

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.I. SHEET NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(201-1HB-1)BP	WINNEBAGO	13	1
		ILLINOIS	CONTRACT NO. 64M50	

\*13 + 5(A-E) = 18 TOTAL SHEETS  
D-92-061-17

FOR INDEX OF SHEETS, SEE SHEET NO. 2  
FOR STATE STANDARDS, SEE SHEET NO. 2

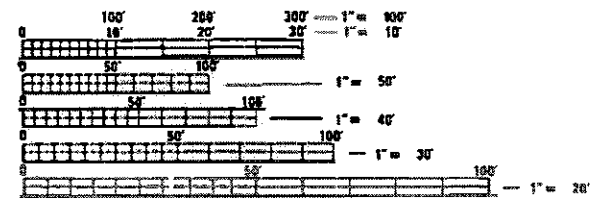
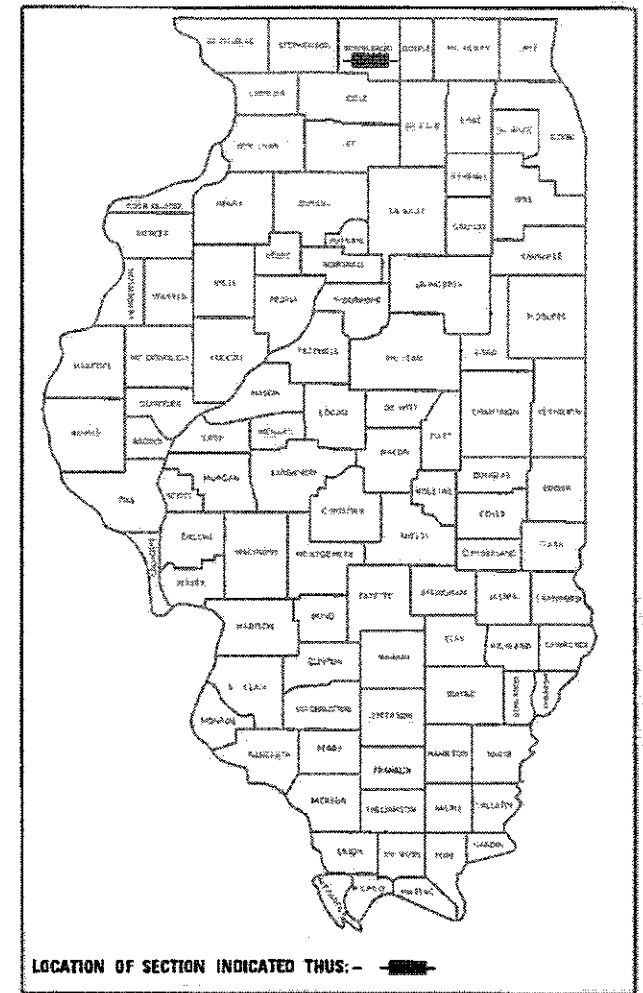
# PROPOSED HIGHWAY PLANS

FAI ROUTE 39 (I-39)  
SECTION (201-1HB-1)BP  
PROJECT: NHPP-HUNA(126)  
TYPE of IMPROVEMENT: BRIDGE PAINTING  
WINNEBAGO COUNTY

WINNEBAGO COUNTY  
CHERRY VALLEY TOWNSHIP - SECTIONS 28 & 29

C-92-074-17  
R.2E.

SN 101-0144

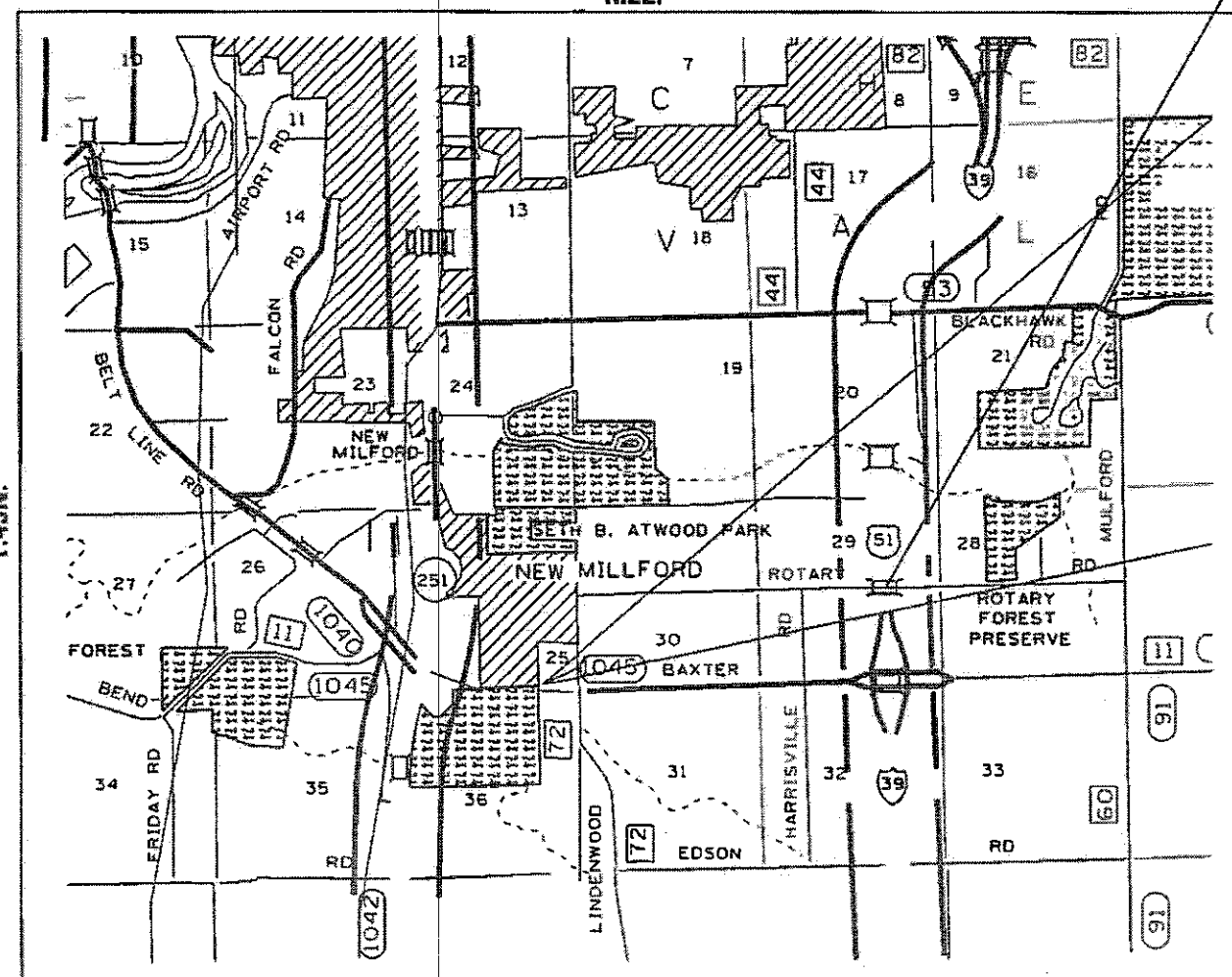


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123  
OR 811

PROJECT ENGINEER: DAVID DOSS (815) 284-5416  
PROJECT MANAGER: MAHMOUD ETEMADI (815) 284-5393

CONTRACT NO. 64M50



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED 1-25 2018  
[Signature] REGIONAL ENGINEER

May 23 2018  
[Signature] ENGINEER OF DESIGN AND ENVIRONMENT

May 23 2018  
[Signature] DIRECTOR OF PROGRAM DEVELOPMENT

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

# INDEX OF SHEETS

- 1 COVER SHEET
- 2 INDEX OF SHEETS / STATE STANDARDS / GENERAL NOTES
- 3 SUMMARY OF QUANTITIES
- 4 SCHEDULE OF QUANTITIES
- 5 STAGING TYPICAL
- 6-13 TRAFFIC CONTROL PLAN FOR SN 101-0144
- 13A-13E EXISTING PLANS SN 101-0144

# STATE STANDARDS

- 701101-05 OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5m) TO 24" (600mm) FROM PAVEMENT EDGE
- 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701400-09 APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
- 701401-11 LANE CLOSURE, FREEWAY/EXPRESSWAY
- 701402-12 LANE CLOSURE, FREEWAY/EXPRESSWAY WITH BARRIER
- 701411-09 LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS  $\geq$  45 MPH
- 701426-09 LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS, FOR SPEEDS  $\geq$  45 MPH
- 701901-07 TRAFFIC CONTROL DEVICES
- 704001-08 TEMPORARY CONCRETE BARRIER
- 720011-01 METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
- 728001-01 TELESCOPING STEEL SIGN SUPPORT
- 729001-01 APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)

# GENERAL NOTES

A MINIMUM OF 2 AIR MONITORS WILL BE REQUIRED TO MONITOR ABRASIVE BLASTING OPERATIONS, SEE SPECIAL PROVISION FOR "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES".

THE CONTRACTOR SHALL SEED ALL DISTURBED AREAS WITHIN THE PROJECT LIMITS. SEEDING CLASS 2A SHALL BE USED. THIS WORK WILL BE INCLUDED IN THE CONTRACT UNIT PRICE PER LUMP SUM FOR CLEANING AND PAINTING STEEL BRIDGE NO. 1.

FERTILIZER SHALL BE APPLIED TO ALL DISTURBED AREAS AND INCORPORATED INTO THE SEEDBED PRIOR TO SEEDING OR PLACEMENT OF SOD AT THE RATE SPECIFIED IN SECTIONS 250 AND 252 OF THE STANDARD SPECIFICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST OF CLEANING AND PAINTING STEEL BRIDGE NO. 1.

MULCH METHOD II SHALL BE APPLIED OVER ALL SEEDED AREAS. THIS SHALL BE INCLUDED IN THE COST OF THE CLEANING AND PAINTING STEEL BRIDGE NO. 1.

ALL BORROW/WASTE/USE SITES MUST BE APPROVED BY THE DEPARTMENT PRIOR TO REMOVING ANY MATERIAL FROM THE PROJECT OR INITIATING ANY EARTHMOVING ACTIVITIES, INCLUDING TEMPORARY STOCKPILING OUTSIDE THE LIMITS OF CONSTRUCTION.

TEMPORARY IMPACT ATTENUATORS WILL BE MEASURED AS EACH FOR EACH ATTENUATOR SUPPLIED ON THE JOB AS SPECIFIED IN THE PLANS, AND SHALL INCLUDE THE COST OF RENTING/OWNING THE ATTENUATOR FOR THE TIME REQUIRED ON THE JOB PLUS HAULING TO AND FROM THE PROJECT SITE, AS WELL AS ONE PLACEMENT AND REMOVAL FROM THE ROADWAY. THIS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR IMPACT ATTENUATORS, TEMPORARY OF THE TYPE SPECIFIED.

