN BY	KAS	PLANS CK'D.	DJW

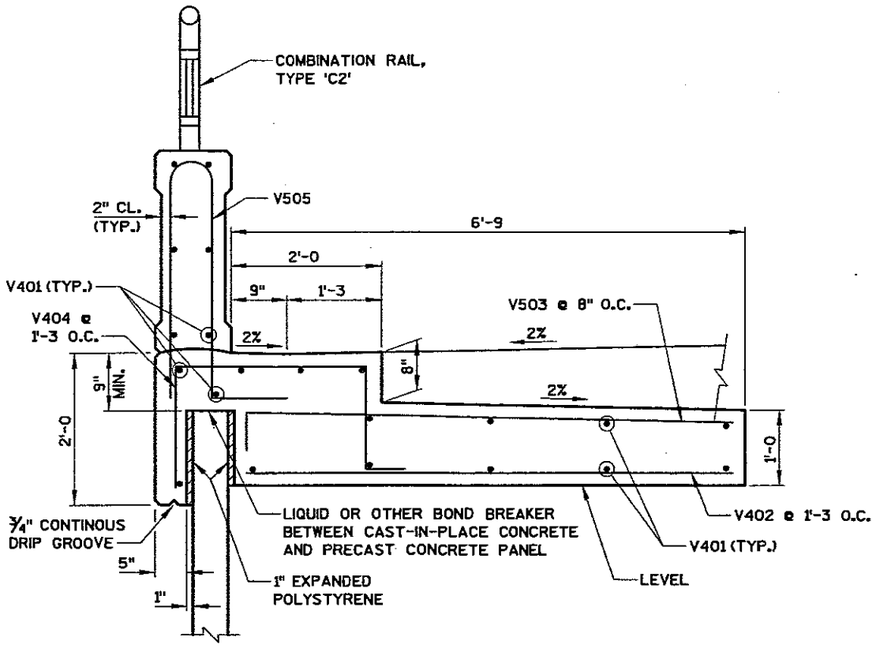
TYPICAL SECTION

SHEET 2

2 12

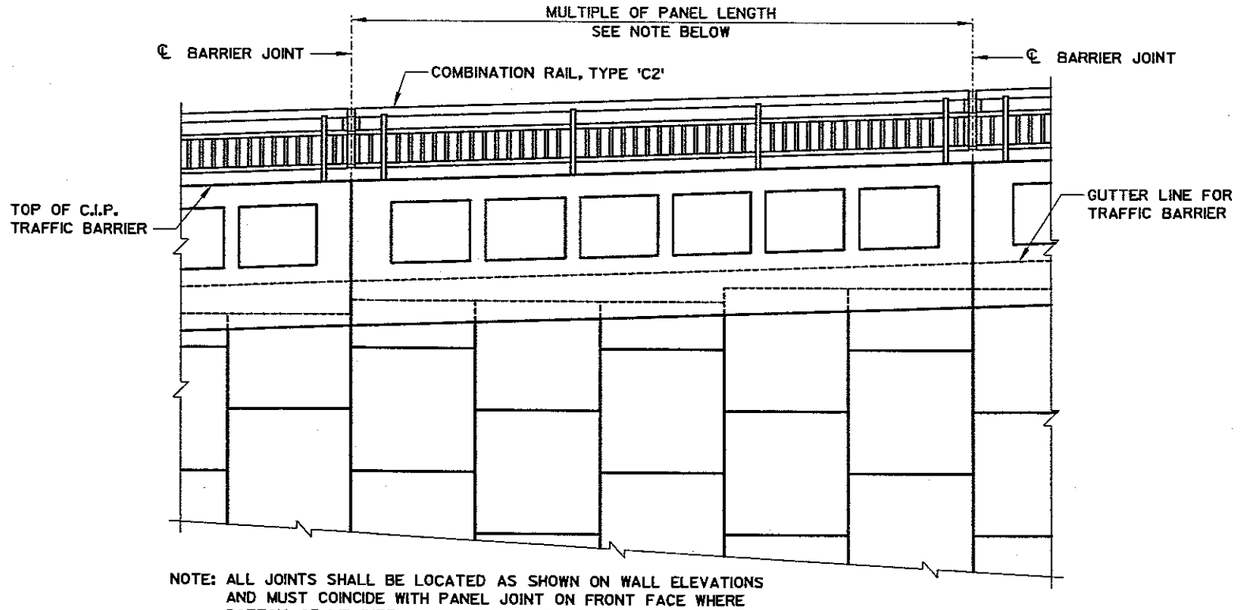
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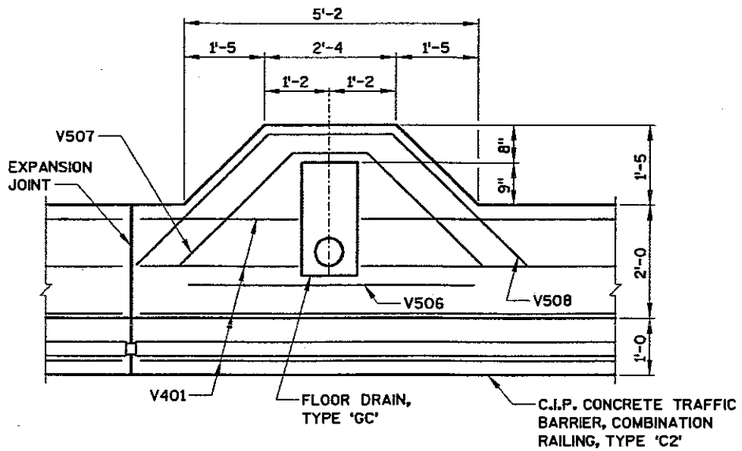
CAST-IN-PLACE CONCRETE TRAFFIC BARRIER DETAIL

OPTIONAL CONSTRUCTION JOINTS IN THE PARAPET AND FOOTING MAY BE USED. RUN BAR REINFORCEMENT THRU JOINT. LAP LONGITUDINAL BARS A MINIMUM OF 1'-9. DEFINE CONSTRUCTION JOINT WITH A ¾" "V" GROOVE.



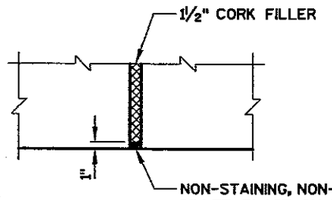
NOTE: ALL JOINTS SHALL BE LOCATED AS SHOWN ON WALL ELEVATIONS AND MUST COINCIDE WITH PANEL JOINT ON FRONT FACE WHERE BOTTOM OF LIP INTERSECTS WITH PANEL JOINT.

C.I.P. TRAFFIC BARRIER PARTIAL ELEVATION



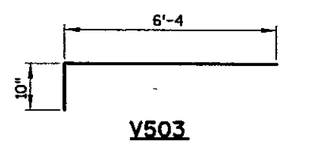
CONCRETE TRAFFIC BARRIER PARTIAL PLAN

EXPANSION JOINTS TO BE A MINIMUM OF 3'-6 FROM ℄ OF FLOOR DRAINS.

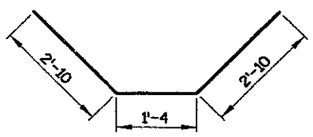


CONCRETE TRAFFIC BARRIER EXPANSION JOINT DETAIL

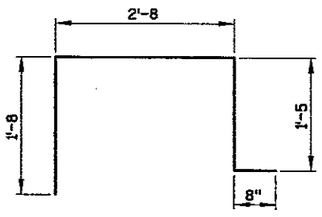
EXPANSION JOINT SPACING NOT TO EXCEED 25'. DO NOT RUN BAR STEEL THRU JOINT. LOCATE OVER WALL JOINT.



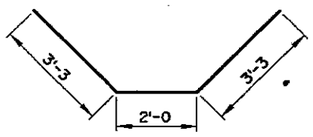
V503



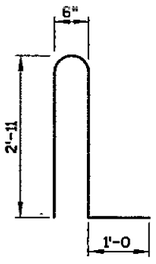
V507



V404



V508



V505

BILL OF BARS — COATED 22,430 LBS

MARK	NO. REQ'D	LENGTH	BENT	COAT	LOCATION
V401	315	38'-10		X	FOOTING & PARAPET - LONGIT.
V402	447	6'-4		X	FOOTING - TRANSV. - BOTTOM
V503	834	7'-1	X	X	FOOTING - TRANSV. - TOP
V404	447	6'-2	X	X	FOOTING - VERT.
V505	561	7'-1	X	X	PARAPET - VERT.
V506	6	5'-0		X	FOOTING - TRANSV. - @ DRAINS
V507	12	6'-10	X	X	FOOTING - TRANSV. - @ DRAINS
V508	12	8'-4	X	X	FOOTING - TRANSV. - @ DRAINS

NOTE: THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE BAR SIZE. BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-37-14

CONST. SPEC.	2003	DRAWN BY	ADW	PLANS CK'D.	DJW

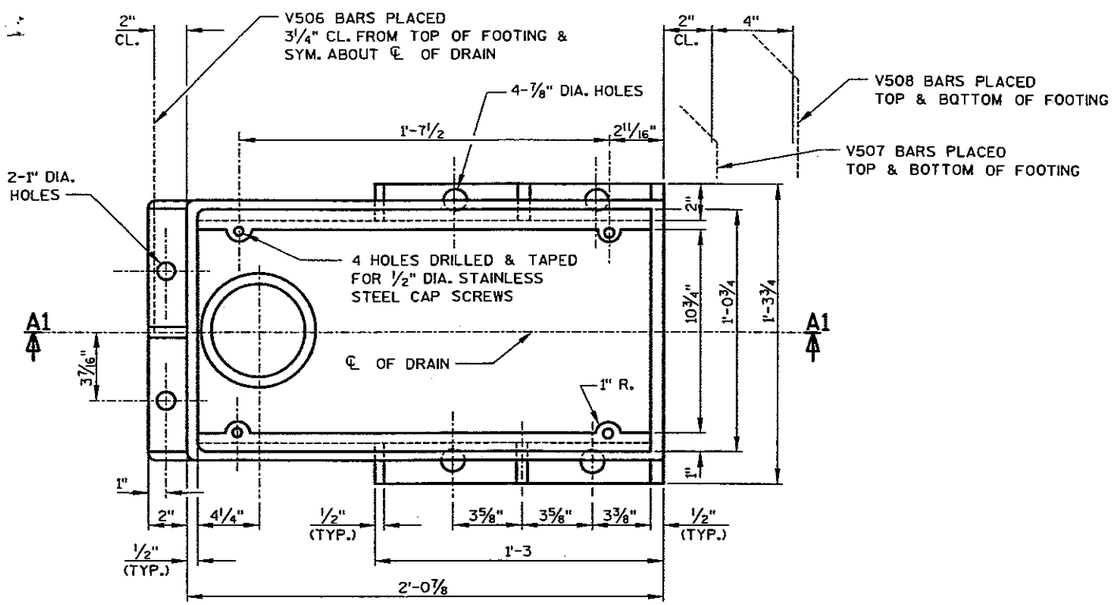
SECTION & DETAILS

SHEET 3

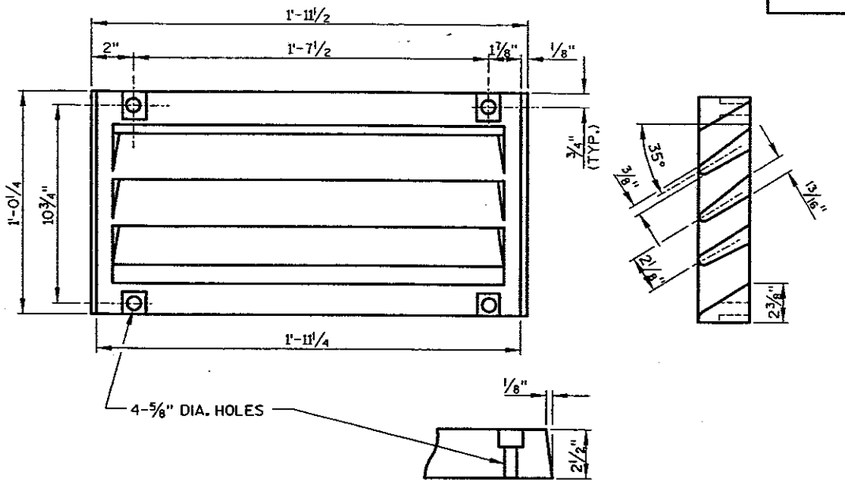
213

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PLAN



GRATE CASTING DETAIL

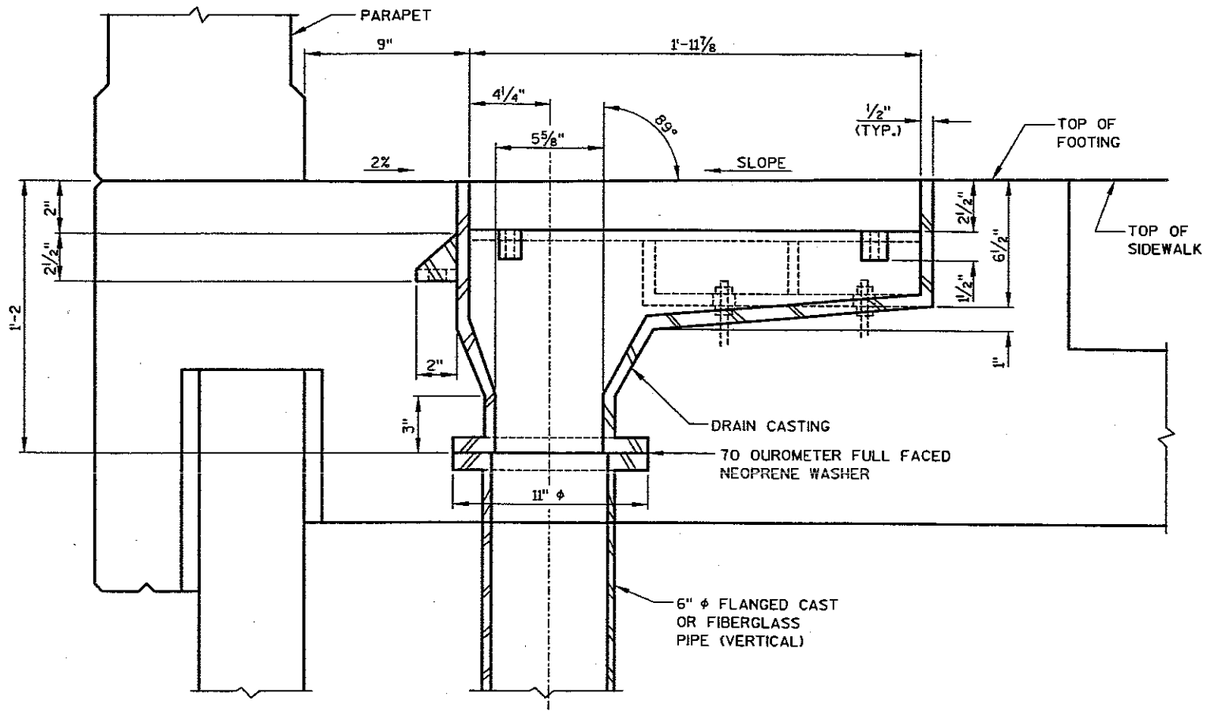
ATTACH GRATE TO FRAME FOR SHIPMENT

GENERAL NOTES

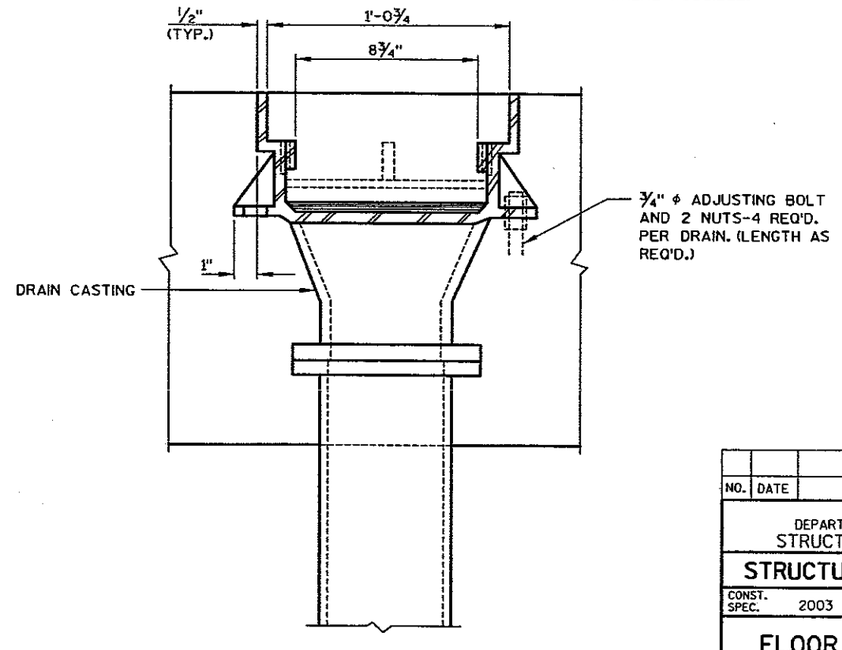
ALL MATERIAL FOR TYPE "GC" CASTING, EXCLUDING GRATE HOLD DOWN SCREWS, SHALL BE GRAY IRON CONFORMING TO ASTM A48, CLASS 30. (APPROXIMATE WEIGHT = 225#)

FLANGED 6" DIA. DOWNSPOUTS SHALL BE EITHER CAST MATERIAL OR FIBERGLASS CONFORMING TO ASTM D2996, GRADE I, CLASS A.

TRANS. AND LONGIT. FOOTING BAR REINF. TO BE CUT A MAX. OF 1" CL. FROM DRAIN FRAME. DISPLACE BARS WHERE POSSIBLE.



SECTION A1



SECTION A2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-37-14

CONST. SPEC.	2003	DRAWN BY	ADW	PLANS CK'D.	DJW

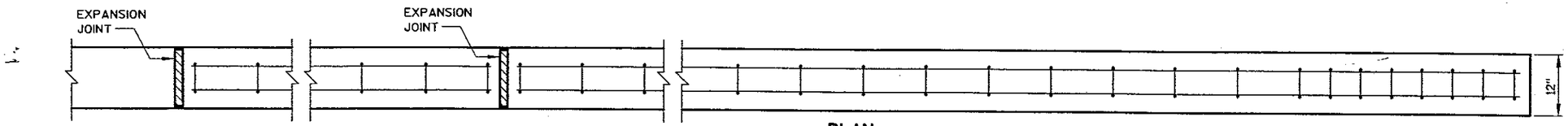
FLOOR DRAIN TYPE 'GC'

SHEET 4

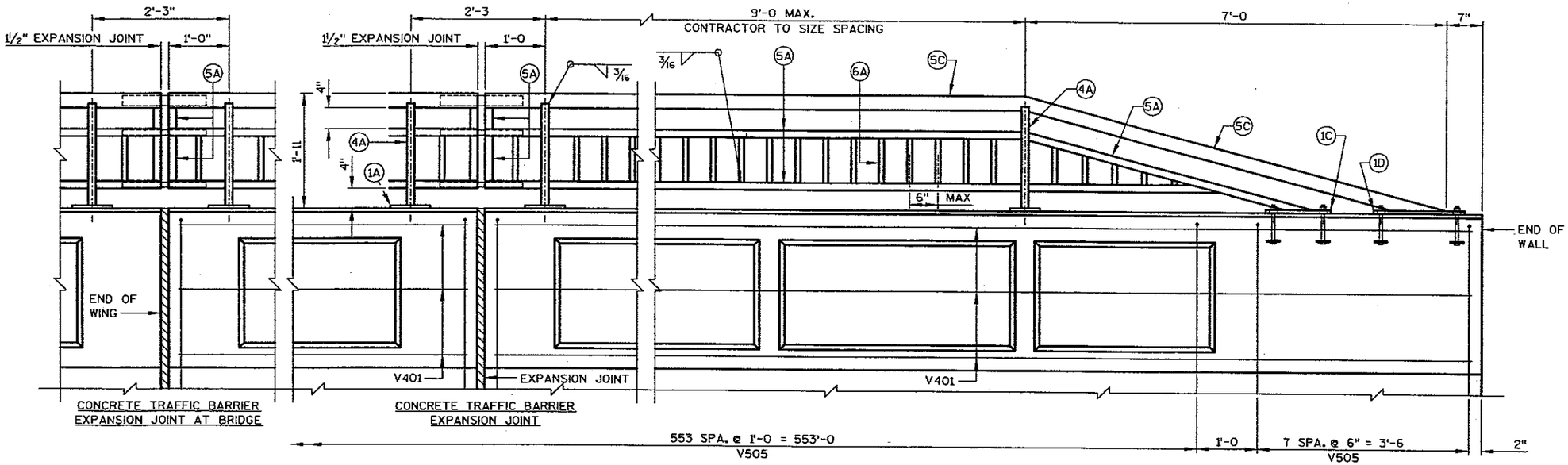
214

8

6675-00-71



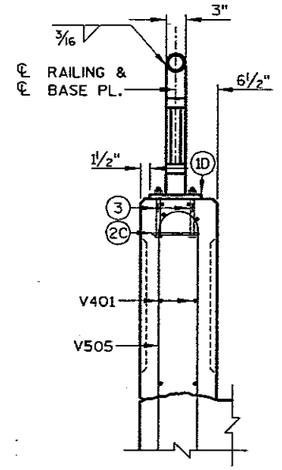
PLAN



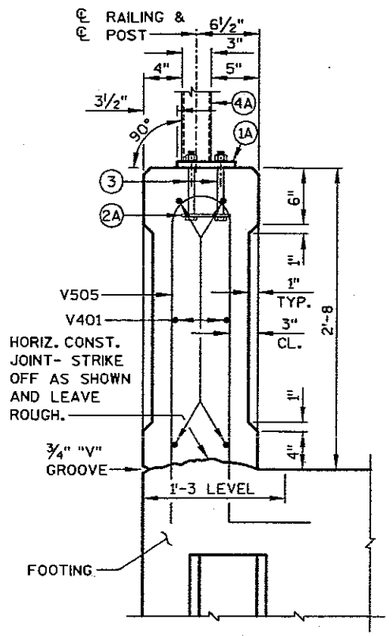
INSIDE ELEVATION

OPTIONAL CONSTRUCTION JOINTS IN THE PARAPETS MAY BE USED. RUN BAR REINF. THRU THE JOINT. LAP LONGIT. BARS A MIN. OF 1'-9. DEFINE CONSTR. JT. WITH A ¾" "V"-GROVE.

EXPANSION JOINT SPACING NOT TO EXCEED 25'. DO NOT RUN BAR STEEL THRU JOINT. LOCATE OVER WALL JOINT.
SEE SHEET 3 FOR LOCATIONS.



END VIEW



SECTION THRU PARAPET

* ADJUST LOCATIONS OF BARS TO ALLOW PLACEMENT OF ANCHOR ASSEMBLY FOR RAILING AND BEAM GUARD (WHEN REQ'D).

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-37-14

CONST. SPEC. 2003	DRAWN BY ADW	PLANS CK'D. DJW

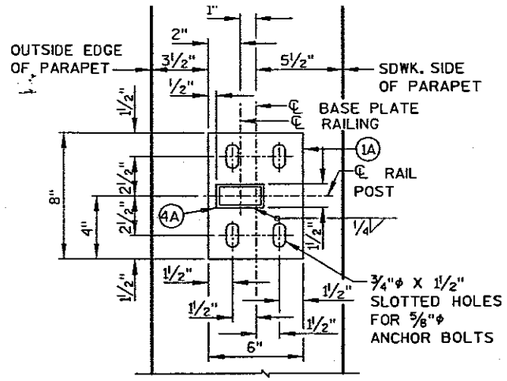
COMBINATION RAIL TYPE 'C2'

SHEET 5

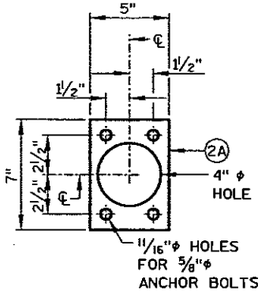
215

FILE NAME : s:\@Soi\701--750\732\421\Micros\RetWalls\54W\R3714N\05-R005-DATE-C212gb07/2003
PLOT BY : $$...olotuser...$$ PLOT NAME :
ORG DATE :

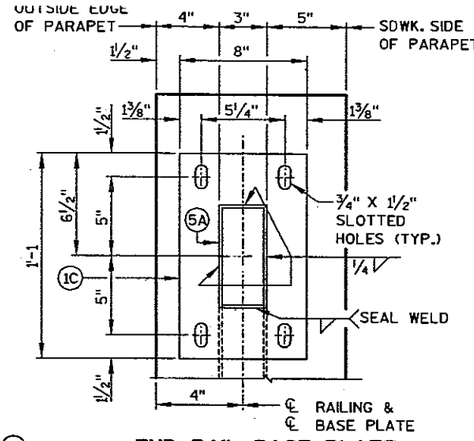
6675-00-71



TYPICAL RAIL POST BASE PLATE

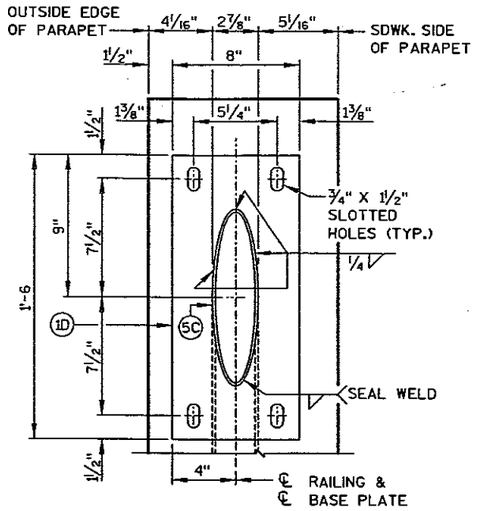


ANCHOR PLATE



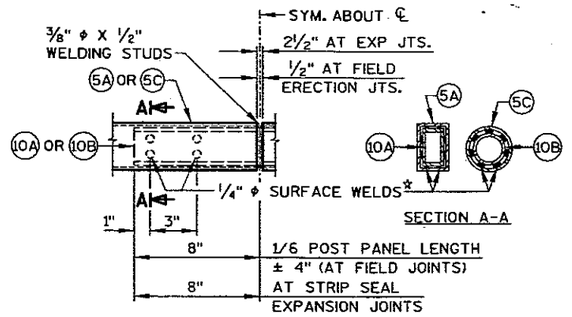
END RAIL BASE PLATE

FOR 3" X 1½" X 3/16" RAIL (5A)



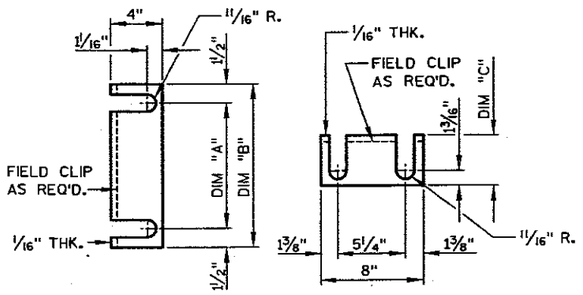
END RAIL BASE PLATE

FOR 2½" ϕ STANDARD PIPE RAIL (5C)



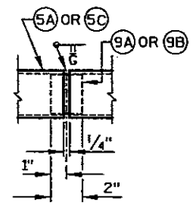
FIELD ERECTION JOINT DETAIL

*MIN. ⅝" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.



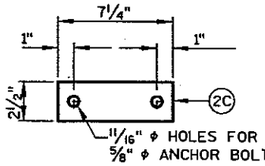
END RAIL SHIM DETAIL

8" X 1'-1 BASE PLATE (1C) DIM "A" = 10", DIM "B" = 1'-1, DIM "C" = 6½"
8" X 1'-6 BASE PLATE (1D) DIM "A" = 1'-3, DIM "B" = 1'-6, DIM "C" = 9"
(2 SETS PER POST)



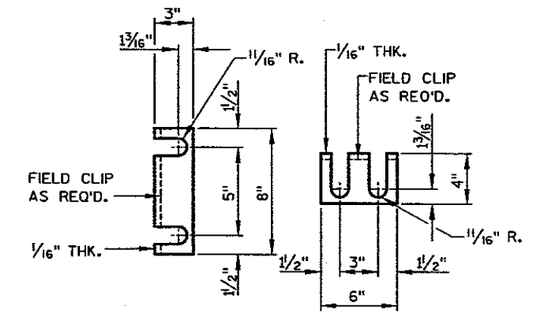
SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



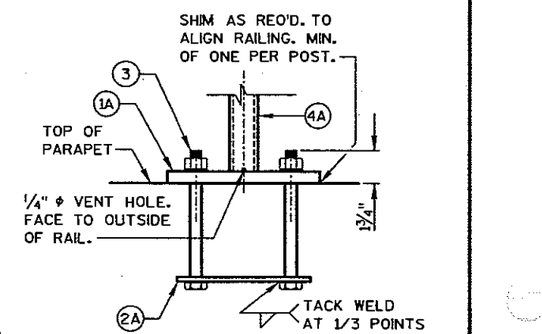
END RAIL ANCHOR PLATE

FOR END RAIL BASE PLATES (1C) & (1D)
2 REQ'D. PER END RAIL BASE PLATE



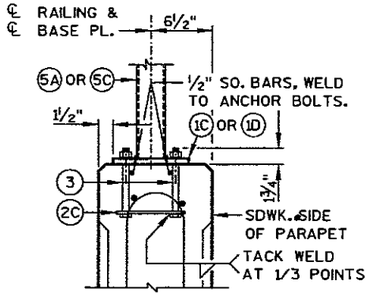
RAIL POST SHIM DETAIL

(2 SETS PER POST)



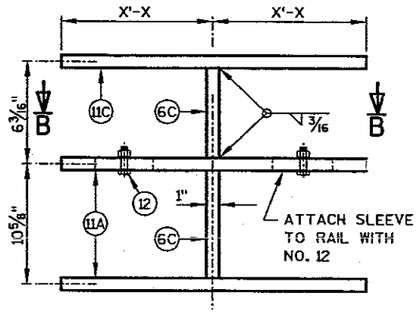
ANCHOR BOLTS FOR RAIL POSTS

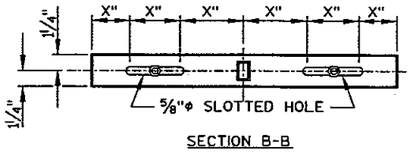
NOTE: ANCHOR PLATE NOT REQUIRED WHEN TYPE S ANCHORS ARE USED.



ANCHOR BOLTS FOR END RAIL

NOTE: ANCHOR PLATE NOT REQUIRED WHEN TYPE S ANCHORS ARE USED.





SECTION B-B

MODULAR JOINT SLEEVE DETAIL

NOTES

BID ITEM SHALL BE "RAILING STEEL TYPE "C2", WHICH SHALL INCLUDE ALL STEEL ITEMS SHOWN, AND PAINTING.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

NO. 1, 2, 8, 9 AND NO. 10 SHALL CONFORM TO A.S.T.M. A709 GRADE 36. STRUCTURAL TUBING SHALL CONFORM TO A.S.T.M. A500 GRADE B (NO. 4, NO.5, AND NO.6).

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT.

FILL BOLT SLOT OPENINGS IN SHIMS AND PLATE NO. 1 AND CAULK AROUND PERIMETER OF PLATE NO. 1 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ALL JOINTS AND RECESSES IN CONCRETE PARAPET ARE TO BE VERTICAL.

AFTER FABRICATION, ALL MATERIAL, EXCEPT ANCHORAGE (NO. 2 & 3) & SHIMS SHALL BE PAINTED WITH A THREE COAT ZINC-RICH EPOXY SYSTEM PER WISDOT STANDARD SPECIFICATION, SECTION 517, EPOXY SYSTEM. SHIMS SHALL BE GIVEN ONE COAT OF ZINC RICH PRIMER PAINT. THE FINISH COLOR SHALL BE FEDERAL COLOR NO. . .

¼"ϕ VENT HOLES LOCATED IN TOP RAIL OVER RAIL POSTS AND AT LOW END OF OTHER RAILS

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

TOUCH-UP PAINTING TO BE DONE AT COMPLETION OF STEEL RAILING INSTALLATION TO THE SATISFACTION OF THE ENGINEER AT NO EXTRA COST.

LEGEND

(1A) PLATE ⅝" X 6" X 8" WITH ¾" X 1½" SLOTTED HOLES.

(1C) PLATE ⅝" X 8" X 1'-1 WITH ¾" X 1½" SLOTTED HOLES.

(1D) PLATE ⅝" X 8" X 1'-6 WITH ¾" X 1½" SLOTTED HOLES.

(2A) ¼" X 5" X 7" ANCHOR PLATE WITH 11/16" ϕ HOLES FOR ANCHOR BOLTS NO. 3.

(2C) ¼" X 2½" X 7¼" ANCHOR PLATE WITH 11/16" ϕ HOLES FOR ANCHOR BOLTS NO. 3.

(3) ⅝" DIA. X 7½" LONG ASTM F593 TYPE 316 STAINLESS STEEL ANCHOR BOLTS WITH NUT AND WASHERS OF SAME ALLOY GROUP. (ALTERNATE RAIL POST ANCHORAGE - 4 EQUIV. STAINLESS STEEL CONCRETE MASONRY ANCHORS, TYPE S (EPOXY), ⅝" ϕ, MINIMUM PULLOUT CAPACITY OF 15 KIPS. EMBED A MIN. OF 7" FOR RAIL POSTS AND 5" FOR END RAILS.)

(4A) STRUCTURAL TUBING 3" X 1½" X 3/16". PLACE VERTICAL. WELD TO NO. 1 & 5.

(5A) STRUCTURAL TUBING 3" X 1½" X 3/16" RAILS. WELD TO NO. 1 & NO. 4.

(5C) 2½" ϕ STANDARD PIPE RAIL (2.875" O.D.). WELD TO NO. 1 & NO. 4.

(6A) STRUCTURAL TUBING 1" X 1" X ⅛" PICKETS. WELD TO NO. 5. SPACE AT 6" MAX. ℄ TO ℄ SPACING. PLACE VERTICAL.

(6C) STRUCTURAL TUBING 1" X 1½" X ⅛" PICKETS. WELD TO NO. 11. PLACE VERTICAL.

(9A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. PROVIDE "SLIDING FIT".

(9B) CIRCULAR SLEEVE FABRICATED FROM 2" ϕ STANDARD PIPE.

(10A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. (1'-4 @ FIELD ERECTION JTS.) (1'-4 @ STRIP SEAL EXP. JTS.)

(10B) CIRCULAR SLEEVE FABRICATED FROM 2" ϕ STANDARD PIPE. (1'-4 @ FIELD ERECTION JTS.) (1'-4 @ STRIP SEAL EXP. JTS.)

(11A) BAR 2½" X 1" X _'-__

(11C) 2" ϕ STANDARD PIPE X _'-___.

(12) ½" DIA. STAINLESS STEEL BOLT WITH NUT AND LOCKWASHER.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-37-14

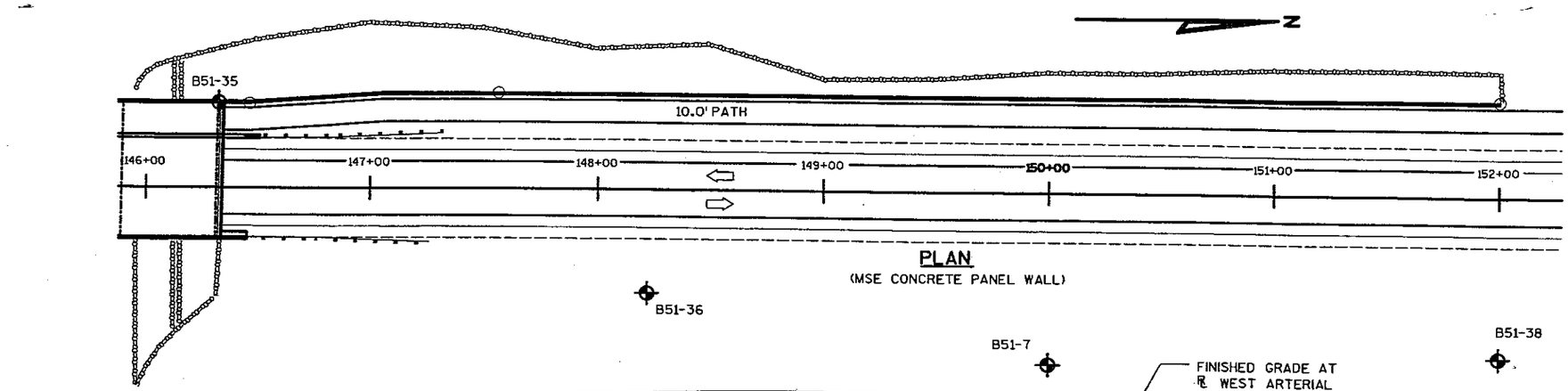
CONST. SPEC.	2003	DRAWN BY	ADW	PLANS CK'D.	DJW

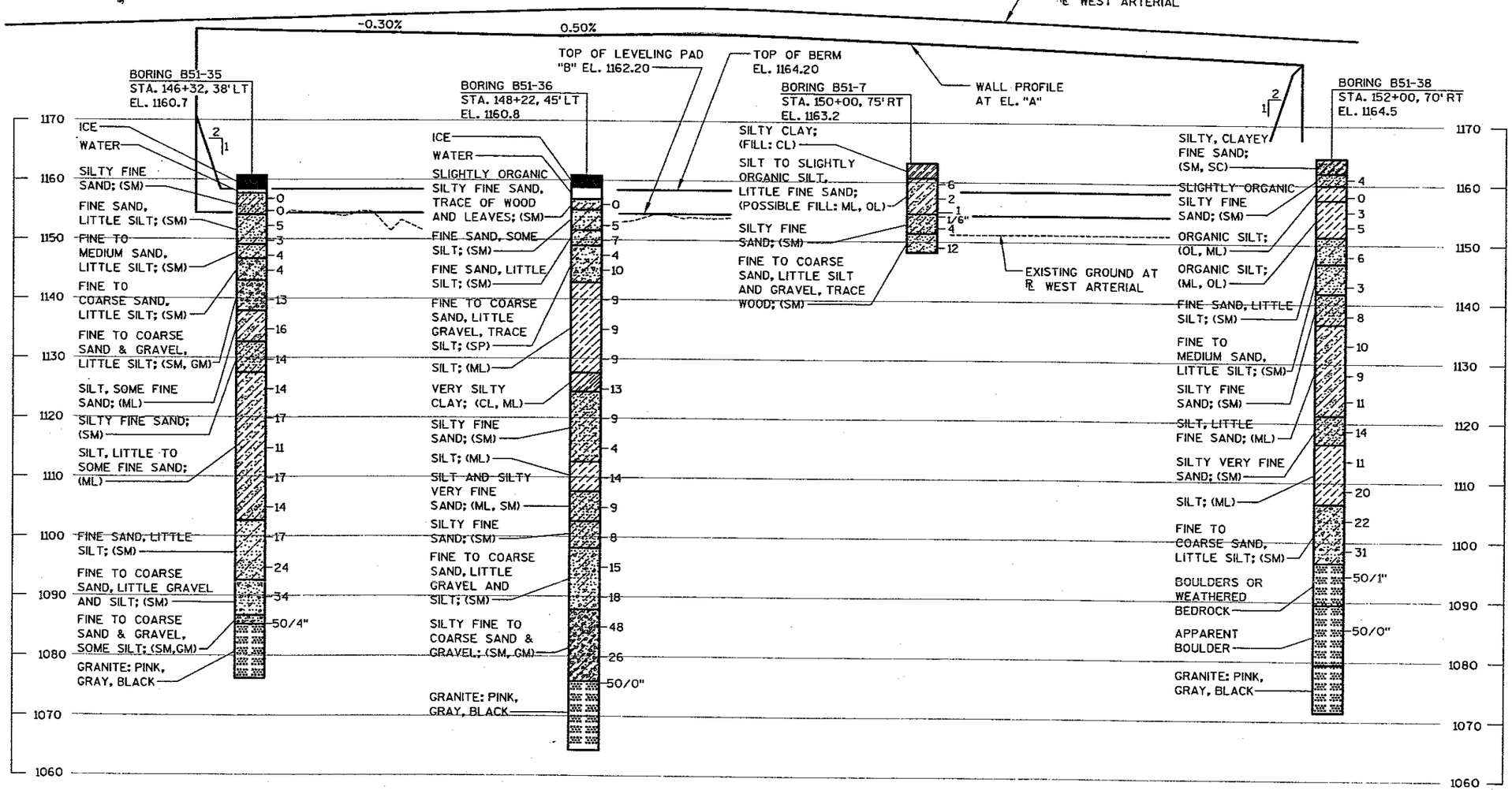
COMBINATION RAIL TYPE 'C2'

SHEET 6

216

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6675-00-71

ABBREVIATIONS

F— FINE M— MEDIUM C— COARSE
WS— WEATHERED SO — SOUND

MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE
SAND, PEAT, LIMESTONE
GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING

PROBING NO.
STA.
ELEVATION
7 AVERAGE BLOWS PER FOOT
REFUSAL 95/6

95/6=95 BLOWS FOR 6" PENETRATION
PROBING TAKEN WITH A 350# WT. FALLING 18" ON A 2" O.D. POINT.

LEGEND OF BORING

BORING NO.
ELEV.
STA.
UNCONFINED STRENGTH → 7.7
BLOWS PER FT. USING 140# WT. FALLING 30"
WASH SAMPLE
SHELBY TUBE — S.T.
GROUND WATER ELEVATION
NO GROUND WATER OBSERVED ABOVE THIS ELEVATION
SANDY GRAVEL
F. BOULDERS OR COBBLES
SAND
SILTY CLAY
SD LIMESTONE

UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-37-14

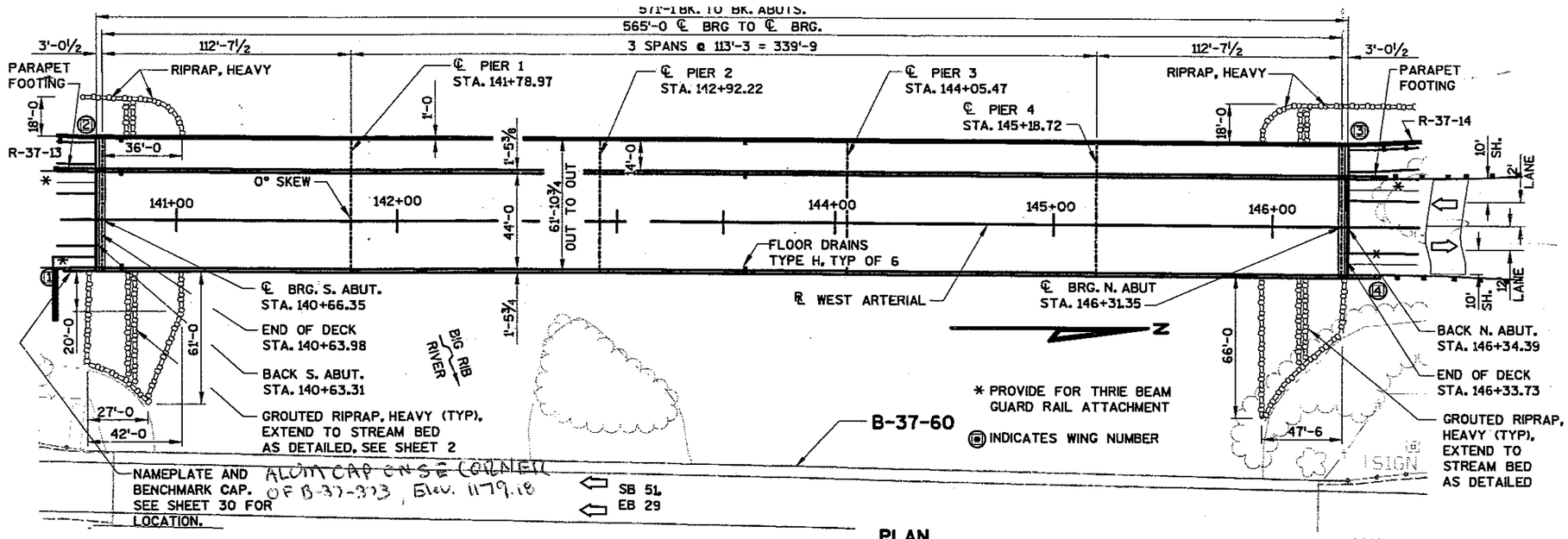
CONST. SPEC.	2003	DRAWN BY	KAS	PLANS CK'D.	DJW

SUBSURFACE EXPLORATION

SHEET 7
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6675-00-71



PLAN

5-SPAN, 54W-INCH PRESTRESSED GIRDER BRIDGE

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION, NOTES AND DETAILS
3. PROFILE AND QUANTITIES
4. SUBSURFACE EXPLORATION
5. SUBSURFACE EXPLORATION
6. SOUTH ABUTMENT
7. SOUTH ABUTMENT DETAILS-1
8. SOUTH ABUTMENT DETAILS-2
9. NORTH ABUTMENT
10. NORTH ABUTMENT DETAILS-1
11. NORTH ABUTMENT DETAILS-2
12. ABUTMENT REINFORCEMENT
13. PIER
14. PIER DETAILS 1
15. PIER DETAILS 2
16. SEAL
17. ELASTOMERIC BEARING PADS
18. 54W" PRESTRESSED GIRDERS
19. INTERMEDIATE STEEL DIAPHRAGM
20. SUPERSTRUCTURE
21. SUPERSTRUCTURE ELEVATIONS
22. SUPERSTRUCTURE PLAN-1
23. SUPERSTRUCTURE PLAN-2
24. SUPERSTRUCTURE PLAN-3
25. SUPERSTRUCTURE DETAILS 1
26. SUPERSTRUCTURE DETAILS 2
27. SUPERSTRUCTURE DETAILS 3
28. FLOOR DRAIN, TYPE H
29. PARAPET FOOTING
30. SLOPED FACE PARAPET, TYPE "LF"
31. TUBULAR RAILING, TYPE "H" (ALUM.)
32. TUBULAR RAILING, TYPE "H", (STEEL)
33. COMBINATION RAIL, TYPE "C2"
34. COMBINATION RAIL, TYPE "C2"
35. EXPANSION DEVICE
36. EXPANSION DEVICE

DESIGN DATA

STRUCTURE DESIGNED FOR A FUTURE WEARING SURFACE OF 20 #/S.F.

LIVE LOAD:
- DESIGN RATING — HS 20
- INVENTORY RATING — HS 28
- OPERATING RATING — HS 50
- MAX. STD. PERMIT VEHICLE LOAD — 250 KIPS

ULTIMATE DESIGN STRESSES:
- CONCRETE MASONRY SLAB — f'c = 4,000 psi
- ALL OTHER — f'c = 3,500 psi
- HIGH STRENGTH BAR STEEL REINFORCEMENT — fy = 60,000 psi

54W" PRESTRESSED GIRDERS:
- CONCRETE MASONRY — f'c = 8,000 psi

STRANDS:
- 0.6 " DIA. WITH ULTIMATE STRENGTH OF — 270,000 psi

TRAFFIC DATA:
- A.D.T. (2004) : N/A
- A.D.T. (2024) : 8000
- DESIGN SPEED: 40 MPH

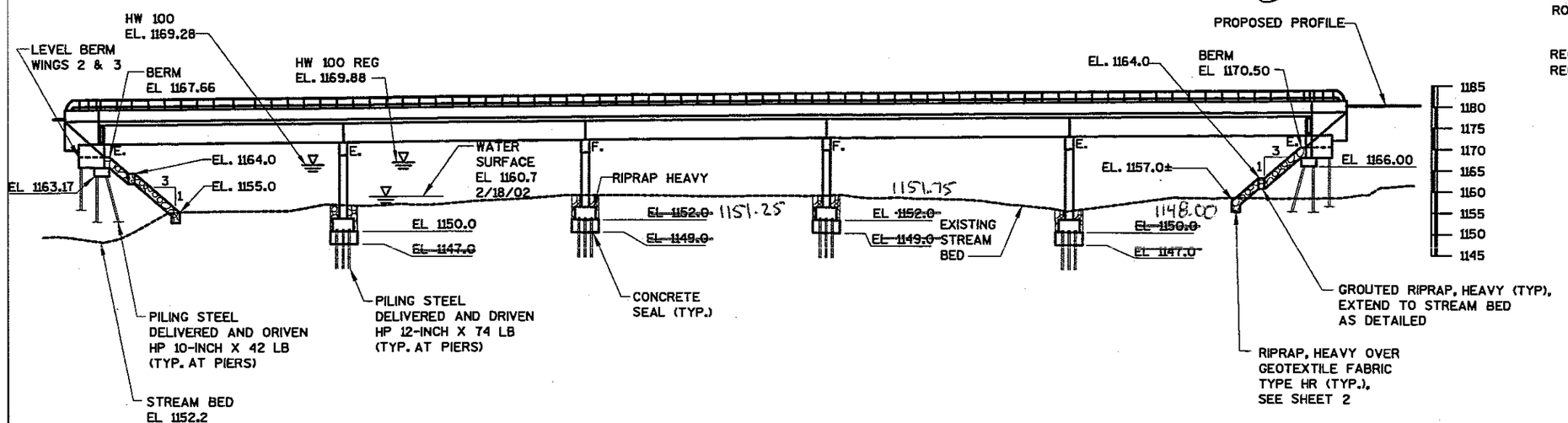
FOUNDATION DATA:

ABUTMENTS TO BE SUPPORTED ON STEEL PILING, HP 10 X 42, DRIVEN TO A MIN. BEARING VALUE OF 50 TONS PER PILE. EST. 82 FEET LONG AT S. ABUT AND 82 FEET LONG AT N. ABUT.

PIERS TO BE SUPPORTED ON STEEL PILING, HP 12 X 74, DRIVEN TO A MIN. BEARING VALUE OF 95 TONS PER PILE. EST. 75 FT. AT PIERS 1 &4, EST. 65 FT. AT PIERS 2 & 3.

HYDRAULIC DATA

- Q_{100}(TOTAL) — 35,000 C.F.S.
- Q_{100}(THRU BRIDGE) — 35,000 C.F.S.
- Q_{100}(OVER ROAD) — 0 C.F.S.
- VELOCITY (THRU BRIDGE) — 5.90 F.P.S.
- HW_{100} ELEV. — 1169.28 FT.
- WATERWAY AREA — 5932 S.F.
- DRAINAGE AREA — 489 SQ. MI.
- SCOUR CRITICAL CODE — 5
- ROADWAY OVERTOPPING — N/A
- Q_2 — 8,800 C.F.S.
- HW_2 — 1163.66 FT.
- REGULATORY Q_{100} — 41,600 C.F.S.
- REGULATORY HW_{100} — 1169.88 FT.



ELEVATION

(LOOKING WEST)

DESIGN CONTACT: DAVID WALKER (608) 251-4843
BRIDGE OFFICE CONTACT: FINN HUBBARD (608) 266-8489

WISCONSIN — DAVID J. WALKER E-23400 VERONA WI — PROFESSIONAL ENGINEER — 2/19/04

NO.	DATE	REVISION	BY

STRAND ASSOCIATES, INC. ENGINEERS
910 WEST WINGRA DRIVE
MADISON, WISCONSIN 53715
(608)-251-4843
(608) 251-8655 FAX
WWW.STRAND.COM

WISDOT
BUREAU OF STRUCTURES

STRUCTURE B-37-373

WEST ARTERIAL OVER BIG RIB RIVER

COUNTY: MARATHON		TOWN/CITY/VILLAGE: ~~TOWN/CITY/VILLAGE~~ WAUSAU	
DESIGN SPEC.: AASHTO STD. SPEC. 2002		LOAD: HS-20	CONST. SPEC.: 1996
DESIGNED BY: KAS	DESIGN CK'D.: DJW	DRAWN BY: KAS	PLANS CK'D.: DJW

APPROVED: Finn Hubbard — 2-19-04
CHIEF STRUCTURAL DESIGN ENGINEER — DATE

GENERAL PLAN

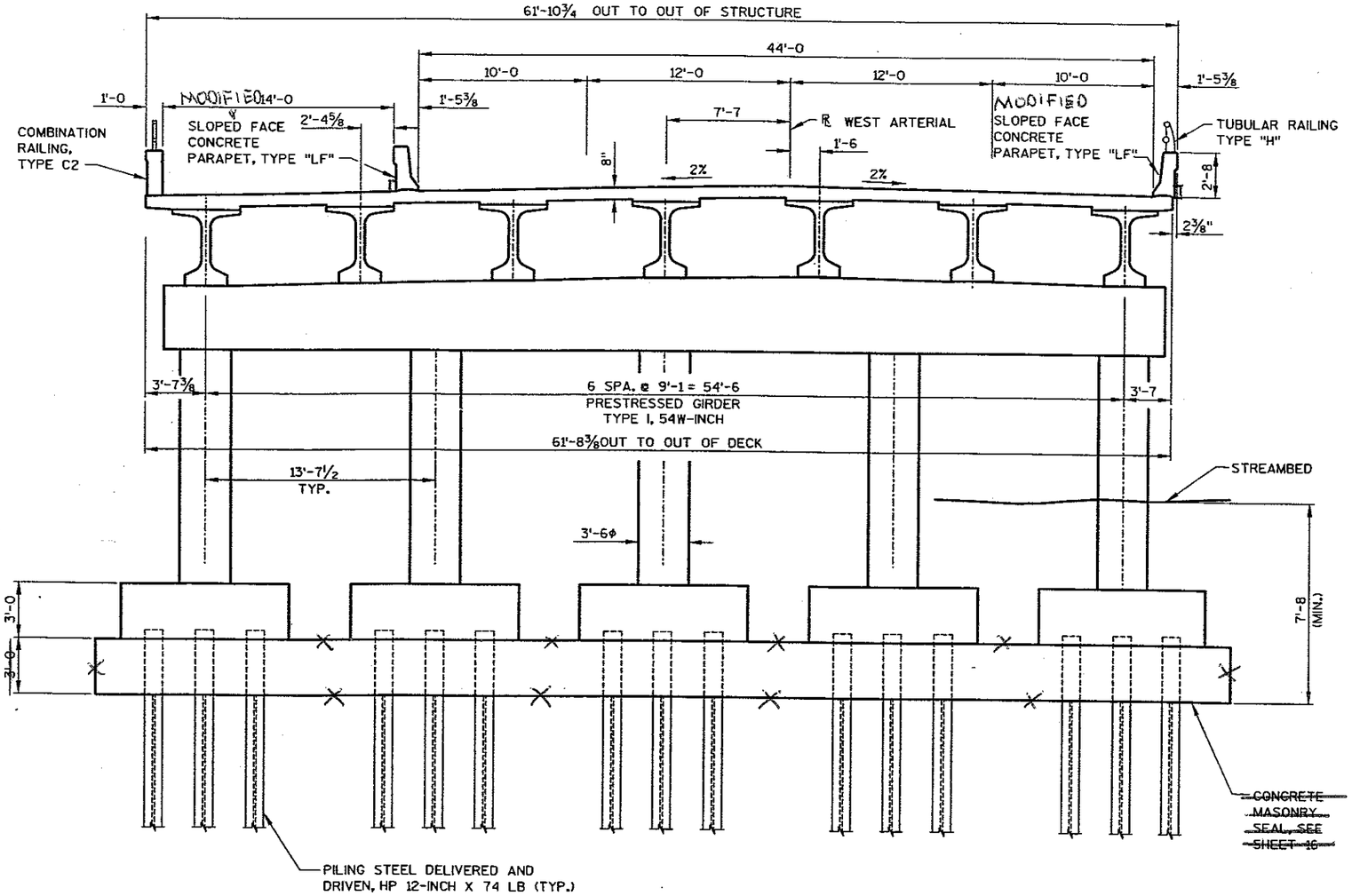
SHEET 1 OF 36

DATE: 2/8

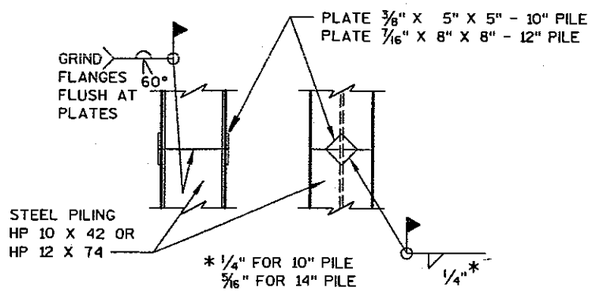
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STATE PROJECT NUMBER

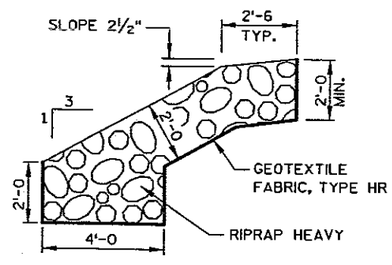
6675-00-71



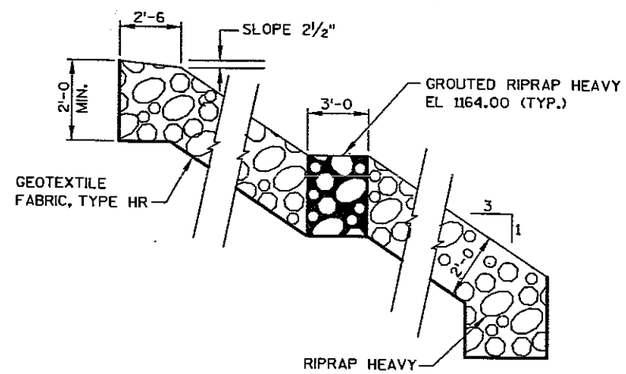
CROSS SECTION
(LOOKING NORTH)



PILE SPLICE DETAILS



HEAVY RIPRAP DETAIL



RIPRAP ANIMAL CROSSING DETAIL

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED

ALL STATIONS AND ALL ELEVATIONS ARE IN FEET.

