INDEX OF SHEETS

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Sheet No. 3 - 3B Estimate of Quantities
Sheet No. 3A - 3C Miscellaneous Quantities
Sheet No. 4 - 4B Right of Way Plat
Sheet No. 5 - 5A Plan and Profile
Sheet No. 6 - 6ZZ Standard Detail Drawings
Sheet No. - Sign Plates
Sheet No. - Structure Plans
Sheet No. - Computer Earthwork Data
Sheet No. 9 - 9Z9 Cross Sections

TOTAL SHEETS = 121

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

TRI - COUNTY FREEWAY

C.T.H. "OO" - U.S.H. 41 (SOUTH SECTION)

S.T.H. 441

OUTAGAMIE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTROL
4685-2-72	—	—

734-5904 FIELD OFFICE #

HAK YOO

STATE PROJECT NUMBER

4685-2-72

DESIGN DESIGNATION

A.D.T. 1990	=	17,300
A.D.T. 2010	=	26,500
D.H.V.	=	2,650
D	=	55-45
T	=	9.0%
V	=	65 N.P.H.

END PROJECT

STA. 623+00.00 NB ℄

BEGIN PROJECT

STA. 592+58.49 NB ℄

X = 2,430,557.920

Y = 838,004.400

LAYOUT

SCALE 0 2 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.576 MI.

CONVENTIONAL SIGNS

COUNTY LINE		COMBUSTIBLE FLUIDS (UNDER PRESSURE)	
CORPORATE LIMITS		UNDERGROUND UTILITIES	
PROPERTY LINE		GAS	G
LOT LINE		ELECTRIC	E
LIMITED EASEMENT		TELEPHONE	T
EXISTING RIGHT OF WAY		SERVICE PEDESTAL	
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			
CULVERT REQUIRED (Profile)			

ALL COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COORDINATE SYSTEM SOUTH ZONE.

SURVEY BOOK NO. 1363B, C

GRADING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Surveyor DIST. 3 District Checker P.D.D.E.

Designer P.E.O. C.O. Plan Examiner K.G.

District Supervisor J.C.L. C.O. Coordinator

APPROVED:

DATE: 4-20-90 for DISTRICT DIRECTOR

APPROVED:

DATE: 7/5/90 REGIONAL CHIEF ROAD DESIGN ENGINEER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION 5. WISCONSIN DIVISION

APPROVED:

DATE: DIVISION ADMINISTRATOR

00-12

FILE NAME: 03_THICO:\4685272T.DGN

WISDOT/CADDS SHEET NO.

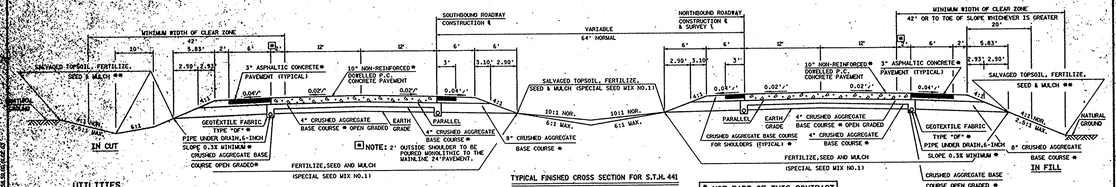
OUTAGAMIE

4685-2-72

00-12

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2

TYPICAL CROSS SECTION
FOR
S.T.H. 441 OUTAGAMIE CO.



TYPICAL FINISHED CROSS SECTION FOR S.T.H. 441
(FOR INFORMATION ONLY)

* NOT PART OF THIS CONTRACT

** NOTE: SPECIAL SEED WIX NO.1 SHALL BE USED IN ALL AREAS OF FLY ASH ENCAPSULATION.

UTILITIES

DIGGER'S HOTLINE 1-800-242-8511 (TOLL FREE)

WISCONSIN BELL, INC.
ROBERT HOFFMAN
321 WEST WASHINGTON STREET
4TH FLOOR, EOPE
APPLETON, WISCONSIN 54911
CABLE LOCATE 1-800-242-8511 (TOLL FREE)

WISCONSIN ELECTRIC POWER COMPANY
WITH 1- BUDGET ENGINEERING SUPERVISOR 414-336-6111
926 INDIANA AVENUE
WEST BEND, WISCONSIN 53095

WISCONSIN NATURAL GAS COMPANY
A.G. HEMB 414-735-8557
926 SOUTH LYNDALE
APPLETON, WISCONSIN 54912

DALE HOUGEN 414-496-5409 EXT.5403
ASSISTANT SUPERINTENDENT PLANT MAINTENANCE
PULLIAM STEAM PLANT
1550 WO. BILBY AVE.
GREEN BAY, WISCONSIN 54303.

DIRECTOR OF PUBLIC WORKS
ROBERT D. WILLER 414-735-6474
200 N. APPLETON
APPLETON, WISCONSIN 54911

APPLETON WATER DEPARTMENT 414-733-231
ATTN: DONALD BAUER
1135 W. BALLARD STREET
APPLETON, WISCONSIN 54911.

OUTAGAMIE COUNTY HIGHWAY COMMISSIONER
MICHAEL G. MARSDEN 414-735-5573
320O WEST BROADWAY STREET
APPLETON, WISCONSIN 54914

CITY OF GRAND CHUTE
525 NORTHLAND AVENUE 414-733-5373
APPLETON, WISCONSIN 54911

DIVISION OF THE FACILITIES
1210 N. LAWE STREET 414-735-5100
APPLETON, WISCONSIN 54911

STANDARD DETAIL DRAWINGS

INLET COVERS	8A5-7a & b
MANHOLE COVERS	8A5-7c
MANHOLES, TYPE 1	8B6-3
INLETS, TYPES 1, 2 AND 3	8C1-4
INLETS, TYPES 8, 9, 10 AND 11	8C5-1
CONCRETE CURB, CONCRETE CURB AND GUTTER AND PAVEMENT TIES	8D1-11
CONCRETE SURFACE DRAIN & ASPHALTIC FLUME	8D4-3
EROSION MAT	8E7-1
SILT FENCE	8E9-3
APRON ENDWALLS FOR CULVERT PIPE	8F1-10d
JOINT TIES FOR CONCRETE PIPE	8F4-3
REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN	8F6-1
AT-GRADE SIDE ROAD INTERSECTIONS, TYPES "B", "C" AND "D"	9A1-8d
AT-GRADE SIDE ROAD INTERSECTIONS, TYPE "A" AND PASSING LANES	9A1-8b
CONDUIT	9B2-4
PULL BOX	9B10-2
CLASS "A" STEEL PLATE BEAM GUARD (two sheets)	14B2-8a & b
CHAIN LINK FENCE (TYPE B)	15B3-7
BARRICADES AND TRAFFIC CONTROL FOR ROAD CLOSURES	15C2-2
PAVEMENT MARKING	15C8-3
LANDMARK REFERENCE MONUMENTS AND COVERS	16A1-4

GENERAL NOTES

ALL DISTURBED AREAS WITHIN THE RIGHT OF WAY, AND THE AREAS BETWEEN THE SUBGRADE SHOULDER POINTS, SHALL BE FERTILIZED,SEEDED AND MULCHED.

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

ALL DISTANCES AND STATIONING SHOWN ON THIS PLAN ARE GROUND VALUES. GRID VALUES ARE OBTAINED BY MULTIPLYING GROUND VALUES BY 0.99996415.

THE CONTROL SURVEY FOR THIS PROJECT WAS CONDUCTED UNDER AND MET SPECIFICATIONS FOR THE THIRD ORDER CONTROL SURVEYS.

FILL AS SHOWN ON THE PLAN PERTAINS TO EMBANKMENT CONSTRUCTED FROM BORROW EXCAVATION, FLYASH, AND UNCLASSIFIED EXCAVATION. THE ALLOWANCE USED FOR EXPANDING THE FILLS TO COMPUTE THE VOLUME OF MATERIAL REQUIRED IS 20%. ALL FILL VOLUMES SHOWN ARE ACTUAL VOLUMES.

BEARINGS ON THIS PLAN ARE GRID BEARINGS TO THE NEAREST SECOND.

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

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

REINFORCED CONCRETE APRON ENDWALLS AND ADJOINING TWO SECTIONS OF CONCRETE PIPE SHALL BE TIED TOGETHER AS SHOWN ON THE STANDARD DETAIL DRAWINGS AND AS LOCATED IN THE MISCELLANEOUS QUANTITIES. JOINT TIES SHALL BE INCIDENTAL TO VARIOUS ITEMS.

WHEN THE QUANTITY OF CRUSHED AGGREGATE BASE COURSE AND SHOULDER AGGREGATE ASPHALTIC PAVEMENT, TYPE "D" IS MEASURED FOR PAYMENT BY THE TON, 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.

THE QUANTITY OF SALVAGED TOPSOIL WAS COMPUTED FROM MEASUREMENTS BETWEEN THE FINISHED SUBGRADE POINTS AND THE SLOPE INTERCEPTS AS SHOWN ON THE CROSS SECTIONS PLUS 5 FEET PER STATION FOR ROUNDING.

THE ELEVATIONS SHOWN ON THE ROADWAY CROSS SECTION ARE EARTH GRADE ELEVATIONS AT THE REFERENCE LINE OF THE ROADWAY.

IF EXCAVATION BELOW SUBGRADE IS REQUIRED IT WILL BE MEASURED AND PAID FOR AS UNCLASSIFIED EXCAVATION, THE LIMITS OF E.O.S. WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

ALL SILT FENCE DELIVERED SHALL MEET THE REQUIREMENTS FOR SILTY SOILS.

THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO INSURE THAT THE THREE D.N.R. MONITORING WELLS ARE NOT DAMAGED DISPLACED OR MISALIGNED. IF THE MONITORING WELL IS DAMAGED IT SHALL BE IMMEDIATELY REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE.

CONSTRUCTION PERMITS FOR P.E. AND DRAINAGE CONSTRUCTION HAVE BEEN OBTAINED AND THESE RIGHTS HAVE BEEN EXTENDED TO THE CONTRACTOR; LIMITS OF CONSTRUCTION PERMITS ARE SHOWN IN THE PLAN AND ARE REFERENCED TO THE R/W LINE.

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.

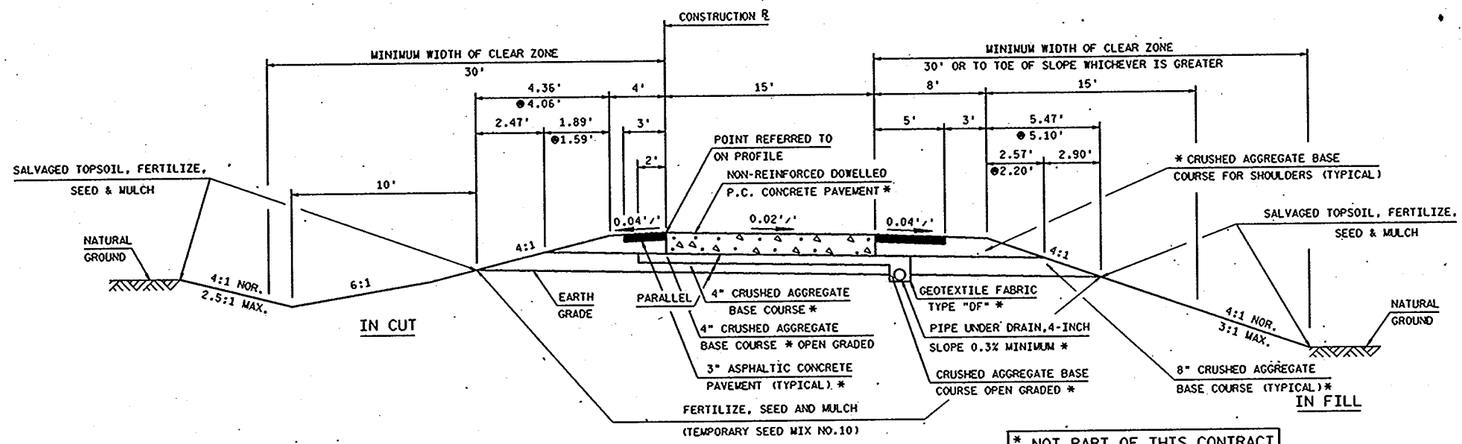
CURB HEIGHTS AT THE END OF CURB AND GUTTER SHALL BE TAPERED FROM 0 TO 6 INCHES IN 10 FEET.

MAINLINE S.T.H. 441 UNCLASSIFIED QUANTITY INCLUDES REMOVAL OF THE EXISTING HAUL ROAD IN AREAS OF FLY ASH PLACEMENT.

POLYSTYRENE INSULATION BOARD AS SHOWN ON S.D.D. FOR REINFORCED CONCRETE APRON ENDWALLS FOR PIPE UNDERDRAIN IS NOT REQUIRED.

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2

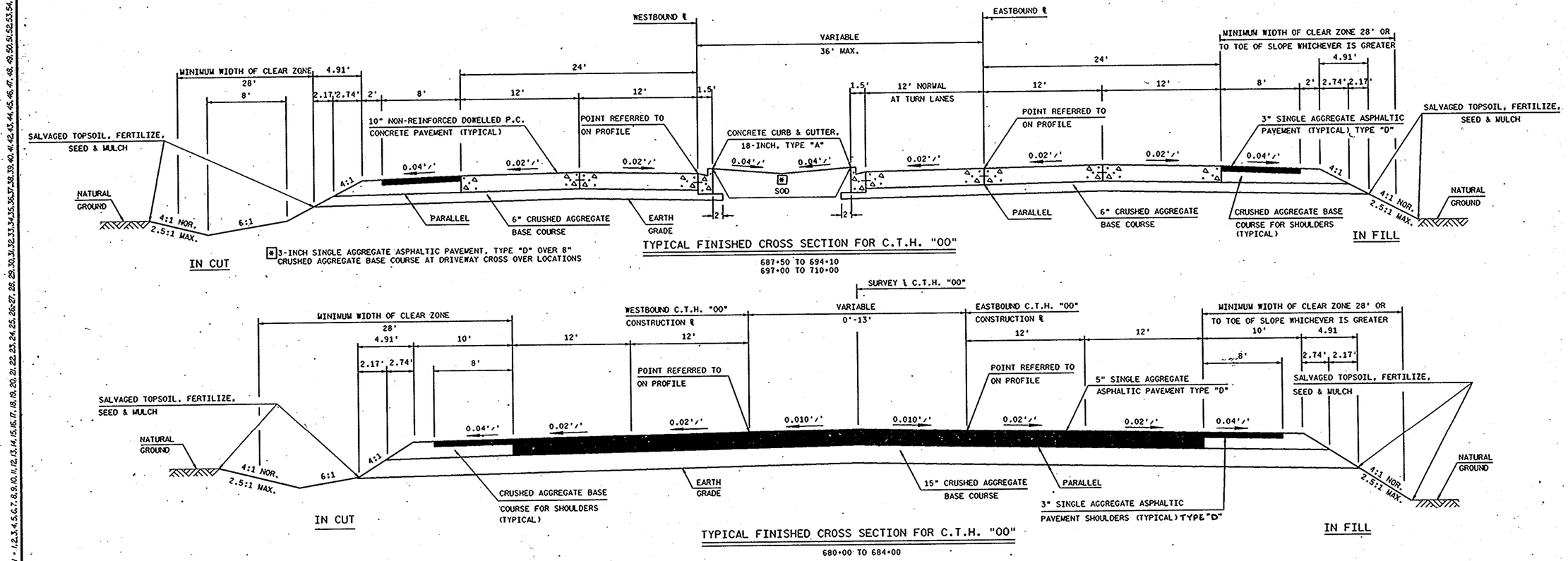
TYPICAL CROSS SECTION
FOR
S.T.H. 441 OUTAGAMIE CO.



* NOT PART OF THIS CONTRACT

TYPICAL FINISHED CROSS SECTION FOR RAMPS

●N.E., N.W. RAMPS AT C.T.H. "00" - 8"
S.E., S.W. RAMPS AT U.S.H. 41 - 9"



TYPICAL FINISHED CROSS SECTION FOR C.T.H. "00"

687+50 TO 694+10
697+00 TO 710+00

TYPICAL FINISHED CROSS SECTION FOR C.T.H. "00"

680+00 TO 684+00

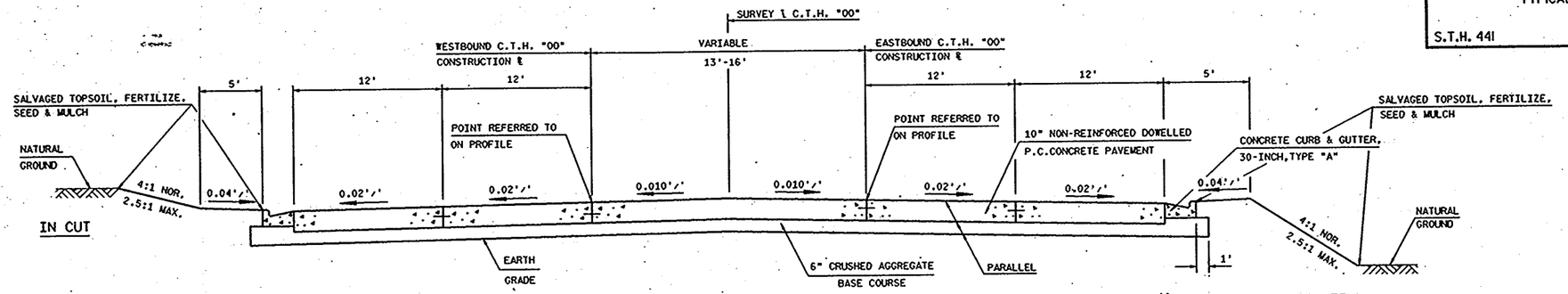
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FILE NAME: HDGN:D3_TRICO:4685272A.DGN

WISDOT/CADDS SHEET 42

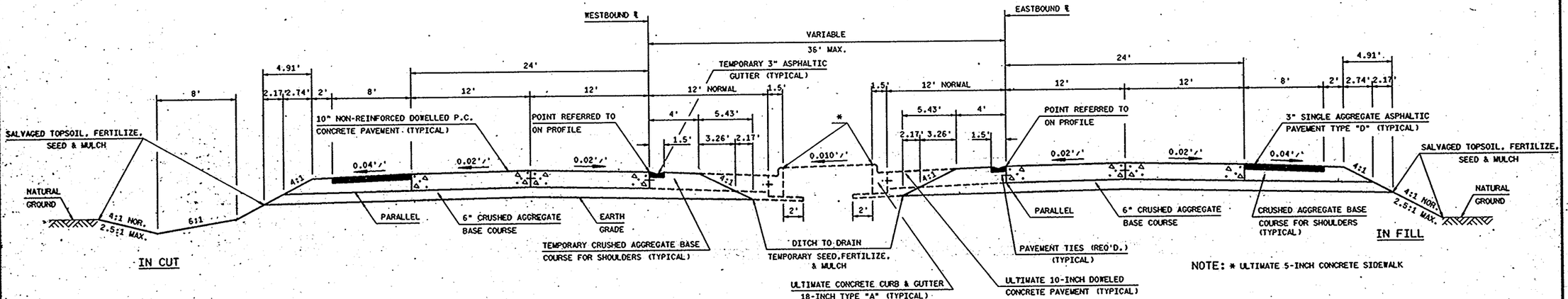
STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2.2

TYPICAL CROSS SECTION
FOR
S.T.H. 441 OUTAGAMIE CO.



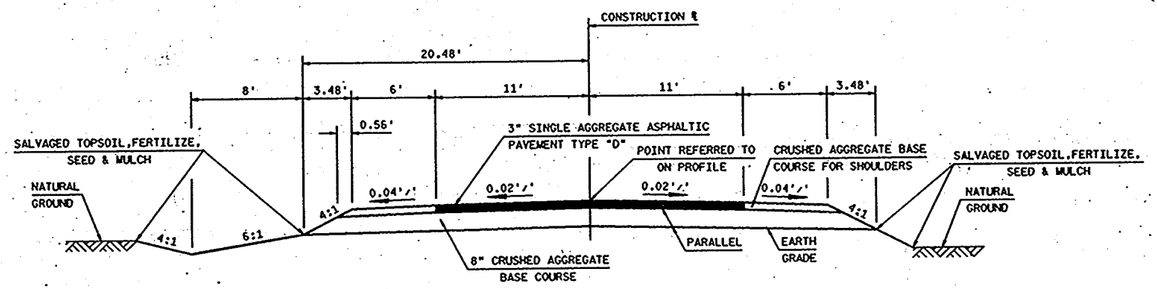
TYPICAL FINISHED CROSS SECTION FOR C.T.H. "00"

684+00 TO 687+50



TYPICAL FINISHED CROSS SECTION FOR C.T.H. "00"

694+10 TO 697+00



TYPICAL FINISHED CROSS SECTION

FRENCH ROAD 590+00 TO 594+00
CHRISTINA STREET 8+50 TO 10+00

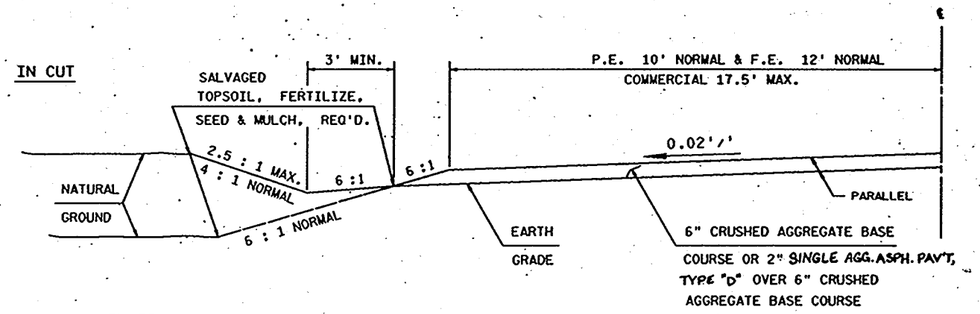
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FILE NAME: HDGN:D3_TRIC01:4685272A.DGN

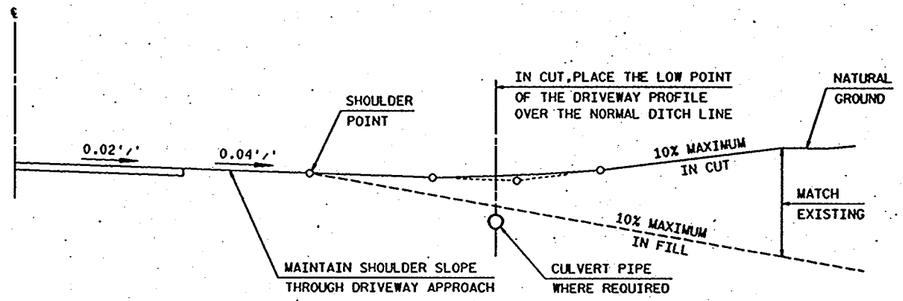
STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2.3

RURAL DRIVEWAY DETAILS

S.T.H. 441 OUTAGAMIE CO.



1 / 2 TYPICAL CROSS SECTION



TYPICAL PROFILE

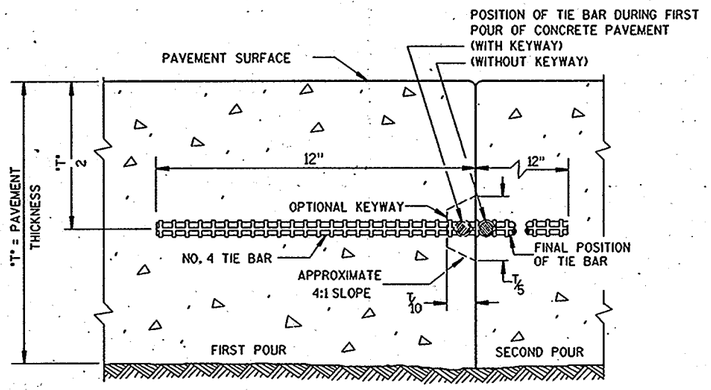
LEVELS ON

FILE NAME: .HDGN:

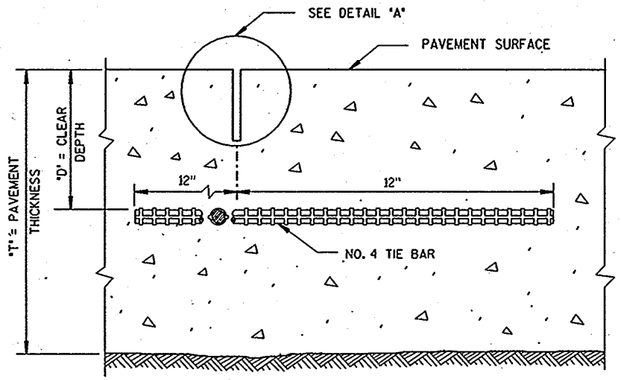
WISDOT/CADDS SHEET

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	24

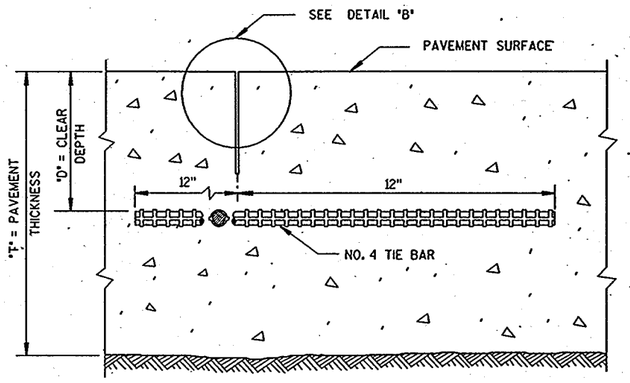
LONGITUDINAL JOINT
(WITH HOT POURED SEALER OR PARTING STRIP)



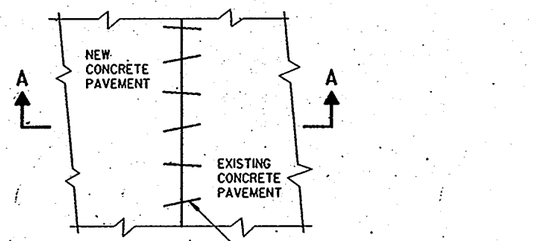
CONSTRUCTION JOINT



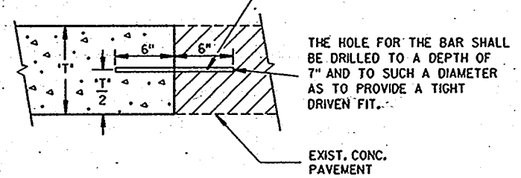
SAWED JOINT



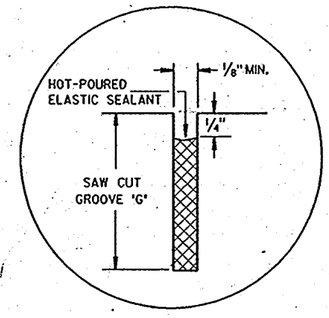
RIBBON JOINT



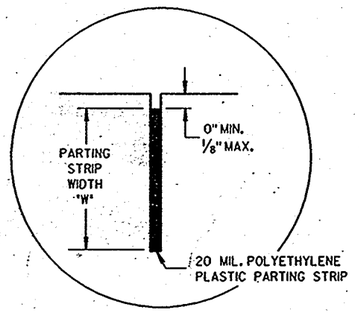
PLAN VIEW



SECTION A-A
PAVEMENT TIES



DETAIL "A"



DETAIL "B"

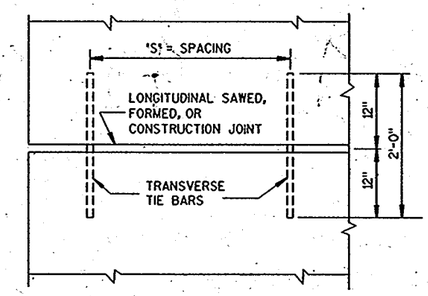
PAVEMENT THICKNESS "T"	CLEAR DEPTH "D"	SAW CUT GROOVE "G"	MAXIMUM TIE BAR SPACING "S"	PARTING STRIP WIDTH "W"
6"	3"±1/2"	1 1/2"	30"	2"
7"	3 1/4"±1"	1 3/4"	30"	2 1/4"
8"	3 3/4"±1"	2"	30"	2 1/2"
9"	4 1/4"±1"	2 1/4"	30"	3"
10"	4 3/4"±1"	2 1/2"	30"	3 1/4"
11"	5 1/4"±1"	2 3/4"	24"	3 3/4"
12"	5 3/4"±1"	3"	24"	4"

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 ELSEWHERE IN THE CONTRACT.

TIE BARS AND PAVEMENT TIES SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.

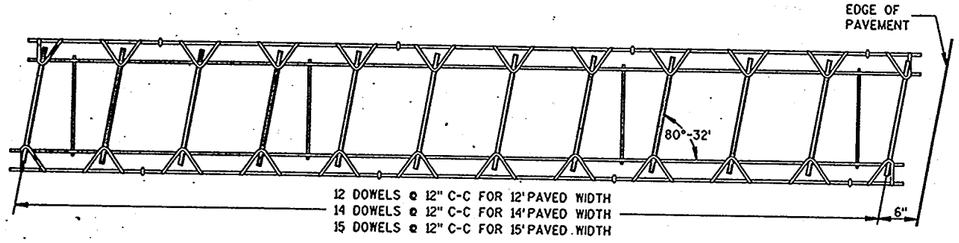


PLAN VIEW
SHOWING LOCATION OF TIE BARS

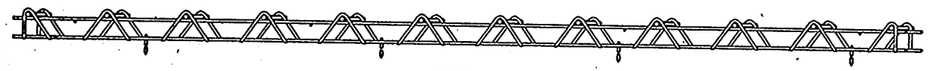
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2.5

DOWELED NON-REINFORCED CONCRETE PAVEMENT
RANDOM SPACED JOINTS, 13'-19'-18'-12'
(HOT POURED SEALANT)



PLAN VIEW

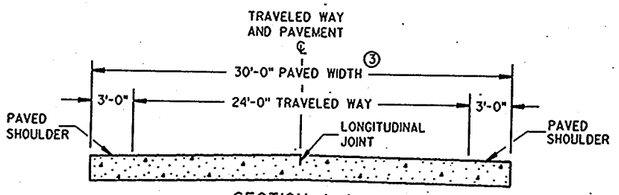


SIDE VIEW

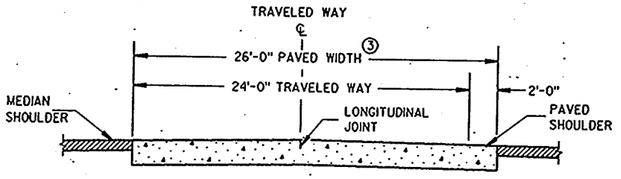
SKEWED CONTRACTION JOINT DOWEL ASSEMBLY ①

DOWEL BAR SIZE TABLE

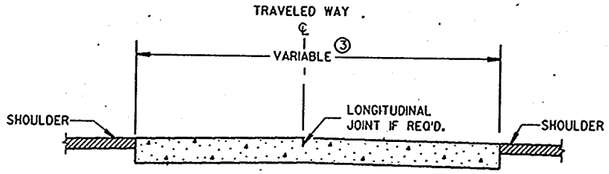
PAVEMENT DEPTH	DOWEL BAR DIAMETER
9" OR LESS	1¼"
MORE THAN 9"	1½"



SECTION A-A
TWO-LANE TWO-WAY HIGHWAY ②



SECTION A-A
DIVIDED HIGHWAY ②



SECTION A-A
RAMPS & SIDEROADS ②

GENERAL NOTES

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

CONTRACTION JOINTS

CONTRACTION JOINTS SHALL BE RANDOM SPACED AND SKEWED RIGHT HAND FORWARD. EXCEPTIONS SUCH AS CONTRACTION JOINTS THROUGH INTERSECTIONS SHALL BE AS DIRECTED BY THE ENGINEER.

DOWEL BARS SHALL BE PARALLEL TO THE CENTERLINE.

CONSTRUCTION JOINTS

CONSTRUCTION JOINTS SHALL BE A MINIMUM OF 4 FEET 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.

TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.

① ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY MAY BE USED WHEN APPROVED BY THE ENGINEER.

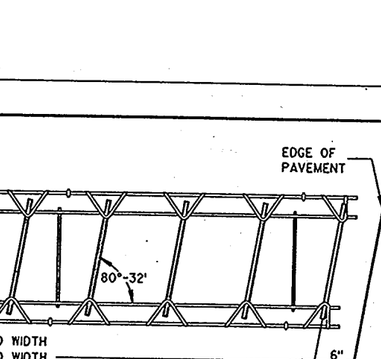
② REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

③ THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER WILL BE MEASURED AS CONCRETE PAVEMENT.

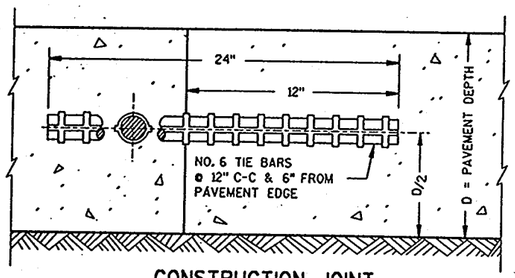
④ SHOULDER CORRUGATIONS REQUIRED FOR DIVIDED HIGHWAYS ONLY. ADJUST SPACING AS NECESSARY TO AVOID LOCATING CORRUGATIONS ON TRANSVERSE JOINTS.

⑤ 2'-0" DIVIDED HIGHWAYS
3'-0" TWO-LANE TWO-WAY HIGHWAYS
SEE SECTION A-A

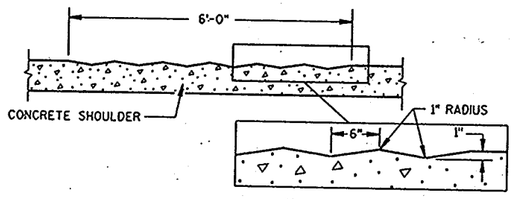
DOWELED CONTRACTION JOINT



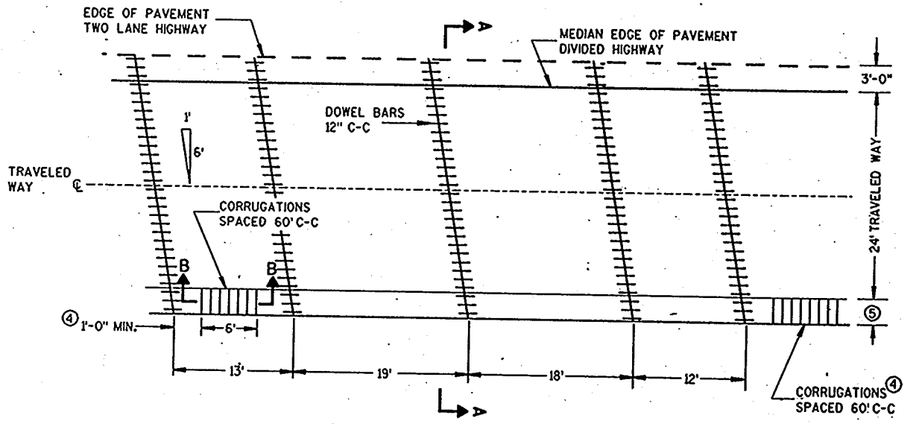
DETAIL A



CONSTRUCTION JOINT



SECTION B-B (FORMED)
CORRUGATION DETAIL ④

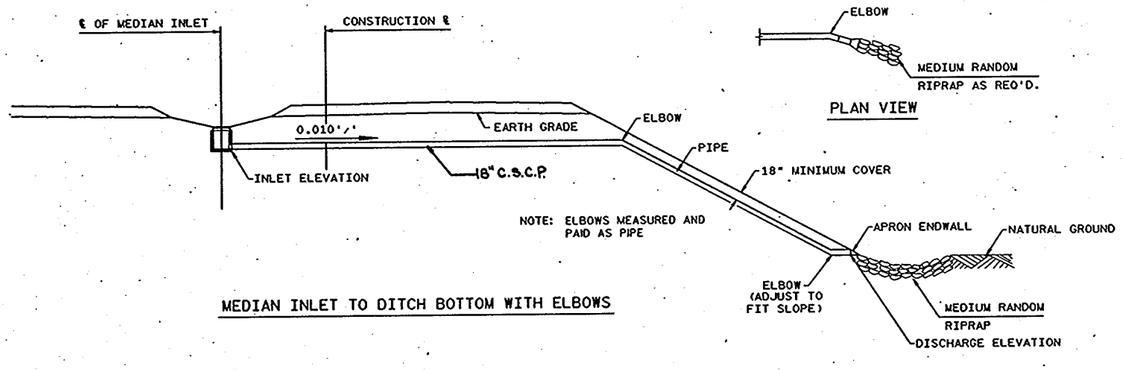


CONTRACTION JOINT LOCATIONS

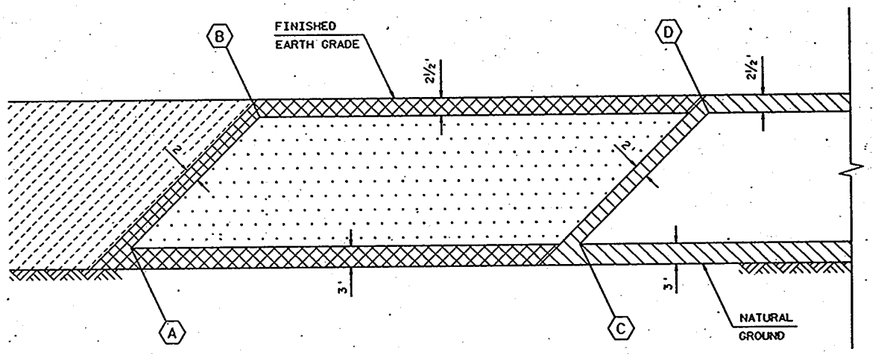
LEVELS ON = 1.

FILE NAME: HDDN1

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2.6
CONSTRUCTION DETAILS FOR	
S.T.H. 441	OUTAGAMIE CO.



MEDIAN INLET TO DITCH BOTTOM WITH ELBOWS



SELECT BORROW (EXISTING)

FLY ASH FILL (EXISTING)

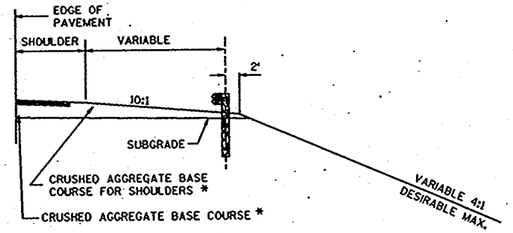
SELECT BORROW (BY GRADING CONTRACTOR)

FLY ASH FILL (BY GRADING CONTRACTOR)

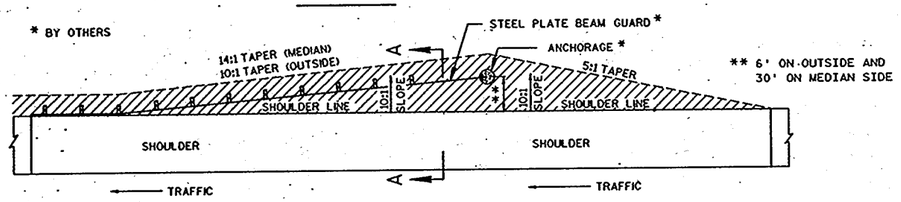
UNCLASSIFIED EXCAVATION OR BORROW FILL (BY GRADING CONTRACTOR)

	STATION	ELEVATION
A	617+75	737.5
B	618+00	748.0
C	623+00	737.0
D	626+00	758.0

LONGITUDINAL SECTION FOR FLY ASH FILL AND ENCAPSULATION

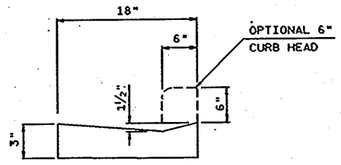


SECTION A-A



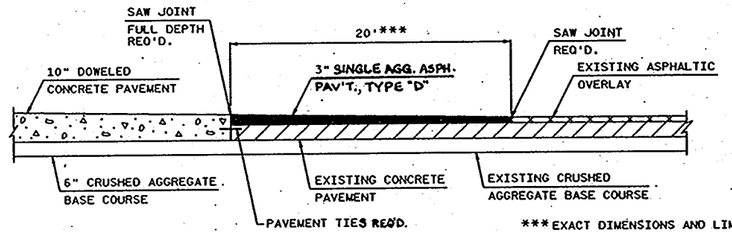
FILL PLACEMENT AT BEAM GUARD FLARE AREAS

ANCHOR AT 594+50 S.T.H. 441 SOUTHBOUND RT.
ANCHOR AT 593+35 S.T.H. 441 SOUTHBOUND LT.



TEMPORARY ASPHALTIC GUTTER

694+10 - 697+00 C.T.H."00" EAST AND WESTBOUND MEDIAN



DETAIL OF BUTTED JOINT

C.T.H."00" - 709+75

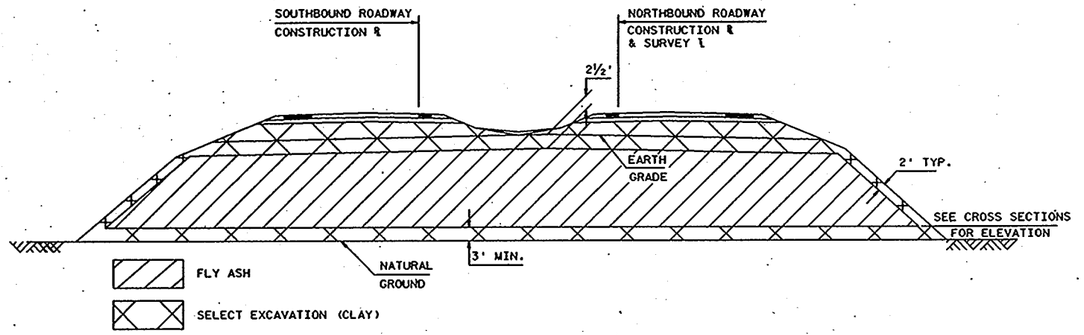
*** EXACT DIMENSIONS AND LIMITS OF PAVEMENT REMOVAL TO BE DETERMINED BY THE ENGINEER IN THE FIELD. PAID FOR AS "REMOVING ASPH. SURF., BUTT JOINTS"

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

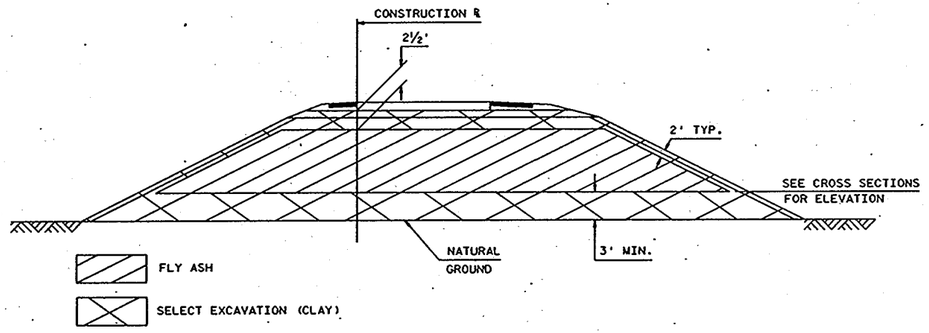
FILE NAME : D3_TRIC01:4685274B

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	27

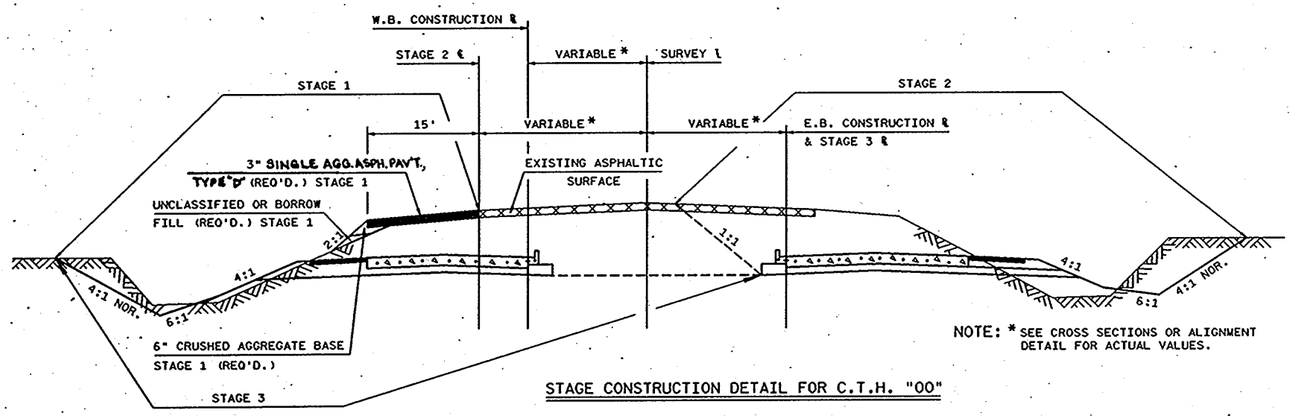
CONSTRUCTION DETAILS
FOR
S.T.H. 441 OUTAGAMIE CO.



TYPICAL CROSS SECTION FOR FLY ASH PLACEMENT ON S.T.H. 441

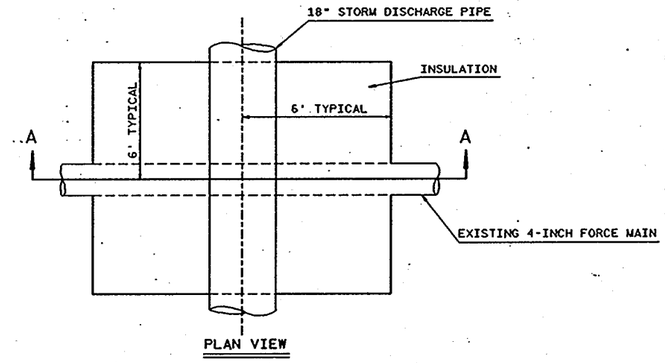


TYPICAL CROSS SECTION FOR FLY ASH PLACEMENT ON RAMPS @ U.S.H. 41



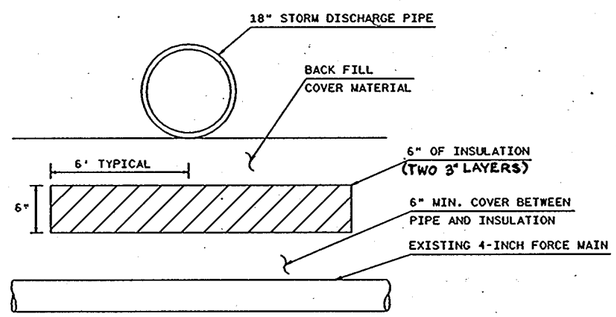
NOTE: * SEE CROSS SECTIONS OR ALIGNMENT DETAIL FOR ACTUAL VALUES.

STAGE CONSTRUCTION DETAIL FOR C.T.H. "OO"



PLAN VIEW

NOTE: IF MORE THAN ONE THICKNESS OF INSULATION SHEETS IS USED, THE JOINTS SHALL HAVE A STAGGERED PATTERN.



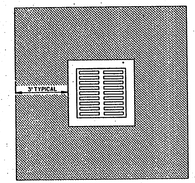
SECTION A-A

INSULATION DETAIL AT STORM SEWER AND FORCEMAIN CROSSING

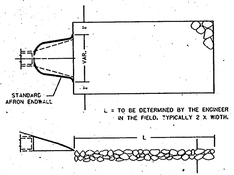
STA. 701+10 RT.
STA. 703+35 RT.

LEVELS ON - 1,2,3,4,5,6,7,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63
3-5-98

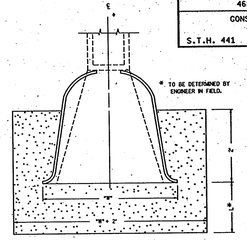
STATE PROJECT NUMBER	SHEET NO.
4685-2-72	28
CONSTRUCTION DETAILS FOR	
S.T.H. 441	OUTAGAMIE CO.



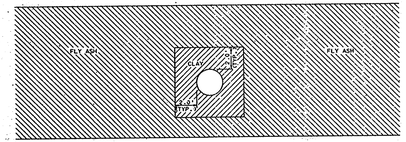
SOD AT INLETS



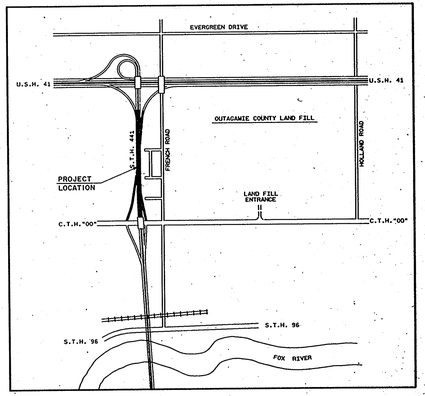
MEDIUM RANDOM RIPRAP DISCHARGE APRON



SOD AT PIPE END



CULVERT PIPE INSTALLATION IN FLY ASH FILL

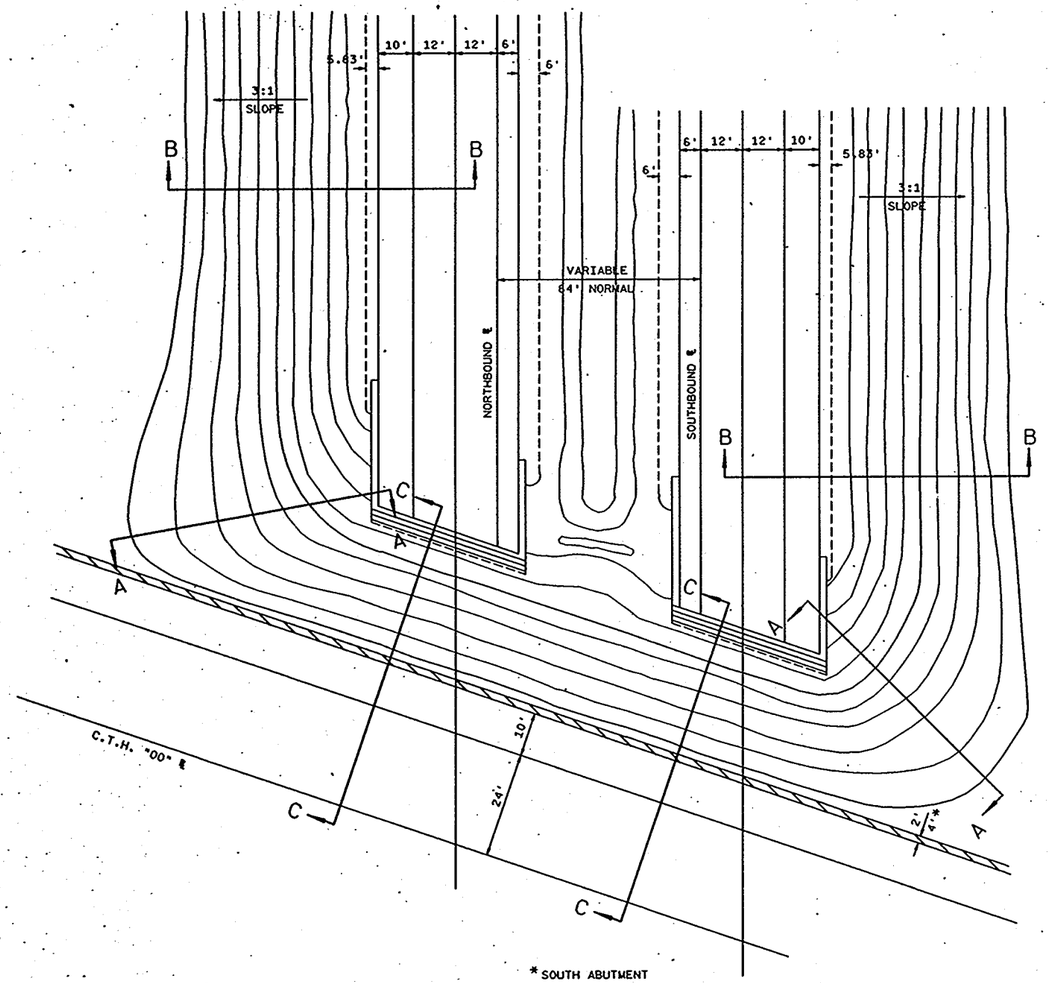


LOCATION OF AVAILABLE BORROW EXCAVATION

FILE NAME : D3_TRICO1685228.dgn

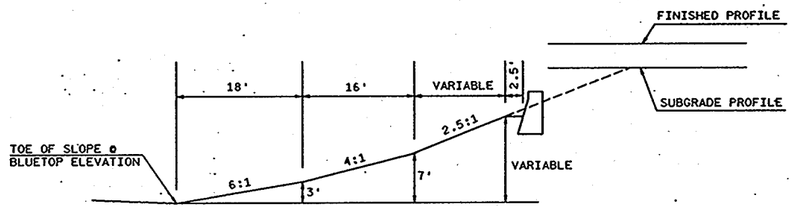
STATE PROJECT NUMBER	SHEET NO.
4685-2-72	29

CONSTRUCTION DETAILS
FOR
S.T.H. 441 OUTAGAMIE CO.



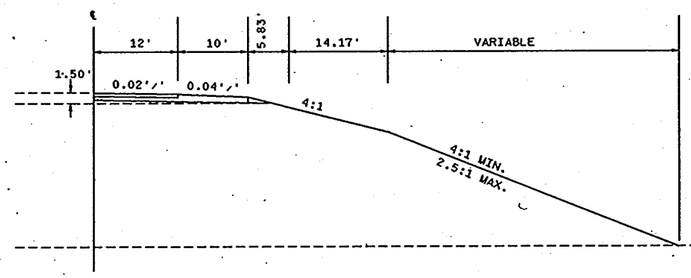
*SOUTH ABUTMENT

STRUCTURE CONE LAYOUT AT C.T.H. "00"



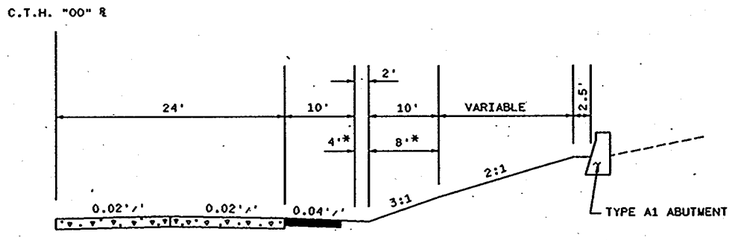
SHOULDER TO ABUTMENT BERM AT CONE

SECTION A-A



½ TYPICAL SECTION

SECTION B-B



*SOUTH ABUTMENT

½ TYPICAL SECTION UNDER

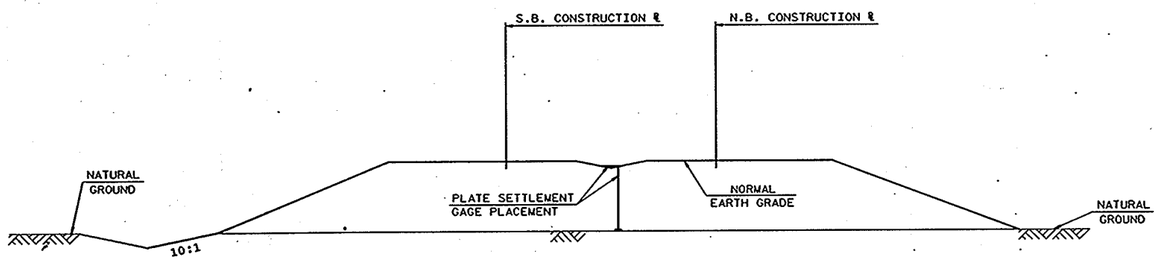
SECTION C-C

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

FILE NAME : D3_TRIC01:4685274B

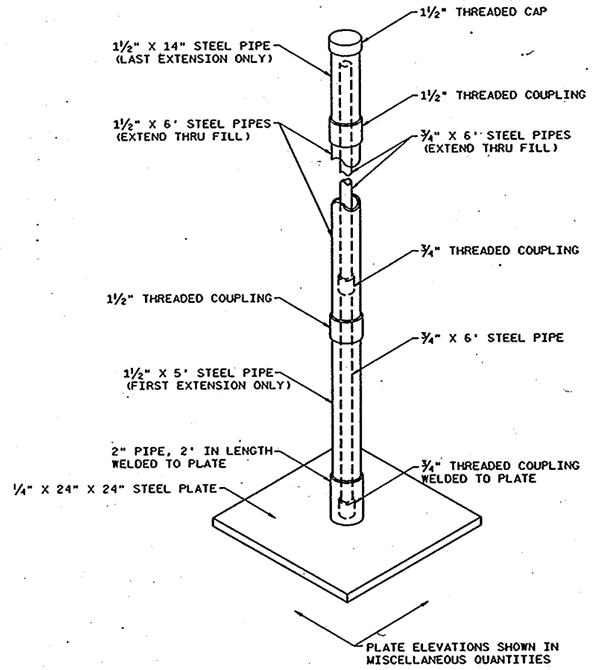
STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2.10

CONSTRUCTION DETAILS
FOR
S.T.H. 441 OUTAGAMIE CO.

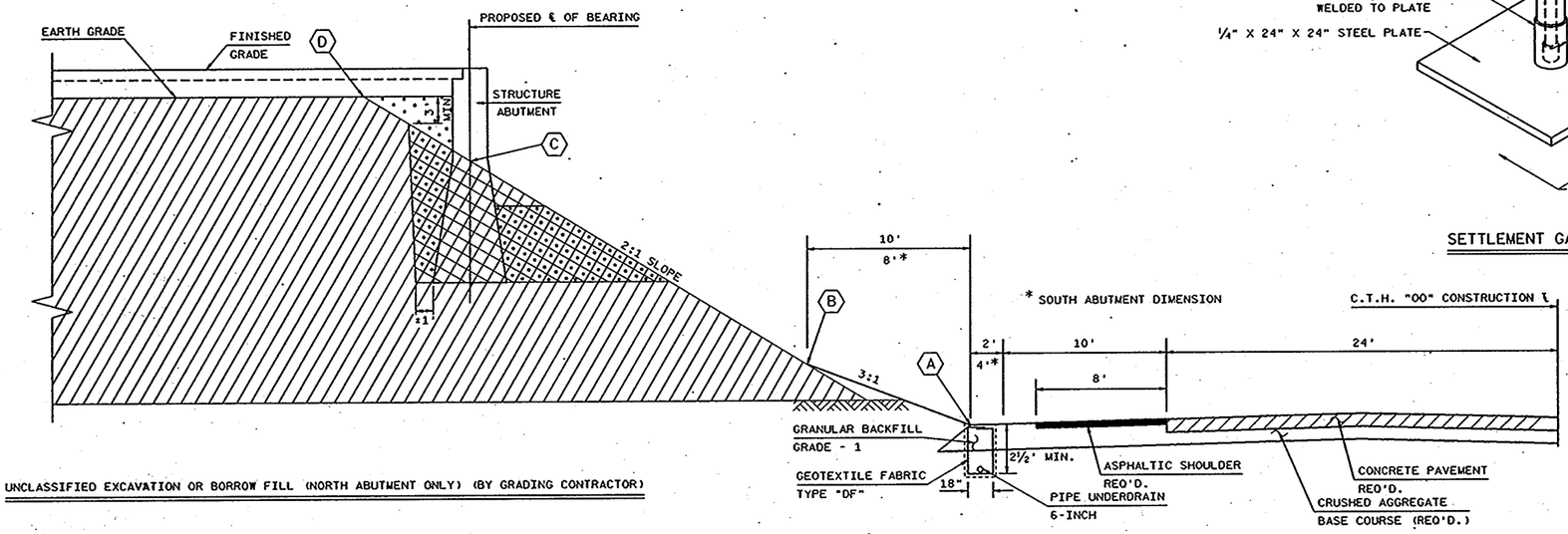


TRANSVERSE SECTION SHOWING SETTLEMENT GAGE PLACEMENT

B-44-127 & 128 NORTH ABUTMENT SIDE



SETTLEMENT GAGE DETAIL



UNCLASSIFIED EXCAVATION OR BORROW FILL (NORTH ABUTMENT ONLY) (BY GRADING CONTRACTOR)

UNCLASSIFIED EXCAVATION OR BORROW FILL (BY GRADING CONTRACTOR)

EXCAVATION FOR STRUCTURE REQ'D (BY BRIDGE CONTRACTOR)

STRUCTURE BACKFILL PLACED BY BRIDGE CONTRACTOR (MATCH ADJACENT SOILS)

GRANULAR BACKFILL PLACED BY BRIDGE CONTRACTOR

		Ⓒ ℄ BEARING.		Ⓐ		Ⓑ		Ⓓ	
STRUCTURE	ABUTMENT	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.	STATION	ELEV.
B-44-127	NORTH	592+48.87	751.4	592+12.27	735.5	592+22.27	738.8	592+57.09	755.7
B-44-128	NORTH	592+56.89	752.3	592+16.39	735.7	592+26.39	739.0	592+62.17	756.2
B-44-127	SOUTH	590+67.89	752.9	591+02.37	734.4	590+94.37	737.1	590+53.37	758.2
B-44-128	SOUTH	590+67.89	752.5	591+06.39	734.5	590+98.39	737.2	590+54.19	759.4

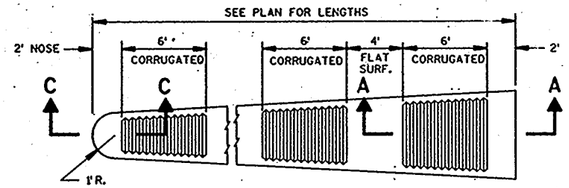
LONGITUDINAL SECTION FOR ABUTMENTS AT S.T.H. 441 OVER C.T.H. "00"

DIMENSIONS A AND B PERTAIN TO THE SOUTH ABUTMENT FILL ONLY

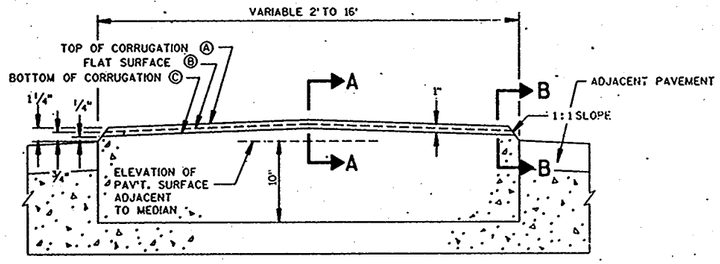
LEVELS ON = 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63
12-1-89
2-2-90
3-31-90
FILE NAME : 03_TRICO:4685274B

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2.11

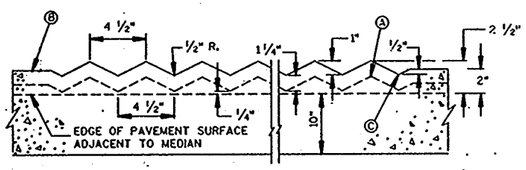
CONSTRUCTION DETAILS
FOR
S.T.H. 441 WINNEBAGO CO.



