INDEX OF SHEETS

TOTAL SHEETS = 128

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

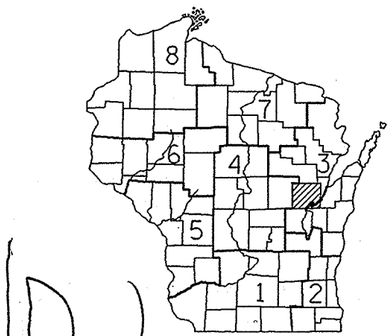
MAES AVE. - S.T.H. 96
COMMUNITY BRIDGE

C.T.H. "N"
OUTAGAMIE COUNTY

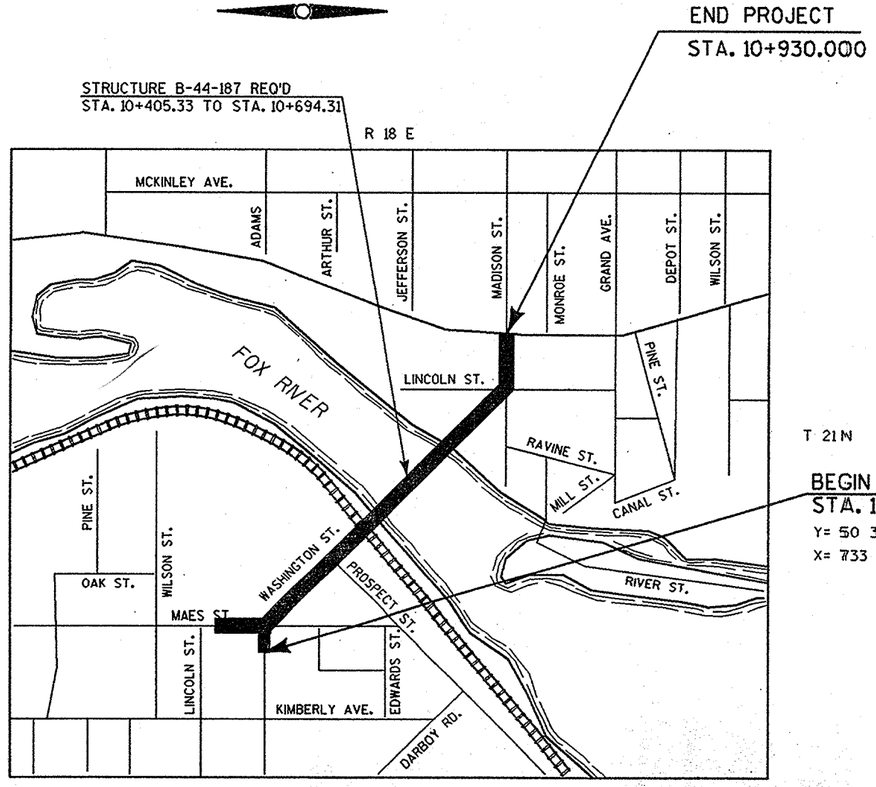
STATE PROJECT NUMBER
4676-03-71

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
4676-03-71	MG 1999 493	1.

METRIC PROJECT



DISTRICTS



DESIGN DESIGNATION

A.D.T.	(1999)	=	17,000
A.D.T.	(2019)	=	23,500
D.H.V.	(2019)	=	2,300
D.		=	60/40
T.		=	9.7%
DESIGN SPEED		=	50 km/HR
E.S.A.L.S.		=	N/A

CONVENTIONAL SIGNS

COUNTY LINE		COMBUSTIBLE FLUIDS (UNDER PRESSURE)	
CORPORATE LIMITS		UNDERGROUND UTILITIES	
PROPERTY LINE		GAS	G
LOT LINE		ELECTRIC	E
LIMITED HIGHWAY EASEMENT		TELEPHONE	T
EXISTING RIGHT OF WAY		SERVICE PEDESTAL	TP
NEW RIGHT OF WAY		CABLE MARKER	
REFERENCE LINE		POWER POLE	
SLOPE INTERCEPT		TELEPHONE POLE	
ORIGINAL GROUND		RAILROADS	
MARSH OR ROCK PROFILE		MARSH	
CULVERT IN PLACE		WOODED AREA	
CULVERT REQUIRED		SILT FENCE	
CULVERT REQUIRED (Profile)		EROSION MAT	
		EROSION BALES	

LAYOUT
SCALE 0 0.2 km

TOTAL NET LENGTH OF CENTERLINE = 0.872 km (URBAN)
(0.542 MILES)

N-22

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COORDINATE SYSTEM, CENTRAL ZONE.

ACCEPTED FOR
COUNTY OF OUTAGAMIE
SIGNATURE
3-30-99 DATE
Public Works Dir TITLE OF OFFICIAL

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES Engineers/Architects Scientists/Surveyors
916 Willard Drive, Suite #200 Green Bay, Wisconsin 54304

WISCONSIN
MARK S. SCHUSTER
E-23976
GREEN BAY, WIS.
PROFESSIONAL ENGINEER
3/30/99 DATE
SIGNATURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor AYRES ASSOCIATES
Designer AYRES ASSOCIATES
District Examiner L. RINGBLOM
District Supervisor J. LAMERS
Proj. Dev. Engineer
C.O. Examiner D. Marg

APPROVED FOR DISTRICT OFFICE
DATE: 3/31/99 (Signature)

M

JULY
OUTAGAMIE
DATE:
DATE:
CHECKED BY: DESIGNER:
REVIEWER:
SCALE: ----
PLOT NAME: TITLE.PRF
REV. DATE: 12/10/97
ORIGINATOR: DJD
4676-03-71
70D
30T

GENERAL NOTES

THE LOCATION OF EXISTING AND PROPOSED UTILITY FACILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

ALL COORDINATES SHOWN ON THIS PLAN ARE GRID COORDINATES REFERENCED TO THE WISCONSIN COORDINATE SYSTEM, CENTRAL ZONE.

ALL DISTANCES AND STATIONING SHOWN ON THIS PLAN ARE GROUND VALUES. GRID VALUES ARE OBTAINED BY MULTIPLYING GROUND VALUES BY 0.999940.

LIMITED EASEMENTS FOR WORK TO BE PERFORMED OUTSIDE OF THE RIGHT -OF-WAY HAVE BEEN OBTAINED AND THESE RIGHTS HAVE BEEN EXTENDED TO THE CONTRACTOR.

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

THE ELEVATIONS SHOWN ON THE ROADWAY CROSS SECTIONS ARE EARTH GRADE ELEVATIONS AT THE CENTERLINE OF THE ROADWAY.

ALL CUTS FOR CONCRETE REMOVAL SHALL BE MADE FULL DEPTH AND MADE BY DIAMOND SAWING.

INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES SHOWN ON THE PLAN ARE APPROXIMATE AND SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

ALL MEDIAN NOSES SHALL BE SLOPED PER S.D.D.

BOX OUTS FOR SIGNS IN CONCRETE MEDIANS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

EXTRA DOWELS FOR INLETS, EXTRA JOINTS, AND CONCRETE PAVEMENT GAPS SHALL BE INCIDENTAL TO CONCRETE PAVEMENT CONSTRUCTION.

THE EXACT LOCATION FOR CONDUITS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE EXACT LOCATIONS AND LIMITS OF PRIVATE ENTRANCES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

CURB AND GUTTER RADII ARE SHOWN TO THE FRONT FACE OF CURB.

THE EXACT LIMITS OF CONCRETE OR ASPHALTIC DRIVEWAY REMOVAL AND REPLACEMENT SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

ALL DISTANCES SHOWN ON THIS PLAN ARE GROUND DISTANCES.

PROPERTY LINES AS SHOWN ARE APPROXIMATE.

EXCAVATION BELOW SUBGRADE (E.B.S.) IS NOT SHOWN ON THE CROSS SECTIONS OR PLAN AND PROFILE SHEETS, BUT IF REQUIRED, E.B.S. SHALL BE MEASURED AND PAID FOR AS UNCLASSIFIED EXCAVATION. THE LOCATION FOR E.B.S. IF REQUIRED, SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

YARDAGE IS COMPUTED BASED ON ANTICIPATED SCHEDULING. FILL MATERIAL IN 1st STAGE AT NORTH ABUTMENT IS BASED ON BORROW QUANTITY. ANY OVEREXCAVATION AND BACKFILLING TO THE ORIGINAL GROUND LIMITS FOR STAGING IS INCIDENTAL TO OTHER WORK IN THIS CONTRACT.

WHEN THE QUANTITY OF CRUSHED AGGREGATE BASE COURSE IS MEASURED FOR PAYMENT BY THE Mg, THE DEPTH OR THICKNESS AS SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND UPON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER IN THE FIELD.

ALL CONCRETE DRIVEWAYS AND SIDEWALKS ACROSS DRIVEWAYS SHALL BE 150 mm THICK, AND SHALL BE PAID FOR AS CONCRETE DRIVEWAY.

THE REMOVAL OF CONCRETE DRIVEWAYS SHALL BE PAID FOR AS CONCRETE SIDEWALK REMOVAL.

ALL LANDSCAPE ITEMS, TREES, SHRUBS, PLANTERS, AND SIGNS IN TEMPORARY LIMITED EASEMENT AREAS SHALL NOT BE DISTURBED UNLESS OTHERWISE SHOWN.

RUNOFF COEFFICIENT FOR THIS PROJECT:

EXISTING PAVEMENT: 0.78	EXISTING SLOPES: 0.28
NEW PAVEMENT: 0.80	NEW SLOPES: 0.28
TOTAL PROJECT AREA 3.1 HECTARES	TOTAL DISTURBED AREA: 2.6 HECTARES

UTILITIES

VILLAGE OF LITTLE CHUTE, DPW
DEPARTMENT OF PUBLIC WORKS
1940 BUCHANAN ST.
LITTLE CHUTE, WISCONSIN 54140
ATTENTION: GENE HOJAN
TELEPHONE 1-920-788-7395

VILLAGE OF KIMBERLY, DPW
515 WEST KIMBERLY AVE.
KIMBERLY, WISCONSIN 54136
ATTENTION: DICK VANDEN BOOGARD
TELEPHONE 1-920-788-7507

VILLAGE OF COMBINED LOCKS
405 WALLACE ST.
COMBINED LOCKS, WISCONSIN 54113
ATTENTION: MARK VAN THIEL
TELEPHONE 1-920-788-7740

HEART OF THE VALLEY METR. SEWAGE COMM. DIST.
801 THILMANY ROAD
KAUKAUNA, WISCONSIN 54130
ATTENTION: JOHN DAVIS
TELEPHONE 1-920-766-5731

KAUKAUNA ELECTRIC AND WATER
777 ISLAND ST.
KAUKAUNA, WISCONSIN 54130
ATTENTION: GARY WOLF
TELEPHONE 1-920-766-5721
EXT. 17

WISCONSIN GAS COMPANY
1921 8th STREET SOUTH
WISCONSIN RAPIDS, WISCONSIN 54494
ATTENTION: DENNIS CHERNEY
TELEPHONE 1-715-423-2800
EXT. 7265

WISCONSIN ELECTRIC POWER COMPANY
800 S. LYNNDALE
APPLETON, WISCONSIN 54914
ATTENTION: KEN SCHOENIKE
TELEPHONE 1-920-380-3359

AMERITECH
221 WEST WASHINGTON ST.
4TH FLOOR OSPE
APPLETON, WISCONSIN 54911
ATTENTION: JOE FEMLING
TELEPHONE 1-920-735-3250

TIME WARNER
1001 KENNEDY AVE.
KIMBERLY, WISCONSIN 54136
ATTENTION: STEVE POEHLEIN
TELEPHONE 1-920-831-9207

RAILROAD

WISCONSIN CENTRAL LTD.
1625 DEPOT STREET
STEVENS POINT, WISCONSIN 54481
ATTENTION: TERRY LEE
TELEPHONE 1-715-345-2503

D.N.R. LIAISON

DEPARTMENT OF NATURAL RESOURCES
1125 NORTH MILITARY AVENUE
GREEN BAY, WISCONSIN 54303
ATTENTION: MR. AL STRANZ
TELEPHONE 1-920-492-5818

SURVEY CONTACT PERSON

OUTAGAMIE COUNTY COURTHOUSE
410 S. WALNUT ST.
APPLETON, WISCONSIN 54911
ATTENTION: JAMES A. HEBERT
TELEPHONE 1-920-832-5255
FAX 1-920-832-4470

METRIC STANDARD DETAIL DRAWINGS

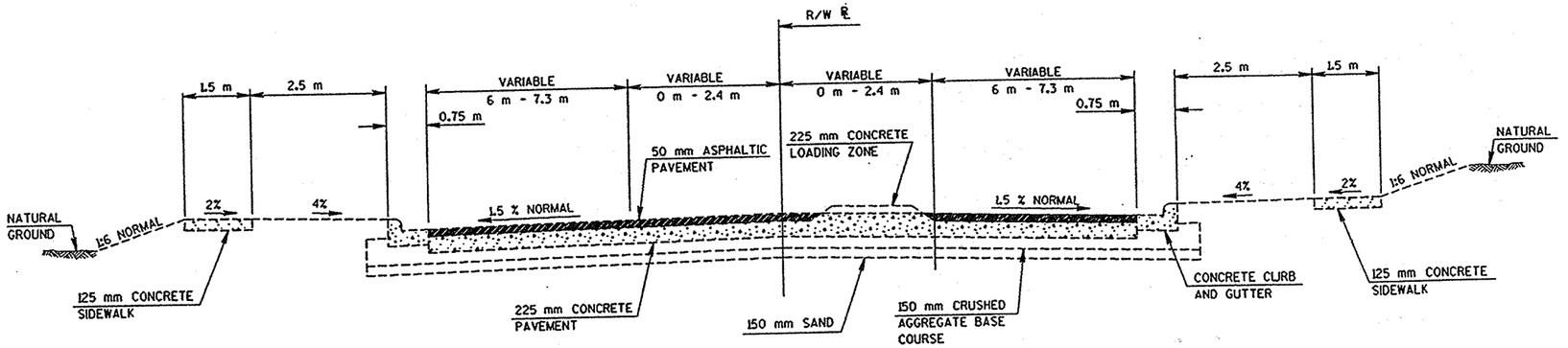
8A5-15a	INLET COVERS
8A5-15d	INLET AND MANHOLE COVERS
8B6-3	MANHOLES, TYPE 1
8C1-5	INLETS, TYPE 1,2,3, AND 4
8D1-12	CONCRETE CURB, CONCRETE CURB AND GUTTER, AND PAVEMENT TIES
8D5-8	CURB RAMPS
8E9-5	SILT FENCE
9B2-6	CONDUIT
9B3-2	CONDUIT FOR MAGNETIC DETECTOR
9B4-3	PULL BOX
9C2-2	CONCRETE BASES, TYPES 1,2, AND 5
9C3-2	TRANSFORMER/PEDESTAL BASES
9C5-2	CONCRETE CONTROL CABINET BASES
9D1-2	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
9D2-2	SIGNAL OR LIGHTING CONTROL CABINET
9E1-3a	POLE MOUNTING FOR TRAFFIC SIGNALS TYPE 2
9E1-3f	HARDWARE DETAILS FOR POLE MOUNTINGS
9E5-1	TRAFFIC SIGNAL STANDARD ORNAMENTAL BRACKET MOUNTINGS
9F9-2	LOOP DETECTOR INSTALLED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT)
11B1-1	CONCRETE CORRUGATED MEDIAN
11B2-1	CONCRETE MEDIAN NOSE
12A2-3	SLOPE PAVING-STRUCTURES (CRUSHED AGGREGATE)
12A3-5	NAME PLATE (STRUCTURES)
13C1-10	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND PAVEMENT TIES
13C13-3	URBAN DOWELED CONCRETE PAVEMENT
14B7-9a	TEMPORARY PRECAST CONCRETE BARRIER
14B7-9b	TEMPORARY PRECAST CONCRETE BARRIER END SECTION
15C7-6a	PAVEMENT MARKING SYMBOLS
15C8-8a	PAVEMENT MARKING (MAINLINE)
15C8-8d	PAVEMENT MARKING (LEFT TURN LANE)
15C8-8e	PAVEMENT MARKING (ISLANDS, STOPLINE, AND CROSS WALK)
15C11-5	FLEXIBLE TUBULAR MARKER POST, ANCHOR AND BASES

MEMBER ONE CALL SYSTEMS INTERNATIONAL

TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

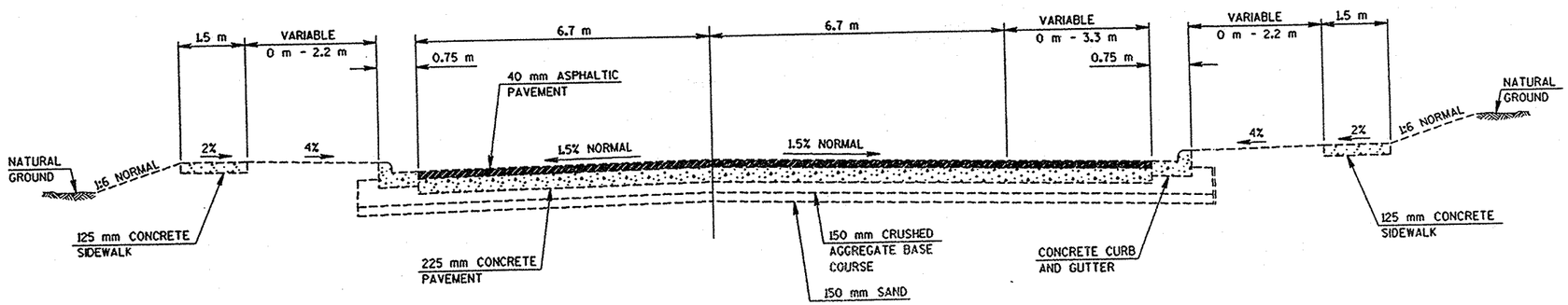
CALL DIGGERS HOTLINE
1-800-242-8511
TOLL FREE
TELEFAX (920) 259-0947
TDD (FOR HEARING IMPAIRED) 1-800-542-2289
WIS. STATUTE 182.0175 (1974)
REQUIRES MIN. OF 3 WORK DAYS
NOTICE BEFORE YOU EXCAVATE.

GENERAL NOTES UTILITIES AND STANDARD DETAIL DRAWINGS	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: 2. /	M



TYPICAL EXISTING CROSS SECTION FOR C.T.H. "N"

STA. 10+110.6 TO STA. 10+412



EXISTING TYPICAL CROSS SECTION FOR C.T.H. "N"

STA. 10+698 TO STA. 10+920

CONSTRUCTION DETAILS	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: 2.2	M

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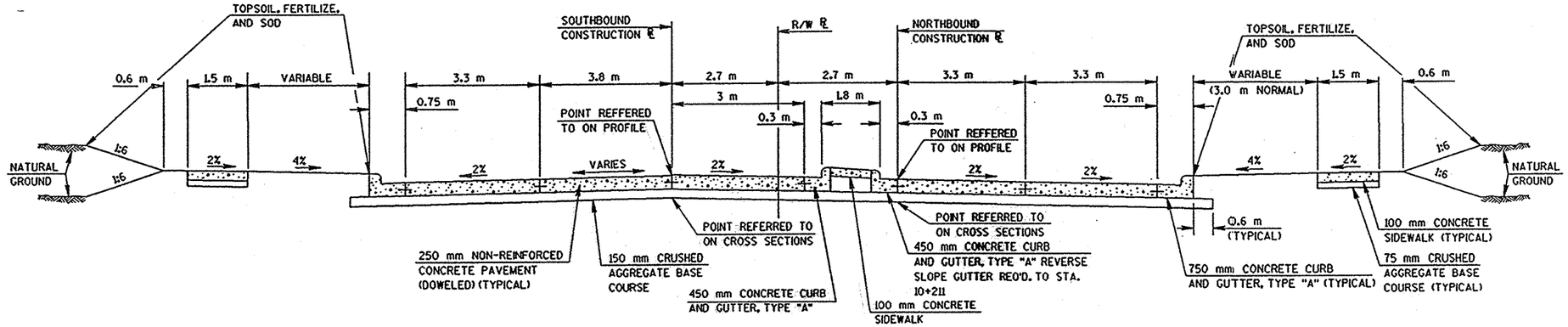
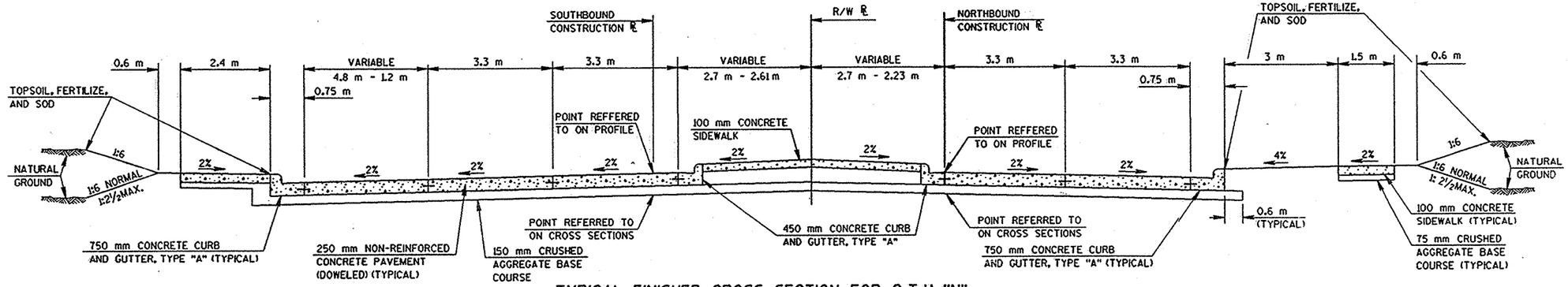


TYPICAL FINISHED CROSS SECTION FOR C.T.H. "N"

STA. 10+111 TO STA. 10+210



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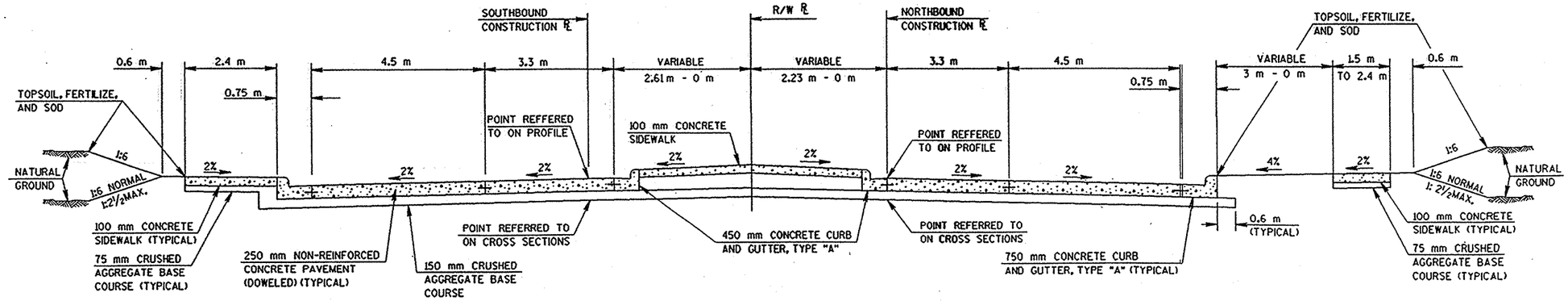
STA. 10+210 TO STA. 10+280



TYPICAL FINISHED CROSS SECTION FOR C.T.H. "N"

STA. 10+280 TO STA. 10+412

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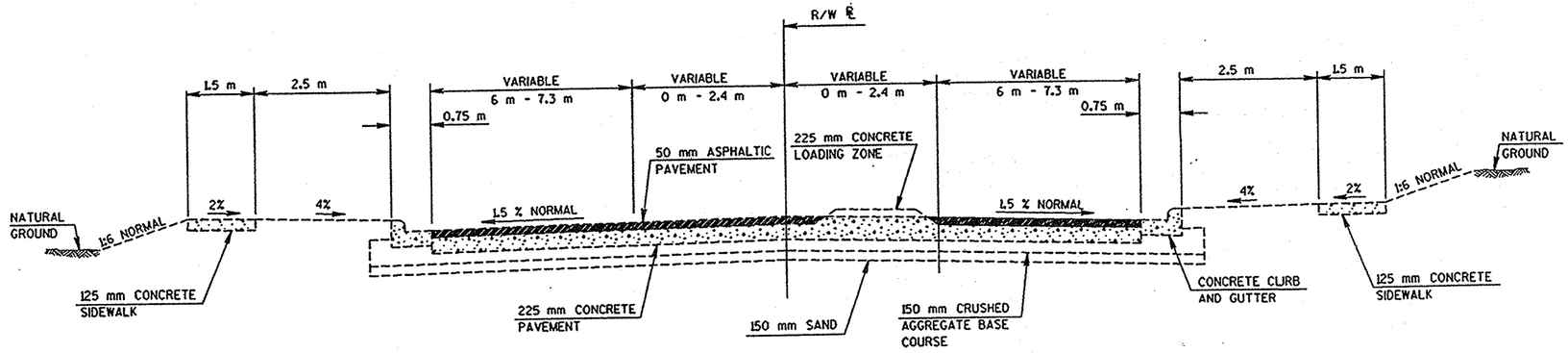
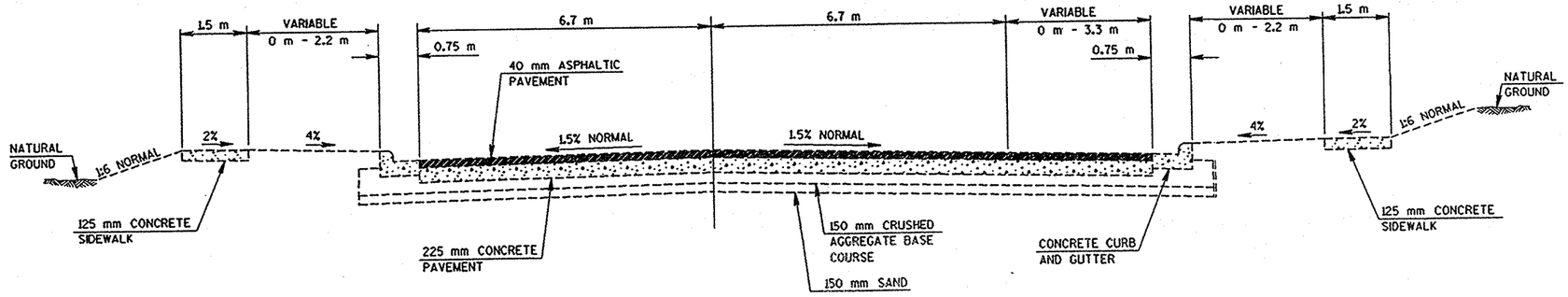
WISDOT: MS-22



TYPICAL EXISTING CROSS SECTION FOR C.T.H. "N"

STA. 10+110.6 TO STA. 10+412



EXISTING TYPICAL CROSS SECTION FOR C.T.H. "N"

STA. 10+698 TO STA. 10+920

CONSTRUCTION DETAILS	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: 2. 2	M

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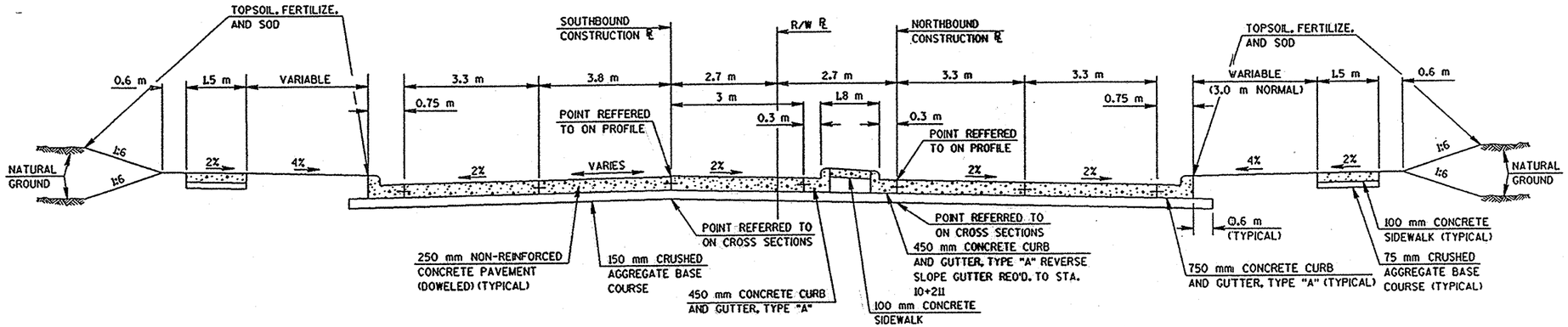
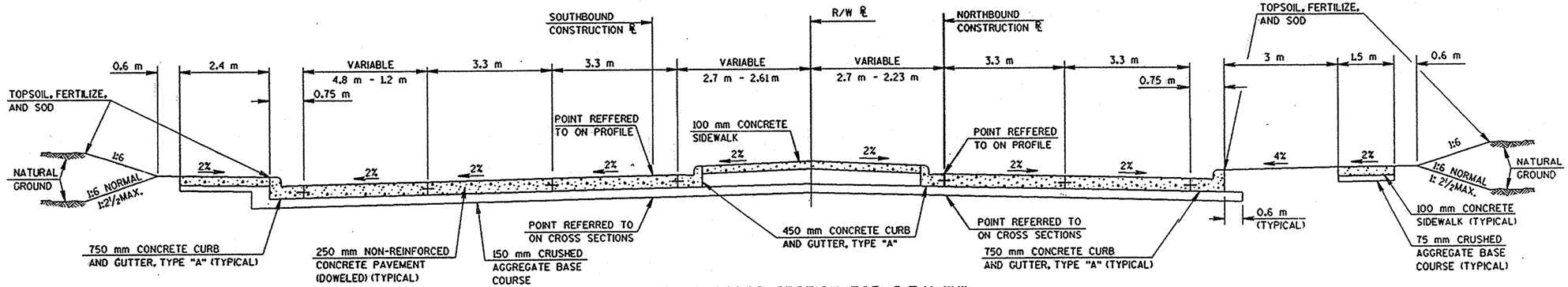


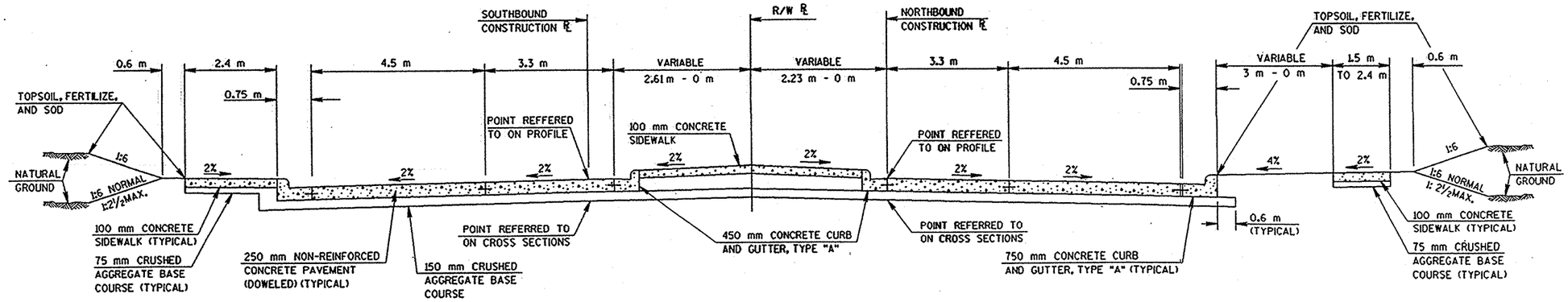
TYPICAL FINISHED CROSS SECTION FOR C.T.H. "N"

STA. 10+111 TO STA. 10+210



TYPICAL FINISHED CROSS SECTION FOR C.T.H. "N"

STA. 10+210 TO STA. 10+280



TYPICAL FINISHED CROSS SECTION FOR C.T.H. "N"

STA. 10+280 TO STA. 10+412

TYPICAL SECTIONS	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: 2.3	M

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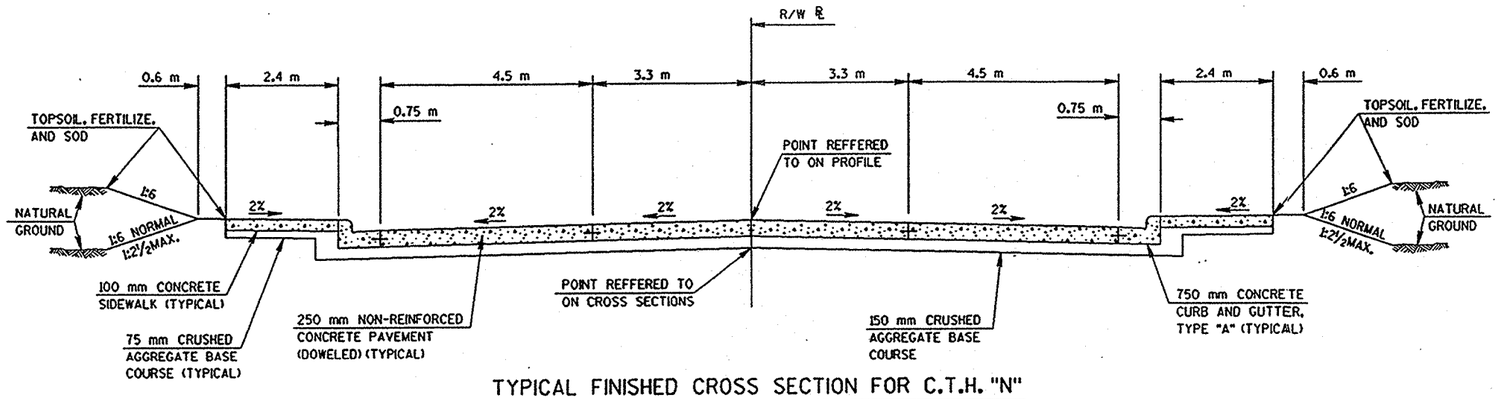
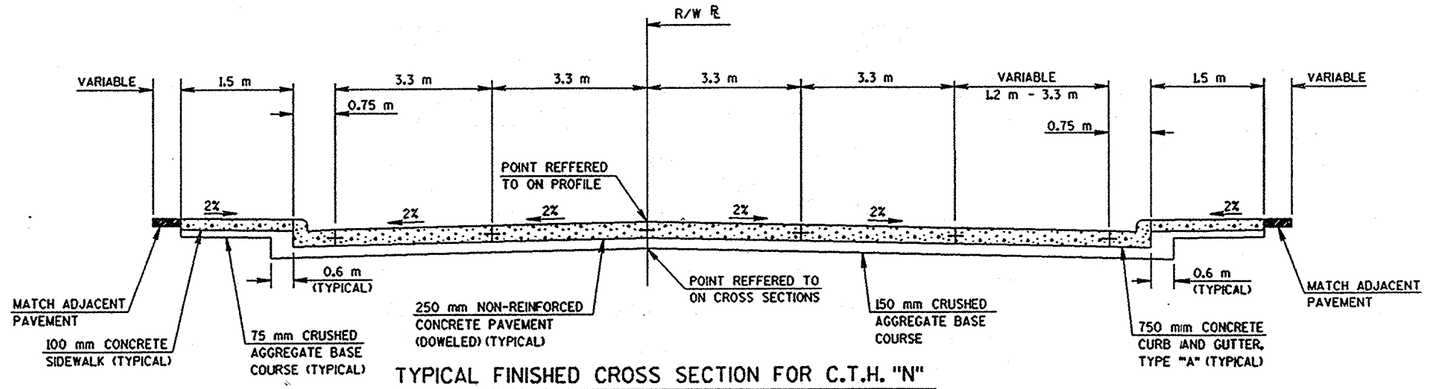


TYPICAL FINISHED CROSS SECTION FOR C.T.H. "N"

STA. 10+698 TO STA. 10+824



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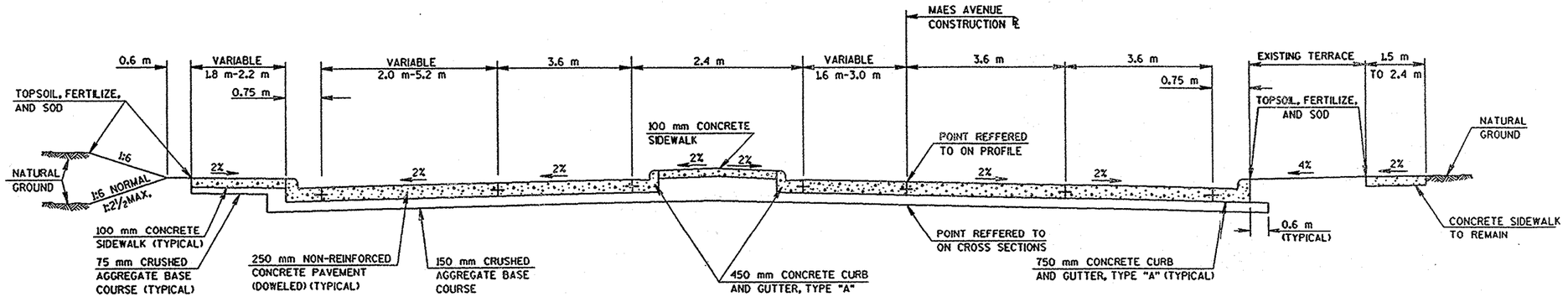
STA. 10+824 TO STA. 10+930



TYPICAL FINISHED CROSS SECTION FOR MAES AVENUE

STA. 19+878 TO STA. 19+980

TYPICAL SECTION	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: 2.4	M

WISDOT: MS-T42

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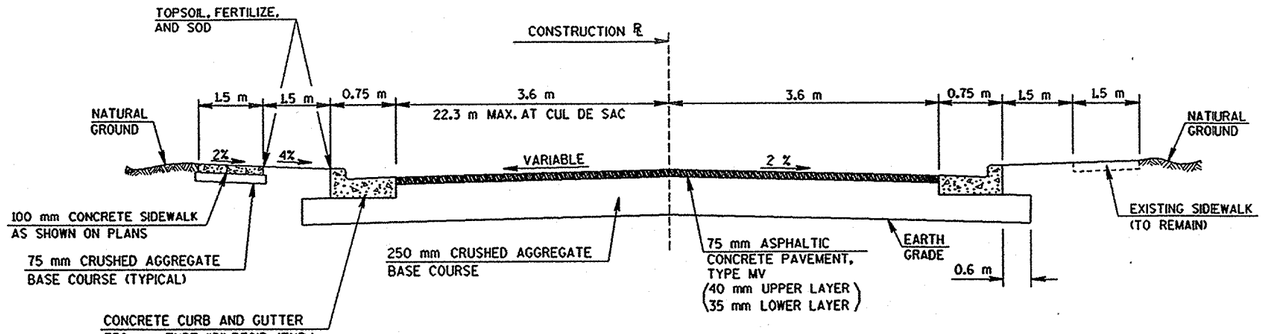
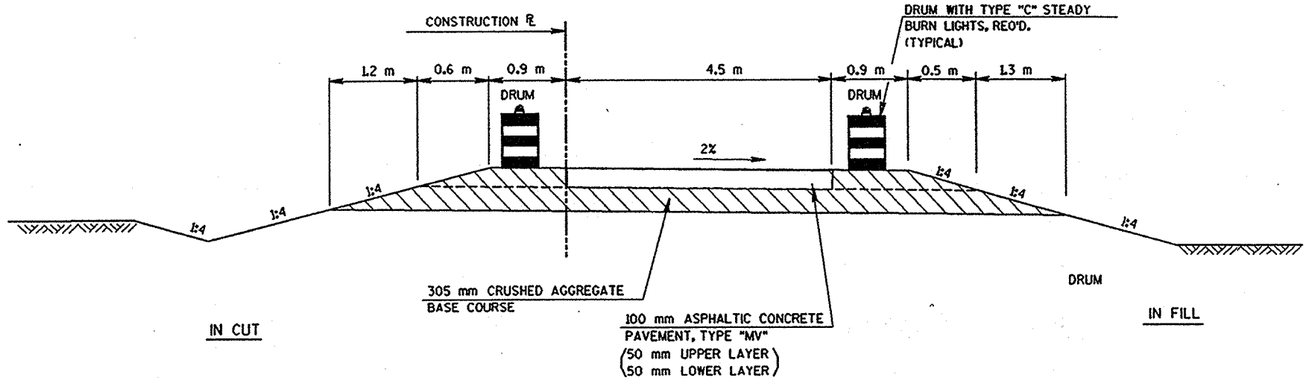
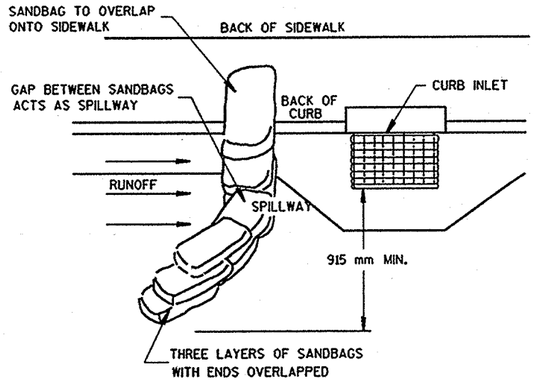


TYPICAL FINISHED CROSS SECTION FOR MADISON STREET



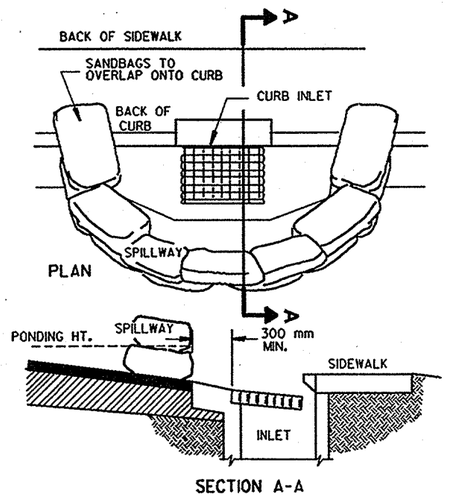
TYPICAL FINISHED SECTION FOR ONE-WAY CROSSOVER

STA. 10+716-10+760 (STAGE 3)



CURB INLET SEDIMENT BARRIER

(FILTERBAG TYPE)

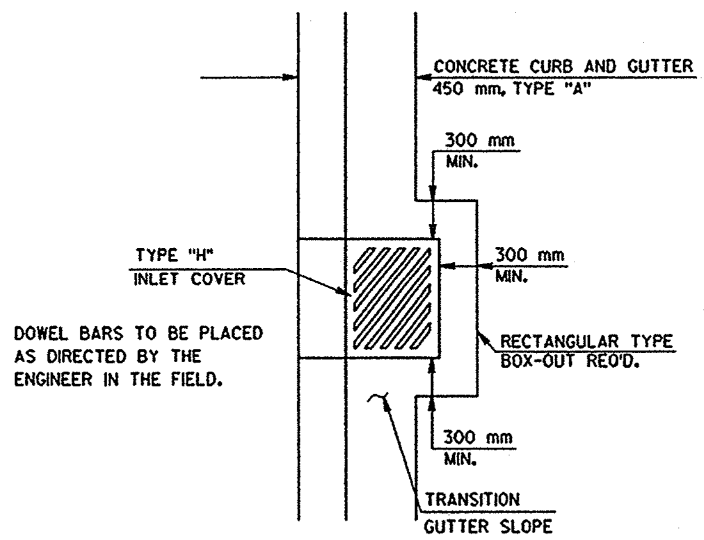


CURB INLET SEDIMENT BARRIER

(FILTERBAG TYPE)

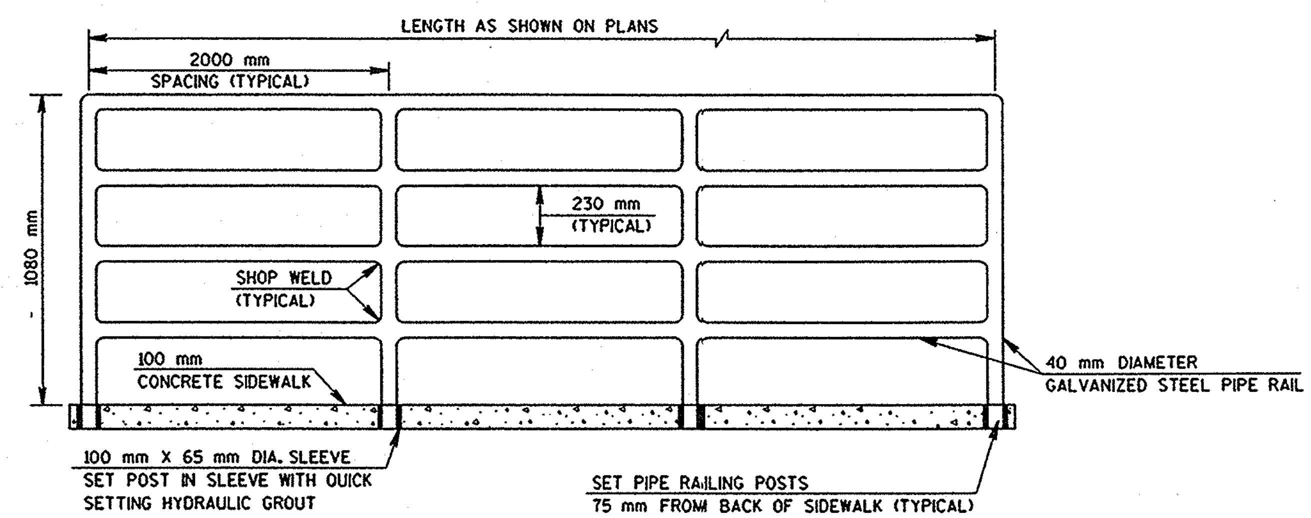
CONSTRUCTION DETAILS	HWY: C.T.H."N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4673-03-71	SHEET NO: 2.5	M

WISDOT: MSHT42



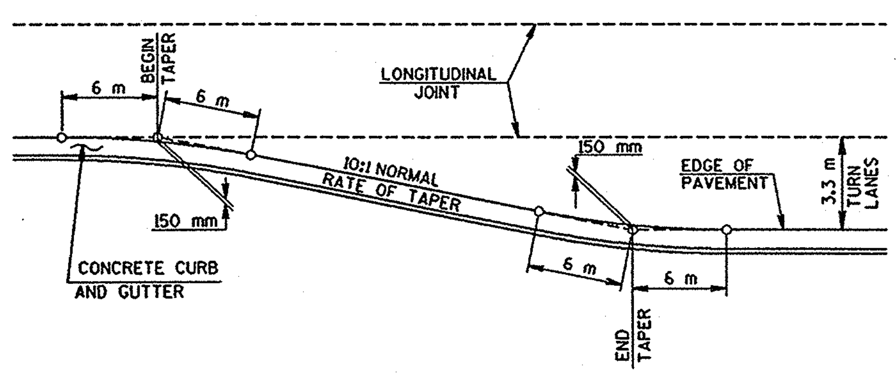
PLACEMENT OF INLET DETAILS

450 mm CURB AND GUTTER



PIPE RAILING DETAIL

REFER TO PLAN SHEETS AND MISCELLANEOUS QUANTITIES
FOR LOCATIONS, DIMENSIONS, AND PAY QUANTITIES.
ALL DIMENSIONS SHOWN IN MILLIMETERS.



TYPICAL LAYOUT FOR TURN LANE TAPER TRANSITIONS

FOR MAINLINE TURN LANES AND MEDIAN
STORAGE TURN LANES

CONSTRUCTION DETAILS	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: 2.6	M

WISDOT: MSHT42

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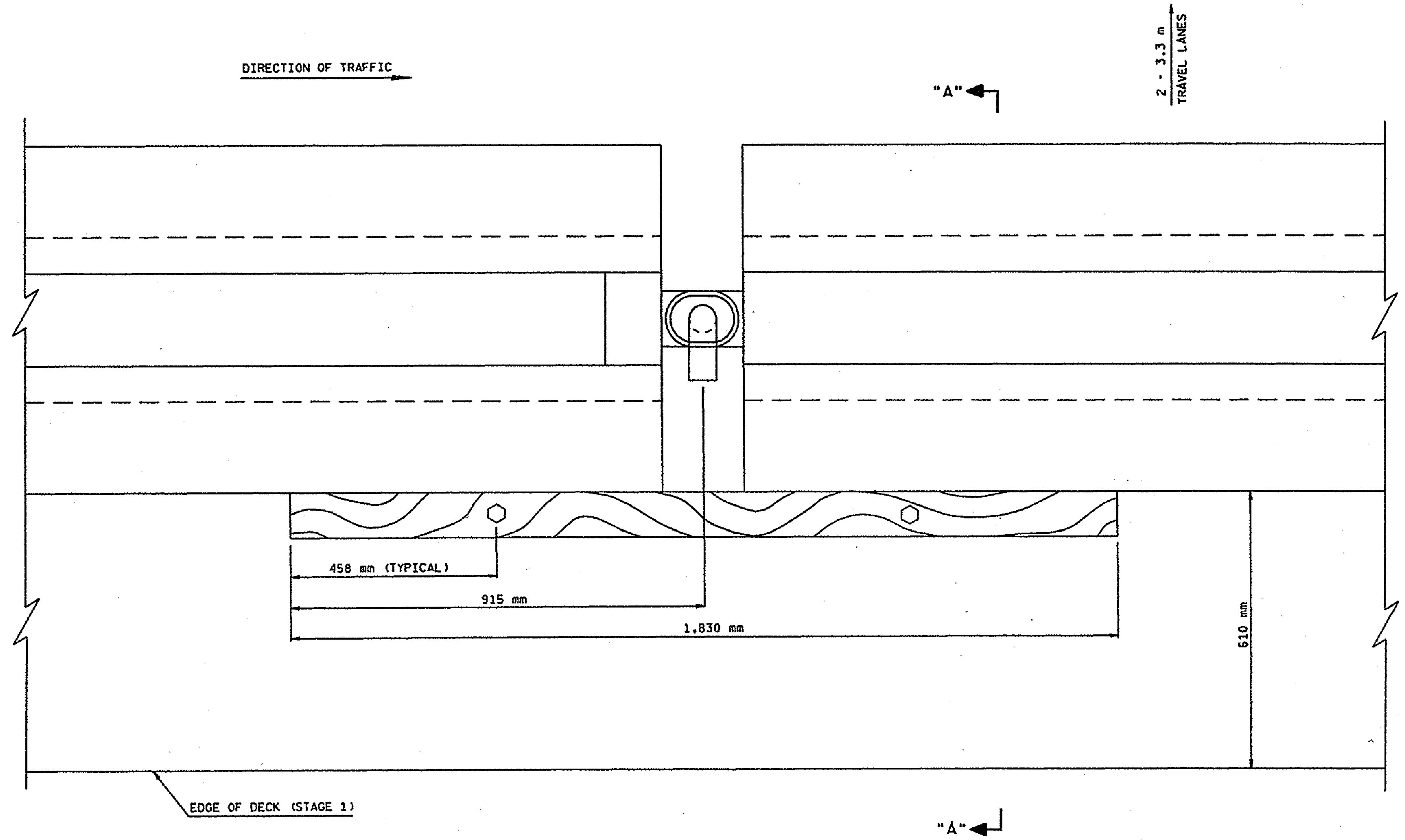
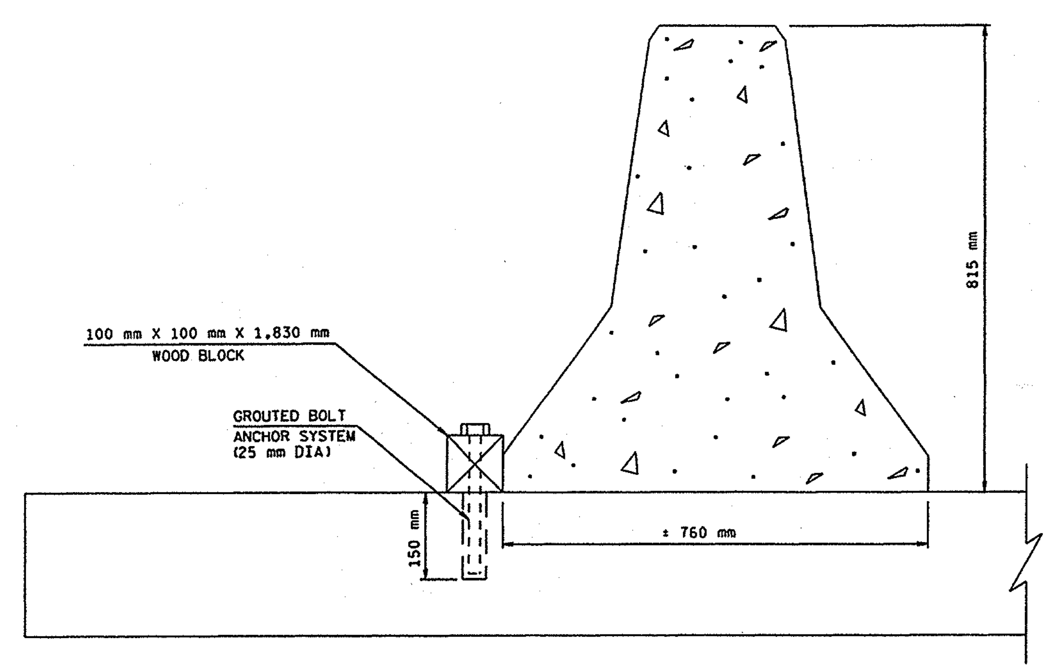


TEMPORARY BARRIER RETAINING BLOCK



SECTION A-A

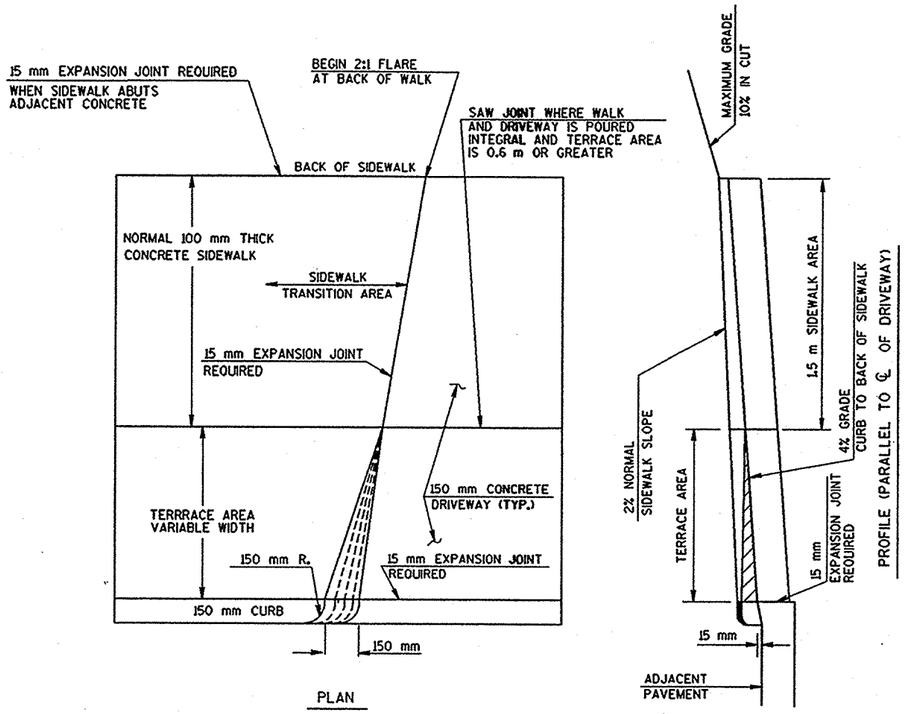
NOTE:

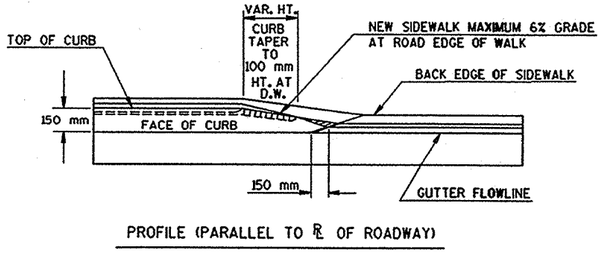
TEMPORARY BARRIER RETAINING BLOCK TO BE PLACED AT ± 20 FOOT INTERVALS (EVERY OTHER BARRIER JOINT LOCATION).

PLACE BOLTS TO MISS TRANSVERSE REINFORCING STEEL IN DECK.

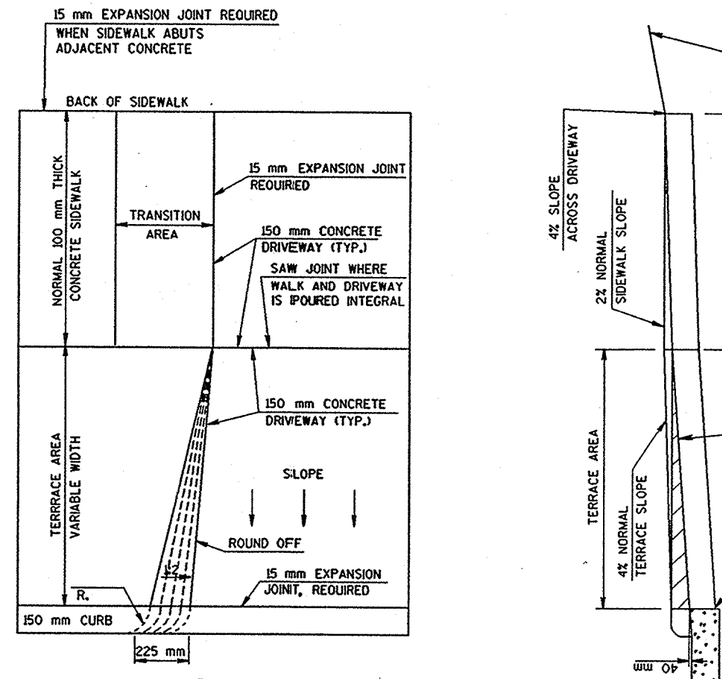
PRE-DRILLED HOLES FOR ANCHOR BOLTS ARE TO BE MADE IN A METHOD AS TO NOT DAMAGE THE DECK SURFACE.

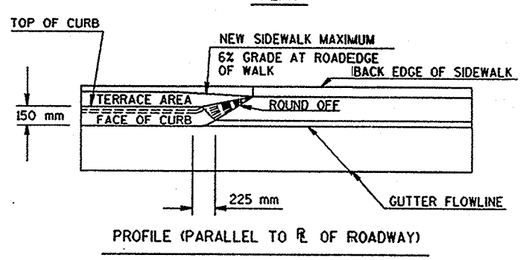
CONSTRUCTION DETAILS	SCALE: 1:1000	HWY: CTH N	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: 27	M





WHEN TERRACE WIDTH IS 1.2 m OR LESS



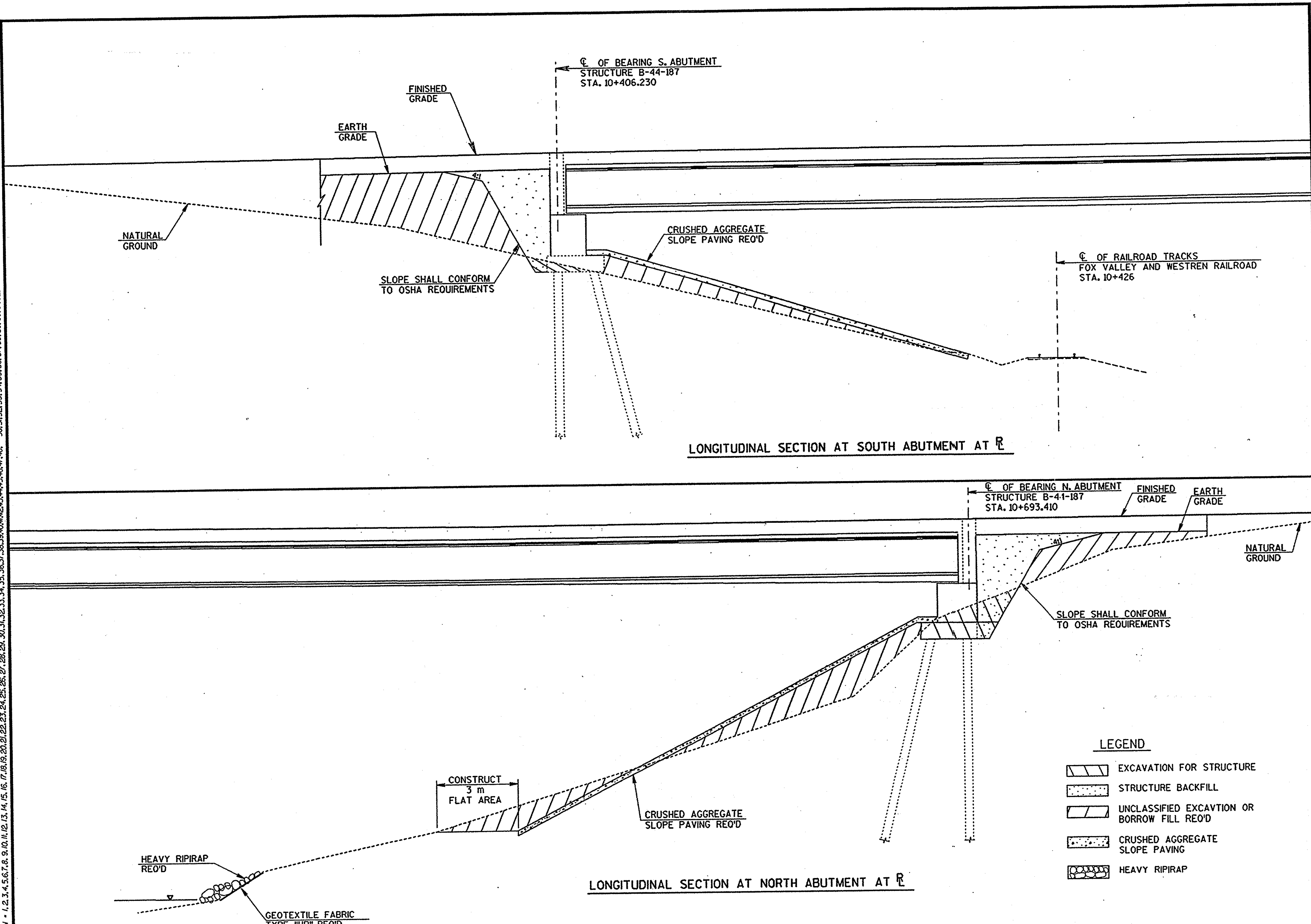


WHEN TERRACE WIDTH IS GREATER THAN 1.2 m

DRIVEWAY DETAILS

GENERAL NOTES

ALL EXPANSION JOINT MATERIAL SHALL BE 25 mm DEEPER THAN THE CONCRETE SLAB BEING PLACED.
CONCRETE - 150 mm DEPTH (INCLUDING WALK ACROSS DRIVE).
RESIDENTIAL DRIVEWAY WIDTHS SHALL BE A MAXIMUM OF 7.3 m
COMMERCIAL DRIVEWAY WIDTHS SHALL BE A MAXIMUM OF 10.7 m



CONSTRUCTION DETAIL	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: 2.9	M

WISDOT: MSHT42

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PROJECT NO:
DATE:
PLOT NAME:
FILE NAME:
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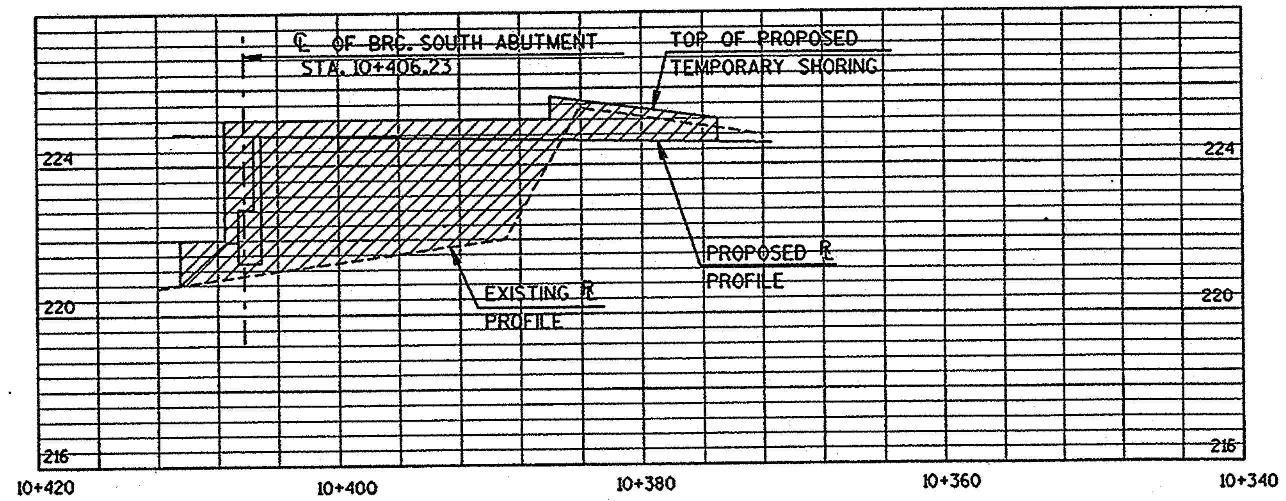
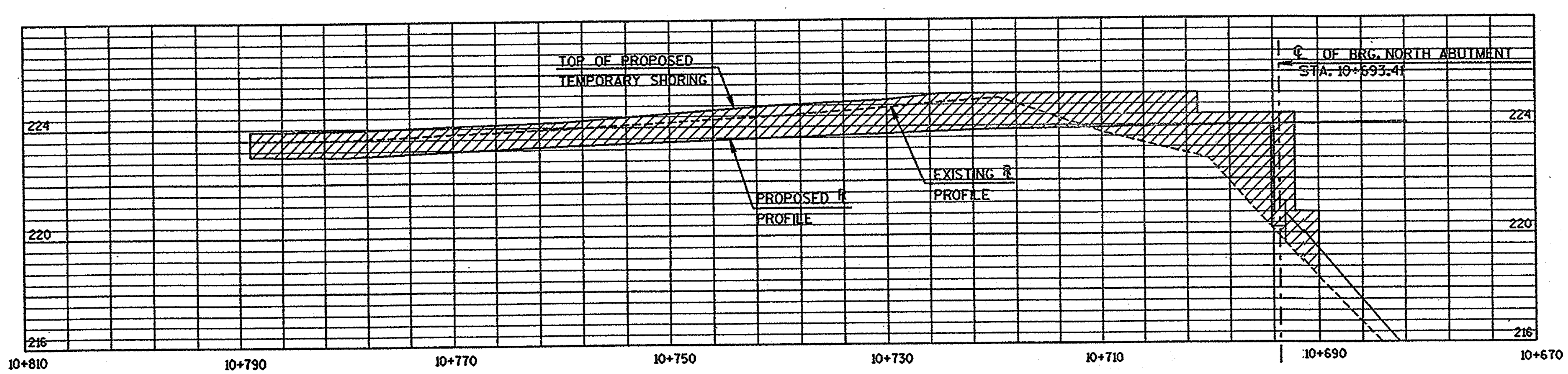


TEMPORARY SHORING DETAIL FOR SOUTH APPROACH

(LOOKING SOUTHEAST)

- TEMPORARY SHORING



TEMPORARY SHORING DETAIL FOR NORTH APPROACH

(LOOKING SOUTHEAST)

- TEMPORARY SHORING

CONSTRUCTION DETAIL	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: 2.10	M

G82
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DATE:
FILE NAME:
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PROJECT NO.
REVISED BY:
DATE REVISED:
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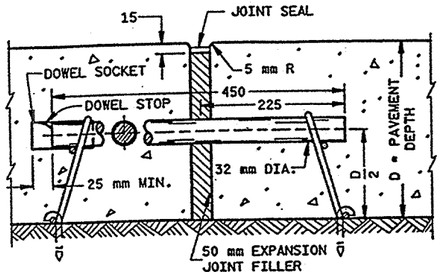
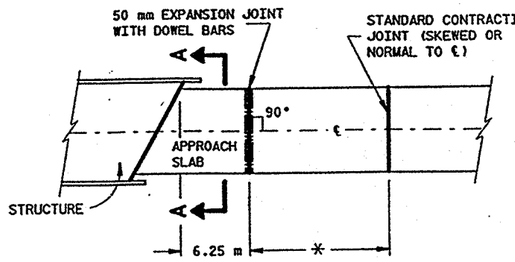
WisDOT: MSHT



EXPANSION JOINT

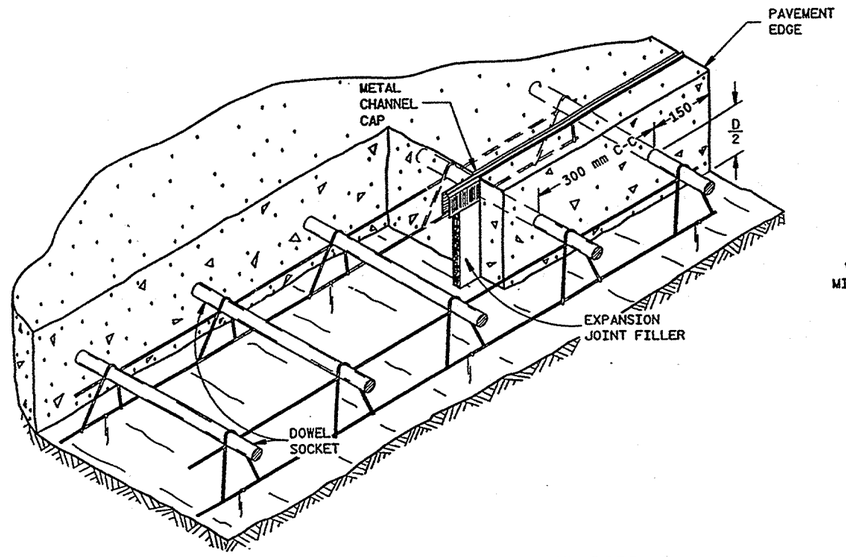


APPROACH SLAB AND ADJACENT PAVEMENT

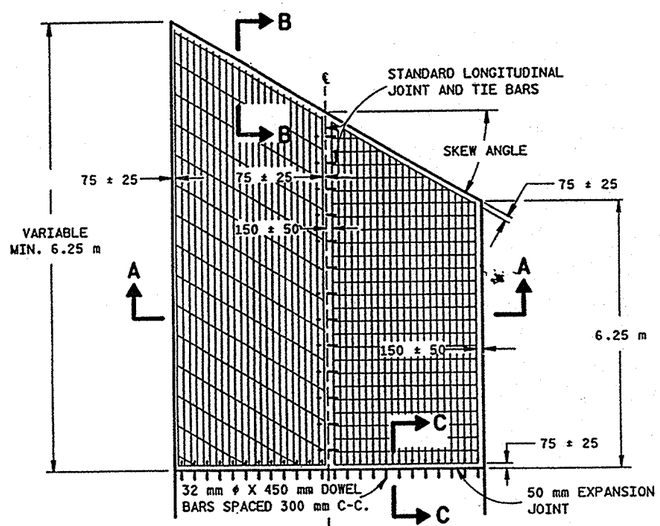
* 3.70 m MIN., 6.1 m MAX. FOR NON-REINFORCED CONCRETE PAVEMENT. 12.2 m ±0.6 m FOR REINFORCED CONCRETE PAVEMENT.

BIDDING INFORMATION

APPROACH SLAB QUANTITIES (ONE SLAB, 7.2 m WIDE)						
SKEW ANGLE	CONCRETE PAVEMENT		WELDED WIRE FABRIC ① 2.68 kg/m²		STEEL REINFORCEMENT (GRADE 60)	
					25M BARS	15M BARS
	m²	m³	m²	kg	kg	kg
0°	45.7	15.2	45.7	123	1201	67
15°	52.8	17.6	52.8	142	1385	76
30°	66.9	22.3	66.9	164	1600	88
45°	72.5	24.2	72.5	195	1840	103
60°	92.1	30.7	92.1	247	2395	130



INSTALLING DEVICE FOR DOWEL BARS AND EXPANSION JOINT ASSEMBLY



HALF SECTION BOTTOM REINFORCEMENT

HALF SECTION TOP REINFORCEMENT

APPROACH SLAB

NOTES

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

DOWEL BARS

DOWEL BARS ACROSS EXPANSION JOINTS SHALL BE CORROSION RESISTANT COATED CONFORMING TO THE REQUIREMENTS OF AASHTO DESIGNATION M 254.

THE COATING TYPE SHALL BE, TYPE B - THERMOSETTING EPOXY.

JOINT SEALING

EXPANSION JOINTS SHALL BE SEALED AS FOLLOWS:

1. ON PAVEMENTS HAVING TRANSVERSE CONTRACTION JOINTS SEALED WITH A POURED TYPE SEALER, EXPANSION JOINTS SHALL BE SEALED WITH THE SAME TYPE SEALANT, 5 mm BELOW PAVEMENT SURFACE.
2. ON PAVEMENTS WITH NO CONTRACTION JOINTS, UNSEALED CONTRACTION OR CONTRACTION JOINTS SEALED WITH COMPRESSION TYPE SEALS, EXPANSION JOINTS SHALL BE SEALED WITH A POURED TYPE SEALER AS SPECIFIED IN THE PLANS OR SPECIAL PROVISIONS.

① WELDED WIRE FABRIC

6 X 12 - WS.5 X W4.0 OR METRIC EQUIVALENT

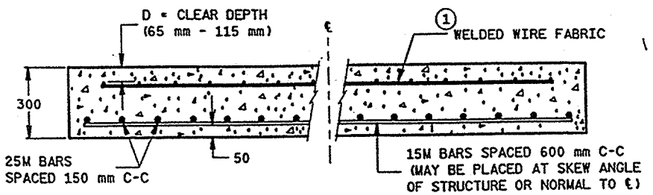
SHEET WIDTHS OF 2.5 m ARE PERMITTED.

STEEL REINFORCEMENT

SPLICING OF 25M BARS IN THE APPROACH SLAB IS PERMITTED FOR SKEWED STRUCTURES ONLY. SPLICES SHALL BE STAGGERED, WITH A MAXIMUM OF ONE SPLICE PER BAR. LAPS SHALL CONFORM TO THE STANDARD SPECIFICATIONS.

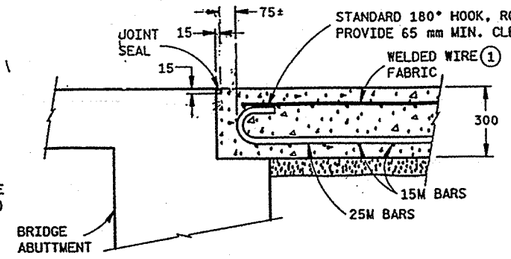
NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.



SECTION A-A

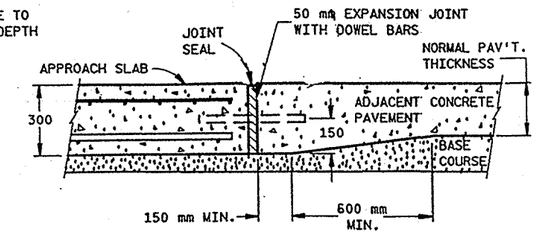
REINFORCEMENT POSITIONING DETAIL



SECTION B-B

BEND DETAIL

BOTTOM REINFORCEMENT



SECTION C-C

TRANSITION DETAIL

APPROACH SLAB TO ADJACENT PAVEMENT

MODIFIED CONCRETE PAVEMENT APPROACH SLAB	SCALE: 1:1000	HWY: CTH N	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: 2.11	M

PLOT SCALE:

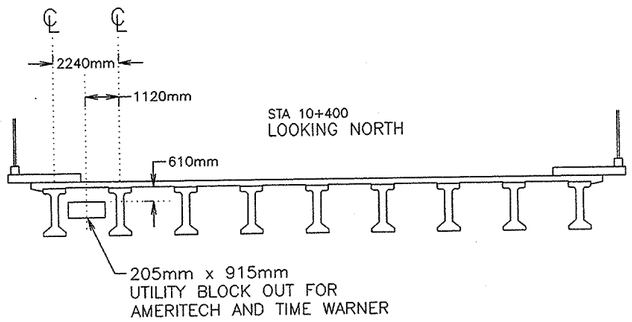
PLOT NAME:

REV. DATE: 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

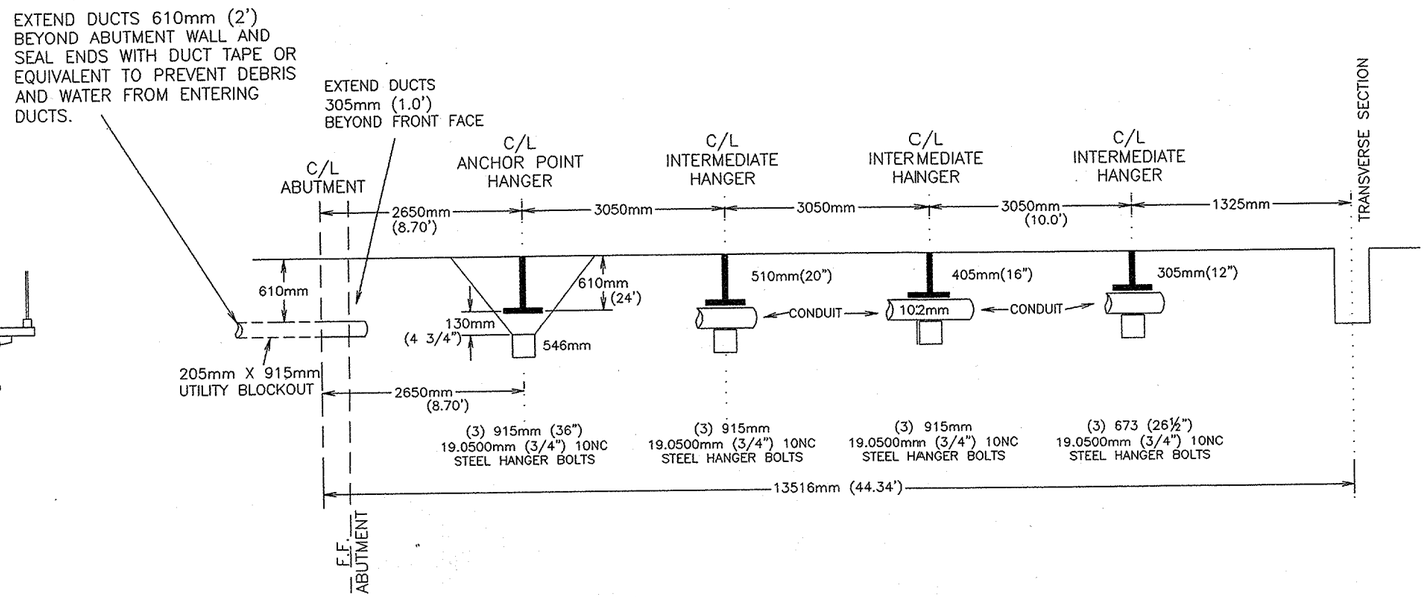
ORIGINATOR: LEVELS ON

FILE NAME: d3 design:s13b203

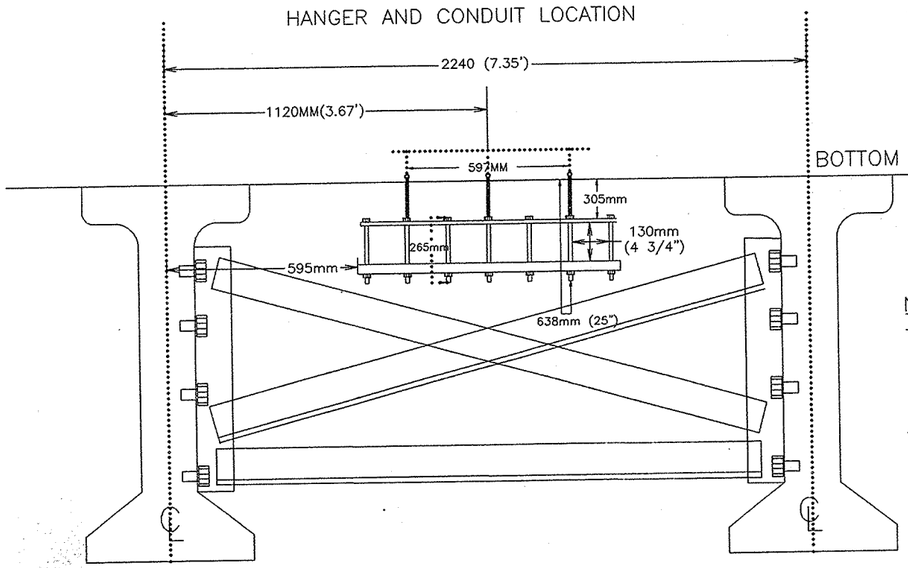
BLOCK OUT PLACEMENT AT ABUTMENTS



ANCHOR POINT HANGER & INTERMEDIATE HANGER LOCATIONS BETWEEN SPANS 1 AND 7 C/L FROM ABUTMENT TO THE FIRST STEEL DIAPHRAGM 13516mm FROM FF ABUTMENTS



HANGER AND CONDUIT LOCATION



NOTE:
- 305mm (1.0') MINIMUM CLEARANCE REQUIRED OF HANGER INSERTS AND ANCHOR BRACE INSERTS FROM ANY DIAPHRAGM (STEEL OR CONCRETE)
- BOTTOM OF CONDUIT AT DIAPHRAGMS IS AND STEEL DIAPHRAGM 435mm (1.42') BELOW BOTTOM OF BRIDGE DECK

UTILITY DETAILS

NO.	DATE	REVISION	BY

DATA-TEL COMMUNICATION SERVICES
1241 BELLEVUE ST.
GREEN BAY, WI 54302

STRUCTURE B-44-187

LOCATION OF JOB:			
COUNTY:		VILLAGE:	
DESIGN SPEC.:		LOAD:	CONST. SPEC.:
DESIGNED BY: TAF	DESIGNED CK'D:	DRAWN BY: LAH	PLANS CK'D:

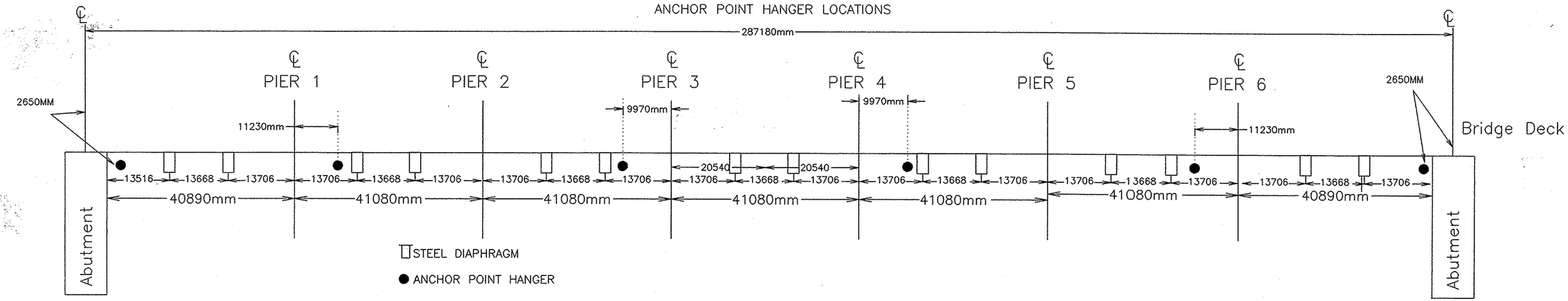
APPROVED _____ DATE _____
CHIEF STRUCTURAL DESIGN ENGINEER

AMERITECH / TIME WARNER BRIDGE
DUCT WORK ASSEMBLY
EXAMPLE SHEET A

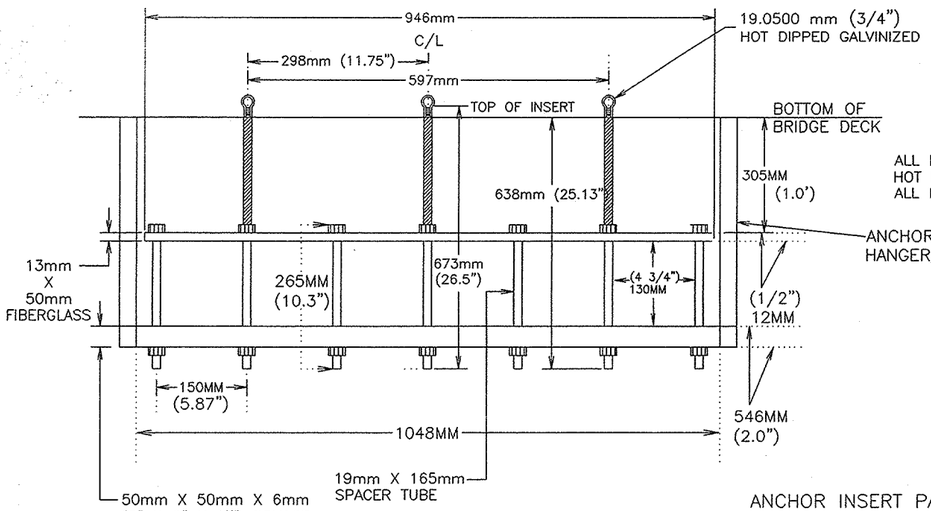
SHEET OF 2.12
DATE:

COUNTY: OUTAGAMIE | STATE PROJECT NO: 4676-03-71

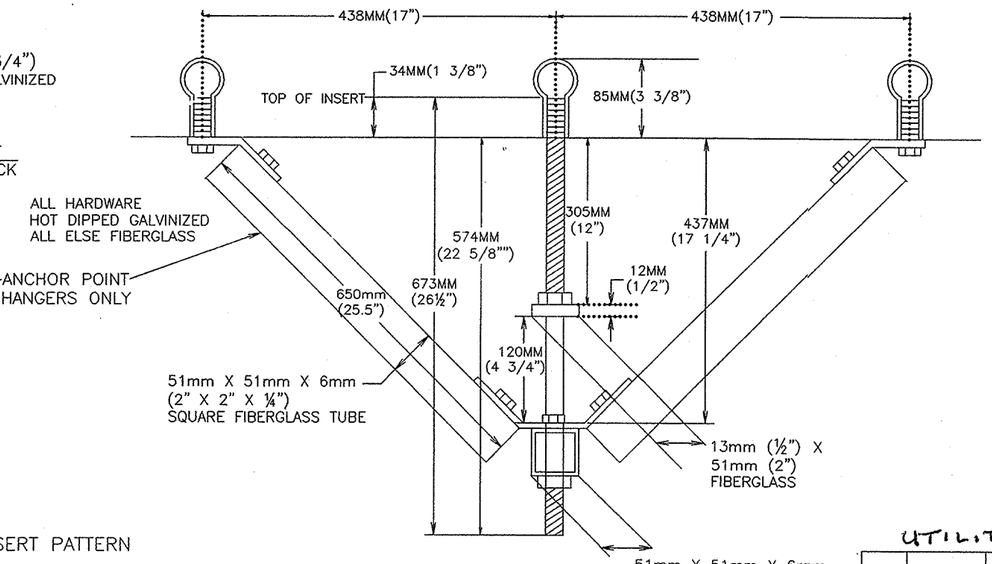
ANCHOR POINT HANGER LOCATIONS



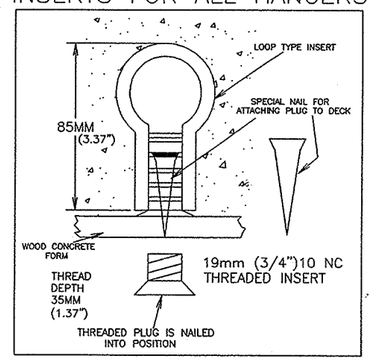
ANCHOR POINT HANGER AND INTERMEDIATE HANGER FRONT/REAR FACE



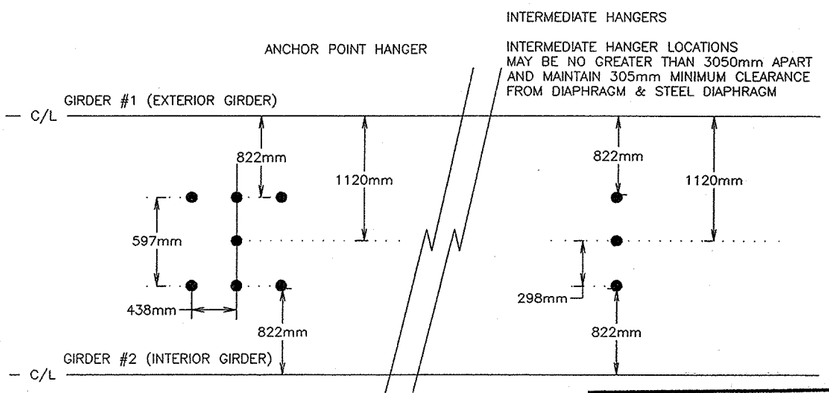
ANCHOR POINT HANGERS SIDE VIEW



INSERTS FOR ALL HANGERS



ANCHOR INSERT PATTERN



UTILITY DETAILS

NO.	DATE	REVISION	BY

DATA-TEL COMMUNICATION SERVICES
1241 BELLEVUE ST.
GREEN BAY, WI 54302

STRUCTURE B-44-187

LOCATION OF JOB:

COUNTY:		VILLAGE:	
DESIGN SPEC.:		LOAD:	CONST. SPEC.:
DESIGNED BY: TAF	DESIGNED CK'D:	DRAWN BY: LAH	PLANS CK'D:

APPROVED _____ DATE _____
CHIEF STRUCTURAL DESIGN ENGINEER

AMERITECH / TIME WARNER BRIDGE DUCT WORK
ASSEMBLY INSERT AND HANGER LOCATION

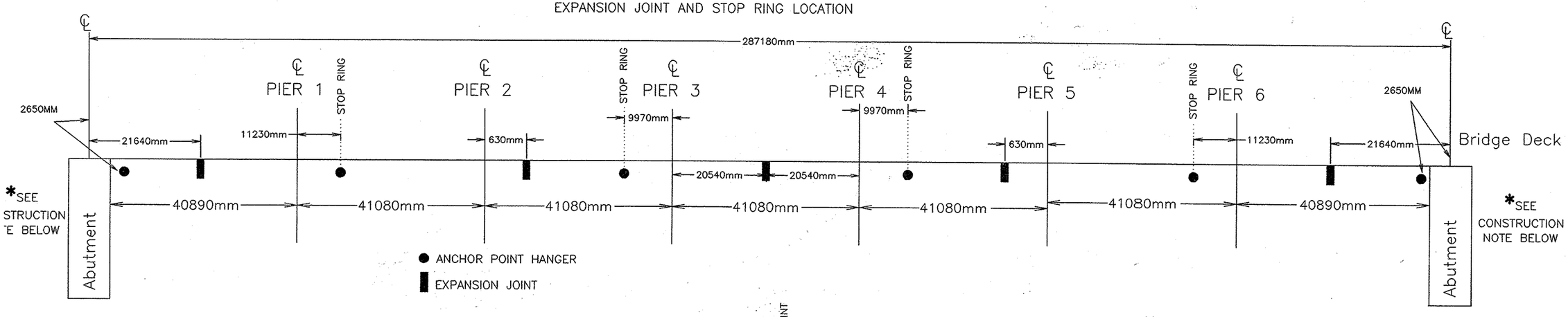
EXAMPLE SHEET B

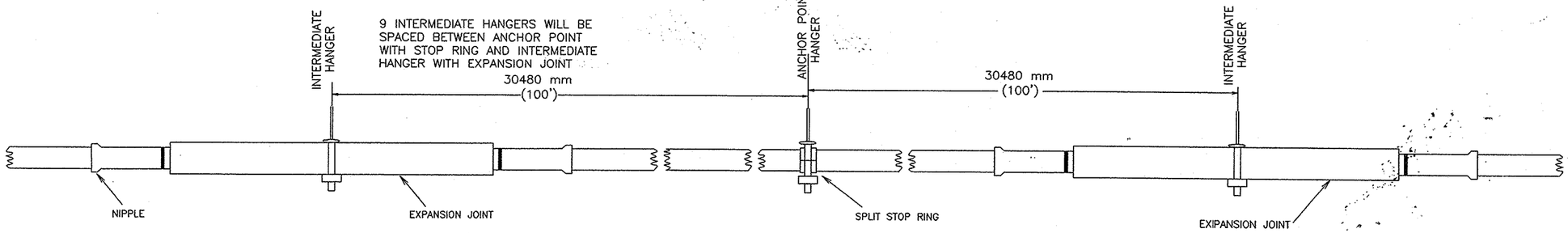
SHEET OF 2.13

DATE:

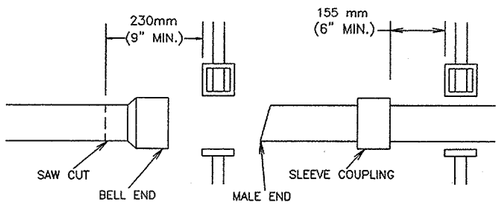
COUNTY: OUTAGAMIE | STATE PROJECT NO: 4676-03-71

EXPANSION JOINT AND STOP RING LOCATION

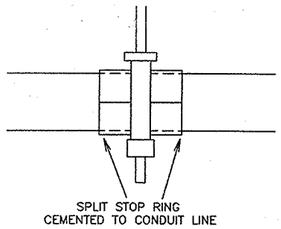


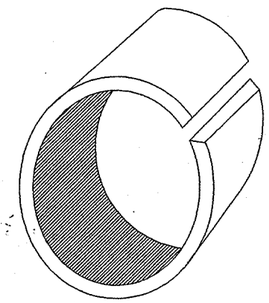


CLEARANCES FOR SLEEVE COUPLINGS AND BELL ENDS



STOP RING PLACEMENT AT ANCHOR POINT HANGERS





SPLIT STOP RING

*Note: Extend ducts 610mm (2') beyond abutment wall and seal conduit ends with duct tape or equivalent to prevent debris and water to enter the ducts. See utility conduit construction methods.