BAR STEEL REINFORCEMENT SHALL BE IMBEDDED 2" CLEAR UNLESS OTHERWISES SHOWN OR NOTED.

ALL REINFORCING BARS ARE ENGLISH AND THE FIRST ONE OR TWO DIGITS OF THE BAR MARK SIGNIFY THE BAR SIZE.

THE FINISHED GRADED SECTION SHALL BE THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES.

THE EMBANKMENTS ADJACENT TO THE BRIDGE WILL BE COVERED WITH RIPRAP HEAVY TO THE EXTENT SHOWN ON THE GENERAL PLAN AND IN THE ABUTMENT DETAILS OR AS DIRECTED BY THE ENGINEER.

AT THE BACKFACE OF ABUTMENTS ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH BACKFILL STRUCTURE.

* Pier 1 2 3 4
3'-0" 3'-9" 3'-3" 5'-0"

Concrete STAIN SHALL BE IN ACCORDANCE WITH THE SPECIAL PROVISIONS, STAIN SHALL BE FEDERAL COLOR #36424, SHALL EXTEND 1'-0" BELOW PROPOSED GRADE, AND SHALL BE APPLIED TO THE FOLLOWING AREAS:
PARAPETS: OUTSIDE FACE OF EAST LF PARAPET
" " " WEST VERTICAL PARAPET
ABUTMENT: FRONT FACE AND SIDES
OUTSIDE EDGE OF DECK AND BOTTOM OF OVERHANGS
OUTSIDE FACE OF GIRDERS AND BOTTOMS
PIERS: ENTIRE PIER EXCEPT TOP OF CAP
COLUMNS: ALL EXPOSED SURFACES

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

CONST. SPEC. 2003	DRAWN BY KAS	PLANS CK'D. DJW

CROSS SECTION, NOTES & DETAILS

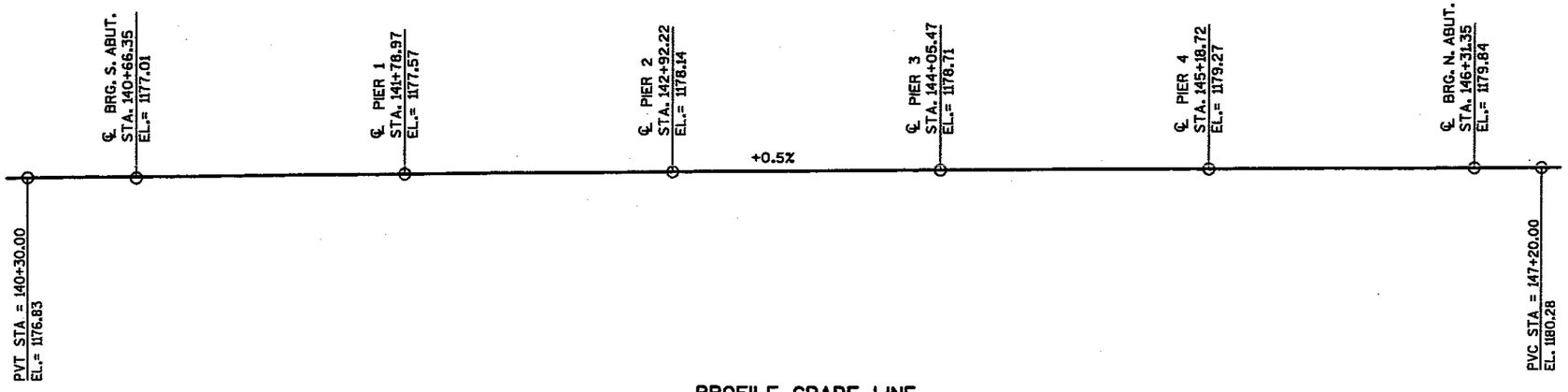
SHEET 2

2/9

6675-00-71

TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT	SOUTH ABUT.	PIER 1	PIER 2	PIER 3	PIER 4	NORTH ABUT.	SUPERS.	TOTALS
EXCAVATION FOR STRUCTURES BRIDGE B-37-373	L.S.	--	--	--	--	--	--	--	1
COFFERDAMS STRUCTURE B-37-373	L.S.	--	--	--	--	--	--	--	1
BACKFILL STRUCTURE	C.Y.	128	--	--	--	--	128	--	256
CONCRETE MASONRY BRIDGES	C.Y.	122	111	109	110	114	122	1,314	2,002
~~CONCRETE MASONRY SEAL~~	~~C.Y.~~	~~--~~	~~99~~	~~99~~	~~99~~	~~99~~	~~--~~	~~--~~	~~396~~
QMP CONCRETE STRUCTURES 5-CYLINDERS	C.Y.	122	111	109	110	114	122	1,314	2,002
INCENTIVE STRENGTH CONCRETE STRUCTURES	DOL.	--	--	--	--	--	--	--	20,020
EXPANSION DEVICE STRUCTURE B-37-373	L.S.	--	--	--	--	--	--	1	1
PROTECTIVE SURFACE TREATMENT	S.Y	--	--	--	--	--	--	4,545	4,545
PRESTRESSED GIRDER TYPE I 54W-INCH	L.F.	--	--	--	--	--	--	3,962	3,962
BAR STEEL REINFORCEMENT HS BRIDGES	LB.	3,040	27,475	26,955	27,230	28,475	3,040	--	116,215
BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB.	2,845	--	--	--	--	2,845	346,575	352,265
STRUCTURAL STEEL, CARBON	LB.	280	--	--	--	--	280	--	560
BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	--	--	7	7	--	--	--	14
BEARING PADS ELASTOMERIC LAMINATED	EACH	7	14	--	--	14	7	--	42
STEEL DIAPHRAGMS STRUCTURE B-37-373	EACH	--	--	--	--	--	--	60	60
PILING STEEL DELIVERED AND DRIVEN HP 10-INCH X 42 LB	L.F.	1,749	--	--	--	--	1,749	--	3,498
PILING STEEL DELIVERED AND DRIVEN HP 12-INCH X 74 LB	L.F.	--	2,250	1,950	1,950	2,250	--	--	8,400
~~RAILING TUBULAR TYPE H STRUCTURE B-37-373~~	~~L.S.~~	~~--~~	~~--~~	~~--~~	~~--~~	~~--~~	~~--~~	~~1~~	~~1~~
RAILING STEEL TYPE C2 STRUCTURE B-37-373	L.S.	--	--	--	--	--	--	~~1~~ 2	~~1~~ 2
FLOOR DRAINS TYPE H	EACH	--	--	--	--	--	--	6	6
RUBBERIZED MEMBRANE WATERPROOFING	S.Y.	15	--	--	--	--	15	--	30
RIPRAP HEAVY	C.Y.	386	203	131	196	128	462	--	1,506
GROUTED RIPRAP HEAVY	C.Y.	30	--	--	--	--	28	--	58
PIPE UNDERDRAIN 6-INCH	L.F.	78	--	--	--	--	78	--	156
PIPE UNDERDRAIN UNPERFORATED 6-INCH	L.F.	30	--	--	--	--	30	--	60
ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	2	--	--	--	--	2	--	4
GEOTEXTILE FABRIC TYPE DF	S.Y.	64	--	--	--	--	64	--	128
GEOTEXTILE FABRIC TYPE HR	S.Y.	690	--	--	--	--	628	--	1,318
NON-BID ITEMS									
FILLER	SIZE	1/2" & 3/4"	3/4"	3/4"	3/4"	3/4"	1/2" & 3/4"	——	1/2" & 3/4"
BRIDGE SEAT PROTECTION	L.S.	——	——	——	——	——	——	——	1



PROFILE GRADE LINE

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

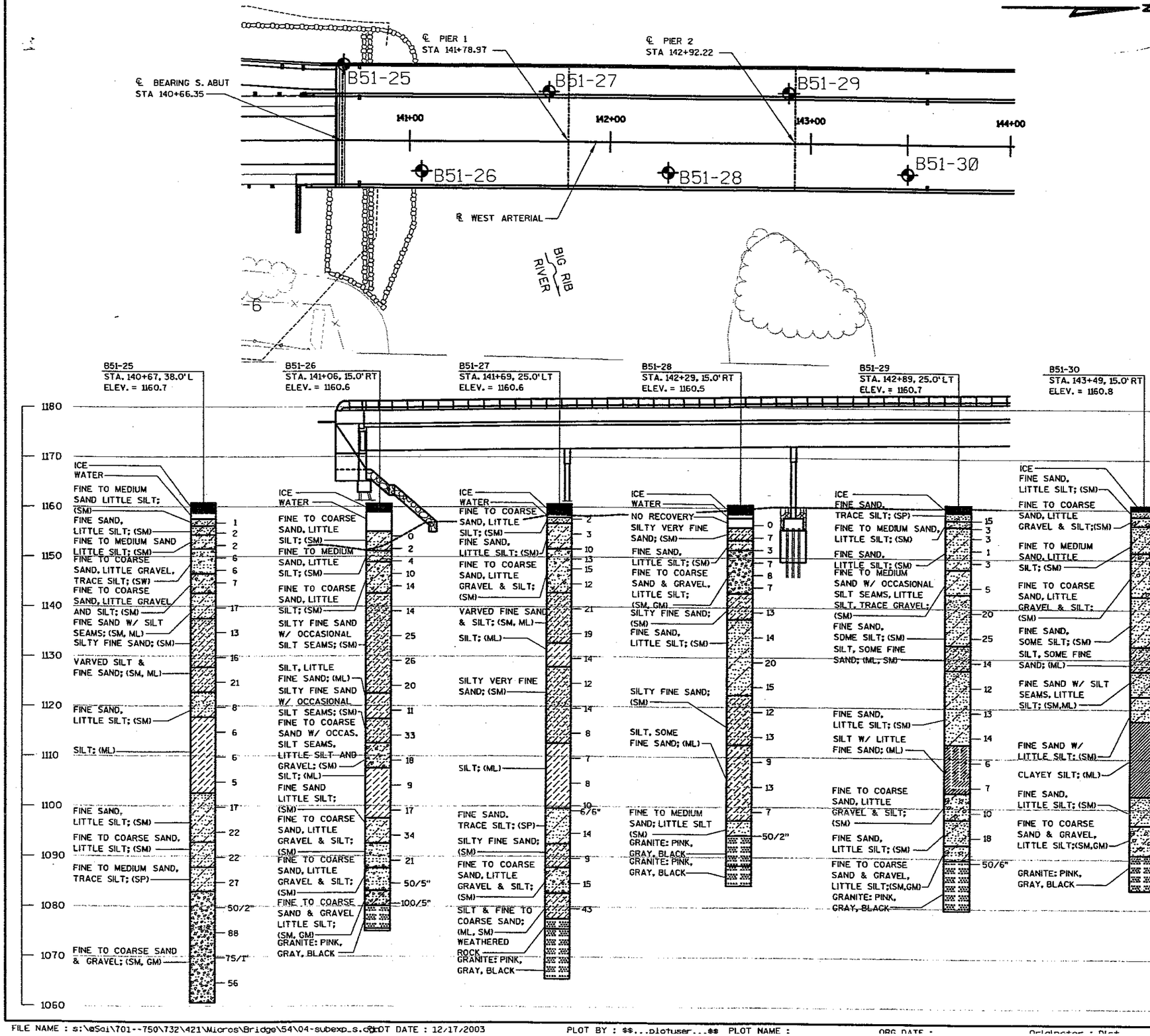
STRUCTURE B-37-373

CONST. SPEC. 2003	DRAWN BY NCC	PLANS CK'D. DJW

PROFILE AND QUANTITIES

SHEET 3

220



6675-00-71

ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE
SAND, PEAT, LIMESTONE
GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING

PROBING NO.
STA.
ELEVATION
7 AVERAGE BLOWS PER FOOT
REFUSAL 95/6

95/6=95 BLOWS FOR 6" PENETRATION
PROBING TAKEN WITH A 350# WT. FALLING 18" ON A 2" O.D. POINT.

LEGEND OF BORING

BORING NO.
ELEV.
STA.
UNCONFINED STRENGTH → 7.7 T
BLOWS PER FT. USING 140# WT. FALLING 30"
WASH SAMPLE
SHELBY TUBE — S.T.
GROUND WATER ELEVATION
NO GROUND WATER OBSERVED ABOVE THIS ELEVATION
SANDY GRAVEL
F. BOULDERS OR COBBLES
SAND
SILTY CLAY
SO
LIMESTONE

UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

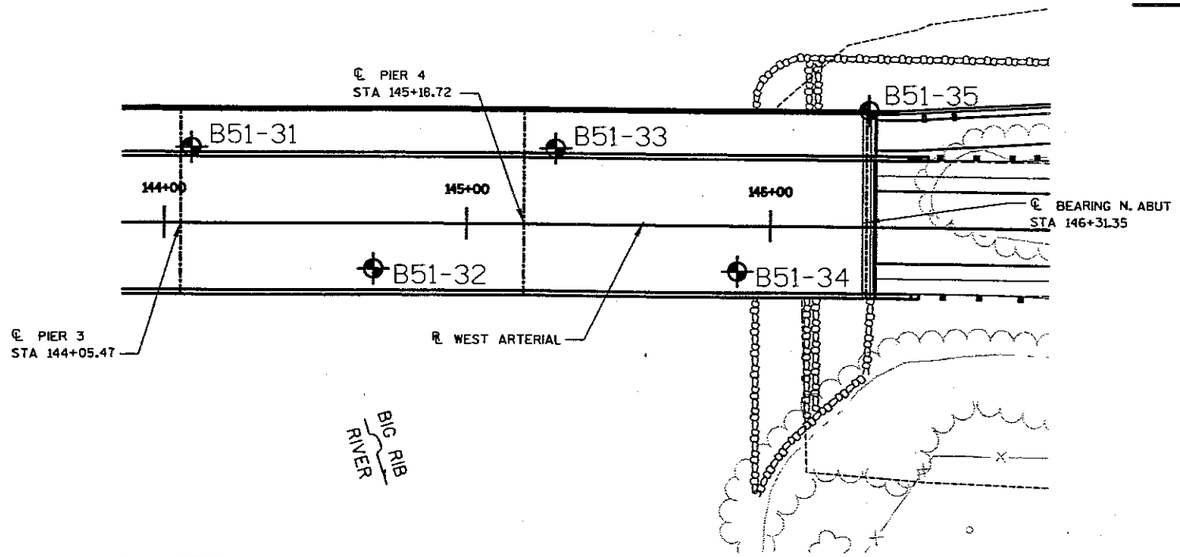
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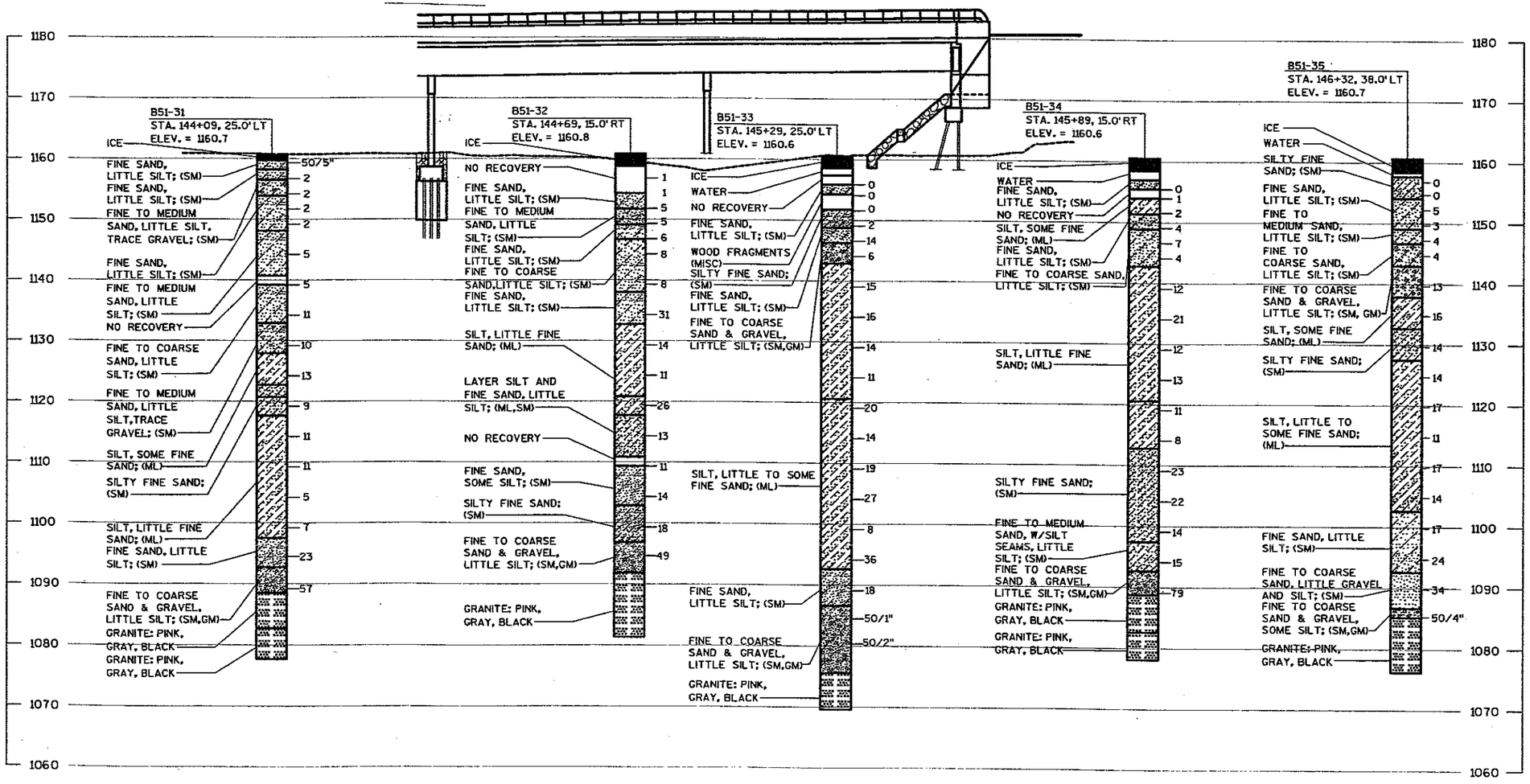
SUBSURFACE EXPLORATION

SHEET 4

22c

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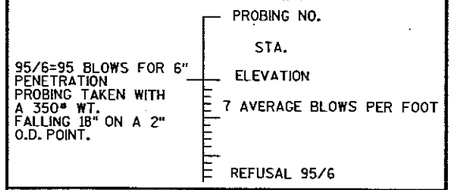
ABBREVIATIONS

F— FINE M— MEDIUM C— COARSE
WS— WEATHERED SO— SOUND

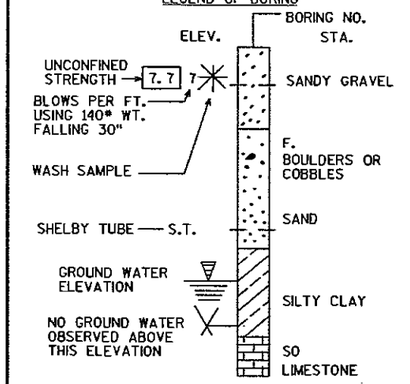
MATERIAL SYMBOLS

TOPSOIL, SAND, GRAVEL, SILT, PEAT, CLAY, SANDSTONE, LIMESTONE, IGNEOUS ROCK

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

CONST. SPEC.	2003	DRAWN BY	BJH	PLANS CK'D.	DJW

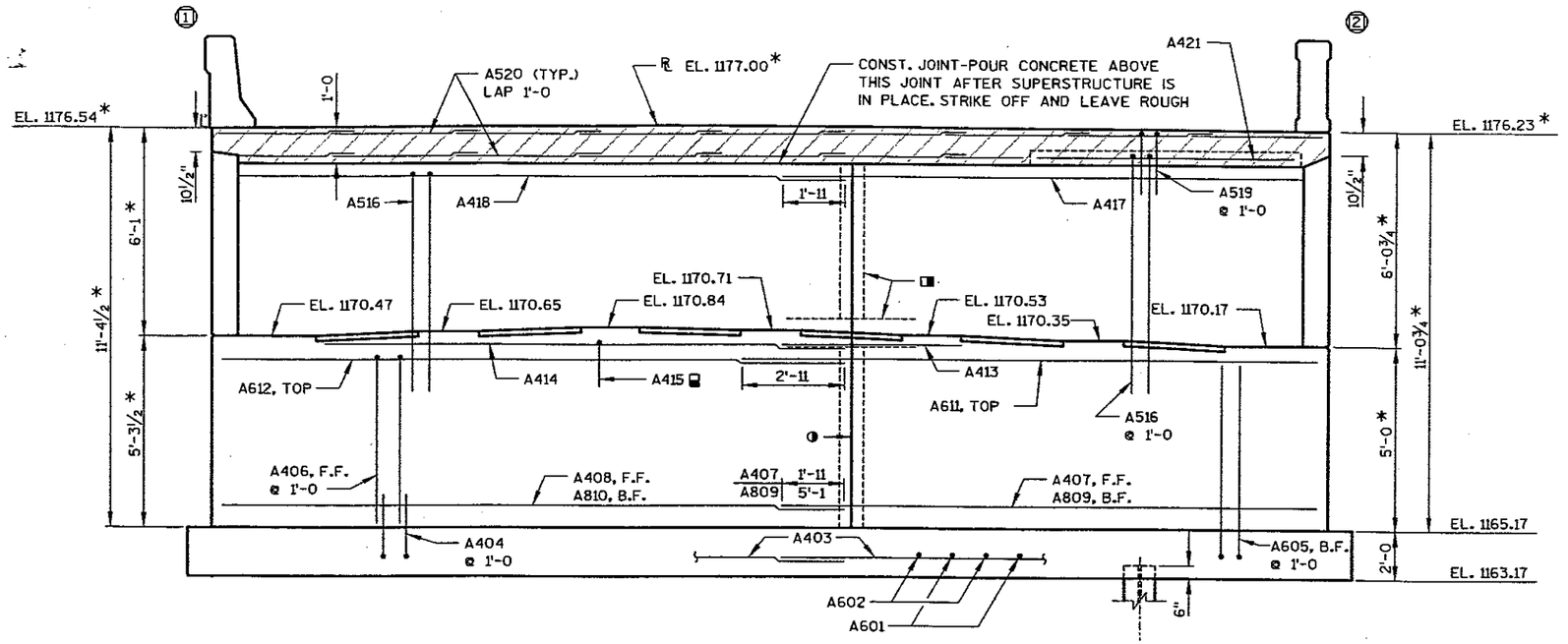
SUBSURFACE EXPLORATION

SHEET 5

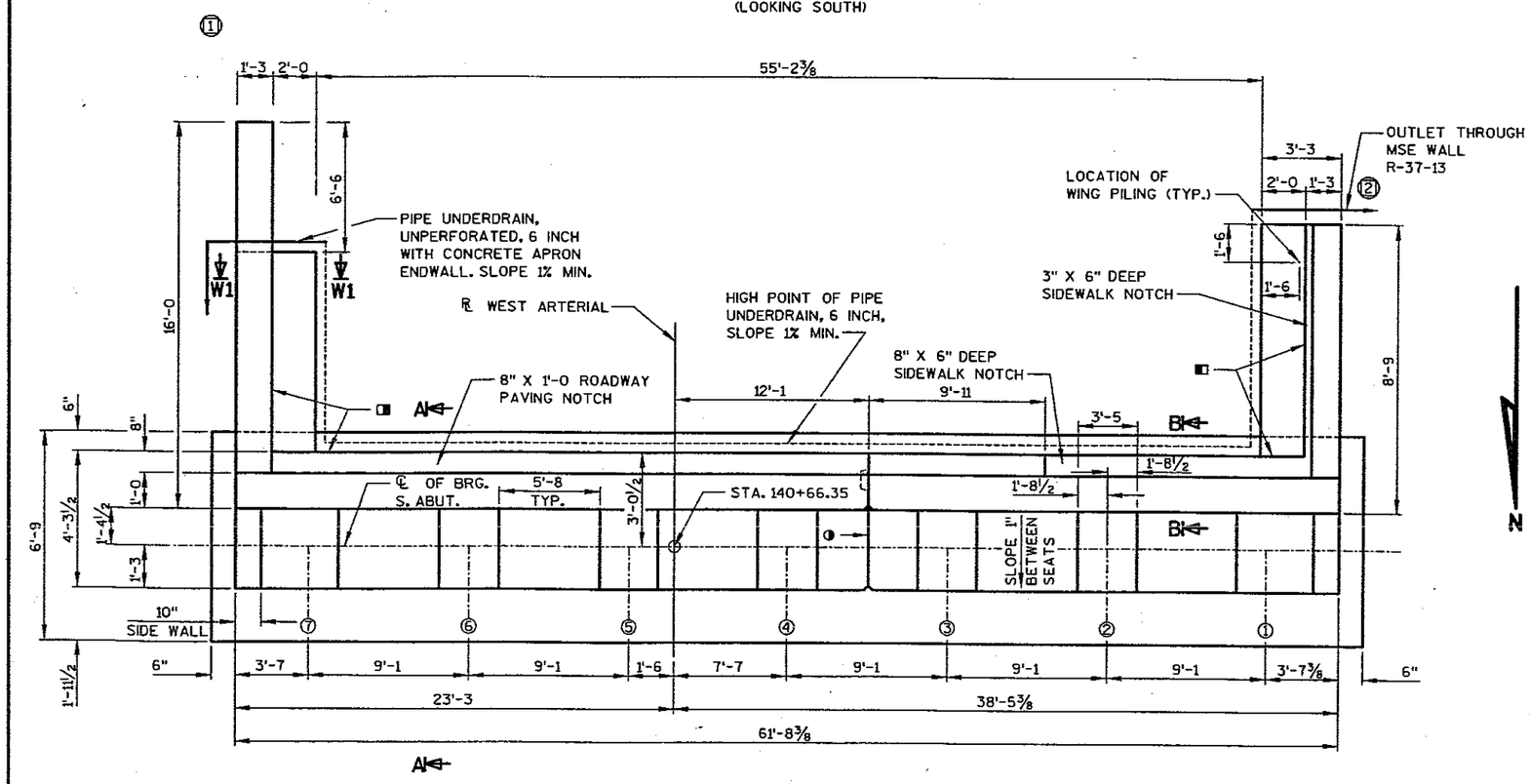
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6675-00-71



ELEVATION
(LOOKING SOUTH)



PLAN

NOTES

◑ VERTICAL CONSTRUCTION JOINT, FORMED BY BEVELED 2" X 8". RUN BAR STEEL THRU JOINT, SEAL JOINT WITH 18" RUBBERIZED MEMBRANE WATERPROOFING AT B.F., ¾" V-GROOVE AT F.F.

◨ 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. AND VERT. JOINTS ON BACKFACE ABOVE FOOTING.

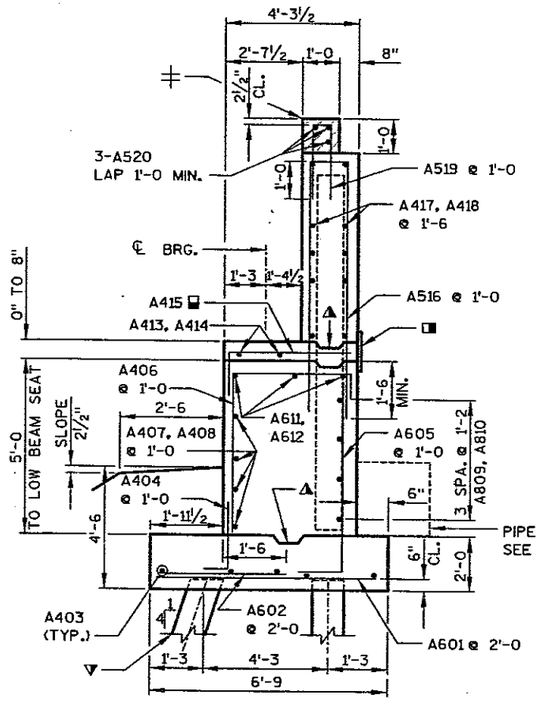
Δ KEYED CONST. JOINT FORMED BY BEVELED 2" X 6". USE ¾" V-GROVE ON F.F. OF WINGWALLS.

* DIMENSIONS AT FRONT FACE OF ABUTMENT BACKWALL.

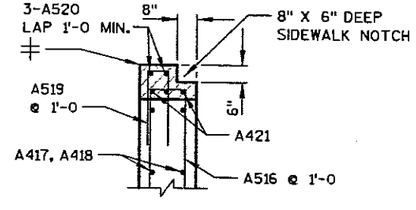
◘ A415 AT 9" IN BEAM SEAT. SPACE AT 1'-6 BETWEEN SEATS.

▽ ABUTMENTS ARE SUPPORTED ON HP 10 X 42 STEEL PILES DRIVEN TO A MIN. BEARING VALUE OF 50 TONS PER PILE. EST. 82 FT. LONG.

⧺ STRIP SEAL EXPANSION DEVICE SEE SHEET 35 &36.



SECTION THRU BODY A-A



SECTION B-B

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

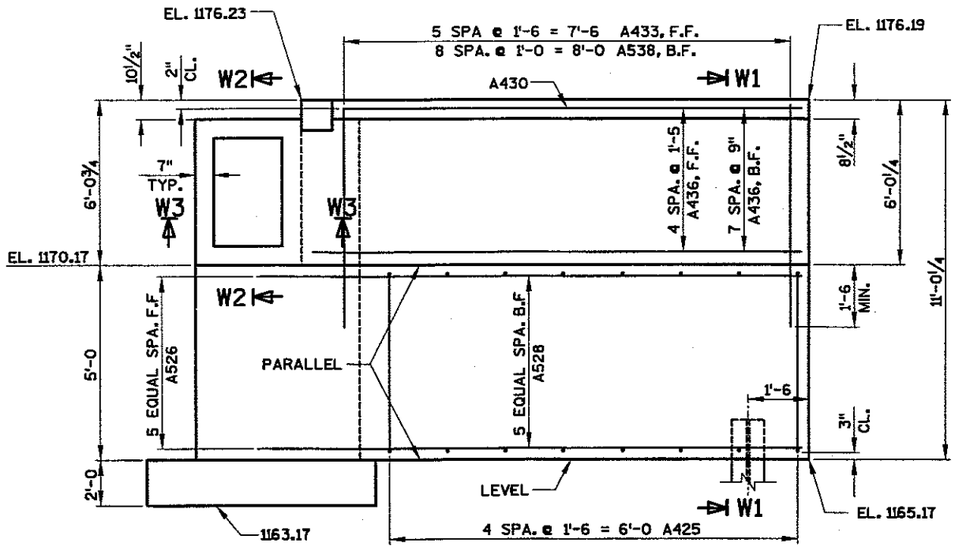
STRUCTURE B-37-373

CONST. SPEC.	2003	DRAWN BY	ADW	PLANS CK'D.	DJW

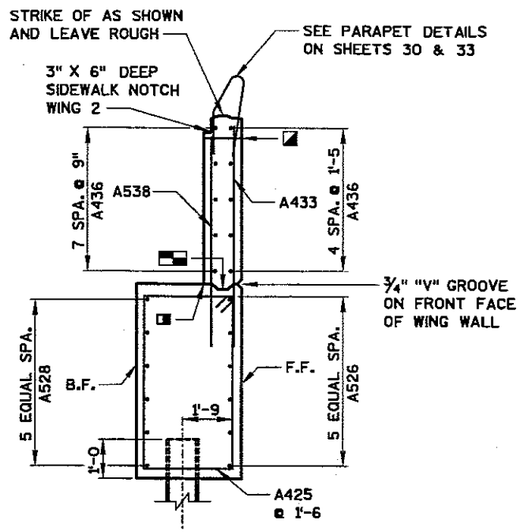
SOUTH ABUTMENT

SHEET 6

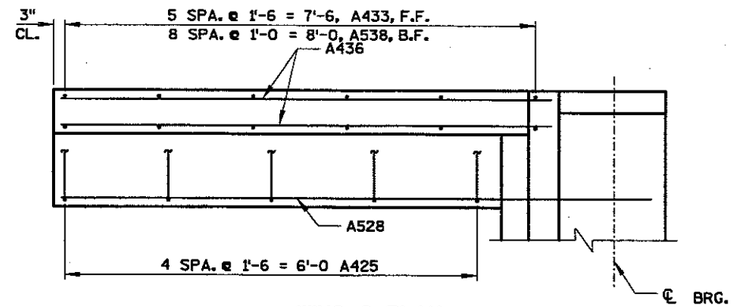
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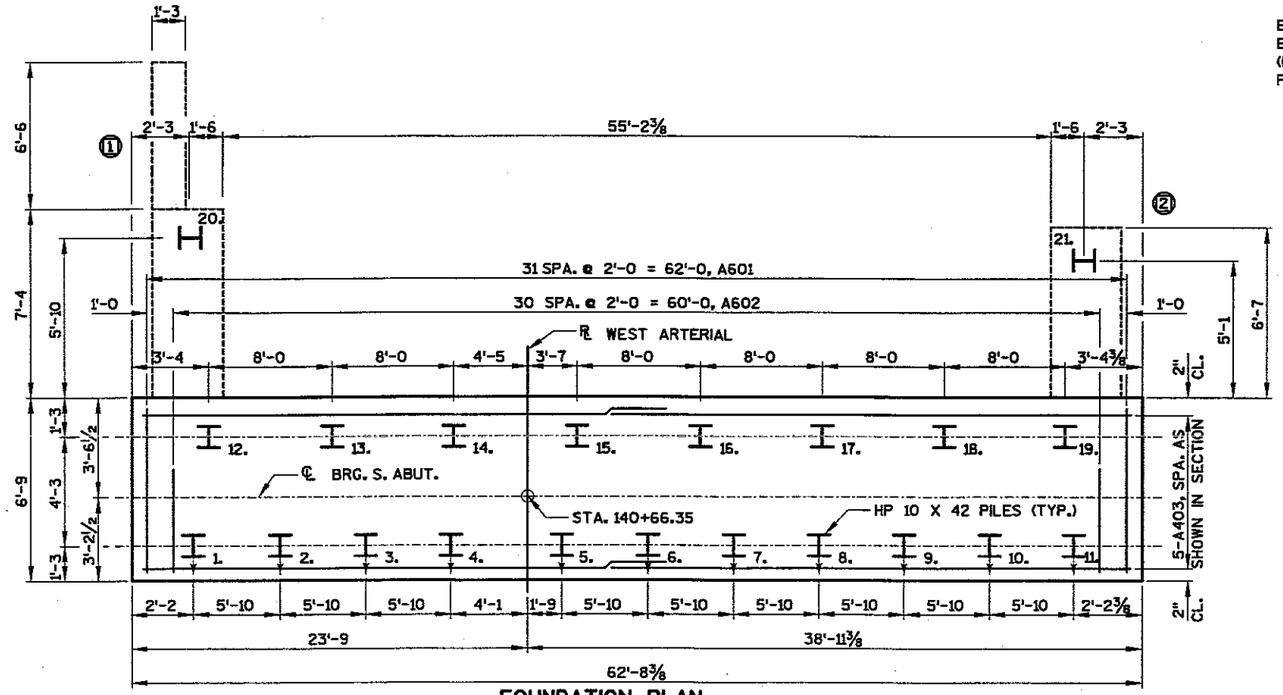
WING 2 ELEVATION



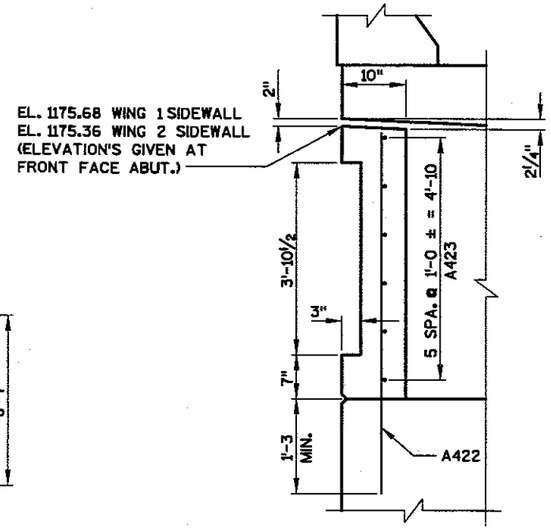
SECTION W1



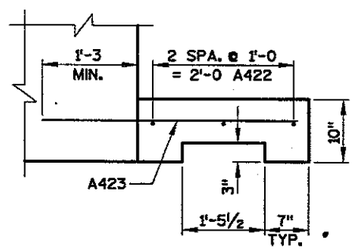
WING 2 PLAN



FOUNDATION PLAN



SECTION W2



SECTION W3

SEE NOTES ON SHEET 8.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

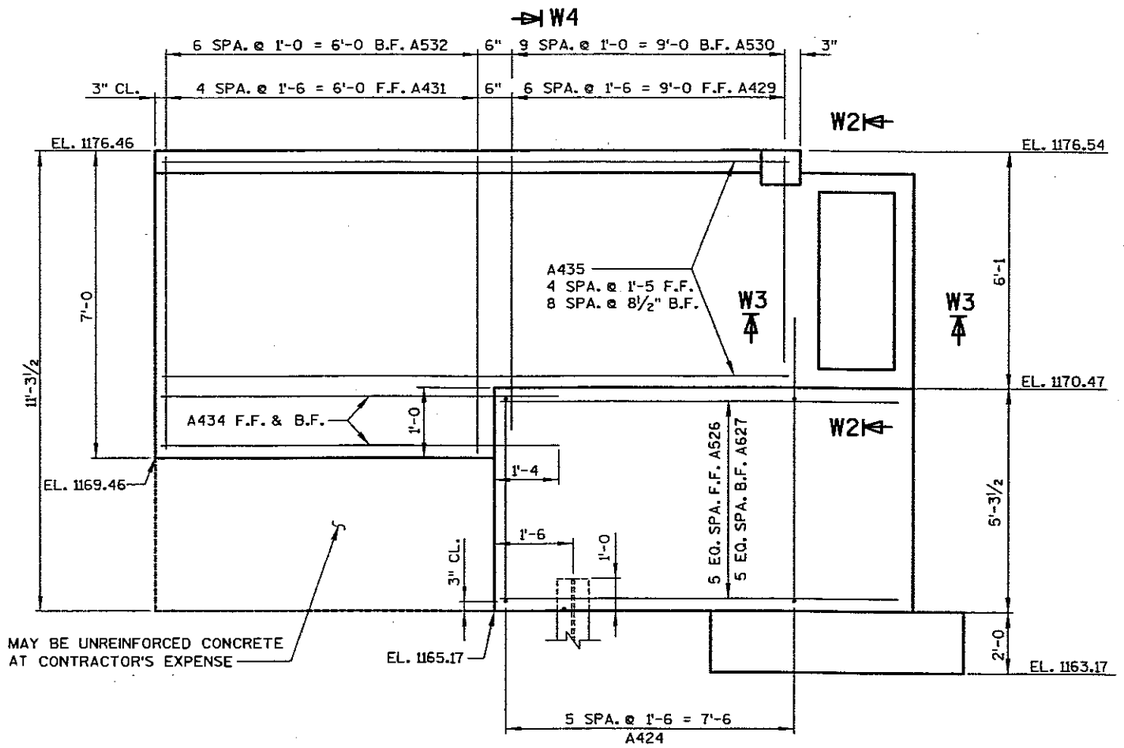
CONST. SPEC. 2003	DRAWN BY ADW	PLANS CK'D. DJW

SOUTH ABUT. DETAILS 1

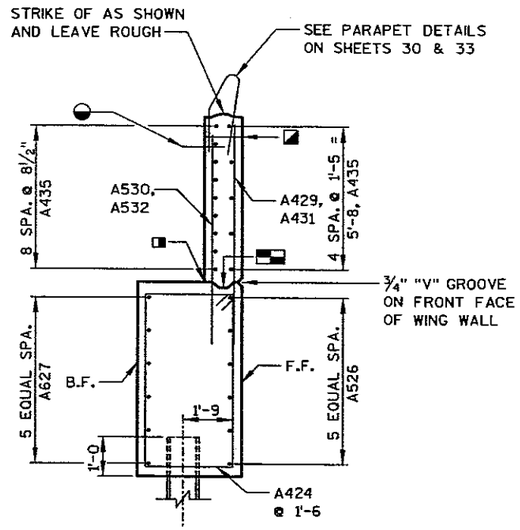
SHEET 7

224

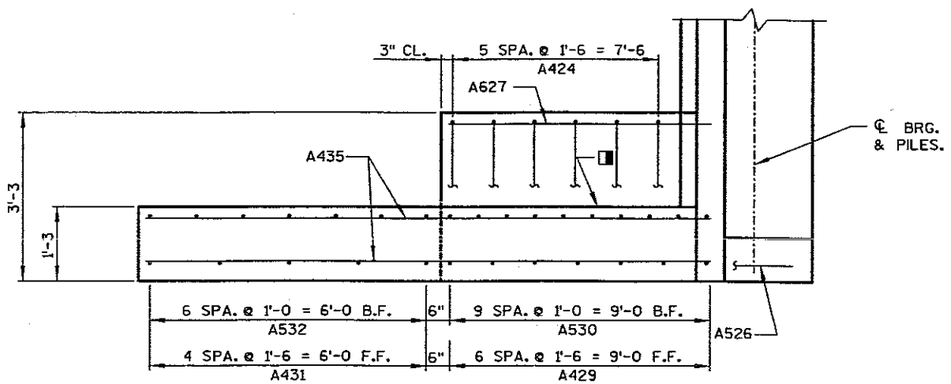
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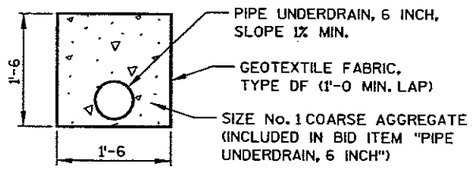
WING 1 ELEVATION



SECTION W4



WING 1 PLAN



PIPE UNDERDRAIN DETAIL

NOTES

- INDICATES PILE BATTERED 4 TO 1 IN DIRECTION OF ARROW.
- OPTIONAL CONST. JOINT FORMED BY BEVEL 2" X 6" KEYWAY WITH 18" RUBBERIZED MEMBRANE WATERPROOFING ON BACKFACE.
- CONSTRUCTION JOINT. LEAVE ROUGH. POUR CONCRETE ABOVE THIS JOINT AFTER DECK IS IN PLACE. ¾" "V" GROOVE OPTIONAL.
- A437 BARS AT 1'-0 CENTERS ALONG WING LENGTH. PLACE IN WING ADJACENT TO SURFACE DRAIN ONLY.
- 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. AND VERT. JOINTS ON BACKFACE ABOVE FOOTING.

SEE SHEET 7 FOR SECTION W2.
SEE SHEET 7 FOR SECTION W3.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

CONST. SPEC.	2003	DRAWN BY	ADW	PLANS CK'D.	DJW

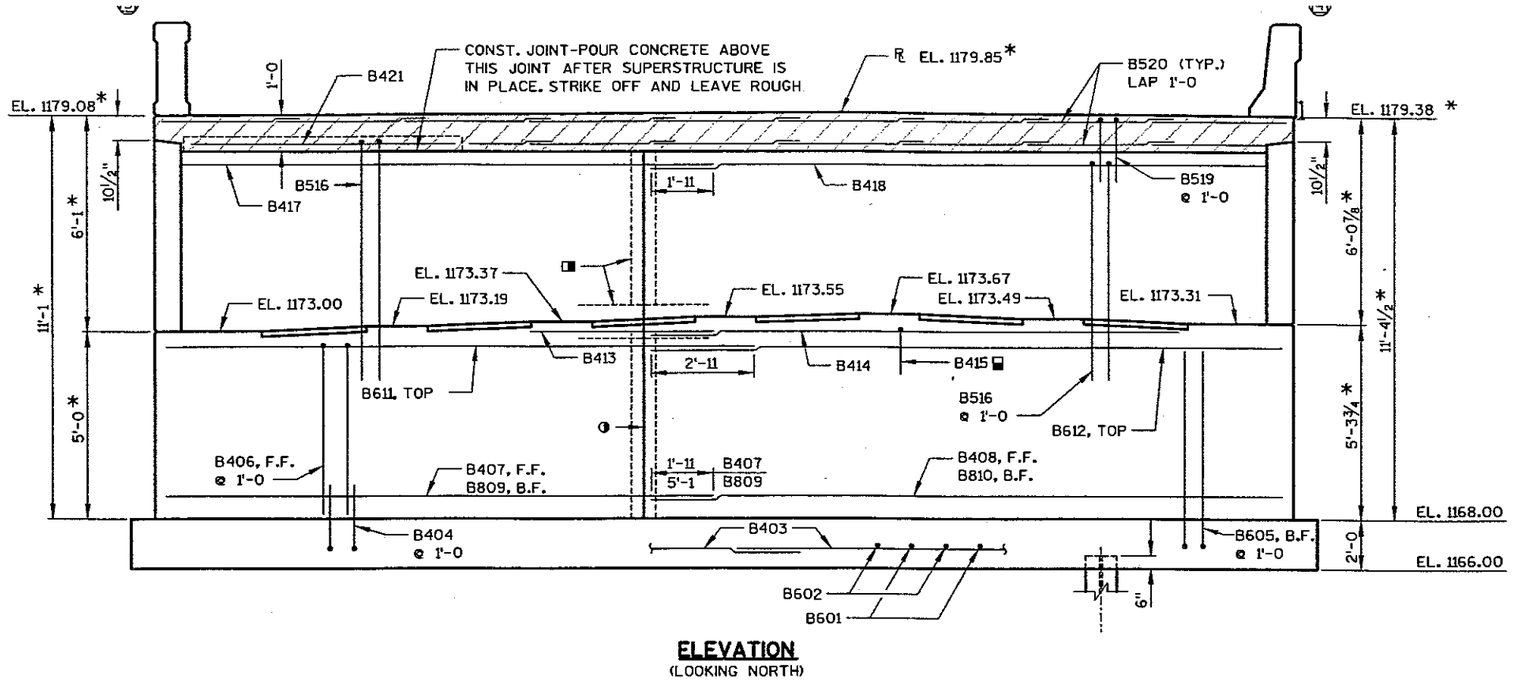
SOUTH ABUT. DETAILS 2

SHEET 8

225

8

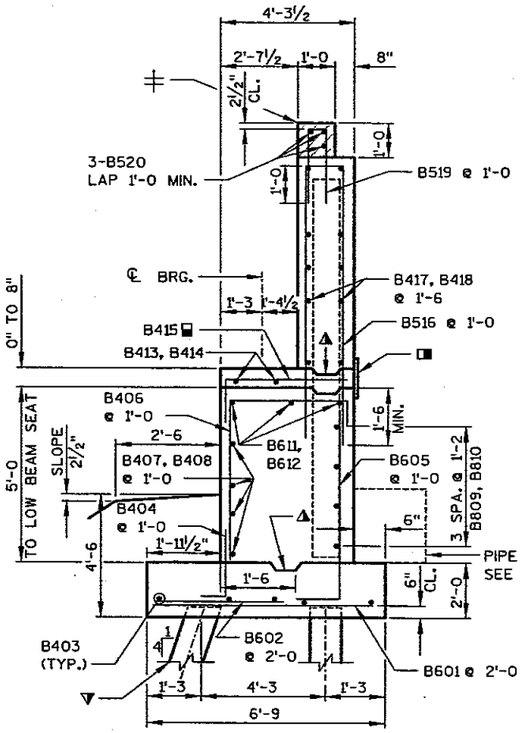
6675-00-71



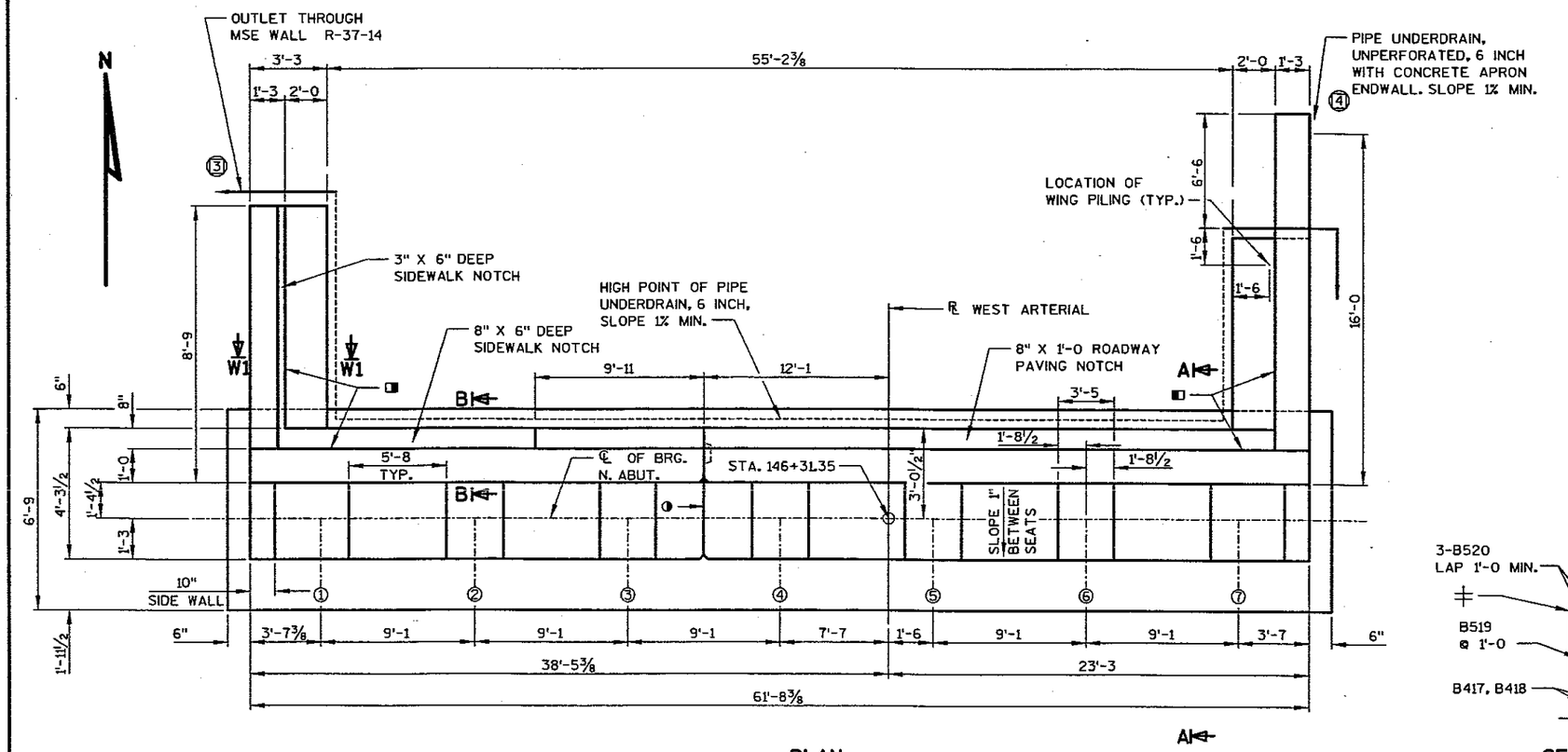
ELEVATION
(LOOKING NORTH)

NOTES

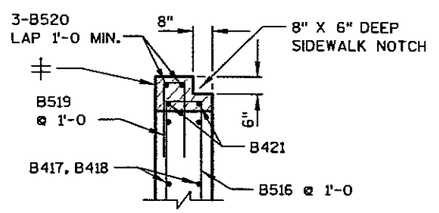
- ◑ VERTICAL CONSTRUCTION JOINT, FORMED BY BEVELED 2" X 8". RUN BAR STEEL THRU JOINT, SEAL JOINT WITH 18" RUBBERIZED MEMBRANE WATERPROOFING AT B.F., ¾" V-GROOVE AT F.F.
- ◨ 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. AND VERT. JOINTS ON BACKFACE ABOVE FOOTING.
- △ KEYED CONST. JOINT FORMED BY BEVELED 2" X 6". USE ¾" V-GROVE ON F.F. OF WINGWALLS.
- * DIMENSIONS AT FRONT FACE OF ABUTMENT BACKWALL.
- ◘ B415 AT 9" IN BEAM SEAT. SPACE AT 1'-6 BETWEEN SEATS.
- ▽ ABUTMENTS ARE SUPPORTED ON HP 10 X 42 STEEL PILES DRIVEN TO A MIN. BEARING VALUE OF 50 TONS PER PILE. EST. 82 FT. LONG.
- ╪ STRIP SEAL EXPANSION DEVICE SEE SHEET 35



SECTION THRU BODY A-A



PLAN



SECTION B-B

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

CONST. SPEC.	2003	DRAWN BY	ADW	PLANS CK'D.	DJW

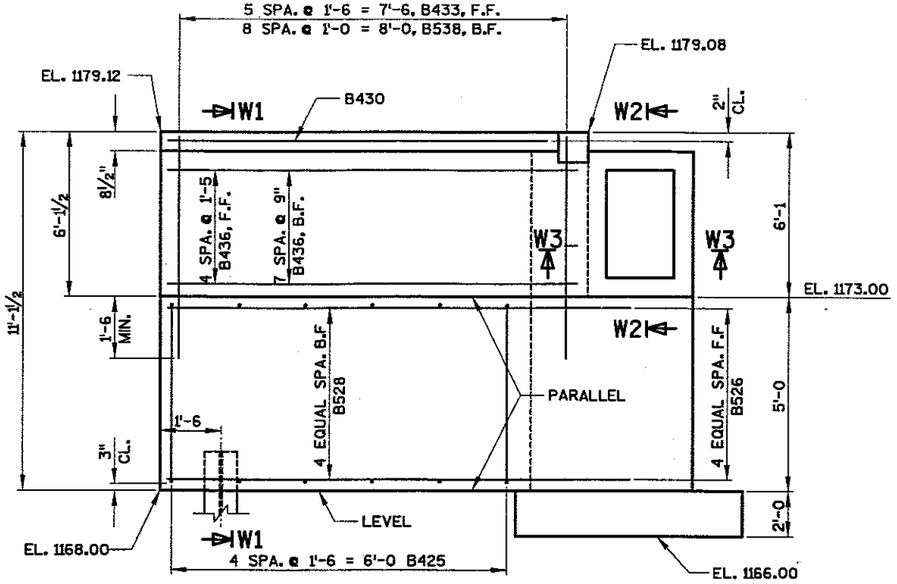
NORTH ABUTMENT

SHEET 9

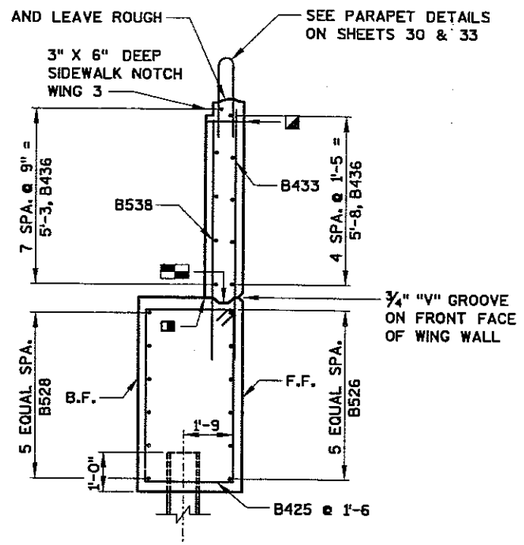
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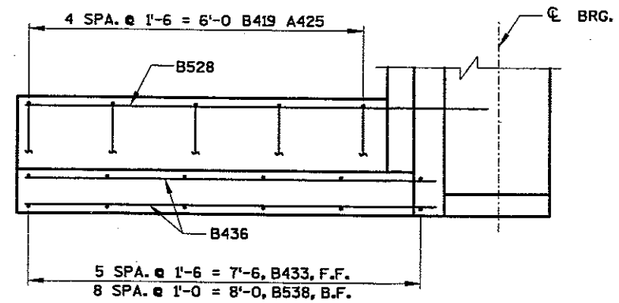
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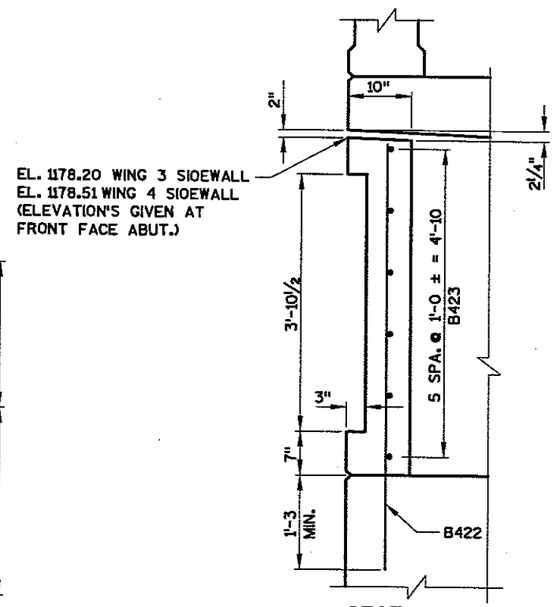
WING 3 ELEVATION