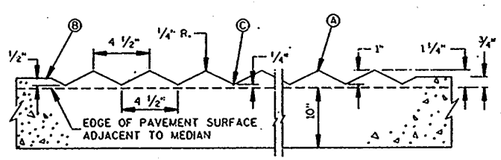
PLAN



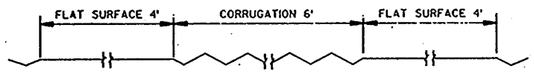
TRANSVERSE SECTION



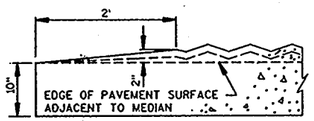
LONGITUDINAL SECTION A-A



LONGITUDINAL SECTION B-B

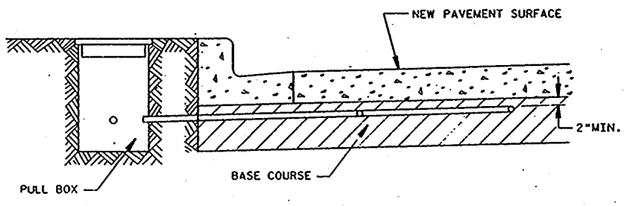


PROFILE ALONG TOP OF PROPOSED MEDIAN

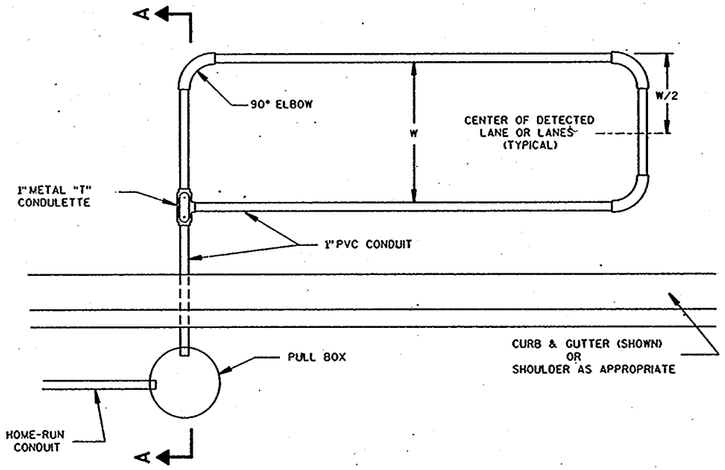


SECTION C-C

CONCRETE CORRUGATED MEDIAN



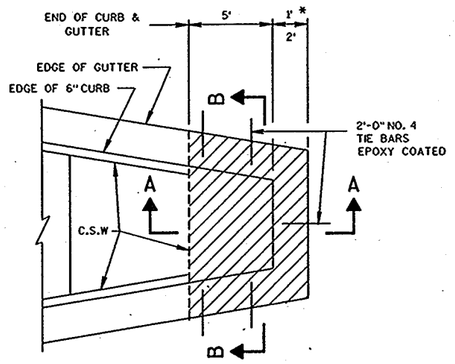
SECTION A-A



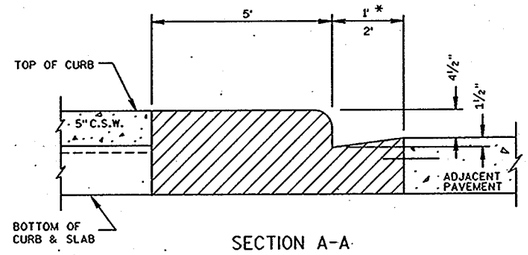
TYPICAL PLAN OF DETECTOR LOOP

MD,13,14,15,16,17,18,19,20, 22.
LEVELS ON
FILE NAME : D3_TRICO:14685286B

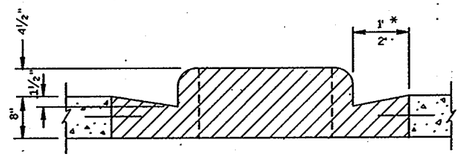
STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2.12
CONSTRUCTION DETAILS FOR	
S.T.H. 441	OUTAGAMIE CO.



DESIGN NOTE: CONCRETE ISLAND NOSE (TO BE PAID FOR AS CONCRETE PAVEMENT.



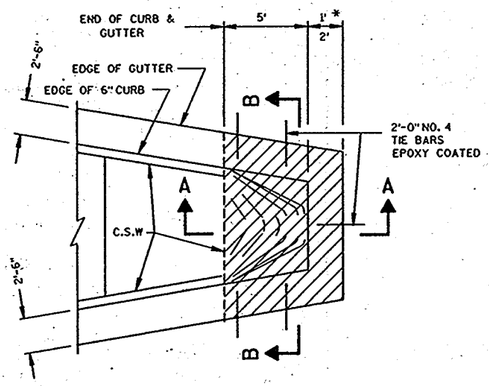
SECTION A-A



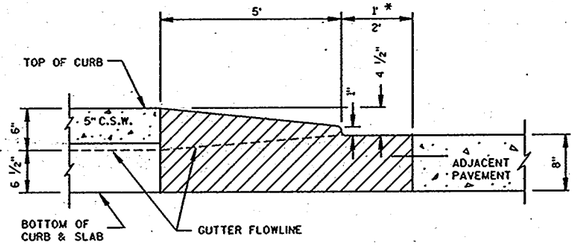
SECTION B-B

* AT 18-INCH CURB & GUTTER LOCATIONS

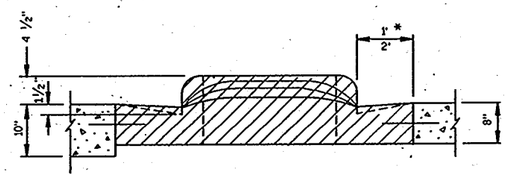
CONCRETE MEDIAN SQUARE NOSE DETAIL FOR 30-INCH CURB & GUTTER



DESIGN NOTE: CONCRETE ISLAND NOSE (TO BE PAID FOR AS CONCRETE PAVEMENT, 8-INCH)



SECTION A-A



SECTION B-B

* AT 18-INCH CURB & GUTTER LOCATIONS

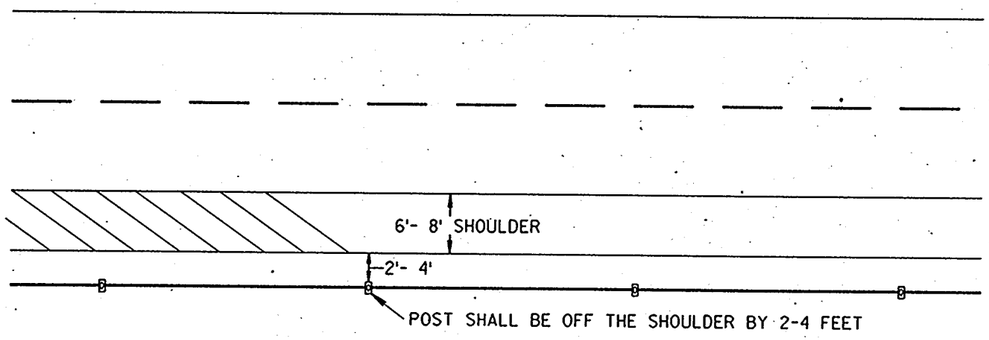
CONCRETE MEDIAN SLOPED NOSE DETAIL

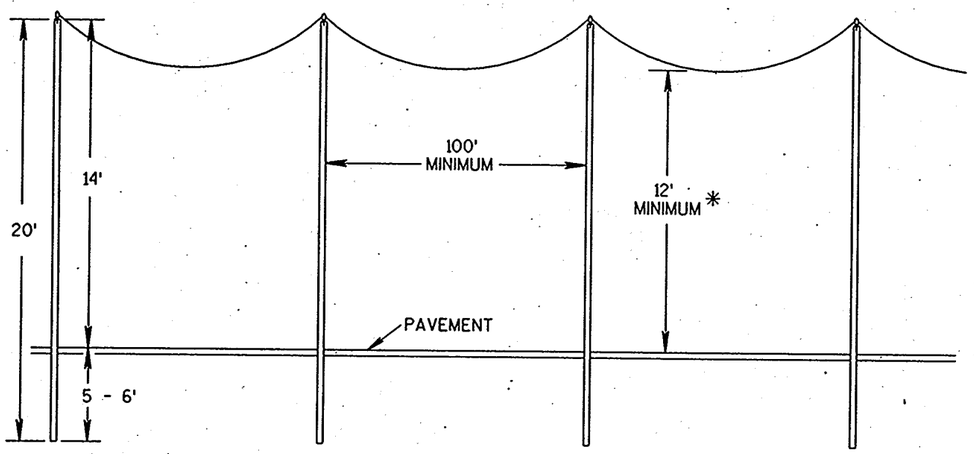
LEVELS ON = 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FILE NAME : D3_TRICO:4685286B

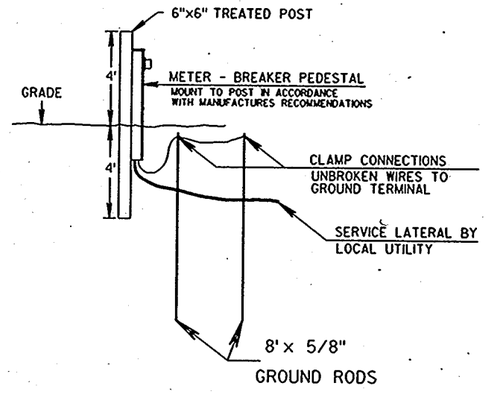
STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2.13

DETAILS FOR WIRING FOR TEMPORARY ELECTRICAL INSTALLATIONS





4"x 6" POSTS PARALLEL TO PAVEMENT

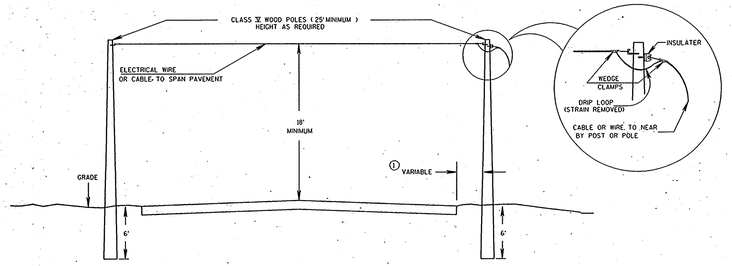


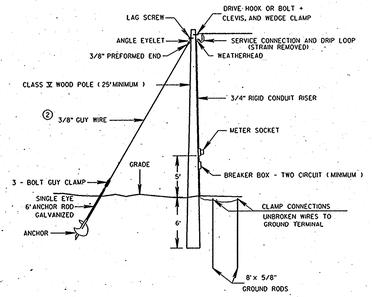
UNDERGROUND SERVICE

* IF VEHICULAR TRAFFIC IS TO PASS UNDER A SECTION OF THIS OVERHEAD CABLE OR WIRE TO GET TO OR FROM THE JOB SITE, THE CABLE OR WIRE SHALL BE RAISED TO 18' IN THAT PARTICULAR SECTION.

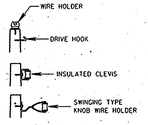
STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2.14

DETAILS
FOR
WIRING FOR TEMPORARY ELECTRICAL INSTALLATIONS

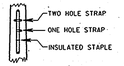




OVERHEAD SERVICE



TYPICAL SECURING DEVICES
AT TOP OF POLES OR POSTS



CONSTRUCTION MANNER IN WHICH
TO SECURE CABLE OR DUCT
TO POST OR POLE

NOTES :

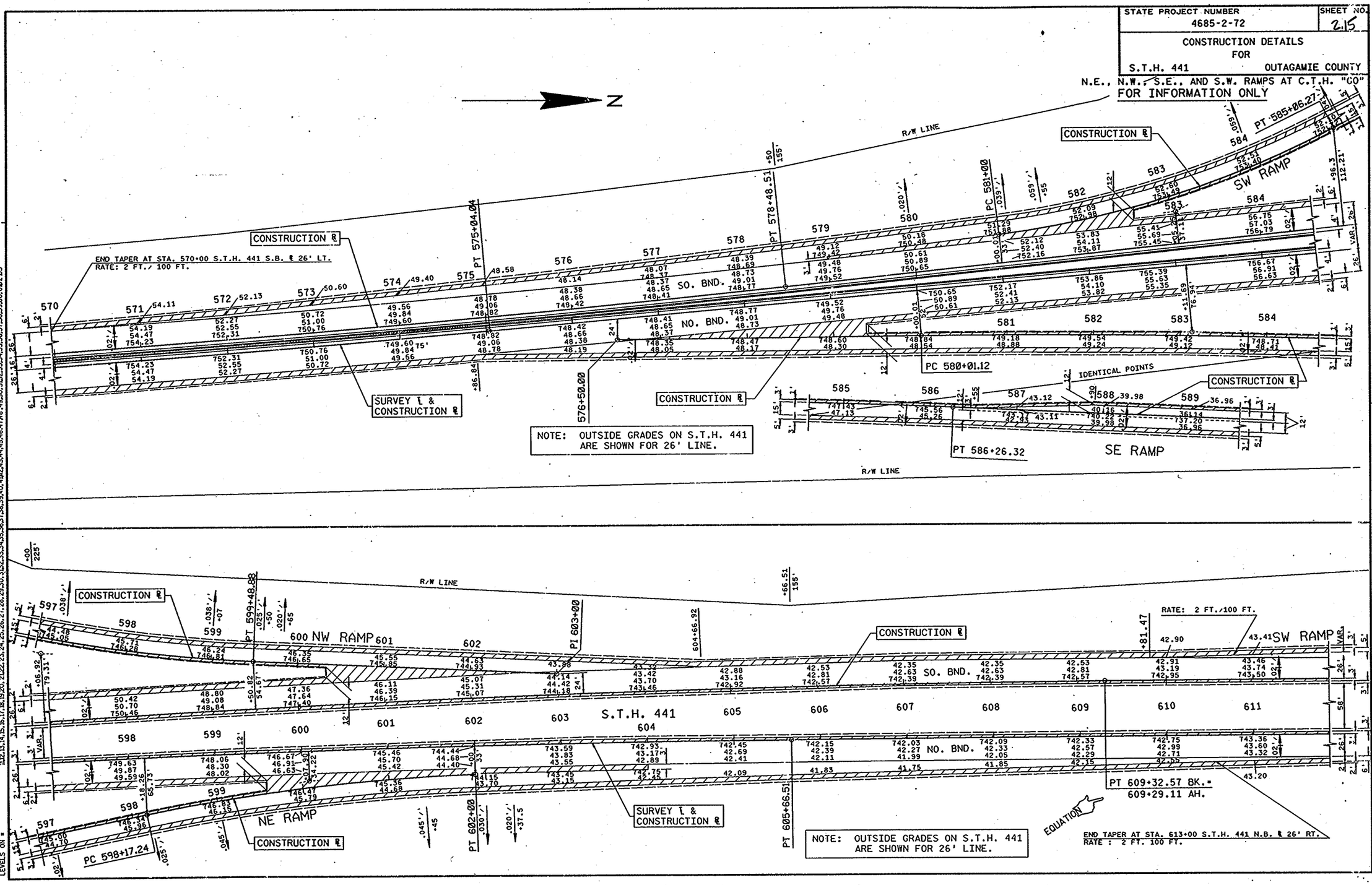
1. DISTANCE OFF OF PAVEMENT AND ANY DIFFERENCE IN POLE HEIGHT SHALL BE DETERMINED BY THE DISTRICT TRAFFIC ENGINEER

2. NECESSARY GUYING OF ANY POLES OR POSTS, (AS SHOWN FOR OVERHEAD SERVICE), SHALL BE DETERMINED BY THE PROJECT ENGINEER

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2.15

CONSTRUCTION DETAILS
FOR
S.T.H. 441 OUTAGAMIE COUNTY

N.E., N.W., S.E., AND S.W. RAMPS AT C.T.H. "CO"
FOR INFORMATION ONLY

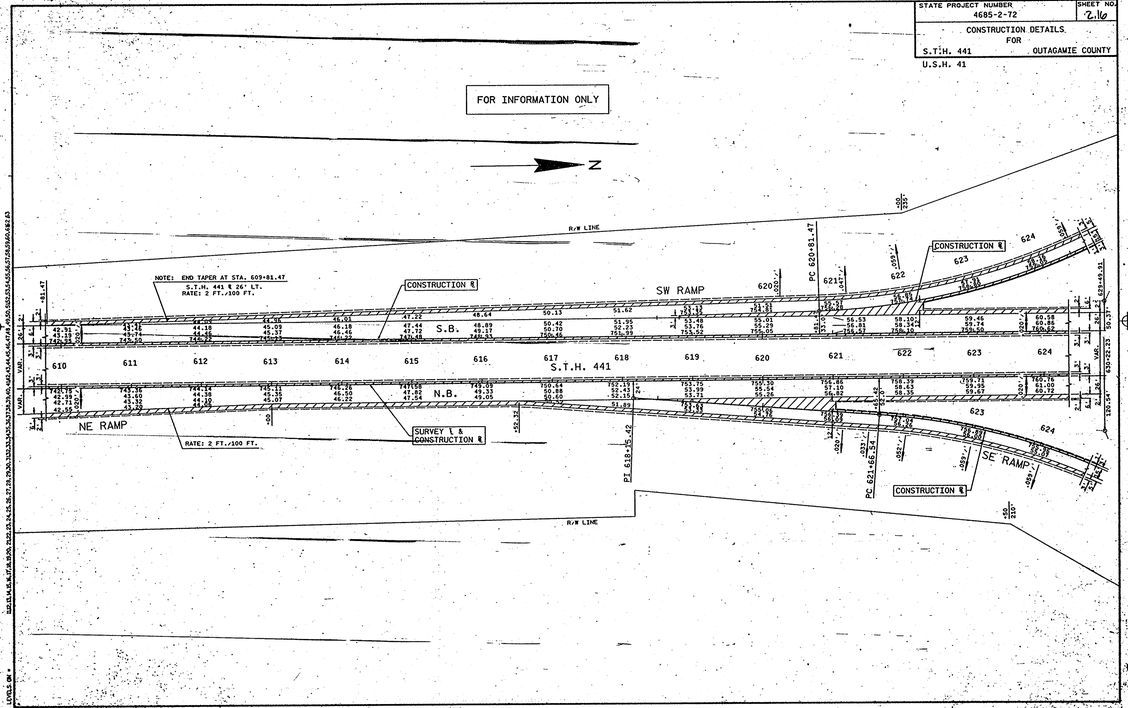


FILE NAME: D3_TRICO:4685022D

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2.16

CONSTRUCTION DETAILS.
FOR
S.T.H. 441 OUTAGAMIE COUNTY
U.S.H. 41

FOR INFORMATION ONLY



FILE NAME= c:\s334\4685022d.dgn

STATE PROJECT NUMBER
4685-2-72

SHEET NO.
21

CONSTRUCTION DETAILS
FOR
S.T.H. 441 OUTAGAMIE CO.
C.T.H. "00"

N

EXISTING R/W

SAW JOINT,
FULL DEPTH
REQ'D.

SHOULDER LINE

SURVEY ℄ &
CONSTRUCTION ℄

676 677 678 679 680 681 682

C.T.H. "00"

746.00 746.00 745.89 745.67 745.35

6

CONSTRUCTION LIMITS
680+00

SHOULDER LINE

EXISTING R/W

DECK

DECK

W

BASE 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 : C43,1034685022K

21

STATE PROJECT NUMBER 4685-2-72 | SHEET NO. 2.8

CONSTRUCTION DETAILS FOR S.T.H. 441 OUTAGAMIE CO.

C.T.H. "OO"

'N

R/W LINE

CONCRETE CURB & GUTTER, 18-INCH, TYPE "A" REQ'D

P.I. 687+05.31 W.B. CONST. & ∠ = 177°-44'-49"

SLOPED ISLAND NOSE

EXISTING R/W

SHOULDER LINE

BEGIN ULTIMATE CONSTRUCTION

684+00 W.B CONST. & BK.=
683+98.93 W.B CONST. & AH.

EQUATION

CONCRETE CURB & GUTTER, 30-INCH, TYPE "A" REQ'D

684+85.14 E.B. CONST. & 9-94.88 CHRISTINA ST.

WESTBOUND

CONSTRUCTION ℄

SURVEY ℄ & CONSTRUCTION ℄

C.T.H. "OO"

SURVEY ℄

EASTBOUND

CONSTRUCTION ℄

90°-03'-04"

684+00 E.B. CONST. & BK.=
683+99.95 E.B. CONST. & AH.

EQUATION

CONCRETE CURB & GUTTER, 30-INCH, TYPE "A" REQ'D

CONCRETE CURB & GUTTER, 30-INCH, TYPE "D" REQ'D

CONST. DRIVEWAY 20' CONST. PERMIT OBTAINED

SOD FLUME REQ'D

DRIVEWAY (REMOVE)

REMOVE DRIVEWAY 40' CONST. PERMIT OBTAINED

CONCRETE CURB & GUTTER, 30-INCH, TYPE "D" REQ'D

SOD FLUME REQ'D.

CONSTRUCT TYPE "B" MOD. INTERSECTION

5" CONC. SIDEWALK REQ'D

SOD REQ'D.

U.T.C.P.

EXISTING R/W

R/W LINE

MEET EXISTING 8+50 SAW JOINT REQ'D

EXISTING R/W ℄

CONSTRUCTION ℄

8 CHRISTINA ST.

OFFSETS

SURVEY ℄ STATION	E.B.℄ STATION	DISTANCE FEET	W.B.℄ STATION	DISTANCE FEET
684+00	683+99.95	6.50	683+98.93	6.50
+50	+49.95	5.69	+48.94	7.31
685+00	684+99.96	4.88	684+98.95	8.13
+50	+49.97	4.06	+48.95	8.94
686+00	685+99.97	3.25	685+98.96	9.75
+50	+49.98	2.44	+48.96	10.56
687+00	686+99.99	1.63	686+98.97	11.38
+50	+49.99	0.81	+49.04	13.91
688+00	688+00	0	687+99.12	16.69

2.8

11-20-89
12-12-89

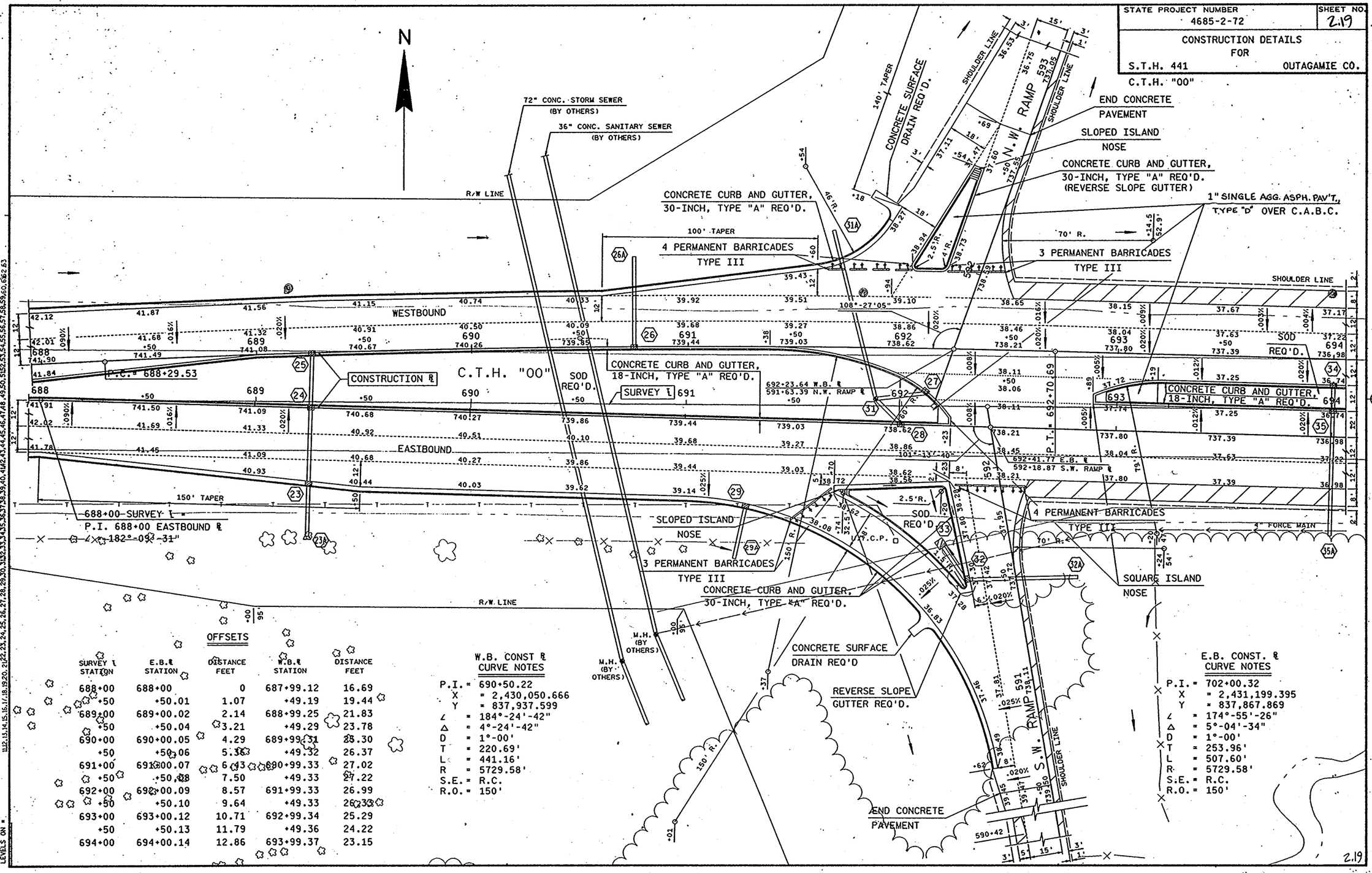
BASE LEVELS ON
LEVELS ON =

FILE NAME: D3_TRICO:4685022L

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2.19

CONSTRUCTION DETAILS
FOR
S.T.H. 441 OUTAGAMIE CO.

C.T.H. "00"



OFFSETS

SURVEY ℄ STATION	E.B.℄ STATION	DISTANCE FEET	W.B.℄ STATION	DISTANCE FEET
688+00	688+00	0	687+99.12	16.69
+50	+50.01	1.07	+49.19	19.44
689+00	689+00.02	2.14	688+99.25	21.83
+50	+50.04	3.21	+49.29	23.78
690+00	690+00.05	4.29	689+99.31	25.30
+50	+50.06	5.36	+49.32	26.37
691+00	691+00.07	6.43	690+99.33	27.02
+50	+50.08	7.50	+49.33	27.22
692+00	692+00.09	8.57	691+99.33	26.99
+50	+50.10	9.64	+49.33	26.33
693+00	693+00.12	10.71	692+99.34	25.29
+50	+50.13	11.79	+49.36	24.22
694+00	694+00.14	12.86	693+99.37	23.15

W.B. CONST ℄ CURVE NOTES

P.I. =	690+50.22
X	= 2,430,050.666
Y	= 837,937.599
∠	= 184°-24'-42"
Δ	= 4°-24'-42"
D	= 1°-00'
T	= 220.69'
L	= 441.16'
R	= 5729.58'
S.E. =	R.C.
R.O. =	150'

E.B. CONST. ℄ CURVE NOTES

P.I. =	702+00.32
X	= 2,431,199.395
Y	= 837,867.869
∠	= 174°-55'-26"
Δ	= 5°-04'-34"
D	= 1°-00'
T	= 253.96'
L	= 507.60'
R	= 5729.58'
S.E. =	R.C.
R.O. =	150'

2.19

PLOT NAME: D:\GEOPAK\...\...M.DGN
PLOT SCALE: 20
PLOT DATE: 7-24-89
11-22-89
12-5-89
4-5-90
REV. DATE:
ORIGINATOR: FDW
DIST: 3 3-6-88
BASE LEVELS ON =

STATE PROJECT NUMBER 4685-2-72 | SHEET NO. 2.20

CONSTRUCTION DETAILS FOR S.T.H. 441 OUTAGAMIE CO.

C.T.H. "OO"

N

SOUTHBOUND 593 | S.T.H. 441 | NORTHBOUND 593

B-44-128 B-44-127

SHOULDER LINE

CONSTRUCTION ℄

END CONCRETE PAVEMENT

5 PERMANENT BARRICADES TYPE III

70° R.

NE RAMP

ASPHALTIC FLUME REQ'D.

CONCRETE CURB & GUTTER, 36-INCH, TYPE "A" REQ'D.

SQUARE ISLAND NOSE

FORCE MAIN

R/W LINE

CONSTRUCT DRIVEWAY 75' CONST. PERMIT OBTAINED

80' 30' 25' R

225' TAPER

BOX CULVERT (REMOVE) C.E. (REMOVE)

SILT FENCE REQ'D.

76°-49'-02"

80' R.

694 695 696 697 698 699 700

END CONCRETE PAVEMENT

SOD(BY OTHERS)

CONCRETE CURB & GUTTER, 18-INCH, TYPE "A" (BY OTHERS)

CONC. SIDEWALK, 5"(BY OTHERS)

BY OTHERS SOD(BY OTHERS)

TEMPORARY ASPHALTIC SHOULDER

697+26.02 W. BND. ℄ = 591+55.70 N.E. RAMP ℄

697+49.45 E.BND. ℄ = 591+27.98 S.E. RAMP ℄

CONSTRUCTION ℄ WESTBOUND

END CONCRETE PAVEMENT

GUARDRAIL (REMOVE)

SURVEY ℄

SOD REQ'D.

DRIVEWAY ENT. CURB REQ'D.

CONCRETE CURB & GUTTER, 18-INCH, TYPE "A" REQ'D

P.C.= 699+46.36

DRIVEWAY ENT. CURB REQ'D.

89°-04'-17"

SHOULDER LINE

4" FORCE MAIN

SQUARE ISLAND NOSE (BY OTHERS)

70' R.

3 PERMANENT BARRICADES TYPE III

1" SINGLE AGG. ASPH. PAV'T, TYPE "D" OVER C.A.B.C.

CONSTRUCTION ℄

LONGITUDINAL CONST. JOINT

EASTBOUND

CONCRETE CURB & GUTTER, 30-INCH, TYPE "A" REQ'D.

GRADING LIMITS PROJECT 4685-2-74 590+72.0

5 PERMANENT BARRICADES TYPE III

CONCRETE CURB & GUTTER, 36-INCH, TYPE "A" REQ'D

SOD FLUME REQ'D.

REVERSE SLOPE GUTTER REQ'D.

SLOPED ISLAND NOSE

150' TAPER

END CONCRETE PAVEMENT

R/W LINE

190'

S.T.H. 441

C-44-70

DITCH DAM REQ'D.

SE RAMP

1' 3' 3' 9' 15' VAR.

OFFSETS

SURVEY ℄ STATION	E.B.℄ STATION	DISTANCE FEET	W.B.℄ STATION	DISTANCE FEET
694+00	694+00.14	12.86	693+99.37	23.15
+50	+50.15	13.93	+49.38	22.08
695+00	695+00.16	15.00	694+99.39	21.01
+50	+50.17	16.07	+49.40	19.94
696+00	696+00.18	17.14	695+99.41	18.87
+50	+50.20	18.21	+49.42	17.79
697+00	697+00.21	19.29	696+99.44	16.72
+50	+50.22	20.36	+49.45	15.65
698+00	698+00.23	21.43	697+99.46	14.58
+50	+50.24	22.50	+49.47	13.51
699+00	699+00.25	23.57	698+99.48	12.44
+50	+50.26	24.64	+49.49	11.37
700+00	700+00.27	25.46	699+99.50	10.29

2.20

BASE LEVELS ON = LEVELS ON =

FILE NAME: D63,D5H5S02S2.2DGN

STATE PROJECT NUMBER 4685-2-72 | SHEET NO. 2.21

CONSTRUCTION DETAILS FOR S.T.H. 441 OUTAGAMIE CO.

C.T.H. "00"

REMOVE FENCE AS NECESSARY

CONSTRUCT DRIVEWAY 50' CONST. PERMIT OBTAINED

E. BND. CONST. & CURVE NOTES

P.I. = 702+00.32
X = 2,431,199.395
Y = 837,867.869
∠ = 174°-55'-26"
Δ = 5°-04'-34"
D = 1°-00'
T = 253.96'
L = 507.60'
R = 5729.58'
S.E. = 7.1%
R.O. = 160'

14" MAPLE SAVE

CONSTRUCTION LIMITS 594+00

3" CHOKE CHERRY SAVE

CLEMENT ROMENESKO

R/W LINE

ASPHALTIC FLUME REQ'D.

SPRUCE SAVE

SAW JOINT REQ'D.

ASPHALTIC FLUME REQ'D.

703+89.46 SURVEY ℓ P.I. ℓ 705+89.04 WESTBOUND ∠ = 177°-58'-14"

EXISTING DRIVEWAY (REMOVE)

SLOPED ISLAND NOSE

CONCRETE CORRUGATED MEDIAN REQ'D.

DRIVEWAY ENTRANCE CURB REQ'D.

P.I. 592+47.65 ∠ = 179°-02'-24"

P.I. 702+50.02 W.B.CONST.ℓ = P.I. 592+22.42 FRENCH RD.

WESTBOUND

CONSTRUCTION ℓ

C.T.H. "00"

SOD REQ'D. CONCRETE CURB & GUTTER 18-INCH, TYPE "A" REQ'D.

DRIVEWAY ENTRANCE CURB REQ'D.

SLOPED ISLAND NOSE

SURVEY ℓ

SOD REQ'D.

P.I. 702+50.20 C.T.H. "00" = P.I. 592+17.50 FRENCH RD.

EASTBOUND

P.I. 702+51.62 E.B.CONST.ℓ = P.I. 591+94.51 FRENCH RD.

CONCRETE CURB & GUTTER 18-INCH, TYPE "A" REQ'D.

3" SINGLE AGGREGATE ASPH. PAV'T. TYPE D OVER 9" CRUSHED AGGREGATE BASE REQ'D.

P.T. 704+53.96

ASPHALTIC FLUME REQ'D.

CONCRETE CURB & GUTTER, 36-INCH TYPE "D" REQ'D. (TYPICAL)

CONSTRUCT TYPE "D" INTERSECTIONS, LT. & RT.

FRENCH RD.

SAW JOINT REQ'D.

CONSTRUCTION LIMITS 590+00

R/W LINE

OFFSETS

SURVEY ℓ STATION	E.B.ℓ STATION	DISTANCE FEET	W.B.ℓ STATION	DISTANCE FEET
700+00	700+00.27	25.46	699+99.50	10.29
+50	+50.27	25.84	+49.52	9.22
701+00	701+00.27	25.79	700+99.53	8.15
+50	+50.28	25.30	+49.54	7.08
702+00	702+00.28	24.37	701+99.55	6.01
+50	+50.30	23.01	+49.56	4.94
703+00	703+00.64	21.90	702+99.52	3.17
+50	+50.66	20.36	+49.56	1.40
+86.46			+89.04	
704+00	704+00.70	18.38		
+50	+50.76	15.97		
705+00	705+00.83	13.31		
+50	+50.90	10.65		
706+00	706+00.97	7.98		

2.21

PLOT SCALE= 20

PLOT NAME= D:\2200\WAER

REV. DATE: 12-29-89 12-12-89 4-6-90

ORIGINATOR: FLYNN DIST: 3 FLYNN

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

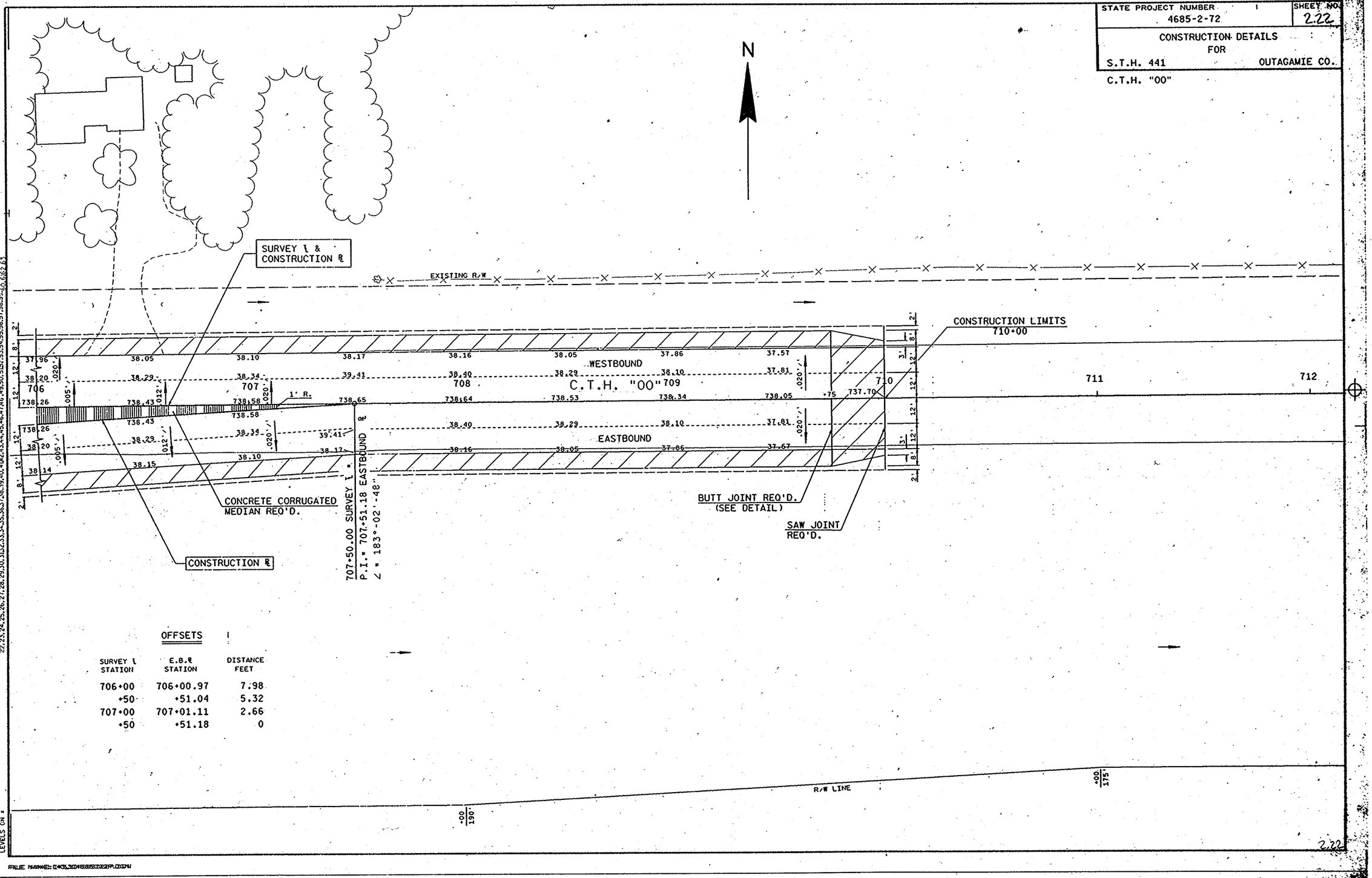
LEVELS ON = 1,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FILE NAME: D:\4685\02\06\4685022.DGN

35

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2.22

CONSTRUCTION DETAILS
FOR
S.T.H. 441 OUTAGAMIE CO.
C.T.H. "00"



OFFSETS

SURVEY ℄ STATION	E.B.℄ STATION	DISTANCE FEET
706+00	706+00.97	7.98
+50	+51.04	5.32
707+00	707+01.11	2.66
+50	+51.18	0

BASE LEVELS ON =
LEVELS ON =

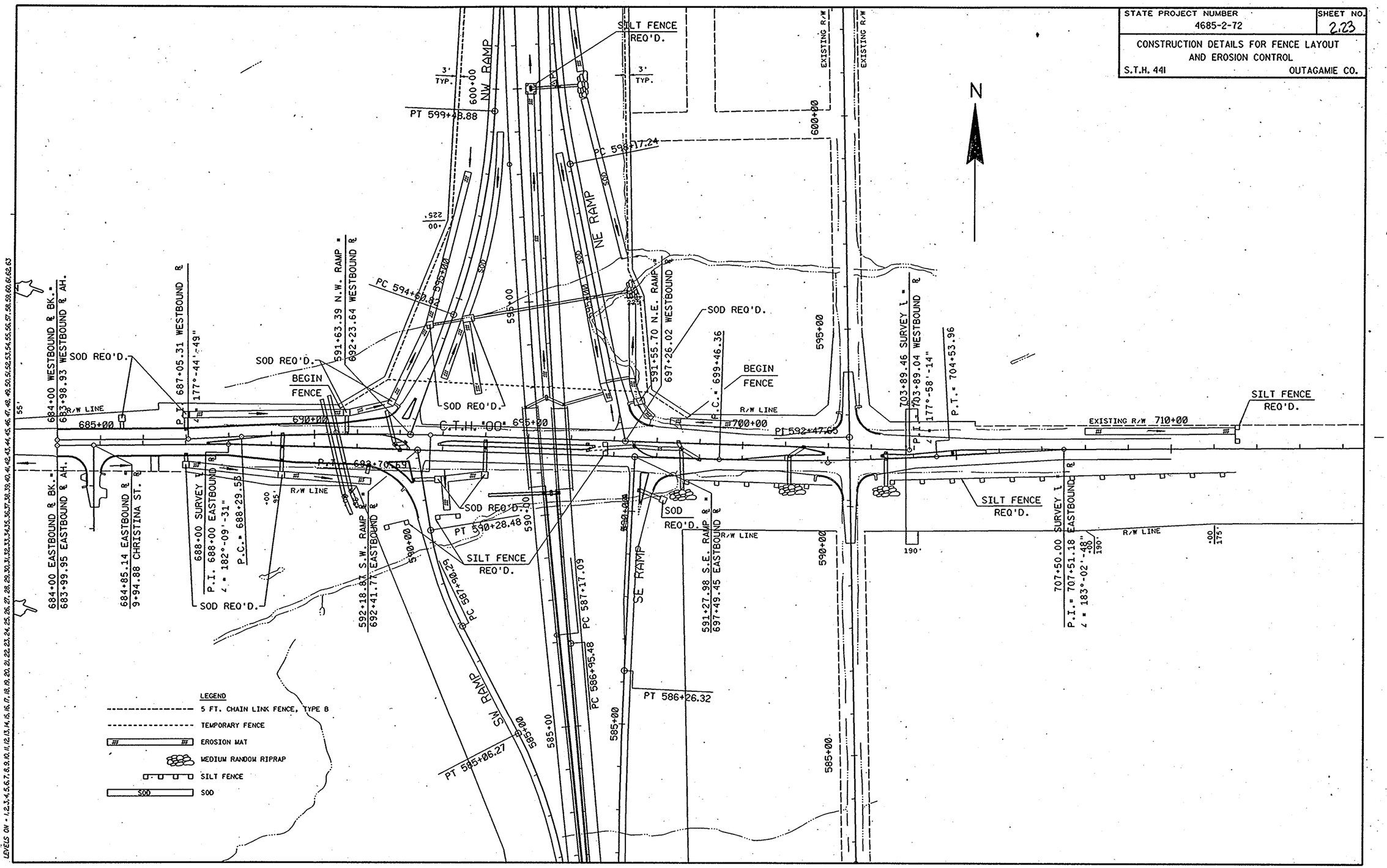
12-13-89

2.22

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2.23

CONSTRUCTION DETAILS FOR FENCE LAYOUT AND EROSION CONTROL

S.T.H. 441 OUTAGAMIE CO.



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

FILE NAME: HDGN:D3_TRICO:4685272D.DGN

WISDOT/CADDS SHEET 42

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2.24

CONSTRUCTION DETAILS FOR FENCE LAYOUT AND EROSION CONTROL

S.T.H. 441 OUTAGAMIE CO.

N

SILT FENCE REQ'D.

SOD REQ'D.

PT 599+38.38

600+00 NW RAMP

603+00.00

605+66.51 155'

605+00

PI 602+80.51

PT 602+80.00

SOD REQ'D.

SILT FENCE REQ'D.

610+00

3' TYP.

SILT FENCE REQ'D.

615+00

PT 609+32.57 BK.*
609+29.11 AH.

SOD REQ'D.

3' TYP.

SOD REQ'D.

620+00 SW RAMP

PC 620+81.47

SILT FENCE REQ'D.

625+00

630+00

255'

SE RAMP

PI 618+15.42

SOD

R/W LINE

SOD REQ'D.

PC 624+66.54

SOD

50 210'

625+00

630+00

R/W LINE

PI 618+86.48

END FENCE

50 FRENCH RD. 205'

620+00

625+00

630+00

R/W LINE

FRENCH ROAD

600+00

EXISTING R/W

605+00

610+00

615+00

EXISTING R/W

EXISTING R/W

R/W LINE

R/W LINE

PT 635+66.22

LEGEND

- 5 FT. CHAIN LINK FENCE, TYPE B
- TEMPORARY FENCE
- EROSION MAT
- MEDIUM RANDOM RIPRAP
- SILT FENCE
- SOD

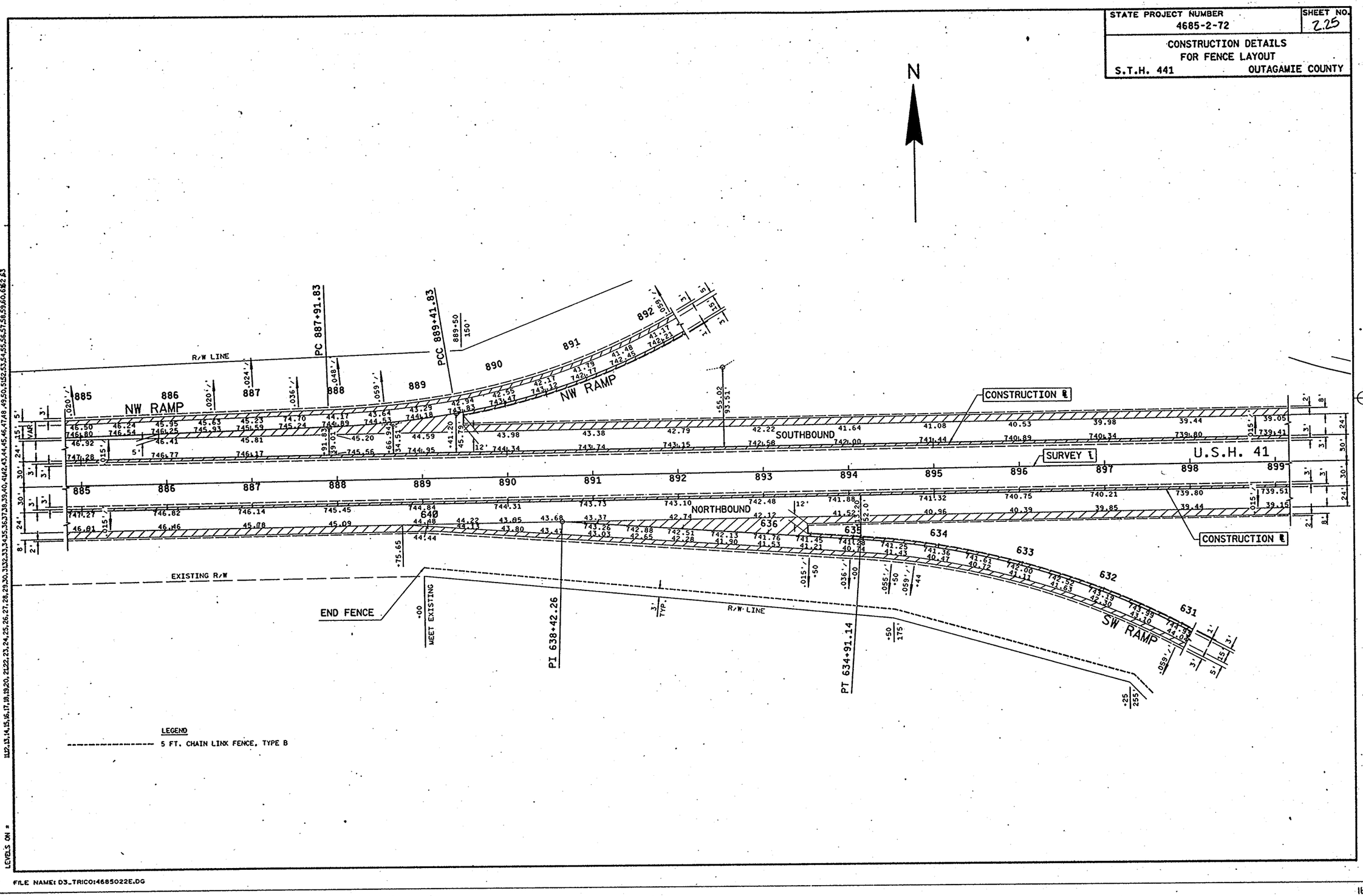
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51

WISDOT/CADDS SHEET 42

FILE NAME: HDGN:D3_TRICO:4685272C.DGN

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2.25

CONSTRUCTION DETAILS
FOR FENCE LAYOUT
S.T.H. 441 OUTAGAMIE COUNTY



LEGEND

---------- 5 FT. CHAIN LINK FENCE, TYPE B

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

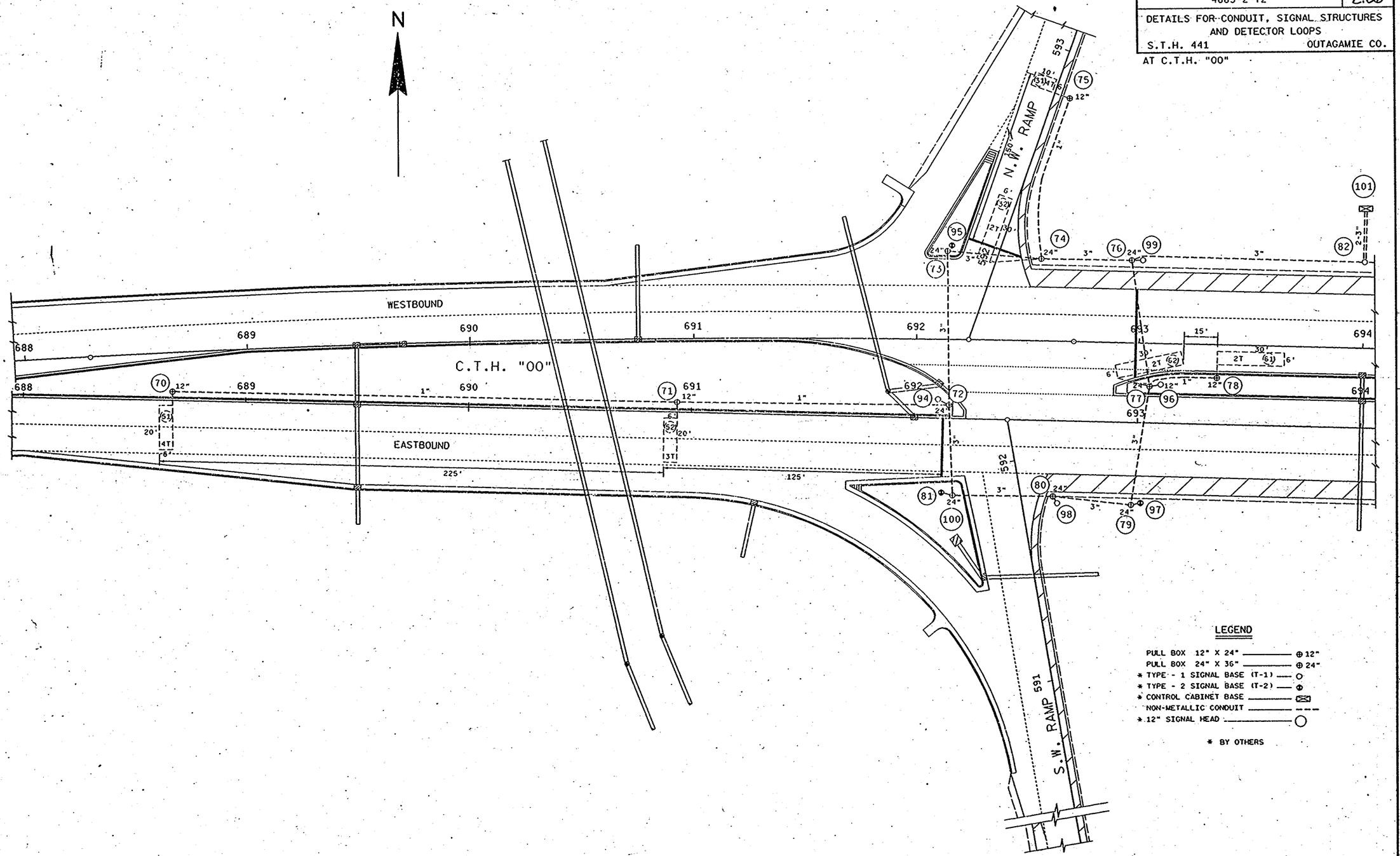
FILE NAME: D3_TRICO:4685022E.DG

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2.26

DETAILS FOR CONDUIT, SIGNAL STRUCTURES AND DETECTOR LOOPS

S.T.H. 441 OUTAGAMIE CO.

AT C.T.H. "00"

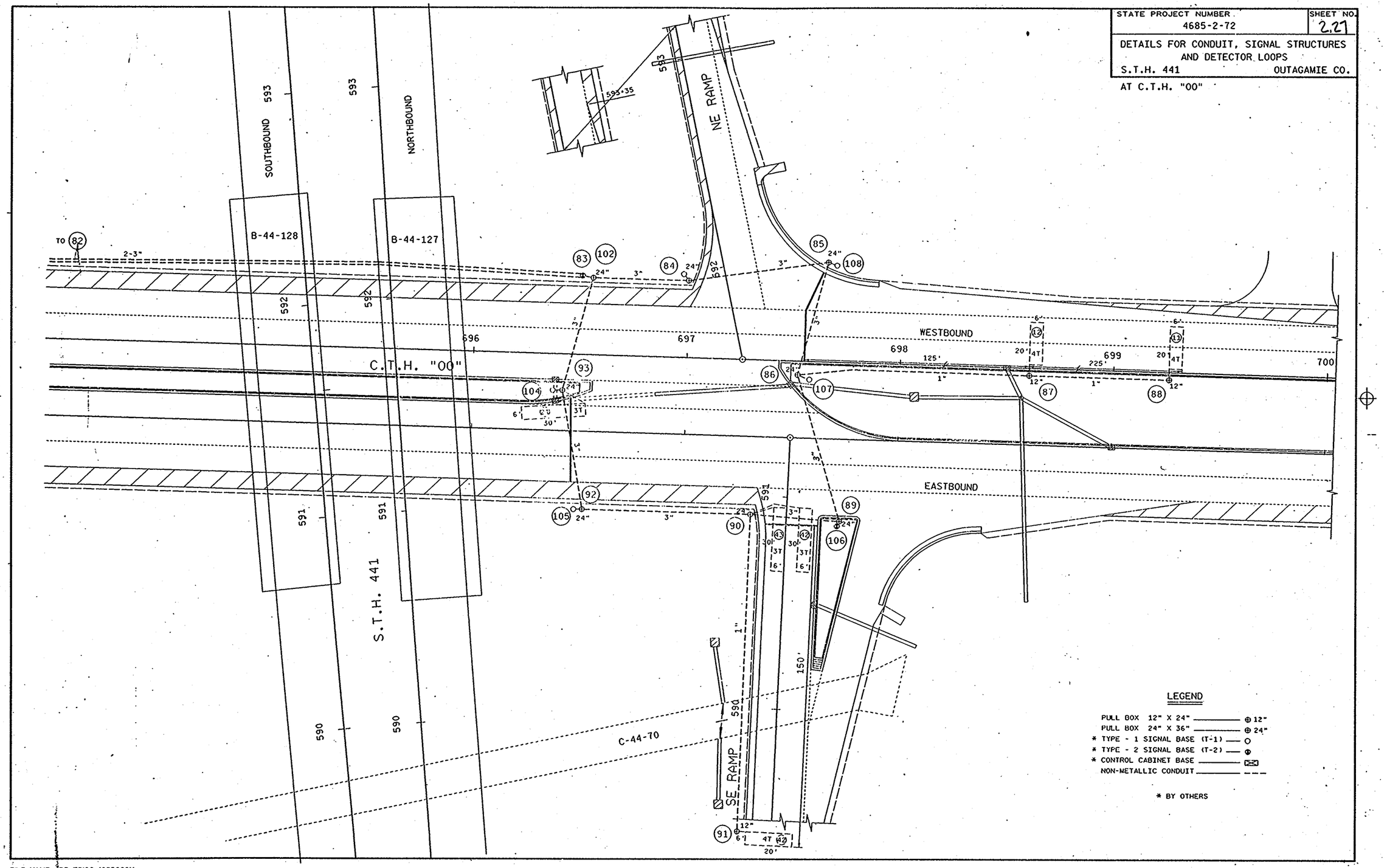


LEVELS ON = 22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59.

FILE NAME : D3_TRICO:4685022M

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2.27

DETAILS FOR CONDUIT, SIGNAL STRUCTURES AND DETECTOR LOOPS
S.T.H. 441 OUTAGAMIE CO.
AT C.T.H. "00"



LEGEND

PULL BOX 12" X 24"	⊕ 12"
PULL BOX 24" X 36"	⊕ 24"
* TYPE - 1 SIGNAL BASE (T-1)	○
* TYPE - 2 SIGNAL BASE (T-2)	⊕
* CONTROL CABINET BASE	⊠
NON-METALLIC CONDUIT	- - -

* BY OTHERS

LEVELS ON * 22,23,24,25,26,27,28,29,30,3132,33,3435,363738,39,40,4142,43,44,45,46,47,48,49,50,5152,53,54,55,56,57,58,59,

7-20-90 BRB *

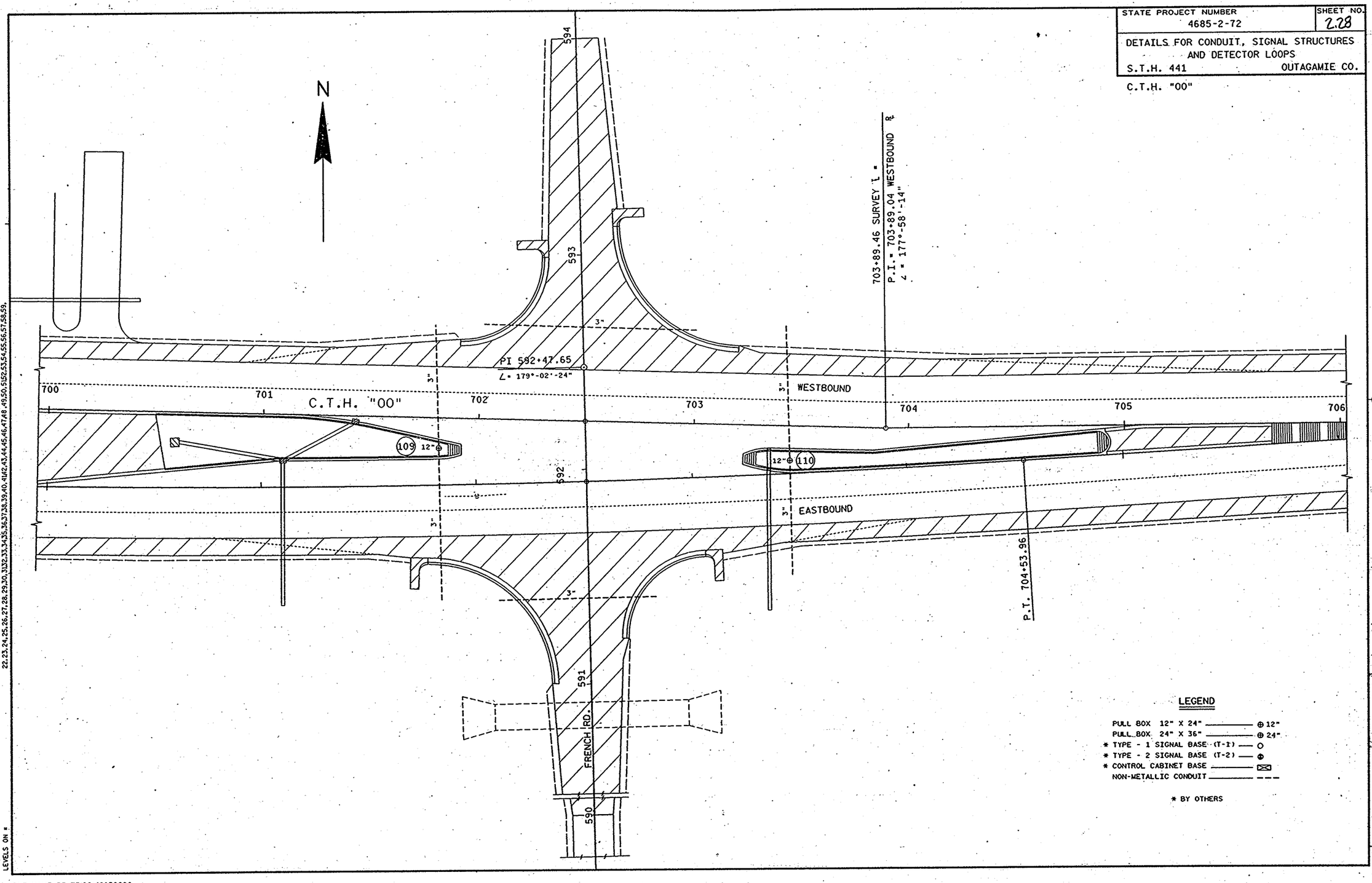
FILE NAME = D3_TRIC01:4685022N

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2.28

DETAILS FOR CONDUIT, SIGNAL STRUCTURES AND DETECTOR LOOPS

S.T.H. 441 OUTAGAMIE CO.