UTILITY DETAILS

NO.	DATE	REVISION	BY

DATA–TEL COMMUNICATION SERVICES
1241 BELLEVUE ST.
GREEN BAY, WI 54302

STRUCTURE B–44–187

LOCATION OF JOB:			
COUNTY:		VILLAGE:	
DESIGN SPEC.:		LOAD:	CONST. SPEC.:
DESIGNED BY: TAF	DESIGNED CK'D:	DRAWN BY: LAH	PLANS CK'D:

APPROVED _____ _____
CHIEF STRUCTURAL DESIGN ENGINEER DATE

AMERITECH / TIME WARNER BRIDGE
DUCT WORK ASSEMBLY EXPANSION JOINT & STOP RING PLACEMENT
EXAMPLE SHEET C

SHEET OF 2,14
DATE:

COUNTY: OUTAGAMIE | STATE PROJECT NO: 4676-03-71

11

LEGEND

- 3-H / 2 — MOUNTING CONFIGURATION / SIGNAL HEAD NUMBER
- PB — PEDESTRIAN PUSH BUTTON
- JUNCTION NUMBERS
- LOOP DETECTOR NUMBER
- TRAFFIC SIGNAL BASE, TYPE 1
- TRAFFIC SIGNAL BASE, TYPE 2
- TRAFFIC CONTROL CABINET BASE
- PULL BOX, 600mm X 900 mm
- NON-METALLIC CONDUIT, 25 mm, 75 mm
- MAST ARM

NOTES:
JUNCTION NUMBERS 2,6,9,16,17
CONSIST OF SALVAGED PEDESTAL BASES, POLES, MAST ARMS, BACKPLATES, SIGNAL HEADS AND PEDESTRIAN HEADS.

JUNCTION NUMBER 8
CONSISTS OF SALVAGED PEDESTAL BASE. POLE, BACKPLATES, AND SIGNAL HEADS. ADD NEW SIGNAL HEAD #6 AND BACKPLATE FACING NORTHEAST.

JUNCTION NUMBER 12
CONSISTS OF NEW HEADS ON NEW STANDARD AND NEW PEDESTAL BASE.

JUNCTION NUMBER 13
CONSISTS OF SALVAGED POLE AND PEDESTRIAN HEADS. ADD NEW SIGNAL HEADS #13, #14, AND NEW BACKPLATES.

JUNCTION NUMBER 19
CONSISTS OF SALVAGED POLE AND PEDESTRIAN HEAD ADD NEW SIGNAL HEAD #16 AND NEW BACKPLATE.

JUNCTION NUMBER 21
CONSISTS OF SALVAGED POLE. ADD NEW SIGNAL HEADS #11, #15, AND NEW BACKPLATES.

REMOVING AND SALVAGING EXSTING EQUIPMENT WILL BE PAID FOR UNDER REMOVING AND SALVAGING EXISTING TRAFFIC SIGNAL EQUIPMENT, CTH N & MAES AVE.

NEW TRAFFIC CONTROLLER REQ'D.

EXISTING TRAFFIC CONTROLLER (REMOVE)

MAES AVENUE

19+960

20+040

C.T.H. "N"

10+080

CORRUGATED CONCRETE MEDIAN

STA 10+103.066 C.T.H. "N" CONSTRUCTION ℄ =
STA. 20+000.000 MAES AVE. CONSTRUCTION ℄

MOUNTING CONFIGURATION WITH SIGNAL HEAD NUMBER		
3-V	5-V	4-V
R Y G 3,7	R Y G Y G 0,1,4,6	R Y G G 11,12,13A 14,15,16
	5-H	4-H
	R Y Y G G 2,5	R Y G G 10,13
	2-P	1-Y
	W / DW 17,18,19,20, 21,22,23,24	Y 8

NOTES (CONTINUED):

THE EXACT LOCATIONS FOR SIGNAL BASES AND PULL BOXES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

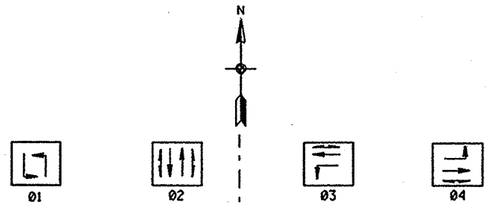
A 0.6 m CLEARANCE FROM SIGNAL BASES TO FACE OF CURB SHALL BE MAINTAINED.

50 mm CONDUIT SHALL BE USED FROM PULL BOXES TO SIGNAL BASES.

TEMPORARY SIGNAL LAYOUTS ARE SHOWN ON TEMPORARY SIGNAL LAYOUT SHEET.

TRAFFIC SIGNAL FOR MAES AVENUE AND C.T.H. "N"	HWY: C.T.H."N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: 2.15	M

WISDOT: MSHT42



SEQUENCE OF OPERATION

	HEAD NO.	Ø1 CLEAR TO R/W	Ø1 CLEAR TO **	Ø2 CLEAR TO R/W	Ø2 CLEAR TO **	Ø3 CLEAR TO R/W	Ø3 CLEAR TO **	Ø4 CLEAR TO R/W	Ø4 CLEAR TO **	FLASH
01	0,1,2,4,5,6	G	Y -	-	- -			-	- -	
02	0,1,2,3,4,5,6,7	R	R R	G	Y R	R	R R	R	R R	R
03	10,11,12	R	R R	R	R R	G	Y R	R	R R	R
04	13,13A,14,15,16	R	R R	R	R R	R	R R	G/G	Y R	R
Ø2P	17,18,19,20	DW	DW DW	*	DW DW	DW	DW DW	DW	DW DW	-
Ø3P	21,22	DW	DW DW	DW	DW DW	*	DW DW	DW	DW DW	-
Ø4P	23,24	DW	DW DW	DW	DW DW	DW	DW DW	*	DW DW	-

NOT USED | NOT USED | NOT USED | NOT USED

	HEAD NO.	Ø5 CLEAR TO R/W	Ø5 CLEAR TO **	Ø6 CLEAR TO R/W	Ø6 CLEAR TO **	Ø7 CLEAR TO R/W	Ø7 CLEAR TO **	Ø8 CLEAR TO R/W	Ø8 CLEAR TO **
Ø1									
Ø2									
Ø3									
Ø4									
Ø5									
Ø6									
Ø7									
Ø8									
Ø2P									
Ø4P									
Ø6P									
Ø8P									

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

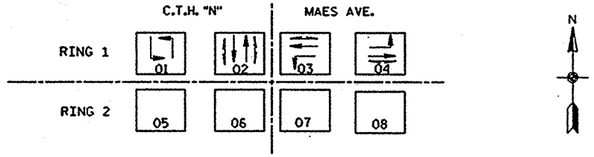
* WHEN CALLED, TIMED A STEADY WALK, THEN FLASHING DON'T WALK, THEN GOES TO STEADY DON'T WALK

CHART 1

PHASE ON	NON-CONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
Ø1	NONE	2,3,4
Ø2	NONE	1,3,4
Ø3	NONE	1,2,4
Ø4	NONE	2,3,4

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	CALLS ONLY	EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT	CALLING DELAY	EXTENSION STRETCH	LOOP SIZE (m)	TURNS
11	1	X			1	1				2x9	3
12	1	X			1	1		X		2x9	3
21	2	X			2	2				2x9	3
22	2	X			2	2		X		2x9	3
31	3	X			3	3				2x9	3
32	3	X			3	3				2x9	3
41	4	X			4	4				2x9	3
42	4	X			4	4				2x9	3
43	4	X			4	4				2x9	3



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

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	

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

NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NON-CONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
3. PROVIDE FOR HAND CONTROL OPERATION.

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W/Ø	PHASE RECALL
1			
2			
3			
4			

TRAFFIC CONTROL DETAIL FOR INTERSECTION	HWY: MAES AVE. & CTH N	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: 2.16	M

WISDOT: MSHT 17

LEGEND

- 3-H / 2 — MOUNTING CONFIGURATION / SIGNAL HEAD NUMBER
- P.B. — PEDESTRIAN PUSH BUTTON
- JUNCTION NUMBERS
- LOOP DETECTOR NUMBERS
- TRAFFIC SIGNAL BASE, TYPE 1
- TRAFFIC SIGNAL BASE, TYPE 2
- TRAFFIC CONTROL CABINET BASE
- PULL BOX, 600 mm X 900mm
- NON-METALLIC CONDUIT, 75 mm
- EXISTING NON-METALLIC CONDUIT
- MAST ARM

N

MAIN ST. (S.T.H. 96)

10+880

10+920

9 m

2 m

3T (11)

3T (21)

(TO REMAIN)

75 mm

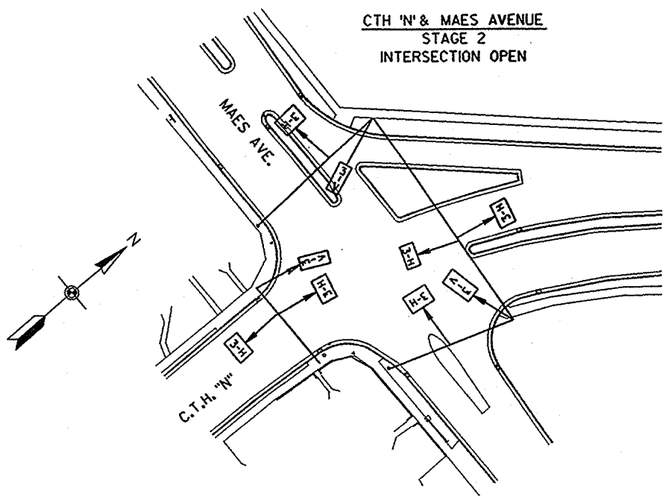
SPLICE NEW 75 mm CONDUIT
TO EXISTING CONDUIT

TRAFFIC CONTROLLER
TO REMAIN

NOTES:
JUNCTION NUMBERS 2,3A,6,10,11,14 CONSIST OF PULL BOXES TO REMAIN.
JUNCTION NUMBERS 3,7,8,9,12,13 CONSIST OF TRAFFIC SIGNALS TO REMAIN.
JUNCTION NUMBER 4 CONSISTS OF REMOVING & SALVAGING PEDESTAL BASE, POLE, MAST ARM, SIGNAL HEADS AND BACKPLATES ON NEW TYPE 2 CONCRETE BASE.
JUNCTION NUMBER 5 CONSISTS OF A NEW PULL BOX.
THE EXACT LOCATIONS FOR SIGNAL BASES AND PULL BOXES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
A 0.6 m CLEARANCE FROM SIGNAL BASES TO FACE OF CURB SHALL BE MAINTAINED.
TEMPORARY SIGNAL LAYOUTS ARE SHOWN ON TEMPORARY SIGNAL LAYOUT SHEET.
50 mm CONDUIT SHALL BE USED FROM PULL BOXES TO SIGNAL BASES.
REMOVING & SALVAGING EXISTING EQUIPMENT WILL BE PAID FOR UNDER REMOVING EXISTING TRAFFIC SIGNAL EQUIPMENT, CTH N & STH 96.

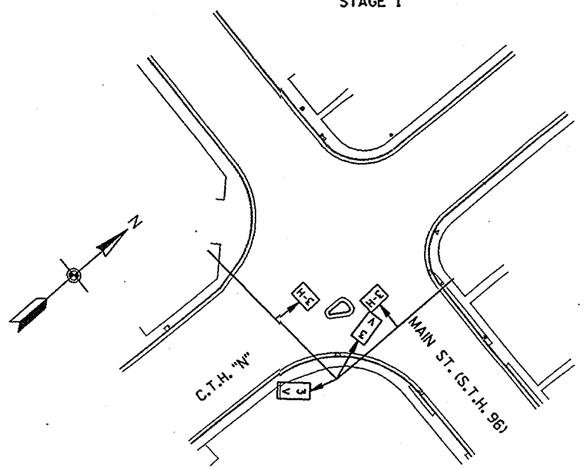
TRAFFIC SIGNALS FOR C.T.H. "N" AND MAIN STREET	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: 2.17	M

CTH 'N' & MAES AVENUE
STAGE 2
INTERSECTION OPEN



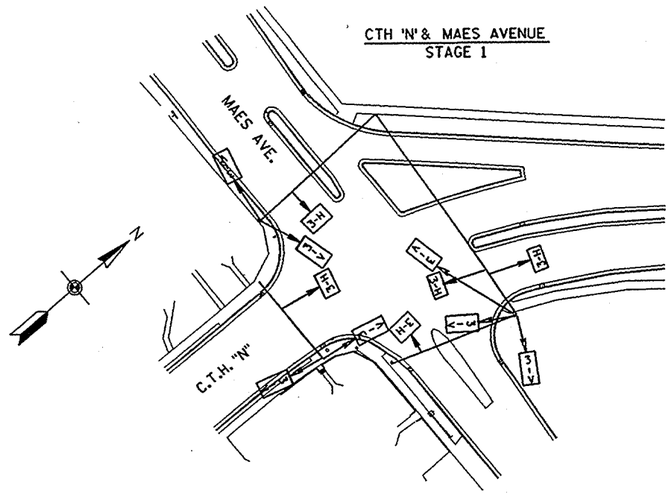
	CTH N	MAES AVE.
	Ø1	Ø2
G	27 SEC.	23 SEC.
Y	4 SEC	4 SEC
R	1 SEC	1 SEC

CTH 'N' & MAIN STREET (STH 96)
STAGE 1



	CTH N	MAIN ST.	MAIN ST.
	Ø1	Ø2	Ø3
G	20 SEC.	G 13 SEC.	16 SEC.
Y	3 SEC	Y 3 SEC	3 SEC
R	1 SEC		1 SEC

CTH 'N' & MAES AVENUE
STAGE 1



	CTH N	MAES AVE.
	Ø1	Ø2
G	27 SEC.	23 SEC.
Y	4 SEC	4 SEC
R	1 SEC	1 SEC

GENERAL NOTES FOR TEMPORARY SIGNALS

1. TEMPORARY SIGNALS SHALL INCLUDE MODIFICATIONS TO PEDESTRIAN FACES TO ACCOMODATE PEDESTRIAN TRAVEL.
2. EXISTING SIGNALS IN CONFLICT OR NOT IN USE WITH TEMPORARY SIGNALS SHALL BE BAGGED TO AVOID CONFUSION TO TRAFFIC FLOW.

TEMPORARY SIGNAL LAYOUTS	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4673-03-71	SHEET NO: 2.18	M

GB 2
PEN TABLE = #plot72#laser#mv80pp.tbl
DATE OF PLOT = 04/21/99
PLOT NA
DESIGN FILE IS I:\440261\dgn\pave1.dgn

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.

ORIGINATOR: JPZ
PROJECT NO. 44-0261
DATE: 5/6/99
FILE NAME: PAVE1.DGN
PLOT NAME:
SCALE:

N

200 mm SOLID WHITE
CHANNELIZING LINE (TYP.)

ARROW, TYPE 2
REO'D. (TYP.)

ISLAND NOSES, YELLOW
REO'D. (TYP.)

100 mm DASHED WHITE
LANE LINE, 1.8 m LENGTH
WITH 1.8 m GAPS.

STA. 10+103.066 C.T.H. "N" R/W R=
STA. 20+000.000 MAES AVE.

YELLOW EPOXY ON FLAT SURFACES
OF CORRUGATED MEDIAN (TYP.)

R/W LINE

10+120

6 m 12.4 m

CURB, YELLOW
REO'D. (TYP.)

2.4 m 15 m 2.4 m 10 m 2.4 m 6 m 1.8 m (TYP.)

19+880

19+920

15.24 m (TYP.) 3.81 m (TYP.)

ARROW, TYPE 3
REO'D. (TYP.)

ARROW, TYPE 2
REO'D. (TYP.)

WORD, WHITE
REO'D. (TYP.)

ONLY

20+040

6 m 10 m 12.4 m 10 m

100 mm DASHED WHITE
LANE LINE REO'D. (TYP.)

200 mm SOLID WHITE
CHANNELIZING LINE (TYP.)

C. VANBOXTEL

450 mm SOLID WHITE
STOPLINE (TYP.)

150 mm SOLID WHITE
CROSSWALK LINE (TYP.)

10+080

12 m (TYP.)

HAROLD
WINIUS

100 mm SOLID DOUBLE
YELLOW CENTERLINE (TYP.)

DONALD
VANDENHEUVEL

ONLY

DANIEL
MEACHAM

WALL
FAMILY

10+040

W. KNOEDLER, JR.

EDMUND
KEMPEN

JOHN
MINTEN

SHIRLEY
BETTER

PAVEMENT MARKING	SCALE, METERS 0 25 50	HWY: MAES AVE. & CTH N	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: 2.19	M

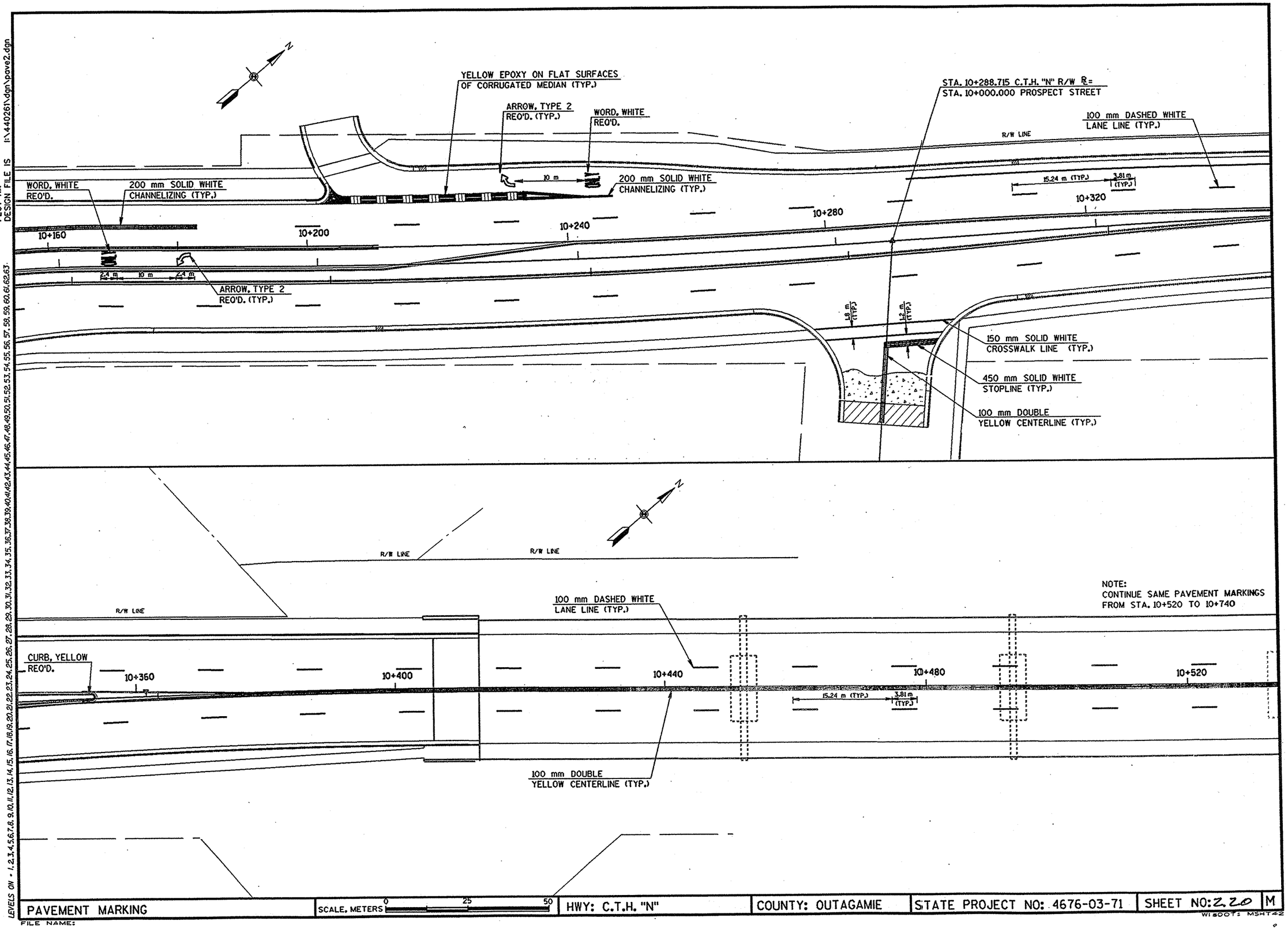
FILE NAME:

WISDOT: MS+T42

GB 2
PEN TABLE = ±plot72±laser±mv80pp.tbl
DATE OF PLOT = 04/21/99
PLOT NA
DESIGN FILE IS I:\440261\dgn\pave2.dgn

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

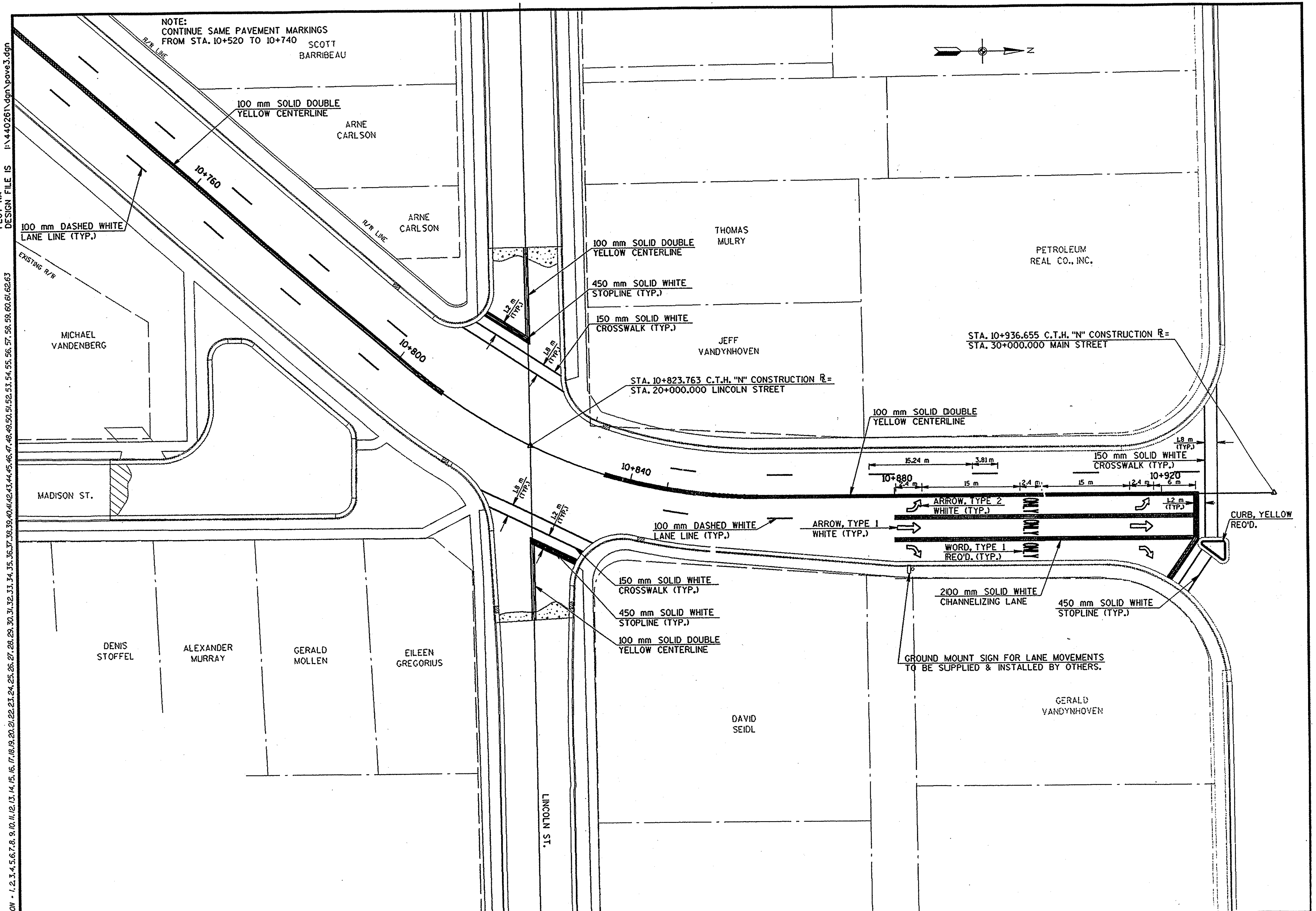
ORIGINATOR: JPZ
PROJECT NO. 44-0261
DATE: 5/6/99
FILE NAME: PAVE2.DGN
PLOT NAME:
SCALE:



PAVEMENT MARKING	SCALE, METERS 0 25 50	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: 2.20	M

FILE NAME:

WisDOT: MSHT42


NOTE:
CONTINUE SAME PAVEMENT MARKINGS
FROM STA. 10+520 TO 10+740
SCOTT
BARRIBEAU
ARNE
CARLSON
ARNE
CARLSON
R/W LINE
R/W LINE
EXISTING R/W
100 mm SOLID DOUBLE
YELLOW CENTERLINE
100 mm DASHED WHITE
LANE LINE (TYP.)
10+760
10+800
10+840
10+880
10+920
MICHAEL
VANDENBERG
MADISON ST.
THOMAS
MULRY
PETROLEUM
REAL CO., INC.
JEFF
VANDYNHOVEN
100 mm SOLID DOUBLE
YELLOW CENTERLINE
450 mm SOLID WHITE
STOPLINE (TYP.)
150 mm SOLID WHITE
CROSSWALK (TYP.)
1.2 m (TYP.)
1.8 m (TYP.)
STA. 10+823.763 C.T.H. "N" CONSTRUCTION ℄=
STA. 20+000.000 LINCOLN STREET
STA. 10+936.655 C.T.H. "N" CONSTRUCTION ℄=
STA. 30+000.000 MAIN STREET
100 mm SOLID DOUBLE
YELLOW CENTERLINE
150 mm SOLID WHITE
CROSSWALK (TYP.)
15.24 m
3.81 m
2.4 m
15 m
6 m
ARROW, TYPE 2
WHITE (TYP.)
ARROW, TYPE 1
WHITE (TYP.)
WORD, TYPE 1
REQ'D. (TYP.)
ONLY
CURB, YELLOW
REQ'D.
100 mm DASHED WHITE
LANE LINE (TYP.)
150 mm SOLID WHITE
CROSSWALK (TYP.)
450 mm SOLID WHITE
STOPLINE (TYP.)
100 mm SOLID DOUBLE
YELLOW CENTERLINE
2100 mm SOLID WHITE
CHANNELIZING LANE
450 mm SOLID WHITE
STOPLINE (TYP.)
GROUND MOUNT SIGN FOR LANE MOVEMENTS
TO BE SUPPLIED & INSTALLED BY OTHERS.
DENIS
STOFFEL
ALEXANDER
MURRAY
GERALD
MOLLEN
EILEEN
GREGORIUS
DAVID
SEIDL
GERALD
VANDYNHOVEN
LINCOLN ST.
N

GB 2
PEN TABLE = ±plot72±laser±mv80pp.tbl
DATE OF PLOT = 03/19/99
PLOT NA
DESIGN FILE IS I:\440261\dgn\pave3.dgn

ORIGINATOR: JPZ DATE: 12-18-98 PLOT NAME:
PROJECT NO. 44-0261 FILE NAME: PAVE3.DGN 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

PAVEMENT MARKING	SCALE, METERS 0 25 50	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: 2.21	M

FILE NAME:

GB 2
PEN TABLE = ±plot72±laser±mv80pp.tbl
DATE OF PLOT = 02/26/99
PLOT NA
DESIGN FILE IS I:\440261\dgn\traf.dgn

59.

50.51.52.

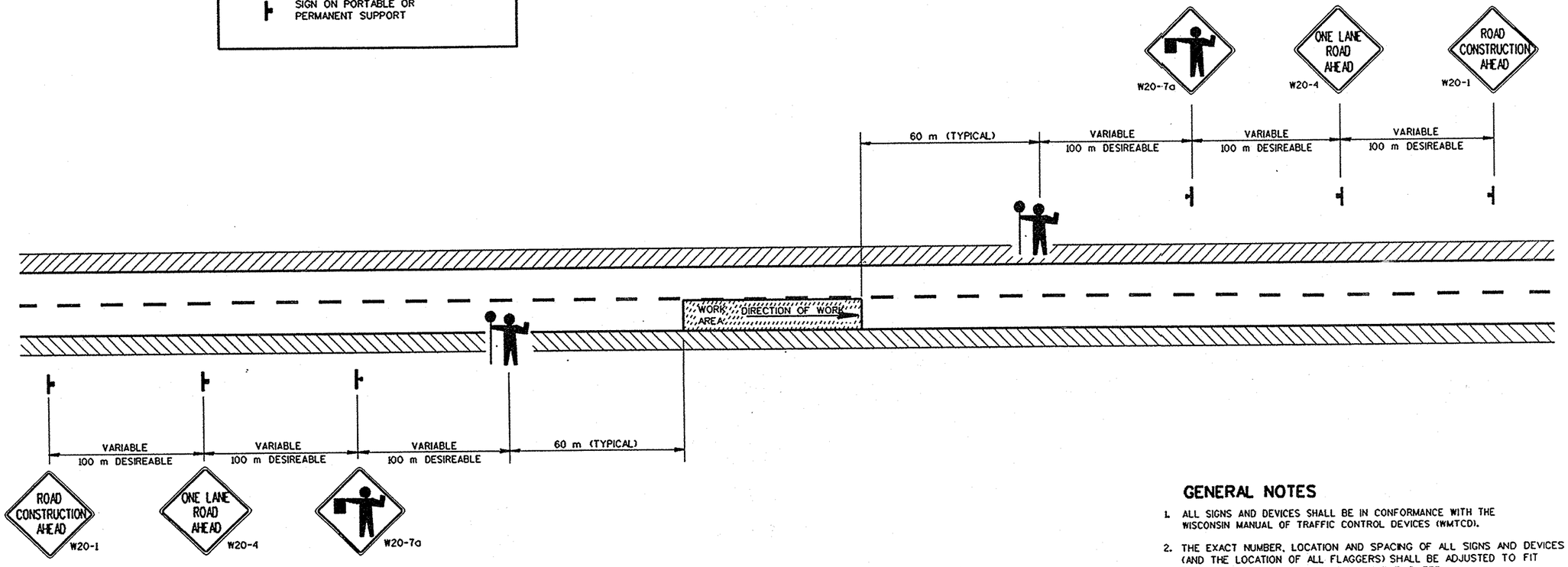
SYMBOLS

WORK AREA

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

SIGN ON SUPPORT STAFF

SIGN ON PORTABLE OR PERMANENT SUPPORT



GENERAL NOTES

1. ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF TRAFFIC CONTROL DEVICES (WMTCD).
2. THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE LOCATION OF ALL FLAGGERS) SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
3. WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.
4. FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, THE "FLAGGER AHEAD", THE "ROAD CONSTRUCTION AHEAD" AND THE ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE FACILITY RESTORED TO NORMAL OPERATION.

ORIGINATOR: DJD
PROJECT NO:
LEVELS ON -
DATE:
PLOT NAME:
FILE NAME:
SCALE:

TRAFFIC DETAIL FOR FLAGGING AND ONE LANE ROAD CLOSURE	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4658-04-72	SHEET NO: 2.22	M

WisDOT: M3-2f

PLACE SIGN AT WILSON AVE. INTERSECTION

ROAD WORK AHEAD W020-1A

LEFT LANE CLOSED AHEAD W020-55A

TEMPORARY PAVEMENT MARKINGS, YELLOW REMOVABLE TAPE

R11-2 (1200 mm X 750 mm) ROAD CLOSED

TYPE III BARRICADE

W01-3R

REMOVE EX. CHANNELIZING LINE.

LINCOLN ST.

MAES AVE.

DRUM

W06-3

REMOVE EXISTING ISLANDS AND TEMPORARY PAVE FOR STAGE 2

FLEXIBLE TUBULAR MARKERS, REQ'D. (TYPICAL)

TEMPORARY PAVEMENT MARKING, YELLOW

TEMPORARY PAVEMENT MARKING, WHITE PAINT

R3-2 (600 x 600 mm)

TYPE III BARRICADE

C.T.H. "N"

10+000

R3-2 (600 x 600 mm)

TEMPORARY PAVEMENT MARKING, YELLOW

TEMPORARY PAVEMENT MARKINGS, YELLOW REMOVABLE TAPE

LEFT LANE CLOSED AHEAD W020-55A

ROAD WORK AHEAD W020-1A

PLACE SIGN 100 m SOUTH OF KIMBERLY AVE. INTERSECTION

HIGH EARLY STRENGTH CONCRETE REQ'D.

CONSTRUCT CONCRETE CORRUGATED MEDIAN IN TEMPORARY MIALL ACCESS AREA DURING STAGE 2

REMOVE MEDIAN AND TEMPORARY PAVE FOR TEMPORAIRY MALL ACCESS

10+200

FLEXIBLE TUBULAR MARKERS, REQ'D. (TYPICAL)

TEMPORARY PAVEMENT MARKING, YELLOW

W01-4L

W06-3

DRUM

MAES AVE.

75 m

20+080

ROAD WORK AHEAD W020-1A

END ROAD WORK G20-2A (1200 mm x 600 mm)

PROSPECT ST.

10+080

TEMPORARY PRECAST BARRIER PLACE FOR STAGE 2. TAPERED END SECTION REQ'D.

R3-2 (600 x 600 mm)

W06-3

TEMPORARY PRECAST CONC. BARRIER. END SECTION REQUIRED.

MATCHLINE

TEMPORARY PAVEMENT MARKING, WHITE PAINT

ROAD WORK AHEAD W020-1A

SYMBOLS

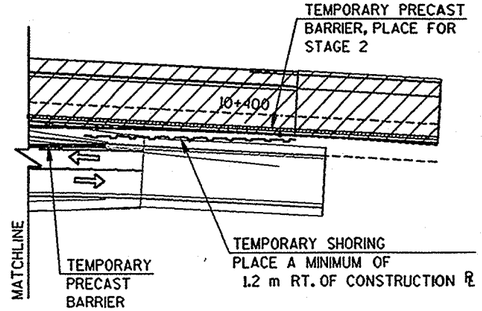
- STAGE CONSTRUCTION AREA
- TRAFFIC DIRECTION
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE 3 BARRICADE WITH SIGN ATTACHED
- NON-METALLIC DRUMS, SPACED AT 10 m TYPICAL
- (A) WARNING LIGHT, TYPE A
- NON-METALLIC DRUMS WITH TYPE "C" STEADY BURN LIGHTS SPACED AT 10 m TYPICAL

STAGE CONSTRUCTION AREA SHOWN IS FOR ROADWAY CONSTRUCTION BEGINNING IN SPRING OF 2000. EXISTING ROADWAYS SHALL REMAIN OPEN FROM FALL OF 1999 TO SPRING OF 2000.

GENERAL NOTES FOR TRAFFIC CONTROL

1. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS DIRECTED BY THE ENGINEER.
2. ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.
3. ALL SIGNS ARE 1200 x 1200 mm UNLESS OTHERWISE NOTED, SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS UNLESS OTHERWISE PROVIDE IN THE PLAN.
4. PAVEMENT MARKING NO LONGER APPLICABLE SHALL BE REMOVED PRIOR TO OPENING TO TRAFFIC.
5. ALL "WO" SIGNS ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.
6. ALL TYPE III BARRICADES ARE TO BE 2.4 m LONG.
7. THE LOCATION OF ALL SIGNS, DRUMS, AND BARRICADES SHALL BE ADJUSTED, ESPECIALLY AT INTERSECTIONS, SO THAT THEY WILL NOT OBSTRUCT A DRIVER'S VIEW OF TRAFFIC, AND AS DIRECTEID BY THE ENGINEER.
8. SIGNS IN PLACE FOR MORE THAN 7 CONTINUOUS DAYS AND NIGHTS SHALL BE MOUNTED ON PERMANENT SUPPORTS WHEN FEASIBLE.
9. FLAGS SHALL 405 mm X 405 mm AND SHALL BE INCIDENTAL TO THE SIGN THEY ARE PLACED ON.

STAGE CONSTRUCTION AREA SHOWN IS FOR BRIDGE CONSTRUCTION BEGINNING IN FALL OF 1999.



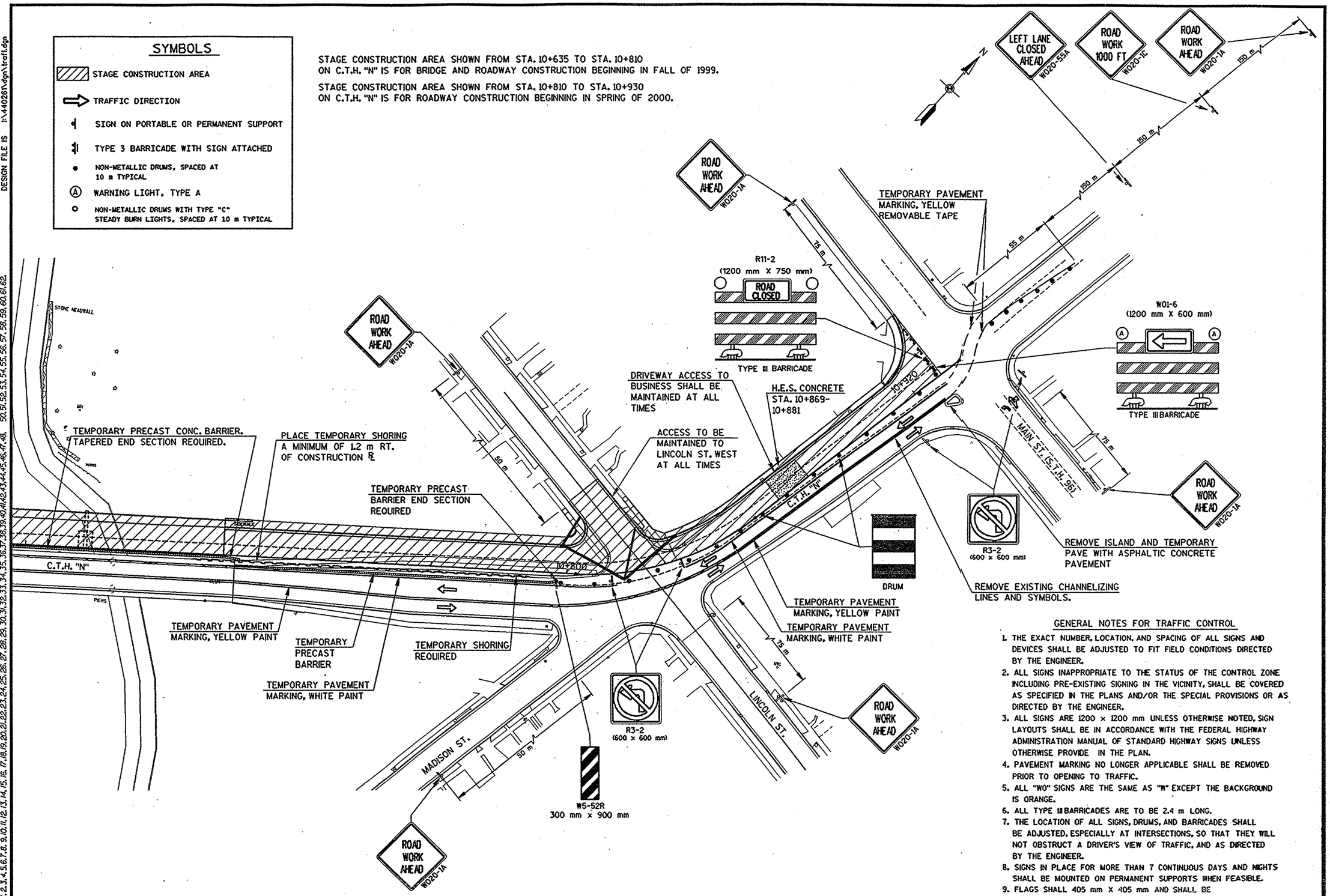
TRAFFIC CONTROL (STAGE 1)	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4673-03-71	SHEET NO: 2.23	M

SYMBOLS

- STAGE CONSTRUCTION AREA
- TRAFFIC DIRECTION
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE 3 BARRICADE WITH SIGN ATTACHED
- NON-METALLIC DRUMS, SPACED AT 10 m TYPICAL
- (A) WARNING LIGHT, TYPE A
- NON-METALLIC DRUMS WITH TYPE "C" STEADY BURN LIGHTS, SPACED AT 10 m TYPICAL

STAGE CONSTRUCTION AREA SHOWN FROM STA. 10+635 TO STA. 10+810
ON C.T.H. "N" IS FOR BRIDGE AND ROADWAY CONSTRUCTION BEGINNING IN FALL OF 1999.

STAGE CONSTRUCTION AREA SHOWN FROM STA. 10+810 TO STA. 10+930
ON C.T.H. "N" IS FOR ROADWAY CONSTRUCTION BEGINNING IN SPRING OF 2000.



GENERAL NOTES FOR TRAFFIC CONTROL

1. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS DIRECTED BY THE ENGINEER.
2. ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.
3. ALL SIGNS ARE 1200 x 1200 mm UNLESS OTHERWISE NOTED, SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS UNLESS OTHERWISE PROVIDE IN THE PLAN.
4. PAVEMENT MARKING NO LONGER APPLICABLE SHALL BE REMOVED PRIOR TO OPENING TO TRAFFIC.
5. ALL "W0" SIGNS ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.
6. ALL TYPE III BARRICADES ARE TO BE 2.4 m LONG.
7. THE LOCATION OF ALL SIGNS, DRUMS, AND BARRICADES SHALL BE ADJUSTED, ESPECIALLY AT INTERSECTIONS, SO THAT THEY WILL NOT OBSTRUCT A DRIVER'S VIEW OF TRAFFIC, AND AS DIRECTED BY THE ENGINEER.
8. SIGNS IN PLACE FOR MORE THAN 7 CONTINUOUS DAYS AND NIGHTS SHALL BE MOUNTED ON PERMANENT SUPPORTS WHEN FEASIBLE.
9. FLAGS SHALL 405 mm X 405 mm AND SHALL BE INCIDENTAL TO THE SIGN THEY ARE PLACED ON.

TRAFFIC CONTROL (STAGE 1)	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4673-03-71	SHEET NO: 2.24	M

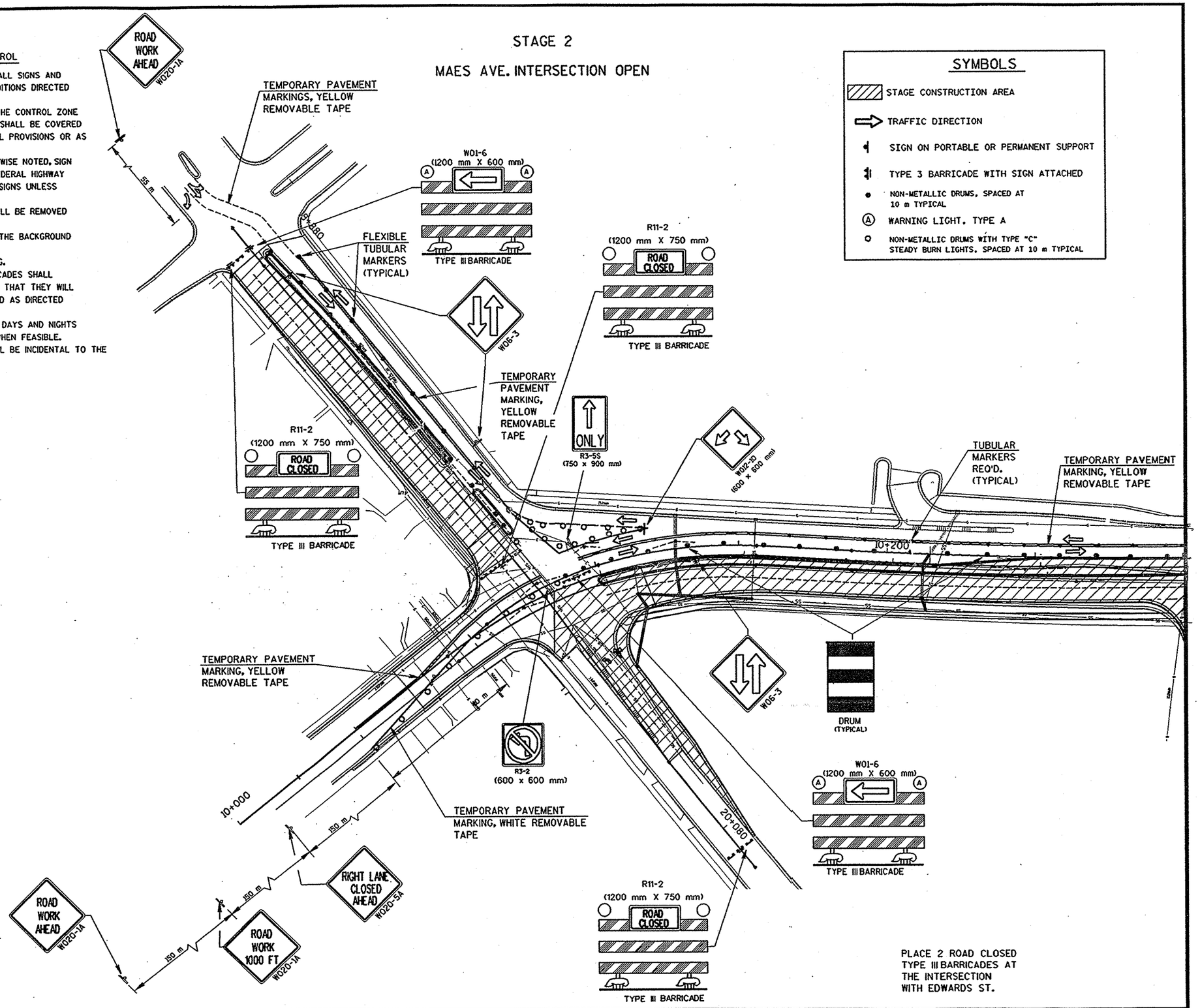
GBZ
PEN TABLE = +plot72+loser+mv80pp.tbl
DATE OF PLOT = 04/21/99
PLOT NA
DESIGN FILE IS I:\440261\dgn\traf2a.dgn
LEVELS ON = 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,50,51,52,53,54,55,56,57,58,59,60,61,62,
ORIGINATOR: DJD
PROJECT NO. 440261.00
REVISED BY:
DATE REVISED:
DATE: 5/6/99
FILE NAME:
PLOT NAME:
SCALE:

GENERAL NOTES FOR TRAFFIC CONTROL

1. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS DIRECTED BY THE ENGINEER.
2. ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.
3. ALL SIGNS ARE 1200 x 1200 mm UNLESS OTHERWISE NOTED. SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS UNLESS OTHERWISE PROVIDE IN THE PLAN.
4. PAVEMENT MARKING NO LONGER APPLICABLE SHALL BE REMOVED PRIOR TO OPENING TO TRAFFIC.
5. ALL "WO" SIGNS ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.
6. ALL TYPE III BARRICADES ARE TO BE 2.4 m LONG.
7. THE LOCATION OF ALL SIGNS, DRUMS, AND BARRICADES SHALL BE ADJUSTED, ESPECIALLY AT INTERSECTIONS, SO THAT THEY WILL NOT OBSTRUCT A DRIVER'S VIEW OF TRAFFIC, AND AS DIRECTED BY THE ENGINEER.
8. SIGNS IN PLACE FOR MORE THAN 7 CONTINUOUS DAYS AND NIGHTS SHALL BE MOUNTED ON PERMANENT SUPPORTS WHEN FEASIBLE.
9. FLAGS SHALL BE 405 mm X 405 mm AND SHALL BE INCIDENTAL TO THE SIGN THEY ARE PLACED ON.

STAGE 2

MAES AVE. INTERSECTION OPEN



SYMBOLS

- STAGE CONSTRUCTION AREA
- TRAFFIC DIRECTION
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE 3 BARRICADE WITH SIGN ATTACHED
- NON-METALLIC DRUMS, SPACED AT 10 m TYPICAL
- (A) WARNING LIGHT, TYPE A
- NON-METALLIC DRUMS WITH TYPE "C" STEADY BURN LIGHTS, SPACED AT 10 m TYPICAL

PLACE 2 ROAD CLOSED TYPE III BARRICADES AT THE INTERSECTION WITH EDWARDS ST.

TRAFFIC CONTROL (STAGE 2)	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4673-03-71	SHEET NO: 2.25	M

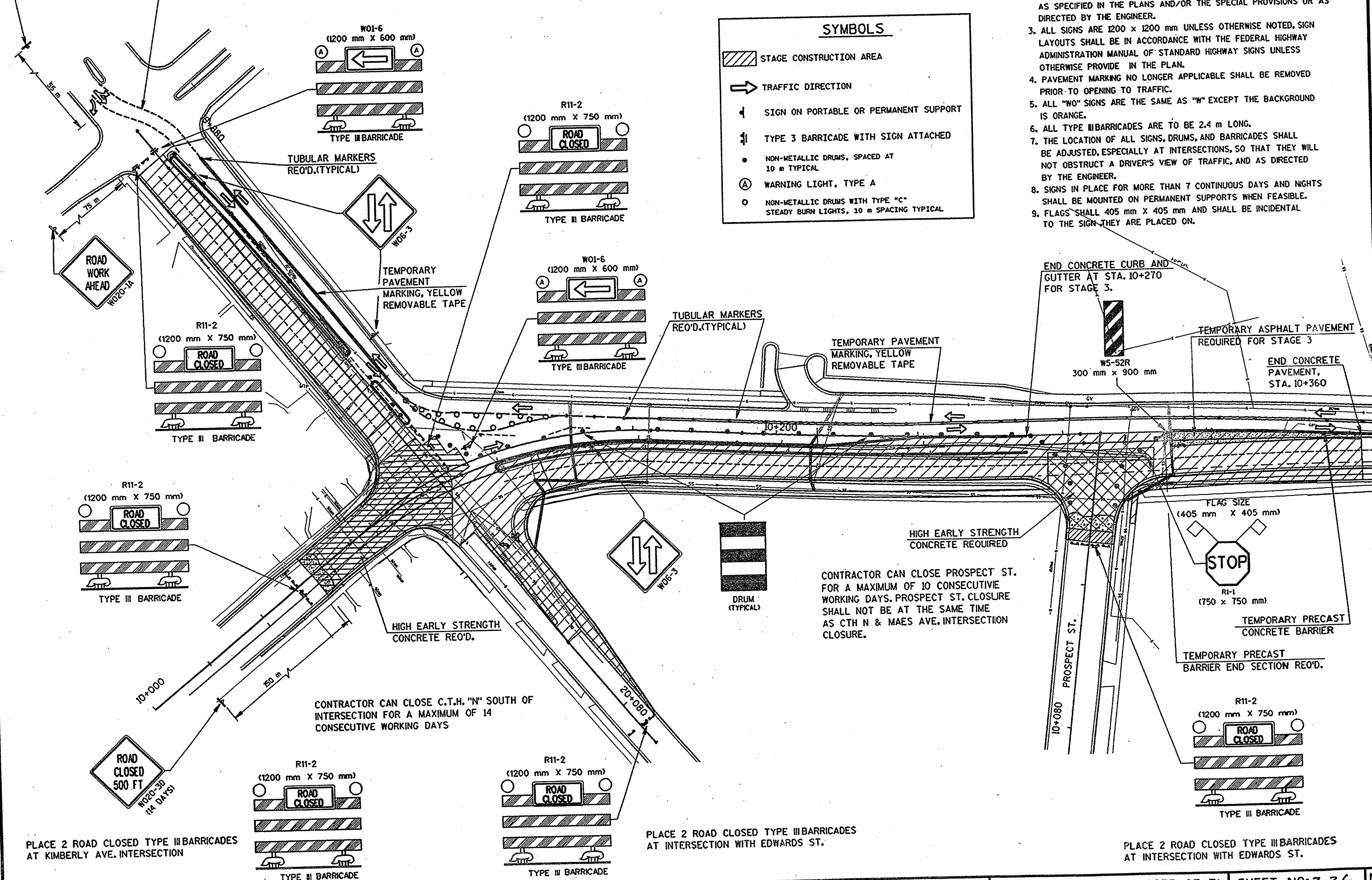
WISDOT: MSHT42

STAGE 2

C.T.H. "N" CLOSED SOUTH OF MAES. AVE. INTERSECTION

GENERAL NOTES FOR TRAFFIC CONTROL

1. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS DIRECTED BY THE ENGINEER.
2. ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.
3. ALL SIGNS ARE 1200 x 1200 mm UNLESS OTHERWISE NOTED. SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS UNLESS OTHERWISE PROVIDE IN THE PLAN.
4. PAVEMENT MARKING NO LONGER APPLICABLE SHALL BE REMOVED PRIOR TO OPENING TO TRAFFIC.
5. ALL "WO" SIGNS ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.
6. ALL TYPE III BARRICADES ARE TO BE 2.4 m LONG.
7. THE LOCATION OF ALL SIGNS, DRUMS, AND BARRICADES SHALL BE ADJUSTED, ESPECIALLY AT INTERSECTIONS, SO THAT THEY WILL NOT OBSTRUCT A DRIVER'S VIEW OF TRAFFIC, AND AS DIRECTED BY THE ENGINEER.
8. SIGNS IN PLACE FOR MORE THAN 7 CONTINUOUS DAYS AND NIGHTS SHALL BE MOUNTED ON PERMANENT SUPPORTS WHEN FEASIBLE.
9. FLAGS SHALL 405 mm X 405 mm AND SHALL BE INCIDENTAL TO THE SIGN THEY ARE PLACED ON.



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TRAFFIC CONTROL (STAGE 2)	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4673-03-71	SHEET NO: 2.26	M

WISDOT: MSHT42

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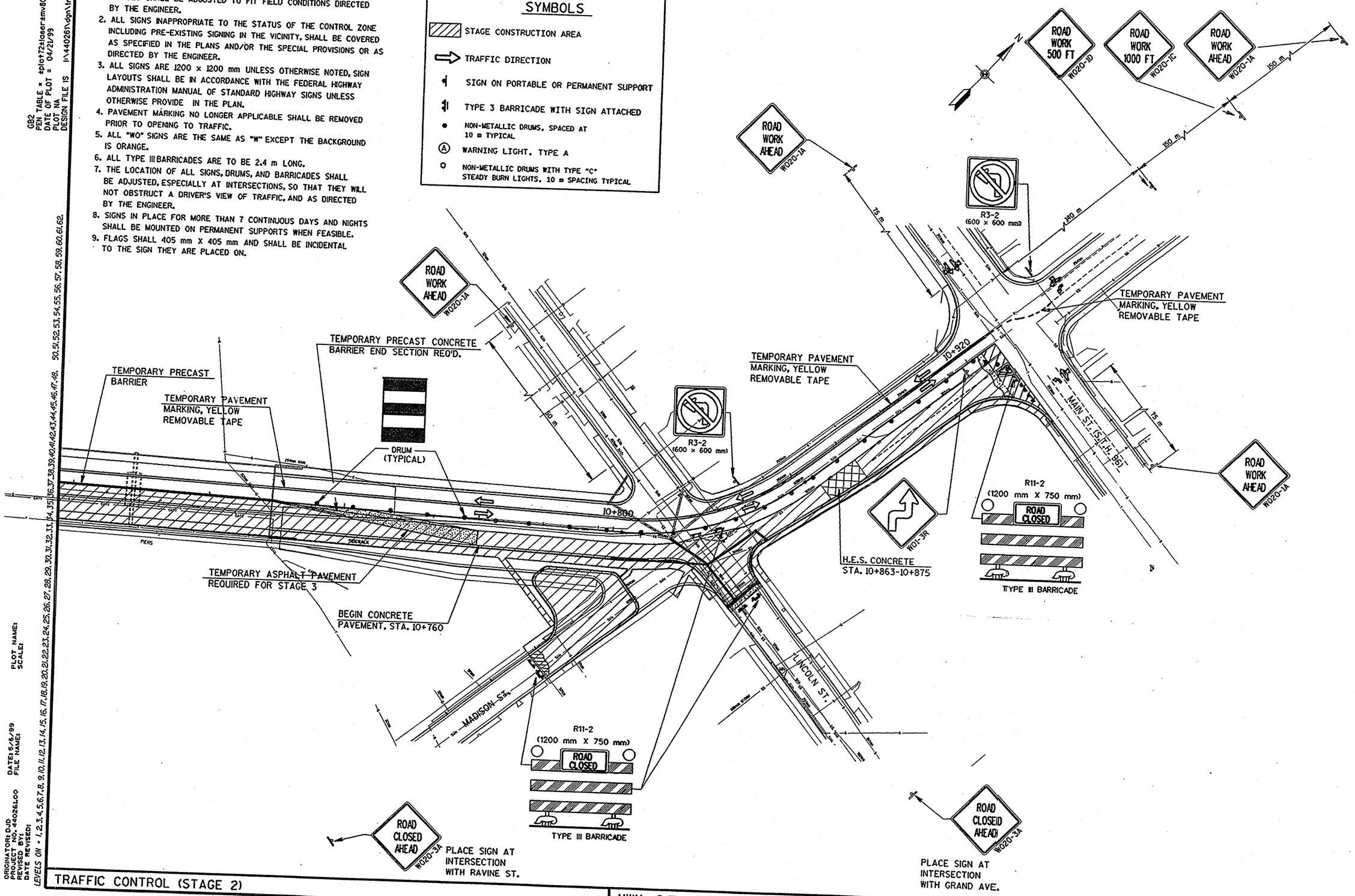
GENERAL NOTES FOR TRAFFIC CONTROL

1. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS DIRECTED BY THE ENGINEER.
2. ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.
3. ALL SIGNS ARE 1200 x 1200 mm UNLESS OTHERWISE NOTED, SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS UNLESS OTHERWISE PROVIDE IN THE PLAN.
4. PAVEMENT MARKING NO LONGER APPLICABLE SHALL BE REMOVED PRIOR TO OPENING TO TRAFFIC.
5. ALL "WO" SIGNS ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.
6. ALL TYPE III BARRICADES ARE TO BE 2.4 m LONG.
7. THE LOCATION OF ALL SIGNS, DRUMS, AND BARRICADES SHALL BE ADJUSTED, ESPECIALLY AT INTERSECTIONS, SO THAT THEY WILL NOT OBSTRUCT A DRIVER'S VIEW OF TRAFFIC, AND AS DIRECTED BY THE ENGINEER.
8. SIGNS IN PLACE FOR MORE THAN 7 CONTINUOUS DAYS AND NIGHTS SHALL BE MOUNTED ON PERMANENT SUPPORTS WHEN FEASIBLE.
9. FLAGS SHALL 405 mm X 405 mm AND SHALL BE INCIDENTAL TO THE SIGN THEY ARE PLACED ON.

SYMBOLS

- STAGE CONSTRUCTION AREA
- TRAFFIC DIRECTION
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE 3 BARRICADE WITH SIGN ATTACHED
- NON-METALLIC DRUMS, SPACED AT 10 m TYPICAL
- (A) WARNING LIGHT, TYPE A
- NON-METALLIC DRUMS WITH TYPE "C" STEADY BURN LIGHTS, 10 m SPACING TYPICAL



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PROJECT NO. 440261.00
REVISED BY:
DATE REVISED:
DATE: 5/5/99
FILE NAME:
PLOT NAME:
SCALE:

TRAFFIC CONTROL (STAGE 2)

HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4673-03-71	SHEET NO: 3 36

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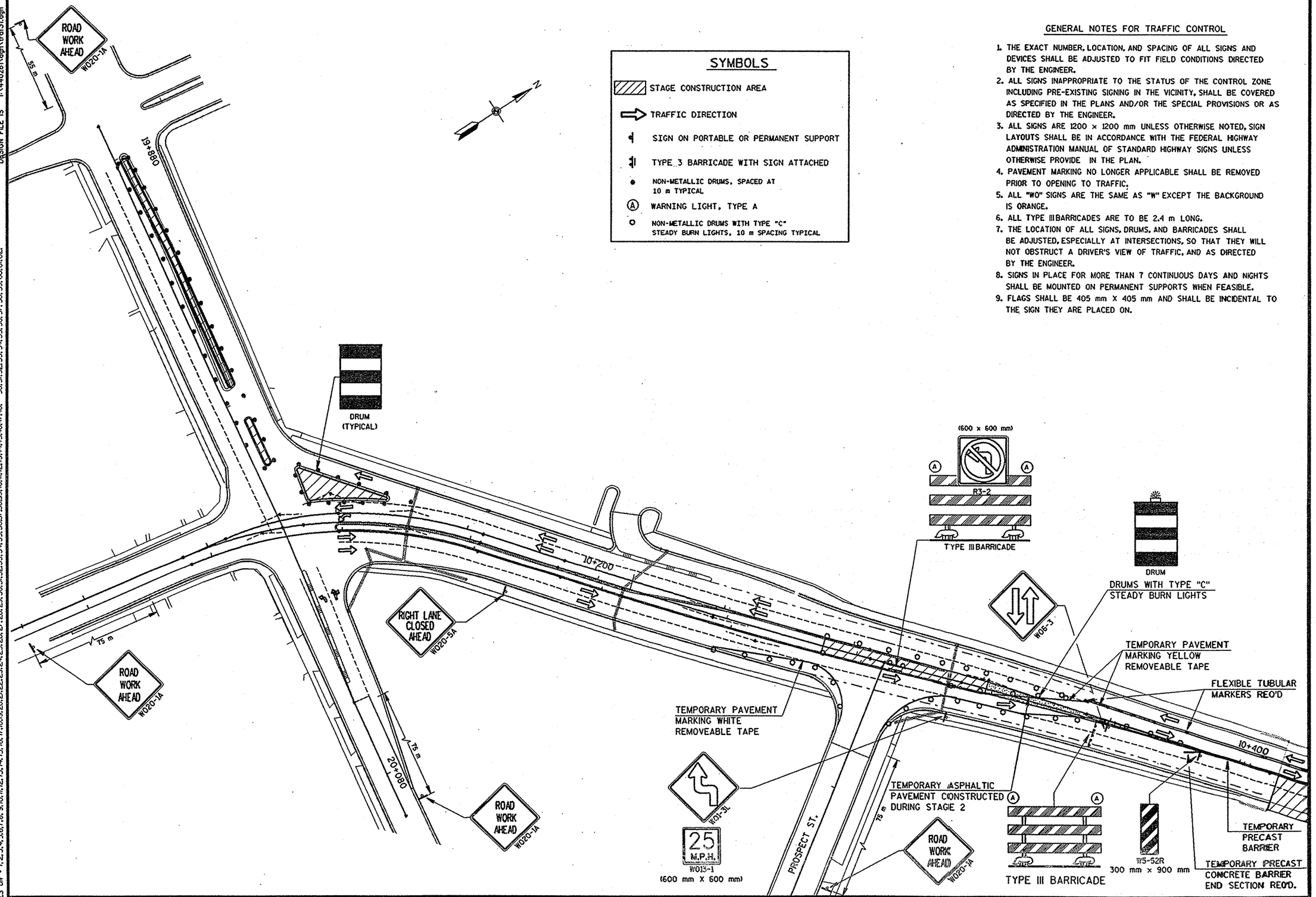


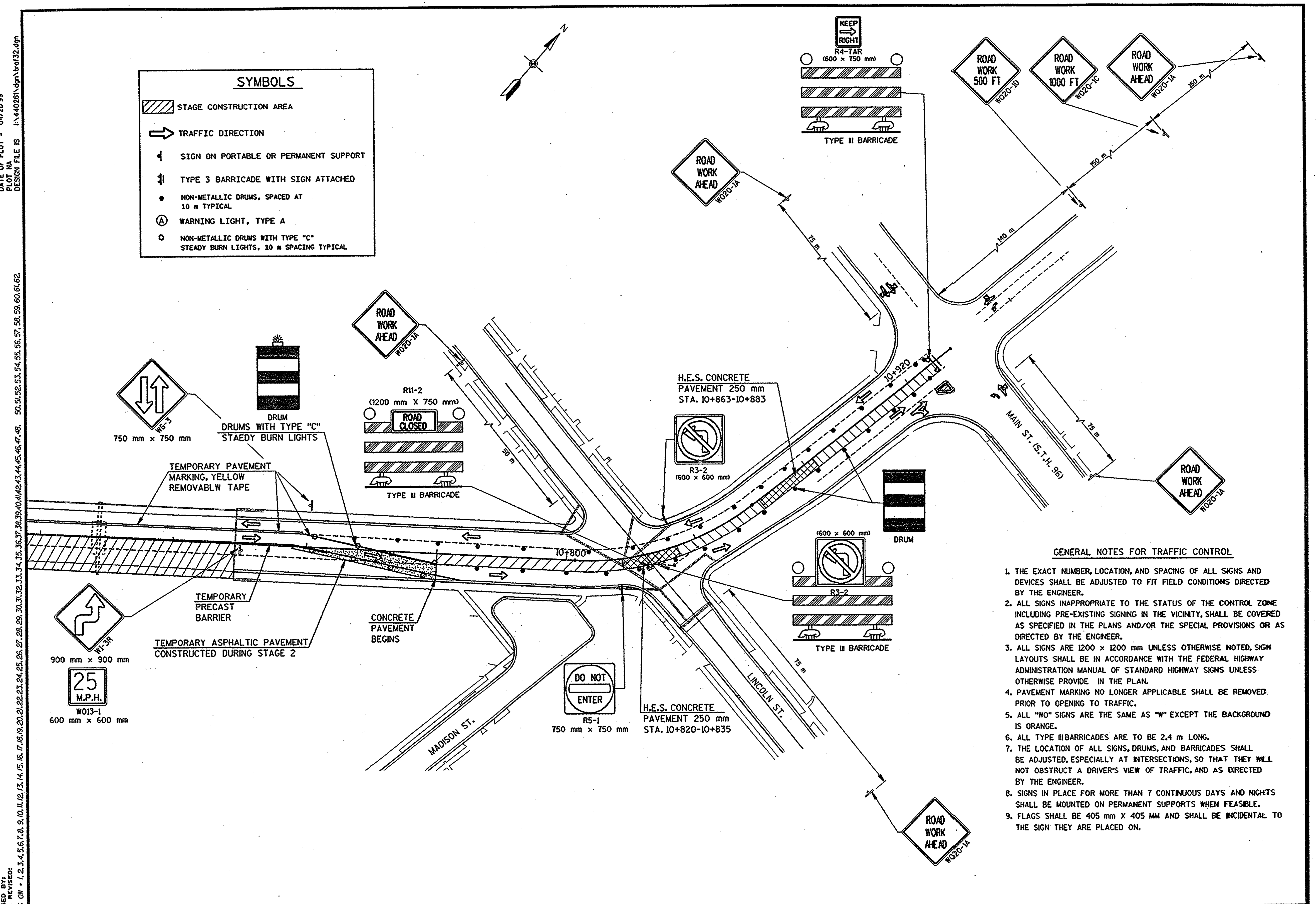
SYMBOLS

- STAGE CONSTRUCTION AREA
- TRAFFIC DIRECTION
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE 3 BARRICADE WITH SIGN ATTACHED
- NON-METALLIC DRUMS, SPACED AT 10 m TYPICAL
- (A) WARNING LIGHT, TYPE A
- NON-METALLIC DRUMS WITH TYPE "C" STEADY BURN LIGHTS, 10 m SPACING TYPICAL

GENERAL NOTES FOR TRAFFIC CONTROL

1. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS DIRECTED BY THE ENGINEER.
2. ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.
3. ALL SIGNS ARE 1200 x 1200 mm UNLESS OTHERWISE NOTED, SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS UNLESS OTHERWISE PROVIDE IN THE PLAN.
4. PAVEMENT MARKING NO LONGER APPLICABLE SHALL BE REMOVED PRIOR TO OPENING TO TRAFFIC.
5. ALL "WO" SIGNS ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.
6. ALL TYPE III BARRICADES ARE TO BE 2.4 m LONG.
7. THE LOCATION OF ALL SIGNS, DRUMS, AND BARRICADES SHALL BE ADJUSTED, ESPECIALLY AT INTERSECTIONS, SO THAT THEY WILL NOT OBSTRUCT A DRIVER'S VIEW OF TRAFFIC, AND AS DIRECTED BY THE ENGINEER.
8. SIGNS IN PLACE FOR MORE THAN 7 CONTINUOUS DAYS AND NIGHTS SHALL BE MOUNTED ON PERMANENT SUPPORTS WHEN FEASIBLE.
9. FLAGS SHALL BE 405 mm X 405 mm AND SHALL BE INCIDENTAL TO THE SIGN THEY ARE PLACED ON.

TRAFFIC CONTROL (STAGE 3)	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4673-01-71	SHEET NO: 2.28	M



GENERAL NOTES FOR TRAFFIC CONTROL

1. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS DIRECTED BY THE ENGINEER.
2. ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.
3. ALL SIGNS ARE 1200 x 1200 mm UNLESS OTHERWISE NOTED. SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS UNLESS OTHERWISE PROVIDE IN THE PLAN.
4. PAVEMENT MARKING NO LONGER APPLICABLE SHALL BE REMOVED PRIOR TO OPENING TO TRAFFIC.
5. ALL "WO" SIGNS ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.
6. ALL TYPE III BARRICADES ARE TO BE 2.4 m LONG.
7. THE LOCATION OF ALL SIGNS, DRUMS, AND BARRICADES SHALL BE ADJUSTED, ESPECIALLY AT INTERSECTIONS, SO THAT THEY WILL NOT OBSTRUCT A DRIVER'S VIEW OF TRAFFIC, AND AS DIRECTED BY THE ENGINEER.
8. SIGNS IN PLACE FOR MORE THAN 7 CONTINUOUS DAYS AND NIGHTS SHALL BE MOUNTED ON PERMANENT SUPPORTS WHEN FEASIBLE.
9. FLAGS SHALL BE 405 mm X 405 MM AND SHALL BE INCIDENTAL TO THE SIGN THEY ARE PLACED ON.

TRAFFIC CONTROL (STAGE 3)	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4373-01-71	SHEET NO: 2.29	M

WISDOT/ MS-T42

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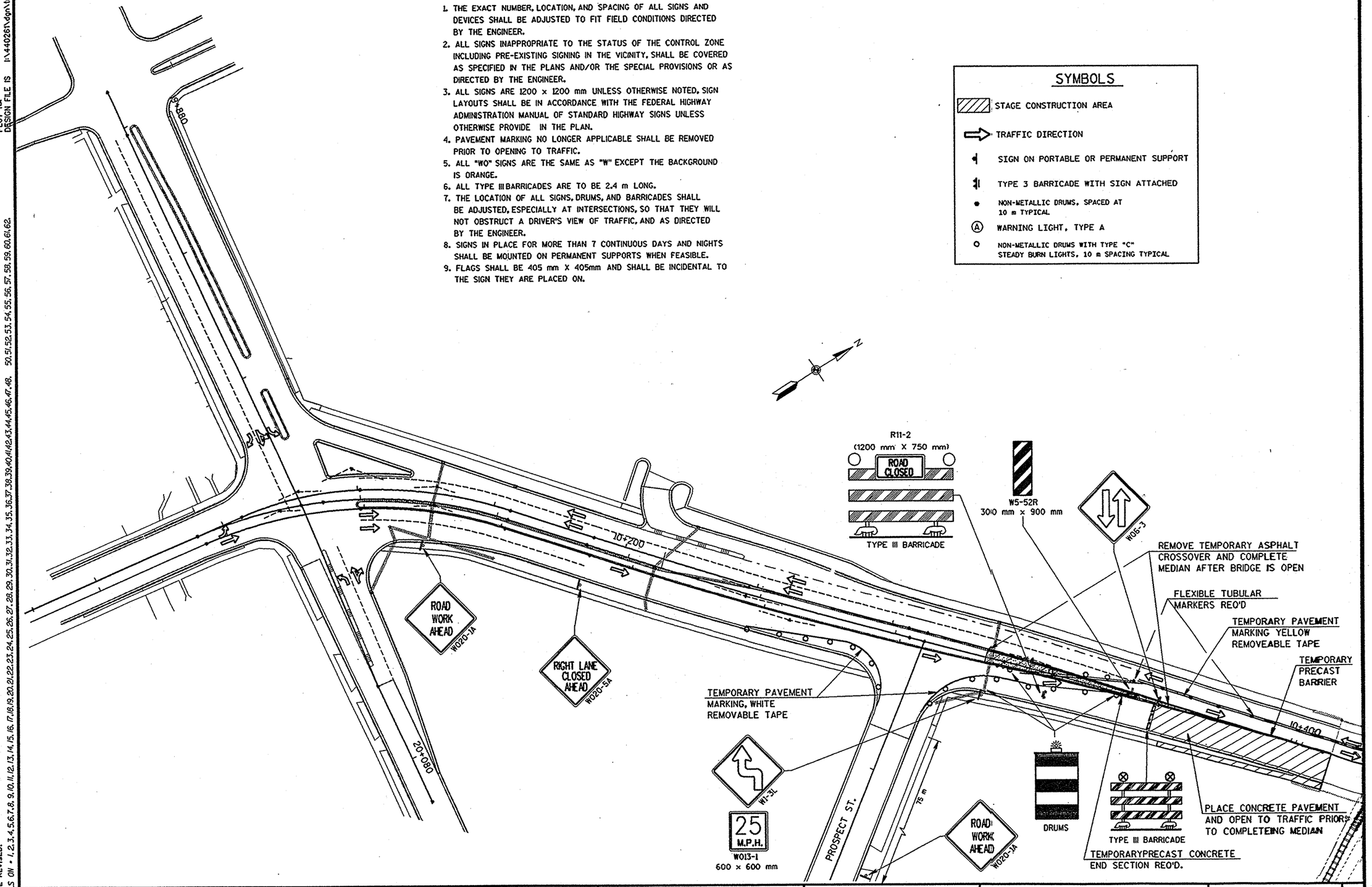
GENERAL NOTES FOR TRAFFIC CONTROL

1. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS DIRECTED BY THE ENGINEER.
2. ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.
3. ALL SIGNS ARE 1200 x 1200 mm UNLESS OTHERWISE NOTED, SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS UNLESS OTHERWISE PROVIDE IN THE PLAN.
4. PAVEMENT MARKING NO LONGER APPLICABLE SHALL BE REMOVED PRIOR TO OPENING TO TRAFFIC.
5. ALL "WO" SIGNS ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.
6. ALL TYPE III BARRICADES ARE TO BE 2.4 m LONG.
7. THE LOCATION OF ALL SIGNS, DRUMS, AND BARRICADES SHALL BE ADJUSTED, ESPECIALLY AT INTERSECTIONS, SO THAT THEY WILL NOT OBSTRUCT A DRIVER'S VIEW OF TRAFFIC, AND AS DIRECTED BY THE ENGINEER.
8. SIGNS IN PLACE FOR MORE THAN 7 CONTINUOUS DAYS AND NIGHTS SHALL BE MOUNTED ON PERMANENT SUPPORTS WHEN FEASIBLE.
9. FLAGS SHALL BE 405 mm X 405mm AND SHALL BE INCIDENTAL TO THE SIGN THEY ARE PLACED ON.

SYMBOLS

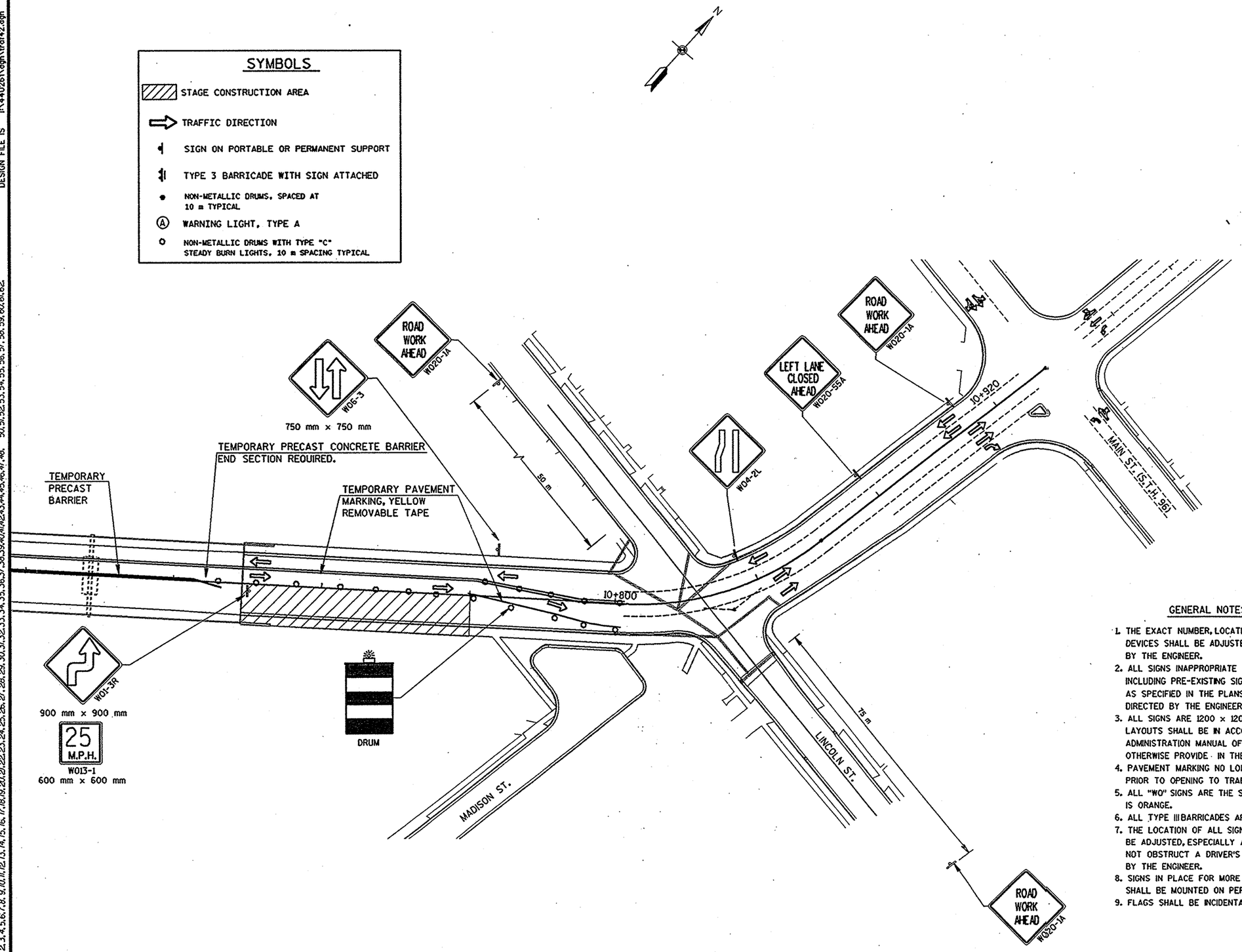
- STAGE CONSTRUCTION AREA
- TRAFFIC DIRECTION
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE 3 BARRICADE WITH SIGN ATTACHED
- NON-METALLIC DRUMS, SPACED AT 10 m TYPICAL
- (A) WARNING LIGHT, TYPE A
- NON-METALLIC DRUMS WITH TYPE "C" STEADY BURN LIGHTS, 10 m SPACING TYPICAL



TRAFFIC CONTROL (STAGE 4)	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4673-03-71	SHEET NO: 2.30	M

SYMBOLS

- STAGE CONSTRUCTION AREA
- TRAFFIC DIRECTION
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE 3 BARRICADE WITH SIGN ATTACHED
- NON-METALLIC DRUMS, SPACED AT 10 m TYPICAL
- (A) WARNING LIGHT, TYPE A
- NON-METALLIC DRUMS WITH TYPE "C" STEADY BURN LIGHTS, 10 m SPACING TYPICAL



GENERAL NOTES FOR TRAFFIC CONTROL

1. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS DIRECTED BY THE ENGINEER.
2. ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.
3. ALL SIGNS ARE 1200 x 1200 mm UNLESS OTHERWISE NOTED, SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS UNLESS OTHERWISE PROVIDE IN THE PLAN.
4. PAVEMENT MARKING NO LONGER APPLICABLE SHALL BE REMOVED PRIOR TO OPENING TO TRAFFIC.
5. ALL "WO" SIGNS ARE THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.
6. ALL TYPE III BARRICADES ARE TO BE 2.4 m LONG.
7. THE LOCATION OF ALL SIGNS, DRUMS, AND BARRICADES SHALL BE ADJUSTED, ESPECIALLY AT INTERSECTIONS, SO THAT THEY WILL NOT OBSTRUCT A DRIVER'S VIEW OF TRAFFIC, AND AS DIRECTED BY THE ENGINEER.
8. SIGNS IN PLACE FOR MORE THAN 7 CONTINUOUS DAYS AND NIGHTS SHALL BE MOUNTED ON PERMANENT SUPPORTS WHEN FEASIBLE.
9. FLAGS SHALL BE INCIDENTAL TO THE SIGN THEY ARE PLACED ON.

TRAFFIC CONTROL (STAGE 4)	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4673-03-71	SHEET NO: 2.31	M

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ORIGINATOR: DJD
PROJECT NO. 44026100
REVISED BY:
DATE REVISED:

DATE: 12/16/97
FILE NAME:

PLOT NAME:
SCALE:

① SOUTHBOUND ℄ CURVE DATA

P.I. 10+103.454
Y 50 349.321
X 733 774.234
△ = 22°01'21"
T = 17.674 m
L = 34.911 m
E = 1.705 m
R = 90.754 m
P.C. 10+085.780
P.T. 10+120.691
S.E. N.C.

② SOUTHBOUND ℄ CURVE DATA

P.I. 10+143.015
Y 50 386.579
X 733 788.777
△ = 19°29'44"
T = 22.324 m
L = 44.202 m
E = 1.937 m
R = 127.699 m
P.C. 10+120.691
P.T. 10+164.893
S.E. N.C.

③ SOUTHBOUND ℄ CURVE DATA

P.I. 10+237.625
Y 50 458.145
X 733 851.331
△ = 3°21'49"
T = 47.270 m
L = 94.509 m
E = 0.745 m
R = 1,500.000 m
P.C. 10+190.355
P.T. 10+284.864
S.E. N.C.

④ R/W ℄ CURVE DATA

P.I. 10+235.873
Y 50 456.272
X 733 853.280
△ = 3°25'16"
T = 48.487 m
L = 96.941 m
E = 0.783 m
R = 1,500.000 m
P.C. 10+187.386
P.T. 10+284.326
S.E. N.C.

⑤ SOUTHBOUND ℄ CURVE DATA

P.I. 10+321.580
Y 50 524.732
X 733 902.508
△ = 3°19'57"
T = 31.053 m
L = 62.086 m
E = 0.482 m
R = 1,000.000 m
P.C. 10+290.528
P.T. 10+352.613
S.E. N.C.

⑥ R/W ℄ CURVE DATA

P.I. 10+832.617
Y 50 910.973
X 734 239.478
△ = 41°03'57"
T = 30.004 m
L = 57.409 m
E = 5.441 m
R = 80.000 m
P.C. 10+802.614
P.T. 10+860.023
S.E. N.C.

STA. 20+000.000 MAES AVENUE=
STA. 10+103.066 C.T.H. "N" R/W ℄ LINE
Y 50 348.660
X 733 778.104

P.I. STA. 19+868.801
Y 50 344.534
X 733 646.978

P.I. STA. 19+882.167
Y 50 842.908
X 733 660.336

P.I. 10+020.000 S.B. CONST. ℄
Y 50 265.878
X 733 775.278

P.I. 10+010.000 N.B. CONST. ℄
Y 50 255.917
X 733 778.403

P.I. 10+000.000 R/W ℄
Y 50 245.881
X 733 775.529

P.I. STA. 20+056.676
Y 50 348.019
X 733 834.772

P.I. STA. 20+093.684
Y 50 349.228
X 733 871.759

P.T. 10+164.893 S.B. CONST. ℄
P.C. 10+190.355 S.B. CONST. ℄
P.C. 10+187.386 R/W ℄
P.T. 10+163.268 R/W ℄
P.C. 10+187.125 N.B. CONST. ℄
P.T. 10+161.256 N.B. CONST. ℄
P.C.C. 10+120.691 S.B. CONST. ℄
P.C.C. 10+118.923 N.B. CONST. ℄
P.C. 10+085.780 S.B. CONST. ℄
P.C. 10+073.456 N.B. CONST. ℄
P.C. 10+071.916 R/W ℄

SOUTHBOUND CONSTRUCTION ℄
C.T.H. "N" R/W ℄
NORTHBOUND CONSTRUCTION ℄

P.T. 10+284.864 S.B. CONST. ℄
P.C. 10+290.528 S.B. CONST. ℄
P.T. 10+284.326 R/W ℄
P.I. 10+308.754 N.B. CONST. ℄
P.C. 10+312.304 R/W ℄
P.C. 10+310.493 N.B. CONST. ℄
P.I. 10+352.613 S.B. CONST. ℄
P.T. 10+407.864 R/W ℄

10+000
10+040 PROSPECT ST.
10+080
10+200
10+400
10+800
29+960
20+040
MAES AVENUE
MADISON ST.
LINCOLN ST.

STA. 10+000.000 PROSPECT ST.=
STA. 10+288.715 C.T.H. "N" R/W ℄ LINE
Y 50 498.246
X 733 885.432

STA. 9+997.836 PROSPECT ST.=
STA. 10+286.589 C.T.H. "N" N.B. CONST. ℄

STA. 10+409.410 S.B. CONST. ℄ BK.=
STA. 10+407.864 C.T.H. "N"
R/W ℄ AND CONST. ℄ AH.
Y 50 590.926
X 733 960.258

EQUATION

STA. 10+406.011 N.B. CONST. ℄ BK.=
STA. 10+407.864 C.T.H. "N"
R/W ℄ AND CONST. ℄ AH.
Y 50 590.926
X 733 960.258

P.I. STA. 29+936.876
Y 50 842.908
X 734 237.372

STA. 20+000.000 LINCOLN ST.=
STA. 10+823.763 C.T.H. CONST. ℄
Y 50 905.943
X 734 231.402

P.I. STA. 19+927.151
Y 50 976.971
X 734 158.563

STA. 30+000.000 MADISON ST.=
STA. 10+843.913 C.T.H. "N" CONST. ℄
Y 50 906.027
X 734 237.746

STA. 29+980.052 MADISON ST.=
STA. 20+006.345 LINCOLN ST.

P.I. STA. 20+081.074
Y 50 907.021
X 734 312.464

P.I. 11+050.190 R/W ℄
Y 51 131.108
X 734 257.189

C.T.H. "N" R/W ℄ AND CONST. ℄

11+000

P.I. 10+936.655 R/W ℄
Y 51 017.602
X 734 239.452

⑦ NORTHBOUND ℄ CURVE DATA

P.I. 10+096.474
Y 50 342.379
X 733 777.321
△ = 22°01'21"
T = 23.018 m
L = 45.466 m
E = 2.220 m
R = 118.195 m
P.C. 10+073.456
P.T. 10+118.923
S.E. N.C.

⑧ R/W ℄ CURVE DATA

P.I. 10+119.739
Y 50 365.604
X 733 774.029
△ = 41°31'20"
T = 47.824 m
L = 91.352 m
E = 8.836 m
R = 125.000 m
P.C. 10+071.916
P.T. 10+163.268

⑨ NORTHBOUND ℄ CURVE DATA

P.I. 10+140.303
Y 50 383.736
X 733 793.464
△ = 19°29'44"
T = 21.380 m
L = 42.333 m
E = 1.855 m
R = 122.299 m
P.C. 10+118.923
P.T. 10+161.256
S.E. N.C.

⑩ NORTHBOUND ℄ CURVE DATA

P.I. 10+247.988
Y 50 465.132
X 733 864.609
△ = 5°20'35"
T = 60.863 m
L = 121.629 m
E = 1.481 m
R = 1,250.000 m
P.C. 10+187.125
P.T. 10+308.754
S.E. N.C.

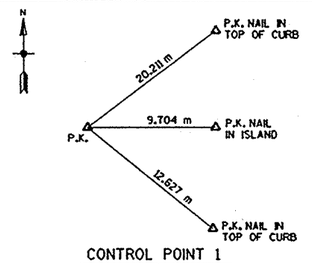
⑪ NORTHBOUND ℄ CURVE DATA

P.I. 10+358.289
Y 50 554.912
X 733 928.838
△ = 5°18'43"
T = 47.796 m
L = 95.518 m
E = 1.152 m
R = 991.026 m
P.C. 10+310.493
P.T. 10+406.011
S.E. N.C.