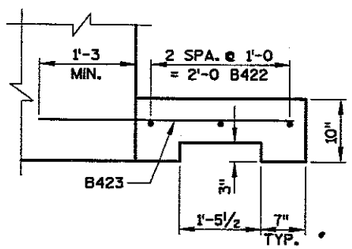
SECTION W1



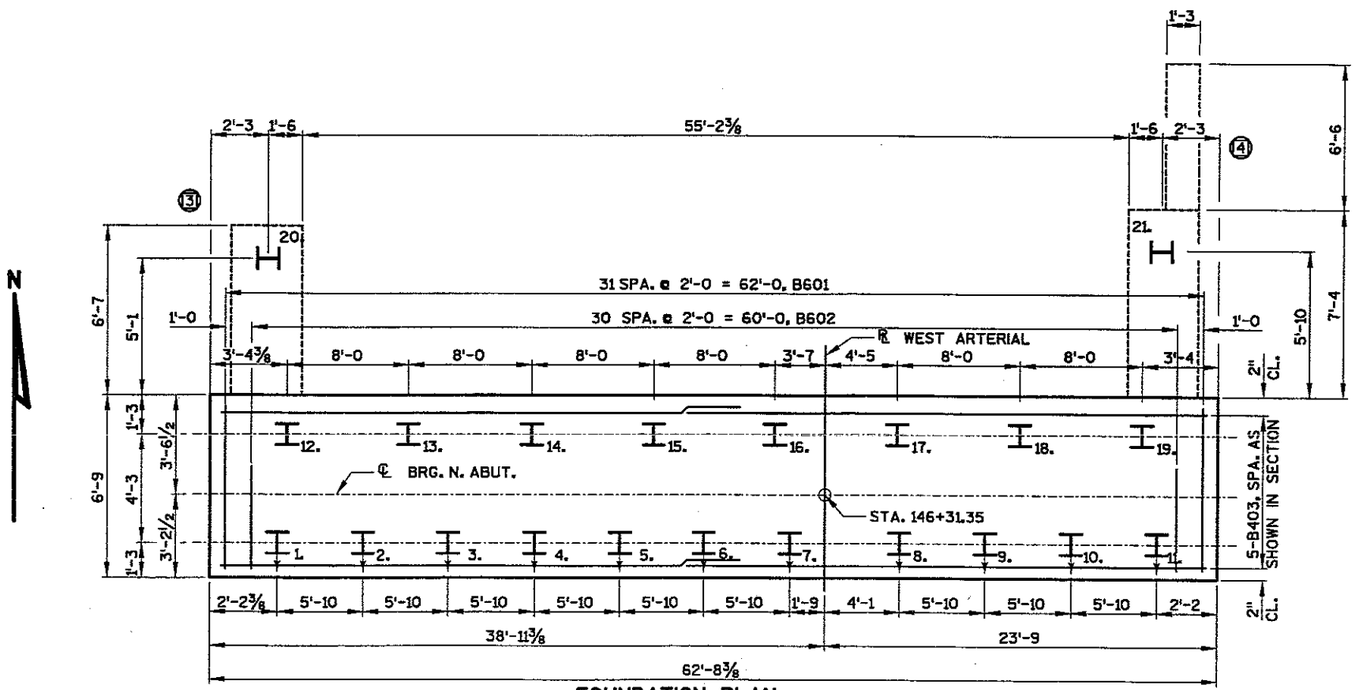
WING 3 PLAN



SECTION W2



SECTION W3



FOUNDATION PLAN

SEE NOTES ON SHEET 11.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

CONST. SPEC.	2003	DRAWN BY	ADW	PLANS CK'D.	DJW

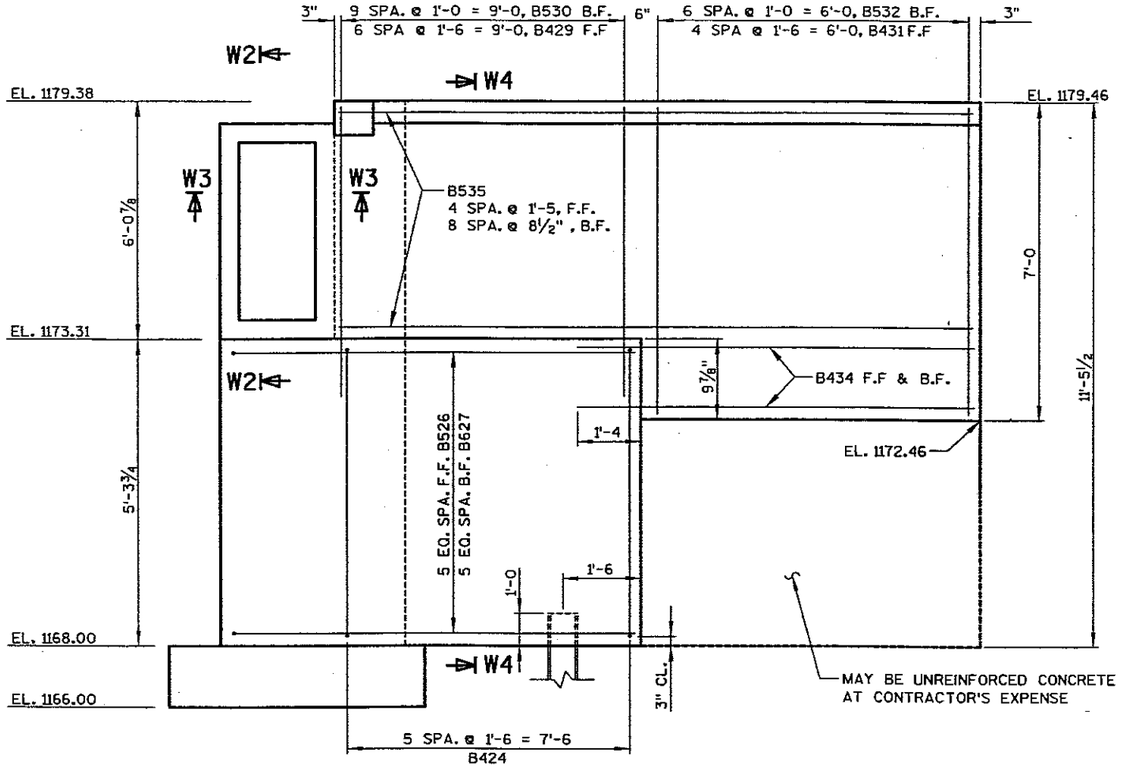
NORTH ABUT. DETAILS 1

SHEET 10

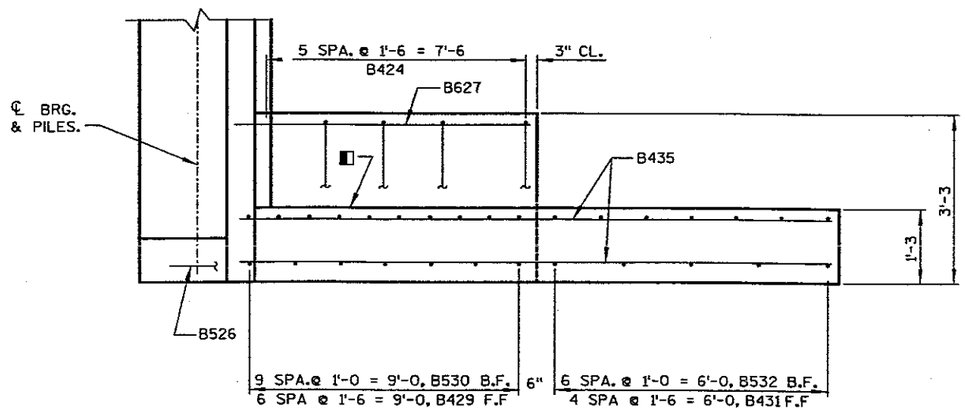
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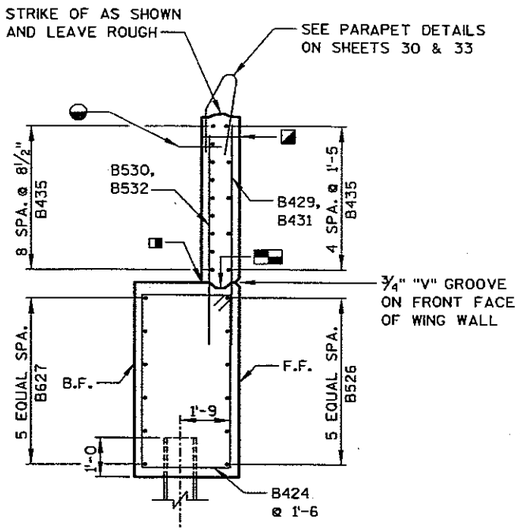
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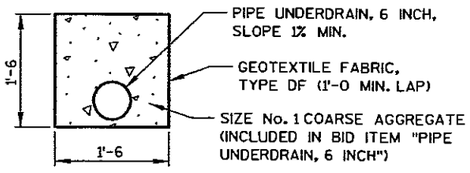
WING 4 ELEVATION



WING 4 PLAN



SECTION W4



PIPE UNDERDRAIN DETAIL

NOTES

- INDICATES PILE BATTERED 4 TO 1 IN DIRECTION OF ARROW.
- OPTIONAL CONST. JOINT FORMED BY BEVEL 2" X 6" KEYWAY WITH 18" RUBBERIZED MEMBRANE WATERPROOFING ON BACKFACE.
- CONSTRUCTION JOINT, LEAVE ROUGH. POUR CONCRETE ABOVE THIS JOINT AFTER DECK IS IN PLACE. ¾" "V" GROOVE OPTIONAL.
- B437 BARS AT 1'-0 CENTERS ALONG WING LENGTH. PLACE IN WING ADJACENT TO SURFACE DRAIN ONLY.
- 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. AND VERT. JOINTS ON BACKFACE ABOVE FOOTING.

SEE SHEET 10 FOR SECTION W2.
SEE SHEET 10 FOR SECTION W3.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

CONST. SPEC.	2003	DRAWN BY	ADW	PLANS CK'D.	DJW

NORTH ABUT. DETAILS 2

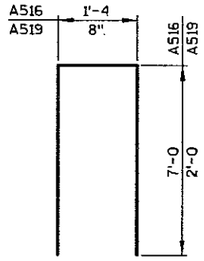
SHEET 11

228

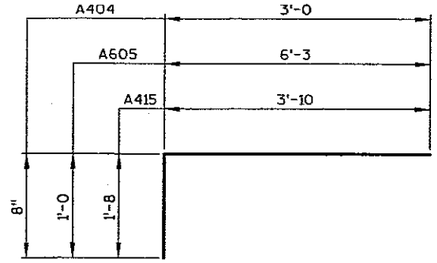
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STATE PROJECT NUMBER

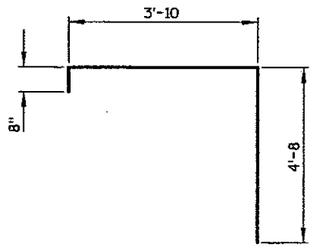
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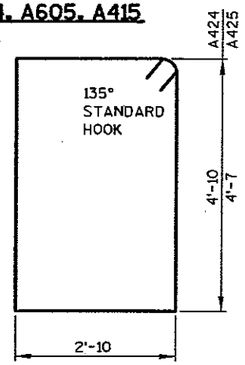
A516, A519



A404, A605, A415



A406



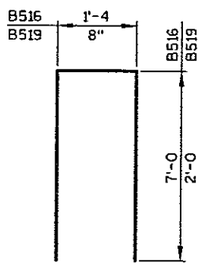
A424, A425

SOUTH ABUTMENT
BILL OF BARS

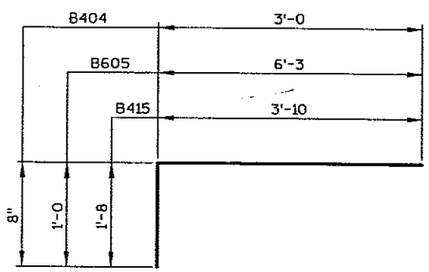
COATED 2940 LBS
UNCOATED 3040 LBS

MARK	NO. REQ'D	LENGTH	BENT	COAT	LOCATION
A601	32	6'-3			ABUT. - FOOTING - TRANS.
A602	31	3'-6			ABUT. - FOOTING - TRANS.
A403	10	32'-3			ABUT. - FOOTING - LONGIT.
A404	62	3'-7	X		ABUT. - FOOTING - VERT. - F.F.
A605	62	7'-1	X		ABUT. - FOOTING & BODY - VERT. - B.F.
A406	62	9'-0	X		ABUT. - BODY - VERT. - F.F.
A407	4	28'-4			ABUT. - BODY - HORIZ. - F.F.
A408	4	35'-0			ABUT. - BODY - HORIZ. - F.F
A809	4	31'-4			ABUT. - BODY - B.F.
A810	4	35'-0			ABUT. - BODY - B.F.
A611	3	29'-3			ABUT. - BODY - TOP
A612	3	35'-0			ABUT. - BODY - TOP
A413	2	8'-4			ABUT. - BODY - TOP - HORIZ.
A414	2	30'-1			ABUT. - BODY - TOP - HORIZ.
A415	36	5'-5	X		ABUT. - BODY - TOP - VERT.
A516	62	15'-1	X	X	ABUT. - BACKWALL - VERT.
A417	5	28'-4		X	ABUT. - BACKWALL - HORIZ. - F.F. & B.F.
A418	5	35'-0		X	ABUT. - BACKWALL - HORIZ. - F.F. & B.F.
A519	62	4'-5	X	X	PAVING BLOCK - VERT.
A520	27	7'-9		X	PAVING BLOCK - HORIZ.
A421	2	16'-1		X	PAVING BLOCK - HORIZ. @ SIDEWALK NOTCH
A422	6	6'-3		X	SIDEWALL - VERT.
A423	12	3'-8		X	SIDEWALL - HORIZ.
A424	6	15'-10	X	X	WING 1 - VERT. - STIRRUPS
A425	5	15'-6	X	X	WING 2 - VERT. - STIRRUPS
A526	6	11'-9		X	WING 1 - HORIZ. - F.F.
A627	6	11'-9		X	WING 1 - HORIZ. - B.F.
A528	6	11'-0		X	WING 2 - HORIZ. - B.F.
A429	7	7'-6		X	WING 1 - VERT. - F.F.
A530	10	7'-6		X	WING 1 - VERT. - B.F.
A431	5	6'-6		X	WING 1 - VERT. - F.F.
A532	7	6'-6		X	WING 1 - VERT. - B.F.
A433	6	7'-6		X	WING 2 - VERT. - F.F.
A434	4	7'-8		X	WING 1 - HORIZ. - F.F. & B.F.
A435	14	15'-8		X	WING 1 - HORIZ. - F.F. & B.F.
A436	13	8'-5		X	WING 2 - HORIZ. - F.F. & B.F.
A437	15	2'-0		X	WING 1 - SURFACE DRAIN ANCHORS
A538	9	7'-6		X	WING 2 - VERT. - B.F.

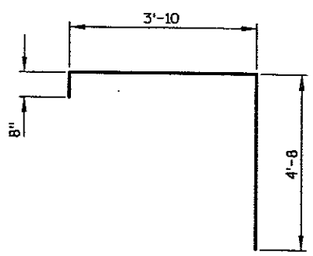
NOTE: THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.
DIMENSIONS FOR BENDING ARE OUT TO OUT OF BAR.



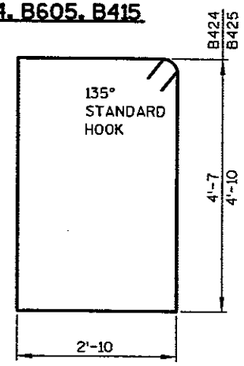
B516, B519



B404, B605, B415



B406



B424, B425

NORTH ABUTMENT
BILL OF BARS

COATED 2940 LBS
UNCOATED 3040 LBS

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B532	7	6'-6		X	WING 4 - VERT. - B.F.
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B437	15	2'-0		X	WING 4 - SURFACE DRAIN ANCHORS
B538	9	7'-6		X	WING 3 - VERT. - B.F.

NOTE: THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.
DIMENSIONS FOR BENDING ARE OUT TO OUT OF BAR.

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

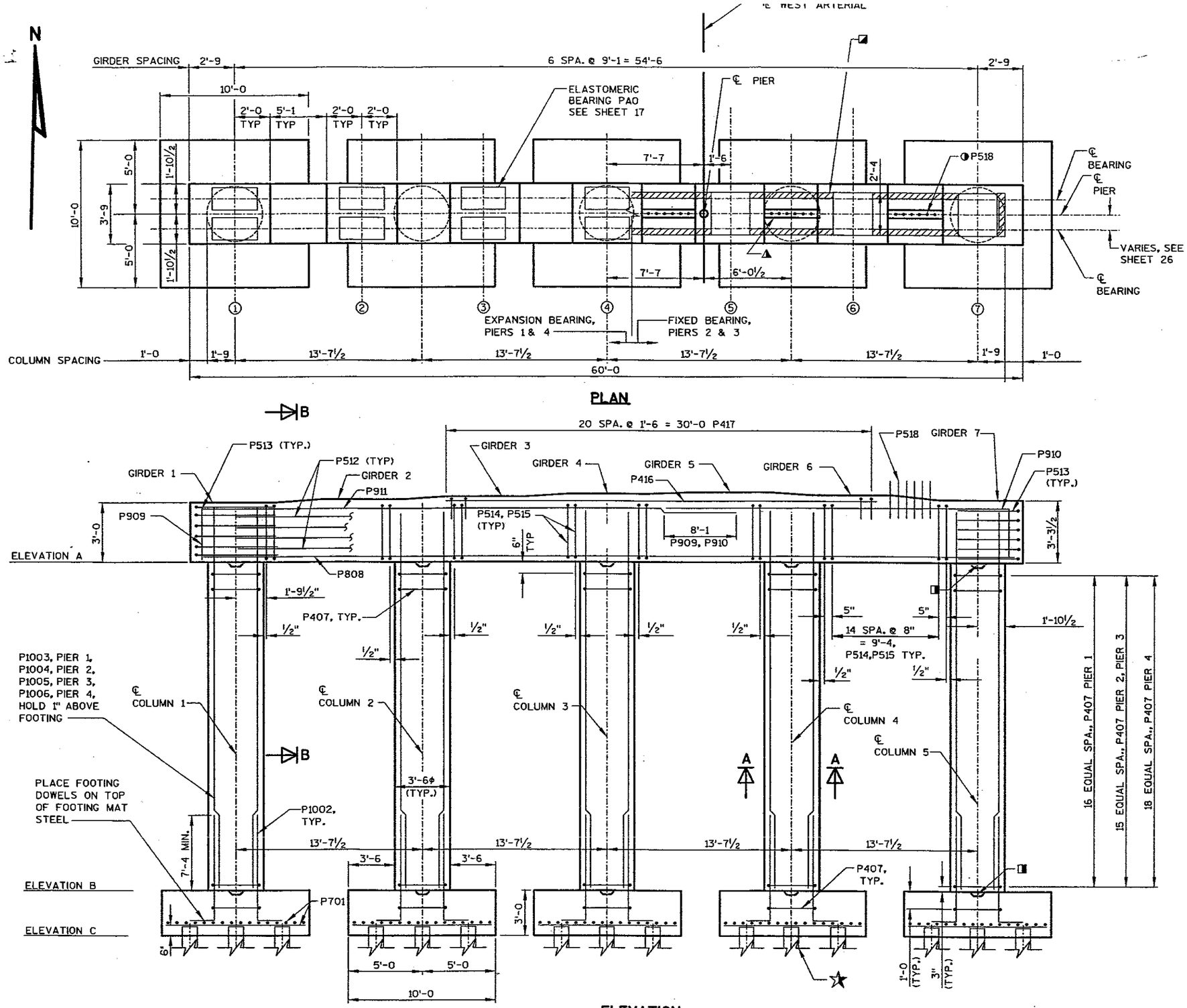
STRUCTURE B-37-373

CONST. SPEC.	2003	DRAWN BY	ADW	PLANS CK'D.	DJW

ABUTMENT REINFORCING

SHEET 12

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ELEVATION
(LOOKING UP STATION)

NOTES

- 1'-3 X 1'-3 X 2" CONST. JOINT FORMED BY BEVELED KEYWAY, TYP. ALL COLUMNS AND FOOTINGS.
- 2" X 6" BEVELED KEYWAY BETWEEN BEAM SEATS.
- P518 BARS @ 1'-0 CENTERS BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0 INTO CONCRETE) ONLY ON FIXED BEARING PIERS 2 AND 3.
- ¾" X 4" PREFORMED FILLER.
- ★ PILING STEEL, DELIVERED AND DRIVEN HP 12-INCH x 74 LB DRIVEN TO A MIN. BEARING VALUE OF 95 TONS, EST. 75 FT. AT PIERS 1& 4, EST. 65 FT. AT PIERS 2 & 3.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

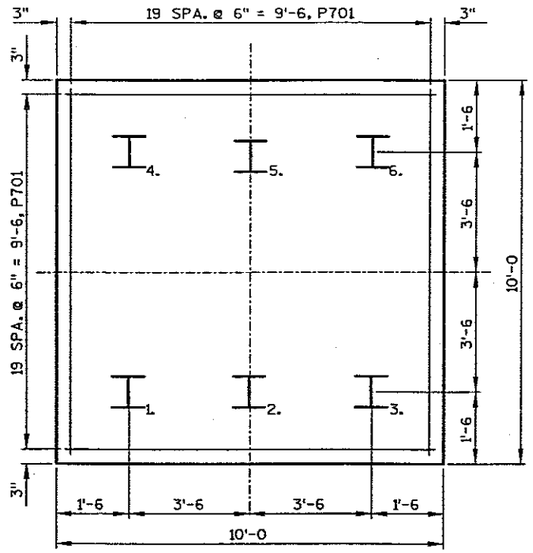
CONST. SPEC.	2003	DRAWN BY	JLB	PLANS CK'D.	DJW

PIER

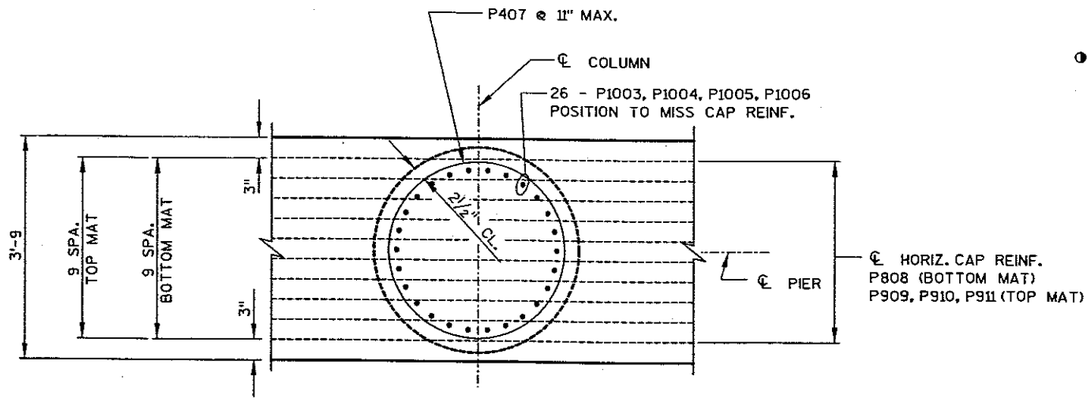
SHEET 13

230

8



FOOTING AND PILE PLAN

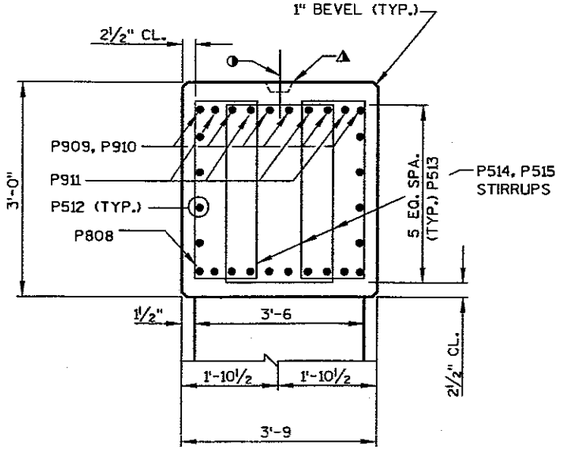


SECTION A-A

NOTES

▲ 2" X 6" BEVELED KEYWAY BETWEEN BEAM SEATS AT FIXED BEARING PIERS

◑ P518 BARS @ 1'-0 CENTERS BETWEEN BEAM SEATS AT FIXED BEARING PIERS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0 INTO CONCRETE). ONLY ON FIXED BEARING PIERS 2 AND 3.



SECTION B-B

PIER	BEAM SEAT ELEVATIONS							STRUCTURE EVEVATIONS			PILE LENGTHS HP 12x74 LB (FEET PER PILE)
	1	2	3	4	5	6	7	A	B	C	
1	1170.90	1171.08	1171.26	1171.44	1171.57	1171.38	1171.20	1167.90	1153.00	1150.00	75
2	1171.86	1172.04	1172.22	1172.41	1172.53	1172.35	1172.16	1168.86	1155.00	~~1152.00~~	1151.25 65
3	1172.43	1172.61	1172.79	1172.97	1173.09	1172.91	1172.73	1169.43	1155.00	~~1152.00~~	1151.75 65
4	1172.60	1172.78	1172.96	1173.14	1173.26	1173.08	1172.90	1169.60	1153.00	~~1150.00~~	1148.00 75

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

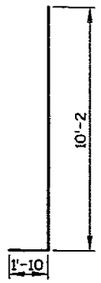
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PIER DETAILS-1

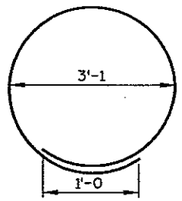
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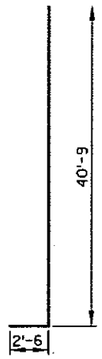
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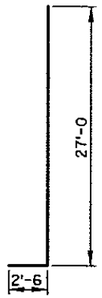
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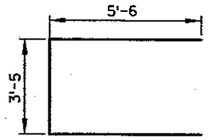
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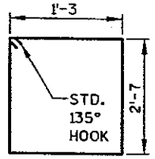
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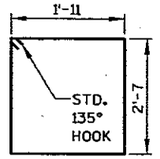
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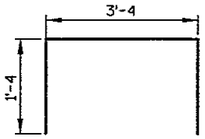
P513



P514



P515



P417

PIER 1 27,475 LB
PIER 2 26,955 LB
PIER 3 27,230 LB
PIER 4 28,475 LB

TOTAL UNCOATED 110,135 LB

PIER BILL OF BARS

MARK	LENGTH	PIER 1 NO. REQ'D	PIER 2 NO. REQ'D	PIER 3 NO. REQ'D	PIER 4 NO. REQ'D	TOTAL NO. REQ'D	BENT	COAT	LOCATION
P701	9'-6	200	200	200	200	800			FOOTING - HORIZ.
P1002	11'-9	130	130	130	130	520	X		FOOTING - COLUMN - DOWELS
P1003	17'-8	130	---	---	---	130			COLUMN - VERT - PIER 1
P1004	16'-8	---	130	---	---	130			COLUMN - VERT - PIER 2
P1005	17'-2	---	---	130	---	130			COLUMN - VERT - PIER 3
P1006	19'-4	---	---	---	130	130			COLUMN - VERT - PIER 4
P407	10'-9	90	85	85	100	360	X		COLUMN - STIRRUPS
P808	59'-6	10	10	10	10	40			CAP - HORIZ. - BOTTOM
P909	43'-0	6	6	6	6	24	X		CAP - HORIZ. - TOP
P910	29'-4	6	6	6	6	24	X		CAP - HORIZ. - TOP
P911	59'-6	4	4	4	4	16			CAP - HORIZ. - TOP
P512	54'-6	8	8	8	8	32			CAP - HORIZ. - SIDES
P513	14'-2	12	12	12	12	48	X		CAP - HORIZ. - ENDS
P514	8'-3	136	136	136	136	544	X		CAP - STIRRUPS
P515	9'-7	68	68	68	68	272	X		CAP - STIRRUPS
P416	30'-6	3	3	3	3	12			CAP - HORIZ. - TOP
P417	5'-10	21	21	21	21	84	X		CAP - HORIZ. - TRANS
P518	2'-0	---	36	36	---	72			CAP - VERT. - DOWELS

NOTE: THE FIRST ONE OR TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE. BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

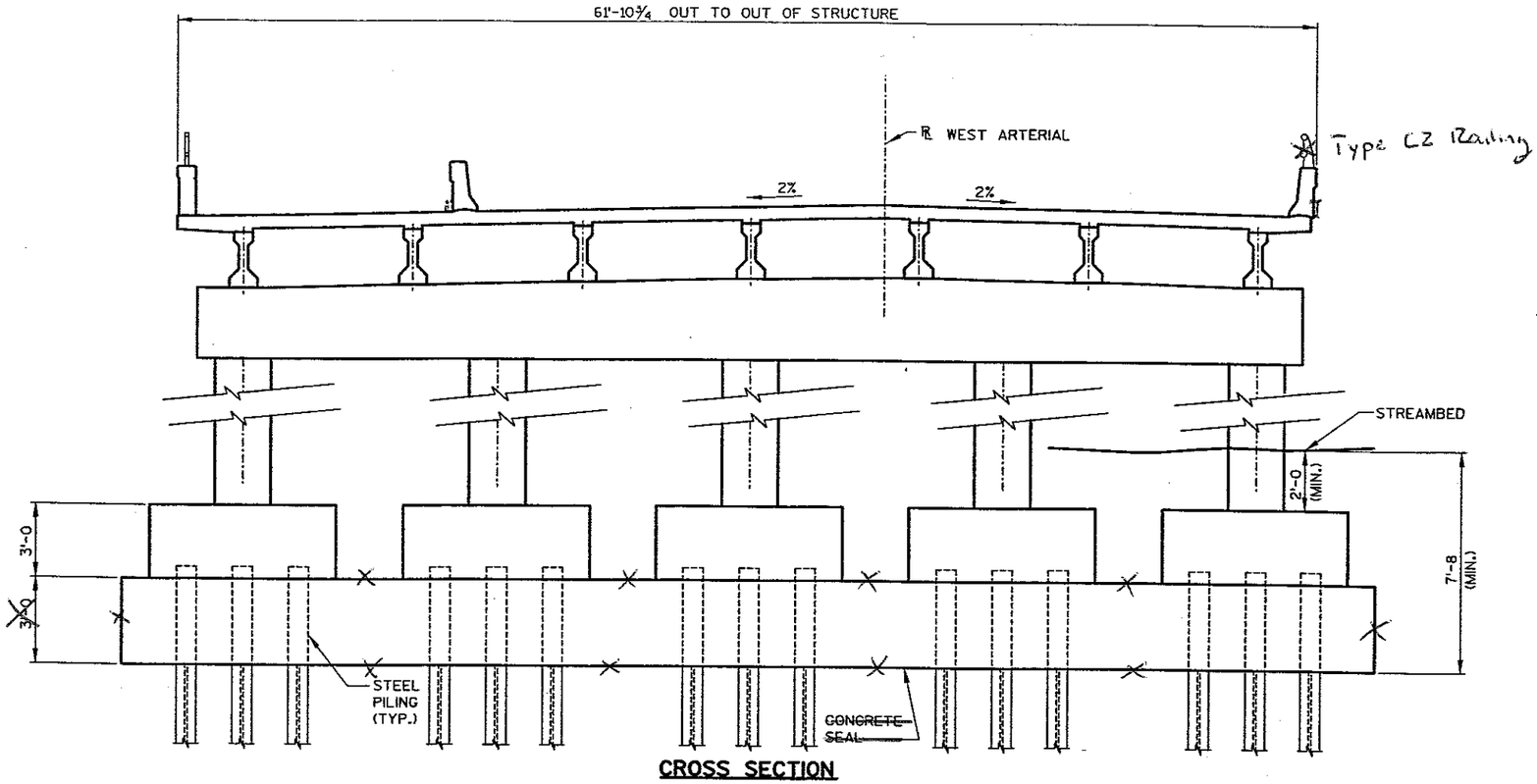
CONST. SPEC.	2003	DRAWN BY	JLB	PLANS CK'D.	DJW

PIER DETAILS-2

SHEET 15

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8

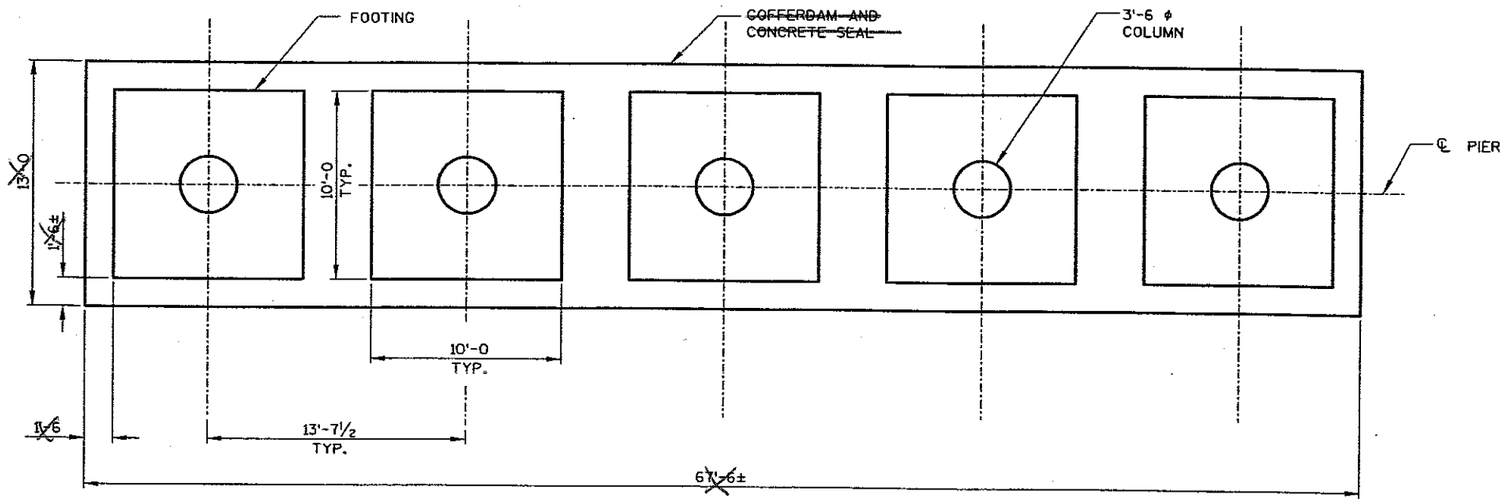


CROSS SECTION
(LOOKING NORTH)

Eliminated Seal

SEAL DATA

PIER	TOP ELEVATION	BOTTOM ELEVATION
1	1150	1147
2	1152	1149
3	1152	1149
4	1150	1147



CROSS SECTION

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

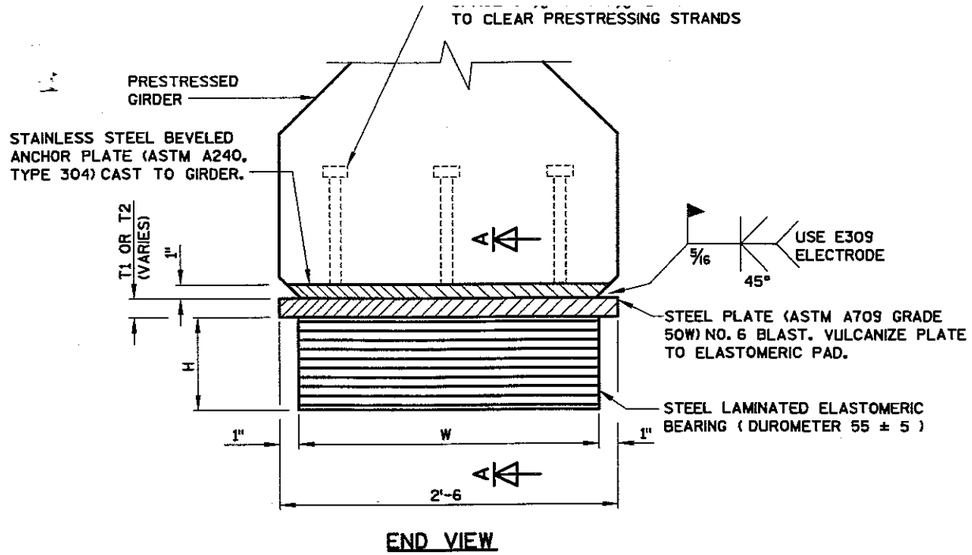
STRUCTURE B-37-373

CONST. SPEC.	2003	DRAWN BY	KAS	PLANS CK'D.	DJW

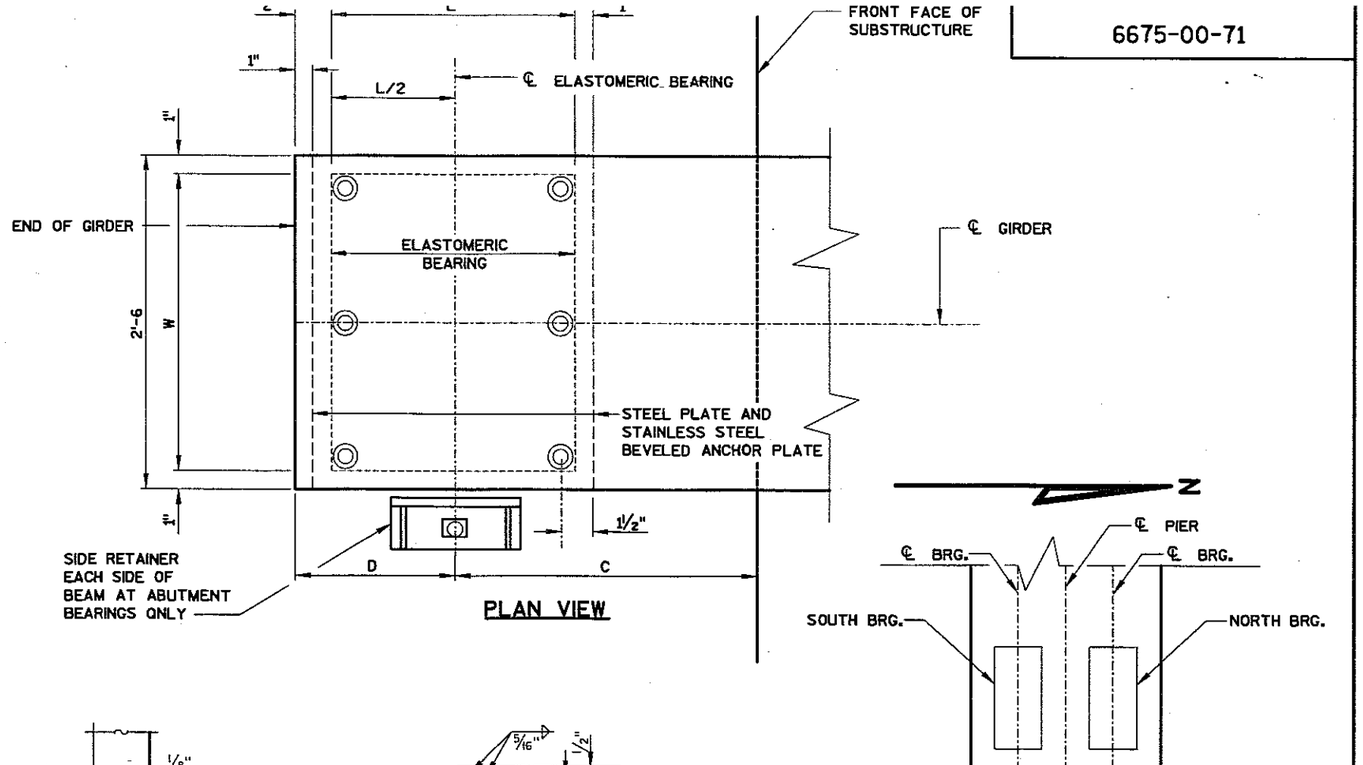
SEAL

SHEET 16
233

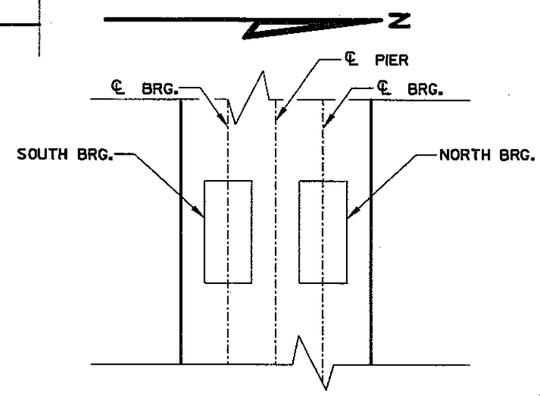
6675-00-71



END VIEW



PLAN VIEW

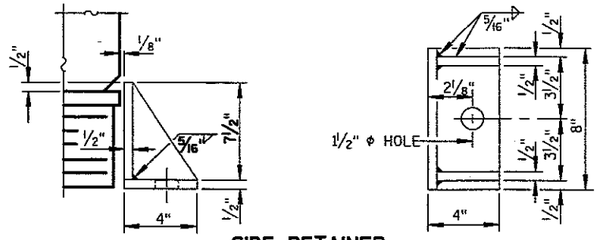


BEARING PLAN
(AT PIERS)

SIDE RETAINER

SECTION A-A THRU ELASTOMERIC BEARING

* NOTE: DIMENSION T1 IS AT END OF GIRDER



SIDE RETAINER

EQUIVALENT ROLLED ANGLE WITH STIFFENERS WILL BE ALLOWED IN LIEU OF WELDED PLATES.

DIM.	S. ABUT.	PIER 1, 4 SOUTH BRG	PIER 1, 4 NORTH BRG	N. ABUT.
H	5⅝"	3¾"	3¾"	5⅝"
L	1'-5	1'-0	1'-0	1'-5
W	2'-4	2'-4	2'-4	2'-4
T1	½"	½"	½"	½"
T2	1¾"	½"	1⅝"	½"
C	1'-3	1'-1	1'-1	1'-3
D	10½"	8"	8"	10½"
* PLATES	9	6	6	9

TABLE OF DIMENSIONS

NOTES:

ALL RETAINER STRUCTURAL STEEL SHALL BE A.S.T.M. A709, GRADE 36.
ALL BOLTS, NUTS AND WASHERS SHALL BE A.S.T.M. A325 TYPE 1.

ALL RETAINER STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH A.S.T.M. A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZE IN ACCORDANCE WITH THE REQUIREMENTS OF A.S.T.M. A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF A.S.T.M. A563, LUBRICANT AND TEST FOR COATED NUTS.

ALL MATERIALS, INCLUDING ANCHOR BOLTS, USED FOR SIDE RETAINERS SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STRUCTURAL STEEL, CARBON".

ALL MATERIAL USED FOR BEARINGS SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "BEARING PADS ELASTOMERIC LAMINATED".

ALL STRUCTURAL STEEL PLATES SHALL BE FLAT ROLLED WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT, AND VERTICAL.

ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

STAINLESS STEEL BEVELED ANCHOR PLATE CAST TO GIRDERS AT ABUTMENT ENDS AND AT EXPANSIONS PIERS 1 AND 4.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

CONST. SPEC.	2003	DRAWN BY	KAS	PLANS CK'D.	DJW

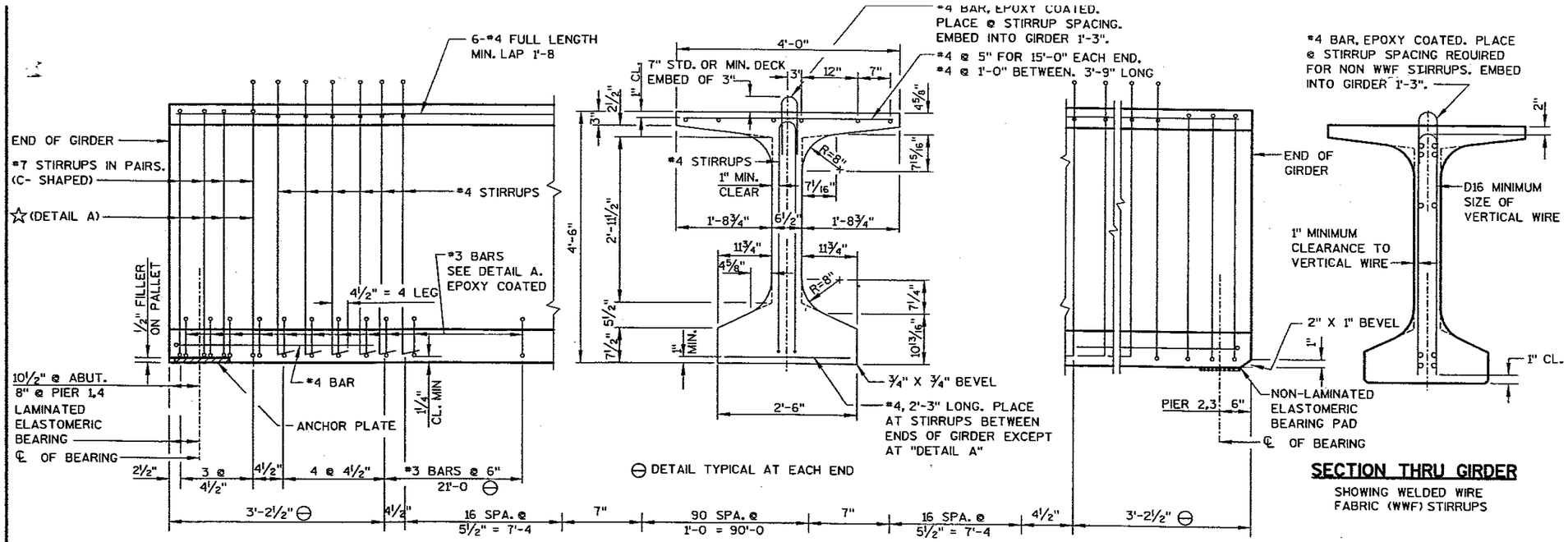
ELASTOMERIC BEARINGS

SHEET 17
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8

STATE PROJECT NUMBER

6675-00-71

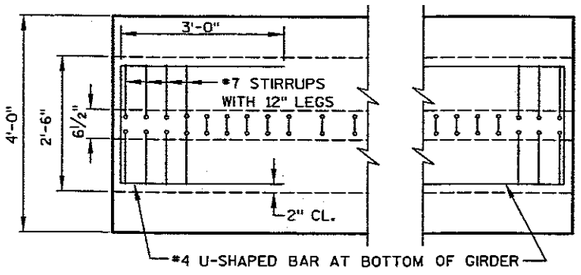


SUPPORT WITH LAMINATED ELASTOMERIC BEARINGS

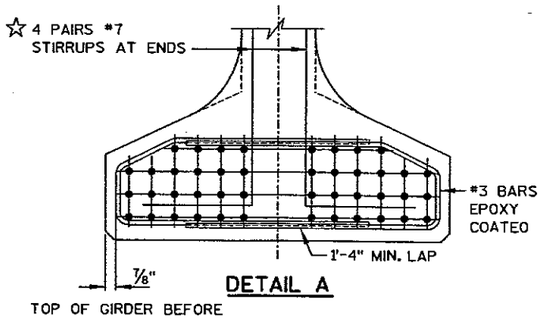
SUPPORT WITH ½" NON-LAMINATED ELASTOMERIC BEARING PAD

SECTION THRU GIRDER

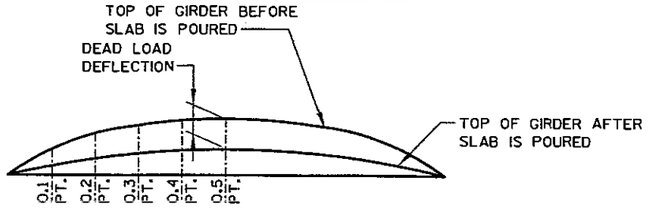
SHOWING WELDED WIRE FABRIC (WWF) STIRRUPS



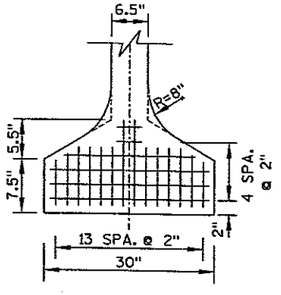
TOP VIEW OF GIRDER ENDS



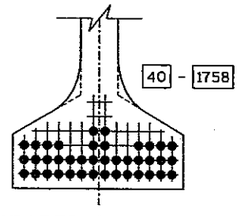
DETAIL A



DEAD LOAD DEFLECTION DIAGRAM



TYP. STRAND PATTERN



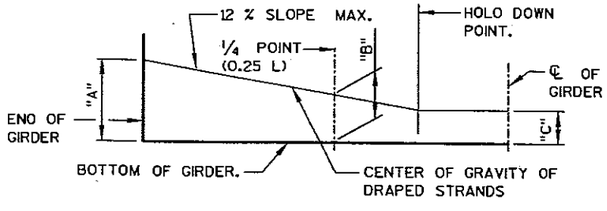
DRAPED PATTERN

40 STRANDS

GIRDER DATA

SPAN	GIRDER LENGTH "L" (FEET)	DEAD LOAD DEFLECTION (INCHES) 0.1 L	0.2 L	0.3 L	0.4 L	0.5 L	CONC. STRGTH. f'c (psi)	"P" (kips)	DIA. OF STRANDS (INCHES)	DRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (psi) *	(INCHES) "A"	"B" MIN.	"B" MAX.	"C"	UNDRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (psi) *
1-5	113'-4½	¾"	1⅜"	1⅞"	2¼"	2⅜"	8000	1758	0.6	40	6400	49	16	19	5		
2,3,4	113'-0"	¾"	1⅜"	1⅞"	2¼"	2⅜"	8000	1758	0.6	40	6400	49	16	19	5		

* MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.



LOCATION OF DRAPED STRANDS

GENERAL NOTES

PRESTRESSING STRANDS SHALL BE 0.6" ϕ 7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270 ksi AND SHALL BE FLUSH WITH THE ENDS OF THE GIRDER. ENDS OF STRANDS SHALL BE PAINTED WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. THIS APPLIES ONLY TO THOSE ENDS OF GIRDERS THAT ARE FINALLY EXPOSED.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "INTERMEDIATE STEEL DIAPHRAGM" SHEET 19.

BEND EACH END OF #4 STIRRUPS 4½".

DATA SHOWN IN DEFLECTION DATA" IS THEORETICAL AND MAY VARY WITH CONCRETE STRENGTH, VARIABLE PRESTRESS CONDITIONS AND PRESTRESS LOSSES.

ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS. ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY FOR BONDING TO THE SLAB, EXCEPT THE OUTSIDE 15" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED LIQUID BOND BREAKER SHALL BE APPLIED TO THE TOP SURFACE OF THE GIRDER EXCEPT FOR THE CENTER 18". APPLY NO MORE THAN 7 DAYS PRIOR TO POURING THE DECK.

NOX-CRETE:
SILCOSEAL 2000 F (2 COATS)
MASTER BUILDERS:
FIRST COAT - PRECO FORM-COTE
SECOND COAT - RHEOFINISH 220

SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT. IF THE FABRICATOR WANTS TO BUILD A BAR STEEL CAGE BY WELDING LONGITUDINAL REINFORCEMENT TO THE #4 STIRRUPS, TWO OPTIONS ARE AVAILABLE:

1. USE ASTM A706 GRADE 60 REINFORCEMENT AND THE STIRRUP SPACING AS SHOWN ON THE PLANS.

2. USE ASTM A615, GRADE 40 REINFORCEMENT AND A MODIFIED STIRRUP SPACING SUBMITTED TO AND APPROVED BY THE STRUCTURES DEVELOPMENT SECTION. (608) 266-8494

AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A497 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DEVELOPMENT SECTION.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

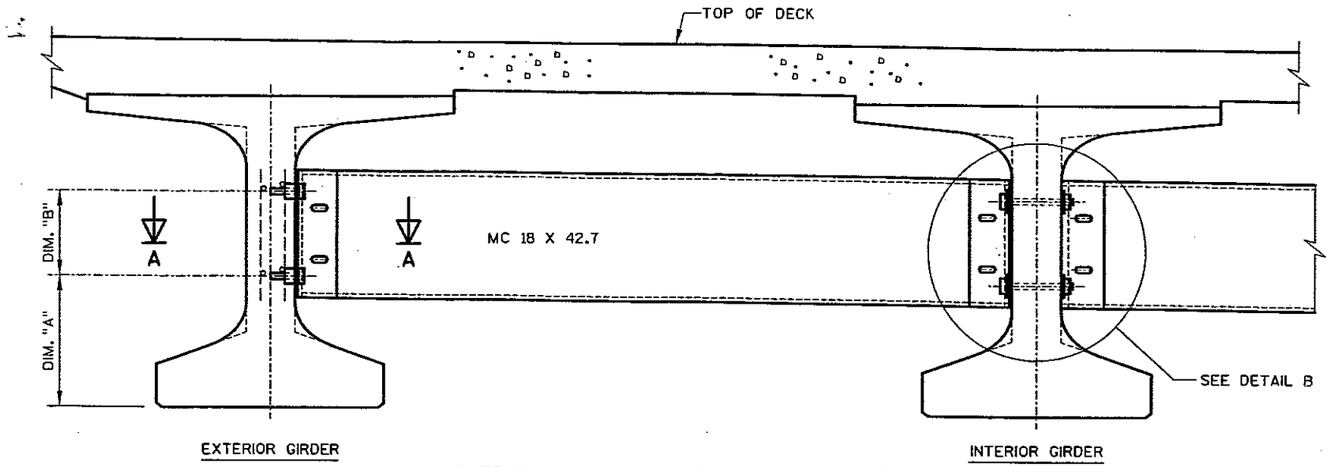
CONST. SPEC.	2003	DRAWN BY	NCC	PLANS CK'D.	DJW

54W PRESTRESSED GIRDERS

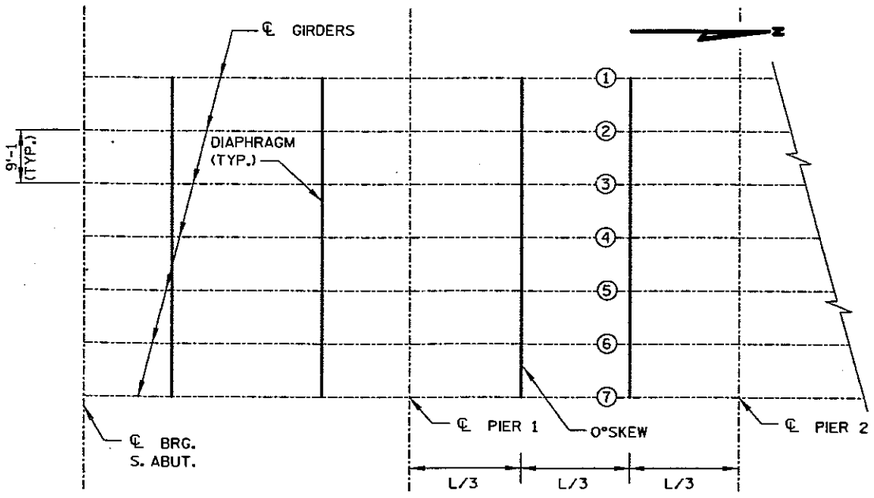
SHEET 18

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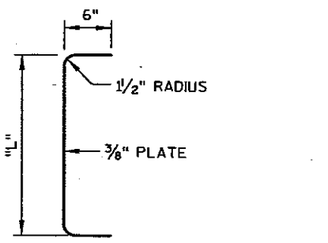
8



PART TRANSVERSE SECTION AT DIAPHRAGM



PLAN



SECTION THRU ALTERNATE DIAPHRAGM

*DIM "X" = 2½" FOR ALTERNATE PLATE DIAPHRAGM

NOTES

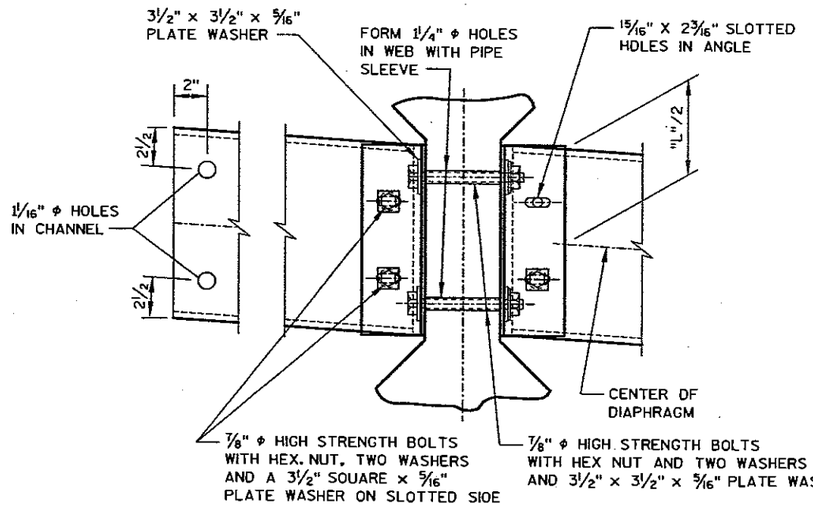
ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS, STRUCTURE B-37-373", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

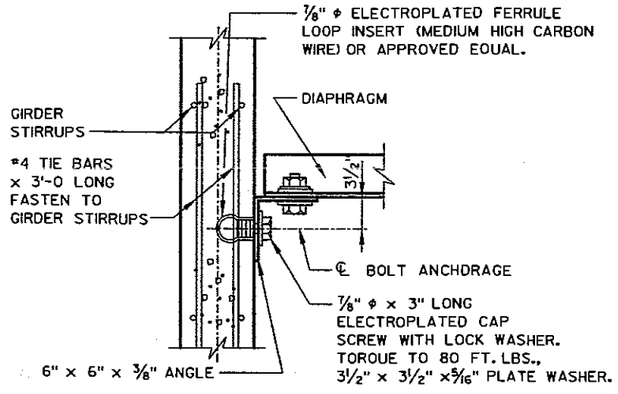
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PLACE DIAPHRAGMS AT 1/3 AND 2/3 POINTS OF GIRDERS.