RELOCATE TEMPORARY IMPACT ATTENUATOR WILL BE PAID FOR AS EACH AND WILL BE PAID FOR EACH TIME THE ATTENUATOR IS REQUIRED BY STAGING TO BE PICKED UP AND MOVED TO A DIFFERENT LOCATION ON THE PROJECT, WHETHER IT IS TO ANOTHER LOCATION ON THE ROADWAY OR TO A STORAGE/STAGING LOCATION FOR THE PROJECT. THIS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR IMPACT ATTENUATORS, RELOCATE OF THE TYPE SPECIFIED.

THIS WORK SHALL BE DONE IN ACCORDANCE WITH SECTION 704 OF THE STANDARD SPECIFICATIONS. TEMPORARY CONCRETE BARRIER WILL BE MEASURED IN FEET ALONG THE CENTERLINE OF THE BARRIER AND SHALL INCLUDE THE COST OF RENTING/OWNING THE BARRIER FOR THE TIME REQUIRED ON THE JOB PLUS HAULING TO AND FROM THE PROJECT SITE, AS WELL AS ONE PLACEMENT AND REMOVAL FROM THE ROADWAY IN ACCORDANCE WITH SECTION 704 OF THE STANDARD AND SPECIFICATION. THIS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR TEMPORARY CONCRETE BARRIER.

RELOCATE TEMPORARY CONCRETE BARRIER WILL BE PAID FOR IN FEET ALONG THE CENTERLINE OF THE BARRIER, AND WILL BE PAID FOR EACH TIME THE BARRIER IS REQUIRED BY STAGING TO BE PICKED UP AND MOVED TO A DIFFERENT LOCATION ON THE PROJECT, WHETHER IT IS TO ANOTHER LOCATION ON THE ROADWAY OR TO A STORAGE/STAGING LOCATION FOR THE PROJECT. THIS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR RELOCATE TEMPORARY CONCRETE BARRIER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY DURING CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. A MINIMUM OF 48 HOURS ADVANCE NOTICE IS REQUIRED FOR NON-EMERGENCY WORK. THE JULIE NUMBER IS 800-892-0123.

THE SSPC QP1 & QP2 CONTRACT CERTIFICATIONS WILL BE REQUIRED FOR THIS CONTRACT.

MODEL: Default  
FILE NAME: \\P:\06\REBID\INTEG\_illinois.gpr\PI\DOT\Documents\DOT\_Offices\District\_2\Projects\Operations\Bridges\_Section\Winnebag10131416\4450CAD\DOT-64M50-INT-cover.dgn

USER NAME = dssdd	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -
PLOT DATE = Jan-29-2018 10:42:13 AM	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS  
STATE STANDARDS & GENERAL NOTES

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(201-1HB-1)BP	WINNEBAGO	13	2
SCALE: _____			SHEET _____ OF _____ SHEETS   STA. _____ TO STA. _____	
ILLINOIS FED. AID PROJECT				

CONTRACT NO. 64M50

# SUMMARY OF QUANTITIES

90% NHPP  
10% STATE

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	WINNEBAGO COUNTY <i>0047</i>
67100100	MOBILIZATION	L SUM	1	1
70100207	TRAFFIC CONTROL AND PROTECTION, STANDARD 701402	EACH	2	2
70100300	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	L SUM	1	1
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	1	1
70107004	PAVEMENT MARKING BLACKOUT TAPE, 4"	FOOT	5960	5960
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	1987	1987
70300520	PAVEMENT MARKING TAPE, TYPE III 4"	FOOT	11,558	11,558
70400100	TEMPORARY CONCRETE BARRIER	FOOT	437.5	437.5
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	662.5	662.5
70600250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	1	1
70600350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	3	3
X5067501	BRIDGE CLEANING AND PAINTING WARRANTY NUMBER 1	L SUM	1	1
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	3854	3854
Z0007101	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO.1	L SUM	1	1
Z0010501	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1	1

MODEL: D:\pwt FILE NAME: P:\11084EBID\INTEG\Illinois.gov\FMIDOT\Documents\DOT\_Cities\District\_2\Projects\Operations\Bridges\_Section\Winnebago\10-10-14\64M50\CAD\DOZ\_64M50-etc-cover.dgn

15

USER NAME = dosadd PLOT SCALE = 100.0000' / in. PLOT DATE = Jan-29-2018 10:42:29 AM	DESIGNED - _____ DRAWN - _____ CHECKED - _____ DATE - _____	REVISED - _____ REVISED - _____ REVISED - _____ REVISED - _____	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b> SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>F.A.I. RTE.</th> <th>SECTION</th> <th>COUNTY</th> <th>TOTAL SHEETS</th> <th>SHEET NO.</th> </tr> <tr> <td>39</td> <td>(201-1H8-1)BP</td> <td>WINNEBAGO</td> <td>13</td> <td>3</td> </tr> <tr> <td colspan="5" style="text-align: right;">CONTRACT NO. 64M50</td> </tr> </table>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	39	(201-1H8-1)BP	WINNEBAGO	13	3	CONTRACT NO. 64M50				
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.																
39	(201-1H8-1)BP	WINNEBAGO	13	3																
CONTRACT NO. 64M50																				

ILLINOIS FED. AID PROJECT

# SCHEDULE OF QUANTITIES

70107004

PAVEMENT MARKING BLACKOUT TAPE, 4"

LOCATION	COMMENTS	FOOT
STAGE I		
1000'	EDGE LINE/RT	1000
320'	SKIP DASH/DOUBLE WIDE (32 DASHES)	640
515'	EDGE LINE/LT	515
STAGE II		
1000'	EDGE LINE/LT	1000
515'	EDGE LINE/RT	515
STAGE III		
500'	EDGE LINE/LT	500
130'	SKIP DASH/DOUBLE WIDE (13 DASHES)	260
515'	EDGE LINE/RT	515
STAGE IV		
500'	EDGE LINE/RT	500
515'	EDGE LINE/LT	515
TOTAL		5960

70300520

PAVEMENT MARKING TAPE, TYPE III 4"

LOCATION	COMMENTS	FOOT
STAGE I		
1000'	TAPER	1000
1000'	CENTERLINE	1000
70'	TAPER x2	140
375'	TANGENT x2	750
70'	TAPER x2	140
631'	RAMP EDGE LINE RT	631
307'	RAMP EDGE LINE LT	307
STAGE II		
1000'	TAPER	1000
1000'	CENTERLINE	1000
70'	TAPER x2	140
375'	TANGENT x2	750
70'	TAPER x2	140
STAGE III		
1000'	TAPER	1000
500'	CENTERLINE	500
70'	TAPER x2	140
375'	TANGENT x2	750
70'	TAPER x2	140
STAGE IV		
1000'	TAPER	1000
70'	TAPER x2	140
375'	TANGENT x2	750
70'	TAPER x2	140
TOTAL		11558

70300150

SHORT TERM PAVEMENT MARKING REMOVAL

LOCATION	COMMENTS	SQ FT
STAGE I		
2155'	BLACKOUT TAPE, 4"	718
STAGE II		
1515'	BLACKOUT TAPE, 4"	505
STAGE III		
1275'	BLACKOUT TAPE, 4"	425
STAGE IV		
1015'	BLACKOUT TAPE, 4"	339
TOTAL		1987

X7030005

TEMPORARY PAVEMENT MARKING REMOVAL

LOCATION	COMMENTS	SQ FT
STAGE I		
3968'	MARKING TAPE, TYPE III, 4"	1323
STAGE II		
3030'	MARKING TAPE, TYPE III, 4"	1010
STAGE III		
2530'	MARKING TAPE, TYPE III, 4"	844
STAGE IV		
2030'	MARKING TAPE, TYPE III, 4"	677
TOTAL		3854

MODEL: Default  
 FILE: \\mhc-pw\ulb\B&E\BID\ITEC\Illinois\gov\PI\DOT\Documents\BID\Office\BID\Ict 2\Projects\Operations\Bldg - Section\Winnebago\101-0114\64M50\CADD\02-64M50-sh-covers.dgn

USER NAME = dossed	DESIGNED - _____	REVISED - _____
	DRAWN - _____	REVISED - _____
PLOT SCALE = 100.0000' / in.	CHECKED - _____	REVISED - _____
PLOT DATE = Jan-29-2018 10:42:34 AM	DATE - _____	REVISED - _____

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

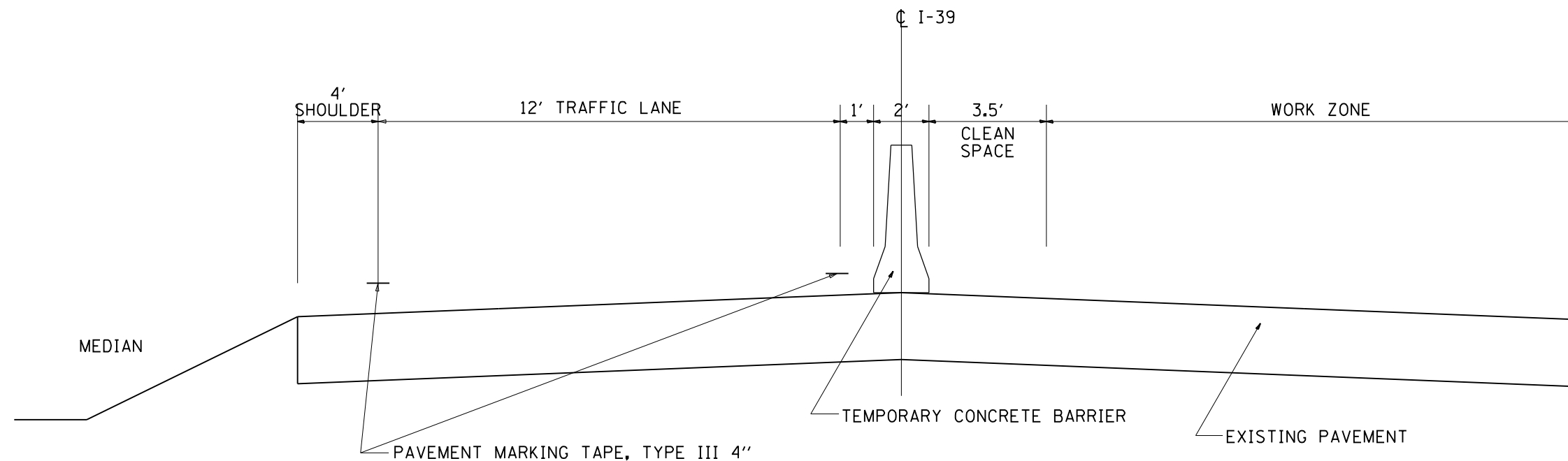
**SCHEDULE OF QUANTITIES**

SCALE: \_\_\_\_\_ SHEET \_\_\_\_ OF \_\_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