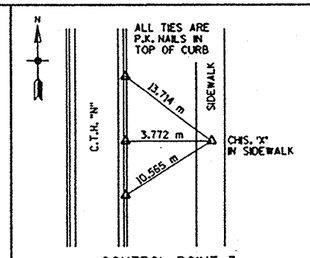
⑫ R/W ℄ CURVE DATA

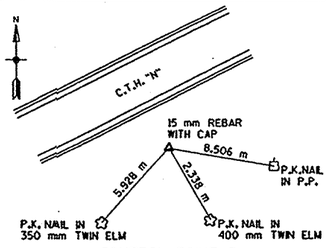
P.I. 10+360.099
Y 50 554.912
X 733 928.838
△ = 3°23'24"
T = 47.796 m
L = 95.559 m
E = 0.761 m
R = 1,500.000 m
P.C. 10+312.304
P.T. 10+407.864

CONTROL POINT 1
ST.A. 10+106.688- 10.412 m RT.
Y 50 349.435
X 733 789.050

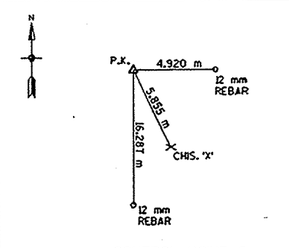


CONTROL POINT 3
STA. 10+314.258- 16.162 m RT.
Y 50 508.677
X 733 913.782





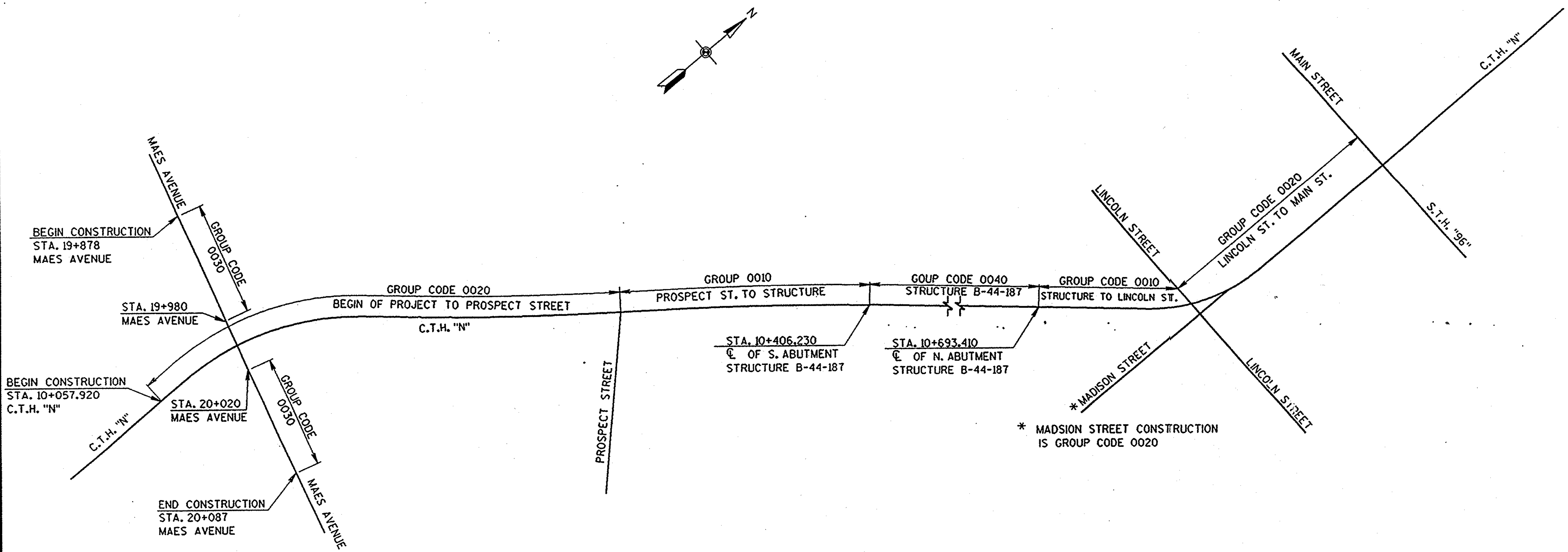
CONTROL POINT 5
STA. 10+720.662- 16.232 m RT.
Y 50 815.946
X 734 178.113



CONTROL POINT 6
STA. 10+822.257- 16.343 m RT.
Y 50 897.169
X 734 245.287

ALIGNMENT DIAGRAM	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: 2.32	M

WisDOT: MSHT 2.



GD2
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DATE OF PLOT = 02/19/99
PLOT NA
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ORIGINATOR: DJD
PROJECT NO. 44026100
REVISED BY:
DATE REVISED:
DATE: 12/15/97
FILE NAME:
PLOT NAME:
SCALE:
LEVELS ON = 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,50,51,52,53,54,55,56,57,58,59,60,61,62

PROJECT OVERVIEW (GROUP CODE BREAKDOWN)	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: 232	M

WISDOT: MSH-4
34

DATE 27APR99

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	4676-03-71 QUANTITY
0010	20101	CLEARING	40M	3.00	3.00
0020	20102	CLEARING	25MM	48.00	48.00
0030	20104	GRUBBING	40M	3.00	3.00
0040	20105	GRUBBING	25MM	48.00	48.00
0050	20351	REMOVING OLD BRIDGE, STATION 10+549.82	LS	1.00	1.00
0060	20401	REMOVING PAVEMENT	M2	12,910.00	12,910.00
0070	20402	REMOVING ASPHALTIC SURFACE	M2	974.00	974.00
0080	20405	REMOVING CURB AND GUTTER	M	2,160.00	2,160.00
0090	20406	REMOVING CONCRETE SIDEWALK	M2	1,938.00	1,938.00
0100	20412	REMOVING FENCE	M	144.00	144.00
0110	20414	REMOVING MANHOLES	EACH	6.00	6.00
0120	20416	REMOVING INLETS	EACH	21.00	21.00
0130	20422	REMOVING CONCRETE BASES	EACH	18.00	18.00
0140	20503	UNCLASSIFIED EXCAVATION	M3	10,532.00	10,532.00
0150	20610	EXCAVATION FOR STRUCTURES, BRIDGES B-44-187	LS	1.00	1.00
0160	20650	COFFERDAMS STRUCTURE B-44-187	LS	1.00	1.00
0170	20801	BORROW EXCAVATION	M3	2,440.00	2,440.00
0180	21001	STRUCTURE BACKFILL	M3	866.00	866.00
0190	30404	CRUSHED AGGREGATE BASE COURSE	MG	7,045.00	7,045.00
0200	40204	ASPHALTIC MATERIAL FOR TACK COAT	L	230.00	230.00
0210	40501	ASPHALTIC MATERIAL FOR PLANT MIXES	MG	19.90	19.90
0220	40713	ASPHALTIC CONCRETE PAVEMENT, TYPE MV	MG	353.00	353.00
0230	41510	CONCRETE PAVEMENT, 250 MM	M2	11,358.00	11,358.00
0240	41520	H.E.S. CONCRETE PAVEMENT, 250 MM	M2	1,275.00	1,275.00
0250	41605	CONCRETE DRIVEWAY, 150 MM	M2	134.00	134.00
0260	41621	CONCRETE PAVEMENT APPROACH SLAB	M2	47.60	47.60
0270	41653	PAVEMENT TIES	EACH	110.00	110.00
0280	41665	CONCRETE PAVEMENT GAPS	EACH	6.00	6.00
0290	50201	CONCRETE MASONRY, BRIDGES	M3	2,658.00	2,658.00
0300	50211	CONCRETE MASONRY, SEAL	M3	755.00	755.00
0310	50265	PROTECTIVE SURFACE TREATMENT	M2	6,358.00	6,358.00
0320	50309	PRESTRESSED GIRDER, I TYPE, 1780 MM	M	2,583.00	2,583.00
0330	50504	HIGH STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	KG	98,690.00	98,690.00

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	4676-03-71 QUANTITY
0340	50511	COATED HIGH STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	KG	239,260.00	239,260.00
0350	50626	NON-LAMINATED ELASTOMERIC BEARING PADS	EACH	54.00	54.00
0360	50640	STEEL DIAPHRAGMS, STRUCTURE B-44-187	EACH	112.00	112.00
0370	50660	EXPANSION BEARING ASSEMBLIES, STRUCTURE B-44-187	EACH	18.00	18.00
0380	51121	STEEL PILING, DELIVERED AND DRIVEN, HP 250 MM X 62 KG/M	M	575.00	575.00
0390	51130	PILE POINTS	EACH	50.00	50.00
0400	51405	FLOOR DRAINS, TYPE GC	EACH	12.00	12.00
0410	51605	RUBBERIZED MEMBRANE WATERPROOFING	M2	24.00	24.00
0420	60119	CONCRETE CURB AND GUTTER, 450 MM, TYPE A	M	655.00	655.00
0430	60123	CONCRETE CURB AND GUTTER, 750 MM, TYPE A	M	1,556.00	1,556.00
0440	60133	CONCRETE CURB AND GUTTER, 750 MM, TYPE D	M	100.00	100.00
0450	60204	CONCRETE SIDEWALK, 100 MM	M2	2,942.00	2,942.00
0460	60308	TEMPORARY PRECAST CONCRETE BARRIER, CONTRACTOR FURNISHED, CONTRACTOR INSTALLED	M	625.00	625.00
0470	60405	SLOPE PAVING, CRUSHED AGGREGATE	M2	550.00	550.00
0480	60602	HEAVY RIPRAP	M3	272.00	272.00
0490	60825	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 300 MM	M	292.00	292.00
0500	60826	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 375 MM	M	13.00	13.00
0510	61110	MANHOLES, TYPE 1	EACH	7.00	7.00
0520	61122	INLETS, TYPE 3	EACH	25.00	25.00
0530	61128	RECONSTRUCTING MANHOLES	EACH	3.00	3.00
0540	61151	MANHOLE COVERS, TYPE J	EACH	7.00	7.00
0550	61167	INLET COVERS, TYPE H	EACH	25.00	25.00
0560	61182	ADJUSTING MANHOLE COVERS	EACH	17.00	17.00
0570	61201	PIPE UNDERDRAIN, 150 MM	M	40.00	40.00
0580	61211	PIPE UNDERDRAIN, UNPERFORATED, 150 MM	M	6.00	6.00
0590	62001	CONCRETE CORRUGATED MEDIAN	M2	82.00	82.00
0600	62401	WATER	KL	267.20	267.20
0610	62501	TOPSOIL	M2	4,410.00	4,410.00
0620	62702	MULCHING	M2	5,269.00	5,269.00
0630	62815	SILT FENCE, DELIVERED	M	376.00	376.00

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	4676-03-71 QUANTITY
0640	62816	SILT FENCE, INSTALLED	M	376.00	376.00
0650	62817	SILT FENCE MAINTENANCE	M	376.00	376.00
0660	62824	EROSION MAT, DELIVERED, CLASS I, TYPE B	M2	1,305.00	1,305.00
0670	62825	EROSION MAT, INSTALLED, CLASS I, TYPE B	M2	1,305.00	1,305.00
0680	62905	FERTILIZER, TYPE B	KG	226.00	226.00
0690	63003	SEEDING, TEMPORARY	KG	57.00	57.00
0700	63009	SEEDING, MIXTURE NO. 20	KG	21.00	21.00
0710	63011	SEEDING, MIXTURE NO. 40	KG	33.00	33.00
0720	63101	SODDING	M2	1,180.00	1,180.00
0730	64202	FIELD OFFICE, TYPE B	LS	1.00	1.00
0740	64311	TRAFFIC CONTROL, SURVEILLANCE AND MAINTENANCE	DAYS	683.00	683.00
0750	64313	TRAFFIC CONTROL, DRUMS	DAYS	26,596.00	26,596.00
0760	64318	TRAFFIC CONTROL, BARRICADES, TYPE III	DAYS	5,491.00	5,491.00
0770	64321	TRAFFIC CONTROL, WARNING LIGHTS, TYPE A	DAYS	8,122.00	8,122.00
0780	64323	TRAFFIC CONTROL, WARNING LIGHTS, TYPE C	DAYS	13,512.00	13,512.00
0790	64326	TRAFFIC CONTROL, SIGNS	DAYS	13,662.00	13,662.00
0800	64329	TRAFFIC CONTROL, FLEXIBLE TUBULAR MARKER POSTS	EACH	66.00	66.00
0810	64333	TRAFFIC CONTROL, FLEXIBLE TUBULAR MARKER BASES	EACH	66.00	66.00
0820	64503	GEOTEXTILE FABRIC, TYPE DF	M2	90.00	90.00
0830	64506	GEOTEXTILE FABRIC, TYPE HR	M2	453.00	453.00
0840	64602	PAVEMENT MARKING, 100 MM, EPOXY	M	1,695.00	1,695.00
0850	64618	PAVEMENT MARKING, CHANNELIZING, 200 MM, EPOXY	M	382.00	382.00
0860	64642	REMOVING PAVEMENT MARKINGS	M	205.00	205.00
0870	64710	PAVEMENT MARKING, STOP LINE, 450 MM, EPOXY	M	67.00	67.00
0880	64718	PAVEMENT MARKING, CROSSWALK, 150 MM, EPOXY	M	308.00	308.00
0890	64730	PAVEMENT MARKING, ARROWS, TYPE 1, EPOXY	EACH	2.00	2.00
0900	64734	PAVEMENT MARKING, ARROWS, TYPE 2, EPOXY	EACH	14.00	14.00
0910	64738	PAVEMENT MARKING, ARROWS, TYPE 3, EPOXY	EACH	2.00	2.00
0920	64758	PAVEMENT MARKING, WORDS, EPOXY	EACH	10.00	10.00
0930	64778	PAVEMENT MARKING, CURB, EPOXY	M	64.00	64.00
0940	64790	PAVEMENT MARKING, ISLAND NOSE, EPOXY	EACH	3.00	3.00
0950	64901	TEMPORARY PAVEMENT MARKING, 100 MM	M	1,579.00	1,579.00

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	4676-03-71 QUANTITY
0960	64904	TEMPORARY PAVEMENT MARKING, 100 MM, REMOVABLE TAPE	M	2,581.00	2,581.00
0970	65216	NONMETALLIC CONDUIT, SCHEDULE 40, 25 MM	M	4.00	4.00
0980	65219	NONMETALLIC CONDUIT, SCHEDULE 40, 50 MM	M	910.00	910.00
0990	65221	NONMETALLIC CONDUIT, SCHEDULE 40, 75 MM	M	194.00	194.00
1000	65250	LOOP DETECTOR CONDUIT	M	313.00	313.00
1010	65306	PULL BOXES, STEEL, 600 X 900 MM	EACH	12.00	12.00
1020	65321	JUNCTION BOXES, 300 X 200 X 150 MM	EACH	16.00	16.00
1030	65401	CONCRETE BASES, TYPE 1	EACH	6.00	6.00
1040	65402	CONCRETE BASES, TYPE 2	EACH	5.00	5.00
1050	65418	CONCRETE CONTROL CABINET BASES, TYPE 9	EACH	1.00	1.00
1060	65425	PEDESTAL BASES	EACH	1.00	1.00
1070	65524	TRAFFIC SIGNAL CABLE, 5 CONDUCTOR, NO. 14	M	36.00	36.00
1080	65526	TRAFFIC SIGNAL CABLE, 7 CONDUCTOR, NO. 14	M	76.00	76.00
1090	65532	TRAFFIC SIGNAL CABLE, 15 CONDUCTOR, NO. 14	M	283.00	283.00
1100	65557	ELECTRICAL WIRE, TRAFFIC SIGNALS, NO. 10	M	599.00	599.00
1110	65571	ELECTRICAL WIRE, LIGHTING, NO. 2	M	1,875.00	1,875.00
1120	65580	LOOP DETECTOR LEAD IN CABLE	M	493.00	493.00
1130	65585	LOOP DETECTOR WIRE	M	854.00	854.00
1140	65615	ELECTRICAL SERVICE, METER BREAKER PEDESTAL,	LS	1.00	1.00
1150	65733	TRAFFIC SIGNAL STANDARDS, ALUMINUM, 4.6 M	EACH	1.00	1.00
1160	65827	TRAFFIC SIGNAL FACES, 4-300 MM VERTICAL	EACH	6.00	6.00
1170	65828	TRAFFIC SIGNAL FACES, 5-300 MM VERTICAL	EACH	1.00	1.00
1180	65830	TRAFFIC SIGNAL FACES, 4-300 MM HORIZONTAL	EACH	2.00	2.00
1190	65837	BACKPLATES, 4 SECTION, 300 MM SIGNAL FACES	EACH	8.00	8.00
1200	65838	BACKPLATES, 5 SECTION, 300 MM SIGNAL FACES	EACH	1.00	1.00
1210	65849	PEDESTRIAN PUSH BUTTONS	EACH	8.00	8.00
1220	65850	TRAFFIC SIGNAL MOUNTING HARDWARE,	LS	1.00	1.00
1230	66501	SAWING EXISTING PAVEMENT	M	198.00	198.00
1240	66502	SAWING CONCRETE PAVEMENT, FULL DEPTH	M	315.20	315.20

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	4676-03-71 QUANTITY
1250	90001	MISC ITEM 90001A CONSTRUCTION STAKING PRELIMINARY	M	1,652.00	1,652.00
1260	90001	MISC ITEM 90001B CONSTRUCTION STAKING SUBGRADE, SPECIAL	M	1,498.00	1,498.00
1270	90001	MISC ITEM 90001E CONSTRUCTION STAKING CONCRETE PAVEMENT, SPECIAL	M	1,461.00	1,461.00
1280	90001	MISC ITEM 90001F REMOVING STORM SEWER	M	126.00	126.00
1290	90001	MISC ITEM 90001G UTILITY CONDUIT, 100 MM	M	1,755.00	1,755.00
1300	90001	MISC ITEM 90001H TRACK CLEARANCE FENCE	M	72.00	72.00
1310	90001	MISC 90001C CONSTRUCTION STAKING, CRUSHED AGG. BASE COURSE FOR ASPH. CONC. PAVT.	M	100.00	100.00
1320	90001	MISC 90001D CONSTRUCTION STAKING, CURB, GUTTER, AND CURB AND GUTTER, SPECIAL	M	100.00	100.00
1330	90002	MISC ITEM 90002A PAVEMENT MARKING CONCRETE CORREGATED MEDIAN, EPOXY	M2	18.00	18.00
1340	90002	MISC ITEM 90002A PAVEMENT MARKING, CONCRETE CORREGATED MEDIAN, EPOXY	M2	15.00	15.00
1350	90002	MISC ITEM 90002B SEALING JOINTS	M2	12,633.00	12,633.00
1360	90002	MISC ITEM 90002C ANTI-GRAFFITI COATING, STRUCTURE B-44-187	M2	488.00	488.00
1370	90002	MISC ITEM 90002D TEMPORARY SHORING	M2	300.00	300.00
1380	90002	MISC ITEM 90002E TURBIDITY BARRIERS	M2	288.00	288.00
1390	90003	MISC ITEM 90003A EXCAVATION FOR PIER NO. 6	M3	60.00	60.00
1400	90003	MISC 90003B QMP, HIGH PERFORMANCE READY MIXED CONCRETE MASONRY FOR BRIDGES	M3	2,658.00	2,658.00
1410	90004	MISC ITEM 90004A TEMPORARY TRAFFIC SIGNALS, CTH N & MAES	LS	1.00	1.00
1420	90004	MISC ITEM 90004B TEMPORARY TRAFFIC SIGNALS, CTH N & STH 96	LS	1.00	1.00
1430	90004	MISC ITEM 90004C CONSTRUCTION STAKING, B-44-187, SPECIAL	LS	1.00	1.00
1440	90004	MISC ITEM 90004F MODULAR EXPANSION DEVICE, STRUCTURE B-44-187	LS	1.00	1.00
1450	90004	MISC 90004E REMOVING AND SALVAGING EXISTING SIGNAL EQUIPMENT, CTH N & STH 96	LS	1.00	1.00
1460	90004	MISC 90004G TUBULAR RAILING, TYPE F, STRUCTURE B-44-187, MODIFIED (4)	LS	1.00	1.00
1470	90004	MISC 9004D REMOVING AND SALVAGING EXISTING SIGNAL EQUIPMENT, CTH N & MAES	LS	1.00	1.00
1480	90005	MISC ITEM 90005A CONSTRUCTION STAKING STORM SEWER SYSTEM	EACH	23.00	23.00
1490	90005	MISC ITEM 90005A CONSTRUCTION STAKING, STORM SEWER SYSTEM	EACH	9.00	9.00

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	4676-03-71 QUANTITY
1500	90005	MISC ITEM 90005C EROSION CONTROL FILTER BAGS, DELIVERED	EACH	240.00	240.00
1510	90005	MISC ITEM 90005D EROSION CONTOL FILTER BAGS INSTALLED	EACH	240.00	240.00
1520	90005	MISC ITEM 90005E EROSION CONTROL FILTER BAG MAINTENANCE	EACH	240.00	240.00
1530	90005	MISC ITEM 90005F UNDERWATER FOUNDATION INSPECTION	EACH	5.00	5.00
1540	90005	MISC ITEM 90005H ANCHOR ASSEMBLIES FOR LIGHT POLES	EACH	16.00	16.00
1550	90005	MISC ITEM 90005J ANCHOR POINT HANGERS	EACH	6.00	6.00
1560	90005	MISC ITEM 90005K INTERMEDIATE HANGERS	EACH	86.00	86.00
1570	90005	MISC ITEM 90005L TEMPORARY BARRIER RETAINING BLOCK	EACH	50.00	50.00
1580	90005	MISC 90005B REMOVING AND SALVAGING OVERHEAD SIGN	EACH	2.00	2.00
1590	90005	MISC 90005G REMOVING PAVEMENT MARKING SYMBOLS	EACH	6.00	6.00
1600	90480	PIPE RAILING	M	40.00	40.00
1610	90502	QMP, MASONRY STRENGTH INCENTIVE, READY MIXED CONCRETE	DOL	21,906.00	21,906.00
1620	90859	TRAFFIC SIGNAL CONTROLLER, FULLY ACTUATED, 8 PHASE	EACH	1.00	1.00

CLEARING AND GRUBBING

STATION-STATION	LOCATION	CLEARING 25 mm	CLEARING 40 m	GRUBBING 25 mm	GRUBBING 40 m
GROUP CODE 010					
10+400-10+425	C.T.H. "N" LT.	0	1	0	1
10+665-10+745	C.T.H. "N" LT. RT.	0	2	0	2
SUBTOTALS		0	3	0	3
GROUP CODE 030					
20+055-20+081	MAES AVE. LT.	48	0	48	0
SUBTOTALS		48	0	48	0
TOTALS		48	3	48	3

SAWING EXISTING PAVEMENT

STATION-STATION	LOCATION	LENGTH m
GROUP CODE 010		
10+289-10+348	C.T.H. "N" LT.	72.0
SUBTOTAL		72.0
GROUP CODE 020		
10+200-10+209	C.T.H. "N" LT.	9.0
10+263-10+289	C.T.H. "N" LT.	18.0
10+820-10+878	C.T.H. "N" LT.	53.0
10+840-10+853	C.T.H. "N" RT.	13.5
10+858-10+875	C.T.H. "N" RT.	17.0
10+900-10+915	C.T.H. "N" LT.	15.5
SUBTOTAL		126.0
TOTAL		198.0

SAWING CONCRETE PAVEMENT, FULL DEPTH

STATION-STATION	LOCATION	QUANTITY m
GROUP CODE 020		
10+058	C.T.H. "N"	13.8
10+137-10+159	C.T.H. "N" RT.	33.0
10+853-10+859	C.T.H. "N" RT.	6.3
10+878-10+898	C.T.H. "N" LT.	20.6
10+916-10+926	C.T.H. "N" LT.	19.5
10+930	C.T.H. "N" LT.	50.5
10+028	PROSPECT ST.	13.8
19+970	LINCOLN ST.	11.3
20+026	LINCOLN ST.	12.1
29+938	MADISON ST.	9.4
SUBTOTAL		190.3
GROUP CODE 030		
19+878	MAES AVE.	23.6
19+936-19+956	MAES AVE. RT.	20.0
20+016-20+087	MAES AVE.	81.3
SUBTOTAL		124.9
TOTAL		315.2

REMOVING PAVEMENT

STATION-STATION	LOCATION	QUANTITY m2
GROUP CODE 010		
10+289-10+384	C.T.H. "N"	1,257
10+702-10+824	C.T.H. "N"	2,149
SUBTOTAL		3,406
GROUP CODE 020		
10+058-10+289	C.T.H. "N"	4,965
10+824-10+930	C.T.H. "N"	1,994
SUBTOTAL		6,959
GROUP CODE 030		
19+878-19+989	MAES AVE.	2,147
20+011-20+057	MAES AVE.	398
SUBTOTAL		2,545
TOTAL		12,910

REMOVING CURB AND GUTTER

STATION-STATION	LOCATION	QUANTITY m
GROUP CODE 010		
10+289-10+384	C.T.H. "N"	229
10+701-10+824	C.T.H. "N"	227
SUBTOTAL		456
GROUP CODE 020		
10+058-10+289	C.T.H. "N"	907
10+824-10+930	C.T.H. "N"	249
29+938-29+994	MADISON ST.	104
SUBTOTAL		1,254
GROUP CODE 030		
19+878-19+986	MAES AVE.	389
20+026-20+087	MAES AVE.	61
SUBTOTAL		450
TOTAL		2,160

REMOVING CONCRETE SIDEWALK

STATION-STATION	LOCATION	QUANTITY m2
GROUP CODE 010		
10+289-10+384	C.T.H. "N"	348
10+701-10+824	C.T.H. "N"	350
SUBTOTAL		698
GROUP CODE 020		
10+058-10+289	C.T.H. "N"	432
10+824-10+930	C.T.H. "N"	476
29+938-29+994	MADISON ST.	77
SUBTOTAL		985
GROUP CODE 030		
19+878-19+986	MAES AVE.	255
SUBTOTAL		255
TOTAL		1,938

REMOVING INLETS

STATION	LOCATION	QUANTITY EACH
GROUP CODE 010		
10+307	C.T.H. "N", 2.8 m LT.	1
10+307	C.T.H. "N", 12 m RT.	1
10+805	C.T.H. "N", 0.3 m RT.	1
10+813	C.T.H. "N", 5.5 m LT.	1
20+023	LINCOLN ST., 5.5 m RT.	1
SUBTOTAL		5
GROUP CODE 020		
10+083	C.T.H. "N", 6.7 m LT.	1
10+087	C.T.H. "N", 6.8 m RT.	1
10+129	C.T.H. "N", 0.6 m RT.	1
10+130	C.T.H. "N", 12.2 m RT.	1
10+163	C.T.H. "N", 10 m LT.	1
10+209	C.T.H. "N", 10.5 m RT.	1
10+217	C.T.H. "N", 13.5 m LT.	1
10+837	C.T.H. "N", 3.8 m LT.	1
10+840	C.T.H. "N", 10 m RT.	1
10+922	C.T.H. "N", 14.5 m RT.	1
19+989	LINCOLN ST., 6 m LT.	1
20+023	LINCOLN ST., 5.5 m LT.	1
SUBTOTAL		12
GROUP CODE 030		
19+967	MAES AVE., 9.5 m LT./RT.	2
19+968	MAES AVE., 14 m LT.	1
20+026	MAES AVE., 7.7 m LT.	1
SUBTOTAL		4
TOTAL		21

REMOVING MANHOLES

STATION	LOCATION	QUANTITY EACH
GROUP CODE 010		
10+408	C.T.H. "N", 3.8 m RT.	1
10+804	C.T.H. "N", 1 m RT.	1
10+817	C.T.H. "N", 2.2 m RT.	1
10+825	C.T.H. "N", 11.4 m RT.	1
SUBTOTAL		4
GROUP CODE 020		
10+121	C.T.H. "N", 13.3 m LT.	1
10+164	C.T.H. "N", 12.2 m RT.	1
SUBTOTAL		2
TOTAL		6

REMOVING FENCE

STATION-STATION	LOCATION	QUANTITY m
GROUP CODE 010		
10+687-10+750	C.T.H. "N" LT.	70
10+723-10+796	C.T.H. "N" RT.	74
TOTAL		144

ADJUSTING MANHOLE COVERS

STATION	LOCATION	TYPE	QUANTITY EACH
GROUP CODE 010			
* 10+823	C.T.H. "N" 8.6 m RT.	SANITARY	1
* 10+825	C.T.H. "N" 7.2 m RT.	SANITARY	1
SUBTOTAL			2
GROUP CODE 020			
10+089	C.T.H. "N" 6.6 m RT.	STORM	1
* 10+089	C.T.H. "N" 4.8 m LT.		1
* 10+100	C.T.H. "N" 4.6 m LT.	SANITARY	1
10+104	C.T.H. "N" 3.5 m LT.	STORM	1
10+128	C.T.H. "N" 8 m RT.	STORM	1
10+209	C.T.H. "N" 12.5 m RT.	STORM	1
* 10+900	C.T.H. "N" 10 m LT.		1
* 10+919	C.T.H. "N" 15.5 m RT.		1
10+922	C.T.H. "N" 12 m LT.	TRAFFIC SIGNAL	1
10+922	C.T.H. "N" 7.5 m RT.	STORM	1
10+927	C.T.H. "N" 8 m RT.	TRAFFIC SIGNAL	1
10+930	C.T.H. "N" 3.5 m RT.	STORM	1
SUBTOTAL			12
GROUP CODE 030			
* 19+931	MAES AVE. 2.2 m RT.	SANITARY	1
19+933	MAES AVE. 2.1 m LT.	STORM	1
20+011	MAES AVE. 1.8 m LT.	STORM	1
SUBTOTAL			3
TOTAL			17

*- NON-PARTICIPATING

RECONSTRUCTING MANHOLES

STATION	LOCATION	EXISTING RIM ELEVATIONS	PROPOSED RIM ELEVATIONS	QUANTITY EACH
GROUP CODE 010				
* 10+388.5	C.T.H. "N" 3.7 m LT.	222.617	224.857	1
* 10+406	C.T.H. "N" 14.9 m LT.	222.500	224.000	1
GROUP CODE 060				
* 10+684.5	C.T.H. "N" 8.5 m LT.	216.356	217.556	1
TOTAL				3

* REMOVE AND SALVAGE EXISTING CONE SECTION. ADD MANHOLE RISER SECTION(S), REINSTALL SALVAGED CONE SECTION AND ADD ADJUSTMENT RINGS AS NECESSARY. TOTAL HEIGHT OF RINGS SHALL NOT BE GREATER THAN 150 mm.

GB2
PEN TABLE = $plot72$loser$mv80pp.tbl
DATE OF PLOT = 04/21/99
PLOT NA
DESIGN FILE IS h:\4026\dgn\mlso.dgn

EARTHWORK DATA
MAES AVE.

STATION	END AREA CUT m2	END AREA FILL m2	FACTOR CUT	FACTOR FILL	* INCREMENTAL VOLUMES CUT m3	* INCREMENTAL VOLUMES FILL m3	* CUMULATIVE VOLUMES CUT m3	* CUMULATIVE VOLUMES FILL m3
GROUP CODE 030								
19+878	9.7	0.0	1.0	1.3				
19+880	9.7	0.0	1.0	1.3	19	0.0	19	0.0
19+900	8.6	0.0	1.0	1.3	183	0.0	202	0.0
19+920	9.5	0.0	1.0	1.3	181	0.0	383	0.0
19+940	9.3	0.1	1.0	1.3	188	1.3	571	1.3
19+960	10.4	0.1	1.0	1.3	197	2.6	768	3.9
19+980	14.1	0.0	1.0	1.3	245	1.3	1,013	5.2
GROUP CODE 030								
20+020	4.4	0.0	1.0	1.3				
20+040	5.8	0.0	1.0	1.3	101	0.0	1,114	5.2
20+060	2.5	0.0	1.0	1.3	83	0.0	1,197	5.2

* VOLUMES SHOWN ARE EXPANDED BY THE FACTOR SHOWN IN THE TABLE.

EARTHWORK DATA
C.T.H. "N" STA. 10+058 TO STA. 10+423

STATION	END AREA CUT m2	END AREA FILL m2	FACTOR CUT	FACTOR FILL	* INCREMENTAL VOLUMES CUT m3	* INCREMENTAL VOLUMES FILL m3	* CUMULATIVE VOLUMES CUT m3	* CUMULATIVE VOLUMES FILL m3
GROUP CODE 020								
10+058	7.4	0.0	1.0	1.3				
10+060	7.4	0.0	1.0	1.3	15	0.0	15	0.0
10+080	6.8	0.0	1.0	1.3	142	0.0	157	0.0
10+100	8.5	0.0	1.0	1.3	153	0.0	310	0.0
10+120	20.9	0.0	1.0	1.3	294	0.0	604	0.0
10+140	16.2	0.0	1.0	1.3	370	0.0	974	0.0
10+160	13.4	0.0	1.0	1.3	296	0.0	1,270	0.0
10+180	11.0	0.0	1.0	1.3	244	0.0	1,514	0.0
10+200	8.6	0.1	1.0	1.3	196	1.3	1,710	1.3
10+220	9.8	0.1	1.0	1.3	184	2.6	1,894	3.9
10+240	10.3	0.2	1.0	1.3	201	3.9	2,095	7.8
10+260	10.7	0.2	1.0	1.3	210	5.2	2,305	13.0
10+280	16.2	0.0	1.0	1.3	270	2.6	2,575	15.6
GROUP CODE 010								
10+300	13.3	0.2	1.0	1.3	295	2.6	2,870	18.2
10+320	11.1	0.5	1.0	1.3	243	9.1	3,113	27.3
10+340	12.8	1.2	1.0	1.3	239	22.1	3,352	49.4
10+360	19.4	0.5	1.0	1.3	322	22.1	3,674	71.5
10+380	18.0	9.4	1.0	1.3	374	128.7	4,048	200.2
10+389	0.0	96.0	1.0	1.3	81	616.6	4,129	816.8
10+400	0.0	144.8	1.0	1.3	0	1,721.7	4,129	2,538.5
10+408	4.5	30.4	1.0	1.3	18	911.0	4,147	3,449.5
10+411	23.1	15.4	1.0	1.3	41	89.3	4,188	3,538.8
10+414	33.4	7.9	1.0	1.3	85	45.5	4,273	3,584.3
10+420	15.7	6.4	1.0	1.3	147	55.9	4,420	3,640.2
10+423	0.0	0.0	1.0	1.3	24	55.8	4,444	3,696.0

* VOLUMES SHOWN ARE EXPANDED BY THE FACTOR SHOWN IN THE TABLE.

EARTHWORK DATA
C.T.H. "N" STA. 10+678 TO STA. 10+930

STATION	END AREA CUT m2	END AREA FILL m2	FACTOR CUT	FACTOR FILL	* INCREMENTAL VOLUMES CUT m3	* INCREMENTAL VOLUMES FILL m3	* CUMULATIVE VOLUMES CUT m3	* CUMULATIVE VOLUMES FILL m3
GROUP CODE 010								
10+678	0.0	0.0	1.0	1.3				
10+680	0.0	24.6	1.0	1.3	0	32	0	32
10+690	0.0	61.4	1.0	1.3	0	559	0	591
10+699	0.0	77.0	1.0	1.3	0	810	0	1,401
10+705	39.3	18.6	1.0	1.3	118	373	118	1,774
10+720	37.4	0.0	1.0	1.3	575	182	693	1,956
10+740	31.3	0.0	1.0	1.3	687	0	1,380	1,956
10+760	27.7	0.0	1.0	1.3	590	0	1,970	1,956
10+780	41.6	0.0	1.0	1.3	694	0	2,664	1,956
10+800	16.7	0.0	1.0	1.3	584	0	3,248	1,956
10+820	8.7	0.0	1.0	1.3	254	0	3,502	1,956
GROUP CODE 020								
10+840	6.4	0.0	1.0	1.3	151	0	3,653	1,956
10+860	6.7	0.0	1.0	1.3	131	0	3,784	1,956
10+880	8.2	0.0	1.0	1.3	150	0	3,934	1,956
10+900	8.8	0.0	1.0	1.3	170	0	4,104	1,956
10+920	9.3	0.0	1.0	1.3	181	0	4,285	1,956
10+930	11.2	0.0	1.0	1.3	103	0	4,388	1,956

* VOLUMES SHOWN ARE EXPANDED BY THE FACTOR SHOWN IN THE TABLE.

EARTHWORK SUMMARY

GROUP CODE	STATION-STATION	LOCATION	* TOTAL UNCLASSIFIED EXCAVATION m3	EXPANDED FILL VOLUME (30%) m3	* WASTE m3	BORROW m3	REMARKS
020	10+058-10+280	C.T.H. "N"	2,575	16	2,559	---	
020	10+120-10+289	C.T.H. "N" MEDIAN	---	178	---	178	
010	10+280-10+423	C.T.H. "N"	1,869	3,680	382	2,193	BORROW REQ'D. FOR STAGE 1 SOUTH ABUTMENT CONSTRUCTION
010	10+289-10+352	C.T.H. "N" MEDIAN	---	69	---	69	
010	10+678-10+820	C.T.H. "N"	3,502	1,633	3,502	1,633	BORROW REQ'D. FOR STAGE 1 NORTH ABUTMENT CONSTRUCTION
020	10+820-10+930	C.T.H. "N"	886	---	886	---	
030	19+878-20+060	MAES AVE.	1,197	5	1,192	---	
010	10+028-10+040	PROSPECT ST.	60	---	60	---	
010	29+938-29+970	MADISON ST.	282	---	282	---	
020	19+970-20+026	LINCOLN ST.	161	---	161	---	
010	SUBTOTAL		5,713			3,895	
020	SUBTOTAL		3,622			178	
030	SUBTOTAL		1,197			0	
	TOTALS		10,532		9,024	4,073	

* UNCLASSIFIED EXCAVATION AND WASTE VOLUMES INCLUDE EXISTING CONCRETE PAVEMENT, SIDEWALK AND MEDIAN.

REMOVING AND SALVAGING OVERHEAD SIGNS

STATION	LOCATION	QUANTITY EACH
GROUP CODE 020		
10+166	C.T.H. "N" LT.	1
SUBTOTAL		1
GROUP CODE 030		
19+881	MAES AVE. RT.	1
SUBTOTAL		1
TOTAL		2

REMOVING ASPHALTIC SURFACE

STATION-STATION	LOCATION	QUANTITY m2
GROUP CODE 010		
10+289-10+347	C.T.H. "N"	229
10+320-10+365	C.T.H. "N" TEMPORARY CROSSOVER	79
10+716-10+760	C.T.H. "N" TEMPORARY CROSSOVER	151
SUBTOTAL		502
GROUP CODE 020		
10+272-10+289	C.T.H. "N", LT.	43
10+833-10+879	C.T.H. "N", LT.	55
10+840-10+875	C.T.H. "N", RT.	35
10+894-10+927	C.T.H. "N", RT.	42
10+898-10+927	C.T.H. "N", LT.	35
29+945-29+949	MADISON ST., RT.	5
	C.T.H. "N" TEMPORARY ISLANDS	257
SUBTOTAL		472
TOTAL		974

REMOVING STORM SEWER

STATION-STATION	LOCATION	QUANTITY m2
GROUP CODE 010		
10+813	C.T.H. "N", RT.	9
10+816	C.T.H. "N"	8
10+820	C.T.H. "N", LT.	12
10+823	C.T.H. "N", RT.	11
SUBTOTAL		40
GROUP CODE 020		
10+128	C.T.H. "N".	34
10+163	C.T.H. "N".	22
10+833	C.T.H. "N", RT.	16
10+838	C.T.H. "N"	14
SUBTOTAL		86
TOTAL		126

REMOVING CONCRETE BASES

STATION-LOCATION	QUANTITY EACH	REMARKS
GROUP CODE 020		
STA. 10+166 C.T.H. "N"	2	OVERHEAD SIGN BASES
STA. 10+928 C.T.H. "N", RT.	1	SIGNAL BASES IN ISLAND
SUBTOTAL	3	
GROUP CODE 030		
MAES AVE. AND C.T.H. "N" INTER.	13	TRAFFIC SIGNAL BASES
STA. 19+878 MAES AVE.	2	OVERHEAD SIGN BASES
SUBTOTAL	15	
TOTAL	18	

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, 50,51,52,53,54,55,56,57,58,59,60,61,62

ORIGINATOR: DJD
PROJECT NO. 44026LOO
REVISED BY:
DATE REVISED:
DATE: 11/27/98
FILE NAME:
PLOT NAME:
SCALE:

CRUSHED AGGREGATE BASE COURSE

STATION-STATION	LOCATION	CRUSHED AGGREGATE BASE COURSE Mg	WATER kL
GROUP CODE 010			
10+289-10+406	C.T.H. "N"	887	37.3
10+693-10+824	C.T.H. "N"	918	38.6
	SIDEWALKS AND DRIVEWAYS	228	
SUBTOTALS		2,033	75.9
GROUP CODE 020			
10+058-10+289	C.T.H. "N"	1,914	80.4
10+824-10+930	C.T.H. "N"	868	36.5
29+938-29+973	MADISON ST.	370	15.5
10+320-10+365	C.T.H. "N" (TEMP. CROSSOVER)	58	2.4
10+716-10+760	C.T.H. "N" (TEMP. CROSSOVER)	190	8.0
	SIDEWALKS AND DRIVEWAYS	271	
SUBTOTALS		3,671	142.8
GROUP CODE 030			
19+878-19+990	MAES AVE.	911	38.3
20+011-20+087	MAES AVE.	243	10.2
	SIDEWALKS AND DRIVEWAYS	187	
SUBTOTALS		1,341	48.5
TOTALS		7,045	267.2

CONCRETE PAVEMENT APPROACH SLAB

STATION-STATION	LOCATION	QUANTITY m2
GROUP CODE 010		
10+400-10+406	C.T.H. "N"	23.8
10+693-10+799	C.T.H. "N"	23.8
TOTAL		47.6

CONCRETE CURB AND GUTTER, 750 mm TYPE "D"

STATION-STATION	LOCATION	QUANTITY m
GROUP CODE 020		
29+938-29+974	MADISON ST.	100

CONCRETE CURB AND GUTTER, 750 mm TYPE "A"

STATION-STATION	LOCATION	QUANTITY m
GROUP CODE 010		
10+289-10+406	C.T.H. "N" LT.	117
PROSPECT ST.-10+406	C.T.H. "N" RT.	125
10+693-LINCOLN ST.	C.T.H. "N" LT.	124
10+693-LINCOLN ST.	C.T.H. "N" RT.	149
SUBTOTAL		515
GROUP CODE 020		
10+058-MAES AVE.	C.T.H. "N" LT.	44
10+058-MAES AVE.	C.T.H. "N" RT.	45
10+111-10+135	C.T.H. "N" ISLAND	64
MAES AVE.-10+289	C.T.H. "N" LT.	210
MAES AVE.-PROSPECT ST.	C.T.H. "N" RT.	126
LINCOLN ST.-MAIN ST.	C.T.H. "N" LT.	133
LINCOLN ST.-MAIN ST.	C.T.H. "N" RT.	115
10+927	C.T.H. "N" ISLAND	10
SUBTOTAL		777
GROUP CODE 030		
19+878-C.T.H. "N"	MAES AVE. LT.	88
19+878-C.T.H. "N"	MAES AVE. RT.	99
C.T.H. "N"-20+087	MAES AVE. LT.	77
SUBTOTAL		264
TOTAL		1,556

CONCRETE CURB AND GUTTER, 450 mm TYPE "A"

STATION-STATION	LOCATION	QUANTITY m
GROUP CODE 010		
10+289-10+352	C.T.H. "N" MEDIAN	128
SUBTOTAL		128
GROUP CODE 020		
10+119-10+289	C.T.H. "N" MEDIAN	341
SUBTOTAL		341
GROUP CODE 030		
19+879-19+956	MAES AVE. MEDIAN	154
19+965-19+982	MAES AVE. MEDIAN	32
SUBTOTAL		186
TOTAL		655

CONCRETE CORRUGATED MEDIAN

STATION-STATION	LOCATION	QUANTITY m2
GROUP CODE 020		
10+200-10+231	C.T.H. "N" LT.	38.4
SUBTOTAL		38.4
GROUP CODE 030		
20+014.5-20+051	MAES AVE.	43.6
SUBTOTAL		43.6
TOTAL		82.0

PAVEMENT TIES

STATION	LOCATION	QUANTITY EACH
GROUP CODE 020		
10+058	C.T.H. "N"	22
10+204	C.T.H. "N" 22 m LT.	13
19+970	LINCOLN ST.	18
20+026	LINCOLN ST.	19
SUBTOTAL		72
GROUP CODE 030		
19+878	MAES AVE.	38
SUBTOTAL		38
TOTAL		110

ASPHALTIC SUMMARY

STATION-STATION	LOCATION	ASPHALTIC CONCRETE PAVEMENT TYPE "MV" Mg	ASPHALTIC MATERIAL FOR PLANT MIXES @ 5.6% Mg	ASPHALTIC MATERIAL FOR TACK COAT L	REMARKS
GROUP CODE 020					
10+271-10+340	C.T.H. "N" 14 m LT.	18	1.0	12	PARKING LOT
10+320-10+365	C.T.H. "N"	17	1.0	11	TEMP. CROSSOVER PAVING FOR STAGE 3
10+716-10+760	C.T.H. "N"	44	2.5	29	TEMP. CROSSOVER PAVING FOR STAGE 3
29+938-29+973	MADISON ST.	127	7.1	84	
10+111-10+132	C.T.H. "N" LT.	42	2.4	28	TEMP. ISLAND PAVING FOR STAGE 2
10+028-10+031	PROSPECT ST.	9	0.5	6	
10+924-10+929	C.T.H. "N" RT.	5	0.3	3	TEMP. ISLAND PAVING, STAGE 1
10+925-10+930	C.T.H. "N"	58	3.2	38	
	PRIVATE ENTRANCES	10	0.6	6	
10+138	CTH "N" RT.	8	0.5	4	PATCH FOR STORM SEWER CONSTRUCTION
SUBTOTALS		338	19.1	221	
GROUP CODE 030					
19+965-19+986	MAES AVE.	15	0.8	9	TEMP. ISLAND PAVING FOR STAGE 2
SUBTOTALS		15	0.8	9	
TOTALS		353	19.9	230	

LANDSCAPING SUMMARY

STATION-STATION	LOCATION	TOPSOIL m2	FERTILIZER TYPE "B" kg	BORROW PIT SEEDING NO. 20 kg	SEEDING NO 40 kg	TEMPORARY SEEDING kg	SOD m2	MULCH m2
GROUP CODE 010								
10+289-10+423	C.T.H. "N"	1,550	55		16	28		1,550
10+677-10+824	C.T.H. "N"	1,680	59		17	29		1,680
	BORROW & WASTE SITES		71	21				2,039
SUBTOTALS		3,230	185	21	33	57		5,269
GROUP CODE 020								
10+058-10+289	C.T.H. "N"	750	26				750	
SUBTOTALS		750	26				750	
GROUP CODE 030								
19+878-20+087	MAES AVE.	430	15				430	
SUBTOTALS		430	15				430	
TOTALS		4,410	226	21	33	57	1,180	5,269

CONSTRUCTION STAKING, PRELIMINARY

STATION-STATION	LOCATION	QUANTITY m
GROUP CODE 010		
10+289-10+406	C.T.H. "N"	351 *
10+693-10+824	C.T.H. "N"	131
10+000-10+028	PROSPECT ST.	28
SUBTOTAL		510
GROUP CODE 020		
10+058-10+289	C.T.H. "N"	693 *
10+824-10+930	C.T.H. "N"	106
19+970-20+026	LINCOLN ST.	56
29+938-30+000	MADISON ST.	62
SUBTOTAL		917
GROUP CODE 030		
19+869-20+094	MAES AVE.	225
SUBTOTAL		225
TOTAL		1,652

*-LENGTH HAS BEEN TRIPLED FOR 3 REFERENCE LINES.

CONSTRUCTION STAKING, STORM SEWER SYSTEM

STATION-STATION	LOCATION	QUANTITY EACH
GROUP CODE 010		
10+302	C.T.H. "N"	2
10+798-10+817	C.T.H. "N"	3
19+975-20+024	LINCOLN ST.	4
SUBTOTAL		9
GROUP CODE 020		
10+083-10+213	C.T.H. "N"	12
10+835-10+923	C.T.H. "N"	4
19+989-20+024	LINCOLN ST.	2
29+972	MADISON ST.	1
SUBTOTAL		19
GROUP CODE 030		
19+965-20+031	MAES AVE.	4
SUBTOTAL		4
TOTAL		32

CONSTRUCTION STAKING, SUBGRADE, SPECIAL

STATION-STATION	LOCATION	QUANTITY m
GROUP CODE 010		
10+289-10+406	C.T.H. "N"	234 *
10+693-10+824	C.T.H. "N"	262 *
SUBTOTAL		496
GROUP CODE 020		
10+058-10+289	C.T.H. "N"	462 *
10+824-10+930	C.T.H. "N"	212 *
29+938-29+975	MADISON ST.	37
SUBTOTAL		711
GROUP CODE 030		
19+878-19+990	MAES AVE.	224 *
20+020-20+087	MAES AVE.	67
SUBTOTAL		291
TOTAL		1,498

*NOTE: LENGTH HAS BEEN DOUBLED FOR STAGE TWO CONSTRUCTION

CONSTRUCTION STAKING, CURB AND GUTTER, SPECIAL

STATION-STATION	LOCATION	QUANTITY m
GROUP CODE 020		
29+938-29+973	MADSION ST.	100
TOTAL		100

CONSTRUCTION STAKING, CRUSHED AGGREGATE BASE COURSE FOR ASPHALTIC CONCRETE PAVEMENT

STATION-STATION	LOCATION	QUANTITY m
GROUP CODE 020		
29+938-29+973	MADSION ST.	100
TOTAL		100

CONSTRUCTION STAKING, CONCRETE PAVEMENT, SPECIAL

STATION-STATION	LOCATION	QUANTITY m
GROUP CODE 010		
10+289-10+411	C.T.H. "N"	244 *
10+698-10+824	C.T.H. "N"	252 *
SUBTOTAL		496
GROUP CODE 020		
10+058-10+289	C.T.H. "N"	462 *
10+824-10+930	C.T.H. "N"	212 *
SUBTOTAL		674
GROUP CODE 030		
19+878-19+990	MAES AVE.	224 *
20+020-20+087	MAES AVE.	67
SUBTOTAL		291
TOTAL		1,461

*NOTE: LENGTH HAS BEEN DOUBLED FOR STAGE TWO CONSTRUCTION

TEMPORARY PRECAST CONCRETE BARRIER, CONTRACTOR FURNISHED, CONTRACTOR INSTALLED

STATION-STATION	LOCATION	QUANTITY m
GROUP CODE 050		
STAGE 1		
10+326-10+376	C.T.H. "N"	50
10+702-10+798	C.T.H. "N"	96
STAGE 2		
10+305-10+720	C.T.H. "N"	415
STAGE 3		
10+379-10+387	C.T.H."N"	8
10+715-10+723	C.T.H. "N"	8
STAGE 4		
10+345-10+385	C.T.H. "N"	40
10+687-10+695	C.T.H. "N"	8
TOTAL		625

SEALING JOINTS

STATION-STATION	LOCATION	QUANTITY m2
GROUP CODE 010		
10+289-10+405	C.T.H. "N"	1,950
10+705-10+824	C.T.H. "N"	2,100
SUBTOTAL		4,050
GROUP CODE 020		
10+058-10+289	C.T.H. "N"	3,174
10+824-10+925	C.T.H. "N"	1,669
SUBTOTAL		4,843
GROUP CODE 030		
19+878-19+990	MAES AVE.	1,939
20+011-20+087	MAES AVE.	526
SUBTOTAL		2,465
TOTAL		11,358

PIPE RAILING

STATION-STATION	LOCATION	QUANTITY m
GROUP CODE 010		
10+379-10+399	C.T.H. "N" LT./RT.	40

CONCRETE DRIVEWAY, 150 mm

STATION	LOCATION	QUANTITY m2
GROUP CODE 020		
19+985	LINNCOLN ST. LT.	22
10+871	C.T.H. "N" RT.	16
10+876	C.T.H. "N" LT.	16
10+883	C.T.H. "N" RT.	16
10+909	C.T.H. "N" LT.	16
29+942	MADISON ST. LT.	13
29+946	MADISON ST. RT.	5
SUBTOTAL		104
GROUP CODE 030		
19+897	MAES AVE. RT.	15
19+933	MAES AVE. RT.	15
SUBTOTAL		30
TOTAL		134

CONCRETE PAVEMENT, 250 mm (DOWELED)

STATION-STATION	LOCATION	QUANTITY m2
GROUP CODE 010		
10+289-10+405	C.T.H. "N"	1,950
10+705-10+824	C.T.H. "N"	2,100
SUBTOTAL		4,050
GROUP CODE 020		
10+058-10+289	C.T.H. "N"	3,174
10+824-10+925	C.T.H. "N"	1,669
SUBTOTAL		4,843
GROUP CODE 030		
19+878-19+990	MAES AVE.	1,939
20+011-20+087	MAES AVE.	526
SUBTOTAL		2,465
TOTAL		11,358

TEMPORARY SHORING

STATION-STATION	LOCATION	QUANTITY m2
GROUP CODE 050		
10+373-10+411	C.T.H. "N"	95
10+690-10+789	C.T.H. "N"	170
TOTAL		265

TEMPORARY BARRIER RETAINING BLOCK

STATION-STATION	LOCATION	QUANTITY EA.
GROUP CODE 050		
10+405-10+695	C.T.H. "N", STAGE 1	50
TOTAL		50

PAVEMENT MARKING, EPOXY

STATION-STATION	LOCATION	100 mm SOLID YELLOW CENTERLINE m	150 mm SOLID WHITE CROSSWALK LINE m	200 mm SOLID WHITE CHANNELIZING m	450 mm SOLID WHITE STOPLINE m	100 mm DASHED WHITE LANE LINE m
GROUP CODE 010						
10+289-10+800	C.T.H. "N" LT.					
10+301-10+813	C.T.H. "N" RT.					
10+340-10+809	C.T.H. "N"	938				
10+289-10+800	C.T.H. "N" LT./RT.					256
SUBTOTALS		938				256
GROUP CODE 020						
10+058-10+087	C.T.H. "N"	58				
10+058-10+087	C.T.H. "N"			28		
10+087	C.T.H. "N"				8	
10+089	C.T.H. "N"		32			
10+116	C.T.H. "N"		62			
10+120	C.T.H. "N"				8	
10+120-10+211	C.T.H. "N"			91		
10+133-10+183	C.T.H. "N" LT.			60		
10+122-10+289	C.T.H. "N" RT.					57
10+195-10+289	C.T.H. "N" LT.					24
10+836-10+925	C.T.H. "N"	178				
10+842-10+923	C.T.H. "N" LT.					23
10+842-10+862	C.T.H. "N" RT.					8
10+880-10+925	C.T.H. "N" RT.			93		
10+925	C.T.H. "N" RT.				13	
10+926	C.T.H. "N"		53			
10+052-10+065	PROSPECT ST.	26				
10+065	PROSPECT ST.		40			
10+067	PROSPECT ST.				8	
19+970-19+986	LINCOLN ST.	38				
19+985	LINCOLN ST.				8	
19+988	LINCOLN ST.		33			
SUBTOTALS		300	220	272	45	112
GROUP CODE 030						
19+889-19+938	MAES AVE.					15
19+941-19+980	MAES AVE.			78		
19+980	MAES AVE.				10	
19+982	MAES AVE.		43			
20+013	MAES AVE.		45			
20+019	MAES AVE.				12	
20+019-20+051	MAES AVE.			32		
20+050-20+087	MAES AVE.	74				
SUBTOTALS	SUBTOTALS	74	88	110	22	15
TOTALS	TOTALS	1,312	308	382	67	383

PAVEMENT MARKING, WORDS AND SYMBOLS, EPOXY

STATION	LOCATION	ARROWS TYPE 1 EACH	ARROWS TYPE 2 EACH	ARROWS TYPE 3 EACH	WORDS EACH	CURB m	ISLAND NOSES EACH	CORRUGATED CONCRETE MEDIAN m2
GROUP CODE 020								
10+065	C.T.H. "N"				1			
10+078	C.T.H. "N"		1					
10+120	C.T.H. "N" ISLAND					16	3	
10+120	C.T.H. "N" MEDIAN					6		
10+126	C.T.H. "N"		1					
10+168	C.T.H. "N"				1			
10+178	C.T.H. "N"		1					
10+200	C.T.H. "N" LT.					11		
10+202-10+234	C.T.H. "N" LT.							15
10+229	C.T.H. "N" LT.		1					
10+242	C.T.H. "N" LT.				1			
10+881	C.T.H. "N" RT.							
10+901	C.T.H. "N" RT.	1	2		3			
10+918	C.T.H. "N" RT.	1	2					
10+927	C.T.H. "N" ISLAND LT.					10		
SUBTOTALS		2	8		6	43	3	15
GROUP CODE 030								
19+880	MAES AVE. MEDIAN					7		
19+942	MAES AVE.		2	1				
19+953	MAES AVE. MEDIAN					7		
19+960	MAES AVE.				3			
19+965	MAES AVE.		2	1				
19+972	MAES AVE. MEDIAN					7		
20+015-20+050	MAES AVE.							18
20+024	MAES AVE. LT.		1					
20+038	MAES AVE. LT.				1			
20+050	MAES AVE. LT.		1					
SUBTOTALS			6	2	4	21		18
TOTALS		2	14	2	10	64	3	33

REMOVING PAVEMENT MARKING LINES & SYMBOLS

STATION-STATION	LOCATION	LINES m	SYMBOLS EACH
GROUP CODE 050			
10+058-10+093	C.T.H. "N"	70	-
10+058-10+093	C.T.H. "N"	35	-
10+900-10+925	C.T.H. "N"	65	3
10+950-10+985	C.T.H. "N"	35	3
TOTAL		205	6

CONCRETE PAVEMENT GAPS

STATION-STATION	LOCATION	OUANTITY EACH
GROUP CODE 010		
10+360-10+411	C.T.H. "N" RT.	1
10+699-10+721	C.T.H. "N" RT.	1
SUBTOTAL		2
GROUP CODE 020		
10+200-10+225	C.T.H. "N", LT.	1
10+820-10+835	C.T.H. "N"	1
10+863-10+875	C.T.H. "N", RT.	1
10+869-10+881	C.T.H. "N", LT.	1
SUBTOTAL		4
TOTAL		6

CONCRETE SIDEWALK, 100 mm

STATION-STATION	LOCATION	OUANTITY m2
GROUP CODE 010		
10+289-10+411	C.T.H. "N"	629
10+699-10+824	C.T.H. "N"	621
SUBTOTAL		1,250
GROUP CODE 020		
10+110-10+289	C.T.H. "N"	1,136
10+824-10+930	C.T.H. "N"	280
SUBTOTAL		1,416
GROUP CODE 030		
19+879-19+982	MAES AVE.	276
SUBTOTAL		276
TOTAL		2,942

H.E.S. CONCRETE PAVEMENT, 250 mm

STATION-STATION	LOCATION	OUANTITY m2
GROUP CODE 020		
10+058-10+103	C.T.H. "N"	695
10+200-10+225	C.T.H. "N", LT.	338
10+820-10+835	C.T.H. "N"	50
10+863-10+875	C.T.H. "N", RT.	108
10+869-10+881	C.T.H. "N", LT.	84
TOTAL		1,275

MANHOLES, INLETS, AND COVERS

GROUP CODE NO.	STRUCTURE NUMBER	STATION	LOCATION	STRUCTURE	DISTANCE LT./RT.	TYPE	COVER	GRATE LT./RT.	ELEVATIONS PAVEMENT	ELEVATIONS FLOWLINE	DEPTH m	REMARKS
020	1	10+087	C.T.H. "N"	INLET	6.9 m RT.	3	H	LT.	221.755	220.500	1.26	CONNECT *1 TO EXIST. 250 mm S.S. TO N.E.
020	2	10+083	C.T.H. "N"	INLET	6.6 m LT.	3	H	RT.	221.980	220.930	1.05	
020	3	10+163	C.T.H. "N"	MANHOLE	12.0 m RT.	1	J	---	221.561	219.847	1.71	
020	4	10+141	C.T.H. "N"	MANHOLE	10.2 m RT.	1	J	---	221.288	220.000	1.29	
020	5	10+138	C.T.H. "N"	INLET	0.5 m RT.	3	H	RT.	221.494	220.305	1.19	
020	6	10+133	C.T.H. "N"	INLET	6.8 m LT.	3	H	RT.	221.632	220.525	1.11	
020	7	10+142	C.T.H. "N"	INLET	11.8 m LT.	3	H	LT.	221.540	220.565	0.98	
020	8	10+140	C.T.H. "N"	INLET	11.5 m RT.	3	H	LT.	221.272	220.220	1.05	
020	9	10+205	C.T.H. "N"	INLET	9.8 m RT.	3	H	RT.	221.989	220.789	1.20	
020	10	10+207.5	C.T.H. "N"	INLET	2.6 m RT.	3	H	LT.	222.153	220.859	1.29	
020	11	10+208	C.T.H. "N"	INLET	0.3 m RT.	3	H	RT.	222.292	220.909	1.38	
020	12	10+212.5	C.T.H. "N"	INLET	14.4 m LT.	3	H	LT.	222.193	221.059	1.13	
010	13	10+302.5	C.T.H. "N"	INLET	11.0 m RT.	3	H	RT.	223.522	222.322	1.20	
010	14	10+308	C.T.H. "N"	INLET	9.6 m LT.	3	H	LT.	223.595	222.522	1.07	
010	15	20+024	LINCOLN ST.	MANHOLE	3.0 m RT.	1	J	---	222.551	220.433	2.12	CONNECT *15 TO EXIST. 375 mm S.S. TO EAST
010	16	20+024	LINCOLN ST.	INLET	5.5 m RT.	3	H	LT.	222.511	221.461	1.05	
020	17	20+024	LINCOLN ST.	INLET	5.7 m LT.	3	H	RT.	222.507	221.457	1.05	
010	18	20+011	LINCOLN ST.	MANHOLE	3.2 m RT.	1	J	---	222.650	220.488	2.16	
020	19	10+841	C.T.H. "N"	MANHOLE	5.6 m RT.	1	J	---	222.884	220.931	1.95	
020	20	10+843	C.T.H. "N"	INLET	9.3 m RT.	3	H	RT.	222.830	221.762	1.05	
010	21	10+801	C.T.H. "N"	INLET	8.2 m RT.	3	H	LT.	222.599	221.547	1.05	
010	22	29+972	MADISON ST.	INLET	10.0 m LT.	3	H	RT.	222.600	221.587	1.01	
010	23	10+817	C.T.H. "N"	MANHOLE	2.0 m RT.	1	J	---	222.794	220.693	2.10	
010	24	10+798.5	C.T.H. "N"	INLET	8.2 m LT.	3	H	RT.	222.599	221.547	1.05	
010	25	19+975.5	LINCOLN ST.	INLET	5.3 m RT.	3	H	LT.	222.704	221.652	1.05	
020	26	19+989	LINCOLN ST.	INLET	5.3 m LT.	3	H	RT.	222.640	221.588	1.05	
020	27	10+835.5	C.T.H. "N"	INLET	6.9 m LT.	3	H	LT.	222.827	221.775	1.05	
020	28	10+923	C.T.H. "N"	INLET	14.4 m RT.	3	H	LT.	223.200	222.148	1.05	CONNECT *28 TO EXIST. 300 mm STORM LEAD
030	29	19+965	MAES AVE.	MANHOLE	2.2 m LT.	1	J	---	221.800	220.518	1.28	CONNECT *29 TO EXIST. 250 mm S.S
030	30	19+966	MAES AVE.	INLET	11.3 m LT.	3	H	RT.	221.626	220.574	1.05	
030	31	19+967	MAES AVE.	INLET	7.5 m RT.	3	H	LT.	221.606	220.554	1.05	
030	32	20+031	MAES AVE.	INLET	8.7 m LT.	3	H	LT.	221.612	220.560	1.05	

		MANHOLES TYPE 1 EACH	COVERS TYPE "J" EACH	INLETS TYPE 3 EACH	COVERS TYPE "H" EACH
010	SUBTOTALS	3	3	7	7
020	SUBTOTALS	3	3	15	15
030	SUBTOTALS	1	1	3	3
	TOTALS	7	7	25	25

STORM SEWER SUMMARY

GROUP CODE NO.	LOCATION FROM	LOCATION TO	DIAMETER 300 mm m	DIAMETER 375 mm m	TYPE	ELEVATIONS INLET	ELEVATIONS DISCHARGE	REMARKS
020	2	1	14		R.C.P., CLASS III, STORM SEWER	220.930	220.500	
020	4	3	20		R.C.P., CLASS III, STORM SEWER	220.000	219.847	
020	5	4	10		R.C.P., CLASS III, STORM SEWER	220.305	220.205	
020	6	5	9		R.C.P., CLASS III, STORM SEWER	220.525	220.305	
020	7	5	13		R.C.P., CLASS III, STORM SEWER	220.565	220.305	
020	8	4	1		R.C.P., CLASS III, STORM SEWER	220.220	220.205	
020	9	9A	3		R.C.P., CLASS III, STORM SEWER	220.789	220.507	
020	10	9	7		R.C.P., CLASS III, STORM SEWER	220.859	220.789	
020	11	10	2		R.C.P., CLASS III, STORM SEWER	220.909	220.859	
020	12	11	15		R.C.P., CLASS III, STORM SEWER	221.059	220.909	
010	13	13A	12		R.C.P., CLASS III, STORM SEWER	222.322	221.728	
010	14	13	20		R.C.P., CLASS III, STORM SEWER	222.522	222.322	
010	16	15	2		R.C.P., CLASS III, STORM SEWER	221.461	221.367	
020	17	15	9		R.C.P., CLASS III, STORM SEWER	221.457	221.367	
010	18	15		13	R.C.P., CLASS III, STORM SEWER	220.488	220.433	
020	19	18	17		R.C.P., CLASS III, STORM SEWER	220.931	220.488	
020	20	19	4		R.C.P., CLASS III, STORM SEWER	221.762	221.722	
010	21	18	28		R.C.P., CLASS III, STORM SEWER	221.547	221.267	
010	22	21	4		R.C.P., CLASS III, STORM SEWER	221.587	221.547	
010	23	18	13		R.C.P., CLASS III, STORM SEWER	220.693	220.563	
010	24	23	20		R.C.P., CLASS III, STORM SEWER	221.547	221.347	
010	25	24	10		R.C.P., CLASS III, STORM SEWER	221.652	221.547	
010	26	23	15		R.C.P., CLASS III, STORM SEWER	221.588	221.438	
020	27	23	19		R.C.P., CLASS III, STORM SEWER	221.775	221.585	
030	30	29	9		R.C.P., CLASS III, STORM SEWER	220.574	220.484	
030	31	29	10		R.C.P., CLASS III, STORM SEWER	220.554	220.454	
030	32	32A	6		R.C.P., CLASS III, STORM SEWER	220.560	220.248	REMOVE INLET *32A. CONNECT TO EXIST. 300 mm STORM LEAD

		DIAMETER 300 mm m	DIAMETER 375 mm m	TYPE
010	SUBTOTALS	124	13	R.C.P., CLASS III, STORM SEWER
020	SUBTOTALS	143	0	R.C.P., CLASS III, STORM SEWER
030	SUBTOTALS	25	0	R.C.P., CLASS III, STORM SEWER
	TOTALS	292	13	

MISCELLANEOUS QUANTITIES	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: .3F	M

ALL QUANTITIES ARE GROUP 050

TRAFFIC CONTROL

STATION	LOCATION	TRAFFIC CONTROL STAGE	SIGNS TYPE	SIGNS NUMBER EACH	SIGNS DAYS	DRUMS POSTS EACH	DRUMS EACH	DRUMS DAYS	TYPE III BARRICADES EACH	TYPE III BARRICADES DAYS	WARNING LIGHTS TYPE 'A' EACH	WARNING LIGHTS TYPE 'A' DAYS	WARNING LIGHTS TYPE 'C' EACH	WARNING LIGHTS TYPE 'C' DAYS	FLEXIBLE MARKER POSTS EACH	TUBULAR MARKER BASES EACH	REMARKS
GROUP CODE 050																	
KIMBERLY AVE.	C.T.H. 'N'	2	R11-2	2	28	-	-	-	2	28	4	56	-	-	-	-	ROAD CLOSED
9+590	C.T.H. 'N', RT.	2	W020-1A	1	70	1	-	-	-	-	-	-	-	-	-	-	ROAD WORK AHEAD
9+740	C.T.H. 'N', RT.	2	W020-1C	1	70	1	-	-	-	-	-	-	-	-	-	-	ROAD WORK 1000 FT
9+890	C.T.H. 'N', RT.	2	W020-5A	1	70	1	-	-	-	-	-	-	-	-	-	-	RIGHT LANE CLOSED AHEAD
9+908	C.T.H. 'N', RT.	2	W020-3D	1	14	1	-	-	-	-	-	-	-	-	-	-	ROAD CLOSED 500 FEET
9+908	C.T.H. 'N', RT.	1,3	W020-1A	1	114	1	-	-	-	-	-	-	-	-	-	-	ROAD WORK AHEAD
9+983	C.T.H. 'N', RT.	1	W020-55A	1	66	1	-	-	-	-	-	-	-	-	-	-	LEFT LANE CLOSED AHEAD
10+010	C.T.H. 'N', RT.	2	W09-27	1	56	1	-	-	-	-	-	-	-	-	-	-	LANE ENDS MERGE LEFT
10+030	PROSPECT ST.	2	R11-2	1	5	-	-	-	4	20	8	40	-	-	-	-	ROAD CLOSED
EDWARDS ST.	PROSPECT ST.	2	R11-2	2	10	-	-	-	2	10	4	20	-	-	-	-	ROAD CLOSED
10+040 - 10+106	C.T.H. 'N'	2	-	-	-	-	8	416	-	-	-	-	8	416	-	-	
10+055	C.T.H. 'N'	2	R11-2	1	14	-	-	-	4	56	8	112	-	-	-	-	ROAD CLOSED
10+058 - 10+087	C.T.H. 'N', RT.	1	-	-	-	-	8	528	-	-	-	-	8	528	-	-	
10+084	C.T.H. 'N', RT.	1	R3-2	1	66	1	-	-	-	-	-	-	-	-	-	-	NO LEFT TURN SYMBOL
10+103	PROSPECT ST., LT.	1,2,3,4	W020-1A	1	683	1	-	-	-	-	-	-	-	-	-	-	ROAD WORK AHEAD
10+104	C.T.H. 'N'	2	R3-2	1	56	-	-	-	-	-	-	-	-	-	-	-	NO LEFT TURN SYMBOL
10+106	C.T.H. 'N', LT.	1	R3-2	1	66	-	-	-	1	66	2	132	-	-	-	-	NO LEFT TURN SYMBOL
10+104 - 10+344	C.T.H. 'N', RT.	1	-	-	-	-	33	2178	-	-	-	-	-	-	-	-	
10+110 - 10+334	C.T.H. 'N', LT.	2	-	-	-	-	50	700	-	-	-	-	18	252	-	-	
10+110 - 10+334	C.T.H. 'N', LT.	2	-	-	-	-	46	2576	-	-	-	-	14	784	-	-	
10+110 - 10+140	C.T.H. 'N', LT.	3	-	-	-	-	13	624	-	-	-	-	-	-	-	-	
10+113	C.T.H. 'N', LT.	2	R3-5S	1	56	-	-	-	-	-	-	-	-	-	-	-	STRAIGHT ARROW ONLY
10+113	C.T.H. 'N'	2	W01-6	1	14	-	-	-	3	42	6	84	-	-	-	-	NIGHT ARROW SYMBOL - LEFT
10+124 - 10+357	C.T.H. 'N', RT.	1	-	-	-	-	-	-	-	-	-	-	-	-	24	24	
10+135	C.T.H. 'N', RT.	1	W06-3	1	66	1	-	-	-	-	-	-	-	-	-	-	TWO WAY TRAFFIC SYMBOL
10+136	C.T.H. 'N', LT.	2	W012-1D	1	56	-	-	-	-	-	-	-	-	-	-	-	DOUBLE DOWN ARROW
10+140	C.T.H. 'N', RT.	1,4	W020-1A	1	499	1	-	-	-	-	-	-	-	-	-	-	ROAD WORK AHEAD
10+147	C.T.H. 'N'	2	W06-3	1	70	1	-	-	-	-	-	-	-	-	-	-	TWO WAY TRAFFIC SYMBOL
10+156 - 10+353	C.T.H. 'N', LT.	2	-	-	-	-	-	-	-	-	-	-	-	-	17	17	
10+175	C.T.H. 'N', RT.	3,4	W020-5R	1	307	1	-	-	-	-	-	-	-	-	-	-	RIGHT LANE CLOSED AHEAD
10+240	C.T.H. 'N', RT.	1	W020-1D	1	240	1	-	-	-	-	-	-	-	-	-	-	ROAD WORK 500 FEET
10+240 - 10+382	C.T.H. 'N'	3	-	-	-	-	38	1824	-	-	-	-	38	1824	-	-	
10+240 - 10+382	C.T.H. 'N'	4	-	-	-	-	24	6216	-	-	-	-	24	6216	-	-	
10+292	C.T.H. 'N'	3	R3-2	1	48	-	-	-	1	48	2	96	-	-	-	-	NO LEFT TURN SYMBOL
10+300	C.T.H. 'N', RT.	2	R1-1	1	70	1	-	-	-	-	-	-	-	-	-	-	STOP SIGN
10+302	C.T.H. 'N', RT.	1	W054-57	1	45	1	-	-	-	-	-	-	-	-	-	-	TRUCKS ENTERING - USE WHEN HAULING BORROW
10+308	C.T.H. 'N'	2	W5-52R	1	70	1	-	-	-	-	-	-	-	-	-	-	CLEARANCE STRIPER
10+310	C.T.H. 'N', RT.	3,4	W01-3L	1	307	1	-	-	-	-	-	-	-	-	-	-	LEFT REVERSE TURN SYMBOL
10+310	C.T.H. 'N', RT.	3,4	W013-1	1	307	-	-	-	-	-	-	-	-	-	-	-	25 M.P.H.
10+319	C.T.H. 'N'	1	R3-2	1	66	1	-	-	-	-	-	-	-	-	-	-	NO LEFT TURN SYMBOL
10+325	C.T.H. 'N', RT.	3,4	R11-2	1	307	-	-	-	1	382	2	764	-	-	-	-	ROAD CLOSED
10+350	C.T.H. 'N'	4	W5-52R	1	259	1	-	-	-	-	-	-	-	-	-	-	CLEARANCE STRIPER
10+350-10+380	C.T.H. 'N', LT.	3,4	-	-	-	-	-	-	-	-	-	-	-	-	5	5	
10+360	C.T.H. 'N'	3,4	W06-3	1	307	1	-	-	-	-	-	-	-	-	-	-	TWO WAY TRAFFIC SYMBOL
10+360	C.T.H. 'N', RT.	3,4	-	-	-	-	-	-	3	921	6	•••	-	-	-	-	
10+361	C.T.H. 'N'	1	W06-3	1	66	1	-	-	-	-	-	-	-	-	-	-	TWO WAY TRAFFIC SYMBOL
10+370	C.T.H. 'N', LT.	1	W054-57	1	45	1	-	-	-	-	-	-	-	-	-	-	TRUCKS ENTERING - USE WHEN HAULING BORROW
10+386	C.T.H. 'N'	3	W5-52R	1	48	1	-	-	-	-	-	-	-	-	-	-	CLEARANCE STRIPER
10+700	C.T.H. 'N'	3,4	W01-3L	1	307	1	-	-	-	-	-	-	-	-	-	-	LEFT REVERSE TURN SYMBOL
10+700	C.T.H. 'N'	3,4	W013-1	1	307	-	-	-	-	-	-	-	-	-	-	-	25 M.P.H.
10+712 - 10+930	C.T.H. 'N'	2	-	-	-	-	25	1750	-	-	-	-	-	-	-	-	
10+720	C.T.H. 'N', LT.	3	W06-3	1	48	1	-	-	-	-	-	-	-	-	-	-	TWO WAY TRAFFIC SYMBOL
10+722 - 10+930	C.T.H. 'N'	3	-	-	-	-	42	2016	-	-	-	-	8	384	-	-	
10+734 - 10+801	C.T.H. 'N'	4	-	-	-	-	12	3108	-	-	-	-	12	3108	-	-	
10+765	C.T.H. 'N', LT.	4	W06-3	1	259	1	-	-	-	-	-	-	-	-	-	-	TWO WAY TRAFFIC SYMBOL
10+795 -10+810	C.T.H. 'N'	1	-	-	-	-	3	918	-	-	-	-	-	-	-	-	
10+810	C.T.H. 'N'	1	R3-2	1	66	1	-	-	-	-	-	-	-	-	-	-	NO LEFT TURN SYMBOL
10+818	C.T.H. 'N', RT.	3	R5-1	1	48	1	-	-	-	-	-	-	-	-	-	-	DO NOT ENTER
10+824	C.T.H. 'N'	2	R11-2	1	70	-	-	-	2	140	4	280	-	-	-	-	ROAD CLOSED
10+824	C.T.H. 'N', RT.	3	R11-2	1	48	-	-	-	1	48	2	96	-	-	-	-	ROAD CLOSED
10+824	C.T.H. 'N', RT.	3	R3-2	1	48	-	-	-	1	48	2	96	-	-	-	-	NO LEFT TURN SYMBOL
10+825 - 10+930	C.T.H. 'N'	1	-	-	-	-	12	792	-	-	-	-	-	-	-	-	
10+840	C.T.H. 'N', LT.	1	W04-2R	1	240	1	-	-	-	-	-	-	-	-	-	-	PAVEMENT WIDTH TRANSITION SYMBOL - RIGHT
10+840	C.T.H. 'N'	1	R3-2	1	66	1	-	-	-	-	-	-	-	-	-	-	NO LEFT TURN SYMBOL
10+840	C.T.H. 'N', LT.	4	W04-2L	1	259	1	-	-	-	-	-	-	-	-	-	-	PAVEMENT WIDTH TRANSITION SYMBOL - LEFT
10+840	C.T.H. 'N', LT.	2,3	R3-2	1	118	1	-	-	-	-	-	-	-	-	-	-	NO LEFT TURN SYMBOL
10+878	C.T.H. 'N', RT.	1	W5-52R	1	66	1	-	-	-	-	-	-	-	-	-	-	CLEARANCE STRIPER
10+880	C.T.H. 'N', LT.	1	W05-1	1	240	1	-	-	-	-	-	-	-	-	-	-	ROAD NARROWS
10+880	C.T.H. 'N', LT.	4	W020-5A	1	259	1	-	-	-	-	-	-	-	-	-	-	LEFT LANE CLOSED AHEAD
10+913	C.T.H. 'N', RT.	1	R3-2	1	66	1	-	-	-	-	-	-	-	-	-	-	NO LEFT TURN SYMBOL

TRAFFIC CONTROL (CON'T.)

TRAFFIC CONTROL

STATION	LOCATION	TRAFFIC CONTROL STAGE	SIGNS TYPE	SIGNS NUMBER EACH	SIGNS DAYS	DRUMS POSTS EACH	DRUMS EACH	DRUMS DAYS	TYPE III EACH	TYPE III DAYS	WARNING LIGHTS TYPE 'A' EACH	WARNING LIGHTS TYPE 'A' DAYS	WARNING LIGHTS TYPE 'C' EACH	WARNING LIGHTS TYPE 'C' DAYS	FLEXIBLE MARKER POSTS EACH	TUBULAR MARKER BASES EACH	REMARKS
10+915	C.T.H. 'N', LT.	1,4	W020-1A	1	499	1	-	-	-	-	-	-	-	-	-	-	ROAD WORK AHEAD
10+918	C.T.H. 'N'	2	W01-3R	1	70	1	-	-	-	-	-	-	-	-	-	-	RIGHT REVERSE TURN
10+926	C.T.H. 'N', 97m L	1,2,3	W020-1A	1	184	1	-	-	-	-	-	-	-	-	-	-	ROAD WORK AHEAD (PLACE ON STH 96)
10+928	C.T.H. 'N', LT.	1	W01-6	1	66	-	-	-	1	66	2	132	-	-	-	-	NIGHT ARROW SYMBOL - LEFT
10+928	C.T.H. 'N', LT.	1	R11-2	1	66	-	-	-	4	264	8	528	-	-	-	-	ROAD CLOSED
10+928	C.T.H. 'N', RT.	2	R11-2	1	70	-	-	-	6	420	1	840	-	-	-	-	ROAD CLOSED
10+930	C.T.H. 'N'	3	R4-7AR	1	48	-	-	-	1	48	2	96	-	-	-	-	KEEP RIGHT
10+945	C.T.H. 'N', 102m .	1,2,3	W020-1A	1	184	-	-	-	-	-	-	-	-	-	-	-	ROAD WORK AHEAD (PLACE ON STH 96)
10+947	C.T.H. 'N', RT.	1	R3-2	1	66	1	-	-	-	-	-	-	-	-	-	-	NO LEFT TURN SYMBOL
11+000	C.T.H. 'N', LT.	2,3	W020-1D	1	118	1	-	-	-	-	-	-	-	-	-	-	ROAD WORK 500 FT
11+150	C.T.H. 'N', RT.	2,3	W020-1C	1	118	1	-	-	-	-	-	-	-	-	-	-	ROAD WORK 1000 FT
11+155	C.T.H. 'N', RT.	1	W020-55A	1	66	1	-	-	-	-	-	-	-	-	-	-	LEFT LANE CLOSED AHEAD
11+300	C.T.H. 'N', RT.	2,3	W020-1A	1	118	1	-	-	-	-	-	-	-	-	-	-	ROAD WORK AHEAD
11+305	C.T.H. 'N', RT.	1	W020-1C	1	66	1	-	-	-	-	-	-	-	-	-	-	ROAD WORK 1000 FT
11+455	C.T.H. 'N', RT.	1	W020-1A	1	66	1	-	-	-	-	-	-	-	-	-	-	ROAD WORK AHEAD
19+920	LINCOLN ST., RT.	1,2,3,4	W020-1A	1	683	1	-	-	-	-	-	-	-	-	-	-	ROAD WORK AHEAD
20+025	LINCOLN ST.	2	R11-2	1	70	-	-	-	2	140	4	280	-	-	-	-	ROAD CLOSED
20+100	LINCOLN ST., LT.	1,3,4	W020-1A	1	613	1	-	-	-	-	-	-	-	-	-	-	ROAD WORK AHEAD
GRAND AVE.	LINCOLN ST., LT.	2	W020-3A	1	70	1	-	-	-	-	-	-	-	-	-	-	ROAD CLOSED AHEAD
RAVINE ST.	MADISON ST., RT.	2	W020-3A	1	70	1	-	-	-	-	-	-	-	-	-	-	ROAD CLOSED AHEAD
29+915	MADISON ST., RT.	1	W020-1A	1	305	1	-	-	-	-	-	-	-	-	-	-	ROAD WORK AHEAD
29+936	MADISON ST.	2	R11-2	1	70	1	-	-	2	140	4	280	-	-	-	-	ROAD CLOSED
19+728	MAES AVE., RT.	1	W020-1A	1	66	1	-	-	-	-	-	-	-	-	-	-	ROAD WORK AHEAD
19+778	MAES AVE., RT.	1	W020-55A	1	66	1	-	-	-	-	-	-	-	-	-	-	LEFT LANE CLOSED AHEAD
19+805	MAES AVE., RT.	2,3	W020-1A	1	118	-	-	-	-	-	-	-	-	-	-	-	ROAD WORK AHEAD
19+875	MAES AVE., 87m RT	1,2	W020-1A	1	136	-	-	-	-	-	-	-	-	-	-	-	ROAD WORK AHEAD (PLACE ON LINCOLN ST.)
19+876	MAES AVE., LT.	1	R11-2	1	66	-	-	-	4	264	8	528	-	-	-	-	ROAD CLOSED
19+876	MAES AVE.	2	W01-6	1	70	-	-	-	1	70	2	140	-	-	-	-	NIGHT ARROW SYMBOL - LEFT
19+876	MAES AVE., RT.	2	R11-2	1	70	-	-	-	2	140	4	280	-	-	-	-	ROAD CLOSED
19+880 - 20+000	MAES AVE.	1	-	-	-	-	13	858	-	-	-	-	-	-	-	-	
19+880 - 20+000	MAES AVE.	2	-	-	-	-	10	700	-	-	-	-	-	-	-	-	
19+880 - 20+000	MAES AVE.	3	-	-	-	-	29	1392	-	-	-	-	-	-	-	-	
19+885 - 19+975	MAES AVE., RT.	1	-	-	-	-	-	-	-	-	-	-	-	-	10	10	
19+885-19+975	MAES AVE., LT.	2	-	-	-	-	-	-	-	-	-	-	-	-	10	10	
19+888	MAES AVE.	1	W01-3R	1	66	1	-	-	-	-	-	-	-	-	-	-	RIGHT REVERSE TURN SYMBO
19+888	MAES AVE., RT.	1	W06-3	1	66	1	-	-	-	-	-	-	-	-	-	-	TWO WAY TRAFFIC SYMBOL
19+888	MAES AVE.	2	W06-3	1	70	1	-	-	-	-	-	-	-	-	-	-	TWO WAY TRAFFIC SYMBOL
19+955	MAES AVE., LT.	2	W06-3	1	70	1	-	-	-	-	-	-	-	-	-	-	TWO WAY TRAFFIC SYMBOL
19+972	MAES AVE.	1	W06-3	1	66	1	-	-	-	-	-	-	-	-	-	-	TWO WAY TRAFFIC SYMBOL
19+982 - 19+998	MAES AVE.	2	R11-2	1	70	-	-	-	5	350	1	700	-	-	-	-	ROAD CLOSED
20+027	MAES AVE., LT.	1	W01-4L	1	66	1	-	-	-	-	-	-	-	-	-	-	LEFT REVERSE CURVE SYMBOL
20+088	MAES AVE.	2	R11-2	1	70	-	-	-	3	210	6	420	-	-	-	-	ROAD CLOSED
20+130	MAES AVE., LT.	1,3	W020-1A	1	114	1	-	-	-	-	-	-	-	-	-	-	ROAD WORK AHEAD
EDWARDS ST.	MAES AVE., LT.	2	R11-2	2	140	-	-	-	2	140	4	280	-	-	-	-	ROAD CLOSED
	UNDISTRIBUTED	1,2	R5-7	6	816	-	-	-	6	816	-	-	-	-	-	-	SIDEWALK CLOSED
	UNDISTRIBUTED	3,4	R5-7	2	614	-	-	-	2	614	-	-	-	-	-	-	SIDEWALK CLOSED
TOTAL					13,662			26,596		5,491		8,122		13,512	66	66	

TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE

LOCATION	QUANTITY DAYS
GROUP CODE 050	
PROJECT 4676-03-71	683

TURBIDITY BARRIER

STATION	LOCATION	QUANTITY m2
GROUP CODE 040		
10+458	C.T.H. "N"	22
10+466	C.T.H. "N"	66
10+652	C.T.H. "N"	95
10+664	C.T.H. "N"	58
10+668	C.T.H. "N"	47
TOTAL		288

EROSION CONTROL ITEMS

STATION-STATION	LOCATION	SILT FENCE DELIVERED m	SILT FENCE INSTALLED m	SILT FENCE MAINTENANCE m	EROSION MAT CLASS1, TYPE B DELIVERED m2	EROSION MAT CLASS1, TYPE B INSTALLED m2	FILTER BAGS DELIVERED EACH	FILTER BAGS INSTALLED EACH	FILTER BAGS MAINTENANCE EACH
GROUP CODE 010									
10+383-10+422	C.T.H. "N" RT.	---	---	---	580	580	---	---	---
10+383-10+426	C.T.H. "N" LT.	---	---	---	410	410	---	---	---
10+680-10+702	C.T.H. "N" RT.	---	---	---	180	180	---	---	---
10+685-10+716	C.T.H. "N" LT.	---	---	---	135	135	---	---	---
SOUTH ABUTMENT	C.T.H. "N"	157	157	157	---	---	---	---	---
PIER NO. 1	C.T.H. "N"	41	41	41	---	---	---	---	---
NORTH ABUTMENT	C.T.H. "N"	178	178	178	---	---	---	---	---
UNDISTRIBUTED	INLETS	---	---	---	---	---	240	240	240
TOTALS		376	376	376	1,305	1,305	240	240	240

ALL QUANTITIES ARE GROUP 030

ELECTRIC WIRE #10

INTERSECTION	JUNCTION NUMBER FROM	TO	EQUIPMENT GROUNDING CONDUCTOR m	GROUNDED CONDUCTOR m
MAES AVE.	1	6	-	20
MAES AVE.	6	8	-	15
MAES AVE.	8	9	-	24
MAES AVE.	9	12	-	8
MAES AVE.	12	13	-	29
MAES AVE.	13	16	-	14
MAES AVE.	16	17	-	24
MAES AVE.	17	19	-	15
MAES AVE.	19	21	-	18
MAES AVE.	21	4	-	18
MAES AVE.	4	1	-	13
MAES AVE.	1	6	20	-
MAES AVE.	6	8	15	-
MAES AVE.	8	9	24	-
MAES AVE.	9	12	8	-
MAES AVE.	12	13	29	-
MAES AVE.	13	16	14	-
MAES AVE.	16	17	24	-
MAES AVE.	17	19	15	-
MAES AVE.	19	21	18	-
MAES AVE.	21	4	18	-
MAES AVE.	4	1	13	-
MAES AVE.	4	3	2	-
MAES AVE.	6	5	2	-
MAES AVE.	8	7	2	-
MAES AVE.	9	10	4	-
MAES AVE.	12	11	2	-
MAES AVE.	13	14	2	-
MAES AVE.	16	15	2	-
MAES AVE.	17	18	3	-
MAES AVE.	19	20	2	-
MAES AVE.	21	22	2	-
SUBTOTAL			221	198
* MAIN ST.	2	3A	-	27
* MAIN ST.	3A	4	-	12
* MAIN ST.	4	6	-	24
* MAIN ST.	6	10	-	26
* MAIN ST.	2	3A	27	-
* MAIN ST.	4	6	24	-
* MAIN ST.	3A	4	12	-
* MAIN ST.	6	10	26	-
* MAIN ST.	4	5	2	-
SUBTOTAL			91	89
TOTALS			312	287

*- NON-PARTICIPATING

CONCRETE BASES

STATION	JUNCTION NUMBER	LOCATION	OFFSET m	TYPE 1 EACH	TYPE 2 EACH
19+980.5	2	MAES AVE.	16.5 m LT.	1	-
19+989	4	MAES AVE.	12 m LT.	-	1
19+996.5	6	MAES AVE.	16 m LT.	1	-
20+021.5	9	MAES AVE.	16 m LT.	-	1
20+025	12	MAES AVE.	12 m LT.	1	-
20+013	13	MAES AVE.	9 m RT.	-	1
20+004	16	MAES AVE.	15 m RT.	1	-
19+026.5	17	MAES AVE.	15.5 m RT.	-	1
19+979	19	MAES AVE.	9 m RT.	1	-
19+979	21	MAES AVE.	4 m LT.	1	-
SUBTOTAL				6	4
*10+928.5		C.T.H. "N"	8 m RT.	-	1
SUBTOTAL	4			-	1
TOTALS				6	5

*- NON-PARTICIPATING

NON-METALLIC CONDUIT, SCHEDULE 40

INTERSECTION	JUNCTION NUMBER FROM	TO	25 mm m	50 mm m	75 mm m
MAES AVE.	1	2	2	2	-
MAES AVE.	1	1A	2	2	2
MAES AVE.	1	5	-	-	10
MAES AVE.	5	6	-	2	-
MAES AVE.	5	7	-	-	11
MAES AVE.	7	8	-	2	-
MAES AVE.	7	10	-	-	18
MAES AVE.	10	9	-	3	-
MAES AVE.	10	11	-	-	4
MAES AVE.	11	12	-	2	-
MAES AVE.	11	14	-	-	24
MAES AVE.	14	13	-	2	-
MAES AVE.	14	15	-	-	10
MAES AVE.	15	16	-	2	-
MAES AVE.	15	18	-	-	19
MAES AVE.	18	17	-	2	-
MAES AVE.	18	20	-	-	10
MAES AVE.	20	19	-	2	-
MAES AVE.	20	22	-	-	14
MAES AVE.	22	21	-	2	-
MAES AVE.	22	3	-	-	13
MAES AVE.	3	4	-	2	-
MAES AVE.	3	1	-	-	10
SUBTOTAL			4	23	145
* MAIN ST.	2	3A	-	-	10
* MAIN ST.	3A	5	-	-	11
* MAIN ST.	5	4	-	2	-
* MAIN ST.	5	6	-	-	20
* MAIN ST.	6	10	-	-	8
SUBTOTAL			-	2	49
TOTALS			4	25	194

*- NON-PARTICIPATING

PULL BOXES

STATION	JUNCTION NUMBER	LOCATION	OFFSET m	PULL BOX 600 mm x 900 mm EACH
19+980.5	1A	MAES AVE.	17 m LT.	1
19+988.5	3	MAES AVE.	12.5 m LT.	1
19+996	5	MAES AVE.	15 m LT.	1
20+007	7	MAES AVE.	15.5 m LT.	1
20+024.5	10	MAES AVE.	15.5 m LT.	1
20+024.5	11	MAES AVE.	12 m LT.	1
20+012	14	MAES AVE.	9 m RT.	1
20+004.5	15	MAES AVE.	15 m RT.	1
19+986	18	MAES AVE.	14 m RT.	1
19+977.5	20	MAES AVE.	9 m RT.	1
19+978.5	22	MAES AVE.	4 m LT.	1
SUBTOTAL				11
* 10+931	5	C.T.H. "N"	12.5 m RT.	1
SUBTOTAL				1
TOTALS				12

*- NON-PARTICIPATING

ELECTRIC SERVICE, METER BREAKER PEDESTAL

STATION	LOCATION	QUANTITY EACH
GROUP CODE 030		
19+979	MAES AVE., 17 m LT.	1

TRAFFIC SIGNAL FACES

INTERSECTION	HEAD NO.	SIGNAL FACES VERTICAL 4-300	SIGNAL FACES HORIZONTAL 4-300	SIGNAL FACES VERTICAL 5-300	BACKPLATES 4 SECTION EACH	BACKPLATES 5 SECTION EACH
MAES AVE.	6	-	-	1	-	1
MAES AVE.	10	-	1	-	1	-
MAES AVE.	11	1	-	-	1	-
MAES AVE.	12	1	-	-	1	-
MAES AVE.	13A	1	-	-	1	-
MAES AVE.	13	-	1	-	1	-
MAES AVE.	14	1	-	-	1	-
MAES AVE.	15	1	-	-	1	-
MAES AVE.	16	1	-	-	1	-
TOTAL		6	2	1	8	1

LOOP DETECTOR INSTALLATION

INTERSECTION	DETECTOR NUMBER	SIZE	LOOP DETECTOR CONDUIT m	LOOP DETECTOR WIRE m	LEAD-IN CABLE m	TURNS EACH
MAES AVE.	11	2x9	30	83	18	3
MAES AVE.	12	2x9	30	83	72	3
MAES AVE.	21	2x9	27	76	18	3
MAES AVE.	22	2x9	25	72	72	3
MAES AVE.	31	2x9	29	76	55	3
MAES AVE.	32	2x9	32	86	55	3
MAES AVE.	41	2x9	33	80	41	3
MAES AVE.	42	2x9	30	76	41	3
MAES AVE.	43	2x9	25	72	41	3
SUBTOTAL			261	704	413	
* MAIN ST.	11	2x9	28	78	40	3
* MAIN ST.	21	2x9	24	72	40	3
SUBTOTAL			52	150	80	
TOTALS			313	854	493	

*- NON-PARTICIPATING

TRAFFIC SIGNALS

INTERSECTION	JUNCTION NUMBER	PEDESTRAL BASE EACH	POLE STANDARD 4.6 m EACH	PEDESTRIAN PUSH BUTTONS EACH
MAES AVE.	2	-	-	1
MAES AVE.	4	-	-	1
MAES AVE.	9	-	-	1
MAES AVE.	12	1	1	1
MAES AVE.	13	-	-	1
MAES AVE.	16	-	-	1
MAES AVE.	17	-	-	1
MAES AVE.	19	-	-	1
TOTALS		1	1	8

TRAFFIC SIGNAL CONTROLLER, FULLY ACTUATED, 8-PHASE

STATION	LOCATION	QUANTITY EACH
GROUP CODE 030		
19+979	MAES AVE., 17 m LT.	1

TRAFFIC SIGNAL CABLE COLOR CODE (15 CONDUCTOR)
MAES AVENUE

COLOR	DIRECTION	REMARKS
BLACK	EAST/WEST	MAES AVE. LT. DON'T WALK
WHITE	EAST/WEST	MAES AVE. LT. WALK
RED	WEST	WESTBOUND RED
GREEN	WEST	WESTBOUND GREEN
ORANGE	WEST	WESTBOUND YELLOW
BLUE	WEST	WESTBOUND GREEN ARROW
WHITE W/BLACK TRACER	EAST/WEST	MAES AVE. RT. WALK
RED W/BLACK TRACER	EAST	EASTBOUND RED
GREEN W/BLACK TRACER	EAST	EASTBOUND GREEN
ORANGE W/BLACK TRACER	EAST	EASTBOUND YELLOW
BLUE W/BLACK TRACER	EAST	EASTBOUND GREEN ARROW
BLACK W/WHITE TRACER	EAST/WEST	MAES AVE. RT. DON'T WALK
RED W/WHITE TRACER	EAST/WEST	PPB FOR MAES AVE. LT.
GREEN W/WHITE TRACER	EAST/WEST	PPB FOR MAES AVE. RT.
BLUE W/WHITE TRACER	EAST/WEST	SPARE

TRAFFIC SIGNAL CABLE COLOR CODE (15 CONDUCTOR)
C.T.H. "N"

COLOR	DIRECTION	REMARKS
BLACK	NORTH/SOUTH	C.T.H. "N" DON'T WALK
WHITE	NORTH/SOUTH	SPARE
RED	NORTH/SOUTH	NORTHBOUND & SOUTHBOUND RED
GREEN	NORTH/SOUTH	NORTHBOUND & SOUTHBOUND GREEN
ORANGE	NORTH/SOUTH	NORTHBOUND & SOUTHBOUND YELLOW
BLUE	NORTH/SOUTH	SPARE
WHITE W/BLACK TRACER	NORTH/SOUTH	PPB FOR C.T.H. "N"
RED W/BLACK TRACER	NORTH/SOUTH	SPARE
GREEN W/BLACK TRACER	NORTH/SOUTH	SPARE
ORANGE W/BLACK TRACER	NORTH/SOUTH	SPARE
BLUE W/BLACK TRACER	NORTH/SOUTH	SPARE
BLACK W/WHITE TRACER	NORTH/SOUTH	C.T.H. "N" WALK
RED W/WHITE TRACER	NORTH/SOUTH	NORTHBOUND & SOUTHBOUND YELLOW ARROW
GREEN W/WHITE TRACER	NORTH/SOUTH	NORTHBOUND & SOUTHBOUND GREEN ARROW
BLUE W/WHITE TRACER	NORTH/SOUTH	SPARE

CONCRETE CONTROL CABINET BASE, TYPE 9

STATION	LOCATION	QUANTITY EACH
GROUP CODE 030		
19+979	MAES AVE., 17 m LT.	1

UTILITY CONDUIT ITEMS

LOCATION	UTILITY CONDUIT, 100 m	ANCHOR POINT HANGERS	INTERMEDIATE HANGERS
	m	EACH	EACH
GROUP CODE 060			
STRUCTURE B-44-187	1,755	6	86

TEMPORARY PAVEMENT MARKING

STATION-STATION	LOCATION	100 mm SOLID YELLOW PAINT CENTERLINE m	100 mm SOLID WHITE PAINT EDGELINE m	100 mm DASHED YELLOW PAINT LANELINE m	100 mm SOLID YELLOW CENTERLINE REMOVABLE TAPE m	100 mm SOLID YELLOW EDGELINE REMOVABLE TAPE m	100 mm SOLID WHITE EDGELINE REMOVABLE TAPE m	100 mm DASHEDSOLID YELLOW CENTERLINE REMOVABLE TAPE m
STAGE 1								
GROUP CODE 050								
10+040-10+085	C.T.H. "N"	---	---	---	---	45	---	---
10+086-10+116	C.T.H. "N"	---	---	21	---	---	---	---
10+117-10+384	C.T.H. "N" RT.	534	---	---	---	---	---	---
10+300-10+384	C.T.H. "N" RT.	---	84	---	---	---	---	---
10+702-10+815	C.T.H. "N" RT.	---	113	---	---	---	---	---
10+702-10+923	C.T.H. "N" RT.	442	---	---	---	---	---	---
10+838-10+923	C.T.H. "N" RT.	---	85	---	---	---	---	---
10+950-11+005	C.T.H. "N" LT.	---	---	---	---	55	---	---
19+803-19+858	MAES AVE. RT.	---	---	---	---	55	---	---
19+856-19+878	MAES AVE.	---	---	---	---	---	---	11
19+878-19+978	MAES AVE. RT.	200	---	---	---	---	---	---
19+878-19+978	MAES AVE. RT.	---	100	---	---	---	---	---
SUBTOTALS		1,176	382	21	---	155	---	11
STAGE 2								
GROUP CODE 050								
10+058-10+106	C.T.H. "N" LT.	---	---	---	96	---	66	---
10+115-10+928	C.T.H. "N" LT.	---	---	---	1,626	---	---	---
10+928-10+969	C.T.H. "N"	---	---	---	---	---	---	11
19+856-19+878	MAES AVE.	---	---	---	---	---	---	22
19+878-19+975	MAES AVE. LT.	---	---	---	194	---	---	---
SUBTOTALS		---	---	---	1,916	---	66	33
STAGE 3								
GROUP CODE 050								
10+240-10+385	C.T.H. "N"	---	---	---	---	48	135	---
10+713-10+760	C.T.H. "N"	---	---	---	---	43	56	---
SUBTOTALS		---	---	---	---	91	191	---
STAGE 4								
GROUP CODE 050								
10+719-10+803	C.T.H. "N"	---	---	---	168	---	---	---
SUBTOTAL		---	---	---	168	---	---	---
TOTALS		1,176	382	21	2,034	246	257	44

TRAFFIC SIGNAL CABLE NO. 14

INTERSECTION	JUNCTION NUMBER FROM	JUNCTION NUMBER TO	HEAD NO.	5 CONDUCTOR m	7 CONDUCTOR m	15 CONDUCTOR (C.T.H."N") m	15 CONDUCTOR (MAES AVE.) m	15 CONDUCTOR (MAIN ST.) m
GROUP CODE 030								
MAES AVE.	1	1A	---	---	---	2	2	---
MAES AVE.	1A	4	17	---	---	10	---	---
MAES AVE.	4	6	0,7	---	---	9	---	---
MAES AVE.	6	8	1,6	---	---	12	---	---
MAES AVE.	8	9	2,23	---	---	21	---	---
MAES AVE.	9	13	19	---	---	28	---	---
MAES AVE.	13	16	3,4	---	---	12	---	---
MAES AVE.	16	17	5,20	---	---	20	---	---
MAES AVE.	1A	4	10,22	---	---	---	10	---
MAES AVE.	4	21	11,15	---	---	---	15	---
MAES AVE.	21	19	16,21	---	---	---	15	---
MAES AVE.	19	13	13,14,24	---	---	---	39	---
MAES AVE.	13	12	12,13A,18	---	---	---	25	---
MAES AVE.	1	2	---	2	---	---	---	---
MAES AVE.	BASE	HEADS	---	34	76	---	---	---
* MAIN ST.	2	3A	---	---	---	---	---	27
* MAIN ST.	3A	4	---	---	---	---	---	12
* MAIN ST.	6	10	---	---	---	---	---	26
TOTALS				36	76	114	104	65

*- NON-PARTICIPATING

R/W PROJECT NUMBER 4676-03-00	SHEET NUMBER	TOTAL SHEETS
FEDERAL PROJECT NUMBER	4.0	5

PLAT OF RIGHT OF WAY REQUIRED FOR

MAES AVENUE-S.T.H. 96

(FOX RIVER BRIDGE AND APPROACHES)

C.T.H. "N" OUTAGAMIE COUNTY

4676-03-04 4.1

CONVENTIONAL SYMBOLS AND ABBREVIATIONS

STATE LINE
COUNTY LINE
TOWNSHIP & RANGE LINES
QUARTER LINE
SIXTEENTH LINE
SECTION LINE
NEW REFERENCE LINE (10, 15)
NEW R/W LINE
EXISTING R/W LINE
PROPERTY LINE (P.L.)
CORPORATE LIMITS

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

LIMITED EASEMENT
FENCE
BEAM GUARD

SECTION CORNER

CULVERT (BOX, PIPE OR CATTLE
LOT & TIE
SLOPE INTERCEPTS
UNDERGROUND UTILITIES (NAME)
IRON PIN/PIPE (OI.P.)
POWER POLE NON COMP.
TELEPHONE POLE NON COMP.
TELEPHONE PEDESTAL NON COMP. (TP)
POWER POLE COMP.
TELEPHONE POLE COMP.
TELEPHONE PEDESTAL COMP. (TP)
MONUMENTED R/W POINT

NOTATION FOR COMBUSTIBLE FLUIDS
BRIDGE
STREAM OR RIVER (NAME)
CHANNEL CHANGE
LAKE (NAME)
RAIL LINE
FOUNDATION OR RUINS (Fdn.)
BUILDING (Type)
SILO, MANHOLE, WELL, VENT, SEPTIC TANK, ETC.