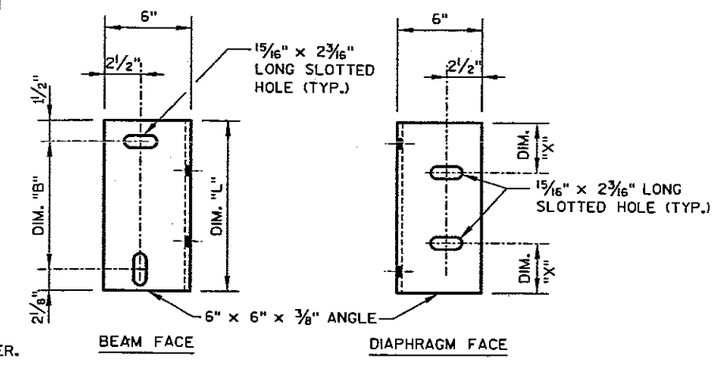


DETAIL B



SECTION A-A

(FOR EXTERIOR ATTACHMENT)



DIAPHRAGM SUPPORT

TABLE

GIRDER HEIGHT	DIM. "A"	DIM. "B"	DIM. "L"	*DIM. "X"
28"	1'-0 7/8"	5 7/8"	9½"	2¼"
36"	1'-2 7/8"	9 7/8"	1'-1½"	3¼"
45"	1'-5 3/8"	1'-1 7/8"	1'-5½"	2¼"
54"	1'-7 7/8"	1'-5 7/8"	1'-9½"	4¼"
54W"	1'-9 1/8"	1'-5 7/8"	1'-9½"	4¼"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

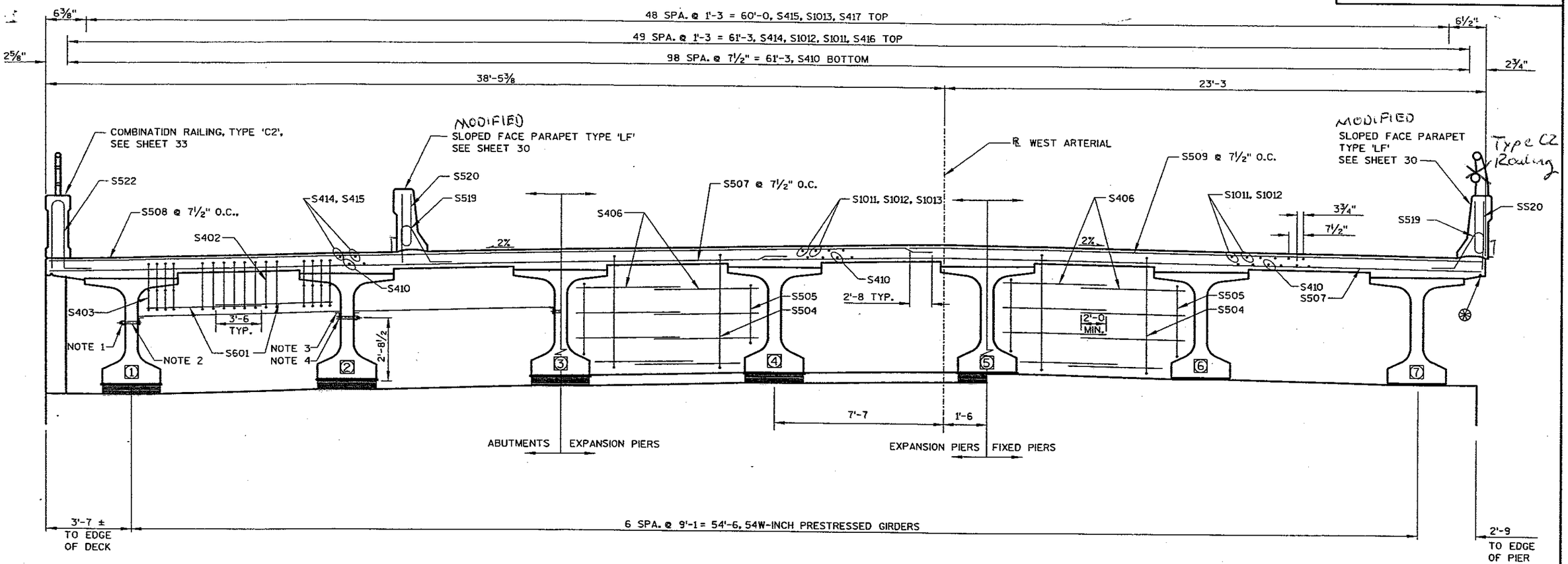
CONST. SPEC. 2003	DRAWN BY KAS	PLANS CK'D. DJW

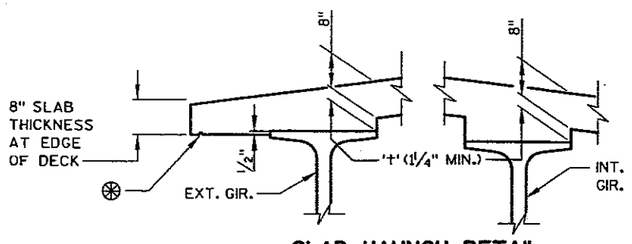
INTERMEDIATE STEEL DIAPHRAGM

SHEET 19

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SLAB HAUNCH DETAIL

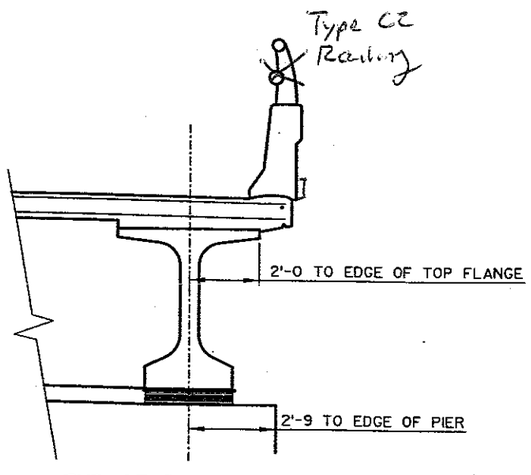
IF 1¼" MINIMUM HAUNCH HEIGHT 't' CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTIDN OF THE CONTRACTOR. THE PLAN SLAB THICKNESS SHALL BE HELD. MAXIMUM HAUNCH HEIGHT EQUALS "STIRRUP PROJECTION" MINUS 3".

TO DETERMINE 't', ELEV. OF TOP GIRDERS AT ℄ OF SUBSTRUCTURE UNITS & AT ¼ POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEADLOAD DEFLECTION
- SLAB THICKNESS

= HAUNCH HEIGHT 't'

HAUNCH = 4½" MAX. AT ℄ OF GIRDER



END OF PIER AT EXPANSION PIER

LEGEND

- ⊛ ¾" CONTINUOUS DRIP GROOVE. END 2'-0 FROM FACE OF SUBSTRUCTURE UNITS.
- ☐ INDICATES GIRDER NUMBER.
- ◪ THESE DIMENSIONS PARALLEL TO GIRDER.

NOTES

1. 3½" X 3½" X½" PLATE WASHER
2. ⅞" DIA. HIGH STRENGTH BOLTS WITH HEX NUT AND WASHERS.
3. ANGLE 6" X 4" X ¾" X 1'-6½
4. 3½" X 3½" X 5/16" PLATE WASHER.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

CONST. SPEC.	2003	DRAWN BY	KAS	PLANS CK'D.	DJW

SUPERSTRUCTURE

SHEET 20

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TOP OF DECK ELEVATIONS AT ℄ GIRDER

LOCATION		WEST EDGE OF DECK	GIRDER NUMBER							EAST EDGE OF DECK
			1	2	3	4	5	6	7	
	STATION	ELEV.	ELEV.	ELEV.	ELEV.	ELEV.	ELEV.	ELEV.	ELEV.	ELEV.
℄ S. ABUT	140+66.35	1176.26	1176.32	1176.50	1176.68	1176.86	1176.98	1176.80	1176.62	1176.55
0.1 L POINT	140+77.61	1176.32	1176.37	1176.55	1176.73	1176.92	1177.04	1176.86	1176.67	1176.60
0.2 L POINT	140+88.88	1176.38	1176.43	1176.61	1176.79	1176.97	1177.09	1176.91	1176.73	1176.66
0.3 L POINT	141+00.14	1176.43	1176.48	1176.67	1176.85	1177.03	1177.15	1176.97	1176.79	1176.72
0.4 L POINT	141+11.40	1176.49	1176.54	1176.72	1176.90	1177.09	1177.21	1177.03	1176.84	1176.77
0.5 L POINT	141+22.66	1176.54	1176.60	1176.78	1176.96	1177.14	1177.26	1177.08	1176.90	1176.83
0.6 L POINT	141+33.93	1176.60	1176.65	1176.83	1177.02	1177.20	1177.32	1177.14	1176.96	1176.88
0.7 L POINT	141+45.19	1176.66	1176.71	1176.89	1177.07	1177.25	1177.38	1177.19	1177.01	1176.94
0.8 L POINT	141+56.45	1176.71	1176.77	1176.95	1177.13	1177.31	1177.43	1177.25	1177.07	1177.00
0.9 L POINT	141+67.71	1176.77	1176.82	1177.00	1177.19	1177.37	1177.49	1177.31	1177.13	1177.05
℄ PIER 1	141+78.98	1176.83	1176.88	1177.06	1177.24	1177.42	1177.54	1177.36	1177.18	1177.11
0.1 L POINT	141+90.30	1176.88	1176.93	1177.12	1177.30	1177.48	1177.60	1177.42	1177.24	1177.17
0.2 L POINT	142+01.63	1176.94	1176.99	1177.17	1177.35	1177.54	1177.66	1177.48	1177.29	1177.22
0.3 L POINT	142+12.95	1177.00	1177.05	1177.23	1177.41	1177.59	1177.71	1177.53	1177.35	1177.28
0.4 L POINT	142+24.28	1177.05	1177.10	1177.29	1177.47	1177.65	1177.77	1177.59	1177.41	1177.34
0.5 L POINT	142+35.60	1177.11	1177.16	1177.34	1177.52	1177.71	1177.83	1177.65	1177.46	1177.39
0.6 L POINT	142+46.93	1177.17	1177.22	1177.40	1177.58	1177.76	1177.88	1177.70	1177.52	1177.45
0.7 L POINT	142+58.25	1177.22	1177.27	1177.46	1177.64	1177.82	1177.94	1177.76	1177.58	1177.51
0.8 L POINT	142+69.58	1177.28	1177.33	1177.51	1177.69	1177.88	1178.00	1177.82	1177.63	1177.56
0.9 L POINT	142+80.90	1177.34	1177.39	1177.57	1177.75	1177.93	1178.05	1177.87	1177.69	1177.62
℄ PIER 2	142+92.23	1177.39	1177.44	1177.63	1177.81	1177.99	1178.11	1177.93	1177.75	1177.68
0.1 L POINT	143+03.55	1177.45	1177.50	1177.68	1177.86	1178.05	1178.17	1177.99	1177.80	1177.73
0.2 L POINT	143+14.88	1177.51	1177.56	1177.74	1177.92	1178.10	1178.22	1178.04	1177.86	1177.79
0.3 L POINT	143+26.20	1177.56	1177.61	1177.80	1177.98	1178.16	1178.28	1178.10	1177.92	1177.85
0.4 L POINT	143+37.53	1177.62	1177.67	1177.85	1178.03	1178.22	1178.34	1178.16	1177.97	1177.90
0.5 L POINT	143+48.85	1177.68	1177.73	1177.91	1178.09	1178.27	1178.39	1178.21	1178.03	1177.96
0.6 L POINT	143+60.18	1177.73	1177.78	1177.97	1178.15	1178.33	1178.45	1178.27	1178.09	1178.02
0.7 L POINT	143+71.50	1177.79	1177.84	1178.02	1178.20	1178.39	1178.51	1178.33	1178.14	1178.07
0.8 L POINT	143+82.83	1177.85	1177.90	1178.08	1178.26	1178.44	1178.56	1178.38	1178.20	1178.13
0.9 L POINT	143+94.15	1177.90	1177.95	1178.14	1178.32	1178.50	1178.62	1178.44	1178.26	1178.19
℄ PIER 3	144+05.48	1177.96	1178.01	1178.19	1178.37	1178.56	1178.68	1178.50	1178.31	1178.24
0.1 L POINT	144+16.80	1178.02	1178.07	1178.25	1178.43	1178.61	1178.73	1178.55	1178.37	1178.30
0.2 L POINT	144+28.13	1178.07	1178.12	1178.31	1178.49	1178.67	1178.79	1178.61	1178.43	1178.36
0.3 L POINT	144+39.45	1178.13	1178.18	1178.36	1178.54	1178.73	1178.85	1178.67	1178.48	1178.41
0.4 L POINT	144+50.78	1178.18	1178.24	1178.42	1178.60	1178.78	1178.90	1178.72	1178.54	1178.47
0.5 L POINT	144+62.10	1178.24	1178.29	1178.48	1178.66	1178.84	1178.96	1178.78	1178.60	1178.53
0.6 L POINT	144+73.43	1178.30	1178.35	1178.53	1178.71	1178.90	1179.02	1178.84	1178.65	1178.58
0.7 L POINT	144+84.75	1178.35	1178.41	1178.59	1178.77	1178.95	1179.07	1178.89	1178.71	1178.64
0.8 L POINT	144+96.08	1178.41	1178.46	1178.65	1178.83	1179.01	1179.13	1178.95	1178.77	1178.70
0.9 L POINT	145+07.40	1178.47	1178.52	1178.70	1178.88	1179.07	1179.19	1179.01	1178.82	1178.75
℄ PIER 4	145+18.73	1178.52	1178.58	1178.76	1178.94	1179.12	1179.24	1179.06	1178.88	1178.81
0.1 L POINT	145+29.99	1178.58	1178.63	1178.81	1179.00	1179.18	1179.30	1179.12	1178.94	1178.86
0.2 L POINT	145+41.25	1178.64	1178.69	1178.87	1179.05	1179.23	1179.36	1179.17	1178.99	1178.92
0.3 L POINT	145+52.51	1178.69	1178.75	1178.93	1179.11	1179.29	1179.41	1179.23	1179.05	1178.98
0.4 L POINT	145+63.78	1178.75	1178.80	1178.98	1179.17	1179.35	1179.47	1179.29	1179.11	1179.03
0.5 L POINT	145+75.04	1178.81	1178.86	1179.04	1179.22	1179.40	1179.53	1179.34	1179.16	1179.09
0.6 L POINT	145+86.30	1178.86	1178.91	1179.10	1179.28	1179.46	1179.58	1179.40	1179.22	1179.15
0.7 L POINT	145+97.56	1178.92	1178.97	1179.15	1179.33	1179.52	1179.64	1179.46	1179.27	1179.20
0.8 L POINT	146+08.83	1178.98	1179.03	1179.21	1179.39	1179.57	1179.69	1179.51	1179.33	1179.26
0.9 L POINT	146+20.09	1179.03	1179.08	1179.27	1179.45	1179.63	1179.75	1179.57	1179.39	1179.32
℄ N. ABUT	146+31.35	1179.09	1179.14	1179.32	1179.50	1179.69	1179.81	1179.63	1179.44	1179.37

ELEVATIONS SHOWN ARE FINISHED GRADE ELEVATIONS.

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

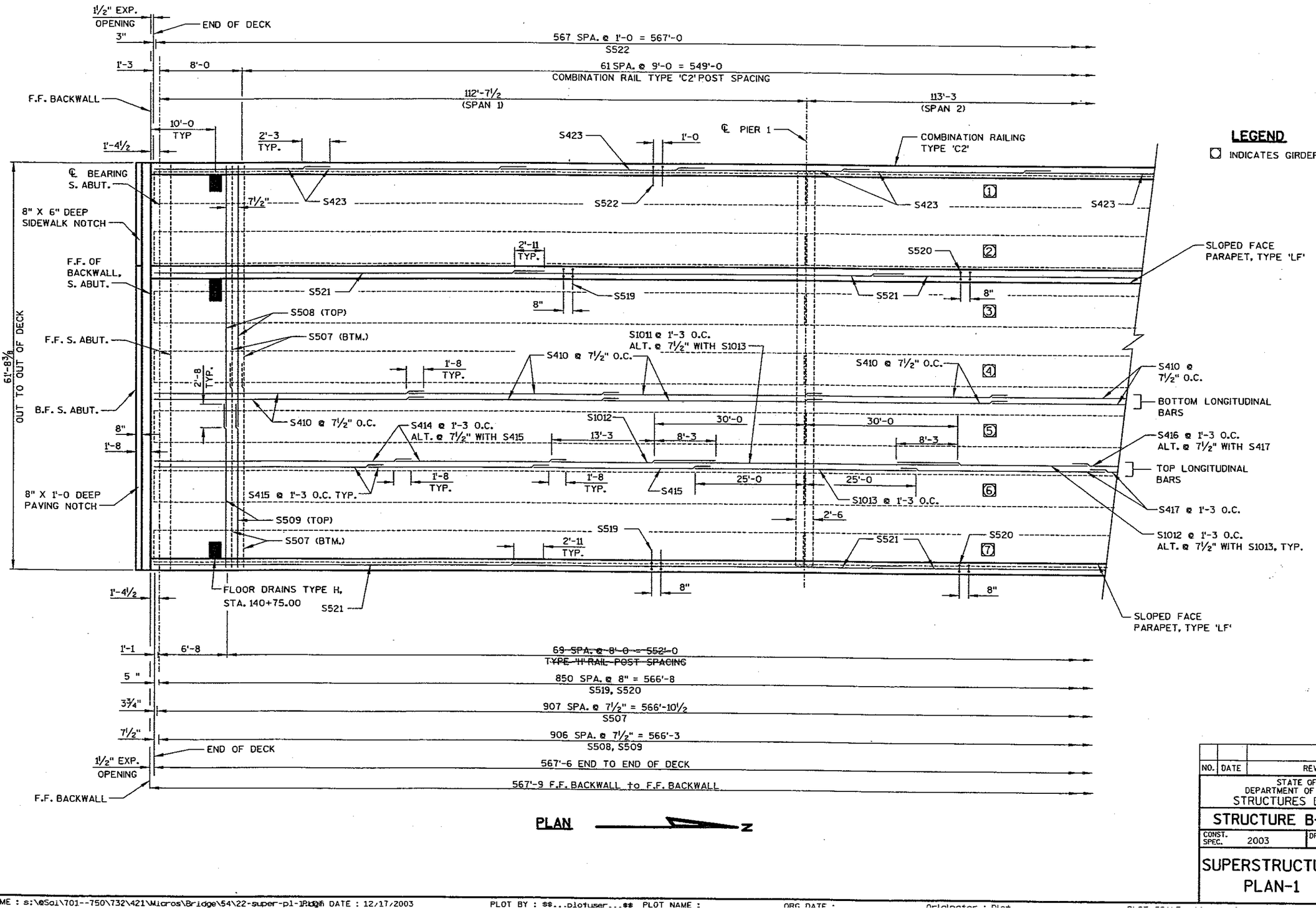
STRUCTURE B-37-373

CONST. SPEC.	2003	DRAWN BY	JAR	PLANS CK'D.	DJW

SUPERSTRCTURE ELEVATIONS

SHEET 21

238



LEGEND

□ INDICATES GIRDER NUMBER.

PLAN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

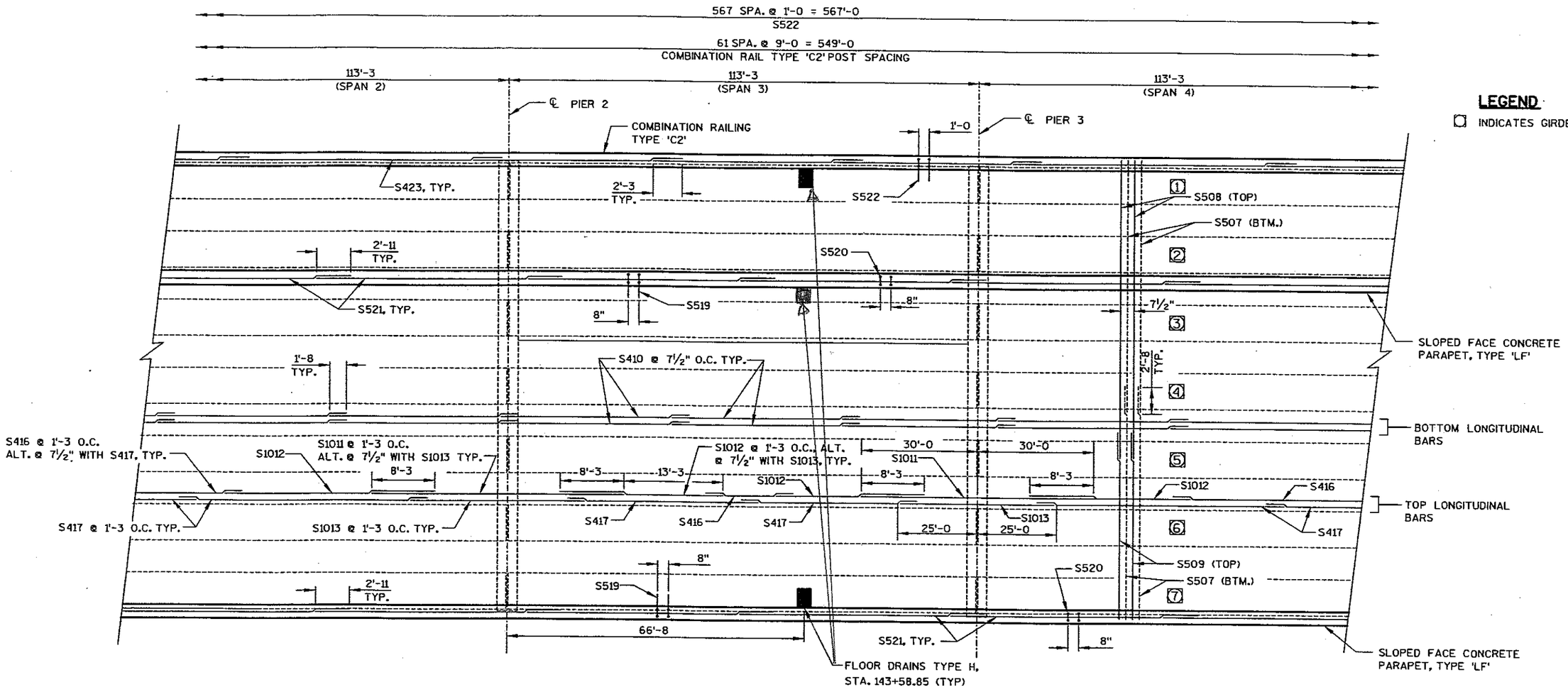
CONST. SPEC.	2003	DRAWN BY	ADW	PLANS CK'D.	DJW

SUPERSTRUCTURE PLAN-1

SHEET 22

239

8



LEGEND

□ INDICATES GIRDER NUMBER.

~~69 SPA. @ 8'-0 = 552'-0~~
~~TYPE 'H' RAIL POST SPACING~~

850 SPA. @ 8" = 566'-8
S519, S520

907 SPA. @ 7½" = 566'-10½
S507

906 SPA. @ 7½" = 566'-3
S508, S509

567'-6 END TO END OF DECK

567'-9 F.F. BACKWALL TO F.F. BACKWALL

PLAN

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

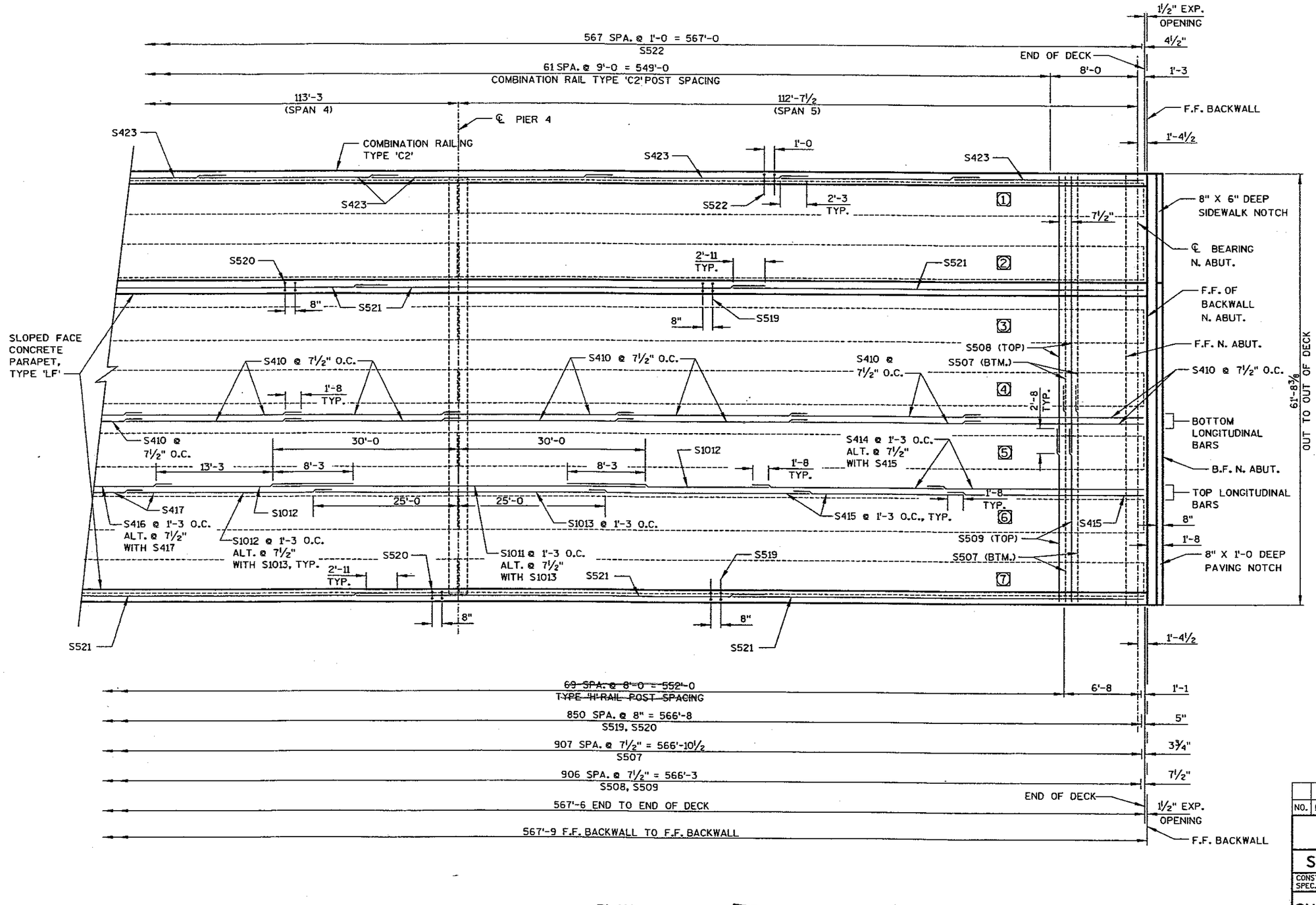
CONST. SPEC.	2003	DRAWN BY	ADW	PLANS CK'D.	DJW

SUPERSTRUCTURE PLAN-2

SHEET 23

240

8



LEGEND

☐ INDICATES GIRDER NUMBER.

PLAN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

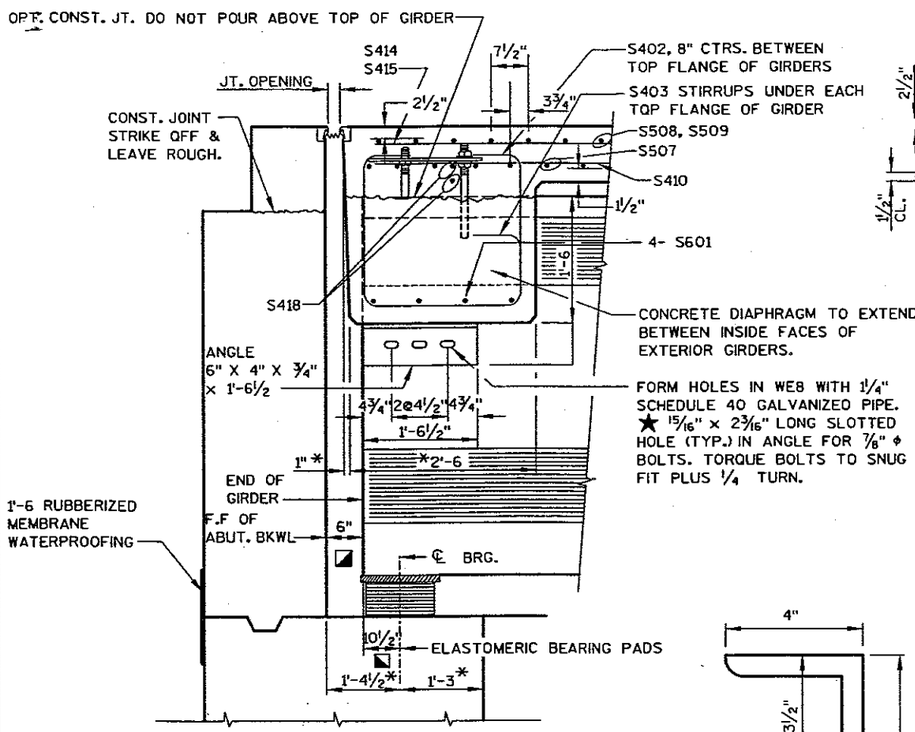
CONST. SPEC.	2003	DRAWN BY	ADW	PLANS CK'D.	DJW

SUPERSTRUCTURE PLAN-3

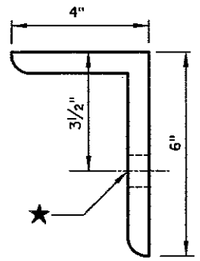
SHEET 24

24(

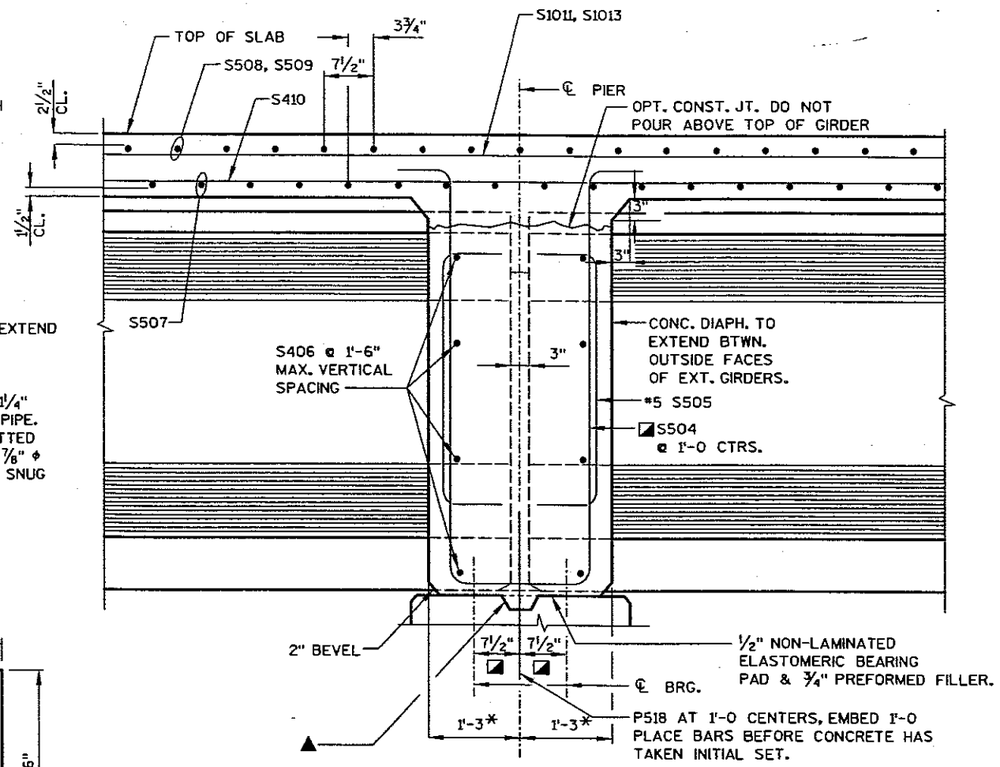
8



ABUTMENT DIAPHRAGM



ANGLE



DIAPHRAGM AT ½" ELASTOMERIC BEARING
(FIXED PIERS 2,3)

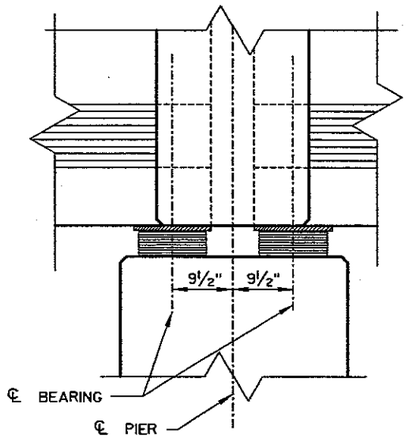
NOTES

▲ KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2"X6".

◪ THESE DIMENSIONS PARALLEL TO GIRDER.

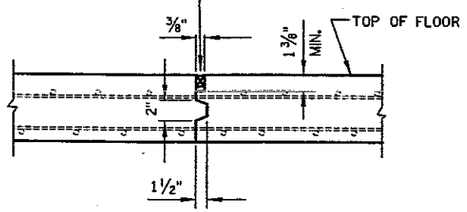
✳ DIMENSION IS TAKEN NORMAL TO SUBSTRUCTURE UNITS.

╪ TRANSVERSE CONSTRUCTION JOINT AS DETAILED IF REQUIRED



DIAPHRAGM AT ELASTOMERIC BEARING
(EXPANSION PIERS 1,4)

PREFORMED ELASTOMERIC JOINT SEAL (COMPRESSED) EXTEND SEAL 4" BEYOND GUTTERLINE AND SEAL ENDS. USE UNCOMPRESSED SEAL DIMENSIONS OF 3/16" WIDTH X 11/16" HEIGHT WITH A TOLERANCE OF PLUS 1/16" ONLY.



╪ CONSTRUCTION JOINT SECTION

NOTE: CONSTRUCTION JOINT SHALL NOT BE PERMITTED EXCEPT BY THE STRUCTURES DEVELOPMENT SECTION. IF APPROVED, LOCATE THE TRANSVERSE JOINT AT THE 0.75 SPAN POINT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

CONST. SPEC.	2003	DRAWN BY	KAS	PLANS CK'D.	DJW

SUPERSTRUCTURE DETAILS - 1

SHEET 25

242

8

STATE PROJECT NUMBER

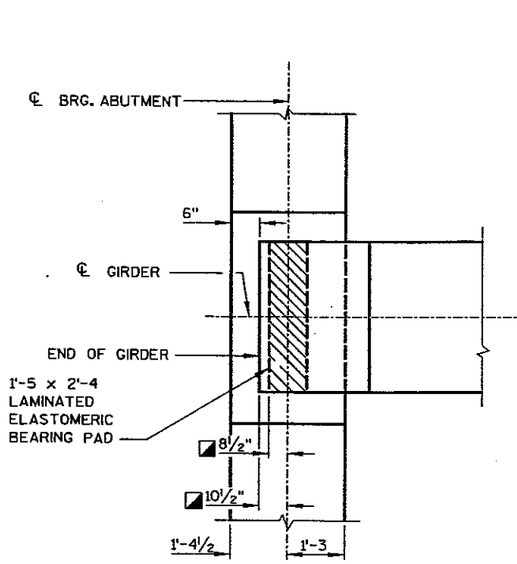
6675-00-71

NOTES

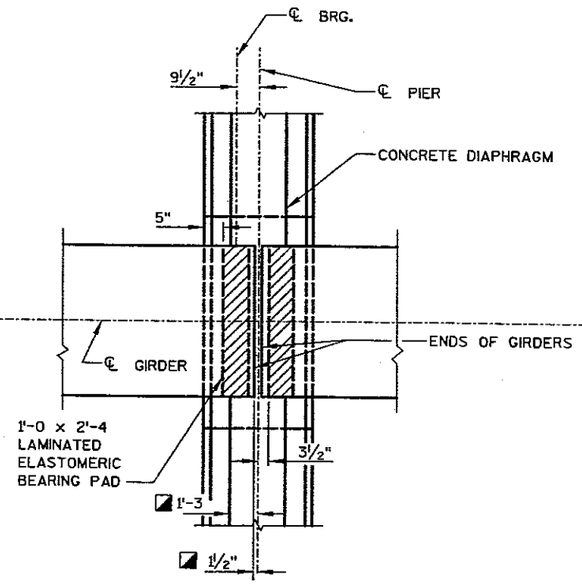
KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2"X6".

◪ THESE DIMENSIONS PARALLEL TO GIRDER.

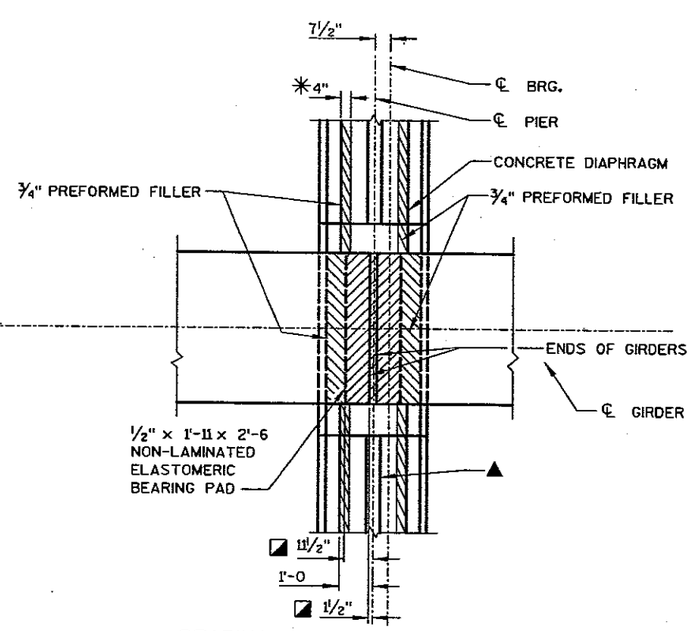
✳ DIMENSION IS TAKEN NORMAL TO SUBSTRUCTURE UNITS.



BEARING PAD AT ABUTMENTS



BEARING PAD AT EXPANSION PIERS 1, 4



BEARING PAD AT FIXED PIERS 2,3

BEARING PAD DETAILS

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

CONST. SPEC.	DRAWN BY	PLANS CK'D.
2003	KAS	DJW

SUPERSTRUCTURE DETAIL-2

SHEET 26

243

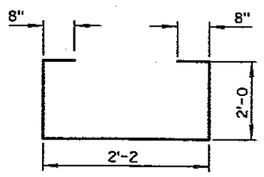
FILE NAME : s:\eSdi\701--750\732\421\Micros\Bridge\54\26-super-dti-2.dgn DATE : 12/17/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Orientation : Plot

SUPERSTRUCTURE
BILL OF BARS

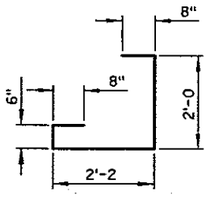
COATED 346,575 LBS

MARK	NO. REQ'D.	LENGTH	BENT	COAT	LOCATION
S601	96	5'-11		X	DIAPHRAGM - ABUT. - HORIZ. - BOTTOM
S402	96	7'-2	X	X	DIAPHRAGM - ABUT. - VERT. - STIRRUPS
S403	96	5'-8	X	X	DIAPHRAGM - ABUT - VERT. - STIRRUPS
S504	144	13'-2	X	X	DIAPHRAGM - PIER - VERT. - STIRRUPS
S505	96	4'-7	X	X	DIAPHRAGM - PIER - VERT. - STIRRUPS
S406	384	5'-2		X	DIAPHRAGM - PIER - HORIZ.
S507	1816	32'-0		X	DECK - TRANS. - BOTTOM.
S508	907	36'-7		X	DECK - TRANS. - TOP
S509	907	27'-3		X	DECK - TRANS. - TOP
S410	1485	39'-5		X	DECK - LONGIT. - BOTTOM
S1011	200	60'-0		X	DECK - LONGIT. - TOP - PIERS
S1012	400	21'-6		X	DECK - LONGIT. - TOP - PIERS
S1013	196	50'-0		X	DECK - LONGIT. - TOP - PIERS
S414	200	37'-0		X	DECK - LONGIT. - TOP - SPAN 1, 5
S415	294	31'-3		X	DECK - LONGIT. - TOP - SPAN 1, 5
S416	150	30'-2		X	DECK - LONGIT. - TOP - SPAN 2, 4
S417	294	34'-2		X	DECK - LONGIT. - TOP - SPAN 2, 4
S418	8	32'-0		X	ABUT - HORIZ. - STRIP SEAL
S519	1702	4'-6	X	X	LF PARAPET - VERT. - DOWELS
S520	1702	4'-10	X	X	LF PARAPET - VERT.
S521	100	59'-3		X	LF PARAPET - LONGIT.
S522	568	7'-1	X	X	COMB. RAIL PARAPET - VERT. DOWELS
S423	90	40'-0		X	COMB. RAIL PARAPET - LONGIT.

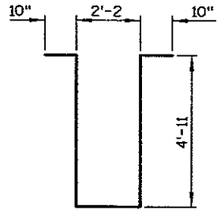
NOTE: THE FIRST ONE OR TWO DIGITS OF A BAR MARK SIGNIFIES THE BAR SIZE. DIMENSIONS FOR BENDING ARE OUT TO OUT OF BAR.



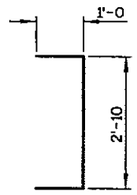
S402



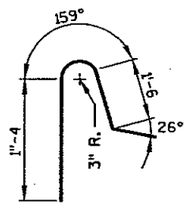
S403



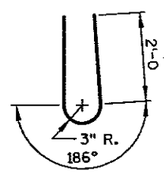
S504



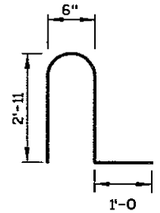
S505



S519



S520



S522

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

CONST. SPEC.	2003	DRAWN BY	KAS	PLANS CK'D.	DJW

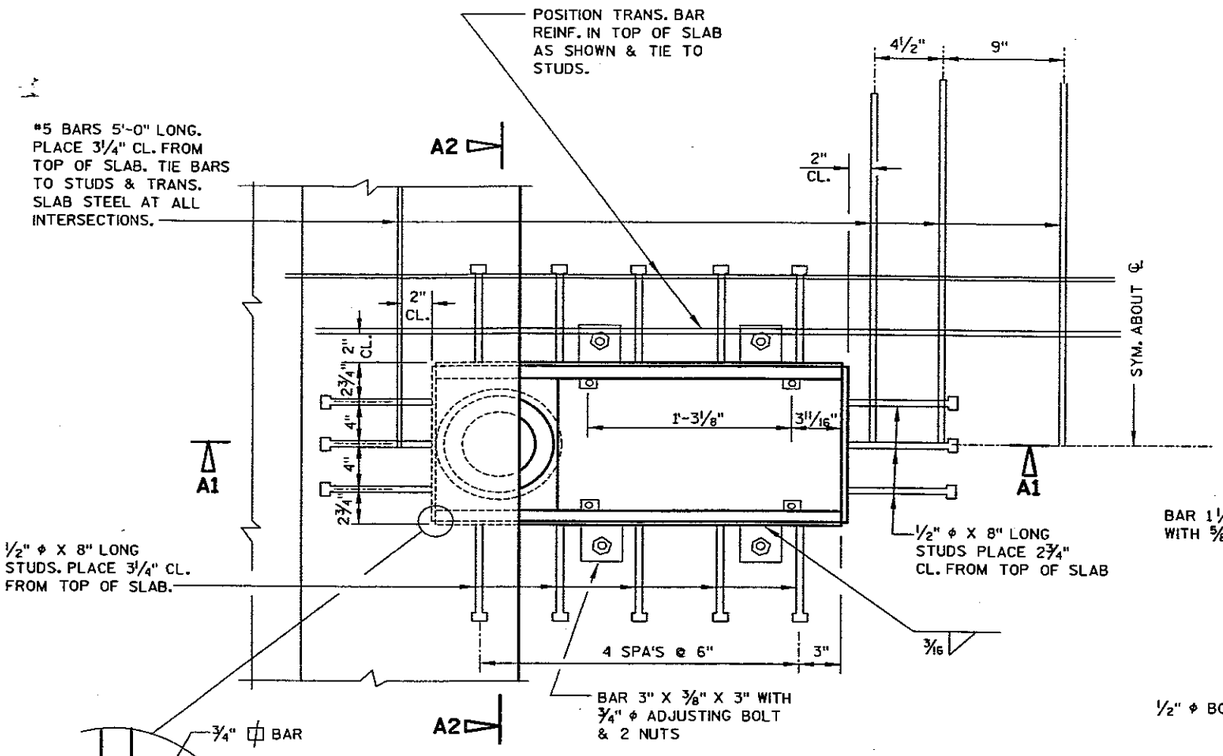
SUPERSTRUCTURE DETAILS - 3

SHEET 27

244

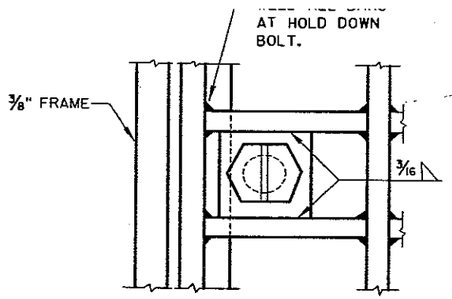
STATE PROJECT NUMBER

6675-00-71

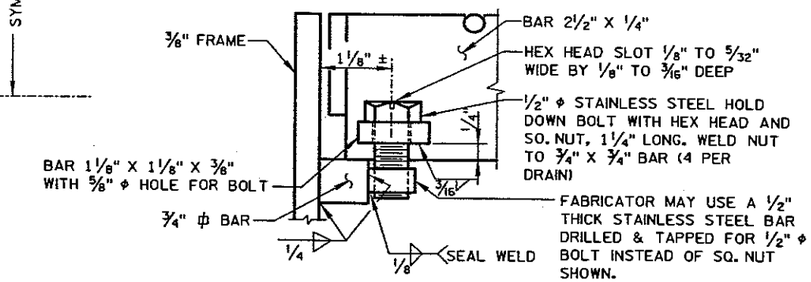


PLAN

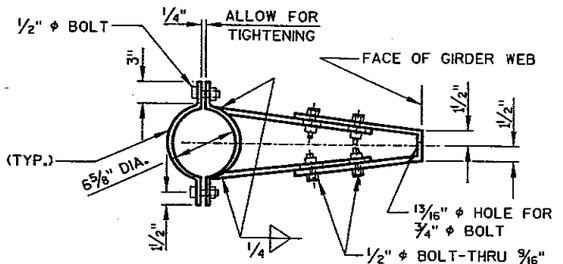
TRANS. & LONGIT. SLAB BAR REINFORCEMENT TO BE CUT A MAX. OF 1" CL. FROM DRAIN FRAME. DISPLACE BARS WHERE POSSIBLE.



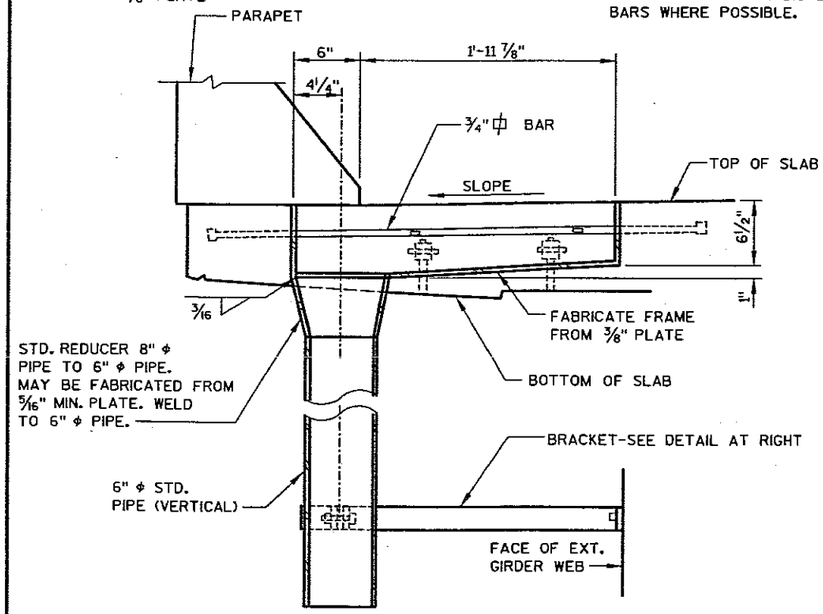
PART PLAN



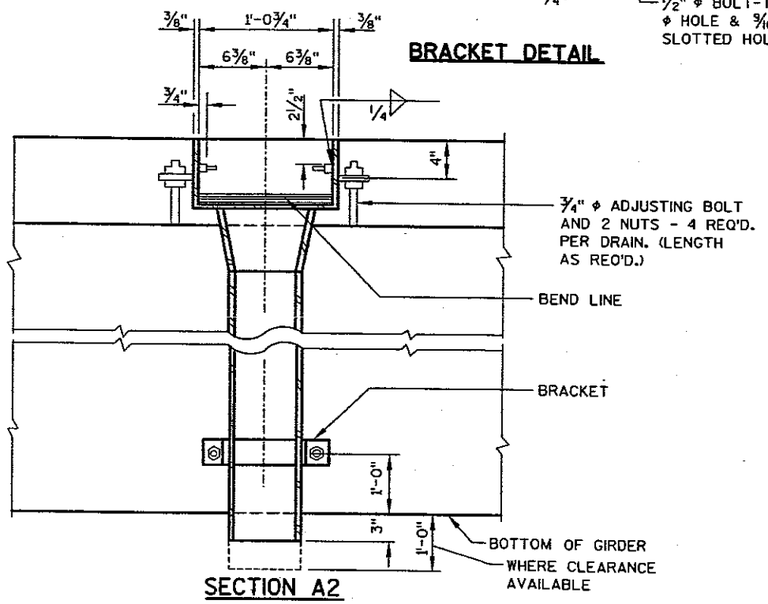
SECTION AT HOLD DOWN BOLT



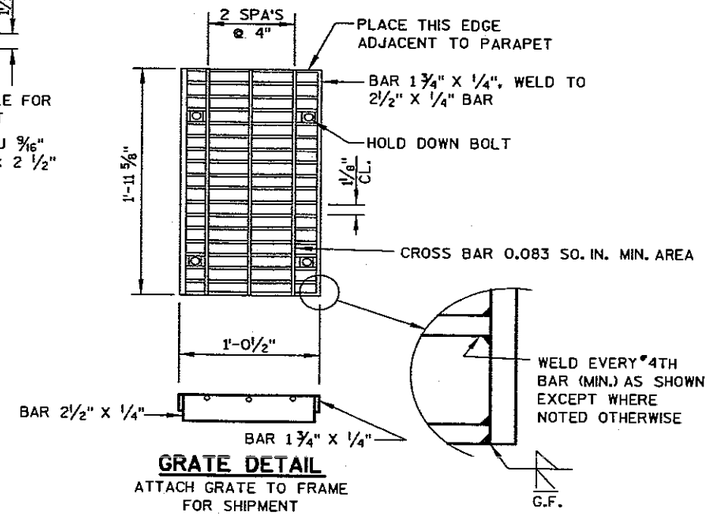
BRACKET DETAIL



SECTION A1



SECTION A2



GRATE DETAIL

ATTACH GRATE TO FRAME FOR SHIPMENT

GENERAL NOTES

ALL DRAIN MATERIAL INCLUDING GRATE, EXCLUDING PIPE & GRATE HOLD DOWN BOLTS, SHALL BE ASTM A36 STEEL.

ALL STEEL SHALL BE GALVANIZED. WELDS SHALL BE MADE WITH LOW HYDROGEN ELECTRODES.

SEAL WELD INSIDE OF DRAIN.

THE CONTRACTOR MAY PROPOSE AN ALTERNATE TYPE OF BRACKET. THE PROPOSED ALTERNATE DETAILS SHALL BE SUBMITTED AND SUBJECT TO THE APPROVAL OF THE ENGINEER.

FLANGED 6" ϕ FIBERGLASS PIPE CONFORMING TO ASTM D2996, GRADE 1, CLASS A, MAY BE USED AS AN ALTERNATE TO GALVANIZED ST'D. PIPE CONFORMING TO ASTM A53.