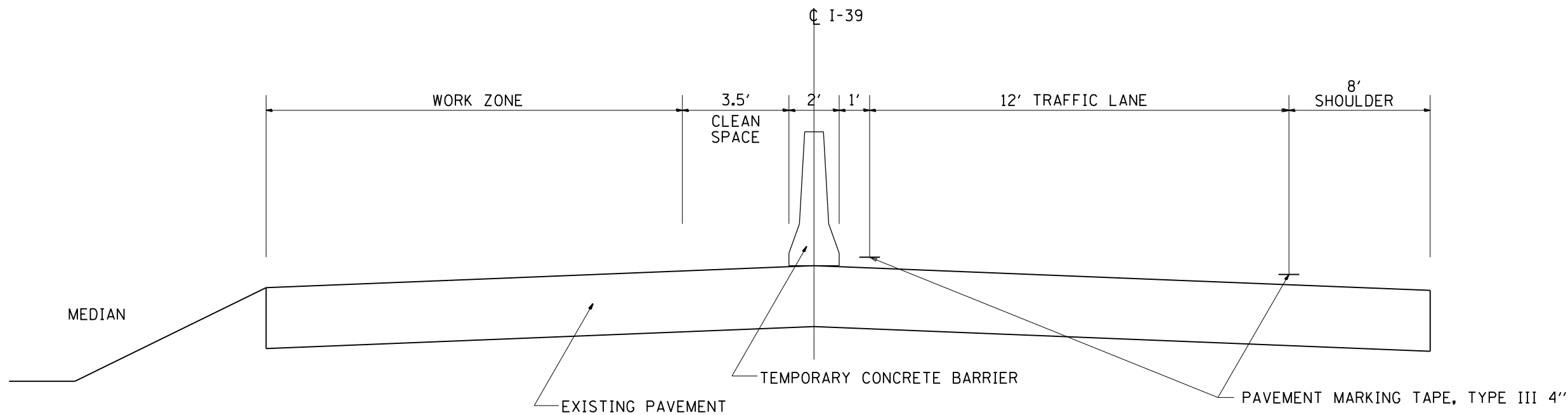
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(201-1HB-1)BP	WINNEBAGO	13	4
CONTRACT NO. 64M50				
ILLINOIS FED. AID PROJECT				

# STAGING TYPICALS

STAGES I & IV SN 101-0144 ROTARY RD OVER I-39



STAGES II & III SN 101-0144 ROTARY RD OVER I-39



MODEL: Default  
 FILE: \\nas01.cas.usg.edu\BID\NTEC\Illinois\gov\PIV\DOT\Documents\BID\Office\BID\BID\2\Projects\Operations\Bids\Stage\_Section\Winnebago\101-0144\64M50\CADD\02-64M50-sh-covers.dgn

USER NAME = drossdd	DESIGNED - _____	REVISED - _____
	DRAWN - _____	REVISED - _____
PLOT SCALE = 100,0000' / in.	CHECKED - _____	REVISED - _____
PLOT DATE = Jan-29-2018 10:42:47 AM	DATE - _____	REVISED - _____

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

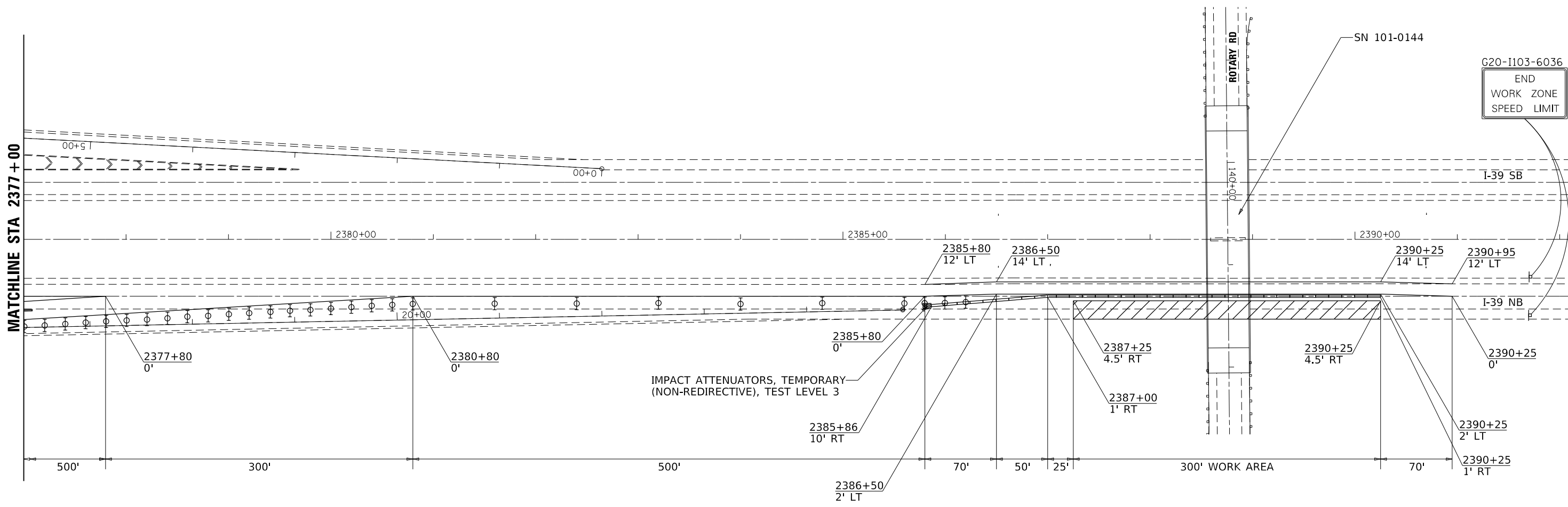
**STAGING TYPICALS**

SCALE: \_\_\_\_\_ SHEET \_\_\_\_ OF \_\_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(201-1HB-1)BP	WINNEBAGO	13	5
CONTRACT NO. 64M50				
ILLINOIS FED. AID PROJECT				



# TRAFFIC CONTROL PLAN STAGE I – SN 101-0144



G20-I103-6036  
END  
WORK ZONE  
SPEED LIMIT

### SYMBOLS

- Arrow board
- Work area
- Sign
- Direction indicator barricade with steady burn monodirectional light
- Type II barricade or drum with steady burn monodirectional light
- Temporary concrete barrier
- Monodirectional barrier wall/guardrail marker
- Impact attenuator
- Drums with steady burning monodirectional light

### NOTES

- ① ReflectORIZED temporary pavement marking shall be placed throughout the taper and along-side the work area. The edge line shall be white for right lane closure and yellow for left lane closures.
- ② Vertical panels at 7.6 m (25') centers with steady burning monodirectional lights.

MODEL: Default  
 FILE: \\nas01\p01\proj\101-0144\64M50\CADD\DOT\Documents\101-0144\64M50\CADD\DOT-64M50-101-0144.dwg  
 PROJECT: Operations\Bldg - Section\WorkArea\101-0144\64M50\CADD\DOT-64M50-101-0144.dwg

USER NAME = dossed	DESIGNED - _____	REVISED - _____
	DRAWN - _____	REVISED - _____
PLOT SCALE = 100,0000' / in.	CHECKED - _____	REVISED - _____
PLOT DATE = Jan-29-2018 10:43:01 AM	DATE - _____	REVISED - _____

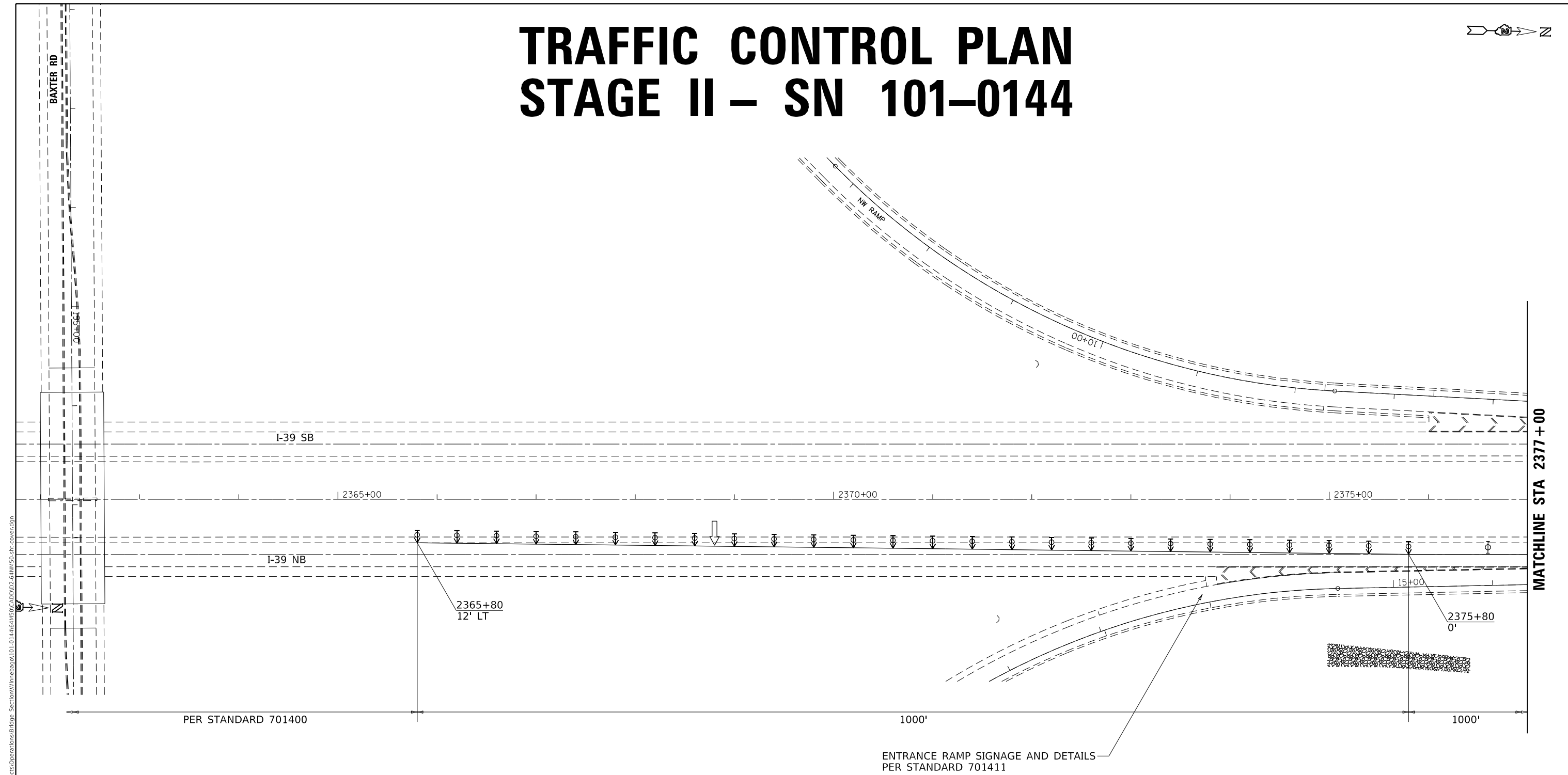
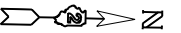
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL PLAN  
STAGE I – SN 101-0144**