A.P.	ACCESS POINT	L.C.B.	LONG CHORD BEARING
AC.	ACRES	M.H.	MANHOLE
A.H.	AHEAD	m	METERS
ALUM.	ALUMINUM	MON.	MONUMENT
ET.AL.	AND OTHERS	O.L.	OUTLOT
BK.	BACK	P.	PAGE
BIT.	BITUMINOUS	P.K.	PARKER-KALON
C.M.	CABLE MARKER	P.L.E.	PERMANENT LIMITED EASEMENT
℄	CENTERLINE	P.C.	POINT OF CURVATURE
C.T.H.	COUNTY TRUNK HIGHWAY	P.I.	POINT OF INTERSECTION
C.S.M.	CERTIFIED SURVEY MAP	P.T.	POINT OF TANGENCY
CONC.	CONCRETE	P.L.	PROPERTY LINE
COR.	CORNER	R	RADIUS
CULV.	CULVERT	R.R.	RAILROAD
d/b/a	DOING BUSINESS AS	R̶	REFERENCE LINE
E	ELECTRIC	R.D.E.	RESTRICTED DEVELOPMENT EASEMENT
FDN.	FOUNDATION	RT.	RIGHT
G.	GARAGE	R/W	RIGHT OF WAY
G.M.	GAS MARKER	SEC.	SECTION
G.P.	GAS PUMPS	S	SHED
H.	HOUSE	S.T.H.	STATE TRUNK HIGHWAY
ha	HECTARES	STA.	STATION
I.P.	IRON PIPE	T	TANGENT LENGTH OF CURVE
L.C.	LAND CONTRACT	TAV.	TAVERN
LT.	LEFT	T.L.E.	TEMPORARY LIMITED EASEMENT
L	LENGTH OF CURVE	X	EAST COORDINATE (GRID)
L.C.	LONG CHORD	Y	NORTH COORDINATE (GRID)

END RELOCATION ORDER PROJECT 4676-03-00

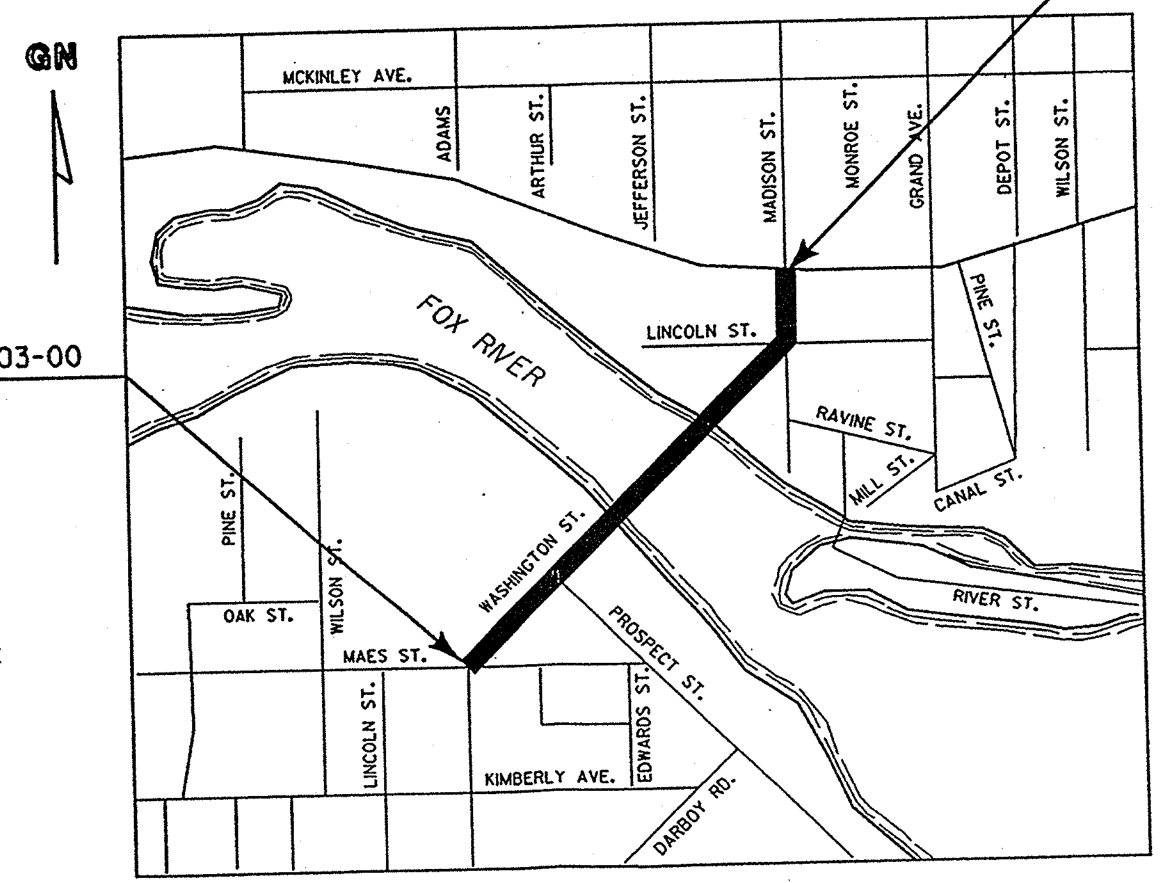
STA 10+936.655 C.T.H. "N"
Y 51 017.602
X 734 239.452
Y 167,380.248
X 2,408,917.266
LOCATED 61.143 m (200.60 FEET) NORTH AND 9.108 m (29.59 FEET) EAST OF THE SOUTHEAST CORNER OF LOT 7, BLOCK 35 OF THE 1986 AMENDMENT TO 1917 ASSESSORS PLAT OF THE VILLAGE OF LITTLE CHUTE, VILLAGE OF LITTLE CHUTE, OUTAGAMIE COUNTY, WISCONSIN.

BEGIN RELOCATION ORDER PROJECT 4676-03-00

STA 10+103.066 C.T.H. "N"
Y 50 348.660
X 733 778.104
Y 165,185.562
X 2,407,403.660
LOCATED 12.873 m (42.23 FEET) SOUTH AND 27.785 m (91.16 FEET) EAST OF THE SOUTHEAST CORNER OF LOT 1 OF CERTIFIED SURVEY MAP 791, RECORDED IN VOLUME 4 OF CERTIFIED SURVEY MAPS, PAGE 791, BEING A PART OF LOTS 7 AND 8 OF HEWITT'S SUBDIVISION IN GOVERNMENT LOTS 4 THROUGH 7, SECTION 26, TOWNSHIP 21 NORTH, RANGE 18 EAST, VILLAGE OF KIMBERLY, OUTAGAMIE COUNTY, WISCONSIN.

R 18 E

T 21 N



LAYOUT
0 0.2 km
SCALE

TOTAL NET LENGTH OF RELOCATION ORDER = 0.834 km (0.518 MILES)

NOTES

COORDINATES AND BEARINGS ON THIS PLAT ARE ORIENTED TO THE WISCONSIN COORDINATE SYSTEM CENTRAL ZONE. ALL PLAT DISTANCES ARE GROUND LENGTH.

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.

PREPARED BY
AYRES ASSOCIATES
Engineers/Architects
Scientists/Surveyors
916 Willard Drive, Suite 200
Green Bay, Wisconsin 54304

WISCONSIN JEFFREY KIP NIXON S-1676 GREEN BAY WIS. LAND SURVEYOR

DATE: MAY 1, 1998

REVISION DATE	APPROVED FOR OUTAGAMIE COUNTY
	4-29-98 DATE — COUNTY HIGHWAY COMMISSIONER

WISDOT: MS 45

PEN TABLE = tplot72±laser±mv80pp.tbl
DATE OF PLOT = 05/01/98
PLOT NA
DESIGN FILE IS I:\440261\DGN\rwtlk.gh

FILE NAME:
SCALE:
DATE:
PLOT NAME:
ORIGINATOR:
PROJECT NO:
FILE NAME:

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 AREA	NEW	R/W AREA REQUIRED OR EXISTING	TOTAL	TOTAL AREA REMAINING	T.L.E. AREA	HIGHWAY EASEMENT AREA
1	4.2	SHOPKO STORES, INC.	FEE	28,823 SQ. m 310,252 SQ. FT.	3 SQ. m 32 SQ. FT.	---- ----	3 SQ. m 32 SQ. FT.	28,820 SQ. m 310,220 SQ. FT.	---- ----	---- ----
2	4.2,4.3	VILLAGE OF KIMBERLY	FEE AND T.L.E.	15,882 SQ. m 170,955 SQ. FT.	2,079 SQ. m 22,378 SQ. FT.	---- ----	2,079 SQ. m 22,378 SQ. FT.	13,803 SQ. m 148,577 SQ. FT.	98 SQ. m 1,055 SQ. FT.	---- ----
3	4.2,4.3	KIMBERLY ASSOCIATES LIMITED PARTNERSHIP	FEE AND T.L.E.	27,061 SQ. m 291,283 SQ. FT.	461 SQ. m 4,962 SQ. FT.	---- ----	461 SQ. m 4,962 SQ. FT.	26,600 SQ. m 286,321 SQ. FT.	634 SQ. m 6,824 SQ. FT.	---- ----
4	4.3	REPAP U.S.A., INC.	FEE	51,674 SQ. m 556,217 SQ. FT.	121 SQ. m 1,302 SQ. FT.	---- ----	121 SQ. m 1,302 SQ. FT.	51,553 SQ. m 554,915 SQ. FT.	---- ----	---- ----
5	4.3	GERALD H. VAN HOOF	FEE	466 SQ. m 5,021 SQ. FT.	113 SQ. m 1,216 SQ. FT.	---- ----	113 SQ. m 1,216 SQ. FT.	353 SQ. m 3,805 SQ. FT.	---- ----	---- ----
6	4.3	JILL M. TOUSEY	FEE	1,219 SQ. m 13,121 SQ. FT.	52 SQ. m 560 SQ. FT.	---- ----	52 SQ. m 560 SQ. FT.	1,167 SQ. m 12,561 SQ. FT	---- ----	---- ----
7	4.3,4.4	ARLINE LAMERS	FEE AND T.L.E.	1,101 SQ. m 11,851 SQ. FT.	23 SQ. m 248 SQ. FT.	---- ----	23 SQ. m 248 SQ. FT.	1,078 SQ. m 11,603 SQ. FT.	15 SQ. m 172 SQ. FT.	---- ----
8	4.4	SCOTT R. AND CARI L. BARRIBEAU	FEE AND T.L.E.	841 SQ. m 9,052 SQ. FT.	6 SQ. m 65 SQ. FT.	---- ----	6 SQ. m 65 SQ. FT.	835 SQ. m 8,987 SQ. FT.	68 SQ. m 732 SQ. FT.	---- ----
9										
10	4.4	JEFFREY W. VAN DYN HOVEN	FEE AND T.L.E.	833 SQ. m 8,966 SQ. FT.	35 SQ. m 377 SQ. FT.	---- ----	35 SQ. m 377 SQ. FT.	798 SQ. m 8,589 SQ. FT.	113 SQ. m 1216 SQ. FT.	---- ----
11	4.4	PETROLEUM REAL COMPANY INC.	T.L.E.	---- ----	---- ----	---- ----	---- ----	---- ----	112 SQ. m 1,206 SQ. FT.	---- ----
12	4.4	DAVID F. SEIDL	T.L.E.	---- ----	---- ----	---- ----	---- ----	---- ----	171 SQ. m 1,840 SQ. FT.	---- ----
13	4.4	GERALD C. VAN DYN HOVEN	T.L.E.	---- ----	---- ----	---- ----	---- ----	---- ----	150 SQ. m 1,615 SQ. FT.	---- ----
14	4.3	WISCONSIN ELECTRIC POWER COMPANY	RELEASE	---- ----	---- ----	---- ----	---- ----	---- ----	---- ----	---- ----
15	4.2,4.3	WISCONSIN GAS COMPANY	RELEASE	---- ----	---- ----	---- ----	---- ----	---- ----	---- ----	---- ----
16										
17	4.3	AMERITECH	RELEASE	---- ----	---- ----	---- ----	---- ----	---- ----	---- ----	---- ----
18	4.3	VILLAGE OF LITTLE CHUTE	RELEASE	---- ----	---- ----	---- ----	---- ----	---- ----	---- ----	---- ----
19	4.3	FOX VALLEY AND WESTERN LIMITED	HIGHWAY EASEMENT	---- ----	---- ----	---- ----	---- ----	---- ----	---- ----	187 SQ. m 2,012 SQ. FT.

REVISION DATE	DATE	HWY: C.T.H. "N"	FEDERAL PROJECT NO: 4676-03-71	4.2
06-01-1998 10-23-1998	04-29-1998	COUNTY: OUTAGAMIE	STATE R/W PROJECT NO: 4676-03-00	SHEET NO: 4.1

ORIGINATOR:
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
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FILE NAME:

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DATE OF PLOT = 10/23/98
PLOT NA
DESIGN FILE IS I:\440261\DGN\rw1.dgn

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*LEV09
*LEV06
*REF12
*REF09
*REF06
*REF03

*LEV11
*LEV08
*LEV05
*REF11
*REF08
*REF05
*REF02

*LEV10
*LEV07
*LEV04
*REF10
*REF07
*REF04
*REF01

ORIGINATOR:
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:

VILLAGE

GOVERNMENT LOT 7 26-21-18

GOVERNMENT LOT 6 26-21-18

GOVERNMENT LOT 5 26-21-18

GOVERNMENT LOT 4 26-21-18

C.T.H. "N" R/W ℄ CURVE DATA

P.I. 10+119.739
Y 50 365.604
X 733 774.030
△ = 41°52'21"
T = 47.824 m (156.90')
L = 91.352 m (299.71')
E = 8.836 m (28.99')
R = 125.000 m (410.10')
P.C. 10+071.916
P.T. 10+163.268
L.C. =89.332 m (293.08')
L.C.B. =N20°13'08"E

REPAP U.S.A., INC.

CURVE DATA

P.I. 10+360.100
Y 50 554.912
X 733 928.838
△ = 3°39'00"
T = 47.796 m (156.81')
L = 95.560 m (313.52')
E = 0.761 m (2.50')
R = 1 500.000 m (4,921.25')
P.C. 10+312.304
P.T. 10+407.864
L.C. =95.544 m (313.46')
L.C.B. =N39°16'39"E

C.T.H. "N" R/W ℄ CURVE DATA

P.I. 10+235.873
Y 50 456.273
X 733 853.280
△ = 3°42'10"
T = 48.487 m (159.08')
L = 96.924 m (317.99')
E = 0.783 m (2.57')
R = 1 500.000 m (4,921.25)
P.C. 10+187.386
P.T. 10+284.326
L.C. =96.923 m (317.99')
L.C.B. =N39°18'14"E

MAES AVENUE R/W ℄

SHOPKO STORES, INC.
(1)
LOT 1 C.S.M. 791
V.4 OF C.S.M. P.791

KIMBERLY ASSOCIATES LIMITED PARTNERSHIP
(3)
LOT 2 C.S.M. 791
V.4 OF C.S.M. P.791

VILLAGE OF KIMBERLY
(2)

WATERMAIN EASEMENT 15' WIDE

GUY WIRE EASEMENT WISCONSIN ELECTRIC POWER COMPANY

WATERMAIN EASEMENT VILLAGE OF KIMBERLY

T.I. (T.L.E.) REQUIRED FOR C.E. CONSTRUCTION

T.I. (T.L.E.) REQUIRED FOR SLOPING

SLOPE INTERCEPTS

LOT 8 HEWITT'S SUBDIVISION
LOT 7 HEWITT'S SUBDIVISION

MALL AREA

BUILDING

P.I. 19+868.801
P.I. 19+882.167
19+880
19+920
19+960
2,700 m (8.86')
R BEARING N88°11'52"E
R BEARING N89°29'45"E
EXISTING R/W

LINCOLN STREET
WASHINGTON STREET
ALLEY
MAES AVENUE
ADAMS PLACE
PROSPECT STREET

10+000
10+040
10+080
10+120
10+160
10+200
10+240
10+280
10+320

STA. 10+103.066 C.T.H. "N" =
STA. 20+000.000 MAES AVENUE

R BEARING N00°43'02"W
R BEARING S89°21'07"E
R BEARING N88°07'41"E

P.C.=10+071.916
P.I.20+056.676
P.I.20+093.684
P.C.=10+187.386
P.T.=10+284.326
P.I.=10+284.326

N65°23'32"E 4.923 m (16.15')
N41°07'19"E 2.700 m (8.86')
N41°07'19"E 88.745 m (291.16')
N41°07'19"E 5.697 m (18.69')
N40°36'58"E 14.755 m (48.41')
N49°05'50"W 4.713 m (15.46')
S49°40'13"E 4.843 m (15.89')
N41°07'19"E 48.690 m (159.74')
N48°52'41"W 4.573 m (15.00')
N41°07'19"E 14.803 m (48.57')
N48°37'04"E 23.462 m (76.97')
S52°23'36"E 13.861 m (45.48')
N41°07'19"E 24.525 m (80.46')
N48°52'41"W 30.480 m (100.00')
N41°07'19"E 87.281 m (286.35')
N37°32'43"E 5.664 m (18.58')
N37°12'52"E 119.334 m (391.51')
N37°27'09"E 27.978 m (91.79')
N41°07'19"E 24.445 m (80.20')
N41°52'50"W 3.704 m (12.15')
N23°11'32"E 30.683 m (100.67')

L=13.000 m (42.65')
LC=12.992 m (42.62')
LCB=N22°38'12"E
R=109.501 m (359.25')

L=28.828 m (94.58')
LC=28.745 m (94.31')
LCB=N33°34'48"E
R=109.501 m (359.25')

L=1.803 m (5.92')
LC=1.803 m (5.92')
LCB=N37°34'48"E
R=1488.750 (4884.34')

L=62.784 m (205.98')
LC=62.774 m (205.95')
LCB=N39°19'26"E
R=1011.250 m (3317.74')

L=95.560 m (313.52')
LC=95.544 m (313.46')
LCB=N39°16'39"E
R=1500.000 m (4921.25')

L=2.725 m (8.94')
LC=2.725 m (8.94')
LCB=N37°30'17"E
R=1500.000 m (4921.25')

SIGN
SIGNAL
HOUSE
GARAGE
MTP
RET. WALL
POST
LP.
EXISTING R/W
CAPITAL CREDIT UNION
GUY POLE
WISCONSIN GAS COMPANY (15)
C.T.H. "N" R/W ℄
C.T.H. "N" 10+320
KIMBERLY

REVISION DATE 06-01-1998	DATE 04-29-1998	SCALE, METERS 0 25 50	HWY: C.T.H. "N"	FEDERAL PROJECT NO: 4676-03-71	4.3
	GRID FACTOR 0.999940		COUNTY: OUTAGAMIE	STATE R/W PROJECT NO: 4676-03-00	SHEET NO: 4.2

PLOT NA
DESIGN FILE IS I:\440261\DGN\rw2.dgn

VILLAGE OF KIMBERLY

GOVERNMENT LOT 5 26-21-18

LOT 7 OF HEWITT'S SUBDIVISION

GOVERNMENT LOT 4 26-21-18

BUILDING

REPAP U.S.A., INC. (4)

V.7 OF C.S.M. P.1278
LOT 2 C.S.M. 1278

KIMBERLY ASSOCIATES LIMITED PARTNERSHIP (3)

EASEMENT-12' WIDE
WISCONSIN ELECTRIC POWER COMPANY (14)
AND AMERITECH (17)
JACKET 10741, IMAGE 43-47

T.L. (T.L.E.) REQUIRED FOR SLOPING

VILLAGE OF KIMBERLY (2)

RAILROAD TRACK RIGHT-OF WAY EASEMENT
FOX VALLEY AND WESTERN LIMITED
JACKET 13005 IMAGE 06

FOX RIVER

GN

18 SANITARY SEWER EASEMEINT-20' WIDE
VILLAGE OF LITTLE CHUTE
VOLUME 393 PAGE 613

15 EASEMENT-10' WIDE
WISCONSIN GAS COMPANY
VOLUME 478 PAGE 445
VOLUME 545 PAGE 296

100 SQ. m (1,076 S.F.) HIGHWAY EASEMENT

RAILROAD TRACK RIGHT-OF WAY EASEMENT (19)
FOX VALLEY AND WESTERN LIMITED
JACKET 13005 IMAGE 09

87 SQ. m (936 S.F.) HIGHWAY EASEMENT

VILLAGE OF KIMBERLY (2)

CAPITAL CREDIT UNION EASEMENT (17)
AMERITECH OF WISCONSIN
JACKET 17213, IMAGE 52
JACKET 17287, IMAGE 25

KIMBERLY

VILLAGE GOVERNMENT LOT 3 26-21-18 OF COMBINED LOCKS

VILLAGE OF LITTLE CHUTE

LOT 1 C.S.M. 2594

BLOCK 36

JAMES W. AND JEAN M. HIETPAS (5)
LOT 2 C.S.M. 2594

MICHAEL J. AND LAURIE A. JANSEN

JILL M. TOUSEY (6)

GERALD H. VAN HOOF (5)

STONE HEADWALL

SHARON J. AND JOHN H. JOHANNES

HOUSE
JEROME R. AND PATRICIA I. DIEDRICK

BLOCK 38

BLOCK 32

MADISON STREET

LITTLE CHUTE

C.T.H. "N" R/W ℄

C.T.H. "N" WASHINGTOIN STREET

℄ BEARING N41°06'09"E

SLOPE INTERCEPTS

EXISTING R/W

C.T.H. "N" CURVE DATA

P.I. 10+360.100
Y 50 554.912
X 733 928.838
Δ = 3°39'00"
T = 47.796 m (156.81')
L = 95.560 m (313.52')
E = 0.761 m (2.50')
R = 1 500.000 m (4,921.25')
P.C. 10+312.304
P.T. 10+407.864
L.C.=95.544 m (313.46')
L.C.B.=N39°16'39"E

REVISION DATE 06-01-1998 10-23-1998	DATE 04-29-1998	SCALE, METERS 0 25 50	HWY: C.T.H. "N"	FEDERAL PROJECT NO: 4676-03-71	44
ORIGINATOR: 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	GRID FACTOR 0.99994		COUNTY: OUTAGAMIE	STATE R/W PROJECT NO: 4676-03-00	SHEET NO: 4.3 M

FILE NAME:

WisDOT: MSP 48

PEN TABLE = ±plot72±laser±mv80dp.tbl
DATE OF PLOT = 10/23/98
PLOT NA .
DESIGN FILE IS I:\440261\DGN\rw3.dgn

*LEV12 *LEV09 *LEV06 *LEV03 *REF12 *REF09 *REF06 *REF03 *LEV11 *LEV08 *LEV05 *REF11 *REF08 *REF05 *LEV10 *LEV07 *LEV04 *REF10 *REF07 *REF04 *REF01

ORIGINATOR: 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:

VILLAGE

MAIN STREET

MADISON STREET

MONROE STREET

MAIN STREET

GRAND AVENUE

LINCOLN AVENUE

LINCOLN AVENUE

MADISON STREET

WASHINGTON STREET

BLOCK 36

BLOCK 37

BLOCK 27

BLOCK 28

1986 AMENDMENT TO THE 1917 ASSESSOR'S PLAT OF VILLAGE OF LITTLE CHUTE

1986 AMENDMENT TO THE 1917 ASSESSOR'S PLAT OF LITTLE CHUTE

PETROLEUM REAL COMPANY, INC. (11)

(10) JEFFREY W. VAN DYN HOVEN

JAMES W. AND JEAN M. HIETPAS
LOT 2 CSM 2594

MICHAEL J. AND LAURIE A. JANSEN

JILL M. TOUSEY (6)

ARLINE LAMERS (7)

SCOTT R. AND CARLA BARRIBEAU (8)

DOMINOS PIZZA

GERALD G. VAN DYN HOVEN (13)

DAVID F. SEIDL (12)

EILEEN GREGORIUS

MICHAEL M. VANDENBERG, ET.AL.

DAVID M. GOEHRING

SHARON J. AND JOHN H. JOHANNES

OUTAGAMIE COUNTY DOCUMENT NO. 1247533

EXPRESS GAS STATION

END RELOCATION ORDER
STA. 10+936.655

STA. 10+936.655 C.T.H. "N" =
STA. 30+000.000 MAIN STREET

C.T.H. "N" R/W ℄

11+000 C.T.H. "N"

10+960

10+920

10+880

10+840

10+800

10+760

10+720

R BEARING N89°10'48"E

R BEARING N89°14'18"E

R BEARING N89°43'52"E

R BEARING N00°00'50"W 76.631 m (251.41')

R BEARING N41°06'09"E 64.558 m (211.80')

R BEARING N41°06'09"E

EXISTING R/W

N89°10'48"E 23.023 m (75.53')

N89°02'47"E 18.288 m (60.00')

N89°43'52"E 28.786 m (94.44')

N00°36'08"W 11.794 m (38.69')

N00°00'40"E 24.023 m (78.82')

N89°02'47"E 13.977 m (45.86')

N41°06'09"E 39.103 m (128.29') BUILDING

N00°47'39"E 4.343 m (14.25')

N00°47'39"W 22.253 m (73.01')

N41°06'09"E 35.509 m (116.50')

N41°06'09"E 12.616 m (41.39')

N89°14'18"E 15.053 m (49.38')

N00°45'32"W 9.470 m (31.07')

N89°14'18"E 5.918 m (19.42')

N41°06'09"E 18.055 m (59.24')

N48°53'51"W 11.100 m (36.42')

N45°50'09"E 18.117 m (59.44')

N50°20'38"W 6.757 m (22.17')

N00°45'42"W 9.157 m (30.04')

N00°49'12"W 11.108 m (36.44')

L=18.543 m (60.84')
LC=15.662 m (54.67')
LCB=N45°25'01"W
R=11.700 m (38.39')

L=21.478 m (70.47')
LC=21.396 m (70.20')
LCB=N11°00'00"E
R=71.050 m (233.10')

L=21.925 m (71.93')
LC=19.767 m (64.85')
LCB=N44°41'31"E
R=14.050 m (46.10')

L=21.402 m (70.22')
LC=21.357 m (70.07')
LCB=N06°26'24"E
R=95.000 m (311.68')

L=21.149 m (69.39')
LC=21.088 m (69.19')
LCB=N33°31'44"E
R=80.000 m (262.47')

CURVE DATA

P.I. 10+832.617
Y 50 910.973
X 734 239.478
△ = 41°06'59"
T = 30.004 m (98.44')
L = 57.409 m (188.35')
E = 5.441 m (17.85')
R = 80.000 m (262.47')
P.C. 10+802.614
P.T. 10+860.023
L.C.=56.186 m (184.36')
L.C.B.=N39°16'39"E

LITTLE CHUTE

REVISION DATE RD-RWSCHED	DATE 04-29-1998 GRID FACTOR 0.99994	SCALE, METERS 0 25 50	HWY: C.T.H. "N" COUNTY: OUTAGAMIE	FEDERAL PROJECT NO: 4676-03-71 STATE R/W PROJECT NO: 4676-03-00	4.5 SHEET NO: 4.4 M

WisDOT: MS-49

BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
1	10+079	TOP OF S.W. FLANGE BOLT W/BURY TAG ON F.H. - 7.1m LT.	222.596

KIMBERLY ASSOCIATED LIMITED PARTNERSHIP

T.I. (T.L.E.) REQUIRED FOR C.E. CONSTRUCTION

C. VANBOXTEL

DONALD VANDENHEUVEL

WALL FAMILY

EDMUND KEMPEN

DANIEL MEACHAM

HAROLD WINIUS

BEGIN PROJECT
STA. 10+057.923

STA. 10+102.802 C.T.H. "N" SBND. CONST. ℄ =
STA. 19+997.730 MAES AVENUE

STA. 10+103.066 C.T.H. "N" R/W ℄ =
STA. 20+000.000 MAES AVENUE

STA. 10+102.934 C.T.H. "N" NBND. CONST. ℄ =
STA. 20+002.808 MAES AVENUE

VILLAGE OF KIMBERLY

C.T.H. "N" SBND. CONSTRUCTION ℄

C.T.H. "N" NBND. CONSTRUCTION ℄

C.T.H. "N" R/W ℄

(REMOVE AND SALVAGE OVERHEAD SIGN)

GAS LINE (APPROXIMATE LOCATION)

CAUTION

TYPE 1 CURB RAMP REQ'D.

TYPE 2 CURB RAMP REQ'D.

TYPE 3 CURB RAMP REQ'D.

TYPE 1A CURB RAMP REQ'D.

100 mm CONCRETE SIDEWALK REQ'D.

100 mm CONCRETE SIDEWALK REQUIRED

SAW CUT REQUIRED

REVERSE SLOPE CURB AND GUTTER REQ'D.

100 mm CONCRETE ISLAND REQ'D.

CONCRETE CURB AND GUTTER, 750 mm TYPE "A" REQ'D.

CONCRETE CURB AND GUTTER, 450 mm TYPE "A" REQ'D.

REVERSE SLOPE GUTTER ON NORTHBOUND MEDIAN CURB STA. 10+122 TO STA. 10+210

100 mm C.S.W. REQ'D.

T.I. (T.L.E.) REQUIRED FOR SLOPING

EXISTING R/W

P.I. STA. 10+057.923 SBND. CONST. ℄ 222.336

P.I. STA. 10+057.923 NBND. CONST. ℄ 222.339

P.I. STA. 10+080.000 NBND. CONST. ℄ 221.968

P.C. STA. 10+100.000 SBND. CONST. ℄ 221.807

P.C. STA. 10+105.000 NBND. CONST. ℄ 221.854

P.I. STA. 10+140.000 SBND. CONST. ℄ 221.275

P.I. STA. 10+140.000 NBND. CONST. ℄ 221.215

P.T. STA. 10+175.000 NBND. CONST. ℄ 221.673

P.T. STA. 10+180.000 SBND. CONST. ℄ 221.861

P.I. STA. 10+200.000 NBND. CONST. ℄ 222.000

-1.330% SBND. CONST. ℄

-1.532% NBND. CONST. ℄

-1.295% NBND. CONST. ℄

+1.465% SBND. CONST. ℄

+1.308% NBND. CONST. ℄

80 m V.C. SBND. CONST. ℄

70 m V.C. NBND. CONST. ℄

FINISHED GRADE SBND. CONST. ℄

FINISHED GRADE NBND. CONST. ℄

PRESENT PROFILE

SBND. CONST. ℄ FINISHED GRADES

NBND. CONST. ℄ FINISHED GRADES

10+020	10+030	10+040	10+050	10+060	10+070	10+080	10+090	10+100	10+110	10+120	10+130	10+140	10+150	10+160	10+170	10+180	10+190	10+200
				222.274		221.968		221.717		221.507		221.439		221.518		221.738		222.000

PLAN AND PROFILE | SCALE, METERS 0 12.5 25 | HWY: C.T.H. "N" | COUNTY: OUTAGAMIE | STATE PROJECT NO: 4676-03-71 | SHEET NO: 5.1 | M

WisDOT: MSH42

50

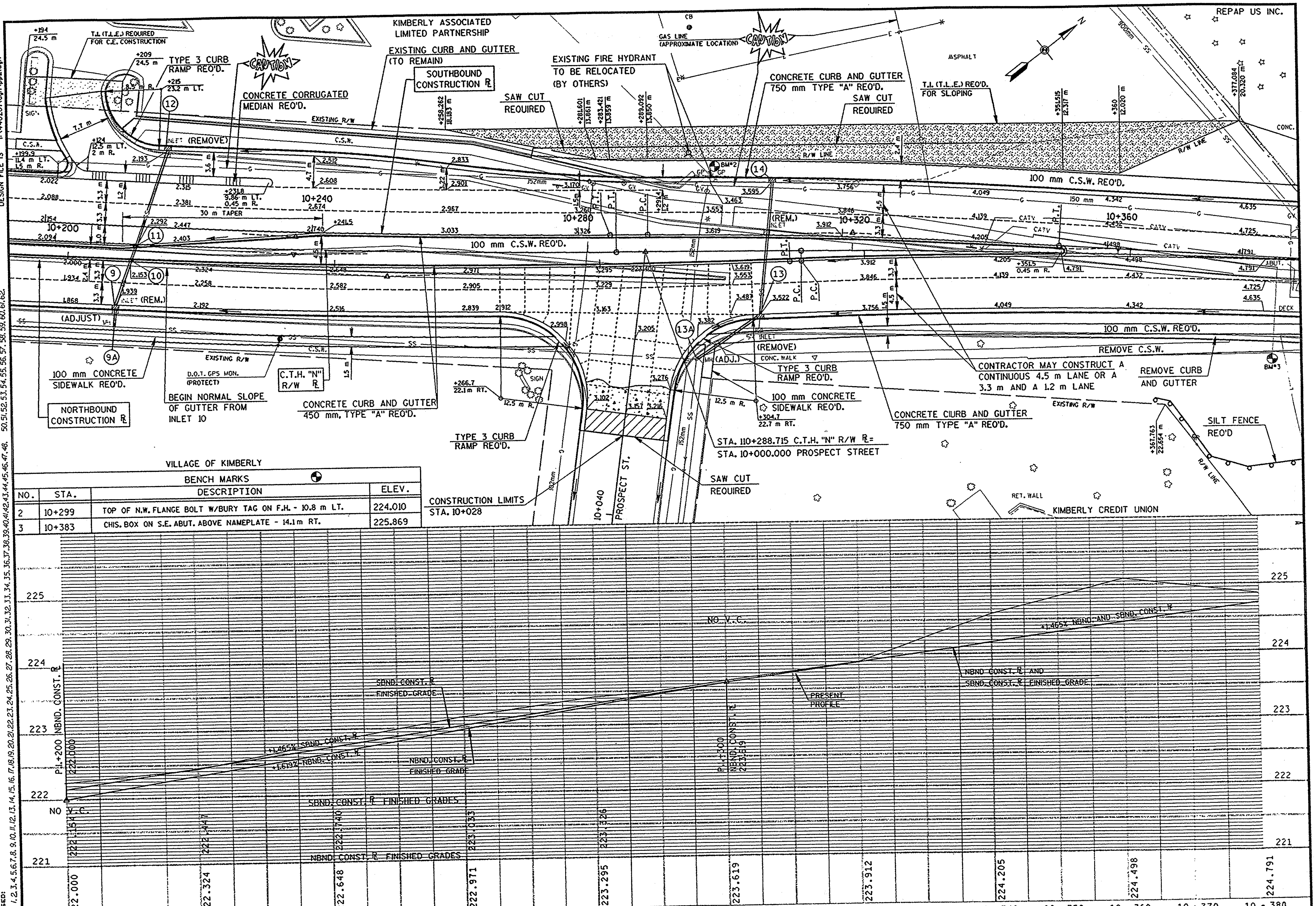
DGN: OB2
PEN TABLE = ±plot72closer+mv80pp.tbl
DATE OF PLOT = 04/06/99
PLOT NA
DESIGN FILE IS I:\440261\dgn\pp1.dgn

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. 50.51.52.53.54.55.56.57.58.59.60.61.62.

ORIGINATOR: DJD
PROJECT NO. 4402610.00
REVISED BY: DJD
DATE REVISED: 01/02/98

DATE: 12/16/97
FILE NAME:

PLOT NAME:
SCALE:


KIMBERLY ASSOCIATED LIMITED PARTNERSHIP
REPAP US INC.
T.L. (T.L.E.) REQUIRED FOR C.E. CONSTRUCTION
TYPE 3 CURB RAMP REQ'D.
CONCRETE CORRUGATED MEDIAN REQ'D.
EXISTING CURB AND GUTTER (TO REMAIN)
SOUTHBOUND CONSTRUCTION ℞
EXISTING FIRE HYDRANT TO BE RELOCATED (BY OTHERS)
SAW CUT REQUIRED
GAS LINE (APPROXIMATE LOCATION)
CAUTION
CONCRETE CURB AND GUTTER 750 mm TYPE "A" REQ'D.
T.L. (T.L.E.) REQ'D. FOR SLOPING
100 mm C.S.W. REQ'D.
INLET (REMOVE)
10+200
10+240
10+280
10+320
10+360
30 m TAPER
100 mm CONCRETE SIDEWALK REQ'D.
D.O.T. GPS MON. (PROTECT)
C.T.H. "N" R/W ℞
BEGIN NORMAL SLOPE OF GUTTER FROM INLET 10
CONCRETE CURB AND GUTTER 450 mm, TYPE "A" REQ'D.
NORTHBOUND CONSTRUCTION ℞
TYPE 3 CURB RAMP REQ'D.
CONSTRUCTION LIMITS STA. 10+028
PROSPECT ST.
STA. 110+288.715 C.T.H. "N" R/W ℞= STA. 10+000.000 PROSPECT STREET
REMOVE C.S.W.
CONTRACTOR MAY CONSTRUCT A CONTINUOUS 4.5 m LANE OR A 3.3 m AND A 1.2 m LANE
REMOVE CURB AND GUTTER
CONCRETE CURB AND GUTTER 750 mm TYPE "A" REQ'D.
SILT FENCE REQ'D
KIMBERLY CREDIT UNION
RET. WALL
VILLAGE OF KIMBERLY
NO V.C.
+1.465% NBND. AND SBND. CONST. ℞
NBND. CONST. ℞ AND SBND. CONST. ℞ FINISHED GRADE
PRESENT PROFILE
SBND. CONST. ℞ FINISHED GRADE
+1.465% SBND. CONST. ℞
+1.619% NBND. CONST. ℞
NBND. CONST. ℞ FINISHED GRADE
SBND. CONST. ℞ FINISHED GRADES
NBND. CONST. ℞ FINISHED GRADES
P.I. 10+200 NBND. CONST. ℞ 222.000
P.I. 10+300 NBND. CONST. ℞ 223.619

BENCH MARKS

NO.	STA.	DESCRIPTION	ELEV.
2	10+299	TOP OF N.W. FLANGE BOLT W/BURY TAG ON F.H. - 10.8 m LT.	224.010
3	10+383	CHIS. BOX ON S.E. ABUT. ABOVE NAMEPLATE - 14.1 m RT.	225.869

GB2
PEN TABLE = splot72sloaerzmv80pp.tbl
DATE OF PLOT = 02/24/99
PLOT NA
DESIGN FILE IS i:\44026l\dgn\pp2.dgn

ORIGINATOR: DJD
PROJECT NO. 44026L00
REVISED BY:
DATE REVISED:
DATE: 12/16/97
FILE NAME:
PLOT NAME:
SCALE:

PLAN AND PROFILE | SCALE, METERS 0 12.5 25 | HWY: C.T.H. "N" | COUNTY: OUTAGAMIE | STATE PROJECT NO: 4676-03-71 | SHEET NO: 5.2 | M

WISDOT: MSHT42

51

BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
10	10+431	CHIS. "X" ON MANHOLE RIM - 0.9 m LT.	215.084

REPAP USA INC.

EQUATION
STA. 10+409.411 SBND. CONST. ℄ BK.=
STA. 10+407.864 C.T.H. "N" R/W ℄
AND CONST. ℄ AH.

CAUTION
FENCE REMOVAL (BY OTHERS)
SILT FENCE REQ'D.
EROSION MAT CLASS I, TYPE "B" REQ'D
VILLAGE OF KIMBERLY
P.L.
R/W LINE
KAUKAUNA ELECTRIC
WOODS
SILT FENCE REQ'D. CABC
STRUCTURE B-44-187
TURBIDITY BARRIER FOR RIPRAP CONSTRUCTION REQ'D.
C.T.H. "N" R/W ℄
+377.084 20.320 m
+389.800 16.750 m
+402.084 20.005 m
+450.726 20.000 m
CONC.
GAS VENTS
900mm SS
MH (RECON.)
GV
CATV
(RECON.)
10+400
10+440
10+480
10+520
10+560
4.928
5.018
5.084
HAND RAIL
ABUT.
DECK
(REM.)
CONC. STEPS
150mm W
380mm RCCP
BM#10
PIERS
152mm
2.4 m
8.3 m
8.5 m
4.5 m
3.3 m
4.3 m
BM#3
PIPE RAILING REQ'D. (TYP.)
CONCRETE PAVEMENT APPROACH SLAB REQ'D.
CONCRETE CURB AND GUTTER 750 mm, TYPE "A" REQ'D.
100 mm CONCRETE SIDEWALK, REQ'D.
SLOPE PAVING REQ'D. (CRUSHED AGGREGATE)
HEAVY RIPRAP REQUIRED.
TURBIDITY BARRIER FOR PIER REMOVAL REQ'D.
REMOVE EXISTING STRUCTURE B-44-5
EXISTING R/W
+432.784 23.204 m
300mm RCCP
FOX RIVER

EQUATION
STA. 10+406.011 NBND. CONST. ℄ BK.=
STA. 10+407.864 C.T.H. "N" R/W ℄
AND CONST. ℄ AH.

EROSION MAT CLASS I, TYPE "B" REQ'D

P.I. 1+425
225.459
FINISHED GRADE
+1.465%
50 m V.C.
P.C. 1+400
223.095
P.I. 1+450
225.537
-0.532%
PRESENT PROFILE
SLOPE PAVING REQ'D. (CRUSHED AGGREGATE)

STA. 10+543
REMOVE EXISTING STRUCTURE B-44-5
EIGHT SPAN 318.50 m STEEL GIRDER BRIDGE
9.1 m CLEAR ROADWAY WIDTH

STA. 10+555
STRUCTURE B-44-187
SEVEN SPAN 287.17 m PRESTRESSED CONCRETE GIRDER BRIDGE
16.6 m CLEAR ROADWAY WIDTH

225 224 223 222 221

224.791 225.084 225.297 225.350 225.264 225.158 225.052 224.945 224.839 224.733

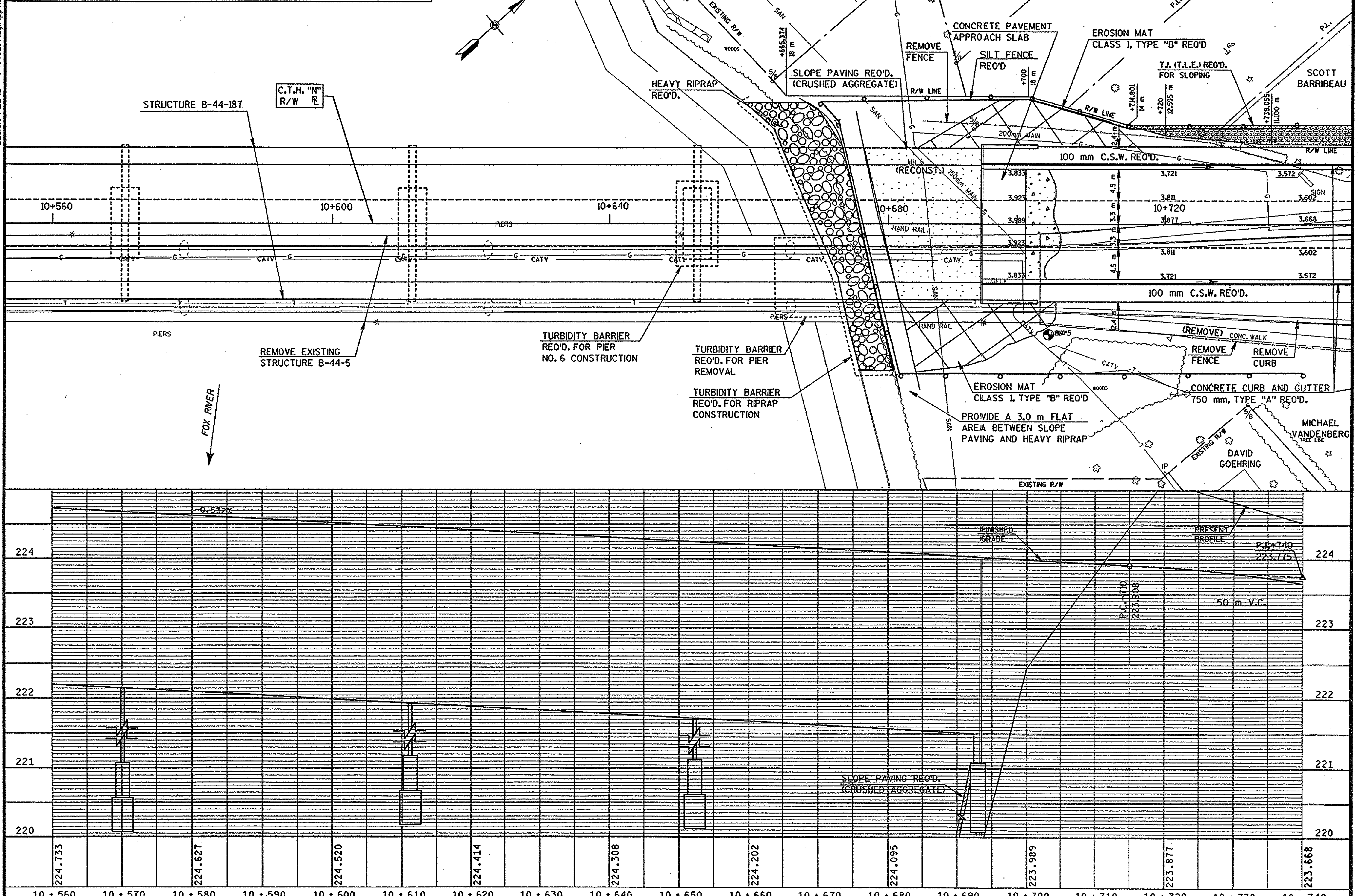
10+380 10+390 10+400 10+410 10+420 10+430 10+440 10+450 10+460 10+470 10+480 10+490 10+500 10+510 10+520 10+530 10+540 10+550 10+560

PLAN AND PROFILE | SCALE, METERS 0 12.5 25 | HWY: C.T.H. "N" | COUNTY: OUTAGAMIE | STATE PROJECT NO: 4676-03-71 | SHEET NO: 5.3 | M

WISDOT: MS-IT42

BENCH MARKS

NO.	STA.	DESCRIPTION	ELEV.
5	10+701	CHIS. "X" IN N.E. CORN ABUT. - 13.8 m RT.	225.882

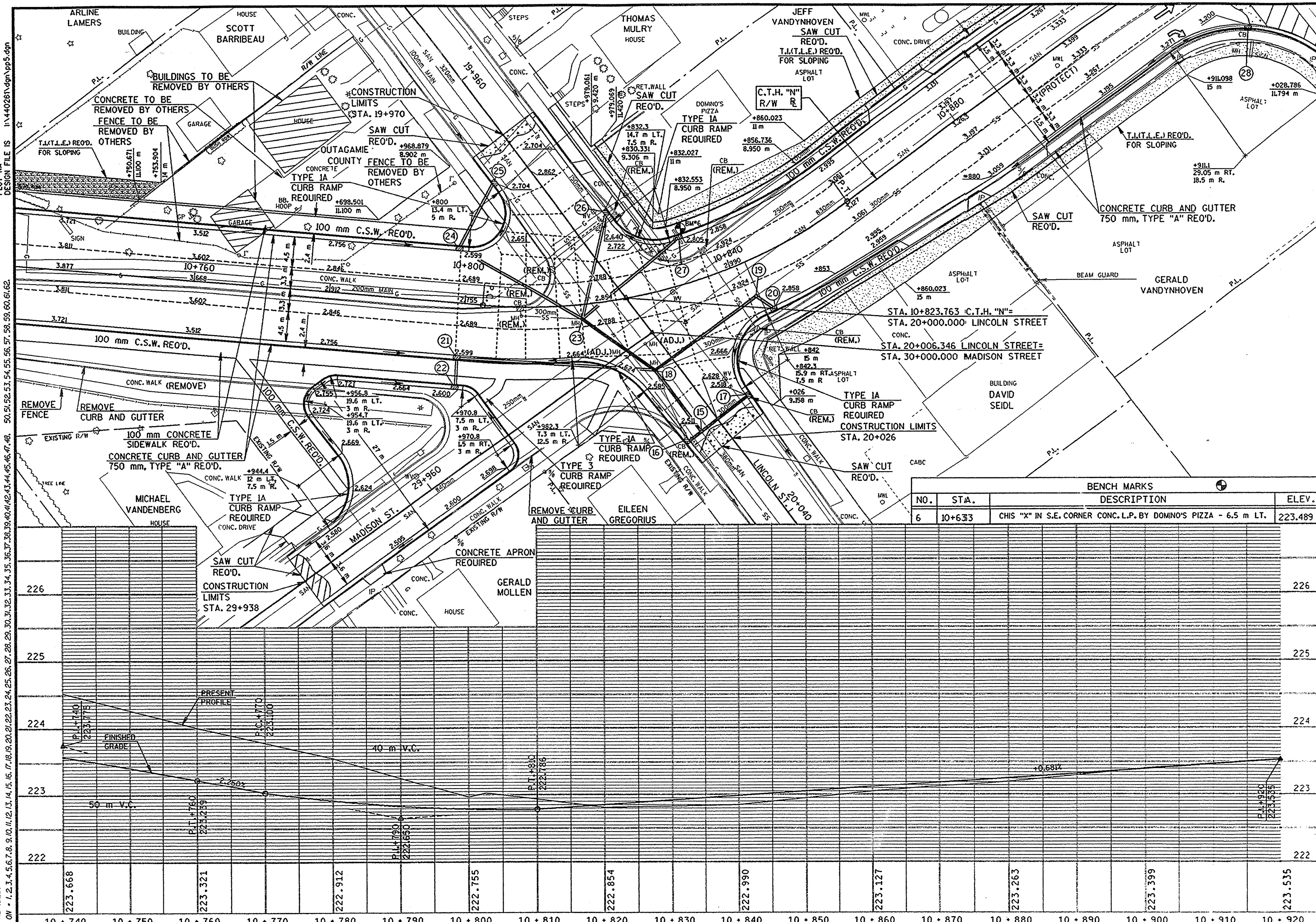


STRUCTURE B-44-187
C.T.H. "N" R/W
10+560
10+600
10+640
0+680
10+720
PIERS
CATV
REMOVE EXISTING STRUCTURE B-44-5
TURBIDITY BARRIER REQ'D. FOR PIER NO. 6 CONSTRUCTION
TURBIDITY BARRIER REQ'D. FOR PIER REMOVAL
TURBIDITY BARRIER REQ'D. FOR RIPRAP CONSTRUCTION
HEAVY RIPRAP REQ'D.
SLOPE PAVING REQ'D. (CRUSHED AGGREGATE)
FOX RIVER
EXISTING R/W
WOODS
MICHAEL JANSEN
JILL TOUSEY
ARLINE LAMERS
BUILDING
SCOTT BARRIBEAU
REMOVE FENCE
CONCRETE PAVEMENT APPROACH SLAB
SILT FENCE REQ'D
EROSION MAT CLASS I, TYPE "B" REQ'D
T.I. (T.L.E.) REQ'D. FOR SLOPING
R/W LINE
200mm MAIN
100 mm C.S.W. REQ'D.
MH (RECONST.)
HAND RAIL
SIGN
(REMOVE) CONC. WALK
REMOVE FENCE
REMOVE CURB
EROSION MAT CLASS I, TYPE "B" REQ'D
CONCRETE CURB AND GUTTER 750 mm, TYPE "A" REQ'D.
PROVIDE A 3.0 m FLAT AREA BETWEEN SLOPE PAVING AND HEAVY RIPRAP
MICHAEL VANDENBERG
DAVID GOEHRING
BM 5
FINISHED GRADE
PRESENT PROFILE
P.I. +740
50 m V.C.
SLOPE PAVING REQ'D. (CRUSHED AGGREGATE)
224
223
222
221
220
224.733
224.627
224.520
224.414
224.308
224.202
224.095
223.989
223.877
223.668
10 + 560
10 + 570
10 + 580
10 + 590
10 + 600
10 + 610
10 + 620
10 + 630
10 + 640
10 + 650
10 + 660
10 + 670
10 + 680
10 + 690
10 + 700
10 + 710
10 + 720
10 + 730
10 + 740

PLAN AND PROFILE	SCALE, METERS 0 12.5 25	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: 5.4	M

WISDOT: MSHT

PROJECT NO. 44026100 FILE NAME:
REVISED BY:
DATE REVISED:
LEVELS ON = 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,50,51,52,53,54,55,56,57,58,59,60,61,62
SCALE:
DATE OF PLOT = 03/19/99
PLOT NA
DESIGN FILE IS I:\440261\dgn\pp5.dgn



ARLINE LAMERS
SCOTT BARRIBEAU
THOMAS MULRY HOUSE
JEFF VANDYNHOVEN
BUILDINGS TO BE REMOVED BY OTHERS
CONCRETE TO BE REMOVED BY OTHERS
FENCE TO BE REMOVED BY OTHERS
T.I.(T.L.E.) REQ'D. FOR SLOPING
CONSTRUCTION LIMITS STA. 19+970
SAW CUT REQ'D.
OUTAGAMIE COUNTY FENCE TO BE REMOVED BY OTHERS
TYPE 1A CURB RAMP REQUIRED
100 mm C.S.W. REQ'D.
C.T.H. "N" R/W
DOMINO'S PIZZA
CONCRETE CURB AND GUTTER 750 mm, TYPE "A" REQ'D.
GERALD VANDYNHOVEN
STA. 10+823.763 C.T.H. "N"= STA. 20+000.000 LINCOLN STREET
STA. 20+006.346 LINCOLN STREET= STA. 30+000.000 MADISON STREET
BUILDING DAVID SEIDL
CONSTRUCTION LIMITS STA. 20+026
REMOVE FENCE
REMOVE CURB AND GUTTER
100 mm CONCRETE SIDEWALK REQ'D.
MICHAEL VANDENBERG HOUSE
TYPE 3 CURB RAMP REQUIRED
REMOVE CURB AND GUTTER
EILEEN GREGORIUS
MADISON ST.
LINCOLN ST.
CONCRETE APRON REQUIRED
CONSTRUCTION LIMITS STA. 29+938
GERALD MOLLEN
PRESENT PROFILE
FINISHED GRADE
40 m V.C.
50 m V.C.
-2.260%
+0.681%
P.I.+790 222.650
P.T.+760 223.239
P.C.+770 223.100
P.T.+810 222.786
P.I.+920 223.535
226
225
224
223
222
223.668
223.321
222.912
222.755
222.854
222.990
223.127
223.263
223.399
223.535
10 + 740
10 + 750
10 + 760
10 + 770
10 + 780
10 + 790
10 + 800
10 + 810
10 + 820
10 + 830
10 + 840
10 + 850
10 + 860
10 + 870
10 + 880
10 + 890
10 + 900
10 + 910
10 + 920

BENCH MARKS

NO.	STA.	DESCRIPTION	ELEV.
6	10+633	CHIS "X" IN S.E. CORNER CONC. L.P. BY DOMINO'S PIZZA - 6.5 m LT.	223.489

PLAN AND PROFILE	SCALE, METERS 0 12.5 25	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: 5.5	M

WISDOT: MS-T42

GB2
PEN TABLE = ±plot72±laser±mv80pp.tbl
DATE OF PLOT = 03/19/99
PLOT NA
DESIGN FILE IS I:\440261\dgn\pp6.dgn

ORIGINATOR: DJD
PROJECT NO: 4402600
REVISED BY:
DATE REVISED:
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, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62.

DATE: 12/16/97
FILE NAME:

PLOT NAME:
SCALE:

BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
8	10+921.6	NORTH FLANGE BOLT ON F.H. - 16.6 m LT.	223.754

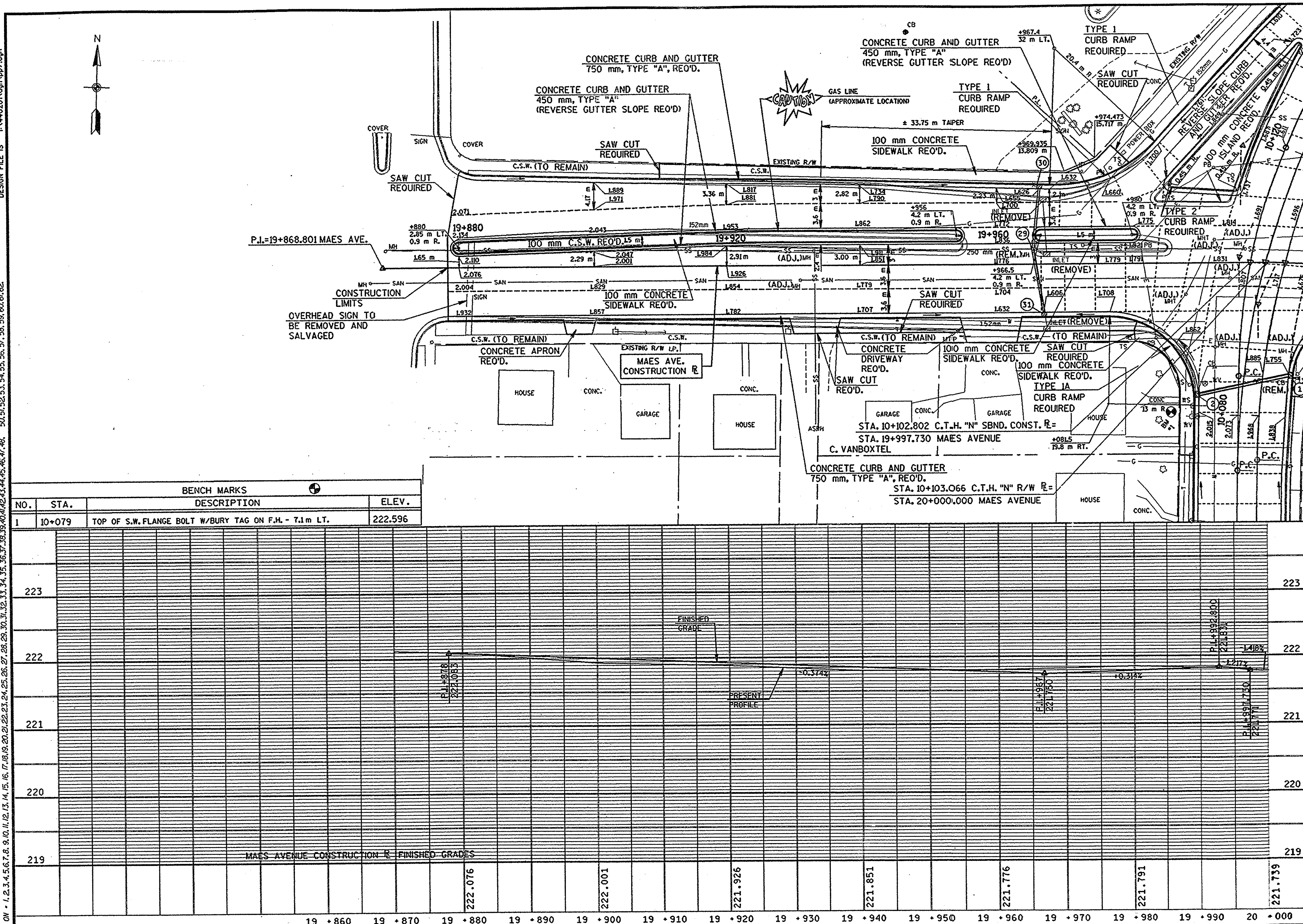
THOMAS MULRY
PETROLEUM REAL CO., INC. EXPRESS GAS STATION
JEFF VANDYNHOVEN
GAS FILL NECKS
ASPHALT LOT
EXISTING R/W
MAIN ST. (S.T.H. 96)
CONCRETE SLAB
CONCRETE CURB AND GUTTER 750 mm, TYPE "A" REQ'D.
100 mm CONCRETE SIDEWALK REQ'D.
SAW CUT REQ'D.
T.I. (TEMP.) REQUIRED FOR SLOPING
2'x5' LID
8M*8 TELE. BTHS.
CONC. DRIVE
P.T. = 10+860.022
STA. 10+936.655 C.T.H. "N"= STA. 30+000.000 MAIN STREET
CONC.
HOUSE
CONC. JOINT
10+880
10+920
(PROTECT)
(TO REMAIN)
(ADJ.)
SIGN
SAN
SS
WV
MH
TS
PB
C.T.H. "N" R/W
TYPE 1A CURB RAMP REQ'D (3 LOCATIONS ON ISLAND)
BEAM GUARD
BUILDING
DAVID SEIDL
GERALD VANDYNHOVEN
END PROJECT STA. 10+930.000

PRESENT PROFILE
FINISHED GRADE
+0.601%
-0.230%
P.I. 10+900 223.535
P.I. 10+930 223.512

10+860	10+870	10+880	10+890	10+900	10+910	10+920	10+930	10+940	10+950	10+960	10+970	10+980	10+990	11+000	11+010	11+020	11+030	11+040
223.127		223.263		223.399		223.535	223.512											

PLAN AND PROFILE | SCALE, METERS 0 12.5 25 | HWY: C.T.H. "N" | COUNTY: OUTAGAMIE | STATE PROJECT NO: 4676-03-71 | SHEET NO: 5.6 | M

WISDOT: MS-T42

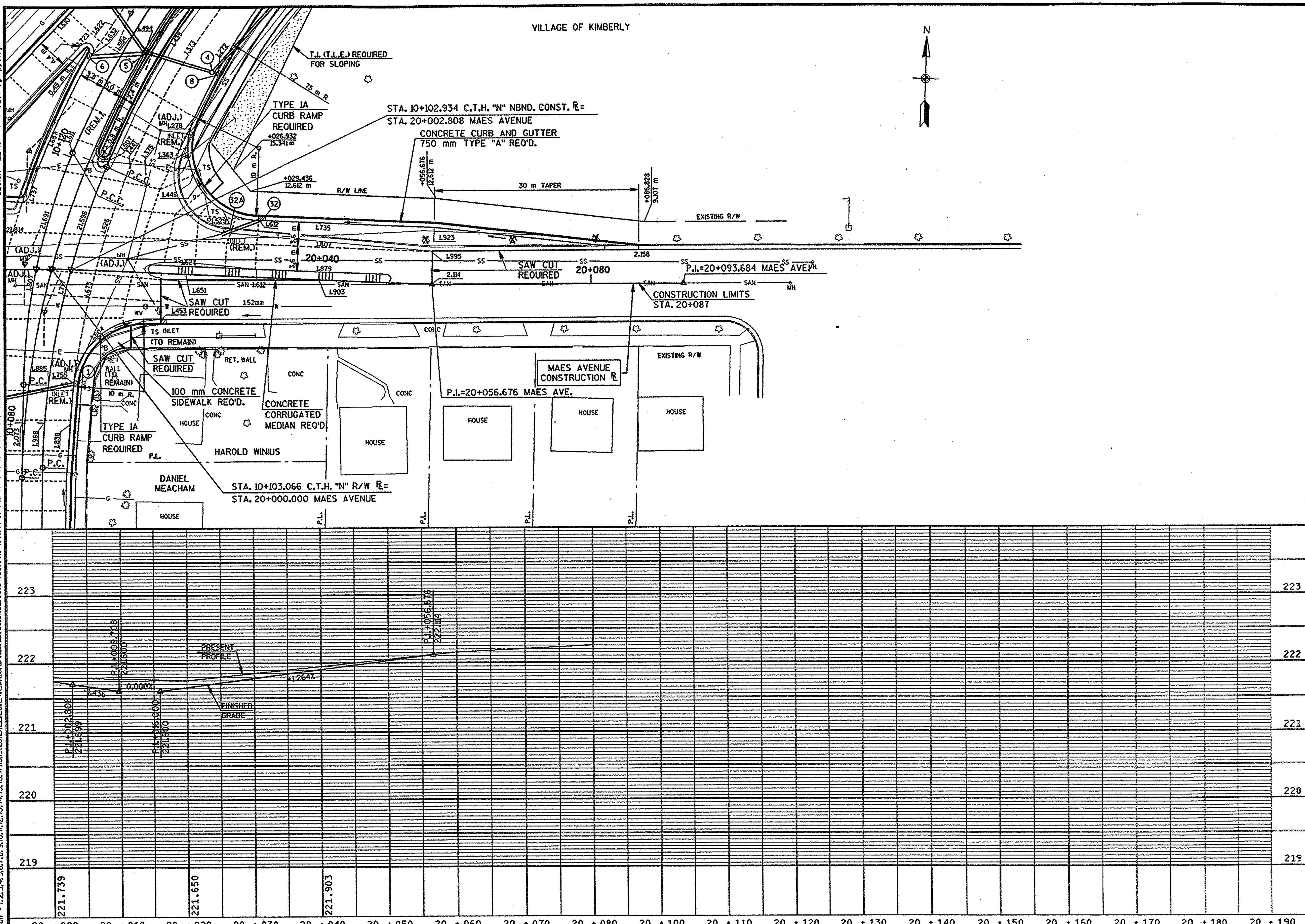


BENCH MARKS

NO.	STA.	DESCRIPTION	ELEV.
1	10+079	TOP OF S.W. FLANGE BOLT W/BURY TAG ON F.H. - 7.1 m LT.	222.596

PLAN AND PROFILE | SCALE, METERS 0 12.5 25 | HWY: MAES AVENUE | COUNTY: OUTAGAMIE | STATE PROJECT NO: 4676-03-71 | SHEET NO: 5.7 | M

WISDOT: MSHT42


VILLAGE OF KIMBERLY
N
T.L. (T.L.E.) REQUIRED FOR SLOPING
TYPE 1A CURB RAMP REQUIRED
STA. 10+102.934 C.T.H. "N" NBND. CONST. ℄=
STA. 20+002.808 MAES AVENUE
CONCRETE CURB AND GUTTER
750 mm TYPE "A" REQ'D.
30 m TAPER
R/W LINE
EXISTING R/W
20+040
20+080
SAW CUT REQUIRED
P.I.=20+093.684 MAES AVE.
CONSTRUCTION LIMITS
STA. 20+087
SAW CUT 152mm
REQUIRED
TS INLET (TO REMAIN)
SAW CUT REQUIRED
RET. WALL
100 mm CONCRETE SIDEWALK REQ'D.
CONCRETE CORRUGATED MEDIAN REQ'D.
MAES AVENUE CONSTRUCTION ℄
P.I.=20+056.676 MAES AVE.
TYPE 1A CURB RAMP REQUIRED
HAROLD WINIUS
DANIEL MEACHAM
HOUSE
CONC
STA. 10+103.066 C.T.H. "N" R/W ℄=
STA. 20+000.000 MAES AVENUE
PRESENT PROFILE
FINISHED GRADE
+1.264%
0.000%
P.I.+002.808 221.899
P.I.+009.708 221.800
P.I.+016.000 221.800
P.I.+056.676 222.114
223
222
221
220
219
221.739
221.650
221.903
20+000 20+010 20+020 20+030 20+040 20+050 20+060 20+070 20+080 20+100 20+110 20+120 20+130 20+140 20+150 20+160 20+170 20+180 20+190

PLAN AND PROFILE | SCALE, METERS 0 12.5 25 | HWY: MAES AVENUE | COUNTY: OUTAGAMIE | STATE PROJECT NO: | SHEET NO: 5.8 | M

WISDOT: MSHT42

GB2 PEN TABLE = splot72slaser-mv80pp.tbl DATE OF PLOT = 04/21/99 PLOT NA DESIGN FILE IS i:\4402611\dgn\pp8.dgn

ORIGINATOR: DJD PROJECT NO. 4440302.00 REVISED BY: DATE REVISED: DATE: 5/6/99 FILE NAME: PLOT NAME: SCALE:

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.

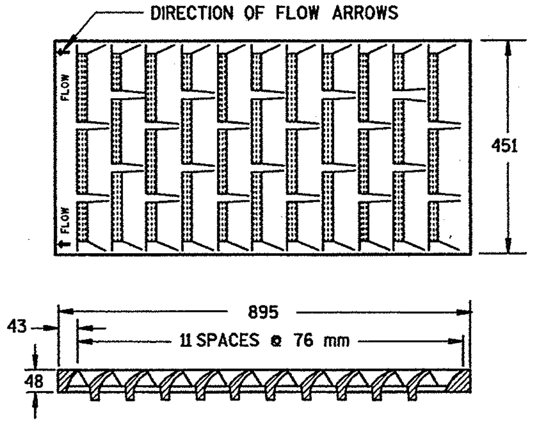
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

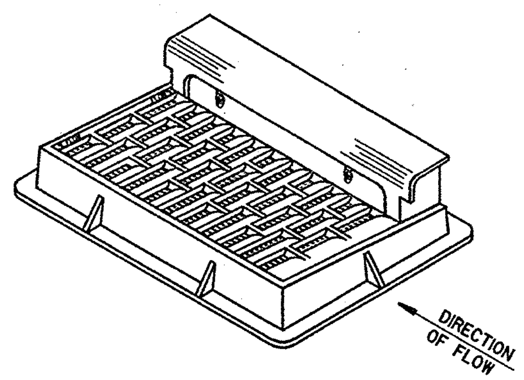
THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

NOTE

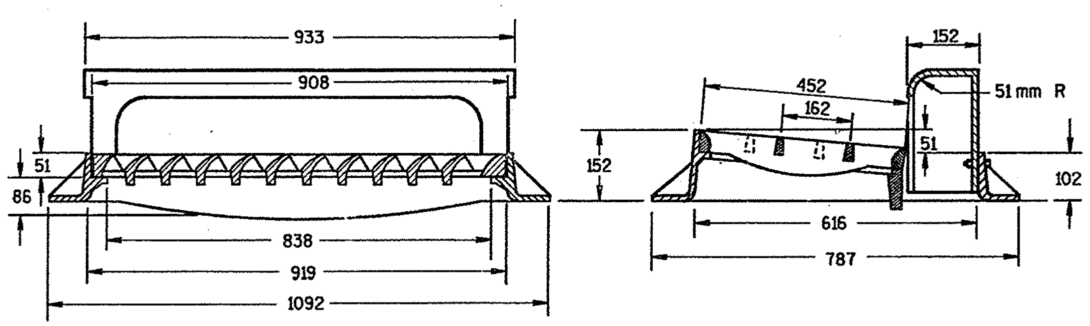
ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE SHOWN.



NOTE:
GRATE IS REVERSIBLE.



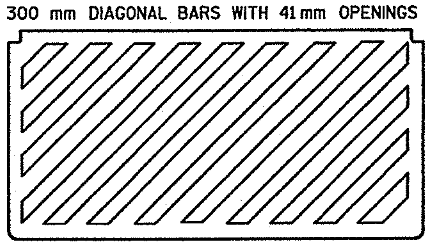
NOTE: CURB BOX HEIGHT ADJUSTABLE 150 mm TO 230 mm



TYPE "H"

(APPROXIMATE WEIGHT 191 kg)
FRAME............... 79 kg
GRATE............... 63 kg
CURB BOX.......... 49 kg

300 mm DIAGONAL BARS WITH 41 mm OPENINGS

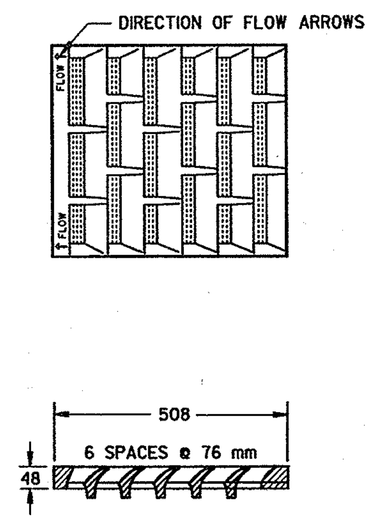


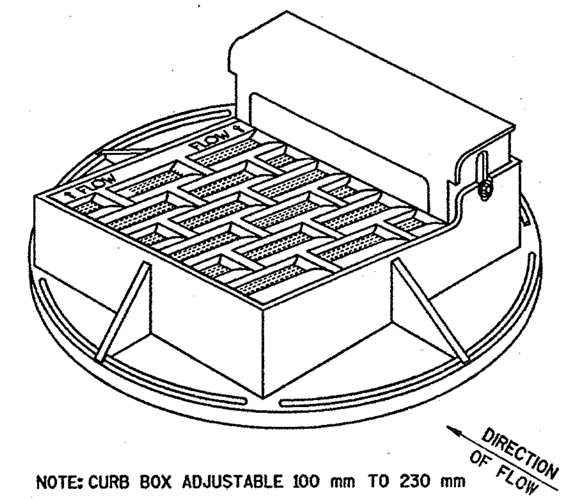
NOTE:
GRATE IS REVERSIBLE.

SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 895 mm X 451 mm X 51 mm)
(APPROXIMATE WEIGHT 78 kg)

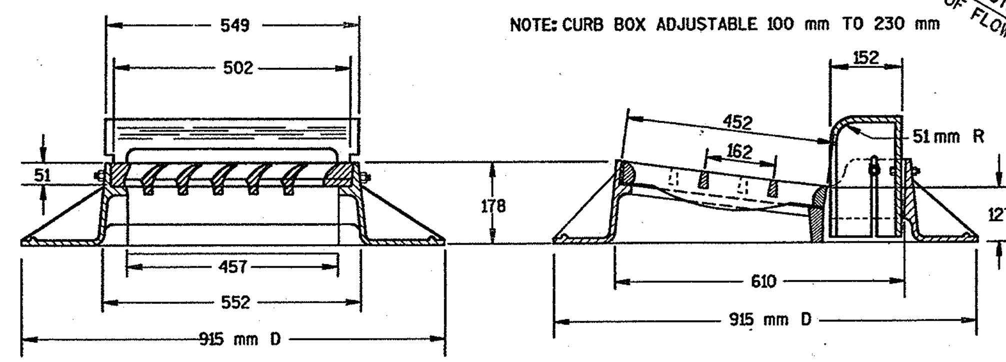
(NOTED AS TYPE H-S ON DRAINAGE TABLE)





NOTE:
GRATE IS REVERSIBLE.

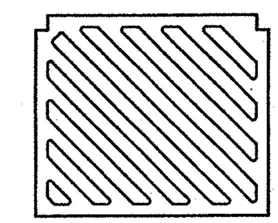
NOTE: CURB BOX ADJUSTABLE 100 mm TO 230 mm



TYPE "A"

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

30 mm DIAGONAL BARS
WITH 30 mm OPENINGS



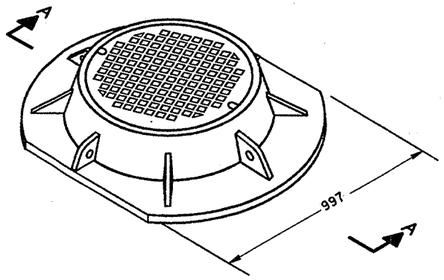
SPECIAL GRATE FOR TYPE "A" COVER

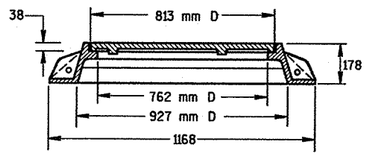
(MEASURES 502 mm X 432 mm X 51 mm)
GRATE............... 38 kg
(NOTED AS TYPE A-S ON DRAINAGE TABLE)

NOTE:
GRATE IS REVERSIBLE.

INLET COVERS TYPE A, H, A-S, & H-S
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 8/27/98 DATE — CHIEF ROADWAY DEVELOPMENT ENGINEER — FHWA — M

LEVELS ON: 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



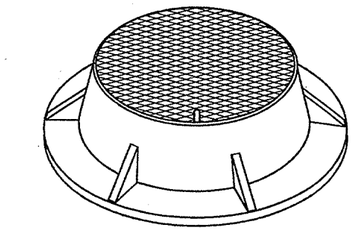


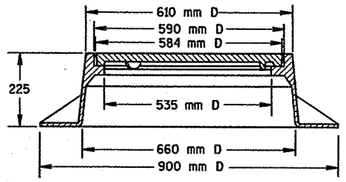
SECTION A-A

TYPE "K"

(APPROXIMATE WEIGHT 188 kg)

FRAME.....95 kg
LID.....93 kg

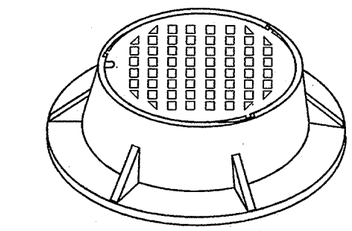


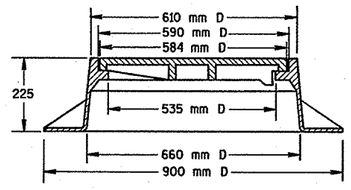


TYPE "J"

(APPROXIMATE WEIGHT 113 kg)

FRAME.....61 kg
LID.....52 kg





TYPE "J" SPECIAL

TYPE "B" NON-ROCKING SELF-SEAL LID

(APPROXIMATE WEIGHT 111 kg)

FRAME.....66 kg
LID.....45 kg

(NOTED AS TYPE J-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.

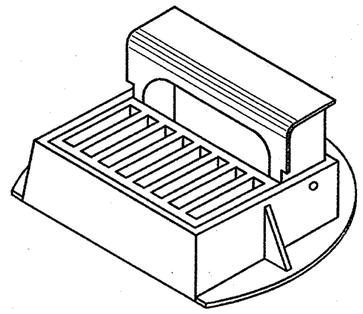
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

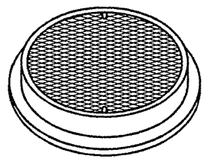
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

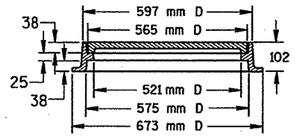
THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.



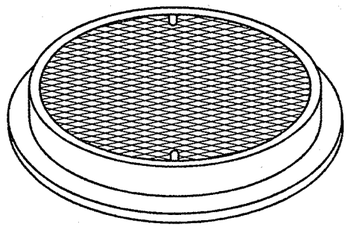


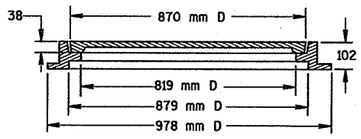


TYPE "L"

(APPROXIMATE WEIGHT 66 kg)

FRAME.....34 kg
LID.....32 kg



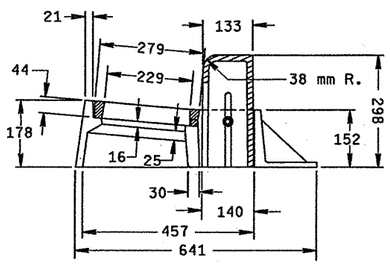


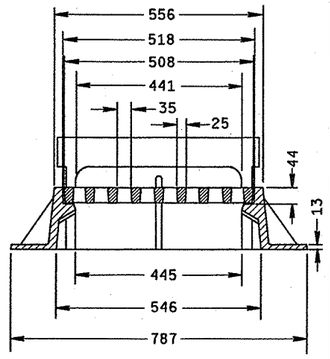
TYPE "M"

(APPROXIMATE WEIGHT 175 kg)

FRAME..... 57 kg
LID..... 118 kg

CURB BOX ADJUSTABLE 102 mm TO 254 mm





INLET COVER TYPE "Z"

(APPROXIMATE WEIGHT 155 kg)

FRAME..... 90 kg
GRATE..... 23 kg
CURB BOX..... 42 kg

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/27/98
DATE

CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

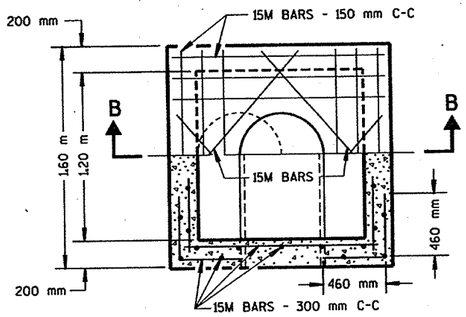
M

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

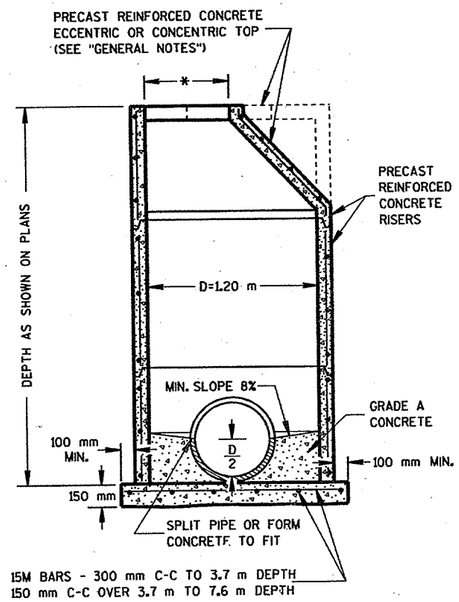
LEVELS OW - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FILE NAME:

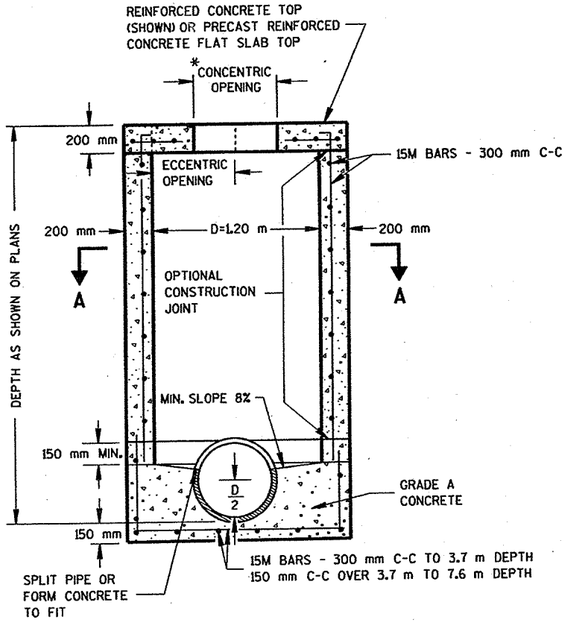
S.D.D. 8 A 5-15d



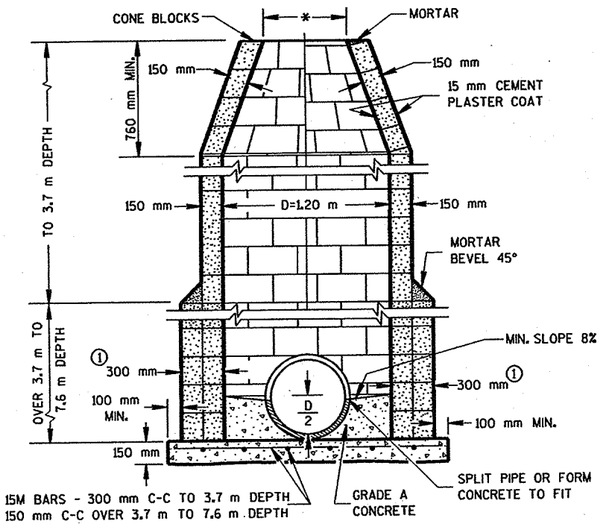
HALF SECTION A-A



PRECAST REINFORCED CONCRETE



SECTION B-B
REINFORCED CONCRETE



CONCRETE BLOCK

MANHOLES 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 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 150 mm IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

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

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 1.5 m OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 1.5 m IN DEPTH: 400 mm C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 100 mm FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 250 mm; MINIMUM WALL EMBEDMENT OF 75 mm; AND BE CAPABLE OF SUPPORTING A CONCENTRATED LOAD OF 136 kg FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 25 mm.