C.T.H. "00"



LEGEND

PULL BOX 12" X 24"	⊕ 12"
PULL BOX 24" X 36"	⊕ 24"
* TYPE - 1 SIGNAL BASE (T-1)	○
* TYPE - 2 SIGNAL BASE (T-2)	⊕
* CONTROL CABINET BASE	⊠
NON-METALLIC CONDUIT	- - -

* BY OTHERS

LEVELS ON # 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,

FILE NAME: D3_TRIC01:46850220

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2.29

PAVEMENT MARKING
FOR
S.T.H. 441 OUTAGAMIE CO.
C.T.H. "00"

N

676 677 678 679 680 681 682

SURVEY ℄ & CONSTRUCTION ℞

C.T.H. "00"

BEGIN PAVEMENT MARKING
677±50

CONSTRUCTION LIMITS
680+00

PAVEMENT MARKING, 4" WHITE (EDGELINE)

PAVEMENT MARKING, 4" WHITE (LANELINE)

12.5' 37.5'

PAVEMENT MARKING, 4"YELLOW (NO PASSING ZONE)

SHOULDER LINE

SHOULDER LINE

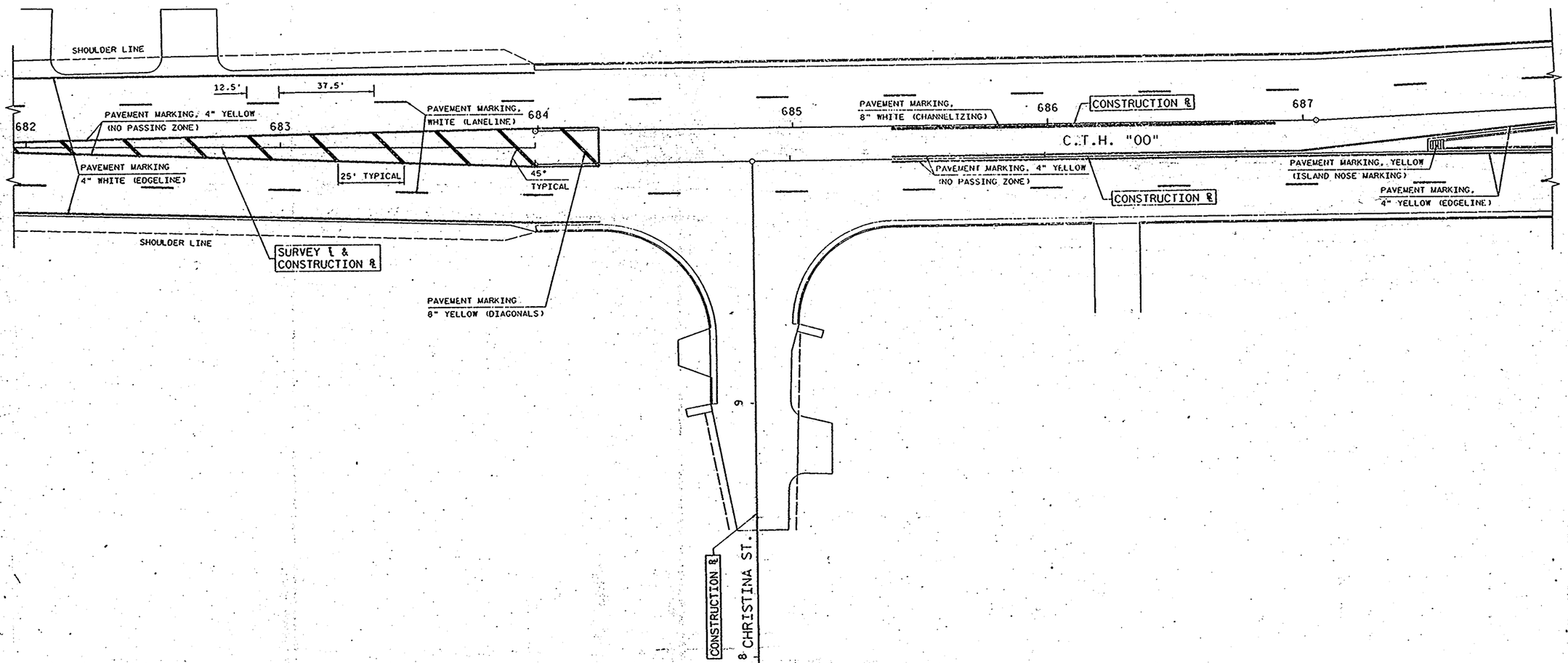
1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

LEVELS ON =

FILE NAME : [43,03_TRICO:4685P1]

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2.30

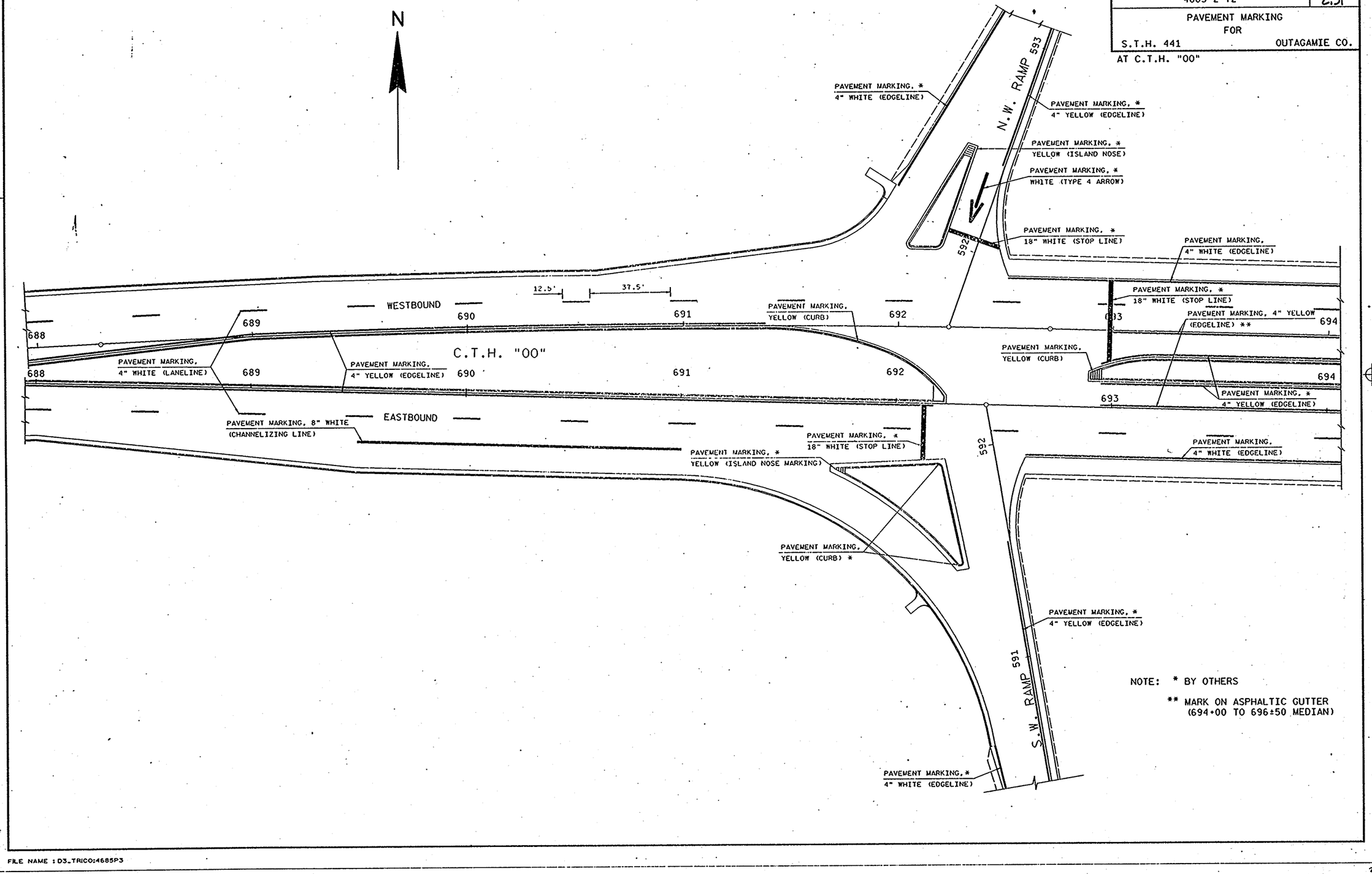
PAVEMENT MARKING
FOR
S.T.H. 441 OUTAGAMIE COUNTY
C.T.H. "00"



FILE NAME : D3_TRICO:4685P2

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2,31

PAVEMENT MARKING
FOR
S.T.H. 441 OUTAGAMIE CO.
AT C.T.H. "00"



NOTE: * BY OTHERS

** MARK ON ASPHALTIC GUTTER (694+00 TO 696±50 MEDIAN)

LEVELS ON = 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,

FILE NAME : D3_TRICO:4685P3

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2.32

PAVEMENT MARKING
FOR
S.T.H. 441 OUTAGAMIE CO.
AT C.T.H. "00"

N

NORTHBOUND

B-44-127

NE RAMP

593

592

PAVEMENT MARKING, * 4" YELLOW (EDGELINE)

PAVEMENT MARKING, * 4" WHITE (EDGELINE)

PAVEMENT MARKING, 4" WHITE (EDGELINE)

PAVEMENT PAVEMENT, * 18" WHITE (STOP LINE)

PAVEMENT MARKING, 4" WHITE (EDGELINE)

12.5'

37.5'

PAVEMENT MARKING, 4" WHITE (LANELINE)

PAVEMENT MARKING, * 4" YELLOW (EDGELINE)

696

PAVEMENT MARKING, 4" YELLOW (EDGELINE) **

697

WESTBOUND

698

699

700

C.T.H. "00"

PAVEMENT MARKING, YELLOW (CURB) *

PAVEMENT WARKING, YELLOW (CURB)

PAVEMENT MARKING, 4" YELLOW (EDGELINE)

PAVEMENT PAVEMENT, * 18" WHITE (STOP LINE)

EASTBOUND

PAVEMENT MARKING, 4" WHITE (EDGELINE)

591

PAVEMENT PAVEMENT, * 18" WHITE (STOP LINE)

PAVEMENT MARKING, 4" WHITE (EDGELINE)

S.T.H. 441

591

590

590

PAVEMENT MARKING, * WHITE (TYPE 4 ARROW)

PAVEMENT MARKING, * YELLOW (ISLAND NOSE)

PAVEMENT MARKING, * 4" YELLOW (EDGELINE)

SE RAMP

PAVEMENT MARKING, * 4" WHITE (EDGELINE)

NOTE: * BY OTHERS

** MARK ON ASPHALTIC GUTTER (694+00 TO 696+50 MEDIAN)

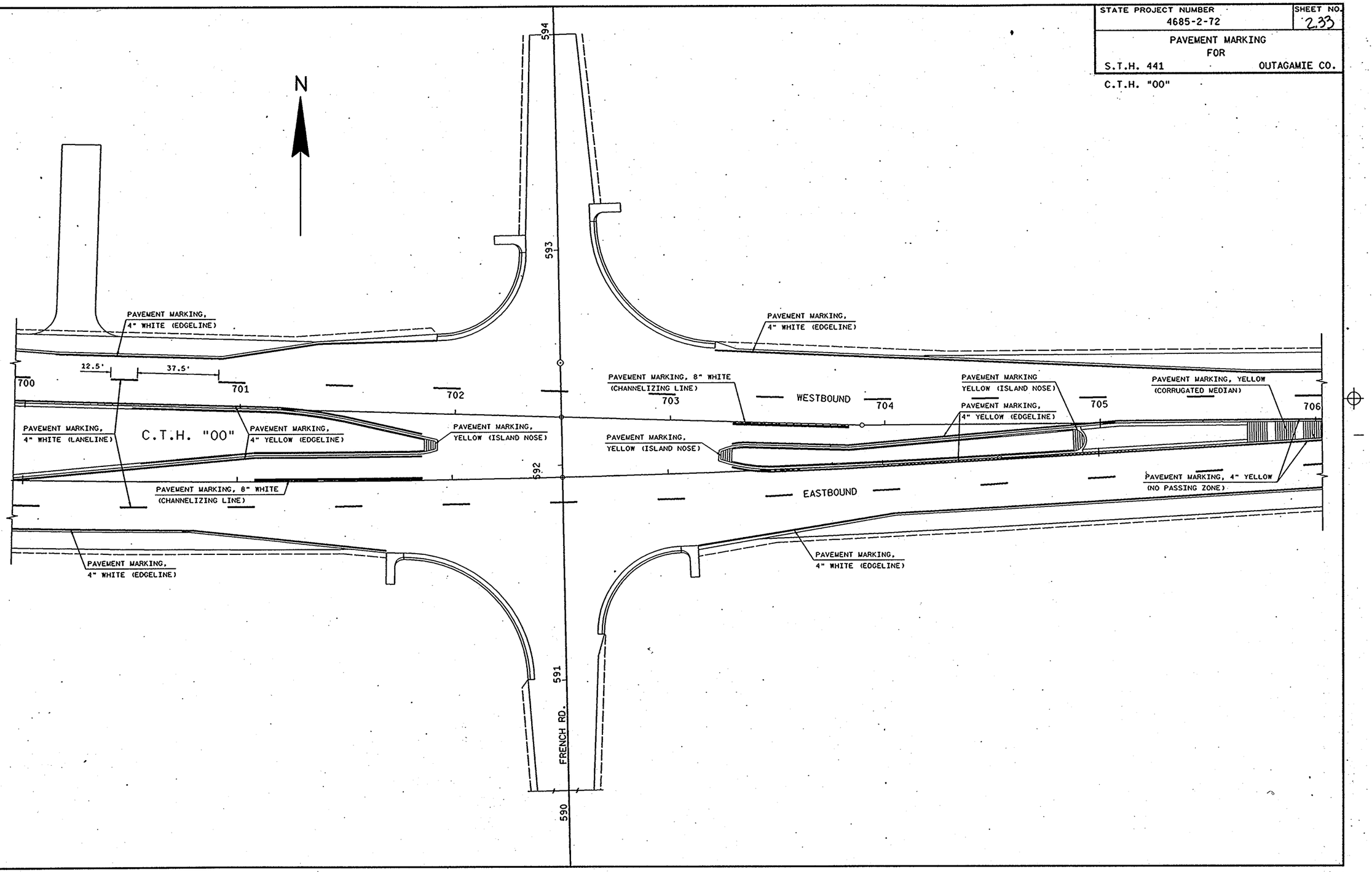
22,23,24,25,26,27,28,29,30,3132,33,3435,363738,39,40,41#2,43,44,45,46,47,48,49,50,5152,53,54,55,56,57,58,59,

LEVELS ON =

FILE NAME : D3_TRICO:4685P4

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2.33

PAVEMENT MARKING
FOR
S.T.H. 441 OUTAGAMIE CO.
C.T.H. "00"

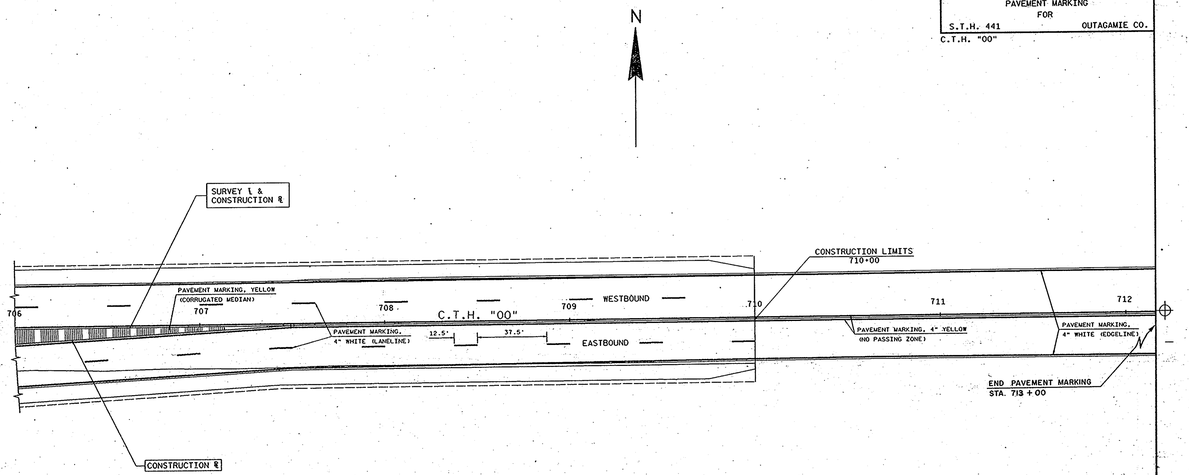


LEVELS ON = 22,23,24,25,26,27,28,29,30,3132,33,3435,363738,39,40,4142,43,44,45,46,4748,4950,5152,53,5455,5657,5859,

FILE NAME: D3_TRICO:4685P5

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	234

PAVEMENT MARKING
FOR
S.T.H. 441 OUTAGAMIE CO.
C.T.H. "OO"



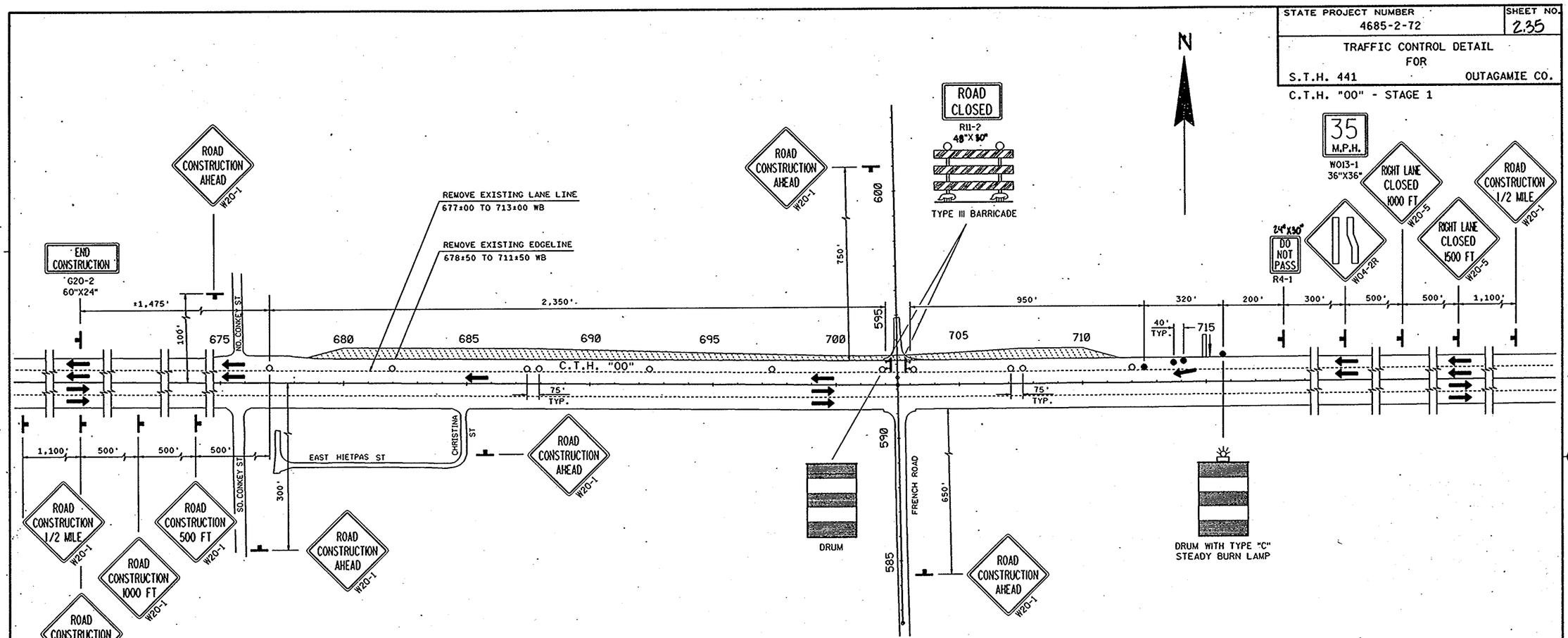
USER:JLH,45,36,37,38,3525,2525,25,24,25,26,27,28,29,30,3133,34,3738,39,40,4142,43,44,45,46,47,48 #4525,5625,55,56,57,58,59,60,6162 63

LEVELS ON

FILE NAME: 03_TRIC01685P6

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2.35

TRAFFIC CONTROL DETAIL
FOR
S.T.H. 441 OUTAGAMIE CO.
C.T.H. "00" - STAGE 1



ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.
"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
THE NUMBER OF TYPE III BARRICADES AND NON-METALLIC DRUMS SHOWN ARE APPROXIMATE AND THE NUMBER MAY CHANGE DEPENDING ON FINAL PLACEMENT.
ALL FLASHING ARROW BOARDS ARE TO BE EQUIPPED WITH DIMMERS.

SYMBOLS

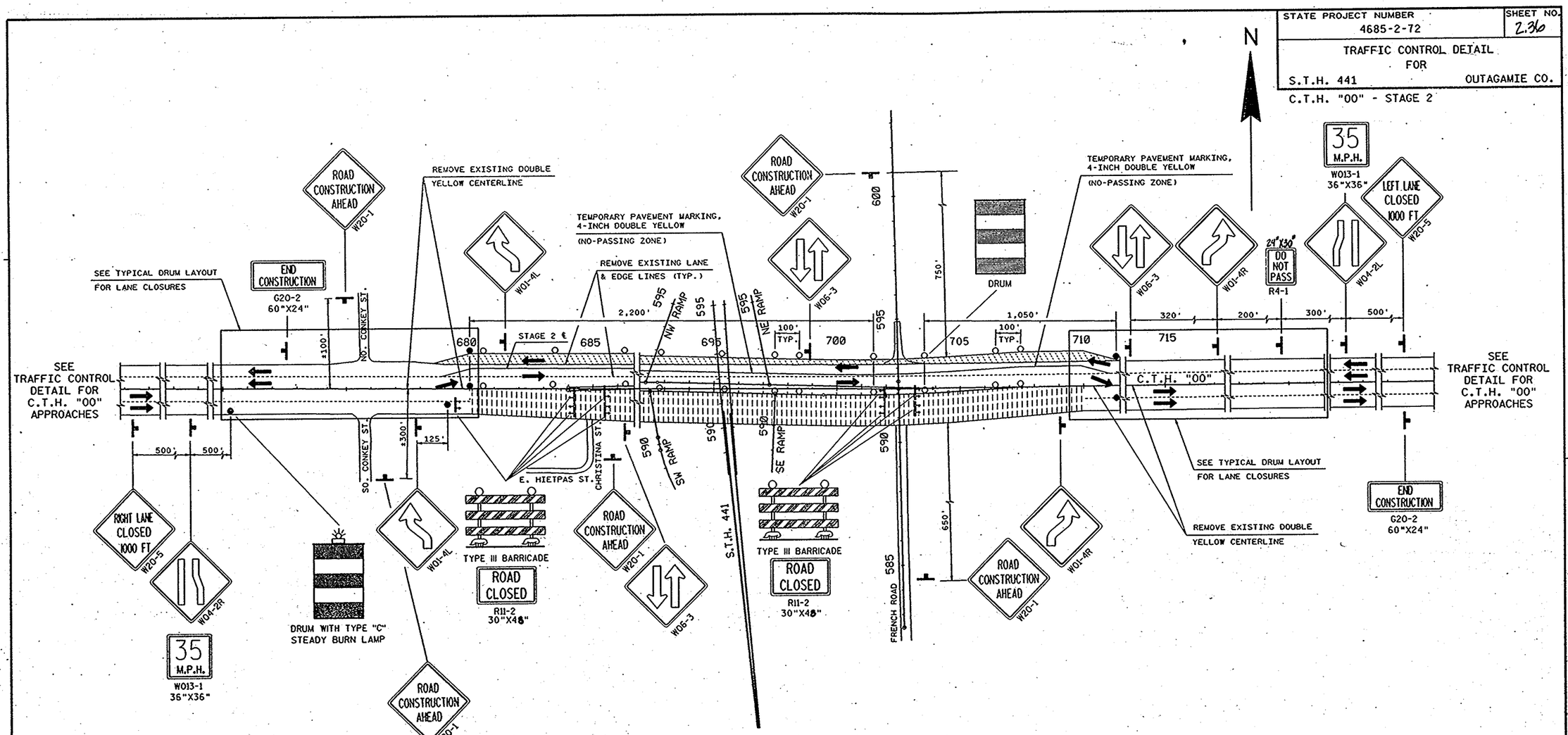
- WORK AREA
- DRUM
- DRUM WITH TYPE "C" STEADY BURN LAMP
- DIRECTION OF TRAFFIC FLOW
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE III BARRICADE WITH TYPE "A" WARNING LIGHTS
- 4'X8' FLASHING ARROW BOARD

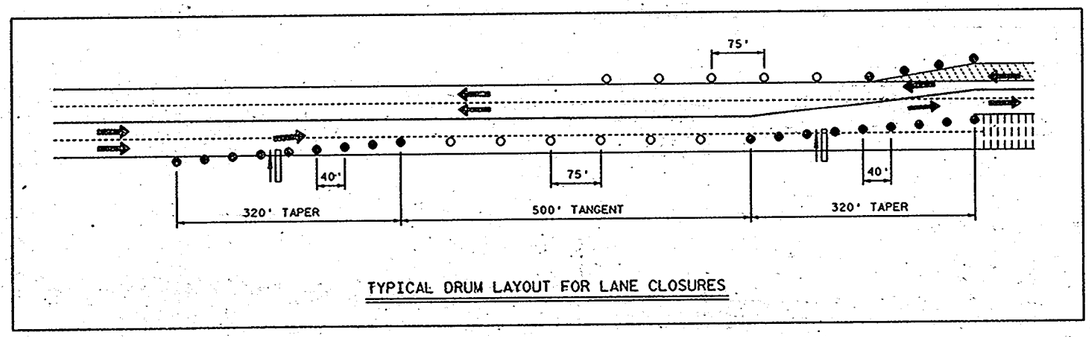
LEVELS ON = 1,12,13,14,15,16,17,18,19,20,21, 23,24,25,26,27, 29,30, 32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FILE NAME : D3_TRICO:TRA200.DGN

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2.36

TRAFFIC CONTROL DETAIL
FOR
S.T.H. 441 OUTAGAMIE CO.
C.T.H. "00" - STAGE 2





TYPICAL DRUM LAYOUT FOR LANE CLOSURES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.
"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
THE NUMBER OF TYPE III BARRICADES AND NON-METALLIC DRUMS SHOWN ARE APPROXIMATE AND THE NUMBER MAY CHANGE DEPENDING ON FINAL PLACEMENT.
ALL FLASHING ARROW BOARDS ARE TO BE EQUIPPED WITH DIMMERS.

SYMBOLS

- WORK AREA
- STAGE 1
- DRUM
- DRUM WITH TYPE "C" STEADY BURN LAMP
- DIRECTION OF TRAFFIC FLOW
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE III BARRICADE WITH TYPE "A" WARNING LIGHTS
- 4'X8' FLASHING ARROW BOARD

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

FILE NAME : D3_TRICO:TRA201.DGN

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2.37

TRAFFIC CONTROL DETAIL
FOR
S.T.H. 441 OUTAGAMIE CO.
C.T.H. "00" - STAGE 3

N

SEE DRUM DETAIL FOR WEST LANE CLOSURE STAGE 3 ONLY

END CONSTRUCTION
G20-2
60"X24"

DRUM WITH TYPE "C" STEADY BURN LAMP

ROAD CONSTRUCTION AHEAD W20-1

DRUM

STAGE 1 (REMOVE)

W01-4R

TEMPORARY SOLID DOUBLE YELLOW NO-PASSING ZONE

ROAD CONSTRUCTION AHEAD W20-1

W06-3

35 M.P.H.
W013-1
36"X36"

RIGHT LANE CLOSED 1000 FT
W20-5

W06-3

W01-4L

W04-2R

350' 320' 500' 320' 500' 500'

675 680 685 695 700 705 710 715 720 725

600 595 590 585

750' ±100' ±300' 650'

NO. CONKEY ST.

SO. CONKEY ST.

595 NW RAMP

595 NE RAMP

590 SW RAMP

590 SE RAMP

C.T.H. "00"

E. HIETPAS ST.

CHRISTINA ST.

S.T.H. 441

FRENCH ROAD

SEE TRAFFIC CONTROL DETAIL FOR C.T.H. "00" APPROACHES

SEE TYPICAL DRUM LAYOUT FOR LANE CLOSURES STAGE 2

500' 500' 320' 500'

LEFT LANE CLOSED 1000 FT
W20-5

W04-2L

35 M.P.H.
W013-1
36"X36"

ROAD CONSTRUCTION AHEAD W20-1

TYPE III BARRICADE

ROAD CLOSED
R11-2
30"X48"

ROAD CONSTRUCTION AHEAD W20-1

W06-3

TYPE III BARRICADE

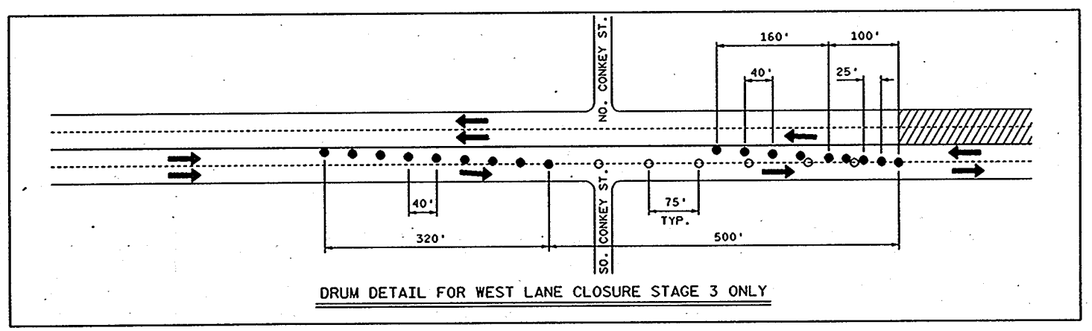
ROAD CLOSED
R11-2
30"X48"

ROAD CONSTRUCTION AHEAD W20-1

TYPE III BARRICADE

ROAD CLOSED
R11-2
30"X48"

END CONSTRUCTION
G20-2
60"X24"



DRUM DETAIL FOR WEST LANE CLOSURE STAGE 3 ONLY

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.
"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
THE NUMBER OF TYPE III BARRICADES AND NON-METALLIC DRUMS SHOWN ARE APPROXIMATE AND THE NUMBER MAY CHANGE DEPENDING ON FINAL PLACEMENT.
ALL FLASHING ARROW BOARDS ARE TO BE EQUIPPED WITH DIMMERS.

SYMBOLS

- WORK AREA
- STAGE 1
- DRUM
- DRUM WITH TYPE "C" STEADY BURN LAMP
- DIRECTION OF TRAFFIC FLOW
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE III BARRICADE WITH TYPE "A" WARNING LIGHTS
- 4'X8' FLASHING ARROW BOARD

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, 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

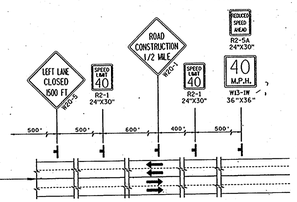
FILE NAME : D3_TRICO:TRA202.DGN

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	7.38

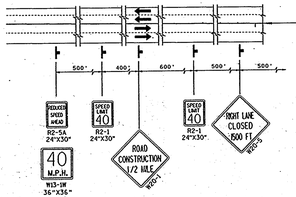
TRAFFIC CONTROL DETAIL
FOR
S.T.H. 441 OUTAGAMIE CO.

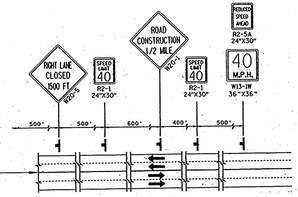
C.T.H. "OO" - APPROACHES

N

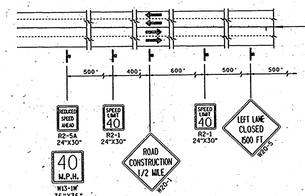


SEE TRAFFIC CONTROL DETAIL FOR C.T.H. "OO" - STAGE 2





SEE TRAFFIC CONTROL DETAIL FOR C.T.H. "OO" - STAGE 3



ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.
"R2" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND ORANGE.
ALL BARRICADES ARE TYPE III BARRICADES AND NON-METALLIC DRUMS SHOWN ARE APPROXIMATE AND THE NUMBER MAY CHANGE DEPENDING ON FINAL PLACEMENT.
ALL FLASHING ARROW BOARDS ARE TO BE EQUIPPED WITH DIMMERS.

SYMBOLS

- DIRECTION OF TRAFFIC FLOW
- SIGN ON PORTABLE OR PERMANENT SUPPORT

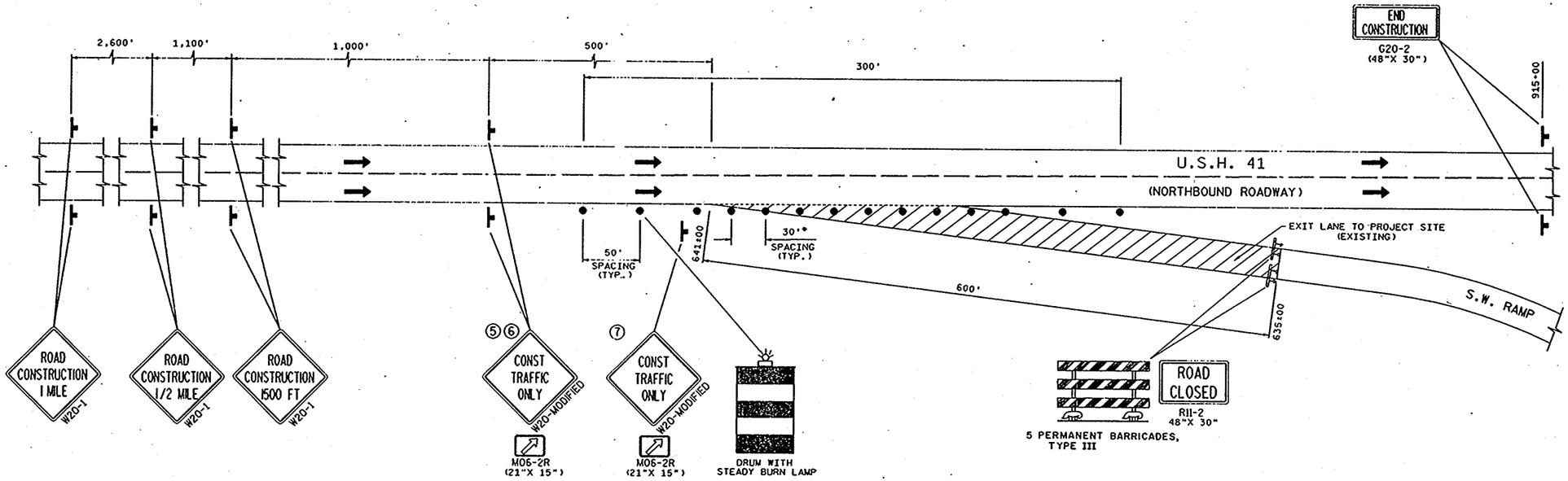
FILE NAME : 03_TRICOTRAZOLOGN

LEVELS ON :

110,15,16,16.5,17,18,19.5,20,22.5,23,24,25,26,27,28,29.5,33,33.5,34.5,36,37,38,39.45,40,41,41.5,42,43,44,45,46,47,48,49.5,50,52.5,53,54.55,56,57,58.5,59.65,A,68243

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2.39

TRAFFIC CONTROL DETAIL
FOR
U.S.H. 41 OUTAGAMIE CO.



SIGNING LAYOUT FOR TEMPORARY HAUL ROAD

641+00 S.W. RAMP TO 915+00 U.S.H. 41

* 30' SPACING REQ'D THRU SW RAMP ENTRANCE. SIGNS ⑤ ⑥ & ⑦ SHALL BE COVERED AT NIGHT.

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

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTORIZED ORANGE AND THEY ARE CLASS 4 SIGNS (48"X48") UNLESS OTHERWISE NOTED.

THE NUMBER OF TYPE III BARRICADES SHOWN ARE APPROXIMATE AND THE NUMBER MAY CHANGE DEPENDING ON FINAL PLACEMENT OF BARRICADES.

SYMBOLS

- DRUM WITH TYPE "C" STEADY BURN LAMP
- DIRECTION OF TRAFFIC FLOW
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE III BARRICADE

SPECIAL SIGN NO	SIGN CORE	SIGN TYPE	CORE SIZE	WIDTH INCHES	HEIGHT INCHES	TOTAL AREA SQ. FT.
5,6,7	W-20 MOD. M06-2R	II	4	48	78	67.0

REMARKS

COSTS OF SIGNS, MOUNTING HARDWARE AND POSTS SHALL BE INCIDENTAL TO THE ITEM OF TRAFFIC CONTROL UPON COMPLETION OF THE ITEM HAULING FLY ASH.

LEVELS ON • 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

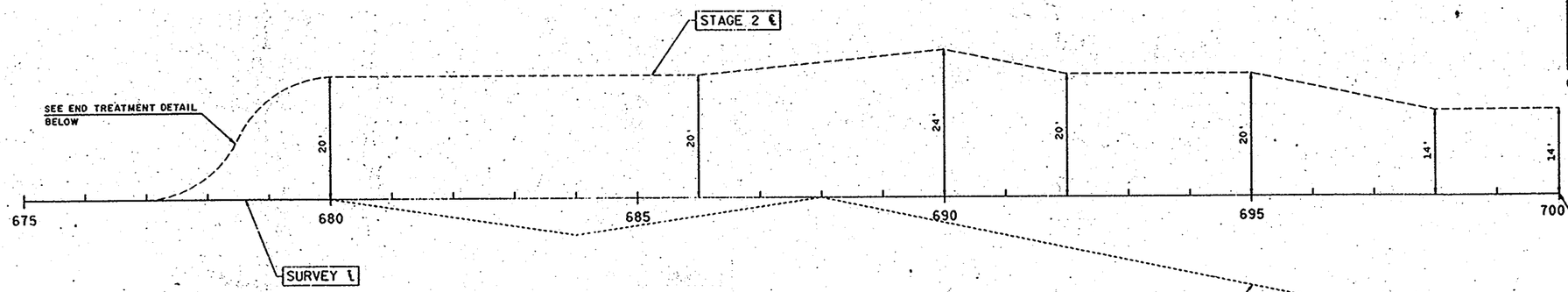
11-30-89

FILE NAME: HDGN:D3_TRICO:468522F.DGN

WISDOT/CADDS SHEET 42

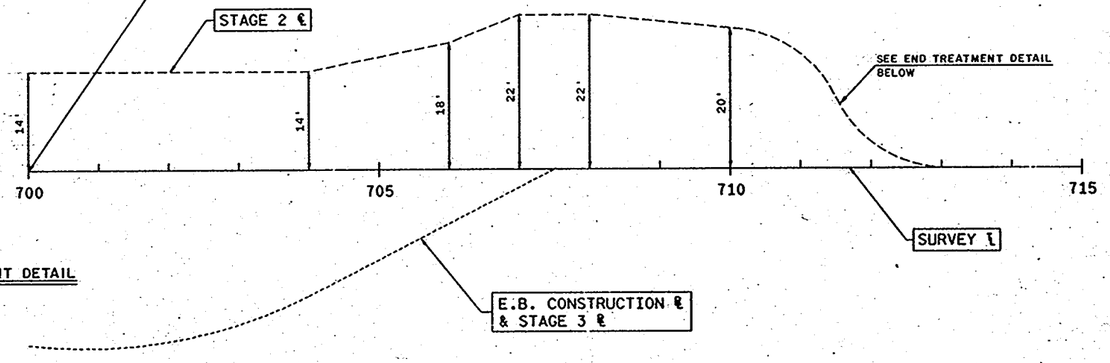
STATE PROJECT NUMBER	SHEET NO.
4685-2-72	2.40

ALIGNMENT DETAILS
FOR:
S.T.H. 441 OUTAGAMIE CO.
C.T.H. "00"



NOTE:
SEE DETAILS FOR STAGE 2 CURVE DATA AND EASTBOUND ℄ LAYOUT.

IDENTICAL POINTS



STAGING ALIGNMENT DETAIL

OFFSET TABLE

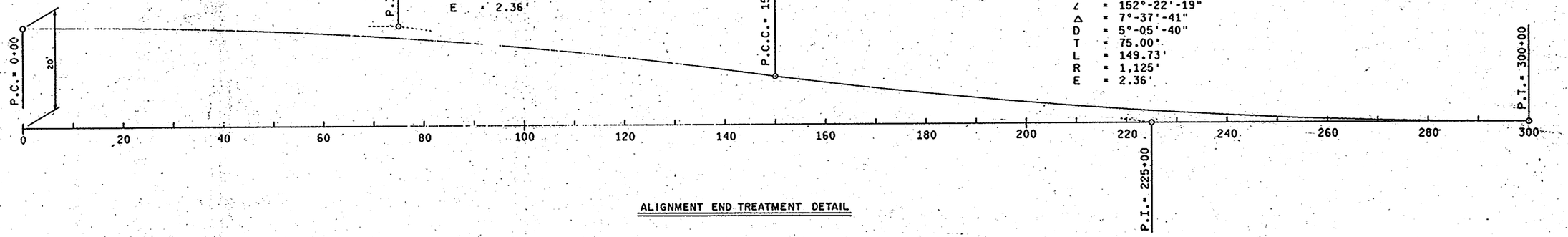
DISTANCE	OFFSET
@P.C.	20.00'
+20'	19.80'
+40'	19.30'
+60'	18.40'
+80'	17.20'
+100'	15.60'
+120'	13.60'
+140'	11.30'
@P.C.C.	10.00'
+160'	9.90'
+180'	9.60'
+200'	8.90'
+220'	7.80'
+240'	6.40'
+260'	4.60'
+280'	2.50'
@P.T.	0.00'

CURVE 1
CURVE NOTES

P.I. = 75+00
∠ = 187°-37'-41"
Δ = 7°-37'-41"
D = 5°-05'-40"
T = 75.00'
L = 149.73'
R = 1,125'
E = 2.36'

CURVE 2
CURVE NOTES

P.I. = 225+00
∠ = 152°-22'-19"
Δ = 7°-37'-41"
D = 5°-05'-40"
T = 75.00'
L = 149.73'
R = 1,125'
E = 2.36'



ALIGNMENT END TREATMENT DETAIL

FILE NAME : D3_TRICU46852748

DATE 08/08/90

ESTIMATE OF QUANTITIES

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	4685-02-72 QUANTITY
20101	CLEARING	STA.	5.00	5.00
20102	CLEARING	I.D.	50.00	50.00
20104	GRUBBING	STA.	5.00	5.00
20105	GRUBBING	I.D.	50.00	50.00
20301	REMOVING OLD CULVERT, STATION 698+55	L.S.	1.00	1.00
20401	REMOVING PAVEMENT	S.Y.	6,700.00	6,700.00
20411	REMOVING GUARDRAIL	L.F.	300.00	300.00
20419	REMOVING ASPHALTIC SURFACE, BUTT JOINTS	S.Y.	110.00	110.00
20503	UNCLASSIFIED EXCAVATION	C.Y.	53,754.00	53,754.00
20801	BORROW EXCAVATION	C.Y.	181,405.00	181,405.00
20811	SELECTED BORROW EXCAVATION	C.Y.	30,341.00	30,341.00
20901	GRANULAR BACKFILL	C.Y.	30.00	30.00
21301	FINISHING ROADWAY	L.S.	1.00	1.00
30404	CRUSHED AGGREGATE BASE COURSE	TON	18,000.00	18,000.00
40501	ASPHALTIC MATERIAL FOR PLANT MIXES	TON	178.00	178.00
41508	CONCRETE PAVEMENT, 8-INCH	S.Y.	770.00	770.00
41509	CONCRETE PAVEMENT, 9-INCH	S.Y.	1,425.00	1,425.00
41510	CONCRETE PAVEMENT, 10-INCH	S.Y.	15,920.00	15,920.00
41520	H.E.S. CONCRETE PAVEMENT, 10-INCH	S.Y.	500.00	500.00
41534	CONCRETE SURFACE DRAINS	C.Y.	4.00	4.00
41571	PAVEMENT TIES	EACH	16.00	16.00
52003	CULVERT PIPE, CLASS III, 18-INCH	L.F.	168.00	168.00
52061	APRON ENDWALLS FOR CULVERT PIPE, 18-INCH	EACH	6.00	6.00
52105	CORRUGATED STEEL CULVERT PIPE, 18-INCH	L.F.	404.00	404.00
52147	STEEL APRON ENDWALLS FOR CULVERT PIPE, 18-INCH	EACH	3.00	3.00
52203	REINFORCED CONCRETE CULVERT PIPE, CLASS III, 18-INCH	L.F.	46.00	46.00
52205	REINFORCED CONCRETE CULVERT PIPE, CLASS III, 24-INCH	L.F.	80.00	80.00

SHEET 2

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	4685-02-72 QUANTITY
52209	REINFORCED CONCRETE CULVERT PIPE, CLASS III, 36-INCH	L.F.	810.00	810.00
52260	REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE, 12-INCH	EACH	4.00	4.00
52262	REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE, 18-INCH	EACH	10.00	10.00
52264	REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE, 24-INCH	EACH	3.00	3.00
52267	REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE, 36-INCH	EACH	6.00	6.00
60119	CONCRETE CURB AND GUTTER, 18-INCH, TYPE A	L.F.	2,565.00	2,565.00
60123	CONCRETE CURB AND GUTTER, 30-INCH, TYPE A	L.F.	1,960.00	1,960.00
60133	CONCRETE CURB AND GUTTER, 30-INCH, TYPE D	L.F.	130.00	130.00
60160	CONCRETE CURB AND GUTTER, 36-INCH, TYPE A	L.F.	150.00	150.00
60170	CONCRETE CURB AND GUTTER, 36-INCH, TYPE D	L.F.	320.00	320.00
60604	MEDIUM RANDOM RIPRAP	C.Y.	80.00	80.00
60825	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 12-INCH	L.F.	333.00	333.00
60827	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 18-INCH	L.F.	698.00	698.00
60829	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 24-INCH	L.F.	96.00	96.00
61110	MANHOLES, TYPE 1	EACH	2.00	2.00
61122	INLETS, TYPE 3	EACH	21.00	21.00
61123	INLETS, TYPE 8	EACH	7.00	7.00
61151	MANHOLE COVERS, TYPE J	EACH	1.00	1.00
61163	INLET COVERS, TYPE C	EACH	1.00	1.00
61167	INLET COVERS, TYPE H	EACH	21.00	21.00
61170	INLET COVERS, TYPE MS	EACH	7.00	7.00
61201	PIPE UNDERDRAIN, 6-INCH	L.F.	160.00	160.00

SHEET 3.1

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	4685-02-72 QUANTITY
61211	PIPE UNDERDRAIN, UNPERFORATED, 6-INCH	L.F.	130.00	130.00
61331	NONMETALLIC CONDUIT, 1-INCH	L.F.	1,030.00	1,030.00
61336	NONMETALLIC CONDUIT, 3-INCH	L.F.	1,867.00	1,867.00
61611	CHAIN LINK FENCE, 5 FT.	L.F.	8,470.00	8,470.00
61801	MAINTENANCE AND REPAIR OF HAUL ROADS	L.S.	1.00	1.00
61910	MOBILIZATION	L.S.	1.00	1.00
62001	CONCRETE CORRUGATED MEDIAN	S.F.	900.00	900.00
62101	LANDMARK REFERENCE MONUMENTS	EACH	4.00	4.00
62203	ASPHALTIC FLUMES	S.Y.	28.00	28.00
62301	CALCIUM CHLORIDE SURFACE TREATMENT	TON	1.50	1.50
62401	WATER	MGAL	1,090.00	1,090.00
62505	SALVAGED TOPSOIL	S.Y.	89,845.00	89,845.00
62703	MULCHING	TON	58.20	58.20
62803	EROSION MAT, DELIVERED	S.Y.	6,640.00	6,640.00
62804	EROSION MAT, INSTALLED	S.Y.	6,640.00	6,640.00
62815	SILT FENCE, DELIVERED	L.F.	1,465.00	1,465.00
62816	SILT FENCE, INSTALLED	L.F.	1,465.00	1,465.00
62817	SILT FENCE MAINTENANCE	L.F.	1,465.00	1,465.00
62819	MOBILIZATIONS, EROSION CONTROL	EACH	2.00	2.00
62905	FERTILIZER, TYPE B	CWT.	92.00	92.00
63002	SEEDING	LB.	982.00	982.00
63003	SEEDING, TEMPORARY	LB.	883.00	883.00
63101	SODDING	S.Y.	4,590.00	4,590.00
64202	FIELD OFFICE, TYPE B	L.S.	1.00	1.00
64210	FIELD LABORATORY	L.S.	1.00	1.00
64301	TRAFFIC CONTROL	L.S.	1.00	1.00
64310	TRAFFIC CONTROL, ARROW BOARDS	DAYS	196.00	196.00
64313	TRAFFIC CONTROL, DRUMS	DAYS	11,088.00	11,088.00
64318	TRAFFIC CONTROL, BARRICADES, TYPE III	DAYS	924.00	924.00

SHEET 3.2

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	4685-02-72 QUANTITY
64321	TRAFFIC CONTROL, WARNING LIGHTS, TYPE A	DAYS	1,848.00	1,848.00
64323	TRAFFIC CONTROL, WARNING LIGHTS, TYPE C	DAYS	4,312.00	4,312.00
64326	TRAFFIC CONTROL, SIGNS	DAYS	3,580.00	3,580.00
64406	PAVEMENT MARKING, EPOXY, 4-INCH	L.F.	14,030.00	14,030.00
64414	PAVEMENT MARKING, CHANNELIZING, EPOXY, 8-INCH	L.F.	300.00	300.00
64481	TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE	L.F.	8,000.00	8,000.00
64484	TEMPORARY PAVEMENT MARKING	L.F.	8,000.00	8,000.00
64487	REMOVING PAVEMENT MARKINGS	L.F.	5,000.00	5,000.00
64489	PAVEMENT MARKING, DIAGONAL, EPOXY, 8-INCH	L.F.	130.00	130.00
64496	PAVEMENT MARKING, ISLAND NOSE, EPOXY	S.F.	828.00	828.00
64503	GEOTEXTILE FABRIC, TYPE DF	S.Y.	180.00	180.00
64601	SAWING EXISTING PAVEMENT	L.F.	110.00	110.00
64602	SAWING CONCRETE PAVEMENT, FULL DEPTH	L.F.	96.00	96.00
90001	HAULING FLY ASH	C.Y.	66,782.00	66,782.00
90002	PLACING FLY ASH	C.Y.	66,782.00	66,782.00
90003	SPECIAL SEED MIX NO. 1	LB.	375.00	375.00
90004	PERMANENT BARRICADES, TYPE III	EACH	32.00	32.00
90005	CONCRETE PAVEMENT GAPS	EACH	3.00	3.00
90006	TEMPORARY FENCE	L.F.	580.00	580.00
90008	SINGLE AGGREGATE ASPHALTIC PAVEMENT, TYPE D1	TON	2,960.00	2,960.00
90009	STOCKPILING SALAVED TOPSOIL	C.Y.	1,000.00	1,000.00
90302	CRUSHED AGGREGATE BASE COURSE CONSTRUCTION STAKING	STA.	130.00	130.00
90303	SUBGRADE CONSTRUCTION STAKING	STA.	200.00	200.00
90328	SETTLEMENT GAGES	EACH	2.00	2.00
90555	REINFORCED CONCRETE APRON ENDWALLS FOR UNDERDRAIN, 6-INCH	EACH	2.00	2.00
90792	PULL BOXES, 12X24-INCH	EACH	7.00	7.00
90797	PULL BOXES, 24 X 36-INCH	EACH	17.00	17.00
90871	LOOP DETECTOR CONDUIT, 1-INCH	L.F.	752.00	752.00
90872	LOOP DETECTOR WIRE	L.F.	1,985.00	1,985.00
90906	POLYSTYRENE INSULATION BOARD, 3-INCH	S.F.	576.00	576.00

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	3A

DETAIL
SUMMARY OF MISCELLANEOUS QUANTITIES

SUMMARY OF EARTHWORK QUANTITIES

STATION	UNCL. EXC. CU. YD.	FILL VOL. CU. YD.	FLY ASH CU. YD.	SELECT BORROW CU. YD.
S.T.H. 441				
592+20				
	72	2,460		
+58				
	169	5,420		
593				
	559	11,828		
594				
	441	11,889		
595				
	64	3,886		
+30				
	95	7,844		
596				
	15	8,231		
597				
		6,031		
598				
		4,576		
599				
	77	1,044		
+20				
	523	4,865		
600				
	444	5,431		
601				
	276	4,807		
602				
	165	4,317		
603				
	109	3,776		
604				
	17	783		
+22				
	78	2,486		
605				
	331	1,809		
606				
	546	754		
607				
	415	781		
608				
	293	948		
609				
	278	1,293		
610				
	174	2,239		
611				
	76	3,507		
612				
	25	4,160		
+85				
	3	854		
613				
	24	6,230		
614				
	14	3,405		
+48				
	24	3,964		
615				
	100	8,235		
616				
	174	9,537		
617				
	151	8,568		
+75				
	52	3,152		
618+00				
SUB-TOTALS	5,784	149,110	0	0

STATION	UNCL. EXC. CU. YD.	FILL VOL. CU. YD.	FLY ASH CU. YD.	SELECT BORROW CU. YD.
S.T.H. 441 CONT.				
618+00				
	148	13,185	4,037	2,804
619				
	306	14,423	8,482	5,941
620				
	306	16,562	10,111	6,451
621				
	296	17,067	11,297	5,771
622				
	278	15,255	11,205	4,050
623				
	815	13,521	11,001	2,519
624				
	318	30	2,302	428
+22				
	1,141	7,353	5,865	1,488
625				
	704	3,371	2,482	889
626+00				
SUB-TOTALS	4,312	100,767	66,782	30,341
TOTALS	10,096	249,877	66,782	30,341

STATION	UNCL. EXC. CU. YD.	FILL VOL. CU. YD.	FLY ASH CU. YD.	SELECT BORROW CU. YD.
S.W. RAMP @ U.S.H. 41				
623+00				
	389	5,979		
624				
	667	3,352		
625				
	259	898		
+50				
	120	435		
626+00				
TOTALS	1,435	10,664		

STATION	UNCL. EXC. CU. YD.	FILL VOL. CU. YD.
N.E. RAMP @ C.T.H. "00"		
592+00		
	45	285
+35		
	47	412
+85		
	6	161
593		
	11	263
+20		
	12	319
+40		
	37	239
+55		
	186	503
+90		
	63	145
594		
	75	182
+12		
	250	787
+54		
	35	139
+60		
	45	203
+68		
	93	637
+94		
	5	124
595		
		1,074
+55		
	5	891
596		
	165	1,678
597		
	483	1,300
598		
	687	1,124
599+00		
TOTALS	2,250	10,466

STATION	UNCL. EXC. CU. YD.	FILL VOL. CU. YD.	FLY ASH CU. YD.	SELECT BORROW CU. YD.
N.W. RAMP @ C.T.H. "00"				
592+50				
	685			
593				
	1,378			
594				
	433	51		
+45				
	425	102		
595				
	828	183		
596				
	889	317		
597				
	624	576		
598				
	219	976		
599+00				
TOTALS	5,481	2,205		

STATION	UNCL. EXC. CU. YD.	FILL VOL. CU. YD.	FLY ASH CU. YD.	SELECT BORROW CU. YD.
S.E. RAMP @ U.S.H. 41				
622+00				
	22	6,241		
623				
	167	5,163		
624				
	77	834		
624+46				
TOTALS	266	12,238		

EARTHWORK QUANTITIES

STATION TO STATION	LOCATION	UNCL. EXC. CU. YD.	FILL CU. YD.	BORROW CU. YD.	FLYASH CU. YD.	SELECT BORROW CU. YD.	REMARKS
592+20 - 626+00	S.T.H. 441	10,096	249,877	144,719	66,782	30,341	
592+00 - 599+00	N.E. RAMP @ C.T.H. "00"	2,250	10,466	9,880			HAUL OUT 2,835 CU. YD. TO S.T.H. 441.
592+00 - 599+00	N.W. RAMP @ C.T.H. "00"	5,481	2,205				
622+00 - 624+46	S.E. RAMP @ U.S.H. 41	266	12,238	14,542			
623+00 - 626+00	S.W. RAMP @ U.S.H. 41	1,435	10,664	12,264			
679+00 - 711+00	C.T.H. '00' STAGE 1	1,410	1,080				FILL TO BE FROM ULTIMATE NORTHSIDE DITCHES.
679+75 - 710+20	C.T.H. '00' STAGE 2	15,451	3,944				HAUL OUT 10,718 CU. YD. TO S.T.H. 441.
679+75 - 710+20	C.T.H. '00' STAGE 3	16,830	1,765				HAUL OUT 14,712 CU. YD. TO S.T.H. 441.
8+00 - 9+68	CHRISTINA STREET	210	40				HAUL OUT 160 CU. YD. TO S.T.H. 441.
589+00 - 594+25	FRENCH ROAD	325	275				
	TOTALS	53,754	292,554	181,405	66,782	30,341	

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: HDGN:D3 QUANTY:312.DGN

WISDOT/CADDS SHEET 42

SUMMARY OF EARTHWORK QUANTITIES

STATION	FILL VOL. CU. YD.
C.T.H. "00" STAGE 1	
679+00	4
680	5
+35	12
681	18
682	6
+30	29
683	22
+45	12
+75	7
684	15
+50	15
685	6
+20	26
686	35
687	74
688	93
689	65
690	59
691	59
692	37
693	28
694	74
695	102
696	65
697	11
+60	
698	
703	4
704	13
705	15
706	15
707	46
708	56
709	37
710	18
700+11	
TOTAL	1,083

STATION	UNC. EXC. CU. YD.	FILL VOL. CU. YD.
C.T.H. "00" STAGE 2		
679+75	40	
680	115	
+35	230	
681	445	
682	155	
+30	350	
683	210	
+45	140	
+75	100	40
684	170	70
+50	205	35
685	95	5
+20	355	5
686	445	
687	520	
688	675	65
689	750	130
690	835	110
691	880	55
692	1,455	5
693	1,545	
694	860	
695	650	5
696	575	20
697	310	70
+60	160	310
698	89	398
+30	128	591
+80	28	131
699	87	375
+45	96	387
700	63	170
+40	139	89
701+00	305	65
702	324	37
703		
SUBTOTALS	13,529	3,168

STATION	UNC. EXC. CU. YD.	FILL VOL. CU. YD.
C.T.H. "00" STAGE 2 CONT.		
703+00	333	93
704	315	139
705	296	148
706	287	139
707	278	102
708	231	74
709	167	74
710	15	7
710+20		
SUB-TOTALS	1,922	776
TOTALS	15,451	3,944
C.T.H. "00" STAGE 3		
679+75	33	
680	81	
+35	139	
681	296	
682	109	
+30	240	1
683	150	1
+45	110	1
+75	98	10
684	190	41
+50	195	41
685	81	15
+20	319	50
686	407	75
687	407	85
688	417	75
689	519	55
690	630	35
691	963	30
692	1,111	10
693	1,018	
694		
SUBTOTALS	7,513	525

STATION	UNC. EXC. CU. YD.	FILL VOL. CU. YD.
C.T.H. "00" STAGE 3 CONT.		
694+00	991	
695	880	
696	795	30
697	410	185
+60	259	275
698	194	240
+30	407	215
+80	133	
699	287	35
+45	200	65
700	170	30
+40	311	15
701	685	
702	830	
703	760	
704	590	
705	425	10
706	300	30
707	260	35
708	205	35
709	150	30
710	75	10
710+20		
SUB-TOTALS	9,317	1,240
TOTALS	16,830	1,765

CHRISTINA STREET

8+00	210	40
9+68		
TOTALS	210	40

FRENCH ROAD

589+00	325	275
594+25		
TOTALS	325	275

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	38

DETAIL
SUMMARY OF MISCELLANEOUS QUANTITIES

CLEARING AND GRUBBING

STATION TO STATION	LOCATION	CLEARING STA.	CLEARING IN. DIA.	GRUBBING STA.	GRUBBING IN. DIA.
592+00 - 596+00	S.T.H. 441	4		4	
596+00 - 623+00	S.T.H. 441		*		*
685+00 - 690+00	C.T.H. "00"		50		50
690+00 - 700+00	C.T.H. "00"		*		*
700+00 - 701+00	C.T.H. "00"	1		1	
701+00 - 710+00	C.T.H. "00"		*		*
	TOTALS	5	50	5	50

* DENOTES METHOD OF MEASUREMENT AND PAYMENT.