SCALE: \_\_\_\_\_ SHEET \_\_\_\_\_ OF \_\_\_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(201-1HB-1)BP	WINNEBAGO	13	7
CONTRACT NO. 64M50			ILLINOIS FED. AID PROJECT	

# TRAFFIC CONTROL PLAN STAGE II – SN 101-0144



MODEL: Default  
 FILE: \\s:\p\1108\B&E\BID\NTEC\Illinois\p\1108\B&E\BID\NTEC\Documents\DOT\_Offices\District 2\Projects\Operations\B&E\Stage II\TrafficControlPlan\TrafficControlPlan.dwg  
 PROJECT: Operations\B&E\Stage II\TrafficControlPlan\TrafficControlPlan.dwg

### SYMBOLS

- Arrow board
- Work area
- Sign
- Direction indicator barricade with steady burn monodirectional light
- Type II barricade or drum with steady burn monodirectional light
- Temporary concrete barrier
- Monodirectional barrier wall/guardrail marker
- Impact attenuator
- Drums with steady burning monodirectional light

### NOTES

- ① ReflectORIZED temporary pavement marking shall be placed throughout the taper and along-side the work area. The edge line shall be white for right lane closure and yellow for left lane closures.
- ② Vertical panels at 7.6 m (25') centers with steady burning monodirectional lights.

USER NAME = drossdd	DESIGNED - _____	REVISED - _____
	DRAWN - _____	REVISED - _____
PLOT SCALE = 100,0000' / in.	CHECKED - _____	REVISED - _____
PLOT DATE = Jan-29-2018 10:43:07 AM	DATE - _____	REVISED - _____

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL PLAN  
STAGE II – SN 101-0144**

SCALE: \_\_\_\_\_ SHEET \_\_\_\_\_ OF \_\_\_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(201-1HB-1)BP	WINNEBAGO	13	8
			CONTRACT NO. 64M50	
		ILLINOIS	FED. AID PROJECT	



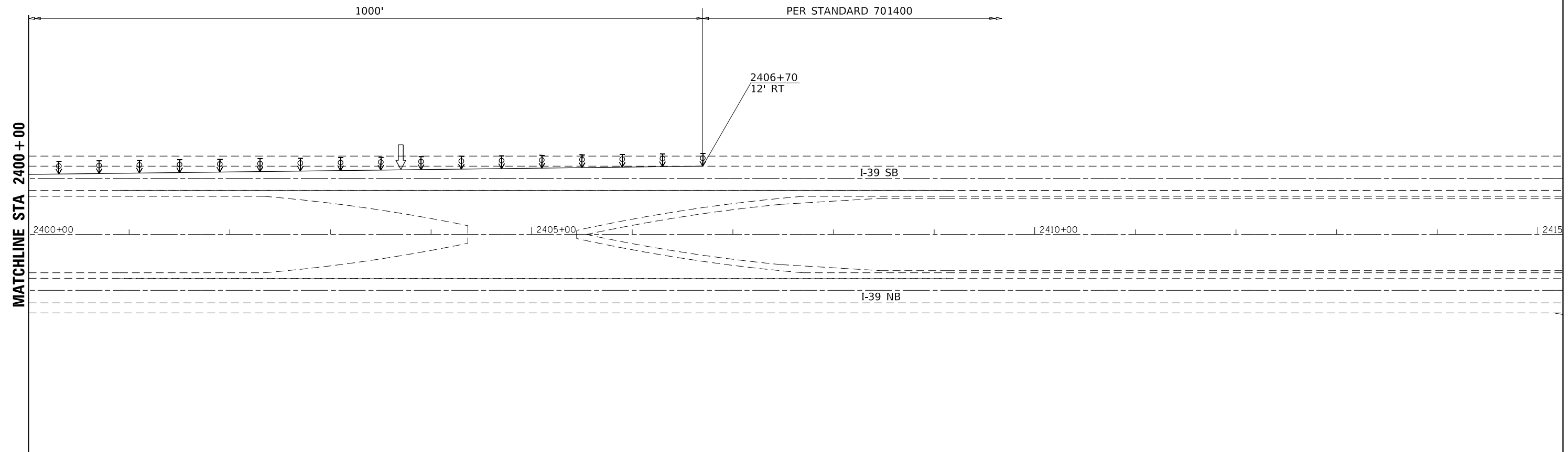








# TRAFFIC CONTROL PLAN STAGE IV – SN 101-0144



### SYMBOLS

- Arrow board
- Work area
- Sign
- Direction indicator barricade with steady burn monodirectional light
- Type II barricade or drum with steady burn monodirectional light
- Temporary concrete barrier  
Monodirectional barrier wall/guardrail marker
- Impact attenuator
- Drums with steady burning monodirectional light

### NOTES

- ① ReflectORIZED temporary pavement marking shall be placed throughout the taper and along-side the work area. The edge line shall be white for right lane closure and yellow for left lane closures.
- ② Vertical panels at 7.6 m (25') centers with steady burning monodirectional lights.

MODEL: Default  
 FILE: \\nas01\pwworkspace\pwworkspace\Projects\Operations\Bldg\_Section\Winnebago\101-0144\64M50\CAD\DD2-64M50-sh-cov.plt

USER NAME = drossdd	DESIGNED - _____	REVISED - _____
DRAWN - _____	REVISIONS - _____	
PLOT SCALE = 100,0000' / in.	CHECKED - _____	REVISIONS - _____
PLOT DATE = Jan-29-2018 10:43:46 AM	DATE - _____	REVISIONS - _____

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL PLAN  
STAGE IV – SN 101-0144**

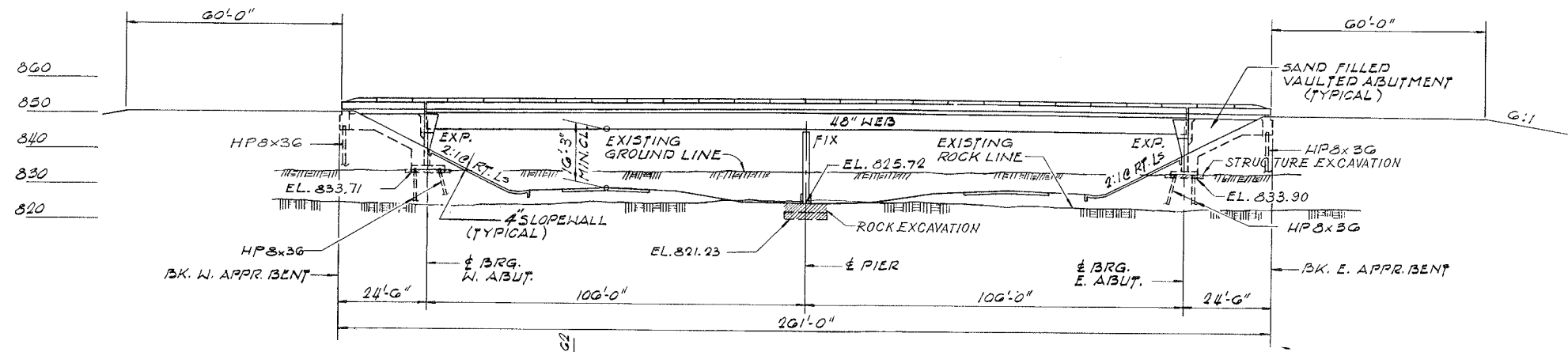
SCALE: \_\_\_\_\_ SHEET \_\_\_\_ OF \_\_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(201-1HB-1)BP	WINNEBAGO	13	13
CONTRACT NO. 64M50				
ILLINOIS FED. AID PROJECT				

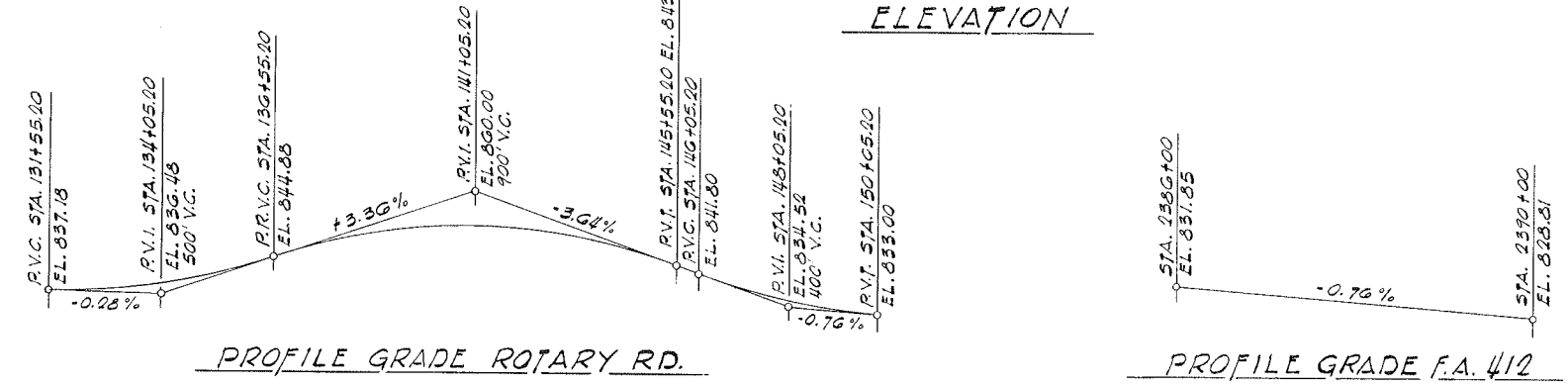
NO EXISTING STRUCTURE  
 BENCHMARK #23.7" SPIKE IN POWER POLE  
 SO. SIDE ROTARY RD. 225' LT. F.A. 412  
 STA. 2388+35 ELEV. 834.014

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 412	201-IHB-1	WINNEBAGO	35	8C
STA.		TO STA.		
F.H.W. A REG. NO. 4		ILLINOIS		PROJECT