SOLID ALUMINUM STEPS SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 19 mm. ALUMINUM SURFACES TO BE EMBEDDED IN CONCRETE SHALL BE GIVEN ONE COAT OF SUITABLE QUALITY PAINT, SUCH AS ZINC CHROMATE PRIMER CONFORMING TO FEDERAL SPECIFICATION TT-P-645 OR EQUIVALENT. STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 50 mm CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

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

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199M.

* USE 600 mm DIAMETER OPENING WITH TYPE "C", "L" AND "J" COVERS, OR 900 mm DIAMETER WITH TYPE "K" AND "M" COVERS.

① 2 COURSES 150 mm BLOCK.

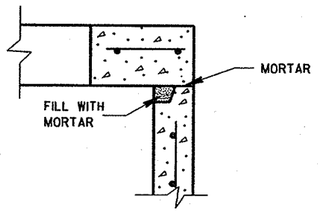
MANHOLES TYPE 1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

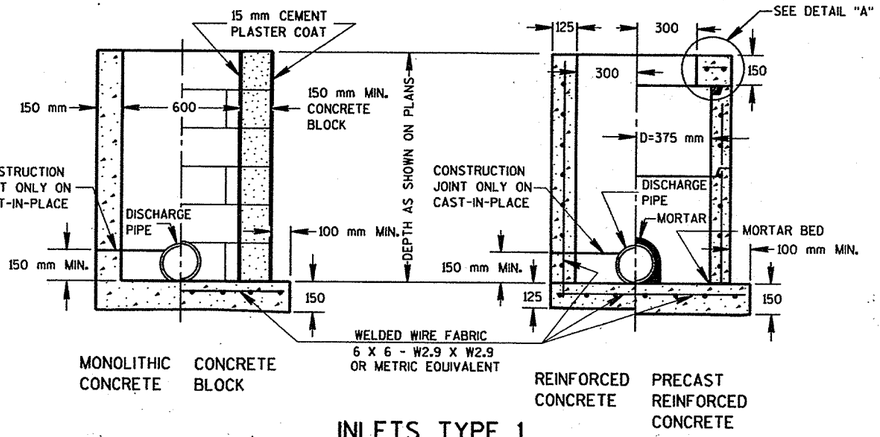
APPROVED 02/07/85 DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA
M

S.D.D. 8 B 6-3

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



DETAIL "A"



INLETS TYPE 1

GENERAL NOTES

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

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

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

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 150 mm 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 50 mm CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

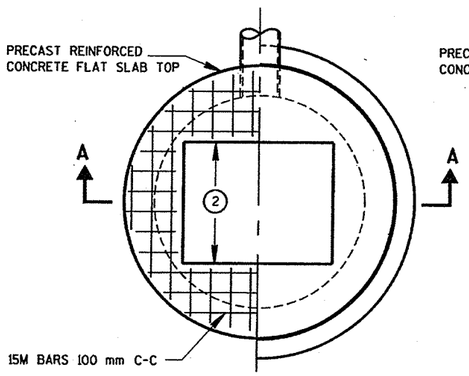
PRECAST REINFORCED CONCRETE RISERS SHALL BE PLACED WITH TONGUE DOWN.

(1) USE 760 mm OPENING FOR TYPE 2 INLETS, 915 mm OPENING FOR TYPE 3 INLETS, AND 890 mm TYPE 4 INLETS.

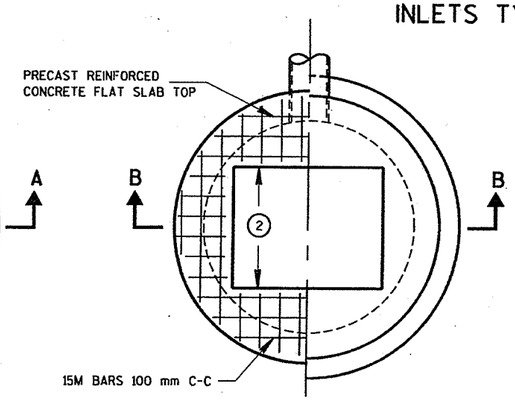
(2) USE 610 mm OPENING FOR TYPE 1, 2 & 3 INLETS, 775 mm OPENING FOR TYPE 4 INLETS.

NOTE

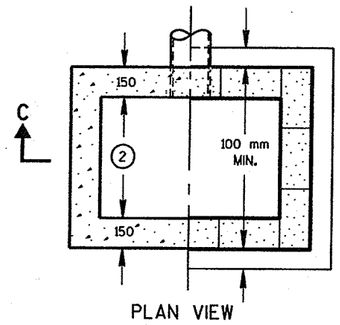
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.



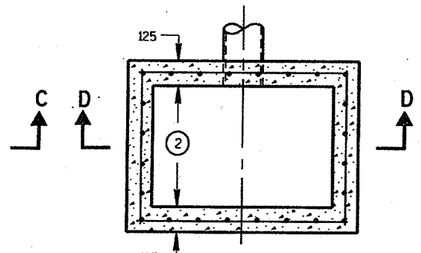
PLAN VIEW



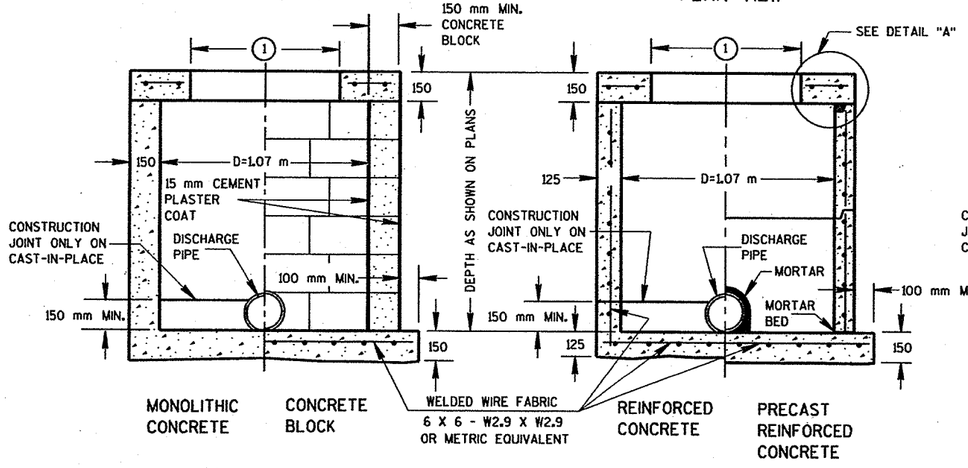
PLAN VIEW



PLAN VIEW

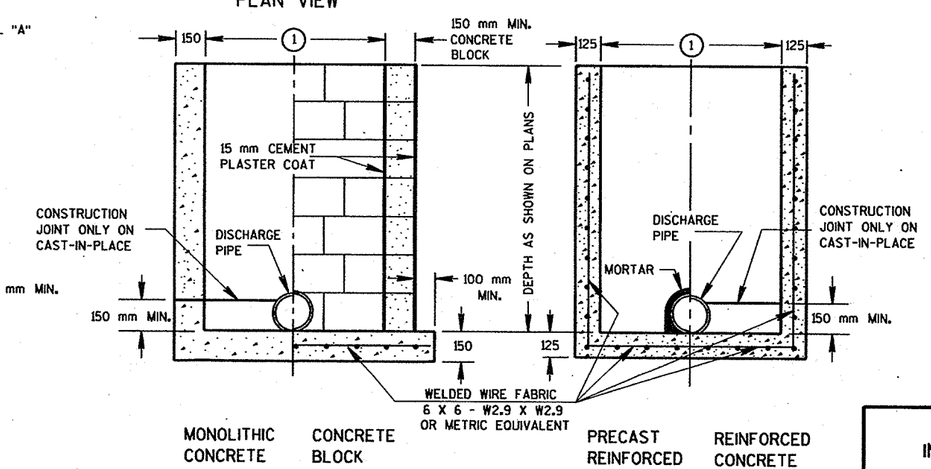


PLAN VIEW



SECTION A-A

SECTION B-B



SECTION C-C

SECTION D-D

INLETS TYPE 2, 3 & 4

INLETS TYPE 1, 2, 3 & 4

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 01/31/95 DATE

Roy L. Thomsen
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

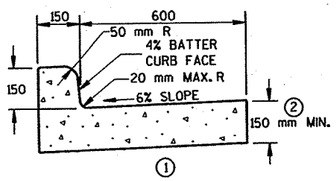
M

S.D.D. 8 C 1-5

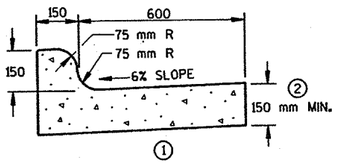
LEVELS ON - 2,3,4,5,6,7,8, 9,10,11,12,13,14,15,16,17,18,19, 20,21,22, 23,24, 25, 26,27, 28,29,30,31,32,33, 34,35,36,37,38,39, 40,41, 42,43,44,45,46,47, 48, 49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

S.D.D. 8 C 1-5

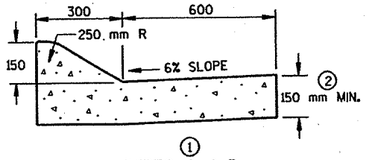
FILE NAME:



TYPES A & D

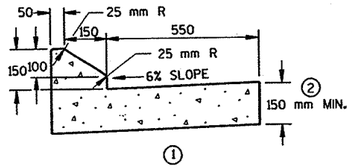


TYPES K & L

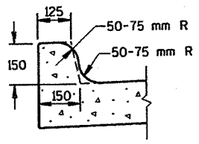


TYPES A & D

CONCRETE CURB & GUTTER 900 mm

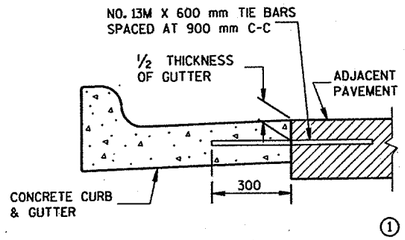


TYPES G & J



OPTIONAL CURB SHAPE
1
FOR TYPES K & L

CONCRETE CURB & GUTTER 750 mm



TYPICAL TIE BAR LOCATION

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 600 mm BEHIND THE BACK OF CURBS.

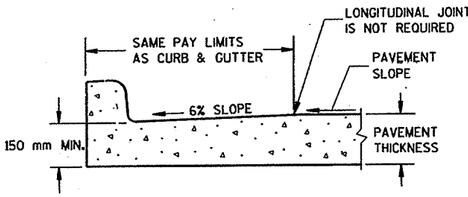
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G AND K.

(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 150 mm MINIMUM GUTTER THICKNESS IS MAINTAINED.

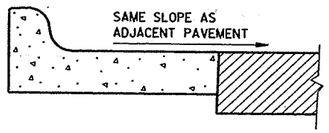
(3) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

NOTE

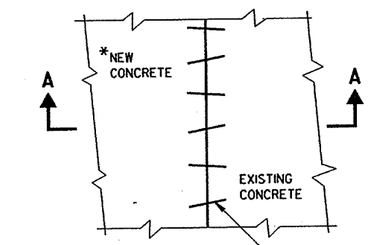
DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER

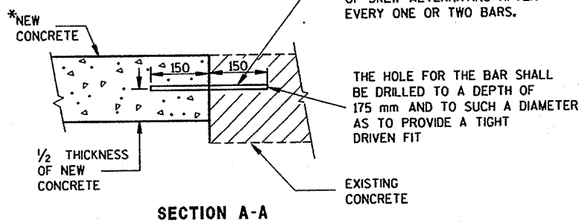


REVERSE SLOPE GUTTER
(TYPICAL FOR ALL CURB & GUTTER TYPES)



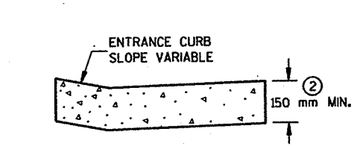
PLAN VIEW

*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

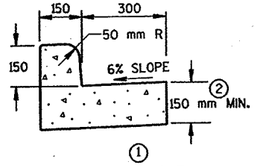


SECTION A-A

PAVEMENT TIES

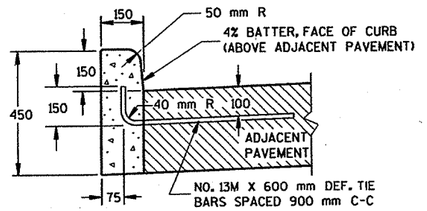


DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

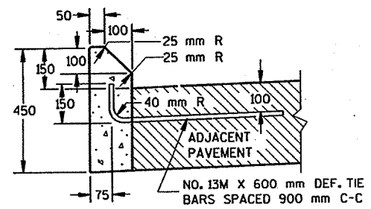


TYPES A & D

CONCRETE CURB & GUTTER 450 mm



TYPES A & D



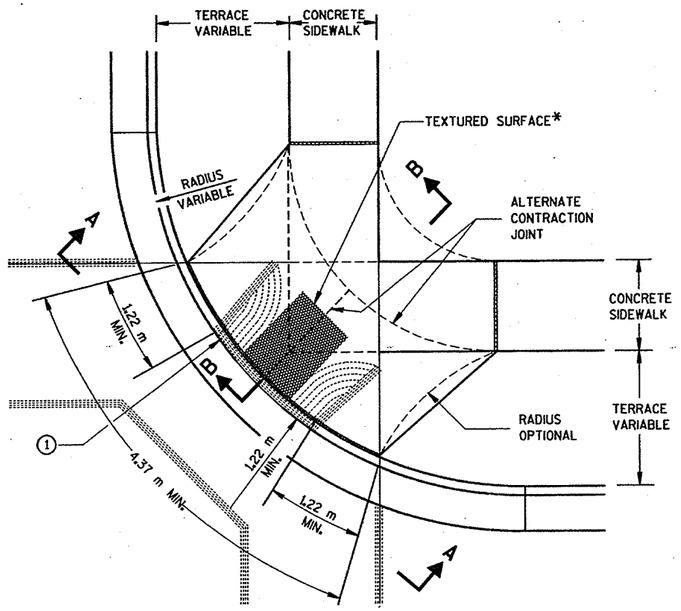
TYPES G & J

CONCRETE CURB

CONCRETE CURB, CONCRETE CURB & GUTTER AND PAVEMENT TIES
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 10/22/96 (DATE) Roy L. Amundson CHIEF ROADWAY DEVELOPMENT ENGINEER FHWA M

S.D.D. 8 D 1-12

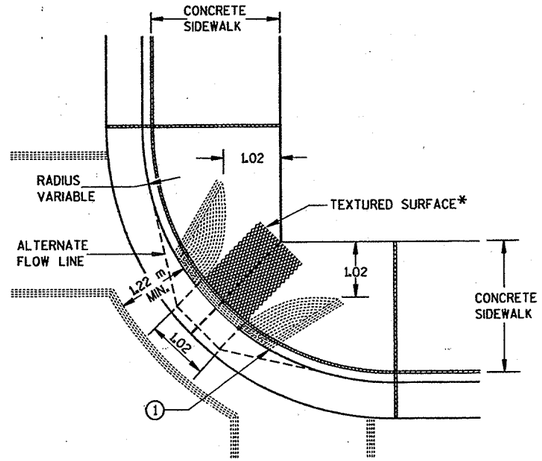
S.D.D. 8 D 1-12



PLAN VIEW

TYPE 1 RAMP

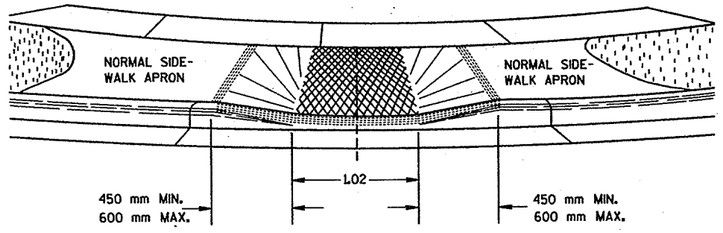
(CENTER OF CORNER RADIUS)



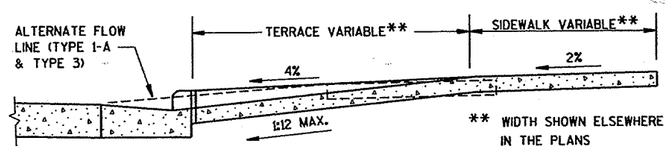
PLAN VIEW

TYPE 1-A RAMP

(NO TERRACE)



VIEW A-A

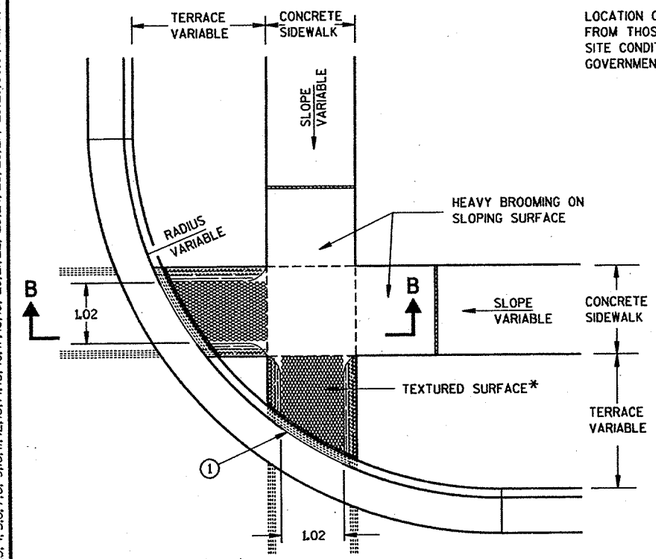


SECTION B-B

13 mm ═══ EXPANSION JOINT-SIDEWALK

– – – – – CONTRACTION JOINT

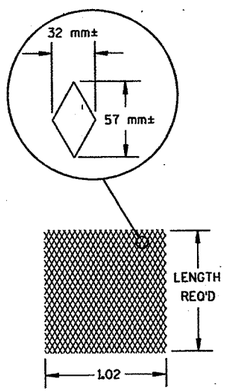
LOCATION OF JOINTS MAY BE VARIED FROM THOSE SHOWN TO BETTER FIT SITE CONDITIONS AND/OR LOCAL GOVERNMENT PREFERENCE.



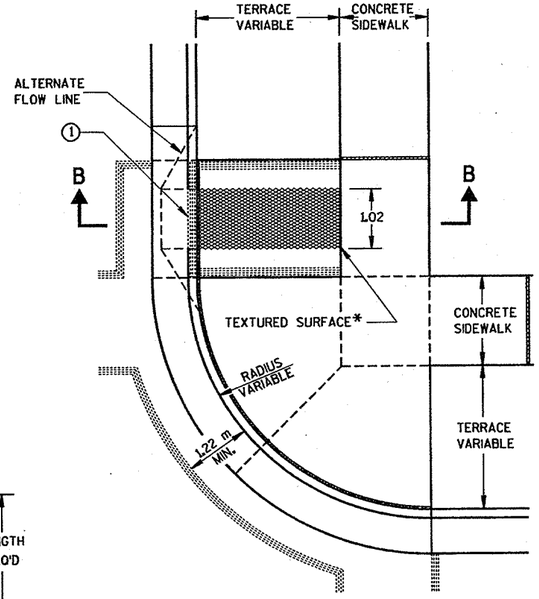
PLAN VIEW

TYPE 2 RAMP

(ON LINE WITH SIDEWALK)



DETAIL OF DIAMOND PATTERN*



PLAN VIEW

TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)

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 1:12 OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 OR TYPE 1-A RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

CURB RAMPS SHALL BE MEASURED AND PAID FOR AS CONCRETE SIDEWALK AND CONCRETE CURB AND GUTTER.

SURFACE TEXTURING SHALL CONSIST OF LINEAR IMPRESSIONS APPROXIMATELY 6 mm TO 9 mm IN DEPTH AND WIDTH, ORIENTED TO PROVIDE A UNIFORM PATTERN OF DIAMOND SHAPES MEASURING APPROXIMATELY 32 mm IN WIDTH BY 57 mm IN LENGTH, WITH THE LENGTH BEING PARALLEL TO THE DIRECTION OF PEDESTRIAN MOVEMENT. THIS SURFACE TEXTURE MAY BE ACHIEVED BY IMPRESSING AND REMOVING A PIECE OF EXPANDED METAL REGULAR INDUSTRIAL MESH INTO THE SURFACE OF THE RAMP WHILE THE CONCRETE IS IN A PLASTIC STATE.

(1) THE RAMP SHALL BE BORDERED ON BOTH SIDES AND ON THE CURB LINE WITH A 100 mm WIDE YELLOW PAINT STRIPE OR WITH BRICK OF A CONTRASTING COLOR. NORMALLY THE PAINT STRIPE ALTERNATE WILL BE USED. THE MUNICAPALITY OR THE DEPARTMENT WILL APPLY THIS STRIPPING UNLESS OTHERWISE SPECIFIED IN THE CONTRACT.

IF A MUNICAPALITY REQUIRES THE BRICK ALTERNATE, SPECIAL DETAILS AND PROVISIONS ARE SHOWN ELSEWHERE IN THE PLANS.

NOTE: ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN.

CURB RAMPS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 01/27/95 DATE — Roy L. Thomson — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

M

S.D.D. 8 D 5-8

PLOT SCALE:

PLOT NAME:

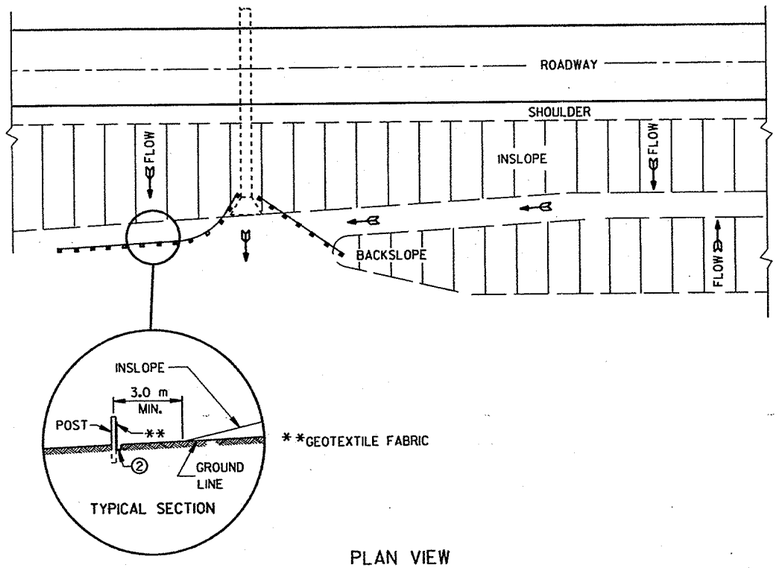
REV. DATE:

LEVELS ON - 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

ORIGINATOR:

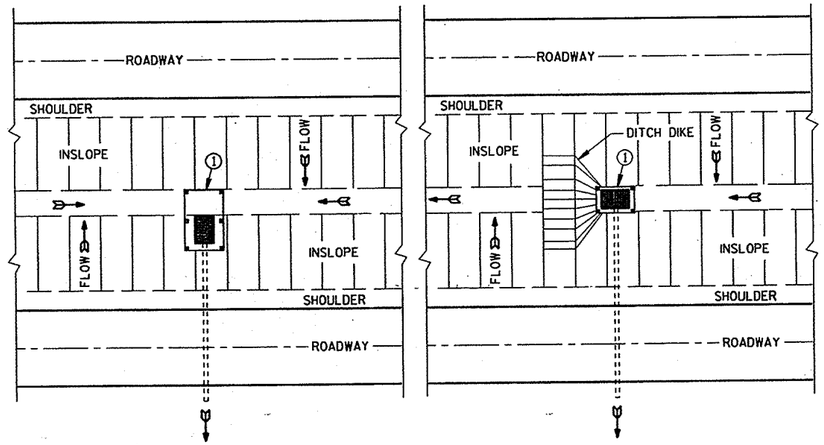
S.D.D. 8 D 5-8

FILE NAME:



PLAN VIEW

TYPICAL APPLICATIONS OF SILT FENCE



SITUATION 1 SITUATION 2

PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

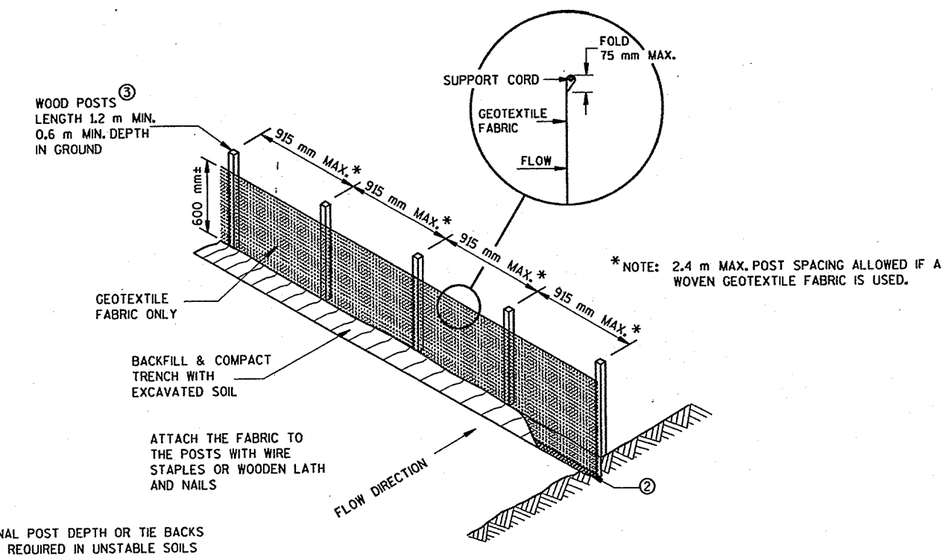
GENERAL NOTES

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

① HORIZONTAL BRACE WITH 50 mm X 100 mm WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS AS DIRECTED BY THE ENGINEER.

② TRENCH SHALL BE A MINIMUM OF 100 mm WIDE & 150 mm DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

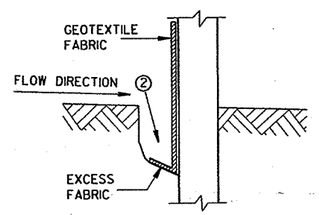
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 30 mm X 30 mm OF OAK OR HICKORY.



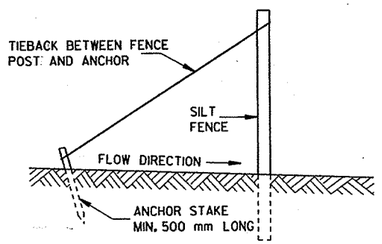
*NOTE: 2.4 m MAX. POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

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

SILT FENCE
(NON-REINFORCED)



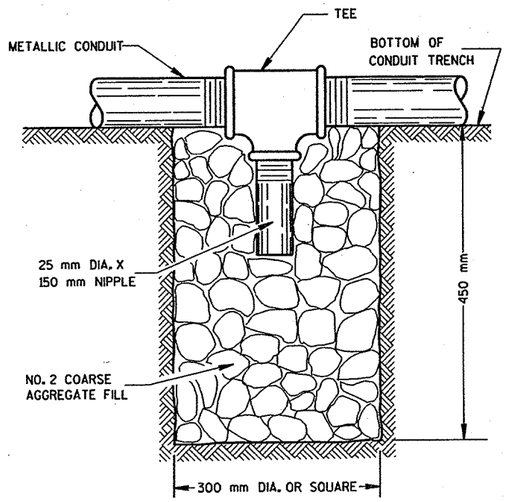
TRENCH DETAIL



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

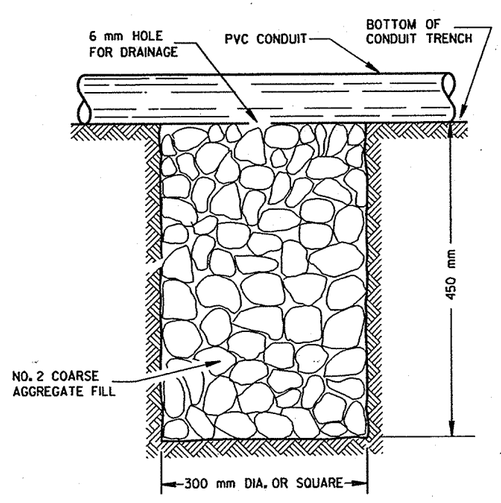
SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 03/11/96 DATE	CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	M

S.D.D. 8 E 9-5



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.

METRIC MEASUREMENTS ARE BASED ON 25 mm (NOMINAL) PER INCH.

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 600 mm MINIMUM AND 900 mm MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 450 mm MIN. AND 900 mm 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.

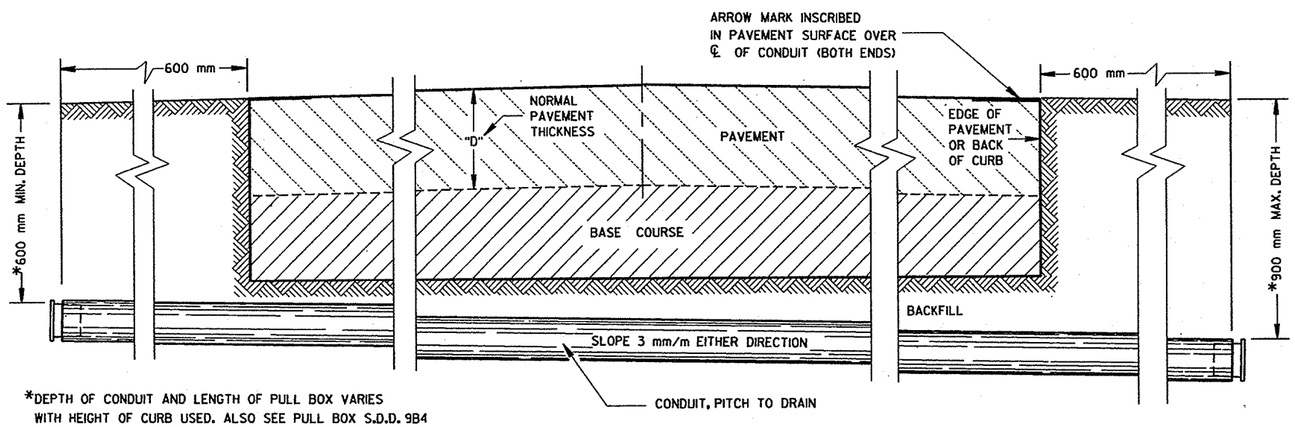
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

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

CONDUIT RUNS SHALL BE THE SAME SIZE PIPE 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.

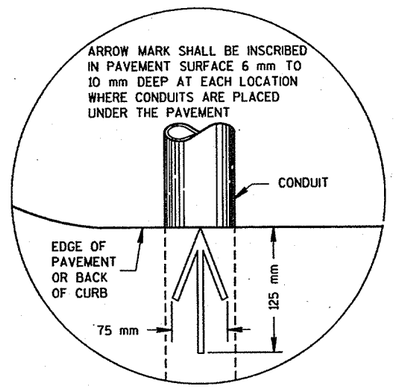
ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS UNLESS OTHERWISE APPROVED BY THE PROJECT ENGINEER.



*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



PLAN VIEW

ARROW MARK

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 10/21/66 DATE

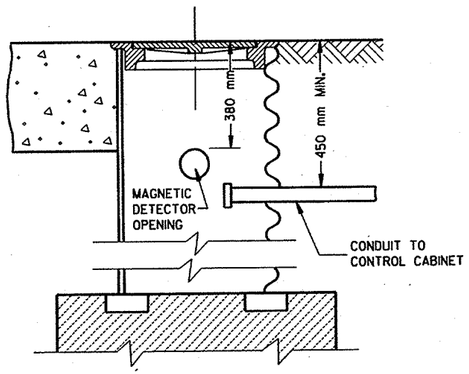
STATE ELECTRICAL ENGINEER FOR HIGHWAYS

FHWA

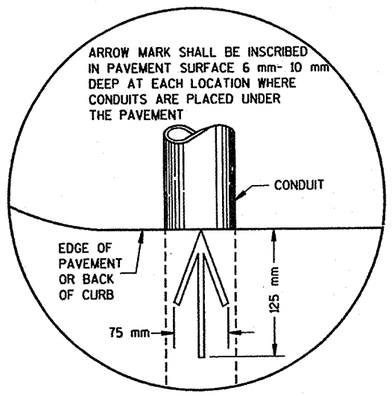
M

S.D.D. 9 B 2-6

S.D.D. 9 B 2-6



DETECTOR IBNSTALLATION AT PULL BOX



PLAN VIEW

ARROW MARK

GENERAL NOTES

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

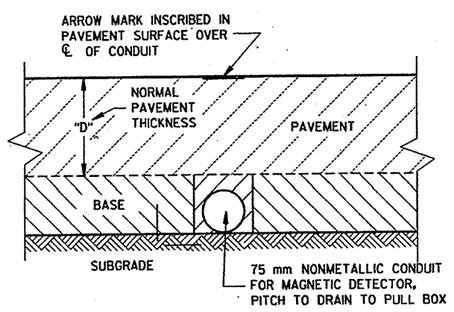
METRIC MEASUREMENTS ARE BASED ON 25 mm (NOMINAL) PER INCH.

ONLY NONMETALLIC CONDUIT SHALL BE FURNISHED AND SHALL BE PLACED AS SHOWN.

(1) PRIOR TO BACKFILLING, THE CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN REINSTALLED TO ASSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

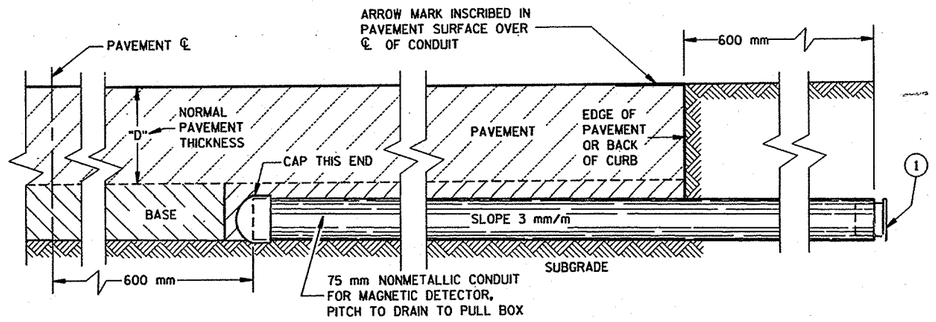
PRIOR TO INSTALLATION OF A MAGNETIC DETECTOR, THE PLUG OR CAP SHALL BE REMOVED AND AN END BELL (U.L. LISTED FOR ELECTRICAL USE) INSTALLED.

THE STANDARD DETAIL DRAWING "CONDUIT" 9B2 SHALL APPLY TO THIS DRAWING.



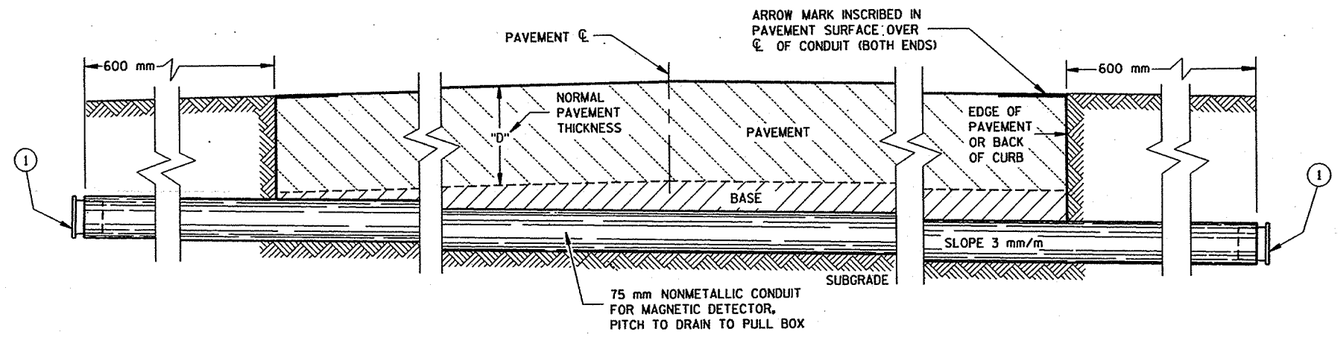
END ELEVATION

MAGNETIC DETECTOR CONDUIT



SIDE ELEVATION

MAGNETIC DETECTOR CONDUIT FOR UNDIVIDED HIGHWAYS



SIDE ELEVATION

MAGNETIC DETECTOR CONDUIT FOR DIVIDED HIGHWAYS

CONDUIT FOR MAGNETIC DETECTOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 10/21/66 DATE

STATE ELECTRICAL ENGINEER FOR HIGHWAYS

FHWA

M

S.D.D. 9 B 3-2

S.D.D. 9 B 3-2

FILE NAME:

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN MILLIMETERS		TYPE OF PIPE									
		CORRUGATED STEEL									POLYETHYLENE SDR 32.5
PIPE DIAMETER (INSIDE)	A	300	300	300	450	450	450	600	600	600	300
PIPE LENGTH **	B	600	750	900	600	750	900	900	1050	1200	600
WALL THICKNESS	C	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	10
COVER	D	260	260	260	413	413	413	565	565	565	260
FRAME	E	368	368	368	521	521	521	676	676	676	368
FRAME	F	217	217	217	368	368	368	521	521	521	217
FRAME	G	293	293	293	445	445	445	597	597	597	293
WEIGHT IN kg											
FRAME AND COVER		27	27	27	50	50	50	70	70	70	27

* 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 1200 mm (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.

METRIC MEASUREMENTS ARE BASED ON 25 mm (NOMINAL) PER INCH.

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

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

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 6 mm.

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.

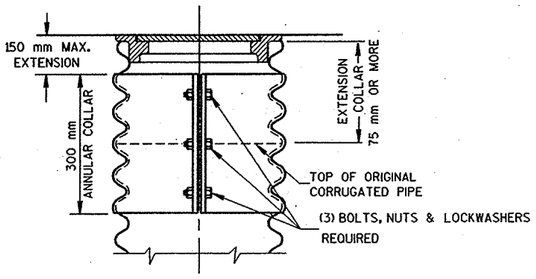
RODENT WIRE SCREEN SHALL BE 3 mm STAINLESS STEEL MESH AND BE INSTALLED WITH A STAINLESS STEEL HOSE CLAMP OF SUFFICIENT SIZE.

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 15 mm X 2400 mm, COPPERCLAD, AND BE EXOTHERMICALLY WELDED TO A #4 AWG, COPPER, STRANDED WIRE (BARE OR GREEN INSULATED). THE #4 AWG WIRE SHALL BE 1200 mm IN LENGTH, NEATLY COILED, TAPED AND AVAILABLE FOR USE WHEN REQUIRED.



CORRUGATED PIPE EXTENDER

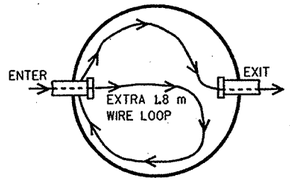
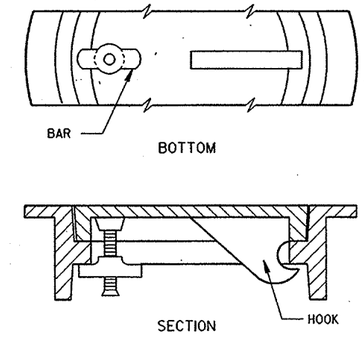
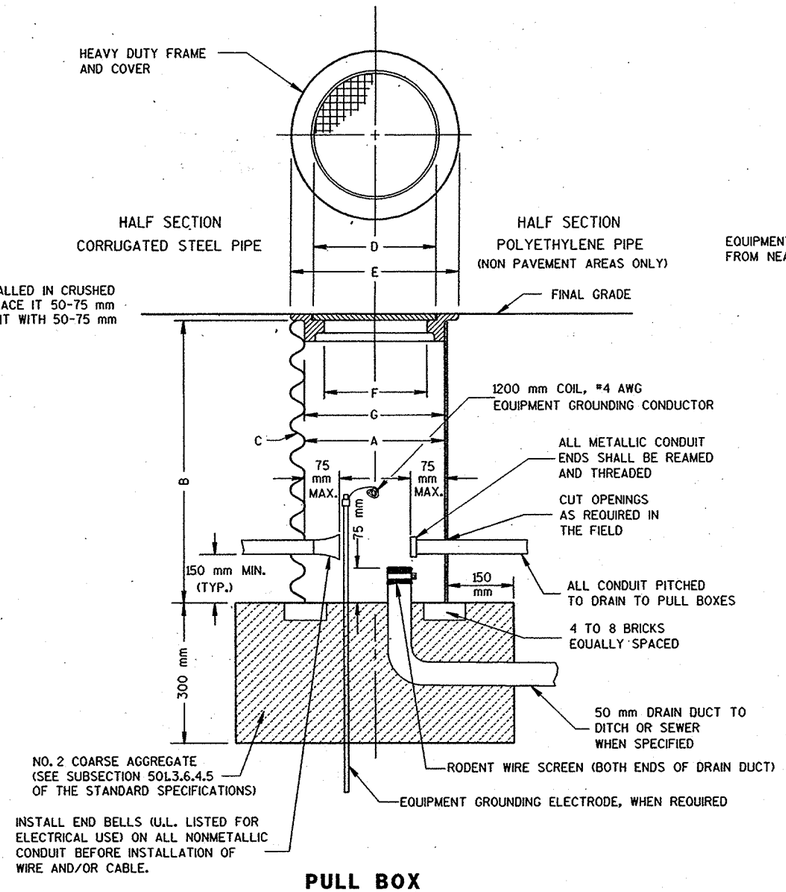


ILLUSTRATION OF WIRE/CABLE PLACEMENT IN PULLBOX



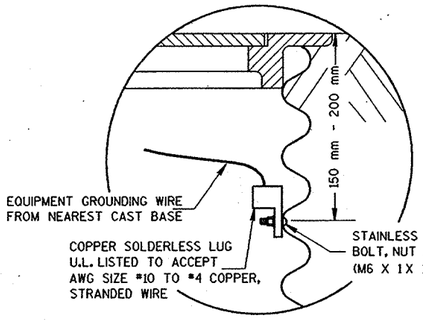
ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 50-75 mm BELOW GRADE AND COVER IT WITH 50-75 mm OF CRUSHED AGGREGATE

PULL BOX



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

PULL BOX

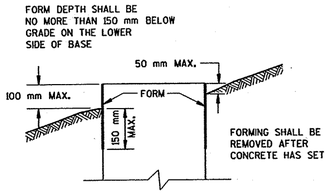
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 3/21/97 DATE
STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA

M

S.D.D. 9 B 4-3

S.D.D. 9 B 4-3

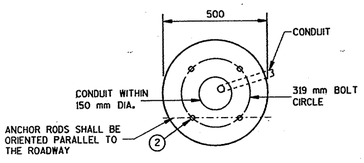


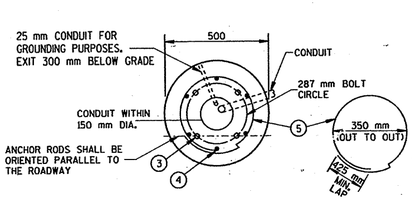
FORMING DETAIL

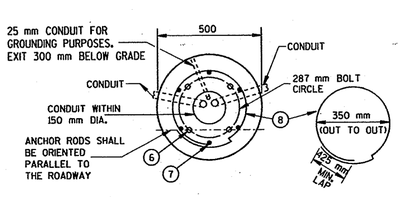
QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5
APPROX. CUBIC METERS OF CONCRETE	.306	.44	.306
kg OF HOOP BAR STEEL	NONE	10.4	7.26
kg OF VERTICAL BAR STEEL	NONE	27.2	8.16

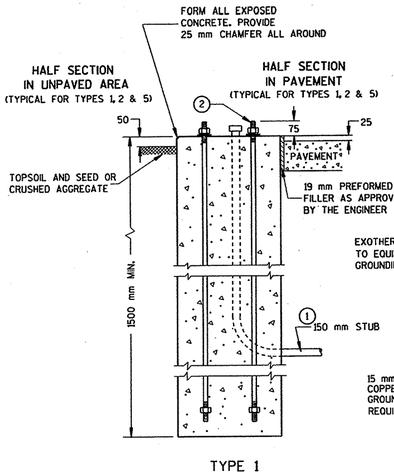
NOTE:

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

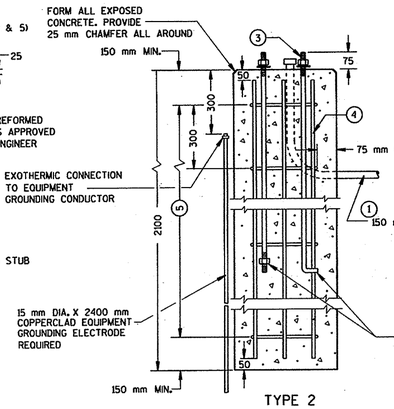




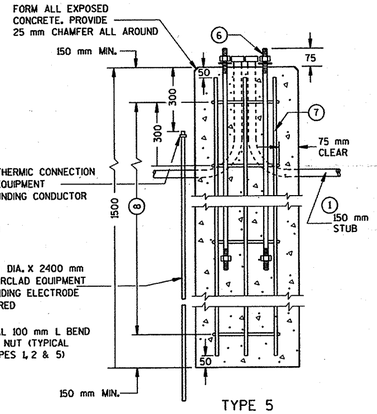




TYPE 1



TYPE 2



TYPE 5

CONCRETE BASES

GENERAL NOTES

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

METRIC MEASUREMENTS ARE BASED ON 25 mm (NOMINAL) PER INCH.

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 150 mm EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN 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 25 mm. 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.

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 300 mm 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 25 mm CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 1200 mm 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 300 mm 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 100 mm "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 SPECIFICATION (LATEST EDITION).

METRIC ANCHOR ROD SIZES SHOWN ARE SOFT CONVERTED ENGLISH SIZES.

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 600 mm. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 450 mm. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 900 mm EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (4) 25.4 mm DIA. X 1050 mm ANCHOR RODS.

(3) (4) 25.4 mm DIA. X 1500 mm ANCHOR RODS.

(4) (6) NO 19 X 2000 mm BAR STEEL REINFORCEMENT.

(5) (7) NO 13 X 1525 mm BAR STEEL REINFORCEMENT @ 300 mm C-C.

(6) (4) 25.4 mm DIA. X 1050 mm ANCHOR RODS.

(7) (6) NO 13 X 1400 mm BAR STEEL REINFORCEMENT

(8) (5) NO 13 X 1525 mm BAR STEEL REINFORCEMENT @ 300 mm C-C.

CONCRETE BASES,
TYPES 1, 2 & 5

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/21/96
DATE

STATE ELECTRICAL ENGINEER FOR HIGHWAYS

FHWA

M

S.D.D. 9 C 2-2

S.D.D. 9 C 2-2
LEVELS ON • 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:

GENERAL NOTES

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

METRIC MEASUREMENTS ARE BASED ON 25 mm (NOMINAL) PER INCH.

FOUR (4) BOLTS (25.4 mm X 3.00 X 100 mm) TO BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 25.4 mm DIAMETER, 100 mm IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS, ASTM A-325, (634 MPa YIELD) HEAVY HEX NUT, AND BE GALVANIZED IN ACCORDANCE 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.

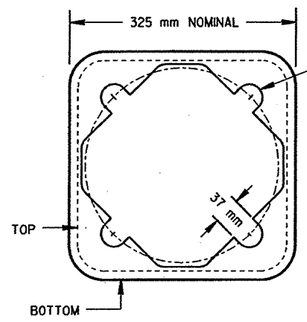
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING AN M6 X 1.00 X 19 mm STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

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.

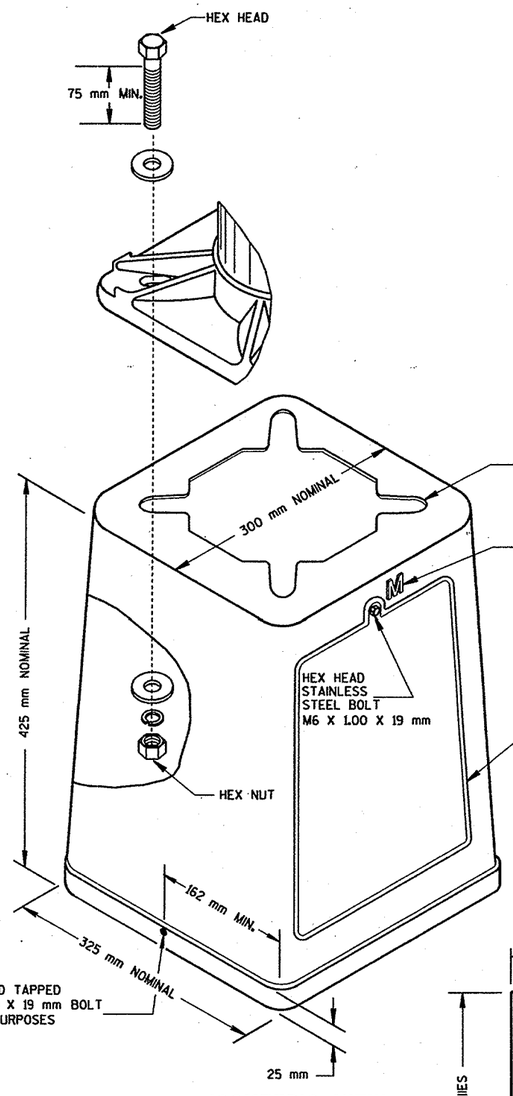
PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 37 mm, THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

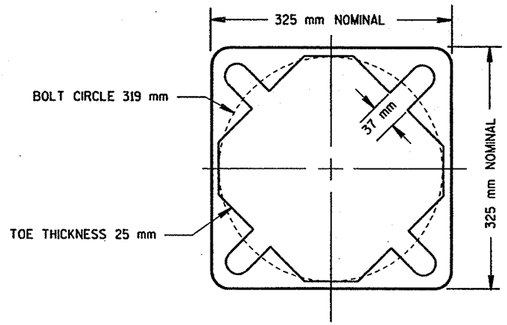
THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.



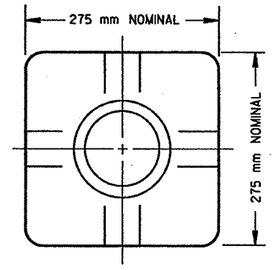
BOTTOM VIEW (TRANSFORMER BASE)



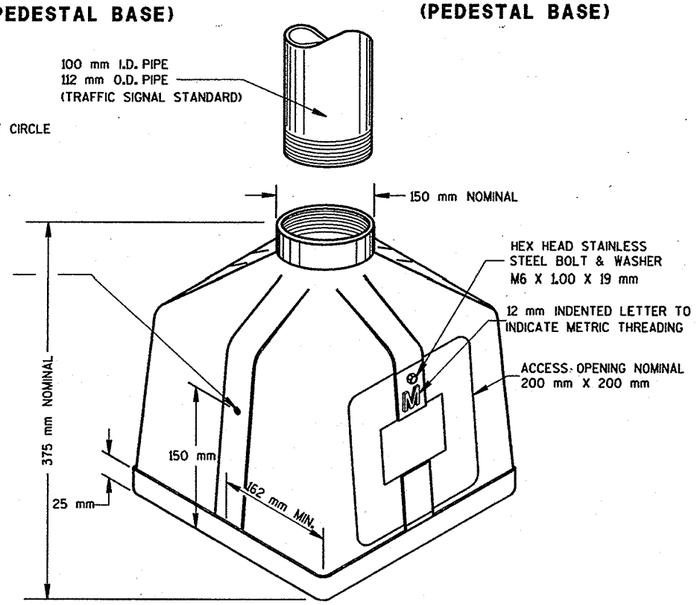
ISOMETRIC VIEW



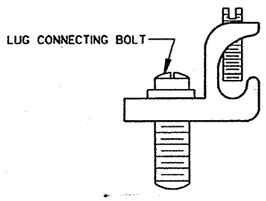
BOTTOM VIEW (PEDESTAL BASE)



TOP VIEW (PEDESTAL BASE)

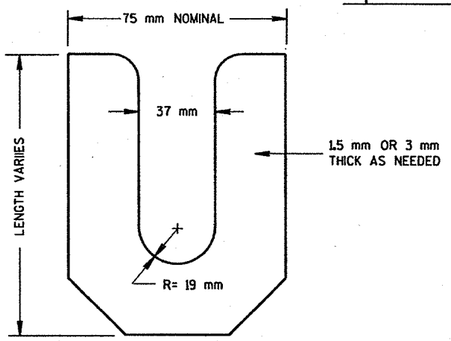


ISOMETRIC VIEW
PEDESTAL BASE



TYPICAL MECHANICAL CONNECTOR LUG
TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE
INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 10/21/96 DATE
STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA

M

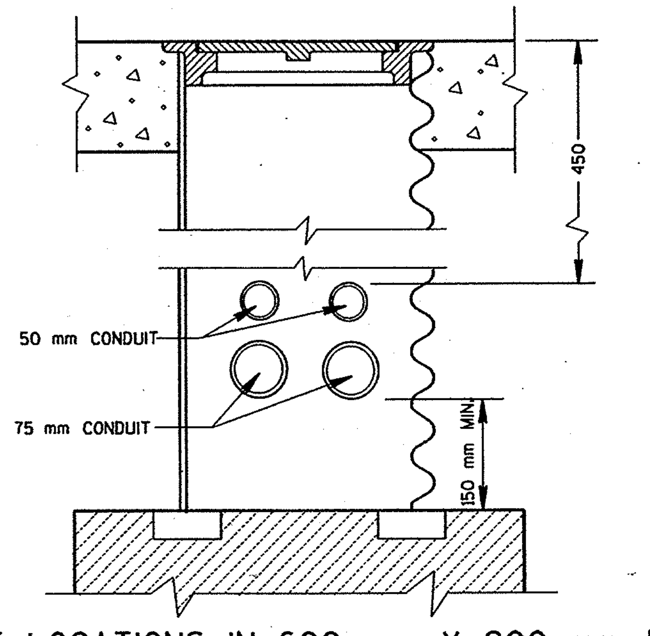
S.D.D. 9 C 3-2

LEVELS ON - 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:

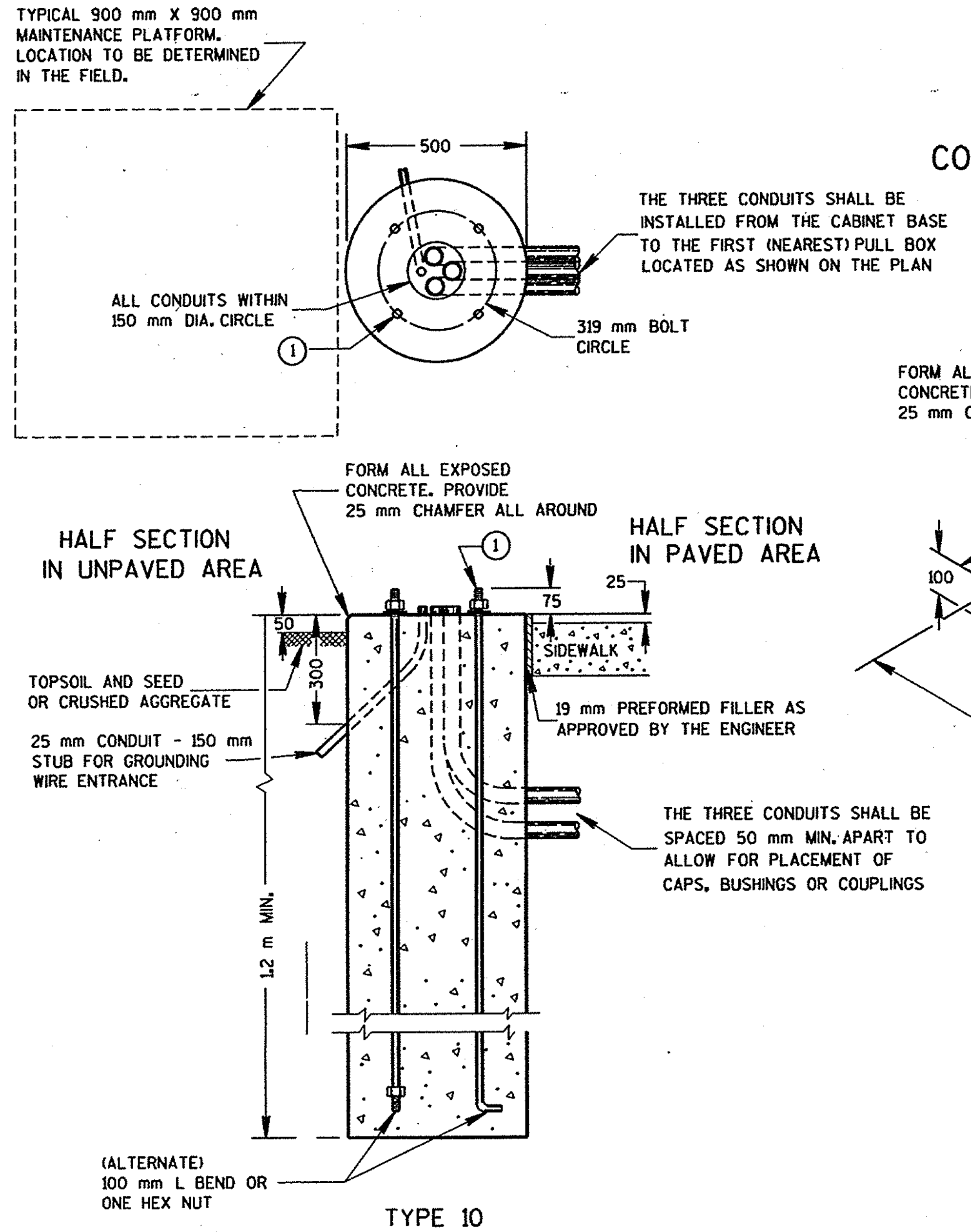
S.D.D. 9 C 3-2

CONTROL CABINET BASE TYPE	DIMENSIONS mm H	I	J	K	m^3 CONCRETE (APPROX.)
TYPE 6 - 750 mm CABINET	850	1500	250	425	.49
TYPE 7 - 950 mm CABINET	1050	1500	250	525	.71
TYPE 8 - 950 mm CABINET	1050	1800	300	525	.99
TYPE 9 - VARIABLE	1350	1800	350	675	1.19
TYPE 10 - POST MOUNT	AS SHOWN				.24

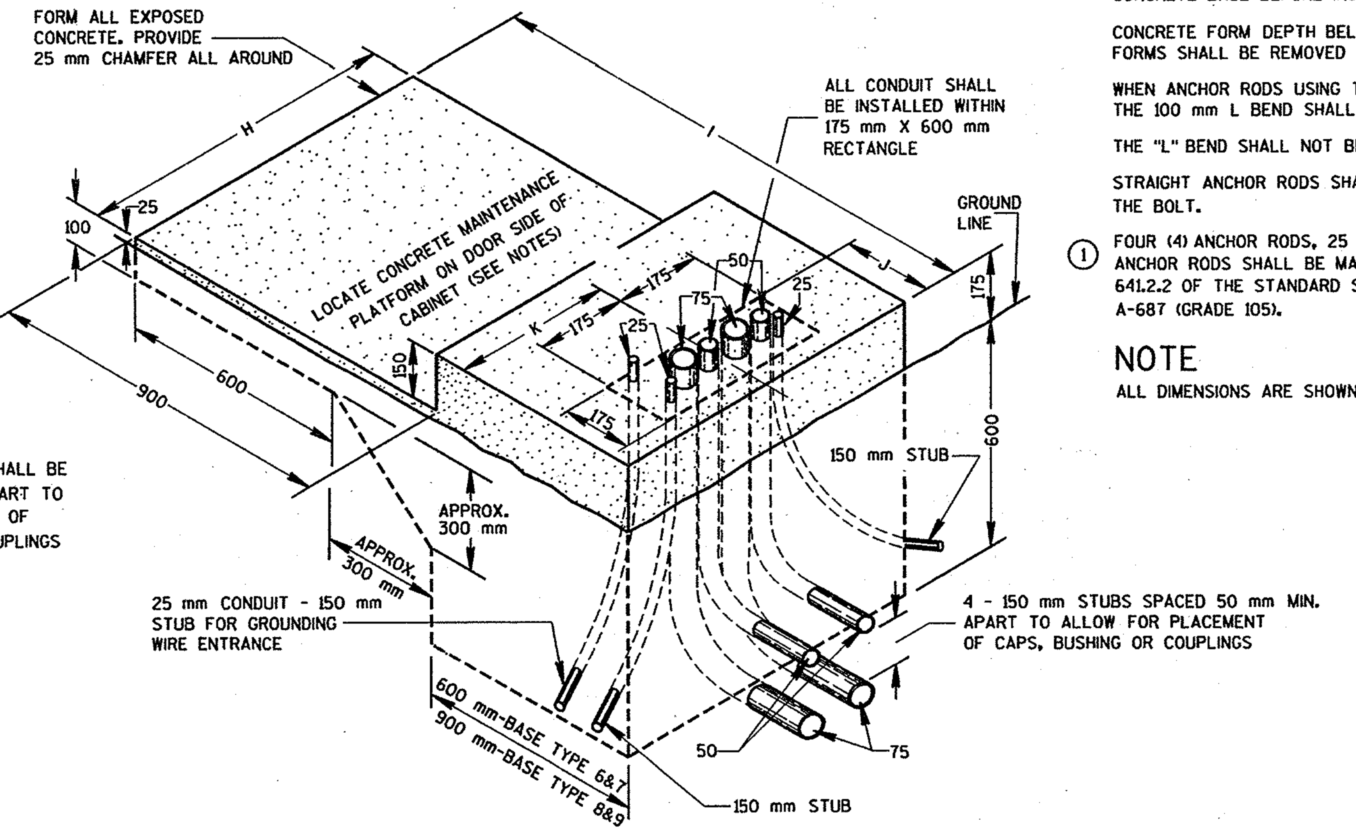


CONDUIT LOCATIONS IN 600 mm X 900 mm PULL BOX

(LEADING TO CONTROLLER CABINET BASE TYPE 6, 7, 8 AND 9)



TYPE 10



TYPE 6,7,8 AND 9 (ISOMETRIC VIEW)

CONCRETE CONTROL CABINET BASES

GENERAL NOTES

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

METRIC MEASUREMENTS ARE BASED ON 25 mm (NOMINAL) PER INCH.

INSTALL FOUR 12 mm MINIMUM DIAMETER X 100 mm MINIMUM LENGTH APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR RODS 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 25 mm.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 600 mm MINIMUM AND 900 mm MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 450 mm MINIMUM AND 900 mm 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 900 mm SQUARE 100 mm THICK CONCRETE MAINTENANCE PLATFORM SHALL BE REQUIRED ON THE DOOR SIDE OF THE CABINET. THE TOP 25 mm 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 (50 mm AND 75 mm) CONDUITS 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 150 mm 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 100 mm 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 300 mm IN LENGTH ON EACH END OF THE BOLT.

(1) FOUR (4) ANCHOR RODS, 25 mm DIA. X 1050 mm. 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).

NOTE

ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.

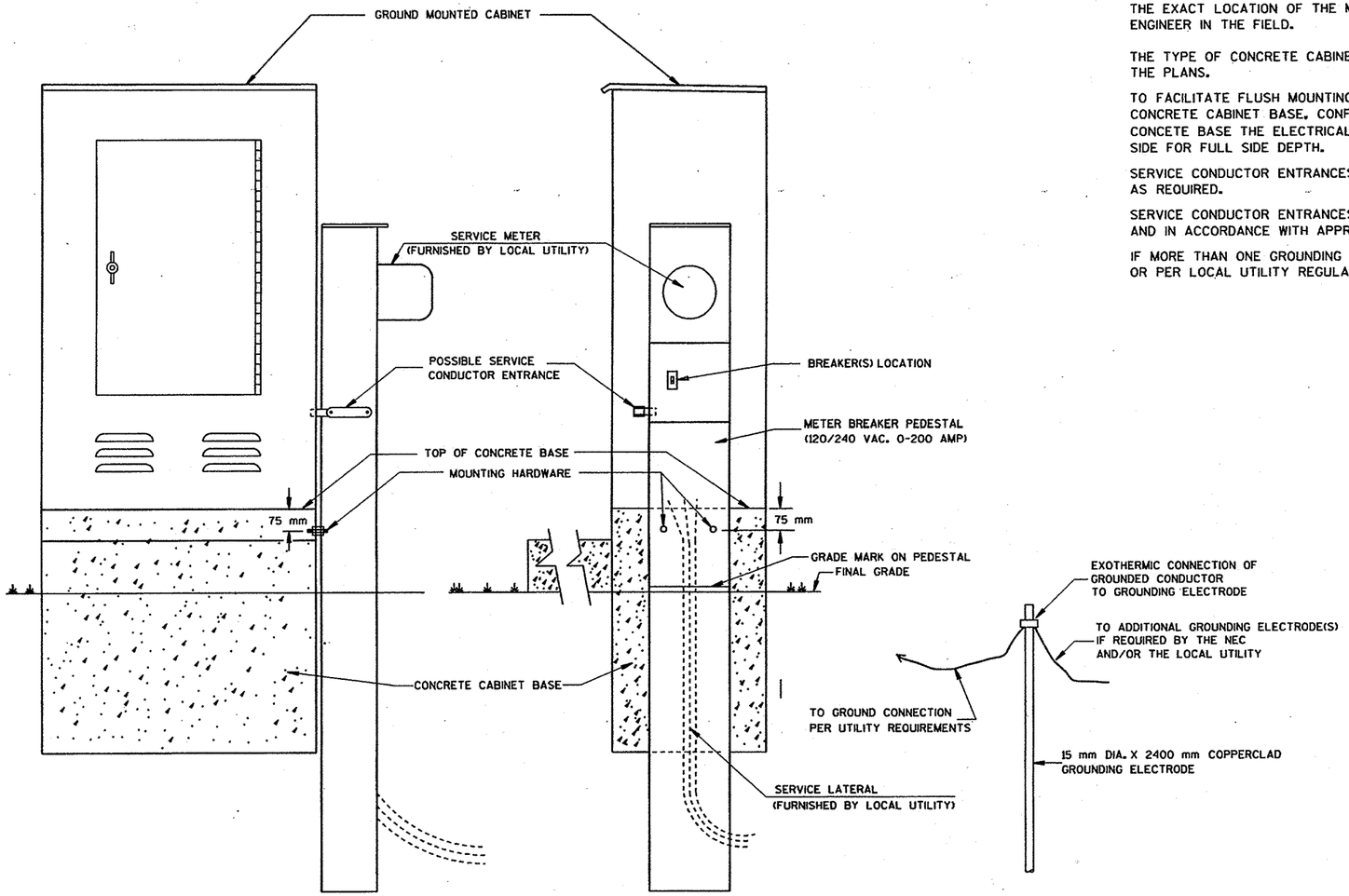
CONCRETE CONTROL CABINET BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 10/21/96 DATE
FHWA
STATE ELECTRICAL ENGINEER FOR HIGHWAYS
M

S.D.D. 9 C 5-2

FILE NAME:



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.

METRIC MEASUREMENTS ARE BASED ON 25mm (NOMINAL) PER INCH.

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 CONCRETE CABINET BASE, CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCETE BASE THE ELECTRICAL 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 1800 mm OR PER LOCAL UTILITY REGULATIONS.

CABINET SERVICE INSTALLATION
(METER BREAKER PEDESTAL)

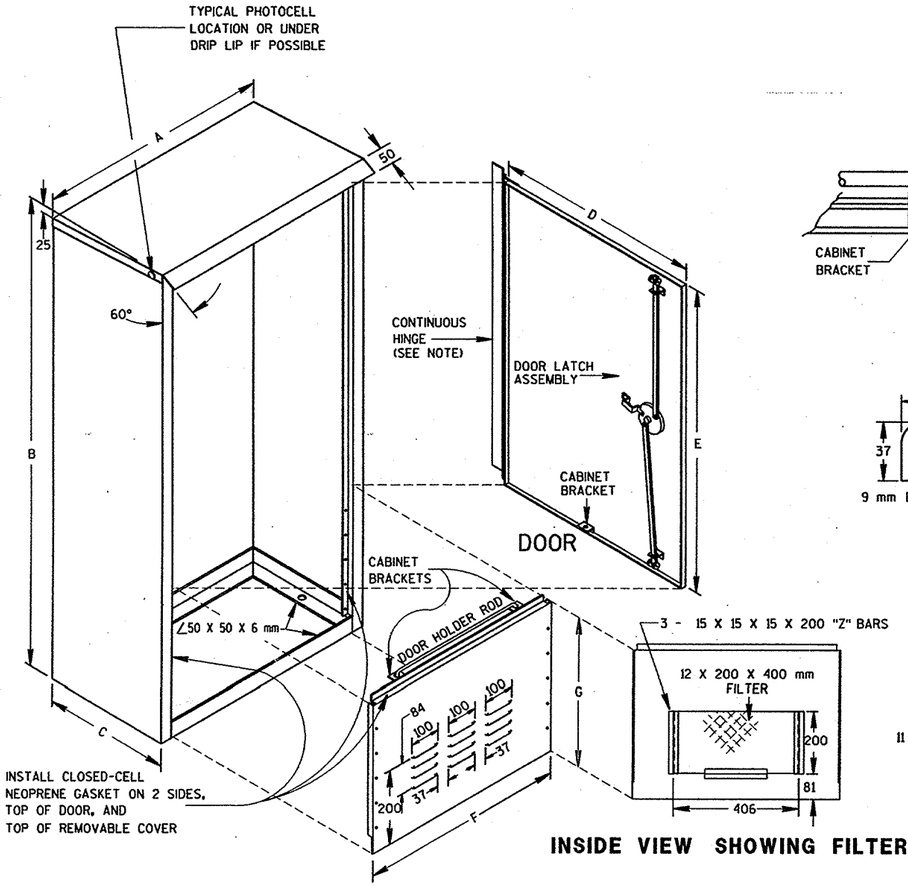
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/21/02
DATE
STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA
M

S.D.D. 9 D 1-2

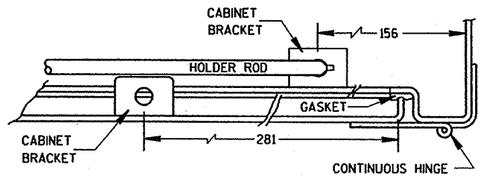
FILE NAME:

S.D.D. 9 D 1-2

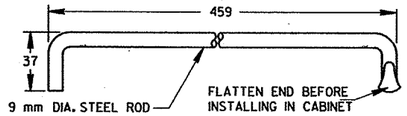


INSIDE VIEW SHOWING FILTER

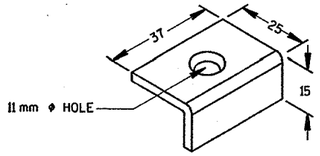
REMOVABLE COVER



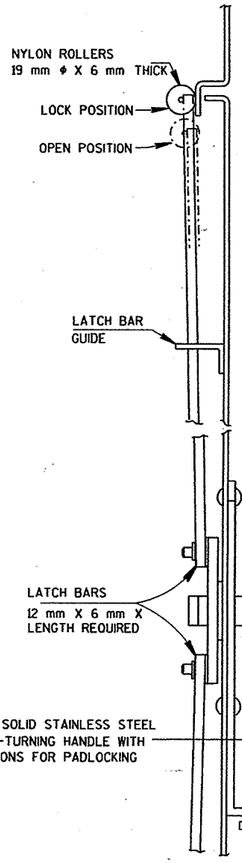
HINGE & DOOR HOLDER



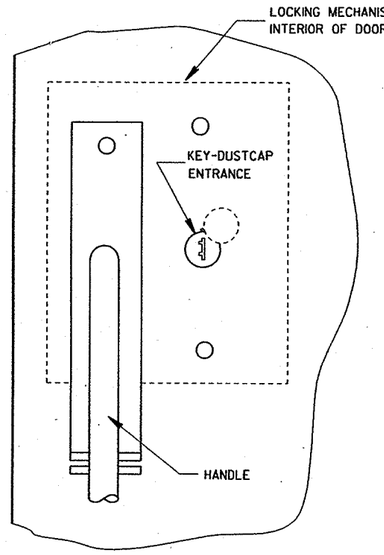
HOLDER ROD



CABINET BRACKET

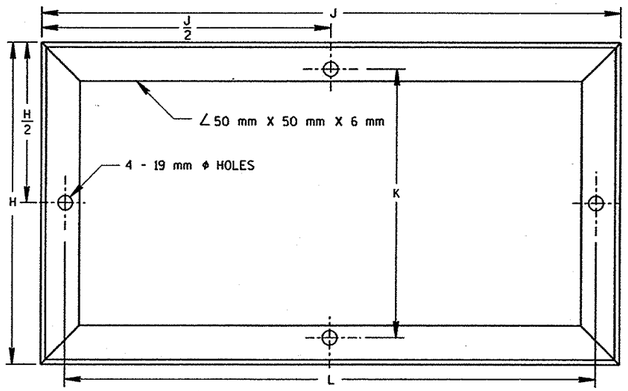


SIDE VIEW



SIDE VIEW

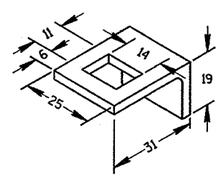
LATCH ASSEMBLY



MOUNTING BASE

TABLE OF DIMENSIONS (mm)

MARK	CABINET TYPE		
	3060	3860	3866
A	750	950	950
B	1500	1500	1650
C	412	412	600
D	662	850	825
E	950	950	950
F	662	850	825
G	475	475	625
H	412	412	600
H/2	206	206	300
J	750	950	950
J/2	375	475	475
K	344	344	525
L	675	875	875



LATCH BAR GUIDE

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.

METRIC MEASUREMENTS ARE BASED ON 25 mm (NOMINAL) PER INCH.

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 3 mm THICK ALUMINUM.

ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH 6 mm DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH M6 X 1.00 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.

NOTE:

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

SIGNAL OR LIGHTING CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 10/21/86 DATE
STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA

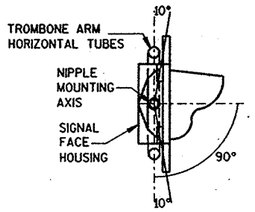
M

S.D.D. 9 D 2-2

LEVELS ON - 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

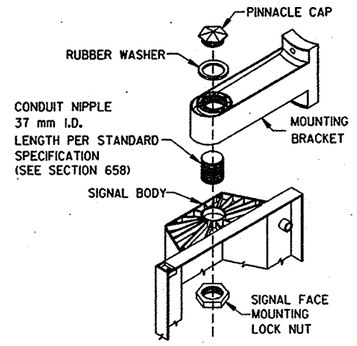
FILE NAME:

S.D.D. 9 D 2-2



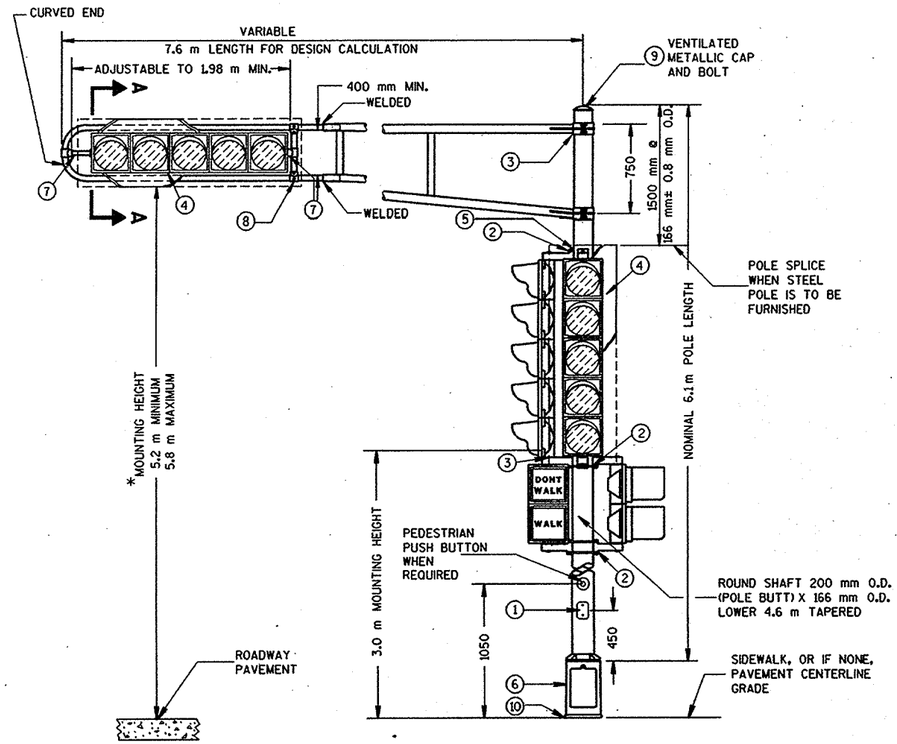
SECTION A-A

(10 DEGREES TILT REQUIREMENT OF FACE(S) IN THE TROMBONE MOUNTING)



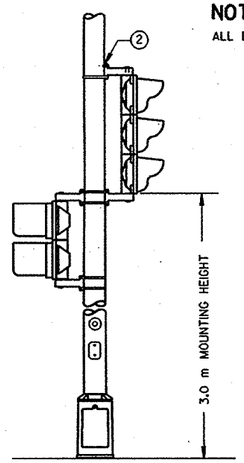
SIGNAL FACE MOUNTING DETAIL

(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.

METRIC MEASUREMENTS ARE BASED ON 25 mm (NOMINAL) PER INCH.

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.

1. 100 mm X 150 mm REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) M6 X 1.00 X 19 mm HEX HEAD STAINLESS STEEL BOLTS.
2. SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS - SEC. 658)
3. GROMMETS, 25 mm CHASE NIPPLES OR 25 mm CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 34 mm HOLE IN POLE SHAFT FOR WIRING.
4. BACKBOARDS ARE REQUIRED AT ALL TIMES ON TROMBONE MAST ARM MOUNTED SIGNAL FACES. VERTICAL MOUNTED SIGNAL FACES WITH BACKBOARDS REQUIRED ARE LOCATED AS SHOWN ON THE PLANS. BACKBOARDS ARE REQUIRED TO SURROUND SIGNAL FACES. BACKBOARDS SHALL EXTEND 125 mm BEYOND EXTREMITIES OF THE SIGNAL FACE.
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 50 mm IN LENGTH AND 37 mm IN DIAMETER. (SEE STANDARD SPECIFICATION - SECTION 658).
8. VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (M6 X 1.00 X 19 mm 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) M6 X 1.00 X 19 mm STAINLESS STEEL, HEX HEAD BOLT.
10. SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

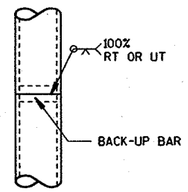
*MOUNTING HEIGHT LIMITATION DIMENSIONS OF THE TROMBONE MAST ARM WILL BE DEPENDENT UPON THE USE/NON-USE OF A TRANSFORMER BASE.

NOTE:

ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE NOTED.

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

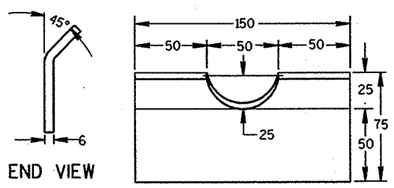
POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION M

S.D.D. 9 E 1-3a

FILE NAME:

S.D.D. 9 E 1-3a

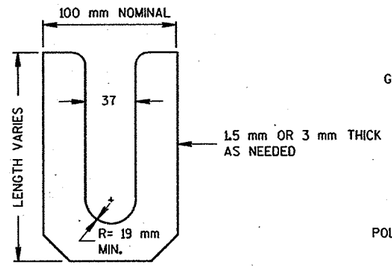
LEVELS ON - 2,3,4,5,6,7,8, 9,10,11,12,13,14,15, 16,17,18,19, 20,21,22, 23,24, 25, 26,27, 28,29,30,31,32,33, 34,35,36,37,38,39, 40,41, 42,43,44, 45,46,47,48, 49,50,51, 52,53,54, 55,56,57,58,59,60,61,62,63



FRONT VIEW

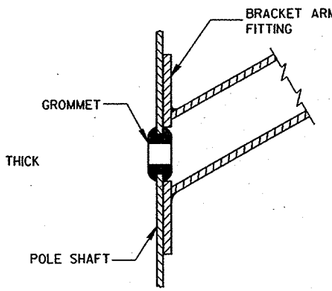
RECTANGULAR CLAMP SHIM

(4 TO A SET)

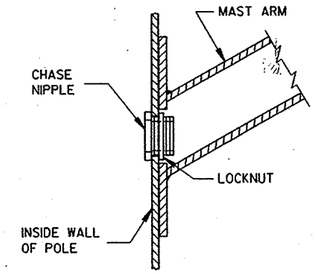


LEVELING SHIM (15)

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 (12 mm NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

(10.) 112 mm I.D. FOR LUMINAIRE MAST ARM CLAMP.
165 mm I.D. FOR TROMBONE MAST ARM CLAMP.

(11.) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

(12.) BASE PLATE SLOTTED TO ACCEPT 275 mm THROUGH 300 mm BOLT CIRCLE USING 25 mm DIAMETER ANCHOR RODS.

(13.) OUTSIDE SHIM DIAMETER - (112 mm O.D. FOR LUMINAIRE MAST ARM)
(165 mm O.D. FOR TROMBONE MAST ARM)

(14.) VARIABLE SHIM THICKNESS - (2.5, 6, 9, 13.5, or 18 mm)

SHIM THICKNESS FOR TROMBONE MAST ARMS MAY BE TYPICALLY 6, 9, 13.5 or 18 mm.

SHIM THICKNESS FOR LUMINAIRE MAST ARMS MAY BE TYPICALLY 2.5, 6 or 9 mm.

SHIM MATERIAL SHALL BE ALUMINUM ALLOY.

SHIM THICKNESS SHALL BE IMPRESSED INTO EACH SHIM. NUMERALS SHALL BE 6 mm HIGH AND LEGIBLE.

THE CONTRACTOR SHALL SUBMIT TWO COPIES OF ALL SHIM SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL.

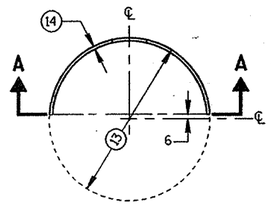
(15.) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

NOTE:

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

METRIC MEASUREMENTS ARE BASED ON 25 mm (NOMINAL) PER INCH.

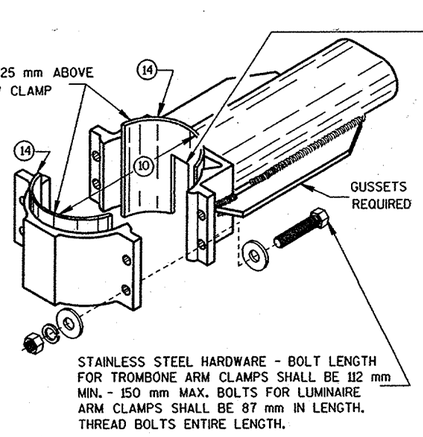


PLAN VIEW

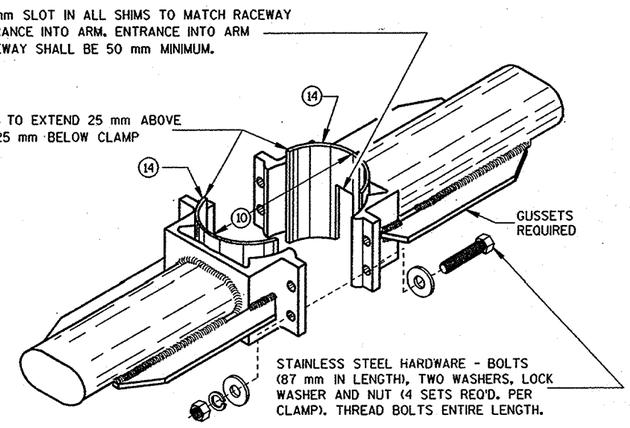
SECTION A-A

CIRCULAR CLAMP SHIM

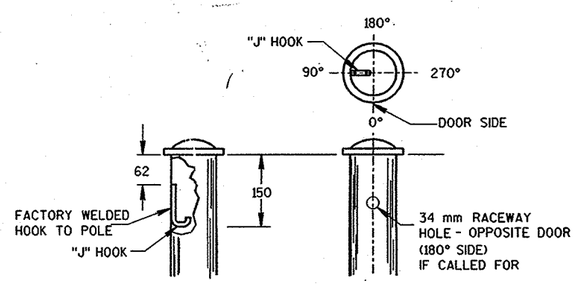
(2 TO A SET)



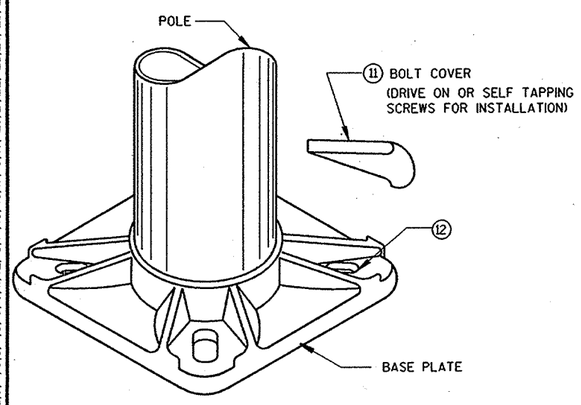
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



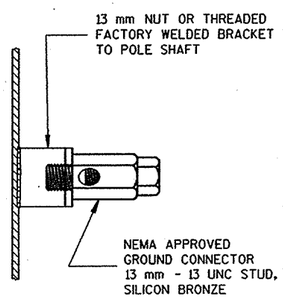
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

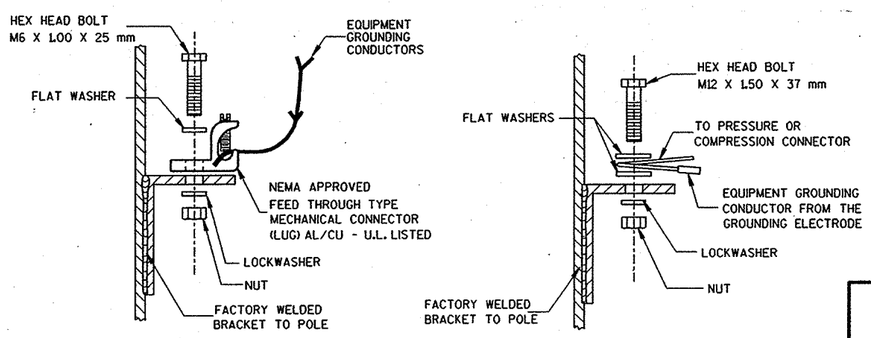


TYPICAL "J" HOOK LOCATION



BASE PLATE





TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HARDWARE DETAILS FOR POLE MOUNTINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 2/24/97 DATE
FHWA

STATE ELECTRICAL ENGINEER FOR HIGHWAYS

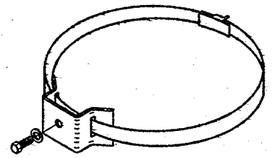
M

S.D.D. 9 E 1-3f

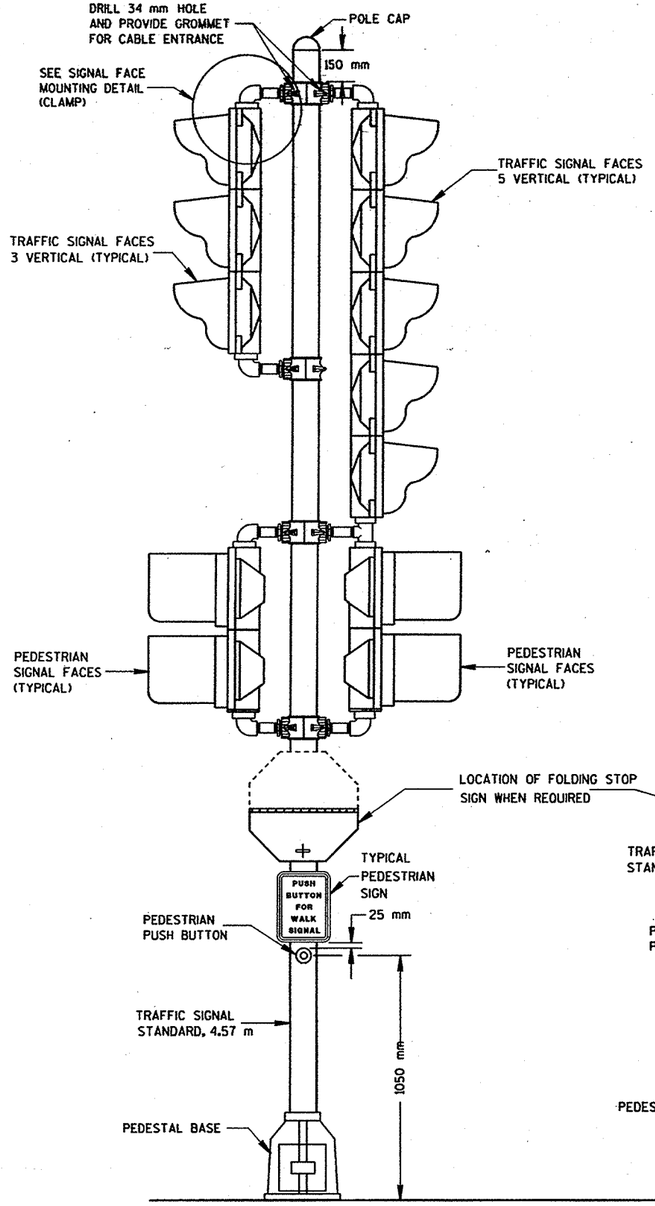
FILE NAME:

S.D.D. 9 E 1-3f

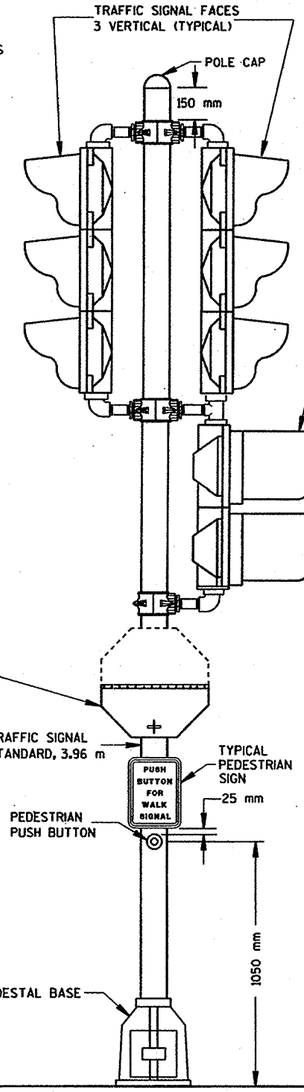
LEVELS ON - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



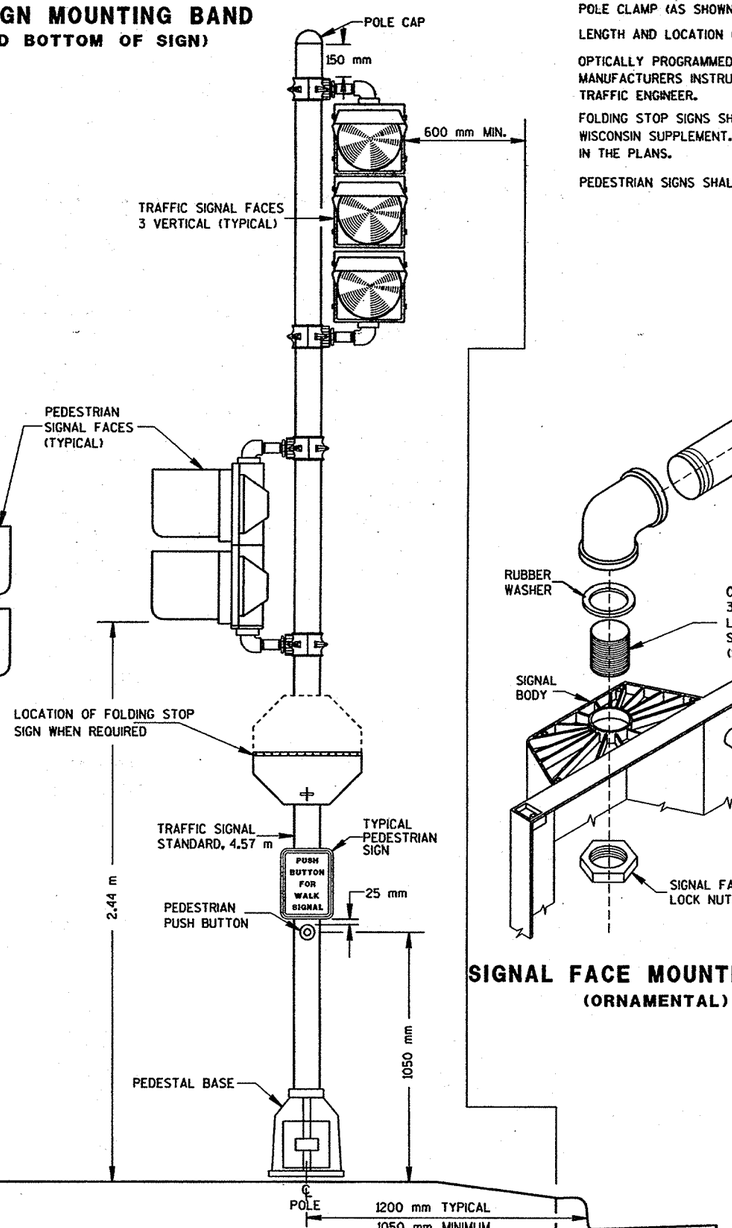
TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



TRAFFIC SIGNAL STANDARD-4.57 m



TRAFFIC SIGNAL STANDARD-3.96 m



TRAFFIC SIGNAL STANDARD-4.57 m
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.