PRIOR TO GALVANIZING A NO. 6 BLAST CLEANING IS REQ'D.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

CONST. SPEC.	2003	DRAWN BY	ADW	PLANS CK'D.	DJW

FLOOR DRAIN TYPE 'H'

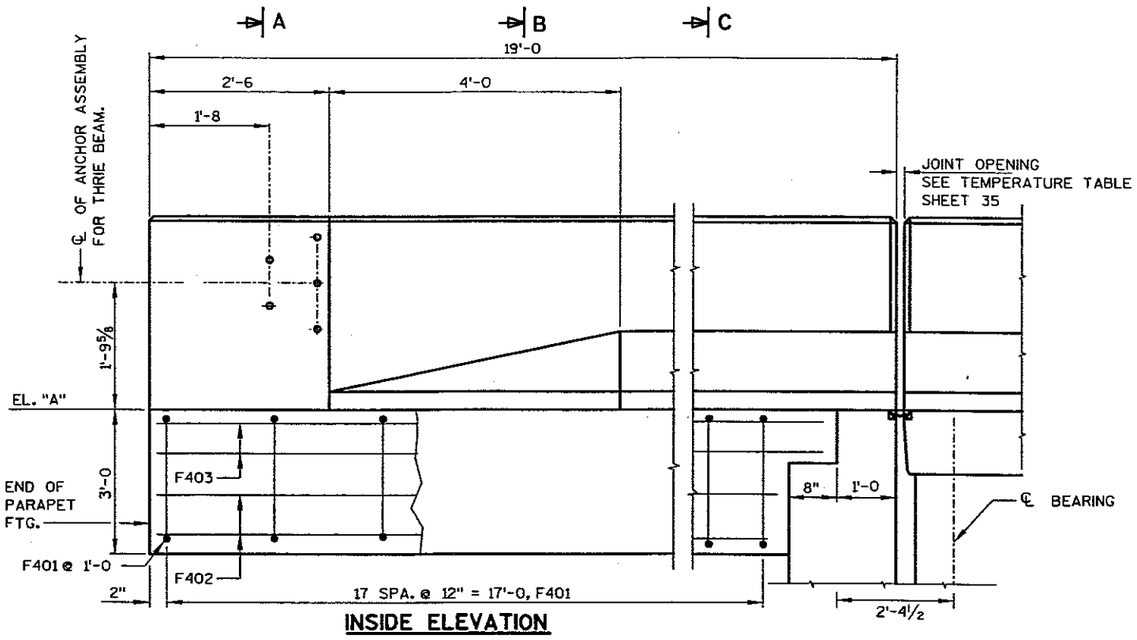
SHEET 28

245

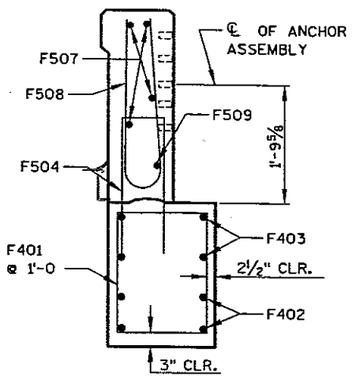
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FILE NAME : s:\eSqi\701--750\732\421\Micros\Bridge\54\28-floor-drn-PLOT DATE : 12/17/2003
PLOT BY : $$...plotuser...$$ PLOT NAME :

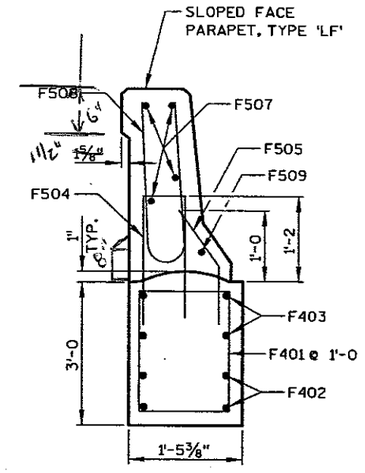
6675-00-71



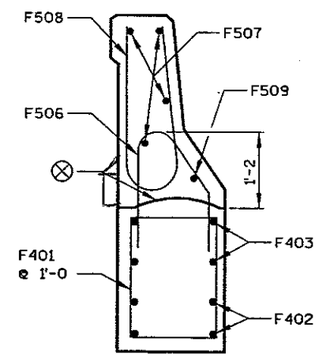
INSIDE ELEVATION



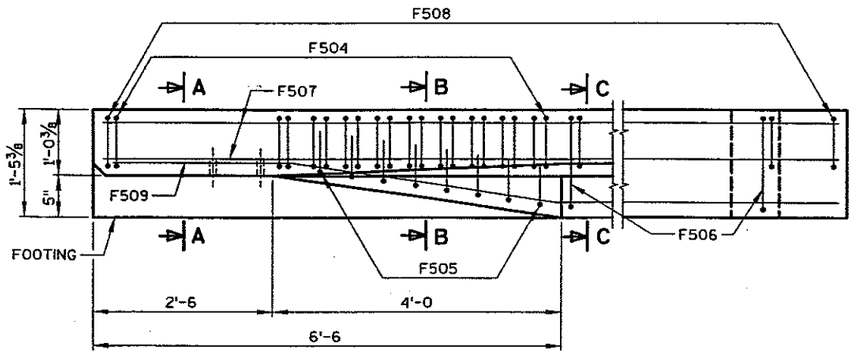
SECTION A



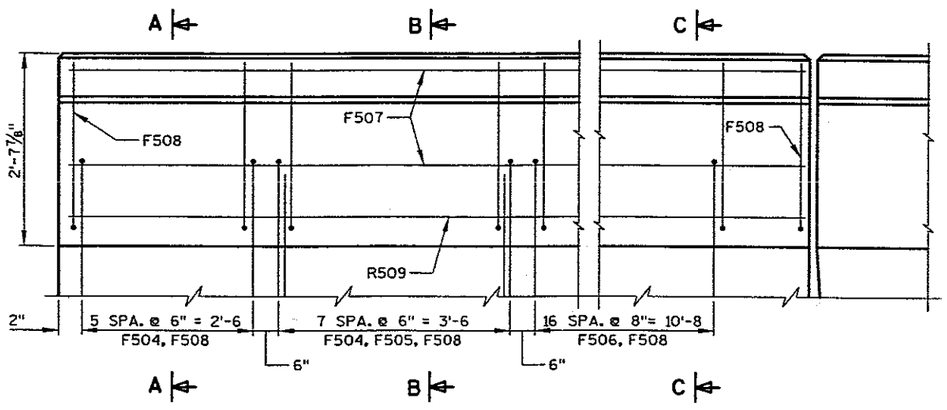
SECTION B



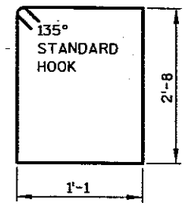
SECTION C



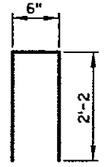
PLAN



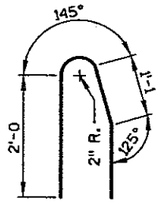
OUTSIDE ELEVATION



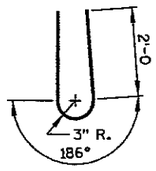
F401



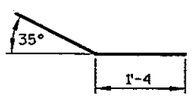
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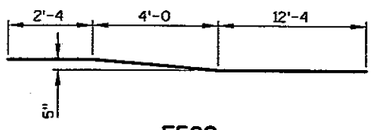
F506



F508



F505



F509

PARAPET FOOTING
BILL OF BARS — COATED 1225 LBS

MARK	NO. REQ'D	LENGTH	BENT	COAT	LOCATION
F401	36	7'-11	X	X	PARAPET FOOTING - VERT.
F402	8	17'-0		X	PARAPET FOOTING - HORIZ.
F403	8	17'-8		X	PARAPET FOOTING - HORIZ.
F504	28	4'-7	X	X	PARAPET - VERT.
F505	16	2'-4	X	X	PARAPET - VERT.
F506	34	4'-6	X	X	PARAPET - VERT.
F507	8	18'-8		X	PARAPET - HORIZ.
F508	64	4'-10	X	X	PARAPET - VERT.
F509	2	18'-8	X	X	PARAPET - HORIZ.

NOTE: THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE BAR SIZE. BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

ELEVATION TABLE

PARAPET	EL. 'A'
SOUTH	1176.48
NORTH	1177.49

NOTES

SEE SHEET 30 FOR SLOPED FACE PARAPET, TYPE 'LF' DETAILS.

⊗ CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

CONST. SPEC. 2003	DRAWN BY ADW	PLANS CK'D. DJW

PARAPET FOOTING

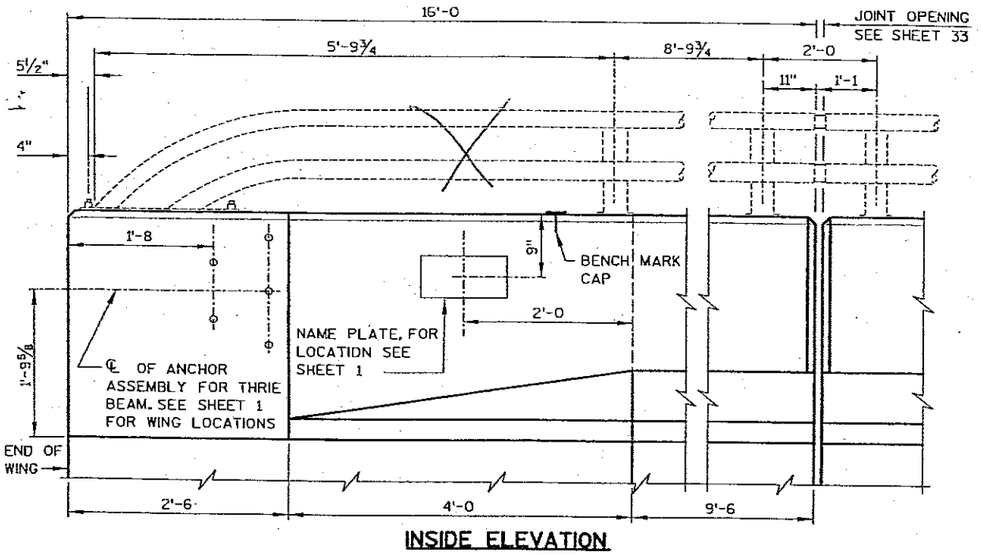
SHEET 29

246

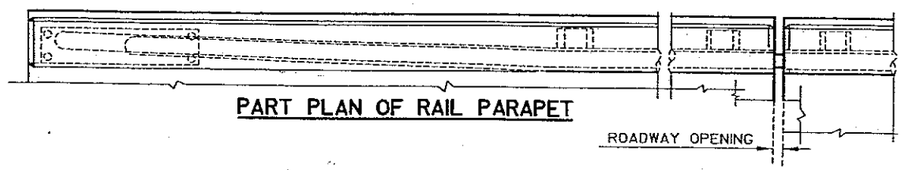
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STATE PROJECT NUMBER

6675-00-71

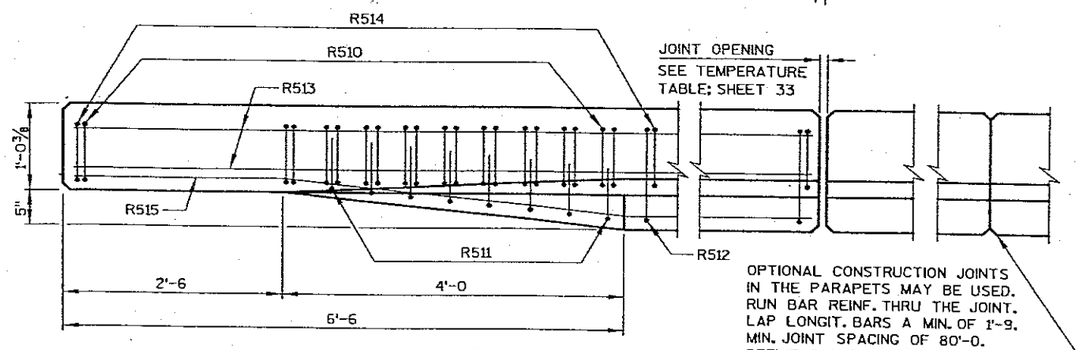


INSIDE ELEVATION



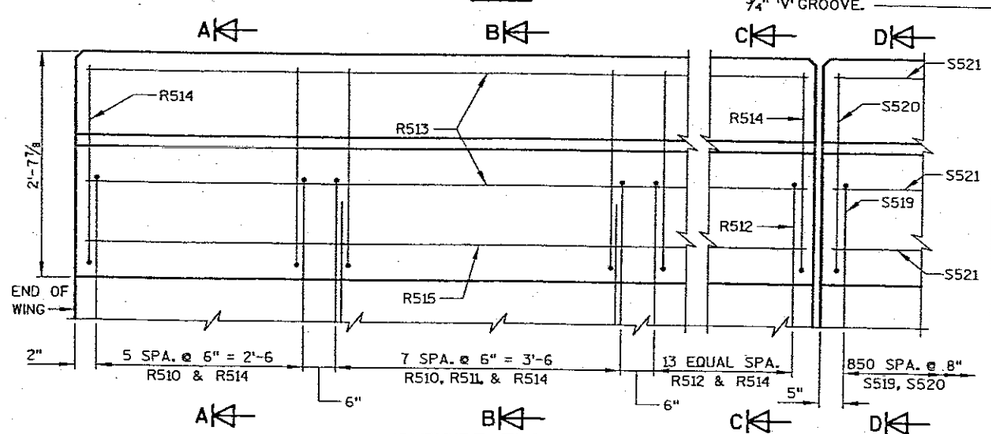
PART PLAN OF RAIL PARAPET

ROADWAY OPENING

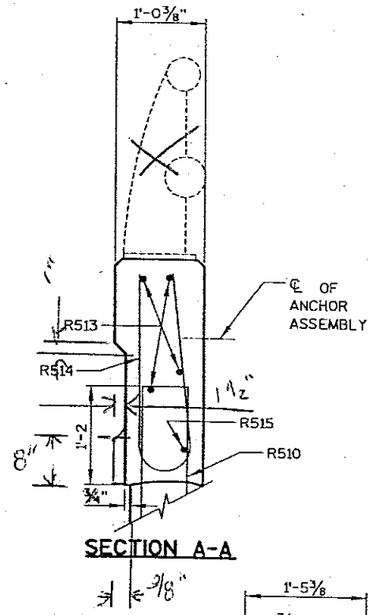


OPTIONAL CONSTRUCTION JOINTS IN THE PARAPETS MAY BE USED. RUN BAR REINF. THRU THE JOINT. LAP LONGIT. BARS A MIN. OF 1'-9. MIN. JOINT SPACING OF 80'-0. DEFINE CONST. JOINT WITH A ¾" 'V' GROOVE.

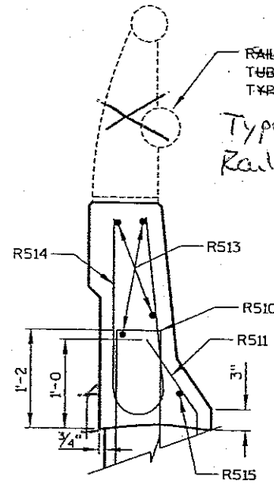
PLAN



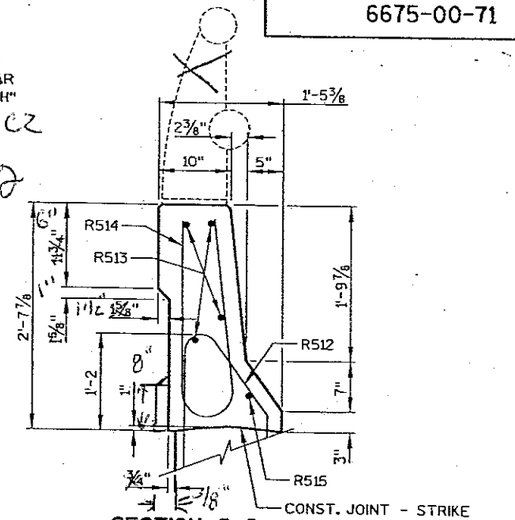
OUTSIDE ELEVATION



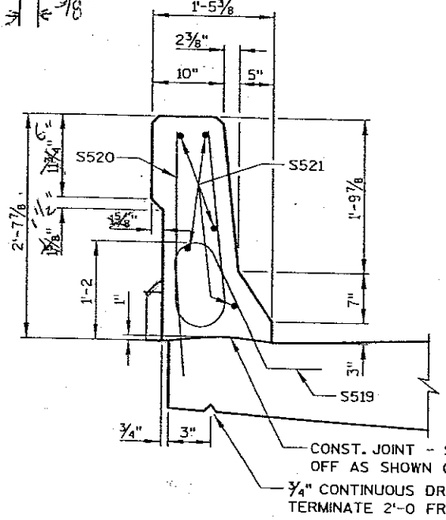
SECTION A-A



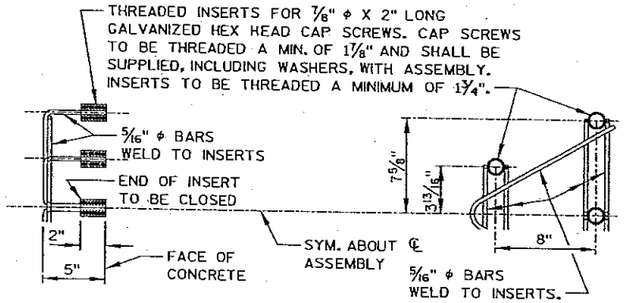
SECTION B-B



SECTION C-C



SECTION D-D THRU PARAPET ON BRIDGE

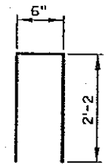


DETAIL OF ANCHOR ASEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

SEE SHEET 1 FOR LOCATION.

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.



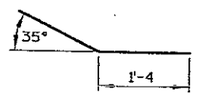
R510

WING 1 AND 4 PARAPET
BILL OF BARS

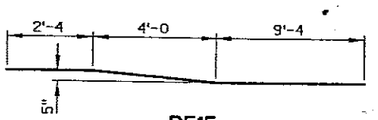
COATED 750 LBS

MARK	NO. REQ'D	LENGTH	BENT	COAT	LOCATION
R510	28	4'-7	X	X	PARAPET - VERT.
R511	16	2'-4	X	X	PARAPET - VERT.
R512	28	4'-6	X	X	PARAPET - VERT.
R513	8	15'-8		X	PARAPET - HORIZ.
R514	56	4'-10	X	X	PARAPET - VERT.
R515	2	15'-8	X	X	PARAPET - HORIZ. - BOT.

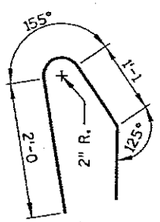
NOTE: THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE BAR SIZE. BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



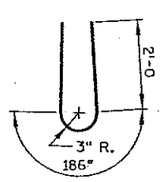
R511



R515



R512



R514

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

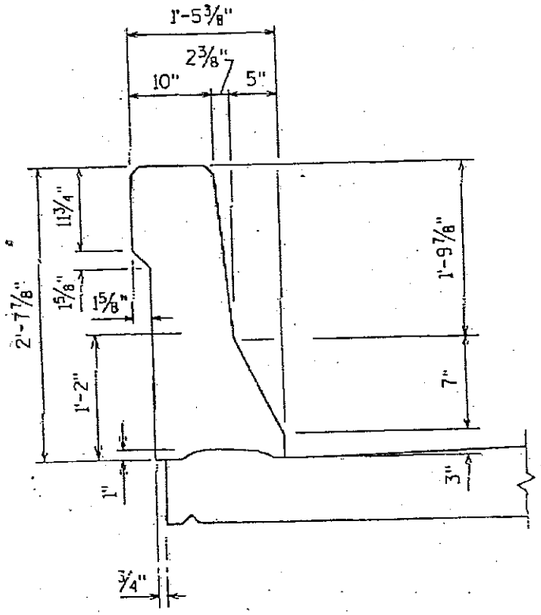
STRUCTURE B-37-373

CONST. SPEC.	2003	DRAWN BY	ADW	PLANS CK'D.	DJW

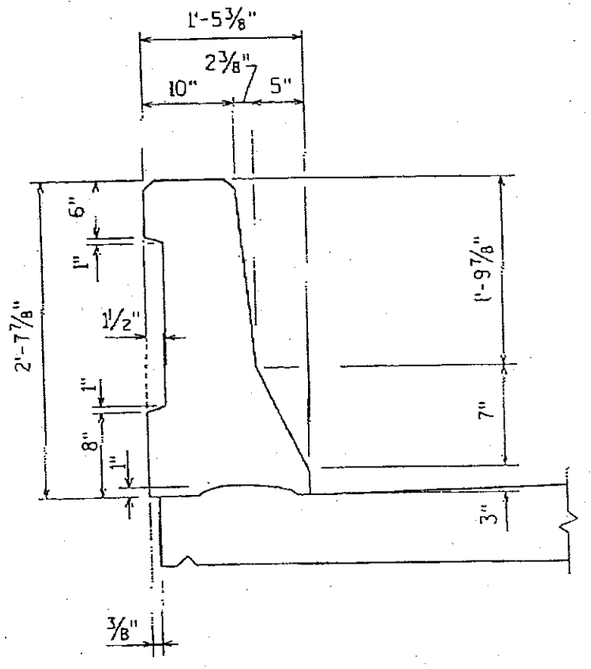
SLOPED FACE PARAPET, TYPE 'H'

SHEET 30

8



STANDARD TYPE 'LF' PARPAPET



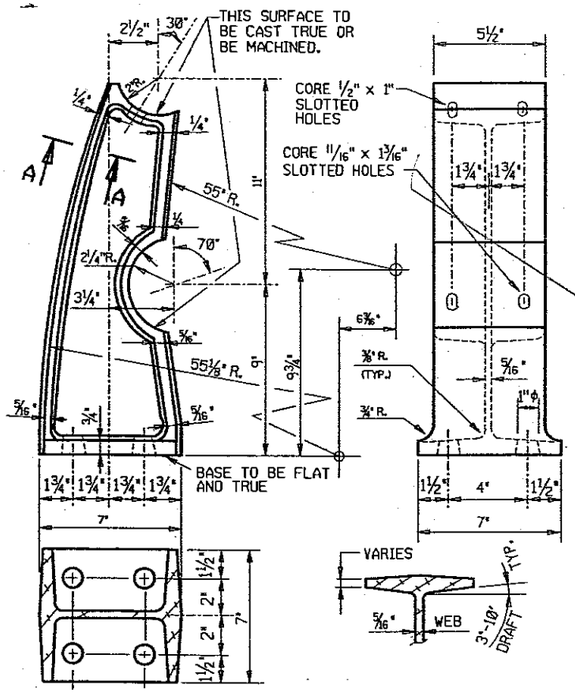
MODIFIED TYPE 'LF' PARAPET

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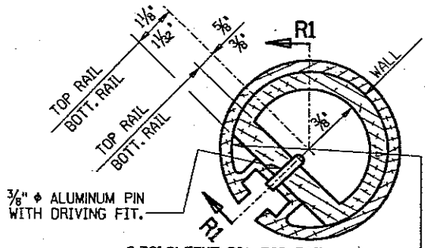
247a

STATE PROJECT NUMBER

6675-00-71

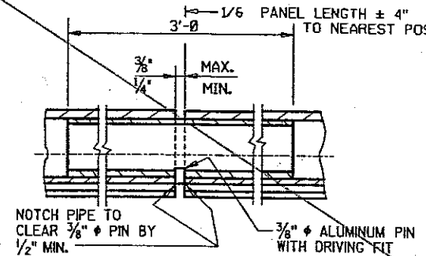


ALUMINUM POST CASTING

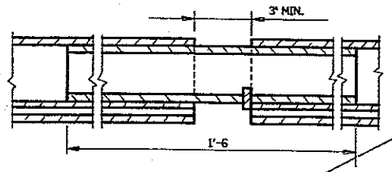


3.70" SLEEVE DIA. TOP RAIL
3.85" SLEEVE DIA. BOTT. RAIL

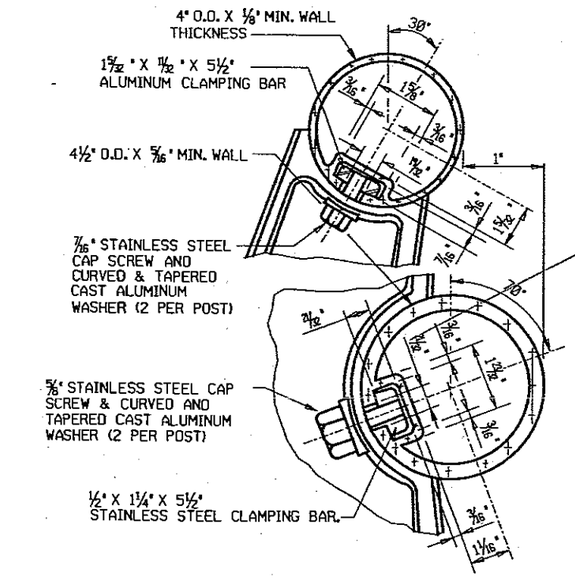
RAIL SPLICE DETAIL



SECTION R1

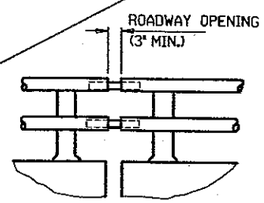


SLEEVE DETAIL AT ABUTMENT



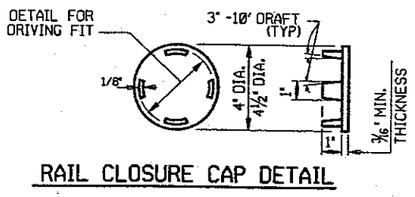
DETAIL OF RAIL ATTACHMENT TO POST

NOTES: MAX. REDUCTION IN DIAMETER OF BENT SECTION SHALL BE 3% WALL THICKNESS OF TUBING SHOWN ABOVE SHALL BE MIN. NOMINAL AVERAGE WALL THICKNESS.
MAX. REDUCTION IN SLOT WIDTH IN BENT TUBING SHALL BE 3/16".

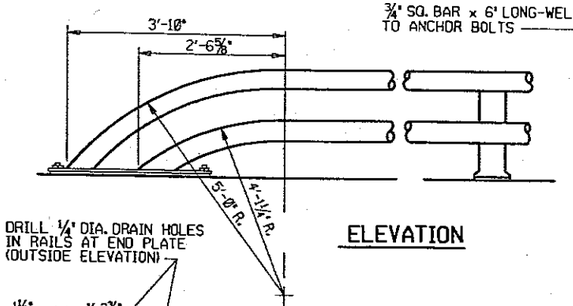


DETAIL AT RAIL OPENINGS

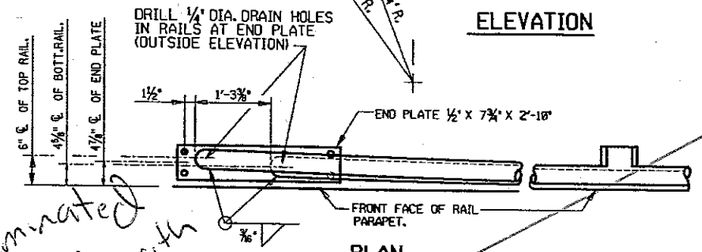
ALL SLEEVE DETAILS SAME AS "RAIL SPLICE DETAIL" UNLESS SHOWN OTHERWISE



RAIL CLOSURE CAP DETAIL



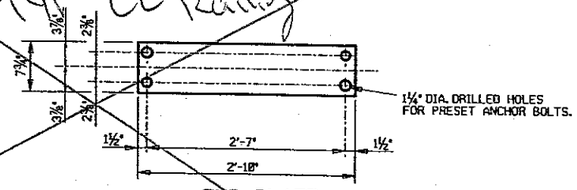
ELEVATION



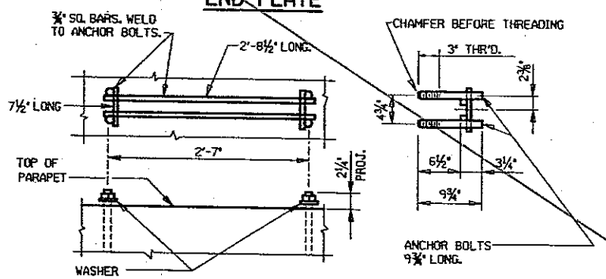
PLAN

Eliminated
Replaced with
Type C Railing

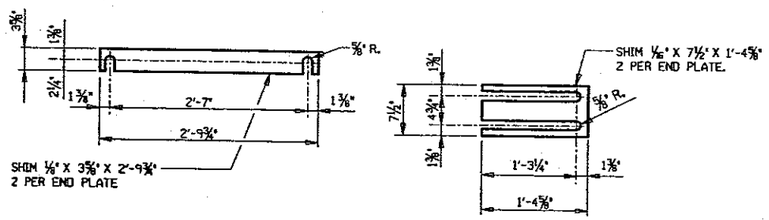
DETAIL OF RAIL BEND AT ABUTMENTS



END PLATE

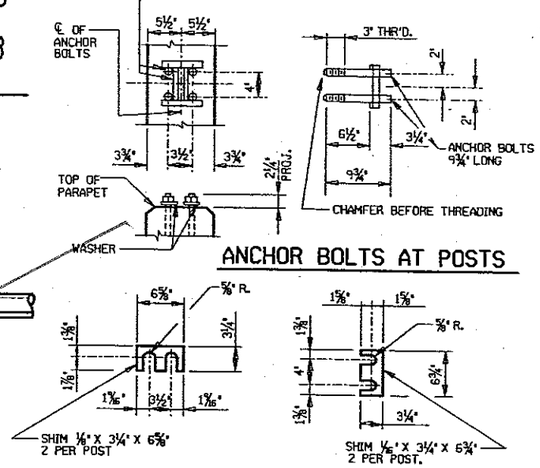


ANCHOR BOLTS AT END PLATE



END PLATE SHIM DETAILS

SHIMS SHALL CONFORM TO SAME MATERIAL AS POSTS



ANCHOR BOLTS AT POSTS

POST SHIM DETAILS

GENERAL NOTES

BID ITEM SHALL BE RAILING TUBULAR, TYPE 'H' WHICH INCLUDES ALL ITEMS SHOWN.

THE SHANK AND ROOT DIAMETER OF THREAD FOR ANCHOR BOLTS SHALL BE A MINIMUM OF ⅝".

SHIMS SHALL CONFORM TO SAME MATERIAL AS POSTS.

RAILS SHALL BE BUILT STRAIGHT AND SPRUNG INTO PLACE FOR STRUCTURES CURVED UP TO 3°. FOR STRUCTURES CURVED GREATER THEN 3° RAILS SHALL BE CURVED TO FIT.

RAILINGS SHALL BE FABRICATED IN 2 AND 3 PANEL LENGTHS.

RAILING POSTS SHALL BE SET NORMAL TO GRADE LINE.

ALL POST SPACINGS ARE MEASURED HORIZONALLY ALONG CENTERLINE OF THE POST BASE.

SHIMS SHALL BE USED UNDER POSTS AND END PLATES WHERE REQ'D FOR ALIGNMENT.

FILL ALL EXPOSED OPENINGS BETWEEN SHIMS AND POST ANCHOR BOLT HOLES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ANCHOR BOLTS, NUTS AND WASHERS SHALL BE STAINLESS STEEL.

SEE SHEET 20 - 22 AND 28 FOR RAIL POST SPACING.

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

CONST. SPEC.	2003	DRAWN BY	ADW	PLANS CK'D.	DJW

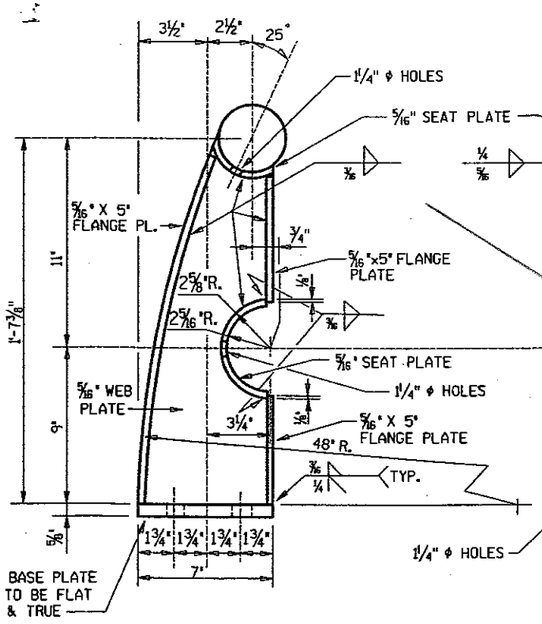
TUBULAR RAILING TYPE "H" (ALUM.)

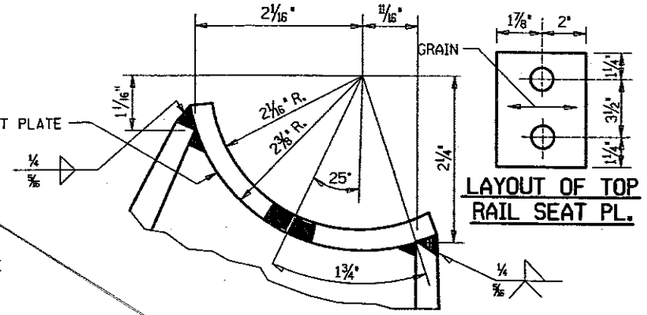
SHEET 31

248

FILE NAME : s:\eSal\701--750\732\421\Micros\Bridge\54731-H-Rail ALUM.dgn DATE : 12/17/2003 PLOT BY :

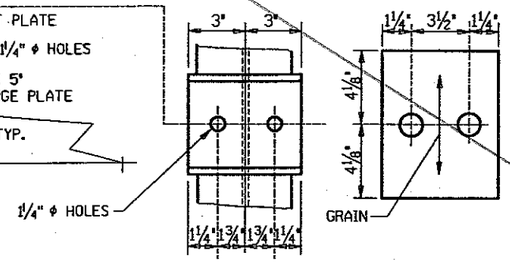
6675-00-71



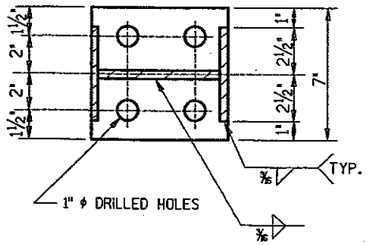


TOP RAIL SEAT PLATE

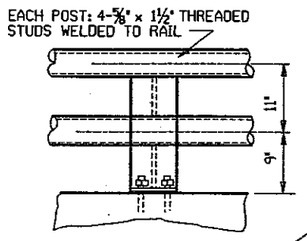
LAYOUT OF TOP RAIL SEAT PL.



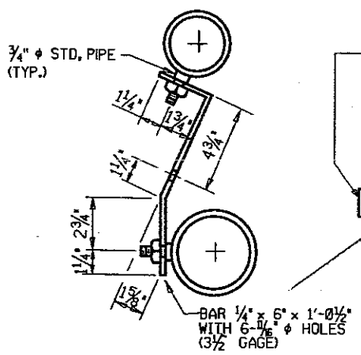
LAYOUT OF BOTTOM RAIL SEAT PL.



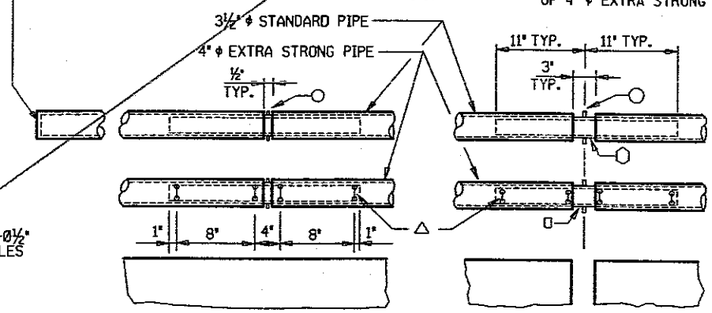
STEEL POST DETAILS



RAIL TO POST CONN.



SHIPPING BAR



FIELD ERECTION JOINT DETAIL

DETAIL AT RAIL OPENING

4-¾" STD. WASHERS (BENT) & 4-⅝" HEX NUTS

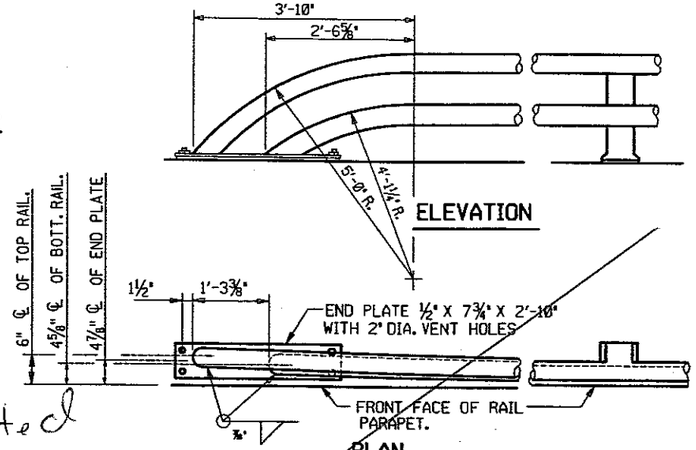
2⅜" R.

ALL SLEEVE DETAILS SAME AS "FIELD ERECTION JOINT DETAIL" UNLESS SHOWN OTHERWISE

LEGEND

- ○ 5/16" x 3/8" WELDED STUDS
- ⬡ 3" ϕ STD. PIPE x 1'-10 LONG
- □ 3" ϕ EXTRA STRONG PIPE x 1'-10 LONG
- △ ½" ϕ WELD BEADS AT 1/3 PTS. ON PIPE 11" CIRCUMF. GRIND BEADS SO THAT SLEEVE FITS FREELY IN THE I.D. OF 4" ϕ EXTRA STRONG PIPE.

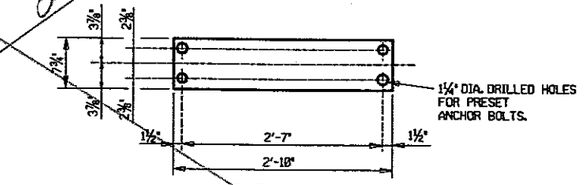
Eliminated
Replaced with
Type 'C2'
Railing



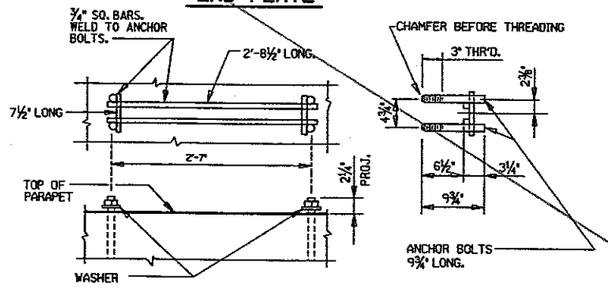
ELEVATION

PLAN

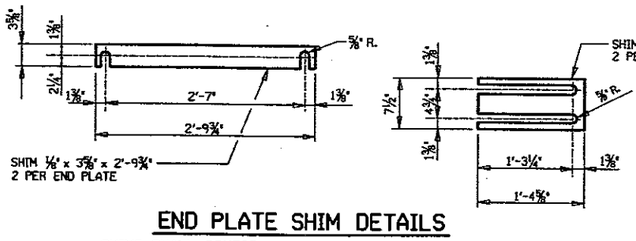
DETAIL OF RAIL BEND AT ABUTMENTS



END PLATE

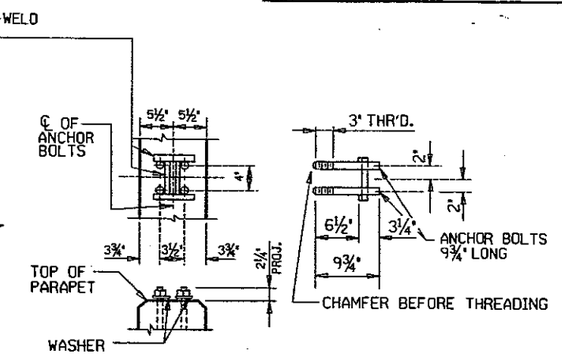


ANCHOR BOLTS AT END PLATE

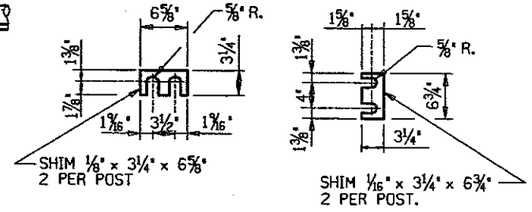


END PLATE SHIM DETAILS

SHIMS SHALL CONFORM TO SAME MATERIAL AS POSTS



ANCHOR BOLTS AT POSTS



POST SHIM DETAILS

GENERAL NOTES

BID ITEM SHALL BE RAILING TUBULAR, TYPE 'H' WHICH INCLUDES ALL ITEMS SHOWN.

RAILINGS SHALL BE FABRICATED IN 2 AND 3 PANEL LENGTHS.

RAILING POSTS SHALL BE SET NORMAL TO GRADE LINE.

ALL POST SPACINGS ARE MEASURED HORIZONALLY ALONG CENTERLINE OF THE POST BASE.

SHIMS SHALL BE USED UNDER POSTS AND END PLATES WHERE REQ'D FOR ALIGNMENT.

FILL ALL EXPOSED OPENINGS BETWEEN SHIMS AND POST ANCHOR BOLTS HOLES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ANCHOR BOLTS, NUTS AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM A307. IF A307 IS USED ELECTRO-GALVANIZE NUTS, WASHERS & TOP 3½" OF ANCHOR BOLTS.

SEE SHEET 20 - 22 AND 28 FOR RAIL POST SPACING.

RAILS, POSTS AND SHIMS SHALL BE MADE FROM MATERIALS CONFORMING TO A.S.T.M. DESIGNATION A709, GRADE 36.

ALL MATERIALS, EXCEPT ANCHORAGES, SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, ALL STEEL SHALL BE GIVEN A NO. 6 BLAST CLEANING BY S.S.P.C. SPECIFICATIONS.

RAILS SHALL BE BUILT STRAIGHT AND SPRUNG INTO PLACE FOR STRUCTURES CURVED UP TO 3°. FOR STRUCTURES CURVED GREATER THAN 3°, RAILS SHALL BE CURVED TO FIT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

CONST. SPEC.	2003	DRAWN BY	ADW	PLANS CK'D.	DJW

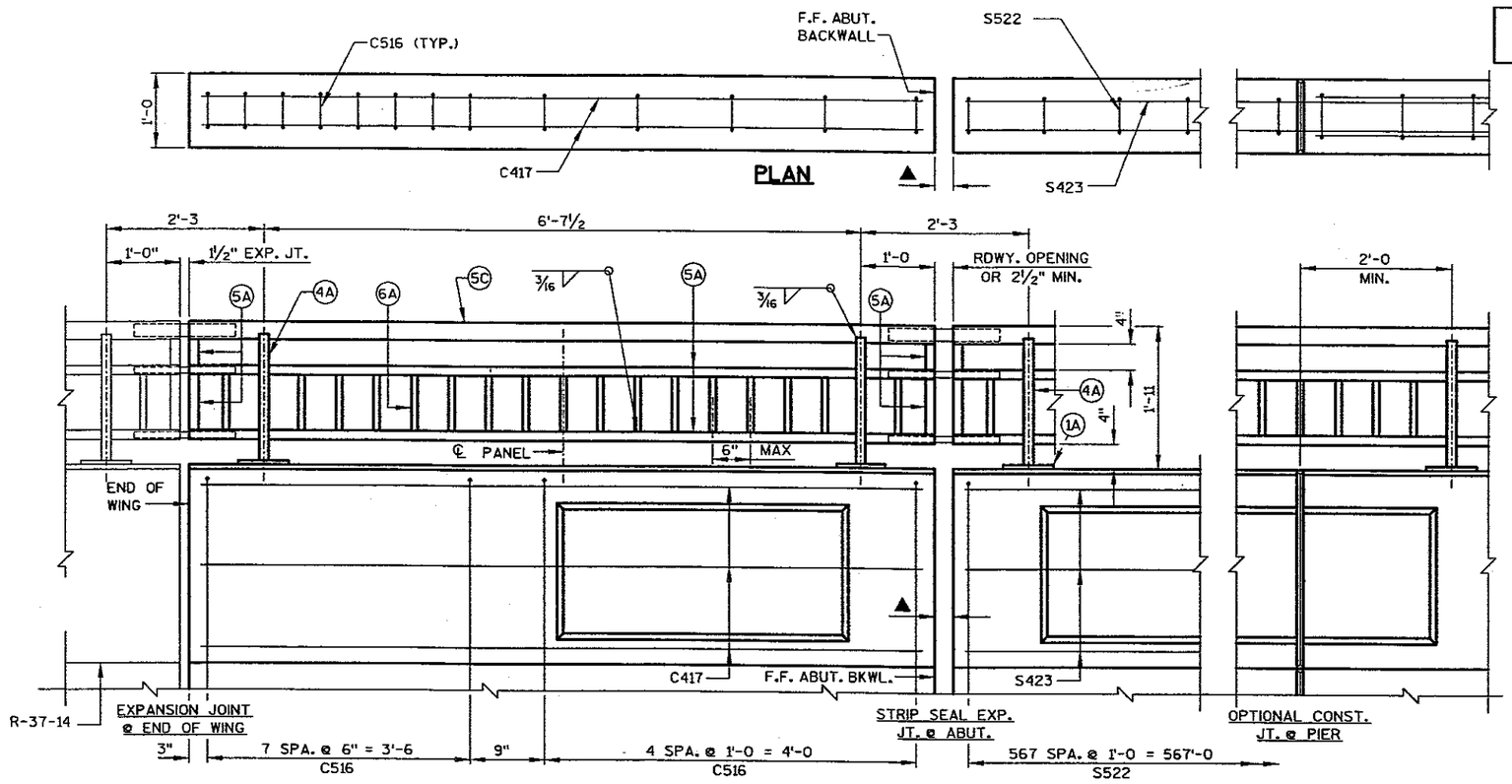
TUBULAR RAILING TYPE "H" (STEEL)

SHEET 32

249

8

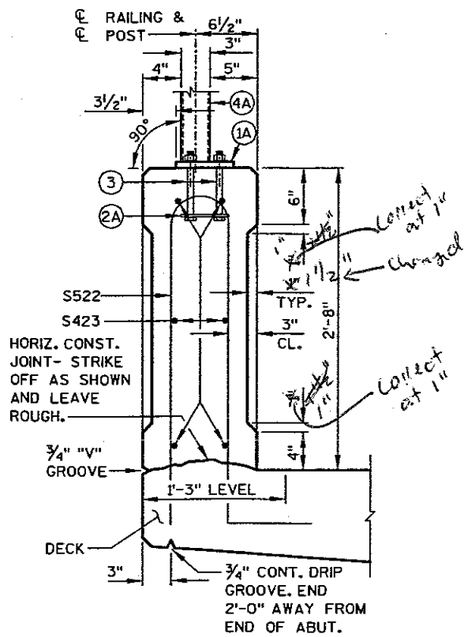
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INSIDE ELEVATION

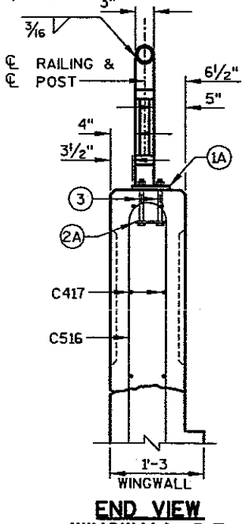
OPTIONAL CONSTRUCTION JOINTS IN THE PARAPETS MAY BE USED. RUN BAR REINF. THRU THE JOINT. LAP LONGIT. BARS A MIN. OF 2'-3. DEFINE CONSTR. JT. WITH A ¾" "V"-GROVE.

This same pattern was used on the median and east L.F. parapets All parapets received this pattern, only the vertical face and East L.F. received the Type 'C2' railing.



SECTION THRU PARAPET ON BRIDGE

* ADJUST LOCATIONS OF BARS TO ALLOW PLACEMENT OF ANCHOR ASSEMBLY FOR RAILING AND BEAM GUARD (WHEN REQ'D).



END VIEW WINGWALL 2.3

NOTES:

BID ITEM FOR STEEL RAILING SHALL BE RAILING STEEL TYPE "C2". SEE SHEET 34 FOR ADDITIONAL DETAILS.

▲ JOINT OPENING, SEE TEMPERATURE TABLE; SHEET 35.

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

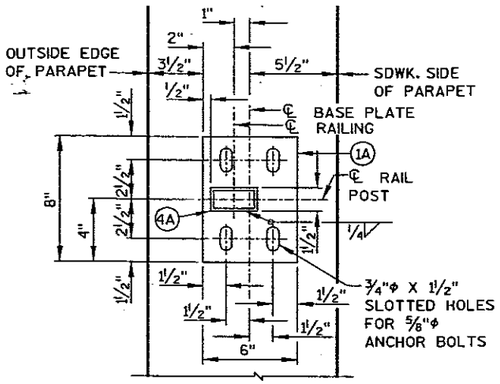
CONST. SPEC.	2003	DRAWN BY	ADW	PLANS CK'D.	DJW

COMBINATION RAIL TYPE "C2"

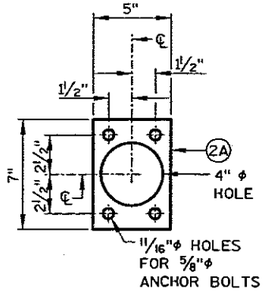
SHEET 33

250

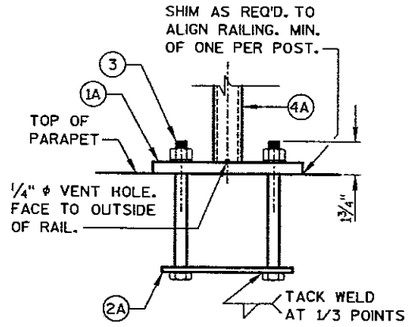
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TYPICAL RAIL POST BASE PLATE

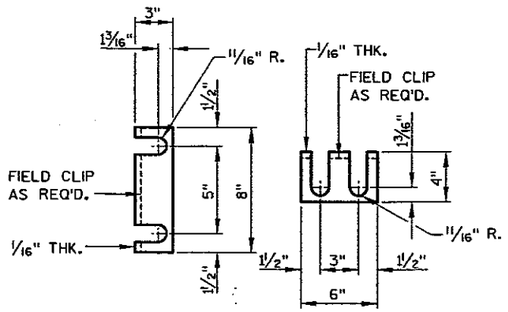


ANCHOR PLATE



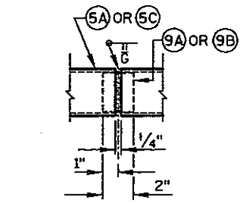
ANCHOR BOLTS FOR RAIL POSTS

NOTE: ANCHOR PLATE NOT REQUIREO WHEN TYPE S ANCHORS ARE USED.



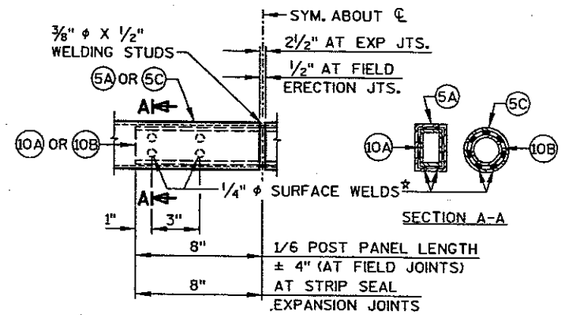
RAIL POST SHIM DETAIL

(2 SETS PER POST)



SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



FIELD ERECTION JOINT DETAIL

*MIN. ⅝" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.

NOTES

BID ITEM SHALL BE "RAILING STEEL TYPE "C2", WHICH SHALL INCLUOE ALL STEEL ITEMS SHOWN, AND PAINTING.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EOGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

NO. 1, 2, 8, 9 AND NO. 10 SHALL CONFORM TO A.S.T.M. A709 GRADE 36. STRUCTURAL TUBING SHALL CONFORM TO A.S.T.M. A500 GRADE B (NO. 4, NO.5, AND NO.6).

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT.

FILL BOLT SLOT OPENINGS IN SHIMS AND PLATE NO. 1 AND CAULK AROUND PERIMETER OF PLATE NO. 1 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ALL JOINTS AND RECESSES IN CONCRETE PARAPET ARE TO BE VERTICAL.

AFTER FABRICATION, ALL MATERIAL, EXCEPT ANCHORAGE (NO. 2 & 3) & SHIMS SHALL BE PAINTED WITH A THREE COAT ZINC-RICH EPOXY SYSTEM PER WISDOT STANDARD SPECIFICATION, SECTION 517, EPOXY SYSTEM. SHIMS SHALL BE GIVEN ONE COAT OF ZINC RICH PRIMER PAINT. THE FINISH COLOR SHALL BE FEDERAL COLOR NO. , .

¼"φ VENT HOLES LOCATED IN TOP RAIL OVER RAIL POSTS AND AT LOW END OF OTHER RAILS

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

TOUCH-UP PAINTING TO BE DONE AT COMPLETION OF STEEL RAILING INSTALLATION TO THE SATISFACTION OF THE ENGINEER AT NO EXTRA COST.

LEGEND

(1A) PLATE ⅝" X 6" X 8" WITH ¾" X 1½" SLOTTED HOLES.

(2A) ¼" X 5" X 7" ANCHOR PLATE WITH 11/16" φ HOLES FOR ANCHOR BOLTS NO. 3.

(3) ⅝" DIA. X 7½" LONG ASTM F593 TYPE 316 STAINLESS STEEL ANCHOR BOLTS WITH NUT AND WASHERS OF SAME ALLOY GROUP. (ALTERNATE RAIL POST ANCHORAGE - 4 EQUIV. STAINLESS STEEL CONCRETE MASONRY ANCHORS, TYPE S (EPOXY), ⅝" φ, MINIMUM PULLOUT CAPACITY OF 15 KIPS. EMBED A MIN. OF 7" FOR RAIL POSTS AND 5" FOR END RAILS.)

(4A) STRUCTURAL TUBING 3" X 1½" X 3/16". PLACE VERTICAL. WELD TO NO. 1 & 5.

(5A) STRUCTURAL TUBING 3" X 1½" X 3/16" RAILS. WELD TO NO. 1 & NO. 4.

(5C) 2½" φ STANDARD PIPE RAIL (2.875" O.D.). WELO TO NO. 1 & NO. 4.

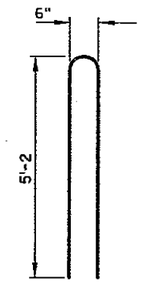
(6A) STRUCTURAL TUBING 1" X 1" X ⅛" PICKETS. WELD TO NO. 5. SPACE AT 6" MAX. ℄ TO ℄ SPACING. PLACE VERTICAL.

(9A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. PROVIDE "SLIDING FIT".

(9B) CIRCULAR SLEEVE FABRICATED FROM 2" φ STANDARD PIPE.

(10A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. (1'-4" @ FIELD ERECTION JTS.) (1'-4" @ STRIP SEAL EXP. JTS.)

(10B) CIRCULAR SLEEVE FABRICATED FROM 2" φ STANDARD PIPE. (1'-4" @ FIELD ERECTION JTS.) (1'-4" @ STRIP SEAL EXP. JTS.)



C516

WING 2 AND 3 PARAPET
BILL OF BARS COATED 345 LBS

MARK	NO. REQ'D	LENGTH	BENT	COAT	LOCATION
C516	26	10'-6	X	X	PARAPET - VERT.
C417	12	8'-5		X	PARAPET - HORIZ.

NOTE: THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE. DIMENSIONS FOR BENDING ARE OUT TO OUT OF BARS.

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

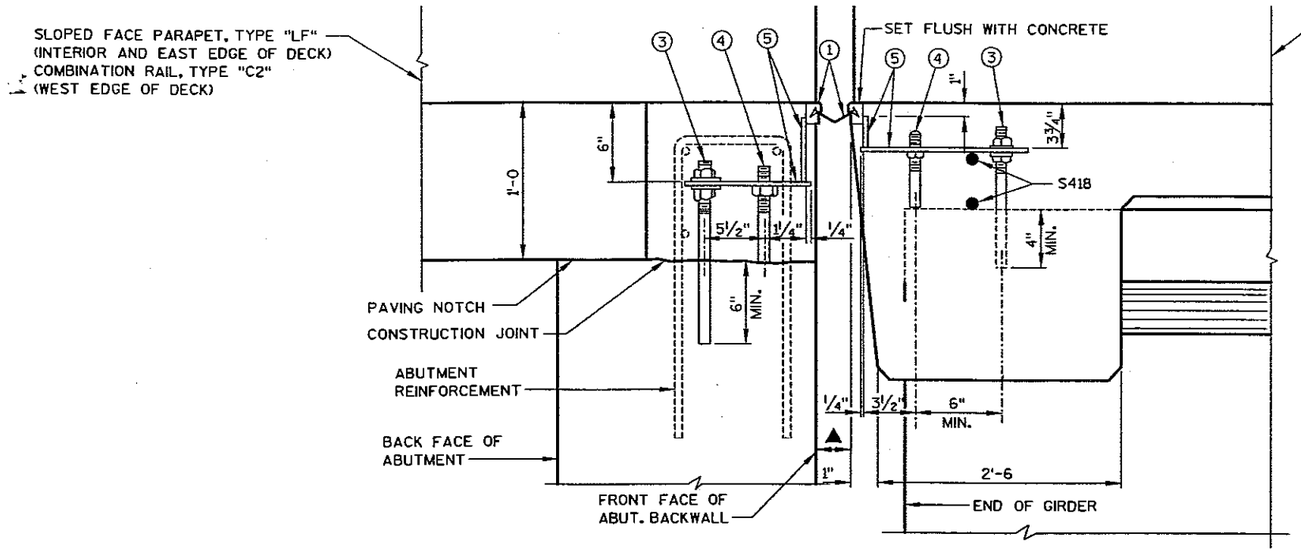
CONST. SPEC.	2003	DRAWN BY	ADW	PLANS CK'D.	DJW

COMBINATION RAIL TYPE "C2"

SHEET 34

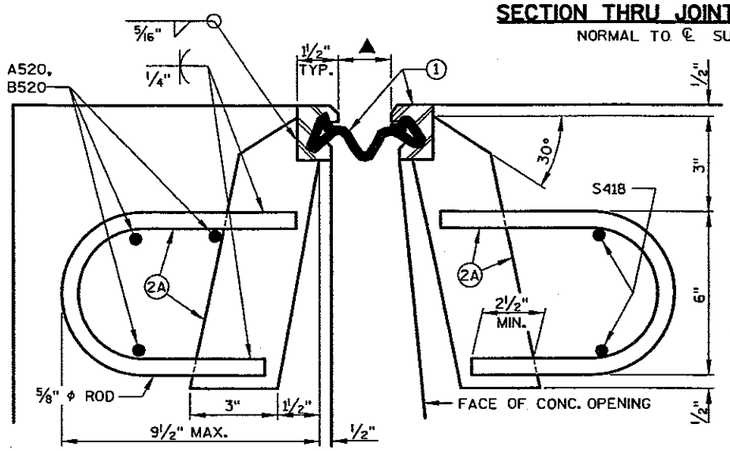
251

FILE NAME : s:\pSdi\701--750\732\421\Micros\Bridge\54\34-comb-rail-RHQTdgDATE : 12/17/2003 PLOT BY : $$...Plotuser...$$ PLOT NAME : ORG DATE : Originator : Plot



SECTION THRU JOINT AT ABUTMENT

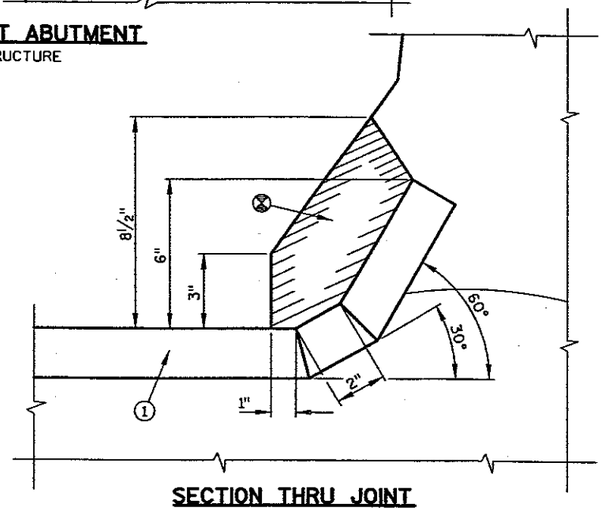
NORMAL TO ℄ SUBSTRUCTURE



AT PAVING BLOCK AT SLAB

SECTION THRU JOINT

ROADWAY TRAFFIC AREA BETWEEN EXTERIOR GIRDERS



SECTION THRU JOINT

AT SLOPE FACE PARAPET, TYPE "LF",
SIMILAR AT COMBINATION RAIL, TYPE "C2".