REMOVING GUARDRAIL

STATION TO STATION	LOCATION	LIN. FT.
697+90 - 699+40	C.T.H. "00" LT.	150
697+90 - 699+40	C.T.H. "00" RT.	150
	TOTAL	300

REMOVING PAVEMENT

STATION TO STATION	LOCATION	SQ. YD.
680+00 - 710+00	C.T.H. "00" STAGE 2	5,000
680+00 - 710+00	C.T.H. "00" STAGE 3	1,700
	TOTAL	6,700

REMOVING ASPHALTIC SURFACE, BUTT JOINTS

STATION	LOCATION	SQ. YD.
710+00	C.T.H. '00"	110

SAWING EXISTING PAVEMENT AND SAWING CONCRETE PAVEMENT, FULL DEPTH

STATION	LOCATION	EXISTING LIN. FT.	CONCRETE FULL DEPTH LIN. FT.
680+00	C.T.H. "00"		48
8+50	CHRISTINA STREET	20	
590+00	FRENCH ROAD	20	
594+00	FRENCH ROAD	22	
710+00	C.T.H. "00"	48	
709+75	C.T.H. "00"		48
	TOTAL	110	96

REMOVING OLD CULVERTS

STATION	LOCATION	L.S.	REMARKS
698+55	C.T.H. "00"	1	14' X 10' CONCRETE BOX CULVERT.

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: MDGN:DS QUANTY:1312.DGN

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	30

DETAIL
SUMMARY OF MISCELLANEOUS QUANTITIES

CRUSHED AGGREGATE BASE COURSE

STATION TO STATION	LOCATION	ROADWAY TON	SHOULDERS TON
STAGE 1			
680+00 - 710+00	C.T.H. "00" STAGE 1	2,000	
STAGE 2			
680+00 - 710+00	C.T.H. "00" STAGE 2	5,960	890
8+50 - 9+70	CHRISTINA STREET STAGE 2	245	10
590+50 - 591+94	S.W. RAMP @ C.T.H. "00" STAGE 2	425	70
589+90 - 591+05	S.E. RAMP @ C.T.H. "00" STAGE 2	370	45
590+00 - 591+70	FRENCH ROAD STAGE 2	405	20
P.E.'S	C.T.H. "00" STAGE 2		10
P.E.'S	CHRISTINA STREET STAGE 2		20
	STAGE 2 SUB-TOTALS	7,405	1,065
STAGE 3			
680+00 - 710+00	C.T.H. "00" STAGE 3	5,775	915
591+40 - 592+70	N.E. RAMP @ C.T.H. "00" STAGE 3	165	15
591+30 - 592+35	N.W. RAMP @ C.T.H. "00" STAGE 3	235	35
592+45 - 594+00	FRENCH ROAD	375	15
	STAGE 3 SUB-TOTALS	6,550	980
	TOTALS	15,955	2,045

ASPHALTIC FLUMES

STATION	LOCATION	SQ. YD.
592+35	N.E. RAMP 23' RT.	4
701+77	C.T.H. "00" 34' RT.	8
703+05	C.T.H. "00" 34' RT.	8
593+00	FRENCH ROAD 15' LT.	4
593+13	FRENCH ROAD 15' RT.	4
	TOTAL	28

CONCRETE PAVEMENT GAPS

STATION	STAGE	LOCATION	EACH
684+85	2	C.T.H. "00" E.B.	1
705+91	2	C.T.H. "00" E.B.	1
699+85	3	C.T.H. "00" W.B.	1
		TOTAL	3

WATER

LOCATION	MGAL.
STAGE 1 C.T.H. "00"	20
STAGE 2 C.T.H. "00"	85
STAGE 3 C.T.H. "00"	75
FLY ASH S.T.H. 441	910
TOTAL	1,090

CALCIUM CHLORIDE SURFACE TREATMENT

LOCATION	TON
CHRISTINA STREET	0.4
FRENCH ROAD SOUTH	0.6
FRENCH ROAD NORTH	0.5
TOTAL	1.5

PERMANENT BARRICADES, TYPE III

LOCATION	EACH
N.W. RAMP AT C.T.H. "00"	7
S.W. RAMP AT C.T.H. "00"	7
N.E. RAMP AT C.T.H. "00"	5
S.E. RAMP AT C.T.H. "00"	8
S.W. RAMP AT U.S.H. 41	5
TOTAL	32

CONCRETE CORRUGATED MEDIAN

STATION TO STATION	LOCATION	SQ. FT.
705+70 - 707+50	C.T.H. "00"	900

ASPHALTIC QUANTITIES

STATION TO STATION	LOCATION	SINGLE AGGREGATE ASPHALTIC PAVEMENT TYPE "D" TON	ASPHALTIC MATERIAL FOR PLANT MIX TON	REMARKS
STAGE 1				
679+00 - 711+00	C.T.H. "00"	1,425	85.0	TEMPORARY BY-PASS ROAD.
STAGE 2				
680+00 - 684+00	C.T.H. "00"	345	21.0	TEMPORARY GUTTER.
694+10 - 697+00	C.T.H. "00"	10	0.5	
692+60 - 710+00	C.T.H. "00"	215	13.0	
590+50 - 591+94	S.W. RAMP @ C.T.H. "00"	23	1.5	
589+90 - 591+05	S.E. RAMP @ C.T.H. "00"	26	1.5	
590+00 - 591+70	FRENCH ROAD	125	7.5	
8+50 - 9+70	CHRISTINA STREET	81	5.0	
	STAGE 2 SUB-TOTALS	825	50.0	
STAGE 3				
680+00 - 684+00	C.T.H. "00"	345	21.0	TEMPORARY GUTTER.
694+10 - 697+00	C.T.H. "00"	10	0.5	
692+60 - 710+00	C.T.H. "00"	215	13.0	
591+40 - 592+70	N.W. RAMP @ C.T.H. "00"	10	0.5	
591+30 - 592+35	N.E. RAMP @ C.T.H. "00"	5	0.5	
592+45 - 594+00	FRENCH ROAD	125	7.5	
	STAGE 3 SUB-TOTALS	710	43.0	
	TOTALS	2,960	178.0	

CONCRETE CURB & GUTTER, TYPE 'A', 18-INCH
CONCRETE CURB & GUTTER, TYPE 'A' & 'D', 30-INCH
CONCRETE CURB & GUTTER, TYPE 'A' & 'D', 36-INCH

STATION TO STATION	LOCATION	TYPE 'A' 18-INCH LIN. FT.	TYPE 'A' 30-INCH LIN. FT.	TYPE 'D' 30-INCH LIN. FT.	TYPE 'A' 36-INCH LIN. FT.	TYPE 'D' 36-INCH LIN. FT.
STAGE 2						
687+56 - 691+50	C.T.H. "00" LT. MEDIAN	395				
691+50 - 692+20	C.T.H. "00" LT. MEDIAN	80				
692+84 - 694+10	C.T.H. "00" LT. MEDIAN	125				
697+45 - 698+00	C.T.H. "00" LT. MEDIAN	70				
698+00 - 701+80	C.T.H. "00" LT. MEDIAN	385				
703+29 - 705+70	C.T.H. "00" LT. MEDIAN	240				
S.E. QUADRANT	CHRISTINA STREET		35	80		
S.W. QUADRANT	CHRISTINA STREET			50		
685+29 - 691+04	C.T.H. "00" RT.		575			
RADIUS	S.W. RAMP @ C.T.H. "00"		120			
ISLAND	S.W. RAMP @ C.T.H. "00"		165			
RADIUS	S.E. RAMP @ C.T.H. "00"		150			
RADIUS	S.W. QUADRANT @ FRENCH ROAD				65	
RADIUS	S.E. QUADRANT @ FRENCH ROAD					90
						70
	STAGE 2 SUB-TOTALS	1,295	1,045	130	65	160
STAGE 3						
687+56 - 692+22	C.T.H. "00" RT. MEDIAN	465				
692+84 - 694+10	C.T.H. "00" RT. MEDIAN	125				
697+45 - 698+00	C.T.H. "00" RT. MEDIAN	55				
698+00 - 701+86	C.T.H. "00" RT. MEDIAN	385				
703+29 - 705+70	C.T.H. "00" RT. MEDIAN	240				
684+00 - 690+61	C.T.H. "00" LT.		660			
RADIUS	N.W. RAMP @ C.T.H. '00'		145			
ISLAND	N.W. RAMP @ C.T.H. '00'		110			
RADIUS	N.E. RAMP @ C.T.H. '00'				85	
RADIUS	N.W. QUADRANT @ FRENCH ROAD					65
RADIUS	N.E. QUADRANT @ FRENCH ROAD					95
	STAGE 3 SUB-TOTALS	1,270	915	0	85	160
	TOTALS	2,565	1,960	130	150	320

WISDOT/CADDS SHEET 42

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FILE NAME: HDQNID3: QUANTY1312.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

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	3D

DETAIL
SUMMARY OF MISCELLANEOUS QUANTITIES

CROSSDRAIN PIPES

STATION	LOCATION	DIAMETER INCH	LENGTH FEET	TYPE	R.C.C.P. CLASS	INLET ELEVATION	DISCHARGE ELEVATION	APRON ENDWALLS EACH	JOINT TIES EACH	REMARKS
593+00	N.E. RAMP ℄ C.T.H. "00"	18	46	R.C.C.P.	III	731.00	728.50	2	8	
594+45	N.W. RAMP ℄ C.T.H. "00"	24	80	R.C.C.P.	III	732.40	732.10	2	8	SKEW 30° R.H.F.
595+00	S.T.H. 441 N.B.	36	362	R.C.C.P.	III	731.90	723.50	2	8	SKEW 7° R.H.F.
604+30	S.T.H. 441 N.B.	36	176	R.C.C.P.	III	734.70	734.40	2	8	SKEW 4° R.H.F.
617+75	S.T.H. 441 N.B.	36	272	R.C.C.P.	III	732.90	732.60	2	8	SKEW 10° R.H.F.

PRIVATE ENTRANCE PIPES

STATION	LOCATION	P.E.	DIAMETER INCHES	LENGTH FEET	TYPE	CLASS	THICKNESS STEEL INCH	THICKNESS ALUMINUM INCH	APRON ENDWALLS EACH	SOD * SQ. YD.	REMARKS
686+25	C.T.H. "00" RT. E.B.	X	18	64	C.P.	III	0.064	0.060	2	16	STAGE 2.
699+85	C.T.H. "00" LT. W.B.	X	18	54	C.P.	III	0.064	0.060	2	16	STAGE 3.
700+45	C.T.H. "00" LT. W.B.	X	18	50	C.P.	III	0.064	0.060	2	16	STAGE 3.

* QUANTITY INCLUDED ELSEWHERE.

ELECTRICAL

NUMBER	STATION	LOCATION		PULL BOX 12 X 24 INCH EACH	PULL BOX 24 X 36 INCH EACH
70	688+69	C.T.H. "00" E.B.	4.5' LT.	1	
71	699+93	C.T.H. "00" E.B.	4.5' LT.	1	
72	692+16	C.T.H. "00" E.B.	4.5' LT.		1
73	591+98	N.W. RAMP ℄ C.T.H. "00"	22.5' LT.		1
74	592+08	N.W. RAMP ℄ C.T.H. "00"	18.0' RT.		1
76	692+95	C.T.H. "00" W.B.	37.0' LT.		1
77	693+00	C.T.H. "00" E.B.	16.5' LT.		1
78	693+34	C.T.H. "00" E.B.	20.0' LT.	1	
79	692+97	C.T.H. "00" E.B.	37.0' RT.		1
80	692+63	C.T.H. "00" E.B.	33.5' RT.		1
81	692+18	C.T.H. "00" E.B.	35.0' RT.		1
82	694+00	C.T.H. "00" W.B.	37.0' LT.		1
83	696+57	C.T.H. "00" W.B.	37.0' LT.		1
84	696+99	C.T.H. "00" W.B.	36.0' LT.		1
85	697+65	C.T.H. "00" W.B.	47.0' LT.		1
86	697+52	C.T.H. "00" W.B.	7.0' RT.		1
87	698+74	C.T.H. "00" W.B.	5.0' RT.	1	
88	700+99	C.T.H. "00" W.B.	5.0' RT.	1	
89	590+89	S.E. RAMP ℄ C.T.H. "00"	25.0' RT.		1
90	590+91	S.E. RAMP ℄ C.T.H. "00"	17.0' LT.		1
92	696+52	C.T.H. "00" E.B.	37.0' RT.		1
93	696+46	C.T.H. "00" E.B.	20.0' LT.		1
109	701+85	C.T.H. "00" W.B.	15.0' LT.	1	
110	703+45	C.T.H. "00" W.B.	15.0' LT.	1	
			TOTALS	7	17

STORM SEWER SUMMARY

LOCATION FROM	LOCATION TO	DIAMETER INCHES	LENGTH FEET	TYPE	CLASS	INLET ELEVATION	DISCHARGE ELEVATION	STEEL THICKNESS INCH	REMARKS
10	10A	18	126	C.S.C.P.	III	740.40	734.00	0.064	2 ELBOW REQUIRED.
11	11A	18	72	R.C.P. S.S.	III	737.20	735.70		
12	12A	18	104	C.S.C.P.	III	739.00	735.00	0.064	
13	13A	18	174	C.S.C.P.	III	748.00	733.00	0.064	2 ELBOW REQUIRED.
20	20A	12	18	R.C.P. S.S.	III	739.00	738.80		
21	21A	12	20	R.C.P. S.S.	III	738.20	738.00		
22	22A	12	16	R.C.P. S.S.	III	738.45	738.30		
23	23A	18	20	R.C.P. S.S.	III	736.20	736.00		
24	23	18	34	R.C.P. S.S.	III	736.50	736.20		
25	24	12	22	R.C.P. S.S.	III	736.80	736.50		
26	26A	18	42	R.C.P. S.S.	III	735.60	735.30		
27	31	12	22	R.C.P. S.S.	III	735.10	734.90		
28	31	12	16	R.C.P. S.S.	III	735.05	734.90		
31	31A	18	75	R.C.P. S.S.	III	734.90	734.50		
29	29A	12	30	R.C.P. S.S.	III	734.50	734.00		
32	32A	18	50	R.C.P. S.S.	III	732.50	732.00		
33	32	12	20	R.C.P. S.S.	III	732.80	732.50		
34	35	12	12	R.C.P. S.S.	III	732.70	732.60		
35	35A	18	55	R.C.P. S.S.	III	732.60	732.00		
40	42	18	68	R.C.P. S.S.	III	730.90	730.20		
42	41	18	54	R.C.P. S.S.	III	730.10	729.60		
41	44	18	48	R.C.P. S.S.	III	729.50	729.00		
43	44	12	15	R.C.P. S.S.	III	731.70	731.50		
45	44	12	46	R.C.P. S.S.	III	731.85	731.40		
44	44A	24	96	R.C.P. S.S.	III	729.00	728.00		
46	46A	18	50	R.C.P. S.S.	III	730.80	730.30		
47	49	12	48	R.C.P. S.S.	III	733.00	732.30		
48	49	12	36	R.C.P. S.S.	III	732.70	732.30		
49	49A	18	66	R.C.P. S.S.	III	732.30	731.50		
50	51	12	12	R.C.P. S.S.	III	733.80	733.70		
51	51A	18	64	R.C.P. S.S.	III	733.70	733.00		

LOOP DETECTOR CONDUIT, 1-INCH AND WIRE

LOOP NO.	SIZE	NO. TURNS	1-INCH CONDUIT LIN. FT.	LOOP DETECTOR WIRE LIN. FT.
11	6' X 20'	4	58	215
12	6' X 20'	4	58	215
21	6' X 30'	3	84	225
32	6' X 30'	2	94	170
42	6' X 30'	3	96	240
43	6' X 30'	3	84	230
51	6' X 20'	4	58	220
52	6' X 20'	3	58	165
61	6' X 30'	2	78	150
62	6' X 30'	2	84	155
		TOTALS	752	1,985

SETTLEMENT GAGES

STATION	LOCATION	EACH	REMARKS
593+50	S.T.H. 441 MEDIAN	1	NATURAL GROUND.
593+55	S.T.H. 441 MEDIAN	1	ELEVATION 751.0.
	TOTAL	2	

NONMETALLIC METALLIC CONDUIT

LOCATION FROM	LOCATION TO	1-INCH LIN. FT.	3-INCH LIN. FT.
70	71	226	
71	82	124	
72	73		70
73	74		40
74	75	150	
74	76		40
76	77		55
77	78	35	
77	79		50
79	80		30
80	81		45
81	72		40
76	82		100
82	83		505
83	84		40
84	85		65
85	86		55
86	87	120	
87	88	225	
86	89		70
89	90		40
90	91	150	
90	92		80
92	93		55
93	83		50
82	101		50
109	LEFT		57
109	RIGHT		60
110	LEFT		60
110	RIGHT		45
FRENCH ROAD SOUTH			70
FRENCH ROAD NORTH			95
TOTALS		1,030	1,867

LEVELS OK - 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,

FILE NAME: H:\DGN\D3 QUANTY\312.DGN

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	3E

DETAIL
SUMMARY OF MISCELLANEOUS QUANTITIES

MANHOLES, INLETS AND COVERS

STRUCTURE NUMBER	STATION	LOCATION		STRUCTURE	STRUCTURE TYPE	COVER	GRATE	TOP OF COVER ELEVATION	TOP OF STRUCTURE ELEVATION	FLOWLINE ELEVATION	DEPTH FEET	BOTTOM OF STRUCTURE ELEVATION
10	600+00	S.T.H. 441 N.B.		INLET	8	MS		743.40		740.40	3.0	
10A	600+00	S.T.H. 441 N.B.		C.S. ENDWALL	18-INCH					734.00		
11	607+00	S.T.H. 441 N.B.		INLET	8	MS		740.20		737.20		
11A	607+00	S.T.H. 441 N.B.		ENDWALL	18-INCH					735.70		
12	614+00	S.T.H. 441 N.B.		INLET	8	MS		742.00		739.00	3.0	
12A	614+00	S.T.H. 441 N.B.		C.S. ENDWALL	18-INCH					735.00		
13	620+50	S.T.H. 441 N.B.		INLET	8	MS		751.00		748.00	3.0	
13A	620+50	S.T.H. 441 N.B.		C.S. ENDWALL	18-INCH					733.00		
20	685+00	C.T.H. "00" W.B.	25' LT.	INLET	3	H	RIGHT	742.93	741.93	739.00	3.0	738.93
20A	685+00	C.T.H. "00" W.B.	42' LT.	ENDWALL	12-INCH					738.80		
21	687+00	C.T.H. "00" W.B.	25' LT.	INLET	3	H	RIGHT	742.06	741.06	738.20	3.0	738.06
21A	687+00	C.T.H. "00" W.B.	45' LT.	ENDWALL	12-INCH					738.00		
22	687+00	C.T.H. "00" E.B.	25' RT.	INLET	3	H	LEFT	742.06	741.06	738.45	3.0	738.06
22A	687+00	C.T.H. "00" E.B.	40' RT.	ENDWALL	12-INCH					738.30		
23	689+25	C.T.H. "00" E.B.	35' RT.	INLET	3	H	LEFT	740.63	739.63	736.20	3.5	736.13
24	689+25	C.T.H. "00" E.B.	1' LT.	INLET	3	H	RIGHT	740.83	739.83	736.50	3.4	736.43
25	689+25	C.T.H. "00" W.B.	1' RT.	INLET	3	H	LEFT	740.82	739.82	736.80	3.0	736.80
23A	689+25	C.T.H. "00" E.B.	55' RT.	ENDWALL	18-INCH					736.00		
26	690+75	C.T.H. "00" W.B.	1' RT.	INLET	3	H	LEFT	739.59	738.59	735.70	3.0	735.59
26A	690+75	C.T.H. "00" W.B.	40' RT.	ENDWALL	18-INCH					735.30		
27	692+10	C.T.H. "00" E.B.	15' LT.	INLET	3	H	LEFT	738.28	737.28	735.10	3.0	734.28
28	692+00	C.T.H. "00" E.B.	1' LT.	INLET	3	H	RIGHT	738.56	737.56	735.05	3.0	734.56
31	691+85	C.T.H. "00" E.B.	12' LT.	MANHOLE	1	C		738.90	737.65	734.90	3.0	734.65
31A	691+70	C.T.H. "00" E.B.	90' LT.	ENDWALL	18-INCH					734.50		
29	691+75	C.T.H. "00" E.B.	40' RT.	INLET	3	H	LEFT	738.57	737.57	734.50	3.1	734.50
29A	691+70	C.T.H. "00" E.B.	70' RT.	ENDWALL	12-INCH					734.00		
32	591+50	S.W. RAMP @ C.T.H. "00"	25' LT.	INLET	3	H	LEFT	736.68	735.68	732.50	3.2	732.50
32A	591+40	S.W. RAMP @ C.T.H. "00"	15' RT.	ENDWALL	18-INCH					732.00		
34	694+00	C.T.H. "00" W.B.	13' RT.	INLET	3	H	RIGHT	736.62	735.62	732.70	3.0	732.62
33	591+65	S.W. RAMP @ C.T.H. "00"	32' LT.	INLET	8	MS		737.50		732.80	4.7	
35	694+00	C.T.H. "00" E.B.	13' LT.	INLET	3	H	LEFT	736.62	735.62	732.60	3.0	732.60
35A	694+00	C.T.H. "00" E.B.	55' RT.	ENDWALL	18-INCH					732.00		
40	696+80	C.T.H. "00" E.B.	18' LT.	ENDWALL	18-INCH					730.90		
42	697+50	C.T.H. "00" W.B.	12' RT.	INLET	3	H	LEFT	735.06	734.06	730.10	4.0	730.10
41	698+05	C.T.H. "00" E.B.	20' LT.	INLET	8	MS		735.50	735.50	729.50	6.0	729.50
44	698+60	C.T.H. "00" E.B.	20' LT.	MANHOLE	1	J		735.70	734.45	729.00	5.7	728.75
44A	698+60	C.T.H. "00" E.B.	76' RT.	ENDWALL	24-INCH					728.00		
43	698+50	C.T.H. "00" W.B.	1' RT.	INLET	3	H	RIGHT	735.69	734.69	731.70	3.0	731.69
45	699+00	C.T.H. "00" E.B.	1' LT.	INLET	3	H	LEFT	735.85	734.85	731.85	3.0	731.85
46	590+50	S.E. RAMP @ C.T.H. "00"	16' RT.	INLET	3	H	RIGHT	734.82	733.82	730.80	3.0	730.82
46A	590+50	S.E. RAMP @ C.T.H. "00"	65' RT.	ENDWALL	18-INCH					730.30		
47	700+60	C.T.H. "00" E.B.	22' LT.	INLET	8	MS		736.00		733.00	3.0	
48	701+45	C.T.H. "00" W.B.	4' RT.	INLET	3	H	RIGHT	736.53	735.53	732.70	3.0	732.53
49	701+10	C.T.H. "00" E.B.	13' LT.	INLET	3	H	LEFT	736.18	735.18	732.30	3.0	732.18
49A	701+10	C.T.H. "00" E.B.	44' RT.	ENDWALL	18-INCH					731.50		
50	703+35	C.T.H. "00" W.B.	13' RT.	INLET	3	H	RIGHT	737.03	736.03	733.80	3.0	733.03
51	703+35	C.T.H. "00" E.B.	3' LT.	INLET	3	H	LEFT	737.18	736.18	733.70	3.0	733.18
51A	703+35	C.T.H. "00" E.B.	60' RT.	ENDWALL	18-INCH					733.00		

CONCRETE SURFACE DRAINS

STATION	LOCATION	CU. YD.
591+35	S.W. RAMP AT C.T.H. "00" LT.	2
592+15	N.W. RAMP AT C.T.H. "00" LT.	2
	TOTAL	4

CONCRETE PAVEMENT 8-INCH

STATION TO STATION	LOCATION	SQ. YD.
591+75 - 592+70	N.W. RAMP @ C.T.H. "00"	450
591+75 - 592+40	N.E. RAMP @ C.T.H. "00"	320
	TOTAL	770

CONCRETE PAVEMENT 9-INCH

STATION TO STATION	LOCATION	SQ. YD.
590+50 - 591+96	S.W. RAMP @ U.S.H. 41	750
589+96 - 591+04	S.E. RAMP @ U.S.H. 41	675
	TOTAL	1,425

CONCRETE PAVEMENT 10-INCH

STATION TO STATION	LOCATION	SQ. YD.
684+00 - 710+00	C.T.H. "00" E.B. STAGE 2	7,935
684+00 - 710+00	C.T.H. "00" W.B. STAGE 3	7,985
	TOTAL	15,920

SALVAGED TOPSOIL, FERTILIZER, SEED AND MULCH

STATION TO STATION	LOCATION	SALVAGED TOPSOIL SQ. YD.	FERTILIZER TYPE "B" CWT.	SEED NO. 10 LBS.	SEED NO. 30 LBS.	SEED NO. 40 LBS.	SPECIAL SEED MIX NO. 1 LBS.	TEMPORARY SEED MIX NO. 20 LBS.	MULCH TON	STOCKPILING SALVAGED TOPSOIL CU. YD.
592+20 - 626+00	S.T.H. 441	12,500	36.0					770	23.0	
592+20 - 626+00	S.T.H. 441	40,600	26.0	250	150		375		16.5	1,000
592+00 - 599+00	N.W. RAMP @ C.T.H. "00"		2.0					37	1.0	
592+00 - 599+00	N.W. RAMP @ C.T.H. "00"	5,200	3.5		95				2.0	
592+00 - 599+00	N.E. RAMP @ C.T.H. "00"		2.0					40	1.5	
592+00 - 599+00	N.E. RAMP @ C.T.H. "00"	5,500	3.5	40	50				2.5	
622+00 - 626+00	S.E. RAMP @ U.S.H. 41		1.0					20	0.5	
622+00 - 626+00	S.E. RAMP @ U.S.H. 41	4,400	3.0	80					2.0	
623+00 - 626+00	S.W. RAMP @ U.S.H. 41		1.0					16	0.5	
623+00 - 626+00	S.W. RAMP @ U.S.H. 41	2,700	2.0	40					1.0	
679+80 - 710+25	C.T.H. "00" STAGE 2	8,400	5.5	55		70			3.5	
679+00 - 711+00	C.T.H. "00" STAGE 3	8,920	5.5	95		30			3.5	
8+40 - 9+50	CHRISTINA STREET	310	0.2			6			0.1	
589+90 - 591+48	FRENCH ROAD SOUTH	660	0.4			9			0.3	
592+50 - 594+50	FRENCH ROAD NORTH	655	0.4			12			0.3	
	TOTALS	89,845	92.0	560	295	127	375	883	58.2	1,000

CHAIN LINK FENCE, 5-FOOT

STATION TO STATION	LOCATION	LIN. FT.	10-FOOT POSTS EACH
593+00 - 593+45	S.T.H. 441 LT.	135	
593+45 - 597+00	S.T.H. 441 LT.	400	
597+00 - 605+67	S.T.H. 441 LT.	880	
605+67 - 622+00	S.T.H. 441 LT.	1,640	
622+00 - 625+00	S.T.H. 441 LT.	315	20
625+00 - 631+25	S.T.H. 441 LT.	470	40
631+25 - 634+50	S.T.H. 441 LT.	285	
634+50 - 640+00	S.T.H. 441 LT.	550	
592+15 - 592+80	S.T.H. 441 RT.	100	
592+80 - 595+00	S.T.H. 441 RT.	220	
595+00 - 595+68	S.T.H. 441 RT.	70	
595+68 - 618+20	S.T.H. 441 RT.	2,240	
618+20 - 618+20	S.T.H. 441 RT.	35	
618+20 - 623+50	S.T.H. 441 RT.	540	5
623+50 - 629+50	S.T.H. 441 RT.	490	55
629+50 - 629+50	S.T.H. 441 RT.	100	
	TOTALS	8,470	120

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

4-12-90
7-20-90

FILE NAME: HDGN1D3 QUANTY1312.DGN

WISDOT/CADDS SHEET 42

DETAIL
SUMMARY OF MISCELLANEOUS QUANTITIES

EROSION CONTROL QUANTITIES

STATION TO STATION	LOCATION	SOD SQ. YD.	EROSION MAT * SQ. YD.	SILT FENCE ** LIN. FT.	MEDIUM RANDOM RIPRAP CU. YD.
S.T.H. 441					
593+00 - 600+00	MEDIAN DITCH		720		
592+50 - 598+50	RIGHT DITCH	400			
593+00 - 594+70	LEFT DITCH		110		
594+90	CROSS DRAIN LT. & RT.	80			45
594+85 - 599+00	LEFT DITCH	290			
600+00	MEDIAN DRAIN (INLET)			80	1
600+00 - 604+20	RIGHT DITCH		425		
602+00 - 604+20	LEFT DITCH		150		
604+20	CROSS DRAIN LT. & RT.	60			
602+00 - 607+00	MEDIAN DITCH		500		
604+40 - 606+00	LEFT DITCH		90		
604+40 - 607+00	RIGHT DITCH		170		
607+00	MEDIAN DRAIN (INLET)	90		80	
607+00 - 613+00	MEDIAN DITCH		600		
610+00 - 617+00	LEFT DITCH		700		
611+00 - 614+00	RIGHT DITCH		200		
614+00	MEDIAN DRAIN (INLET)			80	2
614+00 - 619+50	MEDIAN DITCH		550		
617+80	CROSS DRAIN DRAIN LT. & RT.	140			
618+00 - 623+00	RIGHT DITCH	500			
618+00 - 621+00	LEFT DITCH		200		
620+00	MEDIAN DRAIN (INLET)			80	2
620+00 - 626+00	MEDIAN DITCH		500		
N.W. RAMP @ C.T.H. "00"					
592+50 - 594+25	LEFT DITCH		120		
593+00 - 594+40	RIGHT DITCH		90		
594+40	CROSS DRAIN LEFT	45			
594+30 - 598+00	LEFT DITCH		300		
C.T.H. "00" STAGE 2					
687+00	PIPE END RIGHT	10			
687+00 - 689+10	RIGHT DITCH		140		
689+10	PIPE END RIGHT	10			
689+10 - 691+20	RIGHT DITCH		210		
590+50	LEFT DITCH S.W. RAMP			25	
590+50	RIGHT DITCH S.W. RAMP			25	
591+50	PIPE END RIGHT S.W. RAMP	10			
590+50	PIPE END RIGHT S.E. RAMP	10			
693+00 - 694+00	RIGHT DITCH		120		
698+50	PIPE END RIGHT				10
701+10	PIPE END RIGHT				10
698+50 - 702+00	ALONG SLOPE RIGHT			350	
703+50	PIPE END RIGHT				10
703+50 - 710+50	ALONG SLOPE RIGHT			700	
N.E. RAMP @ C.T.H. "00"					
592+00 - 593+00	RIGHT DITCH		100		
593+00 - 595+00	RIGHT DITCH	200			
596+00 - 600+00	RIGHT DITCH	460			
C.T.H. "00" STAGE 3					
685+50	PIPE END LEFT	10			
687+00 - 690+60	LEFT DITCH		240		
690+60	PIPE END LEFT	10			
690+60 - 692+00	LEFT DITCH		60		
692+00	PIPE END LEFT	10			
697+50	PIPE END LEFT	10			
698+40 - 700+00	LEFT DITCH		110		
708+00 - 711+00	LEFT DITCH		235		
711+00	ACROSS DITCH			25	
696+80	AT PIPE			20	
	C.T.H. "00" MEDIAN	2,140			
	S.W. RAMP AT C.T.H. "00"	105			
	TOTALS	4,590	6,640	1,465	80

* DELIVERED AND INSTALLED.
** DELIVERED, INSTALLED AND MAINTAINED.

TEMPORARY FENCE

STATION	LOCATION	LIN. FT.
593+00	S.T.H. 441 LT. R/W TO RT. R/W	580

LANDMARK REFERENCE MONUMENTS

STATION	LOCATION	EACH	REMARKS
702+50	C.T.H. "00" & FRENCH ROAD	4	S.E. CORNER SEC. 19, T 21 N, R 18 E.

TRAFFIC CONTROL

LOCATION	STAGE	ARROWBOARDS DAYS	DRUMS DAYS	SIGNS DAYS	BARRICADES TYPE III DAYS	WARNING LIGHTS, TYPE "A" DAYS	WARNING LIGHTS, TYPE "C" DAYS
C.T.H. "00"	1	28	1,106	170	56	112	126
C.T.H. "00"	2	84	7,098	1,555	336	672	1848
C.T.H. "00"	3	84	2,394	1,470	462	924	1848
U.S.H. 41	FLYASH		490	385	70	140	490
	TOTALS	196	11,088	3,580	924	1,848	4,312

H.E.S. CONCRETE PAVEMENT, 10-INCH

STATION	LOCATION	SQ. YD.	REMARKS
684+85	C.T.H. "00" E.B.	80	STAGE 2.
699+85	C.T.H. "00" E.B.	80	STAGE 3.
702+51	C.T.H. "00" E.B.	80	STAGE 2.
705+91	C.T.H. "00" E.B.	80	STAGE 2.
702+51	C.T.H. "00" W.B.	80	STAGE 3.
702+51	C.T.H. "00" MEDIAN	100	STAGE 3.
	TOTAL	500	

PAVEMENT TIES

STATION	LOCATION	EACH
709+95	C.T.H. '00"	16

CRUSHED AGGREGATE BASE COURSE CONSTRUCTION STAKING

STATION TO STATION	LOCATION	STATION
680+00 - 710+00	C.T.H. "00" STAGE 1	30
680+00 - 710+00	C.T.H. "00" STAGE 2	35
680+00 - 710+00	C.T.H. "00" STAGE 3	35
592+00 - 592+69	N.W. RAMP AT C.T.H. "00"	3
590+50 - 591+85	S.W. RAMP AT C.T.H. "00"	4
589+90 - 591+00	S.E. RAMP AT C.T.H. "00"	4
591+85 - 592+45	N.E. RAMP AT C.T.H. "00"	4
8+50 - 10+00	CHRISTINA STREET	5
590+00 - 594+00	FRENCH ROAD	10
	TOTAL	130

SUBGRADE CONSTRUCTION STAKING

STATION TO STATION	LOCATION	STATION
592+60 - 626+00	S.T.H. 441 N.B.	35
592+60 - 626+00	S.T.H. 441 S.B.	35
592+50 - 599+00	N.W. RAMP AT C.T.H. "00"	8
592+00 - 599+00	N.E. RAMP AT C.T.H. "00"	8
623+00 - 627+00	S.W. RAMP AT U.S.H. 41	5
622+00 - 625+00	S.E. RAMP AT U.S.H. 41	4
680+00 - 710+00	C.T.H. "00" STAGE 1	30
680+00 - 710+00	C.T.H. "00" STAGE 2	30
680+00 - 710+00	C.T.H. "00" STAGE 3	30
8+50 - 10+00	CHRISTINA STREET	5
590+00 - 594+00	FRENCH ROAD	10
	TOTAL	200

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

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	3G

DETAIL
SUMMARY OF MISCELLANEOUS QUANTITIES

TEMPORARY PAVEMENT MARKING

STATION TO STATION	LOCATION	LIN. FT.	REMARKS
675+00 - 715+00	C.T.H. "00" STAGE 1	8,000	& DOUBLE YELLOW.

TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE

LOCATION	STAGE	LIN. FT.	REMARKS
C.T.H. "00" E.B.	2	8,000	& DOUBLE YELLOW.

REMOVING PAVEMENT MARKING

STATION TO STATION	LOCATION	TYPE	LIN. FT.
STAGE 1			
677+00 - 713+00	C.T.H. '00' W.B. LANE LINE		900
STAGE 2			
678+50 - 711+50	C.T.H. '00' W.B. EDGE LINE		3,300
677+50 - 680+00	C.T.H. '00' W.B. CENTER LINE		500
711+00 - 712+50	C.T.H. '00' W.B. CENTER LINE		300
		TOTAL	5,000

PAVEMENT MARKING, EPOXY

STATION TO STATION	LOCATION	4-INCH YELLOW CENTERLINE LIN. FT.	4-INCH WHITE EDGELINE LIN. FT.	4-INCH WHITE DASHED LIN. FT.	8-INCH WHITE CHANNELIZATION LIN. FT.	8-INCH YELLOW DIAGONAL LIN. FT.	4-INCH YELLOW CURBLINE LIN. FT.	SAFETY ISLAND NOSE MARKING SQ. FT.
676+00 - 687+50	C.T.H. "00" STAGE 3	2,300						
679+00 - 684+00	C.T.H. "00" STAGE 3		1,000					
680+00 - 710+00	C.T.H. "00" STAGE 3 LT.& RT.			1,600				
682+00 - 684+25	C.T.H. "00" STAGE 3					130		
689+50 - 691+00	C.T.H. "00" STAGE 3				150			
692+50 - 697+00	C.T.H. "00" STAGE 3 LT.		450					
692+60 - 697+35	C.T.H. "00" STAGE 3 RT.		475					
687+50 - 689+00	C.T.H. "00" STAGE 3	450						
689+00 - 692+35	C.T.H. "00" STAGE 3						670	
692+95 - 696+55	C.T.H. "00" STAGE 3						720	
692+20 - 696+55	C.T.H. "00" STAGE 3 LT.	435						
693+00 - 696+30	C.T.H. "00" STAGE 3 RT.	330						
697+42 - 701+85	C.T.H. "00" STAGE 3						928	
698+00 - 713+00	C.T.H. "00" STAGE 3 LT.		1,370					
698+38 - 713+00	C.T.H. "00" STAGE 3 RT.		1,360					
701+00 - 701+90	C.T.H. "00" STAGE 3 RT.				90			
703+29 - 707+50	C.T.H. "00" STAGE 3						842	
703+30 - 703+90	C.T.H. "00" STAGE 3				60			
687+50	C.T.H. "00" STAGE 3							37
692+89	C.T.H. "00" STAGE 3							30
696+56	C.T.H. "00" STAGE 3							30
701+92	C.T.H. "00" STAGE 3							46
703+23	C.T.H. "00" STAGE 3							42
705+68 - 707+13	C.T.H. "00" STAGE 3							643
707+50 - 713+00	C.T.H. "00" STAGE 3	1,100						
	TOTALS	4,615	4,655	1,600	300	130	3,160	828

POLYSTYRENE INSULATION BOARD, 3-INCH

STATION	LOCATION	SQ. FT.
701+10	C.T.H. "00" E.B. 23' RT.	288
703+35	C.T.H. "00" E.B. 10' RT.	288
	TOTAL	576

PIPE UNDERDRAIN 6-INCH, PERFORATED AND UNPERFORATED, CONCRETE ENDWALLS, GEOTEXTILE FABRIC TYPE "DF" AND GRANULAR BACKFILL

LOCATION	PIPE UNDERDRAIN, 6-INCH PERFORATED LIN. FT.	PIPE UNDERDRAIN, 6-INCH UNPERFORATED LIN. FT.	CONCRETE ENDWALLS EACH	GEOTEXTILE FABRIC TYPE "DF" SQ. YD.	GRANULAR BACKFILL CU. YD.	REMARKS
NORTH ABUTMENT B-44-127 & 128	80	110	1	90	15	DISCHARGE TO N.E. RAMP DITCH.
SOUTH ABUTMENT B-44-127 & 128	80	20	1	90	15	DISCHARGE TO LEFT MAINLINE DITCH.
TOTALS	160	130	2	180	30	

NOTE: SEE LONGITUDINAL SECTION FOR ABUTMENTS AT S.T.H. 441 OVER C.T.H. "00" FOR LOCATION.

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

2-28-90
2-15-90
7-20-90
7-24-90

REVISION DATE	R/W PROJECT NUMBER	SHEET NUMBER
10/25/85 4/10/86 9/15/87 3/14/88 5/2/88	4685-02-00	4.1
	FEDERAL PROJECT NUMBER	
	PLAT OF RIGHT OF WAY REQUIRED FOR C.T.H. "KK" – U.S.H. "41" TRI-COUNTY EXPRESSWAY OUTAGAMIE CO. DATE	
	CONSTRUCTION PROJECT NUMBER 4685-2-72 4	

SCHEDULE OF LANDS AND INTERESTS REQUIRED

NOTE:
* - INTERESTS REQUIRED FOR THESE PARCELS ACQUIRED UNDER PROJECT 4685-02-40

PARCEL NUMBER	OWNER	SHEET NUMBER	INTEREST REQUIRED	L.H.E ACRES		ACRES REQUIRED			TOTAL REMAINING ACRES	OPERATIONS PROJECT I.D
				TEMP.	PERM	NEW R/W REQUIRED	EXISTING R/W	TOTAL R/W REQUIRED		
1	VILLAGE OF KIMBERLY	4.8,4.10,4.11	FEE TITLE & ACCESS RIGHTS			0.44	—	0.44	30.58 (GOV'T. LOT 7)	
2	JULIA VAN DE VOORT, ET. AL.	4.8, 4.9	FEE TITLE & ACCESS RIGHTS			6.76	0.48	7.24	39.86	
3	JULIA VAN DE VOORT, ET. AL.	4.9,4.10,4.11	FEE TITLE & ACCESS RIGHTS			9.55	0.68	10.23	15.31	
4	KIMBERLY CLARK CORP.	4.8,4.10,4.11	RELEASE OF RIGHTS	—	—	—	—	—	—	
5										
6	RIVERSIDE PAPER CORP.	4.11	FEE TITLE ACCESS RIGHTS & L.H.E	0.39		8.39	0.76	9.15	18.31	
*	C. & N.W. TRANSPORTATION CO.	4.11	HIGHWAY EASEMENT		0.84	—	—	—	—	
8	KAMPO'S APPLETON WHS. INC.	4.11	FEE TITLE & ACCESS RIGHTS			1.59	0.15	1.74	2.14	
9	JEFFEREY DOROW	4.11, 4.12	FEE TITLE			0.01	—	0.01	0.19	
10	ROBERT A. LUKOW	4.11, 4.12	FEE TITLE			0.03	—	0.03	0.20	
11	LEON FISCHER	4.12	FEE TITLE			0.05	—	0.05	0.30	
12	LLOYD WORDELL	4.12	FEE TITLE			0.03	—	0.03	0.54	
13	LEON FISCHER	4.12	FEE TITLE			0.02	—	0.02	0.54	
14										
*	WISCONSIN BELL, INC.	4.12	RELEASE OF RIGHTS	—	—	—	—	—	—	
16										
17	JAMES E. SPRINGBORN	4.12	FEE TITLE			0.03	–	0.03	0.43	
18	MARY HIETPAS	4.13	FEE TITLE			0.43	0.05	0.48	—	
*	C. & N.W. TRANSPORTATION CO.	4.13	HIGHWAY EASEMENT		0.30	—	—	—	—	
20	MARTHA SIEKMAN	4.13	FEE TITLE			0.15	—	0.15	6.35	
21										
22										
23	SYLVESTER BROCKMAN	4.14	FEE TITLE & ACCESS RIGHTS			0.01	0.10	0.11	0.32	
24	JEROME BROCKMAN	4.14	FEE TITLE & ACCESS RIGHTS			0.02	0.10	0.12	0.31	
25	LEROY ZIESEMER	4.14	RELEASE OF RIGHTS	—	—	—	—	—	—	
26										
27	GORDON BROCKMAN	4.14	FEE TITLE & ACCESS RIGHTS			0.03	0.10	0.13	0.30	
28	MAURICE BROCKMAN	4.14	FEE TITLE & ACCESS RIGHTS			0.04	0.10	0.14	0.29	
29	NORMAN COENEN	4.14, 4.15, 4.16	FEE TITLE & ACCESS RIGHTS			0.44	0.17	0.61	1.68	
30	CLEMENT ROMENESKO	4.15, 4.16	FEE TITLE & ACCESS RIGHTS			0.19	0.31	0.50	3.24	
31										
32	JOSEPH BROCKMAN, JR.	4.14, 4.16	FEE TITLE			0.81	—	0.81	61.46	
33	FRANCIS WEYENBERG	4.15	FEE TITLE & ACCESS RIGHTS			3.48	2.97	6.45	30.79	
34	HATTIE SCHUMACHER	4.15	FEE TITLE & ACCESS RIGHTS			0.58	0.12	0.70	55.88	
35										

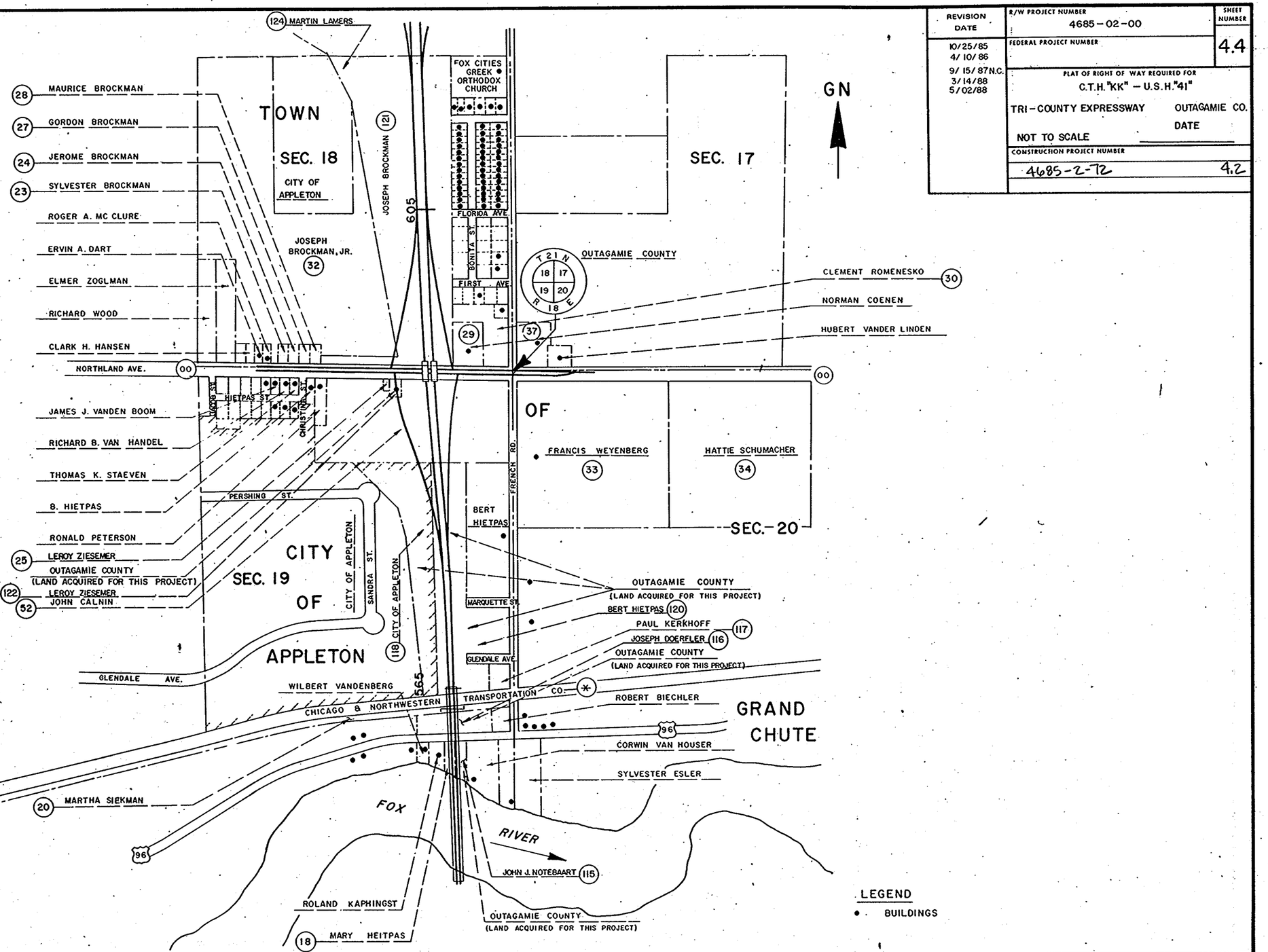
PARCEL NUMBER	OWNER	SHEET NUMBER	INTEREST REQUIRED	L.H.E ACRES		ACRES REQUIRED			TOTAL REMAINING ACRES	OPERATIONS PROJECT I.D
				TEMP.	PERM	NEW R/W REQUIRED	EXISTING R/W	TOTAL R/W REQUIRED		
36										
37	NORMAN COENEN	4.15, 4.16	FEE TITLE & ACCESS RIGHTS			0.15	0.35	0.50	2.38	
38	MARTIN LAMERS	4.16, 4.17, 4.18 4.19, 4.20	FEE TITLE			19.34	0.91	20.25	15.58	
39	FRANCIS WEYENBERG	4.16, 4.17, 4.18	FEE TITLE			0.91	0.91	1.82	48.51	
40										
41	HARVEY FOTH	4.17, 4.18	FEE TITLE			0.68	0.97	1.65	35.03	
42	HARRIET THYSSEN	4.17, 4.18, 4.20	FEE TITLE			14.80	0.79	15.59	20.23	
43										
44	JOHN VAN GROLL	4.19, 4.20	FEE TITLE			0.09	–	0.09	72.84	
45										
46										
*	CITY OF APPLETON	4.8, 4.14	RELEASE OF RIGHTS	—	—	—	—	—	—	
48										
49										
50										
51										
52	JOHN CALNIN	4.14, 4.15	FEE TITLE & ACCESS RIGHTS			11.16	—	—	13.97 (EXCLUSIVE OF OLD HIGHWAY R/W)	
53										
54										
*	WIS. ELECTRIC POWER CO.	4.12, 4.14 4.15, 4.16	RELEASE OF RIGHTS	—	—	—	—	—	—	
56										

REVISION DATE	P/W PROJECT NUMBER	SHEET NUMBER
10/25/85 4/10/86 9/15/87 N.C. 3/14/88 5/02/88 N.C.	4685-02-00 FEDERAL PROJECT NUMBER	4.2
	PLAT OF RIGHT OF WAY REQUIRED FOR C.T.H. "KK"—U.S.H. "41" TRI-COUNTY EXPRESSWAY OUTAGAMIE CO. SCALE 1" DATE	
	CONSTRUCTION PROJECT NUMBER 4685-2-72	4.1

SCHEDULE OF LANDS AND INTERESTS ACQUIRED PRIOR TO JAN. 1, 1986

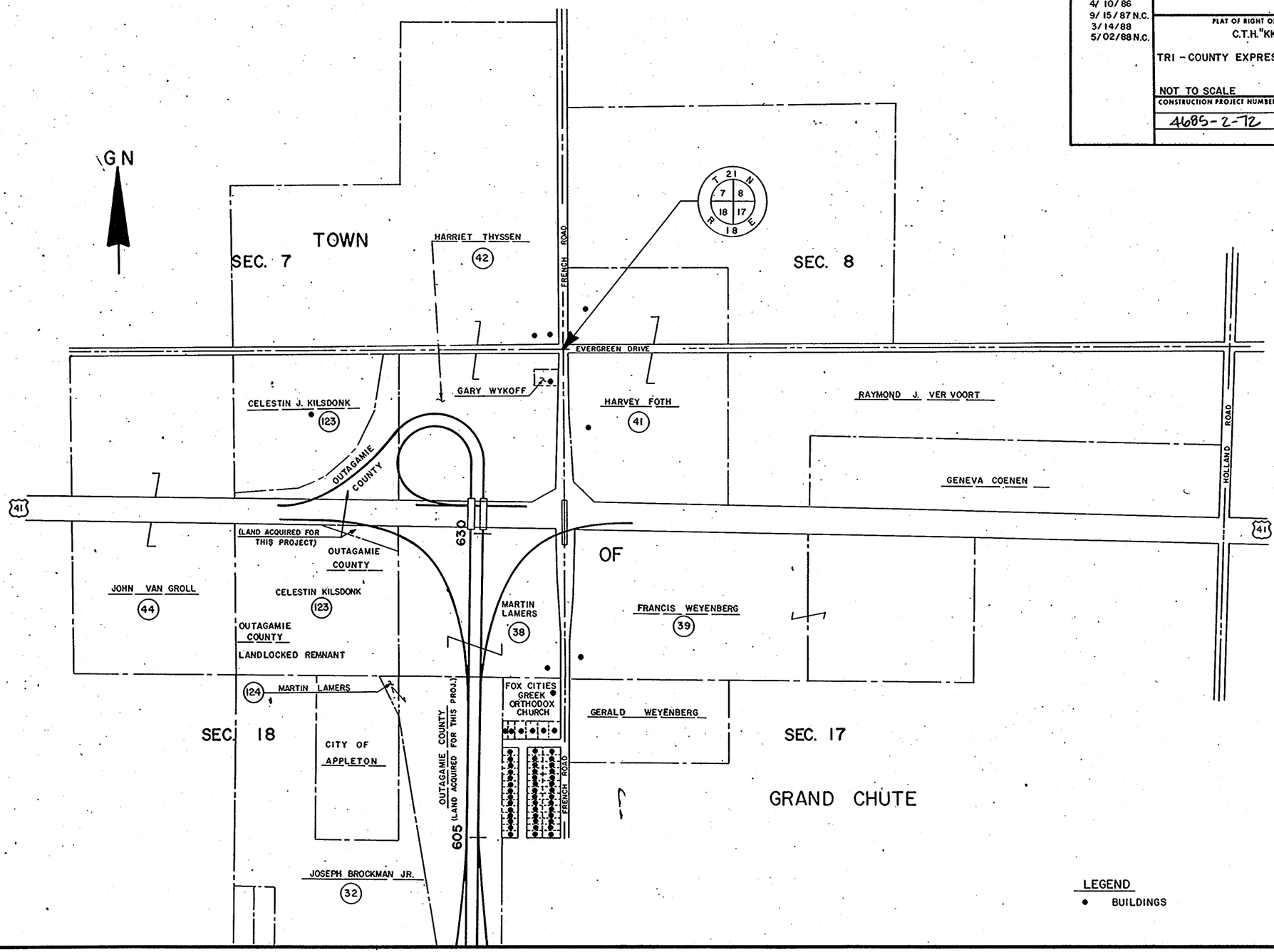
PARCEL NUMBER	OWNER	SHEET NUMBER	INTEREST REQUIRED	L.H.E. ACRES		ACRES REQUIRED			TOTAL REMAINING ACRES	OPERATIONS PROJECT I.D.
				TEMP.	PERM.	NEW R/W REQUIRED	EXISTING R/W	TOTAL R/W REQUIRED		
100	EUNICE M. DIETZEN	4.6, 4.7	FEE TITLE & ACCESS RIGHTS	—	—	13.64	1.52	15.16	24.84	
101	DONALD DEVALK, ET. AL.	4.6, 4.7	FEE TITLE & ACCESS RIGHTS	—	—	4.65	0.76	5.41	13.42	
102	GLEN GRIESBACH	4.7, 4.8	FEE TITLE	—	—	14.19	0.46	14.65	5.35	
103	NORBERT LeNOBLE	4.8	FEE TITLE & ACCESS RIGHTS	—	—	1.97	0.48	2.45	3.86	
104	JOHN WELHOUSE SR.	4.8, 4.9, 4.10	FEE TITLE	—	—	4.63	0.51	5.14	—	
105	JOHN WELHOUSE JR.	4.8	FEE TITLE	—	—	1.03	0.11	1.14	—	
106										
107										
108										
109										
110	WILLIAM D. TURRIFF	4.11	FEE TITLE	—	—	0.57	0.19	0.76	—	
111	PETER F. VAN HAELST	4.11	FEE TITLE	—	—	9.73	0.46	10.19	—	
112	EDWARD J. GASSNER	4.12	FEE TITLE	—	—	1.01	—	1.01	—	
113	CITY OF APPLETON	4.12	FEE TITLE	—	—	9.20±	—	9.20±	—	
114										
115	JOHN J. NOTEBAART	4.13	FEE TITLE	—	—	0.43	0.06	0.49	—	
116	JOSEPH DOERFLER	4.13	FEE TITLE	—	—	2.72	0.48	3.20	—	
117	PAUL KERKHOFF	4.13	FEE TITLE	—	—	0.91	—	0.91	1.76	
118	CITY OF APPLETON	4.13, 4.14	FEE TITLE	—	—	6.42	—	6.42	95.76	
119										
120	BERT HIETPAS	4.13, 4.14	FEE TITLE	—	—	14.92	—	14.92	13.22	
121	JOSEPH BROCKMAN	4.14, 4.16 4.17, 4.19	FEE TITLE & ACCESS RIGHTS	—	—	38.60	—	38.60	62.27	
122	LEROY ZIESEMER	4.14	FEE TITLE	—	—	0.35	—	0.35	—	
123	CELESTIN KILSDONK	4.17, 4.19, 4.20	FEE TITLE	—	—	44.23	0.08	44.31	28.71	
124	MARTIN LAMERS	4.19	FEE TITLE	—	—	20.00	—	20.00	—	

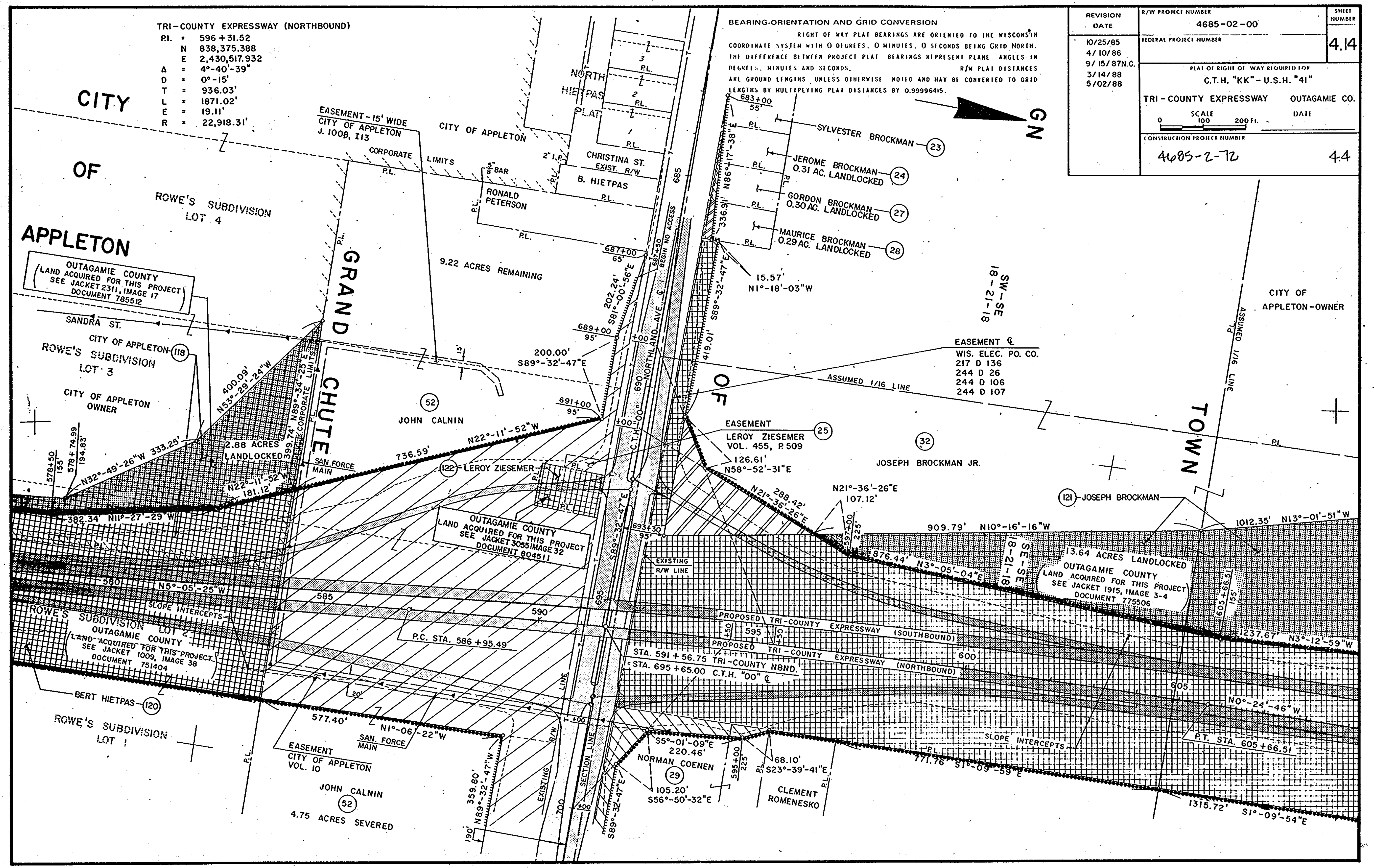
REVISION DATE	R/W PROJECT NUMBER	SHEET NUMBER
10/25/85 4/10/86 9/15/87 N.C. 3/14/88 5/02/88	4685-02-00	4.4
	FEDERAL PROJECT NUMBER	
	PLAT OF RIGHT OF WAY REQUIRED FOR C.T.H. "KK" – U.S.H. "41" TRI-COUNTY EXPRESSWAY OUTAGAMIE CO. NOT TO SCALE DATE	
	CONSTRUCTION PROJECT NUMBER 4685-2-72 4.2	



Cat No 2130 – 0175

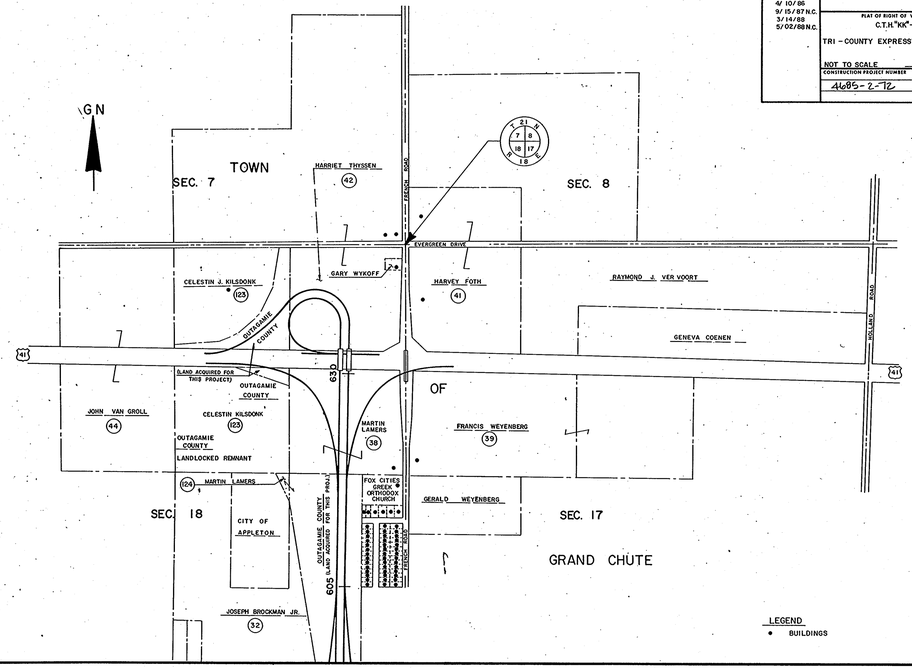
REVISION DATE	R/W PROJECT NUMBER	SHEET NUMBER
10/25/85 4/10/86 9/15/87 N.C. 3/14/88 5/02/88 N.C.	4685-02-00	4.5
	FEDERAL PROJECT NUMBER	
	PLAT OF RIGHT OF WAY REQUIRED FOR C.T.H. "KK" – U.S.H. "41" TRI-COUNTY EXPRESSWAY OUTAGAMIE CO. DATE NOT TO SCALE	
	CONSTRUCTION PROJECT NUMBER 4685-2-72	4.3





Cat No 2130 - 005

REVISION DATE	R/W PROJECT NUMBER	SHEET NUMBER
10/25/85 4/10/86 9/15/87 N.C. 3/14/88 5/02/88 N.C.	4685-02-00	4.5
	FEDERAL PROJECT NUMBER	
	PLAT OF RIGHT OF WAY REQUIRED FOR C.T.H."KK" - U.S.H."41" TRI-COUNTY EXPRESSWAY OUTAGAMIE CO.	
	NOT TO SCALE DATE	
	CONSTRUCTION PROJECT NUMBER	
	4685-2-72	4.3



Cat. No. 2139 - 0105

REVISION DATE	R/W PROJECT NUMBER	SHEET NUMBER
10/25/85 4/10/86 9/15/87 3/14/88 5/02/88	4685-02-00	4.15
	FEDERAL PROJECT NUMBER	
	PLAT OF RIGHT OF WAY REQUIRED FOR C.T.H. "KK" — U.S.H. "41"	
	TRI-COUNTY EXPRESSWAY OUTAGAMIE CO.	
	SCALE 0 100 200' DATE	
	CONSTRUCTION PROJECT NUMBER	
	4685-2-72	4.5

TOWN

GN

SE - SE
18 - 21 - 18

SW - SW
17 - 21 - 18

SE - SW
17 - 21 - 18

OUTAGAMIE COUNTY

OF

GRAND CHUTE

RAILROAD SPIKE
N 837,927.612
E 2,431,249.043

T 21 N
R 18 E
18 17
19 20

EASEMENT ℄
WIS. ELEC. PO. CO.
244 D26
244 D106
244 D107
217 D136

P.L.