METRIC MEASUREMENTS ARE BASED ON 25 mm (NOMINAL) PER INCH.

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.

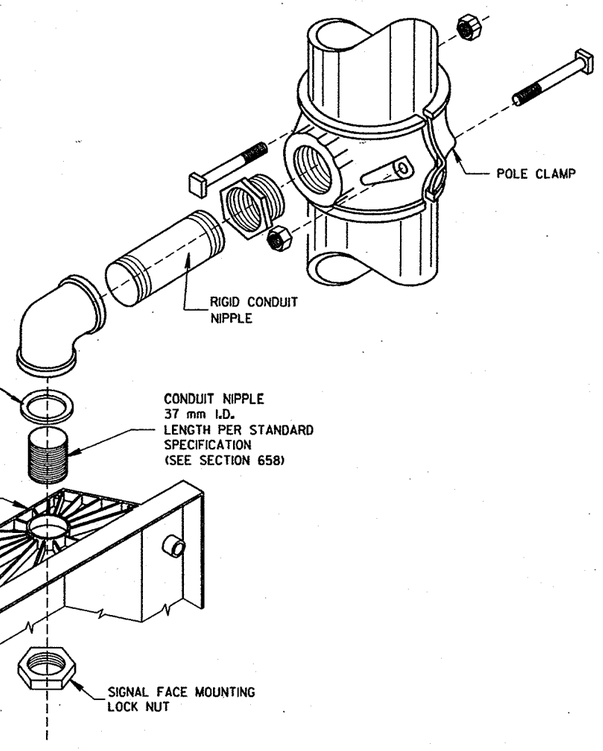
POLE CLAMP (AS SHOWN) MOUNTING BRACKETS SHALL BE USED.

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 THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.



SIGNAL FACE MOUNTING DETAIL
(ORNAMENTAL)

TRAFFIC SIGNAL STANDARD
ORNAMENTAL BRACKET MOUNTINGS
TYPICAL FOR 3.96 m OR 4.57 m

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

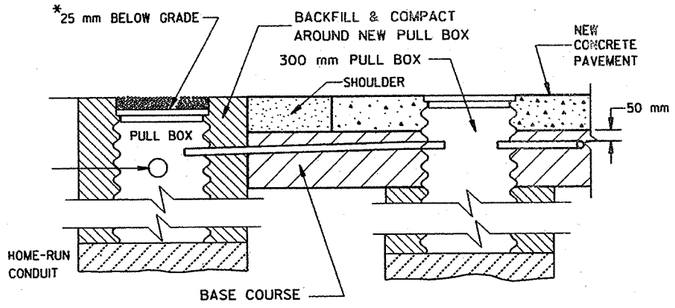
APPROVED
10/21/96
DATE
STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA
M

S.D.D. 9 E 5-1

LEVELS ON - 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:

S.D.D. 9 E 5-1



SECTION A-A

NO CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAILS

*RECESS PULL BOX SO THAT THE COVER IS 75 mm BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

GENERAL NOTES

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

METRIC MEASUREMENTS ARE BASED ON 25 mm (NOMINAL) PER INCH.

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

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

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

THE GROUND RESISTANCE READING OF THE LOOP SHALL READ "INFININTY" 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.

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

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

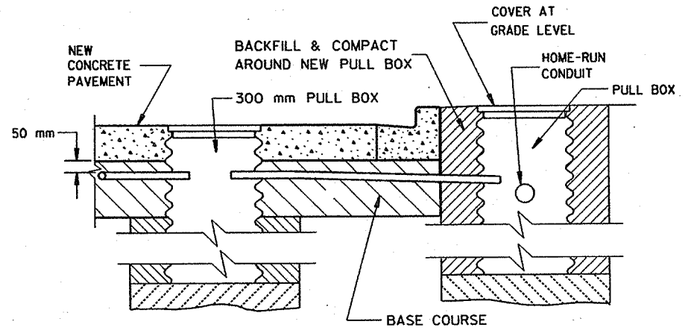
THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER 300 mm BEFORE INSTALLATION.

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

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

PROTECTION OF THE CONDUIT, CONDULET AND PULL BOX SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE THE NEW CONCRETE PAVEMENT IS PLACED.

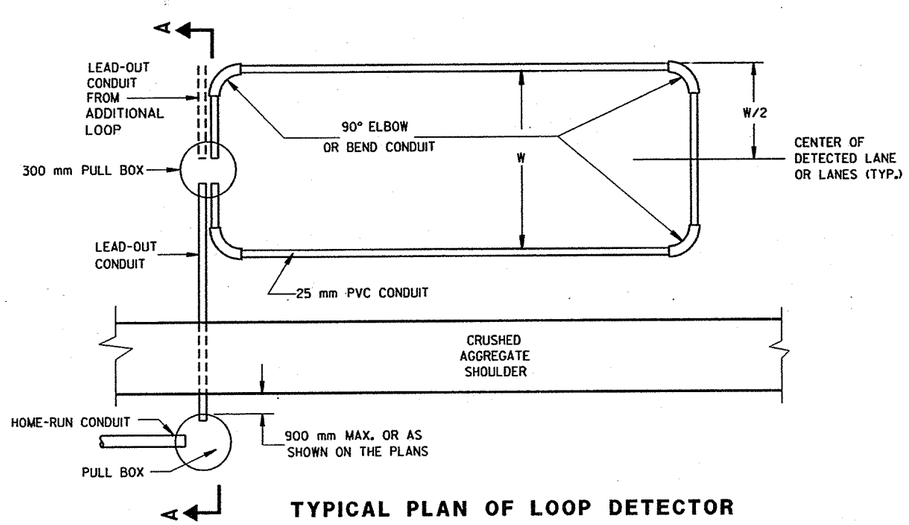
300 mm PULL BOXES IN PAVEMENT SHALL BE CORRUGATED STEEL ONLY.



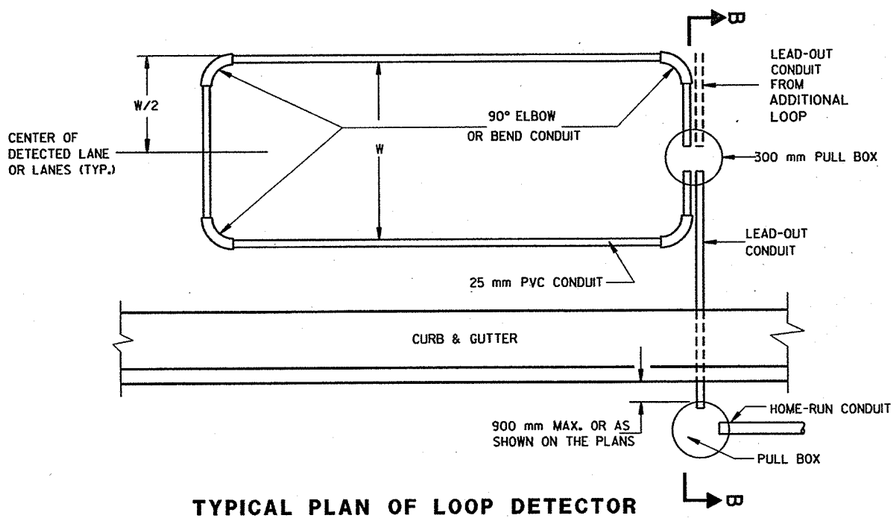
SECTION A-A

CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAILS



TYPICAL PLAN OF LOOP DETECTOR WITH 300 mm PULLBOX



TYPICAL PLAN OF LOOP DETECTOR WITH 300 mm PULLBOX

LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

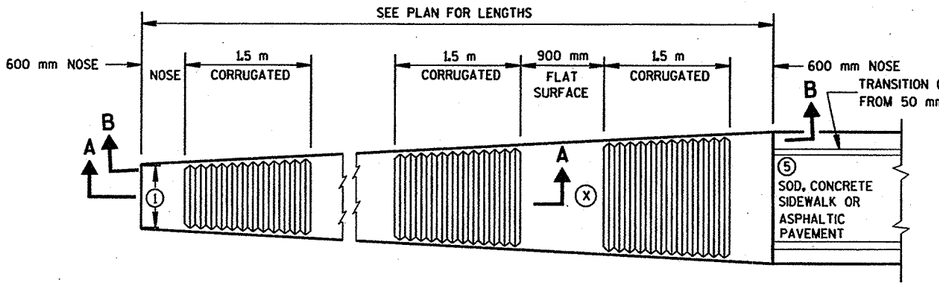
APPROVED
10/21/66
DATE
STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA

M

S.D.D. 9 F 9-2

FILE NAME:

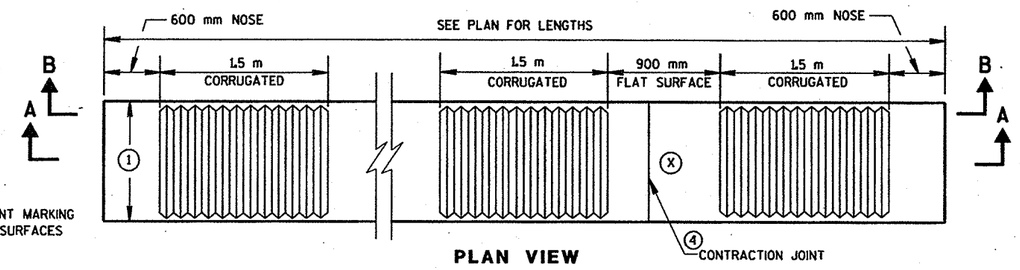
S.D.D. 9 F 9-2



X YELLOW PAVEMENT MARKING REQ'D ON FLAT SURFACES

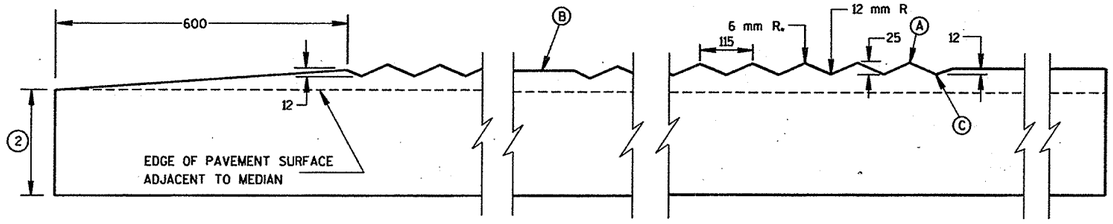
PLAN VIEW

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.

(1) SEE PLANS FOR CONSTANT OR VARIABLE WIDTH.

(2) THE DEPTH OF THE CONCRETE MEDIAN SHALL EQUAL THE DEPTH OF THE ADJACENT PAVEMENT STRUCTURE. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN IN THE PLAN. TYPICAL OPTIONS ARE:

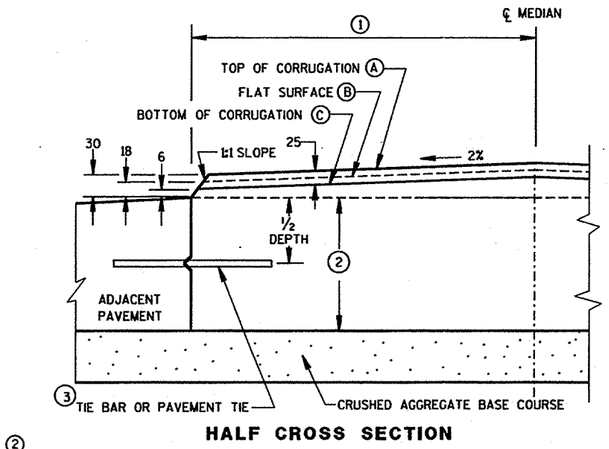
(1) NEW OR EXISTING CONCRETE PAVEMENT.
(2) ASPHALTIC CONCRETE OVER NEW OR EXISTING CONCRETE BASE COURSE.
(3) ASPHALTIC PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(3) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 13 X 600 mm SPACED AT 600 mm C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE PAVEMENT OR CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 19 X 300 mm SPACED AT 900 mm C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

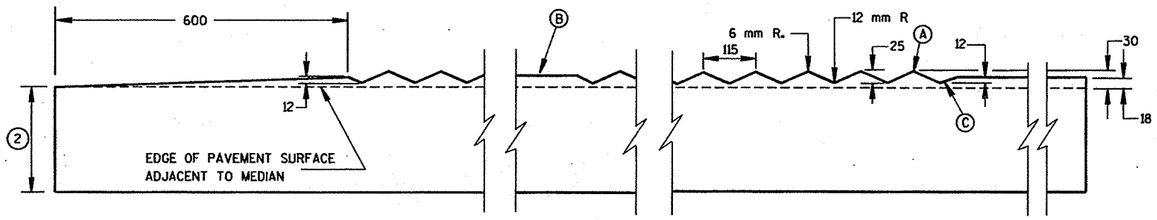
(4) CONCRETE PAVEMENT TRANSVERSE CONTRACTION JOINTS SHALL BE CONSTRUCTED TO MATCH THE JOINTS IN ADJACENT CONCRETE PAVEMENT. WHERE ADJACENT PAVEMENT IS ASPHALT WITH CRUSHED AGGREGATE BASE, TRANSVERSE CONTRACTION JOINTS SHALL BE PROVIDED AT 6 m INTERVALS.

(5) SURFACE TYPE AND DETAILS ARE DEFINED ELSEWHERE IN THE PLAN.



HALF CROSS SECTION

(2) CONCRETE CORRUGATED MEDIAN AND AJACENT PAVEMENT



SECTION B-B

LONGITUDINAL SECTION

NOTE:

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

CONCRETE CORRUGATED MEDIAN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

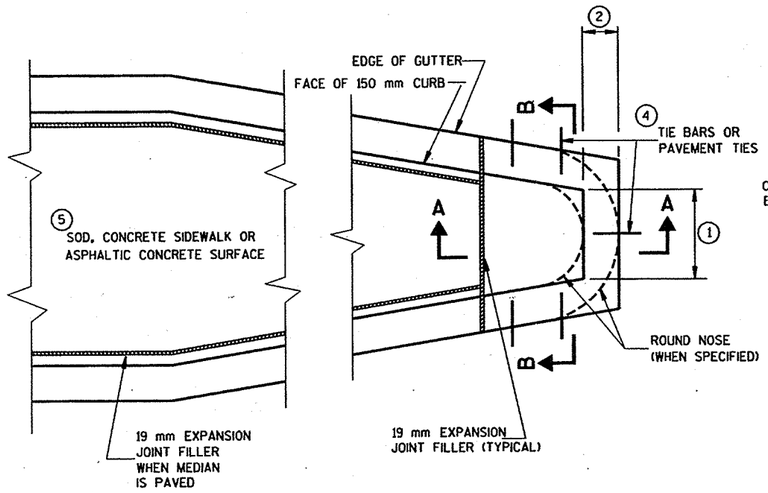
APPROVED 07/30/96 DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

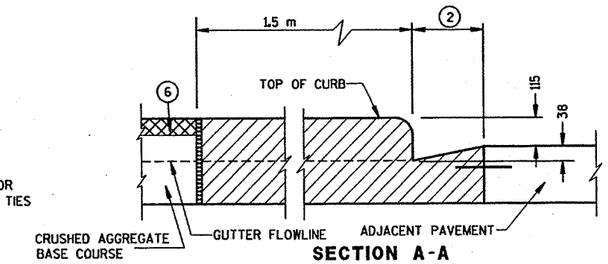
M

S.D.D. 11 B 1-1

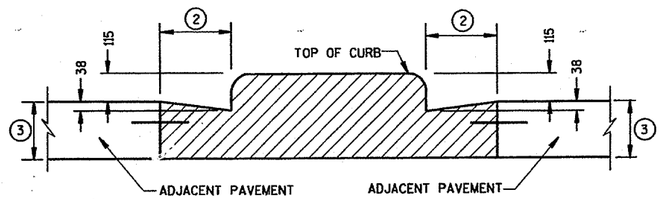
PLOT SCALE:
PLOT NAME:
REV. DATE:
ORIGINATOR:
LEVELS ON • 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63
FILE NAME:

S.D.D. 11 B 1-1





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 IN 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. 13 X 600 mm SPACED AT 600 mm C-C.

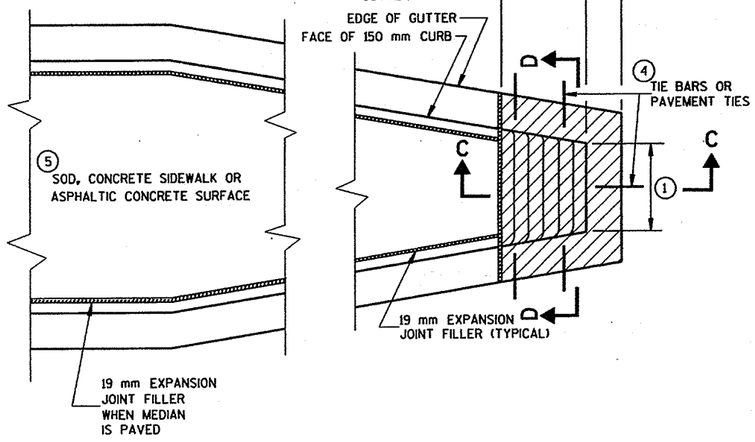
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 19 X 300 mm SPACED AT 900 mm C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

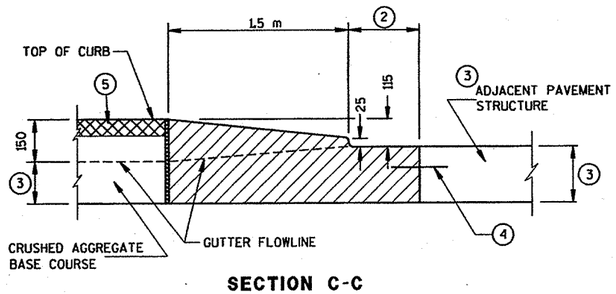
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

NOTE

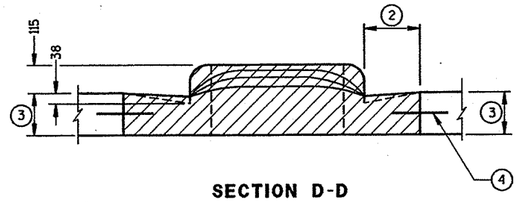
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

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 L. Amundson
CHIEF ROADWAY DEVELOPMENT ENGINEER

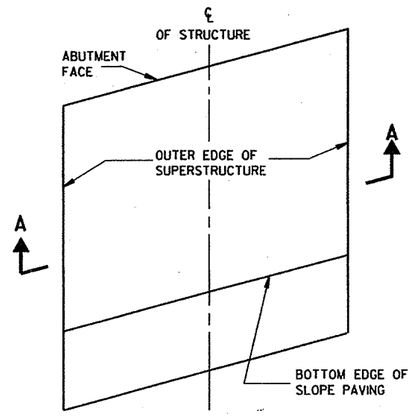
FHWA

M

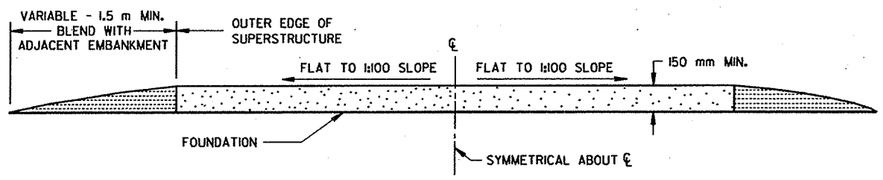
S.D.D. 11 B 2-1

S.D.D. 11 B 2-1

FILE NAME:



PLAN VIEW



SECTION A-A

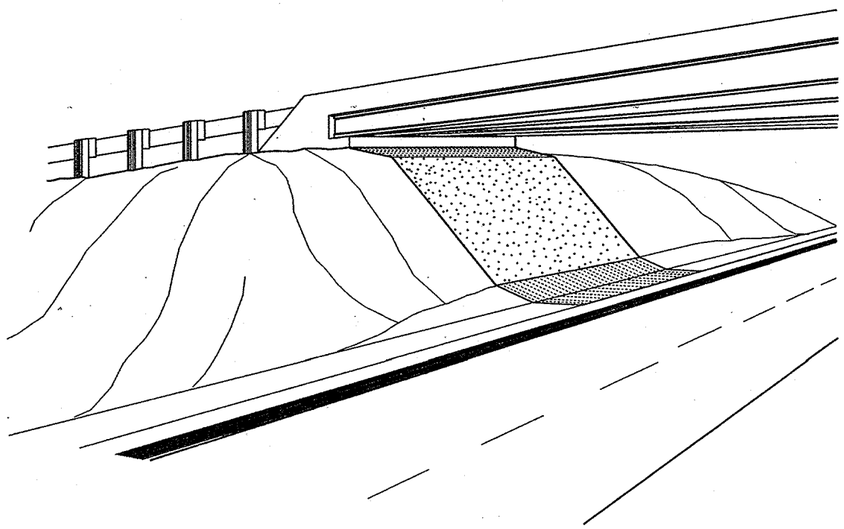
GENERAL NOTES

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.

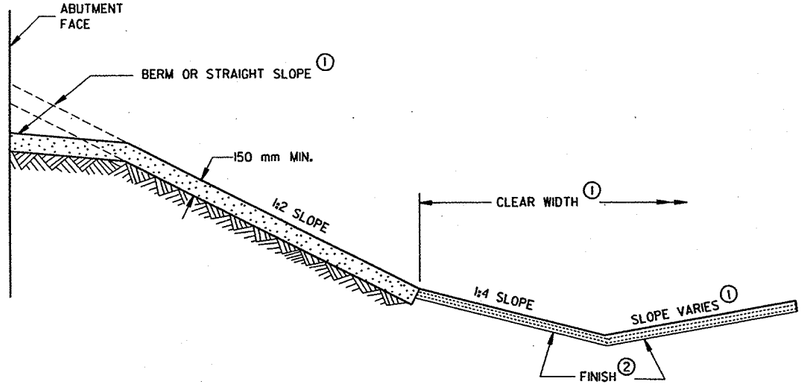
WOOD FORMS MAY BE LEFT IN PLACE WHEN OF A QUALITY ACCEPTABLE TO THE ENGINEER.

① DIMENSIONS, SLOPES AND SLOPE LIMITS ARE DETAILED ON THE STRUCTURE PLANS.

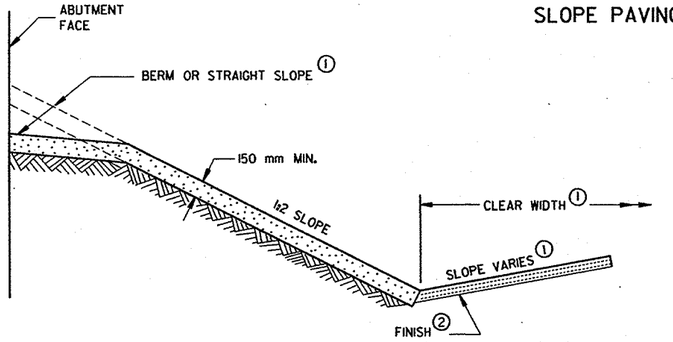
② MATCH EXISTING FINISH OR FINISH AS SHOWN ELSEWHERE IN THE CONTRACT.



SLOPE PAVING UNDER STRUCTURES



STANDARD CROSS SECTION



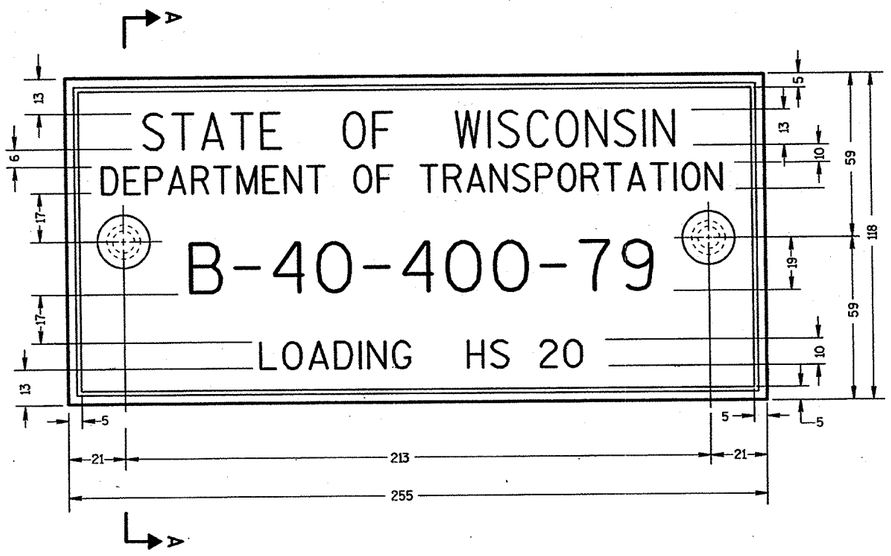
ALTERNATE CROSS SECTION

SLOPE PAVING - STRUCTURES (CRUSHED AGGREGATE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

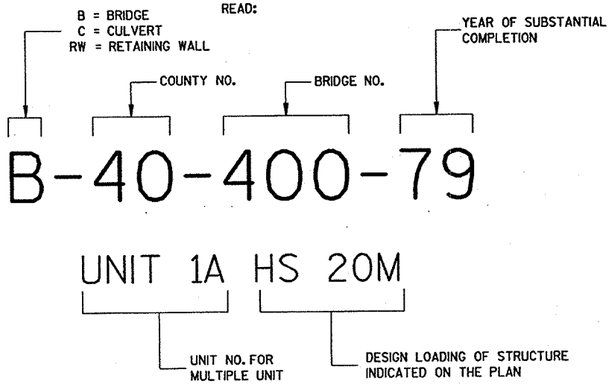
APPROVED
01/25/95
DATE
Roy L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA
M

S.D.D. 12 A 2-3



TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)

FOR MULTI-UNIT STRUCTURES LINES 4 AND 5 ABOVE SHALL READ:



NUMBERING AND LOADING DESIGNATION
MULTI-UNIT STRUCTURES

GENERAL NOTES

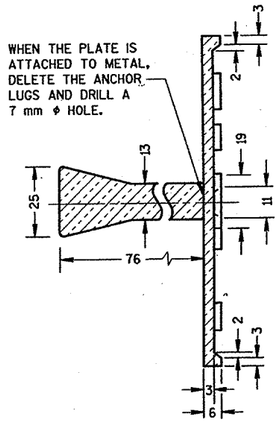
NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 506.2.4 OF THE STANDARD SPECIFICATIONS.

THE BRIDGE NUMBER AND DESIGN LOADING SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND DESIGN LOADING.

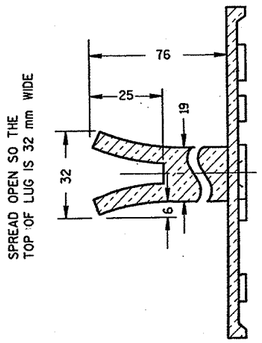
(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

NOTE

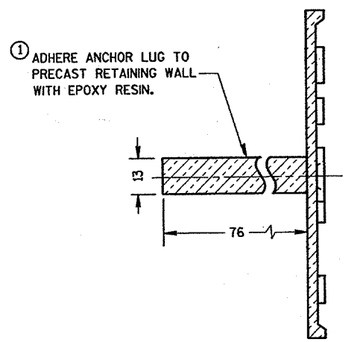
ALL DIMENSIONS SHOWN ARE IN MILLIMETERS



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE
(STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

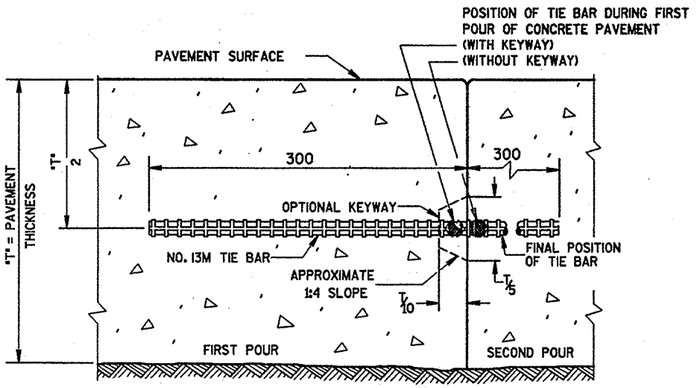
APPROVED 01/21/98 DATE
Roy L. Thimmesch
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA
M

S.D.D. 12 A 3-5

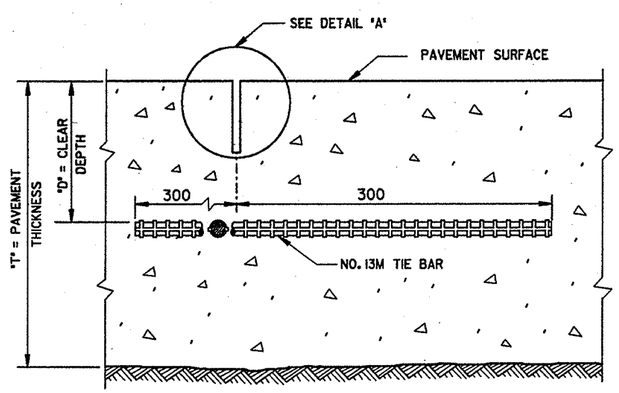
S.D.D. 12 A 3-5

LEVELS ON - 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,3233,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,5051,52,53,54,55,56,57,58,59,60,61,62,63

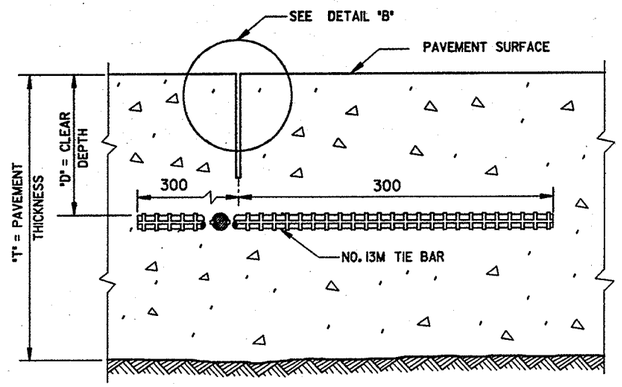
FILE NAME:



CONSTRUCTION JOINT



SAWED JOINT



RIBBON JOINT

GENERAL NOTES

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

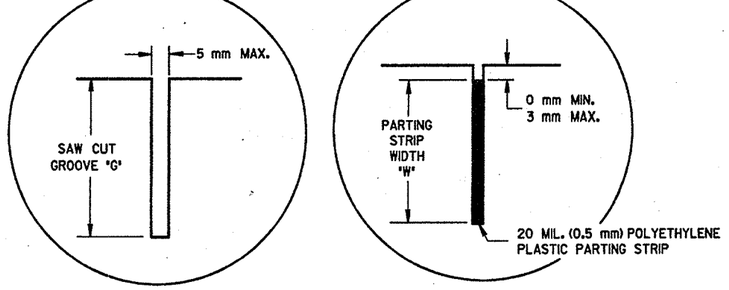
DETAILS "A" AND "B" ARE EQUAL ALTERNATES UNLESS OTHERWISE SPECIFIED IN THE CONTRACT.

LONGITUDINAL JOINTS SHALL NOT BE SEALED OR FILLED.

TIE BAR SPACINGS ARE VALID ONLY FOR PAVEMENT WIDTHS IN THE TABLE. FOR WIDER PAVEMENTS, TIED CONCRETE SHOULDERS OR RAMPS, THE TIE BAR SPACING SHALL BE AS SHOWN ON THE PLANS.

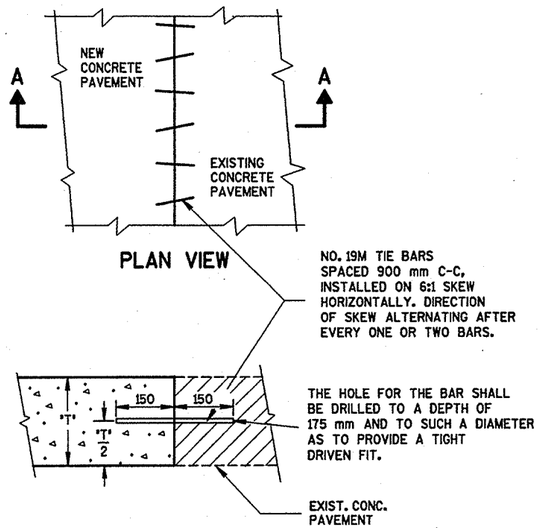
NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.



DETAIL "A"

DETAIL "B"

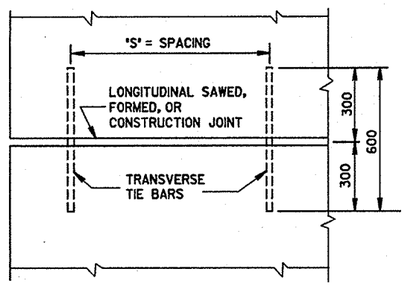


PLAN VIEW

SECTION A-A

PAVEMENT TIES

PAVEMENT THICKNESS "T" (mm)	CLEAR DEPTH "D" (mm)	SAW CUT GROOVE "G" (mm)	MAXIMUM TIE BAR SPACING "S" (mm)		PARTING STRIP WIDTH "W" (mm)
			PAVEMENT WIDTH (m)		
			7.2 OR 7.8	9.0	
150,165	75 ± 13	50	1 000	900	50
175,190	85 ± 25	55	850	800	55
200,215	95 ± 25	65	750	700	65
225,240	110 ± 25	75	650	600	75
250,265	120 ± 25	85	600	550	85
275,290	135 ± 25	95	550	500	95
300	145 ± 25	100	500	450	100



PLAN VIEW

SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT
LONGITUDINAL JOINTS
AND PAVEMENT TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9-24-98
DATE

CHIEF PAVEMENTS & RESEARCH ENGINEER

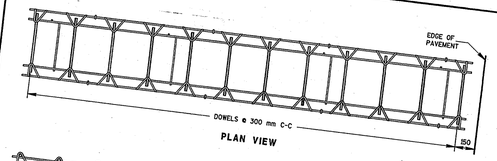
FHWA

M

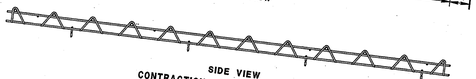
S.D.D. 13 C 1-10

PLOT SCALE: 1:1
PLOT NAME:
REV. DATE:
ORIGINATOR:
LEVELS ON - 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

S.D.D. 13 C 1-10

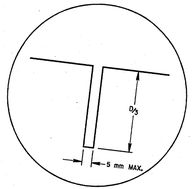


PLAN VIEW



SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①



JOINT DETAIL

GENERAL NOTES

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

CONTRACTION JOINTS

UNLESS OTHERWISE SPECIFIED, CONTRACTION JOINTS SHALL NORMAL TO THE CENTERLINE. THE LOCATION OF CONTRACTION JOINTS THRU INTERSECTIONS SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

CONTRACTION JOINTS SHALL NOT BE SEALED OR FILLED.

DOWEL BARS SHALL BE INSTALLED PARALLEL TO THE PAVEMENT CENTERLINE AND SURFACE.

CONSTRUCTION JOINTS

CONSTRUCTION JOINTS SHALL BE A MINIMUM OF 1.2 m FROM THE NEAREST CONTRACTION JOINT AND ALIGNED EITHER PARALLEL TO CONTRACTION JOINTS OR AT 90° TO THE CENTERLINE.

TIE BARS MAY BE INSERTED THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN POURED.

① ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY MAY BE USED WHEN APPROVED BY THE ENGINEER. MECHANICAL DOWEL BAR IMPLANTERS MAY BE USED INSTEAD OF DOWEL ASSEMBLIES.

② DOWEL BARS SHALL BE ANCHORED INTO DRILL HOLES WITH AN APPROVED EPOXY GROUT.

③ THE FREE END OF DOWEL BARS SHALL RECEIVE A THIN UNIFORM COATING OF BOND BREAKING GREASE.

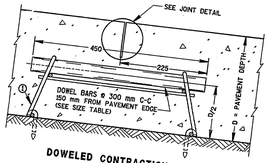
④ DOWEL BARS INSTALLED BY DRILLING SHALL BE SPACED 380 mm ON CENTER. THE GROUPING OF DOWEL BARS SHALL BE CENTERED INSIDE THE SLAB BASED ON ALL THE FOLLOWING SITUATIONS:

BETWEEN THE EDGES OF PAVEMENTS WITHOUT LONGITUDINAL JOINTS OR BETWEEN THE EDGE OF PAVEMENT AND NEAREST LONGITUDINAL JOINT OR BETWEEN TWO ADJACENT LONGITUDINAL JOINTS.

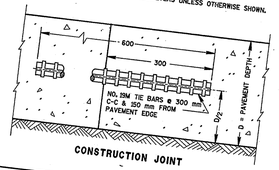
THE CLEAR DISTANCE FROM THE EDGE OF PAVEMENT OR LONGITUDINAL JOINT TO THE NEAR EDGE OF DOWEL BAR NEAREST THAT EDGE OR JOINT SHALL BE A MINIMUM OF 150 mm AND A MAXIMUM OF 355 mm.

NOTE

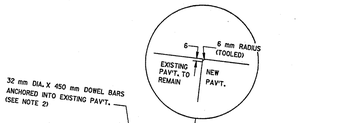
ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE SHOWN.



DOWELED CONTRACTION JOINT

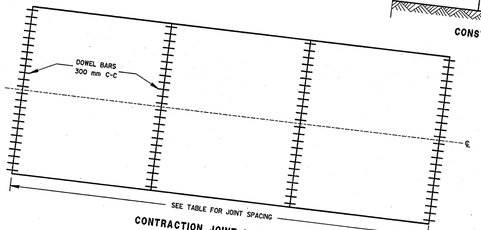


CONSTRUCTION JOINT



TRANSVERSE CONTRACTION JOINTS ABUTTING EXISTING PAVEMENT

② DOWEL BAR DETAIL



CONTRACTION JOINT LOCATI...

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
150,165 mm	32 mm	3,6 m
175,190 mm	32 mm	4,3 m
200,225 mm	32 mm	4,5 m
225,240 mm	32 mm	4,5 m
250 mm & ABOVE	38 mm	5,5 m

URBAN DOWELED CONCRETE PAVEMENT

S.D.D. 13 C 13-3

PLOT SCALE=

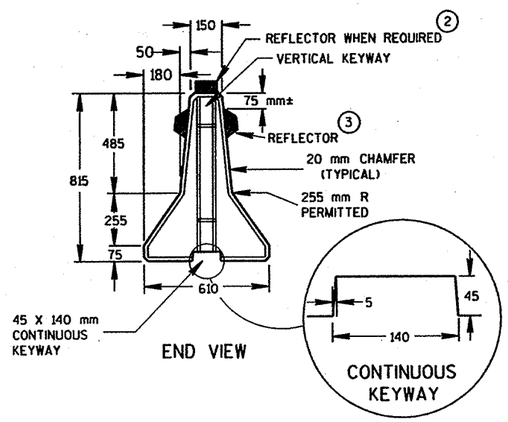
PLOT NAME=

REV. DATE=

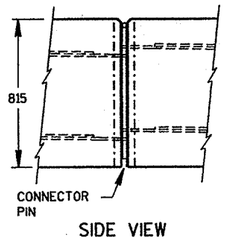
FILE NAME=

DESCRIPTION	SIZE	NO. REQ'D	LENGTH (mm)
TOP CONNECTOR WIRE ROPE (1)	12.7 mm	2	1800
BOTTOM CONN. WIRE ROPE (1)	12.7 mm	2	1800
TOP CONNECTOR STEEL BAR	15M	1	2740
BOTTOM CONN. STEEL BAR	15M	1	2740
STEEL CONNECTING PIN	31.75 mm DIA.	1	760
BOTTOM TIE BARS	15M	5	560
VERTICAL STEEL BAR	15M	10	635
HORIZONTAL STEEL BAR	15M	4	2845

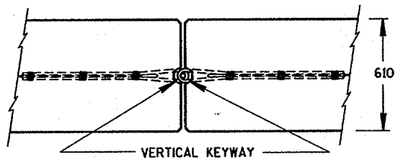
BILL OF MATERIALS



END VIEW



SIDE VIEW



PLAN VIEW

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.

BARRIERS SHALL BE REINFORCED WITH EITHER BAR STEEL REINFORCEMENT AS DETAILED ON THIS DRAWING OR WELDED STEEL WIRE FABRIC ADEQUATE TO ASSURE SAFE HANDLING STRENGTH.

ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 50 mm CLEAR UNLESS OTHERWISE SHOWN.

GALVANIZED WIRE ROPE SHALL BE 6 X 19 CLASS 2 IWRC WITH A MINIMUM BREAKING STRENGTH OF 8900 N AND SHALL CONFORM TO FEDERAL SPECIFICATION RR-W-410. THE ZINC COATING SHALL CONFORM TO TABLE II OF THE FEDERAL SPECIFICATIONS.

REFLECTORS SHALL CONFORM TO SECTION 633 OF THE STANDARD SPECIFICATIONS EXCEPT THE SHAPE SHALL BE AS SHOWN ON THIS DRAWING. ALTERNATIVE SHAPES MAY BE USED WHEN APPROVED BY THE ENGINEER. CONCRETE SURFACE PREPARATION, ADHESIVE AND METHOD OF APPLICATION SHALL BE AS RECOMMENDED BY THE REFLECTOR MANUFACTURER. THE COLOR OF REFLECTORS SHALL BE YELLOW. MAXIMUM SPACING SHALL BE 6.0 m.

(1) CONNECTOR ASSEMBLIES MAY, AT THE CONTRACTORS OPTION, BE FORMED FROM A CONTINUOUS SECTION OF 12.7 mm GALV. WIRE ROPE (5 m MIN. LENGTH). THE 15M CONNECTOR STEEL BARS MAY THEN BE OMITTED.

(2) TOP MOUNTED REFLECTORS SHALL BE PROVIDED IN ADDITION TO THE SIDE MOUNTED REFLECTORS ON ALL BARRIER INSTALLATIONS LOCATED ON CURVED ALIGNMENT LONGER THAN 60 m.

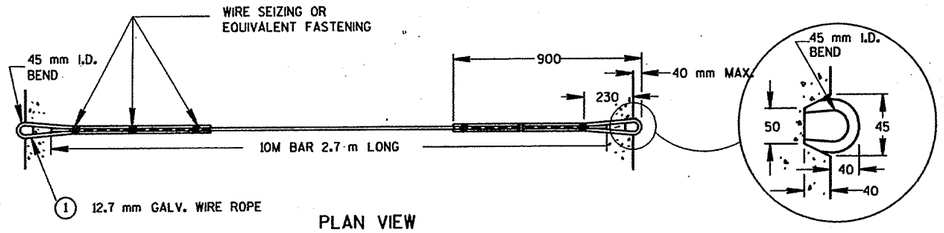
(3) BARRIERS USED TO SEPARATE OPPOSING TRAFFIC SHALL HAVE REFLECTORS ON BOTH SIDES. TOP MOUNTED REFLECTORS SHALL BE DOUBLE FACED FOR THIS CONDITION.

ALTERNATE DESIGN

J-J HOOKS PORTABLE CONCRET4E BARRIER BY EASI-SET INDUSTRIES MAY BE FURNISHED INSTEAD OF THE BARRIER DETAILED ON THIS DRAWING. CONTACT INFORMATION: EASI-SET INDUSTRIES, P.O. BOX 300, MIDLAND, VIRGINIA 22728, TELEPHONE (703) 439-8911.

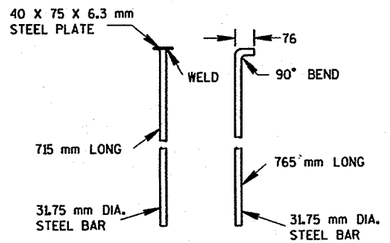
NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

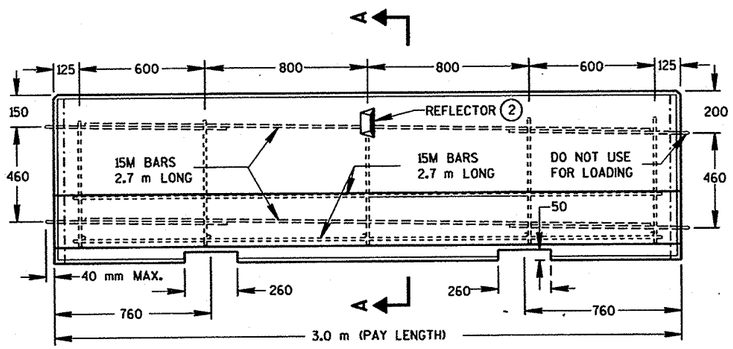


PLAN VIEW

TOP & BOTTOM CONNECTOR ASSEMBLY (1)

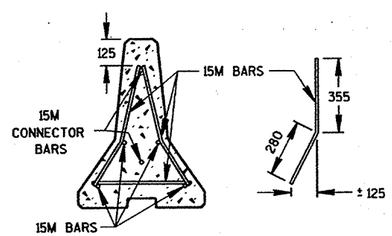


ALTERNATE CONNECTING PINS



SIDE VIEW

LOCATION OF REINFORCEMENT STEEL

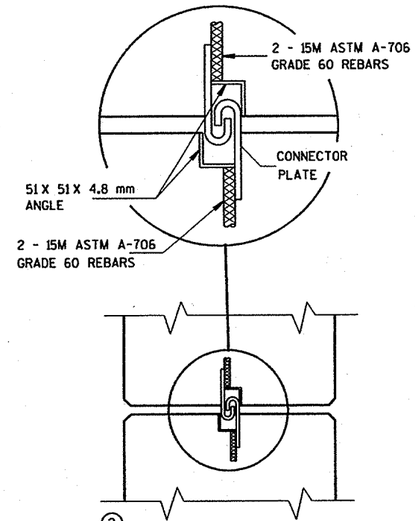


SECTION A-A

BAR STEEL REINFORCEMENT

ALTERNATE DESIGN

J-J HOOKS PORTABLE CONCRETE BARRIER BY EASI-SET INDUSTRIES MAY BE FURNISHED INSTEAD OF THE BARRIER DETAILED ON THIS DRAWING. CONTACT INFORMATION : EASI SET INDUSTRIES, P.O. BOX 300, MIDLAND, VIRGINIA 22728, TELEPHONE (703) 439-8911.

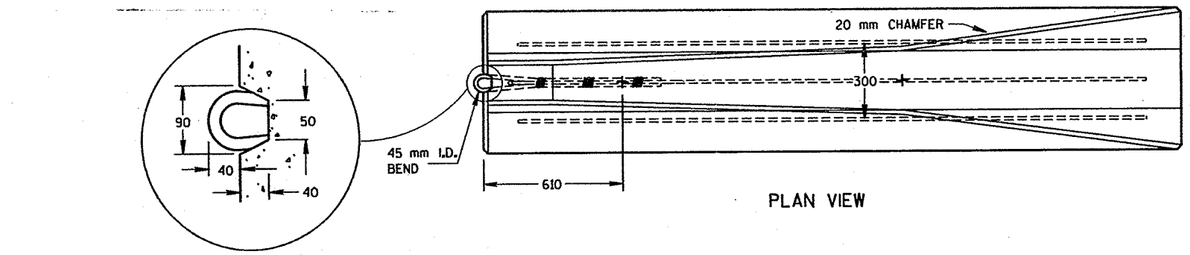


(2) J-J HOOK CONNECTOR
(ALTERNATIVE TO PIN & LOOP CONNECTOR)

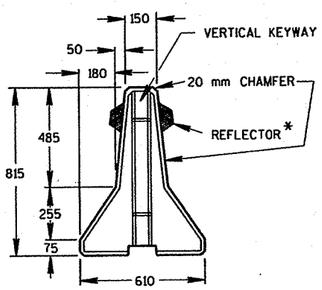
TEMPORARY PRECAST CONCRETE BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

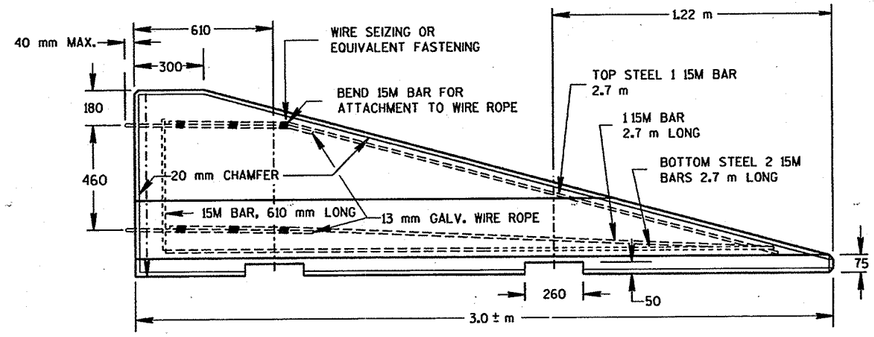
S.D.D. 14 B 7-9a



PLAN VIEW

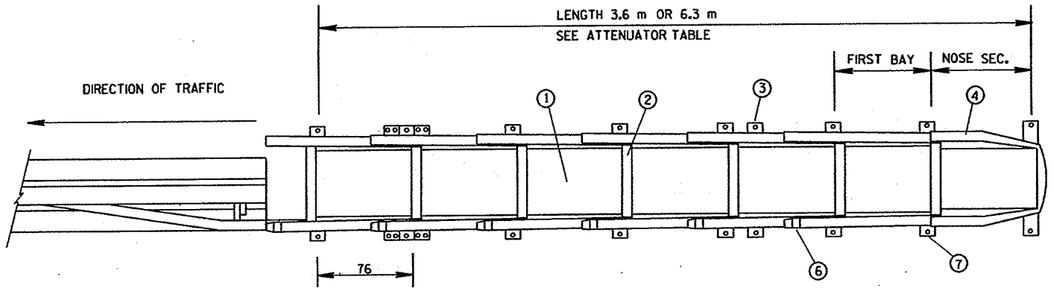


END VIEW

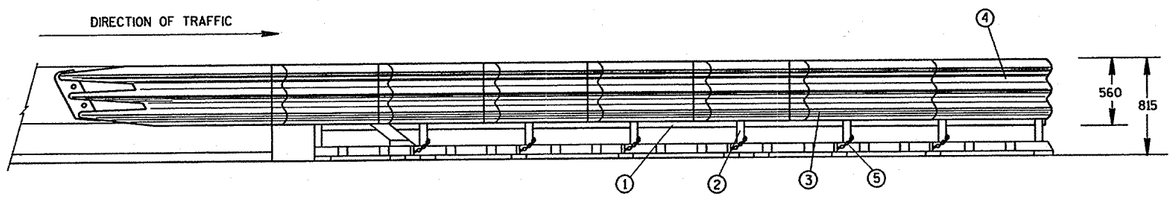


SIDE VIEW

END SECTION FOR TEMPORARY PRECAST CONCRETE BARRIER



PLAN VIEW



NOTE: CROSS SLOPE OF UNIT NOT TO EXCEED 5%

SIDE VIEW

CONSTRUCTION ZONE PORTABLE CRASH CUSHION

ATTENUATOR TABLE

ATTENUATOR LENGTH (m)	NO. OF BAYS	DESIGN SPEED km/h
3.6	3	60 OR LESS
6.3	6	60 TO 90

1. HEX-FOAM CARTRIDGE
2. DIAPHRAGM
3. THRIE BEAM FENDER PANEL
4. NOSE COVER
5. STABILIZING CHAIN
6. DEFLECTOR PANEL
7. ANCHORAGE DEVICE (WHERE ONE-WAY TRAFFIC EXISTS)

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 PORTABLE CRASH CUSHION SHALL BE THE G-R-E-A-T CZ IMPACT ATTENUATOR MANUFACTURED BY ENERGY ABSORPTION SYSTEMS, INC: ONE EAST WACKER DRIVE, CHICAGO, IL., 60601.

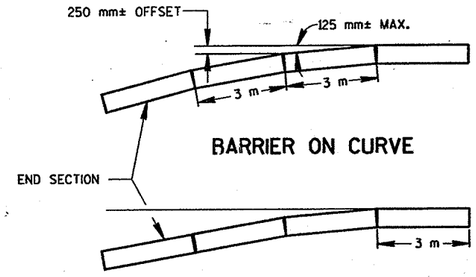
THE CRASH CUSHION SHALL BE MANUFACTURED, ASSEMBLED AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND AS DETAILED ELSEWHERE IN THE PLANS OR AS SHOWN ON THE APPROVED SHOP DRAWINGS. THE CRASH CUSHION PLATFORM SHALL BE ANCHORED TO EITHER 150 mm MINIMUM CONCRETE PAVEMENT OR 75 mm MINIMUM ASPHALTIC SURFACES THAT HAVE A PREPARED COMPACTED SUBBASE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

GALVANIZED WIRE ROPE SHALL BE 6 X 19 CLASS 2 IWRC WITH A MINIMUM BREAKING STRENGTH OF 9050 kg, AND SHALL CONFORM TO FEDERAL SPECIFICATION RR-W-410. THE ZINC COATING SHALL CONFORM TO TABLE II OF THE FEDERAL SPECIFICATIONS.

*WHEN BARRIERS ARE USED TO SEPARATE OPPOSING TRAFFIC, REFLECTORS ARE REQUIRED ON BOTH SIDES.

NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.



BARRIER ON CURVE

FLARE AT BARRIER END

OPERATING SPEED, km/h	FLARE RATE
60 OR LESS	1:10
80 OR MORE	1:15

PRECAST CONCRETE BARRIER
END SECTION AND
PORTABLE CRASH CUSHION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

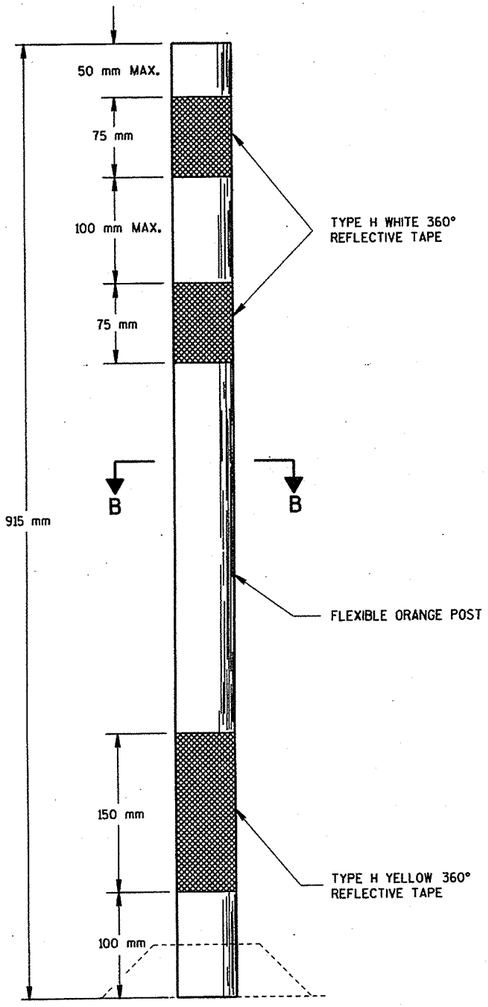
APPROVED 10/24/85 DATE — Tony L. Thurmaier — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA M

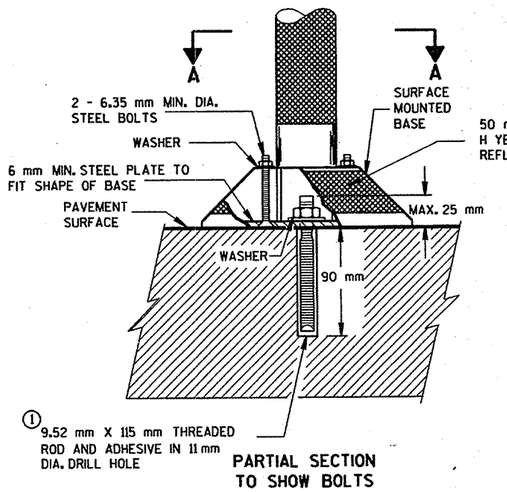
S.D.D. 14 B 7-9b

S.D.D. 14 B 7-9b

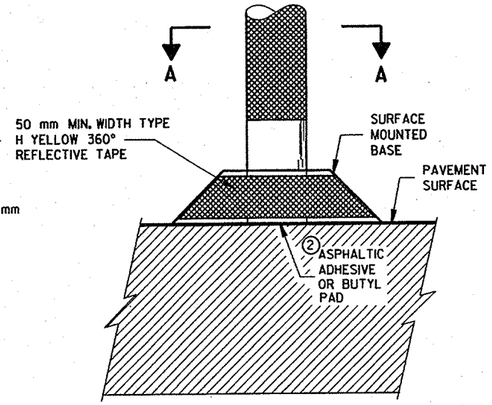
FILE NAME:



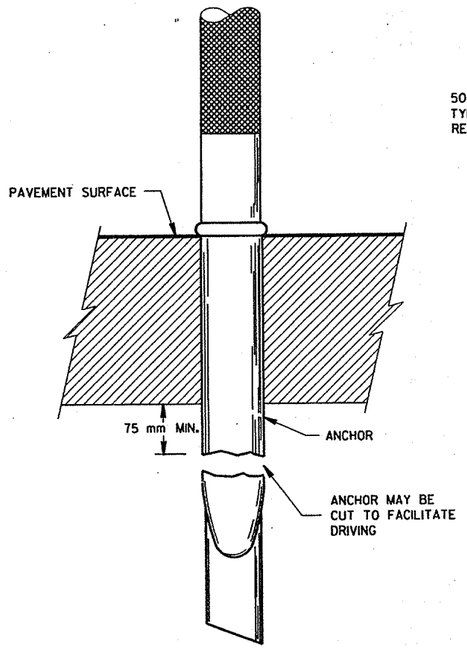
FLEXIBLE TUBULAR MARKER POST

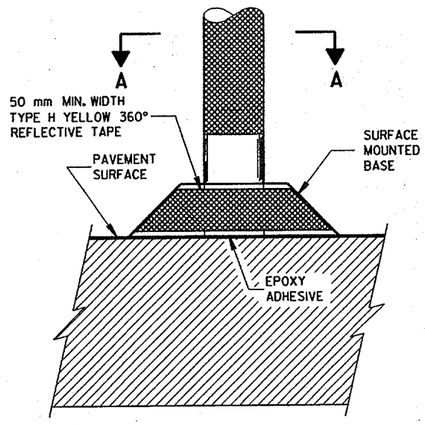


PARTIAL SECTION TO SHOW BOLTS



POST BASES ON NEW OR EXISTING PAVEMENT





POST ANCHOR AND BASE ON PAVEMENT WHICH WILL BE REMOVED

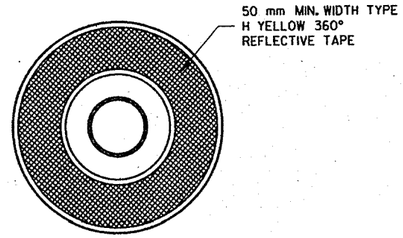
GENERAL NOTES

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

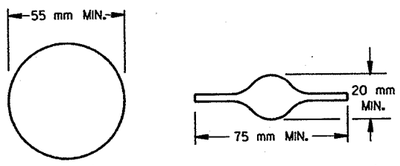
SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

① THREADED ROD SHALL BE MACHINED DOWN TO 7.11 mm DIA. 31.75 mm FROM THE TOP.

② THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.



SECTION A-A
SURFACE MOUNTED BASE

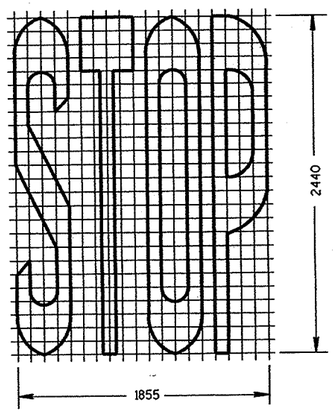


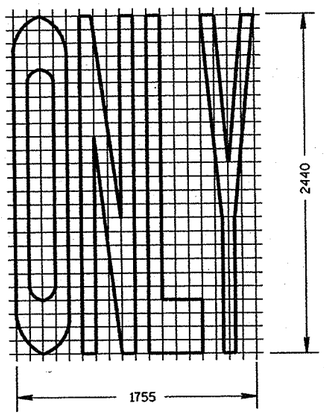
SECTION B-B
ALTERNATIVE SHAPES

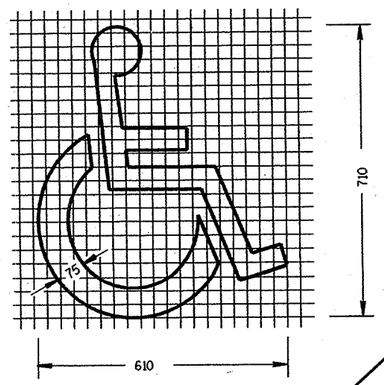
FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8-7-95 DATE FHWA	Charles T. Sparks for DIRECTOR, OFFICE OF TRAFFIC M

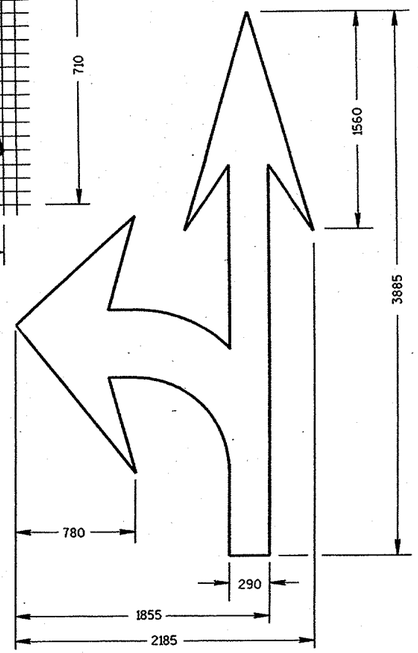
S.D.D. 15 C 11-5

S.D.D. 15 C 11-5

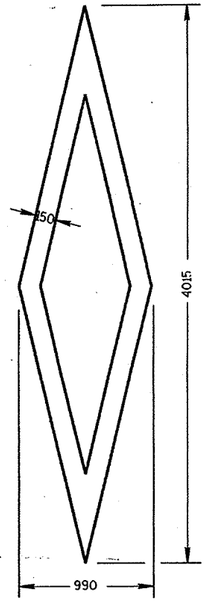




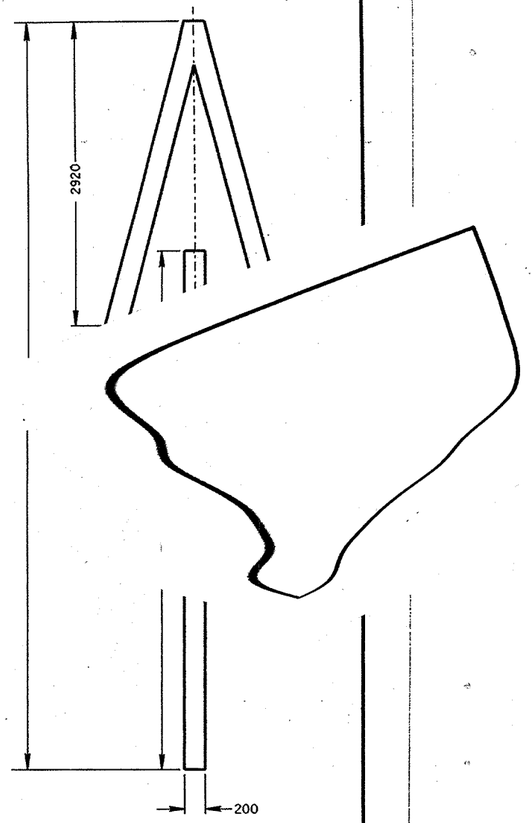




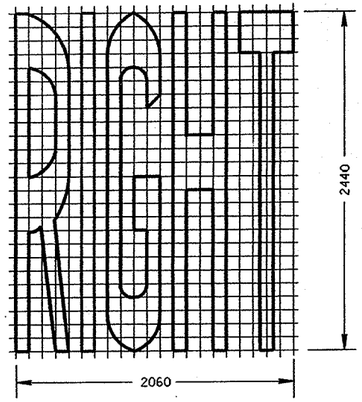
TYPE 3

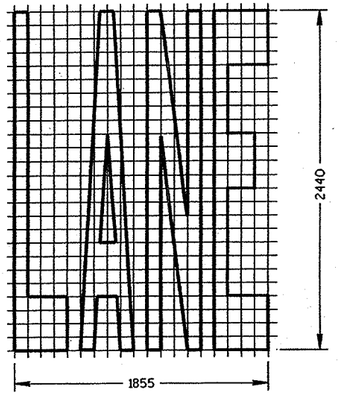


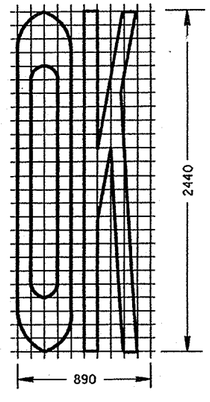
PREFERENTIAL
LANE SYMBOL

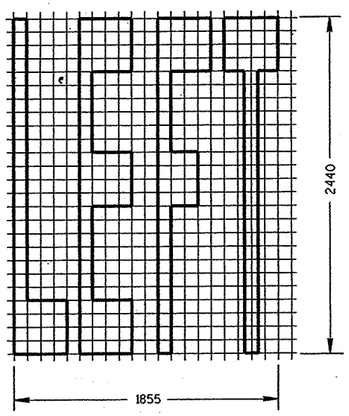


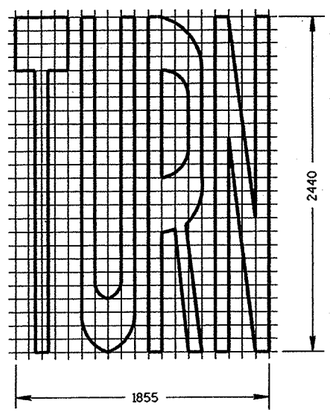
TYPE 4

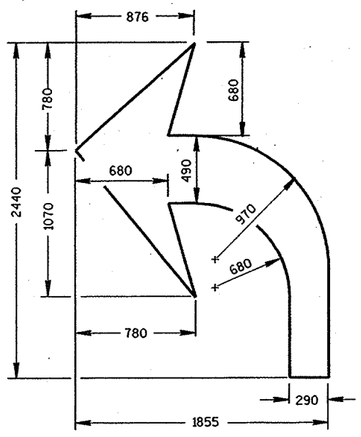




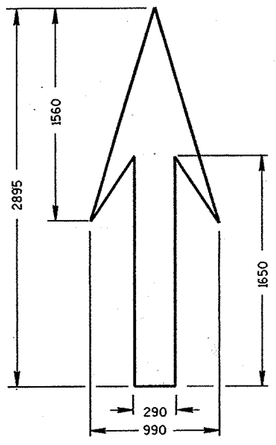








TYPE 2



TYPE 1

GENERAL NOTES

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

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

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

NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

PAVEMENT MARKING SYMBOLS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-15-97
DATE

Christa J. Sapp
for DIRECTOR, OFFICE OF TRAFFIC

FHWA

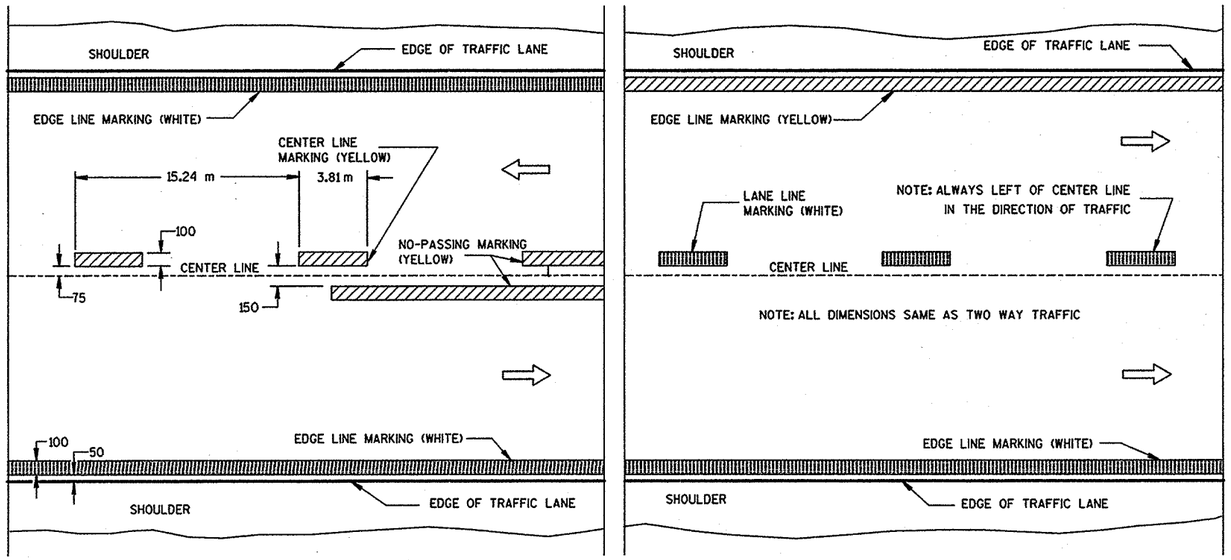
M

S.D.D. 15 C 7-6a

LEVELS ON • 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:

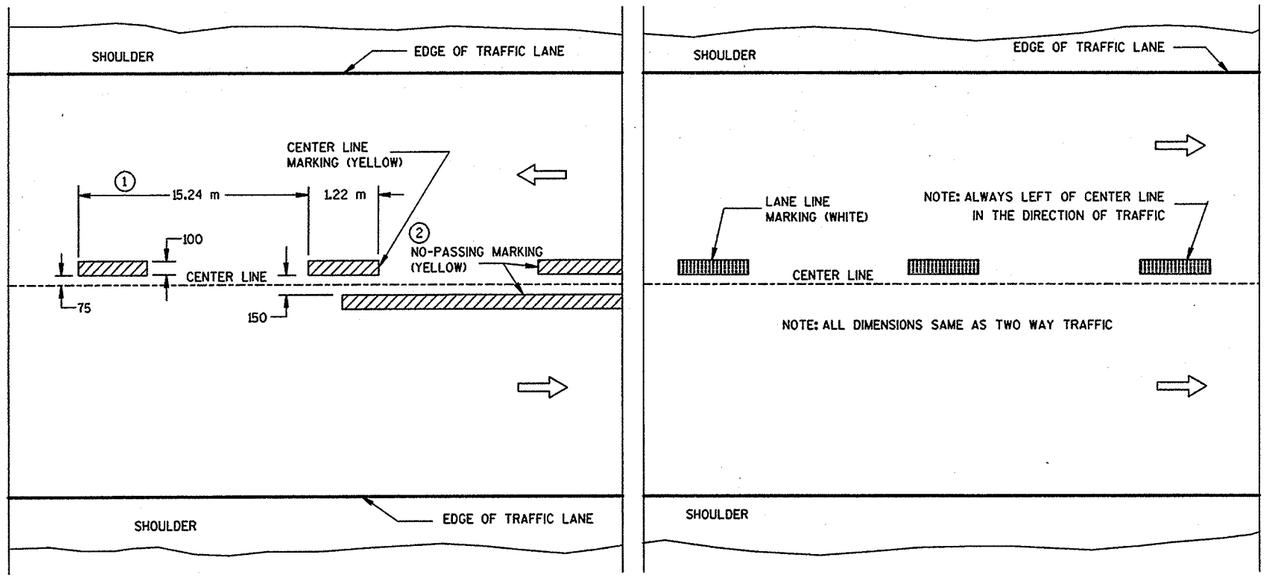
S.D.D. 15 C 7-6a



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 (7.62 m±) WITH 600 mm 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

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-10-98
DATE

Charles T. Sprey
CHIEF SIGNS AND MARKING ENGINEER

FHWA

M

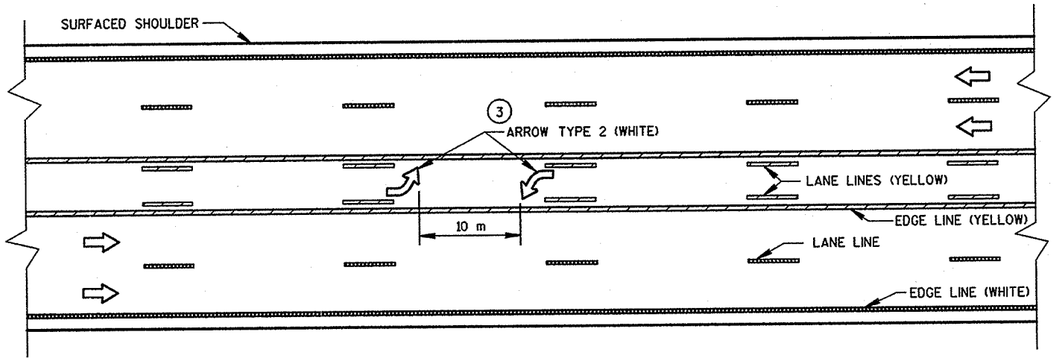
S.D.D. 15 C 8-8a

LEVELS ON - 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:

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

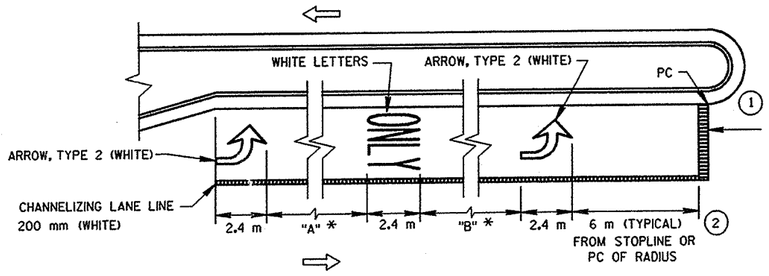
NOTE:
ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



TWO WAY LEFT TURN LANE

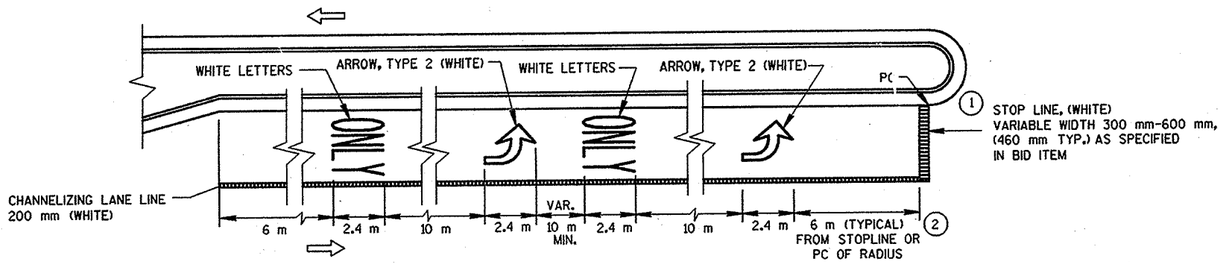
NOTES:

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 120.0 m OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.

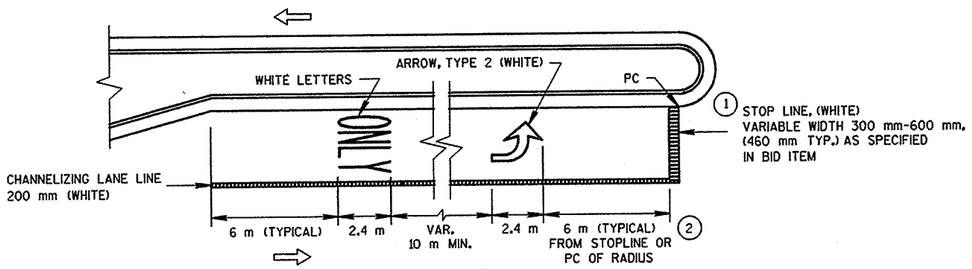


* VARIABLE, 10 m MIN.
"A" = "B" (TYPICAL)

LEFT TURN LANE
(LENGTH 35 m TO 50 m)



LEFT TURN LANE
(LENGTH OVER 50 m)

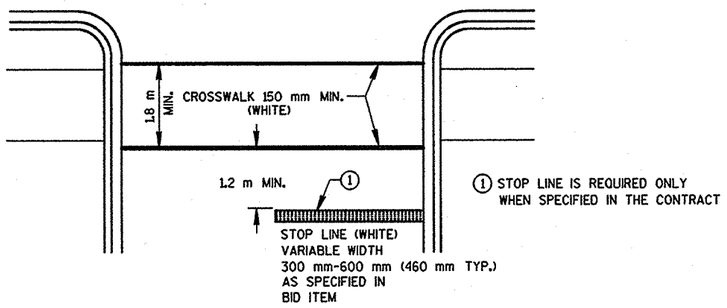


LEFT TURN LANE
(LENGTH UNDER 35 m)

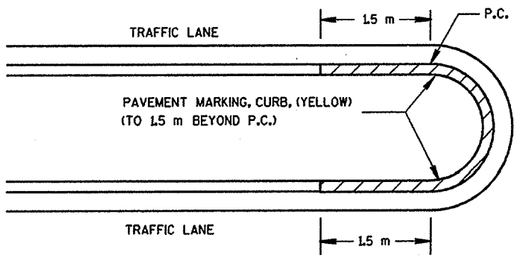
PAVEMENT MARKING
(LEFT TURN LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

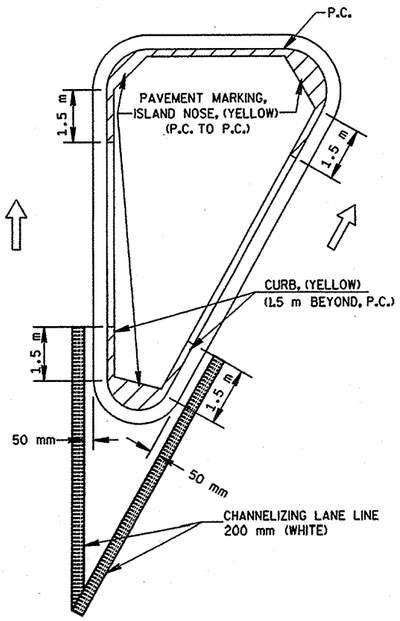
S.D.D. 15 C 8-8d



STOP LINE AND CROSSWALK

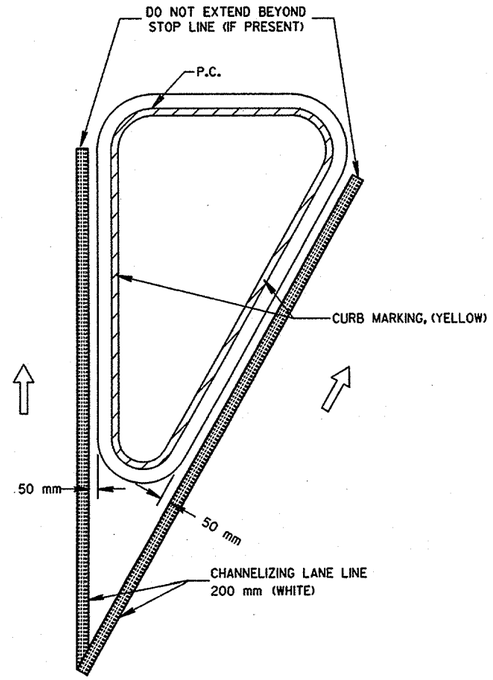


MEDIAN CURB



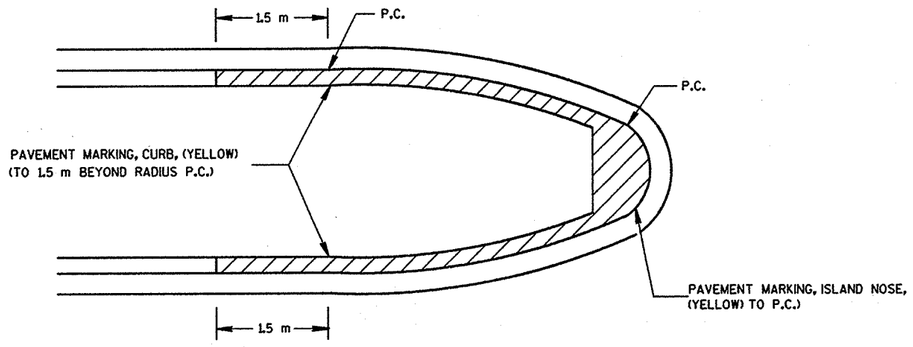
LARGE ISLAND

(GREATER THAN 15.0 m PERIMETER OR ANY SIDE GREATER THAN 8.0 m BETWEEN CURVES)



SMALL ISLAND

(LESS THAN 15.0 m PERIMETER OR ANY SIDE LESS THAN 8.0 m BETWEEN CURVES)



BULLET NOSE ISLAND

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL

PAVEMENT MARKING
(ISLANDS, STOP LINE & CROSS WALK)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-10-98
DATE
Christa J. Sprague
CHIEF SIGNS AND MARKING ENGINEER
FHWA
M

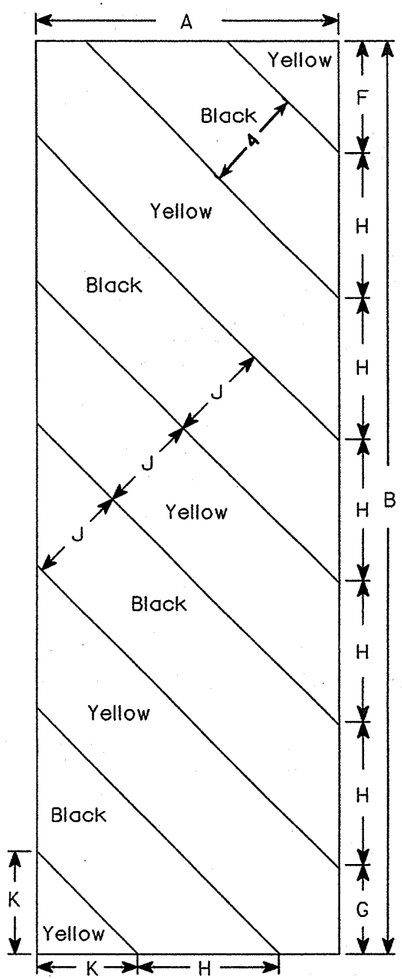
S.D.D. 15 C 8-8e

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

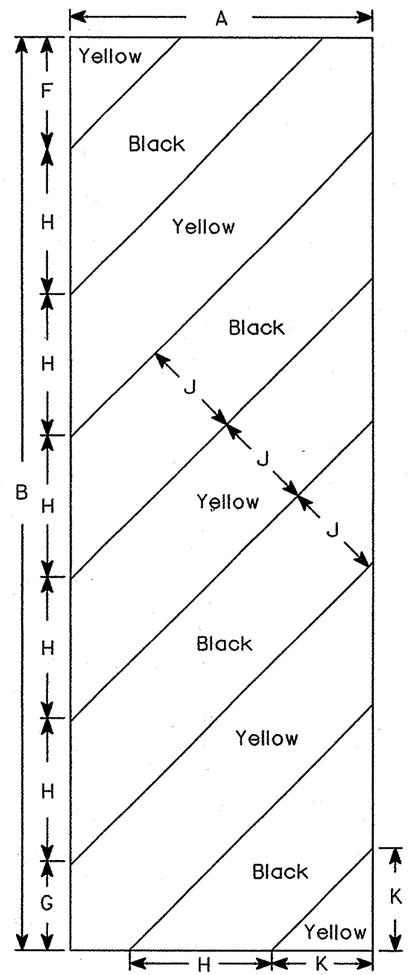
LEVELS ON - 2,3,4,5,6,7,8, 9,10,11, 12,13,14,15, 16,17, 18,19, 20,21,22, 23,24, 25,26,27, 28,29,30,31,32,33, 34,35,36,37,38,39, 40,41, 42,43,44,45,46,47, 48, 49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FILE NAME:

STATE PROJECT NUMBER	SHEET NO.
4676-03-71	7.1



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 Christa J. Sprey for State Traffic Engineer

DATE 8/13/97 PLATE NO. W5-52.7

WISDOT/CADDS METRIC SHEET M

58,59,60, 63

FILE NAME: tr_stdplate w552.dgn
LEVELS ON - 2, 5, 10,

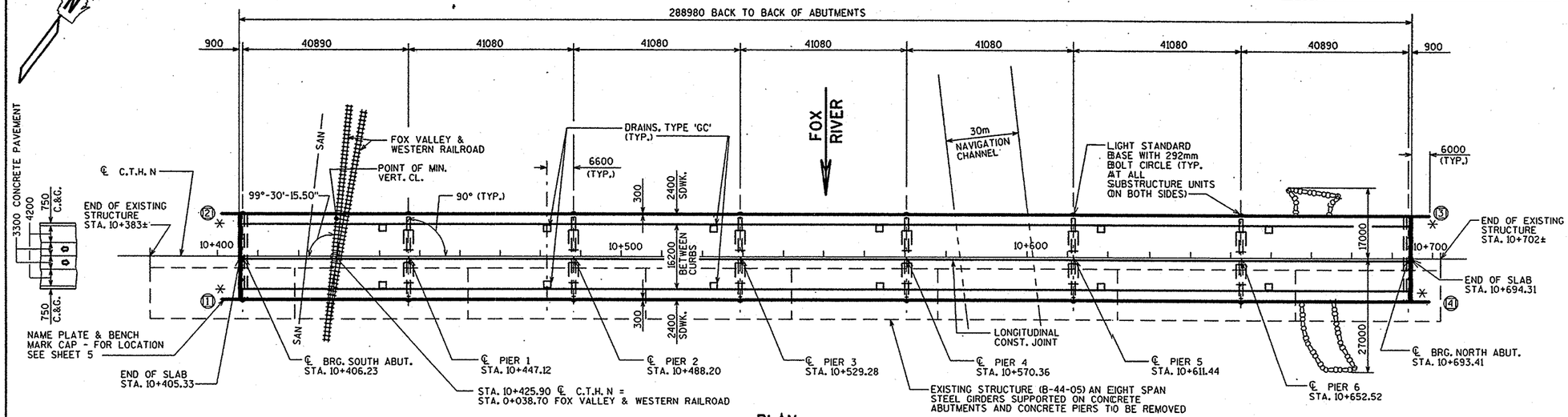
DISTRICT CONTACT: JIM LAMERS

TYPE CODE = X381

STATE PROJECT NUMBER	SHEET NO.
4676-03-71	8.1

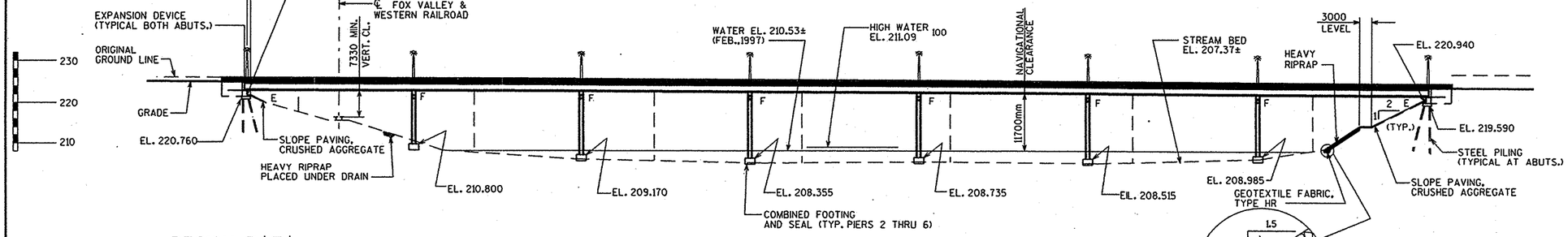
* PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT

(2) INDICATES WING NUMBER



PLAN

7 SPAN- 1780mm PRESTRESSED GIRDERS



ELEVATION

NORMAL TO FOX RIVER AND FOX VALLEY & WESTERN RAILROAD

DESIGN DATA

LIVE LOAD:

DESIGN RATING; MS-18
INVENTORY RATING; MS-20
OPERATIONAL RATING; MS-48
MAXIMUM STANDARD PERMIT VEHICLE LOAD = 1110 kN.
STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 1.0 kN/m².

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY SLAB — f'c = 28 MPa ALL OTHER — f'c = 24 MPa
BAR STEEL REINFORCEMENT, AASHTO M-31, GRADE 420 — fy = 420 MPa
1780mm PRESTRESSED GIRDERS, CONCRETE MASONRY — f'c = 42 MPa
STRANDS - 13mm DIA. WITH ULTIMATE TENSILE STRENGTH OF 1860 MPa

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 250 x 62 STEEL PILING DRIVEN TO A MINIMUM BEARING VALUE OF 490 kN PER PILE. ESTIMATED 12m L.G. ℄ S. ABUT. & 11m L.G. ℄ N. ABUT. PILE POINTS REQ'D. AT ABUTMENTS.