SHEET 1 OF 15



ELEVATION

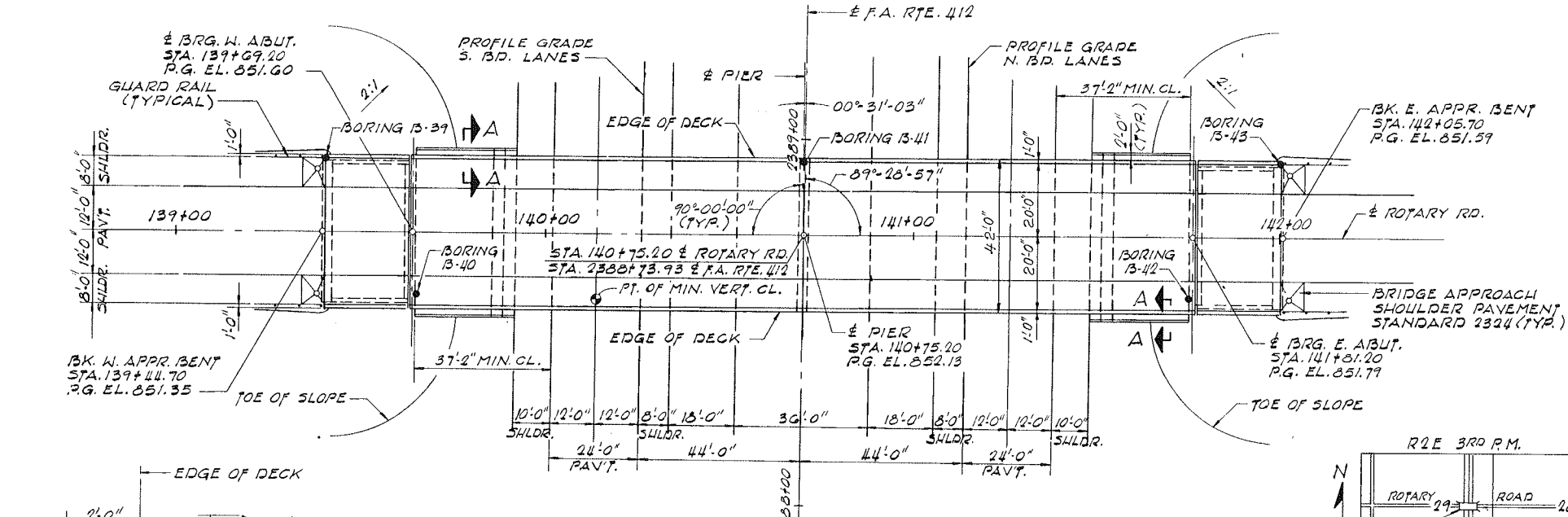


PROFILE GRADE ROTARY RD.

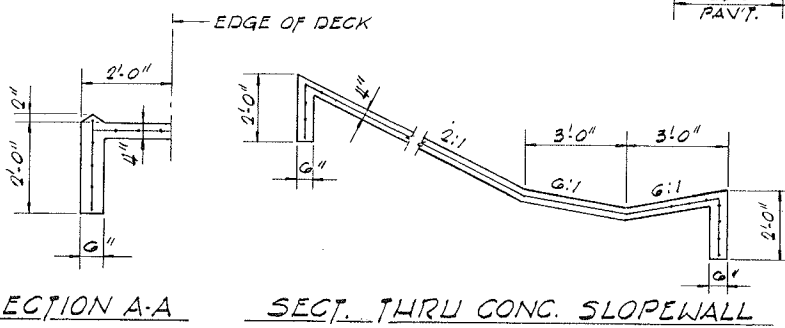
PROFILE GRADE F.A. 412

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	GENERAL PLAN AND ELEVATION
2	GENERAL NOTES, QUANTITIES, NAME PLATE
3	DECK REINFORCEMENT PLAN - SPANS 1 & 4
4	DECK REINFORCEMENT PLAN - SPANS 2 & 3
5	DECK DETAILS - SPANS 2 & 3
6	ALUMINUM RAILING DETAILS
7	TOP OF SLAB ELEVATIONS
8	TOP OF SLAB ELEVATIONS
9	FRAMING PLAN
10	STEEL DETAILS
11	EAST ABUTMENT
12	WEST ABUTMENT
13	ABUTMENT DETAILS
14	PIER
15	DRAINAGE SCUPPER

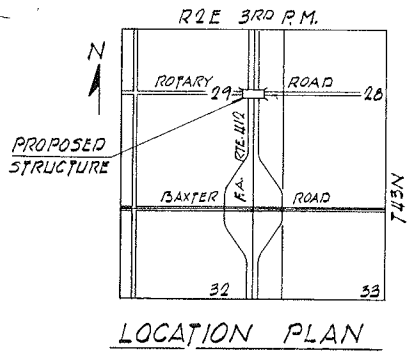


PLAN  
 SCALE: 1" = 20'



SECTION A-A

SECT. THRU CONC. SLOPEWALL



LOCATION PLAN

Span 2&3 Deck Slab  
 Load factor design  
 $f'_c = 3500 \text{ psi}$   
 $f_y = 60,000 \text{ psi}$   
 $n = 8.5$

DESIGN LOAD  
 L.L. = HS20-44  
 FUTURE D.L. = 25 P.S.F.  
 DESIGN STRESSES  
 $f'_c = 3,500 \text{ P.S.I.}$   
 $f_c = 1,400 \text{ P.S.I. (SUBSTRUCTURE, CURB, PARAPET & DECK SLAB - SPANS 1 & 4)}$   
 $f_c = 1,000 \text{ P.S.I. (WITH EARTH PRESSURE)}$   
 $v = 56.2 \text{ P.S.I. (FOOTINGS)}$   
 $n = 10$   
 REINFORCING STEEL  
 $f_s = 20,000 \text{ P.S.I. (SPANS 1 & 4 \& SUBSTRUCTURE)}$   
 STRUCTURAL STEEL  
 $f_s = 20,000 \text{ P.S.I.}$

DESIGN SPECIFICATIONS  
 AASHTO: 1973, AND INTERIMS AS APPLICABLE

APPROVED  
 FOR STRUCTURAL ADEQUACY ONLY  
 [Signature]  
 [Title]

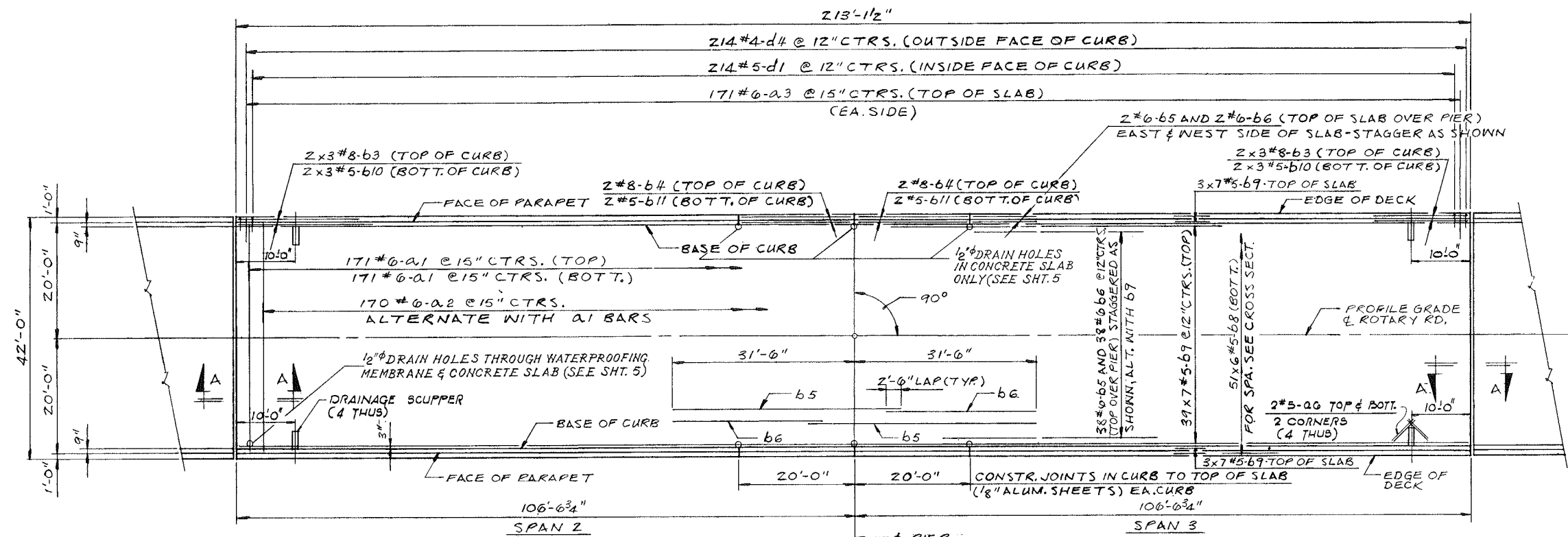
GENERAL PLAN AND ELEVATION  
 ROTARY ROAD  
 OVER F.A. ROUTE 412  
 SECTION  
 PROJECT 201-IHB-1  
 WINNEBAGO COUNTY  
 STATION 2388+73.93

ALFRED BENESCH & COMPANY  
 CONSULTING ENGINEERS  
 JOB NO. 1649-D  
 233 N. MICHIGAN AVE. CHICAGO, ILLINOIS

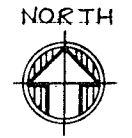
FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 412	201-IHB-1	WINNEBAGO	35	11C
STA.	TO STA.			
F.H.W. A REG. NO. 4	ILLINOIS	PROJECT		

SHEET 4 OF 15



DECK REINFORCEMENT PLAN

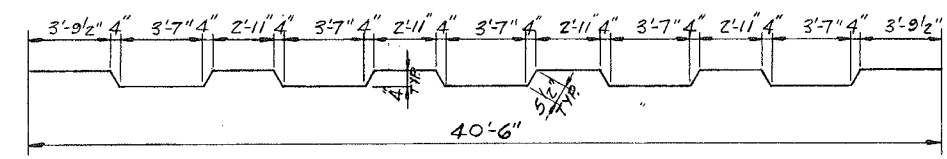


BILL OF MATERIAL

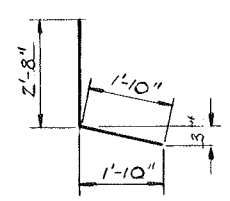
BAR	No.	SIZE	LENGTH	SHAPE
a1	342	#6	40'-0"	—
a2	170	#6	41'-9"	~
a3	342	#6	41'-0"	—
b3	24	#8	30'-3"	—
b4	8	#8	19'-9"	—
b5	42	#6	40'-0"	—
b6	42	#6	25'-6"	—
b8	306	#5	36'-9"	—
b9	315	#5	31'-9"	—
b10	24	#5	29'-9"	—
b11	8	#5	19'-9"	—
d1	428	#5	41'-0"	L
d4	428	#4	41'-6"	L
a6	32	#5	41'-0"	—
CLASS "X" CONCRETE C.U.Y.D.			49	
REINFORCEMENT BARS			LBS.	66,030

NOTES:  
 REINFORCEMENT IN SOUTH CURB SAME AS SHOWN IN NORTH CURB.  
 39x6#5-b ETC. INDICATES 39 LINES OF BARS WITH 6 LENGTHS OF BARS PER LINE.  
 FOR DECK AND CURB CROSS SECTION AND SECTION "A-A" SEE SHT. 5

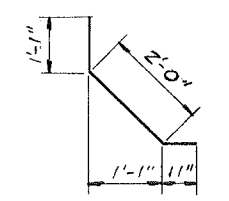
NOTE:  
 ALL BAR DIMENSIONS ARE OUT TO OUT.  
 PARAPET REINFORCING AND CLASS X CONCRETE ARE BILLED ON SHEET 6.