GENERAL NOTES

ONE FIELD SPLICE PERMITTED IN STEEL EXTRUSIONS. IF USED, DETAILS SHALL BE SUBMITTED FOR APPROVAL. NO SPLICING PERMITTED IN NEOPRENE STRIP SEAL.

AFTER FABRICATION, BUT BEFORE SHIPMENT, STRAIGHTEN STEEL EXTRUSIONS SUCH THAT THEY SHALL BE FREE FROM WARP, TWIST & SWEEP.

FABRICATOR SHALL PROVIDE MEANS OF KEEPING GALVANIZED EXTRUSIONS CLEAN & SMOOTH DURING SHIPMENT AND PRIOR TO APPLYING LUBRICANT ADHESIVE FOR NEOPRENE GLAND INSTALLATION.

SANDBLAST PLATES & EXTRUSIONS AFTER FABRICATION IN ACCORDANCE WITH SSPC SP. #6 "COMMERCIAL BLAST CLEANING". AFTER BLAST CLEANING, THE PLATES & EXTRUSIONS SHALL BE HOT DIPPED GALVANIZED.

ANCHOR SYSTEM NO. 8 & NO. 9 SHALL CONFORM TO ASTM A307 & SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C & D.

STRIP SEAL EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS & HARDWARE WILL BE PAID FOR AT THE LUMP SUM PRICE BID FOR "EXPANSION DEVICE".

⊗ BLOCK OUT CONCRETE 2" EACH SIDE FOR JOINT OPENING.

STRIP SEAL MANUFACTURER SHALL MARK "TOP SIDE" ON THE TOP SIDE OF THE NEOPRENE GLAND PRIOR TO SHIPPING.

RUN STRIP SEAL CONTINUOUS THROUGH MEDIAN SLOPE FACE PARAPET, TYPE "LF".

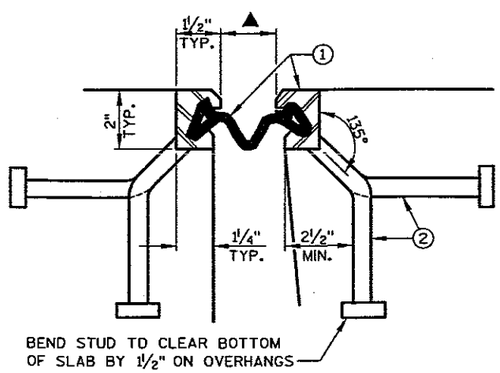
SEE SHEET 36 FOR PLATE DETAILS WITHIN EXTENTS OF MULTI-USE PATH.

LEGEND

1. NEOPRENE STRIP SEAL (4-INCH) & STEEL EXTRUSIONS.
2. STUDS ⅝" ϕ X 6⅜" LONG AT 6" ALTERNATE CENTERS. WELD TO EXTRUSIONS & BEND AS SHOWN AFTER WELDING.

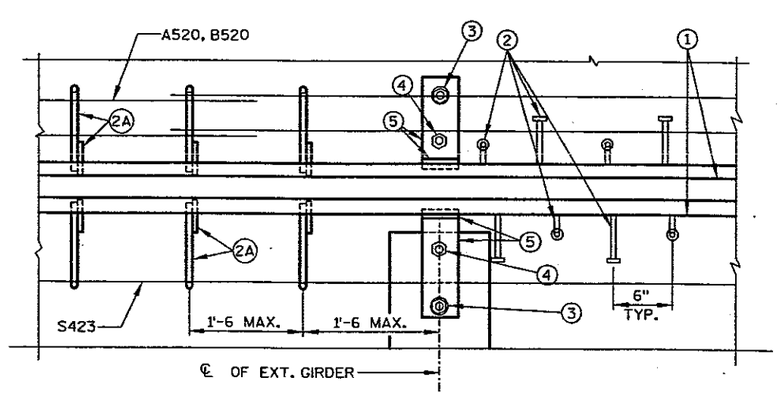
2A. ½" THICK ANCHOR PLATE WITH ⅝" ϕ ROD (OR ALTERNATE STRIP SEAL ANCHOR). TO ANCHOR PLATE, WELD ANCHOR PL. TO NO. 1 AT 1'-6" CTRS. BETWEEN GIRDERS.

3. ¾" ϕ THREADED ROD WITH 2 NUTS AND WASHERS. FIELD SET ON ℄ OF GIRDER. ON ABUTMENT SIDE GROUT THREADED ROD INTO FIELD DRILLED HOLES IN ABUTMENT BACKWALL AS SHOWN.
4. ¾" ϕ THREADED ROD WITH NUT. TACK WELD NUT TO NO. 5.
5. FABRICATE SUPPORT FROM 3" X ½" BAR AS SHOWN OR EQUIVALENT. ONE PER GIRDER PER SIDE. SHOP OR FIELD WELD TO NO. 1. IF FIELD WELDED, COVER WELDED AREAS WITH EPOXY-COATING MATERIAL. PROVIDE 1½" ϕ HOLE FOR NO. 3 & 1" ϕ HOLE FOR NO. 4.

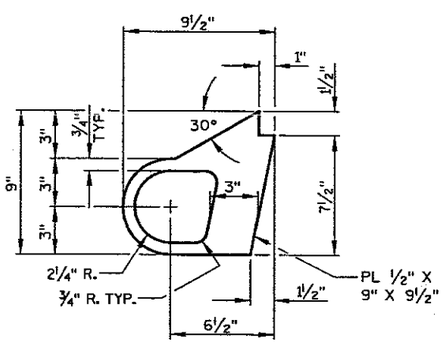


SECTION THRU JOINT

EXTERIOR GIRDER TO EDGE
OF SLAB & AT PARAPETS



PART PLAN



ALTERNATE STRIP SEAL ANCHOR

TEMPERATURE TABLE

TEMPERATURE	JOINT OPENING ▲
85° F	⅝"
45° F	1½"
-5° F	2½"

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STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

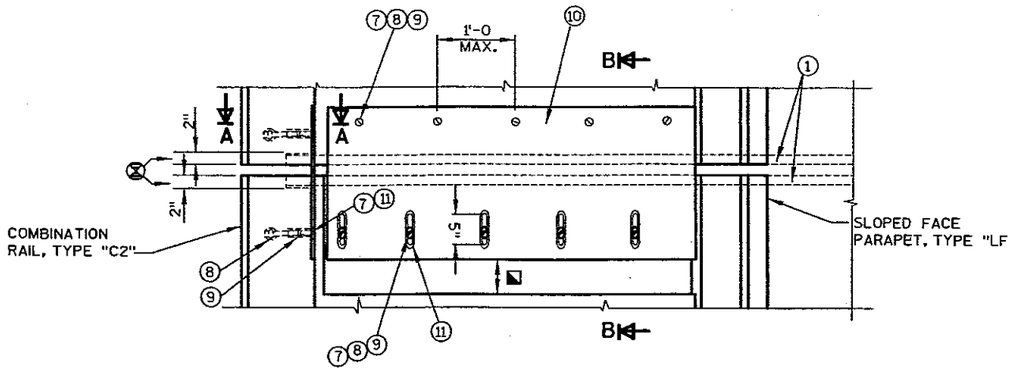
CONST. SPEC.	2003	DRAWN BY	ADW	PLANS CK'D.	DJW

EXPANSION DEVICE

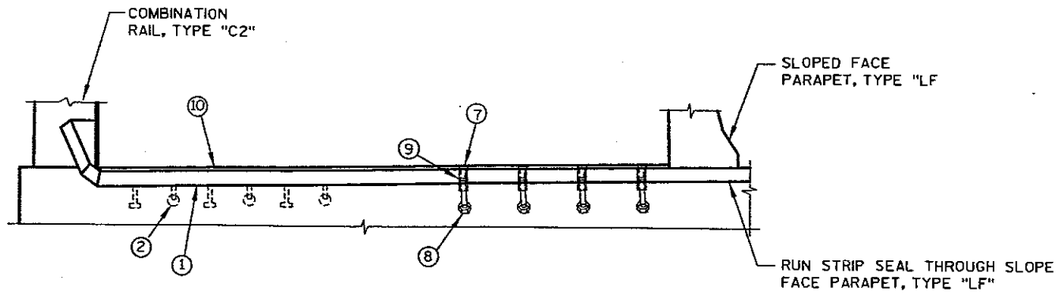
SHEET 35

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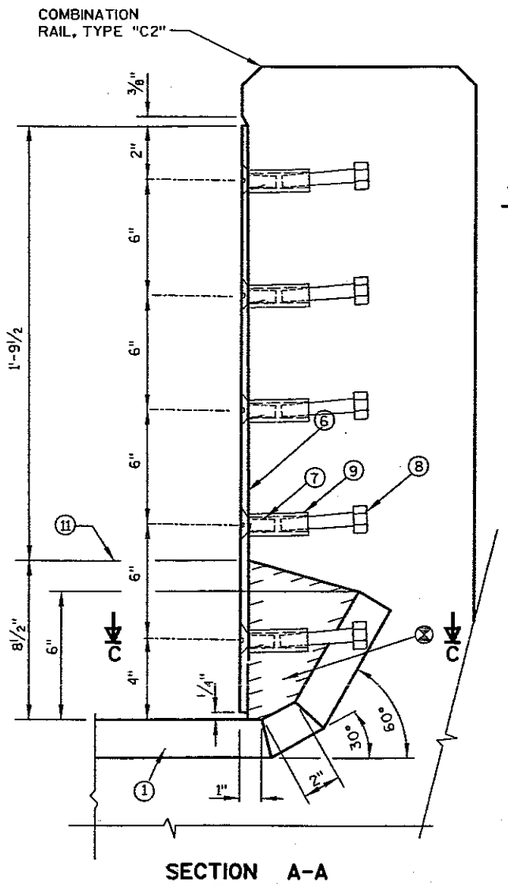
8



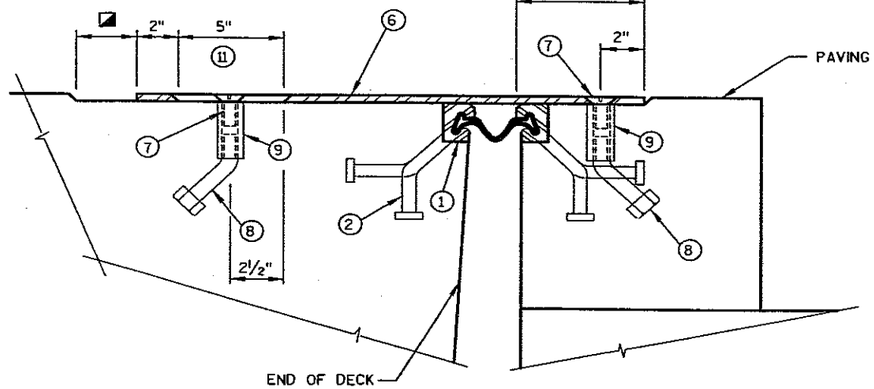
PLAN AT MULTI-USE PATH



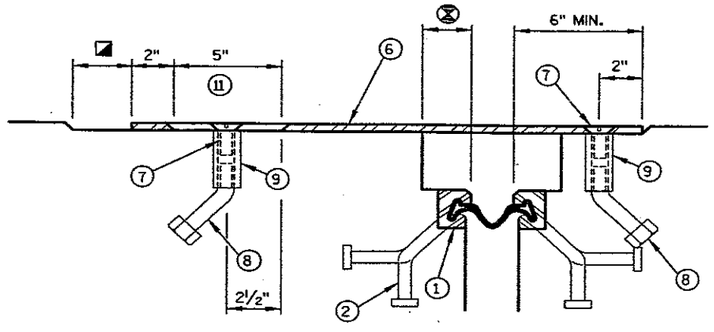
SECTION AT MULTI-USE PATH



SECTION A-A



SECTION B-B



SECTION C-C

LEGEND

6. GALVANIZED PLATE 3/8" × 10 1/2" × 2'-0" LONG WITH HOLES FOR NO. 7. BEND AS SHDWN.
7. 3/4" ϕ × 1 1/2" STAINLESS STEEL FLAT HEAD MACHINE SCREWS. RECESS 1/16" BELOW PLATE SURFACE.
8. 3/4" ϕ × 4" GALVANIZED HEX HEAD BOLT. BEND 45°.
9. 3/4" ϕ × 2 1/4" GALVANIZED THREADED COUPLING.
10. GALVANIZED SIDEWALK PLATE 3/8" × 2'-0" WIDE × LIMITS SHOWN. BEND DOWN FACE OF SIDEWALK WITH HOLES FOR NO. 7.
11. 1" × 5" SLOTTED CSK. HOLE FOR NO. 7. SLOT PARALLEL TO DIRECTION OF MOVEMENT.

⊗ BLOCK OUT CONCRETE 2" EACH SIDE FOR JOINT OPENING

◪ JOINT OPENING DIM. ALONG SKEW PLUS 1/2"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-373

CONST. SPEC.	2003	DRAWN BY	KAS	PLANS CK'D.	DJW

EXPANSION DEVICE

SHEET 36

253

8

* EXPANSION FACTOR = 1.5

EXCAVATION MARSH AND BACKFILL GRANULAR

STATION	CUT AREA (SF)	FILL AREA (SF)	CUT VOLUME (CY)	FILL VOLUME (CY)	CUMULATIVE CUT (CY)	CUMULATIVE ADJUSTED FILL* (CY)
WEST ARTERIAL						
101+15.00	0	0				
			0	0	0	0
101+50.00	0	0				
			586	817	586	1226
102+00.00	633	883				
			1390	1853	1976	4006
102+50.00	868	1118				
			1605	2068	3581	7108
103+00.00	865	1115				
			1569	2032	5150	10155
103+50.00	829	1079				
			2121	2584	7271	14032
104+00.00	1461	1711				
			2521	2956	9792	18466
104+50.00	1261	1481				
			2156	2526	11948	22255
105+00.00	1067	1247				
			1759	2074	13707	25366
105+50.00	832	992				
			1405	1683	15112	27890
106+00.00	685	825				
			1223	1473	16335	30100
106+50.00	636	766				
			1151	1382	17486	32174
107+00.00	607	727				
			1088	1311	18575	34140
107+50.00	568	688				
			1020	1243	19595	36004
108+00.00	534	654				
			997	1219	20592	37832
108+50.00	543	663				
			1003	1225	21595	39670
109+00.00	541	661				
			1023	1245	22618	41538
109+50.00	564	684				
			1089	1312	23707	43505
110+00.00	612	732				
			1122	1344	24829	45521
110+50.00	600	720				
			1077	1300	25906	47471
111+00.00	564	684				
			1020	1243	26927	49335
111+50.00	538	658				
			970	1192	27897	51123
112+00.00	509	629				
			911	1133	28807	52822

* EXPANSION FACTOR = 1.5

EXCAVATION MARSH AND BACKFILL GRANULAR

STATION	CUT AREA (SF)	FILL AREA (SF)	CUT VOLUME (CY)	FILL VOLUME (CY)	CUMULATIVE CUT (CY)	CUMULATIVE ADJUSTED FILL* (CY)
112+50.00	474	594				
			652	874	29459	54133
113+00.00	230	350				
			398	620	29857	55064
113+50.00	200	320				
			322	544	30179	55880
114+00.00	148	268				
			268	490	30448	56616
114+50.00	142	262				
			239	462	30687	57308
115+00.00	117	237				
			278	500	30965	58059
115+50.00	184	304				
			535	757	31500	59195
116+00.00	394	514				
			825	1048	32325	60766
116+50.00	498	618				
			996	1219	33322	62594
117+00.00	578	698				
			1191	1414	34513	64714
117+50.00	708	828				
			1167	1390	35681	66799
118+00.00	553	673				
			1306	1529	36987	69092
118+50.00	858	978				
			1875	2097	38862	72238
119+00.00	1167	1287				
			2099	2321	40961	75719
119+50.00	1100	1220				
			1995	2217	42956	79045
120+00.00	1055	1175				
			1671	1893	44627	81886
120+50.00	750	870				
			1103	1325	45730	83873
121+00.00	441	561				
			791	1013	46521	85393
121+50.00	413	533				
			854	1076	47376	87008
122+00.00	509	629				
			871	1093	48247	88648
122+50.00	431	551				
			714	936	48961	90052
123+00.00	340	460				
			566	788	49527	91235
123+50.00	271	391				
			462	684	49989	92261

STATE PROJECT NUMBER: 6675-00-71	HWY: CTH R	COUNTY: MARATHON	EARTHWORK	SCALE, FEET 0 N/A	SHEET NO: 254	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\earthwork\090101_ew.dgn PLOT DATE : 12/18/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 43

* EXPANSION FACTOR = 1.5

EXCAVATION MARSH AND BACKFILL GRANULAR

STATION	CUT AREA (SF)	FILL AREA (SF)	CUT VOLUME (CY)	FILL VOLUME (CY)	CUMULATIVE CUT (CY)	CUMULATIVE ADJUSTED FILL* (CY)
124+00.00	227	347				
			364	587	50353	93141
124+50.00	166	286				
			247	469	50600	93844
125+00.00	101	221				
WEST ARTERIAL						
130+90.00	0	0				
			21	43	50621	93909
131+00.00	111	231				
			229	452	50850	94586
131+50.00	136	256				
			228	450	51078	95261
132+00.00	110	230				
			327	549	51405	96085
132+50.00	244	364				
			595	817	52000	97311
133+00.00	399	519				
			846	1068	52846	98913
133+50.00	515	635				
			1012	1234	53858	100765
134+00.00	578	698				
			1039	1262	54897	102657
134+50.00	545	665				
			1065	1288	55963	104588
135+00.00	606	726				
			1249	1471	57212	106795
135+50.00	743	863				
			1179	1401	58391	108897
136+00.00	530	650				
			757	979	59147	110366
136+50.00	287	407				
			928	1150	60075	112090
137+00.00	714	834				
			1465	1687	61540	114621
137+50.00	868	988				
			1801	2024	63342	117657
138+00.00	1078	1198				
			2003	2226	65345	120995
138+50.00	1086	1206				
			1764	1986	67109	123974
139+00.00	819	939				
			1331	1553	68440	126304
139+50.00	618	738				
			1026	1248	69466	128176

* EXPANSION FACTOR = 1.5

EXCAVATION MARSH AND BACKFILL GRANULAR

STATION	CUT AREA (SF)	FILL AREA (SF)	CUT VOLUME (CY)	FILL VOLUME (CY)	CUMULATIVE CUT (CY)	CUMULATIVE ADJUSTED FILL* (CY)
140+00.00	490	610				
			708	930	70174	129572
140+50.00	275	395				
WEST ARTERIAL						
148+50.00	0	0				
			300	439	70474	130231
149+00.00	324	474				
			724	1001	71198	131733
149+50.00	457	607				
			1157	1434	72354	133885
150+00.00	792	942				
			1595	1873	73950	136694
150+50.00	931	1081				
			1766	2044	75716	139760
151+00.00	977	1127				
			1913	2191	77629	143047
151+50.00	1090	1240				
			2215	2492	79844	146785
152+00.00	1302	1452				
			2438	2715	82282	150858
152+50.00	1331	1481				
			2390	2667	84671	154859
153+00.00	1250	1400				
			2296	2573	86967	158719
153+50.00	1229	1379				
			2030	2308	88997	162181
154+00.00	964	1114				
			1705	1983	90701	165155
154+50.00	878	1028				
			813	952	91514	166582
155+00.00	0	0				

NOTE: AREA OF FILL IS GREATER THAN AREA OF CUT SINCE MARSH EXCAVATION AREA WILL BE BACKFILLED 1' ABOVE EXISTING SURFACE

	VALUES SHOWN ON EARTHWORK SUMMARY MISC QTY SHEET
91514	TOTAL EXCAVATION MARSH
166582	EXPANDED BACKFILL GRANULAR FOR STA 102+00 - 155+00
3444	EXPANDED BACKFILL GRANULAR FOR PETROLEUM CONTAMINATED AREA
170026	TOTAL EXPANDED BACKFILL GRANULAR

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 : p:\40xx\4025\plan\6675-00-71\earthwork\090102_ew.dgn

PLOT DATE : 12/18/2003

PLOT BY : $$...plotuser...$$ PLOT NAME :

PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 43

* EXPANSION FACTOR = 1.25

EXCAVATION COMMON AND SELECT BORROW

STATION	CUT AREA (SF)	FILL AREA (SF)	CUT VOLUME (CY)	FILL VOLUME (CY)	CUMULATIVE CUT (CY)	CUMULATIVE ADJUSTED FILL* (CY)	MASS ORDINATE (CY)
WETLAND MITIGATION SITE AREA A							
10+00.00	0	0					
			0	0	0	0	0
11+00.00	0	0					
			0	0	0	0	0
12+00.00	0	0					
			0	0	0	0	0
13+00.00	0	0					
			169	0	169	0	169
14+00.00	91	0					
			658	0	827	0	827
15+00.00	264	0					
			1529	0	2356	0	2356
16+00.00	561	0					
			3140	0	5496	0	5496
17+00.00	1135	0					
			5787	0	11284	0	11284
18+00.00	1991	0					
			8365	0	19649	0	19649
19+00.00	2526	0					
			9653	0	29302	0	29302
20+00.00	2686	0					
			10091	0	39393	0	39393
21+00.00	2763	0					
			10379	0	49772	0	49772
22+00.00	2842	0					
			8861	0	58633	0	58633
23+00.00	1943	0					
			5255	0	63888	0	63888
24+00.00	894	0					
			2210	0	66098	0	66098
25+00.00	299	0					
			969	0	67067	0	67067
26+00.00	224	0					
			1021	0	68088	0	68088
27+00.00	327	0					
			1875	0	69962	0	69962
28+00.00	686	0					
			2807	0	72769	0	72769
29+00.00	830	0					
			3341	0	76110	0	76110
30+00.00	974	0					
			4071	0	80181	0	80181
31+00.00	1224	0					
			4229	0	84410	0	84410
32+00.00	1059	0					
			3933	0	88343	0	88343
33+00.00	1065	0					
			2200	0	90543	0	90543
34+00.00	123	0					
			69	0	90611	0	90611
34+30.20	0	0					
WETLAND MITIGATION SITE AREA B							
38+00.00	0	0					
			0	0	90611	0	90611
39+00.00	0	0					

* EXPANSION FACTOR = 1.25

EXCAVATION COMMON AND SELECT BORROW

STATION	CUT AREA (SF)	FILL AREA (SF)	CUT VOLUME (CY)	FILL VOLUME (CY)	CUMULATIVE CUT (CY)	CUMULATIVE AOJUSTED FILL* (CY)	MASS ORDINATE (CY)
40+00.00	506.55	0	938	0	91549	0	91549
41+00.00	291.64	0	1478	0	93027	0	93027
42+00.00	352.06	0	1192	0	94219	0	94219
43+00.00	802.17	0	2137	0	96356	0	96356
44+00.00	1167.43	0	3647	0	100004	0	100004
45+00.00	2202.89	0	6241	0	106245	0	106245
46+00.00	4588.12	0	12576	0	118821	0	118821
47+00.00	5296.11	0	18304	0	137125	0	137125
48+00.00	5062.97	0	19183	0	156309	0	156309
49+00.00	4586.44	0	17869	0	174178	0	174178
50+00.00	4589.56	0	16993	0	191171	0	191171
51+00.00	3939.13	0	15794	0	206964	0	206964
52+00.00	2127.8	0	11235	0	218199	0	218199
53+00.00	1588.41	0	6882	0	225081	0	225081
54+00.00	905.61	0	4619	0	229700	0	229700
55+00.00	635.7	0	2854	0	232554	0	232554
56+00.00	568.27	0	2230	0	234784	0	234784
57+00.00	346.65	0	1594	0	236478	0	236478
58+00.00	0	0	642	0	237120	0	237120
59+00.00	0	0	0	0	237120	0	237120
WEST ARTERIAL							
101+15.00	153	4					
			99	293	237219	366	236853
101+50.00	0	448					
			0	2422	237219	3393	233826
102+00.00	0	2158					
			0	4344	237219	8824	228395
102+50.00	0	2524					
			0	4821	237219	14850	222369
103+00.00	0	2682					
			0	5043	237219	21154	216065
103+50.00	0	2764					
			0	5298	237219	27776	209443
104+00.00	0	2958					
			0	5029	237219	34062	203157
104+50.00	0	2474					

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STATE PROJECT NUMBER: 6675-00-71	HWY: CTH R	COUNTY: MARATHON	EARTHWORK	SCALE, FEET 0 N/A	SHEET NO: 256	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\earthwork\090103_ew.dgn PLOT DATE : 12/18/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 43

* EXPANSION FACTOR = 1.25

EXCAVATION COMMON AND SELECT BORROW

STATION	CUT AREA (SF)	FILL AREA (SF)	CUT VOLUME (CY)	FILL VOLUME (CY)	CUMULATIVE CUT (CY)	CUMULATIVE ADJUSTED FILL* (CY)	MASS ORDINATE (CY)
DRIVEWAY TO DETENTION POND							
0+00.00	0	185					
			0	345	237219	34494	202725
0+50.00	0	188					
			0	401	237219	34995	202224
1+00.00	0	244					
			0	844	237219	36049	201170
1+50.00	0	667					
			0	1076	237219	37394	199825
2+00.00	0	496					
			0	323	237219	37798	199421
2+17.00	0	530					
WEST ARTERIAL							
104+50.00	0	2474					
			0	4113	237219	42940	194279
105+00.00	0	1969					
			0	3243	237219	46993	190226
105+50.00	0	1533					
			0	2460	237219	50068	187151
106+00.00	0	1124					
			0	1790	237219	52305	184914
106+50.00	0	809					
			0	1285	237219	53911	183308
107+00.00	0	578					
			0	925	237219	55068	182151
107+50.00	0	421					
			0	671	237219	55906	181313
108+00.00	0	303					
			0	471	237219	56494	180725
108+50.00	0	205					
			0	344	237219	56924	180295
109+00.00	0	167					
			0	306	237219	57306	179913
109+50.00	0	163					
			0	286	237219	57663	179556
110+00.00	0	145					
			0	243	237219	57967	179252
110+50.00	0	117					
			0	186	237219	58200	179019
111+00.00	0	84					
			0	129	237219	58360	178859
111+50.00	0	55					
			0	89	237219	58472	178747
112+00.00	0	41					
			0	68	237219	58556	178663
112+50.00	0	32					
			0	306	237219	58939	178280
113+00.00	0	299					
			0	534	237219	59607	177612
113+50.00	0	278					
			0	505	237219	60238	176981
114+00.00	0	267					
			0	442	237219	60790	176429
114+50.00	0	211					
			0	352	237219	61230	175989
115+00.00	0	170					
			0	327	237219	61640	175579

* EXPANSION FACTOR = 1.25

EXCAVATION COMMON AND SELECT BORROW

STATION	CUT AREA (SF)	FILL AREA (SF)	CUT VOLUME (CY)	FILL VOLUME (CY)	CUMULATIVE CUT (CY)	CUMULATIVE ADJUSTED FILL* (CY)	MASS ORDINATE (CY)
115+50.00	0	184					
			0	280	237219	61989	175230
116+00.00	0	118					
			0	207	237219	62248	174971
116+50.00	0	105					
			0	215	237219	62517	174702
117+00.00	0	127					
			0	173	237219	62732	174487
117+50.00	0	59					
			0	326	237219	63140	174079
118+00.00	0	293					
			0	434	237219	63682	173537
118+50.00	0	176					
			0	235	237219	63976	173243
119+00.00	0	78					
			0	393	237219	64468	172751
119+50.00	0	347					
			0	761	237219	65420	171799
120+00.00	0	475					
			0	937	237219	66591	170628
120+50.00	0	537					
			0	1105	237219	67972	169247
121+00.00	0	656					
			0	1229	237219	69508	167711
121+50.00	0	671					
			0	1221	237219	71035	166184
122+00.00	0	648					
			0	1259	237219	72609	164610
122+50.00	0	712					
			0	1387	237219	74342	162877
123+00.00	0	786					
			0	1450	237219	76155	161064
123+50.00	0	780					
			0	1388	237219	77889	159330
124+00.00	0	718					
			0	1282	237219	79491	157728
124+50.00	0	666					
			0	1182	237219	80969	156250
125+00.00	0	611					
			0	1201	237219	82470	154749
125+50.00	0	687					
			0	1192	237219	83960	153259
126+00.00	0	601					
			0	1071	237219	85299	151920
126+50.00	0	556					
			0	1033	237219	86590	150629
127+00.00	0	560					
			0	1121	237219	87991	149228
127+50.00	0	650					
			0	1253	237219	89557	147662
128+00.00	0	702					
			0	1380	237219	91283	145936
128+50.00	0	788					
			0	1486	237219	93140	144079
129+00.00	0	816					
			0	1499	237219	95014	142205
129+50.00	0	803					
			0	1699	237219	97138	140081

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: 6675-00-71	HWY: CTH R	COUNTY: MARATHON	EARTHWORK	SCALE, FEET 0 N/A	SHEET NO: 257	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\earthwork\090104_ew.dgn PLOT DATE : 12/18/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 43

* EXPANSION FACTOR = 1.25

EXCAVATION COMMON AND SELECT BORROW

STATION	CUT AREA (SF)	FILL AREA (SF)	CUT VOLUME (CY)	FILL VOLUME (CY)	CUMULATIVE CUT (CY)	CUMULATIVE ADJUSTED FILL* (CY)	MASS ORDINATE (CY)
130+00.00	0	1032					
			0	1897	237219	99509	137710
130+50.00	0	1017					
			0	1699	237219	101633	135586
131+00.00	0	818					
			0	1459	237219	103457	133762
131+50.00	0	758					
			0	1354	237219	105150	132069
132+00.00	0	704					
			0	1252	237219	106715	130504
132+50.00	0	648					
			0	1180	237219	108190	129029
133+00.00	0	626					
			0	1194	237219	109683	127536
133+50.00	0	664					
			0	1326	237219	111341	125878
134+00.00	0	769					
			0	1565	237219	113297	123922
134+50.00	0	921					
			0	1783	237219	115526	121693
135+00.00	0	1004					
			0	1832	237219	117815	119404
135+50.00	0	974					
			0	2265	237219	120647	116572
136+00.00	0	1472					
			0	3129	237219	124557	112662
136+50.00	0	1907					
			0	3082	237219	128410	108809
137+00.00	0	1421					
			0	2578	237219	131632	105587
137+50.00	0	1363					
			0	2489	237219	134743	102476
138+00.00	0	1325					
			0	2645	237219	138049	99170
138+50.00	0	1531					
			0	3206	237219	142056	95163
139+00.00	0	1931					
			0	3751	237219	146746	90473
139+50.00	0	2120					
			0	3998	237219	151743	85476
140+00.00	0	2197					
			0	4125	237219	156899	80320
140+50.00	0	2258					
REINFORCED EARTH FILL INCIDENTAL TO MSE WALL (R-37-13) = 5268 CY							
135+00.00 - 140+50.00					237219	151631	85588
WEST ARTERIAL							
146+50.00	0	1960					
			0	3685	237219	156238	80981
147+00.00	0	2020					
			0	3759	237219	160937	76282
147+50.00	0	2040					
			0	3659	237219	165511	71708
148+00.00	0	1912					
			0	3500	237219	169886	67333
148+50.00	0	1868					
			0	3242	237219	173939	63280

* EXPANSION FACTOR = 1.25

EXCAVATION COMMON AND SELECT BORROW

STATION	CUT AREA (SF)	FILL AREA (SF)	CUT VOLUME (CY)	FILL VOLUME (CY)	CUMULATIVE CUT (CY)	CUMULATIVE ADJUSTED FILL* (CY)	MASS ORDINATE (CY)
149+00.00	0	1633					
			0	3184	237219	177919	59300
149+50.00	0	1805					
			1	3346	237220	182102	55119
150+00.00	1	1809					
			1	3318	237222	186249	50972
150+50.00	0	1774					
			0	3396	237222	190495	46727
151+00.00	1	1894					
			1	3471	237223	194833	42390
151+50.00	0	1855					
			0	3446	237223	199141	38082
152+00.00	0	1867					
REINFORCED EARTH FILL INCIDENTAL TO MSE WALL (R-37-14) = 7846 CY							
146+50.00 - 152+00.00					237223	191295	45928
WEST ARTERIAL							
152+00.00	0	1867					
			0	3346	237223	195478	41745
152+50.00	0	1747					
			0	3146	237223	199410	37813
153+00.00	0	1651					
			1	2941	237224	203087	34137
153+50.00	1	1526					
			1	2772	237225	206553	30673
154+00.00	0	1468					
			0	2660	237226	209877	27349
154+50.00	0	1404					
			0	2671	237226	213216	24010
155+00.00	0	1481					
			0	2811	237226	216730	20495
155+50.00	0	1555					
			0	2985	237226	220462	16764
156+00.00	0	1669					
			0	3152	237226	224401	12824
156+50.00	0	1735					
			0	3001	237226	228152	9073
157+00.00	0	1506					
			0	2853	237226	231719	5506
157+50.00	0	1576					
			0	2766	237226	235177	2049
158+00.00	0	1412					
			0	2466	237226	238259	-1034
158+50.00	0	1251					
			0	2254	237226	241076	-3850
159+00.00	0	1183					
			0	2150	237226	243763	-6538
159+50.00	0	1139					
			0	2043	237226	246317	-9091
160+00.00	0	1067					
			0	1909	237226	248703	-11477
160+50.00	0	994					
			0	1837	237226	250998	-13772
161+00.00	0	989					
			0	1902	237226	253376	-16150
161+50.00	0	1065					
			0	2159	237226	256075	-18849

9

STATE PROJECT NUMBER: 6675-00-71	HWY: CTH R	COUNTY: MARATHON	EARTHWORK	SCALE, FEET 0 N/A	SHEET NO: 258	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\earthwork\090105_ew.dgn PLOT DATE : 12/18/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 43

* EXPANSION FACTOR = 1.25

EXCAVATION COMMON AND SELECT BORROW

STATION	CUT AREA (SF)	FILL AREA (SF)	CUT VOLUME (CY)	FILL VOLUME (CY)	CUMULATIVE CUT (CY)	CUMULATIVE ADJUSTED FILL* (CY)	MASS ORDINATE (CY)
162+00.00	0	1267					
			0	2412	237226	259090	-21865
162+50.00	0	1338					
			0	2293	237226	261957	-24731
163+00.00	0	1138					
			0	1787	237226	264190	-26964
163+50.00	0	791					
			0	1325	237226	265846	-28620
164+00.00	0	640					
			1	1056	237227	267166	-29939
164+50.00	2	501					
			5	361	237232	267617	-30385
164+70.00	11	472					
			18	504	237250	268247	-30998
165+00.00	21	436					
			36	857	237286	269319	-32033
165+50.00	18	490					
			46	764	237332	270274	-32942
166+00.00	32	335					
			72	416	237405	270794	-33389
166+50.00	46	114					
			106	180	237511	271019	-33508
167+00.00	69	80					
			67	92	237578	271134	-33556
167+25.00	76	119					
			77	69	237655	271219	-33565
167+50.00	90	29					
			73	26	237728	271251	-33524
167+70.00	107	40					
			137	28	237865	271286	-33421
168+00.00	139	10					
			292	11	238157	271300	-33143
168+50.00	176	2					
			116	1	238273	271301	-33028
168+63.00	307	0					
			255	0	238528	271301	-32773
168+88.00	242	0					
			107	0	238634	271301	-32667
169+00.00	238	0					
			427	0	239062	271301	-32240
169+50.00	223	0					
			441	0	239502	271301	-31799
170+00.00	253	0					
			460	0	239962	271301	-31339
170+50.00	243	0					
			409	1	240371	271302	-30931
171+00.00	198	1					
			343	2	240714	271304	-30590
171+50.00	173	1					
			402	1	241116	271305	-30189
171+87.00	414	0					
28TH AVENUE							
55+46.00	30	0					
			5	0	241121	271305	-30185
55+50.00	32	0					
			59	0	241180	271305	-30125
56+00.00	32	0					

* EXPANSION FACTOR = 1.25

EXCAVATION COMMON AND SELECT BORROW

STATION	CUT AREA (SF)	FILL AREA (SF)	CUT VOLUME (CY)	FILL VOLUME (CY)	CUMULATIVE CUT (CY)	CUMULATIVE ADJUSTED FILL* (CY)	MASS ORDINATE (CY)
56+50.00	31	0	59	0	241239	271305	-30066
57+00.00	29	0	56	0	241295	271305	-30010
57+50.00	30	0	55	0	241350	271305	-29955
58+00.00	13	0	40	0	241390	271305	-29915
58+23.00	5	0	9	0	241400	271306	-29906

	VALUES SHOWN ON EARTHWORK SUMMARY MISC QTY SHEET
241400	TOTAL EXCAVATION COMMON FOR WEST ARTERIAL & WETLAND MITIGATION SITE
271306	TOTAL EXPANDED FILL FOR WEST ARTERIAL & WETLAND MITIGATION SITE
29906	TOTAL SELECT BORROW FOR WEST ARTERIAL

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: 6675-00-71	HWY: CTH R	COUNTY: MARATHON	EARTHWORK	SCALE, FEET 0 N/A	SHEET NO: 259	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\earthwork\090106_ew.dgn PLOT DATE : 12/18/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 43

MANAGEMENT OF PETROLEUM-CONTAMINATED MATERIAL AND BACKFILL GRANULAR

STATION	CUT AREA (SF)	FILL AREA (SF)	CUT VOLUME (CY)	FILL VOLUME (CY)	CUMULATIVE CUT (CY)	CUMULATIVE ADJUSTED FILL* (CY)
WEST ARTERIAL						
158+31.00	0	0				
			51	51	51	77
158+50.00	146	146				
			599	599	650	975
159+00.00	501	501				
			952	952	1602	2403
159+50.00	527	527				
			635	635	2237	3356
160+00.00	159	159				
			59	59	2296	3444
160+20.00	0	0				

	VALUES SHOWN ON EARTHWORK SUMMARY MISC QTY SHEET
2296	TOTAL CY OF PETROLEUM CONTAMINATED MATERIAL
1.5 TON/CY	CONVERSION FACTOR FOR PETROLEUM CONTAMINATED SOIL
3444	TOTAL TONS FOR MANAGEMENT OF PETROLEUM CONTAMINATED MATERIAL
3444	EXPANDED BACKFILL GRANULAR FOR PETROLEUM CONTAMINATED AREA
166582	EXPANDED BACKFILL GRANULAR FOR STA 102+00 - 155+00
170026	TOTAL EXPANDED BACKFILL GRANULAR

* EXPANSION FACTOR = 1.5

9

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

PROPOSED FILL TO BE COMPLETED UNDER PROJECT 6675-00-70 (BY OTHERS)

101+50

101+15

5 FT

10 FT

BEGIN ABRUPT

9

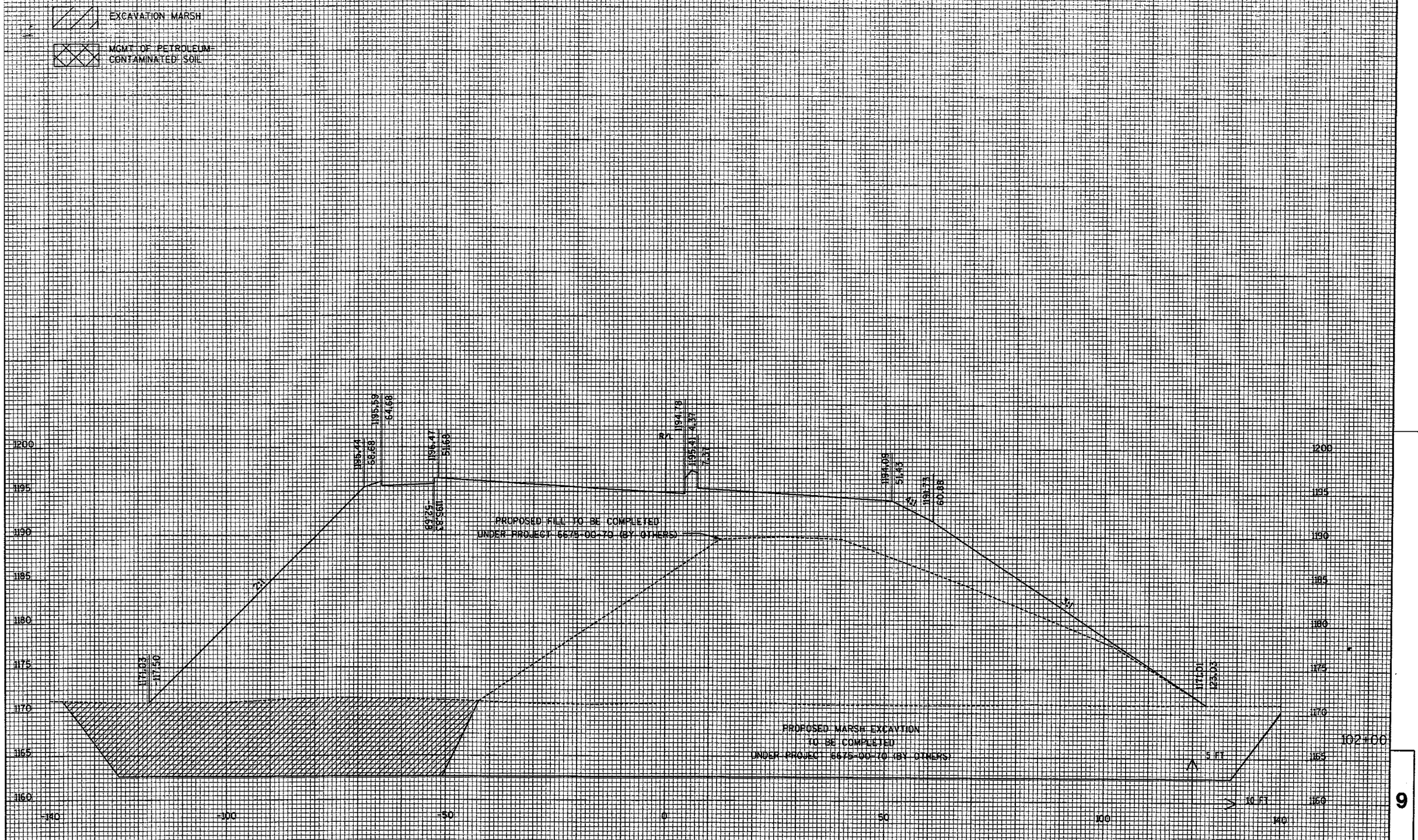
STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 26	E

FILE NAME : p:\40xx\4025\plan\66T5-00-71\cross sections\090201_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

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,

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL



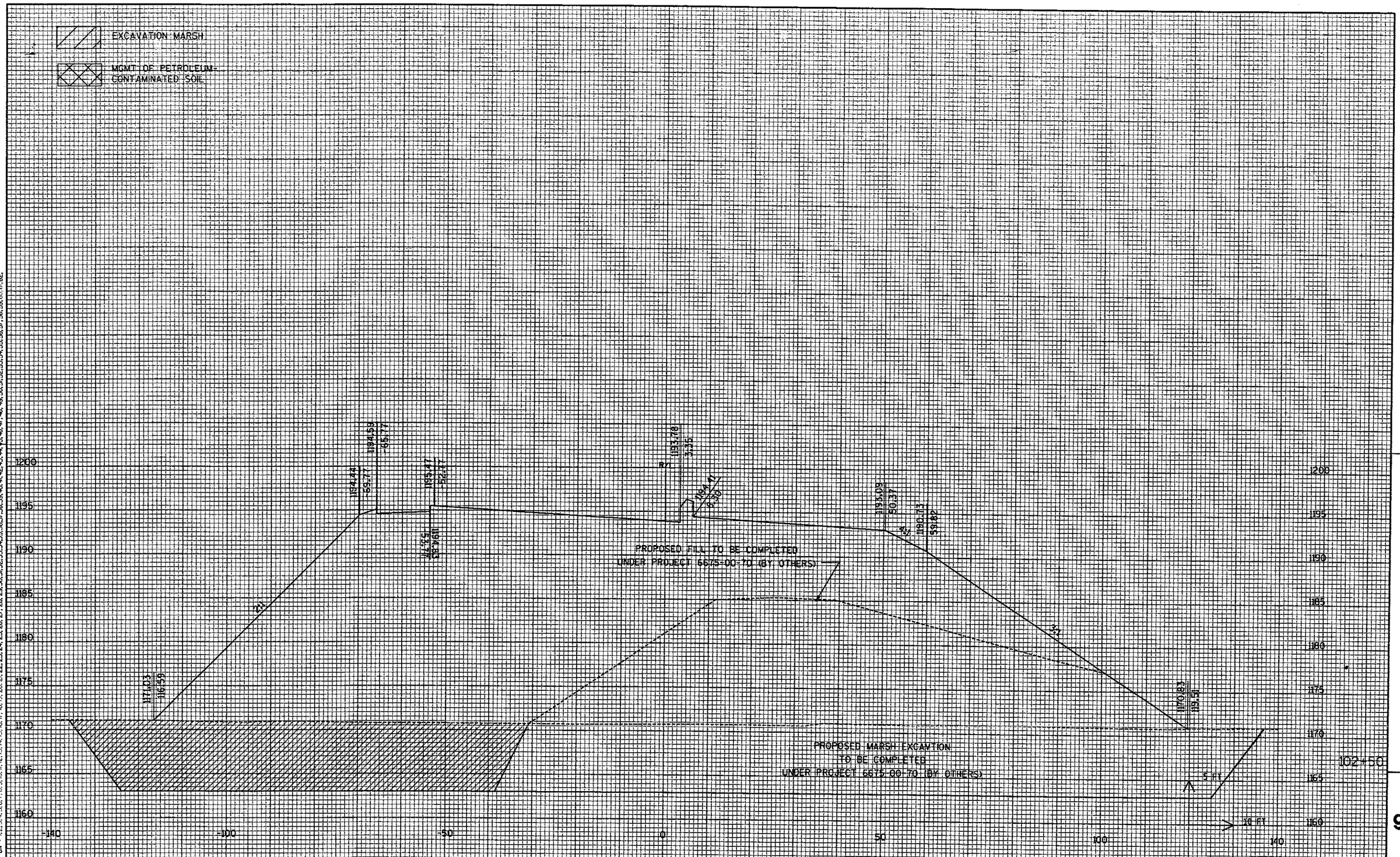
9

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 262	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090201_xs.dgn DOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

EXCAVATION MARSH

MGMT. OF PETROLEUM-CONTAMINATED SOIL



STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY:MARATHON	CROSS SECTIONS:	SHEET NO: 263	E

9

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,

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090201_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

EXCAVATION MARSH

MGMT. OF PETROLEUM-CONTAMINATED SOIL

PROPOSED FILL TO BE COMPLETED UNDER PROJECT 6675-00-70 (BY OTHERS)

PROPOSED MARSH EXCAVTION TO BE COMPLETED UNDER PROJECT 6675-00-70 (BY OTHERS)

103+50

PROPOSED FILL TO BE COMPLETED UNDER PROJECT 6675-00-70 (BY OTHERS)

PROPOSED MARSH EXCAVTION TO BE COMPLETED UNDER PROJECT 6675-00-70 (BY OTHERS)

103+00

9 FT

16 FT

9

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 264	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090201_xs.dgn DOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

104+50

104+00

PROPOSED FILL TO BE COMPLETED UNDER PROJECT 6675-00-70 (BY OTHERS)

PROPOSED MARSH EXCAVTION TO BE COMPLETED UNDER PROJECT 6675-00-70 (BY OTHERS)

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 265	E

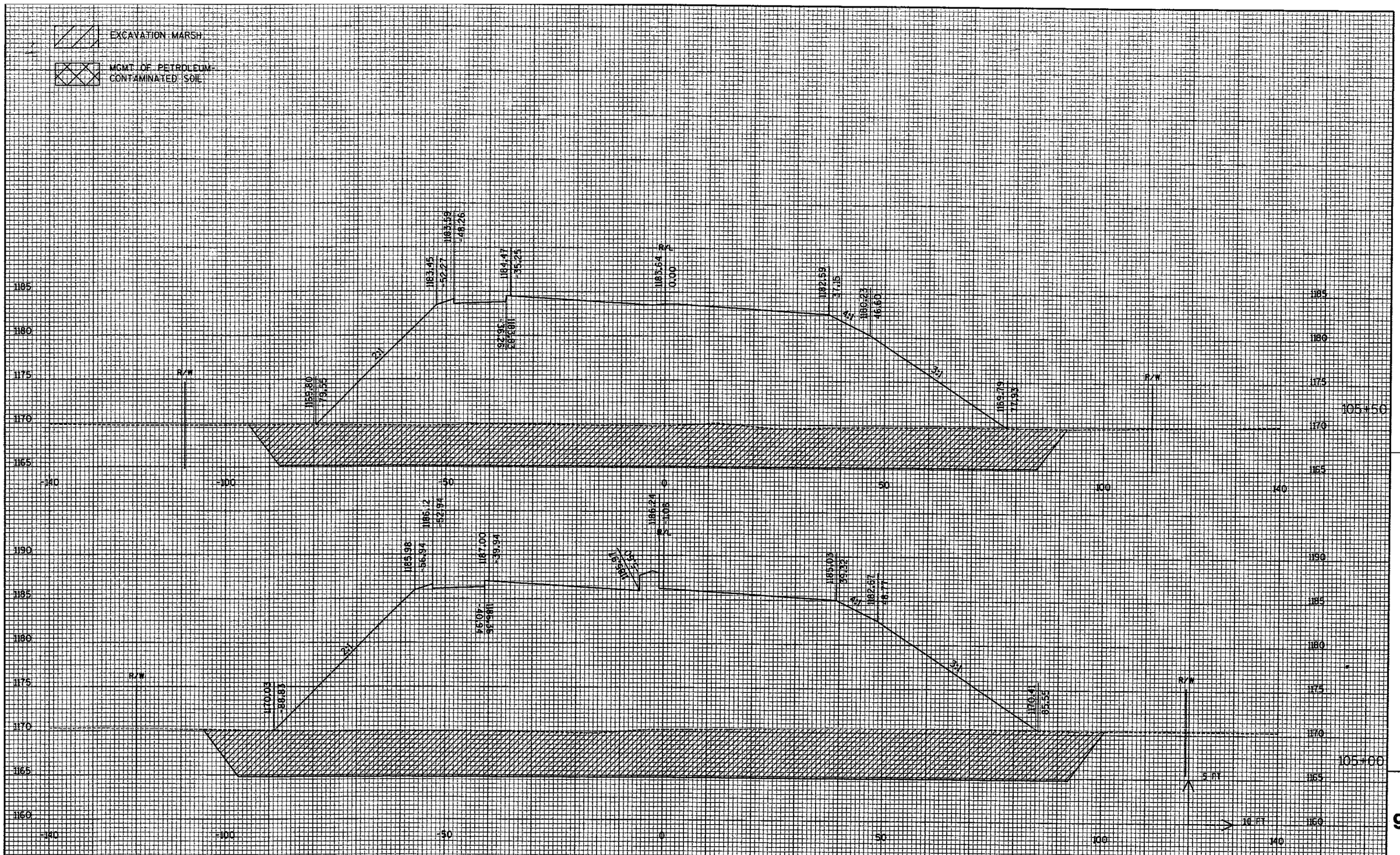
FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090201_xs.dgn DOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

9

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL



STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 266	E

9

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090201_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

107+00

106+50

106+00

STATE PROJECT NUMBER:6675-00-71 | HWY: CTH R | COUNTY: MARATHON | CROSS SECTIONS: | SHEET NO: 267 | E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090201_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

9

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

108+50

108+00

107+50

5 FT

10 FT

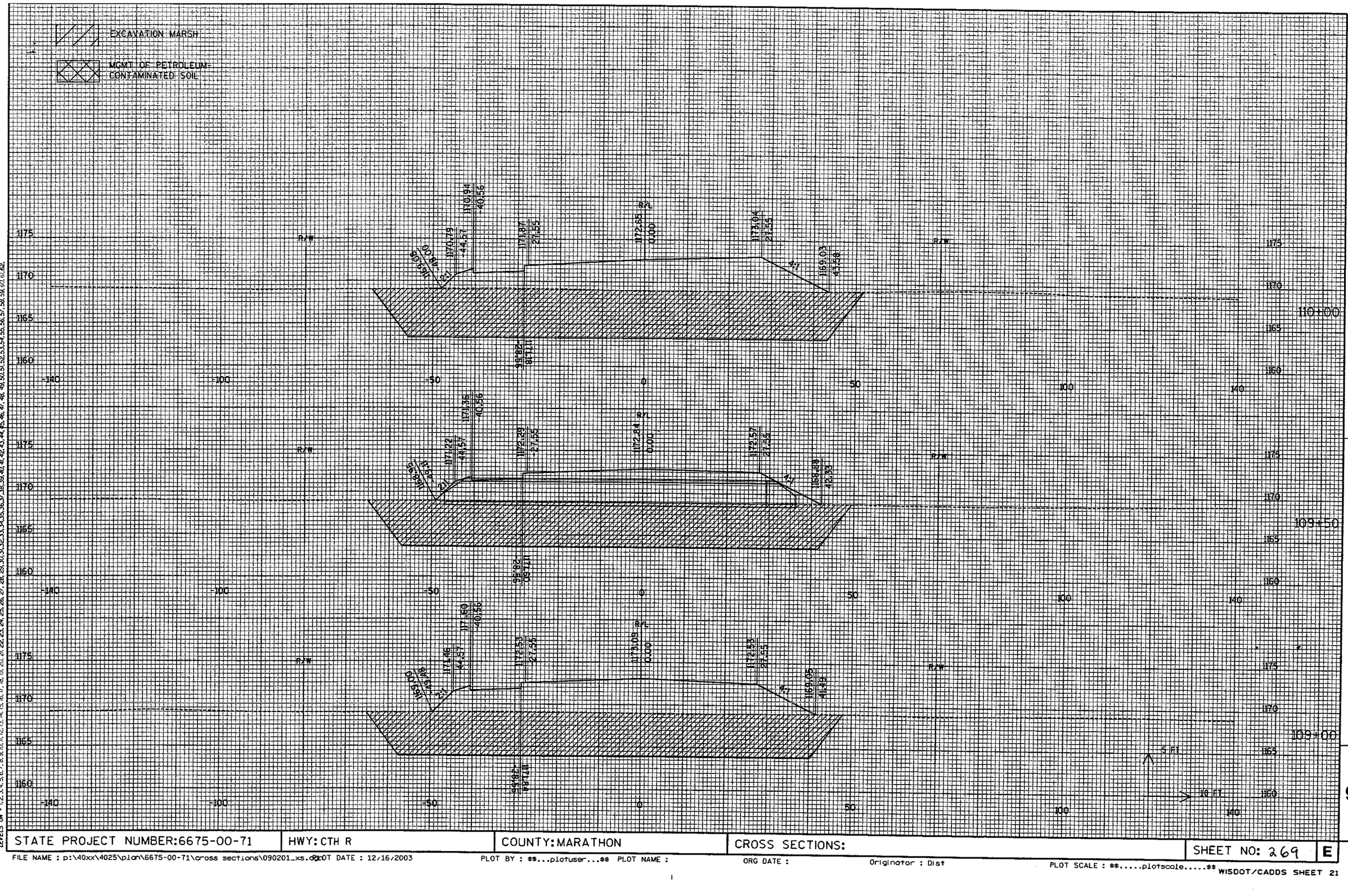
9

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 268	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090201_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL



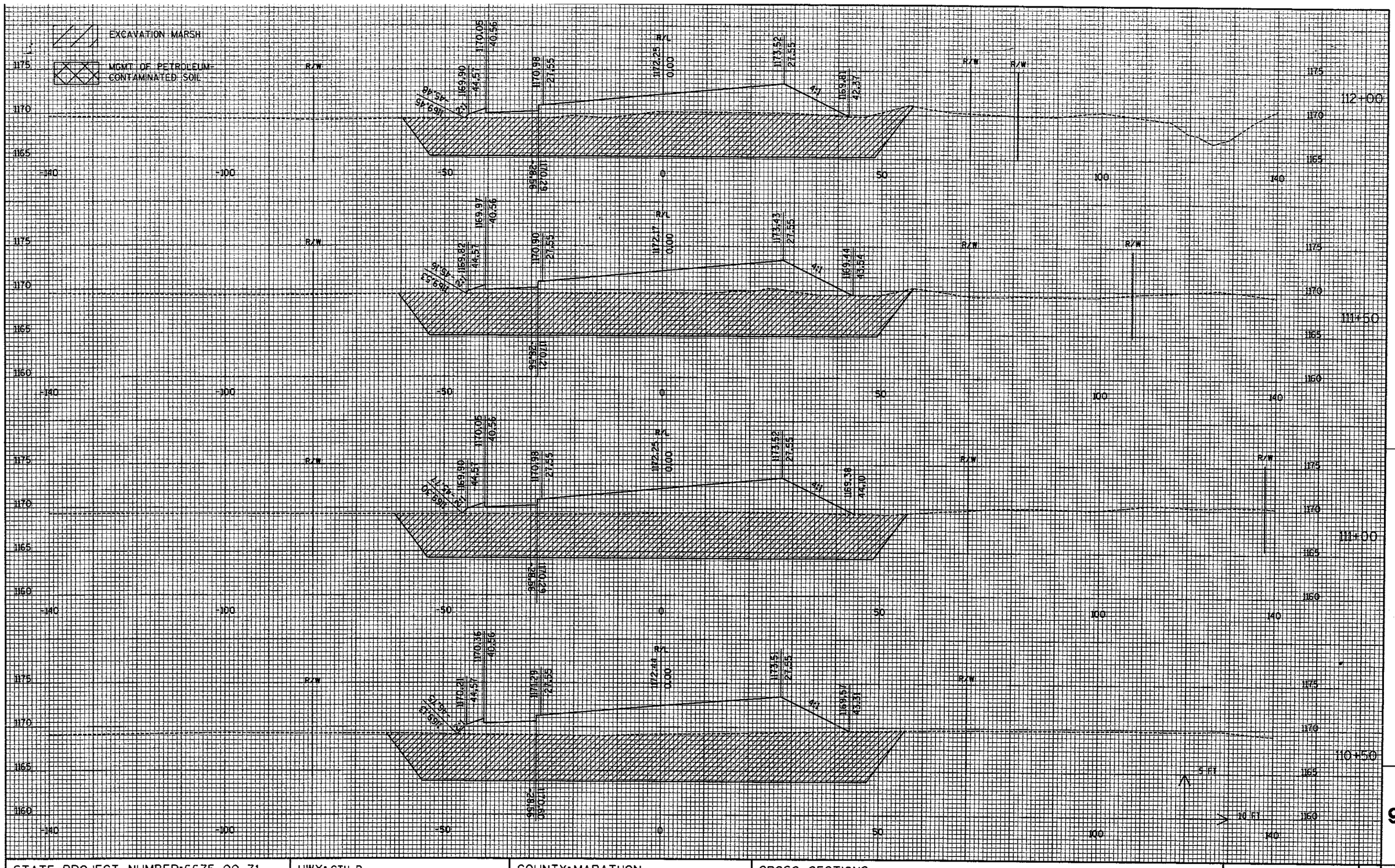
STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 269	E

9

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090201_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

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



STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY:MARATHON	CROSS SECTIONS:	SHEET NO: 270	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090201_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

9

EXCAVATION MARSH

MGMT. OF PETROLEUM-CONTAMINATED SOIL

114+00

113+50

113+00

112+50

5 FT

10 FT

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 27	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090201_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

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.