LEROY ROMENESKO

N23°-39'-41"W 68.10'

N 5°-01'-09"W 220.46'

595+00
225'

NORMAN COENEN (29)

N56°-50'-32"W 105.20'

ONE ACCESS POINT

30' 30'

80'

CLEMENT ROMENESKO (30)

S89°-32'-47"E 277.31'

154.56'

N44°-19'-47"E 280'

SECTION LINE

68' EXIST

EXISTING R/W LINE

N 1°-09'-53"W 1345'

NORMAN COENEN (37)

S6°-36'-04"E 156.63'

S45°-43'-39"E 88.62'

N89°-39'-06"E 186.18'

HUBERT VANDER LINDEN

N1°-08'-51"W 10.00'

⅝" BAR

SLOPE INTERCEPTS

65'

EXISTING R/W LINE

705

710 SECTION LINE

715

720

3" GAS

700

S89°-32'-47"E

400

N 89°-39'-06"E

120'

C.T.H. "00" ℄

NORTHLAND AVE.

CHANNEL CHANGE ℄

EXISTING R/W LINE

N 12°-00'-00"W

0.58 ACRES

718+50 EXISTING

N 87°-00'-00"W 360.00'

S89°-32'-47"E 359.80'

190'

N89°-39'-06"E 514.49'

N86°-47'-22"E 300.38'

N 89°-39'-06"E 650.00'

711+00
175'

708+00
190'

717+50
175'

N41°-55'-32"E 148.66'

N09°-30'-00"W 250.00'

N 50°-00'-00"W 90.00'

210.00'
N 86°-00'-00"W

N 22°-00'-00"W 125.00'

N 06°-00'-00"W 90.00'

JOHN CALNIN (52)

4.75 ACRES SEVERED

FRENCH RD.
N1°-06-21"W
66' EXIST.

EXISTING R/W LINE
SECTION LINE
EXISTING R/W LINE

P.I. STA. 702 + 50.20 C.T.H. "00" ℄
AZ. = 179°-12'-00"

FRANCIS WEYENBERG (33)

HATTIE SCHUMACHER (34)

NE - NW
20 - 21 - 18

24.3 ACRES REMNANT

P.L. + 69 "SOUTH"

ASSUMED 1/16 LINE

NW - NW
20 - 21 - 18

ROWE'S SUBDIVISION
LOT 1

"BEARING ORIENTATION AND GRID CONVERSION"
RIGHT OF WAY PLAT BEARINGS ARE ORIENTED TO THE WISCONSIN COORDINATE SYSTEM WITH 0 DEGREES, 0 MINUTES, 0 SECONDS BEING "GRID NORTH." THE DIFFERENCE BETWEEN PROJECT PLAT BEARINGS REPRESENT PLANE ANGLES IN DEGREES, MINUTES, AND SECONDS. R/W PLAT DISTANCES ARE GROUND LENGTHS UNLESS OTHERWISE NOTED AND MAY BE CONVERTED TO GRID LENGTHS BY MULTIPLYING PLAT DISTANCES BY 0.99996415.

Cat No 7130 0175

TRI-COUNTY EXPRESSWAY (NORTHBOUND)
P.I. = 596+31.52
N 838,375.388
E 2,430,517.932
Δ = 4°-40'-39"
D = 0°-15'
T = 936.03'
L = 1871.02'
E = 19.11'
R = 22,918.31'

BEARING ORIENTATION AND GRID CONVERSION

RIGHT OF WAY PLAT BEARINGS ARE ORIENTED TO THE WISCONSIN COORDINATE SYSTEM WITH 0 DEGREES, 0 MINUTES, 0 SECONDS BEING GRID NORTH. THE DIFFERENCE BETWEEN PROJECT PLAT BEARINGS REPRESENT PLANE ANGLES IN DEGREES, MINUTES AND SECONDS. R/W PLAT DISTANCES ARE GROUND LENGTHS UNLESS OTHERWISE NOTED AND MAY BE CONVERTED TO GRID LENGTHS BY MULTIPLYING PLAT DISTANCES BY 0.99996415.

CITY OF APPLETON - OWNER

GN

REVISION DATE	R/W PROJECT NUMBER	SHEET NUMBER
10/25/85 4/10/86 9/15/87 N.C. 3/14/88 5/02/88	4685-02-00	4.16
	FEDERAL PROJECT NUMBER	

PLAT OF RIGHT OF WAY REQUIRED FOR
C.T.H. "KK" - U.S.H. "41"
TRI-COUNTY EXPRESSWAY OUTAGAMIE CO.
SCALE 0 100 200 ft. DATE
CONSTRUCTION PROJECT NUMBER
4685-2-72 4.16

GRAND CHUTE
TOWN OF
P.L.
EXISTING R/W LINE
EXISTING R/W LINE
ASSUMED 1/16 LINE
ASSUMED 1/16 LINE
ASSUMED 1/4 LINE
N58°-52'-31"E 126.61'
S89°-32'-47"E 419.01'
EASEMENT ℄ WISCONSIN ELECTRIC POWER CO.
244 D26
244 D106
244 D107
217 D136
(32) JOSEPH BROCKMAN JR.
SE-SE 18-21-18
N21°-36'-26"E 107.12'
288.42' N21°-36'-26"E
693+30 95'
397+00 225'
909.79' N10°-16'-16"W
876.44' N3°-05'-04"E
SLOPE INTERCEPTS
605+66.51 155'
(121) JOSEPH BROCKMAN
1012.35' N13°-01'-51"W
320.00' N1°-13'-35"W
13.64 ACRES LANDLOCKED
OUTAGAMIE COUNTY
LAND ACQUIRED FOR THIS PROJECT
SEE JACKET 1915, IMAGE 3-4,
DOCUMENT 775506
NE-SE 18-21-18
414.59' N88°-44'-48"E
397.78' N3°-12'-59"W
1237.67' N3°-12'-59"W
PROPOSED TRI-COUNTY EXPRESSWAY (SOUTHBOUND)
PROPOSED TRI-COUNTY EXPRESSWAY (NORTHBOUND)
N0°-24'-46"W
P.I. STA. 605+66.51
618+05.86
STA. 591+56.75 TRI-COUNTY NBND.
STA. 695+65.00 C.T.H. "00"
N5°-01'-09"W 220.46'
N56°-50'-32"W 105.20'
NORMAN COENEN (29)
ONE ACCESS POINT
ONE ACCESS POINT
S89°-32'-47"E 277.31'
CLEMENT ROMENESKO (30)
N44°-37'-27"E 65.88'
N4°-19'-42"E 154.56'
LEROY ROMENESKO
250' 3" GAS
S6°-36'-04"E 156.63'
RAILROAD SPIKE
N837,927.612
E2,431,249.043
P.I. STA. 702+50.20 C.T.H. "00" ℄
AZ.=179°-12'-00"
NORMAN COENEN (37)
S1°-09'-59"E 148.00'
771.76' S1°-09'-59"E
1315.72' S1°-09'-54"E
BLOCK 2
BLOCK 3
BLOCK 4
BLOCK 5
BLOCK 6
CLEMENT ROMENESKO PLAT
BONITA ST.
1 1/4" GAS
FIRST AVE.
FLORIDA AVE
FRENCH ROAD
N1°-09'-53"W
SECTION LINE
EXISTING R/W LINE
3" GAS
EXISTING R/W LINE
FOX-CITIES GREEK ORTHODOX CHURCH
MARTIN LAMERS (38)
R.R. SPIKE
N840,565.803
E2,431,195.407
T 21 N R 18 E 18 17
N2°-07'-29"W
GERALD WEYENBERG
FRANCIS WEYENBERG (39)
544.65' N5°-23'-05"E
N88°-44'-52"E 38.33'
HORTHLAND AVE.
C.T.H. "00"
690
695
700
600
605
610
615
620
625
630
635
640
645
650

Cat. No 2130 - 0175

50

REVISION DATE	R/W PROJECT NUMBER	SHEET NUMBER
10/25/85 4/10/86 9/15/87 N.C. 3/14/88 5/02/88	4685-02-00	4.17
	FEDERAL PROJECT NUMBER	
	PLAT OF RIGHT OF WAY REQUIRED FOR C.T.H."KK" – U.S.H."41" TRI-COUNTY EXPRESSWAY OUTAGAMIE CO. SCALE 0 100 200 FT. DATE	
	CONSTRUCTION PROJECT NUMBER 4685-2-72	4.7

OUTAGAMIE COUNTY
LAND ACQUIRED FOR THIS PROJECT
SEE JACKET 2135, IMAGE 31-32
DOCUMENT 781069

35.30 ACRES LANDLOCKED REMNANT

CELESTIN KILSDONK (123)

SE-NE 18-21-18

ASSUMED 1/16 LINE N2°-20'-10"W 1044.46' P.L.

MARTIN LAMERS (38)
7.50 ACRES LANDLOCKED

625+00 340 N44°-05'-33"W 474.67'

622+00 235 N19°-42'-10"W 317.84'

SLOPE INTERCEPTS 397.78' N3°-12'-55"W

ASSUMED 1/4 LINE 414.59' N88°-44'-48"E P.L.

NE-SE 8-21-18

OUTAGAMIE COUNTY
LAND ACQUIRED FOR THIS PROJ.
SEE JACKET 1915, IMAGE 3-4,
DOCUMENT 775506

13.64 ACRES LANDLOCKED

1237.67' N3°-12'-53"W

JOSEPH BROCKMAN (21)

615

1315.72 N1°-09'-54"W P.L.

FOX CITIES GREEK ORTHODOX CHURCH

PROPOSED TRI-COUNTY EXPRESSWAY (SOUTHBOUND)
PROPOSED TRI-COUNTY EXPRESSWAY (NORTHBOUND)

STA. 631+01.78 TRI-COUNTY NBND.
=STA. 903+94.16 U.S.H. 41 MEDIAN ℄

N0°-24'-46"W 625

620

623+50 210

491.14' N30°-07'-38"E

618+06.86

N88°-44'-52"E 38.33' 544.65' N5°-23'-05"E

155'

R.R. SPIKE
N 640,565.803
E 2,431,195.407

T. 21 N R. 18 E 18 17

MARTIN LAMERS (38)
8.01 ACRES REMAINING

628+50 FRENCH RD. 205' LT. N87°-52'-31"E 102.56'

N4°-58'-48"W 450.56'

EXISTING R/W LINE

625

FRENCH RD.

609.57' N0°-10'-31"E

SLOPE INTERCEPTS

203.86' N13°-26'-04"W

200.06' N3°-33'-24"W

620 SECTION LINE

N2°-07'-29"W

N5°-00'-02"E 201.56'

N2°-07'-29"W 100.00'

N3°-35'-10"E 100.50'

EXISTING R/W LINE

N1°-09'-53"W

ASSUMED 1/4 LINE

GERALD WEYENBERG

FRANCIS WEYENBERG (39)

NOTE: ACCESS CONTROLS TO U.S.H. "41" ACQUIRED UNDER STATE PROJECT T03-2(28)

GRAND CHUTE
SW-NW 17-21-18

TOWN OF

HARRIET THYSSEN (42)

905+73 EXIST. N8°-56'-52"W 546.96'

89°-42'-05" 650 105' 105' 905

N69°-17'-16"E

SLOPE INTERCEPTS N3°-03'-27"E 639.34'

635

FRENCH RD. N2°-07'-29"W

420.66' N7°-17'-39"W

STA. 910+48.90 U.S.H. 41 MEDIAN ℄
=STA. 631+76.22 FRENCH ROAD

HARVEY FOTH (41)

GN

NW-NW 17-21-18

630 ±00 909±30 90 91°-24'-45"

±00 ±50

915 110'

454.76' N83°-38'-20"E

U.S.H. '41' (SOUTHBOUND) EXISTING R/W LINE

U.S.H. '41' (NORTHBOUND)

916±00 120

N 89°-17'-16"E 300.00'

920

ASSUMED 1/16 LINE

925

400.13' N 87°-51'-21"E

926±32 110

ASSUMED 1/16 LINE

RAYMOND J. VER VOORT

"BEARING ORIENTATION AND GRID CONVERSION"

RIGHT OF WAY PLAT BEARINGS ARE ORIENTED TO THE WISCONSIN COORDINATE SYSTEM WITH 0 DEGREES, 0 MINUTES, 0 SECONDS BEING "GRID NORTH". THE DIFFERENCE BETWEEN PROJECT PLAT BEARINGS REPRESENT PLANE ANGLES IN DEGREES, MINUTES, AND SECONDS. R/W PLAT DISTANCES ARE GROUND LENGTHS UNLESS OTHERWISE NOTED AND MAY BE CONVERTED TO GRID LENGTHS BY MULTIPLYING PLAT DISTANCES BY 0.99996415.

REVISION DATE	R/W PROJECT NUMBER	SHEET NUMBER
10/25/85 4/10/86 9/15/87 N.C. 3/14/88 5/02/88 N.C.	4685-02-00	4.20
	FEDERAL PROJECT NUMBER	
	PLAT OF RIGHT OF WAY REQUIRED FOR C.T.H. "KK" — U.S.H. "41" TRI-COUNTY EXPRESSWAY OUTAGAMIE CO.	
	SCALE 0 100 200 Ft. DATE	
	CONSTRUCTION PROJECT NUMBER	
	4685-2-72	4.8

GN

TOWN OF GRAND CHUTE

NE-NW 18-21-18

NW-NE 18-21-18

SW-NE 18-21-18

NE-NE 18-21-18

ASSUMED 1/4 LINE

ASSUMED 1/16 LINE

P.L.

EVERGREEN DR.

EXISTING R/W LINES

SECTION LINE

NOTE: ACCESS CONTROLS TO U.S.H. "41" ACQUIRED UNDER STATE PROJECT T03-2(28).

JOHN VAN GROLL (44)

CELESTIN KILSDONK (123)

HARRIET THYSSEN (42)

MARTIN LAMERS (38)

OUTAGAMIE COUNTY LAND ACQUIRED FOR THIS PROJECT SEE JACKET 2135, IMAGE 31-32 DOCUMENT 781069

1.55 ACRES REMNANT OUTAGAMIE COUNTY

N.W. RAMP CURVES

P.I. = 628+12.82
N = 841,891.985
E = 2,428,965.066
Δ = 5°-00'00"
D = 7°-30'-00"
T = 75.11'
L = 150.00'
E = 2.46'
R = 1145.92'

P.I. = 632+05.16
N = 841,955.815
E = 2,429,352.385
Δ = 42°-23'-48"
D = 7°-00'
T = 317.45'
L = 605.66'
E = 59.40'
R = 818.51'

P.I. = 633+97.98
N = 842,142.660
E = 2,430,490.797
Δ = 10°-00'
D = 4°-44'-08"
T = 105.85'
L = 211.17'
E = 4.62'
R = 1209.92'

P.I. = 636+16.30
N = 842,357.898
E = 2,430,451.245
Δ = 21°-00'-00"
D = 9°-23'-52"
T = 113.00'
L = 223.46'
E = 10.38'
R = 609.67'

P.I. = 640+89.14
N = 842,763.588
E = 2,430,203.488
Δ = 89°-30'-00"
D = 15°-40'-25"
T = 362.38'
L = 571.03'
E = 149.18'
R = 365.56'

P.I. = 644+08.70
N = 842,520.448
E = 2,429,797.433
Δ = 20°-50'-31"
D = 9°-30'-00"
T = 110.92'
L = 219.39'
E = 10.12'
R = 603.11'

END RELOCATION ORDER
PROJECT 4685-02-00
STA. 631+01.78
N841,846.474
E2,430,492.930

"BEARING ORIENTATION AND GRID CONVERSION"
RIGHT OF WAY PLAT BEARINGS ARE ORIENTED TO THE WISCONSIN COORDINATE SYSTEM WITH O DEGREES, O MINUTES, O SECONDS BEING "GRID NORTH". THE DIFFERENCE BETWEEN PROJECT PLAT BEARINGS REPRESENT PLANE ANGLES IN DEGREES, MINUTES, AND SECONDS. R/W PLAT DISTANCES ARE GROUND LENGTHS UNLESS OTHERWISE NOTED AND MAY BE CONVERTED TO GRID LENGTHS BY MULTIPLYING PLAT DISTANCES BY 0.99996415.

Cat. No 2130 — 0175

STATE PROJECT NUMBER 4685-2-72 | SHEET NO. 5

S.B. CURVE NOTES

P.I. = 571+97.17
X = 2,430,725.133
Y = 835,950.320
∠ = 176°-44'-33"
Δ = 3°-15'-27"
D = 0°-15'
T = 651.70'
L = 1,303.04'
R = 22,918.31'
S.E. = N.C.

N.B. CURVE NOTES

P.I. = 596+31.52
X = 2,430,517.932
Y = 838,375.388
∠ = 184°-40'-39"
Δ = 4°-40'-39"
D = 0°-15'
T = 936.03'
L = 1,871.02'
R = 22,918.31'
S.E. = N.C.

CURVE NOTES

P.I. = 598+25.69
X = 2,430,452.568
Y = 838,564.936
∠ = 185°-32'-19"
Δ = 5°-32'-19"
D = 0°-15'
T = 1,108.61'
L = 2,215.49'
R = 22,918.31'
S.E. = N.C.

BENCH MARKS

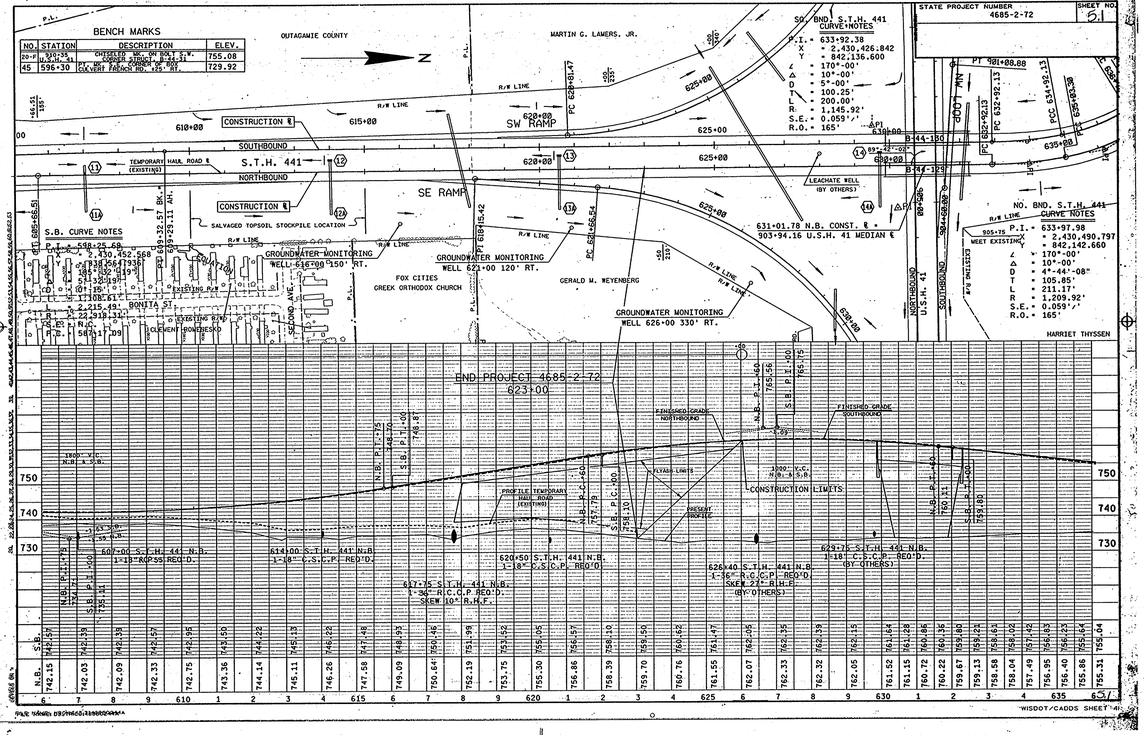
NO.	STATION	DESCRIPTION	ELEV.
45	596+30	PT.MK. S.E. CORNER BOX CULVERT FRENCH RD. 25' RT.	729.92

EARTHWORK QUANTITIES

UNCL. EXC. = 10,096 CU.YDS.
FILL = 249,877 CU.YDS.
BORROW = 144,719 CU.YDS.
FLY ASH = 66,782 CU.YDS.
SELEC. BORROW = 30,341 CU.YDS.
HAUL IN FROM N.W. RAMP 2,835 CU.YDS.
HAUL IN FROM STAGE 2 C.T.H. '00' 10,055 CU.YDS.
HAUL IN FROM STAGE 3 C.T.H. '00' 14,500 CU.YDS.
(EXPANSION FACTOR 1.20)

BEGIN PROJECT 4685-2-72
592+58.49 N.B. PT

WISDOT/CADDS SHEET 41


BENCH MARKS
NO. STATION DESCRIPTION ELEV.
20-F 590+35 CHISELED SQ. ON BOLT S.W. CORNER STREET, 8.44 Rt. 755.08
45 596+30 PK. NAIL IN CONCRETE CURB & GUTTER 16.40 Rt. 729.92
OUTAGAMIE COUNTY
MARTIN G. LAWERS, JR.
SO. BND. S.T.H. 441 CURVE NOTES
P.I. = 633+92.38
X = 2,430,426.842
Y = 842,136.600
∠ = 170°-00'
Δ = 10°-00'
D = 5°-00'
T = 100.25'
L = 200.00'
R = 1,145.92'
S.E. = 0.059'/'
R.O. = 165°
STATE PROJECT NUMBER 4685-2-72
SHEET NO. 5.1
CONSTRUCTION ℄
SOUTHBOUND
NORTHBOUND
S.T.H. 441
SW RAMP
SE RAMP
TEMPORARY HAUL ROAD ℄
SALVAGED TOPSOIL STOCKPILE LOCATION
LEACHATE WELL (BY OTHERS)
631+01.78 N.B. CONST. ℄ = 903+94.16 U.S.H. 41 MEDIAN ℄
S.B. CURVE NOTES
P.I. = 568+25.68
X = 2,430,452.568
Y = 838,564.936
Δ = 10°-00'
D = 5°-00'
T = 100.25'
L = 200.00'
R = 1,145.92'
S.E. = 0.059'/'
R.O. = 165°
NO. BND. S.T.H. 441 CURVE NOTES
P.I. = 633+97.98
X = 2,430,490.797
Y = 842,142.660
∠ = 170°-00'
Δ = 10°-00'
D = 4°-44'-08"
T = 105.85'
L = 211.17'
R = 1,209.92'
S.E. = 0.059'/'
R.O. = 165'
GROUNDWATER MONITORING WELL 614+00 150' RT.
GROUNDWATER MONITORING WELL 621+00 120' RT.
GROUNDWATER MONITORING WELL 626+00 330' RT.
FOX CITIES GREEK ORTHODOX CHURCH
GERALD W. WEYENBERG
HARRIET THYSSEN
BONITA ST.
EXISTING R/W
EXISTING HOUSE TO BE REMOVED
END PROJECT 4685-2-72 623+00
FINISHED GRADE NORTHBOUND
FINISHED GRADE SOUTHBOUND
CONSTRUCTION LIMITS
PROFILE TEMPORARY ROAD EXISTING
PROFILE EXISTING
614+00 S.T.H. 441 N.B. 1-18" C.S.C.P. REQ'D.
617+75 S.T.H. 441 N.B. 1-36" R.C.C.P. REQ'D. SKEW 10° R.H.F.
620+50 S.T.H. 441 N.B. 1-18" C.S.C.P. REQ'D.
626+40 S.T.H. 441 N.B. 1-36" R.C.C.P. REQ'D SKEW 27° R.H.F. (BY OTHERS)
629+75 S.T.H. 441 N.B. 1-18" C.S.C.P. REQ'D. (BY OTHERS)
WISDOT/CADDS SHEET 45

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	5.2

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
45	596±30	PT WK SE CORNER BOX CULVERT 125' RT OF FRENCH RD	729.92

WB. CONST. & CURVE NOTES

P.I. = 690+50.22
X = 2,430,050.666
Y = 837,937.599
∠ = 184°-24'-42"
Δ = 4°-24'-42"
D = 1°-00'
T = 220.69'
L = 441.16'
R = 5,729.58'
S.E. = 0.020'/'
R.O. = 150'

EB. CONST. & CURVE NOTES

P.I. = 702+00.32
X = 2,431,199.395
Y = 837,862.869
∠ = 174°-55'-26"
Δ = 5°-04'-34"
D = 1°-00'
T = 253.96'
L = 507.60'
R = 5,729.58'
S.E. = 0.020'/'
R.O. = 150'

C.T.H. "00"

EQUATION

BEGIN ULTIMATE CONSTRUCTION 684+00

CONSTRUCTION LIMITS MEET EXISTING 680+00

CONSTRUCTION LIMITS MEET EXISTING

EQUATION

EQUATION

EQUATION

EQUATION

687+05.31 WESTBOUND

591+63.39 N.W. RAMP

692+23.64 WESTBOUND

PC 594+60.82

595+00

591+55.70 N.E. RAMP

697+26.02 WESTBOUND

702+51.62 E.B. CONST.

592+22.42 FRENCH ROAD

702+50.02 W.B. CONST.

591+94.51 FRENCH ROAD

703+89.46 SURVEY L

704+53.96

P.I. 687+98.93 WESTBOUND

684+00 WESTBOUND

683+98.93 WESTBOUND

685+00

690+00

695+00

700+00

710+00

EXISTING R/W

REMOVE P.L.E.

R/W LINE

P.I. 688+00 EASTBOUND

∠ = 182°-09'-31"

P.C. 688+29.55

684+00 EASTBOUND

683+99.95 EASTBOUND

684+85.14 EASTBOUND

683+94.88 CHRISTINA ST.

P.I. 692+47.66

PI 702+47.20

PI 592+47.20

C-44-71

C-44-70

PT 590+28.48

PC 587+12.09

PC 586+95.48

RT 586+26.32

SW RAMP

SE RAMP

FORCED MAIN

M.H.S.B. (BY OTHERS)

CONC. STORM SEWER & CONC. SANITARY SEWER (BY OTHERS)

JEROME BROCKMAN

LOUISE BROCKMAN

JEROME BROCKMAN

GORDON BROCKMAN

MAURICE BROCKMAN

JOHN CALNIN

RONALD PETERSON

NORMAN COENEN

ELENI KONESKO

OUTAGAMIE COUNTY

FRANCIS WEYENBERG

EAST HIETPAS ST

FRENCH ROAD

NORMAN-COENEN

PROFILES ON TEMPORARY CONNECTION

ULTIMATE PROFILE

TEMPORARY CONNECTION (SURVEY L)

E.B. & W.B. CONST. & PROFILE

PRESENT PROFILE

BEGIN ULTIMATE CONSTRUCTION 684+00

684+85.14 EB. CONST. & 9+94.88 CHRISTINA STREET

684+85.14 EB. CONST. & BK.

683+99.95 EB. CONST. & AH.

684+00 WB. CONST. & BK.

683+98.93 WB. CONST. & AH.

PROFILES ON CHRISTINA ST.

FINISHED GRADE

PRESENT PROFILE

9+94.88 CHRISTINA ST. & 684+85.14 E.B. CONST. &

PROFILES ON FRENCH RD.

591+94.51 FRENCH RD. & 702+51.62 E.B. CONST. &

592+22.42 FRENCH RD. & 702+50.02 W.B. CONST. &

FINISHED GRADE

PRESENT PROFILE

702+50.42 W.B. CONST. & 592+22.42 FRENCH ROAD

702+51.62 E.B. CONST. & 591+94.51 FRENCH ROAD

703+89.04 WB. CONST. & BK.

703+89.46 WB. CONST. & AH.

707+51.18 EB. CONST. & BK.

707+50.00 EB. CONST. & AH.

STAGE 1 STA. 679+00 - 711+00
UNCL. EXC. 1,410 CU. YD.
FILL 1,080 CU. YD.

STAGE 2 STA. 680+00 - 710+00
UNCL. EXC. 15,451 CU. YD.
FILL 3,944 CU. YD.
HAUL OUT 10,710 CU. YD. TO S.T.H. 441

STAGE 3 STA. 680+00 - 710+00
UNCL. EXC. 16,830 CU. YD.
FILL 1,765 CU. YD.
HAUL OUT 14,712 CU. YD. TO S.T.H. 441

FINISHED (EXPANSION FACTOR 1.20)

	W.B.	E.B.
680	744.08	
1	744.08	
2	743.75	
3	743.28	
4	742.66	
685	741.91	
6	741.09	
7	740.27	
8	739.44	
9	738.62	
690	737.80	
1	736.98	
2	736.16	
3	735.86	
4	735.56	
695	735.58	
6	735.91	
7	736.25	
8	736.59	
9	736.92	
700	737.26	
1	737.59	
2	737.92	
3	738.26	
4	738.58	
705	738.65	
6	738.63	
7	738.53	
8	738.33	
9	738.05	
710	WEST EXISTING	EXISTING

PLOT NAME: D:\CAD\...\685Z0460.DGN PLOT SCALE: 1.000 PLOT DATE: 03/22/2006

REV. DATE: 12-21-88, 4-18-89, 12-26-89, 1-2-90

ORIGINATOR: FLYNN/BRT, 3/9-21-88

WISDOT/CADDS SHEET

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	5.3

S.E. & N.E. RAMPS @ C.T.H. "00"

CITY OF APPLETON

OUTAGAMIE COUNTY

JOSEPH BROCKMAN, JR.

JACOB HIETPAS

JOHN CALNIN

NORMAN J. COENEN

CLEMENT ROMENESKO

BONITA ST.

FIRST ST.

FLORIDA AVE.

SW RAMP

SE RAMP

NW RAMP

NE RAMP

S.T.H. 441 SOUTHBOUND

S.T.H. 441 NORTHBOUND

C.T.H. "00"

CONSTRUCTION LIMITS

R/W LINE

FORCED MAIN

PC 586+95.48

PC 587+12.09

591+27.98 S.E. RAMP ℄
697+49.45 EASTBOUND ℄

591+55.70 N.E. RAMP =
697+26.02 WESTBOUND ℄

P.C. = 699+46.36

589+92

N

S.E. RAMP CURVE NOTES

P.I.	= 583+13.80
X	= 2,430,711.658
Y	= 837,067.632
∠	= 183°-07'-34"
Δ	= 3°-07'-34"
D	= 0°-30'
T	= 312.68'
L	= 625.20'
R	= 11,459.16'
S.E.	= N.C.

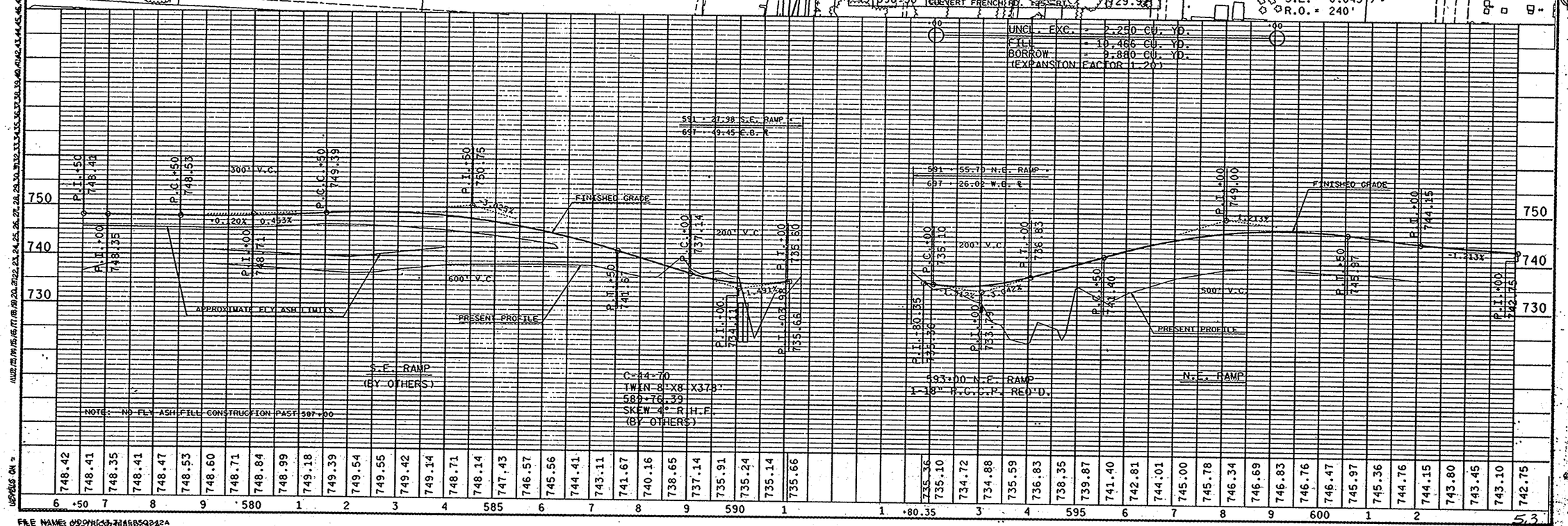
N.E. RAMP CURVE NOTES

P.I.	= 600+09.07
X	= 2,430,556.220
Y	= 838,753.968
∠	= 189°-34'-08"
Δ	= 9°-34'-08"
D	= 2°-30'
T	= 191.82'
L	= 382.76
R	= 2,291.83'
S.E.	= 0.045 /'.
R.O.	= 240'

BENCH MARKS

NO	STATION	DESCRIPTION	ELEV.
45	596+30	BK. UK. S.E. CORNER BOX CULVERT FRENCHBOT. 36" RT.	729.98

UNCL. EXC. = 2,250 CU. YD.
FILL = 10,466 CU. YD.
BORROW = 9,880 CU. YD.
(EXPANSION FACTOR 1.20)



FILE NAME: c:\projects\7685852212A

WISDOT/CADDS SHEET 5.3

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	5.4

S.W. & N.W. RAMPS AT C.T.H. "00"

S.W. RAMP CURVE NOTES

P.I. = 583+05.29
X = 2,430,573.305
Y = 837,048.897
∠ = 159°-41'-11"
Δ = 20°-18'-49"
D = 5°-00'
T = 205.29'
L = 406.27'
R = 1,145.92'
S.E. = 0.059'/'
R.O. = 225'

S.W. RAMP CURVE NOTES

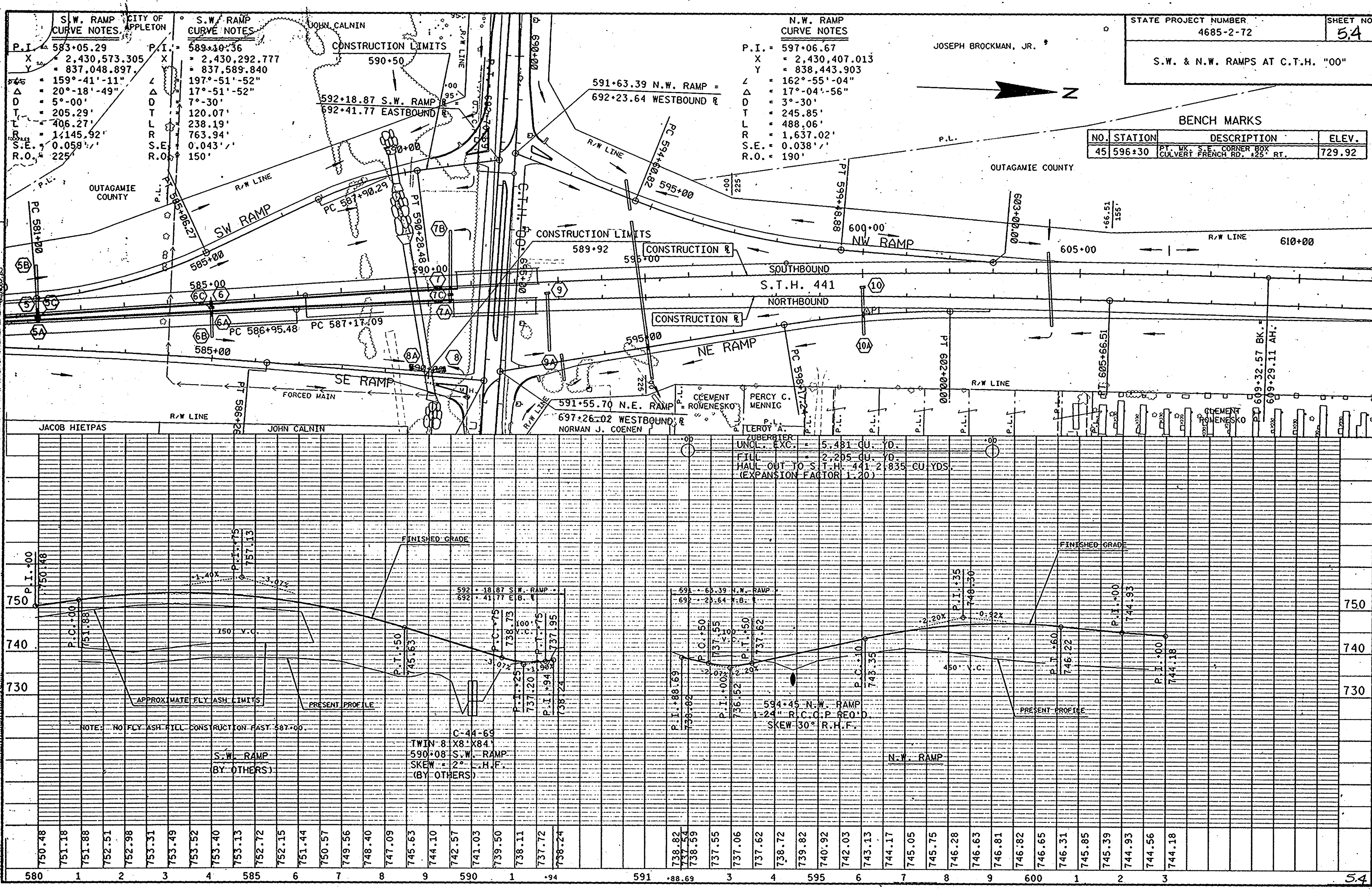
P.I. = 589+10.36
X = 2,430,292.777
Y = 837,589.840
∠ = 197°-51'-52"
Δ = 17°-51'-52"
D = 7°-30'
T = 120.07'
L = 238.19'
R = 763.94'
S.E. = 0.043'/'
R.O. = 150'

N.W. RAMP CURVE NOTES

P.I. = 597+06.67
X = 2,430,407.013
Y = 838,443.903
∠ = 162°-55'-04"
Δ = 17°-04'-56"
D = 3°-30'
T = 245.85'
L = 488.06'
R = 1,637.02'
S.E. = 0.038'/'
R.O. = 190'

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
45	596±30	PT. MK. S.E. CORNER BOX CULVERT FRENCH RD. ±25' RT.	729.92



FILE NAME D3 DTRICO 468502412 41A

WISDOT/CADDS SHEET 41

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	55

S.E. RAMP AT U.S.H. 41

MARTIN LAWERS

HARRIET THYSSEN

HARVEY FOTH

GERALD M. WEYENBERG

GERALD M. WEYENBERG

FOX CITIES GREEK ORTHODOX CHURCH

FRENCH ROAD

U.S.H. 41

EXISTING R/W

R/W LINE

S.E. RAMP CURVE NOTES

P.I. = 630+26.07
X = 2,430,614.039
Y = 841,767.788
∠ = 263°-58'-51"
Δ = 83°-58'-51"
D = 6°-0'-0"
T = 859.53'
L = 1,399.68'
R = 954.93'
S.E. = 0.59'/'
R.O. = 150'

PC 620+81.47
PT 618+15.42
PC 621+65.54
PI 635+66.22

SW RAMP
SE RAMP

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
20-F	910±35 U.S.H. 41	CHISELED WK. ON BOLT S.W. CORNER B-44-31	755.08
45	596±30	PT. WK. S.E. COR. BOX CULVERT FRENCH RD. 25' RT.	729.92

UNCL. EXC. - 266 C.Y.
FILL - 12,238 C.Y.
BORROW - 14,542 C.Y.
(EXPANSION FACTOR .20)

FINISHED GRADE
PRESENT PROFILE
CONSTRUCTION LIMITS
P.I. + 25
759.71
R.C. +50
755.78
P.T. +00
751.72
P.C. +80
743.59
P.I. +55
735.60
P.I. +30
736.02
P.T. +16.36
736.89
550' V.C.
550' V.C.
-3.42%
+0.15%

629+00 S.E. RAMP
1-36" R.C.C.P. REQ'D.
SKEW 47° R.H.F.
(BY OTHERS)

	8	9	620	1	2	3	4	625	6	7	8	9	630	1	2	3	4	635	6	7	8	9	640
	752.92	753.63	755.06	755.78	756.39	756.81	757.04	757.06	756.89	756.52	755.96	755.19	754.23	753.08	751.72	748.82	745.91	743.02	741.69	740.50	739.45	738.54	737.77	737.14	736.64	736.29	736.07	735.99	736.04	736.12	736.27	736.42	736.57	736.72	736.85

760 750 740 730

FILE NAME: c:\pw\rcc\55555548a\sa.dgn

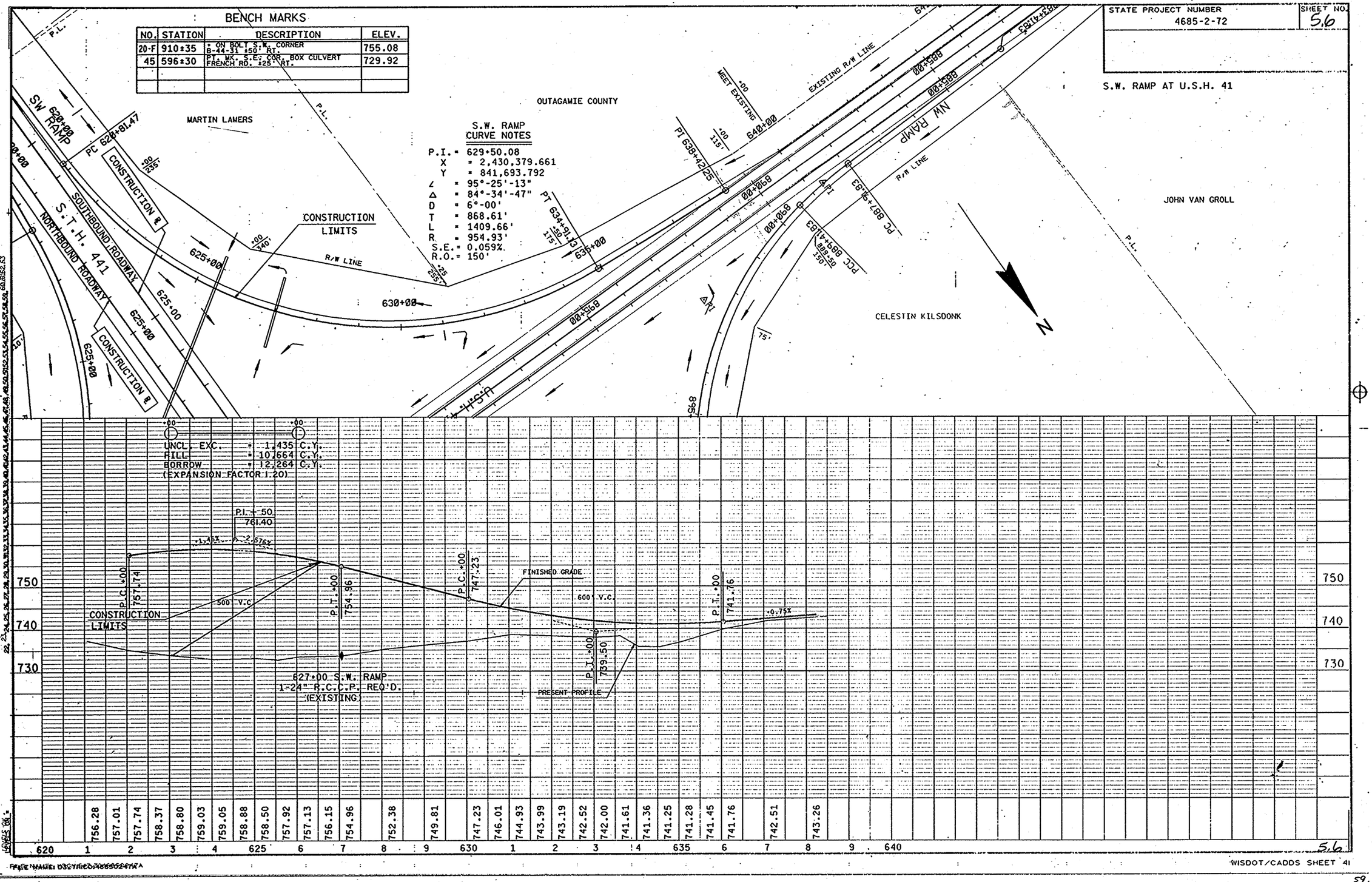
WISDOT/CADDS SHEET 41

STATE PROJECT NUMBER	SHEET NO.
4685-2-72	5,6

S.W. RAMP AT U.S.H. 41

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
20-F	910±35	⊕ ON BOLT S.W. CORNER 8-44-31 ±50' RT.	755.08
45	596±30	PT. W. S.E. COR. BOX CULVERT FRENCH RD. ±25' RT.	729.92



S.W. RAMP CURVE NOTES

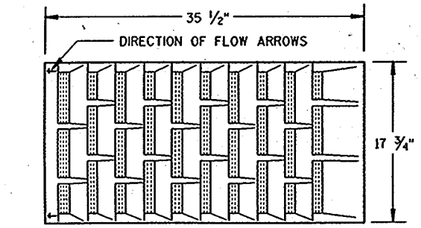
P.I. = 629+50.08
X = 2,430,379.661
Y = 841,693.792
∠ = 95°-25'-13"
Δ = 84°-34'-47"
D = 6°-00'
T = 868.61'
L = 1409.66'
R = 954.93'
S.E. = 0.059%
R.O. = 150'

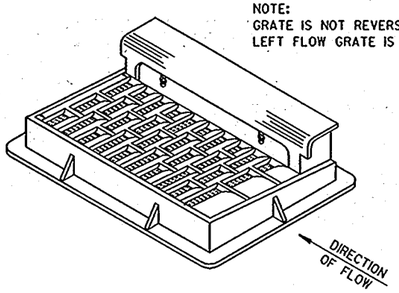
UNCL. EXC. = 17,435 C.Y.
FILL = 10,664 C.Y.
BORROW = 12,264 C.Y.
(EXPANSION FACTOR 1.20)

5,6

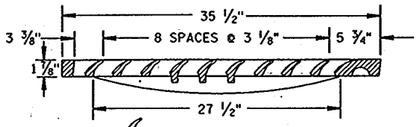
WISDOT/CADDS SHEET 41

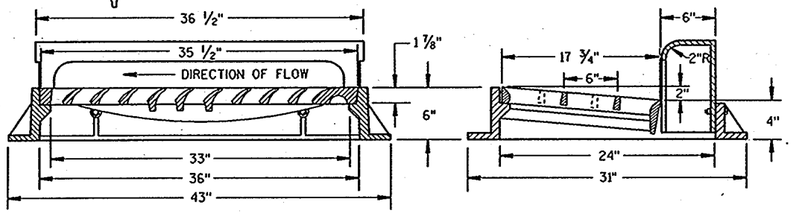
PLOT SCALE: 100
PLOT NAME: SHADOVER
REV. DATE: 12-7-89
LEVELS ON
FILE NAME: D:\PROJECTS\4685024TA





NOTE:
GRATE IS NOT REVERSIBLE.
LEFT FLOW GRATE IS SHOWN

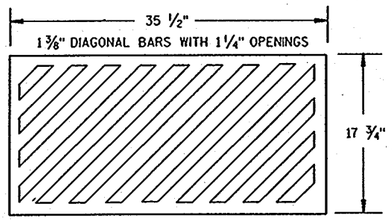




NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

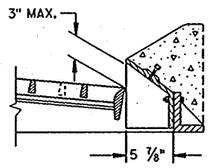
TYPE "H"

(APPROXIMATE WEIGHT 510 LBS.)



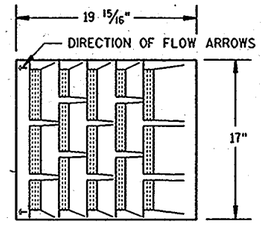
SPECIAL GRATE NO. 1

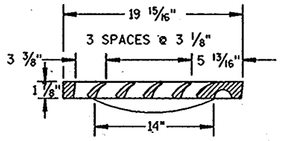
(APPROXIMATE WEIGHT 175 LBS.)
(NOTE AS TYPE H1 ON DRAINAGE TABLE)

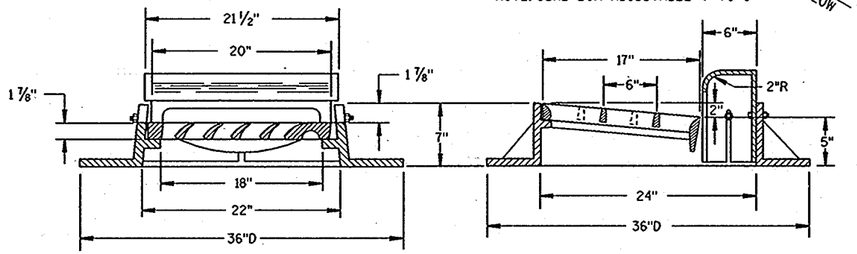


MOUNTABLE CURB BOX FOR TYPE "H" COVER

(FOR USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH)

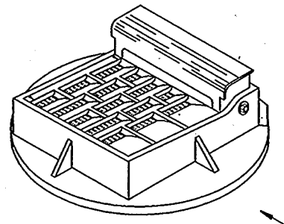






TYPE "A"

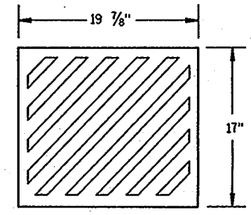
(APPROXIMATE WEIGHT 410 LBS.)



NOTE:
GRATE IS NOT REVERSIBLE
LEFT FLOW GRATE IS SHOWN

NOTE: CURB BOX ADJUSTABLE 4" TO 9"

1" DIAGONAL BARS
WITH 1½" OPENINGS



SPECIAL GRATE NO. 1

(APPROXIMATE WEIGHT 85 LBS.)

(NOTE AS TYPE A1 ON DRAINAGE TABLE)

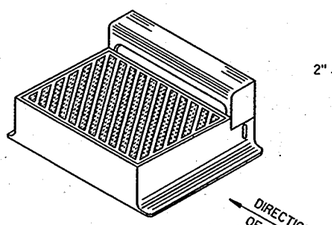
GENERAL NOTES

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

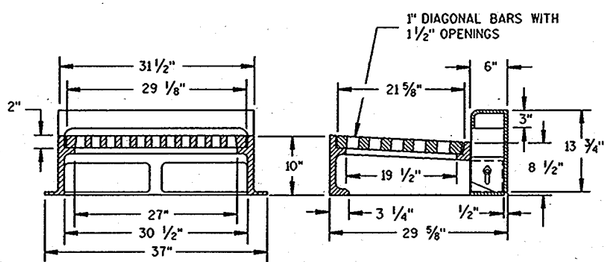
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL CATCH BASIN, MANHOLE AND INLET COVERS WHICH ARE PLACED IN VEHICULAR TRAFFIC AREAS SHALL BE "NON-ROCKING" TYPE.

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



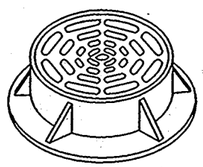
DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.

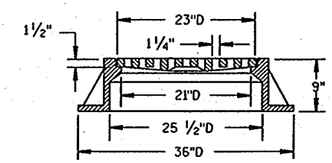


NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

(APPROXIMATE WEIGHT 650 LBS.)





TYPE "C"

(APPROXIMATE WEIGHT 365 LBS.)

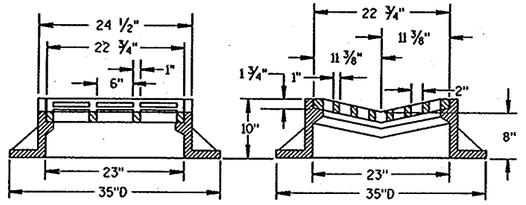
INLET COVERS

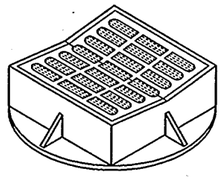
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 10/23/09
DATE
STATE DESIGN ENGINEER FOR HWYS
FHWA

S.D.D. 8 A 5-7a

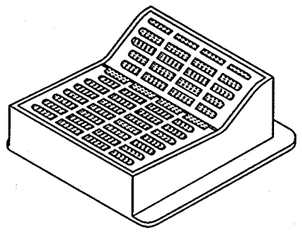
S.D.D. 8 A 5-7a

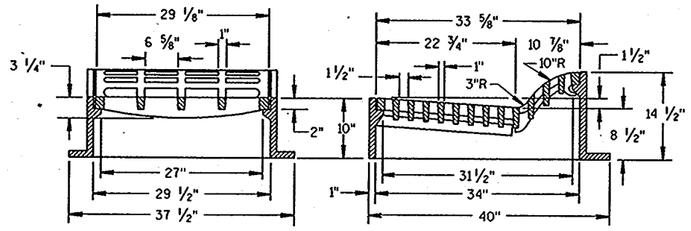




TYPE "B"

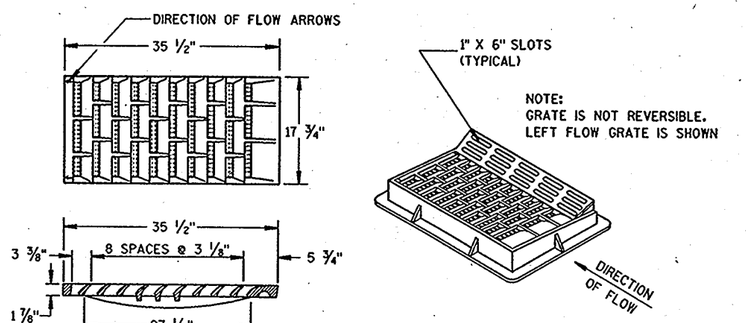
(APPROXIMATE WEIGHT 400 LBS.)





TYPE "F"①

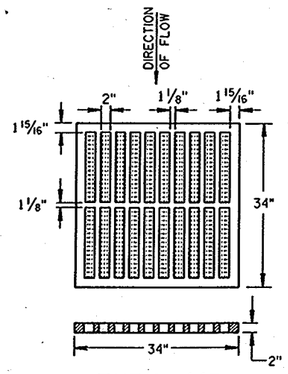
(APPROXIMATE WEIGHT 835 LBS.)



TYPE "HM"①

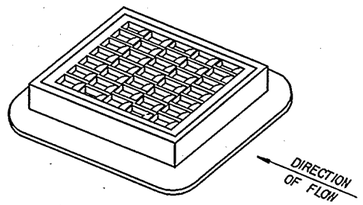
(APPROXIMATE WEIGHT 510 LBS.)

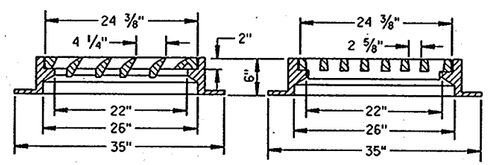
NOTE:
SPECIAL GRATE NO. 1 FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM" COVER



TYPE "MS"

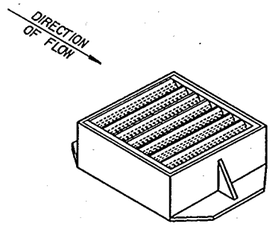
(APPROXIMATE GRATE WEIGHT 285 LBS.)

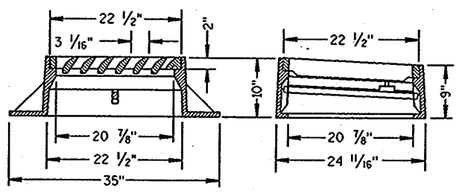




TYPE "S"

(APPROXIMATE WEIGHT 400 LBS.)





TYPE "V"

(APPROXIMATE WEIGHT 400 LBS.)

GENERAL NOTES

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

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

ALL COVERS PLACED IN VEHICULAR TRAFFIC AREAS SHALL BE "NON-ROCKING" TYPE.

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

① FOR USE WITH CONCRETE CURB & GUTTER, 36 INCH.