PIERS TO BE SUPPORTED ON SPREAD FOOTINGS AND KEYED INTO SOUND ROCK A MINIMUM OF 300 mm. AT PIER 1 AND A MINIMUM OF 600 mm. AT PIERS 2 THRU 6 WITH A MINIMUM ALLOWABLE ROCK BEARING CAPACITY OF 800kPa AT ALL PIERS.

HYDRAULIC DATA

100 YEAR FREQUENCY

Q_{100} =671.0 m³/s
VEL. =2.51 m/s
HW.= EL. 211.09
WATERWAY AREA= 266.9 m²
DRAINAGE AREA= 15,435 km²
ROAD OVERTOPPING = NA
SCOUR CRITICAL CODE = 5

TRAFFIC VOLUME

C.T.H. N

A.D.T.=23,500 (2019)
R.D.S.=70 km/h

BENCH MARK

NO.	STATION	DESCRIPTION		ELEV.
10	10+431.00	CHISELED "X" ON MANHOLE RIM	0.9m LEFT	215.084
5	10+701.00	CHISELED "X" IN N.E. CORNER ABUTMENT (B-44-05)	13.8m RIGHT	225.882

LIST OF DRAWINGS

BRIDGE OFFICE CONTACT :
FINN HUBBARD (608) 266-8489
KEITH NELSON (608) 266-5083
JERRY ZIRK (608) 266-5163

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-44-187

C.T.H. N OVER FOX RIVER AND FOX VALLEY & WESTERN RAILROAD

COUNTY	OUTAGAMIE	~~TOWN/CITY~~/VILLAGE	KIMBERLY, LITTLE CHUTE, COMBINED LOCKS
DESIGN SPEC.	AASHTO 1997	LOAD MS-18	CONST. SPEC. 1996
DESIGNED BY	KTN	DESIGN CK'D. DJK	DRAWN BY JHG
PLANS CK'D.	TJRK/KTN	APPROVED	CHIEF STRUCTURAL DESIGN ENGINEER
DATE	09-20-99		

GENERAL PLAN

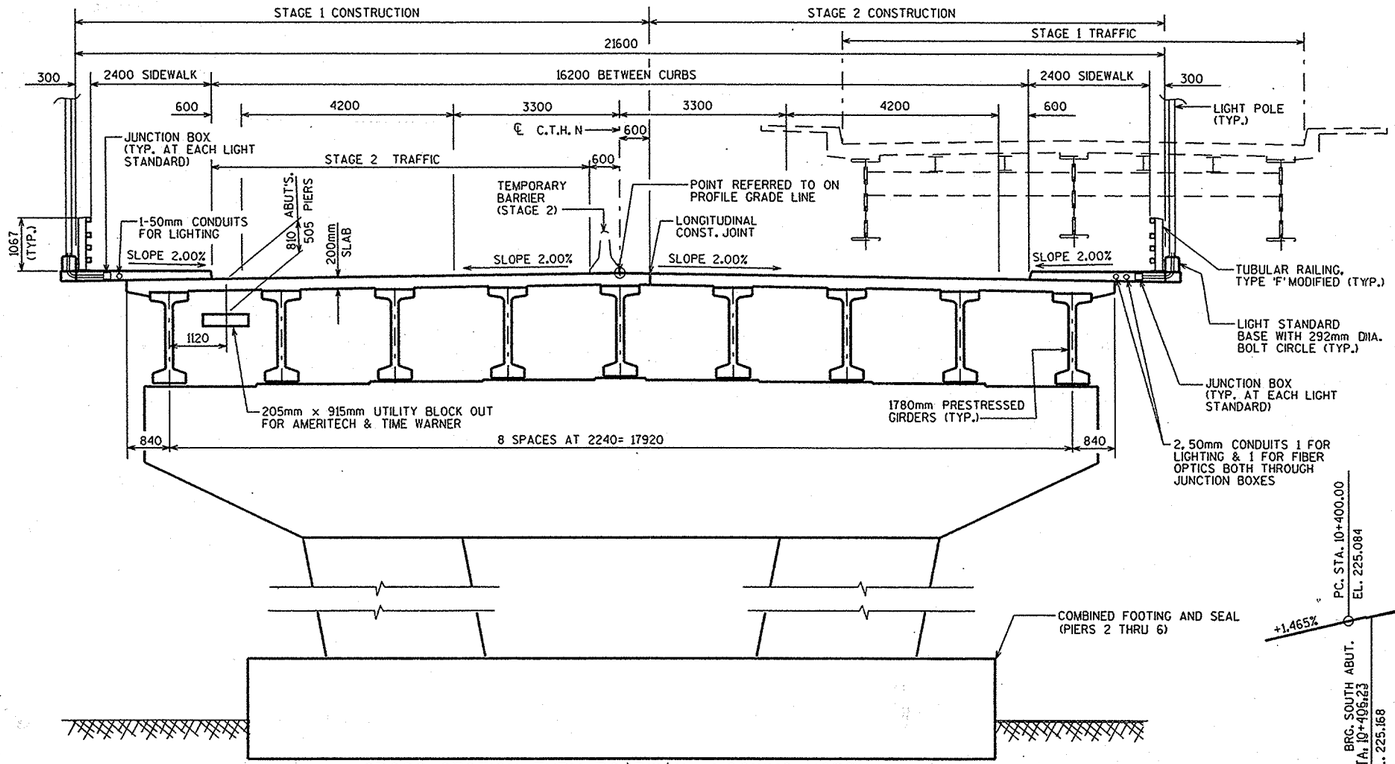
SHEET 1 OF 23

DATE: MAR. '99

FILE= PREPLAN.DGN
SCALE= 500

I.D. 4676-03-00

STATE PROJECT NUMBER	SHEET NO.
4676-03-71	8.Z.



CROSS SECTION THRU ROADWAY LOOKING NORTH

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 50 mm CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL REINFORCING BARS ARE METRIC AND THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

ALL DIMENSIONS MILLIMETERS (mm) UNLESS OTHERWISE NOTED.

ALL STATIONS AND ALL ELEVATIONS ARE METERS (m).

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

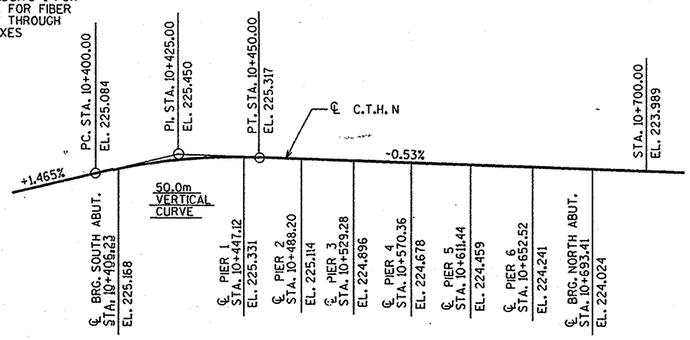
THE EXISTING GROUND LINE (STREAM BED) SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIERS.

AT THE BACKFACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE IN PLACE BEFORE ABUTMENT CONSTRUCTION AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

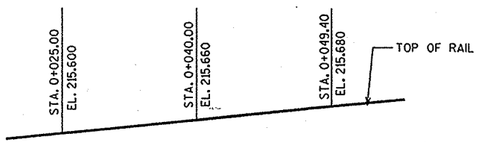
THE GRADATION OF THE STRUCTURE BACKFILL SHALL MEET THE REQUIREMENTS OF SECTION 209.2.2 OF THE STANDARD SPECIFICATIONS FOR GRADE 1 MATERIAL.

CONCRETE INSERTS TO BE FURNISHED BY THE UTILITY COMPANY AND PLACED BY THE CONTRACTOR. COST OF PLACING INSERTS SHALL BE INCLUDED IN THE BID PRICE FOR CONCRETE MASONRY.

PIERS TO BE CONSTRUCTED UNDER STAGE 1 CONSTRUCTION.



PROFILE GRADE LINE C.T.H. N



PROFILE GRADE LINE FOX VALLEY & WESTERN RAILROAD

TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT	SUPER.	SOUTH ABUT.	NORTH ABUT.	PIER 1	PIER 2	PIER 3	PIER 4	PIER 5	PIER 6	TOTALS
REMOVING OLD BRIDGE, STA. 10+549.82	L.S.	—	—	—	—	—	—	—	—	—	1
EXCAVATION FOR STRUCTURES, BRIDGES, B-44-187	L.S.	—	—	—	—	—	—	—	—	—	1
STRUCTURE BACKFILL	m³	—	433	433	—	—	—	—	—	—	866
COFFERDAMS, STRUCTURE B-44-187	L.S.	—	—	—	—	—	—	—	—	—	1
CONCRETE MASONRY, BRIDGES	m³	1758	118	118	140	109	112	109	109	105	2658
CONCRETE MASONRY, SEAL	m³	—	—	—	—	151	151	151	151	151	755
PROTECTIVE SURFACE TREATMENT	m²	6358	—	—	—	—	—	—	—	—	6358
MODULAR EXPANSION DEVICE, STRUCTURE B-44-187	L.S.	—	—	—	—	—	—	—	—	—	1
PRESTRESSED GIRDER, I TYPE, 1780 mm	m	2583	—	—	—	—	—	—	—	—	2583
HIGH-STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	kg	—	2620	2620	16130	15470	15740	15470	15470	15170	98690
COATED HIGH-STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	kg	236480	1390	1390	—	—	—	—	—	—	239260
NON-LAMINATED ELASTOMERIC BEARING PADS	EACH	54	—	—	—	—	—	—	—	—	54
EXPANSION BEARING ASSEMBLIES, STRUCTURE B-44-187	EACH	18	—	—	—	—	—	—	—	—	18
STEEL PILING, DELIVERED AND DRIVEN, HP 250 mm x 62 kg/m	m	—	300	275	—	—	—	—	—	—	575
TUBULAR RAILING, TYPE F, MODIFIED(4), STRUCTURE B-44-187	L.S.	—	—	—	—	—	—	—	—	—	1
FLOOR DRAINS, TYPE GC	EACH	12	—	—	—	—	—	—	—	—	12
RUBBERIZED MEMBRANE WATERPROOFING	m²	—	12	12	—	—	—	—	—	—	24
SLOPE PAVING, CRUSHED AGGREGATE	m²	—	220	330	—	—	—	—	—	—	550
HEAVY RIPRAP	m³	—	—	264	8	—	—	—	—	—	272
PIPE UNDERDRAIN, 150 mm	m	—	20	20	—	—	—	—	—	—	40
PIPE UNDERDRAIN, UNPERFORATED, 150 mm	m	—	3	3	—	—	—	—	—	—	6
GEOTEXTILE FABRIC, TYPE HR	m²	—	—	440	13	—	—	—	—	—	453
GEOTEXTILE FABRIC, TYPE DF	m²	—	45	45	—	—	—	—	—	—	90
ANCHOR ASSEMBLIES FOR LIGHT POLES	EACH	16	—	—	—	—	—	—	—	—	16
STEEL DIAPHRAGMS, STRUCTURE B-44-187	EACH	112	—	—	—	—	—	—	—	—	112
UNDERWATER FOUNDATION INSPECTION	EACH	—	—	—	—	1	1	1	1	1	5
PILE POINTS	EACH	—	25	25	—	—	—	—	—	—	50
ANTI-GRAFFITI COATING, STRUCTURE B-44-184	m²	227	78	78	105						488
NONMETALLIC CONDUIT, SCHEDULE 40, 50mm	m	885	—	—	—	—	—	—	—	—	885
JUNCTION BOXES 300 X 200 X 150mm	EACH	16	—	—	—	—	—	—	—	—	16
OMP, HIGH PREFORMANCE READY MIXED CONCRETE FOR BRIDGES	m³	1758	118	118	140	109	112	109	109	105	2658
OMP, INCENTIVE FOR CONCRETE MASONRY COMPRESSIVE STRENGTH, B-44-187	L.S.	—	—	—	—	—	—	—	—	—	1
ELECTRICAL WIRE, LIGHTING, NO.2	m	1875	—	—	—	—	—	—	—	—	1875
NON-BID ITEMS											
FILLER	SIZE	—	—	—	—	—	—	—	—	—	13 & 19

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-44-187

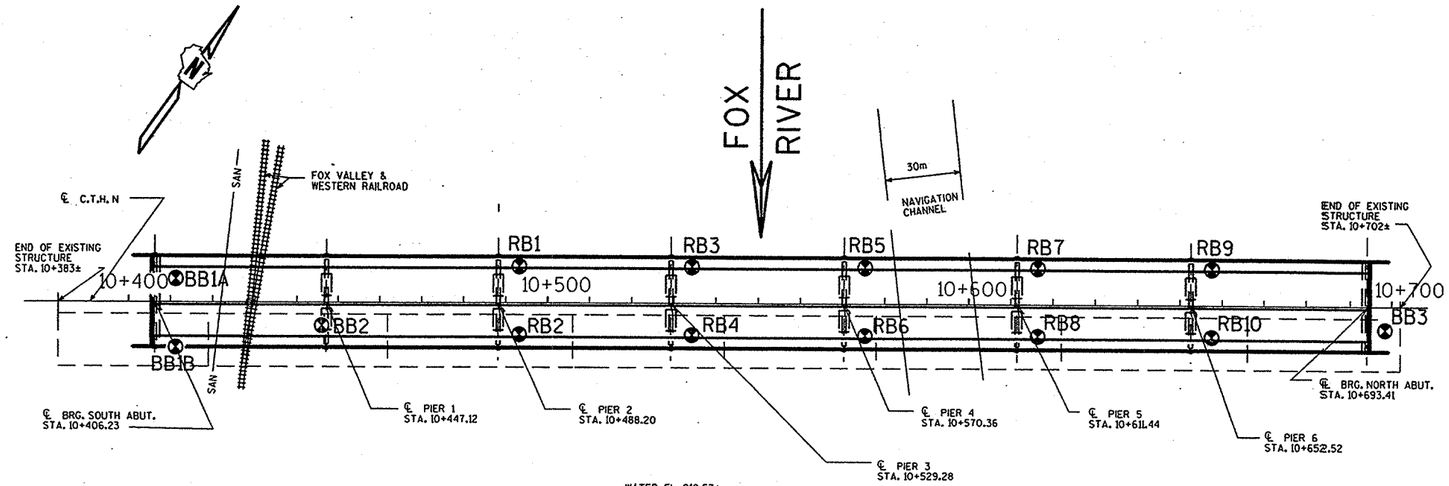
CONST. SPEC. 1996	DRAWN BY JHG	PLANS CK'D.

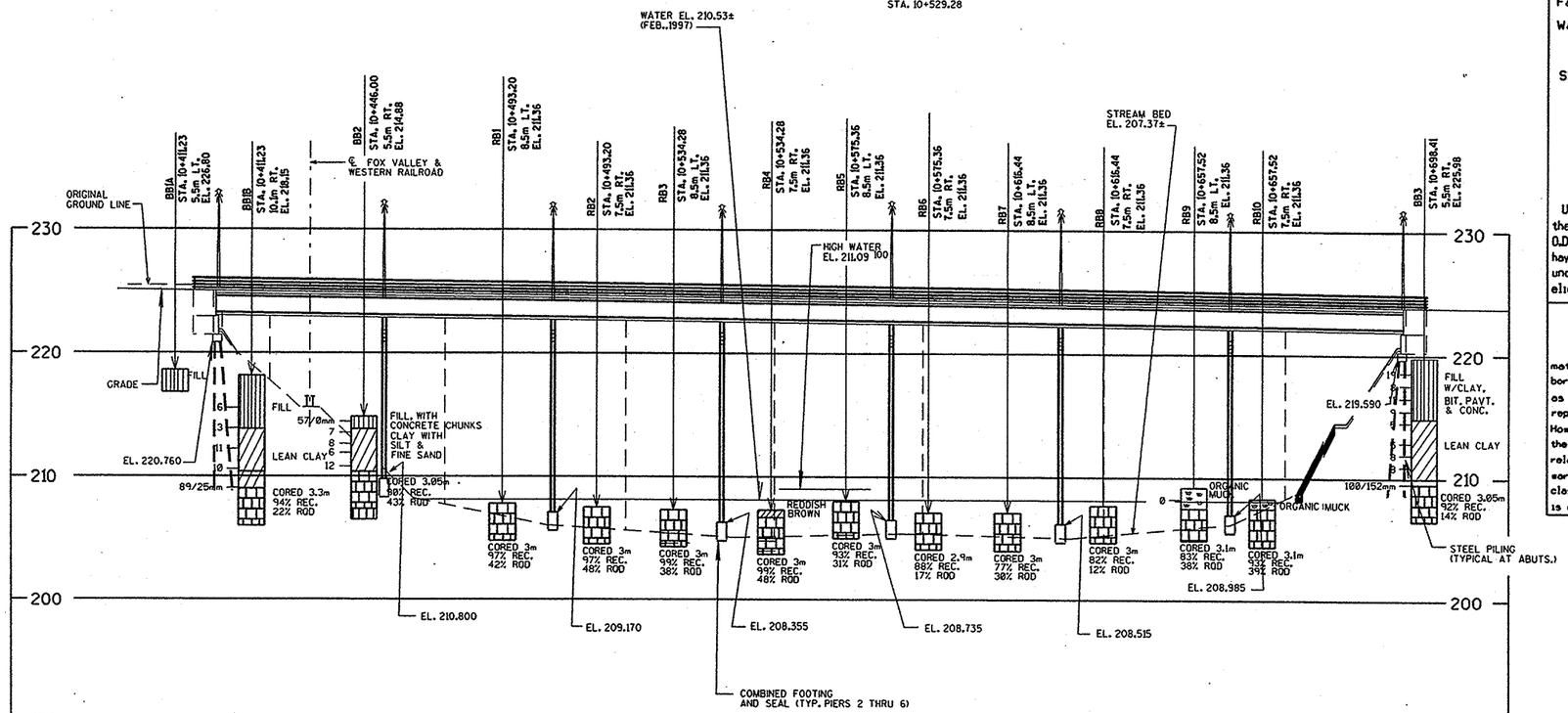
CROSS SECTION & QUANTITIES

SHEET 2

FILE= PREPLAN.DGN
SCALE = 50

CTH "N" OVER THE FOX RIVER
VILLAGES OF KIMBRELY & LITTLE CHUTE





STATE PROJECT NUMBER	SHEET NO.
4676-03-71	8.3

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

95/152=95 Blows for 152mm Penetration
Probing taken with a 159.1Kg Wt. Falling 457mm on a 51mm O.D. Point.

Probing No.
Sta.
Elevation
7 Average Blows Per 305mm
Refusal 95/152

LEGEND OF BORING

Unconfined Strength Kg/cm² → 7.7
Blows Per 305mm Using 63.6 Kg Wt. Falling 762mm
Wash Sample
Shelby Tube—S.T.
Ground Water Elevation
No Ground Water Observed Above This Elevation

Boring No.
Sta.
Elev.
Sandy Gravel
F
Boulders or Cobbles
Sand
Silty Clay
So
Limestone

Unless otherwise specified, the blows per 305mm at the locations indicated are based on driving a 51mm O.D. x 35mm I.D. split spoon sampler with a 63.6Kg hammer having a free fall of 762mm. 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 Division of Highways 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 B-44-187

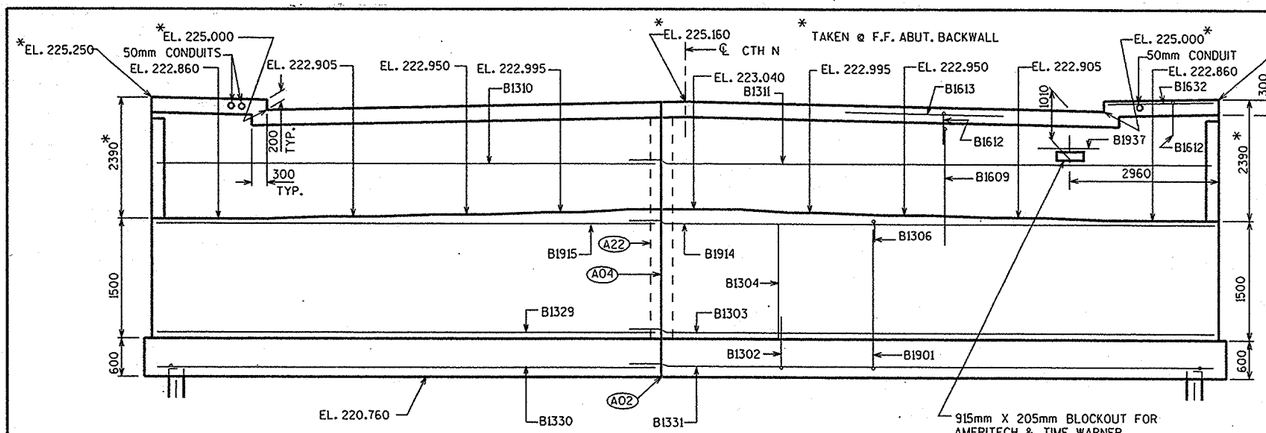
CONST. SPEC. 1996	DRAWN BY JHG	PLANS CK'D. KTN

SUBSURFACE EXPLORATION

SHEET 3

FILE= 187SOILS.DGN
SCALE=

STATE PROJECT NUMBER	SHEET NO.
4676-03-71	8.4



ELEVATION

LOOKING SOUTH

A01 CONSTRUCTION JOINT: KEYWAY FORMED BY A SURFACED, BEVELED 38 mm x 140 mm

A02 FOOTING CONST. JOINT

A04 VERT. CONSTRUCTION JOINT: KEYWAY FORMED BY A SURFACED BEVELED 38 mm x 184 mm. (19 mm "V" GROOVE @ THE FRONT FACE) (R.M.W. @ BACKFACE)

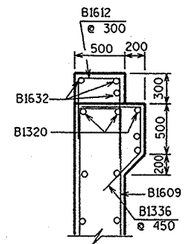
A08 SUPPORT ABUTMENT ON HP 250 x 62 STEEL PILING, ESTIMATED 12m LONG, & DRIVEN TO A MIN. BRG. VALUE OF 490 kN PER PILE. PILE POINTS REQ'D.

A15 PIPE UNDERDRAIN, 150mm (SLOPE TO DRAIN) ENCLOSED IN 450 X 450 AREA OF SIZE 1 COARSE AGGREGATE (INCLUDED IN UNDERDRAIN BID ITEM) WRAPPED IN GEOTEXTILE FABRIC, TYPE DF

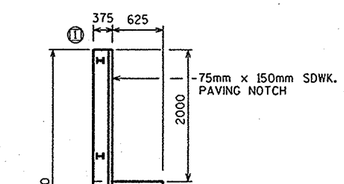
A16 PIPE UNDERDRAIN, 150 mm, UNPERFORATED. TO SUITABLE DRAINAGE.

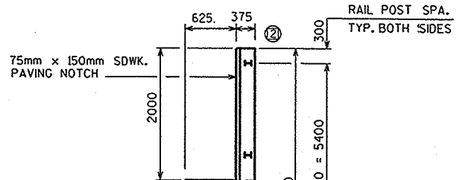
A22 457 mm (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

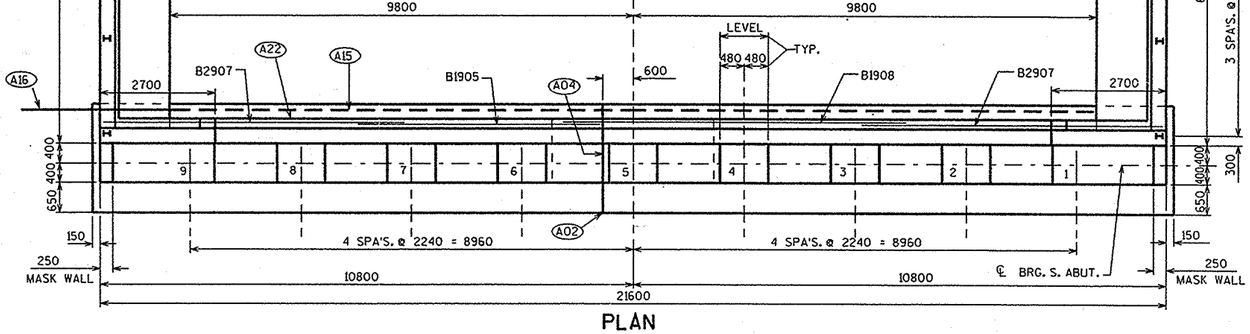
A23 CONSTRUCTION JOINT: POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE. STRIKE OFF AND LEAVE ROUGH.



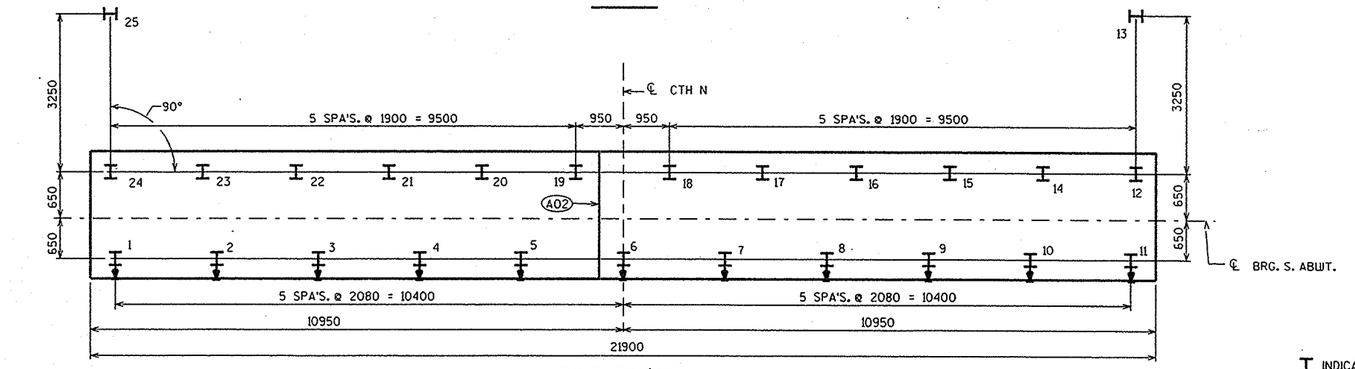
PAVING NOTCH DETAIL AT SDWK.





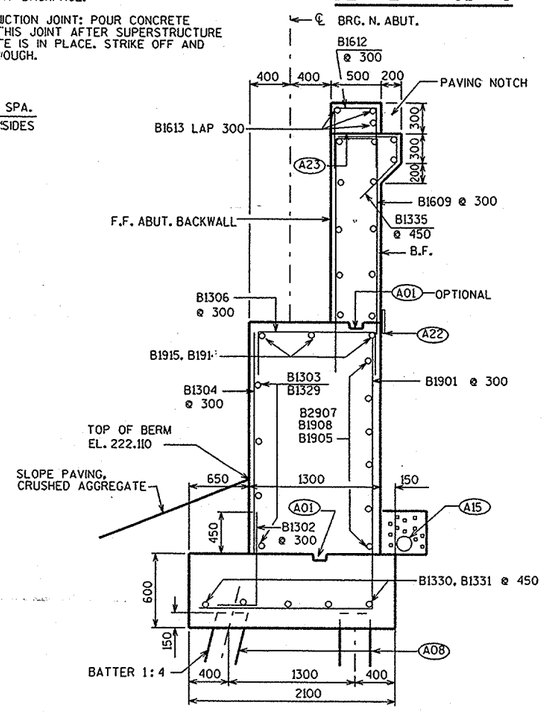


PLAN



PILE PLAN

I INDICATES PILE BATTERED 1:4 IN DIRECTION SHOWN



SECTION THRU BODY

HORIZ. BARS SHOWN IN THIS SECTION NOT OTHERWISE IDENTIFIED ARE B1310 OR B1311 BARS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-44-187

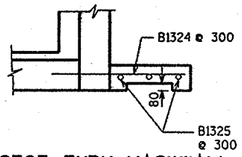
CONST. SPEC.	1996	DRAWN BY	JHG	PLANS CK'D.	KTH

SOUTH ABUTMENT

SHEET 4

FILE= 187ABUTSO.DGN
SCALE = 50

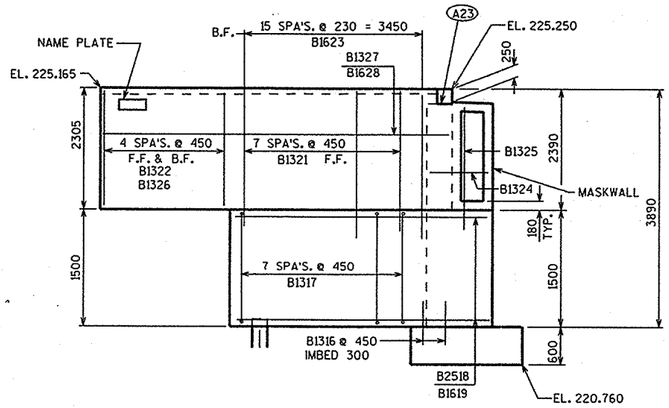
STATE PROJECT NUMBER	SHEET NO.
4676-03-71	8.5



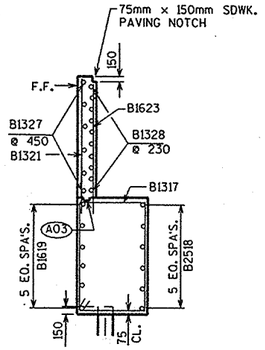
SECT. THRU MASKWALL

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY SURFACED BEVELED 38 mm x 140 mm. 19 mm "V" GROOVE @ F.F. IF JOINT IS USED).

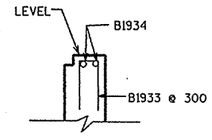
(A23) CONSTRUCTION JOINT: POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE.



WING ELEVATION



WING SECTION

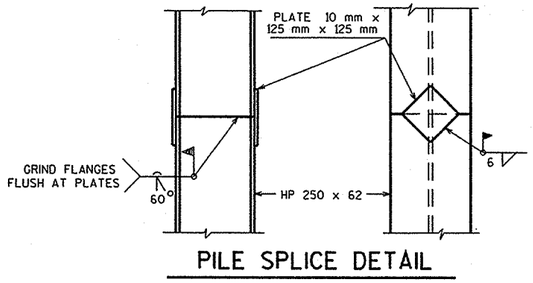


TOP OF WING DETAIL

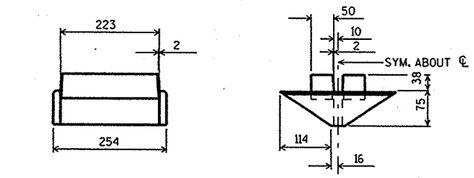
BILL OF BARS

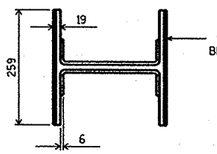
NOTE: THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	
B1901		72	3700	X		FTG. DOWEL B.F.	BODY
B1302		72	1080	X		FTG. DOWEL F.F.	BODY
B1303		4	11950			HORIZ. F.F.	BODY
B1304		72	1425			VERT. F.F.	BODY
B1905		6	5025			HORIZ. B.F.	BODY
B1306		72	2100	X		TOP	BODY
B2907		12	6000			HORIZ. B.F.	BODY
B1908		6	7150			HORIZ. B.F.	BODY
B1609	X	72	5300	X		VERT. BACKWALL	BODY
B1310	X	12	10150			HORIZ.	BODY
B1311	X	12	12050			HORIZ.	BODY
B1612	X	72	1520	X		VERT. PAVING BLOCK	BODY
B1613	X	24	2290			HORIZ. PAVING BLOCK	BODY
B1914		3	12400			HORIZ.	BODY
B1915		3	10125			HORIZ.	BODY
B1316		4	600			FTG. DOWELS	WINGS
B1317		16	4730	X		STIRRUP	WINGS
B2518		12	4700			HORIZ. B.F.	WINGS
B1619		12	4700			HORIZ. F.F.	WINGS
B1320	X	6	2300			HORIZ.	BODY
B1321		16	2670			VERT F.F.	WINGS
B1322		10	2205			VERT F.F.	WINGS
B1623		32	2520			VERT B.F.	WINGS
B1324		16	1110			HORIZ. MASKWALL	EAST & WEST SIDES
B1325		6	2390			VERT MASKWALL	EAST & WEST SIDES
B1326		10	2055			VERT B.F.	WINGS
B1327		12	5900			HORIZ. F.F.	WINGS
B1328		20	5900			HORIZ. B.F.	WINGS
B1329		4	10050			HORIZ. F.F.	BODY
B1330		5	10300			HORIZ. FTG.	BODY
B1331		5	11950			HORIZ. FTG.	BODY
B1632	X	6	2600			HORIZ. PAV. BLOCK @ SDWK.	BODY
B1933	X	40	1295	X		VERT. - RAIL WINGS	
B1934	X	4	5900			HORIZ.. - RAIL WINGS	
B1335	X	38	1375	X		CORBEL FOR PAVING NOTCH	RDWY.
B1336	X	10	1575	X		CORBEL FOR PAVING NOTCH	SDWK.
B1937	X	3	1550	X		UTILITY BLOCKOUT HORIZ.	BODY



PILE SPLICE DETAIL

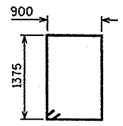




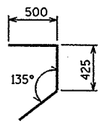
POINT NOTES

1. MATERIAL = CAST STEEL (ASTM A-27-84-65-35)
2. ALL FILLETS = 9mm
3. ALL WELDS BETW. PILE & POINT TO BE IN ACCORDANCE WITH AWS SPEC'S. WELD FLANGES TO FITTING ON OUTSIDE FACES.
4. CONTRACTOR MAY USE AN ALTERNATE DESIGN UPON APPROVAL OF THE ENGINEER.

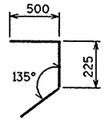
PILE POINT DETAIL



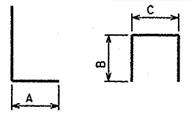
B1317



B1336



B1335



MARK	A	B	C
B1901	1850	---	---
B1302	210	---	---
B1306	---	480	1200
B1609	---	2490	400
B1612	---	600	400
B1933	---	600	195

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-44-187

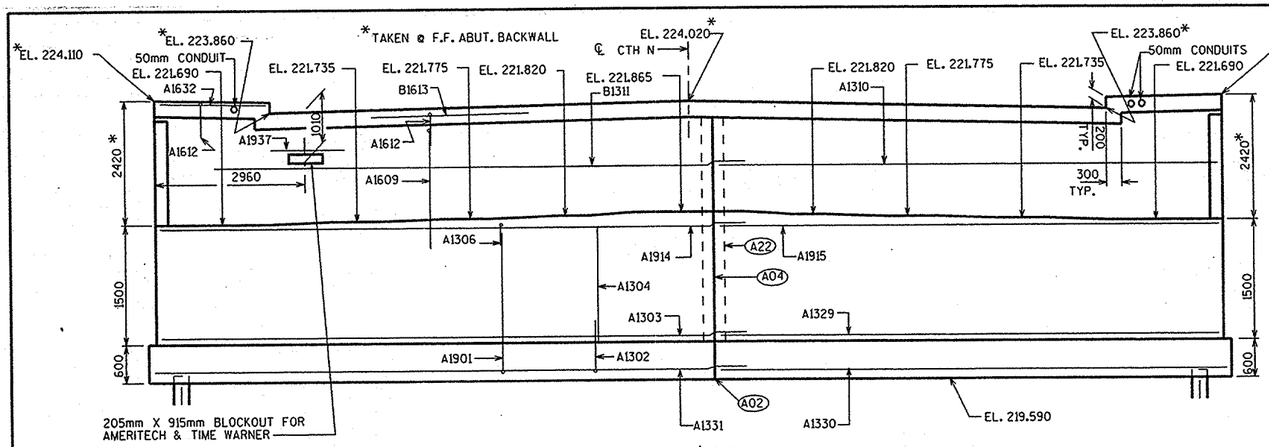
CONST. SPEC. 1996	DRAWN BY JHG	PLANS CK'D. KTN

SOUTH ABUTMENT DETAILS

SHEET 5

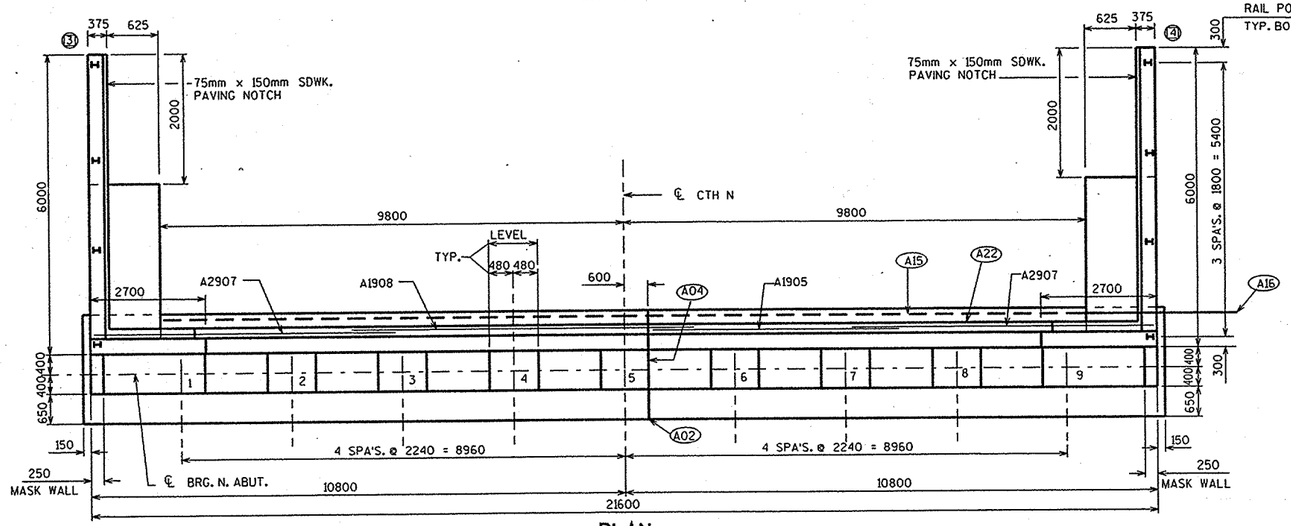
FILE= 187ABUTSD.DGN
SCALE = 50

STATE PROJECT NUMBER	SHEET NO.
4676-03-71	8.6

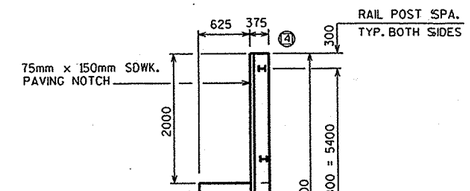


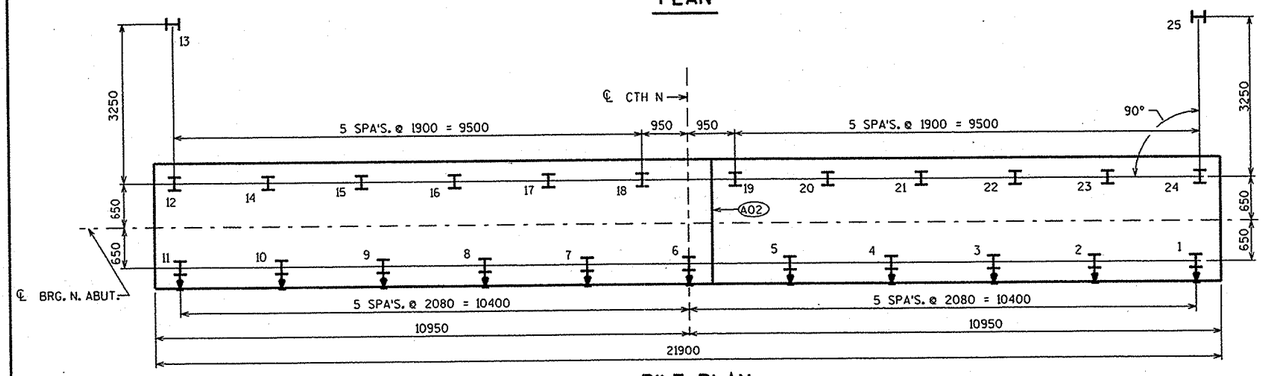
ELEVATION

LOOKING NORTH



PLAN





PILE PLAN

INDICATES PILE BATTERED 1:4 IN DIRECTION SHOWN

(A01) CONSTRUCTION JOINT: KEYWAY FORMED BY A SURFACED, BEVELED 38 mm x 140 mm

(A02) FOOTING CONST. JOINT

(A04) VERT. CONSTRUCTION JOINT: KEYWAY FORMED BY A SURFACED BEVELED 38 mm x 184 mm. (19 mm "V" GROOVE @ THE FRONT FACE) (R.M.W. @ BACKFACE)

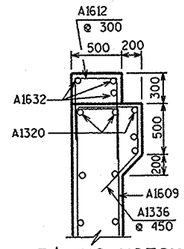
(A08) SUPPORT ABUTMENT ON HP 250 x 62 STEEL PILING, ESTIMATED 11m LONG. & DRIVEN TO A MIN. BRG. VALUE OF 490 kN PER PILE. PILE POINTS REQ'D.

(A15) PIPE UNDERDRAIN, 150mm (SLOPE TO DRAIN) ENCLOSED IN 450 X 450 AREA OF SIZE I COARSE AGGREGATE (INCLUDED IN UNDERDRAIN BID ITEM) WRAPPED IN GEOTEXTILE FABRIC, TYPE DF

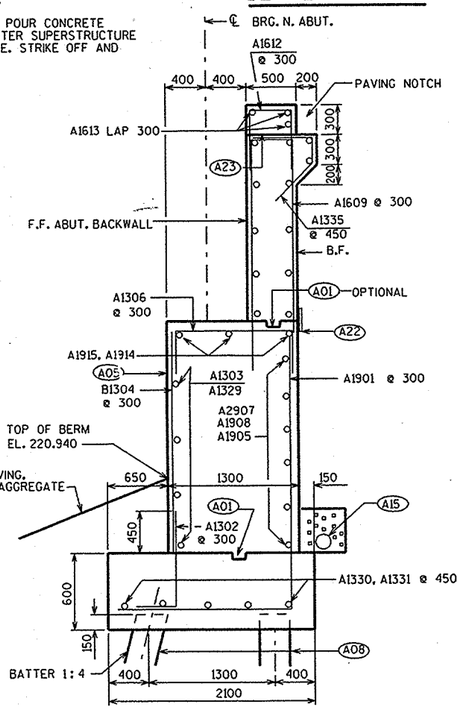
(A16) PIPE UNDERDRAIN, 150 mm, UNPERFORATED. TO SUITABLE DRAINAGE.

(A22) 457 mm (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(A23) CONSTRUCTION JOINT: POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE. STRIKE OFF AND LEAVE ROUGH.



PAVING NOTCH DETAIL AT SDWK.



SECTION THRU BODY

HORIZ. BARS SHOWN IN THIS SECTION NOT OTHERWISE IDENTIFIED ARE A1310 OR A1311 BARS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-44-187

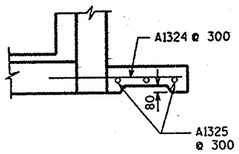
CONST. SPEC.	1996	DRAWN BY	JHG	PLANS CK'D.	GM

NORTH ABUTMENT

SHEET 6

FILE= 187ABUTNO.DGN
SCALE = 50

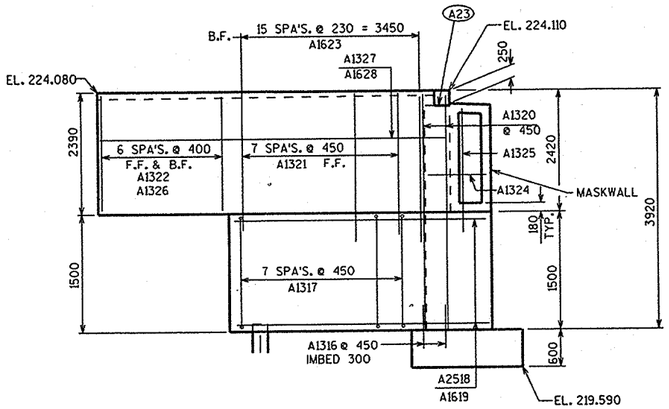
STATE PROJECT NUMBER	SHEET NO.
4676-03-71	8.7



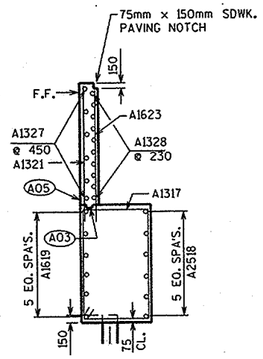
SECT. THRU MASKWALL

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY SURFACED BEVELED 38 mm x 140 mm. 19 mm "V" GROOVE @ F.F. IF JOINT IS USED).

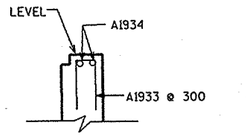
(A23) CONSTRUCTION JOINT: POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE.



WING ELEVATION



WING SECTION

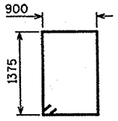


TOP OF WING DETAIL

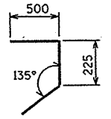
BILL OF BARS

NOTE: THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

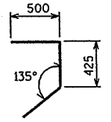
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A1901		72	3700	X		FTG. DOWEL B.F. BODY
A1302		72	1080	X		FTG. DOWEL F.F. BODY
A1303		4	11950			HORIZ. F.F. BODY
A1304		72	1425			VERT. F.F. BODY
A1905		6	5025			HORIZ. B.F. BODY
A1306		72	2100	X		TOP BODY
A2907		12	6000			HORIZ. B.F. BODY
A1908		6	7150			HORIZ. B.F. BODY
A1609	X	72	5300	X		VERT. BACKWALL BODY
A1310	X	12	10150			HORIZ. BODY
A1311	X	12	12050			HORIZ. BODY
A1612	X	72	1520	X		VERT. PAVING BLOCK BODY
A1613	X	24	2290			HORIZ. PAVING BLOCK BODY
A1914		3	12400			HORIZ. BODY
A1915		3	10125			HORIZ. BODY
A1316		4	600			FTG. DOWELS WINGS
A1317		16	4730	X		WINGS
A2518		12	4700			HORIZ. B.F. WINGS
A1619		12	4700			HORIZ. F.F. WINGS
A1320	X	6	2300			VERT F.F. WINGS
A1321		16	2670			VERT F.F. WINGS
A1322		10	2205			VERT F.F. WINGS
A1623		32	2520			VERT B.F. WINGS
A1324		16	1110			HORIZ. MASKWALL EAST & WEST SIDES
A1325		6	2390			VERT MASKWALL EAST & WEST SIDES
A1326		10	2055			VERT B.F. WINGS
A1327		12	5900			HORIZ. F.F. WINGS
A1328		20	5900			HORIZ. B.F. WINGS
A1329		4	10050			HORIZ. F.F. BODY
A1330		5	10300			HORIZ. FTG. BODY
A1331		5	11950			HORIZ. FTG. BODY
A1632	X	6	2600			HORIZ. PAV. BLOCK @ SDWK. BODY
A1933	X	40	1295	X		VERT. - RAIL WINGS
A1934	X	4	5900			HORIZ.. - RAIL WINGS
A1335	X	38	1375	X		CORBEL FOR PAVING NOTCH RDWY.
A1336	X	10	1575	X		CORBEL FOR PAVING NOTCH SDWK.
A1937	X	3	1550	X		UTILITY BLOCKOUT HORIZ. BODY



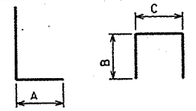
A1317



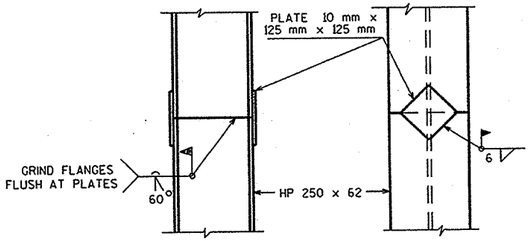
A1335



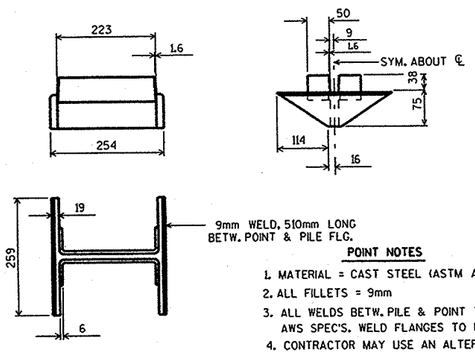
A1336



MARK	A	B	C
A1901	1850	---	---
A1302	210	---	---
A1306	---	480	1200
A1609	---	2490	400
A1612	---	600	400
A1933	---	600	195



PILE SPLICE DETAIL



POINT NOTES

1. MATERIAL = CAST STEEL (ASTM A-27-84-65-35)
2. ALL FILLETS = 9mm
3. ALL WELDS BETW. PILE & POINT TO BE IN ACCORDANCE WITH AWS SPEC'S. WELD FLANGES TO FITTING ON OUTSIDE FACES.
4. CONTRACTOR MAY USE AN ALTERNATE DESIGN UPON APPROVAL OF THE ENGINEER.

PILE POINT DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-44-187

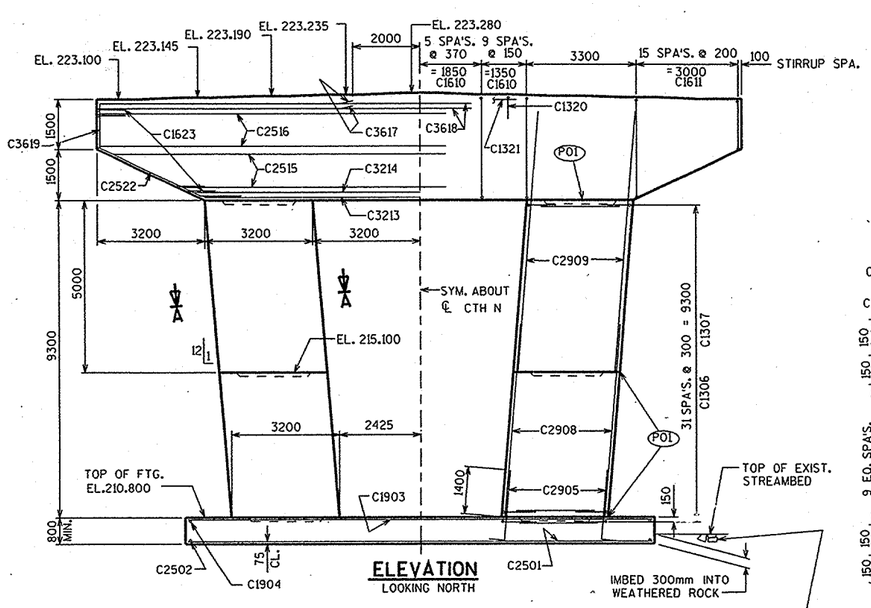
CONST. SPEC.	DRAWN BY	PLANS CK'D.
1996	JHG	KJN

NORTH ABUTMENT DETAILS

SHEET 7

FILE= 187ABUTND.DGN
SCALE = 50

STATE PROJECT NUMBER	SHEET NO.
4676-03-71	8.8

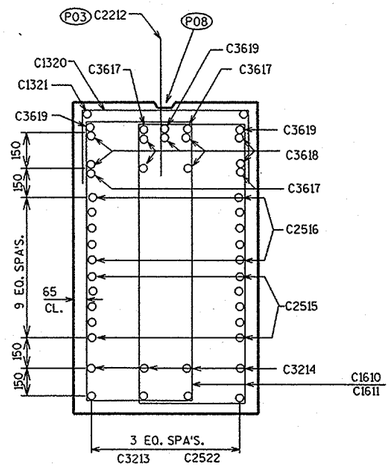


NOTE:
THE MINIMUM ALLOWABLE ROCK BEARING CAPACITY SHALL BE 800kPa AT PIER FOOTINGS.

(P01) 305 mm X 2200 mm X 50 mm CONST. JOINT FORMED BY BEVELED KEYWAY. SEE CONSTRUCTION JOINT DETAIL.

(P03) C2212 BARS @ 300 mm CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 500 mm INTO CONC.)

(P08) CONSTRUCTION JOINT-FORMED BY BEVELED 38 mm x 140 mm BETWEEN BEAM SEATS.



SECT. THRU CAP

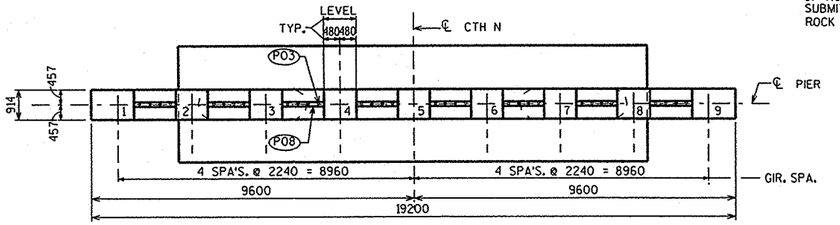
SEE SPECIAL PROVISIONS FOR A DESCRIPTION OF ROCK STRATA. THE CONTRACTOR SHALL SUBMIT A PLAN OF PROPOSED METHOD OF ROCK EXCAVATION.

BILL OF BARS

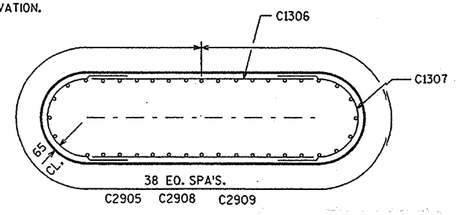
NOTE: THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	BUNDLE	LOCATION
C2501		23	13900				FOOTING BOTT.
C2502		93	3400				FOOTING BOTT.
C1903		12	13900				FOOTING TOP
C1904		47	3400				FOOTING TOP
C2905		76	2535	X			FOOTING TO SHAFT DOWELS
C1306		128	2300				SHAFT TIE BARS HORIZ.
C1307		128	2435	X			SHAFT TIE BARS HORIZ.
C2908		76	5715				SHAFT VERT.
C2909		76	7530				SHAFT VERT.
C1610		58	7060	X			CAP STIRRUPS
C1611		64	5585	X	▲		CAP STIRRUPS
C2212		32	1000				DOWEL CAP TO SUPER.
C3213		4	12800				CAP BOTT. HORIZ.
C3214		4	13480				CAP BOTT. HORIZ.
C2515		20	8875		▲		CAP SIDES
C2516		20	10310				CAP SIDES
C3617		8	7535			X	CAP TOP AT ENDS
C3618		18	11085			X	CAP TOP CONTINUOUS
C3619		6	8735	X		X	CAP TOP AT ENDS
C1320		18	1685	X			CAP TOP GIR'S. 4 THRU 6
C1321		2	5440				CAP TOP GIR'S. 4 THRU 6
C2522		8	4520	X			CAP BOTT.
C1623		24	1780	X			CAP ENDS

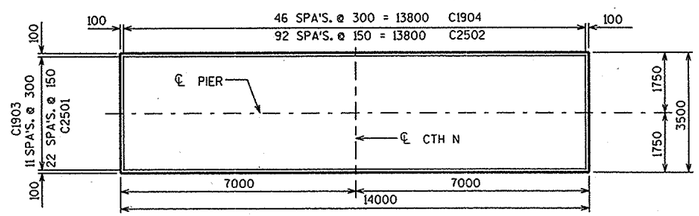
▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.



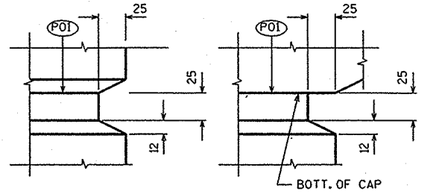
PLAN



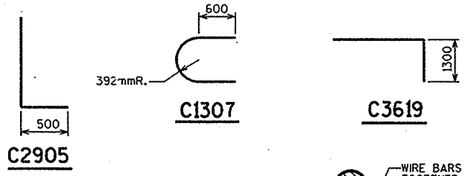
SECT. A-A

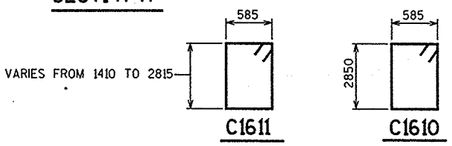


FOOTING PLAN



CONST. JOINT DETAIL





BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
C1611	4 SERIES OF 16	4180 TO 6990
C2515	4 SERIES OF 5	7835 TO 9910
	SERIES OF	TO
	SERIES OF	TO

BUNDLE AND TAG EACH SERIES SEPARATELY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-44-187

CONST. SPEC.	1996	DRAWN BY	JHG	PLANS CK'D.	KJN

PIER 1

SHEET 8

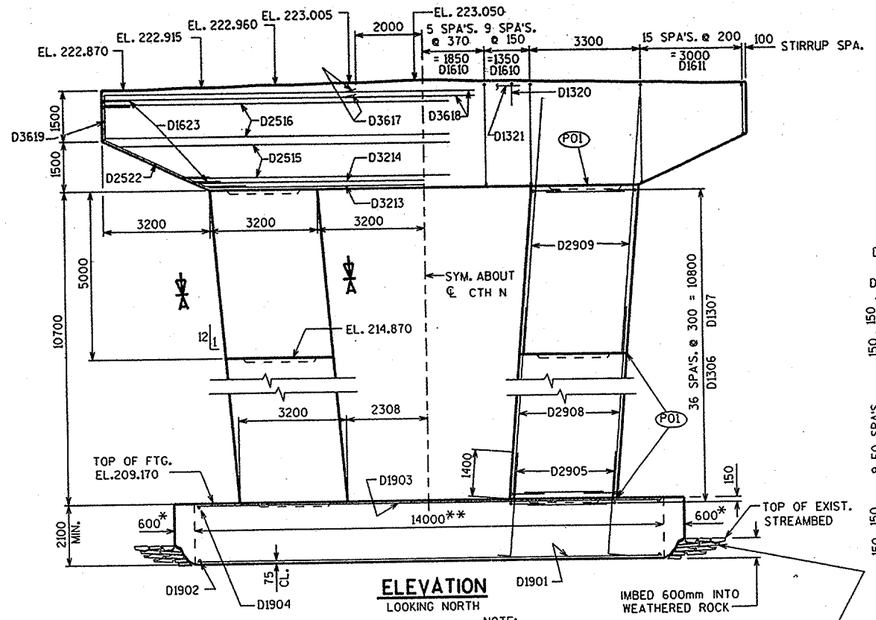
FILE= 187PIER1.DGN
SCALE = 75

STATE PROJECT NUMBER	SHEET NO.
4676-03-71	8.9

(P01) 305 mm X 2200 mm X 50 mm CONST. JOINT FORMED BY BEVELED KEYWAY. SEE CONSTRUCTION JOINT DETAIL.

(P03) D2212 BARS @ 300 mm CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 500 mm INTO CONC.)

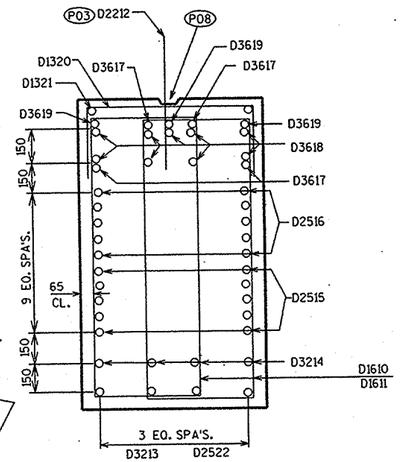
(P08) CONSTRUCTION JOINT-FORMED BY BEVELED 38 mm x 140 mm BETWEEN BEAM SEATS.



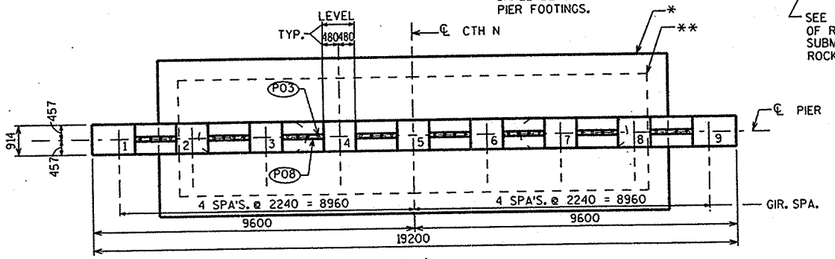
ELEVATION
LOOKING NORTH

NOTE:
THE MINIMUM ALLOWABLE ROCK BEARING CAPACITY SHALL BE 800kPa AT PIER FOOTINGS.

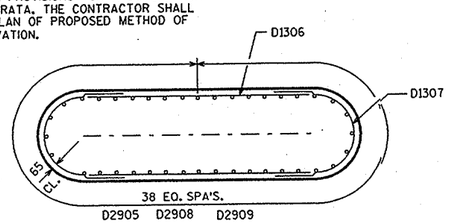
SEE SPECIAL PROVISIONS FOR A DESCRIPTION OF ROCK STRATA. THE CONTRACTOR SHALL SUBMIT A PLAN OF PROPOSED METHOD OF ROCK EXCAVATION.



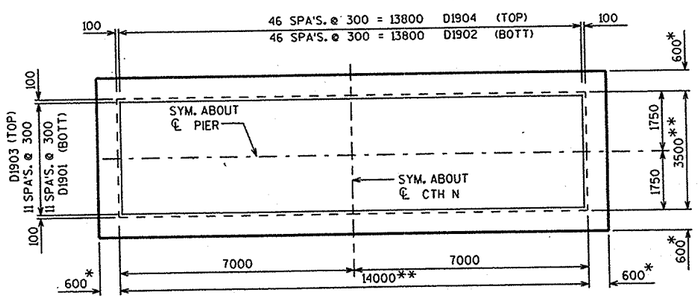
SECT. THRU CAP



PLAN

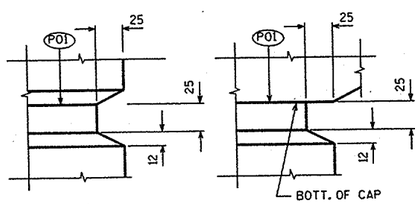


SECT. A-A



FOOTING PLAN

* UNREINFORCED CONCRETE SEAL
** REINFORCED CONCRETE SEAL



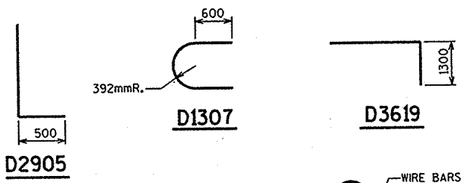
CONST. JOINT DETAIL

BILL OF BARS

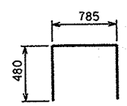
NOTE: THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	BUNDLE	LOCATION
D1901		12	13900				FOOTING BOTT.
D1902		47	3400				FOOTING BOTT.
D1903		12	13900				FOOTING TOP
D1904		47	3400				FOOTING TOP
D2905		76	3840	X			FOOTING TO SHAFT DOWELS
D1306		148	2300				SHAFT TIE BARS HORIZ.
D1307		148	2435	X			SHAFT TIE BARS HORIZ.
D2908		76	7120				SHAFT VERT.
D2909		76	7530				SHAFT VERT.
D1610		58	7060	X			CAP STIRRUPS
D1611		64	5585	X	⚠		CAP STIRRUPS
D2212		32	1000				DOWEL CAP TO SUPER.
D3213		4	12800				CAP BOTT. HORIZ.
D3214		4	13480				CAP BOTT. HORIZ.
D2515		20	8875		⚠		CAP SIDES
D2516		20	10310				CAP SIDES
D3617		8	7535			X	CAP TOP AT ENDS
D3618		18	11085			X	CAP TOP CONTINUOUS
D3619		6	8735	X		X	CAP TOP AT ENDS
D1320		18	1685	X			CAP TOP GIR'S. 4 THRU 6
D1321		2	5440				CAP TOP GIR'S. 4 THRU 6
D2522		8	4520	X			CAP BOTT.
D1623		24	1780	X			CAP ENDS

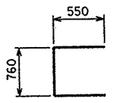
⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.



D1307 D3619 D2905

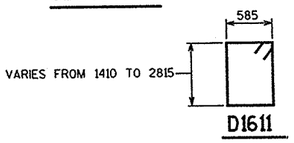


D1320

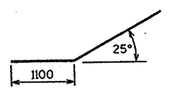


D1623

BUNDLING DETAIL



D1611 D1610



D2522

BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
D1611	4 SERIES OF 16	4180 TO 6990
D2515	4 SERIES OF 5	7835 TO 9910
	SERIES OF	TO
	SERIES OF	TO

BUNDLE AND TAG EACH SERIES SEPARATELY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-44-187

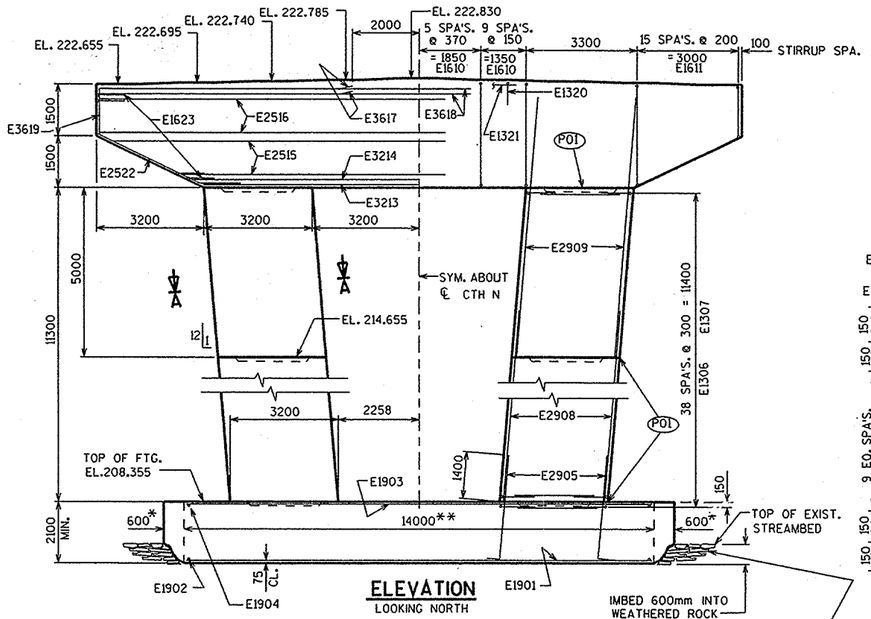
CONST. SPEC.	1996	DRAWN BY	JHG	PLANS CK'D.	KTN

PIER 2

SHEET 9

FILE= 187PIER2.DGN
SCALE = 75

STATE PROJECT NUMBER	SHEET NO.
4676-03-71	8.10



ELEVATION
LOOKING NORTH

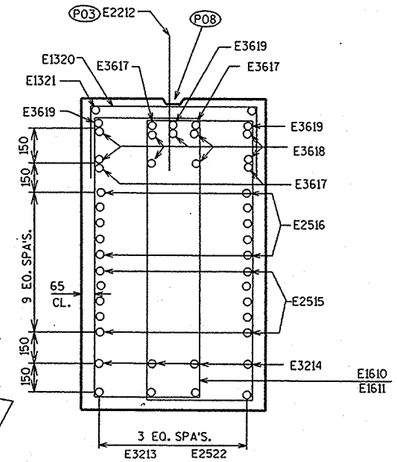
NOTE:
THE MINIMUM ALLOWABLE ROCK BEARING CAPACITY SHALL BE 800kPa AT PIER FOOTINGS.

SEE SPECIAL PROVISIONS FOR A DESCRIPTION OF ROCK STRATA. THE CONTRACTOR SHALL SUBMIT A PLAN OF PROPOSED METHOD OF ROCK EXCAVATION.

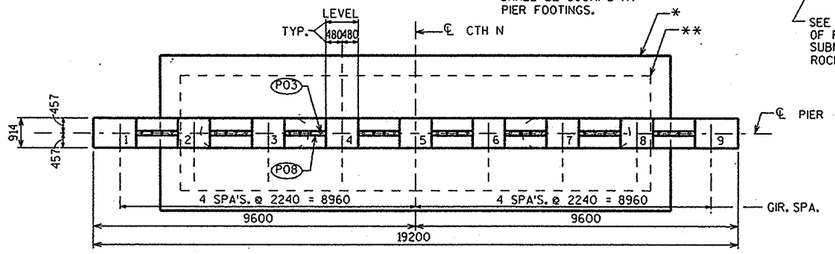
(P01) 305 mm X 2200 mm X 50 mm CONST. JOINT FORMED BY BEVELED KEYWAY. SEE CONSTRUCTION JOINT DETAIL.

(P03) E2212 BARS @ 300 mm CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 500 mm INTO CONC.)

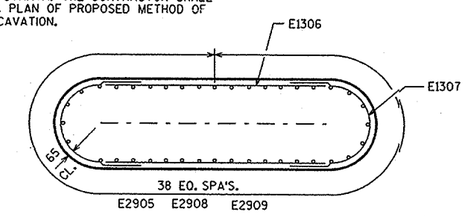
(P08) CONSTRUCTION JOINT-FORMED BY BEVELED 38 mm x 140 mm BETWEEN BEAM SEATS.



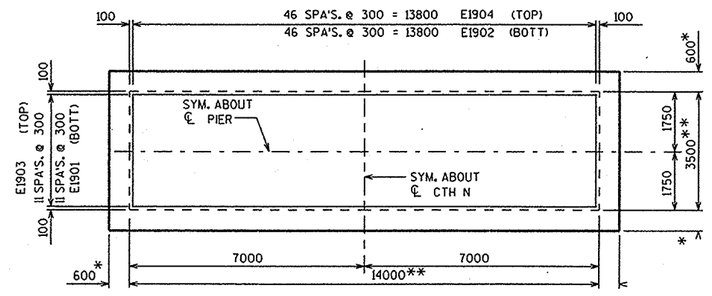
SECT. THRU CAP



PLAN

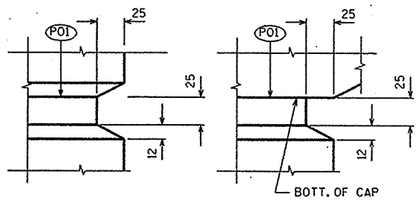


SECT. A-A



FOOTING PLAN

* UNREINFORCED CONCRETE SEAL
** REINFORCED CONCRETE SEAL



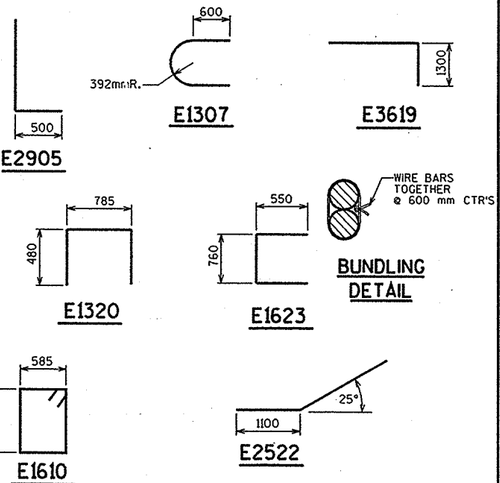
CONST. JOINT DETAIL

BILL OF BARS

NOTE: THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	BUN-DLE	LOCATION
E1901		12	13900				FOOTING BOTT.
E1902		47	3400				FOOTING BOTT.
E1903		12	13900				FOOTING TOP
E1904		47	3400				FOOTING TOP
E2905		76	3840	X			FOOTING TO SHAFT DOWELS
E1306		156	2300				SHAFT TIE BARS HORIZ.
E1307		156	2435	X			SHAFT TIE BARS HORIZ.
E2908		76	7725				SHAFT VERT.
E2909		76	7530				SHAFT VERT.
E1610		58	7060	X			CAP STIRRUPS
E1611		64	5585	X	▲		CAP STIRRUPS
E2212		32	1000				DOWEL CAP TO SUPER.
E3213		4	12800				CAP BOTT. HORIZ.
E3214		4	13480				CAP BOTT. HORIZ.
E2515		20	8875		▲		CAP SIDES
E2516		20	10310				CAP SIDES
E3617		8	7535			X	CAP TOP AT ENDS
E3618		18	11085			X	CAP TOP CONTINUOUS
E3619		6	8735	X		X	CAP TOP AT ENDS
E1320		18	1685	X			CAP TOP GIR'S. 4 THRU 6
E1321		2	5440				CAP TOP GIR'S. 4 THRU 6
E2522		8	4520	X			CAP BOTT.
E1623		24	1780	X			CAP ENDS

▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.



BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
E1611	4 SERIES OF 16	4180 TO 6990
E2515	4 SERIES OF 5	7835 TO 9910
	SERIES OF	TO
	SERIES OF	TO

BUNDLE AND TAG EACH SERIES SEPARATELY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-44-187

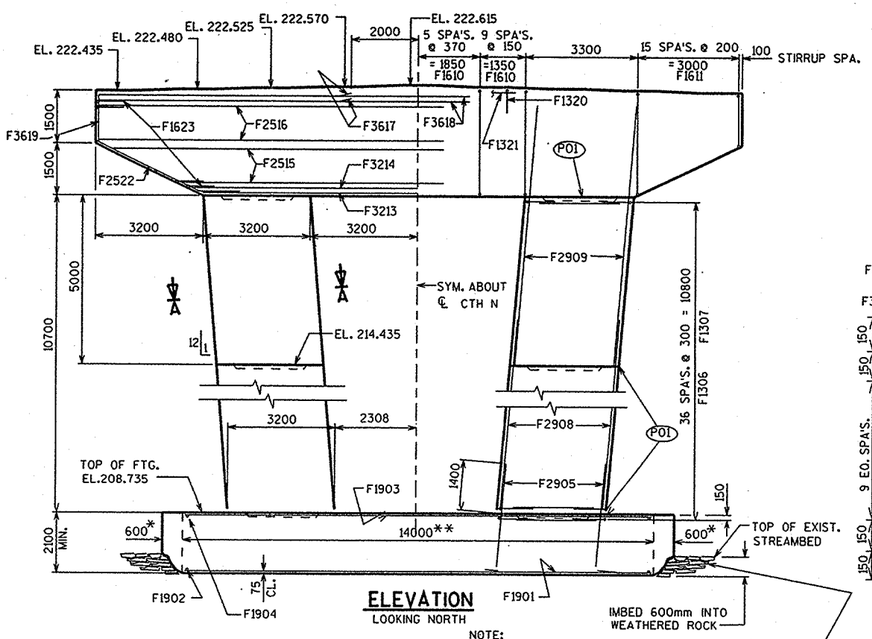
CONST. SPEC.	1996	DRAWN BY	JHG	PLANS CK'D.	KTW

PIER 3

SHEET 10

FILE= 187PIER3.DGN
SCALE = 75

STATE PROJECT NUMBER	SHEET NO.
4676-03-71	8.11



ELEVATION
LOOKING NORTH

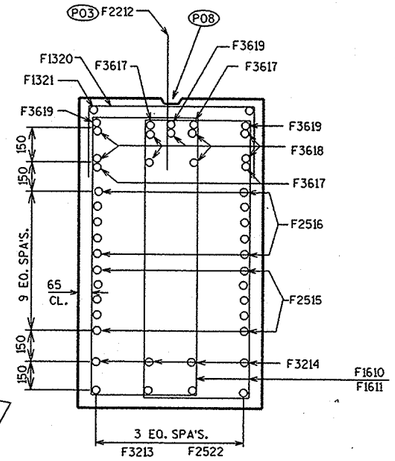
NOTE:
THE MINIMUM ALLOWABLE ROCK BEARING CAPACITY SHALL BE 800kPa AT PIER FOOTINGS.

SEE SPECIAL PROVISIONS FOR A DESCRIPTION OF ROCK STRATA. THE CONTRACTOR SHALL SUBMIT A PLAN OF PROPOSED METHOD OF ROCK EXCAVATION.

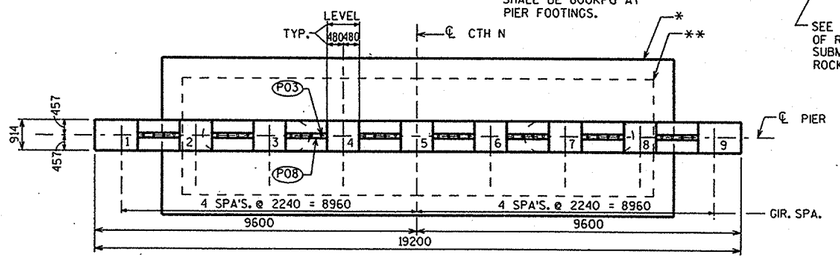
(P01) 305 mm X 2200 mm X 50 mm CONST. JOINT FORMED BY BEVELED KEYWAY. SEE CONSTRUCTION JOINT DETAIL.

(P03) F2212 BARS @ 300 mm CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 500 mm INTO CONC.)

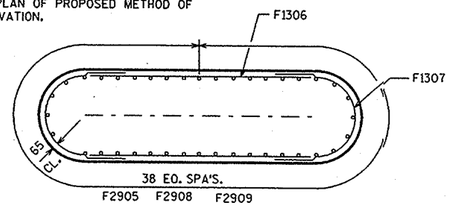
(P08) CONSTRUCTION JOINT-FORMED BY BEVELED 38 mm x 140 mm BETWEEN BEAM SEATS.



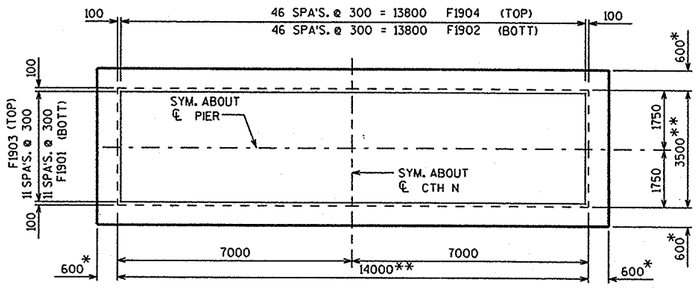
SECT. THRU CAP



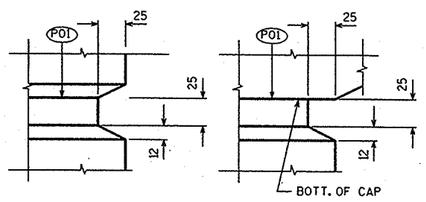
PLAN



SECT. A-A



FOOTING PLAN
* UNREINFORCED CONCRETE SEAL
** REINFORCED CONCRETE SEAL



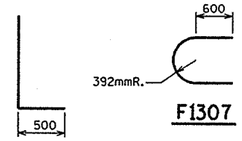
CONST. JOINT DETAIL

BILL OF BARS

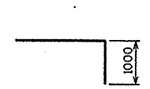
NOTE: THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	BUNDLE	LOCATION
F1901		12	13900				FOOTING BOTT.
F1902		47	3400				FOOTING BOTT.
F1903		12	13900				FOOTING TOP
F1904		47	3400				FOOTING TOP
F2905		76	3840	X			FOOTING TO SHAFT DOWELS
F1306		148	2300				SHAFT TIE BARS HORIZ.
F1307		148	2435	X			SHAFT TIE BARS HORIZ.
F2908		76	7120				SHAFT VERT.
F2909		76	7530				SHAFT VERT.
F1610		58	7060	X			CAP STIRRUPS
F1611		64	5585	X	⚠		CAP STIRRUPS
F2212		32	1000				DOWEL CAP TO SUPER.
F3213		4	12800				CAP BOTT. HORIZ.
F3214		4	13480				CAP BOTT. HORIZ.
F2515		20	8875		⚠		CAP SIDES
F2516		20	10310				CAP SIDES
F3617		8	7535			X	CAP TOP AT ENDS
F3618		18	11085			X	CAP TOP CONTINUOUS
F3619		6	8735	X		X	CAP TOP AT ENDS
F1320		18	1685	X			CAP TOP GIR'S. 4 THRU 6
F1321		2	5440				CAP TOP GIR'S. 4 THRU 6
F2522		8	4520	X			CAP BOTT.
F1623		24	1780	X			CAP ENDS

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.



F2905



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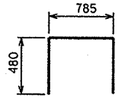
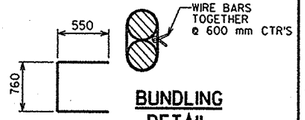
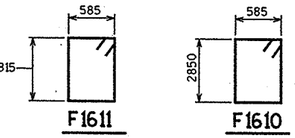


F1320

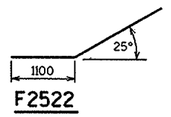


F1623

BUNDLING DETAIL



F1611 F1610



F2522

BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
F1611	4 SERIES OF 16	4180 TO 6990
F2515	4 SERIES OF 5	7835 TO 9910
	SERIES OF	TO
	SERIES OF	TO

BUNDLE AND TAG EACH SERIES SEPARATELY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-44-187

CONST. SPEC.	1996	DRAWN BY	JHG	PLANS CK'D.	KTN

PIER 4

SHEET 11

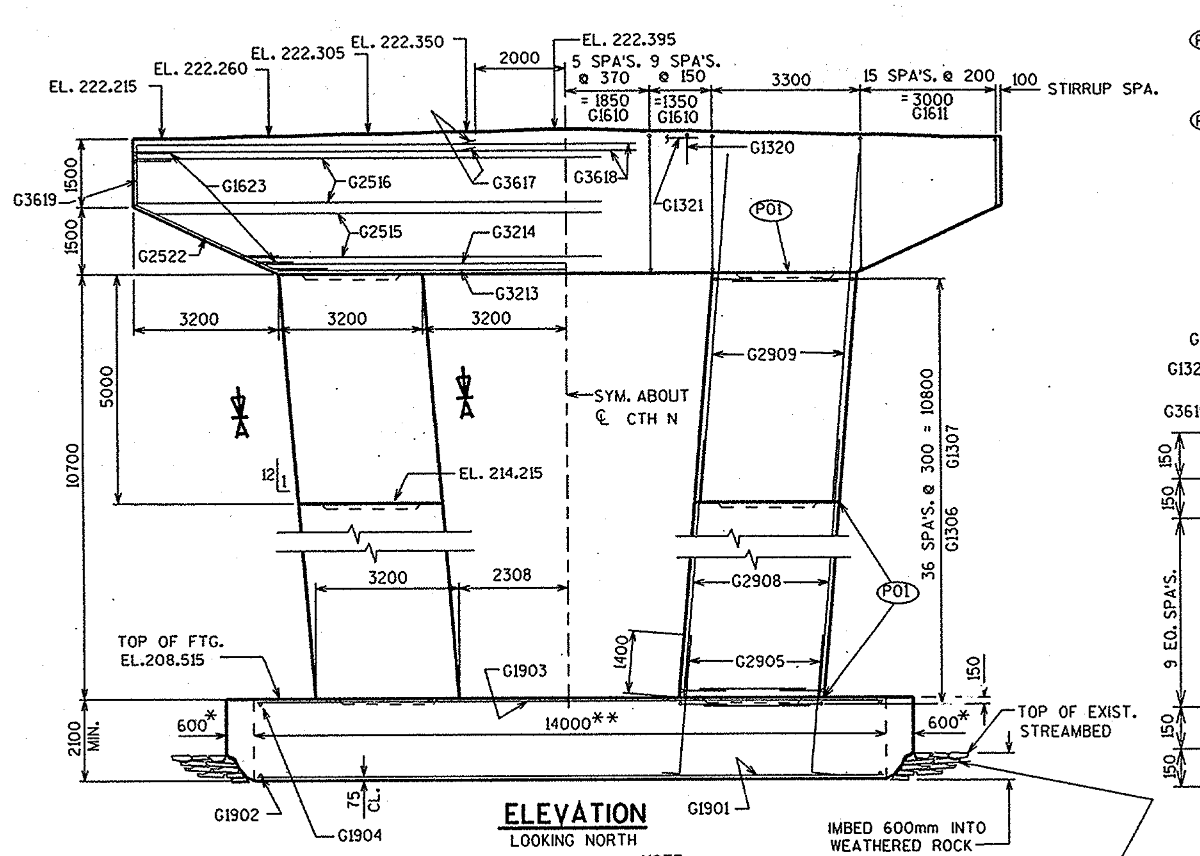
FILE: 187PIER4.DGN
SCALE = 75

STATE PROJECT NUMBER	SHEET NO.
4676-03-71	8.12

(P01) 305 mm X 2200 mm X 50 mm CONST. JOINT FORMED BY BEVELED KEYWAY. SEE CONSTRUCTION JOINT DETAIL.

(P03) G2212 BARS @ 300 mm CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 500 mm INTO CONC.)

(P08) CONSTRUCTION JOINT-FORMED BY BEVELED 38 mm x 140 mm BETWEEN BEAM SEATS.

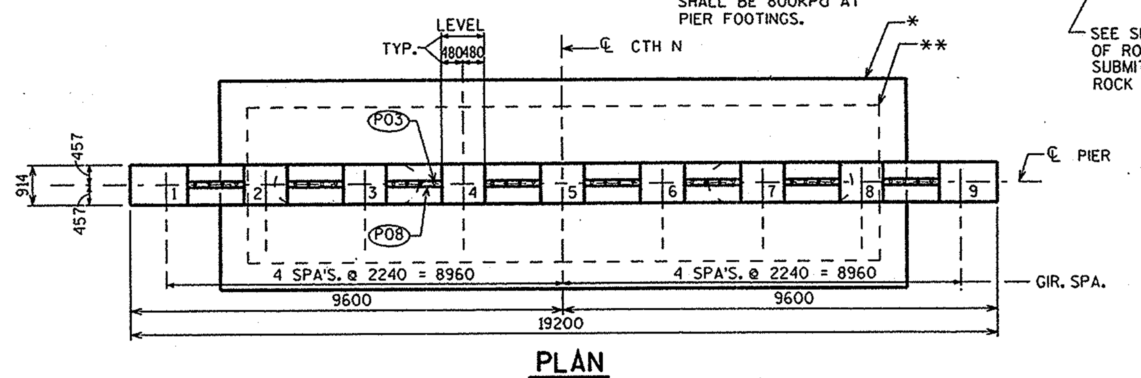


ELEVATION

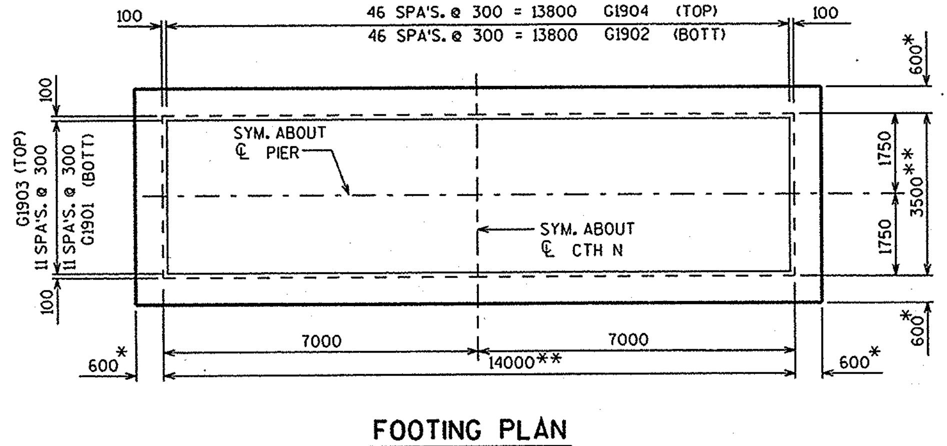
LOOKING NORTH

NOTE:
THE MINIMUM ALLOWABLE ROCK BEARING CAPACITY SHALL BE 800kPa AT PIER FOOTINGS.

SEE SPECIAL PROVISIONS FOR A DESCRIPTION OF ROCK STRATA. THE CONTRACTOR SHALL SUBMIT A PLAN OF PROPOSED METHOD OF ROCK EXCAVATION.

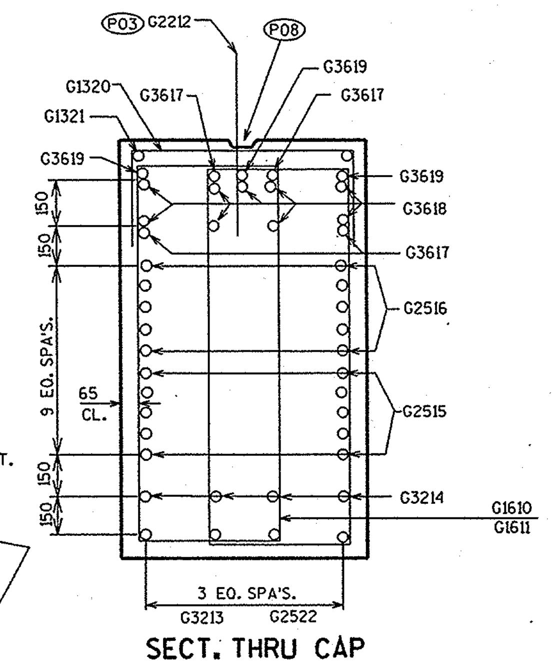


PLAN

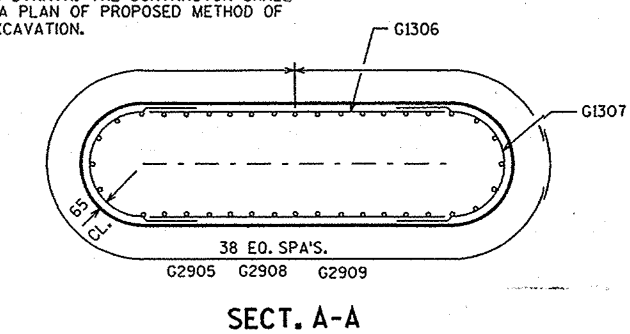


FOOTING PLAN

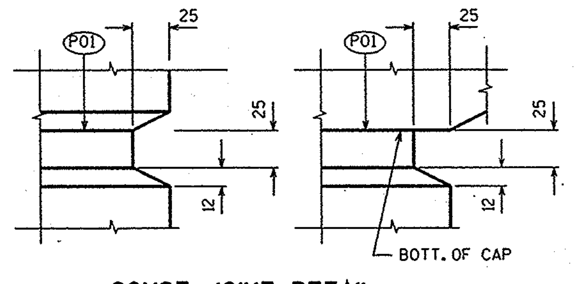
* UNREINFORCED CONCRETE SEAL
** REINFORCED CONCRETE SEAL



SECT. THRU CAP



SECT. A-A



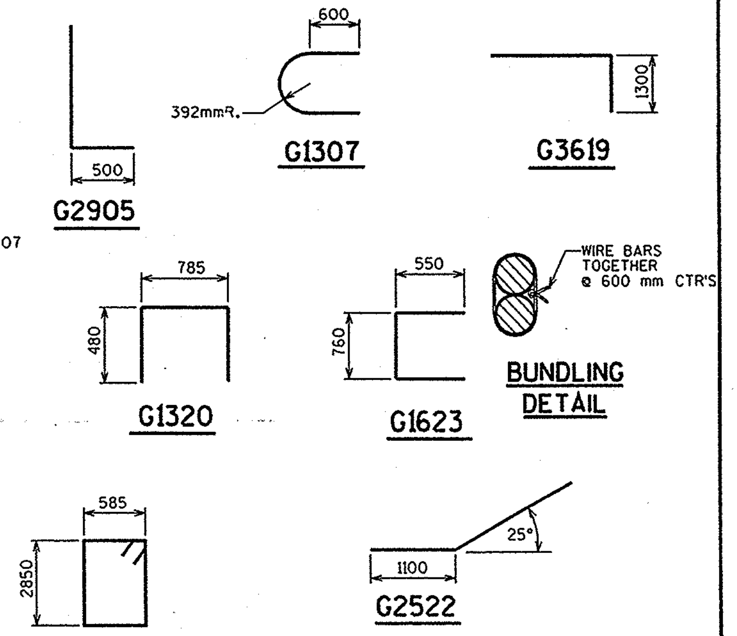
CONST. JOINT DETAIL

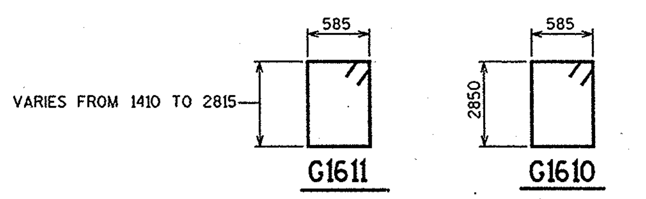
BILL OF BARS

NOTE: THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	BUN-DLE	LOCATION
G1901		12	13900				FOOTING BOTT.
G1902		47	3400				FOOTING BOTT.
G1903		12	13900				FOOTING TOP
G1904		47	3400				FOOTING TOP
G2905		76	3840	X			FOOTING TO SHAFT DOWELS
G1306		148	2300				SHAFT TIE BARS HORIZ.
G1307		148	2435	X			SHAFT TIE BARS HORIZ.
G2908		76	7120				SHAFT VERT.
G2909		76	7530				SHAFT VERT.
G1610		58	7060	X			CAP STIRRUPS
G1611		64	5585	X	⚠		CAP STIRRUPS
G2212		32	1000				DOWEL CAP TO SUPER.
G3213		4	12800				CAP BOTT. HORIZ.
G3214		4	13480				CAP BOTT. HORIZ.
G2515		20	8875		⚠		CAP SIDES
G2516		20	10310				CAP SIDES
G3617		8	7535			X	CAP TOP AT ENDS
G3618		18	11085			X	CAP TOP CONTINUOUS
G3619		6	8735	X		X	CAP TOP AT ENDS
G1320		18	1685	X			CAP TOP GIR'S. 4 THRU 6
G1321		2	5440				CAP TOP GIR'S. 4 THRU 6
G2522		8	4520	X			CAP BOTT.
G1623		24	1780	X			CAP ENDS

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.





BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
G1611	4 SERIES OF 16	4180 TO 6990
G2515	4 SERIES OF 5	7835 TO 9910
	SERIES OF	TO
	SERIES OF	TO

BUNDLE AND TAG EACH SERIES SEPARATELY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-44-187

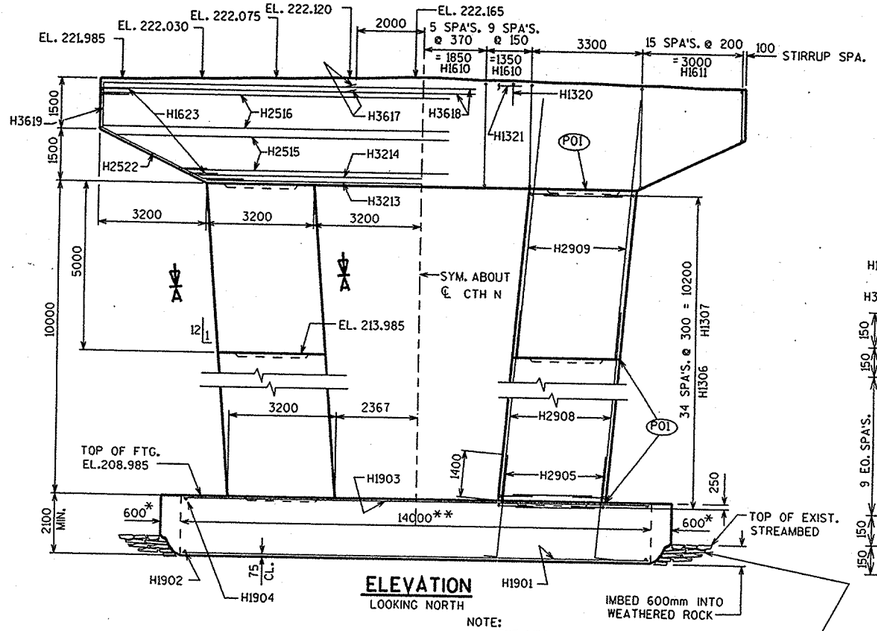
CONST. SPEC. 1996 | DRAWN BY JHG | PLANS CK'D. KAN

PIER 5

SHEET 12

FILE= 187PIER5.DGN
SCALE = 75

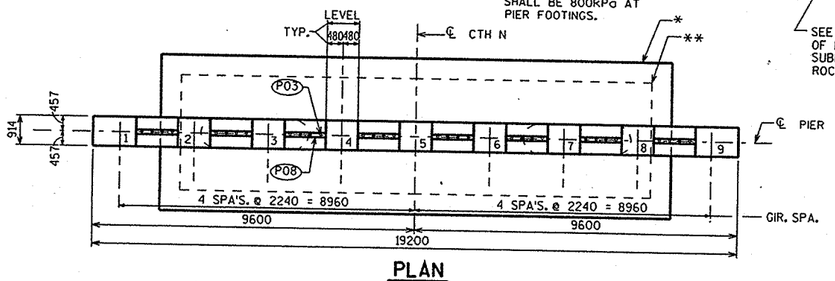
STATE PROJECT NUMBER	SHEET NO.
4676-03-71	8.13



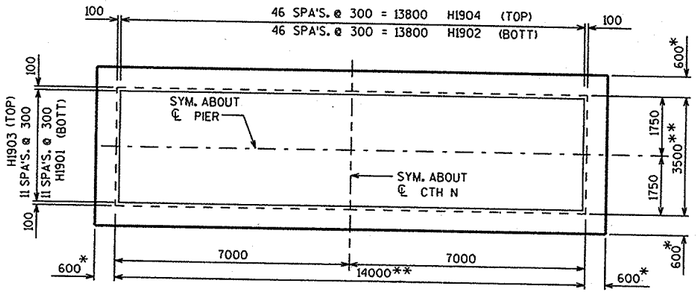
ELEVATION
LOOKING NORTH

NOTE:
THE MINIMUM ALLOWABLE ROCK BEARING CAPACITY SHALL BE 800kPa AT PIER FOOTINGS.

SEE SPECIAL PROVISIONS FOR A DESCRIPTION OF ROCK STRATA. THE CONTRACTOR SHALL SUBMIT A PLAN OF PROPOSED METHOD OF ROCK EXCAVATION.



PLAN

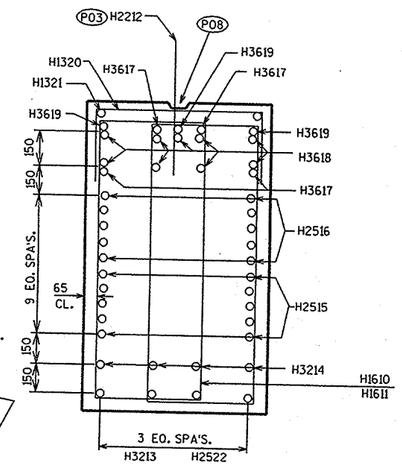


FOOTING PLAN
* UNREINFORCED CONCRETE SEAL
** REINFORCED CONCRETE SEAL

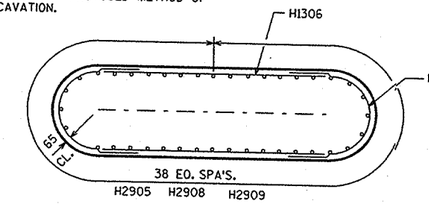
P01 305 mm X 2200 mm X 50 mm CONST. JOINT FORMED BY BEVELED KEYWAY. SEE CONSTRUCTION JOINT DETAIL.

P03 H2212 BARS @ 300 mm CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 500 mm INTO CONC.)

P08 CONSTRUCTION JOINT-FORMED BY BEVELED 38 mm x 140 mm BETWEEN BEAM SEATS.



SECT. THRU CAP



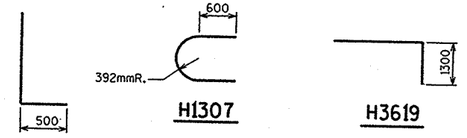
SECT. A-A

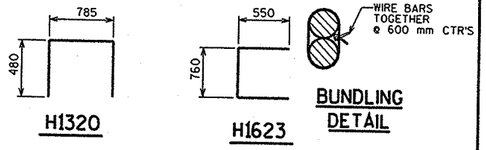
BILL OF BARS

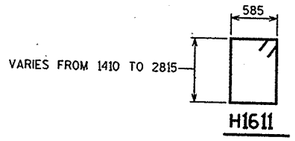
NOTE: THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

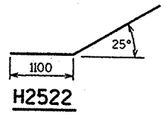
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	BUNDLE	LOCATION
H1901		12	13900				FOOTING BOTT.
H1902		47	3400				FOOTING BOTT.
H1903		12	13900				FOOTING TOP
H1904		47	3400				FOOTING TOP
H2905		76	3840	X			FOOTING TO SHAFT DOWELS
H1306		140	2300				SHAFT TIE BARS HORIZ.
H1307		140	2435	X			SHAFT TIE BARS HORIZ.
H2908		76	6420				SHAFT VERT.
H2909		76	7530				SHAFT VERT.
H1610		58	7060	X			CAP STIRRUPS
H1611		64	5585	X	⚠		CAP STIRRUPS
H2212		32	1000				DOWEL CAP TO SUPER.
H3213		4	12800				CAP BOTT. HORIZ.
H3214		4	13480				CAP BOTT. HORIZ.
H2515		20	8875		⚠		CAP SIDES
H2516		20	10310				CAP SIDES
H3617		8	7535			X	CAP TOP AT ENDS
H3618		18	11085			X	CAP TOP CONTINUOUS
H3619		6	8735	X		X	CAP TOP AT ENDS
H1320		18	1685	X			CAP TOP GIR'S. 4 THRU 6
H1321		2	5440				CAP TOP GIR'S. 4 THRU 6
H2522		8	4520	X			CAP BOTT.
H1623		24	1780	X			CAP ENDS

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.





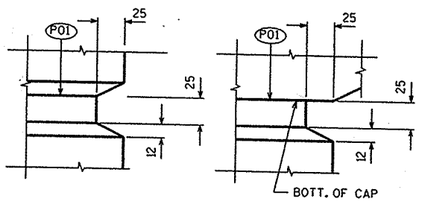




BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
H1611	4 SERIES OF 16	4180 TO 6990
H2515	4 SERIES OF 5	7835 TO 9910
	SERIES OF	TO
	SERIES OF	TO

BUNDLE AND TAG EACH SERIES SEPARATELY.



CONST. JOINT DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

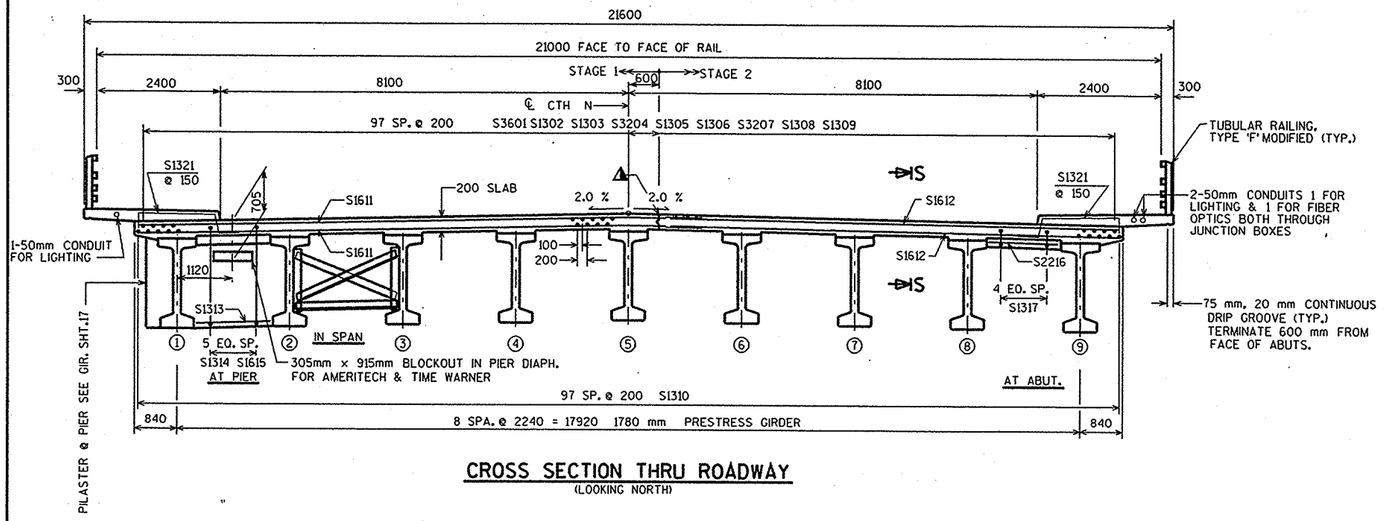
STRUCTURE B-44-187

CONST. SPEC.	1996	DRAWN BY	JHG	PLANS CK'D.	KJN

PIER 6 | SHEET 13

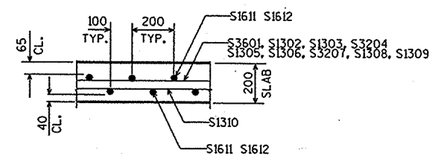
FILE= 187PIER6.DGN
SCALE = 75

STATE PROJECT NUMBER	SHEET NO.
4676-03-71	8.14

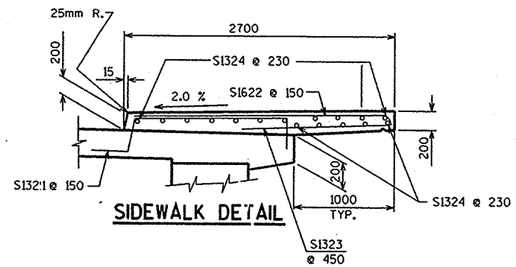


CROSS SECTION THRU ROADWAY
(LOOKING NORTH)

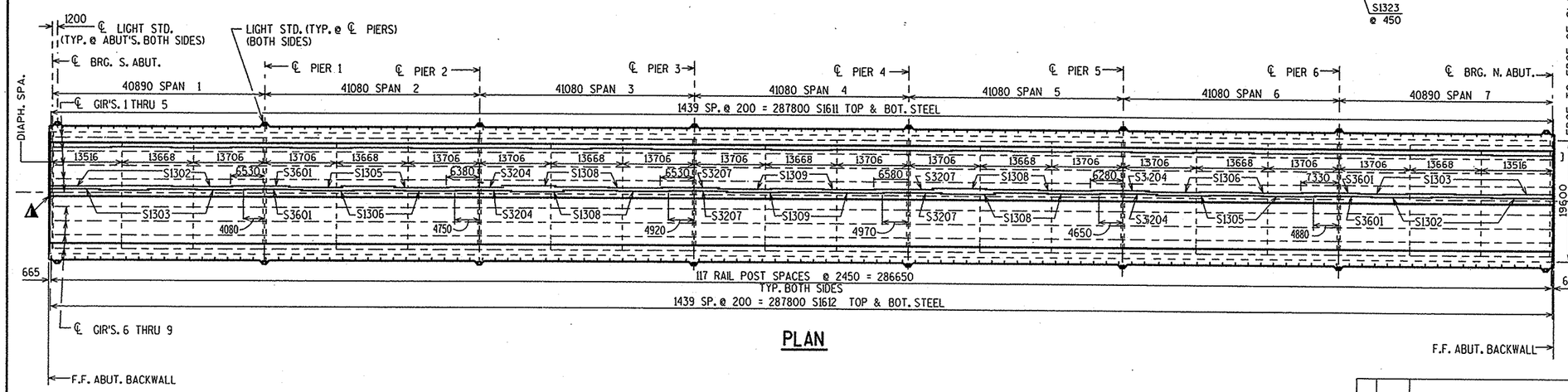
▲ LONGIT. CONST. JOINT FORMED WITH A SURFACED, BEVELED 50mm X 50mm ON ℄ OF SLAB.



SECTION S-S



SIDEWALK DETAIL



PLAN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

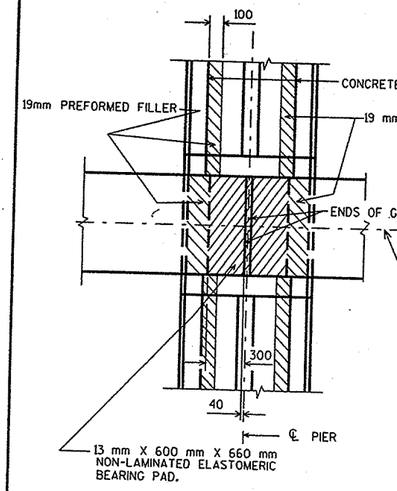
STRUCTURE B-44-187

CONST. SPEC.	1996	DRAWN BY	JHG	PLANS CK'D.	KJH

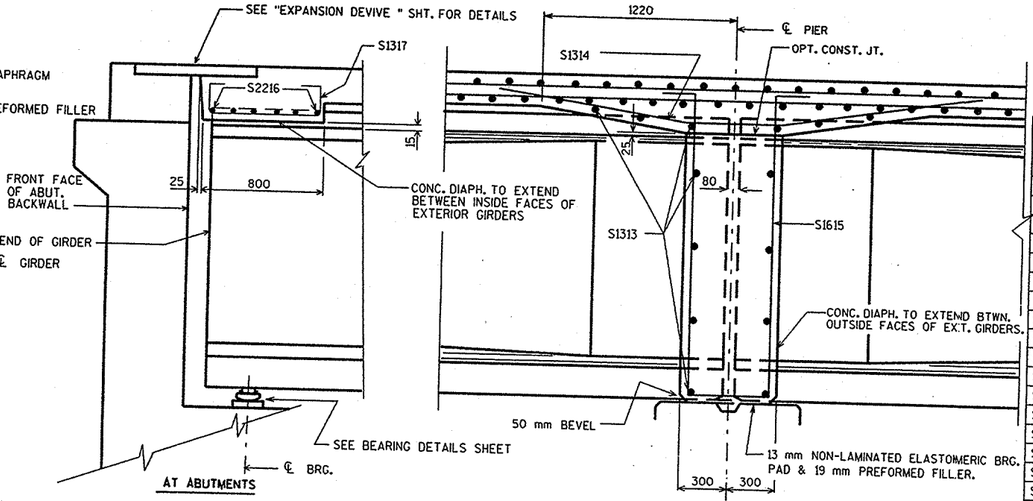
SUPERSTRUCTURE | SHEET 14

FILE= 187GP.DGN
SCALE = 400

STATE PROJECT NUMBER	SHEET NO.
4676-03-71	8.15



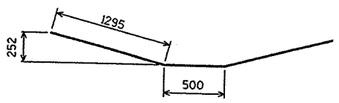
BEARING PAD DETAIL



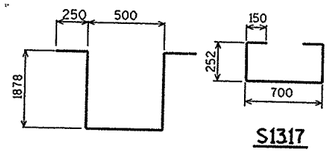
PART LONGIT. SECTION

BILL OF BARS

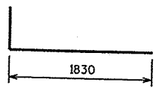
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S3601	X	196	11400			LONGITUDINAL CONTINUITY
S1302	X	294	12050			LONGITUDINAL TOP
S1303	X	392	9775			LONGITUDINAL TOP
S3204	X	196	11025			LONGITUDINAL CONTINUITY
S1305	X	294	10600			LONGITUDINAL TOP
S1306	X	294	10325			LONGITUDINAL TOP
S3207	X	196	11500			LONGITUDINAL CONTINUITY
S1308	X	588	10625			LONGITUDINAL TOP
S1309	X	294	10500			LONGITUDINAL TOP
S1310	X	2450	12000			LONGITUDINAL BOTTOM
S1611	X	2879	11150			TRANSVERSE STAGE 1
S1612	X	2879	9100			TRANSVERSE STAGE 2
S1313	X	672	1375			PIER DIAPHRAGM
S1314	X	288	3100	X		PIER DIAPHRAGM
S1615	X	288	4200	X		PIER DIAPHRAGM
S2216	X	96	1375			ABUT. DIAPHRAGM
S1317	X	80	1400	X		ABUT. DIAPHRAGM
S1318	X	24	2175	X		PIER PILASTER
S1319	X	24	2000	X		PIER PILASTER
S1020	X	72	1175	X		PIER PILASTER
S1321	X	3820	2365	X		SLAB & SDWK.
S1622	X	3820	2640	X		SDWK. TRANS. TOP
S1323	X	1280	2640			SDWK. TRANS. BOTT.
S1324	X	800	12000			SDWK. LONGIT.
S1625	X	128	3040	X		LIGHT STANDARDS
S1626	X	480	2760	X		LIGHT STANDARDS
S1627	X	192	480			LIGHT STANDARDS
S1328	X	48	2180	X		LIGHT STANDARDS
S1629	X	48	1525			AT FLOOR DRAINS
S1930	X	236	3650	X		ONE PER RAIL POST
S1931	X	472	1220			TWO PER RAIL POST



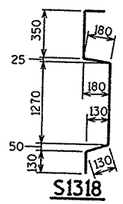
S1314



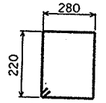
S1615 S1317



S1319



S1318



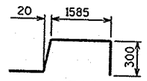
S1020

TOP OF DECK ELEVATIONS

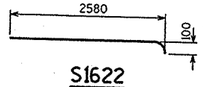
	S. ABUT.	1/8	2/8	3/8	4/8	5/8	6/8	7/8	PIER 1	1/8	2/8	3/8	4/8	5/8	6/8	7/8
GIR. 1	224.990	225.045	225.090	225.130	225.155	225.170	225.175	225.165	225.150	225.125	225.100	225.070	225.045	225.015	224.990	224.965
GIR. 2	225.035	225.090	225.135	225.170	225.200	225.215	225.220	225.210	225.195	225.170	225.145	225.115	225.090	225.060	225.035	225.005
GIR. 3	225.080	225.135	225.180	225.215	225.245	225.260	225.265	225.255	225.240	225.215	225.190	225.160	225.135	225.105	225.080	225.050
GIR. 4	225.125	225.180	225.225	225.260	225.290	225.305	225.305	225.300	225.285	225.260	225.235	225.205	225.180	225.150	225.125	225.095
GIR. 5	225.170	225.225	225.270	225.305	225.330	225.350	225.350	225.345	225.330	225.305	225.280	225.250	225.225	225.195	225.170	225.140
GIR. 6	225.125	225.180	225.225	225.260	225.290	225.305	225.305	225.300	225.285	225.260	225.235	225.205	225.180	225.150	225.125	225.095
GIR. 7	225.080	225.135	225.180	225.215	225.245	225.260	225.265	225.255	225.240	225.215	225.190	225.160	225.135	225.105	225.080	225.050
GIR. 8	225.035	225.090	225.135	225.170	225.200	225.215	225.220	225.210	225.195	225.170	225.145	225.115	225.090	225.060	225.035	225.005
GIR. 9	224.990	225.045	225.090	225.130	225.155	225.170	225.175	225.165	225.150	225.125	225.100	225.070	225.045	225.015	224.990	224.965

PIER 2	1/8	2/8	3/8	4/8	5/8	6/8	7/8	PIER 3	1/8	2/8	3/8	4/8	5/8	6/8	7/8	PIER 4
224.935	224.910	224.880	224.855	224.825	224.800	224.770	224.745	224.720	224.690	224.665	224.635	224.610	224.580	224.555	224.525	224.500
224.980	224.955	224.925	224.900	224.870	224.845	224.815	224.790	224.760	224.735	224.710	224.680	224.655	224.625	224.600	224.570	224.545
225.025	225.000	224.970	224.945	224.915	224.890	224.860	224.835	224.805	224.780	224.755	224.725	224.700	224.670	224.645	224.615	224.590
225.070	225.045	225.015	224.990	224.960	224.935	224.905	224.880	224.850	224.825	224.800	224.770	224.745	224.715	224.690	224.660	224.635
225.115	225.085	225.060	225.035	225.005	224.980	224.950	224.925	224.895	224.870	224.840	224.815	224.790	224.760	224.735	224.705	224.680
225.070	225.045	225.015	224.990	224.960	224.935	224.905	224.880	224.850	224.825	224.800	224.770	224.745	224.715	224.690	224.660	224.635
225.025	225.000	224.970	224.945	224.915	224.890	224.860	224.835	224.805	224.780	224.755	224.725	224.700	224.670	224.645	224.615	224.590
224.980	224.955	224.925	224.900	224.870	224.845	224.815	224.790	224.760	224.735	224.710	224.680	224.655	224.625	224.600	224.570	224.545
224.935	224.910	224.880	224.855	224.825	224.800	224.770	224.745	224.720	224.690	224.665	224.635	224.610	224.580	224.555	224.525	224.500

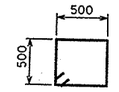
1/8	2/8	3/8	4/8	5/8	6/8	7/8	PIER 5	1/8	2/8	3/8	4/8	5/8	6/8	7/8	PIER 6	1/8	2/8	3/8	4/8	5/8	6/8	7/8	N. ABUT.
224.475	224.445	224.420	224.390	224.365	224.335	224.310	224.280	224.255	224.230	224.200	224.175	224.145	224.120	224.090	224.065	224.035	224.010	223.985	223.955	223.930	223.900	223.875	223.850
224.515	224.490	224.465	224.435	224.410	224.380	224.355	224.325	224.300	224.275	224.245	224.220	224.190	224.165	224.135	224.110	224.080	224.055	224.030	224.000	223.975	223.945	223.920	223.895
224.560	224.535	224.510	224.480	224.455	224.425	224.400	224.370	224.345	224.315	224.290	224.265	224.235	224.210	224.180	224.155	224.125	224.100	224.075	224.045	224.020	223.990	223.965	223.935
224.605	224.580	224.555	224.525	224.500	224.470	224.445	224.415	224.390	224.360	224.335	224.310	224.280	224.255	224.225	224.200	224.170	224.145	224.120	224.090	224.065	224.035	224.010	223.980
224.650	224.625	224.595	224.570	224.545	224.515	224.490	224.460	224.435	224.405	224.380	224.355	224.325	224.300	224.270	224.245	224.215	224.190	224.160	224.135	224.110	224.080	224.055	224.025
224.605	224.580	224.555	224.525	224.500	224.470	224.445	224.415	224.390	224.360	224.335	224.310	224.280	224.255	224.225	224.200	224.170	224.145	224.120	224.090	224.065	224.035	224.010	223.980
224.560	224.535	224.510	224.480	224.455	224.425	224.400	224.370	224.345	224.315	224.290	224.265	224.235	224.210	224.180	224.155	224.125	224.100	224.075	224.045	224.020	223.990	223.965	223.935
224.515	224.490	224.465	224.435	224.410	224.380	224.355	224.325	224.300	224.275	224.245	224.220	224.190	224.165	224.135	224.110	224.080	224.055	224.030	224.000	223.975	223.945	223.920	223.895
224.475	224.445	224.420	224.390	224.365	224.335	224.310	224.280	224.255	224.230	224.200	224.175	224.145	224.120	224.090	224.065	224.035	224.010	223.985	223.955	223.930	223.900	223.875	223.850



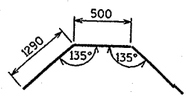
S1321



S1622



S1328



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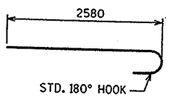
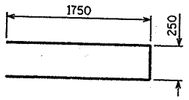


S1626



S1930

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-44-187

CONST. SPEC. 1996	DRAWN BY CMPT/JHG	PLANS CK'D. ZIRK

SUPERSTRUCTURE DETAILS

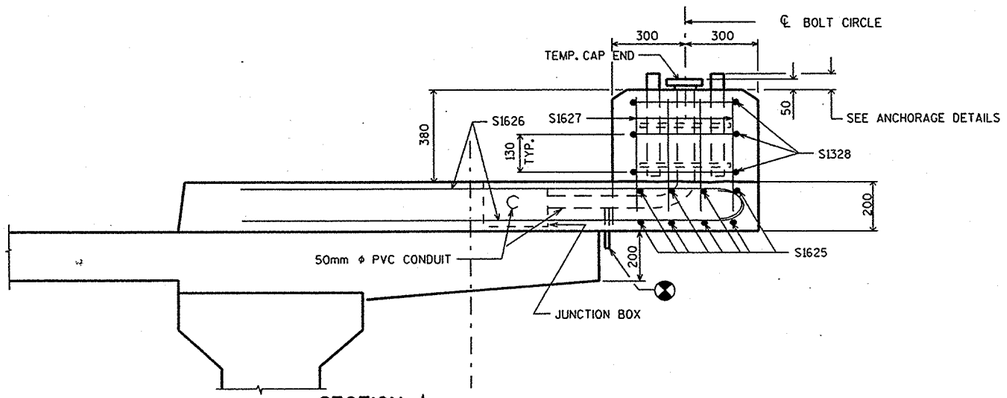
SHEET 15

FILE= 187SUPER.DGN
SCALE = 15

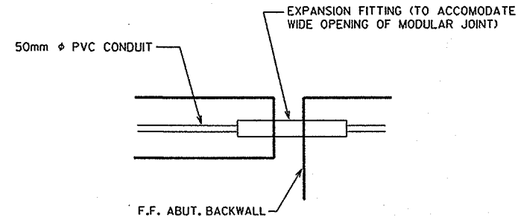
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

STATE PROJECT NUMBER	SHEET NO.
4676-03-71	8.16

⊗ STANDARD TEE & GALVANIZED PIPE STUB-STUB TO PROJECT 25mm BELOW BOTTOM OF SLAB. LOCATE DRAIN AT LOW POINT IN EACH RUN OR AT OTHER LOCATIONS WHERE CONDUIT DOES NOT DRAIN.

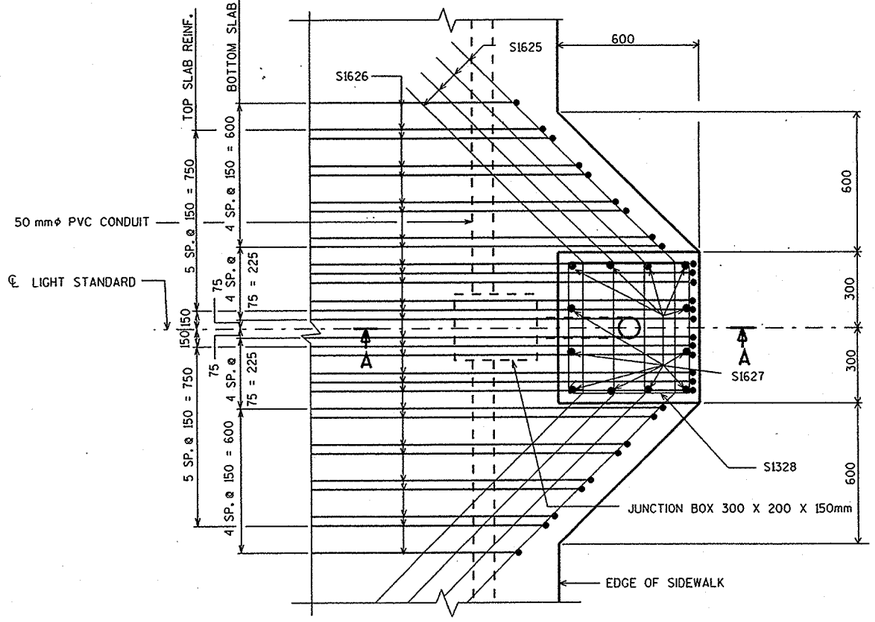


SECTION A

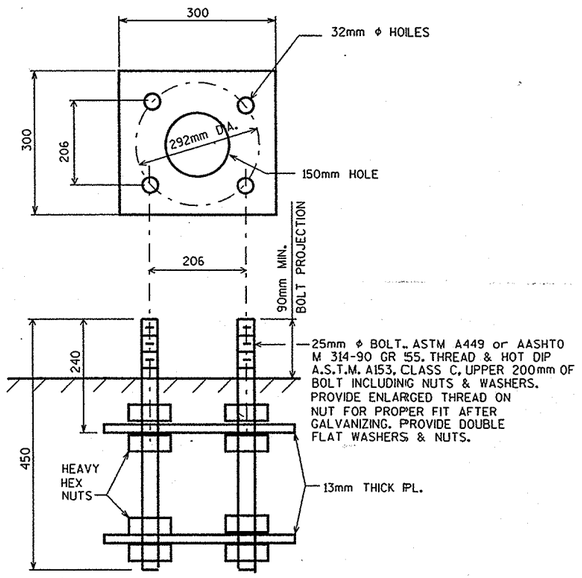


CONDUIT EXP. FITTING AT ABUT'S.

TO BE INCIDENTAL TO BID ITEM, "NON-METALLIC CONDUIT, SCHEDULE 40, 50mm"



PLAN



ANCHORAGE DETAIL 'B'

(KAUKAUNA WATER & ELECTRIC LIGHTS)

NOTE: TO BE PAID FOR AS 'ANCHOR ASSEMBLY LIGHT POLES' EA.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-44-187

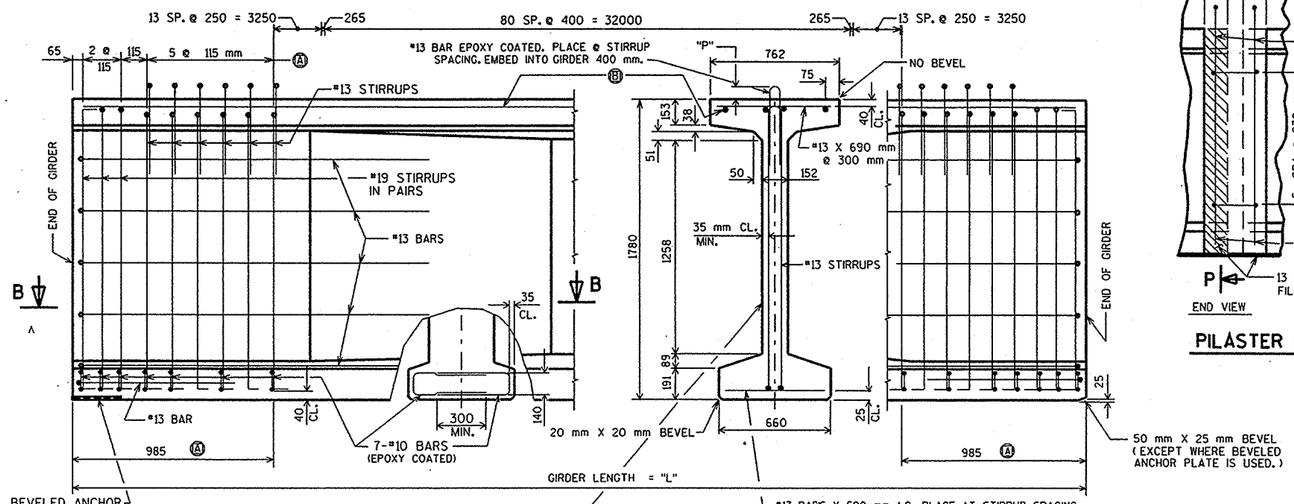
CONST. SPEC. 1996	DRAWN BY JHG	PLANS CK'D. ZIRK

LIGHTING DETAILS

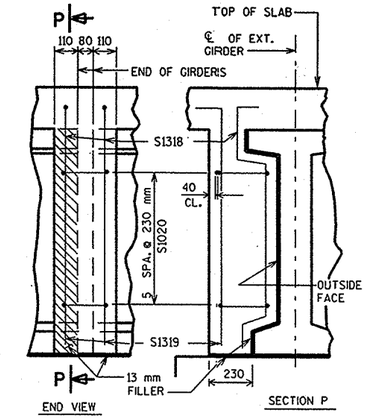
SHEET 16

FILE= 187LITE.DGN
SCALE = 150

STATE PROJECT NUMBER	SHEET NO.
4676-03-71	8.17



SIDE VIEW & TYPICAL SECTION IN SPAN



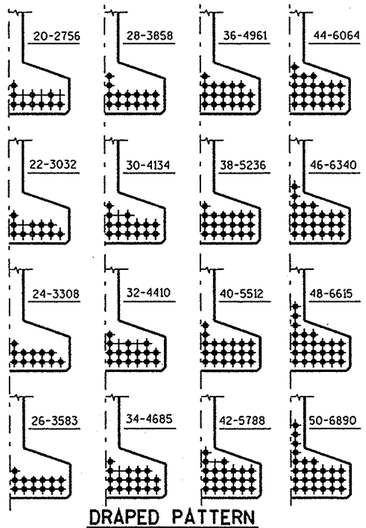
PILASTER DETAILS AT PIERS

(A) DETAIL TYP. AT EACH END.

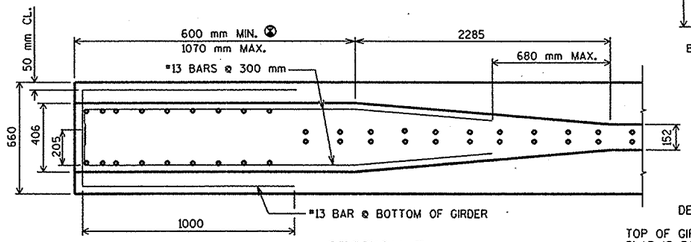
(B) 4 - BARS FULL LENGTH.

NOTE: INSERT FOR DRAIN BRACKET REQ'D.
SEE SHEET 1 FOR DRAIN LOCATION.
SEE SHEET 20 FOR INSERT LOCATION.

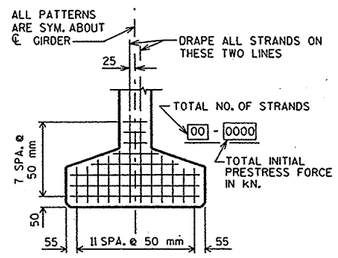
(SPAN 1) 4 *13, 600 MIN. LAP
(SPAN 2) 4 *13, 600 MIN. LAP
(SPAN 3) 4 *13, 600 MIN. LAP
(SPAN 4) 4 *13, 600 MIN. LAP
(SPAN 5) 4 *13, 600 MIN. LAP
(SPAN 6) 4 *13, 600 MIN. LAP
(SPAN 7) 4 *13, 600 MIN. LAP



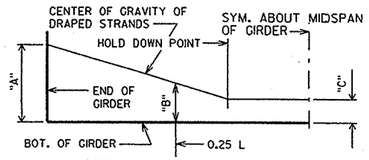
DRAPED PATTERN



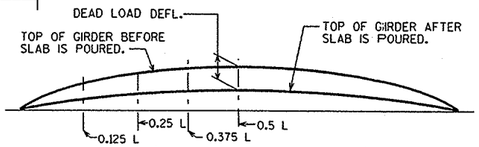
SECTION B



TYP STRAND PATTERN



DRAPED STRAND PROFILE



DEAD LOAD DEFLECTION DIAGRAM

* MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

GIRDER DATA

SPAN	GIRDER LENGTH "L" (mm)	DEAD LOAD DEFL. (mm) .125	.25	.375	.5	CONC. STRGTH. f'c (MPa)	"P"	DRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (MPa) *	(mm) "A"	"B" MIN.	"B" MAX.	"C"	UNDRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (MPa) *
1 & 7	41000	23	40	50	53	42	150	48	36	1575	546	622	203	0	0
2-6	41000	24	41	51	54	42	150	42	33	1626	521	597	152	0	0

GIRDER NOTES

ALL DIMENSIONS ARE IN MILLIMETERS.

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 50 mm OF GIRDER, WHICH SHALL BE TROWEL FINISHED.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS.

PRESTRESSING STRANDS SHALL BE 13 mm ϕ - 7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 1860 MPa AND SHALL BE FLUSH WITH THE ENDS OF THE GIRDER.

BEND EACH END OF *13 STIRRUPS 120 mm AND *19 STIRRUPS 180 mm.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.

(X) ON MULTIPLE SPAN STRUCTURES, SET THE END BLOCK LENGTHS OF GIRDERS RESTING ON THE SAME PIER TO ± 50 mm. ON SIMPLE SPANS, SET THE END BLOCK LENGTH ON BOTH GIRDER ENDS TO ± 50 mm.

IF THE CONTRACTOR USES BOTTOM FLANGE TO SUPPORT CONSTRUCTION FORMS, THE CONTRACTOR SHALL SUBMIT FALSEWORK PLANS FOR APPROVAL OF THE ENGINEER.

ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

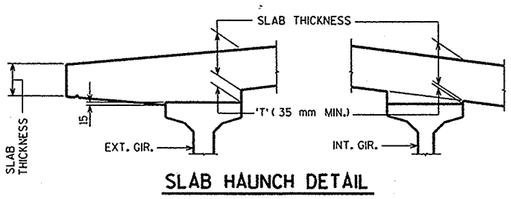
SPACING SHOWN FOR *13 STIRRUPS IS FOR GRADE 420 REINFORCEMENT. IF THE FABRICATOR WANTS TO BUILD A BAR STEEL CAGE BY WELDING LONGITUDINAL REINFORCEMENT TO THE *13 STIRRUPS, 2 OPTIONS ARE AVAILABLE:

1. USE ASTM A706M, GRADE 420 REINFORCEMENT AND THE STIRRUP SPACING AS SHOWN ON THE PLANS.
2. USE ASTM A615M, GRADE 300 REINFORCEMENT AND A MODIFIED STIRRUP SPACING SUBMITTED TO AND APPROVED BY THE STRUCTURES DEVELOPMENT SECTION.

AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DEVELOPMENT SECTION

WELDED WIRE FABRIC SHALL CONFORM TO THE REQUIREMENTS OF ASTM A497.

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.)



SLAB HAUNCH DETAIL

IF 35 mm MINIMUM HAUNCH HEIGHT 'T' CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN SLAB THICKNESS SHALL BE HELD. NOTIFY BRIDGE OFFICE FOR HAUNCH HEIGHTS OVER 100 mm.

TO DETERMINE 'T', ELEV'S. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 0.25 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- SLAB THICKNESS
= HAUNCH HEIGHT 'T'

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-44-187

CONST. SPEC.	1996	DRAWN BY	JHG	PLANS CK'D.	ZIRK

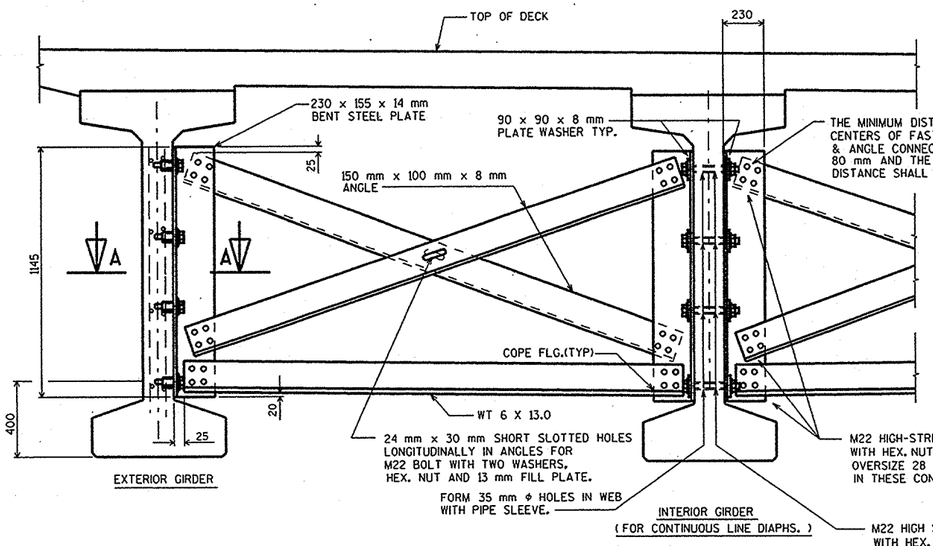
1780 mm PRESTRESSED GIRDER DETAILS

SHEET 17

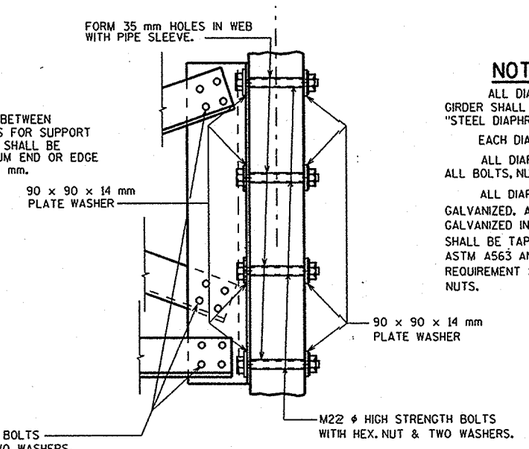
THU JAN 21 12:44:51 1999*
D:±USERS±DOTKTN±187GIR.DGN

FILE= 187GIR.DGN
SCALE =

STATE PROJECT NUMBER	SHEET NO.
4676-03-71	8.18



PART TRANSVERSE SECTION AT DIAPHRAGM



SECTION AT INTERIOR GIRDERS (FOR STAGGERED DIAPHRAGMS)

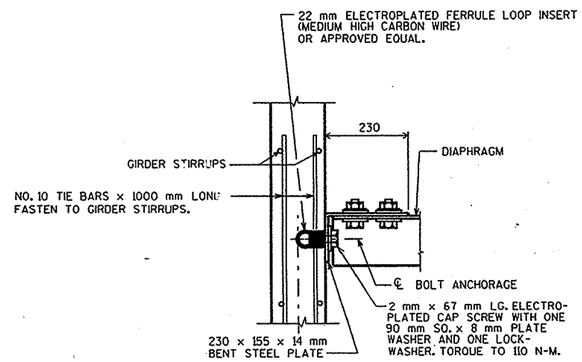
NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGM".

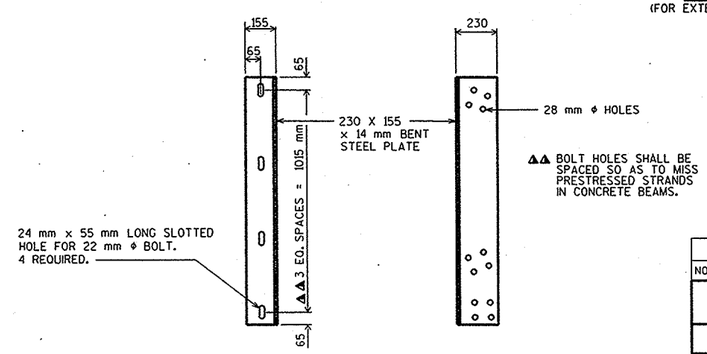
EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.



SECT. A-A
(FOR EXTERIOR ATTACHMENT)



DIAPHRAGM SUPPORT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-44-187

CONST. SPEC. 1996	DRAWN BY JHG	PLANS CK'D. ZIRK

STEEL DIAPHRAGM

SHEET 18

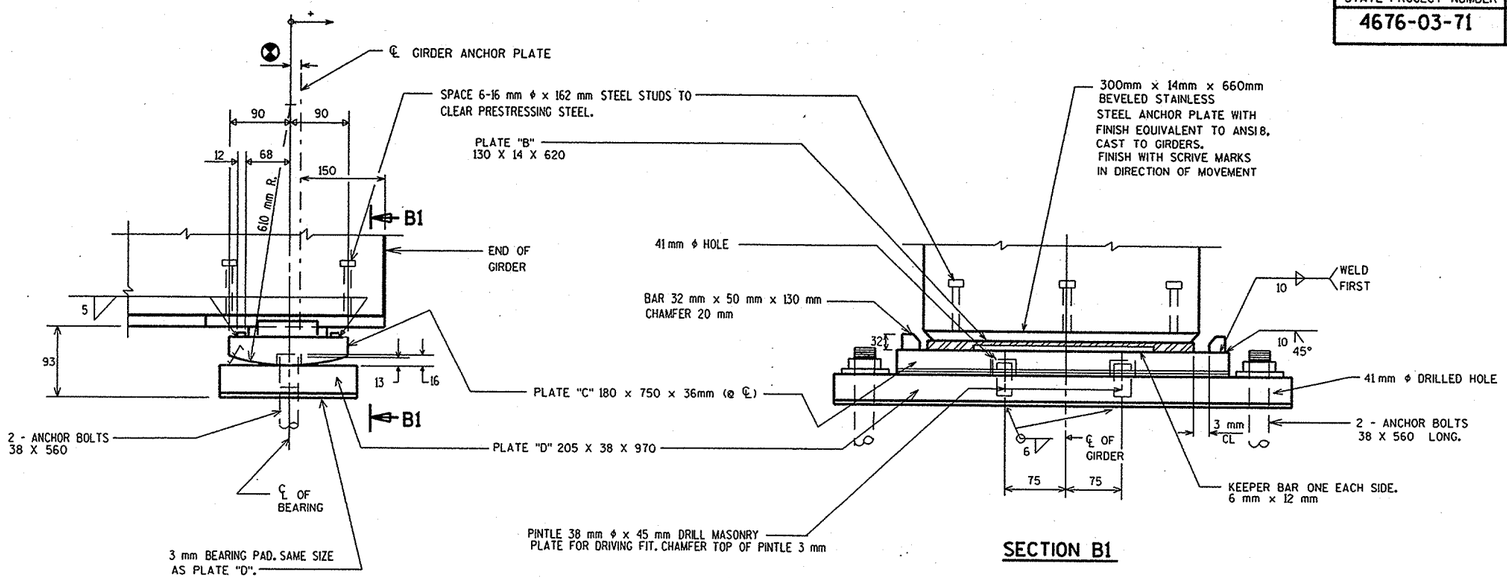
1-5-95

THU JAN 21 12:45:02 1999*

STATE PROJECT NUMBER	SHEET NO.
4676-03-71	8.19

⊗ TEMP. SETTINGS (IN mm)

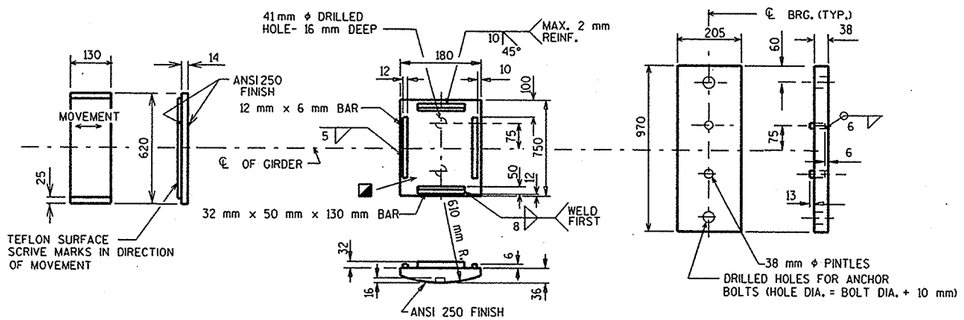
°C	⊗S.ABUT.	⊗N.ABUT.
-15	+10	+10
-5	+30	+30
5	+45	+45
15	+60	+60
25	+75	+75
35	+90	+90



EXPANSION BEARING ASSEMBLY

(AT SOUTH & NORTH ABUT'S)

SECTION B1



EXPANSION BEARING

◥ PROVIDE A METHOD FOR HANDLING PLATE "C" DURING GALVANIZING.

BEARING NOTES

ALL NON-STAINLESS STEEL BEARING MATERIAL EXCLUDING PINTLES AND ANCHOR BOLTS SHALL CONFORM TO A.S.T.M. A709M GRADE 345W.

STAINLESS STEEL PLATE SHALL CONFORM TO A.S.T.M. A240M, TYPE 304.

ALL STRUCTURAL STEEL BEARING PLATES SHALL BE FLAT ROLLED STEEL PLATES 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.

ALL SURFACES MARKED ⌃ SHALL BE MACHINE FINISHED ANSI 250 UNLESS OTHERWISE SHOWN.

ANCHOR BOLTS SHALL CONFORM TO A.S.T.M. SPECIFICATION ASTM A709M GRADE 250 OR MATERIAL OF EQUIVALENT YIELD STRENGTH AND ELONGATION.

◥ ANCHOR BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AS REQUIRED BY ASTM DESIGNATION A153, CLASS "C". PLATE "C", KEEPER BARS & PLATE "D" SHALL BE GALVANIZED AS REQ'D. BY ASTM DESIGNATION A123. PLATE "B" SHALL BE SHOP PAINTED (EXCEPT TEFLON SURFACE).

ALL MATERIALS IN "STEEL BEARINGS FOR PRESTRESSED CONCRETE GIRDERS" SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "EXPANSION BEARING ASSEMBLIES, EACH".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-44-187

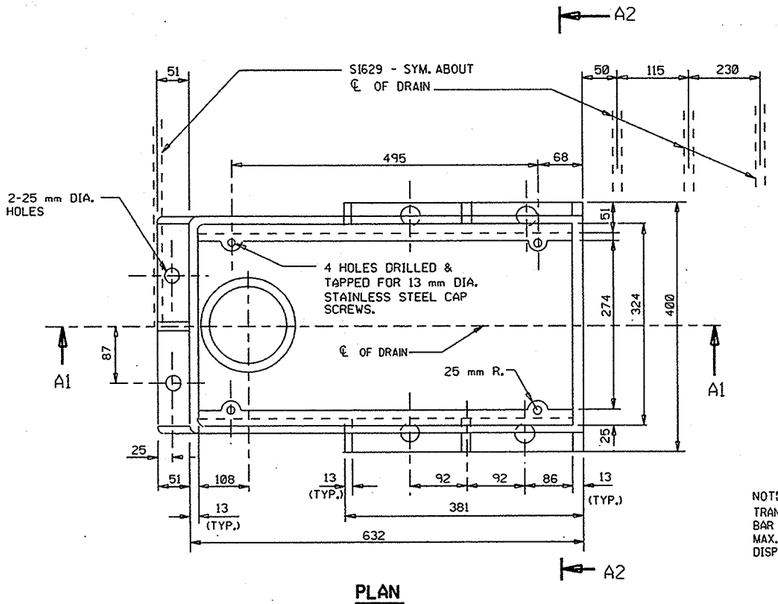
CONST. SPEC.	1996	DRAWN BY	JHG	PLANS CK'D.	ZIRK

BEARING DETAILS

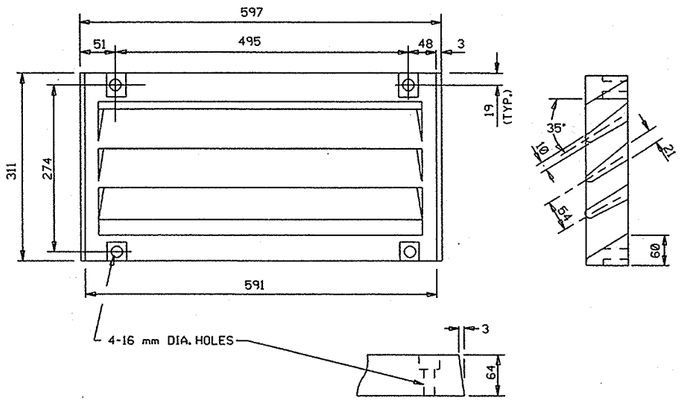
SHEET 19

187BRG.DGN SCALE 1

STATE PROJECT NUMBER	SHEET NO.
4676-03-71	8.20



PLAN



GRATE CASTING DETAIL

ATTACH GRATE TO FRAME FOR SHIPMENT

NOTE:
TRANS. AND LONGIT. SLAB BAR REINF. TO BE CUT A MAX. 25 mm CL. FROM DRAIN. DISPLACE BARS WHERE POSSIBLE

GENERAL NOTES

ALL MATERIAL FOR TYPE 'GC' CASTING, EXCLUDING GRATE HOLD DOWN SCREWS, SHALL BE GRAY IRON CONFORMING TO A.S.T.M. A48, CLASS 30. (APPROX. WEIGHT = 102 Kg)

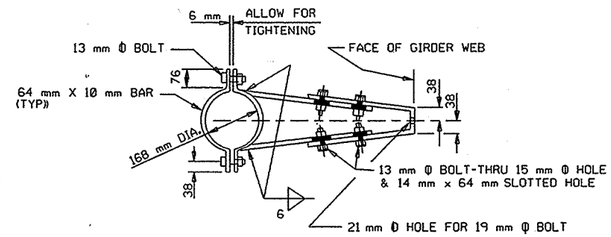
MATERIAL FOR BRACKETS SHALL CONFORM TO A.S.T.M. A36M.

THE CONTRACTOR MAY PROPOSE AN ALTERNATE TYPE OF BRACKET. THE PROPOSED ALTERNATE DETAILS SHALL BE SUBMITTED AND SUBJECT TO THE APPROVAL OF THE ENGINEER.

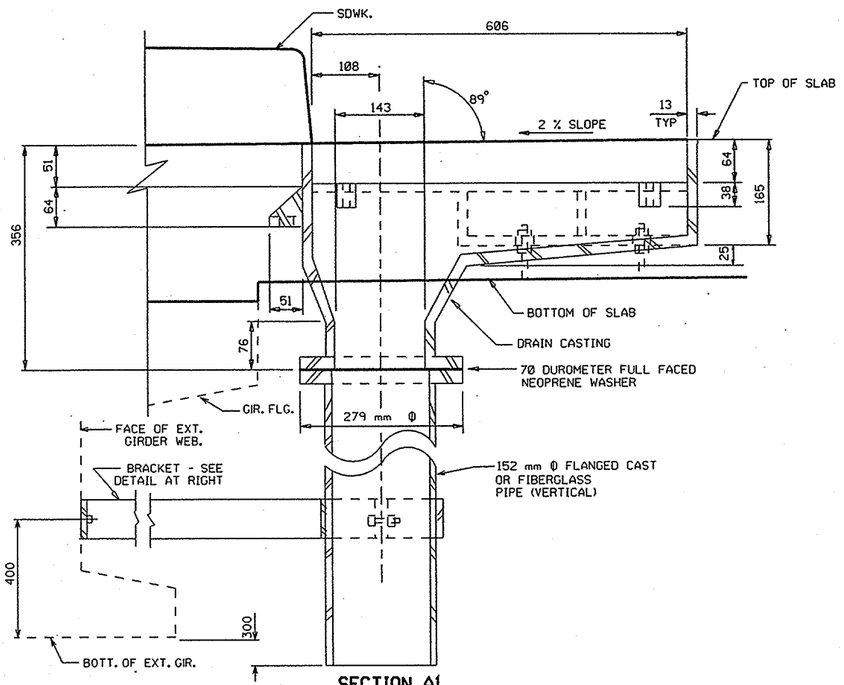
FLANGED 150 mm DIA. DOWNSPOUTS SHALL BE EITHER CAST MATERIAL OR FIBERGLASS CONFORMING TO A.S.T.M. D2996, GRADE I, CLASS A.

ALL DIMENSIONS ARE IN MILLIMETERS.

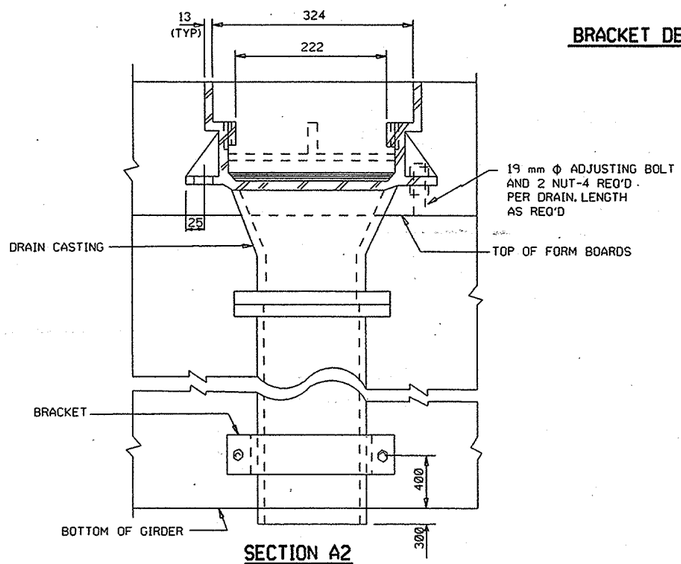
SEE SHEET 1 FOR DRAIN LOCATIONS.



BRACKET DETAIL



SECTION A1



SECTION A2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-44-187

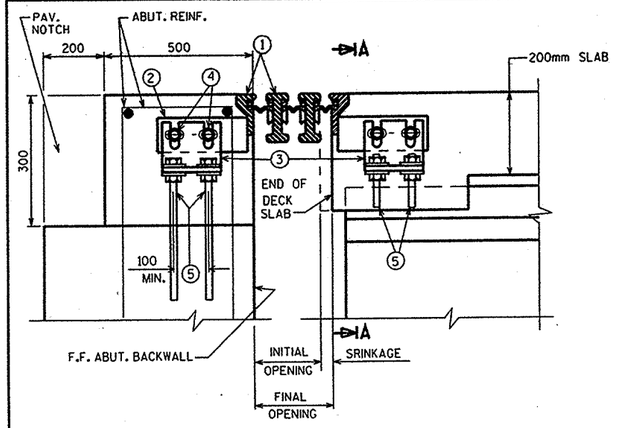
CONST. SPEC. 1996	DRAWN BY JHG	PLANS CK'D. ZJRK

FLOOR DRAINS

SHEET 20

FILE= 187DRAIN.DGN
SCALE = 4

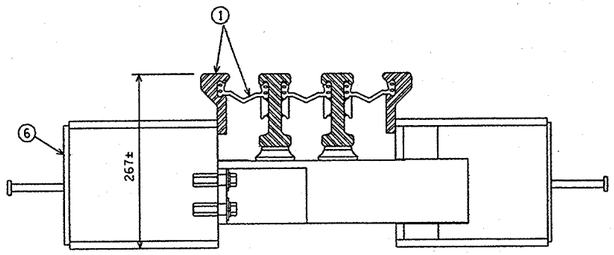
STATE PROJECT NUMBER	SHEET NO.
4676-03-71	8.21



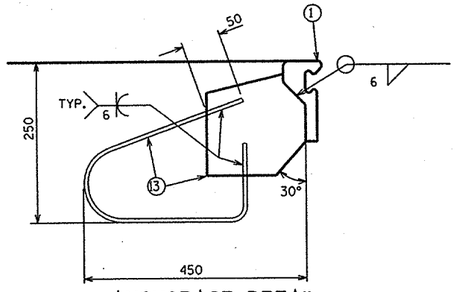
SECTION THRU JOINT

NOTE:
TEMPERATURE TABLE FOR INITIAL JOINT OPENINGS TO BE DETERMINED BY JOINT MANUFACTURER WITH THE FOLLOWING DESIGN DATA:

1. 15mm OF MOVEMENT PER 10° C.
2. MEDIAN TEMPERATURE OF 5° C.
3. TEMP. RANGE -25° C. TO +40° C.
4. ADJUST INITIAL JOINT OPENING FOR AN INCREASE OF 45mm DUE TO SHRINKAGE OF THE DECK OVER TIME.



JOINT DETAIL



ANCHORAGE DETAIL

LEGEND

1. MODULAR EXPANSION JOINT DEVICE
2. 13mm PLATE, ONE PER GIRDER MIN. PROVIDE 2-25x50 SLOTTED HOLES PLACED HORIZONTALLY FOR NO.4.
3. WT 155 x 44. ONE PER GIRDER. PROVIDE 25 x 75 SLOTTED HOLES PLACED VERTICALLY IN WEB OF WT FOR BOLTS NO.4.
4. 19mmφ HIGH STRENGTH BOLTS WITH NUTS & WASHERS. (A325 TYPE 3)
5. 19mmφ THREADED ROD WITH 2 NUTS & WASHERS. GROUT THREADED ROD INTO ABUT. BACKWALL & ON ℄ OF GIR. FLG..
6. SUPPORT BAR ASSEMBLY COVER BOX (SPA. PER MANUFACTURER) SPACE TO MISS GIRDERS. FABRICATE FROM 13mm PL'S.
7. 10mm BULKHEAD PLATE. WELD TO NO. 1 AND NO. 8.
8. INSIDE PLATE. FABRICATE FROM 10mm PLATE. WELD TO # 1.
9. OUTSIDE PLATE. FABRICATE FROM 19mm PLATE.
10. 25mm SQ. BAR. WELD TO NO. 8 AS SHOWN.
11. 19mmφ x 100mm LONG STUDS. WELD TO NO. 8 & NO. 7 AS SHOWN.
12. 19mmφ x 38mm LONG STAINLESS STEEL FLAT HEAD MACHINE SCREWS. RECESS 2mm BELOW PLATE SURFACE.
13. 13mm PLATE WITH 16mmφ LOOP ANCHOR FABRICATED AS SHOWN SPACED AT MFGR'S. SPEC.
14. NOT USED.
15. ADIPRENE BUTTON. SEE DETAIL . SET IN OUTSIDE PLATE.
16. 19mm DIA. X 100mm LG. GALV. HEX. HEAD BOLT. BEND 45°.
17. 19mm DIA. X 57mm LG. GALV. THREADED COUPLING.

NOTES

ONE FIELD SPLICE PERMITTED IN STEEL EXTRUSIONS. DETAILS SHALL BE SUBMITTED. NO SPLICING PERMITTED IN NEOPRENE GLAND.

AFTER FABRICATION, BUT BEFORE SHIPMENT, STRAIGHTEN STEEL EXTRUSIONS SUCH THAT THEY SHALL BE FREE FROM WARP, TWIST & SWEEP.

NO EXPANSION JOINT PROTRUSIONS PERMITTED ABOVE ROADWAY SURFACE OR SIDEWALK SURFACE.

THE EXPANSION JOINT SEALS SHALL BE PLACED, BONDED & SEALED AS RECOMMENDED BY THE MANUFACTURER.

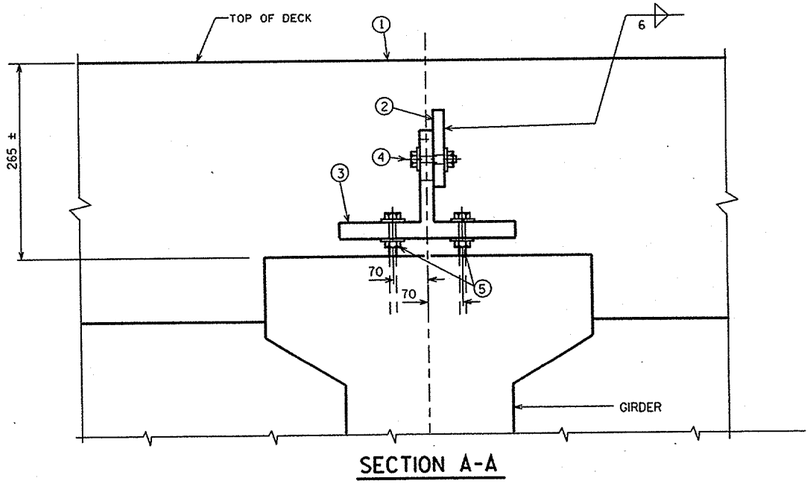
EXPANSION JOINT EXTRUSIONS SHALL BE FABRICATED TO CONFORM TO ROADWAY CROWN & GRADE.

COST OF FURNISHING & PLACING OF THE EXPANSION JOINTS COMPLETE WITH BARS, DIAPH. SUPPORT ANGLES & SDWK. PLATES SHALL BE PAID FOR UNDER THE PRICE BID FOR 'MODULAR EXPANSION JOINT'.

FABRICATOR SHALL PROVIDE MEANS OF KEEPING GALVANIZED EXTRUSIONS CLEAN AND SMOOTH.

SANDBLAST PLATES & EXTRUSIONS AFTER FABRICATION IN ACCORDANCE WITH SSPC S.P. # 6 "COMMERCIAL BLAST CLEANING". AFTER BLAST CLEANING THE PLATES AND EXTRUSIONS SHALL BE HOT DIPPED GALVANIZED.

ANCHOR SYSTEM # 16 & # 17 SHALL CONFORM TO ASTM A307 & SHALL BE GALV. IN ACCORDANCE WITH ASTM 153 CLASS C & D.



SECTION A-A

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-44-187

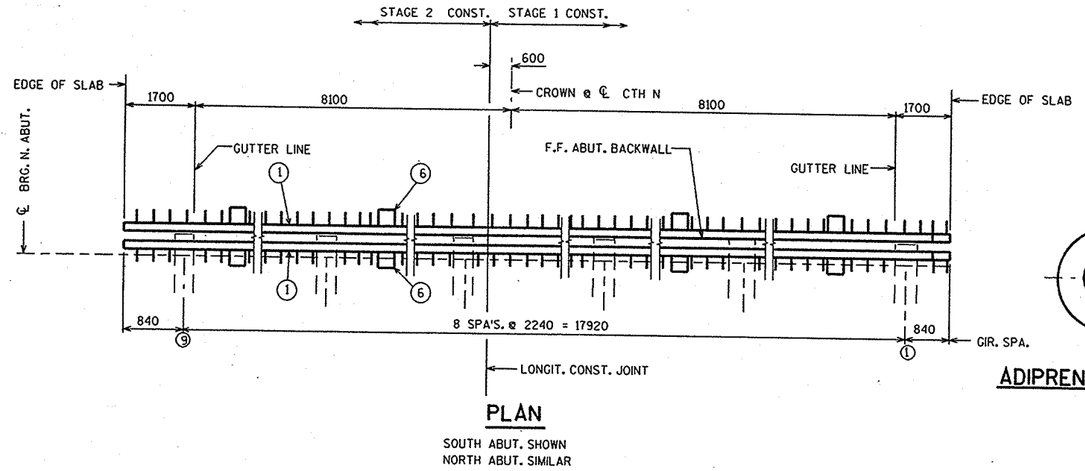
CONST. SPEC.	1996	DRAWN BY	JHG	PLANS CK'D.	

EXPANSION DEVICE

SHEET 21

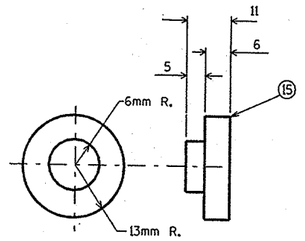
FILE= 187JT.DGN
SCALE = 30

STATE PROJECT NUMBER	SHEET NO.
4676-03-71	8.22



PLAN

SOUTH ABUT. SHOWN
NORTH ABUT. SIMILAR



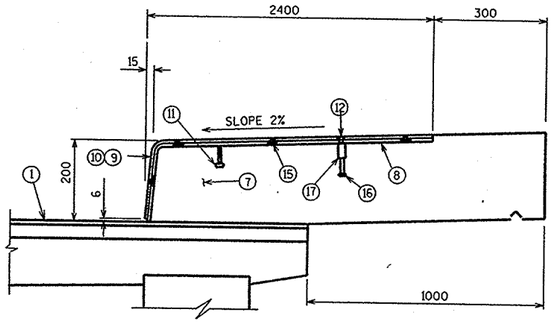
ADIPRENE BUTTON DETAIL

NOTE:

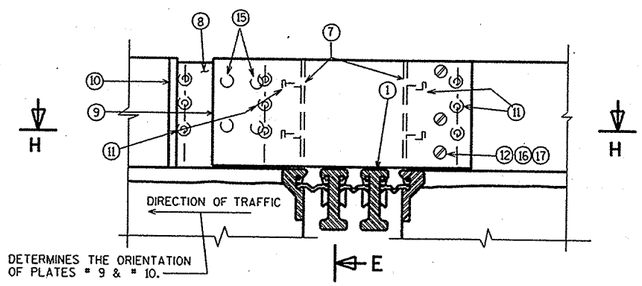
FABRICATOR WILL DESIGN EACH JOINT DEPENDING ON THE CONDITIONS AND THE DESIGN CRITERIA.

FABRICATION DRAWING IS SUBJECT TO THE APPROVAL OF THE BRIDGE OFFICE.

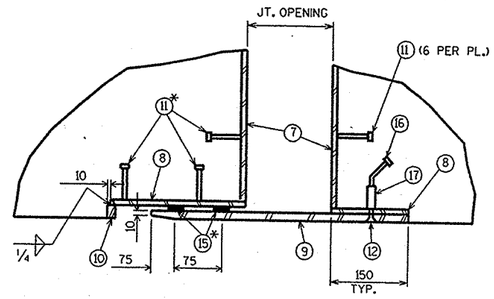
SUPPORT BOXES ARE SHOWN FOR GENERAL INFORMATION AND MAY VARY ACCORDING TO FABRICATOR DESIGN.



SECTION E-E

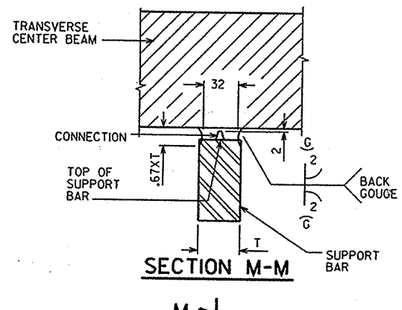


ELEVATION OF SIDEWALK

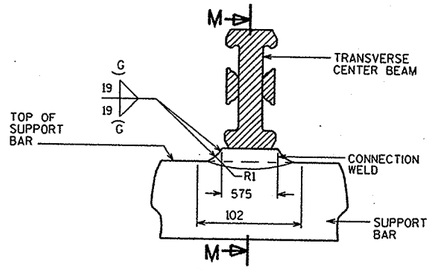


SECTION H-H

*150 MAX. SPA.



SECTION M-M



MODULAR EXPANSION JOINT CONNECTION DETAIL AND WELD SPECIFICATION

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-44-187

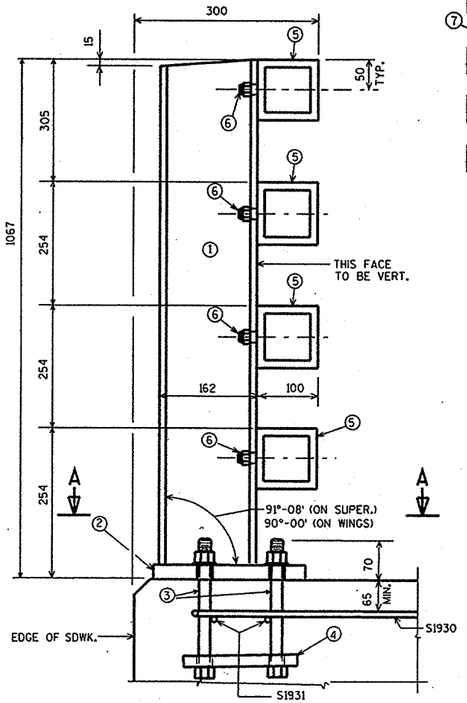
CONST. SPEC. 1996	DRAWN BY JHG	PLANS CK'D. ZMK

EXPANSION DEVICE

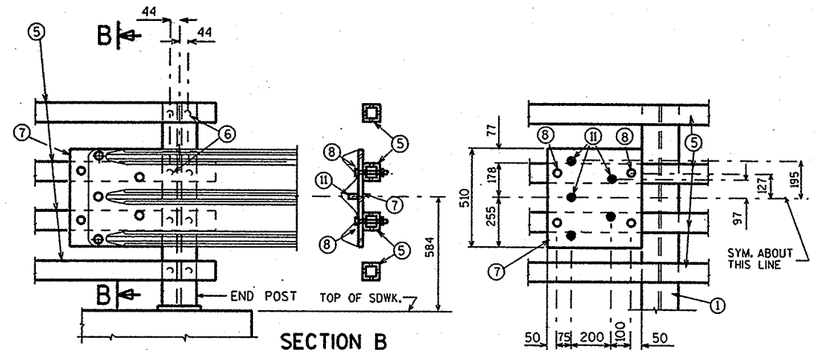
SHEET 22

FILE= 187JT.DGN
SCALE = 30

STATE PROJECT NUMBER	SHEET NO.
4676-03-71	8.23



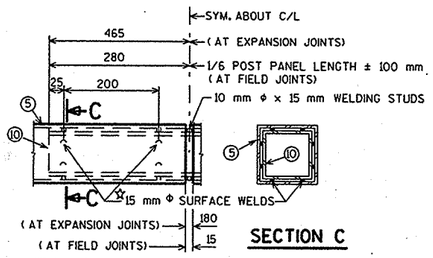
SECTION THRU RAILING



SECTION B

DETAIL AT END POST

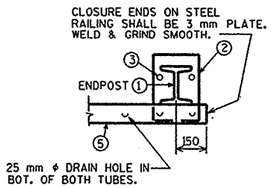
(THRIE BEAM RAIL ATTACHMENT)



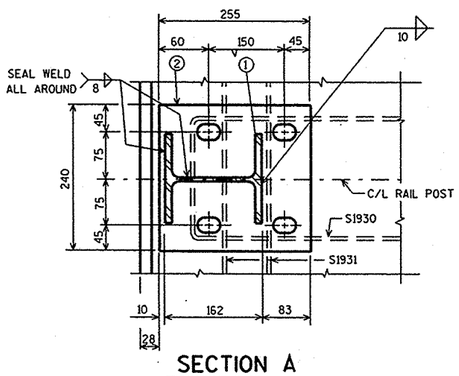
SECTION C

FIELD ERECTION JOINT DETAIL

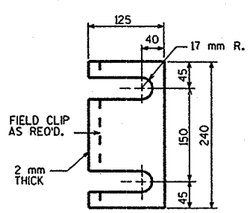
☆ MIN. 15 mm FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.



DETAIL FOR END POSTS

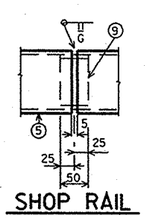


SECTION A



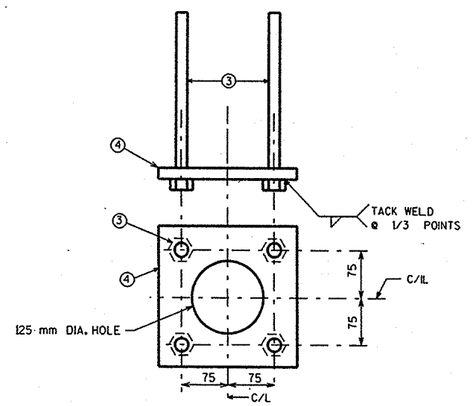
POST SHIM DETAIL

(4 PER POST)



SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



ANCHORAGE DETAIL

LEGEND

① W150X37 WITH 35 mm DIA. HOLES ON EACH SIDE OF POST FOR STUD NO. 6. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POST VERTICAL. PLACE POSTS NORMAL TO GRADE LINE.

② PLATE 25 mm X 240 mm X 255 mm WITH 27 mm X 40 mm SLOTTED HOLES FOR ANCHOR BARS NO. 3. WELD TO NO. 1 AS SHOWN.

③ A325M- M22 X 200 mm LONG HEX BOLTS (GALVANIZED) WITH A325M NUT & WASHER. 4 REQ'D. PER POST. THREAD 75 mm AND PLACE NORMAL TO PLATE NO. 2. CHAMFER TOP OF BOLTS BEFORE THREADING. USE 350mm LONG AT END POST.

④ 6 mm X 200 mm X 200 mm FLAT BAR, WITH 24 mm DIA. HOLES FOR ANCHOR BOLTS NO.3.

⑤ TS. 102 X 102 X 6.4 STRUCTURAL TUBING, CONFORMING TO A.S.T.M. DESIGNATION A5101 OR A500 GRADE B ATTACH TO NO. 1 WITH STUDS NO. 6.

⑥ 16 mm DIA. X 40 mm LG. SHOP WELDED STUDS WITH HEX. NUT AND 50 mm WASHERS. (2 REQ'D. AT EACH RAIL TO POST LOCATION.)

⑦ PLATE 10 mm X 475 mm X 510 mm . BOLT TO RAIL AS SHOWN IN DETAIL. REQUIRED AT THRIE BEAM GUARD RAIL ATTACHMENTS ONLY. PLACE SYMETRICALLY ABOUT TUBES NO.5.

⑧ 25 mm DIA. HOLES IN PLATE NO. 7 & TUBES NO.5 FOR M22 A325M BOLTS W/HEX NUTS AND WASHERS.

⑨ SQUARE SLEEVE FABRICATED FROM 6 mm PLATE. PROVIDE "SLIDING FIT" WITH A MINIMUM OUT TO OUT DIMENSION OF 87 mm.

⑩ TS. 76 X 76 X 6.4 X (710 mm AT EXPANSION JOINTS) & (560 mm AT FIELD JOINTS) LONG. PROVIDE 13 mm DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 5. PROVIDE 10 mm DIA. X 13 mm WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.

⑪ 22 mm DIA. X 38 mm LONG SHOP WELDED STUDS.

GENERAL NOTES

BID ITEM SHALL BE "TUBULAR RAILING TYPE 'F' MODIFIED", WHICH INCLUDES ALL ITEMS SHOWN.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

POSTS BASE PLATES, NO. 2, 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 CUT.

ALL MATERIAL, EXCEPT (NO. 4) SHALL BE GALVANIZED AFTER FABRICATION.

FILL BOLT SLOT OPENINGS IN POST SHIMS AND PLATE NO. 2 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ALL MATERIALS USED IN FABRICATION SHALL BE MADE FROM MATERIALS CONFORMING TO A.S.T.M. DESIGNATION A709M GRADE M250 UNLESS NOTED OTHERWISE.

STEEL POST SHIMS MAY BE USED UNDER POSTS WHERE REQ'D. FOR ALIGNMENT.

PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS & STEEL TUBING SHALL BE GIVEN A NO. 6 BLAST CLEANING BY S.S.P.C. SPECIFICATIONS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-44-187

CONST. SPEC. 1996	DRAWN BY JHG	PLANS CK'D. ZHRK

TUBULAR STEEL RAILING TYPE 'F' MODIFIED

SHEET 23

FILE= 187FRAIL4.DGN

GB2
PEN TABLE = splot72laser+mhalfxs.tbl
DATE OF PLOT 12/09/98
PLOT NAME = P:\LASERAJ\XSECLPRF
DGN FILE = I:\440261\XSEC\xsec.dgn

ORIGINATOR:
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.

35 30 25 20 15 10 5 0 5 10 15 20 25 30

2.70 m 2.70 m
STAGE 1 STAGE 2
R/W
221.154
221.039
1:6
R/W
T.L.E.
1
1
10+140
220

2.70 m 2.70 m
STAGE 1 STAGE 2
R/W
221.211
221.107
MATCHLINE
10+120
220

C.T.H. "N" R/W R.
C.T.H. "N" S.B. CONSTRUCTION R.
2.04 m
2.76 m
C.T.H. "N" N.B. CONSTRUCTION R.
STAGE 1 STAGE 2
MATCHLINE
MATCHLINE
221.407
221.317
10+100
224

STAGE 2
C.T.H. "N" N.B. CONSTRUCTION R.
R/W
R/W
221.679
221.568
1:6
10+080
222

C.T.H. "N" R/W R.
STAGE 2
R/W
R/W
221.939 (FINISHED SUBGRADE TYPICAL)
1:6
10+060
224

BEGIN PROJECT
STA. 10+057.920

CROSS SECTIONS | HWY: C.T.H. "N" | COUNTY: OUTAGAMIE | STATE PROJECT NO: 4676-03-71 | SHEET NO: 9.1 | M

FILE NAME:

GB2
PEN TABLE = splot72±loser±mholfxs.tbl
DATE OF PLOT 12/09/98
PLOT NAME = P:±LASERA3±XSEC2.PRF
DGN FILE = I:\44026I\XSEC\xsec.dgn

ORIGINATOR:
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.

35 30 25 20 15 10 5 0 5 10 15 20 25 30

10+260
222

2.63 m 2.64 m
STAGE 1 STAGE 2
T.L.E.
R/W
222.633
222.57
R/W

10+240
224

2.65 m 2.59 m
STAGE 1 STAGE 2
R/W
222.340
222.248
R/W

10+220
222

2.67 m 2.67 m
STAGE 1 STAGE 2
R/W
222.047
222.924
R/W

10+200
224

2.69 m 2.70 m
STAGE 1 STAGE 2
T.L.E.
R/W
221.754
221.600
R/W

10+180
222

2.70 m 2.70 m
STAGE 1 STAGE 2
R/W
221.461
221.337
R/W

C.T.H. "N" R/W R
C.T.H. "N" S.B. CONSTRUCTION R
2.70 m 2.70 m
C.T.H. "N" N.B. CONSTRUCTION R

10+160
222

STAGE 1 STAGE 2
T.L.E.
R/W
221.238 (FINISHED SUBGRADE TYPICAL)
221.118 (FINISHED SUBGRADE TYPICAL)
R/W
J:6

35 30 25 20 15 10 5 0 5 10 15 20 25 30

CROSS SECTIONS	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: 9.2	M

FILE NAME:

WISDOT

GB2
PEN TABLE = ±plot72±laser±mhdfxs.tbl
DATE OF PLOT 04/06/99
PLOT NAME = P:±LASER3A1±XSEC3.PRF
DGN FILE = i:\440261\xsec\xsec.dgn

ORIGINATOR:
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,

35 30 25 20 15 10 5 C 5 10 15 20 25 30

10+380
226

0.26 m
0.13 m
STAGE 1 STAGE 2
R/W
1:3
224.391
224.391
TEMPORARY SHORING REQ'D.

10+360
225

0.76 m
0.39 m
STAGE 1 STAGE 2
TEMPORARY PRECAST BARRIER REQ'D. (TYPICAL)
T.L.E.
R/W
1:6
224.098
224.098
R/W

10+340
224

1.47 m
0.79 m
STAGE 1 STAGE 2
T.L.E.
R/W
1:6
223.805
223.805
R/W

10+320
226

2.09 m
1.32 m
STAGE 1 STAGE 2
T.L.E.
R/W
1:6
223.512
223.512
R/W

10+300
224

2.62 m
1.92 m
STAGE 1 STAGE 2
T.L.E.
R/W
1:6
223.219
223.219
R/W

10+280
226

C.T.H. "N" R/W R.
C.T.H. "N" S.B. CONSTRUCTION R.
2.61 m
2.25 m
C.T.H. "N" N.B. CONSTRUCTION R.
STAGE 1 STAGE 2
T.L.E.
R/W
222.926 (FINISHED SUBGRADE TYPICAL)
222.895 (FINISHED SUBGRADE TYPICAL)
MATCHLINE

35 30 25 20 15 10 5 C 5 10 15 20 25 30

CROSS SECTIONS | HWY: C.T.H. "N" | COUNTY: OUTAGAMIE | STATE PROJECT NO: 4676-03-71 | SHEET NO: 9.3 | M

FILE NAME:

WISDOT: MSHT23

GB2
PEN TABLE = \plot72\laser-tmhalfxs.tbl
DATE OF PLOT 04/06/99
PLOT NAME = P:\LASER3\XSEC4.PRF
DGN FILE = I:\44026\xsec\xsec.dgn

ORIGINATOR:
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.

35 30 25 20 15 10 5 0 5 10 15 20 25 30

10+420
218

216.190

1:4

10+414
220

219.455

1:2.5

221.560

10+408
220

1:2.5

STA. 10+406.230 TO STA. 10+693.410
STRUCTURE B-44-167 REQ'D.

C.T.H. "N" R/W

STAGE 1 STAGE 2

224.684 (FINISHED SUBGRADE TYPICAL)

R/W

1:3

TEMPORARY SHORING REQ'D. (TYPICAL)

10+400
224

1:2.5

35 30 25 20 15 10 5 0 5 10 15 20 25 30

CROSS SECTIONS	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: 9.4	M

FILE NAME:

WisDOT: MSHT23

GB2
PEN TABLE = ±plot72±loser±mhalfxs.tbl
DATE OF PLOT 04/06/99
PLOT NAME = P:±LASERA3±XSEC5.PRF
DGN FILE = i:\44026l\xsec\xsec.dgn

ORIGINATOR:
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,

35 30 25 20 15 10 5 0 5 10 15 20 25 30

STAGE 1 STAGE 2

TEMPORARY PRECAST BARRIER REQ'D. (TYPICAL)

T.L.E.

R/W

223.477

TEMPORARY SHORING REQ'D. (TYPICAL)

10+720
226

R/W

2.5:1

2.5:1

10+690
216

C.T.H. "N" R/W

2.5:1

10+680
214

35 30 25 20 15 10 5 0 5 10 15 20 25 30

CROSS SECTIONS	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: 9.5	M

FILE NAME:

WI•DOT: MSHTZ: 12

682
PEN TABLE = $plot72$closer$mhalffxs.tbl
DATE OF PLOT 04/06/99
PLOT NAME = P:$LASER$A3$XSEC6.PRF
DGN FILE = i:\440261\vsec\xsec.dgn

ORIGINATOR:
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

35 30 25 20 15 10 5 C 5 10 15 20 25 30

R/W
STAGE 1 STAGE 2
1:6
222.512
10+780
224

R/W
STAGE 1 STAGE 2
1:6
222.921
R/W
10+760
222

C.T.H. "N" R/W R
STAGE 1 STAGE 2
T.L.E.
R/W
1:6
223.268
TEMPORARY PRECAST BARRIER REQ'D. (TYPICAL)
TEMPORARY SHORING REQ'D. (TYPICAL)
R/W
10+740
226

35 30 25 20 15 10 5 C 5 10 15 20 25 30

CROSS SECTIONS	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: 9.6	M

FILE NAME:

WisDOT: MSHT2: 63

GB2
PEN TABLE = ±plot72±laser±mhalfxs.tbl
DATE OF PLOT 12/09/98
PLOT NAME = P:±LASERA3±XSEC5.PRF
DGN FILE = I:\440261\XSEC\xsec.dgn

ORIGINATOR:
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,

35 30 25 20 15 10 5 0 5 10 15 20 25 30

T.L.E. R/W STAGE 1 STAGE 2 222.999 R/W T.L.E. 10+900 224

T.L.E. R/W STAGE 1 STAGE 2 222.863 R/W T.L.E. 10+880 222

T.L.E. R/W STAGE 1 STAGE 2 222.727 R/W T.L.E. 10+860 224

T.L.E. R/W STAGE 1 STAGE 2 222.590 R/W T.L.E. 10+840 224

MATCHLINE MATCHLINE STAGE 1 STAGE 2 222.454 10+820 224

C.T.H. "N" R/W ℄

STAGE 1 STAGE 2 222.355 (FINISHED SUBGRADE TYPICAL) 1:8 1:6 10+800 222

35 30 25 20 15 10 5 0 5 10 15 20 25 30

CROSS SECTIONS	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: 9.7	M

FILE NAME:

WISDOT: WSH 2

GB2
PEN TABLE = ±plot72±loser±mhalfxs.tbl
DATE OF PLOT 12/09/98
PLOT NAME = P:±LASERA3±XSEC6.PRF
DGN FILE = I:\440261\XSEC\xsec.dgn

ORIGINATOR:
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.

35 30 25 20 15 10 5 C 5 10 15 20 25 30

11+020
222

11+000
224

10+980
224

10+960
222

10+940
224

END PROJECT
STA. 10+930.000

C.T.H. "N" R/W ℄

STAGE 1 STAGE 2

R/W

T.L.E.

223.135 (FINISHED SUBGRADE TYPICAL)

R/W

T.L.E.

10+920
222

35 30 25 20 15 10 5 C 5 10 15 20 25 30

CROSS SECTIONS	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: 9.8	M

FILE NAME:

WISDOT: MS-T2:

PEN TABLE = ±plot72laser±mholf×s.tbl
DATE OF PLOT 12/08/98
PLOT NAME = P:±LASERA3±SIDELPRF
DGN FILE = I:\44026I\XSEC\side.dgn

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,

ORIGINATOR:

FILE NAME:

35 30 25 20 15 10 5 0 5 10 15 20 25 30

STAGE 1 | STAGE 2

R/W

221.376

R/W

19+960
220

STAGE 1 | STAGE 2

R/W

221.451

R/W

19+940
224

STAGE 1 | STAGE 2

R/W

221.526

R/W

19+920
222

STAGE 1 | STAGE 2

R/W

221.601

R/W

19+900
226

MAES AVE.
CONSTRUCTION ℄

STAGE 1 | STAGE 2

R/W

221.676 (FINISHED SUBGRADE TYPICAL)

R/W

19+880
224

35 30 25 20 15 10 5 0 5 10 15 20 25 30

CROSS SECTIONS (MAES AVE.)	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: 9.9	M

WisDOT: MS-TS2: 66

GB2
PEN TABLE = #plot72#closer#mholfxs.tbl
DATE OF PLOT 12/08/98
PLOT NAME = P:#LASERA3#SIDE2.PNF
DGN FILE = I:\44026T\XSEC\side.dgn

ORIGINATOR:
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.

35 30 25 20 15 10 5 0 5 10 15 20 25 30

R/W
STAGE 2
20+080
220

20+060
224

R/W
STAGE 2

R/W
STAGE 2
22L503
20+040
222

MATCHLINE
STAGE 2
221.248
20+020
220

MAES AVE.
CONSTRUCTION RL
STAGE 1
STAGE 2
221.391 (FINISHED
SUBGRADE TYPICAL)
1:6
19+980
220

35 30 25 20 15 10 5 0 5 10 15 20 25 30

CROSS SECTIONS (MAES AVE.)	HWY: C.T.H. "N"	COUNTY: OUTAGAMIE	STATE PROJECT NO: 4676-03-71	SHEET NO: 9.10 M

FILE NAME:

WisDOT: 1/97