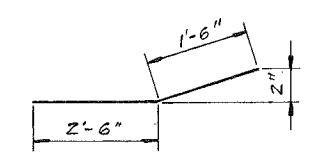
BAR a2



BAR d4



BAR d1



BAR a3

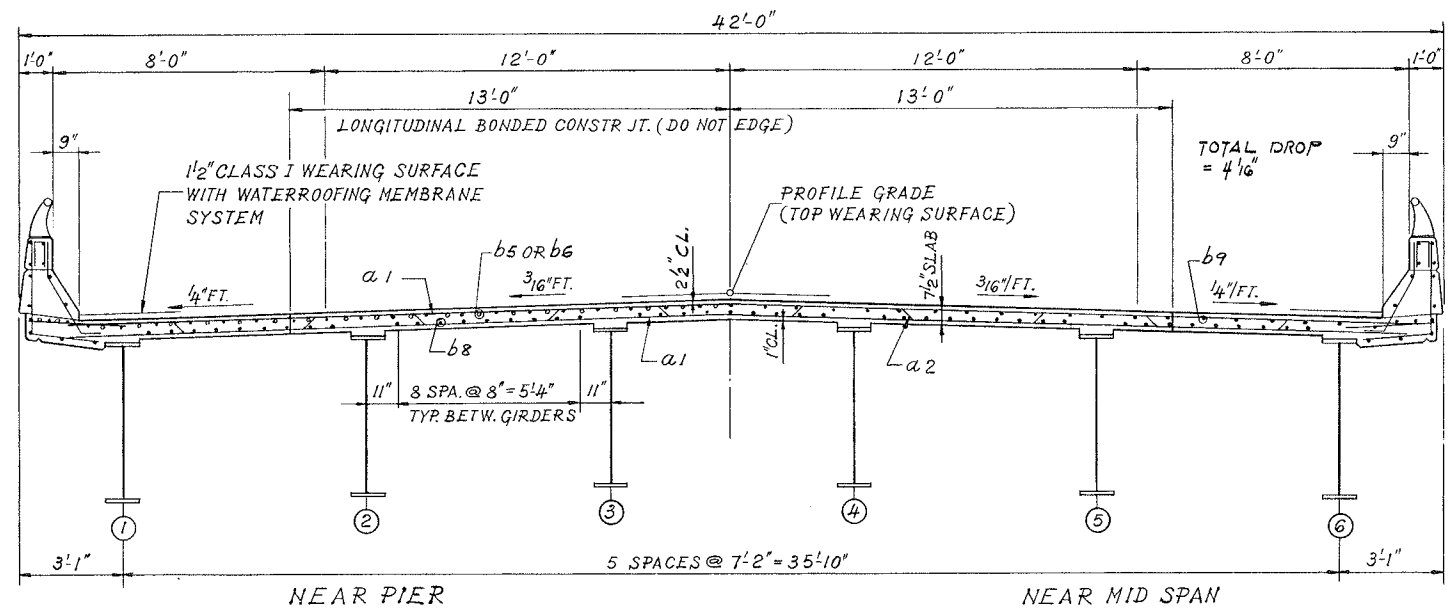
FOR INFORMATION ONLY

ALFRED BENESCH & COMPANY  
 CONSULTING ENGINEERS  
 JOB NO. 1047-D  
 233 N. MICHIGAN AVE., CHICAGO, ILLINOIS

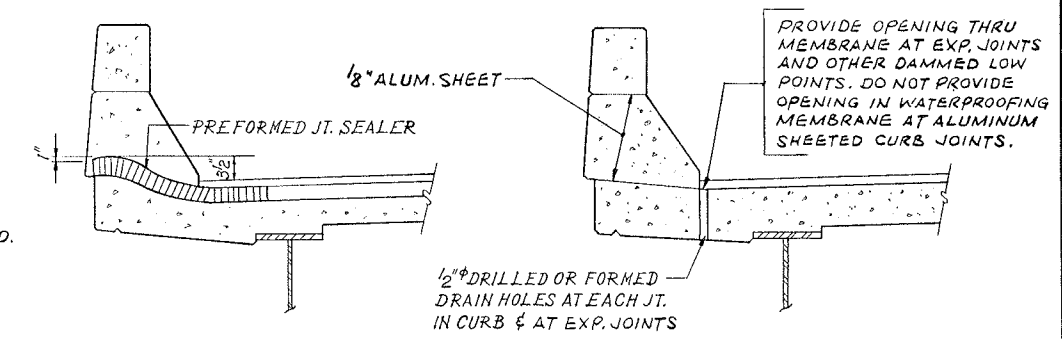
DECK REINFORCEMENT PLAN-SPANS 2 & 3  
 ROTARY ROAD  
 OVER F.A. ROUTE 412  
 PROJECT  
 SECTION 201-IHB-1  
 WINNEBAGO COUNTY  
 STATION 2388+73.93

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 412	201-IHB-1	WINNEBAGO	35	12 C.
STA.	TO STA.		PROJECT	
F.H.W. & REG. NO. 4	ILLINOIS			

SHEET 5 OF 15

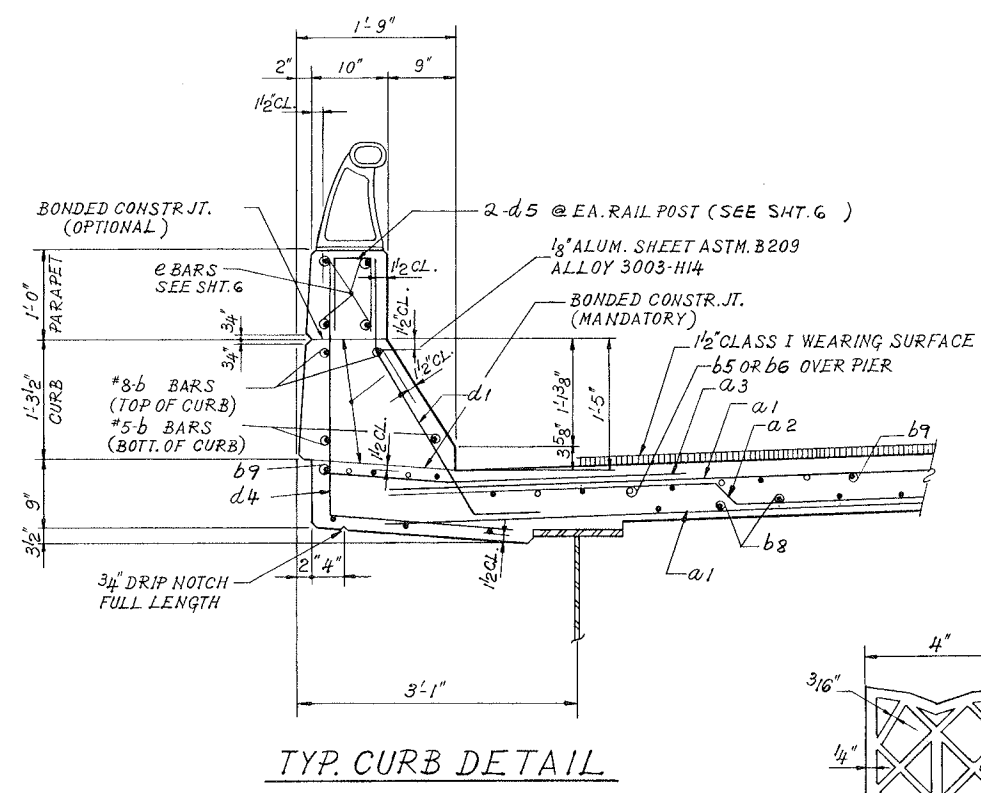


DECK CROSS SECTION-SPAN 2 & 3

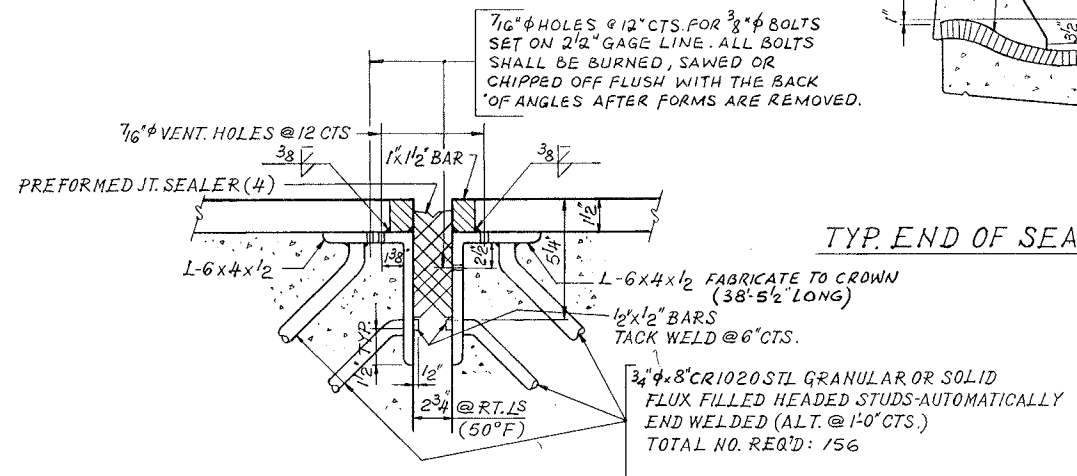


TYP. END OF SEALER TREATMENT

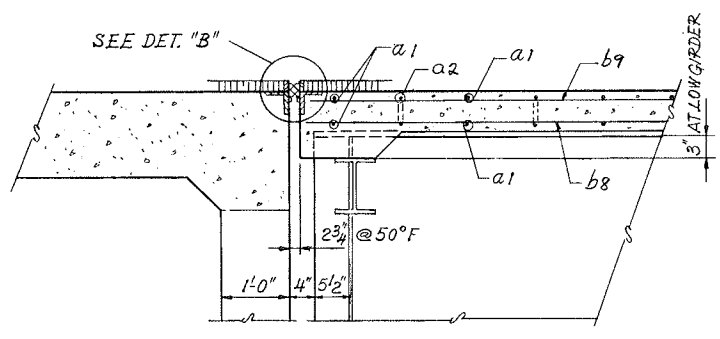
SECTION AT CURB



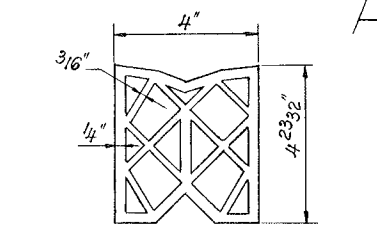
TYP. CURB DETAIL



DETAIL "B"