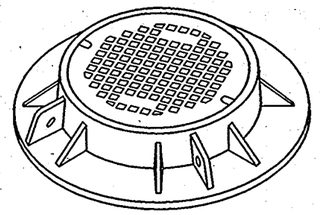
INLET COVERS

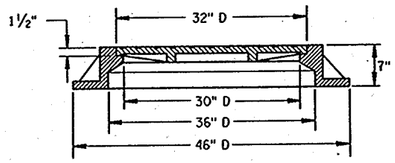
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 10/23/09
DATE
STATE DESIGN ENGINEER FOR HWYS
FHWA

S.D.D. 8 A 5-7b

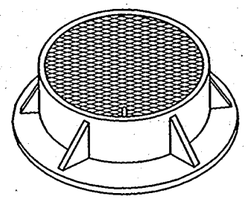
S.D.D. 8 A 5-7b

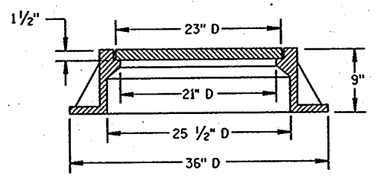




TYPE "K"

(APPROXIMATE WEIGHT 550 LBS.)





TYPE "J"

(APPROXIMATE WEIGHT 395 LBS.)

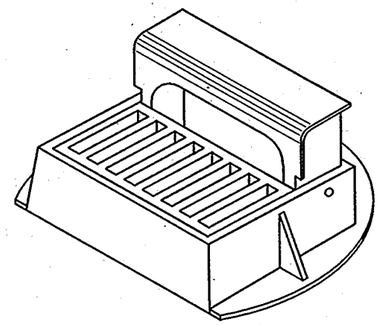
GENERAL NOTES

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

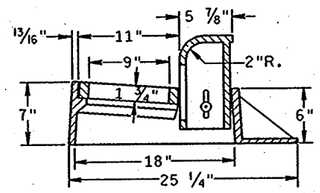
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

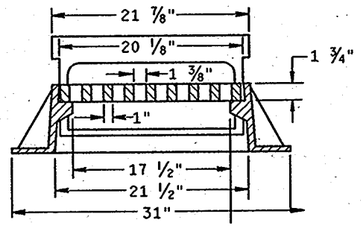
ALL COVERS PLACED IN VEHICULAR TRAFFIC AREAS SHALL BE "NON-ROCKING" TYPE.

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



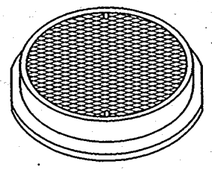
CURB BOX ADJUSTABLE 4" TO 10"

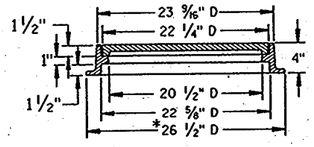




INLET COVER TYPE "Z"

(APPROXIMATE WEIGHT 270 LBS.)

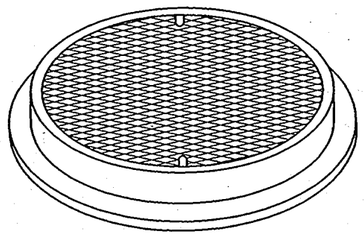


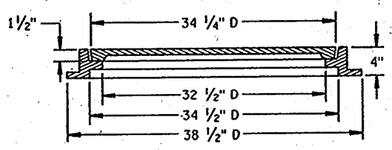


*THIS DIMENSION IS 25 ½" ON BEVELED SIDE

TYPE "L"

(APPROXIMATE WEIGHT 146 LBS.)





TYPE "M"

(APPROXIMATE WEIGHT 385 LBS.)

INLET AND MANHOLE COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

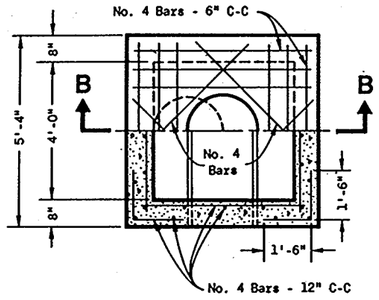
APPROVED 10/25/07 DATE

STATE DESIGN ENGINEER FOR HWYS

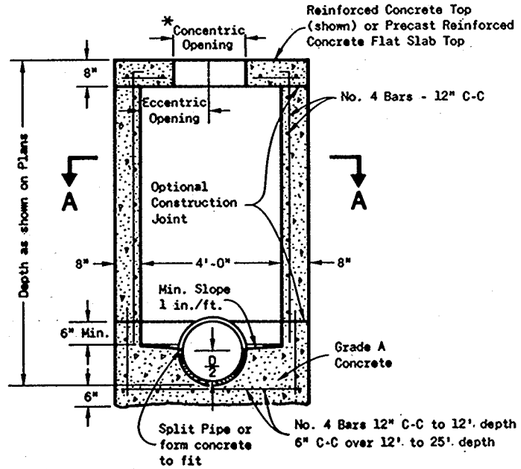
FHWA

S.D.D. 8 A 5-7c

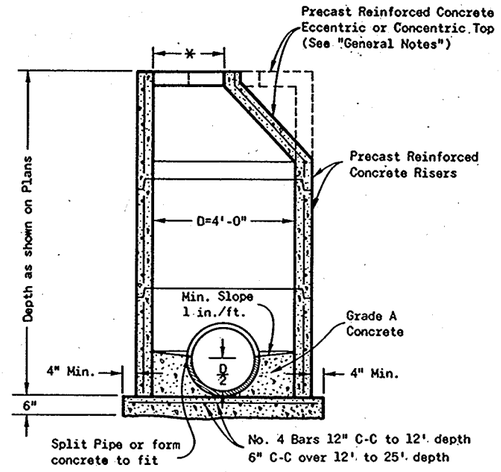
S.D.D. 8 A 5-7c



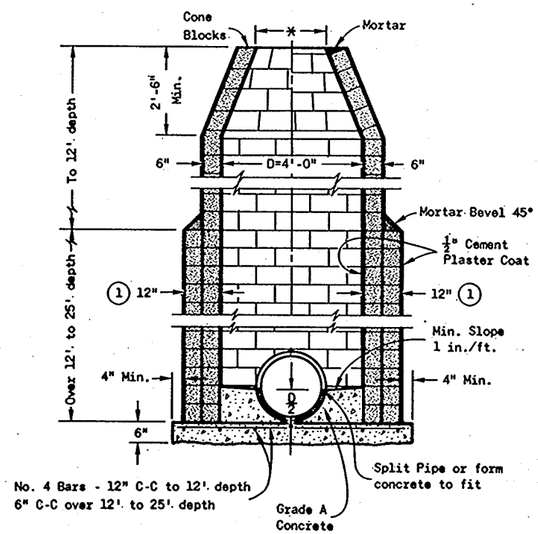
HALF SECTION **A-A**



SECTION **B-B**
REINFORCED CONCRETE



PRECAST REINFORCED CONCRETE



CONCRETE BLOCK

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 6 inches in depth, which meets the requirements for Granular Backfill. This bedding shall be compacted and provide uniform support for the entire area of the base.

Precast Reinforced Concrete 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 5 feet or less in depth, unless otherwise directed by the Engineer.

Steps meeting the following requirements shall be installed in all structures over 5 feet in depth: 16 inch C-C maximum spacing; project a minimum clear distance of 4 inches from the wall at the point of embedment; minimum length of 10 inches; minimum wall embedment of 3 inches; and be capable of supporting a concentrated load of 300 lbs. Ferrous metal steps not painted or treated to resist corrosion shall have a minimum cross sectional dimension of 1 inch.

Solid Aluminum steps shall have a minimum cross sectional dimension of 0.75 inch. 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 Polypropelene plastic coated reinforcement bar will be acceptable.

All bar steel reinforcement shall be embedded 2 inches 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 M 199.

* Use 2'-0" diameter opening with Type "C", "L" and "J" covers, or 3'-0" diameter with Type "K" and "M" covers.

(1) 2 courses 6" block.

MANHOLES TYPE 1

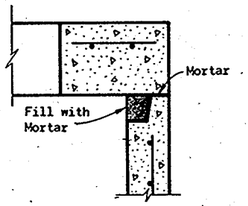
State of Wisconsin
Department of Transportation

APPROVED 4-13-82 DATE
D. A. Strand CHIEF DESIGN ENGINEER
FHWA

S.D.D. 8 B 6-3

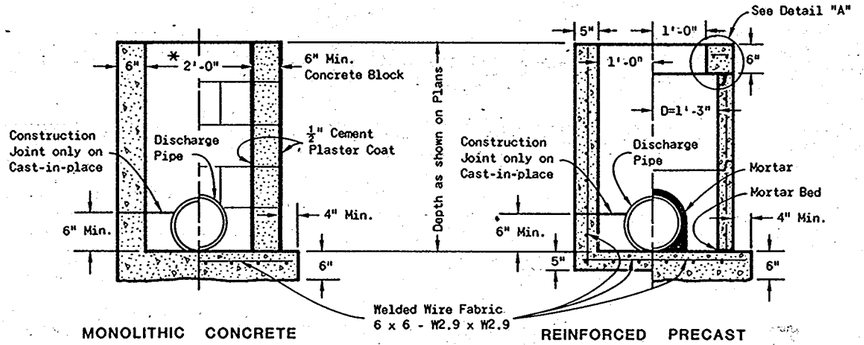
MANHOLES TYPE 1

S.D.D. 8 B 6-3



DETAIL "A"

*Selection of square or circular design will be based on the pipe sizes and the Inlet Cover being utilized.



MONOLITHIC CONCRETE | CONCRETE BLOCK | REINFORCED CONCRETE | PRECAST REINFORCED CONCRETE

INLETS TYPE 1

GENERAL NOTES

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

Detailed drawings for proposed alternate designs for underground drainage structures shall be submitted to the Engineer for approval providing that such alternate designs make provision for equivalent capacity and strength.

All Precast Inlet units shall conform to the pertinent requirements of AASHTO Designation M-199.

All drainage structures are designated on the plans as "Manholes 1-C", "Catch Basins 1-B", "Inlets 3-H", etc. The first digit designates the masonry portion of the structure, and the following letter designates the type of cover to be used to comprise the complete unit.

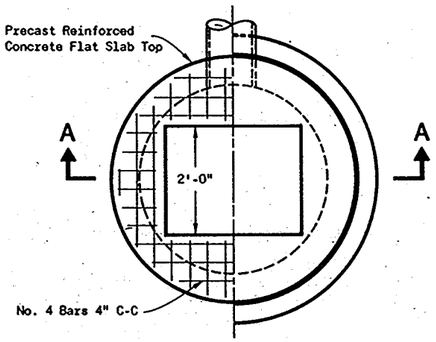
Precast Reinforced Bases shall be placed on a bed of material at least 6 inches in depth, which meets the requirements for Granular Backfill. This bedding shall be compacted and provide uniform support for the entire area of the base.

Precast Reinforced Concrete Flat Slab Tops may be used on the structures. The Tops shall be installed on a bed of mortar.

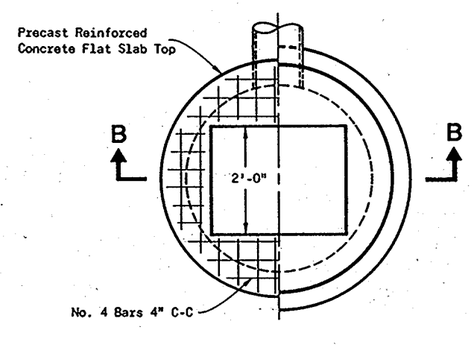
All Bar Steel reinforcement shall be embedded 2 inches clear unless otherwise shown or noted.

Precast Reinforced Concrete Risers shall be placed with tongue down.

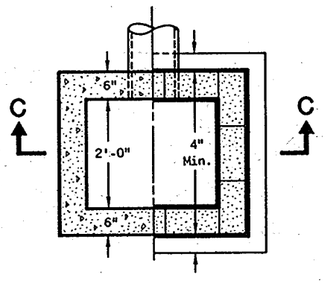
(1) Use 2'-6" opening for Type 2 Inlets and 3'-0" opening for Type 3 Inlets.



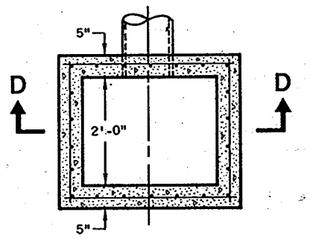
PLAN VIEW



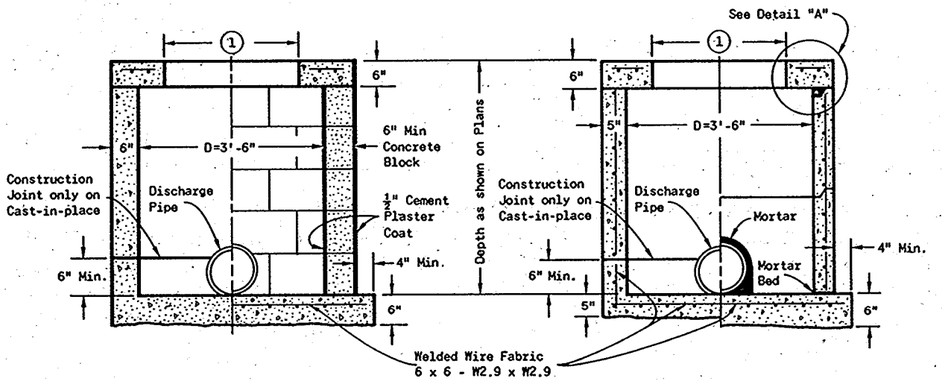
PLAN VIEW



PLAN VIEW

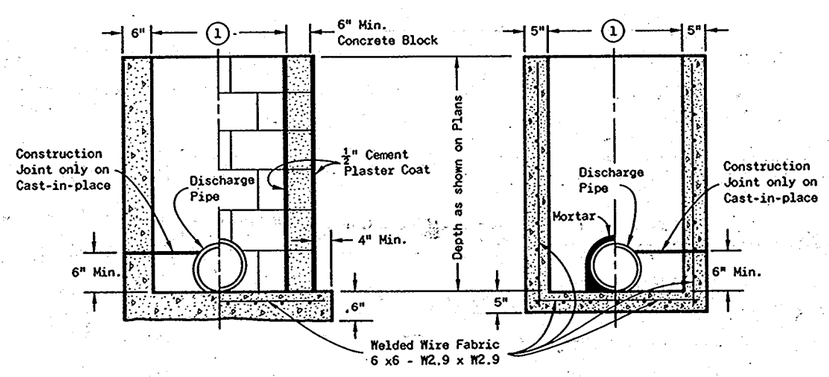


PLAN VIEW



MONOLITHIC CONCRETE | CONCRETE BLOCK | REINFORCED CONCRETE | PRECAST REINFORCED CONCRETE

SECTION A-A | SECTION B-B



MONOLITHIC CONCRETE | CONCRETE BLOCK | PRECAST REINFORCED CONCRETE | REINFORCED CONCRETE

SECTION C-C | SECTION D-D

INLETS TYPE 2 & 3

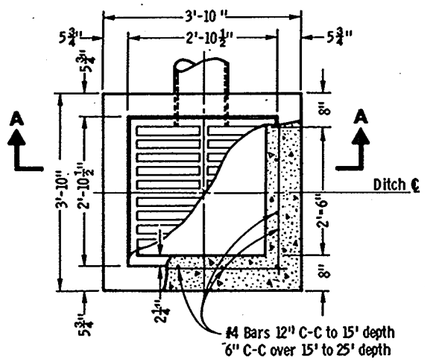
INLETS TYPE 1, 2 & 3

State of Wisconsin
Department of Transportation

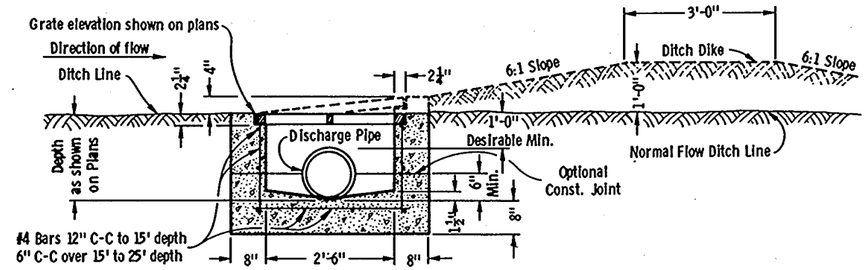
APPROVED 4-13-82 DATE
D. D. Strand CHIEF DESIGN ENGINEER
FHWA

S.D.D. 8 C 1-4

S.D.D. 8 C 1-4



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.

Detailed drawings for proposed alternate designs for inlets which may include precast reinforced concrete inlets, shall be submitted to the Engineer for approval providing that such alternate designs make provision for equivalent capacity and strength.

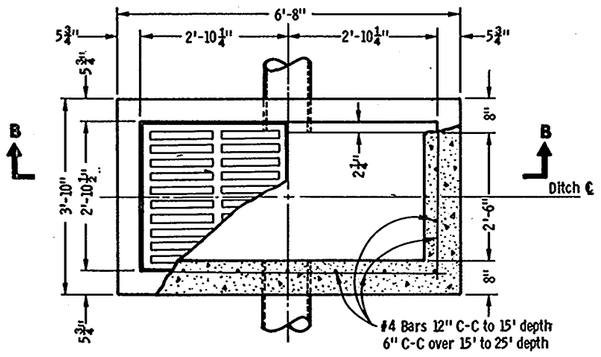
Precast reinforced concrete inlet units, if used, shall conform to the requirements of the Catch Basins, Manholes and Inlets Section of the Standard Specification's.

All inlets are designated on the Plans as "Inlets, 8-MS", etc. This designation is interpreted to mean that the number, or first digit designates the masonry portion of the structure and the following letter designates the type of cover or iron casting to be used therewith to comprise the complete unit.

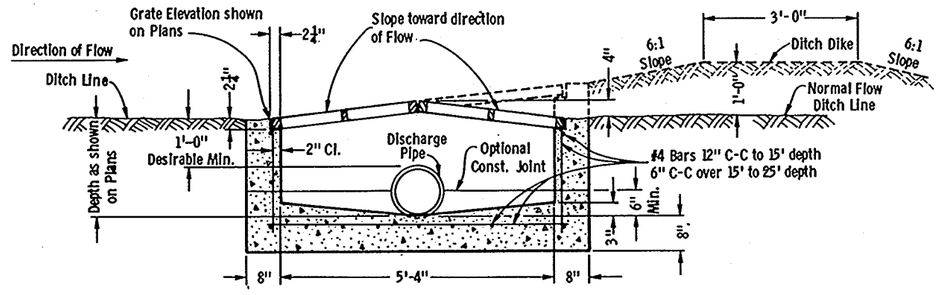
All bar steel reinforcement shall be embedded 2 inches clear unless otherwise shown or noted.

INLET TYPE 8

REINFORCED CONCRETE



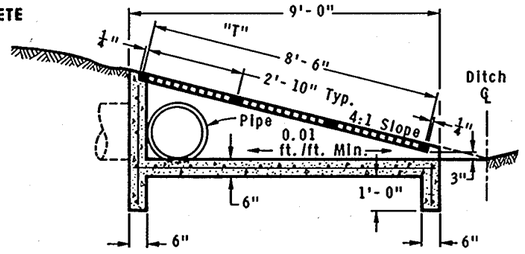
PLAN VIEW



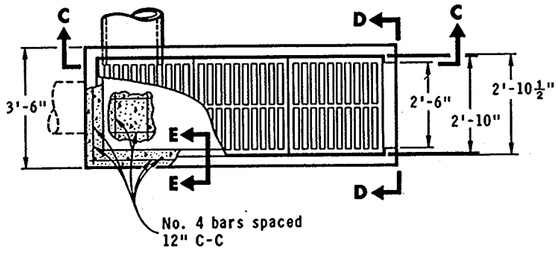
SECTION B-B

INLET TYPE 9

REINFORCED CONCRETE



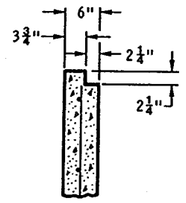
SECTION C-C



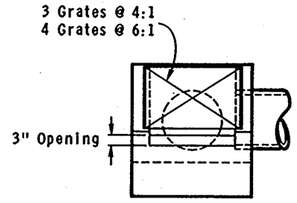
PLAN VIEW

INLET TYPE 10

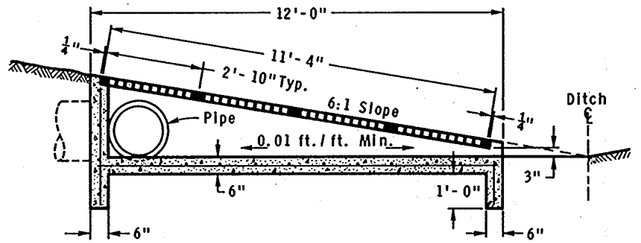
REINFORCED CONCRETE



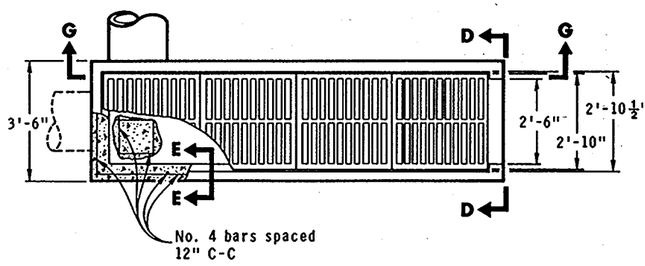
SECTION E-E



VIEW D-D



SECTION G-G



PLAN VIEW

INLET TYPE 11

REINFORCED CONCRETE

INLETS TYPE 8, 9, 10 and 11

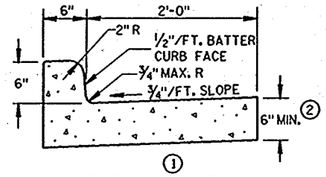
State of Wisconsin
Department of Transportation
Division of Highways

RECOMMENDED FOR APPROVAL:
4-30-74 DATE — CHIEF OF FACILITIES DEVELOPMENT

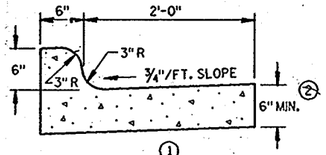
APPROVED
5-02-74 DATE — STATE HIGHWAY ENGINEER

S.D.D. 8C5-1

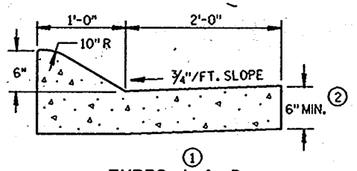
S.D.D. 8C5-1



① TYPES A & D

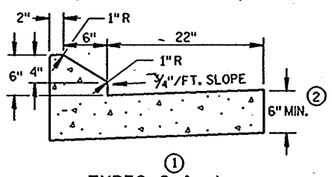


① TYPES K & L

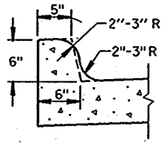


① TYPES A & D

CONCRETE CURB & GUTTER 36"

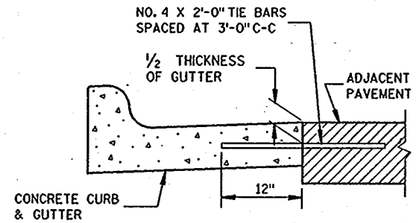


① TYPES G & J



OPTIONAL CURB SHAPE FOR TYPES K & L ①

CONCRETE CURB & GUTTER 30"



TYPICAL TIE BAR LOCATION ①

GENERAL NOTES

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

SEALANT IS NOT REQUIRED IN THE JOINTS OF CONCRETE CURB OR CONCRETE CURB & GUTTER EXCEPT AS REQUIRED FOR INTEGRAL GUTTER.

PAVEMENT TIES ARE REQUIRED, WHEN INCLUDED IN THE CONTRACT, WHERE CONCRETE CURB, CONCRETE CURB AND GUTTER OR CONCRETE PAVEMENT IS PLACED ADJACENT TO EXISTING CONCRETE.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. TIE BARS AND A LONGITUDINAL CONSTRUCTION JOINT ARE NOT REQUIRED WITH THIS ALTERNATE.

PAVEMENT JOINTS SHALL BE EXTENDED THROUGH INTEGRAL CURB & GUTTER. JOINTS IN INTEGRAL GUTTER SHALL HAVE THE SAME DIMENSIONS AS THE JOINTS IN THE ADJACENT PAVEMENT. JOINTS IN INTEGRAL CURB SHALL BE ⅛" WIDE.

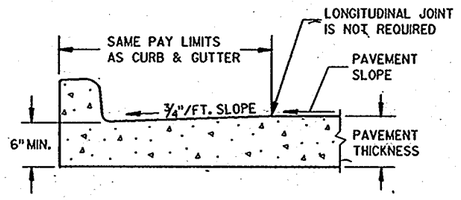
JOINTS IN INTEGRAL CURB & GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME SEALANT SPECIFIED FOR THE PAVEMENT JOINT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB & GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE COURSE AND UNCLASSIFIED EXCAVATION LIMITS ARE TWO FEET BEHIND THE BACK OF CURBS.

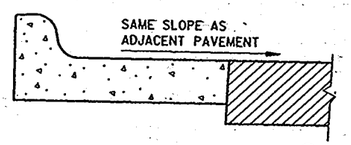
① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G AND K.

② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

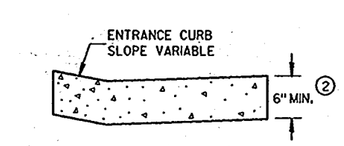
③ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATIONS WILL BE SHOWN ELSEWHERE IN THE PLAN.



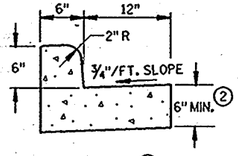
PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



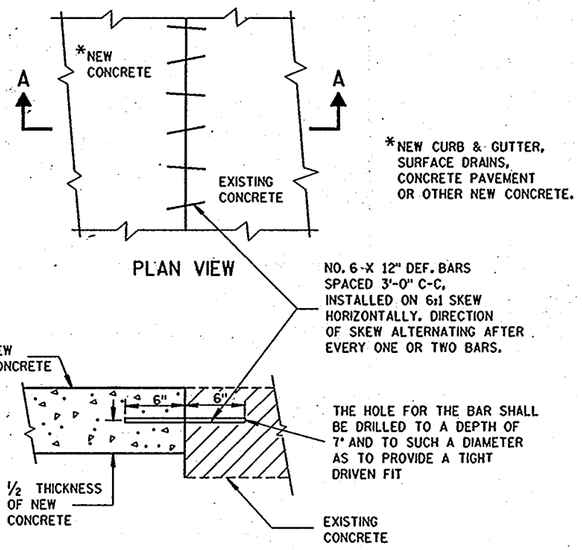
REVERSE SLOPE GUTTER ③
(TYPICAL FOR ALL CURB & GUTTER TYPES)



DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

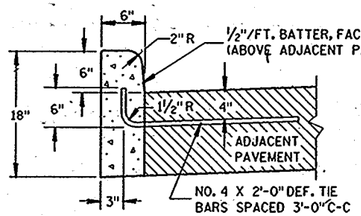


① TYPES A & D
CONCRETE CURB & GUTTER 18"

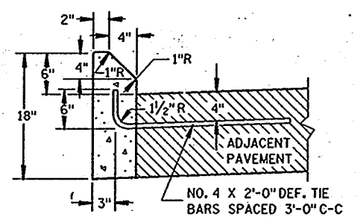


PLAN VIEW

SECTION A-A
PAVEMENT TIES



① TYPES A & D



① TYPES G & J

CONCRETE CURB

CONCRETE CURB, CONCRETE CURB & GUTTER AND PAVEMENT TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10-23-86
DATE

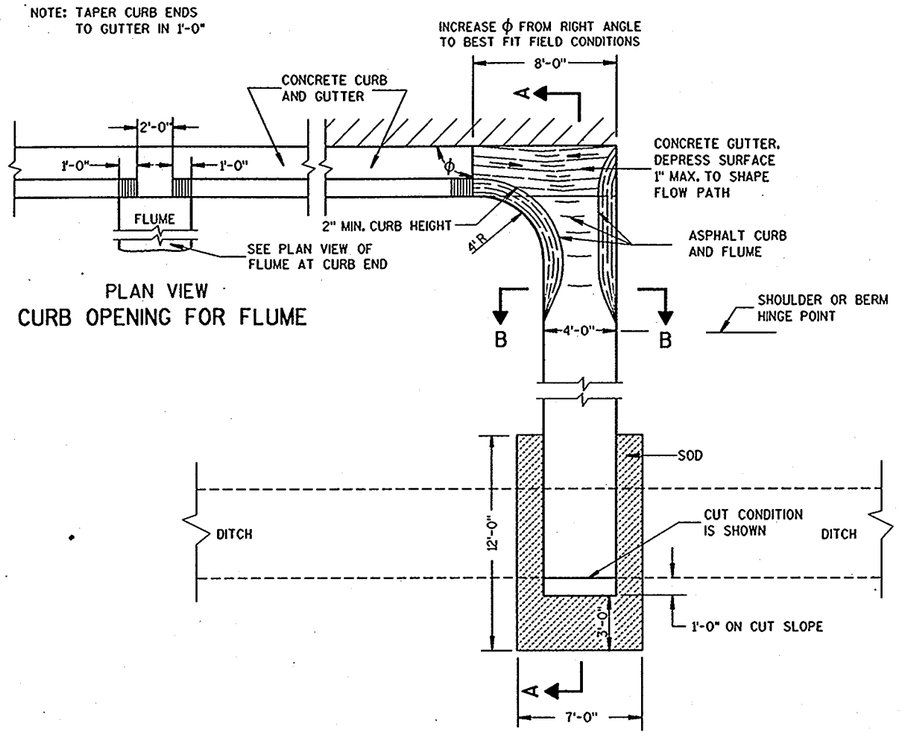
STATE DESIGN ENGINEER FOR HWYS

FHWA

S.D.D. 8 D 1-11

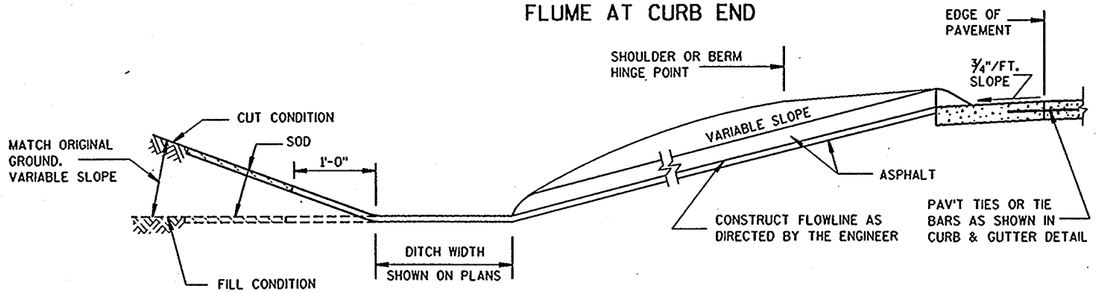
S.D.D. 8 D 1-11

ASPHALTIC FLUME

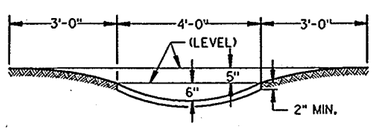


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

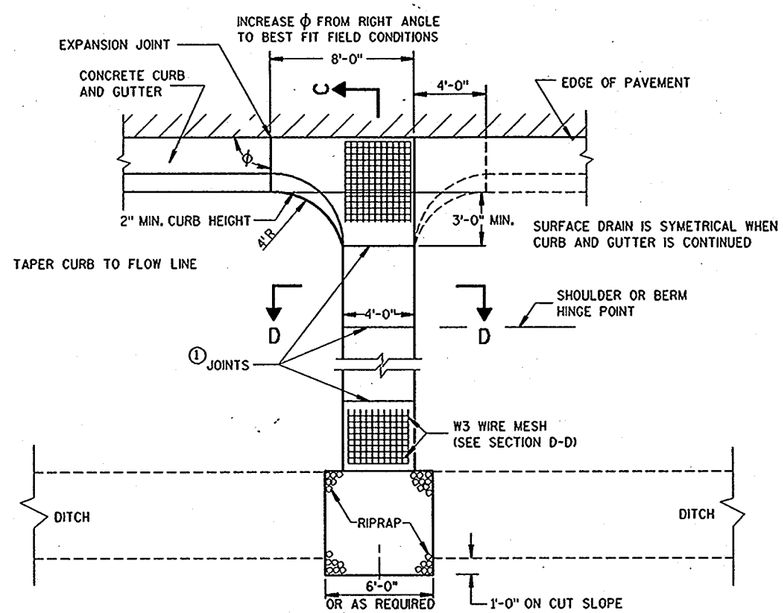
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE ⅛ TO ¼ INCH WIDE BY 1½ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

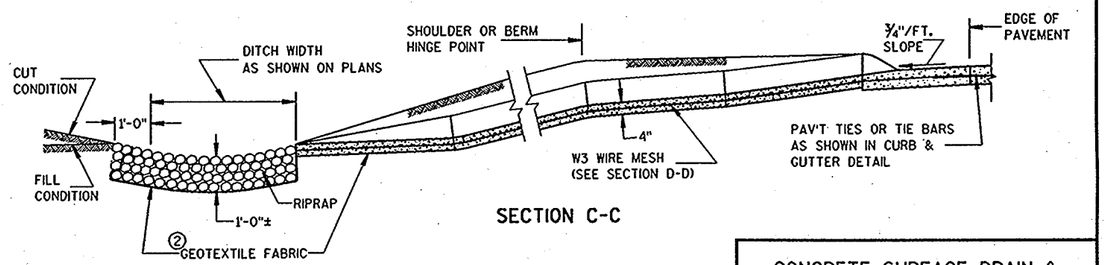
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

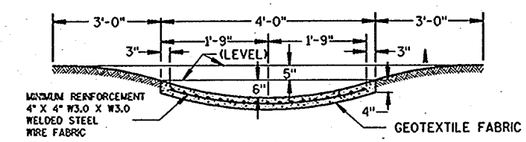
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

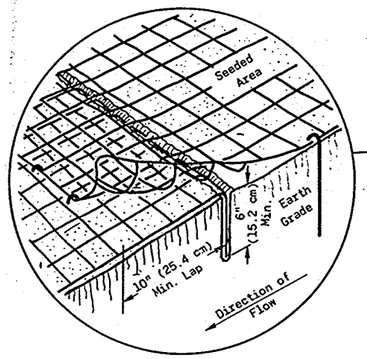
CONCRETE SURFACE DRAIN & ASPHALTIC FLUME

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

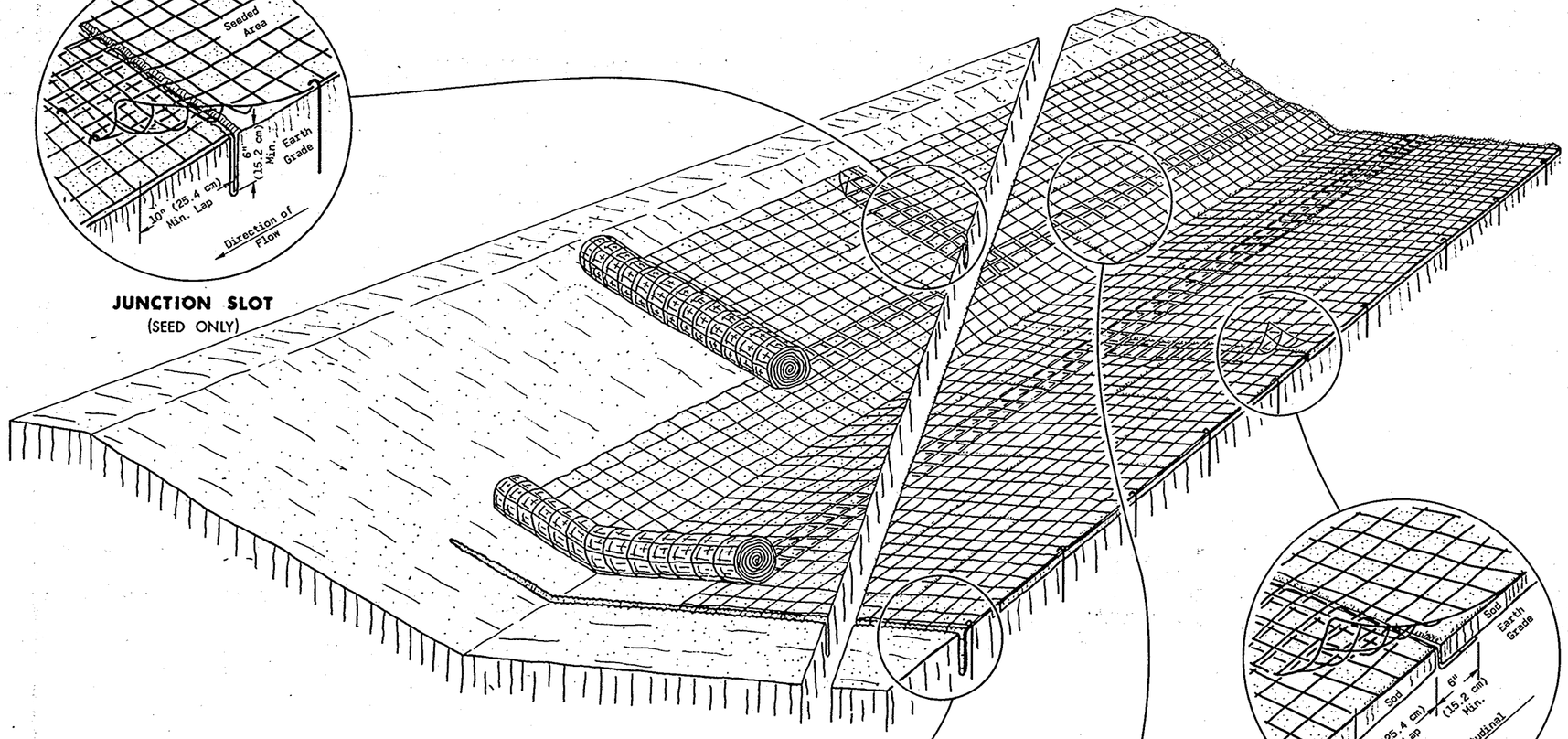
APPROVED 10/23/09
DATE
STATE DESIGN ENGINEER FOR HWYS
FHWA

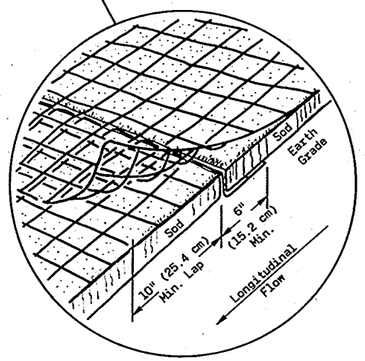
S.D.D. 8 D 4-3

S.D.D. 8 D 4-3

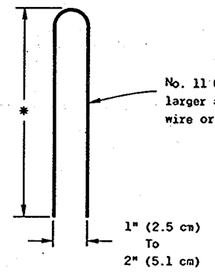


JUNCTION SLOT
(SEED ONLY)



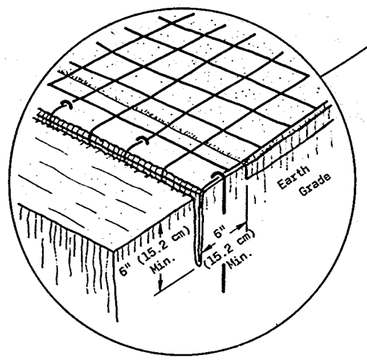


JUNCTION SLOT
(SOD ONLY)

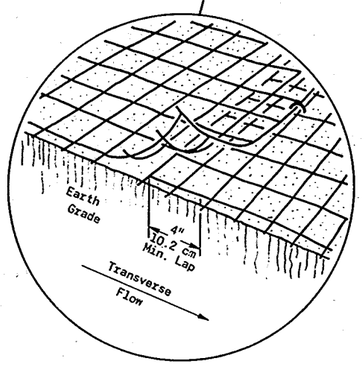


DETAIL OF TYPICAL STAPLE

*6" (15.2 cm) Min. for firm soils
12" (30.5 cm) Min. for loose soils
8" (20.3 cm) Min. where both sod and mats are being used.



ANCHOR SLOT
AT BEGINNING AND END OF EROSION MAT
(SEED AND SOD)



LAP JOINT
(SEED AND SOD)

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.

Variations in the dimensions or materials shown hereon shall be permitted if they provide equivalent protection and material strength and if prior approval of the Engineer is obtained.

Lap joints shall not be placed in the bottom of V-shaped ditches.

Junction Slots on adjacent strips of Matting shall be staggered a minimum of 4 feet (1.219 m) apart.

Edges of the Erosion Mat shall be impressed in the soil.

Erosion Mat shall be measured and payed for in accordance with the Standard Specifications.

EROSION MAT OVER SOD

a. Only Jute Fabric will be permitted over sod.
b. Wood Stakes for Sod may be omitted by the Engineer if the existing slope and soil conditions so warrant.
c. The width of Erosion Mat shall always equal the Sod width.
d. Sod strips may be placed either longitudinally or transversely to the flow line of the Ditch.

EROSION MAT OVER SEEDING

Junction or Anchor Slots shall be at minimum intervals of 100 feet (30.48 m) on grades up to and including 3 percent, and 50 feet (15.24 m) on grades exceeding 3 percent.

METHOD OF DIMENSIONING

1'-0" (30.5 cm)

1'-0" (30.5 cm)

BASIS: 1 in. = EXACTLY 25.4 mm

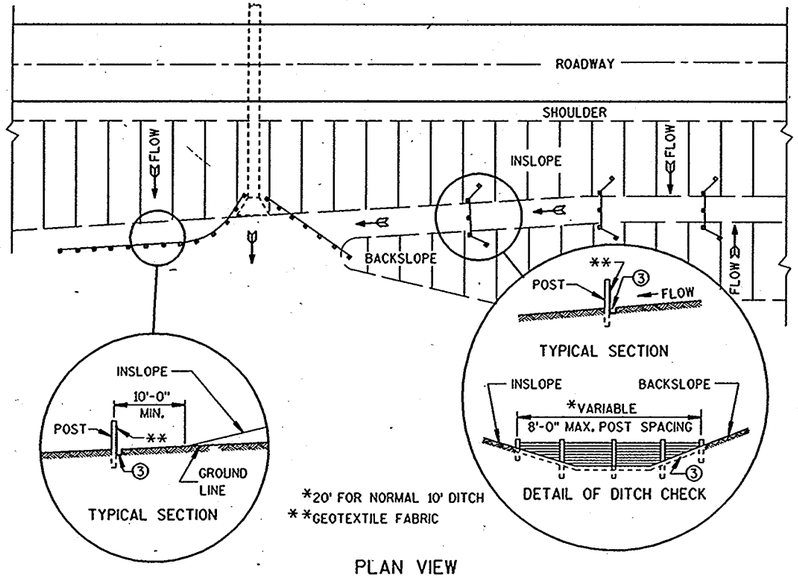
EROSION MAT

State of Wisconsin
Department of Transportation
Division of Highways

RECOMMENDED FOR APPROVAL:
12-3-73 DATE — CHIEF of FACILITIES DEVELOPMENT

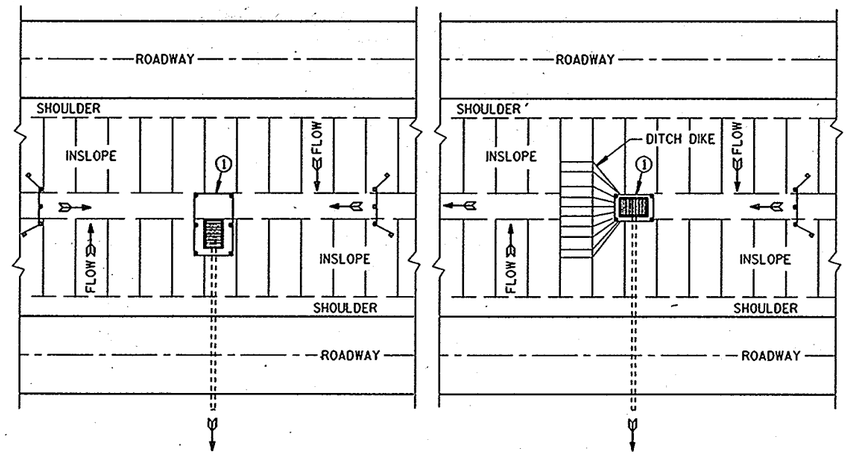
APPROVED
1-15-74 DATE — STATE HIGHWAY ENGINEER

S.D.D. 8E7-1



PLAN VIEW

TYPICAL APPLICATIONS OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

WHEN POSSIBLE THE SILT FENCE SHOULD BE CONSTRUCTED IN AN ARC OR HORSESHOE SHAPE, WITH THE ENDS POINTING UPSLOPE TO MAXIMIZE BOTH STRENGTH AND EFFECTIVENESS.

① CROSS BRACE WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS AS DIRECTED BY THE ENGINEER.

② MINIMUM 14 GAGE WIRE REQUIRED, FOLD FABRIC 3" OVER THE WIRE AND STAPLE OR PLACE WIRE RINGS ON 12" C-C.

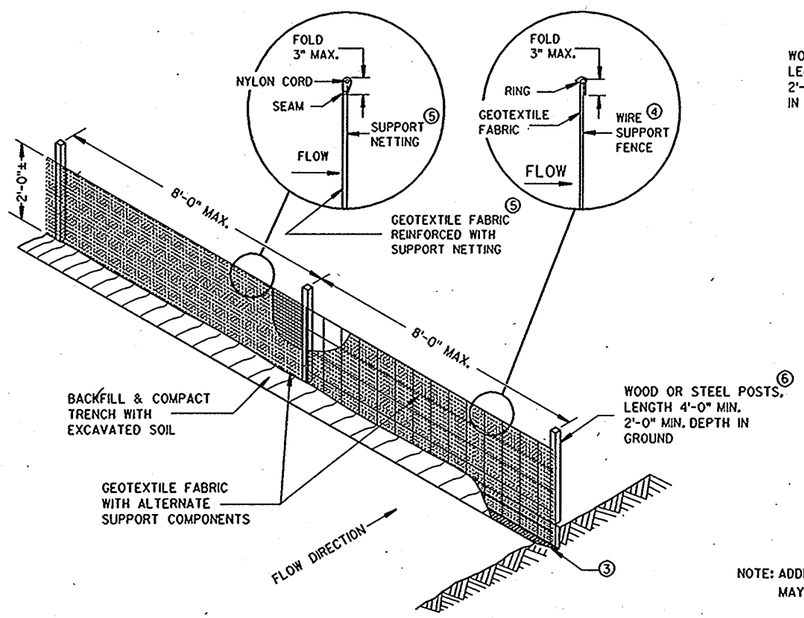
③ EXCAVATE A TRENCH A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

④ WIRE SUPPORT FENCE SHALL BE 14 GAGE MINIMUM WOVEN WIRE WITH A MAXIMUM MESH SPACING OF 6". SECURE TOP OF GEOTEXTILE FABRIC TO TOP OF FENCE WITH STAPLES OR WIRE RINGS AT 12" C-C.

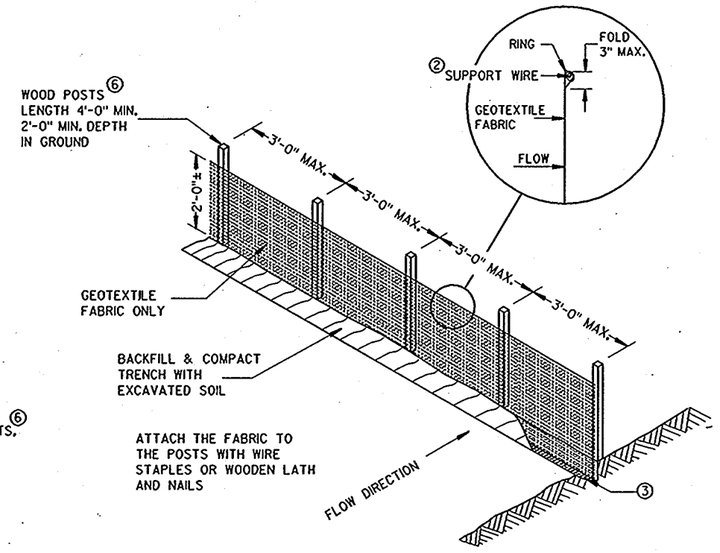
⑤ GEOTEXTILE FABRIC SHALL BE REINFORCED WITH AN INDUSTRIAL POLYPROPYLENE NETTING WITH A MAXIMUM MESH SPACING OF ¾" OR EQUAL. A HEAVY DUTY NYLON TOP SUPPORT CORD OR EQUIVALENT IS REQUIRED.

⑥ STEEL POSTS SHALL BE STUDDED "TEE" OR "U" TYPE WITH A MINIMUM WEIGHT OF 1.28 LBS/LINEAL FOOT (WITHOUT ANCHOR). FIN ANCHORS SUFFICIENT TO RESIST POST MOVEMENT ARE REQUIRED. WOOD POSTS SHALL BE A MINIMUM SIZE OF 4" DIA. OR 1½" X 3½" EXCEPT WOOD POSTS FOR GEOTEXTILE FABRIC REINFORCED WITH NETTING SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OAK OR HICKORY.

ALTERNATES A & B ARE EQUAL AND EITHER MAY BE USED.

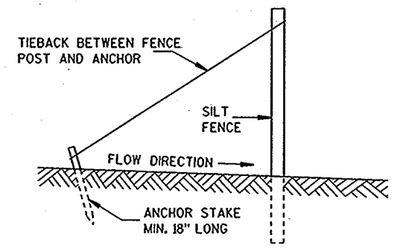


ALTERNATE "A"



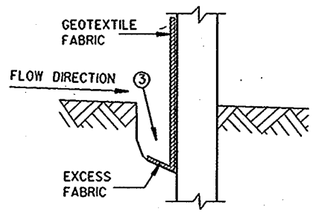
ALTERNATE "B"

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



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)



TRENCH DETAIL

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 8-31-88 DATE

STATE DESIGN ENGINEER FOR HWYS

FHWA

S.D.D. 8 E 9-3

S.D.D. 8 E 9-3

METAL APRON ENDWALLS

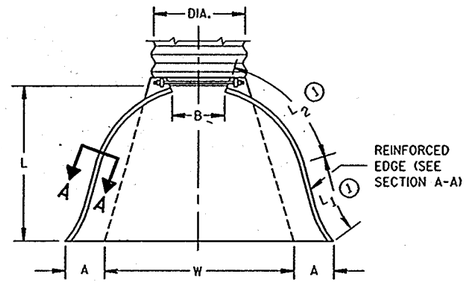
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.079	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.109	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

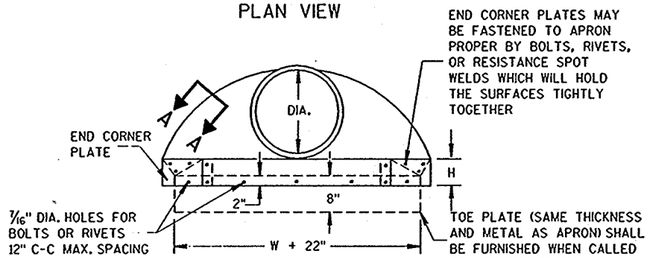
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 7/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 1/4	97 1/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4-35 ** 98 1/4- 100		90	5 1/2	2 2/5 to 1
60	6	* 30-35 **	60	39	99	96	5	2 to 1
66	6 1/2	* 24-30 **	* 72-78 **	* 21-27 **	99	102	5 1/2	2 to 1
72	7	* 24-36 **	78	21	99	108	6	2 to 1
78	7 1/2	* 24-36 **	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

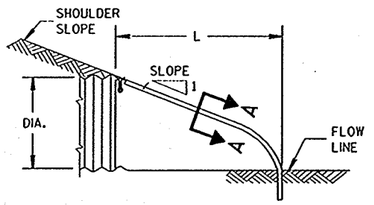
*MINIMUM
**MAXIMUM



PLAN VIEW

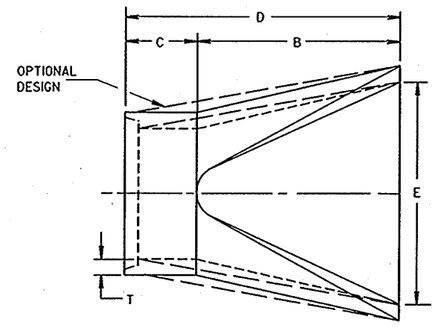


END VIEW

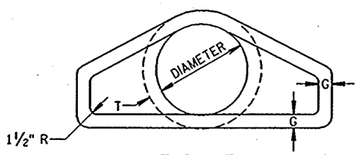


SIDE ELEVATION

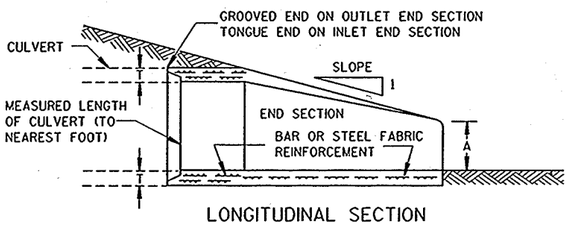
METAL ENDWALLS



PLAN

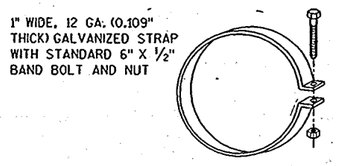


END VIEW



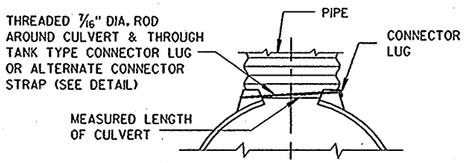
LONGITUDINAL SECTION

CONCRETE ENDWALLS

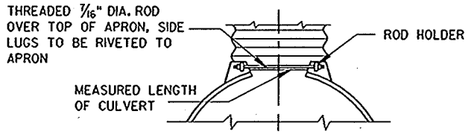


ALTERNATE FOR TYPE 1 CONNECTION

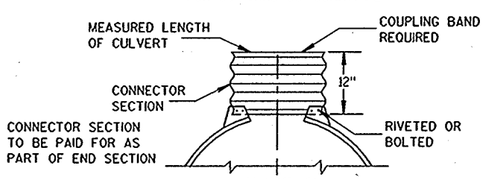
END SECTION CONNECTOR STRAP



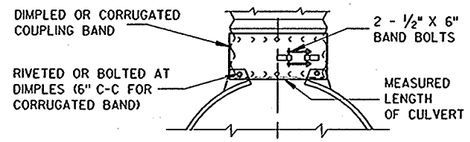
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

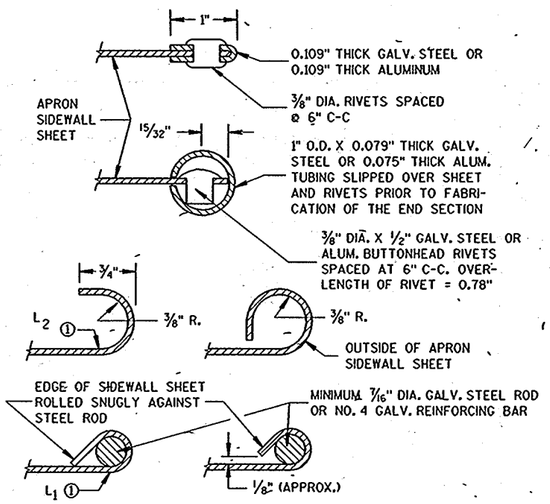
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

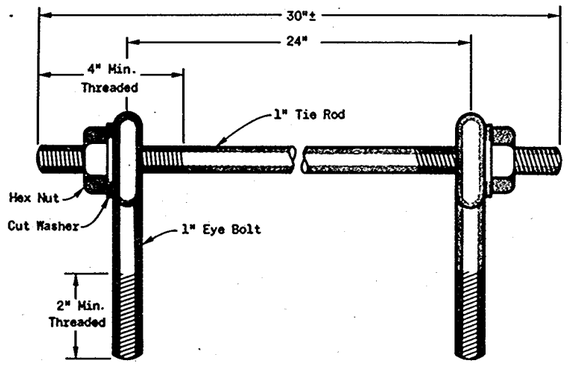
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

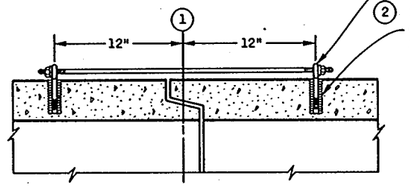
APPROVED 12/17/87 DATE
STATE DESIGN ENGINEER FOR HWYS
FHWA

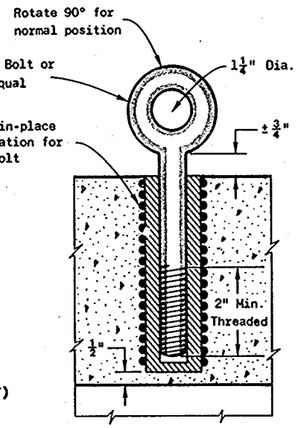
S.D.D. 8 F 1-10c

S.D.D. 8 F 1-10c



EYE BOLTS AND TIE ROD





(CAST-IN-PLACE THREADED INSERT)
LONGITUDINAL SECTIONS

GENERAL NOTES

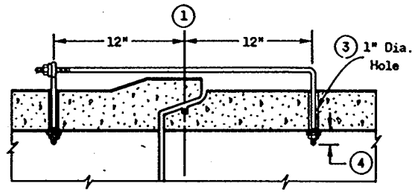
Concrete Culvert Pipe shall be tied together in the manner illustrated by this detail at locations designated on the plan. The contractor may use either Alternate 1, 2 or 3 for drainage structures. Only Alternate 1 and 3 may be used for Cattle Passes. Unless otherwise stated in the contract the materials, fabrication and work necessary to tie Culvert Pipe as indicated on the plans and by this detail will be considered incidental to Culvert Pipe, Reinforced Concrete Culvert Pipe, or Reinforced Concrete Pipe Cattle Pass.

Detailed drawings for proposed alternate designs for Joint Ties shall be submitted to the Engineer for approval.

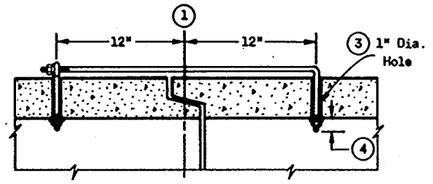
1. ℄ of Tongue and Groove or Bell and Spigot Joints.
2. The inside of the Threaded Inserts shall be clean to allow the insertion of Threaded Eye Bolts.
3. Holes shall be Cast-in-Place or drilled 12" from ℄ of Tongue and Groove.
4. Bolt projection inside of pipe shall not exceed 2".
5. Rod Diameter + 1 inch.

(JOINT TIES FOR 72" DIA. AND OVER CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)



(MODIFIED BELL PIPE)

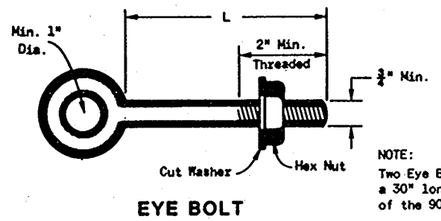


(TONGUE & GROOVE PIPE)

LONGITUDINAL SECTION

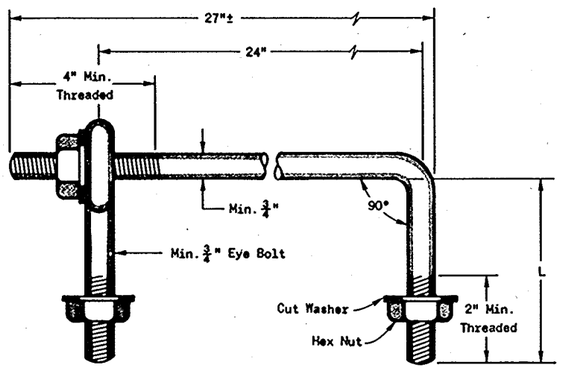
EYE BOLT DIMENSION TABLE

PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" to 24"	4½"	6¼"
30"	5"	7"
36"	5½"	7"
42"	6"	
48"	6½"	
60"	7½"	
66"	8"	



EYE BOLT

NOTE:
Two Eye Bolts may be used with a 30" long Threaded Rod in lieu of the 90° bent Tie Rod.