9

EXCAVATION: MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

USH 51 SHOULDER

FUTURE USH 51 SUBGRADE (WORK BY OTHERS)

116+00

115+50

115+00

114+50

5 FT

10 FT

9

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 272	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090201_xs.dgn WISDOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

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,

USH 51 SHOULDER

FUTURE USH 51 SUBGRADE (WORK BY OTHERS)

USH 51 SHOULDER

LSH 51 SHOULDER

MAXIMUM LIMITS OF MARSH EXCAVATION (TYP) (SEE CONSTRUCTION DETAILS FOR ADDITIONAL MARSH EXCAVATION INFORMATION)

5 FT

10 FT

117+50

117+00

116+50

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 273 E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090201_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

EXCAVATION MARSH

MGMT. OF PETROLEUM-CONTAMINATED SOIL

USH 51 SHOULDER

FUTURE USH 51 SUBGRADE (WORK BY OTHERS)

119+00

118+50

118+00

5 FT

10 FT

9

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 274	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090201_xs.dgn DOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

FUTURE USH 51 SUBGRADE (WORK BY OTHERS)

USH 51 SHOULDER

R/W

R/L

120+50

120+00

119+50

5 FT

10 FT

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,

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 275	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090201_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

9

EXCAVATION MARSH

MGMT OF PETROLEUM CONTAMINATED SOIL

FUTURE USH 51 SUBGRADE (WORK BY OTHERS)

USH 51 SHOULDER

R/L

R/W

122+00

121+50

121+00

5 FT

10 FT

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 276	E

9

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090201_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

FUTURE USH 51 SUBGRADE (WORK BY OTHERS)

USH 51 SHOULDER

123+50

123+00

122+50

5 FT

10 FT

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 277	E

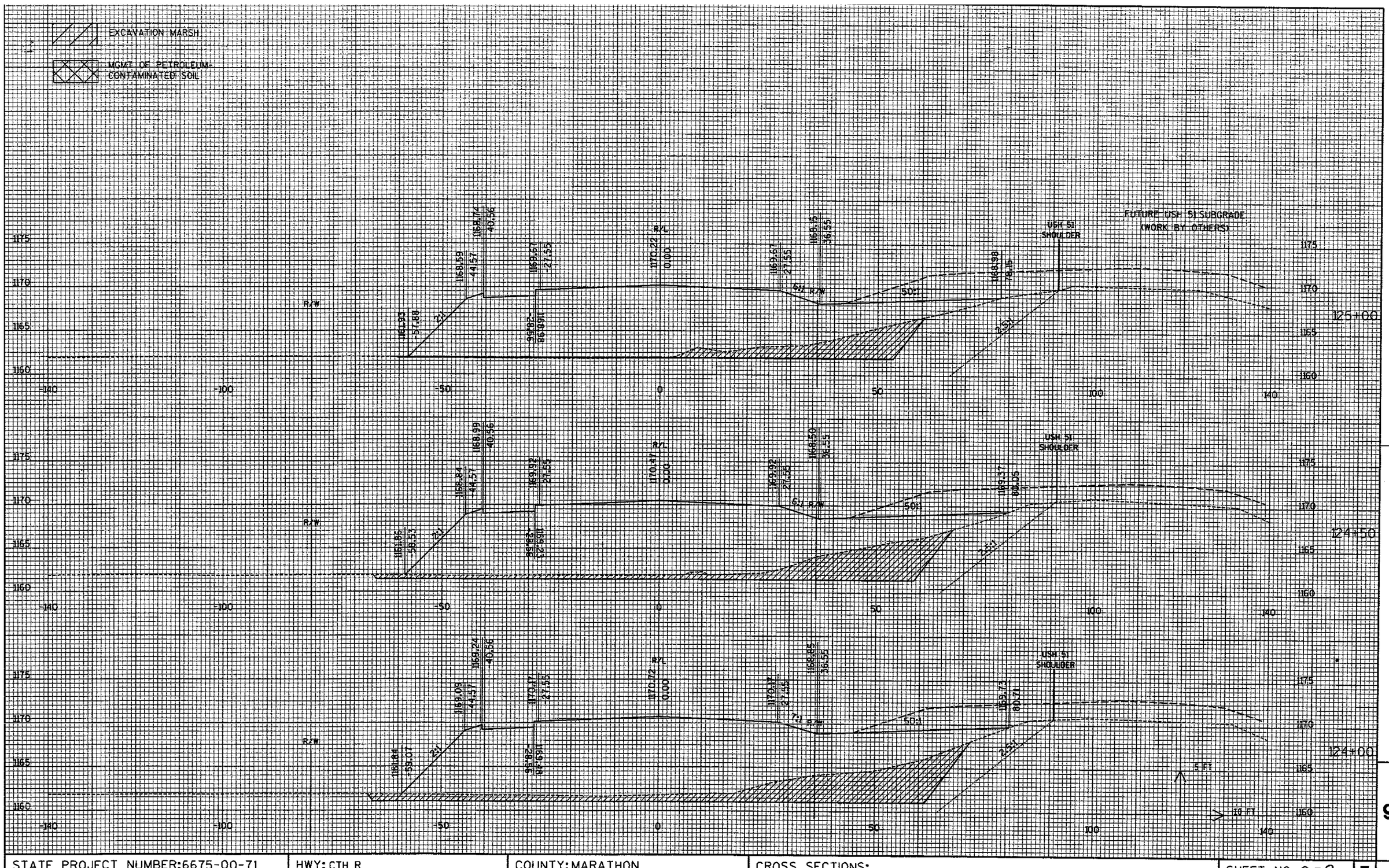
FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090201_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : ss...plotuser...ss PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : ss.....plotscale.....ss

WISDOT/CADDS SHEET 21

9

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL



STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 278	E

9

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090201_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

EXCAVATION: MARSH

MGMT. OF PETROLEUM-CONTAMINATED SOIL

FUTURE USH 51 SUBGRADE (WORK BY OTHERS)

USH 51 SHOULDER

126+50

126+00

125+50

EXCAVATION MARSH

R/W

R/L

20:1

5 FT

10 FT

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

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 279	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090201_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

9

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

FUTURE USH 51 SUBGRADE (WORK BY OTHERS)

128+00

127+50

127+00

USH 51 SHOULDER

R/W

R/L

5 FT

10 FT

9

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 280	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090201_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

FUTURE USH 51 SUBGRADE (WORK BY OTHERS)

USH 51 SHOULDER

R/W

R/L

129+50

129+00

128+50

5 FT

10 FT

9

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 281	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090201_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

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.

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

FUTURE USH 51 SUBGRADE (WORK BY OTHERS)

131+00

130+50

130+00

USH 51 SHOULDER

R/W

R/L

5 FT

10 FT

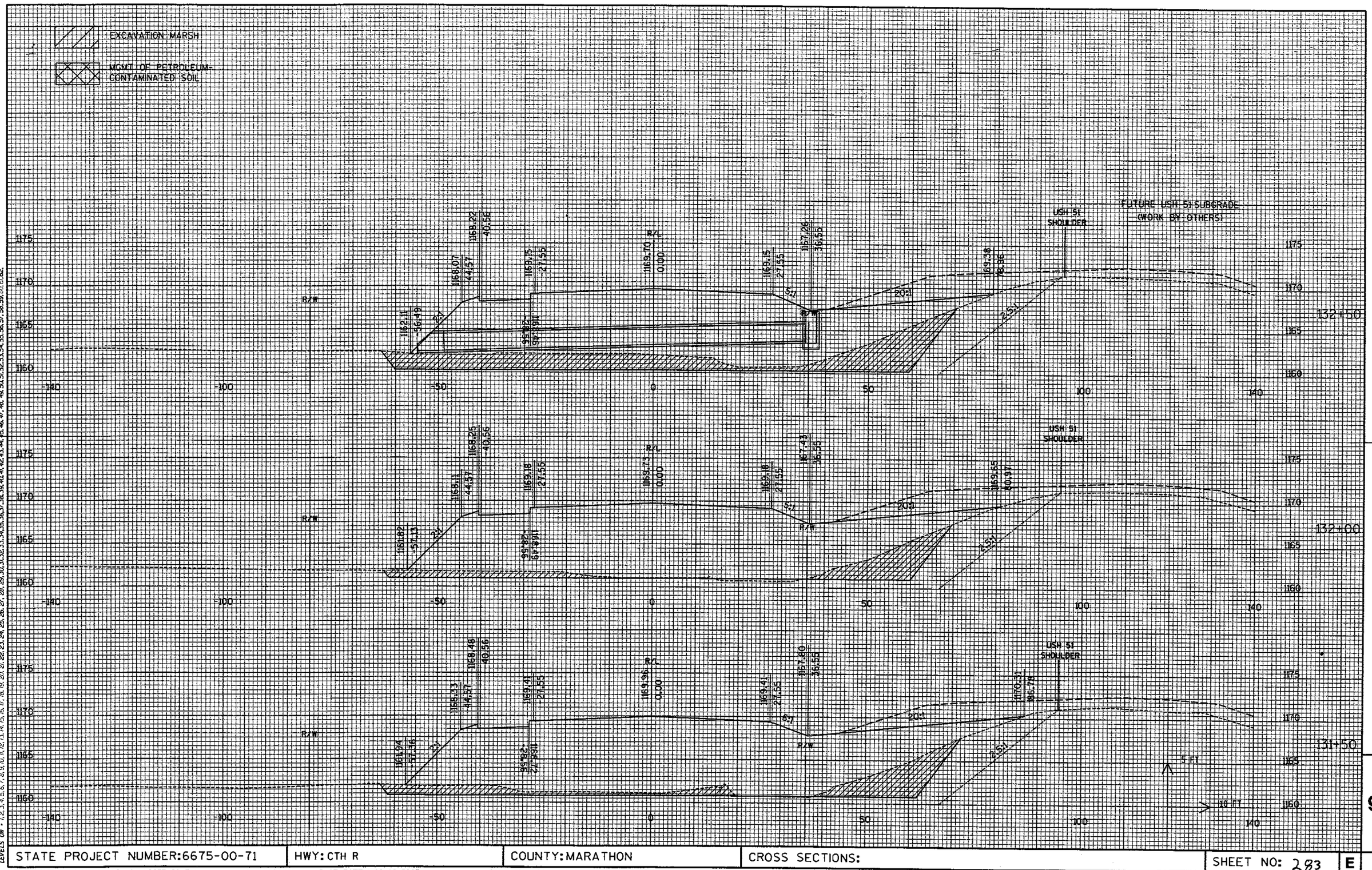
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STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY:MARATHON	CROSS SECTIONS:	SHEET NO: 282	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090201_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL



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.

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 283	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090201_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

9

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

FUTURE USH 51 SUBGRADE (WORK BY OTHERS)

134+00

133+50

133+00

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY:MARATHON	CROSS SECTIONS:	SHEET NO: 284	E

9

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

FUTURE USH 51 SUBGRADE (WORK BY OTHERS)

USH 51 SHOULDER

R/W

R/W

R/W

EXCAVATION: MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

FUTURE USH 51 SUBGRADE (WORK BY OTHERS)

USH 51 SHOULDER

R/W

136+50

136+00

5 FT

10 FT

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.

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 286	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090201_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

9

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

FUTURE USH 51 SUBGRADE
(WORK BY OTHERS)

USH 51
SHOULDER

R/W

R/L

50:1

3.5%

6.5%

5 FT

10 FT

137+50

137+00

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,

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 287	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090201_xs.dgn DOT DATE : 12/16/2003 PLOT BY : $$...platuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

9

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

138+50

138+00

FUTURE USH 51 SUBGRADE (WORK BY OTHERS)

USH 51 SHOULDER

R/W

50:1

5 FT

10 FT

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 288	E

9

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090201_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

EXCAVATION MARSH

MGMT. OF PETROLEUM-CONTAMINATED SOIL

FUTURE USH 51 SUBGRADE (WORK BY OTHERS)

USH 51 SHOULDER

R/W

R/L

3:1

2.5:1

100:1

50:1

139+50

139+00

No Marsh Fence

5 FT

10 FT

9

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 289	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090201_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

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,

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

B-37-373

FUTURE USH 51 SUBGRADE (WORK BY OTHERS)

USH 51 SHOULDER

END ABRUPT

140+50

140+00

R/W

R/L

5 FT

10 FT

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 290	E

9

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090201_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

FUTURE USH 51 SUBGRADE (WORK BY OTHERS)

USH 51 SHOULDER

R/W

R/W

50:1

50:1

2%

2%

4%

4%

1178.43 -40.36

1179.36 -24.06

1178.26 -27.14

1178.67 -28.16

1176.81 0.00

1178.25 27.55

1178.18 31.05

1176.15 36.55

1170.38 53.84

1171.37 97.83

1164.20 -46.69

1154.40 -75.07

1178.48 -36.74

1179.41 -23.73

1178.08 -23.72

1178.72 -24.74

1178.55 0.00

1178.00 27.55

1177.93 31.05

1170.01 54.82

1170.82 95.52

1164.06 -47.27

1155.17 -67.56

147+00

146+50

BEGIN ABRUPT

5 FT

10 FT

B 57-373

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.

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 29(	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090202_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

9

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

FUTURE USH 51 SUBGRADE (WORK BY OTHERS)

USH 51 SHOULDER

148+00

147+50

5 FT

10 FT

9

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 292	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090202_xs.dgn DOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

FUTURE USH 51 SUBGRADE (WORK BY OTHERS)

USH 51 SHOULDER

R/W

R/L

5:1

3:1

2%

5 FT

16 FT

EXCAVATION MARSH

148+50

149+00

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 293	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090202_xs.dgn DOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

9

EXCAVATION-MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

FUTURE USH 51 SUBGRADE (WORK BY OTHERS)

USH 51 SHOULDER

R/W

150+00

149+50

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.

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY:MARATHON	CROSS SECTIONS:	SHEET NO: 294	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090202_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : **...plotuser...** PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : **.....plotscale.....** WISDOT/CADDS SHEET 21

9

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

FUTURE USH 51 SUBGRADE (WORK BY OTHERS)

USH 51 SHOULDER

R/W

R/L

50:1

2.5:1

151+00

150+50

5 FT

10 FT

9

STATE PROJECT NUMBER:6675-00-71 | HWY: CTH R | COUNTY: MARATHON | CROSS SECTIONS: | SHEET NO: 295 | E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090202_xs.dgn | PLOT DATE : 12/16/2003 | PLOT BY : $$...plotuser...$$ | PLOT NAME : | ORG DATE : | Originator : Dist | PLOT SCALE : $$.....plotscale.....$$ | WISDOT/CADDS SHEET 21

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

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

FUTURE USH 51 SUBGRADE
(WORK BY OTHERS)

USH 51
SHOULDER

152+00

151+50

R/W

R/W

R/W

R/W

5 FT

10 FT

9

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY:MARATHON	CROSS SECTIONS:	SHEET NO: 296	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090202_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

FUTURE USH 51 SUBGRADE (WORK BY OTHERS)

USH 51 SHOULDER

R/W

R/C

153+00

152+50

100:1

10:1

2:1

5 FT

10 FT

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 297 E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090202_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

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,

9

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

FUTURE USH 51 SUBGRADE (WORK BY OTHERS)

USH 51 SHOULDER

WIDENING TO ACCOMMODATE CONCRETE BARRIER

154+00

153+50

R/W

R/L

2:1

6:1

50:1

5 FT

10 FT

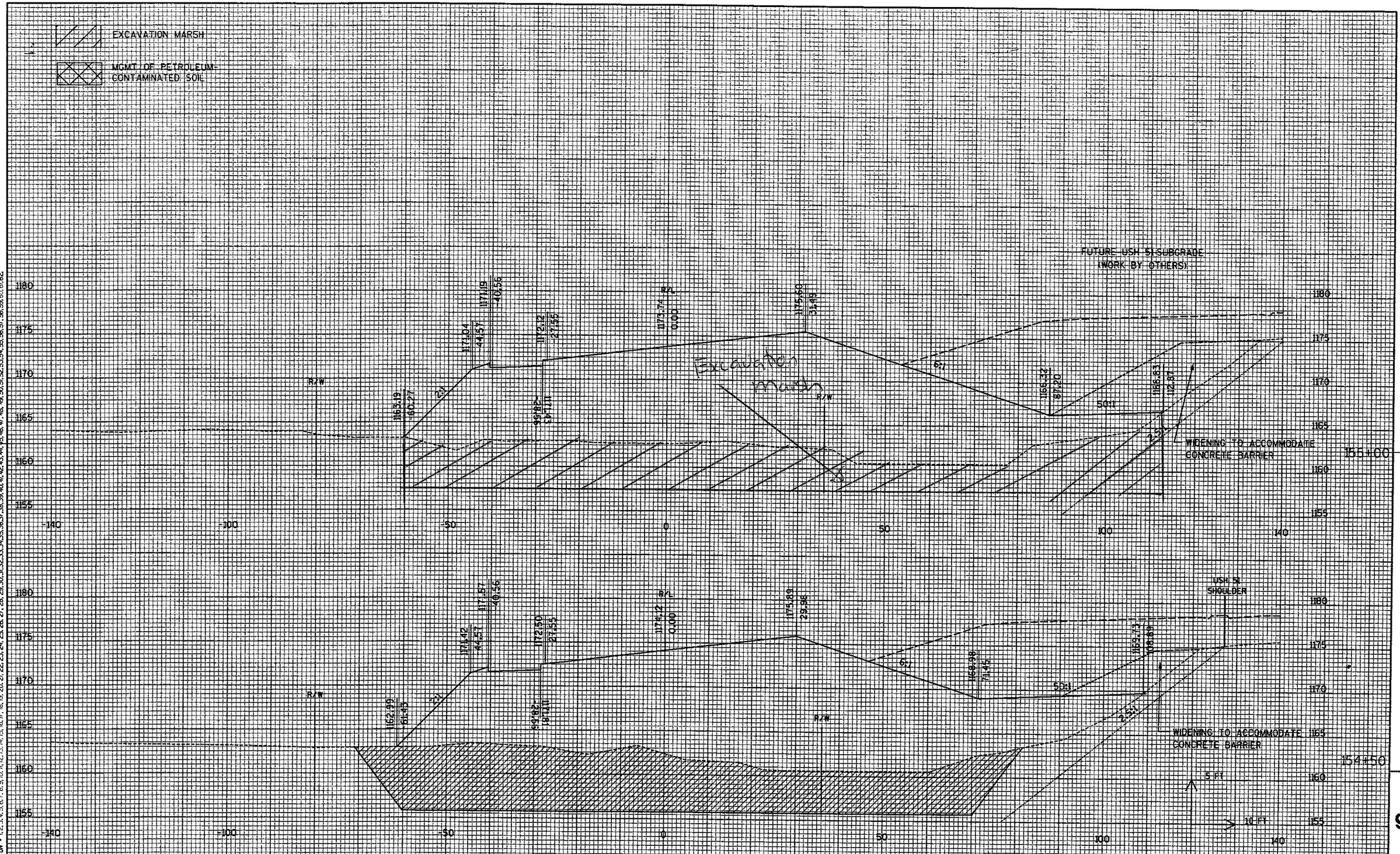
9

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 298	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090202_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

EXCAVATION MARSH

MGMT. OF PETROLEUM-CONTAMINATED SOIL



STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 299	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090202_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

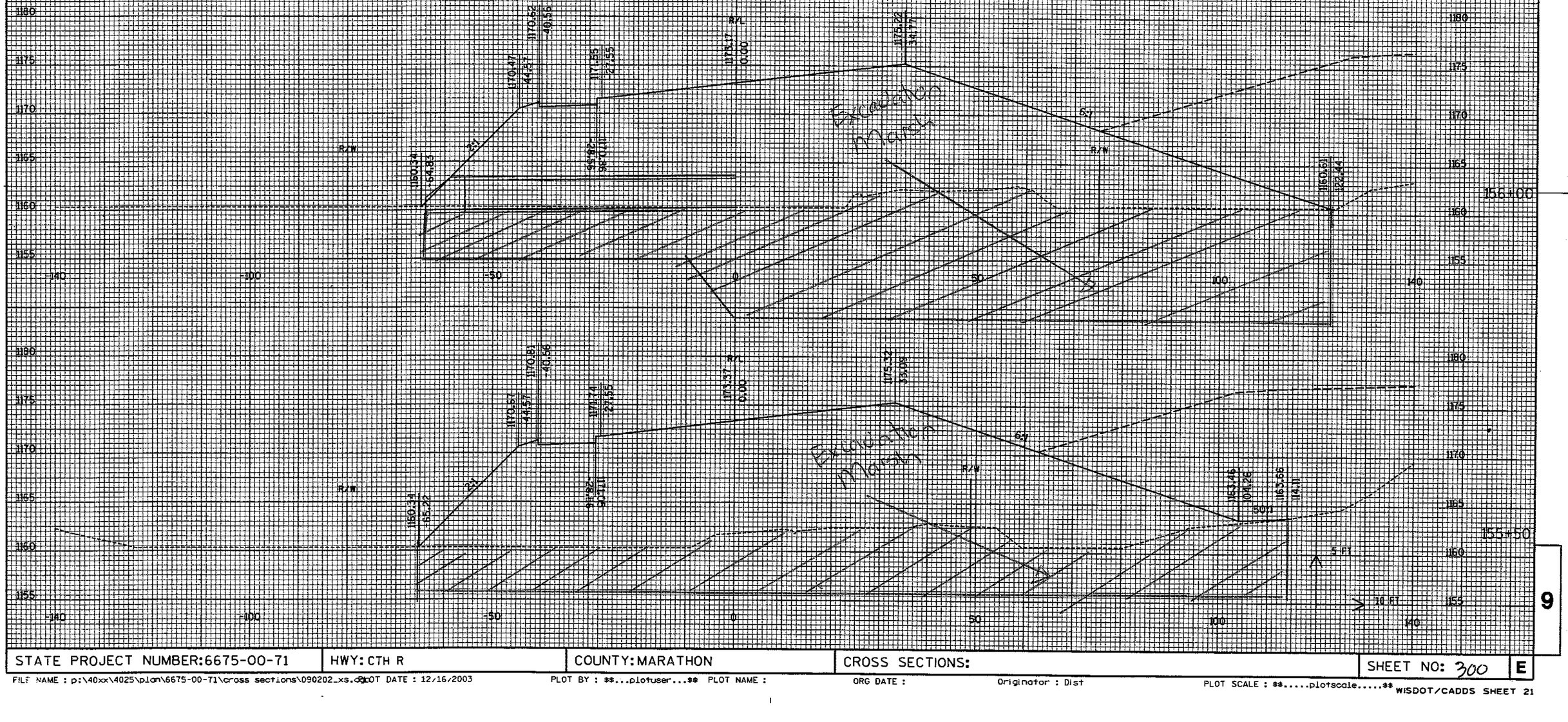
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62

9

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

FUTURE USH 51 SUBGRADE (WORK BY OTHERS)



STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 300	E

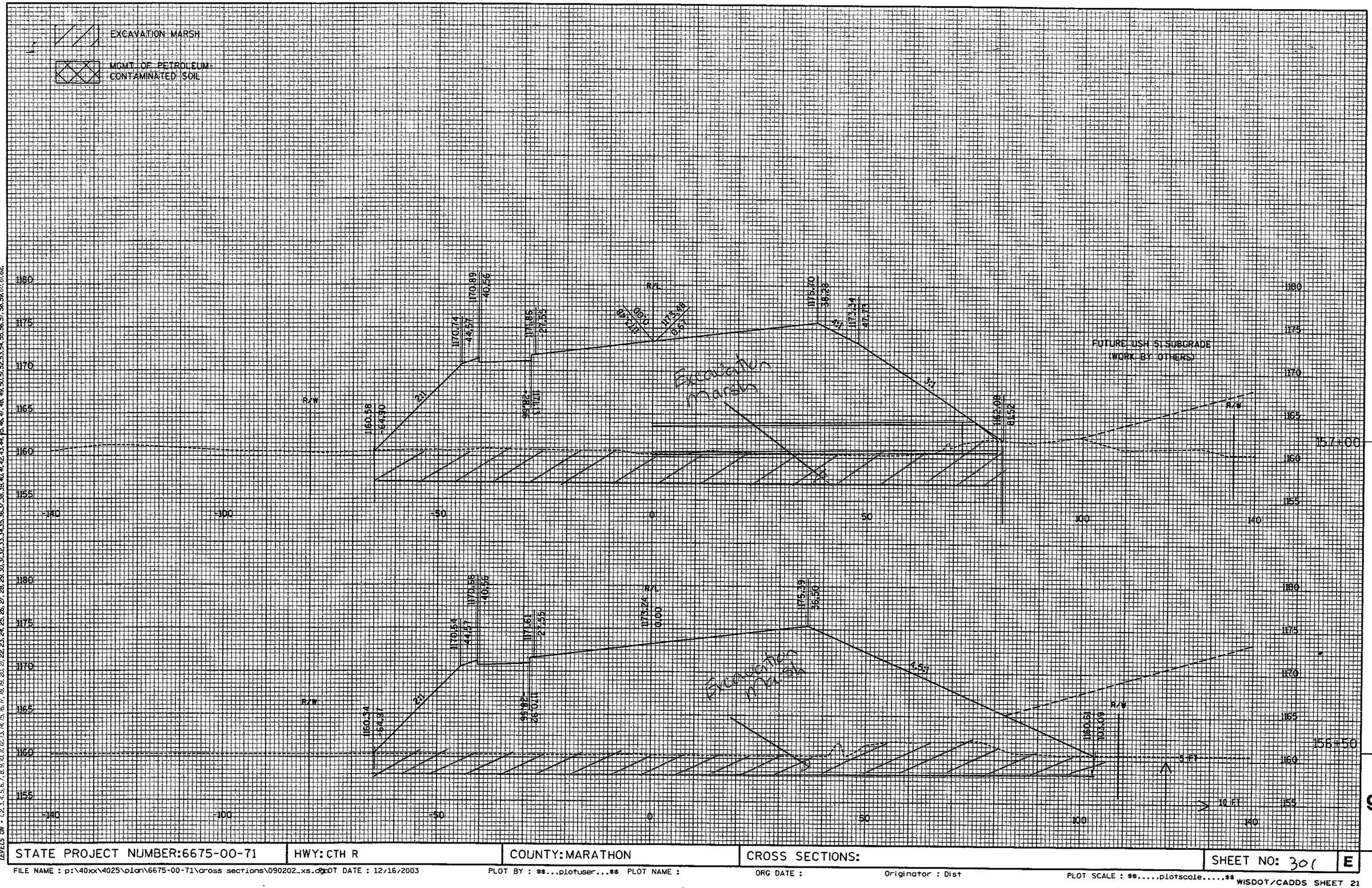
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FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090202_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

EXCAVATION MARSH

MGMT. OF PETROLEUM-CONTAMINATED SOIL



STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 301	E

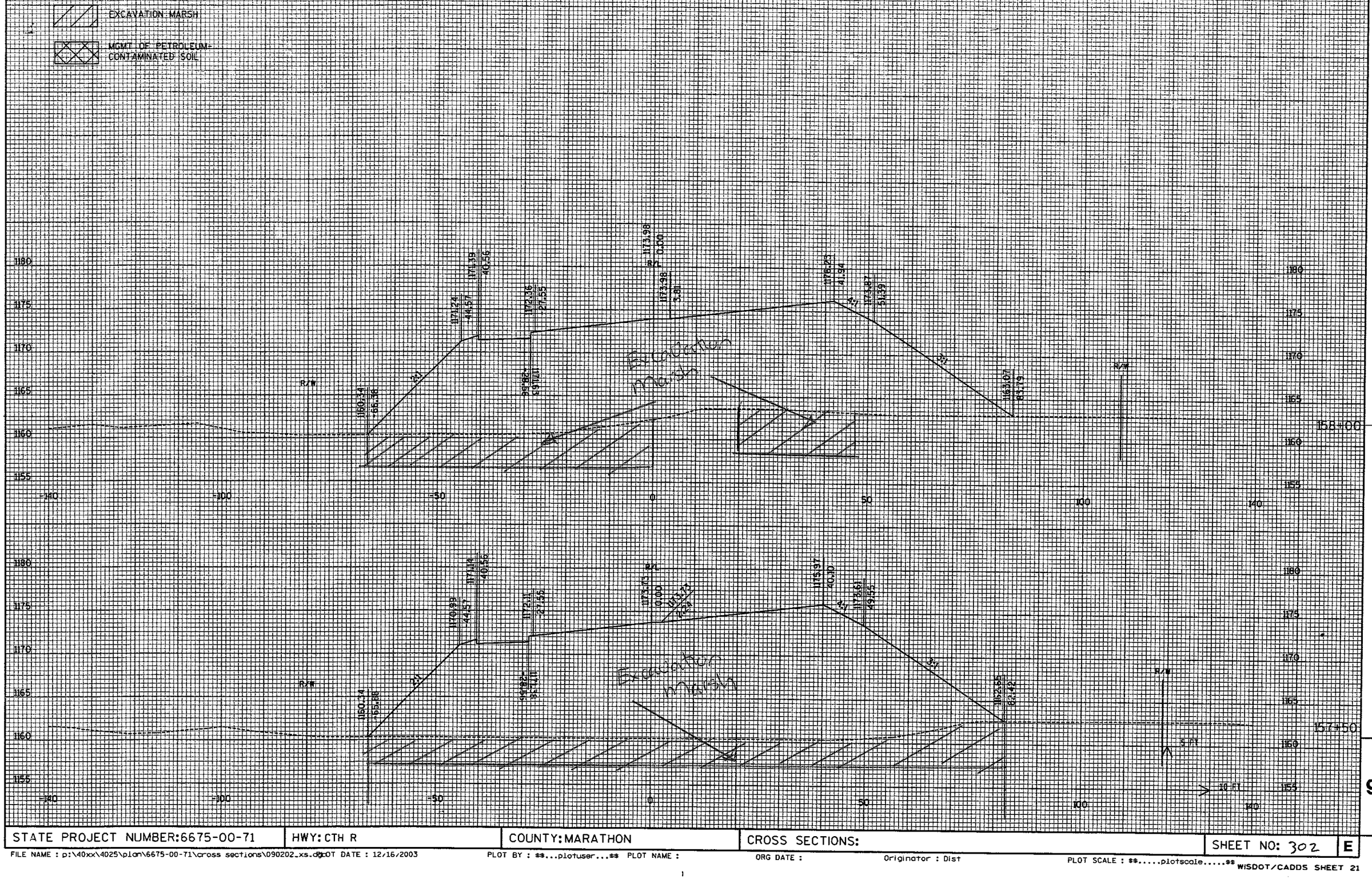
FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090202_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

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.

9

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL



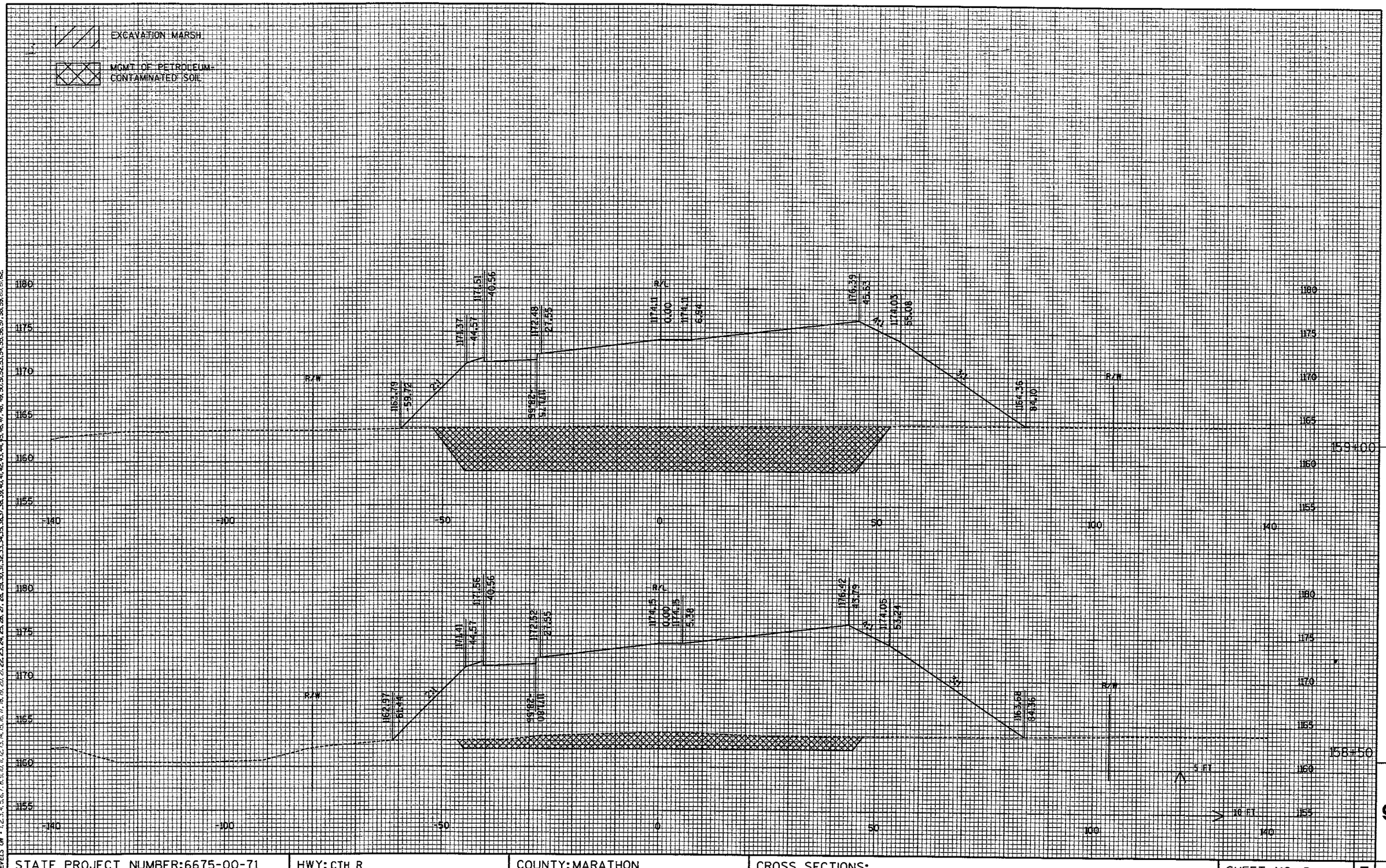
STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 302	E

9

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090202_xs.dgn DOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL



STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 303	E

9

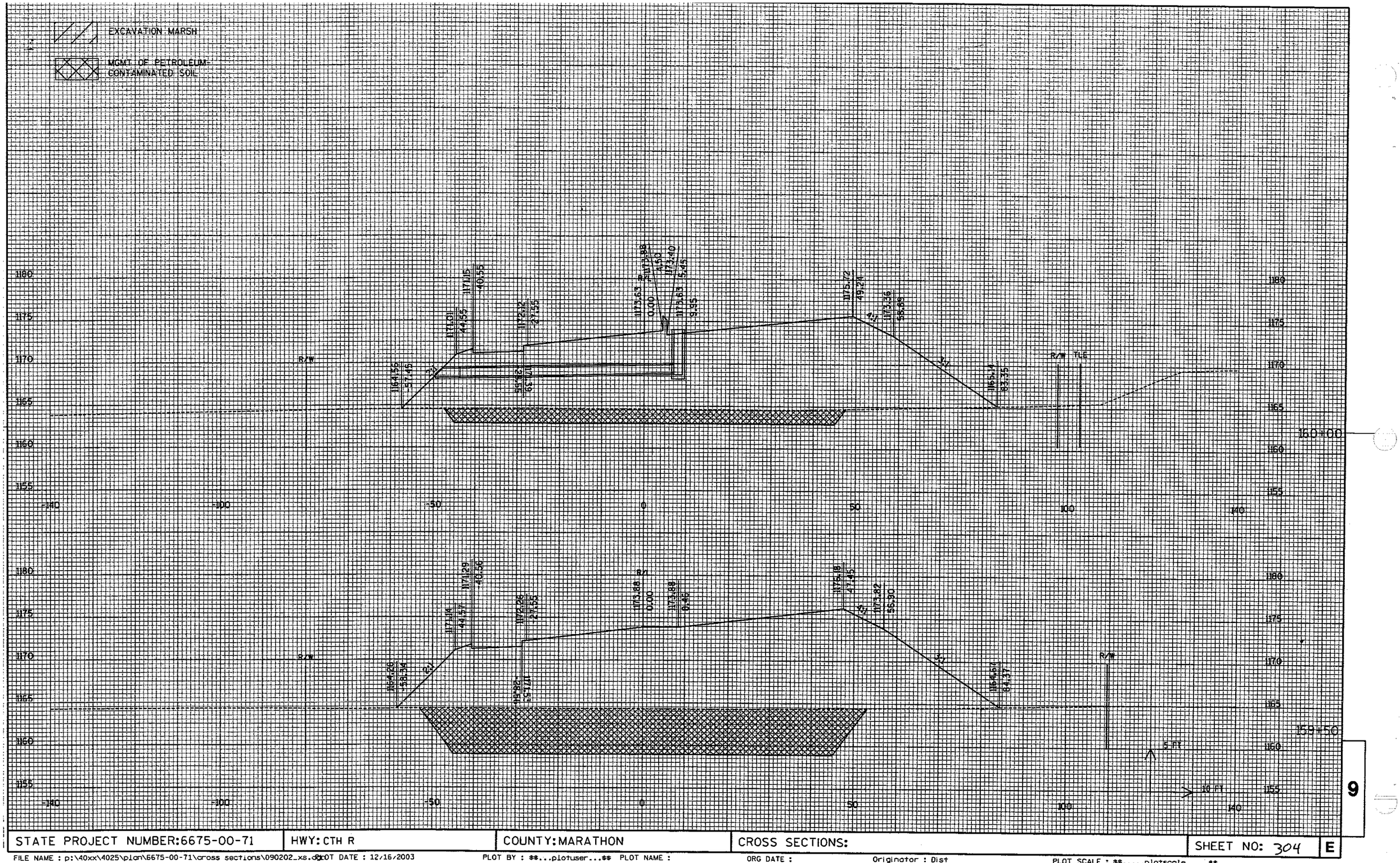
FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090202_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

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,

EXCAVATION MARSH

MGMT. OF PETROLEUM-CONTAMINATED SOIL



STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY:MARATHON	CROSS SECTIONS:	SHEET NO: 304	E

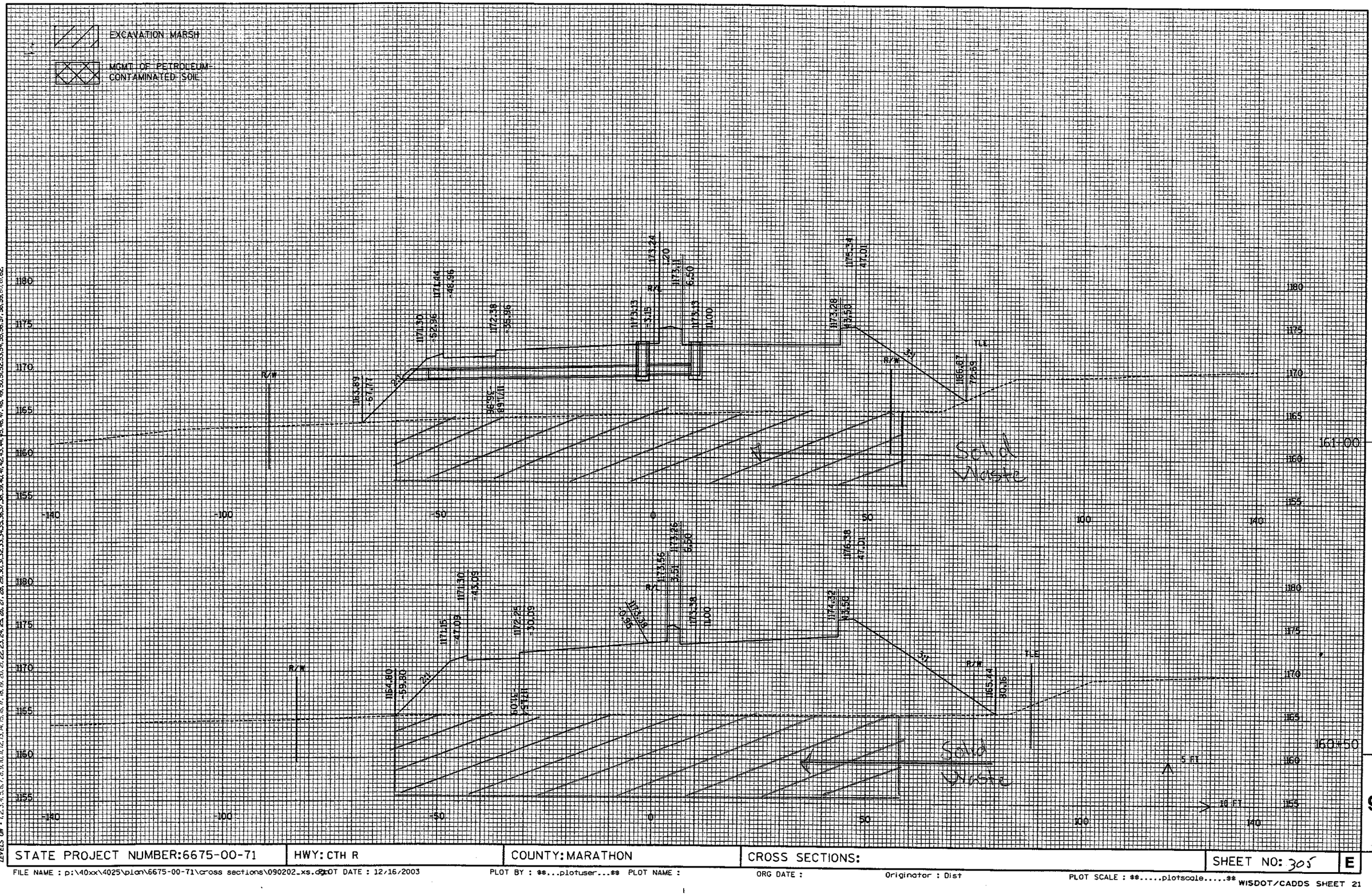
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FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090202_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL



STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 305	E

9

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090202_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

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,

EXCAVATION: MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

Existing Marsh

Solid Waste

162+50

162+00

161+50

5 FT

10 FT

9

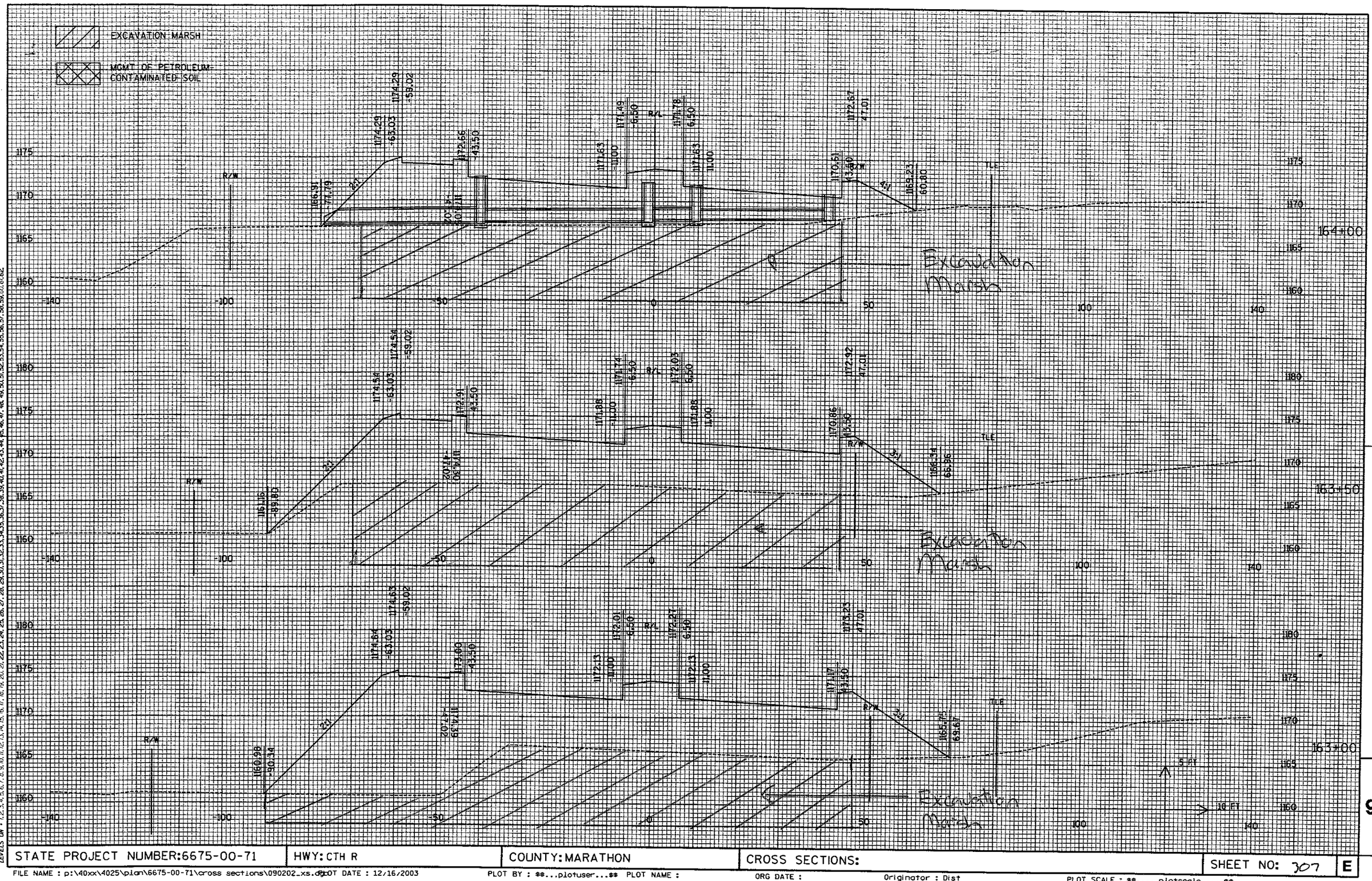
STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 306	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090202_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

EXCAVATION: MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL



STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 307	E

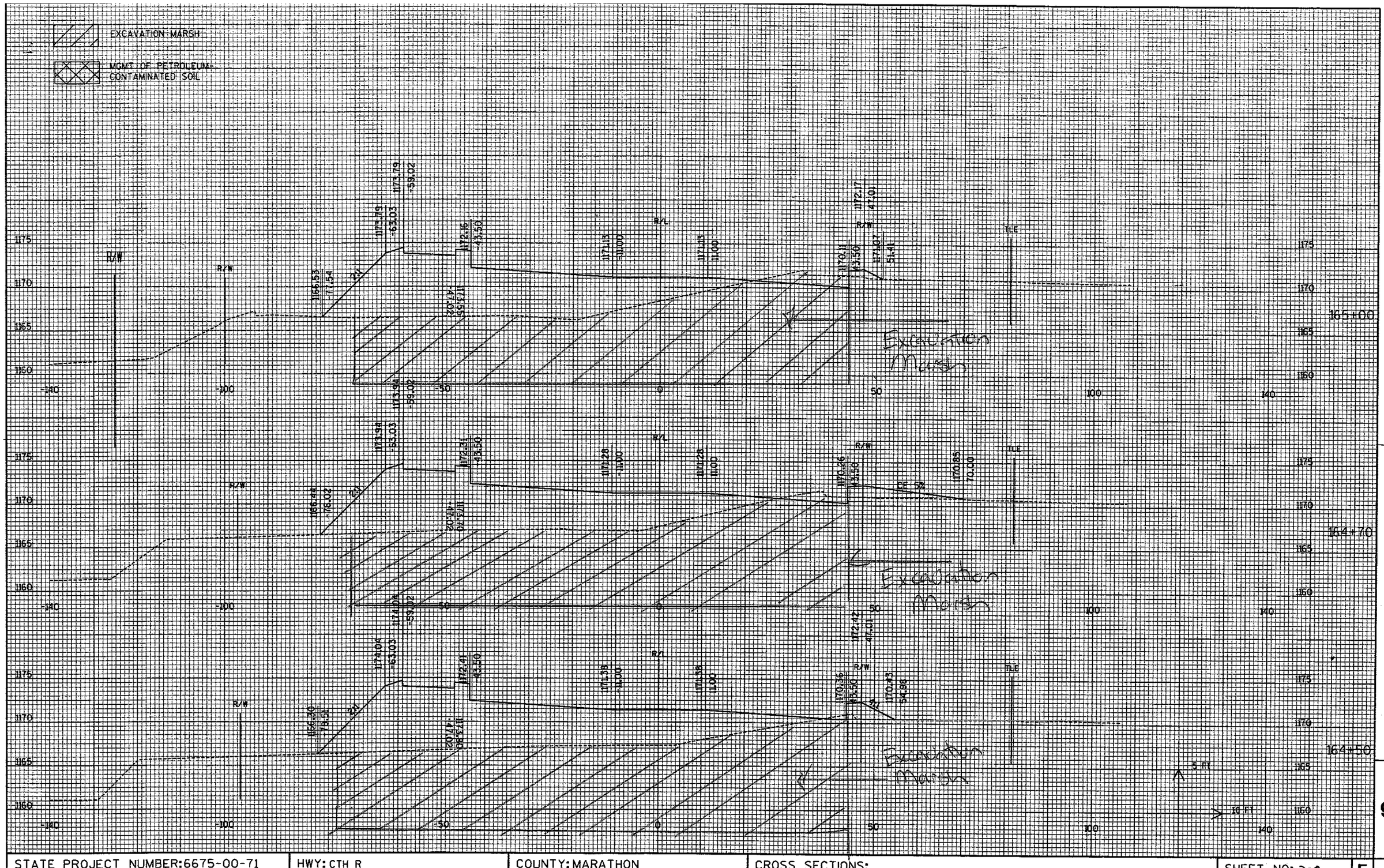
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FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090202_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

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.

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL



STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 308	E

9

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090202_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

R/W

167+00

166+50

166+00

165+50

Excavation Marsh

5 FT

10 FT

9

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 309	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090202_xs.dgn DOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

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.