SECTION AA AT ABUTMENTS



PREFORMED JT. SEALER

DECK DETAILS SPANS 2 & 3  
 ROTARY ROAD  
 OVER F.A. ROUTE 412  
 PROJECT  
 SECTION 201-IHB-1  
 WINNEBAGO COUNTY  
 STATION 2388+73.93

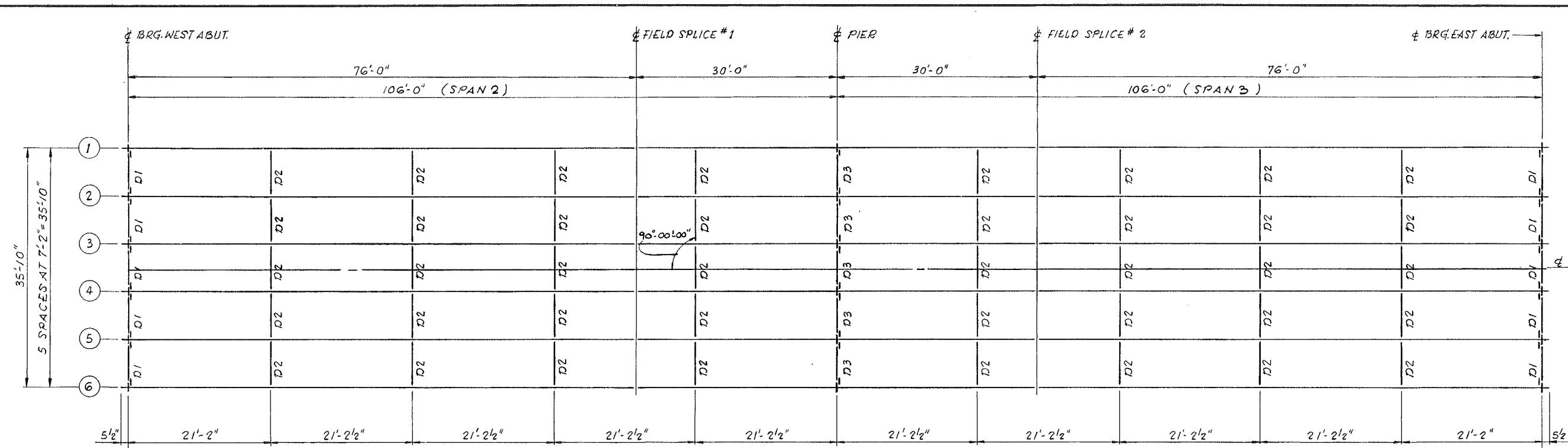
**FOR INFORMATION ONLY**

ALFRED BENESCH & COMPANY  
 CONSULTING ENGINEERS  
 JOB NO. 1649-D  
 235 N. MICHIGAN AVE. CHICAGO, ILLINOIS

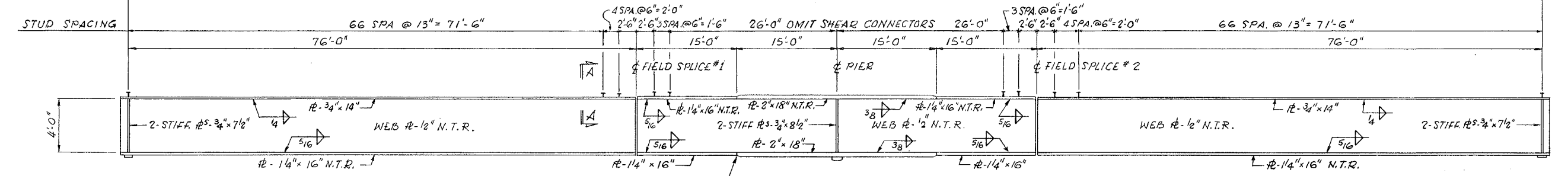


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 412	201-IHB-1	WINNEBAGO	35	16C
STA.	TO STA.		PROJECT	
F.H.W.A. REG. NO. 4	ILLINOIS			

SHEET 9 OF 15

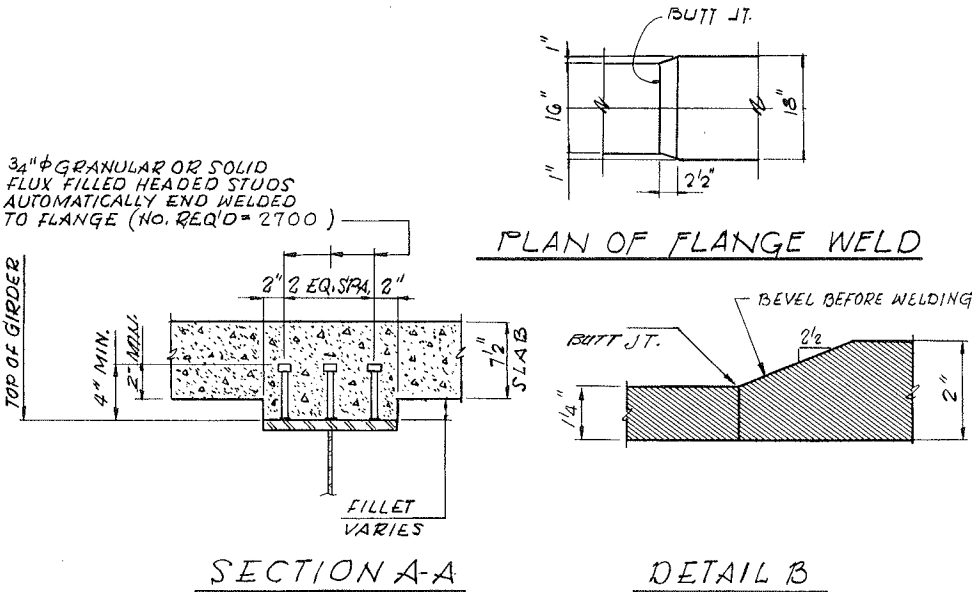


FRAMING PLAN.



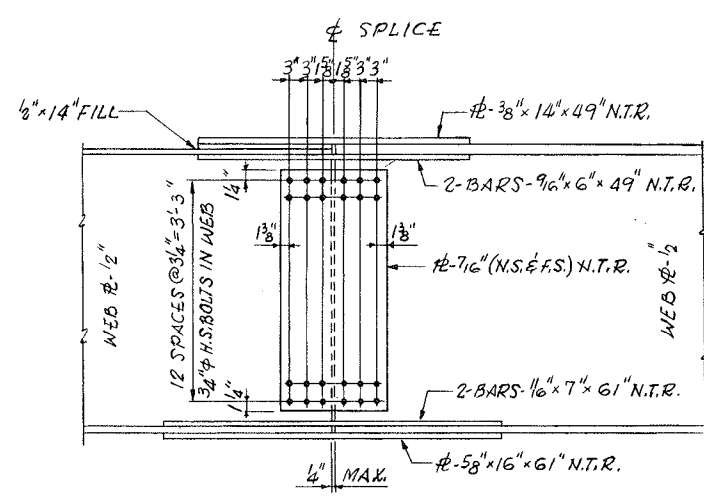
GIRDER ELEVATION

NOTE:  
N.T.R. DESIGNATES MEMBERS SUBJECT TO THE SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS.

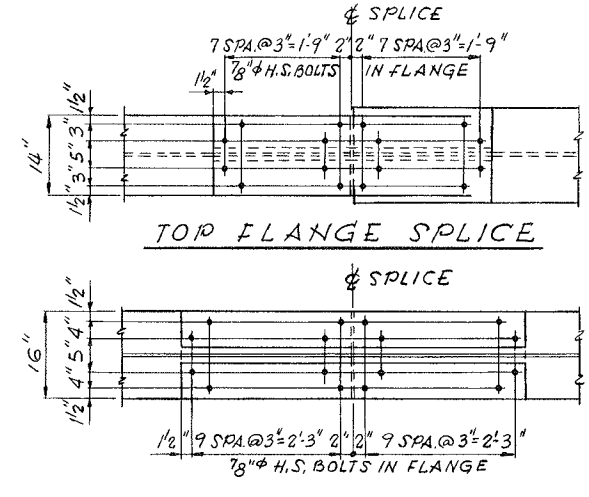


SECTION A-A

DETAIL B



WEB SPLICE



TOP FLANGE SPLICE

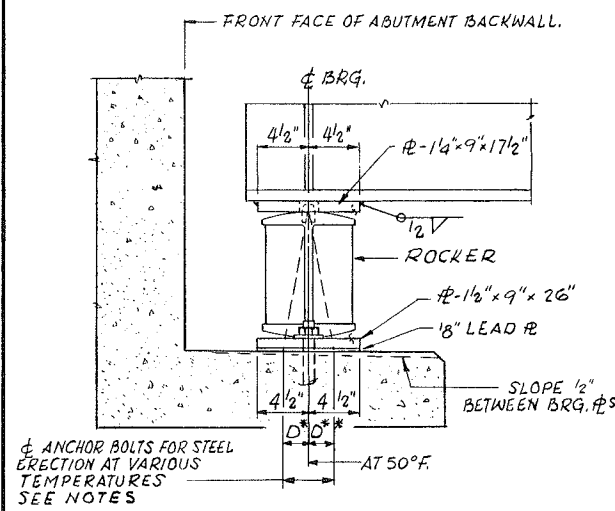
BOTTOM FLANGE SPLICE

BOLTED FIELD SPLICES.