EYE BOLT AND TIE ROD

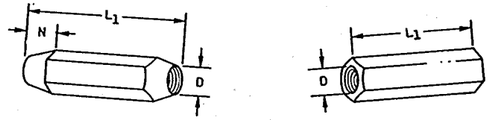
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N	W
12-60	⅝	⅝	5	½	1¾
66-84	¾	¾	5	½	5
90-108	1	1	7	1 7/16	7½

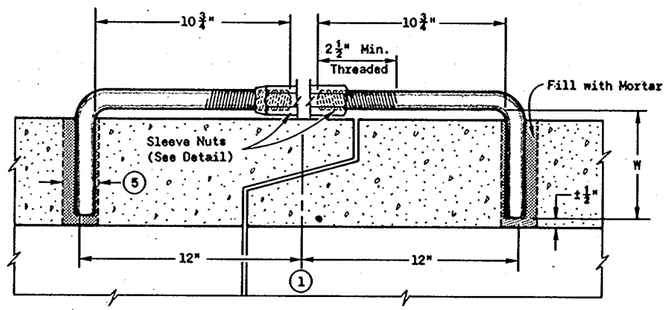
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

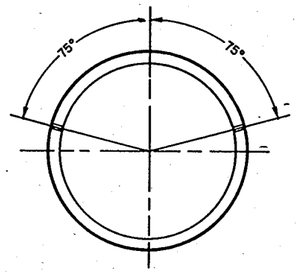
SLEEVE NUTS



LONGITUDINAL SECTION

(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



Placement of (2) Cast-in-Place inserts or holes during fabrication for pipe sections requiring Tie Rods

TRANSVERSE SECTION

JOINT TIES FOR CONCRETE PIPE

State of Wisconsin
Department of Transportation

APPROVED 12-29-82 DATE
FHWA

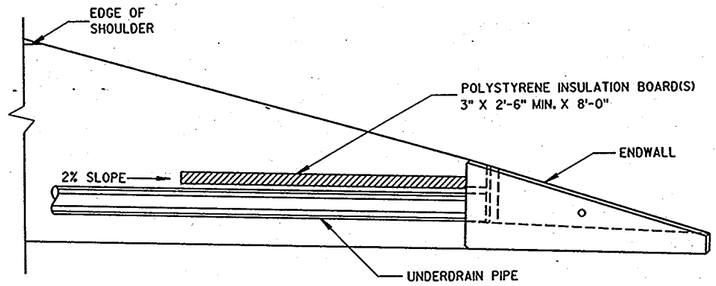
CHIEF DESIGN ENGINEER

S.D.D. 8 F 4-3

S.D.D. 8 F 4-3

DIMENSIONS IN INCHES											
PIPE DIA.	A	B	C	D	E	F	G	H	J	L	M
**4	6	12	5	9	8	32	36	11	2½	6½	4
6	8	14	7	11	10	42	44	13	3½	8½	6

**APRON ENDWALL FOR 6 INCH DIAMETER PIPE MAY BE SUBSTITUTED FOR THIS SIZE PROVIDED THE HOLE IN THE HEADWALL IS SIZED AND LOCATED TO CONFORM TO THE 4 INCH DIAMETER PIPE DIMENSIONS (C & J)



INSTALLATION DETAIL

GENERAL NOTES

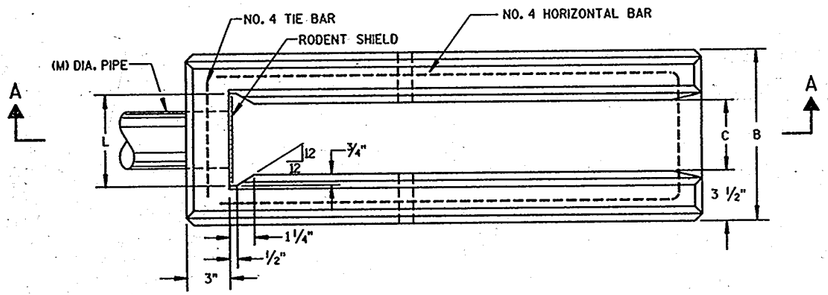
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

ALTERNATIVE DESIGNS WHICH PROVIDE EQUIVALENT CAPACITY AND STRENGTH MAY BE USED WHEN APPROVED BY THE ENGINEER. ENDWALL MAY BE EITHER PRECAST OR CAST-IN-PLACE CONCRETE.

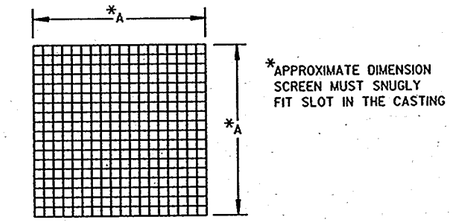
THE UNDERDRAIN PIPE SHALL BE FULLY INSERTED AND SEALED INTO THE ENDWALL WITH CEMENT MORTAR PRIOR TO BACKFILLING AROUND THE STRUCTURE.

THE UPPERMOST POINT OF THE ENDWALL SHALL BE PLACED FLUSH WITH THE ROADWAY SLOPE. ADJACENT EMBANKMENT SLOPES SHALL BE SHAPED TO FIT THE SIDES AND TOE OF THE ENDWALL.

① THE RODENT SHIELD SHALL BE HARDWARE CLOTH OR EQUIVALENT WITH 3X3 MESHES PER LINEAR INCH AND ⅓ INCH SQUARE NOMINAL OPENINGS. THE HARDWARE CLOTH SHALL BE GALVANIZED AFTER WEAVING.

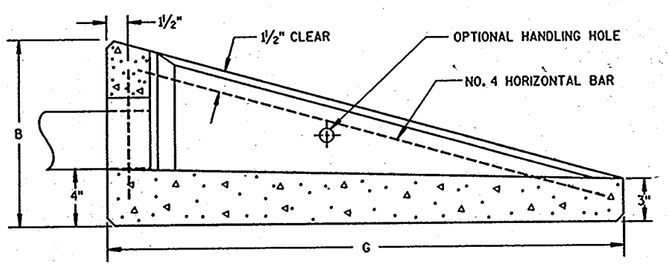


PLAN VIEW

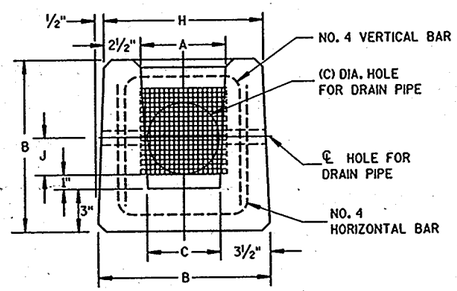


*APPROXIMATE DIMENSION SCREEN MUST SNUGLY FIT SLOT IN THE CASTING

①RODENT SHIELD

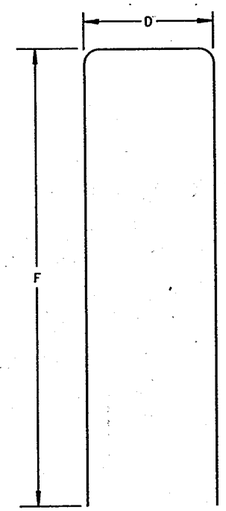


SECTION A-A

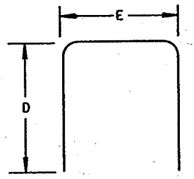


END VIEW

CONCRETE APRON ENDWALL FOR UNDERDRAIN



NO. 4
HORIZONTAL BAR



NO. 4
VERTICAL BAR

BAR STEEL REINFORCEMENT DETAILS

REINFORCED
CONCRETE APRON ENDWALL
FOR PIPE UNDERDRAIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

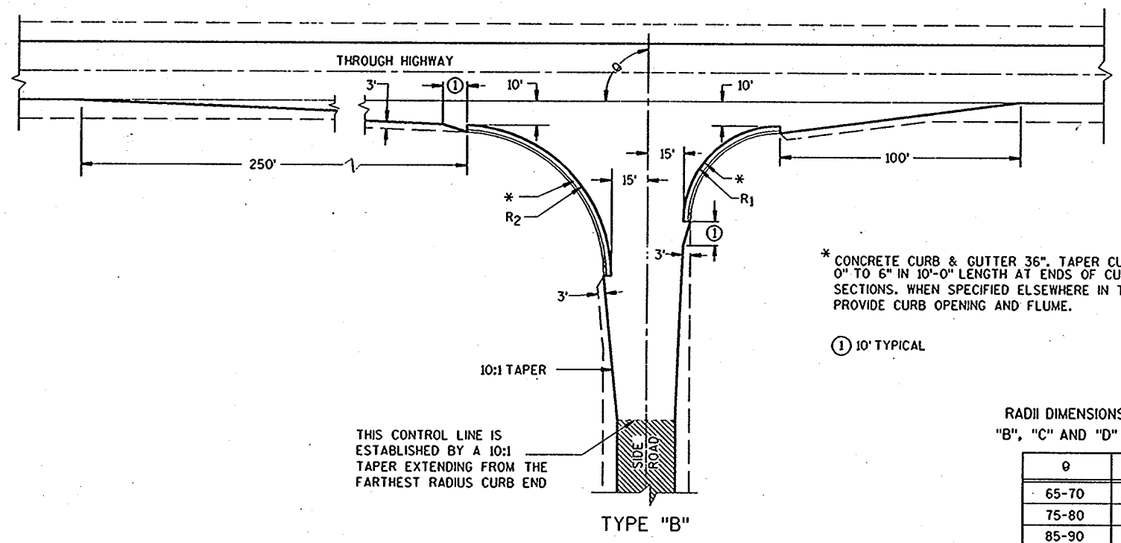
APPROVED 3/8/88 DATE

STATE DESIGN ENGINEER FOR HWYS

FHWA

S.D.D. 8 F 6-1

S.D.D. 8 F 6-1



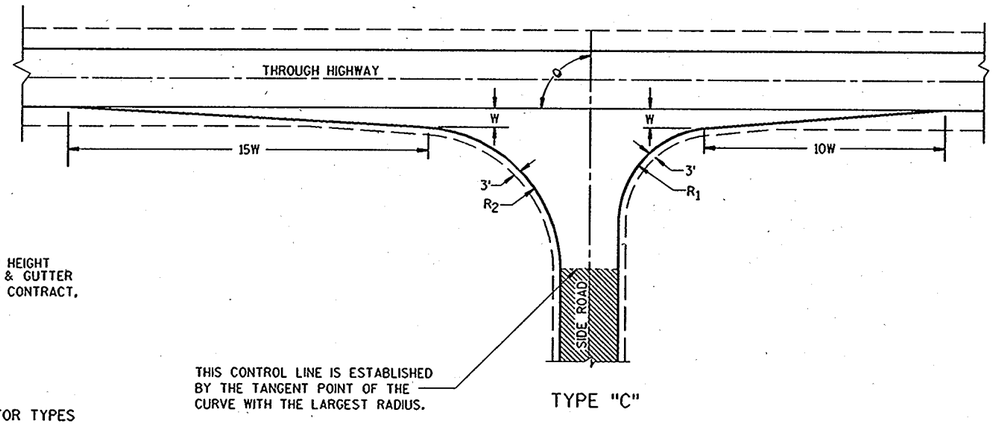
TYPE "B"

* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

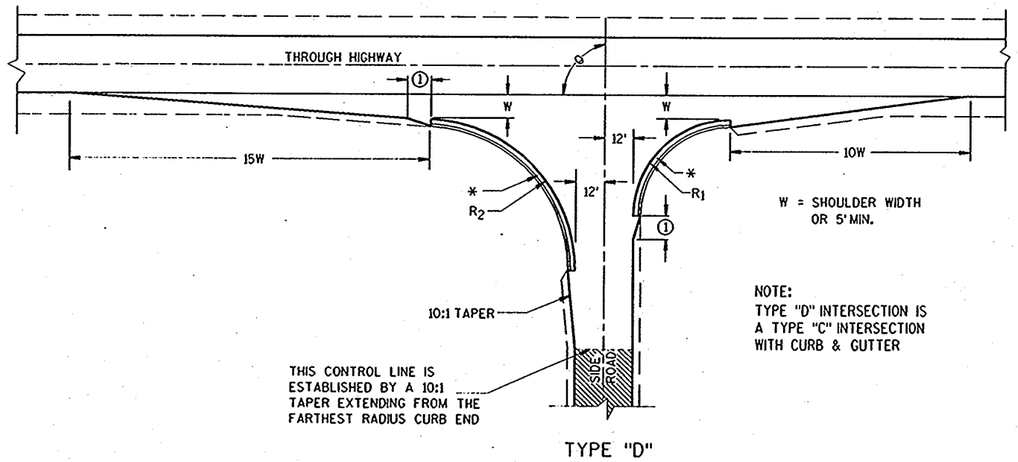
① 10' TYPICAL

RADII DIMENSIONS FOR TYPES "B", "C" AND "D" INTERSECTIONS

θ	R_1	R_2
65-70	35	70
75-80	40	70
85-90	40	60
100	50	55
105-110	60	45



TYPE "C"



W = SHOULDER WIDTH OR 5' MIN.

NOTE:
TYPE "D" INTERSECTION IS A TYPE "C" INTERSECTION WITH CURB & GUTTER

TYPE "D"

GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

▨ EXISTING SURFACE

AT-GRADE SIDE ROAD INTERSECTION, TYPES "B","C" AND "D"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

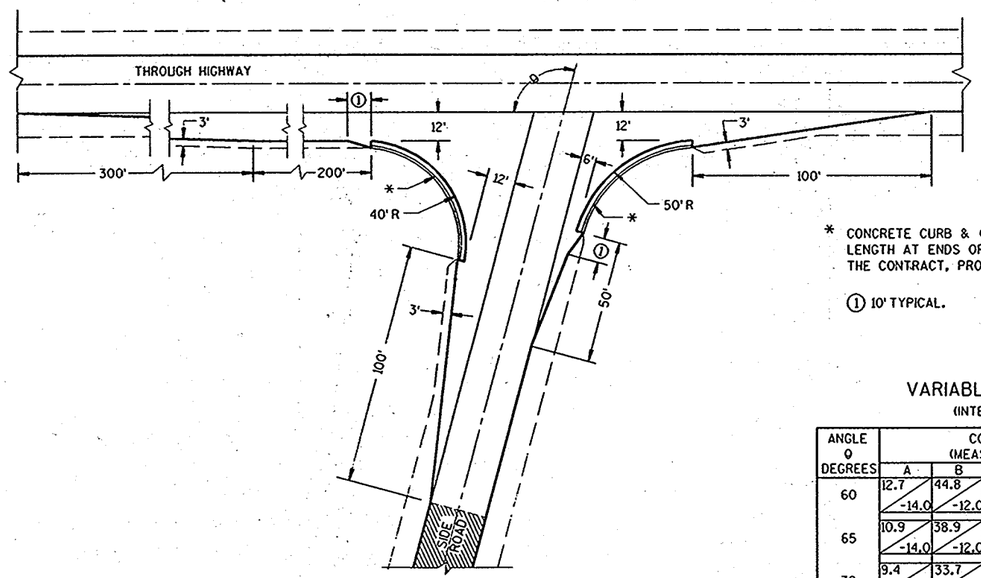
APPROVED 6/22/89
DATE

STATE DESIGN ENGINEER FOR HWYS

FHWA

S.D.D. 9 A 1-8a

S.D.D. 9 A 1-8a



θ = 80° OR MORE

EXISTING SURFACE

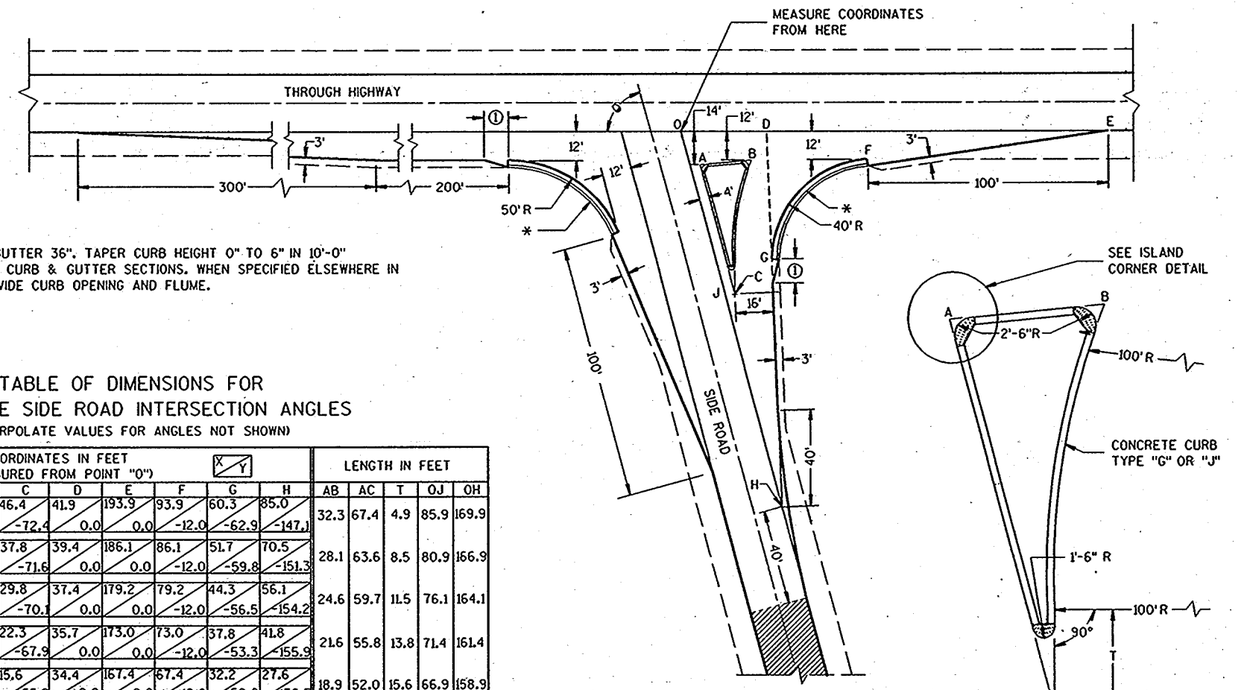
* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

① 10' TYPICAL.

TABLE OF DIMENSIONS FOR VARIABLE SIDE ROAD INTERSECTION ANGLES

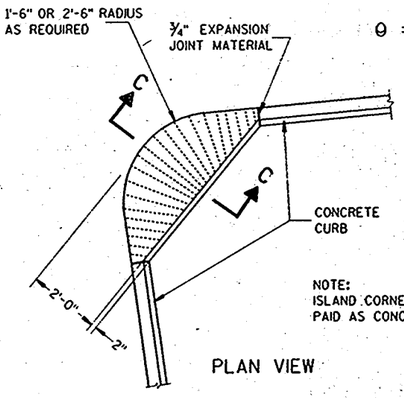
(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

ANGLE θ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT "O") X / Y								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7 / -14.0	44.8 / -12.0	46.4 / -72.4	41.9 / 0.0	193.9 / 0.0	93.9 / -12.0	60.3 / -62.9	85.0 / -147.1	32.3	67.4	4.9	85.9	169.9
65	10.9 / -14.0	38.9 / -12.0	37.8 / -71.6	39.4 / 0.0	186.1 / 0.0	86.1 / -12.0	51.7 / -59.8	70.5 / -151.3	28.1	63.6	8.5	80.9	166.9
70	9.4 / -14.0	33.7 / -12.0	29.8 / -70.1	37.4 / 0.0	179.2 / 0.0	79.2 / -12.0	44.3 / -56.5	56.1 / -154.2	24.6	59.7	11.5	76.1	164.1
75	7.9 / -14.0	29.2 / -12.0	22.3 / -67.9	35.7 / 0.0	173.0 / 0.0	73.0 / -12.0	37.8 / -53.3	41.8 / -155.9	21.6	55.8	13.8	71.4	161.4
80	6.5 / -14.0	25.2 / -12.0	15.6 / -65.2	34.4 / 0.0	167.4 / 0.0	67.4 / -12.0	32.2 / -50.0	27.6 / -156.5	18.9	52.0	15.6	66.9	158.9



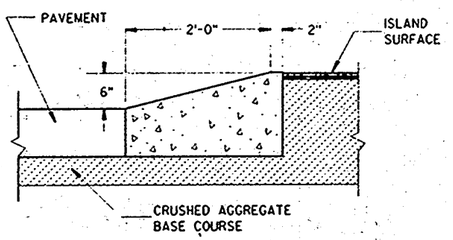
θ = ACUTE ANGLES LESS THAN 80°

TYPE "A" SIDE ROAD INTERSECTION DETAILS



NOTE:
ISLAND CORNER WILL BE PAID AS CONCRETE CURB.

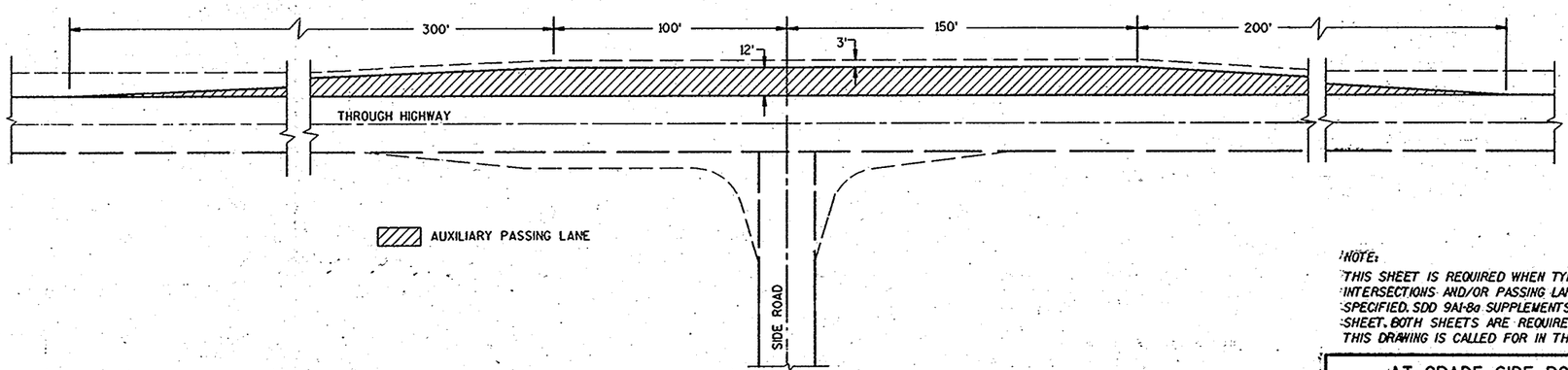
PLAN VIEW



SECTION C-C

ISLAND CORNER DETAIL

(TO BE CONSTRUCTED AT ALL ISLAND CORNERS)



PASSING LANE DETAIL

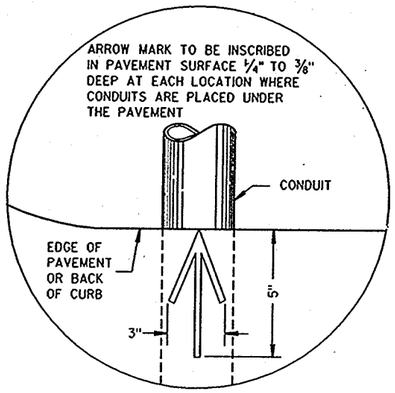
NOTE:
THIS SHEET IS REQUIRED WHEN TYPE "A" INTERSECTIONS AND/OR PASSING LANES ARE SPECIFIED. SDD 9A1-8a SUPPLEMENTS THIS SHEET. BOTH SHEETS ARE REQUIRED WHEN THIS DRAWING IS CALLED FOR IN THE PLANS.

AT-GRADE SIDE ROAD INTERSECTION, TYPE "A" AND PASSING LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

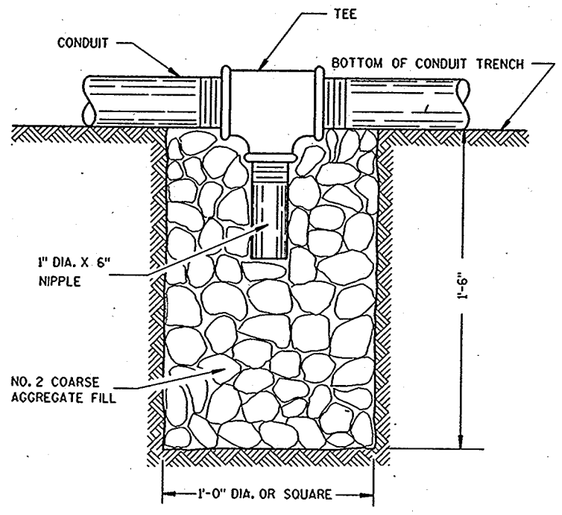
S.D.D. 9 A 1-8b

S.D.D. 9 A 1-8b



PLAN VIEW

ARROW MARK



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

DRAIN SUMP FOR CONDUIT

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 613) OR NONMETALLIC (STANDARD SPECIFICATION 613) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

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

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

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

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

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

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

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

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION.

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

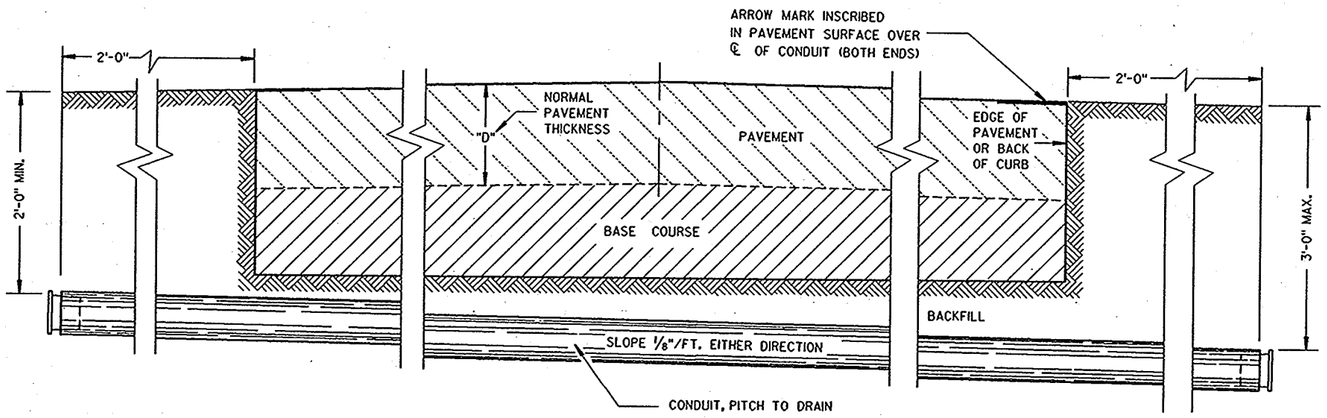
WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

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 ASSURE 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).

A #12 GAUGE, GALVANIZED PULL WIRE SHALL BE INSTALLED IN EACH RUN OF CONDUIT THAT DOES NOT RECEIVE CABLE OR WIRE UNDER THIS CONTRACT. THE PULL WIRE SHALL BE DOUBLED BACK 2 FEET AT EACH END CAP OF THE CONDUIT RUN.



SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
1-29-88
DATE
STATE TRAFFIC ENGINEER FOR HWYS

FHWA

S.D.D. 9 B 2-4

S.D.D. 9 B 2-4

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

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

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

** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED.

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS. LOCKING TYPE COVERS ARE NOT REQUIRED UNLESS SPECIFIED IN THE CONTRACT.

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

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

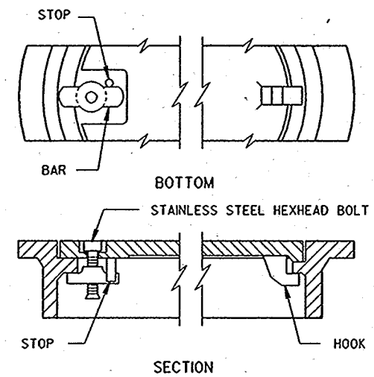
GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE. THE MECHANICAL CONNECTION (INSIDE AND OUTSIDE) TO THE PULL BOX, SHALL BE TOTALLY AND PERMANENTLY SEALED WITH A SILICONE OR RUBBERIZED CAULKING COMPOUND AS APPROVED BY THE ENGINEER.

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

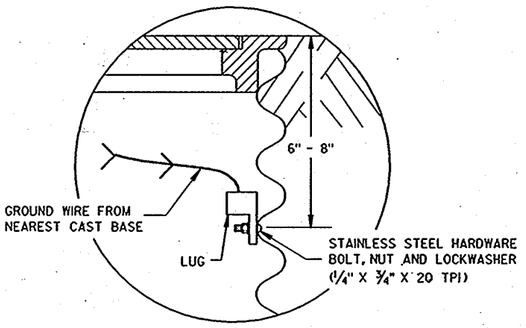
DRAIN DUCT SHALL BE MEASURED AND PAID FOR SEPARATELY.

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

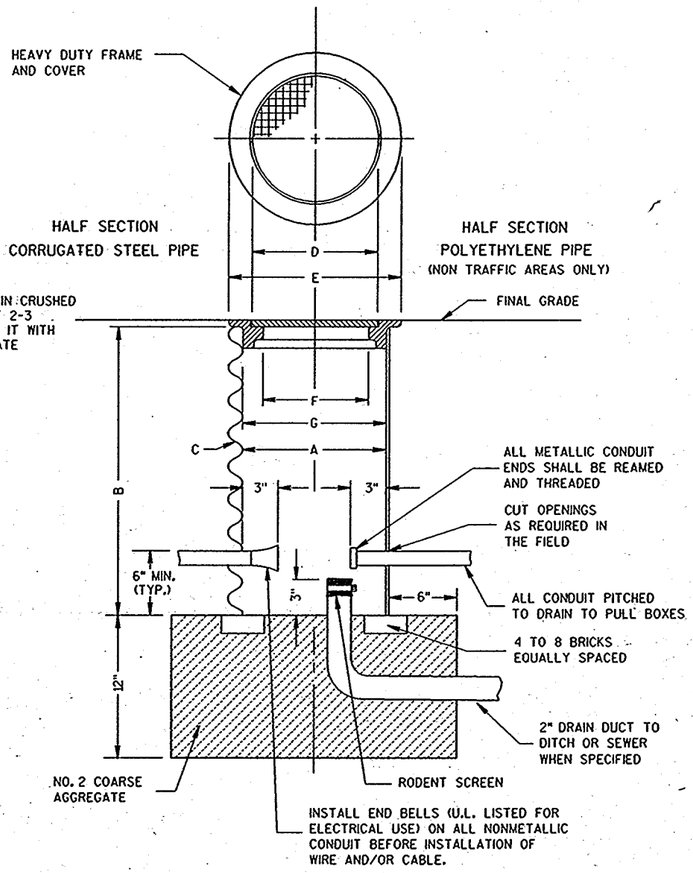
ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.



ALTERNATE COVER (LOCKING)
TIGHTENING BAR TYPE



GROUNDING LUG
AND LOCATION IN
STEEL PULL BOXES



PULL BOX

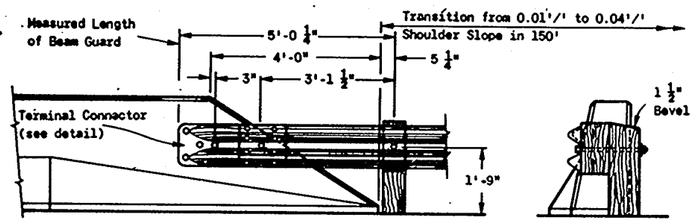
PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 1-29-88
DATE
STATE TRAFFIC ENGINEER FOR HWYS
FHWA

S.D.D. 9 B 10-2

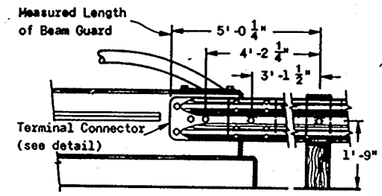
S.D.D. 9 B 10-2



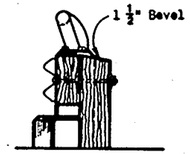
FRONT VIEW

END VIEW

SLOPED FACE PARAPET

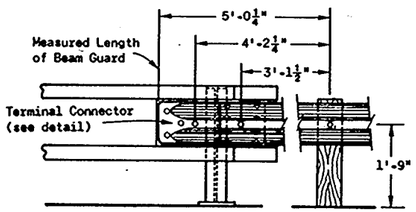


FRONT VIEW

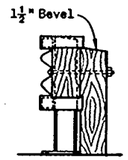


END VIEW

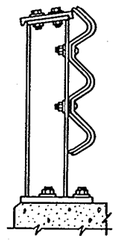
VERTICAL FACE PARAPET



FRONT VIEW

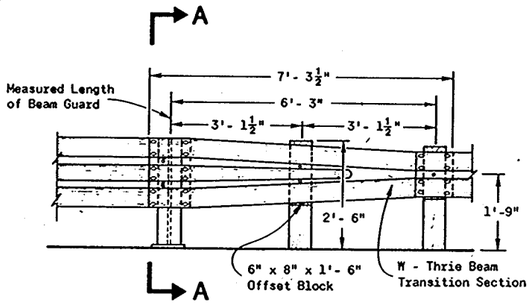


END VIEW



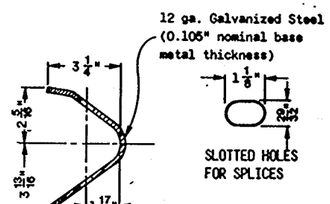
SECTION A-A

RAILING TYPE "F"



FRONT VIEW

RAILING TYPE "W"



SECTION THRU RAIL ELEMENT

GENERAL NOTES

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

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

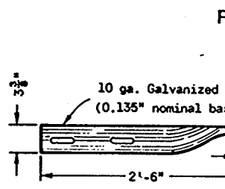
Shoulder widening to accommodate the anchored end of the beam guard shall be accomplished at a rate of widening not to exceed 5 to 1.

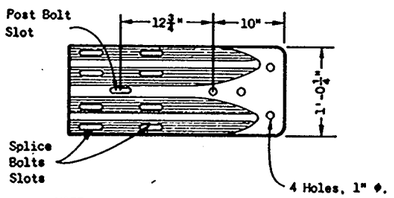
Standard Anchorages - Upon approval of the Engineer, the 6 foot offset may be reduced to nothing where existing conditions will not permit the desirable offset. However, when no offset greater than or equal to 3 feet can be provided, the minimum length of guardrail in advance of an obstacle (obstacle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

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

(1) The minimum clearance from the front face of beam guard to obstacle shall be 4 feet unless otherwise shown on contract plans. When clearance is less than 4 feet, post spacing shall be reduced to 3 feet-1½ inches C-C.

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

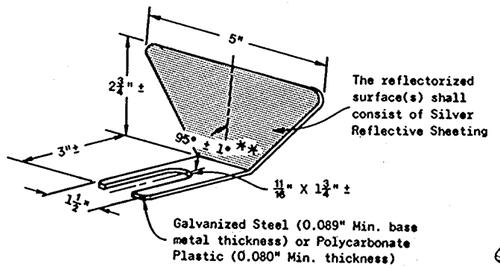




NOTE:
1" I.D., 2" O.D. (0.134" Nominal thickness) galvanized metal washer required under the head of splice bolts used in the Terminal Connector only.

TERMINAL CONNECTOR

STRUCTURE MOUNTING DETAILS



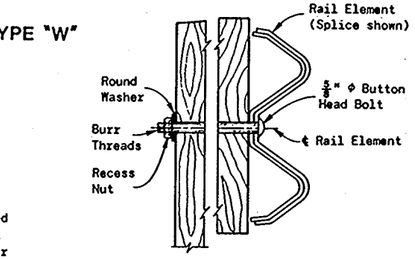
REFLECTOR SPACING

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

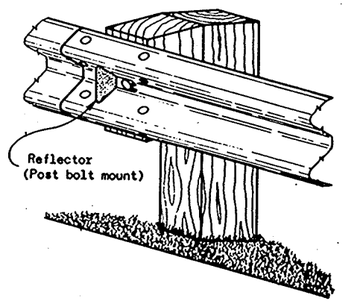
* Every other reflector reversed for 2-way visibility. Contractor may furnish two-sided reflectors in lieu of one-sided reflectors.

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

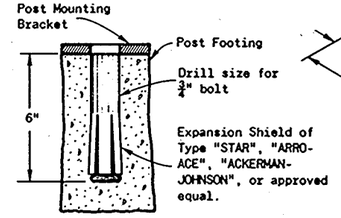
REFLECTOR DETAIL



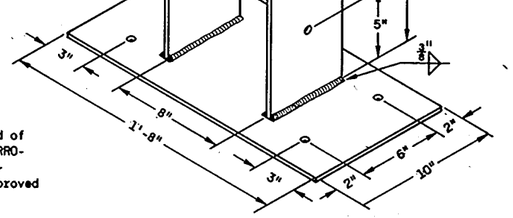
BUTTON HEAD BOLT DETAIL



TYPICAL INSTALLATION



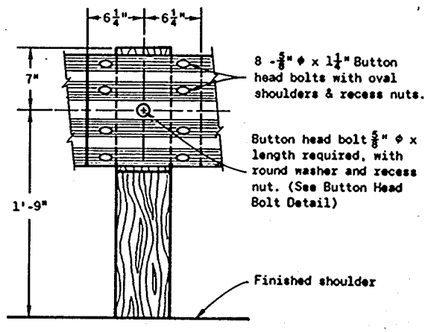
EXPANSION SHIELD DETAIL



POST MOUNTING BRACKET

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

POST FOOTING DETAIL AT PIERS



RAIL ELEMENT SPLICING AND POST MOUNTING DETAIL

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

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

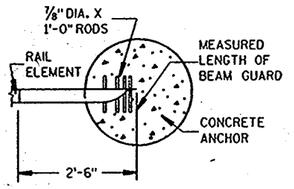
CLASS "A"
STEEL PLATE BEAM GUARD

State of Wisconsin
Department of Transportation

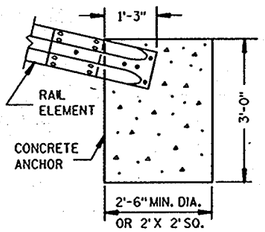
APPROVED 1-31-85
DATE
CHIEF DESIGN ENGINEER
FHWA

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

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



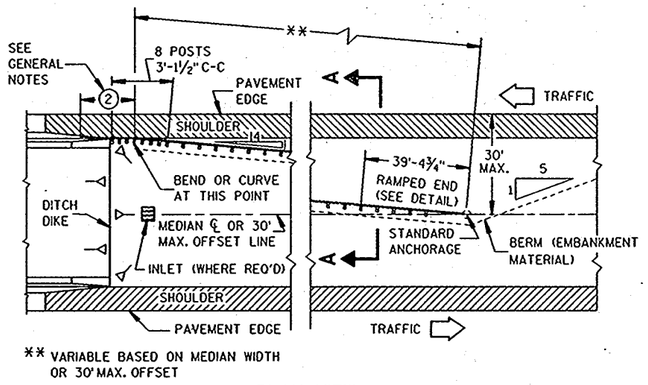
PLAN VIEW IN SECTION



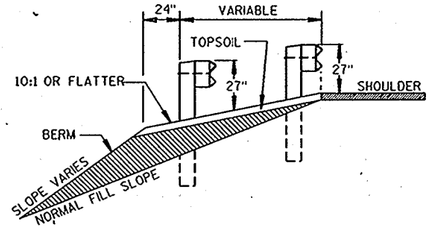
FRONT VIEW IN SECTION

STANDARD ANCHORAGE DETAIL

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

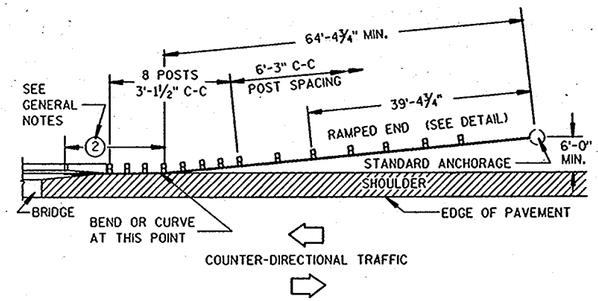


PLAN VIEW



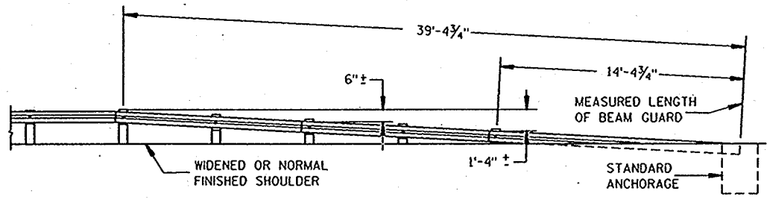
SECTION A-A

TYPICAL MEDIAN INSTALLATION AT STRUCTURES



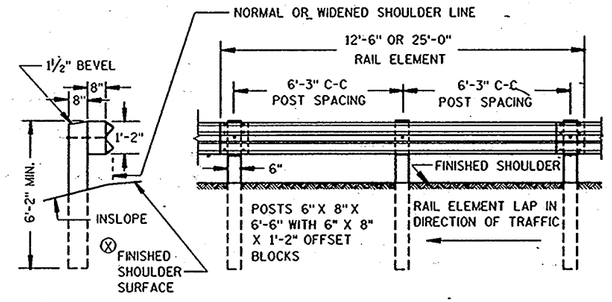
PLAN VIEW

TYPICAL INSTALLATION AT FULL WIDTH STRUCTURES



FRONT VIEW

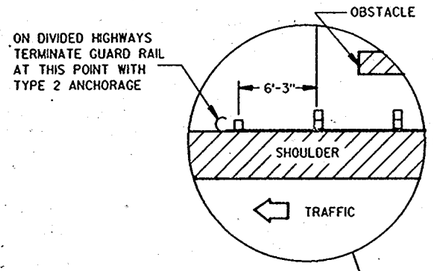
TYPICAL RAMPED END

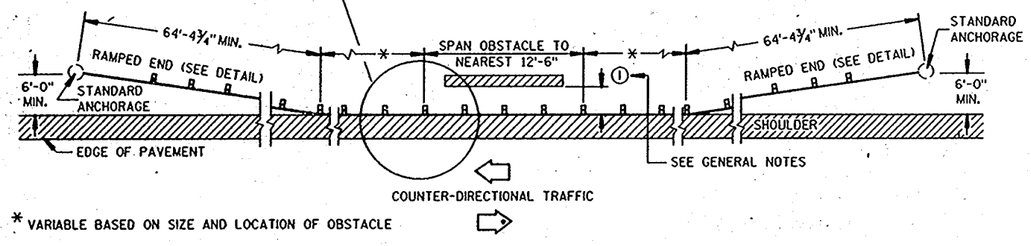


END VIEW FRONT VIEW

TYPICAL STEEL PLATE BEAM GUARD INSTALLATION

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

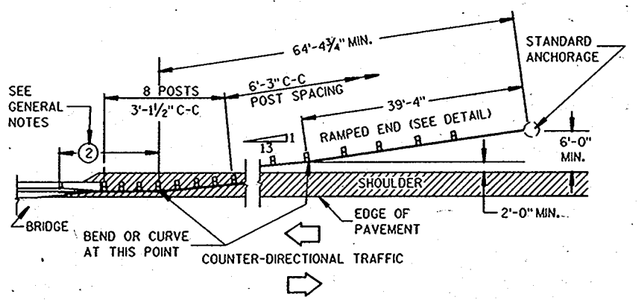




* VARIABLE BASED ON SIZE AND LOCATION OF OBSTACLE

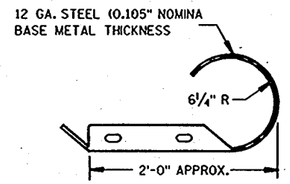
PLAN VIEW

TYPICAL INSTALLATION AT OBSTACLES



PLAN VIEW

TYPICAL INSTALLATION AT NARROW STRUCTURES



PLAN VIEW

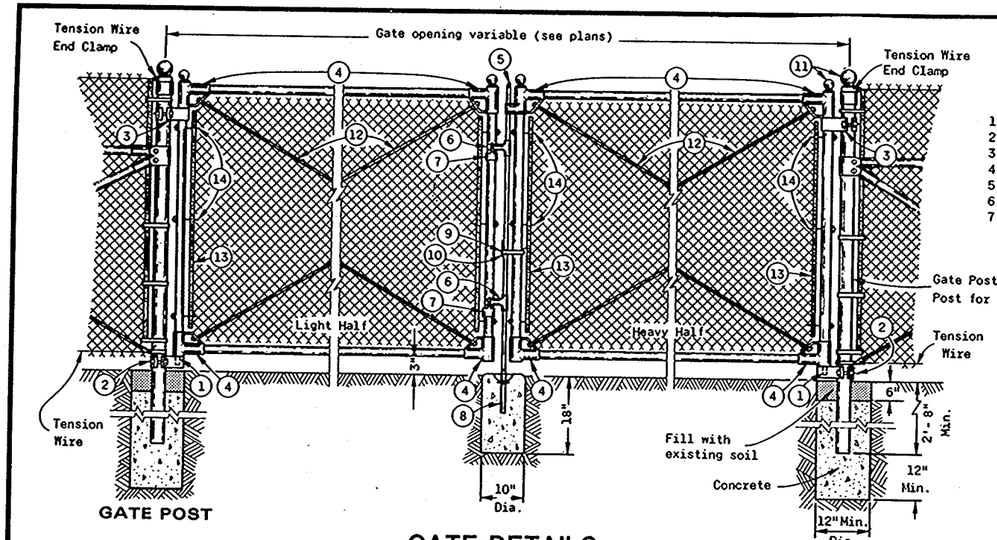
END SECTION (ROUNDED)

CLASS "A" STEEL PLATE BEAM GUARD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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



GATE POST

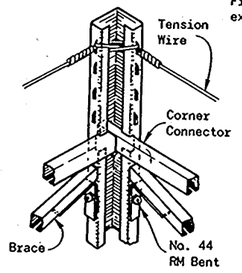
GATE DETAILS

Gate Leaf Width Feet	Type	Shape	GATE POSTS Outside Dimensions Inches	GATE POSTS Weight Lbs./ L.F.	GATE FRAMES (All Heights) Diameter Inches	GATE FRAMES (All Heights) Weight Lbs./ L.F.	Min. Yield Strength psi
6 or less	Aluminum	Round	2.875	2.00	1.90	0.94	—
	Steel	Round	2.875	5.79	1.90	2.72	25,800
	Steel	* Round	2.875	3.22	1.90	2.28	50,000
	Steel	Formed	3.50 x 3.50	4.85	—	—	35,000
Over 6 to 12	Aluminum	Round	4.00	3.15	1.90	0.94	—
	Steel	Round	4.00	9.10	1.90	2.72	25,800
	Steel	* Round	4.00	7.65	1.90	2.28	50,000

*Cold Rolled - High Strength Steel

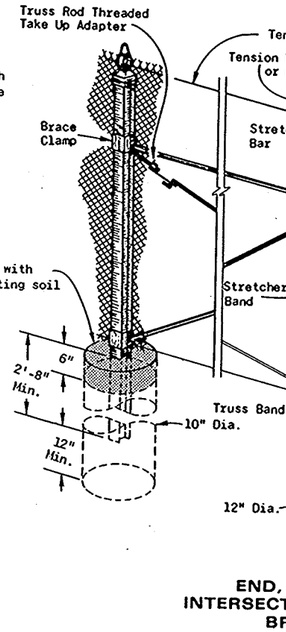
LEGEND

1. Straight Plug
2. Bottom Hinge
3. Top Hinge
4. Corner Elbow
5. Plunger Rod
6. Latch Fork
7. Fork Catch
8. Plunger Rod Catch
9. Lock Keeper Guide
10. Lock Keeper
11. Ornamental Tops
12. Truss Rods
13. Strecher Bar
14. Hook Bolts



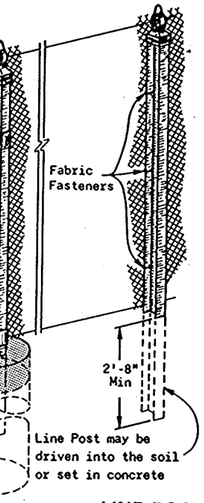
ROLL FORMED POST

TOP & BRACE RAIL CORNER CONNECTION



END, CORNER, ANGLE, INTERSECTION & INTERMEDIATE BRACED POSTS
(PIPE ALTERNATE SHOWN)

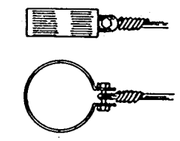
FRONT VIEW



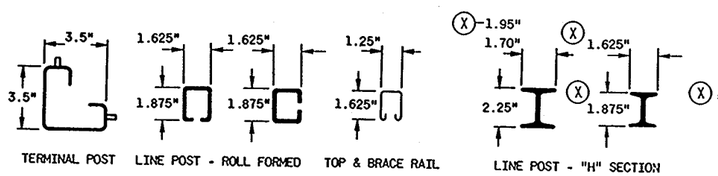
LINE POST

NOTE: 10'-0" Line Post spacing.

TYPICAL LINE SECTION



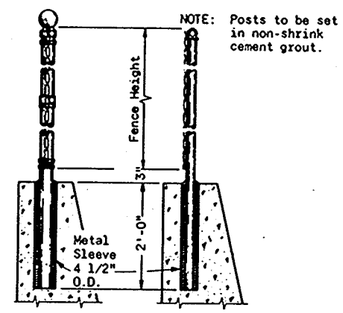
TENSION WIRE END CLAMP



TERMINAL POST | LINE POST - ROLL FORMED | TOP & BRACE RAIL | LINE POST - "H" SECTION

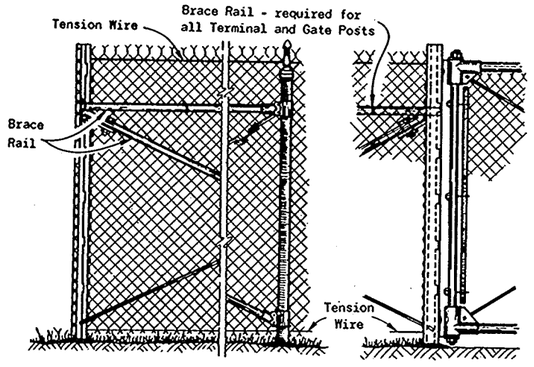
X = Dimensions for Aluminum Alloy Posts

CROSS SECTIONS OF POSTS AND RAILS



END POST & CORNER POST | LINE POST

DETAILS OF FENCE ON WALL
(PIPE ALTERNATE SHOWN)



END, CORNER, ANGLE, INTERSECTION & INTERMEDIATE BRACED POSTS | TERMINAL OR GATE POST

FRONT VIEW
(ROLL FORMED POST ALTERNATE SHOWN)

NOTE: Details of footings are shown on the Pipe Alternate elevation.

Use	STEEL POSTS Fence Ht. Feet	Shape	Outside Dimensions Inches	Weight Lbs./ L.F.	Min. Yield Strength psi	ALUMINUM ALLOY POSTS Fence Ht. Feet	Shape	Outside Dimensions Inches	Weight Lbs./ L.F.
Terminal Posts **	6 and less	Round	2.375	3.65	25,800	6 and less	Round	2.375	1.26
	6 and less	* Round	2.375	2.64	50,000	—	—	—	—
	Over 6	Round	2.875	5.79	25,800	Over 6	Round	2.875	2.00
	Over 6	* Round	2.875	3.22	50,000	—	—	—	—
	All Heights	Formed	3.5 x 3.5	4.85	35,000	—	—	—	—
Line Posts	6 and less	Round	1.90	2.72	25,800	6 and less	Round	1.90	0.94
		* Round	1.90	1.94	50,000		—	—	—
		"H" Section	2.25 x 1.70	3.26	48,000		"H" Section	1.875 x 1.625	0.91
		Formed	1.875 x 1.625	1.60	40,000		—	—	—
	Over 6	Round	2.375	3.65	25,800	Over 6	Round	2.375	1.26
		* Round	2.375	2.64	50,000		—	—	—
		"H" Section	2.25 x 1.70	3.26	45,000		"H" Section	2.25 x 1.95	1.25
		Formed	1.875 x 1.625	2.28	45,000		—	—	—
Brace Rail ***		Round	1.66	2.27	25,800		Round	1.66	0.79
		* Round	1.66	1.45	50,000		—	—	—
		Formed	1.625 x 1.25	1.35	35,000		—	—	—

* Cold Rolled - High Strength Steel
** Includes End, Corner, Angle, Intersection and Intermediate Braced Posts.
*** 7 Ga. Tension Wire will be used in place of Top Rail.

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. Details not covered by any of the above shall conform to the Manufacturers Specifications.

Detailed drawings for proposed alternate designs for "Chain Link Fence or Chain Link Fence Gates" shall be submitted to the Engineer for approval.

Ornamental Tops are required on all posts except the 3.5" x 3.5" Formed Post.

Class 2 steel posts as defined in AASHTO designation M181-81 shall not be used.

Fence fabric shall be either Type II (aluminum coated steel) or Type III (aluminum alloy) as designated by AASHTO M181.

High strength steel tubing (round shape only) for posts, rails and braces shall be either zinc coated or aluminum coated. The minimum weight of aluminum coating on the outer and inner surfaces of the tubing shall be 0.70 ounces per square foot as measured in accordance with AASHTO T 213 (ASTM A428).

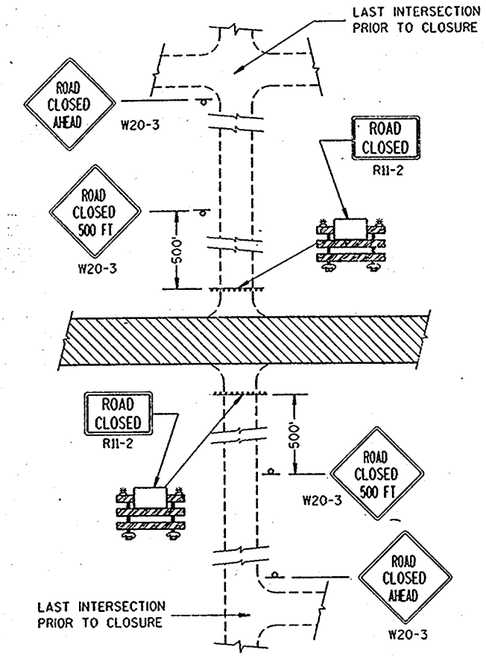
CHAIN LINK FENCE
(TYPE B)

State of Wisconsin
Department of Transportation

APPROVED 10-21-83
DATE
CHIEF DESIGN ENGINEER
FHWA

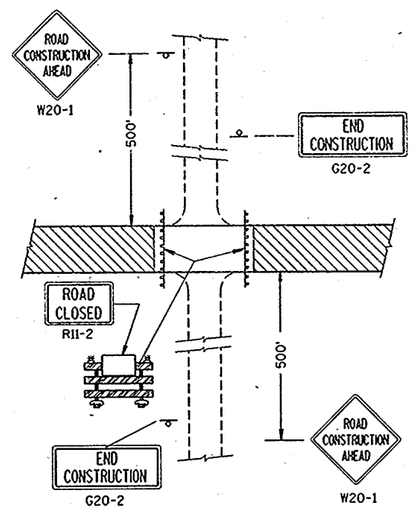
S.D.D. 15 B 3-7

S.D.D. 15 B 3-7



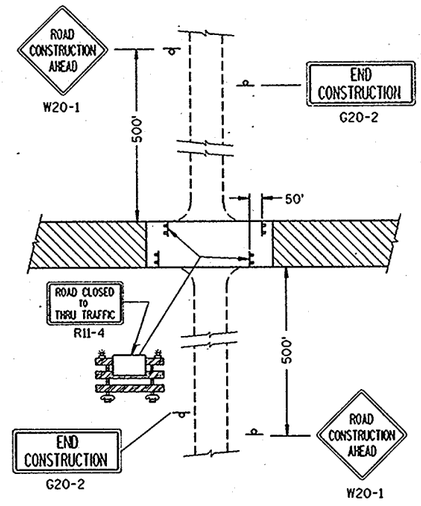
DETAIL 1

(NO ACCESS TO PROJECT)



DETAIL 2

(PUBLIC CROSS-TRAFFIC MAINTAINED. NO ACCESS TO PROJECT).



DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND THEIR LOCATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE WISCONSIN MANUAL OF TRAFFIC CONTROL DEVICES, THE PLANS, SPECIFICATIONS AND CONTRACT.

SIGN AND BARRICADE LOCATIONS MAY BE ADJUSTED IN THE FIELD AS DIRECTED BY THE ENGINEER. ANY EXISTING TRAFFIC SIGNS THAT CONFLICT WITH THIS WORK SHALL BE COVERED AS DIRECTED BY THE ENGINEER; ALL "STOP" OR OTHER REGULATORY SIGNS ON THE SIDE ROADS SHALL NOT BE DISTURBED, EXCEPT WHEN NECESSARY TO COMPLETE THE WORK. THE SIGNS MUST THEN BE IMMEDIATELY REESTABLISHED.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL FOR FULL ROAD CLOSURES. TYPE "A" LOW INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE ROAD CLOSED SIGN (R11-2), ROAD CLOSED ____ MILES AHEAD SIGN (R11-3) AND THE ROAD CLOSED TO THRU TRAFFIC SIGN (R11-4) SHALL BE ATTACHED ONLY TO THE TOP RAIL OF THE TYPE III BARRICADE. THE SIGNS SHALL NOT COVER MIDDLE RAIL.

TYPE "H" REFLECTIVE SHEETING SHALL BE USED ON ALL BARRICADES, TYPE I, II AND III, AND ON ALL R11-2, R11-3 AND R11-4 SIGNS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2, "ROAD CLOSED" SIGNS SHALL BE 48" X 30".
- R11-3, AND R11-4 SIGNS SHALL BE 60" X 30".
- G20-2 SIGNS SHALL BE 60" X 24".

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND AT LEAST ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN.

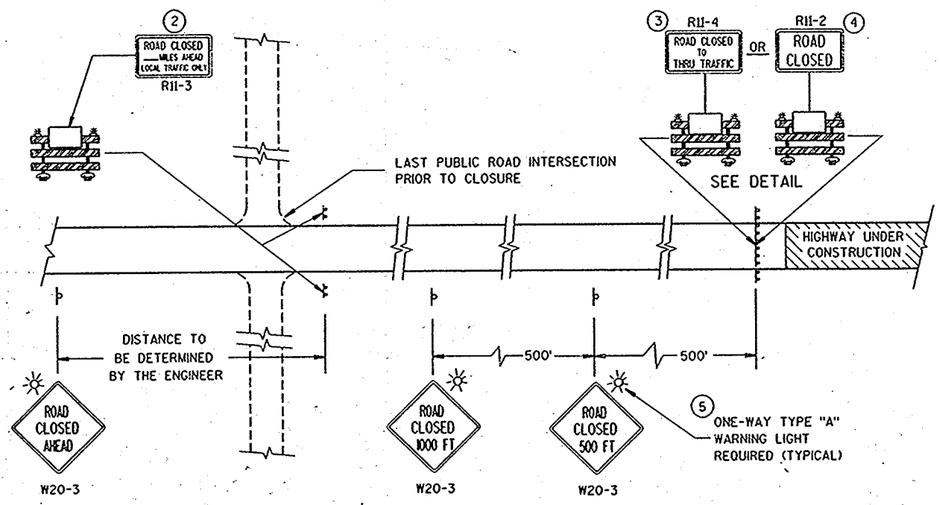
(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

(3) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT. SEE LANE CLOSURE BARRICADE DETAIL.

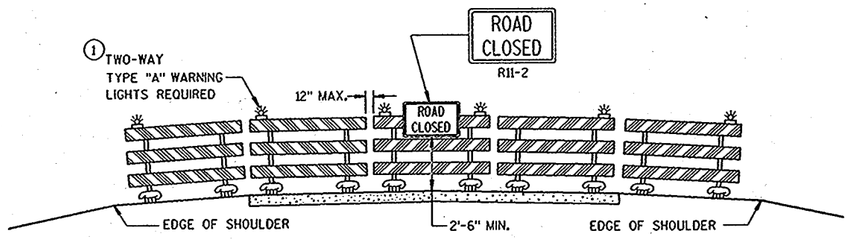
(4) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT. SEE ROAD CLOSURE BARRICADE DETAIL.

(5) ONE-WAY LIGHTS SHALL BE PROVIDED ON ALL ADVANCE WARNING SIGNS. THE UNIT SHALL BE POSITIONED SUCH THAT THE LIGHT SOURCE IS OUTSIDE THE SIGN FACE AND AT THE TOP OF THE SIGN.