EXCAVATION MARSH

MGMT OF PETROLEUM CONTAMINATED SOIL

168+00

167+70

167+50

167+25

STATE PROJECT NUMBER:6675-00-71 | HWY: CTH R | COUNTY: MARATHON | CROSS SECTIONS: | SHEET NO: 310 | E

9

EXCAVATION: MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

169+00

168+88

168+63

168+50

MATCH DRIVEWAY, 150' RT

5 FT

10 FT

9

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 311	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090202_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

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,

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

171+50

171+00

170+50

170+00

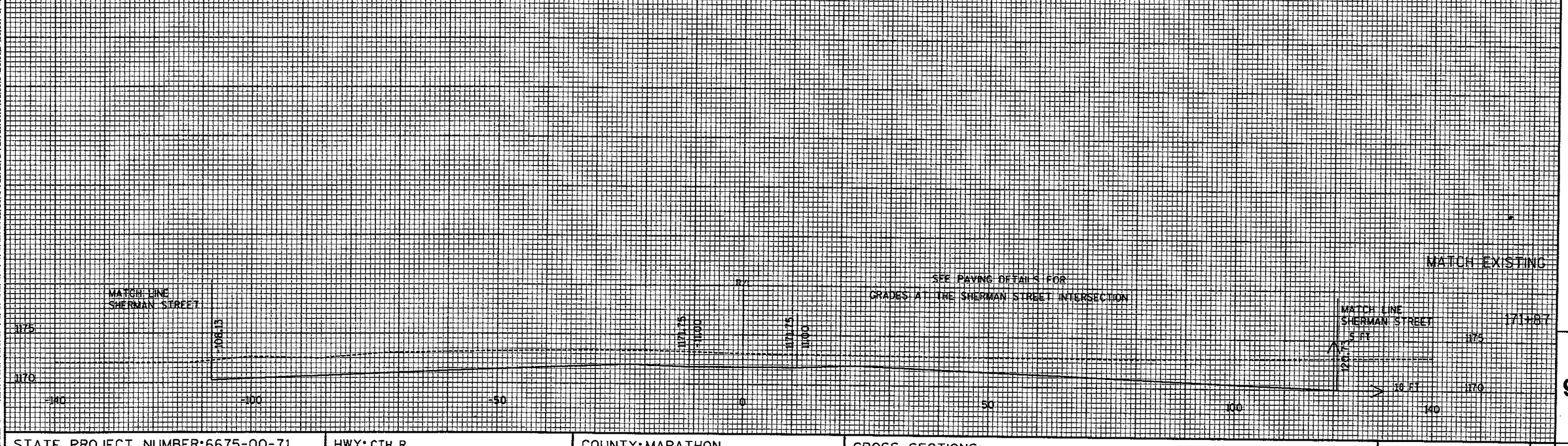
169+50

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY:MARATHON	CROSS SECTIONS:	SHEET NO: 3/2 E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090202_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

EXCAVATION MARSH

MGMT. OF PETROLEUM-CONTAMINATED SOIL



STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:	SHEET NO: 3/3	E

9

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090202_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

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

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

57"TW"+00

56"TW"+50

56"TW"+00

55"TW"+50

BEGIN ABRUPT 55"TW"+46

MATCH EXISTING

5 FT

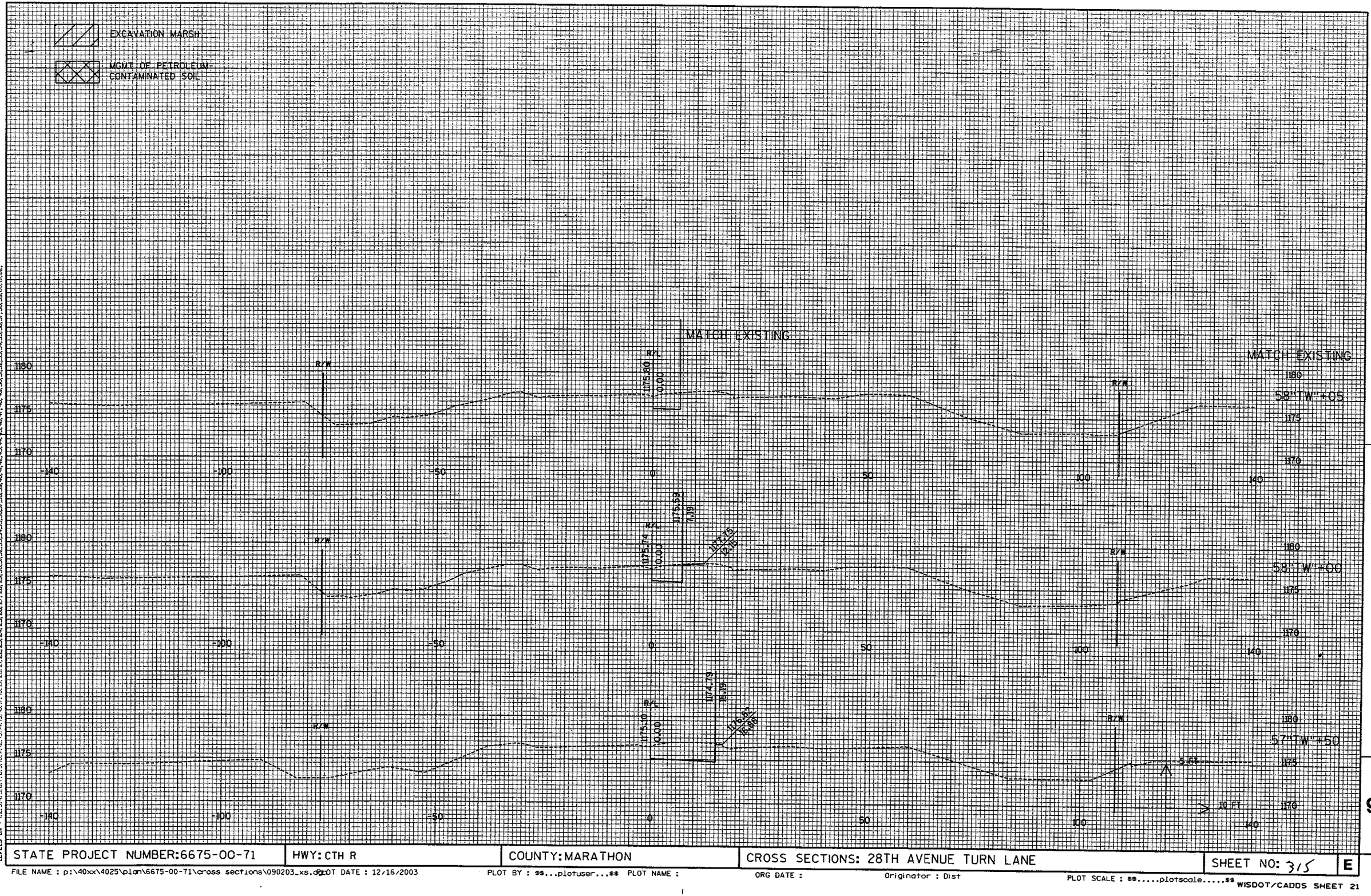
≥ 10 FT

9

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS: 28TH AVENUE TURN LANE	SHEET NO: 314	E

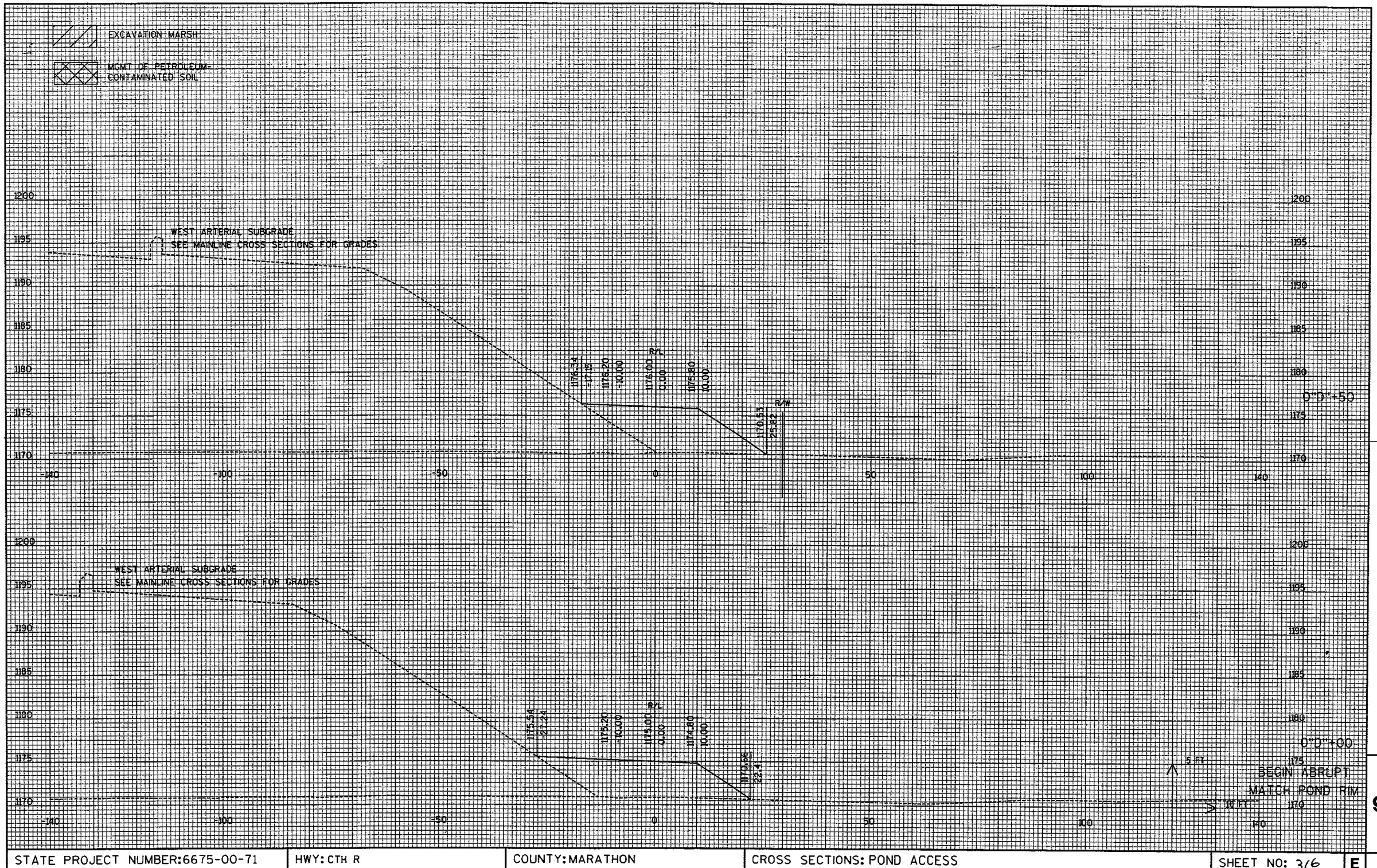
EXCAVATION MARSH

MGMT. OF PETROLEUM-CONTAMINATED SOIL


MATCH EXISTING
MATCH EXISTING
R/W
R/W
R/W

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL



9

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS: POND ACCESS	SHEET NO: 3/6	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090204_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

EXCAVATION MARSH

MGMT OF PETROLEUM-CONTAMINATED SOIL

WEST ARTERIAL SUBGRADE
SEE MAINLINE CROSS SECTIONS FOR GRADES

R/L
1183.50
-24.10
1183.21
-10.00
1183.01
0.00
1182.81
10.00
R/W
1170.43
46.38

WEST ARTERIAL SUBGRADE
SEE MAINLINE CROSS SECTIONS FOR GRADES

R/L
1178.33
-10.00
1178.13
0.00
1177.93
10.00
1178.35
-11.20
R/W
1170.14
30.38

5 FT
10 FT

1"D"=50

1"D"=00

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS: POND ACCESS	SHEET NO: 3/7	E

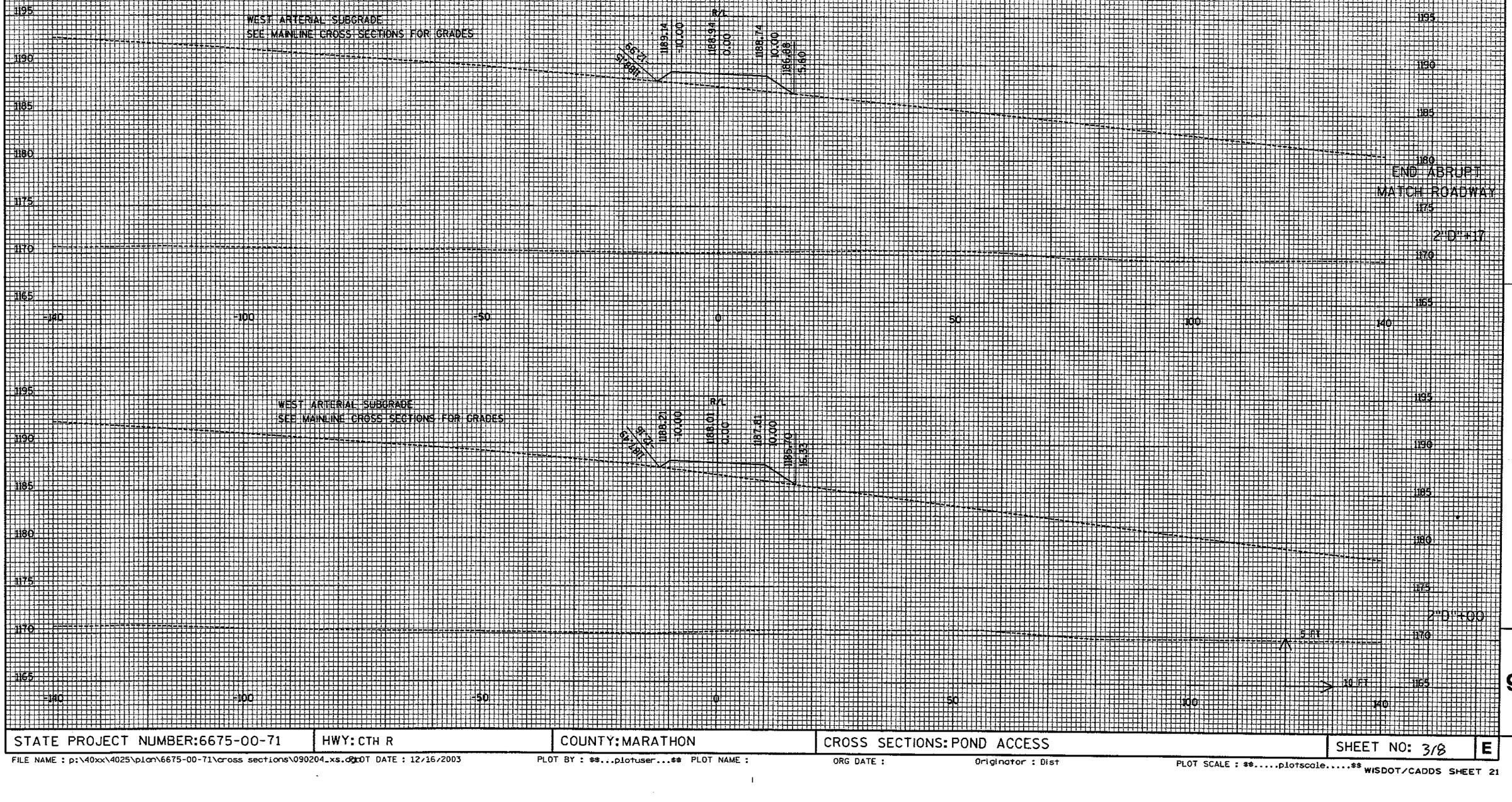
FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090204_xs.dgn WISDOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

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,

9

EXCAVATION MARSH

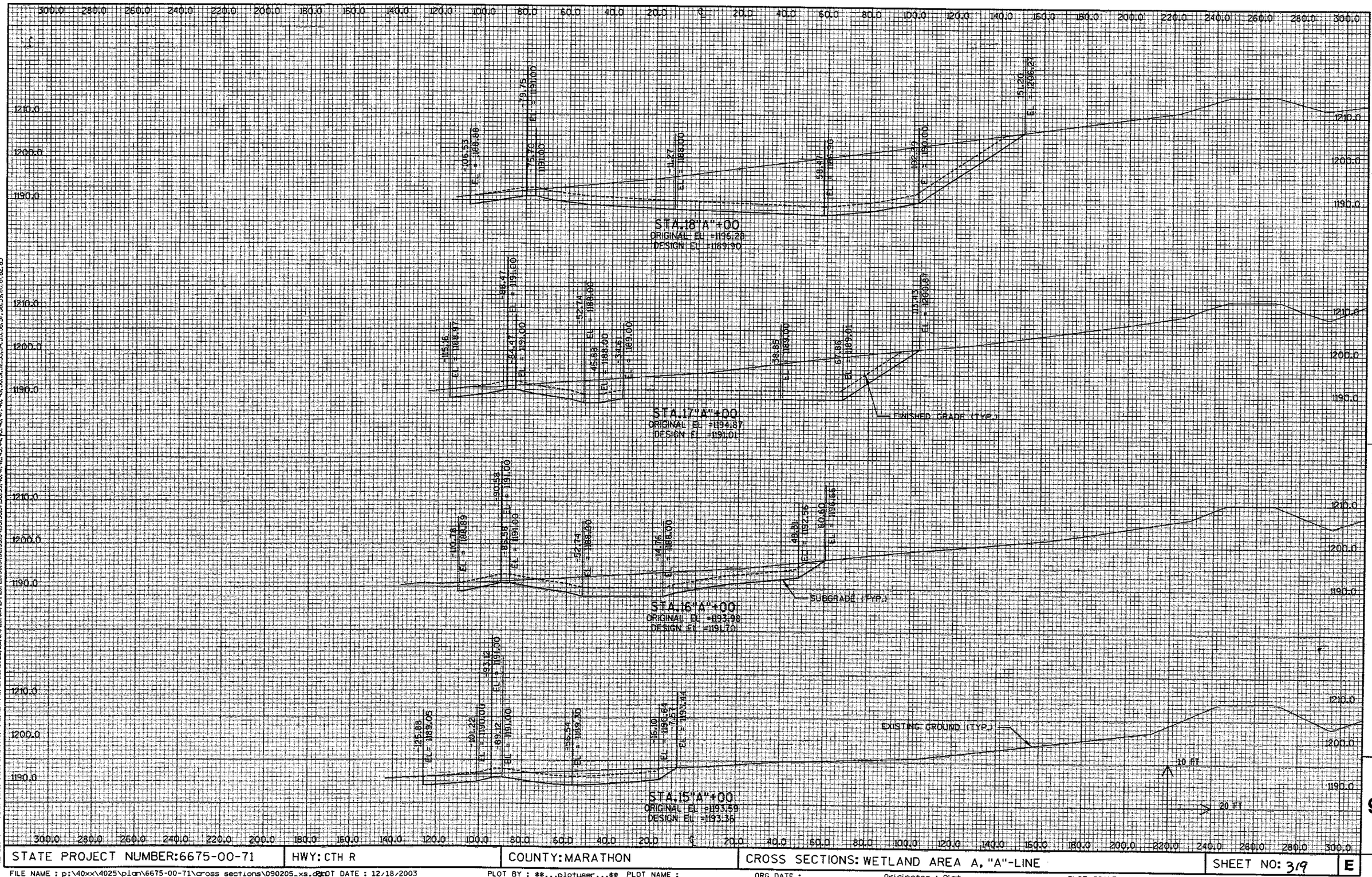
MGMT OF PETROLEUM-CONTAMINATED SOIL



STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS: POND ACCESS	SHEET NO: 3/8	E

9

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090204_xs.dgn PLOT DATE : 12/16/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



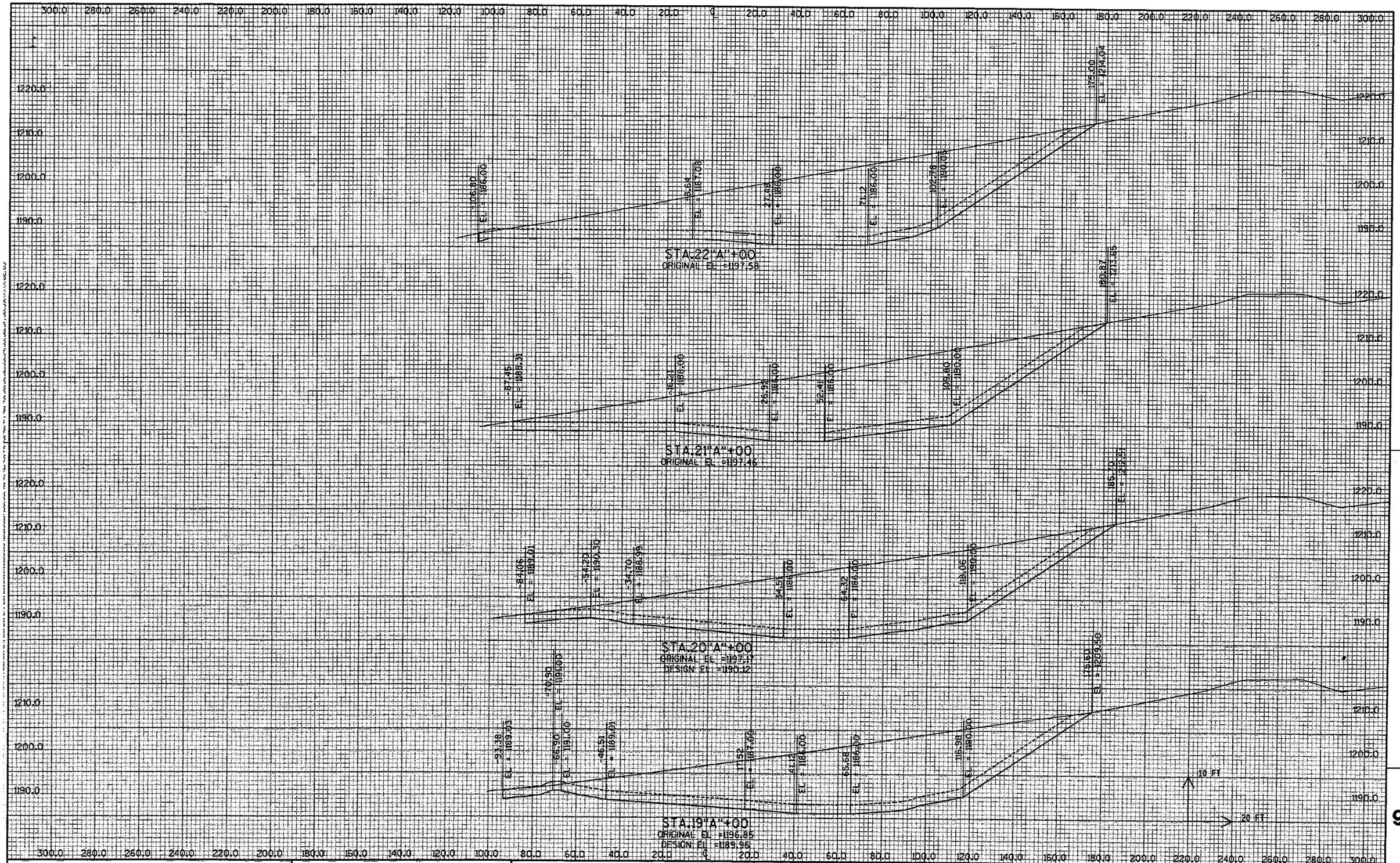
STATE PROJECT NUMBER:6675-00-71 | HWY: CTH R | COUNTY: MARATHON | CROSS SECTIONS: WETLAND AREA A, "A"-LINE | SHEET NO: 3\9 | E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090205_xs.dgn PLOT DATE : 12/18/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

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

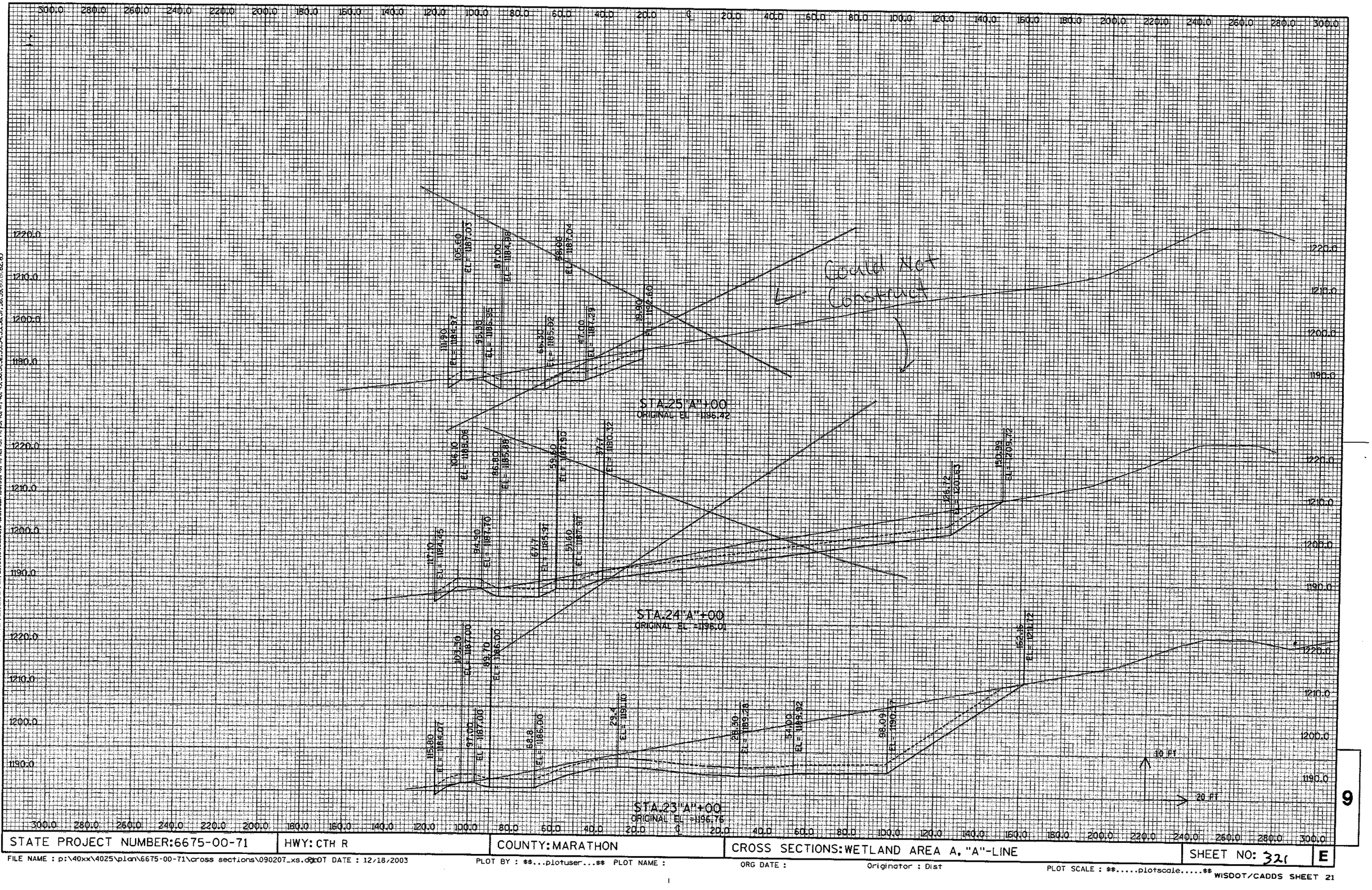
9



STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS: WETLAND AREA A, "A"-LINE	SHEET NO: 320 E

9

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090206_xs.dgn LOT DATE : 12/18/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

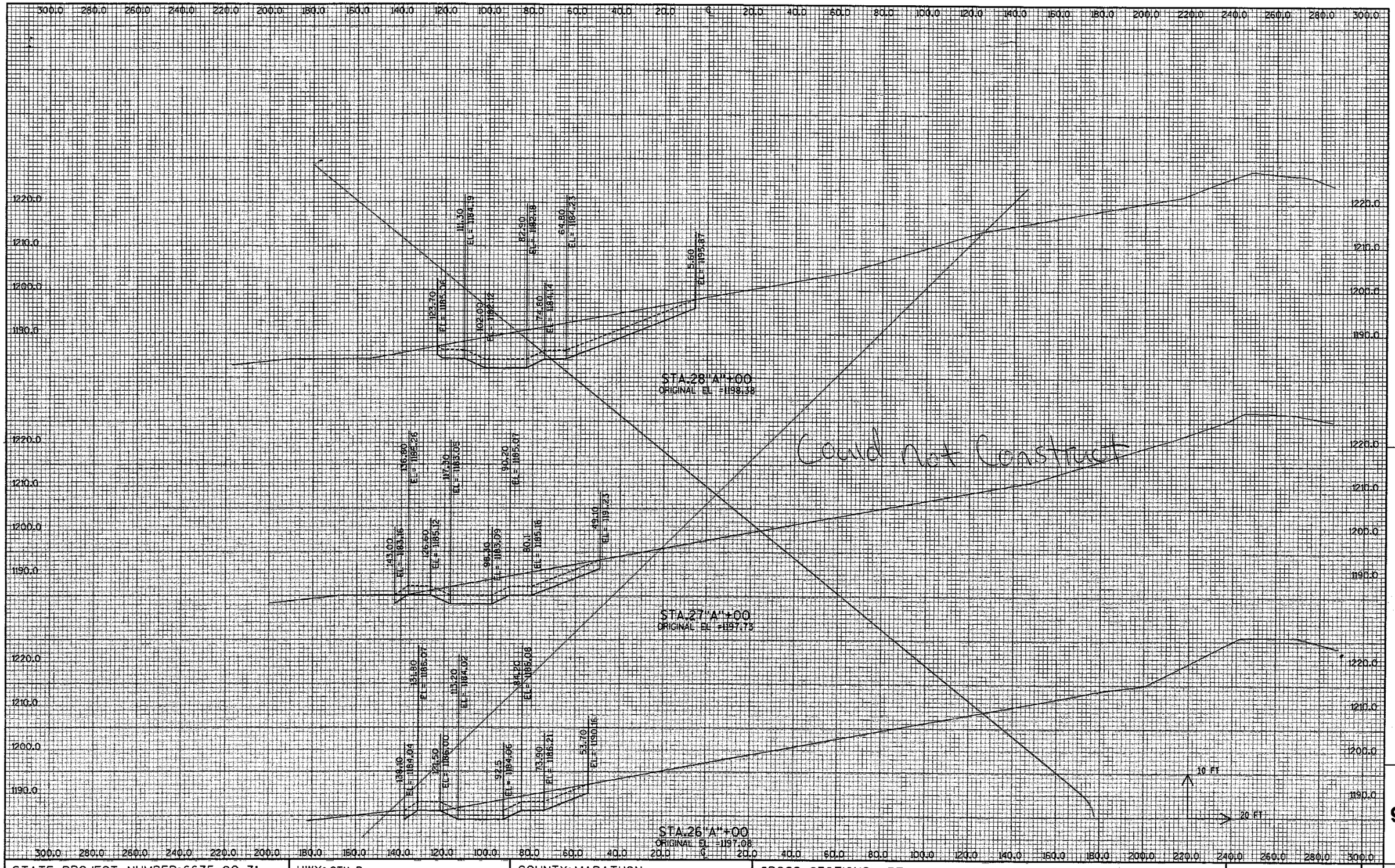


STATE PROJECT NUMBER:6675-00-71 | HWY: CTH R | COUNTY: MARATHON | CROSS SECTIONS: WETLAND AREA A, "A"-LINE | SHEET NO: 321 | E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090207_xs.dgn PLOT DATE : 12/18/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

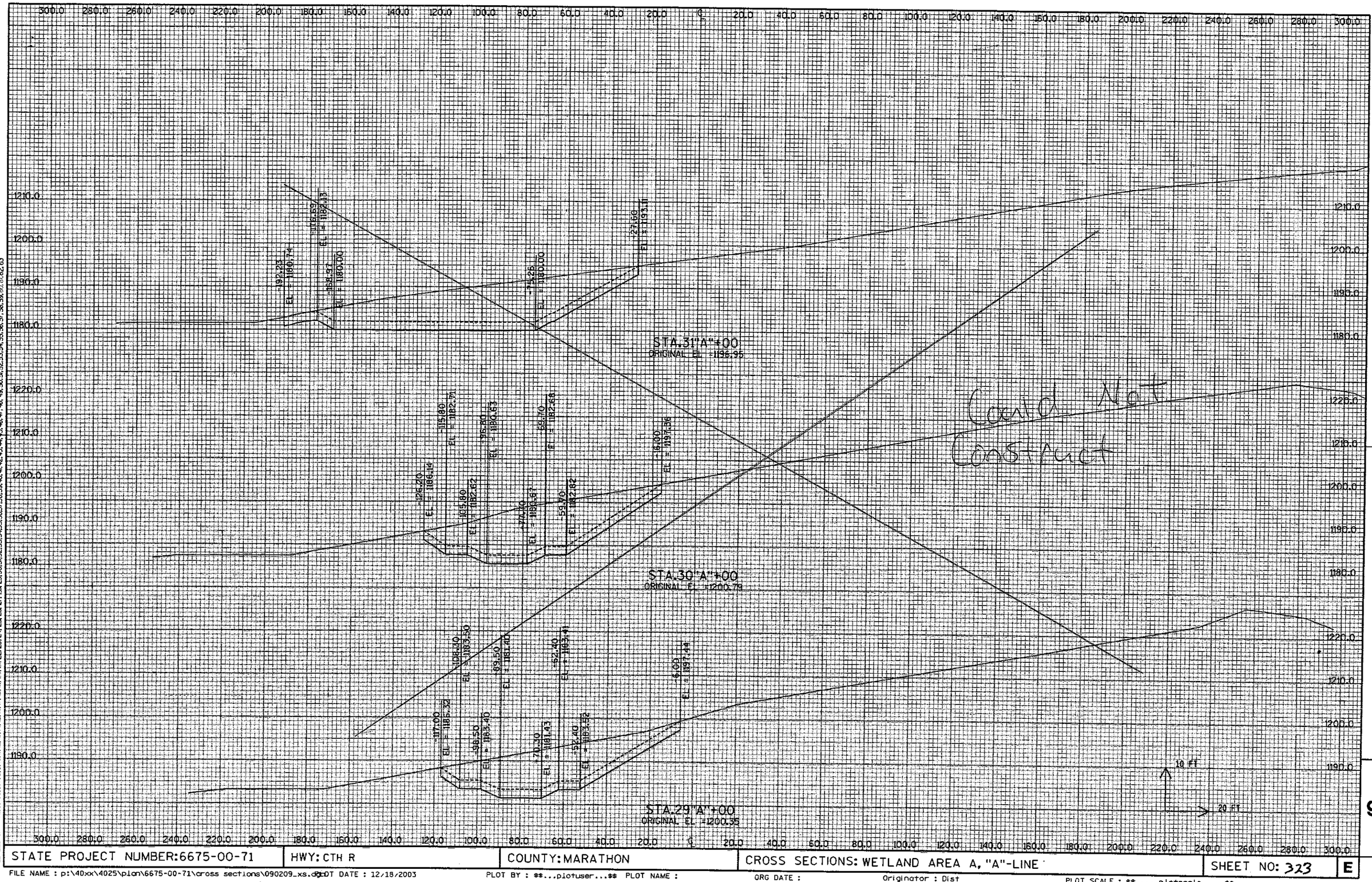
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STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS: WETLAND AREA A, "A"-LINE	SHEET NO: 322	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090208_xs.dgn DOT DATE : 12/18/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

9

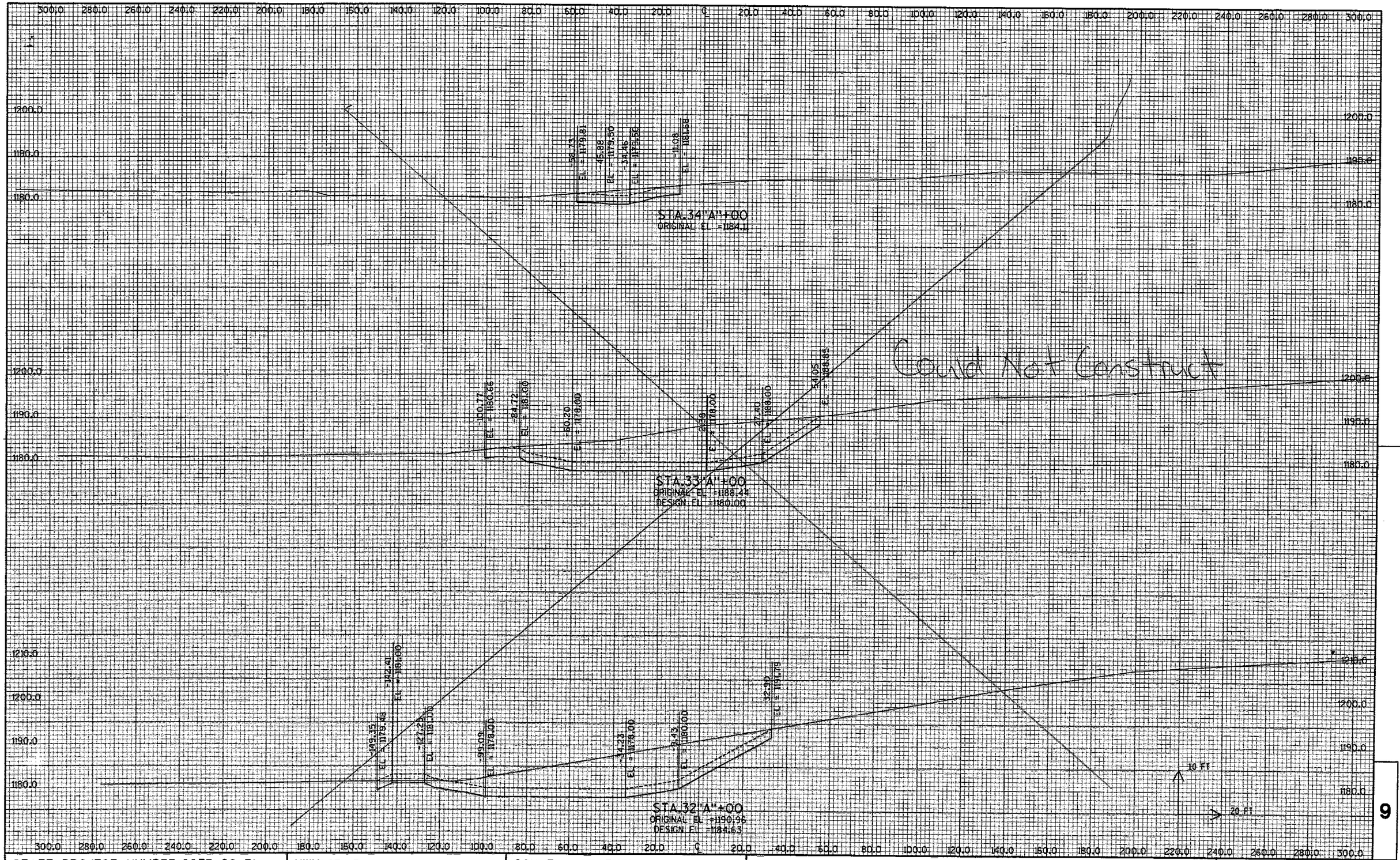


STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY:MARATHON	CROSS SECTIONS: WETLAND AREA A, "A"-LINE	SHEET NO: 323	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090209_xs.dgn PLOT DATE : 12/18/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

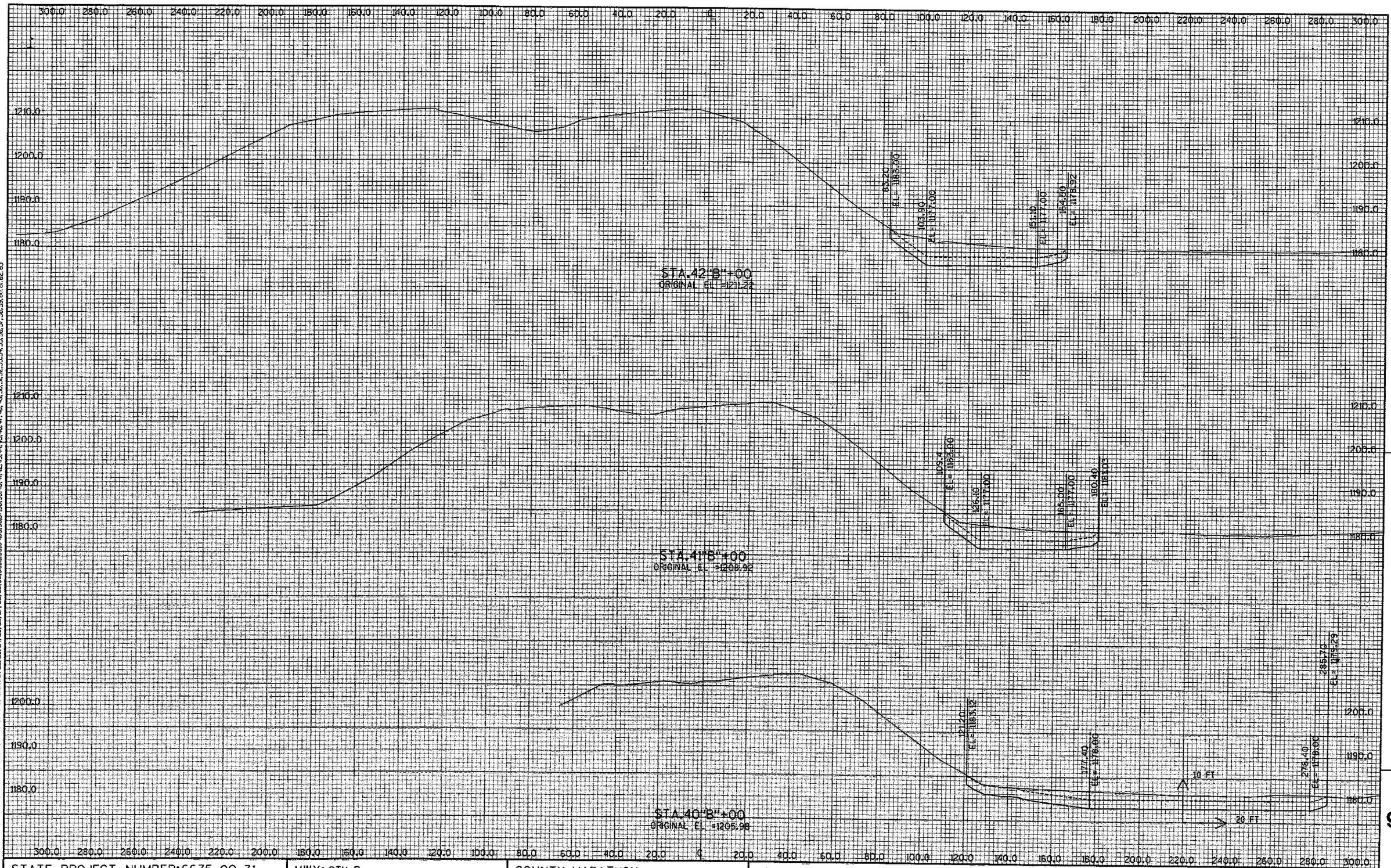
LEVELS ON = 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



STATE PROJECT NUMBER: 6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS: WETLAND AREA A, "A"-LINE	SHEET NO: 324	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090210_xs.dgn DOT DATE : 12/18/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

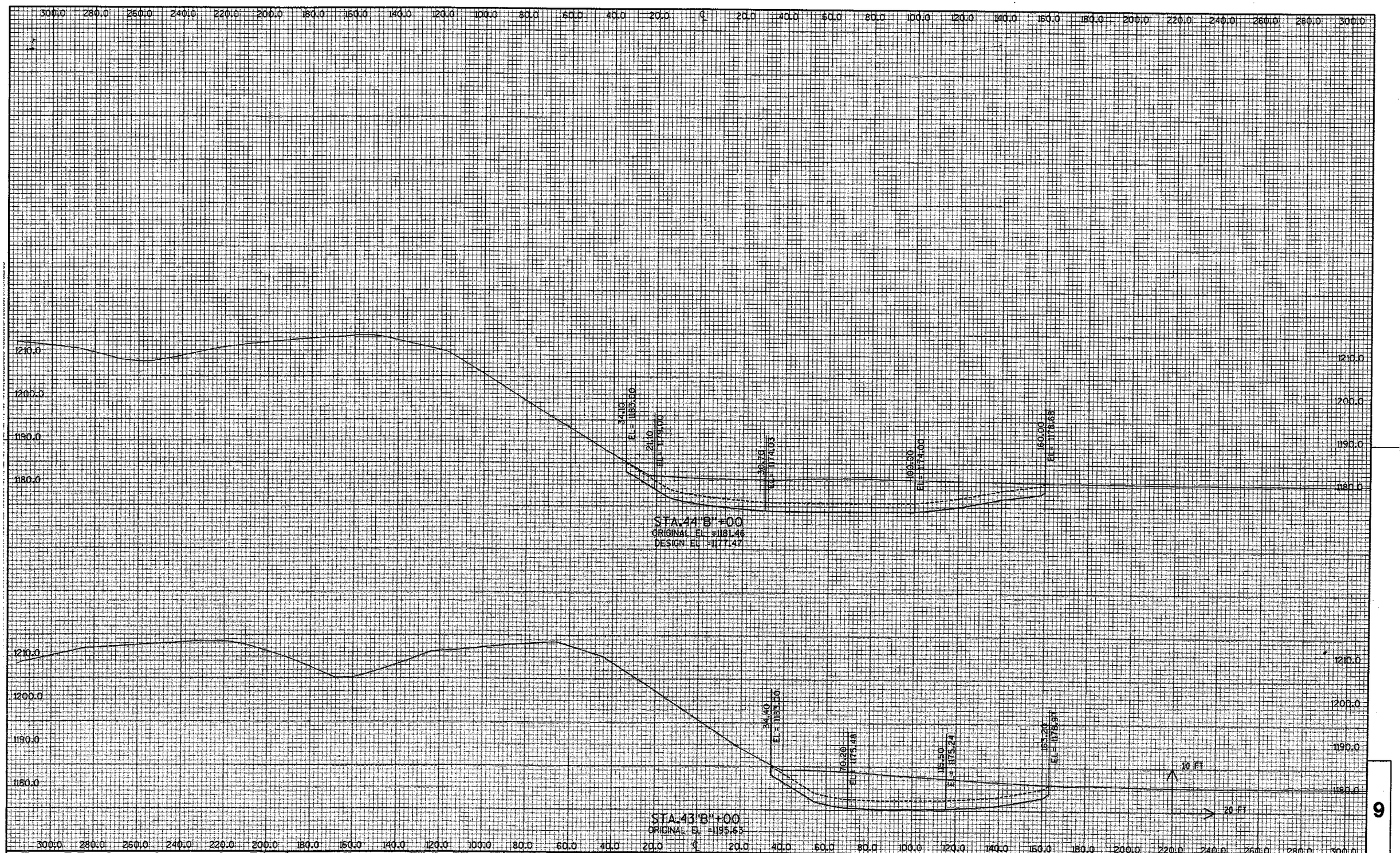
9



STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS: WETLAND AREA B, "B"-LINE	SHEET NO: 325	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090211_xs.dgn PLOT DATE : 12/18/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

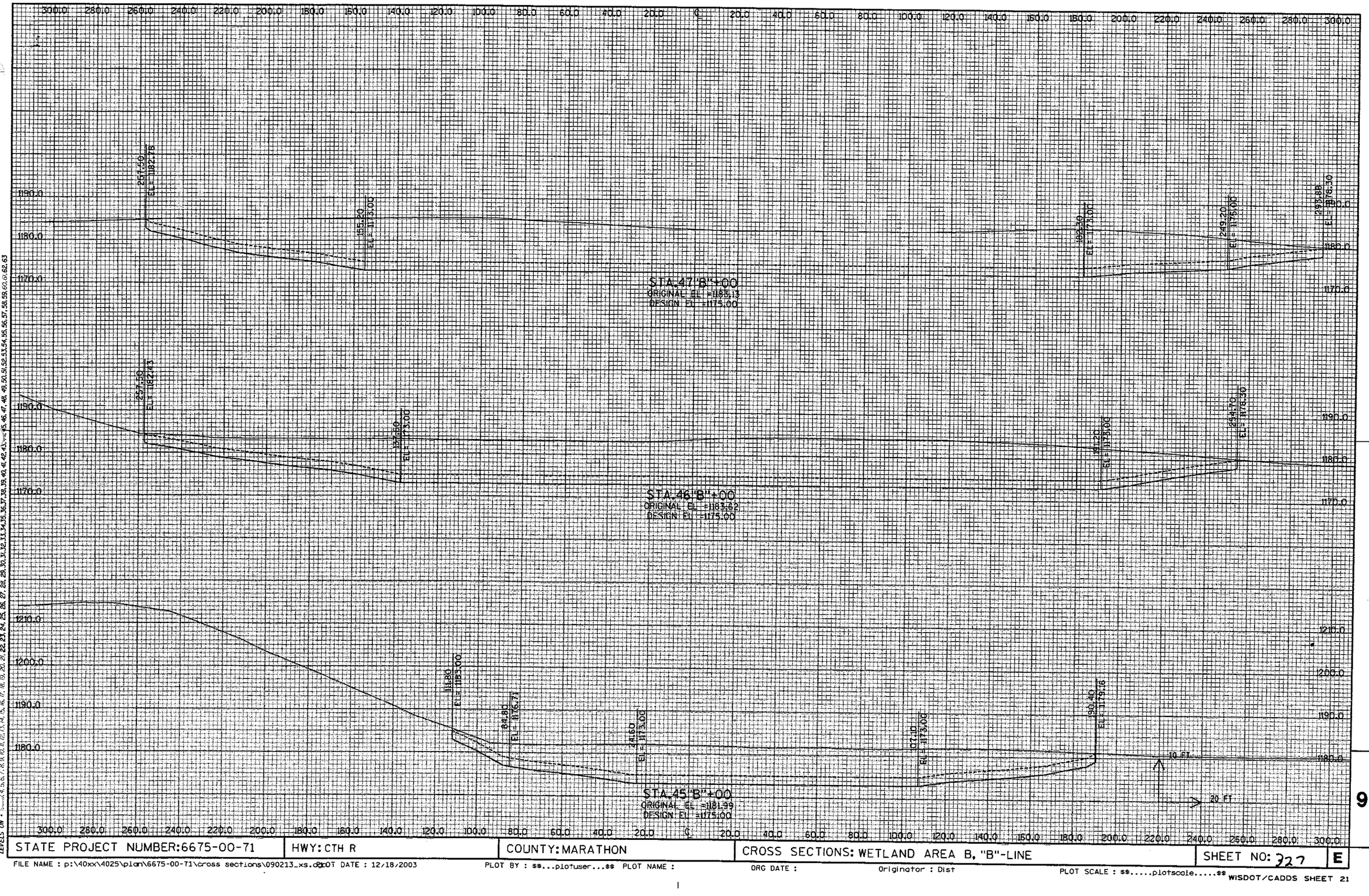
9



9

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS:WETLAND AREA B, "B"-LINE	SHEET NO: 326	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090212_xs.dgn PLOT DATE : 12/18/2003 PLOT BY : **...plotuser...** PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : **.....plotscale.....** WISDOT/CADDS SHEET 21

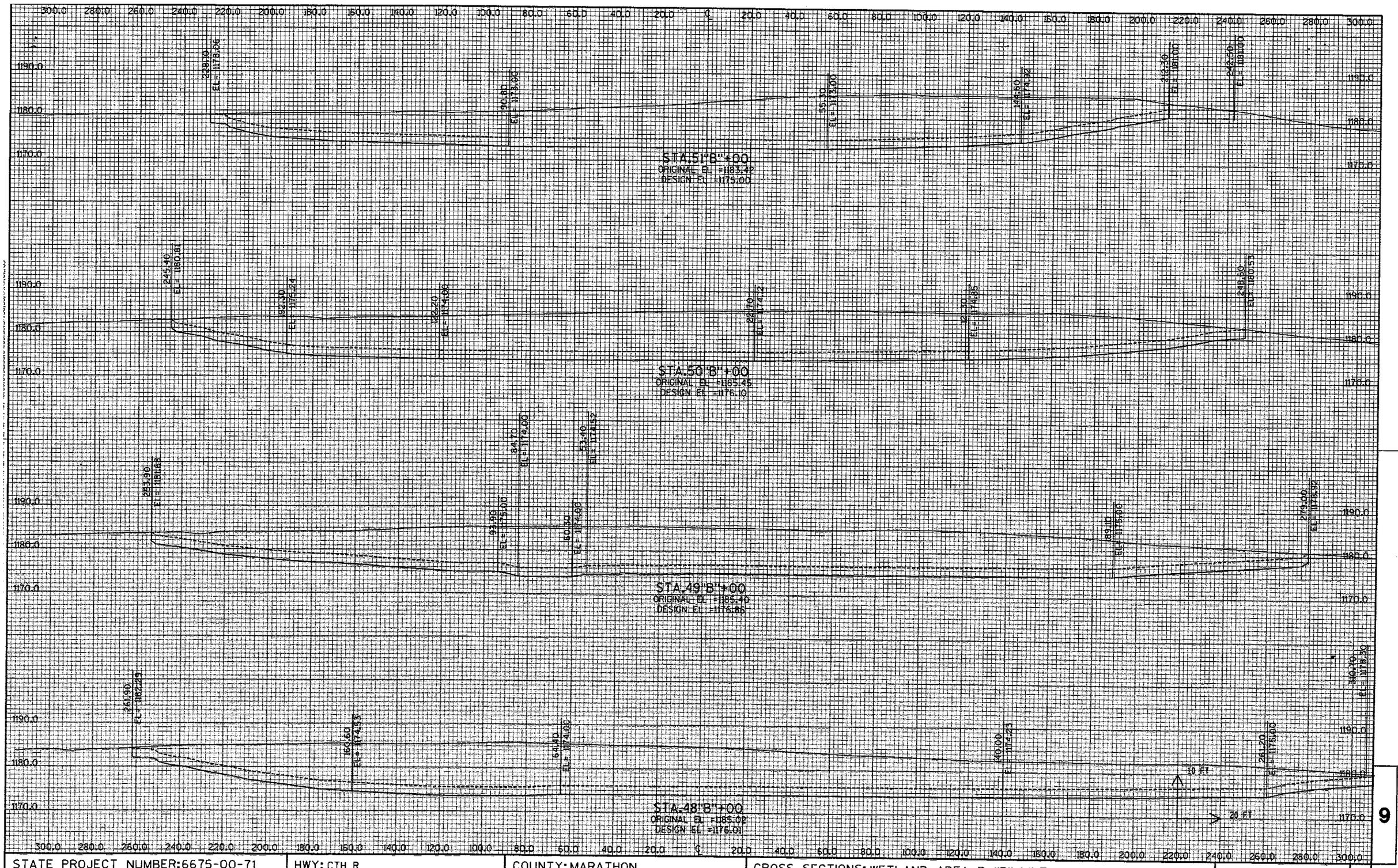


STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS: WETLAND AREA B, "B"-LINE	SHEET NO: 227 E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090213_xs.dgn PLOT DATE : 12/18/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

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

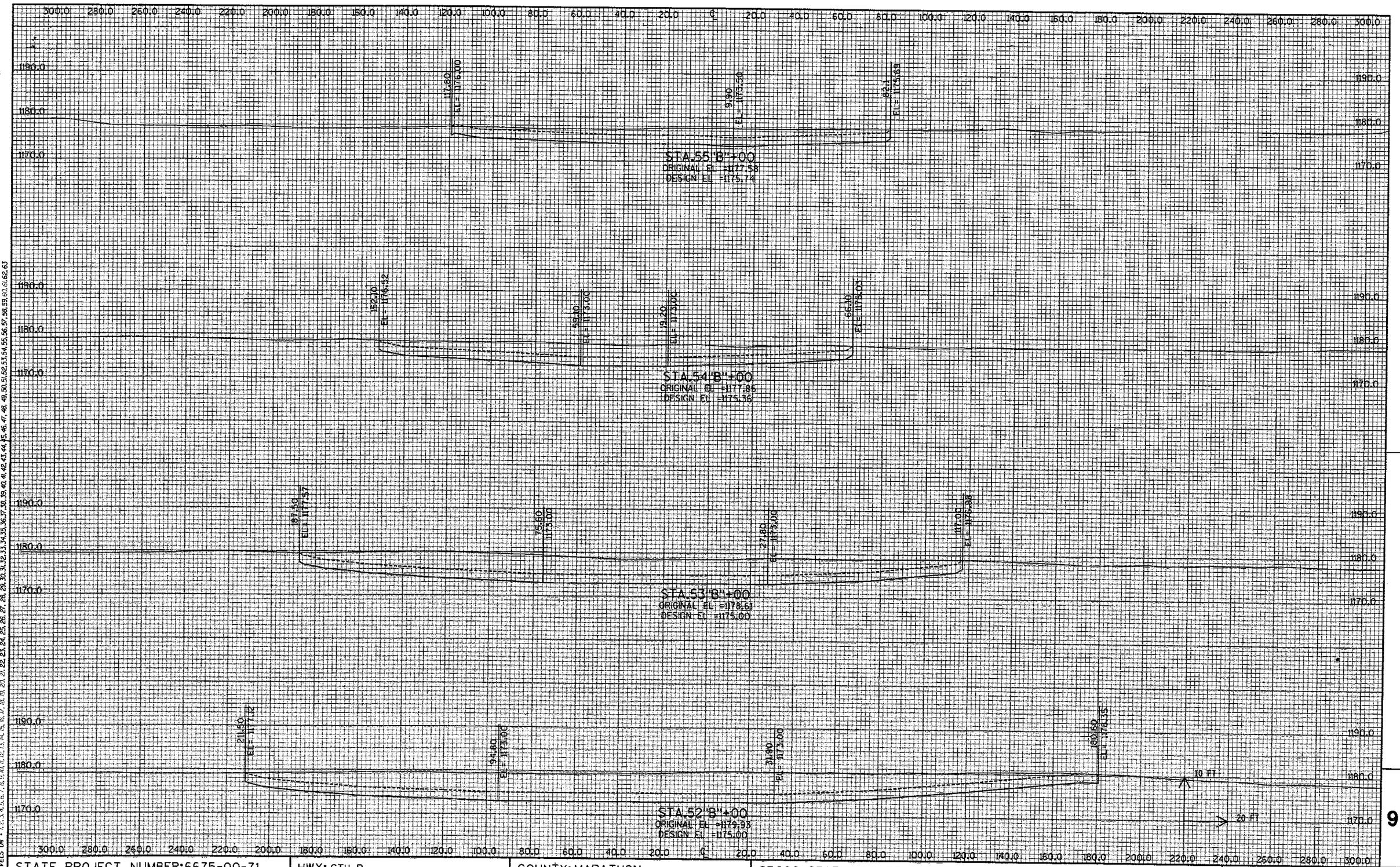
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STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS: WETLAND AREA B, "B"-LINE	SHEET NO: 328	E

9

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090214_xs.dgn PLOT DATE : 12/18/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



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: 6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS: WETLAND AREA B, "B"-LINE	SHEET NO: 329	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090215_xs.dgn PLOT DATE : 12/18/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

9

300.0 280.0 260.0 240.0 220.0 200.0 180.0 160.0 140.0 120.0 100.0 80.0 60.0 40.0 20.0 ℄ 20.0 40.0 60.0 80.0 100.0 120.0 140.0 160.0 180.0 200.0 220.0 240.0 260.0 280.0 300.0

1190.0
1180.0
1170.0

STA.59"B"+00
ORIGINAL EL =1177.85

STA.58"B"+00
ORIGINAL EL =1177.99

STA.57"B"+00
ORIGINAL EL =1178.13
DESIGN EL =1175.77

19.40 EL=1175.97
5.90 EL=1175.00
38.30 EL=1173.00
61.40 EL=1175.92

STA.56"B"+00
ORIGINAL EL =1177.99
DESIGN EL =1176.04

65.10 EL=1176.20
1.20 EL=1174.06
18.60 EL=1173.00
47.10 EL=1173.00
55.10 EL=1174.00
73.90 EL=1176.20

10 FT
20 FT

9

STATE PROJECT NUMBER:6675-00-71	HWY: CTH R	COUNTY: MARATHON	CROSS SECTIONS: WETLAND AREA B, "B"-LINE	SHEET NO: 330	E

FILE NAME : p:\40xx\4025\plan\6675-00-71\cross sections\090216_xs.dgn PLOT DATE : 12/18/2003 PLOT BY : $$...plotuser...$$ PLOT NAME : ORG DATE : Originator : Dist PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21