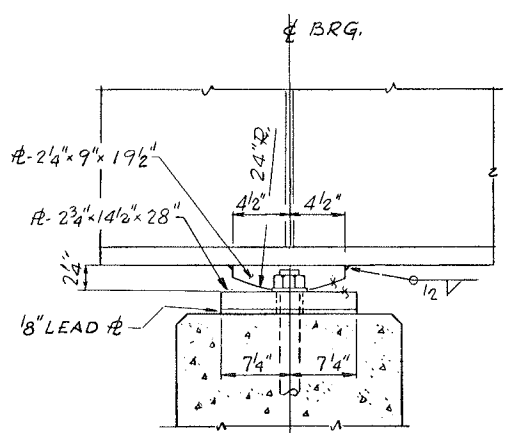
**FOR INFORMATION ONLY**

ALFRED BENESCH & COMPANY  
CONSULTING ENGINEERS  
JOB NO. 16.49-D  
233 N. MICHIGAN AVE. CHICAGO, ILLINOIS

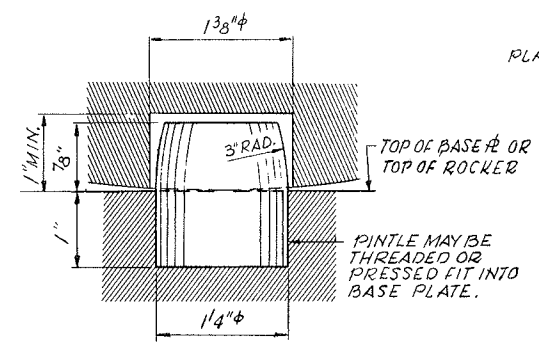
FRAMING PLAN  
ROTARY ROAD  
OVER F.A. ROUTE 412  
PROJECT  
SECTION 201-IHB-1  
WINNEBAGO COUNTY  
STATION 2388+73.93



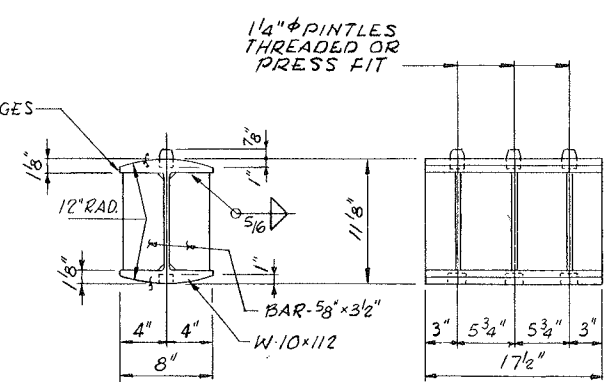
ELEVATION



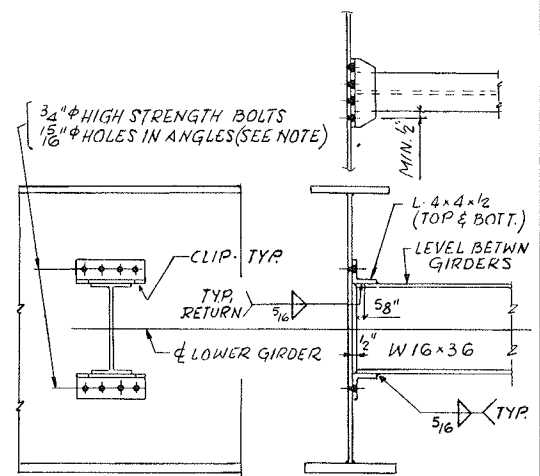
ELEVATION



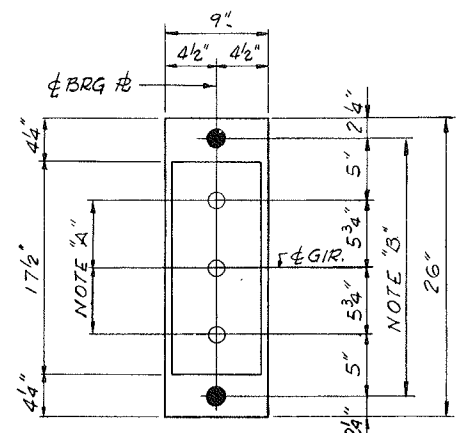
PINTLE



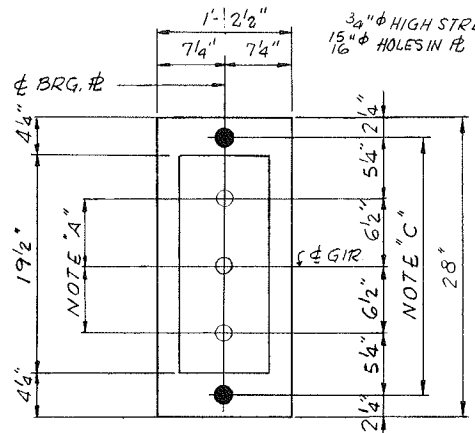
ROCKER DETAIL



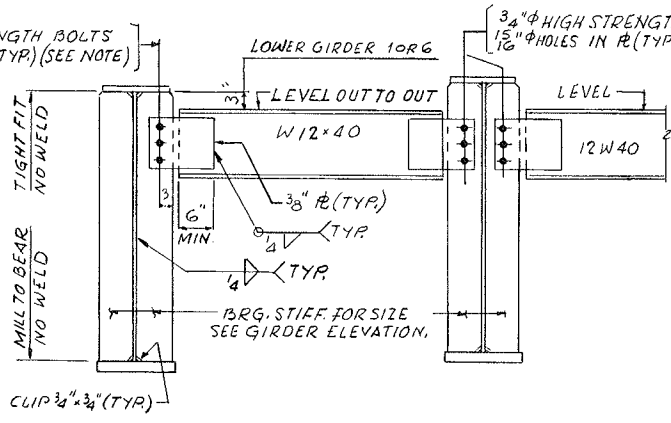
DIAPHRAGM D2



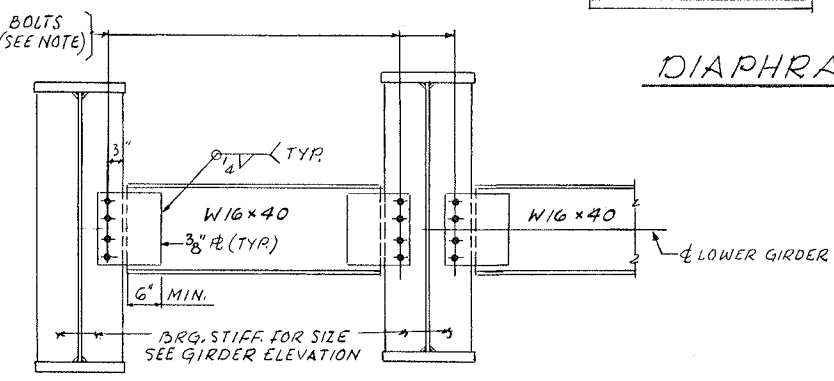
PLAN AT ABUTMENTS



PLAN AT PIER



DIAPHRAGM D1



DIAPHRAGM D3

NOTE "A"  
1-3/8" DIAMETER HOLES-1" DEEP IN TOP PLATE FOR PINTLES. THREAD OR PRESSED FIT PINTLES INTO BOTTOM PLATE.

NOTE "B"  
2" DIAMETER HOLE FOR 1 1/2" DIAMETER X 19" ANCHOR BOLTS. 3/8" X 3" X 3" PLATE WASHERS UNDER NUT.

NOTE "C"  
2" DIAMETER HOLE FOR 1 1/2" DIAMETER X 21" ANCHOR BOLTS. 3/8" X 3" X 3" PLATE WASHERS UNDER NUT.

NOTE:  
HARDENED WASHERS SHALL BE USED OVER 15/16" DIAMETER HOLES IN DIAPHRAGM ANGLES AND CONNECTION PLATES.

NOTES ON SETTING OF ANCHOR BOLTS AT EXPANSION BEARINGS

D\* (SIDE OF BEARING AWAY FROM FIXED BEARING)  
D\* = 1/8" PER EACH 100' OF EXPANSION FOR EVERY 15° FALL BELOW THE NORMAL TEMP. OF 50° F.

D\*\* (SIDE OF BEARING TOWARD FIXED BEARING)  
D\*\* = 1/8" PER EACH 100' OF EXPANSION FOR EVERY 15° RISE ABOVE THE NORMAL TEMP. OF 50° F.

AFTER BEAMS HAVE BEEN ERECTED AND DIMENSIONS D\* OR D\*\* DETERMINED, HOLES SHALL BE DRILLED AND ANCHOR BOLTS SHALL BE GROUTED IN PLACE. ALL FIXED ANCHOR BOLTS MAY BE BUILT INTO THE MASONRY

TOP OF WEB ELEVATIONS (UNDEFLECTED GIRDERS - FOR FABRICATION ONLY)

GIRDER LOCATION	1	2	3	4	5	6
BRG. W. ABUT.	850.398	850.544	850.656	850.656	850.544	850.398
FIELD SPlice #1	850.849	850.992	851.104	850.104	850.992	850.849
PIER	850.826	850.973	851.085	851.085	850.973	850.826
FIELD SPlice #2	850.893	851.039	851.151	851.151	851.039	850.893
BRG. E. ABUT.	850.596	850.741	850.854	850.854	850.741	850.596

NOTE: ELEVATIONS ARE GIVEN TO TOP OF WEB.

REACTION TABLE

INTERIOR GIRDER REACTION TABLE			
LOCATION	WEST ABUT.	PIER	EAST ABUT.
RDL (K)	50.4	185.8	50.4
RLI (K)	46.7	75.3	46.7
IMP (K)	10.1	16.3	10.1
RTOTAL (K)	107.2	277.4	107.2

MOMENT TABLE (COMPOSITE IN POSITIVE MOMENT AREAS ONLY)

	INTERIOR GIRDER-MOMENT TABLE		
	0.4 SPAN 2	PIER	0.6 SPAN 3
I <sub>s</sub> (in <sup>4</sup> )	21951	49,632	21951
I <sub>c</sub> (in <sup>4</sup> )	58806	-	58806
S <sub>s</sub> (in <sup>3</sup> )	1050	1,909	1050
S <sub>c</sub> (in <sup>3</sup> )	1436	-	1436
D.L. (K/ft)	0.876	1.042	0.876
M <sub>DL</sub> (K)	600	-1515	600
f <sub>s DL</sub> (KSI)	6.86	9.52	6.86
S <sub>DL</sub> (K/ft)	0.444	0.444	0.444
M <sub>S DL</sub> (K)	365	-639	365
M <sub>LL</sub> (K)	879	-766	879
M <sub>IMP</sub> (K)	190	-165	190
TOTAL (K)	1434	-1570	1434
f <sub>s LL</sub> (KSI)	11.98	9.87	11.98
f <sub>s TOTAL</sub> (KSI)	18.84	19.39	18.84
V <sub>R</sub> (K)	54.1	-	54.1

I<sub>s</sub> AND S<sub>s</sub> ARE THE MOMENT OF INERTIA AND SECTION MODULUS OF THE STEEL SECTION.  
I<sub>c</sub> AND S<sub>c</sub> ARE THE MOMENT OF INERTIA AND SECTION MODULUS OF THE COMPOSITE SECTION USED IN COMPUTING f<sub>s</sub>.  
V<sub>R</sub> IS THE MAXIMUM LL+IMPACT SHEAR RANGE IN SPAN.

ALFRED BENESCH & COMPANY  
CONSULTING ENGINEERS  
JOB NO. 1649-D  
233 N. MICHIGAN AVE. CHICAGO, ILLINOIS

STEEL DETAILS  
ROTARY ROAD  
OVER F.A. ROUTE 412  
PROJECT  
SECTION 201-IHB-1  
WINNEBAGO COUNTY  
STATION 2388+73.93

FOR INFORMATION ONLY