SIDEROAD CLOSURES

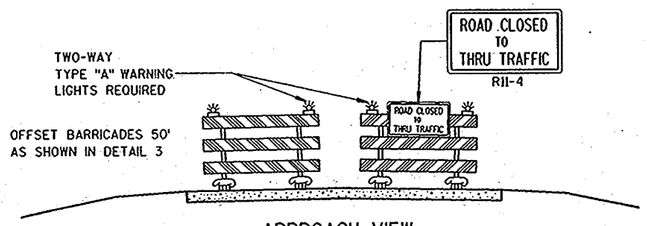


MAINLINE CLOSURE



APPROACH VIEW

ROAD CLOSURE BARRICADE DETAIL



APPROACH VIEW

LANE CLOSURE BARRICADE DETAIL

LEGEND

- POST MOUNTED WARNING SIGN
- TYPE III BARRICADES WITH TYPE "H" REFLECTIVE SHEETING
- TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
- WORK AREA

BARRICADES AND TRAFFIC CONTROL FOR ROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

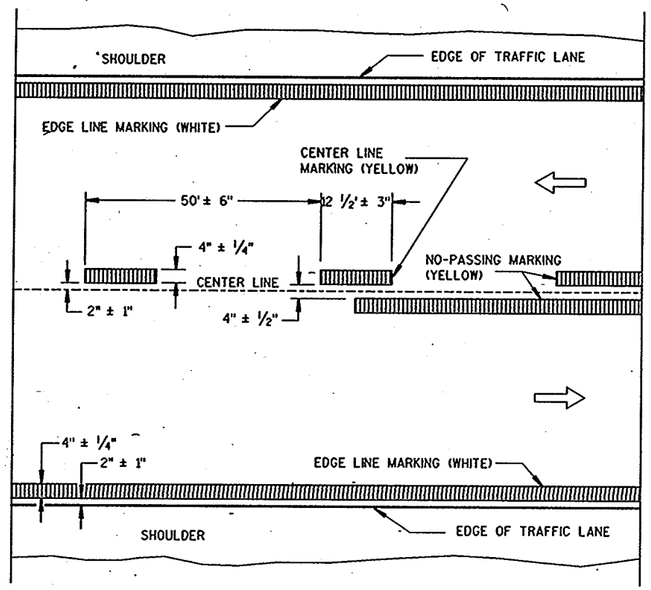
APPROVED 10-31-89 DATE

STATE TRAFFIC ENGINEER FOR HWYS

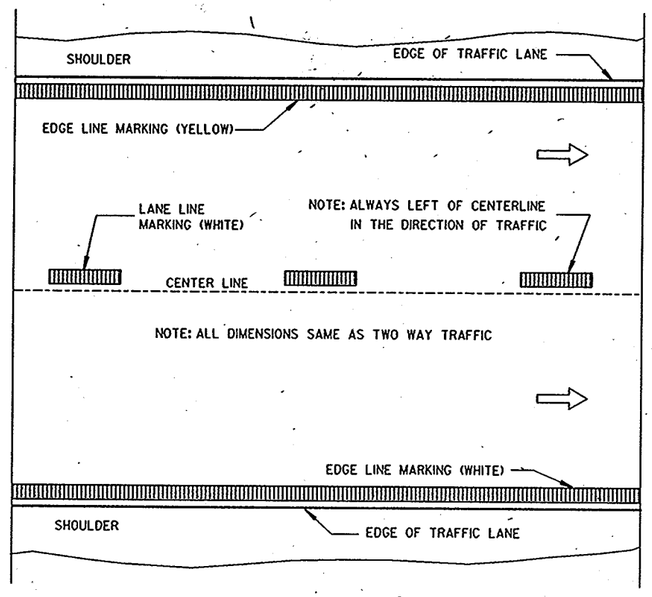
FHWA

S.D.D. 15 C 2-2

S.D.D. 15 C 2-2

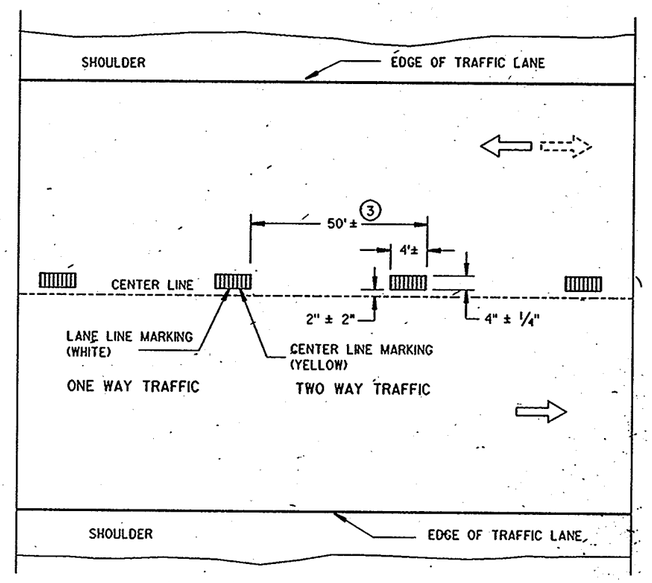


TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TEMPORARY PAVEMENT MARKING

GENERAL NOTES

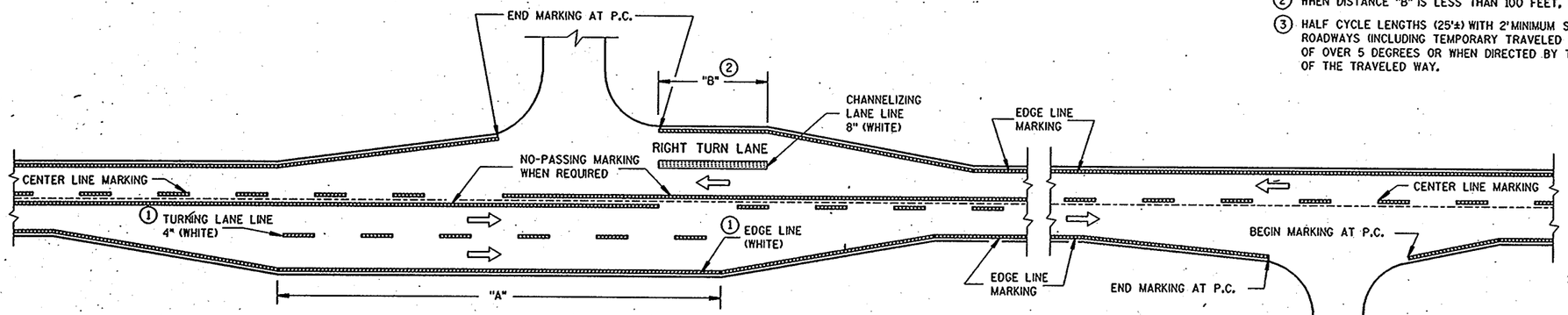
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

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

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

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

③ HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.



MAJOR INTERSECTION

MINOR INTERSECTION

TYPICAL PAVEMENT MARKING FOR RURAL INTERSECTIONS

PAVEMENT MARKING

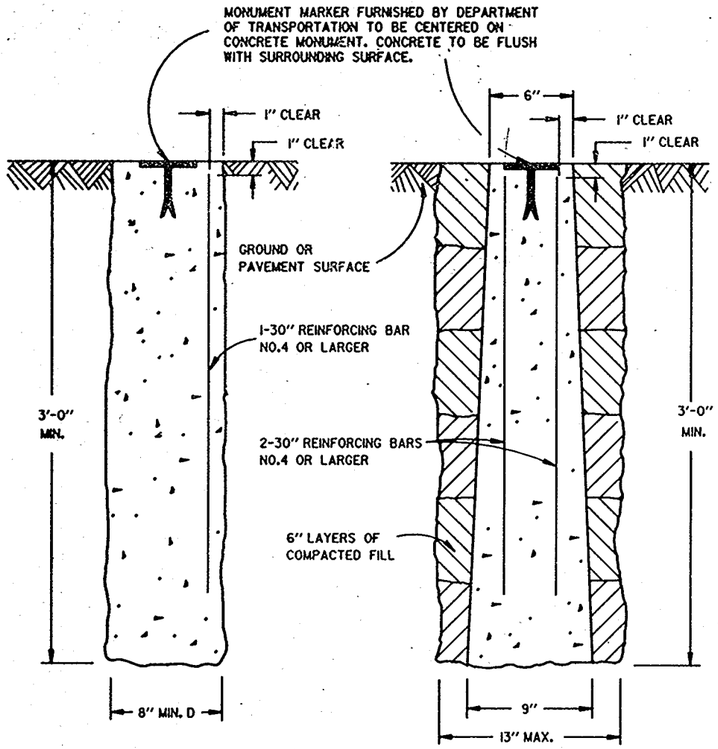
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

S.D.D. 15 C 8-3

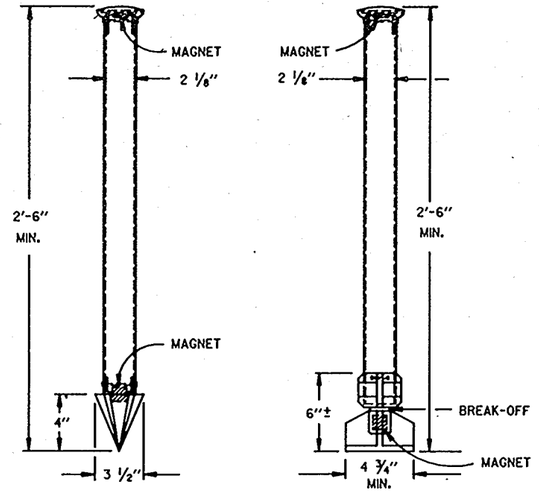
S.D.D. 15 C 8-3



CAST-IN-PLACE PRECAST

CONCRETE MONUMENTS

TYPE A



TYPE C DRIVE-IN MONUMENT

TYPE D BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)

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 OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

THE INSTALLED METAL MONUMENT MUST BE EASILY DETECTED WITH A DIP NEEDLE. INERT PERMANENT MAGNETS SHALL BE ATTACHED NEAR THE TOP AND BOTTOM OF THOSE MONUMENTS CONSTRUCTED OF A METAL ALLOY WHICH IS NOT ATTRACTIVE TO A DIP NEEDLE.

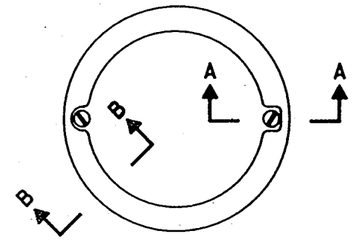
TYPE A AND TYPE D MONUMENTS ARE EQUAL ALTERNATES UNLESS OTHERWISE SPECIFIED.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

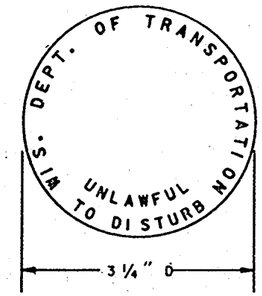
MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

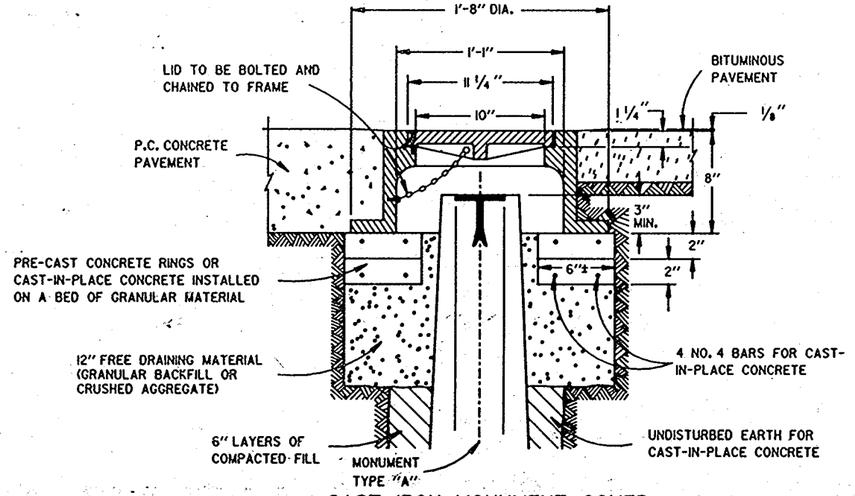
THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.



TOP VIEW

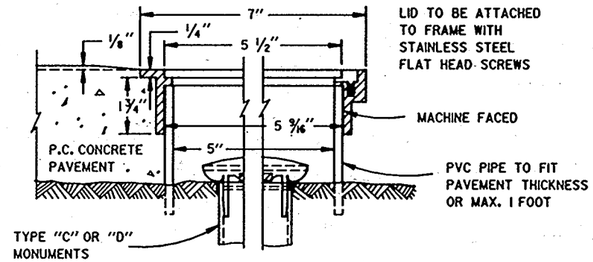


MONUMENT MARKER LOGO FOR TYPES "A", "C" & "D"



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT - 95 LBS.)



SECTION B-B SECTION A-A

ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)

(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MONUMENTS AND COVERS

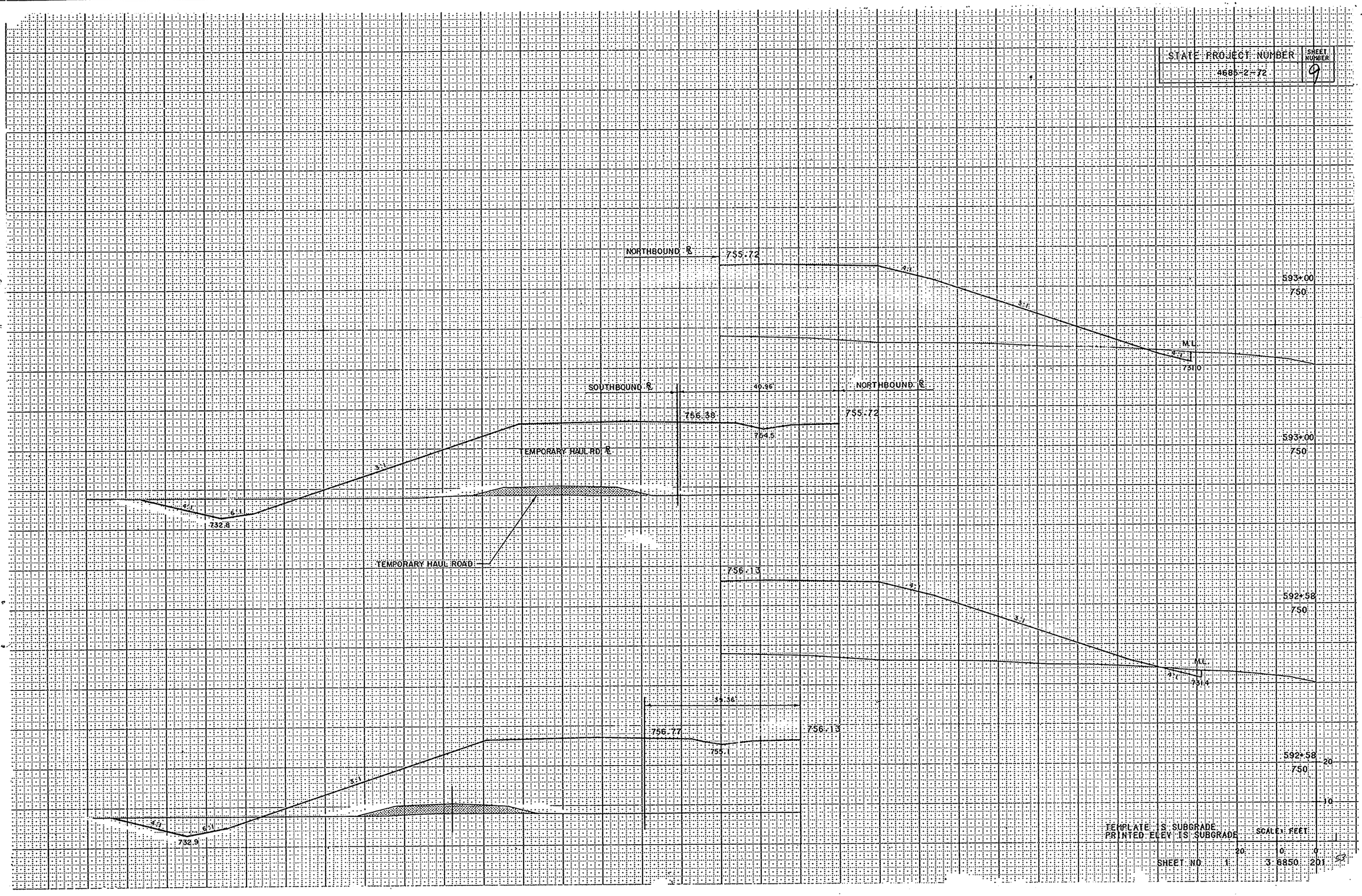
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6-19-84
DATE
CHIEF DESIGN ENGINEER
FHWA

S.D.D. 16 A 1-4

S.D.D. 16 A 1-4

STATE PROJECT NUMBER	SHEET NUMBER
4685-2-72	9



STATE PROJECT NUMBER 4685-2-72 SHEET NUMBER 9

NORTHBOUND ℄
753.17
4%
4%
595+00
750
M.L.
735.5

SOUTHBOUND ℄
753.93
4%
M.L.
734.0
10:1

44.15

NORTHBOUND ℄
753.17
752.0
595+00
750

754.56
4%
4%
594+00
750
M.L.
732.9

32.56
754.56
755.28
753.7
4%
4%
TEMPORARY HAUL ROAD ℄
TEMPORARY HAUL ROAD
32.5
594+00
750
20
10

TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE

SCALE: FEET
20 0 0

SHEET NO 2 3.8850 201 54

STATE PROJECT NUMBER 9605-2-72 | SHEET NUMBER 92

SOUTHBOUND ℄ 748.93 | 48.94' | NORTHBOUND ℄ 748.13

M.L. 744.2 — 5:1 — 746.8 — 4:1 — M.L. 744.4

598+00
740

750.64 | 47.94' | 749.82

TEMPORARY HAUL ROAD CENTERED ON NORTHBOUND ℄

M.L. 741.2 — 4:1 — 748.5 — 4:1 — M.L. 742.4

597+00
740

752.35 | 45.79' | 751.53

M.L. 737.0 — 4:1 — 750.2 — 4:1 — 4:1 — M.L. 739.7

596+00
750

752.70

4:1 — 4:1 — M.L. 738.0

595+30
750

44.15'

753.48 | 752.70

751.9

4:1

M.L. 734.9 — 20:1

595+30
750

20

10

TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE

SCALE: FEET
20 0 0

SHEET NO 3 3.6850 201 5

STATE PROJECT NUMBER 4685-2-72

SHEET NUMBER 93

602+00
740

SOUTHBOUND ℄ — 55.31' — NORTHBOUND ℄

745.55 — 742.93 — 741.0

6:1 4:1 — 736.1 — 4:1 6:1 4:1 — 733.6

601+00
740

63.72' — TEMPORARY HAUL ROAD CENTERED ON NORTHBOUND ℄

744.62 — 743.97 — 741.7

736.7 IDENTICAL POINTS — 733.3

600+00
740

745.17 — 733.0

745.88 — 52.43' — 745.17 — 743.9

8:1 6:1 4:1 — 737.3

600+00
740

746.26

599+20
740

4:1 6:1 4:1 — 732.6

747.01 — 60.85' — 746.28 — 744.8

4:1 6:1 8:1 — 736.7

599+20
740

M.L. — 50.53' — 746.56 — M.L.

747.31 — 745.5 — 745.0 — 745.1

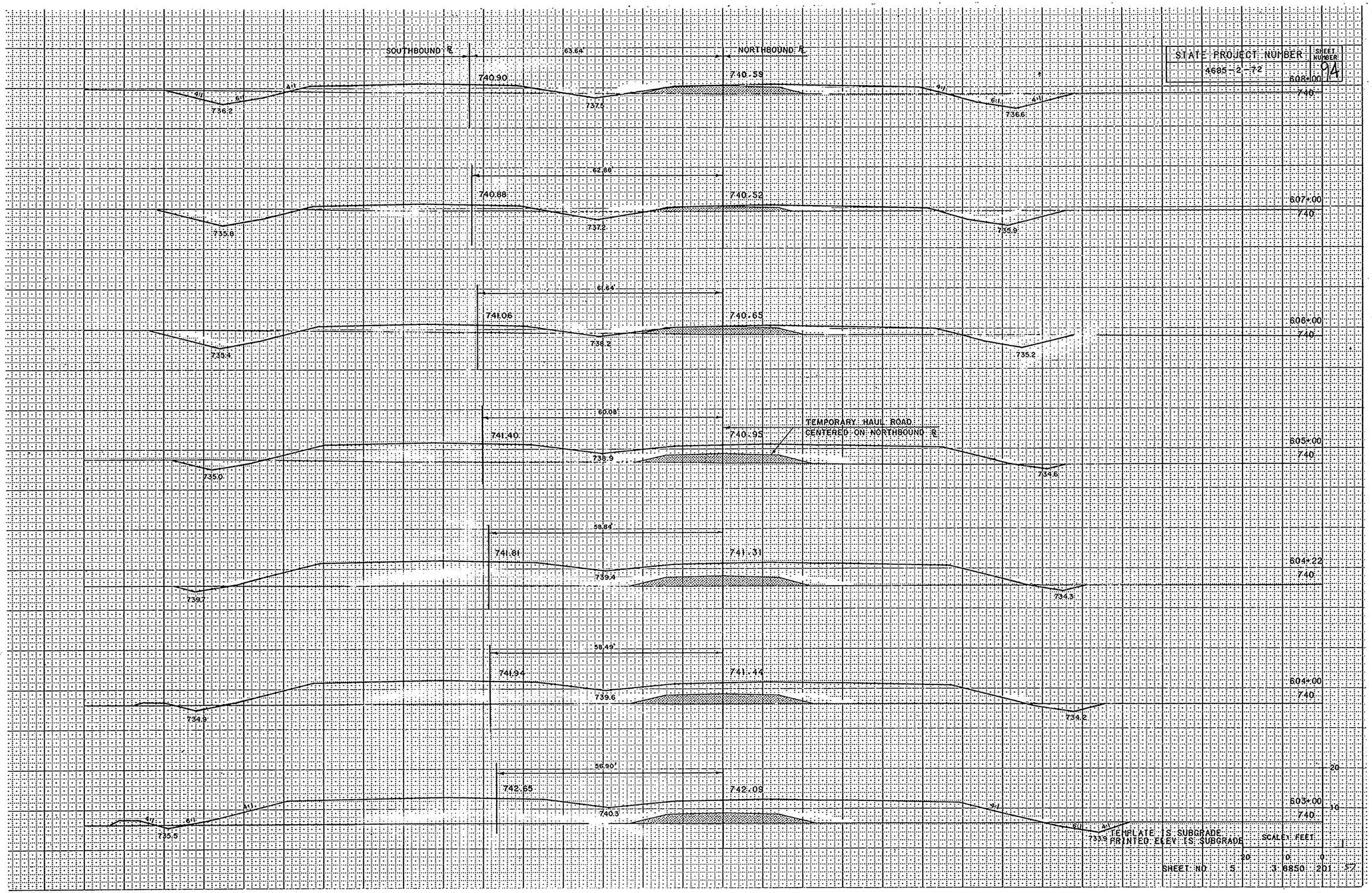
599+00
740

TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE

SCALE: FEET
20 0 0

SHEET NO 4 3.6850 201 SZ

STATE PROJECT NUMBER	SHEET NUMBER
4685-2-72	94



STATE PROJECT NUMBER	SHEET NUMBER
4685-2-72	95

SOUTHBOUND ℄ — 64.00' — NORTHBOUND ℄

743.63 — 741.0 — 743.61

4:1 6:1 4:1 — 734.2 — 734.8 — 4:1 6:1 4:1

743.48 — 740.8 — 743.46

734.3 — 734.7

612+85
740

TEMPORARY HAUL ROAD
CENTERED ON NORTHBOUND ℄

742.78 — 740.0 — 742.64

734.5 — 735.0

612+00
740

741.99 — 739.0 — 741.86

734.8 — 735.4

611+00
740

64.00'

741.45 — 738.5 — 741.25

735.1 — 735.8

610+00
740

63.56'

741.08 — 738.0 — 740.83

4:1 6:1 4:1 — 735.7 — 736.2 — 4:1 6:1 4:1

609+00
740

20
10

TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE

SCALE: FEET 20 10 0 20

SHEET NO 6 3.6850 201.56

STATE PROJECT NUMBER 4685-2-72

SHEET NUMBER 9.6

NORTHBOUND ℄ 746.08

6:1 6:1 733.8

SOUTHBOUND ℄ 64.00' NORTHBOUND ℄

745.98 746.08

6:1 6:1 6:1 733.6 743.0

745.37

6:1 6:1 734.0

745.30 742.5

733.6

TEMPORARY HAUL ROAD CENTERED ON NORTHBOUND ℄

745.37

744.76

6:1 6:1 6:1 734.2

744.72 744.76 742.0

6:1 6:1 6:1 733.9

815+00 740

815+00 740

814+48 740

814+48 740

814+00 740

814+00 740

20 10

TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE

SCALE: FEET

20 0 0

SHEET NO. 7 3 6850 201

STATE PROJECT NUMBER 4685-2-72

SHEET NUMBER 01

NORTHBOUND ℄

750.31

FLY ASH (ULTIMATE)

4:1

732.7

SOUTHBOUND ℄

64'

NORTHBOUND ℄

750.10

746.6

750.31

4:1

4:1

732.8

749.14

TEMPORARY HAUL ROAD
CENTERED ON NORTHBOUND ℄

748.96

745.5

749.14

733.0

733.0

747.59

6:1

733.4

747.43

744.0

747.59

4:1

6:1

6:1

733.5

817+75
750

817+75
750

817+00
740

817+00
740

816+00
740

816+00
740

TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE

SCALE: FEET
20 0 0
10

SHEET NO. 8 3 6850 201

STATE PROJECT NUMBER 4685-2-72 SHEET NUMBER 98

NORTHBOUND ℄

752.28

819+00

750

FLY ASH (ULTIMATE)

4:1

6:1 4:1

732.4

SOUTHBOUND ℄

64'

NORTHBOUND ℄

752.02

749.0

752.28

819+00

750

FLY ASH (ULTIMATE)

4:1

6:1

733.9

750.69

818+00

750

FLY ASH (ULTIMATE)

4:1

6:1 4:1

732.6

TEMPORARY HAUL ROAD
CENTERED ON NORTHBOUND ℄

750.49

747.0

750.69

818+00

750

20

10

4:1 6:1

733.4

FLY ASH (ULTIMATE)

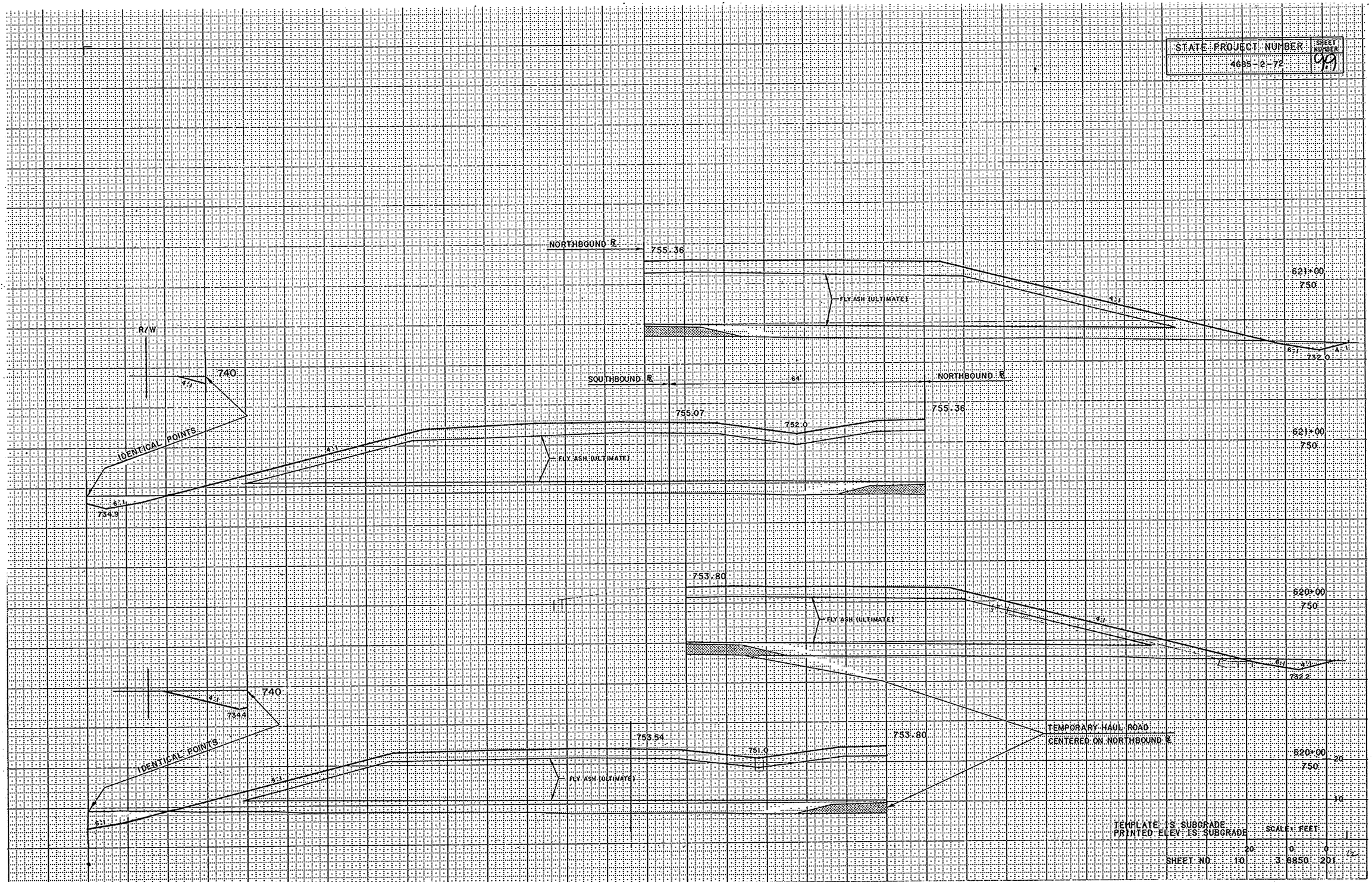
TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE

SCALE: FEET

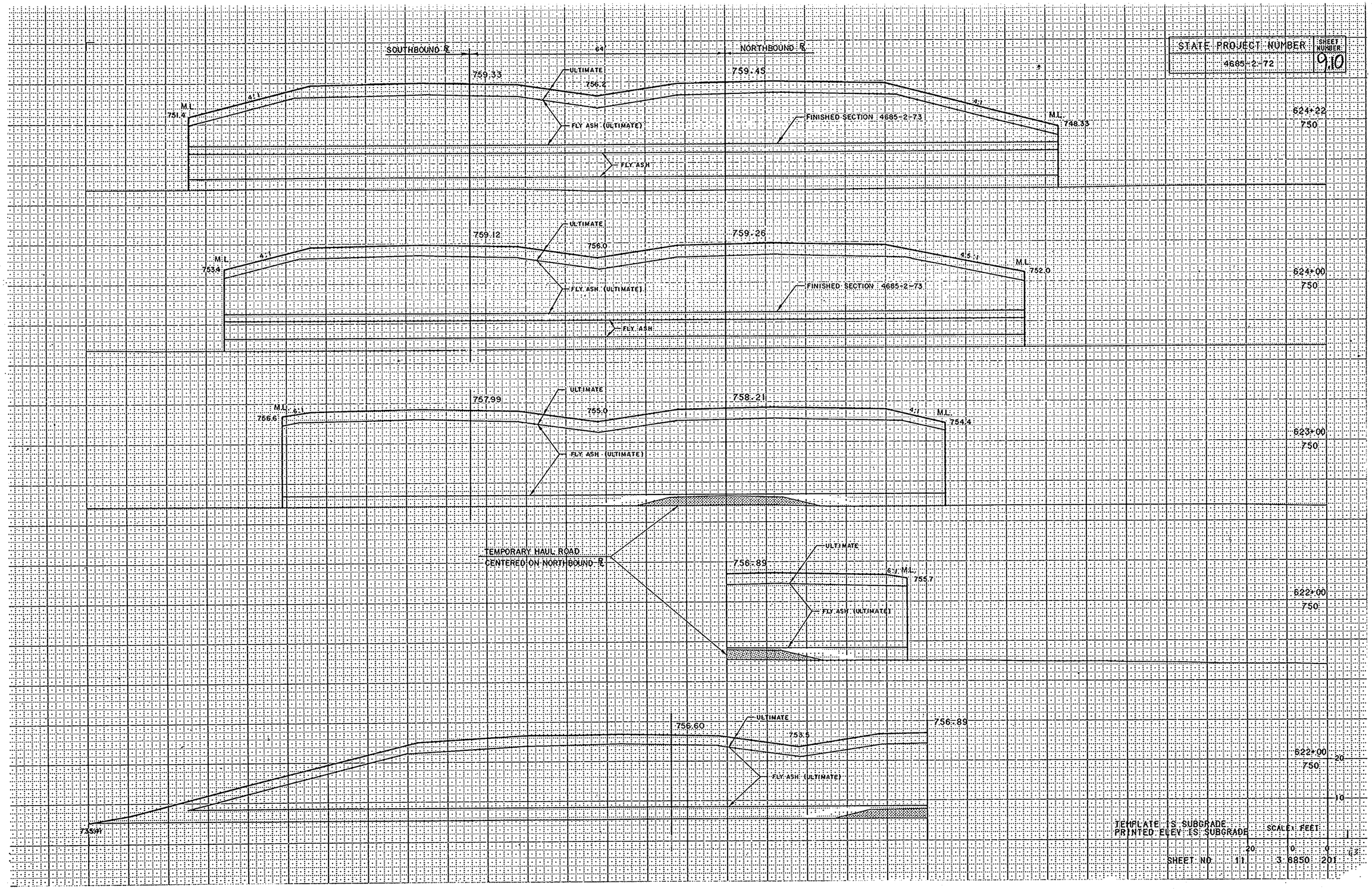
20' 0 0

SHEET NO 9 3.6850 201

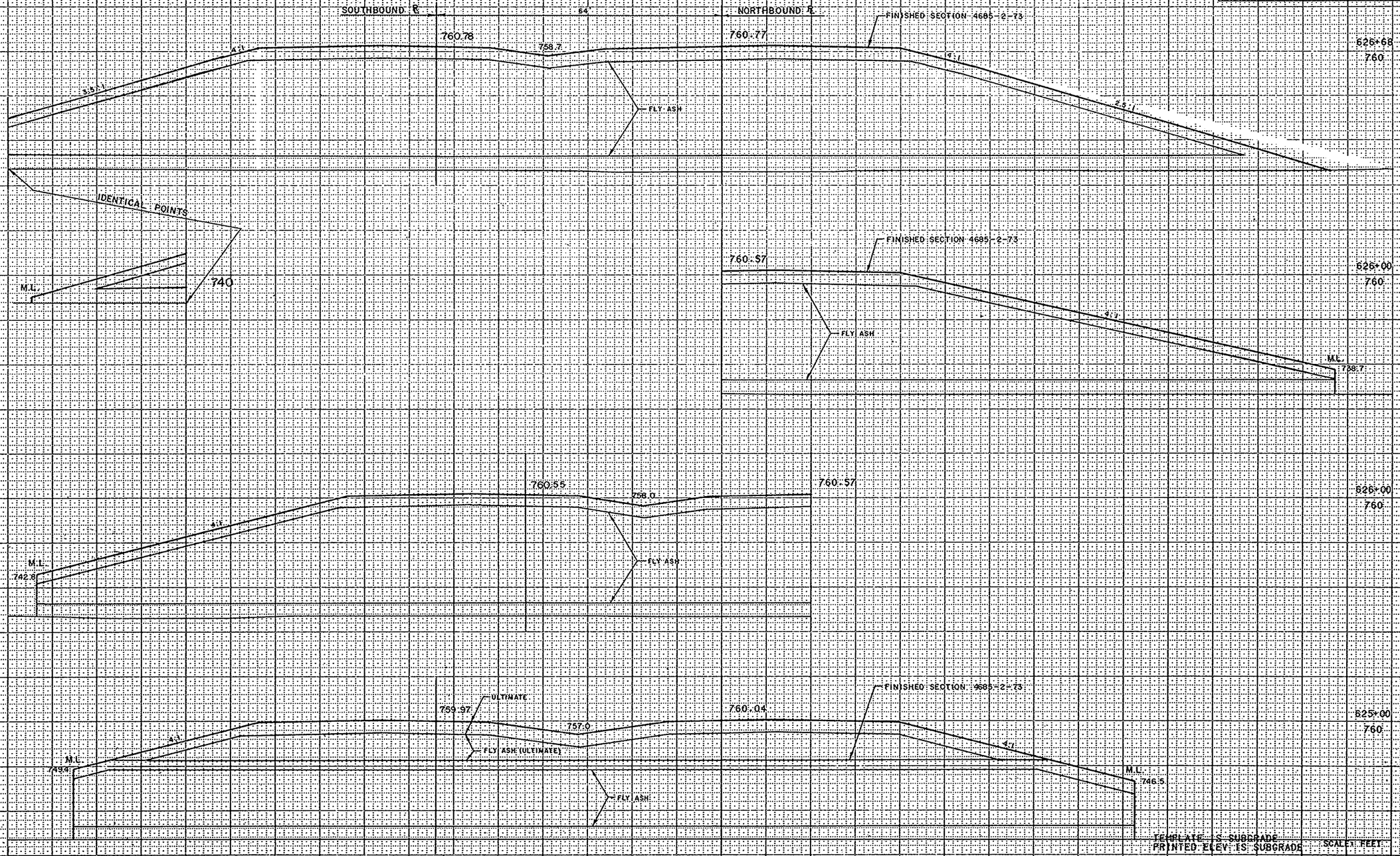
STATE PROJECT NUMBER	SHEET NUMBER
4685-2-72	99



STATE PROJECT NUMBER	SHEET NUMBER
4685-2-72	9.10



STATE PROJECT NUMBER	SHEET NUMBER
4685-2-72	911



SHEET NO. 12 3 6850 201 t4

NORTHWEST RAMP

STATE PROJECT NUMBER	SHEET NUMBER
4685-2-72	912

N.W. RAMP AT C.T.H. "00"

598+00
740

R/W
744.95
M.L.
744.3
6:1
4:1
6:1
735.7

597+00
740

743.72
6:1
741.3
4:1
734.6

596+00
740

741.80
737.0
733.9

595+00
730

739.59
M.L.
734.0
4:1
733.0

594+45
730

738.38
4:1
6:1
4:1
732.4
732.3

594+00
740

737.39
732.5
732.5

593+00
740

735.73
4:1
6:1
6:1
4:1
732.8
733.0

20

R/W
592+50
740
10

736.27
4:1
6:1
4:1
6:1
4:1
733.0
733.3

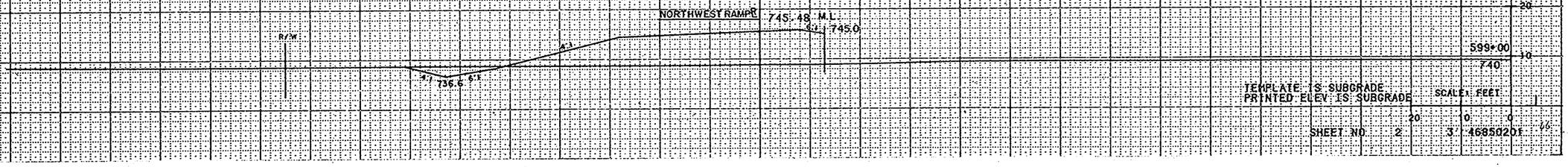
TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE

SCALE: FEET
20 0 0

SHEET NO. 1 3. 4685020I

STATE PROJECT NUMBER 4605-2-72 | SHEET NUMBER 913

N.W. RAMP AT C.T.H. "OO"



TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE

SCALE: FEET
20 0 0

SHEET NO. 2 3 46850201

NORTHEAST RAMP R

STATE PROJECT NUMBER	SHEET NUMBER
4685-2-72	014

N.E. RAMP AT C.T.H. "OO"

M.L. 734.36 731.8 6:1 727.0 R/W 593+55 730

734.08 731.7 4.5:1 727.5 593+40 730

733.78 731.6 5.5:1 728.0 593+20 730

733.58 731.0 6.5:1 728.5 593+00 730

733.48 731.2 728.9 592+85 730

R/W 592+35 740

733.53 731.7 4:1 6:1 16.5:1 730.1

M.L. 733.89 732.0 6:1 10:1 70:1 731.0 592+00 740

20 10

TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE

SCALE: FEET
20' 0 0

SHEET NO 1 3 46850201

STATE PROJECT NUMBER	SHEET NUMBER
4685-2-72	9|5

N.E. RAMP AT C.T.H. "OO"

NORTHEAST RAMP B

737.57
M.L. 7351
6:1
4:1
6:1
5:1
R/W
724.6
594+68
730

737.33
7348
5.5:1
724.8
594+60
730

737.14
7346
5.5:1
724.9
594+54
730

735.87
7339
4:1
725.8
594+12
730

735.50
732.9
726.0
594+00
730

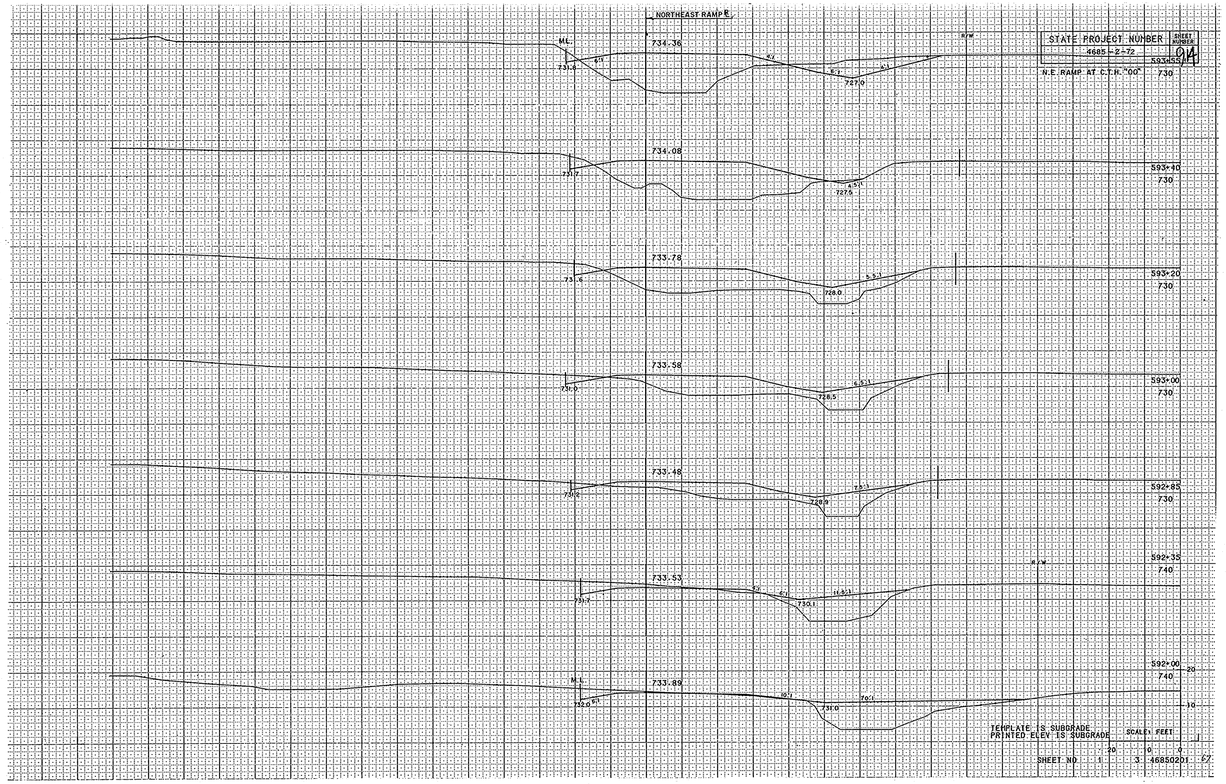
735.21
M.L. 732.5
6:1
4:1
6:1
4:1
R/W
726.3
593+90
730

20
10

TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE

SCALE: FEET
20 0 0

SHEET NO. 2 3 4685020F 16



TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE

SCALE: FEET

-20 0

SHEET NO 1 1 3 46850201 67

STATE PROJECT NUMBER	SHEET NUMBER
4685-2-72	9.16

NORTHEAST RAMP R

N.E. RAMP AT C.T.H. "00"

M.L. 7444 6:1

745.01

4:1

6:1 732.0 4:1

R/W

598+00
740

743.67

7424

4:1

6:1 731.5

597+00
740

741.48

739.7

6:1 4:1

596+00
740

740.22

738.2

730.8

595+55
740

738.54

735.5

4:1

722.9

595+00
730

738.36

M.L. 736.1 6:1

4:1

R/W

5:1 2.5:1

724.1

594+94
730

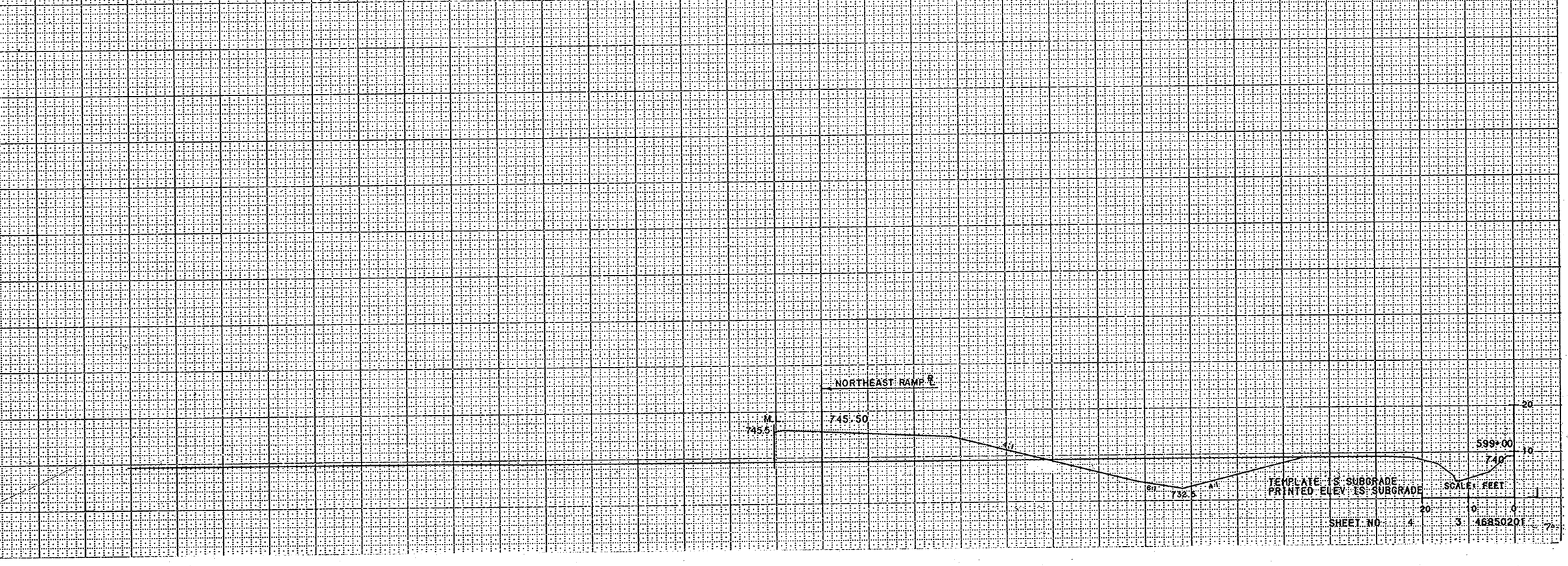
TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE

SCALE: FEET
20 0 0 20

SHEET NO 3 3 46850201

STATE PROJECT NUMBER	SHEET NUMBER
4685-2-72	9,17

N.E. RAMP AT C.T.H. "00"



SHEET NO. 4 3 46850201

STATE PROJECT NUMBER	SHEET NUMBER
4685-2-72	9,18

S.W. RAMP @ U.S.H. 41

SOUTHWEST RAMP ℄

626+00
750

755.72
FINISHED SECTION 4685-2-73
6:1
MATCH LINE
742.8
F.LY. ASH
4:1
R/W
4:1 6:1
732.8

625+50
750

756.49
FINISHED SECTION 4685-2-73
746.2
F.LY. ASH
732.7

625+00
750

ULTIMATE
757.07
FINISHED SECTION 4685-2-73
749.4
F.LY. ASH
733.0

624+00
750

ULTIMATE
757.63
FINISHED SECTION 4685-2-73
755.4
F.LY. ASH
733.4

623+00
750

ULTIMATE
757.38
MATCH LINE
756.6
4:1
R/W
4:1 6:1
733.8

TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE

SCALE: FEET
20 10 0

SHEET NO. 1 3 468502D1 7/

STATE PROJECT NUMBER	SHEET NUMBER
4685-2-72	9

S.E. RAMP @ U.S.H. 41

SOUTHEAST RAMP R

752.81

FINISHED SECTION 4685-2-73

M.L. 746.5

6 %

4 %

6 %

FLY ASH

732.4

625+00

750

R/W

753.84

ULTIMATE

751.3

FINISHED SECTION 4685-2-73

624+46

750

FLY ASH

732.2

754.53

ULTIMATE

752.0

FINISHED SECTION 4685-2-73

624+00

750

FLY ASH

732.0

755.47

ULTIMATE

754.4

6 %

623+00

750

4 %

731.6

M.L. 755.7

755.61

ULTIMATE

622+00

750

20

4 %

10

R/W

TEMPLATE IS SUBGRADE

PRINTED ELEV. IS SUBGRADE

731.8

20

SCALE: FEET

0 0

SHEET NO. 1 3 46850201 72

STATE PROJECT NUMBER 4685-2-72 SHEET NUMBER 9.20

C.T.H. "OO"

100 50 50 100

SURVEY ℄

STAGE 1 — W.B. CONST. ℄ — STAGE 2 — E.B. CONST. ℄ & STAGE 3 ℄

R/W

683+75.0 750

742.48

741.4 — 0.020'/ — 6:1 — 0.013'/ — 740.6

STAGE 3: 0.013'/ 6.09' — 0.013'/ 6.09'

683+45.0 750

742.75

741.6 — 0.016'/ 5.61' — 0.016'/ 5.61' — 740.5

683+00.0 750

743.01

741.8 — 4:1 — 6:1 — 740.4

0.020'/ 4.88' — 0.020'/ 4.88'

682+30.0 750

743.46

742.0 — 740.2

3.74' — 3.74'

682+00.0 750

M.L.

743.68

3:1

740.1

3.25' — 3.25'

681+00.0 750

744.22

741.9 — 739.8

1.63' — 1.63'

680+35.0 750

744.33

741.5 — 739.6

0.57' — 0.57'

STAGE 1 — STAGE 2 ℄ — STAGE 2 — R/W

680+00.0 750

744.33

6:1 — 4:1 — 742.2 — 6:1 — 4:1 — 739.5

STAGE 3 — 0.020'/ — 0.020'/

R/W

MEET EXISTING AT 680+00

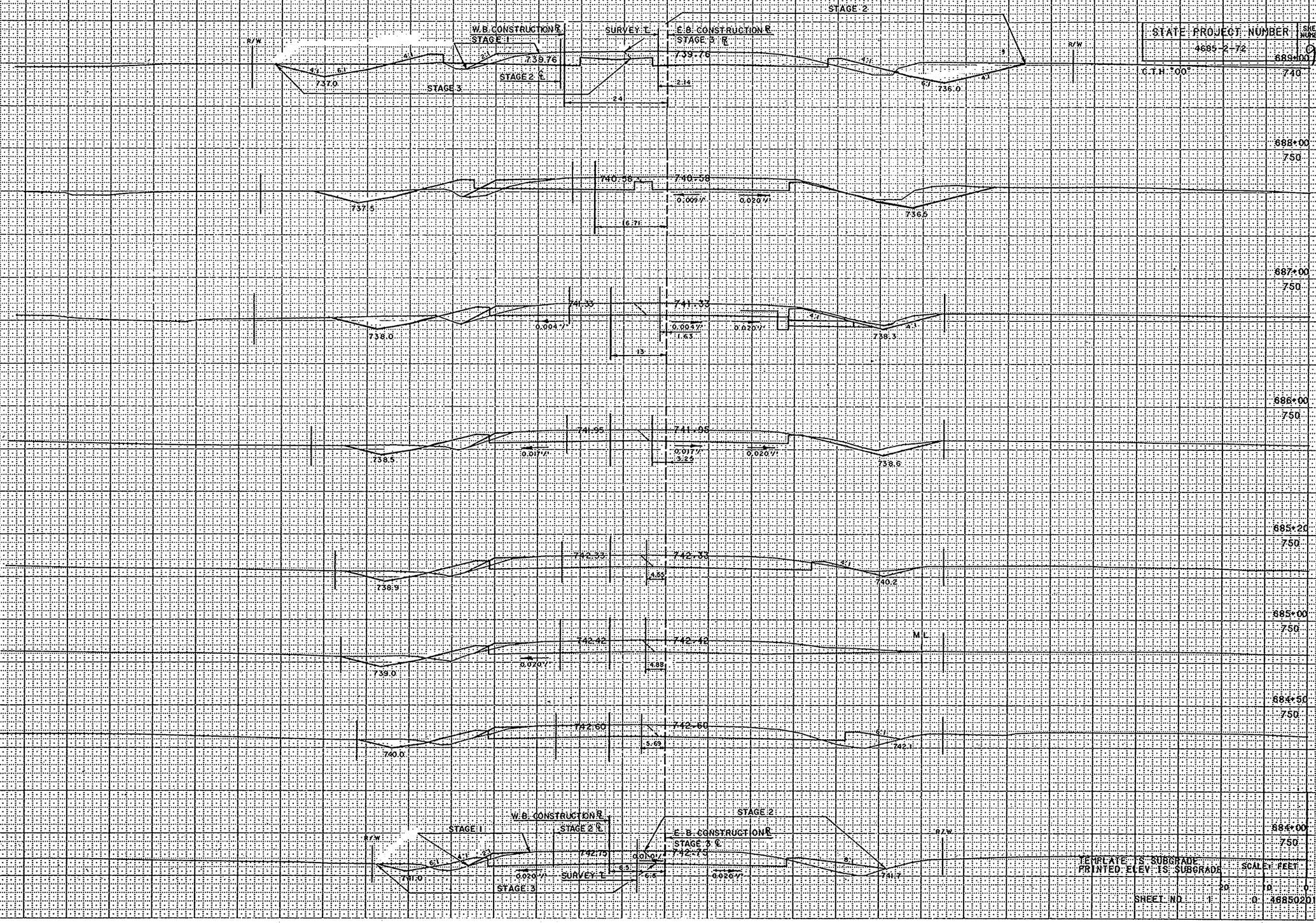
679+00.0 740

100 50 50 100

1 = 10 HOR.
1 = 10 VER.

SHEET NO. 1

STATE PROJECT NUMBER 4685-2-72 | SHEET NUMBER 21



STATE PROJECT NUMBER 4605-2-72 | SHEET NUMBER 9

W.B. CONSTRUCTION ℄ | E.B. CONSTRUCTION ℄ | STAGE 2 ℄ | SURVEY ℄

695+00
C.T.H. "00" 740

M.L. 734.65 0.018'/' 734.83 0.020'/' 734.83 0.020'/' M.L.
36' 15'

694+00
740

M.L. 732.9 0.004'/' 735.65 0.020'/' 735.65 0.020'/' 12.88'
36'
6:1 4:1 730.0

693+00
740

M.L. 733.9 0.004'/' 736.48 0.020'/' 0.005'/' 736.47 0.005'/' 10.71' 4:1 M.L.
36'

692+00
740

734.0 737.29 0.020'/' 737.29 8.57' M.L.
35.58'

691+00
740

R/W 735.0 738.12 738.12 6.43' R/W 735.0
33.46'

STAGE 2

W.B. CONSTRUCTION ℄ | E.B. CONSTRUCTION ℄ | STAGE 1 | STAGE 2 ℄ | SURVEY ℄

20
10

R/W 4:1 6:1 4:1 736.0 738.94 0.020'/' 738.94 0.020'/' 4.29' 0.020'/' 4:1 6:1 735.5 4:1 R/W

890+00
740

STAGE 3
29.60'

TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE

SCALE: FEET
20 0 0 20

SHEET NO. 2 0 46850201

STATE PROJECT NUMBER
4685-2-72

SHEET NUMBER
9,23

C.T.H "OO"

W.B. CONSTRUCTION R

STAGE 2 ℄

STAGE 3

SURVEY ℄

STAGE 2

E.B. CONSTRUCTION R

699+00
740

734.58
0.020'/
0.020'/
23.57'
36.00'
734.58
0.020'/
0.008'/
6:1

R/W AT 190'

698+85
740

734.53
22.82'
734.53

R/W AT 190'

698+30
740

M.L
734.25
22.07'
734.35
FLAT
6:1

698+00
740

6:1
734.25
21.43'
734.25
0.005'/
0.023'/
M.L

697+60
740

6:1
734.11
0.020'/
0.005'/
0.015'/
20.67'
734.11
0.011'/
0.015'/

697+00
740

734.23
0.013'/
0.005'/
0.015'/
19.29'
734.23
0.020'/

W.B. CONSTRUCTION R

STAGE 1

STAGE 2 ℄

SURVEY ℄

STAGE 2

E.B. CONSTRUCTION R & STAGE 3 R

M.L

M.L

734.53
0.020'/
0.020'/
0.020'/
17.13'
0.020'/
0.020'/
734.53

STAGE 3

36.00'

696+00
740

20
10
0

TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE

SCALE: FEET
20 10 0 0

SHEET NO 3 0 4685020J

STATE PROJECT NUMBER
4685-2-72
C.T.H. "00"
SHEET NUMBER 924

704+00
740

WB. CONST. ℄
SURVEY ℄
STAGE 2
736.26
736.26
0.02'/'
4:1
6:1
4:1
733.8
18.42'
STAGE 2 ℄
STAGE 3
EB. CONST. ℄

703+01
740

WB. CONST. ℄
SURVEY ℄
735.93
735.93
0.015'/'
0.015'/'
733.3
21.50'
25.14'

702+00
740

735.59
735.59
0.015'/'
0.015'/'
733.5
24.37'
30.42'

SAVE
± 42" - 2" SPRUCE

701+00
740

R/W
735.26
735.26
733.2
25.79'
33.95'

700+40
740

735.05
735.05
4:1
6:1
733.0
26.65'
35.21'

700+00
740

734.92
734.92
6:1
25.46'
35.76'

699+45
740

WB. CONST. ℄
STAGE 2 ℄
SURVEY ℄
EB. CONST. ℄
STAGE 2
R/W
734.74
734.74
0.02'/'
0.02'/'
6:1
24.54'
36.00'
STAGE 3

TEMPLATE IS SUBGRADE
PRINTED ELEV. IS SUBGRADE

SCALE: FEET
20 0 0 10

SHEET NO 1 0 46850201

STATE PROJECT NUMBER	SHEET NUMBER
4685-2-72	925

C.T.H. "OO"

EB. & WB. CONST. & SURVEY ℄

STAGE 2 ℄

STAGE 2

STAGE 1

STAGE 3

R/W

6:1

737.01

737.30

734.5

708+00

740

WB. CONST. & SURVEY ℄

EB. CONST. & SURVEY ℄

737.25

737.25

0.02/

0.02/

735.0

2.72'

707+00

740

736.93

736.93

0.005/

0.005/

734.7

6:1

6.05'

706+00

740

WB. CONST. & SURVEY ℄

EB. CONST. & SURVEY ℄

STAGE 2 ℄

STAGE 1

STAGE 2

R/W

736.64

736.59

0.008/

0.008/

4:1

6:1

4:1

734.3

8.37'

705+00

740

STAGE 3

20

10

TEMPLATE IS SUBGRADE
PRINTED ELEV. IS SUBGRADE

SCALE: FEET

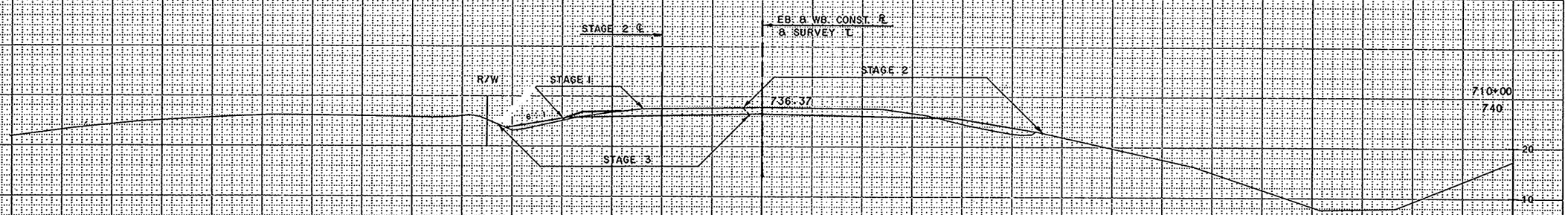
20 0 0

SHEET NO 2 0 46850201 1%

STATE PROJECT NUMBER	SHEET NUMBER
4685-2-72	926

C.T.H. "OO"

MEET EXISTING AT STA. 710+00



TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE

SCALE: FEET

SHEET NO. 3 O 46850201

STATE PROJECT NUMBER 4685-2-72 | SHEET NUMBER 9.21

FRENCH ROAD

100 50 50 100

SAVE
6 BB.-3" CHOKE CHERRY

SAVE
63-15" MAPLE

MEET EXISTING AT STA. 594+00

R/W

734.18

6:1 732.4 6:1

3.5:1

P.E. +70 RT.

SAVE
217 - 9" SPRUCE

SAVE
66 - 6" SPRUCE

737.03

736.3

737.0

TO "00"

738.25

738.38

3:1

INLET EL. 72.00

FLOWLINE OF CHANNEL CHANGE

C-44-7
STA. 590+85

DISCH EL. 720.70

MEET EXISTING AT STA. 590+00

737.68

735.8

737.9

737.1

738.3

738.9

739.4

739.5

594+00.0	740
593+00.0	740
592+00.0	740
591+48.0	740
591+00.0	740
590+00.0	740
589+00.0	740
588+00.0	740
587+00.0	740

1 = 10 HOR.
1 = 10 VER.

SHEET NO 1 3647

100 50 50 100

615+00.0
740

STATE PROJECT NUMBER | SHEET NUMBER
4685-2-72 | 9/28
FRENCH ROAD

598+00.0
740

734.0
732.5

597+53.0
740

732.3
730.8

597+00.0
730

728.3

596+57.0
730

596+00.0
730

727.0

R/W R/W

595+15.0
730

729.8
729.4

595+00.0
740

R/W R/W PE +00 RT

730.8

100 50 50 100

1 = 10 HOR
1 = 10 VER
SHEET NO 2 3647

STATE PROJECT NUMBER | SHEET NUMBER
4685-2-72 | 9.19

CHRISTINA STREET OFF C.T.H. 100

100 50 50 100

10+00.0
750
9+88.0
750
9+50.0
740
9+35.0
750
9+26.0
750
9+00.0
750
8+50.0
750
8+00.0
750

ML
742.25
R/W
R/W
742.14
P.E. 9+20 LT.
742.07
740.8
741.88
741.0
P.E. 9+85 RT.
MEET EXISTING AT STA. 9+50
740.8
740.9
R/W
R/W

1" = 10' HOR
1" = 10' VER

100 50 50 100

SHEET NO. 1 362